DETERMINATION OF ANIONS BY ION CHROMATOGRAPHY
SM 18th Ed 4110 B **Page 1 of 2**

Relevant Aspect of Standards	Method Reference	Y	N	N/A	Comments
Records Examined: SOP Number/ Revision/ Date _____ Analyst:_____ Sample ID: _____ Date of Sample Preparation:_____ Date of Analysis:_____					
Were samples analyzed for Nitrate held at 4°C for no longer than 48 hours?	40 CFR 141.23				
Were samples analyzed for Nitrite held at 4°C for no longer than 48 hours?	40 CFR 141.23				
Were samples analyzed for Fluoride held for no longer than 1 month?	40 CFR 141.23				
Was the Eluent Solution prepared by dissolving 0.5712 g $NaHCO_3$ and 0.7632 g Na_2CO_3 in 4 L water?	3.b				
Was the Regenerant Solution composed of 0.025 H_2SO_4?	3.c				
Are standard anion solutions prepared using salts dried at 105˚C and stored in plastic in the refrigerator for a month (after which stability is verified)?	3.d				
If Nitrite and Orthophosphate were in calibration standards, were working standards prepared fresh daily and stored away from light?	3.e & 3.f				
If Nitrite and Orthophosphate were not in calibration standards, were working standards prepared each month and stored away from light?	3.g				
If Fluoride is to be analyzed has precision and bias been evaluated to determine the effects of the “water dip” and the simple organic acids which elute close to fluoride?	1.d				
Was detector adjusted to zero out eluent conductivity?	4.a				
Were at least three different concentrations used to calibrate for each anion analyzed?	4.b				
Notes/Comments:					

METHOD CHECKLISTS ARE AN INTERVIEW TOOL USED BY ASSESSORS AND ARE NOT TO BE CONSIDERED AS A SUBSTITUTE FOR REQUIREMENTS OF THE PUBLISHED METHOD. CHECKLISTS ARE SUBJECT TO CHANGE.

DETERMINATION OF ANIONS BY ION CHROMATOGRAPHY
SM 4110 B 18th

Relevant Aspect of Standards	Method Reference	Y	N	N/A	Comments
Was instrument recalibrated whenever detector setting, eluent, or regenerant was changed?	4.b				
If necessary, were particulates removed from samples using prewashed 0.2 µm-pore-diameter membrane filter?	4.c				
Is a prewashed syringe with a male luer fitting used to flush the sample through the loop several times?	4.c				
Was the ion chromatograph switched from load to inject mode, the peak heights and retention times recorded on a strip chart recorder?	4.c				
Are samples concentrations calculated using against their appropriate calibration curve or the following equation (when responses are shown to be linear)? C=H x F x D C=mg anion/L H=peak height or area F=response factor D=dilution factor (when required)	5				

Notes/Comments:

METHOD CHECKLISTS ARE AN INTERVIEW TOOL USED BY ASSESSORS AND ARE NOT TO BE CONSIDERED AS A SUBSTITUTE FOR REQUIREMENTS OF THE PUBLISHED METHOD. CHECKLISTS ARE SUBJECT TO CHANGE.