Appendix A: Chapter 5 Addendum

This appendix provides the data tables showing the groundwater monitoring results measured in 2024 at the INL Site and discussed in Chapter 5.

Table A-1. Advanced Test Reactor Complex cold waste pond effluent permit-required monitoring results (2024).[a,b]

PARAMETER	MINIMUM	MAXIMUM	MEDIAN
pH (standard units)	6.30	7.87	7.57
Conductivity (µS/cm)	390	1,327	411
Chromium, filtered (mg/L)	0.00312J[c]	0.0136	0.00399
Chromium, total (mg/L)	0.00331J	0.0134	0.00394
Iron, filtered (mg/L)	0.03U[d]	0.050	0.03U
Iron, total (mg/L)	0.03U	0.0908	0.03U
Nitrate + nitrite as nitrogen (mg/L)	0.859	3.41	1.02
Solids, total dissolved (mg/L)	195	1,020	231
Sulfate (mg/L)	19.8	497	31.0

a. Reuse Permit I-161-03 does not specify maximum effluent constituent loading or concentration limits.
b. Duplicate samples collected in July 2024 are included in the statistical summary.
c. The J flag qualifier indicates the associated value is an estimate and may be inaccurate or imprecise.
d. The U qualifier indicates the result was below the detection limit.

Table A-2. Hydraulic loading rates for the Advanced Test Reactor Complex cold waste pond (2024).

	YEARLY TOTAL VOLUME
2024 flow[a]	187.59 MG[b]
Annual permit limit[c]	375 MG
5-yr moving annual average permit limit	300 MG

a. Annual volume is reported for the 2024 permit reporting year.
b. MG = million gallons.
c. The reuse permit specifies an annual limit based on a 12-month reuse year from November 1 through October 31.

Table A-3. Advanced Test Reactor Complex cold waste pond industrial wastewater reuse permit monitoring well results (2024).[a]

WELL NAME	USGS-098 (GW-0161-01)		USGS-065 (GW-161-02)		USGS-076 (GW-161-04)		TRA-08 (GW-161-05)		MIDDLE-1823 (GW-161-06)		USGS-136 (GW-161-08)		USGS-058[b] (GW-161-07)		PCS/SCS[c]
SAMPLE DATE:	04/22/24	09/23/24	04/24/24	09/25/24	04/25/24	09/26/24	04/23/24	09/24/24	04/23/24	09/24/24	04/24/24	09/25/24	04/22/24	09/23/24	
Water table depth (ft) bls[d]	431.19	432.19	477.37	477.71	486.18	487.23	492.05	493.05	495.93	496.95	491.54	492.53	474.21	475.20	NA[e]
Water table elevation (ft)[f]	4,458.02	4,457.02	4,451.20	4,450.86	4,447.03	4,445.98	4,447.01	4,446.01	4,446.94	4,445.92	4,447.19	4,446.20	4,447.68	4,446.69	NA
Borehole correction factor (ft)[g]	2.53	2.53	NA	NA	NA	NA	0.63	0.63	NA	NA	0.22	0.22	NA	NA	NA
pH (s.u.)	6.58	7.63	6.55	7.79	6.67	7.87	6.67	8.09	6.57	7.91	6.70	7.74	6.61	7.71	6.5 to 8.5 (SCS)
Conductivity (µS/cm)	421	428	576	587	416	421	414	419	415	418	410	420	416	420	NA
Temperature (ºF)	53.4	56.3	55.8	56.8	55.9	56.8	55.6	56.8	55.9	57.7	57.6	58.6	54.9	57.0	NA
Nitrite + nitrate as nitrogen (mg/L)	1.29	1.61J[h]	1.46	1.38	1.04J	1.04J	1.02	1.00J	1.01	0.993J	1.26 (1.28)[i]	1.22	1.13	1.17J	10 (PCS)
Sulfate (mg/L)	23.3	22.7	134	131	32.6	32.5	43.5	39.8	31.6	30.0	28.6 (29.0)	28.8	31.8	30.8	250 (SCS)
Solids, total dissolved (mg/L)	229	239	367	374	217	237	249	253	270	226	231 (235)	234	229	230	500 (SCS)
Chromium, total (mg/L)	0.00625	0.00595J	0.0871	0.112J [0.0979J][j]	0.0109	0.0134	0.0219J	0.0189J	0.0107J	0.0106	0.0116 (0.0119)	0.0153J	0.00971	0.00988J	0.1 (PCS)
Chromium, filtered (mg/L)	0.00607	0.00579J	0.0859	0.107J [0.0974J]	0.0109	0.013	0.0195J	0.0187J	0109J	0.0101J	0.0119 (0.0114)	0.0161J	0.00957	0.00994J	0.1 (PCS)
Iron, filtered (mg/L)	0.03U[k]	0.03U	0.03U	0.03U [0.03U]	0.03U	0.03U	0.03U	0.03U	0.03U	0.03U	0.03U (0.03U)	0.03U	0.03U	0.03U	0.3 (SCS)

a. Reuse Permit I-161-03 was issued October 30, 2019.
b. Reuse Permit I-161-03 only requires water table elevation, water table depth, pH, conductivity, temperature, total dissolved solids, and sulfate levels reported for Well USGS-058. Nitrite + nitrate as nitrogen, total chromium, filtered chromium, and filtered iron were monitored in Well USGS-058 to support observational monitoring and provide consistent evaluation of all analytes sampled from all wells specified in the reuse permit.
c. The primary constituent standards (PCS) and secondary constituent standards (SCS) in groundwater as referenced in the Idaho Ground Water Quality Rule, IDAPA 58.01.11.200.01.a and b.
d. bls = below land surface.
e. NA = not applicable.
f. Water table elevation above mean sea level (ft). Elevation data provided using the North American Vertical Datum of 1988 (NAVD 88).
g. The borehole correction factors determined from U.S. Geological Survey (USGS) gyroscopic surveys to reconcile discrepancies in water level measurements from well deviations.
h. The J flag qualifier indicates the associated value is an estimate and may be inaccurate or imprecise.
i. Results shown in parenthesis are from the field duplicate samples.
j. Results shown in brackets are re-analyzed results.
k. The U flag qualifier indicates the analyte was not detected above the instrument detection limit or the analyte was detected at or above the applicable detection limit but the value is not more than five times the highest positive amount in any laboratory blank and is given a U qualifier as a result of data validation.

Table A-4. Idaho Nuclear Technology and Engineering Center sewage treatment plant influent monitoring results at CPP-769 (2024).

PARAMETER	MINIMUM	MAXIMUM	MEAN
Biochemical oxygen demand (5-day) (mg/L)	54.4 J[a]	801 J[a]	271
Nitrate + nitrite, as nitrogen (mg/L)	0.017 U[b]	0.306	0.187
Total kjeldahl nitrogen (mg/L)	24.6	252[a]	105.6
Total phosphorus (mg/L)	2.70	17.0	8.04
Total suspended solids (mg/L)	28.7	520	165.5

a. The J flag qualifier indicates what the material was analyzed for and that it was detected at or above the detection limit. The associated value is an estimate and may be inaccurate or imprecise.
b. The U flag qualifier indicates what the analyte was analyzed for but that it was not detected above the method detection limit.

Table A-5. Idaho Nuclear Technology and Engineering Center sewage treatment plant effluent monitoring results at CPP-773 (2024).

PARAMETER	MINIMUM	MAXIMUM	MEAN
Biochemical oxygen demand (5-day) (mg/L)	7.44	62.5	24
Nitrate + nitrite, as nitrogen (mg/L)	ND (0.0170)[a]	4.18	1.59
pH (standard units)[b]	6.27	9.27	8.23
Total coliform (MPN[c]/100 mL)[b]	61	24,192	5,508.6
Total kjeldahl nitrogen (mg/L)	6.32	88.4 J[d]	28
Total phosphorus (mg/L)	3.43	8.8	5.98
Total suspended solids (mg/L)	4 UJ[e]	118	42

a. ND = The parameter was not detected in the sample. The value in parentheses is the detection limit.
b. As required by the permit, the results for this parameter were obtained from a grab sample.
c. MPN = most probable number.
d. The J flag qualifier indicates what the material was analyzed for and that it was detected at or above the applicable detection limit. The associated value is an estimate and may be inaccurate or imprecise.
e. The UJ flag qualifier indicates what the material was analyzed for but that it was not detected. The associated value is an estimate and may be inaccurate or imprecise.

Table A-6. Idaho Nuclear Technology and Engineering Center percolation ponds effluent monitoring results at CPP-797 (2024).

PARAMETER	MINIMUM	MAXIMUM	MEAN
Chloride (mg/L)	9.75	168	37.5
Chromium (mg/L)	0.00543 U[a]	0.00663	0.00615
Coliform, fecal (MPN/100 mL)[b]	1	4	2
Coliform, total (MPN/100 mL)[b]	5.2	1,732.9	366.8
Fluoride (mg/L)	0.192	0.320	0.262
Manganese, total (mg/L)	ND (<0.002)[c]	ND (<0.002)	ND (<0.002)
Nitrate + nitrite, as nitrogen (mg/L)	0.755	3.56	1.55
pH (standard units)[b]	7.69	9.39	8.40
Selenium (mg/L)	ND (<0.002)	ND (<0.002)	ND (<0.002)
Total dissolved solids (mg/L)	210	610 J[d]	270
Total phosphorus (mg/L)	0.432	1.52	0.857

a. The U flag qualifier indicates what the material was analyzed for and that it was detected at or above the applicable detection limit. However, the associated value was less than five times the highest positive amount in any laboratory blank.
b. As required by the permit, the results for this parameter were obtained from a grab sample.
c. ND = The parameter was not detected in the sample. The value in parentheses is the detection limit.
d. The J flag qualifier indicates what the material was analyzed for and that it was detected at or above the applicable detection limit. The associated value is an estimate and may be inaccurate or imprecise.

Table A-7. Hydraulic loading rates for the Idaho Nuclear Technology and Engineering Center percolation ponds (2024).

	MAXIMUM DAILY FLOW	YEARLY TOTAL FLOW
2024 flow	1,421,240 gallons	187,236,350 gallons
Permit limit	3,000,000 gallons	1,095 MG[a]

a. MG = million gallons.

Table A-8. Idaho Nuclear Technology and Engineering Center percolation ponds aquifer monitoring well groundwater results (2024).

PARAMETER	ICPP-MON-A-165 (GW-130-06)		ICPP-MON-A-166 (GW-130-07)		ICPP-MON-A-164B (GW-130-11)		STANDARD PCS/SCS[a]
SAMPLE DATE:	04/23/2024	09/24/2024	05/30/2024	09/24/2024	04/22/2024	09/23/2024	
Water table depth (ft below brass cap)	509.79	510.75	515.79	513.45	508.45	509.42	NA[b]
Water table elevation (at brass cap in ft)[c]	4,446.48	4,445.52	4,445.86	4,448.39	4,446.69	4,445.72	NA
Chloride (mg/L)	30.1J[d]	29.9	18.1	20.3	11.0 J	10.3	250
Chromium (mg/L)	0.0145	0.0173	0.0047	0.0058	0.012	0.012	0.1
Coliform, fecal (MPN[e]/100 mL)	<1	<1	<1	<1	<1	<1	<1 CFU[f]/100 mL
Coliform, total (MPN/100 mL)	<1	<1	<1	<1	<1	<1	1 CFU/100 mL[g]
Dissolved oxygen (mg/L)	6.83	7.59	4.23	5.07	6.07	5.49	NA
Electrical conductivity (µmhos/cm)	447	446	344	341	422	409	NA
Fluoride (mg/L)	0.218 J[h]	0.251	0.236	0.320	0.201 J[h]	0.225	4
Manganese, dissolved (mg/L)[i]	NR[j]	NR[j]	NR[j]	NR[j]	NR[j]	NR[j]	0.05
Manganese, total (mg/L)	0.0019 J[k]	0.0019 J[k]	0.0088	0.0164	ND (<0.001)[l]	ND (<0.001)[l]	0.05
Nitrate/nitrite, as nitrogen (mg/L)	1.15	1.15	0.383	0.390	1.03	0.99	10
pH (standard units)	7.73	7.66	7.60	7.43	7.83	7.67	6.5–8.5
Selenium (mg/L)	ND (<0.0015)[l]	ND(<0.0015)[l]	ND (<0.0015)[l]	ND (<0.0015)[l]	ND (<0.0015)[l]	ND (<0.0015)[l]	0.05
Temperature (°F)	55.59	54.55	54.19	58.29	52.03	54.05	NA
Total dissolved solids (mg/L)	234	274	187	211	215	222	500
Total phosphorus (mg/L)	ND (<0.0500)[l]	ND (<0.0500)[l]	ND (<0.0500)[l]	0.0540 U	ND (<0.0500)[l]	0.0580 U[m]	NA

a. The PCS and SCS in groundwater as referenced in the Idaho Ground Water Quality Rule, IDAPA 58.01.11.200.01.a and b.
b. NA = not applicable.
c. Water table elevation above mean sea level. Elevation data provided using the North American Vertical Datum of 1988 (NAVD 88).
d. The J flag indicates the parameter was positively identified, but the reported value is an estimate. The result may be biased high.
e. MPN = most probable number.
f. CFU = colony forming unit.
g. An exceedance of the PCS for total coliform is not a violation. If the PCS for total coliform is exceeded, analysis for fecal coliform is conducted. An exceedance of the PCS for fecal coliform is a violation.
h. The J flag indicates the result is an estimated quantity, but the result may be biased low.
i. The results of the dissolved concentrations of this parameter are used for SCS compliance determinations.
j. NR = Not required since the analytical result for total manganese did not exceed the standard in the Idaho Ground Water Quality Rule, IDAPA 58.01.11.200.01.b for manganese standard of 0.05 mg/L.
k. The J flag qualifier indicates what the material was analyzed for and that it was detected at or above the applicable detection limit. The associated value is an estimate and may be inaccurate or imprecise.
l. ND = The parameter was not detected in the sample. The value in parentheses is the detection limit.
m. The U flag qualifier indicates what the material was analyzed for and that it was detected at or above the applicable detection limit. However, the associated value was less than five times the highest positive amount in any laboratory blank.

Table A-9. Idaho Nuclear Technology and Engineering Center percolation ponds perched water monitoring well groundwater results (2024).

PARAMETER	ICPP-MON-V-191 (GW-130-08)		ICPP-MON-V-200 (GW-130-09)		ICPP-MON-V-212 (GW-130-10)		STANDARD PCS/SCS[a]
SAMPLE DATE:	04/22/2024	09/23/2024	04/22/2024	09/23/2024	04/22/2024	09/23/2024	
Depth to water (ft below brass cap)	Dry[b]	Dry[b]	120.04	119.49	239.29	238.28	NA[c]
Water table elevation (at brass cap in ft)[d]	NA	NA	4,835.56	4,836.11	4,722.11	4,723.12	NA
Chloride (mg/L)	NA	NA	50.2 J[e]	33.6	72.2 J[e]	52.2	250
Chromium (mg/L)	NA	NA	0.0063	0.0074	0.0204	0.0134	0.1
Coliform, fecal (MPN[f]/100 mL)	NA	NA	<1	<1	<1	<1	<1 MPN/100 mL
Coliform, total (MPN/100 mL)	NA	NA	<1	<1	1	<1	1 MPN/100 mL[g]
Dissolved oxygen (mg/L)	NA	NA	4.81	4.35	5.76	3.76	NA
Electrical conductivity (µmhos/cm)	NA	NA	523	453	590	568	NA
Fluoride (mg/L)	NA	NA	0.226 J[h]	0.276	0.238 J[h]	0.243	4
Manganese, dissolved (mg/L)[i]	NA	NA	NR[j]	NR	NR	NR	0.05
Manganese, total (mg/L)	NA	NA	0.0018 J[j]	0.00347 J[j]	0.0041 J[j]	0.0056	0.05
Nitrate/nitrite, as nitrogen (mg/L)	NA	NA	3.36	1.18	1.86	1.97	10
pH (standard units)	NA	NA	7.54	7.55	7.83	9.66	6.5–8.5
Selenium (mg/L)	NA	NA	ND (<0.0015)[k]	ND (<0.0015)[k]	ND (<0.0015)[k]	ND (<0.0015)[k]	0.05
Temperature (°F)	NA	NA	60.02	59.55	60.99	63.44	NA
Total dissolved solids (mg/L)	NA	NA	286	234	340	299	500
Total phosphorus (mg/L)	NA	NA	0.328	0.461	ND (<0.0500)[k]	ND (<0.0500)[k]	NA

a. The PCS and SCS in groundwater as referenced in the Idaho Ground Water Quality Rule, IDAPA 58.01.11.200.01.a and b.
b. Well ICPP-MON-V-191 was dry in April and September 2024.
c. NA = not applicable.
d. Water table elevation above mean sea level. Elevation data provided using the North American Vertical Datum of 1988 (NAVD 88).
e. The J flag indicates the result is an estimated quantity, but the reported value is an estimate. The result may be biased high.
f. An exceedance of the PCS for total coliform is not a violation. If the PCS for total coliform is exceeded, analysis for fecal coliform is conducted. An exceedance of the PCS for fecal coliform is a violation.
g. The results of the dissolved concentrations of this parameter are used for SCS compliance determinations.
h. NR = Not required since the analytical result for total manganese did not exceed the standard in the Idaho Ground Water Quality Rule, IDAPA 58.01.11.200.01.b for manganese of 0.05 mg/L.
i. The J flag indicates what the parameter was analyzed for and that it was detected at or above the applicable detection limit. However, the associated value is an estimate and may be inaccurate or imprecise.
j. ND = The parameter was not detected in the sample. The value in parentheses is the detection limit.
k. MPN = most probable number.

Table A-10. Materials and Fuels Complex industrial waste pond effluent monitoring results for the reuse permit (2024).[a,b,c]

PARAMETER	MINIMUM	MAXIMUM	MEDIAN
pH (standard units)	6.49	8.61	6.88
Conductivity[d] (µS/cm)	403	576	467
Chloride[d] (mg/L)	18.9	34.5	24.6
Nitrate + nitrite as nitrogen (mg/L)	2.93	3.72	3.21
Iron (mg/L)	0.03U[e]	0.110	0.0356
Iron, filtered (mg/L)	0.03U	0.041	0.03U
Manganese (mg/L)	0.002U	0.00581	0.002U
Manganese, filtered (mg/L)	0.002U	0.00538	0.002U
Sodium[d] (mg/L)	18.1	28.9	24.9
Sodium[d], filtered (mg/L)	19.2	31.6	24.9
Solids, total dissolved (mg/L)	215	328	276

a. Liquid effluent results for permit-required constituents collected at the sampling station located on the Industrial Wastewater Collection System (IWCS) pipeline, prior to discharge into the pond.
b. Duplicate samples collected in July 2024. The duplicate results are included in the data summary.
c. Reuse permit I-160-02 does not specify maximum effluent constituent loading or concentration limits.
d. Conductivity, chloride, and sodium are not required effluent monitoring parameters in the reuse permit.
e. U qualifier indicates the result was below the detection limit.

Table A-11. Materials and Fuels Complex effluent hydraulic loading to the industrial waste pond (2024).

	YEARLY TOTAL FLOW
2024 flow[a]	7.753 MG[b]
Annual permit limit[c]	17 MG

a. The annual effluent flow is reported for the 2024 permit reporting year. The annual flow is an estimate due to adjustments during instances when the flow rate exceeded the maximum measurable-flow rate of the flow meter.
b. MG = million gallons.
c. The reuse permit specifies an annual limit based on a 12-month reuse year from November 1 through October 31.

Table A-12. Materials and Fuels Complex industrial waste pond summary of groundwater quality data collected for the reuse permit (2024).

WELL NAME	ANL-MON-A-012 (GW-16001)		ANL-MON-A-013 (GW-16002)		ANL-MON-A-014 (GW-16003)		PCS/SCS[a]
SAMPLE DATE:	04/16/24	09/17/24	04/17/24	09/18/24	04/17/24	09/18/24	
Water table depth (ft bls)[b]	661.13	663.76	649.58	652.05	648.78	651.27	NA[c]
Water table elevation (ft above mean sea level)[d]	4,471.57	4,468.94	4,470.79	4,468.32	4,469.30	4,466.81	NA
Temperature (°F)	56.7	56.1	53.4	55.8	53.8	57.2	NA
pH (s.u)	6.69	7.85	6.73	7.71	6.73	7.76	6.5 to 8.5 (SCS)
Conductivity (µmhos/cm)	375	370	379	398	376 (374)[e]	389	NA
Nitrite + nitrate as N (mg/L)	2.82	2.74	2.74	2.86	2.79 (2.83)	2.82	10 (PCS)
Total dissolved solids (mg/L)	222	235	236	235	233 (229)	219	500 (SCS)
Iron, total (mg/L)	0.03U[f]	0.03U	0.0391	0.0719	0.03U (0.03U)	0.03U	0.3 (SCS)
Iron, filtered (mg/L)	0.03U	0.03U	0.03U	0.03U	0.03U (0.03U)	0.03U	0.3 (SCS)
Manganese, total (mg/L)	0.002U	0.002U	0.002U	0.002UJ[g]	0.002U (0.002U)	0.002UJ	0.05 (SCS)
Manganese, filtered (mg/L)	0.002U	0.002U	0.002U	0.002UJ	0.002U (0.002U)	0.002UJ	0.05 (SCS)

a. The PCS or SCS in groundwater as referenced in the Idaho Ground Water Quality Rule, IDAPA 58.01.11.200.01.a and b.
b. bls = below land surface.
c. NA = not applicable.
d. Water table elevation above mean sea level. Elevation data provided using the National Geodetic Vertical Datum of 1929.
e. Duplicate sample results are shown in parentheses.
f. The U qualifier indicates the analyte was not detected above the instrument detection limit or the analyte was detected at or above the applicable detection limit, but the value is not more than five times the highest positive amount in any laboratory blank.
g. The UJ qualifier indicates the analyte was not detected. The associated value is an estimate and may be inaccurate or imprecise.

Table A-13. Liquid effluent radiological monitoring results for the Idaho Nuclear Technology and Engineering Center Percolation Ponds CPP-797 (2024).

SAMPLE DATE	GAMMA EMITTERS[a] (pCi/L)	GROSS ALPHA[b] (pCi/L)	GROSS BETA[b] (pCi/L)	TOTAL STRONTIUM (pCi/L)
PCS/SCS[b]	NA	15 pCi/L	4 mrem/yr[c]	8 pCi/L
January 2024	ND[d]	6.61 (±1.72) J[e]	7.91 (±1.18)	ND
February 2024	ND	ND	8.04 (±0.962)	ND
March 2024	ND	ND	7.04 (±0.952)	ND
April 2024	ND	ND	4.82 (±0.815)	ND
May 2024	ND	3.19 (±1.02)	6.68 (±0.944)	ND
June 2024	ND	ND	6.26 (±0.901)	ND
July 2024	ND	ND	7.52 (±0.849)	ND
August 2024	ND	3.09 (±1.07) J	7.61 (±0.845)	ND
September 2024	ND	ND	5.55 (±0.834)	ND
October 2024	ND	ND	6.95 (±1.17)	ND
November 2024	ND	ND	7.51 (±0.908)	ND
December 2024	ND	ND	6.09 (±0.513)	ND

a. Gamma-emitting radionuclides include americium-241, antimony-125, cerium-144, cesium-134, cesium-137, cobalt-58, cobalt-60, europium-152, europium-154, europium-155, manganese-54, niobium-95, potassium-40, radium-226, ruthenium-103, ruthenium-106, silver-108m, silver-110m, uranium-235, zinc-65, and zirconium-95.

b. The detected results are shown along with the reported 1σ uncertainty.

c. The PCS in groundwater as referenced in the Idaho Ground Water Quality Rule, IDAPA 58.01.11.200.01.a and b.

d. ND = No radioactivity was detected. The result was not statistically positive at the 95% confidence interval and was below its minimum detectable activity.

e. The J flag qualifier indicates the associated value is an estimate.

Table A-14. Groundwater radiological monitoring results for the Idaho Nuclear Technology and Engineering Center (2024).

MONITORING WELL	SAMPLE DATE	GROSS ALPHA[a] (pCi/L) 15-pCi/L AL[b]	GROSS BETA[a] (pCi/L) 50-pCi/L AL[b]
ICPP-MON-A-165	04/23/2024	ND[c]	3.44 (±0.741)
	09/24/2024	ND	5.77 (0.782)
ICPP-MON-A-166	05/30/2024	4.27 (±1.22)	5.53 (±1.00)
	09/24/2024	ND	4.29 (±0.665)
ICPP-MON-V-200	04/22/2024	2.56 (±0.922) J[d]	5.34 (±0.735)
	09/23/2024	3.14 (±0.949)	7.40 (±0.765)
ICPP-MON-V-212	04/22/2024	4.32 (±1.21)	9.19 (±0.877)
	09/23/2024	ND	57.9 (±1.80)

a. The detected results are shown along with the reported 1σ uncertainty.

b. AL = action level.

c. ND = No radioactivity was detected. The result was not statistically positive at the 95% confidence interval and was below its minimum detectable activity.

d. The J flag qualifier indicates the radionuclide is considered to be present in the sample; however, the result may not be an accurate representation of the amount of activity actually present in the sample.