Proposed Sampling of Underground Test Area Wells 2015-2019

Frenchman Flat Corrective Action Unit

Number of Wells*		Sampling Frequency (years)	Analytes	Tritium Detection Method
Single zone	Multiple** zones			
2***	0	Every 2-3	Alkalinity, pH, specific conductance, Br, Cl, F, SO_4, Ag, Al, As, Ba, Cd, Ca, Cr, Fe, K, Li, Mg, Mn, Na, Pb, Se, Si, Sr, U, Gamma emitters(^{26}Al, ^{40}K, ^{94}Nb, ^{137}Cs, ^{152}Eu, ^{154}Eu, ^{235}U, ^{241}Am, ^{243}Am) gross alpha and gross beta, ^{90}Sr, ^{3}H, ^{14}C, ^{36}Cl, ^{99}Tc, ^{129}I, $^{238/239/240}$Pu, δ^{2}H and δ^{18}O, δ^{13}C and TIC/TOC, and ^{234}U/^{238}U	Low-level
3**	0	Every 4	^{3}H, ^{14}C, ^{36}Cl, ^{99}Tc, and ^{129}I	Standard
1	0	Every 5	^{3}H	Low-level
3	0	Every 5	^{3}H	Standard

Pahute Mesa Corrective Action Unit

Number of Wells*		Sampling Frequency (years)	Analytes	Tritium Detection Method
Single zone	Multiple zones**			
5***	6***	Every 2-3	Alkalinity, pH, specific conductance, Br, Cl, F, SO_4, Ag, Al, As, Ba, Cd, Ca, Cr, Fe, K, Li, Mg, Mn, Na, Pb, Se, Si, Sr, U, Gamma emitters(^{26}Al, ^{40}K, ^{94}Nb, ^{137}Cs, ^{152}Eu, ^{154}Eu, ^{235}U, ^{241}Am, ^{243}Am) gross alpha and gross beta, ^{90}Sr, ^{3}H, ^{14}C, ^{36}Cl, ^{99}Tc, ^{129}I, $^{238/239/240}$Pu, δ^{2}H and δ^{18}O, δ^{13}C and TIC/TOC, and ^{234}U/^{238}U	Low-level
8***	0	Every 4	^{3}H, ^{14}C, ^{36}Cl, ^{99}Tc, and ^{129}I	Standard
3	1	Every 5	^{3}H	Low-level
9	1	Every 5	^{3}H	Standard

Proposed Sampling of Underground Test Area Wells 2015-2019

Rainier Mesa Corrective Action Unit

Number of Wells*		Sampling Frequency (years)	Analytes	Tritium Detection Method
Single zone	Multiple zones**			
0	0	Every 2-3	Alkalinity, pH, specific conductance, Br, Cl, F, SO_4, Ag, Al, As, Ba, Cd, Ca, Cr, Fe, K, Li, Mg, Mn, Na, Pb, Se, Si, Sr, U, Gamma emitters(^{26}Al, ^{40}K, ^{94}Nb, ^{137}Cs, ^{152}Eu, ^{154}Eu, ^{235}U, ^{241}Am, ^{243}Am) gross alpha and gross beta, ^{90}Sr, ^{3}H, ^{14}C, ^{36}Cl, ^{99}Tc, ^{129}I, $^{238/239/240}Pu$, $\delta^{2}H$ and $\delta^{18}O$, $\delta^{13}C$ and TIC/TOC, and $^{234}U/^{238}U$	Low-level
0	1***	Every 4	^{3}H, ^{14}C, ^{36}Cl, ^{99}Tc, ^{129}I and Pu	Standard
1	3	Every 5	^{3}H and Pu	Low-level
7	0	Every 5	^{3}H	Standard

Yucca Flat Corrective Action Unit

Number of Wells*		Sampling Frequency (years)	Analytes	Tritium Detection Method
Single zone	Multiple zones**			
0	0	Every 2-3	Alkalinity, pH, specific conductance, Br, Cl, F, SO_4, Ag, Al, As, Ba, Cd, Ca, Cr, Fe, K, Li, Mg, Mn, Na, Pb, Se, Si, Sr, U, Gamma emitters(^{26}Al, ^{40}K, ^{94}Nb, ^{137}Cs, ^{152}Eu, ^{154}Eu, ^{235}U, ^{241}Am, ^{243}Am) gross alpha and gross beta, ^{90}Sr, ^{3}H, ^{14}C, ^{36}Cl, ^{99}Tc, ^{129}I, $^{238/239/240}Pu$, $\delta^{2}H$ and $\delta^{18}O$, $\delta^{13}C$ and TIC/TOC, and $^{234}U/^{238}U$	Low-level
5***	0	Every 4	^{3}H, ^{14}C, ^{36}Cl, ^{99}Tc, and ^{129}I	Standard
12	0	Every 5	^{3}H	Low-level
2	0	Every 5	^{3}H	Standard

* Sampling may range in depths from 200 to 5,000 feet

** 10 of the 12 multiple zone wells have 2 sampling zones. The remaining 2 wells (both in Pahute Mesa) have 3 sampling zones

*** These wells may contain radionuclides