Alluvium Core Logging Form Comments - Nye County Nuclear Waste Repository Project Office

Borehole ID: **NC-EWDP-22PA** (Phase 3)

Date Logged	Sample Number	Depth Interval (feet bgs) From	Depth Interval (feet bgs) To	Comments
11/7/2002	DC-22PA-1-4	392.25	392.75	A very weak cement was noted while logging sample. Gravel component consists of 90% non-welded and densely welded tuffs and 10% (1 clast approx 4") that is a crystal-rich moderately welded unit: 95% are hard unweathered, 5% weakly weathered. Gravel is subrounded to round, approximately 20% are > 1". Moisture content recorded as dry for all samples - samples were dry at time of logging.
11/7/2002	DC-22PA-1-6	393.25	393.50	Gravel component consists of 100% non-welded and densely welded tuffs: 95% are hard unweathered, 5% weakly weathered. Approx 20% > 1"; all subround to rounded. A very weak cement was noted while logging sample. Moisture content recorded as dry for all samples - samples were dry at time of logging.
11/19/2002	DC-22PA-3-3	553.24	553.74	Gravel is 100% non-to densely welded tuff, and rare chert. 100% is hard and unweathered. 20% of gravels are > 3/4". Sand component is well-graded, 25% is non-welded, 5% of grains have open/porous matrix, sand contains 1-2% pumice. Moisture content recorded as dry for all samples - samples were dry at time of logging.
11/19/2002	DC-22PA-4-3	572.64	573.14	Gravels are approx. 50% hard glassy densely to weakly welded tuff and 50% non-welded tuff. All are mostly fresh, hard, and sl. weathered. Well developed sand coatings are on 1% of gravel clasts. Either cementation is occurring only locally, or gravels are derived from strongly cemented strata. Cement is hard. 33% of gravels are > 3/4". Sand component=1-3% white and greenish pumice, and only approx 15-20% hard glassy flow, 75% tuff. Moisture content recorded as dry for all samples - samples were dry at time of logging.
11/19/2002	DC-22PA-5-3	670.11	670.61	Gravels are approx 50% ashflow tuff, non-to densely welded; 35% shallow intrusive clasts with primary igneous texture; 15% glassy felsic flow. Gravels are hard, unweathered. Sand component = 1-3% greenish pumice, 1-3% non-welded, white and pink ash matrix, 90% weakly to densely welded ashflow. Trace clasts of intrusives. 80% of gravel > 3/4", 45% is > 1". Moisture content recorded as dry for all samples - samples were dry at time of logging.
11/13/2002	DC-22PA-6-5	710.33	710.58	Gravel component consists of 85% partially to densely welded tuff, 10% rhyolitic clasts of glassy flow, 5% non- to weakly welded crystal rich tuff. 95% hard unweathered rock. Sand component is 75% non-welded tuff clasts. Also pumice clasts are present in sand but not gravel component. Moisture content recorded as dry for all samples - samples were dry at time of logging.
11/19/2002	DC-22PA-7-3	740.85	741.35	Gravels are 100% hard, unweathered ashflow tuff. 75% are densely welded, 25% partially welded. No grain coatings are present, as in sample described above. Also no intrusives. Sand component = approx 60% is non-welded tuffs (much more than present in gravel component), sand contains ~ 40% welded fragments. Moisture content recorded as dry for all samples - samples were dry at time of logging.
11/25/2002	DC-22PA-7-5	741.85	742.10	Gravel component is predominantly densely to non-welded tuff and 1% basaltic clasts. 70% are >= 3/4"; 30% are > 3/4". Clasts are very hard. Well developed sandy coatings are present on ~60-70% of gravel clasts. Coatings are very hard and cemented. Also coarse grains are cemented together. Sand component is 75% non- to weakly welded fragments of ash matrix with 5-10% of hard welded clasts. Sand fraction contains fragments of soft, white, and highly clay altered fragments of porous, ashy, volcanic lithics. Resembles kaolinite. Moisture content recorded as dry for all samples - samples were dry at time of logging.