

Deseret Test Center/Project 112 and SHAD State/Country Matrix

State/Country	Test Names	Dates	Biological Agents	Biological Simulants	Chemical Agents	Chemical Simulants	Tracer Elements	Decontaminants
Alaska	Elk Hunt, Phase I	July-August 1964	N/A	N/A	VX	N/A	N/A	N/A
	Elk Hunt, Phase II	June-July 1965 October-December 1964	N/A	N/A	VX	N/A	N/A	N/A
	Sun Down	February, April 1966	N/A	N/A	Sarin	Methylacetoacetate	Tiara	N/A
	West Side, Phase I	January-February 1965	N/A	Bacillus subtilis var. niger (Bacillus globigii)	N/A	N/A	Zinc cadmium sulfide	N/A
	Whistle Down	December 1962-February 1963	N/A	N/A	Sarin, VX	N/A	N/A	N/A
	Devil Hole, Phase I	Summer 1965	N/A	N/A	Sarin	N/A	Zinc cadmium sulfide	N/A
	Devil Hole, Phase II	July-August 1966	N/A	N/A	VX	N/A	N/A	N/A
	Swamp Oak	March-April 1966	N/A	N/A	Sarin	N/A	N/A	N/A
	Dew Point	June-July 1967	N/A	N/A	Sarin	N/A	N/A	N/A
	Red Cloud	November 1966-February 1967	Francisella tularensis in wet and dry forms	Bacillus subtilis var. niger (Bacillus globigii), Serratia marcescens, Escherichia coli	N/A	N/A	N/A	N/A
	Night Train	December 1963-January 1964	N/A	Bacillus subtilis var. niger (Bacillus globigii)	N/A	N/A	Zinc cadmium sulfide	N/A
	Watch Dog	Summer 1967	Francisella tularensis in wet and dry forms	Bacillus subtilis var. niger (Bacillus globigii), Serratia marcescens, Escherichia coli	N/A	N/A	N/A	N/A
California	DTC Test 69-31	August-September 1968	N/A	Bacillus subtilis var. niger (Bacillus globigii)	N/A	Methylacetoacetate	N/A	N/A
	High Low	July-August 1964	N/A	N/A	N/A	Methylacetoacetate	N/A	N/A
	Scarlet Sage	February-March 1966	N/A	Bacillus subtilis var. niger (Bacillus globigii)	N/A	N/A	N/A	N/A
	Purple Sage	January-February 1966	N/A	N/A	N/A	Methylacetoacetate	N/A	N/A
Florida	DTC Test 69-75	October-December 1968	Puccinia graminis var. tritici (TX)	N/A	N/A	N/A	N/A	N/A
Hawaii	Half Note	August-September 1966	N/A	Bacillus subtilis var. niger (Bacillus globigii), Serratia marcescens, Escherichia coli			Calcofluor, zinc cadmium sulfide	N/A
	Tall Timber	May-66	N/A	N/A	Ester of benzoic acid	N/A	N/A	N/A
	Pine Ridge	May-June 1966	N/A	N/A	Sarin, ester of benzoic acid	N/A	N/A	N/A
	Green Mist	March-April 1967	N/A	N/A	Sarin	Methylacetoacetate	N/A	N/A
	Big Tom	May-June 1965	N/A	Bacillus subtilis var. niger (Bacillus globigii)	N/A	N/A	Zinc cadmium sulfide	N/A
	Fearless Johnny	August-September 1965	N/A	N/A	VX	Diethylphthalate	N/A	N/A
	Flower Drum, Phase I	February-April 1964 August-September 1964	N/A	N/A	Sarin			
						Sulfur dioxide, methylacetoacetate	N/A	N/A
Chemical Agents:	Chemical Simulants:	Biological Agents:	Biological Simulants:	Tracers:	Decontaminants:			
Sarin (GB)	Diethylphthalate	Coxiella burnetii (Q fever)	Bacillus subtilis var. niger (Bacillus globigii) (BG)	Tiara	Beta-propiolactone			
Soman (GD)	Di (2 ethyl-hexyl) phthalate (DEHP)	Francisella tularensis (UL, TT, ZZ)	Serratia marcescens (SM)	Zinc cadmium sulfide (FP)				
Tabun (GA)	Bis (2 ethyl-hexyl) hydrogen phosphite	Puccinia graminis var. tritici (TX)	Escherichia coli (EC)	Phosphorous 32				
VX	Tri (2 ethyl-hexyl) phosphate (TOF)	Staphylococcal enterotoxin, Type B (PG2)		Uranine dye (sodium fluorescein)				
Ester of benzoic acid (BZ)	Methylacetoacetate (MAA)							
CS Riot Control agent	Sulfur dioxide (SO2)							

Deseret Test Center/Project 112 and SHAD State/Country Matrix

Hawaii continued									
	Flower Drum, Phase II	November-December 1964	N/A	N/A	VX	Bis (2 ethyl-hexyl) hydrogen phosphite	Phosphorous 32	N/A	
	Eager Belle, Phase I	January-March 1963	N/A	Bacillus subtilis var. niger (Bacillus globigii)	N/A	N/A	N/A	N/A	N/A
	Eager Belle, Phase II	January, March, June 1963	N/A	Bacillus subtilis var. niger (Bacillus globigii)	N/A	N/A	N/A	N/A	N/A
	Autumn Gold	May-63	N/A	Bacillus subtilis var. niger (Bacillus globigii)	N/A	N/A	N/A	N/A	N/A
	DTC Test 69-32	April-June 1969	N/A	Bacillus subtilis var. niger (Bacillus globigii), Serratia marcescens, and Escherichia coli	N/A	N/A	Calcofluor	N/A	
Maryland	Elk Hunt, Phase II	June-July 1964 October-December 1964	N/A	N/A	VX	N/A	N/A	N/A	N/A
	DTC Test 69-12	Spring 1969	N/A	N/A	Sarin, soman, tabun, VX	N/A	N/A	N/A	N/A
Puerto Rico	DTC Test 69-10	May-69	N/A	N/A	N/A	Tri (2-ethylhexyl) phosphate	N/A	N/A	N/A
Utah	DTC 68-53	April-December 1969	N/A	N/A	CS Riot Control agent	N/A	N/A	N/A	N/A
	DTC 70-73	July-December 1970	N/A	Bacillus subtilis var. niger (Bacillus globigii)	N/A	N/A	Zinc cadmium sulfide	N/A	N/A
	DTC 69-14	July-November 1971	N/A	N/A	N/A	Di (2-ethylhexyl) phthalate (DEHP)	N/A	N/A	N/A
Canada	Rapid Tan, Phase II	May-June 1968	N/A	N/A	Soman, tabun, VX	N/A	N/A	N/A	N/A
	West Side, Phase II	January-March 1966	N/A	Bacillus subtilis var. niger (Bacillus globigii)		N/A	Zinc cadmium sulfide	N/A	N/A
	Elk Hunt, Phase II	June-July 1964 October-December 1964	N/A	N/A	VX	N/A	N/A	N/A	N/A
	Copper Head	January-February 1965	N/A	Bacillus subtilis var. niger (Bacillus globigii)	N/A	N/A	Zinc cadmium sulfide	beta-propiolactone	
United Kingdom	Rapid Tan, Phase I	July-August 1967	N/A	N/A	Sarin, soman, tabun, VX	N/A	N/A	N/A	N/A
	Rapid Tan, Phase III	August-September 1968	N/A	N/A	Sarin, soman, tabun, VX	N/A	N/A	N/A	N/A
Marshall Islands	DTC Test 68-50	September-October 1968	Staphylococcal enterotoxin, Type B	Bacillus subtilis var. niger (Bacillus globigii)	N/A	N/A	Uranine dye (sodium fluorescein)	N/A	N/A
Baker Island	Magrc Sword	May-65	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Pacific Ocean	Shady Grove	January-April 1965	Coxiella burnetii, Pasteurella tularensis	Bacillus subtilis var. niger (Bacillus globigii)	N/A	N/A	N/A	N/A	N/A