

DUET Calculation Priority and Consistency Checks per AGENCY/SOURCE ID Groups (CalculationsPerAgencySource\_27dec12\_mem\_final.xlsx)

AGENCY	SOURCE	STATION_TYPE	EVENT_TYPE	STATION	CALCULATIONS	DUET STORED PROCS	PREFERRED RUN ORDER	ORDER NUMBER	CONSISTENCY CHECKS		
DEDNREC	DEDNREC	Primary	R, RSI, S, ONS or OS	304191, 302031	[POC] = [TOC] - [DOC] [TKNW] = [TN] - [NO23W]	usp_CalculatePOC	usp_CalculatePOC	1	[NH4W] + [NO23W] ≤ [TN]    [PO4F] ≤ [TP]    [DOC] ≤ [TOC]		
						usp_CalculateTKNW	usp_CalculateTKNW	2	[NH4W] ≤ [TN]    [NO23W] ≤ [TN]		
USGSWV	USGSWV	Primary	R, RSI, S, ONS or OS	01604500, 01608500, 01616500, 01613030, 01616400, 01611500, 01618100	[DIN] = [NH4F] + [NO23F] [NO3F] = [NO23F] - [NO2F]	usp_CalculateDINv2	usp_CalculateDINv2	1	[NH4F] + [NO23F] ≤ [TN]    [NH4F] ≤ [TN]    [NO23F] ≤ [TN]		
						usp_CalculateNO3F	usp_CalculateNO3F	2	[PO4F] ≤ [TP]    [NO2F] ≤ [NO23F]		
USGSWV	USGSWV	Primary	R, RSI, S, ONS or OS	01595300, 01614000, 01636500	[TN] = [PN] + [TDN] [DON] = [TDN] - [NH4F] - [NO23F] [DIN] = [NH4F] + [NO23F] [NO3F] = [NO23F] - [NO2F] [PP] = [TP] - [TDP] [DOP] = [TDP] - [PO4F]	usp_TN3v2	usp_CalculatePP	1	[NH4F] + [NO23F] ≤ [TDN]    [NO2F] ≤ [NO23F]    [PO4F] ≤ [TDP]		
						usp_CalculateDON2v2	usp_CalculateDOP	2	[TDP] ≤ [TP]		
						usp_CalculateDINv2	usp_CalculateDINv2	3	[NH4F] ≤ [TDN]    [NO23F] ≤ [TDN]		
						usp_CalculateNO3F	usp_CalculateDON2v2	4			
						usp_CalculatePP	usp_CalculateNO3F	5			
						usp_CalculateDOP	usp_TN3v2	6			
SRBC	SRBC	Primary	R, RSI, S, ONS or OS	01502500, 01503000, 01529500, 01511500	[PON] = [TKNW] - [TKNF] [DON] = [TKNF] - [NH4F] [DIN] = [NH4F] + [NO23F] [PP] = [TP] - [TDP] [DOP] = [TDP] - [PO4F] [TN] = [TKNW] + [NO23W] [TDN] = [TKNF] + [NO23F]	usp_CalculatePONv2	usp_CalculatePP	1	[NH4W] ≤ [TKNW]    [NH4F] ≤ [TKNF]    [PO4F] ≤ [TDP]		
						usp_CalculateDON1v2	usp_CalculateDOP	2	[TKNF] ≤ [TKNW]    [TDP] ≤ [TP]		
						usp_CalculateDINv2	usp_CalculateDINv2	3	[NO23F] ≤ [NO23W]    [NH4F] ≤ [NH4W]		
						usp_CalculatePP	usp_CalculateTN2v2	4			
						usp_CalculateDOP	usp_CalculateTDNv2	5			
						usp_CalculateTN2v2	usp_CalculateDON1v2	6			
						usp_CalculateTDNv2	usp_CalculatePONv2	7			
SRBC	SRBC or NYSDEC	Primary	R, RSI, S, ONS or OS	01515000, 01531000	[TN] = [TKNW]+ [NO23W] [TDN]=[TKNF]+ [NO23F] [PON] = [TKNW] - [TKNF] [DON] = [TKNF] - [NH4F] [DIN] = [NH4F] + [NO23F] [PP] = [TP] - [TDP] [DOP] = [TDP] - [PO4F]	usp_CalculateTN2v2	usp_CalculatePP	1	[NH4W] ≤ [TKNW]    [NH4F] ≤ [TKNF]    [PO4F] ≤ [TDP]		
						usp_CalculateTDNv2	usp_CalculateDOP	2	[TKNF] ≤ [TKNW]    [TDP] ≤ [TP]		
						usp_CalculatePONv2	usp_CalculateDINv2	3	[NO23F] ≤ [NO23W]    [NH4F] ≤ [NH4W]		
						usp_CalculateDON1v2	usp_CalculateDON1v2	4			
						usp_CalculateDINv2	usp_CalculatePONv2	5			
						usp_CalculatePP	usp_CalculateTDNv2	6			
						usp_CalculateDOP	usp_CalculateTN2v2	7			
MDDNR	MDDNR	Primary	R, RSI, S, ONS or OS	TUK0181, BEL0053, DER0015, GUN0258, NPA0165, GWN0115, PXT0972, TF1.2, GEO0009, WIL0013, ANT0047, CAC0148, MON0546, LXT0200, MGN0062, NWA0016, WCK0001, MKB0016, CVA0046, WIL0065	[TN] = [PN] + [TDN] [DON] = [TDN] - [NH4F] - [NO23F] [DIN] = [NH4F] + [NO23F] [NO3F] = [NO23F] - [NO2F] [TP] = [PP] + [TDP] [DOP] = [TDP] - [PO4F]	usp_TN3v2	usp_CalculateTP	1	[NH4F] + [NO23F] ≤ [TDN]    [PO4F] ≤ [TDP]    [NO2F] ≤ [NO23F]		
						usp_CalculateDON2v2	usp_CalculateDOP	2	[NH4F] ≤ [TDN]    [NO23F] ≤ [TDN]		
						usp_CalculateDINv2	usp_CalculateDINv2	3			
						usp_CalculateNO3F	usp_CalculateDON2v2	4			
						usp_CalculateTP	usp_CalculateNO3F	5			
						usp_CalculateDOP	usp_TN3v2	6			
MDDNR	USGSMD	Primary_RIM	R, RSI, S, ONS or OS	01491000, 01578310, 01594440, 01646580	[TN] = [PN] + [TDN] [DON] = [TDN] - [NH4F] - [NO23F] [DIN] = [NH4F] + [NO23F] [NO3F] = [NO23F] - [NO2F] [PP] = [TP] - [TDP] [DOP] = [TDP] - [PO4F] [FSS] = [TSS] - [VSS] [TOC] = [PC] - [PIC] + [DOC] [DOP] = [TDP] - [HPO4F]	usp_TN3v2	usp_CalculatePP	1	[NH4F] + [NO23F] ≤ [TDN]    [TDP] ≤ [TP]    [PO4F] ≤ [TDP]		
						usp_CalculateDON2v2	usp_CalculateDOP	2	[NO2F] ≤ [NO23F]    [VSS] ≤ [TSS]    [HPO4F] ≤ [TDP]		
						usp_CalculateDINv2	usp_CalculateDOP2	3	[PIC] ≤ [PC]    [NO23F] ≤ [TDN]    [NH4F] ≤ [TDN]		
						usp_CalculateNO3F	usp_CalculateDINv2	4			
						usp_CalculatePP	usp_CalculateDON2v2	5			
						usp_CalculateDOP	usp_CalculateNO3F	6			
						usp_CalculateFSS	usp_TN3v2	7			
						usp_CalculateTOC	usp_CalculateTOC	8			
						usp_CalculateDOP2	usp_CalculateFSS	9			
PADEP	SRBC	Primary	R, RSI, S, ONS or OS	WQN0201, WQN0214, WQN0273, WQN0301, WQN0305, WQN0401, WQN0204, WQN0210, WQN0223, WQN0229, WQN0243, WQN0263, WQN0271, WQN0272, WQN0302, WQN0404, WQN0445, WQN0448, WQN0226, WQN0281, WQN0282	[PN] = [TN] - [TDN] [TKNW] = [TN] - [NO23W] [DON] = [TDN] - [NH4F] - [NO23F] [DIN] = [NH4F] + [NO23F] [PP] = [TP] - [TDP] [DOP] = [TDP] - [PO4F] [VSS] = [TSS] - [FSS]	usp_CalculatePN	usp_CalculatePP	1	[NH4F] + [NO23F] ≤ [TDN]    [PO4F] ≤ [TDP]    [NO23F] ≤ [NO23W]		
						usp_CalculateTKNW	usp_CalculateDOP	2	[TDN] ≤ [TN]    [FSS] ≤ [TSS]    [TDP] ≤ [TP]		
						usp_CalculateDON2v2	usp_CalculateDINv2	3	[NH4W] + [NO23W] ≤ [TN]		
						usp_CalculateDINv2	usp_CalculateDON2v2	4	[NO23F] ≤ [TDN]    [NO23W] ≤ [TN]    [NH4W] ≤ [TN]		
						usp_CalculatePP	usp_CalculatePN	5	[NH4F] ≤ [TDN]		
						usp_CalculateDOP	usp_CalculateVSS	6			
						usp_CalculateVSS	usp_CalculateTKNW	7			

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AGENCY	SOURCE	STATION_TYPE	EVENT_TYPE	STATION	CALCULATIONS	DUET STORED PROCS	PREFERRED RUN ORDER	ORDER NUMBER	CONSISTENCY CHECKS		
PADEP	USGSPA	Primary	R, RSI, S, ONS or OS	WQN0317, WQN0410, WQN0224, WQN0217, WQN0212, WQN0269, WQN0278, WQN0280	[PN] = [TN] - [TDN]	usp_CalculatePN	usp_CalculatePP	1	[NH4F] + [NO23F] ≤ [TDN]	[PO4F] ≤ [TDP]	[NO23F] ≤ [NO23W]
					[TKNW] = [TN] - [NO23W]	usp_CalculateTKNW	usp_CalculateDOP	2	[TDN] ≤ [TN]	[FSS] ≤ [TSS]	[TDP] ≤ [TP]
					[DON] = [TDN] - [NH4F] - [NO23F]	usp_CalculateDON2v2	usp_CalculateDINv2	3	[NH4W] + [NO23W] ≤ [TN]		
					[DIN] = [NH4F] + [NO23F]	usp_CalculateDINv2	usp_CalculateDON2v2	4	[NO23F] ≤ [TDN]	[NO23W] ≤ [TN]	[NH4W] ≤ [TN]
					[PP] = [TP] - [TDP]	usp_CalculatePP	usp_CalculatePN	5	[NH4F] ≤ [TDN]		
					[DOP] = [TDP] - [PO4F]	usp_CalculateDOP	usp_CalculateVSS	6			
					[VSS] = [TSS] - [FSS]	usp_CalculateVSS	usp_CalculateTKNW	7			
PADEP	PADEP	Primary	R, RSI, S, ONS or OS	WQN0501, WQN0509, WQN0510, WQN0511, WQN0512, WQN0513	[PN] = [TN] - [TDN]	usp_CalculatePN	usp_CalculatePP	1	[NH4F] + [NO23F] ≤ [TDN]	[PO4F] ≤ [TDP]	[NO23F] ≤ [NO23W]
					[TKNW] = [TN] - [NO23W]	usp_CalculateTKNW	usp_CalculateDOP	2	[TDN] ≤ [TN]	[FSS] ≤ [TSS]	[TDP] ≤ [TP]
					[DON] = [TDN] - [NH4F] - [NO23F]	usp_CalculateDON2v2	usp_CalculateDINv2	3	[NH4W] + [NO23W] ≤ [TN]		
					[DIN] = [NH4F] + [NO23F]	usp_CalculateDINv2	usp_CalculateDON2v2	4	[NO23F] ≤ [TDN]	[NO23W] ≤ [TN]	[NH4W] ≤ [TN]
					[PP] = [TP] - [TDP]	usp_CalculatePP	usp_CalculatePN	5	[NH4F] ≤ [TDN]		
					[DOP] = [TDP] - [PO4F]	usp_CalculateDOP	usp_CalculateVSS	6			
					[VSS] = [TSS] - [FSS]	usp_CalculateVSS	usp_CalculateTKNW	7			
VADEQ	USGSVA	Primary_RIM	R, RSI, S, ONS or OS	TF5.0A, TF4.0P, TF5.0J, TF3.0, TF4.0M	[TN] = [PN] + [TDN]	usp_TN3v2	usp_CalculateTP	1	[NH4F] + [NO23F] ≤ [TDN]	[PO4F] ≤ [TDP]	[FSS] ≤ [TSS]
					[DON] = [TDN] - [NH4F] - [NO23F]	usp_CalculateDON2v2	usp_CalculateDOP	2	[TDN] ≤ [TN]		
					[DIN] = [NH4F] + [NO23F]	usp_CalculateDINv2	usp_CalculateDINv2	3	[NO23F] ≤ [TDN]	[NH4F] ≤ [TDN]	
					[NO3F] = [NO23F] - [NO2F]	usp_CalculateNO3F	usp_CalculateDON2v2	4			
					[TP] = [PP] + [TDP]	usp_CalculateTP	usp_CalculateNO3F	5			
					[DOP] = [TDP] - [PO4F]	usp_CalculateDOP	usp_TN3v2	6			
					[VSS] = [TSS] - [FSS]	usp_CalculateVSS	usp_CalculateVSS	7			
VADEQ	USGSVA	Primary (Sampled as a Primary_RIM)	R, RSI, S, ONS or OS	2-JMS113.20	[TN] = [PN] + [TDN]	usp_TN3v2	usp_CalculateTP	1	[NH4F] + [NO23F] ≤ [TDN]	[PO4F] ≤ [TDP]	[FSS] ≤ [TSS]
					[DON] = [TDN] - [NH4F] - [NO23F]	usp_CalculateDON2v2	usp_CalculateDOP	2	[TDN] ≤ [TN]		
					[DIN] = [NH4F] + [NO23F]	usp_CalculateDINv2	usp_CalculateDINv2	3	[NO23F] ≤ [TDN]	[NH4F] ≤ [TDN]	
					[NO3F] = [NO23F] - [NO2F]	usp_CalculateNO3F	usp_CalculateDON2v2	4			
					[TP] = [PP] + [TDP]	usp_CalculateTP	usp_CalculateNO3F	5			
					[DOP] = [TDP] - [PO4F]	usp_CalculateDOP	usp_TN3v2	6			
					[VSS] = [TSS] - [FSS]	usp_CalculateVSS	usp_CalculateVSS	7			
VADEQ	USGSVA	Primary	R, RSI, S, ONS or OS	1BNFS010.34, 1BSMT004.60, 1BSSF003.56, 2-CHK035.26, 2-JMS113.20, 3-RAP030.21, 8-NAR005.42, 1BMDD005.81, 1ADIF000.86, 7-DRN010.48, 1ASOQ006.73	[TKNW] = [TN] - [NO23W]	usp_CalculateTKNW	usp_CalculateVSS	1	[NH4W] + [NO23W] ≤ [TN]	[PO4F] ≤ [TP]	[FSS] ≤ [TSS]
					[VSS] = [TSS] - [FSS]	usp_CalculateVSS	usp_CalculateTKNW	2	[NO23W] ≤ [TN]	[NH4W] ≤ [TN]	
VADEQ	VADEQ/SCRO or USGSVA	Primary	R, RSI, S, ONS or OS	2-JMS279.41, 2-APP110.93	[TKNW] = [TN] - [NO23W]	usp_CalculateTKNW	usp_CalculateVSS	1	[NH4W] + [NO23W] ≤ [TN]	[PO4F] ≤ [TP]	[FSS] ≤ [TSS]
					[VSS] = [TSS] - [FSS]	usp_CalculateVSS	usp_CalculateTKNW	2	[NO23W] ≤ [TN]	[NH4W] ≤ [TN]	
VADEQ	VADEQ/NRO or USGSVA	Primary	R, RSI, S, ONS or OS	1AACO014.57, 3-RPP147.49, 8-MPN094.94	[TKNW] = [TN] - [NO23W]	usp_CalculateTKNW	usp_CalculateVSS	1	[NH4W] + [NO23W] ≤ [TN]	[PO4F] ≤ [TP]	[FSS] ≤ [TSS]
					[VSS] = [TSS] - [FSS]	usp_CalculateVSS	usp_CalculateTKNW	2	[NO23W] ≤ [TN]	[NH4W] ≤ [TN]	
VADEQ	VADEQ/VRO or USGSVA	Primary	R, RSI, S, ONS or OS	2-RVN015.97, 1BSSF100.10	[TKNW] = [TN] - [NO23W]	usp_CalculateTKNW	usp_CalculateVSS	1	[NH4W] + [NO23W] ≤ [TN]	[PO4F] ≤ [TP]	[FSS] ≤ [TSS]
					[VSS] = [TSS] - [FSS]	usp_CalculateVSS	usp_CalculateTKNW	2	[NO23W] ≤ [TN]	[NH4W] ≤ [TN]	
VADEQ	VADEQ/NRO	Secondary	R	3-RAP066.54, 3-ROB001.90, 8-POR008.97, 1ACAX004.57	[VSS] = [TSS] - [FSS]	usp_CalculateVSS	usp_CalculateVSS	1	[NH4W] + [NO23W] ≤ [TN]	[PO4F] ≤ [TP]	[FSS] ≤ [TSS]
									[NO23W] ≤ [TN]	[NH4W] ≤ [TN]	
VADEQ	VADEQ/VRO	Secondary	R	1BSTH027.85, 2-BCC004.71, 2-BLP000.79, 2-CFP004.67, 2-MCM005.12, 2-MRY014.78	[VSS] = [TSS] - [FSS]	usp_CalculateVSS	usp_CalculateVSS	1	[NH4W] + [NO23W] ≤ [TN]	[PO4F] ≤ [TP]	[FSS] ≤ [TSS]
									[NO23W] ≤ [TN]	[NH4W] ≤ [TN]	
VADEQ	VADEQ/PRO	Secondary	R	8-LTL009.54, 2-DPC005.20	[VSS] = [TSS] - [FSS]	usp_CalculateVSS	usp_CalculateVSS	1	[NH4W] + [NO23W] ≤ [TN]	[PO4F] ≤ [TP]	[FSS] ≤ [TSS]
									[NO23W] ≤ [TN]	[NH4W] ≤ [TN]	