CH2M HILL
GRAIN SIZE ANALYSIS

File No. _____

		Perf by	LC	Date	6/29/2007	Boring No.	**SBA-F-2 3 - 4'**
Project	Phase 2 COPR Investigation	Calc. by	WHM	Date	7/14/2007	Test Pit No.	
Location	Dundalk Marine Terminal	Chk'd by	LC	Date	8/5/2007	Sample No.	_____

Gradation sample before washing	
tare no	
wet+tare	952.3
tare wt.	471.8
wet wt.	480.5
Wc →	16.9%
dry weight	411.1

$$= w_d = \frac{w_{wet}}{1 + W_c}$$

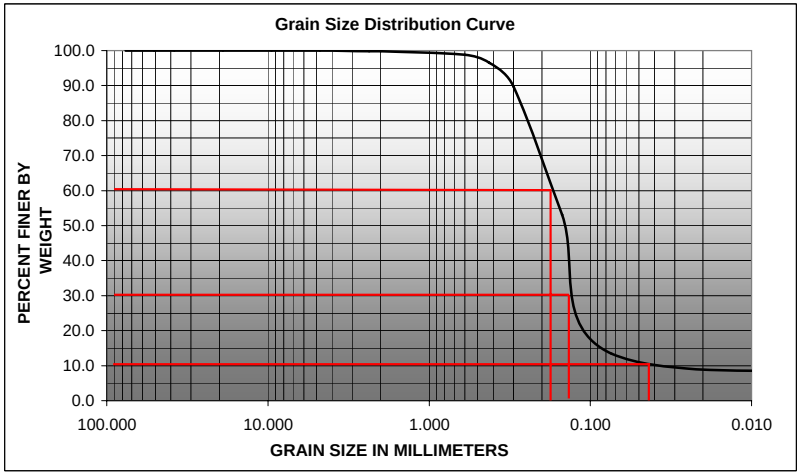
<200 Sieve after washing	
dry + tare	515.23
tare wt.	483.8
dry wt.	31.4

W/C sample	
tare no.	
tare wt.	51.58
wet + tare	175.12
dry + tare	157.27
water	17.9
dry wt.	105.7
W_c	16.9%

Sieve Analysis

Classification		U.S. Std. Sieve No.	Wt. Retained + Tare	Tare Wt.	Wt. Retained	Σ Wt. Retained	Sieve Size mm	Percent Passing
Gravel		3"					76.200	100.0
		2"					50.800	100.0
		1.5"					38.100	100.0
		3/4"					19.000	100.0
		3/8"					9.500	100.0
		#4					4.760	100.0
C	Sand	#8	0.56		0.56	0.56	2.360	99.9
		#10	0.07		0.07	0.63	2.000	99.8
M		#30	4.04		4.04	4.67	0.600	98.8
		#40	9.24		9.24	13.91	0.425	96.5
F		#50	27.15		27.15	41.06	0.300	89.8
		#100	146.81		146.81	187.87	0.150	53.1
		#200	159.34		159.34	347.21	0.074	13.4
Silt/Clay		Pan	22.32		22.32	369.53	0.001	7.8
		Total Sieved	369.53					
		-200 fraction washed	31.44					
		Total Wt.	400.97					

Percentage of:		
Gravel	0.0	
C - Sand	0.2	Total
M - Sand	3.3	% Sand
F - Sand	83.1	86.6
Fines	13.4	



Cu/Cc calculation

D60	0.18
D30	0.15
D10	0.041
Cc	3.05
Cu	4.39

>12% fines → SM - Silty Sand