OMR-TM-158

Rev. 07/25/11
Department of Transportation
State of Georgia

Nuclear Gauge Calibration (12" Ring)

Nuclear Gauge Calibration to Graded Aggregate Base

Project: _____ County: _____
Contract ID: _____ PI # _____
Prime Contractor: _____
Quarry: _____
Material: _____ Item: _____
Tested By: _____ Title: _____

Date _____/_____/_____
N/G # _____
Mode _____
Density Standard Count _____

Moisture Standard Count _____

Maximum Dry Density: _____

Optimum Moisture _____

IN PLACE DATA (NUCLEAR GAUGE)	(1)	(2)	(3)
Sample No			
Station #			
Depth - Thickness			
Gauge Wet Density (PCF)**			
Density Offset			
Wet Density (Gauge Wet Density +/- Offset)			
Gauge Moisture Density (PCF)**			
Moisture Offset			
Moisture (PCF) (Gauge Moisture Density +/- Offset)			
Dry Density (Wet Density – Moisture PCF)			
% Moisture (Moisture PCF ÷ Dry Density)			

IN PLACE WET DENSITY (12" RING)	(1)	(2)	(3)
Sand Density _____			
Gross Wt. (Container and Sand)	_____gms./lbs.	_____gms./lbs.	_____gms./lbs.
Final Wt. (Container / Bag)	_____gms./lbs.	_____gms./lbs.	_____gms./lbs.
Wt. of Sand Used (Gross Wt – Final Wt.)	_____gms./lbs.	_____gms./lbs.	_____gms./lbs.
Wt. of Wet Material from Hole (Include. Container)	_____gms./lbs.	_____gms./lbs.	_____gms./lbs.
Wt. of Container / Bag	_____gms./lbs.	_____gms./lbs.	_____gms./lbs.
Wt. of Wet Material from Hole (Wet Wt Fr. Hole – Container Wt)	_____gms./lbs.	_____gms./lbs.	_____gms./lbs.
In-Place Wet Density (Wet Wt Fr. Hole x Sand Density ÷ Sand Used)	_____PCF	_____PCF	_____PCF
In-Place Dry Density (Wt. Density ÷ % Moist. Content +100 x 100)	_____PCF	_____PCF	_____PCF

IN-PLACE MOISTURE (FLAME DRY)	(1)	(2)	(3)
Wt. of Wet Sample	_____gms./lbs.	_____gms./lbs.	_____gms./lbs.
Wt. of Dry Sample	_____gms./lbs.	_____gms./lbs.	_____gms./lbs.
Wt. of Water (Wt. Wet Sample – Wt. Dry Sample)	_____gms./lbs	_____gms./lbs.	_____gms./lbs.
Moisture Content % (Wt. of Water ÷ Dry Sample x 100)	_____%	_____%	_____%
Moisture Content PCF (Wet density – Dry density)	_____PCF	_____PCF	_____PCF

CALCULATION FOR DENSITY OFFSET

Avg. In-Place Wet Density (12" Ring) _____ **(A)**
Avg. Nuclear Gauge Wet Density ** _____ **(B)**

A – B = Density Offset _____

CALCULATION FOR MOISTURE OFFSET

Avg. PCF (Flame Dry Moisture) _____ **(A)**
Avg. N/G Moisture Density ** _____ **(B)**

A – B = Moisture Offset _____

Note:
If (A) is higher than (B) offset will be a (+)
If (B) is higher than (A) offset will be a (-)