

NAPTF FIELD DENSITY TESTS - SAND CONE METHOD

Rodeo

DATE:		#####	#####
1	TEST NO.	1	2
2	LIFT NO.	P-154	P-154
3	ELEVATION	Top of First Lift	Top of Second Lift
4	LOCATION	905 CL	910 CL
VOLUME OF HOLE			
5	WT. SAND & CONE BEFORE(g)	5786.1	5555.2
6	WT. SAND & CONE AFTER(g)	2438	2201.8
7	WT. OF SAND USED (g) [5-6]	3348.1	3353.4
8	Sand Cone & Base Plate Volume (cm ³)	1055.97	1055.97
9	Sand Calibration Factor [unit wt](g/cm ³)	1.5504	1.5504
10	Tare Volume Correction (g) (8*9)	1637.18	1637.18
11	Net Sand in Hole (g) [7-10]	1710.92	1716.22
12	Net Volume (cm ³) [11/9]	1103.54	1106.96
WET DENSITY OF SOIL			
13	Tare Weight (g)	304	306.9
14	Weight of Wet Soil and Tare (g)	2738.2	2821.9
15	Weight of Wet Soil (g)	2434.2	2515
16	Wet Density of Total Sample (g/cm ³) [15/12]	2.21	2.27
17	Wet density Total Sample (lbs/ft ³) [16 x 62.43]	137.71	141.84
18	Wt. of Plus 3/4" & Tare (g)		
19	Tare Weight (g)		
20	Wt. of Plus 3/4" Soil (g)		
21	% Plus 3/4" of Total Sample [20/15]		
DRY DENSITY OF SOIL			
22	Tare weight	304	306.9
23	tare + wet sample	1639.4	1820.2
24	Weight of Dry Soil and Tare(g)	1564	1735.5
25	Weight of Dry Soil (g) [24-22]	1260	1428.6
26	Percent Moisture [(23-24)/25*100]	5.98	5.93
27	Dry mass of soil (g) [100* 15/(26+100)]	2296.76	2374.23
28	Dry Density g/cm ³ [25/12]	2.08	2.14
29	Dry density Total Sample (lbs/ft ³) [28 x 62.43]	129.93	133.90
% COMPACTION			
30	Max. Dry Density (lbs/ft ³)	133.8	133.8
31	% Compaction [(25/22)*100]	97.11	100.08