

Appendix A: Sand Sampling Results

Sample Number	Analytical Sensitivity ^a	Concentrations of Chrysotile Structures					Concentrations of Amphibole Structures					Concentrations of Total Asbestos Structures				
		Protocol	Fraction	7402	Total	Counted	Protocol	Fraction	7402	Total	Counted	Protocol	Fraction	7402	Total	Counted
		Structures	Long	Structures	Structures	Structures	Structures	Long	Structures	Structures	Structures	Structures	Long	Structures	Structures	Structures
		(s/g _{PM10})	(s/g _{PM10})	(>10 um)	> 5 um in length		(s/g _{PM10})	(%)	(s/g _{PM10})	(s/g _{PM10})	(s/g _{PM10})	(s/g _{PM10})	(%)	(s/g _{PM10})	(s/g _{PM10})	(s/g _{PM10})
GPB-10A	9.6E+05							9.6E+05	9.6E+05				9.6E+05	9.6E+05		
NC GPB-11A	1.0E+06														0.0E+00	
NC GPB-12A	9.9E+05														0.0E+00	
Area: Oak Street Beach, Chicago																
OSB-01A	1.0E+06	4.0E+06	50%	4.0E+06	5.0E+06	1.7E+07	24%	1.5E+07	1.9E+07	2.1E+07	29%	1.9E+07	2.4E+07	2.4E+07		
OSB-02A	9.8E+05	9.8E+05	0%		9.8E+05	9.8E+06	10%	5.9E+06	1.2E+07	1.1E+07	9%	5.9E+06	1.3E+07	1.3E+07		
OSB-03A	9.9E+05	3.0E+06	67%	2.0E+06	4.0E+06	1.6E+07	25%	3.0E+07	3.8E+07	1.9E+07	32%	3.2E+07	4.2E+07	4.2E+07		
OSB-04A	1.0E+06					1.1E+07	0%	9.0E+06	1.2E+07	1.1E+07	0%	9.0E+06	1.2E+07	1.2E+07		
NC OSB-05A	9.8E+05														0.0E+00	
OSB-06A	9.8E+05	9.8E+05	100%		9.8E+05	2.9E+06	33%	2.9E+06	3.9E+06	3.9E+06	50%	2.9E+06	4.9E+06	4.9E+06		
OSB-07A	9.8E+05					2.9E+06	33%	9.8E+05	2.9E+06	2.9E+06	33%	9.8E+05	2.9E+06	2.9E+06		
OSB-08A	9.8E+05	9.8E+05	0%		9.8E+05	2.0E+06	50%	2.0E+06	2.9E+06	2.9E+06	33%	2.0E+06	3.9E+06	3.9E+06		
OSB-09A	9.8E+05	9.8E+05	100%	2.0E+06	2.0E+06	2.0E+06	100%	2.0E+06	2.9E+06	2.9E+06	100%	3.9E+06	4.9E+06	4.9E+06		
OSB-10A	1.0E+06	1.0E+06	100%	1.0E+06	1.0E+06					1.0E+06	100%	1.0E+06	1.0E+06	1.0E+06		
OSB-11A	9.9E+05							9.9E+05	9.9E+05			9.9E+05	9.9E+05	9.9E+05		
OSB-12A	9.9E+05					2.0E+06	50%	2.0E+06	2.0E+06	2.0E+06	50%	2.0E+06	2.0E+06	2.0E+06		
Area: North Point Marina, IBSP																
NPM-01A	1.0E+06	1.0E+06	100%		1.0E+06	5.0E+06	40%	4.0E+06	5.0E+06	6.0E+06	50%	4.0E+06	6.0E+06	6.0E+06		
NPM-02A	9.7E+05	9.7E+05	0%		9.7E+05	9.7E+05	100%	9.7E+05	9.7E+05	1.9E+06	50%	9.7E+05	1.9E+06	1.9E+06		
NPM-03A	9.9E+05	3.9E+06	75%	9.9E+05	3.9E+06	9.9E+05	100%	9.9E+05	9.9E+05	4.9E+06	80%	2.0E+06	4.9E+06	4.9E+06		
NPM-04A	9.7E+05			9.7E+05	9.7E+05	9.7E+05	100%	9.7E+05	1.9E+06	9.7E+05	100%	1.9E+06	2.9E+06	2.9E+06		
NC NPM-05A	9.8E+05														0.0E+00	
NPM-06A	9.8E+05			9.8E+05	9.8E+05							9.8E+05	9.8E+05	9.8E+05		
NPM-07A	9.8E+05	9.8E+05	0%		9.8E+05	9.8E+05	100%	2.0E+06	2.0E+06	2.0E+06	50%	2.0E+06	2.9E+06	2.9E+06		
NC NPM-08A	9.8E+05														0.0E+00	
NPM-09A	9.9E+05					2.0E+06	0%	2.0E+06	2.0E+06	2.0E+06	0%	2.0E+06	2.0E+06	2.0E+06		
NPM-10A	9.7E+05	9.7E+05	100%		9.7E+05					9.7E+05	100%		9.7E+05	9.7E+05		
NC NPM-11A	9.9E+05														0.0E+00	
NPM-12A	9.8E+05					9.8E+05	100%	9.8E+05	9.8E+05	9.8E+05	100%	9.8E+05	9.8E+05	9.8E+05		
NOTES:																
^a Bolded and italicized values for analytical sensitivities represent approximations based on targeted numbers of grid openings counted rather than actual numbers of grid openings counted. The actual number of grid openings counted for samples with zero asbestos structures observed were not independently verified. In general the difference between estimated and counted numbers of grid openings is small so that the analytical sensitivities for these samples are expected to vary by less than 2%.																
NC = None counted		App A-2														

TABLE A-1:
SUMMARY OF CONCENTRATIONS FOUND IN SAND

Sample Number	Analytical Sensitivity ^a	Concentrations of Chrysotile Structures								Concentrations of Amphibole Structures								Concentrations of Total Asbestos Structures			
		Total		7462		Total		Total		7462		Total		Total		7462		Total			
		Protocol Structures	Fraction Long (>10 um)	Structures	Counted Structures	Protocol Structures	Fraction Long (>10 um)	Structures	Counted Structures	Protocol Structures	Fraction Long (>10 um)	Structures	Counted Structures	Protocol Structures	Fraction Long (>10 um)	Structures	Counted Structures	Protocol Structures	Fraction Long (>10 um)	Structures	Counted Structures
		(#/g sand)	(%)	(#/g sand)	(#/g sand)	(#/g sand)	(%)	(#/g sand)	(#/g sand)	(#/g sand)	(%)	(#/g sand)	(#/g sand)	(#/g sand)	(%)	(#/g sand)	(#/g sand)	(#/g sand)	(%)	(#/g sand)	(#/g sand)
Area: Washington Harbor																					
WH-01A	1.0E+06								1.0E+06	100%	1.0E+06	1.0E+06	1.0E+06	100%	1.0E+06	1.0E+06	100%	1.0E+06	1.0E+06	1.0E+06	
WH-02A	9.7E+05	1.9E+06	100%	1.9E+06																	
WH-03A	9.9E+05	4.9E+06	80%	3.0E+06	5.9E+05	3.0E+06	100%	9.9E+05	3.0E+06	100%	9.9E+05	3.0E+06	7.9E+05	80%	3.9E+06	8.9E+05	100%	9.9E+05	8.9E+05	8.9E+05	
WH-04A	9.4E+05	4.7E+06	100%	9.4E+05	4.7E+06	9.4E+05	100%	9.4E+05	9.4E+05	100%	9.4E+05	9.4E+05	6.9E+05	100%	1.9E+06	1.9E+06	100%	9.4E+05	1.9E+06	1.9E+06	
WH-05A	9.9E+05	9.9E+05	100%	9.9E+05	9.9E+05	9.9E+05	100%	9.9E+05	9.9E+05	100%	9.9E+05	9.9E+05	1.9E+06	100%	9.9E+05	9.9E+05	100%	9.9E+05	9.9E+05	9.9E+05	
WH-06A	9.7E+05	3.9E+06	100%	3.9E+06																	
WH-07A	9.9E+05	2.1E+07	76%	1.1E+07	2.1E+07	4.0E+06	50%	2.0E+06	4.0E+06	2.0E+07	72%	1.9E+07	2.5E+07	100%	1.9E+07	4.0E+06	100%	9.9E+05	4.0E+06	4.0E+06	
WH-08A	1.0E+06	2.0E+06	100%	2.0E+06	2.0E+06	2.0E+06	100%	2.0E+06	2.0E+06	2.0E+06	100%	2.0E+06	4.0E+06	100%	2.0E+06	4.0E+06	100%	1.0E+06	4.0E+06	4.0E+06	
WH-09A	9.9E+05	9.9E+05	100%	2.0E+06	2.0E+06	5.0E+06	100%	4.0E+06	7.0E+06	6.0E+06	100%	6.0E+06	6.0E+06	100%	6.0E+06	6.0E+06	100%	9.9E+05	6.0E+06	6.0E+06	
WH-10A	9.7E+05	6.9E+06	57%	3.9E+06	6.9E+06																
WH-11A	9.9E+05	2.0E+06	100%	9.9E+05	2.0E+06	9.9E+05	100%	2.0E+06	2.0E+06	3.0E+06	100%	3.0E+06	3.0E+06	100%	3.0E+06	3.0E+06	100%	9.9E+05	3.0E+06	3.0E+06	
WH-12A	9.7E+05	1.9E+06	100%	1.9E+06																	
Area: Illinois Beach State Park South Unit																					
ISBP-01B	9.7E+05																			0.0E+00	
ISBP-02B	9.9E+05																			0.0E+00	
ISBP-03B	9.9E+06																			0.0E+00	
ISBP-04B	9.7E+05	9.7E+05	0%	9.7E+05	9.7E+05	9.7E+05	0%	2.9E+06	2.9E+06	1.9E+06	0%	2.9E+06	3.9E+06	100%	2.9E+06	3.9E+06	100%	9.7E+05	3.9E+06	3.9E+06	
ISBP-05B	9.9E+05																			0.0E+00	
ISBP-06B	9.9E+05																			0.0E+00	
ISBP-07B	1.0E+06																			0.0E+00	
ISBP-08B	9.9E+05																			0.0E+00	
ISBP-09B	1.0E+06																			0.0E+00	
ISBP-10B	9.9E+05																			0.0E+00	
ISBP-11B	9.9E+06																			0.0E+00	
ISBP-12B	9.9E+05																			0.0E+00	
Area: Illinois Beach State Park North Unit																					
ISBP-17A	9.9E+05																			0.0E+00	
ISBP-18A	9.9E+05	1.9E+06	100%	1.9E+06																0.0E+00	
ISBP-19A	9.9E+05																			0.0E+00	
ISBP-20A	1.0E+06	1.0E+06	100%	1.0E+06	1.0E+06															0.0E+00	
ISBP-21A	9.9E+05	9.9E+05	100%	9.9E+05	9.9E+05															0.0E+00	
ISBP-22A	9.9E+05	9.9E+05	100%	9.9E+05	9.9E+05	3.9E+06	25%	3.9E+06	4.9E+06	4.9E+06	40%	4.9E+06	5.9E+06	100%	4.9E+06	5.9E+06	100%	9.9E+05	5.9E+06	5.9E+06	
ISBP-23A	9.9E+05																			0.0E+00	
ISBP-24A	9.9E+05																			0.0E+00	
ISBP-13S	1.0E+06																			0.0E+00	
ISBP-14S	9.9E+05																			0.0E+00	
ISBP-15S	9.9E+05							9.9E+05	100%	2.0E+06	2.0E+06	9.9E+05	100%	2.0E+06	2.0E+06	100%	2.0E+06	2.0E+06	2.0E+06	2.0E+06	
ISBP-16S	9.9E+05							9.9E+05	0%	9.9E+05	9.9E+05	9.9E+05	0%	9.9E+05	9.9E+05	0%	9.9E+05	9.9E+05	9.9E+05	9.9E+05	
Area: Highland Park Beach																					
HPB-01A	9.9E+06																			0.0E+00	
HPB-02A	9.9E+05																			0.0E+00	
HPB-03A	9.9E+05																			0.0E+00	
HPB-04A	9.7E+05			9.7E+05	9.7E+05															0.0E+00	
HPB-05A	9.9E+05																			0.0E+00	
HPB-06A	1.0E+06																			0.0E+00	
HPB-07A	9.9E+05																			0.0E+00	
HPB-08A	9.9E+05																			0.0E+00	
HPB-09A	9.9E+05																			0.0E+00	
HPB-10A	9.9E+05																			0.0E+00	
HPB-11A	1.0E+06																			0.0E+00	
HPB-12A	9.9E+05																			0.0E+00	
Area: Grand Park Beach, South Milwaukee J																					
GPB-01A	1.0E+06																			0.0E+00	
GPB-02A	1.0E+06																			0.0E+00	
GPB-03A	9.7E+05	9.7E+05	100%	9.7E+05																0.0E+00	
GPB-04A	9.9E+05																			0.0E+00	
GPB-05A	9.9E+05																			0.0E+00	
GPB-06A	9.9E+05																			0.0E+00	
GPB-07A	9.9E+05																			0.0E+00	
GPB-08A	9.9E+05																			0.0E+00	
GPB-09A	1.0E+06																			0.0E+00	
GPB-10A	9.9E+05									9.9E+05	9.9E+05	9.9E+05								0.0E+00	
GPB-11A	1.0E+06																			0.0E+00	
GPB-12A	9.9E+05																			0.0E+00	
Area: Oak Street Beach, Chicago																					
OSB-01A	1.0E+06	4.0E+06	50%	4.0E+06	5.0E+06	1.7E+07	24%	1.5E+07	1.9E+07	2.1E+07	29%	1.9E+07	2.4E+07	100%	1.9E+07	2.4E+07	100%	1.0E+06	2.4E+07	2.4E+07	
OSB-02A	9.9E+05	9.9E+05	0%	9.9E+05	9.9E+05	9.9E+05	10%	5.9E+06	1.2E+07	1.1E+07	9%	5.9E+06	1.2E+07	100%	5.9E+06	1.2E+07	100%	9.9E+05	1.2E+07	1.2E+07	
OSB-03A	9.9E+05	3.0E+06	67%	2.0E+06	4.0E+06	1.5E+07	25%	3.0E+07	3.8E+07	1.9E+07	32%	3.2E+07	4.2E+07	100%	3.2E+07	4.2E+07	100%	9.9E+05	4.2E+07	4.2E+07	
OSB-04A	1.0E+06																			0.0E+00	
OSB-05A	9.9E+05																			0.0E+00	
OSB-06A	9.9E+05	9.9E+05	100%	9.9E+05	9.9E+05	2.9E+06	33%	2.9E+06	3.9E+06	3.9E+06	50%	2.9E+06	4.9E+06	100%	2.9E+06	4.9E+06	100%	9.9E+05	4.9E+06	4.9E+06	
OSB-07A	9.9E+05																			0.0E+00	
OSB-08A	9.9E+05	9.9E+05	0%	9.9E+05	9.9E+05	2.0E+06	50%	2.0E+06	2.9E+06	2.9E+06	33%	2.9E+06	3.9E+06	100%	2.9E+06	3.9E+06	100%	9.9E+05	3.9E+06	3.9E+06	
OSB-09A	9.9E+05	9.9E+05	100%	2.0E+06	2.0E+06	2.0E+06	100%	2.0E+06	2.9E+06	2.9E+06	100%	2.9E+06	3.9E+06	100%	2.9E+06	3.9E+06	100%	9.9E+05	3.9E+06	3.9E+06	

TABLE A-2:
SUMMARY OF STRUCTURE COUNTS AND ASBESTOS TYPES FOUND

Sample Number	Number G.O.s	Chrysotile Structures				Amphibole Structures				Not Amph	Type of Amphibole
		Number Total	Number Long	Number Total	Number Long	Number Total	Number Long	Number Total	Number Long		
		Protocol	Protocol	7402	Protocol	Protocol	7402	Protocol	7402		
> 5 um in length											
Area: Waukegan Harbor											
WH-01A	295	0	0	0	0	1	1	1	1	0	A
WH-02A	283	2	2	0	2	0	0	0	0	0	
WH-03A	294	5	4	3	8	3	3	1	3	2	AA,??
WH-04A	274	5	5	1	5	1	1	1	1	0	A
WH-05A	282	1	1	0	1	1	1	1	1	0	??
WH-06A	270	4	4	0	4	0	0	0	0	0	
WH-07A	258	21	16	11	21	4	2	2	4	0	AAAA
WH-08A	275	2	2	2	2	2	2	0	2	0	AA
WH-09A	285	1	1	2	2	5	5	4	7	4	AAA,??,AAA
WH-10A	274	7	4	4	7	0	0	0	0	0	
WH-11A	272	2	2	1	2	1	1	2	2	3	AA
WH-12A	274	2	2	0	2	1	1	0	1	1	A
Area: Illinois Beach State Park South Unit											
IBSP-01S	285	0	0	0	0	0	0	0	0	1	
IBSP-02S	290	0	0	0	0	0	0	0	0	5	
IBSP-03S	275	0	0	0	0	0	0	0	0	4	
IBSP-04S	278	1	0	0	1	1	0	3	3	1	??,??,?? (all probably A)
IBSP-05S	275	0	0	0	0	0	0	0	0	6	
IBSP-06S	305	0	0	0	0	0	0	0	0	5	
IBSP-07S	290	0	0	0	0	0	0	0	0	4	
IBSP-08S	285	0	0	0	0	0	0	0	0	2	
IBSP-09S	295	0	0	0	0	0	0	0	0	1	
IBSP-10S	285	0	0	0	0	0	0	0	0	2	
IBSP-11S	280	0	0	0	0	0	0	0	0	1	
IBSP-12S	280	0	0	0	0	0	0	0	0	1	
Area: Illinois Beach State Park North Unit											
IBSP-17A	305	0	0	0	0	2	1	2	2	0	A, A
IBSP-18A	300	2	2	0	2	0	0	0	0	0	
IBSP-19A	292	0	0	0	0	0	0	0	0	0	
IBSP-20A	273	1	1	1	1	0	0	0	0	0	
IBSP-21A	294	1	1	0	1	0	0	0	0	0	
IBSP-22A	296	1	1	1	1	4	1	4	5	3	T, T, C, Ac, Ac
IBSP-23A	310	0	0	0	0	0	0	0	0	0	
IBSP-24A	297	0	0	0	0	0	0	0	0	2	
IBSP-13S	285	0	0	0	0	0	0	0	0	0	
IBSP-14S	295	0	0	0	0	0	0	0	0	0	
IBSP-15S	278	0	0	0	0	1	1	2	2	1	A,Ac
IBSP-16S	292	0	0	0	0	1	0	1	1	0	A
Area: Highland Park Beach											
HPB-01A	295	0	0	0	0	0	0	0	0	0	
HPB-02A	295	0	0	0	0	0	0	0	0	0	
HPB-03A	285	0	0	0	0	0	0	0	0	0	
HPB-04A	294	0	0	1	1	0	0	0	0	3	
HPB-05A	285	0	0	0	0	0	0	0	0	0	
HPB-06A	280	0	0	0	0	0	0	0	0	0	
HPB-07A	295	0	0	0	0	0	0	0	0	0	
HPB-08A	270	0	0	0	0	0	0	0	0	1	
HPB-09A	285	0	0	0	0	0	0	0	0	0	
HPB-10A	275	0	0	0	0	0	0	0	0	1	
HPB-11A	290	0	0	0	0	0	0	0	0	2	
HPB-12A	275	0	0	0	0	0	0	0	0	0	
Area: Grant Park Beach, South											
GPB-01A	280	0	0	0	0	0	0	0	0	0	
GPB-02A	270	0	0	0	0	0	0	0	0	0	
GPB-03A	288	1	1	0	1	0	0	0	0	3	
GPB-04A	275	0	0	0	0	0	0	0	0	0	
GPB-05A	270	0	0	0	0	0	0	0	0	0	
GPB-06A	295	0	0	0	0	0	0	0	0	6	
GPB-07A	280	0	0	0	0	0	0	0	0	0	
GPB-08A	305	0	0	0	0	0	0	0	0	0	
GPB-09A	285	0	0	0	0	0	0	0	0	2	
GPB-10A	288	0	0	0	0	0	0	1	1	0	A
GPB-11A	285	0	0	0	0	0	0	0	0	0	
GPB-12A	270	0	0	0	0	0	0	0	0	0	
Area: Oak Street Beach, Chicago											
OSB-01A	273	4	2	4	5	17	4	15	19	8	A-8,Ac-4,T-7
OSB-02A	273	1	0	0	1	10	1	8	12	6	A-2,Ac-7,T-3
OSB-03A	312	3	2	2	4	16	4	30	38	77	A-17,Ac-10,T-11
OSB-04A	270	0	0	0	0	11	0	9	12	4	A-3,Ac-6,T-3
OSB-05A	287	0	0	0	0	0	0	0	0	0	
OSB-06A	271	1	1	0	1	3	1	3	4	1	Ac-4
OSB-07A	288	0	0	0	0	3	1	1	3	4	A-1,Ac-2
OSB-08A	272	1	0	0	1	2	1	2	3	0	A-1,Ac-2
OSB-09A	282	1	1	2	2	2	2	2	3	5	A-1,Ac-2
OSB-10A	300	1	1	1	1	0	0	0	0	0	
OSB-11A	287	0	0	0	0	0	0	1	1	4	??
OSB-12A	292	0	0	0	0	2	1	2	2	8	A-2
Area: North Point Marina, IBSP											
NPM-01A	278	1	1	0	1	5	2	4	5	0	A-3,Ac-2
NPM-02A	289	1	0	0	1	1	1	1	1	0	A
NPM-03A	271	4	3	1	4	1	1	1	1	3	A
NPM-04A	274	0	0	1	1	1	1	1	2	0	A-1,Ac-1
NPM-05A	287	0	0	0	0	0	0	0	0	0	
NPM-06A	287	0	0	1	1	0	0	0	0	0	
NPM-07A	272	1	0	0	1	1	1	2	2	1	A-2
NPM-08A	275	0	0	0	0	0	0	0	0	0	
NPM-09A	285	0	0	0	0	2	0	2	2	3	A-2
NPM-10A	280	1	1	0	1	0	0	0	0	4	
NPM-11A	271	0	0	0	0	0	0	0	0	0	
NPM-12A	282	0	0	0	0	1	1	1	1	1	Ac

Notes: "NC" means non detected, A means amosite, Ac means actinolite, C means crocidolite, T means tremolite, and ?? means not determined.

Table A-3a (Revised Aeolus, Inc. Table 4) Page 1 of 2

GLCEEH SUMMARY OF DUPLICATE/REPLICATE (QUALITY CONTROL SAMPLE) CHI SQUARE RESULTS																										
Sample Number	# of G.O.s	Chrys			Amph			Chi Square Results (Excluding QA-8, QA-9, QA-10)										Amphibole No. of Structures	Test Stat	Consistent?						
		Total	Number	Long	Total	Number	Long	TOTAL	# of Degrees of Freedom	Critical Value	Chrysothile No. of Structures	Test Statistic	Consistent?													
		Protocol	Protocol	Protocol	Protocol	Protocol	Protocol	Protocol	Protocol	7402	7402	7402	7402	7402	7402	7402	7402	7402	7402							
Elutriator Duplicate	291	2	2	2	3	3	2	2	2	2	2	2	2	2	2	2	2	2	2	7	0.245	YES	16	3.286	YES	
WH-09A	285	1	1	2	2	2	5	5	4	4	7															
WH-9 QA-1	280	1	1	0	2	2	3	3	4	7																
QA-9	290	5	2	2	6	6	6	3	6	8																
Elutriator Duplicate	297	40	32	7	40	40	4	0	6	6	6	2	2	5.99	77	4.652	YES	15	3.467	YES						
WH-07A	258	21	16	11	21	21	4	2	2	4																
WH-7 QA-2	106	13	12	4	16	16	4	3	3	5																
QA-8	290	67	36	6	69	69	11	6	9	16																
Elutriator Duplicate	266	13	12	2	13	13	1	1	1	1	1	2	2	5.99	37	9.238	NO	6	0.988	YES						
WH-03A	294	5	4	3	6	6	3	3	1	3																
WH-3 QA-3	213	16	10	2	18	18	2	2	2	2																
QA-10	281	24	17	4	25	25	5	4	2	6																
Elutriator Duplicate	293	2	2	2	3	3	42	13	38	57	3	3	7.81	21	13.617	NO	196	47.355	NO							
OSB-03A	312	3	2	2	4	4	16	4	30	38																
OSB-3 QA-5	128	9	3	1	9	9	33	11	12	35																
OSB-5 QA-7	132	5	3	2	5	5	54	12	33	66																
Elutriator Duplicate	267	0	0	0	0	0	6	6	7	8	1	1	3.84	1	0.96	YES	11	2.48	YES							
IBSP-04S	278	1	0	0	1	1	1	0	3	3																
Elutriator Duplicate	276	0	0	0	0	0	5	2	5	7	1	1	3.84	0	0	YES	7	6.849	NO							
GPB-12A	270	0	0	0	0	0	0	0	0	0																
IBSP-05S	275	0	0	0	0	0	0	0	0	0	1	1	3.84	1	1.054	YES	4	4.215	NO							
IBSP5 QA-4	270	1	0	1	1	1	3	2	2	4																
OSB-01A	273	4	2	4	5	5	17	4	15	19	1	1	3.84	11	2.329	YES	57	29.388	NO							
OSB-1QA-6	134	5	3	3	5	5	32	12	25	38																

Table A-3b (Revised Aeolus, Inc. Table 4 continued) Page 2 of 2

GLCEEH QA/QC Chi-Square recalculations using 3 additional sample results													
Sample Number	Chi Square Results (Including QA-8, QA-9, QA-10)						Re-calculated Test Stat Amphiboles	Re-calculated Test Stat Chrysotile	Amphibole No. of Structures	Con-sistent?	Test Stat	Con-sistent?	Re-calculated Test Stat Amphiboles
	Re-calculated Test Stat Chrysotile	Degrees of Freedom	Critical Value	Chrysotile No. of Structures	Test Stat	Con-sistent?							
WH-9B	0.162	3	7.81	12	1.68	YES	2.175	24	3.76	YES		0.000740111	
WH-9A	0.047						0.525					0.484416546	
WH-9 QA-1	0.037						0.596					0.434253447	
QA-9	0.245						3.296					0.770949261	
											Sum:	1.690359365	
WH-7B	0.844	3	7.81	146	26.96	NO	0.081	30	7.88	NO, marginal		0.782940421	
WH-07A	2.728						0.588					16.48993612	
WH-7 QA-2	1.080						2.799					0.0046716	
QA-8	4.662						3.467					8.68397403	
											Sum:	25.96152217	
WH-3B	0.006	3	7.81	62	26.33	NO	0.549	11	2.62	YES		0.538993878	
WH-03A	4.631						0.226					21.25951557	
WH-3 QA-3	5.975						0.073					1.662629758	
QA-10	10.611						0.848					2.870034602	
											Sum:	26.33117381	
OSB-3B	2.379						1.328						
OSB-03A	1.687						15.121						
OSB-3 QA-5	11.173						1.240						
OSB-3 QA-7	1.006						43.548						
	16.246						61.237						
IBSP-4B	0.490						1.265						
IBSP-04S	0.471						1.215						
	0.860						2.480						
GPB-12B	#DIV/0!						3.386						
GPB-12A	#DIV/0!						3.462						
	#DIV/0!						6.848						
IBSP-05S	0.505						2.016						
IBSP5 QA-4	0.514						2.056						
	1.019						4.074						
OSB-01A	0.435						9.675						
OSB-1 QA-6	0.886						19.712						
	1.320						29.387						

TABLE A-4 (Revised Aeolus, Inc. Table 5):
GLCEEH RECALCULATIONS OF SUMMARY OF RELATIVE PERCENT DIFFERENCE ANALYSES ACROSS DUPLICATE AND REPLICATE SAMPLES

Replicate Number	Sample Number	Laboratory	Q.O.s	Concentration Chrysole Structures				Concentration Amphibole Structures				Packings by mass on filter				Citys Long (> 5 um) Structures RPD	Amph Long (> 5 um) Structures RPD	Total Long (> 5 um) Structures RPD					
				Mass Dep on Filter	Total Protocol Structures (>10 um)	Fraction Long	7402 Structures	Calculated Total Citys Long (> 5 um) Structures	Mass Dep on Filter	Total Protocol Structures (>10 um)	Fraction Long	7402 Structures	Calculated Total Amorph Long (> 5 um) Structures	Mass Dep on Filter	Packings				Citys Long (> 5 um) Structures RPD	Amph Long (> 5 um) Structures RPD			
Existing Gnd	a	WH-8B	EMS	291	143	2.0E+08	100%	3.0E+08	3.0E+08	2.0E+08	2.0E+08	100%	4.0E+08	7.0E+08	5.0E+08	143	1	a	a,b	40	8	111	57
	b	WH-9A	EMS	285	148	9.9E+05	100%	2.0E+08	2.0E+08	6.0E+08	100%	4.0E+08	7.0E+08	8.0E+08	148	2	b	b,c	40	8	101	49	
	c	WH-9 (QA-1)	UA	280	148	1.0E+08	100%	0.0E+00	1.0E+08	3.1E+08	100%	4.1E+08	7.1E+08	8.1E+08	148	2	c	a,c	50	6	112	48	
	d	WH-9 (QA-4)	UA	280	143	8.0E+08	40%	2.0E+08	5.0E+08	6.0E+08	80%	6.0E+08	8.0E+08	1.3E+07	143	1	d	a,d	50	4	120	89	
Extractor Duplicate	a	WH-7B	EMS	287	142	3.9E+07	80%	8.9E+06	3.9E+07	3.9E+07	0%	5.9E+06	5.9E+06	4.5E+07	142	1	a	a,b	81	8	30	58	
	b	WH-7A	EMS	258	158	2.1E+07	76%	1.1E+07	2.1E+07	4.0E+06	50%	2.0E+06	4.0E+06	2.5E+07	158	2	b	b,c	60	10	101	49	
	c	WH-7 (QA-2)	UA	108	158	3.6E+07	82%	1.1E+07	3.0E+07	1.1E+07	75%	8.1E+06	1.3E+07	5.1E+07	158	2	c	a,c	1	5	60	12	
	d	WH-7 (QA-4)	UA	280	142	8.7E+07	54%	6.0E+08	8.9E+07	1.0E+07	55%	8.0E+08	1.8E+07	8.9E+07	142	1	d	a,d	35	4	88	81	
Extractor Duplicate	a	WH-3B	EMS	268	157	1.3E+07	92%	2.0E+06	1.3E+07	6.0E+06	100%	9.9E+05	8.9E+05	1.4E+07	157	1	a	a,b	57	5	22	50	
	b	WH-3A	EMS	294	143	4.8E+06	80%	3.0E+06	5.9E+06	3.0E+06	100%	9.9E+05	8.9E+05	6.9E+06	143	2	b	b,c	74	8	98	44	
	c	WH-3 (QA-3)	UA	213	143	2.0E+07	63%	2.5E+06	2.4E+07	2.5E+06	100%	2.5E+06	4.7E+06	2.7E+06	143	2	c	a,c	87	5	93	102	
	d	WH-3 (QA-10)	UA	281	147	2.3E+07	40%	3.8E+06	2.3E+07	4.7E+06	80%	1.3E+06	4.7E+06	2.8E+07	157	1	d	a,d	120	4	139	85	
Extractor Duplicate	a	OSB-3B	EMS	280	145	1.8E+06	100%	1.9E+06	2.9E+06	4.0E+07	31%	3.9E+07	5.9E+07	5.7E+07	145	1	a	a,b	32	8	36	32	
	b	OSB-3A	EMS	312	134	3.0E+06	87%	2.0E+06	4.0E+06	1.8E+07	25%	3.0E+07	3.9E+07	4.2E+07	134	2	b	b,c	138	6	77	87	
	c	OSB-3 (QA-5)	UA	128	134	1.9E+07	33%	2.0E+06	2.2E+07	6.8E+07	33%	2.5E+07	8.4E+07	1.1E+08	134	2	c	a,c	153	5	43	80	
	d	OSB-3 (QA-7)	UA	132	145	9.7E+06	80%	3.8E+06	1.1E+07	1.0E+08	22%	6.4E+07	1.4E+08	1.5E+08	145	1	d	a,d	115	4	88	80	
Extractor Duplicate	a	ISBP-4B	EMS	267	138	0.0E+00	0%	0.0E+00	0.0E+00	5.9E+06	100%	6.9E+06	7.9E+06	7.9E+06	138	1	a	a,b	200	8	90	66	
	b	ISBP-4A	EMS	278	150	8.7E+05	0%	9.9E+05	8.9E+05	8.7E+05	0%	2.9E+06	3.0E+06	4.0E+06	150	2	b	a,b	200	8	90	66	
	a	GPB-12B	EMS	278	151	0.0E+00	0%	0.0E+00	0.0E+00	5.0E+06	40%	5.0E+06	7.0E+06	7.9E+06	151	1	a	a,b	200	8	90	66	
	b	GPB-12A	EMS	270	151	0.0E+00	0%	0.0E+00	0.0E+00	0.0E+00	0%	0.0E+00	0.0E+00	0.0E+00	151	2	b	a,b	200	8	90	66	
Existing Gnd	a	ISBP-5B	EMS	275	150	1.0E+06	0%	1.0E+06	0.0E+00	0.0E+00	6%	2.1E+06	4.0E+06	0.0E+00	150	1	a	a,b	200	8	200	200	
	b	ISBP-5A (QA-3)	UA	270	150	1.0E+06	0%	1.0E+06	1.0E+06	3.1E+06	6%	2.1E+06	4.0E+06	5.0E+06	150	1	b	a,b	200	8	200	200	
	a	OSB-11A	EMS	273	151	4.0E+06	50%	4.0E+06	5.0E+06	1.7E+07	24%	1.3E+07	1.9E+07	2.4E+07	151	1	a	a,b	94	12	121	116	
	b	OSB-1 (QA-6)	UA	134	151	1.0E+07	60%	6.1E+06	1.2E+07	8.5E+07	38%	5.1E+07	7.9E+07	9.0E+07	151	1	b	a,b	94	12	121	116	