

**ECOTOX ASCII Data Dictionary**  
**Rev. September 2024**

**CHEMICAL\_CARRIERS**

ColumnName	DataType	PrimaryKey	NotNull	Flags	Default Value	Comment	AutoInc
carrier_id	NUMERIC(10)	PK	NN			Primary key. System generated.	
test_id	NUMERIC(11)		NN			Foreign key to TESTS parent table.	
cas_number	NUMERIC(12)		NN			Foreign key to CHEMICAL lookup table.	
chem_name	VARCHAR(500)					Chemical name.	
purpose	VARCHAR(16)					Carrier or Positive Control. Was CHEMICAL_CARRIERS.Purpose.	
grade	VARCHAR(20)					Foreign key to CHEMICAL_GRADE_CODES lookup table. Was CHEMICALINFO.ChemicalGrade; CHEMICAL_CARRIERS.Grade.	
grade_comments	VARCHAR(4000)					New field.	
formulation	VARCHAR(20)					Foreign key to CHEMICAL_FORMULATION_CODES lookup table. Was CHEMICALINFO.Formulation; CHEMICAL_CARRIERS.Formulation.	
formulation_comments	VARCHAR(4000)					New field.	
radiolabel	VARCHAR(20)					Foreign key to RADIO_LABEL_CODES lookup table. Was CHEMICALINFO.Radiolabel; CHEMICAL_CARRIERS.Radio Label.	
radiolabel_comments	VARCHAR(4000)					New field.	
purity_mean_op	VARCHAR(2)					Was CHEMICALINFO.Purity; CHEMICAL_CARRIERS.Purity.	
purity_mean	VARCHAR(10)					Was CHEMICALINFO.Purity; CHEMICAL_CARRIERS.Purity.	
purity_min_op	VARCHAR(2)					Was CHEMICALINFO.Purity; CHEMICAL_CARRIERS.Purity.	
purity_min	VARCHAR(10)					Was CHEMICALINFO.Purity; CHEMICAL_CARRIERS.Purity.	
purity_max_op	VARCHAR(2)					Was CHEMICALINFO.Purity; CHEMICAL_CARRIERS.Purity.	
purity_max	VARCHAR(10)					Was CHEMICALINFO.Purity; CHEMICAL_CARRIERS.Purity.	
purity_comments	VARCHAR(4000)					New field.	
characteristics	VARCHAR(4000)					Was CHEMICALINFO.Characteristics; CHEMICAL_CARRIERS.Characteristics.	

**CHEMICALS**

ColumnName	DataType	PrimaryKey	NotNull	Flags	Default Value	Comment	AutoInc
cas_number	NUMERIC(12)	PK	NN			Was CHEMICALS.CAS.	
chemical_name	VARCHAR(500)					Was CHEMICALS.Chemical_Name.	
ecotox_group	VARCHAR(120)					New field. Not populated.	
dtxsid	VARCHAR(20)					EPA CompTox Chemicals Dashboard unique ID. New field June 2021.	

## DOSE\_RESPONSE\_DETAILS

ColumnName	DataType	PrimaryKey	NotNull	Flags	Default Value	Comment	AutoInc
dose_resp_detail_id	NUMERIC(10)	PK	NN			Primary key - system generated.	
dose_resp_id	NUMERIC(10)		NN			Foreign key to DOSE_RESPONSES parent table.	
dose_id	NUMERIC(10)		NN			Foreign key to DOSES parent table.	
response_mean_op	VARCHAR(2)					Was RESULT.Response Mean Op.	
response_mean	VARCHAR(10)					Was RESULT.Observed Response Mean.	
response_min_op	VARCHAR(2)					Was RESULT.Response Min Op.	
response_min	VARCHAR(10)					Was RESULT.Observed Response Min.	
response_max_op	VARCHAR(2)					Was RESULT.Response Max Op.	
response_max	VARCHAR(10)					Was RESULT.Observed Response Max.	
statistical_method	VARCHAR(20)					Foreign key to DOSE_STAT_METHOD_CODES lookup table. Was RESULT.Statistical Method.	
statistical_method_comments	VARCHAR(4000)					New field.	
response_stat_value	VARCHAR(10)					Was RESULT.Observed Response Value.	
response_stat_value_comments	VARCHAR(4000)					New field.	
sample_size_mean_op	VARCHAR(2)					Was RESULT.Sample Number.	
sample_size_mean	VARCHAR(10)					Was RESULT.Sample Number.	
sample_size_min_op	VARCHAR(2)					Was RESULT.Sample Number.	
sample_size_min	VARCHAR(10)					Was RESULT.Sample Number.	
sample_size_max_op	VARCHAR(2)					Was RESULT.Sample Number.	
sample_size_max	VARCHAR(10)					Was RESULT.Sample Number.	
significance_code	VARCHAR(20)					Foreign key to STATISTICAL_SIGNIFICANCE_CODES lookup table. Was RESULT.Significant.	
significance_type	VARCHAR(2)					P, A, T, NA or NR. Derived from RESULT.Significance Level.	
significance_level_mean_op	VARCHAR(2)					Was RESULT.Significance Level.	
significance_level_mean	VARCHAR(10)					Was RESULT.Significance Level.	
significance_level_min_op	VARCHAR(2)					Was RESULT.Significance Level.	
significance_level_min	VARCHAR(10)					Was RESULT.Significance Level.	
significance_level_max_op	VARCHAR(2)					Was RESULT.Significance Level.	
significance_level_max	VARCHAR(10)					Was RESULT.Significance Level.	
significance_level_comments	VARCHAR(4000)					New field.	
chem_analysis_method	VARCHAR(20)					Foreign key to CHEMICAL_ANALYSIS_CODES lookup table. Was EXPOSURE.Method.	
chem_analysis_method_comments	VARCHAR(4000)					New field.	
dry_wet	VARCHAR(4)					D or W. Derived from RESULT.Dry Weight Percent.	
dry_wet_pct_mean_op	VARCHAR(2)					Was RESULT.Dry Weight Percent.	
dry_wet_pct_mean	VARCHAR(10)					Was RESULT.Dry Weight Percent.	
dry_wet_pct_min_op	VARCHAR(2)					Was RESULT.Dry Weight Percent.	
dry_wet_pct_min	VARCHAR(10)					Was RESULT.Dry Weight Percent.	
dry_wet_pct_max_op	VARCHAR(2)					Was RESULT.Dry Weight Percent.	
dry_wet_pct_max	VARCHAR(10)					Was RESULT.Dry Weight Percent.	
dry_wet_pct_comments	VARCHAR(4000)					New field.	

lipid_pct_mean_op	VARCHAR(2)	Was RESULT.Percent Lipid.
lipid_pct_mean	VARCHAR(10)	Was RESULT.Percent Lipid.
lipid_pct_min_op	VARCHAR(2)	Was RESULT.Percent Lipid.
lipid_pct_min	VARCHAR(10)	Was RESULT.Percent Lipid.
lipid_pct_max_op	VARCHAR(2)	Was RESULT.Percent Lipid.
lipid_pct_max	VARCHAR(10)	Was RESULT.Percent Lipid.
lipid_pct_comments	VARCHAR(4000)	New field.
dose_resp_detail_comments	VARCHAR(4000)	New field.

## DOSE\_RESPONSE\_LINKS

ColumnName	DataType	PrimaryKey	NotNull	Flags	Default Value	Comment	AutoInc
dose_resp_link_id	NUMERIC(10)	PK	NN			Primary key - system generated.	
result_id	NUMERIC(10)		NN			Foreign key to RESULTS parent table. This links to a dose-response summary RESULT record with NR endpoint.	
dose_resp_id	NUMERIC(10)		NN			Foreign key to DOSE_RESPONSES parent table.	

## DOSE\_RESPONSES

ColumnName	DataType	PrimaryKey	NotNull	Flags	Default Value	Comment	AutoInc
dose_resp_id	NUMERIC(10)	PK	NN			Primary key - system generated. Historical Dose Response records were selected from RESULTS linked to EXPOSURES with Exposure Numbers ending in "D".	
test_id	NUMERIC(11)		NN			Foreign key to TESTS parent table.	
sample_size_unit	VARCHAR(20)					Foreign key to SAMPLE_SIZE_UNIT_CODES lookup table. Was RESULT.Sample Unit.	
sample_size_comments	VARCHAR(4000)					New field.	
effect_code	VARCHAR(20)					Foreign key to EFFECT_CODES lookup table. Was RESULT.Effect.	
measurement_code	VARCHAR(20)					Foreign key to MEASUREMENT_CODES lookup table. Was RESULT.Measurement.	
measurement_comments	VARCHAR(4000)					New field.	
response_site	VARCHAR(20)					Foreign key to RESPONSE_SITE_CODES lookup table. Was RESULT.Site.	
response_site_comments	VARCHAR(4000)					New field.	
obs_duration_mean_op	VARCHAR(2)					Was RESULT.Observation Mean Op.	
obs_duration_mean	VARCHAR(10)					Was RESULT.Observation Duration Mean.	
obs_duration_min_op	VARCHAR(2)					Was RESULT.Observation Min Op.	
obs_duration_min	VARCHAR(10)					Was RESULT.Observation Duration Min.	

obs_duration_max_op	VARCHAR(2)	Was RESULT.Observation Max Op.
obs_duration_max	VARCHAR(10)	Was RESULT.Observation Duration Max.
obs_duration_unit	VARCHAR(20)	Foreign key to DURATION_UNIT_CODES lookup table. Was RESULT.Observation Duration Unit.
obs_duration_comments	VARCHAR(4000)	New field.
response_unit	VARCHAR(20)	Foreign key to CONCENTRATION_UNIT_CODES lookup table. Was RESULT.Observed Response Units.
response_comments	VARCHAR(4000)	New field.
additional_comments	VARCHAR(4000)	New field.

## DOSES

ColumnName	DataType	PrimaryKey	NotNull	Flags	Default Value	Comment	AutoInc
dose_id	NUMERIC(10)	PK	NN			Primary key - system generated.	
test_id	NUMERIC(11)		NN			Foreign key to TESTS parent table.	
dose_number	NUMERIC(3)					Was EXPOSURE.Exposure Number where ending in letter "D". Trailing "D" is dropped.	
dose_conc_unit	VARCHAR(20)					Foreign key to CONCENTRATION_UNIT_CODES lookup table. Was EXPOSURE.Dose Units.	
dose_comments	VARCHAR(4000)					New field.	
control_type	VARCHAR(20)					Foreign key to CONTROL_TYPE_CODES lookup table.	
number_organisms_mean_op	VARCHAR(2)					Was EXPOSURE.Organism Number.	
number_organisms_mean	VARCHAR(10)					Was EXPOSURE.Organism Number.	
number_organisms_min_op	VARCHAR(2)					Was EXPOSURE.Organism Number.	
number_organisms_min	VARCHAR(10)					Was EXPOSURE.Organism Number.	
number_organisms_max_op	VARCHAR(2)					Was EXPOSURE.Organism Number.	
number_organisms_max	VARCHAR(10)					Was EXPOSURE.Organism Number.	
dose1_conc_type	VARCHAR(20)					Foreign key to CONCENTRATION_TYPE_CODES lookup table. Was ACQUIRE.Concentration1Type; TEST.Remark LIKE 'CONCTYPE/'	
dose1_mean_op	VARCHAR(2)					Was EXPOSURE.Dose Mean Op.	
dose1_mean	VARCHAR(10)					Was EXPOSURE.Dose Mean.	
dose1_min_op	VARCHAR(2)					Was EXPOSURE.Dose Min Op.	
dose1_min	VARCHAR(10)					Was EXPOSURE.Dose Min.	
dose1_max_op	VARCHAR(2)					Was EXPOSURE.Dose Max Op.	
dose1_max	VARCHAR(10)					Was EXPOSURE.Dose Max.	
dose1_stat_method	VARCHAR(20)					Foreign key to DOSE_STAT_METHOD_CODES	

		lookup table. Was EXPOSURE.Statistical Method.
dose1_stat_value	VARCHAR(10)	Was EXPOSURE.Dose Value
dose2_conc_type	VARCHAR(20)	Foreign key to CONCENTRATION_TYPE_CODES lookup table. Was ACQUIRE.Concentration2Type; TEST.Remark LIKE "CONCTYPE/".
dose2_mean_op	VARCHAR(2)	Was EXPOSURE.Dose Mean Op.
dose2_mean	VARCHAR(10)	Was EXPOSURE.Dose Mean.
dose2_min_op	VARCHAR(2)	Was EXPOSURE.Dose Min Op.
dose2_min	VARCHAR(10)	Was EXPOSURE.Dose Min.
dose2_max_op	VARCHAR(2)	Was EXPOSURE.Dose Max Op.
dose2_max	VARCHAR(10)	Was EXPOSURE.Dose Max.
dose2_stat_method	VARCHAR(20)	Foreign key to DOSE_STAT_METHOD_CODES lookup table. Was EXPOSURE.Statistical Method.
dose2_stat_value	VARCHAR(10)	Was EXPOSURE.Dose Value
dose3_conc_type	VARCHAR(20)	Foreign key to CONCENTRATION_TYPE_CODES lookup table.
dose3_mean_op	VARCHAR(2)	Was EXPOSURE.Dose Mean Op.
dose3_mean	VARCHAR(10)	Was EXPOSURE.Dose Mean.
dose3_min_op	VARCHAR(2)	Was EXPOSURE.Dose Min Op.
dose3_min	VARCHAR(10)	Was EXPOSURE.Dose Min.
dose3_max_op	VARCHAR(2)	Was EXPOSURE.Dose Max Op.
dose3_max	VARCHAR(10)	Was EXPOSURE.Dose Max.
dose3_stat_method	VARCHAR(20)	Foreign key to DOSE_STAT_METHOD_CODES lookup table. Was EXPOSURE.Statistical Method.
dose3_stat_value	VARCHAR(10)	Was EXPOSURE.Dose Value
number_replicates	VARCHAR(10)	

## MEDIA\_CHARACTERISTICS

ColumnName	DataType	PrimaryKey	NotNull	Flags	Default Value	Comment	AutoInc
<b>result_id</b>	<b>NUMERIC(10)</b>	PK	NN			Foreign key link to RESULTS table (1-1).	
soil_type	VARCHAR(40)					Was TEST.Soil Type.	
media_texture_sand_mean_op	VARCHAR(2)					Was TEST.Soil Texture SA Mean Op.	
media_texture_sand_mean	VARCHAR(10)					Was TEST.Soil Texture SA Mean.	
media_texture_sand_min_op	VARCHAR(2)					Was TEST.Soil Texture SA Min Op.	
media_texture_sand_min	VARCHAR(10)					Was TEST.Soil Texture SA Min.	
media_texture_sand_max_op	VARCHAR(2)					Was TEST.Soil Texture SA Max Op.	
media_texture_sand_max	VARCHAR(10)					Was TEST.Soil Texture SA Max.	
media_texture_silt_mean_op	VARCHAR(2)					Was TEST.Soil Texture SI Mean Op.	
media_texture_silt_mean	VARCHAR(10)					Was TEST.Soil Texture SI Mean.	
media_texture_silt_min_op	VARCHAR(2)					Was TEST.Soil Texture SI Min Op.	
media_texture_silt_min	VARCHAR(10)					Was TEST.Soil Texture SI Min.	
media_texture_silt_max_op	VARCHAR(2)					Was TEST.Soil Texture SI Max Op.	
media_texture_silt_max	VARCHAR(10)					Was TEST.Soil Texture SI Max.	
media_texture_clay_mean_op	VARCHAR(2)					Was TEST.Soil Texture CL Mean Op.	
media_texture_clay_mean	VARCHAR(10)					Was TEST.Soil Texture CL Mean.	
media_texture_clay_min_op	VARCHAR(2)					Was TEST.Soil Texture CL Min Op.	
media_texture_clay_min	VARCHAR(10)					Was TEST.Soil Texture CL Min.	

media_texture_clay_max_op	VARCHAR(2)	Was TEST.Soil Texture CL Max Op.
media_texture_clay_max	VARCHAR(10)	Was TEST.Soil Texture CL Max.
media_texture_comments	VARCHAR(4000)	New field.
media_conc_measured	VARCHAR(2)	New field.
media_conc_dry_wet	VARCHAR(3)	New field.
media_conc_comments	VARCHAR(4000)	New field.
media_moisture_pct_mean_op	VARCHAR(2)	Was TEST.Soil Moisture Mean Op.
media_moisture_pct_mean	VARCHAR(10)	Was TEST.Soil Moisture Mean.
media_moisture_pct_min_op	VARCHAR(2)	Was TEST.Soil Moisture Min Op.
media_moisture_pct_min	VARCHAR(10)	Was TEST.Soil Moisture Min.
media_moisture_pct_max_op	VARCHAR(2)	Was TEST.Soil Moisture Max Op.
media_moisture_pct_max	VARCHAR(10)	Was TEST.Soil Moisture Max.
media_moisture_pct_comments	VARCHAR(4000)	New field.
media_cec_mean_op	VARCHAR(2)	Was TEST.Soil CEC Mean Op.
media_cec_mean	VARCHAR(10)	Was TEST.Soil CEC Mean.
media_cec_min_op	VARCHAR(2)	Was TEST.Soil CEC Min Op.
media_cec_min	VARCHAR(10)	Was TEST.Soil CEC Min.
media_cec_max_op	VARCHAR(2)	Was TEST.Soil CEC Max Op.
media_cec_max	VARCHAR(10)	Was TEST.Soil CEC Max.
media_cec_unit	VARCHAR(20)	Foreign key to MEDIA_CHAR_UNIT_CODES lookup table. Was TEST.Soil CEC Units.
media_cec_comments	VARCHAR(4000)	New field.
media_ph_mean_op	VARCHAR(2)	Was WATERCHARACTERISTICS.MeanValueOp (WaterCharacteristicType = 5); TEST.Soil pH Mean Op.
media_ph_mean	VARCHAR(10)	Was WATERCHARACTERISTICS.MeanValue (WaterCharacteristicType = 5); TEST.Soil pH Mean.
media_ph_min_op	VARCHAR(2)	Was WATERCHARACTERISTICS.MinValueOp (WaterCharacteristicType = 5); TEST.Soil pH Min Op.
media_ph_min	VARCHAR(10)	Was WATERCHARACTERISTICS.MinValue (WaterCharacteristicType = 5); TEST.Soil pH Min.
media_ph_max_op	VARCHAR(2)	Was WATERCHARACTERISTICS.MaxValueOp (WaterCharacteristicType = 5); TEST.Soil pH Max Op.
media_ph_max	VARCHAR(10)	Was WATERCHARACTERISTICS.MaxValue (WaterCharacteristicType = 5); TEST.Soil pH Max.
media_ph_comments	VARCHAR(4000)	New field.
media_org_matter_mean_op	VARCHAR(2)	Was TEST.Soil Organic Matter Mean Op.
media_org_matter_mean	VARCHAR(10)	Was TEST.Soil Organic Matter Mean.
media_org_matter_min_op	VARCHAR(2)	Was TEST.Soil Organic Matter Min Op.
media_org_matter_min	VARCHAR(10)	Was TEST.Soil Organic Matter Min.
media_org_matter_max_op	VARCHAR(2)	Was TEST.Soil Organic Matter Max Op.
media_org_matter_max	VARCHAR(10)	Was TEST.Soil Organic Matter Max.
media_org_matter_unit	VARCHAR(20)	Foreign key to MEDIA_CHAR_UNIT_CODES lookup table. Was TEST.Soil Organic Matter Units.
media_org_matter_type	VARCHAR(20)	Foreign key to ORGANIC_MATTER_TYPE_CODES

		lookup table. Was AQUIRE.OrganicCarbonType; TEST.Soil Organic Matter Type.
media_org_matter_comments	VARCHAR(4000)	New field.
media_temperature_mean_op	VARCHAR(2)	Was WATERCHARACTERISTICS.MaxValueOp (WaterCharacteristicType = 2).
media_temperature_mean	VARCHAR(10)	Was WATERCHARACTERISTICS.MeanValue (WaterCharacteristicType = 1).
media_temperature_min_op	VARCHAR(2)	Was WATERCHARACTERISTICS.MinValueOp (WaterCharacteristicType = 1).
media_temperature_min	VARCHAR(10)	Was WATERCHARACTERISTICS.MinValue (WaterCharacteristicType = 1).
media_temperature_max_op	VARCHAR(2)	Was WATERCHARACTERISTICS.MaxValueOp (WaterCharacteristicType = 1).
media_temperature_max	VARCHAR(10)	Was WATERCHARACTERISTICS.MaxValue (WaterCharacteristicType = 1).
media_temperature_unit	VARCHAR(20)	Foreign key to MEDIA_CHAR_UNIT_CODES lookup table. Was WATERCHARACTERISTICS.Units (WaterCharacteristicType = 1).
media_temperature_comments	VARCHAR(4000)	New field.
media_alkalinity_mean_op	VARCHAR(2)	Was WATERCHARACTERISTICS.MeanValueOp (WaterCharacteristicType = 3).
media_alkalinity_mean	VARCHAR(10)	Was WATERCHARACTERISTICS.MeanValue (WaterCharacteristicType = 3).
media_alkalinity_min_op	VARCHAR(2)	Was WATERCHARACTERISTICS.MinValueOp (WaterCharacteristicType = 3).
media_alkalinity_min	VARCHAR(10)	Was WATERCHARACTERISTICS.MinValue (WaterCharacteristicType = 3).
media_alkalinity_max_op	VARCHAR(2)	Was WATERCHARACTERISTICS.MaxValueOp (WaterCharacteristicType = 3).
media_alkalinity_max	VARCHAR(10)	Was WATERCHARACTERISTICS.MaxValue (WaterCharacteristicType = 3).
media_alkalinity_unit	VARCHAR(20)	Foreign key to MEDIA_CHAR_UNIT_CODES lookup table. Was WATERCHARACTERISTICS.Units (WaterCharacteristicType = 3).
media_alkalinity_comments	VARCHAR(4000)	New field.
media_hardness_mean_op	VARCHAR(2)	Was WATERCHARACTERISTICS.MeanValueOp (WaterCharacteristicType = 2).
media_hardness_mean	VARCHAR(10)	Was WATERCHARACTERISTICS.MeanValue (WaterCharacteristicType = 2).
media_hardness_min_op	VARCHAR(2)	Was WATERCHARACTERISTICS.MinValueOp (WaterCharacteristicType = 2).
media_hardness_min	VARCHAR(10)	Was WATERCHARACTERISTICS.MinValue (WaterCharacteristicType = 2).

media_hardness_max_op	VARCHAR(2)	Was WATERCHARACTERISTICS.MaxValueOp (WaterCharacteristicType = 2).
media_hardness_max	VARCHAR(10)	Was WATERCHARACTERISTICS.MaxValue (WaterCharacteristicType = 2).
media_hardness_unit	VARCHAR(20)	Foreign key to MEDIA_CHAR_UNIT_CODES lookup table. Was WATERCHARACTERISTICS.Units (WaterCharacteristicType = 2).
media_hardness_comments	VARCHAR(4000)	New field.
dissolved_oxygen_mean_op	VARCHAR(2)	Was WATERCHARACTERISTICS.MeanValueOp (WaterCharacteristicType = 4).
dissolved_oxygen_mean	VARCHAR(10)	Was WATERCHARACTERISTICS.MeanValue (WaterCharacteristicType = 4).
dissolved_oxygen_min_op	VARCHAR(2)	Was WATERCHARACTERISTICS.MinValueOp (WaterCharacteristicType = 4).
dissolved_oxygen_min	VARCHAR(10)	Was WATERCHARACTERISTICS.MinValue (WaterCharacteristicType = 4).
dissolved_oxygen_max_op	VARCHAR(2)	Was WATERCHARACTERISTICS.MaxValueOp (WaterCharacteristicType = 4).
dissolved_oxygen_max	VARCHAR(10)	Was WATERCHARACTERISTICS.MaxValue (WaterCharacteristicType = 4).
dissolved_oxygen_unit	VARCHAR(20)	Foreign key to MEDIA_CHAR_UNIT_CODES lookup table. Was WATERCHARACTERISTICS.Units (WaterCharacteristicType = 4).
dissolved_oxygen_comments	VARCHAR(4000)	New field.
media_salinity_mean_op	VARCHAR(2)	Was WATERCHARACTERISTICS.MeanValueOp (WaterCharacteristicType = 6).
media_salinity_mean	VARCHAR(10)	Was WATERCHARACTERISTICS.MeanValue (WaterCharacteristicType = 6).
media_salinity_min_op	VARCHAR(2)	Was WATERCHARACTERISTICS.MinValueOp (WaterCharacteristicType = 6).
media_salinity_min	VARCHAR(10)	Was WATERCHARACTERISTICS.MinValue (WaterCharacteristicType = 6).
media_salinity_max_op	VARCHAR(2)	Was WATERCHARACTERISTICS.MaxValueOp (WaterCharacteristicType = 6).
media_salinity_max	VARCHAR(10)	Was WATERCHARACTERISTICS.MaxValue (WaterCharacteristicType = 6).
media_salinity_unit	VARCHAR(20)	Foreign key to MEDIA_CHAR_UNIT_CODES lookup table. Was WATERCHARACTERISTICS.Units (WaterCharacteristicType = 6).
media_salinity_comments	VARCHAR(4000)	New field.
media_conductivity_mean_op	VARCHAR(2)	Was WATERCHARACTERISTICS.MeanValueOp (WaterCharacteristicType = 7).



media_conductivity_mean	VARCHAR(10)	Was WATERCHARACTERISTICS.MeanValue (WaterCharacteristicType = 7).
media_conductivity_min_op	VARCHAR(2)	Was WATERCHARACTERISTICS.MinValueOp (WaterCharacteristicType = 7).
media_conductivity_min	VARCHAR(10)	Was WATERCHARACTERISTICS.MinValue (WaterCharacteristicType = 7).
media_conductivity_max_op	VARCHAR(2)	Was WATERCHARACTERISTICS.MaxValueOp (WaterCharacteristicType = 7).
media_conductivity_max	VARCHAR(10)	Was WATERCHARACTERISTICS.MaxValue (WaterCharacteristicType = 7).
media_conductivity_unit	VARCHAR(20)	Foreign key to MEDIA_CHAR_UNIT_CODES lookup table. Was WATERCHARACTERISTICS.Units (WaterCharacteristicType = 7).
media_conductivity_comments	VARCHAR(4000)	New field.
media_org_carbon_mean_op	VARCHAR(2)	Was WATERCHARACTERISTICS.MeanValueOp (WaterCharacteristicType = 8).
media_org_carbon_mean	VARCHAR(10)	Was WATERCHARACTERISTICS.MeanValue (WaterCharacteristicType = 8).
media_org_carbon_min_op	VARCHAR(2)	Was WATERCHARACTERISTICS.MinValueOp (WaterCharacteristicType = 8).
media_org_carbon_min	VARCHAR(10)	Was WATERCHARACTERISTICS.MinValue (WaterCharacteristicType = 8).
media_org_carbon_max_op	VARCHAR(2)	Was WATERCHARACTERISTICS.MaxValueOp (WaterCharacteristicType = 8).
media_org_carbon_max	VARCHAR(10)	Was WATERCHARACTERISTICS.MaxValue (WaterCharacteristicType = 8).
media_org_carbon_unit	VARCHAR(20)	Foreign key to MEDIA_CHAR_UNIT_CODES lookup table. Was WATERCHARACTERISTICS.Units (WaterCharacteristicType = 8).
media_org_carbon_comments	VARCHAR(4000)	New field.
media_humic_acid_mean_op	VARCHAR(2)	New field.
media_humic_acid_mean	VARCHAR(10)	New field.
media_humic_acid_min_op	VARCHAR(2)	New field.
media_humic_acid_min	VARCHAR(10)	New field.
media_humic_acid_max_op	VARCHAR(2)	New field.
media_humic_acid_max	VARCHAR(10)	New field.
media_humic_acid_unit	VARCHAR(20)	Foreign key to MEDIA_CHAR_UNIT_CODES lookup table. New field.
media_humic_acid_comments	VARCHAR(4000)	New field.
media_calcium_mean_op	VARCHAR(2)	New field.
media_calcium_mean	VARCHAR(10)	New field.
media_calcium_min_op	VARCHAR(2)	New field.
media_calcium_min	VARCHAR(10)	New field.
media_calcium_max_op	VARCHAR(2)	New field.
media_calcium_max	VARCHAR(10)	New field.

media_calcium_unit	VARCHAR(20)	Foreign key to MEDIA_CHAR_UNIT_CODES lookup table. New field.
media_calcium_comments	VARCHAR(4000)	New field.
media_magnesium_mean_op	VARCHAR(2)	New field.
media_magnesium_mean	VARCHAR(10)	New field.
media_magnesium_min_op	VARCHAR(2)	New field.
media_magnesium_min	VARCHAR(10)	New field.
media_magnesium_max_op	VARCHAR(2)	New field.
media_magnesium_max	VARCHAR(10)	New field.
media_magnesium_unit	VARCHAR(20)	Foreign key to MEDIA_CHAR_UNIT_CODES lookup table. New field.
media_magnesium_comments	VARCHAR(4000)	New field.
media_sodium_mean_op	VARCHAR(2)	New field.
media_sodium_mean	VARCHAR(10)	New field.
media_sodium_min_op	VARCHAR(2)	New field.
media_sodium_min	VARCHAR(10)	New field.
media_sodium_max_op	VARCHAR(2)	New field.
media_sodium_max	VARCHAR(10)	New field.
media_sodium_unit	VARCHAR(20)	Foreign key to MEDIA_CHAR_UNIT_CODES lookup table. New field.
media_sodium_comments	VARCHAR(4000)	New field.
media_potassium_mean_op	VARCHAR(2)	New field.
media_potassium_mean	VARCHAR(10)	New field.
media_potassium_min_op	VARCHAR(2)	New field.
media_potassium_min	VARCHAR(10)	New field.
media_potassium_max_op	VARCHAR(2)	New field.
media_potassium_max	VARCHAR(10)	New field.
media_potassium_unit	VARCHAR(20)	Foreign key to MEDIA_CHAR_UNIT_CODES lookup table. New field.
media_potassium_comments	VARCHAR(4000)	New field.
media_sulfate_mean_op	VARCHAR(2)	New field.
media_sulfate_mean	VARCHAR(10)	New field.
media_sulfate_min_op	VARCHAR(2)	New field.
media_sulfate_min	VARCHAR(10)	New field.
media_sulfate_max_op	VARCHAR(2)	New field.
media_sulfate_max	VARCHAR(10)	New field.
media_sulfate_unit	VARCHAR(20)	Foreign key to MEDIA_CHAR_UNIT_CODES lookup table. New field.
media_sulfate_comments	VARCHAR(4000)	New field.
media_chlorine_mean_op	VARCHAR(2)	New field.
media_chlorine_mean	VARCHAR(10)	New field.
media_chlorine_min_op	VARCHAR(2)	New field.
media_chlorine_min	VARCHAR(10)	New field.
media_chlorine_max_op	VARCHAR(2)	New field.
media_chlorine_max	VARCHAR(10)	New field.
media_chlorine_unit	VARCHAR(20)	Foreign key to MEDIA_CHAR_UNIT_CODES lookup table. New field.
media_chlorine_comments	VARCHAR(4000)	New field.
media_diss_carbon_mean_op	VARCHAR(2)	New field.
media_diss_carbon_mean	VARCHAR(10)	New field.
media_diss_carbon_min_op	VARCHAR(2)	New field.

media_diss_carbon_min	VARCHAR(10)	New field.
media_diss_carbon_max_op	VARCHAR(2)	New field.
media_diss_carbon_max	VARCHAR(10)	New field.
media_diss_carbon_unit	VARCHAR(20)	Foreign key to MEDIA_CHAR_UNIT_CODES lookup table. New field.
media_diss_carbon_comments	VARCHAR(4000)	New field.
media_sulfur_mean_op	VARCHAR(2)	New field.
media_sulfur_mean	VARCHAR(10)	New field.
media_sulfur_min_op	VARCHAR(2)	New field.
media_sulfur_min	VARCHAR(10)	New field.
media_sulfur_max_op	VARCHAR(2)	New field.
media_sulfur_max	VARCHAR(10)	New field.
media_sulfur_unit	VARCHAR(20)	Foreign key to MEDIA_CHAR_UNIT_CODES lookup table. New field.
media_sulfur_comment	VARCHAR(4000)	New field.

## REFERENCES

ColumnName	DataType	PrimaryKey	NotNull	Flags	Default Value	Comment	AutoInc
<b>reference_number</b>	<b>NUMERIC(6)</b>	PK	NN			Primary Key. Was REFERENCES.ReferenceNumber.	
reference_db	VARCHAR(3)					Was REFERENCES.ReferenceDB.	
reference_type	VARCHAR(10)					Was REFERENCES.ReferenceType.	
author	VARCHAR(120)					Was REFERENCES.Author.	
title	VARCHAR(220)					Was REFERENCES.Title.	
source	VARCHAR(255)					Was REFERENCES.Source.	
publication_year	VARCHAR(4)					Was REFERENCES.PublicationYear	
doi	VARCHAR(1000)					New field.	

## RESULTS

ColumnName	DataType	PrimaryKey	NotNull	Flags	Default Value	Comment	AutoInc
<b>result_id</b>	<b>NUMERIC(10)</b>	PK	NN			Primary key. Was ACQUIRE.AcquireLocation. Historical terrestrial results were renumbered on data conversion.- see old_terretox_result_number field below for cross-reference.	AI
test_id	NUMERIC(11)		NN			Foreign key to TESTS parent table. Was RESULT.Test Record.	
sample_size_mean_op	VARCHAR(2)					Was RESULT.Sample Number.	
sample_size_mean	VARCHAR(10)					Was RESULT.Sample Number.	
sample_size_min_op	VARCHAR(2)					Was RESULT.Sample Number.	
sample_size_min	VARCHAR(10)					Was RESULT.Sample Number.	
sample_size_max_op	VARCHAR(2)					Was RESULT.Sample Number.	
sample_size_max	VARCHAR(10)					Was RESULT.Sample Number.	
sample_size_unit	VARCHAR(20)					Foreign key to SAMPLE_SIZE_UNIT_CODES lookup table. Was RESULT.Sample Unit.	
sample_size_comments	VARCHAR(4000)					New field.	
obs_duration_mean_op	VARCHAR(2)					Was ACQUIRE.TestDurationOp; RESULT.Observation Mean Op.	

obs_duration_mean	VARCHAR(10)	Was ACQUIRE.TestDuration; RESULT.Observation Duration Mean.
obs_duration_min_op	VARCHAR(2)	Was ACQUIRE.MinDurationOp; RESULT.Observation Min Op.
obs_duration_min	VARCHAR(10)	Was ACQUIRE.MinDuration; RESULT.Observation Duration Min.
obs_duration_max_op	VARCHAR(2)	Was ACQUIRE.MaxDurationOp; RESULT.Observation Max Op.
obs_duration_max	VARCHAR(10)	Was ACQUIRE.MaxDuration; RESULT.Observation Duration Max.
obs_duration_unit	VARCHAR(20)	Foreign key to DURATION_UNIT_CODES lookup table. Was ACQUIRE.DurationUnits; RESULT.Observation Duration Unit.
obs_duration_comments	VARCHAR(4000)	New field.
endpoint	VARCHAR(20)	Foreign key to ENDPOINT_CODES lookup table. Was ACQUIRE.Endpoint; RESULT.Endpoint.
endpoint_comments	VARCHAR(4000)	New field.
trend	VARCHAR(20)	Foreign key to TREND_CODES lookup table. Was ACQUIRE.Trend.
effect	VARCHAR(20)	Foreign key to EFFECT_CODES lookup table. Was ACQUIRE.Effect; RESULT.Effect.
effect_comments	VARCHAR(4000)	New field.
measurement	VARCHAR(20)	Foreign key to MEASUREMENT_CODES lookup table. Was ACQUIRE.Measurement; RESULT.Measurement.
measurement_comments	VARCHAR(4000)	Was REMARKS.Remark (RemarkType = 8).
response_site	VARCHAR(20)	Foreign key to RESPONSE_SITE_CODES lookup table. Was ACQUIRE.Tissue; RESULT.Site.
response_site_comments	VARCHAR(4000)	New field.
effect_pct_mean_op	VARCHAR(2)	Was ACQUIRE.EffectPercentMean.
effect_pct_mean	VARCHAR(10)	Was ACQUIRE.EffectPercentMean.
effect_pct_min_op	VARCHAR(2)	Was ACQUIRE.EffectPercentMin.
effect_pct_min	VARCHAR(10)	Was ACQUIRE.EffectPercentMin.
effect_pct_max_op	VARCHAR(2)	Was ACQUIRE.EffectPercentMax.
effect_pct_max	VARCHAR(10)	Was ACQUIRE.EffectPercentMax.
effect_pct_comments	VARCHAR(4000)	New field.
conc1_type	VARCHAR(20)	Foreign key to CONCENTRATION_TYPE_CODES lookup table. Was ACQUIRE.Concentration1Type.
ion1	VARCHAR(20)	Foreign key to ION_CODES lookup table. Was ACQUIRE.Ion1.
conc1_mean_op	VARCHAR(2)	Was ACQUIRE.Concentration1MeanOp; RESULT.Response Mean Op or EXPOSURE.Dose Mean Op (where endpoint is BCF/BAF).
conc1_mean	VARCHAR(20)	Was ACQUIRE.Concentration1Mean; RESULT.Observed Response Mean or EXPOSURE.Dose Mean (where endpoint is BCF/BAF).
conc1_min_op	VARCHAR(2)	Was ACQUIRE.Concentration1MinOp; RESULT.Response Min Op or EXPOSURE.Dose Min Op (where endpoint is BCF/BAF).

conc1_min	VARCHAR(20)	Was ACQUIRE.Concentration1Min; RESULT.Observed Response Min or EXPOSURE.Dose Min (where endpoint is BCF/BAF).
conc1_max_op	VARCHAR(2)	Was ACQUIRE.Concentration1MaxOp; RESULT.Response Max Op or EXPOSURE.Dose Max Op (where endpoint is BCF/BAF).
conc1_max	VARCHAR(20)	Was ACQUIRE.Concentration1Max; RESULT.Observed Response Max or EXPOSURE.Dose Max (where endpoint is BCF/BAF).
conc1_unit	VARCHAR(20)	Foreign key to CONCENTRATION_UNIT_CODES lookup table. Was ACQUIRE.ConcentrationUnits; RESULT.Observed Response Units or Exposure.Dose Units (where endpoint is BCF/BAF).
conc1_comments	VARCHAR(4000)	New field.
conc2_type	VARCHAR(20)	Foreign key to CONCENTRATION_TYPE_CODES lookup table. Was ACQUIRE.Concentration2Type.
ion2	VARCHAR(20)	Foreign key to ION_CODES lookup table. Was ACQUIRE.Ion2.
conc2_mean_op	VARCHAR(2)	Was ACQUIRE.Concentration2MeanOp; RESULT.Response Mean Op or EXPOSURE.Dose Mean Op (where endpoint is BCF/BAF).
conc2_mean	VARCHAR(20)	Was ACQUIRE.Concentration2Mean; RESULT.Observed Response Mean or EXPOSURE.Dose Mean (where endpoint is BCF/BAF).
conc2_min_op	VARCHAR(2)	Was ACQUIRE.Concentration2MinOp; RESULT.Response Min Op or EXPOSURE.Dose Min Op (where endpoint is BCF/BAF).
conc2_min	VARCHAR(20)	Was ACQUIRE.Concentration2Min; RESULT.Observed Response Min or EXPOSURE.Dose Min (where endpoint is BCF/BAF).
conc2_max_op	VARCHAR(2)	Was ACQUIRE.Concentration2MaxOp; RESULT.Response Max Op or EXPOSURE.Dose Max Op (where endpoint is BCF/BAF).
conc2_max	VARCHAR(20)	Was ACQUIRE.Concentration2Max; RESULT.Observed Response Max or EXPOSURE.Dose Max (where endpoint is BCF/BAF).
conc2_unit	VARCHAR(20)	Foreign key to CONCENTRATION_UNIT_CODES lookup table. Was ACQUIRE.ConcentrationUnits; RESULT.Observed Response Units or Exposure.Dose Units (where endpoint is BCF/BAF).
conc2_comments	VARCHAR(4000)	New field.
conc3_type	VARCHAR(20)	Foreign key to CONCENTRATION_TYPE_CODES lookup table.
ion3	VARCHAR(20)	Foreign key to ION_CODES lookup table.

conc3_mean_op	VARCHAR(2)	Was RESULT.Response Mean Op or EXPOSURE.Dose Mean Op (where endpoint is BCF/BAF).
conc3_mean	VARCHAR(20)	Was RESULT.Observed Response Mean or EXPOSURE.Dose Mean (where endpoint is BCF/BAF).
conc3_min_op	VARCHAR(2)	Was RESULT.Response Min Op or EXPOSURE.Dose Min Op (where endpoint is BCF/BAF).
conc3_min	VARCHAR(20)	Was RESULT.Observed Response Min or EXPOSURE.Dose Min (where endpoint is BCF/BAF).
conc3_max_op	VARCHAR(2)	Was RESULT.Response Max Op or EXPOSURE.Dose Max Op (where endpoint is BCF/BAF).
conc3_max	VARCHAR(20)	Was RESULT.Observed Response Max or EXPOSURE.Dose Max (where endpoint is BCF/BAF).
conc3_unit	VARCHAR(20)	Foreign key to CONCENTRATION_UNIT_CODES lookup table. Was RESULT.Observed Response Units or Exposure.Dose Units (where endpoint is BCF/BAF).
conc3_comments	VARCHAR(4000)	New field.
bcf1_mean_op	VARCHAR(2)	Was ACQUIRE.BCF1MeanOp; RESULT.Response Mean Op (where endpoint is BCF/BAF).
bcf1_mean	VARCHAR(10)	Was ACQUIRE.BCF1Mean; Was RESULT.Observed Response Mean (where endpoint is BCF/BAF).
bcf1_min_op	VARCHAR(2)	Was ACQUIRE.BCF1MinOp; Was RESULT.Response Min Op (where endpoint is BCF/BAF).
bcf1_min	VARCHAR(10)	Was ACQUIRE.BCF1Min; Was RESULT.Observed Response Min (where endpoint is BCF/BAF).
bcf1_max_op	VARCHAR(2)	Was ACQUIRE.BCF1MaxOp; Was RESULT.Response Max Op (where endpoint is BCF/BAF).
bcf1_max	VARCHAR(10)	Was ACQUIRE.BCF1Max; Was RESULT.Observed Response Max (where endpoint is BCF/BAF).
bcf1_unit	VARCHAR(20)	Foreign key to CONCENTRATION_UNIT_CODES lookup table. Was RESULT.Observed Response Units.
bcf1_comments	VARCHAR(4000)	New field.
bcf2_mean_op	VARCHAR(2)	Was ACQUIRE.BCF2MeanOp; RESULT.Response Mean Op (where endpoint is BCF/BAF).
bcf2_mean	VARCHAR(10)	Was ACQUIRE.BCF2Mean; Was RESULT.Observed Response Mean (where endpoint is BCF/BAF).
bcf2_min_op	VARCHAR(2)	Was ACQUIRE.BCF2MinOp; Was RESULT.Response Min Op (where endpoint is BCF/BAF).
bcf2_min	VARCHAR(10)	Was ACQUIRE.BCF2Min; Was RESULT.Observed Response Min (where endpoint is BCF/BAF).
bcf2_max_op	VARCHAR(2)	Was ACQUIRE.BCF2MaxOp; Was RESULT.Response Max Op (where endpoint is BCF/BAF).

bcf2_max	VARCHAR(10)	Was ACQUIRE.BCF2Max; Was RESULT.Observed Response Max (where endpoint is BCF/BAF).
bcf2_unit	VARCHAR(20)	Foreign key to CONCENTRATION_UNIT_CODES lookup table. Was RESULT.Observed Response Units.
bcf2_comments	VARCHAR(4000)	New field.
bcf3_mean_op	VARCHAR(2)	Was RESULT.Response Mean Op (where endpoint is BCF/BAF).
bcf3_mean	VARCHAR(10)	Was RESULT.Response Mean (where endpoint is BCF/BAF).
bcf3_min_op	VARCHAR(2)	Was RESULT.Response Min Op (where endpoint is BCF/BAF).
bcf3_min	VARCHAR(10)	Was RESULT.Response Min (where endpoint is BCF/BAF).
bcf3_max_op	VARCHAR(2)	Was RESULT.Response Max Op (where endpoint is BCF/BAF).
bcf3_max	VARCHAR(10)	Was RESULT.Response Max (where endpoint is BCF/BAF).
bcf3_unit	VARCHAR(2)	Foreign key to CONCENTRATION_UNIT_CODES lookup table. Was RESULT.Observed Response Units.
bcf3_comments	VARCHAR(4000)	New field.
significance_code	VARCHAR(20)	Foreign key to STATISTICAL_SIGNIFICANCE_CODES lookup table. Was ACQUIRE.Significant; RESULT.Significant.
significance_type	VARCHAR(2)	P, A, T, NA or NR. Derived from ACQUIRE.StatisticalSignificance; RESULT.Significance Level.
significance_level_mean_op	VARCHAR(2)	Was ACQUIRE.StatisticalSignificance; RESULT.Significance Level.
significance_level_mean	VARCHAR(15)	Was ACQUIRE.StatisticalSignificance; RESULT.Significance Level.
significance_level_min_op	VARCHAR(2)	Was ACQUIRE.StatisticalSignificance; RESULT.Significance Level.
significance_level_min	VARCHAR(15)	Was ACQUIRE.StatisticalSignificance; RESULT.Significance Level.
significance_level_max_op	VARCHAR(2)	Was ACQUIRE.StatisticalSignificance; RESULT.Significance Level.
significance_level_max	VARCHAR(15)	Was ACQUIRE.StatisticalSignificance; RESULT.Significance Level.
significance_comments	VARCHAR(4000)	New field.
chem_analysis_method	VARCHAR(20)	Foreign key to CHEMICAL_ANALYSIS_CODES lookup table. Was ACQUIRE.TestMethod; EXPOSURE.Method.
chem_analysis_method_comments	VARCHAR(4000)	New field.
endpoint_assigned	VARCHAR(2)	Foreign key to ENDPOINT_ASSIGNED_CODES lookup table. Was ACQUIRE.EndpointAssigned.
organism_final_wt_mean_op	VARCHAR(2)	New field.
organism_final_wt_mean	VARCHAR(10)	New field.
organism_final_wt_min_op	VARCHAR(2)	New field.
organism_final_wt_min	VARCHAR(10)	New field.
organism_final_wt_max_op	VARCHAR(2)	New field.
organism_final_wt_max	VARCHAR(10)	New field.

organism_final_wt_unit	VARCHAR(20)	Foreign key to WEIGHT_UNIT_CODES lookup table. New field.
organism_final_wt_comments	VARCHAR(4000)	New field.
intake_rate_mean_op	VARCHAR(2)	New field.
intake_rate_mean	VARCHAR(10)	New field.
intake_rate_min_op	VARCHAR(2)	New field.
intake_rate_min	VARCHAR(10)	New field.
intake_rate_max_op	VARCHAR(2)	New field.
intake_rate_max	VARCHAR(10)	New field.
intake_rate_unit	VARCHAR(20)	Foreign key to CONCENTRATION_UNIT_CODES lookup table. New field.
intake_rate_comments	VARCHAR(4000)	New field.
lipid_pct_mean_op	VARCHAR(2)	Was RESULT.Percent Lipid
lipid_pct_mean	VARCHAR(10)	Was RESULT.Percent Lipid
lipid_pct_min_op	VARCHAR(2)	Was RESULT.Percent Lipid
lipid_pct_min	VARCHAR(10)	Was RESULT.Percent Lipid
lipid_pct_max_op	VARCHAR(2)	Was RESULT.Percent Lipid
lipid_pct_max	VARCHAR(10)	Was RESULT.Percent Lipid
lipid_pct_comments	VARCHAR(4000)	New field.
dry_wet	VARCHAR(4)	Derived from RESULT.Dry Weight Percent.
dry_wet_pct_mean_op	VARCHAR(2)	Was RESULT.Dry Weight Percent.
dry_wet_pct_mean	VARCHAR(10)	Was RESULT.Dry Weight Percent.
dry_wet_pct_min_op	VARCHAR(2)	Was RESULT.Dry Weight Percent.
dry_wet_pct_min	VARCHAR(10)	Was RESULT.Dry Weight Percent.
dry_wet_pct_max_op	VARCHAR(2)	Was RESULT.Dry Weight Percent.
dry_wet_pct_max	VARCHAR(10)	Was RESULT.Dry Weight Percent.
dry_wet_pct_comments	VARCHAR(4000)	New field.
steady_state	VARCHAR(2)	New field.
additional_comments	VARCHAR(4000)	Was REMARKS.Remark (RemarkType = 4); RESULT.Result Remark.
companion_tag	VARCHAR(4000)	New field.
old_terretox_result_number	NUMERIC(10)	Was RESULT.Record Number.
created_date	DATE	Was ACQUIRE.CreationDate; TEST.Creation Date.
modified_date	DATE	Was ACQUIRE.ModifyDate; TEST.Modify Date.

## SPECIES

ColumnName	DataType	PrimaryKey	NotNull	Flags	Default	Value	Comment	AutoInc
<b>species_number</b>	<b>NUMERIC(10)</b>	PK	NN				Primary Key. Was SPECIES_DATA_FILE.SpeciesID; SPECIES_TAXONOMY.species_number.	
common_name	VARCHAR(60)						Was SPECIES_DATA_FILE.CommonName; SPECIES_TAXONOMY.common_name.	
latin_name	VARCHAR(100)						Was SPECIES_DATA_FILE.LatinName; SPECIES_TAXONOMY.latin_name.	
kingdom	VARCHAR(10)						Was SPECIES_DATA_FILE.Kingdom; SPECIES_TAXONOMY.kingdom.	
phylum_division	VARCHAR(35)						Was SPECIES_TAXONOMY.phylum_division.	
subphylum_div	VARCHAR(35)						Was SPECIES_TAXONOMY.subphylum_div.	



superclass	VARCHAR(35)	Was SPECIES_TAXONOMY.superclass.
class	VARCHAR(35)	Was SPECIES_TAXONOMY.class.
tax_order	VARCHAR(35)	Was SPECIES_TAXONOMY.tax_order.
family	VARCHAR(35)	Was SPECIES_TAXONOMY.family.
genus	VARCHAR(35)	Was SPECIES_TAXONOMY.genus.
species	VARCHAR(35)	Was SPECIES_TAXONOMY.species.
subspecies	VARCHAR(35)	Was SPECIES_TAXONOMY.subspecies.
variety	VARCHAR(35)	Was SPECIES_TAXONOMY.variety.
ecotox_group	VARCHAR(120)	Was SPECIES_GROUPS.species_group (now comma-separated list).
ncbi_taxid	NUMERIC(10)	

## SPECIES\_SYNONYMS

ColumnName	DataType	PrimaryKey	NotNull	Flags	Default Value	Comment	AutoInc
species_number	NUMERIC(10)	PK	NN			Foreign key to SPECIES parent table.	
latin_name	VARCHAR(100)	PK	NN			Was SPECIES_LATIN_NAMES (synonym = S).	

## TESTS

ColumnName	DataType	PrimaryKey	NotNull	Flags	Default Value	Comment	AutoInc
test_id	NUMERIC(11)	PK	NN			Primary key. Was TEST.Record Number; new ID generated for Aquatic.	
reference_number	NUMERIC(6)		NN			Foreign key to REFERENCES lookup table. Was ACQUIRE.ReferenceNumber; TEST.Reference Number.	
test_cas	NUMERIC(12)		NN			Foreign key to CHEMICALS lookup table. Was ACQUIRE.TestCAS; TEST.Test CAS.	
test_grade	VARCHAR(20)					Foreign key to CHEMICAL_GRADE_CODES lookup table. Was ACQUIRE.TestGrade; TEST.Test Grade.	
test_grade_comments	VARCHAR(4000)					New field.	
test_formulation	VARCHAR(20)					Foreign key to CHEMICAL_FORMULATION_CODES lookup table. Was ACQUIRE.TestFormulation; TEST.Test Formulation.	
test_formulation_comments	VARCHAR(4000)					New field.	
test_radiolabel	VARCHAR(20)					Foreign key to RADIO_LABEL_CODES lookup table. Was ACQUIRE.TestRadioLabel; TEST.Test Radio Label.	
test_radiolabel_comments	VARCHAR(4000)					New field.	
test_purity_mean_op	VARCHAR(2)					Was ACQUIRE.TestPurity; TEST.Test Purity.	
test_purity_mean	VARCHAR(10)					Was ACQUIRE.TestPurity; TEST.Test Purity.	
test_purity_min_op	VARCHAR(2)					Was ACQUIRE.TestPurity; TEST.Test Purity.	
test_purity_min	VARCHAR(10)					Was ACQUIRE.TestPurity; TEST.Test Purity.	
test_purity_max_op	VARCHAR(2)					Was ACQUIRE.TestPurity; TEST.Test Purity.	
test_purity_max	VARCHAR(10)					Was ACQUIRE.TestPurity; TEST.Test Purity.	

test_purity_comments	VARCHAR(4000)		New field.
test_characteristics	VARCHAR(4000)		Was ACQUIRE.TestCharacteristics; TEST.Test Characteristics
species_number	NUMERIC(10)	NN	Foreign key to SPECIES lookup table. Was ACQUIRE.SpeciesNumber; TEST.Species Number.
organism_habitat	VARCHAR(11)	NN	New field. Aquatic = Water; Terrestrial = Soil or NonSoil.
organism_source	VARCHAR(20)		Foreign key to ORGANISM_SOURCE_CODES lookup table. Was TEST.Organism Source.
organism_source_comments	VARCHAR(4000)		New field.
organism_lifestage	VARCHAR(20)		Foreign key to LIFESTAGE_CODES lookup table. Was ACQUIRE.Lifestage; TEST.Lifestage.
organism_lifestage_comments	VARCHAR(4000)		New field.
organism_age_mean_op	VARCHAR(2)		Was ACQUIRE.Age; TEST.Age.
organism_age_mean	VARCHAR(10)		Was ACQUIRE.Age; TEST.Age.
organism_age_min_op	VARCHAR(2)		Was ACQUIRE.Age; TEST.Age.
organism_age_min	VARCHAR(10)		Was ACQUIRE.Age; TEST.Age.
organism_age_max_op	VARCHAR(2)		Was ACQUIRE.Age; TEST.Age.
organism_age_max	VARCHAR(10)		Was ACQUIRE.Age; TEST.Age.
organism_age_unit	VARCHAR(20)		Foreign key to DURATION_UNIT_CODES lookup table. Was ACQUIRE.AgeUnit; TEST.Age Units.
organism_init_wt_mean_op	VARCHAR(2)		New field.
organism_init_wt_mean	VARCHAR(10)		New field.
organism_init_wt_min_op	VARCHAR(2)		New field.
organism_init_wt_min	VARCHAR(10)		New field.
organism_init_wt_max_op	VARCHAR(2)		New field.
organism_init_wt_max	VARCHAR(10)		New field.
organism_init_wt_unit	VARCHAR(20)		Foreign key to WEIGHT_UNIT_CODES
organism_length_mean_op	VARCHAR(2)		
organism_length_mean	VARCHAR(10)		
organism_length_min_op	VARCHAR(2)		
organism_length_min	VARCHAR(10)		
organism_length_max_op	VARCHAR(2)		
organism_length_max	VARCHAR(10)		
organism_length_unit	VARCHAR(20)		Foreign key to LENGTH_UNIT_CODES lookup table.
organism_length_type	VARCHAR(20)		Foreign key to LENGTH_TYPE_CODES lookup table.
organism_strain	VARCHAR(4000)		
organism_characteristics	VARCHAR(4000)		Was ACQUIRE.OrganismCharacteristics; TEST.Organism Characteristics.
organism_gender	VARCHAR(6)		Foreign key to GENDER_CODES lookup table. Was EXPOSURE.Sex.
experimental_design	VARCHAR(4000)		Was REMARKS.Remark (RemarkType = 2).
study_duration_mean_op	VARCHAR(2)		Was TEST.Study Mean Op.
study_duration_mean	VARCHAR(10)		Was TEST.Study Mean.
study_duration_min_op	VARCHAR(2)		Was TEST.Study Min Op.
study_duration_min	VARCHAR(10)		Was TEST.Study Min.
study_duration_max_op	VARCHAR(2)		Was TEST.Study Max Op.
study_duration_max	VARCHAR(10)		Was TEST.Study Max.
			Foreign key to DURATION_UNIT_CODES

study_duration_unit	VARCHAR(20)	lookup table. Was TEST.Study Duration Unit.
study_duration_comments	VARCHAR(4000)	New field.
exposure_duration_mean_op	VARCHAR(2)	Was TEST.Exposure Mean Op.
exposure_duration_mean	VARCHAR(10)	Was TEST.Exposure Mean.
exposure_duration_min_op	VARCHAR(2)	Was TEST.Exposure Min Op.
exposure_duration_min	VARCHAR(10)	Was TEST.Exposure Min.
exposure_duration_max_op	VARCHAR(2)	Was TEST.Exposure Max Op.
exposure_duration_max	VARCHAR(10)	Was TEST.Exposure Max.
exposure_duration_unit	VARCHAR(20)	Foreign key to DURATION_UNIT_CODES lookup table. Was TEST.Exposure Duration Unit.
exposure_duration_comments	VARCHAR(4000)	New field.
study_type	VARCHAR(20)	Foreign key to FIELD_STUDY_TYPE_CODES lookup table. Was ACQUIRE.StudyType.
study_type_comments	VARCHAR(4000)	New field.
test_type	VARCHAR(20)	Foreign key to TEST_TYPE_CODES lookup table. New field.
test_type_comments	VARCHAR(4000)	New field.
test_location	VARCHAR(20)	Foreign key to TEST_LOCATION_CODES lookup table. Was ACQUIRE.TestLocation; TEST.Test Location.
test_location_comments	VARCHAR(4000)	New field.
test_method	VARCHAR(20)	Foreign key to TEST_METHOD_CODES lookup table. Was ACQUIRE.TestMethod.
test_method_comments	VARCHAR(4000)	New field.
exposure_type	VARCHAR(20)	Foreign key to EXPOSURE_TYPE_CODES lookup table. Was ACQUIRE.ExposureType; TEST.Exposure Type
exposure_type_comments	VARCHAR(4000)	New field.
control_type	VARCHAR(20)	Foreign key to CONTROL_TYPE_CODES lookup table. Was ACQUIRE.StudyControl; TEST.Control Type.
control_type_comments	VARCHAR(4000)	New field.
media_type	VARCHAR(20)	Foreign key to MEDIA_TYPE_CODES lookup table. Was ACQUIRE.WaterType; TEST.Media Type.
media_type_comments	VARCHAR(4000)	New field.
num_doses_mean_op	VARCHAR(2)	Was TEST.Dose Number.
num_doses_mean	VARCHAR(10)	Was TEST.Dose Number.
num_doses_min_op	VARCHAR(2)	Was TEST.Dose Number.
num_doses_min	VARCHAR(10)	Was TEST.Dose Number.
num_doses_max_op	VARCHAR(2)	Was TEST.Dose Number.
num_doses_max	VARCHAR(10)	Was TEST.Dose Number.
num_doses_comments	VARCHAR(4000)	New field.
other_effect_comments	VARCHAR(4000)	Was REMARKS.Remark (RemarkType = 3).
application_freq_mean_op	VARCHAR(2)	ACQUIRE.ApplicationFrequencyValue; TEST.Application Freq Value.
application_freq_mean	VARCHAR(10)	Was ACQUIRE.ApplicationFrequencyValue; TEST.Application Freq Value.
application_freq_min_op	VARCHAR(2)	Was ACQUIRE.ApplicationFrequencyValue; TEST.Application Freq Value.

application_freq_min	VARCHAR(10)	Was AQUIRE.ApplicationFrequencyValue; TEST.Application Freq Value.
application_freq_max_op	VARCHAR(2)	Was AQUIRE.ApplicationFrequencyValue; TEST.Application Freq Value.
application_freq_max	VARCHAR(10)	Was AQUIRE.ApplicationFrequencyValue; TEST.Application Freq Value.
application_freq_unit	VARCHAR(20)	Foreign key to APPLICATION_FREQUENCY_CODES lookup table. Was AQUIRE.ApplicationFrequencyUnits; TEST.Application Freq Units.
application_freq_comments	VARCHAR(4000)	New field.
application_type	VARCHAR(20)	Foreign key to APPLICATION_TYPE_CODES lookup table. Was FIELDSTUDY.ApplicationType.
application_type_comments	VARCHAR(4000)	New field.
application_rate	VARCHAR(10)	Was FIELDSTUDY.ApplicationRate.
application_rate_unit	VARCHAR(20)	Foreign key to CONCENTRATION_UNIT_CODES lookup table. Was FIELDSTUDY.ApplicatonUnits.
application_date	VARCHAR(15)	Was FIELDSTUDY.ApplicationDate.
application_date_comments	VARCHAR(4000)	New field.
application_season	VARCHAR(20)	Foreign key to SEASON_CODES lookup table. Was FIELDSTUDY.ApplicationSeason.
application_season_comments	VARCHAR(4000)	New field.
subhabitat	VARCHAR(20)	Foreign key to HABITAT_CODES lookup table. Was FIELDSTUDY.HabitatCode.
subhabitat_description	VARCHAR(4000)	Was FIELDSTUDY.Habitat.
substrate	VARCHAR(20)	Foreign key to SUBSTRATE_CODES lookup table. Was FIELDSTUDY.SubstrateCode.
substrate_comments	VARCHAR(4000)	Was FIELDSTUDY.SubstrateDescription.
water_depth_mean_op	VARCHAR(2)	Was WATERCHARACTERISTICS.MeanValueOp (WaterCharcteristicType = 9).
water_depth_mean	VARCHAR(10)	Was WATERCHARACTERISTICS.MeanValue (WaterCharcteristicType = 9).
water_depth_min_op	VARCHAR(2)	Was WATERCHARACTERISTICS.MinValueOp (WaterCharcteristicType = 9).
water_depth_min	VARCHAR(10)	Was WATERCHARACTERISTICS.MinValue (WaterCharcteristicType = 9).
water_depth_max_op	VARCHAR(2)	Was WATERCHARACTERISTICS.MaxValueOp (WaterCharcteristicType = 9).
water_depth_max	VARCHAR(10)	Was WATERCHARACTERISTICS.MaxValue (WaterCharcteristicType = 9).
water_depth_unit	VARCHAR(20)	Foreign key to MEDIA_CHAR_UNIT_CODES lookup table. Was WATERCHARACTERISTICS.Units (WaterCharcteristicType = 9).

water_depth_comments	VARCHAR(4000)				New field.
geographic_code	VARCHAR(20)				Foreign key to GEOGRAPHIC_CODES lookup table. Was FIELDSTUDY.Geocode.
geographic_location	VARCHAR(4000)				New field.
latitude	VARCHAR(30)				Was FIELDSTUDY.Latitude.
longitude	VARCHAR(30)				Was FIELDSTUDY.Longitude.
halfife_mean_op	VARCHAR(2)				Was FIELDSTUDY.HalfifeMean.
halfife_mean	VARCHAR(10)				Was FIELDSTUDY.HalfifeMean.
halfife_min_op	VARCHAR(2)				Was FIELDSTUDY.HalfifeMin.
halfife_min	VARCHAR(10)				Was FIELDSTUDY.HalfifeMin.
halfife_max_op	VARCHAR(2)				Was FIELDSTUDY.HalfifeMax.
halfife_max	VARCHAR(10)				Was FIELDSTUDY.HalfifeMax.
halfife_unit	VARCHAR(20)				Foreign key to DURATION_UNIT_CODES lookup table. Was FIELDSTUDY.HalfifeTimeUnit.
halfife_comments	VARCHAR(4000)				New field.
additional_comments	VARCHAR(4000)				Was TEST.Remark.
created_date	DATE				Was ACQUIRE.CreationDate; TEST.Creation Date.
modified_date	DATE				Was ACQUIRE.ModifyDate; TEST.Modify Date.
published_date	DATE				Was ACQUIRE.DataPublishedDate;