

# **Public Health Environmental Surveillance Open Data Model (PHES-ODM) Documentation**

**Version 2.0.0-rc.3.10**

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# Table of contents

<b>Introduction</b>	<b>1</b>
Quick start . . . . .	2
1. Get oriented to the ODM tables where you record results	2
2. View mandatory and optional data fields in the tables reference guide . . . . .	3
3. Try entering example data in ODM Excel templates . . .	3
4. Next steps . . . . .	4
How to use the documentation . . . . .	4
<b>Getting to know the ODM</b>	<b>7</b>
What are “Parts” and “Part Types”? . . . . .	7
“Sets” and the rationale behind sets . . . . .	8
Why category sets are treated differently . . . . .	9
The “what” and “why” of Specimen IDs . . . . .	10
The “what” and “why” of Groups and Classes . . . . .	10
Tables and table types within the ODM . . . . .	11
Program description tables . . . . .	11
Results tables . . . . .	11
Look-up tables . . . . .	11
Measures, Methods, and Attributes: Key parts . . . . .	12
Measures . . . . .	12
Methods . . . . .	12
Attributes . . . . .	13
Data quality and reportability . . . . .	13
Time periods for samples and measures . . . . .	13
Dates within the ODM . . . . .	14

## Table of contents

Translation and language capabilities . . . . .	15
Questions and online community . . . . .	15
<b>How to use the ODM</b>	<b>17</b>
How-To guides . . . . .	17
1) How to use templates . . . . .	17
2) How to report Measures and Measure Sets: . . . . .	19
Quick Start . . . . .	20
Measures Template . . . . .	20
<b>Measure Sets Template</b> . . . . .	21
Detailed description . . . . .	21
<b>Measures template</b> . . . . .	21
<b>Measure Sets Template</b> . . . . .	26
3) How to report Samples and Sample Relationships: . . . . .	27
Quick Start . . . . .	27
Samples Template . . . . .	28
Sample Relationships Template . . . . .	29
Detailed Description . . . . .	29
Samples Template . . . . .	29
Sample Relationships Template . . . . .	31
4) How to report Protocols, Protocol Steps and Protocol Relationships: . . . . .	33
Quick Start . . . . .	33
<b>Protocol Steps Template</b> . . . . .	33
<b>Protocols Template</b> . . . . .	34
<b>Protocol Relationships Template</b> . . . . .	35
Detailed Description . . . . .	36
<b>Protocol Steps Template</b> . . . . .	36
<b>Protocols Template</b> . . . . .	37
Protocol Relationships Template . . . . .	39
5) How to report Metadata: . . . . .	40
Quick Start . . . . .	41
Addresses Template . . . . .	41
Contacts Template . . . . .	42

## Table of contents

Datasets Template . . . . .	42
Instruments Template . . . . .	43
Organizations Template . . . . .	44
Polygons Template . . . . .	44
Quality Reports Template . . . . .	45
Sites Template . . . . .	45
Detailed Description . . . . .	46
Addresses Template . . . . .	46
Contacts Template . . . . .	47
Datasets Template . . . . .	49
Instruments Template . . . . .	50
Organizations Template . . . . .	52
Polygons Template . . . . .	53
Quality Reports Template . . . . .	54
Sites Template . . . . .	55
Example data for each of the 11 report tables. . . . .	57

## I. Reference guide 59

### Parts 63

a1306s delta-variant gene target . . . . .	64
a1918v delta-variant gene target . . . . .	64
a2710t omicron-variant gene target . . . . .	64
a63t omicron-variant gene target . . . . .	65
a67v omicron-variant gene target . . . . .	65
Atline Analyzer . . . . .	65
Absolute humidity . . . . .	66
Absolute humidity unit set . . . . .	66
Academic institution organization type . . . . .	66
Number of active cases . . . . .	67
Active . . . . .	67
Analysis date . . . . .	67
Analysis date end . . . . .	68

## Table of contents

Analysis date start . . . . .	68
Address Line 1 . . . . .	68
Address Line 2 . . . . .	69
Address table . . . . .	69
Addresses table column order . . . . .	70
Requirement . . . . .	70
Address ID . . . . .	70
Air filter . . . . .	71
Aggregation ID . . . . .	71
Aggregations . . . . .	71
Aggregation scale . . . . .	72
Aggregation scale ID . . . . .	72
Aggregation sets . . . . .	72
Aggregation set ID . . . . .	73
Air compartment . . . . .	73
Air compartment set . . . . .	74
Airplane . . . . .	74
Airport . . . . .	74
Airport lists worksheet . . . . .	75
Air and surface compartment set . . . . .	75
Environmental Temperature . . . . .	76
Air and water compartment set . . . . .	76
Alias depreciated . . . . .	76
Alias ID depreciated . . . . .	77
All domains . . . . .	77
Alleles . . . . .	77
Allele unit set . . . . .	78
Access to all org . . . . .	78
Aloh3 precipitation . . . . .	78
Assay method id default depreciated . . . . .	79
Amicon ultrafiltration . . . . .	79
Amicon filter, extract with MP96 . . . . .	80
Amplicon sequencing . . . . .	80
AND Boolean aggregation . . . . .	80

## Table of contents

Any compartment set . . . . .	81
Any specimen set . . . . .	81
Area proportional sample . . . . .	81
Arrival temperature . . . . .	82
Use of the articV3 primer . . . . .	82
Use of the articV4 primer . . . . .	83
Assay ID . . . . .	83
Attributes . . . . .	83
Bacteria unit set . . . . .	84
Miscellaneous bacteria group . . . . .	84
Bead beating, extract with MP96 . . . . .	85
bcov . . . . .	85
bcov culture spike target . . . . .	85
bcov vaccine spike target . . . . .	86
Beef extract flocculation . . . . .	86
Is Before . . . . .	86
Beta . . . . .	87
Biologic . . . . .	87
Digital droplet emulsification PCR . . . . .	87
Binary Large Object (BLOB) data yype . . . . .	88
Breadth of coverage ( $\geq 5\times$ depth) . . . . .	88
5-Day carbonaceous kiochemical oxygen demand . . . . .	89
5-day total biochemical oxygen demand . . . . .	89
Boolean data type . . . . .	89
Boolean aggregation set . . . . .	90
Boolean value set . . . . .	90
Boolean unit set . . . . .	91
Bovine respiratory syncytial virus group . . . . .	91
brsv culture spike target . . . . .	91
BRSV-N . . . . .	92
brsv vaccine spike target . . . . .	92
Branch sewer pipeleline . . . . .	92
Building cleanout . . . . .	93
Capacity unit set . . . . .	93

## Table of contents

Case report date . . . . .	93
Categorical date type . . . . .	94
Categories . . . . .	94
Category sets . . . . .	95
Category set ID . . . . .	95
Long term acute care hospital . . . . .	96
Child day care . . . . .	96
Degrees Celcius . . . . .	96
Centrifugation . . . . .	97
Centricon ultrafiltration . . . . .	97
Ceres nanotrap . . . . .	97
CFU per 100 ml . . . . .	98
Changes column . . . . .	98
Chemical . . . . .	98
Chemagic viral dna/rna 300 kit . . . . .	99
Child relationship . . . . .	99
City . . . . .	99
Clarified sample . . . . .	100
Classes . . . . .	100
Class . . . . .	101
Cloudy . . . . .	101
Centimetres . . . . .	101
Carbon Dioxide . . . . .	102
Chemical Oxygen Demand . . . . .	102
Collection group . . . . .	102
Collection date time . . . . .	103
Collection date time end . . . . .	103
Collection date time start . . . . .	104
Sample collection category set . . . . .	104
Collection number . . . . .	104
Collection number and period . . . . .	105
Collection period . . . . .	106
Sample collection type . . . . .	106
Co-located sample . . . . .	106



## *Table of contents*

Column name depreciated . . . . .	107
Composite sample - archival . . . . .	107
Composite grab sample of 3 . . . . .	108
Composite grab sample of 3 depreciate . . . . .	108
Composite 3hr grab sample . . . . .	109
Composite 3hr grab sample depreciate . . . . .	109
Composite 8hr grab sample depreciated . . . . .	109
Composite 8hr grab sample deprecated . . . . .	110
Compartments . . . . .	110
Compartment . . . . .	111
Compartment sets . . . . .	111
Sample concentrate . . . . .	112
Confirmed Cases Case report date . . . . .	112
Is concurrent to . . . . .	112
Water conductivity . . . . .	113
Conductivity unit set . . . . .	113
Number of confirmed cases . . . . .	113
Confirmed cases episode date . . . . .	114
Confirmed Cases Onset date . . . . .	114
Contact . . . . .	115
Contact name . . . . .	115
Contact table . . . . .	115
Contacts table column order . . . . .	116
Requirement . . . . .	116
Contact table set . . . . .	116
Confirmed Cases Test date . . . . .	117
Correctional Facility . . . . .	117
COSCa ball . . . . .	117
Country . . . . .	118
Covid-19 . . . . .	118
SARS-CoV-2 measure . . . . .	119
SARS-CoV-2-B.1.1.7 . . . . .	119
SARS-CoV-2-B.1.351 . . . . .	119
SARS-CoV-2-E . . . . .	120

## Table of contents

SARS-CoV-2-N1 . . . . .	120
SARS-CoV-2-N2 . . . . .	120
SARS-CoV-2-N3 . . . . .	121
SARS-CoV-2-P.1 . . . . .	121
SARS-CoV-2-RdRp . . . . .	121
Covid-19 Population Measure date . . . . .	122
Cphd ID . . . . .	122
crAssphage-N . . . . .	123
Crosswal table set . . . . .	123
Cycle threshold or Quantification cycle (Ct or Cq) . . . . .	123
Cumulative count . . . . .	124
Custody Contact ID . . . . .	124
Data custodian . . . . .	124
d377y delta-variant gene target . . . . .	125
d3g omicron-variant gene target { #d3g } . . . . .	125
d63g delta-variant gene target . . . . .	126
d796y omicron-variant gene target { #d796y } . . . . .	126
d950n delta-variant gene target . . . . .	126
Daily count . . . . .	127
Dataset creation date . . . . .	127
Dataset ID . . . . .	127
Dataset table . . . . .	128
Datasets table column order . . . . .	128
Requirement . . . . .	129
Data types . . . . .	129
Date . . . . .	130
Datetime date type . . . . .	130
ddcov_e sars-cov-2 gene target . . . . .	130
ddcov_n sars-cov-2 gene target { #ddcovN } . . . . .	131
Deaths . . . . .	131
del143/145 . . . . .	131
del 157/158 . . . . .	132
del2084/2084 . . . . .	132
del212/212 . . . . .	133

## Table of contents

del3674/3676 . . . . .	133
del69/70 . . . . .	133
Delta . . . . .	134
Depreciated . . . . .	134
Derived sample . . . . .	134
Description . . . . .	135
Description of change . . . . .	135
Desk or counter . . . . .	136
Dewatered solids . . . . .	136
Detected . . . . .	136
Access to details deprecated . . . . .	137
Development . . . . .	137
Under development . . . . .	137
Dictionary reference table set . . . . .	138
Additional dictionary sheets . . . . .	138
Dictionary set type . . . . .	139
Dilution factor . . . . .	139
Point Dillutions . . . . .	139
Diseases (human) . . . . .	140
Dissolved gas concentration unit set . . . . .	140
Depth of coverage . . . . .	141
Domains . . . . .	141
Domain ID . . . . .	141
Higher education domitory or residential building . . . . .	142
e156g delta-variant gene target . . . . .	142
e484a omicron-variant gene target { #e484a } . . . . .	143
Escherichia coli . . . . .	143
Education . . . . .	143
Efficiency . . . . .	144
Contact email . . . . .	144
Rainfall . . . . .	144
Ground snow depth . . . . .	145
Snowfall . . . . .	145
Episode date . . . . .	146

## Table of contents

ERD table set . . . . .	146
Sarbecovirus-specific E sars-cov-2 gene target . . . . .	146
Estimated frequency of reads . . . . .	147
Estuary, natural water body . . . . .	147
Experiment Failed . . . . .	147
4s method . . . . .	148
Nucleic Acid Extraction category set . . . . .	148
Nucleic acid extraction method . . . . .	149
Extraction volume of sample . . . . .	149
Fecal matter . . . . .	149
FALSE . . . . .	150
Field sample . . . . .	150
Field sample replicate . . . . .	150
File location of polygon . . . . .	151
Filtration . . . . .	151
First Nation . . . . .	151
First name of contact . . . . .	152
First released version . . . . .	152
Foreign key . . . . .	153
AI - Inhibition present but addressed . . . . .	153
B - Trace levels of contamination . . . . .	153
FI - Inhibition present and unaddressed . . . . .	154
J - Weak signal extrapolation . . . . .	154
ND - Non-detect . . . . .	155
UJ - Trace signal extrapolation . . . . .	155
UQ - Unquantifiable . . . . .	156
Float date type . . . . .	156
Flow-normalized mean . . . . .	156
Floor . . . . .	157
Flow rate . . . . .	157
Flow proportional 24hr sample depreciated . . . . .	157
Flow . . . . .	158
Flow proportional sample . . . . .	158
Volume flow rate unit set . . . . .	159

## Table of contents

Flow volume . . . . .	159
Influenza virus measure . . . . .	159
Influenza virus A1 . . . . .	160
influenza virus A2 . . . . .	160
Influenza virus B . . . . .	160
Fluidigm digital PCR . . . . .	161
Foggy . . . . .	161
Sample fraction category set . . . . .	161
Fraction analyzed . . . . .	162
Freyja Script . . . . .	162
F-Specific RNA bacteriophages . . . . .	163
F-Specific RNA bacteriophages, G2 . . . . .	163
Sample frozen . . . . .	163
Field sample temperature . . . . .	164
Full dictionary sheets set . . . . .	164
Funder Contact ID . . . . .	164
Funding agency . . . . .	165
g215c delta-variant gene target . . . . .	165
g339d omicron-variant gene target { #g339d } . . . . .	166
g496s omicron-variant gene target { #g496s } . . . . .	166
g662s delta-variant gene target . . . . .	166
Gamma . . . . .	167
Gene copies per copy of crAssphage . . . . .	167
gene copies per day per 100,000 . . . . .	167
Gene copies per gram solids . . . . .	168
Gene copies per L . . . . .	168
Gene copies per mL . . . . .	168
Gene copies per PMMoV copy . . . . .	169
Genetics unit set . . . . .	169
General missingness set . . . . .	169
Generic quality flag set . . . . .	170
European Petroleum Survey Group Coordinates . . . . .	170
Latitude . . . . .	170
Longitude . . . . .	171

## Table of contents

Type of geography . . . . .	171
Geographic category set . . . . .	171
Well-known text . . . . .	172
Gram per cubic metre . . . . .	172
Geometric mean . . . . .	172
Government agency organization type . . . . .	173
Grams . . . . .	173
Gravity settling . . . . .	174
Grab sample . . . . .	174
Gromstole 1.0 Script . . . . .	174
Groups . . . . .	175
Group . . . . .	175
Header . . . . .	176
Health planning region . . . . .	176
Heat inactivated sars-cov-2 virus spike target . . . . .	176
hep g armored rna . . . . .	177
hep g armored rna spike target . . . . .	177
High severity . . . . .	177
Sewer Network Health Region . . . . .	178
Hand Measurement . . . . .	178
Hollow fiber dead end ultrafiltration . . . . .	179
General Hospital Admissions . . . . .	179
Hospital Census . . . . .	179
Hospital . . . . .	180
Holding tank wastewater depreciated . . . . .	180
Holding tank wastewater . . . . .	180
Holding tank . . . . .	181
Human compartment . . . . .	181
Human compartment set . . . . .	181
Humidity . . . . .	182
i1566v omicron-variant gene target { #i1566v } . . . . .	182
i3758v omicron-variant gene target { #i3758v } . . . . .	182
i82t delta-variant gene target . . . . .	183
International Classification of Diseases . . . . .	183

## Table of contents

Intensive care unit patients . . . . .	183
Index . . . . .	184
Inhibition measure . . . . .	184
Inhibition method . . . . .	185
Innovaprep ultrafiltration . . . . .	185
Input . . . . .	185
Instrument ID . . . . .	186
Instrument table . . . . .	186
Instruments table column order . . . . .	187
Requirement . . . . .	187
Other instrument . . . . .	187
Instrument Type . . . . .	188
Instrument category set . . . . .	188
Describe other instrument type, if applicable . . . . .	189
Integer date type . . . . .	189
intercept . . . . .	189
Combined ip2 and ip4 sars-cov-2 gene target . . . . .	190
ISO639-1 . . . . .	190
ISO639-2B . . . . .	191
ISO639-2T . . . . .	191
ISO639-3 . . . . .	192
ISO639-6 . . . . .	192
k856r omicron-variant gene target { #k856r } . . . . .	192
Kilogram per second . . . . .	193
Kilolitres . . . . .	193
Litres . . . . .	194
l452r delta-variant gene target . . . . .	194
l981f omicron-variant gene target { #l981f } . . . . .	194
Lab ID default deprecated . . . . .	195
Laboratory Duplicate . . . . .	195
Lab ID . . . . .	195
Lagoon system . . . . .	196
Lake, natural water body . . . . .	196
Lambda . . . . .	196

## Table of contents

Language family . . . . .	197
Language ID . . . . .	197
Language name . . . . .	198
Language Look-up table . . . . .	198
Language table column order . . . . .	198
Required headers . . . . .	199
Last edited . . . . .	199
Last name of contact . . . . .	200
Last updated version . . . . .	200
LaTeX expression . . . . .	201
Low breadth of coverage . . . . .	201
Laboratory control sample duplicate . . . . .	201
Low depth of coverage . . . . .	202
Leaked sample . . . . .	202
Link . . . . .	202
License . . . . .	203
Linear scale aggregation set . . . . .	203
Liquid fraction . . . . .	204
List worksheet . . . . .	204
List set . . . . .	204
Access to local ha . . . . .	205
Limit of detection (LOD) . . . . .	205
Limit of detection (LOD) - sewage . . . . .	205
Logarithmic scale aggregation set . . . . .	206
Dictionary tables . . . . .	206
Limit of quantification (LOQ) . . . . .	207
Low severity . . . . .	207
Lower limit of a 95% confidence interval . . . . .	207
Low-volume sample . . . . .	208
Long-term care facility . . . . .	208
Long-term care - assisted living or retirement home . . . . .	209
Other long-term care . . . . .	209
Life technologies digital PCR . . . . .	209
Lysis buffer . . . . .	210



## *Table of contents*

Cubic metres per day . . . . .	210
Cubic metres per hour . . . . .	210
Cubic metres per second . . . . .	211
Manufacturer . . . . .	211
Mate Pair Layout . . . . .	211
Maximum length . . . . .	212
Maximum value . . . . .	212
Maximum Value . . . . .	212
Arithmetic mean . . . . .	213
Measurement group . . . . .	213
Other Measure . . . . .	214
Measure . . . . .	214
Measure . . . . .	214
Report ID . . . . .	215
Measure report table . . . . .	215
Measure set report table . . . . .	215
Measure sets table column order . . . . .	216
Requirement . . . . .	216
Measures table column order . . . . .	217
Requirement . . . . .	217
Report set ID . . . . .	217
Median . . . . .	218
Normalized arithmetic mean . . . . .	218
Other Measure Description . . . . .	218
Measure license . . . . .	219
Method . . . . .	219
Concentration method . . . . .	219
Concentration method category set . . . . .	220
Method . . . . .	220
Membrane filtration with acidification and mgcl2 . . . . .	220
Membrane filtration with acidification and mgcl2, mem- brane recombined with separated solids . . . . .	221
Membrane filtration with addition of mgcl2 . . . . .	221
Membrane filtration with mgcl2 and separated solids . . . . .	222

## Table of contents

Membrane filtration with no amendment . . . . .	222
Membrane filtration with no amendment, membrane recom- bined with separated solids . . . . .	222
Membrane filtration with sample acidification . . . . .	223
Membrane filtration with sample acidification, membrane recombined with separated solids . . . . .	223
Millions of gallons per day (MG/D) . . . . .	223
Milligrams per litre . . . . .	224
Murine Hepatitis Virus . . . . .	224
Multiple issues . . . . .	225
Mid-level severity . . . . .	225
Minimum length . . . . .	225
Minimum value . . . . .	226
Minimum Value . . . . .	226
Miscellaneous attribute group . . . . .	226
Miscellaneous measure group . . . . .	227
Missingness . . . . .	227
Missingness set . . . . .	227
Mixed/homogenized sample . . . . .	228
Millilitres . . . . .	228
Megalitres per day (ML/d) . . . . .	229
Millimetres . . . . .	229
Model . . . . .	229
Moore swab passive sample . . . . .	230
Metres per second . . . . .	230
ms2 coliphage . . . . .	230
ms2 coliphage spike target . . . . .	231
Matrix Spike Duplicate . . . . .	231
Moore Swab Passive sample depreciated . . . . .	232
Major sewer pipeline . . . . .	232
Mu . . . . .	232
murine coronavirus . . . . .	233
murine coronavirus spike target . . . . .	233
Multiple fraction . . . . .	233

## Table of contents

Multiple Purpose . . . . .	234
Municipality . . . . .	234
Mutations . . . . .	235
Mutation panels . . . . .	235
N sars-cov-2 gene target . . . . .	235
Combined N1 and N2 sars-cov-2 gene target . . . . .	236
n211i omicron-variant gene target { #n211i } . . . . .	236
n679k omicron-variant gene target { #n679k } . . . . .	236
n856k omicron-variant gene target { #n856k } . . . . .	237
n969k omicron-variant gene target { #n969k } . . . . .	237
Not applicable . . . . .	237
Aggregation not applicable . . . . .	238
Aggregation scale not applicable . . . . .	238
Aggregation set not applicable . . . . .	239
Class not applicable . . . . .	239
Compartment not applicable . . . . .	239
Compartment set not applicable . . . . .	240
Domain not applicable . . . . .	240
Group not applicable . . . . .	240
Name . . . . .	241
Not a number . . . . .	241
Nomenclature not applicable . . . . .	242
Specimen not applicable . . . . .	242
Specimen set not applicable . . . . .	242
Native Name . . . . .	243
Unit not applicable . . . . .	243
Unit set not applicable . . . . .	243
Neighbourhood . . . . .	244
Population of newly vaccinated persons . . . . .	244
NextClade nomenclature . . . . .	245
Normalized geometric mean . . . . .	245
Ammonium Nitrogen . . . . .	245
niid_2019-ncov_n sars-cov-2 gene target . . . . .	246
No quality concerns . . . . .	246

## Table of contents

Sample not labelled . . . . .	246
No liquid concentration, liquid recombined with separated solids . . . . .	247
Nomenclature . . . . .	247
Nomenclature . . . . .	247
Non-detected . . . . .	248
Norovirus G1 . . . . .	248
Norovirus G2 . . . . .	249
Notes . . . . .	249
Sample missing time stamp . . . . .	249
Not reported . . . . .	250
Sarbecovirus-specific N sars-cov-2 gene target . . . . .	250
Nephelometric turbidity unit . . . . .	250
Nuclisens automated magnetic bead extraction kit . . . . .	251
Nuclisens manual magnetic bead extraction kit . . . . .	251
Null . . . . .	252
Water . . . . .	252
coronavirus OC43 . . . . .	252
oc43 spike target . . . . .	253
Ocean, natural water body . . . . .	253
Other Collection depreciated . . . . .	253
Lab Analysis . . . . .	254
Omicron BA.1 . . . . .	254
Omicron BA.2 . . . . .	255
Omicron BA.2.75 . . . . .	255
Omicron BA.4 . . . . .	255
Omicron BA.5 . . . . .	256
Onset date . . . . .	256
Online Sensor . . . . .	256
Ontology reference . . . . .	257
Orthophosphates . . . . .	257
Other residential building . . . . .	258
OR Boolean aggregation . . . . .	258
ORF1a sars-cov-2 gene target . . . . .	258

## Table of contents

ORF1ab sars-cov-2 gene target . . . . .	259
ORF1b sars-cov-2 gene target . . . . .	259
Organization . . . . .	259
Organization table . . . . .	260
Organizations table column order . . . . .	260
Requirement . . . . .	261
Organization type category set . . . . .	261
Organization Type . . . . .	261
Sample origin . . . . .	262
Sample Origin category set . . . . .	262
Other Collection depreciated . . . . .	262
Other aggregation scale . . . . .	263
Other . . . . .	263
Other aggregation set . . . . .	264
Other aggregation deprecated . . . . .	264
Access to other prov deprecated . . . . .	264
Other report table set . . . . .	265
Variants Other . . . . .	265
Other Site - sample depreciated . . . . .	266
Other Site - Site depreciated . . . . .	266
Other Unit deprecated . . . . .	266
Outbreak . . . . .	267
Outbreak End . . . . .	267
Outbreak - on-going . . . . .	268
Outbreak category set . . . . .	268
Outbreak start . . . . .	268
p100l delta-variant gene target . . . . .	269
p2046l delta-variant gene target . . . . .	269
p2287s delta-variant gene target . . . . .	269
p3395h omicron-variant gene target { #p3395h } . . . . .	270
p681r delta-variant gene target . . . . .	270
Paired Layout . . . . .	270
Pangolin nomenclature . . . . .	271
Parent dataset ID . . . . .	271

## Table of contents

Parent sample ID . . . . .	272
Parent Site ID . . . . .	272
Part description . . . . .	272
Part ID . . . . .	273
Part instruction . . . . .	274
Label . . . . .	274
Parts Look-up table . . . . .	274
Parts table column order . . . . .	275
Required headers . . . . .	275
Part types . . . . .	275
Primary Clarifier Effluent depreciated . . . . .	276
Postal or Zip Code . . . . .	276
PCR method . . . . .	277
PCR Method category set . . . . .	277
PCR quality set . . . . .	277
PCR sequencingsSelection method . . . . .	278
Primary Clarifier Sludge depreciated . . . . .	278
Primary clarifier effluent . . . . .	278
Polyethyleneglycol (PEG) precipitation . . . . .	279
Percent . . . . .	279
Percent recovery . . . . .	279
pH . . . . .	280
Access to phac . . . . .	280
Public health department or region . . . . .	281
Phenol chloroform . . . . .	281
Pseudomonas virus phi6 . . . . .	281
phi6 spike target . . . . .	282
Contact phone . . . . .	282
Total phosphorous . . . . .	282
Total Phosphates . . . . .	283
PHRED quality score . . . . .	283
Physical property . . . . .	283
Physical . . . . .	284
Primary key . . . . .	284

## *Table of contents*

PMMoV- and flow-normalized mean . . . . .	284
PMMoV-normalized mean . . . . .	285
Population . . . . .	285
Post-Grit depreciated . . . . .	286
Polygon ID . . . . .	286
Polygon table . . . . .	286
Polygons table column order . . . . .	287
Requirement . . . . .	287
Polygon Population . . . . .	288
Pooled . . . . .	288
Case reporting date category set . . . . .	288
Type of date for case reporting depreciated . . . . .	289
Population equivalents . . . . .	289
Population group . . . . .	290
Population Served . . . . .	290
Population . . . . .	290
Population unit set . . . . .	291
Poulatiion or sample set . . . . .	291
Poulatiion or site set . . . . .	291
Population specimen set . . . . .	292
Percent positive . . . . .	292
parts per million . . . . .	293
PMMoV-CP . . . . .	293
Percent positivity rate . . . . .	293
Percent primary sludge . . . . .	294
Precipitation . . . . .	294
Precipitation unit set . . . . .	294
Pretreatment . . . . .	295
Genetic primer . . . . .	295
Genetic primer category set . . . . .	295
Private sector organization type . . . . .	296
Processing group . . . . .	296
Program decription tables . . . . .	297
promega automated tna kit . . . . .	297

## Table of contents

promega ht tna kit . . . . .	297
promega manual tna kit . . . . .	298
promega wastewater large volume tna capture kit . . . . .	298
Proportion of total . . . . .	298
Proportion of variant in sample . . . . .	299
Proteins . . . . .	299
Protocol ID . . . . .	299
Protocol ID container . . . . .	300
Protocol ID object . . . . .	300
Protocol ID subject . . . . .	301
Protocol relationships table . . . . .	301
Protocol relationships table column order . . . . .	302
Requirement . . . . .	302
Protocol Relationships set . . . . .	303
Protocols table . . . . .	303
Protocols table column order . . . . .	303
Requirement . . . . .	304
Protocol steps table . . . . .	304
Protocol steps table column order . . . . .	304
Requirement . . . . .	305
Protocol table set . . . . .	305
Protocol version . . . . .	306
Access to prov ha . . . . .	306
Provisional report . . . . .	306
Primary clarifier sludge . . . . .	307
Pumping station . . . . .	307
Post-grit . . . . .	307
Pretreatment description - depreciated . . . . .	308
Number of positive tests . . . . .	308
Access to public . . . . .	309
Puro virus . . . . .	309
Puro virus spike target . . . . .	309
Purpose category . . . . .	310
Purpose . . . . .	310



## Table of contents

q19e omicron-variant gene target { #q19e }	310
q493r omicron-variant gene target { #q493r }	311
q498r omicron-variant gene target { #q498r }	311
q954h omicron-variant gene target { #q954h }	312
Quailty assurance method	312
Quality concerns	312
qiagen allprep dna/rna kit	313
qiagen digital PCR	313
qiagen ez1 virus mini kit v2.0	313
qiagen allprep powerfecal dna/rna kit	314
qiagen allprep powerviral dna/rna kit	314
qiagen powerwater kit	314
qiagen qiaamp buffers with epoch columns	315
qiagen rneasy kit	315
qiagen rneasy powermicrobiome kit	315
Quantitative PCR	316
Qualitative	316
Quality indicators	316
Quality control	317
quality flag	317
Quality report ID	317
Quality reports table	318
Quality rerpots table column order	318
Requirement	319
Quality sets	319
Quality set ID	320
Quantitative	320
R squared	320
r203m delta-variant gene target	321
Raindance digital PCR	321
Rainy	321
Random sequencing selection method	322
Ratio	322
Raw wastewater	323

## Table of contents

Raw sewage at site . . . . .	323
Raw sewage downstream from a site . . . . .	323
Raw sewage upstream from a site . . . . .	324
IP2 rdrp sars-cov-2 gene target . . . . .	324
IP4 rdrp sars-cov-2 gene target . . . . .	324
Date sample recieved . . . . .	325
Recovered patients . . . . .	325
Reference link . . . . .	325
Regular . . . . .	326
Regular reports table set . . . . .	326
Relationship . . . . .	327
Relative humidity . . . . .	327
Relative humidity unit set . . . . .	328
Representative grab sample . . . . .	328
Replicate Type category set . . . . .	328
replicate number . . . . .	329
Reportable . . . . .	329
Report date . . . . .	330
Reporter ID depreciated . . . . .	330
Reporter table depreciated . . . . .	330
Replicate Type . . . . .	331
Resuspend COSCa filter collection . . . . .	331
Results tables . . . . .	332
Retention pond . . . . .	332
River, natural water body . . . . .	332
Role of contact . . . . .	333
Rate per 100,000 . . . . .	333
Raw post-pasteurized wastewater . . . . .	333
Respiratory syncytial virus group . . . . .	334
s2083i omicron-variant gene target { #s2083i } . . . . .	334
s371l omicron-variant gene target { #s371l } . . . . .	335
s373p omicron-variant gene target { #s373p } . . . . .	335
s375f omicron-variant gene target { #s375f } . . . . .	335
s477n omicron-variant gene target { #s477n } . . . . .	336

## *Table of contents*

Sample . . . . .	336
Sample material . . . . .	336
Sample ID . . . . .	337
Sample ID Object . . . . .	337
Sample ID Subject . . . . .	337
Sample material category set . . . . .	338
Sample quality set . . . . .	338
Sample relationships table . . . . .	339
Sample relationships table column order . . . . .	339
Requirement . . . . .	339
Sample Relationships set . . . . .	340
Sample report table . . . . .	340
Sample shed . . . . .	341
Samples table column order . . . . .	341
Requirement . . . . .	341
Collection other depreciated . . . . .	342
SARS-CoV-2 . . . . .	342
Sample specimen set . . . . .	343
Sparse coverage . . . . .	343
Secondary clarifier effluent depreciated . . . . .	343
School . . . . .	344
Sequencing script version category set . . . . .	344
Genetic sequencing script version . . . . .	344
Secondary clarifier sludge depreciated . . . . .	345
Standard Deviation . . . . .	345
Normalized Standard Deviation . . . . .	346
Sea, natural water body . . . . .	346
Secondary clarifier effluent . . . . .	346
Access to self . . . . .	347
Date sample was sent . . . . .	347
Septic tank wastewater . . . . .	347
Septic tank . . . . .	348
Sequencing Layout . . . . .	348
Sequencing Layout category set . . . . .	348

## Table of contents

Sequencing quality set . . . . .	349
Sequencing selection method . . . . .	349
Sequencing selection method category set . . . . .	349
Sequencing Strategy . . . . .	350
Sequencing Strategy category set . . . . .	350
Genetic sequences . . . . .	351
Sewer Sediments Depreciated . . . . .	351
Set ID . . . . .	351
Sets look-up table . . . . .	352
Sets table column order . . . . .	352
Required headers . . . . .	352
Settled solids . . . . .	353
Set type . . . . .	353
Set Value . . . . .	354
Severity category set . . . . .	354
Severity indicator . . . . .	354
Sewer network file link depreciated . . . . .	355
S sars-cov-2 gene target . . . . .	355
Sampleshed category set . . . . .	355
Ship . . . . .	356
Shipped on ice . . . . .	356
Short names . . . . .	356
Site . . . . .	357
Single . . . . .	357
Single Layout . . . . .	358
Site or sample specimen set . . . . .	358
Site specimen set . . . . .	358
Site ID default . . . . .	359
Site features group . . . . .	359
Site ID . . . . .	359
Site measure ID . . . . .	360
Sites table . . . . .	360
Sites table column order . . . . .	361
Requirement . . . . .	361

## *Table of contents*

Site category set . . . . .	361
Site Type . . . . .	362
Skimmed milk flocculation . . . . .	362
slope . . . . .	362
Sewer network file link depreciated 2 . . . . .	363
Snowy . . . . .	363
Solid fraction . . . . .	363
Solid seperation . . . . .	364
Solid separation category set . . . . .	364
Source Protocol . . . . .	365
Protocol step source . . . . .	365
Specific humidity . . . . .	365
Specific humidity unit set . . . . .	366
Specifies . . . . .	366
Specimens . . . . .	367
Specimen . . . . .	367
Specimen set . . . . .	367
Specimen sets . . . . .	368
Spike material . . . . .	368
Spike material category set . . . . .	369
Recovery efficiency spike target . . . . .	369
Recovery efficiency spike target category set . . . . .	369
Sample spilled . . . . .	370
Secondary clarifier sludge . . . . .	370
Social services shelter . . . . .	371
Stabilization pond . . . . .	371
Standard concentrations . . . . .	371
Standard curve class . . . . .	372
State, Province, or Region . . . . .	372
Status . . . . .	372
Status category set . . . . .	373
Standard concentration unit set . . . . .	373
Storage temp . . . . .	374
Protocol Step ID . . . . .	374

## Table of contents

Step ID Object . . . . .	374
Step ID Subject . . . . .	375
Method step parent ID . . . . .	376
Protocol step version . . . . .	376
Sewer network file blob . . . . .	376
Storage time . . . . .	377
Sub-variant or lineage . . . . .	377
Summary . . . . .	378
Summary worksheet . . . . .	378
Sunny . . . . .	378
Surface compartment . . . . .	379
Other surface . . . . .	379
Surface compartment set . . . . .	379
Surface and water compartment set . . . . .	380
Surface swab . . . . .	380
Sewage truck . . . . .	380
Sewer catchment area . . . . .	381
Sewer sediment . . . . .	381
Synthetic sample . . . . .	381
t19r delta-variant gene target . . . . .	382
t3646a delta-variant gene target . . . . .	382
t547k omicron-variant gene target { #t547k } . . . . .	382
t9i omicron-variant gene target { #t9i } . . . . .	383
Tables . . . . .	383
Table column category set . . . . .	384
TaqPath N sars-cov-2 gene target . . . . .	384
TaqPath S sars-cov-2 gene target . . . . .	384
Temperature . . . . .	385
Temperature . . . . .	385
Temperature unit set . . . . .	385
Nucleic acid template volume . . . . .	386
Test date . . . . .	386
Number of tests performed . . . . .	386
Testing . . . . .	387

## *Table of contents*

thermo magmax microbiome ultra nucleic acid isolation kit	387
Time proportional sample . . . . .	388
Total Kjeldahl Nitrogen . . . . .	388
Total Nitrogen . . . . .	388
Time Proportional 24hr sample . . . . .	389
Translation look-up table . . . . .	389
Translation table column order . . . . .	390
Required headers . . . . .	390
trizol, zymo mag beads w/ zymo clean and concentrator . .	390
TRUE . . . . .	391
Total solids concentration . . . . .	391
Total suspended solids . . . . .	391
Concentration of total suspended solids . . . . .	392
Turbidity . . . . .	392
Turbidity unit set . . . . .	393
Tube weight empty . . . . .	393
Tube weight full . . . . .	393
Type other depreciate . . . . .	394
Type other depreciate2 . . . . .	394
University campus . . . . .	394
Undisclosed . . . . .	395
Unique sample . . . . .	395
Units . . . . .	396
Unit . . . . .	396
Unitless measure . . . . .	396
Unitless unit set . . . . .	397
Unit sets . . . . .	397
Unit set ID . . . . .	398
Ultracentrifugation . . . . .	398
Upper limit of a 95% confidence interval . . . . .	398
Upstream sites . . . . .	399
Micro-Siemens per centimetre . . . . .	399
U site measure ID . . . . .	399
v2930l delta-variant gene target . . . . .	400

## Table of contents

Validation study . . . . .	400
Value . . . . .	401
Variable character date type . . . . .	401
Frequency of variants detected . . . . .	401
Variants . . . . .	402
Population with 1 dose of vaccine . . . . .	402
Population with 2 doses of vaccine . . . . .	402
Population with 3 doses of vaccine . . . . .	403
Miscellaneous viruses group . . . . .	403
Size in volume . . . . .	404
Volume proportional sample . . . . .	404
Volume unit set . . . . .	404
Volatile suspended solids . . . . .	405
Volatile suspended solids - ignition . . . . .	405
Water compartment . . . . .	406
Water depreciated . . . . .	406
Water compartment set . . . . .	406
Wastewater Temperature . . . . .	407
Weather . . . . .	407
Weather category set . . . . .	407
Whole genome Sequencing . . . . .	408
WHO nomenclature . . . . .	408
Wide 95% interval . . . . .	408
Wide name table . . . . .	409
Wind Speed . . . . .	409
Wind speed unit set . . . . .	410
Measure identification (wide table) . . . . .	410
Sample stored incorrectly . . . . .	410
Sample stored at wrong temperature . . . . .	411
Wastewater treatment plant . . . . .	411
Back-up wastewater treatment site . . . . .	411
Wastewater treatment plant designed capacity . . . . .	412
Industrial wastewater treatment plant . . . . .	412
Municipal wastewater treatment plant for combined sewage	413



Municipal wastewater treatment plant for sanitary dewage only . . . . .	413
y505h omicron-variant gene target { #y505h } . . . . .	413
zymo environ water rna kit/ zymo environ water rna kit (cat. r2042) . . . . .	414
zymo quick-rna fungal/bacterial miniprep #r2014 . . . . .	414
<b>Sets</b>	<b>415</b>
Aggregation sets . . . . .	415
Boolean aggregation set . . . . .	416
Linear scale aggregation set . . . . .	416
Logarithmic scale aggregation set . . . . .	417
Aggregation set not applicable . . . . .	418
Other aggregation set . . . . .	418
Category sets . . . . .	420
Boolean value set . . . . .	420
Sample collection category set . . . . .	420
Nucleic Acid Extraction category set . . . . .	421
Sample fraction category set . . . . .	424
Geographic category set . . . . .	424
Instrument category set . . . . .	425
Concentration method category set . . . . .	425
Organization type category set . . . . .	426
Sample Origin category set . . . . .	427
Outbreak category set . . . . .	427
PCR Method category set . . . . .	427
Genetic primer category set . . . . .	428
Protocol Relationships set . . . . .	428
Purpose category . . . . .	429
Replicate Type category set . . . . .	430
Sample material category set . . . . .	430
Sample Relationships set . . . . .	432
Sequencing script version category set . . . . .	433
Sequencing Layout category set . . . . .	433

## Table of contents

Sequencing selection method category set . . . . .	433
Sequencing Strategy category set . . . . .	434
Severity category set . . . . .	434
Sampleshed category set . . . . .	434
Site category set . . . . .	436
Solid separation category set . . . . .	438
Spike material category set . . . . .	440
Recovery efficiency spike target category set . . . . .	440
Status category set . . . . .	441
Table column category set . . . . .	442
Weather category set . . . . .	442
Compartment sets . . . . .	443
Air compartment set . . . . .	443
Air and surface compartment set . . . . .	443
Air and water compartment set . . . . .	444
Any compartment set . . . . .	444
Human compartment set . . . . .	444
Compartment set not applicable . . . . .	444
Surface compartment set . . . . .	445
Surface and water compartment set . . . . .	445
Water compartment set . . . . .	445
Missingness set . . . . .	445
General missingness set . . . . .	446
Quality sets . . . . .	446
Generic quality flag set . . . . .	447
PCR quality set . . . . .	447
Sample quality set . . . . .	448
Sequencing quality set . . . . .	449
Specimen set . . . . .	450
Any specimen set . . . . .	450
Specimen set not applicable . . . . .	450
Poulatiion or sample set . . . . .	451
Poulatiion or site set . . . . .	451
Population specimen set . . . . .	451

## Table of contents

Sample specimen set . . . . .	451
Site or sample specimen set . . . . .	452
Site specimen set . . . . .	452
Unit sets . . . . .	452
Absolute humidity unit set . . . . .	452
Allele unit set . . . . .	453
Bacteria unit set . . . . .	453
Boolean unit set . . . . .	454
Capacity unit set . . . . .	454
Conductivity unit set . . . . .	454
Dissolved gas concentration unit set . . . . .	454
Volume flow rate unit set . . . . .	455
Genetics unit set . . . . .	455
Unit set not applicable . . . . .	456
Population unit set . . . . .	456
Precipitation unit set . . . . .	458
Relative humidity unit set . . . . .	459
Specific humidity unit set . . . . .	459
Standard concentration unit set . . . . .	459
Temperature unit set . . . . .	459
Turbidity unit set . . . . .	459
Unitless unit set . . . . .	460
Volume unit set . . . . .	460
Wind speed unit set . . . . .	461
<b>Tables</b>	<b>463</b>
Table types . . . . .	463
Header roles . . . . .	464
Mandatory, optional, mandatoryIf . . . . .	465
Table list . . . . .	465
Address table . . . . .	466
Contact table . . . . .	468
Dataset table . . . . .	469
Instrument table . . . . .	470

*Table of contents*

Language Look-up table . . . . .	472
Measure report table . . . . .	473
Measure set report table . . . . .	476
Organization table . . . . .	477
Parts Look-up table . . . . .	478
Polygon table . . . . .	487
Protocol relationships table . . . . .	488
Protocols table . . . . .	490
Protocol steps table . . . . .	491
Quality reports table . . . . .	493
Sample relationships table . . . . .	494
Sample report table . . . . .	494
Sets look-up table . . . . .	497
Sites table . . . . .	498
Translation look-up table . . . . .	500

# Introduction

## Warning

This documentation for PHES-ODM Version 2.0.0 is in the beta testing. Please be aware that changes will occur regularly in the next weeks. If there is something you'd like to see in the documentation that you cannot currently find, please please [create an issue on our GitHub repository](#) or post about it on [our Discourse page](#).

The Public Health and Environmental Surveillance Open Data Model (PHES-ODM or ODM) is an open-source data model and set of tools aimed at promoting global collaboration and use of environment and public health data. The ODM model facilitates interoperable environmental surveillance and research by improving quality reporting data, enhancing data management, and supporting data provenance and sharing.

This documentation is intended for those who want to understand how the ODM model works, its organizational structure, and how to use it effectively for their program. It is also a useful resource for those who currently use a different data dictionary and wish to share their data with a program that uses the ODM. If you need to share your data with another program that uses a different data dictionary, this documentation can help you compare and create a common cross-walk between dictionaries. The ODM starts as a conceptual model that represents real-world processes through data elements and data relationships, which are common to all environmental and public health surveillance systems.

## Introduction

### Quick start

You can get to know the ODM by imagining how to record a polymerase chain reaction (PCR) test result for SARS-CoV-2 from a wastewater sample.

#### 1. Get oriented to the ODM tables where you record results

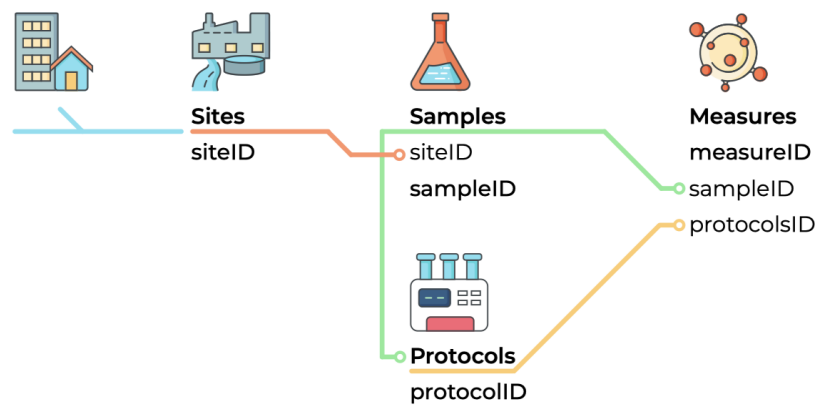


Figure 1.: **Figure 1 - Key ODM tables for recording data**

The Sample report table ([samples](#)) and the Measure report table ([measures](#)) are where you record information about samples and measures.

## 2. View mandatory and optional data fields in the tables reference guide

You can view mandatory and optional data field here: ([samples](#)) and ([measures](#)). ‘Mandatory’ means they are fields are needed to ensure interoperability.

💡 What are ODM parts and how to find them?

In the ODM, tables are an example of an part. A part name can be identified by its text style like **this**. The part ID often follows the part in parenthesis, with a link to the part.

So, **Sample report table** is the part name, and ([samples](#)) is the part ID and link to the documentation for that part.

You can find out more about parts on the [reference guide section](#).

## 3. Try entering example data in ODM Excel templates

Keep in mind, ODM templates are only examples of how to use the ODM dictionary to record data. Templates are available at [OSF.io](#). The ‘[How to use the ODM](#)’ section describes how to enter information into tables.

### Storing sample data in an ODM template

A **sample** ([sampleID](#)) is defined as a representative volume of wastewater (or other forms of water or liquid), air, or surface area taken from a site. The sample template stores one sample per row. The **Sample report table** has seven mandatory fields.

<https://vimeo.com/802349692>

## Introduction

### Storing measure data in an ODM template

A **measure** (**measureID**) is defined as a measurement or observation of any substance including a biological, physical or chemical substance. An measurement is recorded from a specimen (i.e. a site, sample, person or population). The measure template stores on measures per row. If you recorded PCR results for two SARS-CoV-2, say the N1 (covN1) and N1 (covN2) regions, you would record each on its own line. This is referred as the “long” table format, and it is the main format for storing measures. You can create “wide” tables that store multiple measures in one row, or you can mix and match to generate tables that have both long and wide headers. The [European Union airport template](#) is an example of a hybrid template (see the 'Airports' folder).

(Video)

### 4. Next steps

Recording SARS-CoV-2 PCR measures are examples of storing information for a **sample**. You can also record measures for a **site** (i.e. wastewater **flow rate** ([flowRate](parts.qmd#flowRate))), or the **population** served by site (i.e. Covid-19 hospitalization rate for a wastewater treatment plant's wasteshed, or municipality). Figure 2 shows subway lines for the these three specimens (**sample**, **site**, and **population**).

The “who, where, and why” for measures is stored in contact tables. “How”, the measure protocol or method, is stored in the **protocols** tables.

### How to use the documentation

(documentation roadmap).



*How to use the documentation*

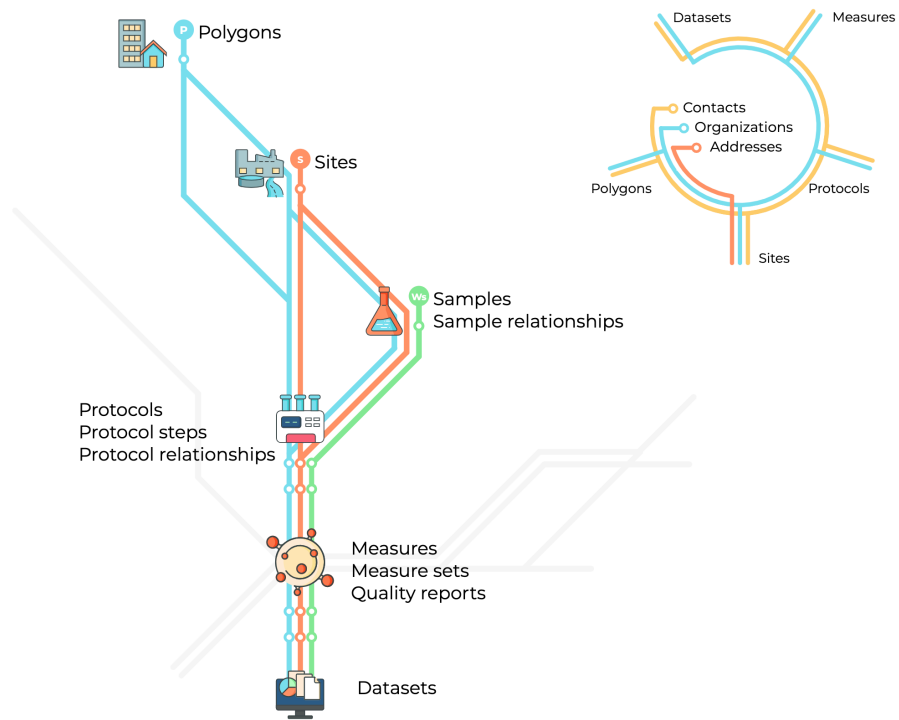


Figure 2.: **Figure 2 - ODM tables and 'subway' lines for storing measures**



# Getting to know the ODM

## What are “Parts” and “Part Types”?

Within the Public Health and Environmental Surveillance Open Data Model (PHES-ODM, hereafter referred to as simply “the ODM”), every piece or component of the model structure is called a “part”. Regardless of function, all of the tables, headers, and categorical inputs are all parts. This creates a foundational term so that the ODM and its structure can be discussed with greater ease by users and designers.

Because the term “parts” refers to every component of the ODM, “part types” are a way to differentiate between parts which have different functions and structures. The three most important part types are:

- Method Part Type
- Measure Part Type
- Attribute Part Type

Please see the [parts reference document](#) for more details, but essentially methods allow the recording of methods in environmental surveillance and testing, while measures allow the recording of observations and results, and attributes capture metadata.

The remaining 20 part types (for a total of 23 part types) are:

- Aggregation Part Type
- Aggregation Scale Part Type
- Aggregation Set Part Type

### *Getting to know the ODM*

- Category Part Type
- Category Set Part Type
- Class Part Type
- Compartment Part Type
- Compartment Set Part Type
- Dictionary Part Type
- Domain Part Type
- Group Part Type
- Missingness Part Type
- Nomenclature Part Type
- Quality Part Type
- Quality Set Part Type
- Specimen Part Type
- Specimen Set Part Type
- Table Part Type
- Unit Part Type
- Unit Set Part Type

For information and details about all the part types, please see the [parts reference document](#).

### **“Sets” and the rationale behind sets**

“Sets” are a way of grouping together different possible categorical inputs within the ODM. The purpose behind sets is to group options together so that users only need to check a few options from a drop-down menu, rather than scroll through a long list. Sets are also designed so that a single part can be used in multiple sets, which avoids the need to create multiple versions of this part for these different use contexts. For example, if you’re taking a measure of concentration, that measure will likely populate the unit choice drop-down list with units from the “standard concentration unit set”. Units in this set include Milligrams per litre, parts per million, and Percent Primary Sludge. Similarly, if one were measuring the amount

### *“Sets” and the rationale behind sets*

of oxygen in a wastewater sample they would be offered units from the “dissolved gas unit set”. The units in this set include parts per million, and Milligrams per litre. You see here how Milligrams per litre is used twice across the sets, but exists still as a single part in the parts list. Unit sets are only one type of set, with the others being:

- Aggregation sets
- Compartment sets
- Quality sets
- Specimen sets

Details about these sets are their similar - but unique - applications can be found in the [parts reference document](#). Importantly, “category sets” are not considered a “set” like these others. See the section below for an explanation of this difference.

### **Why category sets are treated differently**

One of the reasons why “sets” are set up and organized the way that they are, is to allow for the re-use of parts in multiple sets. Category sets are, however, an exception to this rule because the categories that make up a category set are used in only one set. Furthermore, the general sets are needed for almost every measure or method (which require unit, aggregation, quality, and compartment information), while category sets are used only in specific circumstances for specific fields. These are things such as collection metadata (example: Sample collection category set), dictionary metadata and model architecture (example: Data Type Category Set), or more detailed types of certain methods (example: Nucleic Acid Extraction Category Set). Category sets are also a distinct part type, and more information about them can be found in the [parts reference document](#).

## **The “what” and “why” of Specimen IDs**

Specimen IDs indicate the level at which a measure is being done. This can be: a site measure, ie. a measure at a site such as temperature or weather; a sample measure, ie. a laboratory measurement on a sample, such as gene copies of SARS-CoV-2 per mL; a person measure, ie. a measure of something at the level of an individual person, such as a blood pressure reading; or a population measure, ie. an aggregate measure of a population, such as the number of confirmed cases of a given illness. While there is currently nothing in version 2.0 of the ODM with uses the person specimen ID explicitly, it has been included to allow for the possibility of storing individual-level data in a future version. The reason specimen IDs were created was so that there could be a single manner in which measures and methods are recorded, regardless of the level at which they were performed, while still maintaining the possibility to collect site, sample, and population measures as a distinct types of metadata.

## **The “what” and “why” of Groups and Classes**

Groups and classes, similar to sets, are ways of grouping together different measures within the ODM. Given that the ODM aims to be as robust as possible and has a very long list of possible measures, groups and classes were designed to give shorter lists of measures in the drop down lists by specifying details about the kind of measure that a user is recording. Groups and classes can work together to further specify what kinds of measures are being reported. For example, the group `sarsCov2` contains many measures, but by specifying that the class is an `allele` or `variant`, the list of possible measures is pared down. Alternatively, class can be said to be non-applicable, paring down the measures in the `sarsCov2` group to only be unspecified measures of the quantity of the virus.

## **Tables and table types within the ODM**

Within the ODM there are three types of tables: program description tables, results tables, and look-up tables. These table types exist to differentiate the function of these tables and to highlight these differences to users. The different tables take different types of inputs and maintenance from users, so understanding the differences can be important.

### **Program description tables**

Program description tables (represented in yellow in the ERD) are tables used to record metadata on the organizations, locations, methods, and appurtenance. These tables help to describe surveillance and testing programs, and are intended to be updated infrequently.

### **Results tables**

Results tables (represented in blue in the ERD) are the tables used to record details on samples and measures. These tables record the main outcomes data and are updated daily, if not more frequently.

### **Look-up tables**

Look-up tables (represented in green in the ERD) are the tables that are pre-programmed and pre-populated in the ODM. These hold information on sets, all parts, languages, and translation abilities. These are only updated by the ODM team in version updates.

## **Measures, Methods, and Attributes: Key parts**

While there are many part types, there are three main part types users should be most familiar with: measures, methods, and attributes. These three have parallels with the three table types, and the differences and details of these parts are useful to understand.

### **Measures**

Measures are actually types of measures that can be performed. These can range from temperature to the number of gene copies in a sample. The measure, or `measureID`, can be selected from a drop down in the templates and it specifies the kind of measure you intend to record. The actual value of the measure is then recorded in the `value` field of the `measures` table, with units and aggregation specified in the `unitID` and `aggregationID` fields.

### **Methods**

Similar to measures, methods are types of methods that can be performed to accomplish a measurement. These can be diverse, ranging from incubation, qPCR, or nucleic acid extraction. The method itself (`methodID`) is selected from a drop down in the templates, specifying in general terms the kind of method the user wishes to record. From there, the `value` field of the `methodSteps` table can be populated by one of the inputs from the category set associated with that `methodID`. This provides a higher level of detail for a given method. For example, the `methodID` might be `solidSep` for solid separation of a sample. The value field might then be populated with `cent` for centrifugation, indicating more details about how the sample settling was done.



## **Attributes**

Attributes are the largest category of part type, as these refer to any most of the fields in the ODM. Attributes are fields for metadata within the ODM and range greatly in the use. They comprise everything from collection dates, to sampling period, to names.

## **Data quality and reportability**

Within the ODM there is a `qualityFlag` field present in both the `samples` and `measures` tables. This field serves to highlight whether or not there is a quality issues with the sample or the measure. The quality flag also allows a user to specify to type of quality issue. This is managed through the use of quality sets, which are the sets that contain the possible quality flags for a given measure or for samples. The idea is that this provides data on any issues with a sample and an indication of the nature of that issue. Having data about the nature and presence of a quality issue is often not sufficient for decision makers who are trying to use and interpret the data. As such, there is also a `reportable` field with is a Boolean indicator of whether or not data can or should be reported or included in final reports and decisions.

## **Time periods for samples and measures**

For measures, there is a field `aDateStart` and `aDateEnd` which specify the date and time that an analysis was begun and finished. This allows for the recording of greater detail around timelines for especially long, multi-day analyses. For shorter analyses, which will likely make up the bulk of reported measures, the same date can input in both fields. The idea is to have the reporting tables for measures be as robust as possible to allow for various kinds of timelines.

## *Getting to know the ODM*

For samples, there is `col1DT`, `col1DTstart`, and `col1DTend`. The first field is for the collection date and time of a single grab sample, so start and end are not necessary and the other two fields can be left blank. For composite or pooled sample, the start and end date and time for collection is crucial information to know. When these two fields are populated, the `col1DT` field can be left blank.

## **Dates within the ODM**

There are a number of date fields within the ODM which all serve different purposes. Collection datetime (`col1DT`) is the date a sample was collected, used only for grab samples. This field is left blank if the collection datetime start and end fields (`col1DTstart` and `col1DTend`) have been populated instead. Inversely, collection datetime start and end fields should be left blank if the collection datetime field has been populated. Similarly, analysis datetime start and analysis datetime end (`aDateStart` and `aDateEnd`) are used to report the date and or timeline of an analysis for a measure.

Date fields that are more related to data processing and laboratory infrastructure are: the last edited date (`lastEdited`) which indicates the last time a table, or a measure or sample details, were last edited or updated; the sent date (`sentDate`), or date that a sample was sent to the lab from the field; the received date (`recDate`), or the date the sample was received in the lab; and the report date (`repDate`), or the date that the analysis results or measures were reported. These give a greater indication of how up to date data is, but also on the speed and efficiency of the pipeline between sampling and reported results. Dates should be reported in day/month/year format to accommodate the most popular global convention.

## **Translation and language capabilities**

The default language of the ODM is English, but French translations of all descriptive elements of the data model dictionary are also available. As additional nation states and partners adopt the ODM, we anticipate that these fields will be translated into other languages as well. The translation capacities are managed through the language look-up table (`languageLUs`), the translation look-up table (`translationLUs`), and the parts table (`partsLUs`). When a translation for a given part is not available, the dictionary will default to the English term. The language look-up table stores linguistic and classification codes for spoken human languages, with the most recent ISO639 code being the language ID (`languageID`). In the translation table, the language ID is paired with every part ID (`partID`), along with the label (`partLabel`), description (`partDesc`), and instructions (`partInstr`) translated to that language. The part IDs are linked to the full parts list which otherwise contains metadata that is coded in variables and requires no further translation.

## **Questions and online community**

If any users have additional questions or issues with the ODM, we invite them to check out our [Discourse Page](#) for discussion boards and community support. For larger issues, and to ask the ODM team to add additional fields or variables into the model, we encourage users to visit the project's [GitHub repository](#) and to create an issue there so that a team member can respond.



# How to use the ODM

## How-To guides

### 1) How to use templates

ODM Excel report templates provide you with an easy way to enter your wastewater and other environmental data into the PHES-ODM format. The templates also serve as an interactive way to get to know the ODM. Below you will find a series of guides that will walk you through how to enter data into the report templates.

In these guides, “field” refers to a column in the template, and “entry” refers to a row of information that you entered. Guides also provide definitions and explanations for some terms; however, more complete information is found in the most can be found in the reference section of the ODM documentation.

The report templates can be found at the OSF.io [PHES-ODM reference file folder](#). More information about the tables can be found in the [getting-to-know](#) section.

Briefly,

- **samples** and **measures** tables are used day-to-day reporting. Information about a sample will be recorded in the **samples** table. Measurements are recorded in the **measures** table. A measure is

## *How to use the ODM*

‘measurement or observation of any substance including a biological, physical or chemical substance’.

- There are three optional tables to support reporting samples and measures.
  - **sampleRelationships** is optional and used only when you have samples that are pooled or split.
  - **measureSets** is also an optional table that can be used to link measures together.
  - **qualityReports** is used for detailed quality assurance and control measures (you can—and should— record a **quality flag** attribute for each measure or sample in the **measures** and **samples** tables).
- Typically, there is one-time initial setup where information is entered the tables with the yellow tabs in the Excel template. These tables include information about **sites**, **addresses**, **organizations**, and **contacts**.
  - **sites** is a mandatory table records information about where testing is performed.
  - **addresses**, **organizations**, and **contacts** provide the contact information for sites and also other entities such as laboratories, or database custodians.
- There are optional supporting tables that include **protocols** and **instruments** where you record information about how samples are taken and measures are reported. These tables are usually completed once and then updated when there are changes to the protocol. **protocolSteps** and **protocolRelationships** tables are part used alongside the **protocols** table. Other supporting tables include **polygons** where information is store about the sample shed

## 2) How to report Measures and Measure Sets:

and **datasets** which includes information about the data custodian and owner of the data.

The templates contain four main types of fields, each with their own for instructional purposes:

- **Identifier, unique identifier and composite unique identifier (red):** In these fields you will create a value that will be used to identify something. For instance, **Sample** ID is used to identify each unique sample. An identifier can be repeated between entries, while an unique identifier cannot. There is usually only one unique identifier per template, and they correspond to the name of the table. e.g. **Measure** ID for the **measures** table, and **Contact** ID for the **contacts** table.
- **Drop-down and conditional drop-down menus (green):** These fields have a drop-down menu which contain the values that you can either select **or** type in. In conditional drop-down menus, the values depend on what you entered in a previous field.
- **Date fields (purple):** Dates are entered in these fields and must be in the form of the [ISO 8601](#) format: `yyyy-mm-dd`. All date fields also support entries for hours, minutes, and seconds: `2022-01-01T06:11:54` and `2022-01-01T06:11:54+13:30`
- **Free form fields (blue):** In these fields, you can enter your data. Any restrictions will be specified in the relevant sections. Keep in mind, different measures may have different data types that can not be validated in Excel. Data types each measure can be checked in the reference list for the measure. For example, the data type for **temperature** is a real number.

## 2) How to report Measures and Measure Sets:

In this guide you will learn how to record data in the **Measures** and **Measure Sets** table templates. In the **Measures** table, each row repre-

sents a measure. Along the same lines, in the **Measure Sets** template, each entry will be a collection or set of measures.

## Quick Start

Below you will find the mandatory fields for the **measures** Table. You will also find definitions of terms and examples of entries of data, with all of the fields filled and colour-coded. A more detailed description of some of the key concepts can be found in the following section, Detailed description.

## Measures Template

### 1. Mandatory fields

- **Report ID**: Unique identifier for a Measure.
- **Sample ID**: Unique identifier for a Sample.
- **Site ID**: Unique identifier for the location where a Sample was taken.
- **Analysis Date End**: Date the Measure was completed.
- **Measure**: A measurement or observation of any substance including a biological, physical or chemical substances.
- **Value**: Value of the Measure.
- **Unit**: Units of a value.
- **Aggregation**: Statistical measures that the Measure represents.
- **Specimen**: Substance or thing upon which the observation was made. Specimens include water, air, and surface. The Specimen feild is mandatory if there is more than one specimen type that is collected in database.



## Detailed description

### 2. Examples

*Image will be added*

## Measure Sets Template

### 1. Mandatory fields

- **Report Set ID:** Unique identifier that links together a group of related Measures.

### 3. Examples

*Image will be added.*

## Detailed description

## Measures template

### 1. Columns A to H

	A	B	C	D	E	F	G	H
1	Report ID	Protocol ID	Sample ID	Purpose	Polygon ID	Site ID	Dataset ID	Report Set ID
2								
3								

#### i) Columns A-C, and E-H

- These are the identifier fields.

## How to use the ODM

- **Report ID** (column A) is the unique identifier for this template, and it cannot be repeated. Each Report ID represents a unique measure.

The **Report ID** can be any text field up to 30 characters. If you don't have a method to generate a **Report ID** you can use the ODM recommended formula: {Mathew, can you add the formula here}.

- Other identifiers can be repeated between entries (if needed). For instance, if you enter two different measures from the same sample, then the **Sample ID** (column C) will be the same.
- You may have already created these identifiers in another template. For instance, you may have created **Sample ID** in the **samples** Template.

### ii) Column D

- **Purpose** (optional) has a drop-down menu list. In the list, **Regular** is the default purpose.

## 2. Columns I to M

	I	J	K	L	M
1	Analysis date start	Analysis date end	Report Date	Specimen	Fraction analyzed
2					
3					

### i) Columns I to K

- These are the date fields where you can enter the dates associated with your measure in the format yyyy-mm-dd. Including hours and minutes is optional, but all date-entries use the ISO 8601 format. 2022-01-01T06:11:54 or 2022-01-01T06:11:54+13:30

ii) Columns L and M

- **Specimen** and **Fraction analyzed** have drop-down menus. Both fields are optional, but both are recommended.
- **Specimen** is must be included your table has more than one type of specimen. When there is only one specimen, the database table record the specimen type. For example, if your **measures** table include only wastewater sample measures, you can indicate this information in the **databases** table.
- **Fraction analyzed** applies only for water and wastewater samples. You should record the fraction for all samples if they are component type water or wastewater.

3. Columns N to S

	N	O	P	Q	R	S
1	Group	Class	Measure	Value	Unit	Aggregation
2						
3						

i) Columns N and O

- **Group** and **Class** help organize **Measures** to make a specific measure easy to find. The fields have drop-down menus. Both fields are optional and used only if you need help finding a **Measure**.
- For example, to find the allele measures for SARS-CoV-2 you can start by selecting **SARS-CoV-2** in the **Group** column. Next, you select **Allele** in the **Class** column. Then, you'll see the drop-down in the **Measure** column that contains SARS-CoV-2 allele regions.
- Leave these fields **blank** if you do not use them.

ii) Column P

- **Measure** is where you select what is being measured. A measure in ODM is a 'measurement or observation of any

## How to use the ODM

N	O	P	V
Group	Class	Measure	
SARS-CoV-2	Alleles class	<div> <div></div> <div> BRSV-N  SARS-CoV-2-E  SARS-CoV-2-N1  SARS-CoV-2-N2  SARS-CoV-2-N3  SARS-CoV-2-RdRp  crAssphage-N  PMMoV-CP  S sars-cov-2 gene target  Influenza virus A1  Influenza virus A2  Influenza virus B </div> </div>	

substance including a biological, physical or chemical substance.’ **Measure** has a conditional drop-down menu. See above section on **Group** and **Class**.

- If you chose to enter in a **Class** (column O), the drop down menu will contain the **Measures** found in that **Class**. If you did not enter a value in column O, the menu will contain all possible **Measures**.
- iii) Column Q - This where you will enter in the value of your **Measure**. - For instance, if your **Measure** is a temperature of 20 °C, you would enter “20”. - Note: Excel accepts any data type can be entered in the **Measure** column. However, each **Measure** has a specific data type. Data types can be found in the reference documentation for each measure. For example, the data type for temperature can be found [here](#).
- iv) Column R
- **Units** is where you enter the unit for your measure. There is a conditional drop-down list of the units that are valid for the measure in column P. For example, if the measure is [Storate temperature] (.../parts.qmd#sTemp), the only unit displayed is Celcsius.

v) Column S

- **Aggregations** is where you enter the aggregation of your value. There is a conditional drop-down menu field which contains the types of aggregations of your value. For example does your value represent a mean, median, etc.
- What appears in this menu list depends on what you entered in the Unit field (column R).

#### 4. Columns T to AA

	T	U	V	W	X	Y	Z	AA
1	Nomenclature	Index	Measure License	Reportable data flag	Organization ID	Contact ID	Update Date - Last Edited	Notes
2								
3								

i) Columns U, V and AA

- **Index** (column U) is used if you have multiple entries with the exact same values in the other fields. If this is the case you could use “1”, “2”, etc. to differentiate them.
- **Measure license** (column V) refers to the access and use licensing of the measure that you are entering.

ii) Column T and W

- **Reportable** (column W) is where you can indicate if there are quality concerns with the measure and the measure should not be used for regular reporting. More details of the quality concerns can be recorded in the **quality sets** table. There is a drop down list this field.

iii) Column X and Y

- These are identifier fields that are used to indicate the **Organization** and **Contact** associated with the entry.

iv) Column Z

- **Last edited** field is where you indicate the date when the entry was updated. The field is used if you need to modify an entry (row) after your initial recording. You can leave

## How to use the ODM

this field blank if the measure was entered with no updates.  
Meaning, use this field only when you modify the entry (row).

### Measure Sets Template

#### 1. Columns A to G

**i** NOTE: this figure needs to be update with the correct labels.

	A	B	C	D	E	F
1	Report Set ID	Protocol ID	Name	Contact ID	Organization ID	Update - Last E
2						
3						

##### i) Columns A, B, D and E

- These are all Identifier fields.
- Report Set ID (column A) is the Unique Identifier for this template, and cannot be repeated between entries. In essence, each value of Report Set ID represents a unique Measure Set.
- For the rest, you can repeat the Identifier between entries (if needed). For instance, if you are entering two different Measure Sets that came from the same Organization, then the Organization ID (column D) will be the same.
- You may have already created these Identifiers in another template. For instance you may have created Organization ID in the Organizations Template.

##### ii) Columns C and G

### *3) How to report Samples and Sample Relationships:*

- These are Free Form fields in which you will enter the indicated information. Name (column C) refers to the name that you have given to the Measure Set.

#### iii) Column F

- This is a Date field in which you can enter in the date when the entry was updated.

You have now entered your data in the Measures and Measure Sets Template, congratulations!

## **3) How to report Samples and Sample Relationships:**

In this guide you will learn how to enter Samples and Sample Relationships into their respective templates. In the Samples template, each entry represents a Sample. A Sample is the wastewater that you collected so that Measures can be made. Along the same lines, each entry in the Sample Relationships represents an interaction (or Relationship) between two Samples in the form, Subject - Relationship - Object. So, to specify that Sample A is a field sample replicate of Sample B, you would enter “Sample A” - “Field Sample Replicate” - “Sample B”

You can find additional information regarding terms and the colour-coding of columns at the beginning of this guide (1) [How to use templates](#)) and

## **Quick Start**

Below you will find the fields that are mandatory for the Samples and Sample Relationships template. You will also find some examples of entries of data, with the all of the fields filled and colour-coded. A more detailed description of some of the key concepts can be found in the following section, Detailed Description.

## Samples Template

### 1. Mandatory fields

Sample ID	Site ID
Sample Material	Sample Collection Type
Collection Period	Collection Number
Collection Date Time	

### 2. Definitions

- Sample ID: Unique identifier for a Sample.
- Site ID: Unique identifier for the location where a wastewater sample was taken.
- Sample Material: Type of Sample.
- Sample Collection Type: Method used to collect the Sample.
- Collection Period: The time period over which the Sample was collected, in hours.
- Collection Number: The number of subsamples that were combined to create the Sample. Use NA for continuous, proportional or passive sampling.
- Collection Date Time: The date, time and time zone the sample was taken.

### 3. Examples

*to be added*



## Sample Relationships Template

### 1. Mandatory fields

Sample ID Object	Relationship
Sample ID Subject	

### 2. Definitions

- **Sample ID Object:** The Object (or one of the samples) of a relationship between two Samples. This will always be a Sample ID that was previously created in the Samples Template.
- **Relationship:** Describes relationship between two Samples.
- **Sample ID Subject:** The Subject (or one of the samples) of a relationship between two Samples. This will always be a Sample ID that was previously created in the Samples Template.

### 3. Examples

Examples will be added

## Detailed Description

### Samples Template

#### 1. Columns A to G

	A	B	C	D	E	F	G
1	Sample ID	Protocol ID	Organization ID	Contact ID	Site ID	Purpose	Sample material
2							
3							

## How to use the ODM

### i) Columns A to E:

- These are Identifier fields.
- Sample ID (column A) is the Unique Identifier for this template and cannot be repeated between entries. You can think of each Sample ID value as representing a unique Sample.
- For the rest of the fields, you can repeat values between entries. For instance, if you are entering two different Samples from the same Site, then the Site ID (column E) will be the same.
- You may have already created these Identifiers in another template. For instance you may have created Site ID in the Sites Template.

### ii) Columns F to G:

- These are Drop-down Menu fields where you can enter information regarding the Purpose and Sample Material of your Sample.

## 2. Columns H to N

	H	I	J	K	L	M	N
1	Dataset ID	Sample origin	Replicate Type	Sample collection type	Collection Period	Collection Number	Pooled
2							
3							

### i) Columns H:

- These is an Identifier field for the Dataset that your Sample is associated with.

### ii) Columns I to K, N:

- These are Drop-down Menu fields related to various characteristics of your Sample.

## Detailed Description

- Sample Collection Type (column K) refers to the collection technique you used to obtain the Sample.
  - Pooled (column N) refers to whether or not the Sample that you are entering is made up of multiple child Samples.
- iii) Columns L and M:
- These are Free Form fields.
  - Collection Period (column L) refers to the number of hours that it took to collect your Sample.
  - Collection Number (column M) refers to the number of subsamples that were used to create Sample that you are entering.

### 3. Columns O to V

	O	P	Q	R	S	T	U	V
1	Collection date time	Collection date time start	Collection date time end	Date sample was sent	Date sample recieved	Reportable data flag	Update Date - Last Edited	Notes
2								
3								

- i) Columns O to S, U:
- These are Date fields that are related to various dates associated with your Sample. These dates will be in the format dd/mm/yyyy.
- ii) Column T:
- This is a Drop-down Menu field (Reportable Data Flag) where you can indicate whether or not your entry is of a good enough quality that it can be used by others.
- iii) Column V:
- This is a Free Form field where you can indicate anything of interest..

## Sample Relationships Template

### 1. Columns A to E

### How to use the ODM

	A	B	C	D	E
1	Sample ID Subject	Relationship	Sample ID Object	Update Date - Last Edited	Notes
2					
3					

#### i) Columns A and C:

- These are Identifier fields.
- Both of these Identifiers are Sample IDs and represent Samples. You would have created them previously in the Samples Template. Note that neither of them are Unique Identifiers and, thus, can be repeated between entries.

#### ii) Column B:

- This is a Drop-down Menu field, where you can select the type of relationship between two Samples. For instance, if Sample B was a child of Sample A, you would put the Sample ID of Sample A in the Sample ID Subject field (column A), and the Sample ID of Sample B in Sample ID Object field (column C). Then you would chose “Child relationship” from the menu in this column.

#### iii) Columns D and E:

- These are a Date field (column D) and a Free Form field (column E) where you can enter in the indicated information.

You have now entered your data in the Samples Template, congratulations!

4) *How to report Protocols, Protocol Steps and Protocol Relationships:*

## **4) How to report Protocols, Protocol Steps and Protocol Relationships:**

In this guide you will learn how to enter Protocols, Protocol Steps and Protocol Relationships into their respective templates. As described in , a Protocol is “A procedure for collecting a sample or performing a measure”. Each entry in the Protocols Template represents a unique Protocol. A Protocol is made up of Protocol Steps. In the Protocol Steps Template, each entry is one of these steps. Finally, Protocols and Protocols can be linked to each other. Each entry in the Protocol Relationships Template represents one of these relationships in the form, Subject - Relationship - Object. So, for example, to specify that Protocol Step A needs to be done before Protocol Step B, you would enter “Protocol Step A” - “is Before” - “Protocol Step B”. .

You can find additional information regarding terms and the colour-coding of columns at the beginning of this guide (1) [How to use templates](#)) and

## **Quick Start**

Below you will find the fields that are mandatory for the Protocols, Protocol Steps and Protocol Relationships templates. You will also find some examples of entries of data, with all of the fields filled and colour-coded. A more detailed description of some of the key concepts can be found in the following section, Detailed Description.

## **Protocol Steps Template**

### **1. Mandatory fields**

---

Protocol Step ID	Method (if entry is a Method)
Measure (if entry is a Measure)	Value (if entry is a Measure)
Aggregation (if entry is a Measure)	Unit (if entry is a Measure)

---

## 2. Definitions

- Protocol Step ID: Unique identifier for a Protocol Step.
- Measure: A measurement or observation of any substance including a biological, physical or chemical substance.
- Method: A procedure for collecting a sample or performing a Measure.
- Value: Value of the entry.
- Aggregation: Statistical measures used to report a Measure.
- Unit: The units of a Measure.

## 3. Examples

*Image will be added*

## Protocols Template

### 1. Mandatory fields

---

Protocol ID

---

### 2. Definitions

- Protocol ID: A unique identifier for a given Protocol.

### 3. Examples

*Image will be added*

## Protocol Relationships Template

### 1. Mandatory fields

Protocol ID Container	Relationship
Protocol ID Subject (if subject is a Protocol)	Protocol Step ID Subject (if subject is a Protocol Step)
Protocol ID Object (if object is a Protocol)	Protocol Step ID Object (if object is a Protocol Step)

### 2. Definitions

- Protocol ID Container: Unique identifier for a Protocol and the Steps and other Protocols that make it up.
- Relationship: Describes relationship between the Subject and Object.
- Protocol ID Subject: The Subject of a Relationship between a Protocol and a Protocol Step or Protocol.
- Protocol Step ID Subject: The Subject of a Relationship between a Protocol Step and a Protocol Step or Protocol.
- Protocol ID Object: The Object of a Relationship between a Protocol and a Protocol Step or Protocol.
- Protocol ID Step Object: The Object of a Relationship between a Protocol Step and a Protocol Step or Protocol.

### 3. Examples

*Image will be added*

## Detailed Description

### Protocol Steps Template

#### 1. Columns A to G

	A	B	C	D	E	F	G
1	Protocol Step ID	Method	Measure	Summary	Protocol step source	Protocol Step Version	Reference link
2							
3							

##### i) Column A:

- Protocol Step ID (column A) is the Unique Identifier field for this template and cannot be repeated between entries. You can think of each Protocol Step ID value as representing a unique Protocol Step.

##### ii) Columns B to C:

- These are Drop-down Menu fields.
- You only need to enter a value into Method ID (column B) or Measure ID (column C). The former is for when you are entering a Method as a Protocol Step. The latter is when you are entering a Measure as a Protocol Step. Leave the other field **blank**.

##### iii) Columns D to G:

- These are Free Form fields and you can enter the relevant information in any format that you wish.
- Summary (column D) is a short description of the Protocol Step that you are entering.
- Protocol Step Source (column E) specifies the Protocol Step which serves as a basis for the given Protocol Step.
- Protocol Step Version (column F) specifies the version of a given Protocol Step.



## Detailed Description

	H	I	J	K	L	M	N	O
1	Organization ID	Contact ID	Instrument ID	Value	Unit	Aggregation	Update Date - Last Edited	Notes
2								
3								

### 2. Columns H to O

#### i) Columns H to J:

- These are Identifier fields.
- You can repeat values between entries. For instance, if you are entering two different Protocol Steps from the same Organization, then the Organization field (column H) will be the same.

#### ii) Column K:

- A Free Form field in which you will enter the Value of a Measure. If a Method is being entered, then you can put “NA” here.

#### iii) Columns L and M:

- These are Conditional Drop-down Menu fields.
- Unit (column L) depends on what you entered in Measure ID (column C). If you entered a Method, then you can put “NA” in this field.
- Aggregation (column M) depends on what you entered in Unit (column L). If you entered a Method, then you can put “NA” in this field.

#### iv) Columns N and O:

- These are Free Form fields where you can enter the indicated information.

## Protocols Template

### 1. Columns A to F

## How to use the ODM

	A	B	C	D	E	F
1	Source Protocol	Protocol ID	Dataset ID	Name	Summary	Reference link
2						
3						

### i) Columns B and C:

- These are Identifier fields.
- Protocol ID (column B) is the Unique Identifier for this template, and cannot be repeated between entries. In essence, each value of Protocol ID represents a unique Protocol.
- For Dataset ID, you can repeat between entries (if needed). For instance, if you are entering two different Protocols from the same Dataset, then the Dataset ID (column C) will be the same.
- You may have already created the Dataset IDs in the Datasets Template.

### ii) Columns A, D to F:

- These are Free Form fields in which you can enter the indicated information.
- Source Protocol (column A) is where you can indicate the Protocol that served as the basis for the Protocol that is currently being entered.
- Name (column D) refers to the Name that you have decided to give your Protocol.

## 2. Columns G to K

### i) Columns G, H:

- These are Identifier fields. You can repeat values between entries.

### ii) Columns I, K:

### Detailed Description

G	H	I	J	K
Organization ID	Contact ID	Protocol Version	Update Date - Last Edited	Notes

- These are Free Form fields and you can enter the relevant information in any format that you wish.
- You can use the Protocol Version field (column I) to indicate the version of the Protocol that you are entering.

iii) Columns J:

- This is a Date field where you can indicate when the entry was updated.

## Protocol Relationships Template

### 1. Columns A to H

	A	B	C	D	E	F	G	H
1	Protocol ID Container	Protocol ID Object	Step ID Object	Relationship	Protocol ID Subject	Step ID Subject	Update Date - Last Edited	Notes
2								
3								

i) Columns A to C, E and F:

- These are Identifier fields.
- All of these Identifiers are either Protocol IDs or Protocol Step IDs and represent Protocols and Protocol Steps, respectively. This includes Protocol ID Container (column A), which represents the Protocol that contains the relationships that you are entering in this template. Note that none of these fields are Unique Identifiers and, thus, can be repeated between entries.

### *How to use the ODM*

- You should only enter in a value for one of the two “Object” columns (column B and C); this depends on whether the Object of the relationship that you are entering is a Protocol or a Protocol Step. The same is true for the two “Subject” columns (column E and F).
- An example will be given in point (ii) below.

#### ii) Columns D:

- This is a Drop-down Menu field, where you can select the type of Relationship that is being entered.
- For example, say you wanted to enter in a Relationship stating that Protocol Step A takes place before Protocol Step B in a particular Protocol Container. You would enter the relevant Identifiers in the Step ID Object field (column B) and the Step ID Subject field (column F). You would then select “is Before” from the Relationship field. Finally, to identify this relationship, you would enter in the Identifier in the Protocol ID Container field (column A)

#### iii) Columns G and H:

- These are a Date field (column D) and a Free Form field (column E) where you can enter in the indicated information.

You have now entered your data in the Protocol Steps, Protocols and Protocol Relationships Template, congratulations!

## **5) How to report Metadata:**

In this guide you will learn how to enter Metadata through a series of templates. Each entry in a template will usually represent what is found in the title of the template. For instance, in the Organizations template

each row will represent an Organization. In the context of the PHES-ODM, metadata is anything that gives information that is not found in the templates related to Measures, Protocols and Samples.

You can find additional information regarding terms and the colour-coding of columns at the beginning of this guide (1) [How to use templates](#)) and

## Quick Start

Below you will find the fields that are mandatory for the metadata-related templates. You will also find some examples of entries of data, with the fields filled and colour-coded. A more detailed description of some of the key concepts can be found in the following section, Detailed Description.

### Addresses Template

#### 1. Mandatory fields

Address ID	Dataset ID
Address Line 1	City
State, Province or Region	Country

- Address ID: A unique identifier for an Address.
- Dataset ID: The name of the Dataset that stores information for Measures, Samples and other reporting tables.
- Address Line 1: Line 1 (the street name, number and direction) for a given Address.
- City: The city where a Site or Organization is located; part of the Address.

## *How to use the ODM*

- State, Province or Region: The state, province, or region where a Site or Organization is located; part of the Address.
- Country: The country where a Site or Organization is located; part of the Address.

### 2. Examples

*Images will be added*

## **Contacts Template**

### 1. Mandatory fields

Contact ID	Organization ID
Contact email	

- Contact ID: A unique identifier for a given contact person.
- Organization ID: A unique identifier for the Organization to which the reporter is affiliated.
- Email: Contact e-mail address, for the labs.

### 2. Examples

*Images will be added*

## **Datasets Template**

### 1. Mandatory fields

---

Dataset ID	License
Data Custodian	

---

- Dataset ID: A unique identifier for the Dataset that stores information.
- License: The license of the Dataset.
- Data Custodian: The data custodian(s) of the database.

## 2. Examples

*Images will be added*

## Instruments Template

### 1. Mandatory fields

---

Instrument ID	Dataset ID
Model	Instrument Type

---

- Instrument ID: A unique identifier for an Instrument.
- Dataset ID: The name of the Dataset that stores information for Measures, Samples and other reporting tables.
- Model: Model number or version of the Instrument.
- Type of Instrument used to perform the measurement.

## 2. Examples

*Images will be added*

## Organizations Template

### 1. Mandatory fields

Organization ID	Address ID
Organization Type	

- Organization ID: A unique identifier for the Organization to which the reporter is affiliated.
- Address ID: A unique identifier for an Address.
- Organization Type: Specifies the type or purpose of a given Organization.

### 2. Examples

*Images will be added*

## Polygons Template

### 1. Mandatory fields

Polygon ID	Type of Geography
Well-known text	European Petroleum Survey Group Coordinates

- Polygon ID: Unique identifier for the Polygon.
- Type of Geography: Type of geography that is represented by the Polygon.
- Well-known text: Well-known text of the Polygon.
- European Petroleum Survey Group Coordinates: The unique EPSG code specifying a given geospatial area.

### 2. Examples

*Images will be added*



## Quality Reports Template

### 1. Mandatory fields

Quality Report ID	Report ID (if entry is related to a Measure)
Sample ID (if entry is related to a Sample) Quality Flag	Report Set ID (if entry is related to a Measure in a Measure Set)

- Quality Report ID: A unique identifier for a given Quality Report.
- Report ID: Unique identifier for a Measure.
- Sample ID: Unique identifier for a Sample.
- Report Set ID: Unique identifier that links together a group of related Measures.
- Quality Flag: A field for reporting any quality concerns - of lack thereof - for a Sample or Measure.

### 2. Examples

*Images will be added*

## Sites Template

### 1. Mandatory fields

Site ID	Site Type
Sample shed	Contact ID
Latitude	Longitude
European Petroleum Survey Group Coordinates	

- Site ID: Unique identifier for the location where wastewater sample was taken.

## How to use the ODM

- Site Type: Type of Site where sample was taken.
- Sample shed: A geographic area, physical space, or structure. A Sample is taken from a sample shed for a representative measurement of a substance(s).
- Contact ID: A unique identifier for a given contact person.
- Latitude: Latitude in decimal coordinates of the Site.
- Longitude: Longitude in decimal coordinates of the Site.
- European Petroleum Survey Group Coordinates: The unique EPSG code specifying a given geospatial area.

## 2. Examples

*Images will be added*

## Detailed Description

### Addresses Template

#### 1. Columns A to E

	A	B	C	D	E
1	Address ID	Dataset ID	Address Line 1	Address Line 2	City
2					
3					

#### i) Columns A and B:

- These are Identifier fields.
- Address ID (column A) is the Unique Identifier for this template, and cannot be repeated between entries. In essence, each value of Address ID represents a unique Address.

### *Detailed Description*

- For Dataset ID (column B), you can repeat the value between entries (if needed). For instance, if you are entering two different Addresses from the same Dataset, then this column will be the same.
- You may have already created the Dataset ID in the Datasets Template.

ii) Columns C to E:

- These are Free Form fields in which you can enter various information regarding the Address.

#### **2. Columns F to J**

F	G	H	I	J
Province, or Region	Postal or Zip Code	Country	Update Date - Last Edited	Notes

i) Columns F to J:

- Most of these fields are Free Form in which you can enter various information regarding the Contact.
- Update Date - Last Edited (column I) is a date field.

### **Contacts Template**

#### **1. Columns A to E**

i) Columns A to C:

- These are Identifier fields.

### How to use the ODM

	A	B	C	D	E
1	Contact ID	Dataset ID	Organization ID	First name of contact	Last Name of Contact
2					
3					

- Contact ID (column A) is the Unique Identifier for this template, and cannot be repeated between entries. In essence, each value of Contact ID represents a unique Contact.
- For the rest, you can repeat the Identifier between entries (if needed). For instance, if you are entering two different Contacts that came from the same Organization, then the Organization ID (column C) will be the same.
- You may have already created these Identifiers in another template. For instance you may have created Organization ID in the Organizations Template.

#### ii) Columns D and E:

- These are Free Form fields in which you can enter the name of the Contact.

## 2. Columns F to J

	F	G	H	I	J
1	Contact email	Contact phone	Role of Contact	Update Date - Last Edited	Notes
2					
3					

#### i) Columns F to J:

- Most of these fields are Free Form in which you can enter various information regarding the Contact.

- Update Date - Last Edited (column J) is a date field.

## Datasets Template

### 1. Columns A to G

	A	B	C	D	E	F	G
	Parent	Dataset					Reference
1	Dataset ID	Dataset ID	Creation Date	Name	License	Description	link
2							
3							

#### i) Columns A and B:

- These are Identifier fields.
- Dataset ID (column B) is the Unique Identifier for this template, and cannot be repeated between entries. In essence, each value of Dataset ID represents a unique Dataset.
- For Parent Dataset ID (column A), you can repeat the value between entries (if needed). For instance, if you are entering two different Datasets that came from the same Parent Dataset, then the Parent Dataset ID will be the same.

#### ii) Column C

- This is a Date field where you can enter the date that the Dataset was created.

#### iii) Columns D to G:

- These are Free Form fields in which you can enter various information related to the Dataset.

### 2. Columns H to N

## How to use the ODM

	H	I	J	K	L	M	N
1	Language ID	Funder Contact ID	Custody Contact ID	Funding agency	Data custodian	Update Date - Last Edited	Notes
2							
3							

### i) Columns H to L:

- These are Identifier and Free Form fields.
- For information regarding Funders, you can enter their ID and Name in Funder Contact ID and Funding Agency, respectively (columns H and J).
- For information regarding Data Custodians, you can enter their ID and name in Custody Contact ID and Data Custodian, respectively (columns I and K).

### ii) Columns M and N:

- These are a Date field (column L) and a Free Form field (column M) where you can enter in the indicated information.

## Instruments Template

### 1. Columns A to G

	A	B	C	D	E	F	G
1	Instrument ID	Dataset ID	Name	Model	Manufacturer	Contact ID	Organization ID
2							
3							

### i) Columns A, B, F and G:

- These are Identifier fields.

## Detailed Description

- Instrument ID (column A) is the Unique identifier for this template, and cannot be repeated between entries. In essence, each Instrument ID represents a unique Instrument.
- For the rest of the columns, you can repeat the value between entries (if needed). For instance, if you are entering two different Instruments from the same Dataset, then this column will be the same.
- You may have already created some of the Identifiers in other Templates. For instance, you may have already created Dataset ID in the Datasets template.

### ii) Columns C to E

- These are Free Form fields where you can enter the Name (column C), Model (column D) and Manufacturer (column E) of the Instrument.

## 2. Columns H to N

	H	I	J	K	L	M	N
1	Description	Reference link	Instrument Type	Describe other instrument type, if applicable	Index	Update Date - Last Edited	Notes
2							
3							

### i) Columns H, I, L to N:

- Most of these fields are Free Form in which you can enter relevant information regarding your Instrument
- You can use Index (column L) to differentiate two entries of data that are the same in the other fields.
- Update Date - Last Edited (column M) is a date field.

### ii) Columns J and K:

- For Instrument Type (column J), you can select from the drop-down menu the type of Instrument. If you do not see your Instrument, you can enter “Other instrument type”

## How to use the ODM

- If you entered “Other instrument type” in the Instrument Type field, you can use the Describe Other Instrument type, If Applicable field (column K) to describe your Instrument.

## Organizations Template

### 1. Columns A to H

	A	B	C	D	E	F	G	H
1	Organization ID	Dataset ID	Address ID	Organization Type	Name	Description	Update Date - Last Edited	Notes
2								
3								

#### i) Columns A and C:

- These are Identifier fields.
- Organization ID (column A) is the Unique identifier for this template, and cannot be repeated between entries. In essence, each Organization ID represents a unique Organization.
- For the rest of the columns, you can repeat the value between entries (if needed). For instance, if you are entering two different Organizations from the same Address, then this column will be the same.
- You may have already created some of the Identifiers in other Templates. For instance, you may have already created the Address ID in the Addresses Template.

#### ii) Columns D to H:

- For Organization Type (column D), you can select from the menu the type of Organization that you are entering.
- The rest of the columns contain Free Form or Date fields in which you can enter additional information regarding the Organization.



## Polygons Template

### 1. Columns A to G

	A	B	C	D	E	F	G
1	Polygon ID	Dataset ID	Name	Description	Polygon Population	Type of geography	European Petroleum Survey Group Coordinates
2							
3							

#### i) Columns A and B:

- These are Identifier fields.
- Polygon ID (column A) is the Unique identifier for this template, and cannot be repeated between entries. A Polygon is an area on a map. Each Polygon ID represents a unique Polygon.
- For Dataset ID (column B), you can repeat the value between entries (if needed). For instance, if you are entering two different Polygons from the same Dataset, then this column will have the same value.
- You may have already created the Dataset ID in the Datasets Template.

#### ii) Columns C to E, G:

- These are Free Form fields in which you can enter additional information regarding the Polygon.
- Name (column C) is the name of the Polygon.
- European Petroleum Survey Group Coordinates (column G) is a coordinate system that can be used to identify where your Polygon is.

#### iii) Columns F:

- For Type of geography (column F) of the Polygon, you can select one of the values from the drop-down menu.

### 2. Columns H to N

## How to use the ODM

	H	I	J	K	L	M	N
1	Well-known text	File Location of Polygon	Reference link	Organization ID	Contact ID	Update Date - Last Edited	Notes
2							
3							

### i) Columns H to J and N:

- These are Free Form or Date fields in which you can enter relevant information regarding the Polygon.
- Well-known text (column H) refers to the text markup language that can be used to represent the Polygon (

### ii) Columns K and L:

- These are Identifier fields in which the Organization ID and the Contact ID associated with the Polygon are entered.

## Quality Reports Template

### 1. Columns A to H

	A	B	C	D	E	F	G	H
1	Quality Report ID	Report ID	Sample ID	Report Set ID	Quality Flag	Severity Indicator	Update Date - Last Edited	Notes
2								
3								

### i) Columns A to D:

- These are Identifier fields.
- Quality Report ID (column A) is the Unique identifier for this template, and cannot be repeated between entries. In essence, each Quality Report ID represents a unique quality issue that you want to report.
- For the rest of the columns, you can repeat the value between entries (if needed). For instance, if you are entering two different Quality Reports from the same Sample, then the Sample IDs will be the same.

## Detailed Description

- You may have already created some of the Identifiers in other Templates. For instance, you may have already created Sample ID in the Samples template.
- ii) Columns E and F:
- Quality Flag (column E) is a Drop-down Menu field where you can select the type of quality issue that you would like to enter.
  - You can indicate the severity of the Quality Flag in the Severity Indicator field (column F).
- iii) Columns G and H:
- These are a Free Form field and Date field in which you can enter the indicated information.

## Sites Template

### 1. Columns A to F

	A	B	C	D	E	F
1	Parent Site ID	Site ID	Dataset ID	Polygon ID	Site Type	Sample shed
2						
3						

- i) Columns A to C, and F:
- These are Identifier fields.
  - Site ID (column B) is the Unique identifier for this template, and cannot be repeated between entries. In essence, each Sites ID represents a unique Site.
  - For the rest of the columns, you can repeat the value between entries (if needed). For instance, if you are entering two different Sites that are found in the same Polygon, then the Polygon IDs will be the same.

## How to use the ODM

- Parent Site ID (column A) refers to the Site that is parent to the Site that is being entered. For example if the Site that is being entered is a room in a LTC facility, that the Parent Site ID would refer to the LTC facility.

### ii) Columns D to E:

- These are Drop-down Menu fields in which you can specify the Site Type (column D) and the type of Sample shed (column E).

## 2. Columns G to M

	G	H	I	J	K	L	M
1	Address ID	Organization ID	Contact ID	Name	Description	Department or Region	Health Planning Region
2							
3							

### i) Columns G to I:

- These are Identifier fields for additional information that are associated with the Site.

### ii) Columns J to M:

- These are all Free Form fields in which you can enter in relevant information about your Site.
- Public Health Department or Region (column L) and Health Region (column M), refers to the Department or Region where your Site is located.

## 3. Columns N to S

	N	O	P	Q	R	S
1	Population Served	Latitude	Longitude	European Petroleum Survey Group Coordinates	Update Date - Last Edited	Notes
2						
3						

### i) Columns N to S:

- These are Free Form fields and a Date field in which you can enter in additional information of your Site.

*Example data for each of the 11 report tables.*

- European Petroleum Survey Group Coordinates (column Q) is a coordinate system that can be used to identify where your Site is.

You have now entered in your Metadata, congratulations!

**Example data for each of the 11 report tables.**



**Part I.**

**Reference guide**





The reference guide is a technical description of the ODM **parts**. There are three sections to the reference guide.

- **parts** – Parts are the smallest way of describing anything in the ODM. An analogy to parts of a car can be used to illustrate this point. If you own a car, your garage can access a parts list that contains every part of your car, right down to every nut and bolt. There are over 900 parts, all listed in alphabetical order. Each part has up to 60 different attributes such as the part name and description.
- **tables** - The ODM database model has 21 tables in its full relational database. The full model is commonly referred to as “long” tables as it stores data with one measurement per row. The most important tables are the ‘report’ tables that are used for daily reporting of measures and samples.
- **sets** - Sets are lists or collections of parts. You can think of sets as the elements of drop down lists or categories.

💡 Did you know that each part ID has its own URL?

Every part, table, and set has its own URL, that is created using the partID. partIDs are usually parentheses that follow a part, table, or set name.

For example, ‘airport’ is a sample shed category which would appear as: **Airport** ([airport](#)). The permanent link to the airport partID is, <https://docs.phes-odm.org/parts.html#airport>. Airport also is listed in the **Sampleshed** category set ([shedCatSet](#)).



# Parts

ODM version NA.

Parts are the smallest way of describing anything in the ODM. An analogy to parts of a car can be used to illustrate this point. If you own a car, your garage can access a parts list that contains every part of your car, right down to every nut and bolt. Similarly, the ODM has a **part ID** ([partID](#)) and **part description** ([partDescription](#)) for every measure, method, and attribute. There are also **part IDs** for **units**, **aggregations**, and other **parts**. The part list is presented below.

💡 Did you know you can identify part IDs by their specific naming format?

Each part ID starts with a lowercase character and contains no special characters. Parts have less than 12 characters, while part types such as units and aggregations have a maximum of seven characters. The unique construction of part IDs serves several purposes in addition to generating valid URLs. Users can create wide table variable names (headers) using part IDs that are valid in all open software languages. ODM supports a standard method of generating wide variable names by concatenating partIDs with an underscore, `_`. For this reason, some part types have a limit of seven characters to ensure the total length of wide names remains less than 35 characters, which is the character limit length of some statistical language software. The wide variable naming method will be added to the documentation.

## Parts

### **a1306s delta-variant gene target**

(a1306s). a1306s delta-variant gene target *Part Type*: measure *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: sarsCov2 *Class ID*: mutation *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: geneticUnitSet *Aggregation Scale ID*: see unit *Quality Set ID*: pcrQualitySet *Reference Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

### **a1918v delta-variant gene target**

(a1918v). a1918v delta-variant gene target *Part Type*: measure *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: sarsCov2 *Class ID*: mutation *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: geneticUnitSet *Aggregation Scale ID*: see unit *Quality Set ID*: pcrQualitySet *Reference Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

### **a2710t omicron-variant gene target**

(a2710t). a2710t omicron-variant gene target *Part Type*: measure *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: sarsCov2 *Class ID*: mutation *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: geneticUnitSet *Aggregation Scale ID*: see unit *Quality Set ID*: pcrQualitySet *Reference Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

**a63t omicron-variant gene target**

(a63t). a63t omicron-variant gene target *Part Type*: measure *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: sarsCov2 *Class ID*: mutation *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: geneticUnitSet *Aggregation Scale ID*: see unit *Quality Set ID*: pcrQualitySet *Reference Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

**a67v omicron-variant gene target**

(a67v). a67v omicron-variant gene target *Part Type*: measure *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: sarsCov2 *Class ID*: mutation *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: geneticUnitSet *Aggregation Scale ID*: see unit *Quality Set ID*: pcrQualitySet *Reference Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

**Atline Analyzer**

(aas). Atline analyzer with sampler. An atline analyzer with sampler. *Part Type*: category *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: waterCompartment *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 1.0. Last updated: 2.0.

## Parts

### Absolute humidity

(absHum). A measure of the total mass of water vapour present in the air per volume of air. *Part Type*: measure *Domain ID*: Phy *Speciment ID*: siSpecimen *Compartment Set*: anyCompartment *Group ID*: siteFeat *Class ID*: humClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: absHumidUnitSet *Aggregation Scale ID*: see unit *Quality Set ID*: genQualitySet *Reference Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

### Absolute humidity unit set

(absHumidUnitSet). Unit set for absolute humidity measurements. *Part Type*: unitSet *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: anyCompartment *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: absHumidUnitSet *Aggregation Scale ID*: quantAggScale *Quality Set ID*: genQualitySet *Reference Link*: NA *Data Type*: categorical *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

### Academic institution organization type

(academ). The category of organization type used for academic institutions or research groups. *Part Type*: category *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale*

*ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

## Number of active cases

(acti). Number of active cases. *Part Type: unit Domain ID: Bio Specimen ID: poSpecimen Compartment Set: naCompartmentSet Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: genQualitySet Reference Link: NA Data Type: integer Minimum Value: 0 Maximum Value: NA Minimum Length: NA Maximum Length: NA Part Status: active. First released: 1.0. Last updated: 2.0.*

## Active

(active). Indicator that a part is in current use. See partID = status *Part Type: category Domain ID: naDomain Specimen ID: naSpecimenSet Compartment Set: naCompartmentSet Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

## Analysis date

(aDate). Date the measurement was performed in the lab. *Part Type: attribute Domain ID: naDomain Specimen ID: naSpecimenSet Compartment Set: naCompartmentSet Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set*

## Parts

*ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: datetime Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 1.0. Last updated: 2.0.*

## Analysis date end

(aDateEnd). Date the measurement or analysis was completed. *Part Type: attribute Domain ID: naDomain Speciment ID: naSpecimenSet Compartment Set: naCompartmentSet Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: datetime Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 1.0. Last updated: 2.0.*

## Analysis date start

(aDateStart). Date the measurement or analysis was started. *Part Type: attribute Domain ID: naDomain Speciment ID: naSpecimenSet Compartment Set: naCompartmentSet Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: datetime Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 1.0. Last updated: 2.0.*

## Address Line 1

(addL1). Line 1 (the street name, number and direction) for a given address. *Part Type: attribute Domain ID: naDomain Speciment ID: naSpecimenSet Compartment Set: naCompartmentSet Group ID: naGroup Class*



*ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

## Address Line 2

(addL2). Line 2 (the unit number) for a given address. *Part Type: attribute Domain ID: naDomain Specimen ID: naSpecimenSet Compartment Set: naCompartmentSet Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

## Address table

(addresses). The table that contains information about addresses. Addresses can be recorded for sites, organizations or contacts (individuals). The Sites, Organizations, and Contacts tables include a link to the addresses table through Address ID. *Part Type: table Domain ID: naDomain Specimen ID: naSpecimenSet Compartment Set: naCompartmentSet Group ID: naGroup Class ID: programDescr Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

## Parts

### Addresses table column order

(addressesOrder). Specifies the order of the columns in the Addresses table.  
*Part Type:* tableSupport *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* integer *Minimum Value:* 1 *Maximum Value:* NA *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0. Last updated: 2.0.

### Requirement

(addressesRequired). Specifies the columns required in a Addresses table.  
*Part Type:* tableSupport *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

### Address ID

(addressID). A unique identifier for an address. *Part Type:* attribute *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Air filter

(afu). Air filter as part of filtration or circulating unit. Typically the unit would have a fan or blower. *Part Type:* category *Domain ID:* naDomain *Speciment ID:* saSpecimen *Compartment Set:* airCompartment *Group ID:* colGrp *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* genQualitySet *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Aggregation ID

(aggID). Statistical measures used to report a measure. Each aggregation has a corresponding value. *Part Type:* attribute *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* categorical *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 12 *Part Status:* active. First released: 1.0. Last updated: 2.0.

## Aggregations

(aggregation). Statistical measures used to report a measure. Each measure reported as a number should be reported with an aggregation. *Part Type:* partType *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality*

## Parts

*Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

## Aggregation scale

(aggScale). The scale of an aggregation set. Aggregation scales include quantitative and qualitative. *Part Type: partType Domain ID: naDomain Speciment ID: naSpecimenSet Compartment Set: naCompartmentSet Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

## Aggregation scale ID

(aggScaleID). A scale used for an aggregation. See partID = ... Only applicable for measures and units. *Part Type: attribute Domain ID: naDomain Speciment ID: naSpecimenSet Compartment Set: naCompartmentSet Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: categorical Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 12 Part Status: active. First released: 2.0. Last updated: 2.0.*

## Aggregation sets

(aggSet). Sets of aggregations that can be used for measures. Examples of aggregation sets include logarithm, linear and boolean. Sets are lists

of input values. Each input value within a set is a part (has a partID) that can be reused between sets. For example, a set A could contain the values of ‘yes’ and ‘no’; and set B could contain the values of ‘yes’, ‘no’, and ‘maybe.’ partTypes with sets include aggregations, compartments, missingness, quality flags, specimens, and units. Measures with categories and dataTypes have their own specific category sets (catSetID) because their input values are unique and are not reused. *Part Type:* partType *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* anyCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 15 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Aggregation set ID

(aggSetID). The ID for an aggregation set. Mainly applicable to part-Type = “units”. *Part Type:* attribute *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* categorical *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 12 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Air compartment

(air). A measure or observation made from a substance in the air. *Part Type:* compartment *Domain ID:* allDo *Speciment ID:* anySpecimen *Compartment Set:* airCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set*

## Parts

*ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 1 Part Status: active. First released: 2.0. Last updated: 2.0.*

## Air compartment set

(airCompartmentSet). A compartment set for measures and methods in the air compartment. *Part Type: compSet Domain ID: allDo Speciment ID: anySpecimen Compartment Set: airCompartment Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 15 Part Status: active. First released: 2.0. Last updated: 2.0.*

## Airplane

(airpln). Airplane *Part Type: category Domain ID: naDomain Speciment ID: naSpecimenSet Compartment Set: anyCompartment Group ID: col-Grp Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 1.0. Last updated: 2.0.*

## Airport

(airport). Airport Sample Shed category type *Part Type: category Domain ID: naDomain Speciment ID: naSpecimenSet Compartment Set: naCompartmentSet Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set*

*ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

## **Airport lists worksheet**

(airportLists). Parts lists used to generate airport and airplane data entry templates. *Part Type: dictionarySupport Domain ID: naDomain Specimen ID: saSpecimen Compartment Set: naCompartment Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: NA Maximum Length: NA Part Status: active. First released: 2.0.0. Last updated: 2.0.0.*

## **Air and surface compartment set**

(airSurfaceCompartmentSet). A compartment set for measures and methods in the air or surface compartments. *Part Type: compSet Domain ID: allDo Specimen ID: anySpecimen Compartment Set: airSurfaceCompartment Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 15 Part Status: active. First released: 2.0. Last updated: 2.0.*

## Parts

### Environmental Temperature

(airTemp). Environmental temperature. *Part Type*: measure *Domain ID*: Phy *Speciment ID*: siSpecimen *Compartment Set*: anyCompartment *Group ID*: siteFeat *Class ID*: tempClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: temperatureUnitSet *Aggregation Scale ID*: see unit *Quality Set ID*: genQualitySet *Reference Link*: NA *Data Type*: float *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 1.0. Last updated: 2.0.

### Air and water compartment set

(airWaterCompartmentSet). A compartment set for measures and methods in the air or water compartments. *Part Type*: compSet *Domain ID*: allDo *Speciment ID*: anySpecimen *Compartment Set*: airWaterCompartment *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 15 *Part Status*: active. First released: 2.0. Last updated: 2.0.

### Alias deprecated

(aliasDep). ID of an assay that is the same or similar. A comma separated list. Deprecated as of version 2, please avoid use. Use notes instead. *Part Type*: attribute *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA



*Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 10 *Part Status:* **deprecated**. First released: 1.0. Last updated: 2.0.

### Alias ID deprecated

(aliasIDDep). Alias id ID of an assay that is the same or similar. a comma separated list. *Part Type:* attribute *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 10 *Part Status:* **deprecated**. First released: 1.0. Last updated: 2.0.

### All domains

(allDo). Domain that specifies that it could apply to al domains; biological, chemical, and physical. *Part Type:* domain *Domain ID:* allDo *Speciment ID:* anySpecimen *Compartment Set:* anyCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 15 *Part Status:* active. First released: 2.0. Last updated: 2.0.

### Alleles

(allele). Measures and methods related to alleles. *Part Type:* class *Domain ID:* Bio *Speciment ID:* saSpecimen *Compartment Set:* anyCompartment *Group ID:* naGroup *Class ID:* allele *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet

## Parts

*Aggregation Scale ID:* see unit *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Allele unit set

(alleleUnitSet). Unit set for alleles. *Part Type:* unitSet *Domain ID:* naDomain *Specimen ID:* siSpecimen *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* alleleUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* categorical *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Access to all org

(allOrgs). If this is ‘no’, this data will not be available to any partner organization. If missing, data will be available to the all organizations. *Part Type:* attribute *Domain ID:* naDomain *Specimen ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* boolean *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 1 *Part Status:* **deprecated**. First released: 1.0. Last updated: 2.0.

## Aloh3 precipitation

(aloh3). Aloh3 precipitation *Part Type:* category *Domain ID:* Che *Specimen ID:* naSpecimenSet *Compartment Set:* waterCompartment *Group*

*ID: procGrp Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: genQualitySet Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

## Assay method id default depreciated

(amDefDep). Used as default when a new measurement is created for this lab. See ID in AssayMethod table. Deprecated as of version 2, please avoid use. Specify in type, or contact the PHES-ODM research team to add your specific item via a github issue (<https://github.com/Big-Life-Lab/PHES-ODM/issues>), or at phesd\_odm@ohri.ca *Part Type: attribute Domain ID: naDomain Speciment ID: naSpecimenSet Compartment Set: naCompartmentSet Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: depreciated. First released: 1.0. Last updated: 2.0.*

## Amicon ultrafiltration

(amiconUf). Amicon ultrafiltration *Part Type: category Domain ID: Che Speciment ID: naSpecimenSet Compartment Set: waterCompartment Group ID: procGrp Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: genQualitySet Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

## Parts

### Amicon filter, extract with MP96

(amiMP96). Nucleic acid extraction, usually used for the liquid fraction of a wastewater sample, using amicon filtration and using an MP96 for final extraction. *Part Type:* category *Domain ID:* Bio *Speciment ID:* naSpecimenSet *Compartment Set:* waterCompartment *Group ID:* procGrp *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* genQualitySet *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 10 *Part Status:* active. First released: 2.0. Last updated: 2.0.

### Amplicon sequencing

(amp). Specifies the amplicon strategy for genetic sequencing *Part Type:* category *Domain ID:* Bio *Speciment ID:* saSpecimen *Compartment Set:* anyCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* see unit *Minimum Value:* see unit *Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0. Last updated: 2.0.

### AND Boolean aggregation

(andBoo). “AND” aggregation. If all values in the aggregation is “TRUE” then the AND aggregation is also “TRUE”. If all values in the aggregation is “FALSE” then the AND aggregation is also “TRUE”. *Part Type:* aggregation *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set*

*ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: NA Minimum Value: NA Maximum Value: NA Minimum Length: NA Maximum Length: NA Part Status: active. First released: 2.0. Last updated: 2.0.*

### **Any compartment set**

(anyCompartmentSet). A compartment set for measures and methods in any compartment. *Part Type: compSet Domain ID: allDo Speciment ID: anySpecimen Compartment Set: anyCompartment Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 15 Part Status: active. First released: 2.0. Last updated: 2.0.*

### **Any specimen set**

(anySpecimenSet). A specimen set that includes any specimen. *Part Type: specimenSet Domain ID: naDomain Speciment ID: anySpecimen Compartment Set: naCompartmentSet Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: categorical Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

### **Area proportional sample**

(areaPr). An area proportional sample. Used for surface testing. *Part Type: category Domain ID: naDomain Speciment ID: naSpecimenSet Compartment Set: surfaceCompartment Group ID: colGrp Class ID: naClass*

## Parts

*Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Arrival temperature

(arTemp). The temperature of a sample upon arrival at the laboratory for analysis. *Part Type:* measure *Domain ID:* Phy *Speciment ID:* siSaSpecimen *Compartment Set:* waterCompartment *Group ID:* miscMeas *Class ID:* tempClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* temperatureUnitSet *Aggregation Scale ID:* see unit *Quality Set ID:* genQualitySet *Reference Link:* NA *Data Type:* see unit *Minimum Value:* see unit *Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 1.0. Last updated: 2.0.

## Use of the articV3 primer

(articV3). Initial implementation of an ARTIC bioinformatics platform for nanopore sequencing of nCoV2019 novel coronavirus; Artic Foundation v3 primer. *Part Type:* category *Domain ID:* Bio *Speciment ID:* saSpecimen *Compartment Set:* anyCompartment *Group ID:* procGrp *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Use of the articV4 primer

(articV4). Artic V4 sequencing primer for VOCs and VOIs. *Part Type:* category *Domain ID:* Bio *Specimen ID:* saSpecimen *Compartment Set:* anyCompartment *Group ID:* procGrp *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Assay ID

(asId). Links with the AssayMethod used to perform the analysis. Use instrument.ID for measures that are not viral measures. Deprecated as of version 2, please avoid use. Refer to methodID instead. *Part Type:* attribute *Domain ID:* naDomain *Specimen ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* **depreciated**. First released: 1.0. Last updated: 2.0.

## Attributes

(attribute). An attribute of a domain, specimen, compartment, or report-Table. Attributes are one of the three main components or ways to report environment surviellence data. The other two components are measures and methods. *Part Type:* partType *Domain ID:* naDomain *Specimen*

## Parts

*ID: naSpecimenSet Compartment Set: naCompartmentSet Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

## Bacteria unit set

(bacteriaUnitSet). Unit set for bacteria-related measurements. *Part Type: unitSet Domain ID: naDomain Speciment ID: naSpecimenSet Compartment Set: anyCompartment Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: bacteriaUnitSet Aggregation Scale ID: quantAggScale Quality Set ID: NA Reference Link: NA Data Type: categorical Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

## Miscellaneous bacteria group

(bactMisc). A group of measures/methods related to miscellaneous bacteria. The miscallenous bacteria are often have only one measure or method. When a bacteria has many measures, they will be given their own groupID in updated dictionary versions. *Part Type: group Domain ID: Bio Speciment ID: naSpecimenSet Compartment Set: anyCompartment Group ID: bactMisc Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: see unit Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*



**Bead beating, extract with MP96**

(bbMP96). Nucleic acid extraction, usually used for solid fraction of a wastewater sample, using bead beating and using an MP96 for final extraction. *Part Type:* category *Domain ID:* Bio *Speciment ID:* naSpecimenSet *Compartment Set:* waterCompartment *Group ID:* procGrp *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* genQualitySet *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 10 *Part Status:* active. First released: 2.0. Last updated: 2.0.

**bcov**

(bcov). Measure of the amount of bovine coronavirus. *Part Type:* measure *Domain ID:* Bio *Speciment ID:* saSpecimen *Compartment Set:* anyCompartment *Group ID:* virusMisc *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* geneticUnitSet *Aggregation Scale ID:* see unit *Quality Set ID:* genQualitySet *Reference Link:* NA *Data Type:* see unit *Minimum Value:* see unit *Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0. Last updated: 2.0.

**bcov culture spike target**

(bcovCul). Cultured bovine coronavirus is used as the recovery efficiency control target. *Part Type:* category *Domain ID:* Bio *Speciment ID:* saSpecimen *Compartment Set:* anyCompartment *Group ID:* procGrp *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA

## Parts

*Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

### **bcov vaccine spike target**

(bcovVac). The bovine coronavirus vaccine is used as the recovery efficiency control target. *Part Type:* category *Domain ID:* Bio *Speciment ID:* saSpecimen *Compartment Set:* anyCompartment *Group ID:* procGrp *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

### **Beef extract flocculation**

(beeExtractFloc). Beef extract flocculation. *Part Type:* category *Domain ID:* Che *Speciment ID:* naSpecimenSet *Compartment Set:* waterCompartment *Group ID:* procGrp *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* genQualitySet *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

### **Is Before**

(before). Specifies that the object step or protocol occurs before the subject step or protocol in the overall protocol container. Use only for protocolRelationships table relationshipID. *Part Type:* category *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:*

naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Beta

(beta). B.1.351 *Part Type*: measure *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: sarsCov2 *Class ID*: variant *Nomenclature ID*: who *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: geneticUnitSet *Aggregation Scale ID*: see unit *Quality Set ID*: seqQualitySet *Reference Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Biologic

(bio). A living organism or biological substance. *Part Type*: domain *Domain ID*: Bio *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Digital droplet emulsification PCR

(bioRadDdpcr). Describes a PCR analysis done using BioRad's digital droplet emulsification PCR technology. *Part Type*: category *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group*

## Parts

*ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: pcrQualitySet Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

## Binary Large Object (BLOB) data yype

(blob). The data type for Binary Large Object (BLOB) data. Only used for the dictionary entries of parts. *Part Type: dataType Domain ID: naDomain Speciment ID: naSpecimenSet Compartment Set: anyCompartment Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 15 Part Status: active. First released: 2.0. Last updated: 2.0.*

## Breadth of coverage ( $\geq 5\times$ depth)

(boc). Positions with read depth greater or equal to 5. Report as percentage of positions. *Part Type: unit Domain ID: Bio Speciment ID: saSpecimen Compartment Set: anyCompartment Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: quantAggScale Quality Set ID: genQualitySet Reference Link: NA Data Type: integer Minimum Value: 0 Maximum Value: 100 Minimum Length: NA Maximum Length: NA Part Status: active. First released: 2.0. Last updated: 2.0.*

## 5-Day carbonaceous biochemical oxygen demand

(bod5c). The quantity of oxygen utilized for the biochemical degradation of organic matter under standard laboratory procedures in five (5) days in the presence of a nitrification inhibitor, expressed in milligrams per litre (mg/l). *Part Type:* measure *Domain ID:* Bio *Speciment ID:* siSpecimen *Compartment Set:* waterCompartment *Group ID:* miscMeas *Class ID:* standardConc *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* stdConcentrationUnitSet *Aggregation Scale ID:* see unit *Quality Set ID:* genQualitySet *Reference Link:* <https://doi.org/10.1002/wer.1541> *Data Type:* see unit *Minimum Value:* see unit *Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 1.1. Last updated: 2.0.

## 5-day total biochemical oxygen demand

(bod5t). 5 day total biochemical oxygen demand. *Part Type:* measure *Domain ID:* Bio *Speciment ID:* siSpecimen *Compartment Set:* waterCompartment *Group ID:* miscMeas *Class ID:* standardConc *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* stdConcentrationUnitSet *Aggregation Scale ID:* see unit *Quality Set ID:* genQualitySet *Reference Link:* <https://doi.org/10.1002/wer.1541> *Data Type:* see unit *Minimum Value:* see unit *Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 1.1. Last updated: 2.0.

## Boolean data type

(boolean). The data type for boolean/binary data. Encoded as 'TRUE' or 'FALSE' *Part Type:* dataType *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:*

## Parts

naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 15 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Boolean aggregation set

(booleanAggrSet). Aggreagation set for boolean. *Part Type:* aggSet *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* categorical *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Boolean value set

(booleanSet). Set that contains the valid possible values for a boolean measure (TRUE or FALSE). *Part Type:* catSet *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* booleanSet *Unit Set ID:* NA *Aggregation Scale ID:* NA *Quality Set ID:* genQualitySet *Reference Link:* NA *Data Type:* categorical *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Boolean unit set

(booleanUnitSet). Unit set for boolean. *Part Type:* unitSet *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* categorical *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Bovine respiratory syncytial virus group

(brsv). Bovine respiratory syncytial virus. *Part Type:* measure *Domain ID:* Bio *Speciment ID:* naSpecimenSet *Compartment Set:* anyCompartment *Group ID:* virusMisc *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* genQualitySet *Reference Link:* NA *Data Type:* varchar *Minimum Value:* see unit *Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0. Last updated: 2.0.

## brsv culture spike target

(brsvCul). Cultured bovine respiratory syncytial virus (BRSV) is used as the recovery efficiency control target. *Part Type:* category *Domain ID:* Bio *Speciment ID:* saSpecimen *Compartment Set:* anyCompartment *Group ID:* procGrp *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Parts

### BRSV-N

(brsvN). bovine respiratory syncytial virus capsid protein gene region *Part Type*: measure *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: virusMisc *Class ID*: allele *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: geneticUnitSet *Aggregation Scale ID*: see unit *Quality Set ID*: genQualitySet *Reference Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 1.0. Last updated: 2.0.

### brsv vaccine spike target

(brsvVac). The bovine respiratory syncytial virus (BRSV) vaccine is used as the recovery efficiency control target. *Part Type*: category *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: procGrp *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

### Branch sewer pipline

(bSwrPpl). Specifies a site type that is collection pipe that run lateral to other municipal sewer lines, allowing drainage into the main sewer. *Part Type*: category *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: waterCompartment *Group ID*: colGrp *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*:



NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 1.0. Last updated: 2.0.

## Building cleanout

(buildCO). Specifies a site type that is a capped pipe that connects to a building's main sewer line. *Part Type*: category *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: waterCompartment *Group ID*: colGrp *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 1.0. Last updated: 2.0.

## Capacity unit set

(capacityUnitSet). Unit set for capacity measurements. *Part Type*: unitSet *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: waterCompartment *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: capacityUnitSet *Aggregation Scale ID*: quantAggScale *Quality Set ID*: NA *Reference Link*: NA *Data Type*: categorical *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Case report date

(caRepDate). Date that the numbers were reported publicly. Typically, reported data and this measure is most commonly reported and used. *Part*

## Parts

*Type:* category *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* humanCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* datetime *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* **deprecated**. First released: 1.0. Last updated: 2.0.

## Categorical date type

(categorical). The data type for categorical data. Only used for the dictionary entries of parts. *Part Type:* dataType *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* anyCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 15 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Categories

(category). A discrete list of values that can be reported for a measure, method or attribute. A use-case example of categories would be how they are used to record the site where a measure is taken (*partID* = *geoType*). For the *geoType* attribute there are different type of sites where samples can be taken: a wastewater treatment plant, airplane holding tank, wastewater pumping station, etc. Each of these site types is recorded as a category that can be identified in *categorySetID* = *sTypeCatSets* *Part Type:* part-Type *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA

*Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Category sets

(catSet). A set of categories. For example, site type has a list of different sites, such as a wastewater treatment plant, a septic tank, or a pumping station. Only used for the dictionary entries of parts. *Part Type:* partType *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* anyCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 15 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Category set ID

(catSetID). The category set that corresponds to a given part. A set of categories used for a method or measure. Only applicable for categorical fields, and the categories that populate them. *Part Type:* attribute *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* categorical *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 12 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Parts

### Long term acute care hospital

(ccc). Acute care hospitals, or complex continuing care, that provide care for patients with average length of stay longer than 25 days. *Part Type*: category *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: anyCompartment *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

### Child day care

(cdc). Child day care facility. *Part Type*: category *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: anyCompartment *Group ID*: colGrp *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

### Degrees Celcius

(cel). Degrees Celsius. *Part Type*: unit *Domain ID*: Phy *Speciment ID*: siSaSpecimen *Compartment Set*: anyCompartment *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: quantAggScale *Quality Set ID*: genQualitySet *Reference Link*: NA *Data Type*: float *Minimum Value*: -60 *Maximum Value*: 100 *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 1.1. Last updated: 2.0.

## Centrifugation

(cent). Describes solid separation from a wastewater sample via centrifugation. Likely connected to other method steps prior to analysis. *Part Type:* category *Domain ID:* allDo *Speciment ID:* saSpecimen *Compartment Set:* waterCompartment *Group ID:* procGrp *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Centricon ultrafiltration

(centriconUf). Centricon ultrafiltration. *Part Type:* category *Domain ID:* Che *Speciment ID:* naSpecimenSet *Compartment Set:* waterCompartment *Group ID:* procGrp *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* genQualitySet *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Ceres nanotrap

(ceres). Ceres nanotrap. *Part Type:* category *Domain ID:* Che *Speciment ID:* naSpecimenSet *Compartment Set:* waterCompartment *Group ID:* procGrp *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* genQualitySet *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum*

## Parts

*Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

## CFU per 100 ml

(cfu). Colony forming units per 100 ml of filtered sample. *Part Type: unit Domain ID: Bio Specimen ID: saSpecimen Compartment Set: any-Compartment Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: quantAggScale Quality Set ID: gen-QualitySet Reference Link: NA Data Type: float Minimum Value: 0 Maximum Value: NA Minimum Length: NA Maximum Length: NA Part Status: active. First released: 1.1. Last updated: 2.0.*

## Changes column

(changes). A column for recording the changes from a previous version. Use this column as a short-hand change log for dictionary development. *Part Type: tableSupport Domain ID: naDomain Specimen ID: naSpecimenSet Compartment Set: naCompartmentSet Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

## Chemical

(che). A chemical compound. *Part Type: domain Domain ID: Che Specimen ID: anySpecimen Compartment Set: naCompartmentSet Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation*

*Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

## **Chemagic viral dna/rna 300 kit**

(chemVir). Nucleic acid extraction performed using the chemagic viral dna/rna 300 kit. *Part Type: category Domain ID: Bio Speciment ID: saSpecimen Compartment Set: anyCompartment Group ID: procGrp Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

## **Child relationship**

(child). Indicated that this is a sample generated from (an)other sample(s) either because of pooling or sub-sampling. *Part Type: category Domain ID: naDomain Speciment ID: naSpecimenSet Compartment Set: naCompartmentSet Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 1.0. Last updated: 2.0.*

## **City**

(city). The city where a site or organization is located; part of the address. *Part Type: attribute Domain ID: naDomain Speciment ID: naSpecimenSet Compartment Set: naCompartmentSet Group ID: naGroup Class*

## Parts

*ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 1.0. Last updated: 2.0.*

## Clarified sample

(clari). Clarified sample. *Part Type: category Domain ID: naDomain Speciment ID: naSpecimenSet Compartment Set: waterCompartment Group ID: procGrp Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: sampleQualitySet Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 1.0. Last updated: 2.0.*

## Classes

(class). A class is a collection of one or more related measures or methods within a group. A group can have one more more classes to describe different parts or the class. See partID = classID. *Part Type: partType Domain ID: naDomain Speciment ID: naSpecimenSet Compartment Set: naCompartmentSet Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*



## Class

(classID). A unique identifier for a class, which is akin to a sub-group; it's a way of grouping parts within a given groupID. A group can have one or more classes to describe different parts of the class. Currently, class is only used for biologics. For example, SARS-CoV-2 is a group of measures with the following classes of allele, variant, mutation, sequence, and protein. *Part Type:* attribute *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* categorical *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Cloudy

(cloudy). Qualitative category for the weather measure, specifying an overcast day with no rain. *Part Type:* category *Domain ID:* Phy *Speciment ID:* siSpecimen *Compartment Set:* anyCompartment *Group ID:* siteFeat *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Centimetres

(cm). Unit part for the SI unit of centimetres. *Part Type:* unit *Domain ID:* Phy *Speciment ID:* siSpecimen *Compartment Set:* anyCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet

## Parts

*Aggregation Scale ID:* quantAggScale *Quality Set ID:* NA *Reference Link:* NA *Data Type:* float *Minimum Value:* 0 *Maximum Value:* NA *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Carbon Dioxide

(co2). A measure of an amount or concentraion of carbon dioxide. *Part Type:* measure *Domain ID:* Che *Speciment ID:* siSaSpecimen *Compartment Set:* waterCompartment *Group ID:* miscMeas *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* dissGasUnitSet *Aggregation Scale ID:* see unit *Quality Set ID:* genQualitySet *Reference Link:* NA *Data Type:* see unit *Minimum Value:* see unit *Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Chemical Oxygen Demand

(cod). Chemical oxygen demand. *Part Type:* measure *Domain ID:* Che *Speciment ID:* siSaSpecimen *Compartment Set:* waterCompartment *Group ID:* miscMeas *Class ID:* standardConc *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* stdConcentrationUnitSet *Aggregation Scale ID:* see unit *Quality Set ID:* genQualitySet *Reference Link:* NA *Data Type:* see unit *Minimum Value:* see unit *Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 1.0. Last updated: 2.0.

## Collection group

(colGrp). A group of measurement-like attributes related to sample collection. *Part Type:* group *Domain ID:* allDo *Speciment ID:* saSpecimen *Compartment Set:* anyCompartment *Group ID:* colGrp *Class ID:* naClass

*Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* see unit *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Collection date time

(collDT). for grab samples this is the date, time and timezone the sample was taken. *Part Type:* attribute *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* datetime *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 1.0. Last updated: 2.0.

## Collection date time end

(collDTEnd). For integrated time average samples this is the date, time and timezone the sample was finished being taken. *Part Type:* attribute *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* datetime *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 1.0. Last updated: 2.0.

### Collection date time start

(collDTStart). For integrated time averaged samples this is the date, time and timezone the sample was started being taken. *Part Type:* attribute *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* datetime *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 1.0. Last updated: 2.0.

### Sample collection category set

(collectCatSet). The category set for sample collection. *Part Type:* catSet *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* anyCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* collectCatSet *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* categorical *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

### Collection number

(collNum). The number of subsamples that were combined to create the sample. Use NA for continuous, proportional or passive sampling. *Part Type:* attribute *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* colGrp *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* genQualitySet *Reference Link:* NA *Data Type:* integer *Minimum*

*Value:* 1 *Maximum Value:* NA *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Collection number and period

(collNumPer). Composite collection number.period. This a composite measure that combines **collection period** (collPer) and **collection number** (collNum). Collection number and period can be used to reduce the number of table headings during data collection. In data storage, collNum and collPeriod should be transformed to collPer and collNum. For Grab sample, Surface swab, or Area proportional sample just enter 1

In case of Composite, Flow-proportional collection, the number of subsamples followed by a dot, followed by the period of the sampling, in hours. For example, for 4 composite subsamples covering a 8 hours period, the entry would be 4.2 For time-proportional 24 subsamples collected every hour, the entry would be 24.1 For volume-proportional, the entry for 24 subsamples collected over 24 hours should be 24.24, in this case the period part of the entry should be understood as the total collection time instead of the periodicity of the collection.

For a COSCA ball or Moore swab collecting for 24 hours, the entry would be 1.24 *Part Type:* attribute *Domain ID:* naDomain *Speciment ID:* saSpecimen *Compartment Set:* naCompartment *Group ID:* colGrp *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* genQualitySet *Reference Link:* NA *Data Type:* varchar *Minimum Value:* 1:1 *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 6 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Parts

### Collection period

(collPer). Collection period. The time period over which the sample was collected, in hours. Alternatively, use collectionStart and collectionEnd. Examples: 1 hour, 6 hours, 24 hours *Part Type*: attribute *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: colGrp *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: sampleQualitySet *Reference Link*: NA *Data Type*: float *Minimum Value*: 1 *Maximum Value*: NA *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

### Sample collection type

(collType). The type of collection. *Part Type*: attribute *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: anyCompartment *Group ID*: colGrp *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: collectCatSet *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: sampleQualitySet *Reference Link*: NA *Data Type*: categorical *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 12 *Part Status*: active. First released: 1.0. Last updated: 2.0.

### Co-located sample

(colocated). Second or multiples samples collected at same location but different time (water, air) or at a nearby location (soil, sediment). Sent blind to laboratory. *Part Type*: category *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group*

*ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

## Column name depreciated

(columnNameDep). Name for the column Depreciated in ODM version 2. Look-up tables are now incorporated into parts and sets. *Part Type: attribute Domain ID: naDomain Speciment ID: naSpecimenSet Compartment Set: naCompartmentSet Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: depreciated. First released: 1.0. Last updated: 2.0.*

## Composite sample - archival

(comp). A composite sample, usually generated by an autosampler. This is intended for use in updating and mapping archival data into the newest version of the ODM. Generally, autosamplers do time or flow-proportional sampling, and so those collection methods should be used instead. This is only for composite/autosampler samples where these additional details have not yet been specified. Use collectionPeriod to describe how many hours the sample was taken, and collectionNum to record the number of samples. *Part Type: category Domain ID: naDomain Speciment ID: saSpecimen Compartment Set: waterCompartment Group ID: colGrp Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID:*

## Parts

NA *Quality Set ID*: sampleQualitySet *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 1.0. Last updated: 2.0.

## Composite grab sample of 3

(comp3). A grab-composite sample composed of 3 separate grab samples. *Part Type*: category *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: waterCompartment *Group ID*: colGrp *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: sampleQualitySet *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: **depreciated**. First released: 1.0. Last updated: 2.0.

## Composite grab sample of 3 depreciate

(comp3dep). A grab-composite sample composed of 3 separate grab samples. Deprecated in version 2, please do not use. *Part Type*: category *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: waterCompartment *Group ID*: colGrp *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: sampleQualitySet *Reference Link*: NA *Data Type*: NA *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: **depreciated**. First released: 1.0. Last updated: 2.0.



### Composite 3hr grab sample

(comp3h). A 3-hour composite with 3 grab samples each taken once per hour, generally manually performed. *Part Type:* category *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* waterCompartment *Group ID:* colGrp *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* sampleQualitySet *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* **deprecated**. First released: 1.0. Last updated: 2.0.

### Composite 3hr grab sample depreciate

(comp3hdep). A 3-hour composite with 3 grab samples each taken once per hour, generally manually performed. Deprecated in version 2, please do not use. *Part Type:* category *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* waterCompartment *Group ID:* colGrp *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* sampleQualitySet *Reference Link:* NA *Data Type:* NA *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* **deprecated**. First released: 1.0. Last updated: 2.0.

### Composite 8hr grab sample depreciated

(comp8h). An 8-hour composite with 8 grab samples each taken once per hour, generally manually performed. Deprecated in version 2, please do not use. *Part Type:* category *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* waterCompartment *Group ID:* colGrp *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:*

## Parts

NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: sampleQualitySet *Reference Link*: NA *Data Type*: NA *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: **depreciated**. First released: 1.0. Last updated: 2.0.

### Composite 8hr grab sample depreciated

(comp8hDep). A 8-hour composite with 8 grab samples each taken once per hour, generally manually performed. *Part Type*: category *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: waterCompartment *Group ID*: colGrp *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: sampleQualitySet *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: **depreciated**. First released: 1.0. Last updated: 2.0.

## Compartments

(compartment). The substance from which a sample was taken. See part-Type = compartment for all possibilities. For example, wastewater has component of “water”. Most applicable for measures, methods, units, and aggregations. *Part Type*: partType *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Compartment

(compID). The attribute identifying the substance from which where a sample was taken. For more information, see `partID = compartment`.  
*Part Type:* attribute *Domain ID:* naDomain *Speciment ID:* naSpecimenSet  
*Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass  
*Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA  
*Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA  
*Reference Link:* NA *Data Type:* categorical *Minimum Value:* NA  
*Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active.  
 First released: 2.0. Last updated: 2.0.

## Compartment sets

(compSet). Sets of compartments. Compartment sets are used to identify when a measure can be recorded for more than one compartment. For example, SARS-CoV-2 can be measured in people (humans), water, surface, or air. Sets are lists of input values. Each input value within a set is a part (has a `partID`) that can be reused between sets. For example, a set A could contain the values of ‘yes’ and ‘no’; and set B could contain the values of ‘yes’, ‘no’, and ‘maybe.’ `partTypes` with sets include aggregations, compartments, missingness, quality flags, specimens, and units. Measures with categories and `dataTypes` have their own specific category sets (`catSetID`) because their input values are unique and are not reused.  
*Part Type:* partType *Domain ID:* naDomain *Speciment ID:* naSpecimenSet  
*Compartment Set:* anyCompartment *Group ID:* naGroup *Class ID:* naClass  
*Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA  
*Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA  
*Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA  
*Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 15 *Part Status:* active.  
 First released: 2.0. Last updated: 2.0.

## Parts

### Sample concentrate

(conc). Sample concentrate. *Part Type*: category *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: anyCompartment *Group ID*: procGrp *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 1.0. Last updated: 2.0.

### Confirmed Cases Case report date

(conCase). Date that the numbers were reported publicly for a confirmed case. Typically, reported data and this measure is most commonly reported and used. *Part Type*: unit *Domain ID*: Bio *Speciment ID*: poSpecimen *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: quantAggScale *Quality Set ID*: genQualitySet *Reference Link*: NA *Data Type*: dateTime *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 1.0. Last updated: 2.0.

### Is concurrent to

(concurrent). Specifies that the object step or protocol occurs at the same time as the subject step or protocol in the overall protocol container. Use only for protocolRelationships table relationshipID. *Part Type*: category *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit*

*Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Water conductivity

(cond). Measurement of conductivity of sample or site. *Part Type:* measure *Domain ID:* Phy *Speciment ID:* siSaSpecimen *Compartment Set:* waterCompartment *Group ID:* siteFeat *Class ID:* conductivityClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* conductivityUnitSet *Aggregation Scale ID:* see unit *Quality Set ID:* genQualitySet *Reference Link:* NA *Data Type:* see unit *Minimum Value:* see unit *Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 1.0. Last updated: 2.0.

## Conductivity unit set

(conductivityUnitSet). Unit set related to conductivity measurements. *Part Type:* unitSet *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* anyCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* conductivityUnitSet *Aggregation Scale ID:* quantAggScale *Quality Set ID:* NA *Reference Link:* NA *Data Type:* categorical *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Number of confirmed cases

(conf). Number of confirmed cases. *Part Type:* unit *Domain ID:* Bio *Speciment ID:* poSpecimen *Compartment Set:* naCompartmentSet *Group ID:*

## Parts

naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* genQualitySet *Reference Link:* NA *Data Type:* integer *Minimum Value:* 0 *Maximum Value:* NA *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 1.0. Last updated: 2.0.

## Confirmed cases episode date

(confEp). Episode date is the earliest of onset, test or reported date for a confirmed case. *Part Type:* unit *Domain ID:* Bio *Speciment ID:* poSpecimen *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* quantAggScale *Quality Set ID:* genQualitySet *Reference Link:* NA *Data Type:* dateTime *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 1.0. Last updated: 2.0.

## Confirmed Cases Onset date

(confOn). Earliest that symptoms were reported for a confirmed case. This data is often not known and reported. In lieu, episode is used. *Part Type:* unit *Domain ID:* Bio *Speciment ID:* poSpecimen *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* quantAggScale *Quality Set ID:* genQualitySet *Reference Link:* NA *Data Type:* dateTime *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 1.0. Last updated: 2.0.

## Contact

(contactID). A unique identifier for a given contact person. *Part Type:* attribute *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Contact name

(contactName). Contact person or group, for the lab. Depreciated in ODM version 2. see ‘name’ *Part Type:* attribute *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 100 *Part Status:* **depreciated**. First released: 1.0. Last updated: 2.0.

## Contact table

(contacts). The table that contains information about a contact; a person who is the contact of a site or laboratory. adapt from version 1 documentation *Part Type:* table *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* programDescr *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum*

## Parts

*Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Contacts table column order

(contactsOrder). Specifies the order of the columns in a Contacts table. *Part Type:* tableSupport *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* integer *Minimum Value:* 1 *Maximum Value:* NA *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Requirement

(contactsRequired). Specifies the columns required in a Contacts table. *Part Type:* tableSupport *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Contact table set

(contactTableSet). Tables are where measures, methods and attributes are recorded. Tables represent the main entities of the environmental surveillance. *Part Type:* dictSet *Domain ID:* naDomain *Speciment ID:* saSpecimen *Compartment Set:* naCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA



*Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: NA Maximum Length: NA Part Status: active. First released: 2.0.0. Last updated: 2.0.0.*

## Confirmed Cases Test date

(conTest). Date that the covid-19 test was performed for a confirmed case. *Part Type: unit Domain ID: Bio Speciment ID: poSpecimen Compartment Set: naCompartmentSet Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: quantAggScale Quality Set ID: genQualitySet Reference Link: NA Data Type: dateTime Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 1.0. Last updated: 2.0.*

## Correctional Facility

(corFcil). Correctional facility *Part Type: category Domain ID: naDomain Speciment ID: naSpecimenSet Compartment Set: anyCompartment Group ID: colGrp Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 1.0. Last updated: 2.0.*

## COSCa ball

(cosca). COSCa passive sampling device. Use collectionPeriod to describe how many hours the ball was used to collect the sample *Part Type: category Domain ID: naDomain Speciment ID: naSpecimenSet Compartment Set: waterCompartment Group ID:*

## Parts

*colGrp Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: <https://pubs.rsc.org/en/content/articlelanding/2021/ew/d1ew00207d> Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

## Country

(country). The country where a site or organization is located; part of the address. *Part Type: attribute Domain ID: naDomain Specimen ID: naSpecimenSet Compartment Set: naCompartmentSet Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 1.0. Last updated: 2.0.*

## Covid-19

(cov). Covid-19 infection. Any form of Covid-19 human infection - including testing for Covid-19, symptomatic Covid-19, asymptomatic Covid-19, hospitalized Covid-19, long-Covid-19, etc. If needed, define the specific form Covid-19 with units. See populationUnits. *Part Type: measure Domain ID: Bio Specimen ID: poSpecimen Compartment Set: humanCompartment Group ID: sarsCov2 Class ID: disease Nomenclature ID: ICD Ontology Reference: NA Category Set ID: NA Unit Set ID: populationUnitSet Aggregation Scale ID: see unit Quality Set ID: genQualitySet Reference Link: NA Data Type: varchar Minimum Value: see unit Maximum Value: see unit Minimum Length: NA Maximum Length: NA Part Status: active. First released: 2.0. Last updated: 2.0.*

## SARS-CoV-2 measure

(cov2Me). Measure the amount of SARS-CoV-2 virus. This measure should only be used if there is no other SARS-CoV-2 measure. See groupID = sarsCov2. Use a note to describe the specific measure used. *Part Type*: measure *Domain ID*: Bio *Speciment ID*: anySpecimen *Compartment Set*: anyCompartment *Group ID*: sarsCov2 *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: geneticUnitSet *Aggregation Scale ID*: see unit *Quality Set ID*: genQualitySet *Reference Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

## SARS-CoV-2-B.1.1.7

(covB117). Variant B.1.1.7 of the SARS-CoV-2 virus. *Part Type*: measure *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: sarsCov2 *Class ID*: variant *Nomenclature ID*: pangolin *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: geneticUnitSet *Aggregation Scale ID*: see unit *Quality Set ID*: seqQualitySet *Reference Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 1.1. Last updated: 2.0.

## SARS-CoV-2-B.1.351

(covB135). Variant B.1.351 of the SARS-CoV-2 virus. *Part Type*: measure *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: sarsCov2 *Class ID*: variant *Nomenclature ID*: pangolin *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: geneticUnitSet *Aggregation Scale ID*: see unit *Quality Set ID*: seqQualitySet

## Parts

*Reference Link:* NA *Data Type:* see unit *Minimum Value:* see unit *Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 1.1. Last updated: 2.0.

### SARS-CoV-2-E

(covE). SARS-CoV-2 E gene. *Part Type:* measure *Domain ID:* Bio *Speciment ID:* saSpecimen *Compartment Set:* anyCompartment *Group ID:* sarsCov2 *Class ID:* allele *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* geneticUnitSet *Aggregation Scale ID:* see unit *Quality Set ID:* genQualitySet *Reference Link:* NA *Data Type:* see unit *Minimum Value:* see unit *Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 1.0. Last updated: 2.0.

### SARS-CoV-2-N1

(covN1). SARS-CoV-2 nucleocapsid gene, allele 1. *Part Type:* measure *Domain ID:* Bio *Speciment ID:* saSpecimen *Compartment Set:* anyCompartment *Group ID:* sarsCov2 *Class ID:* allele *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* geneticUnitSet *Aggregation Scale ID:* see unit *Quality Set ID:* genQualitySet *Reference Link:* NA *Data Type:* see unit *Minimum Value:* see unit *Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 1.0. Last updated: 2.0.

### SARS-CoV-2-N2

(covN2). SARS-CoV-2 nucleocapsid gene, allele 2. *Part Type:* measure *Domain ID:* Bio *Speciment ID:* saSpecimen *Compartment Set:* anyCompartment *Group ID:* sarsCov2 *Class ID:* allele *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* ge-

neticUnitSet *Aggregation Scale ID*: see unit *Quality Set ID*: genQualitySet  
*Reference Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 1.0. Last updated: 2.0.

### SARS-CoV-2-N3

(covN3). SARS-CoV-2 nucleocapsid gene, allele 3. *Part Type*: measure *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: sarsCov2 *Class ID*: allele *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: geneticUnitSet *Aggregation Scale ID*: see unit *Quality Set ID*: genQualitySet  
*Reference Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 1.0. Last updated: 2.0.

### SARS-CoV-2-P.1

(covP1). Variant P.1 of the SARS-CoV-2 virus. *Part Type*: measure *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: sarsCov2 *Class ID*: variant *Nomenclature ID*: pangolin *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: geneticUnitSet *Aggregation Scale ID*: see unit *Quality Set ID*: seqQualitySet *Reference Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 1.1. Last updated: 2.0.

### SARS-CoV-2-RdRp

(covRdRp). SARS-CoV-2 RdRp gene. *Part Type*: measure *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*:

## Parts

sarsCov2 *Class ID*: allele *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: geneticUnitSet *Aggregation Scale ID*: see unit *Quality Set ID*: genQualitySet *Reference Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 1.0. Last updated: 2.0.

## Covid-19 Population Measure date

(cphDate). date of reporting for covid-19 measure. Depreciated in ODM version 2. The measure identification is now measureReportID with report dates as for any measure report. *Part Type*: attribute *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: **depreciated**. First released: 1.0. Last updated: 2.0.

## Cphd ID

(cphid). Unique identifier for the table. Depreciated in ODM version 2. The measure identification is now measureReportID. *Part Type*: attribute *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: **depreciated**. First released: 1.0. Last updated: 2.0.

**crAssphage-N**

(cra). crAssphage virus capsid protein gene region *Part Type*: measure *Domain ID*: Bio *Specimen ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: virusMisc *Class ID*: allele *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: geneticUnitSet *Aggregation Scale ID*: see unit *Quality Set ID*: genQualitySet *Reference Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 1.0. Last updated: 2.0.

**Crosswal table set**

(crosswalkTableSet). Tables used to translate to and from other environmental dictionaries and models. *Part Type*: dictSet *Domain ID*: naDomain *Specimen ID*: saSpecimen *Compartment Set*: naCompartment *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0.0. Last updated: 2.0.0.

**Cycle threshold or Quantification cycle (Ct or Cq)**

(ct). Cycle thresholds in a PCR assay. *Part Type*: measure *Domain ID*: Bio *Specimen ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: procGrp *Class ID*: standardCurve *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: quantAggScale *Quality Set ID*: pcrQualitySet *Reference Link*: NA *Data Type*: float *Minimum Value*: 0 *Maximum Value*:

## Parts

NA *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active.  
First released: 1.0. Last updated: 2.0.

## Cumulative count

(cuCo). Units for describing a population measure of a cumulative count of cases of a given disease. Unit for a population or disease measure to explain population-level clinical effects. *Part Type*: unit *Domain ID*: Bio *Speciment ID*: poSpecimen *Compartment Set*: anyCompartment *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: quantAggScale *Quality Set ID*: NA *Reference Link*: NA *Data Type*: integer *Minimum Value*: 0 *Maximum Value*: NA *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Custody Contact ID

(custodyCont). A unique identifier for data custodians. *Part Type*: attribute *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Data custodian

(custodyID). The data custodian of a database. Use Organization ID to populate this field, and the organizations table to describe contact information and other details for the data custodian. *Part Type*: attribute



*Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

### **d377y delta-variant gene target**

(d377y). d377y delta-variant gene target. *Part Type:* measure *Domain ID:* Bio *Speciment ID:* saSpecimen *Compartment Set:* anyCompartment *Group ID:* sarsCov2 *Class ID:* mutation *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* geneticUnitSet *Aggregation Scale ID:* see unit *Quality Set ID:* pcrQualitySet *Reference Link:* NA *Data Type:* see unit *Minimum Value:* see unit *Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0. Last updated: 2.0.

### **d3g omicron-variant gene target { #d3g }**

(d3g ). d3g omicron-variant gene target. *Part Type:* measure *Domain ID:* Bio *Speciment ID:* saSpecimen *Compartment Set:* anyCompartment *Group ID:* sarsCov2 *Class ID:* mutation *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* geneticUnitSet *Aggregation Scale ID:* see unit *Quality Set ID:* pcrQualitySet *Reference Link:* NA *Data Type:* see unit *Minimum Value:* see unit *Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0. Last updated: 2.0.

### **d63g delta-variant gene target**

(d63g). d63g delta-variant gene target. *Part Type*: measure *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: sarsCov2 *Class ID*: mutation *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: geneticUnitSet *Aggregation Scale ID*: see unit *Quality Set ID*: pcrQualitySet *Reference Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

### **d796y omicron-variant gene target { #d796y }**

(d796y ). d796y omicron-variant gene target. *Part Type*: measure *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: sarsCov2 *Class ID*: mutation *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: geneticUnitSet *Aggregation Scale ID*: see unit *Quality Set ID*: pcrQualitySet *Reference Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

### **d950n delta-variant gene target**

(d950n). d950n delta-variant gene target. *Part Type*: measure *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: sarsCov2 *Class ID*: mutation *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: geneticUnitSet *Aggregation Scale ID*: see unit *Quality Set ID*: pcrQualitySet *Reference Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Daily count

(daiCo). Units for describing a population measure of a daily count of new cases of a given disease. Unit for a population or disease measure to explain population-level clinical effects. *Part Type:* unit *Domain ID:* Bio *Speciment ID:* poSpecimen *Compartment Set:* anyCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* quantAggScale *Quality Set ID:* NA *Reference Link:* NA *Data Type:* integer *Minimum Value:* 0 *Maximum Value:* NA *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Dataset creation date

(datasetDate). Specifies the date a given dataset was created. *Part Type:* attribute *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* datetime *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Dataset ID

(datasetID). The name of the dataset that stores information for MeasureReport, SampleReport and other reporting tables. Where possible, datasetID name should correspond the original data custodian responsible for generating environmental data. (suggestion for a default name convention.) *Part Type:* attribute *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class*

## Parts

*ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

## Dataset table

(datasets). A report table for capturing details about data's parental data set and data custodians. Supplying attribution for data collectors. *Part Type: table Domain ID: naDomain Speciment ID: naSpecimenSet Compartment Set: naCompartmentSet Group ID: naGroup Class ID: programDescr Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

## Datasets table column order

(datasetsOrder). Specifies the order of the columns in a Datasets table. *Part Type: tableSupport Domain ID: naDomain Speciment ID: naSpecimenSet Compartment Set: naCompartmentSet Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: integer Minimum Value: 1 Maximum Value: NA Minimum Length: NA Maximum Length: NA Part Status: active. First released: 2.0. Last updated: 2.0.*

## Requirement

(datasetsRequired). Specifies the columns required in a Datasets table.  
*Part Type:* tableSupport *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Data types

(dataType). The data type for a part. Data types used in the ODM include: varchar, boolean, float, category, date, time, datetime, url, email. dataType corresponds the the entry or cell within a data table, most commonly within a report table. If the data entry has a unit, then the dataType corresponds to the unit and the dataType refers to 'unit'. If the data entry is a category, then the dataType refers to 'category'. All categories are varchar. Otherwise the dataType is identified within the part entry. TBA: dataType for dictionary. *Part Type:* partType *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 12 *Part Status:* active. First released: 2.0. Last updated: 2.0.

Parts

## Date

(date). Date date on which the assayMethod was created or updated (for version update). *Part Type:* attribute *Domain ID:* naDomain *Specimen ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* datetime *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* **deprecated**. First released: 1.0. Last updated: 2.0.

## Datetime date type

(datetime). The data type for date and time data. Only used for the dictionary entries of parts. *Part Type:* dataType *Domain ID:* naDomain *Specimen ID:* naSpecimenSet *Compartment Set:* anyCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 15 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## ddcov\_e sars-cov-2 gene target

(ddcovE). ddcov\_e sars-cov-2 gene target. *Part Type:* measure *Domain ID:* Bio *Speciment ID:* saSpecimen *Compartment Set:* anyCompartment *Group ID:* sarsCov2 *Class ID:* mutation *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* geneticUnitSet *Aggregation Scale ID:* see unit *Quality Set ID:* pcrQualitySet

*Reference Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

### **ddcov\_n sars-cov-2 gene target { #ddcovN }**

(ddcovN). ddcov\_n sars-cov-2 gene target. *Part Type*: measure *Domain ID*: Bio *Specimen ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: sarsCov2 *Class ID*: mutation *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: geneticUnitSet *Aggregation Scale ID*: see unit *Quality Set ID*: pcrQualitySet *Reference Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

### **Deaths**

(death). Units for describing a population measure of patients who have died from a given cause. Unit for a population or disease measure to explain population-level clinical effects. *Part Type*: unit *Domain ID*: Bio *Specimen ID*: poSpecimen *Compartment Set*: anyCompartment *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: quantAggScale *Quality Set ID*: genQualitySet *Reference Link*: NA *Data Type*: integer *Minimum Value*: 0 *Maximum Value*: NA *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

### **del143/145**

(del143). 143 or 145 deletion omicron-variant gene target. *Part Type*: measure *Domain ID*: Bio *Specimen ID*: saSpecimen *Compartment Set*: any-

## Parts

Compartment *Group ID*: sarsCov2 *Class ID*: mutation *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: geneticUnitSet *Aggregation Scale ID*: see unit *Quality Set ID*: pcrQualitySet *Reference Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

### **del 157/158**

(del157). 157 or 158 deletion delta-variant gene target *Part Type*: measure *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: sarsCov2 *Class ID*: mutation *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: geneticUnitSet *Aggregation Scale ID*: see unit *Quality Set ID*: pcrQualitySet *Reference Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

### **del2084/2084**

(del2084). 2084 or 2084 deletion omicron-variant gene target. *Part Type*: measure *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: sarsCov2 *Class ID*: mutation *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: geneticUnitSet *Aggregation Scale ID*: see unit *Quality Set ID*: pcrQualitySet *Reference Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.



**del212/212**

(del212). 212 or 212 deletion omicron-variant gene target. *Part Type*: measure *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: sarsCov2 *Class ID*: mutation *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: geneticUnitSet *Aggregation Scale ID*: see unit *Quality Set ID*: pcrQualitySet *Reference Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

**del3674/3676**

(del3674). 3674 or 3676 deletion omicron-variant gene target. *Part Type*: measure *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: sarsCov2 *Class ID*: mutation *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: geneticUnitSet *Aggregation Scale ID*: see unit *Quality Set ID*: pcrQualitySet *Reference Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

**del69/70**

(del6970). 69 or 70 deletion omicron-variant gene target. *Part Type*: measure *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: sarsCov2 *Class ID*: mutation *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: geneticUnitSet *Aggregation Scale ID*: see unit *Quality Set ID*: pcrQualitySet *Reference Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Parts

### Delta

(delta). B.1.617.2 *Part Type*: measure *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: sarsCov2 *Class ID*: variant *Nomenclature ID*: who *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: geneticUnitSet *Aggregation Scale ID*: see unit *Quality Set ID*: seqQualitySet *Reference Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

### Deprecated

(deprecated). Indicator to say that a part is no longer in current use in the model. See partID = status *Part Type*: category *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

### Derived sample

(derived). Specifies a sample that is derrived or made from another sample or material. *Part Type*: category *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale*

*ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

## Description

(descr). A detailed description as an attribute for describing results or program elements. A description of the part that serves a clear presentation of the part to a wide audience including technical and not technical staff. A description should allow any person who generates environment surveillance data to know how to identify how to record their data elements in the ODM. partReference can be used to further describe a part. *Part Type: attribute Domain ID: naDomain Speciment ID: naSpecimenSet Compartment Set: naCompartmentSet Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 200 Part Status: active. First released: 2.0. Last updated: 2.0.*

## Description of change

(descrChange). A description of change in a part from the previous version. *Part Type: tableSupport Domain ID: naDomain Speciment ID: naSpecimenSet Compartment Set: naCompartmentSet Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

## Parts

### Desk or counter

(desk). Desk, table, countertop or other flat working surface. *Part Type:* category *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* surfaceCompartment *Group ID:* colGrp *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

### Dewatered solids

(deso). Dewatered solids. *Part Type:* category *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* waterCompartment *Group ID:* procGrp *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 1.0. Last updated: 2.0.

### Detected

(det). Substance detected or not detected. 1 = detected, 0 = not detected *Part Type:* unit *Domain ID:* Bio *Speciment ID:* saSpecimen *Compartment Set:* anyCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* booleanSet *Unit Set ID:* naUnitSet *Aggregation Scale ID:* quantAggScale *Quality Set ID:* genQualitySet *Reference Link:* NA *Data Type:* boolean *Minimum Value:* 0 *Maximum Value:* 1 *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 1.1. Last updated: 2.0.

## Access to details deprecated

(detailsDep). More details on the existing confidentiality requirements of this measurement. *Part Type:* attribute *Domain ID:* naDomain *Specimen ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* booleanSet *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* boolean *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 1 *Part Status:* **depreciated**. First released: 1.0. Last updated: 2.0.

## Development

(development). Indicator that a part is under development use. See partID = status *Part Type:* category *Domain ID:* naDomain *Specimen ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Under development

(devolpment). A status category used for parts that are underdevelopment. Use 'development' as the status attribute for parts that are underdevelopment and not yet completed. Part that are underdevelopment should appear only in the development version of the ODM dictionary. *Part Type:* dictionarySupport *Domain ID:* naDomain *Specimen ID:* naSpecimen *Compartment Set:* naCompartment *Group ID:* naGroup *Class ID:*

## Parts

*naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: categorical Minimum Value: NA Maximum Value: NA Minimum Length: NA Maximum Length: NA Part Status: active. First released: 2.0.6. Last updated: 2.0.6.*

## Dictionary reference table set

(dictionaryRefTableSet). Reference or look-up tables. For example, the parts table describe all elements of the ODM, including tables, table headers, measures, methods, categories, and units. sets are collections of parts. For example, units can be grouped together in a unitSet. languages and translations support translations. *Part Type: dictSet Domain ID: naDomain Speciment ID: saSpecimen Compartment Set: naCompartment Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: NA Maximum Length: NA Part Status: active. First released: 2.0.0. Last updated: 2.0.0.*

## Additional dictionary sheets

(dictionarySupport). Additional sheets for the Excel version of the ODM dictionary. Sheets or tabs for the ODM Excel dictionary include: all ERD tables (look-up tables and data entry tables) and additional supportig tables. *Part Type: partType Domain ID: naDomain Speciment ID: saSpecimen Compartment Set: naCompartment Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum*

*Value:* NA *Maximum Value:* NA *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0.0. Last updated: 2.0.0.

## Dictionary set type

(dictSet). Sets used to describe and group dictionary tables. *Part Type:* dictSet *Domain ID:* naDomain *Speciment ID:* saSpecimen *Compartment Set:* naCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0.0. Last updated: 2.0.0.

## Dilution factor

(dilFact). Specifies the extent to which a sample or aliquot was diluted prior to analysis. Dilution factor is reported as a unitless measure, where a value of 10 indicates a 10:1 dilution. *Part Type:* measure *Domain ID:* allDo *Speciment ID:* saSpecimen *Compartment Set:* anyCompartment *Group ID:* procGrp *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* see unit *Quality Set ID:* genQualitySet *Reference Link:* NA *Data Type:* integer *Minimum Value:* 1 *Maximum Value:* NA *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Point Dillutions

(dillute). Exact concentration or dillutions for generating a standard curve. *Part Type:* measure *Domain ID:* Bio *Speciment ID:* saSpecimen *Compartment Set:* anyCompartment *Group ID:* procGrp *Class ID:* standardCurve

## Parts

*Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* geneticUnitSet *Aggregation Scale ID:* see unit *Quality Set ID:* pcrQualitySet *Reference Link:* NA *Data Type:* float *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0.4. Last updated: 2.0.4.

## Diseases (human)

(disease). Measure and methods related to disease or infection in humans. *Part Type:* class *Domain ID:* Bio *Specimen ID:* poSpecimen *Compartment Set:* humanCompartment *Group ID:* naGroup *Class ID:* disease *Nomenclature ID:* ICD *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* see unit *Quality Set ID:* genQualitySet *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Dissolved gas concentration unit set

(dissGasUnitSet). Unit set for carbon dioxide concentrations measurements in water or air. *Part Type:* unitSet *Domain ID:* naDomain *Specimen ID:* naSpecimenSet *Compartment Set:* airWaterCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* dissGasUnitSet *Aggregation Scale ID:* quantAggScale *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.



## Depth of coverage

(doc). The sequencing read depth. Used to interpret the confidence in a presence or amount of a variant. *Part Type:* unit *Domain ID:* Bio *Speciment ID:* saSpecimen *Compartment Set:* anyCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* quantAggScale *Quality Set ID:* genQualitySet *Reference Link:* NA *Data Type:* integer *Minimum Value:* 0 *Maximum Value:* 100 *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Domains

(domain). Domain is the highest level of describing of a measure. There are three domain types: biologic (i.e. Covid-19, chemical (i.e. nitrogen), physical measure (temperature). *Part Type:* partType *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Domain ID

(domainID). Domain is the highest level of describing of a measure. There are three domain types: biologic (i.e. Covid-19, chemical (i.e. nitrogen), physical measure (temperature). The domain ID that corresponds to a

## Parts

given part. Mostly applicable for measures, methods, units, and aggregations. *Part Type*: attribute *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: categorical *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Higher education dormitory or residential building

(dorm). Higher education dormitory or residential building *Part Type*: category *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: anyCompartment *Group ID*: colGrp *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

## e156g delta-variant gene target

(e156g). e156g delta-variant gene target *Part Type*: measure *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: sarsCov2 *Class ID*: mutation *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: geneticUnitSet *Aggregation Scale ID*: see unit *Quality Set ID*: pcrQualitySet *Reference Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

**e484a omicron-variant gene target { #e484a }**

(e484a ). e484a omicron-variant gene target *Part Type*: measure *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: sarsCov2 *Class ID*: mutation *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: geneticUnitSet *Aggregation Scale ID*: see unit *Quality Set ID*: pcrQualitySet *Reference Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

**Escherichia coli**

(ecoli). Concentration of bacteria that are passed through the faecal excrement of humans, livestock and wildlife *Part Type*: measure *Domain ID*: Bio *Speciment ID*: siSaSpecimen *Compartment Set*: surfaceWaterCompartment *Group ID*: bactMisc *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: bacteriaUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: genQualitySet *Reference Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

**Education**

(education). A measure or sample taken for education or training. Use this purpose, for example, when teaching how to use the PHES-ODM. *Part Type*: category *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*:

## Parts

NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Efficiency

(efficient). The efficiency reported for a standard curve. *Part Type*: measure *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: procGrp *Class ID*: standardCurve *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: geneticUnitSet *Aggregation Scale ID*: see unit *Quality Set ID*: pcrQualitySet *Reference Link*: NA *Data Type*: float *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0.3. Last updated: 2.0.3.

## Contact email

(email). Contact e-mail address, for the lab. *Part Type*: attribute *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 100 *Part Status*: active. First released: 1.0. Last updated: 2.0.

## Rainfall

(envRnF). Rainfall, i.e. amount of precipitation in the form of rain. *Part Type*: measure *Domain ID*: Phy *Speciment ID*: siSpecimen *Compartment Set*: anyCompartment *Group ID*: siteFeat *Class ID*: precipClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA

*Unit Set ID:* precipitationUnitSet *Aggregation Scale ID:* see unit *Quality Set ID:* genQualitySet *Reference Link:* NA *Data Type:* float *Minimum Value:* see unit *Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 1.0. Last updated: 2.0.

## Ground snow depth

(envSnwD). Total depth of snow on the ground. *Part Type:* measure *Domain ID:* Phy *Speciment ID:* siSpecimen *Compartment Set:* anyCompartment *Group ID:* siteFeat *Class ID:* precipClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* precipitationUnitSet *Aggregation Scale ID:* see unit *Quality Set ID:* genQualitySet *Reference Link:* NA *Data Type:* float *Minimum Value:* see unit *Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 1.0. Last updated: 2.0.

## Snowfall

(envSnwF). Snowfall, i.e. amount of precipitation in the form of snow. *Part Type:* measure *Domain ID:* Phy *Speciment ID:* siSpecimen *Compartment Set:* anyCompartment *Group ID:* siteFeat *Class ID:* precipClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* precipitationUnitSet *Aggregation Scale ID:* see unit *Quality Set ID:* genQualitySet *Reference Link:* NA *Data Type:* float *Minimum Value:* see unit *Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 1.0. Last updated: 2.0.

## Parts

### Episode date

(epiDate). Episode date is the earliest of onset, test or reported date. *Part Type:* category *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* humanCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* datetime *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* **depreciated**. First released: 1.0. Last updated: 2.0.

### ERD table set

(erdTableSet). All tables listed in the Entity Relationship Diagram. The full ODM model is commonly referred to as “long” tables as it stores data with one measurement per row. *Part Type:* dictSet *Domain ID:* naDomain *Speciment ID:* saSpecimen *Compartment Set:* naCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0.0. Last updated: 2.0.0.

### Sarbecovirus-specific E sars-cov-2 gene target

(eSarbec). Sarbecovirus-specific E sars-cov-2 gene target *Part Type:* measure *Domain ID:* Bio *Speciment ID:* saSpecimen *Compartment Set:* anyCompartment *Group ID:* sarsCov2 *Class ID:* mutation *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* geneticUnitSet *Aggregation Scale ID:* see unit *Quality Set ID:* pcrQualitySet *Reference Link:* NA *Data Type:* see unit *Minimum Value:* see unit

*Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA  
*Part Status:* active. First released: 2.0. Last updated: 2.0.

## Estimated frequency of reads

(estFreqReads). Estimated frequency of reads in a sequencing assay *Part Type:* measure *Domain ID:* Bio *Speciment ID:* saSpecimen *Compartment Set:* anyCompartment *Group ID:* procGroup *Class ID:* sequence *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* geneticUnitSet *Aggregation Scale ID:* see unit *Quality Set ID:* seqQualitySet *Reference Link:* NA *Data Type:* see unit *Minimum Value:* see unit *Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Estuary, natural water body

(estuary). Estuary, natural water body *Part Type:* category *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* waterCompartment *Group ID:* colGrp *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 1.0. Last updated: 2.0.

## Experiment Failed

(expFail). PCR experiment failed. No value reported. Value should be blank for a measure with this qualityFlag value. *Part Type:* quality *Domain ID:* Bio *Speciment ID:* saSpecimen *Compartment Set:* anyCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naU-

## Parts

nitSet *Aggregation Scale ID*: NA *Quality Set ID*: pcrQualitySet *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

## 4s method

(extract4s). Nucleic acid extraction performed using the 4s method. *Part Type*: category *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: procGrp *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: <https://www.protocols.io/view/v-4-direct-wastewater-rna-capture-and-purification-bpdfmi3n> *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Nucleic Acid Extraction category set

(extractCatSet). Category set used for storing all the valid category values for the nucleic acid extraction method. *Part Type*: catSet *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: extractCatSet *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: categorical *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.



## Nucleic acid extraction method

(extraction). Description of the xtraction method. Description of the method used to extract the sample *Part Type*: method *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: procGrp *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: extractCatSet *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: categorical *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 100 *Part Status*: active. First released: 1.0. Last updated: 2.0.

## Extraction volume of sample

(exvol). Extraction volume of sample. Size of the sample that is analyzed. *Part Type*: measure *Domain ID*: Phy *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: procGrp *Class ID*: physical *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: volumeUnitSet *Aggregation Scale ID*: see unit *Quality Set ID*: genQualitySet *Reference Link*: NA *Data Type*: float *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 1.0. Last updated: 2.0.

## Fecal matter

(faeces). Fecal matter. *Part Type*: category *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: waterCompartment *Group ID*: colGrp *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 1.0. Last updated: 2.0.

## Parts

### FALSE

(false). Boolean data type = FALSE Use these values and their set for any boolean measure or attribute. Use only “FALSE” (case sensitive) *Part Type*: category *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: boolean *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 5 *Maximum Length*: 5 *Part Status*: active. First released: 1.1. Last updated: 2.0.

### Field sample

(field). Specifies a sample taken from the field; directly collected from an area for testing. *Part Type*: category *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

### Field sample replicate

(fieldReplicate). A sample divided into two or more homogeneous parts. *Part Type*: category *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA

*Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## File location of polygon

(fileLocation). The location of the file containing the geometry of the polygon. File path specified, or a URL *Part Type:* attribute *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* blob *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 65535 *Part Status:* active. First released: 1.0. Last updated: 2.0.

## Filtration

(filt). Describes solid separation from a wastewater sample via filtration. Proceeds further concentration or analysis of the liquid filtrate. *Part Type:* category *Domain ID:* allDo *Speciment ID:* saSpecimen *Compartment Set:* waterCompartment *Group ID:* procGrp *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## First Nation

(fiNa). Used to categorize a sampleshed that is a First Nation, or on reserve lands. Likely for internal use only, Indigenous data can and should not be

## Parts

shared without explicit consent of the nation in question. *Part Type:* category *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* colGrp *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 10 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## First name of contact

(firstName). Specifies the first name of a given contact. *Part Type:* attribute *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## First released version

(firstReleased). The version in which a part was first released *Part Type:* partSupport *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Foreign key

(fK). Foreign key for a table. *Part Type*: category *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

## AI - Inhibition present but addressed

(flagAI). The original sample was inhibited; however, the inhibition has been addressed through dilution. The reported concentration estimate is the updated result after addressing inhibition. *Part Type*: quality *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: pcrQualitySet *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

## B - Trace levels of contamination

(flagB). Analytical result may be subject to “trace” levels of contamination; the target analyte was also detected in negative controls on the same run as the sample. *Part Type*: quality *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality*

## Parts

*Set ID:* pcrQualitySet *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## FI - Inhibition present and unaddressed

(flagFI). The original sample was inhibited; however, the inhibition has not been successfully addressed. Therefore, no concentration estimate has been reported. *Part Type:* quality *Domain ID:* Bio *Speciment ID:* saSpecimen *Compartment Set:* anyCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* pcrQualitySet *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## J - Weak signal extrapolation

(flagJ). Analytical result falls below the lowest concentration of the experiment-specific standard curve but above the y-intercept value; the reported value is based on the extrapolation of the standard curve in the non-linear region. *Part Type:* quality *Domain ID:* Bio *Speciment ID:* saSpecimen *Compartment Set:* anyCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* pcrQualitySet *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

**ND - Non-detect**

(flagND). No amplification occurred in the reaction; non-detect. For the value of a non-detected measure, report the actual value even if it is below the limit of detection. The flag here ensures that it's recorded as a non-detect regardless. In instances where the original data doesn't record a value, but only has the flag, please populate the value field with either a 0 if dealing with variant percentages, and a 1 for all other purposes to further indicate a null result. *Part Type:* quality *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

**UJ - Trace signal extrapolation**

(flagUJ). Observed quantitation cycle is greater than the experiment-specific standard curve intercept value but evidence of clear amplification was present (i.e., "trace" signal observed); the reported value is based on the extrapolation of the standard curve in the non-linear region. *Part Type:* quality *Domain ID:* Bio *Speciment ID:* saSpecimen *Compartment Set:* anyCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* pcrQualitySet *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Parts

### UQ - Unquantifiable

(flagUQ). Unquantifiable, Ct value exceeds the maximum value of the standard curve. There was a detect, but we cannot quantify it with certainty. *Part Type:* quality *Domain ID:* Bio *Speciment ID:* saSpecimen *Compartment Set:* anyCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* pcrQualitySet *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

### Float date type

(float). The data type for float data. Only used for the dictionary entries of parts. *Part Type:* dataType *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* anyCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 15 *Part Status:* active. First released: 2.0. Last updated: 2.0.

### Flow-normalized mean

(floMean). Mean measure normalized to wastewater flow. Mostly used for reporting specific alleles (N1, N2, E, etc.) *Part Type:* aggregation *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* quantAggScale *Quality Set ID:* pcrQualitySet *Reference Link:* NA *Data Type:* varchar *Minimum Value:*



see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Floor

(floor). Floor of a building or room. *Part Type*: category *Domain ID*: naDomain *Specimen ID*: naSpecimenSet *Compartment Set*: surfaceCompartment *Group ID*: colGrp *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Flow rate

(floRate). Wastewater volumetric flow rate at the sample collection location over the 24-hr period during which the sample was collected. If only an instantaneous flow measurement is available, it may be reported in units of million gallons per day. *Part Type*: measure *Domain ID*: Phy *Specimen ID*: siSpecimen *Compartment Set*: waterCompartment *Group ID*: siteFeat *Class ID*: flowClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: flowUnitSet *Aggregation Scale ID*: see unit *Quality Set ID*: genQualitySet *Reference Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 1.0. Last updated: 2.0.

## Flow proportional 24hr sample depreciated

(flow24hDep). A flow proportional 24-hour composite sample generally collected by an autosampler. *Part Type*: category *Domain ID*: naDo-

## Parts

main *Speciment ID*: naSpecimenSet *Compartment Set*: waterCompartment *Group ID*: colGrp *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: sampleQualitySet *Reference Link*: NA *Data Type*: NA *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: **deprecated**. First released: 1.0. Last updated: 2.0.

## Flow

(flowClass). Measures and methods related to flow. *Part Type*: class *Domain ID*: Phy *Speciment ID*: siSpecimen *Compartment Set*: waterCompartment *Group ID*: naGroup *Class ID*: flowClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: see unit *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Flow proportional sample

(flowPr). A flow proportionalcomposite sample generally collected by an autosampler. Use collectionPeriod to describe how many hours the sample was taken. *Part Type*: category *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: waterCompartment *Group ID*: colGrp *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: sampleQualitySet *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 1.0. Last updated: 2.0.

## Volume flow rate unit set

(flowUnitSet). Unit set for volume flow measurements. *Part Type:* unitSet *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* waterCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* flowUnitSet *Aggregation Scale ID:* quantAggScale *Quality Set ID:* NA *Reference Link:* NA *Data Type:* categorical *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Flow volume

(flowVol). Volume of influent. *Part Type:* measure *Domain ID:* Phy *Speciment ID:* siSpecimen *Compartment Set:* waterCompartment *Group ID:* siteFeat *Class ID:* flowClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* flowUnitSet *Aggregation Scale ID:* see unit *Quality Set ID:* genQualitySet *Reference Link:* NA *Data Type:* float *Minimum Value:* see unit *Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Influenza virus measure

(flu). General influenza virus measure This measure should only be used if there is no other influenza virus measure. See groupID = virusMisc. Use a note to describe the specific measure used. *Part Type:* measure *Domain ID:* Bio *Speciment ID:* naSpecimenSet *Compartment Set:* anyCompartment *Group ID:* virusMisc *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* [http://purl.obolibrary.org/obo/MONDO\\_0005812](http://purl.obolibrary.org/obo/MONDO_0005812) *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:*

## Parts

genQualitySet *Reference Link*: NA *Data Type*: varchar *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Influenza virus A1

(fluA1). Influenza virus A1 type *Part Type*: measure *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: virusMisc *Class ID*: allele *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: geneticUnitSet *Aggregation Scale ID*: see unit *Quality Set ID*: genQualitySet *Reference Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

## influenza virus A2

(fluA2). influenza virus A2 type *Part Type*: measure *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: virusMisc *Class ID*: allele *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: geneticUnitSet *Aggregation Scale ID*: see unit *Quality Set ID*: genQualitySet *Reference Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Influenza virus B

(fluB). Influenza virus B type *Part Type*: measure *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: virusMisc *Class ID*: allele *Nomenclature ID*: naNomenclature *Ontology*

*Reference*: NA *Category Set ID*: NA *Unit Set ID*: geneticUnitSet *Aggregation Scale ID*: see unit *Quality Set ID*: genQualitySet *Reference Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Fluidigm digital PCR

(fluidPcr). Describes a PCR analysis done using FluidIGM's digital PCR technology. *Part Type*: category *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: pcrQualitySet *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Foggy

(foggy). Qualitative category for the weather measure, specifying a foggy or hazy day. *Part Type*: category *Domain ID*: Phy *Speciment ID*: siSpecimen *Compartment Set*: anyCompartment *Group ID*: siteFeat *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Sample fraction category set

(fractionCatSet). Category set for the fraction of the sample (solid, liquid, etc.). *Part Type*: catSet *Domain ID*: naDomain *Speciment ID*: naSpeci-

## Parts

*menSet Compartment Set: naCompartmentSet Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: fractionCatSet Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: categorical Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

## Fraction analyzed

(fractionID). Fraction of the sample that is analyzed. *Part Type: attribute Domain ID: naDomain Speciment ID: naSpecimenSet Compartment Set: naCompartmentSet Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: fractionCatSet Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: categorical Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 1.0. Last updated: 2.0.*

## Freyja Script

(freyja). Freyja Script for sequencing. *Part Type: category Domain ID: Bio Speciment ID: saSpecimen Compartment Set: anyCompartment Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: <https://github.com/andersen-lab/Freyja> Data Type: see unit Minimum Value: see unit Maximum Value: see unit Minimum Length: NA Maximum Length: NA Part Status: active. First released: 2.0. Last updated: 2.0.*

## F-Specific RNA bacteriophages

(frna). A measure for amount of F-Specific RNA bacteriophages. *Part Type*: measure *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: virusMisc *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: geneticUnitSet *Aggregation Scale ID*: see unit *Quality Set ID*: genQualitySet *Reference Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

## F-Specific RNA bacteriophages, G2

(frnaG2). A measure for amount of G2 F-Specific RNA bacteriophages. *Part Type*: measure *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: virusMisc *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: geneticUnitSet *Aggregation Scale ID*: see unit *Quality Set ID*: genQualitySet *Reference Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Sample frozen

(frozen). Sample was frozen before analysis or processing *Part Type*: quality *Domain ID*: naDomain *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: sampleQualitySet *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum*

## Parts

*Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active.  
First released: 2.0. Last updated: 2.0.

## Field sample temperature

(fst). Temperature that the sample is stored at while it is being sampled. This field is mainly relevant for composite samples which are either kept at ambient temperature or refrigerated while being sampled. *Part Type:* measure *Domain ID:* Phy *Speciment ID:* saSpecimen *Compartment Set:* anyCompartment *Group ID:* procGrp *Class ID:* tempClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* temperatureUnitSet *Aggregation Scale ID:* see unit *Quality Set ID:* genQualitySet *Reference Link:* NA *Data Type:* float *Minimum Value:* see unit *Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 1.0. Last updated: 2.0.

## Full dictionary sheets set

(fullDictionarySheetSet). Worksheets in the full Excel dictionary. The full dictionary is 'ODM\_full-dictionary.xlsx' *Part Type:* dictSet *Domain ID:* naDomain *Speciment ID:* saSpecimen *Compartment Set:* naCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0.0. Last updated: 2.0.0.

## Funder Contact ID

(funderCont). A unique identifier for funders. *Part Type:* attribute *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* na-



CompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Funding agency

(funderID). The funding agency of the dataset. Use Organization ID to populate this field, and the organizations table to describe contact information and other details for the funding agency. *Part Type:* attribute *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## g215c delta-variant gene target

(g215c). g215c delta-variant gene target *Part Type:* measure *Domain ID:* Bio *Speciment ID:* saSpecimen *Compartment Set:* anyCompartment *Group ID:* sarsCov2 *Class ID:* mutation *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* geneticUnitSet *Aggregation Scale ID:* see unit *Quality Set ID:* pcrQualitySet *Reference Link:* NA *Data Type:* see unit *Minimum Value:* see unit *Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0. Last updated: 2.0.

**g339d omicron-variant gene target { #g339d }**

(g339d ). g339d omicron-variant gene target *Part Type*: measure *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: sarsCov2 *Class ID*: mutation *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: geneticUnitSet *Aggregation Scale ID*: see unit *Quality Set ID*: pcrQualitySet *Reference Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

**g496s omicron-variant gene target { #g496s }**

(g496s ). g496s omicron-variant gene target *Part Type*: measure *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: sarsCov2 *Class ID*: mutation *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: geneticUnitSet *Aggregation Scale ID*: see unit *Quality Set ID*: pcrQualitySet *Reference Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

**g662s delta-variant gene target**

(g662s). g662s delta-variant gene target *Part Type*: measure *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: sarsCov2 *Class ID*: mutation *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: geneticUnitSet *Aggregation Scale ID*: see unit *Quality Set ID*: pcrQualitySet *Reference Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

**Gamma**

(gam). P.1 *Part Type*: measure *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: sarsCov2 *Class ID*: variant *Nomenclature ID*: who *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: geneticUnitSet *Aggregation Scale ID*: see unit *Quality Set ID*: seqQualitySet *Reference Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

**Gene copies per copy of crAssphage**

(gcCrA). Gene or variant copies per copy of crAssphage. *Part Type*: unit *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: quantAggScale *Quality Set ID*: pcrQualitySet *Reference Link*: NA *Data Type*: integer *Minimum Value*: 0 *Maximum Value*: NA *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 1.0. Last updated: 2.0.

**gene copies per day per 100,000**

(gcD100). The unit for measures reflecting the gene copies per day per 100,000 people in the population. *Part Type*: unit *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: virusMisc *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: quantAggScale *Quality Set ID*: genQualitySet *Reference Link*: NA *Data Type*: float *Minimum Value*: 0 *Maximum Value*: NA *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Parts

### Gene copies per gram solids

(gCGS). Gene or variant copies per gram solids. *Part Type:* unit *Domain ID:* Bio *Speciment ID:* saSpecimen *Compartment Set:* waterCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* quantAggScale *Quality Set ID:* pcrQualitySet *Reference Link:* NA *Data Type:* integer *Minimum Value:* 0 *Maximum Value:* NA *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 1.0. Last updated: 2.0.

### Gene copies per L

(gcL). Gene or variant copies per litre. *Part Type:* unit *Domain ID:* Bio *Speciment ID:* saSpecimen *Compartment Set:* anyCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* quantAggScale *Quality Set ID:* pcrQualitySet *Reference Link:* NA *Data Type:* integer *Minimum Value:* 0 *Maximum Value:* NA *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 1.0. Last updated: 2.0.

### Gene copies per mL

(gcMl). Gene or variant copies per millilitre of solution. *Part Type:* unit *Domain ID:* Bio *Speciment ID:* saSpecimen *Compartment Set:* anyCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* quantAggScale *Quality Set ID:* pcrQualitySet *Reference Link:* NA *Data Type:* integer *Minimum Value:* 0 *Maximum Value:* NA *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 1.0. Last updated: 2.0.

## Gene copies per PMMoV copy

(gcPpmov). Gene or variant copies per copy of PMMoV. *Part Type:* unit *Domain ID:* Bio *Speciment ID:* saSpecimen *Compartment Set:* waterCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* quantAggScale *Quality Set ID:* pcrQualitySet *Reference Link:* NA *Data Type:* integer *Minimum Value:* 0 *Maximum Value:* NA *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 1.0. Last updated: 2.0.

## Genetics unit set

(geneticUnitSet). Unit set for genetic-related measurements. *Part Type:* unitSet *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* anyCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* geneticUnitSet *Aggregation Scale ID:* quantAggScale *Quality Set ID:* NA *Reference Link:* NA *Data Type:* categorical *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## General missingness set

(genMissingnessSet). The general set for missingness values. *Part Type:* missingnessSet *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Parts

### Generic quality flag set

(genQualitySet). A quality set to specify any generic quality concerns about a measure or sample. *Part Type:* qualitySet *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* anyCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* genQualitySet *Reference Link:* NA *Data Type:* categorical *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 1.0. Last updated: 2.0.

### European Petroleum Survey Group Coordinates

(geoEPSG). The unique EPSG code specifying a given geospatial area. *Part Type:* attribute *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* miscAttr *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* float *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

### Latitude

(geoLat). Geographical location, latitude in decimal coordinates, ie.: (45.424721) *Part Type:* attribute *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* miscAttr *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* float *Minimum Value:* -90 *Maximum Value:* 90 *Minimum Length:* NA

*Maximum Length:* NA *Part Status:* active. First released: 1.0. Last updated: 2.0.

## Longitude

(geoLong). Geographical location, longitude in decimal coordinates, ie.: (-75.695000) *Part Type:* attribute *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* miscAttr *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* float *Minimum Value:* -180 *Maximum Value:* 180 *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 1.0. Last updated: 2.0.

## Type of geography

(geoType). Type of geography that is represented by the polygon. *Part Type:* attribute *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* geoTypeCatSet *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* categorical *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 1.0. Last updated: 2.0.

## Geographic category set

(geoTypeCatSet). Category set for different type of geographic components. *Part Type:* catSet *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA

## Parts

*Category Set ID:* geoTypeCatSet *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* categorical *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Well-known text

(geoWKT). Well-known text of the polygon *Part Type:* attribute *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 63 *Part Status:* active. First released: 1.0. Last updated: 2.0.

## Gram per cubic metre

(gm3). Density unit. Used for absolute humidity and other measures. *Part Type:* unit *Domain ID:* allDo *Speciment ID:* anySpecimen *Compartment Set:* airCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* quantAggScale *Quality Set ID:* genQualitySet *Reference Link:* NA *Data Type:* float *Minimum Value:* 0 *Maximum Value:* NA *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Geometric mean

(gmn). Geometric mean. *Part Type:* aggregation *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature



*Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* quantAggScale *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* see unit *Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 1.0. Last updated: 2.0.

## Government agency organization type

(govt). The category of organization type used for government agencies, programs, or crown-owned bodies. *Part Type:* category *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 10 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Grams

(grams). A unit of mass or weight. *Part Type:* unit *Domain ID:* Phy *Speciment ID:* siSaSpecimen *Compartment Set:* anyCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* quantAggScale *Quality Set ID:* genQualitySet *Reference Link:* NA *Data Type:* float *Minimum Value:* 0 *Maximum Value:* NA *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Parts

### Gravity settling

(graSet). Describes solid separation from a wastewater sample where the sample material is allowed to settle by gravity, and then separated. *Part Type*: category *Domain ID*: allDo *Speciment ID*: saSpecimen *Compartment Set*: waterCompartment *Group ID*: procGrp *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

### Grab sample

(grb). A single large representative grab sample. If the sample was collected over a series of hours or is a composite sammples, please use partID = comp *Part Type*: category *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: waterCompartment *Group ID*: colGrp *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: sampleQualitySet *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 1.0. Last updated: 2.0.

### Gromstole 1.0 Script

(gromstole). Gromstole 1.0 Script for sequencing. *Part Type*: category *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: <https://github.com/PoonLab/gromstole> *Data Type*: see unit *Minimum*

*Value:* see unit *Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Groups

(group). A collection of related measures. See `partID = groupID`. *Part Type:* `partType` *Domain ID:* `naDomain` *Speciment ID:* `naSpecimenSet` *Compartment Set:* `naCompartmentSet` *Group ID:* `naGroup` *Class ID:* `naClass` *Nomenclature ID:* `naNomenclature` *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* `naUnitSet` *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* `varchar` *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Group

(`groupID`). Unique identifier for a group of measures. Mostly applicable for measures, methods, units, and aggregations. A collection of related measures. For example, SARS-CoV-2 is a group. Within the SARS-CoV-2 group, there are measure classes tht include RNA alleles (N1, N2, E, etc.), mutations, (E484K0), an entire sequence, viral proteins, etc. Currently groups are used for measures only. *Part Type:* `attribute` *Domain ID:* `naDomain` *Speciment ID:* `naSpecimenSet` *Compartment Set:* `naCompartmentSet` *Group ID:* `naGroup` *Class ID:* `naClass` *Nomenclature ID:* `naNomenclature` *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* `naUnitSet` *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* `categorical` *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Parts

### Header

(header). Header for a table. Also known as a table variable or entity relationship 'attribute'. Header is the top row or the variable name in a table. *Part Type*: category *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

### Health planning region

(healthReg). The health planning authority where is site or insititute is located. See also `publicHealthDepartment` *Part Type*: attribute *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 1.1. Last updated: 2.0.

### Heat inactivated sars-cov-2 virus spike target

(heatInacSARS). Heat inactivated SARS-CoV-2 virus is used as the recovery efficiency control target. *Part Type*: category *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: procGrp *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar

*Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

### hep g armored rna

(hepGRna). Measure of the amount Hepatitis G Armored RNA. *Part Type:* measure *Domain ID:* Bio *Specimen ID:* saSpecimen *Compartment Set:* anyCompartment *Group ID:* virusMisc *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* geneticUnitSet *Aggregation Scale ID:* see unit *Quality Set ID:* genQualitySet *Reference Link:* NA *Data Type:* see unit *Minimum Value:* see unit *Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0. Last updated: 2.0.

### hep g armored rna spike target

(hepGRnaMat). Hepatitis G armored RNA is used as the recovery efficiency control target. *Part Type:* category *Domain ID:* Bio *Specimen ID:* saSpecimen *Compartment Set:* anyCompartment *Group ID:* procGrp *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

### High severity

(high). Indicates a very sever quality issue, likely meaning the data should not be reported. *Part Type:* category *Domain ID:* naDomain *Specimen*

## Parts

*ID: naSpecimenSet Compartment Set: naCompartmentSet Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

## Sewer Network Health Region

(hlthReg). Health region served by the sewer network *Part Type: category Domain ID: naDomain Speciment ID: naSpecimenSet Compartment Set: naCompartmentSet Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 1.0. Last updated: 2.0.*

## Hand Measurement

(hma). Handheld measurement analyzer. A handheld measurement analyzer. *Part Type: category Domain ID: naDomain Speciment ID: naSpecimenSet Compartment Set: anyCompartment Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 1.0. Last updated: 2.0.*

## Hollow fiber dead end ultrafiltration

(hollowFiberUF). Hollow fiber dead end ultrafiltration *Part Type*: category *Domain ID*: Che *Speciment ID*: naSpecimenSet *Compartment Set*: waterCompartment *Group ID*: procGrp *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: genQualitySet *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

## General Hospital Admissions

(hosa). Hospital admissions or patients newly admitted to hospital. *Part Type*: unit *Domain ID*: Bio *Speciment ID*: poSpecimen *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: genQualitySet *Reference Link*: NA *Data Type*: integer *Minimum Value*: 0 *Maximum Value*: NA *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 1.0. Last updated: 2.0.

## Hospital Census

(hosc). Hospital census or the number of people admitted with an ailment. *Part Type*: unit *Domain ID*: Bio *Speciment ID*: poSpecimen *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: genQualitySet *Reference Link*: NA *Data Type*: integer *Minimum Value*: 0 *Maximum Value*: NA *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 1.0. Last updated: 2.0.

## Parts

### Hospital

(hosptl). Hospital *Part Type*: category *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: anyCompartment *Group ID*: colGrp *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 1.0. Last updated: 2.0.

### Holding tank wastewater depreciated

(hoTaWa). Wastewater from a holding tank, such as from an airplane or ship Deprecated in version 2, please do not use. Duplicate of the sampleMat categories - refer to those. *Part Type*: category *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: waterCompartment *Group ID*: colGrp *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: NA *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: **depreciated**. First released: 1.0. Last updated: 2.0.

### Holding tank wastewater

(htSam). Wastewater sampled from a holding tank, such as from an airplane or ship *Part Type*: category *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: waterCompartment *Group ID*: colGrp *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum*



*Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Holding tank

(htSite). Holding tank *Part Type:* category *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* waterCompartment *Group ID:* colGrp *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 1.0. Last updated: 2.0.

## Human compartment

(hum). A measure or observation made about a human. *Part Type:* compartment *Domain ID:* Bio *Speciment ID:* anySpecimen *Compartment Set:* humanCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 1 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Human compartment set

(humanCompartmentSet). A compartment set for measures and methods in the human compartment. *Part Type:* compSet *Domain ID:* Bio *Speciment ID:* anySpecimen *Compartment Set:* humanCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar

## Parts

*Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 15 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Humidity

(humClass). Measures and methods related to humidity. *Part Type:* class *Domain ID:* Phy *Speciment ID:* siSpecimen *Compartment Set:* airCompartment *Group ID:* naGroup *Class ID:* humClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* see unit *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## i1566v omicron-variant gene target { #i1566v }

(i1566v ). i1566v omicron-variant gene target *Part Type:* measure *Domain ID:* Bio *Speciment ID:* saSpecimen *Compartment Set:* anyCompartment *Group ID:* sarsCov2 *Class ID:* mutation *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* geneticUnitSet *Aggregation Scale ID:* see unit *Quality Set ID:* pcrQualitySet *Reference Link:* NA *Data Type:* see unit *Minimum Value:* see unit *Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0. Last updated: 2.0.

## i3758v omicron-variant gene target { #i3758v }

(i3758v ). i3758v omicron-variant gene target *Part Type:* measure *Domain ID:* Bio *Speciment ID:* saSpecimen *Compartment Set:* anyCompartment *Group ID:* sarsCov2 *Class ID:* mutation *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* geneticUnitSet *Aggregation Scale ID:* see unit *Quality Set ID:* pcrQualitySet

*Reference Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

## **i82t delta-variant gene target**

(i82t). i82t delta-variant gene target *Part Type*: measure *Domain ID*: Bio *Specimen ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: sarsCov2 *Class ID*: mutation *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: geneticUnitSet *Aggregation Scale ID*: see unit *Quality Set ID*: pcrQualitySet *Reference Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

## **International Classification of Diseases**

(icd). Classification system for diseases in humans. *Part Type*: nomenclature *Domain ID*: Bio *Specimen ID*: poSpecimen *Compartment Set*: humanCompartment *Group ID*: naGroup *Class ID*: disease *Nomenclature ID*: ICD *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

## **Intensive care unit patients**

(icu). Units for describing a population measure of patients who are in intensive care due to a given cause. Unit for a population or disease measure to explain population-level clinical effects. *Part Type*: unit *Domain ID*: Bio *Specimen ID*: poSpecimen *Compartment Set*: anyCompartment

## Parts

*Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature  
*Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet  
*Aggregation Scale ID:* quantAggScale *Quality Set ID:* genQualitySet *Reference Link:* NA *Data Type:* integer *Minimum Value:* 0 *Maximum Value:* NA *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active.  
First released: 2.0. Last updated: 2.0.

## Index

(index). Index number in case the measurement was taken multiple times.  
*Part Type:* attribute *Domain ID:* naDomain *Speciment ID:* naSpecimenSet  
*Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass  
*Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA  
*Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA  
*Reference Link:* NA *Data Type:* integer *Minimum Value:* NA  
*Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 50 *Part Status:* active.  
First released: 1.1. Last updated: 2.0.

## Inhibition measure

(inhibMe). Parameter to report whether or not inhibition was detected in the sample. Binary measure - detected or no. *Part Type:* measure *Domain ID:* Bio  
*Speciment ID:* saSpecimen *Compartment Set:* anyCompartment *Group ID:* miscMeas  
*Class ID:* sequence *Nomenclature ID:* naNomenclature *Ontology Reference:* NA  
*Category Set ID:* NA *Unit Set ID:* booleanUnitSet *Aggregation Scale ID:* NA  
*Quality Set ID:* genQualitySet *Reference Link:* NA *Data Type:* categorical  
*Minimum Value:* see unit *Maximum Value:* see unit *Minimum Length:* NA  
*Maximum Length:* NA *Part Status:* active. First released: 1.1. Last updated: 2.0.

## Inhibition method

(inhibMeth). Description of the method used to evaluate molecular inhibition. Description of the inhibition parameters. *Part Type*: method *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: measGrp *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 100 *Part Status*: active. First released: 1.0. Last updated: 2.0.

## Innovaprep ultrafiltration

(innovaprepUF). Innovaprep ultrafiltration *Part Type*: category *Domain ID*: Che *Speciment ID*: naSpecimenSet *Compartment Set*: waterCompartment *Group ID*: procGrp *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: genQualitySet *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Input

(input). Input for a table. Indicates if a part can be used in a table. “Input” is used to indicate if a part can be used as an entry in a table (something with partType = table). For example, covN1 is a specific measure that can be entered in the measureID field of the measures table. Therefore, covN1 has a value “input” in the measures column in the parts list. ODM users can generate their own custom template by modifying

## Parts

using the value “input” for only the parts that are applicable for their program. *Part Type:* category *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Instrument ID

(instrumentID). A unique identifier for an instrument. *Part Type:* attribute *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* categorical *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 10 *Part Status:* active. First released: 1.1. Last updated: 2.0.

## Instrument table

(instruments). The table that contains information about instruments. adapt from version 1 documentation *Part Type:* table *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* programDescr *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 1.0. Last updated: 2.0.

## Instruments table column order

(instrumentsOrder). Specifies the order of the columns in the Instruments table. *Part Type:* tableSupport *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* integer *Minimum Value:* 1 *Maximum Value:* NA *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Requirement

(instrumentsRequired). Specifies the columns required in the Instruments table. *Part Type:* tableSupport *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Other instrument

(instrumentTypeOther). Type of instrument other than those included in the PHES-ODM. An other type of measurement instrument. Add description to notes. See documentation for how to request new instruments added to the dictionary. *Part Type:* category *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group*

## Parts

*ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 1.0. Last updated: 2.0.*

## Instrument Type

(insType). Type of instrument used to perform the measurement. *Part Type: attribute Domain ID: naDomain Speciment ID: naSpecimenSet Compartment Set: naCompartmentSet Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: insTypeCatSet Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: categorical Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 1.0. Last updated: 2.0.*

## Instrument category set

(insTypeCatSet). List of instruments that are used for measures and methods *Part Type: catSet Domain ID: naDomain Speciment ID: naSpecimenSet Compartment Set: naCompartmentSet Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: insTypeCatSet Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: categorical Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*



## Describe other instrument type, if applicable

(insTypeOth). Description of the instrument in case it is not listed in instrumentType. *Part Type:* attribute *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 100 *Part Status:* active. First released: 1.0. Last updated: 2.0.

## Integer date type

(integer). The data type for integers. Only used for the dictionary entries of parts. *Part Type:* dataType *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* anyCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 15 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## intercept

(inter). Intercept value of the calibration curve. Used for storing calibration curve information, potentially also applicable for other curve types. *Part Type:* measure *Domain ID:* allDo *Speciment ID:* siSaSpecimen *Compartment Set:* anyCompartment *Group ID:* procGrp *Class ID:* standard-Curve *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* see unit

## Parts

*Quality Set ID:* pcrQualitySet *Reference Link:* NA *Data Type:* float *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Combined ip2 and ip4 sars-cov-2 gene target

(ip2ip4). Combined ip2 and ip4 sars-cov-2 gene target *Part Type:* measure *Domain ID:* Bio *Speciment ID:* saSpecimen *Compartment Set:* any-Compartment *Group ID:* sarsCov2 *Class ID:* mutation *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* geneticUnitSet *Aggregation Scale ID:* see unit *Quality Set ID:* pcrQualitySet *Reference Link:* NA *Data Type:* see unit *Minimum Value:* see unit *Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0. Last updated: 2.0.

## ISO639-1

(iso6391). The first part of the ISO 639 series of international standards for language codes. Part 1 covers the registration of two-letter codes. There are 183 two-letter codes registered as of June 2021. The registered codes cover the world's major languages. Part of the metedata for a languageID. *Part Type:* attribute *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* na-Class *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* categorical *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

**ISO639-2B**

(iso6392B). A set of international standards that lists short codes for language names. These ISO639-2 are the three-letter codes defined in part two (ISO 639-2) of the standard, including the corresponding two-letter (ISO 639-1) codes where they exist. The ‘B’ specifies the bibliographic code (B code). Part of the metadata for a languageID. *Part Type:* attribute *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* categorical *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

**ISO639-2T**

(iso6392T). A set of international standards that lists short codes for language names. These ISO639-2 are the three-letter codes defined in part two (ISO 639-2) of the standard, including the corresponding two-letter (ISO 639-1) codes where they exist. The ‘T’ specifies the terminological code (T code). Part of the metadata for a languageID. *Part Type:* attribute *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* categorical *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

### ISO639-3

(iso6393). A set of international standards that lists short codes for language names. ISO 639-3 extends the ISO 639-2 alpha-3 codes with an aim to cover all known natural languages. Part of the metadata for a languageID. *Part Type:* attribute *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* categorical *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

### ISO639-6

(iso6396). A set of international standards that lists short codes for language names. ISO 639-6 builds off ISO639-3 with the use of four-letter codes, and allowing users to differentiate between variants of languages and language families, such as historical vs. revived versions of languages. Part of the metadata for a languageID. *Part Type:* attribute *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* categorical *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

### k856r omicron-variant gene target { #k856r }

(k856r ). k856r omicron-variant gene target *Part Type:* measure *Domain ID:* Bio *Speciment ID:* saSpecimen *Compartment Set:* anyCompartment

*Group ID:* sarsCov2 *Class ID:* mutation *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* geneticUnitSet *Aggregation Scale ID:* see unit *Quality Set ID:* pcrQualitySet *Reference Link:* NA *Data Type:* see unit *Minimum Value:* see unit *Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Kilogram per second

(kgS). Kilograms per second. *Part Type:* unit *Domain ID:* Phy *Specimen ID:* siSpecimen *Compartment Set:* waterCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* quantAggScale *Quality Set ID:* genQualitySet *Reference Link:* NA *Data Type:* float *Minimum Value:* 0 *Maximum Value:* NA *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 1.0. Last updated: 2.0.

## Kilolitres

(kl). Kilolitres of volume *Part Type:* unit *Domain ID:* Phy *Specimen ID:* siSaSpecimen *Compartment Set:* waterCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* quantAggScale *Quality Set ID:* genQualitySet *Reference Link:* NA *Data Type:* float *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

Parts

## Litres

(l). Litres of volume *Part Type*: unit *Domain ID*: Phy *Speciment ID*: siSaSpecimen *Compartment Set*: waterCompartment *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: quantAggScale *Quality Set ID*: genQualitySet *Reference Link*: NA *Data Type*: float *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

## l452r delta-variant gene target

(l452r). l452r delta-variant gene target *Part Type*: measure *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: sarsCov2 *Class ID*: mutation *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: geneticUnitSet *Aggregation Scale ID*: see unit *Quality Set ID*: pcrQualitySet *Reference Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

## l981f omicron-variant gene target { #l981f }

(l981f ). l981f omicron-variant gene target *Part Type*: measure *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: sarsCov2 *Class ID*: mutation *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: geneticUnitSet *Aggregation Scale ID*: see unit *Quality Set ID*: pcrQualitySet *Reference Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Lab ID default deprecated

(labDefDep). Used as default when a new sample is created by this reporter. See ID in Lab table. Deprecated as of version 2, no defaults please specify. *Part Type:* attribute *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 10 *Part Status:* **deprecated**. First released: 1.0. Last updated: 2.0.

## Laboratory Duplicate

(labDuplicate). Second (time or more) processing and analysis of sample. Usually for general chemistry or metals analyses. *Part Type:* category *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Lab ID

(labID). Unique identifier for a laboratory. *Part Type:* attribute *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference*

## Parts

*Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 10 *Part Status:* active. First released: 1.0. Last updated: 2.0.

## Lagoon system

(lagoon). Logoon system for extensive wastewater treatment *Part Type:* category *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* waterCompartment *Group ID:* colGrp *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 1.0. Last updated: 2.0.

## Lake, natural water body

(lake). Lake, natural water body *Part Type:* category *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* waterCompartment *Group ID:* colGrp *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 1.0. Last updated: 2.0.

## Lambda

(lambda). C.37 *Part Type:* measure *Domain ID:* Bio *Speciment ID:* saSpecimen *Compartment Set:* anyCompartment *Group ID:* sarsCov2 *Class ID:* variant *Nomenclature ID:* who *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* geneticUnitSet *Aggregation Scale ID:* see unit *Quality*



*Set ID:* seqQualitySet *Reference Link:* NA *Data Type:* see unit *Minimum Value:* see unit *Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Language family

(langFam). Specifies the language family of a given language for translation and language tracking purposes. Part of the metadata for a languageID. *Part Type:* attribute *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Language ID

(langID). Language code for translation purposes. Specifies the language for each translation, other than the default English. Follow the ISO639-3 codes for now. *Part Type:* attribute *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Language name

(langName). Specifies the name of the language in roman alphabet characters for translation and language tracking purposes. Part of the metadata for a languageID. *Part Type:* attribute *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Language Look-up table

(languages). Look up table for all languages, used to give structure to the translation table. *Part Type:* table *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* lookup *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Language table column order

(languagesOrder). Specifies the order of the columns in the Languages table. *Part Type:* tableSupport *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* integer *Minimum Value:* 1 *Maximum Value:* NA *Minimum Length:* NA

*Maximum Length:* NA *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Required headers

(languagesRequired). Required headers in the Languages table. *Part Type:* tableSupport *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Last edited

(lastEdited). The date the entry was last updated. Use lastEdited if an entry is updated. Leave lastEdited blank or 'NA' for the first entry. Updates can include additions or revisions of the entry for any reason. For example, a wastewater measure was repeated later with an improved method. You can revise the entry by updating the value and then adding the date the new measure was performed to 'lastEdited'. To ensure data provenance, the best practice in this example is to generate a new entry with the same measureID as the original measureID. The original and new measures are kept in the database with a date in the 'lastEdited' field for the new entry but not the original one. Some databases may choose a delete-and-replace approach where the original entry is deleted and replaced by a new entry. In this approach, the 'lastEdited' field indicates the delete and replace occurred. *Part Type:* attribute *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group*

## Parts

*ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: datetime Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 1.0. Last updated: 2.0.*

### Last name of contact

(lastName). Specifies the last name of a given contact. *Part Type: attribute Domain ID: naDomain Speciment ID: naSpecimenSet Compartment Set: naCompartmentSet Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

### Last updated version

(lastUpdated). The version in which the part was last updated. Any change to the part of list will result in a change in the lastUpdated field to the dictionary version where the update occurred. *Part Type: partSupport Domain ID: naDomain Speciment ID: naSpecimenSet Compartment Set: naCompartmentSet Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

## LaTeX expression

(latExp). LaTeX expression used to generate formulas, symbols, etc. Mainly relevant for units. *Part Type*: partSupport *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 20 *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Low breadth of coverage

(IBC). The percentage of the genome covered by reads (the breadth) is low. *Part Type*: quality *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Laboratory control sample duplicate

(lcsd). Known amounts of an analyte or representative compounds are added to a second “clean” matrix (lab water or clean sand) in laboratory. Duplicate of LCS *Part Type*: category *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale*

## Parts

*ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

## Low depth of coverage

(IDC). Poor coverage, specifically an insufficient number of reads or too many sequencing reads that are mapped incorrectly. *Part Type: quality Domain ID: naDomain Speciment ID: naSpecimenSet Compartment Set: naCompartmentSet Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

## Leaked sample

(leaked). Sample leaked, some volume and material was lost. *Part Type: quality Domain ID: naDomain Speciment ID: naSpecimenSet Compartment Set: naCompartmentSet Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

## Link

(li). Link to an external reference that describes the geometry of the polygon. Deprecated as of version 2, please avoid use. Use referenceLink instead. *Part Type: attribute Domain ID: naDomain Speciment ID: naSpec-*

imenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 100 *Part Status*: **deprecated**. First released: 1.0. Last updated: 2.0.

## License

(license). The license of a dataset. *Part Type*: attribute *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Linear scale aggregation set

(linearAggrSet). The aggregation set that contains all aggregations that exist on the linear scale (rather than logarithmic or qualitative). *Part Type*: aggSet *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Parts

### Liquid fraction

(liq). Liquid fraction of a sample. *Part Type:* category *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 1.0. Last updated: 2.0.

### List worksheet

(lists). Parts lists for template dropdowns and other documentation. Sheets or tabs for the ODM Excel dictionary include: all ERD tables (look-up tables and data entry tables) and additional supportig tables. *Part Type:* dictionarySupport *Domain ID:* naDomain *Speciment ID:* saSpecimen *Compartment Set:* naCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0.0. Last updated: 2.0.0.

### List set

(listSet). PartTypes that contain categories, sets, or lists. Used to generate documentation. *Part Type:* miscSet *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* airCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* windSpeedUnitSet *Aggregation Scale*



*ID: quantAggScale Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

## Access to local ha

(localHA). If this is 'no', the, data will not be available to local health authorities. If missing, data will be available to local health authorities. *Part Type: attribute Domain ID: naDomain Speciment ID: naSpecimenSet Compartment Set: naCompartmentSet Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: booleanSet Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: boolean Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 1 Part Status: **deprecated**. First released: 1.0. Last updated: 2.0.*

## Limit of detection (LOD)

(lod). LOD Limit of detection (LOD) for this method if one exists. *Part Type: measure Domain ID: naDomain Speciment ID: naSpecimenSet Compartment Set: anyCompartment Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: geneticUnitSet Aggregation Scale ID: NA Quality Set ID: genQualitySet Reference Link: NA Data Type: see unit Minimum Value: see unit Maximum Value: see unit Minimum Length: NA Maximum Length: NA Part Status: active. First released: 1.1. Last updated: 2.0.*

## Limit of detection (LOD) - sewage

(lodSewa). LOD for sewage samples Limit of detection (LOD) for sewage *Part Type: measure Domain ID: naDomain Speciment ID: naSpecimenSet*

## Parts

*Compartment Set:* waterCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* geneticUnitSet *Aggregation Scale ID:* see unit *Quality Set ID:* genQualitySet *Reference Link:* NA *Data Type:* see unit *Minimum Value:* see unit *Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Logarithmic scale aggregation set

(logAggrSet). The aggregation set that contains all aggregations that exist on the logarithmic scale (rather than linear or qualitative). *Part Type:* aggrSet *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Dictionary tables

(lookup). Tables to describe and support the ODM dictionary. These tables hold information on sets, all parts, and support multiple languages and translations. The tables are updated by the ODM development team when a new ODM version is created. *Part Type:* class *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* lookup *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* see unit *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum*

*Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active.  
First released: 2.0. Last updated: 2.0.

### Limit of quantification (LOQ)

(loq). Loq Limit of quantification (LOQ) for this method if one exists.  
*Part Type:* measure *Domain ID:* naDomain *Speciment ID:* naSpecimenSet  
*Compartment Set:* anyCompartment *Group ID:* naGroup *Class ID:* na-  
Class *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Cate-*  
*gory Set ID:* NA *Unit Set ID:* geneticUnitSet *Aggregation Scale ID:* NA  
*Quality Set ID:* genQualitySet *Reference Link:* NA *Data Type:* see unit  
*Minimum Value:* see unit *Maximum Value:* see unit *Minimum Length:*  
NA *Maximum Length:* NA *Part Status:* active. First released: 1.1. Last  
updated: 2.0.

### Low severity

(low). A marker for low severity *Part Type:* category *Domain ID:*  
naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCom-  
partmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:*  
naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set*  
*ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference*  
*Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:*  
NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First  
released: 2.0. Last updated: 2.0.

### Lower limit of a 95% confidence interval

(lowerCI95). Specifies the the lower limit of a 95% confidence interval.  
Should typically be linked to an upper limit, and some indication of data  
spread (ie. standard deviation), and a mean/median measure. *Part Type:*

## Parts

aggregation *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* see unit *Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Low-volume sample

(lowVol). Sample is low-volume, but was run regardless. *Part Type:* quality *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Long-term care facility

(ltcf). A residential healthcare facility that provides 24-medical care. These are also called skilled nursing facilities. *Part Type:* category *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 1.0. Last updated: 2.0.

## Long-term care - assisted living or retirement home

(ltcfAl). A residential facility that provides assistance with daily care but generally does not provide skilled nursing care. *Part Type:* category *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Other long-term care

(ltcfO). Other residential facilities that provide daily and/or medical care, but are not defined as nursing home/skilled nursing facilities or assisted living facilities. *Part Type:* category *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Life technologies digital PCR

(ltDpcr). Describes a PCR analysis done using Life Technologies' digital PCR technology. *Part Type:* category *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale*

## Parts

*ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

## Lysis buffer

(lysi). Lysis buffer. *Part Type: category Domain ID: naDomain Speciment ID: naSpecimenSet Compartment Set: naCompartmentSet Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

## Cubic metres per day

(m3D). Cubic metres per day. *Part Type: unit Domain ID: naDomain Speciment ID: naSpecimenSet Compartment Set: naCompartmentSet Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: float Minimum Value: 0 Maximum Value: NA Minimum Length: NA Maximum Length: NA Part Status: active. First released: 1.1. Last updated: 2.0.*

## Cubic metres per hour

(m3H). Cubic metres per hour. *Part Type: unit Domain ID: naDomain Speciment ID: naSpecimenSet Compartment Set: naCompartmentSet Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data*

*Type:* float *Minimum Value:* 0 *Maximum Value:* NA *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 1.1. Last updated: 2.0.

## Cubic metres per second

(m3S). Cubic metre per second. *Part Type:* unit *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* float *Minimum Value:* 0 *Maximum Value:* NA *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 1.0. Last updated: 2.0.

## Manufacturer

(manufacturer). Manufacturer of an instrument. *Part Type:* attribute *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 100 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Mate Pair Layout

(mateLay). Specifies the mate pair layout for a sequencing method *Part Type:* category *Domain ID:* Bio *Speciment ID:* saSpecimen *Compartment Set:* anyCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA

## Parts

*Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* see unit *Minimum Value:* see unit *Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Maximum length

(maxLength). The maximum length of the value of a part or measure. *Part Type:* partSupport *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* integer *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Maximum value

(maxValue). The maximum value of a part. *Part Type:* partSupport *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Maximum Value

(maxValueAgg). Highest value in a range of values. *Part Type:* aggregation *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment*



*Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* see unit *Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 1.0. Last updated: 2.0.

## Arithmetic mean

(me). Arithmetic mean. *Part Type:* aggregation *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* see unit *Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 1.0. Last updated: 2.0.

## Measurement group

(measGrp). A group of measures that cannot be otherwise categorized. *Part Type:* group *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Parts

### Other Measure

(measOth). Other measure, not otherwise specified in measures. Add description to categoryOther. *Part Type*: measure *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: anyCompartment *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: NA *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: **depreciated**. First released: 1.0. Last updated: 2.0.

### Measure

(measure). An observation recorded from a specimen (i.e. a site, sample, person or population). *Part Type*: partType *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

### Measure

(measureID). A measurement or observation of any substance including a biological, physical or chemical substance. Measures are organized into groups and classes (sub-groups). *Part Type*: attribute *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set*

*ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 12 Part Status: active. First released: 1.0. Last updated: 2.0.*

## Report ID

(measureRepID). Unique identifier for a measurement. Report IDs cannot be repeated. *Part Type: attribute Domain ID: naDomain Speciment ID: naSpecimenSet Compartment Set: naCompartmentSet Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 1.0. Last updated: 2.0.*

## Measure report table

(measures). The table that contains information and details about a given measure adapt from version 1 documentation *Part Type: table Domain ID: naDomain Speciment ID: naSpecimenSet Compartment Set: naCompartmentSet Group ID: naGroup Class ID: results Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 1.0. Last updated: 2.0.*

## Measure set report table

(measureSets). The table that identifies sets of measures. Examples of measure sets include a set of replicates, dilutions (used to generate a Ct

## Parts

curve) or variants that are identified in a single sample. *Part Type*: table *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: results *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Measure sets table column order

(measureSetsOrder). Specifies the order of the columns in a Measure Sets table. *Part Type*: tableSupport *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: integer *Minimum Value*: 1 *Maximum Value*: NA *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Requirement

(measureSetsRequired). Specifies the columns required in a Measure Sets table. *Part Type*: tableSupport *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Measures table column order

(measuresOrder). Specifies the order of the columns in a Measures table.  
*Part Type:* tableSupport *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* integer *Minimum Value:* 1 *Maximum Value:* NA *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Requirement

(measuresRequired). Specifies the columns required in a Measures table.  
*Part Type:* tableSupport *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Report set ID

(meaureSetRepID). Unique identifier that links together a group of related measures. *Part Type:* attribute *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Parts

### Median

(med). Median. *Part Type*: aggregation *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 1.0. Last updated: 2.0.

### Normalized arithmetic mean

(menr). Arithmetic mean, normalized. *Part Type*: aggregation *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 1.0. Last updated: 2.0.

### Other Measure Description

(meOthDe). Description of other measure (measOtherDesc). *Part Type*: measure *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: anyCompartment *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: NA *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 60 *Part Status*: **deprecated**. First released: 1.0. Last updated: 2.0.

## Measure license

(measureLic). Specifies the access and use licensing for a given single measurement. Populated by partID = licenseID *Part Type:* attribute *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Method

(method). A procedure or step that is performed to make a measure. For example, methodExtract is a method tht describes the how a sample was extracted. *Part Type:* partType *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Concentration method

(methodConc). Description of the method to concentrate a wastewater sample. Description of the method used to concentrate the sample *Part Type:* method *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set*

## Parts

*ID: NA Reference Link: NA Data Type: categorical Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 100 Part Status: active. First released: 1.0. Last updated: 2.0.*

## Concentration method category set

(methodConcCatSet). CatSeteogry set for concentration methods. *Part Type: catSet Domain ID: naDomain Speciment ID: naSpecimenSet Compartment Set: naCompartmentSet Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: categorical Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

## Method

(methodID). A procedure for collecting a sample or performing a measure. *dxs Part Type: attribute Domain ID: naDomain Speciment ID: naSpecimenSet Compartment Set: naCompartmentSet Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: categorical Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 10 Part Status: active. First released: 1.0. Last updated: 2.0.*

## Membrane filtration with acidification and mgcl2

(mfAcidmgcl2). Membrane filtration with acidification and mgcl2 *Part Type: category Domain ID: naDomain Speciment ID: naSpecimenSet Compartment Set: naCompartmentSet Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set*



*ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

### **Membrane filtration with acidification and mgcl2, membrane recombined with separated solids**

(mfAcidmgcl2SS). Membrane filtration with acidification and mgcl2, membrane recombined with separated solids *Part Type: category Domain ID: naDomain Speciment ID: naSpecimenSet Compartment Set: naCompartmentSet Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

### **Membrane filtration with addition of mgcl2**

(mfMgcl2). Membrane filtration with addition of mgcl2 *Part Type: category Domain ID: naDomain Speciment ID: naSpecimenSet Compartment Set: naCompartmentSet Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

### Membrane filtration with mgcl2 and separated solids

(mfMgcl2SS). Membrane filtration with addition of mgcl2, membrane recombined with separated solids *Part Type:* category *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

### Membrane filtration with no amendment

(mfNoAmend). Membrane filtration with no amendment *Part Type:* category *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

### Membrane filtration with no amendment, membrane recombined with separated solids

(mfNoAmendSS). Membrane filtration with no amendment, membrane recombined with separated solids *Part Type:* category *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference*

*Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## **Membrane filtration with sample acidification**

(mfSampleAcid). Membrane filtration with sample acidification *Part Type:* category *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## **Membrane filtration with sample acidification, membrane recombined with separated solids**

(mfSampleAcidSS). Membrane filtration with sample acidification, membrane recombined with separated solids *Part Type:* category *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## **Millions of gallons per day (MG/D)**

(mgd). A unit for measuring of design capacity for wastewater treatment plants, represented as millions of gallons per day. Also can be used to mea-

## Parts

sure flow. *Part Type*: unit *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: float *Minimum Value*: 0 *Maximum Value*: NA *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Milligrams per litre

(mgL). Milligrams per litre. *Part Type*: unit *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: float *Minimum Value*: 0 *Maximum Value*: NA *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 1.1. Last updated: 2.0.

## Murine Hepatitis Virus

(mhv). A measure for amount of murine hepatitis viurs. *Part Type*: measure *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: anyCompartment *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: genQualitySet *Reference Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Multiple issues

(mI). Multiple issues have arisen in the sequencing process. When using the ‘multiple issues’ quality flag, please specify the issues and details in the notes section. *Part Type:* quality *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Mid-level severity

(mid). A marker for med-level severity, where there are some concerns. *Part Type:* category *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Minimum length

(minLength). The maximum value of measure. *Part Type:* partSupport *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* integer *Minimum Value:* NA *Maximum Value:* NA

## Parts

*Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

### Minimum value

(minValue). The minimum value of measure. *Part Type:* partSupport *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

### Minimum Value

(minValueAgg). Lowest value in a range of values. *Part Type:* aggregation *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* see unit *Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 1.0. Last updated: 2.0.

### Miscellaneous attribute group

(miscAttr). A group of miscellaneous measurement-like attributes. Examples of these would be longitude and latitude, or EPSG coordinates. *Part Type:* group *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set*

*ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

## Miscellaneous measure group

(miscMeas). A group of measures that cannot be otherwise categorized. *Part Type: group Domain ID: naDomain Speciment ID: naSpecimenSet Compartment Set: naCompartmentSet Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

## Missingness

(missingness). The part type for missingness values. Only used for the dictionary entries of parts. *Part Type: partType Domain ID: naDomain Speciment ID: naSpecimenSet Compartment Set: naCompartmentSet Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 15 Part Status: active. First released: 2.0. Last updated: 2.0.*

## Missingness set

(missingnessSet). The part type for missingness sets. Sets are lists of input values. Each input value within a set is a part (has a partID) that

## Parts

can be reused between sets. For example, a set A could contain the values of ‘yes’ and ‘no’; and set B could contain the values of ‘yes’, ‘no’, and ‘maybe.’ *partTypes* with sets include aggregations, compartments, missingness, quality flags, specimens, and units. Measures with categories and *dataTypes* have their own specific category sets (*catSetID*) because their input values are unique and are not reused. *Part Type*: *partType* *Domain ID*: *naDomain* *Speciment ID*: *naSpecimenSet* *Compartment Set*: *anyCompartment* *Group ID*: *naGroup* *Class ID*: *naClass* *Nomenclature ID*: *naNomenclature* *Ontology Reference*: *NA* *Category Set ID*: *NA* *Unit Set ID*: *naUnitSet* *Aggregation Scale ID*: *NA* *Quality Set ID*: *NA* *Reference Link*: *NA* *Data Type*: *varchar* *Minimum Value*: *NA* *Maximum Value*: *NA* *Minimum Length*: *0* *Maximum Length*: *15* *Part Status*: *active*. First released: 2.0. Last updated: 2.0.

## Mixed/homogenized sample

(mix). Mixed or homogenized sample or fraction analyzed. *Part Type*: *category* *Domain ID*: *naDomain* *Speciment ID*: *naSpecimenSet* *Compartment Set*: *naCompartmentSet* *Group ID*: *naGroup* *Class ID*: *naClass* *Nomenclature ID*: *naNomenclature* *Ontology Reference*: *NA* *Category Set ID*: *NA* *Unit Set ID*: *naUnitSet* *Aggregation Scale ID*: *NA* *Quality Set ID*: *NA* *Reference Link*: *NA* *Data Type*: *varchar* *Minimum Value*: *NA* *Maximum Value*: *NA* *Minimum Length*: *0* *Maximum Length*: *30* *Part Status*: *active*. First released: 1.0. Last updated: 2.0.

## Millilitres

(ml). Millilitres of volume *Part Type*: *unit* *Domain ID*: *naDomain* *Speciment ID*: *naSpecimenSet* *Compartment Set*: *naCompartmentSet* *Group ID*: *naGroup* *Class ID*: *naClass* *Nomenclature ID*: *naNomenclature* *Ontology Reference*: *NA* *Category Set ID*: *NA* *Unit Set ID*: *naUnitSet* *Aggregation Scale ID*: *NA* *Quality Set ID*: *NA* *Reference Link*: *NA* *Data*



*Type:* float *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Megalitres per day (ML/d)

(mld). Megalitres per day. *Part Type:* unit *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* float *Minimum Value:* 0 *Maximum Value:* NA *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Millimetres

(mm). Unit part for the SI unit of millimetres. *Part Type:* unit *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* float *Minimum Value:* 0 *Maximum Value:* NA *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 1.1. Last updated: 2.0.

## Model

(model). Model number or version of the instrument. *Part Type:* attribute *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit*

## Parts

*Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 100 *Part Status:* active. First released: 1.0. Last updated: 2.0.

### Moore swab passive sample

(moorSw). Moore swab passive sample. Use collectionPeriod to describe how many hours the Moore swab was used to collect the sample *Part Type:* category *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 1.0. Last updated: 2.0.

### Metres per second

(ms). metres per second. *Part Type:* unit *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* float *Minimum Value:* 0 *Maximum Value:* NA *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0. Last updated: 2.0.

### ms2 coliphage

(ms2Col). Measure of the amount of ms2 coliphage. *Part Type:* measure *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:*

anyCompartment *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: genQualitySet *Reference Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

## ms2 coliphage spike target

(ms2ColMat). ms2 coliphage is used as the recovery efficiency control target. *Part Type*: category *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Matrix Spike Duplicate

(msd). A known amounts of an analyte or representative compounds are added in the laboratory to a second aliquot of the sample used for matrix spike. *Part Type*: category *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Parts

### Moore Swab Passive sample deprecated

(mspsDep). Moore swab passive sample. Deprecated in version 2, please do not use. *Part Type:* category *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* NA *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* **deprecated**. First released: 1.0. Last updated: 2.0.

### Major sewer pipeline

(mSwrPpl). Major sewer pipeline *Part Type:* category *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 1.0. Last updated: 2.0.

## Mu

(mu). B.1.621 *Part Type:* measure *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* anyCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* genQualitySet *Reference Link:* NA *Data Type:* see unit *Minimum Value:* see unit *Maximum Value:* see unit *Minimum Length:*

NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

### **murine coronavirus**

(muCo). Measure of the amount of murine coronavirus. *Part Type*: measure *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: anyCompartment *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: genQualitySet *Reference Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

### **murine coronavirus spike target**

(muCoMat). Murine coronavirus is used as the recovery efficiency control target. *Part Type*: category *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

### **Multiple fraction**

(mul). Multiple fractions were analyzed separately and aggregated together post-analysis. This fractionID is intended for use for archival data and should not be used for newly added new moving forward (2022). Please also specify in the notes section which fractions were used for the multiple fractions (ex. solid and liquid) to avoid loss of information. *Part*

## Parts

*Type:* category *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Multiple Purpose

(multiple). A measure or sample taken for multiple purposes, not easily captured by the other purpose categories. Useful for parent samples where various subsamples will have different purposes/ *Part Type:* category *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Municipality

(municp). A complete municipality, this specifies an entire metropolitan area, either a city, town, etc. *Part Type:* category *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Mutations

(mutation). Measures and methods related to mutations. *Part Type:* class *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* mutation *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Mutation panels

(mutationPanel). Measures and methods related to a panel or list of more than one mutation from the same sequence read. *Part Type:* class *Domain ID:* Bio *Speciment ID:* saSpecimen *Compartment Set:* anyCompartment *Group ID:* naGroup *Class ID:* mutationPanel *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* geneticUnitSet *Aggregation Scale ID:* see unit *Quality Set ID:* seqQualitySet *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## N sars-cov-2 gene target

(n). N sars-cov-2 gene target *Part Type:* measure *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* anyCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* genQualitySet *Reference Link:* NA *Data Type:* see unit *Minimum Value:* see unit *Maximum Value:* see unit

## Parts

*Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0. Last updated: 2.0.

### Combined N1 and N2 sars-cov-2 gene target

(n1n2). Combined N1 and N2 sars-cov-2 gene target *Part Type:* measure *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* anyCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* genQualitySet *Reference Link:* NA *Data Type:* see unit *Minimum Value:* see unit *Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0. Last updated: 2.0.

### n211i omicron-variant gene target { #n211i }

(n211i ). n211i omicron-variant gene target *Part Type:* measure *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* anyCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* genQualitySet *Reference Link:* NA *Data Type:* see unit *Minimum Value:* see unit *Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0. Last updated: 2.0.

### n679k omicron-variant gene target { #n679k }

(n679k ). n679k omicron-variant gene target *Part Type:* measure *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* anyCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* genQualitySet



*Reference Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

### **n856k omicron-variant gene target { #n856k }**

(n856k ). n856k omicron-variant gene target *Part Type*: measure *Domain ID*: naDomain *Specimen ID*: naSpecimenSet *Compartment Set*: any-Compartment *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: genQualitySet *Reference Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

### **n969k omicron-variant gene target { #n969k }**

(n969k ). n969k omicron-variant gene target *Part Type*: measure *Domain ID*: naDomain *Specimen ID*: naSpecimenSet *Compartment Set*: any-Compartment *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: genQualitySet *Reference Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

### **Not applicable**

(NA). The field for which the expected value is not a property of the described object. Missing value indicator for missing data with no explanation. *Part Type*: missingness *Domain ID*: naDomain *Specimen*

## Parts

*ID: naSpecimenSet Compartment Set: naCompartmentSet Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 1.0. Last updated: 2.0.*

### Aggregation not applicable

(naAggr). Not applicable for aggregations. Used for parts for which an aggregation value is not applicable or appropriate. *Part Type: aggregation Domain ID: naDomain Speciment ID: naSpecimenSet Compartment Set: naCompartmentSet Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

### Aggregation scale not applicable

(naAggrScale). Not application for aggregation sets. Used for parts for which an aggregation scale value is not applicable or appropriate. *Part Type: aggScale Domain ID: naDomain Speciment ID: naSpecimenSet Compartment Set: naCompartmentSet Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

**Aggregation set not applicable**

(naAggrSet). Not application for aggregation sets. Used for parts for which an aggregation set value is not applicable or appropriate. *Part Type:* aggSet *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

**Class not applicable**

(naClass). Class is not applicable. Use this for all parts that don't have classes (most non-measure or method parts) *Part Type:* class *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

**Compartment not applicable**

(naCompartment). Compartment not applicable. *Part Type:* compartment *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum*

## Parts

*Value:* NA *Minimum Length:* 0 *Maximum Length:* 13 *Part Status:* active.  
First released: 2.0. Last updated: 2.0.

### Compartment set not applicable

(naCompartmentSet). Compartment not applicable. *Part Type:* compSet  
*Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:*  
naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature*  
*ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit*  
*Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference*  
*Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA  
*Minimum Length:* 0 *Maximum Length:* 13 *Part Status:* active. First  
released: 2.0. Last updated: 2.0.

### Domain not applicable

(naDomain). Not applicable. Use ‘not applicable’ when there is no domain for the part *Part Type:* domain *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

### Group not applicable

(naGroup). Used when there is no group; ie. groupID is not applicable. Use ‘not applicable’ when there is no group for the part *Part Type:* group *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit*

*Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

## **Name**

(name). Name of a domain, specimen, group, class, attribute, unit, nomenclature or other entity. Name of any entity. Use a prefix to distinguish names from different report tables. See fully specified name (FSN) list. i.e. Si-name = Site name, Po-name = Polygon name, Or-name = Organization name, Me-name = Method-name. *Part Type: attribute Domain ID: naDomain Specimen ID: naSpecimenSet Compartment Set: naCompartmentSet Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

## **Not a number**

(nan). The outcome of a measurement is not a valid number (plus or minus infinity, error, ...) Missing values indicator for when a numeric value is expected but not given. *Part Type: missingness Domain ID: naDomain Specimen ID: naSpecimenSet Compartment Set: naCompartmentSet Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 1.0. Last updated: 2.0.*

## Parts

### Nomenclature not applicable

(naNomenclature). Not applicable. Use ‘not applicable’ when there is no nomenclature for the part *Part Type: nomenclature Domain ID: naDomain Speciment ID: naSpecimenSet Compartment Set: naCompartmentSet Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active*. First released: 2.0. Last updated: 2.0.

### Specimen not applicable

(naSpecimen). Non applicable specimen. Use ‘not applicable’ when there is no specimen/set for the part *Part Type: specimen Domain ID: naDomain Speciment ID: naSpecimenSet Compartment Set: naCompartmentSet Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active*. First released: 2.0. Last updated: 2.0.

### Specimen set not applicable

(naSpecimenSet). A specimen set for when specimen/specimen set is not applicable. Use ‘not applicable’ when there is no specimen/set for the part *Part Type: specimenSet Domain ID: naDomain Speciment ID: naSpecimenSet Compartment Set: naCompartmentSet Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA*

*Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Native Name

(natName). The native name of the language, i.e. what the language is called by its speakers. Part of the metadata for a languageID. *Part Type:* attribute *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* categorical *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Unit not applicable

(naUnit). Not applicable for units. *Part Type:* unit *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* quantAggScale *Quality Set ID:* genQualitySet *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Unit set not applicable

(naUnitSet). Not applicable for unit sets. *Part Type:* unitSet *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:*

## Parts

naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Neighbourhood

(neigh). A municipal neighbourhood, this specifies a sub-section of a larger municipality. *Part Type*: category *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Population of newly vaccinated persons

(newVax). Population of newly vaccinated persons *Part Type*: unit *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: integer *Minimum Value*: 0 *Maximum Value*: NA *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.



## NextClade nomenclature

(nextclade). Specifies variant or genetic nomenclature as set out by NextClade. *Part Type:* nomenclature *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Normalized geometric mean

(ngmn). Geometric mean, normalized. *Part Type:* aggregation *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* see unit *Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 1.0. Last updated: 2.0.

## Ammonium Nitrogen

(nH4N). Ammonium nitrogen concentration, as N. *Part Type:* measure *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* waterCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* genQuality-Set *Reference Link:* NA *Data Type:* see unit *Minimum Value:* see unit

## Parts

*Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA  
*Part Status:* active. First released: 1.0. Last updated: 2.0.

### **niid\_2019-ncov\_n sars-cov-2 gene target**

(niid19). niid\_2019-ncov\_n sars-cov-2 gene target *Part Type:* measure  
*Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:*  
anyCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature*  
*ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit*  
*Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* genQuality-  
Set *Reference Link:* NA *Data Type:* see unit *Minimum Value:* see unit  
*Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA  
*Part Status:* active. First released: 2.0. Last updated: 2.0.

### **No quality concerns**

(noConcern). A flag to indicate there is are no quality concern about  
the measure or sample. *Part Type:* quality *Domain ID:* naDomain *Speci-*  
*ment ID:* naSpecimenSet *Compartment Set:* anyCompartment *Group ID:*  
naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology*  
*Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation*  
*Scale ID:* NA *Quality Set ID:* genQualitySet *Reference Link:* NA *Data*  
*Type:* varchar *Minimum Value:* 1 *Maximum Value:* 1 *Minimum Length:*  
NA *Maximum Length:* NA *Part Status:* active. First released: 1.0. Last  
updated: 2.0.

### **Sample not labelled**

(noLabel). Sample had no label *Part Type:* quality *Domain ID:* naDomain  
*Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet  
*Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature  
*Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet

*Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

### **No liquid concentration, liquid recombined with separated solids**

(noliquid). No liquid concentration, liquid recombined with separated solids *Part Type: category Domain ID: naDomain Specimen ID: naSpecimenSet Compartment Set: naCompartmentSet Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

### **Nomenclature**

(nomenclature). A classification system to report the measure class. See *partID = nomenclatureID. Part Type: partType Domain ID: naDomain Specimen ID: naSpecimenSet Compartment Set: naCompartmentSet Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

### **Nomenclature**

(nomenclatureID). A classification system to report the measure class. Only applicable to variants, mutations, and diseases. Currently only used

## Parts

for class = variant, mutation, or disease. Valid options are currently restricted to 'NextClade', 'Pangolin', 'WHO', or 'ICD'. *Part Type*: attribute *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: categorical *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Non-detected

(nondet). Unit ID for when a measure is “non-detect” in order to explain a value of zero. Use this unit in cases where a measure resulted in no detection *Part Type*: unit *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: integer *Minimum Value*: 0 *Maximum Value*: 1 *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Norovirus G1

(norog1). Norovirus genogroup 1 *Part Type*: measure *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: virusMisc *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: geneticUnitSet *Aggregation Scale ID*: see unit *Quality Set ID*: pcrQualitySet *Reference Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Norovirus G2

(norog2). Norovirus genogroup 2 *Part Type*: measure *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: virusMisc *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: geneticUnitSet *Aggregation Scale ID*: see unit *Quality Set ID*: pcrQualitySet *Reference Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Notes

(notes). A note used to describe details that are not captured in other attributes There is no recommended structure of a note. Use notes as needed. *Part Type*: attribute *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 200 *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Sample missing time stamp

(noTime). Sample is missing the autosampler time; incomplete meta-data on collection. *Part Type*: quality *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale*

## Parts

*ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

## Not reported

(nr). A value could have been recorded, however, it was not. Missing value indicator for data that is absent because it was not reported. *Part Type: missingness Domain ID: naDomain Speciment ID: naSpecimenSet Compartment Set: naCompartmentSet Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 1.0. Last updated: 2.0.*

## Sarbecovirus-specific N sars-cov-2 gene target

(nSarbec). Sarbecovirus-specific N sars-cov-2 gene target *Part Type: measure Domain ID: naDomain Speciment ID: naSpecimenSet Compartment Set: anyCompartment Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: genQualitySet Reference Link: NA Data Type: see unit Minimum Value: see unit Maximum Value: see unit Minimum Length: NA Maximum Length: NA Part Status: active. First released: 2.0. Last updated: 2.0.*

## Nephelometric turbidity unit

(ntu). Nephelometric Turbidity Units, a unit used in the measurement of turbidity (see “turbidity” under measureIDs). Nephelometric turbidity units (NTU) are based on white light (400–680nm) and

90° incident angle. *Part Type:* unit *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* <https://www.sciencedirect.com/topics/engineering/nephelometric-turbidity-unit> *Data Type:* float *Minimum Value:* 0 *Maximum Value:* NA *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0. Last updated: 2.0.

### **Nuclisens automated magnetic bead extraction kit**

(nucAuto). Nucleic acid extraction performed using the nuclisens automated magnetic bead extraction kit. *Part Type:* category *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

### **Nuclisens manual magnetic bead extraction kit**

(nucManu). Nucleic acid extraction performed using the nuclisens manual magnetic bead extraction kit. *Part Type:* category *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum*

## Parts

*Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

## Null

(null). A logical representation of a statement that is neither TRUE nor FALSE. Missing value indicator when the value is neither TRUE nor FALSE. *Part Type: missingness Domain ID: naDomain Specimen ID: naSpecimenSet Compartment Set: naCompartmentSet Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 1.0. Last updated: 2.0.*

## Water

(nww). Non-wastewater, coming from any kind of water body *Part Type: category Domain ID: naDomain Specimen ID: naSpecimenSet Compartment Set: naCompartmentSet Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 1.0. Last updated: 2.0.*

## coronavirus OC43

(oc43). Measure of the amount of coronavirus OC43. *Part Type: measure Domain ID: naDomain Specimen ID: naSpecimenSet Compartment Set: anyCompartment Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit*



*Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* genQuality-Set *Reference Link:* NA *Data Type:* see unit *Minimum Value:* see unit *Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0. Last updated: 2.0.

### **oc43 spike target**

(oc43Mat). Human coronavirus OC43 is used as the recovery efficiency control target. *Part Type:* category *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

### **Ocean, natural water body**

(ocean). Ocean, natural water body *Part Type:* category *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 1.0. Last updated: 2.0.

### **Other Collection deprecated**

(oColDep). Other type of collection method. Add description to collectionOther. Deprecated as of version 2, please avoid use. Specify in type, or contact the PHES-ODM research team to add your specific item via

## Parts

a github issue (<https://github.com/Big-Life-Lab/PHES-ODM/issues>), or at phesd\_odm@ohri.ca *Part Type:* category *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* NA *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* **depreciated**. First released: 1.0. Last updated: 2.0.

## Lab Analysis

(ola). Offline laboratory analysis. *Part Type:* category *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 1.0. Last updated: 2.0.

## Omicron BA.1

(omicr1). Omicron B.1.1.529 *Part Type:* measure *Domain ID:* Bio *Speciment ID:* saSpecimen *Compartment Set:* anyCompartment *Group ID:* sarsCov2 *Class ID:* variant *Nomenclature ID:* who *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* geneticUnitSet *Aggregation Scale ID:* see unit *Quality Set ID:* seqQualitySet *Reference Link:* NA *Data Type:* see unit *Minimum Value:* see unit *Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Omicron BA.2

(omicr2). Omicron BA.2 *Part Type*: measure *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: sarsCov2 *Class ID*: variant *Nomenclature ID*: who *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: geneticUnitSet *Aggregation Scale ID*: see unit *Quality Set ID*: seqQualitySet *Reference Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Omicron BA.2.75

(omicr275). Omicron BA.2.75 *Part Type*: measure *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: sarsCov2 *Class ID*: variant *Nomenclature ID*: who *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: geneticUnitSet *Aggregation Scale ID*: see unit *Quality Set ID*: seqQualitySet *Reference Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Omicron BA.4

(omicr4). Omicron BA.4 *Part Type*: measure *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: sarsCov2 *Class ID*: variant *Nomenclature ID*: who *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: geneticUnitSet *Aggregation Scale ID*: see unit *Quality Set ID*: seqQualitySet *Reference Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Parts

### Omicron BA.5

(omicr5). Omicron BA.5 *Part Type*: measure *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: sarsCov2 *Class ID*: variant *Nomenclature ID*: who *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: geneticUnitSet *Aggregation Scale ID*: see unit *Quality Set ID*: seqQualitySet *Reference Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

### Onset date

(onsDate). Earliest that symptoms were reported for this case. This data is often not known and reported. In lieu, episode is used. *Part Type*: category *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: datetime *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: **deprecated**. First released: 1.0. Last updated: 2.0.

### Online Sensor

(onse). Online sensor An online sensor *Part Type*: category *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*:

NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 1.0. Last updated: 2.0.

## Ontology reference

(ontologyRef). Ontology reference for a part. This field contains a link to an existing ontology reference for the part. ODM content spans several existing ontologies. ODM does not strive to generate a new ontology, rather ODM seeks to harmonize and extend dictionaries for application in environmental and public health surveillance. *Part Type*: partSupport *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 200 *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Orthophosphates

(ophos). Ortho-phosphate concentration. *Part Type*: measure *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: water-Compartment *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: genQualitySet *Reference Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 1.0. Last updated: 2.0.

## Other residential building

(orb). Individual residential buildings or institutions not captured in other categories *Part Type*: category *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

## OR Boolean aggregation

(orBoo). “OR” aggregation. If any value in the aggregation is “TRUE” then the OR aggregation is also “TRUE”. If all values in the aggregation is “FALSE” then the OR aggregation is also “FALSE”. *Part Type*: aggregation *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

## ORF1a sars-cov-2 gene target

(orf1a). ORF1a sars-cov-2 gene target *Part Type*: measure *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: anyCompartment *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: genQualitySet *Reference Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*:

see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active.  
First released: 2.0. Last updated: 2.0.

### ORF1ab sars-cov-2 gene target

(orf1ab). ORF1ab sars-cov-2 gene target *Part Type*: measure *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: anyCompartment *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: genQualitySet *Reference Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active.  
First released: 2.0. Last updated: 2.0.

### ORF1b sars-cov-2 gene target

(orf1b). ORF1b sars-cov-2 gene target *Part Type*: measure *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: anyCompartment *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: genQualitySet *Reference Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active.  
First released: 2.0. Last updated: 2.0.

### Organization

(organizationID). A unique identifier for the organization to which the reporter is affiliated. *Part Type*: attribute *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group*

## Parts

*ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 100 Part Status: active. First released: 1.1. Last updated: 2.0.*

## Organization table

(organizations). The table that contains information about a laboratory. adapt from version 1 documentation *Part Type: table Domain ID: naDomain Speciment ID: naSpecimenSet Compartment Set: naCompartmentSet Group ID: naGroup Class ID: programDescr Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 1.0. Last updated: 2.0.*

## Organizations table column order

(organizationsOrder). Specifies the order of the columns in a Organizations table. *Part Type: tableSupport Domain ID: naDomain Speciment ID: naSpecimenSet Compartment Set: naCompartmentSet Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: integer Minimum Value: 1 Maximum Value: NA Minimum Length: NA Maximum Length: NA Part Status: active. First released: 2.0. Last updated: 2.0.*



## Requirement

(organizationsRequired). Specifies the columns required in a Organizations table. *Part Type*: tableSupport *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Organization type category set

(orgTypeCatSet). The category set for storing organization types. *Part Type*: catSet *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: categorical *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 10 *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Organization Type

(orgTypeID). Specifies the type or purpose of a given organization. *Part Type*: attribute *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: categorical *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Parts

### Sample origin

(origin). An attribute of a sample specifying the origin. *Part Type:* attribute *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* categorical *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

### Sample Origin category set

(originCatSet). The category set for storing the valid categorical values of sample origin. *Part Type:* catSet *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* categorical *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

### Other Collection deprecated

(otco). Other type of collection method. Add description to collectionOther. Deprecated as of version 2, please avoid use. Specify in type, or contact the PHES-ODM research team to add your specific item via a github issue (<https://github.com/Big-Life-Lab/PHES-ODM/issues>), or at phesd\_odm@ohri.ca *Part Type:* category *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet

*Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: NA Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: **depreciated**. First released: 1.0. Last updated: 2.0.*

## Other aggregation scale

(othAgg). Specifies an aggregation scale that can't be described as either "qualitative" or "quantAggScale". *Part Type: aggScale Domain ID: naDomain Speciment ID: naSpecimenSet Compartment Set: naCompartmentSet Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

## Other

(other). Other Other category. A categorical response for several variables in version 1. Also accompanied by a free text field. Depreciated in version 2, with common text fields added as new categories in version 2.0.0 *Part Type: category Domain ID: naDomain Speciment ID: naSpecimen Compartment Set: naCompartment Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: **depreciated**. First released: 2.0.5. Last updated: 2.0.5.*

## Other aggregation set

(otherAggrSet). Aggregation set used for unitless measures. *Part Type*: aggrSet *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Other aggregation deprecated

(otherDep). Other aggregation method. Add description to aggregationOther Deprecated as of version 2, please avoid use. Specify in type, or contact the PHES-ODM research team to add your specific item via a github issue (<https://github.com/Big-Life-Lab/PHES-ODM/issues>), or at phesd\_odm@ohri.ca *Part Type*: aggregation *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: **deprecated**. First released: 1.0. Last updated: 2.0.

## Access to other prov deprecated

(otherProvDep). If this is 'no', this data will not be available to other data providers not listed before. If missing, data will be available to other data providers not listed before *Part Type*: attribute *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet

*Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature  
*Ontology Reference:* NA *Category Set ID:* booleanSet *Unit Set ID:*  
 naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:*  
 NA *Data Type:* boolean *Minimum Value:* NA *Maximum Value:* NA  
*Minimum Length:* 0 *Maximum Length:* 1 *Part Status:* **deprecated**.  
 First released: 1.0. Last updated: 2.0.

## Other report table set

(otherReportTableSet). Additional tables that form the full data model.  
*Part Type:* dictSet *Domain ID:* naDomain *Speciment ID:* saSpecimen *Com-*  
*partment Set:* naCompartment *Group ID:* naGroup *Class ID:* naClass  
*Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set*  
*ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set*  
*ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA  
*Maximum Value:* NA *Minimum Length:* NA *Maximum Length:* NA *Part*  
*Status:* active. First released: 2.0.0. Last updated: 2.0.0.

## Variants Other

(otherV). Used for reporting variants detected for which a specific measureID doesn't already exist. The ODM team will periodically migrate collected responses in this category into set measureIDs. Please write in an official name for the new variant that was detected, and specify which nomenclature you're using with the nomenclatureID. *Part Type:* measure *Domain ID:* Bio *Speciment ID:* saSpecimen *Compartment Set:* anyCompartment *Group ID:* sarsCov2 *Class ID:* variant *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* geneticUnitSet *Aggregation Scale ID:* see unit *Quality Set ID:* seqQualitySet *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

### Other Site - sample deprecated

(otsisaDep). Other type of site. Add description to typeOther. Deprecated as of version 2, please avoid use. Specify in type, or contact the PHES-ODM research team to add your specific item via a github issue (<https://github.com/Big-Life-Lab/PHES-ODM/issues>), or at [phesd\\_odm@ohri.ca](mailto:phesd_odm@ohri.ca) *Part Type:* category *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* NA *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* **deprecated**. First released: 1.0. Last updated: 2.0.

### Other Site - Site deprecated

(otsisiDep). Other site type. Add description to typeOther *Part Type:* category *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* **deprecated**. First released: 1.0. Last updated: 2.0.

### Other Unit deprecated

(otunDep). Other measurement of viral copies or wastewater treatment plant parameter. Add description to UnitOther. Deprecated as of version 2, please avoid use. Specify in type, or contact the PHES-ODM research

team to add your specific item via a github issue (<https://github.com/Big-Life-Lab/PHES-ODM/issues>), or at [phesd\\_odm@ohri.ca](mailto:phesd_odm@ohri.ca) *Part Type*: unit *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: quantAggScale *Quality Set ID*: genQualitySet *Reference Link*: NA *Data Type*: integer *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: **depreciated**. First released: 1.0. Last updated: 2.0.

## Outbreak

(outb). Measure to indicate outbreak status. Given that when outbreaks occur, full data on case counts may not be available or completely accurate, using this measure indicates that case counts may be approximate. The datetime for the measure helps indicate that start and end periods for an outbreak. *Part Type*: measure *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: humanCompartment *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: outbreakCatSet *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: genQualitySet *Reference Link*: NA *Data Type*: categorical *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Outbreak End

(outbEnd). Indicates an outbreak has ended. *Part Type*: category *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference*

## Parts

*Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Outbreak - on-going

(outbOngoing). Indicates an outbreak is on-going. *Part Type:* category *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Outbreak category set

(outbreakCatSet). Category set for the valid values of the outbreak measure. *Part Type:* catSet *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* outbreakCatSet *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* categorical *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Outbreak start

(outbStart). Indicates an outbreak began. *Part Type:* category *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set*



*ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

### **p100l delta-variant gene target**

(p100l). p100l delta-variant gene target *Part Type: measure Domain ID: naDomain Speciment ID: naSpecimenSet Compartment Set: anyCompartment Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: genQualitySet Reference Link: NA Data Type: see unit Minimum Value: see unit Maximum Value: see unit Minimum Length: NA Maximum Length: NA Part Status: active. First released: 2.0. Last updated: 2.0.*

### **p2046l delta-variant gene target**

(p2046l). p2046l delta-variant gene target *Part Type: measure Domain ID: naDomain Speciment ID: naSpecimenSet Compartment Set: anyCompartment Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: genQualitySet Reference Link: NA Data Type: see unit Minimum Value: see unit Maximum Value: see unit Minimum Length: NA Maximum Length: NA Part Status: active. First released: 2.0. Last updated: 2.0.*

### **p2287s delta-variant gene target**

(p2287s). p2287s delta-variant gene target *Part Type: measure Domain ID: naDomain Speciment ID: naSpecimenSet Compartment Set: anyCompartment Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature*

## Parts

clature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: genQualitySet *Reference Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

### **p3395h omicron-variant gene target { #p3395h }**

(p3395h ). p3395h omicron-variant gene target *Part Type*: measure *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: anyCompartment *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: genQualitySet *Reference Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

### **p681r delta-variant gene target**

(p681r). p681r delta-variant gene target *Part Type*: measure *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: anyCompartment *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: genQualitySet *Reference Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

## **Paired Layout**

(pairLay). Specifies the paired layout for a sequencing method *Part Type*: category *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*:

anyCompartment *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Pangolin nomenclature

(pangolin). Specifies variant or genetic nomenclature as set out by the Phylogenetic Assignment of Named Global Outbreak Lineages (Pangolin). *Part Type*: nomenclature *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Parent dataset ID

(parDatasetID). The datasetID that is a parent to another datasetID. *Part Type*: attribute *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Parts

### Parent sample ID

(parent). If this sample has been pooled into one big sample for analysis this indicates the sample of the larger pooled sample. *Part Type*: attribute *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: **depreciated**. First released: 1.1. Last updated: 2.0.

### Parent Site ID

(parSiteID). The siteID that is a parent to another siteID; usually the sub-site will be contained in the parentSite. An example would be surface testing in a LTC facility. The LTC facility would be the parentSiteID, and the various rooms/surfaces would be the sub-sites, or child-sites. *Part Type*: attribute *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

### Part description

(partDesc). The description of the part. Provides description of the part, used for translation. *Part Type*: partSupport *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group*

*ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

## Part ID

(partID). The unique identify of any entity within the dictionary. Every entity in the ODM has a partID. The partID must be unique with no duplicates. partIDs are short. partIDs that are constructed by different part attributes can be up to 28 characters (check max), but each part attribute should be 1 to 5 characters. partIDs are machine readable, but a knowledgeable user can understand what they represent. partID are used, for example, as a header in an Excel input table. Numbers are allowed but there are no other special characters other than `_`. `_` is a reserved character that is used to generate a partID using a component or table attributes. A partID for a subComponent is automatically generated using attributes of a component. For example, the partID for the component SARS-CoV-2 is covid. Covid can have many subComponents including different groups (Covid-19-al, Covid-19-va, ovid-pr (allele, variant or protein) or units and aggregations (i.e. covid-al-N1-mean-cpl representing ovid allele N1, mean observation of viral copies per litre of effluent). A similar approach to naming subComponent is used for naming parts in a reprotTable. *Part Type: partSupport Domain ID: naDomain Speciment ID: naSpecimenSet Compartment Set: naCompartmentSet Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 28 Part Status: active. First released: 2.0. Last updated: 2.0.*

## Parts

### Part instruction

(partInstr). Additional notes and instructions on how a part is used and/or defined. *Part Type:* partSupport *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 200 *Part Status:* active. First released: 2.0. Last updated: 2.0.

### Label

(partLabel). A human readable label of a part. Typically, a part label has no acrynomns (every word is spelled out). Equivalent to a LOINC common name. *Part Type:* partSupport *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

### Parts Look-up table

(parts). Look up table containing all parts in of the data model. Contains all parts, including self-referential parts. *Part Type:* table *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* lookup *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference*

*Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Parts table column order

(partsOrder). Order of headers in the Parts table. *Part Type:* tableSupport *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Required headers

(partsRequired). Required headers in the Parts table. *Part Type:* tableSupport *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Part types

(partType). Part types describe the purpose or use of the part. Enivornment data has three main part types: measure (i.e. covN1 viral measures, wastewater flow rate, temperature), method (e.g. how the measure was taken), and attribute (such as a site name). See description of each of the

## Parts

part types within categorySetID = partTypeCatSets. *Part Type*: part-Type *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 15 *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Primary Clarifier Effluent deprecated

(pceDep). Effluent obtained after primary clarifiers. Deprecated in version 2, please do not use. Duplicate of the sampleMat categories - refer to those. *Part Type*: category *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: waterCompartment *Group ID*: colGrp *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: NA *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: **deprecated**. First released: 1.0. Last updated: 2.0.

## Postal or Zip Code

(pCode). The zip code or postal code for a given address, specifying a specific geographic area. *Part Type*: attribute *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.



## PCR method

(pcr). Description of the PCR method. Description of the PCR method used *Part Type*: method *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: measGrp *Class ID*: sequence *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: pcrCatSet *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: categorical *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 100 *Part Status*: active. First released: 1.0. Last updated: 2.0.

## PCR Method category set

(pcrCatSet). The category set capturing containing all of the valid methods for the PCR method *ID*. *Part Type*: catSet *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: pcrCatSet *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: categorical *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

## PCR quality set

(pcrQualitySet). Quality set for PCR measures. *Part Type*: qualitySet *Domain ID*: naDomain *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: pcrQualitySet *Reference Link*: NA *Data Type*: categorical *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Parts

### PCR sequencingsSelection method

(pcrSeq). Specifies the PCR selection method for sequencing, ie. that a pre-determined primer was used. Primer should be specified if this is selected. *Part Type:* category *Domain ID:* Bio *Speciment ID:* saSpecimen *Compartment Set:* anyCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* see unit *Minimum Value:* see unit *Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0. Last updated: 2.0.

### Primary Clarifier Sludge deprecated

(pcs). Sludge produced by primary clarifiers. *Part Type:* category *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* waterCompartment *Group ID:* colGrp *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* NA *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* **deprecated**. First released: 1.0. Last updated: 2.0.

### Primary clarifier effluent

(pEfflu). Effluent obtained after primary clarifiers *Part Type:* category *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* waterCompartment *Group ID:* colGrp *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:*

NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 1.0. Last updated: 2.0.

## Polyethyleneglycol (PEG) precipitation

(peg). Peg precipitation *Part Type*: category *Domain ID*: Che *Speciment ID*: naSpecimenSet *Compartment Set*: waterCompartment *Group ID*: procGrp *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: genQualitySet *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Percent

(perc). Percentage. *Part Type*: unit *Domain ID*: allDo *Speciment ID*: anySpecimen *Compartment Set*: anyCompartment *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: quantAggScale *Quality Set ID*: genQualitySet *Reference Link*: NA *Data Type*: float *Minimum Value*: 0 *Maximum Value*: NA *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Percent recovery

(percRec). Percent of the surrogate recovery for a recovery efficiency control assay. Use this for reporting the results of any recovery control assay. *Part Type*: unit *Domain ID*: naDomain *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set*

## Parts

*ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: integer Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 100 Part Status: active. First released: 1.0. Last updated: 2.0.*

## pH

(ph). pH measurement *Part Type: measure Domain ID: Phy Specimen ID: siSaSpecimen Compartment Set: anyCompartment Group ID: miscMeas Class ID: standardConc Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: unitlessUnitSet Aggregation Scale ID: see unit Quality Set ID: genQualitySet Reference Link: NA Data Type: float Minimum Value: 1 Maximum Value: 14 Minimum Length: NA Maximum Length: NA Part Status: active. First released: 1.1. Last updated: 2.0.*

## Access to phac

(phac). If this is ‘no’, the data will not be available to employees of the Public Health Agency of Canada - PHAC. If missing, data will be available to employees of the Public Health Agency of Canada - PHAC. *Part Type: attribute Domain ID: naDomain Specimen ID: naSpecimenSet Compartment Set: naCompartmentSet Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: booleanSet Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: boolean Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 1 Part Status: **depreciated**. First released: 1.0. Last updated: 2.0.*

## Public health department or region

(pHDept). The public health department or region where the site or institute is located. See also **healthRegion** if there is a separate regional health care delivery authority. *Part Type:* attribute *Domain ID:* naDomain *Specimen ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 1.1. Last updated: 2.0.

## Phenol chloroform

(phenCl). Nucleic acid extraction performed using phenol chloroform. *Part Type:* category *Domain ID:* Bio *Specimen ID:* saSpecimen *Compartment Set:* anyCompartment *Group ID:* procGrp *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Pseudomonas virus phi6

(phi6). Measure of the amount of pseudomonas virus phi6. *Part Type:* measure *Domain ID:* Bio *Specimen ID:* saSpecimen *Compartment Set:* anyCompartment *Group ID:* virusMisc *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* geneticUnitSet *Aggregation Scale ID:* see unit *Quality Set ID:* genQualitySet *Reference Link:* NA *Data Type:* see unit *Minimum Value:* see

## Parts

unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

### phi6 spike target

(phi6Mat). Pseudomonas virus phi6 is used as the recovery efficiency control target. *Part Type*: category *Domain ID*: Bio *Specimen ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: procGrp *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

### Contact phone

(phone). Contact phone number, for the lab. *Part Type*: attribute *Domain ID*: naDomain *Specimen ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 10 *Maximum Length*: 12 *Part Status*: active. First released: 1.0. Last updated: 2.0.

### Total phosphorous

(phos). Total phosphorous *Part Type*: measure *Domain ID*: Phy *Specimen ID*: siSaSpecimen *Compartment Set*: waterCompartment *Group ID*: miscMeas *Class ID*: standardConc *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: stdConcentrationUnitSet *Aggregation Scale ID*: see unit *Quality Set ID*: genQualitySet

*Reference Link:* NA *Data Type:* see unit *Minimum Value:* see unit *Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 1.1. Last updated: 2.0.

## Total Phosphates

(phostot). Total phosphates *Part Type:* measure *Domain ID:* Phy *Speciment ID:* siSaSpecimen *Compartment Set:* waterCompartment *Group ID:* miscMeas *Class ID:* standardConc *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* stdConcentrationUnitSet *Aggregation Scale ID:* see unit *Quality Set ID:* genQualitySet *Reference Link:* NA *Data Type:* see unit *Minimum Value:* see unit *Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 1.1. Last updated: 2.0.

## PHRED quality score

(phred). PHRED Quality Score For Sequencing *Part Type:* measure *Domain ID:* Bio *Speciment ID:* saSpecimen *Compartment Set:* anyCompartment *Group ID:* procGroup *Class ID:* sequence *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* geneticUnitSet *Aggregation Scale ID:* see unit *Quality Set ID:* seqQualitySet *Reference Link:* NA *Data Type:* see unit *Minimum Value:* see unit *Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Physical property

(phy). A physical property or object not characterized by life or chemistry. *Part Type:* domain *Domain ID:* Phy *Speciment ID:* anySpecimen *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set*

## Parts

*ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

## Physical

(physical). Measures and methods related to generic physical properties. *Part Type: class Domain ID: Phy Specimen ID: saSpecimen Compartment Set: anyCompartment Group ID: naGroup Class ID: physical Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: see unit Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

## Primary key

(pK). Primary key for a table. All report tables have a primary key. Each row in a report table has unique identifier recorded in the primary key. *Part Type: category Domain ID: naDomain Specimen ID: naSpecimenSet Compartment Set: naCompartmentSet Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

## PMMoV- and flow-normalized mean

(pmFloMean). Mean measure normalized to amount of PMMoV and wastewater flow. Mostly used for reporting specific alleles (N1, N2, E, etc.)



*Part Type:* aggregation *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* quantAggScale *Quality Set ID:* pcrQualitySet *Reference Link:* NA *Data Type:* varchar *Minimum Value:* see unit *Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0. Last updated: 2.0.

## PMMoV-normalized mean

(pmmovNorm). Mean measure normalized to amount of PMMoV. Mostly used for reporting specific alleles (N1, N2, E, etc.) *Part Type:* aggregation *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* quantAggScale *Quality Set ID:* pcrQualitySet *Reference Link:* NA *Data Type:* varchar *Minimum Value:* see unit *Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Population

(po). An measure or observation for a geographic area or population. Examples include human compartment measures such as case numbers, hospitalization rates for diseases or surface or air compartment measures such as snow coverage or ambient temperature. *Part Type:* specimen *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA

## Parts

*Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 1.0. Last updated: 2.0.

## Post-Grit depreciated

(pogr). Raw wastewater after a treatment plant's headworks. *Part Type:* category *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* waterCompartment *Group ID:* colGrp *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* NA *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* **depreciated**. First released: 1.0. Last updated: 2.0.

## Polygon ID

(polygonID). Unique identifier for the polygon. A polygon is a geographic are representing the capment area of an environmental sample. *Part Type:* attribute *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 10 *Part Status:* active. First released: 1.0. Last updated: 2.0.

## Polygon table

(polygons). The table that contains information about the geometry of a geographic area. *Part Type:* table *Domain ID:* naDomain *Speciment*

*ID: naSpecimenSet Compartment Set: naCompartmentSet Group ID: naGroup Class ID: programDescr Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 1.0. Last updated: 2.0.*

## Polygons table column order

(polygonsOrder). Specifies the order of the columns in a Polygons table.  
*Part Type: tableSupport Domain ID: naDomain Speciment ID: naSpecimenSet Compartment Set: naCompartmentSet Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: integer Minimum Value: 1 Maximum Value: NA Minimum Length: NA Maximum Length: NA Part Status: active. First released: 2.0. Last updated: 2.0.*

## Requirement

(polygonsRequired). Specifies the columns required in a Polygons table.  
*Part Type: tableSupport Domain ID: naDomain Speciment ID: naSpecimenSet Compartment Set: naCompartmentSet Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

## Polygon Population

(polyPop). An attribute of a polygon, which specifies the population of that polygon. A rough estimate of the number of human residents. *Part Type:* attribute *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* integer *Minimum Value:* 0 *Maximum Value:* NA *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Pooled

(pooled). Is this a pooled sample, and therefore composed of multiple child samples obtained at different sites *Part Type:* attribute *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* booleanSet *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* boolean *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 1.0. Last updated: 2.0.

## Case reporting date category set

(popDateTypeCatSet). Category set for the date of case reporting. *Part Type:* catSet *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* popDateTypeCatSet *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* categorical *Minimum*

*Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* **depreciated**. First released: 1.0. Last updated: 2.0.

## Type of date for case reporting depreciated

(popDateTypeDep). Type of date used for confirmed cases. Typically, report or episode are reported. Onset and test date is not usually reported within aggregate data. *Part Type:* attribute *Domain ID:* Bio *Speciment ID:* poSpecimen *Compartment Set:* humanCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* popDateTypeCatSet *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* **depreciated**. First released: 1.0. Last updated: 2.0.

## Population equivalents

(popEq). A unit for measuring of design capacity for wastewater treatment plants, represented as the approximate amount of water a single person would use. *Part Type:* unit *Domain ID:* Phy *Speciment ID:* siSpecimen *Compartment Set:* waterCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* quantAggScale *Quality Set ID:* genQualitySet *Reference Link:* NA *Data Type:* float *Minimum Value:* 0 *Maximum Value:* NA *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 1.0. Last updated: 2.0.

## Parts

### Population group

(popGrp). A group of measures/methods related to population-level factors. Examples might be case numbers, hospitalization rates, etc. *Part Type*: group *Domain ID*: allDo *Specimen ID*: poSpecimen *Compartment Set*: anyCompartment *Group ID*: popGrp *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: see unit *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

### Population Served

(popServ). An attribute of a site, which specifies the population of/population served by a given site. *Part Type*: attribute *Domain ID*: naDomain *Specimen ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: categorical *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

### Population

(population). Population-level measures/methods. *Part Type*: class *Domain ID*: Bio *Specimen ID*: poSpecimen *Compartment Set*: humanCompartment *Group ID*: naGroup *Class ID*: population *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set*

*ID: naUnitSet Aggregation Scale ID: see unit Quality Set ID: genQuality-Set Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

## Population unit set

(populationUnitSet). Unit set for hospital-related measurements. *Part Type: unitSet Domain ID: naDomain Speciment ID: naSpecimenSet Compartment Set: humanCompartment Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: populationUnitSet Aggregation Scale ID: quantAggScale Quality Set ID: NA Reference Link: NA Data Type: categorical Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

## Poulatiion or sample set

(poSaSpecimenSet). A specimen set that inculdes population or sample specimen. *Part Type: specimenSet Domain ID: naDomain Speciment ID: poSaSpecimen Compartment Set: naCompartmentSet Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: categorical Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

## Poulatiion or site set

(poSiSpecimenSet). A specimen set that inculdes population or site specimen. *Part Type: specimenSet Domain ID: naDomain Speciment ID: po-*

## Parts

SiSpecimen *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: categorical *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Population specimen set

(poSpecimenSet). A specimen set that includes only a population specimen. *Part Type*: specimenSet *Domain ID*: naDomain *Speciment ID*: poSpecimen *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: categorical *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Percent positive

(pp). Percent positive of sample measures. Can use for Moore swabs, etc. *Part Type*: unit *Domain ID*: Bio *Speciment ID*: siSaSpecimen *Compartment Set*: anyCompartment *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: quantAggScale *Quality Set ID*: pcrQualitySet *Reference Link*: NA *Data Type*: float *Minimum Value*: 0 *Maximum Value*: 100 *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 1.0. Last updated: 2.0.



**parts per million**

(ppm). Parts per million. *Part Type*: unit *Domain ID*: Phy *Speciment ID*: siSaSpecimen *Compartment Set*: anyCompartment *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: quantAggScale *Quality Set ID*: genQualitySet *Reference Link*: NA *Data Type*: float *Minimum Value*: 0 *Maximum Value*: NA *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 1.0. Last updated: 2.0.

**PMMoV-CP**

(ppmv). Pepper mild mottle virus capsid protein gene region *Part Type*: measure *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: virusMisc *Class ID*: allele *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: geneticUnitSet *Aggregation Scale ID*: see unit *Quality Set ID*: genQualitySet *Reference Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 1.0. Last updated: 2.0.

**Percent positivity rate**

(pprt). Percent positivity rate of tests conducted within a day in a given region. *Part Type*: unit *Domain ID*: Bio *Speciment ID*: poSpecimen *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: genQualitySet *Reference Link*: NA *Data Type*: float *Minimum Value*: 0 *Maximum Value*: NA *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 1.0. Last updated: 2.0.

## Parts

### Percent primary sludge

(pps). Percentage of total solids, for primary sludge. *Part Type*: unit  
*Domain ID*: Phy *Speciment ID*: siSaSpecimen *Compartment Set*: water-  
*Compartment Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*:  
naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set*  
*ID*: naUnitSet *Aggregation Scale ID*: quantAggScale *Quality Set ID*: gen-  
QualitySet *Reference Link*: NA *Data Type*: float *Minimum Value*: 0 *Maxi-*  
*um Value*: 100 *Minimum Length*: NA *Maximum Length*: NA *Part Status*:  
active. First released: 1.0. Last updated: 2.0.

### Precipitation

(precipClass). Measures and methods related to precipitation. *Part Type*:  
class *Domain ID*: Phy *Speciment ID*: siSaSpecimen *Compartment Set*: any-  
*Compartment Group ID*: naGroup *Class ID*: precipClass *Nomenclature ID*:  
naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set*  
*ID*: naUnitSet *Aggregation Scale ID*: see unit *Quality Set ID*: NA *Refer-*  
*ence Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*:  
NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First  
released: 2.0. Last updated: 2.0.

### Precipitation unit set

(precipitationUnitSet). Unit set for percipitation measurements. *Part*  
*Type*: unitSet *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Com-*  
*partment Set*: anyCompartment *Group ID*: naGroup *Class ID*: naClass  
*Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set*  
*ID*: NA *Unit Set ID*: precipitationUnitSet *Aggregation Scale ID*: quantAg-  
gScale *Quality Set ID*: NA *Reference Link*: NA *Data Type*: categorical

*Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

## Pretreatment

(pretreat). Was the sample chemically treated in anyway with the addition of stabilizers or other Pretreatment method can be describe using a method. See methodID. *Part Type: method Domain ID: naDomain Specimen ID: saSpecimen Compartment Set: anyCompartment Group ID: procGrp Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: booleanSet Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: categorical Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 1 Part Status: active. First released: 1.0. Last updated: 2.0.*

## Genetic primer

(primer). Method ID used for indicating the primer used for a PCR or sequencing assay. *Part Type: method Domain ID: Bio Specimen ID: saSpecimen Compartment Set: anyCompartment Group ID: measGrp Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: primerCatSet Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: categorical Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

## Genetic primer category set

(primerCatSet). The category set for genetic primers used in sequencing or PCR assays. *Part Type: catSet Domain ID: naDomain Specimen*

## Parts

*ID: naSpecimenSet Compartment Set: naCompartmentSet Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: primerCatSet Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: categorical Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

## Private sector organization type

(priv). The category of organization type used for private sector or non-profit groups that are not otherwise captured by the academic category. *Part Type: category Domain ID: naDomain Speciment ID: naSpecimenSet Compartment Set: naCompartmentSet Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 10 Part Status: active. First released: 2.0. Last updated: 2.0.*

## Processing group

(procGrp). A group of measures/methods related to processing samples for analysis. *Part Type: group Domain ID: allDo Speciment ID: siSaSpecimen Compartment Set: anyCompartment Group ID: procGrp Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: see unit Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

## Program decription tables

(programDescr). Tables used to describe surveillance and testing programs. Program description tables record metadata on the organizations, locations, and protocols. Information include the name, location, and other contact information. These tables are usually completed once and they are updated only when contact information changes. *Part Type*: class *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: programDescr *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: see unit *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

## promega automated tna kit

(promAuto). Nucleic acid extraction performed using the promega automated tna kit. *Part Type*: category *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: procGrp *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

## promega ht tna kit

(promHt). Nucleic acid extraction performed using the promega ht tna kit. *Part Type*: category *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: procGrp *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set*

## Parts

*ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

### **promega manual tna kit**

(promManu). Nucleic acid extraction performed using the promega manual tna kit. *Part Type: category Domain ID: Bio Speciment ID: saSpecimen Compartment Set: anyCompartment Group ID: procGrp Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

### **promega wastewater large volume tna capture kit**

(promWW). Nucleic acid extraction performed using the promega wastewater large volume tna capture kit. *Part Type: category Domain ID: Bio Speciment ID: saSpecimen Compartment Set: anyCompartment Group ID: procGrp Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

### **Proportion of total**

(prop). Proportion as a percent of total. *Part Type: unit Domain ID: naDomain Speciment ID: anySpecimen Compartment Set: anyCompartment Group ID: naGroup Class ID: naClass Nomenclature ID: naNomen-*

clature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: quantAggScale *Quality Set ID*: genQualitySet *Reference Link*: NA *Data Type*: float *Minimum Value*: 0 *Maximum Value*: 100 *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 1.0. Last updated: 2.0.

## Proportion of variant in sample

(propV). Proportion of a variant as percent of total variants. *Part Type*: unit *Domain ID*: Bio *Specimen ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: quantAggScale *Quality Set ID*: pcrQualitySet *Reference Link*: NA *Data Type*: float *Minimum Value*: 0 *Maximum Value*: 100 *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 1.1. Last updated: 2.0.

## Proteins

(protein). Measures and methods related to proteins. *Part Type*: class *Domain ID*: Bio *Specimen ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: naGroup *Class ID*: protein *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: see unit *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Protocol ID

(protocolID). A unique identifier for a given protocol. *Part Type*: attribute *Domain ID*: naDomain *Specimen ID*: naSpecimenSet *Compartment Set*:

## Parts

naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Protocol ID container

(protocolIDContainer). Unique identifier for the protocol and the steps and other protocols that make it up. Protocol ID Container is populated by a protocolID (partID = protocolID) *Part Type*: attribute *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 15 *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Protocol ID object

(protocolIDObj). The object of the relationship between one protocol and another protocol or step, within a given protocol ID container. Populate this field using Protocol ID (partID = protocolID). Together with protocolIDSub or stepIDSub and relationshipID, the protocol relationship is defined as: [protocolIDSubject or stepIDSubject] [relationshipID] [protocolIDObject or stepIDObject]. Ex: stepIDSubject precedes protocolIDObject. *Part Type*: attribute *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale*



*ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

## Protocol ID subject

(protocolIDSub). The subject of the relationship between one protocol and another protocol or step, within a given protocol ID container. Populate this field using Protocol ID (partID = protocolID). Together with protocolIDObj or stepIDObj and relationshipID the row of protocolRelationships should say: [protocolIDSubject or stepIDSubject] [relationshipID] [protocolIDObject or stepIDObject]. Ex: stepIDSubject precedes protocolIDObject. *Part Type: attribute Domain ID: naDomain Specimen ID: naSpecimenSet Compartment Set: naCompartmentSet Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

## Protocol relationships table

(protocolRelationships). The table that contains the organizational information and details (such as order) about a given protocol, recorded as a series of protocol steps (protocolSteps). Protocols are a group of related protocol steps. For example a protocol step can describe a sample concentration, extraction, inhibition or a measurement. Protocols can include both methodID (a procedure) and measureIDs (a measure). An example of a method is centrifugation; where the centrifugation rotation speed is described as a measure. *Part Type: table Domain ID: naDomain Specimen ID: naSpecimenSet Compartment Set: naCompartmentSet Group*

## Parts

*ID: naGroup Class ID: programDescr Nomenclature ID: naNomenclature  
Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Ag-  
gregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type:  
varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0  
Maximum Length: 30 Part Status: active. First released: 2.0. Last up-  
dated: 2.0.*

## Protocol relationships table column order

(protocolRelationshipsOrder). Specifies the order of the columns in the Protocol Organization table. *Part Type: tableSupport Domain ID: naDomain Speciment ID: naSpecimenSet Compartment Set: naCom-  
partmentSet Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set  
ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference  
Link: NA Data Type: integer Minimum Value: 1 Maximum Value: NA  
Minimum Length: NA Maximum Length: NA Part Status: active. First  
released: 2.0. Last updated: 2.0.*

## Requirement

(protocolRelationshipsRequired). Specifies the columns required in the Protocol Organization table. *Part Type: tableSupport Domain ID: naDomain Speciment ID: naSpecimenSet Compartment Set: naCom-  
partmentSet Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set  
ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference  
Link: NA Data Type: varchar Minimum Value: NA Maximum Value:  
NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First  
released: 2.0. Last updated: 2.0.*

## Protocol Relationships set

(protocolRelSet). Category set for valid values of relationshipID in the protocolRelationships table. Use only for protocolRelationships table relationshipID. *Part Type:* catSet *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* anyCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* protocolRelSet *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* categorical *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Protocols table

(protocols). The table for protocols. *Part Type:* table *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* programDescr *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Protocols table column order

(protocolsOrder). Specifies the order of the columns in the Protocols table. *Part Type:* tableSupport *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* integer *Minimum*

## Parts

*Value:* 1 *Maximum Value:* NA *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Requirement

(protocolsRequired). Specifies the columns required in the Protocols table. *Part Type:* tableSupport *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Protocol steps table

(protocolSteps). The table for collecting metadata on individual steps in a protocol, methodological process, or assay. *Part Type:* table *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* programDescr *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 1.0. Last updated: 2.0.

## Protocol steps table column order

(protocolStepsOrder). Specifies the order of the columns in a Protocol Steps table. *Part Type:* tableSupport *Domain ID:* naDomain *Speciment*

*ID: naSpecimenSet Compartment Set: naCompartmentSet Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: integer Minimum Value: 1 Maximum Value: NA Minimum Length: NA Maximum Length: NA Part Status: active. First released: 2.0. Last updated: 2.0.*

## Requirement

(protocolStepsRequired). Specifies the columns required in a Protocol Steps table. *Part Type: tableSupport Domain ID: naDomain Speciment ID: naSpecimenSet Compartment Set: naCompartmentSet Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

## Protocol table set

(protocolTableSet). tables holding information on the methods used for sample collection or measurement. *Part Type: dictSet Domain ID: naDomain Speciment ID: saSpecimen Compartment Set: naCompartment Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: NA Maximum Length: NA Part Status: active. First released: 2.0.0. Last updated: 2.0.0.*

## Parts

### Protocol version

(protocolVersion). Specifies the version of a method set. Version of the method set. Semantic versioning is recommended. *Part Type*: attribute *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: integer *Minimum Value*: 1 *Maximum Value*: NA *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

### Access to prov ha

(provHA). If this is ‘no’, this data will not be available to provincial health authorities. If missing, data will be available to provincial health authorities. *Part Type*: attribute *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: booleanSet *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: boolean *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 1 *Part Status*: **depreciated**. First released: 1.0. Last updated: 2.0.

### Provisional report

(provisional). A provisional or interm report. Use for measurement that are not yet finalized. Typically this purpose is not publicly reported. *Part Type*: category *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set*

*ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

## Primary clarifier sludge

(pSludge). Sludge produced by primary clarifiers *Part Type: category Domain ID: naDomain Speciment ID: naSpecimenSet Compartment Set: waterCompartment Group ID: colGrp Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 1.0. Last updated: 2.0.*

## Pumping station

(pStat). Pumping station *Part Type: category Domain ID: naDomain Speciment ID: naSpecimenSet Compartment Set: waterCompartment Group ID: colGrp Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 1.0. Last updated: 2.0.*

## Post-grit

(pstGrit). Raw wastewater after a treatment plant's headworks (post grit or removal of large solids at a treatment plant but priort to a primary clarifier) *Part Type: category Domain ID: naDomain Speciment ID: naSpec-*

## Parts

imenSet *Compartment Set*: waterCompartment *Group ID*: colGrp *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 1.0. Last updated: 2.0.

## Pretreatment description - deprecated

(ptDescDep). If preTreatment then describe the treatment that was performed. Deprecated in version 2, please do not use. Use pretreatment methodID and specify further in summary and/or notes, if necessary. *Part Type*: attribute *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: procGrp *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 255 *Part Status*: **deprecated**. First released: 1.0. Last updated: 2.0.

## Number of positive tests

(ptot). Number of positive tests conducted within a day in a given region. *Part Type*: unit *Domain ID*: Bio *Speciment ID*: poSpecimen *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: genQualitySet *Reference Link*: NA *Data Type*: integer *Minimum Value*: 0 *Maximum Value*: NA *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 1.0. Last updated: 2.0.



## Access to public

(public). If this is 'no', this data will not be available to the public. If missing, data will be available to the public. *Part Type:* attribute *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* booleanSet *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* boolean *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 1 *Part Status:* **depreciated**. First released: 1.0. Last updated: 2.0.

## Puro virus

(puro). Measure of the amount of puro virus. *Part Type:* measure *Domain ID:* Bio *Speciment ID:* saSpecimen *Compartment Set:* anyCompartment *Group ID:* virusMisc *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* geneticUnitSet *Aggregation Scale ID:* see unit *Quality Set ID:* genQualitySet *Reference Link:* NA *Data Type:* see unit *Minimum Value:* see unit *Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Puro virus spike target

(puroMat). Puro Virus is used as the recovery efficiency control target. *Part Type:* category *Domain ID:* Bio *Speciment ID:* saSpecimen *Compartment Set:* anyCompartment *Group ID:* procGrp *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:*

## Parts

NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Purpose category

(purposeCatSet). Purpose category set for a sample or measure. *Part Type*: catSet *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: purposeCatSet *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: categorical *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Purpose

(purposeID). The reason the measure or sample was taken. See allowed categories: report, quality control, validation study, test *Part Type*: attribute *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: purposeCatSet *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: categorical *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

## q19e omicron-variant gene target { #q19e }

(q19e ). q19e omicron-variant gene target *Part Type*: measure *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group*

*ID: sarsCov2 Class ID: mutation Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: geneticUnitSet Aggregation Scale ID: see unit Quality Set ID: pcrQualitySet Reference Link: NA Data Type: see unit Minimum Value: see unit Maximum Value: see unit Minimum Length: NA Maximum Length: NA Part Status: active. First released: 2.0. Last updated: 2.0.*

### **q493r omicron-variant gene target { #q493r }**

(q493r ). q493r omicron-variant gene target *Part Type: measure Domain ID: Bio Speciment ID: saSpecimen Compartment Set: anyCompartment Group ID: sarsCov2 Class ID: mutation Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: geneticUnitSet Aggregation Scale ID: see unit Quality Set ID: pcrQualitySet Reference Link: NA Data Type: see unit Minimum Value: see unit Maximum Value: see unit Minimum Length: NA Maximum Length: NA Part Status: active. First released: 2.0. Last updated: 2.0.*

### **q498r omicron-variant gene target { #q498r }**

(q498r ). q498r omicron-variant gene target *Part Type: measure Domain ID: Bio Speciment ID: saSpecimen Compartment Set: anyCompartment Group ID: sarsCov2 Class ID: mutation Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: geneticUnitSet Aggregation Scale ID: see unit Quality Set ID: pcrQualitySet Reference Link: NA Data Type: see unit Minimum Value: see unit Maximum Value: see unit Minimum Length: NA Maximum Length: NA Part Status: active. First released: 2.0. Last updated: 2.0.*

## Parts

### **q954h omicron-variant gene target { #q954h }**

(q954h ). q954h omicron-variant gene target *Part Type*: measure *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: sarsCov2 *Class ID*: mutation *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: geneticUnitSet *Aggregation Scale ID*: see unit *Quality Set ID*: pcrQualitySet *Reference Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

### **Quaility assurance method**

(qaqc). Quality ass qc Description of the quality control steps taken *Part Type*: method *Domain ID*: naDomain *Speciment ID*: anySpecimen *Compartment Set*: anyCompartment *Group ID*: procGrp *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 100 *Part Status*: **deprecated**. First released: 1.0. Last updated: 2.0.

### **Quality concerns**

(qf1). A flag to indicate there is a quality concern, not otherwise specified. *Part Type*: quality *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: anyCompartment *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: genQualitySet *Reference Link*: NA *Data Type*: varchar *Minimum Value*: 0 *Maximum Value*: 0 *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 1.0. Last updated: 2.0.

**qiagen allprep dna/rna kit**

(qgDNARNA). Nucleic acid extraction performed using the qiagen allprep dna/rna kit. *Part Type:* category *Domain ID:* Bio *Speciment ID:* saSpecimen *Compartment Set:* anyCompartment *Group ID:* procGrp *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

**qiagen digital PCR**

(qgDpcr). Describes a PCR analysis done using Qiagen's digital PCR technology. *Part Type:* category *Domain ID:* Bio *Speciment ID:* saSpecimen *Compartment Set:* anyCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* pcrQualitySet *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

**qiagen ez1 virus mini kit v2.0**

(qgEz1). Nucleic acid extraction performed using the qiagen ez1 virus mini kit v2.0. *Part Type:* category *Domain ID:* Bio *Speciment ID:* saSpecimen *Compartment Set:* anyCompartment *Group ID:* procGrp *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Parts

### qiagen allprep powerfecal dna/rna kit

(qgPwrFecal). Nucleic acid extraction performed using the qiagen allprep powerfecal dna/rna kit. *Part Type*: category *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: procGrp *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

### qiagen allprep powerviral dna/rna kit

(qgPwrViral). Nucleic acid extraction performed using the qiagen allprep powerviral dna/rna kit. *Part Type*: category *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: procGrp *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

### qiagen powerwater kit

(qgPwrWtr). Nucleic acid extraction performed using the qiagen powerwater kit. *Part Type*: category *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: procGrp *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

**qiagen qiaamp buffers with epoch columns**

(qgQiAmp). Nucleic acid extraction performed using the qiagen qiaamp buffers with epoch columns. *Part Type:* category *Domain ID:* Bio *Speciment ID:* saSpecimen *Compartment Set:* anyCompartment *Group ID:* procGrp *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

**qiagen rneasy kit**

(qgRneasy). Nucleic acid extraction performed using the qiagen rneasy kit. *Part Type:* category *Domain ID:* Bio *Speciment ID:* saSpecimen *Compartment Set:* anyCompartment *Group ID:* procGrp *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

**qiagen rneasy powermicrobiome kit**

(qgRneasyPwr). Nucleic acid extraction performed using the qiagen rneasy powermicrobiome kit. *Part Type:* category *Domain ID:* Bio *Speciment ID:* saSpecimen *Compartment Set:* anyCompartment *Group ID:* procGrp *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Parts

### Quantitative PCR

(qpcr). Real-time PCR, also called ‘quantAggScale’ PCR *Part Type*: category *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: any-Compartment *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

### Qualitative

(qualAggScale). The “qualAggScale” aggregation scale. *Part Type*: aggScale *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: qualAggScale *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

### Quality indicators

(quality). A measure of the quality of a reported value or sample. Only used for the dictionary entries of parts. *Part Type*: partType *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*:



NA *Minimum Length*: 0 *Maximum Length*: 15 *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Quality control

(qualityControl). A measure or sample taken for the purpose of quality control. Measures with this category are take to assess quality control. *Part Type*: category *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

## quality flag

(qualityFlag). A field for reporting any quality concerns - of lack thereof - for a sample or measure. Types of quality flag vary on context; please see the qulaityFlagSet to be confirm. *Part Type*: attribute *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: categorical *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Quality report ID

(qualityID). A unique identifier for a given quality report. *Part Type*: attribute *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment*:

## Parts

*ment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass  
*Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Quality reports table

(qualityReports). The table for recording the various quality metrics and indicators for samples and measures. *Part Type:* table *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* results *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Quality repots table column order

(qualityReportsOrder). Specifies the order of the columns in the Quality Reports table. *Part Type:* tableSupport *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* integer *Minimum Value:* 1 *Maximum Value:* NA *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Requirement

(qualityReportsRequired). Specifies the columns required in the Quality Reports table. *Part Type:* tableSupport *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Quality sets

(qualitySet). Sets of quality measures. For example, PCR have a quality measure set. Sets are lists of input values. Each input value within a set is a part (has a partID) that can be reused between sets. For example, a set A could contain the values of 'yes' and 'no'; and set B could contain the values of 'yes', 'no', and 'maybe.' partTypes with sets include aggregations, compartments, missingness, quality flags, specimens, and units. Measures with categories and dataTypes have their own specific category sets (catSetID) because their input values are unique and are not reused. *Part Type:* partType *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* anyCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 15 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Parts

### Quality set ID

(qualitySetID). The quality set that corresponds to a given part. Only applicable for samples and measures. *Part Type:* attribute *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

### Quantitative

(quantAggScale). The “quantAggScale” aggregation scale. *Part Type:* aggScale *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

### R squared

(r2). R-squared value of the calibration curve. Used for storing calibration curve information, potentially also applicable for other curve types. *Part Type:* measure *Domain ID:* allDo *Speciment ID:* siSaSpecimen *Compartment Set:* anyCompartment *Group ID:* procGrp *Class ID:* standardCurve *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* see unit *Quality Set ID:* pcrQualitySet *Reference Link:* NA *Data Type:* float *Minimum Value:*

NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

## **r203m delta-variant gene target**

(r203m). r203m delta-variant gene target *Part Type*: measure *Domain ID*: Bio *Specimen ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: sarsCov2 *Class ID*: mutation *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: geneticUnitSet *Aggregation Scale ID*: see unit *Quality Set ID*: pcrQualitySet *Reference Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

## **Raindance digital PCR**

(rainDpcr). Describes a PCR analysis done using Raindance's digital PCR technology. *Part Type*: category *Domain ID*: Bio *Specimen ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: pcrQualitySet *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

## **Rainy**

(rainy). Qualitative category for the weather measure, specifying a rainy day. *Part Type*: category *Domain ID*: Phy *Specimen ID*: siSpecimen *Compartment Set*: anyCompartment *Group ID*: siteFeat *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set*

## Parts

*ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Random sequencing selection method

(ranSeq). Specifies the random selection method for sequencing No primer set should be used if this is selected. *Part Type:* category *Domain ID:* Bio *Speciment ID:* saSpecimen *Compartment Set:* anyCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* see unit *Minimum Value:* see unit *Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Ratio

(ratio). Ratio (unitless) Report as a real number or fration. i.e 10:2 ratio is reported as 5. The specifics of the ratio (the numerator and the demoninator) are described in the measure. *Part Type:* unit *Domain ID:* naDomain *Speciment ID:* anySpecimen *Compartment Set:* anyCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* quantAggScale *Quality Set ID:* genQualitySet *Reference Link:* NA *Data Type:* float *Minimum Value:* 0 *Maximum Value:* NA *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Raw wastewater

(raws). Raw wastes water sample *Part Type*: category *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: waterCompartment *Group ID*: procGrp *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 1.0. Last updated: 2.0.

## Raw sewage at site

(rawWW). Wastewater without any form of treatment *Part Type*: category *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: waterCompartment *Group ID*: colGrp *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 1.0. Last updated: 2.0.

## Raw sewage downstream from a site

(rawWWdown). Downstream from a site. See partType = rawWWup. *Part Type*: category *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: waterCompartment *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

### Raw sewage upstream from a site

(rawWWup). Upstream from a site. Used when there is not direct access to a site's wastewater inconjuction with downstream sample. For example, if the site is a long-term care home, but there is not access to the building or property cleanout. Use two sample, one sample upstream and one sample downstream. *Part Type*: category *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: waterCompartment *Group ID*: colGrp *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

### IP2 rdrp sars-cov-2 gene target

(rdrpIP2). IP2 rdrp sars-cov-2 gene target *Part Type*: measure *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: sarsCov2 *Class ID*: mutation *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: geneticUnitSet *Aggregation Scale ID*: see unit *Quality Set ID*: pcrQualitySet *Reference Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

### IP4 rdrp sars-cov-2 gene target

(rdrpIP4). IP4 rdrp sars-cov-2 gene target *Part Type*: measure *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: sarsCov2 *Class ID*: mutation *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: geneticUnitSet *Aggregation Scale ID*: see unit *Quality Set ID*: pcrQualitySet *Reference*



*Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Date sample recieved

(recDate). The date the sample was received at the laboratory for analysis. *Part Type*: attribute *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: datetime *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Recovered patients

(recov). Units for describing a population measure of patients who have recovered from a given disease. Unit for a population or disease measure to explain population-level clinical effects. *Part Type*: unit *Domain ID*: Bio *Speciment ID*: poSpecimen *Compartment Set*: anyCompartment *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: quantAggScale *Quality Set ID*: genQualitySet *Reference Link*: NA *Data Type*: integer *Minimum Value*: 0 *Maximum Value*: NA *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Reference link

(refLink). Link to the reference material for a part. May link to literature on a method, measure, etc. Link to standard operating procedure

## Parts

for a measure or part. Part reference is a reference to a technical document that describes the part in detail. The reference could be a URL, DOI, or reference to a technical report. *Part Type*: attribute *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 255 *Part Status*: active. First released: 1.0. Last updated: 2.0.

## Regular

(regular). A measure or sample taken for surveillance or epidemiology. A 'regular' measure is the default. Missing data will be recoded to this purpose. *Part Type*: category *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Regular reports table set

(regularReportTableSet). Tables used for daily reporting of new measurements and information on sample collection. *Part Type*: dictSet *Domain ID*: naDomain *Speciment ID*: saSpecimen *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum*

*Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0.0. Last updated: 2.0.0.

## Relationship

(relationshipID). Attribute for specifying the relationship between a Subject and Object. Together with **sampleIDSub** and **relationshipID** the row of the **sampleRelationships** should say: [sampleIDSubject] is a[relationshipID] of [sampleIDObject] *Part Type:* attribute *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* sampleRelSet, protocolRelSet *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Relative humidity

(relHum). The unit of relative humidity, or the air-water mixture. The ratio of the partial pressure of water vapor in the mixture to the equilibrium vapor pressure of water over a flat surface. of pure water at a given temperature. *Part Type:* measure *Domain ID:* Phy *Speciment ID:* siSpecimen *Compartment Set:* anyCompartment *Group ID:* siteFeat *Class ID:* humClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* relHumidUnitSet *Aggregation Scale ID:* see unit *Quality Set ID:* genQualitySet *Reference Link:* NA *Data Type:* see unit *Minimum Value:* see unit *Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Parts

### Relative humidity unit set

(relHumidUnitSet). Unit set for relative humidity measurements. *Part Type*: unitSet *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: anyCompartment *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: relHumidUnitSet *Aggregation Scale ID*: quantAggScale *Quality Set ID*: NA *Reference Link*: NA *Data Type*: categorical *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

### Representative grab sample

(repGrab). A single large representative grab sample. Deprecated in version 2, please do not use. *Part Type*: category *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: waterCompartment *Group ID*: colGrp *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: sampleQualitySet *Reference Link*: NA *Data Type*: NA *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: **depreciated**. First released: 1.0. Last updated: 2.0.

### Replicate Type category set

(replicateCatSet). The category set for storing valid categorical values of replicate type. *Part Type*: catSet *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: replicateCatSet *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data*

*Type:* categorical *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## replicate number

(repNum). The replicate number for a Ct or Cq value - used for specifying out a protocol standard curve. Only applies and used for aggregated standard curves, or curves that are used across multiple plates. Otherwise, these details can be captured in a measure report and specified by measure index. *Part Type:* measure *Domain ID:* Bio *Speciment ID:* saSpecimen *Compartment Set:* anyCompartment *Group ID:* procGrp *Class ID:* standardCurve *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* geneticUnitSet *Aggregation Scale ID:* see unit *Quality Set ID:* pcrQualitySet *Reference Link:* NA *Data Type:* float *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0.2. Last updated: 2.0.2.

## Reportable

(reportable). Flag for whether a measure is reportable or not, based on confidence in the measure and methods applied. *Part Type:* attribute *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* booleanSet *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* boolean *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 10 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Parts

### Report date

(reportDate). The date a measure was reported. This date is the first date the laboratory or entity reported the measure findings to the public health or other entity who ordered the measure or is responsible for action. Use the analyses end date if the measure is part of a research study or other purpose that does not have a reporting entity. *Part Type:* attribute *Domain ID:* naDomain *Specimen ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* datetime *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 1.0. Last updated: 2.0.

### Reporter ID depreciated

(reporterIDDep). Unique identifier for the person or organization that is reporting the data. *Part Type:* attribute *Domain ID:* naDomain *Specimen ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* **depreciated**. First released: 1.1. Last updated: 2.0.

### Reporter table depreciated

(reportersDep). The table that contains information about a reporter of a sample, method, measure, or attribute. *Part Type:* table *Domain*

*ID: naDomain Speciment ID: naSpecimenSet Compartment Set: naCompartmentSet Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: **deprecated**. First released: 1.0. Last updated: 2.0.*

## Replicate Type

(repType). Attribute of a sample, specifying whether the sample is unique, or a replicate. And if it is a replicate, what type of replicate is it? *Part Type: attribute Domain ID: naDomain Speciment ID: naSpecimenSet Compartment Set: naCompartmentSet Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: replicateCatSet Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: categorical Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

## Resuspend COSCa filter collection

(resCosca). Nucleic acid extraction via resuspension of a sample collected using the COSCa ball method. See partID = cosca for additional details. *Part Type: category Domain ID: Bio Speciment ID: naSpecimenSet Compartment Set: waterCompartment Group ID: procGrp Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: genQualitySet Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 10 Part Status: active. First released: 2.0. Last updated: 2.0.*

## Parts

### Results tables

(results). Tables used to record samples, measures and quality reports. These tables are updated whenever a new sample is taken or a measure is reported. Quality reports are used to report quality assurance and quality control for samples and measures. *Part Type*: class *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: results *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: see unit *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

### Retention pond

(retPond). Retention pond *Part Type*: category *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: waterCompartment *Group ID*: colGrp *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 1.0. Last updated: 2.0.

### River, natural water body

(river). River, natural water body *Part Type*: category *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: waterCompartment *Group ID*: colGrp *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA



*Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 1.0. Last updated: 2.0.

## Role of contact

(role). Specifies the organizational role of a given contact. *Part Type:* attribute *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Rate per 100,000

(rP100). Units for describing a population measure of a rate of case incidence per 100,000 people of a given disease. Unit for a population or disease measure to explain population-level clinical effects. *Part Type:* unit *Domain ID:* Bio *Speciment ID:* poSpecimen *Compartment Set:* any-Compartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* quantAggScale *Quality Set ID:* NA *Reference Link:* NA *Data Type:* float *Minimum Value:* 0 *Maximum Value:* NA *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Raw post-pasteurized wastewater

(rppw). Raw wastewater sample post-pasteurization *Part Type:* category *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:*

## Parts

waterCompartment *Group ID:* procGrp *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 1.0. Last updated: 2.0.

## Respiratory syncytial virus group

(rsv). Respiratory syncytial virus. *Part Type:* measure *Domain ID:* Bio *Speciment ID:* naSpecimenSet *Compartment Set:* anyCompartment *Group ID:* virusMisc *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* [http://purl.obolibrary.org/obo/NCIT\\_C14267](http://purl.obolibrary.org/obo/NCIT_C14267) *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* genQualitySet *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## s2083i omicron-variant gene target { #s2083i }

(s2083i ). s2083i omicron-variant gene target *Part Type:* measure *Domain ID:* Bio *Speciment ID:* saSpecimen *Compartment Set:* anyCompartment *Group ID:* sarsCov2 *Class ID:* mutation *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* geneticUnitSet *Aggregation Scale ID:* see unit *Quality Set ID:* pcrQualitySet *Reference Link:* NA *Data Type:* see unit *Minimum Value:* see unit *Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0. Last updated: 2.0.

**s371l omicron-variant gene target { #s371l }**

(s371l ). s371l omicron-variant gene target *Part Type*: measure *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: sarsCov2 *Class ID*: mutation *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: geneticUnitSet *Aggregation Scale ID*: see unit *Quality Set ID*: pcrQualitySet *Reference Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

**s373p omicron-variant gene target { #s373p }**

(s373p ). s373p omicron-variant gene target *Part Type*: measure *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: sarsCov2 *Class ID*: mutation *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: geneticUnitSet *Aggregation Scale ID*: see unit *Quality Set ID*: pcrQualitySet *Reference Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

**s375f omicron-variant gene target { #s375f }**

(s375f ). s375f omicron-variant gene target *Part Type*: measure *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: sarsCov2 *Class ID*: mutation *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: geneticUnitSet *Aggregation Scale ID*: see unit *Quality Set ID*: pcrQualitySet *Reference Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Parts

### **s477n omicron-variant gene target { #s477n }**

(s477n ). s477n omicron-variant gene target *Part Type*: measure *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: sarsCov2 *Class ID*: mutation *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: geneticUnitSet *Aggregation Scale ID*: see unit *Quality Set ID*: pcrQualitySet *Reference Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Sample

(sa). A measure made on a compartment or property from a sample of a substance. *Part Type*: specimen *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Sample material

(saMaterial). Type of sample. *Part Type*: attribute *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: colGrp *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: sampleMatCatSet *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: categorical *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 1.0. Last updated: 2.0.

## Sample ID

(sampleID). Unique identifier for a sample. Suggestion: siteID-date-index.  
*Part Type:* attribute *Domain ID:* naDomain *Speciment ID:* naSpecimenSet  
*Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* na-  
 Class *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Cate-*  
*gory Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality*  
*Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA  
*Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part*  
*Status:* active. First released: 1.1. Last updated: 2.0.

## Sample ID Object

(sampleIDObj). Populated by **sampleID** - this specifies the object of a sam-  
 ple relationship. Use **sampleID** for this field. Together with **sampleIDSub**  
 and **relationshipID** the row of the **sampleRelationships** should say:  
 [sampleIDSubject] is a[relationshipID] of [sampleIDObject] *Part Type:* at-  
 tribute *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment*  
*Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass  
*Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set*  
*ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:*  
 NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Max-*  
*imum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:*  
 active. First released: 2.0. Last updated: 2.0.

## Sample ID Subject

(sampleIDSub). Populated by **sampleID** - this specifies the subject  
 of a sample relationship. Use **sampleID** for this field. Together with  
**sampleIDSub** and **relationshipID** the row of the **sampleRelationships**  
 should say: [sampleIDSubject] is a[relationshipID] of [sampleIDObject]

## Parts

*Part Type:* attribute *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Sample material category set

(sampleMatCatSet). Category set for the types of material that can be found in a sample. *Part Type:* catSet *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* sampleMatCatSet *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* categorical *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Sample quality set

(sampleQualitySet). Quality set for a sample. *Part Type:* qualitySet *Domain ID:* naDomain *Speciment ID:* saSpecimen *Compartment Set:* anyCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* sampleQualitySet *Reference Link:* NA *Data Type:* categorical *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Sample relationships table

(sampleRelationships). Table for recording the relationships between samples. Specifically designed to capture information on parent-child relationships between samples, and allow for tracking sample lineage for single and pooled samples. *Part Type:* table *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* results *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Sample relationships table column order

(sampleRelationshipsOrder). Specifies the order of the columns in a Sample Relationships table. *Part Type:* tableSupport *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* integer *Minimum Value:* 1 *Maximum Value:* NA *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Requirement

(sampleRelationshipsRequired). Specifies the columns required in a Sample Relationships table. *Part Type:* tableSupport *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet

## Parts

*Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

## Sample Relationships set

(sampleRelSet). Category set for valid values of relationshipID in the sampleRelationships table. Use only for sampleRelationships table relationshipID. *Part Type: catSet Domain ID: naDomain Speciment ID: naSpecimenSet Compartment Set: anyCompartment Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: sampleRelSet Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: categorical Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

## Sample report table

(samples). The table that contains information about a sample, where a sample is defined as a representative volume of wastewater, air, or surface substance taken from a Site which is then analysed by a lab (organization). *Part Type: table Domain ID: naDomain Speciment ID: naSpecimenSet Compartment Set: naCompartmentSet Group ID: naGroup Class ID: results Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 1.0. Last updated: 2.0.*



## Sample shed

(sampleShed). A geographic area, physical space, or structure. A sample is taken from a sampleshed for a representative measurement of a substance(s). Examples: Airplane, Long-term care home, Neighbourhood, University campus, Municipality *Part Type*: attribute *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: anyCompartment *Group ID*: colGrp *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: shedCatSet *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: sampleQualitySet *Reference Link*: NA *Data Type*: categorical *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Samples table column order

(samplesOrder). Specifies the order of the columns in a Samples table. *Part Type*: tableSupport *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: integer *Minimum Value*: 1 *Maximum Value*: NA *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Requirement

(samplesRequired). Specifies the columns required in a Samples table. *Part Type*: tableSupport *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA

## Parts

*Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Collection other depreciated

(sampleTypeOther). Description for other type of method not listed in collection. depreciated *Part Type:* method *Domain ID:* naDomain *Specimen ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* colGrp *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 100 *Part Status:* **depreciated**. First released: 1.0. Last updated: 2.0.

## SARS-CoV-2

(sarsCov2). A group of measures/methods related to the SARS-CoV-2 virus. SARS-CoV-2 measures have the following classes: proteins, alleles, variants, mutations, diseases. *Part Type:* group *Domain ID:* Bio *Specimen ID:* saSpecimen *Compartment Set:* anyCompartment *Group ID:* sarsCov2 *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* [http://purl.obolibrary.org/obo/NCIT\\_C169076](http://purl.obolibrary.org/obo/NCIT_C169076) *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* see unit *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Sample specimen set

(saSpecimenSet). A specimen set that includes only a sample specimen. *Part Type:* specimenSet *Domain ID:* naDomain *Speciment ID:* saSpecimen *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* categorical *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Sparse coverage

(sC). Sequencing shows sparse coverage, ie. numerical breadth of coverage shows as adequate but coverage plots reveal missing genome pieces. If there are multiple issues to flag, use the multiple issues flag and explain the details in the notes section. *Part Type:* quality *Domain ID:* naDomain *Speciment ID:* saSpecimen *Compartment Set:* anyCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* seqQualitySet *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Secondary clarifier effluent depreciated

(sce). Effluent obtained after secondary clarifiers. Deprecated in version 2, please do not use. Duplicate of the sampleMat categories - refer to those. *Part Type:* category *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* waterCompartment *Group ID:* colGrp *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA

## Parts

*Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* NA *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* **deprecated**. First released: 1.0. Last updated: 2.0.

## School

(school). A school serving students in the kindergarten to 12th grade range *Part Type:* category *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* anyCompartment *Group ID:* colGrp *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 1.0. Last updated: 2.0.

## Sequencing script version category set

(scriptCatSet). The category set for script versions *Part Type:* catSet *Domain ID:* Bio *Speciment ID:* saSpecimen *Compartment Set:* anyCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* scriptCatSet *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* see unit *Minimum Value:* see unit *Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Genetic sequencing script version

(scriptVersion). Used to specify the script or script version used to extract summary information (i.e. coverage and mutation frequency statistics, etc.)

from the sequencing output. *Part Type*: method *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: procGroup *Class ID*: sequence *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: scriptCatSet *Unit Set ID*: geneticUnitSet *Aggregation Scale ID*: see unit *Quality Set ID*: seqQualitySet *Reference Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Secondary clarifier sludge depreciated

(scsDep). Sludge produced by secondary clarifiers. Deprecated in version 2, please do not use. Duplicate of the sampleMat categories - refer to those. *Part Type*: category *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: waterCompartment *Group ID*: colGrp *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: NA *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: **depreciated**. First released: 1.0. Last updated: 2.0.

## Standard Deviation

(sd). Standard deviation. *Part Type*: aggregation *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: quantAggScale *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 1.0. Last updated: 2.0.

## Parts

### Normalized Standard Deviation

(sdn). Standard deviation, normalized. *Part Type*: aggregation *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: quantAggScale *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 1.0. Last updated: 2.0.

### Sea, natural water body

(sea). Sea, natural water body *Part Type*: category *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: waterCompartment *Group ID*: colGrp *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 1.0. Last updated: 2.0.

### Secondary clarifier effluent

(sEfflu). Effluent obtained after secondary clarifiers *Part Type*: category *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: waterCompartment *Group ID*: colGrp *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 1.0. Last updated: 2.0.

**Access to self**

(self). If this is ‘no’, this data will not be shown on the portal when this reporter logs in. If missing, data will be available to this reporter.  
*Part Type:* attribute *Domain ID:* naDomain *Speciment ID:* naSpecimenSet  
*Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* na-  
 Class *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Cate-*  
*gory Set ID:* booleanSet *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA  
*Quality Set ID:* NA *Reference Link:* NA *Data Type:* boolean *Minimum*  
*Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:*  
 1 *Part Status:* **depreciated**. First released: 1.0. Last updated: 2.0.

**Date sample was sent**

(sentDate). The date the sample was sent for analyses at a laboratory.  
*Part Type:* attribute *Domain ID:* naDomain *Speciment ID:* naSpecimenSet  
*Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* na-  
 Class *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Cate-*  
*gory Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality*  
*Set ID:* NA *Reference Link:* NA *Data Type:* datetime *Minimum Value:*  
 NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part*  
*Status:* active. First released: 2.0. Last updated: 2.0.

**Septic tank wastewater**

(septage). Wastewater from within a septic tank *Part Type:* category  
*Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:*  
 waterCompartment *Group ID:* colGrp *Class ID:* naClass *Nomenclature ID:*  
 naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set*  
*ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference*  
*Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:*

## Parts

NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 1.0. Last updated: 2.0.

### Septic tank

(septTnk). Septic tank *Part Type*: category *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: waterCompartment *Group ID*: colGrp *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 1.0. Last updated: 2.0.

### Sequencing Layout

(seqLay). The layout of genetic material used in sequencing *Part Type*: method *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: procGroup *Class ID*: sequence *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: seqLayCatSet *Unit Set ID*: geneticUnitSet *Aggregation Scale ID*: see unit *Quality Set ID*: seqQualitySet *Reference Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

### Sequencing Layout category set

(seqLayCatSet). The category set for the layout of genetic material used in sequencing *Part Type*: catSet *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: seqLayCatSet *Unit Set ID*: naUnitSet *Aggregation Scale ID*:



NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Sequencing quality set

(seqQualitySet). Quality set for sequencing measures *Part Type*: quality-Set *Domain ID*: naDomain *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: seqQualitySet *Reference Link*: NA *Data Type*: categorical *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Sequencing selection method

(seqSel). The primer sequence selection method used in sequencing *Part Type*: method *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: procGroup *Class ID*: sequence *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: seqSelCatSet *Unit Set ID*: geneticUnitSet *Aggregation Scale ID*: see unit *Quality Set ID*: seqQualitySet *Reference Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Sequencing selection method category set

(seqSelCatSet). The category set for the selection method used in sequencing *Part Type*: catSet *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: naGroup *Class ID*: naClass

## Parts

*Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* seqSelCatSet *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* see unit *Minimum Value:* see unit *Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Sequencing Strategy

(seqStrat). The sequencing strategy used for an analysis *Part Type:* method *Domain ID:* Bio *Speciment ID:* saSpecimen *Compartment Set:* anyCompartment *Group ID:* procGroup *Class ID:* sequence *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* seqStratCatSet *Unit Set ID:* geneticUnitSet *Aggregation Scale ID:* see unit *Quality Set ID:* seqQualitySet *Reference Link:* NA *Data Type:* see unit *Minimum Value:* see unit *Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Sequencing Strategy category set

(seqStratCatSet). The category set for the sequencing strategy used for an analysis *Part Type:* catSet *Domain ID:* Bio *Speciment ID:* saSpecimen *Compartment Set:* anyCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* seqStratCatSet *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* see unit *Minimum Value:* see unit *Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Genetic sequences

(sequence). Measures and methods related to genetic sequencing. *Part Type*: class *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: naGroup *Class ID*: sequence *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: see unit *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Sewer Sediments Depreciated

(seseDep). Sediments obtained in sewer. *Part Type*: category *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: waterCompartment *Group ID*: colGrp *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: NA *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: **depreciated**. First released: 1.0. Last updated: 2.0.

## Set ID

(setID). The name of a value set. A set is a group of units, attributes, categories, specimens, or compartments that can be used for a measure, method or attribute. *Part Type*: attribute *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*:

## Parts

0 *Maximum Length*: 28 *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Sets look-up table

(sets). Look up table for all sets, managing how categorical inputs for various methods and attributes are grouped together. This table manages many-to-many relationships and category recycling within the ODM. *Part Type*: table *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: lookup *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 1. Last updated: 2.0.

## Sets table column order

(setsOrder). Specifies the order of the columns in the Sets table. *Part Type*: tableSupport *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: integer *Minimum Value*: 1 *Maximum Value*: NA *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Required headers

(setsRequired). Required headers in the Sets table. *Part Type*: tableSupport *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment*

*Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Settled solids

(settsol). Amount of settled solids from a wastewater sample. May be a volume or a weight, see the unitID for a given measure row for details on a given sample. *Part Type:* measure *Domain ID:* Phy *Speciment ID:* saSpecimen *Compartment Set:* waterCompartment *Group ID:* procGrp *Class ID:* physical *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* volumeUnitSet *Aggregation Scale ID:* quantAggScale *Quality Set ID:* genQualitySet *Reference Link:* NA *Data Type:* integer *Minimum Value:* 0 *Maximum Value:* NA *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Set type

(setType). The type of set. i.e. quality set, aggregation set, unit set *Part Type:* partSupport *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* waterCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* NA *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Parts

### Set Value

(setValue). The partID for the set value or category. Populated by any part where partType = aggregationSet, compartmentSet, qualitySet, specimenSet, or unitSet *Part Type*: attribute *Domain ID*: naDomain *Specimen ID*: naSpecimenSet *Compartment Set*: waterCompartment *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: NA *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

### Severity category set

(sevCatSet). A category set for severity indicators. *Part Type*: catSet *Domain ID*: naDomain *Specimen ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: sevCatSet *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

### Severity indicator

(severity). An indicator of the severity or seriousness of a quality flag. *Part Type*: attribute *Domain ID*: naDomain *Specimen ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: sevCatSet *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum*

*Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

### **Sewer network file link deprecated**

(sewerNetworkFileBLOB). Link to a file that has any detailed information about the sewer network associated with the site (any format). *Part Type:* attribute *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* waterCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* **deprecated**. First released: 1.0. Last updated: 2.0.

### **S sars-cov-2 gene target**

(sGene). S sars-cov-2 gene target *Part Type:* measure *Domain ID:* Bio *Speciment ID:* saSpecimen *Compartment Set:* anyCompartment *Group ID:* sarsCov2 *Class ID:* allele *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* geneticUnitSet *Aggregation Scale ID:* see unit *Quality Set ID:* pcrQualitySet *Reference Link:* NA *Data Type:* see unit *Minimum Value:* see unit *Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0. Last updated: 2.0.

### **Sampled category set**

(shedCatSet). The category set for all valid values of sampled. *Part Type:* catSet *Domain ID:* naDomain *Speciment ID:* siSpecimen *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set*

## Parts

*ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: categorical Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

## Ship

(ship). A cruise ship or other ship. *Part Type: category Domain ID: naDomain Speciment ID: naSpecimenSet Compartment Set: anyCompartment Group ID: colGrp Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

## Shipped on ice

(shipOnIce). Was the sample kept cool while being shipped to the lab *Part Type: method Domain ID: naDomain Speciment ID: saSpecimen Compartment Set: anyCompartment Group ID: procGrp Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: booleanSet Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: categorical Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 1 Part Status: active. First released: 1.0. Last updated: 2.0.*

## Short names

(shortName). Shortened names for tables and other important parts for use in wide names. *Part Type: partSupport Domain ID: naDomain Speciment ID: naSpecimenSet Compartment Set: naCompartmentSet Group*



*ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

## Site

(si). A measure made on a compartment or property at a site. An example is the wastewater flow rate, taken at a wastewater treatment plant. *Part Type: specimen Domain ID: naDomain Speciment ID: naSpecimenSet Compartment Set: naCompartmentSet Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

## Single

(sin). A value that is not an aggregate measurement (ie. not a mean, median, max or any other) and can be a replicate value. *Part Type: aggregation Domain ID: naDomain Speciment ID: naSpecimenSet Compartment Set: naCompartmentSet Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: quantAggScale Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: see unit Maximum Value: see unit Minimum Length: NA Maximum Length: NA Part Status: active. First released: 1.0. Last updated: 2.0.*

## Parts

### Single Layout

(sinLay). Specifies the single layout for a sequencing method *Part Type*: category *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

### Site or sample specimen set

(siSaSpecimenSet). A specimen set that inculdes site or sample specimen. *Part Type*: specimenSet *Domain ID*: naDomain *Speciment ID*: siSaSpecimen *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: categorical *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

### Site specimen set

(siSpecimenSet). A specimen set that inculdes only a site specimen. *Part Type*: specimenSet *Domain ID*: naDomain *Speciment ID*: siSpecimen *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: categorical *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Site ID default

(siteDef). Used as default when a new sample is created by this reporter. See ID in Site table. Deprecated in version 2, please do not use. Just populate standard SiteID. *Part Type*: attribute *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: **depreciated**. First released: 1.0. Last updated: 2.0.

## Site features group

(siteFeat). A group of environmental measures/methods and those pertaining to the features of a site. *Part Type*: group *Domain ID*: allDo *Speciment ID*: siSpecimen *Compartment Set*: anyCompartment *Group ID*: siteFeat *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: see unit *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Site ID

(siteID). Unique identifier for the location where a sample was taken. *Part Type*: attribute *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality*

## Parts

*Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 1.0. Last updated: 2.0.

## Site measure ID

(siteMeasureID). Unique identifier for wide table only. Use when all measures are performed on a single sample. Depreciate in version 2. *siteMeasures Part Type:* attribute *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* **deprecated**. First released: 1.0. Last updated: 2.0.

## Sites table

(sites). The table that contains information about a site; the location where an environmental sample was taken. The site of an enviromental sample. Information in the site table does not regularly change. Consider using the MeasureReport table if the infomation changes often. *Part Type:* table *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* programDescr *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 1.0. Last updated: 2.0.

## Sites table column order

(sitesOrder). Specifies the order of the columns in a Sites table. *Part Type:* tableSupport *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* integer *Minimum Value:* 1 *Maximum Value:* NA *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Requirement

(sitesRequired). Specifies the columns required in a Sites table. *Part Type:* tableSupport *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Site category set

(siteTypeCatSet). Category set for the type of sampling site. *Part Type:* catSet *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* siteTypeCatSet *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* categorical *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Parts

### Site Type

(siteTypeID). Type of site or institution where sample was taken. *Part Type:* attribute *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* colGrp *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* siteTypeCatSet *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* categorical *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 1.0. Last updated: 2.0.

### Skimmed milk flocculation

(skimMilkFloc). Skimmed milk flocculation *Part Type:* category *Domain ID:* Che *Speciment ID:* naSpecimenSet *Compartment Set:* waterCompartment *Group ID:* procGrp *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* genQualitySet *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

### slope

(slope). Slope value of the calibration curve. Used for storing calibration curve information, potentially also applicable for other curve types. *Part Type:* measure *Domain ID:* allDo *Speciment ID:* siSaSpecimen *Compartment Set:* anyCompartment *Group ID:* procGrp *Class ID:* standardCurve *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* see unit *Quality Set ID:* pcrQualitySet *Reference Link:* NA *Data Type:* float *Minimum Value:*

NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Sewer network file link deprecated 2

(snfl). Link to a file that has any detailed information about the sewer network associated with the site (any format). Depreciate in version 2. This attribute has been changed to referenceLink. Use po\_referenceLink to specify polygon link to sewer network file. *Part Type*: attribute *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: **deprecated**. First released: 1.0. Last updated: 2.0.

## Snowy

(snowy). Qualitative category for the weather measure, specifying a snowy day. *Part Type*: category *Domain ID*: Phy *Speciment ID*: siSpecimen *Compartment Set*: anyCompartment *Group ID*: siteFeat *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Solid fraction

(sol). Solid fraction of a sample. *Part Type*: category *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: waterCompartment

## Parts

ment *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 1.0. Last updated: 2.0.

## Solid seperation

(solidSep). Process used to separate solid and liquid phases of the sample. Solid seperation is used either prior to or in the absence of the concentration method specified in 'methodConc'. *Part Type*: method *Domain ID*: naDomain *Speciment ID*: saSpecimen *Compartment Set*: waterCompartment *Group ID*: procGrp *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: nput *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: categorical *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Solid separation category set

(solidSeparationCatSet). Category set for the separation of solids. *Part Type*: catSet *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: solidSeparationCatSet *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: categorical *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.



## Source Protocol

(sourceProtocol). A protocol that served as a basis for another protocol. This may be due to version changes, or a referencing a protocol that was later adapted. Populate with protocolID. *Part Type:* attribute *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Protocol step source

(sourceStep). Specifies the protocol step which serves as a basis for a given protocol step. Populate with a protocol step ID (stepID). *Part Type:* attribute *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Specific humidity

(specHum). Measure for specific humidity, the unit is the ratio of the mass of water vapour and the mass of total air. *Part Type:* measure *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* anyCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set*

## Parts

*ID:* specHumidUnitSet *Aggregation Scale ID:* see unit *Quality Set ID:* genQualitySet *Reference Link:* NA *Data Type:* see unit *Minimum Value:* see unit *Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Specific humidity unit set

(specHumidUnitSet). Unit set for specific humidity. *Part Type:* unitSet *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* anyCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* specHumidUnitSet *Aggregation Scale ID:* quantAggScale *Quality Set ID:* NA *Reference Link:* NA *Data Type:* categorical *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Specifies

(specifies). Specifies that the object step or protocol occurs specifies details for the subject step or protocol in the overall protocol container. Use only for protocolRelationships table relationshipID. *Part Type:* category *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Specimens

(specimen). Measures or observations are taken from three types of substances: populations (humans or geographic areas), samples, sites. See *partID* = *specimentID* *Part Type*: *partType* *Domain ID*: *naDomain* *Speciment ID*: *naSpecimenSet* *Compartment Set*: *naCompartmentSet* *Group ID*: *naGroup* *Class ID*: *naClass* *Nomenclature ID*: *naNomenclature* *Ontology Reference*: *NA* *Category Set ID*: *NA* *Unit Set ID*: *naUnitSet* *Aggregation Scale ID*: *NA* *Quality Set ID*: *NA* *Reference Link*: *NA* *Data Type*: *varchar* *Minimum Value*: *NA* *Maximum Value*: *NA* *Minimum Length*: *0* *Maximum Length*: *30* *Part Status*: *active*. First released: 2.0. Last updated: 2.0.

## Specimen

(specimenID). The substance or thing upon which the observation was made. Specimens include: site, sample, person and population. *Part Type*: *attribute* *Domain ID*: *naDomain* *Speciment ID*: *naSpecimenSet* *Compartment Set*: *naCompartmentSet* *Group ID*: *naGroup* *Class ID*: *naClass* *Nomenclature ID*: *naNomenclature* *Ontology Reference*: *NA* *Category Set ID*: *NA* *Unit Set ID*: *naUnitSet* *Aggregation Scale ID*: *NA* *Quality Set ID*: *NA* *Reference Link*: *NA* *Data Type*: *categorical* *Minimum Value*: *NA* *Maximum Value*: *NA* *Minimum Length*: *0* *Maximum Length*: *12* *Part Status*: *active*. First released: 2.0. Last updated: 2.0.

## Specimen set

(specimenSet). The set of valid specimens that apply to another given part. *Part Type*: *attribute* *Domain ID*: *naDomain* *Speciment ID*: *naSpecimenSet* *Compartment Set*: *naCompartmentSet* *Group ID*: *naGroup* *Class ID*: *naClass* *Nomenclature ID*: *naNomenclature* *Ontology Reference*: *NA* *Category Set ID*: *NA* *Unit Set ID*: *naUnitSet* *Aggregation Scale ID*: *NA*

## Parts

*Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 15 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Specimen sets

(specSet). Sets of specimens. Specimen sets are used to identify when a measure can be recorded for more than one specimen. For example, SARS-CoV-2 can be measured in people (humans) or samples. Sets are lists of input values. Each input value within a set is a part (has a partID) that can be reused between sets. For example, a set A could contain the values of 'yes' and 'no'; and set B could contain the values of 'yes', 'no', and 'maybe.' partTypes with sets include aggregations, compartments, missingness, quality flags, specimens, and units. Measures with categories and dataTypes have their own specific category sets (catSetID) because their input values are unique and are not reused. *Part Type:* partType *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* anyCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 15 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Spike material

(spikeMat). Material into which the recovery efficiency control target is spiked. *Part Type:* method *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* anyCompartment *Group ID:* procGrp *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* spikeMatCatSet *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* categorical

*Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 4 *Part Status:* active. First released: 1.0. Last updated: 2.0.

### **Spike material category set**

(spikeMatCatSet). Category set for spikeMat (aterial into which the recovery efficiency control target is spiked). *Part Type:* catSet *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* anyCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* spikeMatCatSet *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* categorical *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

### **Recovery efficiency spike target**

(spikeTarget). Method specifying the recovery efficiency control target. This matches on to the the spike material method ID. Should typically be indexed as a step proceeding the spikeMaterial methodID step. *Part Type:* method *Domain ID:* Bio *Speciment ID:* saSpecimen *Compartment Set:* anyCompartment *Group ID:* measGrp *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* spikeTargetCatSet *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* categorical *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

### **Recovery efficiency spike target category set**

(spikeTargetCatSet). The category set capturing containing all of the valid categories for the recovery efficiency control (or spike) target. *Part Type:*

## Parts

*catSet Domain ID: Bio Speciment ID: saSpecimen Compartment Set: any-Compartment Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: spikeTarget-CatSet Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: categorical Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

## Sample spilled

(spill). Sample contents spilled from container. *Part Type: quality Domain ID: naDomain Speciment ID: saSpecimen Compartment Set: any-Compartment Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: sampleQualitySet Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

## Secondary clarifier sludge

(sSludge). Sludge produced by secondary clarifiers *Part Type: category Domain ID: naDomain Speciment ID: naSpecimenSet Compartment Set: waterCompartment Group ID: colGrp Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 1.0. Last updated: 2.0.*

## Social services shelter

(sss). Other type of social services shelter *Part Type*: category *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: anyCompartment *Group ID*: colGrp *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Stabilization pond

(stabPnd). Specifies a site type which is a pond designed and built for wastewater treatment to reduce the organic content and remove pathogens from wastewater. *Part Type*: category *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: waterCompartment *Group ID*: colGrp *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 1.0. Last updated: 2.0.

## Standard concentrations

(standardConc). Measures and methods relating to standard concentrations. *Part Type*: class *Domain ID*: Phy *Speciment ID*: siSaSpecimen *Compartment Set*: anyCompartment *Group ID*: naGroup *Class ID*: standardConc *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: see

## Parts

*unit Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

## Standard curve class

(standardCurve). Measures and methods relating to generating or recording a standard curve. *Part Type: class Domain ID: Bio Specimen ID: saSpecimen Compartment Set: anyCompartment Group ID: naGroup Class ID: standardCurve Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: geneticUnitSet Aggregation Scale ID: see unit Quality Set ID: seqQualitySet Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0.1. Last updated: 2.0.1.*

## State, Province, or Region

(stateProvReg). The state, province, or region where a site or organization is located; part of the address. *Part Type: attribute Domain ID: naDomain Specimen ID: naSpecimenSet Compartment Set: naCompartmentSet Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 1.0. Last updated: 2.0.*

## Status

(status). Whether the part is still active and can be used in the most current ODM version. Values are ‘active’ or ‘inactive’. The status of the



part or list. ‘active’ means the part is used in the dictionary version. ‘inactive’ means the part has been retired and not longer used in the version. *Part Type:* partSupport *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* statusCatSet *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 1.0. Last updated: 2.0.

### Status category set

(statusCatSet). A category set for partID = Status to indicate whether a part is in current use or not. *Part Type:* catSet *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* categorical *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

### Standard concentration unit set

(stdConcentrationUnitSet). Unit set for concentration measurements. *Part Type:* unitSet *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* anyCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* stdConcentrationUnitSet *Aggregation Scale ID:* quantAggScale *Quality Set ID:* NA *Reference Link:* NA *Data Type:* categorical *Minimum Value:* NA *Maximum Value:* NA *Minimum*

## Parts

*Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Storage temp

(sTemp). Temperature that the sample is stored at in Celsius. *Part Type:* measure *Domain ID:* Phy *Specimen ID:* saSpecimen *Compartment Set:* anyCompartment *Group ID:* procGrp *Class ID:* tempClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* temperatureUnitSet *Aggregation Scale ID:* see unit *Quality Set ID:* genQualitySet *Reference Link:* NA *Data Type:* float *Minimum Value:* see unit *Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 1.0. Last updated: 2.0.

## Protocol Step ID

(stepID). The unique identifier for a specific protocol step. Protocol Steps are the component parts of a larger protocols, the latter being linked to specific measure reports. *Part Type:* attribute *Domain ID:* naDomain *Specimen ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Step ID Object

(stepIDObj). The object of the relationship between one protocol step and another step or protocol, within a given protocol ID container.

Populate this field using Protocol Step ID (`partID = stepID`). Together with `protocolIDSub` or `stepIDSub` and `relationshipID` the row of `protocolRelationships` should say: [`protocolIDSubject` or `stepIDSubject`] [`relationshipID`] [`protocolIDObject` or `stepIDObject`]. Ex: `stepIDSubject` precedes `protocolIDObject`. *Part Type*: attribute *Domain ID*: `naDomain` *Speciment ID*: `naSpecimenSet` *Compartment Set*: `naCompartmentSet` *Group ID*: `naGroup` *Class ID*: `naClass` *Nomenclature ID*: `naNomenclature` *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: `naUnitSet` *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: integer *Minimum Value*: 1 *Maximum Value*: NA *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Step ID Subject

(`stepIDSub`). The subject of the relationship between one protocol step and another step or protocol, within a given protocol ID container. Populate this field using Protocol ID (`partID = stepID`). Together with `protocolIDSub` or `stepIDSub` and `relationshipID` the row of `protocolRelationships` should say: [`protocolIDSubject` or `stepIDSubject`] [`relationshipID`] [`protocolIDObject` or `stepIDObject`]. Ex: `stepIDSubject` precedes `protocolIDObject`. *Part Type*: attribute *Domain ID*: `naDomain` *Speciment ID*: `naSpecimenSet` *Compartment Set*: `naCompartmentSet` *Group ID*: `naGroup` *Class ID*: `naClass` *Nomenclature ID*: `naNomenclature` *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: `naUnitSet` *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

### Method step parent ID

(stepProvenanceID). A method step that served as a basis for another method step. This may be due to version changes, or a referencing a method set that was later adapted. *Part Type:* attribute *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

### Protocol step version

(stepVer). Specifies the version of a given protocol step. Version of the method step. Semantic versioning is recommended. *Part Type:* attribute *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 50 *Part Status:* active. First released: 1.0. Last updated: 2.0.

### Sewer network file blob

(storTempDef). A file blob that has any detailed information about the sewer network associated with the site (any format). Deprecated in version 2, please do not use. Refer to WKT and EPSG instead. *Part Type:* attribute *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass

*Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* blob *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 65535 *Part Status:* **depreciated**. First released: 1.0. Last updated: 2.0.

## Storage time

(stoTim). Length of time that a sample was in storage. *Part Type:* measure *Domain ID:* allDo *Speciment ID:* saSpecimen *Compartment Set:* anyCompartment *Group ID:* procGrp *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* quantAggScale *Quality Set ID:* pcrQualitySet *Reference Link:* NA *Data Type:* float *Minimum Value:* see unit *Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Sub-variant or lineage

(subVar). A unit used to report a specific genetic lineage, or to specify that a reported variant is a sub-variant of another. Combine in a measure report if necessary. *Part Type:* measure *Domain ID:* Bio *Speciment ID:* saSpecimen *Compartment Set:* anyCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* pangolin *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* see unit *Quality Set ID:* seqQualitySet *Reference Link:* NA *Data Type:* var-char *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Parts

### Summary

(summ). Short description of the assay and how it is different from the other assay methods. *Part Type*: attribute *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 255 *Part Status*: active. First released: 1.0. Last updated: 2.0.

### Summary worksheet

(summary). Summary sheet of the dictionary.xlsx file. The summary sheet contains versioning and changelog. *Part Type*: dictionarySupport *Domain ID*: naDomain *Speciment ID*: saSpecimen *Compartment Set*: naCompartment *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0.0. Last updated: 2.0.0.

### Sunny

(sunny). Qualitative category for the weather measure, specifying a clear and sunny day. *Part Type*: category *Domain ID*: Phy *Speciment ID*: siSpecimen *Compartment Set*: anyCompartment *Group ID*: siteFeat *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum*

*Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Surface compartment

(surf). A measure or observation made from a substance on a surface. *Part Type:* compartment *Domain ID:* allDo *Speciment ID:* anySpecimen *Compartment Set:* surfaceCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 1 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Other surface

(surface). Surface other than floor or desk. See also categories for floor and desk. *Part Type:* category *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* surfaceCompartment *Group ID:* colGrp *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Surface compartment set

(surfaceCompartmentSet). A compartment set for measures and methods in the surface compartment. *Part Type:* compSet *Domain ID:* allDo *Speciment ID:* anySpecimen *Compartment Set:* surfaceCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation*

## Parts

*Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 15 Part Status: active. First released: 2.0. Last updated: 2.0.*

## Surface and water compartment set

(surfaceWaterCompartmentSet). A compartment set for measures and methods in the surface or water compartments. *Part Type: compSet Domain ID: allDo Speciment ID: anySpecimen Compartment Set: surface-WaterCompartment Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: varchar Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 15 Part Status: active. First released: 2.0. Last updated: 2.0.*

## Surface swab

(surfSw). Surface swab. *Part Type: category Domain ID: naDomain Speciment ID: naSpecimenSet Compartment Set: surfaceCompartment Group ID: colGrp Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: NA Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

## Sewage truck

(swgTrck). Sewage truck *Part Type: category Domain ID: naDomain Speciment ID: naSpecimenSet Compartment Set: waterCompartment Group ID: colGrp Class ID: naClass Nomenclature ID: naNomenclature Ontology*



*Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 1.0. Last updated: 2.0.

## Sewer catchment area

(swrCatSet). Sewer catchment area. *Part Type:* category *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* waterCompartment *Group ID:* colGrp *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 1.0. Last updated: 2.0.

## Sewer sediment

(swrSed). Sediments obtained in sewer *Part Type:* category *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* waterCompartment *Group ID:* colGrp *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 1.0. Last updated: 2.0.

## Synthetic sample

(synthetic). Specifies a synthetic, or artificially derived sample. *Part Type:* category *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass

## Parts

*Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

### **t19r delta-variant gene target**

(t19r). t19r delta-variant gene target *Part Type:* measure *Domain ID:* Bio *Speciment ID:* saSpecimen *Compartment Set:* anyCompartment *Group ID:* sarsCov2 *Class ID:* mutation *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* geneticUnitSet *Aggregation Scale ID:* see unit *Quality Set ID:* pcrQualitySet *Reference Link:* NA *Data Type:* see unit *Minimum Value:* see unit *Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0. Last updated: 2.0.

### **t3646a delta-variant gene target**

(t3646a). t3646a delta-variant gene target *Part Type:* measure *Domain ID:* Bio *Speciment ID:* saSpecimen *Compartment Set:* anyCompartment *Group ID:* sarsCov2 *Class ID:* mutation *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* geneticUnitSet *Aggregation Scale ID:* see unit *Quality Set ID:* pcrQualitySet *Reference Link:* NA *Data Type:* see unit *Minimum Value:* see unit *Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0. Last updated: 2.0.

### **t547k omicron-variant gene target { #t547k }**

(t547k ). t547k omicron-variant gene target *Part Type:* measure *Domain ID:* Bio *Speciment ID:* saSpecimen *Compartment Set:* anyCompartment

*Group ID:* sarsCov2 *Class ID:* mutation *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* geneticUnitSet *Aggregation Scale ID:* see unit *Quality Set ID:* pcrQualitySet *Reference Link:* NA *Data Type:* see unit *Minimum Value:* see unit *Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0. Last updated: 2.0.

### **t9i omicron-variant gene target { #t9i }**

(t9i). t9i omicron-variant gene target *Part Type:* measure *Domain ID:* Bio *Speciment ID:* saSpecimen *Compartment Set:* anyCompartment *Group ID:* sarsCov2 *Class ID:* mutation *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* geneticUnitSet *Aggregation Scale ID:* see unit *Quality Set ID:* pcrQualitySet *Reference Link:* NA *Data Type:* see unit *Minimum Value:* see unit *Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0. Last updated: 2.0.

## **Tables**

(table). Tables are where measures, methods and attributes are recorded. Tables represent the main entities of the environmental surveillance. There An example of a table is **site** a collection of attributes such as site name and address to describe where environment samples are taken. PHES-ODM has report tables, but users can create their own tables as well. *Part Type:* partType *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Parts

### Table column category set

(tableCatSet). The category set for valid inputs in table columns. These categories are used in the parts list for columns named after tables to indicate the position and function of a given part in the entity relationship diagram of the data model. *Part Type*: catSet *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: tableCatSet *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: categorical *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

### TaqPath N sars-cov-2 gene target

(taqpatN). TaqPath N sars-cov-2 gene target *Part Type*: measure *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: sarsCov2 *Class ID*: mutation *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: geneticUnitSet *Aggregation Scale ID*: see unit *Quality Set ID*: pcrQualitySet *Reference Link*: NA *Data Type*: see unit *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

### TaqPath S sars-cov-2 gene target

(taqpatS). TaqPath N sars-cov-2 gene target *Part Type*: measure *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: sarsCov2 *Class ID*: mutation *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: geneticUnitSet *Aggregation Scale ID*: see unit *Quality Set ID*: pcrQualitySet

*Reference Link:* NA *Data Type:* see unit *Minimum Value:* see unit *Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Temperature

(temp). Temperature of the sample measured in degrees Celcius *Part Type:* measure *Domain ID:* Phy *Speciment ID:* siSaSpecimen *Compartment Set:* anyCompartment *Group ID:* miscMeas *Class ID:* tempClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* temperatureUnitSet *Aggregation Scale ID:* see unit *Quality Set ID:* genQualitySet *Reference Link:* NA *Data Type:* float *Minimum Value:* see unit *Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 1.0. Last updated: 2.0.

## Temperature

(tempClass). Measures and methods related to temperatures. *Part Type:* class *Domain ID:* Phy *Speciment ID:* siSaSpecimen *Compartment Set:* anyCompartment *Group ID:* naGroup *Class ID:* tempClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* see unit *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Temperature unit set

(temperatureUnitSet). Unit set for temperature measurements. *Part Type:* unitSet *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* anyCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set*

## Parts

*ID: NA Unit Set ID: temperatureUnitSet Aggregation Scale ID: quantAggScale Quality Set ID: NA Reference Link: NA Data Type: categorical Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: active. First released: 2.0. Last updated: 2.0.*

## Nucleic acid template volume

(tempVol). The volume of DNA or RNA template used for PCR. *Part Type: measure Domain ID: Bio Specimen ID: saSpecimen Compartment Set: anyCompartment Group ID: procGrp Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: see unit Quality Set ID: genQualitySet Reference Link: NA Data Type: integer Minimum Value: see unit Maximum Value: see unit Minimum Length: NA Maximum Length: NA Part Status: active. First released: 2.0. Last updated: 2.0.*

## Test date

(tesDate). Date that the covid-19 test was performed. *Part Type: category Domain ID: naDomain Specimen ID: naSpecimenSet Compartment Set: humanCompartment Group ID: naGroup Class ID: naClass Nomenclature ID: naNomenclature Ontology Reference: NA Category Set ID: NA Unit Set ID: naUnitSet Aggregation Scale ID: NA Quality Set ID: NA Reference Link: NA Data Type: datetime Minimum Value: NA Maximum Value: NA Minimum Length: 0 Maximum Length: 30 Part Status: **deprecated**. First released: 1.0. Last updated: 2.0.*

## Number of tests performed

(test). Number of tests performed. *Part Type: unit Domain ID: Bio Specimen ID: poSpecimen Compartment Set: anyCompartment Group ID:*

naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* genQualitySet *Reference Link:* NA *Data Type:* integer *Minimum Value:* 0 *Maximum Value:* NA *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 1.0. Last updated: 2.0.

## Testing

(testing). A measure or sample taken to test a new method. These measures are typically used for internal lab uses and not reported to external partners. *Part Type:* category *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## thermo magmax microbiome ultra nucleic acid isolation kit

(thermMag). Nucleic acid extraction performed using the thermo magmax microbiome ultra nucleic acid isolation kit. *Part Type:* category *Domain ID:* Bio *Speciment ID:* saSpecimen *Compartment Set:* anyCompartment *Group ID:* procGrp *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Parts

### Time proportional sample

(timePr). A time proportional composite sample generally collected by an autosampler. Use collectionPeriod to describe how many hours the sample was taken. *Part Type:* category *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* waterCompartment *Group ID:* colGrp *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* sampleQualitySet *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 1.0. Last updated: 2.0.

### Total Kjeldahl Nitrogen

(tkn). A measure of Total Kjeldahl Nitrogen; ie. the sum of nitrogen bound in organic substances, nitrogen in ammonia (NH<sub>3</sub>-N) and in ammonium (NH<sub>4</sub><sup>+</sup>-N) in the chemical analysis of soil, water, or waste water. *Part Type:* measure *Domain ID:* Che *Speciment ID:* siSaSpecimen *Compartment Set:* waterCompartment *Group ID:* miscMeas *Class ID:* standardConc *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* stdConcentrationUnitSet *Aggregation Scale ID:* see unit *Quality Set ID:* genQualitySet *Reference Link:* NA *Data Type:* see unit *Minimum Value:* see unit *Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0. Last updated: 2.0.

### Total Nitrogen

(tn). Total nitrogen concentration, as N. *Part Type:* measure *Domain ID:* Che *Speciment ID:* siSaSpecimen *Compartment Set:* waterCompartment



*Group ID:* miscMeas *Class ID:* standardConc *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* std-ConcentrationUnitSet *Aggregation Scale ID:* see unit *Quality Set ID:* genQualitySet *Reference Link:* NA *Data Type:* see unit *Minimum Value:* see unit *Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 1.0. Last updated: 2.0.

## Time Proportional 24hr sample

(tp24s). A time proportional 24-hour composite sample generally collected by an autosampler. *Part Type:* category *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* waterCompartment *Group ID:* col-Grp *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* sampleQualitySet *Reference Link:* NA *Data Type:* NA *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* **deprecated**. First released: 1.0. Last updated: 2.0.

## Translation look-up table

(translations). Look up table for translations of the description, label, and instruction for all parts. The default language if a translation is not specified is English. *Part Type:* table *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* na-Group *Class ID:* lookup *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Parts

### Translation table column order

(translationsOrder). Specifies the order of the columns in the Translation table. *Part Type*: tableSupport *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: integer *Minimum Value*: 1 *Maximum Value*: NA *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 2.0. Last updated: 2.0.

### Required headers

(translationsRequired). Required headers in the Translations table. *Part Type*: tableSupport *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: naCompartmentSet *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

### trizol, zymo mag beads w/ zymo clean and concentrator

(trizol). Nucleic acid extraction performed using the trizol, zymo mag beads w/ zymo clean and concentrator method. *Part Type*: category *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: procGrp *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum*

*Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## TRUE

(true). Boolean data type = TRUE Use only “TRUE” (case sensitive) *Part Type:* category *Domain ID:* naDomain *Specimen ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* boolean *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 4 *Maximum Length:* 4 *Part Status:* active. First released: 1.1. Last updated: 2.0.

## Total solids concentration

(ts). Total solids concentration *Part Type:* measure *Domain ID:* Che *Specimen ID:* siSaSpecimen *Compartment Set:* waterCompartment *Group ID:* miscMeas *Class ID:* standardConc *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* stdConcentrationUnitSet *Aggregation Scale ID:* see unit *Quality Set ID:* genQualitySet *Reference Link:* NA *Data Type:* see unit *Minimum Value:* see unit *Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 1.0. Last updated: 2.0.

## Total suspended solids

(tss). Total suspended solids *Part Type:* measure *Domain ID:* Che *Specimen ID:* siSaSpecimen *Compartment Set:* waterCompartment *Group ID:* miscMeas *Class ID:* standardConc *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* stdConcentrationUnitSet *Aggregation Scale ID:* see unit *Quality Set ID:* genQualitySet

## Parts

*Reference Link:* NA *Data Type:* see unit *Minimum Value:* see unit *Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 1.0. Last updated: 2.0.

## Concentration of total suspended solids

(tssConc). Total suspended solids concentration of the wastewater. *Part Type:* measure *Domain ID:* Phy *Speciment ID:* siSaSpecimen *Compartment Set:* waterCompartment *Group ID:* miscMeas *Class ID:* standardConc *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* stdConcentrationUnitSet *Aggregation Scale ID:* see unit *Quality Set ID:* genQualitySet *Reference Link:* NA *Data Type:* see unit *Minimum Value:* see unit *Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 1.0. Last updated: 2.0.

## Turbidity

(turb). A measure for the turbidity of water, or a liquid sample, quantifying the relative clarity or opacity of a liquid. Highly indicative of water quality. *Part Type:* measure *Domain ID:* Phy *Speciment ID:* siSaSpecimen *Compartment Set:* waterCompartment *Group ID:* miscMeas *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* turbidityUnitSet *Aggregation Scale ID:* see unit *Quality Set ID:* genQualitySet *Reference Link:* NA *Data Type:* see unit *Minimum Value:* see unit *Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 1.0. Last updated: 2.0.

**Turbidity unit set**

(turbidityUnitSet). Unit set for turbidity measurements. *Part Type:* unit-Set *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* waterCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* turbidityUnitSet *Aggregation Scale ID:* quantAggScale *Quality Set ID:* NA *Reference Link:* NA *Data Type:* categorical *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

**Tube weight empty**

(tWeighE). The weight of the tube used for analysis while full of analyte. *Part Type:* measure *Domain ID:* Phy *Speciment ID:* saSpecimen *Compartment Set:* anyCompartment *Group ID:* procGrp *Class ID:* physical *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* volumeUnitSet *Aggregation Scale ID:* quantAggScale *Quality Set ID:* genQualitySet *Reference Link:* NA *Data Type:* integer *Minimum Value:* 0 *Maximum Value:* NA *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0. Last updated: 2.0.

**Tube weight full**

(tWeighF). The weight of the tube used for analysis while empty. *Part Type:* measure *Domain ID:* Phy *Speciment ID:* saSpecimen *Compartment Set:* anyCompartment *Group ID:* procGrp *Class ID:* physical *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* volumeUnitSet *Aggregation Scale ID:* quantAggScale *Quality Set ID:* genQualitySet *Reference Link:* NA *Data Type:* integer *Minimum*

## Parts

*Value:* 0 *Maximum Value:* NA *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Type other depreciate

(tyOtDep). Description for other type of sample not listed in *Part Type*: method *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* colGrp *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 100 *Part Status:* **depreciated**. First released: 1.0. Last updated: 2.0.

## Type other depreciate2

(tyOtDep2). Description of the site when the site is not listed. See site-Type. *Part Type:* attribute *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 100 *Part Status:* **depreciated**. First released: 1.0. Last updated: 2.0.

## University campus

(uCampus). Universityor college campus - comprising an entire campus or part of a campus. See also 'Higher Education Domitory'. *Part Type:* category *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* anyCompartment *Group ID:* colGrp *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit*

*Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 1.1. Last updated: 2.0.

## Undisclosed

(undisc). A value has been recorded, however it was not included in the dataset. Missing value indicator for data that has not been shared or disclosed with outside parties. *Part Type:* missingness *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 1.0. Last updated: 2.0.

## Unique sample

(unique). A unique sample, not duplicated. *Part Type:* category *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Parts

### Units

(unit). The unit of the measurement. *Part Type:* partType *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

### Unit

(unitID). The units of a measurement. Different units that are used to describe measurement values. Units are combined into UnitSetIDs. Please requests new units by creating an issue in the ODM repository. *Part Type:* attribute *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* categorical *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 1.0. Last updated: 2.0.

### Unitless measure

(unitless). A unit for unitless measures, like pH. *Part Type:* unit *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* anyCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* quantAggScale *Quality Set ID:* genQualitySet *Reference Link:* NA *Data Type:* float *Minimum Value:* NA



*Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Unitless unit set

(unitlessUnitSet). Unit set for measurements that does not have units. *Part Type:* unitSet *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* anyCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* unitlessUnitSet *Aggregation Scale ID:* quantAggScale *Quality Set ID:* NA *Reference Link:* NA *Data Type:* categorical *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Unit sets

(unitSet). Sets of units. Contains units that are associated with part types such as measures. Sets are lists of input values. Each input value within a set is a part (has a partID) that can be reused between sets. For example, a set A could contain the values of 'yes' and 'no'; and set B could contain the values of 'yes', 'no', and 'maybe.' partTypes with sets include aggregations, compartments, missingness, quality flags, specimens, and units. Measures with categories and dataTypes have their own specific category sets (catSetID) because their input values are unique and are not reused. *Part Type:* partType *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* anyCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 15 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Parts

### Unit set ID

(unitSetID). An identification of a set of units that can be used for a measure or method. *Part Type:* attribute *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* categorical *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 28 *Part Status:* active. First released: 2.0. Last updated: 2.0.

### Ultracentrifugation

(untracent). Ultracentrifugation *Part Type:* category *Domain ID:* Che *Speciment ID:* naSpecimenSet *Compartment Set:* waterCompartment *Group ID:* procGrp *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* genQualitySet *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

### Upper limit of a 95% confidence interval

(upperCI95). Specifies the the upper limit of a 95% confidence interval. Should typically be linked to a lower limit, and some indication of data spread (ie. standard deviation), and a mean/median measure. *Part Type:* aggregation *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* quantAggScale *Quality Set ID:* genQualitySet *Reference Link:* NA *Data Type:* varchar

*Minimum Value:* see unit *Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Upstream sites

(upstream). A general site type for upstream wastewater sampling sites. A catch-all category for upstream wastewater sampling sites, including major sewer pipelines and pumping stations. *Part Type:* category *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* waterCompartment *Group ID:* colGrp *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 1.0. Last updated: 2.0.

## Micro-Siemens per centimetre

(uSCm). Micro-siemens per centimetre. *Part Type:* unit *Domain ID:* Phy *Speciment ID:* siSaSpecimen *Compartment Set:* anyCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* quantAggScale *Quality Set ID:* genQualitySet *Reference Link:* NA *Data Type:* float *Minimum Value:* 0 *Maximum Value:* NA *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 1.1. Last updated: 2.0.

## U site measure ID

(uSiteMeasureID). Unique identifier for each measurement for a site. Deprecated in version 2, please do not use. MeasureID will be associated with

## Parts

site, with site specified as the specimen as well. *Part Type:* attribute  
*Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:*  
waterCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature*  
*ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit*  
*Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Refer-*  
*ence Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:*  
NA *Minimum Length:* 0 *Maximum Length:* 12 *Part Status:* **deprecated**.  
First released: 1.0. Last updated: 2.0.

## v2930l delta-variant gene target

(v2930l). v2930l delta-variant gene target *Part Type:* measure *Domain ID:*  
Bio *Speciment ID:* saSpecimen *Compartment Set:* anyCompartment *Group*  
*ID:* sarsCov2 *Class ID:* mutation *Nomenclature ID:* naNomenclature *On-*  
*tology Reference:* NA *Category Set ID:* NA *Unit Set ID:* geneticUnitSet  
*Aggregation Scale ID:* see unit *Quality Set ID:* pcrQualitySet *Reference*  
*Link:* NA *Data Type:* see unit *Minimum Value:* see unit *Maximum Value:*  
see unit *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active.  
First released: 2.0. Last updated: 2.0.

## Validation study

(validationStudy). A measure or sample taken for a validation study. *Part*  
*Type:* category *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Com-*  
*partment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass  
*Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set*  
*ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:*  
NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Max-*  
*imum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:*  
active. First released: 2.0. Last updated: 2.0.

**Value**

(value). Value of a measure, observation or attribute. *Part Type:* attribute *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* NA *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 28 *Part Status:* active. First released: 2.0. Last updated: 2.0.

**Variable character date type**

(varchar). The data type for variable character data. Only used for the dictionary entries of parts. *Part Type:* dataType *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* anyCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 15 *Part Status:* active. First released: 2.0. Last updated: 2.0.

**Frequency of variants detected**

(varFreq). A description of the frequency of a variants detected. Measured by sequencing. *Part Type:* unit *Domain ID:* Bio *Speciment ID:* saSpecimen *Compartment Set:* anyCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* quantAggScale *Quality Set ID:* pcrQualitySet *Reference Link:* NA *Data Type:* integer *Minimum Value:* 0 *Maximum Value:* 100 *Minimum Length:* NA

## Parts

*Maximum Length:* NA *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Variants

(variant). Measures and methods relating to variants. *Part Type:* class *Domain ID:* Bio *Speciment ID:* saSpecimen *Compartment Set:* anyCompartment *Group ID:* naGroup *Class ID:* variant *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* geneticUnitSet *Aggregation Scale ID:* see unit *Quality Set ID:* seqQualitySet *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Population with 1 dose of vaccine

(vax1). A measure of the population with a single dose of vaccine. *Part Type:* unit *Domain ID:* Bio *Speciment ID:* poSpecimen *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* quantAggScale *Quality Set ID:* genQualitySet *Reference Link:* NA *Data Type:* integer *Minimum Value:* 0 *Maximum Value:* NA *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Population with 2 doses of vaccine

(vax2). Population with 2 doses of vaccine *Part Type:* unit *Domain ID:* Bio *Speciment ID:* poSpecimen *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* genQualitySet *Reference Link:* NA

*Data Type:* integer *Minimum Value:* 0 *Maximum Value:* NA *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Population with 3 doses of vaccine

(vax3). Population with 3 doses of vaccine *Part Type:* unit *Domain ID:* Bio *Speciment ID:* poSpecimen *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* genQualitySet *Reference Link:* NA *Data Type:* integer *Minimum Value:* 0 *Maximum Value:* NA *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Miscellaneous viruses group

(virusMisc). A group of measures/methods related to miscellaneous viruses. The miscallenous viruses are often measured for normalization or standardization and have only one measure or method. When a virus has many measures, they will be given their own groupID in updated dictionary versions. *Part Type:* group *Domain ID:* Bio *Speciment ID:* naSpecimenSet *Compartment Set:* anyCompartment *Group ID:* virusMisc *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* see unit *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Parts

### Size in volume

(vol). Total volume of water or sludge sampled. *Part Type*: measure *Domain ID*: Phy *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: measGrp *Class ID*: physical *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: volumeUnitSet *Aggregation Scale ID*: see unit *Quality Set ID*: genQualitySet *Reference Link*: NA *Data Type*: float *Minimum Value*: see unit *Maximum Value*: see unit *Minimum Length*: NA *Maximum Length*: NA *Part Status*: active. First released: 1.0. Last updated: 2.0.

### Volume proportional sample

(volPr). A volume proportional sample generally collected by an autosampler. Used for water or air testing *Part Type*: category *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: airWaterCompartment *Group ID*: colGrp *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: sampleQualitySet *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

### Volume unit set

(volumeUnitSet). Unit set of volume measurements. *Part Type*: unitSet *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: anyCompartment *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: volumeUnitSet *Aggregation Scale ID*: quantAggScale *Quality Set ID*: NA *Reference Link*: NA *Data Type*: categorical *Minimum Value*: NA



*Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Volatile suspended solids

(vss). Volatile suspended solids *Part Type:* measure *Domain ID:* Che *Specimen ID:* siSaSpecimen *Compartment Set:* waterCompartment *Group ID:* miscMeas *Class ID:* standardConc *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* stdConcentrationUnitSet *Aggregation Scale ID:* see unit *Quality Set ID:* genQualitySet *Reference Link:* NA *Data Type:* see unit *Minimum Value:* see unit *Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 1.0. Last updated: 2.0.

## Volatile suspended solids - ignition

(vssIg). A water quality measure, captured by via the loss on ignition of the mass of measured total suspended solids. This ignition generally takes place in an oven at a temperature of 550 °C to 600 °C. It represents the amount of volatile matter present in the solid fraction of the measured solution. *Part Type:* measure *Domain ID:* Phy *Specimen ID:* saSpecimen *Compartment Set:* waterCompartment *Group ID:* measGrp *Class ID:* standardConc *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* stdConcentrationUnitSet *Aggregation Scale ID:* see unit *Quality Set ID:* genQualitySet *Reference Link:* NA *Data Type:* see unit *Minimum Value:* see unit *Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Parts

### Water compartment

(wat). A measure or observation made from a substance in the water, including wastewater. *Part Type*: compartment *Domain ID*: allDo *Speciment ID*: anySpecimen *Compartment Set*: waterCompartment *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 1 *Part Status*: active. First released: 2.0. Last updated: 2.0.

### Water depreciated

(water). Non-wastewater, coming from any kind of water body. *Part Type*: category *Domain ID*: naDomain *Speciment ID*: naSpecimenSet *Compartment Set*: waterCompartment *Group ID*: colGrp *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: NA *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: **depreciated**. First released: 1.0. Last updated: 2.0.

### Water compartment set

(waterCompartmentSet). A compartment set for measures and methods in the water compartment. *Part Type*: compSet *Domain ID*: allDo *Speciment ID*: anySpecimen *Compartment Set*: waterCompartment *Group ID*: naGroup *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 15 *Part Status*: active. First released: 2.0. Last updated: 2.0.

## Wastewater Temperature

(watTemp). Temperature of the wastewater. *Part Type:* measure *Domain ID:* Phy *Speciment ID:* siSaSpecimen *Compartment Set:* waterCompartment *Group ID:* miscMeas *Class ID:* tempClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* temperatureUnitSet *Aggregation Scale ID:* see unit *Quality Set ID:* genQualitySet *Reference Link:* NA *Data Type:* see unit *Minimum Value:* see unit *Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 1.0. Last updated: 2.0.

## Weather

(weath). A measure for weather captured through qualitative categories; part of a larger suite of weather measures that may be useful when collecting samples from outdoor sources. *Part Type:* measure *Domain ID:* Phy *Speciment ID:* siSpecimen *Compartment Set:* anyCompartment *Group ID:* siteFeat *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* weathCatSet *Unit Set ID:* unitlessUnitSet *Aggregation Scale ID:* see unit *Quality Set ID:* genQualitySet *Reference Link:* NA *Data Type:* categorical *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Weather category set

(weathCatSet). A category set of the valid qualitative categories for the qualitative weather measure. *Part Type:* catSet *Domain ID:* naDomain *Speciment ID:* siSpecimen *Compartment Set:* anyCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* weathCatSet *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data*

## Parts

*Type:* categorical *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Whole genome Sequencing

(wgs). Specifies the whole genome sequencing (WGS) strategy for genetic sequencing *Part Type:* category *Domain ID:* Bio *Specimen ID:* saSpecimen *Compartment Set:* anyCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* see unit *Minimum Value:* see unit *Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0. Last updated: 2.0.

## WHO nomenclature

(who). Specifies variant or genetic nomenclature as set out by the World Health Organization. *Part Type:* nomenclature *Domain ID:* Bio *Specimen ID:* naSpecimenSet *Compartment Set:* anyCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Wide 95% interval

(wI). The 95% interval is too wide, low confidence in results. If there are multiple issues to flag, use the multiple issues flag and explain the details in the notes section. *Part Type:* quality *Domain ID:* naDomain *Specimen ID:* saSpecimen *Compartment Set:* anyCompartment *Group ID:* naGroup

*Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* seqQualitySet *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Wide name table

(wideNames). The table for wide names. *Part Type:* table *Domain ID:* naDomain *Speciment ID:* saSpecimen *Compartment Set:* naCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0.0. Last updated: 2.0.0.

## Wind Speed

(wind). A measure for wind speed; part of a larger suite of weather measures that may be useful when collecting samples from outdoor sources. *Part Type:* measure *Domain ID:* Phy *Speciment ID:* siSpecimen *Compartment Set:* anyCompartment *Group ID:* siteFeat *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* windSpeedUnitSet *Aggregation Scale ID:* see unit *Quality Set ID:* genQualitySet *Reference Link:* NA *Data Type:* see unit *Minimum Value:* see unit *Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Parts

### Wind speed unit set

(windSpeedUnitSet). Unit set for wind speed measurements. *Part Type:* unitSet *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* airCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* windSpeedUnitSet *Aggregation Scale ID:* quantAggScale *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

### Measure identification (wide table)

(wMeasureID). Unique identifier for wide table only. Use when all measures are performed on a single sample at the same time and same laboratory. Suggestion: siteID\_sampleID\_LabID\_reportDate\_ID. *Part Type:* attribute *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* naCompartmentSet *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* **depreciated**. First released: 1.0. Last updated: 2.0.

### Sample stored incorrectly

(wrongStorage). Sample was stored inappropriately. *Part Type:* quality *Domain ID:* naDomain *Speciment ID:* saSpecimen *Compartment Set:* anyCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* sampleQualitySet *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum*

*Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active.  
First released: 2.0. Last updated: 2.0.

### **Sample stored at wrong temperature**

(wrongTemp). Sample was stored at an inappropriate temperature. *Part Type:* quality *Domain ID:* naDomain *Speciment ID:* saSpecimen *Compartment Set:* anyCompartment *Group ID:* naGroup *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* sampleQualitySet *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 2.0. Last updated: 2.0.

### **Wastewater treatment plant**

(wwtp). A general site type for wastewater treatment plants. Used as a catch-all category for industrial or municipal wastewater treatment plants that carry combined or sanitary sewage, or lagoons. *Part Type:* category *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* waterCompartment *Group ID:* colGrp *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 1.0. Last updated: 2.0.

### **Back-up wastewater treatment site**

(wwtpBack). Indicates a wastewater treatment plant where multiple labs are or were sampling, and where secondary samples are being taken taken. Sites of this type should ideally should be paired via parent site ID with the

## Parts

general site information. *Part Type:* category *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* waterCompartment *Group ID:* colGrp *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 1.0. Last updated: 2.0.

## Wastewater treatment plant designed capacity

(wwtpCap). A measure for the designed capacity of a wastewater treatment plant, in terms of how much water it was designed to be able to hold and process. Maps to units of either million gallons per day, or population equivalents. *Part Type:* measure *Domain ID:* Phy *Speciment ID:* siSpecimen *Compartment Set:* waterCompartment *Group ID:* siteFeat *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* capacityUnitSet *Aggregation Scale ID:* see unit *Quality Set ID:* genQualitySet *Reference Link:* NA *Data Type:* see unit *Minimum Value:* see unit *Maximum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA *Part Status:* active. First released: 2.0. Last updated: 2.0.

## Industrial wastewater treatment plant

(wwtpInd). Industrial wastewater treatment plant *Part Type:* category *Domain ID:* naDomain *Speciment ID:* naSpecimenSet *Compartment Set:* waterCompartment *Group ID:* colGrp *Class ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part Status:* active. First released: 1.0. Last updated: 2.0.



### **Municipal wastewater treatment plant for combined sewage**

(wwtpMuC). Municipal wastewater treatment plant for combined sewage  
*Part Type:* category *Domain ID:* naDomain *Speciment ID:* naSpecimenSet  
*Compartment Set:* waterCompartment *Group ID:* colGrp *Class ID:* na-  
 Class *Nomenclature ID:* naNomenclature *Ontology Reference:* NA *Cate-*  
*gory Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA *Quality*  
*Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum Value:* NA  
*Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:* 30 *Part*  
*Status:* active. First released: 1.0. Last updated: 2.0.

### **Municipal wastewater treatment plant for sanitary dewage only**

(wwtpMuS). Municipal wastewater treatment plant for sanitary sewage  
 only *Part Type:* category *Domain ID:* naDomain *Speciment ID:* naSpec-  
 imenSet *Compartment Set:* waterCompartment *Group ID:* colGrp *Class*  
*ID:* naClass *Nomenclature ID:* naNomenclature *Ontology Reference:* NA  
*Category Set ID:* NA *Unit Set ID:* naUnitSet *Aggregation Scale ID:* NA  
*Quality Set ID:* NA *Reference Link:* NA *Data Type:* varchar *Minimum*  
*Value:* NA *Maximum Value:* NA *Minimum Length:* 0 *Maximum Length:*  
 30 *Part Status:* active. First released: 1.0. Last updated: 2.0.

### **y505h omicron-variant gene target { #y505h }**

(y505h ). y505h omicron-variant gene target *Part Type:* measure *Domain*  
*ID:* Bio *Speciment ID:* saSpecimen *Compartment Set:* anyCompartment  
*Group ID:* sarsCov2 *Class ID:* mutation *Nomenclature ID:* naNomencla-  
 ture *Ontology Reference:* NA *Category Set ID:* NA *Unit Set ID:* geneti-  
 cUnitSet *Aggregation Scale ID:* see unit *Quality Set ID:* pcrQualitySet  
*Reference Link:* NA *Data Type:* see unit *Minimum Value:* see unit *Max-*  
*imum Value:* see unit *Minimum Length:* NA *Maximum Length:* NA *Part*  
*Status:* active. First released: 2.0. Last updated: 2.0.

## Parts

### **zymo environ water rna kit/ zymo environ water rna kit (cat. r2042)**

(zymoEnv). Nucleic acid extraction performed using the zymo environ water rna kit/ zymo environ water rna kit (cat. r2042). *Part Type*: category *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: procGrp *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

### **zymo quick-rna fungal/bacterial miniprep #r2014**

(zymoQuick). Nucleic acid extraction performed using the zymo quick-rna fungal/bacterial miniprep #r2014 kit. *Part Type*: category *Domain ID*: Bio *Speciment ID*: saSpecimen *Compartment Set*: anyCompartment *Group ID*: procGrp *Class ID*: naClass *Nomenclature ID*: naNomenclature *Ontology Reference*: NA *Category Set ID*: NA *Unit Set ID*: naUnitSet *Aggregation Scale ID*: NA *Quality Set ID*: NA *Reference Link*: NA *Data Type*: varchar *Minimum Value*: NA *Maximum Value*: NA *Minimum Length*: 0 *Maximum Length*: 30 *Part Status*: active. First released: 2.0. Last updated: 2.0.

# Sets

ODM version NA.

Sets are lists of categories and other parts. For example, `Collection category set (collectionCatSet)` contains a list of the different collection types including: `Moore swab`, `Grab sample`, `Flow proportional sample`, etc.

Some sets can have parts that are reused. For example, there are different quality measures for sample collection (e.g. `Sample not collected`), PCR measures (`inhibition preset`), and sequencing measures (`low depth of coverage`), but all quality sets share the `No quality concerns` indicator.

## Aggregation sets

(`aggSet`). Sets of aggregations that can be used for measures. Examples of aggregation sets include `logarithm`, `linear` and `boolean`. Sets are lists of input values. Each input value within a set is a part (has a `partID`) that can be reused between sets. For example, a set A could contain the values of 'yes' and 'no'; and set B could contain the values of 'yes', 'no', and 'maybe.' `partTypes` with sets include `aggregations`, `compartments`, `missingness`, `quality flags`, `specimens`, and `units`. Measures with categories and `dataTypes` have their own specific category sets (`catSetID`) because their input values are unique and are not reused.

## **Boolean aggregation set**

**AND Boolean aggregation** (andBoo). “AND” aggregation. Status: active. First released: 2.0. Last updated: 2.0.

**OR Boolean aggregation** (orBoo). “OR” aggregation. Status: active. First released: 2.0. Last updated: 2.0.

**Single** (sin). A value that is not an aggregate measurement (ie. not a mean, median, max or any other) and can be a replicate value. Status: active. First released: 1.0. Last updated: 2.0.

## **Linear scale aggregation set**

**Flow-normalized mean** (floMean). Mean measure normalized to wastewater flow. Status: active. First released: 2.0. Last updated: 2.0.

**Lower limit of a 95% confidence interval** (lowerCI95). Specifies the the lower limit of a 95% confidence interval. Status: active. First released: 2.0. Last updated: 2.0.

**Maximum Value** (maxValueAgg). Highest value in a range of values. Status: active. First released: 1.0. Last updated: 2.0.

**Arithmetic mean** (me). Arithmetic mean. Status: active. First released: 1.0. Last updated: 2.0.

**Median** (med). Median. Status: active. First released: 1.0. Last updated: 2.0.

**Normalized arithmetic mean** (menr). Arithmetic mean, normalized. Status: active. First released: 1.0. Last updated: 2.0.

**Minimum Value** (minValueAgg). Lowest value in a range of values. Status: active. First released: 1.0. Last updated: 2.0.

**PMMoV- and flow-normalized mean** (pmFloMean). Mean measure normalized to amount of PMMoV and wastewater flow. Status: active. First released: 2.0. Last updated: 2.0.

**PMMoV-normalized mean** (pmmovNorm). Mean measure normalized to amount of PMMoV. Status: active. First released: 2.0. Last updated: 2.0.

**Standard Deviation** (sd). Standard deviation. Status: active. First released: 1.0. Last updated: 2.0.

**Normalized Standard Deviation** (sdn). Standard deviation, normalized. Status: active. First released: 1.0. Last updated: 2.0.

**Single** (sin). A value that is not an aggregate measurement (ie. not a mean, median, max or any other) and can be a replicate value. Status: active. First released: 1.0. Last updated: 2.0.

**Upper limit of a 95% confidence interval** (upperCI95). Specifies the the upper limit of a 95% confidence interval. Status: active. First released: 2.0. Last updated: 2.0.

## **Logarithmic scale aggregation set**

**Flow-normalized mean** (floMean). Mean measure normalized to wastewater flow. Status: active. First released: 2.0. Last updated: 2.0.

**Geometric mean** (gmn). Geometric mean. Status: active. First released: 1.0. Last updated: 2.0.

**Lower limit of a 95% confidence interval** (lowerCI95). Specifies the the lower limit of a 95% confidence interval. Status: active. First released: 2.0. Last updated: 2.0.

**Maximum Value** (maxValueAgg). Highest value in a range of values. Status: active. First released: 1.0. Last updated: 2.0.

## *Sets*

**Minimum Value** (minValueAgg). Lowest value in a range of values. Status: active. First released: 1.0. Last updated: 2.0.

**Normalized geometric mean** (ngmn). Geometric mean, normalized. Status: active. First released: 1.0. Last updated: 2.0.

**PMMoV- and flow-normalized mean** (pmFloMean). Mean measure normalized to amount of PMMoV and wastewater flow. Status: active. First released: 2.0. Last updated: 2.0.

**PMMoV-normalized mean** (pmmovNorm). Mean measure normalized to amount of PMMoV. Status: active. First released: 2.0. Last updated: 2.0.

**Single** (sin). A value that is not an aggregate measurement (ie. not a mean, median, max or any other) and can be a replicate value. Status: active. First released: 1.0. Last updated: 2.0.

**Upper limit of a 95% confidence interval** (upperCI95). Specifies the the upper limit of a 95% confidence interval. Status: active. First released: 2.0. Last updated: 2.0.

## **Aggregation set not applicable**

**Aggregation not applicable** (naAggr). Not applicable for aggregations. Status: active. First released: 2.0. Last updated: 2.0.

## **Other aggregation set**

**Flow-normalized mean** (floMean). Mean measure normalized to wastewater flow. Status: active. First released: 2.0. Last updated: 2.0.

**Geometric mean** (gm). Geometric mean. Status: active. First released: 1.0. Last updated: 2.0.

**Lower limit of a 95% confidence interval** (lowerCI95). Specifies the the lower limit of a 95% confidence interval. Status: active. First released: 2.0. Last updated: 2.0.

**Maximum Value** (maxValueAgg). Highest value in a range of values. Status: active. First released: 1.0. Last updated: 2.0.

**Arithmetic mean** (me). Arithmetic mean. Status: active. First released: 1.0. Last updated: 2.0.

**Median** (med). Median. Status: active. First released: 1.0. Last updated: 2.0.

**Normalized arithmetic mean** (menr). Arithmetic mean, normalized. Status: active. First released: 1.0. Last updated: 2.0.

**Minimum Value** (minValueAgg). Lowest value in a range of values. Status: active. First released: 1.0. Last updated: 2.0.

**Aggregation not applicable** (naAggr). Not applicable for aggregations. Status: active. First released: 2.0. Last updated: 2.0.

**Normalized geometric mean** (ngmn). Geometric mean, normalized. Status: active. First released: 1.0. Last updated: 2.0.

**PMMoV- and flow-normalized mean** (pmFloMean). Mean measure normalized to amount of PMMoV and wastewater flow. Status: active. First released: 2.0. Last updated: 2.0.

**PMMoV-normalized mean** (pmmovNorm). Mean measure normalized to amount of PMMoV. Status: active. First released: 2.0. Last updated: 2.0.

**Standard Deviation** (sd). Standard deviation. Status: active. First released: 1.0. Last updated: 2.0.

**Normalized Standard Deviation** (sdn). Standard deviation, normalized. Status: active. First released: 1.0. Last updated: 2.0.

## *Sets*

**Single** (sin). A value that is not an aggregate measurement (ie. not a mean, median, max or any other) and can be a replicate value. Status: active. First released: 1.0. Last updated: 2.0.

**Upper limit of a 95% confidence interval** (upperCI95). Specifies the the upper limit of a 95% confidence interval. Status: active. First released: 2.0. Last updated: 2.0.

## **Category sets**

(catSet). A set of categories. For example, site type has a list of different sites, such as a wastewater treatment plant, a septic tank, or a pumping station. Only used for the dictionary entries of parts.

## **Boolean value set**

**FALSE** (false). Boolean data type = FALSE Status: active. First released: 1.1. Last updated: 2.0.

**TRUE** (true). Boolean data type = TRUE Status: active. First released: 1.1. Last updated: 2.0.

## **Sample collection category set**

**Area proportional sample** (areaPr). An area proportional sample. Status: active. First released: 2.0. Last updated: 2.0.

**Composite sample - archival** (comp). A composite sample, usually generated by an autosampler. Status: active. First released: 1.0. Last updated: 2.0.

**COSCa ball** (cosca). COSCa passive sampling device. Status: active. First released: 2.0. Last updated: 2.0.



**Flow proportional sample** (flowPr). A flow proportional composite sample generally collected by an autosampler. Status: active. First released: 1.0. Last updated: 2.0.

**Grab sample** (grb). A single large representative grab sample. Status: active. First released: 1.0. Last updated: 2.0.

**Moore swab passive sample** (moorSw). Moore swab passive sample. Status: active. First released: 1.0. Last updated: 2.0.

**Surface swab** (surfSw). Surface swab. Status: active. First released: 2.0. Last updated: 2.0.

**Time proportional sample** (timePr). A time proportional composite sample generally collected by an autosampler. Status: active. First released: 1.0. Last updated: 2.0.

**Volume proportional sample** (volPr). A volume proportional sample generally collected by an autosampler. Status: active. First released: 2.0. Last updated: 2.0.

## **Nucleic Acid Extraction category set**

**Amicon filter, extract with MP96** (amiMP96). Nucleic acid extraction, usually used for the liquid fraction of a wastewater sample, using amicon filtration and using an MP96 for final extraction. Status: active. First released: 2.0. Last updated: 2.0.

**Bead beating, extract with MP96** (bbMP96). Nucleic acid extraction, usually used for solid fraction of a wastewater sample, using bead beating and using an MP96 for final extraction. Status: active. First released: 2.0. Last updated: 2.0.

**Chemagic viral dna/rna 300 kit** (chemVir). Nucleic acid extraction performed using the chemagic viral dna/rna 300 kit. Status: active. First released: 2.0. Last updated: 2.0.

## *Sets*

**4s method** (extract4s). Nucleic acid extraction performed using the 4s method. Status: active. First released: 2.0. Last updated: 2.0.

**Nuclisens automated magnetic bead extraction kit** (nucAuto). Nucleic acid extraction performed using the nuclisens automated magnetic bead extraction kit. Status: active. First released: 2.0. Last updated: 2.0.

**Nuclisens manual magnetic bead extraction kit** (nucManu). Nucleic acid extraction performed using the nuclisens manual magnetic bead extraction kit. Status: active. First released: 2.0. Last updated: 2.0.

**Phenol chloroform** (phenCl). Nucleic acid extraction performed using phenol chloroform. Status: active. First released: 2.0. Last updated: 2.0.

**promega automated tna kit** (promAuto). Nucleic acid extraction performed using the promega automated tna kit. Status: active. First released: 2.0. Last updated: 2.0.

**promega ht tna kit** (promHt). Nucleic acid extraction performed using the promega ht tna kit. Status: active. First released: 2.0. Last updated: 2.0.

**promega manual tna kit** (promManu). Nucleic acid extraction performed using the promega manual tna kit. Status: active. First released: 2.0. Last updated: 2.0.

**promega wastewater large volume tna capture kit** (promWW). Nucleic acid extraction performed using the promega wastewater large volume tna capture kit. Status: active. First released: 2.0. Last updated: 2.0.

**qiagen allprep dna/rna kit** (qgDNARNA). Nucleic acid extraction performed using the qiagen allprep dna/rna kit. Status: active. First released: 2.0. Last updated: 2.0.

**qiagen ez1 virus mini kit v2.0** (qgEz1). Nucleic acid extraction performed using the qiagen ez1 virus mini kit v2.0. Status: active. First released: 2.0. Last updated: 2.0.

**qiagen allprep powerfecal dna/rna kit** (qgPwrFecal). Nucleic acid extraction performed using the qiagen allprep powerfecal dna/rna kit. Status: active. First released: 2.0. Last updated: 2.0.

**qiagen allprep powerviral dna/rna kit** (qgPwrViral). Nucleic acid extraction performed using the qiagen allprep powerviral dna/rna kit. Status: active. First released: 2.0. Last updated: 2.0.

**qiagen powerwater kit** (qgPwrWtr). Nucleic acid extraction performed using the qiagen powerwater kit. Status: active. First released: 2.0. Last updated: 2.0.

**qiagen qiaamp buffers with epoch columns** (qgQiAmp). Nucleic acid extraction performed using the qiagen qiaamp buffers with epoch columns. Status: active. First released: 2.0. Last updated: 2.0.

**qiagen rneasy kit** (qgRneasy). Nucleic acid extraction performed using the qiagen rneasy kit. Status: active. First released: 2.0. Last updated: 2.0.

**qiagen rneasy powermicrobiome kit** (qgRneasyPwr). Nucleic acid extraction performed using the qiagen rneasy powermicrobiome kit. Status: active. First released: 2.0. Last updated: 2.0.

**Resuspend COSCa filter collection** (resCosca). Nucleic acid extraction via resuspension of a sample collected using the COSCa ball method. Status: active. First released: 2.0. Last updated: 2.0.

**thermo magmax microbiome ultra nucleic acid isolation kit** (thermMag). Nucleic acid extraction performed using the thermo magmax microbiome ultra nucleic acid isolation kit. Status: active. First released: 2.0. Last updated: 2.0.

## Sets

**trizol, zymo mag beads w/ zymo clean and concentrator** (trizol). Nucleic acid extraction performed using the trizol, zymo mag beads w/ zymo clean and concentrator method. Status: active. First released: 2.0. Last updated: 2.0.

**zyzo environ water rna kit/ zymo environ water rna kit (cat. r2042)** (zyzoEnv). Nucleic acid extraction performed using the zyzo environ water rna kit/ zymo environ water rna kit (cat. r2042). Status: active. First released: 2.0. Last updated: 2.0.

**zyzo quick-rna fungal/bacterial miniprep #r2014** (zyzoQuick). Nucleic acid extraction performed using the zyzo quick-rna fungal/bacterial miniprep #r2014 kit. Status: active. First released: 2.0. Last updated: 2.0.

## Sample fraction category set

**Liquid fraction** (liq). Liquid fraction of a sample. Status: active. First released: 1.0. Last updated: 2.0.

**Mixed/homogenized sample** (mix). Mixed or homogenized sample or fraction analyzed. Status: active. First released: 1.0. Last updated: 2.0.

**Solid fraction** (sol). Solid fraction of a sample. Status: active. First released: 1.0. Last updated: 2.0.

## Geographic category set

**Sewer Network Health Region** (hlthReg). Health region served by the sewer network Status: active. First released: 1.0. Last updated: 2.0.

**Sewer catchment area** (swrCatSet). Sewer catchment area. Status: active. First released: 1.0. Last updated: 2.0.

### **Instrument category set**

**Atline Analyzer** (aas). Atline analyzer with sampler. Status: active. First released: 1.0. Last updated: 2.0.

**Hand Measurement** (hma). Handheld measurement analyzer. Status: active. First released: 1.0. Last updated: 2.0.

**Other instrument** (instrumentTypeOther). Type of instrument other than those included in the PHES-ODM. Status: active. First released: 1.0. Last updated: 2.0.

**Lab Analysis** (ola). Offline laboratory analysis. Status: active. First released: 1.0. Last updated: 2.0.

**Online Sensor** (onse). Online sensor Status: active. First released: 1.0. Last updated: 2.0.

### **Concentration method category set**

**Aloh3 precipitation** (aloh3). Aloh3 precipitation Status: active. First released: 2.0. Last updated: 2.0.

**Amicon ultrafiltration** (amiconUf). Amicon ultrafiltration Status: active. First released: 2.0. Last updated: 2.0.

**Beef extract flocculation** (beeExtractFloc). Beef extract flocculation. Status: active. First released: 2.0. Last updated: 2.0.

**Centricon ultrafiltration** (centriconUf). Centricon ultrafiltration. Status: active. First released: 2.0. Last updated: 2.0.

**Ceres nanotrap** (ceres). Ceres nanotrap. Status: active. First released: 2.0. Last updated: 2.0.

## *Sets*

**Hollow fiber dead end ultrafiltration** (hollowFiberUF). Hollow fiber dead end ultrafiltration Status: active. First released: 2.0. Last updated: 2.0.

**Innovaprep ultrafiltration** (innovaprepUF). Innovaprep ultrafiltration Status: active. First released: 2.0. Last updated: 2.0.

**Polyethyleneglycol (PEG) precipitation** (peg). Peg precipitation Status: active. First released: 2.0. Last updated: 2.0.

**Skimmed milk flocculation** (skimMilkFloc). Skimmed milk flocculation Status: active. First released: 2.0. Last updated: 2.0.

**Ultracentrifugation** (untracent). Ultracentrifugation Status: active. First released: 2.0. Last updated: 2.0.

## **Organization type category set**

**Academic institution organization type** (academ). The category of organization type used for academic institutions or research groups. Status: active. First released: 2.0. Last updated: 2.0.

**Government agency organization type** (govt). The category of organization type used for government agencies, programs, or crown-owned bodies. Status: active. First released: 2.0. Last updated: 2.0.

**Private sector organization type** (priv). The category of organization type used for private sector or non-profit groups that are not otherwise captured by the academic category. Status: active. First released: 2.0. Last updated: 2.0.

### **Sample Origin category set**

**Derived sample** (derived). Specifies a sample that is derived or made from another sample or material. Status: active. First released: 2.0. Last updated: 2.0.

**Field sample** (field). Specifies a sample taken from the field; directly collected from an area for testing. Status: active. First released: 2.0. Last updated: 2.0.

**Synthetic sample** (synthetic). Specifies a synthetic, or artificially derived sample. Status: active. First released: 2.0. Last updated: 2.0.

### **Outbreak category set**

**Outbreak End** (outbEnd). Indicates an outbreak has ended. Status: active. First released: 2.0. Last updated: 2.0.

**Outbreak - on-going** (outbOngoing). Indicates an outbreak is on-going. Status: active. First released: 2.0. Last updated: 2.0.

**Outbreak start** (outbStart). Indicates an outbreak began. Status: active. First released: 2.0. Last updated: 2.0.

### **PCR Method category set**

**Digital droplet emulsification PCR** (bioRadDdpcr). Describes a PCR analysis done using BioRad's digital droplet emulsification PCR technology. Status: active. First released: 2.0. Last updated: 2.0.

**Fluidigm digital PCR** (fluidPcr). Describes a PCR analysis done using Fluidigm's digital PCR technology. Status: active. First released: 2.0. Last updated: 2.0.

## *Sets*

**Life technologies digital PCR** (ltDpcr). Describes a PCR analysis done using Life Technologies' digital PCR technology. Status: active. First released: 2.0. Last updated: 2.0.

**qiagen digital PCR** (qgDpcr). Describes a PCR analysis done using Qiagen's digital PCR technology. Status: active. First released: 2.0. Last updated: 2.0.

**Quantitative PCR** (qpcr). Real-time PCR, also called 'quantAggScale' PCR. Status: active. First released: 2.0. Last updated: 2.0.

**Raindance digital PCR** (rainDpcr). Describes a PCR analysis done using Raindance's digital PCR technology. Status: active. First released: 2.0. Last updated: 2.0.

## **Genetic primer category set**

**Use of the articV3 primer** (articV3). Initial implementation of an ARTIC bioinformatics platform for nanopore sequencing of nCoV2019 novel coronavirus; Artic Foundation v3 primer. Status: active. First released: 2.0. Last updated: 2.0.

**Use of the articV4 primer** (articV4). Artic V4 sequencing primer for VOCs and VOIs. Status: active. First released: 2.0. Last updated: 2.0.

## **Protocol Relationships set**

**Is Before** (before). Specifies that the object step or protocol occurs before the subject step or protocol in the overall protocol container. Status: active. First released: 2.0. Last updated: 2.0.

**Is concurrent to** (concurrent). Specifies that the object step or protocol occurs at the same time as the subject step or protocol in the overall protocol container. Status: active. First released: 2.0. Last updated: 2.0.



**Specifies** (specifies). Specifies that the object step or protocol occurs specifies details for the subject step or protocol in the overall protocol container. Status: active. First released: 2.0. Last updated: 2.0.

## **Purpose category**

**Education** (education). A measure or sample taken for education or training. Status: active. First released: 2.0. Last updated: 2.0.

**Multiple Purpose** (multiple). A measure or sample taken for multiple purposes, not easily captured by the other purpose categories. Status: active. First released: 2.0. Last updated: 2.0.

**Provisional report** (provisional). A provisional or interm report. Status: active. First released: 2.0. Last updated: 2.0.

**Quality control** (qualityControl). A measure or sample taken for the purpose of quality control. Status: active. First released: 2.0. Last updated: 2.0.

**Regular** (regular). A measure or sample taken for surveillance or epidemiology. Status: active. First released: 2.0. Last updated: 2.0.

**Testing** (testing). A measure or sample taken to test a new method. These measures are typically used for internal lab uses and not reported to external partners. Status: active. First released: 2.0. Last updated: 2.0.

**Validation study** (validationStudy). A measure or sample taken for a validation study. Status: active. First released: 2.0. Last updated: 2.0.

### **Replicate Type category set**

**Co-located sample** (colocated). Second or multiples samples collected at same location but different time (water, air) or at a nearby location (soil, sediment). Sent blind to laboratory. Status: active. First released: 2.0. Last updated: 2.0.

**Field sample replicate** (fieldReplicate). A sample divided into two or more homogeneous parts. Status: active. First released: 2.0. Last updated: 2.0.

**Laboratory Duplicate** (labDuplicate). Second (time or more) processing and analysis of sample. Usually for general chemistry or metals analyses. Status: active. First released: 2.0. Last updated: 2.0.

**Laboratory control sample duplicate** (lcsd). Known amounts of an analyte or representative compounds are added to a second “clean” matrix (lab water or clean sand) in laboratory. Duplicate of LCS Status: active. First released: 2.0. Last updated: 2.0.

**Matrix Spike Duplicate** (msd). A known amounts of an analyte or representative compounds are added in the laboratory to a second aliquot of the sample used for matrix spike. Status: active. First released: 2.0. Last updated: 2.0.

**Unique sample** (unique). A unique sample, not duplicated. Status: active. First released: 2.0. Last updated: 2.0.

### **Sample material category set**

**Air filter** (afu). Air filter as part of filtration or circulating unit. Status: active. First released: 2.0. Last updated: 2.0.

**Desk or counter** (desk). Desk, table, countertop or other flat working surface. Status: active. First released: 2.0. Last updated: 2.0.

**Fecal matter** (faeces). Fecal matter. Status: active. First released: 1.0. Last updated: 2.0.

**Floor** (floor). Floor of a building or room. Status: active. First released: 2.0. Last updated: 2.0.

**Holding tank wastewater** (htSam). Wastewater sampled from a holding tank, such as from an airplane or ship Status: active. First released: 2.0. Last updated: 2.0.

**Water** (nww). Non-wastewater, coming from any kind of water body Status: active. First released: 1.0. Last updated: 2.0.

**Primary clarifier effluent** (pEfflu). Effluent obtained after primary clarifiers Status: active. First released: 1.0. Last updated: 2.0.

**Primary clarifier sludge** (pSludge). Sludge produced by primary clarifiers Status: active. First released: 1.0. Last updated: 2.0.

**Post-grit** (pstGrit). Raw wastewater after a treatment plant's headworks (post grit or removal of large solids at a treatment plant but prior to a primary clarifier) Status: active. First released: 1.0. Last updated: 2.0.

**Raw sewage at site** (rawWW). Wastewater without any form of treatment Status: active. First released: 1.0. Last updated: 2.0.

**Raw sewage downstream from a site** (rawWWdown). Downstream from a site. See partType = rawWWup. Status: active. First released: 2.0. Last updated: 2.0.

**Raw sewage upstream from a site** (rawWWup). Upstream from a site. Used when there is not direct access to a site's wastewater inconjuction with downstream sample. For example, if the site is a long-term care home, but there is not access to the building or property cleanout. Use two samples, one sample upstream and one sample downstream. Status: active. First released: 2.0. Last updated: 2.0.

**Secondary clarifier effluent** (sEfflu). Effluent obtained after secondary clarifiers Status: active. First released: 1.0. Last updated: 2.0.

## *Sets*

**Septic tank wastewater** (septage). Wastewater from within a septic tank Status: active. First released: 1.0. Last updated: 2.0.

**Secondary clarifier sludge** (sSludge). Sludge produced by secondary clarifiers Status: active. First released: 1.0. Last updated: 2.0.

**Other surface** (surface). Surface other than floor or desk. Status: active. First released: 2.0. Last updated: 2.0.

**Sewer sediment** (swrSed). Sediments obtained in sewer Status: active. First released: 1.0. Last updated: 2.0.

## **Sample Relationships set**

**Child relationship** (child). Indicated that this is a sample generated from (an)other sample(s) either because of pooling or sub-sampling. Status: active. First released: 1.0. Last updated: 2.0.

**Co-located sample** (colocated). Second or multiples samples collected at same location but different time (water, air) or at a nearby location (soil, sediment). Sent blind to laboratory. Status: active. First released: 2.0. Last updated: 2.0.

**Field sample replicate** (fieldReplicate). A sample divided into two or more homogeneous parts. Status: active. First released: 2.0. Last updated: 2.0.

**Laboratory Duplicate** (labDuplicate). Second (time or more) processing and analysis of sample. Usually for general chemistry or metals analyses. Status: active. First released: 2.0. Last updated: 2.0.

**Laboratory control sample duplicate** (lcsd). Known amounts of an analyte or representative compounds are added to a second “clean” matrix (lab water or clean sand) in laboratory. Duplicate of LCS Status: active. First released: 2.0. Last updated: 2.0.

**Matrix Spike Duplicate** (msd). A known amounts of an analyte or representative compounds are added in the laboratory to a second aliquot of the sample used for matrix spike. Status: active. First released: 2.0. Last updated: 2.0.

### **Sequencing script version category set**

**Freyja Script** (freyja). Freyja Script for sequencing. Status: active. First released: 2.0. Last updated: 2.0.

**Gromstole 1.0 Script** (gromstole). Gromstole 1.0 Script for sequencing. Status: active. First released: 2.0. Last updated: 2.0.

### **Sequencing Layout category set**

**Mate Pair Layout** (mateLay). Specifies the mate pair layout for a sequencing method Status: active. First released: 2.0. Last updated: 2.0.

**Paired Layout** (pairLay). Specifies the paired layout for a sequencing method Status: active. First released: 2.0. Last updated: 2.0.

**Single Layout** (sinLay). Specifies the single layout for a sequencing method Status: active. First released: 2.0. Last updated: 2.0.

### **Sequencing selection method category set**

**PCR sequencingsSelection method** (pcrSeq). Specifies the PCR selection method for sequencing, ie. that a pre-determined primer was used. Status: active. First released: 2.0. Last updated: 2.0.

**Random sequencing selection method** (ranSeq). Specifies the random selection method for sequencing Status: active. First released: 2.0. Last updated: 2.0.

### **Sequencing Strategy category set**

**Amplicon sequencing** (amp). Specifies the amplicon strategy for genetic sequencing Status: active. First released: 2.0. Last updated: 2.0.

**Whole genome Sequencing** (wgs). Specifies the whole genome sequencing (WGS) strategy for genetic sequencing Status: active. First released: 2.0. Last updated: 2.0.

### **Severity category set**

**High severity** (high). Indicates a very severe quality issue, likely meaning the data should not be reported. Status: active. First released: 2.0. Last updated: 2.0.

**Low severity** (low). A marker for low severity Status: active. First released: 2.0. Last updated: 2.0.

**Mid-level severity** (mid). A marker for med-level severity, where there are some concerns. Status: active. First released: 2.0. Last updated: 2.0.

### **Sampleshed category set**

**Airplane** (airpln). Airplane Status: active. First released: 1.0. Last updated: 2.0.

**Airport** (airport). Airport Sample Shed category type Status: active. First released: 2.0. Last updated: 2.0.

**Long term acute care hospital** (ccc). Acute care hospitals, or complex continuing care, that provide care for patients with average length of stay longer than 25 days. Status: active. First released: 2.0. Last updated: 2.0.

**Child day care** (cdc). Child day care facility. Status: active. First released: 2.0. Last updated: 2.0.

**Correctional Facility** (corFcil). Correctional facility Status: active. First released: 1.0. Last updated: 2.0.

**Higher education dormitory or residential building** (dorm). Higher education dormitory or residential building Status: active. First released: 2.0. Last updated: 2.0.

**First Nation** (fiNa). Used to categorize a sampled that is a First Nation, or on reserve lands. Status: active. First released: 2.0. Last updated: 2.0.

**Hospital** (hosptl). Hospital Status: active. First released: 1.0. Last updated: 2.0.

**Long-term care facility** (ltcf). A residential healthcare facility that provides 24-medical care. These are also called skilled nursing facilities. Status: active. First released: 1.0. Last updated: 2.0.

**Long-term care - assisted living or retirement home** (ltcfAl). A residential facility that provides assistance with daily care but generally does not provide skilled nursing care. Status: active. First released: 2.0. Last updated: 2.0.

**Other long-term care** (ltcfO). Other residential facilities that provide daily and/or medical care, but are not defined as nursing home/skilled nursing facilities or assisted living facilities. Status: active. First released: 2.0. Last updated: 2.0.

**Municipality** (municp). A complete municipality, this specifies an entire metropolitan area, either a city, town, etc. Status: active. First released: 2.0. Last updated: 2.0.

**Neighbourhood** (neigh). A municipal neighbourhood, this specifies a sub-section of a larger municipality. Status: active. First released: 2.0. Last updated: 2.0.

## *Sets*

**Other residential building** (orb). Individual residential buildings or institutions not captured in other categories Status: active. First released: 2.0. Last updated: 2.0.

**School** (school). A school serving students in the kindergarten to 12th grade range Status: active. First released: 1.0. Last updated: 2.0.

**Ship** (ship). A cruise ship or other ship. Status: active. First released: 2.0. Last updated: 2.0.

**Social services shelter** (sss). Other type of social services shelter Status: active. First released: 2.0. Last updated: 2.0.

**University campus** (uCampus). University or college campus - comprising an entire campus or part of a campus. Status: active. First released: 1.1. Last updated: 2.0.

## **Site category set**

**Branch sewer pipeline** (bSwrPpl). Specifies a site type that is collection pipe that run lateral to other municipal sewer lines, allowing drainage into the main sewer. Status: active. First released: 1.0. Last updated: 2.0.

**Building cleanout** (buildCO). Specifies a site type that is a capped pipe that connects to a building's main sewer line. Status: active. First released: 1.0. Last updated: 2.0.

**Estuary, natural water body** (estuary). Estuary, natural water body Status: active. First released: 1.0. Last updated: 2.0.

**Holding tank** (htSite). Holding tank Status: active. First released: 1.0. Last updated: 2.0.

**Lagoon system** (lagoon). Lagoon system for extensive wastewater treatment Status: active. First released: 1.0. Last updated: 2.0.



**Lake, natural water body** (lake). Lake, natural water body Status: active. First released: 1.0. Last updated: 2.0.

**Major sewer pipeline** (mSwrPpl). Major sewer pipeline Status: active. First released: 1.0. Last updated: 2.0.

**Ocean, natural water body** (ocean). Ocean, natural water body Status: active. First released: 1.0. Last updated: 2.0.

**Pumping station** (pStat). Pumping station Status: active. First released: 1.0. Last updated: 2.0.

**Retention pond** (retPond). Retention pond Status: active. First released: 1.0. Last updated: 2.0.

**River, natural water body** (river). River, natural water body Status: active. First released: 1.0. Last updated: 2.0.

**Sea, natural water body** (sea). Sea, natural water body Status: active. First released: 1.0. Last updated: 2.0.

**Septic tank** (septTnk). Septic tank Status: active. First released: 1.0. Last updated: 2.0.

**Stabilization pond** (stabPnd). Specifies a site type which is a pond designed and built for wastewater treatment to reduce the organic content and remove pathogens from wastewater. Status: active. First released: 1.0. Last updated: 2.0.

**Sewage truck** (swgTrck). Sewage truck Status: active. First released: 1.0. Last updated: 2.0.

**Upstream sites** (upstream). A general site type for upstream wastewater sampling sites. Status: active. First released: 1.0. Last updated: 2.0.

**Wastewater treatment plant** (wwtp). A general site type for wastewater treatment plants. Status: active. First released: 1.0. Last updated: 2.0.

## *Sets*

**Back-up wastewater treatment site** (wwtpBack). Indicates a wastewater treatment plant where multiple labs are or were sampling, and where secondary samples are being taken taken. Status: active. First released: 1.0. Last updated: 2.0.

**Industrial wastewater treatment plant** (wwtpInd). Industrial wastewater treatment plant Status: active. First released: 1.0. Last updated: 2.0.

**Municipal wastewater treatment plant for combined sewage** (wwtpMuC). Municipal wastewater treatment plant for combined sewage Status: active. First released: 1.0. Last updated: 2.0.

**Municipal wastewater treatment plant for sanitary dewage only** (wwtpMuS). Municipal wastewater treatment plant for sanitary sewage only Status: active. First released: 1.0. Last updated: 2.0.

## **Solid separation category set**

**Centrifugation** (cent). Describes solid separation from a wastewater sample via centrifugation. Likely connected to other method steps prior to analysis. Status: active. First released: 2.0. Last updated: 2.0.

**Filtration** (filt). Describes solid separation from a wastewater sample via filtration. Proceeds further concentration or analysis of the liquid filtrate. Status: active. First released: 2.0. Last updated: 2.0.

**Gravity settling** (graSet). Describes solid separation from a wastewater sample where the sample material is allowed to settle by gravity, and then separated. Status: active. First released: 2.0. Last updated: 2.0.

**Membrane filtration with acidification and mgcl2** (mfAcidmgcl2). Membrane filtration with acidification and mgcl2 Status: active. First released: 2.0. Last updated: 2.0.

**Membrane filtration with acidification and mgcl2, membrane recombined with separated solids** (mfAcidmgcl2SS). Membrane filtration with acidification and mgcl2, membrane recombined with separated solids Status: active. First released: 2.0. Last updated: 2.0.

**Membrane filtration with addition of mgcl2** (mfMgcl2). Membrane filtration with addition of mgcl2 Status: active. First released: 2.0. Last updated: 2.0.

**Membrane filtration with mgcl2 and separated solids** (mfMgcl2SS). Membrane filtration with addition of mgcl2, membrane recombined with separated solids Status: active. First released: 2.0. Last updated: 2.0.

**Membrane filtration with no amendment** (mfNoAmend). Membrane filtration with no amendment Status: active. First released: 2.0. Last updated: 2.0.

**Membrane filtration with no amendment, membrane recombined with separated solids** (mfNoAmendSS). Membrane filtration with no amendment, membrane recombined with separated solids Status: active. First released: 2.0. Last updated: 2.0.

**Membrane filtration with sample acidification** (mfSampleAcid). Membrane filtration with sample acidification Status: active. First released: 2.0. Last updated: 2.0.

**Membrane filtration with sample acidification, membrane recombined with separated solids** (mfSampleAcidSS). Membrane filtration with sample acidification, membrane recombined with separated solids Status: active. First released: 2.0. Last updated: 2.0.

**No liquid concentration, liquid recombined with separated solids** (noliquid). No liquid concentration, liquid recombined with separated solids Status: active. First released: 2.0. Last updated: 2.0.

## *Sets*

### **Spike material category set**

**Clarified sample** (clari). Clarified sample. Status: active. First released: 1.0. Last updated: 2.0.

**Sample concentrate** (conc). Sample concentrate. Status: active. First released: 1.0. Last updated: 2.0.

**Dewatered solids** (deso). Dewatered solids. Status: active. First released: 1.0. Last updated: 2.0.

**Lysis buffer** (lysi). Lysis buffer. Status: active. First released: 2.0. Last updated: 2.0.

**Raw wastewater** (raws). Raw wastes water sample Status: active. First released: 1.0. Last updated: 2.0.

**Raw post-pasteurized wastewater** (rppw). Raw wastewater sample post-pasteurization Status: active. First released: 1.0. Last updated: 2.0.

### **Recovery efficiency spike target category set**

**bcov culture spike target** (bcovCul). Cultured bovine coronavirus is used as the recovery efficiency control target. Status: active. First released: 2.0. Last updated: 2.0.

**bcov vaccine spike target** (bcovVac). The bovine coronavirus vaccine is used as the recovery efficiency control target. Status: active. First released: 2.0. Last updated: 2.0.

**brsv culture spike target** (brsvCul). Cultured bovine respiratory syncytial virus (BRSV) is used as the recovery efficiency control target. Status: active. First released: 2.0. Last updated: 2.0.

**brsv vaccine spike target** (brsvVac). The bovine respiratory syncytial virus (BRSV) vaccine is used as the recovery efficiency control target. Status: active. First released: 2.0. Last updated: 2.0.

**Heat inactivated sars-cov-2 virus spike target** (heatInacSARS). Heat inactivated SARS-CoV-2 virus is used as the recovery efficiency control target. Status: active. First released: 2.0. Last updated: 2.0.

**hep g armored rna spike target** (hepGRnaMat). Hepatitis G armored RNA is used as the recovery efficiency control target. Status: active. First released: 2.0. Last updated: 2.0.

**ms2 coliphage spike target** (ms2ColMat). ms2 coliphage is used as the recovery efficiency control target. Status: active. First released: 2.0. Last updated: 2.0.

**murine coronavirus spike target** (muCoMat). Murine coronavirus is used as the recovery efficiency control target. Status: active. First released: 2.0. Last updated: 2.0.

**oc43 spike target** (oc43Mat). Human coronavirus OC43 is used as the recovery efficiency control target. Status: active. First released: 2.0. Last updated: 2.0.

**phi6 spike target** (phi6Mat). Pseudomonas virus phi6 is used as the recovery efficiency control target. Status: active. First released: 2.0. Last updated: 2.0.

**Puro virus spike target** (puroMat). Puro Virus is used as the recovery efficiency control target. Status: active. First released: 2.0. Last updated: 2.0.

## **Status category set**

**Active** (active). Indicator that a part is in current use. See partID = status Status: active. First released: 2.0. Last updated: 2.0.

## *Sets*

**Deprecated** (deprecated). Indicator to say that a part is no longer in current use in the model. See partID = status Status: active. First released: 2.0. Last updated: 2.0.

**Development** (development). Indicator that a part is under development use. See partID = status Status: active. First released: 2.0. Last updated: 2.0.

### **Table column category set**

**Foreign key** (fK). Foreign key for a table. Status: active. First released: 2.0. Last updated: 2.0.

**Header** (header). Header for a table. Also known as a table variable or entity relationship 'attribute'. Status: active. First released: 2.0. Last updated: 2.0.

**Input** (input). Input for a table. Indicates if a part can be used in a table. Status: active. First released: 2.0. Last updated: 2.0.

**Primary key** (pK). Primary key for a table. Status: active. First released: 2.0. Last updated: 2.0.

### **Weather category set**

**Cloudy** (cloudy). Qualitative category for the weather measure, specifying an overcast day with no rain. Status: active. First released: 2.0. Last updated: 2.0.

**Foggy** (foggy). Qualitative category for the weather measure, specifying a foggy or hazy day. Status: active. First released: 2.0. Last updated: 2.0.

**Rainy** (rainy). Qualitative category for the weather measure, specifying a rainy day. Status: active. First released: 2.0. Last updated: 2.0.

**Snowy** (snowy). Qualitative category for the weather measure, specifying a snowy day. Status: active. First released: 2.0. Last updated: 2.0.

**Sunny** (sunny). Qualitative category for the weather measure, specifying a clear and sunny day. Status: active. First released: 2.0. Last updated: 2.0.

## **Compartment sets**

(compSet). Sets of compartments. Compartment sets are used to identify when a measure can be recorded for more than one compartment. For example, SARS-CoV-2 can be measured in people (humans), water, surface, or air. Sets are lists of input values. Each input value within a set is a part (has a partID) that can be reused between sets. For example, a set A could contain the values of ‘yes’ and ‘no’; and set B could contain the values of ‘yes’, ‘no’, and ‘maybe.’ partTypes with sets include aggregations, compartments, missingness, quality flags, specimens, and units. Measures with categories and dataTypes have their own specific category sets (catSetID) because their input values are unique and are not reused.

### **Air compartment set**

**Air compartment** (air). A measure or observation made from a substance in the air. Status: active. First released: 2.0. Last updated: 2.0.

### **Air and surface compartment set**

**Air compartment** (air). A measure or observation made from a substance in the air. Status: active. First released: 2.0. Last updated: 2.0.

## *Sets*

**Surface compartment** (surf). A measure or observation made from a substance on a surface. Status: active. First released: 2.0. Last updated: 2.0.

### **Air and water compartment set**

**Air compartment** (air). A measure or observation made from a substance in the air. Status: active. First released: 2.0. Last updated: 2.0.

### **Any compartment set**

**Air compartment** (air). A measure or observation made from a substance in the air. Status: active. First released: 2.0. Last updated: 2.0.

**Surface compartment** (surf). A measure or observation made from a substance on a surface. Status: active. First released: 2.0. Last updated: 2.0.

**Water compartment** (wat). A measure or observation made from a substance in the water, including wastewater. Status: active. First released: 2.0. Last updated: 2.0.

### **Human compartment set**

**Human compartment** (hum). A measure or observation made about a human. Status: active. First released: 2.0. Last updated: 2.0.

### **Compartment set not applicable**

**Compartment not applicable** (naCompartment). Compartment not applicable. Status: active. First released: 2.0. Last updated: 2.0.



## **Surface compartment set**

**Surface compartment** (surf). A measure or observation made from a substance on a surface. Status: active. First released: 2.0. Last updated: 2.0.

## **Surface and water compartment set**

**Surface compartment** (surf). A measure or observation made from a substance on a surface. Status: active. First released: 2.0. Last updated: 2.0.

**Water compartment** (wat). A measure or observation made from a substance in the water, including wastewater. Status: active. First released: 2.0. Last updated: 2.0.

## **Water compartment set**

**Water compartment** (wat). A measure or observation made from a substance in the water, including wastewater. Status: active. First released: 2.0. Last updated: 2.0.

## **Missingness set**

(missingnessSet). The part type for missingness sets. Sets are lists of input values. Each input value within a set is a part (has a partID) that can be reused between sets. For example, a set A could contain the values of ‘yes’ and ‘no’; and set B could contain the values of ‘yes’, ‘no’, and ‘maybe.’ partTypes with sets include aggregations, compartments, missingness, quality flags, specimens, and units. Measures with categories and

## *Sets*

dataTypes have their own specific category sets (catSetID) because their input values are unique and are not reused.

### **General missingness set**

**Not applicable** (NA). The field for which the expected value is not a property of the described object. Status: active. First released: 1.0. Last updated: 2.0.

**Not a number** (nan). The outcome of a measurement is not a valid number (plus or minus infinity, error, ...) Status: active. First released: 1.0. Last updated: 2.0.

**Not reported** (nr). A value could have been recorded, however, it was not. Status: active. First released: 1.0. Last updated: 2.0.

**Null** (null). A logical representation of a statement that is neither TRUE nor FALSE. Status: active. First released: 1.0. Last updated: 2.0.

**Undisclosed** (undisc). A value has been recorded, however it was not included in the dataset. Status: active. First released: 1.0. Last updated: 2.0.

### **Quality sets**

(qualitySet). Sets of quality measures. For example, PCR have a quality measure set. Sets are lists of input values. Each input value within a set is a part (has a partID) that can be reused between sets. For example, a set A could contain the values of 'yes' and 'no'; and set B could contain the values of 'yes', 'no', and 'maybe.' partTypes with sets include aggregations, compartments, missingness, quality flags, specimens, and units. Measures with categories and dataTypes have their own specific category sets (catSetID) because their input values are unique and are not reused.

## Generic quality flag set

**Multiple issues** (mI). Multiple issues have arisen in the sequencing process. Status: active. First released: 2.0. Last updated: 2.0.

**No quality concerns** (noConcern). A flag to indicate there is are no quality concern about the measure or sample. Status: active. First released: 1.0. Last updated: 2.0.

**Quality concerns** (qf1). A flag to indicate there is a quality concern, not otherwise sepcified. Status: active. First released: 1.0. Last updated: 2.0.

## PCR quality set

**Experiment Failed** (expFail). PCR experiment failed. No value reported. Status: active. First released: 2.0. Last updated: 2.0.

**AI - Inhibition present but addressed** (flagAI). The original sample was inhibited; however, the inhibition has been addressed through dilution. The reported concentration estimate is the updated result after addressing inhibition. Status: active. First released: 2.0. Last updated: 2.0.

**B - Trace levels of contamination** (flagB). Analytical result may be subject to “trace” levels of contamination; the target analyte was also detected in negative controls on the same run as the sample. Status: active. First released: 2.0. Last updated: 2.0.

**FI - Inhibition present and unaddressed** (flagFI). The original sample was inhibited; however, the inhibition has not been successfully addressed. Therefore, no concentration estimate has been reported. Status: active. First released: 2.0. Last updated: 2.0.

**J - Weak signal extrapolation** (flagJ). Analytical result falls below the lowest concentration of the experiment-specific standard curve but above the y-intercept value; the reported value is based on the extrapolation of

## *Sets*

the standard curve in the non-linear region. Status: active. First released: 2.0. Last updated: 2.0.

**ND - Non-detect** (flagND). No amplification occurred in the reaction; non-detect. Status: active. First released: 2.0. Last updated: 2.0.

**UJ - Trace signal extrapolation** (flagUJ). Observed quantitation cycle is greater than the experiment-specific standard curve intercept value but evidence of clear amplification was present (i.e., “trace” signal observed); the reported value is based on the extrapolation of the standard curve in the non-linear region. Status: active. First released: 2.0. Last updated: 2.0.

**UQ - Unquantifiable** (flagUQ). Unquantifiable, Ct value exceeds the maximum value of the standard curve. There was a detect, but we cannot quantify it with certainty. Status: active. First released: 2.0. Last updated: 2.0.

**No quality concerns** (noConcern). A flag to indicate there is are no quality concern about the measure or sample. Status: active. First released: 1.0. Last updated: 2.0.

## **Sample quality set**

**Sample frozen** (frozen). Sample was frozen before analysis or processing Status: active. First released: 2.0. Last updated: 2.0.

**Leaked sample** (leaked). Sample leaked, some volume and material was lost. Status: active. First released: 2.0. Last updated: 2.0.

**Low-volume sample** (lowVol). Sample is low-volume, but was run regardless. Status: active. First released: 2.0. Last updated: 2.0.

**No quality concerns** (noConcern). A flag to indicate there is are no quality concern about the measure or sample. Status: active. First released: 1.0. Last updated: 2.0.

**Sample not labelled** (noLabel). Sample had no label Status: active. First released: 2.0. Last updated: 2.0.

**Sample missing time stamp** (noTime). Sample is missing the autosampler time; incomplete metadata on collection. Status: active. First released: 2.0. Last updated: 2.0.

**Sample spilled** (spill). Sample contents spilled from container. Status: active. First released: 2.0. Last updated: 2.0.

**Sample stored incorrectly** (wrongStorage). Sample was stored inappropriately. Status: active. First released: 2.0. Last updated: 2.0.

**Sample stored at wrong temperature** (wrongTemp). Sample was stored at an inappropriate temperature. Status: active. First released: 2.0. Last updated: 2.0.

### **Sequencing quality set**

**Experiment Failed** (expFail). PCR experiment failed. No value reported. Status: active. First released: 2.0. Last updated: 2.0.

**Low breadth of coverage** (IBC). The percentage of the genome covered by reads (the breadth) is low. Status: active. First released: 2.0. Last updated: 2.0.

**Low depth of coverage** (IDC). Poor coverage, specifically an insufficient number of reads or too many sequencing reads that are mapped incorrectly. Status: active. First released: 2.0. Last updated: 2.0.

**No quality concerns** (noConcern). A flag to indicate there is no quality concern about the measure or sample. Status: active. First released: 1.0. Last updated: 2.0.

**Sample missing time stamp** (noTime). Sample is missing the autosampler time; incomplete metadata on collection. Status: active. First released: 2.0. Last updated: 2.0.

## *Sets*

**Sparse coverage** (sC). Sequencing shows sparse coverage, ie. numerical breadth of coverage shows as adequate but coverage plots reveal missing genome pieces. Status: active. First released: 2.0. Last updated: 2.0.

## **Specimen set**

(specimenSet). The set of valid specimens that apply to another given part.

### **Any specimen set**

**Population** (po). An measure or observation for a geographic area or population. Status: active. First released: 1.0. Last updated: 2.0.

**Sample** (sa). A measure made on a compartment or property from a sample of a substance. Status: active. First released: 2.0. Last updated: 2.0.

**Site** (si). A measure made on a compartment or property at a site. Status: active. First released: 2.0. Last updated: 2.0.

### **Specimen set not applicable**

**Specimen not applicable** (naSpecimen). Non applicable specimen. Status: active. First released: 2.0. Last updated: 2.0.

### **Poulatiion or sample set**

**Population** (po). An measure or observation for a geographic area or population. Status: active. First released: 1.0. Last updated: 2.0.

**Sample** (sa). A measure made on a compartment or property from a sample of a substance. Status: active. First released: 2.0. Last updated: 2.0.

### **Poulatiion or site set**

**Population** (po). An measure or observation for a geographic area or population. Status: active. First released: 1.0. Last updated: 2.0.

**Site** (si). A measure made on a compartment or property at a site. Status: active. First released: 2.0. Last updated: 2.0.

### **Population specimen set**

**Population** (po). An measure or observation for a geographic area or population. Status: active. First released: 1.0. Last updated: 2.0.

### **Sample specimen set**

**Sample** (sa). A measure made on a compartment or property from a sample of a substance. Status: active. First released: 2.0. Last updated: 2.0.

## *Sets*

### **Site or sample specimen set**

**Sample** (sa). A measure made on a compartment or property from a sample of a substance. Status: active. First released: 2.0. Last updated: 2.0.

**Site** (si). A measure made on a compartment or property at a site. Status: active. First released: 2.0. Last updated: 2.0.

### **Site specimen set**

**Site** (si). A measure made on a compartment or property at a site. Status: active. First released: 2.0. Last updated: 2.0.

## **Unit sets**

(unitSet). Sets of units. Contains units that are associated with part types such as measures. Sets are lists of input values. Each input value within a set is a part (has a partID) that can be reused between sets. For example, a set A could contain the values of 'yes' and 'no'; and set B could contain the values of 'yes', 'no', and 'maybe.' partTypes with sets include aggregations, compartments, missingness, quality flags, specimens, and units. Measures with categories and dataTypes have their own specific category sets (catSetID) because their input values are unique and are not reused.

### **Absolute humidity unit set**

**Gram per cubic metre** (gm3). Density unit. Status: active. First released: 2.0. Last updated: 2.0.



## **Allele unit set**

**Cycle threshold or Quantification cycle (Ct or Cq)** (ct). Cycle thresholds in a PCR assay. Status: active. First released: 1.0. Last updated: 2.0.

**Detected** (det). Substance detected or not detected. Status: active. First released: 1.1. Last updated: 2.0.

**Depth of coverage** (doc). The sequencing read depth. Status: active. First released: 2.0. Last updated: 2.0.

**Gene copies per copy of crAssphage** (gcCrA). Gene or variant copies per copy of crAssphage. Status: active. First released: 1.0. Last updated: 2.0.

**gene copies per day per 100,000** (gcD100). The unit for measures reflecting the gene copies per day per 100,000 people in the population. Status: active. First released: 2.0. Last updated: 2.0.

**Gene copies per gram solids** (gCGS). Gene or variant copies per gram solids. Status: active. First released: 1.0. Last updated: 2.0.

**Gene copies per mL** (gcMl). Gene or variant copies per millilitre of solution. Status: active. First released: 1.0. Last updated: 2.0.

**Gene copies per PMMoV copy** (gcPpmov). Gene or variant copies per copy of PMMoV. Status: active. First released: 1.0. Last updated: 2.0.

## **Bacteria unit set**

**CFU per 100 ml** (cfu). Colony forming units per 100 ml of filtered sample. Status: active. First released: 1.1. Last updated: 2.0.

### **Boolean unit set**

**Non-detected** (nondet). Unit ID for when a measure is “non-detect” in order to explain a value of zero. Status: active. First released: 2.0. Last updated: 2.0.

### **Capacity unit set**

**Millions of gallons per day (MG/D)** (mgd). A unit for measuring of design capacity for wastewater treatment plants, represented as millions of gallons per day. Also can be used to measure flow. Status: active. First released: 2.0. Last updated: 2.0.

**Megalitres per day (ML/d)** (mld). Megalitres per day. Status: active. First released: 2.0. Last updated: 2.0.

**Population equivalents** (popEq). A unit for measuring of design capacity for wastewater treatment plants, represented as the approximate amount of water a single person would use. Status: active. First released: 1.0. Last updated: 2.0.

### **Conductivity unit set**

**Micro-Siemens per centimetre** (uSCm). Micro-siemens per centimetre. Status: active. First released: 1.1. Last updated: 2.0.

### **Dissolved gas concentration unit set**

**Milligrams per litre** (mgL). Milligrams per litre. Status: active. First released: 1.1. Last updated: 2.0.

**parts per million** (ppm). Parts per million. Status: active. First released: 1.0. Last updated: 2.0.

## **Volume flow rate unit set**

**Kilogram per second** (kgS). Kilograms per second. Status: active. First released: 1.0. Last updated: 2.0.

**Cubic metres per day** (m3D). Cubic metres per day. Status: active. First released: 1.1. Last updated: 2.0.

**Cubic metres per hour** (m3H). Cubic metres per hour. Status: active. First released: 1.1. Last updated: 2.0.

**Cubic metres per second** (m3S). Cubic metre per second. Status: active. First released: 1.0. Last updated: 2.0.

**Millions of gallons per day (MG/D)** (mgd). A unit for measuring of design capacity for wastewater treatment plants, represented as millions of gallons per day. Also can be used to measure flow. Status: active. First released: 2.0. Last updated: 2.0.

**Megalitres per day (ML/d)** (mld). Megalitres per day. Status: active. First released: 2.0. Last updated: 2.0.

## **Genetics unit set**

**Breadth of coverage ( $\geq 5\times$  depth)** (boc). Positions with read depth greater or equal to 5. Status: active. First released: 2.0. Last updated: 2.0.

**Detected** (det). Substance detected or not detected. Status: active. First released: 1.1. Last updated: 2.0.

**Depth of coverage** (doc). The sequencing read depth. Status: active. First released: 2.0. Last updated: 2.0.

**Gene copies per L** (gcL). Gene or variant copies per litre. Status: active. First released: 1.0. Last updated: 2.0.

## *Sets*

**Percent recovery** (percRec). Percent of the surrogate recovery for a recovery efficiency control assay. Status: active. First released: 1.0. Last updated: 2.0.

**Proportion of total** (prop). Proportion as a percent of total. Status: active. First released: 1.0. Last updated: 2.0.

**Proportion of variant in sample** (propV). Proportion of a variant as percent of total variants. Status: active. First released: 1.1. Last updated: 2.0.

## **Unit set not applicable**

**Unit not applicable** (naUnit). Not applicable for units. Status: active. First released: 2.0. Last updated: 2.0.

## **Population unit set**

**Number of active cases** (acti). Number of active cases. Status: active. First released: 1.0. Last updated: 2.0.

**Confirmed Cases Case report date** (conCase). Date that the numbers were reported publicly for a confirmed case. Typically, reported data and this measure is most commonly reported and used. Status: active. First released: 1.0. Last updated: 2.0.

**Number of confirmed cases** (conf). Number of confirmed cases. Status: active. First released: 1.0. Last updated: 2.0.

**Confirmed cases episode date** (confEp). Episode date is the earliest of onset, test or reported date for a confirmed case. Status: active. First released: 1.0. Last updated: 2.0.

**Confirmed Cases Onset date** (confOn). Earliest that symptoms were reported for a confirmed case. This data is often not known and reported.

In lieu, episode is used. Status: active. First released: 1.0. Last updated: 2.0.

**Confirmed Cases Test date** (conTest). Date that the covid-19 test was performed for a confirmed case. Status: active. First released: 1.0. Last updated: 2.0.

**Cumulative count** (cuCo). Units for describing a population measure of a cumulative count of cases of a given disease. Status: active. First released: 2.0. Last updated: 2.0.

**Daily count** (daiCo). Units for describing a population measure of a daily count of new cases of a given disease. Status: active. First released: 2.0. Last updated: 2.0.

**Deaths** (death). Units for describing a population measure of patients who have died from a given cause. Status: active. First released: 2.0. Last updated: 2.0.

**General Hospital Admissions** (hosa). Hospital admissions or patients newly admitted to hospital. Status: active. First released: 1.0. Last updated: 2.0.

**Hospital Census** (hosc). Hospital census or the number of people admitted with an ailment. Status: active. First released: 1.0. Last updated: 2.0.

**Intensive care unit patients** (icu). Units for describing a population measure of patients who are in intensive care due to a given cause. Status: active. First released: 2.0. Last updated: 2.0.

**Population of newly vaccinated persons** (newVax). Population of newly vaccinated persons Status: active. First released: 2.0. Last updated: 2.0.

**Percent positivity rate** (pprt). Percent positivity rate of tests conducted within a day in a given region. Status: active. First released: 1.0. Last updated: 2.0.

## *Sets*

**Number of positive tests** (ptot). Number of positive tests conducted within a day in a given region. Status: active. First released: 1.0. Last updated: 2.0.

**Recovered patients** (recov). Units for describing a population measure of patients who have recovered from a given disease. Status: active. First released: 2.0. Last updated: 2.0.

**Rate per 100,000** (rP100). Units for describing a population measure of a rate of case incidence per 100,000 people of a given disease. Status: active. First released: 2.0. Last updated: 2.0.

**Number of tests performed** (test). Number of tests performed. Status: active. First released: 1.0. Last updated: 2.0.

**Population with 1 dose of vaccine** (vax1). A measure of the population with a single dose of vaccine. Status: active. First released: 2.0. Last updated: 2.0.

**Population with 2 doses of vaccine** (vax2). Population with 2 doses of vaccine Status: active. First released: 2.0. Last updated: 2.0.

**Population with 3 doses of vaccine** (vax3). Population with 3 doses of vaccine Status: active. First released: 2.0. Last updated: 2.0.

## **Precipitation unit set**

**Centimetres** (cm). Unit part for the SI unit of centimetres. Status: active. First released: 2.0. Last updated: 2.0.

**Millimetres** (mm). Unit part for the SI unit of millimetres. Status: active. First released: 1.1. Last updated: 2.0.

### **Relative humidity unit set**

**Percent** (perc). Percentage. Status: active. First released: 2.0. Last updated: 2.0.

### **Specific humidity unit set**

**Ratio** (ratio). Ratio (unitless) Status: active. First released: 2.0. Last updated: 2.0.

### **Standard concentration unit set**

**Milligrams per litre** (mgL). Milligrams per litre. Status: active. First released: 1.1. Last updated: 2.0.

**parts per million** (ppm). Parts per million. Status: active. First released: 1.0. Last updated: 2.0.

**Percent primary sludge** (pps). Percentage of total solids, for primary sludge. Status: active. First released: 1.0. Last updated: 2.0.

### **Temperature unit set**

**Degrees Celcius** (cel). Degrees Celsius. Status: active. First released: 1.1. Last updated: 2.0.

### **Turbidity unit set**

**Nephelometric turbidity unit** (ntu). Nephelometric Turbidity Units, a unit used in the measurement of turbidity (see “turbidity” under measureIDs). Status: active. First released: 2.0. Last updated: 2.0.

## *Sets*

### **Unitless unit set**

**Unitless measure** (unitless). A unit for unitless measures, like pH. Status: active. First released: 2.0. Last updated: 2.0.

### **Volume unit set**

**Grams** (grams). A unit of mass or weight. Status: active. First released: 2.0. Last updated: 2.0.

**Kilolitres** (kl). Kilolitres of volume Status: active. First released: 2.0. Last updated: 2.0.

**Litres** (l). Litres of volume Status: active. First released: 2.0. Last updated: 2.0.

**Millilitres** (ml). Millilitres of volume Status: active. First released: 2.0. Last updated: 2.0.

**Millimetres** (mm). Unit part for the SI unit of millimetres. Status: active. First released: 1.1. Last updated: 2.0.

**Percent positive** (pp). Percent positive of sample measures. Status: active. First released: 1.0. Last updated: 2.0.

**Sub-variant or lineage** (subVar). A unit used to report a specific genetic lineage, or to specify that a reported variant is a sub-variant of another. Status: active. First released: 2.0. Last updated: 2.0.

**Frequency of variants detected** (varFreq). A description of the frequency of a variants detected. Status: active. First released: 2.0. Last updated: 2.0.



**Wind speed unit set**

**Metres per second** (ms). metres per second. Status: active. First released: 2.0. Last updated: 2.0.



# Tables

ODM version NA.

The ODM database model has 21 tables in its full relational database. The full model is commonly referred to as “long” tables as it stores data with one measurement per row. Each table has mandatory and optional headers.

## **i** Data storage

Store all ODM data in the 21 recommended tables to ensure optimal interoperability and support by the [ODM validation toolkit](#) and other ODM libraries.

Users can, however, create custom tables or ‘views’ by merging fields from any table. A common format for data entry format are “wide” table format, with *one day per row* and multiple measures or attributes per row. It is important to note that this guide does not provide instructions on generating wide tables.

## Table types

There are five table types:

1) **Regular report tables.** The **measures** and **samples** tables are used for daily reporting of new measurements and information on sample collection. There are three tables that support regular reporting:- **measureSets**

## Tables

(optional) is used to link measures, `sampleRelationships` (optional) is used when samples are pooled or split, and `qualityReports` is used for detailed quality assurance and control measures.

2) **Contact information tables.** The `sites`, `organizations`, `contacts`, and `addresses` tables store contact information for the testing site and the person who performed the testing.

3) **Protocol or methods tables.** The `protocols` and `instruments` tables hold information on the methods used for sample collection or measurement. `protocolSteps` and `protocolRelationships` tables are used in conjunction with the `protocols` table.

4) **Other report tables.** The `polygons` table stores information on the sample area and the `datasets` table includes information on the data custodian and owner.

5) **Dictionary reference tables.** The `parts` table describes all elements of the ODM, including tables, table headers, measures, methods, categories, and units. The `sets` table stores collections of parts, such as units grouped together in a `unitSet`. The `languages` and `translations` tables support translations.

## Header roles

Each table in the ODM has column headers, also known as table variables, fields, or entity relationship attributes. The header serves as the top row and contains the variable name.

**Primary key (PK)** - With the exception of the dictionary tables, all tables have one primary key. The primary key serves as a unique identifier for each row in the table, meaning that a primary key value cannot be repeated.

*Mandatory, optional, mandatoryIf*

**Foreign key (FK)** - Tables may have one or more foreign keys. A foreign key connects an entry to another table with a primary key. This allows for relationships to be established between tables, making it possible to link data between different tables.

**Header** (header) - This label is used in a table description when a header is not a primary or foreign key.

## **Mandatory, optional, mandatoryIf**

Each header may be classified as either **mandatory** or **optional**. In the **measures** table, examples of mandatory headers are the **measureID** and **measurement date**. The ODM validation toolkit can be used to validate data, and will return an error if a table lacks a mandatory header or if there are missing row entries for mandatory fields.

Additionally, there are special headers called **mandatoryIf** headers. These headers are mandatory if certain conditions apply. For example, the **protocol steps** table has row entries that are either **measures** or **methods**. If the row entry is a **measure**, then a **unit** becomes **mandatory** since all measures must have a unit. Therefore, units are **mandatoryIf** in the protocol steps table.

## **Table list**

Address table

Contact table

Dataset table

Instrument table

Language Look-up table

## *Tables*

Measure report table

Measure set report table

Organization table

Parts Look-up table

Polygon table

Protocol relationships table

Protocols table

Protocol steps table

Quality reports table

Sample relationships table

Sample report table

Sets look-up table

Sites table

Translation look-up table

## **Address table**

partID: addresses. The table that contains information about addresses. Addresses can be recorded for sites, organizations or contacts (individuals). The Sites, Organizations, and Contacts tables include a link to the addresses table through Address ID.

**Address ID** (addressID). A unique identifier for an address. Role: Primary Key. Requirement: mandatory. Data type: varchar.

**Dataset ID** (datasetID). The name of the dataset that stores information for MeasureReport, SampleReport and other reporting tables.Role: Foreign Key.Requirement: mandatory.Data type: varchar.

**Address Line 1** (addL1). Line 1 (the street name, number and direction) for a given address.Role: Header.Requirement: mandatory.Data type: varchar.

**Address Line 2** (addL2). Line 2 (the unit number) for a given address.Role: Header.Requirement: optional.Data type: varchar.

**City** (city). The city where a site or organization is located; part of the address.Role: Header.Requirement: mandatory.Data type: varchar.

**State, Province, or Region** (stateProvReg). The state, province, or region where a site or organization is located; part of the address.Role: Header.Requirement: mandatory.Data type: varchar.

**Postal or Zip Code** (pCode). The zip code or postal code for a given address, specifying a specific geographic area.Role: Header.Requirement: optional.Data type: varchar.

**Country** (country). The country where a site or organization is located; part of the address.Role: Foreign Key.Requirement: mandatory.Data type: varchar.

**Last edited** (lastEdited). The date the entry was last updated.Role: Header.Requirement: optional.Data type: datetime.

**Notes** (notes). A note used to describe details that are not captured in other attributes.Role: Header.Requirement: optional.Data type: varchar.

## Tables

### Contact table

partID: contacts. The table that contains information about a contact; a person who is the contact of a site or laboratory. adapt from version 1 documentation

**Contact** (contactID). A unique identifier for a given contact person.Role: Primary Key.Requirement: mandatory.Data type: varchar.

**Dataset ID** (datasetID). The name of the dataset that stores information for MeasureReport, SampleReport and other reporting tables.Role: Foreign Key.Requirement: optional.Data type: varchar.

**Organization** (organizationID). A unique identifier for the organization to which the reporter is affiliated.Role: Foreign Key.Requirement: mandatory.Data type: varchar.

**First name of contact** (firstName). Specifies the first name of a given contact.Role: Header.Requirement: optional.Data type: varchar.

**Last name of contact** (lastName). Specifies the last name of a given contact.Role: Header.Requirement: optional.Data type: varchar.

**Contact email** (email). Contact e-mail address, for the lab.Role: Header.Requirement: mandatory.Data type: varchar.

**Contact phone** (phone). Contact phone number, for the lab.Role: Header.Requirement: optional.Data type: varchar.

**Role of contact** (role). Specifies the organizational role of a given contact.Role: Header.Requirement: optional.Data type: varchar.

**Last edited** (lastEdited). The date the entry was last updated.Role: Header.Requirement: optional.Data type: datetime.

**Notes** (notes). A note used to describe details that are not captured in other attributesRole: Header.Requirement: optional.Data type: varchar.



**Dataset table**

partID: datasets. A report table for capturing details about data's parental data set and data custodians. Supplying attribution for data collectors.

**Parent dataset ID** (parDatasetID). The datasetID that is a parent to another datasetID.Role: Foreign Key.Requirement: optional.Data type: varchar.

**Dataset ID** (datasetID). The name of the dataset that stores information for MeasureReport, SampleReport and other reporting tables.Role: Primary Key.Requirement: mandatory.Data type: varchar.

**Dataset creation date** (datasetDate). Specifies the date a given dataset was created.Role: Header.Requirement: recommended.Data type: date-time.

**Name** (name). Name of a domain, specimen, group, class, attribute, unit, nomenclature or other entity.Role: Header.Requirement: recommended.Data type: varchar.

**License** (license). The license of a dataset.Role: Foreign Key.Requirement: mandatory.Data type: varchar.

**Description** (descr). A detailed description as an attribute for describing results or program elements.Role: Header.Requirement: optional.Data type: varchar.

**Reference link** (refLink). Link to the reference material for a part. May link to literature on a method, measure, etc.Role: Header.Requirement: optional.Data type: varchar.

**Language ID** (langID). Language code for translation purposes. Specifies the language for each translation, other than the default English.Role: Foreign Key.Requirement: optional.Data type: varchar.

**Funder Contact ID** (funderCont). A unique identifier for funders.Role: Foreign Key.Requirement: recommended.Data type: varchar.

## Tables

**Custody Contact ID** (custodyCont). A unique identifier for data custodians.Role: Foreign Key.Requirement: recommended.Data type: varchar.

**Funding agency** (funderID). The funding agency of the dataset.Role: Foreign Key.Requirement: optional.Data type: varchar.

**Data custodian** (custodyID). The data custodian of a database.Role: Foreign Key.Requirement: mandatory.Data type: varchar.

**Last edited** (lastEdited). The date the entry was last updated.Role: Header.Requirement: optional.Data type: datetime.

**Notes** (notes). A note used to describe details that are not captured in other attributes.Role: Header.Requirement: optional.Data type: varchar.

## Instrument table

partID: instruments. The table that contains information about instruments. adapt from version 1 documentation

**Instrument ID** (instrumentID). A unique identifier for an instrument.Role: Primary Key.Requirement: mandatory.Data type: categorical.

**Dataset ID** (datasetID). The name of the dataset that stores information for MeasureReport, SampleReport and other reporting tables.Role: Foreign Key.Requirement: mandatory.Data type: varchar.

**Name** (name). Name of a domain, specimen, group, class, attribute, unit, nomenclature or other entity.Role: Header.Requirement: recommended.Data type: varchar.

**Model** (model). Model number or version of the instrument.Role: Header.Requirement: mandatory.Data type: varchar.

**Manufacturer** (manufacturer). Manufacturer of an instrument. Role: Header. Requirement: optional. Data type: varchar.

**Contact** (contactID). A unique identifier for a given contact person. Role: Foreign Key. Requirement: optional. Data type: varchar.

**Organization** (organizationID). A unique identifier for the organization to which the reporter is affiliated. Role: Foreign Key. Requirement: optional. Data type: varchar.

**Description** (descr). A detailed description as an attribute for describing results or program elements. Role: Header. Requirement: optional. Data type: varchar.

**Reference link** (refLink). Link to the reference material for a part. May link to literature on a method, measure, etc. Role: Header. Requirement: optional. Data type: varchar.

**Instrument Type** (insType). Type of instrument used to perform the measurement. Role: Foreign Key. Requirement: mandatory. Data type: categorical. CatSet: insTypeCatSet

**Describe other instrument type, if applicable** (insTypeOth). Description of the instrument in case it is not listed in instrumentType. Role: Header. Requirement: optional. Data type: varchar.

**Index** (index). Index number in case the measurement was taken multiple times. Role: Header. Requirement: optional. Data type: integer.

**Last edited** (lastEdited). The date the entry was last updated. Role: Header. Requirement: optional. Data type: datetime.

**Notes** (notes). A note used to describe details that are not captured in other attributes. Role: Header. Requirement: optional. Data type: varchar.

## Language Look-up table

partID: languages. Look up table for all languages, used to give structure to the translation table.

**Language ID** (langID). Language code for translation purposes. Specifies the language for each translation, other than the default English.Role: Primary Key.Requirement: mandatory.Data type: varchar.

**Language family** (langFam). Specifies the language family of a given language for translation and language tracking purposes.Role: Header.Requirement: mandatory.Data type: varchar.

**Language name** (langName). Specifies the name of the language in roman alphabet characters for translation and language tracking purposes.Role: Header.Requirement: mandatory.Data type: varchar.

**Native Name** (natName). The native name of the language, i.e. what the language is called by its speakers.Role: Header.Requirement: mandatory.Data type: categorical.

**ISO639-1** (iso6391). The first part of the ISO 639 series of international standards for language codes. Part 1 covers the registration of two-letter codes. There are 183 two-letter codes registered as of June 2021. The registered codes cover the world's major languages.Role: Header.Requirement: mandatory.Data type: categorical.

**ISO639-2B** (iso6392B). A set of international standards that lists short codes for language names. These ISO639-2 are the three-letter codes defined in part two (ISO 639-2) of the standard, including the corresponding two-letter (ISO 639-1) codes where they exist. The 'B' specifies the bibliographic code (B code).Role: Header.Requirement: mandatory.Data type: categorical.

**ISO639-2T** (iso6392T). A set of international standards that lists short codes for language names. These ISO639-2 are the three-letter codes defined in part two (ISO 639-2) of the standard, including the corresponding

two-letter (ISO 639-1) codes where they exist. The ‘T’ specifies the terminological code (T code).Role: Header.Requirement: mandatory.Data type: categorical.

**ISO639-3** (iso6393). A set of international standards that lists short codes for language names. ISO 639-3 extends the ISO 639-2 alpha-3 codes with an aim to cover all known natural languages.Role: Header.Requirement: mandatory.Data type: categorical.

**ISO639-6** (iso6396). A set of international standards that lists short codes for language names. ISO 639-6 builds off ISO639-3 with the use of four-letter codes, and allowing users to differentiate between variants of languages and language families, such as historical vs. revived versions of languages.Role: Header.Requirement: mandatory.Data type: categorical.

**First released version** (firstReleased). The version in which a part was first releasedRole: Header.Requirement: mandatory.Data type: varchar.

**Last updated version** (lastUpdated). The version in which the part was last updated.Role: Header.Requirement: mandatory.Data type: varchar.

**Changes column** (changes). A column for recording the changes from a previous version.Role: Header.Requirement: optional.Data type: varchar.

**Notes** (notes). A note used to describe details that are not captured in other attributesRole: Header.Requirement: optional.Data type: varchar.

## Measure report table

partID: measures. The table that contains information and details about a given measure adapt from version 1 documentation

## Tables

**Report ID** (measureRepID). Unique identifier for a measurement.Role: Primary Key.Requirement: mandatory.Data type: varchar.

**Protocol ID** (protocolID). A unique identifier for a given protocol.Role: Foreign Key.Requirement: optional.Data type: varchar.

**Sample ID** (sampleID). Unique identifier for a sample.Role: Foreign Key.Requirement: mandatory.Data type: varchar.

**Purpose** (purposeID). The reason the measure or sample was taken.Role: Foreign Key.Requirement: optional.Data type: categorical. CatSet: purposeCatSet

**Polygon ID** (polygonID). Unique identifier for the polygon.Role: Foreign Key.Requirement: optional.Data type: varchar.

**Site ID** (siteID). Unique identifier for the location where a sample was taken.Role: Foreign Key.Requirement: mandatory.Data type: varchar.

**Dataset ID** (datasetID). The name of the dataset that stores information for MeasureReport, SampleReport and other reporting tables.Role: Foreign Key.Requirement: optional.Data type: varchar.

**Report set ID** (meaureSetRepID). Unique identifier that links together a group of related measures.Role: Foreign Key.Requirement: optional.Data type: varchar.

**Analysis date start** (aDateStart). Date the measurement or analysis was started.Role: Header.Requirement: optional.Data type: datetime.

**Analysis date end** (aDateEnd). Date the measurement or analysis was completed.Role: Header.Requirement: mandatory.Data type: datetime.

**Report date** (reportDate). The date a measure was reported.Role: Header.Requirement: optional.Data type: datetime.

**Specimen** (specimenID). The substance or thing upon which the observation was made.Role: Foreign Key.Requirement: mandatory.Data type: categorical.

**Fraction analyzed** (fractionID). Fraction of the sample that is analyzed.Role: Foreign Key.Requirement: recommended.Data type: categorical. CatSet: fractionCatSet

**Group** (groupID). Unique identifier for a group of measures. Mostly applicable for measures, methods, units, and aggregations.Role: Foreign Key.Requirement: optional.Data type: categorical.

**Class** (classID). A unique identifier for a class, which is akin to a subgroup; it's a way of grouping parts within a given groupID. A group can have one or more classes to describe different parts of the class.Role: Foreign Key.Requirement: optional.Data type: categorical.

**Measure** (measureID). A measurement or observation of any substance including a biological, physical or chemical substance.Role: Foreign Key.Requirement: mandatory.Data type: varchar.

**Value** (value). Value of a measure, observation or attribute.Role: Header.Requirement: mandatory.

**Unit** (unitID). The units of a measurement.Role: Foreign Key.Requirement: mandatory.Data type: categorical.

**Aggregation ID** (aggID). Statistical measures used to report a measure. Each aggregation has a corresponding value.Role: Foreign Key.Requirement: mandatory.Data type: categorical.

**Nomenclature** (nomenclatureID). A classification system to report the measure class. Only applicable to variants, mutations, and diseases.Role: Foreign Key.Requirement: optional.Data type: categorical.

**Index** (index). Index number in case the measurement was taken multiple times.Role: Header.Requirement: optional.Data type: integer.

**Measure license** (measureLic). Specifies the access and use licensing for a given single measurement.Role: Header.Requirement: optional.Data type: varchar.

## Tables

**Reportable** (reportable). Flag for whether a measure is reportable or not, based on confidence in the measure and methods applied.Role: Header.Requirement: optional.Data type: boolean.

**Organization** (organizationID). A unique identifier for the organization to which the reporter is affiliated.Role: Header.Requirement: optional.Data type: varchar.

**Contact** (contactID). A unique identifier for a given contact person.Role: Header.Requirement: optional.Data type: varchar.

**Reference link** (refLink). Link to the reference material for a part. May link to literature on a method, measure, etc.Role: Header.Requirement: optional.Data type: varchar.

**Last edited** (lastEdited). The date the entry was last updated.Role: Header.Requirement: optional.Data type: datetime.

**Notes** (notes). A note used to describe details that are not captured in other attributesRole: Header.Requirement: optional.Data type: varchar.

## Measure set report table

partID: measureSets. The table that identifies sets of measures. Examples of measure sets include a set of replicates, dilutions (used to generate a Ct curve) or variants that are identified in a single sample.

**Report set ID** (measureSetRepID). Unique identifier that links together a group of related measures.Role: Primary Key.Requirement: mandatory.Data type: varchar.

**Protocol ID** (protocolID). A unique identifier for a given protocol.Role: Foreign Key.Requirement: optional.Data type: varchar.



**Name** (name). Name of a domain, specimen, group, class, attribute, unit, nomenclature or other entity.Role: Header.Requirement: optional.Data type: varchar.

**Organization** (organizationID). A unique identifier for the organization to which the reporter is affiliated.Role: Foreign Key.Requirement: optional.Data type: varchar.

**Contact** (contactID). A unique identifier for a given contact person.Role: Foreign Key.Requirement: optional.Data type: varchar.

**Last edited** (lastEdited). The date the entry was last updated.Role: Header.Requirement: optional.Data type: datetime.

**Notes** (notes). A note used to describe details that are not captured in other attributesRole: Header.Requirement: optional.Data type: varchar.

## Organization table

partID: organizations. The table that contains information about a laboratory. adapt from version 1 documentation

**Organization** (organizationID). A unique identifier for the organization to which the reporter is affiliated.Role: Primary Key.Requirement: mandatory.Data type: varchar.

**Dataset ID** (datasetID). The name of the dataset that stores information for MeasureReport, SampleReport and other reporting tables.Role: Foreign Key.Requirement: optional.Data type: varchar.

**Address ID** (addressID). A unique identifier for an address.Role: Foreign Key.Requirement: mandatory.Data type: varchar.

**Organization Type** (orgTypeID). Specifies the type or purpose of a given organization.Role: Foreign Key.Requirement: mandatory.Data type: categorical.

## Tables

**Name** (name). Name of a domain, specimen, group, class, attribute, unit, nomenclature or other entity.Role: Header.Requirement: recommended.Data type: varchar.

**Description** (descr). A detailed description as an attribute for describing results or program elements.Role: Header.Requirement: optional.Data type: varchar.

**Last edited** (lastEdited). The date the entry was last updated.Role: Header.Requirement: optional.Data type: datetime.

**Notes** (notes). A note used to describe details that are not captured in other attributes.Role: Header.Requirement: optional.Data type: varchar.

## Parts Look-up table

partID: parts. Look up table containing all parts in of the data model. Contains all parts, including self-referential parts.

**Part ID** (partID). The unique identify of any entity within the dictionary.Role: Primary Key.Requirement: mandatory.Data type: varchar.

**Label** (partLabel). A human readable label of a part.Role: Header.Requirement: mandatory.Data type: varchar.

**Part types** (partType). Part types describe the purpose or use of the part.Role: Header.Requirement: mandatory.Data type: varchar.

**Short names** (shortName). Shortened names for tables and other important parts for use in wide names.Role: Header.Requirement: mandatory.Data type: varchar.

**Part description** (partDesc). The description of the part.Role: Header.Requirement: mandatory.Data type: varchar.

**Part instruction** (partInstr). Additional notes and instructions on how a part is used and/or defined.Role: Header.Requirement: mandatory.Data type: varchar.

**Domain ID** (domainID). Domain is the highest level of describing of a measure. There are three domain types: biologic (i.e. Covid-19, chemical (i.e. nitrogen), physical measure (temperature).Role: Header.Requirement: mandatory.Data type: categorical.

**Specimen set** (specimenSet). The set of valid specimens that apply to another given part.Role: Foreign Key.Requirement: mandatory.Data type: varchar.

**Group** (groupID). Unique identifier for a group of measures. Mostly applicable for measures, methods, units, and aggregations.Role: Header.Requirement: mandatory.Data type: categorical.

**Class** (classID). A unique identifier for a class, which is akin to a subgroup; it's a way of grouping parts within a given groupID. A group can have one or more classes to describe different parts of the class.Role: Header.Requirement: mandatory.Data type: categorical.

**Nomenclature** (nomenclatureID). A classification system to report the measure class. Only applicable to variants, mutations, and diseases.Role: Header.Requirement: mandatory.Data type: categorical.

**Ontology reference** (ontologyRef). Ontology reference for a part.Role: Header.Requirement: mandatory.Data type: varchar.

**LaTeX expression** (latExp). LaTeX expression used to generate formulas, symbols, etc. Mainly relevant for units.Role: Header.Requirement: mandatory.Data type: varchar.

**Category set ID** (catSetID). The category set that corresponds to a given part. A set of categories used for a method or measure. Only applicable for categorical fields, and the categories that populate them.Role: Header.Requirement: mandatory.Data type: categorical.

## Tables

**Unit set ID** (unitSetID). An identification of a set of units that can be used for a measure or method. Role: Header. Requirement: mandatory. Data type: categorical.

**Aggregation scale ID** (aggScaleID). A scale used for an aggregation. See partID = ... Only applicable for measures and units. Role: Header. Requirement: mandatory. Data type: categorical.

**Aggregation set ID** (aggSetID). The ID for an aggregation set. Mainly applicable to partType = “units”. Role: Header. Requirement: mandatory. Data type: categorical.

**Quality set ID** (qualitySetID). The quality set that corresponds to a given part. Only applicable for samples and measures. Role: Header. Requirement: mandatory. Data type: varchar.

**Status** (status). Whether the part is still active and can be used in the most current ODM version. Values are ‘active’ or ‘inactive’. Role: Header. Requirement: mandatory. Data type: varchar.

**First released version** (firstReleased). The version in which a part was first released. Role: Header. Requirement: mandatory. Data type: varchar.

**Last updated version** (lastUpdated). The version in which the part was last updated. Role: Header. Requirement: mandatory. Data type: varchar.

**Changes column** (changes). A column for recording the changes from a previous version. Role: Header. Requirement: mandatory. Data type: varchar.

**Protocol steps table** (protocolSteps). The table for collecting metadata on individual steps in a protocol, methodological process, or assay. Role: Header. Requirement: mandatory. Data type: varchar.

**Requirement** (protocolRelationshipsRequired). Specifies the columns required in the Protocol Organization table. Role: Header. Requirement: mandatory. Data type: varchar.

**Requirement** (protocolStepsRequired). Specifies the columns required in a Protocol Steps table.Role: Header.Requirement: mandatory.Data type: varchar.

**Protocol steps table column order** (protocolStepsOrder). Specifies the order of the columns in a Protocol Steps table.Role: Header.Requirement: mandatory.Data type: integer.

**Protocol relationships table** (protocolRelationships). The table that contains the organizational information and details (such as order) about a given protocol, recorded as a series of protocol steps (protocolSteps).Role: Header.Requirement: mandatory.Data type: varchar.

**Protocol relationships table column order** (protocolRelationshipsOrder). Specifies the order of the columns in the Protocol Organization table.Role: Header.Requirement: mandatory.Data type: integer.

**Measure report table** (measures). The table that contains information and details about a given measureRole: Header.Requirement: mandatory.Data type: varchar.

**Requirement** (measuresRequired). Specifies the columns required in a Measures table.Role: Header.Requirement: mandatory.Data type: varchar.

**Measures table column order** (measuresOrder). Specifies the order of the columns in a Measures table.Role: Header.Requirement: mandatory.Data type: integer.

**Measure set report table** (measureSets). The table that identifies sets of measures.Role: Header.Requirement: mandatory.Data type: varchar.

**Measure sets table column order** (measureSetsOrder). Specifies the order of the columns in a Measure Sets table.Role: Header.Requirement: mandatory.Data type: integer.

## Tables

**Requirement** (measureSetsRequired). Specifies the columns required in a Measure Sets table.Role: Header.Requirement: mandatory.Data type: varchar.

**Dataset table** (datasets). A report table for capturing details about data's parental data set and data custodians. Supplying attribution for data collectors.Role: Header.Requirement: mandatory.Data type: varchar.

**Requirement** (datasetsRequired). Specifies the columns required in a Datasets table.Role: Header.Requirement: mandatory.Data type: varchar.

**Datasets table column order** (datasetsOrder). Specifies the order of the columns in a Datasets table.Role: Header.Requirement: mandatory.Data type: integer.

**Sites table** (sites). The table that contains information about a site; the location where an environmental sample was taken.Role: Header.Requirement: mandatory.Data type: varchar.

**Requirement** (sitesRequired). Specifies the columns required in a Sites table.Role: Header.Requirement: mandatory.Data type: varchar.

**Sites table column order** (sitesOrder). Specifies the order of the columns in a Sites table.Role: Header.Requirement: mandatory.Data type: integer.

**Sample report table** (samples). The table that contains information about a sample, where a sample is defined as a representative volume of wastewater, air, or surface substance taken from a Site which is then analysed by a lab (organization).Role: Header.Requirement: mandatory.Data type: varchar.

**Requirement** (samplesRequired). Specifies the columns required in a Samples table.Role: Header.Requirement: mandatory.Data type: varchar.

**Samples table column order** (samplesOrder). Specifies the order of the columns in a Samples table.Role: Header.Requirement: mandatory.Data type: integer.

**Address table** (addresses). The table that contains information about addresses. Addresses can recorded for sites, organizations or contacts (individuals).Role: Header.Requirement: mandatory.Data type: varchar.

**Requirement** (addressesRequired). Specifies the columns required in a Addresses table.Role: Header.Requirement: mandatory.Data type: varchar.

**Addresses table column order** (addressesOrder). Specifies the order of the columns in the Addresses table.Role: Header.Requirement: mandatory.Data type: integer.

**Contact table** (contacts). The table that contains information about a contact; a person who is the contact of a site or laboratory.Role: Header.Requirement: mandatory.Data type: varchar.

**Requirement** (contactsRequired). Specifies the columns required in a Contacts table.Role: Header.Requirement: mandatory.Data type: varchar.

**Contacts table column order** (contactsOrder). Specifies the order of the columns in a Contacts table.Role: Header.Requirement: mandatory.Data type: integer.

**Organization table** (organizations). The table that contains information about a laboratory.Role: Header.Requirement: mandatory.Data type: varchar.

**Requirement** (organizationsRequired). Specifies the columns required in a Organizations table.Role: Header.Requirement: mandatory.Data type: varchar.

## *Tables*

**Organizations table column order** (organizationsOrder). Specifies the order of the columns in a Organizations table.Role: Header.Requirement: mandatory.Data type: integer.

**Instrument table** (instruments). The table that contains information about instruments.Role: Header.Requirement: mandatory.Data type: varchar.

**Requirement** (instrumentsRequired). Specifies the columns required in the Instruments table.Role: Header.Requirement: mandatory.Data type: varchar.

**Instruments table column order** (instrumentsOrder). Specifies the order of the columns in the Instruments table.Role: Header.Requirement: mandatory.Data type: integer.

**Polygon table** (polygons). The table that contains information about the geometry of a geographic area.Role: Header.Requirement: mandatory.Data type: varchar.

**Requirement** (polygonsRequired). Specifies the columns required in a Polygons table.Role: Header.Requirement: mandatory.Data type: varchar.

**Polygons table column order** (polygonsOrder). Specifies the order of the columns in a Polygons table.Role: Header.Requirement: mandatory.Data type: integer.

**Language Look-up table** (languages). Look up table for all languages, used to give structure to the translation table.Role: Header.Requirement: mandatory.Data type: varchar.

**Required headers** (languagesRequired). Required headers in the Languages table.Role: Header.Requirement: mandatory.Data type: varchar.



**Language table column order** (languagesOrder). Specifies the order of the columns in the Languages table.Role: Header.Requirement: mandatory.Data type: integer.

**Translation look-up table** (translations). Look up table for translations of the description, label, and instruction for all parts.Role: Header.Requirement: mandatory.Data type: varchar.

**Parts Look-up table** (parts). Look up table containing all parts in of the data model.Role: Header.Requirement: mandatory.Data type: varchar.

**Required headers** (translationsRequired). Required headers in the Translations table.Role: Header.Requirement: mandatory.Data type: varchar.

**Translation table column order** (translationsOrder). Specifies the order of the columns in the Translation table.Role: Header.Requirement: mandatory.Data type: integer.

**Parts table column order** (partsOrder). Order of headers in the Parts table.Role: Header.Requirement: mandatory.Data type: varchar.

**Required headers** (partsRequired). Required headers in the Parts table.Role: Header.Requirement: mandatory.Data type: varchar.

**Sets look-up table** (sets). Look up table for all sets, managing how categorical inputs for various methods and attributes are grouped together.Role: Header.Requirement: mandatory.Data type: varchar.

**Sets table column order** (setsOrder). Specifies the order of the columns in the Sets table.Role: Header.Requirement: mandatory.Data type: integer.

**Required headers** (setsRequired). Required headers in the Sets table.Role: Header.Requirement: mandatory.Data type: varchar.

**Quality reports table** (qualityReports). The table for recording the various quality metrics and indicators for samples and measures.Role: Header.Requirement: mandatory.Data type: varchar.

## Tables

**Requirement** (qualityReportsRequired). Specifies the columns required in the Quality Reports table.Role: Header.Requirement: mandatory.Data type: varchar.

**Quality reports table column order** (qualityReportsOrder). Specifies the order of the columns in the Quality Reports table.Role: Header.Requirement: mandatory.Data type: integer.

**Sample relationships table** (sampleRelationships). Table for recording the relationships between samples.Role: Header.Requirement: mandatory.Data type: varchar.

**Requirement** (sampleRelationshipsRequired). Specifies the columns required in a Sample Relationships table.Role: Header.Requirement: mandatory.Data type: varchar.

**Sample relationships table column order** (sampleRelationshipsOrder). Specifies the order of the columns in a Sample Relationships table.Role: Header.Requirement: mandatory.Data type: integer.

**Protocols table** (protocols). The table for protocols.Role: Header.Requirement: mandatory.Data type: varchar.

**Requirement** (protocolsRequired). Specifies the columns required in the Protocols table.Role: Header.Requirement: mandatory.Data type: varchar.

**Protocols table column order** (protocolsOrder). Specifies the order of the columns in the Protocols table.Role: Header.Requirement: mandatory.Data type: integer.

**Reference link** (refLink). Link to the reference material for a part. May link to literature on a method, measure, etc.Role: Header.Requirement: mandatory.Data type: varchar.

**Data types** (dataType). The data type for a part.Role: Header.Requirement: mandatory.Data type: varchar.

**Minimum value** (minValue). The minimum value of measure.Role: Header.Requirement: mandatory.Data type: varchar.

**Maximum value** (maxValue). The maximum value of a part.Role: Header.Requirement: mandatory.Data type: varchar.

**Minimum length** (minLength). The maximum value of measure.Role: Header.Requirement: mandatory.Data type: integer.

**Maximum length** (maxLength). The maximum length of the value of a part or measure.Role: Header.Requirement: mandatory.Data type: integer.

## Polygon table

partID: polygons. The table that contains information about the geometry of a geographic area.

**Polygon ID** (polygonID). Unique identifier for the polygon.Role: Primary Key.Requirement: mandatory.Data type: varchar.

**Dataset ID** (datasetID). The name of the dataset that stores information for MeasureReport, SampleReport and other reporting tables.Role: Foreign Key.Requirement: optional.Data type: varchar.

**Name** (name). Name of a domain, specimen, group, class, attribute, unit, nomenclature or other entity.Role: Header.Requirement: recommended.Data type: varchar.

**Description** (descr). A detailed description as an attribute for describing results or program elements.Role: Header.Requirement: optional.Data type: varchar.

**Polygon Population** (polyPop). An attribute of a polygon, which specifies the population of that polygon. A rough estimate of the number of human residents.Role: Header.Requirement: optional.Data type: integer.

## Tables

**Type of geography** (geoType). Type of geography that is represented by the polygon.Role: Header.Requirement: mandatory.Data type: categorical. CatSet: geoTypeCatSet

**European Petroleum Survey Group Coordinates** (geoEPSG). The unique EPSG code specifying a given geospatial area.Role: Header.Requirement: mandatory.Data type: float.

**Well-known text** (geoWKT). Well-known text of the polygonRole: Header.Requirement: mandatory.Data type: varchar.

**File location of polygon** (fileLocation). The location of the file containing the geometry of the polygon.Role: Header.Requirement: optional.Data type: blob.

**Reference link** (refLink). Link to the reference material for a part. May link to literature on a method, measure, etc.Role: Header.Requirement: optional.Data type: varchar.

**Organization** (organizationID). A unique identifier for the organization to which the reporter is affiliated.Role: Header.Requirement: optional.Data type: varchar.

**Contact** (contactID). A unique identifier for a given contact person.Role: Header.Requirement: optional.Data type: varchar.

**Last edited** (lastEdited). The date the entry was last updated.Role: Header.Requirement: optional.Data type: datetime.

**Notes** (notes). A note used to describe details that are not captured in other attributesRole: Header.Requirement: optional.Data type: varchar.

## Protocol relationships table

partID: protocolRelationships. The table that contains the organizational information and details (such as order) about a given protocol, recorded

as a series of protocol steps (protocolSteps). Protocols are a group of related protocol steps. For example a protocol step can describe a sample concentration, extraction, inhibition or a measurement. Protocols can include both methodID (a procedure) and measureIDs (a measure). An example of a method is centrifugation; where the centrifugation rotation speed is described as a measure.

**Protocol ID container** (protocolIDContainer). Unique identifier for the protocol and the steps and other protocols that make it up.Role: Foreign Key.Requirement: mandatory.Data type: varchar.

**Protocol ID object** (protocolIDObj). The object of the relationship between one protocol and another protocol or step, within a given protocol ID container.Role: Foreign Key.Requirement: mandatoryIf.Data type: varchar.

**Step ID Object** (stepIDObj). The object of the relationship between one protocol step and another step or protocol, within a given protocol ID container.Role: Foreign Key.Requirement: mandatoryIf.Data type: integer.

**Relationship** (relationshipID). Attribute for specifying the relationship between a Subject and Object.Role: Foreign Key.Requirement: mandatory.Data type: varchar.

**Protocol ID subject** (protocolIDSub). The subject of the relationship between one protocol and another protocol or step, within a given protocol ID container.Role: Foreign Key.Requirement: mandatoryIf.Data type: varchar.

**Step ID Subject** (stepIDSub). The subject of the relationship between one protocol step and another step or protocol, within a given protocol ID container.Role: Foreign Key.Requirement: mandatoryIf.Data type: varchar.

**Last edited** (lastEdited). The date the entry was last updated.Role: Header.Requirement: optional.Data type: datetime.

## Tables

**Notes** (notes). A note used to describe details that are not captured in other attributes. Role: Header. Requirement: optional. Data type: varchar.

### Protocols table

partID: protocols. The table for protocols.

**Source Protocol** (sourceProtocol). A protocol that served as a basis for another protocol. This may be due to version changes, or a referencing a protocol that was later adapted. Role: Foreign Key. Requirement: optional. Data type: varchar.

**Protocol ID** (protocolID). A unique identifier for a given protocol. Role: Primary Key. Requirement: mandatory. Data type: varchar.

**Dataset ID** (datasetID). The name of the dataset that stores information for MeasureReport, SampleReport and other reporting tables. Role: Foreign Key. Requirement: optional. Data type: varchar.

**Name** (name). Name of a domain, specimen, group, class, attribute, unit, nomenclature or other entity. Role: Header. Requirement: optional. Data type: varchar.

**Summary** (summ). Short description of the assay and how it is different from the other assay methods. Role: Header. Requirement: optional. Data type: varchar.

**Reference link** (refLink). Link to the reference material for a part. May link to literature on a method, measure, etc. Role: Header. Requirement: optional. Data type: varchar.

**Organization** (organizationID). A unique identifier for the organization to which the reporter is affiliated. Role: Foreign Key. Requirement: optional. Data type: varchar.

**Contact** (contactID). A unique identifier for a given contact person.Role: Foreign Key.Requirement: optional.Data type: varchar.

**Protocol version** (protocolVersion). Specifies the version of a method set.Role: Header.Requirement: optional.Data type: integer.

**Last edited** (lastEdited). The date the entry was last updated.Role: Header.Requirement: optional.Data type: datetime.

**Notes** (notes). A note used to describe details that are not captured in other attributesRole: Header.Requirement: optional.Data type: varchar.

## Protocol steps table

partID: protocolSteps. The table for collecting metadata on individual steps in a protocol, methodological process, or assay.

**Protocol Step ID** (stepID). The unique identifier for a specific protocol step.Role: Primary Key.Requirement: mandatory.Data type: varchar.

**Method** (methodID). A procedure for collecting a sample or performing a measure.Role: Foreign Key.Requirement: mandatoryIf.Data type: categorical.

**Measure** (measureID). A measurement or observation of any substance including a biological, physical or chemical substance.Role: Foreign Key.Requirement: mandatoryIf.Data type: varchar.

**Summary** (summ). Short description of the assay and how it is different from the other assay methods.Role: Header.Requirement: optional.Data type: varchar.

**Protocol step source** (sourceStep). Specifies the protocol step which serves as a basis for a given protocol step.Role: Foreign Key.Requirement: optional.Data type: varchar.

## *Tables*

**Protocol step version** (stepVer). Specifies the version of a given protocol step.Role: Header.Requirement: optional.Data type: varchar.

**Reference link** (refLink). Link to the reference material for a part. May link to literature on a method, measure, etc.Role: Header.Requirement: optional.Data type: varchar.

**Organization** (organizationID). A unique identifier for the organization to which the reporter is affiliated.Role: Foreign Key.Requirement: optional.Data type: varchar.

**Contact** (contactID). A unique identifier for a given contact person.Role: Foreign Key.Requirement: optional.Data type: varchar.

**Instrument ID** (instrumentID). A unique identifier for an instrument.Role: Foreign Key.Requirement: optional.Data type: categorical.

**Value** (value). Value of a measure, observation or attribute.Role: Header.Requirement: mandatoryIf.

**Unit** (unitID). The units of a measurement.Role: Foreign Key.Requirement: mandatoryIf.Data type: categorical.

**Aggregation ID** (aggID). Statistical measures used to report a measure. Each aggregation has a corresponding value.Role: Foreign Key.Requirement: mandatoryIf.Data type: categorical.

**Last edited** (lastEdited). The date the entry was last updated.Role: Header.Requirement: optional.Data type: datetime.

**Notes** (notes). A note used to describe details that are not captured in other attributesRole: Header.Requirement: optional.Data type: varchar.



## Quality reports table

partID: qualityReports. The table for recording the various quality metrics and indicators for samples and measures.

**Quality report ID** (qualityID). A unique identifier for a given quality report.Role: Primary Key.Requirement: mandatory.Data type: varchar.

**Report ID** (measureRepID). Unique identifier for a measurement.Role: Foreign Key.Requirement: mandatoryIf.Data type: varchar.

**Sample ID** (sampleID). Unique identifier for a sample.Role: Foreign Key.Requirement: mandatoryIf.Data type: varchar.

**Report set ID** (meaureSetRepID). Unique identifier that links together a group of related measures.Role: Foreign Key.Requirement: mandatoryIf.Data type: varchar.

**quality flag** (qualityFlag). A field for reporting any quality concerns - of lack thereof - for a sample or measure.Role: Header.Requirement: mandatory.Data type: categorical.

**Severity indicator** (severity). An indicator of the severity or seriousness of a quality flag.Role: Header.Requirement: optional.Data type: varchar.

**Last edited** (lastEdited). The date the entry was last updated.Role: Header.Requirement: optional.Data type: datetime.

**Notes** (notes). A note used to describe details that are not captured in other attributesRole: Header.Requirement: optional.Data type: varchar.

## Tables

### Sample relationships table

partID: sampleRelationships. Table for recording the relationships between samples. Specifically designed to capture information on parent-child relationships between samples, and allow for tracking sample lineage for single and pooled samples.

**Sample ID Subject** (sampleIDSub). Populated by **sampleID** - this specifies the subject of a sample relationship.Role: Foreign Key.Requirement: mandatory.Data type: varchar.

**Relationship** (relationshipID). Attribute for specifying the relationship between a Subject and Object.Role: Foreign Key.Requirement: mandatory.Data type: varchar.

**Sample ID Object** (sampleIDObj). Populated by **sampleID** - this specifies the object of a sample relationship.Role: Foreign Key.Requirement: mandatory.Data type: varchar.

**Last edited** (lastEdited). The date the entry was last updated.Role: Header.Requirement: optional.Data type: datetime.

**Notes** (notes). A note used to describe details that are not captured in other attributesRole: Header.Requirement: optional.Data type: varchar.

### Sample report table

partID: samples. The table that contains information about a sample, where a sample is defined as a representative volume of wastewater, air, or surface substance taken from a Site which is then analysed by a lab (organization).

**Sample ID** (sampleID). Unique identifier for a sample.Role: Primary Key.Requirement: mandatory.Data type: varchar.

**Protocol ID** (protocolID). A unique identifier for a given protocol.Role: Foreign Key.Requirement: optional.Data type: varchar.

**Organization** (organizationID). A unique identifier for the organization to which the reporter is affiliated.Role: Header.Requirement: optional.Data type: varchar.

**Contact** (contactID). A unique identifier for a given contact person.Role: Foreign Key.Requirement: optional.Data type: varchar.

**Site ID** (siteID). Unique identifier for the location where a sample was taken.Role: Foreign Key.Requirement: mandatory.Data type: varchar.

**Purpose** (purposeID). The reason the measure or sample was taken.Role: Foreign Key.Requirement: optional.Data type: categorical. CatSet: purposeCatSet

**Sample material** (saMaterial). Type of sample.Role: Foreign Key.Requirement: mandatory.Data type: categorical. CatSet: sampleMatCatSet

**Dataset ID** (datasetID). The name of the dataset that stores information for MeasureReport, SampleReport and other reporting tables.Role: Foreign Key.Requirement: optional.Data type: varchar.

**Sample origin** (origin). An attribute of a sample specifying the origin.Role: Header.Requirement: optional.Data type: categorical.

**Replicate Type** (repType). Attribute of a sample, specifying whether the sample is unique, or a replicate. And if it is a replicate, what type of replicate is it?Role: Foreign Key.Requirement: optional.Data type: categorical. CatSet: replicateCatSet

**Sample collection type** (collType). The type of collection.Role: Foreign Key.Requirement: mandatory.Data type: categorical. CatSet: collectCatSet

## Tables

**Collection period** (collPer). Collection period. The time period over which the sample was collected, in hours. Alternatively, use collectionStart and collectionEnd.Role: Header.Requirement: mandatory.Data type: float.

**Collection number** (collNum). The number of subsamples that were combined to create the sample. Use NA for continuous, proportional or passive sampling.Role: Header.Requirement: mandatory.Data type: integer.

**Collection number and period** (collNumPer). Composite collection number.period.Role: Header.Requirement: mandatory.Data type: varchar.

**Pooled** (pooled). Is this a pooled sample, and therefore composed of multiple child samples obtained at different sites.Role: Header.Requirement: optional.Data type: boolean.

**Collection date time** (collDT). for grab samples this is the date, time and timezone the sample was taken.Role: Header.Requirement: mandatory.Data type: datetime.

**Collection date time start** (collDTStart). For integrated time averaged samples this is the date, time and timezone the sample was started being taken.Role: Header.Requirement: optional.Data type: datetime.

**Collection date time end** (collDTEnd). For integrated time average samples this is the date, time and timezone the sample was finished being taken.Role: Header.Requirement: optional.Data type: datetime.

**Date sample was sent** (sentDate). The date the sample was sent for analyses at a laboratory.Role: Header.Requirement: optional.Data type: datetime.

**Date sample recieved** (recDate). The date the sample was received at the laboratory for analysis.Role: Header.Requirement: optional.Data type: datetime.

**Reportable** (reportable). Flag for whether a measure is reportable or not, based on confidence in the measure and methods applied.Role: Header.Requirement: optional.Data type: boolean.

**Last edited** (lastEdited). The date the entry was last updated.Role: Header.Requirement: optional.Data type: datetime.

**Notes** (notes). A note used to describe details that are not captured in other attributesRole: Header.Requirement: optional.Data type: varchar.

## Sets look-up table

partID: sets. Look up table for all sets, managing how categorical inputs for various methods and attributes are grouped together. This table manages many-to-many relationships and category recycling within the ODM.

**Set ID** (setID). The name of a value set.Role: Primary Key.Requirement: mandatory.Data type: varchar.

**Set type** (setType). The type of set. i.e. quality set, aggregation set, unit setRole: Header.Requirement: mandatory.

**Set Value** (setValue). The partID for the set value or category.Role: Foreign Key.Requirement: mandatory.

**Label** (partLabel). A human readable label of a part.Role: Header.Requirement: mandatory.Data type: varchar.

**Part instruction** (partInstr). Additional notes and instructions on how a part is used and/or defined.Role: Header.Requirement: mandatory.Data type: varchar.

**Status** (status). Whether the part is still active and can be used in the most current ODM version. Values are 'active' or 'inactive'.Role: Header.Requirement: mandatory.Data type: varchar.

## Tables

**First released version** (firstReleased). The version in which a part was first released.Role: Header.Requirement: mandatory.Data type: varchar.

**Last updated version** (lastUpdated). The version in which the part was last updated.Role: Header.Requirement: mandatory.Data type: varchar.

**Changes column** (changes). A column for recording the changes from a previous version.Role: Header.Requirement: optional.Data type: varchar.

**Notes** (notes). A note used to describe details that are not captured in other attributes.Role: Header.Requirement: optional.Data type: varchar.

## Sites table

partID: sites. The table that contains information about a site; the location where an environmental sample was taken. The site of an environmental sample. Information in the site table does not regularly change. Consider using the MeasureReport table if the information changes often.

**Parent Site ID** (parSiteID). The siteID that is a parent to another siteID; usually the sub-site will be contained in the parentSite.Role: Foreign Key.Requirement: optional.Data type: varchar.

**Site ID** (siteID). Unique identifier for the location where a sample was taken.Role: Primary Key.Requirement: mandatory.Data type: varchar.

**Dataset ID** (datasetID). The name of the dataset that stores information for MeasureReport, SampleReport and other reporting tables.Role: Foreign Key.Requirement: optional.Data type: varchar.

**Polygon ID** (polygonID). Unique identifier for the polygon.Role: Foreign Key.Requirement: optional.Data type: varchar.

**Site Type** (siteTypeID). Type of site or institution where sample was taken.Role: Foreign Key.Requirement: mandatory.Data type: categorical. CatSet: siteTypeCatSet

**Sample shed** (sampleShed). A geographic area, physical space, or structure. A sample is taken from a sampleshed for a representative measurement of a substance(s).Role: Header.Requirement: mandatory.Data type: categorical. CatSet: shedCatSet

**Address ID** (addressID). A unique identifier for an address.Role: Foreign Key.Requirement: optional.Data type: varchar.

**Organization** (organizationID). A unique identifier for the organization to which the reporter is affiliated.Role: Header.Requirement: optional.Data type: varchar.

**Contact** (contactID). A unique identifier for a given contact person.Role: Foreign Key.Requirement: mandatory.Data type: varchar.

**Name** (name). Name of a domain, specimen, group, class, attribute, unit, nomenclature or other entity.Role: Header.Requirement: recommended.Data type: varchar.

**Description** (descr). A detailed description as an attribute for describing results or program elements.Role: Header.Requirement: optional.Data type: varchar.

**Public health department or region** (pHDept). The public health department or region where the site or institute is located. See also **healthRegion** if there is a separate regional health care delivery authority.Role: Header.Requirement: optional.Data type: varchar.

**Health planning region** (healthReg). The health planning authority where is site or insitute is located. See also **publicHealthDepartment**.Role: Header.Requirement: optional.Data type: varchar.

## Tables

**Population Served** (popServ). An attribute of a site, which specifies the population of/population served by a given site.Role: Header.Requirement: optional.Data type: categorical.

**Latitude** (geoLat). Geographical location, latitude in decimal coordinates, ie.: (45.424721)Role: Header.Requirement: mandatoryIf.Data type: float.

**Longitude** (geoLong). Geographical location, longitude in decimal coordinates, ie.: (-75.695000)Role: Header.Requirement: mandatoryIf.Data type: float.

**European Petroleum Survey Group Coordinates** (geoEPSG). The unique EPSG code specifying a given geospatial area.Role: Header.Requirement: mandatoryIf.Data type: float.

**Last edited** (lastEdited). The date the entry was last updated.Role: Header.Requirement: optional.Data type: datetime.

**Notes** (notes). A note used to describe details that are not captured in other attributesRole: Header.Requirement: optional.Data type: varchar.

## Translation look-up table

partID: translations. Look up table for translations of the description, label, and instruction for all parts. The default language if a translation is not specified is English.

**Language ID** (langID). Language code for translation purposes. Specifies the language for each translation, other than the default English.Role: Foreign Key.Requirement: mandatory.Data type: varchar.

**Part ID** (partID). The unique identify of any entity within the dictionary.Role: Foreign Key.Requirement: mandatory.Data type: varchar.



*Table list*

**Label** (partLabel). A human readable label of a part.Role: Header.Requirement: mandatory.Data type: varchar.

**Part description** (partDesc). The description of the part.Role: Header.Requirement: mandatory.Data type: varchar.

**Part instruction** (partInstr). Additional notes and instructions on how a part is used and/or defined.Role: Header.Requirement: optional.Data type: varchar.

**First released version** (firstReleased). The version in which a part was first released.Role: Header.Requirement: mandatory.Data type: varchar.

**Last updated version** (lastUpdated). The version in which the part was last updated.Role: Header.Requirement: mandatory.Data type: varchar.

**Changes column** (changes). A column for recording the changes from a previous version.Role: Header.Requirement: optional.Data type: varchar.

**Notes** (notes). A note used to describe details that are not captured in other attributes.Role: Header.Requirement: optional.Data type: varchar.

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