

SUMMARY OF SOIL LABORATORY TEST RESULTS¹

| Boring / Test Pit No. | Sample Top Depth (ft.) | Sample Type ² | USCS Sample Class. (D 2487) ³ | Sieve Results (D 422) | | Atterberg Limits* (D 4318) | | | | Organic Content (%) | Natural Moisture (%) (D 2216) | Moist Unit Weight (PCF) | Specific Gravity (D 854) | Moisture-Density Relationship (D 1557) | | Bearing Ratio (D 1883) | | Specimen | | Shear Strength | | | | | Consolidation (D 2435) | | | | | | | | | |
|-----------------------|------------------------|--------------------------|--|-------------------------|------------------------|----------------------------|----|----|---------------|---------------------|-------------------------------|-------------------------|--------------------------|--|----------------------|------------------------|--------|----------|-----------|------------------------|--------|-------|-----------|-------|--------------------------------|-----------------|-----------------|----------------|---------------------|--|--|--|--|--|
| | | | | Percent Passing No. 200 | Percent Retained No. 4 | LL | PL | PI | Oven Dried LL | | | | | Dry Unit Wt. (PCF) | Optimum Moisture (%) | Dry | Soaked | Intact | Compacted | Test Type ⁵ | Total | | Effective | | Failure Criterion ⁶ | C _{er} | C _{ec} | e _o | P _p /tsf | | | | | |
| | | | | | | | | | | | | | | | | | | | | | f deg. | C psi | f deg. | C psi | | | | | | | | | | |
| B-320 | 48.5 | LD | CH | 81.5 | 0.0 | 59 | 19 | 40 | | 34.4 | 114 | 2.74 | | | | | X | - | UU | NA | 12.7 | NA | NA | NA | Dev | | | | | | | | | |
| B-320 | 53.5 | SPT | CH | | | 69 | 24 | 45 | | 34.9 | | | | | | | X | - | DS | NA | NA | 21.9 | 9.6 | NA | | | | | | | | | | |
| B-320 | 73.5 | SPT | SM | 15.3 | 5.0 | | | | | 18.8 | | | | | | | | | | | | | | | | | | | | | | | | |
| B-320 | 93.5 | SPT | SM | 15.1 | 1.8 | | | | | 25.4 | | | | | | | | | | | | | | | | | | | | | | | | |
| B-320 | 103.5 | SPT | SM | 16.8 | 0.0 | | | | | 29.2 | | | | | | | | | | | | | | | | | | | | | | | | |
| B-320 | 113.5 | SPT | CL | | | 44 | 16 | 28 | | 28.5 | | | | | | | | | | | | | | | | | | | | | | | | |
| B-320 | 128.5 | SPT | MH | | | 50 | 30 | 20 | | 34.1 | | | | | | | | | | | | | | | | | | | | | | | | |
| B-320 | 148.5 | SPT | SM | 47.7 | 1.4 | | | | | 37.0 | | | | | | | | | | | | | | | | | | | | | | | | |
| B-321 | 2.5 | SPT | SC | 31.0 | 0.9 | | | | | 9.7 | | | | | | | | | | | | | | | | | | | | | | | | |
| B-321 | 5.0 | SPT | SP-SM | | | | | | | 7.4 | | | | | | | | | | | | | | | | | | | | | | | | |
| B-321 | 7.5 | SPT | CL | | | | | | | 25.2 | | | | | | | | | | | | | | | | | | | | | | | | |
| B-321 | 10.5 | SPT | CH | 65.9 | 0.0 | 55 | 20 | 35 | | 36.2 | | | | | | | | | | | | | | | | | | | | | | | | |
| B-321 | 13.5 | SPT | SC | | | | | | | 30.0 | | | | | | | | | | | | | | | | | | | | | | | | |
| B-321 | 18.5 | SPT | SC | 35.3 | 0.0 | | | | | 29.7 | | | | | | | | | | | | | | | | | | | | | | | | |
| B-321 | 23.5 | UD | CL | 99.7 | 0.0 | 45 | 18 | 27 | | 26.2 | 117.8 | 2.79 | | | | | X | - | UU | NA | 32 | NA | NA | NA | Dev | 0.009 | 0.306 | 1.03 | 19 | | | | | |
| B-321 | 28.5 | SPT | SM | 43.6 | 0.0 | 47 | 29 | 18 | | 27.0 | | | | | | | | | | | | | | | | | | | | | | | | |
| B-321 | 33.5 | SPT | SP-SM | | | | | | | 30.9 | | | | | | | | | | | | | | | | | | | | | | | | |
| B-321 | 38.5 | SPT | SP-SM | 9.0 | 1.5 | | | | | 27.1 | | | | | | | | | | | | | | | | | | | | | | | | |
| B-321 | 43.5 | SPT | SP-SM | | | | | | | 26.0 | | | | | | | | | | | | | | | | | | | | | | | | |
| B-321 | 48.5 | SPT | MH | 73.0 | 0.0 | | | | | 35.1 | | | | | | | | | | | | | | | | | | | | | | | | |
| B-321 | 53.5 | SPT | SM | 14.3 | 8.6 | NP | NP | NP | | 25.0 | | | | | | | | | | | | | | | | | | | | | | | | |
| B-321 | 58.5 | SPT | SM | 18.6 | 5.1 | | | | | 22.4 | | | | | | | | | | | | | | | | | | | | | | | | |
| B-321 | 63.5 | SPT | SM | | | | | | | 27.6 | | | | | | | | | | | | | | | | | | | | | | | | |
| B-321 | 68.5 | SPT | SM | 16.0 | 0.2 | | | | | 28.4 | | | | | | | | | | | | | | | | | | | | | | | | |
| B-321 | 73.5 | UD | SM | 15.3 | 0.0 | NP | NP | NP | | 28.5 | 120.5 | 2.67 | | | | | X | - | CU-bar | 20 | 13.5 | 30 | 7 | PSR | 0.003 | 0.064 | 0.72 | 14.2 | | | | | | |
| B-321 | 78.5 | SPT | SM | | | | | | | 34.9 | | | | | | | | | | | | | | | | | | | | | | | | |
| B-321 | 83.5 | SPT | SM | | | | | | | 20.6 | | | | | | | | | | | | | | | | | | | | | | | | |
| B-321 | 88.5 | SPT | SM | 30.0 | 0.2 | | | | | 31.0 | | | | | | | | | | | | | | | | | | | | | | | | |
| B-321 | 93.5 | SPT | SC | 32.2 | 1.0 | 59 | 26 | 33 | | 36.9 | | | | | | | | | | | | | | | | | | | | | | | | |
| B-321 | 98.5 | SPT | SM | 29.8 | 0.0 | | | | | 36.1 | | | | | | | | | | | | | | | | | | | | | | | | |
| B-321 | 103.5 | SPT | SM | | | | | | | 58.2 | | | | | | | | | | | | | | | | | | | | | | | | |
| B-321 | 108.5 | SPT | SM | | | | | | | 42.6 | | | | | | | | | | | | | | | | | | | | | | | | |
| B-321 | 113.5 | SPT | SM | 36.3 | 0.0 | | | | | 34.6 | | | | | | | | | | | | | | | | | | | | | | | | |
| B-321 | 118.5 | SPT | SM | | | | | | | 39.8 | | | | | | | | | | | | | | | | | | | | | | | | |
| B-321 | 123.5 | SPT | SM | | | | | | | 43.1 | | | | | | | | | | | | | | | | | | | | | | | | |
| B-321 | 128.5 | SPT | MH | 60.8 | 0.0 | | | | | 49.5 | | | | | | | | | | | | | | | | | | | | | | | | |



Project Name: Constellation Generation Group COLA Project
 Calvert Cliffs Nuclear Power Plant (CCNPP)
 Calvert County, Maryland
 Project Number: 06120048.00

SUMMARY OF SOIL LABORATORY TEST RESULTS¹

| Boring / Test Pit No. | Sample Top Depth (ft.) | Sample Type ² | USCS Sample Class. (D 2487) ³ | Sieve Results (D 422) | | Atterberg Limits ⁴ | | | | Organic Content (%) | Natural Moisture (%) (D 2216) | Moist Unit Weight (PCF) | Specific Gravity (D 854) | Moisture-Density Relationship (D 1557) | | Bearing Ratio (D 1883) | | Specimen | | Shear Strength | | | | | Consolidation (D 2435) | | | | |
|-----------------------|------------------------|--------------------------|--|-------------------------|------------------------|-------------------------------|----|----|---------------|---------------------|-------------------------------|-------------------------|--------------------------|--|----------------------|------------------------|--------|----------|--------------------|------------------------|--------|-------|-----------|--------|--------------------------------|-----------------|-----------------|----------------|-------------------------|
| | | | | Percent Passing No. 200 | Percent Retained No. 4 | LL | PL | PI | Oven Dried LL | | | | | Dry Unit Wt. (PCF) | Optimum Moisture (%) | Dry | Soaked | Intact | Compacted | Test Type ³ | Total | | Effective | | Failure Criterion ⁶ | C _{er} | C _{ec} | e _o | P _p ' tsf |
| | | | | | | | | | | | | | | | | | | | | | f deg. | c psi | f' deg. | c' psi | | | | | |
| B-333 | 48.5 | UD | SC | 20.0 | 2.0 | 34 | 13 | 21 | | 25.2 | Test Not Performed | 2.73 | | | | | X | - | Qu | Test Not Performed | | | | | | | | | |
| B-333 | 53.5 | SPT | SM | 13.4 | 1.6 | | | | | 20.9 | | | | | | | | | | | | | | | | | | | |
| B-333 | 58.5 | SPT | SM | | | | | | | 34.5 | | | | | | | | | | | | | | | | | | | |
| B-333 | 68.5 | SPT | SM | 23.2 | 20.4 | | | | | 19.3 | | | | | | | | | | | | | | | | | | | |
| B-333 | 78.5 | SPT | SP-SM | 10.8 | 5.7 | NP | NP | NP | | 28.7 | | | | | | | | | | | | | | | | | | | |
| B-333 | 93.5 | SPT | SM | 23.7 | 23.3 | | | | | 16.1 | | | | | | | | | | | | | | | | | | | |
| B-334 | 0.0 | SPT | SP-SM | 11.2 | 0.0 | | | | | 9.6 | | | | | | | | | | | | | | | | | | | |
| B-334 | 5.0 | SPT | SM | 21.3 | 0.0 | | | | | 15.9 | | | | | | | | | | | | | | | | | | | |
| B-334 | 10.5 | SPT | SM | | | NP | NP | NP | | 15.6 | | | | | | | | | | | | | | | | | | | |
| B-334 | 18.5 | SPT | CL | | | | | | | 31.3 | | | | | | | | | | | | | | | | | | | |
| B-334 | 23.0 | UD | CH | 79.0 | 0.0 | 51 | 16 | 35 | | 35.3 | 119 | 2.7 | | | | X | - | UU | NA | 10.1 | NA | NA | Dev | 0.020 | 0.220 | 1.12 | 5.3 | | |
| B-334 | 28.5 | SPT | CH | | | | | | | 42.5 | | | | | | | | | | | | | | | | | | | |
| B-334 | 33.0 | UD | CL | 95.0 | 0.0 | 47 | 13 | 34 | | 32.6 | 115 | 2.71 | | | | X | - | UU | Test Not Performed | | | | | 0.020 | 0.210 | 1.06 | 5.4 | | |
| B-334 | 43.5 | SPT | SM | | | | | | | 27.0 | | | | | | | | | | | | | | | | | | | |
| B-334 | 48.5 | SPT | SM | 26.2 | 0.0 | | | | | 27.2 | | | | | | | | | | | | | | | | | | | |
| B-334 | 53.5 | SPT | SP-SM | | | | | | | 21.4 | | | | | | | | | | | | | | | | | | | |
| B-334 | 63.5 | SPT | GM | 29.8 | 36.1 | NP | NP | NP | | 19.0 | | | | | | | | | | | | | | | | | | | |
| B-334 | 73.5 | SPT | SM | 12.6 | 9.9 | | | | | 27.3 | | | | | | | | | | | | | | | | | | | |
| B-334 | 83.5 | SPT | SM | 13.8 | 0.1 | | | | | 28.0 | | | | | | | | | | | | | | | | | | | |
| B-334 | 98.5 | SPT | SM | 16.6 | 1.0 | | | | | 28.9 | | | | | | | | | | | | | | | | | | | |
| B-336 | 13.5 | SPT | SC | | | | | | | 11.4 | | | | | | | | | | | | | | | | | | | |
| B-336 | 28.5 | SPT | CH | | | | | | | 26.9 | | | | | | | | | | | | | | | | | | | |
| B-336 | 48.5 | SPT | CL | | | | | | | 25.9 | | | | | | | | | | | | | | | | | | | |
| B-336 | 58.5 | SPT | SL | | | | | | | 19.6 | | | | | | | | | | | | | | | | | | | |
| B-336 | 83.5 | SPT | SM | | | | | | | 27.3 | | | | | | | | | | | | | | | | | | | |
| B-336 | 98.5 | SPT | SC | | | | | | | 32.1 | | | | | | | | | | | | | | | | | | | |
| B-337 | 33.5 | SPT | ML | | | | | | | 29.0 | | | | | | | | | | | | | | | | | | | |
| B-337 | 48.5 | SPT | SC | | | | | | | 39.9 | | | | | | | | | | | | | | | | | | | |
| B-337 | 53.5 | UD | SC | 39.0 | 2.0 | 38 | 19 | 19 | | 25.7 | 126 | 2.75 | | | | X | - | UU | NA | 6.2 | NA | NA | Dev | | | | | | |
| B-337 | 73.5 | SPT | SM | | | | | | | 30.9 | | | | | | | | | | | | | | | | | | | |
| B-337 | 88.5 | SPT | SM | | | | | | | 21.0 | | | | | | | | | | | | | | | | | | | |
| B-339 | 5.0 | SPT | SP | 4.6 | 0.1 | | | | | 6.9 | | | | | | | | | | | | | | | | | | | |
| B-339 | 13.5 | SPT | SM | 12.1 | 10.8 | | | | | 19.9 | | | | | | | | | | | | | | | | | | | |
| B-339 | 28.5 | SPT | CH | | | 55 | 19 | 36 | | 31.5 | | | | | | | | | | | | | | | | | | | |
| B-339 | 33.5 | SPT | CH | 62.7 | 0.0 | 62 | 21 | 41 | | 27.0 | | | | | | | | | | | | | | | | | | | |
| B-339 | 38.5 | SPT | CH | | | 71 | 17 | 54 | | 28.6 | | | | | | | | | | | | | | | | | | | |



Project Name: Constellation Generation Group COLA Project
 Calvert Cliffs Nuclear Power Plant (CCNPP)
 Calvert County, Maryland

Project Number: 06120048.00

SUMMARY OF SOIL LABORATORY TEST RESULTS¹

| Boring / Test Pit No. | Sample Top Depth (ft.) | Sample Type ² | USCS Sample Class. (D 2487) ³ | Sieve Results (D 422) | | Atterberg Limits ⁴ (D 4318) | | | | Organic Content (%) | Natural Moisture (%) (D 2216) | Moist Unit Weight (PCF) | Specific Gravity (D 854) | Moisture-Density Relationship (D 1557) | | Bearing Ratio (D 1883) | | Specimen | | Shear Strength | | | | | | Consolidation (D 2435) | | | | | | | | | | | |
|-----------------------|------------------------|--------------------------|--|-------------------------|------------------------|--|-----|-----|---------------|---------------------|-------------------------------|-------------------------|--------------------------|--|----------------------|------------------------|--------|----------|-----------|------------------------|-------|--------------------|-----------|-------|--------------------------------|------------------------|-----------------|----------------|-------------------------|------|--|-------|-------|------|------|--|--|
| | | | | Percent Passing No. 200 | Percent Retained No. 4 | LL | PL | PI | Oven Dried LL | | | | | Dry Unit Wt. (PCF) | Optimum Moisture (%) | Dry | Soaked | Intact | Compacted | Test Type ⁵ | Total | | Effective | | Failure Criterion ⁶ | C _{cr} | C _{cc} | e ₀ | P _p ' tsf | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | f deg | C psi | f deg | C psi | | | | | | | | | | | | | |
| B-401 | 173.5 | UD | CH | 98.2 | 0.0 | 57 | 17 | 40 | | 33.7 | 95 | 2.76 | | | | | | | X | - | UU | Test Not Performed | | | | 0.040 | 0.540 | 2.80 | 11 | | | | | | | | |
| B-401 | 183.5 | SPT | SM | 32.2 | 0.0 | | | | | 31.2 | | | | | | | | | X | - | DS | NA | NA | 18.9 | 32.5 | NA | | | | | | | | | | | |
| B-401 | 193.5 | SPT | ML | | | | | | | 49.2 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B-401 | 198.5 | UD | Not yet available (Fugro) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B-401 | 203.5 | SPT | MH | | | 94 | 69 | 25 | | 58.4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B-401 | 208.5 | SPT | MH | 64.5 | 0.0 | 113 | 74 | 39 | | 62.7 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B-401 | 213.5 | UD | Not yet available (Fugro) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B-401 | 218.5 | SPT | MH | 64.6 | 0.0 | | | | | 77.4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B-401 | 228.5 | UD | Not yet available (Fugro) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B-401 | 238.5 | SPT | MH | | | | | | | 122.5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B-401 | 243.5 | UD | MH | 98.7 | 0.0 | 140 | 65 | 75 | | 96.2 | 86.0 | 2.36 | | | | | | | | | | | | | | | | | | | | 0.006 | 0.519 | 2.41 | 18.3 | | |
| B-401 | 248.5 | SPT | MH | | | 218 | 100 | 118 | | 122.8 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B-401 | 258.5 | SPT | MH | | | | | | | 130.2 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B-401 | 268.5 | SPT | SM | 43.0 | 0.0 | | | | | 63.5 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B-401 | 281.5 | SPT | MH | | | 76 | 42 | 34 | | 30.2 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B-401 | 293.5 | SPT | SC | | | | | | | 20.7 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B-401 | 307.5 | SPT | SM | 16.3 | 0 | 57 | 42 | 15 | | 27.4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B-401 | 318.5 | SPT | CH | | | 58 | 28 | 30 | | 28.9 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B-401 | 338.5 | SPT | ML | | | | | | | 25.3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B-401 | 368.5 | SPT | SP-SM | 11.7 | 0.0 | | | | | 36.9 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B-401 | 400.0 | SPT | SM | 18.2 | 0.0 | | | | | 33.1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B-404 | 52.0 | UD | Not yet available (Fugro) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B-404 | 83.5 | UD | Not yet available (Fugro) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B-406 | 63.5 | UD | OH | 90.1 | 0.0 | 63 | 19 | 44 | 41 | 1.6 | 36.1 | 122.0 | 2.74 | | | | | | X | - | Qu | NA | 20 | NA | NA | Dev | 0.04 | 0.3 | 1.17 | 10.5 | | | | | | | |
| B-407 | 2.5 | SPT | ML | | | NP | NP | NP | | 4.8 | | | | | | | | | X | - | UU | NA | 8.2 | NA | NA | Dev | | | | | | | | | | | |
| B-407 | 10.5 | SPT | SP-SM | | | | | | | 12.3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B-407 | 18.5 | SPT | SM | 30.4 | 0.0 | | | | | 24.9 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B-407 | 28.5 | SPT | MH | | | | | | | 35.1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B-407 | 33.5 | SPT | MH | 96.0 | 0.0 | 77 | 43 | 34 | | 39.4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B-407 | 43.5 | SPT | SM | 17.4 | 1.6 | | | | | 23.3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B-407 | 63.5 | SPT | SM | | | | | | | 28.1 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B-407 | 68.5 | SPT | SM | 11.4 | 6.0 | | | | | 30.0 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B-407 | 73.5 | SPT | SM | | | | | | | 27.3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B-407 | 83.5 | SPT | SM | 14.8 | 12.5 | | | | | 38.3 | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| B-407 | 88.5 | SPT | SM | | | | | | | 12.4 | | | | | | | | | | | | | | | | | | | | | | | | | | | |