State of California

RELATIVE COMPACTION TEST – NUCLEAR

Department of Transportation

Job Stamp	Contract	Test No.
	Type of Material	
	Material From	
	Impact by	Nuclear by
	Date	Date
Show test location and area limits	Non Biased Plan No.	Gage No.

IN-PLACE TEST BY NUCLEAR

	Site	Den. Ct. ___"D.T.	Std. Count Density
A	1		
	2		
	3		Σ
	4		F X̄
	5		Moist Count
	6		1
	7		2
	8		3
			4
			5
			6
			7
			8
B	Σ		Σ
C	X̄		G X̄
CR(C/F)			CR(G/I)
D	X̄ Den. gm/cc		H X̄ H_2O g/cc
E	X̄ Den. Corr. for Moist** ±		

**E = D ± Diff. Bet. X̄ Moist. Fr. Common TM & H

Percent Relative* Compaction		Spec.	Individual	
			Moving Av.	

*E/K for 10% ≤ + 3/4" ; E/W for > 10% + 3/4"

If Common Test Maximum is used (X̄) K or W = X̄ H_2O =

From Tests Dated

Remarks:

IMPACT TEST DATA

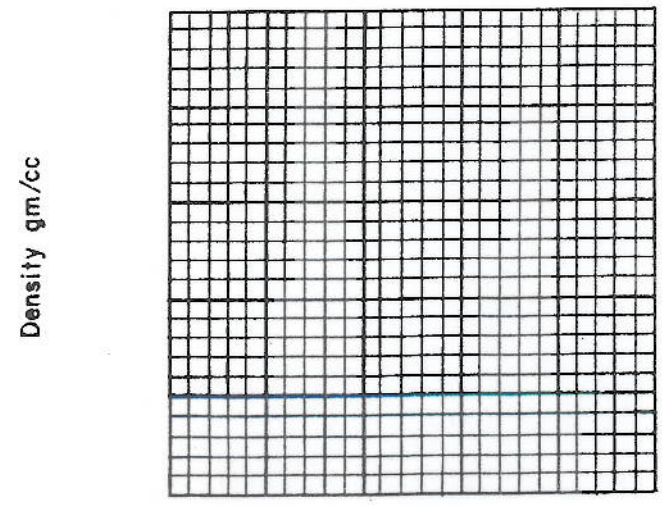
J	Initial Wet Weight of Test Specimen (Grams)				
	Specimen	1	2	3	4
	Water Adjustment				
	Tamper Reading				
K	Wet Density (gm/cc)				

K From Table 1 Test Method 216. Highest Density is Test Max.

L	+ 3/4" Agg. Adj.
% + 3/4" (Q)	Adj.
20 or less	1.00
21-25	0.99
26-30	0.98
31-35	0.97
36-40	0.96
41-45	0.95
46-50	0.94
Std. Count Moist.	
Σ	
I X̄	

SAMPLE FOR ROCK CORRECTION

M	Total Sample Wt. (gm)		
N	+ 3/4" Wt. in Air (gm)		
O	+ 3/4" Wt. in Water (gm)		
P	+ 3/4" Vol. (cc)	(N–O)	
Q	% + 3/4"	100(N/M)	
R	% – 3/4"	(100–Q)	
S	Density of + 3/4"	(N/P)	
T	% + 3/4" / Den. of + 3/4"	(Q/SL)	
U	% – 3/4" / Den. of – 3/4"	(R/K)	
V	Sum of T and U	(T+U)	
W	Adjusted Density gm/cc	(100/V)	



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