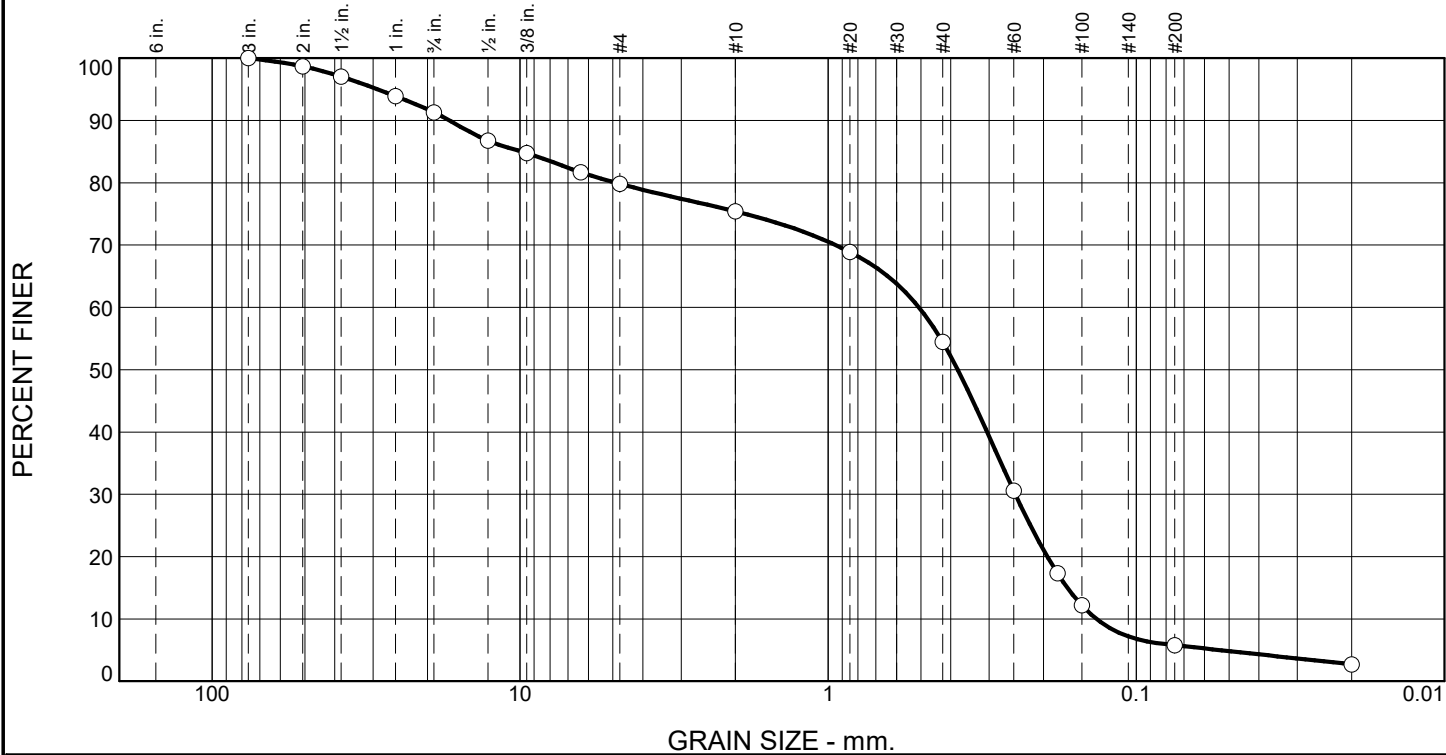


# Particle Size Distribution Report



| % +3" | % Gravel | % Sand |      | % Fines<br>Silt |
|-------|----------|--------|------|-----------------|
|       |          | Coarse | Fine |                 |
| 0     | 25       | 21     | 48   | 6               |

| Test Results (ASTM C 136 & ASTM C 117) |               |                  |                |
|----------------------------------------|---------------|------------------|----------------|
| Opening Size                           | Percent Finer | Spec.* (Percent) | Pass? (X=Fail) |
| 3                                      | 100           |                  |                |
| 2                                      | 99            |                  |                |
| 1.5                                    | 97            |                  |                |
| 1                                      | 94            |                  |                |
| 3/4                                    | 91            |                  |                |
| 1/2                                    | 87            |                  |                |
| 3/8                                    | 85            |                  |                |
| 1/4                                    | 82            |                  |                |
| #4                                     | 80            |                  |                |
| #10                                    | 75            |                  |                |
| #20                                    | 69            |                  |                |
| #40                                    | 54            |                  |                |
| #60                                    | 31            |                  |                |
| #80                                    | 17            |                  |                |
| #100                                   | 12            |                  |                |
| #200                                   | 5.8           |                  |                |
| .02mm                                  | 2.7           |                  |                |

\* (no specification provided)

|                                                                                                                                                                                                                                                                                        |  |                            |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------------------------|
| <b>Material Description</b><br>Silty Sand w/ gravel Existing Subbase                                                                                                                                                                                                                   |  |                            |
| <b>Atterberg Limits (ASTM D 4318)</b><br>PL= NP      LL= NV      PI=                                                                                                                                                                                                                   |  |                            |
| <b>Classification</b><br>USCS (D 2487)= SP-SM      AASHTO (M 145)= A-3                                                                                                                                                                                                                 |  |                            |
| <b>Coefficients</b><br>D <sub>90</sub> = 16.9908      D <sub>85</sub> = 9.8816      D <sub>60</sub> = 0.5078<br>D <sub>50</sub> = 0.3798      D <sub>30</sub> = 0.2470      D <sub>15</sub> = 0.1672<br>D <sub>10</sub> = 0.1345      C <sub>u</sub> = 3.78      C <sub>c</sub> = 0.89 |  |                            |
| <b>Remarks</b><br>Max Dry Density(ASTM D1557):119.8 pcf @ 11.2% moisture                                                                                                                                                                                                               |  |                            |
| <b>Date Received:</b> 5/30/26                                                                                                                                                                                                                                                          |  | <b>Date Tested:</b> 6/1/26 |
| <b>Tested By:</b> Chris Mack, CET                                                                                                                                                                                                                                                      |  |                            |
| <b>Checked By:</b> Stefan Mack, PE                                                                                                                                                                                                                                                     |  |                            |
| <b>Title:</b> Engineer                                                                                                                                                                                                                                                                 |  |                            |

**Location:** South side hanger door 3 58deg 41'08.01"N 156deg 39'45.17" W Sample#4  
**Sample Number:** 26-173 **Depth:** 18.48 Elev

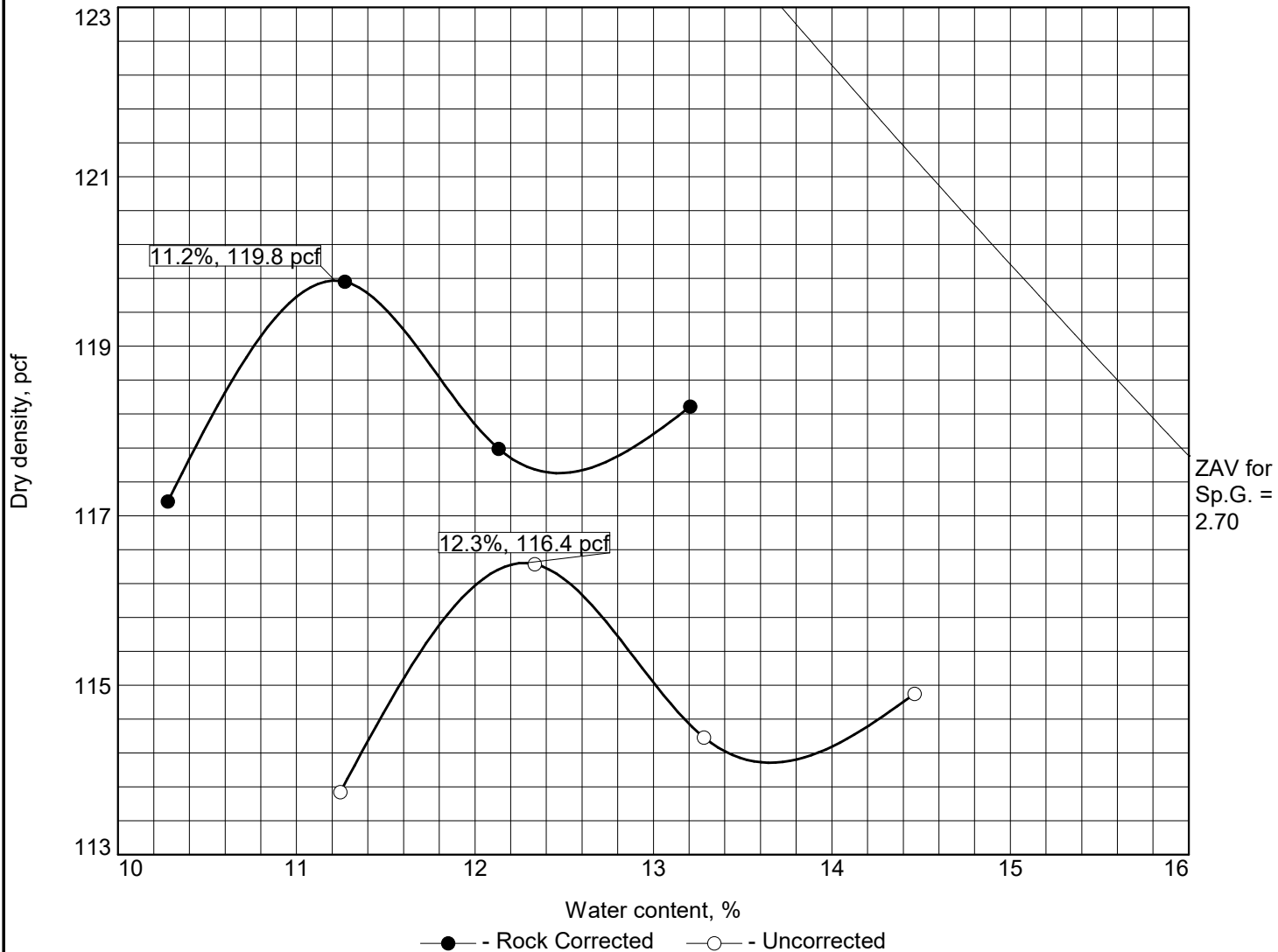
**Date Sampled:** 5/23/26

**MAPPA TESTLAB**  
**1956 Richardson Highway**  
**North Pole, Alaska 99705**

**Client:** HC Contractors  
**Project:** Repair Runway Aprons  
 King Salmon, Alaska  
**Project No:**

**Figure**

# COMPACTION TEST REPORT For Curve No. 26-173



Test specification: ASTM D 698-12 Method C Standard  
ASTM D4718-15 Oversize Corr. Applied to Each Test Point

| Elev/<br>Depth | Classification |        | Nat.<br>Moist. | Sp.G. | LL | PI | % ><br>3/4 in. | % <<br>No.200 |
|----------------|----------------|--------|----------------|-------|----|----|----------------|---------------|
|                | USCS           | AASHTO |                |       |    |    |                |               |
| 18.48 Elev     | SP-SM          | A-3    |                | 2.70  | NV |    | 9              | 5.8           |

| ROCK CORRECTED TEST RESULTS                                                                                                                                                                                                                                                                                                                                                |  | UNCORRECTED | MATERIAL DESCRIPTION                                                                                       |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|-------------|------------------------------------------------------------------------------------------------------------|
| Maximum dry density = 119.8 pcf                                                                                                                                                                                                                                                                                                                                            |  | 116.4 pcf   | Silty Sand w/ gravel Existing Subbase                                                                      |
| Optimum moisture = 11.2 %                                                                                                                                                                                                                                                                                                                                                  |  | 12.3 %      |                                                                                                            |
| <b>Project No.</b> _____ <b>Client:</b> HC Contractors<br><b>Project:</b> Repair Runway Aprons<br>King Salmon, Alaska <b>Date:</b> 5/31/26<br>○ <b>Loc.:</b> South side hanger door 3 58deg 41'08.01"N 156deg 39'45.17" W Sample#4<br><div style="text-align: center;"><b>MAPPA TESTLAB</b><br/> <b>1956 Richardson Highway</b><br/> <b>North Pole, Alaska 99705</b></div> |  |             | <b>Remarks:</b><br>specific gravity assumed<br><br><br><div style="text-align: right;"><b>Figure</b></div> |

Tested By: Chris Mack, CET Checked By: Stefan Mack, PE