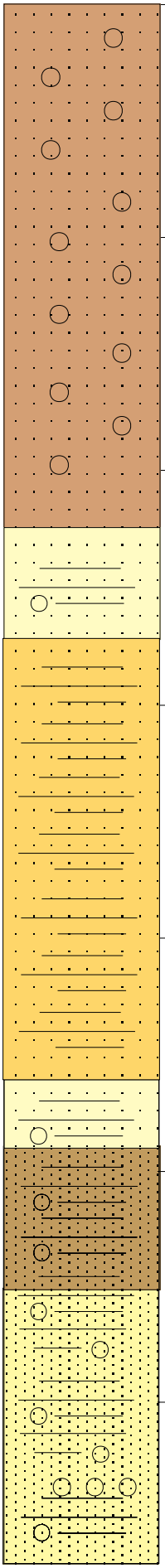


0 to 220 ft WELL-GRADED SAND with silt and gravel (SW-SM)

SW-SM layers up to 70 ft thick predominate. Several layers up to 10 ft thick of well-graded sand with gravel (SW) and a 5 ft thick layer of poorly-graded sand with gravel (SP) are present. A thin well-graded gravel layer with sand (GW) is present from 200 to 210 ft. Gravels are volcanic in origin and rounded to subrounded. Sediment color ranges from grayish orange (10YR 7/4) to dark yellowish orange (10YR 6/6) to grayish orange pink (5YR 7/2). Weak cementation is present from 70 to 80 ft and sediments display a weak to strong reaction to 10% HCl. Samples were dry.

220 to 265 ft Interbedded WELL-GRADED GRAVEL with sand (GW) and CLAYEY GRAVEL with sand (GC)

Thick unit of GW with sand predominating from 220 to 240 ft grading into GC with sand from 240 to 265 ft. Gravels are volcanic in origin and subrounded. Sediment color is predominantly moderate yellowish brown (10YR 5/4). No cementation was observed and sediments displayed no reaction to 10% HCl. Samples were dry.

265 to 460 ft CLAYEY SAND (SC)

A thick SC sequence predominates with alternating increasing and decreasing gravel content. Thin laminations of dark reddish brown clay are present from 290 to 305 ft, and a clayey gravel layer (GC) is present from 310 to 320 ft. Plasticity of fines ranges from moderate to high. Gravels are volcanic in origin and subrounded to subangular in shape. Sediment color ranges from very pale orange to moderate yellowish brown (10YR 8/2 to 5/4) to light brown (5YR 6/4). No cementation was observed and sediments displayed no reaction to 10% HCl. Samples were dry.

460 to 490 ft CLAYEY GRAVEL with sand (GC)

A GC sequence with variable gravel content predominates. Plasticity of clay is moderate to high. Gravels are volcanic in origin and subrounded. Sediment color ranges from very pale orange (10YR 8/2) to moderate yellowish brown (10YR 5/4). No cementation was observed and sediments displayed no reaction to 10% HCl. Samples were dry.

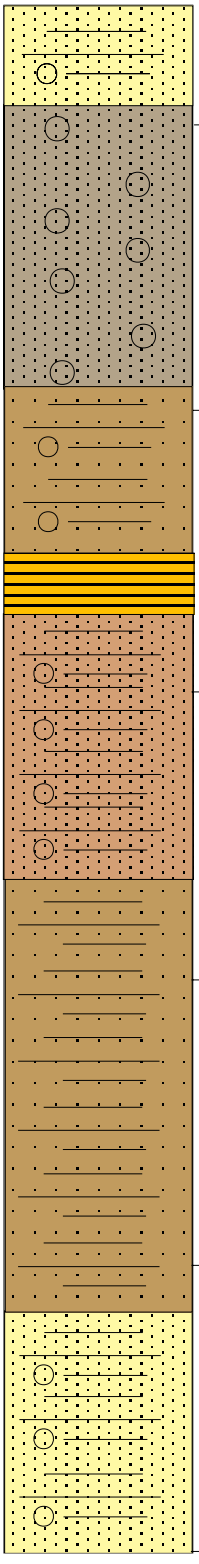
490 to 550 ft CLAYEY SAND with gravel (SC)

SC layers predominate with smaller size gravels from 490 to 510 ft, and larger size gravels from 510 to 550 ft. Gravels are volcanic in origin and subrounded to rounded. Sediment color ranges from pale brown (5YR 5/2) to pale yellowish brown (10YR 6/2). No cementation was observed and sediments displayed no reaction to 10% HCl. Samples were wet below 500 ft.

550 to 695 ft Interbedded CLAYEY SAND with gravel (SC) and WELL-GRADED SAND with gravel (SW)

Unit consists of alternating layers of clayey sand with gravel 40 to 50 ft thick and clean sand with gravel 15 to 35 ft thick. Gravels are volcanic in origin and subrounded to subangular in shape. Sediment color ranges from yellowish brown (10YR 7/2) to grayish yellow (5Y 7/4). No cementation was observed and sediments displayed no reaction to 10% HCl. Samples were wet.

Nye County, Nevada Nuclear Waste Repository Project Office	
Early Warning Drilling Program Summary Lithology Log NC-EWDP-5S	
Date: 2/28/03	Geologist: JSW
Scale: Not to scale	Drawn by: RFD



695 to 795 ft WELL-GRADED SAND with gravel (SW)

Layers of SW with gravel 15 to 25 ft thick predominate. SW layers without gravel are present from 695 to 700 ft and 755 to 770 ft. Gravels are volcanic in origin. Sediment color ranges from grayish red (10R 4/2) to yellowish brown (10YR 6/2). No cementation was observed and sediments displayed no reaction to 10% HCl. Samples were wet.

795 to 845 ft CLAYEY SAND with gravel (SC)

Clayey sand (SC) layers with gravel predominates. Gravels are volcanic in origin and subrounded to subangular in shape. Sediment color ranges from pale orange (10YR 7/2) to reddish orange (10R 6/6). No cementation was observed and sediments displayed no reaction to 10% HCl. Samples were wet.

845 to 867 ft SANDY LEAN CLAY (CL)

Interval consists of a massive CL layer with marked absence of gravel. Color of clay is pale yellowish orange (10YR 7/2). No cementation was observed and sediments displayed no reaction to 10% HCl. Samples were wet.

867 to 965 ft WELL-GRADED SAND with clay and gravel (SW-SC)

Layers of SW-SC with gravel predominate. Thin layers of sandy lean clay (CL) are present from 925 to 935 ft and from 955 to 965 ft. Sand content decreases at the base of unit from 960 to 965 ft. Gravels are volcanic in origin and subrounded to subangular in shape. Sediment color ranges from pale yellowish orange to grayish orange to moderate yellowish brown (10YR 7/2, 7/4, 5/4) to pale reddish brown (10R 5/4). No cementation was observed and sediments displayed no reaction to 10% HCl. Samples were wet.

965 to 1115 ft CLAYEY SAND (SC)

Thick massive sequence of SC is present. Thin layers of clayey gravel with sand (GC) are present from 1060 to 1067 ft and from 1083 to 1086 ft. Gravels are volcanic in origin and subrounded. Sediment color ranges from pale orange brown (10YR 7/2) to grayish orange (10YR 7/4). No cementation was observed and sediments displayed no reaction to 10% HCl. All samples were wet.

1115 to 1200 ft (T.D.) WELL-GRADED SAND with clay and gravel (SW-SC)

Well-graded SW-SC layers with gravel predominate. Thin layers of gravelly lean clay (CL) are present from 1123 to 1132 ft and from 1160 to 1167 ft. Gravels are volcanic in origin and subrounded in shape. Sediment color is light brown (5YR 5/6) to pale reddish brown (10R 5/4). No cementation was observed and sediments displayed no reaction to 10% HCl. All samples were wet.

Nye County, Nevada Nuclear Waste Repository Project Office	
Early Warning Drilling Program Summary Lithology Log NC-EWDP-5S	
Date: 2/28/03	Geologist: JSW
Scale: Not to scale	Drawn by: RFD