



REPORT ON COMPACTION DENSITY BY NUCLEAR METHOD-CONTRACTOR FORM

Fill Out Completely. Original to be retained with project records. Remit copy to District Office

ECMS No.: _____
 SR – Section: _____
 District: _____
 County: _____
 Date: _____

Embankment _____ Subgrade _____ Pipe Backfill _____
 Other: _____

| FILL MATERIAL: (Reference Pub. 408, Sec. 206) | |
|---|---------------------------|
| Material Source: | |
| Specific Gravity, SG: | |
| Passing 3/8 Sieve (%): | |
| Passing No. 200 Sieve (%): | |
| Material Type (Check one) | Soil: Type 1 Granular: |
| Maximum Proctor Density (pcf) *: | |
| Optimum Proctor Moisture (%) *: | |
| Required Min. Compaction (% Proctor): | |
| Required Min. Compaction (pcf): | |

| GAUGE IDENTIFICATION: (Reference PTM No. 418) | |
|--|--|
| Manufacturer: | |
| Model Number: | |
| Date of Annual Calibration: | |
| MONTHLY GAUGE OPERATING LIMITS (from Annual Calibration Report) | |
| Effective Month: | |
| Upper Limit Density Count: | |
| Lower Limit Density Count: | |
| Upper Limit Moisture Count: | |
| Lower Limit Moisture Count: | |
| DAILY GAUGE STANDARDIZATION: (Reference PTM No. 418) | |
| Standardization Date: | |
| Standard Density Count: | |
| Standard Moisture Count: | |

| TEST LOCATIONS: (Reference PTM No. 402) | | | |
|---|--|-----------------------------------|--|
| Test Identification Number: | | Test Elevation (feet): | |
| Station: | | Compacted Lift Height (inches): | |
| Offset: | | Source Rod Position (inches) **:: | |
| Final Subgrade Elevation (feet): | | Test Time (start): | |

| TEST LOCATIONS: (Reference PTM No. 402) | | | | | | | | | |
|---|---|----------------|-----------------|-------------------|------------------|---------|-------------------------------|--|--|
| QC Test | Acceptance Test | Reading 1 (0°) | Reading 2 (90°) | Reading 3 (180°) | Reading 4 (270°) | Average | Meets Tolerances? (Y or N)*** | | |
| Density Count (Shift + Counts) | | | | | | - | - | | |
| Wet Density, WD (pcf) | | | | | | | | | |
| ΔWD from Average | | | | | | - | - | | |
| Moisture Count (Shift + Counts) | | | | | | - | - | | |
| Moisture, (pcf) | | | | | | - | - | | |
| Dry Density, DD (pcf) | | | | | | | | | |
| Moisture, w (%) | | | | | | | | | |
| Δw (%) from Average | | | | | | - | - | | |
| % of Proctor Density (%) | | | | | | | | | |
| Zero Air Voids (ZAV) Formula: | $\frac{62.4}{DD} - \frac{1}{SG} \geq w\%$ | | | show calculation: | | | | | |
| ZAV Check: | Yes: | | No: | | Pass: | | Fail: | | |
| Remarks: | | | | | | | | | |
| Name of Gauge Operator: | | | | | Cert. Number: | | | | |

* Use data as shown on applicable Form TR-4247
 ** For Backscatter Mode, enter 0.
 *** If final averages exceed tolerances, a new location is to be tested