

Consultancy Services for preparation of DPR for development of Economic Corridors, Inter Corridors and Feeder Routes to improve the efficiency of freight movement in India under Bharatmala Pariyojana (Lot-1) Package 1A (Bilasipura – Chapar – Tulungia – Jogighopa – Gendera – Paikan – Dudhnoi – Guwahati Road (Length 225.000 km) in the State of Assam)

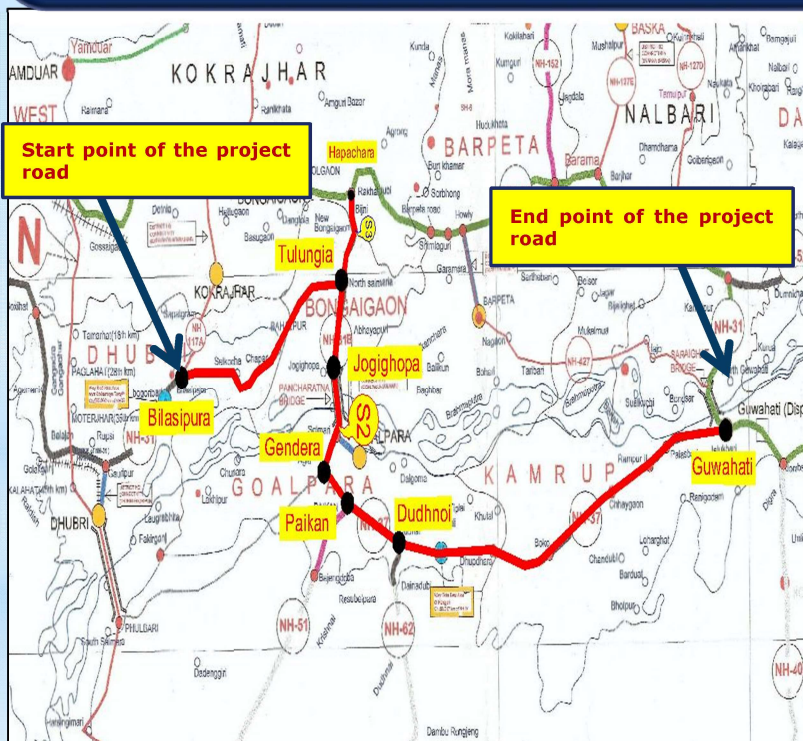
FINAL DETAILED PROJECT REPORT

VOLUME – III : MATERIAL REPORT

FOR PACKAGE-5: EX CH. FROM 52.740KM TO 71.500KM AND DESIGN CH. FROM 48.655KM TO 67.556KM

FOR PACKAGE-6: EX CH. FROM 75.330KM TO 88.000KM AND DESIGN CH. FROM 71.800KM TO 84.100KM

FOR PACKAGE-7: EX CH. FROM 88.000KM TO 99.650KM AND DESIGN CH. FROM 84.100KM TO 95.730KM



Submitted To

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ANNEXURE – I

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J. M. M. M.



SOIL AND MATERIALS INVESTIGATIONS

1.1 INTRODUCTION

The soil and material investigation is an important component of detail engineering project. Investigation, sampling and identification of construction materials involve complex techniques accomplished by many different procedures and interpretations. These are frequently site specific and are influenced by geological and geographical conditions. The information collected, samples submitted to the laboratory and test results have the direct bearing on the design of pavement structure as well as cost of the project. Investigations for soil and other materials have been carried out to establish the following requirements-

- Selection and location of suitable materials for construction.
- The soil and material investigations have been divided into the following components incorporated all the above mentioned requirements:
 - Geological survey,
 - Investigations of existing subgrade soil,
 - Investigations of existing soil on new alignments,

Procedures for investigations, sampling and testing of soils and other construction materials are in accordance with MoRT&H specifications wherever applicable to determine their suitability. It is stressed that the Terms of Reference for the investigation, and the time, cost, and manpower constraints of the project precluded the undertaking of the full detailed engineering investigations necessary to provide definitive detailed engineering design calculations, designs, and drawings.

It is recommended that these preliminary investigations be verified and augmented during the construction process to produce detailed engineering designs based on the broad-brush design philosophy developed from this survey.

1.2 EXISTING CRUST DETAILS

Pavement layer thicknesses were measured by digging test pits 500m intervals along the project roads. Test-pits, approximately 1m x 1m in size, and 1m depth were excavated at the interface between the carriageway and the shoulder, in order to identify and record the compositions of the individual pavement layers. The results of the test pit survey indicate substantial variations in the thicknesses of pavement layers for the various project roads.

A chainage wise summary of existing pavement thickness as obtained from trial pit investigations are given below in Table-1

Table -1: The summary of existing crust thickness

| Sl.No | Trial Pit No. | Chainage (km) | Side | Bituminous Layer (mm) | Granular Layer(mm) | Bituminous Layer (mm) | Granular Layer (mm) | Total Thickness (mm) |
|-------|---------------|---------------|------|---|--------------------|-----------------------|---------------------|----------------------|
| 1 | TP-01 | 0.15 | RHS | 100 | 200 | 80 | 300 | 680 |
| 2 | TP-02 | 0.5 | LHS | 120 | 190 | 60 | 310 | 680 |
| 3 | TP-03 | 1 | RHS | 80 | 320 | - | - | 400 |
| 4 | TP-04 | 1.5 | LHS | 100 | 320 | - | - | 420 |
| 5 | TP-05 | 2 | RHS | 30 | 500 | - | - | 530 |
| 6 | TP-06 | 2.5 | LHS | 40 | 460 | - | - | 500 |
| 7 | TP-07 | 3 | RHS | 70 | 180 | 20 | 220 | 490 |
| 8 | TP-08 | 3.5 | LHS | 80 | 180 | 20 | 200 | 480 |
| 9 | TP-09 | 4 | RHS | 40 | 410 | - | - | 450 |
| 10 | TP-10 | 4.5 | LHS | 40 | 360 | - | - | 400 |
| 11 | TP-11 | 5 | RHS | 30 | 470 | - | - | 500 |
| 12 | TP-12 | 5.5 | LHS | 40 | 510 | - | - | 550 |
| 13 | TP-13 | 6 | RHS | 60 | 240 | - | - | 300 |
| 14 | TP-14 | 6.5 | LHS | 50 | 270 | - | - | 320 |
| 15 | TP-15 | 7 | RHS | 40 | 460 | - | - | 500 |
| 16 | TP-16 | 7.5 | LHS | 40 | 480 | - | - | 520 |
| 17 | TP-17 | 8 | RHS | 100 | 500 | - | - | 600 |
| 18 | TP-18 | 8.5 | LHS | 100 | 450 | - | - | 550 |
| 19 | TP-19 | 9 | RHS | 100 | 460 | - | - | 560 |
| 20 | TP-20 | 9.5 | LHS | 80 | 540 | - | - | 620 |
| 21 | TP-21 | 10 | RHS | 60 | 460 | - | - | 520 |
| 22 | TP-22 | 10.5 | LHS | 70 | 480 | - | - | 550 |
| 23 | TP-23 | 11 | RHS | 90 | 270 | - | - | 360 |
| 24 | TP-24 | 11.5 | LHS | 100 | 300 | - | - | 400 |
| 25 | TP-25 | 12 | RHS | 110 | 280 | 30 | 240 | 660 |
| 26 | TP-26 | 12.5 | LHS | 120 | 280 | 30 | 270 | 700 |
| 27 | TP-27 | 13 | RHS | 110 | 190 | 30 | 130 | 460 |
| 28 | TP-28 | 13.5 | LHS | 100 | 220 | 20 | 130 | 470 |
| 29 | TP-29 | 14 | RHS | 30 | 260 | 30 | 180 | 500 |
| 30 | TP-30 | 14.5 | LHS | 40 | 250 | 30 | 230 | 550 |
| 31 | TP-31 | 15 | RHS | 100 | 190 | 30 | 350 | 670 |
| 32 | TP-32 | 15.5 | LHS | 80 | 220 | 20 | 280 | 600 |
| 33 | TP-33 | 16 | RHS | | | | | - |
| 34 | TP-34 | 16.5 | LHS | Trial Pit is not possible due to work in progress | | | | - |
| 35 | TP-35 | 17 | RHS | | | | | - |
| 36 | TP-36 | 17.5 | LHS | 100 | 570 | - | - | 670 |
| 37 | TP-37 | 18 | RHS | 40 | 610 | - | - | 650 |
| 38 | TP-38 | 18.5 | LHS | 50 | 630 | - | - | 680 |
| 39 | TP-39 | 19 | RHS | 40 | 610 | - | - | 650 |
| 40 | TP-40 | 19.5 | LHS | 40 | 670 | - | - | 710 |
| 41 | TP-41 | 20 | RHS | 30 | 670 | - | - | 700 |
| 42 | TP-42 | 20.5 | LHS | 40 | 710 | - | - | 750 |
| 43 | TP-43 | 21 | RHS | 180 | 420 | 40 | 160 | 800 |
| 44 | TP-44 | 21.5 | LHS | 170 | 430 | 40 | 150 | 790 |
| 45 | TP-45 | 22 | RHS | 100 | 300 | 50 | 250 | 700 |

| Sl.No | Trial Pit No. | Chainage (km) | Side | Bituminous Layer (mm) | Granular Layer(mm) | Bituminous Layer (mm) | Granular Layer (mm) | Total Thickness (mm) |
|-------|---------------|---------------|------|--|--------------------|-----------------------|---------------------|----------------------|
| 46 | TP-46 | 22.5 | LHS | 100 | 310 | 50 | 190 | 650 |
| 47 | TP-47 | 23 | RHS | 160 | 170 | 30 | 190 | 550 |
| 48 | TP-48 | 23.5 | LHS | 200 | 150 | 30 | 220 | 600 |
| 49 | TP-49 | 24 | RHS | 150 | 130 | 100 | 250 | 630 |
| 50 | TP-50 | 24.5 | LHS | 160 | 490 | - | - | 650 |
| 51 | TP-51 | 25 | RHS | 180 | 100 | 30 | 210 | 520 |
| 52 | TP-52 | 25.5 | LHS | 200 | 80 | 40 | 280 | 600 |
| 53 | TP-53 | 26 | RHS | Trial Pit not possible due to congested area | | | | - |
| 54 | TP-54 | 26.5 | LHS | Trial Pit not possible due to congested area | | | | - |
| 55 | TP-55 | 27 | RHS | 180 | 330 | - | - | 510 |
| 56 | TP-56 | 27.5 | LHS | 170 | 310 | - | - | 480 |
| 57 | TP-57 | 28 | RHS | 160 | 320 | - | - | 480 |
| 58 | TP-58 | 28.5 | LHS | 170 | 320 | - | - | 490 |
| 59 | TP-59 | 29 | RHS | 90 | 550 | - | - | 640 |
| 60 | TP-60 | 29.5 | LHS | 80 | 570 | - | - | 650 |
| 61 | TP-61 | 30 | RHS | 60 | 640 | - | - | 700 |
| 62 | TP-62 | 30.5 | LHS | 60 | 600 | - | - | 660 |
| 63 | TP-63 | 31 | RHS | 70 | 530 | - | - | 600 |
| 64 | TP-64 | 31.5 | LHS | 60 | 560 | - | - | 620 |
| 65 | TP-65 | 32 | RHS | 80 | 420 | - | - | 500 |
| 66 | TP-66 | 32.5 | LHS | 70 | 480 | - | - | 550 |
| 67 | TP-67 | 33 | RHS | 140 | 420 | - | - | 560 |
| 68 | TP-68 | 33.5 | LHS | 120 | 380 | - | - | 500 |
| 69 | TP-69 | 34 | RHS | 130 | 220 | 170 | 130 | 650 |
| 70 | TP-70 | 34.5 | LHS | 120 | 200 | 130 | 110 | 560 |
| 71 | TP-71 | 35 | RHS | 100 | 500 | - | - | 600 |
| 72 | TP-72 | 35.5 | LHS | 90 | 480 | - | - | 570 |
| 73 | TP-73 | 36 | RHS | 50 | 600 | - | - | 650 |
| 74 | TP-74 | 36.5 | LHS | 40 | 580 | - | - | 620 |
| 75 | TP-75 | 37 | RHS | 50 | 410 | - | - | 460 |
| 76 | TP-76 | 37.5 | LHS | 50 | 430 | - | - | 480 |
| 77 | TP-77 | 38 | RHS | 80 | 370 | - | - | 450 |
| 78 | TP-78 | 38.5 | LHS | 70 | 430 | - | - | 500 |
| 79 | TP-79 | 39 | RHS | 80 | 620 | - | - | 700 |
| 80 | TP-80 | 39.5 | LHS | 70 | 560 | - | - | 630 |
| 81 | TP-81 | 40 | RHS | 50 | 400 | - | - | 450 |
| 82 | TP-82 | 40.5 | LHS | 50 | 430 | - | - | 480 |
| 83 | TP-83 | 41 | RHS | 50 | 410 | - | - | 460 |
| 84 | TP-84 | 41.5 | LHS | 60 | 380 | - | - | 440 |
| 85 | TP-85 | 42 | RHS | 50 | 510 | - | - | 560 |
| 86 | TP-86 | 42.5 | LHS | 40 | 480 | - | - | 520 |
| 87 | TP-87 | 43.15 | RHS | 160 | 120 | 30 | 190 | 500 |
| 88 | TP-88 | 43.65 | LHS | 170 | 130 | 30 | 190 | 520 |
| 89 | TP-89 | 44 | RHS | 160 | 490 | - | - | 650 |
| 90 | TP-90 | 44.5 | LHS | 160 | 530 | - | - | 690 |
| 91 | TP-91 | 45 | RHS | 160 | 340 | - | - | 500 |
| 92 | TP-92 | 45.5 | LHS | 150 | 380 | - | - | 530 |



| Sl.No | Trial Pit No. | Chainage (km) | Side | Bituminous Layer (mm) | Granular Layer(mm) | Bituminous Layer (mm) | Granular Layer (mm) | Total Thickness (mm) |
|-------|---------------|---------------|------|---|--------------------|-----------------------|---------------------|----------------------|
| 93 | TP-93 | 46 | RHS | 200 | 300 | - | - | 500 |
| 94 | TP-94 | 46.5 | LHS | 180 | 340 | - | - | 520 |
| 95 | TP-95 | 47 | RHS | 150 | 150 | 20 | 160 | 480 |
| 96 | TP-96 | 47.5 | LHS | 150 | 130 | 40 | 180 | 500 |
| 97 | TP-97 | 48 | RHS | 60 | 420 | - | - | 480 |
| 98 | TP-98 | 48.5 | LHS | 50 | 420 | - | - | 470 |
| 99 | TP-99 | 49 | RHS | 80 | 490 | - | - | 570 |
| 100 | TP-100 | 49.5 | LHS | 70 | 450 | - | - | 520 |
| 101 | TP-101 | 50 | RHS | 120 | 380 | - | - | 500 |
| 102 | TP-102 | 50.5 | LHS | Trial Pit not possible due to congested area | | | | |
| 103 | TP-103 | 51 | RHS | 160 | 410 | - | - | 570 |
| 104 | TP-104 | 51.5 | LHS | 150 | 400 | - | - | 550 |
| 105 | TP-105 | 52 | RHS | 140 | 440 | - | - | 580 |
| 106 | TP-106 | 52.5 | LHS | 60 | 500 | - | - | 560 |
| 107 | TP-107 | 53 | RHS | 80 | 500 | - | - | 580 |
| 108 | TP-108 | 53.5 | LHS | 80 | 600 | - | - | 680 |
| 109 | TP-109 | 54 | RHS | 100 | 750 | - | - | 850 |
| 110 | TP-110 | 54.5 | LHS | 80 | 600 | - | - | 680 |
| 111 | TP-111 | 55 | RHS | 100 | 600 | - | - | 700 |
| 112 | TP-112 | 55.5 | LHS | 80 | 400 | - | - | 480 |
| 113 | TP-113 | 56 | RHS | 50 | 550 | - | - | 600 |
| 114 | TP-114 | 56.5 | LHS | 80 | 520 | - | - | 600 |
| 115 | TP-115 | 57 | RHS | 70 | 530 | - | - | 600 |
| 116 | TP-116 | 57.5 | LHS | 100 | 600 | - | - | 700 |
| 117 | TP-117 | 58 | RHS | 80 | 550 | - | - | 630 |
| 118 | TP-118 | 58.5 | LHS | 70 | 600 | - | - | 670 |
| 119 | TP-119 | 59 | RHS | 75 | 625 | - | - | 700 |
| 120 | TP-120 | 59.5 | LHS | 90 | 550 | - | - | 640 |
| 121 | TP-121 | 60 | RHS | 100 | 600 | - | - | 700 |
| 122 | TP-122 | 60.5 | LHS | 80 | 575 | - | - | 655 |
| 123 | TP-123 | 61 | RHS | 70 | 580 | - | - | 650 |
| 124 | TP-124 | 61.5 | LHS | 100 | 600 | - | - | 700 |
| 125 | TP-125 | 62 | RHS | 100 | 700 | - | - | 800 |
| 126 | TP-126 | 62.5 | LHS | 100 | 580 | - | - | 680 |
| 127 | TP-127 | 63 | RHS | 80 | 550 | - | - | 630 |
| 128 | TP-128 | 63.5 | LHS | 100 | 900 | - | - | 1000 |
| 129 | TP-129 | 64 | RHS | 70 | 900 | - | - | 970 |
| 130 | TP-130 | 64.5 | LHS | 70 | 700 | - | - | 770 |
| 131 | TP-131 | 65 | RHS | 100 | 900 | - | - | 1000 |
| 132 | TP-132 | 65.5 | LHS | 40 | 600 | - | - | 640 |
| 133 | TP-133 | 66 | | Trial pit excavation not possible due to congested area | | | | - |
| 134 | TP-134 | 66.5 | RHS | 100 | 600 | - | - | 700 |
| 135 | TP-135 | 67 | LHS | 100 | 600 | - | - | 700 |
| 136 | TP-136 | 67.5 | RHS | 100 | 500 | - | - | 600 |
| 137 | TP-137 | 68 | LHS | 80 | 570 | - | - | 650 |
| 138 | TP-138 | 68.5 | RHS | Trial pit excavation not possible due to congested area | | | | - |
| 139 | TP-139 | 69 | LHS | | | | | - |



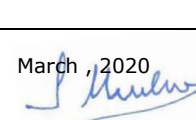
| Sl.No | Trial Pit No. | Chainage (km) | Side | Bituminous Layer (mm) | Granular Layer(mm) | Bituminous Layer (mm) | Granular Layer (mm) | Total Thickness (mm) |
|-------|---------------|---------------|------|-----------------------|--------------------|-----------------------|---------------------|----------------------|
| 140 | TP-140 | 69.5 | RHS | | | | | - |
| 141 | TP-141 | 70 | LHS | | | | | - |
| 142 | TP-142 | 70.5 | RHS | | | | | - |
| 143 | TP-143 | 71 | LHS | | | | | - |
| 144 | TP-144 | 71.5 | RHS | | | | | - |
| 145 | TP-145 | 72 | LHS | | | | | - |
| 146 | TP-146 | 72.5 | RHS | | | | | - |
| 147 | TP-147 | 73 | LHS | | | | | - |
| 148 | TP-148 | 73.5 | RHS | | | | | - |
| 149 | TP-149 | 74 | LHS | | | | | - |
| 150 | TP-150 | 74.5 | RHS | | | | | - |
| 151 | TP-151 | 75 | LHS | 120 | 800 | - | - | 920 |
| 152 | TP-152 | 75.5 | RHS | 100 | 820 | - | - | 920 |
| 153 | TP-153 | 76 | LHS | 90 | 810 | - | - | 900 |
| 154 | TP-154 | 76.5 | RHS | 100 | 800 | - | - | 900 |
| 155 | TP-155 | 77 | LHS | 80 | 940 | - | - | 1020 |
| 156 | TP-156 | 77.5 | RHS | 100 | 900 | - | - | 1000 |
| 157 | TP-157 | 78 | LHS | 100 | 920 | - | - | 1020 |
| 158 | TP-158 | 78.5 | RHS | 90 | 920 | - | - | 1010 |
| 159 | TP-159 | 79 | LHS | 100 | 950 | - | - | 1050 |
| 160 | TP-160 | 79.5 | RHS | 100 | 980 | - | - | 1080 |
| 161 | TP-161 | 80 | LHS | 70 | 820 | - | - | 890 |
| 162 | TP-162 | 80.5 | RHS | 80 | 750 | - | - | 830 |
| 163 | TP-163 | 81 | LHS | 50 | 950 | - | - | 1000 |
| 164 | TP-164 | 81.5 | RHS | 50 | 950 | - | - | 1000 |
| 165 | TP-165 | 82 | LHS | 80 | 1070 | - | - | 1150 |
| 166 | TP-166 | 82.5 | RHS | 100 | 1000 | - | - | 1100 |
| 167 | TP-167 | 83 | LHS | 100 | 850 | - | - | 950 |
| 168 | TP-168 | 83.5 | RHS | 90 | 860 | - | - | 950 |
| 169 | TP-169 | 84 | LHS | 50 | 850 | - | - | 900 |
| 170 | TP-170 | 84.5 | RHS | | | | | - |
| 171 | TP-171 | 85 | LHS | 50 | 650 | - | - | 700 |
| 172 | TP-172 | 85.5 | RHS | 80 | 650 | - | - | 730 |
| 173 | TP-173 | 86 | LHS | 100 | 600 | - | - | 700 |
| 174 | TP-174 | 86.5 | RHS | 100 | 500 | - | - | 600 |
| 175 | TP-175 | 87 | LHS | 80 | 600 | - | - | 680 |
| 176 | TP-176 | 87.5 | RHS | 80 | 550 | - | - | 630 |
| 177 | TP-177 | 88 | LHS | 80 | 580 | - | - | 660 |
| 178 | TP-178 | 88.5 | RHS | 100 | 500 | - | - | 600 |
| 179 | TP-179 | 89 | LHS | 80 | 530 | - | - | 610 |
| 180 | TP-180 | 89.5 | RHS | 90 | 380 | - | - | 470 |
| 181 | TP-181 | 90 | LHS | 100 | 950 | - | - | 1050 |
| 182 | TP-182 | 90.5 | RHS | 80 | 950 | - | - | 1030 |
| 183 | TP-183 | 91 | LHS | 100 | 770 | - | - | 870 |
| 184 | TP-184 | 91.5 | RHS | 100 | 700 | - | - | 800 |
| 185 | TP-185 | 92 | LHS | 90 | 700 | - | - | 790 |
| 186 | TP-186 | 92.5 | RHS | 70 | 700 | - | - | 770 |



| Sl.No | Trial Pit No. | Chainage (km) | Side | Bituminous Layer (mm) | Granular Layer(mm) | Bituminous Layer (mm) | Granular Layer (mm) | Total Thickness (mm) | |
|-------|---------------|---------------|------|---|--------------------|-----------------------|---------------------|----------------------|--|
| 187 | TP-187 | 93 | LHS | 90 | 700 | - | - | 790 | |
| 188 | TP-188 | 93.5 | RHS | 60 | 600 | - | - | 660 | |
| 189 | TP-189 | 94 | LHS | 100 | 750 | - | - | 850 | |
| 190 | TP-190 | 94.5 | RHS | 90 | 650 | - | - | 740 | |
| 191 | TP-191 | 95 | LHS | 90 | 500 | - | - | 590 | |
| 192 | TP-192 | 95.5 | RHS | 50 | 450 | - | - | 500 | |
| 193 | TP-193 | 96 | LHS | 80 | 970 | - | - | 1050 | |
| 194 | TP-194 | 96.5 | RHS | 100 | 500 | - | - | 600 | |
| 195 | TP-195 | 97 | LHS | 90 | 550 | - | - | 640 | |
| 196 | TP-196 | 97.5 | RHS | 90 | 550 | - | - | 640 | |
| 197 | TP-197 | 98 | LHS | 80 | 600 | - | - | 680 | |
| 198 | TP-198 | 98.5 | RHS | Trial pit excavation not possible due to congested area | | | | | |
| 199 | TP-199 | 99 | LHS | 80 | 600 | - | - | 680 | |
| 200 | TP-200 | 99.5 | RHS | 100 | 680 | - | - | 780 | |
| 201 | TP-201 | 100 | LHS | 150 | 450 | - | - | 600 | |
| 202 | TP-202 | 100.5 | RHS | Trial pit excavation not possible due to congested area | | | | - | |
| 203 | TP-203 | 101 | LHS | | | | | - | |
| 204 | TP-204 | 101.5 | RHS | Trial pit excavation not possible due to Major Bridge | | | | - | |
| 205 | TP-205 | 102 | LHS | 150 | 450 | - | - | 600 | |
| 206 | TP-206 | 102.5 | RHS | 60 | 420 | - | - | 480 | |
| 207 | TP-207 | 103 | LHS | 50 | 500 | - | - | 550 | |
| 208 | TP-208 | 103.5 | RHS | 70 | 600 | - | - | 670 | |
| 209 | TP-209 | 104 | LHS | 40 | 600 | 100 | 200 | 940 | |
| 210 | TP-210 | 104.5 | RHS | 30 | 500 | 100 | 150 | 780 | |
| 211 | TP-211 | 105 | LHS | 30 | 650 | - | - | 680 | |
| 212 | TP-212 | 105.5 | RHS | 30 | 550 | - | - | 580 | |
| 213 | TP-213 | 106 | LHS | 100 | 600 | - | - | 700 | |
| 214 | TP-214 | 106.5 | RHS | 90 | 560 | - | - | 650 | |
| 215 | TP-215 | 107 | LHS | 90 | 510 | - | - | 600 | |
| 216 | TP-216 | 107.5 | RHS | 100 | 550 | - | - | 650 | |
| 217 | TP-217 | 108 | LHS | 80 | 440 | - | - | 520 | |
| 218 | TP-218 | 108.5 | RHS | 80 | 480 | - | - | 560 | |
| 219 | TP-219 | 109 | LHS | 80 | 420 | - | - | 500 | |
| 220 | TP-220 | 109.5 | RHS | 80 | 440 | - | - | 520 | |
| 221 | TP-221 | 110 | LHS | 50 | 470 | - | - | 520 | |
| 222 | TP-222 | 110.5 | RHS | 40 | 460 | - | - | 500 | |
| 223 | TP-223 | 111 | LHS | 50 | 470 | - | - | 520 | |
| 224 | TP-224 | 111.5 | RHS | 40 | 640 | - | - | 680 | |
| 225 | TP-225 | 112 | LHS | 50 | 550 | - | - | 600 | |
| 226 | TP-226 | 112.5 | RHS | 50 | 500 | - | - | 550 | |
| 227 | TP-227 | 113 | LHS | Trial Pit excavation not possible due to Congested Area | | | | - | |
| 228 | TP-228 | 113.5 | RHS | | | | | - | |
| 229 | TP-229 | 114 | LHS | | | | | - | |
| 230 | TP-230 | 114.5 | | | | | | - | |
| 231 | TP-231 | 115 | RHS | 30 | 390 | - | - | 420 | |
| 232 | TP-232 | 115.5 | LHS | 20 | 380 | - | - | 400 | |



| Sl.No | Trial Pit No. | Chainage (km) | Side | Bituminous Layer (mm) | Granular Layer(mm) | Bituminous Layer (mm) | Granular Layer (mm) | Total Thickness (mm) |
|-------|---------------|---------------|------|-----------------------|--------------------|-----------------------|---------------------|----------------------|
| 233 | TP-233 | 116 | RHS | 40 | 420 | - | - | 460 |
| 234 | TP-234 | 116.5 | LHS | 50 | 450 | - | - | 500 |
| 235 | TP-235 | 117 | RHS | 30 | 450 | - | - | 480 |
| 236 | TP-236 | 117.5 | LHS | 30 | 470 | - | - | 500 |
| 237 | TP-237 | 118 | RHS | 80 | 560 | - | - | 640 |
| 238 | TP-238 | 118.5 | LHS | 30 | 520 | - | - | 550 |
| 239 | TP-239 | 119 | RHS | 30 | 570 | - | - | 600 |
| 240 | TP-240 | 119.5 | LHS | 40 | 520 | - | - | 560 |
| 241 | TP-241 | 120 | RHS | 50 | 490 | - | - | 540 |
| 242 | TP-242 | 120.5 | LHS | 50 | 510 | - | - | 560 |
| 243 | TP-243 | 121 | RHS | 50 | 550 | - | - | 600 |
| 244 | TP-244 | 121.5 | LHS | 40 | 580 | - | - | 620 |
| 245 | TP-245 | 122 | RHS | 70 | 430 | - | - | 500 |
| 246 | TP-246 | 122.5 | LHS | 80 | 460 | - | - | 540 |
| 247 | TP-247 | 123 | RHS | 90 | 510 | - | - | 600 |
| 248 | TP-248 | 123.5 | LHS | 80 | 500 | - | - | 580 |
| 249 | TP-249 | 124 | RHS | 60 | 500 | - | - | 560 |
| 250 | TP-250 | 124.5 | LHS | 50 | 550 | - | - | 600 |
| 251 | TP-251 | 125 | RHS | 70 | 360 | - | - | 430 |
| 252 | TP-252 | 125.5 | LHS | 100 | 400 | - | - | 500 |
| 253 | TP-253 | 126 | RHS | 50 | 350 | - | - | 400 |
| 254 | TP-254 | 126.5 | LHS | 60 | 380 | - | - | 440 |
| 255 | TP-255 | 127 | RHS | 50 | 390 | - | - | 440 |
| 256 | TP-256 | 127.5 | LHS | 50 | 400 | - | - | 450 |
| 257 | TP-257 | 128 | RHS | 40 | 460 | - | - | 500 |
| 258 | TP-258 | 128.5 | LHS | 40 | 390 | - | - | 430 |
| 259 | TP-259 | 129 | RHS | 100 | 400 | - | - | 500 |
| 260 | TP-260 | 129.5 | LHS | 90 | 440 | - | - | 530 |
| 261 | TP-261 | 130 | RHS | 80 | 440 | - | - | 520 |
| 262 | TP-262 | 130.5 | LHS | 50 | 450 | - | - | 500 |
| 263 | TP-263 | 131 | RHS | 60 | 360 | - | - | 420 |
| 264 | TP-264 | 131.5 | LHS | 70 | 380 | - | - | 450 |
| 265 | TP-265 | 132 | RHS | 50 | 450 | - | - | 500 |
| 266 | TP-266 | 132.5 | LHS | 70 | 410 | - | - | 480 |
| 267 | TP-267 | 133 | RHS | 40 | 510 | - | - | 550 |
| 268 | TP-268 | 133.5 | LHS | 50 | 490 | - | - | 540 |
| 269 | TP-269 | 134 | RHS | 50 | 500 | - | - | 550 |
| 270 | TP-270 | 134.5 | LHS | 60 | 520 | - | - | 580 |
| 271 | TP-271 | 135 | RHS | 40 | 440 | - | - | 480 |
| 272 | TP-272 | 135.5 | LHS | 40 | 480 | - | - | 520 |
| 273 | TP-273 | 136 | RHS | 40 | 380 | - | - | 420 |
| 274 | TP-274 | 136.5 | LHS | 40 | 360 | - | - | 400 |
| 275 | TP-275 | 137 | RHS | 40 | 470 | - | - | 510 |
| 276 | TP-276 | 137.5 | LHS | 40 | 510 | - | - | 550 |
| 277 | TP-277 | 138 | RHS | 70 | 380 | - | - | 450 |
| 278 | TP-278 | 138.5 | LHS | 60 | 420 | - | - | 480 |
| 279 | TP-279 | 139 | RHS | 50 | 410 | - | - | 460 |




| Sl.No | Trial Pit No. | Chainage (km) | Side | Bituminous Layer (mm) | Granular Layer(mm) | Bituminous Layer (mm) | Granular Layer (mm) | Total Thickness (mm) |
|-------|---------------|---------------|------|---|--------------------|-----------------------|---------------------|----------------------|
| 280 | TP-280 | 139.5 | LHS | 50 | 400 | - | - | 450 |
| 281 | TP-281 | 140 | RHS | 50 | 500 | - | - | 550 |
| 282 | TP-282 | 140.5 | LHS | 50 | 440 | - | - | 490 |
| 283 | TP-283 | 141 | RHS | 100 | 340 | - | - | 440 |
| 284 | TP-284 | 141.5 | LHS | 80 | 390 | - | - | 470 |
| 285 | TP-285 | 142 | RHS | 90 | 380 | - | - | 470 |
| 286 | TP-286 | 142.5 | LHS | 100 | 350 | - | - | 450 |
| 287 | TP-287 | 143 | RHS | 80 | 320 | - | - | 400 |
| 288 | TP-288 | 143.5 | LHS | 80 | 370 | - | - | 450 |
| 289 | TP-289 | 144 | RHS | 100 | 420 | 30 | 50 | 600 |
| 290 | TP-290 | 144.5 | LHS | 100 | 400 | 30 | 120 | 650 |
| 291 | TP-291 | 145 | RHS | 90 | 360 | - | - | 450 |
| 292 | TP-292 | 145.5 | LHS | 100 | 390 | - | - | 490 |
| 293 | TP-293 | 146 | RHS | 100 | 450 | - | - | 550 |
| 294 | TP-294 | 146.5 | LHS | 90 | 460 | - | - | 550 |
| 295 | TP-295 | 147 | RHS | 60 | 440 | - | - | 500 |
| 296 | TP-296 | 147.5 | LHS | 60 | 450 | - | - | 510 |
| 297 | TP-297 | 148 | RHS | 60 | 340 | - | - | 400 |
| 298 | TP-298 | 148.5 | LHS | 70 | 310 | - | - | 380 |
| 299 | TP-299 | 149 | RHS | 50 | 350 | - | - | 400 |
| 300 | TP-300 | 149.5 | LHS | 60 | 390 | - | - | 450 |
| 301 | TP-301 | 150 | RHS | 50 | 430 | - | - | 480 |
| 302 | TP-302 | 150.5 | LHS | 50 | 440 | - | - | 490 |
| 303 | TP-303 | 151 | RHS | 100 | 340 | - | - | 440 |
| 304 | TP-304 | 151.5 | LHS | 110 | 390 | - | - | 500 |
| 305 | TP-305 | 152 | RHS | 120 | 330 | - | - | 450 |
| 306 | TP-306 | 152.5 | LHS | 130 | 370 | - | - | 500 |
| 307 | TP-307 | 153 | RHS | 80 | 340 | - | - | 420 |
| 308 | TP-308 | 153.5 | LHS | 100 | 340 | - | - | 440 |
| 309 | TP-309 | 154 | RHS | 120 | 340 | 10 | - | 470 |
| 310 | TP-310 | 154.5 | LHS | 110 | 430 | - | - | 540 |
| 311 | TP-311 | 155 | RHS | 80 | 320 | - | - | 400 |
| 312 | TP-312 | 155.5 | LHS | 80 | 370 | - | - | 450 |
| 313 | TP-313 | 156 | RHS | 110 | 330 | - | - | 440 |
| 314 | TP-314 | 156.5 | LHS | 120 | 380 | - | - | 500 |
| 315 | TP-315 | 157 | RHS | 60 | 300 | 140 | - | 500 |
| 316 | TP-316 | 157.5 | LHS | 60 | 290 | 120 | - | 470 |
| 317 | TP-317 | 158 | RHS | 50 | 350 | - | - | 400 |
| 318 | TP-318 | 158.5 | LHS | 60 | 350 | - | - | 410 |
| 319 | TP-319 | 159 | RHS | 100 | 400 | - | - | 500 |
| 320 | TP-320 | 159.5 | LHS | 100 | 450 | - | - | 550 |
| 321 | TP-321 | 160 | RHS | 100 | 420 | - | - | 520 |
| 322 | TP-322 | 160.5 | LHS | Trial Pit excavation not possible due to congested area | | | | - |
| 323 | TP-323 | 161 | RHS | Trial Pit excavation not possible due to congested area | | | | - |
| 324 | TP-324 | 161.5 | LHS | Trial Pit excavation not possible due to congested area | | | | - |
| 325 | TP-325 | 162 | RHS | Trial Pit excavation not possible due to congested area | | | | - |
| 326 | TP-326 | 162.5 | LHS | 100 | 450 | - | - | 550 |

| Sl.No | Trial Pit No. | Chainage (km) | Side | Bituminous Layer (mm) | Granular Layer(mm) | Bituminous Layer (mm) | Granular Layer (mm) | Total Thickness (mm) |
|-------|---------------|---------------|------|---|--------------------|-----------------------|---------------------|----------------------|
| 327 | TP-327 | 163 | RHS | 100 | 360 | - | - | 460 |
| 328 | TP-328 | 163.5 | LHS | 90 | 450 | - | - | 540 |
| 329 | TP-329 | 164 | RHS | 100 | 500 | - | - | 600 |
| 330 | TP-330 | 164.5 | LHS | 100 | 470 | - | - | 570 |
| 331 | TP-331 | 165 | RHS | 100 | 380 | - | - | 480 |
| 332 | TP-332 | 165.5 | LHS | 100 | 350 | - | - | 450 |
| 333 | TP-333 | 166 | RHS | 100 | 300 | - | - | 400 |
| 334 | TP-334 | 166.5 | LHS | 80 | 370 | - | - | 450 |
| 335 | TP-335 | 167 | RHS | 100 | 300 | - | - | 400 |
| 336 | TP-336 | 167.5 | LHS | 100 | 380 | - | - | 480 |
| 337 | TP-337 | 168 | RHS | Trial Pit excavation not possible due to congested area | | | | - |
| 338 | TP-338 | 168.5 | LHS | 60 | 390 | - | - | 450 |
| 339 | TP-339 | 169 | RHS | 60 | 340 | - | - | 400 |
| 340 | TP-340 | 169.5 | LHS | 50 | 430 | - | - | 480 |
| 341 | TP-341 | 170 | RHS | 50 | 350 | - | - | 400 |
| 342 | TP-342 | 170.5 | LHS | 60 | 390 | - | - | 450 |
| 343 | TP-343 | 171 | RHS | 40 | 360 | - | - | 400 |
| 344 | TP-344 | 171.5 | LHS | 40 | 380 | - | - | 420 |
| 345 | TP-345 | 172 | RHS | 60 | 400 | - | - | 460 |
| 346 | TP-346 | 172.5 | LHS | 60 | 370 | - | - | 430 |
| 347 | TP-347 | 173 | RHS | 60 | 390 | - | - | 450 |
| 348 | TP-348 | 173.5 | LHS | 60 | 340 | - | - | 400 |
| 349 | TP-349 | 174 | RHS | 40 | 340 | - | - | 380 |
| 350 | TP-350 | 174.5 | LHS | 40 | 320 | - | - | 360 |
| 351 | TP-351 | 175 | RHS | 30 | 370 | - | - | 400 |
| 352 | TP-352 | 175.5 | LHS | 30 | 420 | - | - | 450 |
| 353 | TP-353 | 176 | RHS | 30 | 460 | - | - | 490 |
| 354 | TP-354 | 176.5 | LHS | 30 | 420 | - | - | 450 |
| 355 | TP-355 | 177 | RHS | 70 | 350 | - | - | 420 |
| 356 | TP-356 | 177.5 | LHS | 70 | 380 | - | - | 450 |
| 357 | TP-357 | 178 | RHS | Trial Pit excavation not possible due to congested area | | | | - |
| 358 | TP-358 | 178.5 | LHS | | | | | - |
| 359 | TP-359 | 179 | RHS | | | | | - |
| 360 | TP-360 | 179.5 | LHS | 60 | 290 | - | - | 350 |
| 361 | TP-361 | 180 | RHS | 60 | 320 | - | - | 380 |
| 362 | TP-362 | 180.5 | LHS | 60 | 290 | - | - | 350 |
| 363 | TP-363 | 181 | RHS | 40 | 360 | - | - | 400 |
| 364 | TP-364 | 181.5 | LHS | 50 | 420 | - | - | 470 |
| 365 | TP-365 | 182 | RHS | 50 | 410 | - | - | 460 |
| 366 | TP-366 | 182.5 | LHS | 70 | 550 | - | - | 620 |
| 367 | TP-367 | 183 | RHS | 55 | 550 | - | - | 605 |
| 368 | TP-368 | 183.5 | LHS | Trial Pit excavation not possible due to congested area | | | | - |
| 369 | TP-369 | 184 | LHS | 100 | 450 | - | - | 550 |
| 370 | TP-370 | 184.5 | RHS | 50 | 550 | - | - | 600 |
| 371 | TP-371 | 185 | LHS | 30 | 520 | - | - | 550 |
| 372 | TP-372 | 185.5 | RHS | 90 | 550 | - | - | 640 |
| 373 | TP-373 | 186 | LHS | 70 | 450 | - | - | 520 |



| Sl.No | Trial Pit No. | Chainage (km) | Side | Bituminous Layer (mm) | Granular Layer(mm) | Bituminous Layer (mm) | Granular Layer (mm) | Total Thickness (mm) |
|-------|---------------|---------------|------|--|--------------------|-----------------------|---------------------|----------------------|
| 374 | TP-374 | 186.5 | RHS | 70 | 120 | 100 | 350 | 640 |
| 375 | TP-375 | 187 | LHS | Trial Pit excavation not possible due to Major Bridge | | | | - |
| 376 | TP-376 | 187.5 | RHS | Trial Pit excavation not possible due to Major Bridge | | | | - |
| 377 | TP-377 | 188 | LHS | 50 | 100 | 100 | 300 | 550 |
| 378 | TP-378 | 188.5 | RHS | 50 | 400 | - | - | 450 |
| 379 | TP-379 | 189 | LHS | 60 | 550 | - | - | 610 |
| 380 | TP-380 | 189.5 | RHS | 100 | 550 | - | - | 650 |
| 381 | TP-381 | 190 | LHS | 100 | 500 | - | - | 600 |
| 382 | TP-382 | 190.5 | RHS | 50 | 600 | - | - | 650 |
| 383 | TP-383 | 191 | LHS | 80 | 650 | - | - | 730 |
| 384 | TP-384 | 191.5 | RHS | Trial Pit excavation not possible due to Congested Area | | | | - |
| 385 | TP-385 | 192 | LHS | Trial Pit excavation not possible due to Congested Area | | | | - |
| 386 | TP-386 | 192.5 | RHS | Trial Pit excavation not possible due to Congested Area | | | | - |
| 387 | TP-387 | 193 | LHS | 80 | 600 | - | - | 680 |
| 388 | TP-388 | 193.5 | RHS | 100 | 700 | - | - | 800 |
| 389 | TP-389 | 194 | LHS | 100 | 600 | - | - | 700 |
| 390 | TP-390 | 194.5 | RHS | 90 | 700 | - | - | 790 |
| 391 | TP-391 | 195 | LHS | 100 | 500 | - | - | 600 |
| 392 | TP-392 | 195.5 | RHS | Trial Pit excavation not possible due to Congested Area | | | | - |
| 393 | TP-393 | 196 | LHS | 60 | 450 | - | - | 510 |
| 394 | TP-394 | 196.5 | RHS | 70 | 550 | - | - | 620 |
| 395 | TP-395 | 197 | LHS | 100 | 550 | - | - | 650 |
| 396 | TP-396 | 197.5 | RHS | 90 | 630 | - | - | 720 |
| 397 | TP-397 | 198 | LHS | 80 | 550 | - | - | 630 |
| 398 | TP-398 | 198.5 | RHS | 90 | 550 | - | - | 640 |
| 399 | TP-399 | 199 | LHS | 80 | 550 | - | - | 630 |
| 400 | TP-400 | 199.5 | RHS | 100 | 600 | - | - | 700 |
| 401 | TP-401 | 200 | LHS | 100 | 550 | - | - | 650 |
| 402 | TP-402 | 200.5 | RHS | 100 | 700 | - | - | 800 |
| 403 | TP-403 | 201 | LHS | 70 | 550 | - | - | 620 |
| 404 | TP-404 | 201.5 | RHS | 80 | 550 | - | - | 630 |
| 405 | TP-405 | 202 | LHS | 50 | 600 | - | - | 650 |
| 406 | TP-406 | 202.5 | RHS | 70 | 550 | - | - | 620 |
| 407 | TP-407 | 203 | LHS | Trial Pit excavation not possible due to Bridge Location | | | | - |
| 408 | TP-408 | 203.5 | RHS | Trial Pit excavation not possible due to Bridge Location | | | | - |
| 409 | TP-409 | 204 | LHS | 150 | 700 | - | - | 850 |
| 410 | TP-410 | 204.5 | RHS | 120 | 700 | - | - | 820 |
| 411 | TP-411 | 205 | LHS | 130 | 600 | - | - | 730 |
| 412 | TP-412 | 205.5 | RHS | 120 | 600 | - | - | 720 |
| 413 | TP-413 | 206 | LHS | 50 | 700 | - | - | 750 |
| 414 | TP-414 | 206.5 | RHS | 70 | 650 | - | - | 720 |
| 415 | TP-415 | 207 | LHS | 150 | 650 | - | - | 800 |
| 416 | TP-416 | 207.5 | RHS | 90 | 500 | - | - | 590 |
| 417 | TP-417 | 208 | LHS | 100 | 950 | - | - | 1050 |
| 418 | TP-418 | 208.5 | RHS | 100 | 950 | - | - | 1050 |
| 419 | 419 | 209 | | Trial Pit excavation not possible due to Congested Area | | | | - |
| 420 | TP-420 | 209.5 | LHS | 100 | 950 | - | - | 1050 |



| Sl.No | Trial Pit No. | Chainage (km) | Side | Bituminous Layer (mm) | Granular Layer(mm) | Bituminous Layer (mm) | Granular Layer (mm) | Total Thickness (mm) |
|-------|---------------|---------------|------|---|--------------------|-----------------------|---------------------|----------------------|
| 421 | TP-421 | 210 | RHS | 80 | 500 | - | - | 580 |
| 422 | TP-422 | 210.5 | LHS | 50 | 550 | - | - | 600 |
| 423 | TP-423 | 211 | RHS | 50 | 550 | - | - | 600 |
| 424 | TP-424 | 211.5 | LHS | 70 | 600 | - | - | 670 |
| 425 | TP-425 | 212 | RHS | 90 | 1000 | - | - | 1090 |
| 426 | TP-426 | 212.5 | LHS | 100 | 950 | - | - | 1050 |
| 427 | TP-427 | 213 | RHS | 100 | 420 | - | - | 520 |
| 428 | TP-428 | 213.5 | LHS | 110 | 370 | - | - | 480 |
| 429 | TP-429 | 214 | RHS | Trial Pit excavation not possible due to Congested Area | | | | - |
| 430 | TP-430 | 214.5 | LHS | | | | | - |
| 431 | TP-431 | 215 | RHS | | | | | - |
| 432 | TP-432 | 215.5 | LHS | | | | | - |
| | | | | | | | | - |

Details of trial pit investigations showing existing crust thickness, material type along with photographs is given in Annexure-I

1.3 SUBGRADE STRENGTH ASSESSMENT AND PAVEMENT COMPOSITION SURVEY

As part of the preliminary survey test pits were excavated at selected locations along the project corridors to perform field density tests, to collect soil samples for laboratory tests, and to assess the pavement composition. These pits were part of the overall preliminary investigation to obtain reasonable values for feasibility, design and costing.

1.3.1 Investigations Accomplished

Test pits were carefully dug from the pavement surface down to sub-grade level, where the sub-grade was manually leveled and prepared for field density tests. Field density tests on the sub-grade soil were conducted at each test pit location and a small quantity of sample was collected in airtight containers for determining the field moisture content from each test pit. A Dynamic Cone Penetrometer (DCP) test was then carried out at sub-grade level.

Upon completion of the field density and DCP tests representative samples of sub-grade soil were collected in bulk, in gunny bags, from each test pit for laboratory testing. Representative samples of soils and materials collected from the test pits were subjected to various laboratory tests listed as below:

Sub-grade Soil Samples

- Grain size distribution test for each sample,
- Atterberg limits for each sample,
- Moisture density relationship (MDD - Heavy Compaction) for each sample, and
- Four-day soaked CBR at three energy levels on each homogenous group of soils. Soaked CBR at 97% of the MDD have been determined from the graphs plotted for CBR vs. Density at three energy levels.

1.3.2 Test Procedures

The standard test procedures followed for field-testing, soil sampling and laboratory testing are listed in the following Table-2. Soil classification was done according to the Indian Soil Classification System (ISC) as detailed in IS 1498.

Table-2: Testing Codes Adopted

| Type of Test | Method |
|---|----------------------------------|
| Field dry density using sand replacement method | IS 2720 Part 28 |
| Moisture content determination | IS 2720 Part 2 (section I) |
| Atterberg limits | IS 2720 Part 5 |
| Sieve analysis - Natural soils - Rock aggregate | IS 2720 Part 4 IS 2386 Part 1 |
| Compaction test (Heavy Compaction) | IS 2720 Part 8 |
| CBR and Swell (Soaked and unsoaked at three energy levels for sub-grade) | IS 2720 Part 16 |
| Free swell index | IS 2720 Part 40 |

1.3.3 Results of the soil testing

The CBR values of the subgrade are one of the most important parameters in determining the structural pavement design and composition of the layers.

The CBR values of the pavement subgrades vary significantly along the individual project corridors. Summary of test results of subgrade soil is presented in Table-3(a)

Table-3(a): Summary of Test Result of Sub-grade soil

| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | I.S. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--------------------------------------|-------|---------|---------|-------|------|-----------------|--------|--------|---------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| 1 | 0.000 | TP-01 | 100 | 100 | 100 | 100 | 99 | 91 | 32 | 21 | 11 | CL | 10.00 | 1.898 | 12.40 | 1.632 | 5.764 | 1.874 | 8.75 | 2.050 | 10.41 | 8.34 |
| 2 | 0.500 | TP-02 | 100 | 100 | 100 | 100 | 97 | 62 | 29 | 22 | 7 | CL | 0.00 | 2.020 | 14.04 | 1.739 | 10.856 | 2.025 | 16.70 | 2.190 | 19.88 | 15.36 |
| 3 | 1.000 | TP-03 | 100 | 100 | 100 | 100 | 86 | 34 | 30 | 20 | 10 | SC | 0.00 | 2.031 | 11.05 | 1.767 | 19.231 | 2.040 | 27.20 | 2.191 | 34.30 | 25.16 |
| 4 | 1.500 | TP-04 | 100 | 100 | 100 | 100 | 91 | 32 | 28 | 19 | 9 | SC | 0.00 | 2.040 | 10.75 | 1.762 | 22.629 | 2.042 | 32.33 | 2.213 | 39.86 | 30.14 |
| 5 | 2.000 | TP-05 | 100 | 100 | 100 | 98 | 83 | 49 | 37 | 23 | 14 | SC | 2.13 | 1.948 | 14.10 | 1.763 | 11.750 | 1.952 | 16.93 | 2.116 | 20.67 | 15.22 |
| 6 | 2.500 | TP-06 | 100 | 100 | 100 | 97 | 84 | 61 | 37 | 23 | 13 | CI | 4.35 | 1.808 | 12.40 | 1.555 | 5.933 | 1.815 | 9.00 | 1.953 | 10.71 | 8.28 |
| 7 | 3.000 | TP-07 | 100 | 100 | 100 | 100 | 84 | 62 | 36 | 21 | 15 | CI | 9.09 | 1.810 | 12.53 | 1.549 | 5.966 | 1.816 | 8.68 | 1.977 | 10.38 | 8.07 |

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| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | IS. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--------------------------------------|-------|---------|---------|-------|------|-----------------|--------|--------|--------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 8 | 3.500 | TP-08 | 100 | 100 | 100 | 100 | 85 | 64 | 38 | 24 | 13 | CI | 4.35 | 1.816 | 12.75 | 1.589 | 6.213 | 1.822 | 8.79 | 1.983 | 11.08 | 8.12 |
| 9 | 4.000 | TP-09 | 100 | 100 | 100 | 100 | 92 | 77 | 43 | 26 | 17 | CI | 4.35 | 1.790 | 14.00 | 1.522 | 4.797 | 1.796 | 6.59 | 1.958 | 7.83 | 6.20 |
| 10 | 4.500 | TP-10 | 100 | 100 | 100 | 98 | 90 | 75 | 41 | 26 | 15 | MI | 10.00 | 1.768 | 13.70 | 1.529 | 5.344 | 1.772 | 8.08 | 1.915 | 9.74 | 7.44 |
| 11 | 5.000 | TP-11 | 100 | 100 | 99 | 98 | 97 | 93 | 66 | 30 | 37 | CH | 8.33 | 1.873 | 15.90 | 1.695 | 3.473 | 1.818 | 5.25 | 2.030 | 6.33 | 5.24 |
| 12 | 5.500 | TP-12 | 100 | 100 | 100 | 100 | 97 | 84 | 43 | 27 | 17 | MI | 4.00 | 1.890 | 14.90 | 1.710 | 4.892 | 1.896 | 7.05 | 2.053 | 8.61 | 6.32 |
| 13 | 6.000 | TP-13 | 100 | 100 | 100 | 100 | 95 | 60 | 44 | 28 | 16 | MI | 0.00 | 1.895 | 13.80 | 1.630 | 5.500 | 1.996 | 8.35 | 2.047 | 9.93 | 7.12 |
| 14 | 6.500 | TP-14 | 100 | 100 | 100 | 100 | 97 | 51 | 30 | 26 | 4 | ML | 0.00 | 2.015 | 13.80 | 1.725 | 9.324 | 2.020 | 13.57 | 2.200 | 16.22 | 12.63 |
| 15 | 7.000 | TP-15 | 100 | 100 | 100 | 100 | 98 | 44 | 32 | 21 | 11 | SC | 0.00 | 2.020 | 13.10 | 1.739 | 14.548 | 2.030 | 22.38 | 2.190 | 26.63 | 20.48 |
| 16 | 7.500 | TP-16 | 100 | 100 | 100 | 100 | 99 | 45 | 32 | 22 | 10 | SC | 0.00 | 1.985 | 13.10 | 1.737 | 15.425 | 1.992 | 21.82 | 2.168 | 27.51 | 20.15 |

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| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | IS. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--------------------------------------|-------|---------|---------|-------|------|-----------------|--------|--------|--------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 17 | 8.000 | TP-17 | 100 | 100 | 100 | 100 | 99 | 54 | 34 | 23 | 11 | CL | 0.00 | 2.100 | 14.10 | 1.785 | 11.281 | 2.105 | 15.50 | 2.297 | 18.42 | 14.60 |
| 18 | 8.500 | TP-18 | 100 | 100 | 100 | 100 | 97 | 34 | 28 | 20 | 8 | SC | 0.00 | 2.025 | 11.15 | 1.721 | 19.446 | 2.027 | 26.71 | 2.215 | 31.75 | 25.22 |
| 19 | 9.000 | TP-19 | 100 | 100 | 98 | 93 | 63 | 44 | 30 | 20 | 10 | SC | 4.76 | 2.015 | 13.05 | 1.735 | 12.793 | 2.020 | 19.68 | 2.184 | 23.42 | 18.10 |
| 20 | 9.500 | TP-20 | 100 | 100 | 97 | 90 | 57 | 39 | 31 | 18 | 13 | SC | 4.76 | 2.003 | 12.05 | 1.721 | 12.127 | 2.010 | 17.32 | 2.217 | 21.36 | 16.12 |
| 21 | 10.000 | TP-21 | 100 | 100 | 100 | 100 | 95 | 33 | 29 | 19 | 10 | SC | 0.00 | 1.822 | 9.20 | 1.565 | 23.148 | 1.744 | 33.07 | 2.017 | 40.77 | 33.72 |
| 22 | 10.500 | TP-22 | 100 | 100 | 100 | 100 | 98 | 16 | Non-Plastic | | | SM | 0.00 | 2.150 | 9.57 | 1.849 | 30.791 | 2.156 | 44.37 | 2.322 | 54.17 | 41.25 |
| 23 | 11.000 | TP-23 | 100 | 100 | 100 | 100 | 99 | 13 | Non-Plastic | | | SM | 0.00 | 2.155 | 9.15 | 1.950 | 31.418 | 2.160 | 47.53 | 2.336 | 57.28 | 42.18 |
| 24 | 11.500 | TP-24 | 100 | 100 | 100 | 100 | 99 | 13 | Non-Plastic | | | SM | 0.00 | 2.140 | 10.20 | 1.937 | 32.099 | 2.145 | 46.25 | 2.324 | 56.47 | 41.55 |
| 25 | 12.000 | TP-25 | 100 | 100 | 94 | 88 | 81 | 73 | 38 | 26 | 12 | MI | 2.04 | 1.855 | 14.50 | 1.595 | 6.048 | 1.860 | 9.18 | 2.003 | 10.92 | 8.46 |

J. Mulu

| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | IS. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--|-------|---------|---------|-------|------|-----------------|--------|--------|--------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 26 | 12.500 | TP-26 | 100 | 100 | 100 | 100 | 100 | 86 | 37 | 26 | 12 | MI | 1.96 | 1.810 | 15.30 | 1.557 | 5.174 | 1.816 | 7.84 | 1.937 | 9.33 | 7.22 |
| 27 | 13.000 | TP-27 | 100 | 100 | 100 | 100 | 95 | 86 | 38 | 27 | 11 | MI | 2.08 | 1.830 | 14.60 | 1.556 | 6.460 | 1.836 | 8.87 | 2.002 | 10.55 | 8.35 |
| 28 | 13.500 | TP-28 | 100 | 100 | 100 | 100 | 100 | 89 | 40 | 30 | 10 | MI | 1.96 | 1.810 | 15.40 | 1.549 | 5.274 | 1.815 | 7.68 | 1.977 | 9.17 | 7.14 |
| 29 | 14.000 | TP-29 | 100 | 100 | 100 | 100 | 92 | 88 | 42 | 25 | 17 | CI | 4.35 | 1.736 | 14.30 | 1.519 | 4.899 | 1.742 | 6.93 | 1.896 | 8.74 | 6.40 |
| 30 | 14.500 | TP-30 | 100 | 100 | 100 | 100 | 100 | 92 | 39 | 25 | 14 | CI | 2.13 | 1.755 | 15.50 | 1.495 | 5.440 | 1.761 | 7.94 | 1.901 | 9.49 | 7.39 |
| 31 | 15.000 | TP-31 | 100 | 100 | 100 | 100 | 100 | 94 | 43 | 23 | 20 | CI | 2.00 | 1.755 | 13.38 | 1.507 | 2.434 | 1.697 | 3.48 | 1.942 | 4.29 | 3.49 |
| 32 | 15.500 | TP-32 | 100 | 100 | 100 | 100 | 100 | 95 | 39 | 28 | 12 | MI | 0.00 | 1.766 | 15.60 | 1.519 | 5.578 | 1.770 | 8.04 | 1.907 | 9.81 | 7.48 |
| 33 | 16.000 | TP-33 | Trial pit excavation was not possible due to work in progress. | | | | | | | | | | | | | | | | | | | |
| 34 | 16.500 | TP-34 | Trial pit excavation was not possible due to work in progress. | | | | | | | | | | | | | | | | | | | |

J. Mandal

| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | IS. CLASSIFICATION | Differential Free swell index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--|-------|---------|---------|-------|------|-----------------|--------|--------|--------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 35 | 17.000 | TP-35 | Trial pit excavation was not possible due to congested area. | | | | | | | | | | | | | | | | | | | |
| 36 | 17.500 | TP-36 | 100 | 100 | 96 | 86 | 52 | 35 | 43 | 23 | 21 | SC | 13.04 | 2.022 | 11.40 | 1.759 | 13.206 | 2.028 | 19.98 | 2.182 | 24.55 | 18.30 |
| 37 | 18.000 | TP-37 | 100 | 100 | 97 | 95 | 87 | 78 | 41 | 26 | 15 | MI | 4.35 | 1.785 | 13.50 | 1.542 | 5.715 | 1.790 | 8.38 | 1.997 | 10.05 | 7.75 |
| 38 | 18.500 | TP-38 | 100 | 100 | 100 | 100 | 80 | 62 | 42 | 28 | 14 | MI | 5.50 | 1.835 | 12.05 | 1.576 | 6.876 | 1.840 | 11.31 | 1.982 | 13.57 | 10.30 |
| 39 | 19.000 | TP-39 | 100 | 100 | 96 | 92 | 66 | 49 | 45 | 27 | 18 | SC | 4.35 | 1.952 | 13.95 | 1.770 | 9.673 | 1.960 | 13.80 | 2.247 | 17.50 | 12.35 |
| 40 | 19.500 | TP-40 | 100 | 100 | 86 | 80 | 47 | 22 | 39 | 20 | 19 | SC | 2.50 | 2.092 | 9.74 | 1.778 | 18.145 | 2.098 | 27.08 | 2.259 | 32.20 | 25.16 |
| 41 | 20.000 | TP-41 | 100 | 100 | 100 | 100 | 93 | 87 | 58 | 26 | 32 | CH | 8.33 | 1.979 | 12.15 | 1.686 | 3.761 | 1.925 | 5.49 | 2.143 | 6.56 | 5.45 |
| 42 | 20.500 | TP-42 | 100 | 100 | 93 | 83 | 46 | 19 | Non-Plastic | | | SM | 4.76 | 2.115 | 10.14 | 1.904 | 32.032 | 2.121 | 47.45 | 2.375 | 57.04 | 42.53 |
| 43 | 21.000 | TP-43 | 100 | 100 | 100 | 100 | 100 | 90 | 32 | 23 | 10 | CL | 0.00 | 1.830 | 15.50 | 1.574 | 5.322 | 1.835 | 7.76 | 1.976 | 9.50 | 7.20 |

J. Mulu

| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | IS. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--------------------------------------|-------|---------|---------|-------|------|-----------------|--------|--------|--------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 44 | 21.500 | TP-44 | 100 | 100 | 100 | 100 | 96 | 74 | 35 | 29 | 6 | MI | 0.00 | 1.895 | 14.45 | 1.742 | 7.888 | 1.896 | 11.60 | 2.060 | 13.91 | 10.21 |
| 45 | 22.000 | TP-45 | 100 | 100 | 100 | 100 | 96 | 78 | 33 | 23 | 10 | CL | 2.04 | 1.878 | 15.25 | 1.617 | 6.070 | 1.884 | 8.82 | 2.036 | 10.68 | 8.18 |
| 46 | 22.500 | TP-46 | 100 | 100 | 100 | 100 | 96 | 80 | 33 | 22 | 11 | CL | 2.04 | 1.885 | 14.55 | 1.691 | 6.151 | 1.890 | 9.36 | 2.043 | 11.28 | 8.37 |
| 47 | 23.000 | TP-47 | 100 | 100 | 100 | 100 | 87 | 69 | 28 | 19 | 9 | CL | 4.76 | 1.780 | 13.10 | 1.537 | 6.861 | 1.786 | 9.99 | 1.931 | 11.93 | 9.24 |
| 48 | 23.500 | TP-48 | 100 | 100 | 100 | 100 | 89 | 68 | 28 | 19 | 9 | CL | 2.33 | 1.787 | 13.30 | 1.630 | 8.432 | 1.792 | 11.58 | 1.985 | 13.77 | 10.44 |
| 49 | 24.000 | TP-49 | 100 | 100 | 100 | 100 | 97 | 69 | 35 | 28 | 7 | ML | 0.00 | 1.826 | 14.40 | 1.570 | 8.739 | 1.832 | 13.22 | 1.954 | 15.93 | 12.18 |
| 50 | 24.500 | TP-50 | 100 | 100 | 100 | 100 | 97 | 60 | 34 | 29 | 5 | ML | 0.00 | 1.815 | 14.10 | 1.550 | 9.798 | 1.820 | 14.37 | 1.931 | 17.25 | 13.36 |
| 51 | 25.000 | TP-51 | 100 | 100 | 100 | 100 | 96 | 71 | 34 | 27 | 7 | ML | 0.00 | 1.742 | 15.60 | 1.481 | 6.726 | 1.691 | 9.24 | 1.906 | 10.98 | 9.22 |
| 52 | 25.500 | TP-52 | 100 | 100 | 100 | 100 | 99 | 81 | 36 | 29 | 8 | MI | 0.00 | 1.805 | 15.05 | 1.634 | 6.743 | 1.810 | 9.25 | 1.960 | 11.41 | 8.41 |

J. Mulu



| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | IS. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--|-------|---------|---------|-------|------|-----------------|--------|--------|--------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 53 | 26.000 | TP-53 | Trial pit excavation was not possible due to congested area. | | | | | | | | | | | | | | | | | | | |
| 54 | 26.500 | TP-54 | Trial pit excavation was not possible due to congested area. | | | | | | | | | | | | | | | | | | | |
| 55 | 27.000 | TP-55 | 100 | 100 | 100 | 100 | 95 | 65 | 30 | 24 | 6 | ML | 0.00 | 1.815 | 14.05 | 1.643 | 9.563 | 1.815 | 13.62 | 1.967 | 16.52 | 12.34 |
| 56 | 27.500 | TP-56 | 100 | 100 | 100 | 100 | 96 | 64 | 31 | 25 | 6 | ML | 0.00 | 1.836 | 14.10 | 1.643 | 9.580 | 1.841 | 13.75 | 2.020 | 16.43 | 12.48 |
| 57 | 28.000 | TP-57 | 100 | 100 | 100 | 100 | 94 | 82 | 36 | 29 | 6 | MI | 0.00 | 1.818 | 14.45 | 1.571 | 6.014 | 1.825 | 8.82 | 2.034 | 10.57 | 8.14 |
| 58 | 28.500 | TP-58 | 100 | 100 | 100 | 100 | 92 | 76 | 35 | 31 | 4 | MI | 2.04 | 1.822 | 14.05 | 1.573 | 6.868 | 1.826 | 10.00 | 1.977 | 11.95 | 9.27 |
| 59 | 29.000 | TP-59 | 100 | 100 | 100 | 100 | 98 | 79 | 29 | 19 | 10 | CL | 2.08 | 1.855 | 14.80 | 1.705 | 6.466 | 1.860 | 9.51 | 2.016 | 11.40 | 8.32 |
| 60 | 29.500 | TP-60 | 100 | 100 | 100 | 100 | 95 | 79 | 31 | 22 | 9 | CL | 2.13 | 1.880 | 14.45 | 1.715 | 7.461 | 1.886 | 10.25 | 2.089 | 12.18 | 9.23 |
| 61 | 30.000 | TP-61 | 90 | 79 | 70 | 66 | 58 | 46 | 30 | 22 | 8 | GC | 4.17 | 1.987 | 10.24 | 1.729 | 18.415 | 1.926 | 27.86 | 2.144 | 34.24 | 27.90 |

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| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | IS. CLASSIFICATION | Differential Free swell index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--------------------------------------|-------|---------|---------|-------|------|-----------------|--------|--------|--------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 62 | 30.500 | TP-62 | 100 | 100 | 91 | 83 | 71 | 53 | 31 | 23 | 8 | CL | 0.00 | 2.005 | 10.60 | 1.807 | 10.604 | 2.011 | 16.21 | 2.254 | 19.04 | 14.40 |
| 63 | 31.000 | TP-63 | 100 | 100 | 100 | 100 | 48 | 10 | Non-Plastic | | | SM-SP | 0.00 | 2.160 | 10.41 | 1.845 | 28.894 | 2.165 | 44.18 | 2.298 | 51.87 | 40.85 |
| 64 | 31.500 | TP-64 | 100 | 100 | 100 | 100 | 46 | 11 | Non-Plastic | | | SM-SP | 0.00 | 2.155 | 10.55 | 1.942 | 33.131 | 2.161 | 45.45 | 2.422 | 56.08 | 41.48 |
| 65 | 32.000 | TP-65 | 100 | 100 | 97 | 94 | 68 | 26 | Non-Plastic | | | SM | 0.00 | 2.074 | 11.40 | 1.877 | 29.143 | 2.080 | 41.34 | 2.252 | 49.44 | 37.24 |
| 66 | 32.500 | TP-66 | 100 | 100 | 100 | 100 | 70 | 27 | Non-Plastic | | | SM | 0.00 | 2.065 | 10.70 | 1.848 | 31.058 | 2.070 | 42.66 | 2.272 | 50.94 | 39.16 |
| 67 | 33.000 | TP-67 | 100 | 100 | 95 | 89 | 62 | 36 | 25 | 15 | 10 | SC | 4.55 | 2.017 | 11.50 | 1.718 | 15.265 | 2.022 | 23.02 | 2.184 | 27.47 | 21.35 |
| 68 | 33.500 | TP-68 | 100 | 95 | 93 | 89 | 66 | 43 | 28 | 18 | 9 | SC | 2.50 | 1.981 | 12.85 | 1.702 | 14.232 | 1.990 | 20.42 | 2.193 | 24.40 | 18.95 |
| 69 | 34.000 | TP-69 | 100 | 100 | 100 | 100 | 99 | 83 | 36 | 21 | 15 | CI | 8.33 | 1.849 | 15.05 | 1.668 | 5.029 | 1.854 | 7.13 | 2.039 | 8.53 | 6.45 |
| 70 | 34.500 | TP-70 | 100 | 100 | 100 | 100 | 98 | 79 | 38 | 22 | 16 | CI | 6.50 | 1.832 | 14.75 | 1.561 | 4.737 | 1.838 | 6.63 | 1.984 | 8.02 | 6.21 |

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| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | IS. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--------------------------------------|-------|---------|---------|-------|------|-----------------|--------|--------|--------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 71 | 35.000 | TP-71 | 100 | 100 | 100 | 100 | 94 | 75 | 37 | 25 | 12 | MI | 1.96 | 1.676 | 15.70 | 1.517 | 7.229 | 1.622 | 10.42 | 1.820 | 12.72 | 10.46 |
| 72 | 35.500 | TP-72 | 100 | 100 | 100 | 100 | 98 | 81 | 39 | 33 | 6 | MI | 2.08 | 1.847 | 14.95 | 1.596 | 6.223 | 1.852 | 9.12 | 2.067 | 10.94 | 8.44 |
| 73 | 36.000 | TP-73 | 100 | 100 | 100 | 100 | 98 | 82 | 39 | 26 | 12 | MI | 2.08 | 1.860 | 14.90 | 1.581 | 5.927 | 1.864 | 8.85 | 2.009 | 10.52 | 8.23 |
| 74 | 36.500 | TP-74 | 100 | 100 | 100 | 100 | 100 | 87 | 37 | 26 | 11 | MI | 2.04 | 1.851 | 15.30 | 1.592 | 5.283 | 1.855 | 7.99 | 1.981 | 9.63 | 7.38 |
| 75 | 37.000 | TP-75 | 100 | 100 | 100 | 100 | 95 | 76 | 39 | 31 | 8 | MI | 0.00 | 1.887 | 14.30 | 1.630 | 6.807 | 1.892 | 9.91 | 2.047 | 11.84 | 9.18 |
| 76 | 37.500 | TP-76 | 100 | 100 | 100 | 100 | 95 | 79 | 37 | 25 | 12 | MI | 1.96 | 1.871 | 14.44 | 1.707 | 6.541 | 1.876 | 8.98 | 2.079 | 10.68 | 8.10 |
| 77 | 38.000 | TP-77 | 100 | 100 | 100 | 100 | 92 | 70 | 33 | 25 | 7 | ML | 2.13 | 1.890 | 13.75 | 1.710 | 9.836 | 1.895 | 13.49 | 2.053 | 16.65 | 12.27 |
| 78 | 38.500 | TP-78 | 100 | 100 | 100 | 100 | 94 | 74 | 33 | 24 | 9 | ML | 0.00 | 1.875 | 14.10 | 1.678 | 6.409 | 1.880 | 9.20 | 2.063 | 10.99 | 8.35 |
| 79 | 39.000 | TP-79 | 100 | 100 | 100 | 100 | 95 | 81 | 38 | 30 | 9 | MI | 2.13 | 1.862 | 14.55 | 1.601 | 5.777 | 1.866 | 8.74 | 1.992 | 10.53 | 8.07 |

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| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | IS. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--------------------------------------|-------|---------|---------|-------|------|-----------------|--------|--------|--------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 80 | 39.500 | TP-80 | 100 | 100 | 100 | 100 | 99 | 81 | 40 | 30 | 10 | MI | 2.04 | 1.855 | 15.05 | 1.595 | 5.189 | 1.860 | 7.86 | 1.985 | 9.36 | 7.25 |
| 81 | 40.000 | TP-81 | 100 | 100 | 100 | 100 | 98 | 74 | 40 | 30 | 11 | MI | 2.00 | 1.705 | 16.90 | 1.492 | 5.793 | 1.643 | 8.19 | 1.862 | 10.33 | 8.30 |
| 82 | 40.500 | TP-82 | 100 | 100 | 100 | 100 | 95 | 73 | 39 | 31 | 8 | MI | 2.00 | 1.845 | 14.25 | 1.670 | 7.457 | 1.852 | 10.74 | 2.004 | 13.12 | 9.62 |
| 83 | 41.000 | TP-83 | 100 | 100 | 100 | 100 | 97 | 80 | 33 | 24 | 9 | ML | 0.00 | 1.825 | 14.90 | 1.570 | 5.869 | 1.831 | 8.91 | 1.971 | 10.60 | 8.20 |
| 84 | 41.500 | TP-84 | 100 | 100 | 100 | 100 | 95 | 74 | 46 | 30 | 16 | MI | 4.55 | 1.855 | 14.25 | 1.577 | 4.808 | 1.860 | 6.60 | 2.029 | 7.85 | 6.22 |
| 85 | 42.000 | TP-85 | 100 | 100 | 100 | 100 | 90 | 63 | 46 | 31 | 15 | MI | 2.33 | 1.906 | 13.30 | 1.706 | 6.302 | 1.912 | 9.24 | 2.097 | 11.10 | 8.34 |
| 86 | 42.500 | TP-86 | 100 | 100 | 100 | 98 | 88 | 74 | 43 | 32 | 11 | MI | 4.35 | 1.838 | 13.40 | 1.579 | 7.844 | 1.842 | 11.21 | 2.035 | 13.82 | 10.45 |
| 87 | 43.000 | TP-87 | 100 | 100 | 91 | 83 | 54 | 35 | 48 | 28 | 20 | SM | 2.08 | 2.022 | 11.35 | 1.739 | 19.922 | 2.027 | 30.14 | 2.164 | 36.32 | 27.81 |
| 88 | 43.500 | TP-88 | 100 | 100 | 97 | 90 | 57 | 36 | 48 | 36 | 12 | SM | 7.69 | 2.018 | 11.50 | 1.841 | 22.722 | 2.023 | 31.21 | 2.242 | 37.09 | 28.15 |

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|-------|--------------------------|------------|--------------------------------------|-------|---------|---------|-------|------|-----------------|--------|--------|--------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 89 | 44.000 | TP-89 | 100 | 100 | 96 | 86 | 54 | 37 | 42 | 33 | 9 | SM | 9.30 | 2.012 | 12.10 | 1.811 | 22.075 | 2.018 | 32.70 | 2.259 | 39.31 | 29.30 |
| 90 | 44.500 | TP-90 | 100 | 100 | 98 | 88 | 54 | 42 | 35 | 20 | 16 | SC | 2.33 | 1.988 | 12.60 | 1.712 | 14.254 | 1.992 | 20.72 | 2.155 | 25.09 | 19.25 |
| 91 | 45.000 | TP-91 | 100 | 100 | 100 | 100 | 92 | 82 | 32 | 21 | 11 | CL | 2.08 | 1.894 | 12.48 | 1.621 | 6.349 | 1.836 | 9.24 | 2.068 | 11.04 | 9.25 |
| 92 | 45.500 | TP-92 | 100 | 100 | 100 | 100 | 95 | 81 | 28 | 20 | 9 | CL | 4.17 | 1.856 | 14.50 | 1.693 | 8.222 | 1.862 | 11.29 | 2.062 | 13.42 | 10.17 |
| 93 | 46.000 | TP-93 | 100 | 100 | 100 | 100 | 100 | 94 | 48 | 28 | 20 | MI | 13.04 | 1.805 | 15.60 | 1.634 | 3.275 | 1.811 | 4.49 | 1.960 | 5.54 | 4.08 |
| 94 | 46.500 | TP-94 | 100 | 100 | 100 | 100 | 100 | 95 | 50 | 29 | 21 | MH | 7.75 | 1.811 | 15.70 | 1.621 | 2.564 | 1.816 | 3.68 | 1.992 | 4.40 | 3.34 |
| 95 | 47.000 | TP-95 | 100 | 100 | 100 | 100 | 98 | 83 | 35 | 19 | 16 | CI | 2.13 | 1.825 | 15.05 | 1.571 | 5.106 | 1.830 | 7.86 | 1.978 | 9.35 | 7.22 |
| 96 | 47.500 | TP-96 | 100 | 100 | 100 | 100 | 97 | 85 | 32 | 20 | 12 | CL | 6.38 | 1.808 | 14.90 | 1.573 | 5.879 | 1.814 | 8.89 | 1.951 | 10.93 | 8.14 |
| 97 | 48.000 | TP-97 | 100 | 100 | 100 | 98 | 91 | 82 | 31 | 21 | 10 | CL | 4.35 | 1.770 | 14.10 | 1.515 | 5.946 | 1.775 | 8.66 | 1.933 | 10.34 | 8.05 |

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| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | IS. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--|-------|---------|---------|-------|------|-----------------|--------|--------|--------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 98 | 48.500 | TP-98 | 100 | 100 | 100 | 100 | 92 | 81 | 33 | 21 | 12 | CL | 2.27 | 1.793 | 14.15 | 1.605 | 6.349 | 1.799 | 9.11 | 1.972 | 10.89 | 8.26 |
| 99 | 49.000 | TP-99 | 100 | 100 | 100 | 100 | 90 | 23 | Non-Plastic | | | SM | 0.00 | 2.090 | 8.90 | 1.797 | 26.926 | 2.104 | 40.73 | 2.236 | 49.09 | 37.28 |
| 100 | 49.500 | TP-100 | 100 | 100 | 100 | 95 | 81 | 38 | 30 | 20 | 10 | SC | 1.96 | 2.010 | 9.77 | 1.713 | 30.397 | 2.018 | 44.38 | 2.177 | 53.03 | 41.25 |
| 101 | 50.000 | TP-101 | 100 | 100 | 100 | 100 | 88 | 62 | 36 | 22 | 14 | CI | 0.00 | 1.755 | 14.05 | 1.511 | 9.918 | 1.697 | 15.26 | 1.902 | 18.16 | 15.34 |
| 102 | 50.500 | TP-102 | Trial pit excavation was not possible due to congested area. | | | | | | | | | | | | | | | | | | | |
| 103 | 51.000 | TP-103 | 100 | 100 | 100 | 100 | 92 | 74 | 39 | 28 | 10 | MI | 1.96 | 1.830 | 13.90 | 1.574 | 5.992 | 1.833 | 9.09 | 1.976 | 10.82 | 8.40 |
| 104 | 51.500 | TP-104 | 100 | 100 | 100 | 100 | 91 | 70 | 39 | 28 | 11 | MI | 0.00 | 1.835 | 13.70 | 1.578 | 6.195 | 1.840 | 8.93 | 1.982 | 10.90 | 8.30 |
| 105 | 52.000 | TP-105 | 100 | 100 | 95 | 92 | 87 | 67 | 39 | 28 | 11 | MI | 4.76 | 1.866 | 13.05 | 1.607 | 6.477 | 1.872 | 9.96 | 2.023 | 11.86 | 9.15 |
| 106 | 52.500 | TP-106 | 100 | 100 | 100 | 100 | 98 | 59 | 36 | 29 | 8 | MI | 0.00 | 1.908 | 13.60 | 1.741 | 8.350 | 1.914 | 11.47 | 2.120 | 13.63 | 10.33 |

J. Mulu

| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | IS. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--------------------------------------|-------|---------|---------|-------|------|-----------------|--------|--------|--------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 107 | 53.000 | TP-107 | 100 | 100 | 100 | 100 | 99 | 74 | 36 | 26 | 9 | MI | 0.00 | 1.839 | 14.70 | 1.582 | 5.842 | 1.842 | 8.85 | 1.968 | 10.53 | 8.18 |
| 108 | 53.500 | TP-108 | 100 | 100 | 100 | 100 | 98 | 84 | 37 | 28 | 9 | MI | 2.13 | 1.823 | 15.05 | 1.632 | 5.616 | 1.830 | 8.23 | 2.005 | 9.89 | 7.42 |
| 109 | 54.000 | TP-109 | 100 | 100 | 100 | 100 | 99 | 80 | 35 | 26 | 10 | MI | 0.00 | 1.860 | 14.95 | 1.581 | 5.940 | 1.865 | 8.87 | 2.009 | 10.54 | 8.24 |
| 110 | 54.500 | TP-110 | 100 | 100 | 100 | 100 | 94 | 72 | 37 | 25 | 12 | MI | 0.00 | 1.890 | 13.75 | 1.701 | 7.739 | 1.895 | 11.47 | 2.122 | 13.78 | 10.28 |
| 111 | 55.000 | TP-111 | 100 | 100 | 100 | 97 | 90 | 66 | 36 | 25 | 10 | MI | 1.96 | 1.903 | 12.00 | 1.703 | 8.869 | 1.841 | 13.00 | 2.093 | 15.62 | 13.06 |
| 112 | 55.500 | TP-112 | 100 | 100 | 100 | 100 | 100 | 92 | 40 | 27 | 13 | MI | 4.35 | 1.816 | 15.50 | 1.554 | 4.628 | 1.822 | 6.74 | 1.983 | 8.05 | 6.26 |
| 113 | 56.000 | TP-113 | 100 | 100 | 100 | 100 | 100 | 89 | 40 | 27 | 13 | MI | 2.13 | 1.825 | 15.40 | 1.570 | 5.456 | 1.830 | 7.86 | 1.971 | 9.60 | 7.31 |
| 114 | 56.500 | TP-114 | 100 | 100 | 100 | 100 | 94 | 72 | 36 | 24 | 11 | MI | 2.04 | 1.836 | 14.10 | 1.586 | 6.889 | 1.841 | 10.03 | 1.992 | 11.98 | 9.29 |
| 115 | 57.000 | TP-115 | 100 | 100 | 100 | 100 | 97 | 70 | 36 | 24 | 12 | CI | 2.13 | 1.852 | 15.25 | 1.593 | 6.055 | 1.856 | 8.83 | 2.000 | 10.81 | 8.20 |

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| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | IS. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--------------------------------------|-------|---------|---------|-------|------|-----------------|--------|--------|--------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 116 | 57.500 | TP-116 | 100 | 100 | 100 | 100 | 89 | 76 | 30 | 19 | 11 | CL | 4.35 | 1.825 | 13.60 | 1.570 | 6.556 | 1.830 | 9.95 | 1.971 | 11.84 | 9.17 |
| 117 | 58.000 | TP-117 | 100 | 100 | 100 | 100 | 90 | 78 | 34 | 21 | 13 | CL | 8.33 | 1.795 | 13.80 | 1.553 | 6.017 | 1.802 | 9.10 | 1.944 | 10.97 | 8.35 |
| 118 | 58.500 | TP-118 | 100 | 100 | 100 | 96 | 88 | 74 | 37 | 20 | 17 | CI | 11.90 | 1.827 | 13.40 | 1.589 | 4.573 | 1.832 | 6.92 | 1.971 | 8.50 | 6.34 |
| 119 | 59.000 | TP-119 | 100 | 100 | 100 | 100 | 94 | 84 | 33 | 17 | 16 | CL | 4.76 | 1.845 | 14.55 | 1.596 | 4.644 | 1.850 | 7.03 | 1.998 | 8.47 | 6.46 |
| 120 | 59.500 | TP-120 | 100 | 100 | 100 | 100 | 98 | 66 | 36 | 26 | 10 | MI | 0.00 | 1.924 | 14.30 | 1.655 | 7.805 | 1.930 | 11.25 | 2.078 | 13.73 | 10.45 |
| 121 | 60.000 | TP-121 | 100 | 100 | 100 | 100 | 96 | 67 | 30 | 22 | 9 | CL | 0.00 | 1.951 | 11.50 | 1.678 | 11.122 | 1.830 | 16.03 | 2.107 | 19.57 | 16.83 |
| 122 | 60.500 | TP-122 | 100 | 100 | 100 | 100 | 97 | 77 | 34 | 22 | 12 | CL | 4.35 | 1.850 | 14.70 | 1.674 | 8.163 | 1.857 | 11.20 | 2.009 | 13.82 | 10.16 |
| 123 | 61.000 | TP-123 | 100 | 100 | 100 | 100 | 98 | 77 | 37 | 25 | 12 | MI | 0.00 | 1.860 | 14.80 | 1.687 | 6.449 | 1.865 | 9.20 | 2.141 | 11.67 | 8.26 |
| 124 | 61.500 | TP-124 | 100 | 100 | 100 | 100 | 98 | 71 | 39 | 32 | 8 | MI | 0.00 | 1.842 | 14.50 | 1.586 | 7.696 | 1.848 | 11.19 | 1.997 | 13.55 | 10.37 |

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| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | IS. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--|-------|---------|---------|-------|------|-----------------|--------|--------|--------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 125 | 62.000 | TP-125 | 100 | 100 | 100 | 100 | 99 | 83 | 36 | 28 | 8 | MI | 0.00 | 1.824 | 15.10 | 1.651 | 6.199 | 1.848 | 9.38 | 1.977 | 11.30 | 8.11 |
| 126 | 62.500 | TP-126 | 100 | 100 | 100 | 100 | 100 | 94 | 35 | 23 | 12 | CL | 2.00 | 1.805 | 15.60 | 1.559 | 5.976 | 1.811 | 8.70 | 1.958 | 10.40 | 8.05 |
| 127 | 63.000 | TP-127 | 100 | 100 | 100 | 100 | 100 | 93 | 36 | 23 | 12 | CI | 0.00 | 1.812 | 15.50 | 1.653 | 5.887 | 1.818 | 8.09 | 2.013 | 9.61 | 7.28 |
| 128 | 63.500 | TP-128 | 100 | 100 | 100 | 100 | 100 | 98 | 41 | 28 | 14 | MI | 2.04 | 1.801 | 15.70 | 1.556 | 4.472 | 1.802 | 6.56 | 2.015 | 7.86 | 6.09 |
| 129 | 64.000 | TP-129 | 100 | 100 | 100 | 100 | 100 | 96 | 42 | 29 | 13 | MI | 2.08 | 1.815 | 15.60 | 1.546 | 5.237 | 1.816 | 7.65 | 1.966 | 9.14 | 7.15 |
| 130 | 64.500 | TP-130 | 100 | 100 | 95 | 91 | 68 | 57 | 30 | 21 | 9 | CL | 11.11 | 1.975 | 12.75 | 1.787 | 13.319 | 1.909 | 19.19 | 2.145 | 23.43 | 19.31 |
| 131 | 65.000 | TP-131 | Trial pit excavation was not possible due to Filling zone. | | | | | | | | | | | | | | | | | | | |
| 132 | 65.500 | TP-132 | 100 | 100 | 100 | 98 | 85 | 75 | 28 | 19 | 8 | CL | 4.76 | 1.848 | 15.30 | 1.663 | 7.657 | 1.850 | 11.34 | 2.075 | 13.64 | 10.21 |
| 133 | 66.000 | TP-133 | Trial pit excavation was not possible due to congested area. | | | | | | | | | | | | | | | | | | | |

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| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | IS. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--|-------|---------|---------|-------|------|-----------------|--------|--------|--------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 134 | 66.500 | TP-134 | 100 | 100 | 100 | 100 | 95 | 89 | 40 | 25 | 14 | MI | 6.52 | 1.805 | 14.75 | 1.615 | 5.678 | 1.810 | 8.32 | 1.986 | 10.00 | 7.52 |
| 135 | 67.000 | TP-135 | 100 | 100 | 100 | 100 | 94 | 89 | 47 | 26 | 21 | CI | 4.55 | 1.796 | 14.90 | 1.545 | 3.904 | 1.801 | 5.63 | 1.940 | 6.87 | 5.23 |
| 136 | 67.500 | TP-136 | 100 | 100 | 100 | 100 | 100 | 95 | 42 | 25 | 17 | CI | 1.96 | 1.755 | 15.60 | 1.508 | 4.092 | 1.761 | 6.73 | 1.895 | 8.08 | 6.12 |
| 137 | 68.000 | TP-137 | 100 | 100 | 100 | 100 | 96 | 90 | 44 | 23 | 21 | CI | 2.55 | 1.707 | 17.00 | 1.494 | 1.762 | 1.658 | 2.49 | 1.864 | 3.14 | 2.48 |
| 138 | 68.500 | TP-138 | Trial pit excavation was not possible due to congested area. | | | | | | | | | | | | | | | | | | | |
| 139 | 69.000 | TP-139 | Trial pit excavation was not possible due to congested area. | | | | | | | | | | | | | | | | | | | |
| 140 | 69.500 | TP-140 | Trial pit excavation was not possible due to congested area. | | | | | | | | | | | | | | | | | | | |
| 141 | 70.000 | TP-141 | Trial pit excavation was not possible due to congested area. | | | | | | | | | | | | | | | | | | | |
| 142 | 70.500 | TP-142 | Trial pit excavation was not possible due to congested area. | | | | | | | | | | | | | | | | | | | |

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| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | IS. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--|-------|---------|---------|-------|------|-----------------|--------|--------|--------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 143 | 71.000 | TP-143 | Trial pit excavation was not possible due to Major Bridge. | | | | | | | | | | | | | | | | | | | |
| 144 | 71.500 | TP-144 | Trial pit excavation was not possible due to Major Bridge. | | | | | | | | | | | | | | | | | | | |
| 145 | 72.000 | TP-145 | Trial pit excavation was not possible due to Major Bridge. | | | | | | | | | | | | | | | | | | | |
| 146 | 72.500 | TP-146 | Trial pit excavation was not possible due to Major Bridge. | | | | | | | | | | | | | | | | | | | |
| 147 | 73.000 | TP-147 | Trial pit excavation was not possible due to Major Bridge. | | | | | | | | | | | | | | | | | | | |
| 148 | 73.500 | TP-148 | Trial pit excavation was not possible due to Major Bridge. | | | | | | | | | | | | | | | | | | | |
| 149 | 74.000 | TP-149 | Trial pit excavation was not possible due to Major Bridge. | | | | | | | | | | | | | | | | | | | |
| 150 | 74.500 | TP-150 | Trial pit excavation was not possible due to Major Bridge. | | | | | | | | | | | | | | | | | | | |
| 151 | 75.000 | TP-151 | 100 | 100 | 97 | 91 | 71 | 56 | 41 | 27 | 13 | MI | 6.67 | 1.893 | 11.10 | 1.630 | 6.599 | 1.833 | 10.15 | 2.052 | 12.08 | 10.18 |

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| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | IS. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--------------------------------------|-------|---------|---------|-------|------|-----------------|--------|--------|--------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 152 | 75.500 | TP-152 | 100 | 100 | 97 | 93 | 79 | 67 | 41 | 26 | 16 | MI | 6.78 | 1.880 | 12.10 | 1.624 | 6.866 | 1.886 | 9.99 | 2.040 | 11.94 | 9.25 |
| 153 | 76.000 | TP-153 | 100 | 100 | 97 | 92 | 67 | 28 | 32 | 21 | 11 | SC | 4.76 | 2.065 | 10.22 | 1.774 | 18.912 | 2.058 | 27.02 | 2.286 | 33.31 | 25.45 |
| 154 | 76.500 | TP-154 | 100 | 100 | 97 | 93 | 68 | 29 | 41 | 27 | 14 | SM | 4.76 | 2.059 | 9.80 | 1.863 | 18.957 | 2.051 | 27.32 | 2.236 | 33.35 | 24.92 |
| 155 | 77.000 | TP-155 | 100 | 95 | 91 | 82 | 46 | 30 | 43 | 33 | 9 | SM | 4.26 | 2.051 | 10.25 | 1.840 | 18.643 | 2.048 | 28.38 | 2.223 | 34.19 | 25.64 |
| 156 | 77.500 | TP-156 | 100 | 100 | 88 | 79 | 52 | 25 | 42 | 27 | 14 | SM | 2.17 | 2.080 | 9.25 | 1.796 | 26.352 | 2.065 | 38.36 | 2.257 | 45.84 | 36.24 |
| 157 | 78.000 | TP-157 | 100 | 100 | 96 | 88 | 59 | 31 | 49 | 38 | 11 | SM | 6.67 | 2.048 | 10.40 | 1.759 | 20.942 | 2.035 | 29.92 | 2.267 | 36.89 | 28.34 |
| 158 | 78.500 | TP-158 | 100 | 100 | 97 | 91 | 68 | 44 | 45 | 35 | 10 | SM | 2.13 | 1.975 | 13.10 | 1.750 | 16.321 | 1.965 | 24.18 | 2.202 | 29.06 | 22.38 |
| 159 | 79.000 | TP-159 | 100 | 100 | 100 | 100 | 100 | 96 | 49 | 36 | 12 | MI | 10.20 | 1.895 | 15.65 | 1.630 | 4.290 | 1.875 | 6.49 | 2.028 | 7.82 | 6.16 |
| 160 | 79.500 | TP-160 | 100 | 100 | 94 | 89 | 72 | 60 | 46 | 32 | 14 | MI | 8.33 | 1.908 | 10.90 | 1.629 | 5.888 | 1.890 | 8.63 | 2.030 | 10.37 | 8.22 |

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| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | IS. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--------------------------------------|-------|---------|---------|-------|------|-----------------|--------|--------|--------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 161 | 80.000 | TP-161 | 100 | 100 | 96 | 89 | 67 | 54 | 53 | 36 | 17 | MH | 8.33 | 1.956 | 11.90 | 1.751 | 5.846 | 1.962 | 8.39 | 2.152 | 10.02 | 7.61 |
| 162 | 80.500 | TP-162 | 100 | 100 | 95 | 87 | 65 | 52 | 54 | 36 | 18 | MH | 7.50 | 1.962 | 12.75 | 1.694 | 6.035 | 1.950 | 8.78 | 2.129 | 10.50 | 8.28 |
| 163 | 81.000 | TP-163 | 100 | 100 | 100 | 100 | 100 | 97 | 54 | 31 | 23 | MH | 4.00 | 1.744 | 19.25 | 1.482 | 3.179 | 1.697 | 4.37 | 1.908 | 5.19 | 4.34 |
| 164 | 81.500 | TP-164 | 100 | 100 | 100 | 100 | 100 | 94 | 49 | 26 | 23 | CI | 8.33 | 1.805 | 15.60 | 1.534 | 3.496 | 1.800 | 4.80 | 1.975 | 5.71 | 4.56 |
| 165 | 82.000 | TP-165 | 100 | 100 | 96 | 90 | 64 | 35 | 34 | 22 | 12 | SC | 4.00 | 2.025 | 11.00 | 1.725 | 13.312 | 2.018 | 19.43 | 2.193 | 23.22 | 18.31 |
| 166 | 82.500 | TP-166 | 100 | 100 | 97 | 92 | 66 | 37 | 35 | 21 | 14 | SC | 6.60 | 2.014 | 11.70 | 1.716 | 10.901 | 2.001 | 16.44 | 2.181 | 19.61 | 15.52 |
| 167 | 83.000 | TP-167 | 100 | 100 | 98 | 91 | 68 | 46 | 48 | 35 | 13 | SM | 8.33 | 1.966 | 13.40 | 1.779 | 15.673 | 1.970 | 22.33 | 2.131 | 27.08 | 20.13 |
| 168 | 83.500 | TP-168 | 100 | 100 | 98 | 94 | 77 | 61 | 49 | 33 | 15 | MI | 8.33 | 1.826 | 15.60 | 1.559 | 6.683 | 1.831 | 10.22 | 1.943 | 12.00 | 9.44 |
| 169 | 84.000 | TP-169 | 100 | 93 | 87 | 80 | 58 | 45 | 48 | 32 | 16 | SM | 4.26 | 1.972 | 13.20 | 1.765 | 13.491 | 1.960 | 19.78 | 2.169 | 23.76 | 18.26 |

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| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | IS. CLASSIFICATION | Differential Free swell index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|---|-------|---------|---------|-------|------|-----------------|--------|--------|--------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 170 | 84.500 | TP-170 | Trial pit excavation was not possible due to Junction Area. | | | | | | | | | | | | | | | | | | | |
| 171 | 85.000 | TP-171 | 100 | 100 | 100 | 100 | 94 | 87 | 41 | 22 | 19 | CI | 12.82 | 1.825 | 14.00 | 1.633 | 5.110 | 1.761 | 7.49 | 2.008 | 9.00 | 7.55 |
| 172 | 85.500 | TP-172 | 100 | 100 | 100 | 100 | 100 | 94 | 32 | 21 | 11 | CL | 4.76 | 1.858 | 15.60 | 1.553 | 5.663 | 1.850 | 8.57 | 2.090 | 10.58 | 8.10 |
| 173 | 86.000 | TP-173 | 100 | 100 | 100 | 100 | 96 | 88 | 36 | 22 | 14 | CI | 9.09 | 1.840 | 14.90 | 1.650 | 5.379 | 1.830 | 8.19 | 1.995 | 9.87 | 7.48 |
| 174 | 86.500 | TP-174 | 100 | 100 | 100 | 100 | 97 | 91 | 33 | 19 | 14 | CL | 4.76 | 1.845 | 15.10 | 1.568 | 5.082 | 1.832 | 7.46 | 2.018 | 8.98 | 7.08 |
| 175 | 87.000 | TP-175 | 100 | 100 | 100 | 100 | 98 | 86 | 32 | 20 | 11 | CL | 10.00 | 1.835 | 15.18 | 1.661 | 6.303 | 1.825 | 9.08 | 1.993 | 11.09 | 8.32 |
| 176 | 87.500 | TP-176 | 100 | 100 | 100 | 100 | 93 | 80 | 31 | 20 | 11 | CL | 9.50 | 1.808 | 14.20 | 1.557 | 6.265 | 1.750 | 9.11 | 1.960 | 11.03 | 9.14 |
| 177 | 88.000 | TP-177 | 100 | 100 | 100 | 100 | 92 | 82 | 30 | 19 | 11 | CL | 9.09 | 1.787 | 14.45 | 1.543 | 6.283 | 1.740 | 9.15 | 1.939 | 10.93 | 9.05 |
| 178 | 88.500 | TP-178 | 100 | 100 | 100 | 97 | 91 | 81 | 39 | 23 | 16 | CI | 5.00 | 1.767 | 14.06 | 1.599 | 5.317 | 1.725 | 7.29 | 1.919 | 9.00 | 7.12 |

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| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | IS. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--------------------------------------|-------|---------|---------|-------|------|-----------------|--------|--------|--------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 179 | 89.000 | TP-179 | 100 | 100 | 100 | 100 | 95 | 83 | 35 | 22 | 13 | CI | 3.50 | 1.909 | 12.00 | 1.651 | 5.446 | 1.840 | 8.24 | 2.067 | 9.93 | 8.32 |
| 180 | 89.500 | TP-180 | 100 | 100 | 100 | 100 | 92 | 81 | 33 | 19 | 14 | CL | 2.27 | 1.885 | 14.15 | 1.606 | 5.361 | 1.810 | 8.09 | 2.041 | 9.65 | 8.21 |
| 181 | 90.000 | TP-181 | 100 | 100 | 90 | 83 | 50 | 35 | 48 | 33 | 14 | SM | 4.76 | 2.024 | 11.20 | 1.847 | 16.159 | 2.000 | 22.20 | 2.249 | 26.38 | 20.75 |
| 182 | 90.500 | TP-182 | 100 | 100 | 97 | 89 | 58 | 40 | 49 | 36 | 13 | SM | 2.50 | 1.996 | 12.30 | 1.727 | 11.889 | 1.925 | 17.99 | 2.162 | 21.67 | 18.16 |
| 183 | 91.000 | TP-183 | 100 | 100 | 100 | 95 | 62 | 37 | 46 | 31 | 15 | SM | 4.76 | 2.014 | 11.64 | 1.732 | 13.382 | 1.945 | 20.31 | 2.175 | 24.16 | 20.45 |
| 184 | 91.500 | TP-184 | 100 | 100 | 98 | 93 | 62 | 34 | 45 | 31 | 14 | SM | 4.76 | 2.028 | 11.12 | 1.815 | 15.164 | 1.930 | 21.76 | 2.231 | 26.00 | 22.28 |
| 185 | 92.000 | TP-185 | 100 | 100 | 96 | 91 | 75 | 59 | 58 | 37 | 21 | MH | 9.52 | 1.793 | 12.27 | 1.535 | 5.562 | 1.799 | 8.02 | 1.958 | 9.79 | 7.46 |
| 186 | 92.500 | TP-186 | 100 | 100 | 96 | 91 | 77 | 65 | 59 | 38 | 21 | MH | 9.09 | 1.831 | 12.90 | 1.624 | 5.426 | 1.836 | 7.45 | 1.987 | 8.90 | 6.88 |
| 187 | 93.000 | TP-187 | 100 | 100 | 99 | 96 | 76 | 53 | 43 | 25 | 18 | CI | 10.50 | 1.848 | 12.45 | 1.637 | 6.546 | 1.852 | 9.05 | 2.061 | 10.88 | 8.36 |

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| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | IS. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--------------------------------------|-------|---------|---------|-------|------|-----------------|--------|--------|--------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 188 | 93.500 | TP-188 | 100 | 100 | 99 | 96 | 77 | 60 | 43 | 25 | 18 | CI | 5.00 | 1.854 | 11.62 | 1.594 | 6.194 | 1.859 | 8.89 | 2.002 | 10.62 | 8.27 |
| 189 | 94.000 | TP-189 | 100 | 100 | 98 | 94 | 73 | 60 | 55 | 36 | 19 | MH | 6.82 | 1.890 | 11.06 | 1.703 | 5.986 | 1.894 | 9.07 | 2.189 | 10.79 | 8.09 |
| 190 | 94.500 | TP-190 | 100 | 100 | 98 | 94 | 81 | 69 | 57 | 37 | 20 | MH | 5.50 | 1.782 | 12.35 | 1.515 | 4.866 | 1.788 | 7.35 | 1.951 | 8.95 | 6.81 |
| 191 | 95.000 | TP-191 | 100 | 100 | 100 | 100 | 100 | 93 | 39 | 22 | 17 | CI | 4.35 | 1.832 | 15.20 | 1.557 | 4.994 | 1.771 | 6.86 | 2.004 | 8.15 | 6.89 |
| 192 | 95.500 | TP-192 | 100 | 100 | 100 | 100 | 99 | 86 | 37 | 21 | 16 | CI | 6.82 | 1.927 | 15.18 | 1.725 | 5.289 | 1.935 | 7.26 | 2.120 | 8.95 | 6.64 |
| 193 | 96.000 | TP-193 | 100 | 100 | 93 | 88 | 63 | 42 | 33 | 19 | 14 | SC | 4.55 | 1.990 | 12.53 | 1.765 | 10.767 | 1.995 | 15.45 | 2.159 | 18.46 | 14.13 |
| 194 | 96.500 | TP-194 | 100 | 100 | 100 | 100 | 91 | 84 | 41 | 24 | 17 | CI | 15.00 | 1.853 | 14.17 | 1.595 | 5.080 | 1.861 | 7.03 | 2.009 | 8.45 | 6.56 |
| 195 | 97.000 | TP-195 | 100 | 100 | 100 | 98 | 91 | 88 | 41 | 24 | 17 | CI | 12.25 | 1.808 | 14.20 | 1.602 | 4.596 | 1.812 | 7.09 | 2.016 | 8.47 | 6.40 |
| 196 | 97.500 | TP-196 | 100 | 100 | 100 | 100 | 100 | 93 | 39 | 21 | 18 | CI | 9.09 | 1.812 | 15.54 | 1.634 | 4.041 | 1.817 | 6.53 | 1.999 | 7.81 | 5.72 |

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| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | | ATTERBERG LIMIT | | | IS. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--|-------|---------|---------|-------|------|--------|-----------------|--------|-------------|--------------------|---------------------------------|-------------------------------|------------|-------------------------------|------------|--------------|------------|--------------|-------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | MDD (gm/cc) | | | OMC (%) | Test 1 | | Test 2 | | Test 3 | | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | | |
| 197 | 98.000 | TP-197 | 100 | 100 | 100 | 100 | 100 | 92 | 59 | 39 | 20 | MH | 18.18 | 1.820 | 15.52 | 1.558 | 3.889 | 1.828 | 5.56 | 1.987 | 6.85 | 5.17 | |
| 198 | 98.500 | TP-198 | Trial pit excavation was not possible due to congested area. | | | | | | | | | | | | | | | | | | | | |
| 199 | 99.000 | TP-199 | 100 | 100 | 100 | 100 | 92 | 83 | 36 | 21 | 15 | CI | 10.25 | 1.865 | 14.50 | 1.623 | 9.678 | 1.798 | 14.64 | 2.012 | 17.99 | 14.81 | |
| 200 | 99.500 | TP-200 | 100 | 100 | 100 | 100 | 97 | 36 | 31 | 24 | 7 | SM | 2.50 | 2.022 | 11.34 | 1.845 | 22.451 | 2.027 | 34.65 | 2.246 | 41.40 | 30.25 | |
| 201 | 100.000 | TP-201 | 100 | 100 | 100 | 100 | 90 | 83 | 38 | 23 | 15 | CI | 4.76 | 1.725 | 13.95 | 1.585 | 6.487 | 1.729 | 9.73 | 1.875 | 11.60 | 8.47 | |
| 202 | 100.500 | TP-202 | Trial pit excavation was not possible due to congested area. | | | | | | | | | | | | | | | | | | | | |
| 203 | 101.000 | TP-203 | Trial pit excavation was not possible due to congested area. | | | | | | | | | | | | | | | | | | | | |
| 204 | 101.500 | TP-204 | Trial pit excavation was not possible due to Major Bridge. | | | | | | | | | | | | | | | | | | | | |
| 205 | 102.000 | TP-205 | 100 | 100 | 100 | 100 | 94 | 39 | 32 | 21 | 11 | SC | 2.44 | 2.004 | 12.01 | 1.800 | 13.081 | 2.012 | 21.13 | 2.174 | 25.30 | 18.55 | |

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| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | IS. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--------------------------------------|-------|---------|---------|-------|------|-----------------|--------|--------|--------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 206 | 102.500 | TP-206 | 100 | 100 | 100 | 100 | 95 | 48 | 32 | 20 | 12 | SC | 2.50 | 1.958 | 13.70 | 1.766 | 11.036 | 1.962 | 16.09 | 2.160 | 19.71 | 14.47 |
| 207 | 103.000 | TP-207 | 100 | 100 | 100 | 97 | 88 | 82 | 49 | 23 | 25 | CI | 4.35 | 1.694 | 13.74 | 1.482 | 3.558 | 1.680 | 4.89 | 1.850 | 5.84 | 4.64 |
| 208 | 103.500 | TP-208 | 100 | 100 | 100 | 100 | 97 | 91 | 46 | 25 | 21 | CI | 15.91 | 1.840 | 15.03 | 1.589 | 4.502 | 1.849 | 6.54 | 1.996 | 7.93 | 6.04 |
| 209 | 104.000 | TP-209 | 100 | 100 | 100 | 98 | 92 | 86 | 48 | 26 | 21 | CI | 8.33 | 1.749 | 14.28 | 1.478 | 6.102 | 1.753 | 8.75 | 1.905 | 10.45 | 8.21 |
| 210 | 104.500 | TP-210 | 100 | 100 | 100 | 100 | 94 | 88 | 44 | 23 | 21 | CI | 8.33 | 1.785 | 14.57 | 1.608 | 5.524 | 1.790 | 8.04 | 1.940 | 9.61 | 7.23 |
| 211 | 105.000 | TP-211 | 100 | 100 | 100 | 100 | 100 | 95 | 47 | 26 | 21 | CI | 6.52 | 1.745 | 17.00 | 1.499 | 3.985 | 1.698 | 5.69 | 1.932 | 7.02 | 5.65 |
| 212 | 105.500 | TP-212 | 100 | 96 | 90 | 87 | 74 | 62 | 42 | 27 | 15 | MI | 6.67 | 1.456 | 11.24 | 1.252 | 7.035 | 1.462 | 10.72 | 1.572 | 12.89 | 9.85 |
| 213 | 106.000 | TP-213 | 100 | 100 | 100 | 100 | 91 | 82 | 57 | 31 | 27 | MH | 8.33 | 1.824 | 16.30 | 1.651 | 4.415 | 1.829 | 6.36 | 1.981 | 7.77 | 5.71 |
| 214 | 106.500 | TP-214 | 100 | 100 | 100 | 100 | 95 | 89 | 53 | 26 | 27 | CH | 9.25 | 1.825 | 16.25 | 1.633 | 3.594 | 1.830 | 5.27 | 2.008 | 6.33 | 4.76 |

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| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | IS. CLASSIFICATION | Differential Free swell index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--------------------------------------|-------|---------|---------|-------|------|-----------------|--------|--------|--------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 215 | 107.000 | TP-215 | 100 | 100 | 100 | 100 | 92 | 86 | 45 | 25 | 20 | CI | 6.60 | 1.798 | 16.90 | 1.544 | 4.401 | 1.806 | 6.29 | 1.990 | 7.75 | 5.84 |
| 216 | 107.500 | TP-216 | 100 | 100 | 100 | 100 | 92 | 84 | 34 | 20 | 13 | CL | 4.00 | 1.825 | 15.75 | 1.555 | 6.153 | 1.831 | 8.98 | 1.976 | 10.73 | 8.36 |
| 217 | 108.000 | TP-217 | 100 | 100 | 100 | 100 | 92 | 85 | 37 | 21 | 16 | CI | 4.00 | 1.820 | 15.90 | 1.572 | 5.076 | 1.801 | 7.39 | 1.975 | 8.83 | 7.03 |
| 218 | 108.500 | TP-218 | 100 | 100 | 98 | 96 | 92 | 87 | 32 | 20 | 12 | CL | 4.50 | 1.781 | 16.45 | 1.549 | 6.074 | 1.787 | 9.19 | 1.922 | 11.29 | 8.41 |
| 219 | 109.000 | TP-219 | 100 | 100 | 100 | 100 | 90 | 80 | 45 | 24 | 21 | CI | 5.00 | 1.830 | 15.90 | 1.574 | 4.418 | 1.835 | 6.70 | 1.976 | 7.98 | 6.18 |
| 220 | 109.500 | TP-220 | 100 | 100 | 100 | 100 | 89 | 80 | 45 | 23 | 21 | CI | 2.13 | 1.817 | 16.42 | 1.544 | 4.948 | 1.824 | 6.80 | 1.988 | 8.08 | 6.39 |
| 221 | 110.000 | TP-221 | 100 | 100 | 97 | 96 | 90 | 84 | 30 | 20 | 11 | CL | 6.98 | 1.821 | 14.50 | 1.566 | 7.032 | 1.825 | 10.13 | 1.967 | 12.37 | 9.43 |
| 222 | 110.500 | TP-222 | 100 | 100 | 100 | 94 | 75 | 61 | 32 | 19 | 13 | CL | 7.50 | 1.882 | 13.50 | 1.628 | 9.069 | 1.886 | 13.72 | 2.038 | 16.53 | 12.63 |
| 223 | 111.000 | TP-223 | 100 | 100 | 97 | 94 | 81 | 66 | 33 | 20 | 13 | CL | 5.50 | 1.874 | 12.05 | 1.640 | 8.766 | 1.878 | 12.40 | 2.046 | 15.63 | 11.48 |

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| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | IS. CLASSIFICATION | Differential Free swell index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--|-------|---------|---------|-------|------|-----------------|--------|--------|--------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 224 | 111.500 | TP-224 | 100 | 100 | 97 | 94 | 79 | 62 | 30 | 19 | 11 | CL | 9.50 | 1.875 | 15.10 | 1.584 | 7.838 | 1.883 | 11.61 | 2.042 | 13.70 | 10.80 |
| 225 | 112.000 | TP-225 | 100 | 100 | 97 | 94 | 83 | 58 | 32 | 20 | 12 | CL | 10.00 | 1.930 | 13.15 | 1.747 | 7.322 | 1.934 | 11.83 | 2.092 | 14.16 | 10.34 |
| 226 | 112.500 | TP-226 | 100 | 100 | 100 | 100 | 91 | 68 | 32 | 20 | 12 | CL | 8.33 | 1.875 | 15.25 | 1.637 | 5.962 | 1.878 | 9.07 | 2.085 | 10.94 | 8.31 |
| 227 | 113.000 | TP-227 | Trial pit excavation was not possible due to congested area. | | | | | | | | | | | | | | | | | | | |
| 228 | 113.500 | TP-228 | Trial pit excavation was not possible due to congested area. | | | | | | | | | | | | | | | | | | | |
| 229 | 114.000 | TP-229 | Trial pit excavation was not possible due to congested area. | | | | | | | | | | | | | | | | | | | |
| 230 | 114.500 | TP-230 | Trial pit excavation was not possible due to congested area. | | | | | | | | | | | | | | | | | | | |
| 231 | 115.000 | TP-231 | 100 | 100 | 100 | 100 | 98 | 90 | 40 | 24 | 16 | CI | 9.52 | 1.820 | 15.00 | 1.567 | 5.651 | 1.761 | 8.69 | 1.973 | 10.35 | 8.73 |
| 232 | 115.500 | TP-232 | 100 | 100 | 100 | 100 | 93 | 85 | 36 | 21 | 15 | CI | 7.50 | 1.805 | 16.45 | 1.538 | 6.242 | 1.807 | 9.25 | 1.955 | 10.91 | 8.62 |

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| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | IS. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--------------------------------------|-------|---------|---------|-------|------|-----------------|--------|--------|--------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 233 | 116.000 | TP-233 | 100 | 100 | 100 | 100 | 88 | 29 | 31 | 18 | 13 | SC | 2.70 | 1.985 | 10.42 | 1.788 | 15.854 | 1.989 | 25.61 | 2.158 | 30.66 | 22.52 |
| 234 | 116.500 | TP-234 | 100 | 100 | 100 | 100 | 89 | 37 | 29 | 20 | 9 | SC | 5.13 | 1.965 | 10.95 | 1.741 | 14.760 | 1.967 | 20.42 | 2.191 | 24.54 | 18.89 |
| 235 | 117.000 | TP-235 | 100 | 100 | 95 | 91 | 81 | 75 | 34 | 20 | 14 | CL | 16.67 | 1.844 | 14.55 | 1.595 | 6.413 | 1.848 | 9.35 | 1.997 | 11.45 | 8.66 |
| 236 | 117.500 | TP-236 | 100 | 100 | 97 | 92 | 82 | 75 | 33 | 19 | 14 | CL | 0.00 | 1.838 | 14.15 | 1.621 | 6.082 | 1.842 | 9.36 | 2.005 | 11.13 | 8.48 |
| 237 | 118.000 | TP-237 | 100 | 100 | 100 | 100 | 88 | 72 | 28 | 18 | 10 | CL | 0.00 | 1.840 | 15.90 | 1.568 | 6.884 | 1.845 | 9.92 | 1.993 | 12.11 | 9.26 |
| 238 | 118.500 | TP-238 | 100 | 100 | 100 | 98 | 86 | 70 | 27 | 16 | 11 | CL | 4.76 | 1.862 | 14.25 | 1.599 | 7.836 | 1.867 | 11.19 | 2.061 | 13.80 | 10.43 |
| 239 | 119.000 | TP-239 | 100 | 100 | 100 | 100 | 79 | 35 | 27 | 20 | 7 | SC | 2.08 | 2.002 | 9.87 | 1.804 | 19.410 | 2.008 | 29.86 | 2.250 | 35.53 | 26.48 |
| 240 | 119.500 | TP-240 | 100 | 100 | 100 | 100 | 89 | 44 | 26 | 21 | 5 | SM-SC | 0.00 | 1.960 | 10.90 | 1.723 | 15.013 | 1.963 | 22.89 | 2.134 | 27.51 | 20.86 |
| 241 | 120.000 | TP-241 | 100 | 100 | 100 | 99 | 83 | 39 | 31 | 19 | 12 | SC | 0.00 | 1.988 | 9.25 | 1.712 | 11.600 | 1.915 | 17.85 | 2.155 | 21.24 | 18.04 |

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| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | IS. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--------------------------------------|-------|---------|---------|-------|------|-----------------|--------|--------|--------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 242 | 120.500 | TP-242 | 100 | 100 | 100 | 100 | 84 | 39 | 27 | 18 | 9 | SC | 5.00 | 1.976 | 10.45 | 1.816 | 17.385 | 1.978 | 25.31 | 2.148 | 30.57 | 22.31 |
| 243 | 121.000 | TP-243 | 100 | 100 | 100 | 99 | 85 | 44 | 27 | 17 | 9 | SC | 2.50 | 1.938 | 11.25 | 1.740 | 7.257 | 1.941 | 10.93 | 2.103 | 13.05 | 9.81 |
| 244 | 121.500 | TP-244 | 100 | 100 | 94 | 90 | 73 | 51 | 28 | 18 | 10 | CL | 5.41 | 1.962 | 10.40 | 1.762 | 10.893 | 1.969 | 16.50 | 2.129 | 19.64 | 14.72 |
| 245 | 122.000 | TP-245 | 100 | 100 | 98 | 93 | 73 | 61 | 44 | 29 | 15 | MI | 4.35 | 1.870 | 14.30 | 1.627 | 6.587 | 1.878 | 9.38 | 2.018 | 11.38 | 8.67 |
| 246 | 122.500 | TP-246 | 100 | 100 | 98 | 91 | 73 | 59 | 44 | 29 | 15 | MI | 4.35 | 1.887 | 12.70 | 1.708 | 6.230 | 1.890 | 9.45 | 2.049 | 11.25 | 8.40 |
| 247 | 123.000 | TP-247 | 100 | 100 | 98 | 91 | 65 | 48 | 43 | 29 | 14 | SM | 18.18 | 1.962 | 11.60 | 1.654 | 13.615 | 1.968 | 22.39 | 2.148 | 26.87 | 20.58 |
| 248 | 123.500 | TP-248 | 100 | 100 | 100 | 92 | 65 | 48 | 40 | 25 | 15 | SC | 9.09 | 1.977 | 12.05 | 1.680 | 13.004 | 1.984 | 19.61 | 2.165 | 23.40 | 18.17 |
| 249 | 124.000 | TP-249 | 100 | 96 | 93 | 89 | 69 | 45 | 27 | 19 | 8 | SC | 5.00 | 1.907 | 12.06 | 1.665 | 18.238 | 1.909 | 26.28 | 2.121 | 32.09 | 24.33 |
| 250 | 124.500 | TP-250 | 100 | 100 | 100 | 96 | 76 | 48 | 27 | 19 | 8 | SC | 5.13 | 1.932 | 11.05 | 1.671 | 7.752 | 1.938 | 11.30 | 2.092 | 13.84 | 10.45 |

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| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | IS. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--------------------------------------|-------|---------|---------|-------|------|-----------------|--------|--------|--------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 251 | 125.000 | TP-251 | 100 | 100 | 100 | 97 | 81 | 72 | 55 | 29 | 26 | CH | 8.00 | 1.714 | 17.50 | 1.472 | 5.784 | 1.665 | 8.26 | 1.897 | 10.19 | 8.23 |
| 252 | 125.500 | TP-252 | 100 | 100 | 100 | 97 | 82 | 74 | 46 | 80 | -34 | MI | 8.33 | 1.855 | 15.25 | 1.577 | 5.174 | 1.861 | 7.88 | 2.029 | 9.49 | 7.29 |
| 253 | 126.000 | TP-253 | 100 | 91 | 82 | 73 | 56 | 47 | 47 | 28 | 19 | SM | 8.33 | 1.925 | 12.10 | 1.729 | 14.178 | 1.932 | 20.61 | 2.089 | 24.96 | 18.56 |
| 254 | 126.500 | TP-254 | 100 | 90 | 80 | 68 | 47 | 37 | 46 | 28 | 18 | SM | 4.35 | 1.950 | 10.08 | 1.630 | 14.359 | 1.953 | 21.62 | 2.194 | 25.82 | 20.24 |
| 255 | 127.000 | TP-255 | 100 | 94 | 91 | 87 | 69 | 54 | 33 | 18 | 15 | CL | 4.76 | 1.917 | 13.15 | 1.647 | 7.536 | 1.924 | 11.16 | 2.070 | 13.17 | 10.32 |
| 256 | 127.500 | TP-256 | 100 | 100 | 100 | 95 | 76 | 59 | 33 | 18 | 15 | CL | 2.50 | 1.910 | 12.60 | 1.709 | 7.284 | 1.914 | 10.41 | 2.101 | 12.83 | 9.47 |
| 257 | 128.000 | TP-257 | 100 | 100 | 100 | 93 | 74 | 52 | 27 | 19 | 8 | CL | 3.25 | 1.952 | 13.51 | 1.704 | 11.898 | 1.958 | 17.14 | 2.171 | 20.93 | 15.81 |
| 258 | 128.500 | TP-258 | 100 | 100 | 100 | 96 | 75 | 50 | 29 | 18 | 11 | SC | 0.00 | 1.976 | 12.60 | 1.743 | 10.104 | 1.982 | 16.62 | 2.156 | 19.94 | 14.84 |
| 259 | 129.000 | TP-259 | 100 | 100 | 100 | 92 | 72 | 52 | 34 | 20 | 14 | CL | 9.09 | 1.940 | 14.05 | 1.719 | 6.500 | 1.947 | 9.09 | 2.163 | 11.00 | 8.35 |

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| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | IS. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--------------------------------------|-------|---------|---------|-------|------|-----------------|--------|--------|--------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 260 | 129.500 | TP-260 | 100 | 100 | 96 | 89 | 70 | 46 | 32 | 19 | 13 | SC | 9.52 | 1.920 | 11.14 | 1.644 | 10.616 | 1.925 | 15.43 | 2.097 | 18.69 | 14.36 |
| 261 | 130.000 | TP-261 | 100 | 100 | 100 | 100 | 86 | 67 | 26 | 17 | 8 | CL | 12.50 | 2.020 | 8.25 | 1.739 | 8.154 | 1.939 | 12.55 | 2.190 | 14.93 | 12.74 |
| 262 | 130.500 | TP-262 | 100 | 100 | 100 | 99 | 89 | 73 | 27 | 17 | 10 | CL | 15.00 | 1.872 | 15.10 | 1.578 | 6.747 | 1.876 | 10.00 | 2.050 | 12.02 | 9.34 |
| 263 | 131.000 | TP-263 | 100 | 100 | 100 | 100 | 97 | 94 | 52 | 24 | 28 | CH | 2.13 | 1.740 | 18.00 | 1.578 | 3.173 | 1.747 | 4.63 | 2.003 | 5.53 | 4.12 |
| 264 | 131.500 | TP-264 | 100 | 100 | 100 | 100 | 99 | 95 | 50 | 24 | 26 | CI | 3.50 | 1.745 | 18.25 | 1.475 | 3.112 | 1.749 | 4.71 | 1.900 | 5.67 | 4.38 |
| 265 | 132.000 | TP-265 | 100 | 90 | 80 | 68 | 53 | 49 | 45 | 30 | 16 | SM | 4.35 | 1.948 | 11.72 | 1.718 | 11.289 | 1.956 | 17.37 | 2.114 | 20.67 | 15.67 |
| 266 | 132.500 | TP-266 | 100 | 89 | 74 | 64 | 52 | 46 | 45 | 30 | 15 | SM | 4.17 | 1.906 | 10.85 | 1.664 | 11.845 | 1.908 | 18.03 | 2.119 | 21.73 | 16.53 |
| 267 | 133.000 | TP-267 | 100 | 100 | 100 | 100 | 86 | 81 | 45 | 23 | 21 | CI | 4.35 | 1.814 | 15.75 | 1.627 | 5.222 | 1.817 | 7.90 | 1.966 | 9.71 | 7.09 |
| 268 | 133.500 | TP-268 | 100 | 100 | 100 | 100 | 93 | 87 | 39 | 21 | 18 | CI | 8.70 | 1.782 | 15.95 | 1.606 | 5.639 | 1.788 | 8.04 | 2.003 | 10.20 | 7.26 |

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| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | IS. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--------------------------------------|-------|---------|---------|-------|------|-----------------|--------|--------|--------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 269 | 134.000 | TP-269 | 100 | 100 | 100 | 100 | 90 | 58 | 31 | 22 | 9 | CL | 15.00 | 1.925 | 14.30 | 1.648 | 9.357 | 1.929 | 13.64 | 2.102 | 16.71 | 12.70 |
| 270 | 134.500 | TP-270 | 100 | 100 | 100 | 98 | 90 | 62 | 35 | 21 | 14 | CL | 9.09 | 1.866 | 14.60 | 1.683 | 6.256 | 1.873 | 9.48 | 2.058 | 11.28 | 8.41 |
| 271 | 135.000 | TP-271 | 100 | 100 | 100 | 99 | 93 | 88 | 56 | 33 | 23 | MH | 15.91 | 1.611 | 22.00 | 1.394 | 2.338 | 1.556 | 3.54 | 1.745 | 4.26 | 3.56 |
| 272 | 135.500 | TP-272 | 100 | 100 | 100 | 100 | 93 | 87 | 43 | 29 | 14 | MI | 9.09 | 1.815 | 16.15 | 1.668 | 4.632 | 1.822 | 6.61 | 1.973 | 8.38 | 5.82 |
| 273 | 136.000 | TP-273 | 100 | 100 | 100 | 100 | 93 | 88 | 37 | 20 | 18 | CI | 9.09 | 1.825 | 16.35 | 1.570 | 3.848 | 1.831 | 5.86 | 1.971 | 7.06 | 5.39 |
| 274 | 136.500 | TP-274 | 100 | 100 | 100 | 96 | 84 | 77 | 38 | 20 | 18 | CI | 4.55 | 1.812 | 16.10 | 1.567 | 4.793 | 1.820 | 6.97 | 1.962 | 8.44 | 6.43 |
| 275 | 137.000 | TP-275 | 100 | 100 | 100 | 100 | 93 | 87 | 44 | 24 | 20 | CI | 13.04 | 1.804 | 17.25 | 1.521 | 4.160 | 1.809 | 5.88 | 1.975 | 7.42 | 5.53 |
| 276 | 137.500 | TP-276 | 100 | 100 | 98 | 95 | 87 | 82 | 43 | 23 | 20 | CI | 8.33 | 1.844 | 16.30 | 1.578 | 4.264 | 1.850 | 6.14 | 2.014 | 7.50 | 5.72 |
| 277 | 138.000 | TP-277 | 100 | 100 | 98 | 94 | 88 | 82 | 46 | 25 | 20 | CI | 4.35 | 1.804 | 17.20 | 1.533 | 4.205 | 1.809 | 6.12 | 1.975 | 7.39 | 5.71 |

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| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | IS. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--------------------------------------|-------|---------|---------|-------|------|-----------------|--------|--------|--------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 278 | 138.500 | TP-278 | 100 | 100 | 98 | 93 | 88 | 82 | 46 | 26 | 20 | CI | 2.50 | 1.829 | 15.85 | 1.642 | 4.693 | 1.836 | 6.44 | 1.984 | 7.94 | 5.88 |
| 279 | 139.000 | TP-279 | 100 | 100 | 100 | 100 | 91 | 40 | 25 | 19 | 6 | SM-SC | 0.00 | 1.948 | 11.45 | 1.757 | 20.870 | 1.953 | 31.62 | 2.149 | 37.63 | 28.14 |
| 280 | 139.500 | TP-280 | 100 | 100 | 100 | 100 | 90 | 40 | 25 | 20 | 5 | SM-SC | 2.27 | 1.955 | 11.35 | 1.673 | 20.874 | 1.962 | 31.63 | 2.135 | 37.64 | 29.18 |
| 281 | 140.000 | TP-281 | 100 | 100 | 100 | 98 | 92 | 87 | 35 | 24 | 12 | CI | 6.98 | 1.772 | 17.00 | 1.604 | 6.042 | 1.700 | 9.14 | 1.921 | 10.33 | 9.24 |
| 282 | 140.500 | TP-282 | 100 | 100 | 100 | 97 | 81 | 74 | 46 | 27 | 20 | CI | 15.91 | 1.846 | 14.80 | 1.652 | 5.373 | 1.849 | 8.14 | 2.031 | 9.69 | 7.32 |
| 283 | 141.000 | TP-283 | 100 | 100 | 90 | 80 | 64 | 58 | 47 | 29 | 18 | MI | 6.75 | 1.910 | 12.30 | 1.635 | 6.442 | 1.927 | 9.39 | 2.086 | 11.50 | 8.64 |
| 284 | 141.500 | TP-284 | 100 | 100 | 93 | 84 | 70 | 64 | 78 | 28 | 50 | CH | 4.55 | 1.880 | 12.35 | 1.694 | 3.085 | 1.887 | 4.98 | 2.044 | 5.97 | 4.36 |
| 285 | 142.000 | TP-285 | 100 | 100 | 100 | 98 | 84 | 71 | 34 | 20 | 14 | CL | 3.75 | 1.855 | 16.25 | 1.593 | 6.684 | 1.862 | 9.74 | 2.053 | 11.94 | 9.03 |
| 286 | 142.500 | TP-286 | 100 | 100 | 100 | 100 | 87 | 71 | 35 | 19 | 16 | CL | 2.08 | 1.860 | 16.10 | 1.683 | 5.836 | 1.864 | 9.43 | 2.016 | 11.29 | 8.24 |

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| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | IS. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--------------------------------------|-------|---------|---------|-------|------|-----------------|--------|--------|--------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 287 | 143.000 | TP-287 | 100 | 100 | 100 | 96 | 79 | 54 | 24 | 16 | 8 | CL | 2.50 | 1.930 | 12.20 | 1.652 | 8.714 | 1.937 | 13.20 | 2.108 | 15.71 | 12.18 |
| 288 | 143.500 | TP-288 | 100 | 100 | 100 | 97 | 79 | 56 | 24 | 16 | 7 | CL | 0.00 | 1.887 | 12.28 | 1.708 | 10.192 | 1.894 | 15.44 | 2.049 | 18.38 | 13.65 |
| 289 | 144.000 | TP-289 | 100 | 100 | 100 | 100 | 92 | 84 | 31 | 20 | 11 | CL | 4.35 | 1.835 | 16.10 | 1.653 | 6.097 | 1.842 | 9.41 | 2.063 | 11.24 | 8.32 |
| 290 | 144.500 | TP-290 | 100 | 100 | 100 | 100 | 89 | 80 | 32 | 21 | 11 | CL | 4.76 | 1.812 | 16.22 | 1.582 | 5.774 | 1.820 | 8.88 | 1.954 | 10.57 | 8.07 |
| 291 | 145.000 | TP-291 | 100 | 100 | 96 | 93 | 86 | 61 | 29 | 16 | 13 | CL | 2.63 | 2.015 | 11.20 | 1.733 | 7.626 | 1.954 | 11.55 | 2.156 | 13.75 | 11.56 |
| 292 | 145.500 | TP-292 | 100 | 100 | 100 | 96 | 82 | 74 | 34 | 20 | 14 | CL | 0.00 | 1.836 | 14.90 | 1.656 | 6.503 | 1.843 | 9.85 | 2.025 | 11.72 | 8.74 |
| 293 | 146.000 | TP-293 | 100 | 100 | 100 | 100 | 92 | 66 | 23 | 15 | 8 | CL | 1.50 | 1.868 | 13.15 | 1.608 | 9.376 | 1.875 | 13.38 | 2.025 | 16.96 | 12.43 |
| 294 | 146.500 | TP-294 | 100 | 100 | 100 | 100 | 93 | 62 | 23 | 17 | 5 | CL-ML | 0.00 | 1.873 | 13.80 | 1.592 | 12.376 | 1.878 | 17.00 | 2.051 | 20.30 | 16.01 |
| 295 | 147.000 | TP-295 | 100 | 100 | 100 | 100 | 96 | 41 | 32 | 22 | 10 | SC | 1.75 | 2.020 | 10.49 | 1.725 | 13.782 | 2.026 | 20.66 | 2.149 | 24.65 | 19.14 |

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| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | IS. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--------------------------------------|-------|---------|---------|-------|------|-----------------|--------|--------|--------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 296 | 147.500 | TP-296 | 100 | 100 | 100 | 100 | 95 | 44 | 31 | 20 | 11 | SC | 0.00 | 1.952 | 11.36 | 1.751 | 13.157 | 1.958 | 18.07 | 2.116 | 21.58 | 16.54 |
| 297 | 148.000 | TP-297 | 100 | 100 | 100 | 98 | 86 | 73 | 37 | 23 | 14 | CI | 0.00 | 1.860 | 15.35 | 1.665 | 6.490 | 1.865 | 9.43 | 2.046 | 11.42 | 8.54 |
| 298 | 148.500 | TP-298 | 100 | 100 | 100 | 100 | 93 | 82 | 34 | 22 | 12 | CL | 4.55 | 1.835 | 16.55 | 1.642 | 6.802 | 1.839 | 9.89 | 2.019 | 11.97 | 8.96 |
| 299 | 149.000 | TP-299 | 100 | 100 | 100 | 97 | 83 | 64 | 35 | 19 | 16 | CI | 2.33 | 1.871 | 11.25 | 1.633 | 6.538 | 1.878 | 9.95 | 2.081 | 11.99 | 9.07 |
| 300 | 149.500 | TP-300 | 100 | 100 | 100 | 97 | 85 | 69 | 35 | 21 | 14 | CL | 4.76 | 1.864 | 14.30 | 1.622 | 7.088 | 1.869 | 10.30 | 2.011 | 12.48 | 9.51 |
| 301 | 150.000 | TP-301 | 100 | 100 | 100 | 94 | 77 | 60 | 35 | 19 | 16 | CI | 11.90 | 1.816 | 14.50 | 1.625 | 8.236 | 1.753 | 12.08 | 1.998 | 14.50 | 12.16 |
| 302 | 150.500 | TP-302 | 100 | 100 | 100 | 93 | 70 | 50 | 31 | 21 | 10 | CL | 4.76 | 2.009 | 12.05 | 1.720 | 10.593 | 2.015 | 17.11 | 2.194 | 20.48 | 15.65 |
| 303 | 151.000 | TP-303 | 100 | 100 | 100 | 100 | 82 | 42 | 30 | 19 | 11 | SC | 0.00 | 1.956 | 11.95 | 1.762 | 12.065 | 1.963 | 19.49 | 2.126 | 23.33 | 17.06 |
| 304 | 151.500 | TP-304 | 100 | 100 | 100 | 100 | 79 | 32 | 28 | 20 | 7 | SC | 0.00 | 1.981 | 9.50 | 1.706 | 20.347 | 1.986 | 29.19 | 2.163 | 34.86 | 27.16 |

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| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | IS. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--------------------------------------|-------|---------|---------|-------|------|-----------------|--------|--------|--------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 305 | 152.000 | TP-305 | 100 | 100 | 96 | 91 | 71 | 41 | 27 | 22 | 5 | SM | 2.33 | 1.990 | 11.30 | 1.737 | 17.607 | 1.998 | 24.19 | 2.146 | 28.88 | 22.48 |
| 306 | 152.500 | TP-306 | 100 | 100 | 97 | 94 | 71 | 39 | 37 | 23 | 14 | SC | 4.88 | 1.943 | 10.32 | 1.678 | 10.778 | 1.948 | 16.63 | 2.108 | 19.88 | 15.26 |
| 307 | 153.000 | TP-307 | 100 | 100 | 100 | 97 | 87 | 68 | 27 | 15 | 12 | CL | 5.00 | 1.865 | 14.75 | 1.682 | 8.216 | 1.869 | 12.45 | 2.057 | 14.81 | 11.09 |
| 308 | 153.500 | TP-308 | 100 | 100 | 97 | 94 | 86 | 71 | 34 | 20 | 14 | CL | 0.00 | 1.848 | 15.30 | 1.639 | 6.673 | 1.853 | 9.96 | 2.005 | 11.84 | 9.03 |
| 309 | 154.000 | TP-309 | 100 | 100 | 100 | 100 | 90 | 77 | 34 | 21 | 14 | CL | 15.00 | 1.830 | 14.70 | 1.479 | 6.045 | 1.837 | 9.24 | 1.995 | 10.85 | 8.69 |
| 310 | 154.500 | TP-310 | 100 | 100 | 100 | 100 | 94 | 85 | 34 | 20 | 15 | CL | 9.30 | 1.787 | 15.78 | 1.519 | 6.152 | 1.795 | 8.98 | 1.955 | 10.73 | 8.35 |
| 311 | 155.000 | TP-311 | 100 | 100 | 100 | 100 | 92 | 75 | 34 | 20 | 15 | CL | 12.50 | 1.750 | 15.50 | 1.507 | 5.498 | 1.708 | 8.46 | 1.897 | 10.07 | 8.31 |
| 312 | 155.500 | TP-312 | 100 | 100 | 100 | 100 | 90 | 72 | 30 | 18 | 12 | CL | 0.00 | 1.856 | 14.80 | 1.650 | 7.819 | 1.861 | 11.22 | 2.043 | 13.40 | 10.24 |
| 313 | 156.000 | TP-313 | 100 | 100 | 100 | 100 | 92 | 83 | 28 | 18 | 10 | CL | 7.50 | 1.842 | 15.95 | 1.577 | 6.063 | 1.850 | 8.66 | 2.011 | 10.68 | 8.06 |

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| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | IS. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--|-------|---------|---------|-------|------|-----------------|--------|--------|--------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 314 | 156.500 | TP-314 | 100 | 100 | 100 | 100 | 94 | 86 | 29 | 17 | 12 | CL | 13.64 | 1.796 | 16.25 | 1.527 | 5.634 | 1.799 | 7.74 | 1.940 | 9.24 | 7.30 |
| 315 | 157.000 | TP-315 | 100 | 100 | 100 | 100 | 94 | 78 | 29 | 18 | 11 | CL | 0.00 | 1.836 | 16.20 | 1.561 | 5.963 | 1.842 | 8.74 | 2.010 | 10.48 | 8.14 |
| 316 | 157.500 | TP-316 | 100 | 100 | 100 | 100 | 87 | 68 | 29 | 18 | 11 | CL | 0.00 | 1.860 | 14.10 | 1.674 | 7.508 | 1.865 | 10.31 | 2.089 | 12.31 | 9.42 |
| 317 | 158.000 | TP-317 | 100 | 100 | 94 | 92 | 83 | 64 | 30 | 20 | 10 | CL | 10.00 | 1.874 | 13.20 | 1.593 | 7.816 | 1.882 | 11.67 | 2.050 | 13.87 | 4.64 |
| 318 | 158.500 | TP-318 | 100 | 100 | 100 | 98 | 90 | 64 | 30 | 20 | 10 | CL | 0.00 | 1.870 | 12.75 | 1.706 | 8.070 | 1.876 | 11.70 | 2.078 | 14.02 | 10.37 |
| 319 | 159.000 | TP-319 | 100 | 100 | 97 | 94 | 88 | 83 | 38 | 22 | 17 | CI | 2.27 | 1.827 | 16.60 | 1.580 | 5.029 | 1.836 | 7.31 | 1.979 | 8.85 | 6.74 |
| 320 | 159.500 | TP-320 | 100 | 100 | 100 | 97 | 92 | 86 | 37 | 20 | 17 | CI | 4.26 | 1.784 | 16.90 | 1.609 | 3.709 | 1.790 | 5.99 | 1.968 | 7.17 | 5.24 |
| 321 | 160.000 | TP-321 | 100 | 100 | 98 | 95 | 69 | 51 | 28 | 22 | 6 | CL-ML | 0.00 | 2.005 | 8.75 | 1.815 | 10.323 | 1.933 | 14.87 | 2.177 | 18.16 | 8.47 |
| 322 | 160.500 | TP-322 | Trial pit excavation was not possible due to congested area. | | | | | | | | | | | | | | | | | | | |

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| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | IS. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--|-------|---------|---------|-------|------|-----------------|--------|--------|--------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 323 | 161.000 | TP-323 | Trial pit excavation was not possible due to congested area. | | | | | | | | | | | | | | | | | | | |
| 324 | 161.500 | TP-324 | Trial pit excavation was not possible due to congested area. | | | | | | | | | | | | | | | | | | | |
| 325 | 162.000 | TP-325 | Trial pit excavation was not possible due to congested area. | | | | | | | | | | | | | | | | | | | |
| 326 | 162.500 | TP-326 | 100 | 100 | 97 | 94 | 74 | 56 | 26 | 17 | 8 | CL | 0.00 | 1.894 | 12.34 | 1.621 | 8.929 | 1.901 | 13.53 | 2.068 | 16.10 | 12.48 |
| 327 | 163.000 | TP-327 | 100 | 100 | 98 | 97 | 85 | 74 | 24 | 17 | 6 | CL-ML | 12.50 | 1.805 | 15.65 | 1.554 | 6.528 | 1.807 | 9.74 | 1.971 | 11.59 | 9.03 |
| 328 | 163.500 | TP-328 | 100 | 100 | 100 | 100 | 87 | 78 | 25 | 18 | 8 | CL | 2.50 | 1.842 | 15.80 | 1.569 | 6.686 | 1.847 | 10.11 | 1.995 | 12.19 | 9.37 |
| 329 | 164.000 | TP-329 | 100 | 100 | 97 | 91 | 72 | 59 | 26 | 17 | 9 | CL | 4.76 | 1.892 | 12.90 | 1.652 | 11.708 | 1.897 | 16.87 | 2.104 | 20.60 | 15.57 |
| 330 | 164.500 | TP-330 | 100 | 100 | 100 | 89 | 69 | 54 | 30 | 18 | 12 | CL | 4.76 | 1.945 | 14.10 | 1.764 | 12.009 | 1.949 | 17.61 | 2.239 | 21.15 | 15.72 |
| 331 | 165.000 | TP-331 | 100 | 96 | 92 | 88 | 70 | 55 | 22 | 17 | 5 | CL-ML | 0.00 | 1.960 | 10.25 | 1.774 | 17.666 | 1.903 | 25.46 | 2.129 | 31.08 | 25.32 |

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| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | IS. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--|-------|---------|---------|-------|------|-----------------|--------|--------|--------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 332 | 165.500 | TP-332 | 100 | 95 | 92 | 87 | 66 | 55 | 24 | 18 | 7 | CL-ML | 2.27 | 1.925 | 12.04 | 1.733 | 14.671 | 1.928 | 20.12 | 2.162 | 24.83 | 18.43 |
| 333 | 166.000 | TP-333 | 100 | 100 | 97 | 93 | 84 | 78 | 24 | 16 | 7 | CL | 11.11 | 1.848 | 14.90 | 1.571 | 9.423 | 1.852 | 13.03 | 2.024 | 15.67 | 12.27 |
| 334 | 166.500 | TP-334 | 100 | 100 | 98 | 93 | 85 | 80 | 31 | 17 | 14 | CL | 5.00 | 1.827 | 15.40 | 1.571 | 6.000 | 1.831 | 9.05 | 1.955 | 10.80 | 8.36 |
| 335 | 167.000 | TP-335 | 100 | 89 | 85 | 79 | 59 | 42 | 26 | 16 | 10 | SC | 5.00 | 1.962 | 10.55 | 1.689 | 13.773 | 1.969 | 20.05 | 2.143 | 24.22 | 18.57 |
| 336 | 167.500 | TP-336 | 100 | 100 | 94 | 88 | 67 | 59 | 31 | 17 | 13 | CL | 4.00 | 1.897 | 12.50 | 1.709 | 7.997 | 1.904 | 11.90 | 2.132 | 14.54 | 10.62 |
| 337 | 168.000 | TP-337 | Trial pit excavation was not possible due to congested area. | | | | | | | | | | | | | | | | | | | |
| 338 | 168.500 | TP-338 | 100 | 100 | 90 | 82 | 63 | 45 | 30 | 18 | 12 | SC | 0.00 | 1.916 | 11.00 | 1.726 | 12.018 | 1.924 | 17.49 | 2.083 | 20.90 | 15.68 |
| 339 | 169.000 | TP-339 | 100 | 100 | 91 | 85 | 67 | 47 | 22 | 15 | 6 | SM-SC | 0.00 | 1.916 | 11.28 | 1.715 | 17.506 | 1.918 | 26.65 | 2.108 | 32.11 | 23.97 |
| 340 | 169.500 | TP-340 | 100 | 93 | 86 | 79 | 65 | 44 | 27 | 14 | 13 | SC | 7.69 | 1.982 | 11.05 | 1.748 | 10.709 | 1.988 | 16.23 | 2.162 | 19.31 | 14.72 |

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| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | IS. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--------------------------------------|-------|---------|---------|-------|------|-----------------|--------|--------|--------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 341 | 170.000 | TP-341 | 100 | 100 | 100 | 100 | 88 | 66 | 21 | 16 | 6 | CL-ML | 4.17 | 2.018 | 8.60 | 1.756 | 10.756 | 1.951 | 16.27 | 2.177 | 20.00 | 16.37 |
| 342 | 170.500 | TP-342 | 100 | 100 | 100 | 97 | 81 | 54 | 22 | 16 | 6 | CL-ML | 5.41 | 1.923 | 12.60 | 1.656 | 10.935 | 1.928 | 16.64 | 2.100 | 20.06 | 15.33 |
| 343 | 171.000 | TP-343 | 100 | 100 | 100 | 100 | 98 | 90 | 34 | 24 | 10 | CL | 4.90 | 1.785 | 17.35 | 1.558 | 6.556 | 1.790 | 9.17 | 1.925 | 11.09 | 8.51 |
| 344 | 171.500 | TP-344 | 100 | 100 | 100 | 100 | 88 | 77 | 37 | 21 | 16 | CI | 4.55 | 1.824 | 15.75 | 1.654 | 5.955 | 1.829 | 8.67 | 2.099 | 10.36 | 7.74 |
| 345 | 172.000 | TP-345 | 100 | 100 | 93 | 90 | 78 | 60 | 22 | 15 | 7 | CL-ML | 0.00 | 1.873 | 12.80 | 1.618 | 9.343 | 1.880 | 13.07 | 2.032 | 15.81 | 12.17 |
| 346 | 172.500 | TP-346 | 100 | 100 | 92 | 85 | 72 | 52 | 28 | 19 | 9 | CL | 2.50 | 1.951 | 14.10 | 1.670 | 9.560 | 1.956 | 14.48 | 2.130 | 17.24 | 13.39 |
| 347 | 173.000 | TP-347 | 100 | 100 | 100 | 100 | 85 | 54 | 31 | 18 | 13 | CL | 3.15 | 1.940 | 12.50 | 1.693 | 5.723 | 1.944 | 8.83 | 2.092 | 10.55 | 8.06 |
| 348 | 173.500 | TP-348 | 100 | 100 | 100 | 100 | 91 | 62 | 30 | 20 | 10 | CL | 2.13 | 1.875 | 14.20 | 1.654 | 7.598 | 1.882 | 10.42 | 2.034 | 12.86 | 9.64 |
| 349 | 174.000 | TP-349 | 100 | 100 | 100 | 100 | 90 | 66 | 22 | 15 | 7 | CL-ML | 0.00 | 1.872 | 12.66 | 1.720 | 9.919 | 1.876 | 13.72 | 2.035 | 16.49 | 12.25 |

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| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | IS. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--|-------|---------|---------|-------|------|-----------------|--------|--------|--------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 350 | 174.500 | TP-350 | 100 | 100 | 100 | 100 | 91 | 69 | 22 | 15 | 7 | CL | 13.89 | 1.870 | 14.75 | 1.636 | 8.533 | 1.876 | 12.46 | 2.042 | 14.89 | 11.44 |
| 351 | 175.000 | TP-351 | 100 | 100 | 97 | 95 | 82 | 71 | 37 | 21 | 16 | CI | 4.76 | 1.850 | 13.50 | 1.656 | 5.892 | 1.792 | 8.54 | 2.035 | 10.19 | 8.56 |
| 352 | 175.500 | TP-352 | 100 | 100 | 96 | 93 | 73 | 57 | 35 | 20 | 15 | CI | 8.18 | 1.905 | 12.37 | 1.716 | 7.543 | 1.909 | 11.48 | 2.071 | 13.83 | 10.23 |
| 353 | 176.000 | TP-353 | 100 | 100 | 97 | 92 | 74 | 57 | 30 | 25 | 5 | ML | 6.45 | 1.884 | 12.38 | 1.601 | 11.214 | 1.884 | 16.16 | 2.061 | 19.73 | 15.17 |
| 354 | 176.500 | TP-354 | 100 | 100 | 100 | 96 | 78 | 58 | 31 | 19 | 12 | CL | 4.76 | 1.922 | 13.30 | 1.663 | 7.331 | 1.928 | 11.16 | 2.082 | 13.45 | 10.24 |
| 355 | 177.000 | TP-355 | 100 | 100 | 98 | 94 | 78 | 53 | 31 | 20 | 11 | CL | 4.35 | 1.942 | 12.90 | 1.662 | 8.392 | 1.950 | 12.04 | 2.121 | 14.38 | 11.20 |
| 356 | 177.500 | TP-356 | 100 | 100 | 100 | 99 | 83 | 53 | 31 | 19 | 13 | CL | 2.27 | 1.936 | 13.75 | 1.672 | 8.193 | 1.944 | 11.33 | 2.101 | 13.62 | 10.57 |
| 357 | 178.000 | TP-357 | Trial pit excavation was not possible due to congested area. | | | | | | | | | | | | | | | | | | | |
| 358 | 178.500 | TP-358 | Trial pit excavation was not possible due to congested area. | | | | | | | | | | | | | | | | | | | |

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| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | IS. CLASSIFICATION | Differential Free swell index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--|-------|---------|---------|-------|------|-----------------|--------|--------|--------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 359 | 179.000 | TP-359 | Trial pit excavation was not possible due to congested area. | | | | | | | | | | | | | | | | | | | |
| 360 | 179.500 | TP-360 | 100 | 100 | 100 | 100 | 89 | 65 | 34 | 24 | 10 | ML | 4.76 | 1.866 | 11.88 | 1.605 | 8.063 | 1.853 | 11.28 | 1.997 | 13.64 | 10.72 |
| 361 | 180.000 | TP-361 | 100 | 100 | 96 | 92 | 81 | 60 | 30 | 20 | 9 | CL | 4.76 | 1.835 | 13.50 | 1.661 | 10.109 | 1.780 | 14.57 | 1.993 | 18.12 | 14.55 |
| 362 | 180.500 | TP-362 | 100 | 96 | 91 | 84 | 76 | 68 | 34 | 22 | 12 | CL | 4.55 | 1.865 | 14.90 | 1.604 | 8.375 | 1.873 | 11.50 | 2.014 | 13.74 | 10.76 |
| 363 | 181.000 | TP-363 | 100 | 96 | 91 | 84 | 77 | 69 | 33 | 19 | 14 | CL | 8.33 | 1.856 | 15.10 | 1.594 | 6.342 | 1.859 | 10.25 | 2.004 | 12.26 | 9.38 |
| 364 | 181.500 | TP-364 | 100 | 100 | 100 | 100 | 85 | 52 | 31 | 22 | 9 | CL | 0.00 | 1.960 | 13.45 | 1.758 | 8.949 | 1.967 | 13.42 | 2.125 | 16.01 | 12.01 |
| 365 | 182.000 | TP-365 | 100 | 100 | 100 | 100 | 85 | 53 | 32 | 23 | 9 | CL | 2.75 | 1.937 | 13.15 | 1.757 | 9.544 | 1.946 | 13.89 | 2.229 | 16.60 | 12.35 |
| 366 | 182.500 | TP-366 | 100 | 100 | 100 | 100 | 94 | 78 | 42 | 26 | 16 | MI | 4.26 | 1.818 | 15.25 | 1.659 | 5.625 | 1.825 | 8.68 | 2.020 | 10.37 | 7.55 |
| 367 | 183.000 | TP-367 | 100 | 100 | 97 | 94 | 86 | 72 | 43 | 27 | 17 | MI | 0.00 | 1.837 | 14.80 | 1.582 | 5.973 | 1.844 | 8.26 | 1.991 | 9.93 | 7.72 |

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| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | IS. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--|-------|---------|---------|-------|------|-----------------|--------|--------|--------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 368 | 183.500 | TP-368 | Trial pit excavation was not possible due to congested area. | | | | | | | | | | | | | | | | | | | |
| 369 | 184.000 | TP-369 | 100 | 100 | 100 | 100 | 96 | 86 | 33 | 16 | 17 | CL | 4.76 | 1.791 | 15.80 | 1.542 | 4.835 | 1.796 | 7.03 | 1.956 | 8.51 | 6.52 |
| 370 | 184.500 | TP-370 | 100 | 100 | 100 | 100 | 95 | 85 | 28 | 17 | 11 | CL | 7.50 | 1.818 | 16.25 | 1.659 | 6.760 | 1.824 | 9.29 | 2.020 | 11.04 | 8.36 |
| 371 | 185.000 | TP-371 | 100 | 100 | 100 | 100 | 92 | 80 | 37 | 20 | 17 | CI | 11.90 | 1.854 | 13.75 | 1.659 | 4.908 | 1.797 | 7.20 | 2.039 | 8.64 | 7.20 |
| 372 | 185.500 | TP-372 | 100 | 100 | 100 | 98 | 87 | 69 | 29 | 16 | 13 | CL | 4.88 | 1.866 | 14.40 | 1.715 | 7.429 | 1.869 | 11.46 | 2.028 | 13.70 | 9.92 |
| 373 | 186.000 | TP-373 | 100 | 100 | 100 | 98 | 86 | 67 | 25 | 18 | 7 | CL | 5.50 | 1.870 | 13.60 | 1.657 | 7.363 | 1.878 | 11.26 | 2.085 | 13.22 | 10.13 |
| 374 | 186.500 | TP-374 | 100 | 100 | 100 | 98 | 89 | 80 | 24 | 15 | 8 | CL | 4.76 | 1.835 | 16.25 | 1.585 | 6.275 | 1.840 | 9.13 | 2.053 | 10.92 | 8.46 |
| 375 | 187.000 | TP-375 | Trial pit excavation was not possible due to Major Bridge. | | | | | | | | | | | | | | | | | | | |
| 376 | 187.500 | TP-376 | Trial pit excavation was not possible due to Major Bridge. | | | | | | | | | | | | | | | | | | | |

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| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | IS. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--|-------|---------|---------|-------|------|-----------------|--------|--------|--------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 377 | 188.000 | TP-377 | 100 | 100 | 100 | 100 | 100 | 92 | 30 | 18 | 12 | CL | 12.50 | 1.810 | 15.36 | 1.620 | 4.851 | 1.814 | 7.05 | 1.991 | 8.54 | 6.39 |
| 378 | 188.500 | TP-378 | 100 | 100 | 98 | 90 | 77 | 60 | 35 | 19 | 15 | CL | 0.00 | 1.880 | 12.60 | 1.598 | 6.479 | 1.885 | 9.43 | 2.030 | 11.27 | 8.80 |
| 379 | 189.000 | TP-379 | 100 | 100 | 97 | 89 | 73 | 60 | 32 | 18 | 14 | CL | 0.00 | 1.884 | 13.10 | 1.620 | 7.076 | 1.891 | 10.15 | 2.035 | 12.13 | 9.43 |
| 380 | 189.500 | TP-380 | 100 | 100 | 100 | 100 | 96 | 90 | 36 | 19 | 17 | CI | 4.35 | 1.771 | 16.35 | 1.594 | 4.616 | 1.775 | 6.77 | 1.989 | 8.13 | 6.09 |
| 381 | 190.000 | TP-381 | 100 | 100 | 100 | 100 | 97 | 92 | 33 | 20 | 13 | CL | 2.27 | 1.841 | 13.25 | 1.581 | 6.108 | 1.779 | 8.73 | 2.038 | 10.76 | 8.78 |
| 382 | 190.500 | TP-382 | 100 | 100 | 94 | 89 | 84 | 81 | 36 | 17 | 19 | CI | 20.00 | 1.808 | 16.05 | 1.564 | 4.563 | 1.815 | 6.66 | 1.958 | 7.96 | 6.15 |
| 383 | 191.000 | TP-383 | 100 | 100 | 97 | 92 | 88 | 85 | 34 | 19 | 16 | CL | 14.29 | 1.832 | 16.05 | 1.610 | 5.500 | 1.837 | 7.61 | 1.995 | 9.14 | 7.05 |
| 384 | 191.500 | TP-384 | Trial pit excavation was not possible due to congested area. | | | | | | | | | | | | | | | | | | | |
| 385 | 192.000 | TP-385 | Trial pit excavation was not possible due to congested area. | | | | | | | | | | | | | | | | | | | |

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| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | IS. CLASSIFICATION | Differential Free swell index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--|-------|---------|---------|-------|------|-----------------|--------|--------|--------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 386 | 192.500 | TP-386 | Trial pit excavation was not possible due to congested area. | | | | | | | | | | | | | | | | | | | |
| 387 | 193.000 | TP-387 | 100 | 100 | 100 | 98 | 73 | 54 | 30 | 16 | 14 | CL | 9.09 | 1.915 | 14.25 | 1.689 | 8.065 | 1.923 | 13.26 | 2.089 | 15.92 | 11.81 |
| 388 | 193.500 | TP-388 | 100 | 100 | 100 | 100 | 76 | 59 | 29 | 14 | 15 | CL | 13.04 | 1.905 | 13.25 | 1.648 | 7.051 | 1.909 | 10.73 | 2.063 | 12.93 | 9.87 |
| 389 | 194.000 | TP-389 | 100 | 100 | 100 | 100 | 100 | 94 | 34 | 18 | 16 | CL | 9.09 | 1.770 | 17.50 | 1.561 | 5.354 | 1.775 | 7.86 | 1.931 | 9.46 | 7.18 |
| 390 | 194.500 | TP-390 | 100 | 100 | 100 | 100 | 98 | 93 | 34 | 18 | 16 | CL | 2.33 | 1.782 | 17.38 | 1.584 | 5.465 | 1.788 | 8.27 | 1.962 | 10.16 | 7.45 |
| 391 | 195.000 | TP-391 | 100 | 100 | 100 | 98 | 93 | 85 | 41 | 20 | 22 | CI | 4.76 | 1.882 | 14.00 | 1.619 | 4.124 | 1.827 | 6.25 | 2.014 | 7.44 | 6.23 |
| 392 | 195.500 | TP-392 | Trial pit excavation was not possible due to congested area. | | | | | | | | | | | | | | | | | | | |
| 393 | 196.000 | TP-393 | 100 | 100 | 100 | 100 | 75 | 54 | 28 | 17 | 11 | CL | 8.33 | 1.952 | 13.05 | 1.735 | 9.112 | 1.959 | 12.60 | 2.149 | 15.15 | 11.58 |
| 394 | 196.500 | TP-394 | 100 | 100 | 100 | 100 | 77 | 58 | 23 | 16 | 7 | CL | 2.27 | 1.918 | 12.60 | 1.750 | 10.774 | 1.925 | 16.42 | 2.131 | 19.74 | 14.34 |

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| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | IS. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--------------------------------------|-------|---------|---------|-------|------|-----------------|--------|--------|--------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 395 | 197.000 | TP-395 | 100 | 100 | 100 | 100 | 96 | 91 | 29 | 19 | 10 | CL | 2.33 | 1.790 | 16.45 | 1.522 | 6.216 | 1.796 | 8.60 | 1.960 | 10.33 | 8.08 |
| 396 | 197.500 | TP-396 | 100 | 100 | 100 | 100 | 100 | 94 | 29 | 18 | 11 | CL | 0.00 | 1.766 | 18.15 | 1.581 | 5.481 | 1.772 | 7.86 | 1.943 | 9.39 | 7.13 |
| 397 | 198.000 | TP-397 | 100 | 100 | 100 | 100 | 97 | 90 | 41 | 22 | 18 | CI | 4.55 | 1.810 | 16.31 | 1.557 | 4.447 | 1.815 | 6.75 | 1.937 | 8.03 | 6.22 |
| 398 | 198.500 | TP-398 | 100 | 100 | 100 | 100 | 96 | 89 | 41 | 22 | 19 | CI | 4.55 | 1.815 | 17.05 | 1.614 | 5.190 | 1.819 | 7.12 | 1.998 | 8.78 | 6.57 |
| 399 | 199.000 | TP-399 | 100 | 100 | 100 | 100 | 95 | 69 | 26 | 20 | 7 | CL-ML | 10.00 | 1.868 | 15.30 | 1.575 | 7.209 | 1.873 | 10.91 | 2.045 | 13.47 | 10.15 |
| 400 | 199.500 | TP-400 | 100 | 100 | 100 | 100 | 94 | 68 | 25 | 19 | 6 | CL-ML | 13.89 | 1.861 | 15.05 | 1.625 | 7.762 | 1.867 | 12.54 | 2.069 | 15.01 | 11.32 |
| 401 | 200.000 | TP-401 | 100 | 100 | 100 | 99 | 94 | 79 | 30 | 17 | 13 | CL | 5.00 | 1.902 | 11.60 | 1.636 | 6.203 | 1.844 | 9.41 | 2.054 | 11.20 | 9.42 |
| 402 | 200.500 | TP-402 | 100 | 100 | 100 | 99 | 96 | 86 | 30 | 23 | 6 | ML | 9.52 | 1.783 | 15.91 | 1.573 | 7.775 | 1.788 | 11.43 | 1.935 | 13.71 | 10.44 |
| 403 | 201.000 | TP-403 | 100 | 100 | 100 | 100 | 95 | 76 | 27 | 15 | 12 | CL | 2.56 | 1.829 | 14.90 | 1.555 | 7.063 | 1.837 | 10.75 | 1.975 | 12.96 | 9.93 |

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| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | IS. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|---|-------|---------|---------|-------|------|-----------------|--------|--------|--------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 404 | 201.500 | TP-404 | 100 | 100 | 100 | 100 | 93 | 74 | 27 | 14 | 13 | CL | 5.26 | 1.841 | 16.05 | 1.583 | 6.703 | 1.845 | 10.34 | 1.988 | 12.36 | 9.52 |
| 405 | 202.000 | TP-405 | 100 | 100 | 100 | 100 | 96 | 82 | 30 | 15 | 15 | CL | 7.50 | 1.822 | 17.14 | 1.616 | 5.245 | 1.827 | 8.47 | 1.977 | 10.14 | 7.56 |
| 406 | 202.500 | TP-406 | 100 | 100 | 100 | 100 | 87 | 68 | 31 | 19 | 11 | CL | 10.00 | 1.858 | 13.90 | 1.605 | 7.548 | 1.863 | 11.32 | 2.016 | 13.50 | 10.43 |
| 407 | 203.000 | TP-407 | Trial pit excavation was not possible due to Bridge Location. | | | | | | | | | | | | | | | | | | | |
| 408 | 203.500 | TP-408 | Trial pit excavation was not possible due to congested area. | | | | | | | | | | | | | | | | | | | |
| 409 | 204.000 | TP-409 | 100 | 100 | 100 | 96 | 71 | 46 | 29 | 19 | 10 | SC | 5.50 | 1.930 | 12.25 | 1.702 | 13.428 | 1.936 | 19.27 | 2.102 | 23.00 | 17.67 |
| 410 | 204.500 | TP-410 | 100 | 100 | 100 | 97 | 72 | 46 | 31 | 20 | 11 | SC | 4.00 | 1.931 | 11.15 | 1.717 | 11.755 | 1.938 | 17.97 | 2.126 | 21.10 | 16.15 |
| 411 | 205.000 | TP-411 | 100 | 100 | 98 | 95 | 77 | 60 | 33 | 21 | 12 | CL | 9.09 | 1.798 | 15.25 | 1.627 | 6.250 | 1.759 | 9.46 | 1.949 | 11.39 | 9.09 |
| 412 | 205.500 | TP-412 | 100 | 100 | 98 | 95 | 72 | 54 | 32 | 18 | 14 | CL | 4.35 | 1.936 | 12.30 | 1.673 | 9.045 | 1.942 | 12.42 | 2.166 | 14.77 | 11.62 |

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| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | IS. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--|-------|---------|---------|-------|------|-----------------|--------|--------|--------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 413 | 206.000 | TP-413 | 100 | 95 | 91 | 88 | 79 | 50 | 33 | 21 | 12 | CL | 10.00 | 1.985 | 10.62 | 1.751 | 9.356 | 1.991 | 13.64 | 2.166 | 16.71 | 12.47 |
| 414 | 206.500 | TP-414 | 100 | 96 | 92 | 89 | 78 | 44 | 34 | 22 | 11 | SC | 9.09 | 1.948 | 12.15 | 1.701 | 11.277 | 1.954 | 16.39 | 2.166 | 19.85 | 15.09 |
| 415 | 207.000 | TP-415 | 100 | 100 | 94 | 91 | 62 | 42 | 37 | 20 | 17 | SC | 9.09 | 1.975 | 10.61 | 1.699 | 11.517 | 1.983 | 16.52 | 2.133 | 19.75 | 15.34 |
| 416 | 207.500 | TP-416 | 100 | 100 | 98 | 95 | 80 | 56 | 37 | 21 | 16 | CI | 6.52 | 1.880 | 12.29 | 1.658 | 7.649 | 1.886 | 11.13 | 2.040 | 13.31 | 10.18 |
| 417 | 208.000 | TP-417 | 100 | 100 | 97 | 94 | 88 | 73 | 36 | 24 | 12 | MI | 6.52 | 1.865 | 16.15 | 1.688 | 9.074 | 1.873 | 14.66 | 2.022 | 17.55 | 12.73 |
| 418 | 208.500 | TP-418 | 100 | 100 | 100 | 94 | 78 | 53 | 32 | 17 | 15 | CL | 0.00 | 1.928 | 13.50 | 1.729 | 9.586 | 1.935 | 13.26 | 2.090 | 15.94 | 12.10 |
| 419 | 209.000 | TP-419 | Trial pit excavation was not possible due to congested area. | | | | | | | | | | | | | | | | | | | |
| 420 | 209.500 | TP-420 | 100 | 100 | 95 | 90 | 71 | 44 | 37 | 17 | 20 | SC | 6.98 | 1.943 | 10.76 | 1.642 | 10.829 | 1.949 | 14.98 | 2.116 | 18.00 | 14.11 |
| 421 | 210.000 | TP-421 | 100 | 100 | 97 | 92 | 83 | 72 | 31 | 19 | 12 | CL | 4.55 | 1.845 | 16.50 | 1.627 | 6.716 | 1.852 | 10.24 | 2.013 | 12.31 | 9.26 |

| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | IS. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--|-------|---------|---------|-------|------|-----------------|--------|--------|--------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 422 | 210.500 | TP-422 | 100 | 94 | 91 | 89 | 78 | 69 | 32 | 17 | 15 | CL | 2.27 | 1.870 | 14.55 | 1.662 | 6.372 | 1.876 | 9.64 | 2.059 | 11.85 | 8.69 |
| 423 | 211.000 | TP-423 | 100 | 100 | 98 | 94 | 51 | 26 | 28 | 18 | 10 | SC | 6.82 | 1.977 | 11.00 | 1.769 | 17.160 | 1.899 | 25.16 | 2.175 | 33.73 | 25.73 |
| 424 | 211.500 | TP-424 | 100 | 100 | 93 | 87 | 56 | 30 | 32 | 24 | 8 | SM | 4.55 | 2.015 | 9.27 | 1.735 | 25.266 | 2.018 | 38.22 | 2.200 | 46.06 | 35.32 |
| 425 | 212.000 | TP-425 | 100 | 95 | 89 | 84 | 69 | 40 | 32 | 24 | 8 | SM | 2.17 | 1.940 | 10.42 | 1.770 | 21.964 | 1.946 | 31.97 | 2.155 | 38.62 | 28.32 |
| 426 | 212.500 | TP-426 | 100 | 100 | 97 | 91 | 75 | 45 | 37 | 27 | 10 | SM | 2.27 | 1.927 | 11.37 | 1.634 | 19.302 | 1.936 | 26.70 | 2.116 | 32.09 | 25.06 |
| 427 | 213.000 | TP-427 | 100 | 100 | 100 | 93 | 83 | 46 | 31 | 24 | 7 | SM | 2.75 | 1.844 | 13.00 | 1.567 | 19.706 | 1.782 | 27.07 | 2.017 | 32.17 | 27.22 |
| 428 | 213.500 | TP-428 | 100 | 100 | 100 | 94 | 86 | 56 | 42 | 22 | 19 | CI | 9.09 | 1.957 | 14.50 | 1.685 | 7.308 | 1.940 | 11.24 | 2.121 | 13.38 | 10.60 |
| 429 | 214.000 | TP-429 | Trial pit excavation was not possible due to congested area. | | | | | | | | | | | | | | | | | | | |
| 430 | 214.500 | TP-430 | Trial pit excavation was not possible due to congested area. | | | | | | | | | | | | | | | | | | | |

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| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | IS. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--|-------|---------|---------|-------|------|-----------------|--------|--------|--------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 431 | 215.000 | TP-431 | Trial pit excavation was not possible due to congested area. | | | | | | | | | | | | | | | | | | | |
| 432 | 215.575 | TP-432 | Trial pit excavation was not possible due to Junction area. | | | | | | | | | | | | | | | | | | | |

Details of laboratory test results of subgrade soil collected from trial pits are presented in Annexure-II

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Table -3(b) represents minimum, maximum and average value of CBR,MDD,OMC and Atterberg limits of subgrade soil sample.

Table-3(b): Summary of CBR,MDD,OMC & Atterberg Limit

| Type of Test | Unit | Min | Max | Avg. |
|--|-------|--------|-------|-------|
| California Bearing Ratio (CBR at 97%MDD) | % | 2.48 | 42.53 | 12.25 |
| Maximum Dry Density | gm/cc | 1.46 | 2.16 | 1.88 |
| Optimum Moisture Content | % | 8.25 | 22.00 | 13.70 |
| Liquid Limit | % | 21.24 | 78.41 | 35.85 |
| Plastic Limit | % | 13.98 | 80.31 | 22.91 |
| Plasticity Index | % | -33.85 | 50.05 | 12.94 |

Laboratory CBR tests were carried out on samples collected from trial pits excavated along the road alignment. The maximum dry density (MDD) and optimum moisture content vary from 1.46 gm/cc to 2.16 gm/cc and 8.25% to 22%. Chainage wise variation of CBR value from 2.48% to 42.53% is shown below.

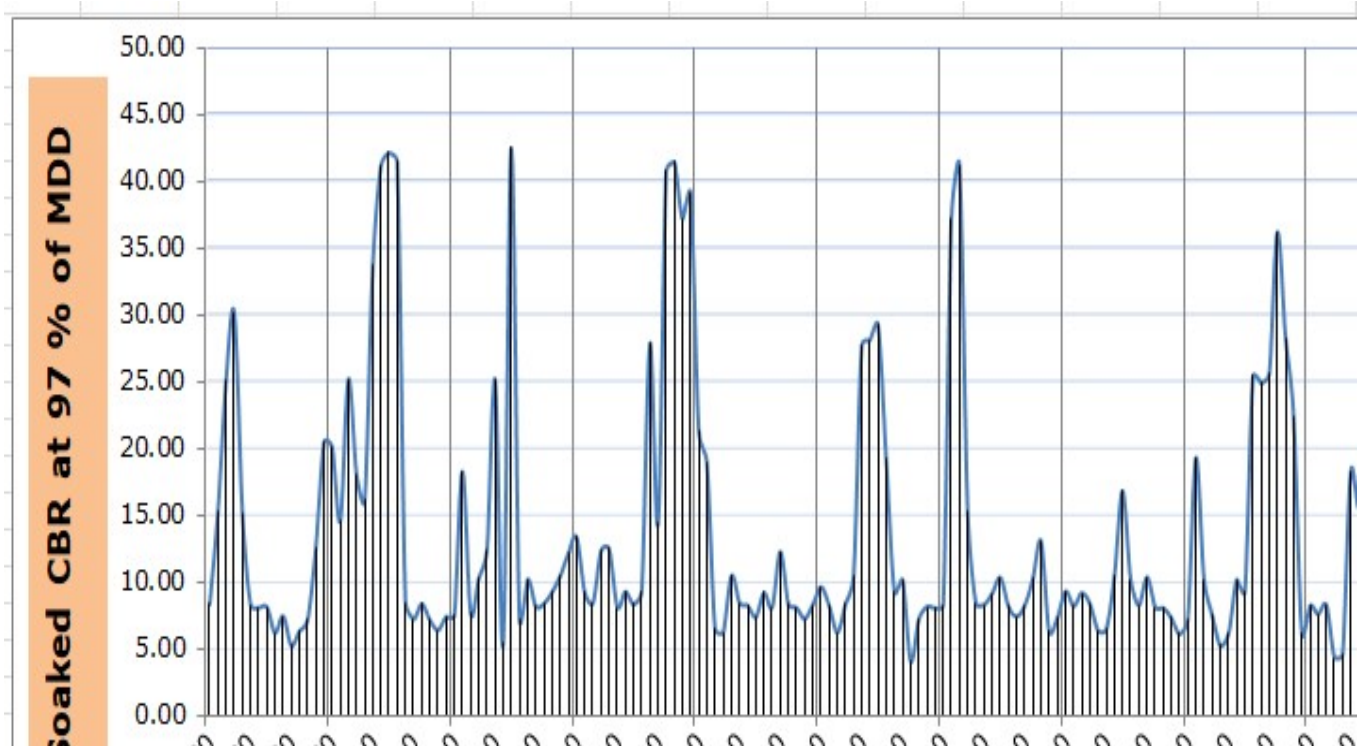


Fig-1: Variation of Subgrade CBR (Ch.000km to Ch.100.000km)

1.4 CONSTRUCTION MATERIALS INVESTIGATION

The objective of the materials survey was to locate potential sources of sand, gravel, rock and other major construction materials within the project vicinity, and to examine the engineering properties of the materials relevant to the project as per MoRT&H specifications.

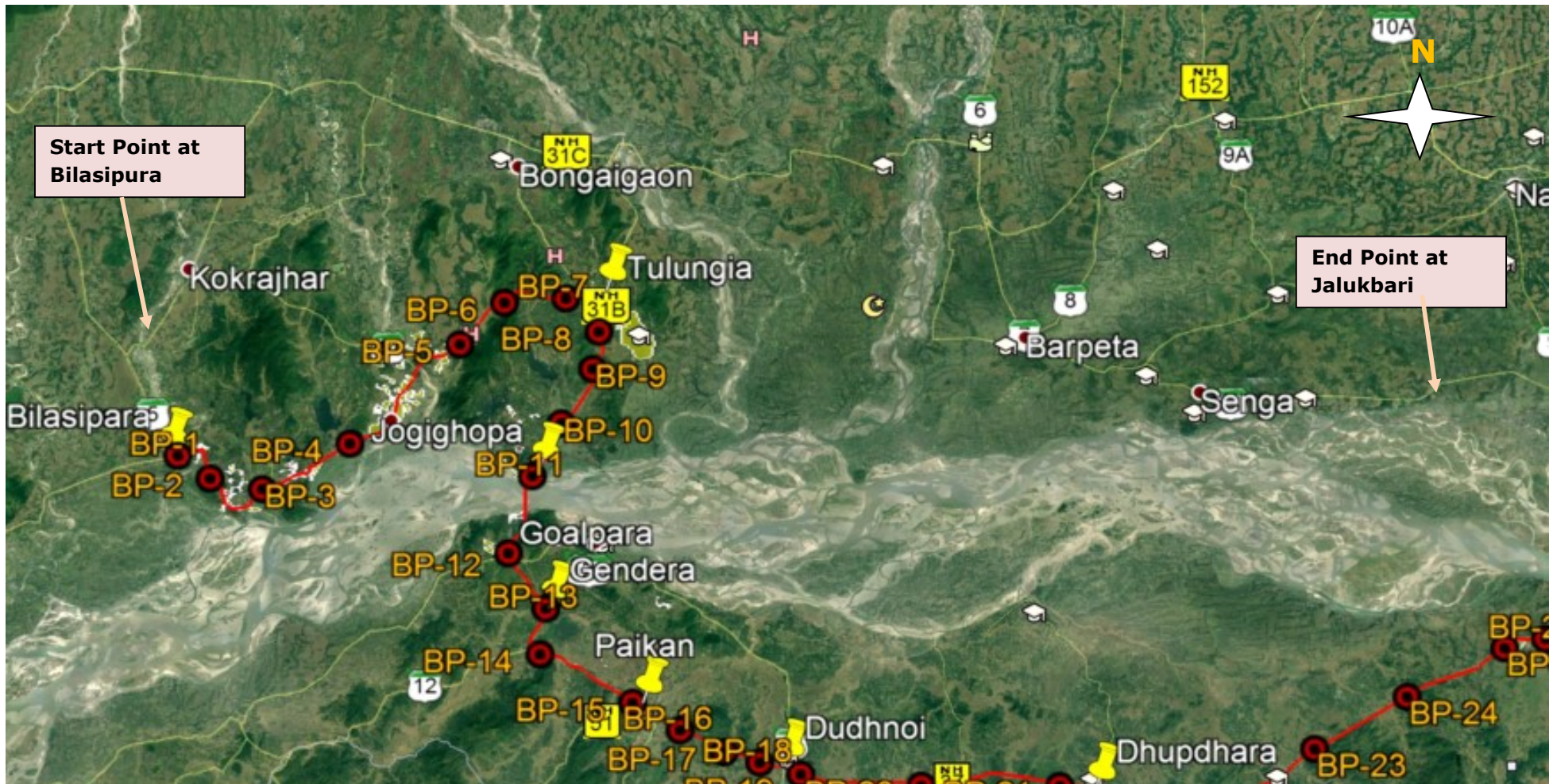
The materials investigation had the following components:

- Identifying sources for other construction materials such as cement, bitumen and steel.
- Investigation for the quantity availability of material for construction.
- Testing of material as per requirement.

1.4.1 Inspection and Exploration of Soil in Borrow Area

The objective of borrow area investigation was to identify suitable borrow sources (in terms of quantity and quality) in the near vicinity of the project road for embankment fill & sub-grade. Enquiries were made with the local inhabitants and material supply contractors who were knowledgeable about the sources due to their involvement in one way or other during construction activities in the project vicinity. A total of Twenty Eight (28) borrow area sources have been visited, inspected and explored. A location plan showing investigated borrow source with respect to project road is shown in Fig- 3.

Fig.- 3: Location of Borrow Area



A summary description of the all borrow areas indicating their location with respect to project road chainage, Photographs, estimated available quantity of soil and ownership details are prepared and the same are presented in Table -4.

Table-4: Details of Borrow Area Location


| Sl. No | Borrow Area No | Chainage (Km) | Name of the Village | Details of Owner | Co-Ordinate | Area | No. of Sample Collected | Photographs |
|--------|----------------|---------------|-----------------------|-------------------|-------------------------|--------|-------------------------|--|
| 1 | BP-01 | 1+150 | Bilasipara Ward no.09 | Bivas Chakraborty | E- 225857 N- 2906272 | Plenty | 2 |  |

Table-4: Details of Borrow Area Location



| Sl. No | Borrow Area No | Chainage (Km) | Name of the Village | Details of Owner | Co-Ordinate | Area | No. of Sample Collected | Photographs |
|--------|----------------|---------------|---------------------|------------------|------------------------|--------|-------------------------|--|
| 2 | BP-02 | 6+100 | Sonamukhi | Mijar Ali | E- 228646 N-2904082 | Plenty | 1 |  |
| 3 | BP-03 | 13+650 | Kumligaon | Nabin Nath | E- 233202 N-2902925 | Plenty | 3 |  |

Table-4: Details of Borrow Area Location



| Sl. No | Borrow Area No | Chainage (Km) | Name of the Village | Details of Owner | Co-Ordinate | Area | No. of Sample Collected | Photographs |
|--------|----------------|---------------|---------------------|------------------|------------------------|--------|-------------------------|--|
| 4 | BP-04 | 22+600 | Pokhipara, Chapar | Prabin Ray | E- 241089 N-2906743 | Plenty | 2 |  |
| 5 | BP-05 | 37+300 | Salbari | Himu Chakraborty | E- 251149 N- 291535 | Plenty | 2 |  |

Table-4: Details of Borrow Area Location





| Sl. No | Borrow Area No | Chainage (Km) | Name of the Village | Details of Owner | Co-Ordinate | Area | No. of Sample Collected | Photographs |
|--------|----------------|---------------|---------------------|------------------|-------------------------|--------|-------------------------|--|
| 6 | BP-06 | 43+100 | Khagarpur | Bhaskar Saikai - | E: 255236 N: 2918978 | Plenty | 1 |  |
| 7 | BP-07 | 48+850 | North Salmara | Kailash Roy | E-260657 N- 2919147 | Plenty | 2 |  |

Table-4: Details of Borrow Area Location

| Sl. No | Borrow Area No | Chainage (Km) | Name of the Village | Details of Owner | Co-Ordinate | Area | No. of Sample Collected | Photographs |
|--------|----------------|---------------|---------------------|--------------------------------|------------------------|--------|-------------------------|--|
| 8 | BP-08 | 55+300 | Dhouhati | Bharat ch. Ray , | E- 263452 N-2916005 | Plenty | 2 |  |
| 9 | BP-09 | 58+700 | Singimari | Govt. land (Sub health centre) | E- 262774 N-2912641 | Plenty | 2 |  |

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Table-4: Details of Borrow Area Location



| Sl. No | Borrow Area No | Chainage (Km) | Name of the Village | Details of Owner | Co-Ordinate | Area | No. of Sample Collected | Photographs |
|--------|----------------|---------------|---------------------|------------------|-------------------------|--------|-------------------------|--|
| 10 | BP-10 | 64+200 | Chalantapara | Govt. land | E-259807 N-2907824 | Plenty | 2 |  |
| 11 | BP-11 | 69+600 | Joghighopa | NFR land | E- 257055 N- 2903135 | Plenty | 2 |  |

Table-4: Details of Borrow Area Location





| Sl. No | Borrow Area No | Chainage (Km) | Name of the Village | Details of Owner | Co-Ordinate | Area | No. of Sample Collected | Photographs |
|--------|----------------|---------------|---------------------|------------------|-------------------------|---------------|-------------------------|--|
| 12 | BP-12 | 76+900 | Makri | NFR land | E- 254689 N- 2896223 | Plenty | 2 |  |
| 13 | BP-13 | 80+900 | Solmari | Putu Mahajan | E- 257768 N- 2891077 | (150m x150m) | 2 |  |

Table-4: Details of Borrow Area Location

| Sl. No | Borrow Area No | Chainage (Km) | Name of the Village | Details of Owner | Co-Ordinate | Area | No. of Sample Collected | Photographs |
|--------|----------------|---------------|---------------------|------------------|-------------------------|---------------|-------------------------|--|
| 14 | BP-14 | 85+000 | Solmari | Govt. land | E- 257119 N- 2886963 | Plenty | 2 |  |
| 15 | BP-15 | 94+300 | Krishnai | Ismile Ali | E- 265063 N- 2882229 | (150m x200m) | 2 |  |

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Table-4: Details of Borrow Area Location



| Sl. No | Borrow Area No | Chainage (Km) | Name of the Village | Details of Owner | Co-Ordinate | Area | No. of Sample Collected | Photographs |
|--------|----------------|---------------|---------------------|------------------|-------------------------|--------|-------------------------|--|
| 16 | BP-16 | 104+200 | Bekipur | Heemen Rabha | E- 269147 N- 2879568 | Plenty | 2 |  |
| 17 | BP-17 | 108+600 | Dabli-Krishnai | Deba Rang Rabha | E:-272946 N- 2877430 | Plenty | 2 |  |

Table-4: Details of Borrow Area Location



| Sl. No | Borrow Area No | Chainage (Km) | Name of the Village | Details of Owner | Co-Ordinate | Area | No. of Sample Collected | Photographs |
|--------|----------------|---------------|--------------------------------|------------------|-------------------------|--------|-------------------------|--|
| 18 | BP-18 | 111+800 | Gram pt-II Opp. Petrol Pump | Lakheraj Mandal | E:-276030 N:-2876354 | Plenty | 2 |  |
| 19 | BP-19 | 115+600 | Dudhnoi, Near Garlic Dhaba | Hemanta Bara | E-279606 N-2875153 | Plenty | 2 |  |

Table-4: Details of Borrow Area Location



| Sl. No | Borrow Area No | Chainage (Km) | Name of the Village | Details of Owner | Co-Ordinate | Area | No. of Sample Collected | Photographs |
|--------|----------------|---------------|-------------------------|------------------|------------------------|--------|-------------------------|--|
| 20 | BP-20 | 126+350 | Patiar Para | Harkanta Das | E-290160 N- 2873700 | Plenty | 2 |  |
| 21 | BP-21 | 138+750 | Kurhiamary, Kotha Kuthi | Dulal Khakolari | E-302352 N-2873164 | Plenty | 2 |  |

Table-4: Details of Borrow Area Location



| Sl. No | Borrow Area No | Chainage (Km) | Name of the Village | Details of Owner | Co-Ordinate | Area | No. of Sample Collected | Photographs |
|--------|----------------|---------------|---------------------|------------------|------------------------|--------|-------------------------|--|
| 22 | BP-22 | 146+150 | Bondapara | Kartik Das | E-309545 N-2871444 | Plenty | 2 |  |
| 23 | BP-23 | 163+270 | Akshia fadli para | Md.Manglu | E-324912 N- 2875593 | Plenty | 2 |  |

Table-4: Details of Borrow Area Location



| Sl. No | Borrow Area No | Chainage (Km) | Name of the Village | Details of Owner | Co-Ordinate | Area | No. of Sample Collected | Photographs |
|--------|----------------|---------------|---------------------|------------------|------------------------|--------|-------------------------|--|
| 24 | BP-24 | 172+700 | Akshia fadli para | Md.Alam | E-333264 N-2879997 | Plenty | 2 |  |
| 25 | BP-25 | 182+500 | Kharbanga | Suraj Das | E- 342065 N-2884049 | Plenty | 2 |  |

Table-4: Details of Borrow Area Location




| Sl. No | Borrow Area No | Chainage (Km) | Name of the Village | Details of Owner | Co-Ordinate | Area | No. of Sample Collected | Photographs |
|--------|----------------|---------------|-----------------------|------------------|------------------------|--------|-------------------------|---|
| 26 | BP-26 | 186+400 | Satpakhali, Tezpur GP | Bhaskar Gogoi | E-345722 N- 2884732 | Plenty | 2 |  |

Table-4: Details of Borrow Area Location

| Sl. No | Borrow Area No | Chainage (Km) | Name of the Village | Details of Owner | Co-Ordinate | Area | No. of Sample Collected | Photographs |
|--------|----------------|---------------|---------------------|------------------|------------------------|--------|-------------------------|--|
| 27 | BP-27 | 197+600 | Borkuchigaon | Khogen Sharma | E- 355649 N-2886623 | Plenty | 2 |  |
| 28 | BP-28 | 200+850 | Raibari | Bhupen Sharma | E- 358359 N-2886126 | Plenty | 2 |  |

1.4.2 Test Result of Borrow Area Soil

Borrow area soil samples are collected and tested in laboratory to determine the soaked CBR at 97% of MDD. The important characteristics of borrow area soils are given below in Table- 5

Table-5: Summary of Test Result of Borrow Area Soil

| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | I.S. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------------|--------------------------------------|-------|---------|---------|-------|------|-----------------|--------|--------|---------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 m | 75 m | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 1 | 1.150 | BP-01 (Sample 1) | 100 | 100 | 100 | 100 | 96 | 84 | 35 | 24 | 11 | MI | 0.00 | 1.720 | 12.75 | 1.539 | 7.517 | 1.659 | 11.02 | 1.892 | 13.24 | 11.11 |
| 2 | 1.150 | BP-01 (Sample 2) | 100 | 100 | 100 | 100 | 97 | 78 | 37 | 25 | 12 | MI | 2.13 | 1.799 | 13.30 | 1.628 | 6.951 | 1.750 | 10.52 | 1.950 | 12.67 | 10.38 |
| 3 | 6.150 | BP-02 (Sample 1) | 100 | 100 | 100 | 100 | 99 | 93 | 41 | 23 | 18 | CI | 4.00 | 1.765 | 17.20 | 1.518 | 3.156 | 1.704 | 4.79 | 1.906 | 5.70 | 4.83 |
| 4 | 6.100 | BP-02 (Sample 2) | 100 | 100 | 100 | 100 | 95 | 84 | 41 | 22 | 19 | CI | 4.08 | 1.832 | 14.79 | 1.640 | 2.690 | 1.779 | 3.94 | 2.015 | 4.74 | 3.93 |
| 5 | 13.650 | BP-03 (Sample 1) | 100 | 100 | 100 | 100 | 100 | 96 | 44 | 29 | 15 | MI | 4.65 | 1.774 | 15.59 | 1.527 | 2.333 | 1.725 | 3.59 | 1.923 | 4.27 | 3.56 |

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| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | | ATTERBERG LIMIT | | | I.S. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------------|--------------------------------------|-------|---------|---------|-------|------|--------|-----------------|--------|-------------|---------------------|---------------------------------|-------------------------------|------------|-------------------------------|------------|--------------|------------|--------------|-------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 m | 75 m | LL (%) | PL (%) | PI (%) | MDD (gm/cc) | | | OMC (%) | Test 1 | | Test 2 | | Test 3 | | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | |
| 6 | 13.650 | BP-03 (Sample 2) | 100 | 100 | 100 | 100 | 99 | 93 | 48 | 35 | 13 | MI | 4.00 | 1.806 | 16.25 | 1.560 | 1.980 | 1.790 | 2.90 | 2.021 | 3.48 | 2.75 | |
| 7 | 13.650 | BP-03 (Sample 3) | 100 | 100 | 100 | 100 | 100 | 97 | 48 | 33 | 15 | MI | 4.17 | 1.821 | 16.50 | 1.551 | 1.404 | 1.763 | 2.05 | 1.972 | 2.45 | 2.06 | |
| 8 | 22.600 | BP-04 (Sample 1) | 100 | 100 | 100 | 100 | 99 | 92 | 44 | 25 | 20 | CI | 3.85 | 1.767 | 18.25 | 1.537 | 3.454 | 1.725 | 5.23 | 1.907 | 6.42 | 5.12 | |
| 9 | 22.650 | BP-04 (Sample 2) | 100 | 100 | 100 | 100 | 99 | 92 | 45 | 23 | 22 | CI | 3.70 | 1.701 | 17.50 | 1.463 | 1.820 | 1.660 | 2.76 | 1.820 | 3.28 | 2.71 | |
| 10 | 37.300 | BP-05 (Sample 1) | 100 | 100 | 100 | 100 | 94 | 81 | 51 | 33 | 18 | MH | 12.00 | 1.589 | 21.75 | 1.365 | 3.769 | 1.538 | 5.38 | 1.758 | 6.64 | 5.40 | |
| 11 | 37.300 | BP-05 (Sample 2) | 100 | 100 | 100 | 100 | 99 | 87 | 52 | 33 | 19 | MH | 11.36 | 1.570 | 22.10 | 1.335 | 3.738 | 1.535 | 5.13 | 1.718 | 6.10 | 5.05 | |
| 12 | 43.100 | BP-06 (Sample 1) | 100 | 100 | 100 | 93 | 69 | 40 | 39 | 21 | 17 | SC | 9.09 | 1.943 | 13.50 | 1.673 | 12.747 | 1.938 | 19.61 | 2.106 | 23.34 | 18.22 | |
| 13 | 43.150 | BP-06 (Sample 2) | 100 | 100 | 100 | 93 | 58 | 36 | 38 | 23 | 15 | SC | 8.33 | 1.905 | 12.95 | 1.638 | 10.035 | 1.739 | 15.23 | 2.057 | 18.12 | 16.22 | |

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| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | I.S. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------------|--------------------------------------|-------|---------|---------|-------|------|-----------------|--------|--------|---------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 m | 75 m | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| 14 | 48.850 | BP-07 (Sample 1) | 100 | 100 | 100 | 100 | 95 | 87 | 44 | 29 | 15 | MI | 8.89 | 1.721 | 16.58 | 1.480 | 7.167 | 1.667 | 10.33 | 1.859 | 12.61 | 10.36 |
| 15 | 48.850 | BP-07 (Sample 2) | 100 | 100 | 100 | 100 | 95 | 88 | 43 | 27 | 16 | MI | 8.33 | 1.727 | 16.50 | 1.485 | 7.427 | 1.676 | 11.27 | 1.865 | 13.41 | 11.25 |
| 16 | 55.300 | BP-08 (Sample 1) | 100 | 100 | 100 | 100 | 99 | 88 | 41 | 32 | 9 | MI | 0 | 1.754 | 15.40 | 1.580 | 8.029 | 1.740 | 12.15 | 2.031 | 14.93 | 11.15 |
| 17 | 55.300 | BP-08 (Sample 2) | 100 | 100 | 100 | 100 | 98 | 72 | 36 | 26 | 10 | MI | 0 | 1.766 | 16.00 | 1.521 | 5.573 | 1.706 | 8.57 | 1.914 | 10.20 | 8.63 |
| 18 | 58.700 | BP-09 (Sample 1) | 100 | 100 | 100 | 100 | 96 | 91 | 46 | 26 | 20 | CI | 9.09 | 1.752 | 19.20 | 1.513 | 3.966 | 1.740 | 5.77 | 1.901 | 6.90 | 5.45 |
| 19 | 58.700 | BP-09 (Sample 2) | 100 | 100 | 100 | 100 | 98 | 91 | 39 | 24 | 15 | CI | 10 | 1.760 | 18.50 | 1.514 | 5.044 | 1.697 | 7.27 | 1.901 | 8.87 | 7.35 |
| 20 | 64.200 | BP-10 (Sample 1) | 100 | 100 | 100 | 100 | 100 | 96 | 52 | 32 | 20 | MH | 2.08 | 1.512 | 21.60 | 1.368 | 2.246 | 1.472 | 3.24 | 1.642 | 3.95 | 3.19 |
| 21 | 64.200 | BP-10 (Sample 2) | 100 | 100 | 100 | 100 | 96 | 93 | 56 | 39 | 17 | MH | 3.70 | 1.531 | 20.45 | 1.386 | 2.737 | 1.510 | 3.75 | 1.663 | 4.63 | 3.55 |

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| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | I.S. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------------|--------------------------------------|-------|---------|---------|-------|------|-----------------|--------|--------|---------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 m | 75 m | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| 22 | 69.600 | BP-11 (Sample 1) | 100 | 100 | 98 | 94 | 90 | 81 | 36 | 23 | 13 | CI | 4.55 | 1.868 | 12.85 | 1.605 | 6.424 | 1.850 | 9.18 | 2.068 | 11.31 | 8.75 |
| 23 | 69.600 | BP-11 (Sample 2) | 100 | 100 | 97 | 95 | 90 | 82 | 38 | 24 | 14 | CI | 5.50 | 1.856 | 13.25 | 1.594 | 6.642 | 1.817 | 9.49 | 2.055 | 11.70 | 9.28 |
| 24 | 76.900 | BP-12 (Sample 1) | 100 | 100 | 100 | 99 | 96 | 90 | 48 | 26 | 22 | CI | 6.00 | 1.685 | 18.00 | 1.525 | 4.635 | 1.627 | 6.68 | 1.830 | 8.16 | 6.73 |
| 25 | 76.900 | BP-12 (Sample 2) | 100 | 100 | 100 | 100 | 99 | 93 | 47 | 24 | 23 | CI | 6.75 | 1.708 | 18.25 | 1.546 | 5.313 | 1.680 | 7.66 | 1.855 | 9.35 | 7.25 |
| 26 | 80.900 | BP-13 (Sample 1) | 100 | 100 | 100 | 100 | 96 | 90 | 37 | 25 | 12 | CI | 4.35 | 1.762 | 15.90 | 1.542 | 7.812 | 1.748 | 11.05 | 1.924 | 13.93 | 10.44 |
| 27 | 80.900 | BP-13 (Sample 2) | 100 | 100 | 100 | 100 | 98 | 91 | 35 | 23 | 12 | CI | 4.76 | 1.779 | 15.25 | 1.592 | 7.438 | 1.707 | 10.91 | 1.957 | 13.10 | 11.07 |
| 28 | 85.000 | BP-14 (Sample 1) | 100 | 100 | 100 | 99 | 86 | 65 | 48 | 34 | 14 | MI | 8.33 | 1.664 | 18.20 | 1.431 | 8.942 | 1.645 | 13.57 | 1.797 | 16.15 | 12.90 |
| 29 | 85.000 | BP-14 (Sample 2) | 100 | 100 | 100 | 99 | 87 | 68 | 48 | 34 | 14 | MI | 9.25 | 1.682 | 17.50 | 1.445 | 10.067 | 1.640 | 14.38 | 1.862 | 17.73 | 14.20 |

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| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | I.S. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------------|--------------------------------------|-------|---------|---------|-------|------|-----------------|--------|--------|---------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 m | 75 m | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| 30 | 94.300 | BP-15 (Sample 1) | 100 | 100 | 100 | 100 | 95 | 86 | 38 | 25 | 13 | CI | 4.35 | 1.821 | 17.30 | 1.566 | 5.742 | 1.801 | 8.27 | 1.967 | 10.10 | 7.90 |
| 31 | 94.300 | BP-15 (Sample 2) | 100 | 100 | 100 | 100 | 96 | 88 | 41 | 24 | 17 | CI | 4.90 | 1.838 | 16.85 | 1.645 | 5.635 | 1.778 | 8.26 | 2.022 | 9.92 | 8.30 |
| 32 | 104.200 | BP-16 (Sample 1) | 100 | 100 | 100 | 100 | 95 | 88 | 39 | 25 | 14 | CI | 2.13 | 1.670 | 19.30 | 1.445 | 5.679 | 1.633 | 8.59 | 1.809 | 10.35 | 8.39 |
| 33 | 104.200 | BP-16 (Sample 2) | 100 | 100 | 100 | 100 | 96 | 86 | 41 | 24 | 17 | CI | 2.50 | 1.695 | 20.10 | 1.458 | 5.982 | 1.668 | 8.62 | 1.831 | 10.52 | 8.32 |
| 34 | 108.600 | BP-17 (Sample 1) | 100 | 100 | 100 | 100 | 93 | 84 | 40 | 16 | 24 | CI | 16.28 | 1.775 | 17.00 | 1.606 | 5.462 | 1.688 | 7.87 | 1.924 | 9.61 | 8.12 |
| 35 | 108.600 | BP-17 (Sample 2) | 100 | 100 | 100 | 100 | 94 | 86 | 38 | 20 | 18 | CI | 18.18 | 1.822 | 15.80 | 1.631 | 6.285 | 1.795 | 9.22 | 2.004 | 11.07 | 8.72 |
| 36 | 111.800 | BP-18 (Sample 1) | 100 | 100 | 100 | 100 | 96 | 89 | 40 | 25 | 15 | CI | 4.88 | 1.788 | 14.75 | 1.600 | 6.569 | 1.739 | 9.63 | 1.967 | 11.57 | 9.53 |
| 37 | 111.800 | BP-18 (Sample 2) | 100 | 100 | 100 | 100 | 95 | 87 | 36 | 22 | 14 | CI | 5.25 | 1.810 | 15.30 | 1.566 | 7.194 | 1.785 | 10.88 | 1.960 | 13.11 | 10.39 |

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| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | I.S. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------------|--------------------------------------|-------|---------|---------|-------|------|-----------------|--------|--------|---------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 m | 75 m | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| 38 | 115.600 | BP-19 (Sample 1) | 100 | 100 | 100 | 100 | 94 | 87 | 44 | 26 | 18 | CI | 4.35 | 1.767 | 18.50 | 1.520 | 6.881 | 1.729 | 10.44 | 1.908 | 12.42 | 10.19 |
| 39 | 115.600 | BP-19 (Sample 2) | 100 | 100 | 100 | 100 | 97 | 92 | 45 | 24 | 21 | CI | 8.33 | 1.748 | 19.15 | 1.489 | 5.875 | 1.728 | 8.58 | 1.893 | 10.25 | 8.21 |
| 40 | 126.350 | BP-20 (Sample 1) | 100 | 100 | 100 | 100 | 90 | 77 | 38 | 23 | 16 | CI | 9.09 | 1.866 | 16.20 | 1.611 | 8.110 | 1.840 | 11.80 | 2.025 | 14.11 | 11.32 |
| 41 | 126.350 | BP-20 (Sample 2) | 100 | 100 | 100 | 100 | 89 | 75 | 38 | 18 | 19 | CI | 6.35 | 1.845 | 15.50 | 1.605 | 7.489 | 1.850 | 11.33 | 1.991 | 13.92 | 10.38 |
| 42 | 138.750 | BP-21 (Sample 1) | 100 | 100 | 100 | 100 | 95 | 83 | 35 | 20 | 16 | CI | 2.44 | 1.876 | 15.05 | 1.615 | 6.963 | 1.855 | 10.71 | 2.034 | 12.75 | 10.16 |
| 43 | 138.750 | BP-21 (Sample 2) | 100 | 100 | 100 | 100 | 99 | 81 | 36 | 23 | 13 | CI | 10.00 | 1.904 | 14.75 | 1.723 | 7.568 | 1.848 | 11.45 | 2.064 | 13.80 | 11.43 |
| 44 | 146.150 | BP-22 (Sample 1) | 100 | 100 | 100 | 100 | 93 | 68 | 39 | 24 | 15 | CI | 9.09 | 1.739 | 16.15 | 1.502 | 6.431 | 1.708 | 9.36 | 1.887 | 11.19 | 9.06 |
| 45 | 146.150 | BP-22 (Sample 2) | 100 | 100 | 100 | 100 | 91 | 70 | 36 | 22 | 14 | CI | 9.09 | 1.755 | 15.50 | 1.508 | 6.679 | 1.699 | 9.54 | 1.943 | 11.76 | 9.57 |

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| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | | ATTERBERG LIMIT | | | I.S. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------------|--------------------------------------|-------|---------|---------|-------|------|--------|-----------------|--------|-------------|---------------------|---------------------------------|-------------------------------|------------|-------------------------------|------------|--------------|------------|--------------|-------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 m | 75 m | LL (%) | PL (%) | PI (%) | MDD (gm/cc) | | | OMC (%) | Test 1 | | Test 2 | | Test 3 | | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | |
| 46 | 163.270 | BP-23 (Sample 1) | 100 | 100 | 100 | 99 | 87 | 75 | 34 | 21 | 14 | CL | 9.52 | 1.872 | 12.90 | 1.595 | 7.393 | 1.825 | 10.79 | 2.027 | 12.90 | 10.66 | |
| 47 | 163.270 | BP-23 (Sample 2) | 100 | 100 | 100 | 98 | 86 | 75 | 30 | 20 | 10 | CL | 10.45 | 1.894 | 12.70 | 1.714 | 8.633 | 1.868 | 11.84 | 2.057 | 14.61 | 11.20 | |
| 48 | 172.700 | BP-24 (Sample 1) | 100 | 100 | 95 | 92 | 88 | 76 | 33 | 20 | 13 | CL | 9.09 | 1.867 | 14.00 | 1.624 | 10.062 | 1.800 | 15.22 | 2.014 | 18.71 | 15.40 | |
| 49 | 172.700 | BP-24 (Sample 2) | 100 | 100 | 100 | 100 | 84 | 72 | 28 | 18 | 10 | CL | 4.65 | 1.908 | 14.25 | 1.641 | 11.162 | 1.877 | 16.89 | 2.042 | 20.35 | 16.25 | |
| 50 | 182.500 | BP-25 (Sample 1) | 100 | 100 | 100 | 100 | 95 | 82 | 34 | 20 | 15 | CL | 15.56 | 1.705 | 19.90 | 1.529 | 5.840 | 1.680 | 8.89 | 1.848 | 10.71 | 8.36 | |
| 51 | 182.500 | BP-25 (Sample 2) | 100 | 100 | 100 | 100 | 97 | 83 | 48 | 26 | 22 | CI | 12.25 | 1.672 | 20.80 | 1.455 | 4.987 | 1.625 | 7.05 | 1.804 | 8.89 | 7.01 | |
| 52 | 186.400 | BP-26 (Sample 1) | 100 | 100 | 98 | 97 | 91 | 81 | 36 | 22 | 14 | CI | 4.76 | 1.820 | 15.50 | 1.565 | 5.660 | 1.753 | 8.16 | 1.966 | 9.96 | 8.26 | |
| 53 | 186.400 | BP-26 (Sample 2) | 100 | 100 | 95 | 94 | 90 | 78 | 37 | 24 | 13 | CI | 6.65 | 1.842 | 14.95 | 1.577 | 6.866 | 1.828 | 9.99 | 2.011 | 11.94 | 9.48 | |

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| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | I.S. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------------|--------------------------------------|-------|---------|---------|-------|------|-----------------|--------|--------|---------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 m | 75 m | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| 54 | 197.600 | BP-27 (Sample 1) | 100 | 100 | 100 | 100 | 87 | 71 | 26 | 18 | 8 | CL | 0.00 | 2.020 | 9.00 | 1.721 | 12.229 | 1.939 | 17.85 | 2.188 | 21.33 | 18.14 |
| 55 | 197.600 | BP-27 (Sample 2) | 100 | 100 | 100 | 100 | 90 | 68 | 30 | 21 | 9 | CL | 2.25 | 2.005 | 10.15 | 1.732 | 11.766 | 1.990 | 17.13 | 2.175 | 20.47 | 16.19 |
| 56 | 200.850 | BP-28 (Sample 1) | 100 | 100 | 100 | 99 | 90 | 78 | 35 | 19 | 16 | CI | 9.09 | 1.892 | 13.10 | 1.712 | 6.521 | 1.877 | 8.94 | 2.055 | 11.04 | 8.33 |
| 57 | 200.850 | BP-28 (Sample 2) | 100 | 100 | 100 | 98 | 84 | 76 | 37 | 19 | 18 | CI | 10.00 | 1.918 | 12.25 | 1.656 | 6.944 | 1.855 | 9.92 | 2.081 | 12.23 | 9.98 |

From the test it is revealed that Borrow area soil near Ch.1+150km, 43+100km, 48+850km, 55+300km,58+700km,69+600km, 76+900km,80+900km, 85+000km, 94+300km, 104+200km,108+600km,111+800km,115+600km, 126+350km, 138+750km, 146+150km,163+270km, 172+700km, 182+500km, 186+400km ,197+600km and 200+850km is found more suitable for use in sub-grade preparation

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1.4.3 Sources for Construction Materials

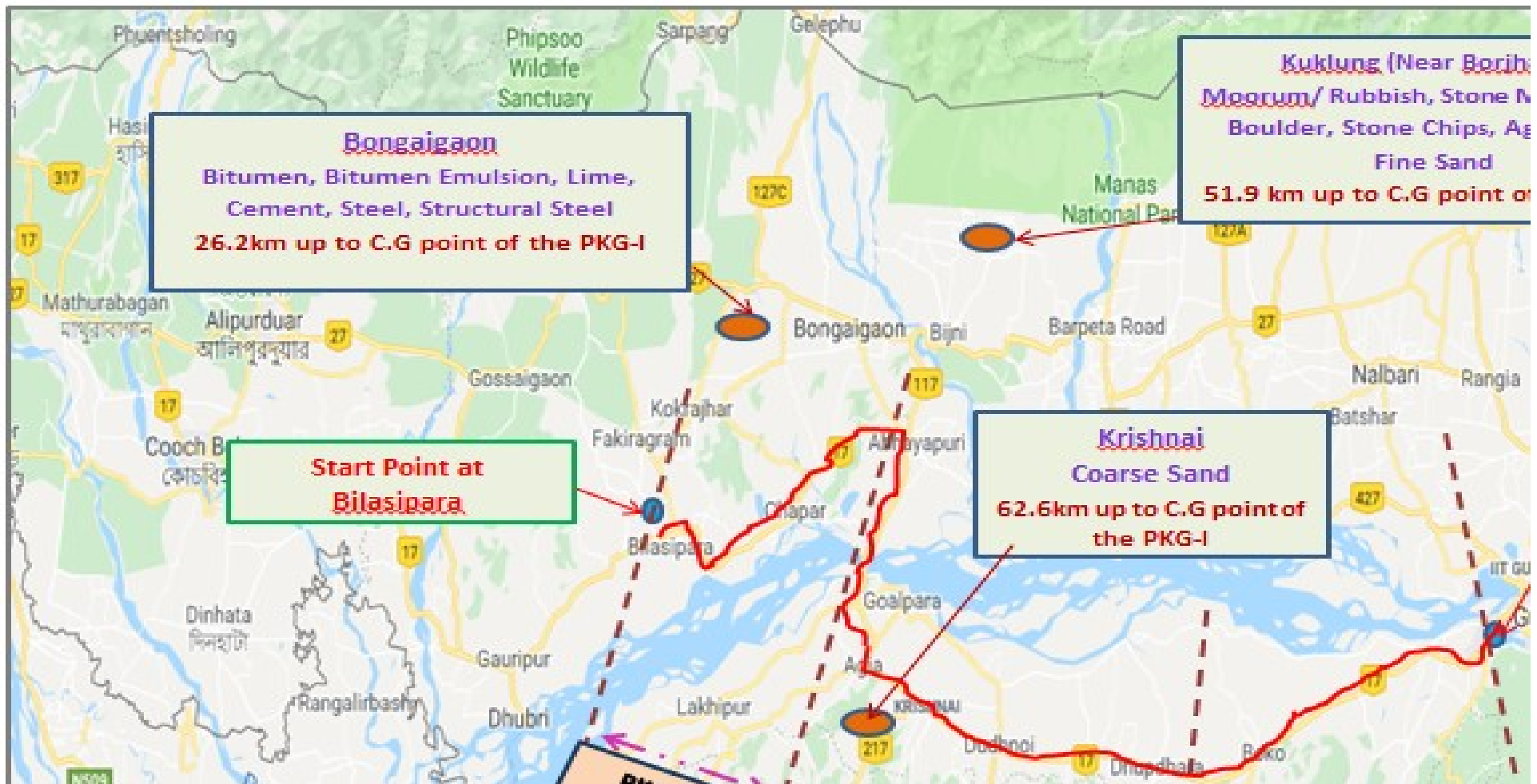
Material survey and investigations have been carried out to determine the availability and suitability of the various soils and materials to be used in the project work. Material of good quality for embankment / sub grade construction and granular material / stone metal for pavement are available in sufficient quantity from various identified quarries.

The project road is divided in 3 packages and List of source of various materials in package wise is given bellow.

Table-6: Lead for various construction materials for PKG-I (Ch.0.00Km to Ch.71.200Km)

| PKG-I (Ch.0.00Km to Ch.71.200Km) | | | | | |
|----------------------------------|------------------------|-------------------------|--|---|-----------------|
| Sl. No. | Name of Material | Place | Distance from Source to Start/ End Point of Project Road | Distance up to Project C.G from Start/ End Point (km) | Total Lead (Km) |
| 1 | Sand (Fine) | Kuklung(Near Borjharni) | 39 km (Up to Ch.48.500 Km of the project Road) | 12.9= 48.500 -(71.200/2) | 51.9 |
| 2 | Lime | Bongaigaon | 23.5km (Up to Ch.32.900 Km of the project Road) | 2.7=(71.200/2)-32.900 | 26.2 |
| 3 | Moorum/ Rubbish | Kuklung(Near Borjharni) | 39 km (Up to Ch.48.500 Km of the project Road) | 12.9= 48.500 -(71.200/2) | 51.9 |
| 4 | Stone Metal | Kuklung(Near Borjharni) | 39 km (Up to Ch.48.500 Km of the project Road) | 12.9= 48.500 -(71.200/2) | 51.9 |
| 5 | Stone Boulder | Kuklung(Near Borjharni) | 39 km (Up to Ch.48.500 Km of the project Road) | 12.9= 48.500 -(71.200/2) | 51.9 |
| 6 | Stone Chips, Aggregate | Kuklung(Near Borjharni) | 39 km (Up to Ch.48.500 Km of the project Road) | 12.9= 48.500 -(71.200/2) | 51.9 |
| 7 | Coarse Sand | Krishnai | 27km(End Point of PKG-I) | 35.6=71.200/2 | 62.6 |
| 8 | Cement | Bongaigaon | 23.5km (Up to Ch.32.900 Km of the project Road) | 2.7=(71.200/2)-32.900 | 26.2 |
| 9 | Steel | Bongaigaon | 23.5km (Up to Ch.32.900 Km of the project Road) | 2.7=(71.200/2)-32.900 | 26.2 |
| 10 | Tar, Bitumen | Bongaigaon | 23.5km (Up to Ch.32.900 Km of the project Road) | 2.7=(71.200/2)-32.900 | 26.2 |
| 11 | Bitumen Emulsion | Bongaigaon | 23.5km (Up to Ch.32.900 Km of the project Road) | 2.7=(71.200/2)-32.900 | 26.2 |
| 12 | Structural Steel | Bongaigaon | 23.5km (Up to Ch.32.900 Km of the project Road) | 2.7=(71.200/2)-32.900 | 26.2 |

Fig - 4 : Lead Diagram of PKG-I (Ch.0.00Km to Ch.71.200Km)



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Table-7: Lead for various construction materials for PKG-II (Ch.71.20Km to Ch.141.950Km)

| PKG-II (Ch.71.200Km to Ch.141.950km) | | | | | |
|--------------------------------------|------------------------|------------|--|--|-----------------|
| Sl. No. | Name of Material | Place | Distance from Source to Start/ End Point of Project Road | Distance upto Project C.G from Start/ End Point (km) | Total Lead (Km) |
| 1 | Sand (Fine) | Krishnai | 1 km (Up to Ch.98.0 Km of the project Road) | $8.575 = (141.950 + 71.200) / 2 - 98.0$ | 9.575 |
| 2 | Lime | Bongaigaon | 22km (Up to Ch.48.500 Km of the project Road) | $58 = (71.200 - 48.500) + (141.950 - 71.200) / 2$ | 80 |
| 3 | Moorum/ Rubbish | Chaygaon | 1km (Up to Ch.194.0 Km of the project Road) | $87.5 = (194 - 141.950) + (141.950 - 71.200) / 2$ | 88.5 |
| 4 | Stone Metal | Chaygaon | 1km (Up to Ch.194.0 Km of the project Road) | $87.5 = (194 - 141.950) + (141.950 - 71.200) / 2$ | 88.5 |
| 5 | Stone Boulder | Chaygaon | 1km (Up to Ch.194.0 Km of the project Road) | $87.5 = (194 - 141.950) + (141.950 - 71.200) / 2$ | 88.5 |
| 6 | Stone Chips, Aggregate | Chaygaon | 1km (Up to Ch.194.0 Km of the project Road) | $87.5 = (194 - 141.950) + (141.950 - 71.200) / 2$ | 88.5 |
| 7 | Coarse Sand | Krishnai | 1 km (Up to Ch.98.0 Km of the project Road) | $8.575 = (141.950 + 71.200) / 2 - 98.0$ | 9.575 |
| 8 | Cement | Bongaigaon | 22km (Up to Ch.48.500 Km of the project Road) | $58 = (71.200 - 48.500) + (141.950 - 71.200) / 2$ | 80 |
| 9 | Steel | Bongaigaon | 22km (Up to Ch.48.500 Km of the project Road) | $58 = (71.200 - 48.500) + (141.950 - 71.200) / 2$ | 80 |
| 10 | Tar, Bitumen | Bongaigaon | 22km (Up to Ch.48.500 Km of the project Road) | $58 = (71.200 - 48.500) + (141.950 - 71.200) / 2$ | 80 |
| 11 | Bitumen Emulsion | Bongaigaon | 22km (Up to Ch.48.500 Km of the project Road) | $58 = (71.200 - 48.500) + (141.950 - 71.200) / 2$ | 80 |
| 12 | Structural Steel | Bongaigaon | 22km (Up to Ch.48.500 Km of the project Road) | $58 = (71.200 - 48.500) + (141.950 - 71.200) / 2$ | 80 |

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Fig- 5: Lead Diagram of PKG-II (Ch.71.20Km to Ch.141.950Km)

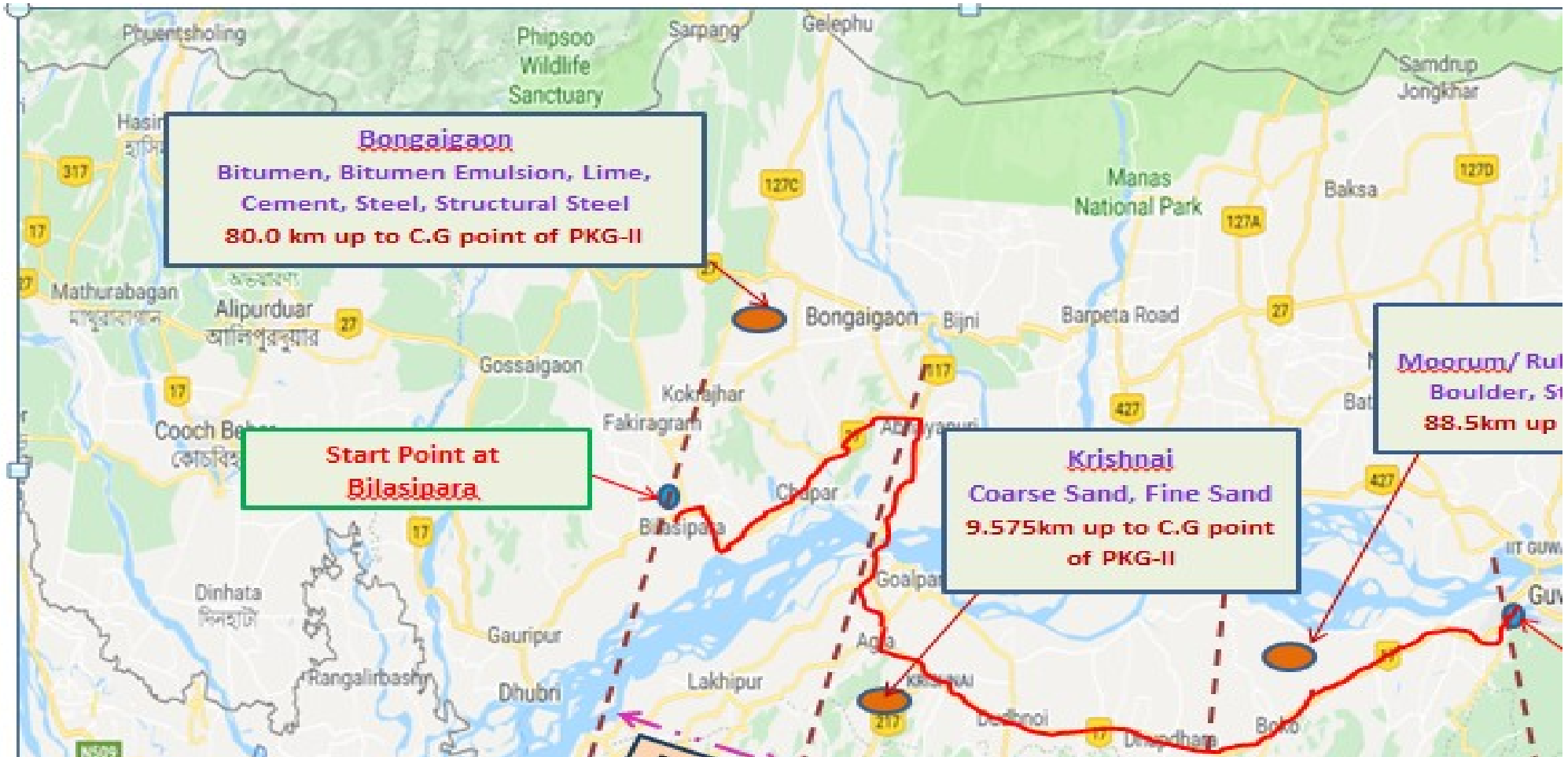


Table-8: Lead for various construction materials for PKG-III (Ch.141.950Km to Ch.214.435Km)

| PKG-III (Ch.141.950Km to Ch.214.435km) | | | | | |
|--|------------------------|----------|--|--|-----------------|
| Sl. No. | Name of Material | Place | Distance from Source to Start/ End Point of Project Road | Distance upto Project C.G from Start/ End Point (km) | Total Lead (Km) |
| 1 | Sand (Fine) | Krishnai | 1 km (Up to Ch.98.0 Km of the project Road) | $80.2 = (141.950 - 98.0) + (214.435 - 141.950) / 2$ | 81.2 |
| 2 | Lime | Guwahati | 10km (Up to end point of the project Road) | $36.250 = (214.435 - 141.950) / 2$ | 46.25 |
| 3 | Moorum/ Rubbish | Chaygaon | 1km (Up to Ch.194.0 Km of the project Road) | $15.8 = 194 - (141.950 + 214.435) / 2$ | 16.8 |
| 4 | Stone Metal | Chaygaon | 1km (Up to Ch.194.0 Km of the project Road) | $15.8 = 194 - (141.950 + 214.435) / 2$ | 16.8 |
| 5 | Stone Boulder | Chaygaon | 1km (Up to Ch.194.0 Km of the project Road) | $15.8 = 194 - (141.950 + 214.435) / 2$ | 16.8 |
| 6 | Stone Chips, Aggregate | Chaygaon | 1km (Up to Ch.194.0 Km of the project Road) | $15.8 = 194 - (141.950 + 214.435) / 2$ | 16.8 |
| 7 | Coarse Sand | Krishnai | 1 km (Up to Ch.98.0 Km of the project Road) | $80.2 = (141.950 - 98.0) + (214.435 - 141.950) / 2$ | 81.2 |
| 8 | Cement | Guwahati | 10km (Up to end point of the project Road) | $36.250 = (214.435 - 141.950) / 2$ | 46.25 |
| 9 | Steel | Guwahati | 10km (Up to end point of the project Road) | $36.250 = (214.435 - 141.950) / 2$ | 46.25 |
| 10 | Tar, Bitumen | Guwahati | 10km (Up to end point of the project Road) | $36.250 = (214.435 - 141.950) / 2$ | 46.25 |
| 11 | Bitumen Emulsion | Guwahati | 10km (Up to end point of the project Road) | $36.250 = (214.435 - 141.950) / 2$ | 46.25 |
| 12 | Structural Steel | Guwahati | 10km (Up to end point of the project Road) | $36.250 = (214.435 - 141.950) / 2$ | 46.25 |

Fig- 6: Lead Diagram of PKG-III (Ch.141.950Km to Ch.214.435Km)



1.4.4 Laboratory Test Result of Coarse Aggregate

From each source representative aggregate samples have been obtained and tested in the laboratory for relevant engineering properties. The results are given below in Table-9

Table 9: Summary of Test Results of Coarse Aggregate Samples

| Sl. No. | Test | Location | Value of Test Results | Limiting Values for Different Layer as per MoRTH and IS 383 |
|---------|---------------------------------|---|-----------------------|---|
| 1 | Aggregate Impact Value(AIV) | Location- 1: Borjharani(Near Hapachara) (Sample No-1,2,3 & 4) | 30.19% | GSB-40%(Wet) WMM-30% DBM-27% BC-24% |
| | | Location- 2: Chayagaon (Sample No-5,6 & 7) | 28.74% | |
| 2 | Los Angeles Abrasion Value | Location- 1: Borjharani(Near Hapachara) (Sample No-1,2,3 & 4) | 27.37% | WMM-40% DBM-35% BC-30% |
| | | Location- 2: Chayagaon (Sample No-5,6 & 7) | 24.80% | |
| 3 | Combined Flakiness & Elongation | Location- 1: Borjharani(Near Hapachara) (Sample No-1,2,3 & 4) | 10.09% | WMM-35% DBM-35% BC-35% |
| | | | 22.36% | |
| | | Location- 2: Chayagaon (Sample No-5,6 & 7) | 12.70% 13.30% | |
| 4 | Crushing Value | Location- 1: Borjharani(Near Hapachara) (Sample No-1,2,3 & 4) | 28.60% | - |
| | | Location- 2: Chayagaon(Sample No-5,6 & 7) | 26.13% | |

| Sl. No. | Test | Location | Value of Test Results | Limiting Values for Different Layer as per MoRTH and IS 383 |
|---------|------------------|---|---|---|
| 5 | Water Absorption | Location- 1: Borjharani(Near Hapachara) (Sample No-1,2,3 & 4) | 0.20% | GSB-2% WMM-2% DBM-2% BC-2% |
| | | Location- 2: Chayagaon(Sample No-5,6 & 7) | 0.20% | |
| 6 | Specific Gravity | Location- 1: Borjharani(Near Hapachara) (Sample No-1,2,3 & 4) | 2.66 | - |
| | | Location- 2: Chayagaon(Sample No-5,6 & 7) | 2.68 | |
| 7 | Sieve Analysis | Location- 1: Borjharani(Near Hapachara) (Sample No-1,2,3 & 4) | 80 mm-.100 63mm -100 40mm- 88.70 20mm- 64.14 16mm- 46.88 12.5 mm- 33.00 10mm- 26.24 4.75mm- 4.88 2.36mm- 0.20 | - |
| | | Location- 2: Chayagaon(Sample No-5,6 & 7) | 80 mm-.100 63mm -100 40mm- 100 20mm- 52.82 16mm- 39.02 12.5 mm- 31.86 10mm- 30.12 4.75mm- 2.40 2.36mm- 0.30 | |

Basic properties like Water Absorption, Aggregate Impact Value, Los Angeles Abrasion Value, Flakiness and elongation are found to be satisfactory. Therefore, the quarry samples from Borjharani(Near Hapachara) and Chayagaon are of approved standard and can be used for road construction.

1.4.5 Laboratory Test Result of Fine Aggregate

Fine Aggregate are collected from various sources and tested in the laboratory. The test results are given below in Table-10.

Table -10: Summary of Test Results of Fine Aggregate Samples

| Sl. No. | Location | Sieve Analysis(% Passing by Weight) | | | | | | | Material finer than 75 micron | Silt content | Fineness Modulus | Specific Gravity | Water Absorption (%) | Bulkage (%) | Zone |
|---|---|-------------------------------------|---------|---------|---------|------------|------------|------------|-------------------------------|--------------|------------------|------------------|----------------------|-------------|------|
| | | 10 mm | 4.75 mm | 2.36 mm | 1.18 mm | 600 micron | 300 micron | 150 micron | | | | | | | |
| 1 | Borjharani(Near Hapachara)Sample No-11) | 100 | 99.25 | 94.65 | 79.65 | 39.65 | 14.75 | 2.25 | 1.10 | 1.03 | 2.69 | 2.64 | 0.63 | 8.6 | |
| 2 | Krishnai(Sample No-12) | 100 | 99.4 | 98.1 | 89.1 | 46 | 18.6 | 2.4 | 1.0 | 1.09 | 2.46 | 2.64 | 0.72 | 10.84 | |
| 3 | Krishnai(Sample No-13) | 100 | 97.1 | 91.9 | 74.6 | 29.9 | 10.8 | 1.6 | 1.6 | 1.13 | 2.94 | 2.65 | 0.87 | 11.34 | |
| IS: 383 Specification Limit For Zone I | | 100 | 90-100 | 60-95 | 30-70 | 15-34 | 5-20 | 0-10 | 3.0 | | 2-3.5 | - | - | - | II |
| IS: 383 Specification Limit For Zone II | | 100 | 90-100 | 75-100 | 55-90 | 35-59 | 8-30 | 0-10 | 3.0 | | 2-3.5 | - | - | - | - |
| IS: 383 Specification Limit For Zone III | | 100 | 90-100 | 85-100 | 75-100 | 60-79 | 12-40 | 0-10 | 3.0 | | 2-3.5 | - | - | - | - |
| IS: 383 Specification Limit For Zone IV | | 100 | 95-100 | 95-100 | 90-100 | 80-100 | 15-50 | 0-15 | 3.0 | | 2-3.5 | - | - | - | - |

Results of fine aggregate sample from Borjharani(Near Hapachara) and Krishnai shows that it is almost conforming to grading zone II as per IS:383 specification and the fineness modulus is within 2 to 3.5. Therefore, the material can be used in road pavement and structural concrete works after necessary testing during construction to ascertain the suitability of proposed mix proportion

Laboratory test results of aggregate and sand samples are presented in Annexure-V& VI

1.5 CUMULATIVE VOLUME OF EARTH WORK AND MASS HAUL DIAGRAM

Cumulative volume of earth work along the proposed road with mass haul diagram is presented below

Table-11: Cumulative Volume of Earth work

| Station | Areas (sqm) | | Volume (cum) | |
|---------|-------------|---------|--------------|---------|
| | Cut | Fill | Cut | Fill |
| 0.0 | 25.503 | 0.0 | | |
| 50.0 | 6.808 | 1.217 | 807.78 | 30.43 |
| 100.0 | 6.436 | 3.575 | 331.10 | 119.80 |
| 150.0 | 6.181 | 3.824 | 315.43 | 184.98 |
| 200.0 | 6.078 | 5.457 | 306.48 | 232.03 |
| 250.0 | 7.306 | 4.372 | 334.60 | 245.73 |
| 300.0 | 10.126 | 6.236 | 435.80 | 265.20 |
| 350.0 | 3.806 | 13.599 | 348.30 | 495.88 |
| 400.0 | 2.031 | 15.095 | 145.93 | 717.35 |
| 450.0 | 6.004 | 13.478 | 200.88 | 714.33 |
| 500.0 | 12.682 | 6.928 | 467.15 | 510.15 |
| 550.0 | 7.806 | 20.181 | 512.20 | 677.73 |
| 600.0 | 9.657 | 8.624 | 436.58 | 720.13 |
| 650.0 | 13.956 | 5.495 | 590.33 | 352.98 |
| 700.0 | 11.122 | 3.743 | 626.95 | 230.95 |
| 750.0 | 11.662 | 2.19 | 569.60 | 148.33 |
| 800.0 | 9.61 | 6.128 | 531.80 | 207.95 |
| 850.0 | 7.8 | 8.443 | 435.25 | 364.28 |
| 900.0 | 8.202 | 8.015 | 400.05 | 411.45 |
| 950.0 | 7.613 | 18.634 | 395.38 | 666.23 |
| 1000.0 | 9.862 | 17.721 | 436.88 | 908.88 |
| 1050.0 | 9.486 | 11.331 | 483.70 | 726.30 |
| 1100.0 | 7.177 | 11.263 | 416.58 | 564.85 |
| 1150.0 | 5.75 | 13.01 | 323.18 | 606.83 |
| 1200.0 | 5.131 | 8.198 | 272.03 | 530.20 |
| 1250.0 | 4.626 | 17.45 | 243.93 | 641.20 |
| 1300.0 | 1.711 | 46.072 | 158.43 | 1588.05 |
| 1350.0 | 3.885 | 13.018 | 139.90 | 1477.25 |
| 1400.0 | 4.845 | 13.202 | 218.25 | 655.50 |
| 1450.0 | 0.349 | 23.149 | 129.85 | 908.78 |
| 1500.0 | 0.0 | 53.174 | 8.73 | 1908.08 |
| 1550.0 | 0.0 | 46.44 | 0.00 | 2490.35 |
| 1600.0 | 0.0 | 41.741 | 0.00 | 2204.53 |
| 1650.0 | 0.0 | 45.105 | 0.00 | 2171.15 |
| 1700.0 | 0.0 | 46.971 | 0.00 | 2301.90 |
| 1750.0 | 0.0 | 43.453 | 0.00 | 2260.60 |
| 1800.0 | 0.699 | 29.496 | 17.48 | 1823.73 |
| 1850.0 | 0.332 | 35.224 | 25.78 | 1618.00 |
| 1900.0 | 0.0 | 63.636 | 8.30 | 2471.50 |
| 1950.0 | 0.0 | 38.829 | 0.00 | 2561.63 |
| 2000.0 | 0.0 | 32.596 | 0.00 | 1785.63 |
| 2050.0 | 0.0 | 26.876 | 0.00 | 1486.80 |
| 2100.0 | 0.0 | 51.757 | 0.00 | 1965.83 |
| 2150.0 | 0.0 | 56.488 | 0.00 | 2706.13 |
| 2200.0 | 0.0 | 63.617 | 0.00 | 3002.63 |
| 2250.0 | 0.0 | 50.8 | 0.00 | 2860.43 |
| 2300.0 | 0.0 | 62.524 | 0.00 | 2833.10 |
| 2350.0 | 0.0 | 96.311 | 0.00 | 3970.88 |
| 2400.0 | 0.0 | 102.514 | 0.00 | 4970.63 |
| 2450.0 | 0.0 | 94.878 | 0.00 | 4934.80 |

| | | | | |
|--------|--------|---------|---------|----------|
| 2500.0 | 0.0 | 92.924 | 0.00 | 4695.05 |
| 2550.0 | 0.0 | 111.407 | 0.00 | 5108.28 |
| 2600.0 | 0.0 | 121.101 | 0.00 | 5812.70 |
| 2650.0 | 0.0 | 159.676 | 0.00 | 7019.43 |
| 2700.0 | 0.0 | 183.126 | 0.00 | 8570.05 |
| 2750.0 | 0.0 | 229.202 | 0.00 | 10308.20 |
| 2800.0 | 0.0 | 316.236 | 0.00 | 13635.95 |
| 2850.0 | 0.0 | 274.203 | 0.00 | 14760.98 |
| 2900.0 | 0.0 | 251.403 | 0.00 | 13140.15 |
| 2950.0 | 0.0 | 271.691 | 0.00 | 13077.35 |
| 3000.0 | 0.0 | 450.943 | 0.00 | 18065.85 |
| 3050.0 | 0.0 | 473.242 | 0.00 | 23104.63 |
| 3100.0 | 0.0 | 255.244 | 0.00 | 18212.15 |
| 3150.0 | 0.0 | 286.168 | 0.00 | 13535.30 |
| 3200.0 | 0.0 | 299.153 | 0.00 | 14633.03 |
| 3250.0 | 0.0 | 314.589 | 0.00 | 15343.55 |
| 3300.0 | 0.0 | 292.679 | 0.00 | 15181.70 |
| 3350.0 | 0.0 | 252.439 | 0.00 | 13627.95 |
| 3400.0 | 0.0 | 198.399 | 0.00 | 11270.95 |
| 3450.0 | 0.0 | 154.368 | 0.00 | 8819.18 |
| 3500.0 | 0.0 | 116.672 | 0.00 | 6776.00 |
| 3550.0 | 0.0 | 70.795 | 0.00 | 4686.68 |
| 3600.0 | 0.0 | 42.183 | 0.00 | 2824.45 |
| 3650.0 | 0.0 | 30.669 | 0.00 | 1821.30 |
| 3700.0 | 0.0 | 33.44 | 0.00 | 1602.73 |
| 3750.0 | 0.169 | 22.011 | 4.23 | 1386.28 |
| 3800.0 | 0.0 | 26.152 | 4.23 | 1204.08 |
| 3850.0 | 0.0 | 29.835 | 0.00 | 1399.68 |
| 3900.0 | 0.0 | 20.174 | 0.00 | 1250.23 |
| 3950.0 | 0.0 | 16.732 | 0.00 | 922.65 |
| 4000.0 | 0.0 | 25.338 | 0.00 | 1051.75 |
| 4050.0 | 0.0 | 25.918 | 0.00 | 1281.40 |
| 4100.0 | 0.0 | 33.137 | 0.00 | 1476.38 |
| 4150.0 | 0.0 | 48.19 | 0.00 | 2033.18 |
| 4200.0 | 0.0 | 66.748 | 0.00 | 2873.45 |
| 4250.0 | 2.659 | 14.434 | 66.48 | 2029.55 |
| 4300.0 | 5.601 | 6.238 | 206.50 | 516.80 |
| 4350.0 | 12.048 | 2.137 | 441.23 | 209.38 |
| 4400.0 | 39.579 | 0.0 | 1290.68 | 53.43 |
| 4450.0 | 6.427 | 0.046 | 1150.15 | 1.15 |
| 4500.0 | 6.652 | 2.166 | 326.98 | 55.30 |
| 4550.0 | 6.097 | 23.959 | 318.73 | 653.13 |
| 4600.0 | 9.251 | 16.065 | 383.70 | 1000.60 |
| 4650.0 | 15.949 | 12.302 | 630.00 | 709.18 |
| 4700.0 | 26.491 | 0.0 | 1061.00 | 307.55 |
| 4750.0 | 7.94 | 30.678 | 860.78 | 766.95 |
| 4800.0 | 7.847 | 35.409 | 394.68 | 1652.18 |
| 4850.0 | 15.963 | 26.94 | 595.25 | 1558.73 |
| 4900.0 | 31.648 | 0.0 | 1190.28 | 673.50 |
| 4950.0 | 11.578 | 3.204 | 1080.65 | 80.10 |
| 5000.0 | 7.093 | 44.53 | 466.78 | 1193.35 |
| 5050.0 | 6.818 | 55.594 | 347.78 | 2503.10 |
| 5100.0 | 7.461 | 35.269 | 356.98 | 2271.58 |
| 5150.0 | 8.262 | 21.0 | 393.08 | 1406.73 |
| 5200.0 | 8.306 | 22.229 | 414.20 | 1080.73 |
| 5250.0 | 7.428 | 23.625 | 393.35 | 1146.35 |
| 5300.0 | 7.16 | 21.155 | 364.70 | 1119.50 |
| 5350.0 | 6.943 | 17.122 | 352.58 | 956.93 |
| 5400.0 | 7.423 | 15.521 | 359.15 | 816.08 |
| 5450.0 | 8.165 | 2.695 | 389.70 | 455.40 |

| | | | | |
|--------|---------|---------|----------|----------|
| 5500.0 | 15.187 | 0.499 | 583.80 | 79.85 |
| 5550.0 | 10.353 | 27.032 | 638.50 | 688.28 |
| 5600.0 | 7.537 | 23.321 | 447.25 | 1258.83 |
| 5650.0 | 6.712 | 25.752 | 356.23 | 1226.83 |
| 5700.0 | 8.236 | 35.227 | 373.70 | 1524.48 |
| 5750.0 | 5.269 | 58.228 | 337.63 | 2336.38 |
| 5800.0 | 0.0 | 127.026 | 131.73 | 4631.35 |
| 5850.0 | 0.0 | 107.003 | 0.00 | 5850.73 |
| 5900.0 | 0.0 | 137.955 | 0.00 | 6123.95 |
| 5950.0 | 1.651 | 68.304 | 41.28 | 5156.48 |
| 6000.0 | 0.0 | 128.83 | 41.28 | 4928.35 |
| 6050.0 | 0.0 | 162.887 | 0.00 | 7292.93 |
| 6100.0 | 0.0 | 138.246 | 0.00 | 7528.33 |
| 6150.0 | 0.0 | 131.698 | 0.00 | 6748.60 |
| 6200.0 | 0.0 | 146.825 | 0.00 | 6963.08 |
| 6250.0 | 0.0 | 125.879 | 0.00 | 6817.60 |
| 6300.0 | 0.0 | 136.95 | 0.00 | 6570.73 |
| 6350.0 | 0.0 | 147.438 | 0.00 | 7109.70 |
| 6400.0 | 0.0 | 153.151 | 0.00 | 7514.73 |
| 6450.0 | 0.0 | 146.722 | 0.00 | 7496.83 |
| 6500.0 | 0.0 | 89.842 | 0.00 | 5914.10 |
| 6550.0 | 0.0 | 149.185 | 0.00 | 5975.68 |
| 6600.0 | 0.0 | 195.071 | 0.00 | 8606.40 |
| 6650.0 | 0.0 | 201.095 | 0.00 | 9904.15 |
| 6700.0 | 0.0 | 190.522 | 0.00 | 9790.43 |
| 6750.0 | 0.0 | 202.112 | 0.00 | 9815.85 |
| 6800.0 | 0.0 | 37.292 | 0.00 | 5985.10 |
| 6850.0 | 0.617 | 8.321 | 15.43 | 1140.33 |
| 6900.0 | 0.0 | 240.44 | 15.43 | 6219.03 |
| 6950.0 | 0.0 | 144.123 | 0.00 | 9614.08 |
| 7000.0 | 0.0 | 139.366 | 0.00 | 7087.23 |
| 7050.0 | 0.0 | 155.53 | 0.00 | 7372.40 |
| 7100.0 | 0.0 | 95.45 | 0.00 | 6274.50 |
| 7150.0 | 0.0 | 172.398 | 0.00 | 6696.20 |
| 7200.0 | 0.0 | 225.549 | 0.00 | 9948.68 |
| 7250.0 | 0.0 | 206.167 | 0.00 | 10792.90 |
| 7300.0 | 0.0 | 105.874 | 0.00 | 7801.03 |
| 7350.0 | 0.0 | 148.02 | 0.00 | 6347.35 |
| 7400.0 | 0.0 | 169.242 | 0.00 | 7931.55 |
| 7450.0 | 4.714 | 128.645 | 117.85 | 7447.18 |
| 7500.0 | 0.0 | 201.956 | 117.85 | 8265.03 |
| 7550.0 | 0.0 | 136.082 | 0.00 | 8450.95 |
| 7600.0 | 29.526 | 38.358 | 738.15 | 4361.00 |
| 7650.0 | 26.63 | 0.341 | 1403.90 | 967.48 |
| 7700.0 | 393.349 | 0.0 | 10499.48 | 8.53 |
| 7750.0 | 179.375 | 0.0 | 14318.10 | 0.00 |
| 7800.0 | 0.327 | 13.865 | 4492.55 | 346.63 |
| 7850.0 | 0.0 | 70.209 | 8.18 | 2101.85 |
| 7900.0 | 9.63 | 57.265 | 240.75 | 3186.85 |
| 7950.0 | 0.0 | 79.677 | 240.75 | 3423.55 |
| 8000.0 | 10.728 | 12.003 | 268.20 | 2292.00 |
| 8050.0 | 0.0 | 194.822 | 268.20 | 5170.63 |
| 8100.0 | 0.0 | 224.39 | 0.00 | 10480.30 |
| 8150.0 | 0.0 | 112.774 | 0.00 | 8429.10 |
| 8200.0 | 0.0 | 210.937 | 0.00 | 8092.78 |
| 8250.0 | 0.0 | 154.988 | 0.00 | 9148.13 |
| 8300.0 | 0.0 | 304.012 | 0.00 | 11475.00 |
| 8350.0 | 0.0 | 164.221 | 0.00 | 11705.83 |
| 8400.0 | 0.0 | 98.295 | 0.00 | 6562.90 |
| 8450.0 | 0.0 | 76.803 | 0.00 | 4377.45 |

| | | | | |
|---------|--------|---------|---------|----------|
| 8500.0 | 0.0 | 55.556 | 0.00 | 3308.98 |
| 8550.0 | 68.146 | 0.0 | 1703.65 | 1388.90 |
| 8600.0 | 0.0 | 36.451 | 1703.65 | 911.28 |
| 8650.0 | 0.0 | 31.121 | 0.00 | 1689.30 |
| 8700.0 | 0.0 | 29.023 | 0.00 | 1503.60 |
| 8750.0 | 0.0 | 26.023 | 0.00 | 1376.15 |
| 8800.0 | 0.0 | 30.859 | 0.00 | 1422.05 |
| 8850.0 | 0.0 | 35.181 | 0.00 | 1651.00 |
| 8900.0 | 0.0 | 58.503 | 0.00 | 2342.10 |
| 8950.0 | 0.0 | 90.373 | 0.00 | 3721.90 |
| 9000.0 | 0.0 | 118.816 | 0.00 | 5229.73 |
| 9050.0 | 0.0 | 153.174 | 0.00 | 6799.75 |
| 9100.0 | 0.0 | 180.923 | 0.00 | 8352.43 |
| 9150.0 | 0.0 | 209.516 | 0.00 | 9760.98 |
| 9200.0 | 0.0 | 307.647 | 0.00 | 12929.08 |
| 9250.0 | 0.0 | 337.622 | 0.00 | 16131.73 |
| 9300.0 | 0.0 | 292.865 | 0.00 | 15762.18 |
| 9350.0 | 0.0 | 313.689 | 0.00 | 15163.85 |
| 9400.0 | 0.0 | 305.676 | 0.00 | 15484.13 |
| 9450.0 | 0.0 | 218.622 | 0.00 | 13107.45 |
| 9500.0 | 0.0 | 285.168 | 0.00 | 12594.75 |
| 9550.0 | 0.0 | 309.471 | 0.00 | 14865.98 |
| 9600.0 | 0.0 | 300.773 | 0.00 | 15256.10 |
| 9650.0 | 0.0 | 285.528 | 0.00 | 14657.53 |
| 9700.0 | 0.0 | 262.554 | 0.00 | 13702.05 |
| 9750.0 | 0.0 | 232.632 | 0.00 | 12379.65 |
| 9800.0 | 0.0 | 206.616 | 0.00 | 10981.20 |
| 9850.0 | 0.0 | 183.61 | 0.00 | 9755.65 |
| 9900.0 | 0.0 | 154.869 | 0.00 | 8461.98 |
| 9950.0 | 0.0 | 95.176 | 0.00 | 6251.13 |
| 10000.0 | 0.0 | 72.543 | 0.00 | 4192.98 |
| 10050.0 | 0.0 | 42.36 | 0.00 | 2872.58 |
| 10100.0 | 0.0 | 38.31 | 0.00 | 2016.75 |
| 10150.0 | 0.0 | 45.151 | 0.00 | 2086.53 |
| 10200.0 | 0.0 | 39.737 | 0.00 | 2122.20 |
| 10250.0 | 0.0 | 42.596 | 0.00 | 2058.33 |
| 10300.0 | 0.0 | 40.414 | 0.00 | 2075.25 |
| 10350.0 | 5.503 | 0.309 | 137.58 | 1018.08 |
| 10400.0 | 0.0 | 24.069 | 137.58 | 609.45 |
| 10450.0 | 0.057 | 22.795 | 1.43 | 1171.60 |
| 10500.0 | 0.0 | 23.345 | 1.43 | 1153.50 |
| 10550.0 | 0.0 | 24.451 | 0.00 | 1194.90 |
| 10600.0 | 0.0 | 22.69 | 0.00 | 1178.53 |
| 10650.0 | 0.0 | 82.186 | 0.00 | 2621.90 |
| 10700.0 | 0.0 | 24.663 | 0.00 | 2671.23 |
| 10750.0 | 0.0 | 38.728 | 0.00 | 1584.78 |
| 10800.0 | 0.0 | 38.805 | 0.00 | 1938.33 |
| 10850.0 | 0.0 | 41.213 | 0.00 | 2000.45 |
| 10900.0 | 0.0 | 47.492 | 0.00 | 2217.63 |
| 10950.0 | 0.212 | 32.304 | 5.30 | 1994.90 |
| 11000.0 | 3.21 | 17.955 | 85.55 | 1256.48 |
| 11050.0 | 5.225 | 14.859 | 210.88 | 820.35 |
| 11100.0 | 5.552 | 16.945 | 269.43 | 795.10 |
| 11150.0 | 7.991 | 16.411 | 338.58 | 833.90 |
| 11200.0 | 8.996 | 14.288 | 424.68 | 767.48 |
| 11250.0 | 8.351 | 8.493 | 433.68 | 569.53 |
| 11300.0 | 7.498 | 10.018 | 396.23 | 462.78 |
| 11350.0 | 6.604 | 13.614 | 352.55 | 590.80 |
| 11400.0 | 6.532 | 15.864 | 328.40 | 736.95 |
| 11450.0 | 6.311 | 14.876 | 321.08 | 768.50 |



| | | | | |
|---------|--------|---------|---------|----------|
| 11500.0 | 2.727 | 14.581 | 225.95 | 736.43 |
| 11550.0 | 0.0 | 24.598 | 68.18 | 979.48 |
| 11600.0 | 0.0 | 68.375 | 0.00 | 2324.33 |
| 11650.0 | 0.0 | 58.449 | 0.00 | 3170.60 |
| 11700.0 | 0.0 | 102.054 | 0.00 | 4012.58 |
| 11750.0 | 1.183 | 116.225 | 29.58 | 5456.98 |
| 11800.0 | 1.516 | 72.21 | 67.48 | 4710.88 |
| 11850.0 | 0.358 | 34.876 | 46.85 | 2677.15 |
| 11900.0 | 0.0 | 217.898 | 8.95 | 6319.35 |
| 11950.0 | 0.0 | 23.904 | 0.00 | 6045.05 |
| 12000.0 | 0.0 | 20.597 | 0.00 | 1112.53 |
| 12050.0 | 0.0 | 63.921 | 0.00 | 2112.95 |
| 12100.0 | 3.89 | 0.793 | 97.25 | 1617.85 |
| 12150.0 | 6.328 | 0.52 | 255.45 | 32.83 |
| 12200.0 | 5.424 | 15.374 | 293.80 | 397.35 |
| 12250.0 | 8.419 | 3.829 | 346.08 | 480.08 |
| 12300.0 | 8.811 | 3.971 | 430.75 | 195.00 |
| 12350.0 | 8.896 | 2.99 | 442.68 | 174.03 |
| 12400.0 | 10.558 | 2.105 | 486.35 | 127.38 |
| 12450.0 | 9.385 | 6.108 | 498.58 | 205.33 |
| 12500.0 | 7.197 | 8.483 | 414.55 | 364.78 |
| 12550.0 | 6.499 | 18.43 | 342.40 | 672.83 |
| 12600.0 | 8.261 | 11.055 | 369.00 | 737.13 |
| 12650.0 | 13.473 | 1.288 | 543.35 | 308.58 |
| 12700.0 | 13.659 | 1.616 | 678.30 | 72.60 |
| 12750.0 | 12.121 | 0.156 | 644.50 | 44.30 |
| 12800.0 | 9.273 | 3.088 | 534.85 | 81.10 |
| 12850.0 | 9.026 | 6.618 | 457.48 | 242.65 |
| 12900.0 | 10.406 | 18.176 | 485.80 | 619.85 |
| 12950.0 | 8.992 | 13.74 | 484.95 | 797.90 |
| 13000.0 | 8.158 | 14.921 | 428.75 | 716.53 |
| 13050.0 | 8.0 | 8.344 | 403.95 | 581.63 |
| 13100.0 | 10.195 | 0.442 | 454.88 | 219.65 |
| 13150.0 | 12.038 | 0.0 | 555.83 | 11.05 |
| 13200.0 | 6.678 | 4.769 | 467.90 | 119.23 |
| 13250.0 | 3.551 | 31.233 | 255.73 | 900.05 |
| 13300.0 | 0.167 | 4.755 | 92.95 | 899.70 |
| 13350.0 | 1.62 | 48.005 | 44.68 | 1319.00 |
| 13400.0 | 9.567 | 1.778 | 279.68 | 1244.58 |
| 13450.0 | 41.411 | 6.351 | 1274.45 | 203.23 |
| 13500.0 | 53.074 | 0.0 | 2362.13 | 158.78 |
| 13550.0 | 26.395 | 5.563 | 1986.73 | 139.08 |
| 13600.0 | 13.554 | 17.779 | 998.73 | 583.55 |
| 13650.0 | 0.0 | 186.437 | 338.85 | 5105.40 |
| 13700.0 | 47.509 | 27.233 | 1187.73 | 5341.75 |
| 13750.0 | 0.055 | 56.555 | 1189.10 | 2094.70 |
| 13800.0 | 1.284 | 7.552 | 33.48 | 1602.68 |
| 13850.0 | 0.0 | 95.148 | 32.10 | 2567.50 |
| 13900.0 | 0.0 | 146.738 | 0.00 | 6047.15 |
| 13950.0 | 0.0 | 272.292 | 0.00 | 10475.75 |
| 14000.0 | 0.0 | 247.822 | 0.00 | 13002.85 |
| 14050.0 | 0.0 | 207.951 | 0.00 | 11394.33 |
| 14100.0 | 37.53 | 0.0 | 938.25 | 5198.78 |
| 14150.0 | 30.008 | 0.185 | 1688.45 | 4.63 |
| 14200.0 | 42.174 | 0.0 | 1804.55 | 4.63 |
| 14250.0 | 22.397 | 0.0 | 1614.28 | 0.00 |
| 14300.0 | 21.028 | 2.546 | 1085.63 | 63.65 |
| 14350.0 | 13.699 | 0.183 | 868.18 | 68.23 |
| 14400.0 | 7.3 | 4.794 | 524.98 | 124.43 |
| 14450.0 | 1.493 | 2.738 | 219.83 | 188.30 |



| | | | | |
|---------|---------|---------|---------|----------|
| 14500.0 | 5.036 | 4.109 | 163.23 | 171.18 |
| 14550.0 | 10.774 | 0.027 | 395.25 | 103.40 |
| 14600.0 | 5.32 | 59.909 | 402.35 | 1498.40 |
| 14650.0 | 0.0 | 199.83 | 133.00 | 6493.48 |
| 14700.0 | 0.0 | 162.109 | 0.00 | 9048.48 |
| 14750.0 | 8.757 | 0.0 | 218.93 | 4052.73 |
| 14800.0 | 9.433 | 0.0 | 454.75 | 0.00 |
| 14850.0 | 0.0 | 10.881 | 235.83 | 272.03 |
| 14900.0 | 0.0 | 165.307 | 0.00 | 4404.70 |
| 14950.0 | 0.0 | 127.166 | 0.00 | 7311.83 |
| 15000.0 | 0.0 | 234.327 | 0.00 | 9037.33 |
| 15050.0 | 0.0 | 133.488 | 0.00 | 9195.38 |
| 15100.0 | 0.02 | 8.044 | 0.50 | 3538.30 |
| 15150.0 | 0.78 | 7.483 | 20.00 | 388.18 |
| 15200.0 | 37.634 | 0.0 | 960.35 | 187.08 |
| 15250.0 | 80.312 | 0.0 | 2948.65 | 0.00 |
| 15300.0 | 120.175 | 0.0 | 5012.18 | 0.00 |
| 15350.0 | 125.835 | 0.0 | 6150.25 | 0.00 |
| 15400.0 | 103.716 | 0.0 | 5738.78 | 0.00 |
| 15450.0 | 21.043 | 0.018 | 3118.98 | 0.45 |
| 15500.0 | 0.0 | 94.737 | 526.08 | 2368.88 |
| 15550.0 | 0.0 | 117.353 | 0.00 | 5302.25 |
| 15600.0 | 0.0 | 60.807 | 0.00 | 4454.00 |
| 15650.0 | 0.0 | 49.149 | 0.00 | 2748.90 |
| 15700.0 | 75.297 | 0.875 | 1882.43 | 1250.60 |
| 15750.0 | 53.266 | 0.0 | 3214.08 | 21.88 |
| 15800.0 | 141.376 | 1.636 | 4866.05 | 40.90 |
| 15850.0 | 56.97 | 4.385 | 4958.65 | 150.53 |
| 15900.0 | 100.327 | 9.458 | 3932.43 | 346.08 |
| 15950.0 | 15.161 | 33.366 | 2887.20 | 1070.60 |
| 16000.0 | 1.213 | 58.937 | 409.35 | 2307.58 |
| 16050.0 | 0.449 | 41.937 | 41.55 | 2521.85 |
| 16100.0 | 1.259 | 20.51 | 42.70 | 1561.18 |
| 16150.0 | 1.803 | 66.574 | 76.55 | 2177.10 |
| 16200.0 | 1.1 | 76.112 | 72.58 | 3567.15 |
| 16250.0 | 0.0 | 60.26 | 27.50 | 3409.30 |
| 16300.0 | 0.0 | 71.03 | 0.00 | 3282.25 |
| 16350.0 | 0.0 | 119.333 | 0.00 | 4759.08 |
| 16400.0 | 0.0 | 63.816 | 0.00 | 4578.73 |
| 16450.0 | 0.0 | 81.545 | 0.00 | 3634.03 |
| 16500.0 | 1.402 | 41.217 | 35.05 | 3069.05 |
| 16550.0 | 0.0 | 390.465 | 35.05 | 10792.05 |
| 16600.0 | 0.0 | 38.784 | 0.00 | 10731.23 |
| 16650.0 | 0.0 | 71.961 | 0.00 | 2768.63 |
| 16700.0 | 0.0 | 80.187 | 0.00 | 3803.70 |
| 16750.0 | 0.0 | 138.988 | 0.00 | 5479.38 |
| 16800.0 | 0.0 | 74.128 | 0.00 | 5327.90 |
| 16850.0 | 0.0 | 84.408 | 0.00 | 3963.40 |
| 16900.0 | 0.0 | 62.867 | 0.00 | 3681.88 |
| 16950.0 | 0.0 | 46.166 | 0.00 | 2725.83 |
| 17000.0 | 0.0 | 36.584 | 0.00 | 2068.75 |
| 17050.0 | 0.0 | 38.589 | 0.00 | 1879.33 |
| 17100.0 | 0.0 | 57.609 | 0.00 | 2404.95 |
| 17150.0 | 0.0 | 35.213 | 0.00 | 2320.55 |
| 17200.0 | 0.0 | 46.339 | 0.00 | 2038.80 |
| 17250.0 | 0.0 | 19.341 | 0.00 | 1642.00 |
| 17300.0 | 0.0 | 16.872 | 0.00 | 905.33 |
| 17350.0 | 0.0 | 34.719 | 0.00 | 1289.78 |
| 17400.0 | 0.0 | 113.573 | 0.00 | 3707.30 |
| 17450.0 | 0.0 | 87.317 | 0.00 | 5022.25 |

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|---------|--------|--------|---------|---------|
| 17500.0 | 0.0 | 26.874 | 0.00 | 2854.78 |
| 17550.0 | 0.0 | 31.105 | 0.00 | 1449.48 |
| 17600.0 | 0.0 | 57.462 | 0.00 | 2214.18 |
| 17650.0 | 0.0 | 45.797 | 0.00 | 2581.48 |
| 17700.0 | 0.0 | 34.92 | 0.00 | 2017.93 |
| 17750.0 | 0.003 | 34.238 | 0.08 | 1728.95 |
| 17800.0 | 0.252 | 28.557 | 6.38 | 1569.88 |
| 17850.0 | 1.483 | 19.262 | 43.38 | 1195.48 |
| 17900.0 | 2.848 | 37.069 | 108.28 | 1408.28 |
| 17950.0 | 1.057 | 22.767 | 97.63 | 1495.90 |
| 18000.0 | 0.0 | 28.353 | 26.43 | 1278.00 |
| 18050.0 | 0.595 | 41.486 | 14.88 | 1745.98 |
| 18100.0 | 1.138 | 47.444 | 43.33 | 2223.25 |
| 18150.0 | 0.644 | 43.431 | 44.55 | 2271.88 |
| 18200.0 | 0.0 | 45.234 | 16.10 | 2216.63 |
| 18250.0 | 0.0 | 55.376 | 0.00 | 2515.25 |
| 18300.0 | 0.0 | 51.334 | 0.00 | 2667.75 |
| 18350.0 | 0.0 | 61.721 | 0.00 | 2826.38 |
| 18400.0 | 0.0 | 57.742 | 0.00 | 2986.58 |
| 18450.0 | 0.0 | 33.317 | 0.00 | 2276.48 |
| 18500.0 | 0.0 | 32.615 | 0.00 | 1648.30 |
| 18550.0 | 0.0 | 54.511 | 0.00 | 2178.15 |
| 18600.0 | 0.0 | 55.14 | 0.00 | 2741.28 |
| 18650.0 | 0.0 | 51.039 | 0.00 | 2654.48 |
| 18700.0 | 0.0 | 53.354 | 0.00 | 2609.83 |
| 18750.0 | 0.0 | 55.697 | 0.00 | 2726.28 |
| 18800.0 | 0.0 | 45.669 | 0.00 | 2534.15 |
| 18850.0 | 0.0 | 50.368 | 0.00 | 2400.93 |
| 18900.0 | 0.0 | 48.008 | 0.00 | 2459.40 |
| 18950.0 | 0.0 | 43.815 | 0.00 | 2295.58 |
| 19000.0 | 0.0 | 32.036 | 0.00 | 1896.28 |
| 19050.0 | 0.0 | 25.407 | 0.00 | 1436.08 |
| 19100.0 | 1.182 | 4.288 | 29.55 | 742.38 |
| 19150.0 | 12.862 | 0.0 | 351.10 | 107.20 |
| 19200.0 | 20.505 | 0.618 | 834.18 | 15.45 |
| 19250.0 | 21.319 | 0.472 | 1045.60 | 27.25 |
| 19300.0 | 32.467 | 0.0 | 1344.65 | 11.80 |
| 19350.0 | 9.968 | 2.535 | 1060.88 | 63.38 |
| 19400.0 | 4.045 | 4.234 | 350.33 | 169.23 |
| 19450.0 | 2.664 | 10.484 | 167.73 | 367.95 |
| 19500.0 | 18.209 | 0.559 | 521.83 | 276.08 |
| 19550.0 | 40.856 | 0.208 | 1476.63 | 19.18 |
| 19600.0 | 7.336 | 7.179 | 1204.80 | 184.68 |
| 19650.0 | 37.242 | 0.0 | 1114.45 | 179.48 |
| 19700.0 | 24.888 | 0.0 | 1553.25 | 0.00 |
| 19750.0 | 39.091 | 0.0 | 1599.48 | 0.00 |
| 19800.0 | 22.055 | 0.0 | 1528.65 | 0.00 |
| 19850.0 | 36.932 | 0.0 | 1474.68 | 0.00 |
| 19900.0 | 20.469 | 0.0 | 1435.03 | 0.00 |
| 19950.0 | 15.998 | 4.587 | 911.68 | 114.68 |
| 20000.0 | 25.144 | 0.0 | 1028.55 | 114.68 |
| 20050.0 | 10.907 | 1.824 | 901.28 | 45.60 |
| 20100.0 | 12.358 | 0.0 | 581.63 | 45.60 |
| 20150.0 | 5.43 | 4.641 | 444.70 | 116.03 |
| 20200.0 | 4.947 | 37.977 | 259.43 | 1065.45 |
| 20250.0 | 5.765 | 15.882 | 267.80 | 1346.48 |
| 20300.0 | 7.737 | 18.908 | 337.55 | 869.75 |
| 20350.0 | 5.686 | 23.225 | 335.58 | 1053.33 |
| 20400.0 | 7.618 | 6.158 | 332.60 | 734.58 |
| 20450.0 | 12.86 | 0.022 | 511.95 | 154.50 |

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|---------|--------|---------|---------|---------|
| 20500.0 | 7.548 | 2.258 | 510.20 | 57.00 |
| 20550.0 | 7.205 | 24.533 | 368.83 | 669.78 |
| 20600.0 | 8.164 | 9.863 | 384.23 | 859.90 |
| 20650.0 | 8.039 | 5.055 | 405.08 | 372.95 |
| 20700.0 | 10.211 | 7.711 | 456.25 | 319.15 |
| 20750.0 | 8.309 | 13.751 | 463.00 | 536.55 |
| 20800.0 | 11.246 | 1.148 | 488.88 | 372.48 |
| 20850.0 | 18.911 | 0.0 | 753.93 | 28.70 |
| 20900.0 | 21.874 | 0.0 | 1019.63 | 0.00 |
| 20950.0 | 24.739 | 0.0 | 1165.33 | 0.00 |
| 21000.0 | 22.111 | 0.0 | 1171.25 | 0.00 |
| 21050.0 | 21.121 | 0.0 | 1080.80 | 0.00 |
| 21100.0 | 13.562 | 0.001 | 867.08 | 0.03 |
| 21150.0 | 13.732 | 0.081 | 682.35 | 2.05 |
| 21200.0 | 21.252 | 0.0 | 874.60 | 2.03 |
| 21250.0 | 20.521 | 0.0 | 1044.33 | 0.00 |
| 21300.0 | 19.715 | 0.003 | 1005.90 | 0.08 |
| 21350.0 | 17.668 | 2.949 | 934.58 | 73.80 |
| 21400.0 | 12.734 | 0.366 | 760.05 | 82.88 |
| 21450.0 | 11.355 | 3.377 | 602.23 | 93.58 |
| 21500.0 | 12.119 | 4.203 | 586.85 | 189.50 |
| 21550.0 | 11.031 | 1.743 | 578.75 | 148.65 |
| 21600.0 | 14.63 | 0.0 | 641.53 | 43.58 |
| 21650.0 | 0.0 | 95.807 | 365.75 | 2395.18 |
| 21700.0 | 9.863 | 21.498 | 246.58 | 2932.63 |
| 21750.0 | 7.936 | 8.464 | 444.98 | 749.05 |
| 21800.0 | 7.825 | 10.154 | 394.03 | 465.45 |
| 21850.0 | 7.647 | 16.072 | 386.80 | 655.65 |
| 21900.0 | 4.627 | 4.74 | 306.85 | 520.30 |
| 21950.0 | 4.022 | 2.913 | 216.23 | 191.33 |
| 22000.0 | 4.483 | 0.077 | 212.63 | 74.75 |
| 22050.0 | 1.51 | 3.118 | 149.83 | 79.88 |
| 22100.0 | 2.277 | 0.955 | 94.68 | 101.83 |
| 22150.0 | 7.332 | 0.032 | 240.23 | 24.68 |
| 22200.0 | 3.962 | 0.633 | 282.35 | 16.63 |
| 22250.0 | 4.5 | 0.545 | 211.55 | 29.45 |
| 22300.0 | 5.963 | 0.049 | 261.58 | 14.85 |
| 22350.0 | 8.057 | 0.0 | 350.50 | 1.23 |
| 22400.0 | 16.731 | 0.0 | 619.70 | 0.00 |
| 22450.0 | 25.218 | 0.0 | 1048.73 | 0.00 |
| 22500.0 | 33.373 | 0.0 | 1464.78 | 0.00 |
| 22550.0 | 37.111 | 0.0 | 1762.10 | 0.00 |
| 22600.0 | 0.0 | 88.234 | 927.78 | 2205.85 |
| 22650.0 | 0.0 | 50.901 | 0.00 | 3478.38 |
| 22700.0 | 0.0 | 44.467 | 0.00 | 2384.20 |
| 22750.0 | 0.0 | 43.186 | 0.00 | 2191.33 |
| 22800.0 | 0.0 | 45.362 | 0.00 | 2213.70 |
| 22850.0 | 0.0 | 43.996 | 0.00 | 2233.95 |
| 22900.0 | 0.0 | 54.084 | 0.00 | 2452.00 |
| 22950.0 | 0.0 | 57.568 | 0.00 | 2791.30 |
| 23000.0 | 0.0 | 56.304 | 0.00 | 2846.80 |
| 23050.0 | 0.0 | 84.422 | 0.00 | 3518.15 |
| 23100.0 | 0.0 | 114.001 | 0.00 | 4960.58 |
| 23150.0 | 0.0 | 60.472 | 0.00 | 4361.83 |
| 23200.0 | 0.0 | 38.372 | 0.00 | 2471.10 |
| 23250.0 | 0.0 | 35.406 | 0.00 | 1844.45 |
| 23300.0 | 0.0 | 42.369 | 0.00 | 1944.38 |
| 23350.0 | 0.0 | 46.839 | 0.00 | 2230.20 |
| 23400.0 | 0.0 | 66.828 | 0.00 | 2841.68 |
| 23450.0 | 0.0 | 60.335 | 0.00 | 3179.08 |

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|---------|-------|--------|-------|---------|
| 23500.0 | 0.0 | 82.78 | 0.00 | 3577.88 |
| 23550.0 | 0.0 | 78.658 | 0.00 | 4035.95 |
| 23600.0 | 0.0 | 85.012 | 0.00 | 4091.75 |
| 23650.0 | 0.0 | 75.602 | 0.00 | 4015.35 |
| 23700.0 | 0.0 | 56.622 | 0.00 | 3305.60 |
| 23750.0 | 0.0 | 53.853 | 0.00 | 2761.88 |
| 23800.0 | 0.0 | 45.653 | 0.00 | 2487.65 |
| 23850.0 | 0.0 | 30.098 | 0.00 | 1893.78 |
| 23900.0 | 0.0 | 31.485 | 0.00 | 1539.58 |
| 23950.0 | 0.0 | 33.991 | 0.00 | 1636.90 |
| 24000.0 | 0.0 | 11.298 | 0.00 | 1132.23 |
| 24050.0 | 0.0 | 14.812 | 0.00 | 652.75 |
| 24100.0 | 0.0 | 13.356 | 0.00 | 704.20 |
| 24150.0 | 0.0 | 16.514 | 0.00 | 746.75 |
| 24200.0 | 0.0 | 20.336 | 0.00 | 921.25 |
| 24250.0 | 0.0 | 27.359 | 0.00 | 1192.38 |
| 24300.0 | 0.0 | 36.126 | 0.00 | 1587.13 |
| 24350.0 | 0.0 | 35.244 | 0.00 | 1784.25 |
| 24400.0 | 0.0 | 34.118 | 0.00 | 1734.05 |
| 24450.0 | 0.0 | 38.642 | 0.00 | 1819.00 |
| 24500.0 | 0.0 | 40.508 | 0.00 | 1978.75 |
| 24550.0 | 0.0 | 36.006 | 0.00 | 1912.85 |
| 24600.0 | 0.0 | 36.718 | 0.00 | 1818.10 |
| 24650.0 | 0.0 | 23.524 | 0.00 | 1506.05 |
| 24700.0 | 0.0 | 30.651 | 0.00 | 1354.38 |
| 24750.0 | 0.0 | 19.595 | 0.00 | 1256.15 |
| 24800.0 | 0.0 | 29.838 | 0.00 | 1235.83 |
| 24850.0 | 0.0 | 37.425 | 0.00 | 1681.58 |
| 24900.0 | 0.0 | 35.629 | 0.00 | 1826.35 |
| 24950.0 | 0.0 | 25.047 | 0.00 | 1516.90 |
| 25000.0 | 0.0 | 24.314 | 0.00 | 1234.03 |
| 25050.0 | 0.0 | 36.786 | 0.00 | 1527.50 |
| 25100.0 | 0.0 | 30.912 | 0.00 | 1692.45 |
| 25150.0 | 0.0 | 34.778 | 0.00 | 1642.25 |
| 25200.0 | 0.0 | 34.405 | 0.00 | 1729.58 |
| 25250.0 | 0.0 | 36.478 | 0.00 | 1772.08 |
| 25300.0 | 0.0 | 30.535 | 0.00 | 1675.33 |
| 25350.0 | 0.0 | 24.386 | 0.00 | 1373.03 |
| 25400.0 | 0.0 | 24.071 | 0.00 | 1211.43 |
| 25450.0 | 0.0 | 26.671 | 0.00 | 1268.55 |
| 25500.0 | 0.086 | 7.155 | 2.15 | 845.65 |
| 25550.0 | 0.027 | 7.444 | 2.83 | 364.98 |
| 25600.0 | 0.0 | 10.038 | 0.68 | 437.05 |
| 25650.0 | 0.0 | 17.491 | 0.00 | 688.23 |
| 25700.0 | 0.0 | 27.631 | 0.00 | 1128.05 |
| 25750.0 | 0.0 | 27.779 | 0.00 | 1385.25 |
| 25800.0 | 2.674 | 9.732 | 66.85 | 937.78 |
| 25850.0 | 0.0 | 18.373 | 66.85 | 702.63 |
| 25900.0 | 0.0 | 17.534 | 0.00 | 897.68 |
| 25950.0 | 0.0 | 21.571 | 0.00 | 977.63 |
| 26000.0 | 0.0 | 18.201 | 0.00 | 994.30 |
| 26050.0 | 0.0 | 24.304 | 0.00 | 1062.63 |
| 26100.0 | 0.0 | 30.515 | 0.00 | 1370.48 |
| 26150.0 | 0.0 | 24.555 | 0.00 | 1376.75 |
| 26200.0 | 0.055 | 9.465 | 1.38 | 850.50 |
| 26250.0 | 0.008 | 7.709 | 1.58 | 429.35 |
| 26300.0 | 0.0 | 19.654 | 0.20 | 684.08 |
| 26350.0 | 0.0 | 25.46 | 0.00 | 1127.85 |
| 26400.0 | 0.0 | 34.726 | 0.00 | 1504.65 |
| 26450.0 | 0.0 | 46.504 | 0.00 | 2030.75 |

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|---------|-------|---------|--------|----------|
| 26500.0 | 0.008 | 6.632 | 0.20 | 1328.40 |
| 26550.0 | 0.039 | 8.391 | 1.18 | 375.58 |
| 26600.0 | 0.0 | 23.212 | 0.98 | 790.08 |
| 26650.0 | 0.0 | 20.698 | 0.00 | 1097.75 |
| 26700.0 | 0.0 | 18.967 | 0.00 | 991.63 |
| 26750.0 | 0.0 | 18.638 | 0.00 | 940.13 |
| 26800.0 | 0.0 | 20.146 | 0.00 | 969.60 |
| 26850.0 | 0.0 | 22.039 | 0.00 | 1054.63 |
| 26900.0 | 0.0 | 24.081 | 0.00 | 1153.00 |
| 26950.0 | 0.0 | 34.108 | 0.00 | 1454.73 |
| 27000.0 | 0.0 | 39.105 | 0.00 | 1830.33 |
| 27050.0 | 0.0 | 42.367 | 0.00 | 2036.80 |
| 27100.0 | 0.0 | 47.713 | 0.00 | 2252.00 |
| 27150.0 | 0.0 | 57.072 | 0.00 | 2619.63 |
| 27200.0 | 0.0 | 50.325 | 0.00 | 2684.93 |
| 27250.0 | 0.0 | 53.019 | 0.00 | 2583.60 |
| 27300.0 | 0.0 | 79.545 | 0.00 | 3314.10 |
| 27350.0 | 0.0 | 124.411 | 0.00 | 5098.90 |
| 27400.0 | 0.0 | 168.79 | 0.00 | 7330.03 |
| 27450.0 | 0.0 | 230.676 | 0.00 | 9986.65 |
| 27500.0 | 0.0 | 289.338 | 0.00 | 13000.35 |
| 27550.0 | 0.0 | 290.439 | 0.00 | 14494.43 |
| 27600.0 | 0.0 | 275.212 | 0.00 | 14141.28 |
| 27650.0 | 0.0 | 473.709 | 0.00 | 18723.03 |
| 27700.0 | 0.0 | 550.369 | 0.00 | 25601.95 |
| 27750.0 | 0.0 | 645.68 | 0.00 | 29901.23 |
| 27800.0 | 0.0 | 669.322 | 0.00 | 32875.05 |
| 27850.0 | 0.0 | 621.412 | 0.00 | 32268.35 |
| 27900.0 | 0.0 | 494.081 | 0.00 | 27887.33 |
| 27950.0 | 0.0 | 469.642 | 0.00 | 24093.08 |
| 28000.0 | 0.0 | 526.569 | 0.00 | 24905.28 |
| 28050.0 | 0.0 | 465.69 | 0.00 | 24806.48 |
| 28100.0 | 0.0 | 476.551 | 0.00 | 23556.03 |
| 28150.0 | 0.0 | 510.699 | 0.00 | 24681.25 |
| 28200.0 | 0.0 | 218.468 | 0.00 | 18229.18 |
| 28250.0 | 0.0 | 210.415 | 0.00 | 10722.08 |
| 28300.0 | 0.0 | 205.347 | 0.00 | 10394.05 |
| 28350.0 | 0.0 | 203.4 | 0.00 | 10218.68 |
| 28400.0 | 0.0 | 182.264 | 0.00 | 9641.60 |
| 28450.0 | 0.0 | 162.883 | 0.00 | 8628.68 |
| 28500.0 | 0.0 | 147.243 | 0.00 | 7753.15 |
| 28550.0 | 0.0 | 118.351 | 0.00 | 6639.85 |
| 28600.0 | 0.0 | 91.196 | 0.00 | 5238.68 |
| 28650.0 | 0.0 | 56.883 | 0.00 | 3701.98 |
| 28700.0 | 0.0 | 23.929 | 0.00 | 2020.30 |
| 28750.0 | 0.043 | 11.372 | 1.08 | 882.53 |
| 28800.0 | 0.149 | 11.674 | 4.80 | 576.15 |
| 28850.0 | 0.0 | 16.665 | 3.73 | 708.48 |
| 28900.0 | 0.0 | 25.854 | 0.00 | 1062.98 |
| 28950.0 | 0.0 | 33.512 | 0.00 | 1484.15 |
| 29000.0 | 0.0 | 32.088 | 0.00 | 1640.00 |
| 29050.0 | 0.0 | 31.247 | 0.00 | 1583.38 |
| 29100.0 | 0.0 | 27.38 | 0.00 | 1465.68 |
| 29150.0 | 0.0 | 22.138 | 0.00 | 1237.95 |
| 29200.0 | 1.095 | 9.764 | 27.38 | 797.55 |
| 29250.0 | 1.794 | 4.64 | 72.23 | 360.10 |
| 29300.0 | 2.948 | 0.55 | 118.55 | 129.75 |
| 29350.0 | 0.0 | 16.623 | 73.70 | 429.33 |
| 29400.0 | 0.0 | 26.207 | 0.00 | 1070.75 |
| 29450.0 | 0.0 | 31.745 | 0.00 | 1448.80 |

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|---------|-------|---------|-------|----------|
| 29500.0 | 0.0 | 31.773 | 0.00 | 1587.95 |
| 29550.0 | 1.287 | 30.127 | 32.18 | 1547.50 |
| 29600.0 | 0.0 | 25.955 | 32.18 | 1402.05 |
| 29650.0 | 0.0 | 11.362 | 0.00 | 932.93 |
| 29700.0 | 0.0 | 30.504 | 0.00 | 1046.65 |
| 29750.0 | 0.0 | 40.059 | 0.00 | 1764.08 |
| 29800.0 | 0.0 | 37.04 | 0.00 | 1927.48 |
| 29850.0 | 0.0 | 38.67 | 0.00 | 1892.75 |
| 29900.0 | 0.0 | 44.388 | 0.00 | 2076.45 |
| 29950.0 | 0.0 | 45.891 | 0.00 | 2256.98 |
| 30000.0 | 0.0 | 44.848 | 0.00 | 2268.48 |
| 30050.0 | 0.0 | 42.361 | 0.00 | 2180.23 |
| 30100.0 | 0.0 | 40.407 | 0.00 | 2069.20 |
| 30150.0 | 0.0 | 41.02 | 0.00 | 2035.68 |
| 30200.0 | 0.0 | 39.267 | 0.00 | 2007.18 |
| 30250.0 | 0.0 | 28.956 | 0.00 | 1705.58 |
| 30300.0 | 0.0 | 29.537 | 0.00 | 1462.33 |
| 30350.0 | 0.0 | 26.451 | 0.00 | 1399.70 |
| 30400.0 | 0.0 | 23.622 | 0.00 | 1251.83 |
| 30450.0 | 0.0 | 19.163 | 0.00 | 1069.63 |
| 30500.0 | 0.0 | 37.654 | 0.00 | 1420.43 |
| 30550.0 | 0.0 | 29.655 | 0.00 | 1682.73 |
| 30600.0 | 0.0 | 18.022 | 0.00 | 1191.93 |
| 30650.0 | 0.0 | 24.764 | 0.00 | 1069.65 |
| 30700.0 | 0.0 | 28.185 | 0.00 | 1323.73 |
| 30750.0 | 0.0 | 25.593 | 0.00 | 1344.45 |
| 30800.0 | 0.0 | 24.963 | 0.00 | 1263.90 |
| 30850.0 | 0.0 | 24.727 | 0.00 | 1242.25 |
| 30900.0 | 0.0 | 24.752 | 0.00 | 1236.98 |
| 30950.0 | 0.0 | 27.594 | 0.00 | 1308.65 |
| 31000.0 | 0.0 | 27.249 | 0.00 | 1371.08 |
| 31050.0 | 0.0 | 31.422 | 0.00 | 1466.78 |
| 31100.0 | 0.0 | 28.586 | 0.00 | 1500.20 |
| 31150.0 | 0.0 | 30.529 | 0.00 | 1477.88 |
| 31200.0 | 0.0 | 26.823 | 0.00 | 1433.80 |
| 31250.0 | 0.0 | 23.324 | 0.00 | 1253.68 |
| 31300.0 | 0.0 | 13.12 | 0.00 | 911.10 |
| 31350.0 | 0.011 | 7.993 | 0.28 | 527.83 |
| 31400.0 | 0.0 | 15.593 | 0.28 | 589.65 |
| 31450.0 | 0.0 | 16.035 | 0.00 | 790.70 |
| 31500.0 | 0.0 | 17.565 | 0.00 | 840.00 |
| 31550.0 | 0.0 | 16.602 | 0.00 | 854.18 |
| 31600.0 | 0.0 | 11.492 | 0.00 | 702.35 |
| 31650.0 | 1.016 | 8.454 | 25.40 | 498.65 |
| 31700.0 | 0.0 | 28.017 | 25.40 | 911.78 |
| 31750.0 | 0.0 | 38.869 | 0.00 | 1672.15 |
| 31800.0 | 0.0 | 30.274 | 0.00 | 1728.58 |
| 31850.0 | 0.95 | 16.265 | 23.75 | 1163.48 |
| 31900.0 | 0.739 | 8.741 | 42.23 | 625.15 |
| 31950.0 | 0.229 | 16.301 | 24.20 | 626.05 |
| 32000.0 | 0.0 | 21.846 | 5.73 | 953.68 |
| 32050.0 | 0.0 | 27.447 | 0.00 | 1232.33 |
| 32100.0 | 0.0 | 31.165 | 0.00 | 1465.30 |
| 32150.0 | 0.0 | 39.852 | 0.00 | 1775.43 |
| 32200.0 | 0.0 | 56.533 | 0.00 | 2409.63 |
| 32250.0 | 0.0 | 62.301 | 0.00 | 2970.85 |
| 32300.0 | 0.0 | 64.663 | 0.00 | 3174.10 |
| 32350.0 | 0.0 | 66.21 | 0.00 | 3271.83 |
| 32400.0 | 0.0 | 287.7 | 0.00 | 8847.75 |
| 32450.0 | 0.0 | 222.385 | 0.00 | 12752.13 |



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|---------|--------|---------|---------|---------|
| 32500.0 | 0.0 | 156.496 | 0.00 | 9472.03 |
| 32550.0 | 0.0 | 150.089 | 0.00 | 7664.63 |
| 32600.0 | 0.0 | 116.308 | 0.00 | 6659.93 |
| 32650.0 | 0.0 | 63.959 | 0.00 | 4506.68 |
| 32700.0 | 0.0 | 61.968 | 0.00 | 3148.18 |
| 32750.0 | 0.798 | 23.104 | 19.95 | 2126.80 |
| 32800.0 | 8.544 | 0.0 | 233.55 | 577.60 |
| 32850.0 | 8.587 | 0.0 | 428.28 | 0.00 |
| 32900.0 | 14.607 | 0.0 | 579.85 | 0.00 |
| 32950.0 | 19.684 | 0.0 | 857.28 | 0.00 |
| 33000.0 | 7.264 | 2.582 | 673.70 | 64.55 |
| 33050.0 | 12.402 | 5.4 | 491.65 | 199.55 |
| 33100.0 | 11.006 | 1.304 | 585.20 | 167.60 |
| 33150.0 | 11.269 | 3.865 | 556.88 | 129.23 |
| 33200.0 | 8.28 | 6.585 | 488.73 | 261.25 |
| 33250.0 | 10.92 | 2.685 | 480.00 | 231.75 |
| 33300.0 | 10.162 | 4.596 | 527.05 | 182.03 |
| 33350.0 | 10.018 | 0.451 | 504.50 | 126.18 |
| 33400.0 | 8.009 | 3.322 | 450.68 | 94.33 |
| 33450.0 | 9.56 | 1.286 | 439.23 | 115.20 |
| 33500.0 | 9.002 | 1.09 | 464.05 | 59.40 |
| 33550.0 | 7.19 | 1.443 | 404.80 | 63.33 |
| 33600.0 | 9.39 | 4.103 | 414.50 | 138.65 |
| 33650.0 | 8.266 | 6.588 | 441.40 | 267.28 |
| 33700.0 | 8.535 | 2.525 | 420.03 | 227.83 |
| 33750.0 | 16.833 | 0.0 | 634.20 | 63.13 |
| 33800.0 | 14.204 | 0.0 | 775.93 | 0.00 |
| 33850.0 | 8.792 | 1.752 | 574.90 | 43.80 |
| 33900.0 | 10.261 | 0.622 | 476.33 | 59.35 |
| 33950.0 | 8.936 | 0.371 | 479.93 | 24.83 |
| 34000.0 | 7.334 | 2.185 | 406.75 | 63.90 |
| 34050.0 | 6.576 | 1.936 | 347.75 | 103.03 |
| 34100.0 | 11.261 | 0.0 | 445.93 | 48.40 |
| 34150.0 | 12.806 | 0.0 | 601.68 | 0.00 |
| 34200.0 | 15.46 | 0.0 | 706.65 | 0.00 |
| 34250.0 | 8.866 | 3.595 | 608.15 | 89.88 |
| 34300.0 | 8.769 | 2.953 | 440.88 | 163.70 |
| 34350.0 | 15.182 | 0.0 | 598.78 | 73.83 |
| 34400.0 | 19.799 | 0.0 | 874.53 | 0.00 |
| 34450.0 | 16.34 | 0.47 | 903.48 | 11.75 |
| 34500.0 | 14.689 | 0.354 | 775.73 | 20.60 |
| 34550.0 | 17.002 | 0.0 | 792.28 | 8.85 |
| 34600.0 | 10.495 | 0.029 | 687.43 | 0.73 |
| 34650.0 | 10.427 | 0.863 | 523.05 | 22.30 |
| 34700.0 | 9.211 | 8.166 | 490.95 | 225.73 |
| 34750.0 | 8.461 | 0.575 | 441.80 | 218.53 |
| 34800.0 | 15.473 | 0.0 | 598.35 | 14.38 |
| 34850.0 | 16.408 | 0.484 | 797.03 | 12.10 |
| 34900.0 | 20.068 | 0.02 | 911.90 | 12.60 |
| 34950.0 | 23.001 | 0.0 | 1076.73 | 0.50 |
| 35000.0 | 25.81 | 0.0 | 1220.28 | 0.00 |
| 35050.0 | 26.274 | 0.0 | 1302.10 | 0.00 |
| 35100.0 | 0.0 | 23.52 | 656.85 | 588.00 |
| 35150.0 | 15.292 | 0.127 | 382.30 | 591.18 |
| 35200.0 | 13.24 | 3.154 | 713.30 | 82.03 |
| 35250.0 | 11.99 | 1.685 | 630.75 | 120.98 |
| 35300.0 | 14.66 | 0.0 | 666.25 | 42.13 |
| 35350.0 | 12.225 | 0.718 | 672.13 | 17.95 |
| 35400.0 | 16.421 | 0.727 | 716.15 | 36.13 |
| 35450.0 | 11.721 | 1.833 | 703.55 | 64.00 |

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|---------|--------|---------|--------|---------|
| 35500.0 | 9.928 | 6.331 | 541.23 | 204.10 |
| 35550.0 | 8.086 | 5.963 | 450.35 | 307.35 |
| 35600.0 | 6.65 | 2.984 | 368.40 | 223.68 |
| 35650.0 | 8.078 | 0.993 | 368.20 | 99.43 |
| 35700.0 | 6.78 | 7.157 | 371.45 | 203.75 |
| 35750.0 | 4.434 | 11.054 | 280.35 | 455.28 |
| 35800.0 | 6.822 | 10.389 | 281.40 | 536.08 |
| 35850.0 | 5.323 | 13.814 | 303.63 | 605.08 |
| 35900.0 | 2.026 | 23.614 | 183.73 | 935.70 |
| 35950.0 | 0.158 | 21.401 | 54.60 | 1125.38 |
| 36000.0 | 0.749 | 22.564 | 22.68 | 1099.13 |
| 36050.0 | 2.678 | 12.009 | 85.68 | 864.33 |
| 36100.0 | 4.031 | 6.93 | 167.73 | 473.48 |
| 36150.0 | 6.27 | 6.676 | 257.53 | 340.15 |
| 36200.0 | 9.382 | 11.471 | 391.30 | 453.68 |
| 36250.0 | 0.0 | 48.463 | 234.55 | 1498.35 |
| 36300.0 | 8.47 | 2.458 | 211.75 | 1273.03 |
| 36350.0 | 5.392 | 13.406 | 346.55 | 396.60 |
| 36400.0 | 7.35 | 13.184 | 318.55 | 664.75 |
| 36450.0 | 7.291 | 7.658 | 366.03 | 521.05 |
| 36500.0 | 5.682 | 7.301 | 324.33 | 373.98 |
| 36550.0 | 5.043 | 22.166 | 268.13 | 736.68 |
| 36600.0 | 6.557 | 16.717 | 290.00 | 972.08 |
| 36650.0 | 8.888 | 11.16 | 386.13 | 696.93 |
| 36700.0 | 9.942 | 14.625 | 470.75 | 644.63 |
| 36750.0 | 7.988 | 9.392 | 448.25 | 600.43 |
| 36800.0 | 8.823 | 20.647 | 420.28 | 750.98 |
| 36850.0 | 7.671 | 11.307 | 412.35 | 798.85 |
| 36900.0 | 7.14 | 12.498 | 370.28 | 595.13 |
| 36950.0 | 2.766 | 26.691 | 247.65 | 979.73 |
| 37000.0 | 1.412 | 32.515 | 104.45 | 1480.15 |
| 37050.0 | 0.0 | 31.028 | 35.30 | 1588.58 |
| 37100.0 | 0.0 | 28.911 | 0.00 | 1498.48 |
| 37150.0 | 0.0 | 56.711 | 0.00 | 2140.55 |
| 37200.0 | 0.0 | 62.375 | 0.00 | 2977.15 |
| 37250.0 | 0.709 | 51.02 | 17.73 | 2834.88 |
| 37300.0 | 0.0 | 225.646 | 17.73 | 6916.65 |
| 37350.0 | 2.284 | 63.86 | 57.10 | 7237.65 |
| 37400.0 | 0.0 | 59.534 | 57.10 | 3084.85 |
| 37450.0 | 0.0 | 58.61 | 0.00 | 2953.60 |
| 37500.0 | 0.0 | 38.405 | 0.00 | 2425.38 |
| 37550.0 | 1.27 | 19.981 | 31.75 | 1459.65 |
| 37600.0 | 2.791 | 15.578 | 101.53 | 888.98 |
| 37650.0 | 2.737 | 16.572 | 138.20 | 803.75 |
| 37700.0 | 2.886 | 20.24 | 140.58 | 920.30 |
| 37750.0 | 0.874 | 15.482 | 94.00 | 893.05 |
| 37800.0 | 2.848 | 27.614 | 93.05 | 1077.40 |
| 37850.0 | 3.798 | 25.975 | 166.15 | 1339.73 |
| 37900.0 | 8.446 | 25.588 | 306.10 | 1289.08 |
| 37950.0 | 4.76 | 26.962 | 330.15 | 1313.75 |
| 38000.0 | 3.723 | 28.766 | 212.08 | 1393.20 |
| 38050.0 | 10.174 | 24.411 | 347.43 | 1329.43 |
| 38100.0 | 6.032 | 24.519 | 405.15 | 1223.25 |
| 38150.0 | 7.502 | 29.317 | 338.35 | 1345.90 |
| 38200.0 | 0.854 | 42.218 | 208.90 | 1788.38 |
| 38250.0 | 0.0 | 53.052 | 21.35 | 2381.75 |
| 38300.0 | 4.948 | 34.626 | 123.70 | 2191.95 |
| 38350.0 | 11.761 | 26.031 | 417.73 | 1516.43 |
| 38400.0 | 10.677 | 26.361 | 560.95 | 1309.80 |
| 38450.0 | 0.044 | 39.714 | 268.03 | 1651.88 |

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|---------|---------|--------|----------|---------|
| 38500.0 | 2.967 | 33.257 | 75.28 | 1824.28 |
| 38550.0 | 4.218 | 28.873 | 179.63 | 1553.25 |
| 38600.0 | 6.864 | 21.917 | 277.05 | 1269.75 |
| 38650.0 | 9.989 | 16.414 | 421.33 | 958.28 |
| 38700.0 | 5.574 | 16.673 | 389.08 | 827.18 |
| 38750.0 | 8.771 | 6.061 | 358.63 | 568.35 |
| 38800.0 | 0.0 | 16.193 | 219.28 | 556.35 |
| 38850.0 | 0.0 | 42.556 | 0.00 | 1468.73 |
| 38900.0 | 0.0 | 76.205 | 0.00 | 2969.03 |
| 38950.0 | 49.381 | 0.0 | 1234.53 | 1905.13 |
| 39000.0 | 575.695 | 0.0 | 15626.90 | 0.00 |
| 39050.0 | 587.35 | 0.0 | 29076.13 | 0.00 |
| 39100.0 | 444.759 | 0.0 | 25802.73 | 0.00 |
| 39150.0 | 241.815 | 0.0 | 17164.35 | 0.00 |
| 39200.0 | 260.251 | 0.0 | 12551.65 | 0.00 |
| 39250.0 | 146.662 | 0.0 | 10172.83 | 0.00 |
| 39300.0 | 37.11 | 10.211 | 4594.30 | 255.28 |
| 39350.0 | 7.328 | 88.586 | 1110.95 | 2469.93 |
| 39400.0 | 2.495 | 83.946 | 245.58 | 4313.30 |
| 39450.0 | 19.619 | 12.892 | 552.85 | 2420.95 |
| 39500.0 | 24.044 | 4.384 | 1091.58 | 431.90 |
| 39550.0 | 5.664 | 47.756 | 742.70 | 1303.50 |
| 39600.0 | 4.602 | 37.382 | 256.65 | 2128.45 |
| 39650.0 | 9.76 | 12.358 | 359.05 | 1243.50 |
| 39700.0 | 23.6 | 8.949 | 834.00 | 532.68 |
| 39750.0 | 37.631 | 4.323 | 1530.78 | 331.80 |
| 39800.0 | 39.183 | 7.22 | 1920.35 | 288.58 |
| 39850.0 | 0.268 | 54.655 | 986.28 | 1546.88 |
| 39900.0 | 0.39 | 89.242 | 16.45 | 3597.43 |
| 39950.0 | 2.447 | 73.069 | 70.93 | 4057.78 |
| 40000.0 | 27.872 | 15.539 | 757.98 | 2215.20 |
| 40050.0 | 28.5 | 29.691 | 1409.30 | 1130.75 |
| 40100.0 | 103.35 | 5.236 | 3296.25 | 873.18 |
| 40150.0 | 237.089 | 0.012 | 8510.98 | 131.20 |
| 40200.0 | 136.079 | 2.259 | 9329.20 | 56.78 |
| 40250.0 | 34.179 | 4.32 | 4256.45 | 164.48 |
| 40300.0 | 14.747 | 19.56 | 1223.15 | 597.00 |
| 40350.0 | 4.071 | 16.735 | 470.45 | 907.38 |
| 40400.0 | 14.37 | 6.273 | 461.03 | 575.20 |
| 40450.0 | 32.854 | 0.0 | 1180.60 | 156.83 |
| 40500.0 | 39.117 | 0.0 | 1799.28 | 0.00 |
| 40550.0 | 1.793 | 9.61 | 1022.75 | 240.25 |
| 40600.0 | 0.194 | 22.626 | 49.68 | 805.90 |
| 40650.0 | 0.0 | 32.263 | 4.85 | 1372.23 |
| 40700.0 | 0.0 | 38.353 | 0.00 | 1765.40 |
| 40750.0 | 4.102 | 28.133 | 102.55 | 1662.15 |
| 40800.0 | 0.0 | 81.218 | 102.55 | 2733.78 |
| 40850.0 | 37.25 | 0.0 | 931.25 | 2030.45 |
| 40900.0 | 34.446 | 0.0 | 1792.40 | 0.00 |
| 40950.0 | 18.829 | 0.0 | 1331.88 | 0.00 |
| 41000.0 | 20.02 | 0.0 | 971.23 | 0.00 |
| 41050.0 | 9.688 | 0.0 | 742.70 | 0.00 |
| 41100.0 | 6.223 | 7.676 | 397.78 | 191.90 |
| 41150.0 | 13.599 | 0.0 | 495.55 | 191.90 |
| 41200.0 | 12.894 | 0.001 | 662.33 | 0.03 |
| 41250.0 | 22.714 | 0.0 | 890.20 | 0.03 |
| 41300.0 | 26.397 | 0.0 | 1227.78 | 0.00 |
| 41350.0 | 23.511 | 0.0 | 1247.70 | 0.00 |
| 41400.0 | 13.917 | 0.0 | 935.70 | 0.00 |
| 41450.0 | 19.864 | 0.255 | 844.53 | 6.38 |

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|---------|--------|--------|---------|---------|
| 41500.0 | 20.408 | 0.0 | 1006.80 | 6.38 |
| 41550.0 | 21.89 | 0.0 | 1057.45 | 0.00 |
| 41600.0 | 16.842 | 0.0 | 968.30 | 0.00 |
| 41650.0 | 20.221 | 0.0 | 926.58 | 0.00 |
| 41700.0 | 10.705 | 0.16 | 773.15 | 4.00 |
| 41750.0 | 17.167 | 0.0 | 696.80 | 4.00 |
| 41800.0 | 20.653 | 0.0 | 945.50 | 0.00 |
| 41850.0 | 35.507 | 0.0 | 1404.00 | 0.00 |
| 41900.0 | 39.189 | 0.0 | 1867.40 | 0.00 |
| 41950.0 | 36.082 | 0.0 | 1881.78 | 0.00 |
| 42000.0 | 10.961 | 0.957 | 1176.08 | 23.93 |
| 42050.0 | 6.116 | 16.163 | 426.93 | 428.00 |
| 42100.0 | 13.894 | 0.345 | 500.25 | 412.70 |
| 42150.0 | 23.573 | 0.0 | 936.68 | 8.63 |
| 42200.0 | 23.718 | 0.0 | 1182.28 | 0.00 |
| 42250.0 | 18.69 | 0.0 | 1060.20 | 0.00 |
| 42300.0 | 14.33 | 0.0 | 825.50 | 0.00 |
| 42350.0 | 22.053 | 0.0 | 909.58 | 0.00 |
| 42400.0 | 21.259 | 0.0 | 1082.80 | 0.00 |
| 42450.0 | 4.952 | 20.653 | 655.28 | 516.33 |
| 42500.0 | 22.156 | 0.089 | 677.70 | 518.55 |
| 42550.0 | 13.685 | 0.0 | 896.03 | 2.23 |
| 42600.0 | 16.438 | 0.0 | 753.08 | 0.00 |
| 42650.0 | 25.867 | 0.0 | 1057.63 | 0.00 |
| 42700.0 | 19.409 | 0.0 | 1131.90 | 0.00 |
| 42750.0 | 13.979 | 0.0 | 834.70 | 0.00 |
| 42800.0 | 9.808 | 2.367 | 594.68 | 59.18 |
| 42850.0 | 19.533 | 0.0 | 733.53 | 59.18 |
| 42900.0 | 22.088 | 0.0 | 1040.53 | 0.00 |
| 42950.0 | 38.094 | 0.0 | 1504.55 | 0.00 |
| 43000.0 | 5.336 | 6.83 | 1085.75 | 170.75 |
| 43050.0 | 0.0 | 60.616 | 133.40 | 1686.15 |
| 43100.0 | 33.646 | 0.0 | 841.15 | 1515.40 |
| 43150.0 | 38.634 | 0.0 | 1807.00 | 0.00 |
| 43200.0 | 48.562 | 0.0 | 2179.90 | 0.00 |
| 43250.0 | 48.153 | 0.0 | 2417.88 | 0.00 |
| 43300.0 | 27.021 | 0.0 | 1879.35 | 0.00 |
| 43350.0 | 25.775 | 0.0 | 1319.90 | 0.00 |
| 43400.0 | 10.045 | 0.0 | 895.50 | 0.00 |
| 43450.0 | 16.571 | 0.0 | 665.40 | 0.00 |
| 43500.0 | 10.871 | 0.0 | 686.05 | 0.00 |
| 43550.0 | 2.886 | 6.489 | 343.93 | 162.23 |
| 43600.0 | 0.372 | 11.398 | 81.45 | 447.18 |
| 43650.0 | 3.074 | 0.488 | 86.15 | 297.15 |
| 43700.0 | 9.956 | 0.0 | 325.75 | 12.20 |
| 43750.0 | 15.251 | 0.0 | 630.18 | 0.00 |
| 43800.0 | 9.439 | 0.528 | 617.25 | 13.20 |
| 43850.0 | 13.989 | 0.0 | 585.70 | 13.20 |
| 43900.0 | 11.321 | 0.0 | 632.75 | 0.00 |
| 43950.0 | 6.962 | 4.285 | 457.08 | 107.13 |
| 44000.0 | 6.797 | 0.0 | 343.98 | 107.13 |
| 44050.0 | 3.251 | 2.154 | 251.20 | 53.85 |
| 44100.0 | 4.789 | 0.007 | 201.00 | 54.03 |
| 44150.0 | 8.677 | 0.0 | 336.65 | 0.18 |
| 44200.0 | 5.946 | 0.61 | 365.58 | 15.25 |
| 44250.0 | 4.123 | 1.629 | 251.73 | 55.98 |
| 44300.0 | 2.527 | 1.402 | 166.25 | 75.78 |
| 44350.0 | 5.076 | 2.609 | 190.08 | 100.28 |
| 44400.0 | 8.651 | 0.002 | 343.18 | 65.28 |
| 44450.0 | 14.087 | 0.0 | 568.45 | 0.05 |

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|---------|--------|---------|--------|---------|
| 44500.0 | 14.546 | 0.0 | 715.83 | 0.00 |
| 44550.0 | 10.41 | 0.0 | 623.90 | 0.00 |
| 44600.0 | 6.583 | 19.648 | 424.83 | 491.20 |
| 44650.0 | 10.268 | 0.0 | 421.28 | 491.20 |
| 44700.0 | 8.434 | 7.234 | 467.55 | 180.85 |
| 44750.0 | 11.74 | 13.426 | 504.35 | 516.50 |
| 44800.0 | 15.149 | 7.328 | 672.23 | 518.85 |
| 44850.0 | 13.051 | 0.552 | 705.00 | 197.00 |
| 44900.0 | 14.054 | 0.0 | 677.63 | 13.80 |
| 44950.0 | 13.014 | 0.889 | 676.70 | 22.23 |
| 45000.0 | 10.116 | 0.772 | 578.25 | 41.53 |
| 45050.0 | 7.608 | 1.707 | 443.10 | 61.98 |
| 45100.0 | 6.341 | 3.263 | 348.73 | 124.25 |
| 45150.0 | 7.537 | 0.004 | 346.95 | 81.68 |
| 45200.0 | 14.598 | 0.0 | 553.38 | 0.10 |
| 45250.0 | 17.371 | 0.0 | 799.23 | 0.00 |
| 45300.0 | 9.545 | 0.395 | 672.90 | 9.88 |
| 45350.0 | 8.857 | 6.405 | 460.05 | 170.00 |
| 45400.0 | 11.956 | 1.622 | 520.33 | 200.68 |
| 45450.0 | 12.493 | 0.017 | 611.23 | 40.98 |
| 45500.0 | 8.552 | 0.429 | 526.13 | 11.15 |
| 45550.0 | 7.606 | 2.537 | 403.95 | 74.15 |
| 45600.0 | 4.438 | 3.05 | 301.10 | 139.68 |
| 45650.0 | 1.498 | 9.126 | 148.40 | 304.40 |
| 45700.0 | 3.953 | 2.113 | 136.28 | 280.98 |
| 45750.0 | 5.889 | 9.041 | 246.05 | 278.85 |
| 45800.0 | 9.485 | 6.226 | 384.35 | 381.68 |
| 45850.0 | 18.656 | 3.222 | 703.53 | 236.20 |
| 45900.0 | 14.692 | 8.727 | 833.70 | 298.73 |
| 45950.0 | 9.793 | 16.663 | 612.13 | 634.75 |
| 46000.0 | 8.465 | 25.006 | 456.45 | 1041.73 |
| 46050.0 | 8.852 | 30.588 | 432.93 | 1389.85 |
| 46100.0 | 6.369 | 23.274 | 380.53 | 1346.55 |
| 46150.0 | 9.704 | 31.97 | 401.83 | 1381.10 |
| 46200.0 | 9.184 | 28.037 | 472.20 | 1500.18 |
| 46250.0 | 6.257 | 32.415 | 386.03 | 1511.30 |
| 46300.0 | 3.165 | 33.6 | 235.55 | 1650.38 |
| 46350.0 | 0.0 | 52.226 | 79.13 | 2145.65 |
| 46400.0 | 0.0 | 97.282 | 0.00 | 3737.70 |
| 46450.0 | 0.0 | 142.889 | 0.00 | 6004.28 |
| 46500.0 | 0.0 | 155.722 | 0.00 | 7465.28 |
| 46550.0 | 0.0 | 152.41 | 0.00 | 7703.30 |
| 46600.0 | 0.0 | 151.558 | 0.00 | 7599.20 |
| 46650.0 | 0.0 | 148.982 | 0.00 | 7513.50 |
| 46700.0 | 0.0 | 140.786 | 0.00 | 7244.20 |
| 46750.0 | 0.0 | 123.647 | 0.00 | 6610.83 |
| 46800.0 | 0.0 | 99.446 | 0.00 | 5577.33 |
| 46850.0 | 0.0 | 75.236 | 0.00 | 4367.05 |
| 46900.0 | 0.0 | 49.678 | 0.00 | 3122.85 |
| 46950.0 | 0.0 | 20.402 | 0.00 | 1752.00 |
| 47000.0 | 2.509 | 1.723 | 62.73 | 553.13 |
| 47050.0 | 8.434 | 2.042 | 273.58 | 94.13 |
| 47100.0 | 5.88 | 9.258 | 357.85 | 282.50 |
| 47150.0 | 7.193 | 7.008 | 326.83 | 406.65 |
| 47200.0 | 9.412 | 12.438 | 415.13 | 486.15 |
| 47250.0 | 6.885 | 13.489 | 407.43 | 648.18 |
| 47300.0 | 4.237 | 10.721 | 278.05 | 605.25 |
| 47350.0 | 1.147 | 28.852 | 134.60 | 989.33 |
| 47400.0 | 0.0 | 29.236 | 28.68 | 1452.20 |
| 47450.0 | 0.0 | 34.445 | 0.00 | 1592.03 |

| | | | | |
|---------|--------|---------|---------|----------|
| 47500.0 | 0.0 | 39.668 | 0.00 | 1852.83 |
| 47550.0 | 0.0 | 88.231 | 0.00 | 3197.48 |
| 47600.0 | 0.0 | 112.224 | 0.00 | 5011.38 |
| 47650.0 | 0.0 | 91.995 | 0.00 | 5105.48 |
| 47700.0 | 0.0 | 54.482 | 0.00 | 3661.93 |
| 47750.0 | 0.0 | 185.983 | 0.00 | 6011.63 |
| 47800.0 | 0.0 | 74.488 | 0.00 | 6511.78 |
| 47850.0 | 0.0 | 76.95 | 0.00 | 3785.95 |
| 47900.0 | 0.0 | 71.6 | 0.00 | 3713.75 |
| 47950.0 | 0.0 | 49.552 | 0.00 | 3028.80 |
| 48000.0 | 0.0 | 34.924 | 0.00 | 2111.90 |
| 48050.0 | 0.0 | 15.237 | 0.00 | 1254.03 |
| 48100.0 | 0.507 | 18.381 | 12.68 | 840.45 |
| 48150.0 | 4.537 | 8.418 | 126.10 | 669.98 |
| 48200.0 | 13.043 | 1.873 | 439.50 | 257.28 |
| 48250.0 | 2.961 | 32.926 | 400.10 | 869.98 |
| 48300.0 | 29.808 | 0.0 | 819.23 | 823.15 |
| 48350.0 | 22.656 | 0.0 | 1311.60 | 0.00 |
| 48400.0 | 15.446 | 0.036 | 952.55 | 0.90 |
| 48450.0 | 22.45 | 0.0 | 947.40 | 0.90 |
| 48500.0 | 10.635 | 3.117 | 827.13 | 77.93 |
| 48550.0 | 6.919 | 2.032 | 438.85 | 128.73 |
| 48600.0 | 4.968 | 2.462 | 297.18 | 112.35 |
| 48650.0 | 6.556 | 1.943 | 288.10 | 110.13 |
| 48700.0 | 7.639 | 1.941 | 354.88 | 97.10 |
| 48750.0 | 5.827 | 3.276 | 336.65 | 130.43 |
| 48800.0 | 7.848 | 1.593 | 341.88 | 121.73 |
| 48850.0 | 7.036 | 2.102 | 372.10 | 92.38 |
| 48900.0 | 6.037 | 3.499 | 326.83 | 140.03 |
| 48950.0 | 4.325 | 4.871 | 259.05 | 209.25 |
| 49000.0 | 11.546 | 0.0 | 396.78 | 121.78 |
| 49050.0 | 6.536 | 9.716 | 452.05 | 242.90 |
| 49100.0 | 10.077 | 0.031 | 415.33 | 243.68 |
| 49150.0 | 3.616 | 0.352 | 342.33 | 9.58 |
| 49200.0 | 7.02 | 0.0 | 265.90 | 8.80 |
| 49250.0 | 0.0 | 5.32 | 175.50 | 133.00 |
| 49300.0 | 0.0 | 27.827 | 0.00 | 828.68 |
| 49350.0 | 0.0 | 64.802 | 0.00 | 2315.73 |
| 49400.0 | 0.0 | 108.533 | 0.00 | 4333.38 |
| 49450.0 | 0.0 | 140.795 | 0.00 | 6233.20 |
| 49500.0 | 0.0 | 181.529 | 0.00 | 8058.10 |
| 49550.0 | 0.0 | 199.22 | 0.00 | 9518.73 |
| 49600.0 | 0.0 | 214.93 | 0.00 | 10353.75 |
| 49650.0 | 0.0 | 222.42 | 0.00 | 10933.75 |
| 49700.0 | 0.0 | 255.125 | 0.00 | 11938.63 |
| 49750.0 | 0.0 | 279.619 | 0.00 | 13368.60 |
| 49800.0 | 0.0 | 215.567 | 0.00 | 12379.65 |
| 49850.0 | 0.0 | 270.945 | 0.00 | 12162.80 |
| 49900.0 | 0.0 | 275.21 | 0.00 | 13653.88 |
| 49950.0 | 0.0 | 257.091 | 0.00 | 13307.53 |
| 50000.0 | 0.0 | 229.206 | 0.00 | 12157.43 |
| 50050.0 | 0.0 | 159.884 | 0.00 | 9727.25 |
| 50100.0 | 0.0 | 130.492 | 0.00 | 7259.40 |
| 50150.0 | 0.0 | 80.044 | 0.00 | 5263.40 |
| 50200.0 | 0.0 | 40.557 | 0.00 | 3015.03 |
| 50250.0 | 0.0 | 12.506 | 0.00 | 1326.58 |
| 50300.0 | 7.081 | 8.357 | 177.03 | 521.58 |
| 50350.0 | 7.11 | 13.736 | 354.78 | 552.33 |
| 50400.0 | 8.02 | 7.189 | 378.25 | 523.13 |
| 50450.0 | 6.948 | 3.152 | 374.20 | 258.53 |

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|---------|--------|--------|--------|---------|
| 50500.0 | 7.357 | 0.86 | 357.63 | 100.30 |
| 50550.0 | 14.339 | 0.0 | 542.40 | 21.50 |
| 50600.0 | 12.081 | 6.465 | 660.50 | 161.63 |
| 50650.0 | 11.638 | 2.761 | 592.98 | 230.65 |
| 50700.0 | 8.361 | 7.113 | 499.98 | 246.85 |
| 50750.0 | 7.198 | 10.706 | 388.98 | 445.48 |
| 50800.0 | 6.741 | 4.969 | 348.48 | 391.88 |
| 50850.0 | 10.74 | 0.024 | 437.03 | 124.83 |
| 50900.0 | 16.93 | 1.25 | 691.75 | 31.85 |
| 50950.0 | 11.284 | 0.655 | 705.35 | 47.63 |
| 51000.0 | 12.899 | 1.352 | 604.58 | 50.18 |
| 51050.0 | 9.279 | 6.906 | 554.45 | 206.45 |
| 51100.0 | 7.298 | 10.571 | 414.43 | 436.93 |
| 51150.0 | 11.569 | 6.936 | 471.68 | 437.68 |
| 51200.0 | 13.025 | 9.883 | 614.85 | 420.48 |
| 51250.0 | 12.118 | 5.205 | 628.58 | 377.20 |
| 51300.0 | 11.672 | 6.723 | 594.75 | 298.20 |
| 51350.0 | 9.322 | 9.179 | 524.85 | 397.55 |
| 51400.0 | 8.013 | 23.617 | 433.38 | 819.90 |
| 51450.0 | 10.229 | 23.274 | 456.05 | 1172.28 |
| 51500.0 | 4.659 | 27.034 | 372.20 | 1257.70 |
| 51550.0 | 3.106 | 17.849 | 194.13 | 1122.08 |
| 51600.0 | 8.385 | 9.879 | 287.28 | 693.20 |
| 51650.0 | 6.711 | 22.342 | 377.40 | 805.53 |
| 51700.0 | 5.496 | 18.559 | 305.18 | 1022.53 |
| 51750.0 | 3.018 | 4.057 | 212.85 | 565.40 |
| 51800.0 | 4.369 | 7.828 | 184.68 | 297.13 |
| 51850.0 | 11.198 | 0.002 | 389.18 | 195.75 |
| 51900.0 | 10.196 | 8.305 | 534.85 | 207.68 |
| 51950.0 | 8.306 | 11.511 | 462.55 | 495.40 |
| 52000.0 | 7.371 | 10.694 | 391.93 | 555.13 |
| 52050.0 | 8.989 | 10.048 | 409.00 | 518.55 |
| 52100.0 | 10.232 | 5.202 | 480.53 | 381.25 |
| 52150.0 | 7.611 | 8.094 | 446.08 | 332.40 |
| 52200.0 | 6.114 | 9.68 | 343.13 | 444.35 |
| 52250.0 | 4.731 | 13.207 | 271.13 | 572.18 |
| 52300.0 | 4.692 | 9.108 | 235.58 | 557.88 |
| 52350.0 | 5.361 | 10.761 | 251.33 | 496.73 |
| 52400.0 | 5.693 | 12.517 | 276.35 | 581.95 |
| 52450.0 | 7.402 | 7.98 | 327.38 | 512.43 |
| 52500.0 | 6.876 | 6.781 | 356.95 | 369.03 |
| 52550.0 | 6.118 | 4.584 | 324.85 | 284.13 |
| 52600.0 | 6.897 | 12.12 | 325.38 | 417.60 |
| 52650.0 | 7.019 | 12.497 | 347.90 | 615.43 |
| 52700.0 | 7.056 | 17.786 | 351.88 | 757.08 |
| 52750.0 | 7.84 | 7.991 | 372.40 | 644.43 |
| 52800.0 | 5.729 | 9.863 | 339.23 | 446.35 |
| 52850.0 | 4.749 | 17.555 | 261.95 | 685.45 |
| 52900.0 | 11.001 | 13.323 | 393.75 | 771.95 |
| 52950.0 | 12.119 | 12.552 | 578.00 | 646.88 |
| 53000.0 | 6.862 | 11.231 | 474.53 | 594.58 |
| 53050.0 | 5.768 | 13.506 | 315.75 | 618.43 |
| 53100.0 | 7.982 | 14.634 | 343.75 | 703.50 |
| 53150.0 | 7.676 | 14.672 | 391.45 | 732.65 |
| 53200.0 | 6.241 | 15.837 | 347.93 | 762.73 |
| 53250.0 | 5.349 | 16.193 | 289.75 | 800.75 |
| 53300.0 | 7.807 | 18.388 | 328.90 | 864.53 |
| 53350.0 | 8.814 | 9.84 | 415.53 | 705.70 |
| 53400.0 | 7.511 | 6.372 | 408.13 | 405.30 |
| 53450.0 | 4.412 | 18.885 | 298.08 | 631.43 |

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|---------|--------|---------|--------|---------|
| 53500.0 | 4.908 | 16.879 | 233.00 | 894.10 |
| 53550.0 | 7.961 | 23.074 | 321.73 | 998.83 |
| 53600.0 | 7.561 | 19.057 | 388.05 | 1053.28 |
| 53650.0 | 7.695 | 15.596 | 381.40 | 866.33 |
| 53700.0 | 9.002 | 19.571 | 417.43 | 879.18 |
| 53750.0 | 8.862 | 14.213 | 446.60 | 844.60 |
| 53800.0 | 15.747 | 10.358 | 615.23 | 614.28 |
| 53850.0 | 3.788 | 30.089 | 488.38 | 1011.18 |
| 53900.0 | 2.377 | 43.065 | 154.13 | 1828.85 |
| 53950.0 | 4.924 | 47.167 | 182.53 | 2255.80 |
| 54000.0 | 6.488 | 30.982 | 285.30 | 1953.73 |
| 54050.0 | 6.89 | 19.539 | 334.45 | 1263.03 |
| 54100.0 | 9.091 | 18.216 | 399.53 | 943.88 |
| 54150.0 | 0.0 | 130.357 | 227.28 | 3714.33 |
| 54200.0 | 9.676 | 1.074 | 241.90 | 3285.78 |
| 54250.0 | 6.873 | 0.135 | 413.73 | 30.23 |
| 54300.0 | 1.25 | 10.137 | 203.08 | 256.80 |
| 54350.0 | 2.832 | 3.85 | 102.05 | 349.68 |
| 54400.0 | 5.911 | 4.046 | 218.58 | 197.40 |
| 54450.0 | 12.646 | 1.328 | 463.93 | 134.35 |
| 54500.0 | 15.942 | 0.0 | 714.70 | 33.20 |
| 54550.0 | 12.916 | 3.684 | 721.45 | 92.10 |
| 54600.0 | 12.949 | 4.422 | 646.63 | 202.65 |
| 54650.0 | 13.125 | 0.125 | 651.85 | 113.68 |
| 54700.0 | 11.122 | 9.664 | 606.18 | 244.73 |
| 54750.0 | 12.071 | 0.38 | 579.83 | 251.10 |
| 54800.0 | 10.344 | 6.81 | 560.38 | 179.75 |
| 54850.0 | 12.31 | 14.426 | 566.35 | 530.90 |
| 54900.0 | 16.927 | 10.875 | 730.93 | 632.53 |
| 54950.0 | 12.736 | 12.594 | 741.58 | 586.73 |
| 55000.0 | 10.344 | 8.327 | 577.00 | 523.03 |
| 55050.0 | 13.08 | 2.576 | 585.60 | 272.58 |
| 55100.0 | 13.294 | 0.618 | 659.35 | 79.85 |
| 55150.0 | 10.569 | 0.947 | 596.58 | 39.13 |
| 55200.0 | 12.7 | 0.035 | 581.73 | 24.55 |
| 55250.0 | 10.311 | 0.0 | 575.28 | 0.88 |
| 55300.0 | 12.886 | 0.0 | 579.93 | 0.00 |
| 55350.0 | 13.796 | 0.296 | 667.05 | 7.40 |
| 55400.0 | 10.973 | 2.937 | 619.23 | 80.83 |
| 55450.0 | 10.985 | 3.745 | 548.95 | 167.05 |
| 55500.0 | 9.076 | 8.632 | 501.53 | 309.43 |
| 55550.0 | 6.49 | 22.062 | 389.15 | 767.35 |
| 55600.0 | 9.604 | 7.21 | 402.35 | 731.80 |
| 55650.0 | 10.191 | 26.402 | 494.88 | 840.30 |
| 55700.0 | 7.595 | 38.287 | 444.65 | 1617.23 |
| 55750.0 | 7.595 | 23.349 | 379.75 | 1540.90 |
| 55800.0 | 7.833 | 12.979 | 385.70 | 908.20 |
| 55850.0 | 12.213 | 2.923 | 501.15 | 397.55 |
| 55900.0 | 14.713 | 0.0 | 673.15 | 73.08 |
| 55950.0 | 7.812 | 10.971 | 563.13 | 274.28 |
| 56000.0 | 7.441 | 25.288 | 381.33 | 906.48 |
| 56050.0 | 12.982 | 4.267 | 510.58 | 738.88 |
| 56100.0 | 9.783 | 24.85 | 569.13 | 727.93 |
| 56150.0 | 8.263 | 19.116 | 451.15 | 1099.15 |
| 56200.0 | 5.795 | 22.071 | 351.45 | 1029.68 |
| 56250.0 | 7.048 | 16.026 | 321.08 | 952.43 |
| 56300.0 | 7.403 | 13.782 | 361.28 | 745.20 |
| 56350.0 | 2.479 | 12.429 | 247.05 | 655.28 |
| 56400.0 | 3.731 | 7.17 | 155.25 | 489.98 |
| 56450.0 | 6.224 | 6.772 | 248.88 | 348.55 |

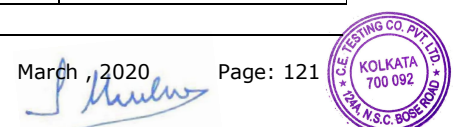
| | | | | |
|---------|--------|--------|--------|---------|
| 56500.0 | 8.67 | 4.425 | 372.35 | 279.93 |
| 56550.0 | 6.722 | 6.716 | 384.80 | 278.53 |
| 56600.0 | 2.79 | 6.188 | 237.80 | 322.60 |
| 56650.0 | 0.188 | 12.586 | 74.45 | 469.35 |
| 56700.0 | 0.508 | 27.463 | 17.40 | 1001.23 |
| 56750.0 | 4.455 | 12.439 | 124.08 | 997.55 |
| 56800.0 | 0.0 | 87.871 | 111.38 | 2507.75 |
| 56850.0 | 1.339 | 24.174 | 33.48 | 2801.13 |
| 56900.0 | 0.0 | 33.926 | 33.48 | 1452.50 |
| 56950.0 | 0.0 | 25.381 | 0.00 | 1482.68 |
| 57000.0 | 2.13 | 24.475 | 53.25 | 1246.40 |
| 57050.0 | 7.322 | 12.314 | 236.30 | 919.73 |
| 57100.0 | 8.581 | 14.517 | 397.58 | 670.78 |
| 57150.0 | 10.847 | 14.552 | 485.70 | 726.73 |
| 57200.0 | 10.28 | 18.448 | 528.18 | 825.00 |
| 57250.0 | 8.993 | 15.431 | 481.83 | 846.98 |
| 57300.0 | 11.652 | 8.256 | 516.13 | 592.18 |
| 57350.0 | 12.427 | 7.413 | 601.98 | 391.73 |
| 57400.0 | 12.1 | 0.0 | 613.18 | 185.33 |
| 57450.0 | 13.665 | 0.265 | 644.13 | 6.63 |
| 57500.0 | 14.904 | 0.0 | 714.23 | 6.63 |
| 57550.0 | 8.404 | 26.75 | 582.70 | 668.75 |
| 57600.0 | 9.163 | 24.956 | 439.18 | 1292.65 |
| 57650.0 | 10.344 | 24.688 | 487.68 | 1241.10 |
| 57700.0 | 9.188 | 22.206 | 488.30 | 1172.35 |
| 57750.0 | 9.076 | 24.345 | 456.60 | 1163.78 |
| 57800.0 | 9.315 | 18.752 | 459.78 | 1077.43 |
| 57850.0 | 8.19 | 22.029 | 437.63 | 1019.53 |
| 57900.0 | 8.319 | 18.979 | 412.73 | 1025.20 |
| 57950.0 | 9.919 | 22.342 | 455.95 | 1033.03 |
| 58000.0 | 10.2 | 24.493 | 502.98 | 1170.88 |
| 58050.0 | 6.226 | 31.699 | 410.65 | 1404.80 |
| 58100.0 | 6.029 | 26.375 | 306.38 | 1451.85 |
| 58150.0 | 6.348 | 17.371 | 309.43 | 1093.65 |
| 58200.0 | 6.632 | 19.585 | 324.50 | 923.90 |
| 58250.0 | 6.501 | 13.286 | 328.33 | 821.78 |
| 58300.0 | 6.507 | 8.784 | 325.20 | 551.75 |
| 58350.0 | 7.284 | 9.115 | 344.78 | 447.48 |
| 58400.0 | 6.689 | 32.481 | 349.33 | 1039.90 |
| 58450.0 | 6.44 | 29.238 | 328.23 | 1542.98 |
| 58500.0 | 6.13 | 17.936 | 314.25 | 1179.35 |
| 58550.0 | 3.311 | 45.494 | 236.03 | 1585.75 |
| 58600.0 | 3.598 | 48.037 | 172.73 | 2338.28 |
| 58650.0 | 4.793 | 46.236 | 209.78 | 2356.83 |
| 58700.0 | 3.355 | 9.888 | 203.70 | 1403.10 |
| 58750.0 | 2.272 | 41.51 | 140.68 | 1284.95 |
| 58800.0 | 4.318 | 30.24 | 164.75 | 1793.75 |
| 58850.0 | 6.454 | 0.0 | 269.30 | 756.00 |
| 58900.0 | 5.028 | 16.693 | 287.05 | 417.33 |
| 58950.0 | 3.937 | 39.453 | 224.13 | 1403.65 |
| 59000.0 | 2.236 | 49.777 | 154.33 | 2230.75 |
| 59050.0 | 0.997 | 18.456 | 80.83 | 1705.83 |
| 59100.0 | 1.763 | 56.651 | 69.00 | 1877.68 |
| 59150.0 | 3.288 | 39.699 | 126.28 | 2408.75 |
| 59200.0 | 3.884 | 27.888 | 179.30 | 1689.68 |
| 59250.0 | 3.638 | 34.945 | 188.05 | 1570.83 |
| 59300.0 | 3.321 | 38.13 | 173.98 | 1826.88 |
| 59350.0 | 3.486 | 34.204 | 170.18 | 1808.35 |
| 59400.0 | 0.999 | 53.454 | 112.13 | 2191.45 |
| 59450.0 | 1.413 | 48.211 | 60.30 | 2541.63 |

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|---------|--------|---------|--------|----------|
| 59500.0 | 4.168 | 49.417 | 139.53 | 2440.70 |
| 59550.0 | 3.961 | 43.204 | 203.23 | 2315.53 |
| 59600.0 | 2.303 | 47.273 | 156.60 | 2261.93 |
| 59650.0 | 1.465 | 54.214 | 94.20 | 2537.18 |
| 59700.0 | 0.0 | 60.394 | 36.63 | 2865.20 |
| 59750.0 | 0.33 | 51.545 | 8.25 | 2798.48 |
| 59800.0 | 0.0 | 39.249 | 8.25 | 2269.85 |
| 59850.0 | 0.0 | 61.712 | 0.00 | 2524.03 |
| 59900.0 | 0.0 | 87.557 | 0.00 | 3731.73 |
| 59950.0 | 0.0 | 138.56 | 0.00 | 5652.93 |
| 60000.0 | 0.0 | 205.492 | 0.00 | 8601.30 |
| 60050.0 | 0.0 | 178.631 | 0.00 | 9603.08 |
| 60100.0 | 0.0 | 149.441 | 0.00 | 8201.80 |
| 60150.0 | 0.0 | 200.414 | 0.00 | 8746.38 |
| 60200.0 | 0.0 | 145.532 | 0.00 | 8648.65 |
| 60250.0 | 0.0 | 23.148 | 0.00 | 4217.00 |
| 60300.0 | 0.0 | 77.806 | 0.00 | 2523.85 |
| 60350.0 | 0.0 | 61.531 | 0.00 | 3483.43 |
| 60400.0 | 0.0 | 35.387 | 0.00 | 2422.95 |
| 60450.0 | 0.0 | 40.748 | 0.00 | 1903.38 |
| 60500.0 | 0.0 | 54.624 | 0.00 | 2384.30 |
| 60550.0 | 0.0 | 69.649 | 0.00 | 3106.83 |
| 60600.0 | 0.0 | 90.393 | 0.00 | 4001.05 |
| 60650.0 | 0.0 | 107.471 | 0.00 | 4946.60 |
| 60700.0 | 0.0 | 122.818 | 0.00 | 5757.23 |
| 60750.0 | 0.0 | 283.166 | 0.00 | 10149.60 |
| 60800.0 | 0.0 | 126.826 | 0.00 | 10249.80 |
| 60850.0 | 0.0 | 115.769 | 0.00 | 6064.88 |
| 60900.0 | 0.0 | 84.237 | 0.00 | 5000.15 |
| 60950.0 | 0.0 | 59.215 | 0.00 | 3586.30 |
| 61000.0 | 0.0 | 34.417 | 0.00 | 2340.80 |
| 61050.0 | 0.0 | 28.058 | 0.00 | 1561.88 |
| 61100.0 | 0.0 | 31.097 | 0.00 | 1478.88 |
| 61150.0 | 0.0 | 31.335 | 0.00 | 1560.80 |
| 61200.0 | 0.0 | 32.806 | 0.00 | 1603.53 |
| 61250.0 | 0.0 | 33.483 | 0.00 | 1657.23 |
| 61300.0 | 0.0 | 27.104 | 0.00 | 1514.68 |
| 61350.0 | 0.0 | 27.868 | 0.00 | 1374.30 |
| 61400.0 | 39.191 | 0.0 | 979.78 | 696.70 |
| 61450.0 | 0.0 | 63.361 | 979.78 | 1584.03 |
| 61500.0 | 0.0 | 11.849 | 0.00 | 1880.25 |
| 61550.0 | 20.887 | 0.254 | 522.18 | 302.58 |
| 61600.0 | 0.0 | 78.248 | 522.18 | 1962.55 |
| 61650.0 | 0.0 | 148.529 | 0.00 | 5669.43 |
| 61700.0 | 0.0 | 204.441 | 0.00 | 8824.25 |
| 61750.0 | 0.0 | 250.85 | 0.00 | 11382.28 |
| 61800.0 | 0.0 | 270.786 | 0.00 | 13040.90 |
| 61850.0 | 0.0 | 362.397 | 0.00 | 15829.58 |
| 61900.0 | 0.0 | 327.878 | 0.00 | 17256.88 |
| 61950.0 | 0.0 | 275.132 | 0.00 | 15075.25 |
| 62000.0 | 0.0 | 216.631 | 0.00 | 12294.08 |
| 62050.0 | 0.0 | 54.005 | 0.00 | 6765.90 |
| 62100.0 | 6.158 | 31.066 | 153.95 | 2126.78 |
| 62150.0 | 12.861 | 20.506 | 475.48 | 1289.30 |
| 62200.0 | 8.993 | 31.536 | 546.35 | 1301.05 |
| 62250.0 | 0.429 | 48.335 | 235.55 | 1996.78 |
| 62300.0 | 0.0 | 77.522 | 10.73 | 3146.43 |
| 62350.0 | 0.0 | 66.188 | 0.00 | 3592.75 |
| 62400.0 | 0.0 | 70.329 | 0.00 | 3412.93 |
| 62450.0 | 14.646 | 10.859 | 366.15 | 2029.70 |

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|---------|---------|---------|---------|----------|
| 62500.0 | 6.069 | 23.156 | 517.88 | 850.38 |
| 62550.0 | 1.304 | 19.741 | 184.33 | 1072.43 |
| 62600.0 | 0.341 | 59.087 | 41.13 | 1970.70 |
| 62650.0 | 2.588 | 21.069 | 73.23 | 2003.90 |
| 62700.0 | 13.755 | 2.018 | 408.58 | 577.18 |
| 62750.0 | 0.56 | 26.456 | 357.88 | 711.85 |
| 62800.0 | 4.252 | 17.56 | 120.30 | 1100.40 |
| 62850.0 | 0.0 | 37.835 | 106.30 | 1384.88 |
| 62900.0 | 32.823 | 12.405 | 820.58 | 1256.00 |
| 62950.0 | 0.899 | 14.429 | 843.05 | 670.85 |
| 63000.0 | 0.0 | 46.576 | 22.48 | 1525.13 |
| 63050.0 | 0.0 | 56.681 | 0.00 | 2581.43 |
| 63100.0 | 0.0 | 82.101 | 0.00 | 3469.55 |
| 63150.0 | 0.0 | 23.164 | 0.00 | 2631.63 |
| 63200.0 | 0.0 | 21.472 | 0.00 | 1115.90 |
| 63250.0 | 0.0 | 14.648 | 0.00 | 903.00 |
| 63300.0 | 3.553 | 15.619 | 88.83 | 756.68 |
| 63350.0 | 0.0 | 32.418 | 88.83 | 1200.93 |
| 63400.0 | 0.0 | 24.319 | 0.00 | 1418.43 |
| 63450.0 | 0.0 | 15.515 | 0.00 | 995.85 |
| 63500.0 | 0.0 | 25.468 | 0.00 | 1024.58 |
| 63550.0 | 0.0 | 46.386 | 0.00 | 1796.35 |
| 63600.0 | 0.0 | 51.933 | 0.00 | 2457.98 |
| 63650.0 | 0.0 | 78.094 | 0.00 | 3250.68 |
| 63700.0 | 0.0 | 91.185 | 0.00 | 4231.98 |
| 63750.0 | 0.0 | 79.277 | 0.00 | 4261.55 |
| 63800.0 | 0.0 | 88.476 | 0.00 | 4193.83 |
| 63850.0 | 12.229 | 10.74 | 305.73 | 2480.40 |
| 63900.0 | 0.289 | 44.233 | 312.95 | 1374.33 |
| 63950.0 | 0.0 | 266.658 | 7.23 | 7772.28 |
| 64000.0 | 0.0 | 87.249 | 0.00 | 8847.68 |
| 64050.0 | 0.0 | 89.754 | 0.00 | 4425.08 |
| 64100.0 | 0.0 | 137.476 | 0.00 | 5680.75 |
| 64150.0 | 0.0 | 114.447 | 0.00 | 6298.08 |
| 64200.0 | 0.0 | 136.98 | 0.00 | 6285.68 |
| 64250.0 | 0.0 | 162.063 | 0.00 | 7476.08 |
| 64300.0 | 0.0 | 157.371 | 0.00 | 7985.85 |
| 64350.0 | 0.0 | 96.261 | 0.00 | 6340.80 |
| 64400.0 | 0.0 | 282.85 | 0.00 | 9477.78 |
| 64450.0 | 0.0 | 255.012 | 0.00 | 13446.55 |
| 64500.0 | 0.0 | 226.736 | 0.00 | 12043.70 |
| 64550.0 | 0.0 | 273.259 | 0.00 | 12499.88 |
| 64600.0 | 0.0 | 280.369 | 0.00 | 13840.70 |
| 64650.0 | 0.0 | 290.219 | 0.00 | 14264.70 |
| 64700.0 | 0.0 | 254.895 | 0.00 | 13627.85 |
| 64750.0 | 0.0 | 283.751 | 0.00 | 13466.15 |
| 64800.0 | 0.0 | 189.514 | 0.00 | 11831.63 |
| 64850.0 | 0.0 | 220.104 | 0.00 | 10240.45 |
| 64900.0 | 0.0 | 242.094 | 0.00 | 11554.95 |
| 64950.0 | 14.689 | 0.007 | 367.23 | 6052.53 |
| 65000.0 | 32.224 | 39.365 | 1172.83 | 984.30 |
| 65050.0 | 88.811 | 0.0 | 3025.88 | 984.13 |
| 65100.0 | 0.0 | 233.342 | 2220.28 | 5833.55 |
| 65150.0 | 6.842 | 42.083 | 171.05 | 6885.63 |
| 65200.0 | 147.474 | 0.0 | 3857.90 | 1052.08 |
| 65250.0 | 241.712 | 0.0 | 9729.65 | 0.00 |
| 65300.0 | 154.992 | 0.0 | 9917.60 | 0.00 |
| 65350.0 | 27.256 | 0.0 | 4556.20 | 0.00 |
| 65400.0 | 0.0 | 83.819 | 681.40 | 2095.48 |
| 65450.0 | 0.0 | 64.062 | 0.00 | 3697.03 |

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| 65500.0 | 0.0 | 41.171 | 0.00 | 2630.83 |
| 65550.0 | 4.621 | 30.321 | 115.53 | 1787.30 |
| 65600.0 | 0.0 | 36.822 | 115.53 | 1678.58 |
| 65650.0 | 0.0 | 44.933 | 0.00 | 2043.88 |
| 65700.0 | 0.279 | 29.887 | 6.98 | 1870.50 |
| 65750.0 | 0.0 | 35.756 | 6.98 | 1641.08 |
| 65800.0 | 0.0 | 42.532 | 0.00 | 1957.20 |
| 65850.0 | 28.43 | 222.747 | 710.75 | 6631.98 |
| 65900.0 | 0.0 | 119.374 | 710.75 | 8553.03 |
| 65950.0 | 0.0 | 115.898 | 0.00 | 5881.80 |
| 66000.0 | 55.29 | 36.875 | 1382.25 | 3819.33 |
| 66050.0 | 201.337 | 16.159 | 6415.68 | 1325.85 |
| 66100.0 | 96.109 | 14.384 | 7436.15 | 763.58 |
| 66150.0 | 0.011 | 14.393 | 2403.00 | 719.43 |
| 66200.0 | 2.342 | 40.007 | 58.83 | 1360.00 |
| 66250.0 | 616.839 | 0.0 | 15479.53 | 1000.18 |
| 66300.0 | 1012.103 | 0.0 | 40723.55 | 0.00 |
| 66350.0 | 663.014 | 0.0 | 41877.93 | 0.00 |
| 66400.0 | 495.601 | 0.0 | 28965.38 | 0.00 |
| 66450.0 | 204.146 | 27.622 | 17493.68 | 690.55 |
| 66500.0 | 329.0 | 18.492 | 13328.65 | 1152.85 |
| 66550.0 | 320.774 | 0.0 | 16244.35 | 462.30 |
| 66600.0 | 509.45 | 0.0 | 20755.60 | 0.00 |
| 66650.0 | 77.846 | 10.349 | 14682.40 | 258.73 |
| 66700.0 | 0.0 | 218.166 | 1946.15 | 5712.88 |
| 66750.0 | 0.0 | 265.653 | 0.00 | 12095.48 |
| 66800.0 | 0.0 | 336.833 | 0.00 | 15062.15 |
| 66850.0 | 0.0 | 383.002 | 0.00 | 17995.88 |
| 66900.0 | 0.0 | 385.6 | 0.00 | 19215.05 |
| 66950.0 | 0.0 | 376.978 | 0.00 | 19064.45 |
| 67000.0 | 0.0 | 188.656 | 0.00 | 14140.85 |
| 67050.0 | 0.0 | 158.344 | 0.00 | 8675.00 |
| 67100.0 | 0.0 | 142.423 | 0.00 | 7519.18 |
| 67150.0 | 0.0 | 101.643 | 0.00 | 6101.65 |
| 67200.0 | 0.0 | 118.621 | 0.00 | 5506.60 |
| 67250.0 | 0.0 | 144.407 | 0.00 | 6575.70 |
| 67300.0 | 0.0 | 157.763 | 0.00 | 7554.25 |
| 67350.0 | 0.0 | 170.495 | 0.00 | 8206.45 |
| 67400.0 | 0.0 | 184.695 | 0.00 | 8879.75 |
| 67450.0 | 0.0 | 149.175 | 0.00 | 8346.75 |
| 67500.0 | 0.0 | 372.828 | 0.00 | 13050.08 |
| 67550.0 | 0.0 | 500.065 | 0.00 | 21822.33 |
| 67600.0 | 0.0 | 490.833 | 0.00 | 24772.45 |
| 67650.0 | 0.0 | 517.646 | 0.00 | 25211.98 |
| 67700.0 | 0.0 | 604.453 | 0.00 | 28052.48 |
| 67750.0 | 0.0 | 763.307 | 0.00 | 34194.00 |
| 67800.0 | 0.0 | 888.124 | 0.00 | 41285.78 |
| 67850.0 | 0.0 | 974.565 | 0.00 | 46567.23 |
| 67900.0 | 0.0 | 1196.566 | 0.00 | 54278.28 |
| 67950.0 | 0.0 | 1200.578 | 0.00 | 59928.60 |
| 68000.0 | 0.0 | 1183.346 | 0.00 | 59598.10 |
| 68050.0 | 0.0 | 1369.839 | 0.00 | 63829.63 |
| 68100.0 | 0.0 | 1579.39 | 0.00 | 73730.73 |
| 68150.0 | 0.0 | 1686.567 | 0.00 | 81648.93 |
| 68200.0 | 0.0 | 1664.335 | 0.00 | 83772.55 |
| 68250.0 | 0.0 | 1652.718 | 0.00 | 82926.33 |
| 68300.0 | 0.0 | 1606.816 | 0.00 | 81488.35 |
| 68350.0 | 0.0 | 1743.395 | 0.00 | 83755.28 |
| 68400.0 | 0.0 | 1657.908 | 0.00 | 85032.58 |
| 68450.0 | 0.0 | 1345.226 | 0.00 | 75078.35 |

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| 68500.0 | 0.0 | 1808.154 | 0.00 | 78834.50 |
| 68550.0 | 0.0 | 971.04 | 0.00 | 69479.85 |
| 68600.0 | 0.0 | 662.4 | 0.00 | 40836.00 |
| 68650.0 | 0.0 | 511.606 | 0.00 | 29350.15 |
| 68700.0 | 0.0 | 481.958 | 0.00 | 24839.10 |
| 68750.0 | 0.0 | 482.798 | 0.00 | 24118.90 |
| 68800.0 | 0.0 | 484.695 | 0.00 | 24187.33 |
| 68850.0 | 0.0 | 487.747 | 0.00 | 24311.05 |
| 68900.0 | 0.0 | 539.481 | 0.00 | 25680.70 |
| 68950.0 | 0.0 | 543.088 | 0.00 | 27064.23 |
| 69000.0 | 0.0 | 496.54 | 0.00 | 25990.70 |
| 69050.0 | 0.0 | 499.475 | 0.00 | 24900.38 |
| 69100.0 | 0.0 | 553.958 | 0.00 | 26335.83 |
| 69150.0 | 0.0 | 505.376 | 0.00 | 26483.35 |
| 69200.0 | 0.0 | 508.326 | 0.00 | 25342.55 |
| 69250.0 | 0.0 | 511.262 | 0.00 | 25489.70 |
| 69300.0 | 0.0 | 567.64 | 0.00 | 26972.55 |
| 69350.0 | 0.0 | 569.601 | 0.00 | 28431.03 |
| 69400.0 | 0.0 | 515.049 | 0.00 | 27116.25 |
| 69450.0 | 0.0 | 571.093 | 0.00 | 27153.55 |
| 69500.0 | 0.0 | 515.418 | 0.00 | 27162.78 |
| 69550.0 | 0.0 | 584.532 | 0.00 | 27498.75 |
| 69600.0 | 0.0 | 963.572 | 0.00 | 38702.60 |
| 69650.0 | 0.0 | 1660.811 | 0.00 | 65609.58 |
| 69700.0 | 0.0 | 1887.916 | 0.00 | 88718.18 |
| 69750.0 | 0.0 | 1841.324 | 0.00 | 93231.00 |
| 69800.0 | 0.0 | 1806.858 | 0.00 | 91204.55 |
| 69850.0 | 0.0 | 1820.413 | 0.00 | 90681.78 |
| 69900.0 | 0.0 | 1872.005 | 0.00 | 92310.45 |
| 69950.0 | 0.0 | 912.502 | 0.00 | 69612.68 |
| 70000.0 | 0.0 | 887.646 | 0.00 | 45003.70 |
| 71000.0 | 0.0 | 1073.361 | 0.00 | 980503.50 |
| 71050.0 | 0.0 | 977.365 | 0.00 | 51268.15 |
| 71100.0 | 0.0 | 698.778 | 0.00 | 41903.58 |
| 71150.0 | 11.298 | 335.306 | 282.45 | 25852.10 |
| 71200.0 | 18.356 | 161.765 | 741.35 | 12426.78 |
| 71250.0 | 18.355 | 186.392 | 917.78 | 8703.93 |
| 71300.0 | 16.974 | 77.662 | 883.23 | 6601.35 |
| 71350.0 | 14.272 | 151.035 | 781.15 | 5717.43 |
| 71400.0 | 13.122 | 72.856 | 684.85 | 5597.28 |
| 71450.0 | 8.656 | 83.244 | 544.45 | 3902.50 |
| 71500.0 | 8.518 | 90.957 | 429.35 | 4355.03 |
| 71550.0 | 4.924 | 59.605 | 336.05 | 3764.05 |
| 71600.0 | 8.91 | 92.959 | 345.85 | 3814.10 |
| 71650.0 | 9.602 | 92.154 | 462.80 | 4627.83 |
| 71700.0 | 9.22 | 88.842 | 470.55 | 4524.90 |
| 71750.0 | 10.037 | 75.558 | 481.43 | 4110.00 |
| 71800.0 | 11.307 | 33.06 | 533.60 | 2715.45 |
| 71850.0 | 13.606 | 0.0 | 622.83 | 826.50 |
| 71900.0 | 12.792 | 38.757 | 659.95 | 968.93 |
| 71950.0 | 13.287 | 36.128 | 651.98 | 1872.13 |
| 72000.0 | 13.464 | 50.868 | 668.78 | 2174.90 |
| 72050.0 | 3.652 | 57.701 | 427.90 | 2714.23 |
| 72100.0 | 2.148 | 57.305 | 145.00 | 2875.15 |
| 72150.0 | 1.015 | 83.121 | 79.08 | 3510.65 |
| 72200.0 | 0.339 | 52.973 | 33.85 | 3402.35 |
| 72250.0 | 0.0 | 96.173 | 8.48 | 3728.65 |
| 72300.0 | 0.0 | 116.198 | 0.00 | 5309.28 |
| 72350.0 | 0.0 | 130.461 | 0.00 | 6166.48 |
| 72400.0 | 0.0 | 156.479 | 0.00 | 7173.50 |



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| 72450.0 | 0.0 | 156.038 | 0.00 | 7812.93 |
| 72500.0 | 0.0 | 186.182 | 0.00 | 8555.50 |
| 72550.0 | 0.0 | 188.64 | 0.00 | 9370.55 |
| 72600.0 | 0.0 | 151.195 | 0.00 | 8495.88 |
| 72650.0 | 0.0 | 209.438 | 0.00 | 9015.83 |
| 72700.0 | 0.0 | 217.269 | 0.00 | 10667.68 |
| 72750.0 | 0.0 | 159.145 | 0.00 | 9410.35 |
| 72800.0 | 0.0 | 139.444 | 0.00 | 7464.73 |
| 72850.0 | 0.0 | 99.006 | 0.00 | 5961.25 |
| 72900.0 | 0.0 | 67.828 | 0.00 | 4170.85 |
| 72950.0 | 0.013 | 42.37 | 0.33 | 2754.95 |
| 73000.0 | 0.0 | 55.038 | 0.33 | 2435.20 |
| 73050.0 | 0.0 | 96.846 | 0.00 | 3797.10 |
| 73100.0 | 0.0 | 148.858 | 0.00 | 6142.60 |
| 73150.0 | 0.0 | 179.736 | 0.00 | 8214.85 |
| 73200.0 | 0.0 | 175.809 | 0.00 | 8888.63 |
| 73250.0 | 0.0 | 197.616 | 0.00 | 9335.63 |
| 73300.0 | 0.0 | 203.104 | 0.00 | 10018.00 |
| 73350.0 | 0.0 | 217.918 | 0.00 | 10525.55 |
| 73400.0 | 0.0 | 228.072 | 0.00 | 11149.75 |
| 73450.0 | 0.0 | 236.502 | 0.00 | 11614.35 |
| 73500.0 | 0.0 | 235.964 | 0.00 | 11811.65 |
| 73550.0 | 0.0 | 227.991 | 0.00 | 11598.88 |
| 73600.0 | 0.0 | 215.8 | 0.00 | 11094.78 |
| 73650.0 | 0.0 | 186.63 | 0.00 | 10060.75 |
| 73700.0 | 0.0 | 170.905 | 0.00 | 8938.38 |
| 73750.0 | 0.0 | 158.292 | 0.00 | 8229.93 |
| 73800.0 | 0.0 | 160.838 | 0.00 | 7978.25 |
| 73850.0 | 0.0 | 138.084 | 0.00 | 7473.05 |
| 73900.0 | 0.0 | 137.586 | 0.00 | 6891.75 |
| 73950.0 | 0.0 | 170.018 | 0.00 | 7690.10 |
| 74000.0 | 0.0 | 220.962 | 0.00 | 9774.50 |
| 74050.0 | 0.0 | 233.564 | 0.00 | 11363.15 |
| 74100.0 | 0.0 | 218.122 | 0.00 | 11292.15 |
| 74150.0 | 0.0 | 215.042 | 0.00 | 10829.10 |
| 74200.0 | 0.0 | 204.923 | 0.00 | 10499.13 |
| 74250.0 | 0.0 | 202.103 | 0.00 | 10175.65 |
| 74300.0 | 0.0 | 172.414 | 0.00 | 9362.93 |
| 74350.0 | 6.955 | 103.308 | 173.88 | 6893.05 |
| 74400.0 | 0.0 | 182.826 | 173.88 | 7153.35 |
| 74450.0 | 21.526 | 87.533 | 538.15 | 6758.98 |
| 74500.0 | 0.0 | 159.114 | 538.15 | 6166.18 |
| 74550.0 | 0.0 | 170.818 | 0.00 | 8248.30 |
| 74600.0 | 0.0 | 102.387 | 0.00 | 6830.13 |
| 74650.0 | 19.244 | 14.059 | 481.10 | 2911.15 |
| 74700.0 | 1.733 | 36.32 | 524.43 | 1259.48 |
| 74750.0 | 0.616 | 111.037 | 58.73 | 3683.93 |
| 74800.0 | 1.853 | 116.755 | 61.73 | 5694.80 |
| 74850.0 | 3.924 | 143.29 | 144.43 | 6501.13 |
| 74900.0 | 8.778 | 108.354 | 317.55 | 6291.10 |
| 74950.0 | 10.03 | 89.373 | 470.20 | 4943.18 |
| 75000.0 | 15.998 | 1.929 | 650.70 | 2282.55 |
| 75050.0 | 9.463 | 58.288 | 636.53 | 1505.43 |
| 75100.0 | 12.749 | 7.504 | 555.30 | 1644.80 |
| 75150.0 | 11.602 | 11.019 | 608.78 | 463.08 |
| 75200.0 | 5.887 | 50.922 | 437.23 | 1548.53 |
| 75250.0 | 4.184 | 68.476 | 251.78 | 2984.95 |
| 75300.0 | 3.091 | 52.64 | 181.88 | 3027.90 |
| 75350.0 | 0.542 | 46.555 | 90.83 | 2479.88 |
| 75400.0 | 0.0 | 40.249 | 13.55 | 2170.10 |

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| 75450.0 | 0.0 | 63.271 | 0.00 | 2588.00 |
| 75500.0 | 0.0 | 96.445 | 0.00 | 3992.90 |
| 75550.0 | 0.0 | 108.189 | 0.00 | 5115.85 |
| 75600.0 | 0.0 | 127.979 | 0.00 | 5904.20 |
| 75650.0 | 0.0 | 136.463 | 0.00 | 6611.05 |
| 75700.0 | 0.0 | 154.569 | 0.00 | 7275.80 |
| 75750.0 | 0.0 | 169.16 | 0.00 | 8093.23 |
| 75800.0 | 0.0 | 154.028 | 0.00 | 8079.70 |
| 75850.0 | 0.0 | 156.862 | 0.00 | 7772.25 |
| 75900.0 | 0.0 | 155.212 | 0.00 | 7801.85 |
| 75950.0 | 0.0 | 150.999 | 0.00 | 7655.28 |
| 76000.0 | 0.0 | 138.078 | 0.00 | 7226.93 |
| 76050.0 | 0.0 | 120.808 | 0.00 | 6472.15 |
| 76100.0 | 0.0 | 95.192 | 0.00 | 5400.00 |
| 76150.0 | 0.0 | 56.357 | 0.00 | 3788.73 |
| 76200.0 | 0.0 | 20.908 | 0.00 | 1931.63 |
| 76250.0 | 1.481 | 1.12 | 37.03 | 550.70 |
| 76300.0 | 8.382 | 0.404 | 246.58 | 38.10 |
| 76350.0 | 6.91 | 0.048 | 382.30 | 11.30 |
| 76400.0 | 4.81 | 2.044 | 293.00 | 52.30 |
| 76450.0 | 4.869 | 2.004 | 241.98 | 101.20 |
| 76500.0 | 8.367 | 0.214 | 330.90 | 55.45 |
| 76550.0 | 8.096 | 0.127 | 411.58 | 8.53 |
| 76600.0 | 3.675 | 2.35 | 294.28 | 61.93 |
| 76650.0 | 2.867 | 42.645 | 163.55 | 1124.88 |
| 76700.0 | 1.52 | 18.821 | 109.68 | 1536.65 |
| 76750.0 | 3.674 | 3.752 | 129.85 | 564.33 |
| 76800.0 | 5.54 | 0.898 | 230.35 | 116.25 |
| 76850.0 | 15.971 | 0.0 | 537.78 | 22.45 |
| 76900.0 | 24.193 | 0.0 | 1004.10 | 0.00 |
| 76950.0 | 27.084 | 0.0 | 1281.93 | 0.00 |
| 77000.0 | 19.536 | 0.259 | 1165.50 | 6.48 |
| 77050.0 | 28.378 | 0.0 | 1197.85 | 6.48 |
| 77100.0 | 33.126 | 0.0 | 1537.60 | 0.00 |
| 77150.0 | 37.897 | 0.0 | 1775.58 | 0.00 |
| 77200.0 | 13.873 | 0.0 | 1294.25 | 0.00 |
| 77250.0 | 4.362 | 41.041 | 455.88 | 1026.03 |
| 77300.0 | 35.234 | 0.0 | 989.90 | 1026.03 |
| 77350.0 | 60.436 | 0.0 | 2391.75 | 0.00 |
| 77400.0 | 45.284 | 0.0 | 2643.00 | 0.00 |
| 77450.0 | 13.353 | 23.204 | 1465.93 | 580.10 |
| 77500.0 | 61.238 | 0.0 | 1864.78 | 580.10 |
| 77550.0 | 84.831 | 0.0 | 3651.73 | 0.00 |
| 77600.0 | 60.257 | 0.0 | 3627.20 | 0.00 |
| 77650.0 | 11.738 | 14.897 | 1799.88 | 372.43 |
| 77700.0 | 33.968 | 0.0 | 1142.65 | 372.43 |
| 77750.0 | 49.038 | 0.0 | 2075.15 | 0.00 |
| 77800.0 | 11.033 | 12.959 | 1501.78 | 323.98 |
| 77850.0 | 61.443 | 0.0 | 1811.90 | 323.98 |
| 77900.0 | 41.909 | 0.0 | 2583.80 | 0.00 |
| 77950.0 | 39.823 | 0.0 | 2043.30 | 0.00 |
| 78000.0 | 15.984 | 0.0 | 1395.18 | 0.00 |
| 78050.0 | 15.964 | 2.243 | 798.70 | 56.08 |
| 78100.0 | 16.147 | 46.893 | 802.78 | 1228.40 |
| 78150.0 | 22.395 | 38.569 | 963.55 | 2136.55 |
| 78200.0 | 28.185 | 33.706 | 1264.50 | 1806.88 |
| 78250.0 | 24.791 | 24.129 | 1324.40 | 1445.88 |
| 78300.0 | 23.077 | 4.06 | 1196.70 | 704.73 |
| 78350.0 | 38.456 | 0.0 | 1538.33 | 101.50 |
| 78400.0 | 39.508 | 0.0 | 1949.10 | 0.00 |

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| 78450.0 | 23.185 | 0.0 | 1567.33 | 0.00 |
| 78500.0 | 37.906 | 0.0 | 1527.28 | 0.00 |
| 78550.0 | 29.434 | 0.0 | 1683.50 | 0.00 |
| 78600.0 | 22.131 | 0.0 | 1289.13 | 0.00 |
| 78650.0 | 28.836 | 0.0 | 1274.18 | 0.00 |
| 78700.0 | 18.209 | 0.0 | 1176.13 | 0.00 |
| 78750.0 | 11.876 | 22.877 | 752.13 | 571.93 |
| 78800.0 | 12.154 | 10.473 | 600.75 | 833.75 |
| 78850.0 | 26.263 | 0.0 | 960.43 | 261.83 |
| 78900.0 | 35.424 | 0.0 | 1542.18 | 0.00 |
| 78950.0 | 22.659 | 0.0 | 1452.08 | 0.00 |
| 79000.0 | 24.828 | 0.0 | 1187.18 | 0.00 |
| 79050.0 | 11.077 | 0.588 | 897.63 | 14.70 |
| 79100.0 | 1.249 | 13.44 | 308.15 | 350.70 |
| 79150.0 | 17.635 | 0.548 | 472.10 | 349.70 |
| 79200.0 | 15.352 | 0.115 | 824.68 | 16.58 |
| 79250.0 | 1.372 | 1.546 | 418.10 | 41.53 |
| 79300.0 | 0.382 | 28.337 | 43.85 | 747.08 |
| 79350.0 | 5.797 | 3.051 | 154.48 | 784.70 |
| 79400.0 | 0.0 | 56.447 | 144.93 | 1487.45 |
| 79450.0 | 17.262 | 0.0 | 431.55 | 1411.18 |
| 79500.0 | 27.617 | 0.0 | 1121.98 | 0.00 |
| 79550.0 | 14.375 | 10.529 | 1049.80 | 263.23 |
| 79600.0 | 10.626 | 18.728 | 625.03 | 731.43 |
| 79650.0 | 13.763 | 0.0 | 609.73 | 468.20 |
| 79700.0 | 31.349 | 0.0 | 1127.80 | 0.00 |
| 79750.0 | 55.453 | 0.0 | 2170.05 | 0.00 |
| 79800.0 | 65.186 | 0.0 | 3015.98 | 0.00 |
| 79850.0 | 31.105 | 0.0 | 2407.28 | 0.00 |
| 79900.0 | 25.908 | 0.0 | 1425.33 | 0.00 |
| 79950.0 | 23.493 | 0.0 | 1235.03 | 0.00 |
| 80000.0 | 13.937 | 18.666 | 935.75 | 466.65 |
| 80050.0 | 12.687 | 19.228 | 665.60 | 947.35 |
| 80100.0 | 13.082 | 20.632 | 644.23 | 996.50 |
| 80150.0 | 6.248 | 46.081 | 483.25 | 1667.83 |
| 80200.0 | 17.247 | 5.925 | 587.38 | 1300.15 |
| 80250.0 | 15.404 | 16.323 | 816.28 | 556.20 |
| 80300.0 | 15.441 | 16.228 | 771.13 | 813.78 |
| 80350.0 | 12.18 | 24.672 | 690.53 | 1022.50 |
| 80400.0 | 10.955 | 9.551 | 578.38 | 855.58 |
| 80450.0 | 13.143 | 0.0 | 602.45 | 238.78 |
| 80500.0 | 11.362 | 2.778 | 612.63 | 69.45 |
| 80550.0 | 13.252 | 2.414 | 615.35 | 129.80 |
| 80600.0 | 9.512 | 14.483 | 569.10 | 422.43 |
| 80650.0 | 10.832 | 11.155 | 508.60 | 640.95 |
| 80700.0 | 9.099 | 18.382 | 498.28 | 738.43 |
| 80750.0 | 7.49 | 21.407 | 414.73 | 994.73 |
| 80800.0 | 7.828 | 23.106 | 382.95 | 1112.83 |
| 80850.0 | 7.619 | 24.902 | 386.18 | 1200.20 |
| 80900.0 | 8.072 | 12.946 | 392.28 | 946.20 |
| 80950.0 | 7.671 | 2.632 | 393.58 | 389.45 |
| 81000.0 | 14.528 | 0.0 | 554.98 | 65.80 |
| 81050.0 | 12.575 | 0.533 | 677.58 | 13.33 |
| 81100.0 | 11.73 | 0.02 | 607.63 | 13.83 |
| 81150.0 | 9.658 | 4.564 | 534.70 | 114.60 |
| 81200.0 | 9.223 | 4.131 | 472.03 | 217.38 |
| 81250.0 | 12.896 | 2.949 | 552.98 | 177.00 |
| 81300.0 | 14.108 | 2.866 | 675.10 | 145.38 |
| 81350.0 | 9.362 | 4.13 | 586.75 | 174.90 |
| 81400.0 | 9.735 | 6.718 | 477.43 | 271.20 |

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|---------|--------|--------|---------|---------|
| 81450.0 | 13.951 | 0.406 | 592.15 | 178.10 |
| 81500.0 | 15.333 | 0.0 | 732.10 | 10.15 |
| 81550.0 | 18.285 | 0.0 | 840.45 | 0.00 |
| 81600.0 | 17.458 | 0.0 | 893.58 | 0.00 |
| 81650.0 | 17.873 | 0.0 | 883.28 | 0.00 |
| 81700.0 | 17.975 | 0.0 | 896.20 | 0.00 |
| 81750.0 | 13.419 | 2.283 | 784.85 | 57.08 |
| 81800.0 | 14.548 | 0.0 | 699.18 | 57.08 |
| 81850.0 | 17.341 | 0.0 | 797.23 | 0.00 |
| 81900.0 | 24.371 | 0.0 | 1042.80 | 0.00 |
| 81950.0 | 24.392 | 0.0 | 1219.08 | 0.00 |
| 82000.0 | 20.938 | 0.0 | 1133.25 | 0.00 |
| 82050.0 | 20.972 | 0.0 | 1047.75 | 0.00 |
| 82100.0 | 19.963 | 0.0 | 1023.38 | 0.00 |
| 82150.0 | 17.402 | 0.0 | 934.13 | 0.00 |
| 82200.0 | 16.684 | 0.015 | 852.15 | 0.38 |
| 82250.0 | 0.0 | 42.059 | 417.10 | 1051.85 |
| 82300.0 | 9.561 | 22.624 | 239.03 | 1617.08 |
| 82350.0 | 11.782 | 0.0 | 533.58 | 565.60 |
| 82400.0 | 5.206 | 15.855 | 424.70 | 396.38 |
| 82450.0 | 5.024 | 0.3 | 255.75 | 403.88 |
| 82500.0 | 7.609 | 0.056 | 315.83 | 8.90 |
| 82550.0 | 14.776 | 0.0 | 559.63 | 1.40 |
| 82600.0 | 18.491 | 0.0 | 831.68 | 0.00 |
| 82650.0 | 15.551 | 0.0 | 851.05 | 0.00 |
| 82700.0 | 19.041 | 0.0 | 864.80 | 0.00 |
| 82750.0 | 12.836 | 0.0 | 796.93 | 0.00 |
| 82800.0 | 11.738 | 0.402 | 614.35 | 10.05 |
| 82850.0 | 11.527 | 0.022 | 581.63 | 10.60 |
| 82900.0 | 9.717 | 0.552 | 531.10 | 14.35 |
| 82950.0 | 13.636 | 0.0 | 583.83 | 13.80 |
| 83000.0 | 17.8 | 0.0 | 785.90 | 0.00 |
| 83050.0 | 16.594 | 0.0 | 859.85 | 0.00 |
| 83100.0 | 14.552 | 0.0 | 778.65 | 0.00 |
| 83150.0 | 12.751 | 0.0 | 682.58 | 0.00 |
| 83200.0 | 12.022 | 0.0 | 619.33 | 0.00 |
| 83250.0 | 18.544 | 0.0 | 764.15 | 0.00 |
| 83300.0 | 22.782 | 0.0 | 1033.15 | 0.00 |
| 83350.0 | 17.122 | 0.0 | 997.60 | 0.00 |
| 83400.0 | 19.811 | 0.0 | 923.33 | 0.00 |
| 83450.0 | 13.042 | 0.0 | 821.33 | 0.00 |
| 83500.0 | 13.454 | 0.438 | 662.40 | 10.95 |
| 83550.0 | 22.729 | 0.0 | 904.58 | 10.95 |
| 83600.0 | 20.838 | 0.0 | 1089.18 | 0.00 |
| 83650.0 | 22.746 | 0.0 | 1089.60 | 0.00 |
| 83700.0 | 11.982 | 0.0 | 868.20 | 0.00 |
| 83750.0 | 18.688 | 0.0 | 766.75 | 0.00 |
| 83800.0 | 14.175 | 0.0 | 821.58 | 0.00 |
| 83850.0 | 7.798 | 0.077 | 549.33 | 1.93 |
| 83900.0 | 12.472 | 0.0 | 506.75 | 1.93 |
| 83950.0 | 15.886 | 0.0 | 708.95 | 0.00 |
| 84000.0 | 20.674 | 0.0 | 914.00 | 0.00 |
| 84050.0 | 19.014 | 0.0 | 992.20 | 0.00 |
| 84100.0 | 19.601 | 0.0 | 965.38 | 0.00 |
| 84150.0 | 21.292 | 0.0 | 1022.33 | 0.00 |
| 84200.0 | 14.738 | 0.0 | 900.75 | 0.00 |
| 84250.0 | 38.22 | 0.0 | 1323.95 | 0.00 |
| 84300.0 | 32.576 | 0.0 | 1769.90 | 0.00 |
| 84350.0 | 37.039 | 0.0 | 1740.38 | 0.00 |
| 84400.0 | 10.177 | 3.001 | 1180.40 | 75.03 |

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|---------|---------|---------|----------|---------|
| 84450.0 | 4.287 | 7.381 | 361.60 | 259.55 |
| 84500.0 | 10.509 | 7.599 | 369.90 | 374.50 |
| 84550.0 | 13.191 | 0.136 | 592.50 | 193.38 |
| 84600.0 | 14.517 | 0.0 | 692.70 | 3.40 |
| 84650.0 | 20.552 | 0.0 | 876.73 | 0.00 |
| 84700.0 | 15.877 | 0.0 | 910.73 | 0.00 |
| 84750.0 | 21.187 | 0.0 | 926.60 | 0.00 |
| 84800.0 | 20.685 | 0.0 | 1046.80 | 0.00 |
| 84850.0 | 22.484 | 0.0 | 1079.23 | 0.00 |
| 84900.0 | 20.858 | 0.0 | 1083.55 | 0.00 |
| 84950.0 | 13.459 | 0.0 | 857.93 | 0.00 |
| 85000.0 | 11.01 | 0.0 | 611.73 | 0.00 |
| 85050.0 | 12.33 | 0.0 | 583.50 | 0.00 |
| 85100.0 | 14.603 | 0.0 | 673.33 | 0.00 |
| 85150.0 | 12.41 | 10.403 | 675.33 | 260.08 |
| 85200.0 | 13.867 | 0.0 | 656.93 | 260.08 |
| 85250.0 | 9.097 | 3.142 | 574.10 | 78.55 |
| 85300.0 | 10.645 | 3.697 | 493.55 | 170.98 |
| 85350.0 | 7.339 | 0.654 | 449.60 | 108.78 |
| 85400.0 | 4.426 | 7.954 | 294.13 | 215.20 |
| 85450.0 | 6.272 | 16.462 | 267.45 | 610.40 |
| 85500.0 | 14.769 | 0.0 | 526.03 | 411.55 |
| 85550.0 | 7.601 | 19.242 | 559.25 | 481.05 |
| 85600.0 | 4.368 | 23.963 | 299.23 | 1080.13 |
| 85650.0 | 0.079 | 4.634 | 111.18 | 714.93 |
| 85700.0 | 2.69 | 8.067 | 69.23 | 317.53 |
| 85750.0 | 4.198 | 6.343 | 172.20 | 360.25 |
| 85800.0 | 8.865 | 0.0 | 326.58 | 158.58 |
| 85850.0 | 16.268 | 0.0 | 628.33 | 0.00 |
| 85900.0 | 15.75 | 0.0 | 800.45 | 0.00 |
| 85950.0 | 13.176 | 0.0 | 723.15 | 0.00 |
| 86000.0 | 15.173 | 0.0 | 708.73 | 0.00 |
| 86050.0 | 34.174 | 0.0 | 1233.68 | 0.00 |
| 86100.0 | 23.474 | 0.0 | 1441.20 | 0.00 |
| 86150.0 | 20.604 | 0.35 | 1101.95 | 8.75 |
| 86200.0 | 35.984 | 0.0 | 1414.70 | 8.75 |
| 86250.0 | 99.475 | 0.0 | 3386.48 | 0.00 |
| 86300.0 | 134.344 | 0.0 | 5845.48 | 0.00 |
| 86350.0 | 154.159 | 0.0 | 7212.58 | 0.00 |
| 86400.0 | 89.134 | 0.0 | 6082.33 | 0.00 |
| 86450.0 | 21.206 | 3.948 | 2758.50 | 98.70 |
| 86500.0 | 1.174 | 117.035 | 559.50 | 3024.58 |
| 86550.0 | 0.0 | 100.27 | 29.35 | 5432.63 |
| 86600.0 | 0.0 | 38.006 | 0.00 | 3456.90 |
| 86650.0 | 20.995 | 0.0 | 524.88 | 950.15 |
| 86700.0 | 233.656 | 0.0 | 6366.28 | 0.00 |
| 86750.0 | 381.282 | 0.0 | 15373.45 | 0.00 |
| 86800.0 | 400.596 | 0.0 | 19546.95 | 0.00 |
| 86850.0 | 208.547 | 0.0 | 15228.58 | 0.00 |
| 86900.0 | 95.613 | 0.0 | 7604.00 | 0.00 |
| 86950.0 | 64.412 | 0.0 | 4000.63 | 0.00 |
| 87000.0 | 17.055 | 36.596 | 2036.68 | 914.90 |
| 87050.0 | 0.0 | 218.087 | 426.38 | 6367.08 |
| 87100.0 | 4.465 | 154.617 | 111.63 | 9317.60 |
| 87150.0 | 1.333 | 83.349 | 144.95 | 5949.15 |
| 87200.0 | 0.0 | 94.988 | 33.33 | 4458.43 |
| 87250.0 | 0.0 | 103.916 | 0.00 | 4972.60 |
| 87300.0 | 0.762 | 65.653 | 19.05 | 4239.23 |
| 87350.0 | 3.391 | 65.337 | 103.83 | 3274.75 |
| 87400.0 | 1.144 | 24.613 | 113.38 | 2248.75 |

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|---------|--------|---------|---------|----------|
| 87450.0 | 0.0 | 57.299 | 28.60 | 2047.80 |
| 87500.0 | 0.067 | 62.216 | 1.68 | 2987.88 |
| 87550.0 | 8.71 | 55.738 | 219.43 | 2948.85 |
| 87600.0 | 6.919 | 160.268 | 390.73 | 5400.15 |
| 87650.0 | 5.505 | 65.942 | 310.60 | 5655.25 |
| 87700.0 | 5.033 | 62.592 | 263.45 | 3213.35 |
| 87750.0 | 6.613 | 67.189 | 291.15 | 3244.53 |
| 87800.0 | 9.055 | 51.13 | 391.70 | 2957.98 |
| 87850.0 | 7.529 | 66.06 | 414.60 | 2929.75 |
| 87900.0 | 10.56 | 23.435 | 452.23 | 2237.38 |
| 87950.0 | 0.0 | 383.217 | 264.00 | 10166.30 |
| 88000.0 | 8.399 | 58.579 | 209.98 | 11044.90 |
| 88050.0 | 2.899 | 30.483 | 282.45 | 2226.55 |
| 88100.0 | 0.214 | 36.779 | 77.83 | 1681.55 |
| 88150.0 | 0.128 | 68.413 | 8.55 | 2629.80 |
| 88200.0 | 3.708 | 16.354 | 95.90 | 2119.18 |
| 88250.0 | 10.255 | 70.894 | 349.08 | 2181.20 |
| 88300.0 | 10.488 | 36.041 | 518.58 | 2673.38 |
| 88350.0 | 9.665 | 44.912 | 503.83 | 2023.83 |
| 88400.0 | 10.291 | 58.012 | 498.90 | 2573.10 |
| 88450.0 | 6.749 | 34.126 | 426.00 | 2303.45 |
| 88500.0 | 3.281 | 37.779 | 250.75 | 1797.63 |
| 88550.0 | 2.847 | 40.015 | 153.20 | 1944.85 |
| 88600.0 | 3.902 | 45.527 | 168.73 | 2138.55 |
| 88650.0 | 0.228 | 45.393 | 103.25 | 2273.00 |
| 88700.0 | 0.0 | 31.113 | 5.70 | 1912.65 |
| 88750.0 | 0.0 | 38.128 | 0.00 | 1731.03 |
| 88800.0 | 0.0 | 215.63 | 0.00 | 6343.95 |
| 88850.0 | 0.0 | 37.283 | 0.00 | 6322.83 |
| 88900.0 | 0.647 | 40.645 | 16.18 | 1948.20 |
| 88950.0 | 3.36 | 25.244 | 100.18 | 1647.23 |
| 89000.0 | 2.712 | 97.434 | 151.80 | 3066.95 |
| 89050.0 | 6.433 | 38.298 | 228.63 | 3393.30 |
| 89100.0 | 4.215 | 41.215 | 266.20 | 1987.83 |
| 89150.0 | 7.306 | 46.631 | 288.03 | 2196.15 |
| 89200.0 | 8.888 | 17.2 | 404.85 | 1595.78 |
| 89250.0 | 9.565 | 12.159 | 461.33 | 733.98 |
| 89300.0 | 9.561 | 19.778 | 478.15 | 798.43 |
| 89350.0 | 10.303 | 36.829 | 496.60 | 1415.18 |
| 89400.0 | 5.318 | 43.934 | 390.53 | 2019.08 |
| 89450.0 | 3.233 | 29.554 | 213.78 | 1837.20 |
| 89500.0 | 0.764 | 65.292 | 99.93 | 2371.15 |
| 89550.0 | 0.0 | 94.813 | 19.10 | 4002.63 |
| 89600.0 | 1.586 | 84.44 | 39.65 | 4481.33 |
| 89650.0 | 6.168 | 60.625 | 193.85 | 3626.63 |
| 89700.0 | 8.773 | 140.704 | 373.53 | 5033.23 |
| 89750.0 | 0.0 | 219.163 | 219.33 | 8996.68 |
| 89800.0 | 7.851 | 79.055 | 196.28 | 7455.45 |
| 89850.0 | 0.0 | 97.848 | 196.28 | 4422.58 |
| 89900.0 | 0.0 | 82.054 | 0.00 | 4497.55 |
| 89950.0 | 0.727 | 46.494 | 18.18 | 3213.70 |
| 90000.0 | 3.253 | 23.727 | 99.50 | 1755.53 |
| 90050.0 | 4.103 | 25.792 | 183.90 | 1237.98 |
| 90100.0 | 4.193 | 22.43 | 207.40 | 1205.55 |
| 90150.0 | 8.648 | 8.199 | 321.03 | 765.73 |
| 90200.0 | 17.488 | 4.908 | 653.40 | 327.68 |
| 90250.0 | 14.104 | 18.162 | 789.80 | 576.75 |
| 90300.0 | 15.839 | 14.192 | 748.58 | 808.85 |
| 90350.0 | 21.543 | 6.066 | 934.55 | 506.45 |
| 90400.0 | 18.684 | 0.604 | 1005.68 | 166.75 |

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|---------|--------|--------|---------|---------|
| 90450.0 | 7.427 | 15.359 | 652.78 | 399.08 |
| 90500.0 | 0.043 | 50.242 | 186.75 | 1640.03 |
| 90550.0 | 0.0 | 57.678 | 1.08 | 2698.00 |
| 90600.0 | 0.024 | 11.967 | 0.60 | 1741.13 |
| 90650.0 | 5.059 | 1.563 | 127.08 | 338.25 |
| 90700.0 | 3.257 | 14.667 | 207.90 | 405.75 |
| 90750.0 | 0.0 | 32.919 | 81.43 | 1189.65 |
| 90800.0 | 11.667 | 6.292 | 291.68 | 980.28 |
| 90850.0 | 51.987 | 0.0 | 1591.35 | 157.30 |
| 90900.0 | 45.97 | 0.0 | 2448.93 | 0.00 |
| 90950.0 | 23.14 | 0.0 | 1727.75 | 0.00 |
| 91000.0 | 14.685 | 0.0 | 945.63 | 0.00 |
| 91050.0 | 11.206 | 2.651 | 647.28 | 66.28 |
| 91100.0 | 21.952 | 0.0 | 828.95 | 66.28 |
| 91150.0 | 51.609 | 0.0 | 1839.03 | 0.00 |
| 91200.0 | 30.136 | 0.0 | 2043.63 | 0.00 |
| 91250.0 | 4.748 | 12.634 | 872.10 | 315.85 |
| 91300.0 | 12.756 | 4.357 | 437.60 | 424.78 |
| 91350.0 | 18.483 | 0.0 | 780.98 | 108.93 |
| 91400.0 | 26.28 | 0.0 | 1119.08 | 0.00 |
| 91450.0 | 13.995 | 0.0 | 1006.88 | 0.00 |
| 91500.0 | 22.013 | 0.0 | 900.20 | 0.00 |
| 91550.0 | 1.979 | 25.763 | 599.80 | 644.08 |
| 91600.0 | 10.107 | 0.0 | 302.15 | 644.08 |
| 91650.0 | 27.612 | 0.0 | 942.98 | 0.00 |
| 91700.0 | 20.956 | 0.0 | 1214.20 | 0.00 |
| 91750.0 | 18.919 | 0.0 | 996.88 | 0.00 |
| 91800.0 | 5.609 | 0.004 | 613.20 | 0.10 |
| 91850.0 | 1.522 | 12.106 | 178.28 | 302.75 |
| 91900.0 | 1.018 | 20.605 | 63.50 | 817.78 |
| 91950.0 | 0.0 | 23.915 | 25.45 | 1113.00 |
| 92000.0 | 4.577 | 0.0 | 114.43 | 597.88 |
| 92050.0 | 14.446 | 0.0 | 475.58 | 0.00 |
| 92100.0 | 15.471 | 17.935 | 747.93 | 448.38 |
| 92150.0 | 12.201 | 5.797 | 691.80 | 593.30 |
| 92200.0 | 38.462 | 0.0 | 1266.58 | 144.93 |
| 92250.0 | 15.783 | 0.0 | 1356.13 | 0.00 |
| 92300.0 | 3.337 | 8.58 | 478.00 | 214.50 |
| 92350.0 | 0.0 | 21.031 | 83.43 | 740.28 |
| 92400.0 | 0.0 | 14.722 | 0.00 | 893.83 |
| 92450.0 | 50.097 | 0.0 | 1252.43 | 368.05 |
| 92500.0 | 24.243 | 0.0 | 1858.50 | 0.00 |
| 92550.0 | 11.707 | 7.433 | 898.75 | 185.83 |
| 92600.0 | 12.459 | 4.22 | 604.15 | 291.33 |
| 92650.0 | 20.272 | 0.069 | 818.28 | 107.23 |
| 92700.0 | 35.691 | 0.0 | 1399.08 | 1.73 |
| 92750.0 | 14.047 | 0.0 | 1243.45 | 0.00 |
| 92800.0 | 8.317 | 0.783 | 559.10 | 19.58 |
| 92850.0 | 33.323 | 0.0 | 1041.00 | 19.58 |
| 92900.0 | 48.854 | 0.0 | 2054.43 | 0.00 |
| 92950.0 | 6.297 | 12.817 | 1378.78 | 320.43 |
| 93000.0 | 6.942 | 3.217 | 330.98 | 400.85 |
| 93050.0 | 14.489 | 0.0 | 535.78 | 80.43 |
| 93100.0 | 37.176 | 0.0 | 1291.63 | 0.00 |
| 93150.0 | 53.19 | 0.0 | 2259.15 | 0.00 |
| 93200.0 | 21.686 | 0.0 | 1871.90 | 0.00 |
| 93250.0 | 10.462 | 7.091 | 803.70 | 177.28 |
| 93300.0 | 6.676 | 0.0 | 428.45 | 177.28 |
| 93350.0 | 13.363 | 0.0 | 500.98 | 0.00 |
| 93400.0 | 27.102 | 0.0 | 1011.63 | 0.00 |

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|---------|--------|---------|---------|---------|
| 93450.0 | 40.104 | 0.0 | 1680.15 | 0.00 |
| 93500.0 | 13.231 | 0.0 | 1333.38 | 0.00 |
| 93550.0 | 2.174 | 3.555 | 385.13 | 88.88 |
| 93600.0 | 0.0 | 7.386 | 54.35 | 273.53 |
| 93650.0 | 0.0 | 15.231 | 0.00 | 565.43 |
| 93700.0 | 0.0 | 45.401 | 0.00 | 1515.80 |
| 93750.0 | 0.0 | 42.218 | 0.00 | 2190.48 |
| 93800.0 | 4.58 | 19.452 | 114.50 | 1541.75 |
| 93850.0 | 4.026 | 80.067 | 215.15 | 2487.98 |
| 93900.0 | 0.0 | 21.64 | 100.65 | 2542.68 |
| 93950.0 | 0.0 | 23.713 | 0.00 | 1133.83 |
| 94000.0 | 0.766 | 4.888 | 19.15 | 715.03 |
| 94050.0 | 10.498 | 0.0 | 281.60 | 122.20 |
| 94100.0 | 12.798 | 0.07 | 582.40 | 1.75 |
| 94150.0 | 24.358 | 1.362 | 928.90 | 35.80 |
| 94200.0 | 22.989 | 0.0 | 1183.68 | 34.05 |
| 94250.0 | 24.187 | 0.0 | 1179.40 | 0.00 |
| 94300.0 | 19.866 | 0.0 | 1101.33 | 0.00 |
| 94350.0 | 15.542 | 0.0 | 885.20 | 0.00 |
| 94400.0 | 15.498 | 0.0 | 776.00 | 0.00 |
| 94450.0 | 31.021 | 0.0 | 1162.98 | 0.00 |
| 94500.0 | 17.824 | 0.0 | 1221.13 | 0.00 |
| 94550.0 | 7.126 | 0.0 | 623.75 | 0.00 |
| 94600.0 | 4.515 | 24.863 | 291.03 | 621.58 |
| 94650.0 | 3.663 | 25.119 | 204.45 | 1249.55 |
| 94700.0 | 9.136 | 0.0 | 319.98 | 627.98 |
| 94750.0 | 5.297 | 0.0 | 360.83 | 0.00 |
| 94800.0 | 6.565 | 0.0 | 296.55 | 0.00 |
| 94850.0 | 4.212 | 7.942 | 269.43 | 198.55 |
| 94900.0 | 2.538 | 1.126 | 168.75 | 226.70 |
| 94950.0 | 1.077 | 5.008 | 90.38 | 153.35 |
| 95000.0 | 0.0 | 33.922 | 26.93 | 973.25 |
| 95050.0 | 0.0 | 72.488 | 0.00 | 2660.25 |
| 95100.0 | 0.0 | 102.639 | 0.00 | 4378.18 |
| 95150.0 | 0.0 | 127.775 | 0.00 | 5760.35 |
| 95200.0 | 0.0 | 152.547 | 0.00 | 7008.05 |
| 95250.0 | 0.0 | 162.384 | 0.00 | 7873.28 |
| 95300.0 | 0.0 | 157.833 | 0.00 | 8005.43 |
| 95350.0 | 0.0 | 151.638 | 0.00 | 7736.78 |
| 95400.0 | 0.0 | 144.749 | 0.00 | 7409.68 |
| 95450.0 | 0.0 | 130.778 | 0.00 | 6888.18 |
| 95500.0 | 0.0 | 107.215 | 0.00 | 5949.83 |
| 95550.0 | 0.0 | 69.467 | 0.00 | 4417.05 |
| 95600.0 | 0.0 | 33.765 | 0.00 | 2580.80 |
| 95650.0 | 0.0 | 14.645 | 0.00 | 1210.25 |
| 95700.0 | 0.0 | 4.671 | 0.00 | 482.90 |
| 95750.0 | 0.158 | 2.087 | 3.95 | 168.95 |
| 95800.0 | 1.403 | 8.131 | 39.03 | 255.45 |
| 95850.0 | 0.0 | 13.326 | 35.08 | 536.43 |
| 95900.0 | 0.0 | 6.445 | 0.00 | 494.28 |
| 95950.0 | 31.926 | 0.0 | 798.15 | 161.13 |
| 96000.0 | 12.543 | 15.031 | 1111.73 | 375.78 |
| 96050.0 | 12.434 | 16.711 | 624.43 | 793.55 |
| 96100.0 | 17.466 | 13.81 | 747.50 | 763.03 |
| 96150.0 | 20.315 | 0.0 | 944.53 | 345.25 |
| 96200.0 | 4.935 | 10.454 | 631.25 | 261.35 |
| 96250.0 | 0.0 | 19.948 | 123.38 | 760.05 |
| 96300.0 | 0.0 | 33.448 | 0.00 | 1334.90 |
| 96350.0 | 0.0 | 28.79 | 0.00 | 1555.95 |
| 96400.0 | 0.371 | 20.347 | 9.28 | 1228.43 |

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|---------|-------|---------|-------|----------|
| 96450.0 | 0.452 | 13.669 | 20.58 | 850.40 |
| 96500.0 | 0.014 | 9.627 | 11.65 | 582.40 |
| 96550.0 | 0.0 | 29.067 | 0.35 | 967.35 |
| 96600.0 | 0.0 | 35.899 | 0.00 | 1624.15 |
| 96650.0 | 0.0 | 37.726 | 0.00 | 1840.63 |
| 96700.0 | 0.0 | 33.106 | 0.00 | 1770.80 |
| 96750.0 | 0.0 | 23.105 | 0.00 | 1405.28 |
| 96800.0 | 0.0 | 22.479 | 0.00 | 1139.60 |
| 96850.0 | 0.0 | 19.746 | 0.00 | 1055.63 |
| 96900.0 | 0.0 | 20.106 | 0.00 | 996.30 |
| 96950.0 | 0.0 | 22.385 | 0.00 | 1062.28 |
| 97000.0 | 0.0 | 30.031 | 0.00 | 1310.40 |
| 97050.0 | 0.0 | 42.139 | 0.00 | 1804.25 |
| 97100.0 | 0.0 | 35.478 | 0.00 | 1940.43 |
| 97150.0 | 0.0 | 28.141 | 0.00 | 1590.48 |
| 97200.0 | 0.0 | 24.982 | 0.00 | 1328.08 |
| 97250.0 | 0.0 | 25.305 | 0.00 | 1257.18 |
| 97300.0 | 0.0 | 20.657 | 0.00 | 1149.05 |
| 97350.0 | 0.0 | 17.928 | 0.00 | 964.63 |
| 97400.0 | 0.0 | 11.983 | 0.00 | 747.78 |
| 97450.0 | 0.0 | 13.115 | 0.00 | 627.45 |
| 97500.0 | 0.0 | 16.945 | 0.00 | 751.50 |
| 97550.0 | 0.0 | 48.064 | 0.00 | 1625.23 |
| 97600.0 | 0.0 | 78.959 | 0.00 | 3175.58 |
| 97650.0 | 0.0 | 122.652 | 0.00 | 5040.28 |
| 97700.0 | 0.0 | 156.779 | 0.00 | 6985.78 |
| 97750.0 | 0.0 | 159.689 | 0.00 | 7911.70 |
| 97800.0 | 0.0 | 170.045 | 0.00 | 8243.35 |
| 97850.0 | 0.0 | 167.443 | 0.00 | 8437.20 |
| 97900.0 | 0.0 | 176.589 | 0.00 | 8600.80 |
| 97950.0 | 0.0 | 173.699 | 0.00 | 8757.20 |
| 98000.0 | 0.0 | 157.569 | 0.00 | 8281.70 |
| 98050.0 | 0.0 | 143.46 | 0.00 | 7525.73 |
| 98100.0 | 0.0 | 129.746 | 0.00 | 6830.15 |
| 98150.0 | 0.0 | 91.878 | 0.00 | 5540.60 |
| 98200.0 | 0.0 | 59.643 | 0.00 | 3788.03 |
| 98250.0 | 0.0 | 37.198 | 0.00 | 2421.03 |
| 98300.0 | 0.0 | 21.639 | 0.00 | 1470.93 |
| 98350.0 | 0.0 | 19.64 | 0.00 | 1031.98 |
| 98400.0 | 0.0 | 25.882 | 0.00 | 1138.05 |
| 98450.0 | 0.0 | 21.196 | 0.00 | 1176.95 |
| 98500.0 | 0.0 | 10.07 | 0.00 | 781.65 |
| 98550.0 | 0.0 | 19.728 | 0.00 | 744.95 |
| 98600.0 | 0.0 | 25.88 | 0.00 | 1140.20 |
| 98650.0 | 0.0 | 25.51 | 0.00 | 1284.75 |
| 98700.0 | 0.0 | 22.415 | 0.00 | 1198.13 |
| 98750.0 | 0.97 | 6.652 | 24.25 | 726.68 |
| 98800.0 | 1.436 | 2.007 | 60.15 | 216.48 |
| 98850.0 | 0.008 | 5.861 | 36.10 | 196.70 |
| 98900.0 | 0.0 | 11.849 | 0.20 | 442.75 |
| 98950.0 | 0.0 | 40.3 | 0.00 | 1303.73 |
| 99000.0 | 0.0 | 113.436 | 0.00 | 3843.40 |
| 99050.0 | 0.0 | 187.155 | 0.00 | 7514.78 |
| 99100.0 | 0.0 | 212.061 | 0.00 | 9980.40 |
| 99150.0 | 0.0 | 215.469 | 0.00 | 10688.25 |
| 99200.0 | 0.0 | 456.903 | 0.00 | 16809.30 |
| 99250.0 | 0.0 | 540.362 | 0.00 | 24931.63 |
| 99300.0 | 0.0 | 593.097 | 0.00 | 28336.48 |
| 99350.0 | 0.0 | 112.904 | 0.00 | 17650.03 |
| 99400.0 | 0.0 | 166.469 | 0.00 | 6984.33 |



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|----------|--------|---------|--------|---------|
| 99450.0 | 0.0 | 138.897 | 0.00 | 7634.15 |
| 99500.0 | 0.0 | 144.821 | 0.00 | 7092.95 |
| 99550.0 | 0.0 | 157.39 | 0.00 | 7555.28 |
| 99600.0 | 0.0 | 162.434 | 0.00 | 7995.60 |
| 99650.0 | 0.0 | 163.675 | 0.00 | 8152.73 |
| 99700.0 | 0.0 | 146.276 | 0.00 | 7748.78 |
| 99750.0 | 0.0 | 127.308 | 0.00 | 6839.60 |
| 99800.0 | 0.0 | 113.007 | 0.00 | 6007.88 |
| 99850.0 | 0.0 | 93.596 | 0.00 | 5165.08 |
| 99900.0 | 0.0 | 52.972 | 0.00 | 3664.20 |
| 99950.0 | 0.0 | 29.667 | 0.00 | 2065.98 |
| 100000.0 | 0.0 | 26.412 | 0.00 | 1401.98 |
| 100050.0 | 0.0 | 28.457 | 0.00 | 1371.73 |
| 100100.0 | 0.0 | 65.611 | 0.00 | 2351.70 |
| 100150.0 | 0.0 | 47.781 | 0.00 | 2834.80 |
| 100200.0 | 0.0 | 46.493 | 0.00 | 2356.85 |
| 100250.0 | 0.0 | 42.774 | 0.00 | 2231.68 |
| 100300.0 | 0.0 | 31.347 | 0.00 | 1853.03 |
| 100350.0 | 0.0 | 54.677 | 0.00 | 2150.60 |
| 100400.0 | 0.0 | 41.466 | 0.00 | 2403.58 |
| 100450.0 | 0.0 | 49.667 | 0.00 | 2278.33 |
| 100500.0 | 0.0 | 51.701 | 0.00 | 2534.20 |
| 100550.0 | 0.0 | 51.586 | 0.00 | 2582.18 |
| 100600.0 | 0.672 | 32.403 | 16.80 | 2099.73 |
| 100650.0 | 0.0 | 16.629 | 16.80 | 1225.80 |
| 100700.0 | 0.123 | 9.735 | 3.08 | 659.10 |
| 100750.0 | 0.0 | 17.01 | 3.08 | 668.63 |
| 100800.0 | 0.0 | 15.053 | 0.00 | 801.58 |
| 100850.0 | 0.424 | 8.734 | 10.60 | 594.68 |
| 100900.0 | 0.543 | 6.25 | 24.18 | 374.60 |
| 100950.0 | 0.0 | 9.346 | 13.58 | 389.90 |
| 101000.0 | 0.0 | 13.383 | 0.00 | 568.23 |
| 101050.0 | 0.0 | 15.494 | 0.00 | 721.93 |
| 101100.0 | 0.0 | 13.755 | 0.00 | 731.23 |
| 101150.0 | 0.0 | 12.87 | 0.00 | 665.63 |
| 101200.0 | 0.0 | 16.353 | 0.00 | 730.58 |
| 101250.0 | 0.0 | 24.854 | 0.00 | 1030.18 |
| 101300.0 | 0.0 | 23.73 | 0.00 | 1214.60 |
| 101350.0 | 5.301 | 17.499 | 132.53 | 1030.73 |
| 101400.0 | 6.001 | 14.562 | 282.55 | 801.53 |
| 101450.0 | 8.899 | 29.765 | 372.50 | 1108.18 |
| 101500.0 | 9.6 | 44.326 | 462.48 | 1852.28 |
| 101550.0 | 5.791 | 55.979 | 384.78 | 2507.63 |
| 101600.0 | 4.021 | 15.279 | 245.30 | 1781.45 |
| 101650.0 | 3.351 | 27.22 | 184.30 | 1062.48 |
| 101700.0 | 9.06 | 20.313 | 310.28 | 1188.33 |
| 101750.0 | 12.088 | 9.268 | 528.70 | 739.53 |
| 101800.0 | 11.185 | 22.827 | 581.83 | 802.38 |
| 101850.0 | 10.019 | 31.102 | 530.10 | 1348.23 |
| 101900.0 | 7.9 | 31.088 | 447.98 | 1554.75 |
| 101950.0 | 3.753 | 26.752 | 291.33 | 1446.00 |
| 102000.0 | 0.0 | 32.537 | 93.83 | 1482.23 |
| 102050.0 | 0.0 | 45.973 | 0.00 | 1962.75 |
| 102100.0 | 0.0 | 41.727 | 0.00 | 2192.50 |
| 102150.0 | 0.0 | 48.346 | 0.00 | 2251.83 |
| 102200.0 | 0.0 | 71.98 | 0.00 | 3008.15 |
| 102250.0 | 0.0 | 54.825 | 0.00 | 3170.13 |
| 102300.0 | 0.0 | 56.444 | 0.00 | 2781.73 |
| 102350.0 | 0.0 | 44.786 | 0.00 | 2530.75 |
| 102400.0 | 2.187 | 23.877 | 54.68 | 1716.58 |

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|----------|--------|--------|---------|---------|
| 102450.0 | 4.865 | 13.412 | 176.30 | 932.23 |
| 102500.0 | 6.121 | 11.93 | 274.65 | 633.55 |
| 102550.0 | 4.565 | 19.696 | 267.15 | 790.65 |
| 102600.0 | 5.789 | 9.32 | 258.85 | 725.40 |
| 102650.0 | 13.537 | 0.0 | 483.15 | 233.00 |
| 102700.0 | 18.025 | 0.0 | 789.05 | 0.00 |
| 102750.0 | 11.742 | 0.0 | 744.18 | 0.00 |
| 102800.0 | 10.312 | 0.0 | 551.35 | 0.00 |
| 102850.0 | 8.853 | 11.017 | 479.13 | 275.43 |
| 102900.0 | 24.052 | 0.0 | 822.63 | 275.43 |
| 102950.0 | 17.557 | 0.0 | 1040.23 | 0.00 |
| 103000.0 | 12.427 | 0.0 | 749.60 | 0.00 |
| 103050.0 | 20.372 | 0.0 | 819.98 | 0.00 |
| 103100.0 | 25.305 | 0.003 | 1141.93 | 0.08 |
| 103150.0 | 0.0 | 36.42 | 632.63 | 910.58 |
| 103200.0 | 4.42 | 35.541 | 110.50 | 1799.03 |
| 103250.0 | 4.95 | 21.23 | 234.25 | 1419.28 |
| 103300.0 | 0.0 | 32.945 | 123.75 | 1354.38 |
| 103350.0 | 2.587 | 1.06 | 64.68 | 850.13 |
| 103400.0 | 5.427 | 6.689 | 200.35 | 193.73 |
| 103450.0 | 4.199 | 17.027 | 240.65 | 592.90 |
| 103500.0 | 11.328 | 0.539 | 388.18 | 439.15 |
| 103550.0 | 6.306 | 1.383 | 440.85 | 48.05 |
| 103600.0 | 5.394 | 13.086 | 292.50 | 361.73 |
| 103650.0 | 9.316 | 0.216 | 367.75 | 332.55 |
| 103700.0 | 14.943 | 0.0 | 606.48 | 5.40 |
| 103750.0 | 11.905 | 0.067 | 671.20 | 1.68 |
| 103800.0 | 13.589 | 0.627 | 637.35 | 17.35 |
| 103850.0 | 8.407 | 8.178 | 549.90 | 220.13 |
| 103900.0 | 11.313 | 9.48 | 493.00 | 441.45 |
| 103950.0 | 8.878 | 3.001 | 504.78 | 312.03 |
| 104000.0 | 14.853 | 0.0 | 593.28 | 75.03 |
| 104050.0 | 20.376 | 0.0 | 880.73 | 0.00 |
| 104100.0 | 15.307 | 0.011 | 892.08 | 0.28 |
| 104150.0 | 5.782 | 10.06 | 527.23 | 251.78 |
| 104200.0 | 4.837 | 5.967 | 265.48 | 400.68 |
| 104250.0 | 7.392 | 17.206 | 305.73 | 579.33 |
| 104300.0 | 10.484 | 5.774 | 446.90 | 574.50 |
| 104350.0 | 20.964 | 0.0 | 786.20 | 144.35 |
| 104400.0 | 28.821 | 0.0 | 1244.63 | 0.00 |
| 104450.0 | 21.477 | 0.0 | 1257.45 | 0.00 |
| 104500.0 | 8.98 | 4.62 | 761.43 | 115.50 |
| 104550.0 | 45.109 | 0.0 | 1352.23 | 115.50 |
| 104600.0 | 31.842 | 0.0 | 1923.78 | 0.00 |
| 104650.0 | 12.165 | 0.0 | 1100.18 | 0.00 |
| 104700.0 | 8.969 | 0.993 | 528.35 | 24.83 |
| 104750.0 | 15.89 | 0.0 | 621.48 | 24.83 |
| 104800.0 | 16.434 | 0.0 | 808.10 | 0.00 |
| 104850.0 | 22.363 | 0.0 | 969.93 | 0.00 |
| 104900.0 | 17.177 | 0.0 | 988.50 | 0.00 |
| 104950.0 | 13.9 | 0.0 | 776.93 | 0.00 |
| 105000.0 | 18.545 | 0.0 | 811.13 | 0.00 |
| 105050.0 | 8.89 | 0.369 | 685.88 | 9.23 |
| 105100.0 | 7.443 | 3.186 | 408.33 | 88.88 |
| 105150.0 | 7.968 | 5.451 | 385.28 | 215.93 |
| 105200.0 | 6.426 | 13.358 | 359.85 | 470.23 |
| 105250.0 | 7.73 | 28.793 | 353.90 | 1053.78 |
| 105300.0 | 8.733 | 4.82 | 411.58 | 840.33 |
| 105350.0 | 13.495 | 0.0 | 555.70 | 120.50 |
| 105400.0 | 11.953 | 0.0 | 636.20 | 0.00 |

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|----------|--------|--------|--------|---------|
| 105450.0 | 9.597 | 0.225 | 538.75 | 5.63 |
| 105500.0 | 6.608 | 2.491 | 405.13 | 67.90 |
| 105550.0 | 6.505 | 0.156 | 327.83 | 66.18 |
| 105600.0 | 11.98 | 0.0 | 462.13 | 3.90 |
| 105650.0 | 5.142 | 5.907 | 428.05 | 147.68 |
| 105700.0 | 7.372 | 24.556 | 312.85 | 761.58 |
| 105750.0 | 13.938 | 0.0 | 532.75 | 613.90 |
| 105800.0 | 16.478 | 0.0 | 760.40 | 0.00 |
| 105850.0 | 10.53 | 3.182 | 675.20 | 79.55 |
| 105900.0 | 15.555 | 0.093 | 652.13 | 81.88 |
| 105950.0 | 17.671 | 0.149 | 830.65 | 6.05 |
| 106000.0 | 14.875 | 0.127 | 813.65 | 6.90 |
| 106050.0 | 5.458 | 3.293 | 508.33 | 85.50 |
| 106100.0 | 0.0 | 23.326 | 136.45 | 665.48 |
| 106150.0 | 0.0 | 49.684 | 0.00 | 1825.25 |
| 106200.0 | 0.0 | 28.079 | 0.00 | 1944.08 |
| 106250.0 | 0.0 | 21.203 | 0.00 | 1232.05 |
| 106300.0 | 0.0 | 20.374 | 0.00 | 1039.43 |
| 106350.0 | 1.205 | 17.141 | 30.13 | 937.88 |
| 106400.0 | 0.499 | 18.743 | 42.60 | 897.10 |
| 106450.0 | 0.0 | 29.504 | 12.48 | 1206.18 |
| 106500.0 | 0.292 | 25.187 | 7.30 | 1367.28 |
| 106550.0 | 4.676 | 10.994 | 124.20 | 904.53 |
| 106600.0 | 0.0 | 16.324 | 116.90 | 682.95 |
| 106650.0 | 8.084 | 6.668 | 202.10 | 574.80 |
| 106700.0 | 14.109 | 2.564 | 554.83 | 230.80 |
| 106750.0 | 14.232 | 2.259 | 708.53 | 120.58 |
| 106800.0 | 8.886 | 7.8 | 577.95 | 251.48 |
| 106850.0 | 4.683 | 14.398 | 339.23 | 554.95 |
| 106900.0 | 6.436 | 9.432 | 277.98 | 595.75 |
| 106950.0 | 15.954 | 0.0 | 559.75 | 235.80 |
| 107000.0 | 15.148 | 0.0 | 777.55 | 0.00 |
| 107050.0 | 6.081 | 1.711 | 530.73 | 42.78 |
| 107100.0 | 7.642 | 19.243 | 343.08 | 523.85 |
| 107150.0 | 4.867 | 19.093 | 312.73 | 958.40 |
| 107200.0 | 2.107 | 19.673 | 174.35 | 969.15 |
| 107250.0 | 4.258 | 7.893 | 159.13 | 689.15 |
| 107300.0 | 6.092 | 10.186 | 258.75 | 451.98 |
| 107350.0 | 5.466 | 13.401 | 288.95 | 589.68 |
| 107400.0 | 3.695 | 16.054 | 229.03 | 736.38 |
| 107450.0 | 3.668 | 13.192 | 184.08 | 731.15 |
| 107500.0 | 6.092 | 11.615 | 244.00 | 620.18 |
| 107550.0 | 6.258 | 4.077 | 308.75 | 392.30 |
| 107600.0 | 7.741 | 7.976 | 349.98 | 301.33 |
| 107650.0 | 8.007 | 8.573 | 393.70 | 413.73 |
| 107700.0 | 6.393 | 10.51 | 360.00 | 477.08 |
| 107750.0 | 7.251 | 15.261 | 341.10 | 644.28 |
| 107800.0 | 11.265 | 0.852 | 462.90 | 402.83 |
| 107850.0 | 11.433 | 0.943 | 567.45 | 44.88 |
| 107900.0 | 7.438 | 1.285 | 471.78 | 55.70 |
| 107950.0 | 5.459 | 0.444 | 322.43 | 43.23 |
| 108000.0 | 0.162 | 6.952 | 140.53 | 184.90 |
| 108050.0 | 2.406 | 36.654 | 64.20 | 1090.15 |
| 108100.0 | 4.898 | 34.567 | 182.60 | 1780.53 |
| 108150.0 | 0.3 | 37.564 | 129.95 | 1803.28 |
| 108200.0 | 0.0 | 38.062 | 7.50 | 1890.65 |
| 108250.0 | 0.0 | 29.172 | 0.00 | 1680.85 |
| 108300.0 | 2.867 | 9.218 | 71.68 | 959.75 |
| 108350.0 | 8.848 | 1.089 | 292.88 | 257.68 |
| 108400.0 | 9.99 | 0.299 | 470.95 | 34.70 |

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| 108450.0 | 14.237 | 0.56 | 605.68 | 21.48 |
| 108500.0 | 14.574 | 1.69 | 720.28 | 56.25 |
| 108550.0 | 12.221 | 7.953 | 669.88 | 241.08 |
| 108600.0 | 13.046 | 0.0 | 631.68 | 198.83 |
| 108650.0 | 11.918 | 0.0 | 624.10 | 0.00 |
| 108700.0 | 1.442 | 4.781 | 334.00 | 119.53 |
| 108750.0 | 6.709 | 18.23 | 203.78 | 575.28 |
| 108800.0 | 8.189 | 23.602 | 372.45 | 1045.80 |
| 108850.0 | 7.988 | 29.754 | 404.43 | 1333.90 |
| 108900.0 | 9.57 | 22.239 | 438.95 | 1299.83 |
| 108950.0 | 9.988 | 19.497 | 488.95 | 1043.40 |
| 109000.0 | 7.003 | 17.017 | 424.78 | 912.85 |
| 109050.0 | 5.209 | 6.336 | 305.30 | 583.83 |
| 109100.0 | 12.989 | 0.494 | 454.95 | 170.75 |
| 109150.0 | 9.21 | 11.754 | 554.98 | 306.20 |
| 109200.0 | 10.517 | 10.72 | 493.18 | 561.85 |
| 109250.0 | 7.632 | 8.468 | 453.73 | 479.70 |
| 109300.0 | 7.865 | 13.373 | 387.43 | 546.03 |
| 109350.0 | 5.848 | 17.543 | 342.83 | 772.90 |
| 109400.0 | 0.0 | 25.247 | 146.20 | 1069.75 |
| 109450.0 | 0.0 | 22.859 | 0.00 | 1202.65 |
| 109500.0 | 0.0 | 30.011 | 0.00 | 1321.75 |
| 109550.0 | 0.0 | 29.948 | 0.00 | 1498.98 |
| 109600.0 | 0.0 | 33.317 | 0.00 | 1581.63 |
| 109650.0 | 0.0 | 36.87 | 0.00 | 1754.68 |
| 109700.0 | 0.0 | 32.564 | 0.00 | 1735.85 |
| 109750.0 | 0.0 | 30.638 | 0.00 | 1580.05 |
| 109800.0 | 0.0 | 27.58 | 0.00 | 1455.45 |
| 109850.0 | 0.0 | 21.411 | 0.00 | 1224.78 |
| 109900.0 | 0.0 | 17.598 | 0.00 | 975.23 |
| 109950.0 | 0.0 | 15.029 | 0.00 | 815.68 |
| 110000.0 | 0.0 | 10.805 | 0.00 | 645.85 |
| 110050.0 | 0.0 | 16.414 | 0.00 | 680.48 |
| 110100.0 | 0.0 | 29.152 | 0.00 | 1139.15 |
| 110150.0 | 0.0 | 51.097 | 0.00 | 2006.23 |
| 110200.0 | 0.0 | 75.698 | 0.00 | 3169.88 |
| 110250.0 | 0.0 | 102.009 | 0.00 | 4442.68 |
| 110300.0 | 0.0 | 119.27 | 0.00 | 5531.98 |
| 110350.0 | 0.0 | 128.335 | 0.00 | 6190.13 |
| 110400.0 | 0.0 | 123.667 | 0.00 | 6300.05 |
| 110450.0 | 0.0 | 102.195 | 0.00 | 5646.55 |
| 110500.0 | 0.0 | 80.134 | 0.00 | 4558.23 |
| 110550.0 | 0.0 | 80.275 | 0.00 | 4010.23 |
| 110600.0 | 0.0 | 78.245 | 0.00 | 3963.00 |
| 110650.0 | 0.0 | 84.183 | 0.00 | 4060.70 |
| 110700.0 | 0.0 | 78.051 | 0.00 | 4055.85 |
| 110750.0 | 0.0 | 134.427 | 0.00 | 5311.95 |
| 110800.0 | 0.0 | 168.223 | 0.00 | 7566.25 |
| 110850.0 | 0.0 | 199.565 | 0.00 | 9194.70 |
| 110900.0 | 0.0 | 228.824 | 0.00 | 10709.73 |
| 110950.0 | 0.0 | 257.574 | 0.00 | 12159.95 |
| 111000.0 | 0.0 | 281.168 | 0.00 | 13468.55 |
| 111050.0 | 0.0 | 297.098 | 0.00 | 14456.65 |
| 111100.0 | 0.0 | 300.941 | 0.00 | 14950.98 |
| 111150.0 | 0.0 | 293.418 | 0.00 | 14858.98 |
| 111200.0 | 0.0 | 275.442 | 0.00 | 14221.50 |
| 111250.0 | 0.0 | 294.768 | 0.00 | 14255.25 |
| 111300.0 | 0.0 | 284.013 | 0.00 | 14469.53 |
| 111350.0 | 0.0 | 275.726 | 0.00 | 13993.48 |
| 111400.0 | 0.0 | 256.274 | 0.00 | 13300.00 |

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|----------|-------|---------|--------|----------|
| 111450.0 | 0.0 | 230.374 | 0.00 | 12166.20 |
| 111500.0 | 0.0 | 203.186 | 0.00 | 10839.00 |
| 111550.0 | 0.0 | 174.357 | 0.00 | 9438.58 |
| 111600.0 | 0.0 | 147.492 | 0.00 | 8046.23 |
| 111650.0 | 0.0 | 116.474 | 0.00 | 6599.15 |
| 111700.0 | 0.0 | 90.511 | 0.00 | 5174.63 |
| 111750.0 | 0.0 | 60.21 | 0.00 | 3768.03 |
| 111800.0 | 0.0 | 31.804 | 0.00 | 2300.35 |
| 111850.0 | 0.0 | 23.964 | 0.00 | 1394.20 |
| 111900.0 | 0.0 | 30.053 | 0.00 | 1350.43 |
| 111950.0 | 0.0 | 40.637 | 0.00 | 1767.25 |
| 112000.0 | 0.0 | 42.699 | 0.00 | 2083.40 |
| 112050.0 | 0.0 | 34.595 | 0.00 | 1932.35 |
| 112100.0 | 0.0 | 27.164 | 0.00 | 1543.98 |
| 112150.0 | 0.0 | 35.675 | 0.00 | 1570.98 |
| 112200.0 | 0.0 | 48.41 | 0.00 | 2102.13 |
| 112250.0 | 0.0 | 36.52 | 0.00 | 2123.25 |
| 112300.0 | 0.0 | 13.346 | 0.00 | 1246.65 |
| 112350.0 | 0.005 | 9.618 | 0.13 | 574.10 |
| 112400.0 | 0.0 | 18.323 | 0.13 | 698.53 |
| 112450.0 | 0.0 | 27.52 | 0.00 | 1146.08 |
| 112500.0 | 0.0 | 44.021 | 0.00 | 1788.53 |
| 112550.0 | 0.0 | 71.991 | 0.00 | 2900.30 |
| 112600.0 | 0.0 | 102.149 | 0.00 | 4353.50 |
| 112650.0 | 0.0 | 114.611 | 0.00 | 5419.00 |
| 112700.0 | 0.0 | 152.026 | 0.00 | 6665.93 |
| 112750.0 | 0.0 | 170.41 | 0.00 | 8060.90 |
| 112800.0 | 0.0 | 195.643 | 0.00 | 9151.33 |
| 112850.0 | 0.0 | 176.505 | 0.00 | 9303.70 |
| 112900.0 | 0.0 | 162.76 | 0.00 | 8481.63 |
| 112950.0 | 0.0 | 173.781 | 0.00 | 8413.53 |
| 113000.0 | 0.0 | 171.783 | 0.00 | 8639.10 |
| 113050.0 | 0.0 | 204.148 | 0.00 | 9398.28 |
| 113100.0 | 0.0 | 93.631 | 0.00 | 7444.48 |
| 113150.0 | 0.0 | 65.402 | 0.00 | 3975.83 |
| 113200.0 | 0.0 | 55.229 | 0.00 | 3015.78 |
| 113250.0 | 0.0 | 37.182 | 0.00 | 2310.28 |
| 113300.0 | 0.0 | 51.499 | 0.00 | 2217.03 |
| 113350.0 | 0.0 | 45.952 | 0.00 | 2436.28 |
| 113400.0 | 0.0 | 47.734 | 0.00 | 2342.15 |
| 113450.0 | 1.241 | 7.735 | 31.03 | 1386.73 |
| 113500.0 | 0.792 | 24.325 | 50.83 | 801.50 |
| 113550.0 | 0.0 | 32.761 | 19.80 | 1427.15 |
| 113600.0 | 0.0 | 26.896 | 0.00 | 1491.43 |
| 113650.0 | 0.0 | 25.448 | 0.00 | 1308.60 |
| 113700.0 | 0.0 | 28.736 | 0.00 | 1354.60 |
| 113750.0 | 0.0 | 22.206 | 0.00 | 1273.55 |
| 113800.0 | 1.055 | 6.747 | 26.38 | 723.83 |
| 113850.0 | 0.405 | 16.592 | 36.50 | 583.48 |
| 113900.0 | 4.447 | 16.447 | 121.30 | 825.98 |
| 113950.0 | 0.0 | 22.3 | 111.18 | 968.68 |
| 114000.0 | 0.0 | 37.433 | 0.00 | 1493.33 |
| 114050.0 | 0.0 | 43.294 | 0.00 | 2018.18 |
| 114100.0 | 0.0 | 30.592 | 0.00 | 1847.15 |
| 114150.0 | 0.0 | 32.527 | 0.00 | 1577.98 |
| 114200.0 | 0.0 | 32.183 | 0.00 | 1617.75 |
| 114250.0 | 0.0 | 31.083 | 0.00 | 1581.65 |
| 114300.0 | 0.0 | 29.094 | 0.00 | 1504.43 |
| 114350.0 | 0.0 | 34.984 | 0.00 | 1601.95 |
| 114400.0 | 0.0 | 35.097 | 0.00 | 1752.03 |

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|----------|--------|---------|--------|----------|
| 114450.0 | 0.0 | 43.296 | 0.00 | 1959.83 |
| 114500.0 | 0.0 | 48.363 | 0.00 | 2291.48 |
| 114550.0 | 0.0 | 41.409 | 0.00 | 2244.30 |
| 114600.0 | 0.0 | 46.545 | 0.00 | 2198.85 |
| 114650.0 | 0.0 | 44.174 | 0.00 | 2267.98 |
| 114700.0 | 0.0 | 35.504 | 0.00 | 1991.95 |
| 114750.0 | 0.0 | 14.596 | 0.00 | 1252.50 |
| 114800.0 | 0.0 | 19.47 | 0.00 | 851.65 |
| 114850.0 | 0.0 | 31.674 | 0.00 | 1278.60 |
| 114900.0 | 0.0 | 26.558 | 0.00 | 1455.80 |
| 114950.0 | 0.745 | 27.164 | 18.63 | 1343.05 |
| 115000.0 | 0.0 | 60.202 | 18.63 | 2184.15 |
| 115050.0 | 0.0 | 131.857 | 0.00 | 4801.48 |
| 115100.0 | 0.0 | 227.645 | 0.00 | 8987.55 |
| 115150.0 | 0.0 | 298.352 | 0.00 | 13149.93 |
| 115200.0 | 0.0 | 275.012 | 0.00 | 14334.10 |
| 115250.0 | 0.0 | 322.127 | 0.00 | 14928.48 |
| 115300.0 | 0.0 | 473.083 | 0.00 | 19880.25 |
| 115350.0 | 0.0 | 186.564 | 0.00 | 16491.18 |
| 115400.0 | 0.0 | 278.148 | 0.00 | 11617.80 |
| 115450.0 | 0.0 | 271.776 | 0.00 | 13748.10 |
| 115500.0 | 0.0 | 215.159 | 0.00 | 12173.38 |
| 115550.0 | 0.0 | 148.699 | 0.00 | 9096.45 |
| 115600.0 | 0.0 | 86.674 | 0.00 | 5884.33 |
| 115650.0 | 0.0 | 74.683 | 0.00 | 4033.93 |
| 115700.0 | 6.651 | 16.146 | 166.28 | 2270.73 |
| 115750.0 | 10.378 | 17.872 | 425.73 | 850.45 |
| 115800.0 | 9.693 | 15.586 | 501.78 | 836.45 |
| 115850.0 | 10.213 | 26.589 | 497.65 | 1054.38 |
| 115900.0 | 8.413 | 16.123 | 465.65 | 1067.80 |
| 115950.0 | 7.988 | 20.257 | 410.03 | 909.50 |
| 116000.0 | 9.736 | 9.292 | 443.10 | 738.73 |
| 116050.0 | 8.486 | 12.582 | 455.55 | 546.85 |
| 116100.0 | 8.773 | 18.697 | 431.48 | 781.98 |
| 116150.0 | 9.572 | 11.223 | 458.63 | 748.00 |
| 116200.0 | 9.952 | 10.689 | 488.10 | 547.80 |
| 116250.0 | 9.184 | 18.963 | 478.40 | 741.30 |
| 116300.0 | 8.482 | 8.128 | 441.65 | 677.28 |
| 116350.0 | 8.638 | 12.627 | 428.00 | 518.88 |
| 116400.0 | 8.693 | 13.62 | 433.28 | 656.18 |
| 116450.0 | 7.568 | 15.043 | 406.53 | 716.58 |
| 116500.0 | 6.946 | 8.284 | 362.85 | 583.18 |
| 116550.0 | 7.383 | 3.715 | 358.23 | 299.98 |
| 116600.0 | 8.421 | 11.614 | 395.10 | 383.23 |
| 116650.0 | 11.003 | 8.769 | 485.60 | 509.58 |
| 116700.0 | 12.838 | 7.708 | 596.03 | 411.93 |
| 116750.0 | 14.814 | 31.768 | 691.30 | 986.90 |
| 116800.0 | 15.686 | 7.842 | 762.50 | 990.25 |
| 116850.0 | 17.449 | 3.793 | 828.38 | 290.88 |
| 116900.0 | 15.225 | 2.639 | 816.85 | 160.80 |
| 116950.0 | 13.841 | 7.143 | 726.65 | 244.55 |
| 117000.0 | 13.881 | 9.246 | 693.05 | 409.73 |
| 117050.0 | 10.682 | 14.052 | 614.08 | 582.45 |
| 117100.0 | 5.479 | 52.822 | 404.03 | 1671.85 |
| 117150.0 | 5.852 | 7.658 | 283.28 | 1512.00 |
| 117200.0 | 5.562 | 10.953 | 285.35 | 465.28 |
| 117250.0 | 5.118 | 15.551 | 267.00 | 662.60 |
| 117300.0 | 4.422 | 38.481 | 238.50 | 1350.80 |
| 117350.0 | 8.048 | 14.793 | 311.75 | 1331.85 |
| 117400.0 | 9.558 | 7.421 | 440.15 | 555.35 |

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|----------|--------|--------|--------|---------|
| 117450.0 | 11.717 | 4.472 | 531.88 | 297.33 |
| 117500.0 | 14.442 | 5.619 | 653.98 | 252.28 |
| 117550.0 | 15.547 | 3.139 | 749.73 | 218.95 |
| 117600.0 | 14.003 | 2.771 | 738.75 | 147.75 |
| 117650.0 | 12.612 | 30.81 | 665.38 | 839.53 |
| 117700.0 | 14.134 | 10.481 | 668.65 | 1032.28 |
| 117750.0 | 10.378 | 10.626 | 612.80 | 527.68 |
| 117800.0 | 7.474 | 6.84 | 446.30 | 436.65 |
| 117850.0 | 7.74 | 6.597 | 380.35 | 335.93 |
| 117900.0 | 6.792 | 10.78 | 363.30 | 434.43 |
| 117950.0 | 7.619 | 15.957 | 360.28 | 668.43 |
| 118000.0 | 7.63 | 22.245 | 381.23 | 955.05 |
| 118050.0 | 9.321 | 17.343 | 423.78 | 989.70 |
| 118100.0 | 10.865 | 11.721 | 504.65 | 726.60 |
| 118150.0 | 4.825 | 17.649 | 392.25 | 734.25 |
| 118200.0 | 11.873 | 0.7 | 417.45 | 458.73 |
| 118250.0 | 9.489 | 15.716 | 534.05 | 410.40 |
| 118300.0 | 8.592 | 16.286 | 452.03 | 800.05 |
| 118350.0 | 9.43 | 15.937 | 450.55 | 805.58 |
| 118400.0 | 10.389 | 18.413 | 495.48 | 858.75 |
| 118450.0 | 11.435 | 19.37 | 545.60 | 944.58 |
| 118500.0 | 11.342 | 19.816 | 569.43 | 979.65 |
| 118550.0 | 10.398 | 19.497 | 543.50 | 982.83 |
| 118600.0 | 18.96 | 0.933 | 733.95 | 510.75 |
| 118650.0 | 11.242 | 5.694 | 755.05 | 165.68 |
| 118700.0 | 11.355 | 17.888 | 564.93 | 589.55 |
| 118750.0 | 11.818 | 16.901 | 579.33 | 869.73 |
| 118800.0 | 11.951 | 13.923 | 594.23 | 770.60 |
| 118850.0 | 12.148 | 14.149 | 602.48 | 701.80 |
| 118900.0 | 10.137 | 19.284 | 557.13 | 835.83 |
| 118950.0 | 9.329 | 15.529 | 486.65 | 870.33 |
| 119000.0 | 8.093 | 20.321 | 435.55 | 896.25 |
| 119050.0 | 8.291 | 20.508 | 409.60 | 1020.73 |
| 119100.0 | 7.851 | 23.536 | 403.55 | 1101.10 |
| 119150.0 | 8.105 | 25.604 | 398.90 | 1228.50 |
| 119200.0 | 7.017 | 28.303 | 378.05 | 1347.68 |
| 119250.0 | 6.539 | 28.196 | 338.90 | 1412.48 |
| 119300.0 | 5.033 | 27.75 | 289.30 | 1398.65 |
| 119350.0 | 4.486 | 25.356 | 237.98 | 1327.65 |
| 119400.0 | 5.054 | 24.182 | 238.50 | 1238.45 |
| 119450.0 | 5.862 | 19.786 | 272.90 | 1099.20 |
| 119500.0 | 7.023 | 21.242 | 322.13 | 1025.70 |
| 119550.0 | 7.307 | 26.534 | 358.25 | 1194.40 |
| 119600.0 | 7.793 | 32.451 | 377.50 | 1474.63 |
| 119650.0 | 9.885 | 35.849 | 441.95 | 1707.50 |
| 119700.0 | 10.656 | 31.891 | 513.53 | 1693.50 |
| 119750.0 | 9.534 | 25.368 | 504.75 | 1431.48 |
| 119800.0 | 0.0 | 114.89 | 238.35 | 3506.45 |
| 119850.0 | 8.722 | 33.778 | 218.05 | 3716.70 |
| 119900.0 | 7.67 | 43.233 | 409.80 | 1925.28 |
| 119950.0 | 6.851 | 42.897 | 363.03 | 2153.25 |
| 120000.0 | 7.342 | 27.909 | 354.83 | 1770.15 |
| 120050.0 | 9.39 | 5.851 | 418.30 | 844.00 |
| 120100.0 | 9.529 | 0.373 | 472.98 | 155.60 |
| 120150.0 | 14.136 | 0.0 | 591.63 | 9.33 |
| 120200.0 | 11.918 | 0.038 | 651.35 | 0.95 |
| 120250.0 | 15.849 | 0.026 | 694.18 | 1.60 |
| 120300.0 | 19.81 | 0.0 | 891.48 | 0.65 |
| 120350.0 | 17.108 | 0.0 | 922.95 | 0.00 |
| 120400.0 | 20.574 | 0.0 | 942.05 | 0.00 |

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|----------|--------|--------|---------|---------|
| 120450.0 | 18.508 | 0.0 | 977.05 | 0.00 |
| 120500.0 | 20.176 | 0.0 | 967.10 | 0.00 |
| 120550.0 | 22.027 | 0.0 | 1055.08 | 0.00 |
| 120600.0 | 19.947 | 0.0 | 1049.35 | 0.00 |
| 120650.0 | 20.575 | 0.0 | 1013.05 | 0.00 |
| 120700.0 | 8.212 | 8.26 | 719.68 | 206.50 |
| 120750.0 | 19.008 | 0.0 | 680.50 | 206.50 |
| 120800.0 | 21.352 | 0.0 | 1009.00 | 0.00 |
| 120850.0 | 24.064 | 0.0 | 1135.40 | 0.00 |
| 120900.0 | 20.705 | 0.0 | 1119.23 | 0.00 |
| 120950.0 | 10.863 | 8.753 | 789.20 | 218.83 |
| 121000.0 | 24.392 | 0.0 | 881.38 | 218.83 |
| 121050.0 | 19.177 | 0.0 | 1089.23 | 0.00 |
| 121100.0 | 15.985 | 0.0 | 879.05 | 0.00 |
| 121150.0 | 13.136 | 7.074 | 728.03 | 176.85 |
| 121200.0 | 16.57 | 0.0 | 742.65 | 176.85 |
| 121250.0 | 16.212 | 0.0 | 819.55 | 0.00 |
| 121300.0 | 7.988 | 0.387 | 605.00 | 9.68 |
| 121350.0 | 7.075 | 1.63 | 376.58 | 50.43 |
| 121400.0 | 6.875 | 6.749 | 348.75 | 209.48 |
| 121450.0 | 13.904 | 0.265 | 519.48 | 175.35 |
| 121500.0 | 6.747 | 7.518 | 516.28 | 194.58 |
| 121550.0 | 8.378 | 32.808 | 378.13 | 1008.15 |
| 121600.0 | 7.149 | 31.116 | 388.18 | 1598.10 |
| 121650.0 | 9.584 | 10.113 | 418.33 | 1030.73 |
| 121700.0 | 8.7 | 28.175 | 457.10 | 957.20 |
| 121750.0 | 8.058 | 34.661 | 418.95 | 1570.90 |
| 121800.0 | 8.546 | 15.917 | 415.10 | 1264.45 |
| 121850.0 | 11.774 | 0.685 | 508.00 | 415.05 |
| 121900.0 | 9.048 | 15.657 | 520.55 | 408.55 |
| 121950.0 | 6.364 | 3.804 | 385.30 | 486.53 |
| 122000.0 | 6.385 | 6.572 | 318.73 | 259.40 |
| 122050.0 | 6.553 | 3.899 | 323.45 | 261.78 |
| 122100.0 | 8.813 | 1.689 | 384.15 | 139.70 |
| 122150.0 | 9.904 | 0.959 | 467.93 | 66.20 |
| 122200.0 | 10.42 | 0.8 | 508.10 | 43.98 |
| 122250.0 | 7.816 | 1.82 | 455.90 | 65.50 |
| 122300.0 | 3.658 | 24.494 | 286.85 | 657.85 |
| 122350.0 | 2.497 | 27.662 | 153.88 | 1303.90 |
| 122400.0 | 4.08 | 8.123 | 164.43 | 894.63 |
| 122450.0 | 3.81 | 10.021 | 197.25 | 453.60 |
| 122500.0 | 5.109 | 7.981 | 222.98 | 450.05 |
| 122550.0 | 6.446 | 6.03 | 288.88 | 350.28 |
| 122600.0 | 6.47 | 6.376 | 322.90 | 310.15 |
| 122650.0 | 7.128 | 11.698 | 339.95 | 451.85 |
| 122700.0 | 7.184 | 9.583 | 357.80 | 532.03 |
| 122750.0 | 9.884 | 0.766 | 426.70 | 258.73 |
| 122800.0 | 10.657 | 5.418 | 513.53 | 154.60 |
| 122850.0 | 9.495 | 35.185 | 503.80 | 1015.08 |
| 122900.0 | 11.036 | 7.318 | 513.28 | 1062.58 |
| 122950.0 | 10.596 | 5.534 | 540.80 | 321.30 |
| 123000.0 | 7.068 | 12.339 | 441.60 | 446.83 |
| 123050.0 | 5.485 | 24.084 | 313.83 | 910.58 |
| 123100.0 | 3.533 | 10.178 | 225.45 | 856.55 |
| 123150.0 | 2.922 | 9.725 | 161.38 | 497.58 |
| 123200.0 | 3.774 | 12.154 | 167.40 | 546.98 |
| 123250.0 | 5.918 | 12.319 | 242.30 | 611.83 |
| 123300.0 | 7.687 | 2.843 | 340.13 | 379.05 |
| 123350.0 | 11.481 | 0.224 | 479.20 | 76.68 |
| 123400.0 | 9.649 | 7.097 | 528.25 | 183.03 |

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| 123450.0 | 17.092 | 0.0 | 668.53 | 177.43 |
| 123500.0 | 13.243 | 0.0 | 758.38 | 0.00 |
| 123550.0 | 8.725 | 3.913 | 549.20 | 97.83 |
| 123600.0 | 7.011 | 14.027 | 393.40 | 448.50 |
| 123650.0 | 4.747 | 4.099 | 293.95 | 453.15 |
| 123700.0 | 2.941 | 22.641 | 192.20 | 668.50 |
| 123750.0 | 5.842 | 27.12 | 219.58 | 1244.03 |
| 123800.0 | 5.318 | 20.407 | 279.00 | 1188.18 |
| 123850.0 | 0.981 | 19.632 | 157.48 | 1000.98 |
| 123900.0 | 2.004 | 12.661 | 74.63 | 807.33 |
| 123950.0 | 2.437 | 8.09 | 111.03 | 518.78 |
| 124000.0 | 4.594 | 4.136 | 175.78 | 305.65 |
| 124050.0 | 11.243 | 2.098 | 395.93 | 155.85 |
| 124100.0 | 8.287 | 4.933 | 488.25 | 175.78 |
| 124150.0 | 6.834 | 9.677 | 378.03 | 365.25 |
| 124200.0 | 6.072 | 11.983 | 322.65 | 541.50 |
| 124250.0 | 5.19 | 11.081 | 281.55 | 576.60 |
| 124300.0 | 4.206 | 11.564 | 234.90 | 566.13 |
| 124350.0 | 0.0 | 47.842 | 105.15 | 1485.15 |
| 124400.0 | 5.464 | 15.17 | 136.60 | 1575.30 |
| 124450.0 | 5.433 | 16.651 | 272.43 | 795.53 |
| 124500.0 | 6.782 | 17.522 | 305.38 | 854.33 |
| 124550.0 | 8.474 | 16.292 | 381.40 | 845.35 |
| 124600.0 | 8.368 | 17.165 | 421.05 | 836.43 |
| 124650.0 | 13.244 | 0.627 | 540.30 | 444.80 |
| 124700.0 | 9.344 | 5.604 | 564.70 | 155.78 |
| 124750.0 | 7.576 | 23.771 | 423.00 | 734.38 |
| 124800.0 | 4.077 | 22.198 | 291.33 | 1149.23 |
| 124850.0 | 1.092 | 16.674 | 129.23 | 971.80 |
| 124900.0 | 1.394 | 1.239 | 62.15 | 447.83 |
| 124950.0 | 2.815 | 6.652 | 105.23 | 197.28 |
| 125000.0 | 2.215 | 0.134 | 125.75 | 169.65 |
| 125050.0 | 5.471 | 2.455 | 192.15 | 64.73 |
| 125100.0 | 10.861 | 0.0 | 408.30 | 61.38 |
| 125150.0 | 19.111 | 0.0 | 749.30 | 0.00 |
| 125200.0 | 20.555 | 0.0 | 991.65 | 0.00 |
| 125250.0 | 23.305 | 0.0 | 1096.50 | 0.00 |
| 125300.0 | 21.917 | 0.0 | 1130.55 | 0.00 |
| 125350.0 | 20.895 | 0.0 | 1070.30 | 0.00 |
| 125400.0 | 20.919 | 0.0 | 1045.35 | 0.00 |
| 125450.0 | 16.592 | 0.0 | 937.78 | 0.00 |
| 125500.0 | 14.58 | 0.0 | 779.30 | 0.00 |
| 125550.0 | 14.563 | 0.0 | 728.58 | 0.00 |
| 125600.0 | 15.514 | 0.0 | 751.93 | 0.00 |
| 125650.0 | 14.816 | 0.037 | 758.25 | 0.93 |
| 125700.0 | 11.343 | 13.443 | 653.98 | 337.00 |
| 125750.0 | 14.015 | 2.676 | 633.95 | 402.98 |
| 125800.0 | 10.34 | 17.493 | 608.88 | 504.23 |
| 125850.0 | 16.905 | 0.0 | 681.13 | 437.33 |
| 125900.0 | 12.358 | 3.349 | 731.58 | 83.73 |
| 125950.0 | 17.773 | 0.0 | 753.28 | 83.73 |
| 126000.0 | 18.96 | 0.0 | 918.33 | 0.00 |
| 126050.0 | 17.102 | 0.0 | 901.55 | 0.00 |
| 126100.0 | 13.079 | 0.494 | 754.53 | 12.35 |
| 126150.0 | 5.088 | 1.68 | 454.18 | 54.35 |
| 126200.0 | 0.0 | 15.832 | 127.20 | 437.80 |
| 126250.0 | 0.0 | 48.829 | 0.00 | 1616.53 |
| 126300.0 | 0.0 | 79.835 | 0.00 | 3216.60 |
| 126350.0 | 0.0 | 109.165 | 0.00 | 4725.00 |
| 126400.0 | 0.0 | 134.584 | 0.00 | 6093.73 |

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|----------|--------|---------|--------|---------|
| 126450.0 | 0.0 | 137.314 | 0.00 | 6797.45 |
| 126500.0 | 0.0 | 135.492 | 0.00 | 6820.15 |
| 126550.0 | 0.0 | 129.036 | 0.00 | 6613.20 |
| 126600.0 | 0.0 | 125.328 | 0.00 | 6359.10 |
| 126650.0 | 0.0 | 105.785 | 0.00 | 5777.83 |
| 126700.0 | 0.0 | 80.038 | 0.00 | 4645.58 |
| 126750.0 | 0.0 | 51.793 | 0.00 | 3295.78 |
| 126800.0 | 0.0 | 31.105 | 0.00 | 2072.45 |
| 126850.0 | 0.0 | 34.372 | 0.00 | 1636.93 |
| 126900.0 | 5.257 | 26.014 | 131.43 | 1509.65 |
| 126950.0 | 0.0 | 91.35 | 131.43 | 2934.10 |
| 127000.0 | 8.502 | 27.293 | 212.55 | 2966.08 |
| 127050.0 | 0.074 | 30.664 | 214.40 | 1448.93 |
| 127100.0 | 0.121 | 19.719 | 4.88 | 1259.58 |
| 127150.0 | 6.047 | 7.589 | 154.20 | 682.70 |
| 127200.0 | 7.864 | 5.751 | 347.78 | 333.50 |
| 127250.0 | 9.203 | 5.437 | 426.68 | 279.70 |
| 127300.0 | 8.955 | 6.63 | 453.95 | 301.68 |
| 127350.0 | 4.792 | 3.18 | 343.68 | 245.25 |
| 127400.0 | 5.858 | 5.773 | 266.25 | 223.83 |
| 127450.0 | 5.877 | 2.494 | 293.38 | 206.68 |
| 127500.0 | 8.56 | 0.509 | 360.93 | 75.08 |
| 127550.0 | 11.825 | 1.154 | 509.63 | 41.58 |
| 127600.0 | 11.039 | 12.124 | 571.60 | 331.95 |
| 127650.0 | 8.485 | 7.609 | 488.10 | 493.33 |
| 127700.0 | 9.105 | 4.652 | 439.75 | 306.53 |
| 127750.0 | 6.344 | 10.24 | 386.23 | 372.30 |
| 127800.0 | 2.52 | 14.409 | 221.60 | 616.23 |
| 127850.0 | 0.0 | 24.924 | 63.00 | 983.33 |
| 127900.0 | 2.129 | 22.739 | 53.23 | 1191.58 |
| 127950.0 | 0.0 | 45.445 | 53.23 | 1704.60 |
| 128000.0 | 4.391 | 24.742 | 109.78 | 1754.68 |
| 128050.0 | 0.0 | 26.104 | 109.78 | 1271.15 |
| 128100.0 | 1.837 | 19.935 | 45.93 | 1150.98 |
| 128150.0 | 5.33 | 9.658 | 179.18 | 739.83 |
| 128200.0 | 8.557 | 8.473 | 347.18 | 453.28 |
| 128250.0 | 7.536 | 10.484 | 402.33 | 473.93 |
| 128300.0 | 5.871 | 13.115 | 335.18 | 589.98 |
| 128350.0 | 5.975 | 1.013 | 296.15 | 353.20 |
| 128400.0 | 7.675 | 3.359 | 341.25 | 109.30 |
| 128450.0 | 19.122 | 0.189 | 669.93 | 88.70 |
| 128500.0 | 7.379 | 5.767 | 662.53 | 148.90 |
| 128550.0 | 2.264 | 9.437 | 241.08 | 380.10 |
| 128600.0 | 0.052 | 18.623 | 57.90 | 701.50 |
| 128650.0 | 0.0 | 38.351 | 1.30 | 1424.35 |
| 128700.0 | 0.0 | 54.628 | 0.00 | 2324.48 |
| 128750.0 | 0.0 | 62.134 | 0.00 | 2919.05 |
| 128800.0 | 0.0 | 50.474 | 0.00 | 2815.20 |
| 128850.0 | 0.0 | 60.521 | 0.00 | 2774.88 |
| 128900.0 | 0.0 | 59.224 | 0.00 | 2993.63 |
| 128950.0 | 0.0 | 46.181 | 0.00 | 2635.13 |
| 129000.0 | 0.068 | 31.263 | 1.70 | 1936.10 |
| 129050.0 | 0.797 | 16.387 | 21.63 | 1191.25 |
| 129100.0 | 0.0 | 22.333 | 19.93 | 968.00 |
| 129150.0 | 0.0 | 46.463 | 0.00 | 1719.90 |
| 129200.0 | 0.0 | 62.736 | 0.00 | 2729.98 |
| 129250.0 | 0.0 | 92.429 | 0.00 | 3879.13 |
| 129300.0 | 0.0 | 123.344 | 0.00 | 5394.33 |
| 129350.0 | 0.0 | 144.588 | 0.00 | 6698.30 |
| 129400.0 | 0.0 | 156.552 | 0.00 | 7528.50 |

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|----------|--------|---------|---------|---------|
| 129450.0 | 0.0 | 163.986 | 0.00 | 8013.45 |
| 129500.0 | 0.0 | 140.582 | 0.00 | 7614.20 |
| 129550.0 | 0.0 | 113.766 | 0.00 | 6358.70 |
| 129600.0 | 0.0 | 97.968 | 0.00 | 5293.35 |
| 129650.0 | 0.0 | 75.253 | 0.00 | 4330.53 |
| 129700.0 | 0.0 | 53.154 | 0.00 | 3210.18 |
| 129750.0 | 0.0 | 29.592 | 0.00 | 2068.65 |
| 129800.0 | 0.124 | 2.759 | 3.10 | 808.78 |
| 129850.0 | 3.709 | 11.602 | 95.83 | 359.03 |
| 129900.0 | 0.0 | 15.694 | 92.73 | 682.40 |
| 129950.0 | 1.342 | 1.376 | 33.55 | 426.75 |
| 130000.0 | 6.259 | 0.098 | 190.03 | 36.85 |
| 130050.0 | 17.086 | 0.0 | 583.63 | 2.45 |
| 130100.0 | 16.194 | 0.0 | 832.00 | 0.00 |
| 130150.0 | 15.469 | 0.0 | 791.58 | 0.00 |
| 130200.0 | 13.887 | 0.286 | 733.90 | 7.15 |
| 130250.0 | 7.012 | 7.644 | 522.48 | 198.25 |
| 130300.0 | 0.0 | 10.456 | 175.30 | 452.50 |
| 130350.0 | 0.0 | 31.07 | 0.00 | 1038.15 |
| 130400.0 | 0.0 | 44.738 | 0.00 | 1895.20 |
| 130450.0 | 0.0 | 45.311 | 0.00 | 2251.23 |
| 130500.0 | 0.0 | 99.006 | 0.00 | 3607.93 |
| 130550.0 | 0.0 | 68.168 | 0.00 | 4179.35 |
| 130600.0 | 0.0 | 50.96 | 0.00 | 2978.20 |
| 130650.0 | 0.0 | 34.444 | 0.00 | 2135.10 |
| 130700.0 | 0.0 | 27.564 | 0.00 | 1550.20 |
| 130750.0 | 1.048 | 16.664 | 26.20 | 1105.70 |
| 130800.0 | 10.562 | 0.0 | 290.25 | 416.60 |
| 130850.0 | 13.286 | 0.023 | 596.20 | 0.58 |
| 130900.0 | 20.111 | 0.0 | 834.93 | 0.58 |
| 130950.0 | 8.548 | 0.121 | 716.48 | 3.03 |
| 131000.0 | 7.688 | 10.515 | 405.90 | 265.90 |
| 131050.0 | 11.227 | 2.239 | 472.88 | 318.85 |
| 131100.0 | 22.543 | 0.0 | 844.25 | 55.98 |
| 131150.0 | 34.293 | 0.0 | 1420.90 | 0.00 |
| 131200.0 | 30.129 | 0.0 | 1610.55 | 0.00 |
| 131250.0 | 15.292 | 0.319 | 1135.53 | 7.98 |
| 131300.0 | 8.659 | 11.383 | 598.78 | 292.55 |
| 131350.0 | 6.882 | 0.776 | 388.53 | 303.98 |
| 131400.0 | 14.453 | 0.0 | 533.38 | 19.40 |
| 131450.0 | 18.716 | 0.0 | 829.23 | 0.00 |
| 131500.0 | 21.24 | 0.0 | 998.90 | 0.00 |
| 131550.0 | 19.203 | 0.0 | 1011.08 | 0.00 |
| 131600.0 | 12.441 | 2.718 | 791.10 | 67.95 |
| 131650.0 | 0.0 | 64.448 | 311.03 | 1679.15 |
| 131700.0 | 7.084 | 0.654 | 177.10 | 1627.55 |
| 131750.0 | 9.207 | 0.0 | 407.28 | 16.35 |
| 131800.0 | 13.106 | 0.0 | 557.83 | 0.00 |
| 131850.0 | 11.314 | 0.0 | 610.50 | 0.00 |
| 131900.0 | 19.275 | 0.0 | 764.73 | 0.00 |
| 131950.0 | 15.176 | 0.0 | 861.28 | 0.00 |
| 132000.0 | 6.735 | 0.921 | 547.78 | 23.03 |
| 132050.0 | 7.322 | 1.472 | 351.43 | 59.83 |
| 132100.0 | 17.133 | 0.0 | 611.38 | 36.80 |
| 132150.0 | 19.26 | 0.0 | 909.83 | 0.00 |
| 132200.0 | 44.147 | 0.0 | 1585.18 | 0.00 |
| 132250.0 | 14.232 | 0.0 | 1459.48 | 0.00 |
| 132300.0 | 3.2 | 29.107 | 435.80 | 727.68 |
| 132350.0 | 13.393 | 0.146 | 414.83 | 731.33 |
| 132400.0 | 12.506 | 3.599 | 647.48 | 93.63 |

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|----------|--------|---------|---------|---------|
| 132450.0 | 11.41 | 0.084 | 597.90 | 92.08 |
| 132500.0 | 11.489 | 3.051 | 572.48 | 78.38 |
| 132550.0 | 10.174 | 4.888 | 541.58 | 198.48 |
| 132600.0 | 9.735 | 4.406 | 497.73 | 232.35 |
| 132650.0 | 14.553 | 6.719 | 607.20 | 278.13 |
| 132700.0 | 9.26 | 1.145 | 595.33 | 196.60 |
| 132750.0 | 6.717 | 12.756 | 399.43 | 347.53 |
| 132800.0 | 22.063 | 0.0 | 719.50 | 318.90 |
| 132850.0 | 28.017 | 0.0 | 1252.00 | 0.00 |
| 132900.0 | 32.322 | 0.0 | 1508.48 | 0.00 |
| 132950.0 | 30.804 | 0.0 | 1578.15 | 0.00 |
| 133000.0 | 25.373 | 0.0 | 1404.43 | 0.00 |
| 133050.0 | 20.018 | 0.0 | 1134.78 | 0.00 |
| 133100.0 | 25.421 | 0.0 | 1135.98 | 0.00 |
| 133150.0 | 23.971 | 0.0 | 1234.80 | 0.00 |
| 133200.0 | 10.287 | 4.195 | 856.45 | 104.88 |
| 133250.0 | 10.193 | 1.973 | 512.00 | 154.20 |
| 133300.0 | 5.567 | 14.786 | 394.00 | 418.98 |
| 133350.0 | 4.746 | 22.733 | 257.83 | 937.98 |
| 133400.0 | 0.0 | 42.868 | 118.65 | 1640.03 |
| 133450.0 | 0.0 | 50.652 | 0.00 | 2338.00 |
| 133500.0 | 2.825 | 37.254 | 70.63 | 2197.65 |
| 133550.0 | 0.536 | 62.143 | 84.03 | 2484.93 |
| 133600.0 | 4.245 | 22.748 | 119.53 | 2122.28 |
| 133650.0 | 6.567 | 13.765 | 270.30 | 912.83 |
| 133700.0 | 7.732 | 14.571 | 357.48 | 708.40 |
| 133750.0 | 6.861 | 19.188 | 364.83 | 843.98 |
| 133800.0 | 6.805 | 16.793 | 341.65 | 899.53 |
| 133850.0 | 7.936 | 24.54 | 368.53 | 1033.33 |
| 133900.0 | 6.138 | 32.823 | 351.85 | 1434.08 |
| 133950.0 | 4.929 | 33.461 | 276.68 | 1657.10 |
| 134000.0 | 6.077 | 37.753 | 275.15 | 1780.35 |
| 134050.0 | 8.456 | 38.159 | 363.33 | 1897.80 |
| 134100.0 | 0.0 | 68.789 | 211.40 | 2673.70 |
| 134150.0 | 0.0 | 124.941 | 0.00 | 4843.25 |
| 134200.0 | 10.853 | 29.579 | 271.33 | 3863.00 |
| 134250.0 | 8.267 | 31.997 | 478.00 | 1539.40 |
| 134300.0 | 9.054 | 7.971 | 433.03 | 999.20 |
| 134350.0 | 12.123 | 3.725 | 529.43 | 292.40 |
| 134400.0 | 20.271 | 0.0 | 809.85 | 93.13 |
| 134450.0 | 19.432 | 0.0 | 992.58 | 0.00 |
| 134500.0 | 29.567 | 0.0 | 1224.98 | 0.00 |
| 134550.0 | 44.106 | 0.0 | 1841.83 | 0.00 |
| 134600.0 | 29.021 | 0.0 | 1828.18 | 0.00 |
| 134650.0 | 3.408 | 0.665 | 810.73 | 16.63 |
| 134700.0 | 2.61 | 7.159 | 150.45 | 195.60 |
| 134750.0 | 22.72 | 0.0 | 633.25 | 178.98 |
| 134800.0 | 23.138 | 0.0 | 1146.45 | 0.00 |
| 134850.0 | 21.082 | 0.0 | 1105.50 | 0.00 |
| 134900.0 | 25.64 | 0.0 | 1168.05 | 0.00 |
| 134950.0 | 19.59 | 0.0 | 1130.75 | 0.00 |
| 135000.0 | 9.844 | 0.0 | 735.85 | 0.00 |
| 135050.0 | 0.181 | 22.599 | 250.63 | 564.98 |
| 135100.0 | 1.538 | 19.216 | 42.98 | 1045.38 |
| 135150.0 | 6.774 | 3.984 | 207.80 | 580.00 |
| 135200.0 | 7.52 | 14.232 | 357.35 | 455.40 |
| 135250.0 | 25.211 | 0.0 | 818.28 | 355.80 |
| 135300.0 | 4.984 | 0.774 | 754.88 | 19.35 |
| 135350.0 | 3.015 | 2.74 | 199.98 | 87.85 |
| 135400.0 | 7.3 | 3.438 | 257.88 | 154.45 |

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| 135450.0 | 9.837 | 19.114 | 428.43 | 563.80 |
| 135500.0 | 0.0 | 282.523 | 245.93 | 7540.93 |
| 135550.0 | 9.358 | 21.461 | 233.95 | 7599.60 |
| 135600.0 | 6.233 | 8.925 | 389.78 | 759.65 |
| 135650.0 | 0.807 | 5.399 | 176.00 | 358.10 |
| 135700.0 | 3.276 | 5.68 | 102.08 | 276.98 |
| 135750.0 | 3.117 | 1.249 | 159.83 | 173.23 |
| 135800.0 | 6.732 | 0.799 | 246.23 | 51.20 |
| 135850.0 | 7.621 | 6.717 | 358.83 | 187.90 |
| 135900.0 | 4.183 | 27.36 | 295.10 | 851.93 |
| 135950.0 | 6.614 | 0.932 | 269.93 | 707.30 |
| 136000.0 | 23.25 | 0.61 | 746.60 | 38.55 |
| 136050.0 | 33.979 | 0.0 | 1430.73 | 15.25 |
| 136100.0 | 24.666 | 0.0 | 1466.13 | 0.00 |
| 136150.0 | 19.187 | 0.0 | 1096.33 | 0.00 |
| 136200.0 | 15.778 | 0.0 | 874.13 | 0.00 |
| 136250.0 | 0.901 | 30.615 | 416.98 | 765.38 |
| 136300.0 | 21.451 | 0.0 | 558.80 | 765.38 |
| 136350.0 | 48.137 | 0.0 | 1739.70 | 0.00 |
| 136400.0 | 42.997 | 0.0 | 2278.35 | 0.00 |
| 136450.0 | 45.975 | 0.0 | 2224.30 | 0.00 |
| 136500.0 | 12.618 | 0.0 | 1464.83 | 0.00 |
| 136550.0 | 0.029 | 44.147 | 316.18 | 1103.68 |
| 136600.0 | 13.721 | 0.085 | 343.75 | 1105.80 |
| 136650.0 | 47.285 | 0.0 | 1525.15 | 2.13 |
| 136700.0 | 31.358 | 0.0 | 1966.08 | 0.00 |
| 136750.0 | 10.728 | 0.061 | 1052.15 | 1.53 |
| 136800.0 | 17.75 | 0.0 | 711.95 | 1.53 |
| 136850.0 | 27.497 | 0.0 | 1131.18 | 0.00 |
| 136900.0 | 32.219 | 0.0 | 1492.90 | 0.00 |
| 136950.0 | 23.765 | 0.0 | 1399.60 | 0.00 |
| 137000.0 | 18.268 | 0.0 | 1050.83 | 0.00 |
| 137050.0 | 26.208 | 0.0 | 1111.90 | 0.00 |
| 137100.0 | 38.478 | 0.0 | 1617.15 | 0.00 |
| 137150.0 | 39.151 | 0.0 | 1940.73 | 0.00 |
| 137200.0 | 14.185 | 0.95 | 1333.40 | 23.75 |
| 137250.0 | 7.311 | 16.728 | 537.40 | 441.95 |
| 137300.0 | 5.388 | 18.92 | 317.48 | 891.20 |
| 137350.0 | 9.677 | 0.417 | 376.63 | 483.43 |
| 137400.0 | 18.333 | 0.0 | 700.25 | 10.43 |
| 137450.0 | 28.88 | 0.071 | 1180.33 | 1.78 |
| 137500.0 | 9.408 | 2.809 | 957.20 | 72.00 |
| 137550.0 | 11.683 | 19.57 | 527.28 | 559.48 |
| 137600.0 | 14.589 | 24.462 | 656.80 | 1100.80 |
| 137650.0 | 16.236 | 0.0 | 770.63 | 611.55 |
| 137700.0 | 12.42 | 5.349 | 716.40 | 133.73 |
| 137750.0 | 10.261 | 16.787 | 567.03 | 553.40 |
| 137800.0 | 11.211 | 14.099 | 536.80 | 772.15 |
| 137850.0 | 14.763 | 0.085 | 649.35 | 354.60 |
| 137900.0 | 20.201 | 0.0 | 874.10 | 2.13 |
| 137950.0 | 18.351 | 0.0 | 963.80 | 0.00 |
| 138000.0 | 25.789 | 0.0 | 1103.50 | 0.00 |
| 138050.0 | 24.437 | 0.0 | 1255.65 | 0.00 |
| 138100.0 | 16.229 | 0.064 | 1016.65 | 1.60 |
| 138150.0 | 19.978 | 0.0 | 905.18 | 1.60 |
| 138200.0 | 25.73 | 0.0 | 1142.70 | 0.00 |
| 138250.0 | 5.081 | 6.568 | 770.28 | 164.20 |
| 138300.0 | 12.046 | 0.161 | 428.18 | 168.23 |
| 138350.0 | 23.9 | 0.0 | 898.65 | 4.03 |
| 138400.0 | 14.31 | 10.128 | 955.25 | 253.20 |

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| 138450.0 | 14.223 | 15.341 | 713.33 | 636.73 |
| 138500.0 | 11.957 | 0.542 | 654.50 | 397.08 |
| 138550.0 | 19.299 | 0.0 | 781.40 | 13.55 |
| 138600.0 | 20.584 | 0.0 | 997.08 | 0.00 |
| 138650.0 | 32.126 | 0.0 | 1317.75 | 0.00 |
| 138700.0 | 28.124 | 0.0 | 1506.25 | 0.00 |
| 138750.0 | 23.986 | 0.0 | 1302.75 | 0.00 |
| 138800.0 | 15.841 | 0.0 | 995.68 | 0.00 |
| 138850.0 | 13.228 | 0.0 | 726.73 | 0.00 |
| 138900.0 | 21.485 | 0.097 | 867.83 | 2.43 |
| 138950.0 | 10.515 | 29.645 | 800.00 | 743.55 |
| 139000.0 | 9.286 | 28.742 | 495.03 | 1459.68 |
| 139050.0 | 11.116 | 4.982 | 510.05 | 843.10 |
| 139100.0 | 7.052 | 21.006 | 454.20 | 649.70 |
| 139150.0 | 10.799 | 23.055 | 446.28 | 1101.53 |
| 139200.0 | 8.244 | 42.231 | 476.08 | 1632.15 |
| 139250.0 | 7.259 | 41.578 | 387.58 | 2095.23 |
| 139300.0 | 7.525 | 39.863 | 369.60 | 2036.03 |
| 139350.0 | 4.201 | 37.106 | 293.15 | 1924.23 |
| 139400.0 | 0.0 | 47.604 | 105.03 | 2117.75 |
| 139450.0 | 0.0 | 68.656 | 0.00 | 2906.50 |
| 139500.0 | 2.566 | 37.948 | 64.15 | 2665.10 |
| 139550.0 | 8.764 | 47.694 | 283.25 | 2141.05 |
| 139600.0 | 0.0 | 168.638 | 219.10 | 5408.30 |
| 139650.0 | 0.0 | 54.863 | 0.00 | 5587.53 |
| 139700.0 | 0.0 | 82.105 | 0.00 | 3424.20 |
| 139750.0 | 0.0 | 93.046 | 0.00 | 4378.78 |
| 139800.0 | 0.0 | 96.726 | 0.00 | 4744.30 |
| 139850.0 | 0.0 | 81.995 | 0.00 | 4468.03 |
| 139900.0 | 0.0 | 20.959 | 0.00 | 2573.85 |
| 139950.0 | 4.306 | 0.896 | 107.65 | 546.38 |
| 140000.0 | 6.663 | 0.0 | 274.23 | 22.40 |
| 140050.0 | 8.411 | 0.0 | 376.85 | 0.00 |
| 140100.0 | 11.807 | 0.0 | 505.45 | 0.00 |
| 140150.0 | 5.536 | 1.824 | 433.58 | 45.60 |
| 140200.0 | 23.005 | 0.0 | 713.53 | 45.60 |
| 140250.0 | 14.142 | 0.0 | 928.68 | 0.00 |
| 140300.0 | 10.163 | 6.479 | 607.63 | 161.98 |
| 140350.0 | 20.534 | 0.0 | 767.43 | 161.98 |
| 140400.0 | 1.287 | 3.624 | 545.53 | 90.60 |
| 140450.0 | 5.31 | 0.002 | 164.93 | 90.65 |
| 140500.0 | 26.644 | 0.0 | 798.85 | 0.05 |
| 140550.0 | 22.586 | 0.0 | 1230.75 | 0.00 |
| 140600.0 | 6.805 | 0.774 | 734.78 | 19.35 |
| 140650.0 | 5.601 | 22.932 | 310.15 | 592.65 |
| 140700.0 | 21.484 | 0.0 | 677.13 | 573.30 |
| 140750.0 | 27.732 | 0.0 | 1230.40 | 0.00 |
| 140800.0 | 26.0 | 0.0 | 1343.30 | 0.00 |
| 140850.0 | 19.85 | 0.0 | 1146.25 | 0.00 |
| 140900.0 | 12.333 | 0.0 | 804.58 | 0.00 |
| 140950.0 | 10.568 | 0.0 | 572.53 | 0.00 |
| 141000.0 | 7.655 | 17.632 | 455.58 | 440.80 |
| 141050.0 | 10.373 | 4.706 | 450.70 | 558.45 |
| 141100.0 | 16.433 | 0.0 | 670.15 | 117.65 |
| 141150.0 | 22.777 | 0.0 | 980.25 | 0.00 |
| 141200.0 | 19.212 | 0.0 | 1049.73 | 0.00 |
| 141250.0 | 18.402 | 0.0 | 940.35 | 0.00 |
| 141300.0 | 15.756 | 0.0 | 853.95 | 0.00 |
| 141350.0 | 11.059 | 0.048 | 670.38 | 1.20 |
| 141400.0 | 13.711 | 0.0 | 619.25 | 1.20 |

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|----------|--------|---------|---------|---------|
| 141450.0 | 18.001 | 0.0 | 792.80 | 0.00 |
| 141500.0 | 0.464 | 1.887 | 461.63 | 47.18 |
| 141550.0 | 0.0 | 26.767 | 11.60 | 716.35 |
| 141600.0 | 0.0 | 65.466 | 0.00 | 2305.83 |
| 141650.0 | 0.0 | 83.289 | 0.00 | 3718.88 |
| 141700.0 | 0.0 | 108.081 | 0.00 | 4784.25 |
| 141750.0 | 0.0 | 128.59 | 0.00 | 5916.78 |
| 141800.0 | 0.0 | 144.777 | 0.00 | 6834.18 |
| 141850.0 | 0.0 | 152.376 | 0.00 | 7428.83 |
| 141900.0 | 0.0 | 157.371 | 0.00 | 7743.68 |
| 141950.0 | 0.0 | 155.256 | 0.00 | 7815.68 |
| 142000.0 | 0.0 | 141.765 | 0.00 | 7425.53 |
| 142050.0 | 0.0 | 117.997 | 0.00 | 6494.05 |
| 142100.0 | 0.0 | 101.958 | 0.00 | 5498.88 |
| 142150.0 | 0.0 | 72.159 | 0.00 | 4352.93 |
| 142200.0 | 0.0 | 45.425 | 0.00 | 2939.60 |
| 142250.0 | 0.0 | 21.391 | 0.00 | 1670.40 |
| 142300.0 | 0.669 | 2.253 | 16.73 | 591.10 |
| 142350.0 | 8.317 | 0.0 | 224.65 | 56.33 |
| 142400.0 | 12.251 | 0.0 | 514.20 | 0.00 |
| 142450.0 | 14.555 | 0.716 | 670.15 | 17.90 |
| 142500.0 | 6.391 | 24.454 | 523.65 | 629.25 |
| 142550.0 | 9.228 | 0.0 | 390.48 | 611.35 |
| 142600.0 | 4.238 | 29.479 | 336.65 | 736.98 |
| 142650.0 | 5.252 | 25.308 | 237.25 | 1369.68 |
| 142700.0 | 8.835 | 14.853 | 352.18 | 1004.03 |
| 142750.0 | 14.641 | 0.0 | 586.90 | 371.33 |
| 142800.0 | 20.22 | 0.0 | 871.53 | 0.00 |
| 142850.0 | 12.284 | 0.0 | 812.60 | 0.00 |
| 142900.0 | 2.996 | 3.072 | 382.00 | 76.80 |
| 142950.0 | 0.899 | 3.725 | 97.38 | 169.93 |
| 143000.0 | 2.254 | 1.871 | 78.83 | 139.90 |
| 143050.0 | 14.018 | 0.0 | 406.80 | 46.78 |
| 143100.0 | 5.598 | 0.0 | 490.40 | 0.00 |
| 143150.0 | 3.827 | 14.723 | 235.63 | 368.08 |
| 143200.0 | 10.645 | 0.834 | 361.80 | 388.93 |
| 143250.0 | 17.218 | 0.0 | 696.58 | 20.85 |
| 143300.0 | 19.712 | 0.0 | 923.25 | 0.00 |
| 143350.0 | 20.313 | 0.0 | 1000.63 | 0.00 |
| 143400.0 | 18.972 | 0.0 | 982.13 | 0.00 |
| 143450.0 | 17.396 | 0.0 | 909.20 | 0.00 |
| 143500.0 | 12.755 | 0.657 | 753.78 | 16.43 |
| 143550.0 | 8.406 | 0.0 | 529.03 | 16.43 |
| 143600.0 | 0.0 | 4.078 | 210.15 | 101.95 |
| 143650.0 | 0.0 | 16.73 | 0.00 | 520.20 |
| 143700.0 | 0.0 | 22.532 | 0.00 | 981.55 |
| 143750.0 | 0.0 | 13.916 | 0.00 | 911.20 |
| 143800.0 | 0.0 | 123.855 | 0.00 | 3444.28 |
| 143850.0 | 0.0 | 14.512 | 0.00 | 3459.18 |
| 143900.0 | 0.0 | 5.926 | 0.00 | 510.95 |
| 143950.0 | 7.257 | 0.0 | 181.43 | 148.15 |
| 144000.0 | 12.64 | 0.0 | 497.43 | 0.00 |
| 144050.0 | 12.474 | 0.0 | 627.85 | 0.00 |
| 144100.0 | 6.603 | 2.309 | 476.93 | 57.73 |
| 144150.0 | 13.262 | 0.0 | 496.63 | 57.73 |
| 144200.0 | 9.475 | 0.578 | 568.43 | 14.45 |
| 144250.0 | 10.27 | 0.0 | 493.63 | 14.45 |
| 144300.0 | 9.109 | 4.658 | 484.48 | 116.45 |
| 144350.0 | 10.209 | 0.721 | 482.95 | 134.48 |
| 144400.0 | 14.93 | 0.0 | 628.48 | 18.03 |

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|----------|--------|--------|--------|---------|
| 144450.0 | 17.945 | 0.0 | 821.88 | 0.00 |
| 144500.0 | 12.485 | 3.077 | 760.75 | 76.93 |
| 144550.0 | 15.713 | 0.3 | 704.95 | 84.43 |
| 144600.0 | 18.562 | 0.0 | 856.88 | 7.50 |
| 144650.0 | 11.485 | 3.043 | 751.18 | 76.08 |
| 144700.0 | 6.403 | 9.271 | 447.20 | 307.85 |
| 144750.0 | 7.291 | 6.942 | 342.35 | 405.33 |
| 144800.0 | 9.541 | 7.283 | 420.80 | 355.63 |
| 144850.0 | 10.661 | 8.452 | 505.05 | 393.38 |
| 144900.0 | 3.861 | 14.951 | 363.05 | 585.08 |
| 144950.0 | 8.559 | 7.478 | 310.50 | 560.73 |
| 145000.0 | 15.058 | 0.0 | 590.43 | 186.95 |
| 145050.0 | 18.342 | 0.0 | 835.00 | 0.00 |
| 145100.0 | 9.794 | 0.0 | 703.40 | 0.00 |
| 145150.0 | 7.045 | 0.558 | 420.98 | 13.95 |
| 145200.0 | 7.906 | 39.645 | 373.78 | 1005.08 |
| 145250.0 | 0.0 | 24.07 | 197.65 | 1592.88 |
| 145300.0 | 0.467 | 16.301 | 11.68 | 1009.28 |
| 145350.0 | 5.751 | 1.427 | 155.45 | 443.20 |
| 145400.0 | 8.747 | 1.708 | 362.45 | 78.38 |
| 145450.0 | 10.935 | 0.606 | 492.05 | 57.85 |
| 145500.0 | 11.375 | 0.0 | 557.75 | 15.15 |
| 145550.0 | 9.375 | 0.224 | 518.75 | 5.60 |
| 145600.0 | 10.169 | 5.009 | 488.60 | 130.83 |
| 145650.0 | 11.505 | 0.007 | 541.85 | 125.40 |
| 145700.0 | 11.119 | 1.304 | 565.60 | 32.78 |
| 145750.0 | 13.433 | 2.381 | 613.80 | 92.13 |
| 145800.0 | 11.034 | 3.354 | 611.68 | 143.38 |
| 145850.0 | 13.35 | 0.245 | 609.60 | 89.98 |
| 145900.0 | 12.957 | 1.74 | 657.68 | 49.63 |
| 145950.0 | 9.099 | 5.945 | 551.40 | 192.13 |
| 146000.0 | 9.241 | 3.592 | 458.50 | 238.43 |
| 146050.0 | 6.181 | 5.399 | 385.55 | 224.78 |
| 146100.0 | 4.083 | 6.183 | 256.60 | 289.55 |
| 146150.0 | 12.93 | 1.666 | 425.33 | 196.23 |
| 146200.0 | 9.378 | 6.902 | 557.70 | 214.20 |
| 146250.0 | 10.478 | 0.0 | 496.40 | 172.55 |
| 146300.0 | 12.052 | 0.001 | 563.25 | 0.03 |
| 146350.0 | 9.421 | 0.906 | 536.83 | 22.68 |
| 146400.0 | 0.0 | 50.948 | 235.53 | 1296.35 |
| 146450.0 | 8.319 | 14.691 | 207.98 | 1640.98 |
| 146500.0 | 10.391 | 0.113 | 467.75 | 370.10 |
| 146550.0 | 12.4 | 0.0 | 569.78 | 2.83 |
| 146600.0 | 7.817 | 1.83 | 505.43 | 45.75 |
| 146650.0 | 7.344 | 3.993 | 379.03 | 145.58 |
| 146700.0 | 7.058 | 6.87 | 360.05 | 271.58 |
| 146750.0 | 10.964 | 0.0 | 450.55 | 171.75 |
| 146800.0 | 0.348 | 48.405 | 282.80 | 1210.13 |
| 146850.0 | 10.501 | 20.128 | 271.23 | 1713.33 |
| 146900.0 | 7.959 | 17.707 | 461.50 | 945.88 |
| 146950.0 | 6.254 | 15.845 | 355.33 | 838.80 |
| 147000.0 | 4.246 | 18.911 | 262.50 | 868.90 |
| 147050.0 | 11.928 | 25.445 | 404.35 | 1108.90 |
| 147100.0 | 16.237 | 6.13 | 704.13 | 789.38 |
| 147150.0 | 0.0 | 214.63 | 405.93 | 5519.00 |
| 147200.0 | 13.037 | 13.246 | 325.93 | 5696.90 |
| 147250.0 | 12.308 | 8.316 | 633.63 | 539.05 |
| 147300.0 | 9.369 | 21.3 | 541.93 | 740.40 |
| 147350.0 | 7.711 | 20.206 | 427.00 | 1037.65 |
| 147400.0 | 7.754 | 15.696 | 386.63 | 897.55 |

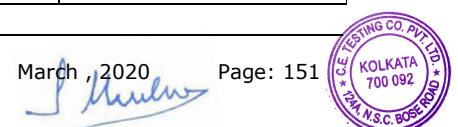
| | | | | |
|----------|--------|--------|---------|---------|
| 147450.0 | 17.102 | 0.0 | 621.40 | 392.40 |
| 147500.0 | 20.819 | 0.0 | 948.03 | 0.00 |
| 147550.0 | 20.131 | 0.0 | 1023.75 | 0.00 |
| 147600.0 | 20.012 | 0.0 | 1003.58 | 0.00 |
| 147650.0 | 25.13 | 0.0 | 1128.55 | 0.00 |
| 147700.0 | 23.246 | 0.0 | 1209.40 | 0.00 |
| 147750.0 | 24.447 | 0.0 | 1192.33 | 0.00 |
| 147800.0 | 19.599 | 0.0 | 1101.15 | 0.00 |
| 147850.0 | 12.577 | 0.0 | 804.40 | 0.00 |
| 147900.0 | 14.35 | 0.343 | 673.18 | 8.58 |
| 147950.0 | 13.154 | 3.893 | 687.60 | 105.90 |
| 148000.0 | 10.77 | 8.855 | 598.10 | 318.70 |
| 148050.0 | 10.877 | 7.989 | 541.18 | 421.10 |
| 148100.0 | 9.931 | 4.261 | 520.20 | 306.25 |
| 148150.0 | 9.083 | 1.993 | 475.35 | 156.35 |
| 148200.0 | 6.518 | 5.959 | 390.03 | 198.80 |
| 148250.0 | 4.073 | 17.25 | 264.78 | 580.23 |
| 148300.0 | 4.571 | 15.285 | 216.10 | 813.38 |
| 148350.0 | 3.477 | 11.311 | 201.20 | 664.90 |
| 148400.0 | 4.364 | 0.559 | 196.03 | 296.75 |
| 148450.0 | 13.055 | 0.0 | 435.48 | 13.98 |
| 148500.0 | 5.109 | 1.401 | 454.10 | 35.03 |
| 148550.0 | 2.681 | 7.767 | 194.75 | 229.20 |
| 148600.0 | 2.403 | 3.934 | 127.10 | 292.53 |
| 148650.0 | 1.377 | 10.049 | 94.50 | 349.58 |
| 148700.0 | 4.411 | 5.415 | 144.70 | 386.60 |
| 148750.0 | 4.247 | 8.434 | 216.45 | 346.23 |
| 148800.0 | 2.265 | 7.03 | 162.80 | 386.60 |
| 148850.0 | 0.396 | 3.795 | 66.53 | 270.63 |
| 148900.0 | 4.584 | 18.611 | 124.50 | 560.15 |
| 148950.0 | 3.945 | 1.695 | 213.23 | 507.65 |
| 149000.0 | 8.114 | 0.0 | 301.48 | 42.38 |
| 149050.0 | 14.812 | 0.0 | 573.15 | 0.00 |
| 149100.0 | 14.351 | 0.003 | 729.08 | 0.08 |
| 149150.0 | 16.208 | 0.0 | 763.98 | 0.08 |
| 149200.0 | 18.085 | 0.0 | 857.33 | 0.00 |
| 149250.0 | 14.318 | 0.376 | 810.08 | 9.40 |
| 149300.0 | 10.657 | 0.553 | 624.38 | 23.23 |
| 149350.0 | 12.75 | 0.922 | 585.18 | 36.88 |
| 149400.0 | 15.956 | 0.637 | 717.65 | 38.98 |
| 149450.0 | 13.5 | 0.315 | 736.40 | 23.80 |
| 149500.0 | 17.153 | 3.404 | 766.33 | 92.98 |
| 149550.0 | 9.267 | 15.339 | 660.50 | 468.58 |
| 149600.0 | 8.068 | 12.578 | 433.38 | 697.93 |
| 149650.0 | 7.286 | 7.778 | 383.85 | 508.90 |
| 149700.0 | 3.068 | 7.318 | 258.85 | 377.40 |
| 149750.0 | 1.684 | 12.283 | 118.80 | 490.03 |
| 149800.0 | 0.748 | 8.354 | 60.80 | 515.93 |
| 149850.0 | 6.071 | 0.891 | 170.48 | 231.13 |
| 149900.0 | 13.896 | 0.0 | 499.18 | 22.28 |
| 149950.0 | 14.008 | 0.0 | 697.60 | 0.00 |
| 150000.0 | 11.677 | 0.0 | 642.13 | 0.00 |
| 150050.0 | 12.924 | 2.782 | 615.03 | 69.55 |
| 150100.0 | 18.422 | 0.0 | 783.65 | 69.55 |
| 150150.0 | 7.776 | 0.324 | 654.95 | 8.10 |
| 150200.0 | 0.107 | 57.076 | 197.08 | 1435.00 |
| 150250.0 | 1.207 | 14.957 | 32.85 | 1800.83 |
| 150300.0 | 16.91 | 0.0 | 452.93 | 373.93 |
| 150350.0 | 18.925 | 0.0 | 895.88 | 0.00 |
| 150400.0 | 11.824 | 3.117 | 768.73 | 77.93 |

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|----------|--------|---------|---------|----------|
| 150450.0 | 16.069 | 0.0 | 697.33 | 77.93 |
| 150500.0 | 22.605 | 0.0 | 966.85 | 0.00 |
| 150550.0 | 26.555 | 0.0 | 1229.00 | 0.00 |
| 150600.0 | 20.917 | 0.0 | 1186.80 | 0.00 |
| 150650.0 | 19.768 | 0.0 | 1017.13 | 0.00 |
| 150700.0 | 17.272 | 0.0 | 926.00 | 0.00 |
| 150750.0 | 4.698 | 0.0 | 549.25 | 0.00 |
| 150800.0 | 0.078 | 5.427 | 119.40 | 135.68 |
| 150850.0 | 1.166 | 42.721 | 31.10 | 1203.70 |
| 150900.0 | 2.541 | 32.006 | 92.68 | 1868.18 |
| 150950.0 | 12.889 | 19.058 | 385.75 | 1276.60 |
| 151000.0 | 18.241 | 10.756 | 778.25 | 745.35 |
| 151050.0 | 9.88 | 21.551 | 703.03 | 807.68 |
| 151100.0 | 5.303 | 27.776 | 379.58 | 1233.18 |
| 151150.0 | 0.0 | 41.164 | 132.58 | 1723.50 |
| 151200.0 | 0.0 | 64.226 | 0.00 | 2634.75 |
| 151250.0 | 0.0 | 78.864 | 0.00 | 3577.25 |
| 151300.0 | 0.0 | 89.767 | 0.00 | 4215.78 |
| 151350.0 | 0.0 | 89.99 | 0.00 | 4493.93 |
| 151400.0 | 0.0 | 79.757 | 0.00 | 4243.68 |
| 151450.0 | 6.179 | 50.765 | 154.48 | 3263.05 |
| 151500.0 | 0.0 | 439.785 | 154.48 | 12263.75 |
| 151550.0 | 0.0 | 247.294 | 0.00 | 17176.98 |
| 151600.0 | 7.019 | 31.471 | 175.48 | 6969.13 |
| 151650.0 | 0.0 | 60.852 | 175.48 | 2308.08 |
| 151700.0 | 0.0 | 39.952 | 0.00 | 2520.10 |
| 151750.0 | 0.0 | 41.601 | 0.00 | 2038.83 |
| 151800.0 | 0.0 | 19.484 | 0.00 | 1527.13 |
| 151850.0 | 0.0 | 11.059 | 0.00 | 763.58 |
| 151900.0 | 0.543 | 10.703 | 13.58 | 544.05 |
| 151950.0 | 4.865 | 12.31 | 135.20 | 575.33 |
| 152000.0 | 7.844 | 17.563 | 317.73 | 746.83 |
| 152050.0 | 14.294 | 0.051 | 553.45 | 440.35 |
| 152100.0 | 15.139 | 0.0 | 735.83 | 1.28 |
| 152150.0 | 26.783 | 0.0 | 1048.05 | 0.00 |
| 152200.0 | 24.888 | 0.0 | 1291.78 | 0.00 |
| 152250.0 | 20.559 | 0.0 | 1136.18 | 0.00 |
| 152300.0 | 18.648 | 0.0 | 980.18 | 0.00 |
| 152350.0 | 21.083 | 0.0 | 993.28 | 0.00 |
| 152400.0 | 20.536 | 0.0 | 1040.48 | 0.00 |
| 152450.0 | 10.719 | 0.214 | 781.38 | 5.35 |
| 152500.0 | 8.952 | 7.795 | 491.78 | 200.23 |
| 152550.0 | 15.76 | 0.0 | 617.80 | 194.88 |
| 152600.0 | 11.357 | 0.0 | 677.93 | 0.00 |
| 152650.0 | 16.305 | 0.0 | 691.55 | 0.00 |
| 152700.0 | 15.337 | 0.0 | 791.05 | 0.00 |
| 152750.0 | 6.669 | 5.917 | 550.15 | 147.93 |
| 152800.0 | 6.418 | 10.1 | 327.18 | 400.43 |
| 152850.0 | 11.94 | 0.219 | 458.95 | 257.98 |
| 152900.0 | 15.924 | 0.061 | 696.60 | 7.00 |
| 152950.0 | 11.929 | 2.019 | 696.33 | 52.00 |
| 153000.0 | 13.177 | 0.0 | 627.65 | 50.48 |
| 153050.0 | 13.163 | 0.0 | 658.50 | 0.00 |
| 153100.0 | 8.703 | 0.0 | 546.65 | 0.00 |
| 153150.0 | 9.716 | 0.0 | 460.48 | 0.00 |
| 153200.0 | 2.43 | 2.568 | 303.65 | 64.20 |
| 153250.0 | 0.221 | 7.838 | 66.28 | 260.15 |
| 153300.0 | 0.685 | 3.832 | 22.65 | 291.75 |
| 153350.0 | 0.579 | 5.202 | 31.60 | 225.85 |
| 153400.0 | 2.758 | 3.078 | 83.43 | 207.00 |

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|----------|--------|---------|--------|---------|
| 153450.0 | 1.908 | 5.775 | 116.65 | 221.33 |
| 153500.0 | 3.734 | 2.479 | 141.05 | 206.35 |
| 153550.0 | 4.118 | 0.984 | 196.30 | 86.58 |
| 153600.0 | 3.626 | 26.739 | 193.60 | 693.08 |
| 153650.0 | 14.309 | 35.042 | 448.38 | 1544.53 |
| 153700.0 | 16.19 | 0.458 | 762.48 | 887.50 |
| 153750.0 | 18.601 | 0.0 | 869.78 | 11.45 |
| 153800.0 | 16.273 | 0.0 | 871.85 | 0.00 |
| 153850.0 | 15.816 | 0.0 | 802.23 | 0.00 |
| 153900.0 | 6.855 | 13.719 | 566.78 | 342.98 |
| 153950.0 | 9.225 | 29.895 | 402.00 | 1090.35 |
| 154000.0 | 5.754 | 15.218 | 374.48 | 1127.83 |
| 154050.0 | 10.599 | 0.895 | 408.83 | 402.83 |
| 154100.0 | 8.945 | 0.394 | 488.60 | 32.23 |
| 154150.0 | 5.318 | 1.055 | 356.58 | 36.23 |
| 154200.0 | 3.636 | 10.652 | 223.85 | 292.68 |
| 154250.0 | 0.861 | 11.101 | 112.43 | 543.83 |
| 154300.0 | 2.65 | 2.616 | 87.78 | 342.93 |
| 154350.0 | 4.028 | 2.494 | 166.95 | 127.75 |
| 154400.0 | 6.592 | 0.18 | 265.50 | 66.85 |
| 154450.0 | 13.149 | 0.0 | 493.53 | 4.50 |
| 154500.0 | 12.548 | 0.0 | 642.43 | 0.00 |
| 154550.0 | 7.945 | 2.399 | 512.33 | 59.98 |
| 154600.0 | 10.051 | 1.14 | 449.90 | 88.48 |
| 154650.0 | 11.487 | 0.0 | 538.45 | 28.50 |
| 154700.0 | 0.0 | 107.393 | 287.18 | 2684.83 |
| 154750.0 | 9.049 | 1.813 | 226.23 | 2730.15 |
| 154800.0 | 11.648 | 0.051 | 517.43 | 46.60 |
| 154850.0 | 6.642 | 0.699 | 457.25 | 18.75 |
| 154900.0 | 7.133 | 0.23 | 344.38 | 23.23 |
| 154950.0 | 4.798 | 0.381 | 298.28 | 15.28 |
| 155000.0 | 0.384 | 4.729 | 129.55 | 127.75 |
| 155050.0 | 0.684 | 14.434 | 26.70 | 479.08 |
| 155100.0 | 3.45 | 5.095 | 103.35 | 488.23 |
| 155150.0 | 11.241 | 0.0 | 367.28 | 127.38 |
| 155200.0 | 9.298 | 0.23 | 513.48 | 5.75 |
| 155250.0 | 5.379 | 1.623 | 366.93 | 46.33 |
| 155300.0 | 2.239 | 3.529 | 190.45 | 128.80 |
| 155350.0 | 3.535 | 7.142 | 144.35 | 266.78 |
| 155400.0 | 3.604 | 6.155 | 178.48 | 332.43 |
| 155450.0 | 5.21 | 8.841 | 220.35 | 374.90 |
| 155500.0 | 8.644 | 0.0 | 346.35 | 221.03 |
| 155550.0 | 2.683 | 2.386 | 283.18 | 59.65 |
| 155600.0 | 1.752 | 5.023 | 110.88 | 185.23 |
| 155650.0 | 2.947 | 6.042 | 117.48 | 276.63 |
| 155700.0 | 2.306 | 21.428 | 131.33 | 686.75 |
| 155750.0 | 4.535 | 3.755 | 171.03 | 629.58 |
| 155800.0 | 5.32 | 1.739 | 246.38 | 137.35 |
| 155850.0 | 7.7 | 0.256 | 325.50 | 49.88 |
| 155900.0 | 6.98 | 0.092 | 367.00 | 8.70 |
| 155950.0 | 16.703 | 0.0 | 592.08 | 2.30 |
| 156000.0 | 20.126 | 0.0 | 920.73 | 0.00 |
| 156050.0 | 9.904 | 0.05 | 750.75 | 1.25 |
| 156100.0 | 5.488 | 3.508 | 384.80 | 88.95 |
| 156150.0 | 16.603 | 0.0 | 552.28 | 87.70 |
| 156200.0 | 16.356 | 0.0 | 823.98 | 0.00 |
| 156250.0 | 3.871 | 0.651 | 505.68 | 16.28 |
| 156300.0 | 8.191 | 0.196 | 301.55 | 21.18 |
| 156350.0 | 3.086 | 0.886 | 281.93 | 27.05 |
| 156400.0 | 0.186 | 20.22 | 81.80 | 527.65 |

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|----------|--------|---------|---------|---------|
| 156450.0 | 1.237 | 5.772 | 35.58 | 649.80 |
| 156500.0 | 1.33 | 4.542 | 64.18 | 257.85 |
| 156550.0 | 3.957 | 2.083 | 132.18 | 165.63 |
| 156600.0 | 5.038 | 1.142 | 224.88 | 80.63 |
| 156650.0 | 7.454 | 4.654 | 312.30 | 144.90 |
| 156700.0 | 8.102 | 7.2 | 388.90 | 296.35 |
| 156750.0 | 10.84 | 3.564 | 473.55 | 269.10 |
| 156800.0 | 11.664 | 0.39 | 562.60 | 98.85 |
| 156850.0 | 5.149 | 0.698 | 420.33 | 27.20 |
| 156900.0 | 5.845 | 0.514 | 274.85 | 30.30 |
| 156950.0 | 2.448 | 1.57 | 207.33 | 52.10 |
| 157000.0 | 7.186 | 4.449 | 240.85 | 150.48 |
| 157050.0 | 6.542 | 6.514 | 343.20 | 274.08 |
| 157100.0 | 6.551 | 8.363 | 327.33 | 371.93 |
| 157150.0 | 12.859 | 0.006 | 485.25 | 209.23 |
| 157200.0 | 20.01 | 0.0 | 821.73 | 0.15 |
| 157250.0 | 14.423 | 0.0 | 860.83 | 0.00 |
| 157300.0 | 13.401 | 0.0 | 695.60 | 0.00 |
| 157350.0 | 8.433 | 0.037 | 545.85 | 0.93 |
| 157400.0 | 8.601 | 0.0 | 425.85 | 0.93 |
| 157450.0 | 10.657 | 0.0 | 481.45 | 0.00 |
| 157500.0 | 8.693 | 0.0 | 483.75 | 0.00 |
| 157550.0 | 5.864 | 0.8 | 363.93 | 20.00 |
| 157600.0 | 12.092 | 0.119 | 448.90 | 22.98 |
| 157650.0 | 14.399 | 0.0 | 662.28 | 2.98 |
| 157700.0 | 3.122 | 7.518 | 438.03 | 187.95 |
| 157750.0 | 0.0 | 35.101 | 78.05 | 1065.48 |
| 157800.0 | 1.289 | 37.545 | 32.23 | 1816.15 |
| 157850.0 | 0.0 | 120.224 | 32.23 | 3944.23 |
| 157900.0 | 0.049 | 22.511 | 1.23 | 3568.38 |
| 157950.0 | 0.383 | 12.163 | 10.80 | 866.85 |
| 158000.0 | 7.547 | 0.538 | 198.25 | 317.53 |
| 158050.0 | 10.815 | 0.827 | 459.05 | 34.13 |
| 158100.0 | 7.398 | 4.304 | 455.33 | 128.28 |
| 158150.0 | 6.979 | 1.527 | 359.43 | 145.78 |
| 158200.0 | 4.925 | 7.372 | 297.60 | 222.48 |
| 158250.0 | 5.597 | 7.598 | 263.05 | 374.25 |
| 158300.0 | 10.091 | 0.668 | 392.20 | 206.65 |
| 158350.0 | 10.56 | 1.101 | 516.28 | 44.23 |
| 158400.0 | 4.355 | 16.312 | 372.88 | 435.33 |
| 158450.0 | 9.073 | 0.0 | 335.70 | 407.80 |
| 158500.0 | 7.283 | 21.027 | 408.90 | 525.68 |
| 158550.0 | 26.325 | 0.0 | 840.20 | 525.68 |
| 158600.0 | 31.356 | 0.0 | 1442.03 | 0.00 |
| 158650.0 | 25.931 | 0.0 | 1432.18 | 0.00 |
| 158700.0 | 17.141 | 0.184 | 1076.80 | 4.60 |
| 158750.0 | 13.559 | 0.0 | 767.50 | 4.60 |
| 158800.0 | 1.65 | 1.738 | 380.23 | 43.45 |
| 158850.0 | 0.0 | 22.318 | 41.25 | 601.40 |
| 158900.0 | 0.0 | 63.508 | 0.00 | 2145.65 |
| 158950.0 | 0.0 | 102.493 | 0.00 | 4150.03 |
| 159000.0 | 0.0 | 145.91 | 0.00 | 6210.08 |
| 159050.0 | 0.0 | 168.26 | 0.00 | 7854.25 |
| 159100.0 | 0.0 | 154.681 | 0.00 | 8073.53 |
| 159150.0 | 0.0 | 156.361 | 0.00 | 7776.05 |
| 159200.0 | 0.0 | 161.59 | 0.00 | 7948.78 |
| 159250.0 | 0.0 | 158.747 | 0.00 | 8008.43 |
| 159300.0 | 0.0 | 148.836 | 0.00 | 7689.58 |
| 159350.0 | 0.0 | 126.863 | 0.00 | 6892.48 |
| 159400.0 | 0.0 | 98.995 | 0.00 | 5646.45 |

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| 159450.0 | 0.0 | 69.228 | 0.00 | 4205.58 |
| 159500.0 | 0.0 | 51.421 | 0.00 | 3016.23 |
| 159550.0 | 0.0 | 40.773 | 0.00 | 2304.85 |
| 159600.0 | 0.0 | 23.468 | 0.00 | 1606.03 |
| 159650.0 | 0.0 | 27.781 | 0.00 | 1281.23 |
| 159700.0 | 0.0 | 36.408 | 0.00 | 1604.73 |
| 159750.0 | 0.0 | 51.144 | 0.00 | 2188.80 |
| 159800.0 | 0.0 | 49.052 | 0.00 | 2504.90 |
| 159850.0 | 0.342 | 26.944 | 8.55 | 1899.90 |
| 159900.0 | 4.21 | 25.833 | 113.80 | 1319.43 |
| 159950.0 | 11.538 | 5.46 | 393.70 | 782.33 |
| 160000.0 | 14.745 | 0.0 | 657.08 | 136.50 |
| 160050.0 | 23.305 | 0.0 | 951.25 | 0.00 |
| 160100.0 | 23.217 | 0.0 | 1163.05 | 0.00 |
| 160150.0 | 12.09 | 0.0 | 882.68 | 0.00 |
| 160200.0 | 0.496 | 3.871 | 314.65 | 96.78 |
| 160250.0 | 0.0 | 27.103 | 12.40 | 774.35 |
| 160300.0 | 0.0 | 47.393 | 0.00 | 1862.40 |
| 160350.0 | 0.0 | 78.227 | 0.00 | 3140.50 |
| 160400.0 | 0.0 | 107.711 | 0.00 | 4648.45 |
| 160450.0 | 0.0 | 125.546 | 0.00 | 5831.43 |
| 160500.0 | 0.0 | 134.544 | 0.00 | 6502.25 |
| 160550.0 | 0.0 | 142.668 | 0.00 | 6930.30 |
| 160600.0 | 0.0 | 136.725 | 0.00 | 6984.83 |
| 160650.0 | 0.0 | 147.739 | 0.00 | 7111.60 |
| 160700.0 | 0.0 | 107.679 | 0.00 | 6385.45 |
| 160750.0 | 0.0 | 82.327 | 0.00 | 4750.15 |
| 160800.0 | 0.0 | 58.71 | 0.00 | 3525.93 |
| 160850.0 | 0.0 | 60.311 | 0.00 | 2975.53 |
| 160900.0 | 0.0 | 39.882 | 0.00 | 2504.83 |
| 160950.0 | 0.0 | 43.644 | 0.00 | 2088.15 |
| 161000.0 | 0.0 | 42.421 | 0.00 | 2151.63 |
| 161050.0 | 0.0 | 26.537 | 0.00 | 1723.95 |
| 161100.0 | 0.0 | 75.905 | 0.00 | 2561.05 |
| 161150.0 | 0.0 | 17.628 | 0.00 | 2338.33 |
| 161200.0 | 0.0 | 30.446 | 0.00 | 1201.85 |
| 161250.0 | 0.0 | 34.865 | 0.00 | 1632.78 |
| 161300.0 | 0.0 | 39.67 | 0.00 | 1863.38 |
| 161350.0 | 0.0 | 30.518 | 0.00 | 1754.70 |
| 161400.0 | 0.0 | 19.027 | 0.00 | 1238.63 |
| 161450.0 | 3.405 | 9.614 | 85.13 | 716.03 |
| 161500.0 | 6.949 | 8.791 | 258.85 | 460.13 |
| 161550.0 | 5.41 | 3.675 | 308.98 | 311.65 |
| 161600.0 | 11.324 | 0.0 | 418.35 | 91.88 |
| 161650.0 | 13.584 | 0.0 | 622.70 | 0.00 |
| 161700.0 | 9.453 | 6.444 | 575.93 | 161.10 |
| 161750.0 | 13.24 | 0.0 | 567.33 | 161.10 |
| 161800.0 | 15.566 | 0.0 | 720.15 | 0.00 |
| 161850.0 | 17.344 | 0.0 | 822.75 | 0.00 |
| 161900.0 | 18.462 | 0.0 | 895.15 | 0.00 |
| 161950.0 | 17.356 | 0.0 | 895.45 | 0.00 |
| 162000.0 | 16.465 | 0.0 | 845.53 | 0.00 |
| 162050.0 | 6.34 | 0.0 | 570.13 | 0.00 |
| 162100.0 | 14.838 | 0.0 | 529.45 | 0.00 |
| 162150.0 | 18.075 | 0.0 | 822.83 | 0.00 |
| 162200.0 | 2.505 | 0.1 | 514.50 | 2.50 |
| 162250.0 | 11.598 | 0.0 | 352.58 | 2.50 |
| 162300.0 | 17.0 | 0.0 | 714.95 | 0.00 |
| 162350.0 | 20.334 | 0.0 | 933.35 | 0.00 |
| 162400.0 | 19.898 | 0.0 | 1005.80 | 0.00 |



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| 162450.0 | 15.631 | 0.053 | 888.23 | 1.33 |
| 162500.0 | 17.652 | 0.0 | 832.08 | 1.33 |
| 162550.0 | 10.78 | 1.335 | 710.80 | 33.38 |
| 162600.0 | 6.579 | 3.361 | 433.98 | 117.40 |
| 162650.0 | 3.782 | 8.535 | 259.03 | 297.40 |
| 162700.0 | 19.329 | 0.0 | 577.78 | 213.38 |
| 162750.0 | 7.618 | 11.332 | 673.68 | 283.30 |
| 162800.0 | 3.632 | 28.891 | 281.25 | 1005.58 |
| 162850.0 | 7.241 | 23.605 | 271.83 | 1312.40 |
| 162900.0 | 8.762 | 9.791 | 400.08 | 834.90 |
| 162950.0 | 11.995 | 2.028 | 518.93 | 295.48 |
| 163000.0 | 16.663 | 1.074 | 716.45 | 77.55 |
| 163050.0 | 6.08 | 4.162 | 568.58 | 130.90 |
| 163100.0 | 0.0 | 9.094 | 152.00 | 331.40 |
| 163150.0 | 0.0 | 21.907 | 0.00 | 775.03 |
| 163200.0 | 0.0 | 21.259 | 0.00 | 1079.15 |
| 163250.0 | 1.899 | 2.533 | 47.48 | 594.80 |
| 163300.0 | 14.597 | 0.0 | 412.40 | 63.33 |
| 163350.0 | 17.154 | 0.0 | 793.78 | 0.00 |
| 163400.0 | 11.175 | 0.0 | 708.23 | 0.00 |
| 163450.0 | 4.165 | 3.787 | 383.50 | 94.68 |
| 163500.0 | 11.217 | 21.552 | 384.55 | 633.48 |
| 163550.0 | 2.688 | 20.123 | 347.63 | 1041.88 |
| 163600.0 | 0.0 | 15.41 | 67.20 | 888.33 |
| 163650.0 | 0.399 | 11.057 | 9.98 | 661.68 |
| 163700.0 | 3.004 | 1.275 | 85.08 | 308.30 |
| 163750.0 | 12.812 | 0.0 | 395.40 | 31.88 |
| 163800.0 | 14.609 | 0.0 | 685.53 | 0.00 |
| 163850.0 | 25.364 | 0.0 | 999.33 | 0.00 |
| 163900.0 | 23.255 | 0.0 | 1215.48 | 0.00 |
| 163950.0 | 23.285 | 0.0 | 1163.50 | 0.00 |
| 164000.0 | 22.578 | 0.0 | 1146.58 | 0.00 |
| 164050.0 | 17.601 | 0.0 | 1004.48 | 0.00 |
| 164100.0 | 22.764 | 0.0 | 1009.13 | 0.00 |
| 164150.0 | 26.557 | 0.0 | 1233.03 | 0.00 |
| 164200.0 | 21.319 | 0.0 | 1196.90 | 0.00 |
| 164250.0 | 22.918 | 0.0 | 1105.93 | 0.00 |
| 164300.0 | 21.857 | 0.0 | 1119.38 | 0.00 |
| 164350.0 | 9.714 | 0.003 | 789.28 | 0.08 |
| 164400.0 | 2.595 | 27.836 | 307.73 | 695.98 |
| 164450.0 | 2.633 | 18.856 | 130.70 | 1167.30 |
| 164500.0 | 8.349 | 9.795 | 274.55 | 716.28 |
| 164550.0 | 8.948 | 1.894 | 432.43 | 292.23 |
| 164600.0 | 13.761 | 0.115 | 567.73 | 50.23 |
| 164650.0 | 9.94 | 8.482 | 592.53 | 214.93 |
| 164700.0 | 7.198 | 4.431 | 428.45 | 322.83 |
| 164750.0 | 8.854 | 3.817 | 401.30 | 206.20 |
| 164800.0 | 23.437 | 0.0 | 807.28 | 95.43 |
| 164850.0 | 24.76 | 0.0 | 1204.93 | 0.00 |
| 164900.0 | 13.394 | 0.0 | 953.85 | 0.00 |
| 164950.0 | 9.909 | 0.238 | 582.58 | 5.95 |
| 165000.0 | 8.255 | 0.934 | 454.10 | 29.30 |
| 165050.0 | 14.102 | 0.001 | 558.93 | 23.38 |
| 165100.0 | 21.573 | 0.0 | 891.88 | 0.03 |
| 165150.0 | 15.429 | 0.0 | 925.05 | 0.00 |
| 165200.0 | 12.848 | 0.0 | 706.93 | 0.00 |
| 165250.0 | 14.485 | 0.0 | 683.33 | 0.00 |
| 165300.0 | 24.839 | 0.0 | 983.10 | 0.00 |
| 165350.0 | 8.032 | 13.381 | 821.78 | 334.53 |
| 165400.0 | 30.628 | 0.0 | 966.50 | 334.53 |

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| 165450.0 | 24.431 | 0.0 | 1376.48 | 0.00 |
| 165500.0 | 0.664 | 2.638 | 627.38 | 65.95 |
| 165550.0 | 1.287 | 5.798 | 48.78 | 210.90 |
| 165600.0 | 4.085 | 8.881 | 134.30 | 366.98 |
| 165650.0 | 0.139 | 11.617 | 105.60 | 512.45 |
| 165700.0 | 2.522 | 7.417 | 66.53 | 475.85 |
| 165750.0 | 6.996 | 0.849 | 237.95 | 206.65 |
| 165800.0 | 13.357 | 0.0 | 508.83 | 21.23 |
| 165850.0 | 16.38 | 0.0 | 743.43 | 0.00 |
| 165900.0 | 6.919 | 10.297 | 582.48 | 257.43 |
| 165950.0 | 8.74 | 15.757 | 391.48 | 651.35 |
| 166000.0 | 9.84 | 11.448 | 464.50 | 680.13 |
| 166050.0 | 9.093 | 1.952 | 473.33 | 335.00 |
| 166100.0 | 4.831 | 1.784 | 348.10 | 93.40 |
| 166150.0 | 5.792 | 1.417 | 265.58 | 80.03 |
| 166200.0 | 4.817 | 1.4 | 265.23 | 70.43 |
| 166250.0 | 7.347 | 0.336 | 304.10 | 43.40 |
| 166300.0 | 9.13 | 0.0 | 411.93 | 8.40 |
| 166350.0 | 4.558 | 2.844 | 342.20 | 71.10 |
| 166400.0 | 7.887 | 2.481 | 311.13 | 133.13 |
| 166450.0 | 8.297 | 5.407 | 404.60 | 197.20 |
| 166500.0 | 7.59 | 14.917 | 397.18 | 508.10 |
| 166550.0 | 0.0 | 50.704 | 189.75 | 1640.53 |
| 166600.0 | 15.913 | 0.306 | 397.83 | 1275.25 |
| 166650.0 | 19.906 | 0.0 | 895.48 | 7.65 |
| 166700.0 | 15.166 | 0.0 | 876.80 | 0.00 |
| 166750.0 | 11.515 | 1.022 | 667.03 | 25.55 |
| 166800.0 | 13.121 | 1.772 | 615.90 | 69.85 |
| 166850.0 | 11.17 | 0.0 | 607.28 | 44.30 |
| 166900.0 | 5.552 | 7.257 | 418.05 | 181.43 |
| 166950.0 | 5.207 | 7.091 | 268.98 | 358.70 |
| 167000.0 | 6.986 | 8.069 | 304.83 | 379.00 |
| 167050.0 | 7.354 | 6.863 | 358.50 | 373.30 |
| 167100.0 | 6.053 | 12.555 | 335.18 | 485.45 |
| 167150.0 | 6.548 | 4.442 | 315.03 | 424.93 |
| 167200.0 | 7.989 | 0.154 | 363.43 | 114.90 |
| 167250.0 | 3.505 | 4.797 | 287.35 | 123.78 |
| 167300.0 | 4.742 | 1.686 | 206.18 | 162.08 |
| 167350.0 | 14.889 | 0.669 | 490.78 | 58.88 |
| 167400.0 | 7.522 | 3.088 | 560.28 | 93.93 |
| 167450.0 | 4.042 | 6.698 | 289.10 | 244.65 |
| 167500.0 | 1.302 | 3.192 | 133.60 | 247.25 |
| 167550.0 | 2.499 | 9.226 | 95.03 | 310.45 |
| 167600.0 | 11.522 | 0.0 | 350.53 | 230.65 |
| 167650.0 | 19.805 | 0.0 | 783.18 | 0.00 |
| 167700.0 | 17.697 | 0.0 | 937.55 | 0.00 |
| 167750.0 | 6.406 | 0.207 | 602.58 | 5.18 |
| 167800.0 | 3.139 | 6.343 | 238.63 | 163.75 |
| 167850.0 | 6.279 | 12.016 | 235.45 | 458.98 |
| 167900.0 | 16.5 | 0.322 | 569.48 | 308.45 |
| 167950.0 | 48.575 | 0.0 | 1626.88 | 8.05 |
| 168000.0 | 29.997 | 0.0 | 1964.30 | 0.00 |
| 168050.0 | 35.722 | 0.0 | 1642.98 | 0.00 |
| 168100.0 | 23.851 | 0.0 | 1489.33 | 0.00 |
| 168150.0 | 18.957 | 0.0 | 1070.20 | 0.00 |
| 168200.0 | 10.573 | 1.301 | 738.25 | 32.53 |
| 168250.0 | 24.091 | 0.0 | 866.60 | 32.53 |
| 168300.0 | 28.064 | 0.0 | 1303.88 | 0.00 |
| 168350.0 | 20.726 | 0.0 | 1219.75 | 0.00 |
| 168400.0 | 5.812 | 0.36 | 663.45 | 9.00 |

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| 168450.0 | 0.954 | 12.947 | 169.15 | 332.68 |
| 168500.0 | 1.328 | 10.181 | 57.05 | 578.20 |
| 168550.0 | 2.911 | 5.463 | 105.98 | 391.10 |
| 168600.0 | 4.708 | 4.015 | 190.48 | 236.95 |
| 168650.0 | 8.621 | 4.214 | 333.23 | 205.73 |
| 168700.0 | 9.769 | 9.228 | 459.75 | 336.05 |
| 168750.0 | 5.848 | 1.671 | 390.43 | 272.48 |
| 168800.0 | 9.926 | 2.393 | 394.35 | 101.60 |
| 168850.0 | 9.718 | 11.74 | 491.10 | 353.33 |
| 168900.0 | 8.358 | 10.655 | 451.90 | 559.88 |
| 168950.0 | 9.14 | 12.366 | 437.45 | 575.53 |
| 169000.0 | 9.623 | 6.754 | 469.08 | 478.00 |
| 169050.0 | 7.172 | 2.006 | 419.88 | 219.00 |
| 169100.0 | 6.663 | 5.127 | 345.88 | 178.33 |
| 169150.0 | 7.12 | 4.544 | 344.58 | 241.78 |
| 169200.0 | 10.255 | 0.005 | 434.38 | 113.73 |
| 169250.0 | 7.119 | 6.071 | 434.35 | 151.90 |
| 169300.0 | 5.826 | 6.699 | 323.63 | 319.25 |
| 169350.0 | 2.655 | 6.294 | 212.03 | 324.83 |
| 169400.0 | 0.644 | 11.924 | 82.48 | 455.45 |
| 169450.0 | 2.176 | 10.555 | 70.50 | 561.98 |
| 169500.0 | 2.114 | 23.497 | 107.25 | 851.30 |
| 169550.0 | 0.586 | 24.011 | 67.50 | 1187.70 |
| 169600.0 | 2.0 | 17.657 | 64.65 | 1041.70 |
| 169650.0 | 4.775 | 12.031 | 169.38 | 742.20 |
| 169700.0 | 8.496 | 9.675 | 331.78 | 542.65 |
| 169750.0 | 10.915 | 8.467 | 485.28 | 453.55 |
| 169800.0 | 7.329 | 7.042 | 456.10 | 387.73 |
| 169850.0 | 5.032 | 6.827 | 309.03 | 346.73 |
| 169900.0 | 6.194 | 2.078 | 280.65 | 222.63 |
| 169950.0 | 8.654 | 1.469 | 371.20 | 88.68 |
| 170000.0 | 9.532 | 1.976 | 454.65 | 86.13 |
| 170050.0 | 14.529 | 0.079 | 601.53 | 51.38 |
| 170100.0 | 13.617 | 0.0 | 703.65 | 1.98 |
| 170150.0 | 4.612 | 4.428 | 455.73 | 110.70 |
| 170200.0 | 2.311 | 10.442 | 173.08 | 371.75 |
| 170250.0 | 4.58 | 0.567 | 172.28 | 275.23 |
| 170300.0 | 4.368 | 0.011 | 223.70 | 14.45 |
| 170350.0 | 1.457 | 0.598 | 145.63 | 15.23 |
| 170400.0 | 0.172 | 5.95 | 40.73 | 163.70 |
| 170450.0 | 0.0 | 11.384 | 4.30 | 433.35 |
| 170500.0 | 1.551 | 9.028 | 38.78 | 510.30 |
| 170550.0 | 0.0 | 91.691 | 38.78 | 2517.98 |
| 170600.0 | 2.745 | 29.901 | 68.63 | 3039.80 |
| 170650.0 | 0.0 | 28.575 | 68.63 | 1461.90 |
| 170700.0 | 0.0 | 31.007 | 0.00 | 1489.55 |
| 170750.0 | 0.649 | 19.083 | 16.23 | 1252.25 |
| 170800.0 | 0.0 | 25.182 | 16.23 | 1106.63 |
| 170850.0 | 0.0 | 39.789 | 0.00 | 1624.28 |
| 170900.0 | 0.0 | 47.36 | 0.00 | 2178.73 |
| 170950.0 | 0.362 | 64.342 | 9.05 | 2792.55 |
| 171000.0 | 0.343 | 51.172 | 17.63 | 2887.85 |
| 171050.0 | 0.0 | 36.146 | 8.58 | 2182.95 |
| 171100.0 | 0.0 | 47.241 | 0.00 | 2084.68 |
| 171150.0 | 0.0 | 35.523 | 0.00 | 2069.10 |
| 171200.0 | 0.264 | 23.531 | 6.60 | 1476.35 |
| 171250.0 | 6.145 | 11.708 | 160.23 | 880.98 |
| 171300.0 | 4.618 | 26.153 | 269.08 | 946.53 |
| 171350.0 | 6.057 | 4.209 | 266.88 | 759.05 |
| 171400.0 | 6.373 | 7.138 | 310.75 | 283.68 |

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| 171450.0 | 8.874 | 2.227 | 381.18 | 234.13 |
| 171500.0 | 11.7 | 0.155 | 514.35 | 59.55 |
| 171550.0 | 7.635 | 0.428 | 483.38 | 14.58 |
| 171600.0 | 3.733 | 2.951 | 284.20 | 84.48 |
| 171650.0 | 4.712 | 1.037 | 211.13 | 99.70 |
| 171700.0 | 11.692 | 0.367 | 410.10 | 35.10 |
| 171750.0 | 13.254 | 0.095 | 623.65 | 11.55 |
| 171800.0 | 21.236 | 0.0 | 862.25 | 2.38 |
| 171850.0 | 39.03 | 0.0 | 1506.65 | 0.00 |
| 171900.0 | 31.978 | 0.0 | 1775.20 | 0.00 |
| 171950.0 | 36.439 | 0.0 | 1710.43 | 0.00 |
| 172000.0 | 66.717 | 0.0 | 2578.90 | 0.00 |
| 172050.0 | 32.747 | 0.0 | 2486.60 | 0.00 |
| 172100.0 | 17.516 | 0.0 | 1256.58 | 0.00 |
| 172150.0 | 7.428 | 2.952 | 623.60 | 73.80 |
| 172200.0 | 8.371 | 6.991 | 394.98 | 248.58 |
| 172250.0 | 6.944 | 18.953 | 382.88 | 648.60 |
| 172300.0 | 6.549 | 18.421 | 337.33 | 934.35 |
| 172350.0 | 6.569 | 18.283 | 327.95 | 917.60 |
| 172400.0 | 5.844 | 15.162 | 310.33 | 836.13 |
| 172450.0 | 7.392 | 14.902 | 330.90 | 751.60 |
| 172500.0 | 6.16 | 7.731 | 338.80 | 565.83 |
| 172550.0 | 5.408 | 48.342 | 289.20 | 1401.83 |
| 172600.0 | 6.637 | 17.76 | 301.13 | 1652.55 |
| 172650.0 | 0.589 | 16.258 | 180.65 | 850.45 |
| 172700.0 | 0.0 | 32.786 | 14.73 | 1226.10 |
| 172750.0 | 0.0 | 57.462 | 0.00 | 2256.20 |
| 172800.0 | 0.0 | 91.542 | 0.00 | 3725.10 |
| 172850.0 | 0.0 | 111.048 | 0.00 | 5064.75 |
| 172900.0 | 0.0 | 114.277 | 0.00 | 5633.13 |
| 172950.0 | 0.0 | 109.818 | 0.00 | 5602.38 |
| 173000.0 | 0.0 | 95.582 | 0.00 | 5135.00 |
| 173050.0 | 1.69 | 63.801 | 42.25 | 3984.58 |
| 173100.0 | 0.0 | 241.463 | 42.25 | 7631.60 |
| 173150.0 | 0.0 | 89.027 | 0.00 | 8262.25 |
| 173200.0 | 0.0 | 116.341 | 0.00 | 5134.20 |
| 173250.0 | 0.0 | 129.703 | 0.00 | 6151.10 |
| 173300.0 | 0.0 | 120.995 | 0.00 | 6267.45 |
| 173350.0 | 0.0 | 76.765 | 0.00 | 4944.00 |
| 173400.0 | 0.0 | 56.525 | 0.00 | 3332.25 |
| 173450.0 | 2.555 | 45.138 | 63.88 | 2541.58 |
| 173500.0 | 5.428 | 23.346 | 199.58 | 1712.10 |
| 173550.0 | 5.294 | 9.515 | 268.05 | 821.53 |
| 173600.0 | 21.602 | 3.737 | 672.40 | 331.30 |
| 173650.0 | 117.38 | 0.0 | 3474.55 | 93.43 |
| 173700.0 | 37.249 | 0.381 | 3865.73 | 9.53 |
| 173750.0 | 5.489 | 4.738 | 1068.45 | 127.98 |
| 173800.0 | 3.116 | 10.582 | 215.13 | 383.00 |
| 173850.0 | 3.722 | 19.314 | 170.95 | 747.40 |
| 173900.0 | 4.94 | 46.596 | 216.55 | 1647.75 |
| 173950.0 | 7.397 | 22.365 | 308.43 | 1724.03 |
| 174000.0 | 6.924 | 12.898 | 358.03 | 881.58 |
| 174050.0 | 4.704 | 8.903 | 290.70 | 545.03 |
| 174100.0 | 3.421 | 10.564 | 203.13 | 486.68 |
| 174150.0 | 2.14 | 10.367 | 139.03 | 523.28 |
| 174200.0 | 3.994 | 6.411 | 153.35 | 419.45 |
| 174250.0 | 4.408 | 4.875 | 210.05 | 282.15 |
| 174300.0 | 4.152 | 9.414 | 214.00 | 357.23 |
| 174350.0 | 3.622 | 10.48 | 194.35 | 497.35 |
| 174400.0 | 0.819 | 14.95 | 111.03 | 635.75 |

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| 174450.0 | 0.0 | 29.433 | 20.48 | 1109.58 |
| 174500.0 | 0.0 | 46.852 | 0.00 | 1907.13 |
| 174550.0 | 0.0 | 59.905 | 0.00 | 2668.93 |
| 174600.0 | 0.0 | 79.698 | 0.00 | 3490.08 |
| 174650.0 | 0.0 | 27.143 | 0.00 | 2671.03 |
| 174700.0 | 0.0 | 63.214 | 0.00 | 2258.93 |
| 174750.0 | 0.381 | 58.415 | 9.53 | 3040.73 |
| 174800.0 | 0.794 | 49.253 | 29.38 | 2691.70 |
| 174850.0 | 2.444 | 31.345 | 80.95 | 2014.95 |
| 174900.0 | 7.814 | 21.271 | 256.45 | 1315.40 |
| 174950.0 | 7.152 | 11.243 | 374.15 | 812.85 |
| 175000.0 | 4.997 | 9.707 | 303.73 | 523.75 |
| 175050.0 | 9.734 | 17.429 | 368.28 | 678.40 |
| 175100.0 | 11.124 | 24.178 | 521.45 | 1040.18 |
| 175150.0 | 12.166 | 11.966 | 582.25 | 903.60 |
| 175200.0 | 11.164 | 64.464 | 583.25 | 1910.75 |
| 175250.0 | 17.684 | 0.0 | 721.20 | 1611.60 |
| 175300.0 | 11.188 | 8.556 | 721.80 | 213.90 |
| 175350.0 | 10.277 | 6.267 | 536.63 | 370.58 |
| 175400.0 | 12.821 | 2.766 | 577.45 | 225.83 |
| 175450.0 | 7.864 | 8.69 | 517.13 | 286.40 |
| 175500.0 | 2.695 | 15.763 | 263.98 | 611.33 |
| 175550.0 | 0.277 | 33.67 | 74.30 | 1235.83 |
| 175600.0 | 0.0 | 61.288 | 6.93 | 2373.95 |
| 175650.0 | 0.0 | 60.003 | 0.00 | 3032.28 |
| 175700.0 | 0.0 | 135.11 | 0.00 | 4877.83 |
| 175750.0 | 0.0 | 69.584 | 0.00 | 5117.35 |
| 175800.0 | 0.0 | 49.729 | 0.00 | 2982.83 |
| 175850.0 | 0.0 | 46.824 | 0.00 | 2413.83 |
| 175900.0 | 0.953 | 27.651 | 23.83 | 1861.88 |
| 175950.0 | 2.666 | 22.321 | 90.48 | 1249.30 |
| 176000.0 | 2.152 | 28.27 | 120.45 | 1264.78 |
| 176050.0 | 3.194 | 15.763 | 133.65 | 1100.83 |
| 176100.0 | 2.668 | 23.692 | 146.55 | 986.38 |
| 176150.0 | 1.698 | 22.828 | 109.15 | 1163.00 |
| 176200.0 | 2.206 | 24.275 | 97.60 | 1177.58 |
| 176250.0 | 3.751 | 21.368 | 148.93 | 1141.08 |
| 176300.0 | 5.883 | 7.818 | 240.85 | 729.65 |
| 176350.0 | 4.86 | 19.087 | 268.58 | 672.63 |
| 176400.0 | 4.97 | 9.224 | 245.75 | 707.78 |
| 176450.0 | 5.066 | 11.395 | 250.90 | 515.48 |
| 176500.0 | 2.684 | 16.666 | 193.75 | 701.53 |
| 176550.0 | 0.0 | 33.632 | 67.10 | 1257.45 |
| 176600.0 | 0.0 | 37.828 | 0.00 | 1786.50 |
| 176650.0 | 0.716 | 26.904 | 17.90 | 1618.30 |
| 176700.0 | 3.624 | 34.446 | 108.50 | 1533.75 |
| 176750.0 | 3.661 | 14.481 | 182.13 | 1223.18 |
| 176800.0 | 0.278 | 14.015 | 98.48 | 712.40 |
| 176850.0 | 0.0 | 16.578 | 6.95 | 764.83 |
| 176900.0 | 0.831 | 14.362 | 20.78 | 773.50 |
| 176950.0 | 3.226 | 16.794 | 101.43 | 778.90 |
| 177000.0 | 3.41 | 21.276 | 165.90 | 951.75 |
| 177050.0 | 4.091 | 19.073 | 187.53 | 1008.73 |
| 177100.0 | 5.565 | 8.843 | 241.40 | 697.90 |
| 177150.0 | 9.975 | 1.327 | 388.50 | 254.25 |
| 177200.0 | 6.689 | 7.578 | 416.60 | 222.63 |
| 177250.0 | 8.041 | 0.016 | 368.25 | 189.85 |
| 177300.0 | 8.046 | 0.0 | 402.18 | 0.40 |
| 177350.0 | 0.968 | 9.032 | 225.35 | 225.80 |
| 177400.0 | 0.0 | 28.993 | 24.20 | 950.63 |

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| 177450.0 | 0.0 | 22.01 | 0.00 | 1275.08 |
| 177500.0 | 0.0 | 25.63 | 0.00 | 1191.00 |
| 177550.0 | 0.0 | 35.366 | 0.00 | 1524.90 |
| 177600.0 | 0.389 | 26.725 | 9.73 | 1552.28 |
| 177650.0 | 0.182 | 28.681 | 14.28 | 1385.15 |
| 177700.0 | 0.0 | 30.287 | 4.55 | 1474.20 |
| 177750.0 | 0.0 | 23.589 | 0.00 | 1346.90 |
| 177800.0 | 0.0 | 20.46 | 0.00 | 1101.23 |
| 177850.0 | 0.0 | 27.01 | 0.00 | 1186.75 |
| 177900.0 | 0.0 | 47.916 | 0.00 | 1873.15 |
| 177950.0 | 0.0 | 77.219 | 0.00 | 3128.38 |
| 178000.0 | 0.0 | 109.232 | 0.00 | 4661.28 |
| 178050.0 | 0.0 | 129.05 | 0.00 | 5957.05 |
| 178100.0 | 0.0 | 131.892 | 0.00 | 6523.55 |
| 178150.0 | 0.0 | 135.888 | 0.00 | 6694.50 |
| 178200.0 | 0.0 | 132.496 | 0.00 | 6709.60 |
| 178250.0 | 0.0 | 114.025 | 0.00 | 6163.03 |
| 178300.0 | 0.0 | 87.56 | 0.00 | 5039.63 |
| 178350.0 | 0.0 | 55.223 | 0.00 | 3569.58 |
| 178400.0 | 0.0 | 29.535 | 0.00 | 2118.95 |
| 178450.0 | 0.0 | 8.154 | 0.00 | 942.23 |
| 178500.0 | 1.576 | 10.734 | 39.40 | 472.20 |
| 178550.0 | 0.879 | 13.194 | 61.38 | 598.20 |
| 178600.0 | 12.291 | 2.562 | 329.25 | 393.90 |
| 178650.0 | 0.0 | 192.947 | 307.28 | 4887.73 |
| 178700.0 | 8.495 | 8.258 | 212.38 | 5030.13 |
| 178750.0 | 1.17 | 7.781 | 241.63 | 400.98 |
| 178800.0 | 0.0 | 42.47 | 29.25 | 1256.28 |
| 178850.0 | 0.0 | 69.375 | 0.00 | 2796.13 |
| 178900.0 | 0.0 | 120.047 | 0.00 | 4735.55 |
| 178950.0 | 0.0 | 152.882 | 0.00 | 6823.23 |
| 179000.0 | 0.0 | 189.539 | 0.00 | 8560.53 |
| 179050.0 | 0.0 | 196.266 | 0.00 | 9645.13 |
| 179100.0 | 0.0 | 197.931 | 0.00 | 9854.93 |
| 179150.0 | 0.0 | 172.252 | 0.00 | 9254.58 |
| 179200.0 | 0.0 | 141.037 | 0.00 | 7832.23 |
| 179250.0 | 0.0 | 116.579 | 0.00 | 6440.40 |
| 179300.0 | 0.0 | 86.885 | 0.00 | 5086.60 |
| 179350.0 | 0.0 | 54.186 | 0.00 | 3526.78 |
| 179400.0 | 0.0 | 27.048 | 0.00 | 2030.85 |
| 179450.0 | 8.999 | 2.063 | 224.98 | 727.78 |
| 179500.0 | 27.761 | 0.0 | 919.00 | 51.58 |
| 179550.0 | 20.338 | 0.039 | 1202.48 | 0.98 |
| 179600.0 | 13.95 | 2.608 | 857.20 | 66.18 |
| 179650.0 | 9.897 | 4.486 | 596.18 | 177.35 |
| 179700.0 | 13.432 | 0.626 | 583.23 | 127.80 |
| 179750.0 | 11.888 | 14.593 | 633.00 | 380.48 |
| 179800.0 | 7.903 | 13.801 | 494.78 | 709.85 |
| 179850.0 | 13.733 | 2.723 | 540.90 | 413.10 |
| 179900.0 | 15.587 | 1.018 | 733.00 | 93.53 |
| 179950.0 | 12.667 | 0.0 | 706.35 | 25.45 |
| 180000.0 | 11.329 | 0.005 | 599.90 | 0.13 |
| 180050.0 | 5.118 | 0.315 | 411.18 | 8.00 |
| 180100.0 | 24.052 | 0.0 | 729.25 | 7.88 |
| 180150.0 | 6.017 | 1.295 | 751.73 | 32.38 |
| 180200.0 | 5.779 | 1.74 | 294.90 | 75.88 |
| 180250.0 | 18.16 | 0.0 | 598.48 | 43.50 |
| 180300.0 | 4.945 | 1.866 | 577.63 | 46.65 |
| 180350.0 | 9.097 | 0.0 | 351.05 | 46.65 |
| 180400.0 | 5.26 | 3.109 | 358.93 | 77.73 |

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| 180450.0 | 6.948 | 0.794 | 305.20 | 97.58 |
| 180500.0 | 2.271 | 7.165 | 230.48 | 198.98 |
| 180550.0 | 8.568 | 0.0 | 270.98 | 179.13 |
| 180600.0 | 3.706 | 0.148 | 306.85 | 3.70 |
| 180650.0 | 2.365 | 9.492 | 151.78 | 241.00 |
| 180700.0 | 2.357 | 7.829 | 118.05 | 433.03 |
| 180750.0 | 1.269 | 19.239 | 90.65 | 676.70 |
| 180800.0 | 2.346 | 7.177 | 90.38 | 660.40 |
| 180850.0 | 2.014 | 30.374 | 109.00 | 938.78 |
| 180900.0 | 2.67 | 5.687 | 117.10 | 901.53 |
| 180950.0 | 1.91 | 14.438 | 114.50 | 503.13 |
| 181000.0 | 0.683 | 35.006 | 64.83 | 1236.10 |
| 181050.0 | 1.765 | 24.061 | 61.20 | 1476.68 |
| 181100.0 | 4.914 | 20.339 | 166.98 | 1110.00 |
| 181150.0 | 10.246 | 21.5 | 379.00 | 1045.98 |
| 181200.0 | 12.462 | 3.256 | 567.70 | 618.90 |
| 181250.0 | 11.822 | 5.183 | 607.10 | 210.98 |
| 181300.0 | 14.172 | 2.669 | 649.85 | 196.30 |
| 181350.0 | 12.499 | 8.274 | 666.78 | 273.58 |
| 181400.0 | 11.058 | 14.242 | 588.93 | 562.90 |
| 181450.0 | 11.262 | 12.905 | 558.00 | 678.68 |
| 181500.0 | 10.801 | 8.78 | 551.58 | 542.13 |
| 181550.0 | 12.981 | 5.135 | 594.55 | 347.88 |
| 181600.0 | 14.082 | 1.608 | 676.58 | 168.58 |
| 181650.0 | 15.157 | 0.0 | 730.98 | 40.20 |
| 181700.0 | 8.612 | 14.461 | 594.23 | 361.53 |
| 181750.0 | 14.153 | 0.123 | 569.13 | 364.60 |
| 181800.0 | 15.874 | 0.0 | 750.68 | 3.08 |
| 181850.0 | 9.101 | 3.384 | 624.38 | 84.60 |
| 181900.0 | 9.688 | 2.237 | 469.73 | 140.53 |
| 181950.0 | 8.914 | 0.975 | 465.05 | 80.30 |
| 182000.0 | 12.913 | 0.0 | 545.68 | 24.38 |
| 182050.0 | 9.106 | 3.881 | 550.48 | 97.03 |
| 182100.0 | 7.819 | 14.519 | 423.13 | 460.00 |
| 182150.0 | 7.863 | 10.015 | 392.05 | 613.35 |
| 182200.0 | 12.445 | 0.0 | 507.70 | 250.38 |
| 182250.0 | 8.277 | 7.1 | 518.05 | 177.50 |
| 182300.0 | 12.702 | 0.0 | 524.48 | 177.50 |
| 182350.0 | 6.566 | 11.208 | 481.70 | 280.20 |
| 182400.0 | 7.443 | 12.894 | 350.23 | 602.55 |
| 182450.0 | 12.675 | 4.939 | 502.95 | 445.83 |
| 182500.0 | 15.547 | 0.003 | 705.55 | 123.55 |
| 182550.0 | 13.121 | 0.483 | 716.70 | 12.15 |
| 182600.0 | 0.0 | 6.853 | 328.03 | 183.40 |
| 182650.0 | 0.0 | 100.446 | 0.00 | 2682.48 |
| 182700.0 | 10.822 | 2.593 | 270.55 | 2575.98 |
| 182750.0 | 6.249 | 8.877 | 426.78 | 286.75 |
| 182800.0 | 0.0 | 26.094 | 156.23 | 874.28 |
| 182850.0 | 0.0 | 66.504 | 0.00 | 2314.95 |
| 182900.0 | 0.0 | 98.504 | 0.00 | 4125.20 |
| 182950.0 | 0.0 | 122.234 | 0.00 | 5518.45 |
| 183000.0 | 0.0 | 141.41 | 0.00 | 6591.10 |
| 183050.0 | 0.0 | 161.619 | 0.00 | 7575.73 |
| 183100.0 | 0.0 | 147.871 | 0.00 | 7737.25 |
| 183150.0 | 0.0 | 134.99 | 0.00 | 7071.53 |
| 183200.0 | 0.0 | 115.482 | 0.00 | 6261.80 |
| 183250.0 | 0.0 | 88.116 | 0.00 | 5089.95 |
| 183300.0 | 0.0 | 65.092 | 0.00 | 3830.20 |
| 183350.0 | 0.0 | 61.027 | 0.00 | 3152.98 |
| 183400.0 | 0.0 | 46.077 | 0.00 | 2677.60 |

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| 183450.0 | 0.0 | 38.469 | 0.00 | 2113.65 |
| 183500.0 | 0.0 | 48.67 | 0.00 | 2178.48 |
| 183550.0 | 0.0 | 25.446 | 0.00 | 1852.90 |
| 183600.0 | 2.384 | 49.063 | 59.60 | 1862.73 |
| 183650.0 | 0.0 | 219.974 | 59.60 | 6725.93 |
| 183700.0 | 0.0 | 209.416 | 0.00 | 10734.75 |
| 183750.0 | 0.0 | 116.944 | 0.00 | 8159.00 |
| 183800.0 | 0.0 | 36.541 | 0.00 | 3837.13 |
| 183850.0 | 0.0 | 34.119 | 0.00 | 1766.50 |
| 183900.0 | 0.0 | 53.809 | 0.00 | 2198.20 |
| 183950.0 | 0.0 | 56.661 | 0.00 | 2761.75 |
| 184000.0 | 0.0 | 59.085 | 0.00 | 2893.65 |
| 184050.0 | 0.0 | 43.584 | 0.00 | 2566.73 |
| 184100.0 | 0.0 | 37.715 | 0.00 | 2032.48 |
| 184150.0 | 0.0 | 18.892 | 0.00 | 1415.18 |
| 184200.0 | 2.974 | 4.709 | 74.35 | 590.03 |
| 184250.0 | 9.689 | 0.119 | 316.58 | 120.70 |
| 184300.0 | 9.807 | 6.682 | 487.40 | 170.03 |
| 184350.0 | 13.824 | 10.478 | 590.78 | 429.00 |
| 184400.0 | 13.395 | 0.771 | 680.48 | 281.23 |
| 184450.0 | 13.357 | 4.997 | 668.80 | 144.20 |
| 184500.0 | 13.753 | 1.25 | 677.75 | 156.18 |
| 184550.0 | 12.749 | 0.45 | 662.55 | 42.50 |
| 184600.0 | 13.027 | 2.669 | 644.40 | 77.98 |
| 184650.0 | 16.092 | 1.014 | 727.98 | 92.08 |
| 184700.0 | 14.746 | 2.783 | 770.95 | 94.93 |
| 184750.0 | 13.437 | 0.472 | 704.58 | 81.38 |
| 184800.0 | 16.716 | 0.25 | 753.83 | 18.05 |
| 184850.0 | 16.201 | 0.068 | 822.93 | 7.95 |
| 184900.0 | 12.117 | 1.166 | 707.95 | 30.85 |
| 184950.0 | 12.53 | 2.371 | 616.18 | 88.43 |
| 185000.0 | 15.666 | 0.8 | 704.90 | 79.28 |
| 185050.0 | 15.565 | 0.129 | 780.78 | 23.23 |
| 185100.0 | 13.445 | 1.461 | 725.25 | 39.75 |
| 185150.0 | 14.878 | 0.596 | 708.08 | 51.43 |
| 185200.0 | 10.487 | 0.157 | 634.13 | 18.83 |
| 185250.0 | 10.556 | 1.078 | 526.08 | 30.88 |
| 185300.0 | 10.571 | 1.024 | 528.18 | 52.55 |
| 185350.0 | 14.944 | 1.905 | 637.88 | 73.23 |
| 185400.0 | 7.359 | 13.322 | 557.58 | 380.68 |
| 185450.0 | 18.361 | 0.0 | 643.00 | 333.05 |
| 185500.0 | 13.054 | 0.256 | 785.38 | 6.40 |
| 185550.0 | 12.089 | 1.5 | 628.58 | 43.90 |
| 185600.0 | 12.326 | 2.894 | 610.38 | 109.85 |
| 185650.0 | 15.689 | 4.464 | 700.38 | 183.95 |
| 185700.0 | 11.427 | 2.279 | 677.90 | 168.58 |
| 185750.0 | 17.331 | 0.0 | 718.95 | 56.98 |
| 185800.0 | 12.244 | 2.108 | 739.38 | 52.70 |
| 185850.0 | 11.09 | 7.947 | 583.35 | 251.38 |
| 185900.0 | 12.219 | 0.684 | 582.73 | 215.78 |
| 185950.0 | 14.799 | 0.016 | 675.45 | 17.50 |
| 186000.0 | 13.578 | 1.759 | 709.43 | 44.38 |
| 186050.0 | 15.862 | 0.0 | 736.00 | 43.98 |
| 186100.0 | 12.887 | 1.389 | 718.73 | 34.73 |
| 186150.0 | 15.676 | 0.044 | 714.08 | 35.83 |
| 186200.0 | 11.377 | 2.196 | 676.33 | 56.00 |
| 186250.0 | 11.15 | 1.879 | 563.18 | 101.88 |
| 186300.0 | 10.701 | 4.739 | 546.28 | 165.45 |
| 186350.0 | 7.486 | 16.177 | 454.68 | 522.90 |
| 186400.0 | 7.964 | 35.931 | 386.25 | 1302.70 |

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| 186450.0 | 10.655 | 1.605 | 465.48 | 938.40 |
| 186500.0 | 11.758 | 2.458 | 560.33 | 101.58 |
| 186550.0 | 10.986 | 1.877 | 568.60 | 108.38 |
| 186600.0 | 13.797 | 1.83 | 619.58 | 92.68 |
| 186650.0 | 10.245 | 5.675 | 601.05 | 187.63 |
| 186700.0 | 12.081 | 7.636 | 558.15 | 332.78 |
| 186750.0 | 15.998 | 0.0 | 701.98 | 190.90 |
| 186800.0 | 15.18 | 0.0 | 779.45 | 0.00 |
| 186850.0 | 16.215 | 0.0 | 784.88 | 0.00 |
| 186900.0 | 11.042 | 0.0 | 681.43 | 0.00 |
| 186950.0 | 2.115 | 3.937 | 328.93 | 98.43 |
| 187000.0 | 1.192 | 0.999 | 82.68 | 123.40 |
| 187050.0 | 5.359 | 4.822 | 163.78 | 145.53 |
| 187100.0 | 13.366 | 14.053 | 468.13 | 471.88 |
| 187150.0 | 8.713 | 25.938 | 551.98 | 999.78 |
| 187200.0 | 0.0 | 84.545 | 217.83 | 2762.08 |
| 187250.0 | 0.0 | 88.715 | 0.00 | 4331.50 |
| 187300.0 | 0.0 | 71.872 | 0.00 | 4014.68 |
| 187350.0 | 0.0 | 59.266 | 0.00 | 3278.45 |
| 187400.0 | 0.0 | 49.087 | 0.00 | 2708.83 |
| 187450.0 | 0.0 | 55.582 | 0.00 | 2616.73 |
| 187500.0 | 0.0 | 47.331 | 0.00 | 2572.83 |
| 187550.0 | 0.0 | 51.162 | 0.00 | 2462.33 |
| 187600.0 | 0.0 | 56.633 | 0.00 | 2694.88 |
| 187650.0 | 0.0 | 49.433 | 0.00 | 2651.65 |
| 187700.0 | 14.36 | 15.162 | 359.00 | 1614.88 |
| 187750.0 | 237.197 | 0.0 | 6288.93 | 379.05 |
| 187800.0 | 0.0 | 19.043 | 5929.93 | 476.08 |
| 187850.0 | 0.0 | 15.046 | 0.00 | 852.23 |
| 187900.0 | 0.0 | 25.439 | 0.00 | 1012.13 |
| 187950.0 | 0.0 | 41.196 | 0.00 | 1665.88 |
| 188000.0 | 0.0 | 46.831 | 0.00 | 2200.68 |
| 188050.0 | 0.034 | 24.873 | 0.85 | 1792.60 |
| 188100.0 | 0.0 | 15.959 | 0.85 | 1020.80 |
| 188150.0 | 0.0 | 9.492 | 0.00 | 636.28 |
| 188200.0 | 0.0 | 29.812 | 0.00 | 982.60 |
| 188250.0 | 0.0 | 31.618 | 0.00 | 1535.75 |
| 188300.0 | 0.0 | 31.664 | 0.00 | 1582.05 |
| 188350.0 | 0.0 | 22.245 | 0.00 | 1347.73 |
| 188400.0 | 0.0 | 48.952 | 0.00 | 1779.93 |
| 188450.0 | 0.0 | 63.449 | 0.00 | 2810.03 |
| 188500.0 | 0.0 | 47.317 | 0.00 | 2769.15 |
| 188550.0 | 0.0 | 39.554 | 0.00 | 2171.78 |
| 188600.0 | 0.0 | 50.044 | 0.00 | 2239.95 |
| 188650.0 | 0.0 | 57.789 | 0.00 | 2695.83 |
| 188700.0 | 0.0 | 68.854 | 0.00 | 3166.08 |
| 188750.0 | 0.0 | 75.178 | 0.00 | 3600.80 |
| 188800.0 | 0.0 | 86.792 | 0.00 | 4049.25 |
| 188850.0 | 0.0 | 74.055 | 0.00 | 4021.18 |
| 188900.0 | 0.0 | 91.349 | 0.00 | 4135.10 |
| 188950.0 | 0.0 | 72.739 | 0.00 | 4102.20 |
| 189000.0 | 0.0 | 52.001 | 0.00 | 3118.50 |
| 189050.0 | 0.0 | 58.123 | 0.00 | 2753.10 |
| 189100.0 | 0.0 | 73.059 | 0.00 | 3279.55 |
| 189150.0 | 0.0 | 105.763 | 0.00 | 4470.55 |
| 189200.0 | 0.0 | 117.375 | 0.00 | 5578.45 |
| 189250.0 | 0.0 | 97.947 | 0.00 | 5383.05 |
| 189300.0 | 0.0 | 23.858 | 0.00 | 3045.13 |
| 189350.0 | 0.0 | 23.443 | 0.00 | 1182.53 |
| 189400.0 | 0.0 | 33.044 | 0.00 | 1412.18 |

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| 189450.0 | 0.0 | 35.535 | 0.00 | 1714.48 |
| 189500.0 | 0.0 | 70.537 | 0.00 | 2651.80 |
| 189550.0 | 0.0 | 77.703 | 0.00 | 3706.00 |
| 189600.0 | 0.0 | 54.711 | 0.00 | 3310.35 |
| 189650.0 | 0.0 | 32.162 | 0.00 | 2171.83 |
| 189700.0 | 0.0 | 76.874 | 0.00 | 2725.90 |
| 189750.0 | 0.0 | 51.937 | 0.00 | 3220.28 |
| 189800.0 | 0.0 | 23.165 | 0.00 | 1877.55 |
| 189850.0 | 0.0 | 12.264 | 0.00 | 885.73 |
| 189900.0 | 0.0 | 32.694 | 0.00 | 1123.95 |
| 189950.0 | 0.006 | 17.272 | 0.15 | 1249.15 |
| 190000.0 | 0.18 | 27.89 | 4.65 | 1129.05 |
| 190050.0 | 0.0 | 48.025 | 4.50 | 1897.88 |
| 190100.0 | 0.0 | 45.048 | 0.00 | 2326.83 |
| 190150.0 | 0.004 | 9.818 | 0.10 | 1371.65 |
| 190200.0 | 0.063 | 10.906 | 1.68 | 518.10 |
| 190250.0 | 0.0 | 38.949 | 1.58 | 1246.38 |
| 190300.0 | 0.0 | 51.693 | 0.00 | 2266.05 |
| 190350.0 | 0.0 | 53.739 | 0.00 | 2635.80 |
| 190400.0 | 0.0 | 53.11 | 0.00 | 2671.23 |
| 190450.0 | 0.0 | 46.364 | 0.00 | 2486.85 |
| 190500.0 | 0.0 | 53.808 | 0.00 | 2504.30 |
| 190550.0 | 0.0 | 36.591 | 0.00 | 2259.98 |
| 190600.0 | 0.0 | 44.977 | 0.00 | 2039.20 |
| 190650.0 | 0.0 | 48.717 | 0.00 | 2342.35 |
| 190700.0 | 0.0 | 44.452 | 0.00 | 2329.23 |
| 190750.0 | 0.0 | 21.806 | 0.00 | 1656.45 |
| 190800.0 | 0.0 | 13.373 | 0.00 | 879.48 |
| 190850.0 | 0.0 | 40.992 | 0.00 | 1359.13 |
| 190900.0 | 0.0 | 47.198 | 0.00 | 2204.75 |
| 190950.0 | 0.0 | 45.036 | 0.00 | 2305.85 |
| 191000.0 | 0.0 | 22.15 | 0.00 | 1679.65 |
| 191050.0 | 0.0 | 16.122 | 0.00 | 956.80 |
| 191100.0 | 1.407 | 1.854 | 35.18 | 449.40 |
| 191150.0 | 0.0 | 19.551 | 35.18 | 535.13 |
| 191200.0 | 0.0 | 28.593 | 0.00 | 1203.60 |
| 191250.0 | 0.0 | 36.733 | 0.00 | 1633.15 |
| 191300.0 | 0.0 | 30.137 | 0.00 | 1671.75 |
| 191350.0 | 0.016 | 9.929 | 0.40 | 1001.65 |
| 191400.0 | 0.141 | 7.661 | 3.93 | 439.75 |
| 191450.0 | 0.468 | 6.629 | 15.23 | 357.25 |
| 191500.0 | 0.671 | 7.251 | 28.48 | 347.00 |
| 191550.0 | 1.333 | 10.994 | 50.10 | 456.13 |
| 191600.0 | 0.092 | 20.644 | 35.63 | 790.95 |
| 191650.0 | 0.0 | 17.538 | 2.30 | 954.55 |
| 191700.0 | 1.713 | 11.985 | 42.83 | 738.08 |
| 191750.0 | 0.0 | 20.636 | 42.83 | 815.53 |
| 191800.0 | 0.0 | 35.784 | 0.00 | 1410.50 |
| 191850.0 | 14.366 | 0.0 | 359.15 | 894.60 |
| 191900.0 | 20.916 | 0.0 | 882.05 | 0.00 |
| 191950.0 | 15.084 | 0.0 | 900.00 | 0.00 |
| 192000.0 | 14.187 | 0.005 | 731.78 | 0.13 |
| 192050.0 | 6.525 | 2.165 | 517.80 | 54.25 |
| 192100.0 | 1.5 | 7.032 | 200.63 | 229.93 |
| 192150.0 | 0.374 | 14.565 | 46.85 | 539.93 |
| 192200.0 | 0.028 | 13.563 | 10.05 | 703.20 |
| 192250.0 | 0.013 | 15.403 | 1.03 | 724.15 |
| 192300.0 | 0.098 | 19.964 | 2.78 | 884.18 |
| 192350.0 | 0.0 | 30.566 | 2.45 | 1263.25 |
| 192400.0 | 0.0 | 23.919 | 0.00 | 1362.13 |

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|----------|--------|---------|--------|---------|
| 192450.0 | 0.0 | 20.591 | 0.00 | 1112.75 |
| 192500.0 | 0.0 | 22.403 | 0.00 | 1074.85 |
| 192550.0 | 0.0 | 20.887 | 0.00 | 1082.25 |
| 192600.0 | 0.0 | 23.468 | 0.00 | 1108.88 |
| 192650.0 | 0.823 | 8.595 | 20.58 | 801.58 |
| 192700.0 | 0.0 | 24.445 | 20.58 | 826.00 |
| 192750.0 | 0.0 | 22.001 | 0.00 | 1161.15 |
| 192800.0 | 0.0 | 16.327 | 0.00 | 958.20 |
| 192850.0 | 0.0 | 28.751 | 0.00 | 1126.95 |
| 192900.0 | 0.0 | 26.068 | 0.00 | 1370.48 |
| 192950.0 | 0.0 | 22.99 | 0.00 | 1226.45 |
| 193000.0 | 0.0 | 25.821 | 0.00 | 1220.28 |
| 193050.0 | 0.0 | 21.205 | 0.00 | 1175.65 |
| 193100.0 | 0.0 | 23.215 | 0.00 | 1110.50 |
| 193150.0 | 0.0 | 25.592 | 0.00 | 1220.18 |
| 193200.0 | 0.0 | 36.088 | 0.00 | 1542.00 |
| 193250.0 | 0.0 | 36.924 | 0.00 | 1825.30 |
| 193300.0 | 0.0 | 54.015 | 0.00 | 2273.48 |
| 193350.0 | 0.0 | 91.739 | 0.00 | 3643.85 |
| 193400.0 | 0.0 | 137.398 | 0.00 | 5728.43 |
| 193450.0 | 0.0 | 167.411 | 0.00 | 7620.23 |
| 193500.0 | 0.0 | 176.08 | 0.00 | 8587.28 |
| 193550.0 | 0.0 | 162.972 | 0.00 | 8476.30 |
| 193600.0 | 0.0 | 161.412 | 0.00 | 8109.60 |
| 193650.0 | 0.0 | 155.486 | 0.00 | 7922.45 |
| 193700.0 | 0.0 | 147.167 | 0.00 | 7566.33 |
| 193750.0 | 0.0 | 128.485 | 0.00 | 6891.30 |
| 193800.0 | 0.0 | 87.58 | 0.00 | 5401.63 |
| 193850.0 | 0.0 | 51.098 | 0.00 | 3466.95 |
| 193900.0 | 0.0 | 18.357 | 0.00 | 1736.38 |
| 193950.0 | 2.566 | 0.172 | 64.15 | 463.23 |
| 194000.0 | 12.617 | 0.0 | 379.58 | 4.30 |
| 194050.0 | 9.633 | 0.0 | 556.25 | 0.00 |
| 194100.0 | 6.578 | 0.0 | 405.28 | 0.00 |
| 194150.0 | 4.666 | 0.182 | 281.10 | 4.55 |
| 194200.0 | 3.607 | 0.405 | 206.83 | 14.68 |
| 194250.0 | 3.285 | 0.678 | 172.30 | 27.08 |
| 194300.0 | 3.171 | 0.846 | 161.40 | 38.10 |
| 194350.0 | 3.268 | 0.712 | 160.98 | 38.95 |
| 194400.0 | 3.801 | 0.536 | 176.73 | 31.20 |
| 194450.0 | 5.057 | 0.388 | 221.45 | 23.10 |
| 194500.0 | 4.084 | 0.231 | 228.53 | 15.48 |
| 194550.0 | 4.74 | 0.056 | 220.60 | 7.18 |
| 194600.0 | 4.816 | 0.0 | 238.90 | 1.40 |
| 194650.0 | 3.148 | 0.948 | 199.10 | 23.70 |
| 194700.0 | 2.27 | 1.144 | 135.45 | 52.30 |
| 194750.0 | 2.44 | 1.009 | 117.75 | 53.83 |
| 194800.0 | 3.739 | 0.341 | 154.48 | 33.75 |
| 194850.0 | 6.03 | 0.0 | 244.23 | 8.53 |
| 194900.0 | 3.341 | 0.883 | 234.28 | 22.08 |
| 194950.0 | 3.924 | 0.404 | 181.63 | 32.18 |
| 195000.0 | 2.844 | 0.928 | 169.20 | 33.30 |
| 195050.0 | 0.434 | 4.215 | 81.95 | 128.58 |
| 195100.0 | 0.0 | 19.35 | 10.85 | 589.13 |
| 195150.0 | 0.0 | 38.154 | 0.00 | 1437.60 |
| 195200.0 | 0.0 | 58.367 | 0.00 | 2413.03 |
| 195250.0 | 0.0 | 63.724 | 0.00 | 3052.28 |
| 195300.0 | 0.0 | 95.608 | 0.00 | 3983.30 |
| 195350.0 | 0.0 | 75.063 | 0.00 | 4266.78 |
| 195400.0 | 0.572 | 18.128 | 14.30 | 2329.78 |

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|----------|--------|---------|--------|----------|
| 195450.0 | 0.242 | 6.064 | 20.35 | 604.80 |
| 195500.0 | 6.545 | 0.0 | 169.68 | 151.60 |
| 195550.0 | 4.312 | 0.674 | 271.43 | 16.85 |
| 195600.0 | 0.0 | 15.643 | 107.80 | 407.93 |
| 195650.0 | 0.072 | 11.834 | 1.80 | 686.93 |
| 195700.0 | 7.203 | 3.872 | 181.88 | 392.65 |
| 195750.0 | 16.751 | 1.155 | 598.85 | 125.68 |
| 195800.0 | 18.158 | 0.276 | 872.73 | 35.78 |
| 195850.0 | 5.529 | 0.0 | 592.18 | 6.90 |
| 195900.0 | 2.767 | 0.851 | 207.40 | 21.28 |
| 195950.0 | 1.623 | 1.532 | 109.75 | 59.58 |
| 196000.0 | 0.924 | 3.134 | 63.68 | 116.65 |
| 196050.0 | 0.305 | 5.416 | 30.73 | 213.75 |
| 196100.0 | 0.007 | 8.461 | 7.80 | 346.93 |
| 196150.0 | 0.001 | 8.938 | 0.20 | 434.98 |
| 196200.0 | 0.004 | 8.641 | 0.13 | 439.48 |
| 196250.0 | 0.024 | 7.865 | 0.70 | 412.65 |
| 196300.0 | 0.769 | 3.186 | 19.83 | 276.28 |
| 196350.0 | 0.619 | 3.851 | 34.70 | 175.93 |
| 196400.0 | 0.378 | 4.987 | 24.93 | 220.95 |
| 196450.0 | 1.368 | 5.593 | 43.65 | 264.50 |
| 196500.0 | 0.011 | 8.871 | 34.48 | 361.60 |
| 196550.0 | 0.0 | 11.881 | 0.28 | 518.80 |
| 196600.0 | 0.037 | 10.471 | 0.93 | 558.80 |
| 196650.0 | 0.024 | 7.309 | 1.53 | 444.50 |
| 196700.0 | 0.367 | 5.593 | 9.78 | 322.55 |
| 196750.0 | 1.935 | 12.779 | 57.55 | 459.30 |
| 196800.0 | 2.82 | 1.141 | 118.88 | 348.00 |
| 196850.0 | 0.0 | 11.306 | 70.50 | 311.18 |
| 196900.0 | 0.17 | 7.449 | 4.25 | 468.88 |
| 196950.0 | 2.876 | 9.53 | 76.15 | 424.48 |
| 197000.0 | 0.0 | 10.973 | 71.90 | 512.58 |
| 197050.0 | 0.07 | 7.718 | 1.75 | 467.28 |
| 197100.0 | 0.022 | 7.421 | 2.30 | 378.48 |
| 197150.0 | 0.27 | 5.554 | 7.30 | 324.38 |
| 197200.0 | 0.264 | 5.402 | 13.35 | 273.90 |
| 197250.0 | 3.528 | 0.409 | 94.80 | 145.28 |
| 197300.0 | 2.014 | 1.293 | 138.55 | 42.55 |
| 197350.0 | 2.338 | 0.976 | 108.80 | 56.73 |
| 197400.0 | 6.89 | 0.0 | 230.70 | 24.40 |
| 197450.0 | 3.217 | 1.02 | 252.68 | 25.50 |
| 197500.0 | 4.587 | 0.151 | 195.10 | 29.28 |
| 197550.0 | 8.26 | 0.0 | 321.18 | 3.78 |
| 197600.0 | 4.005 | 0.206 | 306.63 | 5.15 |
| 197650.0 | 4.821 | 0.032 | 220.65 | 5.95 |
| 197700.0 | 1.373 | 1.855 | 154.85 | 47.18 |
| 197750.0 | 0.0 | 14.695 | 34.33 | 413.75 |
| 197800.0 | 0.0 | 26.556 | 0.00 | 1031.28 |
| 197850.0 | 0.0 | 48.674 | 0.00 | 1880.75 |
| 197900.0 | 0.0 | 72.098 | 0.00 | 3019.30 |
| 197950.0 | 0.0 | 95.936 | 0.00 | 4200.85 |
| 198000.0 | 0.0 | 119.323 | 0.00 | 5381.48 |
| 198050.0 | 0.0 | 144.221 | 0.00 | 6588.60 |
| 198100.0 | 0.0 | 167.875 | 0.00 | 7802.40 |
| 198150.0 | 0.0 | 189.859 | 0.00 | 8943.35 |
| 198200.0 | 0.0 | 208.718 | 0.00 | 9964.43 |
| 198250.0 | 0.0 | 224.195 | 0.00 | 10822.83 |
| 198300.0 | 0.0 | 234.886 | 0.00 | 11477.03 |
| 198350.0 | 0.0 | 236.522 | 0.00 | 11785.20 |
| 198400.0 | 0.0 | 231.98 | 0.00 | 11712.55 |

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|----------|--------|---------|---------|----------|
| 198450.0 | 0.0 | 203.432 | 0.00 | 10885.30 |
| 198500.0 | 0.0 | 243.867 | 0.00 | 11182.48 |
| 198550.0 | 0.0 | 244.691 | 0.00 | 12213.95 |
| 198600.0 | 0.0 | 239.574 | 0.00 | 12106.63 |
| 198650.0 | 0.0 | 229.585 | 0.00 | 11728.98 |
| 198700.0 | 0.0 | 216.827 | 0.00 | 11160.30 |
| 198750.0 | 0.0 | 203.432 | 0.00 | 10506.48 |
| 198800.0 | 0.0 | 181.091 | 0.00 | 9613.08 |
| 198850.0 | 0.0 | 161.362 | 0.00 | 8561.33 |
| 198900.0 | 0.0 | 135.255 | 0.00 | 7415.43 |
| 198950.0 | 0.0 | 109.109 | 0.00 | 6109.10 |
| 199000.0 | 0.0 | 78.43 | 0.00 | 4688.48 |
| 199050.0 | 0.0 | 57.141 | 0.00 | 3389.28 |
| 199100.0 | 0.0 | 45.284 | 0.00 | 2560.63 |
| 199150.0 | 0.0 | 48.353 | 0.00 | 2340.93 |
| 199200.0 | 0.0 | 40.151 | 0.00 | 2212.60 |
| 199250.0 | 0.0 | 43.625 | 0.00 | 2094.40 |
| 199300.0 | 0.0 | 42.566 | 0.00 | 2154.78 |
| 199350.0 | 0.0 | 53.463 | 0.00 | 2400.73 |
| 199400.0 | 0.0 | 33.039 | 0.00 | 2162.55 |
| 199450.0 | 0.0 | 24.473 | 0.00 | 1437.80 |
| 199500.0 | 0.0 | 17.404 | 0.00 | 1046.93 |
| 199550.0 | 0.0 | 34.737 | 0.00 | 1303.53 |
| 199600.0 | 0.0 | 13.838 | 0.00 | 1214.38 |
| 199650.0 | 0.561 | 3.76 | 14.03 | 439.95 |
| 199700.0 | 2.331 | 1.635 | 72.30 | 134.88 |
| 199750.0 | 3.142 | 0.887 | 136.83 | 63.05 |
| 199800.0 | 11.359 | 0.118 | 362.53 | 25.13 |
| 199850.0 | 23.098 | 0.737 | 861.43 | 21.38 |
| 199900.0 | 15.717 | 0.0 | 970.38 | 18.43 |
| 199950.0 | 10.519 | 0.0 | 655.90 | 0.00 |
| 200000.0 | 17.435 | 0.0 | 698.85 | 0.00 |
| 200050.0 | 20.232 | 0.0 | 941.68 | 0.00 |
| 200100.0 | 21.798 | 0.0 | 1050.75 | 0.00 |
| 200150.0 | 22.11 | 0.0 | 1097.70 | 0.00 |
| 200200.0 | 16.626 | 0.0 | 968.40 | 0.00 |
| 200250.0 | 20.338 | 0.0 | 924.10 | 0.00 |
| 200300.0 | 21.187 | 0.0 | 1038.13 | 0.00 |
| 200350.0 | 18.728 | 0.0 | 997.88 | 0.00 |
| 200400.0 | 19.76 | 0.0 | 962.20 | 0.00 |
| 200450.0 | 18.965 | 0.0 | 968.13 | 0.00 |
| 200500.0 | 8.928 | 0.512 | 697.33 | 12.80 |
| 200550.0 | 8.749 | 2.426 | 441.93 | 73.45 |
| 200600.0 | 9.724 | 0.0 | 461.83 | 60.65 |
| 200650.0 | 5.625 | 2.575 | 383.73 | 64.38 |
| 200700.0 | 7.032 | 0.259 | 316.43 | 70.85 |
| 200750.0 | 6.748 | 0.057 | 344.50 | 7.90 |
| 200800.0 | 9.834 | 0.0 | 414.55 | 1.43 |
| 200850.0 | 12.499 | 0.0 | 558.33 | 0.00 |
| 200900.0 | 8.446 | 0.0 | 523.63 | 0.00 |
| 200950.0 | 7.448 | 0.794 | 397.35 | 19.85 |
| 201000.0 | 13.496 | 0.0 | 523.60 | 19.85 |
| 201050.0 | 14.601 | 0.023 | 702.43 | 0.58 |
| 201100.0 | 17.805 | 0.0 | 810.15 | 0.58 |
| 201150.0 | 19.322 | 0.0 | 928.18 | 0.00 |
| 201200.0 | 16.946 | 0.0 | 906.70 | 0.00 |
| 201250.0 | 20.149 | 0.0 | 927.38 | 0.00 |
| 201300.0 | 12.611 | 0.0 | 819.00 | 0.00 |
| 201350.0 | 7.262 | 0.0 | 496.83 | 0.00 |
| 201400.0 | 10.842 | 0.0 | 452.60 | 0.00 |


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|----------|--------|--------|---------|---------|
| 201450.0 | 15.02 | 0.0 | 646.55 | 0.00 |
| 201500.0 | 15.432 | 0.0 | 761.30 | 0.00 |
| 201550.0 | 11.894 | 0.0 | 683.15 | 0.00 |
| 201600.0 | 10.745 | 0.604 | 565.98 | 15.10 |
| 201650.0 | 1.629 | 5.253 | 309.35 | 146.43 |
| 201700.0 | 2.06 | 2.539 | 92.23 | 194.80 |
| 201750.0 | 2.15 | 5.172 | 105.25 | 192.78 |
| 201800.0 | 5.399 | 0.108 | 188.73 | 132.00 |
| 201850.0 | 11.567 | 0.0 | 424.15 | 2.70 |
| 201900.0 | 15.652 | 0.0 | 680.48 | 0.00 |
| 201950.0 | 22.893 | 0.0 | 963.63 | 0.00 |
| 202000.0 | 24.359 | 0.0 | 1181.30 | 0.00 |
| 202050.0 | 17.887 | 0.0 | 1056.15 | 0.00 |
| 202100.0 | 17.046 | 0.0 | 873.33 | 0.00 |
| 202150.0 | 20.434 | 0.0 | 937.00 | 0.00 |
| 202200.0 | 13.792 | 1.185 | 855.65 | 29.63 |
| 202250.0 | 9.443 | 0.0 | 580.88 | 29.63 |
| 202300.0 | 5.327 | 0.643 | 369.25 | 16.08 |
| 202350.0 | 5.147 | 4.486 | 261.85 | 128.23 |
| 202400.0 | 3.408 | 3.157 | 213.88 | 191.08 |
| 202450.0 | 4.515 | 12.709 | 198.08 | 396.65 |
| 202500.0 | 0.0 | 43.541 | 112.88 | 1406.25 |
| 202550.0 | 1.66 | 2.157 | 41.50 | 1142.45 |
| 202600.0 | 1.237 | 4.975 | 72.43 | 178.30 |
| 202650.0 | 7.386 | 0.0 | 215.58 | 124.38 |
| 202700.0 | 22.064 | 0.0 | 736.25 | 0.00 |
| 202750.0 | 33.323 | 0.0 | 1384.68 | 0.00 |
| 202800.0 | 20.098 | 0.102 | 1335.53 | 2.55 |
| 202850.0 | 12.938 | 12.278 | 825.90 | 309.50 |
| 202900.0 | 9.883 | 29.142 | 570.53 | 1035.50 |
| 202950.0 | 7.275 | 51.714 | 428.95 | 2021.40 |
| 203000.0 | 7.176 | 70.819 | 361.28 | 3063.33 |
| 203050.0 | 7.805 | 83.167 | 374.53 | 3849.65 |
| 203100.0 | 9.641 | 86.965 | 436.15 | 4253.30 |
| 203150.0 | 7.646 | 81.196 | 432.18 | 4204.03 |
| 203200.0 | 7.296 | 73.251 | 373.55 | 3861.18 |
| 203250.0 | 7.525 | 54.396 | 370.53 | 3191.18 |
| 203300.0 | 9.417 | 35.765 | 423.55 | 2254.03 |
| 203350.0 | 10.22 | 22.231 | 490.93 | 1449.90 |
| 203400.0 | 11.382 | 10.372 | 540.05 | 815.08 |
| 203450.0 | 12.981 | 0.093 | 609.08 | 261.63 |
| 203500.0 | 22.636 | 0.0 | 890.43 | 2.33 |
| 203550.0 | 27.168 | 0.0 | 1245.10 | 0.00 |
| 203600.0 | 25.432 | 0.0 | 1315.00 | 0.00 |
| 203650.0 | 18.302 | 0.475 | 1093.35 | 11.88 |
| 203700.0 | 26.954 | 0.0 | 1131.40 | 11.88 |
| 203750.0 | 16.489 | 0.0 | 1086.08 | 0.00 |
| 203800.0 | 20.322 | 0.0 | 920.28 | 0.00 |
| 203850.0 | 20.277 | 0.0 | 1014.98 | 0.00 |
| 203900.0 | 18.948 | 0.0 | 980.63 | 0.00 |
| 203950.0 | 19.44 | 0.0 | 959.70 | 0.00 |
| 204000.0 | 24.96 | 0.0 | 1110.00 | 0.00 |
| 204050.0 | 27.598 | 0.0 | 1313.95 | 0.00 |
| 204100.0 | 27.803 | 0.0 | 1385.03 | 0.00 |
| 204150.0 | 25.825 | 0.0 | 1340.70 | 0.00 |
| 204200.0 | 21.615 | 0.0 | 1186.00 | 0.00 |
| 204250.0 | 19.003 | 0.0 | 1015.45 | 0.00 |
| 204300.0 | 18.496 | 0.0 | 937.48 | 0.00 |
| 204350.0 | 15.889 | 1.119 | 859.63 | 27.98 |
| 204400.0 | 19.665 | 0.0 | 888.85 | 27.98 |

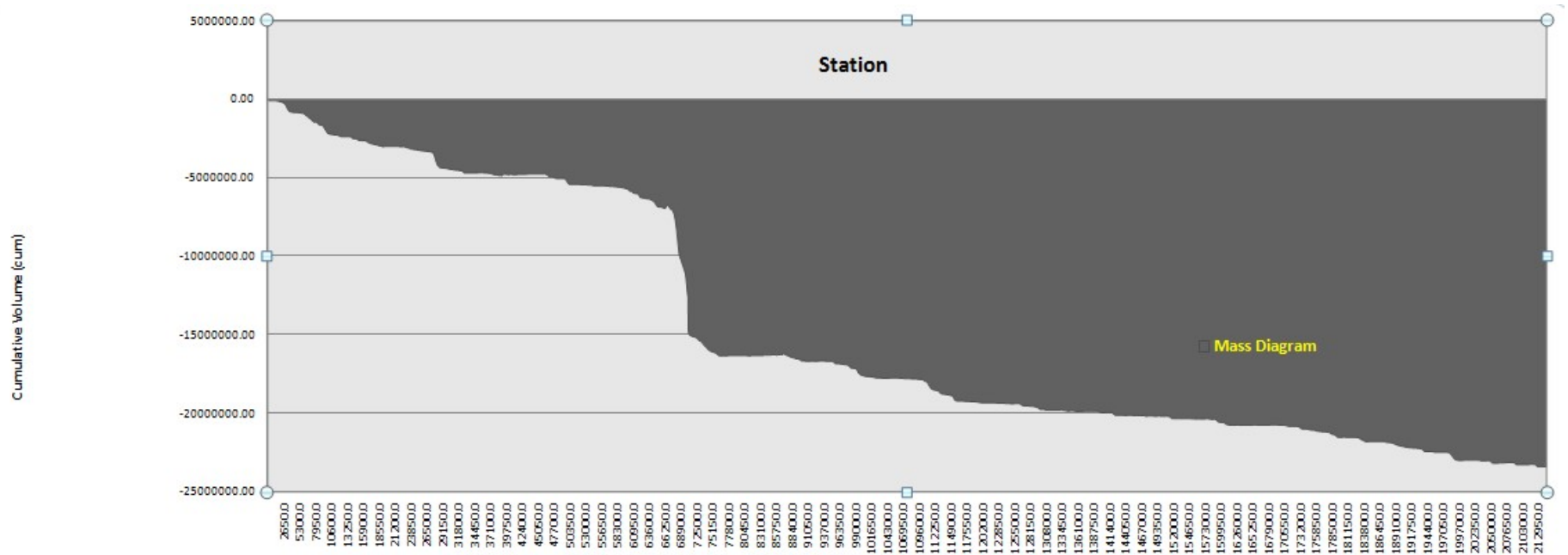
| | | | | |
|----------|--------|---------|---------|---------|
| 204450.0 | 31.297 | 0.0 | 1274.05 | 0.00 |
| 204500.0 | 25.532 | 0.0 | 1420.73 | 0.00 |
| 204550.0 | 3.568 | 0.944 | 727.50 | 23.60 |
| 204600.0 | 0.0 | 15.418 | 89.20 | 409.05 |
| 204650.0 | 0.0 | 47.19 | 0.00 | 1565.20 |
| 204700.0 | 0.0 | 79.841 | 0.00 | 3175.78 |
| 204750.0 | 0.0 | 112.966 | 0.00 | 4820.18 |
| 204800.0 | 0.0 | 145.211 | 0.00 | 6454.43 |
| 204850.0 | 0.0 | 161.01 | 0.00 | 7655.53 |
| 204900.0 | 0.0 | 163.062 | 0.00 | 8101.80 |
| 204950.0 | 0.0 | 163.829 | 0.00 | 8172.28 |
| 205000.0 | 0.0 | 161.296 | 0.00 | 8128.13 |
| 205050.0 | 0.0 | 149.134 | 0.00 | 7760.75 |
| 205100.0 | 0.0 | 128.349 | 0.00 | 6937.08 |
| 205150.0 | 0.0 | 105.088 | 0.00 | 5835.93 |
| 205200.0 | 0.0 | 79.192 | 0.00 | 4607.00 |
| 205250.0 | 0.0 | 49.587 | 0.00 | 3219.48 |
| 205300.0 | 0.0 | 20.16 | 0.00 | 1743.68 |
| 205350.0 | 0.055 | 0.62 | 1.38 | 519.50 |
| 205400.0 | 15.292 | 0.0 | 383.68 | 15.50 |
| 205450.0 | 18.586 | 0.0 | 846.95 | 0.00 |
| 205500.0 | 18.092 | 0.0 | 916.95 | 0.00 |
| 205550.0 | 18.4 | 0.0 | 912.30 | 0.00 |
| 205600.0 | 16.085 | 0.085 | 862.13 | 2.13 |
| 205650.0 | 15.761 | 0.642 | 796.15 | 18.18 |
| 205700.0 | 18.345 | 0.0 | 852.65 | 16.05 |
| 205750.0 | 17.349 | 0.0 | 892.35 | 0.00 |
| 205800.0 | 17.838 | 0.0 | 879.68 | 0.00 |
| 205850.0 | 17.839 | 0.0 | 891.93 | 0.00 |
| 205900.0 | 15.895 | 0.0 | 843.35 | 0.00 |
| 205950.0 | 18.796 | 0.0 | 867.28 | 0.00 |
| 206000.0 | 20.99 | 0.0 | 994.65 | 0.00 |
| 206050.0 | 20.734 | 0.0 | 1043.10 | 0.00 |
| 206100.0 | 20.807 | 0.0 | 1038.53 | 0.00 |
| 206150.0 | 28.023 | 0.0 | 1220.75 | 0.00 |
| 206200.0 | 24.644 | 0.0 | 1316.68 | 0.00 |
| 206250.0 | 28.816 | 0.0 | 1336.50 | 0.00 |
| 206300.0 | 24.789 | 0.0 | 1340.13 | 0.00 |
| 206350.0 | 24.258 | 0.0 | 1226.18 | 0.00 |
| 206400.0 | 22.827 | 0.0 | 1177.13 | 0.00 |
| 206450.0 | 17.735 | 0.0 | 1014.05 | 0.00 |
| 206500.0 | 15.224 | 0.0 | 823.98 | 0.00 |
| 206550.0 | 16.733 | 0.0 | 798.93 | 0.00 |
| 206600.0 | 18.709 | 0.0 | 886.05 | 0.00 |
| 206650.0 | 18.011 | 0.0 | 918.00 | 0.00 |
| 206700.0 | 16.904 | 0.0 | 872.88 | 0.00 |
| 206750.0 | 21.858 | 0.0 | 969.05 | 0.00 |
| 206800.0 | 23.255 | 0.0 | 1127.83 | 0.00 |
| 206850.0 | 15.576 | 0.0 | 970.78 | 0.00 |
| 206900.0 | 9.419 | 0.0 | 624.88 | 0.00 |
| 206950.0 | 13.458 | 0.0 | 571.93 | 0.00 |
| 207000.0 | 16.034 | 0.034 | 737.30 | 0.85 |
| 207050.0 | 17.159 | 0.0 | 829.83 | 0.85 |
| 207100.0 | 19.536 | 0.0 | 917.38 | 0.00 |
| 207150.0 | 17.563 | 0.0 | 927.48 | 0.00 |
| 207200.0 | 16.679 | 0.001 | 856.05 | 0.03 |
| 207250.0 | 18.181 | 0.0 | 871.50 | 0.03 |
| 207300.0 | 21.931 | 0.0 | 1002.80 | 0.00 |
| 207350.0 | 25.076 | 0.0 | 1175.18 | 0.00 |
| 207400.0 | 23.786 | 0.0 | 1221.55 | 0.00 |

| | | | | |
|----------|--------|---------|---------|----------|
| 207450.0 | 23.364 | 0.0 | 1178.75 | 0.00 |
| 207500.0 | 22.464 | 0.0 | 1145.70 | 0.00 |
| 207550.0 | 20.035 | 0.0 | 1062.48 | 0.00 |
| 207600.0 | 13.222 | 0.0 | 831.43 | 0.00 |
| 207650.0 | 15.01 | 0.0 | 705.80 | 0.00 |
| 207700.0 | 17.154 | 0.0 | 804.10 | 0.00 |
| 207750.0 | 14.557 | 1.28 | 792.78 | 32.00 |
| 207800.0 | 18.409 | 0.0 | 824.15 | 32.00 |
| 207850.0 | 13.754 | 0.0 | 804.08 | 0.00 |
| 207900.0 | 8.198 | 0.0 | 548.80 | 0.00 |
| 207950.0 | 6.391 | 1.403 | 364.73 | 35.08 |
| 208000.0 | 8.872 | 0.097 | 381.58 | 37.50 |
| 208050.0 | 9.625 | 0.119 | 462.43 | 5.40 |
| 208100.0 | 15.968 | 0.0 | 639.83 | 2.98 |
| 208150.0 | 27.795 | 0.0 | 1094.08 | 0.00 |
| 208200.0 | 25.915 | 0.0 | 1342.75 | 0.00 |
| 208250.0 | 22.079 | 0.0 | 1199.85 | 0.00 |
| 208300.0 | 20.966 | 0.0 | 1076.13 | 0.00 |
| 208350.0 | 18.514 | 0.0 | 987.00 | 0.00 |
| 208400.0 | 13.997 | 0.0 | 812.78 | 0.00 |
| 208450.0 | 13.77 | 0.0 | 694.18 | 0.00 |
| 208500.0 | 21.693 | 0.0 | 886.58 | 0.00 |
| 208550.0 | 25.095 | 0.0 | 1169.70 | 0.00 |
| 208600.0 | 6.335 | 24.628 | 785.75 | 615.70 |
| 208650.0 | 23.245 | 0.0 | 739.50 | 615.70 |
| 208700.0 | 14.112 | 0.0 | 933.93 | 0.00 |
| 208750.0 | 0.0 | 14.873 | 352.80 | 371.83 |
| 208800.0 | 0.0 | 53.418 | 0.00 | 1707.28 |
| 208850.0 | 0.0 | 192.602 | 0.00 | 6150.50 |
| 208900.0 | 0.0 | 453.782 | 0.00 | 16159.60 |
| 208950.0 | 0.0 | 149.552 | 0.00 | 15083.35 |
| 209000.0 | 0.0 | 159.905 | 0.00 | 7736.43 |
| 209050.0 | 0.0 | 140.988 | 0.00 | 7522.33 |
| 209100.0 | 0.0 | 106.933 | 0.00 | 6198.03 |
| 209150.0 | 0.0 | 60.541 | 0.00 | 4186.85 |
| 209200.0 | 0.0 | 18.286 | 0.00 | 1970.68 |
| 209250.0 | 13.288 | 0.0 | 332.20 | 457.15 |
| 209300.0 | 8.531 | 29.011 | 545.48 | 725.28 |
| 209350.0 | 17.67 | 0.0 | 655.03 | 725.28 |
| 209400.0 | 5.374 | 1.535 | 576.10 | 38.38 |
| 209450.0 | 1.275 | 1.702 | 166.23 | 80.93 |
| 209500.0 | 3.02 | 1.341 | 107.38 | 76.08 |
| 209550.0 | 3.764 | 1.423 | 169.60 | 69.10 |
| 209600.0 | 7.912 | 9.197 | 291.90 | 265.50 |
| 209650.0 | 9.791 | 0.343 | 442.58 | 238.50 |
| 209700.0 | 12.685 | 0.0 | 561.90 | 8.58 |
| 209750.0 | 13.654 | 0.0 | 658.48 | 0.00 |
| 209800.0 | 21.704 | 0.0 | 883.95 | 0.00 |
| 209850.0 | 31.827 | 0.0 | 1338.28 | 0.00 |
| 209900.0 | 21.329 | 0.0 | 1328.90 | 0.00 |
| 209950.0 | 1.282 | 0.791 | 565.28 | 19.78 |
| 210000.0 | 2.237 | 5.711 | 87.98 | 162.55 |
| 210050.0 | 10.215 | 10.317 | 311.30 | 400.70 |
| 210100.0 | 2.626 | 14.854 | 321.03 | 629.28 |
| 210150.0 | 18.503 | 2.989 | 528.23 | 446.08 |
| 210200.0 | 6.741 | 2.29 | 631.10 | 131.98 |
| 210250.0 | 0.62 | 1.7 | 184.03 | 99.75 |
| 210300.0 | 2.419 | 0.08 | 75.98 | 44.50 |
| 210350.0 | 14.911 | 0.0 | 433.25 | 2.00 |
| 210400.0 | 27.471 | 0.0 | 1059.55 | 0.00 |

| | | | | |
|----------|--------|---------|---------|---------|
| 210450.0 | 24.504 | 0.0 | 1299.38 | 0.00 |
| 210500.0 | 19.909 | 0.0 | 1110.33 | 0.00 |
| 210550.0 | 20.151 | 0.0 | 1001.50 | 0.00 |
| 210600.0 | 17.144 | 0.0 | 932.38 | 0.00 |
| 210650.0 | 12.361 | 0.0 | 737.63 | 0.00 |
| 210700.0 | 16.862 | 0.0 | 730.58 | 0.00 |
| 210750.0 | 16.264 | 0.0 | 828.15 | 0.00 |
| 210800.0 | 10.666 | 0.234 | 673.25 | 5.85 |
| 210850.0 | 9.486 | 8.817 | 503.80 | 226.28 |
| 210900.0 | 13.493 | 0.0 | 574.48 | 220.43 |
| 210950.0 | 14.945 | 0.0 | 710.95 | 0.00 |
| 211000.0 | 27.446 | 0.0 | 1059.78 | 0.00 |
| 211050.0 | 15.25 | 0.0 | 1067.40 | 0.00 |
| 211100.0 | 14.839 | 0.006 | 752.23 | 0.15 |
| 211150.0 | 17.79 | 0.0 | 815.73 | 0.15 |
| 211200.0 | 23.067 | 0.0 | 1021.43 | 0.00 |
| 211250.0 | 18.2 | 0.0 | 1031.68 | 0.00 |
| 211300.0 | 23.279 | 0.0 | 1036.98 | 0.00 |
| 211350.0 | 37.766 | 0.0 | 1526.13 | 0.00 |
| 211400.0 | 27.82 | 0.0 | 1639.65 | 0.00 |
| 211450.0 | 19.194 | 0.0 | 1175.35 | 0.00 |
| 211500.0 | 15.745 | 0.011 | 873.48 | 0.28 |
| 211550.0 | 19.637 | 0.0 | 884.55 | 0.28 |
| 211600.0 | 31.755 | 0.0 | 1284.80 | 0.00 |
| 211650.0 | 29.889 | 0.0 | 1541.10 | 0.00 |
| 211700.0 | 20.878 | 0.745 | 1269.18 | 18.63 |
| 211750.0 | 10.58 | 3.389 | 786.45 | 103.35 |
| 211800.0 | 24.767 | 0.0 | 883.68 | 84.73 |
| 211850.0 | 19.881 | 0.0 | 1116.20 | 0.00 |
| 211900.0 | 19.667 | 0.0 | 988.70 | 0.00 |
| 211950.0 | 10.361 | 0.006 | 750.70 | 0.15 |
| 212000.0 | 13.74 | 0.0 | 602.53 | 0.15 |
| 212050.0 | 15.327 | 0.0 | 726.68 | 0.00 |
| 212100.0 | 6.558 | 0.0 | 547.13 | 0.00 |
| 212150.0 | 0.0 | 13.559 | 163.95 | 338.98 |
| 212200.0 | 0.0 | 45.595 | 0.00 | 1478.85 |
| 212250.0 | 0.0 | 86.933 | 0.00 | 3313.20 |
| 212300.0 | 0.0 | 119.144 | 0.00 | 5151.93 |
| 212350.0 | 0.0 | 139.606 | 0.00 | 6468.75 |
| 212400.0 | 0.0 | 154.334 | 0.00 | 7348.50 |
| 212450.0 | 0.0 | 160.754 | 0.00 | 7877.20 |
| 212500.0 | 0.0 | 168.398 | 0.00 | 8228.80 |
| 212550.0 | 0.0 | 164.41 | 0.00 | 8320.20 |
| 212600.0 | 0.0 | 152.332 | 0.00 | 7918.55 |
| 212650.0 | 0.0 | 132.647 | 0.00 | 7124.48 |
| 212700.0 | 0.0 | 104.286 | 0.00 | 5923.33 |
| 212750.0 | 0.0 | 68.854 | 0.00 | 4328.50 |
| 212800.0 | 0.0 | 33.201 | 0.00 | 2551.38 |
| 212850.0 | 0.0 | 7.574 | 0.00 | 1019.38 |
| 212900.0 | 6.746 | 0.87 | 168.65 | 211.10 |
| 212950.0 | 11.517 | 0.384 | 456.58 | 31.35 |
| 213000.0 | 14.89 | 0.0 | 660.18 | 9.60 |
| 213050.0 | 12.648 | 0.0 | 688.45 | 0.00 |
| 213100.0 | 14.502 | 0.0 | 678.75 | 0.00 |
| 213150.0 | 16.328 | 0.0 | 770.75 | 0.00 |
| 213200.0 | 20.552 | 2.486 | 922.00 | 62.15 |
| 213250.0 | 16.158 | 0.295 | 917.75 | 69.53 |
| 213300.0 | 16.198 | 0.0 | 808.90 | 7.38 |
| 213350.0 | 14.338 | 0.0 | 763.40 | 0.00 |
| 213400.0 | 15.162 | 0.0 | 737.50 | 0.00 |

| | | | | |
|----------|--------|--------|---------|--------|
| 213450.0 | 11.994 | 0.0 | 678.90 | 0.00 |
| 213500.0 | 12.831 | 0.0 | 620.63 | 0.00 |
| 213550.0 | 13.37 | 0.563 | 655.03 | 14.08 |
| 213600.0 | 14.445 | 0.39 | 695.38 | 23.83 |
| 213650.0 | 13.853 | 0.155 | 707.45 | 13.63 |
| 213700.0 | 13.579 | 0.028 | 685.80 | 4.58 |
| 213750.0 | 18.046 | 0.0 | 790.63 | 0.70 |
| 213800.0 | 16.127 | 0.0 | 854.33 | 0.00 |
| 213850.0 | 17.166 | 0.0 | 832.33 | 0.00 |
| 213900.0 | 16.347 | 0.497 | 837.83 | 12.43 |
| 213950.0 | 27.146 | 0.0 | 1087.33 | 12.43 |
| 214000.0 | 20.693 | 0.0 | 1195.98 | 0.00 |
| 214050.0 | 22.535 | 5.482 | 1080.70 | 137.05 |
| 214100.0 | 28.71 | 0.0 | 1281.13 | 137.05 |
| 214150.0 | 21.837 | 6.316 | 1263.68 | 157.90 |
| 214200.0 | 19.309 | 7.309 | 1028.65 | 340.63 |
| 214250.0 | 19.14 | 18.832 | 961.23 | 653.53 |
| 214300.0 | 19.692 | 19.469 | 970.80 | 957.53 |
| 214350.0 | 17.384 | 20.157 | 926.90 | 990.65 |





Mass Diagram

J. Mandal



1.6 IMPORTANT INDEX VALUE

| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | I.S. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--------------------------------------|-------|---------|---------|-------|------|-----------------|--------|--------|---------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 1 | 0.000 | TP-01 | 100 | 100 | 100 | 100 | 99 | 91 | 32 | 21 | 11 | CL | 10.00 | 1.898 | 12.40 | 1.632 | 5.764 | 1.874 | 8.75 | 2.050 | 10.41 | 8.34 |
| 2 | 0.500 | TP-02 | 100 | 100 | 100 | 100 | 97 | 62 | 29 | 22 | 7 | CL | 0.00 | 2.020 | 14.04 | 1.739 | 10.856 | 2.025 | 16.70 | 2.190 | 19.88 | 15.36 |
| 3 | 1.000 | TP-03 | 100 | 100 | 100 | 100 | 86 | 34 | 30 | 20 | 10 | SC | 0.00 | 2.031 | 11.05 | 1.767 | 19.231 | 2.040 | 27.20 | 2.191 | 34.30 | 25.16 |
| 4 | 1.500 | TP-04 | 100 | 100 | 100 | 100 | 91 | 32 | 28 | 19 | 9 | SC | 0.00 | 2.040 | 10.75 | 1.762 | 22.629 | 2.042 | 32.33 | 2.213 | 39.86 | 30.14 |
| 5 | 2.000 | TP-05 | 100 | 100 | 100 | 98 | 83 | 49 | 37 | 23 | 14 | SC | 2.13 | 1.948 | 14.10 | 1.763 | 11.750 | 1.952 | 16.93 | 2.116 | 20.67 | 15.22 |
| 6 | 2.500 | TP-06 | 100 | 100 | 100 | 97 | 84 | 61 | 37 | 23 | 13 | CI | 4.35 | 1.808 | 12.40 | 1.555 | 5.933 | 1.815 | 9.00 | 1.953 | 10.71 | 8.28 |
| 7 | 3.000 | TP-07 | 100 | 100 | 100 | 100 | 84 | 62 | 36 | 21 | 15 | CI | 9.09 | 1.810 | 12.53 | 1.549 | 5.966 | 1.816 | 8.68 | 1.977 | 10.38 | 8.07 |
| 8 | 3.500 | TP-08 | 100 | 100 | 100 | 100 | 85 | 64 | 38 | 24 | 13 | CI | 4.35 | 1.816 | 12.75 | 1.589 | 6.213 | 1.822 | 8.79 | 1.983 | 11.08 | 8.12 |

J. Mulu

| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | I.S. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--------------------------------------|-------|---------|---------|-------|------|-----------------|--------|--------|---------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 9 | 4.000 | TP-09 | 100 | 100 | 100 | 100 | 92 | 77 | 43 | 26 | 17 | CI | 4.35 | 1.790 | 14.00 | 1.522 | 4.797 | 1.796 | 6.59 | 1.958 | 7.83 | 6.20 |
| 10 | 4.500 | TP-10 | 100 | 100 | 100 | 98 | 90 | 75 | 41 | 26 | 15 | MI | 10.00 | 1.768 | 13.70 | 1.529 | 5.344 | 1.772 | 8.08 | 1.915 | 9.74 | 7.44 |
| 11 | 5.000 | TP-11 | 100 | 100 | 99 | 98 | 97 | 93 | 66 | 30 | 37 | CH | 8.33 | 1.873 | 15.90 | 1.695 | 3.473 | 1.818 | 5.25 | 2.030 | 6.33 | 5.24 |
| 12 | 5.500 | TP-12 | 100 | 100 | 100 | 100 | 97 | 84 | 43 | 27 | 17 | MI | 4.00 | 1.890 | 14.90 | 1.710 | 4.892 | 1.896 | 7.05 | 2.053 | 8.61 | 6.32 |
| 13 | 6.000 | TP-13 | 100 | 100 | 100 | 100 | 95 | 60 | 44 | 28 | 16 | MI | 0.00 | 1.895 | 13.80 | 1.630 | 5.500 | 1.996 | 8.35 | 2.047 | 9.93 | 7.12 |
| 14 | 6.500 | TP-14 | 100 | 100 | 100 | 100 | 97 | 51 | 30 | 26 | 4 | ML | 0.00 | 2.015 | 13.80 | 1.725 | 9.324 | 2.020 | 13.57 | 2.200 | 16.22 | 12.63 |
| 15 | 7.000 | TP-15 | 100 | 100 | 100 | 100 | 98 | 44 | 32 | 21 | 11 | SC | 0.00 | 2.020 | 13.10 | 1.739 | 14.548 | 2.030 | 22.38 | 2.190 | 26.63 | 20.48 |
| 16 | 7.500 | TP-16 | 100 | 100 | 100 | 100 | 99 | 45 | 32 | 22 | 10 | SC | 0.00 | 1.985 | 13.10 | 1.737 | 15.425 | 1.992 | 21.82 | 2.168 | 27.51 | 20.15 |
| 17 | 8.000 | TP-17 | 100 | 100 | 100 | 100 | 99 | 54 | 34 | 23 | 11 | CL | 0.00 | 2.100 | 14.10 | 1.785 | 11.281 | 2.105 | 15.50 | 2.297 | 18.42 | 14.60 |
| 18 | 8.500 | TP-18 | 100 | 100 | 100 | 100 | 97 | 34 | 28 | 20 | 8 | SC | 0.00 | 2.025 | 11.15 | 1.721 | 19.446 | 2.027 | 26.71 | 2.215 | 31.75 | 25.22 |

J. Mulu



| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | I.S. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--------------------------------------|-------|---------|---------|-------|------|-----------------|--------|--------|---------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 19 | 9.000 | TP-19 | 100 | 100 | 98 | 93 | 63 | 44 | 30 | 20 | 10 | SC | 4.76 | 2.015 | 13.05 | 1.735 | 12.793 | 2.020 | 19.68 | 2.184 | 23.42 | 18.10 |
| 20 | 9.500 | TP-20 | 100 | 100 | 97 | 90 | 57 | 39 | 31 | 18 | 13 | SC | 4.76 | 2.003 | 12.05 | 1.721 | 12.127 | 2.010 | 17.32 | 2.217 | 21.36 | 16.12 |
| 21 | 10.000 | TP-21 | 100 | 100 | 100 | 100 | 95 | 33 | 29 | 19 | 10 | SC | 0.00 | 1.822 | 9.20 | 1.565 | 23.148 | 1.744 | 33.07 | 2.017 | 40.77 | 33.72 |
| 22 | 10.500 | TP-22 | 100 | 100 | 100 | 100 | 98 | 16 | Non-Plastic | | | SM | 0.00 | 2.150 | 9.57 | 1.849 | 30.791 | 2.156 | 44.37 | 2.322 | 54.17 | 41.25 |
| 23 | 11.000 | TP-23 | 100 | 100 | 100 | 100 | 99 | 13 | Non-Plastic | | | SM | 0.00 | 2.155 | 9.15 | 1.950 | 31.418 | 2.160 | 47.53 | 2.336 | 57.28 | 42.18 |
| 24 | 11.500 | TP-24 | 100 | 100 | 100 | 100 | 99 | 13 | Non-Plastic | | | SM | 0.00 | 2.140 | 10.20 | 1.937 | 32.099 | 2.145 | 46.25 | 2.324 | 56.47 | 41.55 |
| 25 | 12.000 | TP-25 | 100 | 100 | 94 | 88 | 81 | 73 | 38 | 26 | 12 | MI | 2.04 | 1.855 | 14.50 | 1.595 | 6.048 | 1.860 | 9.18 | 2.003 | 10.92 | 8.46 |
| 26 | 12.500 | TP-26 | 100 | 100 | 100 | 100 | 100 | 86 | 37 | 26 | 12 | MI | 1.96 | 1.810 | 15.30 | 1.557 | 5.174 | 1.816 | 7.84 | 1.937 | 9.33 | 7.22 |
| 27 | 13.000 | TP-27 | 100 | 100 | 100 | 100 | 95 | 86 | 38 | 27 | 11 | MI | 2.08 | 1.830 | 14.60 | 1.556 | 6.460 | 1.836 | 8.87 | 2.002 | 10.55 | 8.35 |
| 28 | 13.500 | TP-28 | 100 | 100 | 100 | 100 | 100 | 89 | 40 | 30 | 10 | MI | 1.96 | 1.810 | 15.40 | 1.549 | 5.274 | 1.815 | 7.68 | 1.977 | 9.17 | 7.14 |

J. Mulya



| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | I.S. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--|-------|---------|---------|-------|------|-----------------|--------|--------|---------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 29 | 14.000 | TP-29 | 100 | 100 | 100 | 100 | 92 | 88 | 42 | 25 | 17 | CI | 4.35 | 1.736 | 14.30 | 1.519 | 4.899 | 1.742 | 6.93 | 1.896 | 8.74 | 6.40 |
| 30 | 14.500 | TP-30 | 100 | 100 | 100 | 100 | 100 | 92 | 39 | 25 | 14 | CI | 2.13 | 1.755 | 15.50 | 1.495 | 5.440 | 1.761 | 7.94 | 1.901 | 9.49 | 7.39 |
| 31 | 15.000 | TP-31 | 100 | 100 | 100 | 100 | 100 | 94 | 43 | 23 | 20 | CI | 2.00 | 1.755 | 13.38 | 1.507 | 2.434 | 1.697 | 3.48 | 1.942 | 4.29 | 3.49 |
| 32 | 15.500 | TP-32 | 100 | 100 | 100 | 100 | 100 | 95 | 39 | 28 | 12 | MI | 0.00 | 1.766 | 15.60 | 1.519 | 5.578 | 1.770 | 8.04 | 1.907 | 9.81 | 7.48 |
| 33 | 16.000 | TP-33 | Trial pit excavation was not possible due to work in progress. | | | | | | | | | | | | | | | | | | | |
| 34 | 16.500 | TP-34 | Trial pit excavation was not possible due to work in progress. | | | | | | | | | | | | | | | | | | | |
| 35 | 17.000 | TP-35 | Trial pit excavation was not possible due to congested area. | | | | | | | | | | | | | | | | | | | |
| 36 | 17.500 | TP-36 | 100 | 100 | 96 | 86 | 52 | 35 | 43 | 23 | 21 | SC | 13.04 | 2.022 | 11.40 | 1.759 | 13.206 | 2.028 | 19.98 | 2.182 | 24.55 | 18.30 |
| 37 | 18.000 | TP-37 | 100 | 100 | 97 | 95 | 87 | 78 | 41 | 26 | 15 | MI | 4.35 | 1.785 | 13.50 | 1.542 | 5.715 | 1.790 | 8.38 | 1.997 | 10.05 | 7.75 |
| 38 | 18.500 | TP-38 | 100 | 100 | 100 | 100 | 80 | 62 | 42 | 28 | 14 | MI | 5.50 | 1.835 | 12.05 | 1.576 | 6.876 | 1.840 | 11.31 | 1.982 | 13.57 | 10.30 |

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| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | I.S. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--------------------------------------|-------|---------|---------|-------|------|-----------------|--------|--------|---------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 39 | 19.000 | TP-39 | 100 | 100 | 96 | 92 | 66 | 49 | 45 | 27 | 18 | SC | 4.35 | 1.952 | 13.95 | 1.770 | 9.673 | 1.960 | 13.80 | 2.247 | 17.50 | 12.35 |
| 40 | 19.500 | TP-40 | 100 | 100 | 86 | 80 | 47 | 22 | 39 | 20 | 19 | SC | 2.50 | 2.092 | 9.74 | 1.778 | 18.145 | 2.098 | 27.08 | 2.259 | 32.20 | 25.16 |
| 41 | 20.000 | TP-41 | 100 | 100 | 100 | 100 | 93 | 87 | 58 | 26 | 32 | CH | 8.33 | 1.979 | 12.15 | 1.686 | 3.761 | 1.925 | 5.49 | 2.143 | 6.56 | 5.45 |
| 42 | 20.500 | TP-42 | 100 | 100 | 93 | 83 | 46 | 19 | Non-Plastic | | | SM | 4.76 | 2.115 | 10.14 | 1.904 | 32.032 | 2.121 | 47.45 | 2.375 | 57.04 | 42.53 |
| 43 | 21.000 | TP-43 | 100 | 100 | 100 | 100 | 100 | 90 | 32 | 23 | 10 | CL | 0.00 | 1.830 | 15.50 | 1.574 | 5.322 | 1.835 | 7.76 | 1.976 | 9.50 | 7.20 |
| 44 | 21.500 | TP-44 | 100 | 100 | 100 | 100 | 96 | 74 | 35 | 29 | 6 | MI | 0.00 | 1.895 | 14.45 | 1.742 | 7.888 | 1.896 | 11.60 | 2.060 | 13.91 | 10.21 |
| 45 | 22.000 | TP-45 | 100 | 100 | 100 | 100 | 96 | 78 | 33 | 23 | 10 | CL | 2.04 | 1.878 | 15.25 | 1.617 | 6.070 | 1.884 | 8.82 | 2.036 | 10.68 | 8.18 |
| 46 | 22.500 | TP-46 | 100 | 100 | 100 | 100 | 96 | 80 | 33 | 22 | 11 | CL | 2.04 | 1.885 | 14.55 | 1.691 | 6.151 | 1.890 | 9.36 | 2.043 | 11.28 | 8.37 |
| 47 | 23.000 | TP-47 | 100 | 100 | 100 | 100 | 87 | 69 | 28 | 19 | 9 | CL | 4.76 | 1.780 | 13.10 | 1.537 | 6.861 | 1.786 | 9.99 | 1.931 | 11.93 | 9.24 |
| 48 | 23.500 | TP-48 | 100 | 100 | 100 | 100 | 89 | 68 | 28 | 19 | 9 | CL | 2.33 | 1.787 | 13.30 | 1.630 | 8.432 | 1.792 | 11.58 | 1.985 | 13.77 | 10.44 |

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| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | I.S. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--|-------|---------|---------|-------|------|-----------------|--------|--------|---------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 49 | 24.000 | TP-49 | 100 | 100 | 100 | 100 | 97 | 69 | 35 | 28 | 7 | ML | 0.00 | 1.826 | 14.40 | 1.570 | 8.739 | 1.832 | 13.22 | 1.954 | 15.93 | 12.18 |
| 50 | 24.500 | TP-50 | 100 | 100 | 100 | 100 | 97 | 60 | 34 | 29 | 5 | ML | 0.00 | 1.815 | 14.10 | 1.550 | 9.798 | 1.820 | 14.37 | 1.931 | 17.25 | 13.36 |
| 51 | 25.000 | TP-51 | 100 | 100 | 100 | 100 | 96 | 71 | 34 | 27 | 7 | ML | 0.00 | 1.742 | 15.60 | 1.481 | 6.726 | 1.691 | 9.24 | 1.906 | 10.98 | 9.22 |
| 52 | 25.500 | TP-52 | 100 | 100 | 100 | 100 | 99 | 81 | 36 | 29 | 8 | MI | 0.00 | 1.805 | 15.05 | 1.634 | 6.743 | 1.810 | 9.25 | 1.960 | 11.41 | 8.41 |
| 53 | 26.000 | TP-53 | Trial pit excavation was not possible due to congested area. | | | | | | | | | | | | | | | | | | | |
| 54 | 26.500 | TP-54 | Trial pit excavation was not possible due to congested area. | | | | | | | | | | | | | | | | | | | |
| 55 | 27.000 | TP-55 | 100 | 100 | 100 | 100 | 95 | 65 | 30 | 24 | 6 | ML | 0.00 | 1.815 | 14.05 | 1.643 | 9.563 | 1.815 | 13.62 | 1.967 | 16.52 | 12.34 |
| 56 | 27.500 | TP-56 | 100 | 100 | 100 | 100 | 96 | 64 | 31 | 25 | 6 | ML | 0.00 | 1.836 | 14.10 | 1.643 | 9.580 | 1.841 | 13.75 | 2.020 | 16.43 | 12.48 |
| 57 | 28.000 | TP-57 | 100 | 100 | 100 | 100 | 94 | 82 | 36 | 29 | 6 | MI | 0.00 | 1.818 | 14.45 | 1.571 | 6.014 | 1.825 | 8.82 | 2.034 | 10.57 | 8.14 |
| 58 | 28.500 | TP-58 | 100 | 100 | 100 | 100 | 92 | 76 | 35 | 31 | 4 | MI | 2.04 | 1.822 | 14.05 | 1.573 | 6.868 | 1.826 | 10.00 | 1.977 | 11.95 | 9.27 |

| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | I.S. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--------------------------------------|-------|---------|---------|-------|------|-----------------|--------|--------|---------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 59 | 29.000 | TP-59 | 100 | 100 | 100 | 100 | 98 | 79 | 29 | 19 | 10 | CL | 2.08 | 1.855 | 14.80 | 1.705 | 6.466 | 1.860 | 9.51 | 2.016 | 11.40 | 8.32 |
| 60 | 29.500 | TP-60 | 100 | 100 | 100 | 100 | 95 | 79 | 31 | 22 | 9 | CL | 2.13 | 1.880 | 14.45 | 1.715 | 7.461 | 1.886 | 10.25 | 2.089 | 12.18 | 9.23 |
| 61 | 30.000 | TP-61 | 90 | 79 | 70 | 66 | 58 | 46 | 30 | 22 | 8 | GC | 4.17 | 1.987 | 10.24 | 1.729 | 18.415 | 1.926 | 27.86 | 2.144 | 34.24 | 27.90 |
| 62 | 30.500 | TP-62 | 100 | 100 | 91 | 83 | 71 | 53 | 31 | 23 | 8 | CL | 0.00 | 2.005 | 10.60 | 1.807 | 10.604 | 2.011 | 16.21 | 2.254 | 19.04 | 14.40 |
| 63 | 31.000 | TP-63 | 100 | 100 | 100 | 100 | 48 | 10 | Non-Plastic | | | SM-SP | 0.00 | 2.160 | 10.41 | 1.845 | 28.894 | 2.165 | 44.18 | 2.298 | 51.87 | 40.85 |
| 64 | 31.500 | TP-64 | 100 | 100 | 100 | 100 | 46 | 11 | Non-Plastic | | | SM-SP | 0.00 | 2.155 | 10.55 | 1.942 | 33.131 | 2.161 | 45.45 | 2.422 | 56.08 | 41.48 |
| 65 | 32.000 | TP-65 | 100 | 100 | 97 | 94 | 68 | 26 | Non-Plastic | | | SM | 0.00 | 2.074 | 11.40 | 1.877 | 29.143 | 2.080 | 41.34 | 2.252 | 49.44 | 37.24 |
| 66 | 32.500 | TP-66 | 100 | 100 | 100 | 100 | 70 | 27 | Non-Plastic | | | SM | 0.00 | 2.065 | 10.70 | 1.848 | 31.058 | 2.070 | 42.66 | 2.272 | 50.94 | 39.16 |
| 67 | 33.000 | TP-67 | 100 | 100 | 95 | 89 | 62 | 36 | 25 | 15 | 10 | SC | 4.55 | 2.017 | 11.50 | 1.718 | 15.265 | 2.022 | 23.02 | 2.184 | 27.47 | 21.35 |

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| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | I.S. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--------------------------------------|-------|---------|---------|-------|------|-----------------|--------|--------|---------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| | | | | | | | | | | | | | | | | | | | | | | |
| 68 | 33.500 | TP-68 | 100 | 95 | 93 | 89 | 66 | 43 | 28 | 18 | 9 | SC | 2.50 | 1.981 | 12.85 | 1.702 | 14.232 | 1.990 | 20.42 | 2.193 | 24.40 | 18.95 |
| 69 | 34.000 | TP-69 | 100 | 100 | 100 | 100 | 99 | 83 | 36 | 21 | 15 | CI | 8.33 | 1.849 | 15.05 | 1.668 | 5.029 | 1.854 | 7.13 | 2.039 | 8.53 | 6.45 |
| 70 | 34.500 | TP-70 | 100 | 100 | 100 | 100 | 98 | 79 | 38 | 22 | 16 | CI | 6.50 | 1.832 | 14.75 | 1.561 | 4.737 | 1.838 | 6.63 | 1.984 | 8.02 | 6.21 |
| 71 | 35.000 | TP-71 | 100 | 100 | 100 | 100 | 94 | 75 | 37 | 25 | 12 | MI | 1.96 | 1.676 | 15.70 | 1.517 | 7.229 | 1.622 | 10.42 | 1.820 | 12.72 | 10.46 |
| 72 | 35.500 | TP-72 | 100 | 100 | 100 | 100 | 98 | 81 | 39 | 33 | 6 | MI | 2.08 | 1.847 | 14.95 | 1.596 | 6.223 | 1.852 | 9.12 | 2.067 | 10.94 | 8.44 |
| 73 | 36.000 | TP-73 | 100 | 100 | 100 | 100 | 98 | 82 | 39 | 26 | 12 | MI | 2.08 | 1.860 | 14.90 | 1.581 | 5.927 | 1.864 | 8.85 | 2.009 | 10.52 | 8.23 |
| 74 | 36.500 | TP-74 | 100 | 100 | 100 | 100 | 100 | 87 | 37 | 26 | 11 | MI | 2.04 | 1.851 | 15.30 | 1.592 | 5.283 | 1.855 | 7.99 | 1.981 | 9.63 | 7.38 |
| 75 | 37.000 | TP-75 | 100 | 100 | 100 | 100 | 95 | 76 | 39 | 31 | 8 | MI | 0.00 | 1.887 | 14.30 | 1.630 | 6.807 | 1.892 | 9.91 | 2.047 | 11.84 | 9.18 |
| 76 | 37.500 | TP-76 | 100 | 100 | 100 | 100 | 95 | 79 | 37 | 25 | 12 | MI | 1.96 | 1.871 | 14.44 | 1.707 | 6.541 | 1.876 | 8.98 | 2.079 | 10.68 | 8.10 |
| 77 | 38.000 | TP-77 | 100 | 100 | 100 | 100 | 92 | 70 | 33 | 25 | 7 | ML | 2.13 | 1.890 | 13.75 | 1.710 | 9.836 | 1.895 | 13.49 | 2.053 | 16.65 | 12.27 |

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| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | I.S. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--------------------------------------|-------|---------|---------|-------|------|-----------------|--------|--------|---------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 78 | 38.500 | TP-78 | 100 | 100 | 100 | 100 | 94 | 74 | 33 | 24 | 9 | ML | 0.00 | 1.875 | 14.10 | 1.678 | 6.409 | 1.880 | 9.20 | 2.063 | 10.99 | 8.35 |
| 79 | 39.000 | TP-79 | 100 | 100 | 100 | 100 | 95 | 81 | 38 | 30 | 9 | MI | 2.13 | 1.862 | 14.55 | 1.601 | 5.777 | 1.866 | 8.74 | 1.992 | 10.53 | 8.07 |
| 80 | 39.500 | TP-80 | 100 | 100 | 100 | 100 | 99 | 81 | 40 | 30 | 10 | MI | 2.04 | 1.855 | 15.05 | 1.595 | 5.189 | 1.860 | 7.86 | 1.985 | 9.36 | 7.25 |
| 81 | 40.000 | TP-81 | 100 | 100 | 100 | 100 | 98 | 74 | 40 | 30 | 11 | MI | 2.00 | 1.705 | 16.90 | 1.492 | 5.793 | 1.643 | 8.19 | 1.862 | 10.33 | 8.30 |
| 82 | 40.500 | TP-82 | 100 | 100 | 100 | 100 | 95 | 73 | 39 | 31 | 8 | MI | 2.00 | 1.845 | 14.25 | 1.670 | 7.457 | 1.852 | 10.74 | 2.004 | 13.12 | 9.62 |
| 83 | 41.000 | TP-83 | 100 | 100 | 100 | 100 | 97 | 80 | 33 | 24 | 9 | ML | 0.00 | 1.825 | 14.90 | 1.570 | 5.869 | 1.831 | 8.91 | 1.971 | 10.60 | 8.20 |
| 84 | 41.500 | TP-84 | 100 | 100 | 100 | 100 | 95 | 74 | 46 | 30 | 16 | MI | 4.55 | 1.855 | 14.25 | 1.577 | 4.808 | 1.860 | 6.60 | 2.029 | 7.85 | 6.22 |
| 85 | 42.000 | TP-85 | 100 | 100 | 100 | 100 | 90 | 63 | 46 | 31 | 15 | MI | 2.33 | 1.906 | 13.30 | 1.706 | 6.302 | 1.912 | 9.24 | 2.097 | 11.10 | 8.34 |
| 86 | 42.500 | TP-86 | 100 | 100 | 100 | 98 | 88 | 74 | 43 | 32 | 11 | MI | 4.35 | 1.838 | 13.40 | 1.579 | 7.844 | 1.842 | 11.21 | 2.035 | 13.82 | 10.45 |
| 87 | 43.000 | TP-87 | 100 | 100 | 91 | 83 | 54 | 35 | 48 | 28 | 20 | SM | 2.08 | 2.022 | 11.35 | 1.739 | 19.922 | 2.027 | 30.14 | 2.164 | 36.32 | 27.81 |

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| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | I.S. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--------------------------------------|-------|---------|---------|-------|------|-----------------|--------|--------|---------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 88 | 43.500 | TP-88 | 100 | 100 | 97 | 90 | 57 | 36 | 48 | 36 | 12 | SM | 7.69 | 2.018 | 11.50 | 1.841 | 22.722 | 2.023 | 31.21 | 2.242 | 37.09 | 28.15 |
| 89 | 44.000 | TP-89 | 100 | 100 | 96 | 86 | 54 | 37 | 42 | 33 | 9 | SM | 9.30 | 2.012 | 12.10 | 1.811 | 22.075 | 2.018 | 32.70 | 2.259 | 39.31 | 29.30 |
| 90 | 44.500 | TP-90 | 100 | 100 | 98 | 88 | 54 | 42 | 35 | 20 | 16 | SC | 2.33 | 1.988 | 12.60 | 1.712 | 14.254 | 1.992 | 20.72 | 2.155 | 25.09 | 19.25 |
| 91 | 45.000 | TP-91 | 100 | 100 | 100 | 100 | 92 | 82 | 32 | 21 | 11 | CL | 2.08 | 1.894 | 12.48 | 1.621 | 6.349 | 1.836 | 9.24 | 2.068 | 11.04 | 9.25 |
| 92 | 45.500 | TP-92 | 100 | 100 | 100 | 100 | 95 | 81 | 28 | 20 | 9 | CL | 4.17 | 1.856 | 14.50 | 1.693 | 8.222 | 1.862 | 11.29 | 2.062 | 13.42 | 10.17 |
| 93 | 46.000 | TP-93 | 100 | 100 | 100 | 100 | 100 | 94 | 48 | 28 | 20 | MI | 13.04 | 1.805 | 15.60 | 1.634 | 3.275 | 1.811 | 4.49 | 1.960 | 5.54 | 4.08 |
| 94 | 46.500 | TP-94 | 100 | 100 | 100 | 100 | 100 | 95 | 50 | 29 | 21 | MH | 7.75 | 1.811 | 15.70 | 1.621 | 2.564 | 1.816 | 3.68 | 1.992 | 4.40 | 3.34 |
| 95 | 47.000 | TP-95 | 100 | 100 | 100 | 100 | 98 | 83 | 35 | 19 | 16 | CI | 2.13 | 1.825 | 15.05 | 1.571 | 5.106 | 1.830 | 7.86 | 1.978 | 9.35 | 7.22 |
| 96 | 47.500 | TP-96 | 100 | 100 | 100 | 100 | 97 | 85 | 32 | 20 | 12 | CL | 6.38 | 1.808 | 14.90 | 1.573 | 5.879 | 1.814 | 8.89 | 1.951 | 10.93 | 8.14 |
| 97 | 48.000 | TP-97 | 100 | 100 | 100 | 98 | 91 | 82 | 31 | 21 | 10 | CL | 4.35 | 1.770 | 14.10 | 1.515 | 5.946 | 1.775 | 8.66 | 1.933 | 10.34 | 8.05 |

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| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | I.S. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--|-------|---------|---------|-------|------|-----------------|--------|--------|---------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 98 | 48.500 | TP-98 | 100 | 100 | 100 | 100 | 92 | 81 | 33 | 21 | 12 | CL | 2.27 | 1.793 | 14.15 | 1.605 | 6.349 | 1.799 | 9.11 | 1.972 | 10.89 | 8.26 |
| 99 | 49.000 | TP-99 | 100 | 100 | 100 | 100 | 90 | 23 | Non-Plastic | | | SM | 0.00 | 2.090 | 8.90 | 1.797 | 26.926 | 2.104 | 40.73 | 2.236 | 49.09 | 37.28 |
| 100 | 49.500 | TP-100 | 100 | 100 | 100 | 95 | 81 | 38 | 30 | 20 | 10 | SC | 1.96 | 2.010 | 9.77 | 1.713 | 30.397 | 2.018 | 44.38 | 2.177 | 53.03 | 41.25 |
| 101 | 50.000 | TP-101 | 100 | 100 | 100 | 100 | 88 | 62 | 36 | 22 | 14 | CI | 0.00 | 1.755 | 14.05 | 1.511 | 9.918 | 1.697 | 15.26 | 1.902 | 18.16 | 15.34 |
| 102 | 50.500 | TP-102 | Trial pit excavation was not possible due to congested area. | | | | | | | | | | | | | | | | | | | |
| 103 | 51.000 | TP-103 | 100 | 100 | 100 | 100 | 92 | 74 | 39 | 28 | 10 | MI | 1.96 | 1.830 | 13.90 | 1.574 | 5.992 | 1.833 | 9.09 | 1.976 | 10.82 | 8.40 |
| 104 | 51.500 | TP-104 | 100 | 100 | 100 | 100 | 91 | 70 | 39 | 28 | 11 | MI | 0.00 | 1.835 | 13.70 | 1.578 | 6.195 | 1.840 | 8.93 | 1.982 | 10.90 | 8.30 |
| 105 | 52.000 | TP-105 | 100 | 100 | 95 | 92 | 87 | 67 | 39 | 28 | 11 | MI | 4.76 | 1.866 | 13.05 | 1.607 | 6.477 | 1.872 | 9.96 | 2.023 | 11.86 | 9.15 |
| 106 | 52.500 | TP-106 | 100 | 100 | 100 | 100 | 98 | 59 | 36 | 29 | 8 | MI | 0.00 | 1.908 | 13.60 | 1.741 | 8.350 | 1.914 | 11.47 | 2.120 | 13.63 | 10.33 |
| 107 | 53.000 | TP-107 | 100 | 100 | 100 | 100 | 99 | 74 | 36 | 26 | 9 | MI | 0.00 | 1.839 | 14.70 | 1.582 | 5.842 | 1.842 | 8.85 | 1.968 | 10.53 | 8.18 |

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| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | I.S. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--------------------------------------|-------|---------|---------|-------|------|-----------------|--------|--------|---------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 108 | 53.500 | TP-108 | 100 | 100 | 100 | 100 | 98 | 84 | 37 | 28 | 9 | MI | 2.13 | 1.823 | 15.05 | 1.632 | 5.616 | 1.830 | 8.23 | 2.005 | 9.89 | 7.42 |
| 109 | 54.000 | TP-109 | 100 | 100 | 100 | 100 | 99 | 80 | 35 | 26 | 10 | MI | 0.00 | 1.860 | 14.95 | 1.581 | 5.940 | 1.865 | 8.87 | 2.009 | 10.54 | 8.24 |
| 110 | 54.500 | TP-110 | 100 | 100 | 100 | 100 | 94 | 72 | 37 | 25 | 12 | MI | 0.00 | 1.890 | 13.75 | 1.701 | 7.739 | 1.895 | 11.47 | 2.122 | 13.78 | 10.28 |
| 111 | 55.000 | TP-111 | 100 | 100 | 100 | 97 | 90 | 66 | 36 | 25 | 10 | MI | 1.96 | 1.903 | 12.00 | 1.703 | 8.869 | 1.841 | 13.00 | 2.093 | 15.62 | 13.06 |
| 112 | 55.500 | TP-112 | 100 | 100 | 100 | 100 | 100 | 92 | 40 | 27 | 13 | MI | 4.35 | 1.816 | 15.50 | 1.554 | 4.628 | 1.822 | 6.74 | 1.983 | 8.05 | 6.26 |
| 113 | 56.000 | TP-113 | 100 | 100 | 100 | 100 | 100 | 89 | 40 | 27 | 13 | MI | 2.13 | 1.825 | 15.40 | 1.570 | 5.456 | 1.830 | 7.86 | 1.971 | 9.60 | 7.31 |
| 114 | 56.500 | TP-114 | 100 | 100 | 100 | 100 | 94 | 72 | 36 | 24 | 11 | MI | 2.04 | 1.836 | 14.10 | 1.586 | 6.889 | 1.841 | 10.03 | 1.992 | 11.98 | 9.29 |
| 115 | 57.000 | TP-115 | 100 | 100 | 100 | 100 | 97 | 70 | 36 | 24 | 12 | CI | 2.13 | 1.852 | 15.25 | 1.593 | 6.055 | 1.856 | 8.83 | 2.000 | 10.81 | 8.20 |
| 116 | 57.500 | TP-116 | 100 | 100 | 100 | 100 | 89 | 76 | 30 | 19 | 11 | CL | 4.35 | 1.825 | 13.60 | 1.570 | 6.556 | 1.830 | 9.95 | 1.971 | 11.84 | 9.17 |
| 117 | 58.000 | TP-117 | 100 | 100 | 100 | 100 | 90 | 78 | 34 | 21 | 13 | CL | 8.33 | 1.795 | 13.80 | 1.553 | 6.017 | 1.802 | 9.10 | 1.944 | 10.97 | 8.35 |

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| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | I.S. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--------------------------------------|-------|---------|---------|-------|------|-----------------|--------|--------|---------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 118 | 58.500 | TP-118 | 100 | 100 | 100 | 96 | 88 | 74 | 37 | 20 | 17 | CI | 11.90 | 1.827 | 13.40 | 1.589 | 4.573 | 1.832 | 6.92 | 1.971 | 8.50 | 6.34 |
| 119 | 59.000 | TP-119 | 100 | 100 | 100 | 100 | 94 | 84 | 33 | 17 | 16 | CL | 4.76 | 1.845 | 14.55 | 1.596 | 4.644 | 1.850 | 7.03 | 1.998 | 8.47 | 6.46 |
| 120 | 59.500 | TP-120 | 100 | 100 | 100 | 100 | 98 | 66 | 36 | 26 | 10 | MI | 0.00 | 1.924 | 14.30 | 1.655 | 7.805 | 1.930 | 11.25 | 2.078 | 13.73 | 10.45 |
| 121 | 60.000 | TP-121 | 100 | 100 | 100 | 100 | 96 | 67 | 30 | 22 | 9 | CL | 0.00 | 1.951 | 11.50 | 1.678 | 11.122 | 1.830 | 16.03 | 2.107 | 19.57 | 16.83 |
| 122 | 60.500 | TP-122 | 100 | 100 | 100 | 100 | 97 | 77 | 34 | 22 | 12 | CL | 4.35 | 1.850 | 14.70 | 1.674 | 8.163 | 1.857 | 11.20 | 2.009 | 13.82 | 10.16 |
| 123 | 61.000 | TP-123 | 100 | 100 | 100 | 100 | 98 | 77 | 37 | 25 | 12 | MI | 0.00 | 1.860 | 14.80 | 1.687 | 6.449 | 1.865 | 9.20 | 2.141 | 11.67 | 8.26 |
| 124 | 61.500 | TP-124 | 100 | 100 | 100 | 100 | 98 | 71 | 39 | 32 | 8 | MI | 0.00 | 1.842 | 14.50 | 1.586 | 7.696 | 1.848 | 11.19 | 1.997 | 13.55 | 10.37 |
| 125 | 62.000 | TP-125 | 100 | 100 | 100 | 100 | 99 | 83 | 36 | 28 | 8 | MI | 0.00 | 1.824 | 15.10 | 1.651 | 6.199 | 1.848 | 9.38 | 1.977 | 11.30 | 8.11 |
| 126 | 62.500 | TP-126 | 100 | 100 | 100 | 100 | 100 | 94 | 35 | 23 | 12 | CL | 2.00 | 1.805 | 15.60 | 1.559 | 5.976 | 1.811 | 8.70 | 1.958 | 10.40 | 8.05 |
| 127 | 63.000 | TP-127 | 100 | 100 | 100 | 100 | 100 | 93 | 36 | 23 | 12 | CI | 0.00 | 1.812 | 15.50 | 1.653 | 5.887 | 1.818 | 8.09 | 2.013 | 9.61 | 7.28 |

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| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | I.S. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--|-------|---------|---------|-------|------|-----------------|--------|--------|---------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 128 | 63.500 | TP-128 | 100 | 100 | 100 | 100 | 100 | 98 | 41 | 28 | 14 | MI | 2.04 | 1.801 | 15.70 | 1.556 | 4.472 | 1.802 | 6.56 | 2.015 | 7.86 | 6.09 |
| 129 | 64.000 | TP-129 | 100 | 100 | 100 | 100 | 100 | 96 | 42 | 29 | 13 | MI | 2.08 | 1.815 | 15.60 | 1.546 | 5.237 | 1.816 | 7.65 | 1.966 | 9.14 | 7.15 |
| 130 | 64.500 | TP-130 | 100 | 100 | 95 | 91 | 68 | 57 | 30 | 21 | 9 | CL | 11.11 | 1.975 | 12.75 | 1.787 | 13.319 | 1.909 | 19.19 | 2.145 | 23.43 | 19.31 |
| 131 | 65.000 | TP-131 | Trial pit excavation was not possible due to Filling zone. | | | | | | | | | | | | | | | | | | | |
| 132 | 65.500 | TP-132 | 100 | 100 | 100 | 98 | 85 | 75 | 28 | 19 | 8 | CL | 4.76 | 1.848 | 15.30 | 1.663 | 7.657 | 1.850 | 11.34 | 2.075 | 13.64 | 10.21 |
| 133 | 66.000 | TP-133 | Trial pit excavation was not possible due to congested area. | | | | | | | | | | | | | | | | | | | |
| 134 | 66.500 | TP-134 | 100 | 100 | 100 | 100 | 95 | 89 | 40 | 25 | 14 | MI | 6.52 | 1.805 | 14.75 | 1.615 | 5.678 | 1.810 | 8.32 | 1.986 | 10.00 | 7.52 |
| 135 | 67.000 | TP-135 | 100 | 100 | 100 | 100 | 94 | 89 | 47 | 26 | 21 | CI | 4.55 | 1.796 | 14.90 | 1.545 | 3.904 | 1.801 | 5.63 | 1.940 | 6.87 | 5.23 |
| 136 | 67.500 | TP-136 | 100 | 100 | 100 | 100 | 100 | 95 | 42 | 25 | 17 | CI | 1.96 | 1.755 | 15.60 | 1.508 | 4.092 | 1.761 | 6.73 | 1.895 | 8.08 | 6.12 |
| 137 | 68.000 | TP-137 | 100 | 100 | 100 | 100 | 96 | 90 | 44 | 23 | 21 | CI | 2.55 | 1.707 | 17.00 | 1.494 | 1.762 | 1.658 | 2.49 | 1.864 | 3.14 | 2.48 |

| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | I.S. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--|-------|---------|---------|-------|------|-----------------|--------|--------|---------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 138 | 68.500 | TP-138 | Trial pit excavation was not possible due to congested area. | | | | | | | | | | | | | | | | | | | |
| 139 | 69.000 | TP-139 | Trial pit excavation was not possible due to congested area. | | | | | | | | | | | | | | | | | | | |
| 140 | 69.500 | TP-140 | Trial pit excavation was not possible due to congested area. | | | | | | | | | | | | | | | | | | | |
| 141 | 70.000 | TP-141 | Trial pit excavation was not possible due to congested area. | | | | | | | | | | | | | | | | | | | |
| 142 | 70.500 | TP-142 | Trial pit excavation was not possible due to congested area. | | | | | | | | | | | | | | | | | | | |
| 143 | 71.000 | TP-143 | Trial pit excavation was not possible due to Major Bridge. | | | | | | | | | | | | | | | | | | | |
| 144 | 71.500 | TP-144 | Trial pit excavation was not possible due to Major Bridge. | | | | | | | | | | | | | | | | | | | |
| 145 | 72.000 | TP-145 | Trial pit excavation was not possible due to Major Bridge. | | | | | | | | | | | | | | | | | | | |
| 146 | 72.500 | TP-146 | Trial pit excavation was not possible due to Major Bridge. | | | | | | | | | | | | | | | | | | | |
| 147 | 73.000 | TP-147 | Trial pit excavation was not possible due to Major Bridge. | | | | | | | | | | | | | | | | | | | |

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| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | I.S. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--|-------|---------|---------|-------|------|-----------------|--------|--------|---------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 148 | 73.500 | TP-148 | Trial pit excavation was not possible due to Major Bridge. | | | | | | | | | | | | | | | | | | | |
| 149 | 74.000 | TP-149 | Trial pit excavation was not possible due to Major Bridge. | | | | | | | | | | | | | | | | | | | |
| 150 | 74.500 | TP-150 | Trial pit excavation was not possible due to Major Bridge. | | | | | | | | | | | | | | | | | | | |
| 151 | 75.000 | TP-151 | 100 | 100 | 97 | 91 | 71 | 56 | 41 | 27 | 13 | MI | 6.67 | 1.893 | 11.10 | 1.630 | 6.599 | 1.833 | 10.15 | 2.052 | 12.08 | 20.18 |
| 152 | 75.500 | TP-152 | 100 | 100 | 97 | 93 | 79 | 67 | 41 | 26 | 16 | MI | 6.78 | 1.880 | 12.10 | 1.624 | 6.866 | 1.886 | 9.99 | 2.040 | 11.94 | 9.25 |
| 153 | 76.000 | TP-153 | 100 | 100 | 97 | 92 | 67 | 28 | 32 | 21 | 11 | SC | 4.76 | 2.065 | 10.22 | 1.774 | 18.912 | 2.058 | 27.02 | 2.286 | 33.31 | 25.45 |
| 154 | 76.500 | TP-154 | 100 | 100 | 97 | 93 | 68 | 29 | 41 | 27 | 14 | SM | 4.76 | 2.059 | 9.80 | 1.863 | 18.957 | 2.051 | 27.32 | 2.236 | 33.35 | 24.92 |
| 155 | 77.000 | TP-155 | 100 | 95 | 91 | 82 | 46 | 30 | 43 | 33 | 9 | SM | 4.26 | 2.051 | 10.25 | 1.840 | 18.643 | 2.048 | 28.38 | 2.223 | 34.19 | 25.64 |
| 156 | 77.500 | TP-156 | 100 | 100 | 88 | 79 | 52 | 25 | 42 | 27 | 14 | SM | 2.17 | 2.080 | 9.25 | 1.796 | 26.352 | 2.065 | 38.36 | 2.257 | 45.84 | 36.24 |
| 157 | 78.000 | TP-157 | 100 | 100 | 96 | 88 | 59 | 31 | 49 | 38 | 11 | SM | 6.67 | 2.048 | 10.40 | 1.759 | 20.942 | 2.035 | 29.92 | 2.267 | 36.89 | 28.34 |

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| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | I.S. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--------------------------------------|-------|---------|---------|-------|------|-----------------|--------|--------|---------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 158 | 78.500 | TP-158 | 100 | 100 | 97 | 91 | 68 | 44 | 45 | 35 | 10 | SM | 2.13 | 1.975 | 13.10 | 1.750 | 16.321 | 1.965 | 24.18 | 2.202 | 29.06 | 22.38 |
| 159 | 79.000 | TP-159 | 100 | 100 | 100 | 100 | 100 | 96 | 49 | 36 | 12 | MI | 10.20 | 1.895 | 15.65 | 1.630 | 4.290 | 1.875 | 6.49 | 2.028 | 7.82 | 6.16 |
| 160 | 79.500 | TP-160 | 100 | 100 | 94 | 89 | 72 | 60 | 46 | 32 | 14 | MI | 8.33 | 1.908 | 10.90 | 1.629 | 5.888 | 1.890 | 8.63 | 2.030 | 10.37 | 8.22 |
| 161 | 80.000 | TP-161 | 100 | 100 | 96 | 89 | 67 | 54 | 53 | 36 | 17 | MH | 8.33 | 1.956 | 11.90 | 1.751 | 5.846 | 1.962 | 8.39 | 2.152 | 10.02 | 7.61 |
| 162 | 80.500 | TP-162 | 100 | 100 | 95 | 87 | 65 | 52 | 54 | 36 | 18 | MH | 7.50 | 1.962 | 12.75 | 1.694 | 6.035 | 1.950 | 8.78 | 2.129 | 10.50 | 8.28 |
| 163 | 81.000 | TP-163 | 100 | 100 | 100 | 100 | 100 | 97 | 54 | 31 | 23 | MH | 4.00 | 1.744 | 19.25 | 1.482 | 3.179 | 1.697 | 4.37 | 1.908 | 5.19 | 4.34 |
| 164 | 81.500 | TP-164 | 100 | 100 | 100 | 100 | 100 | 94 | 49 | 26 | 23 | CI | 8.33 | 1.805 | 15.60 | 1.534 | 3.496 | 1.800 | 4.80 | 1.975 | 5.71 | 4.56 |
| 165 | 82.000 | TP-165 | 100 | 100 | 96 | 90 | 64 | 35 | 34 | 22 | 12 | SC | 4.00 | 2.025 | 11.00 | 1.725 | 13.312 | 2.018 | 19.43 | 2.193 | 23.22 | 18.31 |
| 166 | 82.500 | TP-166 | 100 | 100 | 97 | 92 | 66 | 37 | 35 | 21 | 14 | SC | 6.60 | 2.014 | 11.70 | 1.716 | 10.901 | 2.001 | 16.44 | 2.181 | 19.61 | 15.52 |
| 167 | 83.000 | TP-167 | 100 | 100 | 98 | 91 | 68 | 46 | 48 | 35 | 13 | SM | 8.33 | 1.966 | 13.40 | 1.779 | 15.673 | 1.970 | 22.33 | 2.131 | 27.08 | 20.13 |

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| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | I.S. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|---|-------|---------|---------|-------|------|-----------------|--------|--------|---------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 168 | 83.500 | TP-168 | 100 | 100 | 98 | 94 | 77 | 61 | 49 | 33 | 15 | MI | 8.33 | 1.826 | 15.60 | 1.559 | 6.683 | 1.831 | 10.22 | 1.943 | 12.00 | 9.44 |
| 169 | 84.000 | TP-169 | 100 | 93 | 87 | 80 | 58 | 45 | 48 | 32 | 16 | SM | 4.26 | 1.972 | 13.20 | 1.765 | 13.491 | 1.960 | 19.78 | 2.169 | 23.76 | 18.26 |
| 170 | 84.500 | TP-170 | Trial pit excavation was not possible due to Junction Area. | | | | | | | | | | | | | | | | | | | |
| 171 | 85.000 | TP-171 | 100 | 100 | 100 | 100 | 94 | 87 | 41 | 22 | 19 | CI | 12.82 | 1.825 | 14.00 | 1.633 | 5.110 | 1.761 | 7.49 | 2.008 | 9.00 | 7.55 |
| 172 | 85.500 | TP-172 | 100 | 100 | 100 | 100 | 100 | 94 | 32 | 21 | 11 | CL | 4.76 | 1.858 | 15.60 | 1.553 | 5.663 | 1.850 | 8.57 | 2.090 | 10.58 | 8.10 |
| 173 | 86.000 | TP-173 | 100 | 100 | 100 | 100 | 96 | 88 | 36 | 22 | 14 | CI | 9.09 | 1.840 | 14.90 | 1.650 | 5.379 | 1.830 | 8.19 | 1.995 | 9.87 | 7.48 |
| 174 | 86.500 | TP-174 | 100 | 100 | 100 | 100 | 97 | 91 | 33 | 19 | 14 | CL | 4.76 | 1.845 | 15.10 | 1.568 | 5.082 | 1.832 | 7.46 | 2.018 | 8.98 | 7.08 |
| 175 | 87.000 | TP-175 | 100 | 100 | 100 | 100 | 98 | 86 | 32 | 20 | 11 | CL | 10.00 | 1.835 | 15.18 | 1.661 | 6.303 | 1.825 | 9.08 | 1.993 | 11.09 | 8.32 |
| 176 | 87.500 | TP-176 | 100 | 100 | 100 | 100 | 93 | 80 | 31 | 20 | 11 | CL | 9.50 | 1.808 | 14.20 | 1.557 | 6.265 | 1.750 | 9.11 | 1.960 | 11.03 | 9.14 |
| 177 | 88.000 | TP-177 | 100 | 100 | 100 | 100 | 92 | 82 | 30 | 19 | 11 | CL | 9.09 | 1.787 | 14.45 | 1.543 | 6.283 | 1.740 | 9.15 | 1.939 | 10.93 | 9.05 |

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|-------|--------------------------|------------|--------------------------------------|-------|---------|---------|-------|------|-----------------|--------|--------|---------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 178 | 88.500 | TP-178 | 100 | 100 | 100 | 97 | 91 | 81 | 39 | 23 | 16 | CI | 5.00 | 1.767 | 14.06 | 1.599 | 5.317 | 1.725 | 7.29 | 1.919 | 9.00 | 7.12 |
| 179 | 89.000 | TP-179 | 100 | 100 | 100 | 100 | 95 | 83 | 35 | 22 | 13 | CI | 3.50 | 1.909 | 12.00 | 1.651 | 5.446 | 1.840 | 8.24 | 2.067 | 9.93 | 8.32 |
| 180 | 89.500 | TP-180 | 100 | 100 | 100 | 100 | 92 | 81 | 33 | 19 | 14 | CL | 2.27 | 1.885 | 14.15 | 1.606 | 5.361 | 1.810 | 8.09 | 2.041 | 9.65 | 8.21 |
| 181 | 90.000 | TP-181 | 100 | 100 | 90 | 83 | 50 | 35 | 48 | 33 | 14 | SM | 4.76 | 2.024 | 11.20 | 1.847 | 16.159 | 2.000 | 22.20 | 2.249 | 26.38 | 20.75 |
| 182 | 90.500 | TP-182 | 100 | 100 | 97 | 89 | 58 | 40 | 49 | 36 | 13 | SM | 2.50 | 1.996 | 12.30 | 1.727 | 11.889 | 1.925 | 17.99 | 2.162 | 21.67 | 18.16 |
| 183 | 91.000 | TP-183 | 100 | 100 | 100 | 95 | 62 | 37 | 46 | 31 | 15 | SM | 4.76 | 2.014 | 11.64 | 1.732 | 13.382 | 1.945 | 20.31 | 2.175 | 24.16 | 20.45 |
| 184 | 91.500 | TP-184 | 100 | 100 | 98 | 93 | 62 | 34 | 45 | 31 | 14 | SM | 4.76 | 2.028 | 11.12 | 1.815 | 15.164 | 1.930 | 21.76 | 2.231 | 26.00 | 22.28 |
| 185 | 92.000 | TP-185 | 100 | 100 | 96 | 91 | 75 | 59 | 58 | 37 | 21 | MH | 9.52 | 1.793 | 12.27 | 1.535 | 5.562 | 1.799 | 8.02 | 1.958 | 9.79 | 7.46 |
| 186 | 92.500 | TP-186 | 100 | 100 | 96 | 91 | 77 | 65 | 59 | 38 | 21 | MH | 9.09 | 1.831 | 12.90 | 1.624 | 5.426 | 1.836 | 7.45 | 1.987 | 8.90 | 6.88 |
| 187 | 93.000 | TP-187 | 100 | 100 | 99 | 96 | 76 | 53 | 43 | 25 | 18 | CI | 10.50 | 1.848 | 12.45 | 1.637 | 6.546 | 1.852 | 9.05 | 2.061 | 10.88 | 8.36 |

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| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | I.S. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--------------------------------------|-------|---------|---------|-------|------|-----------------|--------|--------|---------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 188 | 93.500 | TP-188 | 100 | 100 | 99 | 96 | 77 | 60 | 43 | 25 | 18 | CI | 5.00 | 1.854 | 11.62 | 1.594 | 6.194 | 1.859 | 8.89 | 2.002 | 10.62 | 8.27 |
| 189 | 94.000 | TP-189 | 100 | 100 | 98 | 94 | 73 | 60 | 55 | 36 | 19 | MH | 6.82 | 1.890 | 11.06 | 1.703 | 5.986 | 1.894 | 9.07 | 2.189 | 10.79 | 8.09 |
| 190 | 94.500 | TP-190 | 100 | 100 | 98 | 94 | 81 | 69 | 57 | 37 | 20 | MH | 5.50 | 1.782 | 12.35 | 1.515 | 4.866 | 1.788 | 7.35 | 1.951 | 8.95 | 6.81 |
| 191 | 95.000 | TP-191 | 100 | 100 | 100 | 100 | 100 | 93 | 39 | 22 | 17 | CI | 4.35 | 1.832 | 15.20 | 1.557 | 4.994 | 1.771 | 6.86 | 2.004 | 8.15 | 6.89 |
| 192 | 95.500 | TP-192 | 100 | 100 | 100 | 100 | 99 | 86 | 37 | 21 | 16 | CI | 6.82 | 1.927 | 15.18 | 1.725 | 5.289 | 1.935 | 7.26 | 2.120 | 8.95 | 6.64 |
| 193 | 96.000 | TP-193 | 100 | 100 | 93 | 88 | 63 | 42 | 33 | 19 | 14 | SC | 4.55 | 1.990 | 12.53 | 1.765 | 10.767 | 1.995 | 15.45 | 2.159 | 18.46 | 14.13 |
| 194 | 96.500 | TP-194 | 100 | 100 | 100 | 100 | 91 | 84 | 41 | 24 | 17 | CI | 15.00 | 1.853 | 14.17 | 1.595 | 5.080 | 1.861 | 7.03 | 2.009 | 8.45 | 6.56 |
| 195 | 97.000 | TP-195 | 100 | 100 | 100 | 98 | 91 | 88 | 41 | 24 | 17 | CI | 12.25 | 1.808 | 14.20 | 1.602 | 4.596 | 1.812 | 7.09 | 2.016 | 8.47 | 6.40 |
| 196 | 97.500 | TP-196 | 100 | 100 | 100 | 100 | 100 | 93 | 39 | 21 | 18 | CI | 9.09 | 1.812 | 15.54 | 1.634 | 4.041 | 1.817 | 6.53 | 1.999 | 7.81 | 5.72 |
| 197 | 98.000 | TP-197 | 100 | 100 | 100 | 100 | 100 | 92 | 59 | 39 | 20 | MH | 18.18 | 1.820 | 15.52 | 1.558 | 3.889 | 1.828 | 5.56 | 1.987 | 6.85 | 5.17 |

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| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | I.S. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--|-------|---------|---------|-------|------|-----------------|--------|--------|---------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 198 | 98.500 | TP-198 | Trial pit excavation was not possible due to congested area. | | | | | | | | | | | | | | | | | | | |
| 199 | 99.000 | TP-199 | 100 | 100 | 100 | 100 | 92 | 83 | 36 | 21 | 15 | CI | 10.25 | 1.865 | 14.50 | 1.623 | 9.678 | 1.798 | 14.64 | 2.012 | 17.99 | 14.81 |
| 200 | 99.500 | TP-200 | 100 | 100 | 100 | 100 | 97 | 36 | 31 | 24 | 7 | SM | 2.50 | 2.022 | 11.34 | 1.845 | 22.451 | 2.027 | 34.65 | 2.246 | 41.40 | 30.25 |
| 201 | 100.000 | TP-201 | 100 | 100 | 100 | 100 | 90 | 83 | 38 | 23 | 15 | CI | 4.76 | 1.725 | 13.95 | 1.585 | 6.487 | 1.729 | 9.73 | 1.875 | 11.60 | 8.47 |
| 202 | 100.500 | TP-202 | Trial pit excavation was not possible due to congested area. | | | | | | | | | | | | | | | | | | | |
| 203 | 101.000 | TP-203 | Trial pit excavation was not possible due to congested area. | | | | | | | | | | | | | | | | | | | |
| 204 | 101.500 | TP-204 | Trial pit excavation was not possible due to Major Bridge. | | | | | | | | | | | | | | | | | | | |
| 205 | 102.000 | TP-205 | 100 | 100 | 100 | 100 | 94 | 39 | 32 | 21 | 11 | SC | 2.44 | 2.004 | 12.01 | 1.800 | 13.081 | 2.012 | 21.13 | 2.174 | 25.30 | 18.55 |
| 206 | 102.500 | TP-206 | 100 | 100 | 100 | 100 | 95 | 48 | 32 | 20 | 12 | SC | 2.50 | 1.958 | 13.70 | 1.766 | 11.036 | 1.962 | 16.09 | 2.160 | 19.71 | 14.47 |
| 207 | 103.000 | TP-207 | 100 | 100 | 100 | 97 | 88 | 82 | 49 | 23 | 25 | CI | 4.35 | 1.694 | 13.74 | 1.482 | 3.558 | 1.680 | 4.89 | 1.850 | 5.84 | 4.64 |

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| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | I.S. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--------------------------------------|-------|---------|---------|-------|------|-----------------|--------|--------|---------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 208 | 103.500 | TP-208 | 100 | 100 | 100 | 100 | 97 | 91 | 46 | 25 | 21 | CI | 15.91 | 1.840 | 15.03 | 1.589 | 4.502 | 1.849 | 6.54 | 1.996 | 7.93 | 6.04 |
| 209 | 104.000 | TP-209 | 100 | 100 | 100 | 98 | 92 | 86 | 48 | 26 | 21 | CI | 8.33 | 1.749 | 14.28 | 1.478 | 6.102 | 1.753 | 8.75 | 1.905 | 10.45 | 8.21 |
| 210 | 104.500 | TP-210 | 100 | 100 | 100 | 100 | 94 | 88 | 44 | 23 | 21 | CI | 8.33 | 1.785 | 14.57 | 1.608 | 5.524 | 1.790 | 8.04 | 1.940 | 9.61 | 7.23 |
| 211 | 105.000 | TP-211 | 100 | 100 | 100 | 100 | 100 | 95 | 47 | 26 | 21 | CI | 6.52 | 1.745 | 17.00 | 1.499 | 3.985 | 1.698 | 5.69 | 1.932 | 7.02 | 5.65 |
| 212 | 105.500 | TP-212 | 100 | 96 | 90 | 87 | 74 | 62 | 42 | 27 | 15 | MI | 6.67 | 1.456 | 11.24 | 1.252 | 7.035 | 1.462 | 10.72 | 1.572 | 12.89 | 9.85 |
| 213 | 106.000 | TP-213 | 100 | 100 | 100 | 100 | 91 | 82 | 57 | 31 | 27 | MH | 8.33 | 1.824 | 16.30 | 1.651 | 4.415 | 1.829 | 6.36 | 1.981 | 7.77 | 5.71 |
| 214 | 106.500 | TP-214 | 100 | 100 | 100 | 100 | 95 | 89 | 53 | 26 | 27 | CH | 9.25 | 1.825 | 16.25 | 1.633 | 3.594 | 1.830 | 5.27 | 2.008 | 6.33 | 4.76 |
| 215 | 107.000 | TP-215 | 100 | 100 | 100 | 100 | 92 | 86 | 45 | 25 | 20 | CI | 6.60 | 1.798 | 16.90 | 1.544 | 4.401 | 1.806 | 6.29 | 1.990 | 7.75 | 5.84 |
| 216 | 107.500 | TP-216 | 100 | 100 | 100 | 100 | 92 | 84 | 34 | 20 | 13 | CL | 4.00 | 1.825 | 15.75 | 1.555 | 6.153 | 1.831 | 8.98 | 1.976 | 10.73 | 8.36 |
| 217 | 108.000 | TP-217 | 100 | 100 | 100 | 100 | 92 | 85 | 37 | 21 | 16 | CI | 4.00 | 1.820 | 15.90 | 1.572 | 5.076 | 1.801 | 7.39 | 1.975 | 8.83 | 7.03 |

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| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | I.S. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--|-------|---------|---------|-------|------|-----------------|--------|--------|---------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 218 | 108.500 | TP-218 | 100 | 100 | 98 | 96 | 92 | 87 | 32 | 20 | 12 | CL | 4.50 | 1.781 | 16.45 | 1.549 | 6.074 | 1.787 | 9.19 | 1.922 | 11.29 | 8.41 |
| 219 | 109.000 | TP-219 | 100 | 100 | 100 | 100 | 90 | 80 | 45 | 24 | 21 | CI | 5.00 | 1.830 | 15.90 | 1.574 | 4.418 | 1.835 | 6.70 | 1.976 | 7.98 | 6.18 |
| 220 | 109.500 | TP-220 | 100 | 100 | 100 | 100 | 89 | 80 | 45 | 23 | 21 | CI | 2.13 | 1.817 | 16.42 | 1.544 | 4.948 | 1.824 | 6.80 | 1.988 | 8.08 | 6.39 |
| 221 | 110.000 | TP-221 | 100 | 100 | 97 | 96 | 90 | 84 | 30 | 20 | 11 | CL | 6.98 | 1.821 | 14.50 | 1.566 | 7.032 | 1.825 | 10.13 | 1.967 | 12.37 | 9.43 |
| 222 | 110.500 | TP-222 | 100 | 100 | 100 | 94 | 75 | 61 | 32 | 19 | 13 | CL | 7.50 | 1.882 | 13.50 | 1.628 | 9.069 | 1.886 | 13.72 | 2.038 | 16.53 | 12.63 |
| 223 | 111.000 | TP-223 | 100 | 100 | 97 | 94 | 81 | 66 | 33 | 20 | 13 | CL | 5.50 | 1.874 | 12.05 | 1.640 | 8.766 | 1.878 | 12.40 | 2.046 | 15.63 | 11.48 |
| 224 | 111.500 | TP-224 | 100 | 100 | 97 | 94 | 79 | 62 | 30 | 19 | 11 | CL | 9.50 | 1.875 | 15.10 | 1.584 | 7.838 | 1.883 | 11.61 | 2.042 | 13.70 | 10.80 |
| 225 | 112.000 | TP-225 | 100 | 100 | 97 | 94 | 83 | 58 | 32 | 20 | 12 | CL | 10.00 | 1.930 | 13.15 | 1.747 | 7.322 | 1.934 | 11.83 | 2.092 | 14.16 | 10.34 |
| 226 | 112.500 | TP-226 | 100 | 100 | 100 | 100 | 91 | 68 | 32 | 20 | 12 | CL | 8.33 | 1.875 | 15.25 | 1.637 | 5.962 | 1.878 | 9.07 | 2.085 | 10.94 | 8.31 |
| 227 | 113.000 | TP-227 | Trial pit excavation was not possible due to congested area. | | | | | | | | | | | | | | | | | | | |

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| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | I.S. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--|-------|---------|---------|-------|------|-----------------|--------|--------|---------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 228 | 113.500 | TP-228 | Trial pit excavation was not possible due to congested area. | | | | | | | | | | | | | | | | | | | |
| 229 | 114.000 | TP-229 | Trial pit excavation was not possible due to congested area. | | | | | | | | | | | | | | | | | | | |
| 230 | 114.500 | TP-230 | Trial pit excavation was not possible due to congested area. | | | | | | | | | | | | | | | | | | | |
| 231 | 115.000 | TP-231 | 100 | 100 | 100 | 100 | 98 | 90 | 40 | 24 | 16 | CI | 9.52 | 1.820 | 15.00 | 1.567 | 5.651 | 1.761 | 8.69 | 1.973 | 10.35 | 8.73 |
| 232 | 115.500 | TP-232 | 100 | 100 | 100 | 100 | 93 | 85 | 36 | 21 | 15 | CI | 7.50 | 1.805 | 16.45 | 1.538 | 6.242 | 1.807 | 9.25 | 1.955 | 10.91 | 8.62 |
| 233 | 116.000 | TP-233 | 100 | 100 | 100 | 100 | 88 | 29 | 31 | 18 | 13 | SC | 2.70 | 1.985 | 10.42 | 1.788 | 15.854 | 1.989 | 25.61 | 2.158 | 30.66 | 22.52 |
| 234 | 116.500 | TP-234 | 100 | 100 | 100 | 100 | 89 | 37 | 29 | 20 | 9 | SC | 5.13 | 1.965 | 10.95 | 1.741 | 14.760 | 1.967 | 20.42 | 2.191 | 24.54 | 18.89 |
| 235 | 117.000 | TP-235 | 100 | 100 | 95 | 91 | 81 | 75 | 34 | 20 | 14 | CL | 16.67 | 1.844 | 14.55 | 1.595 | 6.413 | 1.848 | 9.35 | 1.997 | 11.45 | 8.66 |
| 236 | 117.500 | TP-236 | 100 | 100 | 97 | 92 | 82 | 75 | 33 | 19 | 14 | CL | 0.00 | 1.838 | 14.15 | 1.621 | 6.082 | 1.842 | 9.36 | 2.005 | 11.13 | 8.48 |
| 237 | 118.000 | TP-237 | 100 | 100 | 100 | 100 | 88 | 72 | 28 | 18 | 10 | CL | 0.00 | 1.840 | 15.90 | 1.568 | 6.884 | 1.845 | 9.92 | 1.993 | 12.11 | 9.26 |

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| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | I.S. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--------------------------------------|-------|---------|---------|-------|------|-----------------|--------|--------|---------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| | | | | | | | | | | | | | | | | | | | | | | |
| 238 | 118.500 | TP-238 | 100 | 100 | 100 | 98 | 86 | 70 | 27 | 16 | 11 | CL | 4.76 | 1.862 | 14.25 | 1.599 | 7.836 | 1.867 | 11.19 | 2.061 | 13.80 | 10.43 |
| 239 | 119.000 | TP-239 | 100 | 100 | 100 | 100 | 79 | 35 | 27 | 20 | 7 | SC | 2.08 | 2.002 | 9.87 | 1.804 | 19.410 | 2.008 | 29.86 | 2.250 | 35.53 | 26.48 |
| 240 | 119.500 | TP-240 | 100 | 100 | 100 | 100 | 89 | 44 | 26 | 21 | 5 | SM-SC | 0.00 | 1.960 | 10.90 | 1.723 | 15.013 | 1.963 | 22.89 | 2.134 | 27.51 | 20.86 |
| 241 | 120.000 | TP-241 | 100 | 100 | 100 | 99 | 83 | 39 | 31 | 19 | 12 | SC | 0.00 | 1.988 | 9.25 | 1.712 | 11.600 | 1.915 | 17.85 | 2.155 | 21.24 | 18.04 |
| 242 | 120.500 | TP-242 | 100 | 100 | 100 | 100 | 84 | 39 | 27 | 18 | 9 | SC | 5.00 | 1.976 | 10.45 | 1.816 | 17.385 | 1.978 | 25.31 | 2.148 | 30.57 | 22.31 |
| 243 | 121.000 | TP-243 | 100 | 100 | 100 | 99 | 85 | 44 | 27 | 17 | 9 | SC | 2.50 | 1.938 | 11.25 | 1.740 | 7.257 | 1.941 | 10.93 | 2.103 | 13.05 | 9.81 |
| 244 | 121.500 | TP-244 | 100 | 100 | 94 | 90 | 73 | 51 | 28 | 18 | 10 | CL | 5.41 | 1.962 | 10.40 | 1.762 | 10.893 | 1.969 | 16.50 | 2.129 | 19.64 | 14.72 |
| 245 | 122.000 | TP-245 | 100 | 100 | 98 | 93 | 73 | 61 | 44 | 29 | 15 | MI | 4.35 | 1.870 | 14.30 | 1.627 | 6.587 | 1.878 | 9.38 | 2.018 | 11.38 | 8.67 |
| 246 | 122.500 | TP-246 | 100 | 100 | 98 | 91 | 73 | 59 | 44 | 29 | 15 | MI | 4.35 | 1.887 | 12.70 | 1.708 | 6.230 | 1.890 | 9.45 | 2.049 | 11.25 | 8.40 |
| 247 | 123.000 | TP-247 | 100 | 100 | 98 | 91 | 65 | 48 | 43 | 29 | 14 | SM | 18.18 | 1.962 | 11.60 | 1.654 | 13.615 | 1.968 | 22.39 | 2.148 | 26.87 | 20.58 |

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|-------|--------------------------|------------|--------------------------------------|-------|---------|---------|-------|------|-----------------|--------|--------|---------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 248 | 123.500 | TP-248 | 100 | 100 | 100 | 92 | 65 | 48 | 40 | 25 | 15 | SC | 9.09 | 1.977 | 12.05 | 1.680 | 13.004 | 1.984 | 19.61 | 2.165 | 23.40 | 18.17 |
| 249 | 124.000 | TP-249 | 100 | 96 | 93 | 89 | 69 | 45 | 27 | 19 | 8 | SC | 5.00 | 1.907 | 12.06 | 1.665 | 18.238 | 1.909 | 26.28 | 2.121 | 32.09 | 24.33 |
| 250 | 124.500 | TP-250 | 100 | 100 | 100 | 96 | 76 | 48 | 27 | 19 | 8 | SC | 5.13 | 1.932 | 11.05 | 1.671 | 7.752 | 1.938 | 11.30 | 2.092 | 13.84 | 10.45 |
| 251 | 125.000 | TP-251 | 100 | 100 | 100 | 97 | 81 | 72 | 55 | 29 | 26 | CH | 8.00 | 1.714 | 17.50 | 1.472 | 5.784 | 1.665 | 8.26 | 1.897 | 10.19 | 8.23 |
| 252 | 125.500 | TP-252 | 100 | 100 | 100 | 97 | 82 | 74 | 46 | 80 | -34 | MI | 8.33 | 1.855 | 15.25 | 1.577 | 5.174 | 1.861 | 7.88 | 2.029 | 9.49 | 7.29 |
| 253 | 126.000 | TP-253 | 100 | 91 | 82 | 73 | 56 | 47 | 47 | 28 | 19 | SM | 8.33 | 1.925 | 12.10 | 1.729 | 14.178 | 1.932 | 20.61 | 2.089 | 24.96 | 18.56 |
| 254 | 126.500 | TP-254 | 100 | 90 | 80 | 68 | 47 | 37 | 46 | 28 | 18 | SM | 4.35 | 1.950 | 10.08 | 1.630 | 14.359 | 1.953 | 21.62 | 2.194 | 25.82 | 20.24 |
| 255 | 127.000 | TP-255 | 100 | 94 | 91 | 87 | 69 | 54 | 33 | 18 | 15 | CL | 4.76 | 1.917 | 13.15 | 1.647 | 7.536 | 1.924 | 11.16 | 2.070 | 13.17 | 10.32 |
| 256 | 127.500 | TP-256 | 100 | 100 | 100 | 95 | 76 | 59 | 33 | 18 | 15 | CL | 2.50 | 1.910 | 12.60 | 1.709 | 7.284 | 1.914 | 10.41 | 2.101 | 12.83 | 9.47 |
| 257 | 128.000 | TP-257 | 100 | 100 | 100 | 93 | 74 | 52 | 27 | 19 | 8 | CL | 3.25 | 1.952 | 13.51 | 1.704 | 11.898 | 1.958 | 17.14 | 2.171 | 20.93 | 15.81 |

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|-------|--------------------------|------------|--------------------------------------|-------|---------|---------|-------|------|-----------------|--------|--------|---------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 258 | 128.500 | TP-258 | 100 | 100 | 100 | 96 | 75 | 50 | 29 | 18 | 11 | SC | 0.00 | 1.976 | 12.60 | 1.743 | 10.104 | 1.982 | 16.62 | 2.156 | 19.94 | 14.84 |
| 259 | 129.000 | TP-259 | 100 | 100 | 100 | 92 | 72 | 52 | 34 | 20 | 14 | CL | 9.09 | 1.940 | 14.05 | 1.719 | 6.500 | 1.947 | 9.09 | 2.163 | 11.00 | 8.35 |
| 260 | 129.500 | TP-260 | 100 | 100 | 96 | 89 | 70 | 46 | 32 | 19 | 13 | SC | 9.52 | 1.920 | 11.14 | 1.644 | 10.616 | 1.925 | 15.43 | 2.097 | 18.69 | 14.36 |
| 261 | 130.000 | TP-261 | 100 | 100 | 100 | 100 | 86 | 67 | 26 | 17 | 8 | CL | 12.50 | 2.020 | 8.25 | 1.739 | 8.154 | 1.939 | 12.55 | 2.190 | 14.93 | 12.74 |
| 262 | 130.500 | TP-262 | 100 | 100 | 100 | 99 | 89 | 73 | 27 | 17 | 10 | CL | 15.00 | 1.872 | 15.10 | 1.578 | 6.747 | 1.876 | 10.00 | 2.050 | 12.02 | 9.34 |
| 263 | 131.000 | TP-263 | 100 | 100 | 100 | 100 | 97 | 94 | 52 | 24 | 28 | CH | 2.13 | 1.740 | 18.00 | 1.578 | 3.173 | 1.747 | 4.63 | 2.003 | 5.53 | 4.12 |
| 264 | 131.500 | TP-264 | 100 | 100 | 100 | 100 | 99 | 95 | 50 | 24 | 26 | CI | 3.50 | 1.745 | 18.25 | 1.475 | 3.112 | 1.749 | 4.71 | 1.900 | 5.67 | 4.38 |
| 265 | 132.000 | TP-265 | 100 | 90 | 80 | 68 | 53 | 49 | 45 | 30 | 16 | SM | 4.35 | 1.948 | 11.72 | 1.718 | 11.289 | 1.956 | 17.37 | 2.114 | 20.67 | 15.67 |
| 266 | 132.500 | TP-266 | 100 | 89 | 74 | 64 | 52 | 46 | 45 | 30 | 15 | SM | 4.17 | 1.906 | 10.85 | 1.664 | 11.845 | 1.908 | 18.03 | 2.119 | 21.73 | 16.53 |
| 267 | 133.000 | TP-267 | 100 | 100 | 100 | 100 | 86 | 81 | 45 | 23 | 21 | CI | 4.35 | 1.814 | 15.75 | 1.627 | 5.222 | 1.817 | 7.90 | 1.966 | 9.71 | 7.09 |

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|-------|--------------------------|------------|--------------------------------------|-------|---------|---------|-------|------|-----------------|--------|--------|---------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 268 | 133.500 | TP-268 | 100 | 100 | 100 | 100 | 93 | 87 | 39 | 21 | 18 | CI | 8.70 | 1.782 | 15.95 | 1.606 | 5.639 | 1.788 | 8.04 | 2.003 | 10.20 | 7.26 |
| 269 | 134.000 | TP-269 | 100 | 100 | 100 | 100 | 90 | 58 | 31 | 22 | 9 | CL | 15.00 | 1.925 | 14.30 | 1.648 | 9.357 | 1.929 | 13.64 | 2.102 | 16.71 | 12.70 |
| 270 | 134.500 | TP-270 | 100 | 100 | 100 | 98 | 90 | 62 | 35 | 21 | 14 | CL | 9.09 | 1.866 | 14.60 | 1.683 | 6.256 | 1.873 | 9.48 | 2.058 | 11.28 | 8.41 |
| 271 | 135.000 | TP-271 | 100 | 100 | 100 | 99 | 93 | 88 | 56 | 33 | 23 | MH | 15.91 | 1.611 | 22.00 | 1.394 | 2.338 | 1.556 | 3.54 | 1.745 | 4.26 | 3.56 |
| 272 | 135.500 | TP-272 | 100 | 100 | 100 | 100 | 93 | 87 | 43 | 29 | 14 | MI | 9.09 | 1.815 | 16.15 | 1.668 | 4.632 | 1.822 | 6.61 | 1.973 | 8.38 | 5.82 |
| 273 | 136.000 | TP-273 | 100 | 100 | 100 | 100 | 93 | 88 | 37 | 20 | 18 | CI | 9.09 | 1.825 | 16.35 | 1.570 | 3.848 | 1.831 | 5.86 | 1.971 | 7.06 | 5.39 |
| 274 | 136.500 | TP-274 | 100 | 100 | 100 | 96 | 84 | 77 | 38 | 20 | 18 | CI | 4.55 | 1.812 | 16.10 | 1.567 | 4.793 | 1.820 | 6.97 | 1.962 | 8.44 | 6.43 |
| 275 | 137.000 | TP-275 | 100 | 100 | 100 | 100 | 93 | 87 | 44 | 24 | 20 | CI | 13.04 | 1.804 | 17.25 | 1.521 | 4.160 | 1.809 | 5.88 | 1.975 | 7.42 | 5.53 |
| 276 | 137.500 | TP-276 | 100 | 100 | 98 | 95 | 87 | 82 | 43 | 23 | 20 | CI | 8.33 | 1.844 | 16.30 | 1.578 | 4.264 | 1.850 | 6.14 | 2.014 | 7.50 | 5.72 |
| 277 | 138.000 | TP-277 | 100 | 100 | 98 | 94 | 88 | 82 | 46 | 25 | 20 | CI | 4.35 | 1.804 | 17.20 | 1.533 | 4.205 | 1.809 | 6.12 | 1.975 | 7.39 | 5.71 |

J. Mulu



| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | I.S. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--------------------------------------|-------|---------|---------|-------|------|-----------------|--------|--------|---------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 278 | 138.500 | TP-278 | 100 | 100 | 98 | 93 | 88 | 82 | 46 | 26 | 20 | CI | 2.50 | 1.829 | 15.85 | 1.642 | 4.693 | 1.836 | 6.44 | 1.984 | 7.94 | 5.88 |
| 279 | 139.000 | TP-279 | 100 | 100 | 100 | 100 | 91 | 40 | 25 | 19 | 6 | SM-SC | 0.00 | 1.948 | 11.45 | 1.757 | 20.870 | 1.953 | 31.62 | 2.149 | 37.63 | 28.14 |
| 280 | 139.500 | TP-280 | 100 | 100 | 100 | 100 | 90 | 40 | 25 | 20 | 5 | SM-SC | 2.27 | 1.955 | 11.35 | 1.673 | 20.874 | 1.962 | 31.63 | 2.135 | 37.64 | 29.18 |
| 281 | 140.000 | TP-281 | 100 | 100 | 100 | 98 | 92 | 87 | 35 | 24 | 12 | CI | 6.98 | 1.772 | 17.00 | 1.604 | 6.042 | 1.700 | 9.14 | 1.921 | 10.33 | 9.24 |
| 282 | 140.500 | TP-282 | 100 | 100 | 100 | 97 | 81 | 74 | 46 | 27 | 20 | CI | 15.91 | 1.846 | 14.80 | 1.652 | 5.373 | 1.849 | 8.14 | 2.031 | 9.69 | 7.32 |
| 283 | 141.000 | TP-283 | 100 | 100 | 90 | 80 | 64 | 58 | 47 | 29 | 18 | MI | 6.75 | 1.910 | 12.30 | 1.635 | 6.442 | 1.927 | 9.39 | 2.086 | 11.50 | 8.64 |
| 284 | 141.500 | TP-284 | 100 | 100 | 93 | 84 | 70 | 64 | 78 | 28 | 50 | CH | 4.55 | 1.880 | 12.35 | 1.694 | 3.085 | 1.887 | 4.98 | 2.044 | 5.97 | 4.36 |
| 285 | 142.000 | TP-285 | 100 | 100 | 100 | 98 | 84 | 71 | 34 | 20 | 14 | CL | 3.75 | 1.855 | 16.25 | 1.593 | 6.684 | 1.862 | 9.74 | 2.053 | 11.94 | 9.03 |
| 286 | 142.500 | TP-286 | 100 | 100 | 100 | 100 | 87 | 71 | 35 | 19 | 16 | CL | 2.08 | 1.860 | 16.10 | 1.683 | 5.836 | 1.864 | 9.43 | 2.016 | 11.29 | 8.24 |
| 287 | 143.000 | TP-287 | 100 | 100 | 100 | 96 | 79 | 54 | 24 | 16 | 8 | CL | 2.50 | 1.930 | 12.20 | 1.652 | 8.714 | 1.937 | 13.20 | 2.108 | 15.71 | 12.18 |

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| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | I.S. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--------------------------------------|-------|---------|---------|-------|------|-----------------|--------|--------|---------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 288 | 143.500 | TP-288 | 100 | 100 | 100 | 97 | 79 | 56 | 24 | 16 | 7 | CL | 0.00 | 1.887 | 12.28 | 1.708 | 10.192 | 1.894 | 15.44 | 2.049 | 18.38 | 13.65 |
| 289 | 144.000 | TP-289 | 100 | 100 | 100 | 100 | 92 | 84 | 31 | 20 | 11 | CL | 4.35 | 1.835 | 16.10 | 1.653 | 6.097 | 1.842 | 9.41 | 2.063 | 11.24 | 8.32 |
| 290 | 144.500 | TP-290 | 100 | 100 | 100 | 100 | 89 | 80 | 32 | 21 | 11 | CL | 4.76 | 1.812 | 16.22 | 1.582 | 5.774 | 1.820 | 8.88 | 1.954 | 10.57 | 8.07 |
| 291 | 145.000 | TP-291 | 100 | 100 | 96 | 93 | 86 | 61 | 29 | 16 | 13 | CL | 2.63 | 2.015 | 11.20 | 1.733 | 7.626 | 1.954 | 11.55 | 2.156 | 13.75 | 11.56 |
| 292 | 145.500 | TP-292 | 100 | 100 | 100 | 96 | 82 | 74 | 34 | 20 | 14 | CL | 0.00 | 1.836 | 14.90 | 1.656 | 6.503 | 1.843 | 9.85 | 2.025 | 11.72 | 8.74 |
| 293 | 146.000 | TP-293 | 100 | 100 | 100 | 100 | 92 | 66 | 23 | 15 | 8 | CL | 1.50 | 1.868 | 13.15 | 1.608 | 9.376 | 1.875 | 13.38 | 2.025 | 16.96 | 12.43 |
| 294 | 146.500 | TP-294 | 100 | 100 | 100 | 100 | 93 | 62 | 23 | 17 | 5 | CL-ML | 0.00 | 1.873 | 13.80 | 1.592 | 12.376 | 1.878 | 17.00 | 2.051 | 20.30 | 16.01 |
| 295 | 147.000 | TP-295 | 100 | 100 | 100 | 100 | 96 | 41 | 32 | 22 | 10 | SC | 1.75 | 2.020 | 10.49 | 1.725 | 13.782 | 2.026 | 20.66 | 2.149 | 24.65 | 19.14 |
| 296 | 147.500 | TP-296 | 100 | 100 | 100 | 100 | 95 | 44 | 31 | 20 | 11 | SC | 0.00 | 1.952 | 11.36 | 1.751 | 13.157 | 1.958 | 18.07 | 2.116 | 21.58 | 16.54 |
| 297 | 148.000 | TP-297 | 100 | 100 | 100 | 98 | 86 | 73 | 37 | 23 | 14 | CI | 0.00 | 1.860 | 15.35 | 1.665 | 6.490 | 1.865 | 9.43 | 2.046 | 11.42 | 8.54 |

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| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | I.S. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--------------------------------------|-------|---------|---------|-------|------|-----------------|--------|--------|---------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 298 | 148.500 | TP-298 | 100 | 100 | 100 | 100 | 93 | 82 | 34 | 22 | 12 | CL | 4.55 | 1.835 | 16.55 | 1.642 | 6.802 | 1.839 | 9.89 | 2.019 | 11.97 | 8.96 |
| 299 | 149.000 | TP-299 | 100 | 100 | 100 | 97 | 83 | 64 | 35 | 19 | 16 | CI | 2.33 | 1.871 | 11.25 | 1.633 | 6.538 | 1.878 | 9.95 | 2.081 | 11.99 | 9.07 |
| 300 | 149.500 | TP-300 | 100 | 100 | 100 | 97 | 85 | 69 | 35 | 21 | 14 | CL | 4.76 | 1.864 | 14.30 | 1.622 | 7.088 | 1.869 | 10.30 | 2.011 | 12.48 | 9.51 |
| 301 | 150.000 | TP-301 | 100 | 100 | 100 | 94 | 77 | 60 | 35 | 19 | 16 | CI | 11.90 | 1.816 | 14.50 | 1.625 | 8.236 | 1.753 | 12.08 | 1.998 | 14.50 | 12.16 |
| 302 | 150.500 | TP-302 | 100 | 100 | 100 | 93 | 70 | 50 | 31 | 21 | 10 | CL | 4.76 | 2.009 | 12.05 | 1.720 | 10.593 | 2.015 | 17.11 | 2.194 | 20.48 | 15.65 |
| 303 | 151.000 | TP-303 | 100 | 100 | 100 | 100 | 82 | 42 | 30 | 19 | 11 | SC | 0.00 | 1.956 | 11.95 | 1.762 | 12.065 | 1.963 | 19.49 | 2.126 | 23.33 | 17.06 |
| 304 | 151.500 | TP-304 | 100 | 100 | 100 | 100 | 79 | 32 | 28 | 20 | 7 | SC | 0.00 | 1.981 | 9.50 | 1.706 | 20.347 | 1.986 | 29.19 | 2.163 | 34.86 | 27.16 |
| 305 | 152.000 | TP-305 | 100 | 100 | 96 | 91 | 71 | 41 | 27 | 22 | 5 | SM | 2.33 | 1.990 | 11.30 | 1.737 | 17.607 | 1.998 | 24.19 | 2.146 | 28.88 | 22.48 |
| 306 | 152.500 | TP-306 | 100 | 100 | 97 | 94 | 71 | 39 | 37 | 23 | 14 | SC | 4.88 | 1.943 | 10.32 | 1.678 | 10.778 | 1.948 | 16.63 | 2.108 | 19.88 | 15.26 |
| 307 | 153.000 | TP-307 | 100 | 100 | 100 | 97 | 87 | 68 | 27 | 15 | 12 | CL | 5.00 | 1.865 | 14.75 | 1.682 | 8.216 | 1.869 | 12.45 | 2.057 | 14.81 | 11.09 |

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| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | I.S. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--------------------------------------|-------|---------|---------|-------|------|-----------------|--------|--------|---------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 308 | 153.500 | TP-308 | 100 | 100 | 97 | 94 | 86 | 71 | 34 | 20 | 14 | CL | 0.00 | 1.848 | 15.30 | 1.639 | 6.673 | 1.853 | 9.96 | 2.005 | 11.84 | 9.03 |
| 309 | 154.000 | TP-309 | 100 | 100 | 100 | 100 | 90 | 77 | 34 | 21 | 14 | CL | 15.00 | 1.830 | 14.70 | 1.479 | 6.045 | 1.837 | 9.24 | 1.995 | 10.85 | 8.69 |
| 310 | 154.500 | TP-310 | 100 | 100 | 100 | 100 | 94 | 85 | 34 | 20 | 15 | CL | 9.30 | 1.787 | 15.78 | 1.519 | 6.152 | 1.795 | 8.98 | 1.955 | 10.73 | 8.35 |
| 311 | 155.000 | TP-311 | 100 | 100 | 100 | 100 | 92 | 75 | 34 | 20 | 15 | CL | 12.50 | 1.750 | 15.50 | 1.507 | 5.498 | 1.708 | 8.46 | 1.897 | 10.07 | 8.31 |
| 312 | 155.500 | TP-312 | 100 | 100 | 100 | 100 | 90 | 72 | 30 | 18 | 12 | CL | 0.00 | 1.856 | 14.80 | 1.650 | 7.819 | 1.861 | 11.22 | 2.043 | 13.40 | 10.24 |
| 313 | 156.000 | TP-313 | 100 | 100 | 100 | 100 | 92 | 83 | 28 | 18 | 10 | CL | 7.50 | 1.842 | 15.95 | 1.577 | 6.063 | 1.850 | 8.66 | 2.011 | 10.68 | 8.06 |
| 314 | 156.500 | TP-314 | 100 | 100 | 100 | 100 | 94 | 86 | 29 | 17 | 12 | CL | 13.64 | 1.796 | 16.25 | 1.527 | 5.634 | 1.799 | 7.74 | 1.940 | 9.24 | 7.30 |
| 315 | 157.000 | TP-315 | 100 | 100 | 100 | 100 | 94 | 78 | 29 | 18 | 11 | CL | 0.00 | 1.836 | 16.20 | 1.561 | 5.963 | 1.842 | 8.74 | 2.010 | 10.48 | 8.14 |
| 316 | 157.500 | TP-316 | 100 | 100 | 100 | 100 | 87 | 68 | 29 | 18 | 11 | CL | 0.00 | 1.860 | 14.10 | 1.674 | 7.508 | 1.865 | 10.31 | 2.089 | 12.31 | 9.42 |
| 317 | 158.000 | TP-317 | 100 | 100 | 94 | 92 | 83 | 64 | 30 | 20 | 10 | CL | 10.00 | 1.874 | 13.20 | 1.593 | 7.816 | 1.882 | 11.67 | 2.050 | 13.87 | 4.64 |

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| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | I.S. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--|-------|---------|---------|-------|------|-----------------|--------|--------|---------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| | | | | | | | | | | | | | | | | | | | | | | |
| 318 | 158.500 | TP-318 | 100 | 100 | 100 | 98 | 90 | 64 | 30 | 20 | 10 | CL | 0.00 | 1.870 | 12.75 | 1.706 | 8.070 | 1.876 | 11.70 | 2.078 | 14.02 | 10.37 |
| 319 | 159.000 | TP-319 | 100 | 100 | 97 | 94 | 88 | 83 | 38 | 22 | 17 | CI | 2.27 | 1.827 | 16.60 | 1.580 | 5.029 | 1.836 | 7.31 | 1.979 | 8.85 | 6.74 |
| 320 | 159.500 | TP-320 | 100 | 100 | 100 | 97 | 92 | 86 | 37 | 20 | 17 | CI | 4.26 | 1.784 | 16.90 | 1.609 | 3.709 | 1.790 | 5.99 | 1.968 | 7.17 | 5.24 |
| 321 | 160.000 | TP-321 | 100 | 100 | 98 | 95 | 69 | 51 | 28 | 22 | 6 | CL-ML | 0.00 | 2.005 | 8.75 | 1.815 | 10.323 | 1.933 | 14.87 | 2.177 | 18.16 | 8.47 |
| 322 | 160.500 | TP-322 | Trial pit excavation was not possible due to congested area. | | | | | | | | | | | | | | | | | | | |
| 323 | 161.000 | TP-323 | Trial pit excavation was not possible due to congested area. | | | | | | | | | | | | | | | | | | | |
| 324 | 161.500 | TP-324 | Trial pit excavation was not possible due to congested area. | | | | | | | | | | | | | | | | | | | |
| 325 | 162.000 | TP-325 | Trial pit excavation was not possible due to congested area. | | | | | | | | | | | | | | | | | | | |
| 326 | 162.500 | TP-326 | 100 | 100 | 97 | 94 | 74 | 56 | 26 | 17 | 8 | CL | 0.00 | 1.894 | 12.34 | 1.621 | 8.929 | 1.901 | 13.53 | 2.068 | 16.10 | 12.48 |
| 327 | 163.000 | TP-327 | 100 | 100 | 98 | 97 | 85 | 74 | 24 | 17 | 6 | CL-ML | 12.50 | 1.805 | 15.65 | 1.554 | 6.528 | 1.807 | 9.74 | 1.971 | 11.59 | 9.03 |

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| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | I.S. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--|-------|---------|---------|-------|------|-----------------|--------|--------|---------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 328 | 163.500 | TP-328 | 100 | 100 | 100 | 100 | 87 | 78 | 25 | 18 | 8 | CL | 2.50 | 1.842 | 15.80 | 1.569 | 6.686 | 1.847 | 10.11 | 1.995 | 12.19 | 9.37 |
| 329 | 164.000 | TP-329 | 100 | 100 | 97 | 91 | 72 | 59 | 26 | 17 | 9 | CL | 4.76 | 1.892 | 12.90 | 1.652 | 11.708 | 1.897 | 16.87 | 2.104 | 20.60 | 15.57 |
| 330 | 164.500 | TP-330 | 100 | 100 | 100 | 89 | 69 | 54 | 30 | 18 | 12 | CL | 4.76 | 1.945 | 14.10 | 1.764 | 12.009 | 1.949 | 17.61 | 2.239 | 21.15 | 15.72 |
| 331 | 165.000 | TP-331 | 100 | 96 | 92 | 88 | 70 | 55 | 22 | 17 | 5 | CL-ML | 0.00 | 1.960 | 10.25 | 1.774 | 17.666 | 1.903 | 25.46 | 2.129 | 31.08 | 25.32 |
| 332 | 165.500 | TP-332 | 100 | 95 | 92 | 87 | 66 | 55 | 24 | 18 | 7 | CL-ML | 2.27 | 1.925 | 12.04 | 1.733 | 14.671 | 1.928 | 20.12 | 2.162 | 24.83 | 18.43 |
| 333 | 166.000 | TP-333 | 100 | 100 | 97 | 93 | 84 | 78 | 24 | 16 | 7 | CL | 11.11 | 1.848 | 14.90 | 1.571 | 9.423 | 1.852 | 13.03 | 2.024 | 15.67 | 12.27 |
| 334 | 166.500 | TP-334 | 100 | 100 | 98 | 93 | 85 | 80 | 31 | 17 | 14 | CL | 5.00 | 1.827 | 15.40 | 1.571 | 6.000 | 1.831 | 9.05 | 1.955 | 10.80 | 8.36 |
| 335 | 167.000 | TP-335 | 100 | 89 | 85 | 79 | 59 | 42 | 26 | 16 | 10 | SC | 5.00 | 1.962 | 10.55 | 1.689 | 13.773 | 1.969 | 20.05 | 2.143 | 24.22 | 18.57 |
| 336 | 167.500 | TP-336 | 100 | 100 | 94 | 88 | 67 | 59 | 31 | 17 | 13 | CL | 4.00 | 1.897 | 12.50 | 1.709 | 7.997 | 1.904 | 11.90 | 2.132 | 14.54 | 10.62 |
| 337 | 168.000 | TP-337 | Trial pit excavation was not possible due to congested area. | | | | | | | | | | | | | | | | | | | |

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| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | I.S. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--------------------------------------|-------|---------|---------|-------|------|-----------------|--------|--------|---------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 338 | 168.500 | TP-338 | 100 | 100 | 90 | 82 | 63 | 45 | 30 | 18 | 12 | SC | 0.00 | 1.916 | 11.00 | 1.726 | 12.018 | 1.924 | 17.49 | 2.083 | 20.90 | 15.68 |
| 339 | 169.000 | TP-339 | 100 | 100 | 91 | 85 | 67 | 47 | 22 | 15 | 6 | SM-SC | 0.00 | 1.916 | 11.28 | 1.715 | 17.506 | 1.918 | 26.65 | 2.108 | 32.11 | 23.97 |
| 340 | 169.500 | TP-340 | 100 | 93 | 86 | 79 | 65 | 44 | 27 | 14 | 13 | SC | 7.69 | 1.982 | 11.05 | 1.748 | 10.709 | 1.988 | 16.23 | 2.162 | 19.31 | 14.72 |
| 341 | 170.000 | TP-341 | 100 | 100 | 100 | 100 | 88 | 66 | 21 | 16 | 6 | CL-ML | 4.17 | 2.018 | 8.60 | 1.756 | 10.756 | 1.951 | 16.27 | 2.177 | 20.00 | 16.37 |
| 342 | 170.500 | TP-342 | 100 | 100 | 100 | 97 | 81 | 54 | 22 | 16 | 6 | CL-ML | 5.41 | 1.923 | 12.60 | 1.656 | 10.935 | 1.928 | 16.64 | 2.100 | 20.06 | 15.33 |
| 343 | 171.000 | TP-343 | 100 | 100 | 100 | 100 | 98 | 90 | 34 | 24 | 10 | CL | 4.90 | 1.785 | 17.35 | 1.558 | 6.556 | 1.790 | 9.17 | 1.925 | 11.09 | 8.51 |
| 344 | 171.500 | TP-344 | 100 | 100 | 100 | 100 | 88 | 77 | 37 | 21 | 16 | CI | 4.55 | 1.824 | 15.75 | 1.654 | 5.955 | 1.829 | 8.67 | 2.099 | 10.36 | 7.74 |
| 345 | 172.000 | TP-345 | 100 | 100 | 93 | 90 | 78 | 60 | 22 | 15 | 7 | CL-ML | 0.00 | 1.873 | 12.80 | 1.618 | 9.343 | 1.880 | 13.07 | 2.032 | 15.81 | 12.17 |
| 346 | 172.500 | TP-346 | 100 | 100 | 92 | 85 | 72 | 52 | 28 | 19 | 9 | CL | 2.50 | 1.951 | 14.10 | 1.670 | 9.560 | 1.956 | 14.48 | 2.130 | 17.24 | 13.39 |
| 347 | 173.000 | TP-347 | 100 | 100 | 100 | 100 | 85 | 54 | 31 | 18 | 13 | CL | 3.15 | 1.940 | 12.50 | 1.693 | 5.723 | 1.944 | 8.83 | 2.092 | 10.55 | 8.06 |

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| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | I.S. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--|-------|---------|---------|-------|------|-----------------|--------|--------|---------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 348 | 173.500 | TP-348 | 100 | 100 | 100 | 100 | 91 | 62 | 30 | 20 | 10 | CL | 2.13 | 1.875 | 14.20 | 1.654 | 7.598 | 1.882 | 10.42 | 2.034 | 12.86 | 9.64 |
| 349 | 174.000 | TP-349 | 100 | 100 | 100 | 100 | 90 | 66 | 22 | 15 | 7 | CL-ML | 0.00 | 1.872 | 12.66 | 1.720 | 9.919 | 1.876 | 13.72 | 2.035 | 16.49 | 12.25 |
| 350 | 174.500 | TP-350 | 100 | 100 | 100 | 100 | 91 | 69 | 22 | 15 | 7 | CL | 13.89 | 1.870 | 14.75 | 1.636 | 8.533 | 1.876 | 12.46 | 2.042 | 14.89 | 11.44 |
| 351 | 175.000 | TP-351 | 100 | 100 | 97 | 95 | 82 | 71 | 37 | 21 | 16 | CI | 4.76 | 1.850 | 13.50 | 1.656 | 5.892 | 1.792 | 8.54 | 2.035 | 10.19 | 8.56 |
| 352 | 175.500 | TP-352 | 100 | 100 | 96 | 93 | 73 | 57 | 35 | 20 | 15 | CI | 8.18 | 1.905 | 12.37 | 1.716 | 7.543 | 1.909 | 11.48 | 2.071 | 13.83 | 10.23 |
| 353 | 176.000 | TP-353 | 100 | 100 | 97 | 92 | 74 | 57 | 30 | 25 | 5 | ML | 6.45 | 1.884 | 12.38 | 1.601 | 11.214 | 1.884 | 16.16 | 2.061 | 19.73 | 15.17 |
| 354 | 176.500 | TP-354 | 100 | 100 | 100 | 96 | 78 | 58 | 31 | 19 | 12 | CL | 4.76 | 1.922 | 13.30 | 1.663 | 7.331 | 1.928 | 11.16 | 2.082 | 13.45 | 10.24 |
| 355 | 177.000 | TP-355 | 100 | 100 | 98 | 94 | 78 | 53 | 31 | 20 | 11 | CL | 4.35 | 1.942 | 12.90 | 1.662 | 8.392 | 1.950 | 12.04 | 2.121 | 14.38 | 11.20 |
| 356 | 177.500 | TP-356 | 100 | 100 | 100 | 99 | 83 | 53 | 31 | 19 | 13 | CL | 2.27 | 1.936 | 13.75 | 1.672 | 8.193 | 1.944 | 11.33 | 2.101 | 13.62 | 10.57 |
| 357 | 178.000 | TP-357 | Trial pit excavation was not possible due to congested area. | | | | | | | | | | | | | | | | | | | |

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| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | I.S. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--|-------|---------|---------|-------|------|-----------------|--------|--------|---------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 358 | 178.500 | TP-358 | Trial pit excavation was not possible due to congested area. | | | | | | | | | | | | | | | | | | | |
| 359 | 179.000 | TP-359 | Trial pit excavation was not possible due to congested area. | | | | | | | | | | | | | | | | | | | |
| 360 | 179.500 | TP-360 | 100 | 100 | 100 | 100 | 89 | 65 | 34 | 24 | 10 | ML | 4.76 | 1.866 | 11.88 | 1.605 | 8.063 | 1.853 | 11.28 | 1.997 | 13.64 | 10.72 |
| 361 | 180.000 | TP-361 | 100 | 100 | 96 | 92 | 81 | 60 | 30 | 20 | 9 | CL | 4.76 | 1.835 | 13.50 | 1.661 | 10.109 | 1.780 | 14.57 | 1.993 | 18.12 | 14.55 |
| 362 | 180.500 | TP-362 | 100 | 96 | 91 | 84 | 76 | 68 | 34 | 22 | 12 | CL | 4.55 | 1.865 | 14.90 | 1.604 | 8.375 | 1.873 | 11.50 | 2.014 | 13.74 | 10.76 |
| 363 | 181.000 | TP-363 | 100 | 96 | 91 | 84 | 77 | 69 | 33 | 19 | 14 | CL | 8.33 | 1.856 | 15.10 | 1.594 | 6.342 | 1.859 | 10.25 | 2.004 | 12.26 | 9.38 |
| 364 | 181.500 | TP-364 | 100 | 100 | 100 | 100 | 85 | 52 | 31 | 22 | 9 | CL | 0.00 | 1.960 | 13.45 | 1.758 | 8.949 | 1.967 | 13.42 | 2.125 | 16.01 | 12.01 |
| 365 | 182.000 | TP-365 | 100 | 100 | 100 | 100 | 85 | 53 | 32 | 23 | 9 | CL | 2.75 | 1.937 | 13.15 | 1.757 | 9.544 | 1.946 | 13.89 | 2.229 | 16.60 | 12.35 |
| 366 | 182.500 | TP-366 | 100 | 100 | 100 | 100 | 94 | 78 | 42 | 26 | 16 | MI | 4.26 | 1.818 | 15.25 | 1.659 | 5.625 | 1.825 | 8.68 | 2.020 | 10.37 | 7.55 |
| 367 | 183.000 | TP-367 | 100 | 100 | 97 | 94 | 86 | 72 | 43 | 27 | 17 | MI | 0.00 | 1.837 | 14.80 | 1.582 | 5.973 | 1.844 | 8.26 | 1.991 | 9.93 | 7.72 |

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| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | I.S. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--|-------|---------|---------|-------|------|-----------------|--------|--------|---------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 368 | 183.500 | TP-368 | Trial pit excavation was not possible due to congested area. | | | | | | | | | | | | | | | | | | | |
| 369 | 184.000 | TP-369 | 100 | 100 | 100 | 100 | 96 | 86 | 33 | 16 | 17 | CL | 4.76 | 1.791 | 15.80 | 1.542 | 4.835 | 1.796 | 7.03 | 1.956 | 8.51 | 6.52 |
| 370 | 184.500 | TP-370 | 100 | 100 | 100 | 100 | 95 | 85 | 28 | 17 | 11 | CL | 7.50 | 1.818 | 16.25 | 1.659 | 6.760 | 1.824 | 9.29 | 2.020 | 11.04 | 8.36 |
| 371 | 185.000 | TP-371 | 100 | 100 | 100 | 100 | 92 | 80 | 37 | 20 | 17 | CI | 11.90 | 1.854 | 13.75 | 1.659 | 4.908 | 1.797 | 7.20 | 2.039 | 8.64 | 7.20 |
| 372 | 185.500 | TP-372 | 100 | 100 | 100 | 98 | 87 | 69 | 29 | 16 | 13 | CL | 4.88 | 1.866 | 14.40 | 1.715 | 7.429 | 1.869 | 11.46 | 2.028 | 13.70 | 9.92 |
| 373 | 186.000 | TP-373 | 100 | 100 | 100 | 98 | 86 | 67 | 25 | 18 | 7 | CL | 5.50 | 1.870 | 13.60 | 1.657 | 7.363 | 1.878 | 11.26 | 2.085 | 13.22 | 10.13 |
| 374 | 186.500 | TP-374 | 100 | 100 | 100 | 98 | 89 | 80 | 24 | 15 | 8 | CL | 4.76 | 1.835 | 16.25 | 1.585 | 6.275 | 1.840 | 9.13 | 2.053 | 10.92 | 8.46 |
| 375 | 187.000 | TP-375 | Trial pit excavation was not possible due to Major Bridge. | | | | | | | | | | | | | | | | | | | |
| 376 | 187.500 | TP-376 | Trial pit excavation was not possible due to Major Bridge. | | | | | | | | | | | | | | | | | | | |
| 377 | 188.000 | TP-377 | 100 | 100 | 100 | 100 | 100 | 92 | 30 | 18 | 12 | CL | 12.50 | 1.810 | 15.36 | 1.620 | 4.851 | 1.814 | 7.05 | 1.991 | 8.54 | 6.39 |

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| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | I.S. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--|-------|---------|---------|-------|------|-----------------|--------|--------|---------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 378 | 188.500 | TP-378 | 100 | 100 | 98 | 90 | 77 | 60 | 35 | 19 | 15 | CL | 0.00 | 1.880 | 12.60 | 1.598 | 6.479 | 1.885 | 9.43 | 2.030 | 11.27 | 8.80 |
| 379 | 189.000 | TP-379 | 100 | 100 | 97 | 89 | 73 | 60 | 32 | 18 | 14 | CL | 0.00 | 1.884 | 13.10 | 1.620 | 7.076 | 1.891 | 10.15 | 2.035 | 12.13 | 9.43 |
| 380 | 189.500 | TP-380 | 100 | 100 | 100 | 100 | 96 | 90 | 36 | 19 | 17 | CI | 4.35 | 1.771 | 16.35 | 1.594 | 4.616 | 1.775 | 6.77 | 1.989 | 8.13 | 6.09 |
| 381 | 190.000 | TP-381 | 100 | 100 | 100 | 100 | 97 | 92 | 33 | 20 | 13 | CL | 2.27 | 1.841 | 13.25 | 1.581 | 6.108 | 1.779 | 8.73 | 2.038 | 10.76 | 8.78 |
| 382 | 190.500 | TP-382 | 100 | 100 | 94 | 89 | 84 | 81 | 36 | 17 | 19 | CI | 20.00 | 1.808 | 16.05 | 1.564 | 4.563 | 1.815 | 6.66 | 1.958 | 7.96 | 6.15 |
| 383 | 191.000 | TP-383 | 100 | 100 | 97 | 92 | 88 | 85 | 34 | 19 | 16 | CL | 14.29 | 1.832 | 16.05 | 1.610 | 5.500 | 1.837 | 7.61 | 1.995 | 9.14 | 7.05 |
| 384 | 191.500 | TP-384 | Trial pit excavation was not possible due to congested area. | | | | | | | | | | | | | | | | | | | |
| 385 | 192.000 | TP-385 | Trial pit excavation was not possible due to congested area. | | | | | | | | | | | | | | | | | | | |
| 386 | 192.500 | TP-386 | Trial pit excavation was not possible due to congested area. | | | | | | | | | | | | | | | | | | | |
| 387 | 193.000 | TP-387 | 100 | 100 | 100 | 98 | 73 | 54 | 30 | 16 | 14 | CL | 9.09 | 1.915 | 14.25 | 1.689 | 8.065 | 1.923 | 13.26 | 2.089 | 15.92 | 11.81 |

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| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | I.S. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|--|-------|---------|---------|-------|------|-----------------|--------|--------|---------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 388 | 193.500 | TP-388 | 100 | 100 | 100 | 100 | 76 | 59 | 29 | 14 | 15 | CL | 13.04 | 1.905 | 13.25 | 1.648 | 7.051 | 1.909 | 10.73 | 2.063 | 12.93 | 9.87 |
| 389 | 194.000 | TP-389 | 100 | 100 | 100 | 100 | 100 | 94 | 34 | 18 | 16 | CL | 9.09 | 1.770 | 17.50 | 1.561 | 5.354 | 1.775 | 7.86 | 1.931 | 9.46 | 7.18 |
| 390 | 194.500 | TP-390 | 100 | 100 | 100 | 100 | 98 | 93 | 34 | 18 | 16 | CL | 2.33 | 1.782 | 17.38 | 1.584 | 5.465 | 1.788 | 8.27 | 1.962 | 10.16 | 7.45 |
| 391 | 195.000 | TP-391 | 100 | 100 | 100 | 98 | 93 | 85 | 41 | 20 | 22 | CI | 4.76 | 1.882 | 14.00 | 1.619 | 4.124 | 1.827 | 6.25 | 2.014 | 7.44 | 6.23 |
| 392 | 195.500 | TP-392 | Trial pit excavation was not possible due to congested area. | | | | | | | | | | | | | | | | | | | |
| 393 | 196.000 | TP-393 | 100 | 100 | 100 | 100 | 75 | 54 | 28 | 17 | 11 | CL | 8.33 | 1.952 | 13.05 | 1.735 | 9.112 | 1.959 | 12.60 | 2.149 | 15.15 | 11.58 |
| 394 | 196.500 | TP-394 | 100 | 100 | 100 | 100 | 77 | 58 | 23 | 16 | 7 | CL | 2.27 | 1.918 | 12.60 | 1.750 | 10.774 | 1.925 | 16.42 | 2.131 | 19.74 | 14.34 |
| 395 | 197.000 | TP-395 | 100 | 100 | 100 | 100 | 96 | 91 | 29 | 19 | 10 | CL | 2.33 | 1.790 | 16.45 | 1.522 | 6.216 | 1.796 | 8.60 | 1.960 | 10.33 | 8.08 |
| 396 | 197.500 | TP-396 | 100 | 100 | 100 | 100 | 100 | 94 | 29 | 18 | 11 | CL | 0.00 | 1.766 | 18.15 | 1.581 | 5.481 | 1.772 | 7.86 | 1.943 | 9.39 | 7.13 |
| 397 | 198.000 | TP-397 | 100 | 100 | 100 | 100 | 97 | 90 | 41 | 22 | 18 | CI | 4.55 | 1.810 | 16.31 | 1.557 | 4.447 | 1.815 | 6.75 | 1.937 | 8.03 | 6.22 |

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| SL NO | LOCATION / CHAINAGE (KM) | Sample No. | SIEVE ANALYSIS (% PASSING BY WEIGHT) | | | | | | ATTERBERG LIMIT | | | I.S. CLASSIFICATION | Differential Free swell Index % | Laboratory Compaction (Heavy) | | SOAKED CBR AT 3 ENERGY LEVELS | | | | | | SOAKED CBR AT 97 % OF MDD |
|-------|--------------------------|------------|---|-------|---------|---------|-------|------|-----------------|--------|--------|---------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 398 | 198.500 | TP-398 | 100 | 100 | 100 | 100 | 96 | 89 | 41 | 22 | 19 | CI | 4.55 | 1.815 | 17.05 | 1.614 | 5.190 | 1.819 | 7.12 | 1.998 | 8.78 | 6.57 |
| 399 | 199.000 | TP-399 | 100 | 100 | 100 | 100 | 95 | 69 | 26 | 20 | 7 | CL-ML | 10.00 | 1.868 | 15.30 | 1.575 | 7.209 | 1.873 | 10.91 | 2.045 | 13.47 | 10.15 |
| 400 | 199.500 | TP-400 | 100 | 100 | 100 | 100 | 94 | 68 | 25 | 19 | 6 | CL-ML | 13.89 | 1.861 | 15.05 | 1.625 | 7.762 | 1.867 | 12.54 | 2.069 | 15.01 | 11.32 |
| 401 | 200.000 | TP-401 | 100 | 100 | 100 | 99 | 94 | 79 | 30 | 17 | 13 | CL | 5.00 | 1.902 | 11.60 | 1.636 | 6.203 | 1.844 | 9.41 | 2.054 | 11.20 | 9.42 |
| 402 | 200.500 | TP-402 | 100 | 100 | 100 | 99 | 96 | 86 | 30 | 23 | 6 | ML | 9.52 | 1.783 | 15.91 | 1.573 | 7.775 | 1.788 | 11.43 | 1.935 | 13.71 | 10.44 |
| 403 | 201.000 | TP-403 | 100 | 100 | 100 | 100 | 95 | 76 | 27 | 15 | 12 | CL | 2.56 | 1.829 | 14.90 | 1.555 | 7.063 | 1.837 | 10.75 | 1.975 | 12.96 | 9.93 |
| 404 | 201.500 | TP-404 | 100 | 100 | 100 | 100 | 93 | 74 | 27 | 14 | 13 | CL | 5.26 | 1.841 | 16.05 | 1.583 | 6.703 | 1.845 | 10.34 | 1.988 | 12.36 | 9.52 |
| 405 | 202.000 | TP-405 | 100 | 100 | 100 | 100 | 96 | 82 | 30 | 15 | 15 | CL | 7.50 | 1.822 | 17.14 | 1.616 | 5.245 | 1.827 | 8.47 | 1.977 | 10.14 | 7.56 |
| 406 | 202.500 | TP-406 | 100 | 100 | 100 | 100 | 87 | 68 | 31 | 19 | 11 | CL | 10.00 | 1.858 | 13.90 | 1.605 | 7.548 | 1.863 | 11.32 | 2.016 | 13.50 | 10.43 |
| 407 | 203.000 | TP-407 | Trial pit excavation was not possible due to Bridge Location. | | | | | | | | | | | | | | | | | | | |

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|-------|--------------------------|------------|--|-------|---------|---------|-------|------|-----------------|--------|--------|---------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 408 | 203.500 | TP-408 | Trial pit excavation was not possible due to congested area. | | | | | | | | | | | | | | | | | | | |
| 409 | 204.000 | TP-409 | 100 | 100 | 100 | 96 | 71 | 46 | 29 | 19 | 10 | SC | 5.50 | 1.930 | 12.25 | 1.702 | 13.428 | 1.936 | 19.27 | 2.102 | 23.00 | 17.67 |
| 410 | 204.500 | TP-410 | 100 | 100 | 100 | 97 | 72 | 46 | 31 | 20 | 11 | SC | 4.00 | 1.931 | 11.15 | 1.717 | 11.755 | 1.938 | 17.97 | 2.126 | 21.10 | 16.15 |
| 411 | 205.000 | TP-411 | 100 | 100 | 98 | 95 | 77 | 60 | 33 | 21 | 12 | CL | 9.09 | 1.798 | 15.25 | 1.627 | 6.250 | 1.759 | 9.46 | 1.949 | 11.39 | 9.09 |
| 412 | 205.500 | TP-412 | 100 | 100 | 98 | 95 | 72 | 54 | 32 | 18 | 14 | CL | 4.35 | 1.936 | 12.30 | 1.673 | 9.045 | 1.942 | 12.42 | 2.166 | 14.77 | 11.62 |
| 413 | 206.000 | TP-413 | 100 | 95 | 91 | 88 | 79 | 50 | 33 | 21 | 12 | CL | 10.00 | 1.985 | 10.62 | 1.751 | 9.356 | 1.991 | 13.64 | 2.166 | 16.71 | 12.47 |
| 414 | 206.500 | TP-414 | 100 | 96 | 92 | 89 | 78 | 44 | 34 | 22 | 11 | SC | 9.09 | 1.948 | 12.15 | 1.701 | 11.277 | 1.954 | 16.39 | 2.166 | 19.85 | 15.09 |
| 415 | 207.000 | TP-415 | 100 | 100 | 94 | 91 | 62 | 42 | 37 | 20 | 17 | SC | 9.09 | 1.975 | 10.61 | 1.699 | 11.517 | 1.983 | 16.52 | 2.133 | 19.75 | 15.34 |
| 416 | 207.500 | TP-416 | 100 | 100 | 98 | 95 | 80 | 56 | 37 | 21 | 16 | CI | 6.52 | 1.880 | 12.29 | 1.658 | 7.649 | 1.886 | 11.13 | 2.040 | 13.31 | 10.18 |
| 417 | 208.000 | TP-417 | 100 | 100 | 97 | 94 | 88 | 73 | 36 | 24 | 12 | MI | 6.52 | 1.865 | 16.15 | 1.688 | 9.074 | 1.873 | 14.66 | 2.022 | 17.55 | 12.73 |

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|-------|--------------------------|------------|--|-------|---------|---------|-------|------|-----------------|--------|--------|---------------------|---------------------------------|-------------------------------|---------|-------------------------------|--------------|------------|--------------|------------|--------------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | | | MDD (gm/cc) | OMC (%) | Test 1 | | Test 2 | | Test 3 | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | |
| 418 | 208.500 | TP-418 | 100 | 100 | 100 | 94 | 78 | 53 | 32 | 17 | 15 | CL | 0.00 | 1.928 | 13.50 | 1.729 | 9.586 | 1.935 | 13.26 | 2.090 | 15.94 | 12.10 |
| 419 | 209.000 | TP-419 | Trial pit excavation was not possible due to congested area. | | | | | | | | | | | | | | | | | | | |
| 420 | 209.500 | TP-420 | 100 | 100 | 95 | 90 | 71 | 44 | 37 | 17 | 20 | SC | 6.98 | 1.943 | 10.76 | 1.642 | 10.829 | 1.949 | 14.98 | 2.116 | 18.00 | 14.11 |
| 421 | 210.000 | TP-421 | 100 | 100 | 97 | 92 | 83 | 72 | 31 | 19 | 12 | CL | 4.55 | 1.845 | 16.50 | 1.627 | 6.716 | 1.852 | 10.24 | 2.013 | 12.31 | 9.26 |
| 422 | 210.500 | TP-422 | 100 | 94 | 91 | 89 | 78 | 69 | 32 | 17 | 15 | CL | 2.27 | 1.870 | 14.55 | 1.662 | 6.372 | 1.876 | 9.64 | 2.059 | 11.85 | 8.69 |
| 423 | 211.000 | TP-423 | 100 | 100 | 98 | 94 | 51 | 26 | 28 | 18 | 10 | SC | 6.82 | 1.977 | 11.00 | 1.769 | 17.160 | 1.899 | 25.16 | 2.175 | 33.73 | 25.73 |
| 424 | 211.500 | TP-424 | 100 | 100 | 93 | 87 | 56 | 30 | 32 | 24 | 8 | SM | 4.55 | 2.015 | 9.27 | 1.735 | 25.266 | 2.018 | 38.22 | 2.200 | 46.06 | 35.32 |
| 425 | 212.000 | TP-425 | 100 | 95 | 89 | 84 | 69 | 40 | 32 | 24 | 8 | SM | 2.17 | 1.940 | 10.42 | 1.770 | 21.964 | 1.946 | 31.97 | 2.155 | 38.62 | 28.32 |
| 426 | 212.500 | TP-426 | 100 | 100 | 97 | 91 | 75 | 45 | 37 | 27 | 10 | SM | 2.27 | 1.927 | 11.37 | 1.634 | 19.302 | 1.936 | 26.70 | 2.116 | 32.09 | 25.06 |
| 427 | 213.000 | TP-427 | 100 | 100 | 100 | 93 | 83 | 46 | 31 | 24 | 7 | SM | 2.75 | 1.844 | 13.00 | 1.567 | 19.706 | 1.782 | 27.07 | 2.017 | 32.17 | 27.22 |

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|-------|--------------------------|------------|--|-------|---------|---------|-------|------|--------|-----------------|--------|-------------|---------------------|---------------------------------|-------------------------------|------------|-------------------------------|------------|--------------|------------|--------------|-------|---------------------------|
| | | | 20 mm | 10 mm | 4.75 mm | 2.00 mm | 425 μ | 75 μ | LL (%) | PL (%) | PI (%) | MDD (gm/cc) | | | OMC (%) | Test 1 | | Test 2 | | Test 3 | | | |
| | | | | | | | | | | | | | | | | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | DD (gm/cc) | Soaked CBR % | | |
| 428 | 213.500 | TP-428 | 100 | 100 | 100 | 94 | 86 | 56 | 42 | 22 | 19 | CI | 9.09 | 1.957 | 14.50 | 1.685 | 7.308 | 1.940 | 11.24 | 2.121 | 13.38 | 10.60 | |
| 429 | 214.000 | TP-429 | Trial pit excavation was not possible due to congested area. | | | | | | | | | | | | | | | | | | | | |
| 430 | 214.500 | TP-430 | Trial pit excavation was not possible due to congested area. | | | | | | | | | | | | | | | | | | | | |
| 431 | 215.000 | TP-431 | Trial pit excavation was not possible due to congested area. | | | | | | | | | | | | | | | | | | | | |
| 432 | 215.575 | TP-432 | Trial pit excavation was not possible due to Junction area. | | | | | | | | | | | | | | | | | | | | |