MSMT 352
Rev. 07/06

MARYLAND STATE HIGHWAY ADMINISTRATION
NUCLEAR D/M COMPACTION REPORT

S.H.A. 73.0-161

Gauge Model:_____ Gauge Serial No.:_____

Contract No.:_____ F.A.P.No.:_____ Date:_____

Operator:_____ Standard Count: Moisture: MS _____ Density DS:_____

Average of four previous counts: Moisture MS:_____ Density DS:_____

TEST SITE DATA	1. FIELD TEST NUMBER								
	2. TYPE MATERIAL & C.Y. THIS FILL								
	3. SOURCE								
	4. STATION								
	5. ITEM NO.								
	6. DISTANCE TO CENTER LINE or BASE LINE								
	7. HEIGHT TO FINAL GRADE								
IN – PLACE MOISTURE & DENSITY	8. MEASURED COUNT, MC								
	9. WEIGHT OF MOISTURE, M, PCF.								
	10. MOISTURE CONTENT, % M (NOTES 1, 2)								
	11.MOISTURE CORRECTION (NOTE 2)								
	12.MEASURED COUNT, DC								
	13. WET WEIGHT, WD, PCF.								
	14. DRY WEIGHT, DD, PCF.								
COMPACTION	15. MAXIMUM DRY DENSITY FROM CHART (NOTE 3) , PCF								
	16. OPTIMUM MOISTURE FROM CHART, % (NOTE 3)								
	17. COMPACTION REQUIRED, % (NOTE 4)								
	18. COMPACTION OBTAINED, %								

SITE DATA	19. FIELD TEST NUMBER									
	20. COLOR (primary followed by secondary, if any i.e. red/white streaks)									
	21.FIELD DESCRIPTION(i.e. texture, such as sandy clay w/gravel or clayey silt w/mica)									
WET DENSITY VERIFICATION	22.PERCENT PASSING # 4 SCREEN (if≤ 65% use MSMT 351 method D)									
	23. WEIGHT OF MOLD & WET SOIL , LBS.									
	24. WEIGHT OF MOLD, LBS.									
	25. WEIGHT OF WET SOIL(L 23 - L24) , LBS									
	26. WET DENSITY OF SOIL IN MOLD (L25 x 30) , P.C.F.									
	26A. MAX DRY DENSITY FROM CHART, P.C.F.									
	26B. OPTIMUM MOISTURE FROM CHART,%									

TRUE MOISTURE	27. WEIGHT OF WET SOIL & TARE, LBS									
	28. WEIGHT OF DRY SOIL & TARE, LBS									
	29. WEIGHT OF TARE, LBS.									
	30. WEIGHT OF DRY SOIL(L28 − L29), LBS.									
	31. WEIGHT OF MOISTURE (L27 - L28), LBS.									
	32. MOISTURE, % (L31 ÷ L30) x 100									

NOTES	Note: 1. % moisture should not vary more than ± 2% between 2 tests on same grade taken within same 4 hour shift. If % moisture varies, it indicates possible changes in material.
	Note: 2. % of moisture should not exceed true moisture by more than 2%. If it does, then moisture correction is required.
	Note: 3. MDD & Opt. moisture are obtained from typical curve or family of curves for source material per line #3, and verified by plotting results of MSMT 351 from line #26 and against the typical curve or by plotting against the result of a field five-step moisture-density determination for materials not previously identified.
	Note: 4. Refer to Contract Specs or Md Standard Spec. to obtain % compaction required for type material recorded on line #2.