

SF-RAD Metadata Specifications for:

Pretreatment

Importance 1: Required, 0: Optional

SF-RAD Field Name	Definition	Importance
sample_ID	true parent wastewater sample ID (WG0#-YYMMDD)	1
initial_ww_sample_volume_before_split	starting volume before any wastewater is removed/split	1
pasteurized	Was the sample pasteurized?	0
solids_separation	Process used to separate solid and liquid phases of the sample, either prior to or in the absence of the concentration method specified in 'concentration_method'	0
parent_split_before_pre_treatment	was the parent split before additional reagents were added? (Yes/No: aliquotted before the addition of recovery control)	1
splits_pre_treatment	number of splits of pure wastewater removed from parent bottle prior to the addition of recovery control (a per sample basis)	1
split_pre_treatment_aliquot_vol_1	Volume of aliquot [1] of raw wastewater (mL) before any treatment reagents are added to the parent wastewater bottle	0
split_pre_treatment_aliquot_vol_2	Volume of aliquot [2] of raw wastewater (mL) before any treatment reagents are added to the parent wastewater bottle	0
split_pre_treatment_aliquot_vol_3	Volume of aliquot [3] of raw wastewater (mL) before any treatment reagents are added to the parent wastewater bottle	0
split_pre_treatment_aliquot_vol_4	Volume of aliquot [4] of raw wastewater (mL) before any treatment reagents are added to the parent wastewater bottle	0
split_pre_treatment_aliquot_vol_5	Volume of aliquot [5] of raw wastewater (mL) before any treatment reagents are added to the parent wastewater bottle	0
split_pre_treatment_aliquot_vol_6	Volume of aliquot [6] of raw wastewater (mL) before any treatment reagents are added to the parent wastewater bottle	0
split_pre_treatment_purpose_1	What is the purpose of splitting out the [1] pre-treatment aliquot?	0
split_pre_treatment_purpose_2	What is the purpose of splitting out the [2] pre-treatment aliquot?	0
split_pre_treatment_purpose_3	What is the purpose of splitting out the [3] pre-treatment aliquot?	0
split_pre_treatment_purpose_4	What is the purpose of splitting out the [4] pre-treatment aliquot?	0
split_pre_treatment_purpose_5	What is the purpose of splitting out the [5] pre-treatment aliquot?	0
split_pre_treatment_purpose_6	What is the purpose of splitting out the [6] pre-treatment aliquot?	0
split_pre_treatment_ID_1	zz delegation of the aliquot [1] of raw (un-treated) wastewater (-50 for bacteria, -16 for outside lab, -2 for ultracentrifugation, -51 for split receiving OC43)	0
split_pre_treatment_ID_2	zz delegation of the aliquot [2] of raw (un-treated) wastewater (-50 for bacteria, -16 for outside lab, -2 for ultracentrifugation, -51 for split receiving OC43)	0
split_pre_treatment_ID_3	zz delegation of the aliquot [3] of raw (un-treated) wastewater (-50 for bacteria, -16 for outside lab, -2 for ultracentrifugation, -51 for split receiving OC43)	0
split_pre_treatment_ID_4	zz delegation of the aliquot [4] of raw (un-treated) wastewater (-50 for bacteria, -16 for outside lab, -2 for ultracentrifugation, -51 for split receiving OC43)	0
split_pre_treatment_ID_5	zz delegation of the aliquot [5] of raw (un-treated) wastewater (-50 for bacteria, -16 for outside lab, -2 for ultracentrifugation, -51 for split receiving OC43)	0
split_pre_treatment_ID_6	zz delegation of the aliquot [6] of raw (un-treated) wastewater (-50 for bacteria, -16 for outside lab, -2 for ultracentrifugation, -51 for split receiving OC43)	0
recovery_addition	Virus similar to SARS-CoV-2 added in known quantity to confirm recovery at end of process.. was it added? Y/N	1
rec_eff_target_name	Name of the recovery efficiency control target that is spiked in	0
rec_eff_source	if recovery control added, source of recovery control	0
rec_eff_spike_matrix	Matrix into which the recovery efficiency control target is spiked	0
spiked_matrix_ID	zz delegation of the parent bottle with OC43 added (-51 matrix with the recovery control added) this sample will be salted/acidified for ENF following the possible removal of aliquots	0
rec_eff_spike_conc	Spike concentration, on average, Å of the recovery control on a per sample volume basis (particles/uL)	0
rec_eff_volume	Volume of control added (uL)	0
vol_wastewater_receiving_control	Volume of wastewater receiving control (mL)	0
rec_eff_notes	Notes about recovery control - Additional information regarding OC43 control including method for inactivation	0
spiked_matrix_aliquot	was the wastewater containing recovery spike aliquotted out prior to concentration(electronegative filtration)? intended for Manual CERES Mag Bead or Apex Concentration	0
no_aliquot_post_rec_addition_ni_EN	total number of aliquots/splits removed from parent bottle following the addition of OC43 but prior to EN concentration (per sample basis). These are the number of aliquote removed without taking into to account the main remaining volume used for EN.	0
spiked_matrix_aliquot_volume_1	Volume of the aliquot [1] removed from spiked wastewater sample (-51). Does not include the remaining volume used for EN.	0
spiked_matrix_aliquot_volume_2	Volume of the aliquot [2] removed from spiked wastewater sample (-51). Does not include the remaining volume used for EN.	0
spiked_matrix_aliquot_volume_3	Volume of the aliquot [3] removed from spiked wastewater sample (-51). Does not include the remaining volume used for EN.	0
spiked_matrix_aliquot_volume_4	Volume of the aliquot [4] removed from spiked wastewater sample (-51). Does not include the remaining volume used for EN.	0
spiked_matrix_aliquot_volume_5	Volume of the aliquot [5] removed from spiked wastewater sample (-51). Does not include the remaining volume used for EN.	0
spiked_matrix_aliquot_volume_6	Volume of the aliquot [6] removed from spiked wastewater sample (-51). Does not include the remaining volume used for EN.	0
spike_matrix_aliquot_ID_1	zz delegation of the aliquot [1] of W.W. + OC43 (-52, -19, or -54)	0
spike_matrix_aliquot_ID_2	zz delegation of the aliquot [2] of W.W. + OC43 (-52, -19, or -54)	0
spike_matrix_aliquot_ID_3	zz delegation of the aliquot [3] of W.W. + OC43 (-52, -19, or -54)	0
spike_matrix_aliquot_ID_4	zz delegation of the aliquot [4] of W.W. + OC43 (-52, -19, or -54)	0
spike_matrix_aliquot_ID_5	zz delegation of the aliquot [5] of W.W. + OC43 (-52, -19, or -54)	0
spike_matrix_aliquot_ID_6	zz delegation of the aliquot [6] of W.W. + OC43 (-52, -19, or -54)	0

SF-RAD Field Name	Definition	Importance
pre_conc_storage_time	The approximate average duration of time between when samples reach the lab and when they are concentrated (if concentrated)	0
pre_conc_storage_temp	The storage temperature of samples after reaching the lab and prior to concentration (if concentrated)	0
lab_name_to_receive_extra_sample_1	Name of outside lab 1 which wastewater samples were sent to. For labs outside of CFAR, OGSR, and WCM. This lab name also excludes Source Molecular which has its own zz (-16) and Abreu lab which also has its own zz (-24)	0
lab_extra_sample_volume_1	Volume of sample given to outside laboratory 1 (mL)	0
lab_name_to_receive_extra_sample_2	Name of outside lab 2 which wastewater samples were sent to. For labs outside of CFAR, OGSR, and WCM. This lab name also excludes Source Molecular	0
lab_extra_sample_volume_2	Volume of sample given to outside laboratory 2 (mL)	0
pre_ext_storage_time	The approximate average duration of time between when samples are concentrated (if concentrated) and when they are extracted	0
pre_ext_storage_temp	The storage temperature of samples after concentration (if concentrated) and prior to extraction	0