

### Attachment J-10, Analytical Laboratory Methods

Method	Matrix	Lab Test Description
1010	LIQUID	Flash Point
1010	OIL	Flash Point
1010	SLUDGE	Flash Point
1010	SOIL	Flash Point
1010	SOLID	Flash Point
1010	WATER	Flash Point
1030	SLUDGE	Ignitability
1030	SOIL	Ignitability
1030	SOLID	Ignitability
110.2	WATER	Color
1110	LIQUID	Corrosivity
120.1	WATER	Conductivity
130.2	LIQUID	Hardness
130.2	WATER	Hardness
1311M	LIQUID	TCLP extraction-metals
1311M	SLUDGE	TCLP extraction-metals
1311M	SOIL	TCLP extraction-metals
1311M	SOLID	TCLP extraction-metals
1311S	LIQUID	TCLP extraction-semivols
1311S	SLUDGE	TCLP extraction-semivols
1311S	SOIL	TCLP extraction-semivols
1311S	SOLID	TCLP extraction-semivols
1311V	LIQUID	TCLP extraction-vols
1311V	SLUDGE	TCLP extraction-vols
1311V	SOIL	TCLP extraction-vols
1311V	SOLID	TCLP extraction-vols
150.1 1982	LIQUID	pH
150.1 1982	WATER	pH
160.1	LIQUID	Dissolved Solids
160.1	WATER	Dissolved Solids
160.2	LIQUID	Suspended Solids
160.2	WATER	Suspended Solids
160.3	LIQUID	Total Solids
160.3	WATER	Total Solids
1664A	LIQUID	Oil and Grease, Gravimetric
1664A	WATER	Oil and Grease, Gravimetric
180.1 1978	LIQUID	Turbidity

180.1 1978	WATER	Turbidity
200.7 R3.3	WATER	Metals by ICP
2320 B 17	LIQUID	M & P Alkalinity
2320 B 17	WATER	M & P Alkalinity
2340 C 17	LIQUID	Hardness
2340 C 17	WATER	Hardness
245.2	LIQUID	Mercury by CVAA
300.0	LIQUID	Anions by Ion Chromatography
300.0	OIL	Anions by Ion Chromatography
300.0	WATER	Anions by Ion Chromatography
310.1	LIQUID	Alkalinity
330.1 1978	LIQUID	Free Chlorine and Releasable Chlornine
330.1 1978	WATER	Free Chlorine and Releasable Chlornine
335.2	LIQUID	Total Cyanide
335.2	WATER	Total Cyanide
340.2	LIQUID	Fluoride by Ion Selective Electrode
340.2	OIL	Fluoride by Ion Selective Electrode
340.2	SOLID	Fluoride by Ion Selective Electrode
345.1 1974	WATER	Iodide
350.2	WATER	Ammonia by Ion Selective Electrode
350.3	LIQUID	Ammonia by Ion Selective Electrode
350.3	WATER	Ammonia by Ion Selective Electrode
3500-Cr D 17	LIQUID	Hexavalent Chromium
3500-Cr D 17	SOIL	Hexavalent Chromium
3500-Cr D 17	SOLID	Hexavalent Chromium
3500-Cr D 17	WATER	Hexavalent Chromium
3500Fe	LIQUID	Ferrous Iron
3500Fe	WATER	Ferrous Iron
353.3	LIQUID	Nitrate-Nitrite Nitrogen
353.3	WATER	Nitrate-Nitrite Nitrogen
365.3	WATER	Phosphorus - All forms Colorimetric
370.1	LIQUID	Dissolved Silica
370.1	WATER	Dissolved Silica
376.1	LIQUID	Sulfide
377.1 1978	WATER	Sulfite
410.4 1978	LIQUID	COD
410.4 1978	WATER	COD
420.1	LIQUID	Phenol
420.1	WATER	Phenol
425.1	LIQUID	MBAS (Surfactants)
425.1	WATER	MBAS (Surfactants)

5210B	LIQUID	BOD & CBOD
6010B	LIQUID	Metals by ICP
6010B	SOIL	Metals by ICP
6010B	SOLID	Metals by ICP
6010B	WATER	Metals by ICP
6010BTCLP	LIQUID	Metals by ICP
6010BTCLP	SLUDGE	Metals by ICP (not included on original list)
6010BTCLP	SOIL	Metals by ICP
6010BTCLP	SOLID	Metals by ICP
6010BTCLP	WATER	Metals by ICP
6020	SOIL	Metals by ICP-MS
6020	WATER	Metals by ICP-MS
6020	WATER	Metals by ICP-MS
608A	LIQUID	PCB Analysis by GC
608A	WATER	PCB Analysis by GC
624	WATER	Volatiles by GCMS
625	WATER	Semivolatiles by GCMS
7300	FILTER	Metals by ICP-MS
7300 3Feb84	FILTER	Metals by ICP
7400 3May89	FILTER	Fiber Counting
7400 Aug1994	FILTER	Fiber Counting
7470A	LIQUID	Mercury by CVAA
7470A	WATER	Mercury by CVAA
7470ATCLP	LIQUID	Mercury by CVAA (not included in original list)
7470ATCLP	SLUDGE	Mercury by CVAA
7470ATCLP	SOIL	Mercury by CVAA
7470ATCLP	SOLID	Mercury by CVAA
7471A	SLUDGE	Mercury by CVAA
7471A	SOIL	Mercury by CVAA
7471A	SOLID	Mercury by CVAA
7600	FILTER	Hexavalent Chromium
8082	LIQUID	PCB Analysis by GC
8082	OIL	PCB Analysis by GC
8082	SLUDGE	PCB Analysis by GC
8082	SOIL	PCB Analysis by GC
8082	SOLID	PCB Analysis by GC
8082	WATER	PCB Analysis by GC
8082	WIPE	PCB Analysis by GC (Method IH-570)
8260B	LIQUID	Volatiles by GCMS
8260B	SLUDGE	Volatiles by GCMS
8260B	SOIL	Volatiles by GCMS

8260B	SOLID	Volatiles by GCMS
8260B	WATER	Volatiles by GCMS
8260BTCLP	LIQUID	Volatiles by GCMS (includes 1311 extraction cost)
8260BTCLP	SLUDGE	Volatiles by GCMS (includes 1311 extraction cost)
8260BTCLP	SOIL	Volatiles by GCMS (includes 1311 extraction cost)
8260BTCLP	SOLID	Volatiles by GCMS (includes 1311 extraction cost)
8270C	LIQUID	Semivolatiles by GCMS
8270C	SLUDGE	Semivolatiles by GCMS
8270C	SOIL	Semivolatiles by GCMS
8270C	SOLID	Semivolatiles by GCMS
8270C	WATER	Semivolatiles by GCMS
8270CTCLP	LIQUID	Semivolatiles by GCMS (includes 1311 extraction cost)
8270CTCLP	SLUDGE	Semivolatiles by GCMS (includes 1311 extraction cost)
8270CTCLP	SOIL	Semivolatiles by GCMS (includes 1311 extraction cost)
8270CTCLP	SOLID	Semivolatiles by GCMS (includes 1311 extraction cost)
8270CTCLP	WATER	Semivolatiles by GCMS (includes 1311 extraction cost)
8308	URINE	Fluoride in Urine by Ion Selective Electrode
900.0	LIQUID	Gross Alpha/Beta Activity
900.0	WATER	Gross Alpha/Beta Activity
9002	SOIL	Bulk Asbestos
9002	SOLID	Bulk Asbestos
9014	LIQUID	Total Cyanide
9014	SLUDGE	Total Cyanide
9014	SOIL	Total Cyanide
9014	SOLID	Total Cyanide
9014-Releaseable	LIQUID	Releasable Hydrogen Cyanide
9014-Releaseable	OIL	Releasable Hydrogen Cyanide
9014-Releaseable	SLUDGE	Releasable Hydrogen Cyanide
9014-Releaseable	SOIL	Releasable Hydrogen Cyanide
9014-Releaseable	SOLID	Releasable Hydrogen Cyanide
9014-Releaseable	WATER	Releasable Hydrogen Cyanide
9034	LIQUID	Sulfide
9034	WATER	Sulfide
9034-Releaseable	LIQUID	Releasable Hydrogen Sulfide
9034-Releaseable	SOLID	Releasable Hydrogen Sulfide

9034- Releasable	WATER	Releasable Hydrogen Sulfide
9040B	LIQUID	pH
9040B	WATER	pH
9045C	SLUDGE	pH
9045C	SOIL	pH
9045C	SOLID	pH
9050	WATER	Conductivity
9056	LIQUID	Anions by Ion Chromatography
9056	OIL	Anions by Ion Chromatography
9056	SLUDGE	Anions by Ion Chromatography
9056	SOIL	Anions by Ion Chromatography
9056	SOLID	Anions by Ion Chromatography
9060	LIQUID	Total Organic Carbon (TOC)
9060D	LIQUID	Dissolved Organic Carbon (DOC)
9060D	WATER	Dissolved Organic Carbon (DOC)
9070	LIQUID	Oil and Grease, Gravimetric
9070	WATER	Oil and Grease, Gravimetric
9071A	SLUDGE	Oil and Grease by Extraction
9071A	SOIL	Oil and Grease by Extraction
9071A	SOLID	Oil and Grease by Extraction
9095 / 9095A	SLUDGE	Paint Filter Test
9095 / 9095A	SOIL	Paint Filter Test
9095 / 9095A	SOLID	Paint Filter Test
9214	WATER	Fluoride by Selective Ion Electrode
9222 B 17	LIQUID	Total Coliform
9222 B 17	WATER	Total Coliform
9222D	LIQUID	Fecal Coliform
9222D	WATER	Fecal Coliform
9310	LIQUID	Gross Alpha / Beta Activity
9310	WATER	Gross Alpha / Beta Activity
AS7300	LIQUID	Uranium assay and concentration by TIMS
AS7300	LIQUID	Uranium assay by TIMS
AS7300	OIL	Uranium assay and concentration by TIMS
AS7300	OIL	Uranium assay by TIMS
AS7300	SLUDGE	Uranium assay by TIMS
AS7300	SLUDGE	Uranium assay and concentration by TIMS
AS7300	SOIL	Uranium assay by TIMS
AS7300	SOIL	Uranium assay and concentration by TIMS
AS7300	SOLID	Uranium assay by TIMS
AS7300	SOLID	Uranium assay and concentration by TIMS
AS7300	WATER	Uranium assay and concentration by TIMS

AS7300	WATER	Uranium assay by TIMS
AS7300	WIPE	Uranium assay by TIMS
CP4-TS-AN4001	SOLID	Quantitative Mass by Neutron (grams 235U), 5 gallon container
CP4-TS-AN4001	SOLID	Quantification by neutron
CP4-TS-AN4001	SOLID	Quantitative Mass by Neutron (grams 235U), 55 and 85 gallon container
CP4-TS-AN4001	SOLID	Quantitative Mass by Neutron (grams 235U), B-25 gallon box
CP4-TS-AN4001	SOLID	Quantitative Mass by Neutron (grams 235U), Miscellaneous Items
CP4-TS-AN4001	SOLID	Quantitative Mass by Neutron (grams 235U), 10 and 30 gallon container
CP4-TS-AN4009	SOLID	Quantitative Mass by Gamma (grams 235U), Miscellaneous Items
CP4-TS-AN4009	SOLID	Quantitative Mass by Gamma (grams 235U), 10 and 30 gallon container
CP4-TS-AN4009	SOLID	Quantitative Mass by Gamma (grams 235U), 55 and 85 gallon container
CP4-TS-AN4009	SOLID	Quantitative Mass by Gamma (grams 235U), 5 gallon container
CP4-TS-AN4009	SOLID	Quantitative Mass by Gamma (grams 235U), B-25 gallon box
CP4-TS-AN4010	SOLID	Qualitative Gamms (red,yellow,green), B-25 gallon box
CP4-TS-AN4010	SOLID	Qualitative Gamms (red,yellow,green), Miscellaneous Items
CP4-TS-AN4010	SOLID	Qualitative Gamms (red,yellow,green), 55 and 85 gallon container
CP4-TS-AN4010	SOLID	Qualitative Gamms (red,yellow,green), 10 and 30 gallon container
CP4-TS-AN4010	SOLID	Qualitative Gamms (red,yellow,green), 5 gallon container
CP4-TS-AN4010	SOLID	Qualitative gamma (red,yellow,green)
CP4-TS-AN4012	SOLID	Enrichment (wt. % 235U), Miscellaneous Items
CP4-TS-AN4012	SOLID	Enrichment (wt. % 235U), B-25 gallon box
CP4-TS-AN4012	SOLID	Enrichment (wt. % 235U), 55 and 85 gallon container
CP4-TS-AN4012	SOLID	Enrichment (wt. % 235U), 10 and 30 gallon container
CP4-TS-AN4012	SOLID	Enrichment (wt. % 235U), 5 gallon container
CP4-TS-IN7105	FILTER	Uranium by Fluorometry
CP4-TS-IN7105	LIQUID	Uranium by Fluorometry
CP4-TS-IN7105	URINE	Uranium by Fluorometry
CP4-TS-IN7105	WATER	Uranium by Fluorometry
CP4-TS-IN7170	URINE	Protein, Glucose, and Specific Gravity of Urine
CP4-TS-ST7495	LIQUID	Sulfate Reducing Bacteria and/or Total Heterotrophic Bacteria
CP4-TS-ST7495	WATER	Sulfate Reducing Bacteria and/or Total Heterotrophic Bacteria
D1298-06	LIQUID	Specific Gravity
D1298-06	OIL	Specific Gravity
D1298-06	WATER	Specific Gravity
D1298-85	LIQUID	Specific Gravity
D1298-85	OIL	Specific Gravity
D1298-85	WATER	Specific Gravity
D2216-05	LIQUID	Moisture
D2216-05	SLUDGE	Moisture
D2216-05	SOIL	Moisture
D2216-05	SOLID	Moisture

D2216-92	LIQUID	Moisture
D2216-92	SLUDGE	Moisture
D2216-92	SOIL	Moisture
D2216-92	SOLID	Moisture
D3174-04	LIQUID	Ash
D3174-04	OIL	Ash
D3174-04	SLUDGE	Ash
D3174-04	SOIL	Ash
D3174-04	SOLID	Ash
D422-63	SOIL	Particle Size
D854-06	LIQUID	Density
D854-06	OIL	Density
D854-06	SOIL	Density
D854-06	SOLID	Density
D854-92	LIQUID	Density
D854-92	OIL	Density
D854-92	SOIL	Density
D854-92	SOLID	Density
D93-80	LIQUID	Flash Point, closed cup
D93-80	OIL	Flash Point, closed cup
D93-80	SLUDGE	Flash Point, closed cup
D93-80	SOIL	Flash Point, closed cup
D93-80	SOLID	Flash Point, closed cup
D93-80	WATER	Flash Point, closed cup
Lab Specific	SOLID	Scanning Electron Microscope
Lab Specific	FILTER	Technetium-99
Lab Specific	LIQUID	Technetium-99
Lab Specific	OIL	Technetium-99
Lab Specific	SLUDGE	Technetium-99 (not on original list)
Lab Specific	SOIL	Technetium-99
Lab Specific	SOLID	Technetium-99
Lab Specific	URINE	Gross Beta in Urine
Lab Specific	URINE	Technetium-99
Lab Specific	WATER	Technetium-99
Lab Specific	WIPE	Technetium-99
Lab Specific	WATER	Radon-222
Lab Specific	LIQUID	Gross Alpha / Beta Activity
Lab Specific	OIL	Gross Alpha / Beta Activity
Lab Specific	SOIL	Gross Alpha / Beta Activity
Lab Specific	SOLID	Gross Alpha / Beta Activity
Lab Specific	WATER	Gross Alpha / Beta Activity

Lab Specific	WIPE	Gross Alpha / Beta Activity
Lab Specific	LIQUID	Gross Alpha / Beta Activity (Dissolved / Suspended)
Lab Specific	WATER	Gross Alpha / Beta Activity (Dissolved / Suspended)
Lab Specific	LIQUID	Gross Alpha / Beta Activity
Lab Specific	OIL	Gross Alpha / Beta Activity
Lab Specific	SOIL	Gross Alpha / Beta Activity
Lab Specific	SOLID	Gross Alpha / Beta Activity
Lab Specific	WATER	Gross Alpha / Beta Activity
Lab Specific	FILTER	Gross Alpha / Beta Activity
Lab Specific	SOIL	Leaching and Prep of misc materials for RAD analysis w/ HF
Lab Specific	SOLID	Leaching and Prep of misc materials for RAD analysis w/ HF
Lab Specific	FILTER	TRU by Column (Th and Pu)
Lab Specific	LIQUID	TRU by Column (Th and Pu)
Lab Specific	OIL	TRU by Column (Th and Pu)
Lab Specific	SOIL	TRU by Column (Th and Pu)
Lab Specific	SOLID	TRU by Column (Th and Pu)
Lab Specific	WATER	TRU by Column (Th and Pu)
Lab Specific	WIPE	TRU by Column (Th and Pu)
Lab Specific	FILTER	Radionuclides by Gamma Spectroscopy
Lab Specific	LIQUID	Radionuclides by Gamma Spectroscopy
Lab Specific	OIL	Radionuclides by Gamma Spectroscopy
Lab Specific	SLUDGE	Radionuclides by Gamma Spectroscopy (not included on original list)
Lab Specific	SOIL	Radionuclides by Gamma Spectroscopy
Lab Specific	SOLID	Radionuclides by Gamma Spectroscopy
Lab Specific	WATER	Radionuclides by Gamma Spectroscopy
Lab Specific	WIPE	Radionuclides by Gamma Spectroscopy
Lab Specific	FILTER	Radionuclides by Gamma Spectroscopy - Extended
Lab Specific	LIQUID	Radionuclides by Gamma Spectroscopy - Extended
Lab Specific	OIL	Radionuclides by Gamma Spectroscopy - Extended
Lab Specific	SOIL	Radionuclides by Gamma Spectroscopy - Extended
Lab Specific	SOLID	Radionuclides by Gamma Spectroscopy - Extended
Lab Specific	WATER	Radionuclides by Gamma Spectroscopy - Extended
Lab Specific	WIPE	Radionuclides by Gamma Spectroscopy - Extended
Lab Specific	LIQUID	Americium by Alpha Spectroscopy
Lab Specific	OIL	Americium by Alpha Spectroscopy
Lab Specific	SLUDGE	Americium by Alpha Spectroscopy (not included on original list)
Lab Specific	SOIL	Americium by Alpha Spectroscopy
Lab Specific	SOLID	Americium by Alpha Spectroscopy
Lab Specific	WIPE	Americium by Alpha Spectroscopy
Lab Specific	LIQUID	Neptunium/Plutonium by Alpha Spectroscopy

Lab Specific	OIL	Neptunium/Plutonium by Alpha Spectroscopy
Lab Specific	SLUDGE	Neptunium/Plutonium by Alpha Spectroscopy (not included on original list)
Lab Specific	SOIL	Neptunium/Plutonium by Alpha Spectroscopy
Lab Specific	SOLID	Neptunium/Plutonium by Alpha Spectroscopy
Lab Specific	WATER	Neptunium/Plutonium by Alpha Spectroscopy
Lab Specific	WIPE	Neptunium/Plutonium by Alpha Spectroscopy
Lab Specific	LIQUID	Neptunium/Plutonium by Alpha Spectroscopy
Lab Specific	OIL	Neptunium/Plutonium by Alpha Spectroscopy
Lab Specific	SLUDGE	Neptunium/Plutonium by Alpha Spectroscopy (not included on original list)
Lab Specific	SOIL	Neptunium/Plutonium by Alpha Spectroscopy
Lab Specific	SOLID	Neptunium/Plutonium by Alpha Spectroscopy
Lab Specific	WATER	Neptunium/Plutonium by Alpha Spectroscopy
Lab Specific	WIPE	Neptunium/Plutonium by Alpha Spectroscopy
Lab Specific	LIQUID	Thorium by Alpha Spectroscopy
Lab Specific	OIL	Thorium by Alpha Spectroscopy
Lab Specific	SLUDGE	Thorium by Alpha Spectroscopy (not included on original list)
Lab Specific	SOIL	Thorium by Alpha Spectroscopy
Lab Specific	SOLID	Thorium by Alpha Spectroscopy
Lab Specific	WIPE	Thorium by Alpha Spectroscopy
Lab Specific	LIQUID	Uranium by Alpha Spectroscopy
Lab Specific	OIL	Uranium by Alpha Spectroscopy
Lab Specific	SOIL	Uranium by Alpha Spectroscopy
Lab Specific	SOLID	Uranium by Alpha Spectroscopy
Lab Specific	WIPE	Uranium by Alpha Spectroscopy
Lab Specific	WATER	Radium-224 and Radium-226 by Alpha Spectroscopy
Lab Specific	FILTER	Technetium-99 by TEVA
Lab Specific	LIQUID	Technetium-99 by TEVA
Lab Specific	OIL	Technetium-99 by TEVA
Lab Specific	SOIL	Technetium-99 by TEVA
Lab Specific	SOLID	Technetium-99 by TEVA
Lab Specific	WATER	Technetium-99 by TEVA
Lab Specific	WIPE	Technetium-99 by TEVA
Lab Specific	LIQUID	Strontium-90
Lab Specific	OIL	Strontium-90
Lab Specific	SLUDGE	Strontium-90
Lab Specific	SOIL	Strontium-90
Lab Specific	SOLID	Strontium-90
Lab Specific	WATER	Strontium-90
Lab Specific	WIPE	Strontium-90
Lab Specific	SOIL	Digestion for solids/soils with HF

Lab Specific	SOLID	Digestion for solids/soils with HF
Lab Specific	FILTER	Uranium assay by ICP-MS
Lab Specific	LIQUID	Uranium assay by ICP-MS
Lab Specific	OIL	Uranium assay by ICP-MS
Lab Specific	SLUDGE	Uranium assay by ICP-MS
Lab Specific	SOIL	Uranium assay by ICP-MS
Lab Specific	SOLID	Uranium assay by ICP-MS
Lab Specific	WIPE	Uranium assay by ICP-MS
Lab Specific	URINE	U in urine by ICP-MS
200.8	WATER	Metals by ICP-MS
245.2	WATER	Mercury by CVAA
310.1	WATER	Alkalinity
340.2	WATER	Fluoride by Ion Selective Electrode
3500-Fe B 17	WATER	Ferrous Iron
365.3	WATER	Phosphorous - All form Colorimetric
376.1	WATER	Sulfide
377.1	WATER	Sulfite
5210B	WATER	BOD & CBOD
608	WATER	PCB Analysis
7470A	WATER	Mercury by CVAA
8011	WATER	12BrEthane and 12Br3CIPa by GC
9010C	WATER	Total Cyanide
9014	WATER	Total Cyanide
9056	WATER	Anions by Ion Chromatography
9060	WATER	Total Organic Carbon (TOC)
Lab Specific	WATER	Techentium-99 with lower MDA
Lab Specific	WATER	Radionuclides by Gamma Spectroscopy
Lab Specific	WATER	Radionuclides by Gamma Spectroscopy
Lab Specific	WATER	Americium by Alpha Spectroscopy
Lab Specific	WATER	Thorium by Alpha Spectroscopy
Lab Specific	WATER	Uranium by Alpha Spectroscopy
Lab Specific	WATER	Radium-228 by Gamma Spectroscopy
Lab Specific	WATER	Tritium
Lab Specific	WATER	Uranium Assay by ICP-MS