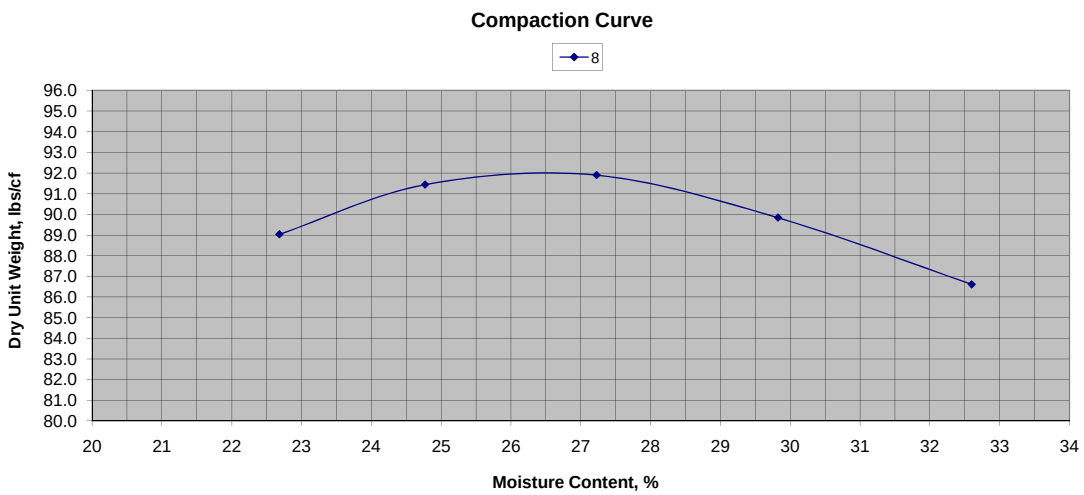
TOLUNAY-WONG ENGINEERS, INC.

Compaction - Moisture Density Relationship - ASTM D 698

Laboratory	TOLUNAY-WONG ENGINEERS		**Test ID**	2762-024	
USACE Contract Number	W912P8-09-D-0046 0008		**Contractor**	PHYLWAY	
Project	WBV-14c.2 PHASE 2, FIRST LIFT		**Date**	8/20/2010	
Source of Material	Material of Existing Levee	Feature	EMBANKMENT	Visual Description (ASTM D 2488)	BR. CLAY
Station	120+50	Offset		Lift Number	1
X-Coordinate		Y-Coordinate		Elevation (ft)	
Test Method	D698	Preparation Method	WET	As-Received Moisture Content	34.9
Hand / Mechanical Rammer	HAND	Specific Gravity		Specific Gravity Method: As Tested or Estimated	ESTIMATED
Percent Retained - No. 4 Sieve	0	Percent Retained - 3/8" Sieve			
Percent Retained - 3/4" Sieve	0	Oversize Fraction		ASTM D 3718 Correction - Yes/No	NO
Tested By	B. LANDERS	Checked By	G. LECOQ	Submitted By	G. LECOQ
Test Sequence Number	1	2	3	4	5
a. Mold Number					
b. Mass of Mold (g)	2017.2	2017.2	2017.2	2017.2	2017.2
c. Volume of Mold (cf)	0.0333	0.0333	0.0333	0.0333	0.0333
d. Mass of Wet Soil+Mold (g)	3667.1	3740.6	3783.3	3778.9	3751.8
e. Mass of Wet Soil (g)	1649.9	1723.4	1766.1	1761.7	1734.6
f. Wet Unit Weight (lbs/cf)	109.2	114.1	116.9	116.6	114.8
g. Container No.	DT40	DT08	DT41	DT43	DT14
h. Mass of Tare (g)	176.20	187.50	178.10	179.90	245.10
i. Mass of Wet Soil+Tare (g)	427.70	364.30	402.40	424.10	479.40
j. Mass of Dry Soil+Tare (g)	381.20	329.20	354.40	368.00	421.80
k. Mass of Water (g)	46.50	35.10	48.00	56.10	57.60
l. Mass of Dry Soil (g)	205.00	141.70	176.30	188.10	176.70
m. Moisture Content %	22.7	24.8	27.2	29.8	32.6
n. Dry Unit Weight (lbs/cf)	89.0	91.4	91.9	89.8	86.6



Test Results	
Compaction Curve Control No.	2762-024 Curve 2
Optimum Moisture Content (%)	26.7
Max. Dry Unit Weight (lbs/cf)	91.7
Classification of Sample	FAT CLAY
Liquid And Plastic Limits	
Liquid Limit	72
Plastic Limit	29
Plasticity Index	43
Symbol From Plastic Chart:	CH
% Passing 200	97.1
% Passing No. 4	100.0

Dry Unit Weight Scale

Min 85 Max 95

Moisture Content % Scale

Min 15 Max 22

Change Graph Scale

Remarks: Avg. Curve 1 & 2; Maximum Dry Unit Wt. = 92.1 lbs/cf; Optimum Moisture = 26.6%