

1.0 STRUCTURE SET B_Sample_Sample_Summary

Note that edit rules listed in the Optionality column and in the Permitted Value List (where certain values are only accepted as stated) apply to “for compliance” samples; that is, samples where field 13 (B_Compliance_Indicator) is “Y.” Setting this indicator to “N” bypasses most of the edit checks imposed on “for compliance” samples except those noted in field 13 as well as the permitted value edit checks for fields that have permitted values (that simply ensure that the permitted value supplied is one of the valid values for that field).

See note (Item 5) at the end of file layout (1.4) for detailed description of sample/result uniqueness evaluation. *Sampling via EDI* Release 8.0 evaluates uniqueness *exactly* as it did in Release 7.0. Uniqueness information for sample/result has been removed from the Optionality column of the pertinent sample/result fields for File Layouts 1/2.1, 1/2.2, 1/2.3, and 1/2.4 and moved to the single location at the end of file layout 1.4 in order to clarify how the software evaluates uniqueness for individual samples/results.

1.1 B_Sample_Sample_Summary File Layout for Total Coliform

B_SAMPLE_SAMPLE_SUMMARY					
FIELD NO	FIELD NAME	DOMAIN	SIZE	POSITION	OPTIONALITY
1.	B_RECORD_NAME	AN	3	1 - 3	MANDATORY - Field must = HDR
2.	B_REPORT_TYPE	AN	1	4	MANDATORY - Field must = T
3.	B_TRANSACTION_NUMBER	AN	10	5 - 14	NOT USED (Blank Fill)
4.	B_LAB_SAMPLE_NUMBER	AN	20	15 - 34	MANDATORY
5.	B_STATE_SAMPLE_NUMBER	AN	20	35 - 54	OPTIONAL
6.	B_WATER_SYSTEM_NUMBER	AN	11	55 - 65	MANDATORY
6.A *	B_REPLACEMENT_INDICATOR	AN	1	66	OPTIONAL
7.	B_STATE_LABORATORY_NUMBER	AN	10	67 - 76	CONDITIONALLY MANDATORY - Must be valued if field 8 (B_FEDERAL_LABORATORY_NUMBER) is not valued.
8.	B_FEDERAL_LABORATORY_NUMBER	AN	10	77 - 86	CONDITIONALLY MANDATORY - Must be valued if field 7 (B_STATE_LABORATORY_NUMBER) is not valued.

* Designates field with permitted values.

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+ Shaded gray blocks designate changes to previously published Structure Sets.

B_SAMPLE_SAMPLE_SUMMARY					
FIELD NO	FIELD NAME	DOMAIN	SIZE	POSITION	OPTIONALITY
9.	B_WATER_FACILITY_STATE_CODE	AN	12	87 - 98	MANDATORY - Must belong to the Water System supplied in field 6 (B_WATER_SYSTEM_NUMBER).
10.	B_SAMPLING_POINT	AN	11	99 - 109	CONDITIONALLY MANDATORY - Must be valued if field 11 (B_SAMPLING_LOCATION) is not valued.
11.	B_SAMPLING_LOCATION	AN	20	110 - 129	CONDITIONALLY MANDATORY - Must be valued if field 10 (B_SAMPLING_POINT) is not valued.
12.*	B_SAMPLE_CATEGORY	AN	2	130 - 131	MANDATORY - Must equal "TC" or "MB."
13.*	B_COMPLIANCE_INDICATOR	AN	1	132	MANDATORY - If not valued, <i>Migration to SDWIS/STATE</i> will set to "Y." If set to N, sample only needs to have field 4 B_LAB_SAMPLE_NUMBER, field 7 B_STATE_LABORATORY_NUMBER, field 12 B_SAMPLE_CATEGORY, field 14 B_COLLECTION_DATE, and field 16 B_SAMPLE_TYPE valued to create the sample. If other data are supplied with the sample, they should be accepted with the sample, but the above are all that is necessary to enter a "not for compliance" sample.
14.	B_COLLECTION_DATE	DT	8	133 - 140	MANDATORY - Value must be less than or equal to the current date.
15.	B_COLLECTION_TIME	TM	6	141 - 146	OPTIONAL
16.*	B_SAMPLE_TYPE	AN	2	147 - 148	MANDATORY - If this field is not valued, <i>Migration to SDWIS/STATE</i> will set to "RT" which is defined as "Routine."
17.*	B_REPEAT_LOCATION_CODE	AN	2	149 - 150	OPTIONAL
18.	B_LAB_RECEIPT_DATE_SAMPLE	DT	8	151 - 158	OPTIONAL
19.	B_COLLECTOR_IDENTIFICATION_NUMBER	AN	5	159 - 163	NOT USED (Blank Fill)

* Designates field with permitted values.

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+ Shaded gray blocks designate changes to previously published Structure Sets.

B_SAMPLE_SAMPLE_SUMMARY					
FIELD NO	FIELD NAME	DOMAIN	SIZE	POSITION	OPTIONALITY
20.	B_COLLECTOR_NAME	AN	40	164 - 203	OPTIONAL - If supplied, format must be: LASTNAME, FIRSTNAME (There is a single space after the comma) if collector is an Individual (Legal Entity). Otherwise, value is stored with Sample as Informal Collector.
21.*	B_SAMPLE_VOLUME	AN	9	204 - 212	OPTIONAL
22.*	B_LEAD_COPPER_SAMPLE_TYPE	AN	3	213 - 215	NOT USED (Blank Fill)
23.*	B_SAMPLE_REJECTION_REASON	AN	2	216 - 217	OPTIONAL - If this field is valued (e.g., for a rejected sample), the sample may be inserted without the sample result. This is the only condition where a sample may be inserted without a result.
24.	B_COLLECTION_METHOD_CODE	AN	12	218 - 229	OPTIONAL
25.	B_ORIGINAL_LAB_SAMPLE_NUMBER	AN	20	230 - 249	CONDITIONALLY MANDATORY - This field must be valued if field 16 (B_SAMPLE_TYPE) = "RP" or if field 6.A (B_REPLACEMENT_INDICATOR) = "Y."
26.	B_LAB_COMPOSITE_NUMBER	AN	20	250 - 269	NOT USED (Blank Fill)
27.	B_COMPOSITE_DATE	DT	8	270 - 277	NOT USED (Blank Fill)
28.*	B_COMPOSITE_INDICATOR	AN	1	278	NOT USED (Blank Fill)
29.*	B_COMPOSITE_QUARTER	AN	1	279	NOT USED (Blank Fill)
30.	B_ANALYTE_CODE	AN	4	280 - 283	NOT USED (Blank Fill)
31.	B_CAS_NUMBER	AN	10	284 - 293	NOT USED (Blank Fill)
32.	B_MONITORING_PERIOD_START_DATE	DT	8	294 - 301	NOT USED (Blank Fill)
33.	B_MONITORING_PERIOD_END_DATE	DT	8	302 - 309	NOT USED (Blank Fill)
34.	B_ANALYSIS_METHOD_CODE	AN	12	310 - 321	NOT USED (Blank Fill)
35.	B_FREE_CHLORINE_RESIDUAL	N	5 (4(2))	322 - 326	OPTIONAL - Note that if valued with spaces, the software will populate field TSAMCSMP.FF_CHLOR_RES_MSR with null.

* Designates field with permitted values.

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B_SAMPLE_SAMPLE_SUMMARY					
FIELD NO	FIELD NAME	DOMAIN	SIZE	POSITION	OPTIONALITY
36.	B_TOTAL_CHLORINE_RESIDUAL	N	5 (4(2))	327 - 331	OPTIONAL - Note that if valued with spaces, the software will populate field TSAMCSMP.FLDTOT_CHL_RES_MSR with null.
37.	B_SAMPLE_WATER_TEMPERATURE	N	4 (3(1))	332 - 335	OPTIONAL - Note that if valued with spaces, the software will populate field TSAMCSMP.FIELD_TEMP_MSR with null.
38.*	B_TEMPERATURE_UNIT_MEASURE	AN	1	336	CONDITIONALLY MANDATORY - This field must be valued if field 37 (B_SAMPLE_WATER_TEMPERATURE) is valued.
39.	B_TURBIDITY_MEASURE	N	6 (5(2))	337 - 342	OPTIONAL - Note that if valued with spaces, the software will populate field TSAMCSMP.FIELD_TURBID_MSR with null.
40.	B_PH_MEASURE	N	5 (4(1))	343 - 347	OPTIONAL - Note that if valued with spaces, the software will populate field TSAMCSMP.FIELD_PH_MEASURE with null.
41.	B_FLOW_RATE	N	8 (7(4))	348 - 355	OPTIONAL - Note that if valued with spaces, the software will populate field TSAMCSMP.FIELD_FLOW_RATE with null.
	FILLER		20	356 - 375	Blank fill to make fixed record length of 375.

* Designates field with permitted values.

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1.2 B_Sample_Sample_Summary File Layout for Chemical and Lead & Copper

B_SAMPLE_SAMPLE_SUMMARY					
FIELD NO	FIELD NAME	DOMAIN	SIZE	POSITION	OPTIONALITY
1.	B_RECORD_NAME	AN	3	1 - 3	MANDATORY - Field must = HDR.
2.	B_REPORT_TYPE	AN	1	4	MANDATORY - Field must = T.
3.	B_TRANSACTION_NUMBER	AN	10	5 - 14	NOT USED (Blank Fill)
4.	B_LAB_SAMPLE_NUMBER	AN	20	15 - 34	MANDATORY
5.	B_STATE_SAMPLE_NUMBER	AN	20	35 - 54	OPTIONAL
6.	B_WATER_SYSTEM_NUMBER	AN	11	55 - 65	MANDATORY
6.A *	B_REPLACEMENT_INDICATOR	AN	1	66	OPTIONAL
7.	B_STATE_LABORATORY_NUMBER	AN	10	67 - 76	CONDITIONALLY MANDATORY - Must be valued if field 8 (B_FEDERAL_LABORATORY_NUMBER) is not valued.
8.	B_FEDERAL_LABORATORY_NUMBER	AN	10	77 - 86	CONDITIONALLY MANDATORY - Must be valued if field 7 (B_STATE_LABORATORY_NUMBER) is not valued.
9.	B_WATER_FACILITY_STATE_CODE	AN	12	87 - 98	MANDATORY - Must belong to the Water System supplied in field 6 (B_WATER_SYSTEM_NUMBER).
10.	B_SAMPLING_POINT	AN	11	99 - 109	CONDITIONALLY MANDATORY - Must be valued if field 11 (B_SAMPLING_LOCATION) is not valued.
11.	B_SAMPLING_LOCATION	AN	20	110 - 129	CONDITIONALLY MANDATORY - Must be valued if field 10 (B_SAMPLING_POINT) is not valued.
12.*	B_SAMPLE_CATEGORY	AN	2	130 - 131	MANDATORY - Field must = "PB" or "CH."

* Designates field with permitted values.

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B_SAMPLE_SAMPLE_SUMMARY					
FIELD NO	FIELD NAME	DOMAIN	SIZE	POSITION	OPTIONALITY
13.*	B_COMPLIANCE_INDICATOR	AN	1	132	MANDATORY - If not valued, <i>Migration to SDWIS/STATE</i> will set to "Y." If set to N, sample only needs to have field 4 B_LAB_SAMPLE_NUMBER, field 7 B_STATE_LABORATORY_NUMBER, field 12 B_SAMPLE_CATEGORY, field 14 B_COLLECTION_DATE, and field 16 B_SAMPLE_TYPE valued to create the sample. If other data are supplied with the sample, they should be accepted with the sample, but the above are all that is necessary to enter a "not for compliance" sample.
14.	B_COLLECTION_DATE	DT	8	133 - 140	MANDATORY
15.	B_COLLECTION_TIME	TM	6	141 - 146	OPTIONAL
16.*	B_SAMPLE_TYPE	AN	2	147 - 148	MANDATORY - If this field is not valued, <i>Migration to SDWIS/STATE</i> will set to "RT" which is defined as "Routine."
17.*	B_REPEAT_LOCATION_CODE	AN	2	149 - 150	NOT USED (Blank Fill)
18.	B_LAB_RECEIPT_DATE_SAMPLE	DT	8	151 - 158	OPTIONAL
19.	B_COLLECTOR_IDENTIFICATION_NUMB	AN	5	159 - 163	NOT USED (Blank Fill)
20.	B_COLLECTOR_NAME	AN	40	164 - 203	OPTIONAL - If supplied, format must be: LASTNAME, FIRSTNAME (there is a single space after the comma) if collector is an Individual (Legal Entity). Otherwise, value is stored with Sample as Informal Collector.
21.*	B_SAMPLE_VOLUME	AN	9	204 - 212	NOT USED (Blank Fill)
22.*	B_LEAD_COPPER_SAMPLE_TYPE	AN	3	213 - 215	OPTIONAL

* Designates field with permitted values.

+ Shaded gray blocks designate changes to previously published Structure Sets.

B_SAMPLE_SAMPLE_SUMMARY					
FIELD NO	FIELD NAME	DOMAIN	SIZE	POSITION	OPTIONALITY
23.*	B_SAMPLE_REJECTION_REASON	AN	2	216 - 217	OPTIONAL - If this field is valued (e.g., for a rejected sample), the sample may be inserted without the sample result. This is the only condition where a sample may be inserted without a result.
24.	B_COLLECTION_METHOD_CODE	AN	12	218 - 229	OPTIONAL
25.	B_ORIGINAL_LAB_SAMPLE_NUMBER	AN	20	230 - 249	CONDITIONALLY MANDATORY - This field must be valued if field 16 (B_SAMPLE_TYPE) = "CO" or "RP" and field 30 (B_ANALYTE_CODE) = "1040" (Nitrate) or "1041" (Nitrite).
26.	B_LAB_COMPOSITE_NUMBER	AN	20	250 - 269	NOT USED (Blank Fill)
27.	B_COMPOSITE_DATE	DT	8	270 - 277	NOT USED (Blank Fill)
28.*	B_COMPOSITE_INDICATOR	AN	1	278	NOT USED (Blank Fill)
29.*	B_COMPOSITE_QUARTER	AN	1	279	NOT USED (Blank Fill)
30.	B_ANALYTE_CODE	AN	4	280 - 283	NOT USED (Blank Fill)
31.	B_CAS_NUMBER	AN	10	284 - 293	NOT USED (Blank Fill)
32.	B_MONITORING_PERIOD_START_DATE	DT	8	294 - 301	NOT USED (Blank Fill)
33.	B_MONITORING_PERIOD_END_DATE	DT	8	302 - 309	NOT USED (Blank Fill)
34.	B_ANALYSIS_METHOD_CODE	AN	12	310 - 321	NOT USED (Blank Fill)
35.	B_FREE_CHLORINE_RESIDUAL	N	5 (4(2))	322 - 326	NOT USED (Blank Fill)
36.	B_TOTL_CHLORINE_RESIDUAL	N	5 (4(2))	327 - 331	NOT USED (Blank Fill)
37.	B_SAMPLE_WATER_TEMPERATURE	N	4 (3(1))	332 - 335	NOT USED (Blank Fill)
38.*	B_TEMPERATURE_UNIT_MEASURE	AN	1	336	NOT USED (Blank Fill)
39.	B_TURBIDITY_MEASURE	N	6 (5(2))	337-342	NOT USED (Blank Fill)
40.	B_PH_MEASURE	N	5 (4(1))	343-347	NOT USED (Blank Fill)
41.	B_FLOW_RATE	N	8 (7(4))	348-355	NOT USED (Blank Fill)

* Designates field with permitted values.

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+ Shaded gray blocks designate changes to previously published Structure Sets.

B_SAMPLE_SAMPLE_SUMMARY					
FIELD NO	FIELD NAME	DOMAIN	SIZE	POSITION	OPTIONALITY
	FILLER		20	356 - 375	Blank fill to make fixed record length of 375.

* Designates field with permitted values.

+ Shaded gray blocks designate changes to previously published Structure Sets.

1.3 B_Sample_Sample_Summary File Layout for Radionuclide

B_SAMPLE_SAMPLE_SUMMARY					
FIELD NO	FIELD NAME	DOMAIN	SIZE	POSITION	OPTIONALITY
1.	B_RECORD_NAME	AN	3	1 - 3	MANDATORY - Field must = HDR
2.	B_REPORT_TYPE	AN	1	4	MANDATORY - Field must = T
3.	B_TRANSACTION_NUMBER	AN	10	5 - 14	NOT USED (Blank Fill)
4.	B_LAB_SAMPLE_NUMBER	AN	20	15 - 34	MANDATORY - If B_COMPOSITE_INDICATOR = Y the uniqueness check described at the end of file layout 1.4 additionally checks if the value in field 29 (B_COMPOSITE_QUARTER) is either 1, 2, 3, or 4 to ensure that a composite sample of the quarter supplied does not already exist for the Rad Composite Group.
5.	B_STATE_SAMPLE_NUMBER	AN	20	35 - 54	OPTIONAL
6.	B_WATER_SYSTEM_NUMBER	AN	11	55 - 65	MANDATORY - If B_COMPOSITE_INDICATOR = Y the uniqueness check described at the end of file layout 1.4 additionally checks if the value in field 29 (B_COMPOSITE_QUARTER) is either 1, 2, 3, or 4 to ensure that a composite sample of the quarter supplied does not already exist for the Rad Composite Group.
6.A *	B_REPLACEMENT_INDICATOR	AN	1	66	OPTIONAL
7.	B_STATE_LABORATORY_NUMBER	AN	10	67 - 76	CONDITIONALLY MANDATORY - Must be valued if field 8 (B_FEDERAL_LABORATORY_NUMBER) is not valued. If (B_COMPOSITE_INDICATOR) = Y the uniqueness check described at the end of file layout 1.4 additionally checks if the value in field 29 (B_COMPOSITE_QUARTER) is either 1, 2, 3, or 4 to ensure that a composite sample of the quarter supplied does not already exist for the Rad Composite Group.

* Designates field with permitted values.

B_SAMPLE_SAMPLE_SUMMARY					
FIELD NO	FIELD NAME	DOMAIN	SIZE	POSITION	OPTIONALITY
8.	B_FEDERAL_LABORATORY_NUMBER	AN	10	77 - 86	CONDITIONALLY MANDATORY - Must be valued if field 7 (B_STATE_LABORATORY_NUMBER) is not valued. If (B_COMPOSITE_INDICATOR) = Y the uniqueness check described at the end of file layout 1.4 additionally checks if the value in field 29 (B_COMPOSITE_QUARTER) is either 1, 2, 3, or 4 to ensure that a composite sample of the quarter supplied does not already exist for the Rad Composite Group.
9.	B_WATER_FACILITY_STATE_CODE	AN	12	87 - 98	MANDATORY - Must belong to the Water System supplied in field 6 (B_WATER_SYSTEM_NUMBER).
10.	B_SAMPLING_POINT	AN	11	99 - 109	CONDITIONALLY MANDATORY - Must be valued if field 11 (B_SAMPLING_LOCATION) is not valued.
11.	B_SAMPLING_LOCATION	AN	20	110 - 129	CONDITIONALLY MANDATORY - Must be valued if field 10 (B_SAMPLING_POINT) is not valued.
12.*	B_SAMPLE_CATEGORY	AN	2	130 - 131	MANDATORY - Must equal "RA."
13.*	B_COMPLIANCE_INDICATOR	AN	1	132	MANDATORY - If not valued, <i>Migration to SDWIS/STATE</i> will set to "Y." If set to N, sample only needs to have field 4 B_LAB_SAMPLE_NUMBER, field 7 B_STATE_LABORATORY_NUMBER, field 12 B_SAMPLE_CATEGORY, field 14 B_COLLECTION_DATE, and field 16 B_SAMPLE_TYPE valued to create the sample. If other data are supplied with the sample, they should be accepted with the sample, but the above are all that is necessary to enter a "not for compliance" sample.

* Designates field with permitted values.

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B_SAMPLE_SAMPLE_SUMMARY					
FIELD NO	FIELD NAME	DOMAIN	SIZE	POSITION	OPTIONALITY
14.	B_COLLECTION_DATE	DT	8	133 - 140	MANDATORY - If (B_COMPOSITE_INDICATOR) = Y the uniqueness check described at the end of file layout 1.4 additionally checks if the value in field 29 (B_COMPOSITE_QUARTER) is either 1, 2, 3, or 4 to ensure that a composite sample of the quarter supplied does not already exist for the Rad Composite Group.
15.	B_COLLECTION_TIME	TM	6	141 - 146	OPTIONAL
16.*	B_SAMPLE_TYPE	AN	2	147 - 148	MANDATORY - If this field is not valued, <i>Migration to SDWIS/STATE</i> will set to "RT" which is defined as "Routine."
17.*	B_REPEAT_LOCATION_CODE	AN	2	149 - 150	NOT USED (Blank Fill)
18.	B_LAB_RECEIPT_DATE_SAMPLE	DT	8	151 - 158	OPTIONAL
19.	B_COLLECTOR_IDENTIFICATION_NUMB	AN	5	159 - 163	NOT USED (Blank Fill)
20.	B_COLLECTOR_NAME	AN	40	164 - 203	OPTIONAL - If supplied, format must be: LASTNAME, FIRSTNAME (there is a single space after the comma) if collector is an Individual (Legal Entity). Otherwise, value is stored with Sample as Informal Collector.
21.*	B_SAMPLE_VOLUME	AN	9	204 - 212	NOT USED (Blank Fill)
22.*	B_LEAD_COPPER_SAMPLE_TYPE	AN	3	213 - 215	NOT USED (Blank Fill)
23.*	B_SAMPLE_REJECTION_REASON	AN	2	216 - 217	OPTIONAL - If this field is valued (e.g., for a rejected sample), the sample may be inserted without the sample result. This is the only condition where a sample may be inserted without a result.
24.	B_COLLECTION_METHOD_CODE	AN	12	218 - 229	OPTIONAL
25.	B_ORIGINAL_LAB_SAMPLE_NUMBER	AN	20	230 - 249	OPTIONAL

* Designates field with permitted values.

+ Shaded gray blocks designate changes to previously published Structure Sets.

B_SAMPLE_SAMPLE_SUMMARY					
FIELD NO	FIELD NAME	DOMAIN	SIZE	POSITION	OPTIONALITY
26.	B_LAB_COMPOSITE_NUMBER	AN	20	250 - 269	<p>CONDITIONALLY MANDATORY - Must be valued if field 28 (B_COMPOSITE_INDICATOR) is valued. All samples that are part of the composite must share the same B_LAB_COMPOSITE_NUMBER or they will not be linked within the same composite family. When valued, and field 26 (B_COMPOSITE_QUARTER) = 2, 3, 4 or null (for the reference composite sample that contains the composite results), the software attempts to retrieve a composite Rad sample of this criteria.</p> <p>If (B_COMPOSITE_INDICATOR) = Y the uniqueness check described at the end of file layout 1.4 additionally checks if the value in field 29 (B_COMPOSITE_QUARTER) is either 1, 2, 3, or 4 to ensure that a composite sample of the quarter supplied does not already exist for the Rad Composite Group.</p>
27.	B_COMPOSITE_DATE	DT	8	270 - 277	OPTIONAL
28.*	B_COMPOSITE_INDICATOR	AN	1	278	CONDITIONALLY MANDATORY - Must be valued if field 26 (B_LAB_COMPOSITE_NUMBER) is valued. Setting this field to Y triggers the identification of a sample as a composite.
29.*	B_COMPOSITE_QUARTER	AN	1	279	CONDITIONALLY MANDATORY - Must be valued if field 26 (B_LAB_COMPOSITE_NUMBER) is valued. The software expects that when the four Rad quarterly composite samples are supplied, the one for the first quarter will always be first. Encountering a 1 in this field triggers the software to create the composite parent record to which all subsequent composite member samples (e.g., the samples for quarters 2, 3, and 4) will be linked. Since this action only occurs with a 1, the software will not be able to properly process the results if the

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B_SAMPLE_SAMPLE_SUMMARY					
FIELD NO	FIELD NAME	DOMAIN	SIZE	POSITION	OPTIONALITY
					<p>composite samples for quarters 2, 3, 4, or the final Rad Composite with the results (Rad Quarter is null) are reported prior to that for quarter 1.</p> <p>This field should contain null when the final composite results are reported. The software will understand that the composited results are being reported when it encounters a sample where Sample Category = RA and Composite Indicator = Y and Rad Quarter Code = null. It will then attempt to retrieve an existing composite sample where Sample Category = RA and Composite Indicator = Y and Rad Quarter Code = 1 and Water System No., Lab St ID, and Lab Composite No. match the values supplied.</p> <p>The software will:</p> <ul style="list-style-type: none"> • Reject a composite sample other than for quarter 1 if it cannot find the matching parent composite sample for quarter 2, 3, 4, or the reported Composite with the result (Rad Quarter Code = null). • Reject a composite sample if the quarter supplied already exists for the Rad Composite Group (e.g., if Rad Quarter 2 is supplied, but the composite group already has a Rad Quarter 2). • Ignore any results reported with the Composite samples for either Quarters 1, 2, 3, or 4 and will only recognize results when it encounters a sample where Sample Category = RA and Composite Indicator = Y and Rad Quarter Code = null. <p>See additional information at the end of file layout 1.4 on Rad</p>

* Designates field with permitted values.

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B_SAMPLE_SAMPLE_SUMMARY					
FIELD NO	FIELD NAME	DOMAIN	SIZE	POSITION	OPTIONALITY
					Composite samples.
30.	B_ANALYTE_CODE	AN	4	280 - 283	NOT USED (Blank Fill)
31.	B_CAS_NUMBER	AN	10	284 - 293	NOT USED (Blank Fill)
32.	B_MONITORING_PERIOD_START_DATE	DT	8	294 - 301	NOT USED (Blank Fill)
33.	B_MONITORING_PERIOD_END_DATE	DT	8	302 - 309	NOT USED (Blank Fill)
34.	B_ANALYSIS_METHOD_CODE	AN	12	310 - 321	NOT USED (Blank Fill)
35.	B_FREE_CHLORINE_RESIDUAL	N	5 (4(2))	322 - 326	NOT USED (Blank Fill)
36.	B_TOTL_CHLORINE_RESIDUAL	N	5 (4(2))	327 - 331	NOT USED (Blank Fill)
37.	B_SAMPLE_WATER_TEMPERATURE	N	4 (3(1))	332 - 335	NOT USED (Blank Fill)
38.*	B_TEMPERATURE_UNIT_MEASURE	AN	1	336	NOT USED (Blank Fill)
39.	B_TURBIDITY_MEASURE	N	6 (5(2))	337 - 342	NOT USED (Blank Fill)
40.	B_PH_MEASURE	N	5 (4(1))	343 - 347	NOT USED (Blank Fill)
41.	B_FLOW_RATE	N	8 (7(4))	348 - 355	NOT USED (Blank Fill)
	FILLER		20	356 - 375	Blank fill to make fixed record length of 375.

* Designates field with permitted values.

1.4 B_Sample_Sample_Summary File Layout for Water Quality

B_SAMPLE_SAMPLE_SUMMARY					
FIELD NO	FIELD NAME	DOMAIN	SIZE	POSITION	OPTIONALITY
1.	B_RECORD_NAME	AN	3	1 - 3	MANDATORY - Field must = HDR.
2.	B_REPORT_TYPE	AN	1	4	MANDATORY - Field must = T.
3.	B_TRANSACTION_NUMBER	AN	10	5 - 14	NOT USED (Blank Fill)
4.	B_LAB_SAMPLE_NUMBER	AN	20	15 - 34	MANDATORY
5.	B_STATE_SAMPLE_NUMBER	AN	20	35 - 54	OPTIONAL
6.	B_WATER_SYSTEM_NUMBER	AN	11	55 - 65	MANDATORY
6.A *	B_REPLACEMENT_INDICATOR	AN	1	66	OPTIONAL
7.	B_STATE_LABORATORY_NUMBER	AN	10	67 - 76	CONDITIONALLY MANDATORY - Must be valued if field 8 (B_FEDERAL_LABORATORY_NUMBER) is not valued.
8.	B_FEDERAL_LABORATORY_NUMBER	AN	10	77 - 86	CONDITIONALLY MANDATORY - Must be valued if field 7 (B_STATE_LABORATORY_NUMBER) is not valued.
9.	B_WATER_FACILITY_STATE_CODE	AN	12	87 - 98	MANDATORY - Must belong to the Water System supplied in field 6 (B_WATER_SYSTEM_NUMBER).
10.	B_SAMPLING_POINT	AN	11	99 - 109	CONDITIONALLY MANDATORY - Must be valued if field 11 (B_SAMPLING_LOCATION) is not valued.
11.	B_SAMPLING_LOCATION	AN	20	110 - 129	CONDITIONALLY MANDATORY - Must be valued if field 10 (B_SAMPLING_POINT) is not valued.
12.*	B_SAMPLE_CATEGORY	AN	2	130 - 131	MANDATORY - Field must = "PP."

* Designates field with permitted values.

B_SAMPLE_SAMPLE_SUMMARY					
FIELD NO	FIELD NAME	DOMAIN	SIZE	POSITION	OPTIONALITY
13.*	B_COMPLIANCE_INDICATOR	AN	1	132	MANDATORY - If not valued, <i>Migration to SDWIS/STATE</i> will set to "Y." If set to N, sample only needs to have field 4 B_LAB_SAMPLE_NUMBER, field 7 B_STATE_LABORATORY_NUMBER, field 12 B_SAMPLE_CATEGORY, field 14 B_COLLECTION_DATE, and field 16 B_SAMPLE_TYPE valued to create the sample. If other data are supplied with the sample, they should be accepted with the sample, but the above are all that is necessary to enter a "not for compliance" sample.
14.	B_COLLECTION_DATE	DT	8	133 - 140	MANDATORY
15.	B_COLLECTION_TIME	TM	6	141 - 146	OPTIONAL
16.*	B_SAMPLE_TYPE	AN	2	147 - 148	MANDATORY - If this field is not valued, <i>Migration to SDWIS/STATE</i> will set to "RT" which is defined as "Routine."
17.*	B_REPEAT_LOCATION_CODE	AN	2	149 - 150	NOT USED (Blank Fill)
18.	B_LAB_RECEIPT_DATE_SAMPLE	DT	8	151 - 158	OPTIONAL
19.	B_COLLECTOR_IDENTIFICATION_NUMB	AN	5	159 - 163	NOT USED (Blank Fill)
20.	B_COLLECTOR_NAME	AN	40	164 - 203	OPTIONAL - If supplied, format must be: LASTNAME, FIRSTNAME (there is a single space after the comma) if collector is an Individual (Legal Entity). Otherwise, value is stored with Sample as Informal Collector.
21.*	B_SAMPLE_VOLUME	AN	9	204 - 212	NOT USED (Blank Fill)
22.*	B_LEAD_COPPER_SAMPLE_TYPE	AN	3	213 - 215	NOT USED (Blank Fill)

* Designates field with permitted values.

B_SAMPLE_SAMPLE_SUMMARY					
FIELD NO	FIELD NAME	DOMAIN	SIZE	POSITION	OPTIONALITY
23.*	B_SAMPLE_REJECTION_REASON	AN	2	216 - 217	OPTIONAL - If this field is valued (e.g., for a rejected sample), the sample may be inserted without the sample result. This is the only condition where a sample may be inserted without a result.
24.	B_COLLECTION_METHOD_CODE	AN	12	218 - 229	OPTIONAL
25.	B_ORIGINAL_LAB_SAMPLE_NUMBER	AN	20	230 - 249	OPTIONAL
26.	B_LAB_COMPOSITE_NUMBER	AN	20	250 - 269	NOT USED (Blank Fill)
27.	B_COMPOSITE_DATE	DT	8	270 - 277	NOT USED (Blank Fill)
28.*	B_COMPOSITE_INDICATOR	AN	1	278	NOT USED (Blank Fill)
29.*	B_COMPOSITE_QUARTER	AN	1	279	NOT USED (Blank Fill)
30.	B_ANALYTE_CODE	AN	4	280 - 283	NOT USED (Blank Fill)
31.	B_CAS_NUMBER	AN	10	284 - 293	NOT USED (Blank Fill)
32.	B_MONITORING_PERIOD_START_DATE	DT	8	294 - 301	NOT USED (Blank Fill)
33.	B_MONITORING_PERIOD_END_DATE	DT	8	302 - 309	NOT USED (Blank Fill)
34.	B_ANALYSIS_METHOD_CODE	AN	12	310 - 321	NOT USED (Blank Fill)
35.	B_FREE_CHLORINE_RESIDUAL	N	5 (4(2))	322 - 326	NOT USED (Blank Fill)
36.	B_TOTL_CHLORINE_RESIDUAL	N	5 (4(2))	327 - 331	NOT USED (Blank Fill)
37.	B_SAMPLE_WATER_TEMPERATURE	N	4 (3(1))	332 - 335	NOT USED (Blank Fill)
38.*	B_TEMPERATURE_UNIT_MEASURE	AN	1	336	NOT USED (Blank Fill)
39.	B_TURBIDITY_MEASURE	N	6 (5(2))	337 - 342	NOT USED (Blank Fill)
40.	B_PH_MEASURE	N	5 (4(1))	343 - 347	NOT USED (Blank Fill)
41.	B_FLOW_RATE	N	8 (7(4))	348 - 355	NOT USED (Blank Fill)
	FILLER		20	356 - 375	Blank fill to make fixed record length of 375.

* Designates field with permitted values.

1. *Sampling via EDI* supports appending sample results to a sample for analytes that do not already exist for the sample.
2. *Sampling via EDI* supports adding a sample, including one that is not rejected, without a result. This means that Rad Composite samples that have been taken during the first, second, third, and fourth quarters but that have not yet been assessed for a composite result can be reported to/recorded in the SDWIS/STATE database.
3. Checks for Rad Compositing:
 - The software will continue to require that the composite sample for the first quarter be reported first, as specified in the structure set (B_COMPOSITE_QUARTER = 1). The software will continue to create the composite parent sample followed by the first child composite sample (whose Rad Quarter Code will be 1). Note that if you have previously applied the results and wish to append new results at a later date, you may do so. In order to check whether the Composite Sample and results exist, the software applies the evaluation logic described in item 5 with the additional check that for a composite sample (Composite Indicator = Y), Composite Number and Rad Quarter Number are also part of the evaluation.
 - B_LAB_COMPOSITE_NUMBER must be valued if field 28 (B_COMPOSITE_INDICATOR) is valued. All samples that are part of the composite must share the same B_LAB_COMPOSITE_NUMBER, Water System Number, and Laboratory ID, or they will not be linked within the same composite family. [Where composite samples are reported as the lab receives them and before the assessment takes place, labs will need to supply the composite number when they report the first quarterly composite as well as with subsequent quarterly composite samples.] When valued, and field 26 (B_COMPOSITE_QUARTER) = (2, 3, 4, or null) software attempts to retrieve a composite Rad sample based on following criteria:
 - (Sample Category = RA) and (Composite Indicator = Y) and (Water System No = [candidate sample's Water System No.]) and (Lab Composite Number = [candidate sample's Lab Composite Number]) and (Laboratory = [candidate sample's Laboratory ID]).
 - If found and (B_COMPOSITE_QUARTER) = (2, 3, or 4) the software finds the parent composite and links the new candidate child composite sample to the parent, adding the new candidate composite sample to the composite family. If found and (B_COMPOSITE_QUARTER) = null, the software updates the Parent Composite Sample (with the Composite Date) and then links each of the results reported with the Composite Sample to the Parent Composite Sample as well as each of the samples in the composite group.
 - Where Sample Category = RA and Composite Indicator = Y and Rad Quarter Code = null, the software understands that this is a *reference* composite sample and does not process it through the sample uniqueness check.
 - SDWIS/STATE will always create the parent composite sample when the composite sample for Rad Quarter 1 is reported. The software assumes the business condition that composite Rad samples will typically have two to four but no more than ten results. If the final Composite with the results is reported prior to one of the quarterly composite samples, it will be linked to the composite group but will not have any sample results.

- When migrating historical composite samples, migrate the composite sample for each Rad quarter (e.g., 1, 2, 3, or 4) without including the results; migrate the results with a “fifth” composite sample where Rad quarter is null (valued with spaces). Any results reported with Rad Composite samples for quarters 1, 2, 3, or 4 will be ignored; the only result reported for a Composite Rad sample that will be processed is the one reported for the final Composite, that is, where Rad quarter is null (valued with spaces). The Composite Date value reported for this composite will update the Parent Composite sample.
4. When the software creates a new Sampling Point, it sets the following values:
- Activity Status—“A.”
 - Status Date—value in B_COLLECTION_DATE.
 - Status Reason Text—“created by *Sampling via EDI*.”
5. Appending New Analytical Results and Sample/Result Uniqueness Evaluation:

In *Sampling via EDI*, new analytical results can be appended to an existing sample. Therefore, SDWIS/STATE first evaluates whether the sample supplied in the structure set already exists. This is a two-stage evaluation. First, the software checks to see if a sample with the same Lab Sample Number for the same Laboratory for the same year already exists. If not, it processes the sample as a new record. However, if it finds a match, then it performs a second evaluation to make sure that the sample is a "duplicate by ID" sample. In this second step, the software checks to see if the sample in the structure set is for the same water system and sampling point and has the same sample collection date (Collection End Date) as the one that already exists in SDWIS/STATE. If one or more of these three criteria do not match, then the sample is rejected as a "duplicate by ID" sample (the same ID used on more than one sample from the same lab for the same year). If, however, all three data elements do match, the software understands that the user wishes to "append" results, and therefore, lists the sample as "accepted" in the *Sampling via EDI* report, because it actually just processes those sample results that are to be appended to the existing referenced sample. The software makes only one duplicate check on appended results: does a result already exist for this same sample and analyte? If not, the result is appended to the existing sample. If a result does already exist for the same sample and analyte, the candidate result is not created in the SDWIS/STATE tables, but rather, is flagged in the EDI report for that run. Note: This processing allows you to use *Sampling via EDI* to enter a sample without any results.

With the append feature, when a *Sampling via EDI* structure set file contains a sample with results that have already been added to the database, the sample is listed as accepted but the results are listed in the flagged report, indicating that they were already present and therefore not appended. If you check the flagged report, you might think a new sample has been added, when in fact, the software encountered an existing sample and result and flagged it as such.

1.5 B_Sample_Sample_Summary File Layout for Sample Summary

B_SAMPLE_SAMPLE_SUMMARY					
FIELD NO	FIELD NAME	DOMAIN	SIZE	POSITION	OPTIONALITY
1.	B_RECORD_NAME	AN	3	1 - 3	MANDATORY - Field must = HDR
2.	B_REPORT_TYPE	AN	1	4	MANDATORY - Field must = S
3.	B_TRANSACTION_NUMBER	AN	10	5 - 14	NOT USED (Blank Fill)
4.	B_LAB_SAMPLE_NUMBER	AN	20	15 - 34	NOT USED (Blank Fill)
5.	B_STATE_SAMPLE_NUMBER	AN	20	35 - 54	NOT USED (Blank Fill)
6.	B_WATER_SYSTEM_NUMBER	AN	11	55 - 65	MANDATORY - Uniqueness/Duplicate check is on the combination of field 6 (B_WATER_SYSTEM_NUMBER), and field 30 (B_ANALYTE_CODE), and field 32 (B_MONITORING_PERIOD_START_DATE), and field 33 (B_MONITORING_PERIOD_END_DATE).
6.A*	B_REPLACEMENT_INDICATOR	AN	1	66	NOT USED (Blank Fill)
7.	B_STATE_LABORATORY_NUMBER	AN	10	67 - 76	OPTIONAL
8.	B_FEDERAL_LABORATORY_NUMBER	AN	10	77 - 86	OPTIONAL
9.	B_WATER_FACILITY_STATE_CODE	AN	12	87 - 98	CONDITIONALLY MANDATORY - If field 30 (B_ANALYTE_CODE) = "PB90" or "CU90," must have a valid water system facility. If supplied, must belong to the Water System supplied in field 6 (B_WATER_SYSTEM_NUMBER) .
10.	B_SAMPLING_POINT	AN	11	99 - 109	OPTIONAL
11.	B_SAMPLING_LOCATION	AN	20	110 - 129	OPTIONAL
12.*	B_SAMPLE_CATEGORY	AN	2	130 - 131	NOT USED (Blank Fill)
13.*	B_COMPLIANCE_INDICATOR	AN	1	132	MANDATORY - If not valued, <i>Migration to SDWIS/STATE</i> will set to "Y."

* Designates field with permitted values.

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+ Shaded gray blocks designate changes to previously published Structure Sets.

B_SAMPLE_SAMPLE_SUMMARY					
FIELD NO	FIELD NAME	DOMAIN	SIZE	POSITION	OPTIONALITY
14.	B_COLLECTION_DATE (For Sample Summary (17.5), this field is used for the Summary Collection Start Date)	DT	8	133 - 140	OPTIONAL - If valued, must be less than or equal to the current date.
15.	B_COLLECTION_TIME	TM	6	141 - 146	NOT USED (Blank Fill)
16.*	B_SAMPLE_TYPE	AN	2	147 - 148	NOT USED (Blank Fill)
17.*	B_REPEAT_LOCATION_CODE	AN	2	149 - 150	NOT USED (Blank Fill)
18.	B_LAB_RECEIPT_DATE_SAMPLE	DT	8	151 - 158	OPTIONAL
19.	B_COLLECTOR_IDENTIFICATION_NUMB	AN	5	159 - 163	NOT USED (Blank Fill)
20.	B_COLLECTOR_NAME	AN	40	164 - 203	NOT USED (Blank Fill)
21*	B_SAMPLE_VOLUME	AN	9	204 - 212	NOT USED (Blank Fill)
22.*	B_LEAD_COPPER_SAMPLE_TYPE	AN	3	213 - 215	NOT USED (Blank Fill)
23.*	B_SAMPLE_REJECTION_REASON	AN	2	216 - 217	NOT USED (Blank Fill)
24.	B_COLLECTION_METHOD_CODE	AN	12	218 - 229	NOT USED (Blank Fill)
25.	B_ORIGINAL_LAB_SAMPLE_NUMBER	AN	20	230 - 249	NOT USED (Blank Fill)
26.	B_LAB_COMPOSITE_NUMBER	AN	20	250 - 269	NOT USED (Blank Fill)
27.	B_COMPOSITE_DATE (For Sample Summary (17.5), this field is used for the Summary Collection End Date)	DT	8	270 - 277	OPTIONAL - If valued, must be after the Collection Start Date in field 14 (B_COLLECTION_DATE).
28.*	B_COMPOSITE_INDICATOR	AN	1	278	NOT USED (Blank Fill)
29.*	B_COMPOSITE_QUARTER	AN	1	279	NOT USED (Blank Fill)
30.	B_ANALYTE_CODE	AN	4	280 - 283	MANDATORY - Uniqueness/Duplicate check is on the combination of field 6 (B_WATER_SYSTEM_NUMBER), and field 30 (B_ANALYTE_CODE), and field 32 (B_MONITORING_PERIOD_START_DATE), and field 33 (B_MONITORING_PERIOD_END_DATE).

* Designates field with permitted values.

+ Shaded gray blocks designate changes to previously published Structure Sets.

B_SAMPLE_SAMPLE_SUMMARY					
FIELD NO	FIELD NAME	DOMAIN	SIZE	POSITION	OPTIONALITY
31.	B_CAS_NUMBER	AN	10	284 - 293	NOT USED (Blank Fill)
32.	B_MONITORING_PERIOD_START_DATE	DT	8	294 - 301	MANDATORY - Uniqueness/Duplicate check is on the combination of field 6 (B_WATER_SYSTEM_NUMBER), and field 30 (B_ANALYTE_CODE), and field 32 (B_MONITORING_PERIOD_START_DATE), and field 33 (B_MONITORING_PERIOD_END_DATE). Value supplied must be the first day of the first month of the monitoring period.
33.	B_MONITORING_PERIOD_END_DATE	DT	8	302 - 309	MANDATORY - Uniqueness/Duplicate check is on the combination of field 6 (B_WATER_SYSTEM_NUMBER), and field 30 (B_ANALYTE_CODE), and field 32 (B_MONITORING_PERIOD_START_DATE), and field 33 (B_MONITORING_PERIOD_END_DATE). Value supplied must be the last day of the last month of the monitoring period.
34.	B_ANALYSIS_METHOD_CODE	AN	12	310 - 321	OPTIONAL - May be either a federally owned or state-owned analyte method pairing that exists in state/region's SDWIS/STATE database.
35.	B_FREE_CHLORINE_RESIDUAL	N	5 (4(2))	322 - 326	NOT USED (Blank Fill)
36.	B_TOTL_CHLORINE_RESIDUAL	N	5 (4(2))	327 - 331	NOT USED (Blank Fill)
37.	B_SAMPLE_WATER_TEMPERATURE	N	4 (3(1))	332 - 335	NOT USED (Blank Fill)
38.*	B_TEMPERATURE_UNIT_MEASURE	AN	1	336	NOT USED (Blank Fill)
39.	B_TURBIDITY_MEASURE	N	6 (5(2))	337 - 342	NOT USED (Blank Fill)
40.	B_PH_MEASURE	N	5 (4(1))	343 - 347	NOT USED (Blank Fill)
41.	B_FLOW_RATE	N	8 (7(4))	348 - 355	NOT USED (Blank Fill)
	FILLER		20	356 - 375	Blank fill to make fixed record length of 375.

* Designates field with permitted values.

Non-TCR sample summaries can now link directly to a Monitoring Period. It is not necessary to have a record in Water System Monitoring Period Asgmt (TMNWSMPA) and Rule Water System Monitoring Period Asgmt (TMNRWSMA).

When creating a new Sampling Point during the processing of individual samples, *Sampling via EDI* sets the following values:

- Activity Status—"A."
- Status Date—value in B_COLLECTION_DATE.
- Status Reason Text—"created by *Sampling via EDI*."

1.6 B_Sample_Sample_Summary Permitted Value List

B_SAMPLE_SAMPLE_SUMMARY		
FIELD NO	ATTRIBUTE NAME	PERMITTED VALUES
6.A	B_REPLACEMENT_INDICATOR	Y Yes N No
12.	B_SAMPLE_CATEGORY	CH Chemicals GE General Samples MB Microbiological PB Lead and Copper PP Water Quality (Physical Parameters) RA Radionuclides TC Total Coliform
13.	B_COMPLIANCE_INDICATOR	Y Yes N No
16.	B_SAMPLE_TYPE for Total Coliform or Microbiological Samples (B_SAMPLE_CATEGORY = TC or MB)	If field 13 (B_COMPLIANCE_INDICATOR) = "Y" RT Routine RP Repeat If field 13 (B_COMPLIANCE_INDICATOR) = "N" RT Routine RP Repeat SP Special SL Split SB Shipping Blank FB Field Blank BB Batch Blank ST Split Blank PE Performance Evaluation MR Max Residence Time

* Designates field with permitted values.

B_SAMPLE_SAMPLE_SUMMARY		
FIELD NO	ATTRIBUTE NAME	PERMITTED VALUES
16.	B_SAMPLE_TYPE for Chemical and Lead & Copper Samples (B_SAMPLE_CATEGORY = CH or PB)	If field 13 (B_COMPLIANCE_INDICATOR) = "Y" RT Routine RP Repeat CO Confirmation SP Special DU Duplicate SL Split MR Max Residence Time If field 13 (B_COMPLIANCE_INDICATOR) = "N" RT Routine CO Confirmation RP Repeat SP Special DU Duplicate SL Split SB Shipping Blank FB Field Blank BB Batch Blank ST Split Blank PE Performance Evaluation MR Max Residence Time

* Designates field with permitted values.

+ Shaded gray blocks designate changes to previously published Structure Sets.

B_SAMPLE_SAMPLE_SUMMARY		
FIELD NO	ATTRIBUTE NAME	PERMITTED VALUES
16.	B_SAMPLE_TYPE for Radionuclide Samples (B_SAMPLE_CATEGORY = RA)	If field 13 (B_COMPLIANCE_INDICATOR) = "Y" RT Routine RP Repeat CO Confirmation SP Special DU Duplicate SL Split If field 13 (B_COMPLIANCE_INDICATOR) = "N" RT Routine RP Repeat CO Confirmation SP Special DU Duplicate SL Split SB Shipping Blank FB Field Blank BB Batch Blank ST Split Blank PE Performance Evaluation MR Max Residence Time

* Designates field with permitted values.

+ Shaded gray blocks designate changes to previously published Structure Sets.

B_SAMPLE_SAMPLE_SUMMARY		
FIELD NO	ATTRIBUTE NAME	PERMITTED VALUES
16.	B_SAMPLE_TYPE for Water Quality Samples (B_SAMPLE_CATEGORY = PP)	If field 13 (B_COMPLIANCE_INDICATOR) = "Y" RT Routine CO Confirmation SP Special DU Duplicate SL Split If field 13 (B_COMPLIANCE_INDICATOR) = "N" RT Routine CO Confirmation SP Special DU Duplicate SL Split SB Shipping Blank FB Field Blank BB Batch Blank ST Split Blank PE Performance Evaluation MR Max Residence Time
17.	B_REPEAT_LOCATION_CODE	DN Downstream within 5 connections of original sample location NF Near First Service Connection OR Original Site OT Other UP Upstream within 5 connections of original sample location
21.	B_SAMPLE_VOLUME	100 300 400

* Designates field with permitted values.

B_SAMPLE_SAMPLE_SUMMARY		
FIELD NO	ATTRIBUTE NAME	PERMITTED VALUES
22.	B_LEAD_COPPER_SAMPLE_TYPE	ATS At Source FLS Flushed FSD First Draw LSL Lead Service Line
23.	B_SAMPLE_REJECTION_REASON	BP Invalid Sampling Point BR Broken CL Chlorine Present EH Exceeds Holding Time FZ Frozen Sample HS Excessive Headspace IN Insufficient Sample Information IP Invalid Sampling Protocol LA Lab Accident LT Leaked in Transit VO Insufficient Volume
28.	B_COMPOSITE_INDICATOR	Y Yes N No
29.	B_COMPOSITE_QUARTER	1 First Quarter Rad Composite 2 Second Quarter Rad Composite 3 Third Quarter Rad Composite 4 Fourth Quarter Rad Composite
38.	B_TEMPERATURE_UNIT_MEASURE	C Celsius (Centigrade) F Fahrenheit

* Designates field with permitted values.

1.7 B_Sample_Sample_Summary Mapping to SDWIS/STATE Entities

B_SAMPLE_SAMPLE_SUMMARY					
FIELD NO	STRUCTURE SET NAME	STRUCTURE SET ATTRIBUTE NAME	SDWIS/STATE TABLE NAME	SDWIS/STATE ENTITY NAME	SDWIS/STATE ATTRIBUTE NAME
1.	B_SAMPLE	B_RECORD_NAME			
2.	B_SAMPLE	B_REPORT_TYPE			
3.	B_SAMPLE	B_TRANSACTION_NUMBER			
4.	B_SAMPLE	B_LAB_SAMPLE_NUMBER	TSASAMPL	SBS Sample	LAB_ASSIGNED_ID_NUMBER
5.	B_SAMPLE	B_STATE_SAMPLE_NUMBER	TSASAMPL	SBS Sample	STATE_ASGN_IDENTIFICATION_NUMBER
6.	B_SAMPLE	B_WATER_SYSTEM_NUMBER	TINWSYS	Water System	NUMBER (<i>Foreign Key to either SBS Sample or Sample Summary</i>)
6.A	B_SAMPLE	B_REPLACEMENT_INDICATOR	TSASAMPL	SBS Sample	REPLACEMENT_INDICATOR_CODE
7.	B_SAMPLE	B_STATE_LABORATORY_NUMBER	TSALAB	Laboratory	STATE_ASSIGNED_ID_NUMBER (<i>Foreign Key to either SBS Sample or Sample Summary</i>)
8.	B_SAMPLE	B_FEDERAL_LABORATORY_NUMBER	TSALAB	Laboratory	FEDERAL_IDENTIFICATION_NUMBER (<i>Foreign Key to either SBS Sample or Sample Summary</i>)
9.	B_SAMPLE	B_WATER_FACILITY_STATE_CODE	TINWSF	Water System Facility	STATE_ASGN_IDENTIFICATION_CODE (<i>Foreign Key to either SBS Sample or Sample Summary</i>)
10.	B_SAMPLE	B_SAMPLING_POINT	TSASMPPT	Sampling Point	IDENTIFICATION_CODE (<i>Foreign Key to either SBS Sample or Sample Summary</i>)
11.	B_SAMPLE	B_SAMPLING_LOCATION	TSASMPPT	Sampling Point	DESCRIPTION_TEXT (<i>Foreign Key to either SBS Sample or Sample Summary</i>)
12.	B_SAMPLE	B_SAMPLE_CATEGORY	TSASAMPL	SBS Sample	D_CATEGORY_FLOW_CODE
13.	B_SAMPLE	B_COMPLIANCE_INDICATOR	TSASAMPL	SBS Sample	COMPLIANCE_PURPOSE_INDICATOR_CODE
14.	B_SAMPLE	B_COLLECTION_DATE	TSASAMPL	SBS Sample	COLLECTION_END_DATE

* Designates field with permitted values.

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+ Shaded gray blocks designate changes to previously published Structure Sets.

B_SAMPLE_SAMPLE_SUMMARY					
FIELD NO	STRUCTURE SET NAME	STRUCTURE SET ATTRIBUTE NAME	SDWIS/STATE TABLE NAME	SDWIS/STATE ENTITY NAME	SDWIS/STATE ATTRIBUTE NAME
15.	B_SAMPLE	B_COLLECTION_TIME	TSASAMPL	SBS Sample	COLLECTION_END_TIME
16.	B_SAMPLE	B_SAMPLE_TYPE	TSASAMPL	SBS Sample	TYPE_CODE
17.	B_SAMPLE	B_REPEAT_LOCATION_CODE	TSASAMPL	SBS Sample	REPEAT_LOCATION_TYPE_CODE
18.	B_SAMPLE	B_LAB_RECEIPT_DATE_SAMPLE	TSASAMPL	SBS Sample	LABORATORY_RECEIVED_DATE
19.	B_SAMPLE	B_COLLECTOR_IDENTIFICATION_NUMB			
20.	B_SAMPLE	B_COLLECTOR_NAME	TININDIV TINLGENT or TSASAMPL	Individual Legal Entity or SBS Sample	NAME (<i>Foreign Key to SBS Sample</i>) (Where INDIVIDUAL_Collector_Indicator_Code = 'Y') or INFORMAL_COLLECTOR
21.	B_SAMPLE	B_SAMPLE_VOLUME	TSASAMPL	SBS Sample	MICROBE_UOM_CODE
22.	B_SAMPLE	B_LEAD_COPPER_SAMPLE_TYPE	TSASAMPL	SBS Sample	LEAD_AND_COPPER_SAMPLE_TYPE_CODE
23.	B_SAMPLE	B_SAMPLE_REJECTION_REASON	TSASAMPL	SBS Sample	REJECTION_REASON_CODE
24.	B_SAMPLE	B_COLLECTION_METHOD_CODE	TSASMN	Standard Method Number	CODE (<i>Foreign Key to SBS Sample</i>)
25.	B_SAMPLE	B_ORIGINAL_LAB_SAMPLE_NUMBER	TSASAMPL	SBS Sample	LAB_ASSIGNED_ID_NUMBER (<i>Foreign Key to SBS Sample</i>)
26.	B_SAMPLE	B_LAB_COMPOSITE_NUMBER	TSASAMPL	SBS Sample	LAB_ASSIGNED_ID_NUMBER (<i>Foreign Key to SBS Sample</i>)
27.	B_SAMPLE	B_COMPOSITE_DATE	TSASAMPL	SBS Sample	COMPOSITE_DATE
28.	B_SAMPLE	B_COMPOSITE_INDICATOR	TSASAMPL	SBS Sample	COMPOSITE_INDICATOR_CODE
29.	B_SAMPLE	B_COMPOSITE_QUARTER	TSASAMPL	SBS Sample	RAD_QUARTER_CODE
30.	B_SAMPLE	B_ANALYTE_CODE	TSAANLYT	Analyte	CODE (<i>Foreign Key to Sample Summary</i>)
31.	B_SAMPLE	B_CAS_NUMBER	TSAANLYT	Analyte	CAS_REGISTRY_NUMBER (<i>Foreign Key to Sample Summary</i>)

* Designates field with permitted values.

B_SAMPLE_SAMPLE_SUMMARY					
FIELD NO	STRUCTURE SET NAME	STRUCTURE SET ATTRIBUTE NAME	SDWIS/STATE TABLE NAME	SDWIS/STATE ENTITY NAME	SDWIS/STATE ATTRIBUTE NAME
32.	B_SAMPLE	B_MONITORING_PERIOD_START_DATE	TMNMPRD	Monitoring Period	BEGIN_DATE (<i>Foreign Key to Sample Summary</i>)
33.	B_SAMPLE	B_MONITORING_PERIOD_END_DATE	TMNMPRD	Monitoring Period	END_DATE (<i>Foreign Key to Sample Summary</i>)
34.	B_SAMPLE	B_ANALYSIS_METHOD_CODE	TSASMN	Standard Method Number	CODE (<i>Foreign Key to Sample Summary</i>)
35.	B_SAMPLE	B_FREE_CHLORINE_RESIDUAL	TSAMCSMP	Microbiological Sample	FIELD_FREE_CHLORINE_RESIDUAL_MSR
36.	B_SAMPLE	B_TOTL_CHLORINE_RESIDUAL	TSAMCSMP	Microbiological Sample	FIELD_TOTAL_CHLORINE_RESIDUAL_MSR
37.	B_SAMPLE	B_SAMPLE_WATER_TEMPERATURE	TSAMCSMP	Microbiological Sample	FIELD_TEMPERATURE_MEASURE
38.	B_SAMPLE	B_TEMPERATURE_UNIT_MEASURE	TSAMCSMP	Microbiological Sample	TEMP_MEASUREMENT_TYPE_CODE
39.	B_SAMPLE	B_TURBIDITY_MEASURE	TSAMCSMP	Microbiological Sample	FIELD_TURBIDITY_MEASURE
40.	B_SAMPLE	B_PH_MEASURE	TSAMCSMP	Microbiological Sample	FIELD_PH_MEASURE
41.	B_SAMPLE	B_FLOW_RATE	TSAMCSMP	Microbiological Sample	FIELD_FLOW_RATE

* Designates field with permitted values.

+ Shaded gray blocks designate changes to previously published Structure Sets.

1.8 B_Sample_Sample_Summary Definitions

B_SAMPLE_SAMPLE_SUMMARY		
FIELD NO	FIELD NAME	INDIVIDUAL SAMPLE (T)/ SAMPLE SUMMARY (S)
1.	B_RECORD_NAME	HDR - Indicates that the input string represents a Sample. Each sample record must contain HDR in the first field.
2.	B_REPORT_TYPE	T - Indicates the input string is an individual Sample/Sample Result; S indicates the input string is a Summary/Summary Result. This field is mandatory.
3.	B_TRANSACTION_NUMBER	Not used.
4.	B_LAB_SAMPLE_NUMBER	Number/alphanumeric that identifies each sample. The LAB_SAMPLE_NUMBER and the WATER_SYSTEM_NUMBER together serve as the reference for each sample result, keeping sample results with their parent samples. This field is mandatory.
5.	B_STATE_SAMPLE_NUMBER	Additional number/alphanumeric to identify the sample. Both LAB_SAMPLE_NUMBER and STATE_SAMPLE_NUMBER may be used.
6.	B_WATER_SYSTEM_NUMBER	The Public Water System (PWS) identification number. This field is mandatory.
6.A	B_REPLACEMENT_INDICATOR	Indicates whether or not the routine, repeat, confirmation, etc. type of sample is a replacement.
7.	B_STATE_LABORATORY_NUMBER	Laboratory Number normally assigned to a laboratory by the State.
8.	B_FEDERAL_LABORATORY_NUMBER	Laboratory Number normally assigned to a laboratory by the EPA or used to designate a laboratory as a federal entity.
9.	B_WATER_FACILITY_STATE_CODE	Number/alphanumeric that uniquely identifies a Water System Facility (e.g., Treatment Plant/Distribution System/Well) within a Water System.
10.	B_SAMPLING_POINT	Number/alphanumeric that uniquely identifies a point within a Water System Facility from which the sample is drawn. (Associated with SAMPLING LOCATION.)
11.	B_SAMPLING_LOCATION	Alphanumeric that typically identifies a Sampling Point as an address or equivalent text description. (Associated with SAMPLING POINT).
12.	B_SAMPLE_CATEGORY	Identifies the sample category as either Total Coliform/Lead & Copper/Chemical/General/ General Microbiological/Radionuclide/Water Quality Parameter.
13.	B_COMPLIANCE_INDICATOR	When set to "Y," indicates that the sample has been taken for compliance.

* Designates field with permitted values.

B_SAMPLE_SAMPLE_SUMMARY		
FIELD NO	FIELD NAME	INDIVIDUAL SAMPLE (T)/ SAMPLE SUMMARY (S)
14.	B_COLLECTION_DATE	The date in which the sample was collected.
15.	B_COLLECTION_TIME	The time at which the sample was collected.
16.	B_SAMPLE_TYPE	Indicates whether the sample is taken for "Routine" purposes or is a "Repeat," "Confirmation," etc. Several types are available although not all may be used with samples taken for compliance.
17.	B_REPEAT_LOCATION_CODE	Indicates the location <i>relative to the original Sampling Point</i> at which the repeat/invalid replacement/confirmation sample was taken (upstream/downstream/original location/etc.).
18.	B_LAB_RECEIPT_DATE_SAMPLE	Date at which the Laboratory received the sample; cannot be prior to Collection Date.
19.	B_COLLECTOR_IDENTIFICATION_NUMBER	No longer used.
20.	B_COLLECTOR_NAME	Name of the Individual who is the collector of the sample.
21.	B_SAMPLE_VOLUME	Value to indicate the size of the volume of water collected for the sample.
22.	B_LEAD_COPPER_SAMPLE_TYPE	Type of Lead & Copper sample (for purposes of Lead & Copper rule compliance).
23.	B_SAMPLE_REJECTION_REASON	Set of possible reasons to reject a sample prior to its analysis at the lab.
24.	B_COLLECTION_METHOD_CODE	Code that indicates the Method used to collect the sample.
25.	B_ORIGINAL_LAB_SAMPLE_NUMBER	LAB_SAMPLE_NUMBER of the sample that was originally taken and whose result required the current Repeat/Invalid Replacement/Confirmation sample to be taken.
26.	B_LAB_COMPOSITE_NUMBER	Number/alphanumeric that ties a composite sample to one or more other composite samples. Each sample that is part of the Composite must carry the same LAB_COMPOSITE_NUMBER.
27.	B_COMPOSITE_DATE	Date in which the Lab composited one or more individual samples.
28.	B_COMPOSITE_INDICATOR	When set to "Y", indicates that the sample is a composite and that the LAB_COMPOSITE_NUMBER will be valued.
29.	B_COMPOSITE_QUARTER	Used only for Radionuclide composites. The quarter (1/2/3/4) to which the individual sample (collected during that quarter but that will be composited at the end of the fourth quarter) should be attributed for purposes of monitoring compliance.
30.	B_ANALYTE_CODE	Standard code used to represent a given analyte. Only valued here for Sample Summary.
31.	B_CAS_NUMBER	Not used.
32.	B_MONITORING_PERIOD_START_DATE	Start date of the Monitoring Period. Only valued here for Sample Summary.

* Designates field with permitted values.

B_SAMPLE_SAMPLE_SUMMARY		
FIELD NO	FIELD NAME	INDIVIDUAL SAMPLE (T)/ SAMPLE SUMMARY (S)
33.	B_MONITORING_PERIOD_END_DATE	End date of the Monitoring Period. Only valued here for Sample Summary.
34.	B_ANALYSIS_METHOD_CODE	Standard Analysis Method Code for a specific analyte. Only valued here for Sample Summary.
35.	B_FREE_CHLORINE_RESIDUAL	"Field Result" value measured at the time/location of sample collection. Reported in MG/L.
36.	B_TOTL_CHLORINE_RESIDUAL	"Field Result" value measured at the time/location of sample collection. Reported in MG/L.
37.	B_SAMPLE_WATER_TEMPERATURE	"Field Result" value measured at the time/location of sample collection.
38.	B_TEMPERATURE_UNIT_MEASURE	Temperature Unit of Measure - either C (Celsius) or F (Fahrenheit).
39.	B_TURBIDITY_MEASURE	"Field Result" value measured at the time/location of sample collection. Reported in NTU.
40.	B_PH_MEASURE	"Field Result" value measured at the time/location of sample collection. Reported in pH Units.
41.	B_FLOW_RATE	"Field Result" value measured at the time/location of sample collection. Reported in gal/min.
	FILLER	

2.0 STRUCTURE SET B_Result_Summary_Result

See note (Item 5) at the end of file layout (1.4) for detailed description of sample/result uniqueness evaluation. *Sampling via EDI* Release 8.0 evaluates uniqueness *exactly* as it did in Release 7.0. Uniqueness information for sample/result has been removed from the Optionality column of the pertinent sample/result fields for File Layouts 1/2.1, 1/2.2, 1/2.3, and 1/2.4 and moved to the single location at the end of file layout 1.4 in order to clarify how the software evaluates uniqueness for individual samples/results.

2.1 B_Result_Summary_Result File Layout for Total Coliform Results

B_RESULT_SUMMARY_RESULT					
FIELD NO	FIELD NAME	DOMAIN	SIZE	POSITION	OPTIONALITY
1.	B_RECORD_NAME	AN	3	1 - 3	MANDATORY - Field must = DTR
2.	B_REPORT_TYPE	AN	1	4	MANDATORY - Field must = T
3.	B_TRANSACTION_NUMBER	AN	10	5 - 14	NOT USED (Blank Fill)
4.	B_LAB_SAMPLE_NUMBER	AN	20	15 - 34	MANDATORY - Reference field required to associate the result to the parent sample. Must be same value as field B_LAB_SAMPLE_NUMBER in B_Sample structure set or result (and sample) will be rejected.
5.	B_WATER_SYSTEM_NUMBER	AN	12	35 - 46	MANDATORY - Reference field required to associate the result to the parent sample. Must be same value as field B_WATER_SYSTEM_NUMBER in B_Sample structure set or result (and sample) will be rejected.
6.	B_ANALYTE_CODE	AN	4	47 - 50	MANDATORY
7.	B_CAS_NUMBER	AN	10	51 - 60	NOT USED (Blank Fill)
8.	B_ANALYSIS_START_DATE	DT	8	61 - 68	OPTIONAL - Sample will be rejected if Analysis Start Date is supplied but is prior to Sample Collection Date.
9.	B_ANALYSIS_START_TIME	TM	6	69 - 74	OPTIONAL

* Designates field with permitted values.

B_RESULT_SUMMARY_RESULT					
FIELD NO	FIELD NAME	DOMAIN	SIZE	POSITION	OPTIONALITY
10.	B_ANALYSIS_COMPLETION_DATE	DT	8	75 - 82	OPTIONAL - Sample will be rejected if Analysis Completion Date is supplied but is prior to Sample Collection Date. Sample will also be rejected if both Analysis Start and Completion Dates are supplied, but Completion Date is prior to Start Date.
11.	B_ANALYSIS_COMPLETION_TIME	TM	6	83 - 88	OPTIONAL
12.	B_STATE_NOTIFY_DATE	DT	8	89 - 96	OPTIONAL
13. *	B_DATA_QUALITY	AN	1	97	OPTIONAL - If this field is not valued, <i>Migration to SDWIS/STATE</i> will set it to "A" which is defined as "Accepted." If valued with "R," this is considered a rejected result, and a result record will be created.
14. *	B_DATA_QUALITY_REASON	AN	2	98 - 99	CONDITIONALLY MANDATORY - Field must be valued if field 13 (B_DATA_QUALITY) = "R."
15. *	B_ANALYSIS_METHOD_CODE	AN	12	100 - 111	OPTIONAL - May be either a federally owned or state-owned analyte method pairing that exists in state/region's SDWIS/STATE database.
16.	B_MONITORING_PERIOD_START_DATE	DT	8	112 - 119	OPTIONAL - <i>If sample is for compliance (see Sample structure set):</i> If valid current TCR monitoring periods do not exist in your database, recommend that date be supplied to preclude sample rejection. See detailed edit check information at the end of this structure set. <i>If sample is not for compliance (see Sample structure set):</i> See detailed edit check information at the end of this structure set. No monitoring period need be in the database or supplied with the input file for the sample to be accepted.

* Designates field with permitted values.

+ Shaded gray blocks designate changes to previously published Structure Sets.

B_RESULT_SUMMARY_RESULT					
FIELD NO	FIELD NAME	DOMAIN	SIZE	POSITION	OPTIONALITY
17.	B_MONITORING_PERIOD_END_DATE	DT	8	120 - 127	OPTIONAL - <i>If sample is for compliance (see Sample structure set):</i> If valid current TCR monitoring periods do not exist in your database, recommend that date be supplied to preclude sample rejection. See detailed edit check information at the end of this structure set. <i>If sample is not for compliance (see Sample structure set):</i> See detailed edit check information at the end of this structure set. No monitoring period need be in the database or supplied with the input file for the sample to be accepted.
18.	B_VOLUME_ASSAYED	AN	9	128 - 136	OPTIONAL
19.*	B_LAB_REJECTION_REASON	AN	4	137 - 140	CONDITIONALLY MANDATORY - See discussion in field 20.
20.*	B_MICROBE_PRESENCE_INDICATOR	AN	1	141	CONDITIONALLY MANDATORY - <ul style="list-style-type: none"> • If not valued, field 19 (B_LAB_REJECTION_REASON) must be valued and field 22 (B_COUNT) must not be valued. • If valued with P, field 22 (B_COUNT) must be either not valued, or if valued, be greater than 0. • If valued with A, field 19 (B_LAB_REJECTION_REASON) should not be valued and field 22 (B_COUNT) should not be valued with 0 or any other integer.
21.*	B_TEST_TYPE	AN	1	142	OPTIONAL
22.	B_COUNT	N	10	143 - 152	CONDITIONALLY MANDATORY - See discussion in field 20.
23.*	B_COUNT_TYPE	AN	10	153 - 162	CONDITIONALLY MANDATORY - Field must be valued if field 22 (B_COUNT) > 0.

* Designates field with permitted values.

+ Shaded gray blocks designate changes to previously published Structure Sets.

B_RESULT_SUMMARY_RESULT					
FIELD NO	FIELD NAME	DOMAIN	SIZE	POSITION	OPTIONALITY
24. *	B_COUNT_UNITS	AN	9	163 - 171	CONDITIONALLY MANDATORY - Field must be valued if field 23 (B_COUNT_TYPE) is valued.
25. *	B_LESS_THAN_INDICATOR	AN	1	172	NOT USED (Blank Fill)
26. *	B_LESS_THAN_CODE	AN	3	173 - 175	NOT USED (Blank Fill)
27.	B_DETECTION_LEVEL	N	16 (15(8))	176 - 191	NOT USED (Blank Fill)
28. *	B_DETECTION_LEVEL_UNIT_CODE	AN	9	192 - 200	NOT USED (Blank Fill)
29.	B_CONCENTRATION	N	14 (13(9))	201 - 214	NOT USED (Blank Fill)
30. *	B_CONCENTRATION_UNIT_CODE	AN	9	215 - 223	NOT USED (Blank Fill)
31.	B_REPORTED_MEASURE	AN	10	224 - 233	NOT USED (Blank Fill)
32.	B_REPORTED_MEASURE_COUNT_ERROR	N	9 (8(3))	234 - 242	NOT USED (Blank Fill)
33. *	B_RESULTS_TYPE	AN	2	243 - 244	NOT USED (Blank Fill)
34.	B_COUNT_QUANTITY	N	10	245 - 254	NOT USED (Blank Fill)
35.	B_MEASURE	N	14(13(9))	255 - 268	NOT USED (Blank Fill)
36. *	B_MEASURE_UNIT_CODE	AN	9	269 - 277	NOT USED (Blank Fill)
	FILLER		98	278 - 375	Blank fill to make fixed record length of 375.

* Designates field with permitted values.

+ Shaded gray blocks designate changes to previously published Structure Sets.

Detailed edit check information for Field 16 B_MONITORING_PERIOD_START_DATE:

If sample is for compliance (see Sample structure set):

If supplied, *MTS: Sampling/Sampling via EDI* checks for a monitoring period in the database that matches dates in field 16 and 17 for supplied Water System (field 5) and TC Rule. If not found, software will attempt to create monitoring period based on the dates supplied in fields 16 and 17 and link it with TCR result.

- If date supplied, value must be the first day of the first month of the monitoring period. If it is supplied:
 - Software calculates Monitoring Period Type. If the number of days difference between fields 17 and 16 is consistent with either “MN” or “QT.”
 - The software checks the periodicity specified by the water system’s TCR schedule that was active on the Sample Collection Date for a match with the calculated monitoring period type. If there is a match, software creates the monitoring period and links it to the result.

If not found, software considers the monitoring periods supplied to be invalid and treats them as if they were absent.

- If invalid (based on above edit checks) or no monitoring period dates are supplied (fields 16 and 17 are blank), software attempts to calculate the correct monitoring period based on supplied Water System (field 5), TC Rule, and sampling periodicity specified by the water system’s TCR monitoring schedule that was active on the Sample Collection Date. If there is a match, software links the retrieved monitoring period to the result.
- If no monitoring period meets this criteria, the sample and result will be rejected.
- **If sample is not for compliance (see Sample structure set):** No monitoring period needs to be supplied for the sample and result to be accepted into the database. The absence of a monitoring period in the database that matches dates in field 16 and 17 for supplied Water System (field 5) and TC Rule and of the periodicity specified by the water system’s TCR schedule that was active on the Sample Collection Date *will not* preclude the result from being entered into the database. Since monitoring periods are associated with compliance, they are not linked to “not for compliance” sample results.

Detailed edit check information for Field 17 B_MONITORING_PERIOD_END_DATE:

The same information applies except if date supplied, value must be the last day of the last month of the monitoring period.

2.2 B_Result_Summary_Result File Layout for Chemical and Lead & Copper Results

B_RESULT_SUMMARY_RESULT					
FIELD NO	FIELD NAME	DOMAIN	SIZE	POSITION	OPTIONALITY
1.	B_RECORD_NAME	AN	3	1 - 3	MANDATORY - Field must = DTR
2.	B_REPORT_TYPE	AN	1	4	MANDATORY - Field must = T
3.	B_TRANSACTION_NUMBER	AN	10	5 - 14	NOT USED (Blank Fill)
4.	B_LAB_SAMPLE_NUMBER	AN	20	15 - 34	MANDATORY - Reference field required to associate the result to the parent sample. Must be same value as field B_LAB_SAMPLE_NUMBER in B_Sample structure set or result (and sample) will be rejected.
5.	B_WATER_SYSTEM_NUMBER	AN	12	35 - 46	MANDATORY - Reference field required to associate the result to the parent sample. Must be same value as field B_WATER_SYSTEM_NUMBER in B_Sample structure set or result (and sample) will be rejected.
6.	B_ANALYTE_CODE	AN	4	47 - 50	CONDITIONALLY MANDATORY - Field must be valued if field 7 (B_CAS_NUMBER) is not valued.
7.	B_CAS_NUMBER	AN	10	51 - 60	CONDITIONALLY MANDATORY - Field must be valued if field 6 (B_ANALYTE_CODE) is not valued.
8.	B_ANALYSIS_START_DATE	DT	8	61 - 68	NOT USED (Blank Fill)
9.	B_ANALYSIS_START_TIME	TM	6	69 - 74	NOT USED (Blank Fill)
10.	B_ANALYSIS_COMPLETION_DATE	DT	8	75 - 82	OPTIONAL
11.	B_ANALYSIS_COMPLETION_TIME	TM	6	83 - 88	OPTIONAL
12.	B_STATE_NOTIFY_DATE	DT	8	89 - 96	OPTIONAL
13.*	B_DATA_QUALITY	AN	1	97	OPTIONAL - If this field is not valued, <i>Migration to SDWIS/STATE</i> will set it to "A" which is defined as "Accepted."

* Designates field with permitted values.

B_RESULT_SUMMARY_RESULT					
FIELD NO	FIELD NAME	DOMAIN	SIZE	POSITION	OPTIONALITY
14.*	B_DATA_QUALITY_REASON	AN	2	98 - 99	CONDITIONALLY MANDATORY - Field must be valued if field 13 (B_DATA_QUALITY) = "R."
15.*	B_ANALYSIS_METHOD_CODE	AN	12	100 - 111	OPTIONAL - May be either a federally owned or state-owned analyte method pairing that exists in state/region's SDWIS/STATE database.
16.	B_MONITORING_PERIOD_START_DATE	DT	8	112 - 119	OPTIONAL - If supplied, value must be the first day of the first month of the monitoring period.
17.	B_MONITORING_PERIOD_END_DATE	DT	8	120 - 127	OPTIONAL - If supplied, value must be the last day of the last month of the monitoring period.
18*	B_VOLUME_ASSAYED	AN	9	128 - 136	NOT USED (Blank Fill)
19.*	B_LAB_REJECTION_REASON	AN	4	137 - 140	NOT USED (Blank Fill)
20.*	B_MICROBE_PRESENCE_INDICATOR	AN	1	141	NOT USED (Blank Fill)
21.*	B_TEST_TYPE	AN	1	142	NOT USED (Blank Fill)
22.	B_COUNT	N	10	143 - 152	NOT USED (Blank Fill)
23.*	B_COUNT_TYPE	AN	10	153 - 162	NOT USED (Blank Fill)
24.*	B_COUNT_UNITS	AN	9	163 - 171	NOT USED (Blank Fill)
25.*	B_LESS_THAN_INDICATOR	AN	1	172	CONDITIONALLY MANDATORY - Must be valued if field 13 (B_DATA_QUALITY) = "A" or "P" and field 29 (B_CONCENTRATION) is either not valued or is valued with 0, and field 31 (B_REPORTED_MEASURE) is either not valued or is valued with a text value that converts to the number 0.
26.*	B_LESS_THAN_CODE	AN	3	173 - 175	CONDITIONALLY MANDATORY - Must be valued if field 25 (B_LESS_THAN_INDICATOR) = "Y."
27.	B_DETECTION_LEVEL	N	16 (15(8))	176 - 191	CONDITIONALLY MANDATORY - Must be valued if field 26 (B_LESS_THAN_CODE) = "MRL."

* Designates field with permitted values.

+ Shaded gray blocks designate changes to previously published Structure Sets.

B_RESULT_SUMMARY_RESULT					
FIELD NO	FIELD NAME	DOMAIN	SIZE	POSITION	OPTIONALITY
28.*	B_DETECTION_LEVEL_UNIT_CODE	AN	9	192 - 200	CONDITIONALLY MANDATORY - Must be valued if field 27 (B_DETECTION_LEVEL) is valued. If sample result is federally reportable (see Appendix F for list of reportable analytes), value must be either MG/L or UG/L.
29.	B_CONCENTRATION	N	14 (13(9))	201 - 214	CONDITIONALLY MANDATORY - Must be valued if field 13 (B_DATA_QUALITY) = ("A" or "P") and field 25 (B_LESS_THAN_INDICATOR) is not valued and field 31 (B_REPORTED_MEASURE) is not valued. Recommend reporting the concentration in both field 29 (B_CONCENTRATION) and field 31 (B_REPORTED_MEASURE) in order to preserve precision.
30.*	B_CONCENTRATION_UNIT_CODE	AN	9	215 - 223	CONDITIONALLY MANDATORY - Must be valued if either field 29 (B_CONCENTRATION) or field 31 (B_REPORTED_MEASURE) are valued. If sample result is federally reportable (see Appendix F for list of reportable analytes), value must be either MG/L or UG/L.
31.	B_REPORTED_MEASURE	AN	10	224 - 233	CONDITIONALLY MANDATORY - Must be valued if field 13 (B_DATA_QUALITY) = ("A" or "P") and field 25 (B_LESS_THAN_INDICATOR) is not valued and field 29 (B_CONCENTRATION) is either not valued or is valued with 0. Value in this field can convert to 0 (e.g., 0.0, 00.00) and be considered a valid result, as long as either field 29 (B_CONCENTRATION) is either not valued or is valued with 0. Value must be numeric; non-numeric symbols (such as ?< ") will cause sample to be rejected. Recommend reporting concentration in both field 29 (B_CONCENTRATION) and field 31 (B_REPORTED_MEASURE) in order to preserve precision.
32.	B_REPORTED_MEASURE_COUNT_ERROR	N	9 (8(3))	234 - 242	NOT USED (Blank Fill)

* Designates field with permitted values.

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+ Shaded gray blocks designate changes to previously published Structure Sets.

B_RESULT_SUMMARY_RESULT					
FIELD NO	FIELD NAME	DOMAIN	SIZE	POSITION	OPTIONALITY
33.*	B_RESULTS_TYPE	AN	2	243 - 244	NOT USED (Blank Fill)
34.	B_COUNT_QUANTITY	N	10	245 - 254	NOT USED (Blank Fill)
35.	B_MEASURE	N	14(13(9))	255 - 268	NOT USED (Blank Fill)
36.*	B_MEASURE_UNIT_CODE	AN	9	269 - 277	NOT USED (Blank Fill)
	FILLER		98	278 - 375	Blank fill to make fixed record length of 375.

* Designates field with permitted values.

2.3 B_Result_Summary_Result File Layout for Radionuclide Results

B_RESULT_SUMMARY_RESULT					
FIELD NO	FIELD NAME	DOMAIN	SIZE	POSITION	OPTIONALITY
1.	B_RECORD_NAME	AN	3	1 - 3	MANDATORY - Field must = DTR
2.	B_REPORT_TYPE	AN	1	4	MANDATORY - Field must = T
3.	B_TRANSACTION_NUMBER	AN	10	5 - 14	NOT USED (Blank Fill)
4.	B_LAB_SAMPLE_NUMBER	AN	20	15 - 34	MANDATORY - Reference field required to associate the result to the parent sample. Must be same value as field B_LAB_SAMPLE_NUMBER in B_SAMPLE structure set or result (and sample) will be rejected.
5.	B_WATER_SYSTEM_NUMBER	AN	12	35 - 46	MANDATORY - Reference field required to associate the result to the parent sample. Must be same value as field B_WATER_SYSTEM_NUMBER in B_SAMPLE structure set or result (and sample) will be rejected.
6.	B_ANALYTE_CODE	AN	4	47 - 50	CONDITIONALLY MANDATORY - Field must be valued if field 7 (B_CAS_NUMBER) is not valued.
7.	B_CAS_NUMBER	AN	10	51 - 60	CONDITIONALLY MANDATORY - Field must be valued if field 6 (B_ANALYTE_CODE) is not valued.
8.	B_ANALYSIS_START_DATE	DT	8	61 - 68	NOT USED (Blank Fill)
9.	B_ANALYSIS_START_TIME	TM	6	69 - 74	NOT USED (Blank Fill)
10.	B_ANALYSIS_COMPLETION_DATE	DT	8	75 - 82	OPTIONAL
11.	B_ANALYSIS_COMPLETION_TIME	TM	6	83 - 88	OPTIONAL
12.	B_STATE_NOTIFY_DATE	DT	8	89 - 96	OPTIONAL
13.*	B_DATA_QUALITY	AN	1	97	OPTIONAL - If this field is not valued, <i>Migration to SDWIS/STATE</i> will set it to "A" which is defined as "Accepted."

* Designates field with permitted values.

B_RESULT_SUMMARY_RESULT					
FIELD NO	FIELD NAME	DOMAIN	SIZE	POSITION	OPTIONALITY
14.*	B_DATA_QUALITY_REASON	AN	2	98 - 99	CONDITIONALLY MANDATORY - Field must be valued if field 13 (B_DATA_QUALITY) = "R."
15.*	B_ANALYSIS_METHOD_CODE	AN	12	100 - 111	OPTIONAL - May be either a federally owned or state-owned analyte method pairing that exists in state/region's SDWIS/STATE database.
16.	B_MONITORING_PERIOD_START_DATE	DT	8	112 - 119	OPTIONAL - If supplied, value must be the first day of the first month of the monitoring period.
17.	B_MONITORING_PERIOD_END_DATE	DT	8	120 - 127	OPTIONAL - If supplied, value must be the last day of the last month of the monitoring period.
18.*	B_VOLUME_ASSAYED	AN	9	128 - 136	NOT USED (Blank Fill)
19.*	B_LAB_REJECTION_REASON	AN	4	137 - 140	NOT USED (Blank Fill)
20.*	B_MICROBE_PRESENCE_INDICATOR	AN	1	141	NOT USED (Blank Fill)
21.*	B_TEST_TYPE	AN	1	142	NOT USED (Blank Fill)
22.	B_COUNT	N	10	143 - 152	NOT USED (Blank Fill)
23.*	B_COUNT_TYPE	AN	10	153 - 162	NOT USED (Blank Fill)
24.*	B_COUNT_UNITS	AN	9	163 - 171	NOT USED (Blank Fill)
25.*	B_LESS_THAN_INDICATOR	AN	1	172	CONDITIONALLY MANDATORY - Must be valued if field 13 (B_DATA_QUALITY) = ("A" or "P") and field 29 (B_CONCENTRATION) is not valued and field 31 (B_REPORTED_MEASURE) is not valued.
26.*	B_LESS_THAN_CODE	AN	3	173 - 175	CONDITIONALLY MANDATORY - Must be valued if field 25 (B_LESS_THAN_INDICATOR) = "Y."
27.	B_DETECTION_LEVEL	N	16 (15(8))	176 - 191	CONDITIONALLY MANDATORY - Must be valued if field 26 (B_LESS_THAN_CODE) = "MRL."
28.*	B_DETECTION_LEVEL_UNIT_CODE	AN	9	192 - 200	CONDITIONALLY MANDATORY - Must be valued if field 27 (B_DETECTION_LEVEL) is valued.

* Designates field with permitted values.

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+ Shaded gray blocks designate changes to previously published Structure Sets.

B_RESULT_SUMMARY_RESULT					
FIELD NO	FIELD NAME	DOMAIN	SIZE	POSITION	OPTIONALITY
29.	B_CONCENTRATION	N	14 (13(9))	201 - 214	CONDITIONALLY MANDATORY - Must be valued if field 13 (B_DATA_QUALITY) = ("A" or "P") and field 25 (B_LESS_THAN_INDICATOR) is not valued and field 31 (B_REPORTED_MEASURE) is not valued.
30.*	B_CONCENTRATION_UNIT_CODE	AN	9	215 - 223	CONDITIONALLY MANDATORY - Must be valued if field 29 (B_CONCENTRATION) or field 31 (B_REPORTED_MEASURE) is valued.
31.	B_REPORTED_MEASURE	AN	10	224 - 233	CONDITIONALLY MANDATORY - Must be valued if field 13 (B_DATA_QUALITY) = ("A" or "P") and field 25 (B_LESS_THAN_INDICATOR) <i>is not</i> valued and field 29 (B_CONCENTRATION) <i>is not</i> valued. Value in this field can convert to 0 (e.g., 0.0, 00.00) and be considered a valid result, as long as either field 29 (B_CONCENTRATION) is either not valued or is valued with 0. Value must be numeric; non-numeric symbols (such as "< ") will cause sample to be rejected. Recommend reporting concentration in both field 29 (B_CONCENTRATION) and field 31 (B_REPORTED_MEASURE) in order to preserve precision.
32.	B_REPORTED_MEASURE_COUNT_ERROR	N	9 (8(3))	234 - 242	OPTIONAL - If value supplied does not convert to valid number, result will be rejected.
33.*	B_RESULTS_TYPE	AN	2	243 - 244	NOT USED (Blank Fill)
34.	B_COUNT_QUANTITY	N	10	245 - 254	NOT USED (Blank Fill)
35.	B_MEASURE	N	14(13(9))	255 - 268	NOT USED (Blank Fill)
36.*	B_MEASURE_UNIT_CODE	AN	9	269 - 277	NOT USED (Blank Fill)
	FILLER		98	278 - 375	Blank fill to make fixed record length of 375.

* Designates field with permitted values.

+ Shaded gray blocks designate changes to previously published Structure Sets.

2.4 B_Result_Summary_Result File Layout for Water Quality Results

B_RESULT_SUMMARY_RESULT					
FIELD NO	FIELD NAME	DOMAIN	SIZE	POSITION	OPTIONALITY
1.	B_RECORD_NAME	AN	3	1 - 3	MANDATORY - Field must = DTR.
2.	B_REPORT_TYPE	AN	1	4	MANDATORY - Field must = T.
3.	B_TRANSACTION_NUMBER	AN	10	5 - 14	NOT USED (Blank Fill)
4.	B_LAB_SAMPLE_NUMBER	AN	20	15 - 34	MANDATORY - Reference field required to associate the result to the parent sample. Must be same value as field B_LAB_SAMPLE_NUMBER in B_SAMPLE structure set or result (and sample) will be rejected.
5.	B_WATER_SYSTEM_NUMBER	AN	12	35 - 46	MANDATORY - Reference field required to associate the result to the parent sample. Must be same value as field B_WATER_SYSTEM_NUMBER in B_SAMPLE structure set or result (and sample) will be rejected.
6.	B_ANALYTE_CODE	AN	4	47 - 50	CONDITIONALLY MANDATORY - Field must be valued if field 7 (B_CAS_NUMBER) is not valued.
7.	B_CAS_NUMBER	AN	10	51 - 60	CONDITIONALLY MANDATORY - Field must be valued if field 6 (B_ANALYTE_CODE) is not valued.
8.	B_ANALYSIS_START_DATE	DT	8	61 - 68	NOT USED (Blank Fill)
9.	B_ANALYSIS_START_TIME	TM	6	69 - 74	NOT USED (Blank Fill)
10.	B_ANALYSIS_COMPLETION_DATE	DT	8	75 - 82	OPTIONAL
11.	B_ANALYSIS_COMPLETION_TIME	TM	6	83 - 88	OPTIONAL
12.	B_STATE_NOTIFY_DATE	DT	8	89 - 96	OPTIONAL
13.*	B_DATA_QUALITY	AN	1	97	OPTIONAL - If this field is not valued, <i>Migration to SDWIS/STATE</i> will set it to "A" which is defined as "Accepted."

* Designates field with permitted values.

B_RESULT_SUMMARY_RESULT					
FIELD NO	FIELD NAME	DOMAIN	SIZE	POSITION	OPTIONALITY
14.*	B_DATA_QUALITY_REASON	AN	2	98 - 99	CONDITIONALLY MANDATORY - Field must be valued if field 13 (B_DATA_QUALITY) = "R."
15.*	B_ANALYSIS_METHOD_CODE	AN	12	100 - 111	OPTIONAL - May be either a federally owned or state-owned analyte method pairing that exists in state/region's SDWIS/STATE database.
16.	B_MONITORING_PERIOD_START_DATE	DT	8	112 - 119	OPTIONAL - If supplied, value must be the first day of the first month of the monitoring period.
17.	B_MONITORING_PERIOD_END_DATE	DT	8	120 - 127	OPTIONAL - If supplied, value must be the last day of the last month of the monitoring period.
18.*	B_VOLUME_ASSAYED	AN	9	128 - 136	NOT USED (Blank Fill)
19.*	B_LAB_REJECTION_REASON	AN	4	137 - 140	NOT USED (Blank Fill)
20.*	B_MICROBE_PRESENCE_INDICATOR	AN	1	141	NOT USED (Blank Fill)
21.*	B_TEST_TYPE	AN	1	142	NOT USED (Blank Fill)
22.	B_COUNT	N	10	143 - 152	NOT USED (Blank Fill)
23.*	B_COUNT_TYPE	AN	10	153 - 162	NOT USED (Blank Fill)
24.*	B_COUNT_UNITS	AN	9	163 - 171	NOT USED (Blank Fill)
25.*	B_LESS_THAN_INDICATOR	AN	1	172	NOT USED (Blank Fill)
26.*	B_LESS_THAN_CODE	AN	3	173 - 175	NOT USED (Blank Fill)
27.	B_DETECTION_LEVEL	N	16 (15(8))	176 - 191	NOT USED (Blank Fill)
28.*	B_DETECTION_LEVEL_UNIT_CODE	AN	9	192 - 200	NOT USED (Blank Fill)
29.	B_CONCENTRATION	N	14 (13(9))	201 - 214	CONDITIONALLY MANDATORY - Must be valued if field 31 (B_REPORTED_MEASURE) is not valued.
30.*	B_CONCENTRATION_UNIT_CODE	AN	9	215 - 223	MANDATORY

* Designates field with permitted values.

+ Shaded gray blocks designate changes to previously published Structure Sets.

B_RESULT_SUMMARY_RESULT					
FIELD NO	FIELD NAME	DOMAIN	SIZE	POSITION	OPTIONALITY
31.	B_REPORTED_MEASURE	AN	10	224 - 233	CONDITIONALLY MANDATORY - Must be valued if field 29 (B_CONCENTRATION) is not valued. Value in this field can convert to 0 (e.g., 0.0, 00.00) and be considered a valid result, as long as either field 29 (B_CONCENTRATION) is either not valued or is valued with 0. Value must be numeric; non-numeric symbols (such as "< ") will cause sample to be rejected. Recommend reporting the concentration in both field 29 (B_CONCENTRATION) and field 31 (B_REPORTED_MEASURE) in order to preserve precision.
32.	B_REPORTED_MEASURE_COUNT_ERROR	N	9 (8(3))	234 - 242	NOT USED (Blank Fill)
33.*	B_RESULTS_TYPE	AN	2	243 - 244	NOT USED (Blank Fill)
34.	B_COUNT_QUANTITY	N	10	245 - 254	NOT USED (Blank Fill)
35.	B_MEASURE	N	14(13(9))	255 - 268	NOT USED (Blank Fill)
36.*	B_MEASURE_UNIT_CODE	AN	9	269 - 277	NOT USED (Blank Fill)
37.	FILLER		98	278 - 375	Blank fill to make fixed record length of 375.

* Designates field with permitted values.

2.5 B_Result_Summary_Result File Layout for Summary Results

B_RESULT_SUMMARY_RESULT					
FIELD NO	FIELD NAME	DOMAIN	SIZE	POSITION	OPTIONALITY
1.	B_RECORD_NAME	AN	3	1 - 3	MANDATORY - Field must = DTR
2.	B_REPORT_TYPE	AN	1	4	MANDATORY - Field must = S
3.	B_TRANSACTION_NUMBER	AN	10	5 - 14	NOT USED (Blank Fill)
4.	B_LAB_SAMPLE_NUMBER	AN	20	15 - 34	NOT USED (Blank Fill)
5.	B_WATER_SYSTEM_NUMBER	AN	12	35 - 46	MANDATORY - Because Sample Summary has no natural identifier, the combination of field 5 (B_WATER_SYSTEM_NUMBER) and field 6 (B_ANALYTE_CODE) and field 16 (B_MONITORING_PERIOD_START_DATE) and field 17 (B_MONITORING_PERIOD_END_DATE) serves as the reference to the parent Sample Summary. Required to associate the summary result to the parent Sample Summary.
6.	B_ANALYTE_CODE	AN	4	47 - 50	MANDATORY - Because Sample Summary has no natural identifier, the combination of field 5 (B_WATER_SYSTEM_NUMBER) and field 6 (B_ANALYTE_CODE) and field 16 (B_MONITORING_PERIOD_START_DATE) and field 17 (B_MONITORING_PERIOD_END_DATE) serves as the reference to the parent Sample Summary. Required to associate the summary result to the parent Sample Summary.
7.	B_CAS_NUMBER	AN	10	51 - 60	NOT USED (Blank Fill)
8.	B_ANALYSIS_START_DATE	DT	8	61 - 68	NOT USED (Blank Fill)
9.	B_ANALYSIS_START_TIME	TM	6	69 - 74	NOT USED (Blank Fill)
10.	B_ANALYSIS_COMPLETION_DATE	DT	8	75 - 82	NOT USED (Blank Fill)
11.	B_ANALYSIS_COMPLETION_TIME	TM	6	83 - 88	NOT USED (Blank Fill)

* Designates field with permitted values.

+ Shaded gray blocks designate changes to previously published Structure Sets.

B_RESULT_SUMMARY_RESULT					
FIELD NO	FIELD NAME	DOMAIN	SIZE	POSITION	OPTIONALITY
12.	B_STATE_NOTIFY_DATE	DT	8	89 - 96	NOT USED (Blank Fill)
13. *	B_DATA_QUALITY	AN	1	97	NOT USED (Blank Fill)
14. *	B_DATA_QUALITY_REASON	AN	2	98 - 99	NOT USED (Blank Fill)
15.	B_ANALYSIS_METHOD_CODE	AN	12	100 - 111	NOT USED (Blank Fill)
16.	B_MONITORING_PERIOD_START_DATE	DT	8	112 - 119	MANDATORY - Because Sample Summary has no natural identifier, the combination of field 5 (B_WATER_SYSTEM_NUMBER) and field 6 (B_ANALYTE_CODE) and field 16 (B_MONITORING_PERIOD_START_DATE) and field 17 (B_MONITORING_PERIOD_END_DATE) serves as the reference to the parent Sample Summary. Required to associate the summary result to the parent Sample Summary.
17.	B_MONITORING_PERIOD_END_DATE	DT	8	120 - 127	MANDATORY - Because Sample Summary has no natural identifier, the combination of field 5 (B_WATER_SYSTEM_NUMBER) and field 6 (B_ANALYTE_CODE) and field 16 (B_MONITORING_PERIOD_START_DATE) and field 17 (B_MONITORING_PERIOD_END_DATE) serves as the reference to the parent Sample Summary. Required to associate the summary result to the parent Sample Summary.
18. *	B_VOLUME_ASSAYED	AN	9	128 - 136	NOT USED (Blank Fill)
19. *	B_LAB_REJECTION_REASON	AN	4	137 - 140	NOT USED (Blank Fill)
20. *	B_MICROBE_PRESENCE_INDICATOR	AN	1	141	NOT USED (Blank Fill)
21. *	B_TEST_TYPE	AN	1	142	NOT USED (Blank Fill)
22.	B_COUNT	N	10	143 - 152	NOT USED (Blank Fill)
23. *	B_COUNT_TYPE	AN	10	153 - 162	NOT USED (Blank Fill)

* Designates field with permitted values.

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+ Shaded gray blocks designate changes to previously published Structure Sets.

B_RESULT_SUMMARY_RESULT					
FIELD NO	FIELD NAME	DOMAIN	SIZE	POSITION	OPTIONALITY
24. *	B_COUNT_UNITS	AN	9	163 - 171	NOT USED (Blank Fill)
25. *	B_LESS_THAN_INDICATOR	AN	1	172	NOT USED (Blank Fill)
26. *	B_LESS_THAN_CODE	AN	3	173 - 175	NOT USED (Blank Fill)
27.	B_DETECTION_LEVEL	N	16(15(8))	176 - 191	NOT USED (Blank Fill)
28. *	B_DETECTION_LEVEL_UNIT_CODE	AN	9	192 - 200	NOT USED (Blank Fill)
29.	B_CONCENTRATION	N	14(13(9))	201 - 214	NOT USED (Blank Fill)
30. *	B_CONCENTRATION_UNIT_CODE	AN	9	215 - 223	NOT USED (Blank Fill)
31.	B_REPORTED_MEASURE	AN	10	224 - 233	NOT USED (Blank Fill)
32.	B_REPORTED_MEASURE_COUNT_ERROR	N	9 (8(3))	234 - 242	NOT USED (Blank Fill)
33. *	B_RESULTS_TYPE	AN	2	243 - 244	MANDATORY - Uniqueness/Duplicate check is on the combination of field 5 (B_WATER_SYSTEM_NUMBER) and field 6 (B_ANALYTE_CODE) and field 16 (B_MONITORING_PERIOD_START_DATE) and field 17 (B_MONITORING_PERIOD_END_DATE) and field 33 (B_RESULTS_TYPE).
34.	B_COUNT_QUANTITY	N	10	245 - 254	CONDITIONALLY MANDATORY - Must be valued if field 35 (B_MEASURE) is not valued.
35.	B_MEASURE	N	14(13(9))	255 - 268	CONDITIONALLY MANDATORY - Must be valued if field 34 (B_COUNT_QUANTITY) is not valued. Value must be numeric; non-numeric symbols (such as "<") will cause sample to be rejected. A result of 0.0 or a value that converts to 0 may be recorded as a result.
36. *	B_MEASURE_UNIT_CODE	AN	9	269 - 277	CONDITIONALLY MANDATORY - Must be valued if field 35 (B_MEASURE) is valued. If the Summary is for Analyte Code PB90 or CU90, only MG/L is valid. If the Summary is for Analyte Code PB90 or CU90 and value in this field is other than MG/L, the summary will be rejected.

* Designates field with permitted values.

+ Shaded gray blocks designate changes to previously published Structure Sets.

B_RESULT_SUMMARY_RESULT					
FIELD NO	FIELD NAME	DOMAIN	SIZE	POSITION	OPTIONALITY
37.	FILLER		98	278 - 375	Blank fill to make fixed record length of 375.

NOTE: At least one Summary Result must exist in order to create a Sample Summary.

* Designates field with permitted values.

+ Shaded gray blocks designate changes to previously published Structure Sets.

2.6 B_Result_Summary_Result Permitted Value List

B_RESULT_SUMMARY_RESULT		
FIELD NO	ATTRIBUTE NAME	PERMITTED VALUES
13.	B_DATA_QUALITY	A Accepted R Rejected P Preliminary V Validated
14.	B_DATA_QUALITY_REASON	IF Instrument Failure LC Lab Not Certified LE Lab Error OT Other RC Requestor Cancelled WR Water System Rejected
15.	B_ANALYSIS_METHOD_CODE	Federally owned Analyte Method Pairings are available in the SDWIS/STATE Online Data Dictionary. Federally owned and state-owned Analyte Method Pairings may be viewed by accessing the Analyte Method Pairing menu item available in the <i>SDWIS Administration</i> component of SDWIS/STATE.
18.	B_VOLUME_ASSAYED	100ML 300ML 400ML
19.	B_LAB_REJECTION_REASON	CNFG Confluent Growth TCNG Turbid Culture No Gas TNTC Too Numerous to Count
20.	B_MICROBE_PRESENCE_INDICATOR	A Absence P Presence
21.	B_TEST_TYPE	C Confirmed P Presumptive

* Designates field with permitted values.

B_RESULT_SUMMARY_RESULT			
FIELD NO	ATTRIBUTE NAME	PERMITTED VALUES	
23.	B_COUNT_TYPE	CFU	Colony Forming Units/Milliliter
		COLONIES	Colonies/100 Milliliters
		CYSTSC	Cysts Calculated (GL)
		CYSTSO	Cysts Observed (GL)
		MPN	Most Probable Number/100 Milliliters
		OBSVNS	Observations
		OCYSTSC	Oocysts Calculated (CRY)
		OCYSTSO	Oocysts Observed (CRY)
		PFU	Plaque Forming Units/Milliliter
		TUBES	Tubes/100 Milliliters
24.	B_COUNT_UNITS	100GAL	100 Gallons
		100L	100 Liters
		100ML	100 Milliliters
		400GAL	400 Gallons
		400ML	400 Milliliters
		FLD100	Field at 100 Power (used in measuring numbers of observations)
		GAL	Gallons
		LITER	Liters
		ML	Milliliters
25.	B_LESS_THAN_INDICATOR	Y	Yes
		N	No
26.	B_LESS_THAN_CODE	MDL	Federal Minimum Detection Limit
		MRL	Lab Reporting Level

* Designates field with permitted values.

+ Shaded gray blocks designate changes to previously published Structure Sets.

B_RESULT_SUMMARY_RESULT		
FIELD NO	ATTRIBUTE NAME	PERMITTED VALUES
28.	B_DETECTION_LEVEL_UNIT_CODE	CM-1 Total Absorbance for UV CT Contact Time LBS/CFT Pounds/Cubic Foot (for measuring density) LBS/GAL Pounds/Gallon (for measuring density) MFL Million of Fibers/Liter (for measuring asbestos) MG/L Milligrams/Liter (AKA Parts per Million - ppm) MREM Millirems/Liter MREMY Millirems/Liter/Year NG/L Nanograms/Liter (AKA Parts per Trillion - ppt) NTU Nephelometric Turbidity Units PIC/L Picocuries/Liter UG/L Micrograms/Liter (AKA Parts per Billion - ppb)
30.	B_CONCENTRATION_UNIT_CODE	%LUM Percent of Luminance (for measuring color) %PUR Percent of Purity (for measuring color) ADMIU American Dye Manufacturers Institute Units (for measuring color) AGGR Aggressive Index (for corrosivity) C Degrees Celsius CM-1 Total Absorbance for UV CT Contact Time CU Color Units F Degrees Fahrenheit FTU Flavor Threshold Units (for measuring taste and odor) LANG Langlier Index (for measuring corrosivity) LBS/CFT Pounds/Cubic Foot (for measuring density) LBS/GAL Pounds/Gallon (for measuring density) MFL Million of Fibers/Liter (for measuring asbestos) MG/L Milligrams/Liter (AKS Parts per Million - ppm) MREM Millirems/Liter

* Designates field with permitted values.

+ Shaded gray blocks designate changes to previously published Structure Sets.

B_RESULT_SUMMARY_RESULT		
FIELD NO	ATTRIBUTE NAME	PERMITTED VALUES
30.	B_CONCENTRATION_UNIT_CODE (cont.)	MREMY Millirems/Liter/Year NG/L Nanograms/Liter (AKA Parts per Trillion - ppt) NMT Nanometers (to measure color wave length) NTU Nephelometric Turbidity Units OBSVNS Observations/Field at 100 power PH PH Measure (parts hydrogen (pH 0 - 14)) PIC/L Picocuries/Liter SU Standard Units (for measuring color) TON Threshold Odor Number (for odor) UG/L Micrograms/Liter (AKA Parts per Billion - ppb) UMHOS/CM Microhos/Centimeter (for measuring conductivity)
33.	B_RESULTS_TYPE	90 90th Percentile (Lead & Copper) CB Chlorine Residual below 0.2 MG/P (0.2 MG/L) CK Check Samples Taken CR Total Chlorine Residual Taken FV Days in Federal Violation Period HR High Result for Period LR Low Result for Period MR Mean Result for Period NE Negative Sample Analytical Results NF Negative Finished Water Samples ND Negative Results from Distribution System Samples NR Negative Raw Water Samples PO Positive Sample Analytical Results RF Required Repeats per Federal Regulations RI Replacement Samples for Invalid Results RJ Rejected Samples RL Replacement Samples

* Designates field with permitted values.

B_RESULT_SUMMARY_RESULT		
FIELD NO	ATTRIBUTE NAME	PERMITTED VALUES
33.	B_RESULTS_TYPE (cont.)	RP Repeat Samples RS Required Repeats per State Regulations RT Routine Samples with Negative Results from Distribution System SP Special Samples SR Samples Required SV Days in State Violation Period TO Total Samples Collected VI Days of Violation Period
36.	B_MEASURE_UNIT_CODE	%LUM Percent of Luminance (for measuring color) %PUR Percent of Purity (for measuring color) ADMIU American Dye Manufacturers Institute Units (for measuring color) AGGR Aggressive Index (for corrosivity) C Degrees Celsius CM-1 Total Absorbance for UV COUNT Count CT Contact Time CU Color Units F Degrees Fahrenheit FTU Flavor Threshold Units (for measuring taste and odor) LANG Langlier Index (for measuring corrosivity) LBS/CFT Pounds/Cubic Foot (for measuring density) LBS/GAL Pounds/Gallon (for measuring density) MFL Million of Fibers/Liter (for measuring asbestos) MG/L Milligrams/Liter (AKA Parts per Million - ppm) MREM Millirems/Liter MREMY Millirems/Liter/Year NG/L Nanograms/Liter (AKA Parts per Trillion - ppt) NMT Nanometers (to measure color wave length)

* Designates field with permitted values.

+ Shaded gray blocks designate changes to previously published Structure Sets.

B_RESULT_SUMMARY_RESULT		
FIELD NO	ATTRIBUTE NAME	PERMITTED VALUES
36.	B_MEASURE_UNIT_CODE (cont.)	NTU Nephelometric Turbidity Units OBSVNS Observations/Field at 100 power PH PH Measure (Parts Hydrogen (pH 1 -14)) PIC/L Picocuries/Liter SU Standard Units (for measuring color) TON Threshold Odor Number (for odor) UG/L Micrograms/Liter (AKA Parts per Billion - ppb) UMHOS/CM Microhos/Centimeter (for measuring conductivity)

* Designates field with permitted values.

+ Shaded gray blocks designate changes to previously published Structure Sets.

2.7 B_Result_Summary_Result Mapping to SDWIS/STATE Entities

B_RESULT_SUMMARY_RESULT					
FIELD NO	STRUCTURE SET NAME	STRUCTURE SET ATTRIBUTE NAME	SDWIS/STATE TABLE NAME	SDWIS/STATE ENTITY NAME	SDWIS/STATE ATTRIBUTE NAME
1.	B_RESULT	B_RECORD_NAME			
2.	B_RESULT	B_REPORT_TYPE			
3.	B_RESULT	B_TRANSACTION_NUMBER			
4.	B_RESULT	B_LAB_SAMPLE_NUMBER	TSASAMPL	SBS Sample	LAB_ASSIGNED_ID_NUMBER <i>(Reference Key to SBS Sample)</i>
5.	B_RESULT	B_WATER_SYSTEM_NUMBER	TINWSYS	Water System	NUMBER <i>(Reference Key to SBS Sample or Reference Key to Sample Summary)</i>
6.	B_RESULT	B_ANALYTE_CODE	TSAANLYT	Analyte	CODE <i>(Foreign Key to SBS Sample Analytical Result or Reference Key to Sample Summary)</i>
7.	B_RESULT	B_CAS_NUMBER	TSAANLYT	Analyte	CAS_REGISTRY_NUMBER <i>(Foreign Key to SBS Sample Analytical Result)</i>
8.	B_RESULT	B_ANALYSIS_START_DATE	TSASAR	SBS Sample Analytical Result	ANALYSIS_START_DATE
9.	B_RESULT	B_ANALYSIS_START_TIME	TSASAR	SBS Sample Analytical Result	ANALYSIS_START_TIME
10.	B_RESULT	B_ANALYSIS_COMPLETION_DATE	TSASAR	SBS Sample Analytical Result	ANALYSIS_COMPLETE_DATE
11.	B_RESULT	B_ANALYSIS_COMPLETION_TIME	TSASAR	SBS Sample Analytical Result	ANALYSIS_COMPLETE_TIME
12.	B_RESULT	B_STATE_NOTIFY_DATE	TSASAR	SBS Sample Analytical Result	STATE_NOTIFICATION_DATE
13.	B_RESULT	B_DATA_QUALITY	TSASAR	SBS Sample Analytical Result	DATA_QUALITY_CODE

* Designates field with permitted values.

+ Shaded gray blocks designate changes to previously published Structure Sets.

B_RESULT_SUMMARY_RESULT					
FIELD NO	STRUCTURE SET NAME	STRUCTURE SET ATTRIBUTE NAME	SDWIS/STATE TABLE NAME	SDWIS/STATE ENTITY NAME	SDWIS/STATE ATTRIBUTE NAME
14.	B_RESULT	B_DATA_QUALITY_REASON	TSASAR	SBS Sample Analytical Result	DATA_QUALITY_REASON_CODE
15.	B_RESULT	B_ANALYSIS_METHOD_CODE	TSASMN	Standard Method Number	CODE (<i>Foreign Key to SBS Sample Analytical Result</i>)
16.	B_RESULT	B_MONITORING_PERIOD_START_DATE	TMNMPRD	Monitoring Period	BEGIN_DATE (<i>Foreign Key to SBS Sample Analytical Result or Reference Key to Sample Summary</i>)
17.	B_RESULT	B_MONITORING_PERIOD_END_DATE	TMNMPRD	Monitoring Period	END_DATE (<i>Foreign Key to SBS Sample Analytical Result or Reference Key to Sample Summary</i>)
18.	B_RESULT	B_VOLUME_ASSAYED	TSAMAR	Microbiological Analytical Result	ASSAY_UOM_CODE
19.	B_RESULT	B_LAB_REJECTION_REASON	TSAMAR	Microbiological Analytical Result	REJECTION_REASON_CODE
20.	B_RESULT	B_MICROBE_PRESENCE_INDICATOR	TSAMAR	Microbiological Analytical Result	PRESENCE_INDICATOR_CODE
21.	B_RESULT	B_TEST_TYPE	TSAMAR	Microbiological Analytical Result	TEST_TYPE
22.	B_RESULT	B_COUNT	TSAMAR	Microbiological Analytical Result	COUNT_QTY
23.	B_RESULT	B_COUNT_TYPE	TSAMAR	Microbiological Analytical Result	COUNT_TYPE
24.	B_RESULT	B_COUNT_UNITS	TSAMAR	Microbiological Analytical Result	COUNT_UOM_CODE
25.	B_RESULT	B_LESS_THAN_INDICATOR	TSASAR	SBS Sample Analytical Result	LESS_THAN_INDICATOR

* Designates field with permitted values.

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+ Shaded gray blocks designate changes to previously published Structure Sets.

B_RESULT_SUMMARY_RESULT					
FIELD NO	STRUCTURE SET NAME	STRUCTURE SET ATTRIBUTE NAME	SDWIS/STATE TABLE NAME	SDWIS/STATE ENTITY NAME	SDWIS/STATE ATTRIBUTE NAME
26.	B_RESULT	B_LESS_THAN_CODE	TSASAR	SBS Sample Analytical Result	LESS_THAN_CODE
27.	B_RESULT	B_DETECTION_LEVEL	TSASAR	SBS Sample Analytical Result	DETECTION_LIMIT_NUMBER
28.	B_RESULT	B_DETECTION_LEVEL_UNIT_CODE	TSASAR	SBS Sample Analytical Result	DETECTION_LIMIT_UOM_CODE
29.	B_RESULT	B_CONCENTRATION	TSASAR	SBS Sample Analytical Result	CONCENTRATION_MSR
30.	B_RESULT	B_CONCENTRATION_UNIT_CODE	TSASAR	SBS Sample Analytical Result	UOM_CODE
31.	B_RESULT	B_REPORTED_MEASURE	TSASAR	SBS Sample Analytical Result	REPORTED_MEASURE
32.	B_RESULT	B_REPORTED_MEASURE_COUNT_ERROR	TSASAR	SBS Sample Analytical Result	RAD_COUNTING_ERROR
33.	B_RESULT	B_RESULTS_TYPE	TSASSR	Sample Summary Result	TYPE_CODE
34.	B_RESULT	B_COUNT_QUANTITY	TSASSR	Sample Summary Result	COUNT_QTY
35.	B_RESULT	B_MEASURE	TSASSR	Sample Summary Result	MEASURE MEASURE_TEXT
36.	B_RESULT	B_MEASURE_UNIT_CODE	TSASSR	Sample Summary Result	UOM_CODE

* Designates field with permitted values.

+ Shaded gray blocks designate changes to previously published Structure Sets.

2.8 B_Result_Summary_Result Definitions

B_RESULT_SUMMARY_RESULT DEFINITIONS		
FIELD NO	FIELD NAME	INDIVIDUAL RESULT (T)/ SUMMARY RESULT (S)
1.	B_RECORD_NAME	DTR - Indicates that the input string represents a Result. Each result record must contain DTR in the first field.
2.	B_REPORT_TYPE	T - Indicates the input string is an individual Sample/Sample Result; S indicates the input string is a Summary/Summary Result. This field is mandatory.
3.	B_TRANSACTION_NUMBER	Not used.
4.	B_LAB_SAMPLE_NUMBER	Reference field - Number/alphanumeric that identifies the sample to which this result belongs. When used, this field must be identical to the B_LAB_SAMPLE_NUMBER in the Sample record unless the sample is a composite in which case it may be identical to the B_LAB_COMPOSITE_NUMBER in the Sample.
5.	B_WATER_SYSTEM_NUMBER	Reference field - The Public Water System (PWS) Identification number. This field is mandatory and must be identical to the B_WATER_SYSTEM_NUMBER in the Sample or Summary.
6.	B_ANALYTE_CODE	Analyte Code for the result to be assessed or the Sample Summary to be referenced.
7.	B_CAS_NUMBER	Chemical Abstract Series Number - Can be used to specify Chemical analytes.
8.	B_ANALYSIS_START_DATE	Date that laboratory analysis begins.
9.	B_ANALYSIS_START_TIME	Time that laboratory analysis begins.
10.	B_ANALYSIS_COMPLETION_DATE	Date that laboratory analysis ends.
11.	B_ANALYSIS_COMPLETION_TIME	Time that laboratory analysis ends.
12.	B_STATE_NOTIFY_DATE	Date that the state receives the analytical result.
13.	B_DATA_QUALITY	Code indicating whether or not the analytical result meets established data quality criteria.
14.	B_DATA_QUALITY_REASON	Possible reasons that the code may not meet data quality standards.
15.	B_ANALYSIS_METHOD_CODE	Standard analysis method code for the analyte for which the result is assessed.
16.	B_MONITORING_PERIOD_START_DATE	Start date of the monitoring period to which the analytical result or the referenced sample summary is assigned. The monitoring period must be valid for the Water System that collected the sample and the rule against which the result is assessed.

* Designates field with permitted values.

B_RESULT_SUMMARY_RESULT DEFINITIONS		
FIELD NO	FIELD NAME	INDIVIDUAL RESULT (T)/ SUMMARY RESULT (S)
17.	B_MONITORING_PERIOD_END_DATE	End date of the monitoring period to which the analytical result or the referenced sample summary is assigned. The monitoring period must be valid for the Water System that collected the sample and the rule against which the result is assessed.
18.	B_VOLUME_ASSAYED	The amount of water used during the laboratory assessment.
19.	B_LAB_REJECTION_REASON	Possible lab comments (Too numerous to count/Turbid Culture No Gas) that may cause the state to reject a microbiological result.
20.	B_MICROBE_PRESENCE_INDICATOR	Presence/Absence indicator - P indicates that the microbiological result is positive while A indicates a negative result.
21.	B_TEST_TYPE	Designates the result as either "presumptive" or "confirmed."
22.	B_COUNT	Value greater than 0 indicates a positive microbiological result.
23.	B_COUNT_TYPE	Type of microbiological unit that is being counted per specified count unit. Count type varies with the microbiological organism where count is being recorded.
24.	B_COUNT_UNITS	The units of measure associated with the microbiological analytical result count.
25.	B_LESS_THAN_INDICATOR	When set to "Y," indicates that the analytical result is less than either the Lab Reporting Level (supplied by the lab) or the federal minimum detection limit. Typically set to "Y" for a non-detect result.
26.	B_LESS_THAN_CODE	<p>MRL - Lab Reporting Level—Indicates that the lab will supply the minimum detection limit and will value the B_DETECTION_LEVEL and B_DETECTION_LEVEL_UNIT_CODE fields. Note: this value may be the federal minimum detection limit for that analyte, but SDWIS/STATE treats it as a Lab Reporting Level if the value is supplied by the lab. (Some laboratories wish to report a value that is more stringent than the federal minimum detection limit for the analyte.)</p> <p>MDL - Federal minimum detection limit—value carried as appropriate for each analyte and method—the source for each value is the code for the Code of Federal Regulation (40 CFR Section 141, et al.). If field contains MDL, SDWIS will look up the federal detection limit for the analyte and populate B_DETECTION_LEVEL and B_DETECTION_LEVEL_UNIT_CODE fields. (The data for MDLs is stored in SDWIS as TSAMAA MDL_Measure and MDL_Msr_Unit_Code.)</p>

* Designates field with permitted values.

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+ Shaded gray blocks designate changes to previously published Structure Sets.

B_RESULT_SUMMARY_RESULT DEFINITIONS		
FIELD NO	FIELD NAME	INDIVIDUAL RESULT (T)/ SUMMARY RESULT (S)
27.	B_DETECTION_LEVEL	If non-detector "less than Lab Reporting Level" - Value supplied by Lab.
28.	B_DETECTION_LEVEL_UNIT_CODE	Lab Reporting Level unit of measure.
29.	B_CONCENTRATION	If detect, this is the concentration value of the result reported as a number.
30.	B_CONCENTRATION_UNIT_CODE	Unit of measure associated with the concentration value.
31.	B_REPORTED_MEASURE	If detect, this is the concentration value of the result; this field preserves precision.
32.	B_REPORTED_MEASURE_COUNT_ERROR	The counting error estimated by the lab due to some analytical anomaly - Usually expressed as a value plus/minus the reported measure/unit of measure.
33.	B_RESULTS_TYPE	Used only in Sample Summary - List of possible types of Sample Summary results.
34.	B_COUNT_QUANTITY	Count of each type of result within the Sample Summary.
35.	B_MEASURE	Measure value that represents the result obtained from a sample analysis.
36.	B_MEASURE_UNIT_CODE	Unit of measure associated with the Measure.

* Designates field with permitted values.

3.0 STRUCTURE SET B_MDBP_Summary

3.1 B_MDBP_Summary File Layout For Generic or User-Defined Summaries (OTHR or State-Owned)

B_MDBP_SUMMARY					
FIELD NO	FIELD NAME	DOMAIN	SIZE	POSITION	OPTIONALITY
1. *	B_MDBP_SUMMARY_TYPE	AN	4	1 - 4	MANDATORY - Overlap check for MDBP Summary is on the combination of the FANL (as defined by the FANL Reference Group, fields 1 - 4), field 5 (B_MON_PERIOD_BEG_DATE), field 6 (B_MON_PERIOD_END_DATE), and field 7 (B_SAMPLING_POINT). See Note at end of this layout. For a MDBP Summary Type, see federally defined list in the permitted values section of this structure set. For a state-defined MDBP Summary type, the type must already exist in the database. System Administrators may add state-defined MDBP Summary types to Code Name TSAMDBPS1 using the online Permitted Values function in the <i>System Administration</i> component.
2.	B_PWS_NUMBER	AN	9	5 - 13	MANDATORY - Overlap check for MDBP Summary is on the combination of the FANL (as defined by the FANL Reference Group, fields 1 - 4), field 5 (B_MON_PERIOD_BEG_DATE), field 6 (B_MON_PERIOD_END_DATE), and field 7 (B_SAMPLING_POINT). See Note at end of this layout.
3.	B_WSF_STATE_ASGN_ID	AN	12	14 - 25	MANDATORY - Overlap check for MDBP Summary is on the combination of the FANL (as defined by the FANL Reference Group, fields 1 - 4), field 5 (B_MON_PERIOD_BEG_DATE), field 6 (B_MON_PERIOD_END_DATE), and field 7

* Designates field with permitted values.

B_MDBP_SUMMARY					
FIELD NO	FIELD NAME	DOMAIN	SIZE	POSITION	OPTIONALITY
					(B_SAMPLING_POINT). See Note at end of this layout.
4. *	B_ANALYTE_CODE	AN	4	26 - 29	MANDATORY - Overlap check for MDBP Summary is on the combination of the FANL (as defined by the FANL Reference Group, fields 1 - 4), field 5 (B_MON_PERIOD_BEG_DATE), field 6 (B_MON_PERIOD_END_DATE), and field 7 (B_SAMPLING_POINT). See Note at end of this layout.
5.	B_MON_PERIOD_BEG_DATE	DT	8	30 - 37	MANDATORY - Overlap check for MDBP Summary is on the combination of the FANL (as defined by the FANL Reference Group, fields 1 - 4), field 5 (B_MON_PERIOD_BEG_DATE), field 6 (B_MON_PERIOD_END_DATE), and field 7 (B_SAMPLING_POINT). See Note at end of this layout.
6.	B_MON_PERIOD_END_DATE	DT	8	38 - 45	MANDATORY - Overlap check for MDBP Summary is on the combination of the FANL (as defined by the FANL Reference Group, fields 1 - 4), field 5 (B_MON_PERIOD_BEG_DATE), field 6 (B_MON_PERIOD_END_DATE), and field 7 (B_SAMPLING_POINT). See Note at end of this layout.
7.	B_SAMPLING_POINT	AN	11	46 - 56	OPTIONAL - Overlap check for MDBP Summary is on the combination of the FANL (as defined by the FANL Reference Group, fields 1 - 4), field 5 (B_MON_PERIOD_BEG_DATE), field 6 (B_MON_PERIOD_END_DATE), and field 7 (B_SAMPLING_POINT). See Note at end of this layout. Must value if need to enter separate summaries for each sampling point. For example, if there are two entry points from one treatment plant. Recommend value when all samples

* Designates field with permitted values.

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+ Shaded gray blocks designate changes to previously published Structure Sets.

B_MDBP_SUMMARY					
FIELD NO	FIELD NAME	DOMAIN	SIZE	POSITION	OPTIONALITY
					<i>collected at same point.</i>
8.	B_LAB_FED_CERT_NO	AN	10	57 - 66	OPTIONAL
9.	B_LAB_STATE_CERT_NO	AN	10	67 - 76	OPTIONAL
10.	B_ANALYST_NO	AN	15	77 - 91	OPTIONAL - If this field is valued, the software will use only this field to retrieve an Individual Legal Entity and will ignore any values in fields 11 - 14.
11.	B_ANALYST_LAST_NAME	AN	20	92 - 111	CONDITIONALLY MANDATORY - Must be valued if either field 12 (B_ANALYST_FIRST_NAME), field 13 (B_ANALYST_ORGANIZATION), or field 14 (B_ANALYST_MAIL_STOP_TEXT) are valued.
12.	B_ANALYST_FIRST_NAME	AN	20	112 - 131	CONDITIONALLY MANDATORY - Must be valued if either field 11 (B_ANALYST_LAST_NAME), field 13 (B_ANALYST_ORGANIZATION), or field 14 (B_ANALYST_MAIL_STOP_TEXT) are valued.
13.	B_ANALYST_ORGANIZATION	AN	30	132 - 161	OPTIONAL - If more than one Individual record in Legal Entities exists with the same First Name and Last Name, users should either populate this field and/or field 14, whichever was used to uniquely identify the desired Individual record. If the user does not, the software will link to the first Individual record that matches based on First Name and Last Name.
14.	B_ANALYST_MAIL_STOP_TEXT	AN	10	162 - 171	OPTIONAL - If more than one Individual record in Legal Entities exists with the same First Name and Last Name, users should either populate this field and/or field 13, whichever was used to uniquely identify the desired Individual record. If the user does not, the software will link to the first Individual record that matches based on First Name and Last Name.
15.	B_REPORTED_DATE	DT	8	172 - 179	OPTIONAL - <i>The SDWIS/STATE team recommends that you value this field.</i> If date exists and it is a future date, the software will set to the current date.

* Designates field with permitted values.

+ Shaded gray blocks designate changes to previously published Structure Sets.

B_MDBP_SUMMARY					
FIELD NO	FIELD NAME	DOMAIN	SIZE	POSITION	OPTIONALITY
16.	B_SAMPLES_REQUIRED	N	5	180 - 184	OPTIONAL - <i>The SDWIS/STATE team recommends that you value this field.</i>
17.	B_SAMPLES_COLLECTED	N	5	185 - 189	OPTIONAL - <i>The SDWIS/STATE team recommends that you value this field.</i>
18. *	B_MR_COMPLIANCE_INDICATOR	AN	3	190 - 192	OPTIONAL - Must value for M&R compliance determination to be made. If not valued and field 16 (B_SAMPLES_REQUIRED) and field 17 (B_SAMPLES_COLLECTED) are valued, the software will value as follows: If $x \geq 100$, default to "Yes." If $x < 89.9$, default to No Major. Otherwise, default to No Minor. Where $x = (\text{Number of Samples Taken/Number of Samples Required}) * 100$. If field 16 (B_SAMPLES_REQUIRED), field 17 (B_SAMPLES_COLLECTED), and field 18 (B_MR_COMPLIANCE_INDICATOR) are valued for any summary type, software will evaluate M&R Compliance and flag if inconsistent. For example if, field 16 (B_SAMPLES_REQUIRED) is greater than field 17 (B_SAMPLES_COLLECTED), and field 18 (B_MR_COMPLIANCE_INDICATOR) equals "Yes," summary will be flagged.
19.	B_TOTAL_SAMPLES_BEYOND_MSR_LVL	N	5	193 - 197	OPTIONAL
20.	B_PERCENT_SAMPLES_BEYOND_MSR_LVL	N	7(6(3))	198 - 204	OPTIONAL - If valued, value must be convertible to a numeric within the range of (6(3)). <i>Developer note: The software uses the number supplied in this field to value both MDBP Summary PERCENT_SAMPLES_BEYOND_MSR_LVL and MDBP Summary PERCENT_SAMPS_BYND_MSR_LVL_TXT.</i>
21.	B_HIGHEST_MEASURE	N	6(5(3))	205 - 210	OPTIONAL - If valued, value must be convertible to a numeric within the range of (5(3)). <i>Developer note: The software uses</i>

* Designates field with permitted values.

+ Shaded gray blocks designate changes to previously published Structure Sets.

B_MDBP_SUMMARY					
FIELD NO	FIELD NAME	DOMAIN	SIZE	POSITION	OPTIONALITY
					<i>the number supplied in this field to value both MDBP Summary HIGHEST_MEASURE and MDBP Summary HIGHEST_MSR_TXT.</i>
22. *	B_LEVEL_COMPLIANCE_INDICATOR	AN	1	211	OPTIONAL - Must value for level compliance determination to be made. If not valued, calculate and value, if field 19 (B_TOTAL_SAMPLES_BEYOND_MSR_LVL) is greater than zero, "No," else "Yes." If field 19 (B_TOTAL_SAMPLES_BEYOND_MSR_LVL) and field 22 (B_LEVEL_COMPLIANCE_INDICATOR) are valued and field 19 (B_TOTAL_SAMPLES_BEYOND_MSR_LVL) is greater than zero and field 22 (B_LEVEL_COMPLIANCE_INDICATOR) equals "Yes," summary will be flagged.
23.	B_MONITORING_PERIOD_AVG_MEASURE	N	8(7(4))	212 - 219	OPTIONAL - If valued, value must be convertible to a numeric within the range of (7(4)). <i>Developer note: The software uses the number supplied in this field to value both MDBP Summary MONITORING_PERIOD_AVG_MEASURE and MDBP Summary MONITORING_PERIOD_AVG_MSR_TXT.</i>
24. *	B_MPA_UOM_CODE	AN	9	220 - 228	CONDITIONALLY MANDATORY - If field 23 (B_MONITORING_PERIOD_AVG_MEASURE) is valued, field 24 (B_MPA_UOM_CODE) must be valued.
25.	B_RUNNING_ANNUAL_AVERAGE_MEASURE	N	8(7(4))	229 - 236	OPTIONAL - If valued, value must be convertible to a numeric within the range of (7(4)). <i>Developer note: The software uses the number supplied in this field to value both MDBP Summary RUNNING_ANNUAL_AVERAGE_MEASURE and MDBP Summary RUNNING_ANNUAL_AVERAGE_MSR_TXT.</i>
26. *	B_RAA_UOM_CODE	AN	9	237 - 245	CONDITIONALLY MANDATORY - If field 25 (B_RUNNING_ANNUAL_AVERAGE_MEASURE) is valued,

* Designates field with permitted values.

+ Shaded gray blocks designate changes to previously published Structure Sets.

B_MDBP_SUMMARY					
FIELD NO	FIELD NAME	DOMAIN	SIZE	POSITION	OPTIONALITY
					field 26 (B_RAA_UOM_CODE) must be valued.
27. *	B_Q1_IFT_MONITORED_INDICATOR	AN	1	246	OPTIONAL
28. *	B_Q2_IFT_RECORDED_INDICATOR	AN	1	247	OPTIONAL
29. *	B_Q3_IFT_EQUIPMENT_INDICATOR	AN	1	248	OPTIONAL
30. *	B_Q4_IFT_GREATER_1_0_INDICATOR	AN	1	249	OPTIONAL
31. *	B_Q5_IFT_GREATER_0_5_INDICATOR	AN	1	250	OPTIONAL
32. *	B_Q6_IFT_GREATER_1_DUR_3_MON_IND	AN	1	251	OPTIONAL
33. *	B_Q7_IFT_GREATER_2_0_DUR_2_MON_IND	AN	1	252	OPTIONAL
34.	B_COMMENTS_TEXT	AN	200	253 - 452	OPTIONAL

Due to the complex nature of MDBP Summaries and their relationships to Facility Analyte Levels (FANL) and CDS Compliance determination, it is recommended that those three areas of the User's Guide be reviewed thoroughly prior to creation of FANL and MDBP Summary text files for migration.

Every MDBP Summary must be associated with a Facility Analyte Level (FANL). *If a FANL that matches the information supplied in the structure set cannot be found, the MDBP Summary will be rejected.*

Overlap check for a Summary is on the combination of:

- The values in the FANL Reference Group fields.
- AND the Monitoring Period specified in fields 5 and 6 (which is also used to retrieve the correct FANL).
- AND the Sampling Point. In this definition, a null value for field 7 (B_Sampling_Point) *is effectively a value in and of itself.*

Additional notes:

- In addition to retrieving the correct Monitoring Period, field 5, B_MON_PERIOD_BEG_DATE, and field 6, B_MON_PERIOD_END_DATE, are used to retrieve the correct FANL. The software identifies the FANL whose Effective Period Begin and End dates covers the specified Monitoring Period Begin Date. It is recommended that FANL Effective Begin and End dates correspond to Monitoring Period Begin and End dates.

* Designates field with permitted values.

- When the summary type is IFT, the software will associate the summary to a FANL whose MDBP Summary Type is 95PT and whose INDIV_FILTER_MNTRG_REQD_FLAG is “Y.”

3.2 B_MDBP_Summary File Layout for Combined Filter Turbidity Summaries (AVGT, MAXT, 95PT)

B_MDBP_Summary					
FIELD NO	FIELD NAME	DOMAIN	SIZE	POSITION	OPTIONALITY
1. *	B_MDBP_SUMMARY_TYPE	AN	4	1 - 4	MANDATORY - Overlap check for MDBP Summary is on the combination of the FANL (as defined by the FANL Reference Group, fields 1 - 4), field 5 (B_MON_PERIOD_BEG_DATE), field 6 (B_MON_PERIOD_END_DATE), and field 7 (B_SAMPLING_POINT). See Note at end of this layout. For a MDBP Summary Type, see federally defined list in the permitted values section of this structure set. For a state-defined MDBP Summary type, the type must already exist in the database. System Administrators may add state-defined MDBP Summary types to Code Name TSAMDBPS1 using the online Permitted Values function in the <i>System Administration</i> component.
2.	B_PWS_NUMBER	AN	9	5 - 13	MANDATORY - Overlap check for MDBP Summary is on the combination of the FANL (as defined by the FANL Reference Group, fields 1 - 4), field 5 (B_MON_PERIOD_BEG_DATE), field 6 (B_MON_PERIOD_END_DATE), and field 7 (B_SAMPLING_POINT). See Note at end of this layout.
3.	B_WSF_STATE_ASGN_ID	AN	12	14 - 25	MANDATORY - Overlap check for MDBP Summary is on the combination of the FANL (as defined by the FANL Reference Group, fields 1 - 4), field 5 (B_MON_PERIOD_BEG_DATE), field 6 (B_MON_PERIOD_END_DATE), and field 7 (B_SAMPLING_POINT). See Note at end of this layout. <i>Recommend WSF of type TP - Treatment Plant.</i>
4. *	B_ANALYTE_CODE	AN	4	26 - 29	MANDATORY - Overlap check for MDBP Summary is on

* Designates field with permitted values.

+ Shaded gray blocks designate changes to previously published Structure Sets.

B_MDBP_Summary					
FIELD NO	FIELD NAME	DOMAIN	SIZE	POSITION	OPTIONALITY
					the combination of the FANL (as defined by the FANL Reference Group, fields 1 - 4), field 5 (B_MON_PERIOD_BEG_DATE), field 6 (B_MON_PERIOD_END_DATE), and field 7 (B_SAMPLING_POINT). See Note at end of this layout. Must be Turbidity 0100.
5.	B_MON_PERIOD_BEG_DATE	DT	8	30 - 37	MANDATORY - Overlap check for MDBP Summary is on the combination of the FANL (as defined by the FANL Reference Group, fields 1 - 4), field 5 (B_MON_PERIOD_BEG_DATE), field 6 (B_MON_PERIOD_END_DATE), and field 7 (B_SAMPLING_POINT). See Note at end of this layout.
6.	B_MON_PERIOD_END_DATE	DT	8	38 - 45	MANDATORY - Overlap check for MDBP Summary is on the combination of the FANL (as defined by the FANL Reference Group, fields 1 - 4), field 5 (B_MON_PERIOD_BEG_DATE), field 6 (B_MON_PERIOD_END_DATE), and field 7 (B_SAMPLING_POINT). See Note at end of this layout.
7.	B_SAMPLING_POINT	AN	11	46 - 56	OPTIONAL - Overlap check for MDBP Summary is on the combination of the FANL (as defined by the FANL Reference Group, fields 1 - 4), field 5 (B_MON_PERIOD_BEG_DATE), field 6 (B_MON_PERIOD_END_DATE), and field 7 (B_SAMPLING_POINT). See Note at end of this layout. Must value if need to enter separate summaries for each sampling point. For example, if there are two entry points from one treatment plant. Recommend value when all samples collected at same point.
8.	B_LAB_FED_CERT_NO	AN	10	57 - 66	OPTIONAL

* Designates field with permitted values.

+ Shaded gray blocks designate changes to previously published Structure Sets.

B_MDBP_Summary					
FIELD NO	FIELD NAME	DOMAIN	SIZE	POSITION	OPTIONALITY
9.	B_LAB_STATE_CERT_NO	AN	10	67 - 76	OPTIONAL
10.	B_ANALYST_NO	AN	15	77 - 91	OPTIONAL - If this field is valued, the software will use only this field to retrieve an Individual Legal Entity and will ignore any values in fields 11 - 14.
11.	B_ANALYST_LAST_NAME	AN	20	92 - 111	CONDITIONALLY MANDATORY - Must be valued if either field 12 (B_ANALYST_FIRST_NAME), field 13 (B_ANALYST_ORGANIZATION), or field 14 (B_ANALYST_MAIL_STOP_TEXT) are valued.
12.	B_ANALYST_FIRST_NAME	AN	20	112 - 131	CONDITIONALLY MANDATORY - Must be valued if either field 11 (B_ANALYST_LAST_NAME), field 13 (B_ANALYST_ORGANIZATION), or field 14 (B_ANALYST_MAIL_STOP_TEXT) are valued.
13.	B_ANALYST_ORGANIZATION	AN	30	132 - 161	OPTIONAL - If more than one Individual record in Legal Entities exists with the same First Name and Last Name, users should either populate this field and/or field 14, whichever was used to uniquely identify the desired Individual record. If the user does not, the software will link to the first Individual record that matches based on First Name and Last Name.
14.	B_ANALYST_MAIL_STOP_TEXT	AN	10	162 - 171	OPTIONAL - If more than one Individual record in Legal Entities exists with the same First Name and Last Name, users should either populate this field and/or field 13, whichever was used to uniquely identify the desired Individual record. If the user does not, the software will link to the first Individual record that matches based on First Name and Last Name.
15.	B_REPORTED_DATE	DT	8	172 - 179	OPTIONAL - <i>The SDWIS/STATE team recommends that you value this field.</i> If date exists and it is a future date, the software will set to the current date.
16.	B_SAMPLES_REQUIRED	N	5	180 - 184	OPTIONAL - <i>The SDWIS/STATE team recommends that you value this field.</i>

* Designates field with permitted values.

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B_MDBP_Summary					
FIELD NO	FIELD NAME	DOMAIN	SIZE	POSITION	OPTIONALITY
17.	B_SAMPLES_COLLECTED	N	5	185 - 189	OPTIONAL - <i>The SDWIS/STATE team recommends that you value this field.</i>
18. *	B_MR_COMPLIANCE_INDICATOR	AN	3	190 - 192	<p>OPTIONAL - Must value for compliance determinations to be made for AVGT and 95PT. Recommend do not value with MAXT type summary.</p> <p>If not valued for type AVGT or 95PT and field 16 (B_SAMPLES_REQUIRED) and field 17 (B_SAMPLES_COLLECTED) valued, the software will value as follows: If $x \geq 100$, default to "Yes." If $x < 89.9$, default to No Major. Otherwise, default to No Minor. Where $x = (\text{Number of Samples Taken}/\text{Number of Samples Required}) * 100$.</p> <p>If field 16 (B_SAMPLES_REQUIRED), field 17 (B_SAMPLES_COLLECTED), and field 18 (B_MR_COMPLIANCE_INDICATOR) valued for any summary type, software will evaluate M&R Compliance and flag if inconsistent. For example if, field 16 (B_SAMPLES_REQUIRED) is greater than field 17 (B_SAMPLES_COLLECTED), and field 18 (B_MR_COMPLIANCE_INDICATOR) equals "Yes," summary will be flagged.</p>
19.	B_TOTAL_SAMPLES_BEYOND_MSR_LVL	N	5	193 - 197	OPTIONAL - <i>The SDWIS/STATE team recommends that you value this field.</i>
20.	B_PERCENT_SAMPLES_BEYOND_MSR_LVL	N	7(6(3))	198 - 204	OPTIONAL - If valued, value must be convertible to a numeric within the range of (6(3)). <i>Developer note: The software uses the number supplied in this field to value both MDBP Summary PERCENT_SAMPLES_BEYOND_MSR_LVL and MDBP Summary</i>

* Designates field with permitted values.

B_MDBP_Summary					
FIELD NO	FIELD NAME	DOMAIN	SIZE	POSITION	OPTIONALITY
					<p><i>PERCENT_SAMPS_BYND_MSR_LVL_TXT.</i> Recommend value with 95PT type summary only. If not valued for summary type 95PT and field 17 (B_SAMPLES_COLLECTED) and field 19 (B_TOTAL_SAMPLES_BEYOND_MSR_LVL) valued, calculate and value $z = (x/y) * 100$; where $x = TOTAL_SAMPLES_BEYOND_MSR_LVL$ and $y = B_SAMPLES_COLLECTED$.</p>
21.	B_HIGHEST_MEASURE	N	6(5(3))	205 - 210	<p>OPTIONAL - If valued, value must be convertible to a numeric within the range of (5(3)). <i>Developer note: The software uses the number supplied in this field to value both MDBP Summary HIGHEST_MEASURE and MDBP Summary HIGHEST_MSR_TXT.</i> Recommend value with MAXT type summary only (MAXT summary must be valued to satisfy Consumer Confidence Reporting - CCR requirements). If not valued for type MAXT, software will flag the summary. Use this field with summary type MAXT to enter the maximum two-day average for turbidity under the old Turbidity rule.</p>
22. *	B_LEVEL_COMPLIANCE_INDICATOR	AN	1	211	<p>OPTIONAL - Must value for compliance determination to be made. If not valued, calculate and value. For type MAXT if field 21 (B_HIGHEST_MEASURE) is greater than CONTROL_LVL_MSR of matching FANL, value "No," else "Yes." For type 95PT, if field 19 (B_PERCENT_SAMPLES_BEYOND_MSR_LVL) greater than 5.49%, value "No," else "Yes."</p>

* Designates field with permitted values.

+ Shaded gray blocks designate changes to previously published Structure Sets.

B_MDBP_Summary					
FIELD NO	FIELD NAME	DOMAIN	SIZE	POSITION	OPTIONALITY
					<p>For type MAXT, if field 21 (B_HIGHEST_MEASURE) and field 22 (B_LEVEL_COMPLIANCE_INDICATOR) are valued, software will evaluate level compliance and flag if inconsistent. For example, if field 21 (B_HIGHEST_MEASURE) is 6 NTU and the CONTROL_LVL_MSR of the matching FANL is 5 NTU and field 22 (B_LEVEL_COMPLIANCE_INDICATOR) equals "Yes," summary will be flagged.</p> <p>For type 95PT, if field 19 (B_PERCENT_SAMPLES_BEYOND_MSR_LVL) and field 22 (B_LEVEL_COMPLIANCE_INDICATOR) are valued, software will evaluate level compliance and flag if inconsistent. For example, if field 19 (B_PERCENT_SAMPLES_BEYOND_MSR_LVL) is greater than 5.49% and field 22 (B_LEVEL_COMPLIANCE_INDICATOR) equals "Yes," summary will be flagged.</p>
23.	B_MONITORING_PERIOD_AVG_MEASURE	N	8(7(4))	212 - 219	OPTIONAL - If entering the average turbidity for a month reported under the old Turbidity rule, use this field and the next to record the average.
24.	B_MPA_UOM_CODE	AN	9	220 - 228	
25.	B_RUNNING_ANNUAL_AVERAGE_MEASURE	N	8(7(4))	229 - 236	NOT USED (Blank Fill)
26.	B_RAA_UOM_CODE	AN	9	237 - 245	NOT USED (Blank Fill)
27.	B_Q1_IFT_MONITORED_INDICATOR	AN	1	246	NOT USED (Blank Fill)
28.	B_Q2_IFT_RECORDED_INDICATOR	AN	1	247	NOT USED (Blank Fill)
29.	B_Q3_IFT_EQUIPMENT_INDICATOR	AN	1	248	NOT USED (Blank Fill)
30.	B_Q4_IFT_GREATER_1_0_INDICATOR	AN	1	249	NOT USED (Blank Fill)
31.	B_Q5_IFT_GREATER_0_5_INDICATOR	AN	1	250	NOT USED (Blank Fill)

* Designates field with permitted values.

+ Shaded gray blocks designate changes to previously published Structure Sets.

B_MDBP_Summary					
FIELD NO	FIELD NAME	DOMAIN	SIZE	POSITION	OPTIONALITY
32.	B_Q6_IFT_GREATER_1_DUR_3_MON_IND	AN	1	251	NOT USED (Blank Fill)
33.	B_Q7_IFT_GREATER_2_0_DUR_2_MON_IND	AN	1	252	NOT USED (Blank Fill)
34.	B_COMMENTS_TEXT	AN	200	253 - 452	OPTIONAL

Due to the complex nature of MDBP Summaries and their relationships to Facility Analyte Levels (FANL) and CDS Compliance determination, it is recommended that those three areas of the User’s Guide be reviewed thoroughly prior to creation of FANL and MDBP Summary text files for migration.

Every MDBP Summary must be associated with a Facility Analyte Level (FANL). *If a FANL that matches the information supplied in the structure set cannot be found, the MDBP Summary will be rejected.*

Overlap check for a Summary is on the combination of:

- The values in the FANL Reference Group fields.
- AND the Monitoring Period specified in fields 5 and 6 (which is also used to retrieve the correct FANL).
- AND the Sampling Point. In this definition, a null value for field 7 (B_Sampling_Point) *is effectively a value in and of itself.*

Additional notes:

- In addition to retrieving the correct Monitoring Period, field 5, B_MON_PERIOD_BEG_DATE, and field 6, B_MON_PERIOD_END_DATE, are used to retrieve the correct FANL. The software identifies the FANL whose Effective Period Begin and End dates covers the specified Monitoring Period Begin Date. It is recommended that FANL Effective Begin and End dates correspond to Monitoring Period Begin and End dates.
- When the summary type is IFT, the software will associate the summary to a FANL whose MDBP Summary Type is 95PT and whose INDIV_FILTER_MNTRG_REQD_FLAG is “Y.”

* Designates field with permitted values.

+ Shaded gray blocks designate changes to previously published Structure Sets.

3.3 B_MDBP_Summary File Layout for Individual Filter Turbidity (IFT)

B_MDBP_Summary					
FIELD NO	FIELD NAME	DOMAIN	SIZE	POSITION	OPTIONALITY
1. *	B_MDBP_SUMMARY_TYPE	AN	4	1 - 4	MANDATORY - Overlap check for MDBP Summary is on the combination of the FANL (as defined by the FANL Reference Group, fields 1 - 4), field 5 (B_MON_PERIOD_BEG_DATE), field 6 (B_MON_PERIOD_END_DATE), and field 7 (B_SAMPLING_POINT). See Note at end of this layout. For a MDBP Summary Type, see federally defined list in the permitted values section of this structure set. For a state-defined MDBP Summary type, the type must already exist in the database. System Administrators may add state-defined MDBP Summary types to Code Name TSAMDBPS1 using the online Permitted Values function in the <i>System Administration</i> component.
2.	B_PWS_NUMBER	AN	9	5 - 13	MANDATORY - Overlap check for MDBP Summary is on the combination of the FANL (as defined by the FANL Reference Group, fields 1 - 4), field 5 (B_MON_PERIOD_BEG_DATE), field 6 (B_MON_PERIOD_END_DATE), and field 7 (B_SAMPLING_POINT). See Note at end of this layout.
3.	B_WSF_STATE_ASGN_ID	AN	12	14 - 25	MANDATORY - Overlap check for MDBP Summary is on the combination of the FANL (as defined by the FANL Reference Group, fields 1 - 4), field 5 (B_MON_PERIOD_BEG_DATE), field 6 (B_MON_PERIOD_END_DATE), and field 7 (B_SAMPLING_POINT). See Note at end of this layout. <i>Recommend WSF of type "TP" Treatment Plant.</i>
4. *	B_ANALYTE_CODE	AN	4	26 - 29	MANDATORY - Overlap check for MDBP Summary is on

* Designates field with permitted values.

+ Shaded gray blocks designate changes to previously published Structure Sets.

B_MDBP_Summary					
FIELD NO	FIELD NAME	DOMAIN	SIZE	POSITION	OPTIONALITY
					the combination of the FANL (as defined by the FANL Reference Group, fields 1 - 4), field 5 (B_MON_PERIOD_BEG_DATE), field 6 (B_MON_PERIOD_END_DATE), and field 7 (B_SAMPLING_POINT). See Note at end of this layout. Must be Turbidity 0100.
5.	B_MON_PERIOD_BEG_DATE	DT	8	30 - 37	MANDATORY - Overlap check for MDBP Summary is on the combination of the FANL (as defined by the FANL Reference Group, fields 1 - 4), field 5 (B_MON_PERIOD_BEG_DATE), field 6 (B_MON_PERIOD_END_DATE), and field 7 (B_SAMPLING_POINT). See Note at end of this layout.
6.	B_MON_PERIOD_END_DATE	DT	8	38 - 45	MANDATORY - Overlap check for MDBP Summary is on the combination of the FANL (as defined by the FANL Reference Group, fields 1 - 4), field 5 (B_MON_PERIOD_BEG_DATE), field 6 (B_MON_PERIOD_END_DATE), and field 7 (B_SAMPLING_POINT). See Note at end of this layout.
7.	B_SAMPLING_POINT	AN	10	46 - 56	NOT USED (Blank Fill)
8.	B_LAB_FED_CERT_NO	AN	10	57 - 66	OPTIONAL
9.	B_LAB_STATE_CERT_NO	AN	10	67 - 76	OPTIONAL
10.	B_ANALYST_NO	AN	15	77 - 91	OPTIONAL - If this field is valued, the software will use only this field to retrieve an Individual Legal Entity and will ignore any values in fields 11 - 14.
11.	B_ANALYST_LAST_NAME	AN	20	92 - 111	CONDITIONALLY MANDATORY - Must be valued if either field 12 (B_ANALYST_FIRST_NAME), field 13 (B_ANALYST_ORGANIZATION), or field 14 (B_ANALYST_MAIL_STOP_TEXT) are valued.

* Designates field with permitted values.

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+ Shaded gray blocks designate changes to previously published Structure Sets.

B_MDBP_Summary					
FIELD NO	FIELD NAME	DOMAIN	SIZE	POSITION	OPTIONALITY
12.	B_ANALYST_FIRST_NAME	AN	20	112 - 131	CONDITIONALLY MANDATORY - Must be valued if either field 11 (B_ANALYST_LAST_NAME), field 13 (B_ANALYST_ORGANIZATION), or field 14 (B_ANALYST_MAIL_STOP_TEXT) are valued.
13.	B_ANALYST_ORGANIZATION	AN	30	132 - 161	OPTIONAL - If more than one Individual record in Legal Entities exists with the same First Name and Last Name, users should either populate this field and/or field 14, whichever was used to uniquely identify the desired Individual record. If the user does not, the software will link to the first Individual record that matches based on First Name and Last Name.
14.	B_ANALYST_MAIL_STOP_TEXT	AN	10	162 - 171	OPTIONAL - If more than one Individual record in Legal Entities exists with the same First Name and Last Name, users should either populate this field and/or field 13, whichever was used to uniquely identify the desired Individual record. If the user does not, the software will link to the first Individual record that matches based on First Name and Last Name.
15.	B_REPORTED_DATE	DT	8	172 - 179	OPTIONAL - <i>The SDWIS/STATE team recommends that you value this field.</i> If date exists and it is a future date, the software will set to the current date.
16.	B_SAMPLES_REQUIRED	N	5	180 - 184	NOT USED (Blank Fill)
17.	B_SAMPLES_COLLECTED	N	5	185 - 189	NOT USED (Blank Fill)
18. *	B_MR_COMPLIANCE_INDICATOR	AN	3	190 - 192	OPTIONAL - <i>Must value for M&R compliance determination to be made. If not valued, flag.</i>
19.	B_TOTAL_SAMPLES_BEYOND_MSR_LVL	N	5	193 - 197	NOT USED (Blank Fill)
20.	B_PERCENT_SAMPLES_BEYOND_MSR_LVL	N	7(6(3))	198 - 204	NOT USED (Blank Fill)
21.	B_HIGHEST_MEASURE	N	6(5(3))	205 - 210	NOT USED (Blank Fill)
22. *	B_LEVEL_COMPLIANCE_INDICATOR	AN	1	211	OPTIONAL - <i>Must value for level compliance determination to be made. If not valued, flag.</i>

* Designates field with permitted values.

+ Shaded gray blocks designate changes to previously published Structure Sets.

B_MDBP_Summary					
FIELD NO	FIELD NAME	DOMAIN	SIZE	POSITION	OPTIONALITY
23.	B_MONITORING_PERIOD_AVG_MEASURE	N	8(7(4))	212 - 219	NOT USED (Blank Fill)
24.	B_MPA_UOM_CODE	AN	9	220 - 228	NOT USED (Blank Fill)
25.	B_RUNNING_ANNUAL_AVERAGE_MEASURE	N	8(7(4))	229 - 236	NOT USED (Blank Fill)
26.	B_RAA_UOM_CODE	AN	9	237 - 245	NOT USED (Blank Fill)
27. *	B_Q1_IFT_MONITORED_INDICATOR	AN	1	246	OPTIONAL - <i>The SDWIS/STATE team recommends that you value this field.</i>
28. *	B_Q2_IFT_RECORDED_INDICATOR	AN	1	247	OPTIONAL - <i>The SDWIS/STATE team recommends that you value this field.</i>
29. *	B_Q3_IFT_EQUIPMENT_INDICATOR	AN	1	248	OPTIONAL - <i>The SDWIS/STATE team recommends that you value this field.</i>
30. *	B_Q4_IFT_GREATER_1_0_INDICATOR	AN	1	249	OPTIONAL - <i>The SDWIS/STATE team recommends that you value this field.</i>
31. *	B_Q5_IFT_GREATER_0_5_INDICATOR	AN	1	250	OPTIONAL - <i>The SDWIS/STATE team recommends that you value this field.</i>
32. *	B_Q6_IFT_GREATER_1_DUR_3_MON_IND	AN	1	251	OPTIONAL - <i>The SDWIS/STATE team recommends that you value this field.</i>
33. *	B_Q7_IFT_GREATER_2_0_DUR_2_MON_IND	AN	1	252	OPTIONAL - <i>The SDWIS/STATE team recommends that you value this field.</i>
34.	B_COMMENTS_TEXT	AN	200	253 - 452	OPTIONAL

Due to the complex nature of MDBP Summaries and their relationships to Facility Analyte Levels (FANL) and CDS Compliance determination, it is recommended that those three areas of the User's Guide be reviewed thoroughly prior to creation of FANL and MDBP Summary text files for migration.

Every MDBP Summary must be associated with a Facility Analyte Level (FANL). *If a FANL that matches the information supplied in the structure set cannot be found, the MDBP Summary will be rejected.*

Overlap check for a Summary is on the combination of:

* Designates field with permitted values.

- The values in the FANL Reference Group fields.
- AND the Monitoring Period specified in fields 5 and 6 (which is also used to retrieve the correct FANL).
- AND the Sampling Point. In this definition, a null value for field 7 (B_Sampling_Point) *is effectively a value in and of itself.*

Additional notes:

- In addition to retrieving the correct Monitoring Period, field 5, B_MON_PERIOD_BEG_DATE, and field 6, B_MON_PERIOD_END_DATE, are used to retrieve the correct FANL. The software identifies the FANL whose Effective Period Begin and End dates covers the specified Monitoring Period Begin Date. It is recommended that FANL Effective Begin and End dates correspond to Monitoring Period Begin and End dates.
- When the summary type is IFT, the software will associate the summary to a FANL whose MDBP Summary Type is 95PT and whose INDIV_FILTER_MNTRG_REQD_FLAG is "Y."

3.4 B_MDBP_Summary File Layout for Minimal Residual Disinfection Summaries (EPRD, SERD, DSRD, SDRD)

B_MDBP_Summary					
FIELD NO	FIELD NAME	DOMAIN	SIZE	POSITION	OPTIONALITY
1. *	B_MDBP_SUMMARY_TYPE	AN	4	1 - 4	MANDATORY - Overlap check for MDBP Summary is on the combination of the FANL (as defined by the FANL Reference Group, fields 1 - 4), field 5 (B_MON_PERIOD_BEG_DATE), field 6 (B_MON_PERIOD_END_DATE), and field 7 (B_SAMPLING_POINT). See Note at end of this layout. For a MDBP Summary Type, see federally defined list in the permitted values section of this structure set. For a state-defined MDBP Summary type, the type must already exist in the database. System Administrators may add state-defined MDBP Summary types to Code Name TSAMDBPS1 using the online Permitted Values function in the <i>System Administration</i> component.
2.	B_PWS_NUMBER	AN	9	5 - 13	MANDATORY - Overlap check for MDBP Summary is on the combination of the FANL (as defined by the FANL Reference Group, fields 1 - 4), field 5 (B_MON_PERIOD_BEG_DATE), field 6 (B_MON_PERIOD_END_DATE), and field 7 (B_SAMPLING_POINT). See Note at end of this layout.
3.	B_WSF_STATE_ASGN_ID	AN	12	14 - 25	MANDATORY - Overlap check for MDBP Summary is on the combination of the FANL (as defined by the FANL Reference Group, fields 1 - 4), field 5 (B_MON_PERIOD_BEG_DATE), field 6 (B_MON_PERIOD_END_DATE), and field 7 (B_SAMPLING_POINT). See Note at end of this layout. <i>For summary type EPRD and SERD, should be type "TP" Treatment Plant. For summary type DSRD and SDRD, should</i>

* Designates field with permitted values.

+ Shaded gray blocks designate changes to previously published Structure Sets.

B_MDBP_Summary					
FIELD NO	FIELD NAME	DOMAIN	SIZE	POSITION	OPTIONALITY
					<i>be type "DS" Distribution System.</i>
4. *	B_ANALYTE_CODE	AN	4	26 - 29	MANDATORY - Overlap check for MDBP Summary is on the combination of the FANL (as defined by the FANL Reference Group, fields 1 - 4), field 5 (B_MON_PERIOD_BEG_DATE), field 6 (B_MON_PERIOD_END_DATE), and field 7 (B_SAMPLING_POINT). See Note at end of this layout. Must be chlorine-0999 or chloramine-1006.
5.	B_MON_PERIOD_BEG_DATE	DT	8	30 - 37	MANDATORY - Overlap check for MDBP Summary is on the combination of the FANL (as defined by the FANL Reference Group, fields 1 - 4), field 5 (B_MON_PERIOD_BEG_DATE), field 6 (B_MON_PERIOD_END_DATE), and field 7 (B_SAMPLING_POINT). See Note at end of this layout.
6.	B_MON_PERIOD_END_DATE	DT	8	38 - 45	MANDATORY - Overlap check for MDBP Summary is on the combination of the FANL (as defined by the FANL Reference Group, fields 1 - 4), field 5 (B_MON_PERIOD_BEG_DATE), field 6 (B_MON_PERIOD_END_DATE), and field 7 (B_SAMPLING_POINT). See Note at end of this layout.
7.	B_SAMPLING_POINT	AN	11	46 - 56	OPTIONAL - Must value if need to enter separate summaries for each sampling point. For example, if there are two entry points for one treatment plant. Recommend value when all samples collected at same point. Overlap check for MDBP Summary is on the combination of, the FANL (as defined by the FANL Reference Group, fields 1 - 4), field 5 (B_MON_PERIOD_BEG_DATE), field 6 (B_MON_PERIOD_END_DATE), and field 7 (B_SAMPLING_POINT). See Note at end of this layout.

* Designates field with permitted values.

+ Shaded gray blocks designate changes to previously published Structure Sets.

B_MDBP_Summary					
FIELD NO	FIELD NAME	DOMAIN	SIZE	POSITION	OPTIONALITY
					<i>For summary type EPRD and SERD, should be valued and sampling point should be type "EP" Entry Point. For summary type DSRD and SDRD, should not be valued.</i>
8.	B_LAB_FED_CERT_NO	AN	10	57 - 66	OPTIONAL
9.	B_LAB_STATE_CERT_NO	AN	10	67 - 76	OPTIONAL
10.	B_ANALYST_NO	AN	15	77 - 91	OPTIONAL - If this field is valued, the software will use only this field to retrieve an Individual Legal Entity and will ignore any values in fields 11 - 14.
11.	B_ANALYST_LAST_NAME	AN	20	92 - 111	CONDITIONALLY MANDATORY - Must be valued if either field 12 (B_ANALYST_FIRST_NAME), field 13 (B_ANALYST_ORGANIZATION), or field 14 (B_ANALYST_MAIL_STOP_TEXT) are valued.
12.	B_ANALYST_FIRST_NAME	AN	20	112 - 131	CONDITIONALLY MANDATORY - Must be valued if either field 11 (B_ANALYST_LAST_NAME), field 13 (B_ANALYST_ORGANIZATION), or field 14 (B_ANALYST_MAIL_STOP_TEXT) are valued.
13.	B_ANALYST_ORGANIZATION	AN	30	132- 161	OPTIONAL - If more than one Individual record in Legal Entities exists with the same First Name and Last Name, users should either populate this field and/or field 14, whichever was used to uniquely identify the desired Individual record. If the user does not, the software will link to the first Individual record that matches based on First Name and Last Name.
14.	B_ANALYST_MAIL_STOP_TEXT	AN	10	162 - 171	OPTIONAL - If more than one Individual record in Legal Entities exists with the same First Name and Last Name, users should either populate this field and/or field 13, whichever was used to uniquely identify the desired Individual record. If the user does not, the software will link to the first Individual record that matches based on First Name and Last Name.
15.	B_REPORTED_DATE	DT	8	172 - 179	OPTIONAL - <i>The SDWIS/STATE team recommends that you</i>

* Designates field with permitted values.

+ Shaded gray blocks designate changes to previously published Structure Sets.

B_MDBP_Summary					
FIELD NO	FIELD NAME	DOMAIN	SIZE	POSITION	OPTIONALITY
					<i>value this field.</i> If date exists and it is a future date, the software will set to the current date.
16.	B_SAMPLES_REQUIRED	N	5	180 - 184	OPTIONAL - <i>Recommend value for summary types EPRD or DSRD.</i>
17.	B_SAMPLES_COLLECTED	N	5	185 - 189	OPTIONAL - <i>Recommend value for summary types EPRD or DSRD.</i>
18. *	B_MR_COMPLIANCE_INDICATOR	AN	3	190 - 192	OPTIONAL - Must value for M&R compliance determination to be made. Recommend do not value for summary types SERD or SDRD. If not valued for type EPRD or DSRD and field 16 (B_SAMPLES_REQUIRED) and field 17 (B_SAMPLES_COLLECTED) are valued, the software will value as follows: If $x \geq 100$, default to "Yes." If $x < 89.9$, default to No Major. Otherwise, default to No Minor. Where $x = (\text{Number of Samples Taken} / \text{Number of Samples Required}) * 100$. If field 16 (B_SAMPLES_REQUIRED), field 17 (B_SAMPLES_COLLECTED), and field 18 (B_MR_COMPLIANCE_INDICATOR) are valued for any summary type, software will evaluate M&R Compliance and flag if inconsistent. For example if, field 16 (B_SAMPLES_REQUIRED) is greater than field 17 (B_SAMPLES_COLLECTED), and field 18 (B_MR_COMPLIANCE_INDICATOR) equals "Yes," summary will be flagged.
19.	B_TOTAL_SAMPLES_BEYOND_MSR_LVL	N	5	193 - 197	OPTIONAL - <i>The SDWIS/STATE team recommends that you value this field.</i>

* Designates field with permitted values.

+ Shaded gray blocks designate changes to previously published Structure Sets.

B_MDBP_Summary					
FIELD NO	FIELD NAME	DOMAIN	SIZE	POSITION	OPTIONALITY
20.	B_PERCENT_SAMPLES_BEYOND_MSR_LVL	N	7(6(3))	198 - 204	<p>OPTIONAL - If valued, value must be convertible to a numeric within the range of (6(3)). <i>Developer note: The software uses the number supplied in this field to value both MDBP Summary PERCENT_SAMPLES_BEYOND_MSR_LVL and MDBP Summary PERCENT_SAMPS_BYND_MSR_LVL_TXT.</i></p> <p>For summary type EPRD and SERD should <i>not</i> be valued. For summary type DSRD and SDRD, should be valued.</p> <p>If not valued for summary type DSRD or SDRD and field 17 (B_SAMPLES_COLLECTED) and field 19 (B_TOTAL_SAMPLES_BEYOND_MSR_LVL) valued, calculate and value $z = (x/y) * 100$; where $x = B_TOTAL_SAMPLES_BEYOND_MSR_LVL$ and $y = B_SAMPLES_COLLECTED$.</p>
21.	B_HIGHEST_MEASURE	N	6(5(3))	205 - 210	<p>OPTIONAL - If valued, value must be convertible to a numeric within the range of (5(3)). <i>Developer note: The software uses the number supplied in this field to value both MDBP Summary HIGHEST_MEASURE and MDBP Summary HIGHEST_MSR_TXT.</i></p>
22. *	B_LEVEL_COMPLIANCE_INDICATOR	AN	1	211	<p>OPTIONAL - Must value for compliance determination to be made.</p> <p>If not valued, calculate and value. For type EPRD and SERD, if field 19 (B_TOTAL_SAMPLES_BEYOND_MSR_LVL) is greater than zero, value "No," else "Yes." For type DSRD and SDRD, if field 20 (B_PERCENT_SAMPLES_BEYOND_MSR_LVL) is greater than 5.49%, value "No," else "Yes."</p>
23.	B_MONITORING_PERIOD_AVG_MEASURE	N	8(7(4))	212 - 219	NOT USED (Blank Fill)

* Designates field with permitted values.

+ Shaded gray blocks designate changes to previously published Structure Sets.

B_MDBP_Summary					
FIELD NO	FIELD NAME	DOMAIN	SIZE	POSITION	OPTIONALITY
24.	B_MPA_UOM_CODE	AN	9	220 - 228	NOT USED (Blank Fill)
25.	B_RUNNING_ANNUAL_AVERAGE_MEASURE	N	8(7(4))	229 - 236	NOT USED (Blank Fill)
26.	B_RAA_UOM_CODE	AN	9	237 - 245	NOT USED (Blank Fill)
27.	B_Q1_IFT_MONITORED_INDICATOR	AN	1	246	NOT USED (Blank Fill)
28.	B_Q2_IFT_RECORDED_INDICATOR	AN	1	247	NOT USED (Blank Fill)
29.	B_Q3_IFT_EQUIPMENT_INDICATOR	AN	1	248	NOT USED (Blank Fill)
30.	B_Q4_IFT_GREATER_1_0_INDICATOR	AN	1	249	NOT USED (Blank Fill)
31.	B_Q5_IFT_GREATER_0_5_INDICATOR	AN	1	250	NOT USED (Blank Fill)
32.	B_Q6_IFT_GREATER_1_DUR_3_MON_IND	AN	1	251	NOT USED (Blank Fill)
33.	B_Q7_IFT_GREATER_2_0_DUR_2_MON_IND	AN	1	252	NOT USED (Blank Fill)
34.	B_COMMENTS_TEXT	AN	200	253 - 452	OPTIONAL

Due to the complex nature of MDBP Summaries and their relationships to Facility Analyte Levels (FANL) and CDS Compliance determination, it is recommended that those three areas of the User's Guide be reviewed thoroughly prior to creation of FANL and MDBP Summary text files for migration.

Every MDBP Summary must be associated with a Facility Analyte Level (FANL). *If a FANL that matches the information supplied in the structure set cannot be found, the MDBP Summary will be rejected.*

Overlap check for a Summary is on the combination of:

- The values in the FANL Reference Group fields.
- AND the Monitoring Period specified in fields 5 and 6 (which is also used to retrieve the correct FANL).
- AND the Sampling Point. In this definition, a null value for field 7 (B_Sampling_Point) *is effectively a value in and of itself.*

Additional notes:

- In addition to retrieving the correct Monitoring Period, field 5, B_MON_PERIOD_BEG_DATE, and field 6, B_MON_PERIOD_END_DATE, are used to retrieve the correct FANL. The software identifies the FANL whose Effective Period Begin and End dates covers the specified Monitoring Period Begin Date. It is recommended that FANL Effective Begin and End dates correspond to Monitoring Period Begin and End dates.
- When the summary type is IFT, the software will associate the summary to a FANL whose MDBP Summary Type is 95PT and whose INDIV_FILTER_MNTRG_REQD_FLAG is "Y."

3.5 B_MDBP_Summary File Layout for Chlorine Dioxide/Chlorite Entry Point Summaries (CLO2,CLO3)

B_MDBP_SUMMARY					
FIELD NO	FIELD NAME	DOMAIN	SIZE	POSITION	OPTIONALITY
1. *	B_MDBP_SUMMARY_TYPE	AN	4	1 - 4	MANDATORY - Overlap check for MDBP Summary is on the combination of the FANL (as defined by the FANL Reference Group, fields 1 - 4), field 5 (B_MON_PERIOD_BEG_DATE), field 6 (B_MON_PERIOD_END_DATE), and field 7 (B_SAMPLING_POINT). See Note at end of this layout. For a MDBP Summary Type, see federally defined list in the permitted values section of this structure set. For a state-defined MDBP Summary type, the type must already exist in the database. System Administrators may add state-defined MDBP Summary types to Code Name TSAMDBPS1 using the online Permitted Values function in the <i>System Administration</i> component.
2.	B_PWS_NUMBER	AN	9	5 - 13	MANDATORY - Overlap check for MDBP Summary is on the combination of, the FANL (as defined by the FANL Reference Group, fields 1 - 4), field 5 (B_MON_PERIOD_BEG_DATE), field 6 (B_MON_PERIOD_END_DATE), and field 7 (B_SAMPLING_POINT). See Note at end of this layout.
3.	B_WSF_STATE_ASGN_ID	AN	12	14 - 25	MANDATORY - Overlap check for MDBP Summary is on the combination of the FANL (as defined by the FANL Reference Group, fields 1 - 4), field 5 (B_MON_PERIOD_BEG_DATE), field 6 (B_MON_PERIOD_END_DATE), and field 7 (B_SAMPLING_POINT). See Note at end of this layout. <i>Should be of type "TP" Treatment Plant.</i>
4. *	B_ANALYTE_CODE	AN	4	26 - 29	MANDATORY - Overlap check for MDBP Summary is on

* Designates field with permitted values.

+ Shaded gray blocks designate changes to previously published Structure Sets.

B_MDBP_SUMMARY					
FIELD NO	FIELD NAME	DOMAIN	SIZE	POSITION	OPTIONALITY
					the combination of the FANL (as defined by the FANL Reference Group, fields 1 - 4), field 5 (B_MON_PERIOD_BEG_DATE), field 6 (B_MON_PERIOD_END_DATE), and field 7 (B_SAMPLING_POINT). See Note at end of this layout. Must be chlorine dioxide-1008 or chlorite-1009.
5.	B_MON_PERIOD_BEG_DATE	DT	8	30 - 37	MANDATORY - Overlap check for MDBP Summary is on the combination of the FANL (as defined by the FANL Reference Group, fields 1 - 4), field 5 (B_MON_PERIOD_BEG_DATE), field 6 (B_MON_PERIOD_END_DATE), and field 7 (B_SAMPLING_POINT). See Note at end of this layout.
6.	B_MON_PERIOD_END_DATE	DT	8	38 - 45	MANDATORY - Overlap check for MDBP Summary is on the combination of the FANL (as defined by the FANL Reference Group, fields 1 - 4), field 5 (B_MON_PERIOD_BEG_DATE), field 6 (B_MON_PERIOD_END_DATE), and field 7 (B_SAMPLING_POINT). See Note at end of this layout.
7.	B_SAMPLING_POINT	AN	11	46 - 56	MANDATORY - Overlap check for MDBP Summary is on the combination of the FANL (as defined by the FANL Reference Group, fields 1 - 4), field 5 (B_MON_PERIOD_BEG_DATE), field 6 (B_MON_PERIOD_END_DATE), and field 7 (B_SAMPLING_POINT). See Note at end of this layout. Should be of type "EP" Entry Point.
8.	B_LAB_FED_CERT_NO	AN	10	57 - 66	OPTIONAL
9.	B_LAB_STATE_CERT_NO	AN	10	67 - 76	OPTIONAL
10.	B_ANALYST_NO	AN	15	77 - 91	OPTIONAL - If this field is valued, the software will use only

* Designates field with permitted values.

+ Shaded gray blocks designate changes to previously published Structure Sets.

B_MDBP_SUMMARY					
FIELD NO	FIELD NAME	DOMAIN	SIZE	POSITION	OPTIONALITY
					this field to retrieve an Individual Legal Entity and will ignore any values in fields 11 - 14.
11.	B_ANALYST_LAST_NAME	AN	20	92 - 111	CONDITIONALLY MANDATORY - Must be valued if either field 12 (B_ANALYST_FIRST_NAME), field 13 (B_ANALYST_ORGANIZATION), or field 14 (B_ANALYST_MAIL_STOP_TEXT) are valued.
12.	B_ANALYST_FIRST_NAME	AN	20	112 - 131	CONDITIONALLY MANDATORY - Must be valued if either field 11 (B_ANALYST_LAST_NAME), field 13 (B_ANALYST_ORGANIZATION), or field 14 (B_ANALYST_MAIL_STOP_TEXT) are valued.
13.	B_ANALYST_ORGANIZATION	AN	30	132 - 161	OPTIONAL - If more than one Individual record in Legal Entities exists with the same First Name and Last Name, users should either populate this field and/or field 14, whichever was used to uniquely identify the desired Individual record. If the user does not, the software will link to the first Individual record that matches based on First Name and Last Name.
14.	B_ANALYST_MAIL_STOP_TEXT	AN	10	162 - 171	OPTIONAL - If more than one Individual record in Legal Entities exists with the same First Name and Last Name, users should either populate this field and/or field 13, whichever was used to uniquely identify the desired Individual record. If the user does not, the software will link to the first Individual record that matches based on First Name and Last Name.
15.	B_REPORTED_DATE	DT	8	172 - 179	OPTIONAL - <i>The SDWIS/STATE team recommends that you value this field.</i> If date exists and it is a future date, the software will set to the current date.
16.	B_SAMPLES_REQUIRED	N	5	180 - 184	OPTIONAL - <i>The SDWIS/STATE team recommends that you value this field.</i>
17.	B_SAMPLES_COLLECTED	N	5	185 - 189	OPTIONAL - <i>The SDWIS/STATE team recommends that you value this field.</i>

* Designates field with permitted values.

+ Shaded gray blocks designate changes to previously published Structure Sets.

B_MDBP_SUMMARY					
FIELD NO	FIELD NAME	DOMAIN	SIZE	POSITION	OPTIONALITY
18. *	B_MR_COMPLIANCE_INDICATOR	AN	3	190 - 192	<p>OPTIONAL - Must value for M&R compliance determination to be made.</p> <p>If not valued and field 16 (B_SAMPLES_REQUIRED) and field 17 (B_SAMPLES_COLLECTED) valued, the software will value as follows: If $x \geq 100$, default to "Yes." If $x < 89.9$, default to No Major. Otherwise, default to No Minor. Where $x = (\text{Number of Samples Taken/Number of Samples Required}) * 100$.</p> <p>If field 16 (B_SAMPLES_REQUIRED), field 17 (B_SAMPLES_COLLECTED), and field 18 (B_MR_COMPLIANCE_INDICATOR) valued, software will evaluate M&R Compliance and flag if inconsistent. For example, if field 16 (B_SAMPLES_REQUIRED) is greater than field 17 (B_SAMPLES_COLLECTED), and field 18 (B_MR_COMPLIANCE_INDICATOR) equals "Yes," summary will be flagged.</p>
19.	B_TOTAL_SAMPLES_BEYOND_MSR_LVL	N	5	193 - 197	OPTIONAL - <i>The SDWIS/STATE team recommends that you value this field.</i>
20.	B_PERCENT_SAMPLES_BEYOND_MSR_LVL	N	7(6(3))	198 - 204	NOT USED (Blank Fill)
21.	B_HIGHEST_MEASURE	N	6(5(3))	205 - 210	OPTIONAL - If valued, value must be convertible to a numeric within the range of (5(3)). <i>Developer note: The software uses the number supplied in this field to value both MDBP Summary HIGHEST_MEASURE and MDBP Summary HIGHEST_MSR_TXT.</i>

* Designates field with permitted values.

B_MDBP_SUMMARY					
FIELD NO	FIELD NAME	DOMAIN	SIZE	POSITION	OPTIONALITY
22. *	B_LEVEL_COMPLIANCE_INDICATOR	AN	1	211	OPTIONAL - Must value for level compliance determination to be made. If not valued, calculate and value. If field 19 (B_TOTAL_SAMPLES_BEYOND_MSR_LVL) is greater than zero, "No," else "Yes."
23.	B_MONITORING_PERIOD_AVG_MEASURE	N	8(7(4))	212 - 219	NOT USED (Blank Fill)
24.	B_MPA_UOM_CODE	AN	9	220 - 228	NOT USED (Blank Fill)
25.	B_RUNNING_ANNUAL_AVERAGE_MEASURE	N	8(7(4))	229 - 236	NOT USED (Blank Fill)
26.	B_RAA_UOM_CODE	AN	9	237 - 245	NOT USED (Blank Fill)
27.	B_Q1_IFT_MONITORED_INDICATOR	AN	1	246	NOT USED (Blank Fill)
28.	B_Q2_IFT_RECORDED_INDICATOR	AN	1	247	NOT USED (Blank Fill)
29.	B_Q3_IFT_EQUIPMENT_INDICATOR	AN	1	248	NOT USED (Blank Fill)
30.	B_Q4_IFT_GREATER_1_0_INDICATOR	AN	1	249	NOT USED (Blank Fill)
31.	B_Q5_IFT_GREATER_0_5_INDICATOR	AN	1	250	NOT USED (Blank Fill)
32.	B_Q6_IFT_GREATER_1_DUR_3_MON_IND	AN	1	251	NOT USED (Blank Fill)
33.	B_Q7_IFT_GREATER_2_0_DUR_2_MON_IND	AN	1	252	NOT USED (Blank Fill)
34.	B_COMMENTS_TEXT	AN	200	253 - 452	OPTIONAL

Due to the complex nature of MDBP Summaries and their relationships to Facility Analyte Levels (FANL) and CDS Compliance determination, it is recommended that those three areas of the User's Guide be reviewed thoroughly prior to creation of FANL and MDBP Summary text files for migration.

Every MDBP Summary must be associated with a Facility Analyte Level (FANL). *If a FANL that matches the information supplied in the structure set cannot be found, the MDBP Summary will be rejected.*

Overlap check for a Summary is on the combination of:

- The values in the FANL Reference Group fields.

* Designates field with permitted values.

- AND the Monitoring Period specified in fields 5 and 6 (which is also used to retrieve the correct FANL).
- AND the Sampling Point. In this definition, a null value for field 7 (B_Sampling_Point) *is effectively a value in and of itself.*

Additional notes:

- In addition to retrieving the correct Monitoring Period, field 5, B_MON_PERIOD_BEG_DATE, and field 6, B_MON_PERIOD_END_DATE, are used to retrieve the correct FANL. The software identifies the FANL whose Effective Period Begin and End dates covers the specified Monitoring Period Begin Date. It is recommended that FANL Effective Begin and End dates correspond to Monitoring Period Begin and End dates.
- When the summary type is IFT, the software will associate the summary to a FANL whose MDBP Summary Type is 95PT and whose INDIV_FILTER_MNTRG_REQD_FLAG is “Y.”

3.6 B_MDBP_Summary File Layout Chlorine/Chloramine MRDL Summaries (MRDL)

B_MDBP_SUMMARY					
FIELD NO	FIELD NAME	DOMAIN	SIZE	POSITION	OPTIONALITY
1. *	B_MDBP_SUMMARY_TYPE	AN	4	1 - 4	MANDATORY - Overlap check for MDBP Summary is on the combination of the FANL (as defined by the FANL Reference Group, fields 1 - 4), field 5 (B_MON_PERIOD_BEG_DATE), field 6 (B_MON_PERIOD_END_DATE), and field 7 (B_SAMPLING_POINT). See Note at end of this layout. For a MDBP Summary Type, see federally defined list in the permitted values section of this structure set. For a state-defined MDBP Summary type, the type must already exist in the database. System Administrators may add state-defined MDBP Summary types to Code Name TSAMDBPS1 using the online Permitted Values function in the <i>System Administration</i> component.
2.	B_PWS_NUMBER	AN	9	5 - 13	MANDATORY - Overlap check for MDBP Summary is on the combination of the FANL (as defined by the FANL Reference Group, fields 1 - 4), field 5 (B_MON_PERIOD_BEG_DATE), field 6 (B_MON_PERIOD_END_DATE), and field 7 (B_SAMPLING_POINT). See Note at end of this layout.
3.	B_WSF_STATE_ASGN_ID	AN	12	14 - 25	MANDATORY - Overlap check for MDBP Summary is on the combination of the FANL (as defined by the FANL Reference Group, fields 1 - 4), field 5 (B_MON_PERIOD_BEG_DATE), field 6 (B_MON_PERIOD_END_DATE), and field 7 (B_SAMPLING_POINT). See Note at end of this layout. <i>Should be of type "DS" Distribution System.</i>
4. *	B_ANALYTE_CODE	AN	4	26 - 29	MANDATORY - Overlap check for MDBP Summary is on

* Designates field with permitted values.

+ Shaded gray blocks designate changes to previously published Structure Sets.

B_MDBP_SUMMARY					
FIELD NO	FIELD NAME	DOMAIN	SIZE	POSITION	OPTIONALITY
					the combination of the FANL (as defined by the FANL Reference Group, fields 1 - 4), field 5 (B_MON_PERIOD_BEG_DATE), field 6 (B_MON_PERIOD_END_DATE), and field 7 (B_SAMPLING_POINT). See Note at end of this layout. Must be chlorine-0999 or chloraqmine-1006.
5.	B_MON_PERIOD_BEG_DATE	DT	8	30 - 37	MANDATORY - Overlap check for MDBP Summary is on the combination of the FANL (as defined by the FANL Reference Group, fields 1 - 4), field 5 (B_MON_PERIOD_BEG_DATE), field 6 (B_MON_PERIOD_END_DATE), and field 7 (B_SAMPLING_POINT). See Note at end of this layout.
6.	B_MON_PERIOD_END_DATE	DT	8	38 - 45	MANDATORY - Overlap check for MDBP Summary is on the combination of the FANL (as defined by the FANL Reference Group, fields 1 - 4), field 5 (B_MON_PERIOD_BEG_DATE), field 6 (B_MON_PERIOD_END_DATE), and field 7 (B_SAMPLING_POINT). See Note at end of this layout.
7.	B_SAMPLING_POINT	AN	11	46 - 56	NOT USED (Blank Fill)
8.	B_LAB_FED_CERT_NO	AN	10	57 - 66	OPTIONAL
9.	B_LAB_STATE_CERT_NO	AN	10	67 - 76	OPTIONAL
10.	B_ANALYST_NO	AN	15	77 - 91	OPTIONAL - If this field is valued, the software will use only this field to retrieve an Individual Legal Entity and will ignore any values in fields 11 - 14.
11.	B_ANALYST_LAST_NAME	AN	20	92 - 111	CONDITIONALLY MANDATORY - Must be valued if either field 12 (B_ANALYST_FIRST_NAME), field 13 (B_ANALYST_ORGANIZATION), or field 14 (B_ANALYST_MAIL_STOP_TEXT) are valued.

* Designates field with permitted values.

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+ Shaded gray blocks designate changes to previously published Structure Sets.

B_MDBP_SUMMARY					
FIELD NO	FIELD NAME	DOMAIN	SIZE	POSITION	OPTIONALITY
12.	B_ANALYST_FIRST_NAME	AN	20	112 - 131	CONDITIONALLY MANDATORY - Must be valued if either field 11 (B_ANALYST_LAST_NAME), field 13 (B_ANALYST_ORGANIZATION), or field 14 (B_ANALYST_MAIL_STOP_TEXT) are valued.
13.	B_ANALYST_ORGANIZATION	AN	30	132 - 161	OPTIONAL - If more than one Individual record in Legal Entities exists with the same First Name and Last Name, users should either populate this field and/or field 14, whichever was used to uniquely identify the desired Individual record. If the user does not, the software will link to the first Individual record that matches based on First Name and Last Name.
14.	B_ANALYST_MAIL_STOP_TEXT	AN	10	162 - 171	OPTIONAL - If more than one Individual record in Legal Entities exists with the same First Name and Last Name, users should either populate this field and/or field 13, whichever was used to uniquely identify the desired Individual record. If the user does not, the software will link to the first Individual record that matches based on First Name and Last Name.
15.	B_REPORTED_DATE	DT	8	172 - 179	OPTIONAL - <i>The SDWIS/STATE team recommends that you value this field.</i> If date exists and it is a future date, the software will set to the current date.
16.	B_SAMPLES_REQUIRED	N	5	180 - 184	OPTIONAL - <i>The SDWIS/STATE team recommends that you value this field.</i>
17.	B_SAMPLES_COLLECTED	N	5	185 - 189	OPTIONAL - <i>The SDWIS/STATE team recommends that you value this field.</i>

* Designates field with permitted values.

+ Shaded gray blocks designate changes to previously published Structure Sets.

B_MDBP_SUMMARY					
FIELD NO	FIELD NAME	DOMAIN	SIZE	POSITION	OPTIONALITY
18. *	B_MR_COMPLIANCE_INDICATOR	AN	3	190 - 192	<p>OPTIONAL - Must value for M&R compliance determination to be made.</p> <p>If not valued and field 16 (B_SAMPLES_REQUIRED) and field 17 (B_SAMPLES_COLLECTED) valued, the software will value as follows: If $x \geq 100$, default to "Yes." If $x < 89.9$, default to No Major. Otherwise, default to No Minor. Where $x = (\text{Number of Samples Taken/Number of Samples Required}) * 100$.</p> <p>If field 16 (B_SAMPLES_REQUIRED), field 17 (B_SAMPLES_COLLECTED), and field 18 (B_MR_COMPLIANCE_INDICATOR) valued, software will evaluate M&R Compliance and flag if inconsistent. For example if, field 16 (B_SAMPLES_REQUIRED) is greater than field 17 (B_SAMPLES_COLLECTED), and field 18 (B_MR_COMPLIANCE_INDICATOR) equals "Yes," summary will be flagged.</p>
19.	B_TOTAL_SAMPLES_BEYOND_MSR_LVL	N	5	193 - 197	OPTIONAL
20.	B_PERCENT_SAMPLES_BEYOND_MSR_LVL	N	7(6(3))	198 - 204	NOT USED (Blank Fill)
21.	B_HIGHEST_MEASURE	N	6(5(3))	205 - 210	<p>OPTIONAL - If valued, value must be convertible to a numeric within the range of (5(3)). <i>Developer note: The software uses the number supplied in this field to value both MDBP Summary HIGHEST_MEASURE and MDBP Summary HIGHEST_MSR_TXT.</i></p>
22. *	B_LEVEL_COMPLIANCE_INDICATOR	AN	1	211	OPTIONAL - Must value for level compliance determination to be made.

* Designates field with permitted values.

+ Shaded gray blocks designate changes to previously published Structure Sets.

B_MDBP_SUMMARY					
FIELD NO	FIELD NAME	DOMAIN	SIZE	POSITION	OPTIONALITY
23.	B_MONITORING_PERIOD_AVG_MEASURE	N	8(7(4))	212 - 219	OPTIONAL - If valued, value must be convertible to a numeric within the range of (7(4)). <i>Developer note: The software uses the number supplied in this field to value both MDBP Summary MONITORING_PERIOD_AVG_MEASURE and MDBP Summary MONITORING_PERIOD_AVG_MSR_TXT. The SDWIS/STATE team recommends that you value this field.</i>
24. *	B_MPA_UOM_CODE	AN	9	220 - 228	CONDITIONALLY MANDATORY - Must be valued if field 23 (MONITORING_PERIOD_AVG_MEASURE) is valued.
25.	B_RUNNING_ANNUAL_AVERAGE_MEASURE	N	8(7(4))	229 - 236	OPTIONAL - If valued, value must be convertible to a numeric within the range of (7(4)). <i>Developer note: The software uses the number supplied in this field to value both MDBP Summary RUNNING_ANNUAL_AVERAGE_MEASURE and MDBP Summary RUNNING_ANNUAL_AVERAGE_MSR_TXT. The SDWIS/STATE team recommends that you value this field.</i>
26. *	B_RAA_UOM_CODE	AN	9	237 - 245	CONDITIONALLY MANDATORY - Must be valued if field 25 (RUNNING_ANNUAL_AVERAGE_MEASURE) is valued.
27.	B_Q1_IFT_MONITORED_INDICATOR	AN	1	246	NOT USED (Blank Fill)
28.	B_Q2_IFT_RECORDED_INDICATOR	AN	1	247	NOT USED (Blank Fill)
29.	B_Q3_IFT_EQUIPMENT_INDICATOR	AN	1	248	NOT USED (Blank Fill)
30.	B_Q4_IFT_GREATER_1_0_INDICATOR	AN	1	249	NOT USED (Blank Fill)
31.	B_Q5_IFT_GREATER_0_5_INDICATOR	AN	1	250	NOT USED (Blank Fill)
32.	B_Q6_IFT_GREATER_1_DUR_3_MON_IND	AN	1	251	NOT USED (Blank Fill)
33.	B_Q7_IFT_GREATER_2_0_DUR_2_MON_IND	AN	1	252	NOT USED (Blank Fill)
34.	B_COMMENTS_TEXT	AN	200	253 - 452	OPTIONAL

Due to the complex nature of MDBP Summaries and their relationships to Facility Analyte Levels (FANL) and CDS Compliance determination, it is recommended that those three areas of the User's Guide be reviewed thoroughly prior to creation of FANL and MDBP Summary text files for migration.

* Designates field with permitted values.

Every MDBP Summary must be associated with a Facility Analyte Level (FANL). *If a FANL that matches the information supplied in the structure set cannot be found, the MDBP Summary will be rejected.*

Overlap check for a Summary is on the combination of:

- The values in the FANL Reference Group fields.
- AND the Monitoring Period specified in fields 5 and 6 (which is also used to retrieve the correct FANL).
- AND the Sampling Point. In this definition, a null value for field 7 (B_Sampling_Point) *is effectively a value in and of itself.*

Additional notes:

- In addition to retrieving the correct Monitoring Period, field 5, B_MON_PERIOD_BEG_DATE, and field 6, B_MON_PERIOD_END_DATE, are used to retrieve the correct FANL. The software identifies the FANL whose Effective Period Begin and End dates covers the specified Monitoring Period Begin Date. It is recommended that FANL Effective Begin and End dates correspond to Monitoring Period Begin and End dates.
- When the summary type is IFT, the software will associate the summary to a FANL whose MDBP Summary Type is 95PT and whose INDIV_FILTER_MNTRG_REQD_FLAG is "Y."

3.7 B_MDBP_Summary Permitted Value List

B_MDBP_SUMMARY		
FIELD NO	ATTRIBUTE NAME	PERMITTED VALUES
1.	B_MDBP_SUMMARY_TYPE for Generic or User-Defined Summaries	All summary types in the SDWIS/STATE permitted values table (TINPVALS:TSAMDBPAS1) are permitted value. The current list of federally owned summary types is available in the SDWIS/STATE Online Data Dictionary, the online <i>SDWIS Administration</i> (Permitted Value Maintenance) component, and via RELATION.MDB. OTHR Other.
1.	B_MDBP_SUMMARY_TYPE for Combined Filter Turbidity Summaries	AVGT Combined Filter Effluent (CFT) Average Turbidity MAXT Combined Filter Effluent (CFT) Maximum Turbidity 95PT Combined Filter Effluent (CFT) 95% Turbidity
1.	B_MDBP_SUMMARY_TYPE for Individual Filter Turbidity Summaries	IFT Individual Filter Effluent Turbidity
1.	B_MDBP_SUMMARY_TYPE for Minimal Residual Disinfection Summaries	EPRD Entry Point (EP) Residual Disinfectant Concentration (RDC) SERD State Entry Point (EP) Residual Disinfectant Concentration (RDC) DSRD Distribution Residual Disinfectant Concentration (RDC) SDRD State Distribution Residual Disinfectant Concentration (RDC)
1.	B_MDBP_SUMMARY_TYPE for Chlorine Dioxide/Chlorite Entry Point Summaries	CLO2 Entry Point (EP) Chlorine Dioxide CLO3 Entry Point (EP) Chlorite
1.	B_MDBP_SUMMARY_TYPE for Chlorine/Chloramine MRDL Summaries	MRDL Chlorine/Chloramine Maximum Residual Disinfectant Level (MRDL)
4.	B_ANALYTE_CODE for Generic or User-Defined (OTHR) Summaries	All analytes in the SDWIS/STATE Analyte table (TSAANLYT) are permitted value. The current list of federally owned analytes is available in the SDWIS/STATE Online Data Dictionary, the online <i>SDWIS Administration</i> (Analyte Maintenance) component, and via RELATION.MDB.
4.	B_ANALYTE_CODE for Combined and Individual Filter Turbidity (AVGT, MAXT, 95PT, IFT) Summaries	0100 Turbidity
4.	B_ANALYTE_CODE for Minimal Residual Disinfection and Chlorine/Chloramine MRDL (EPRD, SERD, DSRD, SDRD, MRDL) Summaries	0999 Chlorine 1006 Chloramine

* Designates field with permitted values.

+ Shaded gray blocks designate changes to previously published Structure Sets.

B_MDBP_SUMMARY			
FIELD NO	ATTRIBUTE NAME	PERMITTED VALUES	
4.	B_ANALYTE_CODE for Chlorine Dioxide/(CLO2) Summaries	1008	Chlorine Dioxide
4.	B_ANALYTE_CODE for Chlorite (CLO3) Summaries	1009	Chlorite
18.	B_MR_COMPLIANCE_INDICATOR	Y NMJ NMN	Yes-In Compliance No-Major Monitoring Non-Compliance No-Minor Monitoring Non-Compliance
22.	B_LEVEL_COMPLIANCE_INDICATOR	Y N	Yes-In Compliance No-Not Compliant
24.	B_MPA_UOM_CODE for Generic or User-Defined (OTHR) Summaries	%LUM %PUR ADMIU AGGR C CM-1 CT CU F FTU LANG LBS/CFT LBS/GAL MFL MG/L MREM MREMY NG/L NMT NTU	Percent of Luminance (for measuring color) Percent of Purity (for measuring color) American Dye Manufacturers Institute Units (for measuring color) Aggressive Index (for corrosivity) Degrees Celsius Total Absorbance for UV Contact Time Color Units Degrees Fahrenheit Flavor Threshold Units (for measuring taste and odor) Langlier Index (for measuring corrosivity) Pounds/Cubic Foot (for measuring density) Pounds/Gallon (for measuring density) Million of Fibers/Liter (for measuring asbestos) Milligrams/Liter (AKS Parts per Million - ppm) Millirems/Liter Millirems/Liter/Year Nanograms/Liter (AKA Parts per Trillion - ppt) Nanometers (to measure color wave length) Nephelometric Turbidity Units

* Designates field with permitted values.

+ Shaded gray blocks designate changes to previously published Structure Sets.

B_MDBP_SUMMARY		
FIELD NO	ATTRIBUTE NAME	PERMITTED VALUES
		OBSVNS Observations/Field at 100 power PH PH Measure (parts hydrogen (pH 0 - 14) PIC/L Picocuries/Liter RATIO Total Organic Carbon SU Standard Units (for measuring color) TON Threshold Odor Number (for odor) UG/L Micrograms/Liter (AKA Parts per Billion - ppb) UMHOS/CM Microhos/Centimeter (for measuring conductivity)
24.	B_MPA_UOM_CODE for Chlorine/Chloramine MRDL (MRDL) Summaries	MG/L Milligrams/Liter (AKS Parts per Million - ppm)
26.	B_RAA_UOM_CODE for Generic or User-Defined (OTHR) Summaries	%LUM Percent of Luminance (for measuring color) %PUR Percent of Purity (for measuring color) ADMIU American Dye Manufacturers Institute Units (for measuring color) AGGR Aggressive Index (for corrosivity) C Degrees Celsius CM-1 Total Absorbance for UV CT Contact Time CU Color Units F Degrees Fahrenheit FTU Flavor Threshold Units (for measuring taste and odor) LANG Langlier Index (for measuring corrosivity) LBS/CFT Pounds/Cubic Foot (for measuring density) LBS/GAL Pounds/Gallon (for measuring density) MFL Million of Fibers/Liter (for measuring asbestos) MG/L Milligrams/Liter (AKS Parts per Million - ppm) MREM Millirems/Liter MREMY Millirems/Liter/Year NG/L Nanograms/Liter (AKA Parts per Trillion - ppt) NMT Nanometers (to measure color wave length)

* Designates field with permitted values.

+ Shaded gray blocks designate changes to previously published Structure Sets.

B_MDBP_SUMMARY		
FIELD NO	ATTRIBUTE NAME	PERMITTED VALUES
		NTU Nephelometric Turbidity Units OBSVNS Observations/Field at 100 power PH PH Measure (parts hydrogen (pH 0 - 14) PIC/L Picocuries/Liter RATIO Total Organic Carbon SU Standard Units (for measuring color) TON Threshold Odor Number (for odor) UG/L Micrograms/Liter (AKA Parts per Billion - ppb) UMHOS/CM Microhos/Centimeter (for measuring conductivity)
26.	B_RAA_UOM_CODE for Chlorine/Chloramine MRDL (MRDL) Summaries	MG/L Milligrams/Liter (AKS Parts per Million - ppm)
27.	B_Q1_IFT_MONITORED_INDICATOR for Generic or User-Defined and Individual Filter Turbidities (OTHR, IFT) Summaries	Blank Y Yes N No
28.	B_Q2_IFT_RECORDED_INDICATOR for Generic or User-Defined and Individual Filter Turbidities (OTHR, IFT) Summaries	Blank Y Yes N No
29.	B_Q3_IFT_EQUIPMENT_INDICATOR for Generic or User-Defined and Individual Filter Turbidities (OTHR, IFT) Summaries	Blank Y Yes N No
30.	B_Q4_IFT_GREATER_1_0_INDICATOR for Generic or User-Defined and Individual Filter Turbidities (OTHR, IFT) Summaries	Blank Y Yes N No
31.	B_Q5_IFT_GREATER_0_5_INDICATOR for Generic or User-Defined and Individual Filter Turbidities (OTHR, IFT) Summaries	Blank Y Yes N No

* Designates field with permitted values.

B_MDBP_SUMMARY		
FIELD NO	ATTRIBUTE NAME	PERMITTED VALUES
32.	B_Q6_IFT_GREATER_1_DUR_3_MON_IND for Generic or User-Defined and Individual Filter Turbidities (OTHR, IFT) Summaries	Blank Y Yes N No
33.	B_Q7_IFT_GREATER_2_0_DUR_2_MON_IND for Generic or User-Defined and Individual Filter Turbidities (OTHR, IFT) Summaries	Blank Y Yes N No

* Designates field with permitted values.

+ Shaded gray blocks designate changes to previously published Structure Sets.

3.8 B_MDBP_Summary Mapping to SDWIS/STATE Entities

B_MDBP_SUMMARY					
FIELD NO	STRUCTURE SET NAME	STRUCTURE SET ATTRIBUTE NAME	SDWIS/STATE TABLE NAME	SDWIS/STATE ENTITY NAME	SDWIS/STATE ATTRIBUTE NAME
1.	B_MDBP_Summary	B_MDBP_SUMMARY_TYPE	TSAMDBPS TMNFANL	MDBP Summary Facility Analyte Level	TYPE_CODE_CV SUMMARY_TYPE_CODE_CV <i>(Foreign Key)</i>
2.	B_MDBP_Summary	B_PWS_NUMBER	TINWSYS	Water System	NUMBER <i>(Foreign Key)</i>
3.	B_MDBP_Summary	B_WSF_STATE_ASGN_ID	TINWSF	Water System Facility	STATE_ASGN_IDENTIFICATION_CODE <i>(Foreign Key)</i>
4.	B_MDBP_Summary	B_ANALYTE_CODE	TSAANLYT	Analyte	CODE <i>(Foreign Key)</i>
5.	B_MDBP_Summary	B_MON_PERIOD_BEG_DATE	TMNMPRD TMNFANL	Monitoring Period Facility Analyte Level	BEGIN_DATE <i>(Foreign Key)</i> EFFECTIVE_BEGIN_DATE <i>(Foreign Key)</i>
6.	B_MDBP_Summary	B_MON_PERIOD_END_DATE	TMNMPRD	Monitoring Period	END_DATE <i>(Foreign Key)</i>
7.	B_MDBP_Summary	B_SAMPLING_POINT	TSASMPPT	Sampling Point	IDENTIFICATION_CODE <i>(Foreign Key)</i>
8.	B_MDBP_Summary	B_LAB_FED_CERT_NO	TSALAB	Laboratory	FEDERAL_IDENTIFICATION_CODE <i>(Foreign Key)</i>
9.	B_MDBP_Summary	B_LAB_STATE_CERT_NO	TSALAB	Laboratory	STATE_ASGN_IDENTIFICATION_NUMBER <i>(Foreign Key)</i>
10.	B_MDBP_Summary	B_ANALYST_NO	TINLGENT	Legal Entity	EMPLOYER_IDENTIFICATION_NUMBER <i>(Foreign Key)</i>
11.	B_MDBP_Summary	B_ANALYST_LAST_NAME	TININDIV TINLGENT	Individual Legal Entity	LAST_NAME <i>(Foreign Key)</i> NAME <i>(Foreign Key)</i>
12.	B_MDBP_Summary	B_ANALYST_FIRST_NAME	TININDIV TINLGENT	Individual Legal Entity	FIRST_NAME_TEXT <i>(Foreign Key)</i> NAME <i>(Foreign Key)</i>
13.	B_MDBP_Summary	B_ANALYST_ORGANIZATION	TININDIV	Individual	ORGANIZATION_NAME <i>(Foreign Key)</i>
14.	B_MDBP_Summary	B_ANALYST_MAIL_STOP_TEXT	TININDIV	Individual	MAIL_STOP_TEXT <i>(Foreign Key)</i>
15.	B_MDBP_Summary	B_REPORTED_DATE	TSAMDBPS	MDBP Summary	REPORTED_DATE

* Designates field with permitted values.

B_MDBP_SUMMARY					
FIELD NO	STRUCTURE SET NAME	STRUCTURE SET ATTRIBUTE NAME	SDWIS/STATE TABLE NAME	SDWIS/STATE ENTITY NAME	SDWIS/STATE ATTRIBUTE NAME
16.	B_MDBP_Summary	B_SAMPLES_REQUIRED	TSAMDBPS	MDBP Summary	SAMPLES_REQUIRED
17.	B_MDBP_Summary	B_SAMPLES_COLLECTED	TSAMDBPS	MDBP Summary	SAMPLES_COLLECTED
18.	B_MDBP_Summary	B_MR_COMPLIANCE_INDICATOR	TSAMDBPS	MDBP Summary	MR_COMPLIANCE_INDICATOR
19.	B_MDBP_Summary	B_TOTAL_SAMPLES_BEYOND_MSR_LVL	TSAMDBPS	MDBP Summary	TOTAL_SAMPLES_BEYOND_MSR_LVL
20.	B_MDBP_Summary	B_PERCENT_SAMPLES_BEYOND_MSR_LVL	TSAMDBPS	MDBP Summary	PERCENT_SAMPLES_BEYOND_MSR_LVL
					PERCENT_SAMPBS_BYND_MSR_LVL_TXT
21.	B_MDBP_Summary	B_HIGHEST_MEASURE	TSAMDBPS	MDBP Summary	HIGHEST_MEASURE
					HIGHEST_MSR_TXT
22.	B_MDBP_Summary	B_LEVEL_COMPLIANCE_INDICATOR	TSAMDBPS	MDBP Summary	LEVEL_COMPLIANCE_INDICATOR
23.	B_MDBP_Summary	B_MONITORING_PERIOD_AVG_MEASURE	TSAMDBPS	MDBP Summary	MONITORING_PERIOD_AVG_MEASURE
					MONITORING_PERIOD_AVG_MSR_TXT
24.	B_MDBP_Summary	B_MPA_UOM_CODE	TSAMDBPS	MDBP Summary	MPA_UOM_CODE
25.	B_MDBP_Summary	B_RUNNING_ANNUAL_AVERAGE_MEASURE	TSAMDBPS	MDBP Summary	RUNNING_ANNUAL_AVERAGE_MEASURE
					RUNNING_ANNUAL_AVERAGE_MSR_TXT
26.	B_MDBP_Summary	B_RAA_UOM_CODE	TSAMDBPS	MDBP Summary	RAA_UOM_CODE
27.	B_MDBP_Summary	B_Q1_IFT_MONITORED_INDICATOR	TSAMDBPS	MDBP Summary	Q1_IFT_MONITORED_INDICATOR
28.	B_MDBP_Summary	B_Q2_IFT_RECORDED_INDICATOR	TSAMDBPS	MDBP Summary	Q2_IFT_RECORDED_INDICATOR
29.	B_MDBP_Summary	B_Q3_IFT_EQUIPMENT_INDICATOR	TSAMDBPS	MDBP Summary	Q3_IFT_EQUIPMENT_INDICATOR
30.	B_MDBP_Summary	B_Q4_IFT_GREATER_1_0_INDICATOR	TSAMDBPS	MDBP Summary	Q4_IFT_GREATER_1_0_INDICATOR
31.	B_MDBP_Summary	B_Q5_IFT_GREATER_0_5_INDICATOR	TSAMDBPS	MDBP Summary	Q5_IFT_GREATER_0_5_INDICATOR
32.	B_MDBP_Summary	B_Q6_IFT_GREATER_1_DUR_3_MON_IND	TSAMDBPS	MDBP Summary	Q6_IFT_GREATER_1_DUR_3_MON_IND
33.	B_MDBP_Summary	B_Q7_IFT_GREATER_2_0_DUR_2_MON_IND	TSAMDBPS	MDBP Summary	Q7_IFT_GREATER_2_0_DUR_2_MON_IND
34.	B_MDBP_Summary	B_COMMENTS_TEXT	TSAMDBPS	MDBP Summary	COMMENTS_TEXT

* Designates field with permitted values.

3.9 B_MDBP_Summary Structure Set to Staging Table Mapping

B_MDBP_SUMMARY				
FIELD NO	STRUCTURE SET NAME	STRUCTURE SET ATTRIBUTE NAME	STAGING TABLE NAME	STAGING TABLE FIELD NAME
1.	B_MDBP_Summary	B_MDBP_SUMMARY_TYPE	TMGMDBPS	B_MDBP_SUMMARY_TYP
2.	B_MDBP_Summary	B_PWS_NUMBER	TMGMDBPS	B_PWS_NUMBER
3.	B_MDBP_Summary	B_WSF_STATE_ASGN_ID	TMGMDBPS	B_WSF_STAT_ASGN_ID
4.	B_MDBP_Summary	B_ANALYTE_CODE	TMGMDBPS	B_ANALYTE_CD
5.	B_MDBP_Summary	B_MON_PERIOD_BEG_DATE	TMGMDBPS	B_MON_PER_BEG_DAT
6.	B_MDBP_Summary	B_MON_PERIOD_END_DATE	TMGMDBPS	B_MON_PER_END_DAT
7.	B_MDBP_Summary	B_SAMPLING_POINT	TMGMDBPS	B_SAMPLING_PT
8.	B_MDBP_Summary	B_LAB_FED_CERT_NO	TMGMDBPS	B_LAB_FED_CERT_NO
9.	B_MDBP_Summary	B_LAB_STATE_CERT_NO	TMGMDBPS	B_LAB_STAT_CERT_NO
10.	B_MDBP_Summary	B_ANALYST_NO	TMGMDBPS	B_ANALYST_NO
11.	B_MDBP_Summary	B_ANALYST_LAST_NAME	TMGMDBPS	B_ANALYST_LAST_NAM
12.	B_MDBP_Summary	B_ANALYST_FIRST_NAME	TMGMDBPS	B_ANALYST_FIRS_NAM
13.	B_MDBP_Summary	B_ANALYST_ORGANIZATION	TMGMDBPS	B_ANALYST_ORG_NAM
14.	B_MDBP_Summary	B_ANALYST_MAIL_STOP_TEXT	TMGMDBPS	B_ANLYST_MAIL_STOP
15.	B_MDBP_Summary	B_REPORTED_DATE	TMGMDBPS	B_REPORTED_DAT
16.	B_MDBP_Summary	B_SAMPLES_REQUIRED	TMGMDBPS	B_SAMPLES_REQUIRED
17.	B_MDBP_Summary	B_SAMPLES_COLLECTED	TMGMDBPS	B_SAMPLES_COLLECT
18.	B_MDBP_Summary	B_MR_COMPLIANCE_INDICATOR	TMGMDBPS	MR_COMPLIANCE_IND
19.	B_MDBP_Summary	B_TOTAL_SAMPLES_BEYOND_MSR_LVL	TMGMDBPS	B_SMPL_BYND_ME_LVL
20.	B_MDBP_Summary	B_PERCENT_SAMPLES_BEYOND_MSR_LVL	TMGMDBPS	B_PCNT_BYND_ME_LVL
21.	B_MDBP_Summary	B_HIGHEST_MEASURE	TMGMDBPS	B_HIGHEST_MSR
22.	B_MDBP_Summary	B_LEVEL_COMPLIANCE_INDICATOR	TMGMDBPS	B_LVL_CMPLIANC_IND
23.	B_MDBP_Summary	B_MONITORING_PERIOD_AVG_MEASURE	TMGMDBPS	B_MON_PER_AVG_MSR
24.	B_MDBP_Summary	B_MPA_UOM_CODE	TMGMDBPS	B_MPA_UOM_CD
25.	B_MDBP_Summary	B_RUNNING_ANNUAL_AVERAGE_MEASURE	TMGMDBPS	B_RUN_ANL_AVG_MSR

* Designates field with permitted values.

+ Shaded gray blocks designate changes to previously published Structure Sets.

B_MDBP_SUMMARY				
FIELD NO	STRUCTURE SET NAME	STRUCTURE SET ATTRIBUTE NAME	STAGING TABLE NAME	STAGING TABLE FIELD NAME
26.	B_MDBP_Summary	B_RAA_UOM_CODE	TMGMDBPS	B_RAA_UOM_CD
27.	B_MDBP_Summary	B_Q1_IFT_MONITORED_INDICATOR	TMGMDBPS	B_Q1_IFT_IND
28.	B_MDBP_Summary	B_Q2_IFT_RECORDED_INDICATOR	TMGMDBPS	B_Q2_IFT_IND
29.	B_MDBP_Summary	B_Q3_IFT_EQUIPMENT_INDICATOR	TMGMDBPS	B_Q3_IFT_IND
30.	B_MDBP_Summary	B_Q4_IFT_GREATER_1_0_INDICATOR	TMGMDBPS	B_Q4_IFT_IND
31.	B_MDBP_Summary	B_Q5_IFT_GREATER_0_5_INDICATOR	TMGMDBPS	B_Q5_IFT_IND
32.	B_MDBP_Summary	B_Q6_IFT_GREATER_1_DUR_3_MON_IND	TMGMDBPS	B_Q6_IFT_IND
33.	B_MDBP_Summary	B_Q7_IFT_GREATER_2_0_DUR_2_MON_IND	TMGMDBPS	B_Q7_IFT_IND
34.	B_MDBP_Summary	B_COMMENTS_TEXT	TMGMDBPS	B_COMMENTS_TEXT

* Designates field with permitted values.

+ Shaded gray blocks designate changes to previously published Structure Sets.