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REMEDIAL INVESTIGATION REPORT
SOUTH BAY ASBESTOS SITE
Volume II

ALVISO, CALIFORNIA

DECEMBER 1988

REM II

PERFORMANCE OF REMEDIAL RESPONSE ACTIVITIES AT UNCONTROLLED HAZARDOUS WASTE SITES

U.S. EPA CONTRACT NO. 68-01-6939

CDM Federal Programs Corporation

CAMP DRESSER & McKEE INC.

ROY F. WESTON INC.

WOODWARD-CLYDE CONSULTANTS

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LIST OF APPENDICES

APPENDICES

APPENDIX C

PREVIOUS SOIL SAMPLE RESULTS

SUMMARY OF ASBESTOS CONCENTRATIONS IN SURFACE SOIL SAMPLES

Sampling Date	Sample Number	Location	% Asbestos	Agency
8/8/83	31616	W. End of Liberty St.	30 ± 10	CAL/OSHA
	31616-J1	Excavation	30 ± 20	
	31616-J2	Excavation site	30 ± 10	
8/10/83	31639	Liberty & Washington Sts.		CAL/OSHA
	31639-J3	Top of Levee, Adjacent of Liberty Street	7.5 ± 2.5	
	31639-J4	Top of Levee, 10° W. of sample J3	7.5 ± 2.5	
	31639-J5	Field W. of excavation spoils	7.5 ± 2.5	
	31639-J6	N. face of levee	< 1.	
	31639-J7	Field N. of excavation spoils	7.5 ± 2.5	
	31639-J8	Top of levee, E. of excavation spoils	7.5 ± 2.5	

Sampling Date	Sample Number	Location	% Asbestos	Agency
8/10/83	31645-CFW	Liberty & Moffett Sts.		DHS
	31645 CFW-300	E. end of excavation next to Liberty St.	30 ± 10	
	31645 CFW-301	S. end of excavation Spoils adjacent to levee road	30 ± 10	
	31645 CFW-302	N. end of excavation spoils	30 ± 10	DHS
	31645 CFW-303	On levee E. of Liberty Street	3 ± 2	
	31645 CFW-304	On roadside along levee	3 ± 2	
	31645 CFW-305	N. of levee road and E. of Gold Street	3 ± 2	
	31645 CFW-306	In ditch West of Liberty N. of bridge	<0.5	
8/18/83	31679 CFW-307	Liberty & Moffett Sts., Vacant lot	3 ± 2	DHS con't
	31679 CFW-308	On levee road, S. of Moffett, E. of Liberty, SCVWD #1027	3 ± 2	
	31679 CFW-309	On levee road, S. of Moffett, E. of Liberty, SCVWD #1034	3 ± 2	
	31679 CFW-310	On Levee Rd., outside side of levee, SCVWD #1040	3 ± 2	

Sampling Date	Sample Number	Location	% Asbestos	Agency
8/18/83 cont.	31679 CFW-311	Top of Levee Rd., SCVWD #1040	3 ± 2	
	31679 CFW-312	Foundry sand. End of Washington St. 19.34 m from SCVWD #1040	0.1	DHS
	31679 CFW-313	N. of levee rd. East of excavation, SCVWD #1046	<0.01	
	31679 CFW-314	On levee rd., E. of excavation, SCVWD #1046	0.1	
	31679 CFW-315	N. of levee rd., East of sample 315, SCVWD #1052	<0.01	
	31679 CFW-316	Top of levee rd.. S. of sample 315, SCVWD #1052	<0.01	
	31679 CFW-317	North of Hwy. 237, E. of Guadalupe River, SCVWD #1057	<0.01	
	31679 CFW-318	N. Hwy. 237, South of sample 317, SCVWD #1057	<0.01	
	31679 CFW-319	N. of Hwy. 237, S. of sample 20 m. W. of SCVWD #1057	<0.01	
	31679 CFW-320	15 m. NNE of SCVWD #1046	<0.01	
	31679 CFW-321	N. of sample. 320 graded area	0.1	

Sampling Date	Sample Number	Location	% Asbestos	Agency
8/18/82 cont.	31679 CFW-322	Inside levee, SCVWD 30	<0.01	
	31679 CFW-323	Top of levee, SCVWD 30	<0.01	
	31679 CFW-324	North trailer park fence line, SCVWD 36	<0.01	DHS
	31679 CFW-325	Top of levee, SCVWD 36	<0.01	
	31679 CFW-326	Inside of levee, SCVWD 36	<0.01	
	31679 CFW-327	At SCVWD marker 36	<0.01	
	31679 CFW-328	Top of levee, SCVWD 42	1	
	31679 CFW-329	Inside of levee, SCVWD 42	1	
	31679 CFW-330	Outside slope of levee, SCVWD 45	<0.01	
	31679 CFW-331	Top of levee, SCVWD 45	0.1	
	31679 CFW-332	Inside levee, SCVWD 45	<0.01	

Sampling Date	Sample Number	Location	% Asbestos	Agency
8/18/83 cont.	31679 CFW-333	Outside levee, SCVWD 52	<0.01	
	31679 CFW-334	Top of levee, SCVWD 52	<0.01	
	31721 CFW-335	Liberty & Moffett Sts. Vacant lot - core sample 4 ft. Same location as 307	<0.01	DHS
	31712 CFW-336	N. levee - core sample, SCVWD 1034 3.5 ft.	<0.01	
	31712 CFW-337	N. levee - core sample, SCVWD 1027 3 ft.	<0.01	
	31712 CFW-338	N. levee - core sample 2-1/2 ft., SCVWD 1040	0.1	
	31712 CFW-339	N. levee - core sample 3 ft., SCVWD 1046	0.1	
	31712 CFW-340	N. levee - core sample 3 ft., SCVWD 1052	<0.01	
	31712 CFW-341	N. levee - core sample 3 ft., SCVWD 1057	<0.01	
	31759 CFW-344	S. side Moffett in ditch between Liberty & Gold	<0.01	

Sampling Date	Sample Number	Location	% Asbestos	Agency
8/18/83 cont.	31759 CFW-345	S. side Moffett between Liberty & Gold	<0.01	
	31759 CFW-346	Field N. side of Moffett, 50 ft. from stop sign	<0.01	
	31759 CFW-347	Field N. side of Moffett, 50 ft. from stop sign	<0.01	
	31759 CFW-348	?	<0.01	DHS
	31759 CFW-349	Field N.E. corner Liberty & Moffett	<0.01	
	31759 CFW-350	Field NE corner Liberty & Moffett. Same location #349 - 1-1/2 ft. deep	<0.01	
8/30/83 and 9/1/83	31823 DT-374	S. side trailer park. East of Gold St.	<0.01	DHS
	31823 DT-375	S. E. of DT-376 on boundary of trailer park	<0.01	
	31823 DT-376	S. E. of DT-375 along boundary of trailer park	<0.01	
	31823 DT-377	E. of DT-376 along boundary of trailer park	<0.01	

Sampling Date	Sample Number	Location	% Asbestos	Agency
8/30/83 and 9/1/83	31823 DT-378	N.E. of DT-377 along boundary of trailer park	<0.01	
	31823 DT-379	N. of DT-378 along boundary of trailer park	<0.01	
	31823 DT-380	S.W. of DT-379, N.W. of DT-378	<0.01	
	31823 DT-381	3' auger hole in levee north of river west of Liberty St.	7.5 ± 2.5	
	31823 DT-382	S. W. corner Moffett & Gold Streets	<1	DHS
	31823 DT-383	N.W. corner Moffett & Gold Streets	<0.01	
	31823 DT-384	N.W. corner Moffett & Gold Streets	<0.01	
	31823 DT-385	Tow yard 1/3 closest to 237	<0.01	
	31823 DT-386	Tow yard mid-section	0.1	
	31823 DT-387	Tow yard next to Liberty Street	7.5 ± 2.5	
	31823 DT-389	West side of tow yard, Entry way	<0.01	

Sampling Date	Sample Number	Location	% Asbestos	Agency
8/30/83 and 9/1/83	31823 DT-390	E. of fence. close to Mel's	<0.01	
9/12/83	31823 BB-217	Corner of Spreckles Avenue at Wabash	3 ± 2	
	31832 BB-218	Back yard, 31 Wilson Way	<0.01	
	31832 BB-219	End of Wilson Way Base of dike	3 ± 2	
	31832 BB-220	Corner of Truman & Roosevelt, unoccupied trailer	<0.01	
	31832 BB-221	Empty field across from 1465 Michigan	<0.01	DHS Random Grid
	31832 BB-222	Empty field across from 1448 Michigan between 1441 & 1453	<0.01	
	31832 BB-223	Corner of 1432 State Street in gutter	0.1	
	31832 BB-224	Vacant lot adjacent to 1370 Wabash facing Essex	<0.01	
	31832 BB-225	Commercial lot adjacent 1327 State Street	0.1	

Sampling Date	Sample Number	Location	% Asbestos	Agency
9/12/83 cont.	31832 BB-226	Vacant lot corner of Michigan & Essex	<0.01	
	31832 BB-227	Entrance to truck yard at State Street at Catherine	0.1	
	31823 BB-228	20 ft. from light post corner of Grand Avenue	0.01	
	31832 BB-229	Rear fence lot across from 1445 Wabash	0.01	
	31832 BB-230	End of Michigan at at Taylor along canal	<0.01	
	31832 BB-231	Vacant lot corner of Moffett & El Dorado	<0.01	DHS Random Grid
	31832 BB-232	Hoppe St. in front of cannery where Catherine ends	0.01	
	31832 BB-233	Alleyway off Gold Street between Taylor & Catherine	0.01	
	31832 BB-234	Across from Gold Street Fire Station close to Hoppe Street	0.01	
	31832 BB-235	Taylor Road next to levee between El Dorado & Hope	<0.01	

Sampling Date	Sample Number	Location	% Asbestos	Agency
9/12/83	31832 BB-236	Beside levee on Catherine at end of El Dorado	3 ± 2	
	31832 BB-237	Across from Gold Street Fire Station, same as BB-234, lavender powder	<0.01	
	31832 BB-238	End of Michigan at Taylor along levee	<0.01	DHS
	31832 BB-239	Vacant lot corner of Michigan & Archer, 10 ft. from telephone pole	<0.01	
	31832 BB-240	Across from Gold Street Fire Station close to Hope Street	<0.01	
	31832 BB-241	Marsh area behind levee at end of El Dorado	<0.01	

Sampling Date	Sample Number	Location	Percent Asbestos	Agency
6/18/85	50933 Field #1	Levee at Michigan - Worst case experiment	<1 (PLM) 24 (TEM)	DHS
6/18/85	50933 Field #2	Levee at Michigan - Worst case experiment	<1 (PLM) 36 (TEM)	DHS
9/17/85	Field #4	Levee at Michigan - Field experiment	12.5	DHS
9/17/85	Field #5	Levee at State	13.5	DHS
9/25/85	7	Center of road at north end Spreckles - Traffic Simulation	10	DHS
9/25/85	8	Northeast edge of Spreckles at north end - Traffic Simulation	63 - 75	DHS

Sampling Date	Sample Number	Location	% Asbestos	Agency
8/27/85	1A 51305 1B	Across from 1418 Michigan Street next to curb on road	<1 <0.5	U.S. EPA Emergency Response Section and DHS Duplicate Sampling
	2A 51305 2B	On levee at Spreckles & Michigan Streets near telephone pole	3-5 <3	
	3A -	In levee at Spreckles & Michigan Streets near telephone pole. Duplicate of 2A.	1-3 -	
	4A 51305 4B	Next to levee, curb side along Spreckles Avenue. 10 ft. S. samples 2 & 3	1-3 <0.5	
	5A 51305 5B	Along levee @ 20 ft. N. of intersection of Spreckles, Los Esteros & Grand Blvd.	1-3 3 ± 2	
	6A -	Along levee @ 20 ft. N. of intersection of Spreckles, Los Esteros & Grand Blvd. Rock sample	10-20 -	
	7A 51305 7B	Along levee, at intersection of Spreckles & Wabash	1-2 3 ± 2	
	8A	Behind ring levee at	5-10	

Sampling Date	Sample Number	Location	% Asbestos	Agency
	51305 8B	at intersection of State & Spreckles	7.5 ± 2,5	
8/27/85	9A 51305 9B	N.W. end of Spreckles. 30 ft. from end of previous paved road	3-5 3 ± 2	U.S. EPA Emergency Response Section and DHS Duplicate Sampling
	10A 51305 10B	30 ft. east of gate off Gold Street to the Guada-lupe River at edge of field	<1 <0.01	
	11A 51305 11B	Field with Moffett, Liberty & Gold as boundary. Equidistant between fence on Gold & Discovery site	7.5 ± 2,5	
	12A 51305 12B	20 ft, towards outfall structure from 11A	<1 <0.5	
	13A 51305 13B	Field with Moffett, Liberty & Gold as bound-aries, 30 ft. from levee, 20 ft. from gate	1-3 <0.01	
	14A	Field with Moffett, Liberty & Gold Streets as boundaries. 20 ft. from levee & 100 ft. from gate.	5-10	

Sampling Date	Sample Number	Location	% Asbestos	Agency
10/4/85	2720-53	Unpaved portion of Spreckles Avenue. Samples taken in zig-zag pattern 30 ft. apart, with sample #1 located 35 ft. from the N.W. corner of State & Spreckles Streets.		U. S. EPA Emergency Response Section
10/4/85	2720-53 1		3-5	U. S. EPA Emergency Response Section
	2720-53 2		1-3	
	2720-53 3		1-3	
	2720-53 4		1-3	
	2720-53 5		1-3	
	2720-53 6		1-3	
	2720-53 7		<1	
	2720-53 8		<1	

Sampling Date	Sample Number	Location	% Asbestos	Agency
10/4/85	2720-53 9		1-3	U. S. EPA Emergency Response Section
	2720-53 10		1-3	
	2720-53 11		1-3	
	2720-54 12		3-5	
	2720-53 13		1-3	
	2720-53 14		1-3	
	2720-53 15		<1	
	2720-53 16		1-3	
	2720-53 17		<1	
	2720-53 18		<1	
	2720-53 19		<1	

Sampling Date	Sample Number	Location	% Asbestos	Agency
10/4/85 cont.	2720-53 20		1-3	U. S. EPA Emergency Response Section
	2720-53 21		1-3	
	2720-53 22		<1	
	2720-53 23		1-3	
	2720-53 24		1-3	
	2720-53 25		<1	
	2720-53 26		<1	
	2720-53 27		<1	
	2720-53 28		1-3	
	2720-53 29		1-3	
	2720-53 30		<1	

Sampling Date	Sample Number	Location	% Asbestos	Agency
10/4/85	2720-53 31		<1	U. S. EPA Emergency Response Section
	2720-53 32		<1	
	2720-53 33		<1	
	2720-53 34		1-3	
	2720-53 35	Samples 35-42 at Mayne School in gravel area at 10 ft. intervals	<1	
	2720-53 36		<1	
	2720-53 37		<1	
	2720-53 38		1-3	
	2720-53 39		3-5	
	2720-53 40		3-5	
	2720-53 41		1-3	

Sampling Date	Sample Number	Location	% Asbestos	Agency
10/4/85 cont.	2720-53 42		1-3	U. S. EPA Emergency Response Section
	2720-53 43	Samples 43-47 at Mayne School gravel area, 30 ft. intervals	<1	
	2720-53 44		<1	
	2720-53 45		<1	
	2720-53 46		1-3	
	2720-53 47		<1	
10/23/85	1 - 66	Samples on unpaved roads in the O'Neill Tract.		U. S. EPA Emergency Response Section
	1	Truman Way south of Roosevelt Way	1-2	
	2	"	trace	
	3	"	trace	
	4	"	trace	
	5	"	trace	
	6	"	trace	
	7	Intersection of Truman and Roosevelt	trace	
	8	Roosevelt Way east of Truman Way	N/D+	
	9	"	trace	
	10	"	trace	
	11	"	trace	

Sampling Date	Sample Number	Location	% Asbestos	Agency
	12	Roosevelt Way east of Truman Way	trace	
	13	"	trace	
	14	"	trace	
	15	"	trace	
	16	"	trace	
	17	Truman Way north of Roosevelt Way	trace	
	18	"	N/D	
	19	"	trace	
	20	"	trace	
	21	"	trace	
	22	"	trace	
	23	Intersection of Truman Way and Park Ave.	trace	
	24	"	trace	
	25	Jackson Way east of Truman Way	trace	
	26	"	trace	
	27	"	trace	
	28	"	trace	
	29	"	trace	
	30	"	trace	
	31	"	trace	
	32	"	trace	
	33	"	trace	
	34	"	trace	
	35	Jackson Way west of Truman Way	trace	
	36	"	N/D	
	37	"	trace	
	38	"	trace	
	39	"	trace	
	40	"	trace	
	41	"	N/D	
	42	Park Ave. north of Roosevelt Way	trace	
	43	"	trace	
	44	"	N/D	
	45	"	N/D	
	46	"	trace	
	47	"	N/D	
	48	"	trace	
	49	"	trace	
	50	"	trace	
	51	Intersection of Park Ave. & Roosevelt	trace	
	52	"	trace	
	53	Park Ave. south of Roosevelt Way	trace	
	54	"	trace	
	55	"	trace	
	56	Roosevelt Way west of Truman Way	trace	

Sampling Date	Sample Number	Location	% Asbestos	Agency
	57	Roosevelt Way west of Truman Way	trace	
	58	"	trace	
	59	"	trace	
	60	"	trace	
	61	"	trace	
	62	"	trace	
	63	"	trace	
	64	"	trace	
	65	"	trace	
	66	"	trace	
	67	Unknown	trace	

EPA Grid Sampling

Sampling Date	Sample Number	Location	Percent Asbestos	Agency
12/16/85 - 12/31/85	LV-1	Southeast end ring levee	<1 ND*	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-2	Ring levee near southeast end	<1 ND	EPA (Emergency Response Section)
2/16/85 - 12/31/85	LV-4	Ring levee near intersection of school & Taylor	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-5	Ring levee near intersection of School & Taylor	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-8	Ring levee near school	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-11	Ring levee at intersection of School & Wilson	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-15	Ring levee between Roosevelt & Jackson	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-21	Ring levee north of Jackson	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-22	Ring levee north of Jackson	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-23	Ring levee north of Jackson	<1 ND	EPA (Emergency Response Section)

*Not Detected.

Sampling Date	Sample Number	Location	Percent Asbestos	Agency
12/16/85 - 12/31/85	LV-24	Ring levee north of Jackson	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-25	Ring levee north of Jackson	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-26	Ring levee southeast of intersection of Grand & Pacific	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-27	Ring levee southeast of intersection of Grand & Pacific	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-45	Ring levee between Wabash & State	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-55	Ring levee at north end Spreckles	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-57	Ring levee at north end Spreckles	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-200	Ring levee east of the marina	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-201	Ring levee east of the marina	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-202	Ring levee east of the marina	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-216	Ring levee north of intersection of State & Catherine	<1 ND	EPA (Emergency Response Section)

Sampling Date	Sample Number	Location	Percent Asbestos	Agency
12/16/85 - 12/31/85	LV-218	Ring levee north of intersection of State & Catherine	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-222	Ring levee northeast of intersection of State & Catherine	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R- 1	East end Grand Ave.	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R- 2	East end Grand Ave.	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R- 3	East end Grand Ave.	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R- 4	Marsh east of Spreckles	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R- 5	Marsh east of Spreckles	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R- 6	Marsh east of Spreckles	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R- 7	Marsh east of Spreckles	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R- 9	Marsh east of Spreckles	<1 ND	EPA (Emergency Response Section)

Sampling Date	Sample Number	Location	Percent Asbestos	Agency
12/16/85 - 12/31/85	R-10	Marsh east of Spreckles	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-11	Duplicate of R-10	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-12	Marsh east of Spreckles	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-14	Marsh east of Spreckles	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-15	Marsh east of Spreckles	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-16	Marsh east of Spreckles	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-17	Marsh east of Spreckles	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-18	Duplicate of R-14	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-21	1560 Grand Avenue	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-22	1556 Grand Avenue	<1 ND	EPA (Emergency Response Section)

Sampling Date	Sample Number	Location	Percent Asbestos	Agency
12/16/85 - 12/31/85	R-23	1528 Grand Avenue	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-29	1545 Michigan Avenue	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-32	Marsh east of Spreckles	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-33	Marsh east of Spreckles	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-34	1520 Michigan Avenue	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-36	1511 Wabash St.	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-38	1586 Michigan Avenue	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-50	1468 Grand Avenue	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-68	Near intersection of Wabash and Essex	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-90	East of intersection of Grand and Wilson	<1 ND	EPA (Emergency Response Section)

Sampling Date	Sample Number	Location	Percent Asbestos	Agency
12/16/85 - 12/31/85	R-91	South of intersection of Grand and Essex	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-95	Maciel truckyard near Archer and State	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-98	A&R Concrete, west of State	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-99	A&R Concrete, west of State	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-100	Railroad tracks at Elizabeth	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-102	Railroad tracks at Catherine	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-103	Railroad tracks at Gold	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-104	Alfa Foundry at El Dorado and Hoppe	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-106	Railroad tracks at Moffat	<1 ND	EPA (Emergency Response Section
12/16/85 - 12/31/85	R-107	Southwest of intersection of Gold and Moffat	<1 ND	EPA (Emergency Response Section)

Sampling Date	Sample Number	Location	Percent Asbestos	Agency
12/16/85 - 12/31/85	R-117	1385 State Street	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-118	Intersection of Liberty and Hoppe	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-119	Intersection of Liberty and Moffat	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-126	Across street from 1121 Catherine	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-127	Intersection of Catherine and Elizabeth	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-128	Railroad tracks at Elizabeth	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-129	Intersection of Catherine and El Dorado	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-130	1044 Catherine	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-131	Intersection of Gold and Taylor	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-132	Taylor between Gold and Liberty	<1 ND	EPA (Emergency Response Section)

Sampling Date	Sample Number	Location	Percent Asbestos	Agency
12/16/85 - 12/31/85	R-133	Gold Street between Taylor and Hoppe	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-134	1610 Gold Street	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-137	Intersection of El Dorado and Moffat	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-201	Wabash between Archer and Essex	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-211	Duplicate of R-210	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-212	Northeast of intersection of State and Archer	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-213	Southwest of intersection of State and Archer	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-400	River levee west of Hope Street	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-401	River levee west of Hope Street	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-402	River levee west of Hope Street	<1 ND	EPA (Emergency Response Section)

Sampling Date	Sample Number	Location	Percent Asbestos	Agency
12/16/85 - 12/31/85	R-403	River levee west of Hope Street	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-406	River levee west of Hope Street	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-407	River levee west of Hope Street	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-411	Duplicate of R-410	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-412	River levee west of Hope Street	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-413	River levee west of Hope Street	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-414	River levee west of Hope Street	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	EC-13	Environmental Education Center, east side of building	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	EC-14	Environmental Education Center, west side of building	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	EC-15	Environmental Education Center, path north of building	<1 ND	EPA (Emergency Response Section)

Sampling Date	Sample Number	Location	Percent Asbestos	Agency
12/16/85 - 12/31/85	EC-16	Marsh at Environmental Education Center	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	EC-18	Levee trail at Environmental Education Center	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	EC-19	Levee trail at Environmental Education Center	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	EC-20	Levee trail at Environmental Education Center	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	EC-21	Environmental Education Center	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	EC-22	Duplicate of EC-21	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	SD-5	Intersection of State and Essex. Street dust.	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	SD-6	Northeast of intersection of State and Essex. Street dust.	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	C-1	Vacant land between river and Taylor Street	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	C-2	Vacant land between river and Taylor Street	<1 ND	EPA (Emergency Response Section)

Sampling Date	Sample Number	Location	Percent Asbestos	Agency
12/16/85 - 12/31/85	C-4	Vacant land between river and Taylor Street	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	C-7	Vacant land between river and Taylor Street	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	C-8	Vacant land between river and Taylor Street	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	C-9	Vacant land between river and Taylor Street	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	C-10	Vacant land between river and Taylor Street	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	C-12	Vacant land between river and Taylor Street	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	RK-301	East of Liberty and and south of Taylor	<1 ND	EPA (Emergency Response Section)
2/16/85 - 12/31/85	RK-302	East of Liberty and and south of Taylor	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	RK-304	East of Liberty and and south of Taylor	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	RK-309	East of Liberty and and south of Taylor	<1 ND	EPA (Emergency Response Section)

Sampling Date	Sample Number	Location	Percent Asbestos	Agency
12/16/85 - 12/31/85	RK-310	Duplicate of RK-309	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	RK-312	East of Liberty and and south of Taylor	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	RK-313	East of Liberty and and south of Taylor	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	GM-1	George Mayne School grounds	<1 ND	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-3	Ring levee near south end	<1 TR*	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-46	Duplicate of LV-45	<1 TR	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-50	Ring levee near inter-section of Spreckles and State	<1 TR	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-52	Ring levee north end Spreckles Steet	<1 TR	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-54	Ring levee north end Spreckles Street	<1 TR	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-56	Ring levee north end Spreckles Street	<1 TR	EPA (Emergency Response Section)

*Trace.

Sampling Date	Sample Number	Location	Percent Asbestos	Agency
12/16/85 - 12/31/85	LV-213	Ring levee at intersection of Catherine and Gold	<1 TR	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-214	Ring levee between Gold and Liberty	<1 TR	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-215	Ring levee between Gold and Liberty	<1 TR	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-221	Ring levee northeast of intersection of State and Liberty	<1 TR	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-223	Ring levee northeast of intersection of Stae and Liberty	<1 TR	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-20	1560 Grand Avenue	<1 TR	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-24	1504 Grand Avenue	<1 TR	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-25	1500 block Grand Avenue	<1 TR	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-26	1500 block Grand Avenue	<1 TR	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-27	1541 Michigan Avenue	<1 TR	EPA (Emergency Response Section)

Sampling Date	Sample Number	Location	Percent Asbestos	Agency
12/16/85 - 12/31/85	R-28	1545 Michigan Avenue	<1 TR	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-35	1500 block Michigan Avenue	<1 TR	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-40	1532 Wabash Street	<1 TR	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-41	1532 Wabash Street	<1 TR	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-43	North of intersection of State and Pacific	<1 TR	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-44	Northeast of inter-section of State and Pacific	<1 TR	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-46	Northwest of inter-section of State and Pacific	<1 TR	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-47	North of intersection of State and Pacific	<1 TR	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-48	South of Spreckles near north end	<1 TR	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-49	Duplicate of R-48	<1 TR	EPA (Emergency Response Section)

Sampling Date	Sample Number	Location	Percent Asbestos	Agency
12/16/85 - 12/31/85	R-56	Intersection of Essex and Michigan	<1 TR	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-59	1421 Wabash Street	<1 TR	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-61	Southwest of intersection of Pacific and State	<1 TR	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-62	Southwest of intersection of Pacific and State	<1 TR	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-63	Southwest of intersection of Pacific and State	<1 TR	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-64	Southwest of intersection of Pacific and State	<1 TR	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-65	1432 State Street	<1 TR	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-69	Duplicate of R-68	<1 TR	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-70	1385 Grand Blvd.	<1 TR	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-71	1385 Grand Blvd.	<1 TR	EPA (Emergency Response Section)

Sampling Date	Sample Number	Location	Percent Asbestos	Agency
12/16/85 - 12/31/85	R-77	1313 Michigan Avenue	<1 TR	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-80	Michigan between Taylor and Archer	<1 TR	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-81	North of intersection of Taylor and Michigan	<1 TR	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-85	Intersection of Taylor and Grand	<1 TR	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-86	Grand between Taylor and Archer	<1 TR	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-88	South of intersection of Wilson and Grand	<1 TR	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-89	Duplicate of R-88	<1 TR	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-93	Grand between Essex and Pacific	<1 TR	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-101	Intersection of El Dorado and Catherine	<1 TR	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-105	North of intersection of El Dorado and Moffat	<1 TR	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-108	Fire Station at Hoppe and Gold	<1 TR	EPA (Emergency Response Section)

Sampling Date	Sample Number	Location	Percent Asbestos	Agency
12/16/85 – 12/31/85	R-109	Duplicate of R-108	<1 TR	EPA (Emergency Response Section)
12/16/85 – 12/31/85	R-110	North of Fire Station	<1 TR	EPA (Emergency Response Section)
12/16/85 – 12/31/85	R-120	North of intersection of Liberty and Moffat	<1 TR	EPA (Emergency Response Section)
12/16/85 – 12/31/85	R-121	North of intersection of Liberty and Moffat	<1 TR	EPA (Emergency Response Section)
12/16/85 – 12/31/85	R-122	Intersection of Liberty and Hoppe	<1 TR	EPA (Emergency Response Section)
12/16/85 – 12/31/85	R-123	1165 Liberty	<1 TR	EPA (Emergency Response Section)
12/16/85 – 12/31/85	R-124	1463 Liberty	<1 TR	EPA (Emergency Response Section)
12/16/85 – 12/31/85	R-125	Intersection of Catherine and Liberty	<1 TR	EPA (Emergency Response Section)
12/16/85 – 12/31/85	R-135	Intersection of Gold and Moffat	<1 TR	EPA (Emergency Response Section)
12/16/85 – 12/31/85	R-136	Intersection of Gold and Moffat	<1 TR	EPA (Emergency Response Section)

Sampling Date	Sample Number	Location	Percent Asbestos	Agency
12/16/85 – 12/31/85	R-138	Railroad tracks at Hoppe	<1 TR	EPA (Emergency Response Section)
12/16/85 – 12/31/85	R-139	Taylor between Gold and El Dorado	<1 TR	EPA (Emergency Response Section)
12/16/85 – 12/31/85	R-200	Intersection of Wabash and Essex	<1 TR	EPA (Emergency Response Section)
12/16/85 – 12/31/85	R-203	Intersection of Wabash and Archer	<1 TR	EPA (Emergency Response Section)
12/16/85 – 12/31/85	R-205	Southwest end Wabash	<1 TR	EPA (Emergency Response Section)
12/16/85 – 12/31/85	R-216	North of intersection of State and Liberty	<1 TR	EPA (Emergency Response Section)
12/16/85 – 12/31/85	R-405	River levee west of Hope Street	<1 TR	EPA (Emergency Response Section)
12/16/85 – 12/31/85	R-415	Intersection of Taylor El Dorado	<1 TR	EPA (Emergency Response Section)
12/16/85 – 12/31/85	EC-12	Environmental Education Center, northeast of building	<1 TR	EPA (Emergency Response Section)
12/16/85 – 12/31/85	SS-1	Entrance to trailer park	<1 TR	EPA (Emergency Response Section)

Sampling Date	Sample Number	Location	Percent Asbestos	Agency
12/16/85 - 12/31/85	SS-4	Channel Drive East	<1 TR	EPA (Emergency Response Section)
12/16/85 - 12/31/85	SS-5	Sun Rise Drive	<1 TR	EPA (Emergency Response Section)
12/16/85 - 12/31/85	SS-13	Channel Drive East	<1 TR	EPA (Emergency Response Section)
12/16/85 - 12/31/85	SS-15	Channel Drive West	<1 TR	EPA (Emergency Response Section)
12/16/85 - 12/31/85	SD-3	Intersection of Archer and State. Street dust.	<1 TR	EPA (Emergency Response Section)
12/16/85 - 12/31/85	SD-7	Intersection of Pacific and State. Street Dust.	<1 TR	EPA (Emergency Response Section)
12/16/85 - 12/31/85	SD-8	State Street between Pacific and Spreckles. Street dust.	<1 TR	EPA (Emergency Response Section)
12/16/85 - 12/31/85	C-3	Vacant land between river and Taylor Street	<1 TR	EPA (Emergency Response Section)
12/16/85 - 12/31/85	C-5	Vacant land between river and Taylor Street	<1 TR	EPA (Emergency Response Section)
12/16/85 - 12/31/85	C-6	Vacant land between river and Taylor Street	<1 TR	EPA (Emergency Response Section)

Sampling Date	Sample Number	Location	Percent Asbestos	Agency
12/16/85 - 12/31/85	C-11	Vacant land between river and Taylor Street	<1 TR	EPA (Emergency Response Section)
12/16/85 - 12/31/85	C-14	Vacant land between river and Taylor Street	<1 TR	EPA (Emergency Response Section)
12/16/85 - 12/31/85	C-15	Vacant land between river and Taylor Street	<1 TR	EPA (Emergency Response Section)
12/16/85 - 12/31/85	RK-300	East of Liberty and south of Taylor	<1 TR	EPA (Emergency Response Section)
12/16/85 - 12/31/85	RK-303	East of Liberty and south of Taylor	<1 TR	EPA (Emergency Response Section)
12/16/85 - 12/31/85	RK-306	East of Liberty and south of Taylor	<1 TR	EPA (Emergency Response Section)
12/16/85 - 12/31/85	RK-308	East of Liberty and south of Taylor	<1 TR	EPA (Emergency Response Section)
12/16/85 - 12/31/85	RK-314	East of Liberty and south of Taylor	<1 TR	EPA (Emergency Response Section)
12/16/85 - 12/31/85	RK-315	East of Liberty and south of Taylor	<1 TR	EPA (Emergency Response Section)
12/16/85 - 12/31/85	RK-316	East of Liberty and south of Taylor	<1 TR	EPA (Emergency Response Section)

Sampling Date	Sample Number	Location	Percent Asbestos	Agency
12/16/85 - 12/31/85	LV-6	Ring levee near intersection of School and Taylor	1-2	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-7	Ring levee between Taylor and Wilson	1-2	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-14	Ring levee at Roosevelt Way	1-2	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-16	Ring levee at Jackson Way	1-2	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-17	Ring Levee at Jackson Way	1-2	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-28	Ring levee near intersection of Grand and Pacific	1-2	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-48	Ring Levee between State and Wabash	1-2	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-49	Ring Levee at intersection of State and Spreckles	1-2	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-51	Ring Levee at north end Spreckles	1-2	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-53	Ring levee at north end Spreckles	1-2	EPA (Emergency Response Section)

Sampling Date	Sample Number	Location	Percent Asbestos	Agency
12/16/85 - 12/31/85	LV-58	Ring levee north of sewage treatment plant	1-2	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-203	Ring levee east of marina	1-2	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-207	Ring levee between El Dorado and Gold	1-2	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-217	Ring levee north of intersection of State and Catherine	1-2	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-219	Ring levee north of intersection of State and Catherine	1-2	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-220	Ring levee north of intersection of State and Catherine	1-2	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-19	Intersection of Grand and Spreckles	1-2	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-30	Intersection of Michigan and Spreckles	1-2	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-31	Intersection of Michigan and Spreckles	1-2	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-37	1545 Wabash Street	1-2	EPA (Emergency Response Section)

Sampling Date	Sample Number	Location	Percent Asbestos	Agency
12/16/85 - 12/31/85	R-45	West of intersection of State and Spreckles	1-2	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-53	Northeast of inter-section of Essex and Michigan	1-2	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-54	Intersection of Pacific and Michigan	1-2	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-55	1456 Michigan	1-2	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-57	Wabash between Essex and Pacific	1-2	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-58	1421 Wabash Street	1-2	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-66	State between Pacific and Essex	1-2	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-67	State between Pacific and Essex	1-2	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-72	Grand between Archer and Essex	1-2	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-74	Near intersection of Michigan and Essex	1-2	EPA (Emergency Response Section)

Sampling Date	Sample Number	Location	Percent Asbestos	Agency
12/16/85 - 12/31/85	R-76	Near intersection of Michigan and Archer	1-2	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-78	South of intersection Michigan and Archer	1-2	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-79	Duplicate of R-78	1-2	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-83	North of intersection of Taylor and Grand	1-2	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-84	Grand between Taylor and Archer	1-2	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-87	Near intersection of Archer and Grand	1-2	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-92	Grand between Essex and Pacific	1-2	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-96	Northwest of inter-section of State and Archer	1-2	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-111	Intersection of Gold and Taylor	1-2	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-115	Intersection of State and Liberty	1-2	EPA (Emergency Response Section)

Sampling Date	Sample Number	Location	Percent Asbestos	Agency
12/16/85 - 12/31/85	R-116	Near intersection of Liberty and Hoppe	1-2	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-141	Moffat between Gold and Liberty	1-2	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-202	Near intersection of Archer and Wabash	1-2	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-207	Southwest of intersection of State and Essex	1-2	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-217	Northwest of intersection of Liberty and Catherine	1-2	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-409	Intersection of Hope and Catherine	1-2	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-410	River levee west of Hope Street	1-2	EPA (Emergency Response Section)
12/16/85 - 12/31/85	EC-10	Environmental Education Center, berm on east side of the road	1-2	EPA (Emergency Response Section)
12/16/85 - 12/31/85	EC-11	Duplicate of EC-10	1-2	EPA (Emergency Response Section)
12/16/85 - 12/31/85	SS-2	Near entrance of trailer park	1-2	EPA (Emergency Response Section)
12/16/85 - 12/31/85	SS-3	Near west end of Channel Drive West	1-2	EPA (Emergency Response Section)

Sampling Date	Sample Number	Location	Percent Asbestos	Agency
12/16/85 - 12/31/85	SS-6	Near east end of Sunrise Drive	1-2	EPA (Emergency Response Section)
12/16/85 - 12/31/85	SS-7	East end Sea View Drive	1-2	EPA (Emergency Response Section)
12/16/85 - 12/31/85	SS-8	Horizon Circle	1-2	EPA (Emergency Response Section)
12/16/85 - 12/31/85	SS-12	North side of Channel Drive East	1-2	EPA (Emergency Response Section)
12/16/85 - 12/31/85	SS-14	East side of trailer park	1-2	EPA (Emergency Response Section)
12/16/85 - 12/31/85	SD-4	State Street between Archer and Essex. Street dust.	1-2	EPA (Emergency Response Section)
12/16/85 - 12/31/85	RK-305	East of Liberty and south of Taylor	1-2	EPA (Emergency Response Section)
12/16/85 - 12/31/85	RK-311	East of Liberty and south of Taylor	1-2	EPA (Emergency Response Section)
12/16/85 - 12/31/85	GM-3	George Mayne School grounds	1-2	EPA (Emergency Response Section)
12/16/85 - 12/31/85	GM-4	George Mayne School grounds	1-2	EPA (Emergency Response Section)

Sampling Date	Sample Number	Location	Percent Asbestos	Agency
12/16/85 - 12/31/85	GM-5	George Mayne School grounds	1-2	EPA (Emergency Response Section)
12/16/85 - 12/31/85	GM-7	George Mayne School grounds	1-2	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-13	Ring levee at Roosevelt Way	2-3	EPA (Emergency Response Section)
12/16/85- 12/31/85	LV-18	Ring levee north of Jackson Way	2-3	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-19	Ring levee north of Jackson Way	2-3	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-20	Ring levee north of Jackson Way	2-3	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-47	Ring levee between State and Wabash	2-3	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-59	Ring levee north of old sewage treatment plant	2-3	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-13	Marsh east of intersection of Spreckles and Wabash	2-3	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-42	Intersection of Spreckles and Wabash	2-3	EPA (Emergency Response Section)

Sampling Date	Sample Number	Location	Percent Asbestos	Agency
12/16/85 - 12/31/85	R-51	Intersection of Pacific and Grand	2-3	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-73	Intersection of Archer and Grand	2-3	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-75	Michigan between Archer and Essex	2-3	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-82	Intersection of Taylor and Michigan	2-3	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-94	Intersection of Pacific and Grand	2-3	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-114	Catherine between Gold and Liberty	2-3	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-206	West end of Wabash Street	2-3	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-210	Intersection of State and Archer	2-3	EPA (Emergency Response Section)
12/16/85 - 12/31/85	EC-3	Environmental Education Center, berm on east side of road	2-3	EPA (Emergency Response Section)
12/16/85 - 12/31/85	EC-5	Environmental Education Center, berm on east side of road	2-3	EPA (Emergency Response Section)

Sampling Date	Sample Number	Location	Percent Asbestos	Agency
12/16/85 - 12/31/85	EC-23	Debris pile at Environmental Education Center	2-3	EPA (Emergency Response Section)
12/16/85 - 12/31/85	SS-9	Intersection of Horizon Circle and Sea View Drive	2-3	EPA (Emergency Response Section)
12/16/85 - 12/31/85	SS-10	Sea View Drive	2-3	EPA (Emergency Response Section)
12/16/85 - 12/31/85	SS-11	Duplicate of SS-10	2-3	EPA (Emergency Response Section)
12/16/85 - 12/31/85	SD-1	Intersection of Liberty and State	2-3	EPA (Emergency Response Section)
12/16/85 - 12/31/85	SD-2	State between Liberty and Archer	2-3	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-9	Ring levee south of Wilson Way	3-5	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-10	Ring levee at Wilson Way	3-5	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-212	Ring levee between Catherine and Elizabeth	3-5	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-244	Ring levee west of intersection of State and Pacific	3-5	EPA (Emergency Response Section)

Sampling Date	Sample Number	Location	Percent Asbestos	Agency
12/16/85 - 12/31/85	R-39	1435 Pacific	3-5	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-60	Intersection of State and Pacific	3-5	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-97	Near ring levee north of intersection of State and Archer	3-5	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-113	1121 Catherine	3-5	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-208	State between Archer and Essex	3-5	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-209	Driveway at 1350 State	3-5	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-215	Intersection of State and Catherine	3-5	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-408	956 Catherine	3-5	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-12	Ring levee between Wilson and Roosevelt	5-10	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-30	Ring levee near intersection of Grand and Pacific	5-10	EPA (Emergency Response Section)

Sampling Date	Sample Number	Location	Percent Asbestos	Agency
12/16/85 - 12/31/85	LV-31	Ring levee near intersection of Grand and Pacific	5-10	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-37	Ring levee at intersection of Grand and Spreckles	5-10	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-38	Ring levee between Michigan and Grand	5-10	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-43	Ring levee at Wabash	5-10	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-44	Ring levee at Wabash	5-10	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-60	Ring levee at old sewage treatment plant	5-10	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-62	Ring levee at old sewage treatment plant	5-10	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-204	Ring levee at El Dorado	5-10	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-208	Ring levee at intersection of Elizabeth and Catherine	5-10	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-209	Ring levee at intersection of Elizabeth and Catherine	5-10	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-210	Ring levee at intersection of Elizabeth and Catherine	5-10	EPA (Emergency Response Section)

Sampling Date	Sample Number	Location	Percent Asbestos	Agency
12/16/85 - 12/31/85	LV-211	Duplicate of LV-210	5-10	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-224	Ring levee northeast of intersection of State and Liberty	5-10	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-225	Ring levee northeast of intersection of State and Liberty	5-10	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-229	Ring levee northwest of intersection of State and Archer	5-10	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-231	Ring levee north of intersection of State and Archer	5-10	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-243	Ring levee west of intersection of State and Pacific	5-10	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-52	Grand between Essex and Pacific	5-10	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-204	Wabash between Taylor and Archer	5-10	EPA (Emergency Response Section)
12/16/85 - 12/31/85	EC-7	Environmental Education Center, berm on east side of road	5-10	EPA (Emergency Response Section)
12/16/85 - 12/31/85	EC-8	Environmental Education Center, berm on east side of road	5-10	EPA (Emergency Response Section)

Sampling Date	Sample Number	Location	Percent Asbestos	Agency
12/16/85 - 12/31/85	EC-9	Environmental Education Center, berm on east side of road	5-10	EPA (Emergency Response Section)
12/16/85 - 12/31/85	RK-307	East of Liberty and south of Taylor	5-10	EPA (Emergency Response Section)
12/16/85 - 12/31/85	GM-2	George Mayne School grounds	5-10	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-32	Ring levee between Pacific and Spreckles	10-20	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-36	Duplicate of LV-35	10-20	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-39	Ring levee between Grand and Michigan	10-20	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-40	Ring Levee at Michigan	10-20	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-41	Ring levee between Michigan and Wabash	10-20	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-42	Ring levee between Michigan and Wabash	10-20	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-64	Ring levee at old sewage-treatment plant	10-20	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-66	Ring levee northwest of intersection of State and Pacific	10-20	EPA (Emergency Response Section)

Sampling Date	Sample Number	Location	Percent Asbestos	Agency
12/16/85 - 12/31/85	LV-205	Ring levee north of Elizabeth	10-20	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-206	Ring levee north of Elizabeth	10-20	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-226	Ring levee northwest of intersection of State and Archer	10-20	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-227	Ring levee northwest of intersection of State and Archer	10-20	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-228	Ring levee northwest of intersection of State and Archer	10-20	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-230	Ring levee northwest of intersection of State and Archer	10-20	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-240	Ring levee west of intersection of State and Pacific	10-20	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-241	Ring levee west of intersection of State and Pacific	10-20	EPA (Emergency Response Section)
12/16/85 - 12/31/85	EC-1	Environmental Education Center, berm on east side of road	10-20	EPA (Emergency Response Section)
12/16/85 - 12/31/85	EC-2	Environmental Education Center, berm on east side of road	10-20	EPA (Emergency Response Section)

Sampling Date	Sample Number	Location	Percent Asbestos	Agency
12/16/85 - 12/31/85	EC-4	Environmental Education Center, berm on east side of road	10-20	EPA (Emergency Response Section)
12/16/85 - 12/31/85	EC-6	Environmental Education Center, berm on east side of road	10-20	EPA (Emergency Response Section)
12/16/85 - 12/31/85	GM-6	George Mayne School grounds	10-20	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-29	Ring levee at Pacific Avenue	20-30	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-33	Ring levee between Pacific and Spreckles	20-30	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-34	Ring levee between Pacific and Spreckles	20-30	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-35	Ring levee between Pacific and Spreckles	20-30	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-61	Ring levee at old sewage-treatment plant	20-30	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-65	Ring levee near old sewage-treatment plant	20-30	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-232	Ring levee west of intersection of State and Essex	20-30	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-235	Ring levee northwest of intersection of State and Essex	20-30	EPA (Emergency Response Section)

Sampling Date	Sample Number	Location	Percent Asbestos	Agency
12/16/85 - 12/31/85	LV-236	Ring levee northwest of intersection of State and Essex	20-30	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-237	Ring levee northwest of intersection of State and Essex	20-30	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-238	Ring levee northwest of intersection of State and Essex	20-30	EPA (Emergency Response Section)
12/16/85 - 12/31/85	R-112	Near intersection of Gold and Catherine	20-30	EPA (Emergency Response Section)
12/16/85 - 12/31/85	EC-17	Levee trail at Environmental Education Center	20-30	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-63	Ring levee at old sewage-treatment plant	30-40	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-233	Ring levee west of intersection of State and Essex	30-40	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-234	Ring levee west of intersection of State and Essex	30-40	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-239	Ring levee west of intersection of State and Pacific	30-40	EPA (Emergency Response Section)
12/16/85 - 12/31/85	LV-242	Ring levee west of intersection of State and Pacific	30-40	EPA (Emergency Response Section)

Sampling Date	Sample Number	Location	Percent Asbestos	Agency
12/16/85 - 12/31/85	R-8	Marsh east of Spreckles	30-40	EPA (Emergency Response Section)
12/16/85 - 12/31/85	EC-24	Debris pile at Environmental Center	30-40	EPA (Emergency Response Section)

City of San Jose

Sampling Date	Sample Number	Location	Percent Asbestos	Agency
5/7/86	?	Topsoil at WSP Truckyard	2	City of San Jose (Woodward Clyde Consultants)

Sampling Date	Sample Number	Location	Percent Asbestos	Agency
5/15/86 & 5/16/86	1A	Southeast end of ring levee. From 4-6" depth.	ND*	City of San Jose (Woodward Clyde Con-sultants)
5/15/86 & 5/16/86	1B	Same as 1A. From 12-18" depth	ND	City of San Jose (Woodward Clyde Con-sultants)
5/15/86 & 5/16/86	2A	Ring Levee near south-east end. From 4-6" depth.	ND	City of San Jose (Woodward Clyde Con-sultants)
5/15/86 & 5/16/86	2B	Same as 2A. From 12-18" depth.	ND	City of San Jose (Woodward Clyde Con-sultants)
5/15/86 & 5/16/86	3A	Ring levee near south end School St. From 4-6" depth.	2	City of San Jose (Woodward Clyde Con-sultants)
5/15/86 & 5/16/86	3B	Same as 3A. From 12-18" depth.	2	City of San Jose (Woodward Clyde Con-sultants)
5/15/86 & 5/16/86	4A	Ring levee south of Wilson Way. From 4-6" depth.	1	City of San Jose (Woodward Clyde Con-sultants)
5/15/86 & 5/16/86	4B	Same as 4A. From 12-18" depth.	10	City of San Jose (Woodward Clyde Con-sultants)
5/15/86 & 5/16/86	5A	Ring levee at Wilson Way. From 4-6" depth.	3	City of San Jose (Woodward Clyde Con-sultants)

*Not Detected.

Sampling Date	Sample Number	Location	Percent Asbestos	Agency
5/15/86 & 5/16/86	5B	Same as 5A. From 12-18" depth.	ND	City of San Jose (Woodward Clyde Consultants)
5/15/86 & 5/16/86	6A	Ring levee north of Wilson Way. From 4-6" depth.	2	City of San Jose (Woodward Clyde Consultants)
5/15/86 & 5/16/86	6B	Same as 6A. From 12-18" depth.	ND	City of San Jose (Woodward Clyde Consultants)
5/15/86 & 5/16/86	7A	Ring levee north of Roosevelt Way. From 4-6" depth.	2	City of San Jose (Woodward Clyde Consultants)
5/15/86 & 5/16/86	7B	Same as 7A. From 12-18" depth.	1	City of San Jose (Woodward Clyde Consultants)
5/15/86 & 5/16/86	8A	Ring levee north of Jackson Way. From 4-6" depth.	2	City of San Jose (Woodward Clyde Consultants)
5/15/86 & 5/16/86	8B	Same as 8A. From 12-18" depth.	3	City of San Jose (Woodward Clyde Consultants)
5/15/86 & 5/16/86	9A	Ring levee north of Jackson Way. From 4-6" depth.	3	City of San Jose (Woodward Clyde Consultants)
5/15/86 & 5/16/86	9B	Same as 9A. From 12-18" depth.	ND	City of San Jose (Woodward Clyde Consultants)

Sampling Date	Sample Number	Location	Percent Asbestos	Agency
5/15/86 & 5/16/86	10A	Ring levee north of Jackson Way. From 4-6" depth.	ND	City of San Jose (Woodward Clyde Consultants)
5/15/86 & 5/16/86	10B	Same as 10A. From 12-18" depth.	1	City of San Jose (Woodward Clyde Consultants)
5/15/86 & 5/16/86	11A	Ring levee north of Jackson Way. From 4-6" depth.	ND	City of San Jose (Woodward Clyde Consultants)
5/15/86 & 5/16/86	11B	Same as 11A. From 12-18" depth.	ND	City of San Jose (Woodward Clyde Consultants)
5/15/86 & 5/16/86	12A	Ring levee east of intersection of Pacific & Grand. From 4-6" depth.	<1	City of San Jose (Woodward Clyde Consultants)
5/15/86 & 5/16/86	12B	Same as 12A. From 12-18" depth.	4	City of San Jose (Woodward Clyde Consultants)
5/15/86 & 5/16/86	13A	Ring levee northeast of intersection of Pacific and Grand. From 4-6" depth.	15	City of San Jose (Woodward Clyde Consultants)
5/15/86 & 5/16/86	13B	Same as 13A. From 12-18" depth.	15	City of San Jose (Woodward Clyde Consultants)
5/15/86 & 5/16/86	14A	Ring levee at Grand Ave. From 4-6" depth.	10	City of San Jose (Woodward Clyde Consultants)

Sampling Date	Sample Number	Location	Percent Asbestos	Agency
5/15/86 & 5/16/86	14B	Same as 14A. From 12-18" depth.	4.5	City of San Jose (Woodward Clyde Consultants)
5/15/86 & 5/16/86	15A	Ring levee at Grand Ave. From 4-6" depth.	5	City of San Jose (Woodward Clyde Consultants)
5/15/86 & 5/16/86	15B	Same as 15A. From 12-18" depth.	4	City of San Jose (Woodward Clyde Consultants)
5/15/86 & 5/16/86	16A	Ring levee at intersection of Grand & Spreckles. From 4-6" depth.	10	City of San Jose (Woodward Clyde Consultants)
	16B	Not collected.		City of San Jose (Woodward Clyde Consultants)
5/15/86 & 5/16/86	17A	Ring levee at Michigan St. From 4-6" depth.	12	City of San Jose (Woodward Clyde Consultants)
5/15/86 & 5/16/86	17B	Same as 17A. From 12-18" depth.	22	City of San Jose (Woodward Clyde Consultants)
5/15/86 & 5/16/86	18A	Ring levee beween Michigan and Wabash. From 4-6" depth.	15	City of San Jose (Woodward Clyde Consultants)
5/15/86 & 5/16/86	18B	Same as 18A. From 12-18" depth.	17	City of San Jose (Woodward Clyde Consultants)

Sampling Date	Sample Number	Location	Percent Asbestos	Agency
5/15/86 & 5/16/86	19A	Ring levee between Wabash and State. From 4-6" depth.	ND	City of San Jose (Woodward Clyde Con-sultants)
5/15/86 & 5/16/86	19B	Same as 19A. From 12-18" depth.	19	City of San Jose (Woodward Clyde Con-sultants)
5/15/86 & 5/16/86	20A	Ring levee at Inter-section of State & Spreckles. From 4-6" depth.	9.5	City of San Jose (Woodward Clyde Con-sultants)
5/15/86& 5/16/86	20B	Same as 20A. From 12-18" depth.	5	City of San Jose (Woodward Clyde Con-sultants)
5/15/86 & 5/16/86	21A	Ring levee along north end Spreckles. From 4-6" depth.	ND	City of San Jose (Woodward Clyde Con-sultants)
5/15/86 & 5/16/86	21B	Same as 21A. From 12-18" depth.	7	City of San Jose (Woodward Clyde Con-sultants)
5/15/86 & 5/16/86	22A	Ring levee along north end of Spreckles. From 4-6" depth.	1	City of San Jose (Woodward Clyde Con-sultants)
5/15/86 & 5/16/86	22B	Same as 22A. From 12-18" depth.	5	City of San Jose (Woodward Clyde Con-sultants)
5/15/86 & 5/16/86	23A	North end ring levee at Spreckles. From 4-6" depth.	ND	City of San Jose (Woodward Clyde Con-sultants)

Sampling Date	Sample Number	Location	Percent Asbestos	Agency
5/15/86 & 5/16/86	23B	Same as 23A. From 12-18" depth.	ND	City of San Jose (Woodward Clyde Con-sultants)
5/15/86 & 5/16/86	24A	Ring levee north of old sewage treatment plant. From 4-6" depth.	<1	City of San Jose (Woodward Clyde Con-sultants)
5/15/86 & 5/16/86	24B	Same as 24A. From 12-18" depth.	1	City of San Jose (Woodward Clyde Con-sultants)
5/15/86 & 5/16/86	25A	Ring levee near inter-of Mill & Hope. From 4-6" depth.	2	City of San Jose (Woodward Clyde Con-sultants)
5/15/86 & 5/16/86	25B	Same as 25A. From 12-18" depth.	10	City of San Jose (Woodward Clyde Con-sultants)
5/15/86 & 5 16/86	26A	Ring levee east of Hope St. From 4-6" depth.	2	City of San Jose (Woodward Clyde Con-sultants)
5/15/86 & 5/16/86	26B	Same as 26A. From 12-18" depth.	6	City of San Jose (Woodward Clyde Con-sultants)
5/15/86 & 5/16/86	27A	Ring levee at inter-section of Elizabeth & El Dorado. From 4-6" depth.	8	City of San Jose (Woodward Clyde Con-sultants)
5/15/86 & 5/16/86	27B	Same as 27A. From 12-18" depth.	4	City of San Jose (Woodward Clyde Con-sultants)

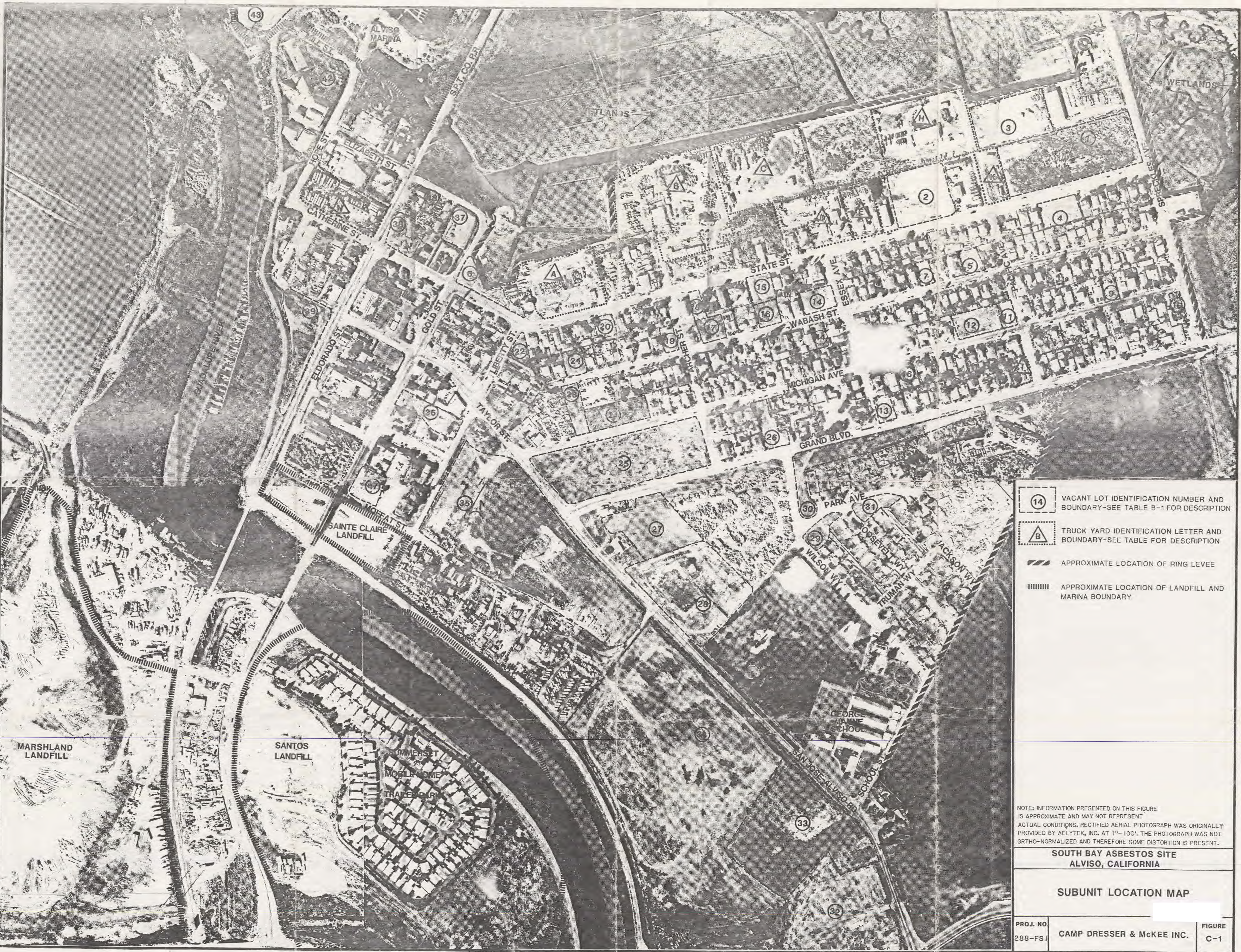
Sampling Date	Sample Number	Location	Percent Asbestos	Agency
5/15/86 & 5/16/86	28A	Ring levee between El Dorado & Gold. From 4-6" depth.	2	City of San Jose (Woodward Clyde Consultants)
5/15/86 & 5/16/86	28B	Same as 28A. From 12-18" depth.	2	City of San Jose (Woodward Clyde Consultants)
5/15/86 & 5/16/86	29A	Ring levee at intersection of Elizabeth & Gold. From 4-6" depth.	2	City of San Jose (Woodward Clyde Consultants)
5/15/86 & 5/16/86	29B	Same as 29A. From 12-18" depth.	2	City of San Jose (Woodward Clyde Consultants)
5/15/86 & 5/16/86	30A	Ring levee at Gold St. between Elizabeth & Catherine. From 4-6" depth.	5	City of San Jose (Woodward Clyde Consultants)
5/15/86 & 5/16/86	30B	Same as 30A. From 12-18" depth.	11	City of San Jose (Woodward Clyde Consultants)
5/15/86 & 5/16/86	31A	Ring levee near intersection of Liberty & Catherine. From 4-6" depth.	3	City of San Jose (Woodward Clyde Consultants)
5/15/86 & 5/16/86	31B	Same as 31A. From 12-18" depth.	5	City of San Jose (Woodward Clyde Consultants)
5/15/86 & 5/16/86	32A	Ring levee north of intersection of Liberty & State. From 4-6" depth.	ND	City of San Jose (Woodward Clyde Consultants)

Sampling Date	Sample Number	Location	Percent Asbestos	Agency
5/15/86 & 5/16/86	32B	Same as 32A. From 12-18" depth.	2	City of San Jose (Woodward Clyde Consultants)
5/15/86 & 5/16/86	33A	Ring levee west of intersection of State & Archer. From 4-6" depth.	ND	City of San Jose (Woodward Clyde Consultants)
5/15/86 & 5/16/86	33B	Same as 33A. From 12-18" depth.	ND	City of San Jose (Woodward Clyde Consultants)
5/15/86 & 5/16/86	34A	Ring levee northwest of intersection of State & Archer. From 4-6" depth.	5	City of San Jose (Woodward Clyde Consultants)
5/15/86 & 5/16/86	34B	Same as 34A. From 12-18" depth.	2	City of San Jose (Woodward Clyde Consultants)
5/15/86 & 5/16/86	35A	Ring levee northwest of intersection of State & Archer. From 4-6" depth.	<1	City of San Jose (Woodward Clyde Consultants)
5/15/86 & 5/16/86	35B	Same as 35A. From 12-18" depth.	ND	City of San Jose (Woodward Clyde Consultants)
5/15/86 & 5/16/86	36A	Ring levee northwest of intersection of State & Archer. From 4-6" depth.	ND	City of San Jose (Woodward Clyde Consultants)
5/15/86 & 5/16/86	36B	Same as 36A. From 12-18" depth.	4.5	City of San Jose (Woodward Clyde Consultants)

Sampling Date	Sample Number	Location	Percent Asbestos	Agency
5/15/86 & 5/16/86	37A	Ring levee north of intersection of State & Archer. From 4-6" depth.	2	City of San Jose (Woodward Clyde Consultants)
5/15/86 & 5/16/86	37B	Same as 37A. From 12-18" depth.	5	City of San Jose (Woodward Clyde Consultants)
5/15/86 & 5/16/86	38A	Ring levee northwest of intersection of State & Essex. From 4-6" depth.	10	City of San Jose (Woodward Clyde Consultants)
5/15/86 & 5/16/86	38B	Same as 38A. From 12-18" depth.	3	City of San Jose (Woodward Clyde Consultants)
5/15/86 & 5/16/86	39A	Ring levee northwest of intersection of State & Essex. From 4-6" depth.	ND	City of San Jose (Woodward Clyde Consultants)
5/15/86 & 5/16/86	39B	Same as 39A. From 12-18" depth.	ND	City of San Jose (Woodward Clyde Consultants)
5/15/86 & 5/16/86	40A	Ring levee northwest of intersection of State & Essex. From 4-6" depth.	2	City of San Jose (Woodward Clyde Consultants)
5/15/86 & 5/16/86	40B	Same as 40A. From 12-18" depth.	5	City of San Jose (Woodward Clyde Consultants)
5/15/86 & 5/16/86	41A	Ring levee north of intersection of State & Essex. From 4-6" depth.	10	City of San Jose (Woodward Clyde Consultants)

Sampling Date	Sample Number	Location	Percent Asbestos	Agency
5/15/86 & 5/16/86	41B	Same as 41A. From 12-18" depth.	15	City of San Jose (Woodward Clyde Consultants)
5/15/86 & 5/16/86	42A	Ring levee northwest of intersection of State & Pacific. From 4-6" depth.	3	City of San Jose (Woodward Clyde Consultants)
5/15/86 & 5/16/86	42B	Same as 42A. From 12-18" depth.	10	City of San Jose (Woodward Clyde Consultants)
5/15/86 & 5/16/86	43A	Ring levee at southwest corner of old sewer pond. From 4-6" depth.	13	City of San Jose (Woodward Clyde Consultants)
5/15/86 & 5/16/86	43B	Same as 43A. From 12-18" depth.	10	City of San Jose (Woodward Clyde Consultants)
5/15/86 & 5/16/86	44A	Ring levee at southeast edge of old sewer pond. From 4-6" depth.	1	City of San Jose (Woodward Clyde Consultants)
5/15/86 & 5/16/86	44B	Same as 44A. From 12-18" depth.	3	City of San Jose (Woodward Clyde Consultants)
5/15/86 & 5/16/86	45A	Ring levee at southeast edge of old sewer pond. From 4-6" depth.	5	City of San Jose (Woodward Clyde Consultants)
5/15/86 & 5/16/86	45B	Same as 45A. From 12-18" depth.	5	City of San Jose (Woodward Clyde Consultants)

Sampling Date	Sample Number	Location	Percent Asbestos	Agency
5/15/86 & 5/16/86	46A	Ring levee at southeast edge of old sewer pond. From 4-6" depth.	5	City of San Jose (Woodward Clyde Consultants)
5/15/86 & 5/16/86	46B	Same as 46A. From 12-18" depth.	2	City of San Jose (Woodward Clyde Consultants)
5/15/86, & 5/16/86	47A	Ring levee at railroad tracks north of Elizabeth. From 4-6" depth.	10	City of San Jose (Woodward Clyde Consultants)
5/15/86 & 5/16/86	47B	Same as 47A. From 12-18" depth.	3	City of San Jose (Woodward Clyde Consusltants)



NOTE: INFORMATION PRESENTED ON THIS FIGURE IS APPROXIMATE AND MAY NOT REPRESENT ACTUAL CONDITIONS. RECTIFIED AERIAL PHOTOGRAPH WAS ORIGINALLY PROVIDED BY AELYTEK, INC. AT 1"=100'. THE PHOTOGRAPH WAS NOT ORTHO-NORMALIZED AND THEREFORE SOME DISTORTION IS PRESENT.

SOUTH BAY ASBESTOS SITE
ALVISO, CALIFORNIA

SUBUNIT LOCATION MAP

PROJ. NO		FIGURE
288-FSI	CAMP DRESSER & McKEE INC.	C-1

APPENDIX D

DISCUSSION OF DHS AIR SAMPLING DATA BY AQUA - TERRA TECHNOLOGIES, 1986

5.0 PRELIMINARY AIR INVESTIGATION

5.1 INTRODUCTION

A total of 47 air samples were collected from the SBAA for asbestos analysis during the period of October 1983 through September 1985 by the DHS.

5.2 METHODS

Most airborne asbestos samples were collected on 0.2 um pore size nucleopore polycarbonate membrane filters using Sierra Instruments Monocot Samplers. For ambient air samples, flow rates averaged approximately 15 liters per minutes. Sample filters were transported to the laboratory in their cassettes inside plastic Petri dishes in an upright position. Once in the laboratory, filters were immediately carbon-coated and placed in a HEPA-filtered laminar flow hood for further handling.

Due to the static charge in the filter cassette a substantial portion of fibers in an air sample can collect on the cassette rather than the filter. Hayward (1985) found that for most samples an amount equal to approximately 25 to 100 percent of the mass collected on the filter could be washed off the sampling cassette. Airborne concentrations reported do not account for these fibers, and therefore, may possibly be low by 20 to 50 percent.

The protocol for measuring of asbestos fiber concentrations in air samples was developed by Dr. Steve Hayward of the Air and Industrial Hygiene Laboratory (AIHL), California Department of Health Services, (Hayward, 1983).

Sample analysis was by transmission electron microscopy (TEM). Samples were prepared and analyzed by an expanded version of the U.S. Environmental Protection Agency

Provisional Methodology Manual Electron Microscope Measurement of Airborne Asbestos Concentrations (EPA-600/2-77-178). Modifications of the EPA analytical method were as follows:

- A low magnification scan of 400 to 1,000 grid windows was carried out to detect "optically visible" or "NIOSH" asbestos fibers. These are fiber bundles that, from their size (diameter greater than 0.3 µm), can be assumed to be visible under a light microscope. The National Institute for Occupational Safety and Health (NIOSH) rules for counting asbestos, are also followed. The NIOSH rules states length greater than 5 um, and length:width greater than 3:1. All such fiber bundles were identified as asbestos by microdiffraction and, when necessary, energy-dispersive x-ray analysis (EDXRA).

- A high magnification scan of 10 to 40 grid windows was used to count all asbestos fibers and asbestos "structures". For the purposes of this analysis, the following definitions apply: "asbestos fibers" include all fibers (length:width greater than 3) of any size positively identified as asbestos by microdiffraction and if necessary EDXRA. Such fibers must either be free (unattached), or attached to particles whose diameter is "inhalable" (less than 10 um). Each fiber or fiber bundle so found is counted separately, so that if several fibers are separately attached to the same particle, they are all counted. Asbestos "structures" are free asbestos fibers, fiber bundles, or respirable particles with one or more asbestos fibers and/or fiber bundles attached

- The diameter and le~gth of each fiber is estimated during TEM analysis and each fiber is identified as chrysotile or amphibole. Knowing the density of the fiber types (chrysotile 2.5, amphibole 3.25), mass concentration for each sample were calculated by summing the estimated mass of individual fibers per volume of air sampled (ng/m^3).

- The 95 percent confidence intervals for fiber concentrations were calculated based on count differences between grids using methods outlined by the U.S. Environmental Protection Agency Interim Method for Determining Asbestos in Water (EPA-600/4-80-005). Confidence intervals were calculated for all types of fiber classifications, except for those cases when the distribution of fibers were non-uniform.

For the DHS count data, a poisson distribution was assumed to fit fiber (structure) counts and was used to calculate a 95 percent confidence interval for estimated concentrations (Chatfield; 1982, 1983). This statistical approach is thought to more accurately estimate confidence intervals for rare event phenomenona like fiber counting, than techniques for confidence interval estimation based on difference between counts per grid.

A major problem in interpreting asbestos concentration data for ambient air samples is the lack of standardization in protocol. Differences may occur in sample collection, sample preparation, or in TEM counting procedures. Because there was a substantial discrepancy in results for split samples analyzed by the AIHL and Med-Tox Laboratories, comparisons among samples will generally be limited to those analyzed by AIHL.

5.3 AMBIENT AIR SAMPLE RESULTS

A summary of asbestos concentrations in ambient air samples collected in the SBAA is presented in Table 5-1. A total of 40 air samples were taken at 10 sites between October 7, 1983 and November 1, 1984 to quantitatively define airborne asbestos levels in the SBAA. The sampling site located in the SBAA are identified on Plate 5-1. Sampling sites include the Fire Station, Mayne School, the Martinez and Gordon Residences, the Summerset Mobile Home Park, and the William Smith (Truck) Yard. With the exception of the William Smith Yard, all sites in the SBAA are considered to be surrounded by local asbestos sources. Sampling sites outside of the SBAA ring levee are identified on Plate 5-2. A location on Moffett Park Drive just west of State Highway 101 (Moffett Field) was selected as an reference site away from SBAA influences and other local asbestos sources and the Bay Area Air Quality Management District (BAAQMD) air monitoring

TABLE 5-1. SUMMARY OF ASBESTOS CONCENTRATIONS IN SBAA AMBIENT AIR SAMPLES AIHL[a]

Location	Date	Conditions	Structures[b]/ m^3	Mass ng/m^3	"NIOSH"[c] Fibers/m^3
Fire Station	10/07/83	dry; moderate windy from NNW	910,000	130	NR
	08/16/84	dry; 7.3 mph from NW	491,700	48.3	2,720
	09/25/84	dry; 5.8 mph from W	141,840	30.4	680
	09/27/84	dry; 0.8 mph from W,SE	152,720	4.6	1,470
			256,626(RC)	8.7	NR
	11/01/84	dry; 1.3 mph from E,NW,SW,SE	9,855(m)	0.3(m)	0(m)
Mayne School Outdoors	12/15/83	not given	373,000	278	4,000
	12/28/83	not given	52,000	5	NR
	03/02/84	not given	261,000	NR	700
	08/16/84	assumed same as Fire Station	112,140	1.6	1,030
	09/25/84	assumes same as Fire Station	51,360	0.9	220
	09/27/84	assumed same as Fire Station	120,900	136.5	590
Mayne School Indoors	12/15/83		532,000	166	6,600
	12/28/83		78,000	51	10,000
	03/02/84		164,000	NR	1,300

TABLE 5-1. SUMMARY OF ASBESTOS CONCENTRATIONS IN SBAA AMBIENT AIR SAMPLES AIHL[a] (continued)

Location	Date	Conditions	Structures[b]/ m^3	Mass ng/m^3	"NIOSH"[c] Fibers/m^3
Environmental Education Center	08/16/84	dry; 3 mph from NW	9,160	0.4	120
	09/25/84	dry; 9.5 mph from NW	3,250	0.005	0
	09/27/84	dry; 1 mph from SE,NW	104,160	27.5	2,010
	11/01/84	1.8 mph from NE,NW	2,656(m)	0.05(m)	0(m)
Martinez Residence	04/11/84	outdoors	190,000	7	380
		indoors	453,000	299	1,900
Gordon Residence	05/03/84	outdoors	800,000	527	3,900
		indoors	960,000	1,994	5,800
Cardroom	08/16/84	not given	NR	NR	NR
	09/25/84	not given	27,108(m)	12.7(m)	340(m)
	09/27/84	not given	13,765(m)	318(m)	1,250(m)
Mobile Home Park	10/12/83	dry; moderate wind NNW	230,000	11,000	3,800
	08/16/84	assumed same as Fire Station	46,000(m)	766	770
	09/25/84	assumed same as Fire Station	0(m)	0(m)	0(m)
	09/27/84	assumed same as Fire Station	9,960	73.5(m)	930(m)
	11/01/84	assumed same as Fire Station	7,142	201.6(m)	1,070(m)
William Smith Yard	10/07/83	dry; moderate wind NNW	14,000	NR	0.25
"upwind"	10/12/83	dry; moderate wind NNW	97,000	0.94	1,300

TABLE 5-1. SUMMARY OF ASBESTOS CONCENTRATIONS IN SBAA AMBIENT AIR SAMPLES AIHL[a] (continued)

Location	Date	Conditions	Structures[b]/ m^3	Mass ng/m^3	"NIOSH"[c] $Fibers/m^3$
Moffett Field	08/16/84	dry; 9.5 from NW	67,020	2.1	110
	09/25/84	dry; 7 from NW	59,380	1.0	90
	09/27/84	dry; 2.0 from N,S,W	11,910	4.3	100
	11/01/84	dry; 2.0 from S,NW,N,NE	0(M)	NR	0(m)
San Jose	08/16/84	dry; 7.3 from NW	95,870	149.6	1,150
	09/25/84	dry; 4.5 from N,NW	5,209(m)	145.7(m)	2,060(m)
	09/27/84	dry; 1.3 from E,SE,NW	63,352	137(m)	4,220(m)
	11/01/84	dry; 2.3 from S,SE	29,209(m)	450(m)	2,090(m)

a Sample analysis was by transmission electron microscope (TEM) following the protocol described by Hayward (1983), Air and Industrial Hygiene Laboratory (AIHL). Samples were collected during 1983 and 1984

b asbestos structures are defined as free fibers, fiber bundles, or respirable particles with one or more fiber or bundles attached

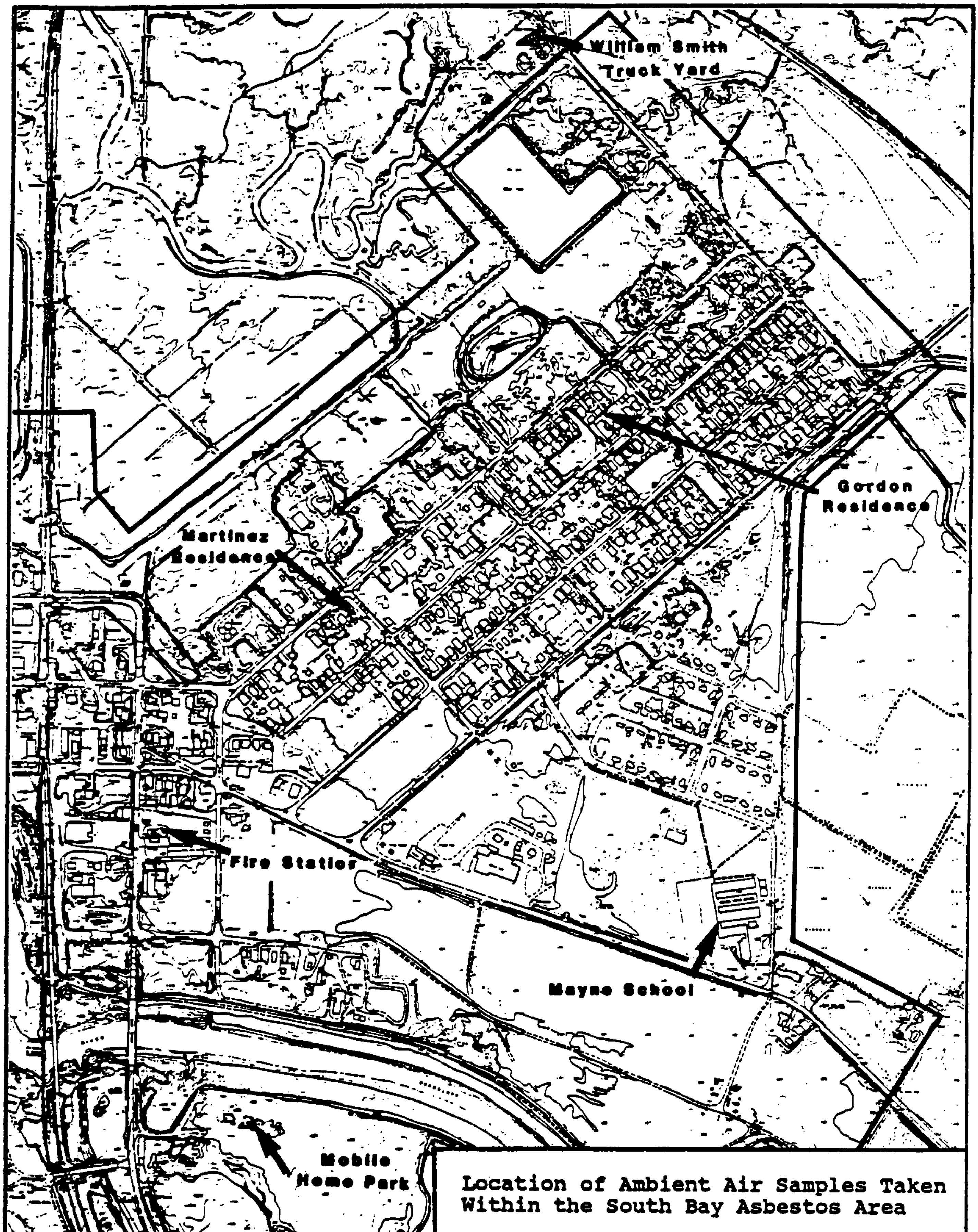
c "NIOSH" fibers are optically visible fibers determined under a low magnification TEM scan. These are fiber bundles with a diameter greater than 0.3 um, length greater than 5 um and aspect ratio greater than 3:1

NR Not reported

ND Not detected

(RC) Recount of the same sample

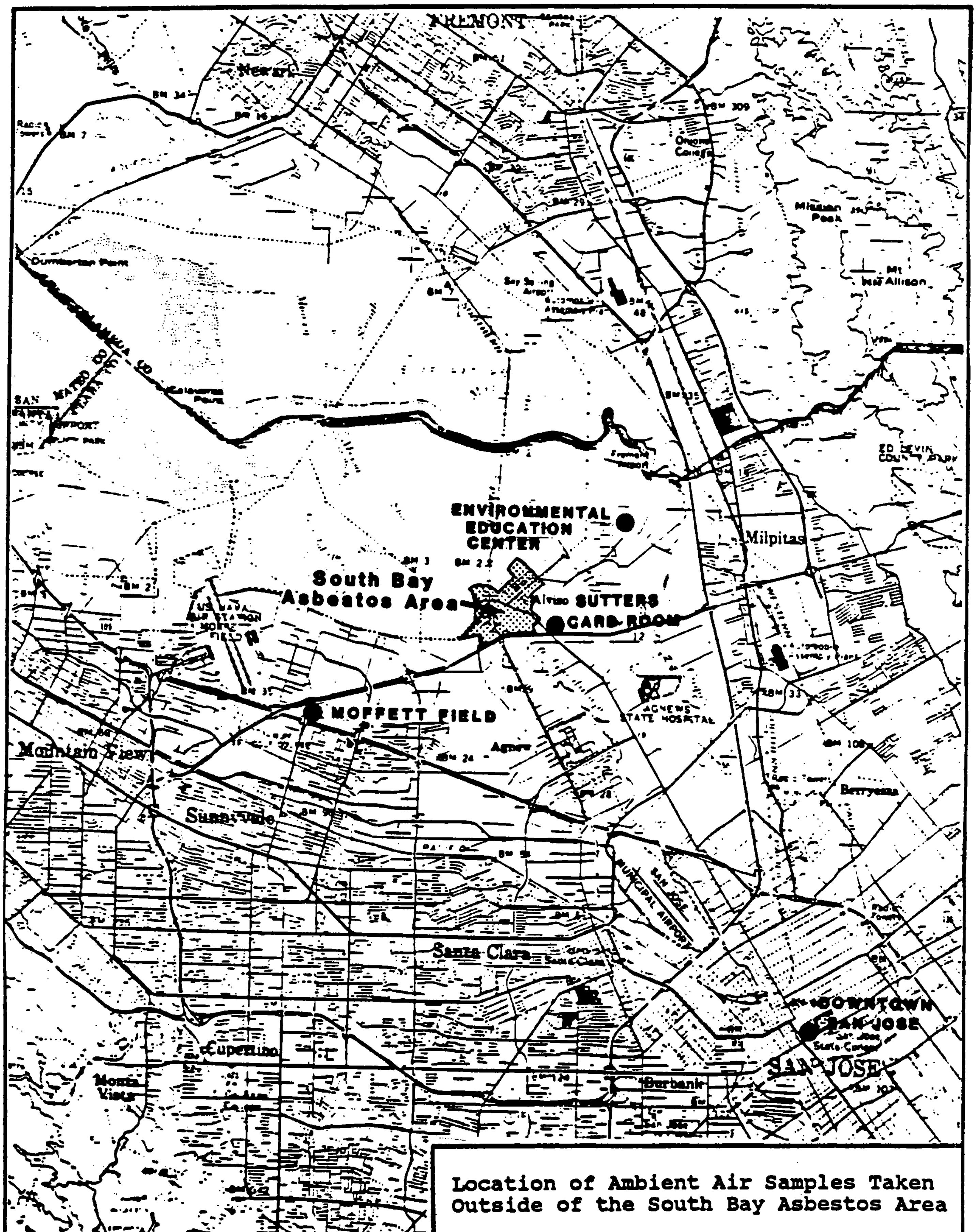
(m) TEM analysis performed outside the AIHL Laboratory Facility by Med-Tox Associates.



Location of Ambient Air Samples Taken Within the South Bay Asbestos Area

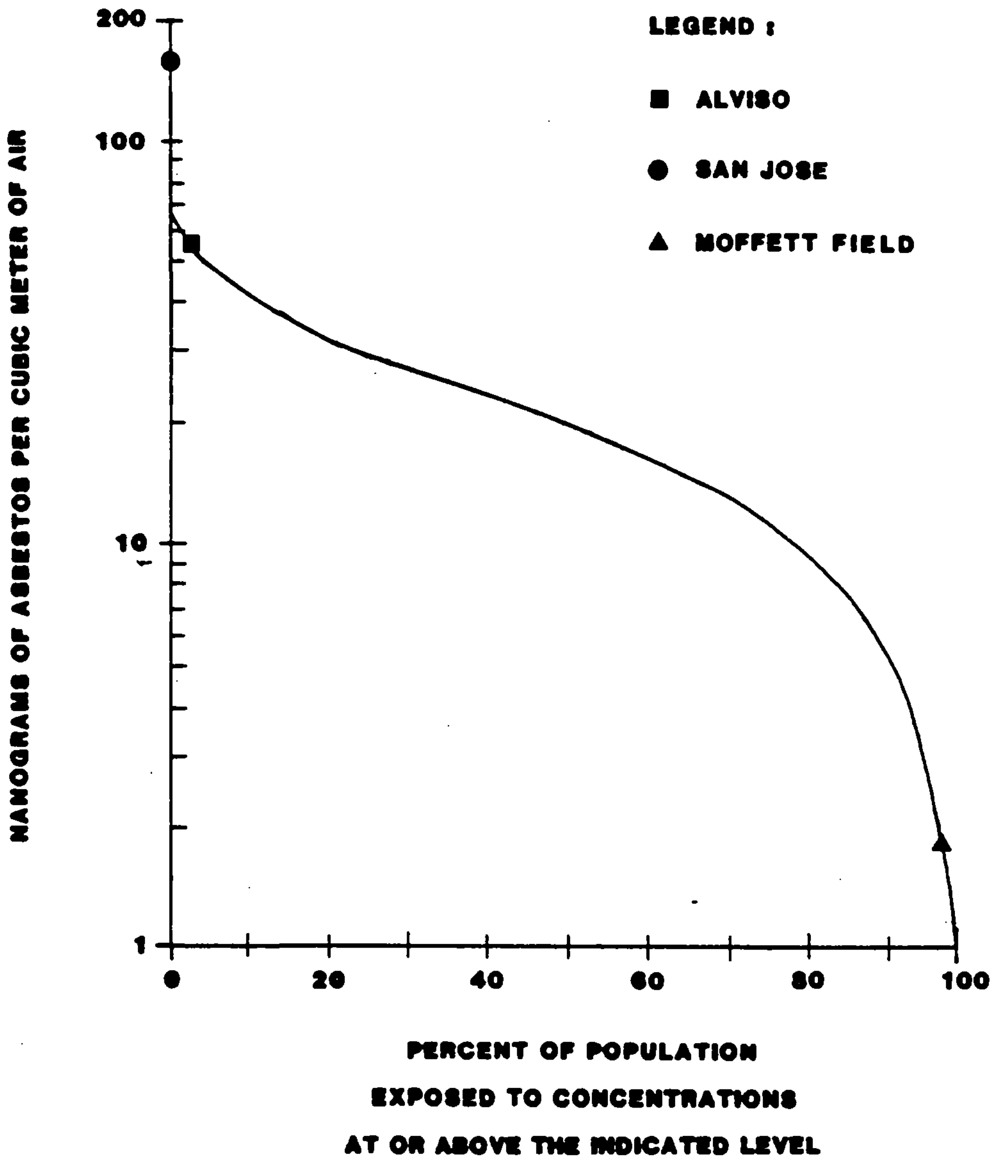
AQUA TERRA TECHNOLOGIES
Environmental Consultants

JOB NUMBER	DATE	APPROVED	PLATE
529	3/14/86		5-1



Location of Ambient Air Samples Taken Outside of the South Bay Asbestos Area

AQUA TERRA TECHNOLOGIES Environmental Consultants	JOB NUMBER: 529	DATE: 3/14/86	APPROVED:	PLATE: 5-2



FROM: SUTA AND LEVINE, 1979

Distribution of Exposures to Asbestos in Ambient Air of Urban Areas

AQUA TERRA TECHNOLOGIES Environmental Consultants	JOB NUMBER 529	DATE 3/14/86	APPROVED	PLATE 5-3

TABLE 5-2. THE 95 PERCENT CONFIDENCE INTERVAL FOR ASBESTOS STRUCTURES IN AMBIENT AIR SAMPLES AIHL

Location	Date	Raw Count	Structures/m^3	95 Percent Confidence Interval Lower	95 Percent Confidence Interval Upper
Firehouse	10/07/83	52	910,000	674,512	1,182,444
	08/16/84	58	491,700	374,565	634,695
	09/25/84	42	141,840	102,326	191,878
	09/27/84	54	152,720	114,782	198,781
		91(RC)	256,630	207,361	316,020
Mayne School Outdoors	12/15/83	19	373,000	221,083	573,193
	12/28/82	6	52,000	19,070	113,554
	03/02/84	31	261,000	174,781	365,346
	08/16/84	29	112,140	74,662	160,177
	09/25/84	17	51,360	29,967	82,108
	09/27/84	41	120,900	86,805	164,057
Mayne School Indoors	12/15/83	28	532,000	347,643	755,843
	12/28/83	9	78,000	35,540	148,227
	03/02/84	20	164,000	101,364	256,689
Environmental Education Center	08/16/84	3	9,160	1,896	26,910
	09/25/84	1	3,250	98	18,244
	09/27/84	31	104,160	70,694	147,771
Martinez Residence Outdoors	04/11/84	44	190,000	137,923	254,872
Martinez Residence Indoors	04/11/84	75	453,000	357,960	567,600
Gordon Residence Outdoors	05/03/84	115	800,000	662,643	961,037
Gordon Residence Indoors	05/03/84	138	960,000	810,748	1,137,793
Mobile Home Park	10/12/83	21	230,000	144,057	355,710

TABLE 5-2. THE 95 PERCENT CONFIDENCE INTERVAL FOR ASBESTOS STRUCTURES IN AMBIENT AIR SAMPLES AIHL (continued)

Location	Date	Raw Count	Structures/m^3	95 Percent Confidence Interval Lower	95 Percent Confidence Interval Upper
William Smith					
Yard	10/07/83	2	14,000	1,579	47,375
Upwind	10/12/83	14	97,000	53,397	162,972
Moffett Field	08/16/84	24	67,020	43,367	100,535
Upwind	09/25/84	26	59,380	38,825	86,969
Reference	09/27/84	5	11,910	3,807	27,837
San Jose Downwind Reference	08/16/84	30	95,870	64,543	136,754

RC Sample Recount

TABLE 5-3. THE 95 PERCENT CONFIDENCE INTERVAL FOR "NIOSH" EQUIVALENT ASBESTOS FIBERS IN SBAA AMBIENT AIR SAMPLES - AIHL

Location	Date	Raw Counts	"NIOSH" Fiber/m^3	95 Percent Confidence Interval Lower	Upper
Firehouse	10/07/83	NA	NA	NA	NA
	08/16/84	16	2,720	1,554	4,400
	09/25/84	5	680	216	1,582
	09/25/84	13	1,470	787	2,507
Mayne School Outdoors	12/15/83	8	4,000	1,718	7,756
	12/28/83	0	0	0	1,284
	03/02/84	2	700	80	2,394
	08/16/84	9	1,030	470	1,961
	09/25/84	2	220	29	871
	09/27/84	5	590	189	1,381
Mayne School Indoors	12/15/83	14	6,600	3,646	11,128
	12/28/83	29	10,000	6,731	14,440
	03/02/84	4	1,300	366	3,392
Environmental Education Center	08/16/84	1	120	4	685
	09/25/84	0	0	0	82
	09/27/84	15	2,010	1,130	3,300
Martinez Residence Outdoors	04/11/85	2	380	46	1,368
Martinez Residence Indoors	04/11/85	8	1,900	846	3,821
Gordon Residence Outdoors	05/03/84	14	3,900	2,138	6,524
Gordon Residence Indoors	05/03/84	21	5,800	3,618	8,935
Mobile Park	12/03/84	14	3,800	2,162	6,598

TABLE 5-3. THE 95 PERCENT CONFIDENCE INTERVAL FOR "NIOSH" EQUIVALENT ASBESTOS FIBERS IN SBAA AMBIENT AIR SAMPLES - AIHL (continued)

Location	Date	Raw Counts	"NIOSH" Fiber/m^3	95 Percent Confidence Interval Lower	Upper
William Smith Yard	10/07/84	NA	NA	NA	NA
	10/12/83	4	1,300	383	3,547
Moffett Field	08/16/84	1	110	3	631
Upwind	09/25/84	1	90	3	512
Reference	09/27/84	1	100	3	533
San Jose Downwind Reference	08/16/84	9	1,150	524	2,187

NA Not Analyzed

station in San Jose at Fourth Street and East San Carlos Street was selected as a reference site generally downwind of the SBAA.

5.3.1 Mass Concentrations

The range of measured airborne asbestos fiber concentrations and mass levels at the SBAA sampling sites and at reference sites was substantial. Although mass is perhaps the most variable index of asbestos levels, it is also the most reported measure of ambient airborne concentrations. The geometric means for airborne asbestos mass for the SBAA samples and the Moffett Field and San Jose reference samples are overlain on a plot of ambient air asbestos concentrations in urban areas of the United States (Plate 5-3). Mean asbestos mass concentrations for SBAA and San Jose samples were greater than 60 ng/m^3 of air sampled. Although asbestos mass was not measured by the same techniques in all studies, the levels for the SBAA and San Jose appear high compared to those measured in other urban areas of the United States. Less than five percent of the people in the United States are likely exposed to this mass of asbestos fibers, based on the summary by Suta and Levine (1979). The mass levels measured for Moffett Field air indicate this reference site to be comparatively free of asbestos contaminated air. However, the extreme variability in mass measurements suggest that great caution should be used in quantitative interpretation of asbestos concentration data based solely on mass as an index.

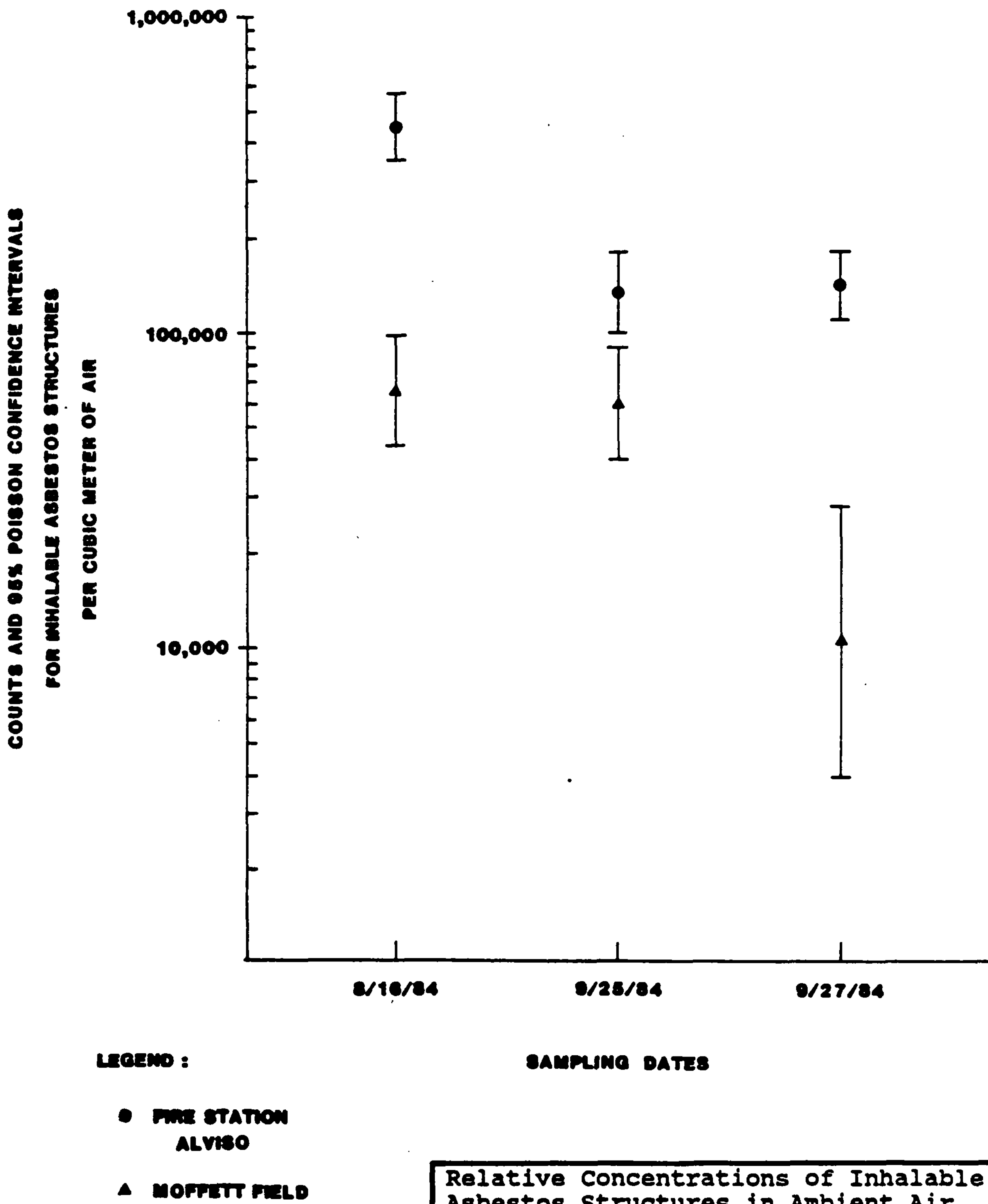
5.3.2 Fiber Concentrations

Summaries of airborne asbestos structure and "NIOSH" fiber concentrations with 95 percent confidence intervals are presented in Tables 5-2, and 5-3. The limits of structure concentrations range from approximately 100 to 1,000,000 per cubic meter of air (0.001 to 1.0 structure/cm^3). For SBAA sites, including the Fire Station, residences, and the Summerset Mobile Home Park with "high" fiber levels, confidence intervals for asbestos structures did not overlap with confidence intervals for structure concentrations at reference sites such as the William Smith Yard, the Environmental Education Center, or Moffett Field (Table 5-2 and Plates 5-1, 5-2).

Only the upper confidence limit for the September 27, 1984, sample from the Environmental Education Center (perhaps an analysis sample) and the August 16, 1984, sample from San Jose overlapped with the lower confidence limits from the outdoor sample at the Martinez Residence and the Mobile Home Park. Approximately half of the Mayne School indoor and outdoor sample concentrations cannot be statistically distinguished from Moffett Field sample concentrations for the same collection dates.

Plate 5-4 shows that structure concentrations for August and September 1984 samples at the Alviso Fire Station were significantly higher than those at the Moffett Field reference site. For the single sampling date of August 16, 1984, for which AIHL analysis was available for the Fire Station and the Moffett Field and "downwind" San Jose reference sites, relative comparisons are plotted on Plate 5-5. For this date with a typical NW wind of 7.3 miles per hour, ambient air at the Fire Station contained substantially higher concentrations of asbestos structures than air from either reference site. Structure concentrations were not statistically different at the Moffett Field site and "downwind" San Jose reference site.

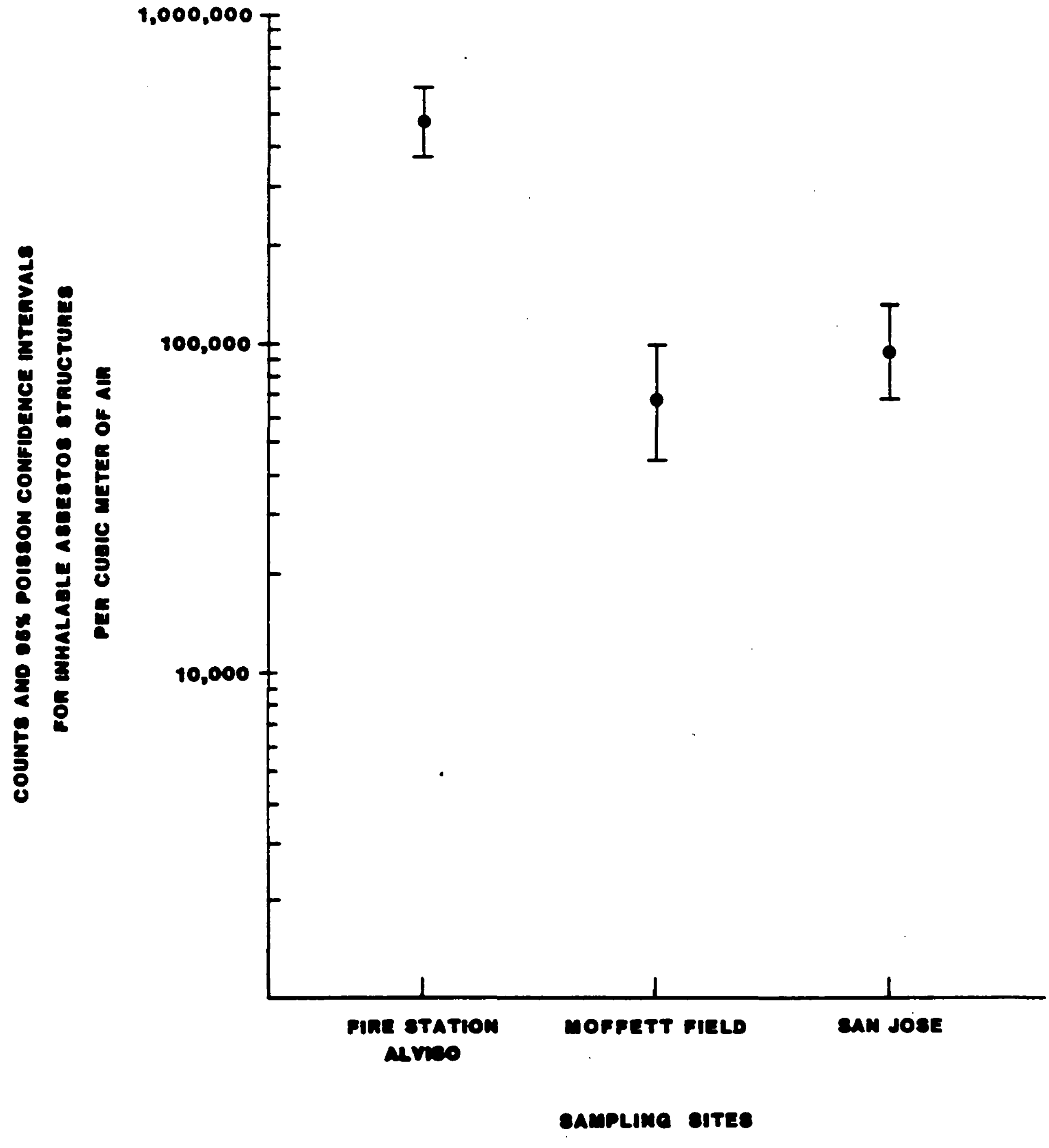
The data presented in Table 5-3 indicates that few optically visible "NIOSH" fibers were found in most samples. The low



Relative Concentrations of Inhalable Asbestos Structures in Ambient Air Samples Taken in the South Bay Asbestos Area & Upwind at Moffett Field

AQUA TERRA TECHNOLOGIES
Environmental Consultants

JOB NUMBER	DATE	APPROVED	PLATE
529	3/14/86		5-4



Relative Concentrations of Inhalable Asbestos Structures in Ambient Air Samples Taken in the South Bay Asbestos Area, Moffett Field, & San Jose

AQUA TERRA TECHNOLOGIES Environmental Consultants	JOB NUMBER 529	DATE 3/14/86	APPROVED	PLATE 5-5

fiber counts raise the level of uncertainty in "NIOSH" fiber concentration estimates.

Generally more "NIOSH" fibers were detected in air samples from sites in the SBAA than in the air samples from Moffett Field. However, optically visible fiber concentrations in the ambient air sample for San Jose on August 16, 1984 was not distinguishable from "NIOSH" fiber levels in samples from the Alviso Fire Station or Mayne School.

5.3.3 Asbestos Concentration Relationship Indices

Table 5-4 presents a summary of the relationship of asbestos concentration indices for air samples from SBAA sampling sites. The concentration of total fibers/m^3 and structures/m^3 are closely related. Total fiber concentrations are from one and one-half to two times structure concentrations. Free fiber concentrations are a factor of 10 to 30 times lower than structure concentrations. This relationship indicates that a substantial number of fibers are associated with inhalable dust particles.

Based on nine outdoor air samples collected at the Alviso Fire Station and Mayne School, structure concentrations were related to "NIOSH" fibers concentrations with the following linear regression equation ($r = 0.83$):

$$\text{"NIOSH" fibers/m}^3 = 0.007 \text{ Structures/m}^3 - 129.9$$

This relationship suggests that the conversion factor range of 0.01 to 0.001 structures to one PCLM fiber as used by the DHS (ARB, 1986) may adequately represent the "structures" to "NIOSH" fiber ratio for ambient air samples in an environmental setting such as the SBAA.*

* Note: The conversion factor range used by DHS is actually 100 to 1000 structures to one PCLM fiber. There was an error in the ATT report.

TABLE 5-4. ANALYTICAL RESULTS FOR SBAA AIRBORNE ASBESTOS AND REFERENCE SAMPLES COUNT INDEX COMPARISON[a] (HAYWARD, 1985)

Location	Total Fibers/m^3	Mass (ng/m^3)	Structures/m^3	Free Fibers/m^3	"NIOSH" Fibers/m^3
Mayne School (6 samples)	3.7×10^5 (2.2)	25 (13)	1.5×10^5 (2.1)	3.2×10^4 (3.5)	1.4×10^3 2.8)
Fire Station (3 samples)	9.1×10^5 (2.5)	38 (3.1)	3.9×10^5 (2.0)	8.1×10^4 (1.3)	1.9×10^3 (1.7)
Moffett Field (2 samples)	6.0×10^5 (2.5)	2.8 (1.8)	4.9×10^5 (2.2)	1.3×10^4 (1.7)	1.3×10^2 (1.1)
Environmental Education Center (2 samples)	1.2×10^4 (2.8)	0.11 (15)	7.3×10^3 (1.7)	0 -	1.2×10^2 (13)

a Data summaries are presented as geometric means with geometric standard deviations in parenthesis

5.3.4 Split Sample Data Comparison

A number of sample filters were split into sections and separate sections were analyzed by AIHL and Med-Tox.In Tables 5-5 and 5-6, results from analyses of SBAA airborne asbestos samples as performed at the Med-Tox Laboratory facility are summarized. Data from the AIHL analysis was previously presented in Tables 5-2 and 5-3. SBAA samples collected on November 1, 1984 were analyzed only by the Med-Tox group. There are few sampling dates or sites for which SBAA samples can be statistically distinguished from reference samples based on the counts reported by Med-Tox. Only the air samples from San Jose show a consistent trend of moderately high structure and "NIOSH" fiber concentrations.

A comparison of Med-Tox and AIHL results for split samples suggests that generally more asbestos fibers were counted by AIHL, but there were exceptions. AIHL and Med-Tox groups are now counting the same TEM grids to try and ascertain the reasons for the substantial differences in count results (S. Hayward: AIHL, personal communication; D. Baxter: Med-Tox, personal communication).

5.3.5 Meterological Influence Factors

There was insufficient sample data and inadequate meteorological characterization of sampling conditions to identify a relationships between wind velocity/direction and ambient atmospheric asbestos concentrations. It does appear from limited data that SBAA sites downwind from the ring levee and other potential local sources have moderately high levels of asbestos structures in air samples on days with winds blowing from the northwest. Asbestos levels in air samples from the William Smith Yard (generally upwind of SBAA sources) on October 7, 1983 were significantly lower than structure concentrations in samples at the Alviso Fire Station. On October 12, 1983, under similar wind conditions,

TABLE 5-5. THE 95 PERCENT CONFIDENCE INTERVAL FOR ASBESTOS STRUCTURES IN SBAA AMBIENT AIR SAMPLES - MEDTOX

Location	Date	Raw Counts	Structures/m^3	95 Percent Confidence Interval Lower	Upper
Fire Station	08/16/84	62	115,787	89,072	148,267
	09/25/84	8	9,527	5,211	23,523
	09/27/84	3	3,733	711	10,949
	11/01/84	7	9,855	3,942	20,271
Mayne School Outdoors	08/16/84	24	30,293	19,436	45,055
	09/25/84	0	0	0	4,924
	09/27/84	9	11,692	5,326	22,213
Environmental Education Center	08/16/84	9	12,126	5,524	23,038
	09/25/84	1	1,435	43	8,038
	09/27/84	25	37,011	23,981	54,622
	11/01/84	2	2,656	32	9,559
Cardroom	08/16/84	NA	NA	NA	NA
	09/25/84	25	27,108	17,565	40,009
	09/27/84	11	13,765	6,907	24,600
Trailer Park	08/16/84	30	46,000	30,977	65,635
	09/25/84	0	0	0	4,245
	09/27/84	8	9,960	4,357	19,669
	11/01/84	5	7,142	2,285	16,711
Moffett Field Upwind Reference	08/16/84	1	1,241	37	6,948
	09/25/84	1	1,006	30	5,635
	09/27/84	0	0	0	3,878
	11/01/84	0	0	0	4,908
San Jose Downwind Reference	08/16/84	26	36,606	23,930	53,492
	09/25/84	37	52,090	36,741	71,792
	09/27/84	45	63,352	46,172	84,743
	11/01/84	21	29,209	18,080	44,365

NA - Not Analyzed

TABLE 5-6. THE 95 PERCENT CONFIDENCE INTERVAL FOR "NIOSH" EQUIVALENT ASBESTOS FIBERS IN SBAA AMBIENT AIR SAMPLES - MEDTOX

Location	Date	Raw Counts	"NIOSH" Fibers/m^3	95 Percent Confidence Interval Lower	Upper
Fire Station	08/16/84	1	470	14	2,614
	09/25/84	0	0	0	1,377
	09/27/84	1	310	9	1,741
	11/01/84	0	0	0	1,302
Mayne School Outdoors"	08/16/84	1	320	9	1,767
	09/25/84	0	0	0	1,231
	09/27/84	2	650	78	2,338
Environmental Education Center	08/16/84	0	0	0	1,246
	09/25/84	0	0	0	1,328
	09/27/84	2	740	9	2,665
	11/01/84	0	0	0	1,228
Cardroom	08/16/84	NA	NA	NA	NA
	09/25/84	1	340	10	1,898
	09/27/84	4	1,250	344	3,191
Mobile Home Park	08/16/84	2	770	92	2,760
	09/25/84	0	0	0	1,060
	09/27/84	3	930	193	2,739
	11/01/84	3	1,070	221	3,142
Moffett Field Upwind Reference	08/16/84	0	0	0	1,148
	09/25/84	0	0	0	931
	09/27/84	0	0	0	970
	11/01/84	0	0	0	1,227
San Jose Downwind Reference	08/16/84	2	700	84	2,534
	09/25/84	7	2,460	985	5,068
	09/27/84	12	4,220	2,196	7,362
	11/01/84	6	2,090	765	4,555

NA Not Analyzed

concentrations in air at the William Smith Yard were lower (but not statistically different) than asbestos levels in air samples from the Mobile Home Park. On two of three sampling dates with prevailing northwest wind conditions, structure concentrations were greater in airborne samples from SBAA sites than from the Environmental Education Center site. (Tables 5-1 and 5-2). At individual sites, airborne concentrations on moderately windy days (August 6, 1984 and September 25, 1984) were generally not significantly different from concentrations measured for a stagnant air day (September 27, 1984).

5.3.6 Indoor - Outdoor Concentrations

Relative concentrations of asbestos structures and "NIOSH" fibers in ambient air indoors and outdoors were compared with samples from the Mayne School and from two SBAA residences (Table 5-7). Outdoor and indoor asbestos structures concentrations were only statistically different for samples from the Martinez Residence. "NIOSH" fiber concentrations were generally greater indoors but were only significantly different from outdoor levels on December 28, 1983, at Mayne School. From this limited data, asbestos concentrations in ambient air samples from indoors and outdoors in the SBAA are assumed to be similar.

5.3.7 Ambient Concentration Summary

The mean and geometric mean of asbestos structure concentrations were calculated from the limited sample data available from AIHL (Table 5-8). The highest mean asbestos concentration was found in the four residential samples (~500,000 structures/m^3). The best present estimate of an overall mean concentration of asbestos structures in the ambient air in the SBAA is approximately 230,000 structures/m^3 of air. This value was estimated as the geometric mean of 18 air sample analyses. Average "upwind"

TABLE 5-7. INHALABLE ASBESTOS RELATIVE CONCENTRARION IN OUTDOOR AND INDOOR AMBIENT AIR SAMPLES FROM SELECTED SBAA SITES

		Outdoor Concentrations		Indoor Concentrations	
Location	Date	Structures/m^3 (95% CI)	NIOSH Fibers/m^3 (95% CI)	Structures/m^3 (95% CI)	NIOSH Fibers/m^3 (95% CI)
Mayne School	12/15/83	373,000 (221,083 - 573,193)	4,000 (1,718-7,756)	532,000 (347,643 - 755,843)	6,600 (3,646 - 11,128)
	12/28/83	52,000 (19,070 - 113,554)	0 (0-1,284)	78,000 (35,540 - 148,227)	10,000 (6,731 - 14,440)
	03/02/84	261,000 (174,781 - 365,346)	700 (80-2,394)	164,000 (101,364 - 256,689)	1,300 (366 - 3,392)
Martinez Residence	04/11/84	190,000 (137,923 - 254,872)	380 (46-1,368)	453,000 (357,960 - 567,600)	1,900 (846 - 3,821)
Gordon Residence	05/03/84	800,000 (662,643 - 961,037)	3,900 (2,138 - 6,574)	960,000 (810,748 - 1,137,773)	5,800 (3618 - 8,935)

TABLE 5-8. MEAN ABESTOS STRUCTURES CONCENTRATION IN THE SBAA AMBIENT AIR SAMPLES "UPWIND" AND "DOWNWIND"

Location	Number of Samples	Structures/m³ Mean (SD)[a]	Geometric Mean (Geometric SD)	CV[b]
DOWNWIND				
Fire Station	4	424,065 (362,393)	313,768 (2.48)	7.2
Mayne School	6	161,733 (128,715)	123,366 (2.25)	6.9
Residences	4	600,750 (346,076)	507,053 (2.07)	5.5
All Samples	18	337,425 (294,608)	231,099 (2.52)	7.5
UPWIND				
William Smith Yard	2	-	36,851 (3.93)	13.0
Environmental Education Center	3	38,857 (56,631)	14,582 (5.93)	18.6
Moffett Field	3	46,103 (29,858)	36,1[illegible] (2.62)	9.2
All Samples	8	45,735 (41,360)	25,853 (3.63)	12.7

a Standard Deviation
b Coefficient Variation

concentrations (uncontaminated references) are approximately 15,000 to 40,000 structures/m^3. Concentrations of asbestos in air from urban San Jose appear to be somewhere in between SBAA levels and those for reference areas. With some caution, it is suggested that asbestos levels in SBAA air may be three to 10 times higher than ambient levels reported for the Moffett Field reference site. The relative difference between SBAA and San Jose airborne asbestos concentrations is not clear.

No definitive comparison of the SBAA data to results from other California or United States locations is possible. The SAI samples from other California locations (SAI 1983), were collected and counted differently than the DHS samples for the SBAA. Because a substantial number of methodological differences occurred in these two studies, conversion factors cannot be estimated. The analysis to present has only considered variation associated with count statistics. Chatfield (1982, 1983) concluded that there may be a 10 fold variation in interlaboratory counts and additional variation associated with differences in collection and preparation techniques for airborne asbestos samples.

5.4 SPECIAL EXPOSURE SITUATIONS

In order to ascertain if work or play activities disturbing surface dust increase the atmospheric concentrations of asbestos fibers and, therefore, potential exposure, the DHS initiated three special studies:

- o Creation of a dust plume simulating a "worst case" exposure situation

- o Simulation of exposure conditions associated with continuous vehicle traffic on an unpaved SBAA dirt street

APPENDIX E

MARSHLAND LANDFILL DATA

Table 4a. SOIL CHEMICAL DATA - PRIORITY POLLUTANT METALS: BORING ML-1

		Priority Pollutant Metals													
Depth	Sample No.	Arsenic (ppm)	Barium (ppm)	Cadmium (ppm)	Chromium (ppm)	Copper (ppm)	Lead (ppm)	Mercury (ppm)	Nickel (ppm)	Selenium (ppm)	Silver (ppm)	Zinc (ppm)	Antimony (ppm)	Thallium (ppm)	Cyanide (ppm)
5	ML1-1B	9.5	100	<1.0[1]	47	38	99	0.14	50	<0.2[1]	<1[1]	86	<.02[1]	4	0.16
10	ML1-2B	2.3	110	<1.0[1]	36	108	130	0.20	47	<0.2[1]	<1[1]	140	<.02[1]	4	0.07
15	ML1-3B	8.9	110	1.8	48	40	85	0.24	61	<0.2[1]	<1[1]	150	<.02[1]	5	0.08
20	ML1-4B	10	140	2.3	26	91	380	0.52	52.	<0.2[1]	<1[1]	1000	<.02[1]	3	0.63
25	ML1-5B	No Sample Recovered													
30	ML1-6B	No Sample Recovered													
35	ML1-7B	20	160	66	141	2050	2500	0.27	850	<0.2[1]	1	820	12.5	5	0.26
40	ML1-8B	4	110	9.3	54	2400	1150	0.32	300	<0.2[1]	2	1020	25	2	23
45	ML1-9B	6	110	3.0	32	310	300	0.63	52	<0.2[1]	1	310	1.5	3	2.16
50	ML1-10B	22	310	6.3	61	1000	800	0.13	81	<0.2[1]	1	2700	0.5	7	30
55	ML1-11B	6	25	0.8	20	26	7.4	0.15	31	<0.2[1]	<0.1[1]	38	<0.2[1]	3	<0.05[1]
TTLC[2] (mg/kg)		500	10,000[3]	100	500,2500	2300	1000	20	2000	100	500	5000	500	700	

[1] Not detected at this limit

[2] Total Threshold Limit Concentration (State of California, 1984), ppm equivalent to mg/kg

[3] Excluding Barium Sulfate

Table 4b. SOIL CHEMICAL DATA - PRIORITY POLLUTANT METALS: BORING ML-2

Depth	Sample No.	Priority Pollutant Metals: Arsenic (ppm)	Barium (ppm)	Cadmium (ppm)	Chromium (ppm)	Copper (ppm)	Lead (ppm)	Mercury (ppm)	Nickel (ppm)	Selenium (ppm)	Silver (ppm)	Zinc (ppm)	Antimony (ppm)	Thallium (ppm)	Cyanide (ppm)
5	ML2-1B	Sample insufficient for analysis													
10	ML2-2B	7	10	1.4	66	210	50	0.17	108	<0.2[1]	1	330	0.25	7	0.28
15	ML2-3B	Sample insufficient for analysis													
20	ML2-4B	Sample insufficient for analysis													
25	ML2-5B	Sample insufficient for analysis													
30	ML2-6B	4	65	1.2	15	197	80	0.24	36	<0.2[1]	<0.1[1]	260	0.2	5	0.18
35	ML2-7B	5.5	85	0.8	36	66	29	0.09	60	<0.2[1]	<0.1[1]	81	<0.2[1]	5	0.06
40	ML2-8B	Sample insufficient for analysis													
45	ML2-9B	7	15	1.3	6	120	250	0.36	80	<0.2[1]	1	670	0.3	3	1.88
50	ML2-10B	3	50	0.7	8	165	--	0.30	12	<0.2[1]	<0.2[1]	500	0.2	3	6.4
55	ML2-11B	No Sample Recovered													
TTLC[2] (mg/kg)		500	10,000[3]	100	500,2500	2300	1000	20	2000	100	500	5000	500	700	

[1] Not detected at this limit

[2] Total Threshold Limit Concentration (State of California, 1984), ppm equivalent to mg/kg

[3] Excluding Barium Sulfate

Table 4c. SOIL CHEMICAL DATA - PRIORITY POLLUTANT METALS: BORING ML-3

		Priority Pollutant Metals													
Depth	Sample No.	Arsenic (ppm)	Barium (ppm)	Cadmium (ppm)	Chromium (ppm)	Copper (ppm)	Lead (ppm)	Mercury (ppm)	Nickel (ppm)	Selenium (ppm)	Silver (ppm)	Zinc (ppm)	Antimony (ppm)	Thallium (ppm)	Cyanide (ppm)
5	ML3-1B	8	30	<1[1]	98	41	27	0.29	250	<0.02[1]	<1[1]	62	<0.2[1]	7	0.17
10	ML3-2B	7.8	70	<1	40	160	47	0.18	83	<0.2[1]	<1[1]	230	<0.2[1]	4	0.11
15	ML3-3B	5.0	40	2.3	31	800	290	0.25	48	<0.2[1]	<1[1]	1000	<0.2[1]	3	2.0
20	ML3-4B	7.0	40	<1[1]	96	48	32	0.16	140	0.25	<1[1]	67	<0.2[1]	5	0.08
25	ML3-5B	6.5	50	<1[1]	1.3	50	21	0.14	190	0.25	<1[1]	56	<0.2[1]	7	0.17
30	ML3-6B	2.6	10	<1[1]	15	94	25	1.34	32	<0.2[1]	<1[1]	200	<0.2[1]	2	0.39
35	ML3-7B	12	40	<1[1]	24	38	31	0.21	38	0.02	<1[1]	110	<0.2[1]	4	0.11
40	ML3-8B	5.7	40	<1[1]	49	61	73	0.21	33	<0.02	<1[1]	460	<0.2[1]	2	0.27
45	ML3-9B	3	30	<1[1]	27	80	170	0.48	29	<0.02	<1[1]	1300	<0.2[1]	2	1.46
50	ML3-10B	No Sample Recovered													
TTLC[2] (mg/kg)		500	10,000[3]	100	500,2500	2300	1000	20	2000	100	500	5000	500	700	

[1] Not detected at this limit.

[2] Total Threshold Limit Concentration (State of California, 1984), ppm equivalent to mg/kg

[3] Excluding Barium Sulfate

Table 5a. SOIL CHEMICAL DATA - HALOGENATED HYDROCARBONS: BORING ML-1

		Halogenated Hydrocarbons Method 601					
Depth	Sample No.	Methylene Chloride (ppb)	DCE[3] (ppb)	TCE[4] (ppb)	PCE[5] (ppb)	DCB[6] (ppb)	TCA[7] or DCA[8] (ppb)
5	ML1-1A	<100	<50	<50	<50	<50	
10	ML1-2A	<100	<50	<50	<50	<50	
15	ML1-3A	<100	<50	<50	<50	<50	
20	ML1-4A	<100	<50	<50	<50	<50	
25	ML1-5A	---------No sample recovered-----------					
30	ML1-6A	---------No sample recovered-----------					
35	ML1-7A	<100	<50	<50	<50	<50	
40	ML1-8A	<100	<50	<50	<50	<50	
45	ML1-9A	<50	<50	94	<50	<100	
50	ML1-10A	<100	<50	<50	<50	<50	
55	ML1-11A	<100	<50	<50	<50	<50	
TTLC[2] mg/kg (ppm)				2040			

1 Not detected

2 Total Threshold Limit Concentration (State of California, 1984)

3 DCE: 1,2 dichloroethene

4 TCE: trichloroethene

5 PCE: Tetrachloroethene

6 DCB: 1,4 dichlorobenzene

7 TCA: 1,1,1 trichloroethane

8 DCA: 1,1 dichloroethane and 1,2 dichloroethane

Table 5b. SOIL CHEMICAL DATA - HALOGENATED HYDROCARBONS: BORING ML-2

		Halogenated Hydrocarbons Method 601					
Depth	Sample No.	DCE[3] (ppb)	TCE[4] (ppb)	PCE[5] (ppb)	DCB[6] (ppb)	TCA[7] or DCA[8] (ppb)	Other (ppb)
5	ML2-1A	<50	50	180	75	<50	
10	ML2-2A	<50	50	50	116	<50	
15	ML2-3A	50	<50	95	530	<50	
20	ML2-4A	71	79	64	<100	<50	100[9]
25	ML2-5A	320	100	96	<100	<50	
30	ML2-6A	<50	<50	<50	<100	<50	
35	ML2-7A	1000	140	420	580	<50	
40	ML2-8A	1500	3000	430	180	<50	
45	ML2-9A	110	510	160	260	<50	
50	ML2-10A	91	68	100	<100	<50 (DCA) <100 (TCA)	
TTLC[3] mg/kg (ppm)			2040				

[1] Not detected

[2] Total Threshold Limit Concentration (State of California, 1984

[3] DCE: 1,2 dichloroethene

[4] TCE: trichloroethene

[5] PCE: Tetrachloroethene

[6] DCB: 1,2 dichlorobenzene and 1,4 dichlorobenzene

[7] TCA: 1,1,1 trichloroethane

[8] DCA: 1,1 dichloroethane and 1,2 dichloroethane

[9] MC: Methylene Chloride

Table 5c. SOIL CHEMICAL DATA - HALOGENATED HYDROCARBONS: BORING ML-3

		Halogenated Hydrocarbons Method 601						
Depth	Sample No.	Vinyl Chloride (ppb)	DCE[3] (ppb)	TCE[4] (ppb)	PCE[5] (ppb)	DCB[6] (ppb)	TCA[7] or DCA[8]	Other
5	ML3-1A	<50	280	<50	290	<50	<50(DCA)	
10	ML3-2A	<50	<50	<50	300	360	<50	
15	ML3-3A	<100	<50	<50	140	230	<50	
20	ML3-4A	<50	110	50	320	370	<50	
25	ML3-5A	<100	<100	50	100	150	<50	
30	ML3-6A	<100	<50	<50	<50	<50	<50	
35	ML3-7A	<100	<50	<50	<50	<50	<50	
40	ML3-8A	<100	1700	3300	1600	690	113(DCA[8]) <50(TCA)	220(MC[9]) 52(TCFM[10])
45	ML3-9A	<100	<50	<50	<50	<50	<50	
50	ML3-10A	----------	----------	----------	No Sample	----------	----------	----------
55	ML3-11A	<100	<50	<50	<50	<50	<50	
TTLC[2] (mg/kg)		10		2,040				

[1] Not detected
[2] Total Threshold Limit Concentration (State of California, 1984)
[3] DCE: 1,2 dichloroethene
[4] TCE: trichloroethene
[5] PCE: tetrachloroethene
[6] DCB: 1,4 dichlorobenzene
[7] TCA: 1,1,1 trichloroethane
[8] DCA: 1,1 dichloroethane and 1,2 dichloroethane
[9] MC: methylene chloride
[10] TCFM: trichlorofloromethane

Table 6a. SOIL CHEMICAL DATA - NON-HALOGENATED HYDROCARBONS: BORING ML-1

Depth	Sample No.	Method 602			
		Benzene (ppm)	Toluene ppm (dry wt)	Xylene/ ethyl- benzene (ppm)	Dichloro- benzene (ppm)
5	ML1-1A	<0.1[2]	<0.1[2]	0.4	<0.4[2]
10	ML1-2A	<0.1[2]	<0.1[2]	<0.4[2]	<0.1[2]
15	ML1-3A	0.1	0.2	2.7	<4.0[2]
20	ML1-4A	0.4	0.4	1.6	<2.0[2]
25	ML1-5A	------------ No Sample Recovered ------------			
30	ML1-6A	------------ No Sample Recovered ------------			
35	ML1-7A	<0.1[2]	<0.1[2]	0.6	<1.0[2]
40	ML1-8A	<0.1[2]	<0.1	3.8	<4.0[2]
45	ML1-9A	<0.1[2]	<0.1	2.3	<2.0[2]
50	ML1-10A	<0.1[2]	<0.1[2]	13.0	<10.0[2]
55	ML1-11A	<0.1[2]	<0.1[2]	<0.4[2]	<0.1[2]
TTLC[3] mg/kg (ppm)					

[1] Not detected

[2] Not detected at this limit

[3] Total Threshold Limit Concentration (State of California, 1984)

Table 6b. SOIL CHEMICAL DATA - NON-HALOGENATED HYDROCARBONS: BORING ML-2

		Method 602			
Depth	Sample No.	Benzene (ppm)	Toluene ppm (dry wt)	Xylene/ ethyl-benzene (ppm)	Dichloro-benzene (ppm)
5	ML2-1A	0.1	0.4	2.5	<4.0[2]
10	ML2-2A	<0.1[2]	0.3	8.9	<10.0[2]
15	ML2-3A	0.2	0.3	11.0	<10.0[2]
20	ML2-4A	0.1	0.4	5.6	<5.0[2]
25	ML2-5A	0.8	1.6	14.0	<10.0[2]
30	ML2-6A	<0.1[2]	<0.2[2]	2.4	<1.0
35	ML2-7A	0.7	4.3	30.0	<40.0[2]
40	ML2-8A	<1.0[2]	<1.0[2]	<1.0	<1.0[2]
45	ML2-9A	<0.1[2]	2.2	60	<50.0[2]
50	ML2-10A	0.4	<0.2[2]	0.8	<0.5[2]
TTLC[3] mg/kg (ppm)					

[1] Not detected

[2] Not detected at this limit

[3] Total Threshold Limit Concentration (State of California, 1984)

Table 6c. SOIL CHEMICAL DATA - NON-HALOGENATED HYDROCARBONS: BORING ML-3

		Method 602			
Depth	Sample No.	Benzene (ppm)	Toluene ppm (dry wt)	Xylene/ ethyl-benzene (ppm)	Dichloro-benzene (ppm)
5	ML3-1A	<0.5[1]	1.3	<10.0[1]	<1.0[1]
10	ML3-2A	<0.1[1]	1.2	1.6	<0.4
15	ML3-3A	<0.1[1]	0.4	5.7	<0.4[1]
20	ML3-4A	<0.5[1]	1.1	<5.0[1]	<5.0[1]
25	ML3-5A	<0.1[1]	<0.2[1]	<1.0[1]	<2.0[1]
30	ML3-6A	<0.1[1]	<0.1[1]	<0.4[1]	<0.4[1]
35	ML3-7A	<0.1[1]	<0.1[1]	<0.4[1]	<0.1[1]
40	ML3-8A	1.0	8.5	5.1	<4.0[1]
45	ML3-9A	0.2	0.8	3.7	<4.0[1]
50	ML3-10A	--------------- No Recovery ---------------			
55	ML3-11A	<0.1[1]	<0.1[1]	0.5	<0.4[1]
TTLC[2] (mg/kg)					

[1] Not detected at this limit

[2] Total Threshold Limit Concentration (State of California, 1984)

Table 7a. SOIL CHEMICAL DATA - PCBs AND PESTICIDES: BORING ML-1

		Method 608					
		Standard	Pesticides				
Depth	Sample No.	PCB (ppm)	Aldrin (ppm)	Chlordene (ppm)	DDE (ppm)	DDD (ppm)	DDT (ppm)
5	ML1-1A	<0.1	<0.01	<0.05	0.02	<0.05	<0.05
10	ML1-2A	1.3(1254)[4]	0.02	1.30	0.15	<0.25	0.43
15	ML1-3A	<1.0	<0.1	0.84	0.24	0.13	0.24
20	ML1-4A	0.58(1254)[4]	0.01	<0.5	0.20	<0.25	<0.25
25	ML1-5A	----------------- No Sample Recovered --------------------					
30	ML1-6A	----------------- No Sample Recovered --------------------					
35	ML1-7A	6.2(1242)[4] 2.8(1254) <5.0(1260)	<0.2	<1.0	<0.1	<1.0	<0.5
40	ML1-8A	<1.0[4]	<0.1	1.2	0.15	<0.5	<0.5
45	ML1-9A	<1.0	<0.1	<0.05	<0.01	<0.05	<0.05
50	ML1-10A	<0.5	<0.05	<0.5	<0.05	<0.2	<0.2
55	ML1-11A	<0.1	<0.01	<0.05	<0.01	<0.05	<0.05
TTLC[3] mg/kg (ppm)		50	1.4	2.5	1.0[5]	1.0[5]	1.0[5]

[1] Not detected

[2] Not detected at this limit

[3] Total Threshold Limit Concentration

[4] (1242) indicates PCB variety: Arochlor 1242

[5] DDT, DDE, and DDD combined

Table 7b. SOIL CHEMICAL DATA - PCBs AND PESTICIDES: BORING ML-2

Depth	Sample No.	Method 608: Standard PCB (ppm)	Pesticides: Aldrin (ppm)	Chlordene (ppm)	DDE (ppm)	DDD (ppm)	DDT (ppm)
5	ML2-1A	<0.5	<0.05	0.35	0.17	0.16	<0.5
10	ML2-2A	<0.5	<0.05	0.32	0.16	0.13	<0.05
15	ML2-3A	<0.5	<0.05	0.43	0.13	0.18	<0.05
20	ML2-4A	<0.5	<0.05	<1.0	0.07	0.19	<0.05
25	ML2-5A	<1.0	<0.1	<0.5	0.2	<0.5	<0.5
30	ML2-6A	<0.5(1242) <0.1 (1254, 1260)	<0.05	<0.05	<0.01	0.07	<0.05
35	ML2-7A	<0.5	<0.05	<0.5	3.0	2.1	<0.1
40	ML2-8A	<1.0	<0.1	<1.0	<0.1	<1.0	<1.0
45	ML2-9A	<0.5	<0.05	<0.5	0.22	0.36	<0.5
50	ML2-10A	<0.5	<0.05	<0.5	0.34	0.40	<0.2
TTLC[3] mg/kg (ppm)		50	1.4	2.5	1.0[5]	1.0[5]	1.0[5]

[1] Not detected

[2] Not detected at this limit

[3] Total Threshold Limit Concentration

[4] (1245) indicates PCB variety: Arochlor 1245

[5] DDT, DDE, and DDD combined

Table 7c. SOIL CHEMICAL DATA - PCBs AND PESTICIDES: BORING ML-3

Depth	Sample No.	Standard PCB (ppm)	Aldrin (ppm)	Chlordane (ppm)	DDE (ppm)	DDT (ppm)	DDD (ppm)	BHC[3] (ppm)	Heptachlor (ppm)
		Method 608	Pesticides						
5	ML3-1A	<1.0	<0.1	<0.5	0.02	<0.5	<0.5	<0.1	<0.1
10	ML3-2A	<0.5	<0.05	0.75	0.25	<0.25	0.33	<0.01	<0.02
15	ML3-3A	<0.5	<0.02	<0.1	0.11	<1.0	0.05	<0.1	<0.05
20	ML3-4A	<5.0	<0.4	<2.0	0.16	<0.2	0.12	<0.2	<0.1
25	ML3-5A	<5.0	<0.05	<0.5	0.10	<0.2	0.07	<0.1	<0.1
30	ML3-6A	<5.0	<0.5	20.0	0.21	<0.3	<0.2	2.1	<0.5
35	ML3-7A	<0.5	<0.01	0.14	0.28	<0.05	0.06	<0.05	<0.01
40	ML3-8A	<5.0	<0.2	<0.5	0.29	<2.0	<0.2	<0.1	<0.1
45	ML3-9A	<5.0	<0.2	0.62	<0.2	<0.5	<0.2	<0.1	<0.1
50	ML3-10A	No Recovery							
55	ML3-11A	<1.0	<0.02	<0.1	<0.02	<0.1	<0.1	<0.02	<0.02
TTLC[1] (mg/kg)		50	1.4	2.5	1.0[2]	1.0[2]	1.0[2]	4.0	4.7

[1] Total Threshold Limit Concentration (State of California), ppm equivalent to mg/kg

[2] DDT, DDE, and DDD combined

[3] BHC: Lindane

Table 8a. ASBESTOS IN SOILS: BORING ML-1

Depth	Sample No.	Asbestos (percent)
5	ML1- 1C	< 1
10	ML1- 2C	< 1
15	ML1- 3B	< 1
20	ML1- 4B	< 1
35	ML1- 7C	< 1
40	ML1- 8B	< 1
45	ML1- 9B	< 1
50	ML1-10C	< 1
TTLC[1]		1.0

[1] Total Threshold Limit Concentration (State of California, 1984)

Table 8b. ASBESTOS IN SOILS: BORING ML-2

Depth	Sample No.	Asbestos (%)
5	ML2- 1A	< 1
10	ML2- 2B	< 1
15	ML2- 3C	< 1
20	ML2- 4C	< 1
25	ML2- 5C	< 1
30	ML2- 6C	< 1
35	ML2- 7C	< 1
TTLC[1]		1.0

[1] Total Threshold Limit Concentration (State of California, 1984)

Table 8c. ASBESTOS IN SOILS: BORING ML-3

Depth	Sample No.	Asbestos (percent)	
5	ML3- 1C	< 1	
10	ML3- 2B	< 1	trace chrysotile
	ML3- 2C	< 1	
20	ML3- 4B	< 1	
25	ML3- 5B	< 1	
30	ML3- 6B	< 1	
	ML3- 6C	< 1	
35	ML3- 7B	< 1	
	ML3- 7C	< 1	
40	ML3- 8B	< 1	
45	ML3- 9B	< 1	
55	ML3- 11A	< 1	
TTLC[1]		1.0	

[1] Total Threshold Limit Concentration (State of California, 1984)

Table 9. SOIL GAS CHEMICAL DATA

	Boring		
	ML1-A (ppm)	ML2-A (ppm)	ML3-A (ppm)
Volatile Organic Compounds			
Benzene	3.3	2.5	0.6
Toluene	5.0	3.7	0.7
Xylenes & Ethyl Benzene	12.0	11.0	1.4
Trichlorotrifluoroethane	<1.1	1.7	<1.1
1,2 Dichloroethene	8.1	21.0	<2.8
Tetrachloroethene	0.8	1.8	<0.3
Gasoline	Positive	Positive	Positive
2-Chloroethylvinyl ether	<0.4	<0.4	<0.4
Inorganic Gas Compounds			
Sulfer Dioxide	2.6	3.6	4.9
(H_2S) Sulfides	<0.1[1]	<0.1[1]	<0.1[1]

[1] Not detectable at this limit

Table 10. LEACHATE CHEMICAL DATA - NON-HALOGENATED HYDROCARBONS, PCBs AND PESTICIDES

	Boring			
	ML-1	ML-2	ML-3	STLC[3] (mg/ℓ)
Date Sampled	3-25-85	3-23-85	3-11-85	
pH	7.2	6.0	6.4	N/A
Specific conductivity (umhos/cm)	12,835	33,640	27,860	N/A
Method 602	(ppb)	(ppb)	(ppb)	
Benzene	7.0	1400.0	10.0	
Toluene	5.0	590.0	<10[2]	
Xylene Isomers/ Ethylbenzene	300.0	180.0	60.0	
Dichlorobenzene	<400[2]	<200[2]	ND[1]	
Method 608				
PCB	(ppb)	(ppb)	(ppb)	
1242	100	<10[2]	18	
1254	51	<10[2]	5.3	
1260	<50[2]	10	<5[2]	
cumulative	<201	<30	<28.3	5.0
Pesticides	(ppb)	(ppb)	(ppb)	
Aldrin	<30	<1	<5	0.14
Chlordane	<10	<110	<30	0.25
DDE	<5	0.64	<6	0.10[4]
DDD	<2	<2	<5	
DDT	<1	<2	<20	
BHC[c] (Lindane)	ND	1	9.2	0.4
Heptachlor	<10	<1	<5	0.47
Dieldrin	0.17	<0.1	<0.2	0.8
Di-ethylphthalate	13	990	-	
Di-N-butylphthalate	15	38	-	
Di-N-octylphthalate	ND	71	-	

[1] Not detected

[2] Not detectable at this limit

[3] Soluble Threshold Limit Concentration (State of California, 1984)

[4] DDE, DDD, DDT combined

Table 11. LEACHATE CHEMICAL DATA - HALOGENATED HYDROCARBONS

Halogenated Hydrocarbons	Boring ML-1 (ppb)	ML-2 (ppb)	ML-3 (ppb)	STLC[2] (ppm)
Date Sampled	3-25-85	3-23-85	3-11-85	
Method 601				
Chlorobenzene	<5[1]	<5	<5[1]	
Chloroethane	<5[1]	180	<5[1]	
Chloromethane	<5[1]	540	<5[1]	
1,1 Dichloroethane	<5[1]	2800	<5[1]	
1,1 Dichloroethene	<5[1]	36	<5[1]	
Methylene choride	<5[1]	350	<5[1]	
Tetrachloroethylene	<5[1]	97	<5[1]	
1,1,1 Trichloroethane	<5[1]	120	<5[1]	
1,1,2 Trichloroethane	<5[1]	30	<5[1]	
Trichloroethylene	<5[1]	1500	<5[1]	204.0
Freon 1,1,2 Tf.	<5[1]	1400	<5[1]	
Vinyl chloride	<5[1]	250[1]	<5[1]	
Dichlorodifluoromethane	<5[1]	12000[3]	<5[1]	

[1] Not detectable at this limit

[2] Soluble Threshold Limit Concentration (State of California, 1984)

[3] Dichlorodifluoromethane content was unstable

Table 12. LEACHATE CHEMICAL DATA - PRIORITY POLLUTANT METALS

Priority Pollutant Metals	Boring ML-1 (ppm)	Boring ML-2 (ppm)	Boring ML-3 (ppm)	STLC[2] (mg/l)
Date Sampled	3-25-85	3-23-85	3-11-85	
Arsenic	2.4	0.6	0.01	5.0
Beryllium	<0.01[1]	<0.01[1]	<0.01[1]	100.0
Cadmium	0.1	0.1	0.03	1.0
Chromium, Total	7.2	0.77	0.11	560.0
Copper	8.8	1.0	0.32	25.0
Lead	37.0	2.8	0.79	5.0
Mercury	0.048	0.038	<0.0005[1]	0.2
Nickel	9.8	1.45	0.25	20.0
Selenium	0.01	<0.01[1]	<0.01[1]	1.0
Silver	0.27	0.26	0.04	5.0
Zinc	66.0	12.0	2.7	250.0
Antimony	0.07	0.01	<0.01[1]	15.0
Thallium	<1.0[1]	<0.5[1]	<0.1[1]	7.0

[1] Not detectable at this limit

[2] Soluble Threshold Limit Concentration (State of California, 1984)

APPENDIX F

AIR QUALITY SAMPLE INFORMATION

AIR QUALITY SAMPLES
SUBMITTED FOR LABORATORY ANALYSIS

AIR QUALITY SAMPLE INVENTORY
SOUTH BAY ASBESTOS SITE

SAMPLE STATION	SAMPLE NUMBER	QC SAMPLES: FIELD DUPLICATES	QC SAMPLES: BLANK TYPE	FLOW VOLUME	SAMPLE CONTAINER TYPE	LOT/ FILTER NUMBER	ANALYSIS REQUESTED	LAB	CHAIN OF CUSTODY RECORD NO.	AIRBILL NUMBER	TIME SAMPLED (PST) FROM	TIME SAMPLED (PST) TO	DATE COLLECTED	DATE SHIPPED	COMMENTS
288-AQ-05C-001	2984Y-123			1670 cu. m.	F	R7175001	6	CLAYTON	9-5110	4709919874	0000	2400	07-28-87	08-06-87	
288-AQ-05D-001	2984Y-124			1673 cu. m.	F	R7175002	6	CLAYTON	9-5110	4709919874	0000	2400	07-28-87	08-06-87	
288-AQ-04C-001	2984Y-125	2984Y-127		1661 cu. m.	F	R7175003	6	CLAYTON	9-5110	4709919874	0000	2400	07-28-87	08-06-87	
288-AQ-04D-001	2984Y-126	2984Y-128		1675 cu. m.	F	R7175004	6	CLAYTON	9-5110	4709919874	0000	2400	07-28-87	08-06-87	
288-AQ-04E-001	2984Y-127	2984Y-125		1645 cu. m.	F	R7175005	6	CLAYTON	9-5110	4709919874	0000	2400	07-28-87	08-06-87	
288-AQ-04F-001	2984Y-128	2984Y-126		1652 cu. m.	F	R7175006	6	CLAYTON	9-5110	4709919874	0000	2400	07-28-87	08-06-87	
288-AQ-01C-001	2984Y-129			1676 cu. m.	F	R7175007	6	CLAYTON	9-5110	4709919874	0000	2400	07-28-87	08-06-87	
288-AQ-01D-001	2984Y-130			1726 cu. m.	F	R7175008	6	CLAYTON	9-5110	4709919874	0000	2400	07-28-87	08-06-87	
288-AQ-03C-001	2984Y-131			1597 cu. m.	F	R7175009	6	CLAYTON	9-5110	4709919874	0000	2400	07-28-87	08-06-87	
288-AQ-03D-001	2984Y-132			1699 cu. m.	F	R7175010	6	CLAYTON	9-5110	4709919874	0000	2400	07-28-87	08-06-87	
288-AQ-02C-001	2984Y-133			1693 cu. m.	F	R7175011	6	CLAYTON	9-5110	4709919874	0000	2400	07-28-87	08-06-87	
288-AQ-02D-001	2984Y-134			1710 cu. m.	F	R7175012	6	CLAYTON	9-5110	4709919874	0000	2400	07-28-87	08-06-87	
288-AQ-01C-002	2984Y-135			25 cu. m.	F	R7175013	6	CLAYTON	9-5110	4709919874	0000	2400	07-31-87	08-06-87	
288-AQ-01D-002	2984Y-136			1657 cu. m.	F	R7175014	6	CLAYTON	9-5110	4709919874	0000	2400	07-31-87	08-06-87	
288-AQ-02C-002	2984Y-137			1659 cu. m.	F	R7175015	6	CLAYTON	9-5110	4709919874	0000	2400	07-31-87	08-06-87	
288-AQ-02D-002	2984Y-138			1665 cu. m.	F	R7175016	6	CLAYTON	9-5111	4709919874	0000	2400	07-31-87	08-06-87	
288-AQ-03C-002	2984Y-139			1628 cu. m.	F	R7175017	6	CLAYTON	9-5111	4709919874	0000	2400	07-31-87	08-06-87	
288-AQ-03D-002	2984Y-140			1631 cu. m.	F	R7175018	6	CLAYTON	9-5111	4709919874	0000	2400	07-31-87	08-06-87	
288-AQ-04C-002	2984Y-141			1593 cu. m.	F	R7175019	6	CLAYTON	9-5111	4709919874	0000	2400	07-31-87	08-06-87	
288-AQ-04D-002	2984Y-142			1668 cu. m.	F	R7175020	6	CLAYTON	9-5111	4709919874	0000	2400	07-31-87	08-06-87	
288-AQ-05D-002	2984Y-143			1720 cu. m.	F	R7175021	6	CLAYTON	9-5111	4709919874	0000	2400	07-31-87	08-06-87	
288-AQ-01C-003	2984Y-144			1051 cu. m.	F	R7175022	6	CLAYTON	9-5111	4709919874	0000	2400	08-03-87	08-06-87	
288-AQ-01D-003	2984Y-145			1670 cu. m.	F	R7175023	6	CLAYTON	9-5111	4709919874	0000	2400	08-03-87	08-06-87	
288-AQ-03C-003	2984Y-146			1443 cu. m.	F	R7175024	6	CLAYTON	9-5111	4709919874	0000	2400	08-03-87	08-06-87	
288-AQ-02C-003	2984Y-147			1648 cu. m.	F	R7175025	6	CLAYTON	9-5111	4709919874	0000	2400	08-03-87	08-06-87	
288-AQ-02D-003	2984Y-148			1685 cu. m.	F	R7175026	6	CLAYTON	9-5111	4709919874	0000	2400	08-03-87	08-06-87	
288-AQ-03D-003	2984Y-149			1628 cu. m.	F	R7175027	6	CLAYTON	9-5111	4709919874	0000	2400	08-03-87	08-06-87	
288-AQ-04C-003	2984Y-150	2984Y-153		1279 cu. m.	F	R7175028	6	CLAYTON	9-5111	4709919874	0000	2400	08-03-87	08-06-87	
288-AQ-04D-003	2984Y-151	2984Y-152		1670 cu. m.	F	R7175029	6	CLAYTON	9-5111	4709919874	0000	2400	08-03-87	08-06-87	
288-AQ-04F-003	2984Y-152	2984Y-151		1628 cu. m.	F	R7175030	6	CLAYTON	9-5111	4709919874	0000	2400	08-03-87	08-06-87	
288-AQ-04E-003	2984Y-153	2984Y-150		1628 cu. m.	F	R7175031	6	CLAYTON	9-5112	4709919874	0000	2400	08-03-87	08-06-87	
288-AQ-05C-003	2984Y-154			--	F	R7175032	6	CLAYTON	9-5112	4709919874	0000	2400	08-03-87	08-06-87	
288-AQ-05D-003	2984Y-155			1663 cu. m.	F	R7175033	6	CLAYTON	9-5112	4709919874	0000	2400	08-03-87	08-06-87	
288-AQ-01A-003	2984Y-156			2547 L.	C	618C257	TEM 1	CLAYTON	9-5112	4709919874	0000	2400	08-03-87	08-06-87	
288-AQ-01B-003	2984Y-157			-- L.	C	618C257	TEM 1	CLAYTON	9-5112	4709919874	0000	2400	08-03-87	08-06-87	
288-AQ-02A-003	2984Y-158			3070 L.	C	618C257	TEM 1	CLAYTON	9-5112	4709919874	0000	2400	08-03-87	08-06-87	
288-AQ-02B-003	2984Y-159			-- L.	C	618C257	TEM 1	CLAYTON	9-5112	4709919874	0000	2400	08-03-87	08-06-87	
288-AQ-03A-003	2984Y-160			2517 L.	C	618C257	TEM 1	CLAYTON	9-5112	4709919874	0000	2400	08-03-87	08-06-87	
288-AQ-03B-003	2984Y-161			-- L.	C	618C257	TEM 1	CLAYTON	9-5112	4709919874	0000	2400	08-03-87	08-06-87	
288-AQ-04A-003	2984Y-162	2984Y-163		2784 L.	C	618C257	TEM 1	CLAYTON	9-5112	4709919874	0000	2400	08-03-87	08-06-87	
288-AQ-04B-003	2984Y-163	2984Y-162		2479 L.	C	618C257	TEM 1	CLAYTON	9-5112	4709919874	0000	2400	08-03-87	08-06-87	
288-AQ-05A-003	2984Y-164			2734 L.	C	618C257	TEM 1	CLAYTON	9-5112	4709919874	0000	2400	08-03-87	08-06-87	
288-AQ-05B-003	2984Y-165			-- L.	C	618C257	TEM 1	CLAYTON	9-5112	4709919874	0000	2400	08-03-87	08-06-87	
288-AQ-01A-004	2984Y-166			2537 L.	C	618C257	TEM 1	CLAYTON	9-5113	4709919885	0000	2400	08-06-87	08-11-87	

continued on next page

LEGEND:

STATION NUMBER:
- 288=SITE NUMBER
- AQ=AIR QUALITY
- 01=AIR STATION 1.
- 02=AIR STATION 2.
- 03=AIR STATION 3.
- 04=AIR STATION 4.
- 05=AIR STATION 5.
- A=ASBESTOS SAMPLER A
- B=ASBESTOS SAMPLER B
- C=HIGH VOLUME SAMPLER C (TOTAL SUSPENDED PARTICULATES)
- D=HIGH VOLUME SAMPLER D (PM10)
- E=HIGH VOLUME SAMPLER E (TOTAL SUSPENDED PARTICULATES)
- F=HIGH VOLUME SAMPLER F (PM10)
- G=BLANK
- 001.002.etc.=SAMPLE EVENT NUMBER (E=EPISODIC EVENT)

*INDICATES BREAK IN SAMPLE NO. SEQUENCE

FB=FIELD BLANK
TB=TRAVEL BLANK

cu. m.=CUBIC METER
L=LITER
-- = NOT CALCULATED

F=FILTER
C=CASSETTE
P=PLASTIC DISH

G=GRAVIMETRIC
TEM 1=ASBESTOS-TEM LEVEL 1
TEM 2=ASBESTOS-TEM LEVEL 2

CLAYTON=CLAYTON ENV. CONSULTANTS INC.

AIR QUALITY SAMPLE INVENTORY
SOUTH BAY ASBESTOS SITE
(continued)

SAMPLE STATION	SAMPLE NUMBER	QC SAMPLES FIELD DUPLICATES	QC SAMPLES BLANK TYPE	FLOW VOLUME	SAMPLE CONTAINER TYPE	LOT/ FILTER NUMBER	ANALYSIS REQUESTED	LAB	CHAIN OF CUSTODY RECORD NO.	AIRBILL NUMBER	TIME SAMPLED (PST) FROM	TIME SAMPLED (PST) TO	DATE COLLECTED	DATE SHIPPED	COMMENTS
288-AQ-01B-004	2984Y-167			3992 L.	C	618C257	TEM 1	CLAYTON	9-5113	4709919885	0000	2400	08-06-87	08-11-87	
288-AQ-02A-004	2984Y-168			3073 L.	C	618C257	TEM 1	CLAYTON	9-5113	4709919885	0000	2400	08-06-87	08-11-87	
288-AQ-02B-004	2984Y-169			3964 L.	C	618C257	TEM 1	CLAYTON	9-5113	4709919885	0000	2400	08-06-87	08-11-87	
288-AQ-03A-004	2984Y-170			2517 L.	C	618C257	TEM 1	CLAYTON	9-5113	4709919885	0000	2400	08-06-87	08-11-87	
288-AQ-03B-004	2984Y-171			3374 L.	C	618C257	TEM 1	CLAYTON	9-5113	4709919885	0000	2400	08-06-87	08-11-87	
288-AQ-04A-004	2984Y-172	2984Y-173		2234 L.	C	618C257	TEM 1	CLAYTON	9-5113	4709919885	0000	2400	08-06-87	08-11-87	
288-AQ-04B-004	2984Y-173	2984Y-172		3280 L.	C	618C257	TEM 1	CLAYTON	9-5113	4709919885	0000	2400	08-06-87	08-11-87	
288-AQ-05A-004	2984Y-174			2734 L.	C	618C257	TEM 1	CLAYTON	9-5113	4709919885	0000	2400	08-06-87	08-11-87	
288-AQ-05B-004	2984Y-175			4382 L.	C	618C257	TEM 1	CLAYTON	9-5113	4709919885	0000	2400	08-06-87	08-11-87	
288-AQ-01C-004	2984Y-176			1659 cu. m.	F	R7175034	G	CLAYTON	9-5114	4709919885	0000	2400	08-06-87	08-11-87	
288-AQ-01D-004	2984Y-177			1712 cu. m.	F	R7175035	G	CLAYTON	9-5114	4709919885	0000	2400	08-06-87	08-11-87	
288-AQ-02C-004	2984Y-178			1653 cu. m.	F	R7175036	G	CLAYTON	9-5114	4709919885	0000	2400	08-06-87	08-11-87	
288-AQ-02D-004	2984Y-179			1282 cu. m.	F	R7175037	G	CLAYTON	9-5114	4709919885	0000	2400	08-06-87	08-11-87	
288-AQ-03C-004	2984Y-180			1616 cu. m.	F	R7175038	G	CLAYTON	9-5114	4709919885	0000	2400	08-06-87	08-11-87	
288-AQ-03D-004	2984Y-181			1642 cu. m.	F	R7175040	G	CLAYTON	9-5114	4709919885	0000	2400	08-06-87	08-11-87	
288-AQ-04C-004	2984Y-182	2984Y-184		1005 cu. m.	F	R7175041	G	CLAYTON	9-5114	4709919885	0000	2400	08-06-87	08-11-87	
288-AQ-04D-004	2984Y-183	2984Y-185		1335 cu. m.	F	R7175042	G	CLAYTON	9-5114	4709919885	0000	2400	08-06-87	08-11-87	
288-AQ-04E-004	2984Y-184	2984Y-182		1299 cu. m.	F	R7175043	G	CLAYTON	9-5114	4709919885	0000	2400	08-06-87	08-11-87	
288-AQ-04F-004	2984Y-185	2984Y-183		1303 cu. m.	F	R7175044	G	CLAYTON	9-5114	4709919885	0000	2400	08-06-87	08-11-87	
288-AQ-05C-004	2984Y-186			4227 cu. m.	F	R7175045	G	CLAYTON	9-5114	4709919885	0000	2400	08-06-87	08-11-87	
288-AQ-05D-004	2984Y-187			1665 cu. m.	F	R7175046	G	CLAYTON	9-5114	4709919885	0000	2400	08-06-87	08-11-87	
288-AQ-01C-005	2984Y-188			1663 cu. m.	F	R7175047	G	CLAYTON	9-C101	4709700041	0000	2400	08-09-87	08-18-87	
288-AQ-01D-005	2984Y-189			1629 cu. m.	F	R7175048	G	CLAYTON	9-C101	4709700041	0000	2400	08-09-87	08-18-87	
288-AQ-02C-005	2984Y-190			1651 cu. m.	F	R7175049	G	CLAYTON	9-C101	4709700041	0000	2400	08-09-87	08-18-87	
288-AQ-02D-005	2984Y-191			2408 cu. m.	F	R7175050	G	CLAYTON	9-C101	4709700041	0000	2400	08-09-87	08-18-87	
288-AQ-03C-005	2984Y-192			1617 cu. m.	F	R7175051	G	CLAYTON	9-C101	4709700041	0000	2400	08-09-87	08-18-87	
288-AQ-03D-005	2984Y-193			1643 cu. m.	F	R7175052	G	CLAYTON	9-C101	4709700041	0000	2400	08-09-87	08-18-87	
288-AQ-04C-005	2984Y-194	2984Y-196		1118 cu. m.	F	R7175053	G	CLAYTON	9-C101	4709700041	0000	2400	08-09-87	08-18-87	
288-AQ-04D-005	2984Y-195	2984Y-197		1692 cu. m.	F	R7175054	G	CLAYTON	9-C101	4709700041	0000	2400	08-09-87	08-18-87	
288-AQ-04E-005	2984Y-196	2984Y-194		1630 cu. m.	F	R7175055	G	CLAYTON	9-C101	4709700041	0000	2400	08-09-87	08-18-87	
288-AQ-04F-005	2984Y-197	2984Y-195		1629 cu. m.	F	R7175056	G	CLAYTON	9-C101	4709700041	0000	2400	08-09-87	08-18-87	
288-AQ-05C-005	2984Y-198			1589 cu. m.	F	R7175057	G	CLAYTON	9-C101	4709700041	0000	2400	08-09-87	08-18-87	
288-AQ-05D-005	2984Y-199			1666 cu. m.	F	R7175058	G	CLAYTON	9-C101	4709700041	0000	2400	08-09-87	08-18-87	
288-AQ-01C-006	2984Y-200			1674 cu. m.	F	R7175059	G	CLAYTON	9-C101	4709700041	0000	2400	08-12-87	08-18-87	
288-AQ-01D-006	2984Y-201			1637 cu. m.	F	R7175060	G	CLAYTON	9-C101	4709700041	0000	2400	08-12-87	08-18-87	
288-AQ-02C-006	2984Y-202			1631 cu. m.	F	R7175061	G	CLAYTON	9-C101	4709700041	0000	2400	08-12-87	08-18-87	
288-AQ-02D-006	2984Y-203			2413 cu. m.	F	R7175062	G	CLAYTON	9-C101	4709700041	0000	2400	08-12-87	08-18-87	
288-AQ-03C-006	2984Y-204			1641 cu. m.	F	R7175063	G	CLAYTON	9-C101	4709700041	0000	2400	08-12-87	08-18-87	
288-AQ-03D-006	2984Y-205			1644 cu. m.	F	R7175064	G	CLAYTON	9-C102	4709700041	0000	2400	08-12-87	08-18-87	
288-AQ-04C-006	2984Y-206	2984Y-208		880 cu. m.	F	R7175065	G	CLAYTON	9-C102	4709700041	0000	2400	08-12-87	08-18-87	
288-AQ-04D-006	2984Y-207	2984Y-209		1010 cu. m.	F	R7175066	G	CLAYTON	9-C102	4709700041	0000	2400	08-12-87	08-18-87	
288-AQ-04E-006	2984Y-208	2984Y-206		1621 cu. m.	F	R7175067	G	CLAYTON	9-C102	4709700041	0000	2400	08-12-87	08-18-87	
288-AQ-04F-006	2984Y-209	2984Y-207		1640 cu. m.	F	R7175068	G	CLAYTON	9-C102	4709700041	0000	2400	08-12-87	08-18-87	
288-AQ-05C-006	2984Y-210			1615 cu. m.	F	R7175069	G	CLAYTON	9-C102	4709700041	0000	2400	08-12-87	08-18-87	

continued on next page

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- D=HIGH VOLUME SAMPLER D (PM10)
- E=HIGH VOLUME SAMPLER E (TOTAL SUSPENDED PARTICULATES)
- F=HIGH VOLUME SAMPLER F (PM10)
- G=BLANK
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*INDICATES BREAK IN SAMPLE NO. SEQUENCE

FB=FIELD BLANK
TB=TRAVEL BLANK

cu. m.=CUBIC METER
L=LITER
-- = NOT CALCULATED

F=FILTER
C=CASSETTE
P=PLASTIC DISH

G=GRAVIMETRIC
TEM 1=ASBESTOS-TEM LEVEL 1
TEM 2=ASBESTOS-TEM LEVEL 2

CLAYTON=CLAYTON ENV. CONSULTANTS INC.

AIR QUALITY SAMPLE INVENTORY
SOUTH BAY ASBESTOS SITE
(continued)

SAMPLE STATION	SAMPLE NUMBER	QC SAMPLES: FIELD DUPLICATE	QC SAMPLES: BLANK TYPE	FLOW VOLUME	SAMPLE CONTAINER TYPE	LOT/ FILTER NUMBER	ANALYSIS REQUESTED	LAB	CHAIN OF CUSTODY RECORD NO.	AIRBILL NUMBER	TIME SAMPLED (PST): FROM	TIME SAMPLED (PST): TO	DATE COLLECTED	DATE SHIPPED	COMMENTS
288-AQ-05D-006	2984Y-211			1691 cu. m.	F	7175070	G	CLAYTON	9-C102	4709700041	0000	2400	08-12-87	08-18-87	
288-AQ-01C-007E	2984Y-212			411 cu. m.	F	7175071	G	CLAYTON	9-C102	4709700041	1230	1830	08-13-87	08-18-87	
288-AQ-01D-007E	2984Y-213			400 cu. m.	F	7175072	G	CLAYTON	9-C102	4709700041	1230	1830	08-13-87	08-18-87	
288-AQ-02C-007E	2984Y-214			--	F	7175073	G	CLAYTON	9-C102	4709700041	1230	1830	08-13-87	08-18-87	
288-AQ-02D-007E	2984Y-215			608 cu. m.	F	7175074	G	CLAYTON	9-C102	4709700041	1230	1830	08-13-87	08-18-87	
288-AQ-03C-007E	2984Y-216			426 cu. m.	F	7175075	G	CLAYTON	9-C102	4709700041	1230	1830	08-13-87	08-18-87	
288-AQ-03D-007E	2984Y-217			432 cu. m.	F	7175076	G	CLAYTON	9-C102	4709700041	1230	1830	08-13-87	08-18-87	
288-AQ-04C-007E	2984Y-218	2984Y-220		439 cu. m.	F	7175077	G	CLAYTON	9-C102	4709700041	1230	1830	08-13-87	08-18-87	
288-AQ-04D-007E	2984Y-219	2984Y-221		441 cu. m.	F	7175078	G	CLAYTON	9-C102	4709700041	1230	1830	08-13-87	08-18-87	
288-AQ-04E-007E	2984Y-220	2984Y-218		420 cu. m.	F	7175079	G	CLAYTON	9-C102	4709700041	1230	1830	08-13-87	08-18-87	
288-AQ-04F-007E	2984Y-221	2984Y-219		434 cu. m.	F	7175080	G	CLAYTON	9-C102	4709700041	1230	1830	08-13-87	08-18-87	
288-AQ-05C-007E	2984Y-222			399 cu. m.	F	7175081	G	CLAYTON	9-C103	4709700041	1230	1830	08-13-87	08-18-87	
288-AQ-05D-007E	2984Y-223			422 cu. m.	F	7175082	G	CLAYTON	9-C103	4709700041	1230	1830	08-13-87	08-18-87	
288-AQ-01C-008E	2984Y-224			554 cu. m.	F	7175083	G	CLAYTON	9-C103	4709700041	0100	0900	08-14-87	08-18-87	
288-AQ-01D-008E	2984Y-225			--	F	7175084	G	CLAYTON	9-C103	4709700041	0100	0900	08-14-87	08-18-87	
288-AQ-02C-008	2984Y-226			1629 cu. m.	F	7175085	G	CLAYTON	9-C103	4709700041	0000	2400	08-15-87	08-18-87	
288-AQ-02D-008	2984Y-227			2411 cu. m.	F	7175086	G	CLAYTON	9-C103	4709700041	0000	2400	08-15-87	08-18-87	
288-AQ-03C-008	2984Y-228			1617 cu. m.	F	7175087	G	CLAYTON	9-C103	4709700041	0000	2400	08-15-87	08-18-87	
288-AQ-03D-008	2984Y-229			1643 cu. m.	F	7175088	G	CLAYTON	9-C103	4709700041	0000	2400	08-15-87	08-18-87	
288-AQ-04C-008	2984Y-230	2984Y-232		--	F	7175089	G	CLAYTON	9-C103	4709700041	0000	2400	08-15-87	08-18-87	
288-AQ-04D-008	2984Y-231	2984Y-233		1100 cu. m.	F	7175090	G	CLAYTON	9-C103	4709700041	0000	2400	08-15-87	08-18-87	
288-AQ-04E-008	2984Y-232	2984Y-230		1091 cu. m.	F	7175091	G	CLAYTON	9-C103	4709700041	0000	2400	08-15-87	08-18-87	
288-AQ-04F-008	2984Y-233	2984Y-231		1122 cu. m.	F	7175092	G	CLAYTON	9-C103	4709700041	0000	2400	08-15-87	08-18-87	
288-AQ-05C-008E	2984Y-234			540 cu. m.	F	7175093	G	CLAYTON	9-C103	4709700041	0100	0900	08-14-87	08-18-87	
288-AQ-05D-008E	2984Y-235			596 cu. m.	F	7175094	G	CLAYTON	9-C103	4709700041	0100	0900	08-14-87	08-18-87	
288-AQ-05C-008	2984Y-236			526 cu. m.	F	7175095	G	CLAYTON	9-C103	4709700041	0000	2400	08-15-87	08-18-87	
288-AQ-05D-008	2984Y-237			--	F	7175096	G	CLAYTON	9-C103	4709700041	0000	2400	08-15-87	08-18-87	
288-AQ-01C-008	2984Y-238			597 cu. m.	F	7175097	G	CLAYTON	9-C103	4709700041	0000	2400	08-15-87	08-18-87	
288-AQ-01D-008	2984Y-239			1665 cu. m.	F	7175098	G	CLAYTON	9-C104	4709700041	0000	2400	08-15-87	08-18-87	
288-AQ-01C-009	2984Y-240			1653 cu. m.	F	7175099	G	CLAYTON	9-C105	4709700063	0000	2400	08-18-87	08-24-87	
288-AQ-01D-009	2984Y-241			1537 cu. m.	F	7175100	G	CLAYTON	9-C105	4709700063	0000	2400	08-18-87	08-24-87	
288-AQ-02C-009	2984Y-242			1153 cu. m.	F	7175101	G	CLAYTON	9-C105	4709700063	0000	2400	08-18-87	08-24-87	
288-AQ-02D-009	2984Y-243			3255 cu. m.	F	7175102	G	CLAYTON	9-C105	4709700063	0000	2400	08-18-87	08-24-87	
288-AQ-03C-009	2984Y-244			1623 cu. m.	F	7175103	G	CLAYTON	9-C105	4709700063	0000	2400	08-18-87	08-24-87	
288-AQ-03D-009	2984Y-245			1647 cu. m.	F	7175104	G	CLAYTON	9-C105	4709700063	0000	2400	08-18-87	08-24-87	
288-AQ-04C-009	2984Y-246	2984Y-250		1489 cu. m.	F	7175105	G	CLAYTON	9-C105	4709700063	0000	2400	08-18-87	08-24-87	
288-AQ-04D-009	2984Y-247	2984Y-251		1645 cu. m.	F	7175106	G	CLAYTON	9-C105	4709700063	0000	2400	08-18-87	08-24-87	
288-AQ-05C-010E	2984Y-248			402 cu. m.	F	7175107	G	CLAYTON	9-C105	4709700063	1200	1800	08-19-87	08-24-87	
288-AQ-05D-010E	2984Y-249			444 cu. m.	F	7175108	G	CLAYTON	9-C105	4709700063	1200	1800	08-19-87	08-24-87	
288-AQ-04E-009	2984Y-250	2984Y-246		1614 cu. m.	F	7175109	G	CLAYTON	9-C105	4709700063	0000	2400	08-18-87	08-24-87	
288-AQ-04F-009	2946Y-251	2984Y-247		1626 cu. m.	F	7175110	G	CLAYTON	9-C105	4709700063	0000	2400	08-18-87	08-24-87	
288-AQ-05C-009	2984Y-252			1594 cu. m.	F	7175111	G	CLAYTON	9-C105	4709700063	0000	2400	08-18-87	08-24-87	
288-AQ-05D-009	2984Y-253			1670 cu. m.	F	7175112	G	CLAYTON	9-C105	4709700063	0000	2400	08-18-87	08-24-87	
288-AQ-01C-010E	2984Y-254			416 cu. m.	F	7175113	G	CLAYTON	9-C105	4709700063	1200	1800	08-19-87	08-24-87	

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G=GRAVIMETRIC
TEM 1=ASBESTOS-TEM LEVEL 1
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CLAYTON=CLAYTON ENV. CONSULTANTS INC.

AIR QUALITY SAMPLE INVENTORY
SOUTH BAY ASBESTOS SITE
(continued)

SAMPLE STATION	SAMPLE NUMBER	QC SAMPLES DUPLICATE OF	QC SAMPLES FIELD BLANK	FLOW VOLUME	SAMPLE CONTAINER TYPE	LOT/ FILTER NUMBER	ANALYSIS REQUESTED	LAB	CHAIN OF CUSTODY RECORD NO.	AIRBILL NUMBER	TIME SAMPLED (PST) FROM	TIME SAMPLED (PST) TO	DATE COLLECTED	DATE SHIPPED	COMMENTS
288-AQ-01D-010E	2984Y-255			389 cu. m.	F	7175114	G	CLAYTON	9-C105	4709700063	1200	1800	08-19-87	08-24-87	
288-AQ-02C-010E	2984Y-256			451 cu. m.	F	7175115	G	CLAYTON	9-C105	4709700063	1200	1800	08-19-87	08-24-87	
288-AQ-02D-010E	2984Y-257			621 cu. m.	F	7175116	G	CLAYTON	9-C106	4709700063	1200	1800	08-19-87	08-24-87	
288-AQ-03D-010E	2984Y-258			450 cu. m.	F	7175117	G	CLAYTON	9-C106	4709700063	1200	1800	08-19-87	08-24-87	
288-AQ-03C-010E	2984Y-259			419 cu. m.	F	7175118	G	CLAYTON	9-C106	4709700063	1200	1800	08-19-87	08-24-87	
288-AQ-04C-010E	2984Y-260	2984Y-262		343 cu. m.	F	7175119	G	CLAYTON	9-C106	4709700063	1200	1800	08-19-87	08-24-87	
288-AQ-04D-010E	2984Y-261	2984Y-263		442 cu. m.	F	7175120	G	CLAYTON	9-C106	4709700063	1200	1800	08-19-87	08-24-87	
288-AQ-04E-010E	2984Y-262	2984Y-260		213 cu. m.	F	7175121	G	CLAYTON	9-C106	4709700063	1200	1800	08-19-87	08-24-87	
288-AQ-04F-010E	2984Y-263	2984Y-261		--	F	7175122	G	CLAYTON	9-C106	4709700063	1200	1800	08-19-87	08-24-87	
288-AQ-01C-011E	2984Y-264			282 cu. m.	F	7175123	G	CLAYTON	9-C106	4709700063	0400	0800	08-20-87	08-24-87	
288-AQ-01D-011E	2984Y-265			257 cu. m.	F	7175124	G	CLAYTON	9-C106	4709700063	0400	0800	08-20-87	08-24-87	
288-AQ-02C-011E	2984Y-266			267 cu. m.	F	7175125	G	CLAYTON	9-C106	4709700063	0400	0800	08-20-87	08-24-87	
288-AQ-02D-011E	2984Y-267			421 cu. m.	F	7175126	G	CLAYTON	9-C106	4709700063	0400	0800	08-20-87	08-24-87	
288-AQ-03C-011E	2984Y-268			260 cu. m.	F	7175127	G	CLAYTON	9-C106	4709700063	0400	0800	08-20-87	08-24-87	
288-AQ-03D-011E	2984Y-269			282 cu. m.	F	7175128	G	CLAYTON	9-C106	4709700063	0400	0800	08-20-87	08-24-87	
288-AQ-04C-011E	2984Y-270	2984Y-272		231 cu. m.	F	7175129	G	CLAYTON	9-C106	4709700063	0400	0800	08-20-87	08-24-87	
288-AQ-04D-011E	2984Y-271	2984Y-273		294 cu. m.	F	7175130	G	CLAYTON	9-C106	4709700063	0400	0800	08-20-87	08-24-87	
288-AQ-04E-011E	2984Y-272	2984Y-270		290 cu. m.	F	7175131	G	CLAYTON	9-C106	4709700063	0400	0800	08-20-87	08-24-87	
288-AQ-04F-011E	2984Y-273	2984Y-271		294 cu. m.	F	7175132	G	CLAYTON	9-C106	4709700063	0400	0800	08-20-87	08-24-87	
288-AQ-05C-011E	2984Y-274			287 cu. m.	F	7175133	G	CLAYTON	9-C107	4709700063	0400	0800	08-20-87	08-24-87	
288-AQ-05D-011E	2984Y-275			281 cu. m.	F	7175134	G	CLAYTON	9-C107	4709700063	0400	0800	08-20-87	08-24-87	
288-AQ-01C-012	2984Y-276			1667 cu. m.	F	7175135	G	CLAYTON	9-C107	4709700063	0000	2400	08-21-87	08-24-87	
288-AQ-01D-012	2984Y-277			1548 cu. m.	F	7175136	G	CLAYTON	9-C107	4709700063	0000	2400	08-21-87	08-24-87	
288-AQ-02D-012	2984Y-278			2420 cu. m.	F	7175137	G	CLAYTON	9-C107	4709700063	0000	2400	08-21-87	08-24-87	
288-AQ-02C-012	2984Y-279			1641 cu. m.	F	7175138	G	CLAYTON	9-C107	4709700063	0000	2400	08-21-87	08-24-87	
288-AQ-03C-012	2984Y-280			1624 cu. m.	F	7175139	G	CLAYTON	9-C107	4709700063	0000	2400	08-21-87	08-24-87	
288-AQ-03D-012	2984Y-281			1658 cu. m.	F	7175140	G	CLAYTON	9-C107	4709700063	0000	2400	08-21-87	08-24-87	
288-AQ-04C-012	2984Y-282	2984Y-284		1320 cu. m.	F	7175141	G	CLAYTON	9-C107	4709700063	0000	2400	08-21-87	08-24-87	
288-AQ-04D-012	2984Y-283	2984Y-285		1671 cu. m.	F	7175142	G	CLAYTON	9-C107	4709700063	0000	2400	08-21-87	08-24-87	
288-AQ-04E-012	2984Y-284	2984Y-282		1623 cu. m.	F	7175143	G	CLAYTON	9-C107	4709700063	0000	2400	08-21-87	08-24-87	
288-AQ-04F-012	2984Y-285	2984Y-283		1641 cu. m.	F	7175144	G	CLAYTON	9-C107	4709700063	0000	2400	08-21-87	08-24-87	
288-AQ-05C-012	2984Y-286			1576 cu. m.	F	7175145	G	CLAYTON	9-C107	4709700063	0000	2400	08-21-87	08-24-87	
288-AQ-05D-012	2984Y-287			1680 cu. m.	F	7175146	G	CLAYTON	9-C107	4709700063	0000	2400	08-21-87	08-24-87	
288-AQ-01A-010E	2984Y-288			3236 L.	C	618C257	TEM-1	CLAYTON	9-C107	4709700063	1200	1800	08-19-87	08-24-87	
288-AQ-02A-010E	2984Y-289			3438 L.	C	618C257	TEM-1	CLAYTON	9-C107	4709700063	1200	1800	08-19-87	08-24-87	
288-AQ-03B-010E	2984Y-290			4626 L.	C	618C257	TEM-1	CLAYTON	9-C107	4709700063	1200	1800	08-19-87	08-24-87	
288-AQ-04A-010E	2984Y-291	2984Y-292		3530 L.	C	618C257	TEM-1	CLAYTON	9-C108	4709700063	1200	1800	08-19-87	08-24-87	
288-AQ-04B-010E	2984Y-292	2984Y-291		3271 L.	C	618C257	TEM-1	CLAYTON	9-C108	4709700063	1200	1800	08-19-87	08-24-87	
288-AQ-05A-010E	2984Y-293			3190 L.	C	618C257	TEM-1	CLAYTON	9-C108	4709700063	1200	1800	08-19-87	08-24-87	
288-AQ-01G-010E	2984Y-294		FB	N/A	C	618C257	TEM-1	CLAYTON	9-C108	4709700063	N/A	N/A	08-19-87	08-24-87	Exposed 29 min, 36 sec
288-AQ-01C-013	2984Y-295			1665 cu. m.	F	7175147	G	CLAYTON	9-C109	4709700085	0000	2400	08-24-87	08-31-87	
288-AQ-01D-013	2984Y-296			1634 cu. m.	F	7175148	G	CLAYTON	9-C109	4709700085	0000	2400	08-24-87	08-31-87	
288-AQ-02C-013	2984Y-297			1619 cu. m.	F	7175149	G	CLAYTON	9-C109	4709700085	0000	2400	08-24-87	08-31-87	
288-AQ-02D-013	2984Y-298			2409 cu. m.	F	7175150	G	CLAYTON	9-C109	4709700085	0000	2400	08-24-87	08-31-87	

continued on next page

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- C=HIGH VOLUME SAMPLER C (TOTAL SUSPENDED PARTICULATES)
- D=HIGH VOLUME SAMPLER D (PM10)
- E=HIGH VOLUME SAMPLER E (TOTAL SUSPENDED PARTICULATES)
- F=HIGH VOLUME SAMPLER F (PM10)
- G=BLANK
- 001,002,etc.=SAMPLE EVENT NUMBER (E=EPISODIC EVENT)

*INDICATES BREAK IN SAMPLE NO. SEQUENCE

FB=FIELD BLANK
TB=TRAVEL BLANK

cu. m.=CUBIC METER
L=LITER
-- = NOT CALCULATED

F=FILTER
C=CASSETTE
P=PLASTIC DISH

G=GRAVIMETRIC
TEM 1=ASBESTOS-TEM LEVEL 1
TEM 2=ASBESTOS-TEM LEVEL 2

CLAYTON=CLAYTON ENV. CONSULTANTS INC.

AIR QUALITY SAMPLE INVENTORY
SOUTH BAY ASBESTOS SITE
(continued)

SAMPLE STATION	SAMPLE NUMBER	QC SAMPLES: DUPLICATE OF	QC SAMPLES: BLANK TYPE	FLOW VOLUME	SAMPLE CONTAINER TYPE	LOT/ FILTER NUMBER	ANALYSIS REQUESTED	LAB	CHAIN OF CUSTODY RECORD NO.	AIRBILL NUMBER	TIME SAMPLED FROM	TIME SAMPLED TO	DATE COLLECTED	DATE SHIPPED	COMMENTS
288-AQ-03C-013	2984Y-299			1633 cu. m.	F	7176001	G	CLAYTON	9-C109	4709700085	0000	2400	08-24-87	08-31-87	
288-AQ-03D-013	2984Y-300			1655 cu. m.	F	7176002	G	CLAYTON	9-C109	4709700085	0000	2400	08-24-87	08-31-87	
288-AQ-04C-013	2984Y-301	2984Y-303		1347 cu. m.	F	7176003	G	CLAYTON	9-C109	4709700085	0000	2400	08-24-87	08-31-87	
288-AQ-04D-013	2984Y-302	2984Y-304		1668 cu. m.	F	7176004	G	CLAYTON	9-C109	4709700085	0000	2400	08-24-87	08-31-87	
288-AQ-04E-013	2984Y-303	2984Y-301		1611 cu. m.	F	7176005	G	CLAYTON	9-C109	4709700085	0000	2400	08-24-87	08-31-87	
288-AQ-04F-013	2984Y-304	2984Y-302		1644 cu. m.	F	7176006	G	CLAYTON	9-C109	4709700085	0000	2400	08-24-87	08-31-87	
288-AQ-05C-013	2984Y-305			1573 cu. m.	F	7176007	G	CLAYTON	9-C109	4709700085	0000	2400	08-24-87	08-31-87	
288-AQ-05D-013	2984Y-306			1682 cu. m.	F	7176008	G	CLAYTON	9-C109	4709700085	0000	2400	08-24-87	08-31-87	
288-AQ-01C-014	2984Y-307			1652 cu. m.	F	7176009	G	CLAYTON	9-C109	4709700085	0000	2400	08-27-87	08-31-87	
288-AQ-01D-014	2984Y-308			1611 cu. m.	F	7176010	G	CLAYTON	9-C109	4709700085	0000	2400	08-27-87	08-31-87	
288-AQ-02C-014	2984Y-309			1625 cu. m.	F	7176011	G	CLAYTON	9-C109	4709700085	0000	2400	08-27-87	08-31-87	
288-AQ-02D-014	2984Y-310			1604 cu. m.	F	7176012	G	CLAYTON	9-C109	4709700085	0000	2400	08-27-87	08-31-87	
288-AQ-03C-014	2984Y-311			1626 cu. m.	F	7176013	G	CLAYTON	9-C109	4709700085	0000	2400	08-27-87	08-31-87	
288-AQ-03D-014	2984Y-312			1650 cu. m.	F	7176014	G	CLAYTON	9-C110	4709700085	0000	2400	08-27-87	08-31-87	
288-AQ-04C-014	2984Y-313	2984Y-315		--	F	7176015	G	CLAYTON	9-C110	4709700085	0000	2400	08-27-87	08-31-87	
288-AQ-04D-014	2984Y-314	2984Y-316		1648 cu. m.	F	7176016	G	CLAYTON	9-C110	4709700085	0000	2400	08-27-87	08-31-87	
288-AQ-04E-014	2984Y-315	2984Y-313		1585 cu. m.	F	7176017	G	CLAYTON	9-C110	4709700085	0000	2400	08-27-87	08-31-87	
288-AQ-04F-014	2984Y-316	2984Y-314		1613 cu. m.	F	7176018	G	CLAYTON	9-C110	4709700085	0000	2400	08-27-87	08-31-87	
288-AQ-05C-014	2984Y-317			1559 cu. m.	F	7176020	G	CLAYTON	9-C110	4709700085	0000	2400	08-27-87	08-31-87	
288-AQ-05D-014	2984Y-318			1669 cu. m.	F	7176021	G	CLAYTON	9-C110	4709700085	0000	2400	08-27-87	08-31-87	
288-AQ-01C-015	2984Y-319			1663 cu. m.	F	7176022	G	CLAYTON	9-6078	4709700133	0000	2400	08-30-87	09-08-87	
288-AQ-01D-015	2984Y-320			1601 cu. m.	F	7176023	G	CLAYTON	9-6078	4709700133	0000	2400	08-30-87	09-08-87	
288-AQ-02C-015	2984Y-321			1596 cu. m.	F	7176024	G	CLAYTON	9-6078	4709700133	0000	2400	08-30-87	09-08-87	
288-AQ-02D-015	2984Y-322			1512 cu. m.	F	7176025	G	CLAYTON	9-6078	4709700133	0000	2400	08-30-87	09-08-87	
288-AQ-03C-015	2984Y-323			1614 cu. m.	F	7176026	G	CLAYTON	9-6078	4709700133	0000	2400	08-30-87	09-08-87	
288-AQ-03D-015	2984Y-324			1640 cu. m.	F	7176027	G	CLAYTON	9-6078	4709700133	0000	2400	08-30-87	09-08-87	
288-AQ-04C-015	2984Y-325	2984Y-327		1636 cu. m.	F	7176028	G	CLAYTON	9-6078	4709700133	0000	2400	08-30-87	09-08-87	
288-AQ-04D-015	2984Y-326	2984Y-328		1587 cu. m.	F	7176029	G	CLAYTON	9-6078	4709700133	0000	2400	08-30-87	09-08-87	
288-AQ-04E-015	2984Y-327	2984Y-325		1543 cu. m.	F	7176030	G	CLAYTON	9-6078	4709700133	0000	2400	08-30-87	09-08-87	
288-AQ-04F-015	2984Y-328	2984Y-326		1619 cu. m.	F	7176031	G	CLAYTON	9-6078	4709700133	0000	2400	08-30-87	09-08-87	
288-AQ-05C-015	2984Y-329			1584 cu. m.	F	7176032	G	CLAYTON	9-6078	4709700133	0000	2400	08-30-87	09-08-87	
288-AQ-05D-015	2984Y-330			1659 cu. m.	F	7176033	G	CLAYTON	9-6078	4709700133	0000	2400	08-30-87	09-08-87	
288-AQ-01C-016E	2984Y-331			470 cu. m.	F	7176034	G	CLAYTON	9-6078	4709700133	1100	1800	09-01-87	09-08-87	
288-AQ-01D-016E	2984Y-332			485 cu. m.	F	7176035	G	CLAYTON	9-6078	4709700133	1100	1800	09-01-87	09-08-87	
288-AQ-02D-016E	2984Y-333			469 cu. m.	F	7176036	G	CLAYTON	9-6078	4709700133	1100	1800	09-01-87	09-08-87	
288-AQ-02C-016E	2984Y-334			506 cu. m.	F	7176037	G	CLAYTON	9-6079	4709700133	1100	1800	09-01-87	09-08-87	
288-AQ-03C-016E	2984Y-335			493 cu. m.	F	7176038	G	CLAYTON	9-6079	4709700133	1100	1800	09-01-87	09-08-87	
288-AQ-03D-016E	2984Y-336			499 cu. m.	F	7176039	G	CLAYTON	9-6079	4709700133	1100	1800	09-01-87	09-08-87	
288-AQ-04C-016E	2984Y-337	2984Y-339		497 cu. m.	F	7176040	G	CLAYTON	9-6079	4709700133	1100	1800	09-01-87	09-08-87	
288-AQ-04D-016E	2984Y-338	2984Y-340		511 cu. m.	F	7176041	G	CLAYTON	9-6079	4709700133	1100	1800	09-01-87	09-08-87	
288-AQ-04E-016E	2984Y-339	2984Y-337		472 cu. m.	F	7176042	G	CLAYTON	9-6079	4709700133	1100	1800	09-01-87	09-08-87	
288-AQ-04F-016E	2984Y-340	2984Y-338		515 cu. m.	F	7176043	G	CLAYTON	9-6079	4709700133	1100	1800	09-01-87	09-08-87	
288-AQ-05D-016E	2984Y-341			481 cu. m.	F	7176044	G	CLAYTON	9-6079	4709700133	1100	1800	09-01-87	09-08-87	
288-AQ-05C-016E	2984Y-342			449 cu. m.	F	7176045	G	CLAYTON	9-6079	4709700133	1100	1800	09-01-87	09-08-87	

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- C=HIGH VOLUME SAMPLER C (TOTAL SUSPENDED PARTICULATES)
- D=HIGH VOLUME SAMPLER D (PM10)
- E=HIGH VOLUME SAMPLER E (TOTAL SUSPENDED PARTICULATES)
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*INDICATES BREAK IN SAMPLE NO. SEQUENCE

FB=FIELD BLANK
TB=TRAVEL BLANK

cu. m.=CUBIC METER
L=LITER
-- = NOT CALCULATED

F=FILTER
C=CASSETTE
P=PLASTIC DISH

G=GRAVIMETRIC
TEM 1=ASBESTOS-TEM LEVEL 1
TEM 2=ASBESTOS-TEM LEVEL 2

CLAYTON=CLAYTON ENV. CONSULTANTS INC.

AIR QUALITY SAMPLE INVENTORY
SOUTH BAY ASBESTOS SITE
(continued)

SAMPLE STATION	SAMPLE NUMBER	QC SAMPLES: FIELD DUPLICATES	QC SAMPLES: BLANK TYPE	FLOW VOLUME	SAMPLE CONTAINER TYPE	LOT/ FILTER NUMBER	ANALYSIS REQUESTED	LAB	CHAIN OF CUSTODY RECORD NO.	AIRBILL NUMBER	TIME SAMPLED (PST) FROM	TIME SAMPLED (PST) TO	DATE COLLECTED	DATE SHIPPED	COMMENTS
288-AQ-01C-017	2984Y-343			1642 cu. m.	F	7176046	G	CLAYTON	9-6079	4709700133	0000	2400	09-02-87	09-08-87	
288-AQ-01D-017	2984Y-344			1571 cu. m.	F	7176047	G	CLAYTON	9-6079	4709700133	0000	2400	09-02-87	09-08-87	
288-AQ-02C-017	2984Y-345			1603 cu. m.	F	7176048	G	CLAYTON	9-6079	4709700133	0000	2400	09-02-87	09-08-87	
288-AQ-02D-017	2984Y-346			1503 cu. m.	F	7176049	G	CLAYTON	9-6079	4709700133	0000	2400	09-02-87	09-08-87	
288-AQ-03C-017	2984Y-347			1594 cu. m.	F	7176050	G	CLAYTON	9-6079	4709700133	0000	2400	09-02-87	09-08-87	
288-AQ-03D-017	2984Y-348			1703 cu. m.	F	7176051	G	CLAYTON	9-6079	4709700133	0000	2400	09-02-87	09-08-87	
288-AQ-04C-017	2984Y-349	2984Y-353		1632 cu. m.	F	7176052	G	CLAYTON	9-6080	4709700133	0000	2400	09-02-87	09-08-87	
N/A	2984Y-350			N/A	P	N/A	TEM-1	CLAYTON	9-6077	5174487953	N/A	N/A	N/A	09-01-87	CA - DOHS # 1589
N/A	2984Y-351			N/A	P	N/A	TEM-1	CLAYTON	9-6077	5174487953	N/A	N/A	N/A	09-01-87	CA - DOHS # 1553
288-AQ-04D-017	2984Y-352	2984Y-354		1587 cu. m.	F	7176053	G	CLAYTON	9-6080	4709700133	0000	2400	09-02-87	09-08-87	
288-AQ-04E-017	2984Y-353	2984Y-349		1576 cu. m.	F	7176054	G	CLAYTON	9-6080	4709700133	0000	2400	09-02-87	09-08-87	
288-AQ-04F-017	2984Y-354	2984Y-352		1607 cu. m.	F	7176055	G	CLAYTON	9-6080	4709700133	0000	2400	09-02-87	09-08-87	
288-AQ-05C-017	2984Y-355			1558 cu. m.	F	7176056	G	CLAYTON	9-6080	4709700133	0000	2400	09-02-87	09-08-87	
288-AQ-05D-017	2984Y-356			1681 cu. m.	F	7176057	G	CLAYTON	9-6080	4709700133	0000	2400	09-02-87	09-08-87	
288-AQ-01C-018E	2984Y-357			422 cu. m.	F	7176058	G	CLAYTON	9-6080	4709700133	1200	1800	09-03-87	09-08-87	
288-AQ-01D-018E	2984Y-358			421 cu. m.	F	7176059	G	CLAYTON	9-6080	4709700133	1200	1800	09-03-87	09-08-87	
288-AQ-02C-018E	2984Y-359			440 cu. m.	F	7176060	G	CLAYTON	9-6080	4709700133	1200	1800	09-03-87	09-08-87	
288-AQ-02D-018E	2984Y-360			409 cu. m.	F	7176061	G	CLAYTON	9-6080	4709700133	1200	1800	09-03-87	09-08-87	
288-AQ-03C-018E	2984Y-361			413 cu. m.	F	7176062	G	CLAYTON	9-6080	4709700133	1200	1800	09-03-87	09-08-87	
288-AQ-03D-018E	2984Y-362			459 cu. m.	F	7176063	G	CLAYTON	9-6080	4709700133	1200	1800	09-03-87	09-08-87	
288-AQ-04C-018E	2984Y-363	2984Y-365		443 cu. m.	F	7176064	G	CLAYTON	9-6080	4709700133	1200	1800	09-03-87	09-08-87	
288-AQ-04D-018E	2984Y-364	2984Y-366		461 cu. m.	F	7176065	G	CLAYTON	9-6081	4709700133	1200	1800	09-03-87	09-08-87	
288-AQ-04E-018E	2984Y-365	2984Y-363		394 cu. m.	F	7176066	G	CLAYTON	9-6081	4709700133	1200	1800	09-03-87	09-08-87	
288-AQ-04F-018E	2984Y-366	2984Y-364		456 cu. m.	F	7176067	G	CLAYTON	9-6081	4709700133	1200	1800	09-03-87	09-08-87	
288-AQ-05C-018E	2984Y-367			400 cu. m.	F	7176068	G	CLAYTON	9-6081	4709700133	1200	1800	09-03-87	09-08-87	
288-AQ-05D-018E	2984Y-368			489 cu. m.	F	7176069	G	CLAYTON	9-6081	4709700133	1200	1800	09-03-87	09-08-87	
288-AQ-02C-019	2984Y-369			1551 cu. m.	F	7176072	G	CLAYTON	9-6081	4709700133	0000	2400	09-05-87	09-08-87	S.J. Airport temp. data
288-AQ-02D-019	2984Y-370			3275 cu. m.	F	7176073	G	CLAYTON	9-6081	4709700133	0000	2400	09-05-87	09-08-87	S.J. Airport temp. data
288-AQ-03C-019	2984Y-371			1591 cu. m.	F	7176075	G	CLAYTON	9-6081	4709700133	0000	2400	09-05-87	09-08-87	S.J. Airport temp. data
288-AQ-03D-019	2984Y-372			--	F	7176076	G	CLAYTON	9-6081	4709700133	0000	2400	09-05-87	09-08-87	S.J. Airport temp. data
288-AQ-04C-019	2984Y-373	2984Y-375		1629 cu. m.	F	7176077	G	CLAYTON	9-6081	4709700133	0000	2400	09-05-87	09-08-87	S.J. Airport temp. data
288-AQ-04D-019	2984Y-374	2984Y-376		1581 cu. m.	F	7176078	G	CLAYTON	9-6081	4709700133	0000	2400	09-05-87	09-08-87	S.J. Airport temp. data
288-AQ-04E-019	2984Y-375	2984Y-373		1574 cu. m.	F	7176079	G	CLAYTON	9-6081	4709700133	0000	2400	09-05-87	09-08-87	S.J. Airport temp. data
288-AQ-04F-019	2984Y-376	2984Y-374		1595 cu. m.	F	7176080	G	CLAYTON	9-6081	4709700133	0000	2400	09-05-87	09-08-87	S.J. Airport temp. data
288-AQ-05C-019	2984Y-377			1555 cu. m.	F	7176081	G	CLAYTON	9-6081	4709700133	0000	2400	09-05-87	09-08-87	S.J. Airport temp. data
288-AQ-05D-019	2984Y-378			1677 cu. m.	F	7176082	G	CLAYTON	9-6081	4709700133	0000	2400	09-05-87	09-08-87	S.J. Airport temp. data
288-AQ-01A-016E	2984Y-379			3887 L.	C	618C257	TEM-1	CLAYTON	9-6082	4709700133	1100	1800	09-01-87	09-08-87	Overloaded
288-AQ-02A-016E	2984Y-380			3888 L.	C	618C257	TEM-1	CLAYTON	9-6082	4709700133	1100	1800	09-01-87	09-08-87	Overloaded
288-AQ-02G-016E	2984Y-381		FB	N/A	C	618C257	TEM-1	CLAYTON	9-6082	4709700133	N/A	N/A	09-01-87	09-08-87	Exposed 36 min
288-AQ-03B-016E	2984Y-382			3739 L.	C	616C257	TEM-1	CLAYTON	9-6082	4709700133	1100	1800	09-01-87	09-08-87	Overloaded
288-AQ-04A-016E	2984Y-383			4283 L.	C	618C257	TEM-1	CLAYTON	9-6082	4709700133	1100	1800	09-01-87	09-08-87	Overloaded
288-AQ-05A-016E	2984Y-384			3631 L.	C	618C257	TEM-1	CLAYTON	9-6082	4709700133	1100	1800	09-01-87	09-08-87	Overloaded
288-AQ-01A-018E	2984Y-385			3411 L.	C	618C257	TEM-1	CLAYTON	9-6082	4709700133	1200	1800	09-03-87	09-08-87	Overloaded

continued on next page

LEGEND:

STATION NUMBER:
288=SITE NUMBER
AQ=AIR QUALITY
01=AIR STATION 1,
02=AIR STATION 2,
03=AIR STATION 3,
04=AIR STATION 4,
05=AIR STATION 5,
A=ASBESTOS SAMPLER A
B=ASBESTOS SAMPLER B
C=HIGH VOLUME SAMPLER C (TOTAL SUSPENDED PARTICULATES)
D=HIGH VOLUME SAMPLER D (PM10)
E=HIGH VOLUME SAMPLER E (TOTAL SUSPENDED PARTICULATES)
F=HIGH VOLUME SAMPLER F (PM10)
G=BLANK
001,002,etc.=SAMPLE EVENT NUMBER (E=EPISODIC EVENT)

#INDICATES BREAK IN SAMPLE NO. SEQUENCE

FB=FIELD BLANK
TB=TRAVEL BLANK

cu. m.=CUBIC METER
L=LITER
-- = NOT CALCULATED

F=FILTER
C=CASSETTE
P=PLASTIC DISH

G=GRAVIMETRIC
TEM 1=ASBESTOS-TEM LEVEL 1
TEM 2=ASBESTOS-TEM LEVEL 2

CLAYTON=CLAYTON ENV. CONSULTANTS INC.

AIR-QUALITY SAMPLE INVENTORY
SOUTH BAY ASBESTOS SITE
(continued)

SAMPLE STATION	SAMPLE NUMBER	QC SAMPLES: DUPLICATE OF	QC SAMPLES: BLANK TYPE	FLOW VOLUME	SAMPLE CONTAINER TYPE	LOT/ FILTER NUMBER	ANALYSIS REQUESTED	LAB	CHAIN OF CUSTODY RECORD NO.	AIRBILL NUMBER	TIME SAMPLED (PST): FROM	TIME SAMPLED (PST): TO	DATE COLLECTED	DATE SHIPPED	COMMENTS
288-AQ-02A-018E	2984Y-386			4164 L.	C	618C257	TEM 1	CLAYTON	9-6082	4709700133	1200	1800	09-03-87	09-08-87	Overloaded
288-AQ-03A-018E	2984Y-387		FB	N/A	C	618C257	TEM 1	CLAYTON	9-6082	4709700133	N/A	N/A	09-03-87	09-08-87	Exposed 19 min
288-AQ-03B-018E	2984Y-388			3131 L.	C	618C257	TEM 1	CLAYTON	9-6082	4709700133	1200	1800	09-03-87	09-08-87	Overloaded
288-AQ-04A-018E	2984Y-389			3743 L.	C	618C257	TEM 1	CLAYTON	9-6082	4709700133	1200	1800	09-03-87	09-08-87	Overloaded
288-AQ-05A-018E	2984Y-390			3520 L.	C	618C257	TEM 1	CLAYTON	9-6082	4709700133	1200	1800	09-03-87	09-08-87	Overloaded
288-AQ-01C-019	2984Y-391			1634 cu. m.	F	7176070	G	CLAYTON	9-6083	2255569746	0000	2400	09-08-87	09-14-87	
288-AQ-01D-019	2984Y-392			1587 cu. m.	F	7176071	G	CLAYTON	9-6083	2255569746	0000	2400	09-08-87	09-14-87	
288-AQ-01C-021	2984Y-393			1654 cu. m.	F	7176083	G	CLAYTON	9-6083	2255569746	0000	2400	09-11-87	09-14-87	
288-AQ-01D-021	2984Y-394			1611 cu. m.	F	7176084	G	CLAYTON	9-6083	2255569746	0000	2400	09-11-87	09-14-87	
288-AQ-02C-020	2984Y-395			1568 cu. m.	F	7176085	G	CLAYTON	9-6083	2255569746	0000	2400	09-08-87	09-14-87	
288-AQ-02D-020	2984Y-396			1644 cu. m.	F	7176086	G	CLAYTON	9-6083	2255569746	0000	2400	09-08-87	09-14-87	
288-AQ-03C-020	2984Y-397			1605 cu. m.	F	7176087	G	CLAYTON	9-6083	2255569746	0000	2400	09-08-87	09-14-87	
288-AQ-03D-020	2984Y-398			4 cu. m.	F	7176089	G	CLAYTON	9-6083	2255569746	0000	2400	09-08-87	09-14-87	
288-AQ-04C-020	2984Y-399	2984Y-401		1641 cu. m.	F	7176090	G	CLAYTON	9-6083	2255569746	0000	2400	09-08-87	09-14-87	
288-AQ-04D-020	2984Y-400	2984Y-402		1591 cu. m.	F	7176091	G	CLAYTON	9-6083	2255569746	0000	2400	09-08-87	09-14-87	
288-AQ-04E-020	2984Y-401	2984Y-399		1553 cu. m.	F	7176092	G	CLAYTON	9-6083	2255569746	0000	2400	09-08-87	09-14-87	
288-AQ-04F-020	2984Y-402	2984Y-400		1579 cu. m.	F	7176093	G	CLAYTON	9-6083	2255569746	0000	2400	09-08-87	09-14-87	
288-AQ-05C-020	2984Y-403			1548 cu. m.	F	7176094	G	CLAYTON	9-6083	2255569746	0000	2400	09-08-87	09-14-87	
288-AQ-05D-020	2984Y-404			1660 cu. m.	F	7176095	G	CLAYTON	9-6083	2255569746	0000	2400	09-08-87	09-14-87	
288-AQ-02C-021	2984Y-405			1596 cu. m.	F	7176096	G	CLAYTON	9-6083	2255569746	0000	2400	09-11-87	09-14-87	
288-AQ-02D-021	2984Y-406			1664 cu. m.	F	7176097	G	CLAYTON	9-6084	2255569746	0000	2400	09-11-87	09-14-87	
288-AQ-03C-021	2984Y-407			1649 cu. m.	F	7176098	G	CLAYTON	9-6084	2255569746	0000	2400	09-11-87	09-14-87	
288-AQ-03D-021	2984Y-408			1678 cu. m.	F	7176099	G	CLAYTON	9-6084	2255569746	0000	2400	09-11-87	09-14-87	
288-AQ-04C-021	2984Y-409	2984Y-411		1642 cu. m.	F	7176100	G	CLAYTON	9-6084	2255569746	0000	2400	09-11-87	09-14-87	
288-AQ-04D-021	2984Y-410	2984Y-412		1593 cu. m.	F	7176101	G	CLAYTON	9-6084	2255569746	0000	2400	09-11-87	09-14-87	
288-AQ-04E-021	2984Y-411	2984Y-409		1647 cu. m.	F	7176102	G	CLAYTON	9-6084	2255569746	0000	2400	09-11-87	09-14-87	
288-AQ-04F-021	2984Y-412	2984Y-410		1645 cu. m.	F	7176103	G	CLAYTON	9-6084	2255569746	0000	2400	09-11-87	09-14-87	
288-AQ-05C-021	2984Y-413			1630 cu. m.	F	7176104	G	CLAYTON	9-6084	2255569746	0000	2400	09-11-87	09-14-87	
288-AQ-05D-021	2984Y-414			1783 cu. m.	F	7176105	G	CLAYTON	9-6084	2255569746	0000	2400	09-11-87	09-14-87	
288-AQ-03A-013	2984Y-415		FB	N/A	C	618C257	TEM-1	CLAYTON	9-6085	2255569746	N/A	N/A	08-24-87	09-14-87	Exposed 46 hr. 4 min
288-AQ-03A-010E	2984Y-416		FB	N/A	C	618C257	TEM-1	CLAYTON	9-6085	2255569746	N/A	N/A	08-19-87	09-14-87	Exposed 10 hr. 30 min
288-AQ-02G-013	2984Y-417		TB	N/A	C	618C257	TEM-1	CLAYTON	9-6085	2255569746	N/A	N/A	08-24-87	09-14-87	
288-AQ-03G-010E	2984Y-418		TB	N/A	C	618C257	TEM-1	CLAYTON	9-6085	2255569746	N/A	N/A	08-19-87	09-14-87	
288-AQ-04G-022	2984Y-419		FB	N/A	C	719H277	TEM-1	CLAYTON	9-6085	2255569746	N/A	N/A	09-12-87	09-14-87	Exposed 15 min
288-AQ-05G-022	2984Y-420		TB	N/A	C	719H277	TEM-1	CLAYTON	9-6085	2255569746	N/A	N/A	09-11-87	09-14-87	
288-AQ-01C-022	2984Y-421			1639 cu. m.	F	7176106	G	CLAYTON	9-6086	2255569886	0000	2400	09-14-87	09-21-87	
288-AQ-01D-022	2984Y-422			1568 cu. m.	F	7176107	G	CLAYTON	9-6086	2255569886	0000	2400	09-14-87	09-21-87	
288-AQ-02C-022	2984Y-423			1651 cu. m.	F	7176108	G	CLAYTON	9-6086	2255569886	0000	2400	09-14-87	09-21-87	
288-AQ-02D-022	2984Y-424			1555 cu. m.	F	7176109	G	CLAYTON	9-6086	2255569886	0000	2400	09-14-87	09-21-87	
288-AQ-03C-022	2984Y-425			1641 cu. m.	F	7176110	G	CLAYTON	9-6086	2255569886	0000	2400	09-14-87	09-21-87	
288-AQ-03D-022	2984Y-426			1666 cu. m.	F	7176111	G	CLAYTON	9-6086	2255569886	0000	2400	09-14-87	09-21-87	
288-AQ-04C-022	2984Y-427	2984Y-429		1646 cu. m.	F	7176112	G	CLAYTON	9-6086	2255569886	0000	2400	09-14-87	09-21-87	
288-AQ-04D-022	2984Y-428	2984Y-430		1613 cu. m.	F	7176113	G	CLAYTON	9-6086	2255569886	0000	2400	09-14-87	09-21-87	
288-AQ-04E-022	2984Y-429	2984Y-427		1628 cu. m.	F	7176114	G	CLAYTON	9-6086	2255569886	0000	2400	09-14-87	09-21-87	

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LEGEND:

STATION NUMBER:
288=SITE NUMBER
AQ=AIR QUALITY
01=AIR STATION 1,
02=AIR STATION 2,
03=AIR STATION 3,
04=AIR STATION 4,
05=AIR STATION 5,
A=ASBESTOS SAMPLER A
B=ASBESTOS SAMPLER B
C=HIGH VOLUME SAMPLER C (TOTAL SUSPENDED PARTICULATES)
D=HIGH VOLUME SAMPLER D (PM10)
E=HIGH VOLUME SAMPLER E (TOTAL SUSPENDED PARTICULATES)
F=HIGH VOLUME SAMPLER F (PM10)
G=BLANK
001,002,etc.=SAMPLE EVENT NUMBER (E=EPISODIC EVENT)

*INDICATES BREAK IN SAMPLE NO. SEQUENCE

FB=FIELD BLANK
TB=TRAVEL BLANK

cu. m.=CUBIC METER
L=LITER
-- = NOT CALCULATED

F=FILTER
C=CASSETTE
P=PLASTIC DISH

G=GRAVIMETRIC
TEM 1=ASBESTOS-TEM LEVEL 1
TEM 2=ASBESTOS-TEM LEVEL 2

CLAYTON=CLAYTON ENV. CONSULTANTS INC.

AIR QUALITY SAMPLE INVENTORY
SOUTH BAY ASBESTOS SITE
(continued)

SAMPLE STATION	SAMPLE NUMBER	QC SAMPLES: DUPLICATE OF	QC SAMPLES: FIELD BLANK	FLOW VOLUME	SAMPLE CONTAINER TYPE	LOT/ FILTER NUMBER	ANALYSIS REQUESTED	LAB	CHAIN OF CUSTODY RECORD NO.	AIRBILL NUMBER	TIME SAMPLED (PST) FROM	TIME SAMPLED (PST) TO	DATE COLLECTED	DATE SHIPPED	COMMENTS
288-AQ-04F-022	29847-430	29847-428		1647 cu. m.	F	7176115	G	CLAYTON	9-6086	2255569886	0000	2400	09-14-87	09-21-87	
288-AQ-05C-022	29847-431			--	F	7176116	G	CLAYTON	9-6086	2255569886	0000	2400	09-14-87	09-21-87	Did not operate
288-AQ-05D-022	29847-432			1762 cu. m.	F	7176117	G	CLAYTON	9-6086	2255569886	0000	2400	09-14-87	09-21-87	
288-AQ-01C-023E	29847-433			322 cu. m.	F	7176118	G	CLAYTON	9-6086	2255569886	0400	1000	09-15-87	09-21-87	
288-AQ-01D-023E	29847-434			314 cu. m.	F	7176119	G	CLAYTON	9-6086	2255569886	0400	1000	09-15-87	09-21-87	
288-AQ-02C-023E	29847-435			302 cu. m.	F	7176120	G	CLAYTON	9-6086	2255569886	0400	1000	09-15-87	09-21-87	
288-AQ-02D-023E	29847-436			316 cu. m.	F	7176121	G	CLAYTON	9-6087	2255569886	0400	1000	09-15-87	09-21-87	
288-AQ-03C-023E	29847-437			324 cu. m.	F	7176122	G	CLAYTON	9-6087	2255569886	0400	1000	09-15-87	09-21-87	
288-AQ-03D-023E	29847-438			333 cu. m.	F	7176123	G	CLAYTON	9-6087	2255569886	0400	1000	09-15-87	09-21-87	
288-AQ-04C-023E	29847-439	29847-441		322 cu. m.	F	7176124	G	CLAYTON	9-6087	2255569886	0400	1000	09-15-87	09-21-87	
288-AQ-04D-023E	29847-440	29847-442		311 cu. m.	F	7176125	G	CLAYTON	9-6087	2255569886	0400	1000	09-15-87	09-21-87	
288-AQ-04E-023E	29847-441	29847-439		325 cu. m.	F	7176126	G	CLAYTON	9-6087	2255569886	0400	1000	09-15-87	09-21-87	
288-AQ-04F-023E	29847-442	29847-440		316 cu. m.	F	7176127	G	CLAYTON	9-6087	2255569886	0400	1000	09-15-87	09-21-87	
288-AQ-05C-023E	29847-443			347 cu. m.	F	7176128	G	CLAYTON	9-6087	2255569886	0400	1000	09-15-87	09-21-87	
288-AQ-05D-023E	29847-444			385 cu. m.	F	7176129	G	CLAYTON	9-6087	2255569886	0400	1000	09-15-87	09-21-87	
288-AQ-01C-024E	29847-445			392 cu. m.	F	7176130	G	CLAYTON	9-6087	2255569886	0200	0800	09-16-87	09-21-87	
288-AQ-01D-024E	29847-446			370 cu. m.	F	7176131	G	CLAYTON	9-6087	2255569886	0200	0800	09-16-87	09-21-87	
288-AQ-02C-024E	29847-447			396 cu. m.	F	7176132	G	CLAYTON	9-6087	2255569886	0200	0800	09-16-87	09-21-87	
288-AQ-02D-024E	29847-448			410 cu. m.	F	7176133	G	CLAYTON	9-6087	2255569886	0200	0800	09-16-87	09-21-87	
288-AQ-03C-024E	29847-449			412 cu. m.	F	7176134	G	CLAYTON	9-6087	2255569886	0200	0800	09-16-87	09-21-87	
288-AQ-03D-024E	29847-450			417 cu. m.	F	7176135	G	CLAYTON	9-6087	2255569886	0200	0800	09-16-87	09-21-87	
288-AQ-04C-024E	29847-451	29847-453		427 cu. m.	F	7176136	G	CLAYTON	9-6088	2255569886	0200	0800	09-16-87	09-21-87	
288-AQ-04D-024E	29847-452	29847-454		408 cu. m.	F	7176137	G	CLAYTON	9-6088	2255569886	0200	0800	09-16-87	09-21-87	
288-AQ-04E-024E	29847-453	29847-451		423 cu. m.	F	7176138	G	CLAYTON	9-6088	2255569886	0200	0800	09-16-87	09-21-87	
288-AQ-04F-024E	29847-454	29847-452		421 cu. m.	F	7176139	G	CLAYTON	9-6088	2255569886	0200	0800	09-16-87	09-21-87	
288-AQ-05C-024E	29847-455			449 cu. m.	F	7176140	G	CLAYTON	9-6088	2255569886	0200	0800	09-16-87	09-21-87	
288-AQ-05D-024E	29847-456			495 cu. m.	F	7176141	G	CLAYTON	9-6088	2255569886	0200	0800	09-16-87	09-21-87	
288-AQ-01C-025	29847-457			415 cu. m.	F	7176142	G	CLAYTON	9-6088	2255569886	0000	2400	09-17-87	09-21-87	
288-AQ-01D-025	29847-458			1525 cu. m.	F	7176143	G	CLAYTON	9-6088	2255569886	0000	2400	09-17-87	09-21-87	
288-AQ-02C-025	29847-459			1592 cu. m.	F	7176144	G	CLAYTON	9-6088	2255569886	0000	2400	09-17-87	09-21-87	
288-AQ-02D-025	29847-460			1629 cu. m.	F	7176145	G	CLAYTON	9-6088	2255569886	0000	2400	09-17-87	09-21-87	
288-AQ-03C-025	29847-461			1629 cu. m.	F	7176146	G	CLAYTON	9-6088	2255569886	0000	2400	09-17-87	09-21-87	
288-AQ-03D-025	29847-462			1646 cu. m.	F	7176147	G	CLAYTON	9-6088	2255569886	0000	2400	09-17-87	09-21-87	
288-AQ-04C-025	29847-463	29847-465		1653 cu. m.	F	7176148	G	CLAYTON	9-6088	2255569886	0000	2400	09-17-87	09-21-87	
288-AQ-04D-025	29847-464	29847-466		1581 cu. m.	F	7176149	G	CLAYTON	9-6088	2255569886	0000	2400	09-17-87	09-21-87	
288-AQ-04E-025	29847-465	29847-463		1616 cu. m.	F	7176150	G	CLAYTON	9-6088	2255569886	0000	2400	09-17-87	09-21-87	
288-AQ-04F-025	29847-466	29847-464		1665 cu. m.	F	7176151	G	CLAYTON	9-6089	2255569886	0000	2400	09-17-87	09-21-87	
288-AQ-05C-025	29847-467			1641 cu. m.	F	7176152	G	CLAYTON	9-6089	2255569886	0000	2400	09-17-87	09-21-87	
288-AQ-05D-025	29847-468			1818 cu. m.	F	7176153	G	CLAYTON	9-6089	2255569886	0000	2400	09-17-87	09-21-87	
288-AQ-01A-023E	29847-469			2621 L.	C	719H277	TEM 1	CLAYTON	9-6089	2255569886	0400	0900	09-15-87	09-21-87	Overloaded
288-AQ-02A-023E	29847-470			2446 L.	C	719H277	TEM 1	CLAYTON	9-6089	2255569886	0400	0900	09-15-87	09-21-87	
288-AQ-03B-023E	29847-471			2449 L.	C	719H277	TEM 1	CLAYTON	9-6089	2255569886	0400	0900	09-15-87	09-21-87	Overloaded
288-AQ-04A-023E	29847-472			2589 L.	C	719H277	TEM 1	CLAYTON	9-6089	2255569886	0400	0900	09-15-87	09-21-87	Overloaded
288-AQ-05B-023E	29847-473			2860 L.	C	719H277	TEM 1	CLAYTON	9-6089	2255569886	0400	0900	09-15-87	09-21-87	Overloaded

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LEGEND:

STATION NUMBER:
- 288=SITE NUMBER
- AQ=AIR QUALITY
- 01=AIR STATION 1,
- 02=AIR STATION 2,
- 03=AIR STATION 3,
- 04=AIR STATION 4,
- 05=AIR STATION 5,
- A=ASBESTOS SAMPLER A
- B=ASBESTOS SAMPLER B
- C=HIGH VOLUME SAMPLER C (TOTAL SUSPENDED PARTICULATES)
- D=HIGH VOLUME SAMPLER D (PM10)
- E=HIGH VOLUME SAMPLER E (TOTAL SUSPENDED PARTICULATES)
- F=HIGH VOLUME SAMPLER F (PM10)
- G=BLANK
- 001,002,etc.=SAMPLE EVENT NUMBER (E=EPISODIC EVENT)

*INDICATES BREAK IN SAMPLE NO. SEQUENCE

FB=FIELD BLANK
TB=TRAVEL BLANK

cu. m.=CUBIC METER
L=LITER
-- = NOT CALCULATED

F=FILTER
C=CASSETTE
P=PLASTIC DISH

G=GRAVIMETRIC
TEM 1=ASBESTOS-TEM LEVEL 1
TEM 2=ASBESTOS-TEM LEVEL 2

CLAYTON=CLAYTON ENV. CONSULTANTS INC.

AIR QUALITY SAMPLE INVENTORY
SOUTH BAY ASBESTOS SITE
(continued)

SAMPLE STATION	SAMPLE NUMBER	QC SAMPLES: FIELD DUPLICTES	QC SAMPLES: BLANK TYPE	FLOW VOLUME	SAMPLE CONTAINER TYPE	LOT/ FILTER NUMBER	ANALYSIS REQUESTED	LAB	CHAIN OF CUSTODY RECORD NO.	AIRBILL NUMBER	TIME SAMPLED (PST) FROM	TIME SAMPLED (PST) TO	DATE COLLECTED	DATE SHIPPED	COMMENTS
288-AQ-05G-023E	2984Y-474		FB	N/A	C	719H277	TEM-1	CLAYTON	9-6089	2255569886	N/A	N/A	09-15-87	09-21-87	Exposed 1 sec
288-AQ-01G-024E	2984Y-475		FB	N/A	C	719H277	TEM-1	CLAYTON	9-6089	2255569886	N/A	N/A	09-16-87	09-21-87	Exposed 1 sec
288-AQ-01A-024E	2984Y-476			3121 L.	C	719H277	TEM-1	CLAYTON	9-6089	2255569886	0200	0800	09-16-87	09-21-87	Overloaded
288-AQ-02A-024E	2984Y-477			3198 L.	C	719H277	TEM-1	CLAYTON	9-6089	2255569886	0200	0800	09-16-87	09-21-87	Overloaded
288-AQ-03B-024E	2984Y-478			3151 L.	C	719H277	TEM-1	CLAYTON	9-6089	2255569886	0200	0800	09-16-87	09-21-87	Overloaded
288-AQ-04A-024E	2984Y-479			3535 L.	C	719H277	TEM-1	CLAYTON	9-6089	2255569886	0200	0800	09-16-87	09-21-87	Overloaded
288-AQ-05B-024E	2984Y-480			3623 L.	C	719H277	TEM-1	CLAYTON	9-6090	2255569886	0200	0800	09-16-87	09-21-87	Overloaded
288-AQ-05G-024E	2984Y-481		TB	N/A	C	719H277	TEM-1	CLAYTON	9-6090	2255569886	N/A	N/A	09-16-87	09-21-87	
288-AQ-01C-026	2984Y-482			1663 cu. m.	F	R7176154	G	CLAYTON	9-6091	5183003125	0000	2400	09-20-87	09-28-87	
288-AQ-01D-026	2984Y-483			1534 cu. m.	F	R7176155	G	CLAYTON	9-6091	5183003125	0000	2400	09-20-87	09-28-87	
288-AQ-02D-026	2984Y-484			1628 cu. m.	F	R7176156	G	CLAYTON	9-6091	5183003125	0000	2400	09-20-87	09-28-87	
288-AQ-02C-026	2984Y-485			1562 cu. m.	F	R7176157	G	CLAYTON	9-6091	5183003125	0000	2400	09-20-87	09-28-87	
288-AQ-03C-026	2984Y-486			1616 cu. m.	F	R7176158	G	CLAYTON	9-6091	5183003125	0000	2400	09-20-87	09-28-87	
288-AQ-03D-026	2984Y-487			1654 cu. m.	F	R7176159	G	CLAYTON	9-6091	5183003125	0000	2400	09-20-87	09-28-87	
288-AQ-04C-026	2984Y-488	2984Y-490		1611 cu. m.	F	R7176160	G	CLAYTON	9-6091	5183003125	0000	2400	09-20-87	09-28-87	
288-AQ-04D-026	2984Y-489	2984Y-491		1565 cu. m.	F	R7176161	G	CLAYTON	9-6091	5183003125	0000	2400	09-20-87	09-28-87	
288-AQ-04E-026	2984Y-490	2984Y-488		1625 cu. m.	F	R7176162	G	CLAYTON	9-6091	5183003125	0000	2400	09-20-87	09-28-87	
288-AQ-04F-026	2984Y-491	2984Y-489		1644 cu. m.	F	R7176163	G	CLAYTON	9-6091	5183003125	0000	2400	09-20-87	09-28-87	
288-AQ-05C-026	2984Y-492			1624 cu. m.	F	R7176164	G	CLAYTON	9-6091	5183003125	0000	2400	09-20-87	09-28-87	
288-AQ-05D-026	2984Y-493			1829 cu. m.	F	R7176165	G	CLAYTON	9-6091	5183003125	0000	2400	09-20-87	09-28-87	
288-AQ-01C-027E	2984Y-494			421 cu. m.	F	R7176166	G	CLAYTON	9-6091	5183003125	1200	1800	09-22-87	09-28-87	
288-AQ-01D-027E	2984Y-495			413 cu. m.	F	R7176167	G	CLAYTON	9-6091	5183003125	1200	1800	09-22-87	09-28-87	
288-AQ-02C-027E	2984Y-496			391 cu. m.	F	R7176168	G	CLAYTON	9-6091	5183003125	1200	1800	09-22-87	09-28-87	
288-AQ-02D-027E	2984Y-497			391 cu. m.	F	R7176169	G	CLAYTON	9-6092	5183003125	1200	1800	09-22-87	09-28-87	
288-AQ-03C-027E	2984Y-498			445 cu. m.	F	R7176170	G	CLAYTON	9-6092	5183003125	1200	1800	09-22-87	09-28-87	
288-AQ-03D-027E	2984Y-499			413 cu. m.	F	R7176171	G	CLAYTON	9-6092	5183003125	1200	1800	09-22-87	09-28-87	
288-AQ-04C-027E	2984Y-500	2984Y-502		444 cu. m.	F	R7176172	G	CLAYTON	9-6092	5183003125	1200	1800	09-22-87	09-28-87	
288-AQ-04D-027E	2984Y-501	2984Y-503		416 cu. m.	F	R7176173	G	CLAYTON	9-6092	5183003125	1200	1800	09-22-87	09-28-87	
288-AQ-04E-027E	2984Y-502	2984Y-500		414 cu. m.	F	R7176174	G	CLAYTON	9-6092	5183003125	1200	1800	09-22-87	09-28-87	
288-AQ-04F-027E	2984Y-503	2984Y-501		454 cu. m.	F	R7176175	G	CLAYTON	9-6092	5183003125	1200	1800	09-22-87	09-28-87	
288-AQ-05C-027E	2984Y-504			415 cu. m.	F	R7176176	G	CLAYTON	9-6092	5183003125	1200	1800	09-22-87	09-28-87	
288-AQ-05D-027E	2984Y-505			450 cu. m.	F	R7176177	G	CLAYTON	9-6092	5183003125	1200	1800	09-22-87	09-28-87	
288-AQ-01C-028	2984Y-506			1654 cu. m.	F	R7176178	G	CLAYTON	9-6092	5183003125	0000	2400	09-23-87	09-28-87	
288-AQ-01D-028	2984Y-507			1665 cu. m.	F	R7176179	G	CLAYTON	9-6092	5183003125	0000	2400	09-23-87	09-28-87	
288-AQ-02C-028	2984Y-508			1570 cu. m.	F	R7176180	G	CLAYTON	9-6092	5183003125	0000	2400	09-23-87	09-28-87	
288-AQ-02D-028	2984Y-509			1626 cu. m.	F	R7176181	G	CLAYTON	9-6092	5183003125	0000	2400	09-23-87	09-28-87	
288-AQ-03C-028	2984Y-510			1683 cu. m.	F	R7176182	G	CLAYTON	9-6092	5183003125	0000	2400	09-23-87	09-28-87	
288-AQ-03D-028	2984Y-511			1642 cu. m.	F	R7176183	G	CLAYTON	9-6092	5183003125	0000	2400	09-23-87	09-28-87	
288-AQ-04C-028	2984Y-512	2984Y-514		1638 cu. m.	F	R7176184	G	CLAYTON	9-6093	5183003125	0000	2400	09-23-87	09-28-87	
288-AQ-04D-028	2984Y-513	2984Y-515		1573 cu. m.	F	R7176185	G	CLAYTON	9-6093	5183003125	0000	2400	09-23-87	09-28-87	
288-AQ-04E-028	2984Y-514	2984Y-512		1657 cu. m.	F	R7176186	G	CLAYTON	9-6093	5183003125	0000	2400	09-23-87	09-28-87	
288-AQ-04F-028	2984Y-515	2984Y-513		1610 cu. m.	F	R7176187	G	CLAYTON	9-6093	5183003125	0000	2400	09-23-87	09-28-87	
288-AQ-05C-028	2984Y-516			1636 cu. m.	F	R7176188	G	CLAYTON	9-6093	5183003125	0000	2400	09-23-87	09-28-87	
288-AQ-05D-028	2984Y-517			1795 cu. m.	F	R7176189	G	CLAYTON	9-6093	5183003125	0000	2400	09-23-87	09-28-87	

continued on next page

LEGEND:

STATION NUMBER:
288=SITE NUMBER
AQ=AIR QUALITY
01=AIR STATION 1,
02=AIR STATION 2,
03=AIR STATION 3,
04=AIR STATION 4,
05=AIR STATION 5,
A=ASBESTOS SAMPLER A
B=ASBESTOS SAMPLER B
C=HIGH VOLUME SAMPLER C (TOTAL SUSPENDED PARTICULATES)
D=HIGH VOLUME SAMPLER D (PM10)
E=HIGH VOLUME SAMPLER E (TOTAL SUSPENDED PARTICULATES)
F=HIGH VOLUME SAMPLER F (PM10)
G=BLANK
001,002,etc.=SAMPLE EVENT NUMBER (E=EPISODIC EVENT)

*INDICATES BREAK IN SAMPLE NO. SEQUENCE

FB=FIELD BLANK
TB=TRAVEL BLANK

cu. m.=CUBIC METER
L=LITER
-- = NOT CALCULATED

F=FILTER
C=CASSETTE
P=PLASTIC DISH

G=GRAVIMETRIC
TEM 1=ASBESTOS-TEM LEVEL 1
TEM 2=ASBESTOS-TEM LEVEL 2

CLAYTON=CLAYTON ENV. CONSULTANTS INC.

AIR QUALITY SAMPLE INVENTORY
SOUTH BAY ASBESTOS SITE
(continued)

SAMPLE STATION	SAMPLE NUMBER	QC SAMPLES DUPLICATE OF	QC SAMPLES BLANK TYPE	FLOW VOLUME	SAMPLE CONTAINER TYPE	LOT/ FILTER NUMBER	ANALYSIS REQUESTED	LAB	CHAIN OF CUSTODY RECORD NO.	AIRBILL NUMBER	TIME SAMPLED (PST) FROM	TIME SAMPLED (PST) TO	DATE COLLECTED	DATE SHIPPED	COMMENTS
288-AQ-01D-029E	2984Y-518			433 cu. m.	F	R7176190	G	CLAYTON	9-6093	5183003125	1400	2000	09-24-87	09-28-87	
288-AQ-01C-029E	2984Y-519			731 cu. m.	F	R7176191	G	CLAYTON	9-6093	5183003125	1400	2000	09-24-87	09-28-87	Ran appr. 10 hr.
288-AQ-02C-029E	2984Y-520			405 cu. m.	F	R7176192	G	CLAYTON	9-6093	5183003125	1400	2000	09-24-87	09-28-87	
288-AQ-02D-029E	2984Y-521			431 cu. m.	F	R7176193	G	CLAYTON	9-6093	5183003125	1400	2000	09-24-87	09-28-87	
288-AQ-03C-029E	2984Y-522			437 cu. m.	F	R7176194	G	CLAYTON	9-6093	5183003125	1400	2000	09-24-87	09-28-87	
288-AQ-03D-029E	2984Y-523			434 cu. m.	F	R7176195	G	CLAYTON	9-6093	5183003125	1400	2000	09-24-87	09-28-87	
288-AQ-04C-029E	2984Y-524	2984Y-526		428 cu. m.	F	R7176196	G	CLAYTON	9-6093	5183003125	1400	2000	09-24-87	09-28-87	
288-AQ-04D-029E	2984Y-525	2984Y-527		430 cu. m.	F	R7176197	G	CLAYTON	9-6093	5183003125	1400	2000	09-24-87	09-28-87	
288-AQ-04E-029E	2984Y-526	2984Y-524		370 cu. m.	F	R7176198	G	CLAYTON	9-6093	5183003125	1400	2000	09-24-87	09-28-87	
288-AQ-04F-029E	2984Y-527	2984Y-525		446 cu. m.	F	R7176199	G	CLAYTON	9-6094	5183003125	1400	2000	09-24-87	09-28-87	
288-AQ-05C-029E	2984Y-528			414 cu. m.	F	R7176200	G	CLAYTON	9-6094	5183003125	1400	2000	09-24-87	09-28-87	
288-AQ-05D-029E	2984Y-529			437 cu. m.	F	R7176201	G	CLAYTON	9-6094	5183003125	1400	2000	09-24-87	09-28-87	
288-AQ-01C-031	2984Y-530			1648 cu. m.	F	R7176202	G	CLAYTON	9-6094	5183003125	0000	2400	09-26-87	09-28-87	
288-AQ-01D-031	2984Y-531			1673 cu. m.	F	R7176203	G	CLAYTON	9-6094	5183003125	0000	2400	09-26-87	09-28-87	
288-AQ-02C-031	2984Y-532			1560 cu. m.	F	R7176204	G	CLAYTON	9-6094	5183003125	0000	2400	09-26-87	09-28-87	
288-AQ-02D-031	2984Y-533			1591 cu. m.	F	R7176205	G	CLAYTON	9-6094	5183003125	0000	2400	09-26-87	09-28-87	
288-AQ-03C-031	2984Y-534			1682 cu. m.	F	R7176206	G	CLAYTON	9-6094	5183003125	0000	2400	09-26-87	09-28-87	
288-AQ-03D-031	2984Y-535			1650 cu. m.	F	R7176207	G	CLAYTON	9-6094	5183003125	0000	2400	09-26-87	09-28-87	
288-AQ-04C-031	2984Y-536	2984Y-538		1637 cu. m.	F	R7176208	G	CLAYTON	9-6094	5183003125	0000	2400	09-26-87	09-28-87	
288-AQ-04D-031	2984Y-537	2984Y-539		1978 cu. m.	F	R7176209	G	CLAYTON	9-6094	5183003125	0000	2400	09-26-87	09-28-87	Ran appr. 30 hr.
288-AQ-04E-031	2984Y-538	2984Y-536		1649 cu. m.	F	R7176210	G	CLAYTON	9-6094	5183003125	0000	2400	09-26-87	09-28-87	
288-AQ-04F-031	2984Y-539	2984Y-537		1623 cu. m.	F	R7176211	G	CLAYTON	9-6094	5183003125	0000	2400	09-26-87	09-28-87	
288-AQ-05C-031	2984Y-540			1810 cu. m.	F	R7176212	G	CLAYTON	9-6094	5183003125	0000	2400	09-26-87	09-28-87	
288-AQ-05D-031	2984Y-541			1959 cu. m.	F	R7176213	G	CLAYTON	9-6094	5183003125	0000	2400	09-26-87	09-28-87	
288-AQ-01C-030E	2984Y-542			418 cu. m.	F	R7176240	G	CLAYTON	9-6095	5183003125	0600	1200	09-25-87	09-28-87	
288-AQ-01D-030E	2984Y-543			447 cu. m.	F	R7176241	G	CLAYTON	9-6095	5183003125	0600	1200	09-25-87	09-28-87	
288-AQ-02C-030E	2984Y-544			414 cu. m.	F	R7176242	G	CLAYTON	9-6095	5183003125	0600	1200	09-25-87	09-28-87	
288-AQ-02D-030E	2984Y-545			430 cu. m.	F	R7176243	G	CLAYTON	9-6095	5183003125	0600	1200	09-25-87	09-28-87	
288-AQ-03C-030E	2984Y-546			440 cu. m.	F	R7176244	G	CLAYTON	9-6095	5183003125	0600	1200	09-25-87	09-28-87	
288-AQ-03D-030E	2984Y-547			435 cu. m.	F	R7176245	G	CLAYTON	9-6095	5183003125	0600	1200	09-25-87	09-28-87	
288-AQ-04C-030E	2984Y-548	2984Y-550		445 cu. m.	F	R7176246	G	CLAYTON	9-6095	5183003125	0600	1200	09-25-87	09-28-87	
288-AQ-04D-030E	2984Y-549	2984Y-551		405 cu. m.	F	R7176247	G	CLAYTON	9-6095	5183003125	0600	1200	09-25-87	09-28-87	
288-AQ-04E-030E	2984Y-550	2984Y-548		392 cu. m.	F	R7176248	G	CLAYTON	9-6095	5183003125	0600	1200	09-25-87	09-28-87	
288-AQ-04F-030E	2984Y-551	2984Y-549		441 cu. m.	F	R7176249	G	CLAYTON	9-6095	5183003125	0600	1200	09-25-87	09-28-87	
288-AQ-05C-030E	2984Y-552			410 cu. m.	F	R7176250	G	CLAYTON	9-6095	5183003125	0600	1200	09-25-87	09-28-87	
288-AQ-05D-030E	2984Y-553			607 cu. m.	F	R7176238	G	CLAYTON	9-6095	5183003125	0600	1200	09-25-87	09-28-87	
288-AQ-01A-027E	2984Y-554			3414 L.	C	719H277	TEM-1	CLAYTON	9-6096	5183003125	1200	1800	09-22-87	09-28-87	Overloaded
288-AQ-02A-027E	2984Y-555			--	C	719H277	TEM-1	CLAYTON	9-6096	5183003125	1200	1800	09-22-87	09-28-87	Overloaded
288-AQ-03B-027E	2984Y-556			3211 L.	C	719H277	TEM-1	CLAYTON	9-6096	5183003125	1200	1800	09-22-87	09-28-87	Overloaded
288-AQ-04A-027E	2984Y-557	2984Y-558		3510 L.	C	719H277	TEM-1	CLAYTON	9-6096	5183003125	1200	1800	09-22-87	09-28-87	Overloaded
288-AQ-04B-027E	2984Y-558	2984Y-557		3253 L.	C	719H277	TEM-1	CLAYTON	9-6096	5183003125	1200	1800	09-22-87	09-28-87	Overloaded
288-AQ-05B-027E	2984Y-559			3227 L.	C	719H277	TEM-1	CLAYTON	9-6096	5183003125	1200	1800	09-22-87	09-28-87	Overloaded
288-AQ-05G-027E	2984Y-560		TB	N/A	C	719H277	TEM-1	CLAYTON	9-6096	5183003125	N/A	N/A	09-22-87	09-28-87	
288-AQ-01A-029E	2984Y-561			3354 L.	C	719H277	TEM-1	CLAYTON	9-6096	5183003125	1400	2000	09-24-87	09-28-87	

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LEGEND:

STATION NUMBER:
- 288=SITE NUMBER
- AQ=AIR QUALITY
- 01=AIR STATION 1.
- 02=AIR STATION 2.
- 03=AIR STATION 3.
- 04=AIR STATION 4.
- 05=AIR STATION 5.
- A=ASBESTOS SAMPLER A
- B=ASBESTOS SAMPLER B
- C=HIGH VOLUME SAMPLER C (TOTAL SUSPENDED PARTICULATES)
- D=HIGH VOLUME SAMPLER D (PM10)
- E=HIGH VOLUME SAMPLER E (TOTAL SUSPENDED PARTICULATES)
- F=HIGH VOLUME SAMPLER F (PM10)
- G=BLANK
- 001,002,etc.=SAMPLE EVENT NUMBER (E=EPISODIC EVENT)

*INDICATES BREAK IN SAMPLE NO. SEQUENCE

FB=FIELD BLANK
TB=TRAVEL BLANK

cu. m.=CUBIC METER
L=LITER
-- = NOT CALCULATED

F=FILTER
C=CASSETTE
P=PLASTIC DISH

G=GRAVIMETRIC
TEM 1=ASBESTOS-TEM LEVEL 1
TEM 2=ASBESTOS-TEM LEVEL 2

CLAYTON=CLAYTON ENV. CONSULTANTS INC.

AIR QUALITY SAMPLE INVENTORY
SOUTH BAY ASBESTOS SITE
(continued)

SAMPLE STATION	SAMPLE NUMBER	QC SAMPLES: FIELD DUPLICATES	QC SAMPLES: BLANK TYPE	FLOW VOLUME	SAMPLE CONTAINER TYPE	LOT/ FILTER NUMBER	ANALYSIS REQUESTED	LAB	CHAIN OF CUSTODY RECORD NO.	AIRBILL NUMBER	TIME SAMPLED (PST) FROM	TIME SAMPLED (PST) TO	DATE COLLECTED	DATE SHIPPED	COMMENTS
288-AQ-02A-029E	2984Y-562			3311 L.	C	719H277	TEM 1	CLAYTON	9-6096	5183003125	1400	2000	09-24-87	09-28-87	
288-AQ-03B-029E	2984Y-563			3173 L.	C	719H277	TEM 1	CLAYTON	9-6096	5183003125	1400	2000	09-24-87	09-28-87	
288-AQ-04A-029E	2984Y-564	2984Y-565		3559 L.	C	719H277	TEM 1	CLAYTON	9-6096	5183003125	1400	2000	09-24-87	09-28-87	
288-AQ-04B-029E	2984Y-565	2984Y-564		3299 L.	C	719H277	TEM 1	CLAYTON	9-6096	5183003125	1400	2000	09-24-87	09-28-87	
288-AQ-05B-029E	2984Y-566			3312 L.	C	719H277	TEM 1	CLAYTON	9-6096	5183003125	1400	2000	09-24-87	09-28-87	
288-AQ-01A-030E	2984Y-567			3389 L.	C	719H277	TEM 1	CLAYTON	9-6096	5183003125	0600	1200	09-25-87	09-28-87	
288-AQ-02A-030E	2984Y-568			3190 L.	C	719H277	TEM 1	CLAYTON	9-6096	5183003125	0600	1200	09-25-87	09-28-87	Overloaded
288-AQ-03B-030E	2984Y-569			3178 L.	C	719H277	TEM 1	CLAYTON	9-6097	5183003125	0600	1200	09-25-87	09-28-87	
288-AQ-04A-030E	2984Y-570	2984Y-571		3496 L.	C	719H277	TEM 1	CLAYTON	9-6097	5183003125	0600	1200	09-25-87	09-28-87	
288-AQ-04B-030E	2984Y-571	2984Y-570		3241 L.	C	719H277	TEM 1	CLAYTON	9-6097	5183003125	0600	1200	09-25-87	09-28-87	
288-AQ-05B-030E	2984Y-572			4468 L.	C	719H277	TEM 1	CLAYTON	9-6097	5183003125	0600	1200	09-25-87	09-28-87	Overloaded. ran ~ 8 hr.
288-AQ-02G-029E	2984Y-573		FB	N/A	C	719H277	TEM 1	CLAYTON	9-6097	5183003125	N/A	N/A	09-24-87	09-28-87	Exposed 1 sec
288-AQ-04G-030E	2984Y-574		FB	N/A	C	719H277	TEM 1	CLAYTON	9-6097	5183003125	N/A	N/A	09-25-87	09-28-87	Exposed 1 sec
288-AQ-01C-032	2984Y-575			1650 cu. m.	F	R7176214	G	CLAYTON	9-6109	5183002882	0000	2400	09-29-87	10-05-87	
288-AQ-01D-032	2984Y-576			1600 cu. m.	F	R7176215	G	CLAYTON	9-6109	5183002882	0000	2400	09-29-87	10-05-87	
288-AQ-02C-032	2984Y-577			1530 cu. m.	F	R7176216	G	CLAYTON	9-6109	5183002882	0000	2400	09-29-87	10-05-87	
288-AQ-02D-032	2984Y-578			1582 cu. m.	F	R7176217	G	CLAYTON	9-6109	5183002882	0000	2400	09-29-87	10-05-87	
288-AQ-03C-032	2984Y-579			1676 cu. m.	F	R7176218	G	CLAYTON	9-6109	5183002882	0000	2400	09-29-87	10-05-87	
288-AQ-03D-032	2984Y-580			1626 cu. m.	F	R7176219	G	CLAYTON	9-6109	5183002882	0000	2400	09-29-87	10-05-87	
288-AQ-04D-032	2984Y-581	2984Y-583		1588 cu. m.	F	R7176221	G	CLAYTON	9-6109	5183002882	0000	2400	09-29-87	10-05-87	
288-AQ-04E-032	2984Y-582	2984Y-610		1618 cu. m.	F	R7176222	G	CLAYTON	9-6109	5183002882	0000	2400	09-29-87	10-05-87	
288-AQ-04F-032	2984Y-583	2984Y-581		1594 cu. m.	F	R7176223	G	CLAYTON	9-6109	5183002882	0000	2400	09-29-87	10-05-87	
288-AQ-05C-032	2984Y-584			1610 cu. m.	F	R7176224	G	CLAYTON	9-6109	5183002882	0000	2400	09-29-87	10-05-87	
288-AQ-05D-032	2984Y-585			1739 cu. m.	F	R7176225	G	CLAYTON	9-6109	5183002882	0000	2400	09-29-87	10-05-87	
288-AQ-01C-033E	2984Y-586			839 cu. m.	F	R7176226	G	CLAYTON	9-6109	5183002882	1130	2330	09-30-87	10-05-87	
288-AQ-01D-033E	2984Y-587			795 cu. m.	F	R7176227	G	CLAYTON	9-6109	5183002882	1130	2330	09-30-87	10-05-87	
288-AQ-02C-033E	2984Y-588			732 cu. m.	F	R7176228	G	CLAYTON	9-6109	5183002882	1130	2330	09-30-87	10-05-87	
288-AQ-02D-033E	2984Y-589			750 cu. m.	F	R7176229	G	CLAYTON	9-6109	5183002882	1130	2330	09-30-87	10-05-87	
288-AQ-03C-033E	2984Y-590			835 cu. m.	F	R7176230	G	CLAYTON	9-6110	5183002882	1130	2330	09-30-87	10-05-87	
288-AQ-03D-033E	2984Y-591			771 cu. m.	F	R7176231	G	CLAYTON	9-6110	5183002882	1130	2330	09-30-87	10-05-87	
288-AQ-04C-033E	2984Y-592	2984Y-594		857 cu. m.	F	R7176232	G	CLAYTON	9-6110	5183002882	1130	2330	09-30-87	10-05-87	
288-AQ-04D-033E	2984Y-593	2984Y-595		815 cu. m.	F	R7176233	G	CLAYTON	9-6110	5183002882	1130	2330	09-30-87	10-05-87	
288-AQ-04E-033E	2984Y-594	2984Y-592		818 cu. m.	F	R7176234	G	CLAYTON	9-6110	5183002882	1130	2330	09-30-87	10-05-87	
288-AQ-04F-033E	2984Y-595	2984Y-593		875 cu. m.	F	R7176235	G	CLAYTON	9-6110	5183002882	1130	2330	09-30-87	10-05-87	
288-AQ-05C-033E	2984Y-596			812 cu. m.	F	R7176236	G	CLAYTON	9-6110	5183002882	1130	2330	09-30-87	10-05-87	
288-AQ-05D-033E	2984Y-597			863 cu. m.	F	R7176237	G	CLAYTON	9-6110	5183002882	1130	2330	09-30-87	10-05-87	
288-AQ-01C-034	2984Y-598			1632 cu. m.	F	R7268101	G	CLAYTON	9-6110	5183002882	0000	2400	10-02-87	10-05-87	
288-AQ-01D-034	2984Y-599			1555 cu. m.	F	R7268102	G	CLAYTON	9-6110	5183002882	0000	2400	10-02-87	10-05-87	
288-AQ-02C-034	2984Y-600			705 cu. m.	F	R7268103	G	CLAYTON	9-6110	5183002882	0000	2400	10-02-87	10-05-87	Ran only 11 hrs.
288-AQ-02D-034	2984Y-601			761 cu. m.	F	R7268104	G	CLAYTON	9-6110	5183002882	0000	2400	10-02-87	10-05-87	Ran only 11 hrs.
288-AQ-03C-034	2984Y-602			1675 cu. m.	F	R7268105	G	CLAYTON	9-6110	5183002882	0000	2400	10-02-87	10-05-87	
288-AQ-03D-034	2984Y-603			1637 cu. m.	F	R7268106	G	CLAYTON	9-6110	5183002882	0000	2400	10-02-87	10-05-87	
288-AQ-04C-034	2984Y-604	2984Y-606		1687 cu. m.	F	R7268107	G	CLAYTON	9-6110	5183002882	0000	2400	10-02-87	10-05-87	

LEGEND:

STATION NUMBER:
- 28B=SITE NUMBER
- AQ=AIR QUALITY
- 01=AIR STATION 1,
- 02=AIR STATION 2,
- 03=AIR STATION 3,
- 04=AIR STATION 4,
- 05=AIR STATION 5,
- A=ASBESTOS SAMPLER A
- B=ASBESTOS SAMPLER B
- C=HIGH VOLUME SAMPLER C (TOTAL SUSPENDED PARTICULATES)
- D=HIGH VOLUME SAMPLER D (PM10)
- E=HIGH VOLUME SAMPLER E (TOTAL SUSPENDED PARTICULATES)
- F=HIGH VOLUME SAMPLER F (PM10)
- G=BLANK
- 001,002,etc.=SAMPLE EVENT NUMBER (E=EPISODIC EVENT)

* INDICATES BREAK IN SAMPLE NO. SEQUENCE

FB=FIELD BLANK
TB=TRAVEL BLANK

cu. m.=CUBIC METER
L=LITER
-- = NOT CALCULATED

F=FILTER
C=CASSETTE
P=PLASTIC DISH

G=GRAVIMETRIC
TEM 1=ASBESTOS-TEM LEVEL 1
TEM 2=ASBESTOS-TEM LEVEL 2

CLAYTON=CLAYTON ENV. CONSULTANTS INC.

AIR QUALITY SAMPLE INVENTORY
SOUTH BAY ASBESTOS SITE
(continued)

SAMPLE STATION	SAMPLE NUMBER	QC SAMPLES FIELD DUPLICATES	QC SAMPLES BLANK TYPE	FLOW VOLUME	SAMPLE CONTAINER TYPE	LOT/ FILTER NUMBER	ANALYSIS REQUESTED	LAB	CHAIN OF CUSTODY RECORD NO.	AIRBILL NUMBER	TIME SAMPLED (PST) FROM	TIME SAMPLED (PST) TO	DATE COLLECTED	DATE SHIPPED	COMMENTS
288-AQ-04D-034	2984Y-605	2984Y-607		1543 cu. m.	F	R7268108	G	CLAYTON	9-6111	5183002882	0000	2400	10-02-87	10-05-87	
288-AQ-04E-034	2984Y-606	2984Y-604		1602 cu. m.	F	R7268109	8	CLAYTON	9-6111	5183002882	0000	2400	10-02-87	10-05-87	
288-AQ-04F-034	2984Y-607	2984Y-605		1663 cu. m.	F	R7268110	G	CLAYTON	9-6111	5183002882	0000	2400	10-02-87	10-05-87	
288-AQ-05C-034	2984Y-608			1638 cu. m.	F	R7268111	G	CLAYTON	9-6111	5183002882	0000	2400	10-02-87	10-05-87	
288-AQ-05D-034	2984Y-609			1718 cu. m.	F	R7268112	G	CLAYTON	9-6111	5183002882	0000	2400	10-02-87	10-05-87	
288-AQ-04C-032	2984Y-610	2984Y-582		1605 cu. m.	F	R7176220	G	CLAYTON	9-6111	5183002882	0000	2400	09-29-87	10-05-87	
288-AQ-01A-033E	2984Y-611			3412 L.	C	719H277	TEM 1	CLAYTON	9-6112	5183002882	1130	2300	09-30-87	10-05-87	Overloaded
288-AQ-02A-033E	2984Y-612			3128 L.	C	719H277	TEM 1	CLAYTON	9-6112	5183002882	1130	2300	09-30-87	10-05-87	Overloaded
288-AQ-03B-033E	2984Y-613			3174 L.	C	719H277	TEM 1	CLAYTON	9-6112	5183002882	1130	2300	09-30-87	10-05-87	Overloaded
288-AQ-04B-033E	2984Y-614	2984Y-615		3289 L.	C	719H277	TEM 1	CLAYTON	9-6112	5183002882	1130	2300	09-30-87	10-05-87	Overloaded
288-AQ-04A-033E	2984Y-615	2984Y-614		3582 L.	C	719H277	TEM 1	CLAYTON	9-6112	5183002882	1130	2300	09-30-87	10-05-87	Overloaded
288-AQ-05B-033E	2984Y-616			3559 L.	C	719H277	TEM 1	CLAYTON	9-6112	5183002882	1130	2300	09-30-87	10-05-87	Overloaded
288-AQ-04G-033E	2984Y-617		FB	N/A	C	719H277	TEM 1	CLAYTON	9-6112	5183002882	N/A	N/A	09-30-87	10-05-87	Exposed 1 sec
288-AQ-01C-035	2984Y-618			1636 cu. m.	F	R7268113	G	CLAYTON	9-6108	5183003022	0000	2400	10-05-87	10-12-87	
288-AQ-01D-035	2984Y-619			1532 cu. m.	F	R7268114	G	CLAYTON	9-6108	5183003022	0000	2400	10-05-87	10-12-87	
288-AQ-02C-035	2984Y-620			1550 cu. m.	F	R7268115	G	CLAYTON	9-6108	5183003022	0000	2400	10-05-87	10-12-87	
288-AQ-02D-035	2984Y-621			1570 cu. m.	F	R7268116	G	CLAYTON	9-6108	5183003022	0000	2400	10-05-87	10-12-87	
288-AQ-03C-035	2984Y-622			1641 cu. m.	F	R7268117	G	CLAYTON	9-6108	5183003022	0000	2400	10-05-87	10-12-87	
288-AQ-03D-035	2984Y-626*			1613 cu. m.	F	R7268118	G	CLAYTON	9-6108	5183003022	0000	2400	10-05-87	10-12-87	
288-AQ-04C-035	2984Y-627	2984Y-629		1643 cu. m.	F	R7268119	G	CLAYTON	9-6108	5183003022	0000	2400	10-05-87	10-12-87	
288-AQ-04D-035	2984Y-628	2984Y-630		1549 cu. m.	F	R7268120	G	CLAYTON	9-6108	5183003022	0000	2400	10-05-87	10-12-87	
288-AQ-04E-035	2984Y-629	2984Y-627		1603 cu. m.	F	R7268121	G	CLAYTON	9-6108	5183003022	0000	2400	10-05-87	10-12-87	
288-AQ-04F-035	2984Y-630	2984Y-628		1645 cu. m.	F	R7268122	G	CLAYTON	9-6108	5183003022	0000	2400	10-05-87	10-12-87	
288-AQ-05C-035	2984Y-631			1651 cu. m.	F	R7268123	G	CLAYTON	9-6108	5183003022	0000	2400	10-05-87	10-12-87	
288-AQ-05D-035	2984Y-632			1699 cu. m.	F	R7268124	G	CLAYTON	9-6108	5183003022	0000	2400	10-05-87	10-12-87	
288-AQ-02C-036E	2984Y-633			433 cu. m.	F	R7268127	G	CLAYTON	9-6108	5183003022	1200	1800	10-07-87	10-12-87	
288-AQ-02D-036E	2984Y-634			432 cu. m.	F	R7268128	G	CLAYTON	9-6108	5183003022	1200	1800	10-07-87	10-12-87	
288-AQ-01C-036E	2984Y-635			420 cu. m.	F	R7268125	G	CLAYTON	9-6108	5183003022	1200	1800	10-07-87	10-12-87	
288-AQ-01D-036E	2984Y-636			413 cu. m.	F	R7268126	G	CLAYTON	9-6113	5183003022	1200	1800	10-07-87	10-12-87	
288-AQ-03C-036E	2984Y-637			440 cu. m.	F	R7268129	G	CLAYTON	9-6113	5183003022	1200	1800	10-07-87	10-12-87	
288-AQ-03D-036E	2984Y-638			442 cu. m.	F	R7268130	G	CLAYTON	9-6113	5183003022	1200	1800	10-07-87	10-12-87	
288-AQ-04C-036E	2984Y-639	2984Y-641		396 cu. m.	F	R7268131	G	CLAYTON	9-6113	5183003022	1200	1800	10-07-87	10-12-87	
288-AQ-04D-036E	2984Y-640	2984Y-642		389 cu. m.	F	R7268132	G	CLAYTON	9-6113	5183003022	1200	1800	10-07-87	10-12-87	
288-AQ-04E-036E	2984Y-641	2984Y-639		408 cu. m.	F	R7268133	8	CLAYTON	9-6113	5183003022	1200	1800	10-07-87	10-12-87	
288-AQ-04F-036E	2984Y-642	2984Y-640		426 cu. m.	F	R7268134	G	CLAYTON	9-6113	5183003022	1200	1800	10-07-87	10-12-87	
288-AQ-05C-036E	2984Y-643			417 cu. m.	F	R7268135	8	CLAYTON	9-6113	5183003022	1200	1800	10-07-87	10-12-87	
288-AQ-05D-036E	2984Y-644			457 cu. m.	F	R7268136	G	CLAYTON	9-6113	5183003022	1200	1800	10-07-87	10-12-87	
288-AQ-01C-037	2984Y-645			1659 cu. m.	F	R7268137	G	CLAYTON	9-6113	5183003022	0000	2400	10-08-87	10-12-87	
288-AQ-01D-037	2984Y-646			1584 cu. m.	F	R7268138	G	CLAYTON	9-6113	5183003022	0000	2400	10-08-87	10-12-87	
288-AQ-02C-037	2984Y-647			1620 cu. m.	F	R7268139	G	CLAYTON	9-6113	5183003022	0000	2400	10-08-87	10-12-87	

continued on next page

LEGEND:

STATION NUMBER:
288=SITE NUMBER
AQ=AIR QUALITY
01=AIR STATION 1,
02=AIR STATION 2,
03=AIR STATION 3,
04=AIR STATION 4,
05=AIR STATION 5,
A=ASBESTOS SAMPLER A
B=ASBESTOS SAMPLER B
C=HIGH VOLUME SAMPLER C (TOTAL SUSPENDED PARTICULATES)
D=HIGH VOLUME SAMPLER D (PM10)
E=HIGH VOLUME SAMPLER E (TOTAL SUSPENDED PARTICULATES)
F=HIGH VOLUME SAMPLER F (PM10)
G=BLANK
001,002,etc.=SAMPLE EVENT NUMBER (E=EPISODIC EVENT)

* INDICATES BREAK IN SAMPLE NO. SEQUENCE

FB=FIELD BLANK
TB=TRAVEL BLANK

cu. m.=CUBIC METER
L=LITER
-- = NOT CALCULATED

F=FILTER
C=CASSETTE
P=PLASTIC DISH

G=GRAVIMETRIC
TEM 1=ASBESTOS-TEM LEVEL 1
TEM 2=ASBESTOS-TEM LEVEL 2

CLAYTON=CLAYTON ENV. CONSULTANTS INC.

AIR QUALITY SAMPLE INVENTORY
SOUTH BAY ASBESTOS SITE
(continued)

SAMPLE STATION	SAMPLE NUMBER	QC SAMPLES FIELD DUPLICATE	QC SAMPLES BLANK TYPE	FLOW VOLUME	SAMPLE CONTAINER TYPE	LOT/ FILTER NUMBER	ANALYSIS REQUESTED	LAB	CHAIN OF CUSTODY RECORD NO.	AIRBILL NUMBER	TIME SAMPLED (PST) FROM	TIME SAMPLED (PST) TO	DATE COLLECTED	DATE SHIPPED	COMMENTS
288-AQ-02D-037	2984Y-648			1639 cu. m.	F	R7268140	G	CLAYTON	9-6113	5183003022	0000	2400	10-08-87	10-12-87	
288-AQ-03C-037	2984Y-649			1641 cu. m.	F	R7268141	G	CLAYTON	9-6113	5183003022	0000	2400	10-08-87	10-12-87	
288-AQ-03D-037	2984Y-650			1753 cu. m.	F	R7268142	G	CLAYTON	9-6113	5183003022	0000	2400	10-08-87	10-12-87	
288-AQ-04C-037	2984Y-651	2984Y-653		1689 cu. m.	F	R7268143	G	CLAYTON	9-6114	5183003022	0000	2400	10-08-87	10-12-87	
288-AQ-04D-037	2984Y-652	2984Y-654		448 cu. m.	F	R7268144	G	CLAYTON	9-6114	5183003022	0000	2400	10-08-87	10-12-87	Ran only 6 hrs.
288-AQ-04E-037	2984Y-653	2984Y-651		1654 cu. m.	F	R7268145	G	CLAYTON	9-6114	5183003022	0000	2400	10-08-87	10-12-87	
288-AQ-04F-037	2984Y-654	2984Y-652		1713 cu. m.	F	R7268146	G	CLAYTON	9-6114	5183003022	0000	2400	10-08-87	10-12-87	
288-AQ-05C-037	2984Y-655			1675 cu. m.	F	R7268147	G	CLAYTON	9-6114	5183003022	0000	2400	10-08-87	10-12-87	
288-AQ-05D-037	2984Y-656			1854 cu. m.	F	R7268148	G	CLAYTON	9-6114	5183003022	0000	2400	10-08-87	10-12-87	
288-AQ-01C-038E	2984Y-657			412 cu. m.	F	R7268149	G	CLAYTON	9-6114	5183003022	0500	1100	10-09-87	10-12-87	
288-AQ-01D-038E	2984Y-658			401 cu. m.	F	R7268150	G	CLAYTON	9-6114	5183003022	0500	1100	10-09-87	10-12-87	
288-AQ-02C-038E	2984Y-659			430 cu. m.	F	R7268151	G	CLAYTON	9-6114	5183003022	0500	1100	10-09-87	10-12-87	
288-AQ-02D-038E	2984Y-660			435 cu. m.	F	R7268152	G	CLAYTON	9-6114	5183003022	0500	1100	10-09-87	10-12-87	
288-AQ-03C-038E	2984Y-661			443 cu. m.	F	R7268153	G	CLAYTON	9-6114	5183003022	0500	1100	10-09-87	10-12-87	
288-AQ-03D-038E	2984Y-662			427 cu. m.	F	R7268154	G	CLAYTON	9-6114	5183003022	0500	1100	10-09-87	10-12-87	
288-AQ-04C-038E	2984Y-663	2984Y-665		450 cu. m.	F	R7268155	G	CLAYTON	9-6114	5183003022	0500	1100	10-09-87	10-12-87	
288-AQ-04D-038E	2984Y-664	2984Y-666		426 cu. m.	F	R7268156	G	CLAYTON	9-6114	5183003022	0500	1100	10-09-87	10-12-87	
288-AQ-04E-038E	2984Y-665	2984Y-663		430 cu. m.	F	R7268157	G	CLAYTON	9-6114	5183003022	0500	1100	10-09-87	10-12-87	
288-AQ-04F-038E	2984Y-666	2984Y-664		462 cu. m.	F	R7268158	G	CLAYTON	9-6115	5183003022	0500	1100	10-09-87	10-12-87	
288-AQ-05C-038E	2984Y-667			421 cu. m.	F	R7268159	G	CLAYTON	9-6115	5183003022	0500	1100	10-09-87	10-12-87	
288-AQ-05D-038E	2984Y-668			480 cu. m.	F	R7268160	G	CLAYTON	9-6115	5183003022	0500	1100	10-09-87	10-12-87	
288-AQ-01A-036E	2984Y-669			1765 L.	C	719H277	TEM 1	CLAYTON	9-6116	5183003022	1200	1800	10-07-87	10-12-87	
288-AQ-02A-036E	2984Y-670			1817 L.	C	719H277	TEM 1	CLAYTON	9-6116	5183003022	1200	1800	10-07-87	10-12-87	
288-AQ-03B-036E	2984Y-671			1666 L.	C	719H277	TEM 1	CLAYTON	9-6116	5183003022	1200	1800	10-07-87	10-12-87	
288-AQ-04A-036E	2984Y-672	2984Y-673		1745 L.	C	719H277	TEM 1	CLAYTON	9-6116	5183003022	1200	1800	10-07-87	10-12-87	
288-AQ-04B-036E	2984Y-673	2984Y-672		1602 L.	C	719H277	TEM 1	CLAYTON	9-6116	5183003022	1200	1800	10-07-87	10-12-87	
288-AQ-05A-036E	2984Y-674		FB	N/A	C	719H277	TEM 1	CLAYTON	9-6116	5183003022	N/A	N/A	10-07-87	10-12-87	Exposed 1 sec
288-AQ-05B-036E	2984Y-675			1753 L.	C	719H277	TEM 1	CLAYTON	9-6116	5183003022	1200	1800	10-07-87	10-12-87	
288-AQ-01A-038E	2984Y-676			1701 L.	C	719H277	TEM 1	CLAYTON	9-6116	5183003022	0500	1100	10-09-87	10-12-87	
288-AQ-02A-038E	2984Y-677			1805 L.	C	719H277	TEM 1	CLAYTON	9-6116	5183003022	0500	1100	10-09-87	10-12-87	
288-AQ-02B-038E	2984Y-678		FB	N/A	C	719H277	TEM 1	CLAYTON	9-6116	5183003022	N/A	N/A	10-09-87	10-12-87	Exposed 1 sec
288-AQ-03B-038E	2984Y-679			1646 L.	C	719H277	TEM 1	CLAYTON	9-6116	5183003022	0500	1100	10-09-87	10-12-87	
288-AQ-04A-038E	2984Y-680	2984Y-681		1836 L.	C	719H277	TEM 1	CLAYTON	9-6116	5183003022	0500	1100	10-09-87	10-12-87	
288-AQ-04B-038E	2984Y-681	2984Y-680		1686 L.	C	719H277	TEM 1	CLAYTON	9-6116	5183003022	0500	1100	10-09-87	10-12-87	
288-AQ-05B-038E	2984Y-682			1785 L.	C	719H277	TEM 1	CLAYTON	9-6116	5183003022	0500	1100	10-09-87	10-12-87	
288-AQ-01C-039	2984Y-683			1641 cu. m.	F	7268161	G	CLAYTON	9-6117	5183002322	0000	2400	10-11-87	10-19-87	
288-AQ-01D-039	2984Y-684			1595 cu. m.	F	7268162	G	CLAYTON	9-6117	5183002322	0000	2400	10-11-87	10-19-87	
288-AQ-02C-039	2984Y-685			1546 cu. m.	F	7268163	G	CLAYTON	9-6117	5183002322	0000	2400	10-11-87	10-19-87	
288-AQ-02D-039	2984Y-686			1625 cu. m.	F	7268164	G	CLAYTON	9-6117	5183002322	0000	2400	10-11-87	10-19-87	
288-AQ-03C-039	2984Y-687			1696 cu. m.	F	7268165	G	CLAYTON	9-6117	5183002322	0000	2400	10-11-87	10-19-87	
288-AQ-03D-039	2984Y-688			1661 cu. m.	F	7268166	G	CLAYTON	9-6117	5183002322	0000	2400	10-11-87	10-19-87	
288-AQ-04C-039	2984Y-689	2984Y-691		1674 cu. m.	F	7268167	G	CLAYTON	9-6117	5183002322	0000	2400	10-11-87	10-19-87	
288-AQ-04D-039	2984Y-690	2984Y-692		1627 cu. m.	F	7268168	G	CLAYTON	9-6117	5183002322	0000	2400	10-11-87	10-19-87	

continued on next page

LEGEND:

STATION NUMBER:
288=SITE NUMBER
AQ=AIR QUALITY
01=AIR STATION 1,
02=AIR STATION 2,
03=AIR STATION 3,
04=AIR STATION 4,
05=AIR STATION 5,
A=ASBESTOS SAMPLER A
B=ASBESTOS SAMPLER B
C=HIGH VOLUME SAMPLER C (TOTAL SUSPENDED PARTICULATES)
D=HIGH VOLUME SAMPLER D (PM10)
E=HIGH VOLUME SAMPLER E (TOTAL SUSPENDED PARTICULATES)
F=HIGH VOLUME SAMPLER F (PM10)
G=BLANK
001,002,etc.=SAMPLE EVENT NUMBER (E=EPISODIC EVENT)

* INDICATES BREAK IN SAMPLE NO. SEQUENCE

FB=FIELD BLANK
TB=TRAVEL BLANK

cu. m.=CUBIC METER
L=LITER
-- = NOT CALCULATED

F=FILTER
C=CASSETTE
P=PLASTIC DISH

G=GRAVIMETRIC
TEM 1=ASBESTOS-TEM LEVEL 1
TEM 2=ASBESTOS-TEM LEVEL 2

CLAYTON=CLAYTON ENV. CONSULTANTS INC.

AIR QUALITY SAMPLE INVENTORY
SOUTH BAY ASBESTOS SITE
(contiued)

SAMPLE STATION	SAMPLE NUMBER	QC SAMPLES FIELD DUPLICATE	QC SAMPLES BLANK TYPE	FLOW VOLUME	SAMPLE CONTAINER TYPE	LOT/ FILTER NUMBER	ANALYSIS REQUESTED	LAB	CHAIN OF CUSTODY RECORD NO.	AIRBILL NUMBER	TIME SAMPLED (PST) FROM	TIME SAMPLED (PST) TO	DATE COLLECTED	DATE SHIPPED	COMMENTS
288-AQ-04E-039	2984Y-691	2984Y-689		1612 cu. m.	F	7268169	G	CLAYTON	9-6117	5183002322	0000	2400	10-11-87	10-19-87	
288-AQ-04F-039	2984Y-692	2984Y-690		1692 cu. m.	F	7268170	G	CLAYTON	9-6117	5183002322	0000	2400	10-11-87	10-19-87	
288-AQ-05C-039	2984Y-693			1616 cu. m.	F	7268171	G	CLAYTON	9-6117	5183002322	0000	2400	10-11-87	10-19-87	
288-AQ-01C-040	2984Y-694			1649 cu. m.	F	7268173	G	CLAYTON	9-6117	5183002322	0000	2400	10-14-87	10-19-87	
288-AQ-01D-040	2984Y-695			1594 cu. m.	F	7268174	G	CLAYTON	9-6117	5183002322	0000	2400	10-14-87	10-19-87	
288-AQ-02C-040	2984Y-696			1618 cu. m.	F	7268175	G	CLAYTON	9-6117	5183002322	0000	2400	10-14-87	10-19-87	
288-AQ-02D-040	2984Y-697			1653 cu. m.	F	7268176	G	CLAYTON	9-6117	5183002322	0000	2400	10-14-87	10-19-87	
288-AQ-03C-040	2984Y-698			1702 cu. m.	F	7268177	G	CLAYTON	9-6118	5183002322	0000	2400	10-14-87	10-19-87	
288-AQ-03D-040	2984Y-699			1671 cu. m.	F	7268178	G	CLAYTON	9-6118	5183002322	0000	2400	10-14-87	10-19-87	
288-AQ-04C-040	2984Y-735#	2984Y-737		1677 cu. m.	F	7268179	G	CLAYTON	9-6118	5183002322	0000	2400	10-14-87	10-19-87	
288-AQ-04D-040	2984Y-736	2984Y-738		1647 cu. m.	F	7268180	G	CLAYTON	9-6118	5183002322	0000	2400	10-14-87	10-19-87	
288-AQ-04E-040	2984Y-737	2984Y-735		1617 cu. m.	F	7268181	G	CLAYTON	9-6118	5183002322	0000	2400	10-14-87	10-19-87	
288-AQ-04F-040	2984Y-738	2984Y-736		1695 cu. m.	F	7268182	G	CLAYTON	9-6118	5183002322	0000	2400	10-14-87	10-19-87	
288-AQ-05C-040	2984Y-739			1665 cu. m.	F	7268183	G	CLAYTON	9-6118	5183002322	0000	2400	10-14-87	10-19-87	
288-AQ-05D-040	2984Y-740			1782 cu. m.	F	7268184	G	CLAYTON	9-6118	5183002322	0000	2400	10-14-87	10-19-87	
288-AQ-01C-041E	2984Y-741			421 cu. m.	F	7268185	G	CLAYTON	9-6118	5183002322	0500	1100	10-15-87	10-19-87	
288-AQ-01D-041E	2984Y-742			417 cu. m.	F	7268186	G	CLAYTON	9-6118	5183002322	0500	1100	10-15-87	10-19-87	
288-AQ-02C-041E	2984Y-743			441 cu. m.	F	7268187	G	CLAYTON	9-6118	5183002322	0500	1100	10-15-87	10-19-87	
288-AQ-02D-041E	2984Y-744			430 cu. m.	F	7268188	G	CLAYTON	9-6118	5183002322	0500	1100	10-15-87	10-19-87	
288-AQ-03C-041E	2984Y-745			425 cu. m.	F	7268189	G	CLAYTON	9-6118	5183002322	0500	1100	10-15-87	10-19-87	
288-AQ-03D-041E	2984Y-746			435 cu. m.	F	7268190	G	CLAYTON	9-6118	5183002322	0500	1100	10-15-87	10-19-87	
288-AQ-04C-041E	2984Y-747	2984Y-749		454 cu. m.	F	7268191	G	CLAYTON	9-6119	5183002322	0500	1100	10-15-87	10-19-87	
288-AQ-04D-041E	2984Y-748	2984Y-750		437 cu. m.	F	7268192	G	CLAYTON	9-6119	5183002322	0500	1100	10-15-87	10-19-87	
288-AQ-04E-041E	2984Y-749	2984Y-747		425 cu. m.	F	7268193	G	CLAYTON	9-6119	5183002322	0500	1100	10-15-87	10-19-87	
288-AQ-04F-041E	2984Y-750	2984Y-748		457 cu. m.	F	7268194	G	CLAYTON	9-6119	5183002322	0500	1100	10-15-87	10-19-87	
288-AQ-05C-041E	2984Y-751			418 cu. m.	F	7268195	G	CLAYTON	9-6119	5183002322	0500	1100	10-15-87	10-19-87	
288-AQ-05D-041E	2984Y-752			464 cu. m.	F	7268196	G	CLAYTON	9-6119	5183002322	0500	1100	10-15-87	10-19-87	
288-AQ-01C-042E	2984Y-753			419 cu. m.	F	7268197	G	CLAYTON	9-6119	5183002322	0600	1200	10-16-87	10-19-87	
288-AQ-01D-042E	2984Y-754			419 cu. m.	F	7268198	G	CLAYTON	9-6119	5183002322	0600	1200	10-16-87	10-19-87	
288-AQ-02C-042E	2984Y-755			435 cu. m.	F	7268199	G	CLAYTON	9-6119	5183002322	0600	1200	10-16-87	10-19-87	
288-AQ-02D-042E	2984Y-756			415 cu. m.	F	7268200	G	CLAYTON	9-6119	5183002322	0600	1200	10-16-87	10-19-87	
288-AQ-03C-042E	2984Y-757			408 cu. m.	F	7268100	G	CLAYTON	9-6119	5183002322	0600	1200	10-16-87	10-19-87	
288-AQ-03D-042E	2984Y-758			412 cu. m.	F	7268099	G	CLAYTON	9-6119	5183002322	0600	1200	10-16-87	10-19-87	
288-AQ-04C-042E	2984Y-759	2984Y-761		436 cu. m.	F	7268098	G	CLAYTON	9-6119	5183002322	0600	1200	10-16-87	10-19-87	
288-AQ-04D-042E	2984Y-760	2984Y-762		430 cu. m.	F	7268097	G	CLAYTON	9-6119	5183002322	0600	1200	10-16-87	10-19-87	
288-AQ-04E-042E	2984Y-761	2984Y-759		384 cu. m.	F	7268096	G	CLAYTON	9-6119	5183002322	0600	1200	10-16-87	10-19-87	
288-AQ-04F-042E	2984Y-762	2984Y-760		456 cu. m.	F	7268095	G	CLAYTON	9-6120	5183002322	0600	1200	10-16-87	10-19-87	
288-AQ-05C-042E	2984Y-763			428 cu. m.	F	7268094	G	CLAYTON	9-6120	5183002322	0600	1200	10-16-87	10-19-87	
288-AQ-05D-042E	2984Y-764			471 cu. m.	F	7268093	G	CLAYTON	9-6120	5183002322	0600	1200	10-16-87	10-19-87	
288-AQ-01C-043	2984Y-765			1617 cu. m.	F	7268092	G	CLAYTON	9-6120	5183002322	0000	2400	10-17-87	10-19-87	
288-AQ-01D-043	2984Y-766			1575 cu. m.	F	7268091	G	CLAYTON	9-6120	5183002322	0000	2400	10-17-87	10-19-87	
288-AQ-02C-043	2984Y-767			1609 cu. m.	F	7268090	G	CLAYTON	9-6120	5183002322	0000	2400	10-17-87	10-19-87	
288-AQ-02D-043	2984Y-768			1643 cu. m.	F	7268089	G	CLAYTON	9-6120	5183002322	0000	2400	10-17-87	10-19-87	

continued on next page

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# INDICATES BREAK IN SAMPLE NO. SEQUENCE

FB=FIELD BLANK
TB=TRAVEL BLANK

cu. m.=CUBIC METER
L=LITER
-- = NOT CALCULATED

F=FILTER
C=CASSETTE
P=PLASTIC DISH

G=GRAVIMETRIC
TEM 1=ASBESTOS-TEM LEVEL 1
TEM 2=ASBESTOS-TEM LEVEL 2

CLAYTON=CLAYTON ENV. CONSULTANTS INC.

AIR QUALITY SAMPLE INVENTORY
SOUTH BAY ASBESTOS SITE
(continued)

SAMPLE STATION	SAMPLE NUMBER	QC SAMPLES: DUPLICATE OF	QC SAMPLES: BLANK TYPE	FLOW VOLUME	SAMPLE CONTAINER TYPE	LOT/ FILTER NUMBER	ANALYSIS REQUESTED	LAB	CHAIN OF CUSTODY RECORD NO.	AIRBILL NUMBER	TIME SAMPLED (PST) FROM	TIME SAMPLED (PST) TO	DATE COLLECTED	DATE * SHIPPED	COMMENTS
288-AQ-03C-043	2984Y-769			1624 cu. m.	F	7268088	G	CLAYTON	9-6120	5183002322	0000	2400	10-17-87	10-19-87	
288-AQ-03D-043	2984Y-770			1662 cu. m.	F	7268087	G	CLAYTON	9-6120	5183002322	0000	2400	10-17-87	10-19-87	
288-AQ-04C-043	2984Y-771	2984Y-773		1666 cu. m.	F	7268086	G	CLAYTON	9-6120	5183002322	0000	2400	10-17-87	10-19-87	
288-AQ-04D-043	2984Y-772	2984Y-774		1637 cu. m.	F	7268085	G	CLAYTON	9-6120	5183002322	0000	2400	10-17-87	10-19-87	
288-AQ-04E-043	2984Y-773	2984Y-771		1605 cu. m.	F	7268084	G	CLAYTON	9-6120	5183002322	0000	2400	10-17-87	10-19-87	
288-AQ-04F-043	2984Y-774	2984Y-772		1668 cu. m.	F	7268083	G	CLAYTON	9-6120	5183002322	0000	2400	10-17-87	10-19-87	
288-AQ-05C-043	2984Y-775			1655 cu. m.	F	7268082	G	CLAYTON	9-6120	5183002322	0000	2400	10-17-87	10-19-87	
288-AQ-05D-043	2984Y-776			1793 cu. m.	F	7268081	G	CLAYTON	9-6120	5183002322	0000	2400	10-17-87	10-19-87	
288-AQ-01A-042E	2984Y-777			1744 L.	C	719J087	TEM 1	CLAYTON	9-6121	5183002322	0600	1200	10-16-87	10-19-87	
288-AQ-02A-042E	2984Y-778			1756 L.	C	719J087	TEM 1	CLAYTON	9-6121	5183002322	0600	1200	10-16-87	10-19-87	
288-AQ-03A-042E	2984Y-779			1759 L.	C	719J087	TEM 1	CLAYTON	9-6121	5183002322	0600	1200	10-16-87	10-19-87	
288-AQ-04A-042E	2984Y-780	2984Y-781		1789 L.	C	719J087	TEM 1	CLAYTON	9-6121	5183002322	0600	1200	10-16-87	10-19-87	
288-AQ-04B-042E	2984Y-781	2984Y-780		1794 L.	C	719J087	TEM 1	CLAYTON	9-6121	5183002322	0600	1200	10-16-87	10-19-87	
288-AQ-04G-042E	2984Y-782		FB	N/A	C	719J087	TEM 1	CLAYTON	9-6121	5183002322	0600	1200	10-16-87	10-19-87	Exposed 1 sec
288-AQ-05B-042E	2984Y-783			1789 L.	C	719J087	TEM 1	CLAYTON	9-6121	5183002322	0600	1200	10-16-87	10-19-87	
288-AQ-05A-042E	2984Y-784		TB	N/A	C	719J087	TEM 1	CLAYTON	9-6121	5183002322	0600	1200	10-16-87	10-19-87	
288-AQ-01G-041E	2984Y-785		FB	N/A	C	719J087	TEM 1	CLAYTON	9-6121	5183002322	N/A	N/A	10-15-87	10-19-87	Exposed 1 sec
288-AQ-01A-041E	2984Y-786			1718 L.	C	719J087	TEM 1	CLAYTON	9-6121	5183002322	0500	1100	10-15-87	10-19-87	
288-AQ-02A-041E	2984Y-787			1787 L.	C	719J087	TEM 1	CLAYTON	9-6121	5183002322	0500	1100	10-15-87	10-19-87	
288-AQ-03A-041E	2984Y-788			1713 L.	C	719J087	TEM 1	CLAYTON	9-6121	5183002322	0500	1100	10-15-87	10-19-87	
288-AQ-04A-041E	2984Y-789	2984Y-790		1797 L.	C	719J087	TEM 1	CLAYTON	9-6121	5183002322	0500	1100	10-15-87	10-19-87	
288-AQ-04B-041E	2984Y-790	2984Y-789		1804 L.	C	719J087	TEM 1	CLAYTON	9-6121	5183002322	0500	1100	10-15-87	10-19-87	
288-AQ-05B-041E	2984Y-791			1788 L.	C	719J087	TEM 1	CLAYTON	9-6121	5183002322	0500	1100	10-15-87	10-19-87	
288-AQ-05D-039	2984Y-792A			1798 cu. m.	F	7268172	G	CLAYTON	9-6118	5183002322	0000	2400	10-11-87	10-19-87	
288-AQ-05D-046	2984Y-792B			1742 cu. m.	F	7268043	G	CLAYTON	9-6122	5183002473	0000	2400	10-23-87	10-26-87	
288-AQ-05C-046	2984Y-793			1647 cu. m.	F	7268044	G	CLAYTON	9-6122	5183002473	0000	2400	10-23-87	10-26-87	
288-AQ-04F-046	2984Y-794	2984Y-796		422 cu. m.	F	7268045	G	CLAYTON	9-6122	5183002473	0000	2400	10-23-87	10-26-87	Ran appr. 6 hrs.
288-AQ-04E-046	2984Y-795	2984Y-797		416 cu. m.	F	7268046	G	CLAYTON	9-6122	5183002473	0000	2400	10-23-87	10-26-87	Ran appr. 6 hrs.
288-AQ-04D-046	2984Y-796	2984Y-794		448 cu. m.	F	7268047	G	CLAYTON	9-6122	5183002473	0000	2400	10-23-87	10-26-87	Ran appr. 6 hrs.
288-AQ-04C-046	2984Y-797	2984Y-795		483 cu. m.	F	7268049	G	CLAYTON	9-6122	5183002473	0000	2400	10-23-87	10-26-87	Ran appr. 6 hrs.
288-AQ-03D-046	2984Y-798			432 cu. m.	F	7268050	G	CLAYTON	9-6122	5183002473	0000	2400	10-23-87	10-26-87	Ran appr. 6 hrs.
288-AQ-03C-046	2984Y-799			426 cu. m.	F	7268051	G	CLAYTON	9-6122	5183002473	0000	2400	10-23-87	10-26-87	Ran appr. 6 hrs.
288-AQ-02D-046	2984Y-800			1638 cu. m.	F	7268052	G	CLAYTON	9-6122	5183002473	0000	2400	10-23-87	10-26-87	
288-AQ-02C-046	2984Y-801			406 cu. m.	F	7268054	G	CLAYTON	9-6122	5183002473	0000	2400	10-23-87	10-26-87	
288-AQ-01D-046	2984Y-802			1539 cu. m.	F	7268055	G	CLAYTON	9-6122	5183002473	0000	2400	10-23-87	10-26-87	
288-AQ-01C-046	2984Y-803			1655 cu. m.	F	7268056	G	CLAYTON	9-6122	5183002473	0000	2400	10-23-87	10-26-87	
288-AQ-05D-045E	2984Y-804			458 cu. m.	F	7268057	G	CLAYTON	9-6122	5183002473	0100	0700	10-22-87	10-26-87	
288-AQ-05C-045E	2984Y-805			413 cu. m.	F	7268058	G	CLAYTON	9-6122	5183002473	0100	0700	10-22-87	10-26-87	
288-AQ-04F-045E	2984Y-806	2984Y-808		492 cu. m.	F	7268059	G	CLAYTON	9-6122	5183002473	0100	0700	10-22-87	10-26-87	
288-AQ-04E-045E	2984Y-807	2984Y-809		488 cu. m.	F	7268060	G	CLAYTON	9-6240	5183002473	0100	0700	10-22-87	10-26-87	
288-AQ-04D-045E	2984Y-808	2984Y-806		414 cu. m.	F	7268061	G	CLAYTON	9-6240	5183002473	0100	0700	10-22-87	10-26-87	
288-AQ-04C-045E	2984Y-809	2984Y-807		422 cu. m.	F	7268062	G	CLAYTON	9-6240	5183002473	0100	0700	10-22-87	10-26-87	
288-AQ-03D-045E	2984Y-810			421 cu. m.	F	7268063	G	CLAYTON	9-6240	5183002473	0100	0700	10-22-87	10-26-87	
288-AQ-03C-045E	2984Y-811			393 cu. m.	F	7268064	G	CLAYTON	9-6240	5183002473	0100	0700	10-22-87	10-26-87	

continued on next page

LEGEND:

STATION NUMBER:
- 288=SITE NUMBER
- AQ=AIR QUALITY
- 01=AIR STATION 1,
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- A=ASBESTOS SAMPLER A
- B=ASBESTOS SAMPLER B
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- D=HIGH VOLUME SAMPLER D (PM10)
- E=HIGH VOLUME SAMPLER E (TOTAL SUSPENDED PARTICULATES)
- F=HIGH VOLUME SAMPLER F (PM10)
- G=BLANK
- 001,002,etc.=SAMPLE EVENT NUMBER (E=EPISODIC EVENT)

* INDICATES BREAK IN SAMPLE NO. SEQUENCE

FB=FIELD BLANK
TB=TRAVEL BLANK

cu. m.=CUBIC METER
L=LITER
-- = NOT CALCULATED

F=FILTER
C=CASSETTE
P=PLASTIC DISH

G=GRAVIMETRIC
TEM 1=ASBESTOS-TEM LEVEL 1
TEM 2=ASBESTOS-TEM LEVEL 2

CLAYTON=CLAYTON ENV. CONSULTANTS INC.

AIR QUALITY SAMPLE INVENTORY
SOUTH BAY ASBESTOS SITE
(continued)

SAMPLE STATION	SAMPLE NUMBER	QC SAMPLES: FIELD DUPLICATE	QC SAMPLES: BLANK TYPE	FLOW VOLUME	SAMPLE CONTAINER TYPE	LOT/ FILTER NUMBER	ANALYSIS REQUESTED	LAB	CHAIN OF CUSTODY RECORD NO.	AIRBILL NUMBER	TIME SAMPLED (PST) FROM	TIME SAMPLED (PST) TO	DATE COLLECTED	DATE SHIPPED	COMMENTS
288-AQ-02D-045E	2984Y-812			425 cu. m.	F	7268065	6	CLAYTON	9-6240	5183002473	0100	0700	10-22-87	10-26-87	
288-AQ-02C-045E	2984Y-813			4 cu. m.	F	7268066	6	CLAYTON	9-6240	5183002473	0100	0700	10-22-87	10-26-87	
288-AQ-01D-045E	2984Y-814			300 cu. m.	F	7268067	6	CLAYTON	9-6240	5183002473	0100	0700	10-22-87	10-26-87	
288-AQ-01C-045E	2984Y-815			411 cu. m.	F	7268068	6	CLAYTON	9-6240	5183002473	0100	0700	10-22-87	10-26-87	
288-AQ-05D-044	2984Y-816			1754 cu. m.	F	7268069	6	CLAYTON	9-6240	5183002473	0000	2400	10-20-87	10-26-87	
288-AQ-05C-044	2984Y-817			1638 cu. m.	F	7268070	6	CLAYTON	9-6240	5183002473	0000	2400	10-20-87	10-26-87	
288-AQ-04F-044	2984Y-618	2984Y-820		1679 cu. m.	F	7268071	6	CLAYTON	9-6240	5183002473	0000	2400	10-20-87	10-26-87	
288-AQ-04E-044	2984Y-819	2984Y-821		1618 cu. m.	F	7268072	6	CLAYTON	9-6240	5183002473	0000	2400	10-20-87	10-26-87	
288-AQ-04D-044	2984Y-820	2984Y-818		5 cu. m.	F	7268073	6	CLAYTON	9-6240	5183002473	0000	2400	10-20-87	10-26-87	
288-AQ-04C-044	2984Y-821	2984Y-819		9 cu. m.	F	7268074	6	CLAYTON	9-6240	5183002473	0000	2400	10-20-87	10-26-87	
288-AQ-01C-044	2984Y-822			1645 cu. m.	F	7268080	6	CLAYTON	9-6241	5183002473	0000	2400	10-20-87	10-26-87	
288-AQ-01D-044	2984Y-823			1539 cu. m.	F	7268079	6	CLAYTON	9-6241	5183002473	0000	2400	10-20-87	10-26-87	
288-AQ-02C-044	2984Y-824			4 cu. m.	F	7268078	6	CLAYTON	9-6241	5183002473	0000	2400	10-20-87	10-26-87	
288-AQ-02D-044	2984Y-825			1655 cu. m.	F	7268077	6	CLAYTON	9-6241	5183002473	0000	2400	10-20-87	10-26-87	
288-AQ-03C-044	2984Y-826			1628 cu. m.	F	7268076	6	CLAYTON	9-6241	5183002473	0000	2400	10-20-87	10-26-87	
288-AQ-03D-044	2984Y-827			1645 cu. m.	F	7268075	6	CLAYTON	9-6241	5183002473	0000	2400	10-20-87	10-26-87	
288-AQ-01A-045E	2984Y-828			1267 L.	C	719J087	TEM 1	CLAYTON	9-6242	5183002473	0100	0700	10-22-87	10-26-87	
288-AQ-02A-045E	2984Y-829			15 L.	C	719J087	TEM 1	CLAYTON	9-6242	5183002473	0100	0700	10-22-87	10-26-87	Ran 3 hrs.
288-AQ-03A-045E	2984Y-830			1628 L.	C	719J087	TEM 1	CLAYTON	9-6242	5183002473	0100	0700	10-22-87	10-26-87	
288-AQ-04A-045E	2984Y-831	2984Y-832		1762 L.	C	719J087	TEM 1	CLAYTON	9-6242	5183002473	0100	0700	10-22-87	10-26-87	
288-AQ-04B-045E	2984Y-832	2984Y-831		3381 L.	C	719J087	TEM 1	CLAYTON	9-6242	5183002473	0100	0700	10-22-87	10-26-87	
288-AQ-05B-045E	2984Y-833			1783 L.	C	719J087	TEM 1	CLAYTON	9-6242	5183002473	0100	0700	10-22-87	10-26-87	
288-AQ-03G-045E	2984Y-834		FB	N/A	C	719J087	TEM 1	CLAYTON	9-6242	5183002473	0100	0700	10-22-87	10-26-87	Exposed 1 sec
288-AQ-05A-045E	2984Y-835		TB	N/A	C	719J087	TEM 1	CLAYTON	9-6242	5183002473	0100	0700	10-22-87	10-26-87	
288-AQ-05D-049E	2984Y-848*			465 cu. m.	F	7268007	6	CLAYTON	9-6243	5183002742	1215	1815	10-31-87	11-02-87	
288-AQ-05C-049E	2984Y-849			422 cu. m.	F	7268008	6	CLAYTON	9-6243	5183002742	1215	1815	10-31-87	11-02-87	
288-AQ-04F-049E	2984Y-850	2984Y-852		471 cu. m.	F	7268009	6	CLAYTON	9-6243	5183002742	1215	1815	10-31-87	11-02-87	
288-AQ-04E-049E	2984Y-851	2984Y-853		428 cu. m.	F	7268010	6	CLAYTON	9-6243	5183002742	1215	1815	10-31-87	11-02-87	
288-AQ-04D-049E	2984Y-852	2984Y-850		438 cu. m.	F	7268011	6	CLAYTON	9-6243	5183002742	1215	1815	10-31-87	11-02-87	
288-AQ-04C-049E	2984Y-853	2984Y-851		437 cu. m.	F	7268012	6	CLAYTON	9-6243	5183002742	1215	1815	10-31-87	11-02-87	
288-AQ-03D-049E	2984Y-854			453 cu. m.	F	7268013	6	CLAYTON	9-6243	5183002742	1215	1815	10-31-87	11-02-87	
288-AQ-03C-049E	2984Y-855			430 cu. m.	F	7268014	6	CLAYTON	9-6243	5183002742	1215	1815	10-31-87	11-02-87	
288-AQ-02D-049E	2984Y-856			432 cu. m.	F	7278015	6	CLAYTON	9-6243	5183002742	1215	1815	10-31-87	11-02-87	
288-AQ-02C-049E	2984Y-857			446 cu. m.	F	7278016	6	CLAYTON	9-6243	5183002742	1215	1815	10-31-87	11-02-87	
288-AQ-01D-049E	2984Y-858			419 cu. m.	F	7278017	6	CLAYTON	9-6243	5183002742	1215	1815	10-31-87	11-02-87	
288-AQ-01C-049E	2984Y-859			419 cu. m.	F	7278018	6	CLAYTON	9-6243	5183002742	1215	1815	10-31-87	11-02-87	
288-AQ-05D-048	2984Y-860			1794 cu. m.	F	7278019	6	CLAYTON	9-6243	5183002742	0000	2400	10-29-87	11-02-87	
288-AQ-05C-048	2984Y-861			1681 cu. m.	F	7278020	6	CLAYTON	9-6243	5183002742	0000	2400	10-29-87	11-02-87	
288-AQ-04F-048	2984Y-862	2984Y-864		3 cu. m.	F	7278021	6	CLAYTON	9-6243	5183002742	0000	2400	10-29-87	11-02-87	
288-AQ-04E-048	2984Y-863	2984Y-865		5 cu. m.	F	7278022	6	CLAYTON	9-6244	5183002742	0000	2400	10-29-87	11-02-87	
288-AQ-04D-048	2984Y-864	2984Y-862		6 cu. m.	F	7278023	6	CLAYTON	9-6244	5183002742	0000	2400	10-29-87	11-02-87	
288-AQ-04C-048	2984Y-865	2984Y-863		2 cu. m.	F	7278024	6	CLAYTON	9-6244	5183002742	0000	2400	10-29-87	11-02-87	
288-AQ-03D-048	2984Y-866			8 cu. m.	F	7278025	6	CLAYTON	9-6244	5183002742	0000	2400	10-29-87	11-02-87	

continued on next page

LEGEND:

STATION NUMBER:
288=SITE NUMBER
AQ=AIR QUALITY
01=AIR STATION 1,
02=AIR STATION 2,
03=AIR STATION 3,
04=AIR STATION 4,
05=AIR STATION 5,
A=ASBESTOS SAMPLER A
B=ASBESTOS SAMPLER B
C=HIGH VOLUME SAMPLER C (TOTAL SUSPENDED PARTICULATES)
D=HIGH VOLUME SAMPLER D (PM10)
E=HIGH VOLUME SAMPLER E (TOTAL SUSPENDED PARTICULATES)
F=HIGH VOLUME SAMPLER F (PM10)
G=BLANK
001,002,etc.=SAMPLE EVENT NUMBER (E=EPISODIC EVENT)

* INDICATES BREAK IN SAMPLE NO. SEQUENCE

FB=FIELD BLANK
TB=TRAVEL BLANK

cu. m.=CUBIC METER
L=LITER
-- =, NOT CALCULATED

F=FILTER
C=CASSETTE
P=PLASTIC DISH

6=GRAVIMETRIC
TEM 1=ASBESTOS-TEM LEVEL 1
TEM 2=ASBESTOS-TEM LEVEL 2

CLAYTON=CLAYTON ENV. CONSULTANTS INC.

AIR QUALITY SAMPLE INVENTORY
SOUTH BAY ASBESTOS SITE
(continued)

SAMPLE STATION	SAMPLE NUMBER	QC SAMPLES FIELD DUPLICATE	QC SAMPLES BLANK TYPE	FLOW VOLUME	SAMPLE CONTAINER TYPE	LOT/ FILTER NUMBER	ANALYSIS REQUESTED	LAB	CHAIN OF CUSTODY RECORD NO.	AIRBILL NUMBER	TIME SAMPLED FROM	TIME SAMPLED TO	DATE COLLECTED	DATE SHIPPED	COMMENTS
288-AQ-03C-048	2984Y-867			7 cu. m.	F	7278026	G	CLAYTON	9-6244	5183002742	0000	2400	10-29-87	11-02-87	
288-AQ-02D-048	2984Y-868			2 cu. m.	F	7278027	G	CLAYTON	9-6244	5183002742	0000	2400	10-29-87	11-02-87	
288-AQ-02C-048	2984Y-869			4 cu. m.	F	7278028	G	CLAYTON	9-6244	5183002742	0000	2400	10-29-87	11-02-87	
288-AQ-01D-048	2984Y-870			1566 cu. m.	F	7278029	G	CLAYTON	9-6244	5183002742	0000	2400	10-29-87	11-02-87	
288-AQ-01C-048	2984Y-871			1640 cu. m.	F	7278030	G	CLAYTON	9-6244	5183002742	0000	2400	10-29-87	11-02-87	
288-AQ-04D-047	2984Y-872	2984Y-874		1652 cu. m.	F	7278031	G	CLAYTON	9-6244	5183002742	0000	2400	10-26-87	11-02-87	
288-AQ-04C-047	2984Y-873	2984Y-875		1626 cu. m.	F	7278032	.G	CLAYTON	9-6244	5183002742	0000	2400	10-26-87	11-02-87	
288-AQ-04F-047	2984Y-874	2984Y-872		1631 cu. m.	F	7278033	G	CLAYTON	9-6244	5183002742	0000	2400	10-26-87	11-02-87	
288-AQ-04E-047	2984Y-875	2984Y-873		1612 cu. m.	F	7278034	G	CLAYTON	9-6244	5183002742	0000	2400	10-26-87	11-02-87	
288-AQ-05D-047	2984Y-876			1731 cu. m.	F	7268035	G	CLAYTON	9-6244	5183002742	0000	2400	10-26-87	11-02-87	
288-AQ-05C-047	2984Y-877			1661 cu. m.	F	7268036	G	CLAYTON	9-6244	5183002742	0000	2400	10-26-87	11-02-87	
288-AQ-03D-047	2984Y-878			1627 cu. m.	F	7268037	G	CLAYTON	9-6245	5183002742	0000	2400	10-26-87	11-02-87	
288-AQ-03C-047	2984Y-879			1609 cu. m.	F	7268038	G	CLAYTON	9-6245	5183002742	0000	2400	10-26-87	11-02-87	
288-AQ-02D-047	2984Y-880			1628 cu. m.	F	7268039	G	CLAYTON	9-6245	5183002742	0000	2400	10-26-87	11-02-87	
288-AQ-02C-047	2984Y-881			1596 cu. m.	F	7268040	G	CLAYTON	9-6245	5183002742	0000	2400	10-26-87	11-02-87	
288-AQ-01D-047	2984Y-882			1548 cu. m.	F	7268041	G	CLAYTON	9-6245	5183002742	0000	2400	10-26-87	11-02-87	
288-AQ-01C-047	2984Y-883			1623 cu. m.	F	7268042	G	CLAYTON	9-6245	5183002742	0000	2400	10-26-87	11-02-87	
288-AQ-05B-049E	2984Y-884			1797 L.	C	719J087	TEM 1	CLAYTON	9-6246	5183002742	1215	1815	10-31-87	11-02-87	
288-AQ-01A-049E	2984Y-885			1754 L.	C	719J087	TEM 1	CLAYTON	9-6246	5183002742	1215	1815	10-31-87	11-02-87	
288-AQ-02A-049E	2984Y-886			1787 L.	C	719J087	TEM 1	CLAYTON	9-6246	5183002742	1215	1815	10-31-87	11-02-87	
288-AQ-03A-049E	2984Y-887			1722 L.	C	719J087	TEM 1	CLAYTON	9-6246	5183002742	1215	1815	10-31-87	11-02-87	
288-AQ-04A-049E	2984Y-888	2984Y-889		1767 L.	C	719J087	TEM 1	CLAYTON	9-6246	5183002742	1215	1815	10-31-87	11-02-87	
288-AQ-04B-049E	2984Y-889	2984Y-888		3390 L.	C	719J087	TEM 1	CLAYTON	9-6246	5183002742	1215	1815	10-31-87	11-02-87	
288-AQ-04G-049E	2984Y-890		FB	N/A	C	719J087	TEM 1	CLAYTON	9-6246	5183002742	1215	1815	10-31-87	11-02-87	Exposed 1 sec
288-AQ-05A-049E	2984Y-891		TB	N/A	C	719J087	TEM 1	CLAYTON	9-6246	5183002742	1215	1815	10-31-87	11-02-87	
288-AQ-01C-050	2984Y-892		TB	N/A	F	7268006	G	CLAYTON	9-6245	5183002742	0000	2400	11-02-87	11-02-87	
288-AQ-01A-009	2984Y-950*			2538 L.	C	618C257	TEM 1	CLAYTON	9-6250	5183001946	0000	2400	08-18-87	11-18-87	
288-AQ-02A-009	2984Y-951			3070 L.	C	618C257	TEM 1	CLAYTON	9-6250	5183001946	0000	2400	08-18-87	11-18-87	
288-AQ-03B-009	2984Y-952			3783 L.	C	618C257	TEM 1	CLAYTON	9-6250	5183001946	0000	2400	08-18-87	11-18-87	
288-AQ-04A-009	2984Y-953			2792 L.	C	618C257	TEM 1	CLAYTON	9-6250	5183001946	0000	2400	08-18-87	11-18-87	
288-AQ-05A-009	2984Y-954			2734 L.	C	618C257	TEM 1	CLAYTON	9-6250	5183001946	0000	2400	08-18-87	11-18-87	
288-AQ-01A-015	2984Y-955			2545 L.	C	618C257	TEM 1	CLAYTON	9-6250	5183001946	0000	2400	08-30-87	11-18-87	
288-AQ-02A-015	2984Y-956			3071 L.	C	618C257	TEM 1	CLAYTON	9-6250	5183001946	0000	2400	08-30-87	11-18-87	
288-AQ-03B-015	2984Y-957			3780 L.	C	618C257	TEM 1	CLAYTON	9-6250	5183001946	0000	2400	08-30-87	11-18-87	
288-AQ-04B-015	2984Y-958			2489 L.	C	618C257	TEM 1	CLAYTON	9-6250	5183001946	0000	2400	08-30-87	11-18-87	
288-AQ-05A-015	2984Y-959			2736 L.	C	618C257	TEM 1	CLAYTON	9-6250	5183001946	0000	2400	08-30-87	11-18-87	
288-AQ-05A-034	2984Y-960		FB	N/A	C	719H277	TEM 1	CLAYTON	9-6252	5183001946	0000	2400	10-02-87	11-18-87	Exposed 1 sec
288-AQ-01A-017	2984Y-961			2546 L.	C	618C257	TEM 1	CLAYTON	9-6250	5183001946	0000	2400	09-02-87	11-18-87	
288-AQ-02A-017	2984Y-962			3073 L.	C	618C257	TEM 1	CLAYTON	9-6250	5183001946	0000	2400	09-02-87	11-18-87	
288-AQ-03B-017	2984Y-963			2243 L.	C	618C257	TEM 1	CLAYTON	9-6250	5183001946	0000	2400	09-02-87	11-18-87	
288-AQ-04B-017	2984Y-964			2494 L.	C	618C257	TEM 1	CLAYTON	9-6250	5183001946	0000	2400	09-02-87	11-18-87	
288-AQ-05A-017	2984Y-965			2750 L.	C	618C257	TEM 1	CLAYTON	9-6250	5183001946	0000	2400	09-02-87	11-18-87	
288-AQ-01A-021	2984Y-966			2542 L.	C	719H277	TEM 1	CLAYTON	9-6251	5183001946	0000	2400	09-11-87	11-18-87	

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LEGEND:

STATION NUMBER:
- 288=SITE NUMBER
- AQ=AIR QUALITY
- 01=AIR STATION 1,
- 02=AIR STATION 2,
- 03=AIR STATION 3,
- 04=AIR STATION 4,
- 05=AIR STATION 5,
- A=ASBESTOS SAMPLER A
- B=ASBESTOS SAMPLER B
- C=HIGH VOLUME SAMPLER C (TOTAL SUSPENDED PARTICULATES)
- D=HIGH VOLUME SAMPLER D (PM10)
- E=HIGH VOLUME SAMPLER E (TOTAL SUSPENDED PARTICULATES)
- F=HIGH VOLUME SAMPLER F (PM10)
- G=BLANK
- 001,002,etc.=SAMPLE EVENT NUMBER (E=EPISODIC EVENT)

* INDICATES BREAK IN SAMPLE NO. SEQUENCE

FB=FIELD BLANK
TB=TRAVEL BLANK

cu. m.=CUBIC METER
L=LITER
-- = NOT CALCULATED

F=FILTER
C=CASSETTE
P=PLASTIC DISH

G=GRAVIMETRIC
TEM 1=ASBESTOS-TEM LEVEL 1
TEM 2=ASBESTOS-TEM LEVEL 2

CLAYTON=CLAYTON ENV. CONSULTANTS INC.

AIR QUALITY SAMPLE INVENTORY
SOUTH BAY ASBESTOS SITE
(continued)

SAMPLE STATION	SAMPLE NUMBER	QC SAMPLES: FIELD DUPLICATE	QC SAMPLES: BLANK TYPE	FLOW VOLUME	SAMPLE CONTAINER TYPE	LOT/ FILTER NUMBER	ANALYSIS REQUESTED	LAB	CHAIN OF CUSTODY RECORD NO.	AIRBILL NUMBER	TIME SAMPLED (PST) FROM	TIME SAMPLED (PST) TO	DATE COLLECTED	DATE SHIPPED	COMMENTS
288-AQ-02A-021	2984Y-967			3066 L.	C	719H277	TEM 1	CLAYTON	9-6251	5183001946	0000	2400	09-11-87	11-18-87	
288-AQ-03B-021	2984Y-968			2237 L.	C	719H277	TEM 1	CLAYTON	9-6251	5183001946	0000	2400	09-11-87	11-18-87	
288-AQ-04B-021	2984Y-969			2485 L.	C	719H277	TEM 1	CLAYTON	9-6251	5183001946	0000	2400	09-11-87	11-18-87	
288-AQ-05A-021	2984Y-970			2737 L.	C	719H277	TEM 1	CLAYTON	9-6251	5183001946	0000	2400	09-11-87	11-18-87	
288-AQ-01A-025	2984Y-971			2541 L.	C	719H277	TEM 1	CLAYTON	9-6251	5183001946	0000	2400	09-17-87	11-18-87	
288-AQ-02A-025	2984Y-972			3072 L.	C	719H277	TEM 1	CLAYTON	9-6251	5183001946	0000	2400	09-17-87	11-18-87	
288-AQ-03B-025	2984Y-973			2238 L.	C	719H277	TEM 1	CLAYTON	9-6251	5183001946	0000	2400	09-17-87	11-18-87	
288-AQ-04B-025	2984Y-974			2484 L.	C	719H277	TEM 1	CLAYTON	9-6251	5183001946	0000	2400	09-17-87	11-18-87	
288-AQ-05B-025	2984Y-975			3020 L.	C	719H277	TEM 1	CLAYTON	9-6251	5183001946	0000	2400	09-17-87	11-18-87	
288-AQ-01A-026	2984Y-976			2541 L.	C	719H277	TEM 1	CLAYTON	9-6251	5183001946	0000	2400	09-20-87	11-18-87	
288-AQ-02A-026	2984Y-977			3077 L.	C	719H277	TEM 1	CLAYTON	9-6251	5183001946	0000	2400	09-20-87	11-18-87	
288-AQ-03B-026	2984Y-978			3777 L.	C	719H277	TEM 1	CLAYTON	9-6251	5183001946	0000	2400	09-20-87	11-18-87	
288-AQ-04A-026	2984Y-979			2789 L.	C	719H277	TEM 1	CLAYTON	9-6251	5183001946	0000	2400	09-20-87	11-18-87	
288-AQ-05B-026	2984Y-980			3017 L.	C	719H277	TEM 1	CLAYTON	9-6251	5183001946	0000	2400	09-20-87	11-18-87	
288-AQ-01A-040	2984Y-981			2544 L.	C	719H277	TEM 1	CLAYTON	9-6252	5183001946	0000	2400	10-14-87	11-18-87	
288-AQ-02A-040	2984Y-982			3069 L.	C	719H277	TEM 1	CLAYTON	9-6252	5183001946	0000	2400	10-14-87	11-18-87	
288-AQ-03A-040	2984Y-983			2866 L.	C	719H277	TEM 1	CLAYTON	9-6252	5183001946	0000	2400	10-14-87	11-18-87	
288-AQ-04B-040	2984Y-984			2701 L.	C	719H277	TEM 1	CLAYTON	9-6252	5183001946	0000	2400	10-14-87	11-18-87	
288-AQ-05B-040	2984Y-985			2791 L.	C	719H277	TEM 1	CLAYTON	9-6252	5183001946	0000	2400	10-14-87	11-18-87	
288-AQ-01A-005	2984Y-986			2539 L.	C	618C257	TEM 1	CLAYTON	9-6252	5183001946	0000	2400	08-09-87	11-18-87	
288-AQ-02A-005	2984Y-987			3069 L.	C	618C257	TEM 1	CLAYTON	9-6252	5183001946	0000	2400	08-09-87	11-18-87	
288-AQ-03A-005	2984Y-988			2519 L.	C	618C257	TEM 1	CLAYTON	9-6252	5183001946	0000	2400	08-09-87	11-18-87	
288-AQ-04B-005	2984Y-989			4082 L.	C	618C257	TEM 1	CLAYTON	9-6252	5183001946	0000	2400	08-09-87	11-18-87	
288-AQ-05A-005	2984Y-990			2732 L.	C	618C257	TEM 1	CLAYTON	9-6252	5183001946	0000	2400	08-09-87	11-18-87	
288-AQ-01A-035	2984Y-991			2542 L.	C	719H277	TEM 1	CLAYTON	9-6252	5183001946	0000	2400	10-05-87	11-18-87	
288-AQ-02A-035	2984Y-992			3069 L.	C	719H277	TEM 1	CLAYTON	9-6252	5183001946	0000	2400	10-05-87	11-18-87	
288-AQ-03A-035	2984Y-993			2517 L.	C	719H277	TEM 1	CLAYTON	9-6252	5183001946	0000	2400	10-05-87	11-18-87	
288-AQ-04A-035	2984Y-994			2789 L.	C	719H277	TEM 1	CLAYTON	9-6252	5183001946	0000	2400	10-05-87	11-18-87	
288-AQ-05B-035	2984Y-995			2792 L.	C	719H277	TEM 1	CLAYTON	9-6253	5183001946	0000	2400	10-05-87	11-18-87	
288-AQ-01A-039	2984Y-996			2547 L.	C	719H277	TEM 1	CLAYTON	9-6253	5183001946	0000	2400	10-11-87	11-18-87	
288-AQ-02A-039	2984Y-997			3074 L.	C	719H277	TEM 1	CLAYTON	9-6253	5183001946	0000	2400	10-11-87	11-18-87	
288-AQ-03A-039	2984Y-998			2865 L.	C	719H277	TEM 1	CLAYTON	9-6253	5183001946	0000	2400	10-11-87	11-18-87	
288-AQ-04B-039	2984Y-999			2716 L.	C	719H277	TEM 1	CLAYTON	9-6253	5183001946	0000	2400	10-11-87	11-18-87	
288-AQ-05B-039	2984Y-1000			2789 L.	C	719H277	TEM 1	CLAYTON	9-6253	5183001946	0000	2400	10-11-87	11-18-87	
288-AQ-01A-043	2984Y-1001			2544 L.	C	719J087	TEM 1	CLAYTON	9-6253	5183001946	0000	2400	10-17-87	11-18-87	
288-AQ-02A-043	2984Y-1002			3067 L.	C	719J087	TEM 1	CLAYTON	9-6253	5183001946	0000	2400	10-17-87	11-18-87	
288-AQ-03A-043	2984Y-1003			2867 L.	C	719J087	TEM 1	CLAYTON	9-6253	5183001946	0000	2400	10-17-87	11-18-87	Overloaded
288-AQ-04A-043	2984Y-1004			3072 L.	C	719J087	TEM 1	CLAYTON	9-6253	5183001946	0000	2400	10-17-87	11-18-87	Overloaded
288-AQ-05B-043	2984Y-1005			2791 L.	C	719J087	TEM 1	CLAYTON	9-6253	5183001946	0000	2400	10-17-87	11-18-87	
288-AQ-01A-047	2984Y-1006			2541 L.	C	719J087	TEM 1	CLAYTON	9-6253	5183001946	0000	2400	10-26-87	11-18-87	Overloaded
288-AQ-02A-047	2984Y-1007			3072 L.	C	719J087	TEM 1	CLAYTON	9-6253	5183001946	0000	2400	10-26-87	11-18-87	
288-AQ-03A-047	2984Y-1008			2868 L.	C	719J087	TEM 1	CLAYTON	9-6253	5183001946	0000	2400	10-26-87	11-18-87	
288-AQ-04A-047	2984Y-1009			3070 L.	C	719J087	TEM 1	CLAYTON	9-6253	5183001946	0000	2400	10-26-87	11-18-87	
288-AQ-05B-047	2984Y-1010			2787 L.	C	719J087	TEM 1	CLAYTON	9-6254	5183001946	0000	2400	10-26-87	11-18-87	
288-AQ-05A-033E	2984Y-1011		TB	N/A	C	719J087	TEM 1	CLAYTON	9-6255	5183001946	N/A	N/A	9-29-87	11-18-87	
288-AQ-05A-041E	2984Y-1012		TB	N/A	C	719J087	TEM 1	CLAYTON	9-6255	5183001946	N/A	N/A	10-15-87	11-18-87	

LEGEND:

STATION NUMBER:
- 288=SITE NUMBER
- AQ=AIR QUALITY
- 01=AIR STATION 1,
- 02=AIR STATION 2,
- 03=AIR STATION 3,
- 04=AIR STATION 4,
- 05=AIR STATION 5,
- A=ASBESTOS SAMPLER A
- B=ASBESTOS SAMPLER B
- C=HIGH VOLUME SAMPLER C (TOTAL SUSPENDED PARTICULATES)
- D=HIGH VOLUME SAMPLER D (PM10)
- E=HIGH VOLUME SAMPLER E (TOTAL SUSPENDED PARTICULATES)
- F=HIGH VOLUME SAMPLER F (PM10)
- G=BLANK
- 001,002,etc.=SAMPLE EVENT NUMBER (E=EPISODIC EVENT)

* INDICATES BREAK IN SAMPLE NO. SEQUENCE

FB=FIELD BLANK
TB=TRAVEL BLANK

cu. m.=CUBIC METER
L=LITER
-- = NOT CALCULATED

F=FILTER
C=CASSETTE
P=PLASTIC DISH

G=GRAVIMETRIC
TEM 1=ASBESTOS-TEM LEVEL 1
TEM 2=ASBESTOS-TEM LEVEL 2

CLAYTON=CLAYTON ENV. CONSULTANTS INC.

ARCHIVED AIR QUALITY SAMPLES

INVENTORY OF ARCHIVED AIR QUALITY SAMPLES
SOUTH BAY ASBESTOS SITE

SAMPLE STATION	QUALITY CONTROL SAMPLES: FIELD DUPLICATES: SAMPLE NUMBER	FIELD DUPLICATES: SAMPLE STATION	BLANK TYPE	FLOW RATE (Liters Per Minute)	SAMPLE CONTAINER TYPE	FILTER LOT NUMBER	TIME SAMPLED (Pacific Standard Time) FROM	TO	DATE COLLECTED	COMMENTS
288-AQ-01A-001				10	C	618C257	0000	2400	07-28-87	
288-AQ-02A-001				10	C	618C257	0000	2400	07-28-87	
288-AQ-03A-001				10	C	618C257	0000	2400	07-28-87	
288-AQ-04A-001		288-AQ-04B-001		10	C	618C257	0000	2400	07-28-87	
288-AQ-05A-001				10	C	618C257	0000	2400	07-28-87	
288-AQ-01B-001				15	C	618C257	0000	2400	07-28-87	
288-AQ-02B-001				15	C	618C257	0000	2400	07-28-87	
288-AQ-03B-001				15	C	618C257	0000	2400	07-28-87	
288-AQ-04B-001		288-AQ-04A-001		10	C	618C257	0000	2400	07-28-87	
288-AQ-01A-002				10	C	618C257	0000	2400	07-31-87	
288-AQ-02A-002				10	C	618C257	0000	2400	07-31-87	
288-AQ-03A-002				10	C	618C257	0000	2400	07-31-87	
288-AQ-05A-002				10	C	618C257	0000	2400	07-31-87	
288-AQ-01B-002				15	C	618C257	0000	2400	07-31-87	
288-AQ-02B-002				15	C	618C257	0000	2400	07-31-87	
288-AQ-03B-002				15	C	618C257	0000	2400	07-31-87	
288-AQ-04B-002				10	C	618E257	0000	2400	07-31-87	
288-AQ-05B-002				15	C	618C257	0000	2400	07-31-87	
288-AQ-04A-005				2	C	618C257	0000	2400	08-09-87	
288-AQ-01B-005				3	C	618C257	0000	2400	08-09-87	
288-AQ-02B-005				3	C	618C257	0000	2400	08-09-87	
288-AQ-03B-005				3	C	618C257	0000	2400	08-09-87	
288-AQ-05B-005				3	C	618C257	0000	2400	08-09-87	
288-AQ-01A-006				2	C	618C257	0000	2400	08-12-87	
288-AQ-02A-006				2	C	618C257	0000	2400	08-12-87	
288-AQ-03A-006				2	C	618C257	0000	2400	08-12-87	
288-AQ-04A-006		288-AQ-04B-006		2	C	618C257	0000	2400	08-12-87	
288-AQ-05A-006				2	C	618C257	0000	2400	08-12-87	
288-AQ-01B-006				3	C	618C257	0000	2400	08-12-87	
288-AQ-02B-006				3	C	618C257	0000	2400	08-12-87	
288-AQ-03B-006				3	C	618C257	0000	2400	08-12-87	
288-AQ-04B-006		288-AQ-04A-006		2	C	618C257	0000	2400	08-12-87	
288-AQ-05B-006				3	C	618C257	0000	2400	08-12-87	
288-AQ-01A-007E				2	C	618C257	1230	1830	08-13-87	
288-AQ-02A-007E				2	C	618C257	1230	1830	08-13-87	
288-AQ-03A-007E				3	C	618C257	1230	1830	08-13-87	
288-AQ-04A-007E		288-AQ-04B-007E		2	C	618C257	1230	1830	08-13-87	
288-AQ-01B-007E				3	C	618C257	1230	1830	08-13-87	

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LEGEND:

STATION NUMBER:
- 288=SITE NUMBER
- AQ=AIR QUALITY
- 01=AIR STATION 1,
- 02=AIR STATION 2,
- 03=AIR STATION 3,
- 04=AIR STATION 4,
- 05=AIR STATION 5,
- A=ASBESTOS SAMPLER A
- B=ASBESTOS SAMPLER B
- G=BLANK
- 001,002,etc.=SAMPLE EVENT NUMBER (E=EPISODIC EVENT)

FB=FIELD BLANK
TB=TRAVEL BLANK

C=FILTER CASSETTE

SAMPLE STATION	QUALITY CONTROL SAMPLES: FIELD DUPLICATES: SAMPLE NUMBER	QUALITY CONTROL SAMPLES: FIELD DUPLICATES: SAMPLE STATION	BLANK TYPE	FLOW RATE (Liters Per Minute)	SAMPLE CONTAINER TYPE	FILTER LOT NUMBER	TIME SAMPLED (Pacific Standard Time): FROM	TIME SAMPLED (Pacific Standard Time): TO	DATE COLLECTED	COMMENTS
288-AQ-02B-007E				3	C	618C257	1230	1830	08-13-87	
288-AQ-03B-007E				3	C	618C257	1230	1830	08-13-87	
288-AQ-04B-007E		288-AQ-04A-007E		2	C	618C257	1230	1830	08-13-87	
288-AQ-01A-008				2	C	618C257	0000	2400	08-15-87	
288-AQ-02A-008				2	C	618C257	0000	2400	08-15-87	
288-AQ-03A-008				2	C	618C257	0000	2400	08-15-87	
288-AQ-05A-008				2	C	618C257	0000	2400	08-15-87	
288-AQ-01B-008				3	C	618C257	0000	2400	08-15-87	
288-AQ-02B-008				3	C	618C257	0000	2400	08-15-87	
288-AQ-03B-008				3	C	618C257	0000	2400	08-15-87	
288-AQ-04B-008				2	C	618C257	0000	2400	08-15-87	
288-AQ-05B-008				3	C	618C257	0000	2400	08-15-87	
288-AQ-03A-009				2	C	618C257	0000	2400	08-18-87	
288-AQ-01B-009				3	C	618C257	0000	2400	08-18-87	
288-AQ-02B-009				3	C	618C257	0000	2400	08-18-87	
288-AQ-04B-009	2984Y-953	288-AQ-04A-009		2	C	618C257	0000	2400	08-18-87	
288-AQ-05B-009				3	C	618C257	0000	2400	08-18-87	
288-AQ-01A-010E				2	C	618C257	1200	1800	08-19-87	
288-AQ-01B-010E				3	C	618C257	1200	1800	08-19-87	
288-AQ-02B-010E				3	C	618C257	1200	1800	08-19-87	
288-AQ-05B-010E				3	C	618C257	1200	1800	08-19-87	
288-AQ-01A-011E				10	C	618C257	0400	0800	08-20-87	
288-AQ-02A-011E				10	C	618C257	0400	0800	08-20-87	
288-AQ-03A-011E			FB	N/A	C	618C257	N/A	N/A	08-20-87	Exposed 29 hrs.
288-AQ-04A-011E		288-AQ-04B-011E		10	C	618C257	0400	0800	08-20-87	
288-AQ-05A-011E				10	C	618C257	0400	0800	08-20-87	
288-AQ-01B-011E				15	C	618C257	0400	0800	08-20-87	
288-AQ-02B-011E				15	C	618C257	0400	0800	08-20-87	
288-AQ-03B-011E				15	C	618C257	0400	0800	08-20-87	
288-AQ-04B-011E		288-AQ-04A-011E		10	C	618C257	0400	0800	08-20-87	
288-AQ-05B-011E				15	C	618C257	0400	0800	08-20-87	
288-AQ-01A-012				2	C	618C257	0000	2400	08-21-87	
288-AQ-02A-012				2	C	618C257	0000	2400	08-21-87	
288-AQ-03A-012			FB	N/A	C	618C257	N/A	N/A	08-21-87	Exposed 48 hrs.
288-AQ-04A-012		288-AQ-04B-012		2	C	618C257	0000	2400	08-21-87	
288-AQ-05A-012				2	C	618C257	0000	2400	08-21-87	

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LEGEND:

STATION NUMBER:
- 288=SITE NUMBER
- AQ=AIR QUALITY
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- 03=AIR STATION 3,
- 04=AIR STATION 4,
- 05=AIR STATION 5,
- A=ASBESTOS SAMPLER A
- B=ASBESTOS SAMPLER B
- G=BLANK
- 001,002,etc.=SAMPLE EVENT NUMBER (E=EPISODIC EVENT)

FB=FIELD BLANK
TB=TRAVEL BLANK

C=FILTER CASSETTE

INVENTORY OF ARCHIVED AIR QUALITY SAMPLES
SOUTH BAY ASBESTOS SITE
(continued)

SAMPLE STATION	QUALITY CONTROL SAMPLES: FIELD DUPLICATES: SAMPLE NUMBER	QUALITY CONTROL SAMPLES: FIELD DUPLICATES: SAMPLE STATION	QUALITY CONTROL SAMPLES: BLANK TYPE	FLOW RATE (Liters Per Minute)	SAMPLE CONTAINER TYPE	FILTER LOT NUMBER	TIME SAMPLED (Pacific Standard Time): FROM	TIME SAMPLED (Pacific Standard Time): TO	DATE COLLECTED	COMMENTS
288-AQ-01B-012				3	C	618C257	0000	2400	08-21-87	
288-AQ-02B-012				3	C	618C257	0000	2400	08-21-87	
288-AQ-03B-012				3	C	618C257	0000	2400	08-21-87	
288-AQ-04B-012		288-AQ-04A-012		2	C	618C257	0000	2400	08-21-87	
288-AQ-05B-012				3	C	618C257	0000	2400	08-21-87	
288-AQ-01A-013				2	C	618C257	0000	2400	08-24-87	
288-AQ-02A-013				2	C	618C257	0000	2400	08-24-87	
288-AQ-04A-013		288-AQ-04B-013		2	C	618C257	0000	2400	08-24-87	
288-AQ-05A-013				2	C	618C257	0000	2400	08-24-87	
288-AQ-01B-013				3	C	618C257	0000	2400	08-24-87	
288-AQ-02B-013				3	C	618C257	0000	2400	08-24-87	
288-AQ-03B-013				3	C	618C257	0000	2400	08-24-87	
288-AQ-04B-013		288-AQ-04A-013		2	C	618C257	0000	2400	08-24-87	
288-AQ-05B-013				3	C	618C257	0000	2400	08-24-87	
288-AQ-03G-013			TB	N/A	C	618C257	N/A	N/A	08-24-87	Box 3
288-AQ-01A-014				2	C	618C257	0000	2400	08-27-87	
288-AQ-02A-014				2	C	618C257	0000	2400	08-27-87	
288-AQ-03A-014			FB	N/A	C	618C257	N/A	N/A	08-27-87	Exposed 43 hrs.
288-AQ-04A-014		288-AQ-04B-014		2	C	618C257	0000	2400	08-27-87	
288-AQ-05A-014				2	C	618C257	0000	2400	08-27-87	
288-AQ-01B-014				3	C	618C257	0000	2400	08-27-87	
288-AQ-02B-014				3	C	618C257	0000	2400	08-27-87	
288-AQ-03B-014				3	C	618C257	0000	2400	08-27-87	
288-AQ-04B-014		288-AQ-04A-014		2	C	618C257	0000	2400	08-27-87	
288-AQ-05B-014				3	C	618C257	0000	2400	08-27-87	
288-AQ-04A-015	2984Y-958	288-AQ-04B-015		2	C	618C257	0000	2400	08-30-87	
288-AQ-01B-015				3	C	618C257	0000	2400	08-30-87	
288-AQ-02B-015				3	C	618C257	0000	2400	08-30-87	
288-AQ-05B-015				3	C	618C257	0000	2400	08-30-87	
288-AQ-03G-015			TB	N/A	C	618C257	N/A	N/A	08-30-87	Box 4
288-AQ-03A-016E			FB	N/A	C	618C257	N/A	N/A	09-01-87	Exposed 11 hrs.
288-AQ-01B-016E				15	C	618C257	1100	1800	09-01-87	
288-AQ-02B-016E				15	C	618C257	1100	1800	09-01-87	
288-AQ-04B-016E	2984Y-383	288-AQ-04A-016E		10	C	618C257	1100	1800	09-01-87	
288-AQ-05B-016E				15	C	618C257	1100	1800	09-01-87	
288-AQ-03A-017			FB	N/A	C	618C257	N/A	N/A	09-02-87	Exposed 36 hrs.
288-AQ-04A-017	2984Y-964	288-AQ-04B-017		10	C	618C257	0000	2400	09-02-87	
288-AQ-01B-017				15	C	618C257	0000	2400	09-02-87	
288-AQ-02B-017				15	C	618C257	0000	2400	09-02-87	

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LEGEND:

STATION NUMBER:
288=SITE NUMBER
AQ=AIR QUALITY
01=AIR STATION 1,
02=AIR STATION 2,
03=AIR STATION 3,
04=AIR STATION 4,
05=AIR STATION 5,
A=ASBESTOS SAMPLER A
B=ASBESTOS SAMPLER B
G=BLANK
001,002,etc.=SAMPLE EVENT NUMBER (E=EPISODIC EVENT)

FB=FIELD BLANK
TB=TRAVEL BLANK

C=FILTER CASSETTE

INVENTORY OF ARCHIVED AIR QUALITY SAMPLES
SOUTH BAY ASBESTOS SITE
(continued)

SAMPLE STATION	QUALITY CONTROL SAMPLES: FIELD DUPLICATES: SAMPLE NUMBER	QUALITY CONTROL SAMPLES: FIELD DUPLICATES: SAMPLE STATION	BLANK TYPE	FLOW RATE (Liters Per Minute)	SAMPLE CONTAINER TYPE	FILTER LOT NUMBER	TIME SAMPLED (Pacific Standard Time) FROM	TIME SAMPLED (Pacific Standard Time) TO	DATE COLLECTED	COMMENTS
288-AQ-05B-017				15	C	618C257	0000	2400	09-02-87	
288-AQ-03A-018E			FB	N/A	C	618C257	N/A	N/A	09-03-87	Exposed 19 min.
288-AQ-01B-018E				15	C	618C257	1200	1800	09-03-87	
288-AQ-02B-018E				15	C	618C257	1200	1800	09-03-87	
288-AQ-04B-018E	29B4Y-389	288-AQ-04A-018E		10	C	618C257	1200	1800	09-03-87	
288-AQ-05B-018E				15	C	618C257	1200	1800	09-03-87	
288-AQ-01A-019				2	C	719H277	0000	2400	09-05-87	
288-AQ-02A-019				2	C	719H277	0000	2400	09-05-87	
288-AQ-04A-019		288-AQ-04B-019		2	C	719H277	0000	2400	09-05-87	
288-AQ-05A-019				2	C	719H277	0000	2400	09-05-87	
288-AQ-01B-019				3	C	719H277	0000	2400	09-05-87	
288-AQ-02B-019				3	C	719H277	0000	2400	09-05-87	
288-AQ-03B-019				3	C	719H277	0000	2400	09-05-87	
288-AQ-04B-019		288-AQ-04A-019		2	C	719H277	0000	2400	09-05-87	
288-AQ-05B-019				3	C	719H277	0000	2400	09-05-87	
288-AQ-01A-020				2	C	719H277	0000	2400	09-08-87	
288-AQ-02A-020				2	C	719H277	0000	2400	09-08-87	
288-AQ-04A-020		288-AQ-04B-020		2	C	719H277	0000	2400	09-08-87	
288-AQ-05A-020				2	C	719H277	0000	2400	09-08-87	
288-AQ-01B-020				3	C	719H277	0000	2400	09-08-87	
288-AQ-02B-020				3	C	719H277	0000	2400	09-08-87	
288-AQ-03B-020				3	C	719H277	0000	2400	09-08-87	
288-AQ-04B-020		288-AQ-04A-020		2	C	719H277	0000	2400	09-08-87	
288-AQ-05B-020				3	C	719H277	0000	2400	09-08-87	
288-AQ-03A-021			TB	N/A	C	719H277	N/A	N/A	09-11-87	Box 5
288-AQ-04A-021	29B4Y-969	288-AQ-04B-021		2	C	719H277	0000	2400	09-11-87	
288-AQ-01B-021				3	C	719H277	0000	2400	09-11-87	
288-AQ-02B-021				3	C	719H277	0000	2400	09-11-87	
288-AQ-05B-021				3	C	719H277	0000	2400	09-11-87	
288-AQ-01A-022				2	C	719H277	0000	2400	09-14-87	
288-AQ-02A-022				2	C	719H277	0000	2400	09-14-87	
288-AQ-04A-022		288-AQ-04B-022		2	C	719H277	0000	2400	09-14-87	
288-AQ-05A-022				2	C	719H277	0000	2400	09-14-87	
288-AQ-01B-022				3	C	719H277	0000	2400	09-14-87	
288-AQ-02B-022				3	C	719H277	0000	2400	09-14-87	
288-AQ-03B-022				3	C	719H277	0000	2400	09-14-87	
288-AQ-04B-022		288-AQ-04A-022		2	C	719H277	0000	2400	09-14-87	
288-AQ-05B-022				3	C	719H277	0000	2400	09-14-87	

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LEGEND:

STATION NUMBER:
- 288=SITE NUMBER
- AQ=AIR QUALITY
- 01=AIR STATION 1,
- 02=AIR STATION 2,
- 03=AIR STATION 3,
- 04=AIR STATION 4,
- 05=AIR STATION 5,
- A=ASBESTOS SAMPLER A
- B=ASBESTOS SAMPLER B
- 6=BLANK
- 001,002,etc.=SAMPLE EVENT NUMBER (E=EPISODIC EVENT)

FB=FIELD BLANK
TB=TRAVEL BLANK

C=FILTER CASSETTE

INVENTORY OF ARCHIVED AIR QUALITY SAMPLES
SOUTH BAY ASBESTOS SITE
(continued)

SAMPLE STATION	QUALITY CONTROL SAMPLES — FIELD DUPLICATES — SAMPLE NUMBER	QUALITY CONTROL SAMPLES — FIELD DUPLICATES — SAMPLE STATION	QUALITY CONTROL SAMPLES — BLANK TYPE	FLOW RATE (Liters Per Minute)	SAMPLE CONTAINER TYPE	FILTER LOT NUMBER	TIME SAMPLED (Pacific Standard Time) FROM	TIME SAMPLED (Pacific Standard Time) TO	DATE COLLECTED	COMMENTS
288-AQ-05A-023E				10	C	719H277	0400	1000	09-15-87	
288-AQ-01B-023E				15	C	719H277	0400	1000	09-15-87	
288-AQ-02B-023E				15	C	719H277	0400	1000	09-15-87	
288-AQ-04B-023E	2984Y-472	288-AQ-04A-023E		10	C	719H277	0400	1000	09-15-87	
288-AQ-03A-024E				2	C	719H277	0200	0800	09-16-87	
288-AQ-05A-024E				2	C	719H277	0200	0800	09-16-87	
288-AQ-01B-024E				3	C	719H277	0200	0800	09-16-87	
288-AQ-02B-024E				3	C	719H277	0200	0800	09-16-87	
288-AQ-04B-024E	2984Y-479	288-AQ-04A-024E		2	C	719H277	0200	0800	09-16-87	
288-AQ-03A-025				2	C	719H277	0000	2400	09-17-87	
288-AQ-04A-025	2984Y-974	288-AQ-04B-025		2	C	719H277	0000	2400	09-17-87	
288-AQ-05A-025			FB	N/A	C	719H277	N/A	N/A	09-17-87	Exposed 47 hrs.
288-AQ-01B-025				3	C	719H277	0000	2400	09-17-87	
288-AQ-02B-025				3	C	719H277	0000	2400	09-17-87	
288-AQ-03A-026				2	C	719H277	0000	2400	09-20-87	
288-AQ-05A-026			TB	N/A	C	719H277	N/A	N/A	09-20-87	Box 6
288-AQ-01B-026				3	C	719H277	0000	2400	09-20-87	
288-AQ-02B-026				3	C	719H277	0000	2400	09-20-87	
288-AQ-04B-026	2984Y-979	288-AQ-04A-026		2	C	719H277	0000	2400	09-20-87	
288-AQ-02G-026			FB	N/A	C	719H277	N/A	N/A	09-20-87	Exposed 1 sec.
288-AQ-03A-027E				10	C	719H277	1200	1800	09-22-87	
288-AQ-05A-027E			FB	N/A	C	719H277	N/A	N/A	09-22-87	Exposed 1 sec.
288-AQ-01B-027E				15	C	719H277	1200	1800	09-22-87	
288-AQ-02B-027E				15	C	719H277	1200	1800	09-22-87	
288-AQ-01A-028				2	C	719H277	0000	2400	09-23-87	
288-AQ-02A-028				2	C	719H277	0000	2400	09-23-87	
288-AQ-03A-028				2	C	719H277	0000	2400	09-23-87	
288-AQ-04A-028		288-AQ-04B-028		2	C	719H277	0000	2400	09-23-87	
288-AQ-05A-028				2	C	719H277	0000	2400	09-23-87	
288-AQ-01B-028				3	C	719H277	0000	2400	09-23-87	
288-AQ-02B-028				3	C	719H277	0000	2400	09-23-87	
288-AQ-03B-028				3	C	719H277	0000	2400	09-23-87	
288-AQ-04B-028		288-AQ-04A-028		2	C	719H277	0000	2400	09-23-87	
288-AQ-05B-028				3	C	719H277	0000	2400	09-23-87	
288-AQ-03A-029E				10	C	719H277	1400	2000	09-24-87	
288-AQ-01B-029E				15	C	719H277	1400	2000	09-24-87	
288-AQ-02B-029E				15	C	719H277	1400	2000	09-24-87	

continued on next page

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- 05=AIR STATION 5,
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- B=ASBESTOS SAMPLER B
- G=BLANK
- 001,002,etc.=SAMPLE EVENT NUMBER (E=EPISODIC EVENT)

FB=FIELD BLANK
TB=TRAVEL BLANK

C=FILTER CASSETTE

SAMPLE STATION	QUALITY CONTROL SAMPLES: FIELD DUPLICATES: SAMPLE NUMBER	FIELD DUPLICATES: SAMPLE STATION	BLANK TYPE	FLOW RATE (Liters Per Minute)	SAMPLE CONTAINER TYPE	FILTER LOT NUMBER	TIME SAMPLED (Pacific Standard Time): FROM	TO	DATE COLLECTED	COMMENTS
288-AQ-03A-030E				10	C	719H277	0600	1200	09-25-87	
288-AQ-05A-030E			TB	N/A	C	719H277	N/A	N/A	09-25-87	Box 7
288-AQ-01B-030E				15	C	719H277	0600	1200	09-25-87	
288-AQ-02B-030E				15	C	719H277	0600	1200	09-25-87	
288-AQ-01A-031				2	C	719H277	0000	2400	09-26-87	
288-AQ-02A-031				2	C	719H277	0000	2400	09-26-87	
288-AQ-03A-031				2	C	719H277	0000	2400	09-26-87	
288-AQ-04A-031		288-AQ-04B-031		2	C	719H277	0000	2400	09-26-87	
288-AQ-05A-031			TB	N/A	C	719H277	N/A	N/A	09-26-87	Box 7
288-AQ-01B-031				3	C	719H277	0000	2400	09-26-87	
288-AQ-02B-031				3	C	719H277	0000	2400	09-26-87	
288-AQ-03B-031				3	C	719H277	0000	2400	09-26-87	
288-AQ-04B-031		288-AQ-04A-031		2	C	719H277	0000	2400	09-26-87	
288-AQ-05B-031				3	C	719H277	0000	2400	09-26-87	
288-AQ-01A-032				2	C	719H277	0000	2400	09-29-87	
288-AQ-02A-032				2	C	719H277	0000	2400	09-29-87	
288-AQ-03A-032				2	C	719H277	0000	2400	09-29-87	
288-AQ-04A-032		288-AQ-04B-032		2	C	719H277	0000	2400	09-29-87	
288-AQ-05A-032			TB	N/A	C	719H277	N/A	N/A	09-29-87	Box 8
288-AQ-01B-032				3	C	719H277	0000	2400	09-29-87	
288-AQ-02B-032				3	C	719H277	0000	2400	09-29-87	
288-AQ-03B-032				3	C	719H277	0000	2400	09-29-87	
288-AQ-04B-032		288-AQ-04A-032		2	C	719H277	0000	2400	09-29-87	
288-AQ-05B-032				3	C	719H277	0000	2400	09-29-87	
288-AQ-03A-033E				5	C	719J087	1130	2300	09-30-87	
288-AQ-01B-033E				10	C	719J087	1130	2300	09-30-87	
288-AQ-02B-033E				10	C	719J087	1130	2300	09-30-87	
288-AQ-01A-034				2	C	719J087	0000	2400	10-02-87	
288-AQ-02A-034				2	C	719J087	0000	2400	10-02-87	
288-AQ-03A-034				2	C	719J087	0000	2400	10-02-87	
288-AQ-04A-034		288-AQ-04B-034		2	C	719J087	0000	2400	10-02-87	
288-AQ-01B-034				3	C	719J087	0000	2400	10-02-87	
288-AQ-02B-034				3	C	719J087	0000	2400	10-02-87	
288-AQ-03B-034				3	C	719J087	0000	2400	10-02-87	
288-AQ-04B-034		288-AQ-04A-034		2	C	719J087	0000	2400	10-02-87	
288-AQ-05B-034				3	C	719J087	0000	2400	10-02-87	
288-AQ-01B-035				3	C	719J087	0000	2400	10-05-87	
288-AQ-02B-035				3	C	719J087	0000	2400	10-05-87	
288-AQ-03B-035				3	C	719J087	0000	2400	10-05-87	
288-AQ-04B-035	2984Y-994	288-AQ-04A-035		2	C	719J087	0000	2400	10-05-87	

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TB=TRAVEL BLANK

C=FILTER CASSETTE

INVENTORY OF ARCHIVED AIR QUALITY SAMPLES
SOUTH BAY ASBESTOS SITE
(continued)

SAMPLE STATION	QUALITY CONTROL SAMPLES: FIELD DUPLICATES: SAMPLE NUMBER	QUALITY CONTROL SAMPLES: FIELD DUPLICATES: SAMPLE STATION	BLANK TYPE	FLOW RATE (Liters Per Minute)	SAMPLE CONTAINER TYPE	FILTER LOT NUMBER	TIME SAMPLED (Pacific Standard Time) FROM	TIME SAMPLED (Pacific Standard Time) TO	DATE COLLECTED	COMMENTS
288-AQ-03A-036E				5	C	719J087	1200	1800	10-07-87	
288-AQ-01B-036E				8	C	719J087	1200	1800	10-07-87	
288-AQ-02B-036E				8	C	719J087	1200	1800	10-07-87	
288-AQ-01A-037				2	C	719J087	0000	2400	10-08-87	
288-AQ-02A-037				2	C	719J087	0000	2400	10-08-87	
288-AQ-03A-037				2	C	719J087	0000	2400	10-08-87	
288-AQ-04A-037		288-AQ-04B-037		2	C	719J087	0000	2400	10-08-87	
288-AQ-01B-037				3	C	719J087	0000	2400	10-08-87	
288-AQ-02B-037				3	C	719J087	0000	2400	10-08-87	
288-AQ-03B-037				3	C	719J087	0000	2400	10-08-87	
288-AQ-04B-037		288-AQ-04A-037		2	C	719J087	0000	2400	10-08-87	
288-AQ-05B-037				3	C	719J087	0000	2400	10-08-87	
288-AQ-04A-039	2984Y-999	288-AQ-04B-039		2	C	719J087	0000	2400	10-11-87	
288-AQ-04A-040	2984Y-984	288-AQ-04B-040		2	C	719J087	0000	2400	10-14-87	
288-AQ-05A-040				2	C	719J087	0000	2400	10-14-87	
288-AQ-01B-040				3	C	719J087	0000	2400	10-14-87	
288-AQ-02B-040				3	C	719J087	0000	2400	10-14-87	
288-AQ-03B-040				3	C	719J087	0000	2400	10-14-87	
288-AQ-01B-041E				8	C	719J087	0500	1100	10-15-87	
288-AQ-02B-041E				8	C	719J087	0500	1100	10-15-87	
288-AQ-03B-041E				8	C	719J087	0500	1100	10-15-87	
288-AQ-03A-042E				5	C	719J087	0600	1200	10-16-87	
288-AQ-05A-042E				5	C	719J087	0600	1200	10-16-87	
288-AQ-01B-042E				10	C	719J087	0600	1200	10-16-87	
288-AQ-02B-042E				10	C	719J087	0600	1200	10-16-87	
288-AQ-03B-042E				10	C	719J087	0600	1200	10-16-87	
288-AQ-01B-043				3	C	719J087	0000	2400	10-17-87	
288-AQ-02B-043				3	C	719J087	0000	2400	10-17-87	
288-AQ-03B-043				3	C	719J087	0000	2400	10-17-87	
288-AQ-04B-043	2984Y-1004	288-AQ-04A-043		2	C	719J087	0000	2400	10-17-87	
288-AQ-01A-044				2	C	719J087	0000	2400	10-20-87	
288-AQ-02A-044				2	C	719J087	0000	2400	10-20-87	
288-AQ-03A-044				2	C	719J087	0000	2400	10-20-87	
288-AQ-04A-044		288-AQ-04B-044		2	C	719J087	0000	2400	10-20-87	
288-AQ-05A-044			TB	N/A	C	719J087	N/A	N/A	10-20-87	Box 10

continued on next page

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INVENTORY OF ARCHIVED AIR QUALITY SAMPLES
SOUTH BAY ASBESTOS SITE
(continued)

SAMPLE STATION	QUALITY CONTROL SAMPLES: FIELD DUPLICATES: SAMPLE NUMBER	QUALITY CONTROL SAMPLES: FIELD DUPLICATES: SAMPLE STATION	BLANK TYPE	FLOW RATE (Liters Per Minute)	SAMPLE CONTAINER TYPE	FILTER LOT NUMBER	TIME SAMPLED (Pacific Standard Time) FROM	TIME SAMPLED (Pacific Standard Time) TO	DATE COLLECTED	COMMENTS
288-AQ-01B-044				3	C	719J087	0000	2400	10-20-87	
288-AQ-02B-044				3	C	719J087	0000	2400	10-20-87	
288-AQ-03B-044				3	C	719J087	0000	2400	10-20-87	
288-AQ-04B-044		288-AQ-04A-044		2	C	719J087	0000	2400	10-20-87	
288-AQ-05B-044				3	C	719J087	0000	2400	10-20-87	
288-AQ-01B-045E				10	C	719J087	0100	0700	10-22-87	
288-AQ-02B-045E				10	C	719J087	0100	0700	10-22-87	
288-AQ-03B-045E				10	C	719J087	0100	0700	10-22-87	
288-AQ-01A-046				2	C	719J087	0000	2400	10-23-87	
288-AQ-02A-046				2	C	719J087	0000	2400	10-23-87	
288-AQ-03A-046				2	C	719J087	0000	2400	10-23-87	
288-AQ-04A-046		288-AQ-04B-046		2	C	719J087	0000	2400	10-23-87	
288-AQ-05A-046			TB	N/A	C	719J087	N/A	N/A	10-23-87	Box 10
288-AQ-01B-046				3	C	719J087	0000	2400	10-23-87	
288-AQ-02B-046				3	C	719J087	0000	2400	10-23-87	
288-AQ-03B-046				3	C	719J087	0000	2400	10-23-87	
288-AQ-04B-046		288-AQ-04A-046		2	C	719J087	0000	2400	10-23-87	
288-AQ-05B-046				3	C	719J087	0000	2400	10-23-87	
288-AQ-05A-047			TB	N/A	C	719J087	N/A	N/A	10-26-87	Box 10
288-AQ-01B-047				3	C	719J087	0000	2400	10-26-87	
288-AQ-02B-047				3	C	719J087	0000	2400	10-26-87	
288-AQ-03B-047				3	C	719J087	0000	2400	10-26-87	
288-AQ-04B-047	2984Y-1009	288-AQ-04A-047		2	C	719J087	0000	2400	10-26-87	
288-AQ-01A-048				2	C	719J087	0000	2400	10-29-87	
288-AQ-02A-048				2	C	719J087	0000	2400	10-29-87	
288-AQ-03A-048				2	C	719J087	0000	2400	10-29-87	
288-AQ-04A-048		288-AQ-04B-048		2	C	719J087	0000	2400	10-29-87	
288-AQ-05A-048			TB	N/A	C	719J087	N/A	N/A	10-29-87	Box 10
288-AQ-01B-048				3	C	719J087	0000	2400	10-29-87	
288-AQ-02B-048				3	C	719J087	0000	2400	10-29-87	
288-AQ-03B-048				3	C	719J087	0000	2400	10-29-87	
288-AQ-04B-048		288-AQ-04A-048		2	C	719J087	0000	2400	10-29-87	
288-AQ-05B-048				3	C	719J087	0000	2400	10-29-87	
288-AQ-01B-049E				10	C	719J087	1215	1815	10-31-87	
288-AQ-02B-049E				10	C	719J087	1215	1815	10-31-87	
288-AQ-03B-049E				10	C	719J087	1215	1815	10-31-87	

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APPENDIX G

SAMPLING INFORMATION FOR SOIL, SEDIMENT AND WATER

SAMPLE INVENTORY

WATER, SOIL, AND SEDIMENT SAMPLE INVENTORY
SOUTH BAY ASBESTOS SITE

SAMPLE STATION	SAMPLE NUMBER	DUPLICATE OF	SAMPLERS	SAMPLE CONTAINER NO. & TYPE	LOT NUMBER	BLANK Y/N	ANALYSIS REQUESTED	LAB	CHAIN OF CUSTODY RECORD NO.	AIRBILL NUMBER	DATE COLLECTED	DATE SHIPPED	COMMENTS
SD-001-001	MYB206		AK,KB,SB	2 x 8 oz. G	F7085092	N	C,I	ALI	9-4901	4106703613	5/21/87	5/21/87	
	YC605			2 x 8 oz. G	F7085092	N	F	SWRI	9-4902	4106703694	5/21/87	5/21/87	
				2 x 120ml G	D6083612								
	29B4Y-24			1 x 8 oz. G	F7085092	N	PLM,TEM-2	CLAYTON	9-5056	4106703436	5/21/87	6/11/87	
SD-002-001	MYB207		AK,KB,SB	2 x 8 oz. G	F7085092	N	C,I	ALI	9-4901	4106703613	5/21/87	5/21/87	
	YC606			2 x 8 oz. G	F7085092	N	F	SWRI	9-4902	4106703694	5/21/87	5/21/87	
				2 x 120ml G	D6083612								
	29B4Y-25			1 x 8 oz. G	F7085092	N	PLM-TEM-1	CLAYTON	9-5056	4106703436	5/21/87	6/11/87	
SD-003-001	MYB208	MYB209	AK,KB,SB	2 x 8 oz. G	F7085092	N	C,I	ALI	9-4901	4106703613	5/21/87	5/21/87	
	YC607	YC608		2 x 8 oz. G	F7085092	N	F	SWRI	9-4902	4106703694	5/21/87	5/21/87	
				2 x 120ml G	D6083612								
	29B4Y-26	29B4Y-27		1 x 8 oz. G	F7085092	N	PLM	CLAYTON	9-5056	4106703436	5/21/87	6/11/87	
SD-003-002	MYB209	MYB208	AK,KB,SB	2 x 8 oz. G	F7085092	N	C,I	ALI	9-4901	4106703613	5/21/87	5/21/87	
	YC608	YC607		2 x 8 oz. G	F7085092	N	F	SWRI	9-4903	4106703705	5/21/87	5/21/87	
				2 x 120ml G	D6083612								
	29B4Y-27	29B4Y-26		1 x 8 oz. G	F7085092	N	PLM	CLAYTON	9-5056	4106703436	5/21/87	6/11/87	
SD-004-001	MYB210		AK,KB,SB	2 x 8 oz. G	F7085092	N	C,I	ALI	9-4901	4106703613	5/21/87	5/21/87	BACKGROUND SAMPLE
	YC609			1 x 8 oz. G	F7085092	N	F	SWRI	9-4903	4106703705	5/21/87	5/21/87	
				2 x 120ml G	D6083612								
	29B4Y-28			2 x 120ml G	D6083622	N	PLM	CLAYTON	9-5056	4106703436	5/21/87	6/11/87	
					D6083612								
SW-001-001	MYB204		AK,KB,SB	2 x 8 oz. G	C6199222	N	C,I	ALI	9-4901	4106703694	5/21/87	5/21/87	
	YC603			2 x 40 ml G	B7077121	N	F	SWRI	9-4902	4106703694	5/21/87	5/21/87	
				4 x 1 L G	H7079062								
	29B4Y-18			2 x 1 L G	H7079062	N	TEM	CLAYTON	9-5056	4106703436	5/21/87	6/11/87	
SW-002-001	MYB202	MYB203	AK,KB,SB	2 x 1 L P	C6199222	N	C,I	ALI	9-4901	4106703613	5/21/87	5/21/87	
	YC601	YC602		2 x 40 ml G	C6199222	N	F	SWRI	9-4903	4106703705	5/21/87	5/21/87	
				4 x 1 L G	G7077242								
					H7079062								
	29B4Y-19	29B4Y-20		2 x 1 L G	H7079062	N	TEM	CLAYTON	9-5056	4106703436	5/21/87	6/11/87	
SW-002-002	MYB203	MYB202	AK,KB,SB	2 x 1 L P	C6199222	N	C,I	ALI	9-4901	4106703613	5/21/87	5/21/87	
	YC602	YC601		2 x 40 ml G	B7077121	N	F	SWRI	9-4903	4106703705	5/21/87	5/21/87	
				4 x 1 L G	H7079062								
	29B4Y-20	29B4Y-19		2 x 1 L G	H7079062	N	TEM	CLAYTON	9-5056	4106703436	5/21/87	6/11/87	
SW-003-001	MYB205		AK,KB,SB	2 x 1 L P	C6199222	Y	C,I	ALI	9-4901	4106703613	5/21/87	5/21/87	RINSATE BLANK
	YC604			2 x 40 ml G	B7077121	Y	F	SWRI	9-4902	4106703694	5/21/87	5/21/87	
				4 x 1 L G	H7079062								
	29B4Y-21			2 x 1 L G	H7079062	Y	TEM	CLAYTON	9-5056	4106703436	5/21/87	6/11/87	
SS-MW-001-001	29B4Y-14		AK,BG,TC	1 x 8 oz. G	F7085122	N	PLM,TEM-1	CLAYTON	9-4905	4106703440	6/11/87	6/15/87	
SS-MW-001-002	29B4Y-15		AK,BG,TC	1 x 8 oz. G	F7085122	N	PLM	CLAYTON	9-4905	4106703440	6/11/87	6/15/87	
SS-MW-001-003	MYB215	MYB216	AK,BG,TC	2 x 8 oz. G	F7085122	N	C,I	ALI	9-4904	4106703635	6/11/87	6/11/87	
	YC615	YC616		1 x 8 oz. G	F7085122	N	F	SWRI	9-5061	4106703521	6/11/87	6/11/87	
				2 x 120ml G	G6197082								
	29B4Y-16	29B4Y-17		1 x 8 oz. G	F7085122	N	PLM	CLAYTON	9-4905	4106703440	6/11/87	6/15/87	

continued on next page

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SD=RIVER SEDIMENT
SW=SURFACE WATER
SS=SUBSURFACE SOIL
GW=GROUNDWATER
SL=SURFACE SOIL

AK=ANNE KELLY
KB=KEN BLACK
SB=SARA BLACK
TC=TODD CULP
BG=BILL GROVE

G=GLASS
P=POLYETHYLENE

C=CYANIDE
I=TASK 1 & 2 METALS
F=FULL ORGANICS
PLM=ASBESTOS-PLM
TEM=ASBESTOS-TEM
TEM-1=ASBESTOS-TEM LEVEL I
TEM-2=ASBESTOS-TEM LEVEL 2

ALI=ASSOCIATED LABS INC.
CLAYTON=CLAYTON ENVIRONMENTAL CONSULTANTS
SWRI=SOUTHWEST RESEARCH INSTITUTE

SOUTH BAY ASBESTOS SAMPLE COLLECTION DATA
(continued)

SAMPLE STATION	SAMPLE NUMBER	DUPLICATE OF	SAMPLERS	SAMPLE CONTAINER NO. & TYPE	LOT NUMBER	BLANK Y/N	ANALYSIS REQUESTED	LAB	CHAIN OF CUSTODY RECORD NO.	AIRBILL NUMBER	DATE COLLECTED	DATE SHIPPED	COMMENTS
SS-MW-001-004	MYB216	MYB215	AK,BG,TC	2 x 8 oz. G	F7085122	N	C,I	ALI	9-4904	4106703635	6/11/87	6/11/87	
	YC616	YC615		1 x 8 oz. G	F7085122	N	F	SWRI	9-5061	4106703510	6/11/87	6/11/87	
				2 x 120ml G	66197082								
	2984Y-17	2984Y-16		1 x 8 oz. G	F7085122	N	PLM	CLAYTON	9-4905	4106703440	6/11/87	6/15/87	
SS-MW-002-001	2984Y-29	2984Y-30	AK,BG,TC	1 x 8 oz. G	F7085092	N	PLM	CLAYTON	9-4905	4106703440	6/11/87	6/15/87	
SS-MW-002-002	2984Y-30	2984Y-29	AK,BG,TC	1 x 8 oz. G	F7085112	N	PLM	CLAYTON	9-4905	4106703440	6/11/87	6/15/87	
SS-MW-002-003	2984Y-31		AK,BG,TC	2 x 8 oz. G	F7085092	N	PLM,TEM-1	CLAYTON	9-4905	4106703440	6/11/87	6/15/87	
SS-MW-002-004	MYB213		AK,BG,TC	2 x 8 oz. G	F7085092	N	C,I	ALI	9-4904	4106703635	6/11/87	6/11/87	
	YC612			2 x 8 oz. G	F7085092	N	F	SWRI	9-5061	4106703521	6/9/87	6/11/87	
				2 x 120ml G	D7083612								
	2984Y-32			1 x 8 oz. G	F7085092	N	PLM	CLAYTON	9-4905	4106703440	6/11/87	6/15/87	
SS-MW-003-001	2984Y-10	2984Y-13	AK,BG,TC	2 x 8 oz. G	F7085122	N	PLM,TEM	CLAYTON	9-5056	4106703436	6/10/87	6/11/87	
SS-MW-003-002	2984Y-11		AK,BG,TC	1 x 8 oz. G	F7085122	N	PLM	CLAYTON	9-5056	4106703436	6/10/87	6/11/87	
SS-MW-003-003	MYB214		AK,BG,TC	2 x 8 oz. G	F7085122	N	C,I	ALI	9-5054	4106703536	6/10/87	6/10/87	
	YC614			2 x 8 oz. G	F7085122	N	F	SWRI	9-5055	4106703543	6/10/87	6/10/87	
				2 x 120ml G	B6083612								
	2984Y-12			1 x 8 oz. G	F7085122	N	PLM	CLAYTON	9-5056	4106703436	6/10/87	6/11/87	
SS-MW-003-004	2984Y-13	2984Y-10	AK,BG,TC	2 x 8 oz. G	F7085122	N	PLM,TEM	CLAYTON	9-5056	4106703436	6/10/87	6/11/87	
SS-MW-004-001	2984Y-1		AK,BG,TC	1 x 8 oz. G	F7085112	N	PLM	CLAYTON	9-5049	4106703591	6/8/87	6/8/87	
SS-MW-004-002	2984Y-2		AK,BG,TC	1 x 8 oz. G	F7085112	N	PLM,TEM	CLAYTON	9-5049	4106703591	6/8/87	6/8/87	
SS-MW-004-003	2984Y-3		AK,BG,TC	1 x 8 oz. G	F7085112	N	PLM	CLAYTON	9-5049	4106703591	6/8/87	6/8/87	
SS-MW-004-004	2984Y-4		AK,BG,TC	1 x 8 oz. G	F7085112	N	PLM	CLAYTON	9-5049	4106703591	6/8/87	6/8/87	
SS-MW-004-005	MYB211		AK,BG,TC	2 x 8 oz. G	F7085112	N	C,I	ALI	9-5048	4106703720	6/8/87	6/8/87	
	YC610			2 x 8 oz. G	F7085112	N	F	SWRI	9-5047	4106703624	6/8/87	6/8/87	
				2 x 120ml G	D6083612								
	2984Y-5			1 x 8 oz. G	F7085112	N	PLM	CLAYTON	9-5049	4106703591	6/8/87	6/8/87	
SS-MW-004-006	2984Y-6		AK,BG,TC	1 x 8 oz. G	F7085112	N	PLM	CLAYTON	9-5049	4106703591	6/8/87	6/8/87	
SS-MW-005-001	2984Y-7		AK,BG,TC	1 x 8 oz. G	F7085122	N	PLM	CLAYTON	9-5053	4106703484	6/9/87	6/9/87	
SS-MW-005-002	2984Y-8		AK,BG,TC	2 x 8 oz. G	F7085122	N	PLM,TEM-1	CLAYTON	9-5053	4106703484	6/9/87	6/9/87	
SS-MW-005-003	MYB212		AK,BG,TC	2 x 8 oz. G	F7085112	N	C,I	ALI	9-5051	4106703580	6/9/87	6/9/87	
	YC611			1 x 8 oz. G	F7085112	N	F	SWRI	9-5052	4106703495	6/9/87	6/9/87	
				2 x 120ml G	D6083612								
	2984Y-9			1 x 8 oz. G	F7085122	N	PLM	CLAYTON	9-5053	4106703484	6/9/87	6/9/87	
SS-MW-006-001	MYB226		AK,KBr	2 x 8 oz. G	F7139082	N	C,I	RMAL	9-5067	290339000	7/14/87	7/14/87	BACKGROUND BORING
	YC626			2 x 8 oz. G	F7139082	N	F	SWRI	9-5065	290338996	7-14-87	7-14-87	
	2984Y-119			2 x 8 oz. G	F7139082	N	PLM,TEM-1	CLAYTON	9-5064	4106703473	7-14-87	7-14-87	
SS-BOR-007-001	2984Y-33		AK,BG,TC	1 x 8 oz. G	F7085122	N	PLM	CLAYTON	9-4905	4106703440	6/12/87	6/15/87	
SS-BOR-007-002	2984Y-34		AK,BG,TC	2 x 8 oz. G	F7085122	N	PLM,TEM-2	CLAYTON	9-4905	4106703440	6/12/87	6/15/87	
SS-BOR-007-003	2984Y-35		AK,BG,TC	1 x 8 oz. G	F7085122	N	PLM	CLAYTON	9-4905	4106703440	6/12/87	6/15/87	
SS-BOR-008-001	2984Y-36		AK,BG,TC	1 x 8 oz. G	F7085122	N	PLM	CLAYTON	9-4905	4106703440	6/12/87	6/15/87	
SS-BOR-008-002	2984Y-37		AK,BG,TC	2 x 8 oz. G	F7085122	N	PLM,TEM-1	CLAYTON	9-4905	4106703440	6/12/87	6/15/87	

continued on next page

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RMAL=ENESCO/ROCKY MOUNTAIN ANALYTICAL
SWRI=SOUTHWEST RESEARCH INSTITUTE

SAMPLE STATION	SAMPLE NUMBER	DUPLICATE OF	SAMPLERS	SAMPLE CONTAINER NO. & TYPE	LOT NUMBER	BLANK Y/N	ANALYSIS REQUESTED	LAB	CHAIN OF CUSTODY RECORD NO.	AIRBILL NUMBER	DATE COLLECTED	DATE SHIPPED	COMMENTS
SS-BOR-008-003	2984Y-38		AK,BG,TC	1 x 8 oz. G	F7085122	N	PLM	CLAYTON	9-4905	4106703440	6/12/87	6/15/87	
SS-BOR-009-001	2984Y-95		AK,BG,TC	1 x 8 oz. G	F7085122	N	PLM	CLAYTON	9-4907	4106703451	6/16/87	6/17/87	
SS-BOR-009-002	2984Y-96		AK,BG,TC	2 x 8 oz. G	F7085122	N	PLM,TEM-1	CLAYTON	9-4907	4106703451	6/16/87	6/17/87	
SS-BOR-009-003	2984Y-47		AK,BG,TC	1 x 8 oz. G	F7085122	N	PLM	CLAYTON	9-4907	4106703451	6/16/87	6/17/87	
SS-BOR-010-001	2984Y-39		AK,BG,TC	1 x 8 oz. G	F7085122	N	PLM	CLAYTON	9-4906	4106703440	6/15/87	6/15/87	
SS-BOR-010-002	2984Y-40	2984Y-42	AK,BG,TC	2 x 8 oz. G	F7085122	N	PLM,TEM-1	CLAYTON	9-4906	4106703440	6/15/87	6/15/87	
SS-BOR-010-003	2984Y-41		AK,BG,TC	2 x 8 oz. G	F7085122	N	PLM	CLAYTON	9-4906	4106703440	6/15/87	6/15/87	
SS-BOR-010-004	2984Y-42	2984Y-40	AK,BG,TC	2 x 8 oz. G	F7085122	N	PLM,TEM-1	CLAYTON	9-4906	4106703440	6/15/87	6/15/87	
SS-BOR-011-001	2984Y-43	2984Y-46	AK,BG,TC	1 x 8 oz. G	F7085122	N	PLM	CLAYTON	9-4906	4106703440	6/15/87	6/15/87	
SS-BOR-011-002	2984Y-44		AK,BG,TC	2 x 8 oz. G	F7085122	N	PLM,TEM-1	CLAYTON	9-4906	4106703440	6/15/87	6/15/87	
SS-BOR-011-003	2984Y-45		AK,BG,TC	1 x 8 oz. G	F7085122	N	PLM	CLAYTON	9-4906	4106703440	6/15/87	6/15/87	
SS-BOR-011-004	2984Y-46	2984Y-43	AK,BG,TC	1 x 8 oz. G	F7085122	N	PLM	CLAYTON	9-4906	4106703440	6/15/87	6/15/87	
SS-G3-001	2984Y-B45		AK,SB	2 x 8 oz. G	F7287522	N	PLM,TEM-1	CLAYTON	9-6106	1834796003	10/26/87	10/30/87	
SS-G3-002	2984Y-B36		AK,SB	1 x 8 oz. G	F7287522	N	PLM	CLAYTON	9-6106	1834796003	10/26/87	10/30/87	
	SS-G3-002			3 x 8 oz. G	F7287522	N	C,1,F	R9-LV	9-6105	1834795981	10/26/87	10/26/87	
				2 x 120ml G	D7198021								
SS-G4-001	2984Y-B37		AK,SB	1 x 8 oz. G	F7287522	N	PLM	CLAYTON	9-6106	1834796003	10/27/87	10/30/87	
SS-G5-001	2984Y-B38		AK,SB	2 x 8 oz. G	F7287522	N	PLM,TEM-1	CLAYTON	9-6106	1834796003	10/27/87	10/30/87	
SS-G5-002	2984Y-B39		AK	1 x 8 oz. G	F7287522	N	PLM	CLAYTON	9-6106	1834796003	10/28/87	10/30/87	
SS-G5-003	SS-G5-003		AK	3 x 8 oz. G	F7287522	N	C,1,F	R9-LV	9-6315	1834796250	10/28/87	10/28/87	
				2 x 120ml G	D7198021								
SS-G6-001	2984Y-B42		AK	1 x 8 oz. G	F7287522	N	PLM	CLAYTON	9-6106	1834796003	10/29/87	10/30/87	
SS-G6-002	2984Y-B43	2984Y-B44	AK	2 x 8 oz. G	F7287522	N	PLM,TEM-1	CLAYTON	9-6106	1834796003	10/29/87	10/30/87	
	SS-G6-002	SS-G6-003		3 x 8 oz. G	F7287522	N	C,1,F	R9-LV	9-6316	1834795981	10/29/87	10/29/87	
				2 x 120ml G	D7198021								
SS-G6-003	2984Y-B44	2984Y-B43	AK	2 x 8 oz. G	F7287522	N	PLM,TEM-1	CLAYTON	9-6106	1834796003	10/29/87	10/30/87	
	SS-G6-003	SS-G6-002		3 x 8 oz. G	F7287522	N	C,1,F	R9-LV	9-6316	1834795981	10/29/87	10/29/87	
				2 x 120ml G	D7198021								
SS-G9-001	2984Y-B46		AK	1 x 8 oz. G	F7287522	N	PLM	CLAYTON	9-6106	1834796003	10/30/87	10/30/87	
SS-G9-002	2984Y-B47		AK	2 x 8 oz. G	F7287522	N	PLM,TEM-1	CLAYTON	9-6106	1834796003	10/30/87	10/30/87	
	SS-G9-002			3 x 8 oz. G	F7287522	N	C,1,F	R9-LV	9-6317	1834796224	10/30/87	10/30/87	
				2 x 120ml G	D7198021								
SS-G11-001	2984Y-B40		AK	1 x 8 oz. G	F7287522	N	PLM	CLAYTON	9-6106	1834796003	10/28/87	10/30/87	
SS-G11-002	2984Y-B41		AK	2 x 8 oz. G	F7287522	N	PLM,TEM-1	CLAYTON	9-6106	1834796003	10/28/87	10/30/87	
	SS-G11-002			3 x 8 oz. G	F7287522	N	C,1,F	R9-LV	9-6315	1834796250	10/28/87	10/28/87	
				2 x 120ml G	D7198021								
GW-001-001	MYB217		BG,TC	2 x 1 L P	C7091082	N	C,1	WEYER	9-4914	4106703366	6/25/87	6/25/87	
	YC617			4 x 1 L G	H7079062	N	F	EAL	9-4913	4106703355	6/25/87	6/25/87	
				2 x 40ml G	B7077121								
	2984Y-112			2 x 1 L G	C7091082	N	A-2	CLAYTON	9-4915	4106703392	6/25/87	6/26/87	
GW-001-002	MY0795		AK,NB	2 x 1 L P	C7033212	N	C,1	WILSON	9-6102	1834795970	10/7/87	10/7/87	
	YC436			4 x 1 L G	H7208132	N	F	AQUATEC	9-6101,	1834796246	10/7/87	10/7/87	
				2 x 40ml G	B7261321								

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C=CYANIDE
1=TASK 1 & 2 METALS
F=FULL ORGANICS
PLM=ASBESTOS-PLM
TEM-1=ASBESTOS-TEM LEVEL 1
A-2=ASBESTOS LEVEL 2

AQUATEC=AQUATEC INC.
CLAYTON=CLAYTON ENVIRONMENT
CONSULTANTS
EAL=EAL CORPORATION
R9-LV=EPA REGION 9 LABORATO
WEYER=WEYERHAUSER COMPANY
WILSON=WILSON LABORATORIES

SOUTH BAY ASBESTOS SAMPLE COLLECTION DATA
(continued)

SAMPLE STATION	SAMPLE NUMBER	DUPLICATE OF	SAMPLERS	SAMPLE CONTAINER NO. & TYPE	LOT NUMBER	BLANK Y/N	ANALYSIS REQUESTED	LAB	CHAIN OF CUSTODY RECORD NO.	AIRBILL NUMBER	DATE COLLECTED	DATE SHIPPED	COMMENTS
GW-002-001	MYB218		BG,TC	2 x 1 L P	C7091082	N	C,I	MEYER	9-4914	4106703366	6/25/87	6/25/87	
	YC618			2 x 40ml G	B7077121	N	F	EAL	9-4913	4106703355	6/25/87	6/25/87	
				4 x 1 L G	H7079062								
					H7079052								
	2984Y-114			2 x 1 L P	C7091082	N	A-1	CLAYTON	9-4915	4106703392	6/25/87	6/26/87	
GW-002-002	MYB0792	MYB0793	AK,NB	2 x 1 L P	C7015232	N	C,I	WILSON	9-6102	1834795970	10/7/87	10/7/87	
	YC433	YC434		2 x 40ml G	B7261321	N	F	AQUATEC	9-6101	1834796246	10/7/87	10/7/87	
				4 x 1 L G	H7208132								
GW-002-003	MYB0793	MYB0792	AK,NB	2 x 1 L P	C7015232	N	C,I	WILSON	9-6102	1834795970	10/7/87	10/7/87	
	YC434	YC433		2 x 40ml G	B7261321	N	F	AQUATEC	9-6101	1834796246	10/7/87	10/7/87	
				4 x 1 L G	H7208132								
GW-003-001	MYB219		BG,TC	2 x 1 L P	C7091082	N	C,I	MEYER	9-4917	3681362565	6/26/87	6/26/87	MON. WELL 005
	YC619			2 x 40ml G	B7077121	N	F	EAL	9-4916	4106703322	6/26/87	6/26/87	
				4 x 1 L G	H7079062								
					H7079052								
	2984Y-117			2 x 1 L P	C7091082	N	A-1	CLAYTON	9-4915	4106703392	6/26/87	6/26/87	
GW-003-002	MY0796		AK,NB	2 x 1 L P	C7015232	N	C,I	WILSON	9-6104	1834795966	10/8/87	10/8/87	MON. WELL 003
	YC437			2 x 40ml G	B7261321	N	F	AQUATEC	9-6103	1834795992	6/26/87	6/26/87	
				4 x 1 L G	H7208132								
GW-004-001	MYB220		BG,TC	2 x 1 L P	C7091082	N	C,I	MEYER	9-4917	3681362565	6/26/87	6/26/87	
	YC620			4 x 1 L G	H7079062	N	F	EAL	9-4916	4106703322	6/26/87	6/26/87	
				2 x 40ml G	B7077121								
	2984Y-115			2 x 1 L P	C7091082	N	A-1	CLAYTON	9-4915	4106703392	6/26/87	6/26/87	
GW-004-002	MY0797		AK,NB	2 x 1 L P	C7015232	N	C,I	WILSON	9-6104	1834795966	10/8/87	10/8/87	MON. WELL 005
	YC438			4 x 1 L G	H7208132	N	F	AQUATEC	9-6103	1834795992	10/8/87	10/8/87	
				2 x 40ml G	B7261321								
GW-005-001	MYB221	MYB222	BG,TC	2 x 1 L P	C7091082	N	C,I	MEYER	9-4912	4106703344	6/24/87	6/24/87	MON. WELL 003
	YC621	YC622		4 x 1 L G	H7079062	N	F	EAL	9-4911	4106703333	6/24/87	6/24/87	
				2 x 40ml G	B7077121								
	2984Y-109	2984Y-110		2 x 1 L P	C7091082	N	A-1	CLAYTON	9-4915	4106703392	6/24/87	6/26/87	
GW-005-002	MYB222	MYB221	BG,TC	2 x 1 L P	C7091082	N	C,I	MEYER	9-4912	4106703344	6/24/87	6/24/87	MON. WELL 003
	YC622	YC621		4 x 1 L G	H7079062	N	F	EAL	9-4911	4106703333	6/24/87	6/24/87	
				2 x 40ml G	B7077121								
	2984Y-110	2984Y-109		2 x 1 L P	C7091082	Y	A-1	CLAYTON	9-4915	4106703392	6/24/87	6/26/87	
GW-005-003	MY0798		AK,NB	2 x 1 L P	C7015232	N	C,I	WILSON	9-6104	1834795966	10/8/87	10/8/87	MON. WELL 004
	YC439			4 x 1 L G	H7163192	N	F	AQUATEC	9-6103	1834795992	10/8/87	10/8/87	
				2 x 40ml G	B7261321								
GW-006-001	MYB223		BG,TC	2 x 1 L P	C7091082	Y	C,I	MEYER	9-4912	4106703344	6/24/87	6/24/87	RINSATE BLANK
	YC623			4 x 1 L G	H7079062	Y	F	EAL	9-4911	4106703333	6/24/87	6/24/87	
				2 x 40ml G	B7077121								
	2984Y-111			2 x 1 L P	C6199222	Y	A-1	CLAYTON	9-4915	4106703392	6/24/87	6/26/87	
GW-006-002	MY0794		AK,NB	2 x 1 L P	C7033212	Y	C,I	WILSON	9-6102,	1834795970	10/07/87	10/07/87	RINSATE BLANK
	YC435			4 x 1 L G	H7208132	Y	F	AQUATEC	9-6101	1834796246	10/07/87	10/07/87	
				2 x 40ml G	B7261321								

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G=GLASS
P=POLYETHYLENE

C=CYANIDE
F=FULL ORGANICS
I=TASK 1 & 2 METALS
A-1=ASBESTOS LEVEL 1

AQUATEC=AQUATEC INC.
CLAYTON=CLAYTON ENVIRONMENT CONSULTANTS
EAL=EAL CORPORATION
WEYER=WEYERHAUSER COMPANY
WILSON=WILSON LABORATORIES

SAMPLE STATION	SAMPLE NUMBER	DUPLICATE OF	SAMPLERS	SAMPLE CONTAINER NO. & TYPE	LOT NUMBER	BLANK Y/N	ANALYSIS REQUESTED	LAB	CHAIN OF CUSTODY RECORD NO.	AIRBILL NUMBER	DATE COLLECTED	DATE SHIPPED	COMMENTS
GW-006-003	GW-006-003		AK	2 x 1 L P	C7154122	Y	C,I	R9-LV	9-6323	5763655181	11/16/87	11/16/87	FIELD BLANK
	YC858			4 x 1 L G	H7253142	Y	F	RADSAC	9-6322	5763655155	11/16/87	11/16/87	
				2 x 40ml G	B7261321								
	2984Y-900			2 x 1 L P	C7154122	Y	A-1	CLAYTON	9-6319	5763655144	11/16/87	11/18/87	
GW-013-001	MYB224		BG,TC	2 x 1 L P	C7091082	Y	C,I	WEYER	9-4914	4106703366	6/25/87	6/25/87	RINSATE BLANK
	YC624			4 x 1 L G	H7079062	Y	F	EAL	9-4913	4106703355	6/25/87	6/25/87	
				2 x 40ml G	B7077121								
	2984Y-113			2 x 1 L P	C7091072	Y	A-1	CLAYTON	9-4915	4106703392	6/25/87	6/26/87	
GW-013-002	MYA985		AK,NB	2 x 1 L P	C7033212	Y	C,I	WILSON	9-6104	1834795966	10/08/87	10/08/87	RINSATE BLANK
	YC435			4 x 1 L G	H7163192	Y	F	AQUATEC	9-6103	1834795992	10/08/87	10/08/87	
				2 x 40ml G	B7261321								
GW-013-003	GW-013-003		AK	2 x 1 L P	C7042172	Y	C,I	R9-LV	9-6324	5763655111	11/17/87	11/17/87	FIELD BLANK
	YC598			4 x 1 L G	H7253142	Y	F	RADSAC	9-6325	5763655100	11/17/87	11/17/87	
				2 x 40ml G	B7261321								
	2984Y-901			2 x 1 L P	C7042172	Y	A-1	CLAYTON	9-6319	5763655144	11/17/87	11/18/87	
GW-014-001	MYB225		BG,TC	2 x 1 L P	C7091082	Y	C,I	WEYER	9-4917	3681362565	6/26/87	6/26/87	RINSATE BLANK
	YC625			4 x 1 L G	H7079062	Y	F	EAL	9-4916	4106703322	6/26/87	6/26/87	
				2 x 40ml G	B7077121								
	2984Y-116			2 x 1 L P	C7091072	Y	A-1	CLAYTON	9-4915	4106703392	6/26/87	6/26/87	
GW-G3-001	GW-G3-001		AK	2 x 1 L P	C7154122	N	C,I	R9-LV	9-6323	5763655181	11/16/87	11/16/87	
	YC856			4 x 1 L G	H7253142	N	F	RADSAC	9-6322	5763655155	11/16/87	11/16/87	
				2 x 40ml G	B7261321								
GW-G5-001	GW-G5-001	GW-G5-002	AK	2 x 1 L P	C7154122	N	C,I	R9-LV	9-6324	5763655111	11/17/87	11/17/87	
	YC199	YC599		4 x 1 L G	H7253142	N	F	RADSAC	9-6325	5763655100	11/17/87	11/17/87	
				2 x 40ml G	B7261321								
	2984Y-902	2984Y-903		2 x 1 L P	C7154122	N	A-1	CLAYTON	9-6319	5763655144	11/17/87	11/18/87	
GW-G5-002	GW-G5-002	GW-G5-001	AK	2 x 1 L P	C7154122	N	C,I	R9-LV	9-6324	5763655111	11/17/87	11/17/87	
	YC599	YC199		4 x 1 L G	H7253132	N	F	RADSAC	9-6325	5763655100	11/17/87	11/17/87	
				2 x 40ml G	B7261321								
	2984Y-903	2984Y-902		2 x 1 L P	C7154122	N	A-1	CLAYTON	9-6319	.5763655144	11/17/87	11/18/87	
GW-G6-001	YC198		AK	3 x 1 L G	H7253132	N	F	RADSAC	9-6325	5763655100	11/17/87	11/17/87	WELL PRODUCED LITTLE WATER
				2 x 40ml G	B7261321								
GW-G6-002	GW-G6-002		AK	2 x 1 L P	C7042172		C,I	R9-LV	9-6318	5763655085	11/18/87	11/18/87	WELL PRODUCED LITTLE WATER
GW-G9-001	YC200		AK	2 x 40ml G	B7261321	N	V	RADSAC	9-6320	5763655096	11/18/87	11/18/87	WELL PRODUCED LITTLE WATER
GW-G11-001	GW-G11-001		AK	2 x 1 L P	C7154122	N	C,I	R9-LV	9-6323	5763655181	11/16/87	11/16/87	
	YC857		AK	4 x 1 L G	H7253142	N	F	RADSAC	9-6322	5763655155	11/16/87	11/16/87	
				2 x 40ml G									
SL-001-001	2984Y-22		AK,SB	2 x 8 oz. G	F7085092	N	PLM,TEM	CLAYTON	9-5056	4106703436	6/1/87	6/11/87	
SL-001-001M	2984Y-706		AK,NB	1 x 1 gal Z	N/A	N	MG	CLAYTON	9-6099	1834796014	9/30/87	10/01/87	
SL-002-001	2984Y-23		AK,SB	2 x 8 oz. G	F7085092	N	PLM,TEM	CLAYTON	9-5056	4106703436	6/1/87	6/11/87	
SL-002-001M	2984Y-705		AK,NB	1 x 1 gal Z	N/A	N	MG	CLAYTON	9-6099	1834796014	9/30/87	10/01/87	
SL-003-001	2984Y-51		AK,BG,TC	1 x 8 oz. G	F7085092	N	PLM	CLAYTON	9-4907,	4106703451	6/17/87	6/17/87	
SL-003-001M	2984Y-704		AK,NB	1 x 1 gal Z	N/A	N	MG	CLAYTON	9-6099	1834796014	9/30/87	10/01/87	
SL-004-001	2984Y-52		AK,BG,TC	1 x 8 oz. G	F7085092	N	PLM	CLAYTON	9-4907	4106703451	6/17/87	6/17/87	
SL-004-001M	2984Y-703		AK,NB	1 x 1 gal Z	N/A	N	MG	CLAYTON	9-6099	1834796014	9/30/87	10/01/87	

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LEGEND:

SD=RIVER SEDIMENT
SW=SURFACE WATER
SS=SUBSURFACE SOIL
GW=GROUNDWATER
SL=SURFACE SOIL

AK=ANNE KELLY
BG=BILL GROVE
NB=NEIL BOTTS
SB=SARA BLACK
TC=TODD CULP

G=GLASS
P=POLYETHYLENE
Z=ZIPLOCK BAG

C=CYANIDE
F=FULL ORGANICS
I=TASK 1 & 2 METALS
V=VOLATILES
PLM=ASBESTOS-PLM
TEM-1=ASBESTOS-TEM LEVEL 1
A-1=ASBESTOS LEVEL 1
MG=MOISTURE AND GRAIN SIZE

AQUATEC=AQUATEC INC.
CLAYTON=CLAYTON ENVIRONMENT CONSULTANTS
EAL=EAL CORPORATION
RADSAC=RADIAN CORPORATION, SACRAMENTO
R9-LV=EPA REGION 9 LABORATO
WEYER=WEYERHAUSER COMPANY
WILSON=WILSON LABORATORIES

SOUTH BAY ASBESTOS SAMPLE COLLECTION DATA
(continued)

SAMPLE STATION	SAMPLE NUMBER	DUPLICATE OF	SAMPLERS	SAMPLE CONTAINER NO. & TYPE	LOT NUMBER	BLANK Y/N	ANALYSIS REQUESTED	LAB	CHAIN OF CUSTODY RECORD NO.	AIRBILL NUMBER	DATE COLLECTED	DATE SHIPPED	COMMENTS
SL-005-001	2984Y-53		AK,BG,TC	2 x 8 oz. G	F7085092	N	PLM,TEM-1	CLAYTON	9-4907	4106703451	6/17/87	6/17/87	CO-LOCATED WITH 2984Y-54
SL-005-001M	2984Y-707		AK,NB	1 x 1 gal Z	N/A	N	MG	CLAYTON	9-6099	1834796014	9/30/87	10/01/87	
SL-006-001	2984Y-54		AK,BG,TC	2 x 8 oz. G	F7085112	N	PLM,TEM-1	CLAYTON	9-4907	4106703451	6/17/87	6/17/87	CO-LOCATED WITH 2984Y-53
SL-007-001	2984Y-61		AK,BG,TC	1 x 8 oz. G	F7085122	N	PLM	CLAYTON	9-4908	4106703370	6/18/87	6/18/87	
SL-007-001M	2984Y-701		AK,NB	1 x 1 gal Z	N/A	N	MG	CLAYTON	9-6099	1834796014	9/30/87	10/01/87	
SL-008-001	2984Y-62		AK,BG,TC	1 x 8 oz. G	F7085122	N	PLM	CLAYTON	9-4908	4106703370	6/18/87	6/18/87	CO-LOCATED WITH 2984Y-63
SL-008-001M	2984Y-702		AK,NB	1 x 1 gal Z	N/A	N	MG	CLAYTON	9-6099	1834796014	9/30/87	10/01/87	
SL-009-001	2984Y-63		AK,BG,TC	1 x 8 oz. G	F7085122	N	PLM	CLAYTON	9-4908	4106703370	6/18/87	6/18/87	CO-LOCATED WITH 2984Y-62
SL-010-001	2984Y-64	2984Y-65	AK,BG,TC	2 x 8 oz. G	F7085112	N	PLM	CLAYTON	9-4908	4106703370	6/18/87	6/18/87	
					F7085122		TEM-1						
SL-010-002	2984Y-65	2984Y-64	AK,BG,TC	2 x 8 oz. G	F7085132	N	PLM,TEM-1	CLAYTON	9-4908	4106703370	6/18/87	6/18/87	
SL-011-001	2984Y-66		AK,BG,TC	1 x 8 oz. G	F7085132	N	PLM	CLAYTON	9-4908	4106703370	6/18/87	6/18/87	
SL-012-001	2984Y-67		AK,BG,TC	2 x 8 oz. G	F7085132	N	PLM,TEM-1	CLAYTON	9-5057	4106703462	6/19/87	6/19/87	CO-LOCATED WITH 2984Y-68
SL-013-001	2984Y-68		AK,BG,TC	2 x 8 oz. G	F7085132	N	PLM,TEM-1	CLAYTON	9-5057	4106703462	6/19/87	6/19/87	CO-LOCATED WITH 2984Y-67
SL-014-001	2984Y-69		AK,BG,TC	2 x 8 oz. G	F7085132	N	PLM,TEM-2	CLAYTON	9-5057	4106703462	6/19/87	6/19/87	
SL-015-001	2984Y-70		AK,BG,TC	1 x 8 oz. G	F7085132	N	PLM	CLAYTON	9-5057	4106703462	6/19/87	6/19/87	
SL-016-001	2984Y-58		AK,BG,TC	1 x 8 oz. G	F7085132	N	PLM	CLAYTON	9-4908	4106703370	6/18/87	6/18/87	CO-LOCATED WITH 2984Y-59
SL-016-001M	2984Y-724		AK,NB	1 x 1 gal Z	N/A	N	MG	CLAYTON	9-6099	1834796014	10/01/87	10/01/87	
SL-017-001	2984Y-59		AK,BG,TC	1 x 8 oz. G	F7085112	N	PLM	CLAYTON	9-4908	4106703370	6/18/87	6/18/87	CO-LOCATED WITH 2984Y-58
SL-018-001	2984Y-60		AK,BG,TC	1 x 8 oz. G	F7085092	N	PLM	CLAYTON	9-4908	4106703370	6/18/87	6/18/87	
SL-018-001M	2984Y-725		AK,NB	1 x 1 gal Z	N/A	N	MG	CLAYTON	9-6099	1834796014	10/01/87	10/01/87	
SL-019-001	2984Y-76		AK,BG,TC	4 x 120ml G	B6083622	N	PLM,TEM-2	CLAYTON	9-5058	4106703381	6/22/87	6/22/87	
SL-019-001M	2984Y-711		AK,NB	1 x 1 gal Z	N/A	N	MG	CLAYTON	9-6099	1834796014	9/30/87	10/01/87	
SL-020-001	2984Y-77	2984Y-78	AK,BG,TC	4 x 120ml G	D7076021	N	PLM,TEM-1	CLAYTON	9-5058	4106703381	6/22/87	6/22/87	
SL-020-001M	2984Y-712		AK,NB	1 x 1 gal Z	N/A	N	MG	CLAYTON	9-6099	1834796014	9/30/87	10/01/87	
SL-020-002	2984Y-78	2984Y-77	AK,BG,TC	4 x 120ml G	D7076021	N	PLM,TEM-1	CLAYTON	9-5058	4106703381	6/22/87	6/22/87	
SL-021-001	2984Y-79		AK,BG,TC	4 x 120ml G	45161102	N	PLM,TEM-1	CLAYTON	9-5058	4106703381	6/22/87	6/22/87	CO-LOCATED WITH 2984Y-80
SL-021-001M	2984Y-716		AK,NB	1 x 1 gal Z	N/A	N	MG	CLAYTON	9-6099	1834796014	9/30/87	10/01/87	
SL-022-001	2984Y-80		AK,BG,TC	4 x 120ml G	45161102	N	PLM,TEM-1	CLAYTON	9-5058	4106703381	6/22/87	6/22/87	CO-LOCATED WITH 2984Y-79
SL-023-001	2984Y-81		AK,BG,TC	2 x 120ml G	45161102	N	PLM	CLAYTON	9-5058	4106703381	6/22/87	6/22/87	CO-LOCATED WITH 2984Y-82
SL-023-001M	2984Y-717		AK,NB	1 x 1 gal Z	N/A	N	MG	CLAYTON	9-6099	1834796014	9/30/87	10/01/87	
SL-024-001	2984Y-82		AK,BG,TC	2 x 120ml G	45161102	N	PLM	CLAYTON	9-5058	4106703381	6/22/87	6/22/87	CO-LOCATED WITH 2984Y-81
SL-025-001	2984Y-83		AK,BG,TC	4 x 4 oz. G	G6197082	N	PLM,TEM-1	CLAYTON	9-5058	4106703381	6/22/87	6/22/87	CO-LOCATED WITH 2984Y-84
SL-026-001	2984Y-84		AK,BG,TC	4 x 120ml G	D7076021	N	PLM,TEM-1	CLAYTON	9-5058	4106703381	6/22/87	6/22/87	CO-LOCATED WITH 2984Y-83
SL-026-001M	2984Y-718		AK,NB	1 x 1 gal Z	N/A	N	MG	CLAYTON	9-6099	1834796014	9/30/87	10/01/87	
SL-027-001	2984Y-86		AK,BG,TC	2 x 120ml G	D7076021	N	PLM	CLAYTON	9-5058	4106703381	6/22/87	6/22/87	CO-LOCATED WITH 2984Y-85
SL-027-001M	2984Y-726		AK,NB	1 x 1 gal Z	N/A	N	MG	CLAYTON	9-6099	1834796014	10/01/87	10/01/87	
SL-028-001	2984Y-85		AK,BG,TC	2 x 4 oz. G	75009252	N	PLM	CLAYTON	9-5058	4106703381	6/22/87	6/22/87	CO-LOCATED WITH 2984Y-86
SL-029-001	2984Y-87		AK,BG,TC	2 x 120ml G	D7076021	N	PLM	CLAYTON	9-5058	4106703381	6/22/87	6/22/87	CO-LOCATED WITH 2984Y-88
SL-029-001M	2984Y-727		AK,NB	1 x 1 gal Z	N/A	N	MG	CLAYTON	9-6099	1834796014	10/01/87	10/01/87	
SL-030-001	2984Y-88	2984Y-94	AK,BG,TC	2 x 120ml G	D7076031	N	PLM	CLAYTON	9-5058	4106703381	6/22/87	6/22/87	CO-LOCATED WITH 2984Y-87
SL-030-002	2984Y-94	2984Y-88	AK,BG,TC	2 x 120ml G	D7076031	N	PLM	CLAYTON	9-5059	4106703381	6/22/87	6/22/87	
SL-031-001	2984Y-102		AK,BG,TC	2 x 8 oz. G	F7139082	N	PLM,TEM-1	CLAYTON	9-4910	4106703425	6/23/87	6/23/87	CO-LOCATED WITH 2984Y-103
SL-031-001M	2984Y-728		AK,NB	1 x 1 gal Z	N/A	N	MG	CLAYTON	9-6099	1834796014	10/01/87	10/01/87	
SL-032-001	2984Y-103		AK,BG,TC	2 x 8 oz. G	F7139082	N	PLM,TEM-1	CLAYTON	9-4910	4106703425	6/23/87	6/23/87	CO-LOCATED WITH 2984Y-102

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LEGEND:

SD=RIVER SEDIMENT
SW=SURFACE WATER
SS=SUBSURFACE SOIL
GW=GROUNDWATER
SL=SURFACE SOIL

AK=ANNE KELLY
BG=BILL GROVE
NB=NEIL BOTTS
TC=TODD CULP

G=GLASS
Z=ZIPLOCK BAG

PLM=ASBESTOS-PLM
TEM-1=ASBESTOS-TEM LEVEL 1
TEM-2=ASBESTOS-TEM LEVEL 2
MG=MOISTURE AND GRAIN SIZE

CLAYTON=CLAYTON ENVIRONMEN
CONSULTANTS

SOUTH BAY ASBESTOS SAMPLE COLLECTION DATA
(continued)

SAMPLE STATION	SAMPLE NUMBER	DUPLICATE OF	SAMPLERS	SAMPLE CONTAINER NO. & TYPE	LOT NUMBER	BLANK Y/N	ANALYSIS REQUESTED	LAB	CHAIN OF CUSTODY RECORD NO.	AIRBILL NUMBER	DATE COLLECTED	DATE SHIPPED	COMMENTS
SL-033-001	2984Y-104		AK,BG,TC	2 x 8 oz. G	F7139082	N	PLM,TEM-1	CLAYTON	9-4910	4106703425	6/23/87	6/23/87	CO-LOCATED WITH 2984Y-105
SL-033-001M	2984Y-729		AK,NB	1 x 1 gal Z	N/A	N	MG	CLAYTON	9-6099	1834796014	10/01/87	10/01/87	
SL-034-001	2984Y-105		AK,BG,TC	2 x 8 oz. G	F7139082	N	PLM,TEM-1	CLAYTON	9-4910	4106703425	6/23/87	6/23/87	CO-LOCATED WITH 2984Y-104
SL-035-001	2984Y-106		AK,BG,TC	2 x 8 oz. G	F7139082	N	PLM,TEM-1	CLAYTON	9-4910	4106703425	6/23/87	6/23/87	CO-LOCATED WITH 2984Y-107
SL-035-001M	2984Y-719		AK,NB	1 x 1 gal Z	N/A	N	MG	CLAYTON	9-6099	1834796014	9/30/87	10/01/87	
SL-036-001	2984Y-107		AK,BG,TC	2 x 8 oz. G	F7139082	N	PLM,TEM-1	CLAYTON	9-4910	4106703425	6/23/87	6/23/87	CO-LOCATED WITH 2984Y-106
SL-037-001	2984Y-97		AK,BG,TC	2 x 120ml G	B7076021	N	PLM	CLAYTON	9-4910	4106703425	6/23/87	6/23/87	CO-LOCATED WITH 2984Y-98
SL-037-001M	2984Y-710		AK,NB	1 x 1 gal Z	N/A	N	MG	CLAYTON	9-6099	1834796014	9/30/87	10/01/87	
SL-038-001	2984Y-98		AK,BG,TC	2 x 120ml G	B7076021	N	PLM	CLAYTON	9-4910	4106703425	6/23/87	6/23/87	CO-LOCATED WITH 2984Y-97
SL-039-001	2984Y-118		AK,BG,TC	4 x 4 oz. G	66197222	N	PLM,TEM-1	CLAYTON	9-4910	4106703425	6/23/87	6/23/87	
SL-039-001M	2984Y-713		AK,NB	1 x 1 gal Z	N/A	N	MG	CLAYTON	9-6099	1834796014	9/30/87	10/01/87	
SL-040-001	2984Y-48	2984Y-49	AK,BG,TC	2 x 8 oz. G	F7085102	N	PLM,TEM-1	CLAYTON	9-4907	4106703451	6/6/87	6/7/87	CO-LOCATED WITH 2984Y-50
SL-040-001M	2984Y-700		AK,NB	1 x 1 gal Z	N/A	N	MG	CLAYTON	9-6099	1834796014	9/30/87	10/01/87	
SL-040-002	2984Y-49	2984Y-48	AK,BG,TC	2 x 8 oz. G	F7085112	N	PLM,TEM-1	CLAYTON	9-4907	4106703451	6/16/87	6/17/87	
SL-041-001	2984Y-50		AK,BG,TC	2 x 8 oz. G	F7085112	N	PLM,TEM-1	CLAYTON	9-4907	4106703451	6/16/87	6/17/87	CO-LOCATED WITH 2984Y-48
SL-042-001	2984Y-71		AK,BG,TC	2 x 8 oz. G	F7085092	N	PLM	CLAYTON	9-5057	4106703462	6/19/87	6/19/87	CO-LOCATED WITH 2984Y-72
					F7085122		TEM						
SL-042-001M	2984Y-709		AK,NB	1 x 1 gal Z	N/A	N	MG	CLAYTON	9-6099	1834796014	9/30/87	10/01/87	
SL-043-001	2984Y-72		AK,BG,TC	2 x 8 oz. G	F7085122	N	PLM	CLAYTON	9-5057	4106703462	6/19/87	6/19/87	CO-LOCATED WITH 2984Y-71
					F7085092		TEM						
SL-044-001	2984Y-73		AK,BG,TC	2 x 120ml G	45161102	N	PLM	CLAYTON	9-5057	4106703462	6/19/87	6/19/87	CO-LOCATED WITH 2984Y-74
SL-044-001M	2984Y-708		AK,NB	1 x 1 gal Z	N/A	N	MG	CLAYTON	9-6099	1834796014	9/30/87	10/01/87	
SL-045-001	2984Y-74		AK,BG,TC	2 x 120ml G	45161102	N	PLM	CLAYTON	9-5057	4106703462	6/19/87	6/19/87	CO-LOCATED WITH 2984Y-73
SL-046-001	2984Y-92		AK,BG,TC	4 x 4 oz. G	66197132	N	PLM,TEM-1	CLAYTON	9-4910	4106703425	6/23/87	6/23/87	CO-LOCATED WITH 2984Y-93
SL-046-001M	2984Y-714		AK,NB	1 x 1 gal Z	N/A	N	MG	CLAYTON	9-6099	1834796014	9/30/87	10/01/87	
SL-047-001	2984Y-93		AK,BG,TC	4 x 4 oz. G	66197132	N	PLM,TEM-1	CLAYTON	9-4910	4106703425	6/23/87	6/23/87	CO-LOCATED WITH 2984Y-92
SL-048-001	2984Y-75		AK,BG,TC	4 x 120ml G	45161102	N	PLM,TEM-1	CLAYTON	9-5057	4106703462	6/19/87	6/19/87	
SL-048-001M	2984Y-715		AK,NB	1 x 1 gal Z	N/A	N	MG	CLAYTON	9-6099	1834796014	9/30/87	10/01/87	
SL-049-001	2984Y-55		AK,BG,TC	1 x 8 oz. G	F7085122	N	PLM	CLAYTON	9-4907	4106703451	6/17/87	6/17/87	
SL-049-001M	2984Y-720		AK,NB	1 x 1 gal Z	N/A	N	MG	CLAYTON	9-6099	1834796014	9/30/87	10/01/87	
SL-050-001	2984Y-56		AK,BG,TC	2 x 8 oz. G	F7085122	N	PLM,TEM-1	CLAYTON	9-4907	4106703451	6/17/87	6/17/87	
SL-050-001M	2984Y-722		AK,NB	1 x 1 gal Z	N/A	N	MG	CLAYTON	9-6099	1834796014	9/30/87	10/01/87	
SL-051-001	2984Y-57		AK,BG,TC	1 x 8 oz. G	F7085122	N	PLM	CLAYTON	9-4908	4106703370	6/18/87	6/18/87	
SL-051-001M	2984Y-721		AK,NB	1 x 1 gal Z	N/A	N	MG	CLAYTON	9-6099	1834796014	9/30/87	10/01/87	
SL-052-001	2984Y-108		AK,BG,TC	1 x 8 oz. G	F7139082	N	PLM	CLAYTON	9-4910	4106703425	6/23/87	6/23/87	
SL-052-001M	2984Y-723		AK,NB	1 x 1 gal Z	N/A	N	MG	CLAYTON	9-6099	1834796014	9/30/87	10/01/87	
SL-053-001	2984Y-89		AK,BG,TC	4 x 120ml G	B7076021	N	PLM,TEM-1	CLAYTON	9-5058	4106703381	6/22/87	6/22/87	
SL-053-001M	2984Y-732		AK,NB	1 x 1 gal Z	N/A	N	MG	CLAYTON	9-6099	1834796014	10/01/87	10/01/87	
SL-054-001	2984Y-90		AK,BG,TC	2 x 120ml G	B7076021	N	PLM	CLAYTON	9-5058	4106703381	6/22/87	6/22/87	
SL-054-001M	2984Y-733		AK,NB	1 x 1 gal Z	N/A	N	MG	CLAYTON	9-6099	1834796014	10/01/87	10/01/87	
SL-055-001	2984Y-91		AK,BG,TC	2 x 120ml G	B7076021	N	PLM	CLAYTON	9-5059	4106703381	6/22/87	6/22/87	
SL-055-001M	2984Y-734		AK,NB	1 x 1 gal Z	N/A	N	MG	CLAYTON	9-6099	1834796014	10/01/87	10/01/87	
SL-056-001	2984Y-99		AK,BG,TC	2 x 120ml G	B7076031	N	PLM	CLAYTON	9-4910	4106703425	6/23/87	6/23/87	
SL-056-001M	2984Y-731		AK,NB	1 x 1 gal Z	N/A	N	MG	CLAYTON	9-6099	1834796014	10/01/87	10/01/87	

continued on next page

LEGEND:

SD=RIVER SEDIMENT
SW=SURFACE WATER
SS=SUBSURFACE SOIL
GW=GROUNDWATER
SL=SURFACE SOIL

AK=ANNE KELLY
BG=BILL GROVE
NB=NEIL BOTTS
TC=TODD CULP

G=GLASS
Z=ZIPLOCK BAG

PLM=ASBESTOS-PLM
TEM-1=ASBESTOS-TEM LEVEL 1
MG=MOISTURE AND GRAIN SIZE

CLAYTON=CLAYTON ENVIRONMENT CONSULTANTS

SOUTH BAY ASBESTOS SAMPLE COLLECTION DATA
(continued)

SAMPLE STATION	SAMPLE NUMBER	DUPLICATE OF	SAMPLERS	SAMPLE CONTAINER NO. & TYPE	LOT NUMBER	BLANK Y/N	ANALYSIS REQUESTED	LAB	CHAIN OF CUSTODY RECORD NO.	AIRBILL NUMBER	DATE COLLECTED	DATE SHIPPED	COMMENTS
SL-057-001	2984Y-100		AK,BG,TC	4 x 4 oz. G	86197222	N	PLM,TEM-1	CLAYTON	9-4910	4106703425	6/23/87	6/23/87	CO-LOCATED WITH 2984Y-101
SL-057-001M	2984Y-730		AK,NB	1 x 1 gal Z	N/A	N	MG	CLAYTON	9-6099	1034796014	10/01/87	10/01/87	
SL-058-001	2984Y-101		AK,BG,TC	4 x 120ml G	D6085062	N	PLM,TEM-1	CLAYTON	9-4910	4106703425	6/23/87	6/23/87	CO-LOCATED WITH 2984Y-100
N/A	2984Y-120		CA-DOHS	1 PLSTIC DSH	N/A	N	TEM-1	CLAYTON	9-4909	4106709693	6/24/87	6/24/87	CA DOHS STANDARD: 0.01%
N/A	2984Y-121		CA-DOHS	1 PLSTIC DSH	N/A	N	TEM-1	CLAYTON	9-4909	4106709693	6/24/87	6/24/87	CA DOHS STANDARD: 0.1%
N/A	2984Y-122		CA-DOHS	1 PLSTIC DSH	N/A	N	TEM-1	CLAYTON	9-4909	4106709693	6/24/87	6/24/87	CA DOHS STANDARD: 5%

LEGEND:

SD=RIVER SEDIMENT
SW=SURFACE WATER
SS=SUBSURFACE SOIL
GW=GROUNDWATER
SL=SURFACE SOIL

AK=ANNE KELLY
BG=BILL GROVE
NB=NEIL BOTTS
TC=TODD CULP
CA DOHS=CALIFORNIA DEPARTME
OF HEALTH SERVICES

G=GLASS
Z-ZIPLOCK BAG

PLM=ASBESTOS-PLM
TEM-1=ASBESTOS-TEM LEVEL 1
MG=MOISTURE AND GRAIN SIZE

CLAYTON=CLAYTON ENVIRONMENT
CONSULTANTS

LOGS FOR WELLS AND SOIL BORINGS

SAMPLE COLLECTION DATA AND DESCRIPTIONS
SUBSURFACE SOIL
SOUTH BAY ASBESTOS SITE

HOLE NUMBER	SAMPLE COLLECTION DATA						SOIL DESCRIPTION		
	SAMPLE STATION NUMBER	DATE	TIME	SAMPLE INTERVAL DEPTH (ft)	RECOVERY (ft)	BLOWS/6" (Top to bottom)	DEPTH (feet)	SOIL TYPE	DESCRIPTION
MW-001	SS-MW-001-001	6-11-87	0935	0 - 1.5	1.2	3-9-10	0 - 0.7	Silty Clay	Dk. brown; very sightly moist to dry.
							0.7 - 1.0	Fill Material	White, cruably, contains streaks of black silty clay, moist.
							1.0 - 1.2	Fill Material	Includes silty clay, dk. and lt. brown; asbestos fibers, lt. gray; and rock fragments 1/8 - 1" diam. Spots of dk. orange iron stain throughout. Slightly moist.
	SS-MW-001-002	6-11-87	0950	3.5 - 5.0	1.5	1-2-2	3.5 - 4.2	Clay	Lt. brown; contains streaks of greenish black and med. brown clay, 1" thick; possible asbestos fibers in top 1"; very moist.
							4.2 - 5.0	Clay	Dk. greenish black and lt. green; contains minor grass fibers; very moist.
	SS-MW-001-003 (and duplicate SS-MW-001-004)	6-11-87	1010	8.0 - 9.5	1.5	3-4-7	8.0 - 9.4	Clay	Dk. brown; contains minor silt and minor roots; contains gray material, possibly asbestos, in top 1"; moist.
							9.4 - 9.5	Silty Clay	Lt. to med. brown; contains white particles, 1/16" diameter; moist.
MW-002	SS-MW-002-001 (and duplicate SS-MW-002-002)	6-11-87	1130	0-1.5	0.6	2-2-(50) refusal	0 - 0.2	Silty Clay	Dk. brown, contains roots and minor pebbles 1/8" diameter, moist.
							0.2 - 0.6	Clayey Silt	Med. brown; contains rots and rock fragments, subangular to very angular, 1/8 - 1/2" diameter; very dry. Refusal in concrete.
	SS-MW-002-003	6-11-87	1215	4.0 - 5.5	1.2	6-11-11	4.0 - 4.3	Clay	Dk. brown, minor roots, minor spots of med. orange iron oxide stain throughout, slightly moist.
							4.3 - 5.0	Clay	Med. brown, contains many rock fragments, subangular to very angular, 1/8 - 2" diameter, contains fragments of bottle glass and plastic; extensive med. orange iron oxide stain; dry.
							5.0 - 5.2	Clay	Green, interbedded with light and dark brown slightly silty clay; spots of med. orange iron oxide stain; slightly moist.
	SS-MW-002-004	6-11-87	1240	9.0 - 10.5	1.6	3-3-5	9.0 - 9.1	Silty Clay	Med. brown; contains rock fragments, subangular, 1/8 - 1.5" diameter, poorly consolidated; spots of light orange iron oxide stain; slightly moist.
							9.1 - 10.6	Clay	Dk. brown; contains rock fragments, angular, 3/8" diameter; lenses of silty clay, med. brown, in basal 3"; moist.
MW-003	SS-MW-003-001 (and duplicate SS-MW-003-004)	6-10-87	1020	2.5 - 4.0	0.6	9-5-3	2.5 - 3.1	Silty Clay	Dk. brown with black streaks, which appear to be oil staining. Contains sand, very coarse, and numerous rock fragments, rounded to very angular, 1/8 - 1.5" diameter; poorly consolidated. Very minor iron oxide stain in basal 1"; very slightly moist.

LEGEND:

SAMPLE DEPTHS MEASURED FROM GROUND SURFACE

SAMPLE COLLECTION DATA AND DESCRIPTIONS
SUBSURFACE SOIL
SOUTH BAY ASBESTOS SITE

HOLE NUMBER	SAMPLE COLLECTION DATA						SOIL DESCRIPTION		
	SAMPLE STATION NUMBER	DATE	TIME	SAMPLE INTERVAL DEPTH (ft)	RECOVERY (ft)	BLOWS/6" (Top to bottom)	DEPTH (feet)	SOIL TYPE	DESCRIPTION
	SS-MW-003-002	6-10-87	1040	3.5 - 5.0	1.0	2-5-5	3.5 - 4.5	Clay	Dk. brown, moist.
	SS-MW-003-003	6-10-87	1055	8.5 - 10.0	1.5	5-7-11	8.5 - 9.2	Clay	Med. to dark greenish brown. Contains very minor silt and minor pebbles, mod. to well rounded, 1/8 - 3/8" diameter. Med. reddish brown iron oxide stain throughout; moist.
							9.2 - 9.6	Silty Clay	Med. brown, contains pebbles, mod. to well rounded, 1/8 - 1/2" diameter. Light reddish brown iron oxide stain throughout; moist.
							9.6 - 10.0	Silty Clay	Med. greenish brown, iron oxide stain throughout, moist.
MW-004	SS-MW-004-001	6-8-87	1515	0 - 1.5	1.5	2-3-4	0 - 1.2	Silty Clay	Med. brown, contains pebbles 1/4" diameter, very sli. moist.
							1.2 - 1.5	Clay	Med. brown with light brown mottles, contains minor silt; poorly consolidated; very slightly moist.
	SS-MW-004-002	6-8-87	1345	4.0 - 5.5	1.1	3-7-10	4.4 - 4.8	Silty Clay	Med. blackish brown, contains minor sand, slightly moist.
							4.8 - 5.5	Silty Clay	Dk. blackish brown, contains minor sand, moist.
	SS-MW-004-003	6-8-87	1400	9.0 - 10.5	1.0	3-5-7	9.0 - 9.2	Silty Clay	Dk. brown, numerous spots of iron oxide stain, slightly moist.
							9.2 - 10.0	Silty Clay	Dk. brown, contains pebbles, rounded, up to 1 inch diameter, and minor roots; mottles of iron oxide stain throughout; moist.
	SS-MW-004-004	6-8-87	1415	14.0 - 15.5	1.2	3-3-5	14.0 - 15.2	Clay	Dk. brown, contains minor silt, several mottles of iron oxide stain, very moist.
	SS-MW-004-005	6-8-87	1425	19.0 - 20.5	1.2	2-2-4	19.0 - 19.2	Silty Clay	Med. brown; contains sand, light brown, fine to med. grained, micaceous; iron oxide stained, slightly moist.
							19.2 - 20.2	Clay	Dk. greenish black; contains minor silt; contains minor organic debris; moist.
	SS-MW-004-006	6-8-87	1435	24.0 - 25.5	1.1	2-2-3	24.0 - 24.2	Silty Clay	Dk. brown, contains sand, fine to med. grained.
							24.2 - 25.1	Clay	Greenish black, contains very minor silt and minor root fragments, saturated.

LEGEND:

SAMPLE DEPTHS MEASURED FROM GROUND SURFACE

SAMPLE COLLECTION DATA AND DESCRIPTIONS
SUBSURFACE SOIL
SOUTH BAY ASBESTOS SITE

HOLE NUMBER	SAMPLE COLLECTION DATA: SAMPLE STATION NUMBER	DATE	TIME	SAMPLE INTERVAL DEPTH (ft)	RECOVERY (ft)	BLOWS/6" (Top to bottom)	SOIL DESCRIPTION: DEPTH (feet)	SOIL TYPE	DESCRIPTION
MW-005	SS-MW-005-001	6-9-87	1425	0 - 1.5	1.5	4-4-4	0 - 0.2	Clayey Silt	Med. brown, crumbly, very dry.
							0.2 - 0.7	Clay	Dk. brown with black mottling, contains minor silt, crumbly, dry.
							0.7 - 1.2	Silty Clay	Med. brown, poorly consolidated, very slightly moist.
							1.2 - 1.5	Clay	Dk. brown with black mottling, contains minor silt.
	SS-MW-005-002	6-9-87	1445	4.0 - 5.5	1.2	4-6-5	4.0 - 4.4	Silty Clay	Med. brown, crumbly, minor iron oxide stain, slightly damp.
							4.4 - 4.7	Clay	Med. brown, crumbly, minor iron oxide stain, moist.
							4.7 - 5.2	Silty Clay	Lt. to med. brown; contains occas. pebble, black, 1/4" diameter; contains minor roots; slightly moist.
	SS-MW-005-003	6-9-87	1500	9.0 - 10.5	1.3	1-1-2	9.0 - 9.2	Clay	Lt. greenish gray; contains minor silt and minor brown clay; very moist.
							9.2 - 9.8	Clay	Black and greenish gray, plastic, contains occas. root; saturated.
							9.8 - 10.3	Silty Clay	Dk. brown to greenish black; minor brown clay; plastic and sticky, very moist.
BOR-006*	SS-BOR-006-001	7-14-87	1325	0 - 0.6	N/A	N/A	0 - 0.6	Clayey silt	Dk. brown, contains rock fragments 1/4 - 1/2" diameter, loose, dry. From perimeter of plowed field.
BOR-007	SS-BOR-007-001	6-12-87	1005	0 - 1.5	1.3	4-14-15	0 - 0.2	Clay	Dk. brown, contains minor silt and pebbles, angular to subangular, 1/4 - 3/4" diameter; contains occas. root; moist.
							0.2 - 0.8	Silty Clay	Med. to lt. brown, contains rock fragments, subangular to angular, 1/8 - 1" diam., roots throughout, crumbly, dry. 1/4" layer of dry grass at 0.4' depth.
							0.8 - 1.3	Fill Material	Lt. gray, contains very silty clay and lt. gray to white particles, possibly plaster, up to 1/2" diameter, contains glass and rock fragments up to 1" diameter. Root material throughout. Dry.
	SS-BOR-007-002	6-12-87	0940	4.0 - 5.5	1.3	4-4-6	4.0 - 4.1	Silty Clay	Med. brown, crumbly, slightly moist.
							4.1 - 5.3	Clay	Dk. brown, cohesive, moist. Cracks and voids in the sample from 5.0 - 5.3' are filled with small white crystals, possibly halite.

LEGEND:

SAMPLE DEPTHS MEASURED FROM GROUND SURFACE

* Boring 006 is a background sample; collected using 8" hand auger.

SAMPLE COLLECTION DATA AND DESCRIPTIONS
SUBSURFACE SOIL
SOUTH BAY ASBESTOS SITE

HOLE NUMBER	SAMPLE COLLECTION DATA: SAMPLE STATION NUMBER	DATE	TIME	SAMPLE INTERVAL DEPTH (ft)	RECOVERY (ft)	BLOWS/6" (Top to bottom)	SOIL DESCRIPTION: DEPTH (feet)	SOIL TYPE	DESCRIPTION
BOR-007	SS-BOR-007-003	6-12-87	0955	9.0 - 10.5	1.3	4-8-9	9.0 - 10.3	Clay	Med. brown at base grading to dark brown at top; contains minor silt. Upper 0.8' has green and black mottling, lower 0.5' has light orange iron oxide stain.
BOR-008	SS-BOR-008-001	6-12-87	1050	0 - 1.5	1.2	5-9-9	0 - 0.3	Silty Clay	Lt. brown and lt. gray; contains numerous rock fragments, angular to subangular, 1/4 - 1" diameter; minor roots in upper 0.2'; at 0.3', composed of >50% white particles, possibly plaster.
							0.3 - 0.9	Silty Clay	Med. to dark brown; contains rock fragments 1/8 - 1" diam., very angular to subrounded; very hard; occas. 1/4" diam. mottles of lt. orange iron oxide stain; very slightly moist.
							0.9 - 1.2	Asphalt	Black, fragmented.
	SS-BOR-008-002	6-12-87	1105	3.5 - 5.0	1.1	3-6-6	3.5 - 4.6	Clay	Dk. brown, moist.
	SS-BOR-008-003	6-12-87	1120	8.5 - 10.0	1.5	4-11-14	8.5 - 10.0	Clay	Lt. greenish gray and med. orange, moist.
BOR-009	SS-BOR-009-001	6-16-87	1100	0 - 1.5	1.2	4-3-4	0 - 0.2	Silty Clay	Lt. brown; contains 35% rock fragments, rounded to very angular, 1/8 - 1" diam.; contains roots; crumbly; dry.
							0.2 - 1.2	Clay	Dk. greenish brown, contains minor silt and rock fragments, subangular to angular, 1/8 - 1.5" diam.; several mottles of lt. orange iron stain; moderately moist.
	SS-BOR-009-002	6-16-87	1115	4.0 - 5.5	1.4	1-1-2	4.0 - 4.2	Silty Clay	Lt. brown; contains minor sand; contains rock fragments, subangular to angular, 1/4 - 1" diam.; contains occas. concrete frags. up to 1" diam.; crumbly; small mottles med. orange iron stain; very slightly moist. Lower contact is irregular but very distinct.
							4.2 - 5.4	Clay	Dk. greenish black, contains minor root matter. Occas. fragments of glass, wood. Extremely micaceous at 4.4'. Very plastic, sticky, saturated.
	SS-BOR-009-003	6-16-87	1145	9.0 - 10.5	1.2	2-4-6	9.0 - 9.1	Silty Clay	Med. brown; contains 40% rock fragments, angular, 1/8 - 1/4" diam, and minor sand; medium dense, slightly moist. Lower contact abrupt.
							9.1 - 10.2	Clay	Dk. brown; contains occas. particles of green material up to 1/8" diam.; moist.
BOR-010	SS-BOR-010-001	6-15-87	0955	1.0 - 2.5	1.2	6-5-6	1.0 - 1.2	Clay	Black, very hard, very slightly moist.

LEGEND:

SAMPLE DEPTHS MEASURED FROM GROUND SURFACE

SAMPLE COLLECTION DATA AND DESCRIPTIONS
SUBSURFACE SOIL
SOUTH BAY ASBESTOS SITE

HOLE NUMBER	SAMPLE COLLECTION DATA						SOIL DESCRIPTION		
	SAMPLE STATION NUMBER	DATE	TIME	SAMPLE INTERVAL DEPTH (ft)	RECOVERY (ft)	BLOWS/6" (Top to bottom)	DEPTH (feet)	SOIL TYPE	DESCRIPTION
BOR-010							1.2 - 2.2	Clay	Dk. brown, contains silt, contains numerous rock fragments 1/16 - 1/2" diameter; hard; slightly moist.
	SS-BOR-010-002 (and duplicate SS-BOR-010-004)	6-15-87	1005	3.5 - 5.0	0.7	6-3-6	3.5 - 3.8	Clay	Dk. brown; contains silt, sand, and rock fragments, angular; minor lt. orange iron stain, moist.
							3.8 - 4.2	Asphalt	Black, fragmented, contains rock fragments 1/16 - 1" diam.
	SS-BOR-010-003	6-15-87	1020	8.5 - 10.0	1.4	4-6-11	8.5 - 9.2	Clay	Dk. brown to black, moist.
							9.2 - 9.9	Clay	Med. to dk. brown, extensive med. orange iron stain, slightly moist.
BOR-011	SS-BOR-011-001 (and duplicate SS-BOR-011-004)	6-15-87	1135	0 - 1.5	1.2	3-7-8	0 - 0.4	Silty Clay	Dk. brown; contains rock fragments, angular to subrounded, 1/8 - 1" diam; contains minor roots; crumbly; slightly moist.
							0.4 - 1.2	Clay	Med. brown; contains minor silt; contains occas. rock frag. up to 1.5" diam.; contains white material, possibly plaster, at 0.7'; contains roots at base; hard; slightly moist.
	SS-BOR-011-002	6-15-87	1150	4.0 - 5.5	1.1	5-8-7	4.0 - 5.1	Clay	Dk. brown; contains small white particles throughout,possibly plaster; hard; slightly moist.
	SS-BOR-011-003	6-15-87	1200	9.0 - 10.5	0.9	5-5-4	9.0 - 9.9	Clay	Med. brown; contains minor silt; contains rock fragments, angular,1/2" diam.; 1/2" thick lense of clayey sand, med. to coarse grained, at 0.7'; several black mottles, occas. lt. orange stain; saturated.
63	SS-63-001	10-26-87	1030	0 - 1.0	1.0	N/A	0 - 1.0	Soil	Lt. to med. brown and med. gray, contains abundant pebbles up to 1" diam., some are serpentine.
	SS-63-002	10-26-87	1120	8.5 - 11.5	1.0	N/A	8.5 - 11.5	Rubble	Composed of large concrete fragments and minor loose fill soil, lt. to dark gray, silt to gravel size particles. Recovery of 1' is believed to be representative of interval from 8.5 to 11.5'.
64	SS-64-001	10-27-87	0915	0 - 3.0	2.8	N/A	0 - 1.0	Silty Sand	Med. brown, contains abundant pebbles up to 2" diam.
							1.0 - 2.0	Clayey Sand	Med. brown, contains silt and abundant pebbles up to 2" diam. Numerous serpentine rock fragments at 2.0'.
							2.0 - 3.0	Asphalt	Black, fragmented.

LEGEND:

SAMPLE DEPTHS MEASURED FROM GROUND SURFACE

SAMPLE COLLECTION DATA AND DESCRIPTIONS
SUBSURFACE SOIL
SOUTH BAY ASBESTOS SITE

HOLE NUMBER	SAMPLE COLLECTION DATA						SOIL DESCRIPTION		
	SAMPLE STATION NUMBER	DATE	TIME	SAMPLE INTERVAL DEPTH (ft)	RECOVERY (ft)	BLOWS/6" (Top to bottom)	DEPTH (feet)	SOIL TYPE	DESCRIPTION
65	SS-65-001	10-27-87	1545	0 - 1.2	1.2	N/A	0 - 1.2	Fill Soil	Med. brown and gray, contains abundant pebbles, up to 1" diam., and wood fragments. Minor dry grass fibers at top. Abundant concrete at base. Dry.
	SS-65-002	10-28-87	1000	16.4 - 16.5	0.1	N/A	16.4 - 16.5	Wood debris and wire	Med. brown and gray. Wood debris is coated with white powdery substance.
	SS-65-003	10-28-87	1005	16.5 - 18.0	0.7	8-40-43	16.5 - 18.0	Clayey Silt	Dk. brown and black. Abundant wood fragments and sheet metal scraps.
611	SS-611-001	10-28-87	1520	0 - 1.5	1.5	N/A	0 - 0.3	Sandy Silt	Med. brown, contains clay.
							0.3 - 1.5	Fill Soil	Med. brown, contains numerous pebbles up to 2.75" diam. Pebbles include concrete and asphalt. Abundant shredded black plastic. Dry.
	SS-611-002	10-28-87	1600	6.0 - 8.0	1.5	N/A	6.0 - 7.5	Fill Material	Dark gray. Includes pebbles, wood fragments, and concrete.
66	SS-66-001	10-29-87	1415	0 - 1.5	1.5	N/A	0 - 1.5	Fill dirt	Dk. brown, includes pebbles, brick fragments, styrofoam, and dried grass fibers. Slightly damp.
	SS-66-002	10-29-87	1445	4.5 - 5.5	1.0	N/A	4.5 - 5.5	Fill Material	Material includes wood, carpet pad, pebbles up to 1.5" diam., and asbestos cement.
69	SS-69-001	10-30-87	1200	0 - 1.5	1.5	N/A	0 - 0.2	Clay	Dk. brown, contains dried grass fibers, moist.
							0.2 - 1.5	Clayey Sand	Lt. brown, contains abundant pebbles and roots.
	SS-69-002	10-30-87	1220	3.3 - 5.3	2.0	N/A	3.3 - 4.0	Silty Clay	Med. brown, contains sand throughout, contains possible wood chips, up to 0.3" diam. Layer of dried grass at 3.3'. Dry.
							4.0 - 5.3	Clay	Tan, dense, moist.

LEGEND:

SAMPLE DEPTHS MEASURED FROM GROUND SURFACE

FIELD MEASUREMENTS FOR WATER SAMPLES

FIELD MEASUREMENTS AND WELL EVACUATION DATA
SURFACE WATER AND GROUND WATER
SOUTH BAY ASBESTOS SITE

WELL NUMBER	SAMPLE STATION	DATE SAMPLED	FIELD MEASUREMENTS: TEMPERATURE (C)	FIELD MEASUREMENTS: ELECTRICAL CONDUCTIVITY (umhos/cm)	FIELD MEASUREMENTS: pH	FIELD MEASUREMENTS: SALINITY (%)	WELL EVACUATION DATA: SWL (feet)	WELL EVACUATION DATA: WELL DEPTH (feet)	WELL EVACUATION DATA: PURGE VOLUME (gallons)	WELL EVACUATION DATA: EVACUATION METHOD	COMMENTS
	SW-001-001	05/21/87	19.5	870	7.30	0.2	N/A	N/A	N/A	N/A	Highway 237 Bridge
	SW-002-001	05/21/87	19.8	950	7.05	0.2	N/A	N/A	N/A	N/A	Gold Street Bridge
	SW-002-002	05/21/87	19.8	950	7.05	0.2	N/A	N/A	N/A	N/A	Duplicate of SW-002-002
	SW-003-001	05/21/87	--	--	--	--	N/A	N/A	N/A	N/A	Rinsate Blank
MW-001	GW-001-001	06/25/87	18.9	26,200	6.53	17.7	7.1	15.5	25.0	Fultz Pump	North of levee, east of Gold St.
MW-001	GW-001-002	10/07/87	20.3	27,200	6.85	17.4	6.9	15.5	20.0	Bailer	North of levee, east of Gold St.
MW-002	GW-002-001	06/25/87	20.0	37,000	6.72	25.5	7.5	15.0	20.0	Bailer	Near RR Tracks, north of levee
MW-002	GW-002-002	10/07/87	20.2	36,800	6.83	25.5	7.7	15.0	20.0	Bailer	Near RR Tracks, north of levee
MW-002	GW-002-003	10/07/87	20.2	36,800	6.83	25.5	7.7	15.0	20.0	Bailer	Duplicate of GW-002-002
MW-003	GW-005-001	06/24/87	20.6	3,930	7.16	2.4	6.5	14.3	25.0	Fultz Pump	Near east end of Moffat St.
MW-003	GW-005-002	06/24/87	20.6	3,930	7.16	2.4	6.5	14.3	25.0	Fultz Pump	Duplicate of GW-005-001
MW-003	GW-003-002	10/08/87	21.5	4,090	7.53	2.6	7.2	14.3	18.0	Bailer	Near east end of Moffat St.
MW-004	GW-004-001	06/26/87	19.3	24,800	6.75	16.5	20.0	29.0	15.0	Bailer	Eastern well on levee; evacuated 6-25-87
MW-004	GW-005-003	10/08/87	18.0	22,900	6.96	16.1	20.0	29.0	18.0	Bailer	Eastern well on levee
MW-005	GW-003-001	06/26/87	19.2	16,800	6.36	11.4	12.0	20.5	24.0	Bailer	On levee near gate
MW-005	GW-004-002	10/08/87	20.0	16,100	6.68	12.2	12.0	20.5	17.0	Bailer	On levee near gate
	GW-006-001	06/24/87	--	--	--	--	N/A	N/A	N/A	N/A	Rinsate Blank
	GW-006-002	10/07/87	--	--	--	--	N/A	N/A	N/A	N/A	Rinsate Blank
	GW-006-003	10/16/87	--	--	--	--	N/A	N/A	N/A	N/A	Field Blank
	GW-013-001	06/25/87	--	--	--	--	N/A	N/A	N/A	N/A	Rinsate Blank
	GW-013-002	10/08/87	--	--	--	--	N/A	N/A	N/A	N/A	Rinsate Blank
	GW-013-003	10/17/87	--	--	--	--	N/A	N/A	N/A	N/A	Field Blank
	GW-014-001	06/26/87	--	--	--	--	N/A	N/A	N/A	N/A	Rinsate Blank
G3	GW-G3-001	10/16/87	19.5	13,000	7.61	--	10.4	20.0	7.0	Bladder Pump	North of landfill
G5	GW-G5-001	10/17/87	22.8	14,370	6.61	--	24.6	32.5	6.5	Bladder Pump	East of landfill
G5	GW-G5-002	10/17/87	22.8	14,370	6.61	--	24.6	32.5	6.5	Bladder Pump	East of landfill
G6	GW-G6-001	10/17/87	20.7	>20,000	6.30	--	7.3	15.5	2.5	Bladder Pump	Organics sample; south of landfill
G6	GW-G6-002	10/18/87	--	--	--	--	--	15.5	N/A	N/A	Inorganics sample; south of landfill
G9	GW-G9-001	10/18/87	U	U	U	--	U	U	U	Bailer	VOA sample; SW of landfill; evacuated 11-17-87
G11	GW-G11-001	10/16/87	25.9	16250	6.96	--	8.0	17.5	6.5	Bladder Pump	Northwest of landfill

LEGEND:

SWL = STANDING WATER LEVEL, MEASURED FROM NORTH SIDE OF PROTECTIVE CASING

* WELL DEPTH MEASURED FROM GROUND SURFACE

-- = NOT MEASURED

U = DATA UNAVAILABLE

APPENDIX H

METEOROLOGICAL DATA SUMMARIES

10 METER WIND DATA ANALYSIS

FROM 205/87 THROUGH 305/87

SOUTH BAY ASBESTOS PROJECT

FREQUENCY OF OCCURRENCE OF WIND SPEED BY DIRECTION

DIR	+-----------WIND SPEED CLASSES (M/S)------------+							AVERA WIND SPEE
	0.- 2.	2.- 3.	3.- 5.	5.- 8.	8.-11.	>11.	TOTAL	
N	.0110	.0617	.0284	.0055	.0000	.0000	.1065	3.0
NNE	.0050	.0144	.0000	.0000	.0000	.0000	.0194	1.9
NE	.0060	.0040	.0000	.0000	.0000	.0000	.0100	1.5
ENE	.0020	.0040	.0000	.0000	.0000	.0000	.0060	1.7
E	.0085	.0005	.0000	.0000	.0000	.0000	.0090	1.1
ESE	.0065	.0055	.0000	.0000	.0000	.0000	.0119	1.5
SE	.0174	.0299	.0000	.0000	.0000	.0000	.0473	1.8
SSE	.0124	.0329	.0035	.0000	.0000	.0000	.0488	2.1
S	.0134	.0224	.0010	.0000	.0000	.0000	.0368	1.9
SSW	.0080	.0050	.0000	.0000	.0000	.0000	.0129	1.4
SW	.0055	.0060	.0020	.0000	.0000	.0000	.0134	2.0
WSW	.0035	.0055	.0005	.0005	.0000	.0000	.0100	2.2
W	.0085	.0194	.0070	.0005	.0000	.0000	.0353	2.5
WNW	.0070	.0592	.0557	.0194	.0000	.0000	.1414	3.8
NW	.0139	.1125	.0886	.0841	.0060	.0000	.3051	4.3
NNW	.0100	.0876	.0443	.0423	.0020	.0000	.1862	3.9
TOTAL	.1384	.4704	.2310	.1523	.0080	.0000	1.000	
AVER	1.0	2.4	4.4	6.8	9.0	.0		3.3

CALMS AND VARIABLES FOR THIS TABLE => 78
(CALMS AND VARIIABLE DIRECTIONS ARE COUNTED IN AVERAGE
WIND SPEED BUT NOT IN FREQUENCY COUNTS)

TOTAL NUMBER OF VALID READINGS FOR THIS TABLE => 2087
OUT OF NUMBER READ => 2391
("VALID" INCLUDES CALMS)

10 METER WIND DATA ANALYSIS

FROM 205/87 THROUGH 305/87

SOUTH BAY ASBESTOS PROJECT

FREQUENCY OF OCCURRENCE OF WIND SPEED BY DIRECTION
STABILITY CLASS A FOR SIGMA THETA

DIR	WIND SPEED CLASSES (M/S) 0.- 2.	2.- 3.	3.- 5.	5.- 8.	8.-11.	>11.	TOTAL	AVERAGE WIND SPEED
N	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0
NNE	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0
NE	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0
ENE	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0
E	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0
ESE	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0
SE	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0
SSE	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0
S	.0000	.0005	.0000	.0000	.0000	.0000	.0005	2.0
SSW	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0
SW	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0
WSW	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0
W	.0000	.0000	.0005	.0000	.0000	.0000	.0005	4.0
WNW	.0000	.0036	.0123	.0050	.0000	.0000	.0209	4.6
NW	.0009	.0091	.0086	.0055	.0000	.0000	.0241	4.0
NNW	.0000	.0009	.0009	.0005	.0000	.0000	.0023	3.8
TOTAL	.0009	.0141	.0223	.0109	.0000	.0000	.048	
AVER	1.0	2.5	4.6	6.0	.0	.0		4.3

TOTAL NUMBER OF VALID READINGS FOR THIS TABLE => 106
OUT OF NUMBER READ => 2391
"VALID" DOES NOT INCLUDE CALMS OR ANY MISSING STABILITY

10 METER WIND DATA ANALYSIS

FROM 205/87 THROUGH 305/87

SOUTH BAY ASBESTOS PROJECT

FREQUENCY OF OCCURRENCE OF WIND SPEED BY DIRECTION
STABILITY CLASS B FOR SIGMA THETA

DIR	WIND SPEED CLASSES (M/S)							AVERA WIND SPEE
	0.- 2.	2.- 3.	3.- 5.	5.- 8.	8.-11.	>11.	TOTAL	
N	.0009	.0118	.0068	.0045	.0000	.0000	.0241	3.7
NNE	.0000	.0009	.0000	.0000	.0000	.0000	.0009	2.0
NE	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0
ENE	.0005	.0000	.0000	.0000	.0000	.0000	.0005	1.0
E	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0
ESE	.0000	.0009	.0000	.0000	.0000	.0000	.0009	2.0
SE	.0005	.0005	.0000	.0000	.0000	.0000	.0009	2.0
SSE	.0000	.0005	.0005	.0000	.0000	.0000	.0009	4.0
S	.0009	.0018	.0000	.0000	.0000	.0000	.0027	2.0
SSW	.0000	.0005	.0000	.0000	.0000	.0000	.0005	2.0
SW	.0000	.0005	.0000	.0000	.0000	.0000	.0005	3.0
WSW	.0000	.0005	.0000	.0000	.0000	.0000	.0005	2.0
W	.0014	.0014	.0005	.0000	.0000	.0000	.0032	2.0
WNW	.0018	.0246	.0227	.0055	.0000	.0000	.0546	3.6
NW	.0018	.0314	.0264	.0141	.0000	.0000	.0737	3.8
NNW	.0009	.0045	.0041	.0032	.0000	.0000	.0127	4.0
TOTAL	.0086	.0796	.0610	.0273	.0000	.0000	.177	
AVER	1.0	2.5	4.6	6.0	.0	.0		3.7

TOTAL NUMBER OF VALID READINGS FOR THIS TABLE => 388
OUT OF NUMBER READ => 2391
"VALID" DOES NOT INCLUDE CALMS OR ANY MISSING STABILITY

10 METER WIND DATA ANALYSIS

FROM 205/87 THROUGH 305/87

SOUTH BAY ASBESTOS PROJECT

FREQUENCY OF OCCURRENCE OF WIND SPEED BY DIRECTION
STABILITY CLASS C FOR SIGMA THETA

DIR	WIND SPEED CLASSES (M/S) 0.- 2.	2.- 3.	3.- 5.	5.- 8.	8.-11.	≥11.	TOTAL	AVERAGE WIND SPEED
N	.0082	.0127	.0005	.0000	.0000	.0000	.0214	1.8
NNE	.0009	.0014	.0000	.0000	.0000	.0000	.0023	1.6
NE	.0014	.0005	.0000	.0000	.0000	.0000	.0018	1.3
ENE	.0000	.0005	.0000	.0000	.0000	.0000	.0005	2.0
E	.0014	.0005	.0000	.0000	.0000	.0000	.0018	1.3
ESE	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0
SE	.0014	.0045	.0000	.0000	.0000	.0000	.0059	2.0
SSE	.0014	.0041	.0014	.0000	.0000	.0000	.0068	2.4
S	.0023	.0055	.0005	.0000	.0000	.0000	.0082	2.3
SSW	.0005	.0000	.0000	.0000	.0000	.0000	.0005	1.0
SW	.0005	.0009	.0014	.0000	.0000	.0000	.0027	3.2
WSW	.0009	.0000	.0005	.0005	.0000	.0000	.0018	3.3
W	.0018	.0027	.0018	.0000	.0000	.0000	.0064	2.6
WNW	.0014	.0114	.0032	.0000	.0000	.0000	.0159	2.8
NW	.0041	.0214	.0064	.0027	.0000	.0000	.0346	2.9
NNW	.0027	.0159	.0032	.0005	.0000	.0000	.0223	2.6
TOTAL	.0287	.0819	.0187	.0036	.0000	.0000	.133	
AVER	1.0	2.4	4.5	6.0	.0	.0		2.5

TOTAL NUMBER OF VALID READINGS FOR THIS TABLE => 292
OUT OF NUMBER READ => 2391
"VALID" DOES NOT INCLUDE CALMS OR ANY MISSING STABILITY

10 METER WIND DATA ANALYSIS

FROM 205/87 THROUGH 305/87

SOUTH BAY ASBESTOS PROJECT

FREQUENCY OF OCCURRENCE OF WIND SPEED BY DIRECTION
STABILITY CLASS D FOR SIGMA THETA

DIR	WIND SPEED CLASSES (M/S) 0.- 2.	2.- 3.	3.- 5.	5.- 8.	8.-11.	>11.	TOTAL	AVERA WIND SPEE
N	.0005	.0305	.0369	.0159	.0000	.0000	.0837	4.3
NNE	.0000	.0032	.0000	.0000	.0000	.0000	.0032	3.0
NE	.0000	.0005	.0000	.0000	.0000	.0000	.0005	3.0
ENE	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0
E	.0005	.0000	.0000	.0000	.0000	.0000	.0005	1.0
ESE	.0005	.0009	.0000	.0000	.0000	.0000	.0014	2.0
SE	.0018	.0073	.0000	.0000	.0000	.0000	.0091	2.2
SSE	.0014	.0077	.0014	.0000	.0000	.0000	.0105	2.7
S	.0005	.0041	.0005	.0000	.0000	.0000	.0050	2.7
SSW	.0005	.0005	.0000	.0000	.0000	.0000	.0009	2.0
SW	.0000	.0005	.0005	.0000	.0000	.0000	.0009	3.5
WSW	.0000	.0018	.0000	.0000	.0000	.0000	.0018	3.0
W	.0005	.0059	.0036	.0005	.0000	.0000	.0105	3.6
WNW	.0000	.0064	.0127	.0073	.0000	.0000	.0264	4.9
NW	.0000	.0200	.0396	.0546	.0055	.0000	.1197	5.6
NNW	.0000	.0241	.0323	.0346	.0018	.0000	.0928	5.1
TOTAL	.0059	.1133	.1274	.1128	.0073	.0000	.367	
AVER	1.0	2.9	4.3	7.0	9.0	.0		4.8

TOTAL NUMBER OF VALID READINGS FOR THIS TABLE => 806
OUT OF NUMBER READ => 2391
"VALID" DOES NOT INCLUDE CALMS OR ANY MISSING STABILITY

10 METER WIND DATA ANALYSIS

FROM 205/87 THROUGH 305/87

SOUTH BAY ASBESTOS PROJECT

FREQUENCY OF OCCURRENCE OF WIND SPEED BY DIRECTION
STABILITY CLASS E FOR SIGMA THETA

DIR	WIND SPEED CLASSES (M/S) 0.- 2.	2.- 3.	3.- 5.	5.- 8.	8.-11.	>11.	TOTAL	AVERAGE WIND SPEED
N	.0150	.0378	.0000	.0000	.0000	.0005	.0532	9.3
NNE	.0036	.0077	.0000	.0000	.0000	.0000	.0114	1.7
NE	.0041	.0027	.0000	.0000	.0000	.0000	.0068	1.4
ENE	.0009	.0032	.0000	.0000	.0000	.0000	.0041	1.8
E	.0045	.0000	.0000	.0000	.0000	.0000	.0045	1.0
ESE	.0050	.0023	.0000	.0000	.0000	.0000	.0073	1.3
SE	.0105	.0105	.0000	.0000	.0000	.0000	.0209	1.5
SSE	.0059	.0150	.0000	.0000	.0000	.0000	.0209	1.7
S	.0073	.0068	.0000	.0000	.0000	.0000	.0141	1.5
SSW	.0059	.0027	.0000	.0000	.0000	.0000	.0086	1.3
SW	.0041	.0027	.0000	.0000	.0000	.0000	.0068	1.4
WSW	.0014	.0027	.0000	.0000	.0000	.0000	.0041	1.7
W	.0036	.0059	.0000	.0000	.0000	.0000	.0096	1.7
WNW	.0023	.0050	.0000	.0000	.0000	.0000	.0073	1.7
NW	.0041	.0141	.0000	.0000	.0000	.0000	.0182	1.9
NNW	.0050	.0296	.0000	.0000	.0000	.0000	.0346	1.9
TOTAL	.0833	.1488	.0000	.0000	.0000	.0005	.232	
AVER	1.0	2.0	.0	.0	.0	888.0		3.4

TOTAL NUMBER OF VALID READINGS FOR THIS TABLE => 511
OUT OF NUMBER READ => 2391
"VALID" DOES NOT INCLUDE CALMS OR ANY MISSING STABILITY

10 METER WIND DATA ANALYSIS

FROM 205/87 THROUGH 305/87

SOUTH BAY ASBESTOS PROJECT

FREQUENCY OF OCCURRENCE OF WIND SPEED BY DIRECTION
STABILITY CLASS F FOR SIGMA THETA

DIR	+----------WIND SPEED CLASSES (M/S)------------+						TOTAL	AVERA WIND SPEE
	0.- 2.	2.- 3.	3.- 5.	5.- 8.	8.-11.	>11.		
N	.0005	.0005	.0000	.0000	.0000	.0000	.0009	1.5
NNE	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0
NE	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0
ENE	.0005	.0000	.0000	.0000	.0000	.0000	.0005	1.0
E	.0014	.0000	.0000	.0000	.0000	.0000	.0014	1.0
ESE	.0005	.0009	.0000	.0000	.0000	.0000	.0014	1.7
SE	.0018	.0045	.0000	.0000	.0000	.0000	.0064	1.7
SSE	.0027	.0027	.0000	.0000	.0000	.0000	.0055	1.5
S	.0014	.0018	.0000	.0000	.0000	.0000	.0032	1.6
SSW	.0005	.0009	.0000	.0000	.0000	.0000	.0014	1.7
SW	.0005	.0009	.0000	.0000	.0000	.0000	.0014	1.7
WSW	.0009	.0000	.0000	.0000	.0000	.0000	.0009	1.0
W	.0005	.0018	.0000	.0000	.0000	.0000	.0023	1.8
WNW	.0009	.0032	.0000	.0000	.0000	.0000	.0041	1.8
NW	.0018	.0068	.0000	.0000	.0000	.0000	.0086	1.8
NNW	.0005	.0050	.0000	.0000	.0000	.0000	.0055	1.9
	-----	-----	-----	-----	-----	-----	-----	-----
TOTAL	.0141	.0291	.0000	.0000	.0000	.0000	.043	
AVER	1.0	2.0	.0	.0	.0	.0		1.7

TOTAL NUMBER OF VALID READINGS FOR THIS TABLE => 95
OUT OF NUMBER READ => 2391
"VALID" DOES NOT INCLUDE CALMS OR ANY MISSING STABILITY

10 METER WIND DATA ANALYSIS

FROM 205/87 THROUGH 305/87

SOUTH BAY ASBESTOS PROJECT

FREQUENCY OF OCCURRENCE OF WIND SPEED BY DIRECTION
HOURS 0000 THROUGH 0400

DIR	WIND SPEED CLASSES (M/S) 0.- 2.	2.- 3.	3.- 5.	5.- 8.	8.-11.	>11.	TOTAL	AVERAGE WIND SPEED
N	.0063	.0857	.0603	.0000	.0000	.0000	.1524	3.0
NNE	.0159	.0317	.0000	.0000	.0000	.0000	.0476	1.9
NE	.0063	.0127	.0000	.0000	.0000	.0000	.0190	1.8
ENE	.0000	.0063	.0000	.0000	.0000	.0000	.0063	2.0
E	.0222	.0000	.0000	.0000	.0000	.0000	.0222	1.0
ESE	.0127	.0095	.0000	.0000	.0000	.0000	.0222	1.6
SE	.0476	.0667	.0000	.0000	.0000	.0000	.1143	1.6
SSE	.0222	.0730	.0032	.0000	.0000	.0000	.0984	2.0
S	.0317	.0286	.0032	.0000	.0000	.0000	.0635	1.7
SSW	.0159	.0159	.0000	.0000	.0000	.0000	.0317	1.5
SW	.0159	.0159	.0000	.0000	.0000	.0000	.0317	1.6
WSW	.0127	.0063	.0000	.0000	.0000	.0000	.0190	1.5
W	.0063	.0286	.0127	.0000	.0000	.0000	.0476	2.8
WNW	.0032	.0190	.0095	.0000	.0000	.0000	.0317	3.1
NW	.0190	.0794	.0190	.0000	.0000	.0000	.1175	2.4
NNW	.0127	.1365	.0254	.0000	.0000	.0000	.1746	2.5
TOTAL	.2508	.6159	.1333	.0000	.0000	.0000	1.000	
AVER	1.0	2.3	4.2	.0	.0	.0		2.0

CALMS AND VARIABLES FOR THIS TABLE => 27
(CALMS AND VARIIABLE DIRECTIONS ARE COUNTED IN AVERAGE
WIND SPEED BUT NOT IN FREQUENCY COUNTS)
FREQUENCY DETERMINED FROM THIS 4-HOUR PERIOD ONLY.

TOTAL NUMBER OF VALID READINGS FOR THIS TABLE => 342
OUT OF NUMBER READ => 2391
("VALID" INCLUDES CALMS)

10 METER WIND DATA ANALYSIS

FROM 205/87 THROUGH 305/87

SOUTH BAY ASBESTOS PROJECT

FREQUENCY OF OCCURRENCE OF WIND SPEED BY DIRECTION
HOURS 0400 THROUGH 0800

DIR	+----------WIND SPEED CLASSES (M/S)----------+							AVERA(WIND SPEE)
	0.- 2.	2.- 3.	3.- 5.	5.- 8.	8.-11.	>11.	TOTAL	
N	.0126	.0409	.0000	.0000	.0000	.0000	.0535	1.9
NNE	.0094	.0220	.0000	.0000	.0000	.0000	.0314	1.7
NE	.0189	.0031	.0000	.0000	.0000	.0000	.0220	1.1
ENE	.0094	.0094	.0000	.0000	.0000	.0000	.0189	1.5
E	.0252	.0031	.0000	.0000	.0000	.0000	.0283	1.1
ESE	.0283	.0126	.0000	.0000	.0000	.0000	.0409	1.3
SE	.0440	.0818	.0000	.0000	.0000	.0000	.1258	1.9
SSE	.0377	.0912	.0126	.0000	.0000	.0000	.1415	2.1
S	.0377	.0597	.0031	.0000	.0000	.0000	.1006	1.9
SSW	.0252	.0094	.0000	.0000	.0000	.0000	.0346	1.4
SW	.0157	.0094	.0031	.0000	.0000	.0000	.0283	1.7
WSW	.0031	.0126	.0000	.0000	.0000	.0000	.0157	1.8
W	.0157	.0314	.0000	.0000	.0000	.0000	.0472	1.9
WNW	.0126	.0377	.0126	.0000	.0000	.0000	.0629	2.4
NW	.0252	.0597	.0283	.0000	.0000	.0000	.1132	2.6
NNW	.0157	.1132	.0063	.0000	.0000	.0000	.1352	2.3
TOTAL	.3365	.5975	.0660	.0000	.0000	.0000	1.000	
AVER	1.0	2.3	4.1	.0	.0	.0		1.8

CALMS AND VARIABLES FOR THIS TABLE => 30
(CALMS AND VARIIABLE DIRECTIONS ARE COUNTED IN AVERAGE
WIND SPEED BUT NOT IN FREQUENCY COUNTS)
FREQUENCY DETERMINED FROM THIS 4-HOUR PERIOD ONLY.

TOTAL NUMBER OF VALID READINGS FOR THIS TABLE => 348
OUT OF NUMBER READ => 2391
("VALID" INCLUDES CALMS)

10 METER WIND DATA ANALYSIS

FROM 205/87 THROUGH 305/87

SOUTH BAY ASBESTOS PROJECT

FREQUENCY OF OCCURRENCE OF WIND SPEED BY DIRECTION
HOURS 0800 THROUGH 1200

DIR	WIND SPEED CLASSES (M/S)							AVERAGE WIND SPEED
	0.- 2.	2.- 3.	3.- 5.	5.- 8.	8.-11.	>11.	TOTAL	
N	.0348	.0609	.0029	.0000	.0000	.0000	.0986	1.8
NNE	.0029	.0116	.0000	.0000	.0000	.0000	.0145	1.8
NE	.0029	.0029	.0000	.0000	.0000	.0000	.0058	1.5
ENE	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0
E	.0029	.0000	.0000	.0000	.0000	.0000	.0029	1.0
ESE	.0000	.0029	.0000	.0000	.0000	.0000	.0029	2.0
SE	.0116	.0174	.0000	.0000	.0000	.0000	.0290	1.6
SSE	.0058	.0116	.0029	.0000	.0000	.0000	.0203	2.1
S	.0087	.0290	.0000	.0000	.0000	.0000	.0377	2.4
SSW	.0029	.0029	.0000	.0000	.0000	.0000	.0058	1.5
SW	.0029	.0029	.0058	.0000	.0000	.0000	.0116	3.3
WSW	.0029	.0029	.0029	.0029	.0000	.0000	.0116	3.5
W	.0174	.0203	.0029	.0000	.0000	.0000	.0406	1.9
WNW	.0116	.1710	.0290	.0000	.0000	.0000	.2116	2.8
NW	.0232	.2899	.0580	.0058	.0000	.0000	.3768	2.7
NNW	.0174	.0899	.0203	.0029	.0000	.0000	.1304	2.6
	-----	-----	-----	-----	-----	-----	-----	-----
TOTAL	.1478	.7159	.1246	.0116	.0000	.0000	1.000	
AVER	1.0	2.4	4.3	6.8	.0	.0		2.5

CALMS AND VARIABLES FOR THIS TABLE => 4
(CALMS AND VARIIABLE DIRECTIONS ARE COUNTED IN AVERAGE
WIND SPEED BUT NOT IN FREQUENCY COUNTS)
FREQUENCY DETERMINED FROM THIS 4-HOUR PERIOD ONLY.

TOTAL NUMBER OF VALID READINGS FOR THIS TABLE => 349
OUT OF NUMBER READ => 2391
("VALID" INCLUDES CALMS)

10 METER WIND DATA ANALYSIS

FROM 205/87 THROUGH 305/87

SOUTH BAY ASBESTOS PROJECT

FREQUENCY OF OCCURRENCE OF WIND SPEED BY DIRECTION
HOURS 1200 THROUGH 1600

DIR	+----------- WIND SPEED CLASSES (M/S) ------------+						TOTAL	AVERA WIND SPEE
	0.- 2.	2.- 3.	3.- 5.	5.- 8.	8.-11.	>11.		
N	.0000	.0029	.0000	.0000	.0000	.0000	.0029	2.0
NNE	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0
NE	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0
ENE	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0
E	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0
ESE	.0000	.0029	.0000	.0000	.0000	.0000	.0029	2.0
SE	.0000	.0029	.0000	.0000	.0000	.0000	.0029	3.0
SSE	.0000	.0000	.0029	.0000	.0000	.0000	.0029	5.0
S	.0000	.0029	.0000	.0000	.0000	.0000	.0029	2.0
SSW	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0
SW	.0000	.0029	.0000	.0000	.0000	.0000	.0029	3.0
WSW	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0
W	.0000	.0000	.0144	.0000	.0000	.0000	.0144	4.4
WNW	.0029	.0690	.1925	.0718	.0000	.0000	.3362	4.6
NW	.0057	.0833	.1379	.2586	.0172	.0000	.5029	5.6
NNW	.0000	.0172	.0201	.0833	.0086	.0000	.1293	6.2
	-----	-----	-----	-----	-----	-----	-----	-----
TOTAL	.0086	.1839	.3678	.4138	.0259	.0000	1.000	
AVER	1.0	2.6	4.6	6.9	9.0	.0		5.3

CALMS AND VARIABLES FOR THIS TABLE => 0
(CALMS AND VARIIABLE DIRECTIONS ARE COUNTED IN AVERAGE
WIND SPEED BUT NOT IN FREQUENCY COUNTS)
FREQUENCY DETERMINED FROM THIS 4-HOUR PERIOD ONLY.

TOTAL NUMBER OF VALID READINGS FOR THIS TABLE => 348
OUT OF NUMBER READ => 2391
("VALID" INCLUDES CALMS)

10 METER WIND DATA ANALYSIS

FROM 205/87 THROUGH 305/87

SOUTH BAY ASBESTOS PROJECT

FREQUENCY OF OCCURRENCE OF WIND SPEED BY DIRECTION
HOURS 1600 THROUGH 2000

DIR	WIND SPEED CLASSES (M/S)							AVERAGE WIND SPEED
	0.- 2.	2.- 3.	3.- 5.	5.- 8.	8.-11.	>11.	TOTAL	
N	.0000	.0232	.0435	.0290	.0000	.0000	.0957	4.8
NNE	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0
NE	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0
ENE	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0
E	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0
ESE	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0
SE	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0
SSE	.0000	.0087	.0000	.0000	.0000	.0000	.0087	2.0
S	.0029	.0029	.0000	.0000	.0000	.0000	.0058	1.5
SSW	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0
SW	.0000	.0000	.0029	.0000	.0000	.0000	.0029	4.0
WSW	.0000	.0000	.0000	.0000	.0000	.0000	.0000	.0
W	.0029	.0145	.0000	.0000	.0000	.0000	.0174	2.2
WNW	.0058	.0145	.0551	.0377	.0000	.0000	.1130	4.8
NW	.0058	.0377	.1826	.2203	.0174	.0000	.4638	5.5
NNW	.0000	.0377	.0986	.1536	.0029	.0000	.2928	5.6
TOTAL	.0174	.1391	.3826	.4406	.0203	.0000	1.000	
AVER	1.0	2.7	4.6	6.7	9.0	.0		5.2

CALMS AND VARIABLES FOR THIS TABLE => 3
(CALMS AND VARIIABLE DIRECTIONS ARE COUNTED IN AVERAGE
WIND SPEED BUT NOT IN FREQUENCY COUNTS)
FREQUENCY DETERMINED FROM THIS 4-HOUR PERIOD ONLY.

TOTAL NUMBER OF VALID READINGS FOR THIS TABLE => 348
OUT OF NUMBER READ => 2391
("VALID" INCLUDES CALMS)

10 METER WIND DATA ANALYSIS

FROM 205/87 THROUGH 305/87

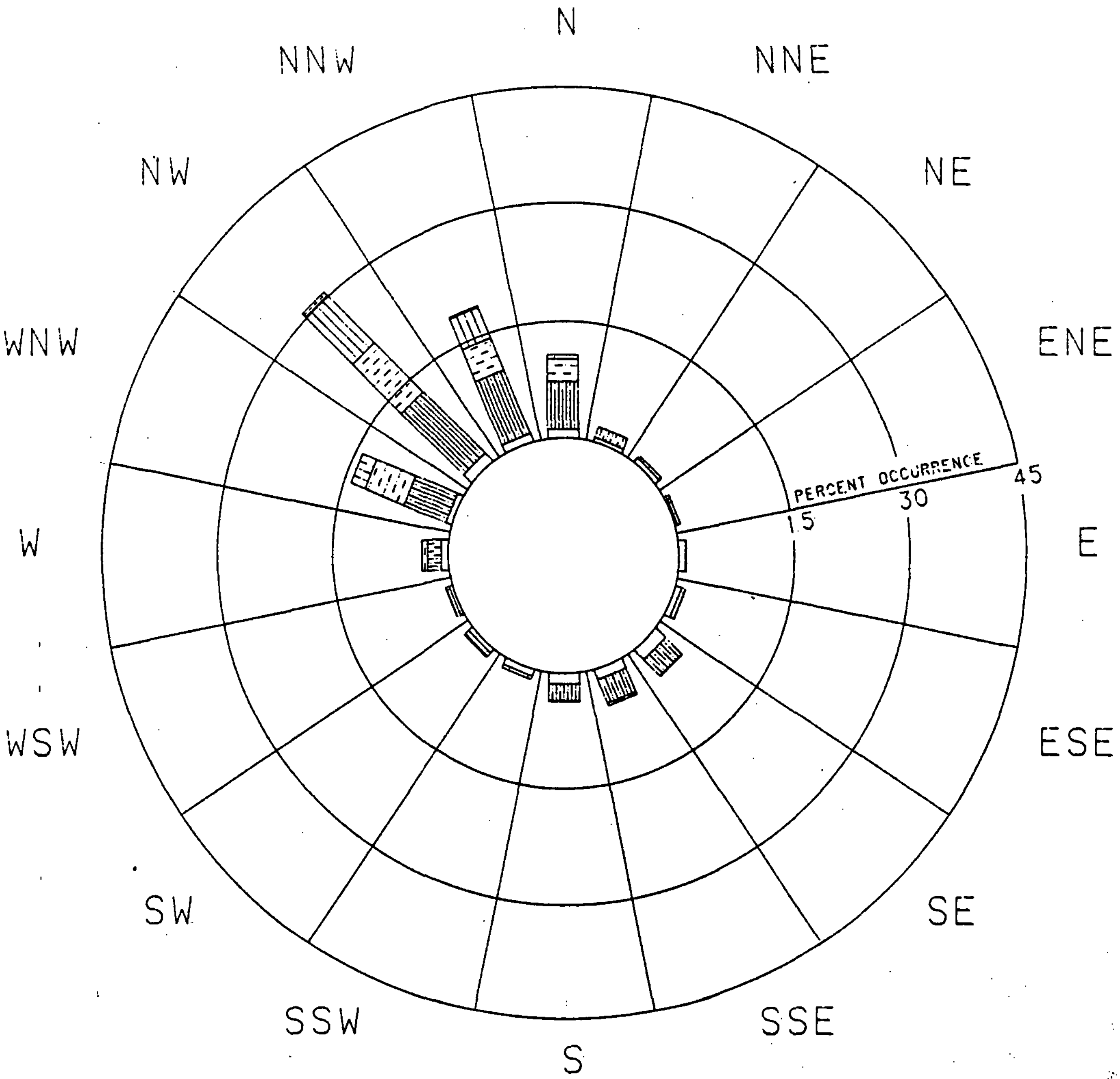
SOUTH BAY ASBESTOS PROJECT

FREQUENCY OF OCCURRENCE OF WIND SPEED BY DIRECTION
HOURS 2000 THROUGH 2400

DIR	+----------WIND SPEED CLASSES (M/S)------------+							AVERA WIND SPEE
	0.- 2.	2.- 3.	3.- 5.	5.- 8.	8.-11.	>11.	TOTAL	
N	.0118	.1598	.0651	.0030	.0000	.0000	.2396	2.9
NNE	.0030	.0237	.0000	.0000	.0000	.0000	.0266	2.3
NE	.0089	.0059	.0000	.0000	.0000	.0000	.0148	1.4
ENE	.0030	.0089	.0000	.0000	.0000	.0000	.0118	1.8
E	.0030	.0000	.0000	.0000	.0000	.0000	.0030	1.0
ESE	.0000	.0059	.0000	.0000	.0000	.0000	.0059	2.0
SE	.0059	.0178	.0000	.0000	.0000	.0000	.0237	1.9
SSE	.0118	.0207	.0000	.0000	.0000	.0000	.0325	1.7
S	.0030	.0148	.0000	.0000	.0000	.0000	.0178	1.8
SSW	.0059	.0030	.0000	.0000	.0000	.0000	.0089	1.3
SW	.0000	.0059	.0000	.0000	.0000	.0000	.0059	2.0
WSW	.0030	.0118	.0000	.0000	.0000	.0000	.0148	2.4
W	.0089	.0237	.0118	.0030	.0000	.0000	.0473	3.1
WNW	.0059	.0385	.0266	.0030	.0000	.0000	.0740	3.3
NW	.0059	.1183	.0947	.0030	.0000	.0000	.2219	3.3
NNW	.0148	.1391	.0917	.0059	.0000	.0000	.2515	3.1
	-----	-----	-----	-----	-----	-----	-----	-----
TOTAL	.0947	.5976	.2899	.0178	.0000	.0000	1.000	
AVER	1.0	2.5	4.3	6.0	.0	.0		2.8

CALMS AND VARIABLES FOR THIS TABLE => 14
(CALMS AND VARIIABLE DIRECTIONS ARE COUNTED IN AVERAGE
WIND SPEED BUT NOT IN FREQUENCY COUNTS)
FREQUENCY DETERMINED FROM THIS 4-HOUR PERIOD ONLY.

TOTAL NUMBER OF VALID READINGS FOR THIS TABLE => 352
OUT OF NUMBER READ => 2391
("VALID" INCLUDES CALMS)

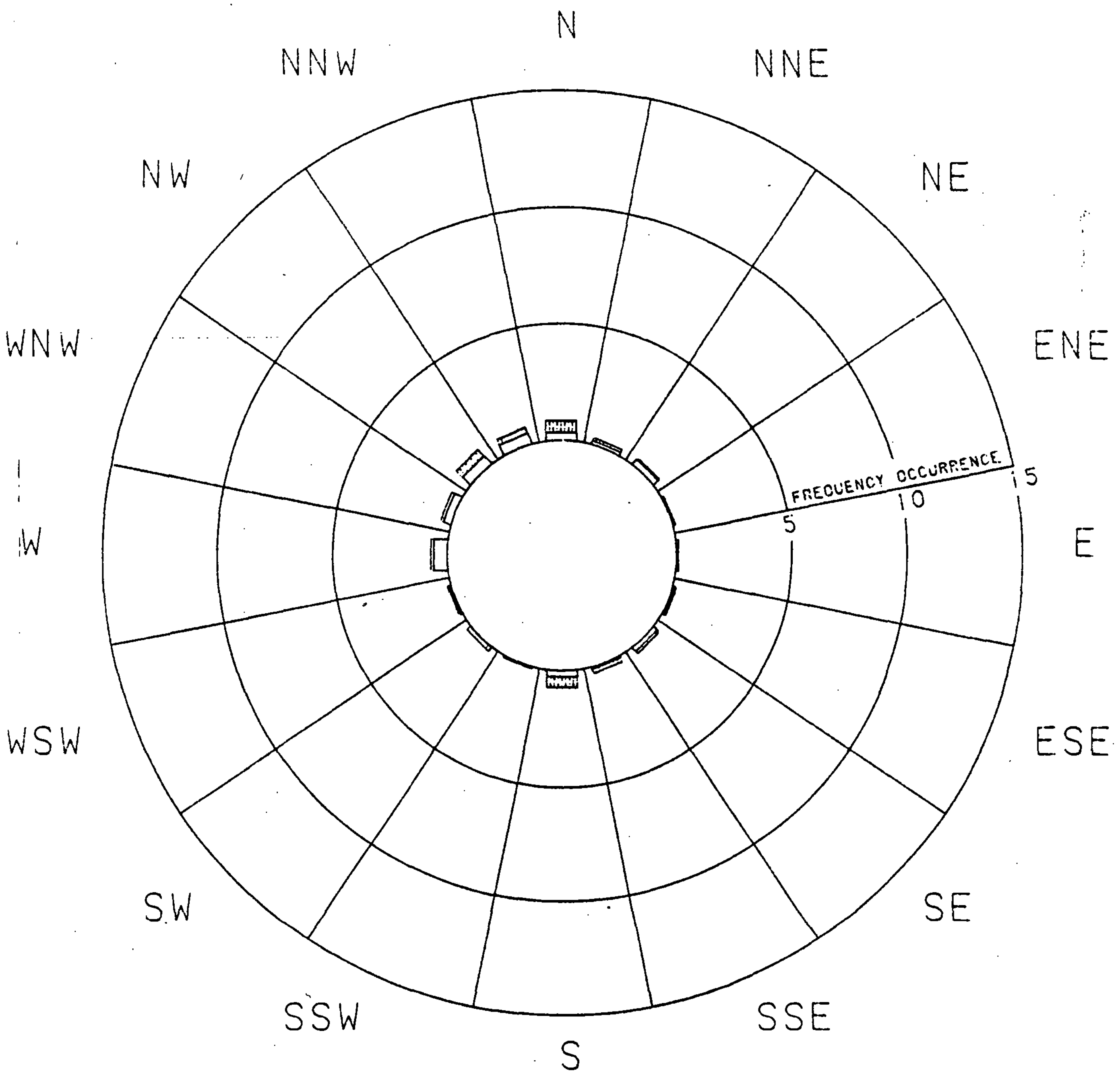


0.0<1.5 M/S
1.5<3.1
3.1<5.1
5.1<8.2
8.2<10.8
>10.8

FREQUENCY OF WINDS
BY DIRECTION AND SPEED
FOR SOUTH BAY ASBESTOS PROJECT

JULY 24 - OCTOBER 31, 1987
ALL STABILITY CLASSES

McVehil-Monnett Associates, Inc.

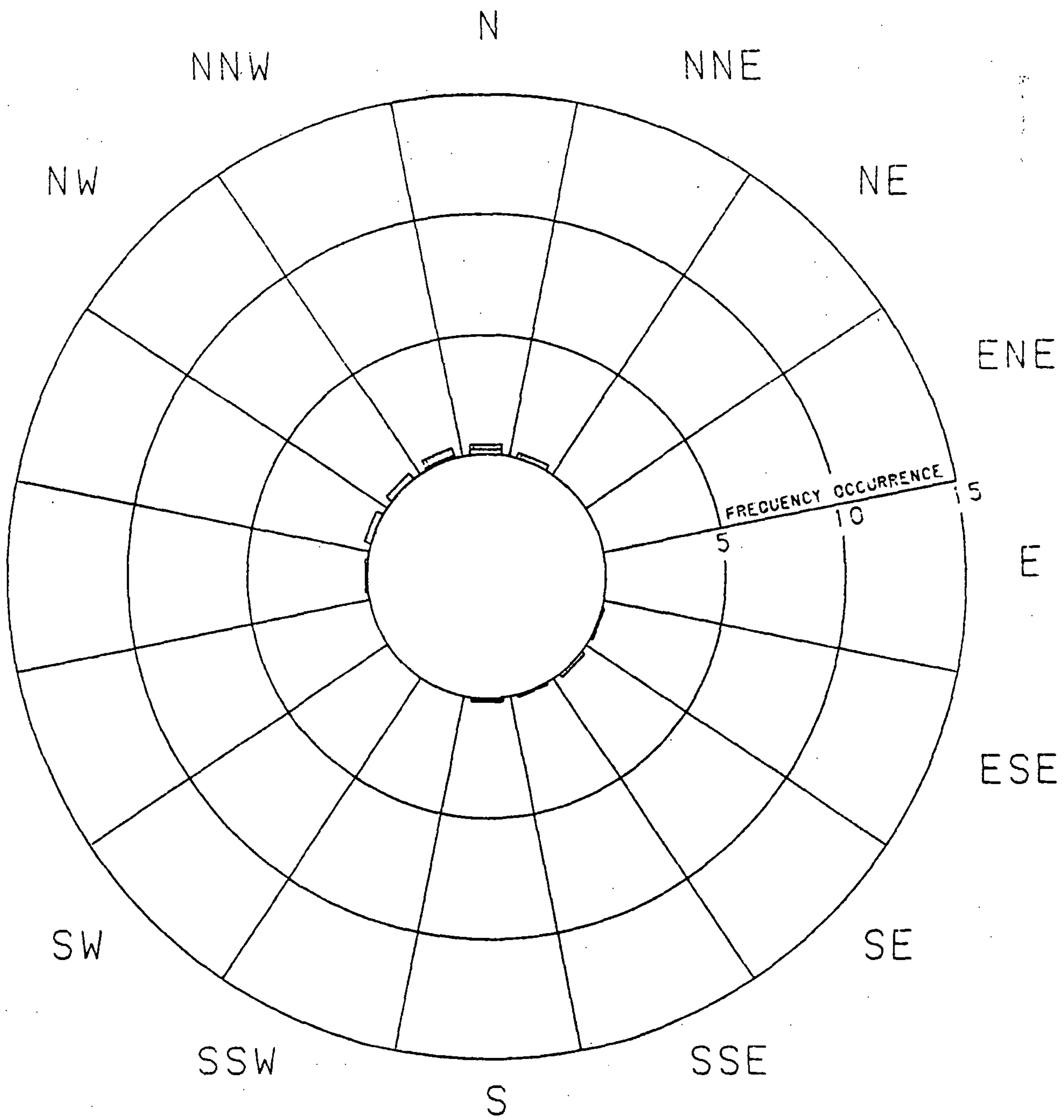


☐	0.0<1.5 M/S
	1.5<3.1
	3.1<5.1
	5.1<8.2
	8.2<10.8
	>10.8

FREQUENCY OF WINDS
BY DIRECTION AND SPEED
FOR SOUTH BAY ASBESTOS PROJECT

JULY 24 - OCTOBER 31, 1987
STABILITY CLASS A

McVehil-Monnett Associates, Inc.

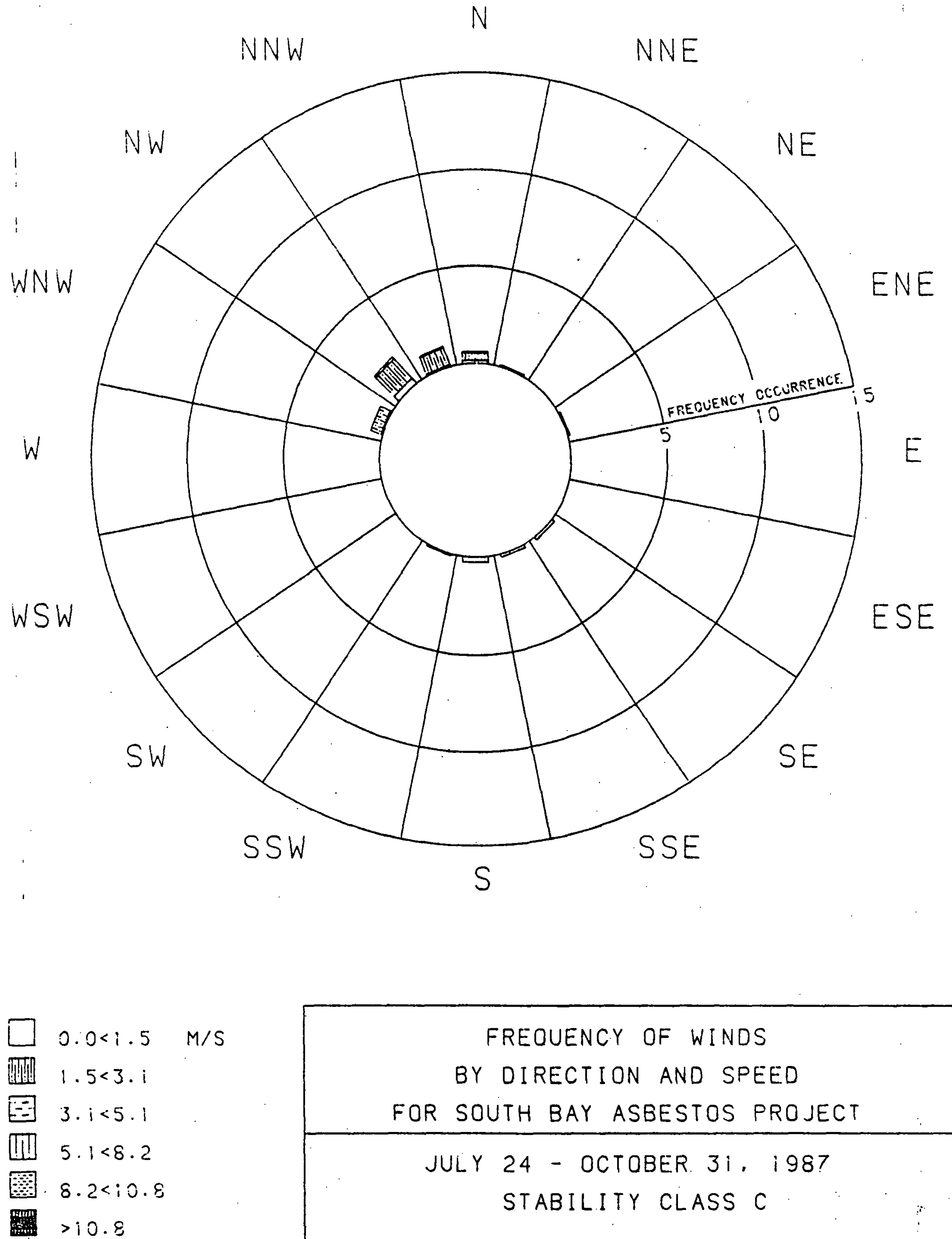


☐	0.0<1.5 M/S
▥	1.5<3.1
▤	3.1<5.1
▥	5.1<8.2
▒	8.2<10.8
▓	>10.8

FREQUENCY OF WINDS
BY DIRECTION AND SPEED
FOR SOUTH BAY ASBESTOS PROJECT

JULY 24 - OCTOBER 31, 1987
STABILITY CLASS B

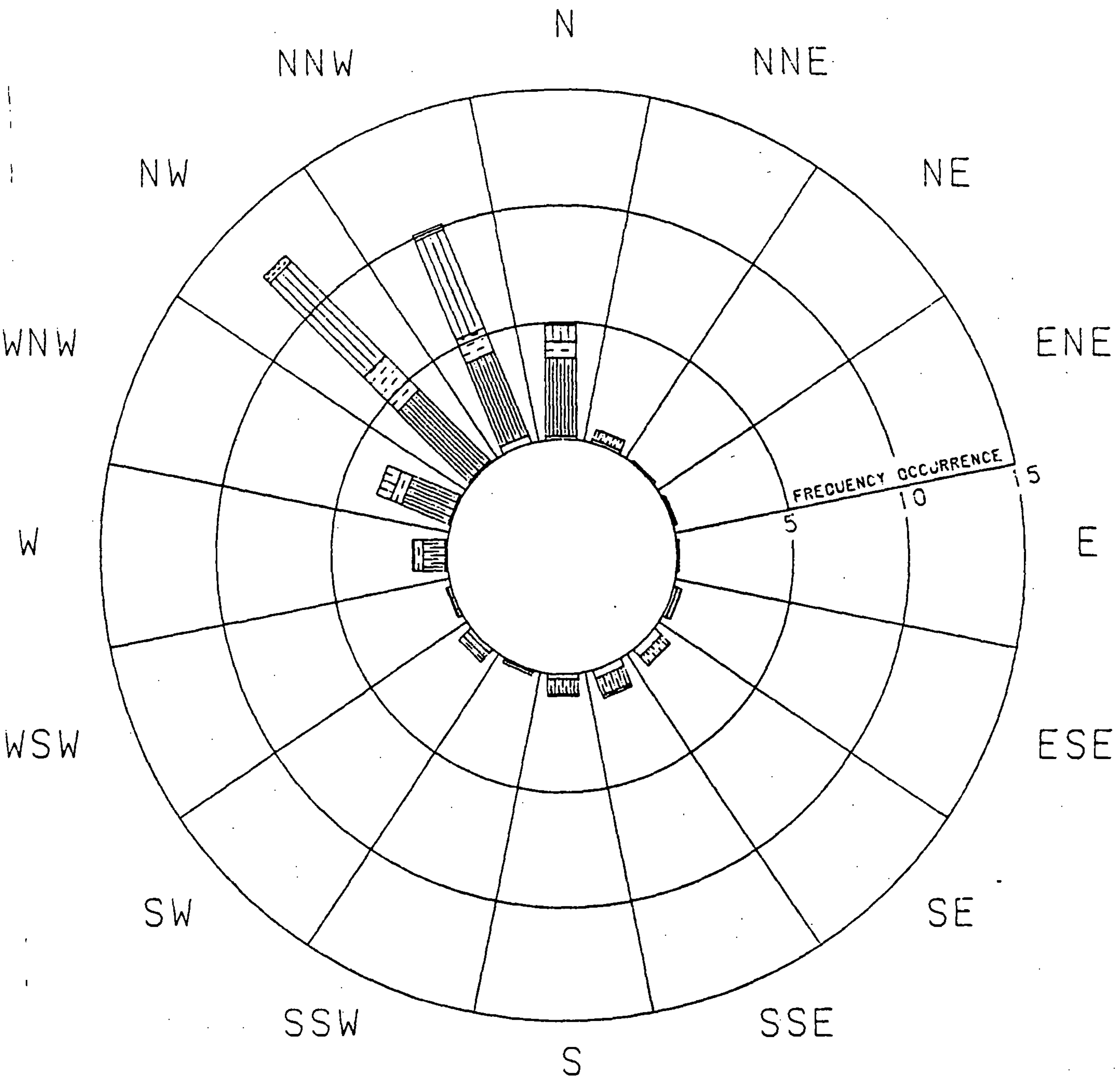
McVehil-Monnett Associates, Inc.



FREQUENCY OF WINDS
BY DIRECTION AND SPEED
FOR SOUTH BAY ASBESTOS PROJECT

JULY 24 - OCTOBER 31, 1987
STABILITY CLASS C

McVehil-Monnett Associates, Inc.

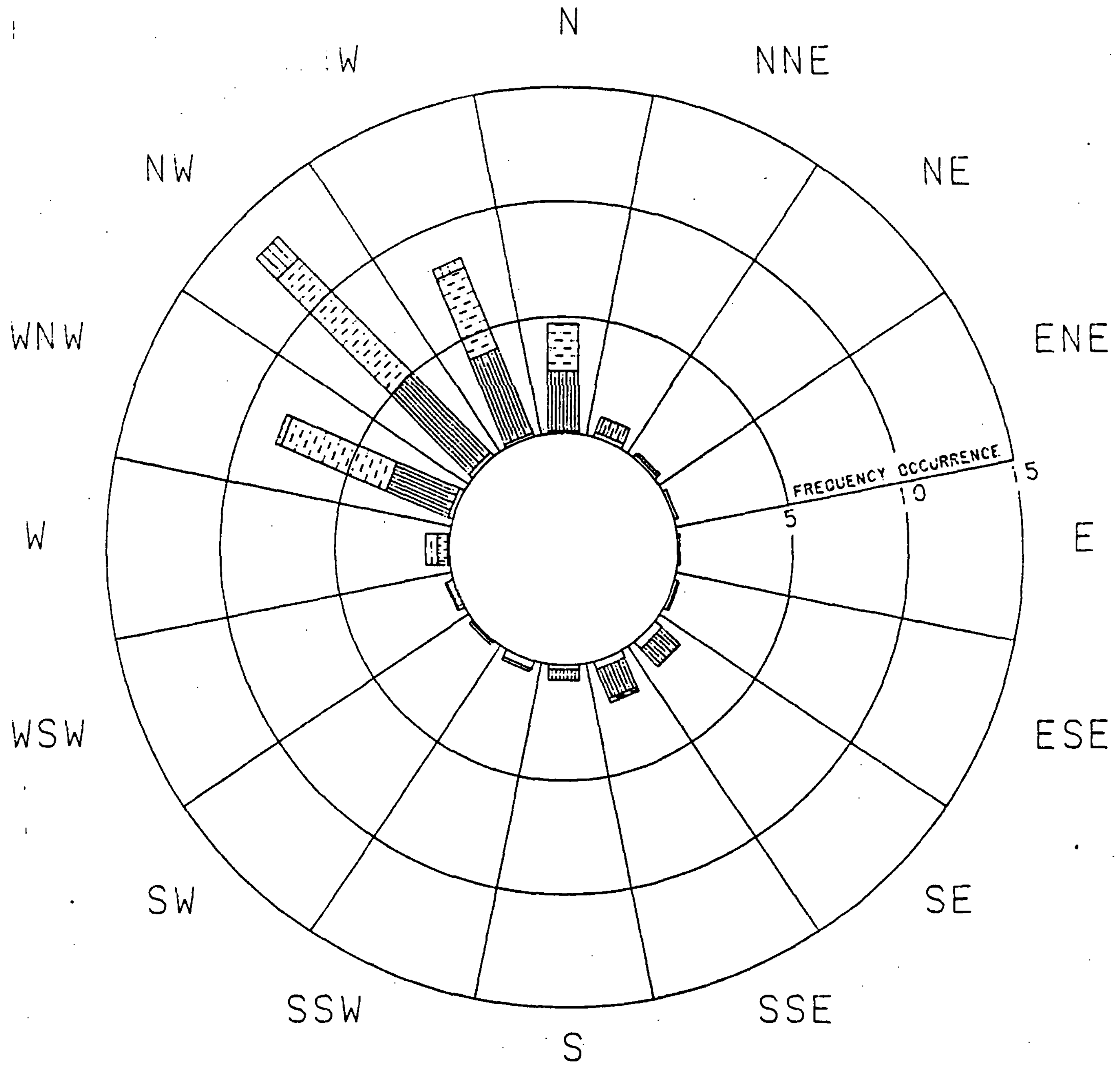


0.0<1.5 M/S
1.5<3.1
3.1<5.1
5.1<8.2
8.2<10.8
>10.8

FREQUENCY OF WINDS
BY DIRECTION AND SPEED
FOR SOUTH BAY ASBESTOS PROJECT

JULY 24 - OCTOBER 31, 1987
STABILITY CLASS D

McVehil-Monnett Associates, Inc.

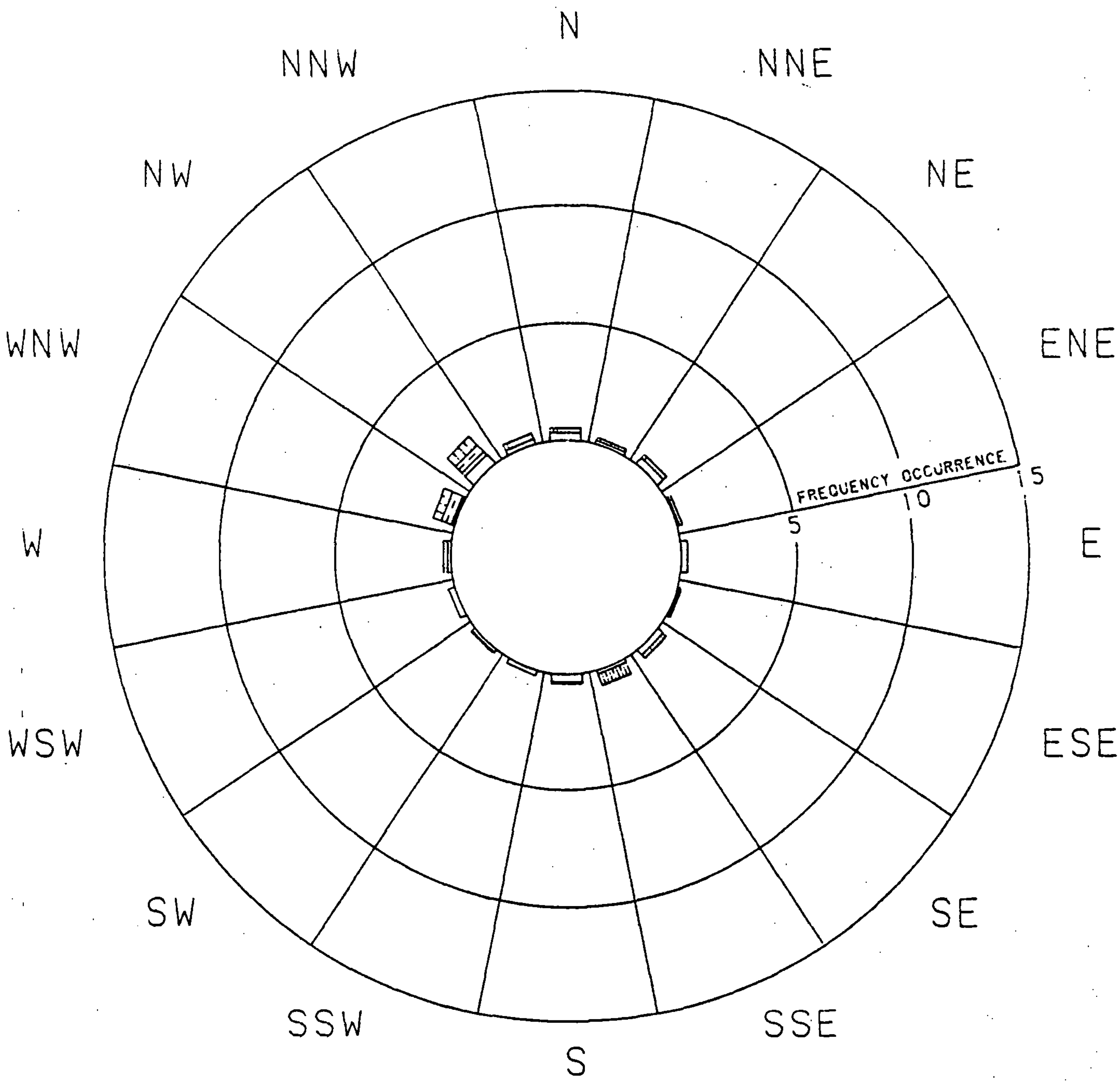


0.0<1.5 M/S
1.5<3.1
3.1<5.1
5.1<8.2
8.2<10.8
>10.8

FREQUENCY OF WINDS
BY DIRECTION AND SPEED
FOR SOUTH BAY ASBESTOS PROJECT

JULY 24 - OCTOBER 31, 1987
STABILITY CLASS E

McVehil-Monnett Associates, Inc.

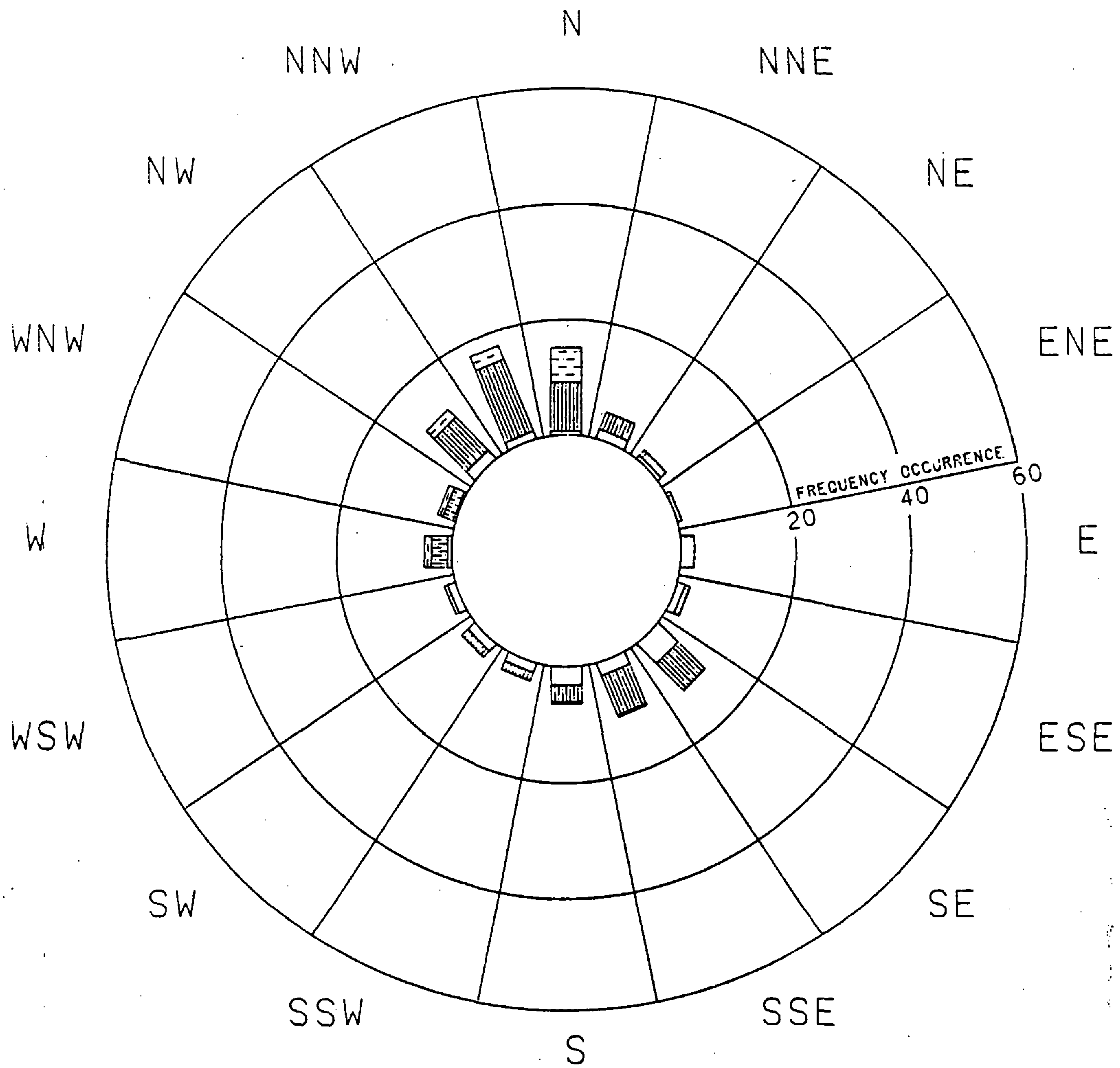


Legend	Speed
(open)	0.0<1.5 M/S
(vertical lines)	1.5<3.1
(dashed)	3.1<5.1
(wide vertical)	5.1<8.2
(dotted)	8.2<10.8
(solid)	>10.8

FREQUENCY OF WINDS
BY DIRECTION AND SPEED
FOR SOUTH BAY ASBESTOS PROJECT

JULY 24 - OCTOBER 31, 1987
STABILITY CLASS F

McVehil-Monnett Associates, Inc.

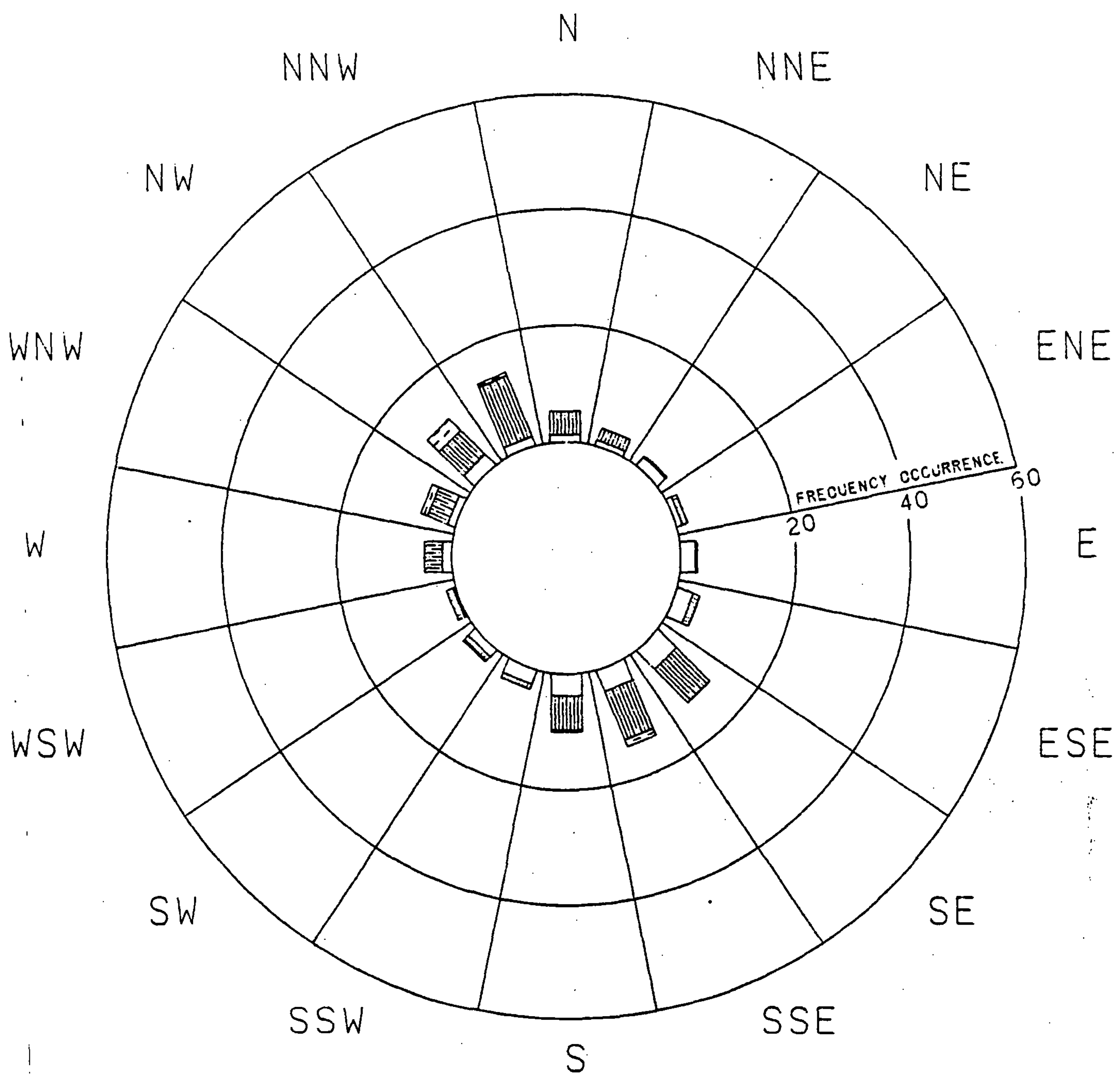


0.0<1.5 M/S
1.5<3.1
3.1<5.1
5.1<8.2
8.2<10.8
>10.8

FREQUENCY OF WINDS
BY DIRECTION AND SPEED
FOR SOUTH BAY ASBESTOS PROJECT

JULY 24 - OCTOBER 31, 1987
HOUR 0000-0400

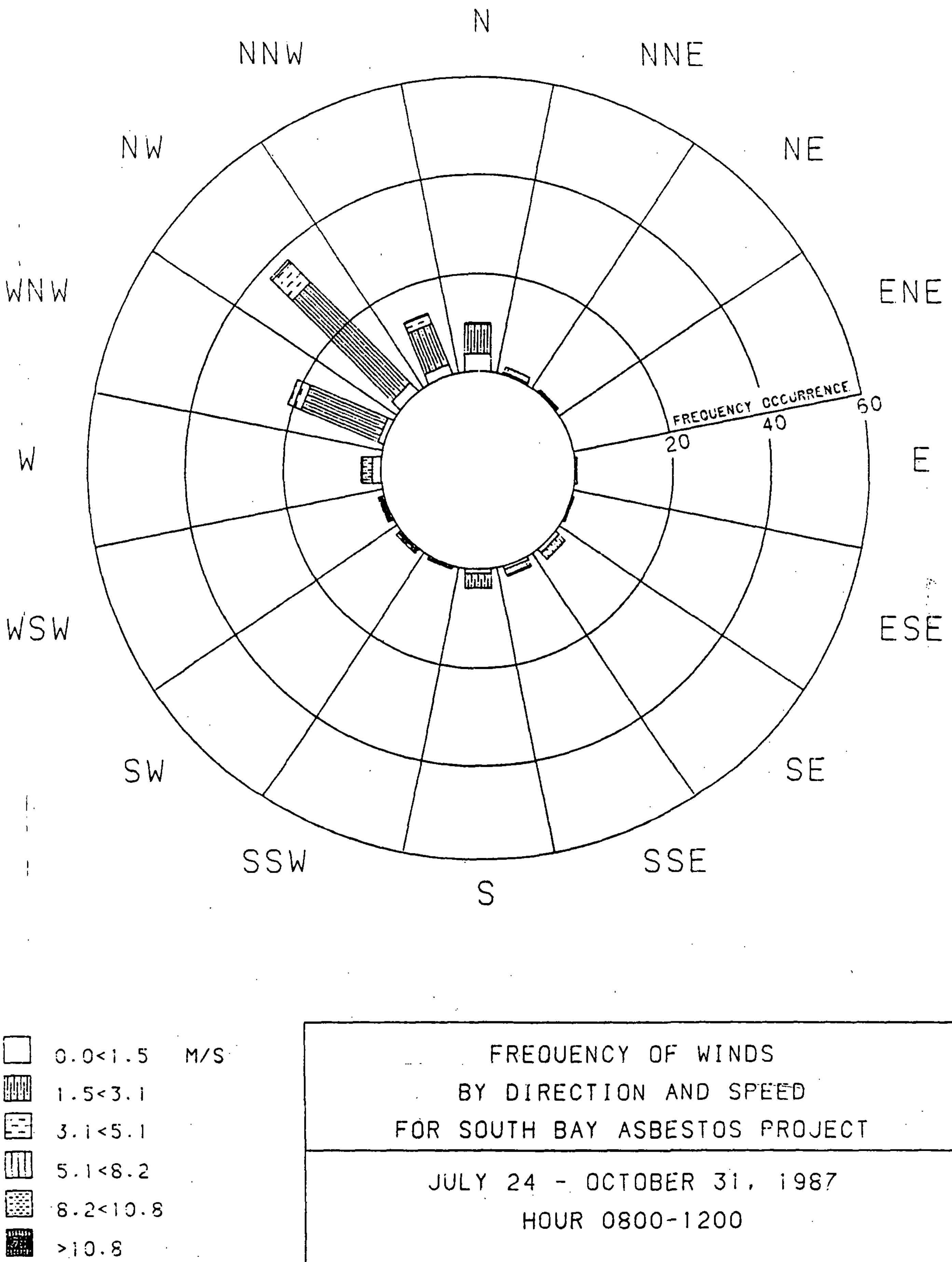
McVehil-Monnett Associates, Inc.



0.0<1.5 M/S	
1.5<3.1	
3.1<5.1	
5.1<8.2	
8.2<10.8	
>10.8	

FREQUENCY OF WINDS
BY DIRECTION AND SPEED
FOR SOUTH BAY ASBESTOS PROJECT

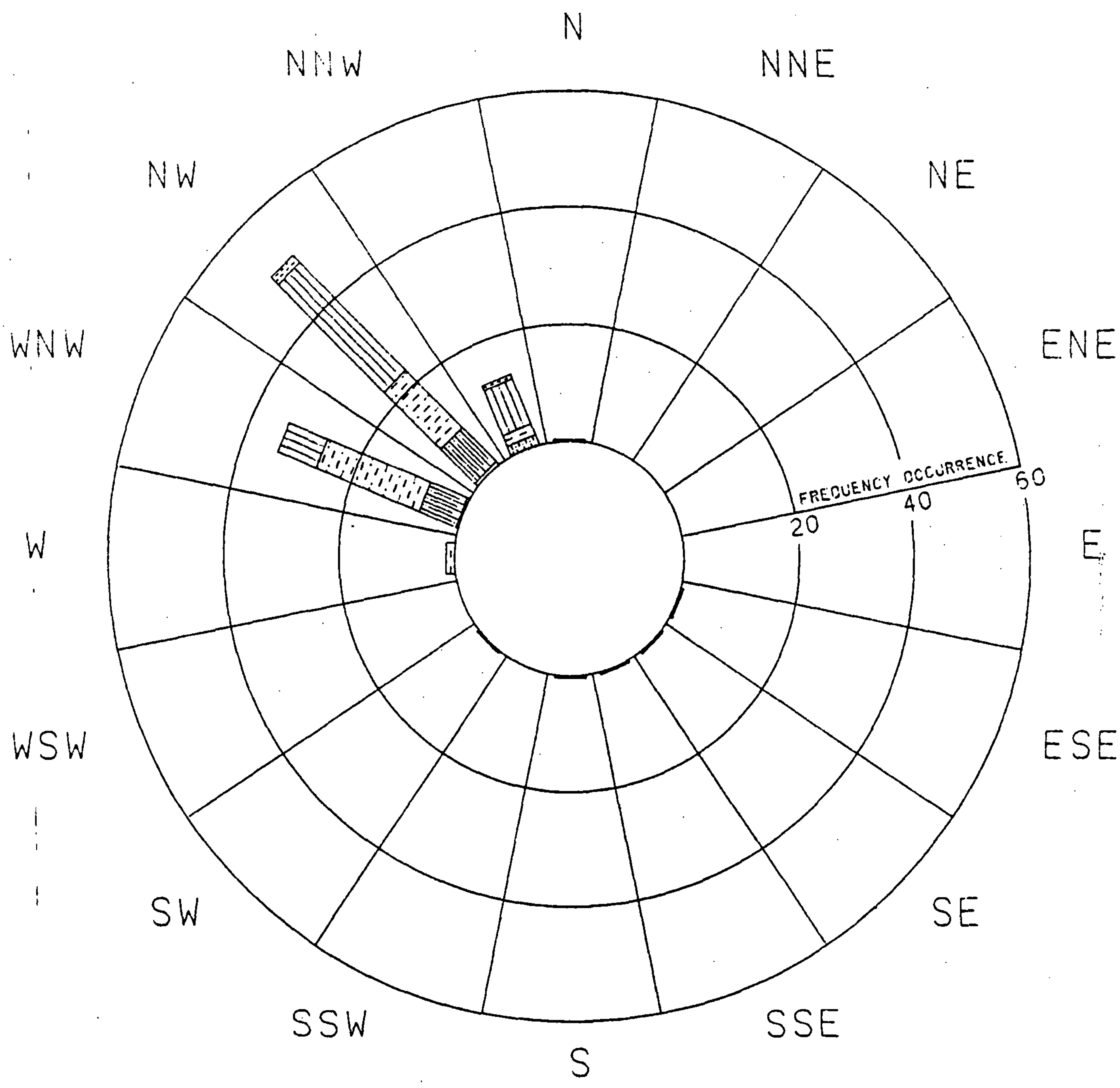
JULY 24 - OCTOBER 31, 1987
HOUR 0400-0800



FREQUENCY OF WINDS
BY DIRECTION AND SPEED
FOR SOUTH BAY ASBESTOS PROJECT

JULY 24 - OCTOBER 31, 1987
HOUR 0800-1200

McVehil-Monnett Associates, Inc.

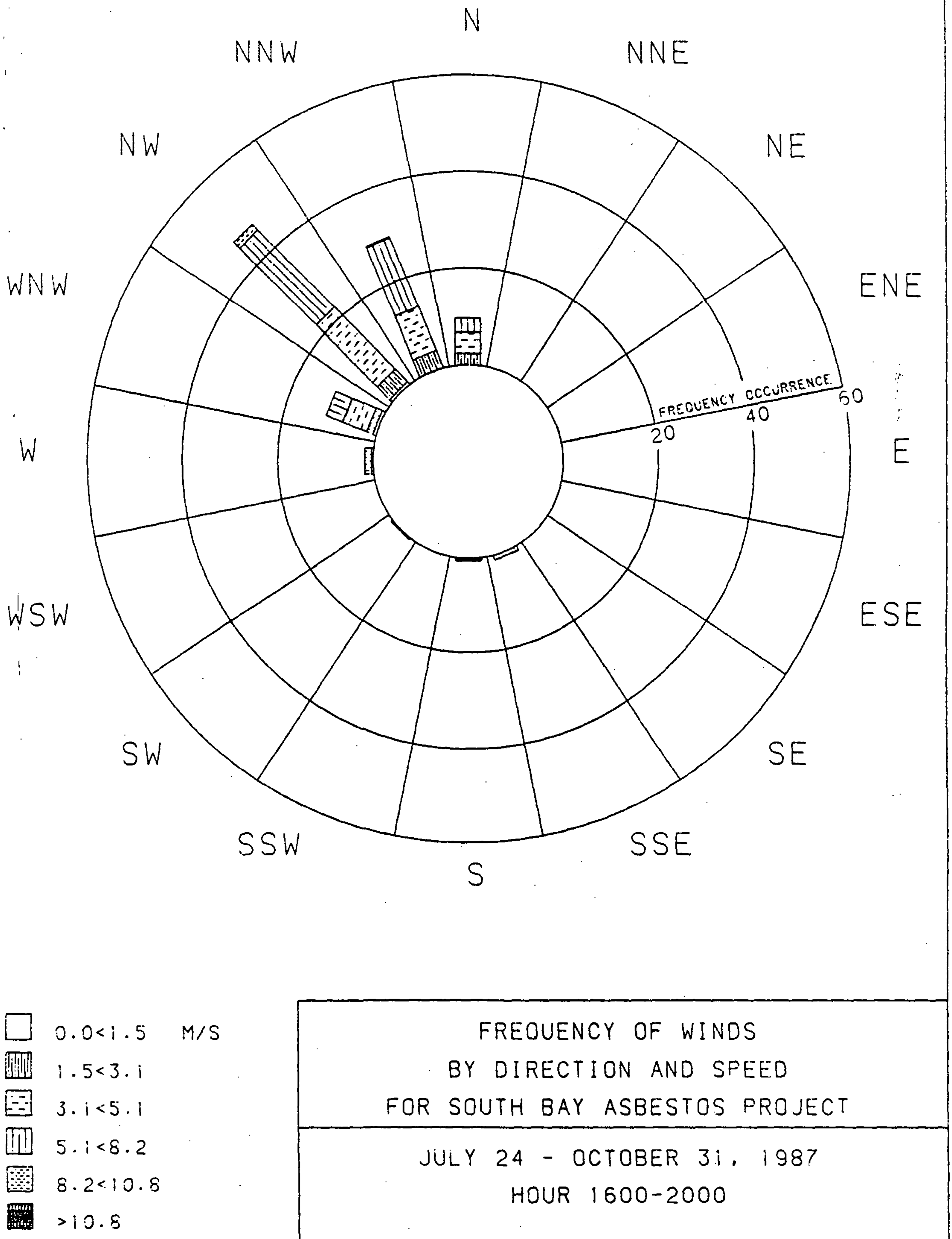


☐	0.0<1.5 M/S
▥	1.5<3.1
☰	3.1<5.1
▥	5.1<8.2
▦	8.2<10.8
■	>10.8

FREQUENCY OF WINDS
BY DIRECTION AND SPEED
FOR SOUTH BAY ASBESTOS PROJECT

JULY 24 - OCTOBER 31, 1987
HOUR 1200-1600

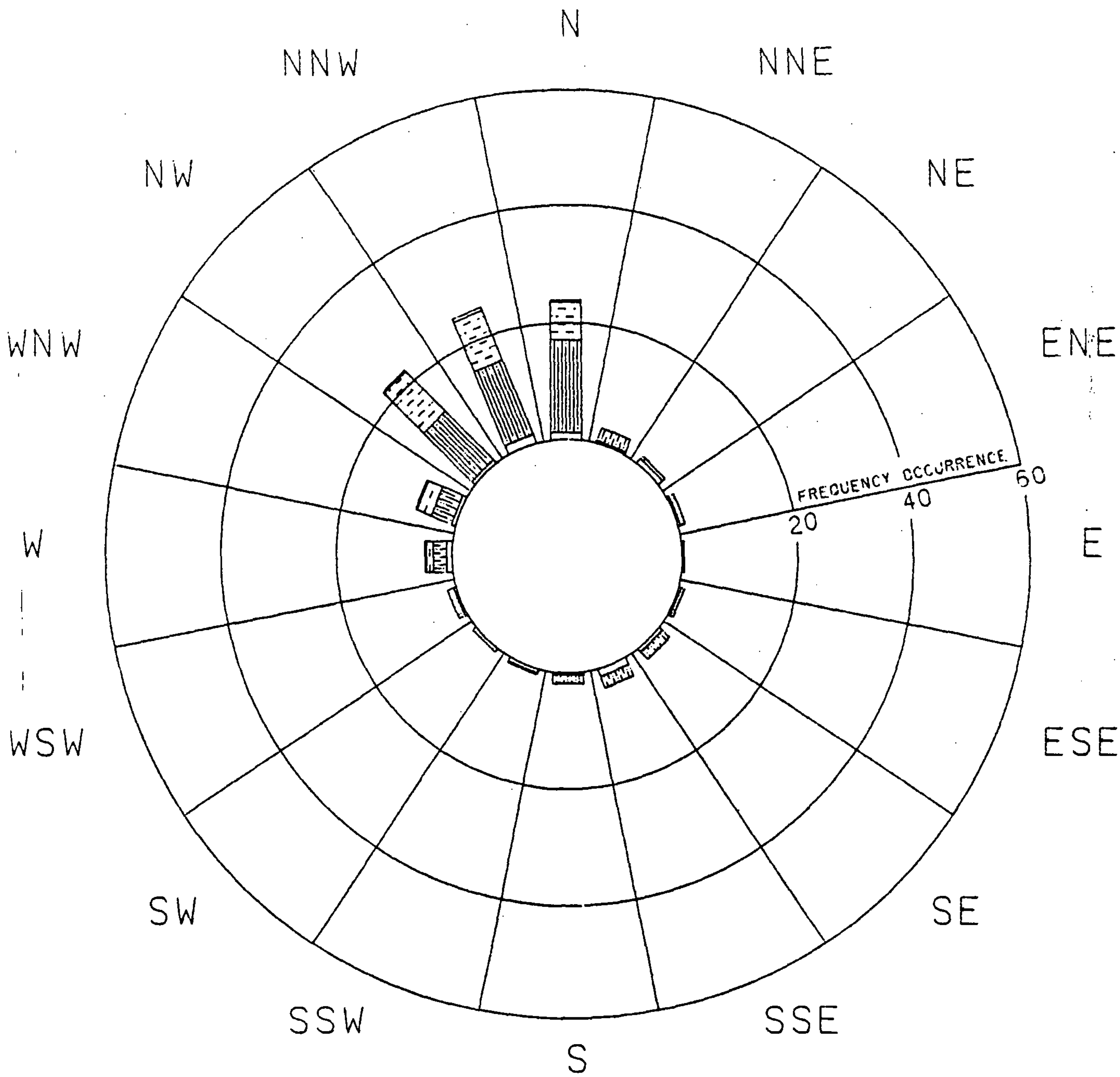
McVehil-Monnett Associates, Inc.



FREQUENCY OF WINDS
BY DIRECTION AND SPEED
FOR SOUTH BAY ASBESTOS PROJECT

JULY 24 - OCTOBER 31, 1987
HOUR 1600-2000

McVehil-Monnett Associates, Inc.



0.0<1.5 M/S
1.5<3.1
3.1<5.1
5.1<8.2
8.2<10.8
>10.8

FREQUENCY OF WINDS
BY DIRECTION AND SPEED
FOR SOUTH BAY ASBESTOS PROJECT

JULY 24 - OCTOBER 31, 1987
HOUR 2000-2400

McVehil-Monnett Associates, Inc.

APPENDIX I

RI ANALYTICAL DATA SUMMARIES

Notes: 1) With a value of zero, "U" indicates not detected.

2) "J" indicates an estimated value considered usable for limited purposes, due to accuracy and precision problems. For metals analyese, "J" also indicates an estimated value less than contract required detection limit but greater than instrument detection limit.

3) "UJ" indicates that a difference of less than 5 fibers was observed between the asbestos sample and the associated blank. The detection limits are raised to the value found in the sample.

4) "R" is a rejected value, due to out of control matrix spike recovery limits.

The following qualifiers give further detail of the type and amount of qualification a given data point has recevied:

-H = Qualified due to holding time violation

-E = Qualified due to interference problems (ICP serial dilution or poor analytical spike recovery by graphite furnace)

-I = Qualified due to exceeding ICP linear range

-* = Qualified due to duplicate control limits being exceeded.

-S = Qualified due to matrix spike recoveries outside control problems

-C = Qualified due to instrument calibration problems

-L = Qualified due to LCS recoveries outside control limits

-B = Qualified due to blank contamination problems

For air samples specifically:

Suffix E = episodic sample

FB = field blank (exposed in the field)

TB = travel blank (unexposed lot blank sample)

SURFACE SOIL

SOUTH BAY ASBESTOS
SURFACE SOIL ANALYTICAL RESULTS

			SAMPLING LOCATION											
		LOCID -->	SL-001-001		SL-001-003		SL-002-001		SL-002-003		SL-003-001		SL-003-003	
		Date sample taken -->	06/01/87		09/30/87		06/01/87		09/30/87		06/17/87		09/30/87	
SERIES CONTAMINANT NAME	CAS #	UNIT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT
ASBESTOS														
CHRYSOTILE (mass conc.)	CHRY(mass)	ng/mg	663.6000	0.50000	NA	NA	117.2000 J	0.50000	NA	NA	NA	NA	NA	NA
AMPHIBOLE (mass conc.)	AMPH(mass)	ng/mg	0.5000 U	0.50000	NA	NA	0.5000 U	0.50000	NA	NA	NA	NA	NA	NA
TOTAL ASBESTOS (wt. %)	TOTAS(wt%)	%	0.0663	0.00005	NA	NA	0.0117 J	0.00005	NA	NA	NA	NA	NA	NA
PLM (Total Asbestos:area % chrysotile)	PLM:tasb%	%	1.0000 U	1.00000	NA	NA	1.0000	1.00000	NA	NA	1.0000 U	1.00000	NA	NA
GRAIN SIZE & SOIL MOISTURE														
FINE SAND (Percent)	FS:%	%	NA	NA	14.1000	0.00000	NA	NA	16.3000	0.00000	NA	NA	13.4000	0.00000
SILT & CLAY (Percent)	S&C:%	%	NA	NA	13.0000	0.00000	NA	NA	6.7000	0.00000	NA	NA	6.4000	0.00000
SOIL MOISTURE (Percent)	MOIST:%	%	NA	NA	1.5000	0.00000	NA	NA	1.3000	0.00000	NA	NA	2.7000	0.00000
SAND & GRAVEL (Percent)	S&G:%	%	NA	NA	72.9000	0.00000	NA	NA	76.9000	0.00000	NA	NA	80.1000	0.00000

Grain size categories defined as follows:

silt and clay - less than 75 microns
fine sand - 75 to 300 microns
sand and gravel - 300 microns to greater than 37.5 mm

SOUTH BAY ASBESTOS
SURFACE SOIL ANALYTICAL RESULTS

SERIES / CONTAMINANT NAME	CAS #	UNIT	SAMPLING LOCATION											
		LOCID -->	SL-004-001		SL-004-003		SL-005-001		SL-005-003		SL-006-001		SL-007-001	
		Date sample taken -->	06/17/87		09/30/87		06/17/87		09/30/87		06/17/87		06/18/87	
			READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT
ASBESTOS														
CHRYSOTILE (mass conc.)	CHRY(mass)	%	NA	NA	NA	NA	64241.0000 J	0.50000	NA	NA	28896.0000 J	0.50000	NA	NA
AMPHIBOLE (mass conc.)	AMPH(mass)	%	NA	NA	NA	NA	0.5000 U	0.50000	NA	NA	0.5000 U	0.50000	NA	NA
TOTAL ASBESTOS (wt. %)	TOTAS(wt%)	%	NA	NA	NA	NA	6.4200 J	0.00005	NA	NA	2.8900 J	0.00005	NA	NA
PLM (Total Asbestos:area % chrysotile)	PLM:tasb%	%	2.0000 J	1.00000	NA	NA	6.0000 J	1.00000	NA	NA	8.0000 J	1.00000	1.0000 U	1.00000
GRAIN SIZE & SOIL MOISTURE														
FINE SAND (Percent)	FS:%	%	NA	NA	13.6000	0.00000	NA	NA	20.2000	0.00000	NA	NA	NA	NA
SILT & CLAY (Percent)	S&C:%	%	NA	NA	8.1000	0.00000	NA	NA	9.8000	0.00000	NA	NA	NA	NA
SOIL MOISTURE (Percent)	MOIST:%	%	NA	NA	3.5000	0.00000	NA	NA	4.1000	0.00000	NA	NA	NA	NA
SAND & GRAVEL (Percent)	S&G:%	%	NA	NA	78.2000	0.00000	NA	NA	70.1000	0.00000	NA	NA	NA	NA

SOUTH BAY ASBESTOS
SURFACE SOIL ANALYTICAL RESULTS

			SAMPLING LOCATION											
	LOCID -->		SL-007-003		SL-008-001		SL-008-003		SL-009-001		SL-010-001		SL-010-002	
	Date sample taken -->		09/30/87		06/18/87		09/30/87		06/18/87		06/18/87		06/18/87	
SERIES CONTAMINANT NAME	CAS #	UNIT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT
ASBESTOS														
CHRYSOTILE (mass conc.)	CHRY(mass)	%	NA	NA	NA	NA	NA	NA	NA	NA	128.0000 J	0.50000	89.0000 J	0.50000
AMPHIBOLE (mass conc.)	AMPH(mass)	%	NA	NA	NA	NA	NA	NA	NA	NA	0.5000 U	0.50000	7.0000 J	0.50000
TOTAL ASBESTOS (wt. %)	TOTAS(wt%)	%	NA	NA	NA	NA	NA	NA	NA	NA	0.0130 J	0.00005	0.0100 J	0.00005
PLM (Total Asbestos:area % chrysotile)	PLM:tasb%	%	NA	NA	1.0000 U	1.00000	NA	NA	1.0000 U	1.00000	1.0000 U	1.00000	1.0000 U	1.00000
GRAIN SIZE & SOIL MOISTURE														
FINE SAND (Percent)	FS:%	%	30.7000	0.00000	NA	NA	58.5000	0.00000	NA	NA	NA	NA	NA	NA
SILT & CLAY (Percent)	S&C:%	%	12.6000	0.00000	NA	NA	12.2000	0.00000	NA	NA	NA	NA	NA	NA
SOIL MOISTURE (Percent)	MOIST:%	%	6.3000	0.00000	NA	NA	5.8000	0.00000	NA	NA	NA	NA	NA	NA
SAND & GRAVEL (Percent)	S&G:%	%	56.7000	0.00000	NA	NA	29.2000	0.00000	NA	NA	NA	NA	NA	NA

SOUTH BAY ASBESTOS
SURFACE SOIL ANALYTICAL RESULTS

SERIES / CONTAMINANT NAME	CAS #	UNIT	SL-011-001 (06/18/87) READING	DETECT	SL-012-001 (06/19/87) READING	DETECT	SL-013-001 (06/19/87) READING	DETECT	SL-014-001 (06/19/87) READING	DETECT	SL-015-001 (06/19/87) READING	DETECT	SL-016-001 (06/18/87) READING	DETECT
ASBESTOS														
CHRYSOTILE (mass conc.)	CHRY(mass)	%	NA	NA	92.0000 J	0.50000	104.0000 J	0.50000	0.5000 U	0.50000	NA	NA	NA	NA
AMPHIBOLE (mass conc.)	AMPH(mass)	%	NA	NA	1.0000 J	0.50000	18.0000 J	0.50000	0.5000 U	0.50000	NA	NA	NA	NA
TOTAL ASBESTOS (wt. %)	TOTAS(wt%)	%	NA	NA	0.0090 J	0.00005	0.0120 J	0.00005	102.0000 J	0.00005	NA	NA	NA	NA
PLM (Total Asbestos:area % chrysotile)	PLM:tasb%	%	1.0000 U	1.00000	1.0000 U	1.00000	1.0000 U	1.00000	26.0000	1.00000	14.0000	1.00000	1.0000 U	1.00000
GRAIN SIZE & SOIL MOISTURE														
FINE SAND (Percent)	FS:%	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SILT & CLAY (Percent)	S&C:%	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SOIL MOISTURE (Percent)	MOIST:%	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SAND & GRAVEL (Percent)	S&G:%	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

SOUTH BAY ASBESTOS
SURFACE SOIL ANALYTICAL RESULTS

			SAMPLING LOCATION											
		LOCID -->	SL-016-003		SL-017-001		SL-018-001		SL-018-003		SL-019-001		SL-019-003	
		Date sample taken -->	10/01/87		06/18/87		06/18/87		10/01/87		06/22/87		09/30/87	
SERIES CONTAMINANT NAME	CAS #	UNIT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT
ASBESTOS														
CHRYSOTILE (mass conc.)	CHRY(mass)	%	NA	NA	NA	NA	NA	NA	NA	NA	1361.0000 J	0.50000	NA	NA
AMPHIBOLE (mass conc.)	AMPH(mass)	%	NA	NA	NA	NA	NA	NA	NA	NA	44.0000 J	0.50000	NA	NA
TOTAL ASBESTOS (wt. %)	TOTAS(wt%)	%	NA	NA	NA	NA	NA	NA	NA	NA	0.1400 J	0.00005	NA	NA
PLM (Total Asbestos:area % chrysotile)	PLM:tasb%	%	NA	NA	1.0000 U	1.00000	1.0000 U	1.00000	NA	NA	1.0000 J	1.00000	NA	NA
GRAIN SIZE & SOIL MOISTURE														
FINE SAND (Percent)	FS:%	%	49.6000	0.00000	NA	NA	NA	NA	57.6000	0.00000	NA	NA	17.6000	0.00000
SILT & CLAY (Percent)	S&C:%	%	17.5000	0.00000	NA	NA	NA	NA	12.0000	0.00000	NA	NA	6.9000	0.00000
SOIL MOISTURE (Percent)	MOIST:%	%	11.8000	0.00000	NA	NA	NA	NA	14.8000	0.00000	NA	NA	0.6000	0.00000
SAND & GRAVEL (Percent)	S&G:%	%	32.7000	0.00000	NA	NA	NA	NA	30.4000	0.00000	NA	NA	75.3000	0.00000

SOUTH BAY ASBESTOS
SURFACE SOIL ANALYTICAL RESULTS

SERIES			SAMPLING LOCATION											
		LOCID -->	SL-020-001		SL-020-002		SL-020-003		SL-021-001		SL-021-003		SL-022-001	
		Date sample taken -->	06/22/87		06/22/87		09/30/87		06/22/87		09/30/87		06/22/87	
CONTAMINANT NAME	CAS #	UNIT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT
ASBESTOS														
CHRYSOTILE (mass conc.)	CHRY(mass)	mg/mg	792.0000 J	0.50000	44.0000 J	0.50000	NA	NA	2904.0000 J	0.50000	NA	NA	2736.0000 J	0.50000
AMPHIBOLE (mass conc.)	AMPH(mass)	mg/mg	561.0000 J	0.50000	0.5000 U	0.50000	NA	NA	793.0000 J	0.50000	NA	NA	52.0000 J	0.50000
TOTAL ASBESTOS (wt. %)	TOTAS(wt%)	%	0.1350 J	0.00005	0.0040 J	0.00005	NA	NA	0.3700 J	0.00005	NA	NA	0.2790 J	0.00005
PLM (Total Asbestos:area % chrysotile)	PLM:tasb%	%	1.0000 J	1.00000	2.0000 J	1.00000	NA	NA	1.0000 U	1.00000	NA	NA	1.0000 J	1.00000
GRAIN SIZE & SOIL MOISTURE														
FINE SAND (Percent)	FS:%	%	NA	NA	NA	NA	14.0000	0.00000	NA	NA	16.3000	0.00000	NA	NA
SILT & CLAY (Percent)	S&C:%	%	NA	NA	NA	NA	4.3000	0.00000	NA	NA	8.8000	0.00000	NA	NA
SOIL MOISTURE (Percent)	MOIST:%	%	NA	NA	NA	NA	0.6000	0.00000	NA	NA	3.1000	0.00000	NA	NA
SAND & GRAVEL (Percent)	S&G:%	%	NA	NA	NA	NA	82.2000	0.00000	NA	NA	75.2000	0.00000	NA	NA

SOUTH BAY ASBESTOS
SURFACE SOIL ANALYTICAL RESULTS

SERIES / CONTAMINANT NAME	CAS #	UNIT	SL-023-001 (06/22/87) READING	DETECT	SL-023-003 (09/30/87) READING	DETECT	SL-024-001 (06/22/87) READING	DETECT	SL-025-001 (06/22/87) READING	DETECT	SL-026-001 (06/22/87) READING	DETECT	SL-026-003 (09/30/87) READING	DETECT
ASBESTOS														
CHRYSOTILE (mass conc.)	CHRY(mass)	%	NA	NA	NA	NA	NA	NA	0.5000 U	0.50000	8301.0000 J	0.50000	NA	NA
AMPHIBOLE (mass conc.)	AMPH(mass)	%	NA	NA	NA	NA	NA	NA	115.0000 J	0.50000	0.5000 U	0.50000	NA	NA
TOTAL ASBESTOS (wt. %)	TOTAS(wt%)	%	NA	NA	NA	NA	NA	NA	0.3460 J	0.00005	0.8300 J	0.00005	NA	NA
PLM (Total Asbestos:area % chrysotile)	PLM:tasb%	%	1.0000 U	1.00000	NA	NA	1.0000 U	1.00000	1.0000 J	1.00000	2.0000 J	1.00000	NA	NA
GRAIN SIZE & SOIL MOISTURE														
FINE SAND (Percent)	FS:%	%	NA	NA	4.1000	0.00000	NA	NA	NA	NA	NA	NA	6.8000	0.00000
SILT & CLAY (Percent)	S&C:%	%	NA	NA	1.4000	0.00000	NA	NA	NA	NA	NA	NA	2.0000	0.00000
SOIL MOISTURE (Percent)	MOIST:%	%	NA	NA	3.1000	0.00000	NA	NA	NA	NA	NA	NA	2.6000	0.00000
SAND & GRAVEL (Percent)	S&G:%	%	NA	NA	93.8000	0.00000	NA	NA	NA	NA	NA	NA	91.5000	0.00000

SOUTH BAY ASBESTOS
SURFACE SOIL ANALYTICAL RESULTS

SERIES / CONTAMINANT NAME	CAS #	UNIT	SL-027-001 06/22/87 READING	SL-027-001 06/22/87 DETECT	SL-027-003 10/01/87 READING	SL-027-003 10/01/87 DETECT	SL-028-001 06/22/87 READING	SL-028-001 06/22/87 DETECT	SL-029-001 06/22/87 READING	SL-029-001 06/22/87 DETECT	SL-029-003 10/01/87 READING	SL-029-003 10/01/87 DETECT	SL-030-001 06/22/87 READING	SL-030-001 06/22/87 DETECT
ASBESTOS														
CHRYSOTILE (mass conc.)	CHRY(mass)	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
AMPHIBOLE (mass conc.)	AMPH(mass)	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
TOTAL ASBESTOS (wt. %)	TOTAS(wt%)	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
PLM (Total Asbestos:area % chrysotile)	PLM:tasb%	%	1.0000 U	1.00000	NA	NA	1.0000 U	1.00000	1.0000 U	1.00000	NA	NA	1.0000 U	1.00000
GRAIN SIZE & SOIL MOISTURE														
FINE SAND (Percent)	FS:%	%	NA	NA	6.1000	0.00000	NA	NA	NA	NA	23.4000	0.00000	NA	NA
SILT & CLAY (Percent)	S&C:%	%	NA	NA	2.3000	0.00000	NA	NA	NA	NA	4.8000	0.00000	NA	NA
SOIL MOISTURE (Percent)	MOIST:%	%	NA	NA	2.9000	0.00000	NA	NA	NA	NA	5.0000	0.00000	NA	NA
SAND & GRAVEL (Percent)	S&G:%	%	NA	NA	91.8000	0.00000	NA	NA	NA	NA	71.9000	0.00000	NA	NA

SOUTH BAY ASBESTOS
SURFACE SOIL ANALYTICAL RESULTS

SERIES / CONTAMINANT NAME	CAS #	UNIT	SL-030-002 (06/22/87) READING	DETECT	SL-031-001 (06/23/87) READING	DETECT	SL-031-003 (10/01/87) READING	DETECT	SL-032-001 (06/23/87) READING	DETECT	SL-033-001 (06/23/87) READING	DETECT	SL-033-003 (10/01/87) READING	DETECT
ASBESTOS														
CHRYSOTILE (mass conc.)	CHRY(mass)	%	NA	NA	363.0000 J	0.50000	NA	NA	0.5000 U	0.50000	121.0000 J	0.50000	NA	NA
AMPHIBOLE (mass conc.)	AMPH(mass)	%	NA	NA	196.0000 J	0.50000	NA	NA	32.0000 J	0.50000	52.0000 J	0.50000	NA	NA
TOTAL ASBESTOS (wt. %)	TOTAS(wt%)	%	NA	NA	0.0560 J	0.00005	NA	NA	0.0660 J	0.00005	0.0170 J	0.00005	NA	NA
PLM (Total Asbestos:area % chrysotile)	PLM:tasb%	%	1.0000 J	1.00000	1.0000 U	1.00000	NA	NA	1.0000 U	1.00000	1.0000 U	1.00000	NA	NA
GRAIN SIZE & SOIL MOISTURE														
FINE SAND (Percent)	FS:%	%	NA	NA	NA	NA	10.3000	0.00000	NA	NA	NA	NA	10.2000	0.00000
SILT & CLAY (Percent)	S&C:%	%	NA	NA	NA	NA	8.8000	0.00000	NA	NA	NA	NA	2.9000	0.00000
SOIL MOISTURE (Percent)	MOIST:%	%	NA	NA	NA	NA	3.8000	0.00000	NA	NA	NA	NA	2.0000	0.00000
SAND & GRAVEL (Percent)	S&G:%	%	NA	NA	NA	NA	80.9000	0.00000	NA	NA	NA	NA	86.9000	0.00000

SOUTH BAY ASBESTOS
SURFACE SOIL ANALYTICAL RESULTS

SERIES / CONTAMINANT NAME	CAS #	UNIT	SL-034-001 (06/23/87) READING	SL-034-001 DETECT	SL-035-001 (06/23/87) READING	SL-035-001 DETECT	SL-035-003 (09/30/87) READING	SL-035-003 DETECT	SL-036-001 (06/23/87) READING	SL-036-001 DETECT	SL-037-001 (06/23/87) READING	SL-037-001 DETECT	SL-037-003 (09/30/87) READING	SL-037-003 DETECT
ASBESTOS														
CHRYSOTILE (mass conc.)	CHRY(mass)	ng/mg	8.0000 J	0.50000	3027.0000 J	0.50000	NA	NA	784.0000 J	0.50000	NA	NA	NA	NA
AMPHIBOLE (mass conc.)	AMPH(mass)	ng/mg	81.0000 J	0.50000	224.0000 J	0.50000	NA	NA	658.0000 J	0.50000	NA	NA	NA	NA
TOTAL ASBESTOS (wt. %)	TOTAS(wt%)	%	0.0090 J	0.00005	0.3250 J	0.00005	NA	NA	0.1440 J	0.00005	NA	NA	NA	NA
PLM (Total Asbestos:area % chrysotile)	PLM:tasb%	%	1.0000 U	1.00000	1.0000 J	1.00000	NA	NA	1.0000 U	1.00000	1.0000 U	1.00000	NA	NA
GRAIN SIZE & SOIL MOISTURE														
FINE SAND (Percent)	FS:%	%	NA	NA	NA	NA	29.3000	0.00000	NA	NA	NA	NA	12.0000	0.00000
SILT & CLAY (Percent)	S&C:%	%	NA	NA	NA	NA	9.6000	0.00000	NA	NA	NA	NA	4.5000	0.00000
SOIL MOISTURE (Percent)	MOIST:%	%	NA	NA	NA	NA	0.8000	0.00000	NA	NA	NA	NA	2.6000	0.00000
SAND & GRAVEL (Percent)	S&G:%	%	NA	NA	NA	NA	61.3000	0.00000	NA	NA	NA	NA	83.5000	0.00000

SOUTH BAY ASBESTOS
SURFACE SOIL ANALYTICAL RESULTS

			SAMPLING LOCATION											
		LOCID -->	SL-038-001		SL-039-001		SL-039-003		SL-040-001		SL-040-002		SL-040-003	
		Date sample taken -->	06/23/87		06/23/87		09/30/87		06/06/87		06/16/87		09/30/87	
SERIES CONTAMINANT NAME	CAS #	UNIT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT
ASBESTOS														
CHRYSOTILE (mass conc.)	CHRY(mass)	%	NA	NA	2333.0000 J	0.50000	NA	NA	253.0000 J	0.50000	3868.0000 J	0.50000	NA	NA
AMPHIBOLE (mass conc.)	AMPH(mass)	%	NA	NA	82.0000 J	0.50000	NA	NA	184.0000 J	0.50000	0.5000 U	0.50000	NA	NA
TOTAL ASBESTOS (wt. %)	TOTAS(wt%)	%	NA	NA	0.2420 J	0.00005	NA	NA	0.0440 J	0.00005	0.3870 J	0.00005	NA	NA
PLM (Total Asbestos:area % chrysotile)	PLM:tasb%	%	2.0000 J	1.00000	1.0000 U	1.00000	NA	NA	2.0000 J	1.00000	1.0000 U	1.00000	NA	NA
GRAIN SIZE & SOIL MOISTURE														
FINE SAND (Percent)	FS:%	%	NA	NA	NA	NA	13.7000	0.00000	NA	NA	NA	NA	15.7000	0.00000
SILT & CLAY (Percent)	S&C:%	%	NA	NA	NA	NA	5.8000	0.00000	NA	NA	NA	NA	4.5000	0.00000
SOIL MOISTURE (Percent)	MOIST:%	%	NA	NA	NA	NA	3.3000	0.00000	NA	NA	NA	NA	2.3000	0.00000
SAND & GRAVEL (Percent)	S&G:%	%	NA	NA	NA	NA	80.6000	0.00000	NA	NA	NA	NA	NA	NA

SOUTH BAY ASBESTOS
SURFACE SOIL ANALYTICAL RESULTS

			SAMPLING LOCATION											
	LOCID -->		SL-041-001		SL-042-001		SL-042-003		SL-043-001		SL-044-001		SL-044-003	
	Date sample taken -->		06/16/87		06/19/87		09/30/87		06/19/87		06/19/87		09/30/87	
SERIES CONTAMINANT NAME	CAS #	UNIT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT
ASBESTOS														
CHRYSOTILE (mass conc.)	CHRY(mass)	ng/mg	0.5000 U	0.50000	8378.0000 J	0.50000	NA	NA	0.5000 U	0.50000	NA	NA	NA	NA
AMPHIBOLE (mass conc.)	AMPH(mass)	ng/mg	0.5000 U	0.50000	0.5000 U	0.50000	NA	NA	0.5000 U	0.50000	NA	NA	NA	NA
TOTAL ASBESTOS (wt. %)	TOTAS(wt%)	%	0.2200 J	0.00005	0.8380 J	0.00005	NA	NA	1.4000 J	0.00005	NA	NA	NA	NA
PLM (Total Asbestos:area % chrysotile)	PLM:tasb%	%	1.0000 J	1.00000	3.0000 J	1.00000	NA	NA	8.0000 J	1.00000	2.0000 J	1.00000	NA	NA
GRAIN SIZE & SOIL MOISTURE														
FINE SAND (Percent)	FS:%	%	NA	NA	NA	NA	24.3000	0.00000	NA	NA	NA	NA	12.2000	0.00000
SILT & CLAY (Percent)	S&C:%	%	NA	NA	NA	NA	7.0000	0.00000	NA	NA	NA	NA	5.8000	0.00000
SOIL MOISTURE (Percent)	MOIST:%	%	NA	NA	NA	NA	2.3000	0.00000	NA	NA	NA	NA	2.7000	0.00000
SAND & GRAVEL (Percent)	S&G:%	%	NA	NA	NA	NA	68.7000	0.00000	NA	NA	NA	NA	81.9000	0.00000

SOUTH BAY ASBESTOS
SURFACE SOIL ANALYTICAL RESULTS

			SAMPLING LOCATION											
	LOCID -->		SL-045-001		SL-046-001		SL-046-003		SL-047-001		SL-048-001		SL-048-003	
	Date sample taken -->		06/19/87		06/23/87		09/30/87		06/23/87		06/19/87		09/30/87	
SERIES CONTAMINANT NAME	CAS #	UNIT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT
ASBESTOS														
CHRYSOTILE (mass conc.)	CHRY(mass)	%	NA	NA	1003.0000 J	0.50000	NA	NA	1682.0000 J	0.50000	117.0000 J	0.50000	NA	NA
AMPHIBOLE (mass conc.)	AMPH(mass)	%	NA	NA	0.5000 U	0.50000	NA	NA	814.0000 J	0.50000	26.0000 J	0.50000	NA	NA
TOTAL ASBESTOS (wt. %)	TOTAS(wt%)	%	NA	NA	0.1030 J	0.00005	NA	NA	0.2500 J	0.00005	0.0030 J	0.00005	NA	NA
PLM (Total Asbestos:area % chrysotile)	PLM:tasb%	%	2.0000 J	1.00000	1.0000 U	1.00000	NA	NA	1.0000 U	1.00000	1.0000 U	1.00000	NA	NA
GRAIN SIZE & SOIL MOISTURE														
FINE SAND (Percent)	FS:%	%	NA	NA	NA	NA	24.9000	0.00000	NA	NA	NA	NA	12.3000	0.00000
SILT & CLAY (Percent)	S&C:%	%	NA	NA	NA	NA	9.7000	0.00000	NA	NA	NA	NA	8.3000	0.00000
SOIL MOISTURE (Percent)	MOIST:%	%	NA	NA	NA	NA	1.7000	0.00000	NA	NA	NA	NA	1.3000	0.00000
SAND & GRAVEL (Percent)	S&G:%	%	NA	NA	NA	NA	65.5000	0.00000	NA	NA	NA	NA	79.4000	0.00000

SOUTH BAY ASBESTOS
SURFACE SOIL ANALYTICAL RESULTS

SERIES CONTAMINANT NAME	CAS #	UNIT	SL-049-001 06/17/87 READING	DETECT	SL-049-003 09/30/87 READING	DETECT	SL-050-001 06/17/87 READING	DETECT	SL-050-003 09/30/87 READING	DETECT	SL-051-001 06/18/87 READING	DETECT	SL-051-003 09/30/87 READING	DETECT
ASBESTOS														
CHRYSOTILE (mass conc.)	CHRY(mass)	%	NA	NA	NA	NA	292.0000 J	0.50000	NA	NA	NA	NA	NA	NA
AMPHIBOLE (mass conc.)	AMPH(mass)	%	NA	NA	NA	NA	4.0000 J	0.50000	NA	NA	NA	NA	NA	NA
TOTAL ASBESTOS (wt. %)	TOTAS(wt%)	%	NA	NA	NA	NA	0.0300 J	0.00005	NA	NA	NA	NA	NA	NA
PLM (Total Asbestos:area % chrysotile)	PLM:tasb%	%	1.0000 U	1.00000	NA	NA	1.0000 J	1.00000	NA	NA	1.0000 U	1.00000	NA	NA
GRAIN SIZE & SOIL MOISTURE														
FINE SAND (Percent)	FS:%	%	NA	NA	14.6000	0.00000	NA	NA	12.5000	0.00000	NA	NA	15.0000	0.00000
SILT & CLAY (Percent)	S&C:%	%	NA	NA	7.9000	0.00000	NA	NA	6.3000	0.00000	NA	NA	8.8000	0.00000
SOIL MOISTURE (Percent)	MOIST:%	%	NA	NA	2.6000	0.00000	NA	NA	2.0000	0.00000	NA	NA	3.6000	0.00000
SAND & GRAVEL (Percent)	S&G:%	%	NA	NA	77.8000	0.00000	NA	NA	81.3000	0.00000	NA	NA	76.2000	0.00000

SOUTH BAY ASBESTOS
SURFACE SOIL ANALYTICAL RESULTS

			SAMPLING LOCATION											
	LOCID -->		SL-052-001		SL-052-003		SL-053-001		SL-053-003		SL-054-001		SL-054-003	
	Date sample taken -->		06/23/87		09/30/87		06/22/87		10/01/87		06/22/87		10/01/87	
SERIES CONTAMINANT NAME	CAS #	UNIT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT
ASBESTOS														
CHRYSOTILE (mass conc.)	CHRY(mass)	%	NA	NA	NA	NA	539.0000 J	0.50000	NA	NA	NA	NA	NA	NA
AMPHIBOLE (mass conc.)	AMPH(mass)	%	NA	NA	NA	NA	0.5000 U	0.50000	NA	NA	NA	NA	NA	NA
TOTAL ASBESTOS (wt. %)	TOTAS(wt%)	%	NA	NA	NA	NA	0.0640 J	0.00005	NA	NA	NA	NA	NA	NA
PLM (Total Asbestos:area % chrysotile)	PLM:tasb%	%	1.0000 U	1.00000	NA	NA	4.0000 J	1.00000	NA	NA	1.0000 U	1.00000	NA	NA
GRAIN SIZE & SOIL MOISTURE														
FINE SAND (Percent)	FS:%	%	NA	NA	5.4000	0.00000	NA	NA	8.6000	0.00000	NA	NA	3.5000	0.00000
SILT & CLAY (Percent)	S&C:%	%	NA	NA	2.1000	0.00000	NA	NA	2.1000	0.00000	NA	NA	1.0000	0.00000
SOIL MOISTURE (Percent)	MOIST:%	%	NA	NA	0.6000	0.00000	NA	NA	5.2000	0.00000	NA	NA	9.9000	0.00000
SAND & GRAVEL (Percent)	S&G:%	%	NA	NA	92.6000	0.00000	NA	NA	89.4000	0.00000	NA	NA	95.6000	0.00000

SOUTH BAY ASBESTOS
SURFACE SOIL ANALYTICAL RESULTS

			SAMPLING LOCATION											
		LOCID -->	SL-055-001		SL-055-003		SL-056-001		SL-056-003		SL-057-001		SL-057-003	
		Date sample taken -->	06/22/87		10/01/87		06/23/87		10/01/87		06/23/87		10/01/87	
SERIES CONTAMINANT NAME	CAS #	UNIT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT
ASBESTOS														
CHRYSOTILE (mass conc.)	CHRY(mass)	%	NA	NA	NA	NA	NA	NA	NA	NA	319.0000 J	0.50000	NA	NA
AMPHIBOLE (mass conc.)	AMPH(mass)	%	NA	NA	NA	NA	NA	NA	NA	NA	0.5000 U	0.50000	NA	NA
TOTAL ASBESTOS (wt. %)	TOTAS(wt%)	%	NA	NA	NA	NA	NA	NA	NA	NA	0.0320 J	0.00005	NA	NA
PLM (Total Asbestos:area % chrysotile)	PLM:tasb%	%	4.0000 J	1.00000	NA	NA	2.0000 J	1.00000	NA	NA	1.0000 J	1.00000	NA	NA
GRAIN SIZE & SOIL MOISTURE														
FINE SAND (Percent)	FS:%	%	NA	NA	2.4000	0.00000	NA	NA	3.8000	0.00000	NA	NA	4.5000	0.00000
SILT & CLAY (Percent)	S&C:%	%	NA	NA	1.1000	0.00000	NA	NA	0.7000	0.00000	NA	NA	0.8000	0.00000
SOIL MOISTURE (Percent)	MOIST:%	%	NA	NA	3.6000	0.00000	NA	NA	14.6000	0.00000	NA	NA	12.9000	0.00000
SAND & GRAVEL (Percent)	S&G:%	%	NA	NA	96.6000	0.00000	NA	NA	95.6000	0.00000	NA	NA	94.6000	0.00000

SOUTH BAY ASBESTOS
SURFACE SOIL ANALYTICAL RESULTS

			SAMPLING LOCATION											
		LOCID -->	SL-058-001		SL-STD-001		SL-STD-002		SL-STD-003		SL-STD-004		SL-STD-005	
		Date sample taken -->	06/23/87		06/24/87		06/24/87		06/24/87		11/25/87		11/25/87	
SERIES CONTAMINANT NAME	CAS #	UNIT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT
ASBESTOS														
CHRYSOTILE (mass conc.)	CHRY(mass)	ng/mg	242.0000 J	0.50000	183.0000 J	0.50000	1049.0000 J	0.50000	213764.0000 J	0.50000	3421.0000	0.50000	3475.0000	0.50000
AMPHIBOLE (mass conc.)	AMPH(mass)	ng/mg	0.5000 U	0.50000	277.0000 J	0.50000	647.0000 J	0.50000	0.5000 U	0.50000	0.5000 U	0.50000	0.5000 U	0.50000
TOTAL ASBESTOS (wt. %)	TOTAS(wt%)	%	0.0240 J	0.00005	0.0460 J	0.00005	0.2500 J	0.00005	21.4000 J	0.00005	0.3420	0.00005	0.3470	0.00005
PLM (Total Asbestos:area % chrysotile)	PLM:tasb%	%	1.0000 U	1.00000	1.0000 U	1.00000	1.0000 U	1.00000	1.0000 U	1.00000	NA	NA	NA	NA
GRAIN SIZE & SOIL MOISTURE														
FINE SAND (Percent)	FS:%	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SILT & CLAY (Percent)	S&C:%	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SOIL MOISTURE (Percent)	MOIST:%	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SAND & GRAVEL (Percent)	S&G:%	%	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

SUBSURFACE SOIL

SOUTH BAY ASBESTOS
SUBSURFACE SOIL ANALYTICAL RESULTS

SERIES CONTAMINANT NAME	CAS #	UNIT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT
SAMPLING LOCATION														
LOCID -->			SS-001-001		SS-001-002		SS-001-003		SS-001-004		SS-002-001		SS-002-002	
Date sample taken -->			06/11/87		06/11/87		06/11/87		06/11/87		06/11/87		06/11/87	
Depth sample taken -->			0.0-1.5 FT.		3.5-5.0 FT.		8.0-9.5 FT.		8.0-9.5 FT.		0.0-1.5 FT.		0.0-1.5 FT.	
ASBESTOS														
CHRYSOTILE (mass conc.)	CHRY(mass)	ng/mg	1253.0000 J	0.50000	NA	NA	NA	NA	NA	NA	NA	NA	300.0000 J	0.50000
AMPHIBOLE (mass conc.)	AMPH(mass)	ng/mg	214.0000 J	0.50000	NA	NA	NA	NA	NA	NA	NA	NA	119.0000 J	0.50000
TOTAL ASBESTOS (wt. %)	TOTAS(wt%)	%	0.1470 J	0.00005	NA	NA	NA	NA	NA	NA	NA	NA	0.0420 J	0.00005
PLM (Total Asbestos:area % chrysotile)	PLM:tasb%	%	2.0000 J	1.00000	1.0000 U	1.00000	1.0000 U	1.00000	1.0000 U	1.00000	1.0000 J	1.00000	1.0000 U	1.00000
BASE NEUTAL ACID EXTRACTABLE														
4-NITROANILINE	100-01-6	ug/kg	NA	NA	NA	NA	4160.0000 UJ	4160.00	4144.0000 UJ	4144.00	NA	NA	NA	NA
PHENOL	108-95-2	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	855.0000 U	855.000	NA	NA	NA	NA
4-NITROPHENOL	100-02-7	ug/kg	NA	NA	NA	NA	4160.0000 U	4160.00	4144.0000 U	4144.00	NA	NA	NA	NA
BIS(2-CHLOROETHYL) ETHER	111-44-4	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	855.0000 U	855.000	NA	NA	NA	NA
4-BROMOPHENYLPHENYL ETHER	101-55-3	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	855.0000 U	855.000	NA	NA	NA	NA
BENZO(B)FLUORANTHENE	205-99-2	ug/kg	NA	NA	NA	NA	858.0000 UJ	858.000	855.0000 UJ	855.000	NA	NA	NA	NA
4-METHYLPHENOL	106-44-5	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	855.0000 U	855.000	NA	NA	NA	NA
4-CHLOROANILINE	106-47-8	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	855.0000 U	855.000	NA	NA	NA	NA
BENZYL ALCOHOL	100-51-6	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	855.0000 U	855.000	NA	NA	NA	NA
2,4-DIMETHYLPHENOL	105-67-9	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	855.0000 U	855.000	NA	NA	NA	NA
1,4-DICHLOROBENZENE	106-46-7	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	855.0000 U	855.000	NA	NA	NA	NA
FLUORANTHENE	206-44-0	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	855.0000 U	855.000	NA	NA	NA	NA
BIS(2-ETHYLHEXYL) PHTHALATE	117-81-7	ug/kg	NA	NA	NA	NA	858.0000 UJ	858.000	855.0000 UJ	855.000	NA	NA	NA	NA
BENZO(K)FLUORANTHENE	207-08-9	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	855.0000 U	855.000	NA	NA	NA	NA
HEXACHLOROBENZENE	118-74-1	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	855.0000 U	855.000	NA	NA	NA	NA
ACENAPHTHYLENE	208-96-8	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	855.0000 U	855.000	NA	NA	NA	NA
1,2,4-TRICHLOROBENZENE	120-82-1	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	855.0000 U	855.000	NA	NA	NA	NA
BENZO(A)ANTHRACENE	56-55-3	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	855.0000 U	855.000	NA	NA	NA	NA
CHRYSENE	218-01-9	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	855.0000 U	855.000	NA	NA	NA	NA
4-CHLORO-3-METHYLPHENOL	59-50-7	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	855.0000 U	855.000	NA	NA	NA	NA
BIS(2-CHLISOPROPYL) ETHER	39638-32-9	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	855.0000 U	855.000	NA	NA	NA	NA
2,6-DINITROTOLUENE	606-20-2	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	855.0000 U	855.000	NA	NA	NA	NA
BENZO(A)PYRENE	50-32-8	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	855.0000 U	855.000	NA	NA	NA	NA
2,4-DINITROPHENOL	51-28-5	ug/kg	NA	NA	NA	NA	4160.0000 U	4160.00	4144.0000 U	4144.00	NA	NA	NA	NA
DIBENZO(A,H)ANTHRACENE	53-70-3	ug/kg	NA	NA	NA	NA	858.0000 UJ	858.000	855.0000 UJ	855.000	NA	NA	NA	NA
NITROBENZENE	98-95-3	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	855.0000 U	855.000	NA	NA	NA	NA
3-NITROANILINE	99-09-2	ug/kg	NA	NA	NA	NA	4160.0000 UJ	4160.00	4144.0000 UJ	4144.00	NA	NA	NA	NA
INDENO(1,2,3-CD)PYRENE	193-39-5	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	855.0000 U	855.000	NA	NA	NA	NA
BENZOIC ACID	65-85-0	ug/kg	NA	NA	NA	NA	4160.0000 UJ	4160.00	4144.0000 UJ	4144.00	NA	NA	NA	NA
2,4-DICHLOROPHENOL	120-83-2	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	855.0000 U	855.000	NA	NA	NA	NA
1,3-DICHLOROBENZENE	541-73-1	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	855.0000 U	855.000	NA	NA	NA	NA
4-CHLOROPHENYLPHENYL ETHER	7005-72-3	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	855.0000 U	855.000	NA	NA	NA	NA
DIMETHYL PHTHALATE	131-11-3	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	855.0000 U	855.000	NA	NA	NA	NA
BIS(2-CHLOROETHOXY) METHANE	111-91-1	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	855.0000 U	855.000	NA	NA	NA	NA
ISOPHORONE	78-59-1	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	855.0000 U	855.000	NA	NA	NA	NA
PYRENE	129-00-0	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	855.0000 U	855.000	NA	NA	NA	NA
DIBENZOFURAN	132-64-9	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	855.0000 U	855.000	NA	NA	NA	NA
BENZO(G,H,I)PERYLENE	191-24-2	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	855.0000 U	855.000	NA	NA	NA	NA
ANTHRACENE	120-12-7	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	855.0000 U	855.000	NA	NA	NA	NA
DI-N-OCTYL PHTHALATE	117-84-0	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	855.0000 U	855.000	NA	NA	NA	NA

SOUTH BAY ASBESTOS
SUBSURFACE SOIL ANALYTICAL RESULTS

SAMPLING LOCATION

		LOCID -->	SS-001-001		SS-001-002		SS-001-003		SS-001-004		SS-002-001		SS-002-002	
		Date sample taken -->	06/11/87		06/11/87		06/11/87		06/11/87		06/11/87		06/11/87	
		Depth sample taken -->	0.0-1.5 FT.		3.5-5.0 FT.		8.0-9.5 FT.		8.0-9.5 FT.		0.0-1.5 FT.		0.0-1.5 FT.	
SERIES CONTAMINANT NAME	CAS #	UNIT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT
DIETHYL PHTHALATE	84-66-2	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	855.0000 U	855.000	NA	NA	NA	NA
PHENANTHRENE	85-01-8	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	855.0000 U	855.000	NA	NA	NA	NA
N-NITROSODIPHENYLAMINE	86-30-6	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	855.0000 U	855.000	NA	NA	NA	NA
ACENAPHTHENE	83-32-9	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	855.0000 U	855.000	NA	NA	NA	NA
PENTACHLOROPHENOL	87-86-5	ug/kg	NA	NA	NA	NA	4160.0000 U	4160.00	4144.0000 U	4144.00	NA	NA	NA	NA
4,6-DiNO2-2-Methylphenol	111-11-11	ug/kg	NA	NA	NA	NA	4160.0000 UJ	4160.00	4144.0000 UJ	4144.00	NA	NA	NA	NA
2,4,5-TRICHLOROPHENOL	95-95-4	ug/kg	NA	NA	NA	NA	4160.0000 U	4160.00	4144.0000 U	4144.00	NA	NA	NA	NA
2,4,6-TRICHLOROPHENOL	88-06-2	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	855.0000 U	855.000	NA	NA	NA	NA
2-METHYLNAPHTHALENE	91-57-6	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	855.0000 U	855.000	NA	NA	NA	NA
2-METHYLPHENOL	95-48-7	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	855.0000 U	855.000	NA	NA	NA	NA
N-NITROSO-DIPROPYLAMINE	621-64-7	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	855.0000 U	855.000	NA	NA	NA	NA
DI-N-BUTYL PHTHALATE	84-74-2	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	530.0000 J	10.0000	NA	NA	NA	NA
2-NITROANILINE	88-74-4	ug/kg	NA	NA	NA	NA	4160.0000 U	4160.00	4144.0000 U	4144.00	NA	NA	NA	NA
1,2-DICHLOROBENZENE	95-50-1	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	855.0000 U	855.000	NA	NA	NA	NA
BUTYLBENZYLPHTHALATE	85-68-7	ug/kg	NA	NA	NA	NA	858.0000 UJ	858.000	855.0000 UJ	855.000	NA	NA	NA	NA
HEXACHLOROBUTADIENE	87-68-3	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	855.0000 U	855.000	NA	NA	NA	NA
3,3-DICHLOROBENZIDINE	91-94-1	ug/kg	NA	NA	NA	NA	1716.0000 UJ	1716.00	1709.0000 UJ	1709.00	NA	NA	NA	NA
HEXACHLOROCYCLOPENTADIENE	77-47-4	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	855.0000 U	855.000	NA	NA	NA	NA
2-CHLORONAPHTHALENE	91-58-7	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	855.0000 U	855.000	NA	NA	NA	NA
NAPHTHALENE	91-20-3	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	855.0000 U	855.000	NA	NA	NA	NA
2-CHLOROPHENOL	95-57-8	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	855.0000 U	855.000	NA	NA	NA	NA
FLUORENE	86-73-7	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	855.0000 U	855.000	NA	NA	NA	NA
HEXACHLOROETHANE	67-72-1	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	855.0000 U	855.000	NA	NA	NA	NA
2-NITROPHENOL	88-75-5	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	855.0000 U	855.000	NA	NA	NA	NA
METALS														
CYANIDE	74-90-8D	mg/kg	NA	NA	NA	NA	0.3300 U	0.33000	0.3200 U	0.32000	NA	NA	NA	NA
ARSENIC	7440-38-2	mg/kg	NA	NA	NA	NA	6.5000	0.14000	5.9000	0.14000	NA	NA	NA	NA
BERYLLIUM	7440-41-7	mg/kg	NA	NA	NA	NA	1.9000	0.68000	1.8000	0.68000	NA	NA	NA	NA
LEAD	7439-92-1	mg/kg	NA	NA	NA	NA	10.0000 J-*	0.10000	9.8000 J-*	0.10000	NA	NA	NA	NA
VANADIUM	7440-62-2	mg/kg	NA	NA	NA	NA	77.0000	0.88000	76.0000	0.88000	NA	NA	NA	NA
MANGANESE	7439-96-5	mg/kg	NA	NA	NA	NA	619.0000	0.56000	502.0000	0.56000	NA	NA	NA	NA
ZINC	7440-66-6	mg/kg	NA	NA	NA	NA	86.0000 J-E	0.36000	87.0000 J-E	0.36000	NA	NA	NA	NA
NICKEL	7440-02-0	mg/kg	NA	NA	NA	NA	108.0000	3.20000	113.0000	3.20000	NA	NA	NA	NA
CALCIUM	7440-70-2	mg/kg	NA	NA	NA	NA	5880.0000	3.40000	5320.0000	3.40000	NA	NA	NA	NA
SILVER	7440-22-4	mg/kg	NA	NA	NA	NA	4.9000	0.92000	3.6000	0.92000	NA	NA	NA	NA
SELENIUM	7782-49-2	mg/kg	NA	NA	NA	NA	1.0000 U	1.00000	0.9000 U	0.90000	NA	NA	NA	NA
THALLIUM	7440-28-0	mg/kg	NA	NA	NA	NA	2.0000 U	2.00000	1.8000 U	1.80000	NA	NA	NA	NA
ANTIMONY	7440-36-0	mg/kg	NA	NA	NA	NA	25.0000 J-S	3.20000	27.0000 J-S	3.20000	NA	NA	NA	NA
SODIUM	7440-23-5	mg/kg	NA	NA	NA	NA	5980.0000	7.00000	5980.0000	7.00000	NA	NA	NA	NA
ALUMINUM	7429-90-5	mg/kg	NA	NA	NA	NA	39500.0000	7.40000	35900.0000	7.40000	NA	NA	NA	NA
COBALT	7440-48-4	mg/kg	NA	NA	NA	NA	22.0000	1.42000	21.0000	1.42000	NA	NA	NA	NA
CHROMIUM	7440-47-3	mg/kg	NA	NA	NA	NA	104.0000	1.04000	102.0000	1.04000	NA	NA	NA	NA
COPPER	7440-50-8	mg/kg	NA	NA	NA	NA	54.0000	2.00000	57.0000	2.00000	NA	NA	NA	NA
MAGNESIUM	7439-95-4	mg/kg	NA	NA	NA	NA	14300.0000	4.60000	14500.0000	4.60000	NA	NA	NA	NA
POTASSIUM	7440-09-7	mg/kg	NA	NA	NA	NA	5510.0000	54.4000	4900.0000	54.4000	NA	NA	NA	NA
CADMIUM	7440-43-9	mg/kg	NA	NA	NA	NA	0.6900 U	0.70000	0.8300 U	0.83000	NA	NA	NA	NA
IRON	7439-89-6	mg/kg	NA	NA	NA	NA	43500.0000	0.50000	43100.0000	0.50000	NA	NA	NA	NA

SOUTH BAY ASBESTOS
SUBSURFACE SOIL ANALYTICAL RESULTS

			SAMPLING LOCATION											
	LOCID -->		SS-001-001		SS-001-002		SS-001-003		SS-001-004		SS-002-001		SS-002-002	
	Date sample taken -->		06/11/87		06/11/87		06/11/87		06/11/87		06/11/87		06/11/87	
	Depth sample taken -->		0.0-1.5 FT.		3.5-5.0 FT.		8.0-9.5 FT.		8.0-9.5 FT.		0.0-1.5 FT.		0.0-1.5 FT.	
SERIES CONTAMINANT NAME	CAS #	UNIT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT
MERCURY	7439-97-6	mg/kg	NA	NA	NA	NA	0.2800 J-S	0.10000	0.1400 J-S	0.10000	NA	NA	NA	NA
BARIUM	7440-39-3	mg/kg	NA	NA	NA	NA	289.0000	0.14000	226.0000	0.14000	NA	NA	NA	NA
PESTICIDES														
METHOXYCHLOR	72-43-5	ug/kg	NA	NA	NA	NA	208.0000 U	208.000	207.2000 U	207.200	NA	NA	NA	NA
4,4-DDT	50-29-3	ug/kg	NA	NA	NA	NA	41.6000 U	41.6000	41.4400 U	41.4400	NA	NA	NA	NA
HEPTACHLOR EPOXIDE	1024-57-3	ug/kg	NA	NA	NA	NA	20.8000 U	20.8000	20.7200 U	20.7200	NA	NA	NA	NA
4,4-DDD	72-54-8	ug/kg	NA	NA	NA	NA	41.6000 U	41.6000	41.4400 U	41.4400	NA	NA	NA	NA
PCB-1254	11097-69-1	ug/kg	NA	NA	NA	NA	416.0000 U	416.000	414.4000 U	414.400	NA	NA	NA	NA
PCB-1221	11104-28-2	ug/kg	NA	NA	NA	NA	208.0000 U	208.000	207.2000 U	207.200	NA	NA	NA	NA
PCB-1232	11141-16-5	ug/kg	NA	NA	NA	NA	208.0000 U	208.000	207.2000 U	207.200	NA	NA	NA	NA
4,4-DDE	72-55-9	ug/kg	NA	NA	NA	NA	41.6000 U	41.6000	41.4400 U	41.4400	NA	NA	NA	NA
PCB-1016	12674-11-2	ug/kg	NA	NA	NA	NA	208.0000 U	208.000	207.2000 U	207.200	NA	NA	NA	NA
ALDRIN	309-00-2	ug/kg	NA	NA	NA	NA	20.8000 U	20.8000	20.7200 U	20.7200	NA	NA	NA	NA
ALPHA-BHC	319-84-6	ug/kg	NA	NA	NA	NA	20.8000 U	20.8000	20.7200 U	20.7200	NA	NA	NA	NA
ENDOSULFAN II	33213-65-9	ug/kg	NA	NA	NA	NA	41.6000 U	41.6000	41.4400 U	41.4400	NA	NA	NA	NA
DELTA-BHC	319-86-8	ug/kg	NA	NA	NA	NA	20.8000 U	20.8000	20.7200 U	20.7200	NA	NA	NA	NA
PCB-1260	11096-82-5	ug/kg	NA	NA	NA	NA	416.0000 U	416.000	414.4000 U	414.400	NA	NA	NA	NA
ENDRIN KETONE	53494-70-5	ug/kg	NA	NA	NA	NA	41.6000 U	41.6000	41.4400 U	41.4400	NA	NA	NA	NA
PCB-1248	12672-29-6	ug/kg	NA	NA	NA	NA	208.0000 U	208.000	207.2000 U	207.200	NA	NA	NA	NA
GAMMA-BHC (LINDANE)	58-89-9	ug/kg	NA	NA	NA	NA	20.8000 U	20.8000	20.7200 U	20.7200	NA	NA	NA	NA
ENDRIN	72-20-8	ug/kg	NA	NA	NA	NA	41.6000 U	41.6000	41.4400 U	41.4400	NA	NA	NA	NA
PCB-1242	53469-21-9	ug/kg	NA	NA	NA	NA	208.0000 U	208.000	207.2000 U	207.200	NA	NA	NA	NA
ALPHA-CHLORDANE	57-74-9	ug/kg	NA	NA	NA	NA	208.0000 U	208.000	207.2000 U	207.200	NA	NA	NA	NA
DIELDRIN	60-57-1	ug/kg	NA	NA	NA	NA	41.6000 U	41.6000	41.4400 U	41.4400	NA	NA	NA	NA
BETA-BHC	319-85-7	ug/kg	NA	NA	NA	NA	20.8000 U	20.8000	20.7200 U	20.7200	NA	NA	NA	NA
HEPTACHLOR	76-44-8	ug/kg	NA	NA	NA	NA	20.8000 U	20.8000	20.7200 U	20.7200	NA	NA	NA	NA
TOXAPHENE	8001-35-2	ug/kg	NA	NA	NA	NA	416.0000 U	416.000	414.4000 U	414.400	NA	NA	NA	NA
ENDOSULFAN I	959-98-8	ug/kg	NA	NA	NA	NA	20.8000 U	20.8000	20.7200 U	20.7200	NA	NA	NA	NA
ENDOSULFAN SULFATE	1031-07-8	ug/kg	NA	NA	NA	NA	41.6000 U	41.6000	41.4400 U	41.4400	NA	NA	NA	NA
VOLATILES														
STYRENE	100-42-5	ug/kg	NA	NA	NA	NA	6.0000 U	6.00000	6.0000 U	6.00000	NA	NA	NA	NA
CIS-1,3-DICHLOROPROPENE	10061-01-5	ug/kg	NA	NA	NA	NA	6.0000 U	6.00000	6.0000 U	6.00000	NA	NA	NA	NA
ETHYLBENZENE	100-41-4	ug/kg	NA	NA	NA	NA	6.0000 U	6.00000	6.0000 U	6.00000	NA	NA	NA	NA
1,1,2,2-TETRACHLOROETHANE	79-34-5	ug/kg	NA	NA	NA	NA	6.0000 U	6.00000	6.0000 U	6.00000	NA	NA	NA	NA
DIBROMOCHLOROMETHANE	124-48-1	ug/kg	NA	NA	NA	NA	6.0000 U	6.00000	6.0000 U	6.00000	NA	NA	NA	NA
CHLOROETHANE	75-00-3	ug/kg	NA	NA	NA	NA	13.0000 U	13.0000	12.0000 U	12.0000	NA	NA	NA	NA
VINYL ACETATE	108-05-4	ug/kg	NA	NA	NA	NA	13.0000 U	13.0000	12.0000 U	12.0000	NA	NA	NA	NA
TOLUENE	108-88-3	ug/kg	NA	NA	NA	NA	8.0000 U	8.00000	8.0000 U	8.00000	NA	NA	NA	NA
METHYLENE CHLORIDE (DICHLOROMETHANE)	75-09-2	ug/kg	NA	NA	NA	NA	10.0000 UJB	10.0000	10.0000 UJB	10.0000	NA	NA	NA	NA
1,2-DICHLOROETHANE	107-06-2	ug/kg	NA	NA	NA	NA	6.0000 U	6.00000	6.0000 U	6.00000	NA	NA	NA	NA
CHLOROBENZENE	108-90-7	ug/kg	NA	NA	NA	NA	6.0000 U	6.00000	6.0000 U	6.00000	NA	NA	NA	NA
BROMOFORM	75-25-2	ug/kg	NA	NA	NA	NA	6.0000 U	6.00000	6.0000 U	6.00000	NA	NA	NA	NA
CARBON TETRACHLORIDE	56-23-5	ug/kg	NA	NA	NA	NA	6.0000 U	6.00000	6.0000 U	6.00000	NA	NA	NA	NA
ACETONE	67-64-1	ug/kg	NA	NA	NA	NA	33.0000 UJB	33.0000	43.0000 UJB	43.0000	NA	NA	NA	NA
1,1-DICHLOROETHANE	75-34-3	ug/kg	NA	NA	NA	NA	6.0000 U	6.00000	6.0000 U	6.00000	NA	NA	NA	NA
BENZENE	71-43-2	ug/kg	NA	NA	NA	NA	6.0000 U	6.00000	6.0000 U	6.00000	NA	NA	NA	NA
TRICHLOROETHENE	79-01-6	ug/kg	NA	NA	NA	NA	6.0000 U	6.00000	6.0000 U	6.00000	NA	NA	NA	NA

SOUTH BAY ASBESTOS
SUBSURFACE SOIL ANALYTICAL RESULTS

			SAMPLING LOCATION											
		LOCID -->	SS-001-001		SS-001-002		SS-001-003		SS-001-004		SS-002-001		SS-002-002	
		Date sample taken -->	06/11/87		06/11/87		06/11/87		06/11/87		06/11/87		06/11/87	
		Depth sample taken -->	0.0-1.5 FT.		3.5-5.0 FT.		8.0-9.5 FT.		8.0-9.5 FT.		0.0-1.5 FT.		0.0-1.5 FT.	
SERIES CONTAMINANT NAME	CAS #	UNIT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT
1,2-DICHLOROPROPANE	78-87-5	ug/kg	NA	NA	NA	NA	6.0000 U	6.00000	6.0000 U	6.00000	NA	NA	NA	NA
TETRACHLOROETHENE	127-18-4	ug/kg	NA	NA	NA	NA	6.0000 U	6.00000	6.0000 U	6.00000	NA	NA	NA	NA
2-CHLOROETHYLVINYLETHER	110-75-8	ug/kg	NA	NA	NA	NA	13.0000 U	13.0000	12.0000 U	12.0000	NA	NA	NA	NA
1,1,1-TRICHLOROETHANE	71-55-6	ug/kg	NA	NA	NA	NA	6.0000 U	6.00000	6.0000 U	6.00000	NA	NA	NA	NA
TRANS-1,2-DICHLOROETHENE	156-60-5	ug/kg	NA	NA	NA	NA	6.0000 UJ	6.00000	6.0000 UJ	6.00000	NA	NA	NA	NA
CHLOROFORM	67-66-3	ug/kg	NA	NA	NA	NA	3.0000 J	6.00000	2.0000 J	6.00000	NA	NA	NA	NA
VINYL CHLORIDE	75-01-4	ug/kg	NA	NA	NA	NA	13.0000 U	13.0000	12.0000 U	12.0000	NA	NA	NA	NA
BROMOMETHANE (METHYL BROMIDE)	74-83-9	ug/kg	NA	NA	NA	NA	13.0000 UJ	13.0000	12.0000 UJ	12.0000	NA	NA	NA	NA
4-METHYL-2-PENTANONE	108-10-1	ug/kg	NA	NA	NA	NA	13.0000 U	13.0000	12.0000 U	12.0000	NA	NA	NA	NA
2-HEXANONE	591-78-6	ug/kg	NA	NA	NA	NA	13.0000 U	13.0000	12.0000 U	12.0000	NA	NA	NA	NA
1,1,2-TRICHLOROETHANE	79-00-5	ug/kg	NA	NA	NA	NA	6.0000 U	6.00000	6.0000 U	6.00000	NA	NA	NA	NA
TOTAL XYLENES	1330-20-7	ug/kg	NA	NA	NA	NA	6.0000 U	6.00000	6.0000 U	6.00000	NA	NA	NA	NA
BROMODICHLOROMETHANE	75-27-4	ug/kg	NA	NA	NA	NA	6.0000 U	6.00000	6.0000 U	6.00000	NA	NA	NA	NA
1,1-DICHLOROETHENE	75-35-4	ug/kg	NA	NA	NA	NA	6.0000 U	6.00000	6.0000 U	6.00000	NA	NA	NA	NA
2-BUTANONE	78-93-3	ug/kg	NA	NA	NA	NA	13.0000 U	13.0000	8.0000 J	10.0000	NA	NA	NA	NA
CHLOROMETHANE (METHYL CHLORIDE)	74-87-3	ug/kg	NA	NA	NA	NA	13.0000 UJ	13.0000	12.0000 UJ	12.0000	NA	NA	NA	NA
CARBON DISULFIDE	75-15-0	ug/kg	NA	NA	NA	NA	6.0000 U	6.00000	6.0000 U	6.00000	NA	NA	NA	NA
TRANS-1,3-DICHLOROPROPENE	10061-02-6	ug/kg	NA	NA	NA	NA	7.0000 U	7.00000	7.0000 U	7.00000	NA	NA	NA	NA

SOUTH BAY ASBESTOS
SUBSURFACE SOIL ANALYTICAL RESULTS

			SAMPLING LOCATION											
		LOCID -->	SS-002-003		SS-002-004		SS-003-001		SS-003-002		SS-003-003		SS-003-004	
		Date sample taken -->	06/11/87		06/11/87		06/10/87		06/10/87		06/10/87		06/10/87	
		Depth sample taken -->	4.0-5.5 FT.		9.0-10.5 FT.		2.5-4.0 FT.		3.5-5.0 FT.		8.5-10.0 FT.		2.4-4.0 FT.	
SERIES CONTAMINANT NAME	CAS #	UNIT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT
ASBESTOS														
CHRYSOTILE (mass conc.)	CHRY(mass)	ng/mg	45.0000 J	0.50000	NA	NA	22.2000 J	0.50000	NA	NA	NA	NA	15.9000 J	0.50000
AMPHIBOLE (mass conc.)	AMPH(mass)	ng/mg	63.0000 J	0.50000	NA	NA	8.2000 J	0.50000	NA	NA	NA	NA	0.5000 U	0.50000
TOTAL ASBESTOS (wt. %)	TOTAS(wt%)	%	0.0110 J	0.00005	NA	NA	0.0030 J	0.00005	NA	NA	NA	NA	0.0016 J	0.00005
PLM (Total Asbestos:area % chrysotile)	PLM:tasb%	%	1.0000 U	1.00000	1.0000 U	1.00000	1.0000 U	1.00000	1.0000 U	1.00000	1.0000 U	1.00000	1.0000 U	1.00000
BASE NEUTAL ACID EXTRACTABLE														
4-NITROANILINE	100-01-6	ug/kg	NA	NA	4224.0000 UJ	4224.00	NA	NA	NA	NA	3792.0000 UJ	3792.00	NA	NA
PHENOL	108-95-2	ug/kg	NA	NA	871.0000 U	871.000	NA	NA	NA	NA	782.0000 U	782.000	NA	NA
4-NITROPHENOL	100-02-7	ug/kg	NA	NA	4224.0000 U	4224.00	NA	NA	NA	NA	3792.0000 U	3792.00	NA	NA
BIS(2-CHLOROETHYL) ETHER	111-44-4	ug/kg	NA	NA	871.0000 U	871.000	NA	NA	NA	NA	782.0000 U	782.000	NA	NA
4-BROMOPHENYLPHENYL ETHER	101-55-3	ug/kg	NA	NA	871.0000 U	871.000	NA	NA	NA	NA	782.0000 U	782.000	NA	NA
BENZO(B)FLUORANTHENE	205-99-2	ug/kg	NA	NA	871.0000 UJ	871.000	NA	NA	NA	NA	782.0000 UJ	782.000	NA	NA
4-METHYLPHENOL	106-44-5	ug/kg	NA	NA	871.0000 U	871.000	NA	NA	NA	NA	782.0000 U	782.000	NA	NA
4-CHLOROANILINE	106-47-8	ug/kg	NA	NA	871.0000 U	871.000	NA	NA	NA	NA	782.0000 U	782.000	NA	NA
BENZYL ALCOHOL	100-51-6	ug/kg	NA	NA	871.0000 U	871.000	NA	NA	NA	NA	782.0000 U	782.000	NA	NA
2,4-DIMETHYLPHENOL	105-67-9	ug/kg	NA	NA	871.0000 U	871.000	NA	NA	NA	NA	782.0000 U	782.000	NA	NA
1,4-DICHLOROBENZENE	106-46-7	ug/kg	NA	NA	871.0000 U	871.000	NA	NA	NA	NA	782.0000 U	782.000	NA	NA
FLUORANTHENE	206-44-0	ug/kg	NA	NA	871.0000 U	871.000	NA	NA	NA	NA	782.0000 U	782.000	NA	NA
BIS(2-ETHYLHEXYL) PHTHALATE	117-81-7	ug/kg	NA	NA	871.0000 UJ	871.000	NA	NA	NA	NA	782.0000 UJ	782.000	NA	NA
BENZO(K)FLUORANTHENE	207-08-9	ug/kg	NA	NA	871.0000 U	871.000	NA	NA	NA	NA	782.0000 U	782.000	NA	NA
HEXACHLOROBENZENE	118-74-1	ug/kg	NA	NA	871.0000 U	871.000	NA	NA	NA	NA	782.0000 U	782.000	NA	NA
ACENAPHTHYLENE	208-96-8	ug/kg	NA	NA	871.0000 U	871.000	NA	NA	NA	NA	782.0000 U	782.000	NA	NA
1,2,4-TRICHLOROBENZENE	120-82-1	ug/kg	NA	NA	871.0000 U	871.000	NA	NA	NA	NA	782.0000 U	782.000	NA	NA
BENZO(A)ANTHRACENE	56-55-3	ug/kg	NA	NA	871.0000 U	871.000	NA	NA	NA	NA	782.0000 U	782.000	NA	NA
CHRYSENE	218-01-9	ug/kg	NA	NA	871.0000 U	871.000	NA	NA	NA	NA	782.0000 U	782.000	NA	NA
4-CHLORO-3-METHYLPHENOL	59-50-7	ug/kg	NA	NA	871.0000 U	871.000	NA	NA	NA	NA	782.0000 U	782.000	NA	NA
BIS(2-CHLISOPROPYL) ETHER	39638-32-9	ug/kg	NA	NA	871.0000 U	871.000	NA	NA	NA	NA	782.0000 U	782.000	NA	NA
2,6-DINITROTOLUENE	606-20-2	ug/kg	NA	NA	871.0000 U	871.000	NA	NA	NA	NA	782.0000 U	782.000	NA	NA
BENZO(A)PYRENE	50-32-8	ug/kg	NA	NA	871.0000 U	871.000	NA	NA	NA	NA	782.0000 U	782.000	NA	NA
2,4-DINITROPHENOL	51-28-5	ug/kg	NA	NA	4224.0000 U	4224.00	NA	NA	NA	NA	3792.0000 U	3792.00	NA	NA
DIBENZO(A,H)ANTHRACENE	53-70-3	ug/kg	NA	NA	871.0000 UJ	871.000	NA	NA	NA	NA	782.0000 UJ	782.000	NA	NA
NITROBENZENE	98-95-3	ug/kg	NA	NA	871.0000 U	871.000	NA	NA	NA	NA	782.0000 U	782.000	NA	NA
3-NITROANILINE	99-09-2	ug/kg	NA	NA	4224.0000 UJ	4224.00	NA	NA	NA	NA	3792.0000 UJ	3792.00	NA	NA
INDENO(1,2,3-CD)PYRENE	193-39-5	ug/kg	NA	NA	871.0000 U	871.000	NA	NA	NA	NA	782.0000 U	782.000	NA	NA
BENZOIC ACID	65-85-0	ug/kg	NA	NA	4224.0000 UJ	4224.00	NA	NA	NA	NA	3792.0000 UJ	3792.00	NA	NA
2,4-DICHLOROPHENOL	120-83-2	ug/kg	NA	NA	871.0000 U	871.000	NA	NA	NA	NA	782.0000 U	782.000	NA	NA
1,3-DICHLOROBENZENE	541-73-1	ug/kg	NA	NA	871.0000 U	871.000	NA	NA	NA	NA	782.0000 U	782.000	NA	NA
4-CHLOROPHENYLPHENYL ETHER	7005-72-3	ug/kg	NA	NA	871.0000 U	871.000	NA	NA	NA	NA	782.0000 U	782.000	NA	NA
DIMETHYL PHTHALATE	131-11-3	ug/kg	NA	NA	871.0000 U	871.000	NA	NA	NA	NA	782.0000 U	782.000	NA	NA
BIS(2-CHLOROETHOXY) METHANE	111-91-1	ug/kg	NA	NA	871.0000 U	871.000	NA	NA	NA	NA	782.0000 U	782.000	NA	NA
ISOPHORONE	78-59-1	ug/kg	NA	NA	971.0000 U	671.000	NA	NA	NA	NA	782.0000 U	782.000	NA	NA
PYRENE	129-00-0	ug/kg	NA	NA	871.0000 U	871.000	NA	NA	NA	NA	782.0000 U	782.000	NA	NA
DIBENZOFURAN	132-64-9	ug/kg	NA	NA	871.0000 U	871.000	NA	NA	NA	NA	782.0000 U	782.000	NA	NA
BENZO(G,H,I)PERYLENE	191-24-2	ug/kg	NA	NA	871.0000 U	871.000	NA	NA	NA	NA	782.0000 U	782.000	NA	NA
ANTHRACENE	120-12-7	ug/kg	NA	NA	871.0000 U	871.000	NA	NA	NA	NA	782.0000 U	782.000	NA	NA
DI-N-OCTYL PHTHALATE	117-84-0	ug/kg	NA	NA	871.0000 U	871.000	NA	NA	NA	NA	782.0000 U	782.000	NA	NA
2,4-DINITROTOLUENE	121-14-2	ug/kg	NA	NA	871.0000 U	871.000	NA	NA	NA	NA	782.0000 U	782.000	NA	NA

SOUTH BAY ASBESTOS
SUBSURFACE SOIL ANALYTICAL RESULTS

			SAMPLING LOCATION											
		LOCID -->	SS-002-003		SS-002-004		SS-003-001		SS-003-002		SS-003-003		SS-003-004	
		Date sample taken -->	06/11/87		06/11/87		06/10/87		06/10/87		06/10/87		06/10/87	
		Depth sample taken -->	4.0-5.5 FT.		9.0-10.5 FT.		2.5-4.0 FT.		3.5-5.0 FT.		8.5-10.0 FT.		2.4-4.0 FT.	
SERIES CONTAMINANT NAME	CAS #	UNIT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT
DIETHYL PHTHALATE	84-66-2	ug/kg	NA	NA	871.0000 U	871.000	NA	NA	NA	NA	782.0000 U	782.000	NA	NA
PHENANTHRENE	85-01-8	ug/kg	NA	NA	871.0000 U	871.000	NA	NA	NA	NA	782.0000 U	782.000	NA	NA
N-NITROSODIPHENYLAMINE	86-30-6	ug/kg	NA	NA	871.0000 U	871.000	NA	NA	NA	NA	782.0000 U	782.000	NA	NA
ACENAPHTHENE	83-32-9	ug/kg	NA	NA	871.0000 U	871.000	NA	NA	NA	NA	782.0000 U	782.000	NA	NA
PENTACHLOROPHENOL	87-86-5	ug/kg	NA	NA	4224.0000 U	4224.00	NA	NA	NA	NA	3792.0000 U	3792.00	NA	NA
4,6-DiNO2-2-Methylphenol	111-11-11	ug/kg	NA	NA	4224.0000 UJ	4224.00	NA	NA	NA	NA	3792.0000 UJ	3792.00	NA	NA
2,4,5-TRICHLOROPHENOL	95-95-4	ug/kg	NA	NA	4224.0000 U	4224.00	NA	NA	NA	NA	3792.0000 U	3792.00	NA	NA
2,4,6-TRICHLOROPHENOL	88-06-2	ug/kg	NA	NA	871.0000 U	871.000	NA	NA	NA	NA	782.0000 U	782.000	NA	NA
2-METHYLNAPHTHALENE	91-57-6	ug/kg	NA	NA	871.0000 U	871.000	NA	NA	NA	NA	782.0000 U	782.000	NA	NA
2-METHYLPHENOL	95-48-7	ug/kg	NA	NA	871.0000 U	871.000	NA	NA	NA	NA	782.0000 U	782.000	NA	NA
N-NITROSO-DIPROPYLAMINE	621-64-7	ug/kg	NA	NA	871.0000 U	871.000	NA	NA	NA	NA	782.0000 U	782.000	NA	NA
DI-N-BUTYL PHTHALATE	84-74-2	ug/kg	NA	NA	871.0000 U	871.000	NA	NA	NA	NA	630.0000 J	10.0000	NA	NA
2-NITROANILINE	88-74-4	ug/kg	NA	NA	4224.0000 U	4224.00	NA	NA	NA	NA	3792.0000 U	3792.00	NA	NA
1,2-DICHLOROBENZENE	95-50-1	ug/kg	NA	NA	871.0000 U	871.000	NA	NA	NA	NA	782.0000 U	782.000	NA	NA
BUTYLBENZYLPHTHALATE	85-68-7	ug/kg	NA	NA	871.0000 UJ	871.000	NA	NA	NA	NA	782.0000 UJ	782.000	NA	NA
HEXACHLOROBUTADIENE	87-68-3	ug/kg	NA	NA	871.0000 U	871.000	NA	NA	NA	NA	782.0000 U	782.000	NA	NA
3,3-DICHLOROBENZIDINE	91-94-1	ug/kg	NA	NA	1742.0000 UJ	1742.00	NA	NA	NA	NA	1564.0000 UJ	1564.00	NA	NA
HEXACHLOROCYCLOPENTADIENE	77-47-4	ug/kg	NA	NA	871.0000 U	871.000	NA	NA	NA	NA	782.0000 U	782.000	NA	NA
2-CHLORONAPHTHALENE	91-58-7	ug/kg	NA	NA	871.0000 U	871.000	NA	NA	NA	NA	782.0000 U	782.000	NA	NA
NAPHTHALENE	91-20-3	ug/kg	NA	NA	871.0000 U	871.000	NA	NA	NA	NA	782.0000 U	782.000	NA	NA
2-CHLOROPHENOL	95-57-8	ug/kg	NA	NA	871.0000 U	871.000	NA	NA	NA	NA	782.0000 U	782.000	NA	NA
FLUORENE	86-73-7	ug/kg	NA	NA	871.0000 U	871.000	NA	NA	NA	NA	782.0000 U	782.000	NA	NA
HEXACHLOROETHANE	67-72-1	ug/kg	NA	NA	871.0000 U	871.000	NA	NA	NA	NA	782.0000 U	782.000	NA	NA
2-NITROPHENOL	88-75-5	ug/kg	NA	NA	871.0000 U	871.000	NA	NA	NA	NA	782.0000 U	782.000	NA	NA
METALS														
CYANIDE	74-90-8D	mg/kg	NA	NA	0.3500 U	0.35000	NA	NA	NA	NA	0.2800 U	0.28000	NA	NA
ARSENIC	7440-38-2	mg/kg	NA	NA	4.4000	0.14000	NA	NA	NA	NA	4.9000	0.14000	NA	NA
BERYLLIUM	7440-41-7	mg/kg	NA	NA	2.1000	0.68000	NA	NA	NA	NA	1.5000	0.68000	NA	NA
LEAD	7439-92-1	mg/kg	NA	NA	7.5000 J-*	0.10000	NA	NA	NA	NA	7.0000 J-*	0.10000	NA	NA
VANADIUM	7440-62-2	mg/kg	NA	NA	79.0000	0.88000	NA	NA	NA	NA	60.0000	0.88000	NA	NA
MANGANESE	7439-96-5	mg/kg	NA	NA	447.0000	0.56000	NA	NA	NA	NA	425.0000	0.56000	NA	NA
ZINC	7440-66-6	mg/kg	NA	NA	94.0000 J-E	0.36000	NA	NA	NA	NA	64.0000 J-E	0.36000	NA	NA
NICKEL	7440-02-0	mg/kg	NA	NA	117.0000	3.20000	NA	NA	NA	NA	75.0000	3.20000	NA	NA
CALCIUM	7440-70-2	mg/kg	NA	NA	6990.0000	3.40000	NA	NA	NA	NA	11500.0000	3.40000	NA	NA
SILVER	7440-22-4	mg/kg	NA	NA	4.3000	0.92000	NA	NA	NA	NA	5.0000	0.92000	NA	NA
SELENIUM	7782-49-2	mg/kg	NA	NA	1.2000 U	1.20000	NA	NA	NA	NA	1.0000 U	1.00000	NA	NA
THALLIUM	7440-28-0	mg/kg	NA	NA	2.4000 U	2.40000	NA	NA	NA	NA	2.0000 U	2.00000	NA	NA
ANTIMONY	7440-36-0	mg/kg	NA	NA	32.0000 J-S	3.20000	NA	NA	NA	NA	24.0000 J-S	3.20000	NA	NA
SODIUM	7440-23-5	mg/kg	NA	NA	7160.0000	7.00000	NA	NA	NA	NA	2190.0000	7.00000	NA	NA
ALUMINUM	7429-90-5	mg/kg	NA	NA	36000.0000	7.40000	NA	NA	NA	NA	24600.0000	7.40000	NA	NA
COBALT	7440-48-4	mg/kg	NA	NA	23.0000	1.42000	NA	NA	NA	NA	15.0000	1.42000	NA	NA
CHROMIUM	7440-47-3	mg/kg	NA	NA	103.0000	1.04000	NA	NA	NA	NA	77.0000	1.04000	NA	NA
COPPER	7440-50-8	mg/kg	NA	NA	59.0000	2.00000	NA	NA	NA	NA	35.0000	2.00000	NA	NA
MAGNESIUM	7439-95-4	mg/kg	NA	NA	16600.0000	4.60000	NA	NA	NA	NA	11700.0000	4.60000	NA	NA
POTASSIUM	7440-09-7	mg/kg	NA	NA	5980.0000	54.4000	NA	NA	NA	NA	2050.0000	54.4000	NA	NA
CADMIUM	7440-43-9	mg/kg	NA	NA	0.8200 U	0.82000	NA	NA	NA	NA	0.6800 U	0.70000	NA	NA
IRON	7439-89-6	mg/kg	NA	NA	45100.0000	0.50000	NA	NA	NA	NA	32100.0000	0.50000	NA	NA

SOUTH BAY ASBESTOS
SUBSURFACE SOIL ANALYTICAL RESULTS

SERIES / CONTAMINANT NAME	CAS #	UNIT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT
			SAMPLING LOCATION											
LOCID -->			SS-002-003		SS-002-004		SS-003-001		SS-003-002		SS-003-003		SS-003-004	
Date sample taken -->			06/11/87		06/11/87		06/10/87		06/10/87		06/10/87		06/10/87	
Depth sample taken -->			4.0-5.5 FT.		9.0-10.5 FT.		2.5-4.0 FT.		3.5-5.0 FT.		8.5-10.0 FT.		2.4-4.0 FT.	
MERCURY	7439-97-6	mg/kg	NA	NA	0.2200 J-S	0.10000	NA	NA	NA	NA	0.3300 J-S	0.10000	NA	NA
BARIUM	7440-39-3	mg/kg	NA	NA	394.0000	0.14000	NA	NA	NA	NA	175.0000	0.14000	NA	NA
PESTICIDES														
METHOXYCHLOR	72-43-5	ug/kg	NA	NA	211.2000 U	211.200	NA	NA	NA	NA	188.8000 U	188.800	NA	NA
4,4-DDT	50-29-3	ug/kg	NA	NA	42.2400 U	42.2400	NA	NA	NA	NA	37.7600 U	37.7600	NA	NA
HEPTACHLOR EPOXIDE	1024-57-3	ug/kg	NA	NA	21.1200 U	21.1200	NA	NA	NA	NA	18.8800 U	18.8800	NA	NA
4,4-DDD	72-54-8	ug/kg	NA	NA	42.2400 U	42.2400	NA	NA	NA	NA	37.7600 U	37.7600	NA	NA
PCB-1254	11097-69-1	ug/kg	NA	NA	422.4000 U	422.400	NA	NA	NA	NA	377.6000 U	377.600	NA	NA
PCB-1221	11104-28-2	ug/kg	NA	NA	211.2000 U	211.200	NA	NA	NA	NA	188.8000 U	188.800	NA	NA
PCB-1232	11141-16-5	ug/kg	NA	NA	211.2000 U	211.200	NA	NA	NA	NA	188.8000 U	188.800	NA	NA
4,4-DDE	72-55-9	ug/kg	NA	NA	42.2400 U	42.2400	NA	NA	NA	NA	37.7600 U	37.7600	NA	NA
PCB-1016	12674-11-2	ug/kg	NA	NA	211.2000 U	211.200	NA	NA	NA	NA	188.8000 U	188.800	NA	NA
ALDRIN	309-00-2	ug/kg	NA	NA	21.1200 U	21.1200	NA	NA	NA	NA	18.8800 U	18.8800	NA	NA
ALPHA-BHC	319-84-6	ug/kg	NA	NA	21.1200 U	21.1200	NA	NA	NA	NA	18.8800 U	18.8800	NA	NA
ENDOSULFAN II	33213-65-9	ug/kg	NA	NA	42.2400 U	42.2400	NA	NA	NA	NA	37.7600 U	37.7600	NA	NA
DELTA-BHC	319-86-8	ug/kg	NA	NA	21.1200 U	21.1200	NA	NA	NA	NA	18.8800 U	18.8800	NA	NA
PCB-1260	11096-82-5	ug/kg	NA	NA	422.4000 U	422.400	NA	NA	NA	NA	377.6000 U	377.600	NA	NA
ENDRIN KETONE	53494-70-5	ug/kg	NA	NA	42.2400 U	42.2400	NA	NA	NA	NA	37.7600 U	37.7600	NA	NA
PCB-1248	12672-29-6	ug/kg	NA	NA	211.2000 U	211.200	NA	NA	NA	NA	188.8000 U	188.800	NA	NA
GAMMA-BHC (LINDANE)	58-89-9	ug/kg	NA	NA	21.1200 U	21.1200	NA	NA	NA	NA	18.8800 U	18.8800	NA	NA
ENDRIN	72-20-8	ug/kg	NA	NA	42.2400 U	42.2400	NA	NA	NA	NA	37.7600 U	37.7600	NA	NA
PCB-1242	53469-21-9	ug/kg	NA	NA	211.2000 U	211.200	NA	NA	NA	NA	188.8000 U	188.800	NA	NA
ALPHA-CHLORDANE	57-74-9	ug/kg	NA	NA	211.2000 U	211.200	NA	NA	NA	NA	188.8000 U	188.800	NA	NA
DIELDRIN	60-57-1	ug/kg	NA	NA	42.2400 U	42.2400	NA	NA	NA	NA	37.7600 U	37.7600	NA	NA
BETA-BHC	319-85-7	ug/kg	NA	NA	21.1200 U	21.1200	NA	NA	NA	NA	18.8800 U	18.8800	NA	NA
HEPTACHLOR	76-44-8	ug/kg	NA	NA	21.1200 U	21.1200	NA	NA	NA	NA	18.8800 U	18.8800	NA	NA
TOXAPHENE	8001-35-2	ug/kg	NA	NA	422.4000 U	422.400	NA	NA	NA	NA	377.6000 U	377.600	NA	NA
ENDOSULFAN I	959-98-8	ug/kg	NA	NA	21.1200 U	21.1200	NA	NA	NA	NA	18.8800 U	18.8800	NA	NA
ENDOSULFAN SULFATE	1031-07-8	ug/kg	NA	NA	42.2400 U	42.2400	NA	NA	NA	NA	37.7600 U	37.7600	NA	NA
VOLATILES														
STYRENE	100-42-5	ug/kg	NA	NA	7.0000 U	7.00000	NA	NA	NA	NA	6.0000 U	6.00000	NA	NA
CIS-1,3-DICHLOROPROPENE	10061-01-5	ug/kg	NA	NA	7.0000 U	7.00000	NA	NA	NA	NA	6.0000 U	6.00000	NA	NA
ETHYLBENZENE	100-41-4	ug/kg	NA	NA	7.0000 U	7.00000	NA	NA	NA	NA	6.0000 U	6.00000	NA	NA
1,1,2,2-TETRACHLOROETHANE	79-34-5	ug/kg	NA	NA	7.0000 U	7.00000	NA	NA	NA	NA	6.0000 U	6.00000	NA	NA
DIBROMOCHLOROMETHANE	124-48-1	ug/kg	NA	NA	7.0000 U	7.00000	NA	NA	NA	NA	6.0000 U	6.00000	NA	NA
CHLOROETHANE	75-00-3	ug/kg	NA	NA	13.0000 U	13.0000	NA	NA	NA	NA	12.0000 U	12.0000	NA	NA
VINYL ACETATE	108-05-4	ug/kg	NA	NA	13.0000 U	13.0000	NA	NA	NA	NA	12.0000 U	12.0000	NA	NA
TOLUENE	108-88-3	ug/kg	NA	NA	8.0000 U	8.00000	NA	NA	NA	NA	8.0000 U	8.00000	NA	NA
METHYLENE CHLORIDE (DICHLOROMETHANE)	75-09-2	ug/kg	NA	NA	10.0000 UJB	10.0000	NA	NA	NA	NA	7.0000 U	7.00000	NA	NA
1,2-DICHLOROETHANE	107-06-2	ug/kg	NA	NA	7.0000 U	7.00000	NA	NA	NA	NA	6.0000 U	6.00000	NA	NA
CHLOROBENZENE	108-90-7	ug/kg	NA	NA	7.0000 U	7.00000	NA	NA	NA	NA	6.0000 U	6.00000	NA	NA
BROMOFORM	75-25-2	ug/kg	NA	NA	7.0000 U	7.00000	NA	NA	NA	NA	6.0000 U	6.00000	NA	NA
CARBON TETRACHLORIDE	56-23-5	ug/kg	NA	NA	7.0000 U	7.00000	NA	NA	NA	NA	6.0000 U	6.00000	NA	NA
ACETONE	67-64-1	ug/kg	NA	NA	34.0000 UJB	34.0000	NA	NA	NA	NA	12.0000 U	12.0000	NA	NA
1,1-DICHLOROETHANE	75-34-3	ug/kg	NA	NA	7.0000 U	7.00000	NA	NA	NA	NA	6.0000 U	6.00000	NA	NA
BENZENE	71-43-2	ug/kg	NA	NA	7.0000 U	7.00000	NA	NA	NA	NA	6.0000 U	6.00000	NA	NA
TRICHLOROETHENE	79-01-6	ug/kg	NA	NA	7.0000 U	7.00000	NA	NA	NA	NA	6.0000 U	6.00000	NA	NA

SOUTH BAY ASBESTOS

SUBSURFACE SOIL ANALYTICAL RESULTS

			SAMPLING LOCATION											
		LOCID -->	SS-002-003		SS-002-004		SS-003-001		SS-003-002		SS-003-003		SS-003-004	
		Date sample taken -->	06/11/87		06/11/87		06/10/87		06/10/87		06/10/87		06/10/87	
		Depth sample taken -->	4.0-5.5 FT.		9.0-10.5 FT.		2.5-4.0 FT.		3.5-5.0 FT.		8.5-10.0 FT.		2.4-4.0 FT.	
SERIES CONTAMINANT NAME	CAS #	UNIT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT
1,2-DICHLOROPROPANE	78-87-5	ug/kg	NA	NA	7.0000 U	7.00000	NA	NA	NA	NA	6.0000 U	6.00000	NA	NA
TETRACHLOROETHENE	127-18-4	ug/kg	NA	NA	7.0000 U	7.00000	NA	NA	NA	NA	6.0000 U	6.00000	NA	NA
2-CHLOROETHYLVINYLETHER	110-75-8	ug/kg	NA	NA	13.0000 U	13.0000	NA	NA	NA	NA	12.0000 U	12.0000	NA	NA
1,1,1-TRICHLOROETHANE	71-55-6	ug/kg	NA	NA	7.0000 U	7.00000	NA	NA	NA	NA	6.0000 U	6.00000	NA	NA
TRANS-1,2-DICHLOROETHENE	156-60-5	ug/kg	NA	NA	7.0000 UJ	7.00000	NA	NA	NA	NA	6.0000 UJ	6.00000	NA	NA
CHLOROFORM	67-66-3	ug/kg	NA	NA	5.0000 J	6.00000	NA	NA	NA	NA	9.0000	6.00000	NA	NA
VINYL CHLORIDE	75-01-4	ug/kg	NA	NA	13.0000 U	13.0000	NA	NA	NA	NA	12.0000 U	12.0000	NA	NA
BROMOMETHANE (METHYL BROMIDE)	74-83-9	ug/kg	NA	NA	13.0000 UJ	13.0000	NA	NA	NA	NA	12.0000 UJ	12.0000	NA	NA
4-METHYL-2-PENTANONE	108-10-1	ug/kg	NA	NA	13.0000 U	13.0000	NA	NA	NA	NA	12.0000 U	12.0000	NA	NA
2-HEXANONE	591-78-6	ug/kg	NA	NA	13.0000 U	13.0000	NA	NA	NA	NA	12.0000 U	12.0000	NA	NA
1,1,2-TRICHLOROETHANE	79-00-5	ug/kg	NA	NA	7.0000 U	7.00000	NA	NA	NA	NA	6.0000 U	6.00000	NA	NA
TOTAL XYLENES	1330-20-7	ug/kg	NA	NA	7.0000 U	7.00000	NA	NA	NA	NA	6.0000 U	6.00000	NA	NA
BROMODICHLOROMETHANE	75-27-4	ug/kg	NA	NA	7.0000 U	7.00000	NA	NA	NA	NA	6.0000 U	6.00000	NA	NA
1,1-DICHLOROETHENE	75-35-4	ug/kg	NA	NA	7.0000 U	7.00000	NA	NA	NA	NA	6.0000 U	6.00000	NA	NA
2-BUTANONE	78-93-3	ug/kg	NA	NA	13.0000 U	13.0000	NA	NA	NA	NA	12.0000 U	12.0000	NA	NA
CHLOROMETHANE (METHYL CHLORIDE)	74-87-3	ug/kg	NA	NA	13.0000 UJ	13.0000	NA	NA	NA	NA	12.0000 UJ	12.0000	NA	NA
CARBON DISULFIDE	75-15-0	ug/kg	NA	NA	7.0000 U	7.00000	NA	NA	NA	NA	6.0000 U	6.00000	NA	NA
TRANS-1,3-DICHLOROPROPENE	10061-02-6	ug/kg	NA	NA	7.0000 U	7.00000	NA	NA	NA	NA	7.0000 U	7.00000	NA	NA

SOUTH BAY ASBESTOS
SUBSURFACE SOIL ANALYTICAL RESULTS

SERIES / CONTAMINANT NAME	CAS #	UNIT	SS-004-001 06/08/87 0.0-1.5 FT. READING	SS-004-001 DETECT	SS-004-002 06/08/87 4.0-5.5 FT. READING	SS-004-002 DETECT	SS-004-003 06/08/87 9.0-10.5 FT READING	SS-004-003 DETECT	SS-004-004 06/08/87 14.0-15.5 FT. READING	SS-004-004 DETECT	SS-004-005 06/08/87 19.0-20.5 FT. READING	SS-004-005 DETECT	SS-004-006 06/08/87 24.0-25.5 FT. READING	SS-004-006 DETECT
ASBESTOS														
CHRYSOTILE (mass conc.)	CHRY(mass)	ug/kg	NA	NA	89.8000 J	0.50000	NA	NA	NA	NA	NA	NA	NA	NA
AMPHIBOLE (mass conc.)	AMPH(mass)	ug/kg	NA	NA	150.7000 J	0.50000	NA	NA	NA	NA	NA	NA	NA	NA
TOTAL ASBESTOS (wt. %)	TOTAS(wt%)	ug/kg	NA	NA	0.0241 J	0.00005	NA	NA	NA	NA	NA	NA	NA	NA
PLM (Total Asbestos:area % chrysotile)	PLM:tasb%	%	1.0000 U	1.00000	1.0000 U	1.00000	7.0000	1.00000	1.0000 U	1.00000	1.0000 U	1.00000	1.0000 U	1.00000
BASE NEUTAL ACID EXTRACTABLE														
4-NITROANILINE	100-01-6	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	4032.0000 UJ	4032.00	NA	NA
PHENOL	108-95-2	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	832.0000 U	832.000	NA	NA
4-NITROPHENOL	100-02-7	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	4032.0000 UJ	4032.00	NA	NA
BIS(2-CHLOROETHYL) ETHER	111-44-4	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	832.0000 U	832.000	NA	NA
4-BROMOPHENYLPHENYL ETHER	101-55-3	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	832.0000 U	832.000	NA	NA
BENZO(B)FLUORANTHENE	205-99-2	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	832.0000 UJ	832.000	NA	NA
4-METHYLPHENOL	106-44-5	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	832.0000 U	832.000	NA	NA
4-CHLOROANILINE	106-47-8	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	832.0000 UJ	832.000	NA	NA
BENZYL ALCOHOL	100-51-6	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	832.0000 U	832.000	NA	NA
2,4-DIMETHYLPHENOL	105-67-9	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	832.0000 U	832.000	NA	NA
1,4-DICHLOROBENZENE	106-46-7	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	832.0000 U	832.000	NA	NA
FLUORANTHENE	206-44-0	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	832.0000 U	832.000	NA	NA
BIS(2-ETHYLHEXYL) PHTHALATE	117-81-7	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	520.0000 J	10.0000	NA	NA
BENZO(K)FLUORANTHENE	207-08-9	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	832.0000 U	832.000	NA	NA
HEXACHLOROBENZENE	118-74-1	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	832.0000 U	832.000	NA	NA
ACENAPHTHYLENE	208-96-8	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	832.0000 U	832.000	NA	NA
1,2,4-TRICHLOROBENZENE	120-82-1	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	832.0000 U	832.000	NA	NA
BENZO(A)ANTHRACENE	56-55-3	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	832.0000 U	832.000	NA	NA
CHRYSENE	218-01-9	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	832.0000 UJ	832.000	NA	NA
4-CHLORO-3-METHYLPHENOL	59-50-7	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	832.0000 U	832.000	NA	NA
BIS(2-CHLISOPROPYL) ETHER	39638-32-9	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	832.0000 U	832.000	NA	NA
2,6-DINITROTOLUENE	606-20-2	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	832.0000 U	832.000	NA	NA
BENZO(A)PYRENE	50-32-8	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	832.0000 U	832.000	NA	NA
2,4-DINITROPHENOL	51-28-5	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	4032.0000 U	4032.00	NA	NA
DIBENZO(A,H)ANTHRACENE	53-70-3	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	832.0000 UJ	832.000	NA	NA
NITROBENZENE	98-95-3	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	832.0000 U	832.000	NA	NA
3-NITROANILINE	99-09-2	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	4032.0000 UJ	4032.00	NA	NA
INDENO(1,2,3-CD)PYRENE	193-39-5	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	832.0000 U	832.000	NA	NA
BENZOIC ACID	65-85-0	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	4032.0000 UJ	4032.00	NA	NA
2,4-DICHLOROPHENOL	120-83-2	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	832.0000 U	832.000	NA	NA
1,3-DICHLOROBENZENE	541-73-1	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	832.0000 U	832.000	NA	NA
4-CHLOROPHENYLPHENYL ETHER	7005-72-3	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	832.0000 U	832.000	NA	NA
DIMETHYL PHTHALATE	131-11-3	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	832.0000 U	832.000	NA	NA
BIS(2-CHLOROETHOXY) METHANE	111-91-1	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	832.0000 U	832.000	NA	NA
ISOPHORONE	78-59-1	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	832.0000 U	832.000	NA	NA
PYRENE	129-00-0	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	832.0000 U	832.000	NA	NA
DIBENZOFURAN	132-64-9	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	832.0000 U	832.000	NA	NA
BENZO(G,H,I)PERYLENE	191-24-2	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	832.0000 U	832.000	NA	NA
ANTHRACENE	120-12-7	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	832.0000 U	832.000	NA	NA
DI-N-OCTYL PHTHALATE	117-84-0	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	832.0000 U	832.000	NA	NA
2,4-DINITROTOLUENE	[illegible]	[illegible]	NA	NA	NA	NA	NA	NA	NA	NA	[illegible]	[illegible]	NA	NA

SOUTH BAY ASBESTOS
SUBSURFACE SOIL ANALYTICAL RESULTS

			SAMPLING LOCATION											
		LOCID -->	SS-004-001		SS-004-002		SS-004-003		SS-004-004		SS-004-005		SS-004-006	
		Date sample taken -->	06/08/87		06/08/87		06/08/87		06/08/87		06/08/87		06/08/87	
		Depth sample taken -->	0.0-1.5 FT.		4.0-5.5 FT.		9.0-10.5 FT		14.0-15.5 FT.		19.0-20.5 FT.		24.0-25.5 FT.	
SERIES CONTAMINANT NAME	CAS #	UNIT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT
DIETHYL PHTHALATE	84-66-2	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	832.0000 U	832.000	NA	NA
PHENANTHRENE	85-01-8	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	832.0000 U	832.000	NA	NA
N-NITROSODIPHENYLAMINE	86-30-6	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	832.0000 U	832.000	NA	NA
ACENAPHTHENE	83-32-9	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	832.0000 U	832.000	NA	NA
PENTACHLOROPHENOL	87-86-5	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	4032.0000 U	4032.00	NA	NA
4,6-DiNO2-2-Methylphenol	111-11-11	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	4032.0000 UJ	4032.00	NA	NA
2,4,5-TRICHLOROPHENOL	95-95-4	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	4032.0000 U	4032.00	NA	NA
2,4,6-TRICHLOROPHENOL	88-06-2	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	832.0000 U	832.000	NA	NA
2-METHYLNAPHTHALENE	91-57-6	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	832.0000 U	832.000	NA	NA
2-METHYLPHENOL	95-48-7	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	832.0000 U	832.000	NA	NA
N-NITROSO-DIPROPYLAMINE	621-64-7	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	832.0000 U	832.000	NA	NA
DI-N-BUTYL PHTHALATE	84-74-2	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	832.0000 U	832.000	NA	NA
2-NITROANILINE	88-74-4	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	4032.0000 U	4032.00	NA	NA
1,2-DICHLOROBENZENE	95-50-1	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	832.0000 U	832.000	NA	NA
BUTYLBENZYLPHTHALATE	85-68-7	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	832.0000 UJ	832.000	NA	NA
HEXACHLOROBUTADIENE	87-68-3	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	832.0000 U	832.000	NA	NA
3,3-DICHLOROBENZIDINE	91-94-1	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	1663.0000 UJ	1663.00	NA	NA
HEXACHLOROCYCLOPENTADIENE	77-47-4	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	832.0000 U	832.000	NA	NA
2-CHLORONAPHTHALENE	91-58-7	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	832.0000 U	832.000	NA	NA
NAPHTHALENE	91-20-3	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	832.0000 U	832.000	NA	NA
2-CHLOROPHENOL	95-57-8	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	832.0000 U	832.000	NA	NA
FLUORENE	86-73-7	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	832.0000 U	832.000	NA	NA
HEXACHLOROETHANE	67-72-1	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	832.0000 U	832.000	NA	NA
2-NITROPHENOL	88-75-5	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	832.0000 U	832.000	NA	NA
METALS														
CYANIDE	74-90-8D	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	0.3000 U	0.30000	NA	NA
ARSENIC	7440-38-2	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	6.6000	0.14000	NA	NA
BERYLLIUM	7440-41-7	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	1.1000	0.68000	NA	NA
LEAD	7439-92-1	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	82.0000 J-*	0.10000	NA	NA
VANADIUM	7440-62-2	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	48.0000	0.88000	NA	NA
MANGANESE	7439-96-5	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	664.0000	0.56000	NA	NA
ZINC	7440-66-6	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	128.0000 J-E	0.36000	NA	NA
NICKEL	7440-02-0	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	118.0000	3.20000	NA	NA
CALCIUM	7440-70-2	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	8270.0000	3.40000	NA	NA
SILVER	7440-22-4	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	3.9000	0.92000	NA	NA
SELENIUM	7782-49-2	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	1.0000 U	1.00000	NA	NA
THALLIUM	7440-28-0	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	0.1000	0.10000	NA	NA
ANTIMONY	7440-36-0	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	23.0000 J-S	3.20000	NA	NA
SODIUM	7440-23-5	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	1750.0000	7.00000	NA	NA
ALUMINUM	7429-90-5	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	21800.0000	7.40000	NA	NA
COBALT	7440-48-4	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	18.0000	1.42000	NA	NA
CHROMIUM	7440-47-3	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	85.0000	1.04000	NA	NA
COPPER	7440-50-8	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	64.0000	2.00000	NA	NA
MAGNESIUM	7439-95-4	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	13200.0000	4.60000	NA	NA
POTASSIUM	7440-09-7	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	2610.0000	54.4000	NA	NA
CADMIUM	7440-43-9	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	0.8300	0.70000	NA	NA
IRON	7439-89-6	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	39200.0000	0.50000	NA	NA

SOUTH BAY ASBESTOS
SUBSURFACE SOIL ANALYTICAL RESULTS

SAMPLING LOCATION

SERIES / CONTAMINANT NAME	CAS #	UNIT	SS-004-001 06/08/87 0.0-1.5 FT. READING	DETECT	SS-004-002 06/08/87 4.0-5.5 FT. READING	DETECT	SS-004-003 06/08/87 9.0-10.5 FT READING	DETECT	SS-004-004 06/08/87 14.0-15.5 FT. READING	DETECT	SS-004-005 06/08/87 19.0-20.5 FT. READING	DETECT	SS-004-006 06/08/87 24.0-25.5 FT. READING	DETECT
LOCID --> / Date sample taken --> / Depth sample taken -->														
MERCURY	7439-97-6	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	2.4000 J-H	50.10000	NA	NA
BARIUM	7440-39-3	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	250.0000	0.14000	NA	NA
PESTICIDES														
METHOXYCHLOR	72-43-5	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	201.6000 U	201.600	NA	NA
4,4-DDT	50-29-3	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	40.3200 U	40.3200	NA	NA
HEPTACHLOR EPOXIDE	1024-57-3	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	20.1600 U	20.1600	NA	NA
4,4-DDD	72-54-8	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	67.6200	0.10000	NA	NA
PCB-1254	11097-69-1	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	403.2000 U	403.200	NA	NA
PCB-1221	11104-28-2	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	201.6000 U	201.600	NA	NA
PCB-1232	11141-16-5	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	201.6000 U	201.600	NA	NA
4,4-DDE	72-55-9	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	40.3200 U	40.3200	NA	NA
PCB-1016	12674-11-2	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	201.6000 U	201.600	NA	NA
ALDRIN	309-00-2	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	20.1600 U	20.1600	NA	NA
ALPHA-BHC	319-84-6	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	20.1600 U	20.1600	NA	NA
ENDOSULFAN II	33213-65-9	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	40.3200 U	40.3200	NA	NA
DELTA-BHC	319-86-8	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	20.1600 U	20.1600	NA	NA
PCB-1260	11096-82-5	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	403.2000 U	403.200	NA	NA
ENDRIN KETONE	53494-70-5	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	40.3200 U	40.3200	NA	NA
PCB-1248	12672-29-6	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	201.6000 U	201.600	NA	NA
GAMMA BHC (LINDANE)	58-89-9	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	20.1600 U	20.1600	NA	NA
ENDRIN	72-20-8	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	40.3200 U	40.3200	NA	NA
PCB-1242	53469-21-9	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	201.6000 U	201.600	NA	NA
ALPHA-CHLORDANE	57-74-9	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	201.6000 U	201.600	NA	NA
DIELDRIN	60-57-1	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	40.3200 U	40.3200	NA	NA
BETA-BHC	319-85-7	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	20.1600 U	20.1600	NA	NA
HEPTACHLOR	76-44-8	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	20.1600 U	20.1600	NA	NA
TOXAPHENE	8001-35-2	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	403.2000 U	403.200	NA	NA
ENDOSULFAN I	959-98-8	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	20.1600 U	20.1600	NA	NA
ENDOSULFAN SULFATE	1031-07-8	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	40.3200 U	40.3200	NA	NA
VOLATILES														
STYRENE	100-42-5	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	6.0000 U	6.00000	NA	NA
CIS-1,3-DICHLOROPROPENE	10061-01-5	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	6.0000 U	6.00000	NA	NA
ETHYLBENZENE	100-41-4	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	6.0000 U	6.00000	NA	NA
1,1,2,2-TETRACHLOROETHANE	79-34-5	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	6.0000 U	6.00000	NA	NA
DIBROMOCHLOROMETHANE	124-48-1	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	6.0000 U	6.00000	NA	NA
CHLOROETHANE	75-00-3	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	13.0000 U	13.0000	NA	NA
VINYL ACETATE	108-05-4	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	13.0000 U	13.0000	NA	NA
TOLUENE	108-88-3	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	8.0000 U	8.00000	NA	NA
METHYLENE CHLORIDE (DICHLOROMETHANE)	75-09-2	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	16.0000 UJB	16.0000	NA	NA
1,2-DICHLOROETHANE	107-06-2	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	6.0000 U	6.00000	NA	NA
CHLOROBENZENE	108-90-7	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	6.0000 U	6.00000	NA	NA
BROMOFORM	75-25-2	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	6.0000 U	6.00000	NA	NA
CARBON TETRACHLORIDE	56-23-5	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	6.0000 U	6.00000	NA	NA
ACETONE	67-64-1	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	140.0000 JB	10.0000	NA	NA
1,1-DICHLOROETHANE	75-34-3	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	3.0000 J	5.00000	NA	NA
BENZENE	71-43-2	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	6.0000 U	6.00000	NA	NA

SOUTH BAY ASBESTOS
SUBSURFACE SOIL ANALYTICAL RESULTS

SERIES CONTAMINANT NAME	CAS #	UNIT	SS-004-001 READING	SS-004-001 DETECT	SS-004-002 READING	SS-004-002 DETECT	SS-004-003 READING	SS-004-003 DETECT	SS-004-004 READING	SS-004-004 DETECT	SS-004-005 READING	SS-004-005 DETECT	SS-004-006 READING	SS-004-006 DETECT
SAMPLING LOCATION: LOCID -->			SS-004-001		SS-004-002		SS-004-003		SS-004-004		SS-004-005		SS-004-006	
Date sample taken -->			06/08/87		06/08/87		06/08/87		06/08/87		06/08/87		06/08/87	
Depth sample taken -->			0.0-1.5 FT.		4.0-5.5 FT.		9.0-10.5 FT		14.0-15.5 FT.		19.0-20.5 FT.		24.0-25.5 FT.	
1,2-DICHLOROPROPANE	78-87-5	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	6.0000 U	6.00000	NA	NA
TETRACHLOROETHENE	127-18-4	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	6.0000 U	6.00000	NA	NA
2-CHLOROETHYLVINYLETHER	110-75-8	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	13.0000 U	13.0000	NA	NA
1,1,1-TRICHLOROETHANE	71-55-6	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	6.0000 U	6.00000	NA	NA
TRANS-1,2-DICHLOROETHENE	156-60-5	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	6.0000 UJ	6.00000	NA	NA
CHLOROFORM	67-66-3	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	6.0000 U	6.00000	NA	NA
VINYL CHLORIDE	75-01-4	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	13.0000 U	13.0000	NA	NA
BROMOMETHANE (METHYL BROMIDE)	74-83-9	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	13.0000 UJ	13.0000	NA	NA
4-METHYL-2-PENTANONE	108-10-1	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	13.0000 U	13.0000	NA	NA
2-HEXANONE	591-78-6	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	13.0000 U	13.0000	NA	NA
1,1,2-TRICHLOROETHANE	79-00-5	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	6.0000 U	6.00000	NA	NA
TOTAL XYLENES	1330-20-7	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	6.0000 U	6.00000	NA	NA
BROMODICHLOROMETHANE	75-27-4	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	6.0000 U	6.00000	NA	NA
1,1-DICHLOROETHENE	75-35-4	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	6.0000 U	6.00000	NA	NA
2-BUTANONE	78-93-3	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	21.0000	10.0000	NA	NA
CHLOROMETHANE (METHYL CHLORIDE)	74-87-3	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	13.0000 UJ	13.0000	NA	NA
CARBON DISULFIDE	75-15-0	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	6.0000 U	6.00000	NA	NA
TRANS-1,3-DICHLOROPROPENE	10061-02-6	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	7.0000 U	7.00000	NA	NA

SOUTH BAY ASBESTOS
SUBSURFACE SOIL ANALYTICAL RESULTS

			SAMPLING LOCATION											
		LOCID -->	SS-005-001		SS-005-002		SS-005-003		SS-006-001		SS-007-001		SS-007-002	
		Date sample taken -->	06/09/87		06/09/87		06/09/87		07/14/87		06/12/87		06/12/87	
		Depth sample taken -->	0.0-1.5 FT.		4.0-5.5 FT.		9.0-10.5 FT.		0.0-0.6 FT.		0.0-1.5 FT.		4.0-5.5 FT.	
SERIES CONTAMINANT NAME	CAS #	UNIT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT
ASBESTOS														
CHRYSOTILE (mass conc.)	CHRY(mass)	ug/kg	NA	NA	21.7000 J	0.50000	NA	NA	757.0000 J	0.50000	NA	NA	118.0000 J	0.50000
AMPHIBOLE (mass conc.)	AMPH(mass)	ug/kg	NA	NA	20.5000 J	0.50000	NA	NA	47.0000 J	0.50000	NA	NA	14.0000 J	0.50000
TOTAL ASBESTOS (wt. %)	TOTAS(wt%)	ug/kg	NA	NA	0.0042 J	0.00005	NA	NA	0.0800 J	0.00005	NA	NA	0.0130 J	0.00005
PLM (Total Asbestos:area % chrysotile)	PLM:tasb%	%	1.0000 U	1.00000	1.0000 U	1.00000	1.0000 U	1.00000	1.0000 J	1.00000	1.0000 U	1.00000	1.0000 U	1.00000
BASE NEUTAL ACID EXTRACTABLE														
4-NITROANILINE	100-01-6	ug/kg	NA	NA	NA	NA	4160.0000 UJ	4160.00	0.0000 R	50.0000	NA	NA	NA	NA
PHENOL	108-95-2	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	743.0000 U	743.000	NA	NA	NA	NA
4-NITROPHENOL	100-02-7	ug/kg	NA	NA	NA	NA	4160.0000 U	4160.00	3600.0000 U	3600.00	NA	NA	NA	NA
BIS(2-CHLOROETHYL) ETHER	111-44-4	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	743.0000 U	743.000	NA	NA	NA	NA
4-BROMOPHENYLPHENYL ETHER	101-55-3	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	743.0000 U	743.000	NA	NA	NA	NA
BENZO(B)FLUORANTHENE	205-99-2	ug/kg	NA	NA	NA	NA	858.0000 UJ	858.000	743.0000 U	743.000	NA	NA	NA	NA
4-METHYLPHENOL	106-44-5	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	743.0000 U	743.000	NA	NA	NA	NA
4-CHLOROANILINE	106-47-8	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	743.0000 UJ	743.000	NA	NA	NA	NA
BENZYL ALCOHOL	100-51-6	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	743.0000 U	743.000	NA	NA	NA	NA
2,4-DIMETHYLPHENOL	105-67-9	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	743.0000 U	743.000	NA	NA	NA	NA
1,4-DICHLOROBENZENE	106-46-7	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	743.0000 U	743.000	NA	NA	NA	NA
FLUORANTHENE	206-44-0	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	743.0000 U	743.000	NA	NA	NA	NA
BIS(2-ETHYLHEXYL) PHTHALATE	117-81-7	ug/kg	NA	NA	NA	NA	858.0000 UJ	858.000	743.0000 U	743.000	NA	NA	NA	NA
BENZO(K)FLUORANTHENE	207-08-9	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	743.0000 UJ	743.000	NA	NA	NA	NA
HEXACHLOROBENZENE	118-74-1	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	743.0000 U	743.000	NA	NA	NA	NA
ACENAPHTHYLENE	208-96-8	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	743.0000 U	743.000	NA	NA	NA	NA
1,2,4-TRICHLOROBENZENE	120-82-1	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	743.0000 U	743.000	NA	NA	NA	NA
BENZO(A)ANTHRACENE	56-55-3	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	743.0000 U	743.000	NA	NA	NA	NA
CHRYSENE	218-01-9	ug/kg	NA	NA	NA	NA	858.0000 UJ	858.000	743.0000 U	743.000	NA	NA	NA	NA
4-CHLORO-3-METHYLPHENOL	59-50-7	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	743.0000 U	743.000	NA	NA	NA	NA
BIS(2-CHLISOPROPYL) ETHER	39638-32-9	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	743.0000 U	743.000	NA	NA	NA	NA
2,6-DINITROTOLUENE	606-20-2	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	743.0000 U	743.000	NA	NA	NA	NA
BENZO(A)PYRENE	50-32-8	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	743.0000 U	743.000	NA	NA	NA	NA
2,4-DINITROPHENOL	51-28-5	ug/kg	NA	NA	NA	NA	4160.0000 U	4160.00	3600.0000 U	3600.00	NA	NA	NA	NA
DIBENZO(A,H)ANTHRACENE	53-70-3	ug/kg	NA	NA	NA	NA	858.0000 UJ	858.000	743.0000 U	743.000	NA	NA	NA	NA
NITROBENZENE	98-95-3	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	743.0000 U	743.000	NA	NA	NA	NA
3-NITROANILINE	99-09-2	ug/kg	NA	NA	NA	NA	4160.0000 UJ	4160.00	0.0000 R	50.0000	NA	NA	NA	NA
INDENO(1,2,3-CD)PYRENE	193-39-5	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	743.0000 U	743.000	NA	NA	NA	NA
BENZOIC ACID	65-85-0	ug/kg	NA	NA	NA	NA	4160.0000 UJ	4160.00	3600.0000 UJ	3600.00	NA	NA	NA	NA
2,4-DICHLOROPHENOL	120-83-2	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	743.0000 U	743.000	NA	NA	NA	NA
1,3-DICHLOROBENZENE	541-73-1	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	743.0000 U	743.000	NA	NA	NA	NA
4-CHLOROPHENYLPHENYL ETHER	7005-72-3	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	743.0000 U	743.000	NA	NA	NA	NA
DIMETHYL PHTHALATE	131-11-3	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	743.0000 U	743.000	NA	NA	NA	NA
BIS(2-CHLOROETHOXY) METHANE	111-91-1	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	743.0000 U	743.000	NA	NA	NA	NA
ISOPHORONE	78-59-1	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	743.0000 U	743.000	NA	NA	NA	NA
PYPENE	129-00-0	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	743.0000 U	743.000	NA	NA	NA	NA
DIBENZOFURAN	132-64-9	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	743.0000 U	743.000	NA	NA	NA	NA
BENZO(G,H,I)PERYLENE	191-24-2	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	743.0000 U	743.000	NA	NA	NA	NA
ANTHRACENE	120-12-7	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	743.0000 U	743.000	NA	NA	NA	NA
DI-N-OCTYL PHTHALATE	117-84-0	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	743.0000 U	743.000	NA	NA	NA	NA

SOUTH BAY ASBESTOS
SUBSURFACE SOIL ANALYTICAL RESULTS

			SAMPLING LOCATION											
		LOCID -->	SS-005-001		SS-005-002		SS-005-003		SS-006-001		SS-007-001		SS-007-002	
		Date sample taken -->	06/09/87		06/09/87		06/09/87		07/14/87		06/12/87		06/12/87	
		Depth sample taken -->	0.0-1.5 FT.		4.0-5.5 FT.		9.0-10.5 FT.		0.0-0.6 FT.		0.0-1.5 FT.		4.0-5.5 FT.	
SERIES CONTAMINANT NAME	CAS #	UNIT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT
DIETHYL PHTHALATE	84-66-2	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	743.0000 U	743.000	NA	NA	NA	NA
PHENANTHRENE	85-01-8	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	743.0000 U	743.000	NA	NA	NA	NA
N-NITROSODIPHENYLAMINE	86-30-6	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	743.0000 U	743.000	NA	NA	NA	NA
ACENAPHTHENE	83-32-9	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	743.0000 U	743.000	NA	NA	NA	NA
PENTACHLOROPHENOL	87-86-5	ug/kg	NA	NA	NA	NA	4160.0000 U	4160.00	3600.0000 U	3600.00	NA	NA	NA	NA
4,6-DiNO2-2-Methylphenol	111-11-11	ug/kg	NA	NA	NA	NA	4160.0000 UJ	4160.00	3600.0000 U	3600.00	NA	NA	NA	NA
2,4,5-TRICHLOROPHENOL	95-95-4	ug/kg	NA	NA	NA	NA	4160.0000 U	4160.00	3600.0000 U	3600.00	NA	NA	NA	NA
2,4,6-TRICHLOROPHENOL	88-06-2	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	743.0000 U	743.000	NA	NA	NA	NA
2-METHYLNAPHTHALENE	91-57-6	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	743.0000 U	743.000	NA	NA	NA	NA
2-METHYLPHENOL	95-48-7	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	743.0000 U	743.000	NA	NA	NA	NA
N-NITROSO-DIPROPYLAMINE	621-64-7	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	743.0000 U	743.000	NA	NA	NA	NA
DI-N-BUTYL PHTHALATE	84-74-2	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	NA	NA	NA	NA	NA	NA
2-NITROANILINE	88-74-4	ug/kg	NA	NA	NA	NA	4160.0000 U	4160.00	3600.0000 U	3600.00	NA	NA	NA	NA
1,2-DICHLOROBENZENE	95-50-1	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	743.0000 U	743.000	NA	NA	NA	NA
BUTYLBENZYLPHTHALATE	85-68-7	ug/kg	NA	NA	NA	NA	858.0000 UJ	858.000	743.0000 U	743.000	NA	NA	NA	NA
HEXACHLOROBUTADIENE	87-68-3	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	743.0000 U	743.000	NA	NA	NA	NA
3,3-DICHLOROBENZIDINE	91-94-1	ug/kg	NA	NA	NA	NA	1716.0000 UJ	1716.00	1485.0000 U	1485.00	NA	NA	NA	NA
HEXACHLOROCYCLOPENTADIENE	77-47-4	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	743.0000 U	743.000	NA	NA	NA	NA
2-CHLORONAPHTHALENE	91-58-7	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	743.0000 U	743.000	NA	NA	NA	NA
NAPHTHALENE	91-20-3	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	743.0000 U	743.000	NA	NA	NA	NA
2-CHLOROPHENOL	95-57-8	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	743.0000 U	743.000	NA	NA	NA	NA
FLUORENE	86-73-7	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	743.0000 U	743.000	NA	NA	NA	NA
HEXACHLOROETHANE	67-72-1	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	743.0000 U	743.000	NA	NA	NA	NA
2-NITROPHENOL	88-75-5	ug/kg	NA	NA	NA	NA	858.0000 U	858.000	743.0000 U	743.000	NA	NA	NA	NA
METALS														
CYANIDE	74-90-8D	mg/kg	NA	NA	NA	NA	0.3300 U	0.33000	0.5600 U	0.56000	NA	NA	NA	NA
ARSENIC	7440-38-2	mg/kg	NA	NA	NA	NA	7.6000	0.14000	17.0000 J	5.00000	NA	NA	NA	NA
BERYLLIUM	7440-41-7	mg/kg	NA	NA	NA	NA	1.4000	0.68000	0.5600 U	0.56000	NA	NA	NA	NA
LEAD	7439-92-1	mg/kg	NA	NA	NA	NA	20.0000 J-*	0.10000	15.0000	2.50000	NA	NA	NA	NA
VANADIUM	7440-62-2	mg/kg	NA	NA	NA	NA	57.0000	0.88000	46.0000	3.50000	NA	NA	NA	NA
MANGANESE	7439-96-5	mg/kg	NA	NA	NA	NA	878.0000	0.56000	614.0000	2.00000	NA	NA	NA	NA
ZINC	7440-66-6	mg/kg	NA	NA	NA	NA	89.0000 J-E	0.36000	87.0000	2.10000	NA	NA	NA	NA
NICKEL	7440-02-0	mg/kg	NA	NA	NA	NA	92.0000	3.20000	121.0000	4.00000	NA	NA	NA	NA
CALCIUM	7440-70-2	mg/kg	NA	NA	NA	NA	18400.0000	3.40000	7530.0000	89.5000	NA	NA	NA	NA
SILVER	7440-22-4	mg/kg	NA	NA	NA	NA	4.9000	0.92000	2.2000 U-J	2.20000	NA	NA	NA	NA
SELENIUM	7782-49-2	mg/kg	NA	NA	NA	NA	1.0000 U	1.00000	2.8000 U	2.80000	NA	NA	NA	NA
THALLIUM	7440-28-0	mg/kg	NA	NA	NA	NA	0.1400	0.10000	5.6000 U	5.60000	NA	NA	NA	NA
ANTIMONY	7440-36-0	mg/kg	NA	NA	NA	NA	27.0000 J-S	3.20000	14.0000 U-J	14.0000	NA	NA	NA	NA
SODIUM	7440-23-5	mg/kg	NA	NA	NA	NA	978.0000	7.00000	612.0000 U	612.000	NA	NA	NA	NA
ALUMINUM	7429-90-5	mg/kg	NA	NA	NA	NA	29300.0000	7.40000	16900.0000	7.50000	NA	NA	NA	NA
COBALT	7440-48-4	mg/kg	NA	NA	NA	NA	18.0000	1.42000	14.0000	4.50000	NA	NA	NA	NA
CHROMIUM	7440-47-3	mg/kg	NA	NA	NA	NA	81.0000	1.04000	69.0000	2.00000	NA	NA	NA	NA
COPPER	7440-50-8	mg/kg	NA	NA	NA	NA	45.0000	2.00000	42.0000	3.00000	NA	NA	NA	NA
MAGNESIUM	7439-95-4	mg/kg	NA	NA	NA	NA	14600.0000	4.60000	13800.0000	76.5000	NA	NA	NA	NA
POTASSIUM	7440-09-7	mg/kg	NA	NA	NA	NA	2680.0000	54.4000	3290.0000	87.5000	NA	NA	NA	NA
CADMIUM	7440-43-9	mg/kg	NA	NA	NA	NA	0.6800 U	0.70000	2.2000 U	2.20000	NA	NA	NA	NA
IRON	7439-89-6	mg/kg	NA	NA	NA	NA	40600.0000	0.50000	33400.0000	12.0000	NA	NA	NA	NA

SOUTH BAY ASBESTOS
SUBSURFACE SOIL ANALYTICAL RESULTS

SAMPLING LOCATION

		LOCID -->	SS-005-001		SS-005-002		SS-005-003		SS-006-001		SS-007-001		SS-007-002	
		Date sample taken -->	06/09/87		06/09/87		06/09/87		07/14/87		06/12/87		06/12/87	
		Depth sample taken -->	0.0-1.5 FT.		4.0-5.5 FT.		9.0-10.5 FT.		0.0-0.6 FT.		0.0-1.5 FT.		4.0-5.5 FT.	
SERIES CONTAMINANT NAME	CAS #	UNIT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT
MERCURY	7439-97-6	mg/kg	NA	NA	NA	NA	0.6000 J-H	50.10000	0.1100 U-J	0.11000	NA	NA	NA	NA
BARIUM	7440-39-3	mg/kg	NA	NA	NA	NA	242.0000	0.14000	212.0000	1.50000	NA	NA	NA	NA
PESTICIDES														
METHOXYCHLOR	72-43-5	ug/kg	NA	NA	NA	NA	208.0000 U	208.000	180.0000 U	180.000	NA	NA	NA	NA
4,4-DDT	50-29-3	ug/kg	NA	NA	NA	NA	41.6000 U	41.6000	129.0000	0.10000	NA	NA	NA	NA
HEPTACHLOR EPOXIDE	1024-57-3	ug/kg	NA	NA	NA	NA	20.8000 U	20.8000	18.0000 U	18.0000	NA	NA	NA	NA
4,4-DDD	72-54-8	ug/kg	NA	NA	NA	NA	41.6000 U	41.6000	36.0000 U	36.0000	NA	NA	NA	NA
PCB-1254	11097-69-1	ug/kg	NA	NA	NA	NA	416.0000 U	416.000	360.0000 U	360.000	NA	NA	NA	NA
PCB-1221	11104-28-2	ug/kg	NA	NA	NA	NA	208.0000 U	208.000	180.0000 U	180.000	NA	NA	NA	NA
PCB-1232	11141-16-5	ug/kg	NA	NA	NA	NA	208.0000 U	208.000	180.0000 U	180.000	NA	NA	NA	NA
4,4-DDE	72-55-9	ug/kg	NA	NA	NA	NA	41.6000 U	41.6000	126.0000	0.10000	NA	NA	NA	NA
PCB-1016	12674-11-2	ug/kg	NA	NA	NA	NA	208.0000 U	208.000	180.0000 U	180.000	NA	NA	NA	NA
ALDRIN	309-00-2	ug/kg	NA	NA	NA	NA	20.8000 U	20.8000	18.0000 U	18.0000	NA	NA	NA	NA
ALPHA-BHC	319-84-6	ug/kg	NA	NA	NA	NA	20.8000 U	20.8000	18.0000 U	18.0000	NA	NA	NA	NA
ENDOSULFAN II	33213-65-9	ug/kg	NA	NA	NA	NA	41.6000 U	41.6000	36.0000 U	36.0000	NA	NA	NA	NA
DELTA-BHC	319-86-8	ug/kg	NA	NA	NA	NA	20.8000 U	20.8000	18.0000 U	18.0000	NA	NA	NA	NA
PCB-1260	11096-82-5	ug/kg	NA	NA	NA	NA	416.0000 U	416.000	360.0000 U	360.000	NA	NA	NA	NA
ENDRIN KETONE	53494-70-5	ug/kg	NA	NA	NA	NA	41.6000 U	41.6000	36.0000 U	36.0000	NA	NA	NA	NA
PCB-1248	12672-29-6	ug/kg	NA	NA	NA	NA	208.0000 U	208.000	180.0000 U	180.000	NA	NA	NA	NA
GAMMA-BHC (LINDANE)	58-89-9	ug/kg	NA	NA	NA	NA	20.8000 U	20.8000	18.0000 U	18.0000	NA	NA	NA	NA
ENDRIN	72-20-8	ug/kg	NA	NA	NA	NA	41.6000 U	41.6000	36.0000 U	36.0000	NA	NA	NA	NA
PCB-1242	53469-21-9	ug/kg	NA	NA	NA	NA	208.0000 U	208.000	180.0000 U	180.000	NA	NA	NA	NA
ALPHA-CHLORDANE	57-74-9	ug/kg	NA	NA	NA	NA	208.0000 U	208.000	180.0000 U	180.000	NA	NA	NA	NA
DIELDRIN	60-57-1	ug/kg	NA	NA	NA	NA	41.6000 U	41.6000	36.0000 U	36.0000	NA	NA	NA	NA
BETA-BHC	319-85-7	ug/kg	NA	NA	NA	NA	20.8000 U	20.8000	18.0000 U	18.0000	NA	NA	NA	NA
HEPTACHLOR	76-44-8	ug/kg	NA	NA	NA	NA	20.8000 U	20.8000	18.0000 U	18.0000	NA	NA	NA	NA
TOXAPHENE	8001-35-2	ug/kg	NA	NA	NA	NA	416.0000 U	416.000	360.0000 U	360.000	NA	NA	NA	NA
ENDOSULFAN I	959-98-8	ug/kg	NA	NA	NA	NA	20.8000 U	20.8000	18.0000 U	18.0000	NA	NA	NA	NA
ENDOSULFAN SULFATE	1031-07-8	ug/kg	NA	NA	NA	NA	41.6000 U	41.6000	36.0000 U	36.0000	NA	NA	NA	NA
VOLATILES														
STYRENE	100-42-5	ug/kg	NA	NA	NA	NA	6.0000 U	6.00000	6.0000 U	6.00000	NA	NA	NA	NA
CIS-1,3-DICHLOROPROPENE	10061-01-5	ug/kg	NA	NA	NA	NA	6.0000 U	6.00000	6.0000 U	6.00000	NA	NA	NA	NA
ETHYLBENZENE	100-41-4	ug/kg	NA	NA	NA	NA	6.0000 U	6.00000	6.0000 U	6.00000	NA	NA	NA	NA
1,1,2,2-TETRACHLOROETHANE	79-34-5	ug/kg	NA	NA	NA	NA	6.0000 U	6.00000	6.0000 U	6.00000	NA	NA	NA	NA
DIBROMOCHLOROMETHANE	124-48-1	ug/kg	NA	NA	NA	NA	6.0000 U	6.00000	6.0000 U	6.00000	NA	NA	NA	NA
CHLOROETHANE	75-00-3	ug/kg	NA	NA	NA	NA	13.0000 U	13.0000	11.0000 U	11.0000	NA	NA	NA	NA
VINYL ACETATE	108-05-4	ug/kg	NA	NA	NA	NA	13.0000 U	13.0000	11.0000 U	11.0000	NA	NA	NA	NA
TOLUENE	108-88-3	ug/kg	NA	NA	NA	NA	2.0000 J	8.00000	8.0000 U	8.00000	NA	NA	NA	NA
METHYLENE CHLORIDE (DICHLOROMETHANE)	75-09-2	ug/kg	NA	NA	NA	NA	10.0000 UJB	10.0000	6.0000 U	7.00000	NA	NA	NA	NA
1,2-DICHLOROETHANE	107-06-2	ug/kg	NA	NA	NA	NA	6.0000 U	6.00000	6.0000 U	6.00000	NA	NA	NA	NA
CHLOROBENZENE	108-90-7	ug/kg	NA	NA	NA	NA	6.0000 U	6.00000	6.0000 U	6.00000	NA	NA	NA	NA
BROMOFORM	75-25-2	ug/kg	NA	NA	NA	NA	6.0000 U	6.00000	6.0000 UJ	6.00000	NA	NA	NA	NA
CARBON TETRACHLORIDE	56-23-5	ug/kg	NA	NA	NA	NA	6.0000 U	6.00000	6.0000 U	6.00000	NA	NA	NA	NA
ACETONE	67-64-1	ug/kg	NA	NA	NA	NA	61.0000 UJB	61.0000	11.0000 UJ	11.0000	NA	NA	NA	NA
1,1-DICHLOROETHANE	75-34-3	ug/kg	NA	NA	NA	NA	4.0000 J	5.00000	4.0000 J	5.00000	NA	NA	NA	NA
BENZENE	71-43-2	ug/kg	NA	NA	NA	NA	6.0000 U	6.00000	6.0000 U	6.00000	NA	NA	NA	NA
TRICHLOROETHENE	[illegible]	[illegible]	NA	NA	NA	NA	6.0000 U	6.00000	6.0000 U	6.00000	NA	NA	NA	NA

SOUTH BAY ASBESTOS
SUBSURFACE SOIL ANALYTICAL RESULTS

SAMPLING LOCATION

SERIES CONTAMINANT NAME	CAS #	UNIT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT
		LOCID -->	SS-005-001		SS-005-002		SS-005-003		SS-006-001		SS-007-001		SS-007-002	
		Date sample taken -->	06/09/87		06/09/87		06/09/87		07/14/87		06/12/87		06/12/87	
		Depth sample taken -->	0.0-1.5 FT.		4.0-5.5 FT.		9.0-10.5 FT.		0.0-0.6 FT.		0.0-1.5 FT.		4.0-5.5 FT.	
1,2-DICHLOROPROPANE	78-87-5	ug/kg	NA	NA	NA	NA	6.0000 U	6.00000	6.0000 U	6.00000	NA	NA	NA	NA
TETRACHLOROETHENE	127-18-4	ug/kg	NA	NA	NA	NA	6.0000 U	6.00000	6.0000 UJ	6.00000	NA	NA	NA	NA
2-CHLOROETHYLVINYLETHER	110-75-8	ug/kg	NA	NA	NA	NA	13.0000 U	13.0000	11.0000 U	11.0000	NA	NA	NA	NA
1,1,1-TRICHLOROETHANE	71-55-6	ug/kg	NA	NA	NA	NA	6.0000 U	6.00000	6.0000 U	6.00000	NA	NA	NA	NA
TRANS-1,2-DICHLOROETHENE	156-60-5	ug/kg	NA	NA	NA	NA	6.0000 UJ	6.00000	6.0000 U	6.00000	NA	NA	NA	NA
CHLOROFORM	67-66-3	ug/kg	NA	NA	NA	NA	6.0000 J	6.00000	6.0000 U	6.00000	NA	NA	NA	NA
VINYL CHLORIDE	75-01-4	ug/kg	NA	NA	NA	NA	13.0000 U	13.0000	11.0000 U	11.0000	NA	NA	NA	NA
BROMOMETHANE (METHYL BROMIDE)	74-83-9	ug/kg	NA	NA	NA	NA	13.0000 UJ	13.0000	11.0000 UJ	11.0000	NA	NA	NA	NA
4-METHYL-2-PENTANONE	108-10-1	ug/kg	NA	NA	NA	NA	13.0000 U	13.0000	11.0000 U	11.0000	NA	NA	NA	NA
2-HEXANONE	591-78-6	ug/kg	NA	NA	NA	NA	13.0000 U	13.0000	11.0000 U	11.0000	NA	NA	NA	NA
1,1,2-TRICHLOROETHANE	79-00-5	ug/kg	NA	NA	NA	NA	6.0000 U	6.00000	6.0000 U	6.00000	NA	NA	NA	NA
TOTAL XYLENES	1330-20-7	ug/kg	NA	NA	NA	NA	6.0000 U	6.00000	6.0000 UJ	6.00000	NA	NA	NA	NA
BROMODICHLOROMETHANE	75-27-4	ug/kg	NA	NA	NA	NA	6.0000 U	6.00000	6.0000 U	6.00000	NA	NA	NA	NA
1,1-DICHLOROETHENE	75-35-4	ug/kg	NA	NA	NA	NA	6.0000 U	6.00000	6.0000 U	6.00000	NA	NA	NA	NA
2-BUTANONE	78-93-3	ug/kg	NA	NA	NA	NA	13.0000 U	13.0000	11.0000 U	11.0000	NA	NA	NA	NA
CHLOROMETHANE (METHYL CHLORIDE)	74-87-3	ug/kg	NA	NA	NA	NA	13.0000 UJ	13.0000	11.0000 U	11.0000	NA	NA	NA	NA
CARBON DISULFIDE	75-15-0	ug/kg	NA	NA	NA	NA	6.0000 U	6.00000	6.0000 U	6.00000	NA	NA	NA	NA
TRANS-1,3-DICHLOROPROPENE	10061-02-6	ug/kg	NA	NA	NA	NA	7.0000 U	7.00000	6.0000 U	7.00000	NA	NA	NA	NA

SOUTH BAY ASBESTOS
SUBSURFACE SOIL ANALYTICAL RESULTS

SAMPLING LOCATION

			LOCID --> SS-007-003		SS-008-001		SS-008-002		SS-008-003		SS-009-001		SS-009-002	
			Date sample taken --> 06/12/87		06/12/87		06/12/87		06/12/87		06/16/87		06/16/87	
			Depth sample taken --> 9.0-10.5 FT		0.0-1.5 FT.		3.5-5.0 FT.		8.5-10.0 FT		0.0-1.5 FT.		4.0-5.5 FT.	
SERIES CONTAMINANT NAME	CAS #	UNIT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT
ASBESTOS														
CHRYSOTILE (mass conc.)	CHRY(mass)	ug/kg	NA	NA	NA	NA	335.0000 J	0.50000	NA	NA	NA	NA	4737.0000 J	0.50000
AMPHIBOLE (mass conc.)	AMPH(mass)	ug/kg	NA	NA	NA	NA	29.0000 J	0.50000	NA	NA	NA	NA	5.0000 J	0.50000
TOTAL ASBESTOS (wt. %)	TOTAS(wt%)	ug/kg	NA	NA	NA	NA	0.0360 J	0.00005	NA	NA	NA	NA	0.4740 J	0.00005
PLM (Total Asbestos:area % chrysotile)	PLM:tasb%	%	1.0000 U	1.00000	1.0000 U	1.00000	1.0000 U	1.00000	1.0000 U	1.00000	5.0000 J	1.00000	2.0000 J	1.00000
BASE NEUTAL ACID EXTRACTABLE														
METALS														
PESTICIDES														
VOLATILES														

SOUTH BAY ASBESTOS
SUBSURFACE SOIL ANALYTICAL RESULTS

			SAMPLING LOCATION											
		LOCID -->	SS-009-003		SS-010-001		SS-010-002		SS-010-003		SS-010-004		SS-011-001	
		Date sample taken -->	06/16/87		06/15/87		06/15/87		06/15/87		06/15/87		06/15/87	
		Depth sample taken -->	9.0-10.5 FT		1.0-2.5 FT.		3.5-5.0 FT.		8.5-10.0 FT		3.5-5.0 FT.		0.0-1.5 FT.	
SERIES CONTAMINANT NAME	CAS #	UNIT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT
ASBESTOS														
CHRYSOTILE (mass conc.)	CHRY(mass)	ug/kg	NA	NA	NA	NA	99.0000 J	0.50000	NA	NA	24.0000 J	0.50000	NA	NA
AMPHIBOLE (mass conc.)	AMPH(mass)	ug/kg	NA	NA	NA	NA	78.0000 J	0.50000	NA	NA	75.0000 J	0.50000	NA	NA
TOTAL ASBESTOS (wt. %)	TOTAS(wt%)	ug/kg	NA	NA	NA	NA	0.0180 J	0.00005	NA	NA	0.0100 J	0.00005	NA	NA
PLM (Total Asbestos:area % chrysotile)	PLM:tasb%	%	1.0000 U	1.00000	1.0000 U	1.00000	1.0000 U	1.00000	1.0000 U	1.00000	1.0000 U	1.00000	1.0000 U	1.00000
BASE NEUTAL ACID EXTRACTABLE														
METALS														
PESTICIDES														
VOLATILES														

SOUTH BAY ASBESTOS
SUBSURFACE SOIL ANALYTICAL RESULTS

SERIES / CONTAMINANT NAME	CAS #	UNIT	SAMPLING LOCATION											
		LOCID -->	SS-011-002		SS-011-003		SS-011-004		SS-603-001		SS-603-002		SS-604-001	
		Date sample taken -->	06/15/87		06/15/87		06/15/87		10/26/87		10/26/87		10/27/87	
		Depth sample taken -->	4.0-5.5 FT.		9.0-10.5 FT		0.0-1.5 FT.		0.0-1.0 FT.		8.5-11.5 FT.		0.0-3.0 FT.	
			READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT
ASBESTOS														
CHRYSOTILE (mass conc.)	CHRY(mass)	ng/mg	27.0000 J	0.50000	NA	NA	NA	NA	3000.0000	0.50000	NA	NA	NA	NA
AMPHIBOLE (mass conc.)	AMPH(mass)	ng/mg	3.0000 J	0.50000	NA	NA	NA	NA	0.5000 U	0.50000	NA	NA	NA	NA
TOTAL ASBESTOS (wt. %)	TOTAS(wt%)	%	0.0030 J	0.00005	NA	NA	NA	NA	0.3000	0.00005	NA	NA	NA	NA
PLM (Total Asbestos:area % chrysotile)	PLM:tasb%	%	1.0000 U	1.00000	1.0000 U	1.00000	1.0000 U	1.00000	1.0000 U	1.00000	1.0000 U	1.00000	1.0000 U	1.00000
BASE NEUTAL ACID EXTRACTABLE														
4-NITROANILINE	100-01-6	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	490.0000 U	490.000	NA	NA
PHENOL	108-95-2	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	490.0000 UJ	490.000	NA	NA
4-NITROPHENOL	100-02-7	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	2400.0000 U	2400.00	NA	NA
BIS(2-CHLOROETHYL) ETHER	111-44-4	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	490.0000 U	490.000	NA	NA
4-BROMOPHENYLPHENYL ETHER	101-55-3	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	2400.0000 U	2400.00	NA	NA
BENZO(B)FLUORANTHENE	205-99-2	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	490.0000 U	490.000	NA	NA
4-METHYLPHENOL	106-44-5	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	490.0000 U	490.000	NA	NA
4-CHLOROANILINE	106-47-8	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	490.0000 U	490.000	NA	NA
BENZYL ALCOHOL	100-51-6	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	490.0000 U	490.000	NA	NA
2,4-DIMETHYLPHENOL	105-67-9	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	490.0000 U	490.000	NA	NA
1,4-DICHLOROBENZENE	106-46-7	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	490.0000 U	490.000	NA	NA
FLUORANTHENE	206-44-0	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	490.0000 U	490.000	NA	NA
BIS(2-ETHYLHEXYL) PHTHALATE	117-81-7	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	490.0000 U	490.000	NA	NA
BENZO(K)FLUORANTHENE	207-08-9	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	490.0000 U	490.000	NA	NA
HEXACHLOROBENZENE	118-74-1	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	490.0000 U	490.000	NA	NA
ACENAPHTHYLENE	208-96-8	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	490.0000 U	490.000	NA	NA
1,2,4-TRICHLOROBENZENE	120-82-1	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	490.0000 U	490.000	NA	NA
BENZO(A)ANTHRACENE	56-55-3	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	490.0000 U	490.000	NA	NA
CHRYSENE	218-01-9	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	490.0000 U	490.000	NA	NA
4-CHLORO-3-METHYLPHENOL	59-50-7	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	490.0000 U	490.000	NA	NA
BIS(2-CHLISOPROPYL) ETHER	39638-32-9	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	490.0000 U	490.000	NA	NA
2,6-DINITROTOLUENE	606-20-2	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	490.0000 U	490.000	NA	NA
BENZO(A)PYRENE	50-32-8	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	490.0000 U	490.000	NA	NA
2,4-DINITROPHENOL	51-28-5	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	2400.0000 U	2400.00	NA	NA
DIBENZO(A,H)ANTHRACENE	53-70-3	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	490.0000 U	490.000	NA	NA
NITROBENZENE	98-95-3	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	490.0000 U	490.000	NA	NA
3-NITROANILINE	99-09-2	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	490.0000 U	490.000	NA	NA
INDENO(1,2,3-CD)PYRENE	193-39-5	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	490.0000 U	490.000	NA	NA
BENZOIC ACID	65-85-0	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	2400.0000 U	2400.00	NA	NA
2,4-DICHLOROPHENOL	120-83-2	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	490.0000 U	490.000	NA	NA
1,3-DICHLOROBENZENE	541-73-1	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	490.0000 U	490.000	NA	NA
4-CHLOROPHENYLPHENYL ETHER	7005-72-3	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	490.0000 U	490.000	NA	NA
DIMETHYL PHTHALATE	131-11-3	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	490.0000 U	490.000	NA	NA
BIS(2-CHLOROETHOXY) METHANE	111-91-1	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	490.0000 U	490.000	NA	NA
ISOPHORONE	78-59-1	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	490.0000 U	490.000	NA	NA
PYRENE	129-00-0	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	490.0000 U	490.000	NA	NA
DIBENZOFURAN	132-64-9	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	490.0000 U	490.000	NA	NA
BENZO(G,H,I)PERYLENE	191-24-2	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	490.0000 U	490.000	NA	NA
ANTHRACENE	120-12-7	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	490.0000 U	490.000	NA	NA
DI-N-OCTYL PHTHALATE	117-84-0	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	490.0000 U	490.000	NA	NA

SOUTH BAY ASBESTOS
SUBSURFACE SOIL ANALYTICAL RESULTS

			SAMPLING LOCATION											
		LOCID -->	SS-011-002		SS-011-003		SS-011-004		SS-G03-001		SS-G03-002		SS-G04-001	
		Date sample taken -->	06/15/87		06/15/87		06/15/87		10/26/87		10/26/87		10/27/87	
		Depth sample taken -->	4.0-5.5 FT.		9.0-10.5 FT		0.0-1.5 FT.		0.0-1.0 FT.		8.5-11.5 FT.		0.0-3.0 FT.	
SERIES CONTAMINANT NAME	CAS #	UNIT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT
DIETHYL PHTHALATE	84-66-2	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	490.0000 U	490.000	NA	NA
PHENANTHRENE	85-01-8	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	490.0000 U	490.000	NA	NA
N-NITROSODIPHENYLAMINE	86-30-6	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	2400.0000 U	2400.00	NA	NA
ACENAPHTHENE	83-32-9	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	490.0000 U	490.000	NA	NA
PENTACHLOROPHENOL	87-86-5	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	2400.0000 U	2400.00	NA	NA
4,6-DiNO2-2-Methylphenol	111-11-11	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	2400.0000 U	2400.00	NA	NA
2,4,5-TRICHLOROPHENOL	95-95-4	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	2400.0000 U	2400.00	NA	NA
2,4,6-TRICHLOROPHENOL	88-06-2	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	490.0000 U	490.000	NA	NA
2-METHYLNAPHTHALENE	91-57-6	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	490.0000 U	490.000	NA	NA
2-METHYLPHENOL	95-48-7	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	490.0000 U	490.000	NA	NA
N-NITROSO-DIPROPYLAMINE	621-64-7	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	490.0000 U	490.000	NA	NA
DI-N-BUTYL PHTHALATE	84-74-2	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	490.0000 U	490.000	NA	NA
2-NITROANILINE	88-74-4	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	2400.0000 U	2400.00	NA	NA
1,2-DICHLOROBENZENE	95-50-1	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	490.0000 U	490.000	NA	NA
BUTYLBENZYLPHTHALATE	85-68-7	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	490.0000 U	490.000	NA	NA
HEXACHLOROBUTADIENE	87-68-3	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	490.0000 U	490.000	NA	NA
3,3-DICHLOROBENZIDINE	91-94-1	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	970.0000 U	970.000	NA	NA
HEXACHLOROCYCLOPENTADIENE	77-47-4	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	490.0000 U	490.000	NA	NA
2-CHLORONAPHTHALENE	91-58-7	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	490.0000 U	490.000	NA	NA
NAPHTHALENE	91-20-3	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	490.0000 U	490.000	NA	NA
2-CHLOROPHENOL	95-57-8	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	490.0000 U	490.000	NA	NA
FLUORENE	86-73-7	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	490.0000 U	490.000	NA	NA
HEXACHLOROETHANE	67-72-1	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	490.0000 U	490.000	NA	NA
2-NITROPHENOL	88-75-5	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	490.0000 U	490.000	NA	NA
METALS														
CYANIDE	74-90-8D	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	0.5900 U	5.00000	NA	NA
ARSENIC	7440-38-2	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	8.4000 J	5.00000	NA	NA
BERYLLIUM	7440-41-7	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	0.2600 U	2.50000	NA	NA
LEAD	7439-92-1	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	63.2000 UJ	63.2000	NA	NA
VANADIUM	7440-62-2	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	52.0000 UJ	52.0000	NA	NA
MANGANESE	7439-96-5	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	467.0000 J	7.50000	NA	NA
ZINC	7440-66-6	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	145.0000	10.0000	NA	NA
NICKEL	7440-02-0	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	93.0000	20.0000	NA	NA
CALCIUM	7440-70-2	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	21500.0000	2500.00	NA	NA
SILVER	7440-22-4	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	1.5000 U	5.00000	NA	NA
SELENIUM	7782-49-2	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	0.4300 J	2.50000	NA	NA
THALLIUM	7440-28-0	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	0.4300 U	5.00000	NA	NA
ANTIMONY	7440-36-0	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	0.4300 UJ	30.0000	NA	NA
SODIUM	7440-23-5	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	1190.0000	2500.00	NA	NA
ALUMINUM	7429-90-5	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	16571.0000	100.000	NA	NA
COBALT	7440-48-4	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	16.8000 J	25.0000	NA	NA
CHROMIUM	7440-47-3	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	6.4000 UJ	6.40000	NA	NA
COPPER	7440-50-8	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	39.2000	12.5000	NA	NA
MAGNESIUM	7439-95-4	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	12600.0000	2500.00	NA	NA
POTASSIUM	7440-09-7	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	2600.0000 UJ	2600.00	NA	NA
CADMIUM	7440-43-9	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	1.9000 J	2.50000	NA	NA
MERCURY	7439-97-6	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	0.5200	0.10000	NA	NA

SOUTH BAY ASBESTOS
SUBSURFACE SOIL ANALYTICAL RESULTS

SAMPLING LOCATION

		LOCID -->	SS-011-002		SS-011-003		SS-011-004		SS-603-001		SS-603-002		SS-604-001	
		Date sample taken -->	06/15/87		06/15/87		06/15/87		10/26/87		10/26/87		10/27/87	
		Depth sample taken -->	4.0-5.5 FT.		9.0-10.5 FT		0.0-1.5 FT.		0.0-1.0 FT.		8.5-11.5 FT.		0.0-3.0 FT.	
SERIES CONTAMINANT NAME	CAS #	UNIT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT
BARIUM	7440-39-3	mg/kg	NA	NA	NA	NA	NA	NA	NA	NA	181.0000 J	100.000	NA	NA
PESTICIDES														
4,4-DDT	50-29-3	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	99.0000 UJ	100.000	NA	NA
4,4-DDD	72-54-8	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	111.0000 J	16.0000	NA	NA
4,4-DDE	72-55-9	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	95.0000 J	16.0000	NA	NA
ALPHA-CHLORDANE	57-74-9	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	633.0000 J	80.0000	NA	NA
DIELDRIN	60-57-1	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	19.0000 J	16.0000	NA	NA
GAMMA-CHLORDANE	57-74-96	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	389.0000 J	80.0000	NA	NA
VOLATILES														
ETHYLBENZENE	100-41-4	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	25.0000	7.00000	NA	NA
TOLUENE	108-88-3	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	12.0000 UJ	12.0000	NA	NA
METHYLENE CHLORIDE (DICHLOROMETHANE)	75-09-2	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	5.0000 J	7.00000	NA	NA
ACETONE	67-64-1	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	46.0000	14.0000	NA	NA
BENZENE	71-43-2	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	6.0000 UJ	7.00000	NA	NA
TETRACHLOROETHENE	127-18-4	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	2.0000 J	7.00000	NA	NA
CHLOROFORM	67-66-3	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	3.0000 UJ	7.00000	NA	NA
4-METHYL-2-PENTANONE	108-10-1	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	87.0000 UJ	87.0000	NA	NA
2-HEXANONE	591-78-6	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	91.0000 UJ	91.0000	NA	NA
TOTAL XYLENES	1330-20-7	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	69.0000	7.00000	NA	NA
2-BUTANONE	78-93-3	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	24.0000 UJ	24.0000	NA	NA
CARBON DISULFIDE	75-15-0	ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	2.0000 J	7.00000	NA	NA

SOUTH BAY ASBESTOS
SUBSURFACE SOIL ANALYTICAL RESULTS

SERIES			SAMPLING LOCATION											
		LOCID -->	SS-605-001		SS-605-002		SS-605-003		SS-606-001		SS-606-002		SS-606-003	
		Date sample taken -->	10/27/87		10/28/87		10/28/87		10/29/87		10/29/87		10/29/87	
		Depth sample taken -->	0.0-1.5 FT.		16.4-16.5 FT.		16.5-18.0 FT.		0.0-1.5 FT.		0.0-1.5 FT.		4.5-5.5 FT.	
CONTAMINANT NAME	CAS #	UNIT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT
ASBESTOS														
CHRYSOTILE (mass conc.)	CHRY(mass)	ng/mg	1600.0000	0.50000	NA	NA	NA	NA	NA	NA	85.0000	0.50000	200.0000	0.50000
AMPHIBOLE (mass conc.)	AMPH(mass)	ng/mg	2900.0000	0.50000	NA	NA	NA	NA	NA	NA	19.0000	0.50000	300.0000	0.50000
TOTAL ASBESTOS (wt. %)	TOTAS(wt%)	%	0.4500	0.00005	NA	NA	NA	NA	NA	NA	0.0100	0.00005	0.0500	0.00005
PLM (Total Asbestos:area % chrysotile)	PLM:tasb%	%	1.0000 U	1.00000	1.0000	1.00000	NA	NA	1.0000 U	1.00000	1.0000 U	1.00000	1.0000 U	1.00000
BASE NEUTAL ACID EXTRACTABLE														
4-NITROANILINE	100-01-6	ug/kg	NA	NA	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000	490.0000 U	490.000
PHENOL	108-95-2	ug/kg	NA	NA	NA	NA	240.0000 J	490.000	NA	NA	560.0000 UJ	560.000	540.0000 UJ	540.000
4-NITROPHENOL	100-02-7	ug/kg	NA	NA	NA	NA	2400.0000 U	2400.00	NA	NA	2400.0000 U	2400.00	2400.0000 U	2400.00
BIS(2-CHLOROETHYL) ETHER	111-44-4	ug/kg	NA	NA	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000	490.0000 U	490.000
4-BROMOPHENYLPHENYL ETHER	101-55-3	ug/kg	NA	NA	NA	NA	2400.0000 U	2400.00	NA	NA	2400.0000 U	2400.00	2400.0000 U	2400.00
BENZO(B)FLUORANTHENE	205-99-2	ug/kg	NA	NA	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000	490.0000 U	490.000
4-METHYLPHENOL	106-44-5	ug/kg	NA	NA	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000	490.0000 U	490.000
4-CHLOROANILINE	106-47-8	ug/kg	NA	NA	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000	490.0000 U	490.000
BENZYL ALCOHOL	100-51-6	ug/kg	NA	NA	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000	490.0000 U	490.000
2,4-DIMETHYLPHENOL	105-67-9	ug/kg	NA	NA	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000	490.0000 U	490.000
1,4-DICHLOROBENZENE	106-46-7	ug/kg	NA	NA	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000	490.0000 U	490.000
FLUORANTHENE	206-44-0	ug/kg	NA	NA	NA	NA	3.0000 J	490.000	NA	NA	560.0000 U	560.000	540.0000 U	540.000
BIS(2-ETHYLHEXYL) PHTHALATE	117-81-7	ug/kg	NA	NA	NA	NA	510.0000 U	510.000	NA	NA	7.0000 UJ	490.000	9.0000 UJ	490.000
BENZO(K)FLUORANTHENE	207-08-9	ug/kg	NA	NA	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000	490.0000 U	490.000
HEXACHLOROBENZENE	118-74-1	ug/kg	NA	NA	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000	490.0000 U	490.000
ACENAPHTHYLENE	208-96-8	ug/kg	NA	NA	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000	490.0000 U	490.000
1,2,4-TRICHLOROBENZENE	120-82-1	ug/kg	NA	NA	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000	490.0000 U	490.000
BENZO(A)ANTHRACENE	56-55-3	ug/kg	NA	NA	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000	490.0000 U	490.000
CHRYSENE	218-01-9	ug/kg	NA	NA	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000	490.0000 U	490.000
4-CHLORO-3-METHYLPHENOL	59-50-7	ug/kg	NA	NA	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000	490.0000 U	490.000
BIS(2-CHLISOPROPYL) ETHER	39638-32-9	ug/kg	NA	NA	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000	490.0000 U	490.000
2,6-DINITROTOLUENE	606-20-2	ug/kg	NA	NA	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000	490.0000 U	490.000
BENZO(A)PYRENE	50-32-8	ug/kg	NA	NA	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000	490.0000 U	490.000
2,4-DINITROPHENOL	51-28-5	ug/kg	NA	NA	NA	NA	2400.0000 U	2400.00	NA	NA	2400.0000 U	2400.00	2400.0000 U	2400.00
DIBENZO(A,H)ANTHRACENE	53-70-3	ug/kg	NA	NA	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000	490.0000 U	490.000
NITROBENZENE	98-95-3	ug/kg	NA	NA	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000	490.0000 U	490.000
3-NITROANILINE	99-09-2	ug/kg	NA	NA	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000	490.0000 U	490.000
INDENO(1,2,3-CD)PYRENE	193-39-5	ug/kg	NA	NA	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000	490.0000 U	490.000
BENZOIC ACID	65-85-0	ug/kg	NA	NA	NA	NA	2400.0000 U	2400.00	NA	NA	2400.0000 U	2400.00	2400.0000 U	2400.00
2,4-DICHLOROPHENOL	120-83-2	ug/kg	NA	NA	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000	490.0000 U	490.000
1,3-DICHLOROBENZENE	541-73-1	ug/kg	NA	NA	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000	490.0000 U	490.000
4-CHLOROPHENYLPHENYL ETHER	7005-72-3	ug/kg	NA	NA	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000	490.0000 U	490.000
DIMETHYL PHTHALATE	131-11-3	ug/kg	NA	NA	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000	490.0000 U	490.000
BIS(2-CHLOROETHOXY) METHANE	111-91-1	ug/kg	NA	NA	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000	490.0000 U	490.000
ISOPHORONE	78-59-1	ug/kg	NA	NA	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000	490.0000 U	490.000
PYRENE	129-00-0	ug/kg	NA	NA	NA	NA	3.0000 J	490.000	NA	NA	560.0000 U	560.000	540.0000 U	540.000
DIBENZOFURAN	132-64-9	ug/kg	NA	NA	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000	490.0000 U	490.000
BENZO(G,H,I)PERYLENE	191-24-2	ug/kg	NA	NA	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000	490.0000 U	490.000
ANTHRACENE	120-12-7	ug/kg	NA	NA	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000	490.0000 U	490.000
DI-N-OCTYL PHTHALATE	117-84-0	ug/kg	NA	NA	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000	490.0000 U	490.000
2,4-DINITROTOLUENE	121-14-2	ug/kg	NA	NA	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000	490.0000 U	490.000

SOUTH BAY ASBESTOS
SUBSURFACE SOIL ANALYTICAL RESULTS

SAMPLING LOCATION														
		LOCID -->	SS-605-001		SS-605-002		SS-605-003		SS-606-001		SS-606-002		SS-606-003	
		Date sample taken -->	10/27/87		10/28/87		10/28/87		10/29/87		10/29/87		10/29/87	
		Depth sample taken -->	0.0-1.5 FT.		16.4-16.5 FT.		16.5-18.0 FT.		0.0-1.5 FT.		0.0-1.5 FT.		4.5-5.5 FT.	
SERIES CONTAMINANT NAME	CAS #	UNIT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT
DIETHYL PHTHALATE	84-66-2	ug/kg	NA	NA	NA	NA	2.0000 J	490.000	NA	NA	560.0000 U	560.000	540.0000 U	540.000
PHENANTHRENE	85-01-8	ug/kg	NA	NA	NA	NA	5.0000 J	490.000	NA	NA	560.0000 U	560.000	540.0000 U	540.000
N-NITROSODIPHENYLAMINE	86-30-6	ug/kg	NA	NA	NA	NA	2400.0000 U	2400.00	NA	NA	2400.0000 U	2400.00	2400.0000 U	2400.00
ACENAPHTHENE	83-32-9	ug/kg	NA	NA	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000	490.0000 U	490.000
PENTACHLOROPHENOL	87-86-5	ug/kg	NA	NA	NA	NA	5.0000 J	490.000	NA	NA	2700.0000 U	2700.00	2600.0000 U	2600.00
4,6-DiNO2-2-Methylphenol	111-11-11	ug/kg	NA	NA	NA	NA	2400.0000 U	2400.00	NA	NA	2400.0000 U	2400.00	2400.0000 U	2400.00
2,4,5-TRICHLOROPHENOL	95-95-4	ug/kg	NA	NA	NA	NA	2400.0000 U	2400.00	NA	NA	2400.0000 U	2400.00	2400.0000 U	2400.00
2,4,6-TRICHLOROPHENOL	88-06-2	ug/kg	NA	NA	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000	490.0000 U	490.000
2-METHYLNAPHTHALENE	91-57-6	ug/kg	NA	NA	NA	NA	4.0000 J	490.000	NA	NA	560.0000 U	560.000	540.0000 U	540.000
2-METHYLPHENOL	95-48-7	ug/kg	NA	NA	NA	NA	62.0000 J	490.000	NA	NA	560.0000 U	560.000	540.0000 U	540.000
N-NITROSO-DIPROPYLAMINE	621-64-7	ug/kg	NA	NA	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000	490.0000 U	490.000
DI-N-BUTYL PHTHALATE	84-74-2	ug/kg	NA	NA	NA	NA	12.0000 J	490.000	NA	NA	560.0000 U	560.000	540.0000 U	540.000
2-NITROANILINE	88-74-4	ug/kg	NA	NA	NA	NA	2400.0000 U	2400.00	NA	NA	2400.0000 U	2400.00	2400.0000 U	2400.00
1,2-DICHLOROBENZENE	95-50-1	ug/kg	NA	NA	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000	490.0000 U	490.000
BUTYLBENZYLPHTHALATE	85-68-7	ug/kg	NA	NA	NA	NA	1200.0000 J	490.000	NA	NA	560.0000 U	560.000	2.0000 J	490.000
HEXACHLOROBUTADIENE	87-68-3	ug/kg	NA	NA	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000	490.0000 U	490.000
3,3-DICHLOROBENZIDINE	91-94-1	ug/kg	NA	NA	NA	NA	970.0000 U	970.000	NA	NA	970.0000 U	970.000	970.0000 U	970.000
HEXACHLOROCYCLOPENTADIENE	77-47-4	ug/kg	NA	NA	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000	490.0000 U	490.000
2-CHLORONAPHTHALENE	91-58-7	ug/kg	NA	NA	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000	490.0000 U	490.000
NAPHTHALENE	91-20-3	ug/kg	NA	NA	NA	NA	8.0000 J	490.000	NA	NA	560.0000 U	560.000	540.0000 U	540.000
2-CHLOROPHENOL	95-57-8	ug/kg	NA	NA	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000	490.0000 U	490.000
FLUORENE	86-73-7	ug/kg	NA	NA	NA	NA	2.0000 J	490.000	NA	NA	560.0000 U	560.000	540.0000 U	540.000
HEXACHLOROETHANE	67-72-1	ug/kg	NA	NA	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000	490.0000 U	490.000
2-NITROPHENOL	88-75-5	ug/kg	NA	NA	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000	490.0000 U	490.000
4-METHYL-2,4-PHENOL		ug/kg	NA	NA	NA	NA	NA	NA	NA	NA	560.0000 U	560.000	540.0000 U	540.000
METALS														
CYANIDE	74-90-8D	mg/kg	NA	NA	NA	NA	0.6200 U	5.00000	NA	NA	0.6900 U	5.00000	0.6600 U	5.00000
ARSENIC	7440-38-2	mg/kg	NA	NA	NA	NA	22.4000	5.00000	NA	NA	5.6000 J	5.00000	4.5000 J	5.00000
BERYLLIUM	7440-41-7	mg/kg	NA	NA	NA	NA	0.2800 U	2.50000	NA	NA	0.5600 J	2.50000	0.7600 J	2.50000
LEAD	7439-92-1	mg/kg	NA	NA	NA	NA	217.0000 J	2.50000	NA	NA	20.2000 UJ	20.2000	29.9000 UJ	29.9000
VANADIUM	7440-62-2	mg/kg	NA	NA	NA	NA	35.0000 UJ	35.0000	NA	NA	78.9000	25.0000	66.6000 UJ	66.6000
MANGANESE	7439-96-5	mg/kg	NA	NA	NA	NA	444.0000 J	7.50000	NA	NA	440.0000 J	7.50000	475.0000 J	7.50000
ZINC	7440-66-6	mg/kg	NA	NA	NA	NA	225.0000	10.0000	NA	NA	103.0000	10.0000	91.0000	10.0000
NICKEL	7440-02-0	mg/kg	NA	NA	NA	NA	74.0000	20.0000	NA	NA	93.5000	20.0000	89.6000	20.0000
CALCIUM	7440-70-2	mg/kg	NA	NA	NA	NA	42000.0000	2500.00	NA	NA	27600.0000	2500.00	40600.0000	2500.00
SILVER	7440-22-4	mg/kg	NA	NA	NA	NA	1.6000 U	5.00000	NA	NA	1.7000 U	5.00000	1.5000 U	5.00000
SELENIUM	7782-49-2	mg/kg	NA	NA	NA	NA	0.4700 UJ	2.50000	NA	NA	0.4900 UJ	2.50000	0.4300 UJ	2.50000
THALLIUM	7440-28-0	mg/kg	NA	NA	NA	NA	0.4700 U	5.00000	NA	NA	0.4900 U	5.00000	0.4300 U	5.00000
ANTIMONY	7440-36-0	mg/kg	NA	NA	NA	NA	0.4700 UJ	30.0000	NA	NA	0.4900 UJ	30.0000	0.4300 UJ	30.0000
SODIUM	7440-23-5	mg/kg	NA	NA	NA	NA	662.0000	2500.00	NA	NA	6520.0000	2500.00	6000.0000	2500.00
ALUMINUM	7429-90-5	mg/kg	NA	NA	NA	NA	15100.0000	100.000	NA	NA	29600.0000	100.000	25300.0000	100.000
COBALT	7440-48-4	mg/kg	NA	NA	NA	NA	10.7000 J	25.0000	NA	NA	21.0000 J	25.0000	17.3000 J	25.0000
CHROMIUM	7440-47-3	mg/kg	NA	NA	NA	NA	55.1000 UJ	55.1000	NA	NA	87.7000	5.00000	78.6000 UJ	78.6000
COPPER	7440-50-8	mg/kg	NA	NA	NA	NA	206.0000	12.5000	NA	NA	48.8000	12.5000	42.8000	12.5000
MAGNESIUM	7439-95-4	mg/kg	NA	NA	NA	NA	12400.0000	2500.00	NA	NA	13900.0000	2500.00	13600.0000	2500.00
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

SOUTH BAY ASBESTOS
SUBSURFACE SOIL ANALYTICAL RESULTS

			SAMPLING LOCATION											
		LOCID -->	SS-G05-001		SS-G05-002		SS-G05-003		SS-G06-001		SS-G06-002		SS-G06-003	
		Date sample taken -->	10/27/87		10/28/87		10/28/87		10/29/87		10/29/87		10/29/87	
		Depth sample taken -->	0.0-1.5 FT.		16.4-16.5 FT.		16.5-18.0 FT.		0.0-1.5 FT.		0.0-1.5 FT.		4.5-5.5 FT.	
SERIES CONTAMINANT NAME	CAS #	UNIT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT
MERCURY	7439-97-6	mg/kg	NA	NA	NA	NA	0.2100	0.10000	NA	NA	0.3000	0.10000	0.4400	0.10000
BARIUM	7440-39-3	mg/kg	NA	NA	NA	NA	264.0000	100.000	NA	NA	181.0000 J	100.000	228.0000	100.000
PESTICIDES														
4,4-DDT	50-29-3	ug/kg	NA	NA	NA	NA	119.0000 UJ	119.000	NA	NA	99.0000 UJ	100.000	100.0000 U	100.000
4,4-DDD	72-54-8	ug/kg	NA	NA	NA	NA	149.0000 J	16.0000	NA	NA	71.0000 J	16.0000	46.0000 J	16.0000
4,4-DDE	72-55-9	ug/kg	NA	NA	NA	NA	412.0000 J	16.0000	NA	NA	29.0000 J	16.0000	24.0000 J	16.0000
ALPHA-CHLORDANE	57-74-9	ug/kg	NA	NA	NA	NA	100.0000 U	100.000	NA	NA	110.0000 U	110.000	105.0000 U	105.000
DIELDRIN	60-57-1	ug/kg	NA	NA	NA	NA	20.0000 U	20.0000	NA	NA	22.0000 U	22.0000	21.0000 U	21.0000
GAMMA-CHLORDANE	57-74-96	ug/kg	NA	NA	NA	NA	100.0000 U	100.000	NA	NA	110.0000 U	110.000	105.0000 U	105.000
VOLATILES														
ETHYLBENZENE	100-41-4	ug/kg	NA	NA	NA	NA	30.0000	7.00000	NA	NA	7.0000 U	7.00000	7.0000 U	7.00000
TOLUENE	108-88-3	ug/kg	NA	NA	NA	NA	22.0000 UJ	22.0000	NA	NA	11.0000 UJ	11.0000	14.0000 UJ	14.0000
METHYLENE CHLORIDE (DICHLOROMETHANE)	75-09-2	ug/kg	NA	NA	NA	NA	18.0000	7.00000	NA	NA	7.0000 U	7.00000	7.0000 U	7.00000
ACETONE	67-64-1	ug/kg	NA	NA	NA	NA	380.0000 J	14.0000	NA	NA	1600.0000 J	14.0000	2300.0000 J	14.0000
BENZENE	71-43-2	ug/kg	NA	NA	NA	NA	7.0000 UJ	7.00000	NA	NA	6.0000 UJ	7.00000	8.0000 UJ	8.00000
TETRACHLOROETHENE	127-18-4	ug/kg	NA	NA	NA	NA	6.0000 U	7.00000	NA	NA	7.0000 U	7.00000	7.0000 U	7.00000
CHLOROFORM	67-66-3	ug/kg	NA	NA	NA	NA	2.0000 UJ	7.00000	NA	NA	4.0000 UJ	7.00000	3.0000 UJ	7.00000
4-METHYL-2-PENTANONE	108-10-1	ug/kg	NA	NA	NA	NA	12.0000 U	14.0000	NA	NA	14.0000 U	14.0000	13.0000 U	14.0000
2-HEXANONE	591-78-6	ug/kg	NA	NA	NA	NA	12.0000 U	14.0000	NA	NA	14.0000 U	14.0000	13.0000 U	14.0000
TOTAL XYLENES	1330-20-7	ug/kg	NA	NA	NA	NA	6.0000 U	7.00000	NA	NA	7.0000 U	7.00000	7.0000 U	7.00000
2-BUTANONE	78-93-3	ug/kg	NA	NA	NA	NA	69.0000 UJ	69.0000	NA	NA	14.0000 U	14.0000	13.0000 U	14.0000
CARBON DISULFIDE	75-15-0	ug/kg	NA	NA	NA	NA	6.0000 J	7.00000	NA	NA	14.0000 U	14.0000	13.0000 U	13.0000

SOUTH BAY ASBESTOS
SUBSURFACE SOIL ANALYTICAL RESULTS

SAMPLING LOCATION

	LOCID -->		SS-G09-001		SS-G09-002		SS-G11-001		SS-G11-002			
	Date sample taken -->		10/30/87		10/30/87		10/28/87		10/28/87			
	Depth sample taken -->		0.0-1.5 FT.		3.3-5.3 FT.		0.0-1.5 FT.		6.0-8.0 FT.			
SERIES CONTAMINANT NAME	CAS #	UNIT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT
ASBESTOS												
CHRYSOTILE (mass conc.)	CHRY(mass)	ug/kg	NA	NA	1600.0000	0.50000	NA	NA	40.0000	0.50000		
AMPHIBOLE (mass conc.)	AMPH(mass)	ug/kg	NA	NA	97.0000	0.50000	NA	NA	83.0000	0.50000		
TOTAL ASBESTOS (wt. %)	TOTAS(wt%)	ug/kg	NA	NA	0.1700	0.00005	NA	NA	0.0120	0.00005		
PLM (Total Asbestos:area % chrysotile)	PLM:tasb%		1.0000 U	1.00000	1.0000 U	1.00000	1.0000 U	1.00000	1.0000 U	1.00000		
BASE NEUTAL ACID EXTRACTABLE												
4-NITROANILINE	100-01-6	ug/kg	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000		
PHENOL	108-95-2	ug/kg	NA	NA	510.0000 UJ	510.000	NA	NA	3.0000 J	490.000		
4-NITROPHENOL	100-02-7	ug/kg	NA	NA	2400.0000 U	2400.00	NA	NA	2400.0000 U	2400.00		
BIS(2-CHLOROETHYL) ETHER	111-44-4	ug/kg	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000		
4-BROMOPHENYLPHENYL ETHER	101-55-3	ug/kg	NA	NA	2400.0000 U	2400.00	NA	NA	2400.0000 U	2400.00		
BENZO(B)FLUORANTHENE	205-99-2	ug/kg	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000		
4-METHYLPHENOL	106-44-5	ug/kg	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000		
4-CHLOROANILINE	106-47-8	ug/kg	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000		
BENZYL ALCOHOL	100-51-6	ug/kg	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000		
2,4-DIMETHYLPHENOL	105-67-9	ug/kg	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000		
1,4-DICHLOROBENZENE	106-46-7	ug/kg	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000		
FLUORANTHENE	206-44-0	ug/kg	NA	NA	510.0000 U	510.000	NA	NA	530.0000 U	530.000		
BIS(2-ETHYLHEXYL) PHTHALATE	117-81-7	ug/kg	NA	NA	510.0000 U	510.000	NA	NA	3.0000 UJ	490.000		
BENZO(K)FLUORANTHENE	207-08-9	ug/kg	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000		
HEXACHLOROBENZENE	118-74-1	ug/kg	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000		
ACENAPHTHYLENE	208-96-8	ug/kg	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000		
1,2,4-TRICHLOROBENZENE	120-82-1	ug/kg	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000		
BENZO(A)ANTHRACENE	56-55-3	ug/kg	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000		
CHRYSENE	218-01-9	ug/kg	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000		
4-CHLORO-3-METHYLPHENOL	59 50-7	ug/kg	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000		
BIS(2-CHLISOPROPYL) ETHER	39638-32-9	ug/kg	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000		
2,6-DINITROTOLUENE	606-20-2	ug/kg	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000		
BENZO(A)PYRENE	50-32-8	ug/kg	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000		
2,4-DINITROPHENOL	51-28-5	ug/kg	NA	NA	2400.0000 U	2400.00	NA	NA	2400.0000 U	2400.00		
DIBENZO(A,H)ANTHRACENE	53-70-3	ug/kg	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000		
NITROBENZENE	98-95-3	ug/kg	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000		
3-NITROANILINE	99-09-2	ug/kg	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000		
INDENO(1,2,3-CD)PYRENE	193-39-5	ug/kg	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000		
BENZOIC ACID	65-85-0	ug/kg	NA	NA	2400.0000 U	2400.00	NA	NA	2400.0000 U	2400.00		
2,4-DICHLOROPHENOL	120-83-2	ug/kg	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000		
1,3-DICHLOROBENZENE	541-73-1	ug/kg	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000		
4-CHLOROPHENYLPHENYL ETHER	7005-72-3	ug/kg	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000		
DIMETHYL PHTHALATE	131-11-3	ug/kg	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000		
BIS(2-CHLOROETHOXY) METHANE	111-91-1	ug/kg	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000		
ISOPHORONE	78-59-1	ug/kg	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000		
PYRENE	129-00-0	ug/kg	NA	NA	510.0000 U	510.000	NA	NA	4.0000 J	490.000		
DIBENZOFURAN	132-64-9	ug/kg	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000		
BENZO(G,H,I)PERYLENE	191-24-2	ug/kg	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000		
ANTHRACENE	120-12-7	ug/kg	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000		

SOUTH BAY ASBESTOS
SUBSURFACE SOIL ANALYTICAL RESULTS

SERIES / CONTAMINANT NAME	CAS #	UNIT	SAMPLING LOCATION: LOCID --> SS-G09-001; Date sample taken --> 10/30/87; Depth sample taken --> 0.0-1.5 FT.		SS-G09-002; 10/30/87; 3.3-5.3 FT.		SS-G11-001; 10/28/87; 0.0-1.5 FT.		SS-G11-002; 10/28/87; 6.0-8.0 FT.			
			READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT
DIETHYL PHTHALATE	84-66-2	ug/kg	NA	NA	510.0000 U	510.000	NA	NA	530.0000 U	530.000		
PHENANTHRENE	85-01-8	ug/kg	NA	NA	510.0000 U	510.000	NA	NA	5.0000 J	490.000		
N-NITROSODIPHENYLAMINE	86-30-6	ug/kg	NA	NA	2400.0000 U	2400.00	NA	NA	2400.0000 U	2400.00		
ACENAPHTHENE	83-32-9	ug/kg	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000		
PENTACHLOROPHENOL	87-86-5	ug/kg	NA	NA	2400.0000 U	2400.00	NA	NA	2600.0000 U	2600.00		
4,6-DiNO2-2-Methylphenol	111-11-11	ug/kg	NA	NA	2400.0000 U	2400.00	NA	NA	2400.0000 U	2400.00		
2,4,5-TRICHLOROPHENOL	95-95-4	ug/kg	NA	NA	2400.0000 U	2400.00	NA	NA	2400.0000 U	2400.00		
2,4,6-TRICHLOROPHENOL	88-06-2	ug/kg	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000		
2-METHYLNAPHTHALENE	91-57-6	ug/kg	NA	NA	510.0000 U	510.000	NA	NA	6.0000 J	490.000		
2-METHYLPHENOL	95-48-7	ug/kg	NA	NA	510.0000 U	510.000	NA	NA	530.0000 U	530.000		
N-NITROSO-DIPROPYLAMINE	621-64-7	ug/kg	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000		
DI-N-BUTYL PHTHALATE	84-74-2	ug/kg	NA	NA	510.0000 U	510.000	NA	NA	530.0000 U	530.000		
2-NITROANILINE	88-74-4	ug/kg	NA	NA	2400.0000 U	2400.00	NA	NA	2400.0000 U	2400.00		
1,2-DICHLOROBENZENE	95-50-1	ug/kg	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000		
BUTYLBENZYLPHTHALATE	85-68-7	ug/kg	NA	NA	4.0000 J	490.000	NA	NA	530.0000 U	530.000		
HEXACHLOROBUTADIENE	87-68-3	ug/kg	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000		
3,3-DICHLOROBENZIDINE	91-94-1	ug/kg	NA	NA	970.0000 U	970.000	NA	NA	970.0000 U	970.000		
HEXACHLOROCYCLOPENTADIENE	77-47-4	ug/kg	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000		
2-CHLORONAPHTHALENE	91-58-7	ug/kg	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000		
NAPHTHALENE	91-20-3	ug/kg	NA	NA	510.0000 U	510.000	NA	NA	3.0000 J	490.000		
2-CHLOROPHENOL	95-57-8	ug/kg	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000		
FLUORENE	86-73-7	ug/kg	NA	NA	510.0000 U	510.000	NA	NA	530.0000 U	530.000		
HEXACHLOROETHANE	67-72-1	ug/kg	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000		
2-NITROPHENOL	88-75-5	ug/kg	NA	NA	490.0000 U	490.000	NA	NA	490.0000 U	490.000		
4-METHYL-2,4-PHENOL		ug/kg	NA	NA	510.0000 U	510.000	NA	NA	530.0000 U	530.000		
METALS												
CYANIDE	74-90-8D	mg/kg	NA	NA	0.5200 U	5.00000	NA	NA	0.6500 U	5.00000		
ARSENIC	7440-38-2	mg/kg	NA	NA	6.0000 J	5.00000	NA	NA	10.2000	5.00000		
BERYLLIUM	7440-41-7	mg/kg	NA	NA	0.5700 J	2.50000	NA	NA	0.2600 U	2.50000		
LEAD	7439-92-1	mg/kg	NA	NA	14.0000 UJ	14.0000	NA	NA	911.0000 J	2.50000		
VANADIUM	7440-62-2	mg/kg	NA	NA	75.4000	25.0000	NA	NA	51.8000 UJ	51.8000		
MANGANESE	7439-96-5	mg/kg	NA	NA	624.0000 J	7.50000	NA	NA	441.0000 J	7.50000		
ZINC	7440-66-6	mg/kg	NA	NA	92.3000	10.0000	NA	NA	747.0000	10.0000		
NICKEL	7440-02-0	mg/kg	NA	NA	104.0000	20.0000	NA	NA	57.2000	20.0000		
CALCIUM	7440-70-2	mg/kg	NA	NA	27200.0000	2500.00	NA	NA	35800.0000	2500.00		
SILVER	7440-22-4	mg/kg	NA	NA	1.4000 U	5.00000	NA	NA	1.5000 U	5.00000		
SELENIUM	7782-49-2	mg/kg	NA	NA	0.3900 UJ	2.50000	NA	NA	0.7000 J	2.50000		
THALLIUM	7440-28-0	mg/kg	NA	NA	0.3300 U	5.00000	NA	NA	0.4400 U	5.00000		
ANTIMONY	7440-36-0	mg/kg	NA	NA	0.3900 UJ	30.0000	NA	NA	0.4400 UJ	30.0000		
SODIUM	7440-23-5	mg/kg	NA	NA	4600.0000	2500.00	NA	NA	634.0000	2500.00		
ALUMINUM	7429-90-5	mg/kg	NA	NA	25400.0000	100.000	NA	NA	15600.0000	100.000		
COBALT	7440-48-4	mg/kg	NA	NA	23.2000 J	25.0000	NA	NA	13.0000 J	25.0000		
CHROMIUM	7440-47-3	mg/kg	NA	NA	86.0000 UJ	86.0000	NA	NA	51.0000 UJ	51.0000		
COPPER	7440-50-8	mg/kg	NA	NA	43.8000	12.5000	NA	NA	45.4000	12.5000		
MAGNESIUM	7439-95-4	mg/kg	NA	NA	25000.0000	2500.00	NA	NA	10000.0000	2500.00		
POTASSIUM	7440-09-7	mg/kg	NA	NA	1790.0000 UJ	2500.00	NA	NA	2380.0000 UJ	2500.00		
CADMIUM	7440-43-9	mg/kg	NA	NA	2.2000 J	2.50000	NA	NA	2.3000 J	2.50000		

SOUTH BAY ASBESTOS
SUBSURFACE SOIL ANALYTICAL RESULTS

SAMPLING LOCATION

SERIES CONTAMINANT NAME	CAS #	UNIT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT
LOCID -->			SS-G09-001		SS-G09-002		SS-G11-001		SS-G11-002			
Date sample taken -->			10/30/87		10/30/87		10/28/87		10/28/87			
Depth sample taken -->			0.0-1.5 FT.		3.3-5.3 FT.		0.0-1.5 FT.		6.0-8.0 FT.			
MERCURY	7439-97-6	mg/kg	NA	NA	0.2000	0.10000	NA	NA	0.7200	0.10000		
BARIUM	7440-39-3	mg/kg	NA	NA	125.0000 J	100.000	NA	NA	647.0000	100.000		
PESTICIDES												
4,4-DDT	50-29-3	ug/kg	NA	NA	52.0000 UJ	100.000	NA	NA	21.0000 U	100.000		
4,4-DDD	72-54-8	ug/kg	NA	NA	20.0000 U	20.0000	NA	NA	401.0000 J	16.0000		
4,4-DDE	72-55-9	ug/kg	NA	NA	20.0000 U	20.0000	NA	NA	369.0000 J	16.0000		
ALPHA-CHLORDANE	57-74-9	ug/kg	NA	NA	99.0000 U	99.0000	NA	NA	1810.0000 J	80.0000		
DIELDRIN	60-57-1	ug/kg	NA	NA	20.0000 U	20.0000	NA	NA	21.0000 U	21.0000		
GAMMA-CHLORDANE	57-74-9G	ug/kg	NA	NA	99.0000 U	99.0000	NA	NA	104.0000 U	104.000		
VOLATILES												
ETHYLBENZENE	100-41-4	ug/kg	NA	NA	5.0000 U	7.00000	NA	NA	6.0000 U	7.00000		
TOLUENE	108-88-3	ug/kg	NA	NA	10.0000 UJ	10.0000	NA	NA	14.0000 UJ	14.0000		
METHYLENE CHLORIDE (DICHLOROMETHANE)	75-09-2	ug/kg	NA	NA	5.0000 U	7.00000	NA	NA	6.0000 U	7.00000		
ACETONE	67-64-1	ug/kg	NA	NA	960.0000 J	14.0000	NA	NA	260.0000 J	14.0000		
BENZENE	71-43-2	ug/kg	NA	NA	5.0000 UJ	7.00000	NA	NA	16.0000 UJ	16.0000		
TETRACHLOROETHENE	127-18-4	ug/kg	NA	NA	6.0000 U	7.00000	NA	NA	6.0000 U	7.00000		
CHLOROFORM	67-66-3	ug/kg	NA	NA	5.0000 U	7.00000	NA	NA	3.0000 UJ	7.00000		
4-METHYL-2-PENTANONE	108-10-1	ug/kg	NA	NA	260.0000	14.0000	NA	NA	13.0000 U	14.0000		
2-HEXANONE	591-78-6	ug/kg	NA	NA	12.0000 U	14.0000	NA	NA	13.0000 U	14.0000		
TOTAL XYLENES	1330-20-7	ug/kg	NA	NA	6.0000 U	7.00000	NA	NA	6.0000 U	7.00000		
2-BUTANONE	78-93-3	ug/kg	NA	NA	12.0000 U	14.0000	NA	NA	45.0000 UJ	45.0000		
CARBON DISULFIDE	75-15-0	ug/kg	NA	NA	6.0000 U	7.00000	NA	NA	11.0000	7.00000		

Note:
Complete TCL list not included if compounds not detected.

SEDIMENT

SOUTH BAY ASBESTOS
SEDIMENT ANALYTICAL RESULTS

SAMPLING LOCATION

SERIES / CONTAMINANT NAME	CAS #	UNIT	SD-001-001 05/21/87 READING	SD-001-001 DETECT	SD-002-001 05/21/87 READING	SD-002-001 DETECT	SD-003-001 05/21/87 READING	SD-003-001 DETECT	SD-003-002 05/21/87 READING	SD-003-002 DETECT	SD-004-001 05/21/87 READING	SD-004-001 DETECT
LOCID --> / Date sample taken -->			SD-001-001 / 05/21/87		SD-002-001 / 05/21/87		SD-003-001 / 05/21/87		SD-003-002 / 05/21/87		SD-004-001 / 05/21/87	
ASBESTOS SEDIMENT												
CHRYSOTILE (mass conc.)	CHRY(mass)	ng/mg	52.1000 J	0.50000	133.7000 J	0.50000	NA	NA	NA	NA	NA	NA
AMPHIBOLE (mass conc.)	AMPH(mass)	ng/mg	0.5000 U	0.50000	55.8000 J	0.50000	NA	NA	NA	NA	NA	NA
TOTAL ASBESTOS (wt. %)	TOTAS(wt%)	%	0.0052 J	0.00005	0.0189 J	0.00005	NA	NA	NA	NA	NA	NA
PLM (Total Asbestos:area % chrysotile)	PLM:tasb%	%	1.0000 U	1.00000	1.0000 U	1.00000	1.0000 U	1.00000	1.0000 U	1.00000	1.0000	1.00000
BASE NEUTAL ACID EXTRACTABLE												
4-NITROANILINE	100-01-6	ug/kg	9200.0000 UJ	9200.00	NA	NA	9136.0000 UJ	9136.00	8896.0000 UJ	8896.00	8816.0000 UJ	8816.00
PHENOL	108-95-2	ug/kg	1898.0000 U	1898.00	1765.0000 U	1765.00	1884.0000 U	1884.00	1835.0000 U	1835.00	1818.0000 U	1818.00
4-NITROPHENOL	100-02-7	ug/kg	9200.0000 U	9200.00	8560.0000 U	8560.00	9136.0000 U	9136.00	8896.0000 U	8896.00	8816.0000 U	8816.00
BIS(2-CHLOROETHYL) ETHER	111-44-4	ug/kg	1898.0000 U	1898.00	1765.0000 U	1765.00	1884.0000 U	1884.00	1835.0000 U	1835.00	1818.0000 U	1818.00
4-BROMOPHENYLPHENYL ETHER	101-55-3	ug/kg	1898.0000 U	1898.00	1765.0000 U	1765.00	1884.0000 U	1884.00	1835.0000 U	1835.00	1818.0000 U	1818.00
BENZO(B)FLUORANTHENE	205-99-2	ug/kg	1898.0000 UJ	1898.00	1765.0000 UJ	1765.00	1884.0000 UJ	1884.00	1835.0000 UJ	1835.00	1818.0000 UJ	1818.00
4-METHYLPHENOL	106-44-5	ug/kg	1898.0000 U	1898.00	1765.0000 U	1765.00	1884.0000 U	1884.00	1835.0000 U	1835.00	1818.0000 U	1818.00
4-CHLOROANILINE	106-47-8	ug/kg	1898.0000 UJ	1898.00	NA	NA	1884.0000 UJ	1884.00	1835.0000 UJ	1835.00	1818.0000 UJ	1818.00
BENZYL ALCOHOL	100-51-6	ug/kg	1898.0000 U	1898.00	1765.0000 U	1765.00	1884.0000 U	1884.00	1835.0000 U	1835.00	1818.0000 U	1818.00
2,4-DIMETHYLPHENOL	105-67-9	ug/kg	1898.0000 U	1898.00	1765.0000 U	1765.00	1884.0000 U	1884.00	1835.0000 U	1835.00	1818.0000 U	1818.00
1,4-DICHLOROBENZENE	106-46-7	ug/kg	1898.0000 U	1898.00	1765.0000 U	1765.00	1884.0000 U	1884.00	1835.0000 U	1835.00	1818.0000 U	1818.00
FLUORANTHENE	206-44-0	ug/kg	1898.0000 U	1898.00	1765.0000 U	1765.00	1884.0000 U	1884.00	1835.0000 U	1835.00	1818.0000 U	1818.00
BIS(2-ETHYLHEXYL) PHTHALATE	117-81-7	ug/kg	1898.0000 UJ	1898.00	1765.0000 UJ	1765.00	1884.0000 UJ	1884.00	1835.0000 UJ	1835.00	1818.0000 UJ	1818.00
BENZO(K)FLUORANTHENE	207-08-9	ug/kg	1898.0000 U	1898.00	1765.0000 U	1765.00	1884.0000 U	1884.00	1835.0000 U	1835.00	1818.0000 U	1818.00
HEXACHLOROBENZENE	118-74-1	ug/kg	1898.0000 U	1898.00	1765.0000 U	1765.00	1884.0000 U	1884.00	1835.0000 U	1835.00	1818.0000 U	1818.00
ACENAPHTHYLENE	208-96-8	ug/kg	1898.0000 U	1898.00	1765.0000 U	1765.00	1884.0000 U	1884.00	1835.0000 U	1835.00	1818.0000 U	1818.00
1,2,4-TRICHLOROBENZENE	120-82-1	ug/kg	1898.0000 U	1898.00	1765.0000 U	1765.00	1884.0000 U	1884.00	1835.0000 U	1835.00	1818.0000 U	1818.00
BENZO(A)ANTHRACENE	56-55-3	ug/kg	1898.0000 U	1898.00	1765.0000 U	1765.00	1884.0000 U	1884.00	1835.0000 U	1835.00	1818.0000 U	1818.00
CHRYSENE	218-01-9	ug/kg	1898.0000 U	1898.00	1765.0000 U	1765.00	1884.0000 U	1884.00	1835.0000 U	1835.00	1818.0000 U	1818.00
4-CHLORO-3-METHYLPHENOL	59-50-7	ug/kg	1898.0000 U	1898.00	1765.0000 U	1765.00	1884.0000 U	1884.00	1835.0000 U	1835.00	1818.0000 U	1818.00
BIS(2-CHLISOPROPYL) ETHER	39638-32-9	ug/kg	1898.0000 U	1898.00	1765.0000 U	1765.00	1884.0000 U	1884.00	1835.0000 U	1835.00	1818.0000 U	1818.00
2,6-DINITROTOLUENE	606-20-2	ug/kg	1898.0000 U	1898.00	1765.0000 U	1765.00	1884.0000 U	1884.00	1835.0000 U	1835.00	1818.0000 U	1818.00
BENZO(A)PYRENE	50-32-8	ug/kg	1898.0000 U	1898.00	1765.0000 U	1765.00	1884.0000 U	1884.00	1835.0000 U	1835.00	1818.0000 U	1818.00
2,4-DINITROPHENOL	51-28-5	ug/kg	9200.0000 UJ	9200.00	8560.0000 UJ	8560.00	9136.0000 UJ	9136.00	8896.0000 UJ	8896.00	8816.0000 UJ	8816.00
DIBENZO(A,H)ANTHRACENE	53-70-3	ug/kg	1898.0000 U	1898.00	1765.0000 U	1765.00	1884.0000 U	1884.00	1835.0000 U	1835.00	1818.0000 U	1818.00
NITROBENZENE	98-95-3	ug/kg	1898.0000 UJ	1898.00	1765.0000 UJ	1765.00	1884.0000 UJ	1884.00	1835.0000 UJ	1835.00	1818.0000 UJ	1818.00
3-NITROANILINE	99-09-2	ug/kg	50.0000 R	50.0000	50.0000 R	50.0000	1884.0000 R	1884.00	50.0000 R	50.0000	50.0000 R	50.0000
INDENO(1,2,3-CD)PYRENE	193-39-5	ug/kg	1898.0000 U	1898.00	1765.0000 U	1765.00	1884.0000 U	1884.00	1835.0000 U	1835.00	1818.0000 U	1818.00
BENZOIC ACID	65-85-0	ug/kg	9200.0000 UJ	9200.00	8560.0000 UJ	8560.00	9136.0000 UJ	9136.00	8896.0000 UJ	8896.00	8816.0000 UJ	8816.00
2,4-DICHLOROPHENOL	120-83-2	ug/kg	1898.0000 U	1898.00	1765.0000 U	1765.00	1884.0000 U	1884.00	1835.0000 U	1835.00	1818.0000 U	1818.00
1,3-DICHLOROBENZENE	541-73-1	ug/kg	1898.0000 U	1898.00	1765.0000 U	1765.00	1884.0000 U	1884.00	1835.0000 U	1835.00	1818.0000 U	1818.00
4-CHLOROPHENYLPHENYL ETHER	7005-72-3	ug/kg	1898.0000 U	1898.00	1765.0000 U	1765.00	1884.0000 U	1884.00	1835.0000 U	1835.00	1818.0000 U	1818.00
DIMETHYL PHTHALATE	131-11-3	ug/kg	1898.0000 U	1898.00	1765.0000 U	1765.00	1884.0000 U	1984.00	1835.0000 U	1835.00	1818.0000 U	1818.00
BIS(2-CHLOROETHOXY) METHANE	111-91-1	ug/kg	1898.0000 U	1890.00	1765.0000 U	1765.00	1884.0000 U	1884.00	1835.0000 U	1835.00	1818.0000 U	1818.00
ISOPHORONE	78-59-1	ug/kg	1898.0000 U	1898.00	1765.0000 U	1765.00	1884.0000 U	1884.00	1835.0000 U	1835.00	1818.0000 U	1818.00
PYRENE	129-00-0	ug/kg	1898.0000 U	1898.00	1765.0000 U	1765.00	1884.0000 U	1884.00	1835.0000 U	1835.00	1818.0000 U	1818.00
DIBENZOFURAN	132-64-9	ug/kg	1898.0000 U	1898.00	1765.0000 U	1765.00	1884.0000 U	1884.00	1835.0000 U	1835.00	1818.0000 U	1818.00
BENZO(G,H,I)PERYLENE	191-24-2	ug/kg	1898.0000 UJ	1898.00	1765.0000 UJ	1765.00	1884.0000 UJ	1884.00	1835.0000 UJ	1835.00	1818.0000 UJ	1818.00
ANTHRACENE	120-12-7	ug/kg	1898.0000 U	1898.00	1765.0000 U	1765.00	1884.0000 U	1884.00	1835.0000 U	1835.00	1818.0000 U	1818.00
DI-N-OCTYL PHTHALATE	117-84-0	ug/kg	1898.0000 U	1898.00	1765.0000 U	1765.00	1884.0000 U	1884.00	1835.0000 U	1835.00	1818.0000 U	1818.00

SOUTH BAY ASBESTOS
SEDIMENT ANALYTICAL RESULTS

			SAMPLING LOCATION									
		LOCID -->	SD-001-001		SD-002-001		SD-003-001		SD-003-002		SD-004-001	
		Date sample taken -->	05/21/87		05/21/87		05/21/87		05/21/87		05/21/87	
SERIES CONTAMINANT NAME	CAS #	UNIT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT
DIETHYL PHTHALATE	84-66-2	ug/kg	1898.0000 U	1898.00	1765.0000 U	1765.00	1884.0000 U	1884.00	1835.0000 U	1835.00	1818.0000 U	1818.00
PHENANTHRENE	85-01-8	ug/kg	1898.0000 U	1898.00	1765.0000 U	1765.00	1884.0000 U	1884.00	1835.0000 U	1835.00	1818.0000 U	1818.00
N-NITROSODIPHENYLAMINE	86-30-6	ug/kg	1898.0000 U	1898.00	1765.0000 U	1765.00	1884.0000 U	1884.00	1835.0000 U	1835.00	1818.0000 U	1818.00
ACENAPHTHENE	83-32-9	ug/kg	1898.0000 U	1898.00	1765.0000 U	1765.00	1884.0000 U	1884.00	1835.0000 U	1835.00	1818.0000 U	1818.00
PENTACHLOROPHENOL	87-86-5	ug/kg	9200.0000 U	9200.00	8560.0000 U	8560.00	9136.0000 U	9136.00	8896.0000 U	8896.00	8816.0000 U	8816.00
4,6-DiNO2-2-Methylphenol	111-11-11	ug/kg	9200.0000 UJ	9200.00	8560.0000 UJ	8560.00	9136.0000 UJ	9136.00	8896.0000 UJ	8896.00	8816.0000 UJ	8816.00
2,4,5-TRICHLOROPHENOL	95-95-4	ug/kg	9200.0000 U	9200.00	8560.0000 U	8560.00	9136.0000 U	9136.00	8896.0000 U	8896.00	8816.0000 U	8816.00
2,4,6-TRICHLOROPHENOL	88-06-2	ug/kg	1898.0000 U	1898.00	1765.0000 U	1765.00	1884.0000 U	1884.00	1835.0000 U	1835.00	1818.0000 U	1818.00
2-METHYLNAPHTHALENE	91-57-6	ug/kg	1898.0000 U	1898.00	1765.0000 U	1765.00	1884.0000 U	1884.00	1835.0000 U	1835.00	1818.0000 U	1818.00
2-METHYLPHENOL	95-48-7	ug/kg	1898.0000 U	1898.00	1765.0000 U	1765.00	1884.0000 U	1884.00	1835.0000 U	1835.00	1818.0000 U	1818.00
N-NITROSO-DIPROPYLAMINE	621-64-7	ug/kg	1898.0000 U	1898.00	1765.0000 U	1765.00	1884.0000 U	1884.00	1835.0000 U	1835.00	1818.0000 U	1818.00
DI-N-BUTYL PHTHALATE	84-74-2	ug/kg	1898.0000 U	1898.00	1765.0000 U	1765.00	1884.0000 U	1884.00	1835.0000 U	1835.00	1818.0000 U	1818.00
2-NITROANILINE	88-74-4	ug/kg	9200.0000 U	9200.00	8560.0000 U	8560.00	9136.0000 U	9136.00	8896.0000 U	8896.00	8816.0000 U	8816.00
1,2-DICHLOROBENZENE	95-50-1	ug/kg	1898.0000 U	1898.00	1765.0000 U	1765.00	1884.0000 U	1884.00	1835.0000 U	1835.00	1818.0000 U	1818.00
BUTYLBENZYLPHTHALATE	85-68-7	ug/kg	1898.0000 UJ	1898.00	800.0000 J	800.000	1884.0000 UJ	1884.00	1835.0000 UJ	1835.00	1818.0000 UJ	1818.00
HEXACHLOROBUTADIENE	87-68-3	ug/kg	1898.0000 U	1898.00	1765.0000 U	1765.00	1884.0000 U	1884.00	1835.0000 U	1835.00	1818.0000 U	1818.00
3,3-DICHLOROBENZIDINE	91-94-1	ug/kg	20.0000 R	20.0000	20.0000 R	20.0000	20.0000 R	20.0000	20.0000 R	20.0000	20.0000 R	20.0000
HEXACHLOROCYCLOPENTADIENE	77-47-4	ug/kg	1898.0000 U	1898.00	1765.0000 U	1765.00	1884.0000 U	1884.00	1835.0000 U	1835.00	1818.0000 U	1818.00
2-CHLORONAPHTHALENE	91-58-7	ug/kg	1898.0000 U	1898.00	1765.0000 U	1765.00	1884.0000 U	1884.00	1835.0000 U	1835.00	1818.0000 U	1818.00
NAPHTHALENE	91-20-3	ug/kg	1898.0000 U	1898.00	1765.0000 U	1765.00	1884.0000 U	1884.00	1835.0000 U	1835.00	1818.0000 U	1818.00
2-CHLOROPHENOL	95-57-8	ug/kg	1898.0000 U	1898.00	1765.0000 U	1765.00	1884.0000 U	1884.00	1835.0000 U	1835.00	1818.0000 U	1818.00
FLUORENE	86-73-7	ug/kg	1898.0000 U	1898.00	1765.0000 U	1765.00	1884.0000 U	1884.00	1835.0000 U	1835.00	1818.0000 U	1818.00
HEXACHLOROETHANE	67-72-1	ug/kg	1898.0000 U	1898.00	1765.0000 U	1765.00	1884.0000 U	1884.00	1835.0000 U	1835.00	1818.0000 U	1818.00
2-NITROPHENOL	88-75-5	ug/kg	1898.0000 U	1898.00	1765.0000 U	1765.00	1884.0000 U	1884.00	1835.0000 U	1835.00	1818.0000 U	1818.00
METALS												
CYANIDE	74-90-8	mg/kg	0.7200 J	5.00000	0.6900 J	5.00000	0.6600 J	5.00000	0.6600 J	5.00000	0.6200 J	5.00000
ARSENIC	7440-38-2	mg/kg	6.0000	5.00000	6.0000	5.00000	4.4000 J	5.00000	5.0000	5.00000	8.6000	5.00000
BERYLLIUM	7440-41-7	mg/kg	1.7000 J	2.50000	1.8000 J	2.50000	1.7000 J	2.50000	1.7000 J	2.50000	1.6000 J	2.50000
LEAD	7439-92-1	mg/kg	40.0000	2.50000	58.0000	2.50000	32.0000	2.50000	32.0000	2.50000	46.0000	2.50000
VANADIUM	7440-62-2	mg/kg	60.0000	25.0000	59.0000	25.0000	54.0000	25.0000	47.0000	25.0000	54.0000	25.0000
MANGANESE	7439-96-5	mg/kg	1670.0000	7.50000	1130.0000	7.50000	1340.0000	7.50000	1220.0000	7.50000	1350.0000	7.50000
ZINC	7440-66-6	mg/kg	162.0000 J	10.0000	152.0000 J	10.0000	151.0000 J	10.0000	139.0000	10.0000	168.0000 J	10.0000
NICKEL	7440-02-0	mg/kg	118.0000	20.0000	105.0000	20.0000	109.0000	20.0000	96.0000	20.0000	NA	NA
CALCIUM	7440-70-2	mg/kg	8190.0000	2500.00	7950.0000	2500.00	7790.0000	2500.00	7070.0000	2500.00	10300.0000	2500.00
SILVER	7440-22-4	mg/kg	3.3000 J	5.00000	2.7000 J	5.00000	2.3000 J	5.00000	2.2000 J	5.00000	2.6000 J	5.00000
SELENIUM	7782-49-2	mg/kg	0.2500 U	2.50000	0.2300 J	2.50000	0.2500 U	2.50000	0.2400 J	2.50000	0.2200 J	2.50000
THALLIUM	7440-28-0	mg/kg	0.2500 U	5.00000	0.2800 J	5.00000	0.2500 J	5.00000	0.2400 J	5.00000	0.2200 J	5.00000
ANTIMONY	7440-36-0	mg/kg	31.0000	30.0000	28.0000 J	30.0000	NA	NA	NA	NA	29.0000 J	30.0000
SODIUM	7440-23-5	mg/kg	5880.0000	2500.00	6320.0000	2500.00	8150.0000	2500.00	8240.0000	2500.00	2480.0000 J	2500.00
ALUMINUM	7429-90-5	mg/kg	28400.0000	100.000	28000.0000	100.000	25200.0000	100.000	20300.0000	100.000	25600.0000	100.000
COBALT	7440-48-4	mg/kg	20.0000 J	25.0000	19.0000 J	25.0000	18.0000 J	25.0000	17.0000 J	25.0000	19.0000 J	25.0000
CHROMIUM	7440-47-3	mg/kg	108.0000	5.00000	104.0000	5.00000	97.0000	5.00000	86.0000	5.00000	103.0000	5.00000
COPPER	7440-50-8	mg/kg	71.0000	13.0000	64.0000 J	13.0000	63.0000 J	13.0000	60.0000	13.0000	70.0000	13.0000
MAGNESIUM	7439-95-4	mg/kg	16500.0000	2500.00	16000.0000	2500.00	15600.0000	2500.00	14300.0000	2500.00	15400.0000	2500.00
POTASSIUM	7440-09-7	mg/kg	4000.0000	2500.00	4150.0000	2500.00	3440.0000	2500.00	3370.0000	2500.00	3130.0000	2500.00
CADMIUM	7440-43-9	mg/kg	2.4000 J	2.50000	1.6000 J	2.50000	1.7000 J	2.50000	1.7000 J	2.50000	1.6000 J	2.50000
MERCURY	7439-97-6	mg/kg	1.2900	0.10000	1.3400	0.10000	1.0300	0.10000	0.8900	0.10000	1.3500	0.10000

SOUTH BAY ASBESTOS
SEDIMENT ANALYTICAL RESULTS

SERIES / CONTAMINANT NAME	CAS #	UNIT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT
			SAMPLING LOCATION									
	LOCID -->		SD-001-001		SD-002-001		SD-003-001		SD-003-002		SD-004-001	
	Date sample taken -->		05/21/87		05/21/87		05/21/87		05/21/87		05/21/87	
BARIUM	7440-39-3	mg/kg	109.0000	100.000	110.0000	100.000	95.0000 J	100.000	91.0000 J	100.000	154.0000	100.000
PESTICIDES												
METHOXYCHLOR	72-43-5	ug/kg	459.7600 U	459.760	428.0000 U	428.000	456.8000 U	456.800	444.0000 U	444.000	440.8000 U	440.800
4,4-DDT	50-29-3	ug/kg	91.9500 U	91.9500	85.6000 U	85.6000	91.3600 U	91.3600	88.8000 U	88.8000	88.1600 U	88.1600
HEPTACHLOR EPOXIDE	1024-57-3	ug/kg	45.9800 U	45.9800	42.8000 U	42.8000	45.6800 U	45.6800	44.4000 U	44.4000	44.0800 U	44.0800
4,4-DDD	72-54-8	ug/kg	91.9500 U	91.9500	85.6000 U	85.6000	91.3600 U	91.3600	88.8000 U	88.8000	88.1600 U	88.1600
PCB-1254	11097-69-1	ug/kg	919.5200 U	919.520	856.0000 U	856.000	913.6000 U	913.600	888.0000 U	888.000	881.6000 U	881.600
PCB-1221	11104-28-2	ug/kg	459.7600 U	459.760	428.0000 U	428.000	456.8000 U	456.800	444.0000 U	444.000	440.8000 U	440.800
PCB-1232	11141-16-5	ug/kg	459.7600 U	459.760	428.0000 U	428.000	456.8000 U	456.800	444.0000 U	444.000	440.8000 U	440.800
4,4-DDE	72-55-9	ug/kg	91.9500 U	91.9500	85.6000 U	85.6000	91.3600 U	91.3600	88.8000 U	88.8000	88.1600 U	88.1600
PCB-1016	12674-11-2	ug/kg	459.7600 U	459.760	428.0000 U	428.000	456.8000 U	456.800	444.0000 U	444.000	440.8000 U	440.800
ALDRIN	309-00-2	ug/kg	45.9800 U	45.9800	42.8000 U	42.8000	45.6800 U	45.6800	44.4000 U	44.4000	44.0800 U	44.0800
ALPHA-BHC	319-84-6	ug/kg	45.9800 U	45.9800	42.8000 U	42.8000	45.6800 U	45.6800	44.4000 U	44.4000	44.0800 U	44.0800
ENDOSULFAN II	33213-65-9	ug/kg	91.9500 U	91.9500	85.6000 U	85.6000	91.3600 U	91.3600	88.8000 U	88.8000	88.1600 U	88.1600
DELTA-BHC	319-86-8	ug/kg	45.9800 U	45.9800	42.8000 U	42.8000	45.6800 U	45.6800	44.4000 U	44.4000	44.0800 U	44.0800
PCB-1260	11096-82-5	ug/kg	919.5200 U	919.520	856.0000 U	856.000	913.6000 U	913.600	888.0000 U	888.000	881.6000 U	881.600
ENDRIN KETONE	53494-70-5	ug/kg	91.9500 U	91.9500	85.6000 U	85.6000	91.3600 U	91.3600	88.8000 U	88.8000	88.1600 U	88.1600
PCB-1248	12672-29-6	ug/kg	459.7600 U	459.760	428.0000 U	428.000	456.8000 U	456.800	444.0000 U	444.000	440.8000 U	440.800
GAMMA-BHC (LINDANE)	58-89-9	ug/kg	45.9800 U	45.9800	42.8000 U	42.8000	45.6800 U	45.6800	44.4000 U	44.4000	44.0800 U	44.0800
ENDRIN	72-20-8	ug/kg	91.9500 U	91.9500	85.6000 U	85.6000	91.3600 U	91.3600	88.8000 U	88.8000	88.1600 U	88.1600
PCB-1242	53469-21-9	ug/kg	459.7600 U	459.760	428.0000 U	428.000	456.8000 U	456.800	444.0000 U	444.000	440.8000 U	440.800
CHLORDANE	57-74-9	ug/kg	459.7600 U	459.760	428.0000 U	428.000	456.8000 U	456.800	444.0000 U	444.000	440.8000 U	440.800
DIELDRIN	60-57-1	ug/kg	91.9500 U	91.9500	85.6000 U	85.6000	91.3600 U	91.3600	88.8000 U	88.8000	88.1600 U	88.1600
BETA-BHC	319-85-7	ug/kg	45.9800 U	45.9800	42.8000 U	42.8000	45.6800 U	45.6800	44.4000 U	44.4000	44.0800 U	44.0800
HEPTACHLOR	76-44-8	ug/kg	45.9800 U	45.9800	42.8000 U	42.8000	45.6800 U	45.6800	44.4000 U	44.4000	44.0800 U	44.0800
TOXAPHENE	8001-35-2	ug/kg	919.5200 U	919.520	856.0000 U	856.000	913.6000 U	913.600	888.0000 U	888.000	881.6000 U	881.600
ENDOSULFAN I	959-98-8	ug/kg	45.9800 U	45.9800	42.8000 U	42.8000	45.6800 U	45.6800	44.4000 U	44.4000	44.0800 U	44.0800
ENDOSULFAN SULFATE	1031-07-8	ug/kg	91.9500 U	91.9500	85.6000 U	85.6000	91.3600 U	91.3600	88.8000 U	88.8000	88.1600 U	88.1600
VOLATILES												
STYRENE	100-42-5	ug/kg	13.0000 U	13.0000	13.0000 U	13.0000	14.0000 U	14.0000	14.0000 U	14.0000	14.0000 U	14.0000
CIS-1,3-DICHLOROPROPENE	10061-01-5	ug/kg	13.0000 U	13.0000	13.0000 U	13.0000	14.0000 U	14.0000	14.0000 U	14.0000	14.0000 U	14.0000
ETHYLBENZENE	100-41-4	ug/kg	13.0000 U	13.0000	13.0000 U	13.0000	14.0000 U	14.0000	14.0000 U	14.0000	14.0000 U	14.0000
1,1,2,2-TETRACHLOROETHANE	79-34-5	ug/kg	13.0000 U	13.0000	13.0000 U	13.0000	14.0000 U	14.0000	14.0000 U	14.0000	14.0000 U	14.0000
DIBROMOCHLOROMETHANE	124-48-1	ug/kg	13.0000 U	13.0000	13.0000 U	13.0000	14.0000 U	14.0000	14.0000 U	14.0000	14.0000 U	14.0000
CHLOROETHANE	75-00-3	ug/kg	25.0000 U	25.0000	25.0000 U	25.0000	28.0000 U	28.0000	27.0000 U	27.0000	28.0000 U	28.0000
VINYL ACETATE	108-05-4	ug/kg	25.0000 UJ	25.0000	25.0000 UJ	25.0000	28.0000 UJ	28.0000	27.0000 UJ	27.0000	28.0000 UJ	28.0000
TOLUENE	108-88-3	ug/kg	13.0000 U	13.0000	13.0000 U	13.0000	14.0000 U	14.0000	14.0000 U	14.0000	14.0000 U	14.0000
METHYLENE CHLORIDE (DICHLOROMETHANE)	75-09-2	ug/kg	13.0000 U	13.0000	13.0000 U	13.0000	14.0000 U	14.0000	14.0000 U	14.0000	14.0000 U	14.0000
1,2-DICHLOROETHANE	107-06-2	ug/kg	13.0000 U	13.0000	13.0000 U	13.0000	14.0000 U	14.0000	14.0000 U	14.0000	14.0000 U	14.0000
CHLOROBENZENE	108-90-7	ug/kg	13.0000 U	13.0000	13.0000 U	13.0000	14.0000 U	14.0000	14.0000 U	14.0000	14.0000 U	14.0000
BROMOFORM	75-25-2	ug/kg	13.0000 UJ	13.0000	13.0000 UJ	13.0000	14.0000 UJ	14.0000	14.0000 UJ	14.0000	14.0000 UJ	14.0000
CARBON TETRACHLORIDE	56-23-5	ug/kg	13.0000 UJ	13.0000	13.0000 UJ	13.0000	14.0000 UJ	14.0000	14.0000 UJ	14.0000	14.0000 UJ	14.0000
ACETONE	67-64-1	ug/kg	25.0000 UJ	25.0000	25.0000 UJ	25.0000	28.0000 UJ	28.0000	27.0000 UJB	27.0000	30.0000 UJB	30.0000
1,1-DICHLOROETHANE	75-34-3	ug/kg	13.0000 U	13.0000	13.0000 U	13.0000	14.0000 U	14.0000	14.0000 U	14.0000	14.0000 U	14.0000
BENZENE	71-43-2	ug/kg	13.0000 U	13.0000	13.0000 U	13.0000	14.0000 U	14.0000	14.0000 U	14.0000	14.0000 U	14.0000
TRICHLOROETHENE	79-01-6	ug/kg	13.0000 U	13.0000	13.0000 U	13.0000	14.0000 U	14.0000	14.0000 U	14.0000	14.0000 U	14.0000
1,2-DICHLOROPROPANE	78-87-5	ug/kg	13.0000 U	13.0000	13.0000 U	13.0000	14.0000 U	14.0000	14.0000 U	14.0000	14.0000 U	14.0000

SOUTH BAY ASBESTOS
SEDIMENT ANALYTICAL RESULTS

SAMPLING LOCATION

SERIES CONTAMINANT NAME	CAS #	UNIT	LOCID --> SD-001-001 Date sample taken --> 05/21/87 READING	DETECT	SD-002-001 05/21/87 READING	DETECT	SD-003-001 05/21/87 READING	DETECT	SD-003-002 05/21/87 READING	DETECT	SD-004-001 05/21/87 READING	DETECT
TETRACHLOROETHENE	127-18-4	ug/kg	13.0000 UJ	13.0000	13.0000 UJ	13.0000	14.0000 UJ	14.0000	14.0000 UJ	14.0000	14.0000 UJ	14.0000
2-CHLOROETHYLVINYLETHER	110-75-8	ug/kg	25.0000 U	25.0000	25.0000 U	25.0000	28.0000 U	28.0000	27.0000 U	27.0000	28.0000 U	28.0000
1,1,1-TRICHLOROETHANE	71-55-6	ug/kg	13.0000 U	13.0000	13.0000 U	13.0000	14.0000 U	14.0000	14.0000 U	14.0000	14.0000 U	14.0000
TRANS-1,2-DICHLOROETHENE	156-60-5	ug/kg	13.0000 U	13.0000	13.0000 U	13.0000	14.0000 U	14.0000	14.0000 U	14.0000	14.0000 U	14.0000
CHLOROFORM	67-66-3	ug/kg	13.0000 U	13.0000	13.0000 U	13.0000	14.0000 U	14.0000	14.0000 U	14.0000	14.0000 U	14.0000
VINYL CHLORIDE	75-01-4	ug/kg	25.0000 U	25.0000	25.0000 U	25.0000	28.0000 U	28.0000	27.0000 U	27.0000	28.0000 U	28.0000
BROMOMETHANE (METHYL BROMIDE)	74-83-9	ug/kg	25.0000 U	25.0000	25.0000 U	25.0000	28.0000 U	28.0000	27.0000 U	27.0000	28.0000 U	28.0000
4-METHYL-2-PENTANONE	108-10-1	ug/kg	25.0000 U	25.0000	25.0000 U	25.0000	28.0000 U	28.0000	27.0000 U	27.0000	28.0000 U	28.0000
2-HEXANONE	591-78-6	ug/kg	25.0000 U	25.0000	25.0000 U	25.0000	28.0000 U	28.0000	27.0000 U	27.0000	28.0000 U	28.0000
1,1,2-TRICHLOROETHANE	79-00-5	ug/kg	13.0000 U	13.0000	13.0000 U	13.0000	14.0000 U	14.0000	14.0000 U	14.0000	14.0000 U	14.0000
TOTAL XYLENES	1330-20-7	ug/kg	13.0000 U	13.0000	13.0000 U	13.0000	14.0000 U	14.0000	14.0000 U	14.0000	14.0000 U	14.0000
BROMODICHLOROMETHANE	75-27-4	ug/kg	13.0000 U	13.0000	13.0000 U	13.0000	14.0000 U	14.0000	14.0000 U	14.0000	14.0000 U	14.0000
1,1-DICHLOROETHENE	75-35-4	ug/kg	13.0000 U	13.0000	13.0000 U	13.0000	14.0000 U	14.0000	14.0000 U	14.0000	14.0000 U	14.0000
2-BUTANONE	78-93-3	ug/kg	25.0000 UJ	25.0000	25.0000 UJ	25.0000	28.0000 UJ	28.0000	27.0000 UJ	27.0000	28.0000 UJ	28.0000
CHLOROMETHANE (METHYL CHLORIDE)	74-87-3	ug/kg	25.0000 U	25.0000	25.0000 U	25.0000	28.0000 U	28.0000	27.0000 U	27.0000	28.0000 U	28.0000
CARBON DISULFIDE	75-15-0	ug/kg	13.0000 U	13.0000	13.0000 U	13.0000	14.0000 U	14.0000	14.0000 U	14.0000	14.0000 U	14.0000
TRANS-1,3-DICHLOROPROPENE	10061-02-6	ug/kg	13.0000 U	13.0000	13.0000 U	13.0000	14.0000 U	14.0000	14.0000 U	14.0000	14.0000 U	14.0000

SURFACE WATER

SOUTH BAY ASBESTOS
SURFACE WATER ANALYTICAL RESULTS

			SAMPLING LOCATION							
	LOCID -->		SW-001-001		SW-002-001		SW-002-002		SW-003-001	
	Date sample taken -->		05/21/87		05/21/87		05/21/87		05/21/87	
SERIES CONTAMINANT NAME	CAS #	UNIT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT
ASBESTOS WATER										
CHRYSOTILE (fibers)	CHRY(fib)	mf/l	3266.000	0.010	2060.000	0.010	2883.000	0.010	0.879	0.010
AMPHIBOLE (fibers)	AMPH(fib)	mf/l	0.010 U	0.010	100.000	0.010	188.000	0.010	0.251	0.010
TOTAL ASBESTOS (fibers)	TOTAS(fib)	mf/l	3266.000	0.010	2160.000	0.010	3077.000	0.010	1.130	0.010
BASE NEUTAL ACID EXTRACTABLE										
4-NITROANILINE	100-01-6	ug/l	50.000 UJ	50.000	50.000 R	50.000	50.000 UJ	50.000	50.000 R	50.000
PHENOL	108-95-2	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
4-NITROPHENOL	100-02-7	ug/l	50.000 U	50.000	50.000 UJ	50.000	50.000 U	50.000	50.000 UJ	50.000
BIS(2-CHLOROETHYL) ETHER	111-44-4	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
4-BROMOPHENYLPHENYL ETHER	101-55-3	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
BENZO(B)FLUORANTHENE	205-99-2	ug/l	10.000 UJ	10.000	10.000 U	10.000	10.000 UJ	10.000	10.000 U	10.000
4-METHYLPHENOL	106-44-5	ug/l	10.000 U	10.000	10.000 UJ	10.000	10.000 U	10.000	10.000 UJ	10.000
4-CHLOROANILINE	106-47-8	ug/l	10.000 UJ	10.000	10.000 UJ	10.000	10.000 UJ	10.000	10.000 UJ	10.000
BENZYL ALCOHOL	100-51-6	ug/l	10.000 U	10.000	10.000 UJ	10.000	10.000 U	10.000	10.000 UJ	10.000
2,4-DIMETHYLPHENOL	105-67-9	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
1,4-DICHLOROBENZENE	106-46-7	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
FLUORANTHENE	206-44-0	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
BIS(2-ETHYLHEXYL) PHTHALATE	117-81-7	ug/l	10.000 UJ	10.000	10.000 U	10.000	10.000 UJ	10.000	16.000	10.000
BENZO(K)FLUORANTHENE	207-08-9	ug/l	10.000 U	10.000	10.000 UJ	10.000	10.000 U	10.000	10.000 UJ	10.000
HEXACHLOROBENZENE	118-74-1	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
ACENAPHTHYLENE	208-96-8	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
1,2,4-TRICHLOROBENZENE	120-82-1	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
BENZO(A)ANTHRACENE	56-55-3	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
CHRYSENE	218-01-9	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
4-CHLORO-3-METHYLPHENOL	59-50-7	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
BIS(2-CHLISOPROPYL) ETHER	39638-32-9	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
2,6-DINITROTOLUENE	606-20-2	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
BENZO(A)PYRENE	50-32-8	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
2,4-DINITROPHENOL	51-28-5	ug/l	50.000 UJ	50.000	50.000 UJ	50.000	50.000 UJ	50.000	50.000 UJ	50.000
DIBENZO(A,H)ANTHRACENE	53-70-3	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
NITROBENZENE	98-95-3	ug/l	10.000 UJ	10.000	10.000 U	10.000	10.000 UJ	10.000	10.000 U	10.000
3-NITROANILINE	99-09-2	ug/l	50.000 R	50.000	50.000 R	50.000	50.000 R	50.000	50.000 R	50.000
INDENO(1,2,3-CD)PYRENE	193-39-5	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
BENZOIC ACID	65-85-0	ug/l	50.000 UJ	50.000	50.000 UJ	50.000	50.000 UJ	50.000	50.000 UJ	50.000
2,4-DICHLOROPHENOL	120-83-2	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
1,3-DICHLOROBENZENE	541-73-1	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
4-CHLOROPHENYLPHENYL ETHER	7005-72-3	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
DIMETHYL PHTHALATE	131-11-3	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
BIS(2-CHLOROETHOXY) METHANE	111-91-1	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
ISOPHOPONE	78-59-1	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
PYPENE	129-00-0	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
DIBENZOFURAN	132-64-9	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
BENZO(G,H,I)PERYLENE	191-24-2	ug/l	10.000 UJ	10.000	10.000 U	10.000	10.000 UJ	10.000	10.000 U	10.000
ANTHRACENE	120-12-7	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
DI-N-OCTYL PHTHALATE	117-84-0	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
2,4-DINITROTOLUENE	121-14-2	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
DIETHYL PHTHALATE	84-66-2	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000

SOUTH BAY ASBESTOS
SURFACE WATER ANALYTICAL RESULTS

SERIES CONTAMINANT NAME	CAS #	UNIT	SW-001-001 (05/21/87) READING	SW-001-001 DETECT	SW-002-001 (05/21/87) READING	SW-002-001 DETECT	SW-002-002 (05/21/87) READING	SW-002-002 DETECT	SW-003-001 (05/21/87) READING	SW-003-001 DETECT
PHENANTHRENE	85-01-8	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
N-NITROSODIPHENYLAMINE	86-30-6	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
ACENAPHTHENE	83-32-9	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
PENTACHLOROPHENOL	87-86-5	ug/l	50.000 U	50.000	50.000 U	50.000	50.000 U	50.000	50.000 U	50.000
4,6-DINO2-2-Methylphenol	111-11-11	ug/l	50.000 UJ	50.000	50.000 U	50.000	50.000 UJ	50.000	50.000 U	50.000
2,4,5-TRICHLOROPHENOL	95-95-4	ug/l	50.000 U	50.000	50.000 U	50.000	50.000 U	50.000	50.000 U	50.000
2,4,6-TRICHLOROPHENOL	88-06-2	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
2-METHYLNAPHTHALENE	91-57-6	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
2-METHYLPHENOL	95-48-7	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
N-NITROSO-DIPROPYLAMINE	621-64-7	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
DI-N-BUTYL PHTHALATE	84-74-2	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
2-NITROANILINE	88-74-4	ug/l	50.000 U	50.000	50.000 UJ	50.000	50.000 U	50.000	50.000 UJ	50.000
1,2-DICHLOROBENZENE	95-50-1	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
BUTYLBENZYLPHTHALATE	85-68-7	ug/l	10.000 UJ	10.000	10.000 U	10.000	10.000 UJ	10.000	10.000 U	10.000
HEXACHLOROBUTADIENE	87-68-3	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
3,3-DICHLOROBENZIDINE	91-94-1	ug/l	20.000 R	20.000	20.000 R	20.000	20.000 R	20.000	20.000 R	20.000
HEXACHLOROCYCLOPENTADIENE	77-47-4	ug/l	10.000 U	10.000	10.000 UJ	10.000	10.000 U	10.000	10.000 UJ	10.000
2-CHLORONAPHTHALENE	91-58-7	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
NAPHTHALENE	91-20-3	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
2-CHLOROPHENOL	95-57-8	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
FLUORENE	86-73-7	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
HEXACHLOROETHANE	67-72-1	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
2-NITROPHENOL	88-75-5	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
DISSOLVED METALS										
ALUMINUM (DISSOLVED)	7429-90-5D	ug/l	37.000 U	37.000	290.000	37.000	37.000 U	37.000	37.000 U	37.000
CADMIUM (DISSOLVED)	7440-43-9D	ug/l	3.500 U	3.500	3.500 U	3.500	3.500 U	3.500	3.500 U	3.500
MERCURY (DISSOLVED)	7439-97-6D	ug/l	0.200 U	6.200	0.200 U	0.200	0.200 U	0.200	0.200 U	0.200
VANADIUM (DISSOLVED)	7440-62-2D	ug/l	6.800	4.400	6.300	4.400	4.600	4.400	4.400 U	4.400
NICKEL (DISSOLVED)	7440-02-0D	ug/l	16.000 U	16.000	16.000 U	16.000	16.000 U	16.000	16.000 U	16.000
COPPER (DISSOLVED)	7440-50-8D	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
POTASSIUM (DISSOLVED)	7440-09-7D	ug/l	1760.000	272.00	1620.000	272.00	NA	NA	272.000 U	272.00
MAGNESIUM (DISSOLVED)	7439-95-4D	ug/l	54500.000	23.000	51600.000	23.000	53100.000	23.000	56.000	23.000
SELENIUM (DISSOLVED)	7782-49-2D	ug/l	0.500 U	0.500	4.000	0.500	0.600 U	0.500	0.500 U	0.500
BARIUM (DISSOLVED)	7440-39-3D	ug/l	44.000	0.700	46.000	0.700	49.000	0.700	6.400	0.700
SILVER (DISSOLVED)	7440-22-4D	ug/l	4.600 U	4.600	4.600 U	4.600	4.600 U	4.600	4.600 U	4.600
CHROMIUM (DISSOLVED)	7440-47-3D	ug/l	5.200 U	5.200	5.200 U	5.200	5.200 U	5.200	5.200 U	5.200
SODIUM (DISSOLVED)	7440-23-5D	ug/l	74700.000	3.500	70000.000	3.500	68200.000	3.500	301.000	3.500
IRON (DISSOLVED)	7439-89-6D	ug/l	266.000 J	2.500	620.000 J	2.500	588.000 J	2.500	233.000 J	2.500
THALLIUM (DISSOLVED)	7440-28-0D	ug/l	0.500 U	0.500	0.700	0.500	0.500 U	0.500	0.600	0.500
ZINC (DISSOLVED)	7440-66-6D	ug/l	37.000 J	1.800	60.000 J	1.800	37.000 J	1.800	58.000 J	1.800
MANGANESE (DISSOLVED)	7439-96-5D	ug/l	299.000	2.800	301.000	2.800	281.000	2.800	2.800 U	2.800
BERYLLIUM (DISSOLVED)	7440-41-7D	ug/l	3.400 U	3.400	3.400 U	3.400	3.400 U	3.400	3.400 U	3.400
COBALT (DISSOLVED)	7440-48-4D	ug/l	7.100 U	7.100	7.100 U	7.100	7.100 U	7.100	7.100 U	7.100
LEAD (DISSOLVED)	7439-92-1D	ug/l	5.000 U	5.000	5.000 U	5.000	NA	NA	5.000 U	5.000
ARSENIC (DISSOLVED)	7440-38-2D	ug/l	10.000 U	10.000	10.000 U	10.000	NA	NA	10.000 U	10.000
CALCIUM (DISSOLVED)	7440-70-2D	ug/l	72600.000	17.000	68900.000	17.000	NA	NA	163.000	17.000
ANTIMONY (DISSOLVED)	7440-36-0D	ug/l	92.000	16.000	89.000	16.000	97.000	16.000	16.000 U	16.000

SOUTH BAY ASBESTOS
SURFACE WATER ANALYTICAL RESULTS

			SAMPLING LOCATION							
	LOCID -->		SW-001-001		SW-002-001		SW-002-002		SW-003-001	
	Date sample taken -->		05/21/87		05/21/87		05/21/87		05/21/87	
SERIES CONTAMINANT NAME	CAS #	UNIT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT
CYANIDE (DISSOLVED)	74-90-8	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
PESTICIDES										
METHOXYCHLOR	72-43-5	ug/l	0.500 U	0.500	0.500 U	0.500	0.500 U	0.500	0.500 U	0.500
4,4-DDT	50-29-3	ug/l	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100
HEPTACHLOR EPOXIDE	1024-57-3	ug/l	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050
4,4-DDD	72-54-8	ug/l	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100
PCB-1254	11097-69-1	ug/l	1.000 U	1.000	1.000 U	1.000	1.000 U	1.000	1.000 U	1.000
PCB-1221	11104-28-2	ug/l	0.500 U	0.500	0.500 U	0.500	0.500 U	0.500	0.500 U	0.500
PCB-1232	11141-16-5	ug/l	0.500 U	0.500	0.500 U	0.500	0.500 U	0.500	0.500 U	0.500
4,4-DDE	72-55-9	ug/l	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100
PCB-1016	12674-11-2	ug/l	0.500 U	0.500	0.500 U	0.500	0.500 U	0.500	0.500 U	0.500
ALDRIN	309-00-2	ug/l	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050
ALPHA-BHC	319-84-6	ug/l	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050
ENDOSULFAN II	33213-65-9	ug/l	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100
DELTA-BHC	319-86-8	ug/l	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050
PCB-1260	11096-82-5	ug/l	1.000 U	1.000	1.000 U	1.000	1.000 U	1.000	1.000 U	1.000
ENDRIN KETONE	53494-70-5	ug/l	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100
PCB-1248	12672-29-6	ug/l	0.500 U	0.500	0.500 U	0.500	0.500 U	0.500	0.500 U	0.500
GAMMA-BHC (LINDANE)	58-89-9	ug/l	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050
ENDRIN	72-20-8	ug/l	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100
PCB-1242	53469-21-9	ug/l	0.500 U	0.500	0.500 U	0.500	0.500 U	0.500	0.500 U	0.500
CHLORDANE	57-74-9	ug/l	0.500 U	0.500	0.500 U	0.500	0.500 U	0.500	0.500 U	0.500
DIELDRIN	60-57-1	ug/l	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100
BETA-BHC	319-85-7	ug/l	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050
HEPTACHLOR	76-44-8	ug/l	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050
TOXAPHENE	8001-35-2	ug/l	1.000 U	1.000	1.000 U	1.000	1.000 U	1.000	1.000 U	1.000
ENDOSULFAN I	959-98-8	ug/l	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050
ENDOSULFAN SULFATE	1031-07-8	ug/l	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100
VOLATILES										
STYRENE	100-42-5	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
CIS-1,3-DICHLOROPROPENE	10061-01-5	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
ETHYLBENZENE	100-41-4	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
1,1,2,2-TETRACHLOROETHANE	79-34-5	ug/l	6.000 U	6.000	6.000 U	6.000	6.000 U	6.000	6.000 U	6.000
DIBROMOCHLOROMETHANE	124-48-1	ug/l	5.000 UJ	5.000	5.000 UJ	5.000	5.000 UJ	5.000	5.000 UJ	5.000
CHLOROETHANE	75-00-3	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
VINYL ACETATE	108-05-4	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
TOLUENE	108-88-3	ug/l	8.000 U	8.000	8.000 U	8.000	8.000 U	8.000	8.000 U	8.000
METHYLENE CHLORIDE (DICHLOROMETHANE)	75-09-2	ug/l	7.000 U	7.000	7.000 U	7.000	7.000 U	7.000	7.000 U	7.000
1,2-DICHLOROETHANE	107-06-2	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
CHLOROBENZENE	108-90-7	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
BROMOFORM	75-25-2	ug/l	5.000 UJ	5.000	5.000 UJ	5.000	5.000 UJ	5.000	5.000 UJ	5.000
CARBON TETRACHLORIDE	56-23-5	ug/l	5.000 UJ	5.000	5.000 UJ	5.000	5.000 UJ	5.000	5.000 UJ	5.000
ACETONE	67-64-1	ug/l	10.000 UJ	10.000	10.000 UJ	10.000	11.000 UJB	11.000	10.000 UJ	10.000
1,1-DICHLOROETHANE	75-34-3	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
BENZENE	71-43-2	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
TRICHLOROETHENE	79-01-6	ug/l	6.000 U	6.000	6.000 U	6.000	6.000 U	6.000	6.000 U	6.000
1,2-DICHLOROPROPANE	78-87-5	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000

SOUTH BAY ASBESTOS
SURFACE WATER ANALYTICAL RESULTS

			SAMPLING LOCATION							
		LOCID -->	SW-001-001		SW-002-001		SW-002-002		SW-003-001	
		Date sample taken -->	05/21/87		05/21/87		05/21/87		05/21/87	
SERIES CONTAMINANT NAME	CAS #	UNIT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT
TETRACHLOROETHENE	127-18-4	ug/l	5.000 UJ	5.000	5.000 UJ	5.000	5.000 UJ	5.000	5.000 UJ	5.000
2-CHLOROETHYLVINYLETHER	110-75-8	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
1,1,1-TRICHLOROETHANE	71-55-6	ug/l	5.000 UJ	5.000	5.000 UJ	5.000	5.000 UJ	5.000	5.000 UJ	5.000
TRANS-1,2-DICHLOROETHENE	156-60-5	ug/l	5.000 U	5.000	5,000 U	5.000	5.000 U	5.000	5.000 U	5.000
CHLOROFORM	67-66-3	ug/l	6.000 U	6.000	6.000 U	6.000	6.000 U	6.000	6.000 U	6.000
VINYL CHLORIDE	75-01-4	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
BROMOMETHANE (METHYL BROMIDE)	74-83-9	ug/l	10.000 UJ	10.000	10.000 UJ	10.000	10.000 UJ	10.000	10.000 UJ	10.000
4-METHYL-2-PENTANONE	108-10-1	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
2-HEXANONE	591-78-6	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
1,1,2-TRICHLOROETHANE	79-00-5	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
TOTAL XYLENES	1330-20-7	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
BROMODICHLOROMETHANE	75-27-4	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
1,1-DICHLOROETHENE	75-35-4	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
2-BUTANONE	78-93-3	ug/l	10.000 UJ	10.000	10.000 UJ	10.000	10.000 UJ	10.000	10.000 UJ	10.000
CHLOROMETHANE (METHYL CHLORIDE)	74-87-3	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
CARBON DISULFIDE	75-15-0	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
TRANS-1,3-DICHLOROPROPENE	10061-02-6	ug/l	7.000 U	7.000	7.000 U	7.000	7.000 U	7.000	7.000 U	7.000

GROUNDWATER

SOUTH BAY ASBESTOS
GROUND WATER ANALYTICAL RESULTS

SERIES CONTAMINANT NAME	CAS #	UNIT	GW-001-001 06/25/87 READING	GW-001-001 06/25/87 DETECT	GW-001-002 10/07/87 READING	GW-001-002 10/07/87 DETECT	GW-002-001 06/25/87 READING	GW-002-001 06/25/87 DETECT	GW-002-002 10/07/87 READING	GW-002-002 10/07/87 DETECT	GW-002-003 10/07/87 READING	GW-002-003 10/07/87 DETECT	GW-003-001 06/26/87 READING	GW-003-001 06/26/87 DETECT
			SAMPLING LOCATION											
		LOCID -->	GW-001-001		GW-001-002		GW-002-001		GW-002-002		GW-002-003		GW-003-001	
		Date sample taken -->	06/25/87		10/07/87		06/25/87		10/07/87		10/07/87		06/26/87	
ASBESTOS														
CHRYSOTILE (fibers)	CHRY(fib)	mf/l	4774.000 J	0.010	NA	NA	2303.000	0.010	NA	NA	NA	NA	2060.000	0.010
AMPHIBOLE (fibers)	AMPH(fib)	mf/l	0.010 U	0.010	NA	NA	168.000	0.010	NA	NA	NA	NA	151.000	0.010
TOTAL ASBESTOS (fibers)	TOTAS(fib)	mf/l	4774.000 J	0.010	NA	NA	2471.000	0.010	NA	NA	NA	NA	2211.000	0.010
BASE NEUTAL ACID EXTRACTABLE														
4-NITROANILINE	100-01-6	ug/l	100.000 U	100.00	50.000 U	50.000	100.000 U	100.00	50.000 U	50.000	50.000 U	50.000	100.000 U	100.00
PHENOL	108-95-2	ug/l	0.000 R	10.000	27.000 U	27.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
4-NITROPHENOL	100-02-7	ug/l	0.000 R	50.000	50.000 U	50.000	50.000 U	50.000	50.000 U	50.000	50.000 U	50.000	50.000 U	50.000
BIS(2-CHLOROETHYL) ETHER	111-44-4	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
4-BROMOPHENYLPHENYL ETHER	101-55-3	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
BENZO(B)FLUORANTHENE	205-99-2	ug/l	15.000 U	15.000	10.000 U	10.000	15.000 U	15.000	10.000 U	10.000	10.000 U	10.000	15.000 U	15.000
4-METHYLPHENOL	106-44-5	ug/l	0.000 R	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
4-CHLOROANILINE	106-47-8	ug/l	10.000 UJ	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 UJ	10.000
BENZYL ALCOHOL	100-51-6	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
2,4-DIMETHYLPHENOL	105-67-9	ug/l	0.000 R	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
1,4-DICHLOROBENZENE	106-46-7	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
FLUORANTHENE	206-44-0	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
BIS(2-ETHYLHEXYL) PHTHALATE	117-81-7	ug/l	10.000 U	10.000	10.000 J	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
BENZO(K)FLUORANTHENE	207-08-9	ug/l	12.000 U	12.000	10.000 U	10.000	12.000 U	12.000	10.000 U	10.000	10.000 U	10.000	12.000 U	12.000
HEXACHLOROBENZENE	118-74-1	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
ACENAPHTHYLENE	208-96-8	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
1,2,4-TRICHLOROBENZENE	120-82-1	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
BENZO(A)ANTHRACENE	56-55-3	ug/l	11.000 U	11.000	10.000 U	10.000	11.000 U	11.000	10.000 U	10.000	10.000 U	10.000	11.000 U	11.000
CHRYSENE	218-01-9	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
4-CHLORO-3-METHYLPHENOL	59-50-7	ug/l	0.000 R	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
BIS(2-CHLISOPROPYL) ETHER	39638-32-9	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
2,6-DINITROTOLUENE	606-20-2	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
BENZO(A)PYRENE	50-32-8	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
2,4-DINITROPHENOL	51-28-5	ug/l	0.000 R	50.000	50.000 U	50.000	50.000 UJ	50.000	50.000 U	50.000	50.000 U	50.000	50.000 U	50.000
DIBENZO(A,H)ANTHRACENE	53-70-3	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
NITROBENZENE	98-95-3	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
3-NITROANILINE	99-09-2	ug/l	0.000 R	50.000	50.000 U	50.000	0.000 R	50.000	50.000 U	50.000	50.000 U	50.000	0.000 R	50.000
INDENO(1,2,3-CD)PYRENE	193-39-5	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
BENZOIC ACID	65-85-0	ug/l	50.000 UJ	50.000	50.000 U	50.000	50.000 U	50.000	50.000 U	50.000	50.000 U	50.000	50.000 UJ	50.000
2,4-DICHLOROPHENOL	120-83-2	ug/l	0.000 R	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
1,3-DICHLOROBENZENE	541-73-1	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
4-CHLOROPHENYLPHENYL ETHER	7005-72-3	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
DIMETHYL PHTHALATE	131-11-3	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
BIS(2-CHLOROETHOXY) METHANE	111-91-1	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
ISOPHORONE	78-59-1	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
PYRENE	129-00-0	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
DIBENZOFURAN	132-64-9	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
BENZO(G,H,I)PERYLENE	191-24-2	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
ANTHRACENE	120-12-7	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
DI-N-OCTYL PHTHALATE	117-84-0	ug/l	12.000 U	12.000	10.000 U	10.000	12.000 U	12.000	10.000 U	10.000	10.000 U	10.000	12.000 U	12.000
2,4-DINITROTOLUENE	121-14-2	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
DIETHYL PHTHALATE	84-66-2	ug/l	14.000 U	14.000	10.000 U	10.000	14.000 U	14.000	10.000 U	10.000	10.000 U	10.000	14.000 U	14.000

SOUTH BAY ASBESTOS
GROUND WATER ANALYTICAL RESULTS

SAMPLING LOCATION

SERIES / CONTAMINANT NAME	CAS #	UNIT	GW-001-001 06/25/87 READING	DETECT	GW-001-002 10/07/87 READING	DETECT	GW-002-001 06/25/87 READING	DETECT	GW-002-002 10/07/87 READING	DETECT	GW-002-003 10/07/87 READING	DETECT	GW-003-001 06/26/87 READING	DETECT
PHENANTHRENE	85-01-8	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
N-NITROSODIPHENYLAMINE	86-30-6	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
ACENAPHTHENE	83-32-9	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
PENTACHLOROPHENOL	87-86-5	ug/l	0.000 R	50.000	50.000 U	50.000	50.000 U	50.000	50.000 U	50.000	50.000 U	50.000	50.000 U	50.000
4,6-DiNO2-2-Methylphenol	111-11-11	ug/l	0.000 R	50.000	50.000 U	50.000	50.000 U	50.000	50.000 U	50.000	50.000 U	50.000	50.000 U	50.000
2,4,5-TRICHLOROPHENOL	95-95-4	ug/l	0.000 R	50.000	50.000 U	50.000	50.000 U	50.000	50.000 U	50.000	50.000 U	50.000	50.000 U	50.000
2,4,6-TRICHLOROPHENOL	88-06-2	ug/l	0.000 R	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
2-METHYLNAPHTHALENE	91-57-6	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
2-METHYLPHENOL	95-48-7	ug/l	0.000 R	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
N-NITROSO-DIPROPYLAMINE	621-64-7	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
DI-N-BUTYL PHTHALATE	84-74-2	ug/l	10.000 U	10.000	10.300 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
2-NITROANILINE	88-74-4	ug/l	50.000 U	50.000	50.000 U	50.000	50.000 U	50.000	50.000 U	50.000	50.000 U	50.000	50.000 U	50.000
1,2-DICHLOROBENZENE	95-50-1	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
BUTYLBENZYLPHTHALATE	85-68-7	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
HEXACHLOROBUTADIENE	87-68-3	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
3,3-DICHLOROBENZIDINE	91-94-1	ug/l	28.000 U	28.000	20.000 U	20.000	28.000 U	28.000	20.000 U	20.000	20.000 U	20.000	28.000 U	28.000
HEXACHLOROCYCLOPENTADIENE	77-47-4	ug/l	14.000 U	14.000	10.000 U	10.000	14.000 U	14.000	10.000 U	10.000	10.000 U	10.000	14.000 U	14.000
2-CHLORONAPHTHALENE	91-58-7	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
NAPHTHALENE	91-20-3	ug/l	10.000 U	10.000	27.000 U	27.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	9.000 J	10.000
2-CHLOROPHENOL	95-57-8	ug/l	0.000 R	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
FLUORENE	86-73-7	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
HEXACHLOROETHANE	67-72-1	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
2-NITROPHENOL	88-75-5	ug/l	0.000 R	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
DISSOLVED METALS														
ALUMINUM (DISSOLVED)	7429-90-5D	ug/l	92.000 J	200.00	140.000 U	140.00	89.000 J	200.00	140.000 U	140.00	140.000 U	140.00	77.000 J	200.00
CADMIUM (DISSOLVED)	7440-43-9D	ug/l	3.000 U	3.000	4.000	4.000	3.000 U	3.000	5.000	4.000	4.000 U	4.000	3.000 U	3.000
MERCURY (DISSOLVED)	7439-97-6D	ug/l	16.000	0.100	2.000 J	0.200	18.000	0.100	8.100 J	0.200	2.700 J	0.200	6.400	0.100
VANADIUM (DISSOLVED)	7440-62-2D	ug/l	28.000 J	50.000	20.000 U	20.000	29.000 J	50.000	20.000 U	20.000	20.000 U	20.000	16.000 J	50.000
NICKEL (DISSOLVED)	7440-02-0D	ug/l	67.000	40.000	989.000	24.000	14.000 U	14.000	54.000	24.000	66.000	24.000	14.000 U	14.000
COPPER (DISSOLVED)	7440-50-8D	ug/l	20.000 J	25.000	11.000 U	11.000	7.300 J	25.000	13.000	11.000	11.000 U	11.000	10.000 J	25.000
POTASSIUM (DISSOLVED)	7440-09-7D	ug/l	8360.000 J-CE	5000.0	18600.000	1400.0	225000.000 J-C	5000.0	274000.000	1400.0	265000.000	1400.0	136000.000	5000.0
MAGNESIUM (DISSOLVED)	7439-95-4D	ug/l	810000.000	5000.0	739000.000	1400.0	924000.000	5000.0	860000.000	1400.0	882000.000	1400.0	500000.000	5000.0
SELENIUM (DISSOLVED)	7782-49-2D	ug/l	50.000 UJ-S	50.000	50.000 U	50.000	50.000 UJ-S	50.000	50.000 U	50.000	50.000 U	50.000	0.000 R-S	5.000
BARIUM (DISSOLVED)	7440-39-3D	ug/l	78.000 J-E	200.00	70.000	70.000	47.000 J-E	200.00	90.000	70.000	70.000 U	70.000	2380.000	200.00
SILVER (DISSOLVED)	7440-22-4D	ug/l	4.000 U	4.000	10.000 U	10.000	4.000 U	4.000	10.000 U	10.000	10.000 UJ	10.000	5.700 J	10.000
CHROMIUM (DISSOLVED)	7440-47-3D	ug/l	3.000 U	3.000	10.000 U	10.000	3.000 U	3.000	10.000 U	10.000	10.000 U	10.000	3.000 UJ-S	3.000
SODIUM (DISSOLVED)	7440-23-5D	ug/l	5450000.000	5000.0	7600000.000	1500.0	8050000.000	5000.0	11300000.000	1500.0	11900000.000	1500.0	3600000.000	5000.0
IRON (DISSOLVED)	7439-89-6D	ug/l	141.000 J-E	100.00	3330.000	60.000	38.000 J-E	100.00	110.000	60.000	60.000	60.000	57700.000	100.00
THALLIUM (DISSOLVED)	7440-28-0D	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 UJ-S	10.000
ZINC (DISSOLVED)	7440-66-6D	ug/l	18.000 J	20.000	69.000 J	15.000	14.000 J	20.000	87.000	15.000	37.000 J	15.000	31.000	20.000
MANGANESE (DISSOLVED)	7439-96-5D	ug/l	3980.000	15.000	3910.000	11.000	2420.000	15.000	2410.000	11.000	2180.000	11.000	1590.000	15.000
BERYLLIUM (DISSOLVED)	7440-41-7D	ug/l	2.000 U	2.000	3.000 U	3.000	2.000 U	2.000	3.000 U	3.000	3.000 U	3.000	2.000 UJ-S	2.000
COBALT (DISSOLVED)	7440-48-4D	ug/l	4.700 J	50.000	82.000	30.000	4.400 J	50.000	30.000	30.000	30.000 U	30.000	3.900 J-S	50.000
LEAD (DISSOLVED)	7439-92-1D	ug/l	50.000 U	50.000	12.000 J	5.000	50.000 U	50.000	50.000 U	50.000	50.000 U	50.000	5.000 U	5.000
ARSENIC (DISSOLVED)	7440-38-2D	ug/l	3.000 U	3.000	10.000 UJ	10.000	10.000 U	10.000	100.000 UJ	100.00	100.000 UJ	100.00	10.000 U	10.000
CALCIUM (DISSOLVED)	7440-70-2D	ug/l	483000.000	5000.0	488000.000	1900.0	370000.000	5000.0	364000.000	1900.0	351000.000	1900.0	310000.000	5000.0
ANTIMONY (DISSOLVED)	7440-36-0D	ug/l	81.000	60.000	60.000 U	60.000	60.000 U	60.000	60.000 U	60.000	60.000 U	60.000	183.000 J-L	60.000

SOUTH BAY ASBESTOS
GROUND WATER ANALYTICAL RESULTS

SAMPLING LOCATION

SERIES / CONTAMINANT NAME	CAS #	UNIT	LOCID --> GW-001-001, Date sample taken --> 06/25/87 READING	DETECT	GW-001-002 10/07/87 READING	DETECT	GW-002-001 06/25/87 READING	DETECT	GW-002-002 10/07/87 READING	DETECT	GW-002-003 10/07/87 READING	DETECT	GW-003-001 06/26/87 READING	DETECT
CYANIDE (DISSOLVED)	74-90-8	ug/l	10.000 UJ-H	10.000	10.000 U	10.000	10.000 UJ-H	10.000	10.000 U	10.000	20.000 J	10.000	10.000 UJ-H	10.000
TIN (DISSOLVED)	7440-12-9D	ug/l	NA	NA	40.000 U	40.000	NA	NA	40.000 U	40.000	40.000 U	40.000	NA	NA
PESTICIDES														
METHOXYCHLOR	72-43-5	ug/l	0.500 U	0.500	0.500 U	0.500	0.560 U	0.560	0.500 U	0.500	0.500 U	0.500	0.500 U	0.500
4,4-DDT	50-29-3	ug/l	0.100 U	0.100	0.100 U	0.100	0.110 U	0.110	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100
HEPTACHLOR EPOXIDE	1024-57-3	ug/l	0.090 UJB	0.090	0.050 U	0.050	0.090 UJB	0.090	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050
4,4-DDD	72-54-8	ug/l	0.100 U	0.100	0.100 U	0.100	0.110 U	0.110	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100
PCB-1254	11097-69-1	ug/l	1.000 U	1.000	1.000 U	1.000	1.130 U	1.130	1.000 U	1.000	1.000 U	1.000	1.000 U	1.000
PCB-1221	11104-28-2	ug/l	0.500 U	0.500	0.500 U	0.500	0.560 U	0.560	0.500 U	0.500	0.500 U	0.500	0.500 U	0.500
PCB-1232	11141-16-5	ug/l	0.500 U	0.500	0.500 U	0.500	0.560 U	0.560	0.500 U	0.500	0.500 U	0.500	0.500 U	0.500
4,4-DDE	72-55-9	ug/l	0.100 U	0.100	0.100 U	0.100	0.110 U	0.110	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100
PCB-1016	12674-11-2	ug/l	0.500 U	0.500	0.500 U	0.500	0.560 U	0.560	0.500 U	0.500	0.500 U	0.500	0.500 U	0.500
ALDRIN	309-00-2	ug/l	0.050 U	0.050	0.050 U	0.050	0.060 U	0.060	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050
ALPHA-BHC	319-84-6	ug/l	0.050 U	0.050	0.050 U	0.050	0.060 U	0.060	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050
ENDOSULFAN II	33213-65-9	ug/l	0.100 U	0.100	0.100 U	0.100	0.110 U	0.110	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100
DELTA-BHC	319-86-8	ug/l	0.050 U	0.050	0.050 U	0.050	0.060 U	0.060	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050
PCB-1260	11096-82-5	ug/l	1.000 U	1.000	1.000 U	1.000	1.130 U	1.130	1.000 U	1.000	1.000 U	1.000	1.000 U	1.000
ENDRIN KETONE	53494-70-5	ug/l	0.100 U	0.100	0.100 U	0.100	0.110 U	0.110	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100
PCB-1248	12672-29-6	ug/l	0.500 U	0.500	0.500 U	0.500	0.560 U	0.560	0.500 U	0.500	0.500 U	0.500	0.500 U	0.500
GAMMA-BHC (LINDANE)	58-89-9	ug/l	0.050 U	0.050	0.050 U	0.050	0.060 U	0.060	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050
ENDRIN	72-20-8	ug/l	0.100 U	0.100	0.100 U	0.100	0.110 U	0.110	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100
PCB-1242	53469-21-9	ug/l	0.500 U	0.500	0.500 U	0.500	0.560 U	0.560	0.500 U	0.500	0.500 U	0.500	0.500 U	0.500
CHLORDANE	57-74-9	ug/l	0.500 U	0.500	0.500 U	0.500	0.560 U	0.560	0.500 U	0.500	0.500 U	0.500	0.500 U	0.500
DIELDRIN	60-57-1	ug/l	0.100 U	0.100	0.100 U	0.100	0.110 U	0.110	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100
BETA-BHC	319-85-7	ug/l	0.050 U	0.050	0.050 U	0.050	0.060 U	0.060	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050
HEPTACHLOR	76-44-8	ug/l	0.050 U	0.050	0.050 U	0.050	0.060 U	0.060	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050
TOXAPHENE	8001-35-2	ug/l	1.000 U	1.000	1.000 U	1.000	1.130 U	1.130	1.000 U	1.000	1.000 U	1.000	1.000 U	1.000
ENDOSULFAN I	959-98-8	ug/l	0.050 U	0.050	0.050 U	0.050	0.060 U	0.060	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050
ENDOSULFAN SULFATE	1031-07-8	ug/l	0.100 U	0.100	0.100 U	0.100	0.110 U	0.110	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100
VOLATILES														
STYRENE	100-42-5	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
CIS-1,3-DICHLOROPROPENE	10061-01-5	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
ETHYLBENZENE	100-41-4	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
1,1,2,2-TETRACHLOROETHANE	79-34-5	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
DIBROMOCHLOROMETHANE	124-48-1	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
CHLOROETHANE	75-00-3	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
VINYL ACETATE	108-05-4	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
TOLUENE	108-88-3	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	1.000 J	5.000	5.000 U	5.000	5.000 U	5.000
METHYLENE CHLORIDE (DICHLOROMETHANE)	75-09-2	ug/l	5.000 UJB	5.000	5.000 U	5.000	5.000 UJB	5.000	5.000 U	5.000	5.000 U	5.000	5.000 UJB	5.000
1,2-DICHLOROETHANE	107-06-2	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
CHLOROBENZENE	108-90-7	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
BROMOFORM	75-25-2	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
CARBON TETRACHLORIDE	56-23-5	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
ACETONE	67-64-1	ug/l	13.000 U	13.000	10.000 U	10.000	13.000 U	13.000	10.000 U	10.000	10.000 U	10.000	13.000 U	13.000
1,1-DICHLOROETHANE	75-34-3	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
BENZENE	71-43-2	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
TRICHLOROETHENE	79-01-6	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000

SERIES CONTAMINANT NAME	CAS #	UNIT	SAMPLING LOCATION LOCID --> GW-001-001 Date sample taken --> 06/25/87		GW-001-002 10/07/87		GW-002-001 06/25/87		GW-002-002 10/07/87		GW-002-003 10/07/87		GW-003-001 06/26/87	
			READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT
1,2-DICHLOROPROPANE	78-87-5	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
TETRACHLOROETHENE	127-18-4	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
2-CHLOROETHYLVINYLETHER	110-75-8	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
1,1,1-TRICHLOROETHANE	71-55-6	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
TRANS-1,2-DICHLOROETHENE	156-60-5	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
CHLOROFORM	67-66-3	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
VINYL CHLORIDE	75-01-4	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
BROMOMETHANE (METHYL BROMIDE)	74-83-9	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
4-METHYL-2-PENTANONE	108-10-1	ug/l	11.000 U	11.000	10.000 U	10.000	11.000 U	11.000	10.000 U	10.000	10.000 U	10.000	11.000 U	11.000
2-HEXANONE	591-78-6	ug/l	17.000 U	17.000	10.000 U	10.000	17.000 U	17.000	10.000 U	10.000	10.000 U	10.000	17.000 U	17.000
1,1,2-TRICHLOROETHANE	79-00-5	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
TOTAL XYLENES	1330-20-7	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
BROMODICHLOROMETHANE	75-27-4	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
1,1-DICHLOROETHENE	75-35-4	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
2-BUTANONE	78-93-3	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
CHLOROMETHANE (METHYL CHLORIDE)	74-87-3	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
CARBON DISULFIDE	75-15-0	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
TRANS-1,3-DICHLOROPROPENE	10061-02-6	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000

SOUTH BAY ASBESTOS
GROUND WATER ANALYTICAL RESULTS

SAMPLING LOCATION

SERIES CONTAMINANT NAME	CAS #	UNIT	LOCID --> GW-003-002 READING	Date sample taken --> 10/08/87 DETECT	GW-004-001 06/26/87 READING	DETECT	GW-004-002 10/08/87 READING	DETECT	GW-005-001 06/24/87 READING	DETECT	GW-005-002 06/24/87 READING	DETECT	GW-005-003 10/08/87 READING	DETECT
ASBESTOS														
CHRYSOTILE (fibers)	CHRY(fib)	ug/l	NA	NA	1795.000	0.010	NA	NA	100.000	0.010	201.000	0.010	NA	NA
AMPHIBOLE (fibers)	AMPH(fib)	ug/l	NA	NA	72.000	0.010	NA	NA	109.000	0.010	117.000	0.010	NA	NA
TOTAL ASBESTOS (fibers)	TOTAS(fib)	ug/l	NA	NA	1867.000	0.010	NA	NA	209.000	0.010	318.000	0.010	NA	NA
BASE NEUTAL ACID EXTRACTABLE														
4-NITROANILINE	100-01-6	ug/l	50.000 U	50.000	100.000 U	100.00	50.000 U	50.000	100.000 U	100.00	100.000 U	100.00	50.000 U	50.000
PHENOL	108-95-2	ug/l	10.000 U	10.000	10.000 U	10.000	11.000 U	11.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
4-NITROPHENOL	100-02-7	ug/l	50.000 U	50.000	50.000 U	50.000	50.000 U	50.000	51.000 UJ	51.000	50.000 UJ	50.000	50.000 U	50.000
BIS(2-CHLOROETHYL) ETHER	111-44-4	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
4-BROMOPHENYLPHENYL ETHER	101-55-3	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
BENZO(B)FLUORANTHENE	205-99-2	ug/l	10.000 U	10.000	15.000 U	15.000	10.000 U	10.000	15.000 U	15.000	15.000 U	15.000	10.000 U	10.000
4-METHYLPHENOL	106-44-5	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
4-CHLOROANILINE	106-47-8	ug/l	10.000 U	10.000	10.000 UJ	10.000	10.000 U	10.000	10.000 UJ	10.000	10.000 UJ	10.000	10.000 U	10.000
BENZYL ALCOHOL	100-51-6	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
2,4-DIMETHYLPHENOL	105-67-9	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
1,4-DICHLOROBENZENE	106-46-7	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
FLUORANTHENE	206-44-0	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
BIS(2-ETHYLHEXYL) PHTHALATE	117-81-7	ug/l	10.000 U	10.000	10.000 U	10.000	11.000 U	11.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
BENZO(K)FLUORANTHENE	207-08-9	ug/l	10.000 U	10.000	12.000 U	12.000	10.000 U	10.000	12.000 U	12.000	12.000 U	12.000	10.000 U	10.000
HEXACHLOROBENZENE	118-74-1	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
ACENAPHTHYLENE	208-96-8	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
1,2,4-TRICHLOROBENZENE	120-82-1	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
BENZO(A)ANTHRACENE	56-55-3	ug/l	10.000 U	10.000	11.000 U	11.000	10.000 U	10.000	11.000 U	11.000	11.000 U	11.000	10.000 U	10.000
CHRYSENE	218-01-9	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
4-CHLORO-3-METHYLPHENOL	59-50-7	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
BIS(2-CHLISOPROPYL) ETHER	39638-32-9	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
2,6-DINITROTOLUENE	606-20-2	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
BENZO(A)PYRENE	50-32-8	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
2,4-DINITROPHENOL	51-28-5	ug/l	50.000 U	50.000	50.000 U	50.000	50.000 U	50.000	51.000 UJ	51.000	50.000 UJ	50.000	50.000 U	50.000
DIBENZO(A,H)ANTHRACENE	53-70-3	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
NITROBENZENE	98-95-3	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
3-NITROANILINE	99-09-2	ug/l	50.000 U	50.000	0.000 R	50.000	50.000 U	50.000	53.000 UJ	53.000	53.000 UJ	53.000	50.000 U	50.000
INDENO(1,2,3-CD)PYRENE	193-39-5	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
BENZOIC ACID	65-85-0	ug/l	50.000 U	50.000	50.000 UJ	50.000	50.000 U	50.000	51.000 U	51.000	50.000 U	50.000	50.000 U	50.000
2,4-DICHLOROPHENOL	120-83-2	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
1,3-DICHLOROBENZENE	541-73-1	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
4-CHLOROPHENYLPHENYL ETHER	7005-72-3	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
DIMETHYL PHTHALATE	131-11-3	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
BIS(2-CHLOROETHOXY) METHANE	111-91-1	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
ISOPHORONE	78-59-1	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
PYRENE	129-00-0	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
DIBENZOFURAN	132-64-9	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
BENZO(G,H,I)PERYLENE	191-24-2	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
ANTHRACENE	120-12-7	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
DI-N-OCTYL PHTHALATE	117-84-0	ug/l	10.000 U	10.000	12.000 U	12.000	10.000 U	10.000	12.000 U	12.000	12.000 U	12.000	10.000 U	10.000
2,4-DINITROTOLUENE	121-14-2	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
DIETHYL PHTHALATE	84-66-2	ug/l	10.000 U	10.000	14.000 U	14.000	10.000 U	10.000	14.000 U	14.000	14.000 U	14.000	10.000 U	10.000

SAMPLING LOCATION

SERIES		LOCID -->	GW-003-002		GW-004-001		GW-004-002		GW-005-001		GW-005-002		GW-005-003	
		Date sample taken -->	10/08/87		06/26/87		10/08/87		06/24/87		06/24/87		10/08/87	
CONTAMINANT NAME	CAS #	UNIT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT
PHENANTHRENE	85-01-8	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
N-NITROSODIPHENYLAMINE	86-30-6	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
ACENAPHTHENE	83-32-9	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
PENTACHLOROPHENOL	87-86-5	ug/l	50.000 U	50.000	50.000 U	50.000	50.000 U	50.000	51.000 U	51.000	50.000 U	50.000	50.000 U	50.000
4,6-DiNO2-2-Methylphenol	111-11-11	ug/l	50.000 U	50.000	50.000 U	50.000	50.000 U	50.000	51.000 U	51.000	50.000 U	50.000	50.000 U	50.000
2,4,5-TRICHLOROPHENOL	95-95-4	ug/l	50.000 U	50.000	50.000 U	50.000	50.000 U	50.000	51.000 U	51.000	50.000 U	50.000	50.000 U	50.000
2,4,6-TRICHLOROPHENOL	88-06-2	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
2-METHYLNAPHTHALENE	91-57-6	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
2-METHYLPHENOL	95-48-7	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
N-NITROSO-DIPROPYLAMINE	621-64-7	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
DI-N-BUTYL PHTHALATE	84-74-2	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
2-NITROANILINE	88-74-4	ug/l	50.000 U	50.000	50.000 U	50.000	50.000 U	50.000	51.000 U	51.000	50.000 U	50.000	50.000 U	50.000
1,2-DICHLOROBENZENE	95-50-1	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
BUTYLBENZYLPHTHALATE	85-68-7	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
HEXACHLOROBUTADIENE	87-68-3	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
3,3-DICHLOROBENZIDINE	91-94-1	ug/l	20.000 U	20.000	28.000 U	28.000	20.000 U	20.000	28.000 UJ	28.000	28.000 UJ	28.000	20.000 U	20.000
HEXACHLOROCYCLOPENTADIENE	77-47-4	ug/l	10.000 U	10.000	14.000 U	14.000	10.000 U	10.000	14.000 U	14.000	14.000 U	14.000	10.000 U	10.000
2-CHLORONAPHTHALENE	91-58-7	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
NAPHTHALENE	91-20-3	ug/l	10.000 U	10.000	10.000 U	10.000	11.000 J	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
2-CHLOROPHENOL	95-57-8	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
FLUORENE	86-73-7	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
HEXACHLOROETHANE	67-72-1	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
2-NITROPHENOL	88-75-5	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
DISSOLVED METALS														
ALUMINUM (DISSOLVED)	7429-90-5D	ug/l	140.000 U	140.00	81.000 J	200.00	700.000 U	700.00	33.000 J	200.00	29.000 J	200.00	220.000	140.00
CADMIUM (DISSOLVED)	7440-43-9D	ug/l	4.000 U	4.000	3.000 U	3.000	4.000 U	4.000	3.000 U	3.000	3.000 U	3.000	5.000	4.000
MERCURY (DISSOLVED)	7439-97-6D	ug/l	6.000 J	0.200	7.200	0.100	2.700 J	0.200	0.200 U	0.200	0.200 U	0.200	5.800 J	0.200
VANADIUM (DISSOLVED)	7440-62-2D	ug/l	21.000	20.000	33.000 J	50.000	20.000 U	20.000	4.800 J	50.000	4.800 J	50.000	20.000 U	20.000
NICKEL (DISSOLVED)	7440-02-0D	ug/l	853.000	24.000	14.000 U	14.000	27.000	24.000	14.000 U	14.000	14.000 U	14.000	32.000	24.000
COPPER (DISSOLVED)	7440-50-8D	ug/l	11.000 U	11.000	10.000 J	25.000	11.000 U	11.000	45.000	25.000	40.000	25.000	11.000 U	11.000
POTASSIUM (DISSOLVED)	7440-09-7D	ug/l	1400.000 U	1400.0	96400.000	5000.0	138000.000	1400.0	2270.000 J-E	5000.0	2080.000 JC-E	5000.0	81300.000	1400.0
MAGNESIUM (DISSOLVED)	7439-95-4D	ug/l	29200.000	1400.0	879000.000	5000.0	456000.000	1400.0	26800.000 J-E	5000.0	26400.000 J-E	5000.0	842000.000	1400.0
SELENIUM (DISSOLVED)	7782-49-2D	ug/l	5.000 U	5.000	0.000 R-S	5.000	50.000 U	50.000	5.000 UJ-S	5.000	5.000 UJ-S	5.000	50.000 U	50.000
BARIUM (DISSOLVED)	7440-39-3D	ug/l	70.000 U	70.000	1360.000	10.000	2170.000	70.000	20.000 J-E	200.00	19.000 J-E	200.00	1140.000	70.000
SILVER (DISSOLVED)	7440-22-4D	ug/l	11.000 J	10.000	4.000 U	4.000	11.000 J	10.000	4.000 U	4.000	4.000 U	4.000	10.000 UJ	10.000
CHROMIUM (DISSOLVED)	7440-47-3D	ug/l	10.000 U	10.000	3.000 UJ-S	3.000	10.000 U	10.000	3.000 U	3.000	3.000 U	3.000	10.000 U	10.000
SODIUM (DISSOLVED)	7440-23-5D	ug/l	1160000.000	1500.0	5550000.000	5000.0	4660000.000	1500.0	968000.000 J-E	5000.0	950000.000 J-E	5000.0	6630000.000	1500.0
IRON (DISSOLVED)	7439-89-6D	ug/l	604.000	60.000	17300.000	100.00	34900.000	60.000	17.000 J-E	100.00	18.000 J-E	100.00	180.000	60.000
THALLIUM (DISSOLVED)	7440-28-0D	ug/l	10.000 U	10.000	20.000 UJ-S	20.000	10.000 U	10.000	2.000 U	2.000	2.000 U	2.000	10.000 U	10.000
ZINC (DISSOLVED)	7440-66-6D	ug/l	90.000 J	15.000	18.000 J	20.000	417.000 J	15.000	15.000 J	20.000	14.000 J	20.000	119.000 J	15.000
MANGANESE (DISSOLVED)	7439-96-5D	ug/l	414.000	11.000	6850.000	15.000	1050.000	11.000	131.000 J-E	15.000	131.000 J-E	15.000	3260.000	11.000
BERYLLIUM (DISSOLVED)	7440-41-7D	ug/l	3.000 U	3.000	2.000 UJ-S	2.000	3.000 U	3.000	2.000 U	2.000	2.000 U	2.000	3.000 U	3.000
COBALT (DISSOLVED)	7440-48-4D	ug/l	46.000	30.000	4.700 J-S	50.000	33.000	30.000	3.000 U	3.000	3.000 U	3.000	30.000 U	30.000
LEAD (DISSOLVED)	7439-92-1D	ug/l	56.000 J	5.000	5.000 U	5.000	63.000 J	5.000	2.000 U	2.000	2.000 U	2.000	33.000 J	5.000
ARSENIC (DISSOLVED)	7440-38-2D	ug/l	10.000 UJ	10.000	3.000 U	3.000	100.000 U	100.00	3.000 U	3.000	10.000 U	10.000	10.000 UJ	10.000
CALCIUM (DISSOLVED)	7440-70-2D	ug/l	18600.000	1900.0	480000.000	5000.0	266000.000	1900.0	16000.000	5000.0	16000.000	5000.0	471000.000	1900.0
ANTIMONY (DISSOLVED)	7440-36-0D	ug/l	60.000 U	60.000	68.000 J-L	60.000	60.000 U	60.000	60.000 U	60.000	60.000 U	60.000	60.000 U	60.000

SOUTH BAY ASBESTOS
GROUND WATER ANALYTICAL RESULTS

SAMPLING LOCATION

SERIES / CONTAMINANT NAME	CAS #	UNIT	LOCID --> GW-003-002 Date sample taken --> 10/08/87 READING	DETECT	GW-004-001 06/26/87 READING	DETECT	GW-004-002 10/08/87 READING	DETECT	GW-005-001 06/24/87 READING	DETECT	GW-005-002 06/24/87 READING	DETECT	GW-005-003 10/08/87 READING	DETECT
CYANIDE (DISSOLVED)	74-90-8	ug/l	60.000 J	10.000	10.000 UJ-H	10.000	10.000 U	10.000	10.000 UJ-H	10.000	10.000 UJ-H	10.000	10.000 U	10.000
TIN (DISSOLVED)	7440-12-9D	ug/l	40.000 U	40.000	NA	NA	40.000 U	40.000	NA	NA	NA	NA	40.000	40.000
PESTICIDES														
METHOXYCHLOR	72-43-5	ug/l	0.500 U	0.500	0.500 U	0.500	0.500 U	0.500	0.500 U	0.500	0.500 U	0.500	0.500 U	0.500
4,4-DDT	50-29-3	ug/l	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100
HEPTACHLOR EPOXIDE	1024-57-3	ug/l	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050	0.100 UJB	0.100	0.050 U	0.050	0.050 U	0.050
4,4-DDD	72-54-8	ug/l	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100
PCB-1254	11097-69-1	ug/l	1.000 U	1.000	1.000 U	1.000	1.000 U	1.000	1.000 U	1.000	1.000 U	1.000	1.000 U	1.000
PCB-1221	11104-28-2	ug/l	0.500 U	0.500	0.500 U	0.500	0.500 U	0.500	0.500 U	0.500	0.500 U	0.500	0.500 U	0.500
PCB-1232	11141-16-5	ug/l	0.500 U	0.500	0.500 U	0.500	0.500 U	0.500	0.500 U	0.500	0.500 U	0.500	0.500 U	0.500
4,4-DDE	72-55-9	ug/l	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100
PCB-1016	12674-11-2	ug/l	0.500 U	0.500	0.500 U	0.500	0.500 U	0.500	0.500 U	0.500	0.500 U	0.500	0.500 U	0.500
ALDRIN	309-00-2	ug/l	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050
ALPHA-BHC	319-84-6	ug/l	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050
ENDOSULFAN II	33213-65-9	ug/l	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100
DELTA-BHC	319-86-8	ug/l	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050
PCB-1260	11096-82-5	ug/l	1.000 U	1.000	1.000 U	1.000	1.000 U	1.000	1.000 U	1.000	1.000 U	1.000	1.000 U	1.000
ENDRIN KETONE	53494-70-5	ug/l	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100
PCB-1248	12672-29-6	ug/l	0.500 U	0.500	0.500 U	0.500	0.500 U	0.500	0.500 U	0.500	0.500 U	0.500	0.500 U	0.500
GAMMA-BHC (LINDANE)	58-89-9	ug/l	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050
ENDRIN	72-20-8	ug/l	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100	0.100 UJB	0.100	0.100 UJB	0.100	0.100 U	0.100
PCB-1242	53469-21-9	ug/l	0.500 U	0.500	0.500 U	0.500	0.500 U	0.500	0.500 U	0.500	0.500 U	0.500	0.500 U	0.500
CHLORDANE	57-74-9	ug/l	0.500 U	0.500	0.500 U	0.500	0.500 U	0.500	0.500 U	0.500	0.500 U	0.500	0.500 U	0.500
DIELDRIN	60-57-1	ug/l	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100
BETA-BHC	319-85-7	ug/l	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050
HEPTACHLOR	76-44-8	ug/l	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050
TOXAPHENE	8001-35-2	ug/l	1.000 U	1.000	1.000 U	1.000	1.000 U	1.000	1.000 U	1.000	1.000 U	1.000	1.000 U	1.000
ENDOSULFAN I	959-98-8	ug/l	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050
ENDOSULFAN SULFATE	1031-07-8	ug/l	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100	0.090 J	0.100	0.100 U	0.100	0.100 U	0.100
VOLATILES														
STYRENE	100-42-5	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
CIS-1,3-DICHLOROPROPENE	10061-01-5	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
ETHYLBENZENE	100-41-4	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
1,1,2,2-TETRACHLOROETHANE	79-34-5	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
DIBROMOCHLOROMETHANE	124-48-1	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
CHLOROETHANE	75-00-3	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
VINYL ACETATE	108-05-4	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
TOLUENE	108-88-3	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
METHYLENE CHLORIDE (DICHLOROMETHANE)	75-09-2	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 UJB	5.000	5.000 U	5.000
1,2-DICHLOROETHANE	107-06-2	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
CHLOROBENZENE	108-90-7	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
BROMOFORM	75-25-2	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
CARBON TETRACHLORIDE	56-23-5	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
ACETONE	67-64-1	ug/l	10.000 U	10.000	13.000 U	13.000	10.000 U	10.000	13.000 U	13.000	3.000 J	10.000	10.000 U	10.000
1,1-DICHLOROETHANE	75-34-3	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
BENZENE	71-43-2	ug/l	5.000 U	5.000	5.000 U	5.000	1.000 J	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000

SAMPLING LOCATION

SERIES CONTAMINANT NAME	CAS #	UNIT	LOCID --> GW-003-002 Date sample taken --> 10/08/87 READING	DETECT	GW-004-001 06/26/87 READING	DETECT	GW-004-002 10/08/87 READING	DETECT	GW-005-001 06/24/87 READING	DETECT	GW-005-002 06/24/87 READING	DETECT	GW-005-003 10/08/87 READING	DETECT
1,2-DICHLOROPROPANE	78-87-5	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
TETRACHLOROETHENE	127-18-4	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
2-CHLOROETHYLVINYLETHER	110-75-8	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
1,1,1-TRICHLOROETHANE	71-55-6	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
TRANS-1,2-DICHLOROETHENE	156-60-5	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
CHLOROFORM	67-66-3	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
VINYL CHLORIDE	75-01-4	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
BROMOMETHANE (METHYL BROMIDE)	74-83-9	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
4-METHYL-2-PENTANONE	108-10-1	ug/l	10.000 U	10.000	11.000 U	11.000	10.000 U	10.000	11.000 U	11.000	11.000 U	11.000	10.000 U	10.000
2-HEXANONE	591-78-6	ug/l	10.000 U	10.000	17.000 U	17.000	10.000 U	10.000	17.000 U	17.000	17.000 U	17.000	10.000 U	10.000
1,1,2-TRICHLOROETHANE	79-00-5	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
TOTAL XYLENES	1330-20-7	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
BROMODICHLOROMETHANE	75-27-4	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
1,1-DICHLOROETHENE	75-35-4	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
2-BUTANONE	78-93-3	ug/l	10.000 U	10.000	10.000 U	10.000	3.000 J	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
CHLOROMETHANE (METHYL CHLORIDE)	74-87-3	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
CARBON DISULFIDE	75-15-0	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
TRANS-1,3-DICHLOROPROPENE	10061-02-6	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000

SOUTH BAY ASBESTOS
GROUND WATER ANALYTICAL RESULTS

SERIES / CONTAMINANT NAME	CAS #	UNIT	GW-006-001 06/24/87 READING	GW-006-001 DETECT	GW-006-002 10/07/87 READING	GW-006-002 DETECT	GW-006-003 11/16/87 READING	GW-006-003 DETECT	GW-013-001 06/25/87 READING	GW-013-001 DETECT	GW-013-002 06/25/87 READING	GW-013-002 DETECT	GW-013-003 11/17/87 READING	GW-013-003 DETECT
ASBESTOS														
CHRYSOTILE (fibers)	CHRY(fib)	mf/l	18.000	0.010	NA	NA	1.500	0.010	20.000	0.010	NA	NA	1.700	0.010
AMPHIBOLE (fibers)	AMPH(fib)	mf/l	1.000	0.010	NA	NA	0.400	0.010	1.000	0.010	NA	NA	0.010 U	0.010
TOTAL ASBESTOS (fibers)	TOTAS(fib)	mf/l	19.000	0.010	NA	NA	2.000	0.010	21.000	0.010	NA	NA	1.700	0.010
BASE NEUTAL ACID EXTRACTABLE														
4-NITROANILINE	100-01-6	ug/l	100.000 U	100.00	50.000 U	50.000	50.000 U	50.000	100.000 U	100.00	50.000 U	50.000	50.000 U	50.000
PHENOL	108-95-2	ug/l	10.000 U	10.000	8.000 J	10.000	2.000 J	10.000	10.000 U	10.000	10.000 U	10.000	2.000 J	10.000
4-NITROPHENOL	100-02-7	ug/l	51.000 UJ	51.000	50.000 U	50.000	50.000 U	50.000	50.000 U	50.000	50.000 U	50.000	50.000 U	50.000
BIS(2-CHLOROETHYL) ETHER	111-44-4	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
4-BROMOPHENYLPHENYL ETHER	101-55-3	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
BENZO(B)FLUORANTHENE	205-99-2	ug/l	15.000 U	15.000	10.000 U	10.000	10.000 U	10.000	15.000 U	15.000	10.000 U	10.000	10.000 U	10.000
4-METHYLPHENOL	106-44-5	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
4-CHLOROANILINE	106-47-8	ug/l	10.000 UJ	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
BENZYL ALCOHOL	100-51-6	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
2,4-DIMETHYLPHENOL	105-67-9	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
1,4-DICHLOROBENZENE	106-46-7	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
FLUORANTHENE	206-44-0	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
BIS(2-ETHYLHEXYL) PHTHALATE	117-81-7	ug/l	10.000 U	10.000	10.000 U	10.000	19.000 U	19.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
BENZO(K)FLUORANTHENE	207-08-9	ug/l	12.000 U	12.000	10.000 U	10.000	10.000 U	10.000	12.000 U	12.000	10.000 U	10.000	10.000 U	10.000
HEXACHLOROBENZENE	118-74-1	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
ACENAPHTHYLENE	208-96-8	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
1,2,4-TRICHLOROBENZENE	120-82-1	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
BENZO(A)ANTHRACENE	56-55-3	ug/l	11.000 U	11.000	10.000 U	10.000	10.000 U	10.000	11.000 U	11.000	10.000 U	10.000	10.000 U	10.000
CHRYSENE	218-01-9	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
4-CHLORO-3-METHYLPHENOL	59-50-7	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
BIS(2-CHLISOPROPYL) ETHER	39638-32-9	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
2,6-DINITROTOLUENE	606-20-2	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
BENZO(A)PYRENE	50-32-8	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
2,4-DINITROPHENOL	51-28-5	ug/l	51.000 UJ	51.000	50.000 U	50.000	50.000 U	50.000	50.000 UJ	50.000	50.000 U	50.000	50.000 U	50.000
DIBENZO(A,H)ANTHRACENE	53-70-3	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
NITROBENZENE	98-95-3	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
3-NITROANILINE	99-09-2	ug/l	53.000 UJ	53.000	50.000 U	50.000	50.000 U	50.000	0.000 R	50.000	50.000 U	50.000	50.000 U	50.000
INDENO(1,2,3-CD)PYRENE	193-39-5	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
BENZOIC ACID	65-85-0	ug/l	51.000 U	51.000	50.000 U	50.000	50.000 U	50.000	50.000 U	50.000	50.000 U	50.000	50.000 U	50.000
2,4-DICHLOROPHENOL	120-83-2	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
1,3-DICHLOROBENZENE	541-73-1	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
4-CHLOROPHENYLPHENYL ETHER	7005-72-3	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
DIMETHYL PHTHALATE	131-11-3	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
BIS(2-CHLOROETHOXY) METHANE	111-91-1	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
ISOPHORONE	78-59-1	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
PYRENE	129-00-0	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
DIBENZOFURAN	132-64-9	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
BENZO(G,H,I)PERYLENE	191-24-2	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
ANTHRACENE	120-12-7	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
DI-N-OCTYL PHTHALATE	117-84-0	ug/l	12.000 U	12.000	10.000 U	10.000	10.000 U	10.000	12.000 U	12.000	10.000 U	10.000	10.000 U	10.000
2,4-DINITROTOLUENE	121-14-2	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
DIETHYL PHTHALATE	84-66-2	ug/l	14.000 U	14.000	10.000 U	10.000	10.000 U	10.000	14.000 U	14.000	10.000 U	10.000	10.000 U	10.000

			SAMPLING LOCATION											
		LOCID -->	GW-006-001		GW-006-002		GW-006-003		GW-013-001		GW-013-002		GW-013-003	
		Date sample taken -->	06/24/87		10/07/87		11/16/87		06/25/87		06/25/87		11/17/87	
SERIES CONTAMINANT NAME	CAS #	UNIT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT
PHENANTHRENE	85-01-8	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
N-NITROSODIPHENYLAMINE	86-30-6	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
ACENAPHTHENE	83-32-9	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
PENTACHLOROPHENOL	87-86-5	ug/l	51.000 U	51.000	50.000 U	50.000	50.000 U	50.000	50.000 U	50.000	50.000 U	50.000	50.000 U	50.000
4,6-DiNO2-2-Methylphenol	111-11-11	ug/l	51.000 U	51.000	50.000 U	50.000	50.000 U	50.000	50.000 U	50.000	50.000 U	50.000	50.000 U	50.000
2,4,5-TRICHLOROPHENOL	95-95-4	ug/l	51.000 U	51.000	50.000 U	50.000	50.000 U	50.000	50.000 U	50.000	50.000 U	50.000	50.000 U	50.000
2,4,6-TRICHLOROPHENOL	88-06-2	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
2-METHYLNAPHTHALENE	91-57-6	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
2-METHYLPHENOL	95-48-7	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
N-NITROSO-DIPROPYLAMINE	621-64-7	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
DI-N-BUTYL PHTHALATE	84-74-2	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	11.000 U	11.000
2-NITROANILINE	88-74-4	ug/l	51.000 U	51.000	50.000 U	50.000	50.000 U	50.000	50.000 U	50.000	50.000 U	50.000	50.000 U	50.000
1,2-DICHLOROBENZENE	95-50-1	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
BUTYLBENZYLPHTHALATE	85-68-7	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
HEXACHLOROBUTADIENE	87-68-3	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
3,3-DICHLOROBENZIDINE	91-94-1	ug/l	28.000 U	28.000	20.000 U	20.000	20.000 U	20.000	28.000 U	28.000	20.000 U	20.000	20.000 U	20.000
HEXACHLOROCYCLOPENTADIENE	77-47-4	ug/l	14.000 U	14.000	10.000 U	10.000	10.000 U	10.000	14.000 U	14.000	10.000 U	10.000	10.000 U	10.000
2-CHLORONAPHTHALENE	91-58-7	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
NAPHTHALENE	91-20-3	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
2-CHLOROPHENOL	95-57-8	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
FLUORENE	86-73-7	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
HEXACHLOROETHANE	67-72-1	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
2-NITROPHENOL	88-75-5	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
DISSOLVED METALS														
ALUMINUM (DISSOLVED)	7429-90-5D	ug/l	9.000 J	200.00	140.000 U	140.00	120.000 U	140.00	58.000 J	200.00	140.000 U	140.00	120.000 J	140.00
CADMIUM (DISSOLVED)	7440-43-9D	ug/l	3.000 U	3.000	4.000	4.000	3.500 UJ	4.000	3.000 U	3.000	4.000 U	4.000	2.000 UJ	4.000
MERCURY (DISSOLVED)	7439-97-6D	ug/l	0.710	0.100	2.000	0.200	0.200 U	0.200	23.000	0.100	2.400	0.200	0.200 U	0.200
VANADIUM (DISSOLVED)	7440-62-2D	ug/l	2.000 U	2.000	20.000 U	20.000	36.000 U	36.000	2.000 U	2.000	20.000 U	20.000	36.000 U	36.000
NICKEL (DISSOLVED)	7440-02-0D	ug/l	14.000 U	14.000	24.000 U	24.000	39.000 U	39.000	14.000 U	14.000	25.000	24.000	39.000 U	39.000
COPPER (DISSOLVED)	7440-50-8D	ug/l	6.700 J	25.000	11.000 U	11.000	8.000 U	11.000	5.400 J	25.000	11.000 U	11.000	8.000 U	11.000
POTASSIUM (DISSOLVED)	7440-09-7D	ug/l	100.000 UJCE	100.00	1400.000 U	1400.0	291.000 U	1400.0	431.000 JC-E	5000.0	1400.000 U	1400.0	291.000 U	1400.0
MAGNESIUM (DISSOLVED)	7439-95-4D	ug/l	18.000 J-E	5000.0	1400.000 U	1400.0	1200.000 U	1400.0	147.000 J-E	5000.0	1400.000 U	1400.0	1200.000 U	1400.0
SELENIUM (DISSOLVED)	7782-49-2D	ug/l	3.000 UJ-S	3.000	5.000 U	5.000	2.000 U	5.000	3.000 UJ-S	3.000	5.000 U	5.000	20.000 U	20.000
BARIUM (DISSOLVED)	7440-39-3D	ug/l	3.800 J-E	200.00	70.000 U	70.000	72.000 U	72.000	2.000 UJ-E	2.000	70.000 U	70.000	72.000 U	72.000
SILVER (DISSOLVED)	7440-22-4D	ug/l	4.000 U	4.000	10.000 UJ	10.000	1.500 UJ	10.000	4.000 U	4.000	10.000 U	10.000	9.000 U	10.000
CHROMIUM (DISSOLVED)	7440-47-3D	ug/l	3.000 J	10.000	10.000 U	10.000	12.000 UJ	12.000	3.000 U	3.000	10.000 U	10.000	10.000 UJ	10.000
SODIUM (DISSOLVED)	7440-23-5D	ug/l	1290.000 J-E	5000.0	5100.000	1500.0	974.000 J	1500.0	2720.000 J-E	5000.0	4600.000	1500.0	1275.000 J	1500.0
IRON (DISSOLVED)	7439-89-6D	ug/l	17.000 J-E	100.00	110.000	60.000	30.000 J	60.000	29.000 J-E	100.00	60.000 U	60.000	24.000 U	60.000
THALLIUM (DISSOLVED)	7440-28-0D	ug/l	2.000 U	2.000	10.000 U	10.000	2.000 U	10.000	2.000 U	2.000	10.000 U	10.000	20.000 U	20.000
ZINC (DISSOLVED)	7440-66-6D	ug/l	9.300 J	20.000	66.000 J	15.000	45.800	15.000	6.100 J	20.000	62.000	15.000	83.400	15.000
MANGANESE (DISSOLVED)	7439-96-5D	ug/l	1.000 UJ-E	1.000	11.000 U	11.000	10.000 U	11.000	1.000 UJ-E	1.000	11.000 U	11.000	10.000 U	11.000
BERYLLIUM (DISSOLVED)	7440-41-7D	ug/l	2.000 U	2.000	3.000 U	3.000	5.000 U	5.000	2.000 U	2.000	3.000 U	3.000	5.000 U	5.000
COBALT (DISSOLVED)	7440-48-4D	ug/l	3.000 U	3.000	30.000 U	30.000	22.000 U	30.000	3.000 U	3.000	30.000 U	30.000	22.000 U	30.000
LEAD (DISSOLVED)	7439-92-1D	ug/l	2.000 U	2.000	16.000 J	5.000	46.600	5.000	5.000 U	5.000	44.000	5.000	49.700	5.000
ARSENIC (DISSOLVED)	7440-38-2D	ug/l	10.000 U	10.000	10.000 UJ	10.000	2.000 U	10.000	3.000 U	3.000	10.000 UJ	10.000	2.000 U	10.000
CALCIUM (DISSOLVED)	7440-70-2D	ug/l	158.000 J	5000.0	1900.000 U	1900.0	2640.000 U	2640.0	546.000 J	5000.0	1900.000 U	1900.0	2640.000 U	2640.0
ANTIMONY (DISSOLVED)	7440-36-0D	ug/l	60.000 U	60.000	60.000 U	60.000	20.000 U	60.000	60.000 U	60.000	60.000 U	60.000	20.000 U	60.000

SOUTH BAY ASBESTOS
GROUND WATER ANALYTICAL RESULTS

SERIES / CONTAMINANT NAME	CAS #	UNIT	GW-006-001 06/24/87 READING	DETECT	GW-006-002 10/07/87 READING	DETECT	GW-006-003 11/16/87 READING	DETECT	GW-013-001 06/25/87 READING	DETECT	GW-013-002 06/25/87 READING	DETECT	GW-013-003 11/17/87 READING	DETECT
CYANIDE (DISSOLVED)	74-90-8	ug/l	10.000 UJ-H	10.000	10.000 J	10.000	5.000 U	10.000	10.000 UJ-H	10.000	10.000 U	10.000	5.000 U	10.000
TIN (DISSOLVED)	7440-12-9D	ug/l	NA	NA	40.000 U	40.000	NA	NA	NA	NA	40.000 U	40.000	NA	NA
PESTICIDES														
METHOXYCHLOR	72-43-5	ug/l	0.510 U	0.510	0.500 U	0.500	0.500 U	0.500	0.510 U	0.510	0.500 U	0.500	0.500 U	0.500
4,4-DDT	50-29-3	ug/l	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100
HEPTACHLOR EPOXIDE	1024-57-3	ug/l	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050
4,4-DDD	72-54-8	ug/l	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100
PCB-1254	11097-69-1	ug/l	1.020 U	1.020	1.000 U	1.000	1.000 U	1.000	1.010 U	1.010	1.000 U	1.000	1.000 U	1.000
PCB-1221	11104-28-2	ug/l	0.510 U	0.510	0.500 U	0.500	0.500 U	0.500	0.510 U	0.510	0.500 U	0.500	0.500 U	0.500
PCB-1232	11141-16-5	ug/l	0.510 U	0.510	0.500 U	0.500	0.500 U	0.500	0.510 U	0.510	0.500 U	0.500	0.500 U	0.500
4,4-DDE	72-55-9	ug/l	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100
PCB-1016	12674-11-2	ug/l	0.510 U	0.510	0.500 U	0.500	0.500 U	0.500	0.510 U	0.510	0.500 U	0.500	0.500 U	0.500
ALDRIN	309-00-2	ug/l	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050
ALPHA-BHC	319-84-6	ug/l	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050
ENDOSULFAN II	33213-65-9	ug/l	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100
DELTA-BHC	319-86-8	ug/l	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050
PCB-1260	11096-82-5	ug/l	1.020 U	1.020	1.000 U	1.000	1.000 U	1.000	1.010 U	1.010	1.000 U	1.000	1.000 U	1.000
ENDRIN KETONE	53494-70-5	ug/l	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100
PCB-1248	12672-29-6	ug/l	0.510 U	0.510	0.500 U	0.500	0.500 U	0.500	0.510 U	0.510	0.500 U	0.500	0.500 U	0.500
GAMMA-BHC (LINDANE)	58-89-9	ug/l	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050
ENDRIN	72-20-8	ug/l	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100
PCB-1242	53469-21-9	ug/l	0.510 U	0.510	0.500 U	0.500	0.500 U	0.500	0.510 U	0.510	0.500 U	0.500	0.500 U	0.500
CHLORDANE	57-74-9	ug/l	0.510 U	0.510	0.500 U	0.500	0.500 U	0.500	0.510 U	0.510	0.500 U	0.500	0.500 U	0.500
DIELDRIN	60-57-1	ug/l	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100
BETA-BHC	319-85-7	ug/l	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050
HEPTACHLOR	76-44-8	ug/l	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050
TOXAPHENE	8001-35-2	ug/l	1.020 U	1.020	1.000 U	1.000	1.000 U	1.000	1.010 U	1.010	1.000 U	1.000	1.000 U	1.000
ENDOSULFAN I	959-98-8	ug/l	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050
ENDOSULFAN SULFATE	1031-07-8	ug/l	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100
VOLATILES														
STYRENE	100-42-5	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
CIS-1,3-DICHLOROPROPENE	10061-01-5	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
ETHYLBENZENE	100-41-4	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
1,1,2,2-TETRACHLOROETHANE	79-34-5	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
DIBROMOCHLOROMETHANE	124-48-1	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
CHLOROETHANE	75-00-3	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
VINYL ACETATE	108-05-4	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
TOLUENE	108-88-3	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
METHYLENE CHLORIDE (DICHLOROMETHANE)	75-09-2	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	8.000 UJ	8.000	2.000 J	5.000
1,2-DICHLOROETHANE	107-06-2	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
CHLOROBENZENE	108-90-7	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
BROMOFORM	75-25-2	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
CARBON TETRACHLORIDE	56-23-5	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
ACETONE	67-64-1	ug/l	13.000 U	13.000	17.000 UJ	17.000	10.000 U	10.000	13.000 U	13.000	12.000 UJ	12.000	10.000 U	10.000
1,1-DICHLOROETHANE	75-34-3	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
BENZENE	71-43-2	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
TRICHLOROETHENE	79-01-6	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000

SAMPLING LOCATION

SERIES CONTAMINANT NAME	CAS #	UNIT	LOCID --> GW-006-001 Date sample taken --> 06/24/87 READING	DETECT	GW-006-002 10/07/87 READING	DETECT	GW-006-003 11/16/87 READING	DETECT	GW-013-001 06/25/87 READING	DETECT	GW-013-002 06/25/87 READING	DETECT	GW-013-003 11/17/87 READING	DETECT
1,2-DICHLOROPROPANE	78-87-5	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
TETRACHLOROETHENE	127-18-4	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
2-CHLOROETHYLVINYLETHER	110-75-8	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
1,1,1-TRICHLOROETHANE	71-55-6	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
TRANS-1,2-DICHLOROETHENE	156-60-5	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
CHLOROFORM	67-66-3	ug/l	5.000 U	5.000	5.000 U	5.000	2.000 J	5.000	5.000 U	5.000	5.000 U	5.000	2.000 J	5.000
VINYL CHLORIDE	75-01-4	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
BROMOMETHANE (METHYL BROMIDE)	74-83-9	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
4-METHYL-2-PENTANONE	108-10-1	ug/l	11.000 U	11.000	10.000 U	10.000	10.000 U	10.000	11.000 U	11.000	10.000 U	10.000	10.000 U	10.000
2-HEXANONE	591-78-6	ug/l	17.000 U	17.000	10.000 U	10.000	10.000 U	10.000	17.000 U	17.000	10.000 U	10.000	10.000 U	10.000
1,1,2-TRICHLOROETHANE	79-00-5	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
TOTAL XYLENES	1330-20-7	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
BROMODICHLOROMETHANE	75-27-4	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
1,1-DICHLOROETHENE	75-35-4	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
2-BUTANONE	78-93-3	ug/l	18.000	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
CHLOROMETHANE (METHYL CHLORIDE)	74-87-3	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
CARBON DISULFIDE	75-15-0	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
TRANS-1,3-DICHLOROPROPENE	10061-02-6	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000

SERIES CONTAMINANT NAME	CAS #	UNIT	SAMPLING LOCATION LOCID --> GW-014-001 Date sample taken --> 06/26/87 READING	DETECT	GW-603-001 11/16/87 READING	DETECT	GW-605-001 11/17/87 READING	DETECT	GW-605-002 11/17/87 READING	DETECT	GW-606-001 11/17/87 READING	DETECT	GW-609-001 11/18/87 READING	DETECT
ASBESTOS														
CHRYSOTILE (fibers)	CHRY(fib)	mf/l	6.000	0.010	NA	NA	290.000	0.010	70.000	0.010	NA	NA	NA	NA
AMPHIBOLE (fibers)	AMPH(fib)	mf/l	1.000	0.010	NA	NA	28.000	0.010	0.010	0.010	NA	NA	NA	NA
TOTAL ASBESTOS (fibers)	TOTAS(fib)	mf/l	7.000	0.010	NA	NA	320.000	0.010	70.000	0.010	NA	NA	NA	NA
BASE NEUTAL ACID EXTRACTABLE														
4-NITROANILINE	100-01-6	ug/l	100.000 U	100.00	50.000 U	50.000	50.000 U	50.000	50.000 U	50.000	50.000 U	50.000	NA	NA
PHENOL	108-95-2	ug/l	10.000 U	10.000	11.000 U	11.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	NA	NA
4-NITROPHENOL	100-02-7	ug/l	50.000 U	50.000	50.000 U	50.000	50.000 U	50.000	50.000 U	50.000	50.000 U	50.000	NA	NA
BIS(2-CHLOROETHYL) ETHER	111-44-4	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	NA	NA
4-BROMOPHENYLPHENYL ETHER	101-55-3	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	NA	NA
BENZO(B)FLUORANTHENE	205-99-2	ug/l	15.000 U	15.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	NA	NA
4-METHYLPHENOL	106-44-5	ug/l	10.000 U	10.000	11.000 U	11.000	3.000 J	10.000	2.000 J	10.000	10.000 U	10.000	NA	NA
4-CHLOROANILINE	106-47-8	ug/l	10.000 UJ	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	NA	NA
BENZYL ALCOHOL	100-51-6	ug/l	10.000 U	10.000	2.000 J	10.000	10.000 U	10.000	10.000 U	10.000	2.000 J	10.000	NA	NA
2,4-DIMETHYLPHENOL	105-67-9	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	NA	NA
1,4-DICHLOROBENZENE	106-46-7	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	NA	NA
FLUORANTHENE	206-44-0	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	NA	NA
BIS(2-ETHYLHEXYL) PHTHALATE	117-81-7	ug/l	10.000 U	10.000	11.000 U	11.000	10.000 U	10.000	10.000 U	10.000	47.000 U	47.000	NA	NA
BENZO(K)FLUORANTHENE	207-08-9	ug/l	12.000 U	12.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	NA	NA
HEXACHLOROBENZENE	118-74-1	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	NA	NA
ACENAPHTHYLENE	208-96-8	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	NA	NA
1,2,4-TRICHLOROBENZENE	120-82-1	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	NA	NA
BENZO(A)ANTHRACENE	56-55-3	ug/l	11.000 U	11.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	NA	NA
CHRYSENE	218-01-9	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	NA	NA
4-CHLORO-3-METHYLPHENOL	59-50-7	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	NA	NA
BIS(2-CHLISOPROPYL) ETHER	39638-32-9	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	NA	NA
2,6-DINITROTOLUENE	606-20-2	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	NA	NA
BENZO(A)PYRENE	50-32-8	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	NA	NA
2,4-DINITROPHENOL	51-28-5	ug/l	50.000 U	50.000	50.000 U	50.000	50.000 U	50.000	50.000 U	50.000	50.000 U	50.000	NA	NA
DIBENZO(A,H)ANTHRACENE	53-70-3	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	NA	NA
NITROBENZENE	98-95-3	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	NA	NA
3-NITROANILINE	99-09-2	ug/l	0.000 R	50.000	50.000 U	50.000	50.000 U	50.000	50.000 U	50.000	50.000 U	50.000	NA	NA
INDENO(1,2,3-CD)PYRENE	193-39-5	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	NA	NA
BENZOIC ACID	65-85-0	ug/l	50.000 UJ	50.000	50.000 U	50.000	50.000 U	50.000	50.000 U	50.000	50.000 U	50.000	NA	NA
2,4-DICHLOROPHENOL	120-83-2	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	NA	NA
1,3-DICHLOROBENZENE	541-73-1	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	NA	NA
4-CHLOROPHENYLPHENYL ETHER	7005-72-3	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	NA	NA
DIMETHYL PHTHALATE	131-11-3	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	NA	NA
BIS(2-CHLOROETHOXY) METHANE	111-91-1	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	NA	NA
ISOPHORONE	78-59-1	ug/l	10.000 U	10.000	11.000 U	11.000	2.000 J	10.000	10.000 U	10.000	10.000 U	10.000	NA	NA
PYRENE	129-00-0	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	NA	NA
DIBENZOFURAN	132-64-9	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	NA	NA
BENZO(G,H,I)PERYLENE	191-24-2	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	NA	NA
ANTHRACENE	120-12-7	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	NA	NA
DI-N-OCTYL PHTHALATE	117-84-0	ug/l	12.000 U	12.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	NA	NA
2,4-DINITROTOLUENE	121-14-2	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	NA	NA
DIETHYL PHTHALATE	84-66-2	ug/l	14.000 U	14.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	NA	NA

SAMPLING LOCATION

			LOCID --> GW-014-001		GW-603-001		GW-605-001		GW-605-002		GW-606-001		GW-609-001	
		Date sample taken -->	06/26/87		11/16/87		11/17/87		11/17/87		11/17/87		11/18/87	
SERIES CONTAMINANT NAME	CAS #	UNIT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT
PHENANTHRENE	85-01-8	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	NA	NA
N-NITROSODIPHENYLAMINE	86-30-6	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	NA	NA
ACENAPHTHENE	83-32-9	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	NA	NA
PENTACHLOROPHENOL	87-86-5	ug/l	50.000 U	50.000	55.000 U	55.000	50.000 U	50.000	50.000 U	50.000	50.000 U	50.000	NA	NA
4,6-DiNO2-2-Methylphenol	111-11-11	ug/l	50.000 U	50.000	50.000 U	50.000	50.000 U	50.000	50.000 U	50.000	50.000 U	50.000	NA	NA
2,4,5-TRICHLOROPHENOL	95-95-4	ug/l	50.000 U	50.000	50.000 U	50.000	50.000 U	50.000	50.000 U	50.000	50.000 U	50.000	NA	NA
2,4,6-TRICHLOROPHENOL	88-06-2	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	NA	NA
2-METHYLNAPHTHALENE	91-57-6	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	NA	NA
2-METHYLPHENOL	95-48-7	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	NA	NA
N-NITROSO-DIPROPYLAMINE	621-64-7	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	NA	NA
DI-N-BUTYL PHTHALATE	84-74-2	ug/l	10.000 U	10.000	11.000 U	11.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	NA	NA
2-NITROANILINE	88-74-4	ug/l	50.000 U	50.000	50.000 U	50.000	50.000 U	50.000	50.000 U	50.000	50.000 U	50.000	NA	NA
1,2-DICHLOROBENZENE	95-50-1	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	NA	NA
BUTYLBENZYLPHTHALATE	85-68-7	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	NA	NA
HEXACHLOROBUTADIENE	87-68-3	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	NA	NA
3,3-DICHLOROBENZIDINE	91-94-1	ug/l	28.000 U	28.000	20.000 U	20.000	20.000 U	20.000	20.000 U	20.000	20.000 U	20.000	NA	NA
HEXACHLOROCYCLOPENTADIENE	77-47-4	ug/l	14.000 U	14.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	NA	NA
2-CHLORONAPHTHALENE	91-58-7	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	NA	NA
NAPHTHALENE	91-20-3	ug/l	10.000 U	10.000	11.000 U	11.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	NA	NA
2-CHLOROPHENOL	95-57-8	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	NA	NA
FLUORENE	86-73-7	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	NA	NA
HEXACHLOROETHANE	67-72-1	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	NA	NA
2-NITROPHENOL	88-75-5	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	NA	NA
DISSOLVED METALS														
ALUMINUM (DISSOLVED)	7429-90-5D	ug/l	57.000 J	200.00	120.000 U	140.00	120.000 J	140.00	120.000 U	140.00	NA	NA	NA	NA
CADMIUM (DISSOLVED)	7440-43-9D	ug/l	3.000 U	3.000	22.500 UJ	22.500	29.300 J	4.000	28.600 J	4.000	NA	NA	NA	NA
MERCURY (DISSOLVED)	7439-97-6D	ug/l	3.200	0.100	0.200 U	0.200	0.200 U	0.200	0.200 U	0.200	NA	NA	NA	NA
VANADIUM (DISSOLVED)	7440-62-2D	ug/l	2.000 U	2.000	36.000 U	36.000	36.000 U	36.000	36.000 U	36.000	NA	NA	NA	NA
NICKEL (DISSOLVED)	7440-02-0D	ug/l	14.000 U	14.000	88.000	24.000	105.000	24.000	103.000	24.000	NA	NA	NA	NA
COPPER (DISSOLVED)	7440-50-8D	ug/l	7.800 J	25.000	18.600 B	11.000	25.000 B	11.000	23.000 J	11.000	NA	NA	NA	NA
POTASSIUM (DISSOLVED)	7440-09-7D	ug/l	273.000 J-E	5000.0	986000.000	1400.0	183000.000	1400.0	202000.000	1400.0	NA	NA	NA	NA
MAGNESIUM (DISSOLVED)	7439-95-4D	ug/l	47.000 J-E	5000.0	22723.000	1400.0	352000.000	1400.0	350000.000	1400.0	NA	NA	NA	NA
SELENIUM (DISSOLVED)	7782-49-2D	ug/l	0.000 R-S	5.000	20.000 U	20.000	20.000 U	20.000	20.000 U	20.000	NA	NA	NA	NA
BARIUM (DISSOLVED)	7440-39-3D	ug/l	9.500 J-E	200.00	360.000	70.000	1746.000	72.000	1708.000	70.000	NA	NA	NA	NA
SILVER (DISSOLVED)	7440-22-4D	ug/l	4.000 U	4.000	9.000 U	10.000	9.000 U	10.000	9.000 U	10.000	NA	NA	NA	NA
CHROMIUM (DISSOLVED)	7440-47-3D	ug/l	3.000 UJ-S	3.000	22.000 J	10.000	28.000 J	10.000	33.000 J	10.000	NA	NA	NA	NA
SODIUM (DISSOLVED)	7440-23-5D	ug/l	1410.000 J-E	5000.0	2370000.000	1500.0	2310000.000	1500.0	2420000.000	1500.0	NA	NA	NA	NA
IRON (DISSOLVED)	7439-89-6D	ug/l	43.000 J-E	100.00	277.000	60.000	6855.000	60.000	5547.000	60.000	NA	NA	NA	NA
THALLIUM (DISSOLVED)	7440-28-0D	ug/l	2.000 UJ-S	2.000	20.000 U	20.000	2.000 U	10.000	20.000 U	20.000	NA	NA	NA	NA
ZINC (DISSOLVED)	7440-66-6D	ug/l	9.600 J	20.000	295.000	15.000	102.800	15.000	141.000	15.000	NA	NA	NA	NA
MANGANESE (DISSOLVED)	7439-96-5D	ug/l	1.100 J-E	15.000	775.000	11.000	1773.000	11.000	1742.000	11.000	NA	NA	NA	NA
BERYLLIUM (DISSOLVED)	7440-41-7D	ug/l	2.000 UJ-S	2.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	NA	NA	NA	NA
COBALT (DISSOLVED)	7440-48-4D	ug/l	3.000 UJ-S	3.000	97.000	30.000	156.000	30.000	151.000	30.000	NA	NA	NA	NA
LEAD (DISSOLVED)	7439-92-1D	ug/l	2.000 U	2.000	26.500	5.000	6.900	5.000	8.500	5.000	NA	NA	NA	NA
ARSENIC (DISSOLVED)	7440-38-2D	ug/l	3.000 U	3.000	3.400 B	10.000	6.700 J	10.000	6.400 J	10.000	NA	NA	NA	NA
CALCIUM (DISSOLVED)	7440-70-2D	ug/l	686.000 J	5000.0	103000.000	1900.0	31800.000	2640.0	309000.000	1900.0	NA	NA	NA	NA
ANTIMONY (DISSOLVED)	7440-36-0D	ug/l	60.000 UJ-L	60.000	20.000 U	60.000	20.000 U	60.000	20.000 U	60.000	NA	NA	NA	NA

SERIES / CONTAMINANT NAME	CAS #	UNIT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT
			SAMPLING LOCATION											
		LOCID -->	GW-014-001		GW-603-001		GW-605-001		GW-605-002		GW-606-001		GW-609-001	
		Date sample taken -->	06/26/87		11/16/87		11/17/87		11/17/87		11/17/87		11/18/87	
CYANIDE (DISSOLVED)	74-90-8	ug/l	10.000 UJ-H	10.000	5.000 U	10.000	14.400	10.000	15.800	10.000	NA	NA	NA	NA
PESTICIDES														
METHOXYCHLOR	72-43-5	ug/l	0.500 U	0.500	0.500 U	0.500	0.500 U	0.500	0.500 U	0.500	0.500 U	0.500	NA	NA
4,4-DDT	50-29-3	ug/l	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100	NA	NA
HEPTACHLOR EPOXIDE	1024-57-3	ug/l	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050	NA	NA
4,4-DDD	72-54-8	ug/l	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100	NA	NA
PCB-1254	11097-69-1	ug/l	1.000 U	1.000	1.000 U	1.000	1.000 U	1.000	1.000 U	1.000	1.000 U	1.000	NA	NA
PCB-1221	11104-28-2	ug/l	0.500 U	0.500	0.500 U	0.500	0.500 U	0.500	0.500 U	0.500	0.500 U	0.500	NA	NA
PCB-1232	11141-16-5	ug/l	0.500 U	0.500	0.500 U	0.500	0.500 U	0.500	0.500 U	0.500	0.500 U	0.500	NA	NA
4,4-DDE	72-55-9	ug/l	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100	NA	NA
PCB-1016	12674-11-2	ug/l	0.500 U	0.500	0.500 U	0.500	0.500 U	0.500	0.500 U	0.500	0.500 U	0.500	NA	NA
ALDRIN	309-00-2	ug/l	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050	NA	NA
ALPHA-BHC	319-84-6	ug/l	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050	NA	NA
ENDOSULFAN II	33213-65-9	ug/l	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100	NA	NA
DELTA-BHC	319-86-8	ug/l	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050	NA	NA
PCB-1260	11096-82-5	ug/l	1.000 U	1.000	1.000 U	1.000	1.000 U	1.000	1.000 U	1.000	1.000 U	1.000	NA	NA
ENDRIN KETONE	53494-70-5	ug/l	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100	NA	NA
PCB-1248	12672-29-6	ug/l	0.500 U	0.500	0.500 U	0.500	0.500 U	0.500	0.500 U	0.500	0.500 U	0.500	NA	NA
GAMMA-BHC (LINDANE)	58-89-9	ug/l	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050	NA	NA
ENDRIN	72-20-8	ug/l	0.080 J	0.100	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100	NA	NA
PCB-1242	53469-21-9	ug/l	0.500 U	0.500	0.500 U	0.500	0.500 U	0.500	0.500 U	0.500	0.500 U	0.500	NA	NA
CHLORDANE	57-74-9	ug/l	0.500 U	0.500	0.500 U	0.500	0.500 U	0.500	0.500 U	0.500	0.500 U	0.500	NA	NA
DIELDRIN	60-57-1	ug/l	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100	NA	NA
BETA-BHC	319-85-7	ug/l	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050	NA	NA
HEPTACHLOR	76-44-8	ug/l	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050	NA	NA
TOXAPHENE	8001-35-2	ug/l	1.000 U	1.000	1.000 U	1.000	1.000 U	1.000	1.000 U	1.000	1.000 U	1.000	NA	NA
ENDOSULFAN I	959-98-8	ug/l	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050	0.050 U	0.050	NA	NA
ENDOSULFAN SULFATE	1031-07-8	ug/l	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100	0.100 U	0.100	NA	NA
VOLATILES														
STYRENE	100-42-5	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
CIS-1,3-DICHLOROPROPENE	10061-01-5	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
ETHYLBENZENE	100-41-4	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
1,1,2,2-TETRACHLOROETHANE	79-34-5	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
DIBROMOCHLOROMETHANE	124-48-1	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
CHLOROETHANE	75-00-3	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
VINYL ACETATE	108-05-4	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
TOLUENE	108-88-3	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
METHYLENE CHLORIDE (DICHLOROMETHANE)	75-09-2	ug/l	5.000 U	5.000	5.000 U	5.000	50.000 U	50.000	50.000 U	50.000	5.000 U	5.000	5.000 U	5.000
1,2-DICHLOROETHANE	107-06-2	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
CHLOROBENZENE	108-90-7	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
BROMOFORM	75-25-2	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
CARBON TETRACHLORIDE	56-23-5	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
ACETONE	67-64-1	ug/l	12.000 J	10.000	10.000 U	10.000	160.000 U	160.00	100.000 U	100.00	10.000 U	10.000	10.000 U	10.000
1,1-DICHLOROETHANE	75-34-3	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
BENZENE	71-43-2	ug/l	5.000 U	5.000	5.000 U	5.000	50.000 U	50.000	50.000 U	50.000	5.000 U	5.000	5.000 U	5.000
TRICHLOROETHENE	79-01-6	ug/l	5.000 U	5.000	5.000 U	5.000	50.000 U	50.000	50.000 U	50.000	5.000 U	5.000	5.000 U	5.000
[illegible]	78-87-5	[illegible]	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000

			SAMPLING LOCATION											
		LOCID -->	GW-014-001		GW-G03-001		GW-G05-001		GW-G05-002		GW-G06-001		GW-G09-001	
		Date sample taken -->	06/26/87		11/16/87		11/17/87		11/17/87		11/17/87		11/18/87	
SERIES CONTAMINANT NAME	CAS #	UNIT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT
TETRACHLOROETHENE	127-18-4	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
2-CHLOROETHYLVINYLETHER	110-75-8	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
1,1,1-TRICHLOROETHANE	71-55-6	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
TRANS-1,2-DICHLOROETHENE	156-60-5	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
CHLOROFORM	67-66-3	ug/l	5.000 U	5.000	5.000 U	5.000	50.000 U	50.000	50.000 U	50.000	5.000 U	5.000	1.000 J	5.000
VINYL CHLORIDE	75-01-4	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
BROMOMETHANE (METHYL BROMIDE)	74-83-9	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
4-METHYL-2-PENTANONE	108-10-1	ug/l	11.000 U	11.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
2-HEXANONE	591-78-6	ug/l	17.000 U	17.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
1,1,2-TRICHLOROETHANE	79-00-5	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
TOTAL XYLENES	1330-20-7	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
BROMODICHLOROMETHANE	75-27-4	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
1,1-DICHLOROETHENE	75-35-4	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
2-BUTANONE	78-93-3	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
CHLOROMETHANE (METHYL CHLORIDE)	74-87-3	ug/l	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000	10.000 U	10.000
CARBON DISULFIDE	75-15-0	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000
TRANS-1,3-DICHLOROPROPENE	10061-02-6	ug/l	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000	5.000 U	5.000

SAMPLING LOCATION

LOCID --> GW-611-001
Date sample taken --> 11/16/87

SERIES CONTAMINANT NAME	CAS #	UNIT	READING	DETECT
ASBESTOS				
BASE NEUTAL ACID EXTRACTABLE				
4-NITROANILINE	100-01-6	ug/l	50.000 U	50.000
PHENOL	108-95-2	ug/l	10.000 U	10.000
4-NITROPHENOL	100-02-7	ug/l	50.000 U	50.000
BIS(2-CHLOROETHYL) ETHER	111-44-4	ug/l	10.000 U	10.000
4-BROMOPHENYLPHENYL ETHER	101-55-3	ug/l	10.000 U	10.000
BENZO(B)FLUORANTHENE	205-99-2	ug/l	10.000 U	10.000
4-METHYLPHENOL	106-44-5	ug/l	3.000 J	10.000
4-CHLOROANILINE	106-47-8	ug/l	10.000 U	10.000
BENZYL ALCOHOL	100-51-6	ug/l	10.000 U	10.000
2,4-DIMETHYLPHENOL	105-67-9	ug/l	10.000 U	10.000
1,4-DICHLOROBENZENE	106-46-7	ug/l	10.000 U	10.000
FLUORANTHENE	206-44-0	ug/l	10.000 U	10.000
BIS(2-ETHYLHEXYL) PHTHALATE	117-81-7	ug/l	10.000 U	10.000
BENZO(K)FLUORANTHENE	207-08-9	ug/l	10.000 U	10.000
HEXACHLOROBENZENE	118-74-1	ug/l	10.000 U	10.000
ACENAPHTHYLENE	208-96-8	ug/l	10.000 U	10.000
1,2,4-TRICHLOROBENZENE	120-82-1	ug/l	10.000 U	10.000
BENZO(A)ANTHRACENE	56-55-3	ug/l	10.000 U	10.000
CHRYSENE	218-01-9	ug/l	10.000 U	10.000
4-CHLORO-3-METHYLPHENOL	59-50-7	ug/l	10.000 U	10.000
BIS(2-CHLISOPROPYL) ETHER	39638-32-9	ug/l	10.000 U	10.000
2,6-DINITROTOLUENE	606-20-2	ug/l	10.000 U	10.000
BENZO(A)PYRENE	50-32-8	ug/l	10.000 U	10.000
2,4-DINITROPHENOL	51-28-5	ug/l	50.000 U	50.000
DIBENZO(A,H)ANTHRACENE	53-70-3	ug/l	10.000 U	10.000
NITROBENZENE	98-95-3	ug/l	10.000 U	10.000
3-NITROANILINE	99-09-2	ug/l	50.000 U	50.000
INDENO(1,2,3-CD)PYRENE	193-39-5	ug/l	10.000 U	10.000
BENZOIC ACID	65-85-0	ug/l	50.000 U	50.000
2,4-DICHLOROPHENOL	120-83-2	ug/l	10.000 U	10.000
1,3-DICHLOROBENZENE	541-73-1	ug/l	10.000 U	10.000
4-CHLOROPHENYLPHENYL ETHER	7005-72-3	ug/l	10.000 U	10.000
DIMETHYL PHTHALATE	131-11-3	ug/l	10.000 U	10.000
BIS(2-CHLOROETHOXY) METHANE	111-91-1	ug/l	10.000 U	10.000
ISOPHORONE	78-59-1	ug/l	10.000 U	10.000
PYRENE	129-00-0	ug/l	10.000 U	10.000
DIBENZOFURAN	132-64-9	ug/l	10.000 U	10.000
BENZO(G,H,I)PERYLENE	191-24-2	ug/l	10.000 U	10.000
ANTHRACENE	120-12-7	ug/l	10.000 U	10.000
DI-N-OCTYL PHTHALATE	117-84-0	ug/l	10.000 U	10.000
2,4-DINITROTOLUENE	121-14-2	ug/l	10.000 U	10.000
DIETHYL PHTHALATE	84-66-2	ug/l	10.000 U	10.000
PHENANTHRENE	85-01-8	ug/l	10.000 U	10.000
N-NITROSODIPHENYLAMINE	86-30-6	ug/l	10.000 U	10.000
ACENAPHTHENE	83-32-9	ug/l	10.000 U	10.000

SAMPLING LOCATION

LOCID --> GW-611-001
Date sample taken --> 11/16/87

SERIES CONTAMINANT NAME	CAS #	UNIT	READING	DETECT
PENTACHLOROPHENOL	87-86-5	ug/l	3.000 J	50.000
4,6-DiNO2-2-Methylphenol	111-11-11	ug/l	50.000 U	50.000
2,4,5-TRICHLOROPHENOL	95-95-4	ug/l	50.000 U	50.000
2,4,6-TRICHLOROPHENOL	88-06-2	ug/l	10.000 U	10.000
2-METHYLNAPHTHALENE	91-57-6	ug/l	10.000 U	10.000
2-METHYLPHENOL	95-48-7	ug/l	10.000 U	10.000
N-NITROSO-DIPROPYLAMINE	621-64-7	ug/l	10.000 U	10.000
DI-N-BUTYL PHTHALATE	84-74-2	ug/l	12.000 U	12.000
2-NITROANILINE	88-74-4	ug/l	50.000 U	50.000
1,2-DICHLOROBENZENE	95-50-1	ug/l	10.000 U	10.000
BUTYLBENZYLPHTHALATE	85-68-7	ug/l	10.000 U	10.000
HEXACHLOROBUTADIENE	87-68-3	ug/l	10.000 U	10.000
3,3-DICHLOROBENZIDINE	91-94-1	ug/l	20.000 U	20.000
HEXACHLOROCYCLOPENTADIENE	77-47-4	ug/l	10.000 U	10.000
2-CHLORONAPHTHALENE	91-58-7	ug/l	10.000 U	10.000
NAPHTHALENE	91-20-3	ug/l	1.000 J	10.000
2-CHLOROPHENOL	95-57-8	ug/l	10.000 U	10.000
FLUORENE	86-73-7	ug/l	10.000 U	10.000
HEXACHLOROETHANE	67-72-1	ug/l	10.000 U	10.000
2-NITROPHENOL	88-75-5	ug/l	10.000 U	10.000
DISSOLVED METALS				
ALUMINUM (DISSOLVED)	7429-90-5D	ug/l	120.000 U	140.00
CADMIUM (DISSOLVED)	7440-43-9D	ug/l	33.400 J	4.000
MERCURY (DISSOLVED)	7439-97-6D	ug/l	0.200 U	0.200
VANADIUM (DISSOLVED)	7440-62-2D	ug/l	36.000 U	36.000
NICKEL (DISSOLVED)	7440-02-0D	ug/l	115.000	24.000
COPPER (DISSOLVED)	7440-50-8D	ug/l	27.900	11.000
POTASSIUM (DISSOLVED)	7440-09-7D	ug/l	267000.000	1400.0
MAGNESIUM (DISSOLVED)	7439-95-4D	ug/l	366000.000	1400.0
SELENIUM (DISSOLVED)	7782-49-2D	ug/l	20.000 U	20.000
BARIUM (DISSOLVED)	7440-39-3D	ug/l	1940.000	70.000
SILVER (DISSOLVED)	7440-22-4D	ug/l	9.000 U	10.000
CHROMIUM (DISSOLVED)	7440-47-3D	ug/l	33.000 J	10.000
SODIUM (DISSOLVED)	7440-23-5D	ug/l	2540000.000	1500.0
IRON (DISSOLVED)	7439-89-6D	ug/l	11100.000	60.000
THALLIUM (DISSOLVED)	7440-28-0D	ug/l	20.000 U	20.000
ZINC (DISSOLVED)	7440-66-6D	ug/l	290.000	15.000
MANGANESE (DISSOLVED)	7439-96-5D	ug/l	1810.000	11.000
BERYLLIUM (DISSOLVED)	7440-41-7D	ug/l	5.000 U	5.000
COBALT (DISSOLVED)	7440-48-4D	ug/l	174.000	30.000
LEAD (DISSOLVED)	7439-92-1D	ug/l	18.500	5.000
ARSENIC (DISSOLVED)	7440-38-2D	ug/l	14.200	10.000
CALCIUM (DISSOLVED)	7440-70-2D	ug/l	534000.000	1900.0
ANTIMONY (DISSOLVED)	7440-36-0D	ug/l	20.000 U	60.000
CYANIDE (DISSOLVED)	74-90-8	ug/l	21.700	10.000
PESTICIDES				
METHOXYCHLOR	72-43-5	ug/l	0.500 U	0.500

SAMPLING LOCATION

LOCID --> GW-611-001
Date sample taken --> 11/16/87

SERIES CONTAMINANT NAME	CAS #	UNIT	READING	DETECT
4,4-DDT	50-29-3	ug/l	0.100 U	0.100
HEPTACHLOR EPOXIDE	1024-57-3	ug/l	0.050 U	0.050
4,4-DDD	72-54-8	ug/l	0.100 U	0.100
PCB-1254	11097-69-1	ug/l	1.000 U	1.000
PCB-1221	11104-28-2	ug/l	0.500 U	0.500
PCB-1232	11141-16-5	ug/l	0.500 U	0.500
4,4-DDE	72-55-9	ug/l	0.100 U	0.100
PCB-1016	12674-11-2	ug/l	0.500 U	0.500
ALDRIN	309-00-2	ug/l	0.050 U	0.050
ALPHA-BHC	319-84-6	ug/l	0.050 U	0.050
ENDOSULFAN II	33213-65-9	ug/l	0.100 U	0.100
DELTA-BHC	319-86-8	ug/l	0.050 U	0.050
PCB-1260	11096-82-5	ug/l	1.000 U	1.000
ENDRIN KETONE	53494-70-5	ug/l	0.100 U	0.100
PCB-1248	12672-29-6	ug/l	0.500 U	0.500
GAMMA-BHC (LINDANE)	58-89-9	ug/l	0.050 U	0.050
ENDRIN	72-20-8	ug/l	0.100 U	0.100
PCB-1242	53469-21-9	ug/l	0.500 U	0.500
CHLORDANE	57-74-9	ug/l	0.500 U	0.500
DIELDRIN	60-57-1	ug/l	0.100 U	0.100
BETA-BHC	319-85-7	ug/l	0.050 U	0.050
HEPTACHLOR	76-44-8	ug/l	0.050 U	0.050
TOXAPHENE	8001-35-2	ug/l	1.000 U	1.000
ENDOSULFAN I	959-98-8	ug/l	0.050 U	0.050
ENDOSULFAN SULFATE	1031-07-8	ug/l	0.100 U	0.100
VOLATILES				
STYRENE	100-42-5	ug/l	5.000 U	5.000
CIS-1,3-DICHLOROPROPENE	10061-01-5	ug/l	5.000 U	5.000
ETHYLBENZENE	100-41-4	ug/l	5.000 U	5.000
1,1,2,2-TETRACHLOROETHANE	79-34-5	ug/l	5.000 U	5.000
DIBROMOCHLOROMETHANE	124-48-1	ug/l	5.000 U	5.000
CHLOROETHANE	75-00-3	ug/l	10.000 U	10.000
VINYL ACETATE	108-05-4	ug/l	10.000 U	10.000
TOLUENE	108-88-3	ug/l	5.000 U	5.000
METHYLENE CHLORIDE (DICHLOROMETHANE)	75-09-2	ug/l	10.000 U	10.000
1,2-DICHLOROETHANE	107-06-2	ug/l	5.000 U	5.000
CHLOROBENZENE	108-90-7	ug/l	5.000 U	5.000
BROMOFORM	75-25-2	ug/l	5.000 U	5.000
CARBON TETRACHLORIDE	56-23-5	ug/l	5.000 U	5.000
ACETONE	67-64-1	ug/l	34.000 U	34.000
1,1-DICHLOROETHANE	75-34-3	ug/l	5.000 U	5.000
BENZENE	71-43-2	ug/l	10.000 U	10.000
TRICHLOROETHENE	79-01-6	ug/l	320.000	5.000
1,2-DICHLOROPROPANE	78-87-5	ug/l	5.000 U	5.000
TETRACHLOROETHENE	127-18-4	ug/l	5.000 U	5.000
2-CHLOROETHYLVINYLETHER	110-75-8	ug/l	10.000 U	10.000
1,1,1-TRICHLOROETHANE	71-55-6	ug/l	5.000 U	5.000

SAMPLING LOCATION

LOCID --> GW-G11-001
Date sample taken --> 11/16/87

SERIES CONTAMINANT NAME	CAS #	UNIT	READING	DETECT
TRANS-1,2-DICHLOROETHENE	156-60-5	ug/l	5.000 U	5.000
CHLOROFORM	67-66-3	ug/l	10.000 U	10.000
VINYL CHLORIDE	75-01-4	ug/l	10.000 U	10.000
BROMOMETHANE (METHYL BROMIDE)	74-83-9	ug/l	10.000 U	10.000
4-METHYL-2-PENTANONE	108-10-1	ug/l	10.000 U	10.000
2-HEXANONE	591-78-6	ug/l	10.000 U	10.000
1,1,2-TRICHLOROETHANE	79-00-5	ug/l	5.000 U	5.000
TOTAL XYLENES	1330-20-7	ug/l	5.000 U	5.000
BROMODICHLOROMETHANE	75-27-4	ug/l	5.000 U	5.000
1,1-DICHLOROETHENE	75-35-4	ug/l	5.000 U	5.000
2-BUTANONE	78-93-3	ug/l	10.000 U	10.000
CHLOROMETHANE (METHYL CHLORIDE)	74-87-3	ug/l	10.000 U	10.000
CARBON DISULFIDE	75-15-0	ug/l	5.000 U	5.000
TRANS-1,3-DICHLOROPROPENE	10061-02-6	ug/l	5.000 U	5.000

AIR - PHASE I ASBESTOS

SOUTH BAY ASBESTOS
AIR ASBESTOS ANALYTICAL RESULTS
FIBERS AND STRUCTURES
SITE # 1

SAMPLE DESIGNATION / SAMPLING DATE		AQ-01A-003 08/03/87		AQ-01A-004 08/06/87		AQ-01A-005 08/09/87		AQ-01A-009 08/18/87		AQ-01A-010E 08/19/87		AQ-01A-015 08/30/87		AQ-01A-017 09/02/87		AQ-01A-021 09/11/87	
PARAMETER	UNITS	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT
FLOW VOLUME	Liters	2,547		2,537		2,539		2,538		3,236		2,545		2,546		2,542	
CHRYSOTILE ASBESTOS STRUCTURES	#/cc	0.0037 UJ	0.00370	0.0028	0.00092	0.0020 UJ	0.00200	0.0021 UJ	0.00210	0.0000 U	0.00035	0.0020 UJ	0.00200	0.00500 UJ	0.00500	0.00000 U	0.00050
AMPHIBOLE ASBESTOS STRUCTURES	#/cc	0.0000 U	0.00370	0.0000 U	0.00092	0.0000 U	0.00200	0.0000 U	0.00210	0.0000 U	0.00035	0.0000 U	0.00200	0.00000 U	0.00500	0.00000 U	0.00050
TOTAL ASBESTOS STRUCTURES	#/cc	0.0037 UJ	0.00370	0.0028	0.00092	0.0020 UJ	0.00200	0.0021 UJ	0.00210	0.0000 U	0.00035	0.0020 UJ	0.00200	0.00500 UJ	0.00500	0.00000 U	0.00050
# STRUCTURES COUNTED		4		3		2		2		0		2		5		0	
CHRYSOTILE ASBESTOS FIBERS	#/cc	0.0028 UJ	0.00280	0.0028	0.00092	0.0010 UJ	0.00100	0.0000 U	0.00102	0.0000 U	0.00035	0.0010 UJ	0.00100	0.00100 UJ	0.00100	0.00000 U	0.00050
AMPHIBOLE ASBESTOS FIBERS	#/cc	0.0000 U	0.00280	0.0000 U	0.00092	0.0000 U	0.00100	0.0000 U	0.00102	0.0000 U	0.00035	0.0000 U	0.00100	0.00000 U	0.00100	0.00000 U	0.00050
TOTAL ASBESTOS FIBERS	#/cc	0.0028 UJ	0.00280	0.0028	0.00092	0.0010 UJ	0.00100	0.0000 U	0.00102	0.0000 U	0.00035	0.0010 UJ	0.00100	0.00100 UJ	0.00100	0.00000 U	0.00050
# FIBERS COUNTED		3		3		1		0		0		1		1		0	
"PCM EQUIVALENT"	#/cc	0.0009 U		0.0000 U		0.0000 UJ		0.0000 UJ		0.0000 U		0.0000 UJ		0.00100 UJ		0.00000 U	
PCM DATA	#/cc	N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A	

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SOUTH BAY ASBESTOS
AIR ASBESTOS ANALYTICAL RESULTS
FIBERS AND STRUCTURES
SITE # 1

SAMPLE DESIGNATION / SAMPLING DATE		AQ-01A-025 09/17/87		AQ-01A-026 09/20/87		AQ-01A-029E 09/24/87		AQ-01A-030E 09/25/87		AQ-01A-035 10/05/87		AQ-01A-036E 10/07/87		AQ-01A-038E 10/09/87		AQ-01A-039 10/11/87	
PARAMETER	UNITS	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT
FLOW VOLUME	Liters	2,541		2,541		3,354		3,389		2,542		1,765		1,701		2,547	
CHRYSOTILE ASBESTOS STRUCTURES	#/cc	0.00000 U	0.00050	0.00000 U	0.00050	0.00000 U	0.00040	0.00160 UJ	0.00160	0.00000 U	0.00050	0.00000 U	0.00075	0.00000 U	0.00080	0.00000 U	0.00050
AMPHIBOLE ASBESTOS STRUCTURES	#/cc	0.00000 U	0.00050	0.00000 U	0.00050	0.00000 U	0.00040	0.00000 U	0.00160	0.00000 U	0.00050	0.00000 U	0.00075	0.00000 U	0.00080	0.00000 U	0.00050
TOTAL ASBESTOS STRUCTURES	#/cc	0.00000 U	0.00050	0.00000 U	0.00050	0.00000 U	0.00040	0.00160 UJ	0.00160	0.00000 U	0.00050	0.00000 U	0.00075	0.00000 U	0.00080	0.00000 U	0.00050
# STRUCTURES COUNTED		0		0		0		2		0		0		0		0	
CHRYSOTILE ASBESTOS FIBERS	#/cc	0.00000 U	0.00050	0.00000 U	0.00050	0.00000 U	0.00040	0.00160 UJ	0.00160	0.00000 U	0.00050	0.00000 U	0.00075	0.00000 U	0.00080	0.00000 U	0.00050
AMPHIBOLE ASBESTOS FIBERS	#/cc	0.00000 U	0.00050	0.00000 U	0.00050	0.00000 U	0.00040	0.00000 U	0.00160	0.00000 U	0.00050	0.00000 U	0.00075	0.00000 U	0.00080	0.00000 U	0.00050
TOTAL ASBESTOS FIBERS	#/cc	0.00000 U	0.00050	0.00000 U	0.00050	0.00000 U	0.00040	0.00160 UJ	0.00160	0.00000 U	0.00050	0.00000 U	0.00075	0.00000 U	0.00080	0.00000 U	0.00050
# FIBERS COUNTED		0		0		0		2		0		0		0		0	
"PCM EQUIVALENT"	#/cc	0.00000 U		0.00000 U		0.00000 U		0.00000 UJ		0.00000 U		0.00000 U		0.00000 U		0.00000 U	
PCM DATA	#/cc	N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A	

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SOUTH BAY ASBESTOS
AIR ASBESTOS ANALYTICAL RESULTS
FIBERS AND STRUCTURES
SITE # 1

SAMPLE DESIGNATION		AQ-01A-040		AQ-01A-041E		AQ-01A-042E		AQ-01A-043		AQ-01A-045E		AQ-01A-049E		AQ-01B-004		AQ-01G-010EFB	
SAMPLING DATE		10/14/87		10/15/87		10/16/87		10/17/87		10/22/87		10/31/87		08/06/87		08/19/87	
PARAMETER	UNITS	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT
FLOW VOLUME	liters	3,069		1,718		1,744		2,544		1,267		1,754		3,992		N/A	
CHRYSOTILE ASBESTOS STRUCTURES	#/cc	0.00000 U	0.00050	0.00460 UJ	0.00460	0.00000 U	0.00150	0.00000 U	0.00050	0.00400 UJ	0.00400	0.00000 U	0.00200	0.00240 UJ	0.00240	0.00000 U	0.00000
AMPHIBOLE ASBESTOS STRUCTURES	#/cc	0.00000 U	0.00050	0.00000 U	0.00460	0.00150 UJ	0.00150	0.00000 U	0.00050	0.00000 U	0.00400	0.00200 UJ	0.00200	0.00000 U	0.00240	0.00000 U	0.00000
TOTAL ASBESTOS STRUCTURES	#/cc	0.00000 U	0.00050	0.00460 UJ	0.00460	0.00150 UJ	0.00150	0.00000 U	0.00050	0.00400 UJ	0.00400	0.00200 UJ	0.00200	0.00240 UJ	0.00240	0.00000 U	0.00000
# STRUCTURES COUNTED		0		3		1		0		2		1		4		0	
CHRYSOTILE ASBESTOS FIBERS	#/cc	0.00000 U	0.00050	0.00460 UJ	0.00460	0.00000 U	0.00150	0.00000 U	0.00050	0.00200 UJ	0.00200	0.00000 U	0.00200	0.00000 U	0.00030	0.00000 U	0.00000
AMPHIBOLE ASBESTOS FIBERS	#/cc	0.00000 U	0.00050	0.00000 U	0.00460	0.00150 UJ	0.00150	0.00000 U	0.00050	0.00000 U	0.00200	0.00200 UJ	0.00200	0.00000 U	0.00030	0.00000 U	0.00000
TOTAL ASBESTOS FIBERS	#/cc	0.00000 U	0.00050	0.00460 UJ	0.00460	0.00150 UJ	0.00150	0.00000 U	0.00050	0.00200 UJ	0.00200	0.00200 UJ	0.00200	0.00000 U	0.00030	0.00000 U	0.00000
# FIBERS COUNTED		0		3		1		0		1		1		0		0	
"PCM EQUIVALENT"	#/cc	0.00000 U		0.00000 UJ		0.00000 UJ		0.00000 U		0.00000 UJ		0.00000 UJ		0.00000 U		0.00000 U	
PCM DATA	#/cc	N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A	

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SOUTH BAY ASBESTOS
AIR ASBESTOS ANALYTICAL RESULTS
FIBERS AND STRUCTURES
SITE # 1

SAMPLE DESIGNATION		AQ-016-024EFB		AQ-016-041EFB	
SAMPLING DATE		09/16/87		10/15/87	
PARAMETER	UNITS	READING	DETECT	READING	DETECT
FLOW VOLUME	Liters	N/A		N/A	
CHRYSOTILE ASBESTOS STRUCTURES	#/cc	0.00000 U	0.00000	0.00000 U	0.00320
AMPHIBOLE ASBESTOS STRUCTURES	#/cc	0.00000 U	0.00000	0.00320 UJ	0.00320
TOTAL ASBESTOS STRUCTURES	#/cc	0.00000 U	0.00000	0.00320 UJ	0.00320
# STRUCTURES COUNTED		0		2	
CHRYSOTILE ASBESTOS FIBERS	#/cc	0.00000 U	0.00000	0.00000 U	0.00320
AMPHIBOLE ASBESTOS FIBERS	#/cc	0.00000 U	0.00000	0.00320 UJ	0.00320
TOTAL ASBESTOS FIBERS	#/cc	0.00000 U	0.00000	0.00320 UJ	0.00320
# FIBERS COUNTED		0		2	
"PCM EQUIVALENT"	#/cc	0.00000 U		0.00000 UJ	
PCM DATA	#/cc	N/A		N/A	

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SOUTH BAY ASBESTOS
AIR ASBESTOS ANALYTICAL RESULTS
FIBERS AND STRUCTURES
SITE # 2

SAMPLE DESIGNATION		AQ-02A-003		AQ-02A-004		AQ-02A-005		AQ-02A-009		AQ-02A-010E		AQ-02A-015		AQ-02A-017		AQ-02A-021	
SAMPLING DATE		08/03/87		08/06/87		08/09/87		08/18/87		08/19/87		08/30/87		09/02/87		09/11/87	
PARAMETER	UNITS	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT
FLOW VOLUME	Liters	3,070		3,073		3,069		3,069		3,153		3,071		3,073		3,066	
CHRYSOTILE ASBESTOS STRUCTURES	#/cc	0.00310 UJ	0.00310	0.00700	0.00076	0.00170 UJ	0.00170	0.00000 U	0.00045	0.00830	0.00074	0.00340 UJ	0.00340	0.00000 U	0.00045	0.00000 U	0.00045
AMPHIBOLE ASBESTOS STRUCTURES	#/cc	0.00000 U	0.00310	0.00080	0.00076	0.00000 U	0.00170	0.00000 U	0.00045	0.00080	0.00074	0.00000 U	0.00340	0.00000 U	0.00045	0.00000 U	0.00045
TOTAL ASBESTOS STRUCTURES	#/cc	0.00310 UJ	0.00310	0.00780	0.00076	0.00170 UJ	0.00170	0.00000 U	0.00045	0.00900	0.00074	0.00340 UJ	0.00340	0.00000 U	0.00045	0.00000 U	0.00045
# STRUCTURES COUNTED		4		10		2		0		12		4		0		0	
CHRYSOTILE ASBESTOS FIBERS	#/cc	0.00310 UJ	0.00310	0.00620	0.00076	0.00090 UJ	0.00090	0.00000 U	0.00045	0.00450	0.00074	0.00090 UJ	0.00090	0.00000 U	0.00045	0.00000 U	0.00045
AMPHIBOLE ASBESTOS FIBERS	#/cc	0.00000 U	0.00310	0.00080	0.00076	0.00000 U	0.00090	0.00000 U	0.00045	0.00080	0.00074	0.00000 U	0.00090	0.00000 U	0.00045	0.00000 U	0.00045
TOTAL ASBESTOS FIBERS	#/cc	0.00310 UJ	0.00310	0.00700	0.00076	0.00090 UJ	0.00090	0.00000 U	0.00045	0.00530	0.00074	0.00090 UJ	0.00090	0.00000 U	0.00045	0.00000 U	0.00045
# FIBERS COUNTED		4		9		1		0		7		1		0		0	
"PCM EQUIVALENT"	#/cc	0.00080 UJ		0.00000 U		0.00090 UJ		0.00000 U		0.00230		0.00000 UJ		0.00000 U		0.00000 U	
PCM DATA	#/cc	N/A		0.00120	0.00020	N/A		N/A		0.00130	0.00020	N/A		N/A		N/A	

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SOUTH BAY ASBESTOS
AIR ASBESTOS ANALYTICAL RESULTS
FIBERS AND STRUCTURES
SITE # 2

SAMPLE DESIGNATION / SAMPLING DATE		AQ-02A-023E 09/15/87		AQ-02A-025 09/17/87		AQ-02A-026 09/20/87		AQ-02A-029E 09/24/87		AQ-02A-035 10/05/87		AQ-02A-036E 10/07/87		AQ-02A-038E 10/09/87		AQ-02A-039 10/11/87	
PARAMETER	UNITS	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT
FLOW VOLUME	Liters	2,446		3,072		3,077		3,311		3,069		1,817		1,701		3,074	
CHRYSOTILE ASBESTOS STRUCTURES	#/cc	0.0000 U	0.00055	0.0009 UJ	0.00090	0.0000 U	0.00045	0.0024 UJ	0.00024	0.0052 UJ	0.00520	0.0090 UJ	0.00900	0.0010 UJ	0.00100	0.0000 U	0.00045
AMPHIBOLE ASBESTOS STRUCTURES	#/cc	0.0000 U	0.00055	0.0000 U	0.00090	0.0000 U	0.00045	0.0000 U	0.00240	0.0000 U	0.00520	0.0000 U	0.00900	0.0000 U	0.00100	0.0000 U	0.00045
TOTAL ASBESTOS STRUCTURES	#/cc	0.0000 U	0.00055	0.0009 UJ	0.00090	0.0000 U	0.00045	0.0024 UJ	0.00024	0.0052 UJ	0.00520	0.0090 UJ	0.00900	0.0010 UJ	0.00100	0.0000 U	0.00045
# STRUCTURES COUNTED		0		1		0		3		6		6		1		0	
CHRYSOTILE ASBESTOS FIBERS	#/cc	0.0000 U	0.00055	0.0000 U	0.00045	0.0000 U	0.00045	0.0024 UJ	0.00024	0.0000 U	0.00045	0.0060 UJ	0.00600	0.0000 U	0.00075	0.0000 U	0.00045
AMPHIBOLE ASBESTOS FIBERS	#/cc	0.0000 U	0.00055	0.0000 U	0.00045	0.0000 U	0.00045	0.0000 U	0.00240	0.0000 U	0.00045	0.0000 U	0.00600	0.0000 U	0.00075	0.0000 U	0.00045
TOTAL ASBESTOS FIBERS	#/cc	0.0000 U	0.00055	0.0000 U	0.00045	0.0000 U	0.00045	0.0024 UJ	0.00024	0.0000 U	0.00045	0.0060 UJ	0.00600	0.0000 U	0.00075	0.0000 U	0.00045
# FIBERS COUNTED		0		0		0		3		0		4		0		0	
"PCM EQUIVALENT"	#/cc	0.0000 U		0.0000 UJ		0.0000 U		0.0016 UJ		0.0017 UJ		0.0010 UJ		0.0010 UJ		0.0000 U	
PCM DATA	#/cc	N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A	

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SOUTH BAY ASBESTOS
AIR ASBESTOS ANALYTICAL RESULTS
FIBERS AND STRUCTURES
SITE # 2

SAMPLE DESIGNATION SAMPLING DATE		AQ-02A-040 10/14/87		AQ-02A-041E 10/15/87		AQ-02A-042E 10/16/87		AQ-02A-043 10/17/87		AQ-02A-045E 10/22/87		AQ-02A-047 10/26/87		AQ-02A-049E 10/31/87		AQ-02B-004 08/06/87	
PARAMETER	UNITS	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT
FLOW VOLUME	Liters	3,069		1,782		1,742		3,067		15		3,072		1,787		3,964	
CHRYSOTILE ASBESTOS STRUCTURES	#/cc	0.0000 U	0.00045	0.0000 U	0.00440	0.0091 UJ	0.00910	0.0000 U	0.00045	0.0000 U	0.17290	0.0026 UJ	0.00260	0.0000 U	0.00075	0.0054	0.00059
AMPHIBOLE ASBESTOS STRUCTURES	#/cc	0.0000 U	0.00045	0.0044 UJ	0.00440	0.0076 UJ	0.00760	0.0000 U	0.00045	0.0000 U	0.17290	0.0000 U	0.00260	0.0000 U	0.00075	0.0012	0.00059
TOTAL ASBESTOS STRUCTURES	#/cc	0.0000 U	0.00045	0.0044 UJ	0.00440	0.0167 UJ	0.01670	0.0000 U	0.00045	0.0000 U	0.17290	0.0026 UJ	0.00260	0.0000 U	0.00075	0.0066	0.00059
# STRUCTURES COUNTED		0		3		11		0		0		3		0		11	
CHRYSOTILE ASBESTOS FIBERS	#/cc	0.0000 U	0.00045	0.0000 U	0.00440	0.0076 UJ	0.00760	0.0000 U	0.00045	0.0000 U	0.17290	0.0026 UJ	0.00260	0.0000 U	0.00075	0.0048	0.00059
AMPHIBOLE ASBESTOS FIBERS	#/cc	0.0000 U	0.00045	0.0044 UJ	0.00440	0.0061 UJ	0.00610	0.0000 U	0.00045	0.0000 U	0.17290	0.0000 U	0.00260	0.0000 U	0.00075	0.0012	0.00059
TOTAL ASBESTOS FIBERS	#/cc	0.0000 U	0.00045	0.0044 UJ	0.00440	0.0136 UJ	0.01360	0.0000 U	0.00045	0.0000 U	0.17290	0.0026 UJ	0.00260	0.0000 U	0.00075	0.0060	0.00059
# FIBERS COUNTED		0		3		9		0		0		3		0		10	
"PCM EQUIVALENT"	#/cc	0.0000 U		0.0000 UJ		0.0045 UJ		0.0000 U		0.0000 U		0.0000 UJ		0.0000 U		0.0000 U	
PCM DATA	#/cc	N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A	

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SOUTH BAY ASBESTOS
AIR ASBESTOS ANALYTICAL RESULTS
FIBERS AND STRUCTURES
SITE # 2

SAMPLE DESIGNATION		AQ-02B-038EFB		AQ-026-013TB		AQ-026-029EFB	
SAMPLING DATE		10/09/87		08/24/87		09/24/87	
PARAMETER	UNITS	READING	DETECT	READING	DETECT	READING	DETECT
FLOW VOLUME	Liters	N/A		N/A		N/A	
CHRYSOTILE ASBESTOS STRUCTURES	#/cc	0.0000 U	0.00000	0.0000 U	0.00000	0.0000 U	0.00000
AMPHIBOLE ASBESTOS STRUCTURES	#/cc	0.0000 U	0.00000	0.0000 U	0.00000	0.0000 U	0.00000
TOTAL ASBESTOS STRUCTURES	#/cc	0.0000 U	0.00000	0.0000 U	0.00000	0.0000 U	0.00000
# STRUCTURES COUNTED		0		0		0	
CHRYSOTILE ASBESTOS FIBERS	#/cc	0.0000 U	0.00000	0.0000 U	0.00000	0.0000 U	0.00000
AMPHIBOLE ASBESTOS FIBERS	#/cc	0.0000 U	0.00000	0.0000 U	0.00000	0.0000 U	0.00000
TOTAL ASBESTOS FIBERS	#/cc	0.0000 U	0.00000	0.0000 U	0.00000	0.0000 U	0.00000
# FIBERS COUNTED		0		0		0	
"PCM EQUIVALENT"	#/cc	0.0000 U		0.0000 U		0.0000 U	
PCM DATA	#/cc	N/A		N/A		N/A	

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SOUTH BAY ASBESTOS
AIR ASBESTOS ANALYTICAL RESULTS
FIBERS AND STRUCTURES
SITE # 3

SAMPLE DESIGNATION		AQ-03A-003		AQ-03A-004		AQ-03A-005		AQ-03A-010EFB		AQ-03A-013FB		AQ-03A-035		AQ-03A-039		AQ-03A-040	
SAMPLING DATE		08/03/87		08/06/87		08/09/87		08/19/87		08/24/87		10/05/87		10/11/87		10/14/87	
PARAMETER	UNITS	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT
FLOW VOLUME	Liters	2,517		2,517		2,519		N/A		N/A		3,069		2,865		2,866	
CHRYSOTILE ASBESTOS STRUCTURES	#/cc	0.0075	0.00093	0.0075	0.00093	0.0030 UJ	0.00300	0.0000 U	0.00000	0.0000 U	0.00000	0.0260	0.00103	0.0009 UJ	0.00090	0.0000 U	0.00045
AMPHIBOLE ASBESTOS STRUCTURES	#/cc	0.0028	0.00093	0.0000 U	0.00093	0.0000	0.00300	0.0000 U	0.00000	0.0000 U	0.00000	0.0000 U	0.00103	0.0000 U	0.00090	0.0000 U	0.00045
TOTAL ASBESTOS STRUCTURES	#/cc	0.0103	0.00093	0.0075	0.00093	0.0030 UJ	0.00300	0.0000 U	0.00000	0.0000 U	0.00000	0.0260	0.00103	0.0009 UJ	0.00090	0.0000 U	0.00045
# STRUCTURES COUNTED		11		8		4		0		0		25		1		0	
CHRYSOTILE ASBESTOS FIBERS	#/cc	0.0075	0.00093	0.0066	0.00093	0.0030 UJ	0.00300	0.0000 U	0.00000	0.0000 U	0.00000	0.0080	0.00103	0.0009 UJ	0.00090	0.0000 U	0.00045
AMPHIBOLE ASBESTOS FIBERS	#/cc	0.0028	0.00093	0.0000 U	0.00093	0.0000	0.00300	0.0000 U	0.00000	0.0000 U	0.00000	0.0000 U	0.00103	0.0000 U	0.00090	0.0000 U	0.00045
TOTAL ASBESTOS FIBERS	#/cc	0.0103	0.00093	0.0066	0.00093	0.0030 UJ	0.00300	0.0000 U	0.00000	0.0000 U	0.00000	0.0080	0.00103	0.0009 UJ	0.00090	0.0000 U	0.00045
# FIBERS COUNTED		11		7		3		0		0		8		1		0	
"PCM EQUIVALENT"	#/cc	0.0000 U		0.0000 U		0.0000 UJ		0.0000 U		0.0000 U		0.0080		0.0000 UJ		0.0000 U	
PCM DATA	#/cc	N/A		0.0021	0.00020	N/A		N/A		N/A		N/A		N/A		N/A	

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SOUTH BAY ASBESTOS
AIR ASBESTOS ANALYTICAL RESULTS
FIBERS AND STRUCTURES
SITE # 3

SAMPLE DESIGNATION		AQ-03A-041E		AQ-03A-042E		AQ-03A-045E		AQ-03A-047	
SAMPLING DATE		10/15/87		10/16/87		10/22/87		10/26/87	
PARAMETER	UNITS	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT
FLOW VOLUME	Liters	1,713		1,742		1,628		2,868	
CHRYSOTILE ASBESTOS STRUCTURES	#/cc	0.0046 UJ	0.00460	0.0000 U	0.00075	0.0280	0.00159	0.0000 U	0.00090
AMPHIBOLE ASBESTOS STRUCTURES	#/cc	0.0015 UJ	0.00150	0.0000 U	0.00075	0.0000 U	0.00159	0.0000 U	0.00090
TOTAL ASBESTOS STRUCTURES	#/cc	0.0062 UJ	0.00620	0.0000 U	0.00075	0.0280	0.00159	0.0000 U	0.00090
# STRUCTURES COUNTED		4		0		17		0	
CHRYSOTILE ASBESTOS FIBERS	#/cc	0.0031 UJ	0.00310	0.0000 U	0.00075	0.0110	0.00159	0.0000 U	0.00090
AMPHIBOLE ASBESTOS FIBERS	#/cc	0.0015 UJ	0.00150	0.0000 U	0.00075	0.0000 U	0.00159	0.0000 U	0.00090
TOTAL ASBESTOS FIBERS	#/cc	0.0046 UJ	0.00460	0.0000 U	0.00075	0.0110	0.00159	0.0000 U	0.00090
# FIBERS COUNTED		3		0		7		0	
"PCM EQUIVALENT"	#/cc	0.0031 UJ		0.0000 U		0.0030		0.0000 U	
PCM DATA	#/cc	N/A		N/A		N/A		N/A	

SAMPLE DESIGNATION		AQ-03A-049E		AQ-03B-004		AQ-03B-009		AQ-03B-010E	
SAMPLING DATE		10/31/87		08/06/87		08/18/87		08/19/87	
PARAMETER	UNITS	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT
FLOW VOLUME	Liters	1,722		3,374		3,783		4,626	
CHRYSOTILE ASBESTOS STRUCTURES	#/cc	0.0020	0.00151	0.0069	0.00069	0.0070	0.00069	0.0015 UJ	0.00150
AMPHIBOLE ASBESTOS STRUCTURES	#/cc	0.0000	0.00151	0.0000 U	0.00069	0.0014	0.00069	0.0000 U	0.00150
TOTAL ASBESTOS STRUCTURES	#/cc	0.0020	0.00151	0.0069	0.00069	0.0084	0.00069	0.0015 UJ	0.00150
# STRUCTURES COUNTED		1		12		12		3	
CHRYSOTILE ASBESTOS FIBERS	#/cc	0.0020	0.00151	0.0063	0.00069	0.0049	0.00069	0.0010 UJ	0.00100
AMPHIBOLE ASBESTOS FIBERS	#/cc	0.0000	0.00151	0.0000 U	0.00069	0.0007	0.00069	0.0000 U	0.00100
TOTAL ASBESTOS FIBERS	#/cc	0.0020	0.00151	0.0063	0.00069	0.0056	0.00069	0.0010 UJ	0.00100
# FIBERS COUNTED		1		11		8		2	
"PCM EQUIVALENT"	#/cc	0.0000 U		0.0006		0.0000 U		0.0000 UJ	
PCM DATA	#/cc	N/A		0.0027	0.00010	N/A		N/A	

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SOUTH BAY ASBESTOS
AIR ASBESTOS ANALYTICAL RESULTS
FIBERS AND STRUCTURES
SITE # 3

SAMPLE DESIGNATION		AQ-03B-015		AQ-03B-017		AQ-03B-021		AQ-03B-025		AQ-03B-026		AQ-03B-029E		AQ-03B-030E		AQ-03B-036E	
SAMPLING DATE		08/30/87		09/02/87		09/11/87		09/17/87		09/20/87		09/24/87		09/25/87		10/07/87	
PARAMETER	UNITS	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT
FLOW VOLUME	Liters	3,780		2,243		2,237		2,238		3,777		3,173		3,178		1,666	
CHRYSOTILE ASBESTOS STRUCTURES	#/cc	0.0028 UJ	0.00280	0.0000 U	0.00060	0.0000 U	0.00060	0.0000 U	0.00060	0.0000 U	0.00035	0.0008 UJ	0.00080	0.0000 U	0.00040	0.0020 UJ	0.00200
AMPHIBOLE ASBESTOS STRUCTURES	#/cc	0.0000 U	0.00280	0.0000 U	0.00060	0.0000 U	0.00060	0.0000 U	0.00060	0.0000 U	0.00035	0.0000 U	0.00080	0.0000 U	0.00040	0.0000 U	0.00200
TOTAL ASBESTOS STRUCTURES	#/cc	0.0028 UJ	0.00280	0.0000 U	0.00060	0.0000 U	0.00060	0.0000 U	0.00060	0.0000 U	0.00035	0.0008 UJ	0.00080	0.0000 U	0.00040	0.0020 UJ	0.00200
# STRUCTURES COUNTED		4		0		0		0		0		1		0		1	
CHRYSOTILE ASBESTOS FIBERS	#/cc	0.0000 U	0.00045	0.0000 U	0.00060	0.0000 U	0.00060	0.0000 U	0.00060	0.0000 U	0.00035	0.0008 UJ	0.00080	0.0000 U	0.00040	0.0020 UJ	0.00200
AMPHIBOLE ASBESTOS FIBERS	#/cc	0.0000 U	0.00045	0.0000 U	0.00060	0.0000 U	0.00060	0.0000 U	0.00060	0.0000 U	0.00035	0.0000 U	0.00080	0.0000 U	0.00040	0.0000 U	0.00200
TOTAL ASBESTOS FIBERS	#/cc	0.0000 U	0.00045	0.0000 U	0.00060	0.0000 U	0.00060	0.0000 U	0.00060	0.0000 U	0.00035	0.0008 UJ	0.00080	0.0000 U	0.00040	0.0020 UJ	0.00200
# FIBERS COUNTED		0		0		0		0		0		1		0		1	
"PCM EQUIVALENT"	#/cc	0.0007 UJ		0.0000 U		0.0000 U		0.0000 U		0.0000 U		0.0000 UJ		0.0000 U		0.0000 UJ	
PCM DATA	#/cc	N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A	

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SOUTH BAY ASBESTOS
AIR ASBESTOS ANALYTICAL RESULTS
FIBERS AND STRUCTURES
SITE # 3

SAMPLE DESIGNATION		AQ-03B-03BE		AQ-03G-010ETB		AQ-03G-030EFB		AQ-03G-045EFB	
SAMPLING DATE		10/09/87		08/19/87		09/25/87		10/22/87	
PARAMETER	UNITS	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT
FLOW VOLUME	Liters	1,646		N/A		N/A		N/A	
CHRYSOTILE ASBESTOS STRUCTURES	#/cc	0.0100 UJ	0.01000	0.0000 U	0.00000	0.0000 U	0.00000	0.0000 U	0.00000
AMPHIBOLE ASBESTOS STRUCTURES	#/cc	0.0000 U	0.01000	0.0000 U	0.00000	0.0000 U	0.00000	0.0000 U	0.00000
TOTAL ASBESTOS STRUCTURES	#/cc	0.0100 UJ	0.01000	0.0000 U	0.00000	0.0000 U	0.00000	0.0000 U	0.00000
# STRUCTURES COUNTED		6		0		0		0	
CHRYSOTILE ASBESTOS FIBERS	#/cc	0.0050 UJ	0.00500	0.0000 U	0.00000	0.0000 U	0.00000	0.0000 U	0.00000
AMPHIBOLE ASBESTOS FIBERS	#/cc	0.0000 U	0.00500	0.0000 U	0.00000	0.0000 U	0.00000	0.0000 U	0.00000
TOTAL ASBESTOS FIBERS	#/cc	0.0050 UJ	0.00500	0.0000 U	0.00000	0.0000 U	0.00000	0.0000 U	0.00000
# FIBERS COUNTED		3		0		0		0	
"PCM EQUIVALENT"	#/cc	0.0030 UJ		0.0000 U		0.0000 U		0.0000 U	
PCM DATA	#/cc	N/A		N/A		N/A		N/A	

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SOUTH BAY ASBESTOS
AIR ASBESTOS ANALYTICAL RESULTS
FIBERS AND STRUCTURES
SITE # 4

SAMPLE DESIGNATION SAMPLING DATE		AQ-04A-003 08/03/87		AQ-04A-004 08/06/87		AQ-04A-009 08/18/87		AQ-04A-010E 08/19/87		AQ-04A-026 09/20/87		AQ-04A-029E 09/24/87		AQ-04A-030E 09/25/87		AQ-04A-035 10/05/87	
PARAMETER	UNITS	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT
FLOW VOLUME	Liters	2,784		2,234		2,792		3,530		3,077		3,559		3,389		2,789	
CHRYSOTILE ASBESTOS STRUCTURES	#/cc	0.0102	0.00084	0.0032 UJ	0.00320	0.0076 UJ	0.00760	0.0000 U	0.00035	0.0000 U	0.00045	0.0015 UJ	0.00150	0.0000 U	0.00074	0.0028 UJ	0.00280
AMPHIBOLE ASBESTOS STRUCTURES	#/cc	0.0000 U	0.00084	0.0000 U	0.00320	0.0000 U	0.00760	0.0000 U	0.00035	0.0000 U	0.00045	0.0000 U	0.00150	0.0000 U	0.00074	0.0000 U	0.00280
TOTAL ASBESTOS STRUCTURES	#/cc	0.0102	0.00084	0.0032 UJ	0.00320	0.0076 UJ	0.00760	0.0000 U	0.00035	0.0000 U	0.00045	0.0015 UJ	0.00150	0.0000 U	0.00074	0.0028 UJ	0.00280
# STRUCTURES COUNTED		12		3		8		0		0		2		0		3	
CHRYSOTILE ASBESTOS FIBERS	#/cc	0.0102	0.00084	0.0032 UJ	0.00320	0.0038 UJ	0.00380	0.0000 U	0.00035	0.0000 U	0.00045	0.0015 UJ	0.00150	0.0000 U	0.00074	0.0028 UJ	0.00280
AMPHIBOLE ASBESTOS FIBERS	#/cc	0.0000 U	0.00084	0.0000 U	0.00320	0.0000 U	0.00380	0.0000 U	0.00035	0.0000 U	0.00045	0.0000 U	0.00150	0.0000 U	0.00074	0.0000 U	0.00280
TOTAL ASBESTOS FIBERS	#/cc	0.0102	0.00084	0.0032 UJ	0.00320	0.0038 UJ	0.00380	0.0000 U	0.00035	0.0000 U	0.00045	0.0015 UJ	0.00150	0.0000 U	0.00074	0.0028 UJ	0.00280
# FIBERS COUNTED		12		3		4		0		0		2		0		3	
"PCM EQUIVALENT"	#/cc	0.0000 U		0.0000 UJ		0.0000 UJ		0.0000 U		0.0000 U		0.0000 UJ		0.0000 U		0.0000 UJ	
PCM DATA	#/cc	N/A		0.0029	0.00020	N/A		N/A		N/A		N/A		N/A		N/A	

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SOUTH BAY ASBESTOS
AIR ASBESTOS ANALYTICAL RESULTS
FIBERS AND STRUCTURES
SITE # 4

SAMPLE DESIGNATION		AQ-04A-036E		AQ-04A-038E		AQ-04A-041E		AQ-04A-042E		AQ-04A-045E		AQ-04A-047		AQ-04A-049E		AQ-04B-003	
SAMPLING DATE		10/07/87		10/09/87		10/15/87		10/16/87		10/22/87		10/26/87		10/31/87		08/03/87	
PARAMETER	UNITS	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT
FLOW VOLUME	Liters	1,745		1,836		1,797		1,789		1,762		3,070		1,767		2,479	
CHRYSOTILE ASBESTOS STRUCTURES	#/cc	0.0030 UJ	0.00300	0.0010 UJ	0.00100	0.0044 UJ	0.00440	0.0000 U	0.00075	0.0160	0.00147	0.0034 UJ	0.00340	0.0000 U	0.00075	0.0038	0.00094
AMPHIBOLE ASBESTOS STRUCTURES	#/cc	0.0000 U	0.00300	0.0000 U	0.00100	0.0000 U	0.00440	0.0000 U	0.00075	0.0000 U	0.00147	0.0000 U	0.00034	0.0000 U	0.00075	0.0010	0.00094
TOTAL ASBESTOS STRUCTURES	#/cc	0.0030 UJ	0.00300	0.0010 UJ	0.00100	0.0044 UJ	0.00440	0.0000 U	0.00075	0.0160	0.00147	0.0034 UJ	0.00340	0.0000 U	0.00075	0.0048	0.00094
# STRUCTURES COUNTED		2		1		3		0		11		4		0		5	
CHRYSOTILE ASBESTOS FIBERS	#/cc	0.0030 UJ	0.00300	0.0010 UJ	0.00100	0.0044 UJ	0.00440	0.0000 U	0.00075	0.0100	0.00147	0.0026 UJ	0.00260	0.0000 U	0.00075	0.0029	0.00094
AMPHIBOLE ASBESTOS FIBERS	#/cc	0.0000 U	0.00300	0.0000 U	0.00100	0.0000 U	0.00440	0.0000 U	0.00075	0.0000 U	0.00147	0.0000 U	0.00260	0.0000 U	0.00075	0.0010	0.00094
TOTAL ASBESTOS FIBERS	#/cc	0.0030 UJ	0.00300	0.0010 UJ	0.00100	0.0044 UJ	0.00440	0.0000 U	0.00075	0.0100	0.00147	0.0026 UJ	0.00260	0.0000 U	0.00075	0.0039	0.00094
# FIBERS COUNTED		2		1		3		0		7		3		0		4	
"PCM EQUIVALENT"	#/cc	0.0000 UJ		0.0000 UJ		0.0000 UJ		0.0000 U		0.0100		0.0000 UJ		0.0000 U		0.0000 U	
PCM DATA	#/cc	N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A	

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SOUTH BAY ASBESTOS
AIR ASBESTOS ANALYTICAL RESULTS
FIBERS AND STRUCTURES
SITE # 4

SAMPLE DESIGNATION		AQ-04B-004		AQ-04B-005		AQ-04B-010E		AQ-04B-015		AQ-04B-017		AQ-04B-021		AQ-04B-025		AQ-04B-029E	
SAMPLING DATE		08/06/87		08/09/87		08/19/87		08/30/87		09/02/87		09/11/87		09/17/87		09/24/87	
PARAMETER	UNITS	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT
FLOW VOLUME	Liters	3,280		4,082		3,271		2,489		2,494		2,485		2,484		3,299	
CHRYSOTILE ASBESTOS STRUCTURES	#/cc	0.0080	0.00071	0.0013 UJ	0.00130	0.0000 U	0.00035	0.0010 UJ	0.00100	0.0000 U	0.00055	0.0000 U	0.00055	0.0010 UJ	0.00100	0.0056 UJ	0.00560
AMPHIBOLE ASBESTOS STRUCTURES	#/cc	0.0000 U	0.00071	0.0006 UJ	0.00060	0.0000 U	0.00035	0.0000 U	0.00100	0.0000 U	0.00055	0.0000 U	0.00055	0.0000 U	0.00100	0.0000 U	0.00560
TOTAL ASBESTOS STRUCTURES	#/cc	0.0080	0.00071	0.0019 UJ	0.00190	0.0000 U	0.00035	0.0010 UJ	0.00100	0.0000 U	0.00055	0.0000 U	0.00055	0.0010 UJ	0.00100	0.0056 UJ	0.00560
# STRUCTURES COUNTED		11		3		0		1		0		0		1		7	
CHRYSOTILE ASBESTOS FIBERS	#/cc	0.0036	0.00071	0.0000 U	0.00060	0.0000 U	0.00035	0.0010 UJ	0.00100	0.0000 U	0.00055	0.0000 U	0.00055	0.0000 U	0.00104	0.0032 UJ	0.00320
AMPHIBOLE ASBESTOS FIBERS	#/cc	0.0000 U	0.00071	0.0006 UJ	0.00060	0.0000 U	0.00035	0.0000 U	0.00100	0.0000 U	0.00055	0.0000 U	0.00055	0.0000 U	0.00104	0.0000 U	0.00320
TOTAL ASBESTOS FIBERS	#/cc	0.0036	0.00071	0.0006 UJ	0.00060	0.0000 U	0.00035	0.0010 UJ	0.00100	0.0000 U	0.00055	0.0000 U	0.00055	0.0000 U	0.00104	0.0032 UJ	0.00320
# FIBERS COUNTED		5		1		0		1		0		0		0		4	
"PCM EQUIVALENT"	#/cc	0.0014		0.0006 UJ		0.0000 U		0.0000 UJ		0.0000 U		0.0000 U		0.0000 UJ		0.0008 UJ	
PCM DATA	#/cc	0.0021	0.00020	N/A		N/A		N/A		N/A		N/A		N/A		N/A	

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SOUTH BAY ASBESTOS
AIR ASBESTOS ANALYTICAL RESULTS
FIBERS AND STRUCTURES
SITE # 4

SAMPLE DESIGNATION		AQ-04B-030E		AQ-04B-036E		AQ-04B-038E		AQ-04B-039		AQ-04B-040		AQ-04B-041E		AQ-04B-042E		AQ-04B-045E	
SAMPLING DATE		09/25/87		10/07/87		10/09/87		10/11/87		10/14/87		10/15/87		10/16/87		10/22/87	
PARAMETER	UNITS	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT
FLOW VOLUME	Liters	3,241		1,602		1,686		2,716		2,701		1,804		1,794		3,381	
CHRYSOTILE ASBESTOS STRUCTURES	#/cc	0.0016 UJ	0.00160	0.0020 UJ	0.00200	0.0000 U	0.00080	0.0000 U	0.00050	0.0000 U	0.00050	0.0044 UJ	0.00440	0.0015 UJ	0.00150	0.0055	0.00077
AMPHIBOLE ASBESTOS STRUCTURES	#/cc	0.0000 U	0.00160	0.0000 U	0.00200	0.0000 U	0.00080	0.0000 U	0.00050	0.0000 U	0.00050	0.0015 UJ	0.00150	0.0000 U	0.00150	0.0000 U	0.00077
TOTAL ASBESTOS STRUCTURES	#/cc	0.0016 UJ	0.00160	0.0020 UJ	0.00200	0.0000 U	0.00080	0.0000 U	0.00050	0.0000 U	0.00050	0.0059 UJ	0.00590	0.0015 UJ	0.00150	0.0055	0.00077
# STRUCTURES COUNTED		2		1		0		0		0		4		1		7	
CHRYSOTILE ASBESTOS FIBERS	#/cc	0.0008 UJ	0.00080	0.0020 UJ	0.00200	0.0000 U	0.00080	0.0000 U	0.00050	0.0000 U	0.00050	0.0044 UJ	0.00440	0.0015 UJ	0.00150	0.0047	0.00077
AMPHIBOLE ASBESTOS FIBERS	#/cc	0.0000 U	0.00080	0.0000 U	0.00200	0.0000 U	0.00080	0.0000 U	0.00050	0.0000 U	0.00050	0.0015 UJ	0.00150	0.0000 U	0.00150	0.0000 U	0.00077
TOTAL ASBESTOS FIBERS	#/cc	0.0008 UJ	0.00080	0.0020 UJ	0.00200	0.0000 U	0.00080	0.0000 U	0.00050	0.0000 U	0.00050	0.0059 UJ	0.00590	0.0015 UJ	0.00150	0.0047	0.00077
# FIBERS COUNTED		1		1		0		0		0		4		1		6	
"PCM EQUIVALENT"	#/cc	0.0008 UJ		0.0000 UJ		0.0000 U		0.0000 U		0.0000 U		0.0000 UJ		0.0000 UJ		0.0000 U	
PCM DATA	#/cc	N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A	

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SOUTH BAY ASBESTOS
AIR ASBESTOS ANALYTICAL RESULTS
FIBERS AND STRUCTURES
SITE # 4

SAMPLE DESIGNATION		AQ-04B-049E		AQ-04G-022FB		AQ-04G-042EFB		AQ-04G-049EFB	
SAMPLING DATE		10/31/87		09/12/87		10/16/87		10/31/87	
PARAMETER	UNITS	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT
FLOW VOLUME	Liters	3,390		N/A		N/A		N/A	
CHRYSOTILE ASBESTOS STRUCTURES	#/cc	0.0080 UJ	0.00800	0.0000 U	0.00000	0.0000 U	0.00000	0.0000 U	0.00000
AMPHIBOLE ASBESTOS STRUCTURES	#/cc	0.0000 U	0.00800	0.0000 U	0.00000	0.0000 U	0.00000	0.0000 U	0.00000
TOTAL ASBESTOS STRUCTURES	#/cc	0.0080 UJ	0.00800	0.0000 U	0.00000	0.0000 U	0.00000	0.0000 U	0.00000
# STRUCTURES COUNTED		1		0		0		0	
CHRYSOTILE ASBESTOS FIBERS	#/cc	0.0000 U	0.00040	0.0000 U	0.00000	0.0000 U	0.00000	0.0000 U	0.00000
AMPHIBOLE ASBESTOS FIBERS	#/cc	0.0000 U	0.00040	0.0000 U	0.00000	0.0000 U	0.00000	0.0000 U	0.00000
TOTAL ASBESTOS FIBERS	#/cc	0.0000 U	0.00040	0.0000 U	0.00000	0.0000 U	0.00000	0.0000 U	0.00000
# FIBERS COUNTED		0		0		0		0	
"PCM EQUIVALENT"	#/cc	0.0000 UJ		0.0000 U		0.0000 U		0.0000 U	
PCM DATA	#/cc	N/A		N/A		N/A		N/A	

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SOUTH BAY ASBESTOS
AIR ASBESTOS ANALYTICAL RESULTS
FIBERS AND STRUCTURES
SITE # 5

SAMPLE DESIGNATION		AQ-05A-003		AQ-05A-004		AQ-05A-005		AQ-05A-009		AQ-05A-010E		AQ-05A-015		AQ-05A-017		AQ-05A-021	
SAMPLING DATE		08/03/87		08/06/87		08/09/87		08/18/87		08/19/87		08/30/87		09/02/87		09/11/87	
PARAMETER	UNITS	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT
FLOW VOLUME	Liters	2,734		2,734		2,732		2,734		3,190		2,736		2,750		2,737	
CHRYSOTILE ASBESTOS STRUCTURES	#/cc	0.0009	0.00085	0.0000 U	0.00045	0.0000 U	0.00050	0.0090	0.00095	0.0007 UJ	0.00070	0.0020 UJ	0.00200	0.0020 UJ	0.00200	0.0020 UJ	0.00200
AMPHIBOLE ASBESTOS STRUCTURES	#/cc	0.0009	0.00085	0.0000 U	0.00045	0.0000 U	0.00050	0.0100	0.00095	0.0000 U	0.00070	0.0000 U	0.00020	0.0000 U	0.00200	0.0000 U	0.00200
TOTAL ASBESTOS STRUCTURES	#/cc	0.0018	0.00085	0.0000 U	0.00045	0.0000 U	0.00050	0.0100	0.00095	0.0007 UJ	0.00070	0.0020 UJ	0.00200	0.0020 UJ	0.00200	0.0020 UJ	0.00200
# STRUCTURES COUNTED		2		0		0		10		1		2		2		2	
CHRYSOTILE ASBESTOS FIBERS	#/cc	0.0009	0.00085	0.0000 U	0.00045	0.0000 U	0.00050	0.0070	0.00095	0.0007 UJ	0.00070	0.0010 UJ	0.00100	0.0020 UJ	0.00200	0.0010 UJ	0.00200
AMPHIBOLE ASBESTOS FIBERS	#/cc	0.0009	0.00085	0.0000 U	0.00045	0.0000 U	0.00050	0.0010	0.00095	0.0000 U	0.00070	0.0000 U	0.00100	0.0000 U	0.00200	0.0000 U	0.00200
TOTAL ASBESTOS FIBERS	#/cc	0.0018	0.00085	0.0000 U	0.00045	0.0000 U	0.00050	0.0080	0.00095	0.0007 UJ	0.00070	0.0010 UJ	0.00100	0.0020 UJ	0.00200	0.0010 UJ	0.00200
# FIBERS COUNTED		2		0		0		8		1		1		2		1	
"PCM EQUIVALENT"	#/cc	0.0000 U		0.0000 U		0.0000 U		0.0010		0.0000 UJ		0.0000 UJ		0.0000 UJ		0.0000 UJ	
PCM DATA	#/cc	N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A	

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SOUTH BAY ASBESTOS
AIR ASBESTOS ANALYTICAL RESULTS
FIBERS AND STRUCTURES
SITE # 5

SAMPLE DESIGNATION		AQ-05A-033ETB		AQ-05A-034FB		AQ-05A-036EFB		AQ-05A-041ETB		AQ-05A-042ETB		AQ-05A-045ETB		AQ-05A-049ETB		AQ-058-004	
SAMPLING DATE		09/29/87		10/02/87		10/07/87		10/15/87		10/16/87		10/22/87		10/31/87		08/06/87	
PARAMETER	UNITS	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT
FLOW VOLUME	Liters	N/A		N/A		N/A		N/A		N/A		N/A		N/A		4,382	
CHRYSOTILE ASBESTOS STRUCTURES	#/cc	0.0000 U	0.00000	0.0000 U	0.00000	0.0000 U	0.00000	0.0000 U	0.00000	0.0097 U	0.00000	0.0000 U	0.00000	0.0000 U	0.00000	0.0033	0.00053
AMPHIBOLE ASBESTOS STRUCTURES	#/cc	0.0000 U	0.00000	0.0000 U	0.00000	0.0000 U	0.00000	0.0000 U	0.00000	0.0049 U	0.00000	0.0000 U	0.00000	0.0000 U	0.00000	0.0000 U	0.00053
TOTAL ASBESTOS STRUCTURES	#/cc	0.0000 U	0.00000	0.0000 U	0.00000	0.0000 U	0.00000	0.0000 U	0.00000	0.0146 U	0.00000	0.0000 U	0.00000	0.0000 U	0.00000	0.0033	0.00053
# STRUCTURES COUNTED		0		0		0		0		9		0		0		6	
CHRYSOTILE ASBESTOS FIBERS	#/cc	0.0000 U	0.00000	0.0000 U	0.00000	0.0000 U	0.00000	0.0000 U	0.00000	0.0097 U	0.00000	0.0000 U	0.00000	0.0000 U	0.00000	0.0033	0.00053
AMPHIBOLE ASBESTOS FIBERS	#/cc	0.0000 U	0.00000	0.0000 U	0.00000	0.0000 U	0.00000	0.0000 U	0.00000	0.0049 U	0.00000	0.0000 U	0.00000	0.0000 U	0.00000	0.0000 U	0.00053
TOTAL ASBESTOS FIBERS	#/cc	0.0000 U	0.00000	0.0000 U	0.00000	0.0000 U	0.00000	0.0000 U	0.00000	0.0146 U	0.00000	0.0000 U	0.00000	0.0000 U	0.00000	0.0033	0.00053
# FIBERS COUNTED		0		0		0		0		9		0		0		6	
"PCM EQUIVALENT"	#/cc	0.0000 U		0.0000 U		0.0000 U		0.0000 U		0.0000 U		0.0000 U		0.0000 U		0.0000 U	
PCM DATA	#/cc	N/A		N/A		N/A		N/A		N/A		N/A		N/A		0.0010	0.00010

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SOUTH BAY ASBESTOS
AIR ASBESTOS ANALYTICAL RESULTS
FIBERS AND STRUCTURES
SITE # 5

SAMPLE DESIGNATION		AQ-05B-025		AQ-05B-026		AQ-05B-029E		AQ-05B-035		AQ-05B-036E		AQ-05B-038E		AQ-05B-039		AQ-05B-040	
SAMPLING DATE		09/17/87		09/20/87		09/24/87		10/05/87		10/07/87		10/09/87		10/11/87		10/14/87	
PARAMETER	UNITS	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT
FLOW VOLUME	Liters	3,020		3,017		3,312		2,792		1,753		1,785		2,789		2,791	
CHRYSOTILE ASBESTOS STRUCTURES	#/cc	0.0105	0.00086	0.0000 U	0.00045	0.0008 UJ	0.00080	0.0000 U	0.00045	0.0080	0.00148	0.0030 UJ	0.00300	0.0009 UJ	0.00090	0.0009 UJ	0.00090
AMPHIBOLE ASBESTOS STRUCTURES	#/cc	0.0000 U	0.00086	0.0000 U	0.00045	0.0000 U	0.00080	0.0000 U	0.00045	0.0000 U	0.00148	0.0000 U	0.00000	0.0000 U	0.00090	0.0000 U	0.00090
TOTAL ASBESTOS STRUCTURES	#/cc	0.0105	0.00086	0.0000 U	0.00045	0.0008 UJ	0.00080	0.0000 U	0.00045	0.0080	0.00148	0.0030 UJ	0.00300	0.0009 UJ	0.00090	0.0009 UJ	0.00090
# STRUCTURES COUNTED		12		0		1		0		5		2		1		1	
CHRYSOTILE ASBESTOS FIBERS	#/cc	0.0087	0.00086	0.0000 U	0.00045	0.0008 UJ	0.00080	0.0000 U	0.00045	0.0080	0.00148	0.0015 UJ	0.00100	0.0000 U	0.00093	0.0000 U	0.00093
AMPHIBOLE ASBESTOS FIBERS	#/cc	0.0000 U	0.00086	0.0000 U	0.00045	0.0000 U	0.00080	0.0000 U	0.00045	0.0000 U	0.00148	0.0000 U	0.00000	0.0000 U	0.00093	0.0000 U	0.00093
TOTAL ASBESTOS FIBERS	#/cc	0.0087	0.00086	0.0000 U	0.00045	0.0008 UJ	0.00080	0.0000 U	0.00045	0.0080	0.00148	0.0015 UJ	0.00100	0.0000 U	0.00093	0.0000 U	0.00093
# FIBERS COUNTED		10		0		1		0		5		1		0		0	
"PCM EQUIVALENT"	#/cc	0.0000 U		0.0000 U		0.0000 UJ		0.0000 U		0.0000 U		0.0010 UJ		0.0000 UJ		0.0000 UJ	
PCM DATA	#/cc	N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A	

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SOUTH BAY ASBESTOS
AIR ASBESTOS ANALYTICAL RESULTS
FIBERS AND STRUCTURES
SITE # 5

SAMPLE DESIGNATION		AQ-05B-041E		AQ-05B-042E		AQ-05B-043		AQ-05B-045E		AQ-05B-047		AQ-05B-049E		AQ-05G-022TB		AQ-05G-023EFB	
SAMPLING DATE		10/15/87		10/16/87		10/17/87		10/22/87		10/26/87		10/31/87		09/11/87		09/15/87	
PARAMETER	UNITS	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT	READING	DETECT
FLOW VOLUME	Liters	1,788		1,789		2,791		1,783		2,787		1,797		N/A		N/A	
CHRYSOTILE ASBESTOS STRUCTURES	#/cc	0.0030 UJ	0.00300	0.0000 U	0.00590	0.0000 U	0.00045	0.0100	0.00146	0.0000 U	0.00045	0.0000 U	0.00000	0.0000 U	0.00000	0.0012 U	0.00000
AMPHIBOLE ASBESTOS STRUCTURES	#/cc	0.0000 U	0.00030	0.0059 UJ	0.00590	0.0000 U	0.00045	0.0000 U	0.00146	0.0000 U	0.00045	0.0000 U	0.00000	0.0000 U	0.00000	0.0000 U	0.00000
TOTAL ASBESTOS STRUCTURES	#/cc	0.0030 UJ	0.00300	0.0059 UJ	0.00590	0.0000 U	0.00045	0.0100	0.00146	0.0000 U	0.00045	0.0000 U	0.00000	0.0000 U	0.00000	0.0012 U	0.00000
# STRUCTURES COUNTED		2		4		0		7		0		0		0		1	
CHRYSOTILE ASBESTOS FIBERS	#/cc	0.0030 UJ	0.00300	0.0000 U	0.00590	0.0000 U	0.00045	0.0070	0.00146	0.0000 U	0.00045	0.0000 U	0.00000	0.0000 U	0.00000	0.0012 U	0.00000
AMPHIBOLE ASBESTOS FIBERS	#/cc	0.0000 U	0.00030	0.0059 UJ	0.00590	0.0000 U	0.00045	0.0000 U	0.00146	0.0000 U	0.00045	0.0000 U	0.00000	0.0000 U	0.00000	0.0000 U	0.00000
TOTAL ASBESTOS FIBERS	#/cc	0.0030 UJ	0.00300	0.0059 UJ	0.00590	0.0000 U	0.00045	0.0070	0.00146	0.0000 U	0.00045	0.0000 U	0.00000	0.0000 U	0.00000	0.0012 U	0.00000
# FIBERS COUNTED		2		4		0		5		0		0		0		1	
"PCM EQUIVALENT"	#/cc	0.0000 UJ		0.0000 UJ		0.0000 U		0.0000 U		0.0000 U		0.0000 U		0.0000 U		0.0000 U	
PCM DATA	#/cc	N/A		N/A		N/A		N/A		N/A		N/A		N/A		N/A	

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SOUTH BAY ASBESTOS
AIR ASBESTOS ANALYTICAL RESULTS
FIBERS AND STRUCTURES
SITE # 5

SAMPLE DESIGNATION		AQ-056-024ETB		AQ-056-027ETB	
SAMPLING DATE		09/16/87		09/22/87	
PARAMETER	UNITS	READING	DETECT	READING	DETECT
FLOW VOLUME	Liters	N/A		N/A	
CHRYSOTILE ASBESTOS STRUCTURES	#/cc	0.0000 U	0.00000	0.0043 U	0.00000
AMPHIBOLE ASBESTOS STRUCTURES	#/cc	0.0000 U	0.00000	0.0000 U	0.00000
TOTAL ASBESTOS STRUCTURES	#/cc	0.0000 U	0.00000	0.0043 U	0.00000
# STRUCTURES COUNTED		0		5	
CHRYSOTILE ASBESTOS FIBERS	#/cc	0.0000 U	0.00000	0.0043 U	0.00000
AMPHIBOLE ASBESTOS FIBERS	#/cc	0.0000 U	0.00000	0.0000 U	0.00000
TOTAL ASBESTOS FIBERS	#/cc	0.0000 U	0.00000	0.0043 U	0.00000
# FIBERS COUNTED		0		5	
"PCM EQUIVALENT"	#/cc	0.0000 U		0.0000 U	
PCM DATA	#/cc	N/A		N/A	0

AIR - PARTICULATE

SOUTH BAY ASBESTOS
AIR PARTICULATE ANALYTICAL RESULTS

		CONTAMINANT --> PARTICULATE		SAMPLE VOLUME		PARTICULATES PER UNIT VOLUME	
LOCATION	DATE	READING	UNITS	READING	UNITS	READING	UNITS
AQ-01C-001	07/28/87	45.2000	mg	1676.0000	m3	0.0270	mg/m3
AQ-01C-002	07/31/87	57.4000	mg	25.0000	m3	2.3000	mg/m3
AQ-01C-003	08/03/87	52.1000	mg	1051.0000	m3	0.0500	mg/m3
AQ-01C-004	08/06/87	93.9000	mg	1659.0000	m3	0.0570	mg/m3
AQ-01C-005	08/09/87	52.5000	mg	1663.0000	m3	0.0316	mg/m3
AQ-01C-006	08/12/87	61.2000	mg	1674.0000	m3	0.0366	mg/m3
AQ-01C-007E	08/13/87	29.4000	mg	411.0000	m3	0.0715	mg/m3
AQ-01C-008	08/15/87	36.2000	mg	597.0000	m3	0.0606	mg/m3
AQ-01C-008E	08/14/87	15.3000	mg	554.0000	m3	0.0276	mg/m3
AQ-01C-009	08/18/87	72.4000	mg	1653.0000	m3	0.0438	mg/m3
AQ-01C-010E	08/19/87	17.7000	mg	416.0000	m3	0.0425	mg/m3
AQ-01C-011E	08/20/87	14.6000	mg	282.0000	m3	0.0518	mg/m3
AQ-01C-012	08/21/87	71.5000	mg	1667.0000	m3	0.0429	mg/m3
AQ-01C-013	08/24/87	49.2000	mg	1665.0000	m3	0.0295	mg/m3
AQ-01C-014	08/27/87	73.7000	mg	1652.0000	m3	0.0446	mg/m3
AQ-01C-015	08/30/87	66.4000	mg	1663.0000	m3	0.0399	mg/m3
AQ-01C-016E	09/01/87	31.0000	mg	470.0000	m3	0.0660	mg/m3
AQ-01C-017	09/02/87	68.5000	mg	1642.0000	m3	0.0417	mg/m3
AQ-01C-018E	09/03/87	30.7000	mg	422.0000	m3	0.0727	mg/m3
AQ-01C-019	09/08/87	128.8000	mg	1634.0000	m3	0.0788	mg/m3
AQ-01C-021	09/11/87	62.3000	mg	1654.0000	m3	0.0377	mg/m3
AQ-01C-022	09/14/87	31.7000	mg	1639.0000	m3	0.0193	mg/m3
AQ-01C-023E	09/15/87	23.6000	mg	322.0000	m3	0.0733	mg/m3
AQ-01C-024E	09/16/87	41.8000	mg	392.0000	m3	0.1070	mg/m3
AQ-01C-025	09/17/87	35.2000	mg	415.0000	m3	0.0848	mg/m3
AQ-01C-026	09/20/87	101.1000	mg	1663.0000	m3	0.0608	mg/m3
AQ-01C-027E	09/22/87	34.1000	mg	421.0000	m3	0.0810	mg/m3
AQ-01C-028	09/23/87	51.3000	mg	1654.0000	m3	0.0310	mg/m3
AQ-01C-029E	09/24/87	12.7000	mg	433.0000	m3	0.0293	mg/m3
AQ-01C-030E	09/25/87	112.3000	mg	418.0000	m3	0.2687	mg/m3
AQ-01C-031	09/26/87	90.0000	mg	1648.0000	m3	0.0546	mg/m3
AQ-01C-032	09/29/87	130.5000	mg	1650.0000	m3	0.0791	mg/m3
AQ-01C-033E	09/30/87	44.9000	mg	795.0000	m3	0.0565	mg/m3
AQ-01C-034	10/02/87	98.3000	mg	1555.0000	m3	0.0632	mg/m3
AQ-01C-035	10/05/87	184.1000	mg	1636.0000	m3	0.1130	mg/m3
AQ-01C-036E	10/07/87	24.6000	mg	420.0000	m3	0.0586	mg/m3
AQ-01C-037	10/08/87	53.0000	mg	1659.0000	m3	0.0319	mg/m3
AQ-01C-038E	10/09/87	10.0000	mg	412.0000	m3	0.0243	mg/m3
AQ-01C-039	10/11/87	79.5000	mg	1641.0000	m3	0.0484	mg/m3
AQ-01C-040	10/14/87	94.2000	mg	1649.0000	m3	0.0571	mg/m3
AQ-01C-041E	10/15/87	42.8000	mg	421.0000	m3	0.1020	mg/m3
AQ-01C-042E	10/16/87	34.2000	mg	419.0000	m3	0.0816	mg/m3
AQ-01C-043	10/17/87	132.1000	mg	1617.0000	m3	0.0817	mg/m3
AQ-01C-044	10/20/87	98.2000	mg	1645.0000	m3	0.0597	mg/m3
AQ-01C-045E	10/22/87	12.9000	mg	411.0000	m3	0.0314	mg/m3
AQ-01C-046	10/23/87	39.6000	mg	1655.0000	m3	0.0239	mg/m3
AQ-01C-047	10/26/87	105.8000	mg	1623.0000	m3	0.0652	mg/m3
AQ-01C-048	10/29/87	25.6000	mg	1640.0000	m3	0.0156	mg/m3
AQ-01C-049E	10/31/87	18.5000	mg	419.0000	m3	0.0442	mg/m3
AQ-01C-050	11/02/87	0.0000	mg	1585.0000	m3	0.0000	mg/m3

SOUTH BAY ASBESTOS
AIR PARTICULATE ANALYTICAL RESULTS

		CONTAMINANT --> PARTICULATE		SAMPLE VOLUME		PARTICULATES PER UNIT VOLUME	
LOCATION	DATE	READING	UNITS	READING	UNITS	READING	UNITS
AQ-01D-001	07/28/87	21.5000	mg	1726.0000	m3	0.0120	mg/m3
AQ-01D-002	07/31/87	10.8000	mg	1657.0000	m3	0.0060	mg/m3
AQ-01D-003	08/03/87	45.8000	mg	1670.0000	m3	0.0270	mg/m3
AQ-01D-004	08/06/87	54.7000	mg	1712.0000	m3	0.0320	mg/m3
AQ-01D-005	08/09/87	32.5000	mg	1629.0000	m3	0.0200	mg/m3
AQ-01D-006	08/12/87	34.0000	mg	1637.0000	m3	0.0208	mg/m3
AQ-01D-007E	08/13/87	13.1000	mg	400.0000	m3	0.0328	mg/m3
AQ-01D-008	08/15/87	19.7000	mg	1665.0000	m3	0.0118	mg/m3
AQ-01D-008E	08/14/87	3.0000	mg	0.0000	m3	0.0000	mg/m3
AQ-01D-009	08/18/87	45.0000	mg	1537.0000	m3	0.0293	mg/m3
AQ-01D-010E	08/19/87	11.0000	mg	389.0000	m3	0.0283	mg/m3
AQ-01D-011E	08/20/87	11.6000	mg	257.0000	m3	0.0451	mg/m3
AQ-01D-012	08/21/87	41.0000	mg	1548.0000	m3	0.0265	mg/m3
AQ-01D-013	08/24/87	100.0000	mg	1634.0000	m3	0.0612	mg/m3
AQ-01D-014	08/27/87	42.6000	mg	1611.0000	m3	0.0264	mg/m3
AQ-01D-015	08/30/87	41.8000	mg	1047.0000	m3	0.0399	mg/m3
AQ-01D-016E	09/01/87	20.7000	mg	485.0000	m3	0.0427	mg/m3
AQ-01D-017	09/02/87	44.1000	mg	1571.0000	m3	0.0281	mg/m3
AQ-01D-018E	09/03/87	19.3000	mg	421.0000	m3	0.0458	mg/m3
AQ-01D-019	09/08/87	86.8000	mg	0.0000	m3	0.0000	mg/m3
AQ-01D-021	09/11/87	34.4000	mg	1611.0000	m3	0.0214	mg/m3
AQ-01D-022	09/14/87	16.3000	mg	1568.0000	m3	0.0104	mg/m3
AQ-01D-023E	09/15/87	15.1000	mg	314.0000	m3	0.0481	mg/m3
AQ-01D-024E	09/16/87	31.4000	mg	370.0000	m3	0.0849	mg/m3
AQ-01D-025	09/17/87	120.3000	mg	1525.0000	m3	0.0789	mg/m3
AQ-01D-026	09/20/87	84.9000	mg	1534.0000	m3	0.0553	mg/m3
AQ-01D-027E	09/22/87	19.0000	mg	413.0000	m3	0.0460	mg/m3
AQ-01D-028	09/23/87	38.4000	mg	1665.0000	m3	0.0231	mg/m3
AQ-01D-029E	09/24/87	5.8000	mg	731.0000	m3	0.0079	mg/m3
AQ-01D-030E	09/25/87	9.8000	mg	447.0000	m3	0.0219	mg/m3
AQ-01D-031	09/26/87	69.7000	mg	1673.0000	m3	0.0417	mg/m3
AQ-01D-032	09/29/87	101.0000	mg	1600.0000	m3	0.0631	mg/m3
AQ-01D-033E	09/30/87	34.4000	mg	795.0000	m3	0.0433	mg/m3
AQ-01D-034	10/02/87	77.8000	mg	1555.0000	m3	0.0500	mg/m3
AQ-01D-035	10/05/87	136.2000	mg	1532.0000	m3	0.0889	mg/m3
AQ-01D-036E	10/07/87	12.8000	mg	413.0000	m3	0.0310	mg/m3
AQ-01D-037	10/08/87	34.6000	mg	1584.0000	m3	0.0218	mg/m3
AQ-01D-038E	10/09/87	4.6000	mg	401.0000	m3	0.0115	mg/m3
AQ-01D-039	10/11/87	50.0000	mg	1595.0000	m3	0.0313	mg/m3
AQ-01D-040	10/14/87	70.9000	mg	1594.0000	m3	0.0445	mg/m3
AQ-01D-041E	10/15/87	31.4000	mg	417.0000	m3	0.0753	mg/m3
AQ-01D-042E	10/16/87	24.3000	mg	419.0000	m3	0.0580	mg/m3
AQ-01D-043	10/17/87	101.5000	mg	1575.0000	m3	0.0644	mg/m3
AQ-01D-044	10/20/87	75.9000	mg	1539.0000	m3	0.0493	mg/m3
AQ-01D-045E	10/22/87	8.4000	mg	300.0000	m3	0.0280	mg/m3
AQ-01D-046	10/23/87	27.0000	mg	1539.0000	m3	0.0175	mg/m3
AQ-01D-047	10/26/87	79.1000	mg	1548.0000	m3	0.0511	mg/m3
AQ-01D-048	10/29/87	19.7000	mg	1566.0000	m3	0.0126	mg/m3
AQ-01D-049E	10/31/87	15.2000	mg	419.0000	m3	0.0363	mg/m3
AQ-02C-001	07/28/87	306.9000	mg	1693.0000	m3	0.1810	mg/m3

SOUTH BAY ASBESTOS
AIR PARTICULATE ANALYTICAL RESULTS

	CONTAMINANT --> PARTICULATE			SAMPLE VOLUME		PARTICULATES PER UNIT VOLUME	
LOCATION	DATE	READING	UNITS	READING	UNITS	READING	UNITS
AQ-02C-002	07/31/87	206.4000	mg	1685.0000	m3	0.1220	mg/m3
AQ-02C-003	08/03/87	215.6000	mg	1648.0000	m3	0.1310	mg/m3
AQ-02C-004	08/06/87	226.0000	mg	1653.0000	m3	0.1370	mg/m3
AQ-02C-005	08/09/87	128.4000	mg	1653.0000	m3	0.0777	mg/m3
AQ-02C-006	08/12/87	197.7000	mg	1631.0000	m3	0.1210	mg/m3
AQ-02C-007E	08/13/87	128.1000	mg	0.0000	m3	0.0000	mg/m3
AQ-02C-008	08/15/87	121.6000	mg	1629.0000	m3	0.0746	mg/m3
AQ-02C-009	08/18/87	176.2000	mg	1152.0000	m3	0.1530	mg/m3
AQ-02C-010E	08/19/87	75.1000	mg	413.0000	m3	0.1820	mg/m3
AQ-02C-011E	08/20/87	32.1000	mg	267.0000	m3	0.1200	mg/m3
AQ-02C-012	08/21/87	222.7000	mg	2420.0000	m3	0.0920	mg/m3
AQ-02C-013	08/24/87	232.7000	mg	1619.0000	m3	0.1440	mg/m3
AQ-02C-014	08/27/87	187.6000	mg	1625.0000	m3	0.1150	mg/m3
AQ-02C-015	08/30/87	130.4000	mg	1551.0000	m3	0.0841	mg/m3
AQ-02C-016E	09/01/87	34.1000	mg	469.0000	m3	0.0727	mg/m3
AQ-02C-017	09/02/87	208.9000	mg	1553.0000	m3	0.1350	mg/m3
AQ-02C-018E	09/03/87	118.3000	mg	440.0000	m3	0.2690	mg/m3
AQ-02C-019	09/05/87	158.6000	mg	1551.0000	m3	0.1023	mg/m3
AQ-02C-020	09/08/87	204.4000	mg	1568.0000	m3	0.1300	mg/m3
AQ-02C-021	09/11/87	275.0000	mg	1596.0000	m3	0.1720	mg/m3
AQ-02C-022	09/14/87	153.2000	mg	1649.0000	m3	0.0929	mg/m3
AQ-02C-023E	09/15/87	37.2000	mg	302.0000	m3	0.1230	mg/m3
AQ-02C-024E	09/16/87	47.7000	mg	396.0000	m3	0.1200	mg/m3
AQ-02C-025	09/17/87	284.6000	mg	1592.0000	m3	0.1790	mg/m3
AQ-02C-026	09/20/87	147.0000	mg	1628.0000	m3	0.0903	mg/m3
AQ-02C-027E	09/22/87	174.5000	mg	391.0000	m3	0.4463	mg/m3
AQ-02C-028	09/23/87	174.5000	mg	1570.0000	m3	0.1111	mg/m3
AQ-02C-029E	09/24/87	37.1000	mg	405.0000	m3	0.0916	mg/m3
AQ-02C-030E	09/25/87	38.7000	mg	427.0000	m3	0.0906	mg/m3
AQ-02C-031	09/26/87	117.6000	mg	1560.0000	m3	0.0754	mg/m3
AQ-02C-032	09/29/87	214.5000	mg	1530.0000	m3	0.1400	mg/m3
AQ-02C-033E	09/30/87	99.4000	mg	732.0000	m3	0.1360	mg/m3
AQ-02C-034	10/02/87	116.1000	mg	705.0000	m3	0.1650	mg/m3
AQ-02C-035	10/05/87	312.1000	mg	1550.0000	m3	0.2010	mg/m3
AQ-02C-036E	10/07/87	126.8000	mg	433.0000	m3	0.2930	mg/m3
AQ-02C-037	10/08/87	179.4000	mg	1620.0000	m3	0.1110	mg/m3
AQ-02C-038E	10/09/87	73.9000	mg	430.0000	m3	0.1720	mg/m3
AQ-02C-039	10/11/87	161.4000	mg	1546.0000	m3	0.1040	mg/m3
AQ-02C-040	10/14/87	176.2000	mg	1618.0000	m3	0.1090	mg/m3
AQ-02C-041E	10/15/87	64.8000	mg	440.0000	m3	0.1470	mg/m3
AQ-02C-042E	10/16/87	120.7000	mg	431.0000	m3	0.2800	mg/m3
AQ-02C-043	10/17/87	172.8000	mg	1609.0000	m3	0.1070	mg/m3
AQ-02C-044	10/20/87	12.5000	mg	4.0000	m3	3.0000	mg/m3
AQ-02C-045E	10/22/87	5.8000	mg	4.0000	m3	1.0000	mg/m3
AQ-02C-046	10/23/87	27.9000	mg	406.0000	m3	0.0687	mg/m3
AQ-02C-047	10/26/87	218.1000	mg	1596.0000	m3	0.1370	mg/m3
AQ-02C-048	10/29/87	19.2000	mg	4.0000	m3	5.0000	mg/m3
AQ-02C-049E	10/31/87	43.1000	mg	446.0000	m3	0.0966	mg/m3
AQ-02D-001	07/28/87	90.9000	mg	3176.0000	m3	0.0290	mg/m3
AQ-02D-002	07/31/87	85.0000	mg	3094.0000	m3	0.0280	mg/m3

SOUTH BAY ASBESTOS
AIR PARTICULATE ANALYTICAL RESULTS

	CONTAMINANT --> PARTICULATE			SAMPLE VOLUME		PARTICULATES PER UNIT VOLUME	
LOCATION	DATE	READING	UNITS	READING	UNITS	READING	UNITS
AQ-02D-003	08/03/87	81.6000	mg	3176.0000	m3	0.0260	mg/m3
AQ-02D-004	08/06/87	70.5000	mg	2384.0000	m3	0.0300	mg/m3
AQ-02D-005	08/09/87	50.6000	mg	2408.0000	m3	0.0210	mg/m3
AQ-02D-006	08/12/87	78.7000	mg	2413.0000	m3	0.0326	mg/m3
AQ-02D-007E	08/13/87	51.6000	mg	608.0000	m3	0.0849	mg/m3
AQ-02D-008	08/15/87	60.5000	mg	2411.0000	m3	0.0251	mg/m3
AQ-02D-009	08/18/87	80.6000	mg	3256.0000	m3	0.0248	mg/m3
AQ-02D-010E	08/19/87	30.5000	mg	673.0000	m3	0.0453	mg/m3
AQ-02D-011E	08/20/87	17.6000	mg	421.0000	m3	0.0418	mg/m3
AQ-02D-012	08/21/87	99.1000	mg	1641.0000	m3	0.0604	mg/m3
AQ-02D-013	08/24/87	108.8000	mg	2409.0000	m3	0.0452	mg/m3
AQ-02D-014	08/27/87	70.3000	mg	1604.0000	m3	0.0438	mg/m3
AQ-02D-015	08/30/87	49.9000	mg	1512.0000	m3	0.0330	mg/m3
AQ-02D-016E	09/01/87	97.4000	mg	506.0000	m3	0.1920	mg/m3
AQ-02D-017	09/02/87	77.0000	mg	1551.0000	m3	0.0496	mg/m3
AQ-02D-018E	09/03/87	42.1000	mg	408.0000	m3	0.1030	mg/m3
AQ-02D-019	09/05/87	164.4000	mg	3275.0000	m3	0.0502	mg/m3
AQ-02D-020	09/08/87	107.7000	mg	1644.0000	m3	0.0655	mg/m3
AQ-02D-021	09/11/87	96.0000	mg	1664.0000	m3	0.0577	mg/m3
AQ-02D-022	09/14/87	48.5000	mg	1556.0000	m3	0.0312	mg/m3
AQ-02D-023E	09/15/87	14.1000	mg	316.0000	m3	0.0446	mg/m3
AQ-02D-024E	09/16/87	29.5000	mg	410.0000	m3	0.0720	mg/m3
AQ-02D-025	09/17/87	143.8000	mg	1629.0000	m3	0.0883	mg/m3
AQ-02D-026	09/20/87	88.3000	mg	1562.0000	m3	0.0565	mg/m3
AQ-02D-027E	09/22/87	61.1000	mg	391.0000	m3	0.1563	mg/m3
AQ-02D-028	09/23/87	68.4000	mg	1626.0000	m3	0.0421	mg/m3
AQ-02D-029E	09/24/87	10.9000	mg	431.0000	m3	0.0253	mg/m3
AQ-02D-030E	09/25/87	15.7000	mg	417.0000	m3	0.0376	mg/m3
AQ-02D-031	09/26/87	71.9000	mg	1591.0000	m3	0.0452	mg/m3
AQ-02D-032	09/29/87	115.7000	mg	1582.0000	m3	0.0731	mg/m3
AQ-02D-033E	09/30/87	44.4000	mg	750.0000	m3	0.0592	mg/m3
AQ-02D-034	10/02/87	52.0000	mg	761.0000	m3	0.0683	mg/m3
AQ-02D-035	10/05/87	155.4000	mg	1570.0000	m3	0.0990	mg/m3
AQ-02D-036E	10/07/87	33.1000	mg	432.0000	m3	0.0788	mg/m3
AQ-02D-037	10/08/87	58.9000	mg	1639.0000	m3	0.0359	mg/m3
AQ-02D-038E	10/09/87	21.7000	mg	435.0000	m3	0.0499	mg/m3
AQ-02D-039	10/11/87	60.7000	mg	1625.0000	m3	0.0374	mg/m3
AQ-02D-040	10/14/87	81.6000	mg	1653.0000	m3	0.0494	mg/m3
AQ-02D-041E	10/15/87	38.3000	mg	431.0000	m3	0.0889	mg/m3
AQ-02D-042E	10/16/87	42.4000	mg	2102.0000	m3	0.0202	mg/m3
AQ-02D-043	10/17/87	108.5000	mg	1643.0000	m3	0.0660	mg/m3
AQ-02D-044	10/20/87	74.4000	mg	1655.0000	m3	0.0450	mg/m3
AQ-02D-045E	10/22/87	17.1000	mg	425.0000	m3	0.0402	mg/m3
AQ-02D-046	10/23/87	34.2000	mg	1638.0000	m3	0.0209	mg/m3
AQ-02D-047	10/26/87	107.6000	mg	1628.0000	m3	0.0661	mg/m3
AQ-02D-048	10/29/87	0.0000	mg	2.0000	m3	0.0000	mg/m3
AQ-02D-049E	10/31/87	18.9000	mg	432.0000	m3	0.0438	mg/m3
AQ-03C-001	07/28/87	96.0000	mg	1597.0000	m3	0.0600	mg/m3
AQ-03C-002	07/31/87	143.6000	mg	1628.0000	m3	0.0880	mg/m3
AQ-03C-003	08/03/87	15.2000	mg	1628.0000	m3	0.0090	mg/m3

SOUTH BAY ASBESTOS
AIR PARTICULATE ANALYTICAL RESULTS

		CONTAMINANT --> PARTICULATE		SAMPLE VOLUME		PARTICULATES PER UNIT VOLUME	
LOCATION	DATE	READING	UNITS	READING	UNITS	READING	UNITS
AQ-03C-004	08/06/87	130.9000	mg	1616.0000	m3	0.0810	mg/m3
AQ-03C-005	08/09/87	79.4000	mg	1617.0000	m3	0.0491	mg/m3
AQ-03C-006	08/12/87	98.3000	mg	1641.0000	m3	0.0599	mg/m3
AQ-03C-007E	08/13/87	67.3000	mg	426.0000	m3	0.1580	mg/m3
AQ-03C-008	08/15/87	90.4000	mg	1617.0000	m3	0.0559	mg/m3
AQ-03C-009	08/18/87	116.8000	mg	1647.0000	m3	0.0709	mg/m3
AQ-03C-010E	08/19/87	36.3000	mg	419.0000	m3	0.0866	mg/m3
AQ-03C-011E	08/20/87	35.4000	mg	259.0000	m3	0.1370	mg/m3
AQ-03C-012	08/21/87	114.1000	mg	1624.0000	m3	0.0703	mg/m3
AQ-03C-013	08/24/87	103.8000	mg	1633.0000	m3	0.0636	mg/m3
AQ-03C-014	08/27/87	109.8000	mg	1626.0000	m3	0.0675	mg/m3
AQ-03C-015	08/30/87	93.3000	mg	1669.0000	m3	0.0559	mg/m3
AQ-03C-016E	09/01/87	49.9000	mg	493.0000	m3	0.1010	mg/m3
AQ-03C-017	09/02/87	98.6000	mg	1594.0000	m3	0.0619	mg/m3
AQ-03C-018E	09/03/87	55.6000	mg	413.0000	m3	0.1350	mg/m3
AQ-03C-019	09/05/87	120.6000	mg	1591.0000	m3	0.0758	mg/m3
AQ-03C-020	09/08/87	145.8000	mg	1605.0000	m3	0.0908	mg/m3
AQ-03C-021	09/11/87	129.3000	mg	1649.0000	m3	0.0784	mg/m3
AQ-03C-022	09/14/87	86.3000	mg	1641.0000	m3	0.0526	mg/m3
AQ-03C-023E	09/15/87	35.0000	mg	324.0000	m3	0.1080	mg/m3
AQ-03C-024E	09/16/87	49.4000	mg	412.0000	m3	0.1200	mg/m3
AQ-03C-025	09/17/87	185.9000	mg	1629.0000	m3	0.1140	mg/m3
AQ-03C-026	09/20/87	118.2000	mg	1616.0000	m3	0.0731	mg/m3
AQ-03C-027E	09/22/87	49.6000	mg	445.0000	m3	0.1115	mg/m3
AQ-03C-028	09/23/87	82.8000	mg	1683.0000	m3	0.0492	mg/m3
AQ-03C-029E	09/24/87	27.7000	mg	437.0000	m3	0.0634	mg/m3
AQ-03C-030E	09/25/87	20.5000	mg	440.0000	m3	0.0466	mg/m3
AQ-03C-031	09/26/87	121.3000	mg	1682.0000	m3	0.0721	mg/m3
AQ-03C-032	09/29/87	157.8000	mg	1676.0000	m3	0.0942	mg/m3
AQ-03C-033E	09/30/87	56.0000	mg	835.0000	m3	0.0671	mg/m3
AQ-03C-034	10/02/87	125.3000	mg	1675.0000	m3	0.0748	mg/m3
AQ-03C-035	10/05/87	227.4000	mg	1641.0000	m3	0.1390	mg/m3
AQ-03C-036E	10/07/87	68.9000	mg	440.0000	m3	0.1570	mg/m3
AQ-03C-037	10/08/87	90.7000	mg	1641.0000	m3	0.0553	mg/m3
AQ-03C-038E	10/09/87	22.3000	mg	443.0000	m3	0.0503	mg/m3
AQ-03C-039	10/11/87	110.0000	mg	1696.0000	m3	0.0649	mg/m3
AQ-03C-040	10/14/87	117.4000	mg	1702.0000	m3	0.0690	mg/m3
AQ-03C-041E	10/15/87	48.2000	mg	425.0000	m3	0.1130	mg/m3
AQ-03C-042E	10/16/87	47.1000	mg	408.0000	m3	0.1150	mg/m3
AQ-03C-043	10/17/87	160.7000	mg	1624.0000	m3	0.0990	mg/m3
AQ-03C-044	10/20/87	111.0000	mg	1628.0000	m3	0.0682	mg/m3
AQ-03C-045E	10/22/87	24.2000	mg	393.0000	m3	0.0616	mg/m3
AQ-03C-046	10/23/87	20.1000	mg	426.0000	m3	0.0472	mg/m3
AQ-03C-047	10/26/87	145.0000	mg	1609.0000	m3	0.0901	mg/m3
AQ-03C-048	10/29/87	3.2000	mg	7.0000	m3	0.5000	mg/m3
AQ-03C-049E	10/31/87	29.7000	mg	430.0000	m3	0.0691	mg/m3
AQ-03D-001	07/28/87	35.3000	mg	1699.0000	m3	0.0210	mg/m3
AQ-03D-002	07/31/87	77.4000	mg	1631.0000	m3	0.0470	mg/m3
AQ-03D-003	08/03/87	55.7000	mg	1443.0000	m3	0.0390	mg/m3
AQ-03D-004	08/06/87	65.5000	mg	1642.0000	m3	0.0400	mg/m3

SOUTH BAY ASBESTOS
AIR PARTICULATE ANALYTICAL RESULTS

	CONTAMINANT --> PARTICULATE			SAMPLE VOLUME		PARTICULATES PER UNIT VOLUME	
LOCATION	DATE	READING	UNITS	READING	UNITS	READING	UNITS
AQ-03D-005	08/09/87	35.7000	mg	1643.0000	m3	0.0217	mg/m3
AQ-03D-006	08/12/87	39.9000	mg	1644.0000	m3	0.0243	mg/m3
AQ-03D-007E	08/13/87	20.9000	mg	432.0000	m3	0.0484	mg/m3
AQ-03D-008	08/15/87	42.4000	mg	1643.0000	m3	0.0258	mg/m3
AQ-03D-009	08/18/87	53.7000	mg	1623.0000	m3	0.0331	mg/m3
AQ-03D-010E	08/19/87	17.1000	mg	450.0000	m3	0.0380	mg/m3
AQ-03D-011E	08/20/87	18.9000	mg	282.0000	m3	0.0670	mg/m3
AQ-03D-012	08/21/87	50.2000	mg	1658.0000	m3	0.0303	mg/m3
AQ-03D-013	08/24/87	52.7000	mg	1655.0000	m3	0.0318	mg/m3
AQ-03D-014	08/27/87	56.0000	mg	1650.0000	m3	0.0339	mg/m3
AQ-03D-015	08/30/87	48.4000	mg	1640.0000	m3	0.0295	mg/m3
AQ-03D-016E	09/01/87	24.2000	mg	499.0000	m3	0.0485	mg/m3
AQ-03D-017	09/02/87	54.2000	mg	1703.0000	m3	0.0318	mg/m3
AQ-03D-018E	09/03/87	28.4000	mg	459.0000	m3	0.0619	mg/m3
AQ-03D-019	09/05/87	83.2000	mg	0.0000	m3	0.0000	mg/m3
AQ-03D-020	09/08/87	2.5000	mg	1785.0000	m3	0.0014	mg/m3
AQ-03D-021	09/11/87	54.4000	mg	1678.0000	m3	0.0324	mg/m3
AQ-03D-022	09/14/87	26.7000	mg	1666.0000	m3	0.0160	mg/m3
AQ-03D-023E	09/15/87	20.3000	mg	333.0000	m3	0.0610	mg/m3
AQ-03D-024E	09/16/87	31.4000	mg	417.0000	m3	0.0753	mg/m3
AQ-03D-025	09/17/87	127.2000	mg	1646.0000	m3	0.0773	mg/m3
AQ-03D-026	09/20/87	88.1000	mg	1654.0000	m3	0.0533	mg/m3
AQ-03D-027E	09/22/87	25.9000	mg	413.0000	m3	0.0627	mg/m3
AQ-03D-028	09/23/87	48.8000	mg	1642.0000	m3	0.0297	mg/m3
AQ-03D-029E	09/24/87	11.7000	mg	434.0000	m3	0.0270	mg/m3
AQ-03D-030E	09/25/87	11.3000	mg	435.0000	m3	0.0260	mg/m3
AQ-03D-031	09/26/87	78.3000	mg	1650.0000	m3	0.0475	mg/m3
AQ-03D-032	09/29/87	107.8000	mg	1626.0000	m3	0.0663	mg/m3
AQ-03D-033E	09/30/87	33.7000	mg	771.0000	m3	0.0437	mg/m3
AQ-03D-034	10/02/87	82.9000	mg	1637.0000	m3	0.0506	mg/m3
AQ-03D-035	10/05/87	144.5000	mg	1613.0000	m3	0.0896	mg/m3
AQ-03D-036E	10/07/87	24.0000	mg	442.0000	m3	0.0543	mg/m3
AQ-03D-037	10/08/87	44.4000	mg	1753.0000	m3	0.0253	mg/m3
AQ-03D-038E	10/09/87	9.7000	mg	427.0000	m3	0.0227	mg/m3
AQ-03D-039	10/11/87	53.8000	mg	1661.0000	m3	0.0324	mg/m3
AQ-03D-040	10/14/87	74.0000	mg	1671.0000	m3	0.0443	mg/m3
AQ-03D-041E	10/15/87	36.1000	mg	435.0000	m3	0.0830	mg/m3
AQ-03D-042E	10/16/87	26.2000	mg	412.0000	m3	0.0636	mg/m3
AQ-03D-043	10/17/87	110.8000	mg	1662.0000	m3	0.0667	mg/m3
AQ-03D-044	10/20/87	65.6000	mg	1645.0000	m3	0.0399	mg/m3
AQ-03D-045E	10/22/87	13.8000	mg	421.0000	m3	0.0328	mg/m3
AQ-03D-046	10/23/87	10.3000	mg	432.0000	m3	0.0238	mg/m3
AQ-03D-047	10/26/87	95.4000	mg	1627.0000	m3	0.0586	mg/m3
AQ-03D-048	10/29/87	0.0000	mg	8.0000	m3	0.0000	mg/m3
AQ-03D-049E	10/31/87	18.0000	mg	453.0000	m3	0.0397	mg/m3
AQ-04C-001	07/28/87	67.1000	mg	1661.0000	m3	0.0400	mg/m3
AQ-04C-002	07/31/87	116.7000	mg	1593.0000	m3	0.0730	mg/m3
AQ-04C-003	08/03/87	77.1000	mg	1279.0000	m3	0.0600	mg/m3
AQ-04C-004	08/06/87	71.8000	mg	1005.0000	m3	0.0710	mg/m3
AQ-04C-005	08/09/87	55.4000	mg	1118.0000	m3	0.0496	mg/m3

SOUTH BAY ASBESTOS
AIR PARTICULATE ANALYTICAL RESULTS

		CONTAMINANT --> PARTICULATE		SAMPLE VOLUME		PARTICULATES PER UNIT VOLUME	
LOCATION	DATE	READING	UNITS	READING	UNITS	READING	UNITS
AQ-04C-006	08/12/87	51.0000	mg	880.0000	m3	0.0580	mg/m3
AQ-04C-007E	08/13/87	43.2000	mg	439.0000	m3	0.0984	mg/m3
AQ-04C-008	08/15/87	55.6000	mg	0.0000	m3	0.0000	mg/m3
AQ-04C-009	08/18/87	74.7000	mg	1542.0000	m3	0.0484	mg/m3
AQ-04C-010E	08/19/87	21.1000	mg	343.0000	m3	0.0615	mg/m3
AQ-04C-011E	08/20/87	13.4000	mg	231.0000	m3	0.0580	mg/m3
AQ-04C-012	08/21/87	59.3000	mg	1320.0000	m3	0.0449	mg/m3
AQ-04C-013	08/24/87	65.7000	mg	1347.0000	m3	0.0488	mg/m3
AQ-04C-014	08/27/87	2.1000	mg	0.0000	m3	0.0000	mg/m3
AQ-04C-015	08/30/87	77.3000	mg	1636.0000	m3	0.0472	mg/m3
AQ-04C-016E	09/01/87	47.1000	mg	497.0000	m3	0.0948	mg/m3
AQ-04C-017	09/02/87	89.2000	mg	1632.0000	m3	0.0547	mg/m3
AQ-04C-018E	09/03/87	39.9000	mg	443.0000	m3	0.0901	mg/m3
AQ-04C-019	09/05/87	104.9000	mg	1629.0000	m3	0.0644	mg/m3
AQ-04C-020	09/08/87	129.7000	mg	1641.0000	m3	0.0790	mg/m3
AQ-04C-021	09/11/87	92.7000	mg	1642.0000	m3	0.0565	mg/m3
AQ-04C-022	09/14/87	51.8000	mg	1646.0000	m3	0.0315	mg/m3
AQ-04C-023E	09/15/87	25.4000	mg	322.0000	m3	0.0789	mg/m3
AQ-04C-024E	09/16/87	52.4000	mg	427.0000	m3	0.1230	mg/m3
AQ-04C-025	09/17/87	153.0000	mg	1653.0000	m3	0.0926	mg/m3
AQ-04C-026	09/20/87	106.0000	mg	1611.0000	m3	0.0658	mg/m3
AQ-04C-027E	09/22/87	44.2000	mg	444.0000	m3	0.0995	mg/m3
AQ-04C-028	09/23/87	65.6000	mg	1638.0000	m3	0.0400	mg/m3
AQ-04C-029E	09/24/87	18.1000	mg	428.0000	m3	0.0423	mg/m3
AQ-04C-030E	09/25/87	17.3000	mg	445.0000	m3	0.0389	mg/m3
AQ-04C-031	09/26/87	99.2000	mg	1637.0000	m3	0.0606	mg/m3
AQ-04C-032	09/29/87	145.4000	mg	1605.0000	m3	0.0906	mg/m3
AQ-04C-033E	09/30/87	49.2000	mg	857.0000	m3	0.0574	mg/m3
AQ-04C-034	10/02/87	115.2000	mg	1687.0000	m3	0.0683	mg/m3
AQ-04C-035	10/05/87	194.6000	mg	1643.0000	m3	0.1180	mg/m3
AQ-04C-036E	10/07/87	36.1000	mg	396.0000	m3	0.0912	mg/m3
AQ-04C-037	10/08/87	64.6000	mg	1689.0000	m3	0.0382	mg/m3
AQ-04C-038E	10/09/87	17.7000	mg	450.0000	m3	0.0393	mg/m3
AQ-04C-039	10/11/87	91.2000	mg	1674.0000	m3	0.5450	mg/m3
AQ-04C-040	10/14/87	101.9000	mg	1677.0000	m3	0.0608	mg/m3
AQ-04C-041E	10/15/87	50.9000	mg	454.0000	m3	0.1120	mg/m3
AQ-04C-042E	10/16/87	37.2000	mg	436.0000	m3	0.0853	mg/m3
AQ-04C-043	10/17/87	140.2000	mg	1666.0000	m3	0.0842	mg/m3
AQ-04C-044	10/20/87	2.1000	mg	9.0000	m3	0.2000	mg/m3
AQ-04C-045E	10/22/87	21.3000	mg	422.0000	m3	0.0505	mg/m3
AQ-04C-046	10/23/87	14.4000	mg	483.0000	m3	0.0298	mg/m3
AQ-04C-047	10/26/87	131.5000	mg	1626.0000	m3	0.0809	mg/m3
AQ-04C-048	10/29/87	0.0000	mg	2.0000	m3	0.0000	mg/m3
AQ-04C-049E	10/31/87	20.7000	mg	437.0000	m3	0.0474	mg/m3
AQ-04D-001	07/28/87	40.3000	mg	1675.0000	m3	0.0240	mg/m3
AQ-04D-002	07/31/87	83.3000	mg	1668.0000	m3	0.0500	mg/m3
AQ-04D-003	08/03/87	49.3000	mg	1670.0000	m3	0.0300	mg/m3
AQ-04D-004	08/06/87	62.1000	mg	1335.0000	m3	0.0460	mg/m3
AQ-04D-005	08/09/87	38.3000	mg	1692.0000	m3	0.0229	mg/m3
AQ-04D-006	08/12/87	32.2000	mg	1010.0000	m3	0.0319	mg/m3

SOUTH BAY ASBESTOS
AIR PARTICULATE ANALYTICAL RESULTS

		CONTAMINANT --> PARTICULATE		SAMPLE VOLUME		PARTICULATES PER UNIT VOLUME	
LOCATION	DATE	READING	UNITS	READING	UNITS	READING	UNITS
AQ-04D-007E	08/13/87	21.2000	mg	441.0000	m3	0.0481	mg/m3
AQ-04D-008	08/15/87	36.2000	mg	1100.0000	m3	0.0329	mg/m3
AQ-04D-009	08/18/87	52.8000	mg	1645.0000	m3	0.0321	mg/m3
AQ-04D-010E	08/19/87	16.4000	mg	442.0000	m3	0.0371	mg/m3
AQ-04D-011E	08/20/87	11.0000	mg	294.0000	m3	0.0374	mg/m3
AQ-04D-012	08/21/87	50.7000	mg	1671.0000	m3	0.0303	mg/m3
AQ-04D-013	08/24/87	57.4000	mg	1668.0000	m3	0.0344	mg/m3
AQ-04D-014	08/27/87	54.4000	mg	1648.0000	m3	0.0330	mg/m3
AQ-04D-015	08/30/87	49.5000	mg	1658.0000	m3	0.0299	mg/m3
AQ-04D-016E	09/01/87	27.0000	mg	511.0000	m3	0.0528	mg/m3
AQ-04D-017	09/02/87	57.2000	mg	1587.0000	m3	0.0360	mg/m3
AQ-04D-018E	09/03/87	25.6000	mg	461.0000	m3	0.0555	mg/m3
AQ-04D-019	09/05/87	78.3000	mg	1581.0000	m3	0.0495	mg/m3
AQ-04D-020	09/08/87	94.1000	mg	1591.0000	m3	0.0591	mg/m3
AQ-04D-021	09/11/87	40.6000	mg	1593.0000	m3	0.0255	mg/m3
AQ-04D-022	09/14/87	20.6000	mg	1613.0000	m3	0.0128	mg/m3
AQ-04D-023E	09/15/87	14.7000	mg	311.0000	m3	0.0473	mg/m3
AQ-04D-024E	09/16/87	30.3000	mg	408.0000	m3	0.0743	mg/m3
AQ-04D-025	09/17/87	104.5000	mg	1581.0000	m3	0.0661	mg/m3
AQ-04D-026	09/20/87	76.9000	mg	1565.0000	m3	0.0491	mg/m3
AQ-04D-027E	09/22/87	27.3000	mg	416.0000	m3	0.0656	mg/m3
AQ-04D-028	09/23/87	40.9000	mg	1573.0000	m3	0.0260	mg/m3
AQ-04D-029E	09/24/87	9.8000	mg	430.0000	m3	0.0228	mg/m3
AQ-04D-030E	09/25/87	10.3000	mg	405.0000	m3	0.0254	mg/m3
AQ-04D-031	09/26/87	81.8000	mg	1978.0000	m3	0.0414	mg/m3
AQ-04D-032	09/29/87	97.4000	mg	1588.0000	m3	0.0613	mg/m3
AQ-04D-033E	09/30/87	33.5000	mg	815.0000	m3	0.0411	mg/m3
AQ-04D-034	10/02/87	79.0000	mg	1543.0000	m3	0.0512	mg/m3
AQ-04D-035	10/05/87	124.0000	mg	1549.0000	m3	0.0801	mg/m3
AQ-04D-036E	10/07/87	16.2000	mg	389.0000	m3	0.0416	mg/m3
AQ-04D-037	10/08/87	11.9000	mg	448.0000	m3	0.0266	mg/m3
AQ-04D-038E	10/09/87	8.0000	mg	426.0000	m3	0.0188	mg/m3
AQ-04D-039	10/11/87	47.6000	mg	1627.0000	m3	0.0293	mg/m3
AQ-04D-040	10/14/87	67.8000	mg	1647.0000	m3	0.0412	mg/m3
AQ-04D-041E	10/15/87	30.8000	mg	437.0000	m3	0.0705	mg/m3
AQ-04D-042E	10/16/87	24.7000	mg	430.0000	m3	0.0574	mg/m3
AQ-04D-043	10/17/87	97.3000	mg	1637.0000	m3	0.0594	mg/m3
AQ-04D-044	10/20/87	0.0000	mg	5.0000	m3	0.0000	mg/m3
AQ-04D-045E	10/22/87	13.6000	mg	414.0000	m3	0.0329	mg/m3
AQ-04D-046	10/23/87	9.0000	mg	448.0000	m3	0.0201	mg/m3
AQ-04D-047	10/26/87	89.4000	mg	1652.0000	m3	0.0541	mg/m3
AQ-04D-048	10/29/87	0.0000	mg	6.0000	m3	0.0000	mg/m3
AQ-04D-049E	10/31/87	16.3000	mg	438.0000	m3	0.0372	mg/m3
AQ-04E-001	07/28/87	67.5000	mg	1645.0000	m3	0.0410	mg/m3
AQ-04E-003	08/03/87	57.8000	mg	1786.0000	m3	0.0320	mg/m3
AQ-04E-004	08/06/87	97.0000	mg	1299.0000	m3	0.0750	mg/m3
AQ-04E-005	08/09/87	63.6000	mg	1630.0000	m3	0.0390	mg/m3
AQ-04E-006	08/12/87	74.9000	mg	1621.0000	m3	0.0462	mg/m3
AQ-04E-007E	08/13/87	41.7000	mg	420.0000	m3	0.0993	mg/m3
AQ-04E-008	08/15/87	57.9000	mg	1091.0000	m3	0.0531	mg/m3

SOUTH BAY ASBESTOS
AIR PARTICULATE ANALYTICAL RESULTS

		CONTAMINANT --> PARTICULATE		SAMPLE VOLUME		PARTICULATES PER UNIT VOLUME	
LOCATION	DATE	READING	UNITS	READING	UNITS	READING	UNITS
AQ-04E-009	08/18/87	84.8000	mg	1614.0000	m3	0.0525	mg/m3
AQ-04E-010E	08/19/87	26.2000	mg	213.0000	m3	0.1230	mg/m3
AQ-04E-011E	08/20/87	23.0000	mg	290.0000	m3	0.0793	mg/m3
AQ-04E-012	08/21/87	84.8000	mg	1623.0000	m3	0.0522	mg/m3
AQ-04E-013	08/24/87	85.5000	mg	1611.0000	m3	0.0531	mg/m3
AQ-04E-014	08/27/87	79.0000	mg	1585.0000	m3	0.0498	mg/m3
AQ-04E-015	08/30/87	77.8000	mg	1543.0000	m3	0.0504	mg/m3
AQ-04E-016E	09/01/87	46.7000	mg	472.0000	m3	0.0989	mg/m3
AQ-04E-017	09/02/87	87.7000	mg	1576.0000	m3	0.0556	mg/m3
AQ-04E-018E	09/03/87	38.3000	mg	394.0000	m3	0.0972	mg/m3
AQ-04E-019	09/05/87	103.7000	mg	1574.0000	m3	0.0659	mg/m3
AQ-04E-020	09/08/87	127.8000	mg	1553.0000	m3	0.0823	mg/m3
AQ-04E-021	09/11/87	79.6000	mg	1647.0000	m3	0.0483	mg/m3
AQ-04E-022	09/14/87	56.1000	mg	1628.0000	m3	0.0345	mg/m3
AQ-04E-023E	09/15/87	25.1000	mg	325.0000	m3	0.0772	mg/m3
AQ-04E-024E	09/16/87	54.5000	mg	423.0000	m3	0.1290	mg/m3
AQ-04E-025	09/17/87	153.6000	mg	1616.0000	m3	0.0950	mg/m3
AQ-04E-026	09/20/87	108.5000	mg	1625.0000	m3	0.0668	mg/m3
AQ-04E-027E	09/22/87	43.1000	mg	414.0000	m3	0.1041	mg/m3
AQ-04E-028	09/23/87	66.6000	mg	1657.0000	m3	0.0402	mg/m3
AQ-04E-029E	09/24/87	9.1000	mg	370.0000	m3	0.0246	mg/m3
AQ-04E-030E	09/25/87	13.8000	mg	392.0000	m3	0.0352	mg/m3
AQ-04E-031	09/26/87	95.9000	mg	1649.0000	m3	0.0582	mg/m3
AQ-04E-032	09/29/87	148.3000	mg	1618.0000	m3	0.0917	mg/m3
AQ-04E-033E	09/30/87	48.9000	mg	818.0000	m3	0.0598	mg/m3
AQ-04E-034	10/02/87	117.5000	mg	1602.0000	m3	0.0733	mg/m3
AQ-04E-035	10/05/87	201.6000	mg	1603.0000	m3	0.1260	mg/m3
AQ-04E-036E	10/07/87	39.1000	mg	408.0000	m3	0.0958	mg/m3
AQ-04E-037	10/08/87	66.4000	mg	1654.0000	m3	0.0401	mg/m3
AQ-04E-038E	10/09/87	17.0000	mg	430.0000	m3	0.0395	mg/m3
AQ-04E-039	10/11/87	91.8000	mg	1612.0000	m3	0.0569	mg/m3
AQ-04E-040	10/14/87	104.6000	mg	1617.0000	m3	0.0647	mg/m3
AQ-04E-041E	10/15/87	48.7000	mg	425.0000	m3	0.1150	mg/m3
AQ-04E-042E	10/16/87	32.5000	mg	384.0000	m3	0.0846	mg/m3
AQ-04E-043	10/17/87	144.5000	mg	1605.0000	m3	0.0900	mg/m3
AQ-04E-044	10/20/87	94.7000	mg	1618.0000	m3	0.0585	mg/m3
AQ-04E-045E	10/22/87	24.6000	mg	488.0000	m3	0.0504	mg/m3
AQ-04E-046	10/23/87	16.8000	mg	416.0000	m3	0.0404	mg/m3
AQ-04E-047	10/26/87	129.8000	mg	1612.0000	m3	0.0805	mg/m3
AQ-04E-048	10/29/87	1.6000	mg	5.0000	m3	0.3000	mg/m3
AQ-04E-049E	10/31/87	22.3000	mg	428.0000	m3	0.0521	mg/m3
AQ-04F-001	07/28/87	30.5000	mg	1652.0000	m3	0.0185	mg/m3
AQ-04F-003	08/03/87	49.3000	mg	1670.0000	m3	0.0300	mg/m3
AQ-04F-004	08/06/87	52.7000	mg	1303.0000	m3	0.0400	mg/m3
AQ-04F-005	08/09/87	32.4000	mg	1629.0000	m3	0.0199	mg/m3
AQ-04F-006	08/12/87	33.6000	mg	1640.0000	m3	0.0205	mg/m3
AQ-04F-007E	08/13/87	18.0000	mg	434.0000	m3	0.0415	mg/m3
AQ-04F-008	08/15/87	31.5000	mg	1122.0000	m3	0.0281	mg/m3
AQ-04F-009	08/18/87	46.1000	mg	1626.0000	m3	0.0284	mg/m3
AQ-04F-010E	08/19/87	14.4000	mg	0.0000	m3	0.0000	mg/m3

SOUTH BAY ASBESTOS
AIR PARTICULATE ANALYTICAL RESULTS

		CONTAMINANT --> PARTICULATE		SAMPLE VOLUME		PARTICULATES PER UNIT VOLUME	
LOCATION	DATE	READING	UNITS	READING	UNITS	READING	UNITS
AQ-04F-011E	08/20/87	10.0000	mg	294.0000	m3	0.0340	mg/m3
AQ-04F-012	08/21/87	41.8000	mg	1641.0000	m3	0.0255	mg/m3
AQ-04F-013	08/24/87	49.5000	mg	1644.0000	m3	0.0301	mg/m3
AQ-04F-014	08/27/87	47.2000	mg	1613.0000	m3	0.0293	mg/m3
AQ-04F-015	08/30/87	47.2000	mg	1619.0000	m3	0.0292	mg/m3
AQ-04F-016E	09/01/87	25.7000	mg	515.0000	m3	0.0499	mg/m3
AQ-04F-017	09/02/87	52.7000	mg	1607.0000	m3	0.0328	mg/m3
AQ-04F-018E	09/03/87	23.6000	mg	456.0000	m3	0.0518	mg/m3
AQ-04F-019	09/05/87	77.3000	mg	1595.0000	m3	0.0485	mg/m3
AQ-04F-020	09/08/87	91.1000	mg	1579.0000	m3	0.0577	mg/m3
AQ-04F-021	09/11/87	40.3000	mg	1645.0000	m3	0.0245	mg/m3
AQ-04F-022	09/14/87	20.2000	mg	1647.0000	m3	0.0123	mg/m3
AQ-04F-023E	09/15/87	14.5000	mg	316.0000	m3	0.0459	mg/m3
AQ-04F-024E	09/16/87	33.1000	mg	421.0000	m3	0.0786	mg/m3
AQ-04F-025	09/17/87	104.3000	mg	1665.0000	m3	0.0626	mg/m3
AQ-04F-026	09/20/87	85.4000	mg	1644.0000	m3	0.0519	mg/m3
AQ-04F-027E	09/22/87	27.1000	mg	454.0000	m3	0.0597	mg/m3
AQ-04F-028	09/23/87	41.6000	mg	1610.0000	m3	0.0258	mg/m3
AQ-04F-029E	09/24/87	14.3000	mg	446.0000	m3	0.0321	mg/m3
AQ-04F-030E	09/25/87	10.1000	mg	441.0000	m3	0.0229	mg/m3
AQ-04F-031	09/26/87	68.3000	mg	1623.0000	m3	0.0421	mg/m3
AQ-04F-032	09/29/87	101.4000	mg	1594.0000	m3	0.0636	mg/m3
AQ-04F-033E	09/30/87	35.1000	mg	875.0000	m3	0.0401	mg/m3
AQ-04F-034	10/02/87	79.3000	mg	1663.0000	m3	0.0477	mg/m3
AQ-04F-035	10/05/87	126.8000	mg	1645.0000	m3	0.0771	mg/m3
AQ-04F-036E	10/07/87	15.7000	mg	426.0000	m3	0.0369	mg/m3
AQ-04F-037	10/08/87	34.3000	mg	1713.0000	m3	0.0200	mg/m3
AQ-04F-038E	10/09/87	8.5000	mg	462.0000	m3	0.0184	mg/m3
AQ-04F-039	10/11/87	48.1000	mg	1692.0000	m3	0.0284	mg/m3
AQ-04F-040	10/14/87	68.1000	mg	1695.0000	m3	0.0402	mg/m3
AQ-04F-041E	10/15/87	34.8000	mg	457.0000	m3	0.0761	mg/m3
AQ-04F-042E	10/16/87	25.4000	mg	456.0000	m3	0.0557	mg/m3
AQ-04F-043	10/17/87	99.8000	mg	1668.0000	m3	0.0598	mg/m3
AQ-04F-044	10/20/87	58.6000	mg	1679.0000	m3	0.0349	mg/m3
AQ-04F-045E	10/22/87	14.9000	mg	492.0000	m3	0.0303	mg/m3
AQ-04F-046	10/23/87	9.9000	mg	422.0000	m3	0.0235	mg/m3
AQ-04F-047	10/26/87	85.6000	mg	1631.0000	m3	0.0525	mg/m3
AQ-04F-048	10/29/87	0.0000	mg	3.0000	m3	0.0000	mg/m3
AQ-04F-049E	10/31/87	15.1000	mg	471.0000	m3	0.0321	mg/m3
AQ-05C-001	07/28/87	165.2000	mg	1670.0000	m3	0.0990	mg/m3
AQ-05C-003	08/03/87	214.5000	mg	0.0000	m3	0.0000	mg/m3
AQ-05C-004	08/06/87	379.2000	mg	4227.0000	m3	0.0900	mg/m3
AQ-05C-005	08/09/87	127.4000	mg	1616.0000	m3	0.0788	mg/m3
AQ-05C-006	08/12/87	600.2000	mg	1615.0000	m3	0.3720	mg/m3
AQ-05C-007E	08/13/87	201.0000	mg	399.0000	m3	0.5040	mg/m3
AQ-05C-008	08/15/87	34.0000	mg	526.0000	m3	0.0646	mg/m3
AQ-05C-008E	08/14/87	27.1000	mg	540.0000	m3	0.0502	mg/m3
AQ-05C-009	08/18/87	188.4000	mg	1594.0000	m3	0.1180	mg/m3
AQ-05C-010E	08/19/87	52.4000	mg	402.0000	m3	0.1300	mg/m3
AQ-05C-011E	08/20/87	48.0000	mg	283.0000	m3	0.1700	mg/m3

SOUTH BAY ASBESTOS
AIR PARTICULATE ANALYTICAL RESULTS

		CONTAMINANT --> PARTICULATE		SAMPLE VOLUME		PARTICULATES PER UNIT VOLUME	
LOCATION	DATE	READING	UNITS	READING	UNITS	READING	UNITS
AQ-05D-012	08/21/87	57.0000	mg	1680.0000	m3	0.0339	mg/m3
AQ-05D-013	08/24/87	64.8000	mg	1682.0000	m3	0.0385	mg/m3
AQ-05D-014	08/27/87	56.3000	mg	1669.0000	m3	0.0337	mg/m3
AQ-05D-015	08/30/87	49.5000	mg	1659.0000	m3	0.0298	mg/m3
AQ-05D-016E	09/01/87	38.7000	mg	449.0000	m3	0.0862	mg/m3
AQ-05D-017	09/02/87	72.1000	mg	1681.0000	m3	0.0429	mg/m3
AQ-05D-018E	09/03/87	45.9000	mg	489.0000	m3	0.0939	mg/m3
AQ-05D-019	09/05/87	84.4000	mg	1677.0000	m3	0.0503	mg/m3
AQ-05D-020	09/08/87	93.7000	mg	1660.0000	m3	0.0564	mg/m3
AQ-05D-021	09/11/87	143.0000	mg	1783.0000	m3	0.0802	mg/m3
AQ-05D-022	09/14/87	27.8000	mg	1762.0000	m3	0.0158	mg/m3
AQ-05D-023E	09/15/87	17.0000	mg	385.0000	m3	0.0442	mg/m3
AQ-05D-024E	09/16/87	37.0000	mg	495.0000	m3	0.0747	mg/m3
AQ-05D-025	09/17/87	137.7000	mg	1818.0000	m3	0.0757	mg/m3
AQ-05D-026	09/20/87	84.9000	mg	1829.0000	m3	0.0464	mg/m3
AQ-05D-027E	09/22/87	34.6000	mg	450.0000	m3	0.0769	mg/m3
AQ-05D-028	09/23/87	56.4000	mg	1795.0000	m3	0.0314	mg/m3
AQ-05D-029E	09/24/87	15.3000	mg	437.0000	m3	0.0350	mg/m3
AQ-05D-030E	09/25/87	17.9000	mg	607.0000	m3	0.0295	mg/m3
AQ-05D-031	09/26/87	84.8000	mg	1959.0000	m3	0.0433	mg/m3
AQ-05D-032	09/29/87	121.6000	mg	1739.0000	m3	0.0700	mg/m3
AQ-05D-033E	09/30/87	49.1000	mg	863.0000	m3	0.0569	mg/m3
AQ-05D-034	10/02/87	93.6000	mg	1718.0000	m3	0.0545	mg/m3
AQ-05D-035	10/05/87	155.9000	mg	1699.0000	m3	0.0918	mg/m3
AQ-05D-036E	10/07/87	34.8000	mg	457.0000	m3	0.0761	mg/m3
AQ-05D-037	10/08/87	55.3000	mg	1854.0000	m3	0.0298	mg/m3
AQ-05D-038E	10/09/87	12.1000	mg	480.0000	m3	0.0252	mg/m3
AQ-05D-039	10/11/87	76.7000	mg	1798.0000	m3	0.0427	mg/m3
AQ-05D-040	10/14/87	89.4000	mg	1782.0000	m3	0.0502	mg/m3
AQ-05D-041E	10/15/87	38.1000	mg	464.0000	m3	0.0821	mg/m3
AQ-05D-042E	10/16/87	1.11	mg	1.11	m3	1.11	mg/m3
AQ-05D-043	10/17/87	107.8000	mg	1793.0000	m3	0.0601	mg/m3
AQ-05D-044	10/20/87	67.9000	mg	1754.0000	m3	0.0387	mg/m3
AQ-05D-045E	10/22/87	11.6000	mg	458.0000	m3	0.0253	mg/m3
AQ-05D-046	10/23/87	27.6000	mg	1742.0000	m3	0.0158	mg/m3
AQ-05D-047	10/26/87	90.2000	mg	1731.0000	m3	0.0521	mg/m3
AQ-05D-048	10/29/87	23.3000	mg	1794.0000	m3	0.0130	mg/m3
AQ-05D-049E	10/31/87	15.7000	mg	465.0000	m3	0.0338	mg/m3

SOUTH BAY ASBESTOS
AIR PARTICULATE ANALYTICAL RESULTS

		CONTAMINANT --> PARTICULATE		SAMPLE VOLUME		PARTICULATES PER UNIT VOLUME	
LOCATION	DATE	READING	UNITS	READING	UNITS	READING	UNITS
AQ-05C-012	08/21/87	166.3000	mg	1576.0000	m3	0.1060	mg/m3
AQ-05C-013	08/24/87	165.4000	mg	1573.0000	m3	0.1050	mg/m3
AQ-05C-014	08/27/87	148.1000	mg	1559.0000	m3	0.0950	mg/m3
AQ-05C-015	08/30/87	100.0000	mg	1584.0000	m3	0.0631	mg/m3
AQ-05C-016E	09/01/87	79.0000	mg	481.0000	m3	0.1640	mg/m3
AQ-05C-017	09/02/87	139.0000	mg	1558.0000	m3	0.0892	mg/m3
AQ-05C-018E	09/03/87	88.0000	mg	400.0000	m3	0.2200	mg/m3
AQ-05C-019	09/05/87	132.7000	mg	1555.0000	m3	0.0853	mg/m3
AQ-05C-020	09/08/87	155.3000	mg	1548.0000	m3	0.1000	mg/m3
AQ-05C-021	09/11/87	568.7000	mg	1630.0000	m3	0.3490	mg/m3
AQ-05C-022	09/14/87	24.0000	mg	0.0000	m3	0.0000	mg/m3
AQ-05C-023E	09/15/87	43.6000	mg	347.0000	m3	0.1260	mg/m3
AQ-05C-024E	09/16/87	57.2000	mg	449.0000	m3	0.1270	mg/m3
AQ-05C-025	09/17/87	218.1000	mg	1641.0000	m3	0.1330	mg/m3
AQ-05C-026	09/20/87	110.0000	mg	1624.0000	m3	0.0677	mg/m3
AQ-05C-027E	09/22/87	53.8000	mg	415.0000	m3	0.1296	mg/m3
AQ-05C-028	09/23/87	104.0000	mg	1636.0000	m3	0.0636	mg/m3
AQ-05C-029E	09/24/87	54.1000	mg	414.0000	m3	0.1307	mg/m3
AQ-05C-030E	09/25/87	28.3000	mg	410.0000	m3	0.0690	mg/m3
AQ-05C-031	09/26/87	102.2000	mg	1810.0000	m3	0.0565	mg/m3
AQ-05C-032	09/29/87	228.8000	mg	1610.0000	m3	0.1420	mg/m3
AQ-05C-033E	09/30/87	87.1000	mg	812.0000	m3	0.1070	mg/m3
AQ-05C-034	10/02/87	136.3000	mg	1638.0000	m3	0.0832	mg/m3
AQ-05C-035	10/05/87	285.1000	mg	1651.0000	m3	0.1730	mg/m3
AQ-05C-036E	10/07/87	124.7000	mg	417.0000	m3	0.2990	mg/m3
AQ-05C-037	10/08/87	168.0000	mg	1675.0000	m3	0.1000	mg/m3
AQ-05C-038E	10/09/87	34.6000	mg	421.0000	m3	0.0822	mg/m3
AQ-05C-039	10/11/87	185.6000	mg	1616.0000	m3	0.1150	mg/m3
AQ-05C-040	10/14/87	152.8000	mg	1665.0000	m3	0.0918	mg/m3
AQ-05C-041E	10/15/87	54.5000	mg	418.0000	m3	0.1300	mg/m3
AQ-05C-042E	10/16/87	76.2000	mg	428.0000	m3	0.1780	mg/m3
AQ-05C-043	10/17/87	142.7000	mg	1655.0000	m3	0.0862	mg/m3
AQ-05C-044	10/20/87	141.7000	mg	1638.0000	m3	0.0865	mg/m3
AQ-05C-045E	10/22/87	17.3000	mg	413.0000	m3	0.0419	mg/m3
AQ-05C-046	10/23/87	48.1000	mg	1647.0000	m3	0.0292	mg/m3
AQ-05C-047	10/26/87	128.5000	mg	1661.0000	m3	0.0774	mg/m3
AQ-05C-048	10/29/87	35.7000	mg	1681.0000	m3	0.0212	mg/m3
AQ-05C-049E	10/31/87	19.0000	mg	422.0000	m3	0.0450	mg/m3
AQ-05D-001	07/28/87	51.1000	mg	1673.0000	m3	0.0300	mg/m3
AQ-05D-002	07/31/87	67.9000	mg	1720.0000	m3	0.0390	mg/m3
AQ-05D-003	08/03/87	73.6000	mg	1663.0000	m3	0.0440	mg/m3
AQ-05D-004	08/06/87	66.2000	mg	1665.0000	m3	0.0400	mg/m3
AQ-05D-005	08/09/87	42.9000	mg	1666.0000	m3	0.0258	mg/m3
AQ-05D-006	08/12/87	159.3000	mg	1691.0000	m3	0.0942	mg/m3
AQ-05D-007E	08/13/87	52.9000	mg	422.0000	m3	0.1250	mg/m3
AQ-05D-008	08/15/87	39.2000	mg	0.0000	m3	0.0000	mg/m3
AQ-05D-008E	08/14/87	12.6000	mg	0.0000	m3	0.0000	mg/m3
AQ-05D-009	08/18/87	69.1000	mg	1670.0000	m3	0.0414	mg/m3
AQ-05D-010E	08/19/87	15.6000	mg	444.0000	m3	0.0351	mg/m3
AQ-05D-011E	08/20/87	14.9000	mg	281.0000	m3	0.0530	mg/m3

AIR - PHASE II REANALYSIS
INDIRECT PREPARATION

SOUTH BAY ASBESTOS
AIR ASBESTOS REANALYSIS RESULTS
INDIRECT PREPARATION

SAMPLE DESIGNATION LAB NUMBER DUPLICATE OF		AQ-01B-009 1322 (AQ-01A-009)	AQ-01B-015 1325 (AQ-01A-015)	AQ-01B-025 1314 (AQ-01A-025)	AQ-01B-026 1311 (AQ-01A-026)	AQ-01B-030 1308 (AQ-01A-030E)	AQ-01B-030 1308 Amphibole (AQ-01A-030E)	AQ-01B-041 1317 (AQ-01A-041E)	AQ-02B-010 1321 (AQ-02A-010E)
SAMPLING DATE		08/18/87	08/30/87	09/17/87	09/20/87	09/25/87	09/25/87	10/15/87	08/19/87
PARAMETER	UNITS	READING	READING	READING	READING	READING	READING	READING	READING
FLOW VOLUME	Liters	3,994	4,005	4,000	4,000	4,628	4,628	2,519	4,829
LOW MAGNIFICATION:									
NUMBER OF GRIDS EXAMINED		404	436	145	405	402	402	406	198
FIBERS/AREA VIEWED		2	5	13	1 U	6	1 U	1	10
PCMe FIBERS/AREA VIEWED		0	0	3	0	1	0	0	1
BUNDLES/AREA VIEWED		4	1	5	1 U	7	1 U	1	2
CLUSTER/AREA VIEWED		1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
TOTAL STRUCTURES/CC	#/cc	0.00046	0.00033	0.0032	0.00005 U	0.00055	0.00004	0.00016	0.0018
LONG, THIN STRUCTURES/CC	#/cc	0.00015	0.00023	0.0023	0.00005 U	0.00034	0.00004 U	0.00008	0.0013
PCMe STRUCTURES/CC	#/cc	0.00031	0.00009	0.00086	0.00005 U	0.00021	0.00004	0.00008	0.00043
PCMe FIBERS/CC	#/cc	0.00005 U	0.00004 U	0.00043	0.00005 U	0.00004	0.00004 U	0.00008 U	0.00009
HIGH MAGNIFICATION:									
NUMBER OF GRIDS EXAMINED		8	24	2	49	5	5	35	2
FIBERS/AREA VIEWED		37	33	46	16	51	1 U	38	40
BUNDLES/AREA VIEWED		10	4	5	2	4	1 U	3	3
CLUSTER/AREA VIEWED		1 U	1 U	1	1 U	1 U	1 U	2	1 U
TOTAL STRUCTURES/CC	#/cc	0.14	0.043	0.85	0.0081	0.19	0.19	0.047	0.54
SHORT STRUCTURES/CC	#/cc	0.14	0.042	0.85	0.0081	0.19	0.19	0.047	0.54
LONG, THIN STRUCTURES/CC	#/cc	0.0031 U	0.00086	0.01 U	0.00042 U	0.0034 U	0.0034 U	0.00095 U	0.0087 U
PCMe STRUCTURES/CC	#/cc	0.0031 U	0.00086	0.01 U	0.00042 U	0.0034 U	0.0034 U	0.00095 U	0.0087 U

NOTES:

1) PCMe fibers are defined as follows:
   Aspect ratio > 3
   Length >= 5 um
   Diam >= 0.25
   No bundles, clusters, or matrix were included.

2) Detection level set to 1 fiber per area viewed.

3) "U" indicates not detected. Value shown with "U" is level of detection equivalent to 1 fiber detected.
   "J" indicates that results is usable for limited purposes only; fiber clumping on the filter was indicated by the chi-square test.
   ND = Not detected
   NR = Not reported

SOUTH BAY ASBESTOS
AIR ASBESTOS REANALYSIS RESULTS
INDIRECT PREPARATION

SAMPLE DESIGNATION		AQ-02B-015	AQ-02B-021	AQ-02B-025	AQ-02B-026	AQ-02B-047	AQ-03A-036	AQ-03B-035	AQ-03B-040
LAB NUMBER		1305	1309	1302	1304	1319	1301	1310	1327
DUPLICATE OF		(AQ-02A-015)	(AQ-02A-021)	(AQ-02A-025)	(AQ-02A-026)	(AQ-02A-047)	(AQ-03B-036E)	(AQ-03A-035)	(AQ-03A-040)
SAMPLING DATE		08/30/87	09/11/87	09/17/87	09/20/87	10/26/87	10/07/87	10/05/87	10/14/87
PARAMETER	UNITS	READING	READING	READING	READING	READING	READING	READING	READING
FLOW VOLUME	Liters	3,962	3,955	3,963	3,969	3,963	2,517	3,775	3,776
LOW MAGNIFICATION:									
NUMBER OF GRIDS EXAMINED		43	35	50	400	19	49	132	420
FIBERS/AREA VIEWED		13	2	8	1	12	3	6	3
PCMe FIBERS/AREA VIEWED		0	0	0	1	0	0	0	0
BUNDLES/AREA VIEWED		2	3	5	9	2	11	9	7
CLUSTER/AREA VIEWED		1 U	1 U	1 U	1	1 U	1 U	1 U	1 U
TOTAL STRUCTURES/CC	#/cc	0.012	0.013	0.008	0.00085	0.022	0.015	0.0039	0.00063
LONG, THIN STRUCTURES/CC	#/cc	0.011	0.0042	0.006	0.0001	0.021	0.01	0.0025	0.00031
PCMe STRUCTURES/CC	#/cc	0.00098	0.0085	0.0012	0.00065	0.0011	0.0045	0.0013	0.00031
PCMe FIBERS/CC	#/cc	0.00049 U	0.0006 U	0.0004 U	0.00005	0.0011 U	0.00064 U	0.00016 U	0.00005 U
HIGH MAGNIFICATION:									
NUMBER OF GRIDS EXAMINED		2	1	1	14	2	1	2	6
FIBERS/AREA VIEWED		58	32	40	23 J	60	29	53	32
BUNDLES/AREA VIEWED		6	6	3	5 J	15	10	8	5
CLUSTER/AREA VIEWED		1 U	1 U	1	4 J	1 U	2	1	1 U
TOTAL STRUCTURES/CC	#/cc	0.82	1.1	1.3	0.069 J	1.0	1.5	0.83	0.18
SHORT STRUCTURES/CC	#/cc	0.81	1.1	1.3	0.066 J	1.0	1.5	0.82	0.18
LONG, THIN STRUCTURES/CC	#/cc	0.01	0.021 U	0.02 U	0.0014 UJ	0.011 U	0.032 U	0.011	0.0037 U
PCMe STRUCTURES/CC	#/cc	0.01 U	0.021 U	0.02 U	0.0028 J	0.011 U	0.032 U	0.011 U	0.0037 U

NOTES:

1) PCMe fibers are defined as follows:
   Aspect ratio > 3
   Length >= 5 um
   Diam >= 0.25
   No bundles, clusters, or matrix were included.

2) Detection level set to 1 fiber per area viewed.

3) "U" indicates not detected. Value shown with "U" is level of detection equivalent to 1 fiber detected.
   "J" indicates that results is usable for limited purposes only; fiber clumping on the filter was indicated by the chi-square test.
   ND = Not detected
   NR = Not reported

TITLE:

SOUTH BAY ASBESTOS
AIR ASBESTOS REANALYSIS RESULTS
INDIRECT PREPARATION

SAMPLE DESIGNATION LAB NUMBER DUPLICATE OF		AQ-03B-040 1327 Amphibole AQ-03A-040	AQ-03B-043 1313 (AQ-03A-043)#	AQ-04A-015 1329 (AQ-04B-015)	AQ-04A-021 1326 (AQ-04B-021)	AQ-04A-025 1307 (AQ-04B-025)	AQ-04B-009 1323 (AQ-04A-009)	AQ-04B-026 1300 (AQ-04A-026)	AQ-04B-035 1328 (AQ-04A-035)
SAMPLING DATE		10/14/87		08/30/87	09/11/87	09/17/87	08/18/87	09/20/87	10/05/87
PARAMETER	UNITS	READING	READING	READING	READING	READING	READING	READING	READING
FLOW VOLUME	Liters	3,776	3,780	2,794	2,790	2,789	4,099	4,095	4,095
LOW MAGNIFICATION:									
NUMBER OF GRIDS EXAMINED		420	38	397	253	400	362	403	31
FIBERS/AREA VIEWED		1	2	9	9	7	11	1	5
PCMe FIBERS/AREA VIEWED		1	0	0	0	0	0	0	0
BUNDLES/AREA VIEWED		1 U	5	8	10	7	8	2	9
CLUSTER/AREA VIEWED		1 U	1 U	1 U	1	1 U	2	1 U	1 U
TOTAL STRUCTURES/CC	#/cc	0.00005	0.012	0.0014	0.0027	0.0015	0.0012	0.00024	0.013
LONG, THIN STRUCTURES/CC	#/cc	0.00005 U	0.0046	0.00083	0.002	0.00094	0.00084	0.00009	0.0099
PCMe STRUCTURES/CC	#/cc	0.00005	0.0076	0.0006	0.00071	0.00051	0.00039	0.00014	0.0033
PCMe FIBERS/CC	#/cc	0.00005	0.00058 U	0.00007 U	0.00011 U	0.00008 U	0.00005 U	0.00004 U	0.00065 U
HIGH MAGNIFICATION:									
NUMBER OF GRIDS EXAMINED		6	1	2	4	7	5	19	1
FIBERS/AREA VIEWED		1 U	39	53	39	39	65	33	60
BUNDLES/AREA VIEWED		1 U	7	6	9	1 U	2	2	18
CLUSTER/AREA VIEWED		1 U	1	1 U	1 U	7	1 U	1	2
TOTAL STRUCTURES/CC	#/cc	0.0037 U	1.5	0.99	0.42	0.23	0.33	0.047	1.8
SHORT STRUCTURES/CC	#/cc	0.0037 U	1.4	0.99	0.42	0.23	0.33	0.046	1.7
LONG, THIN STRUCTURES/CC	#/cc	0.0037 U	0.022 U	0.015 U	0.0075 U	0.0043 U	0.0041 U	0.001 U	0.02
PCMe STRUCTURES/CC	#/cc	0.0037 U	0.044	0.015 U	0.0075 U	0.0043 U	0.0041 U	0.001 U	0.02

NOTES:

1) PCMe fibers are defined as follows:
   Aspect ratio > 3
   Length >= 5 um
   Diam >= 0.25
   No bundles, clusters, or matrix were included.

2) Detection level set to 1 fiber per area viewed.

3) "U" indicates not detected. Value shown with "U" is level of detection equivalent to 1 fiber detected.
   "J" indicates that results is usable for limited purposes only; fiber clumping on the filter was indicated by the chi-square test.
   ND = Not detected
   NR = Not reported
   # Sample AQ-03B-043 (lab #1313) has no duplicate since AQ-03A-043 was not analyzed due to filter overloading.

SOUTH BAY ASBESTOS
AIR ASBESTOS REANALYSIS RESULTS
INDIRECT PREPARATION

SAMPLE DESIGNATION		AQ-04B-035		AQ-04B-047		AQ-04B-047		AQ-05B-009		AQ-05B-015		AQ-05B-015	
LAB NUMBER		1328 Amphibole		1306		1306 Amphibole		1320		1316		1316 Amphibole	
DUPLICATE OF		(AQ-04A-035)		(AQ-04A-047)		(AQ-04A-047)		(AQ-05A-009)		(AQ-05A-015)		(AQ-05A-015)	
SAMPLING DATE		10/05/87		10/26/87		10/26/87		08/18/87		08/30/87		08/30/87	
PARAMETER	UNITS	READING		READING		READING		READING		READING		READING	
FLOW VOLUME	Liters	4,095		4,401		4,401		4,383		4,385		4,385	
LOW MAGNIFICATION:													
NUMBER OF GRIDS EXAMINED		31		328		328		234		475		475	
FIBERS/AREA VIEWED		1	U	5		1	U	12		1	U	1	
PCMe FIBERS/AREA VIEWED		0		0		0		0		0		1	
BUNDLES/AREA VIEWED		1	U	6		1	U	9		2		1	U
CLUSTER/AREA VIEWED		1	U	1	U	1	U	1	U	1	U	1	U
TOTAL STRUCTURES/CC	#/cc	0.00065	U	0.0012		0.00005	U	0.0033		0.00004		0.00008	
LONG, THIN STRUCTURES/CC	#/cc	0.00065	U	0.00057		0.00005	U	0.002		0.00004	U	0.00004	U
PCMe STRUCTURES/CC	#/cc	0.00065	U	0.00063		0.00005	U	0.0011		0.00004		0.00008	
PCMe FIBERS/CC	#/cc	0.00065	U	0.00005	U	0.00005	U	0.00008	U	0.00004	U	0.00004	
HIGH MAGNIFICATION:													
NUMBER OF GRIDS EXAMINED		1		5		5		2		15		15	
FIBERS/AREA VIEWED		1		43		1		46		34		1	U
BUNDLES/AREA VIEWED		1	U	2		1	U	10		6		1	U
CLUSTER/AREA VIEWED		1	U	1		1	U	1	U	1	U	1	U
TOTAL STRUCTURES/CC	#/cc	0.02		0.22		0.0038		0.69		0.065		0.0013	U
SHORT STRUCTURES/CC	#/cc	0.02		0.22		0.0038		0.68		0.062		0.0013	U
LONG, THIN STRUCTURES/CC	#/cc	0.02	U	0.0038		0.0038	U	0.0095		0.0013	U	0.0013	U
PCMe STRUCTURES/CC	#/cc	0.02	U	0.0038	U	0.0038	U	0.0095	U	0.0025		0.0013	U

NOTES:

1) PCMe fibers are defined as follows:
   Aspect ratio > 3
   Length >= 5 um
   Diam >= 0.25
   No bundles, clusters, or matrix were included.

2) Detection level set to 1 fiber per area viewed.

3) "U" indicates not detected. Value shown with "U" is level of detection equivalent to 1 fiber detected.
   "J" indicates that results is usable for limited purposes only; fiber clumping on the filter was indicated by the chi-square test.
   ND = Not detected
   NR = Not reported

SOUTH BAY ASBESTOS
AIR ASBESTOS REANALYSIS RESULTS
DIRECT PREPARATION

SAMPLE DESIGNATION		AQ-01B-009		AQ-04B-009		AQ-05B-009	
LAB NUMBER		1322		1323		1320	
DUPLICATE OF		(AQ-01A-009)		(AQ-04A-009)		(AQ-05A-009)	
SAMPLING DATE		08/18/87		08/18/87		08/18/87	
PARAMETER	UNITS	READING		READING		READING	
FLOW VOLUME	Liters	3,994		4,099		4,383	
LOW MAGNIFICATION:							
NUMBER OF GRIDS EXAMINED		814		884		801	
FIBERS/AREA VIEWED		2		1		2	
PCMe FIBERS/AREA VIEWED		ND		ND		ND	
BUNDLES/AREA VIEWED		1	U	4		9	
CLUSTER/AREA VIEWED		1	U	1	U	1	U
TOTAL STRUCTURES/CC	#/cc	0.00006		0.0001		0.00026	
LONG, THIN STRUCTURES/CC	#/cc	0.00004		0.00006		0.00006	
PCMe STRUCTURES/CC	#/cc	0.00001		0.00003		0.00019	
PCMe FIBERS/CC	#/cc	0.00002	U	0.00001	U	0.00001	U
HIGH MAGNIFICATION:							
NUMBER OF GRIDS EXAMINED		120		86		68	
FIBERS/AREA VIEWED		7		6		69	
BUNDLES/AREA VIEWED		1		2		3	
CLUSTER/AREA VIEWED		1	U	1	U	1	U
TOTAL STRUCTURES/CC	#/cc	0.0023		0.0023		0.016	
SHORT STRUCTURES/CC	#/cc	0.0022		0.0023		0.016	
LONG, THIN STRUCTURES/CC	#/cc	0.0001	U	0.00015	U	0.00015	
PCMe STRUCTURES/CC	#/cc	0.0001		0.00015	U	0.00015	U

NOTES:

1) PCMe fibers are defined as follows:
   Aspect ratio > 3
   Length >= 5 um
   Diam >= 0.25
   No bundles, clusters, or matrix were included.

2) Detection level set to 1 fiber per area viewed.

3) "U" indicates not detected. Value shown with "U" is level of detection equivalent to 1 fiber detected.
   "J" indicates that results is usable for limited purposes only; fiber clumping on the filter was indicated by the chi-square test.
   ND = Not detected
   NR = Not reported

APPENDIX J

NATURE AND EXTENT OF CONTAMINATION

APPENDIX J

NATURE AND EXTENT OF CONTAMINATION

The purpose of this section is to present and discuss the results of the RI sample collection and analysis to determine the magnitude and extent of contamination in air, soil and water. As described in Section 3.0, air, surface soil, subsurface soil, groundwater, surface water, and sediment samples were collected to investigate the extent of both asbestos and other hazardous contaminants. This section describes the distribution and magnitude of contamination in each of the various sampled media.

All data collected during this investigation were subjected to extensive Quality Assurance (QA) and Quality Control (QC) procedures. The QA process, described in detail in the site Quality Assurance Project Plan (CDM, 1986) provided a framework to assure the collection of data of the highest possible quality. Site field audits were performed to investigate adherence to collection, handling, and chain of custody protocols. QC was performed through the use of quality control samples (duplicates, blanks, check samples, spikes). All laboratory data and QC sample results underwent data validation to examine adherence to laboratory protocols and acceptability of the results. Data validation resulted in the assignment of qualitative indicators or flags which describe the usability of each data point.

Sample data for each individual medium will be presented separately. The quality and usability of the data will be discussed first, followed by a discussion of the magnitude and extent of contamination and important relationships which may influence contaminant transport. This information will be used in Section 6.0 to determine the exposure pathways of concern.

J.1 SOIL INVESTIGATION RESULTS

The discussion of soil results will be presented as follows. First, the surface soil asbestos results will be presented and discussed. The subsurface soil results will follow, for both asbestos and target compound list (TCL) compounds. Finally, the Guadalupe River sediment results will be presented for asbestos and TCL Compounds. In general, the soils data can be summarized by stating that asbestos fibers in surface soils is the contaminant of concern; hazardous constitutents (TCL) were not detected at significant levels in soils. The distribution of asbestos in surface soils does not follow any predictable pattern. In general, the RI soil results confirm the previous soil data in a gross sense; for example, the generally high concentrations in the ring levee soils were repeated. The results are discussed in more detail in each following section.

J.1.1 DATA QUALITY - SOIL

A data quality analysis examines results from quality control samples such as field blanks, check samples (standards), and duplicates to quantify the uncertainty in reported concentrations. Generally, a concentration reported by a laboratory is not exactly equivalent to the actual concentration present in the sample. The difference between the actual and reported concentration is termed laboratory error. Laboratory errors can be systematic or random. The terms used to express the uncertainty in analytical measurements are accuracy and precision. Accuracy describes any systematic errors in the concentrations reported by the laboratory while precision describes the impact of random errors. Accuracy can only be determined by analyzing samples containing known concentrations (standards), while precision can be determined from duplicate analyses or standards. The measure used for accuracy is % bias which is defined as:

$$\% \text{ bias} = 100 (R-T)/T$$

where R = Reported Concentration
T = True Concentration

The measure used for precision is Relative Standard Deviation (% RSD) which is defined as:

$$\%RSD = 200 (|D_1 - D_2|/((D_1 + D_2) \sqrt{2}))$$

Where D_1 and D_2 are concentrations reported for a duplicate pair.

Precision and accuracy were evaluated for soil asbestos samples. A similar analysis was not performed for organic and inorganic TCL compounds, since these compounds were not detected frequently enough to allow a detailed error analysis.

During sampling to assess the nature and extent of asbestos contamination, soil and sediment samples were analyzed for asbestos using polarized light microscopy (PLM) and transmission electron microscopy (TEM). A total of 68 TEM analyses and 126 PLM analyses were performed. This sample analysis count includes all QC samples. A breakdown of QC samples by type is presented below:

	TEM	PLM
o Co-Located Samples	11	18
o Field Duplicates	6	11
o Lab Duplicates	6	6
o Standards	6	2

Three types of duplicate samples were analyzed. Co-located samples are unique samples collected from adjacent locations. Concentration differences observed in co-located samples are due to laboratory variability, sampling variability, and actual difference in concentration between closely spaced samples. Field duplicates are samples which were collected from one location, then homogenized and split in the field. Concentration differences in these samples measure laboratory and sampling variability. Laboratory duplicates are prepared at the laboratory and measure only laboratory variability. Standard samples are prepared using a known concentration of asbestos. The duplicate analysis results are presented in Table J.1. Standard results are presented in Table J.2.

Since co-located samples measure more sources of variability than field duplicates or lab duplicates, the concentration difference between pairs of co-located samples was expected to be larger than the concentration difference between samples comprising a field duplicate pair. Similarly, field duplicates were expected to show greater concentration differences than lab duplicates. TEM duplicate results do not obey the expected relationships. Table J.1 indicates no clear difference in %RSD for any of the types of duplicates. This observation indicates that the laboratory variability of the TEM method (due to preparation, fiber counting, or other sources of error) dominates over other sources of variability. PLM duplicate results indicate that lab variability is not the dominant source of variability and that the lab variability of the PLM results is less than for the TEM results. Thus the precision of the PLM analyses is greater than the precision of the TEM analyses.

In addition to duplicate samples, standard samples containing known amounts of asbestos were also submitted for PLM and TEM analyses. Reported concentrations for the standard samples are presented in Table J.2. Standards can be used to determine systematic errors or the accuracy of the reported concentrations; that is, any consistent over- or under-estimation of the actual concentration by the lab can be determined. The laboratory underestimated the concentration of three TEM asbestos samples by 65%; however, the concentrations of three other standards were over-estimated by more than 100%. These differences may be due to sample preparation. The over-estimated standards were subjected to grinding as specified by the soil TEM preparation method (Section 3.3). The grinding may have "created" or liberated fibers by breaking down asbestos bundles or clusters, leading to an over-estimate of the true concentration. The standards which were under-estimated were not ground. The PLM standards also provided inconclusive results, as the concentration of one standard was correctly measured but the concentration of the second standard was overestimated by 200%. The standards results presented in Table J.2 are inconclusive, so no general statements concerning accuracy or systematic errors can be made.

A major difficulty in attempting to assess the systematic error in soil asbestos measurement is that the random errors, as measured by %RSD, are large. Table J.2 presents the %RSD values for the standards analyses. These %RSD values are similar in magnitude to the duplicate sample %RSD values presented in Table J.1. The similarity of these %RSD values indicates that the laboratory's inability to reproduce the concentrations of the standard samples may be due to random laboratory variability and not systematic errors.

As a result of the poor performance of the laboratory on duplicate and standard samples, the Phase I TEM and PLM results should be considered as qualitative indicators of asbestos concentrations. Thus the data can be used to point out areas of high or low asbestos concentrations; however, the exact numerical concentration at any location is uncertain. The errors observed are such that a sample with a reported concentration of 0.5% could actually contain as low as 0.1% or as high as 2.0% asbestos. However, the actual concentration of this sample is very unlikely to be as large as 5.0%. This uncertainty must be considered when using the asbestos soil concentration data. The additional background samples collected in Phase II could not be evaluated because of the small number of samples.

The data quality for the TCL analyses can be summarized as follows. Semivolatile organic soil analyses were cited for poor precision, blank contamination, and poor spike recovery. Volatile organic analyses were cited for blank contamination and poor spike recovery. Inorganic samples were cited for exceeding mercury holding times, poor lead precision and poor spike recoveries for mercury and antimony. The impact of these data validation citations on data quality are that all reported semivolatile concentrations should be considered as qualitatively but not quantitatively correct. Nearly all volatile organic concentrations are considered as estimates due to blank contamination. Metals concentrations are considered valid for all purposes except for lead, mercury, antimony, and zinc concentrations, which are qualitatively but not quantitatively identified.

J.1.2 SURFACE SOIL RESULTS

As described in Section 3.0, 62 samples of surface soil were collected at 40 locations in Alviso. The samples were collected from open areas with a high likelihood for human contact, from areas not sampled previously, or from previously indicated "hot spots" to confirm existing data. Figures J-1 and J-2 show the sampled locations and the results. All samples were analyzed by polarized light microscopy (PLM), the most common method for analyzing asbestos in solids. About half of the samples were also analyzed by the more rigorous transmission electron microscopy method (TEM). Each sample location was also tested for soil grain size and moisture content. Sample results are included in tabular form in Appendix I.

The results for PLM and TEM have been summarized in Tables J.3 and J.4.

Extent of Asbestos Contamination in Surface Soil

The results indicate that asbestos is present in soils at or near known sources of serpentine rock, such as the ring levee and the small dike surrounding the Alviso Marina picnic area. High values near the intersection of Liberty and Catherine Streets probably indicate areas where levee building material was stockpiled during construction. When previous soil sampling data (Figures 2-1, 2-2, 2-3) are examined in conjunction with the RI data, the original discovery site where waste asbestos-cement pipe was dumped (at Liberty and Moffat Streets near the Guadalupe River levee) is also generally elevated in asbestos. The asbestos values in the remainder of the site, including most of the residential areas, are generally low or not detected.

There are no detectable differences between serpentine rock and waste asbestos sources, based on asbestos type, fiber size, or morphology. However, it should be noted that the specific concentration of asbestos can vary widely at any particular location, as shown by the co-located duplicate results (for example, PLM samples 037 and 038, TEM samples 040 and 041). This variability may be due to a combination of the natural variation of serpentine or waste asbestos in the fill soils in Alviso, and the variability of the asbestos soil analytical techniques. The data quality analysis (discussed in Section J.1) appears to indicate that PLM results are less variable than TEM results.

Comparison of PLM and TEM Results

As described in Section 3.0, samples were analyzed by both the PLM and TEM methods to test the usefulness of both types of analysis for natural soils. The objective of performing both analyses was to investigate whether a site-specific relationship between TEM and PLM could be established, so that less-expensive PLM analyses could be substituted for the costlier TEM analyses. PLM is the method typically used for solids, but it has a relatively high level of detection (~1%) and estimates asbestos using a field-of-view counting method. TEM was anticipated to produce more accurate results, although grinding of the sample was required to achieve homogeneity during the water suspension step. The grinding may have broken up asbestos clusters or bundles in the natural soil, producing many smaller fibers which potentially could effect mass calculations.

Although the two methods are very different and produce results with different units, the sample pairs analyzed by TEM and PLM were plotted together to assess the possible site-specific comparability of the method results. Figure J-3 is a scattergram showing TEM results versus PLM results for surface and subsurface soils (approximately 60 soil pairs). For the purpose of the figure, PLM non-detect values, or <1 percent, were set equal to zero. The plot shows that when PLM fails to detect asbestos, TEM values are an average of 0.105 percent by weight, and do not exceed 0.5 weight percent. This indicates that if PLM analyses are used to guide site remediation, it is likely that a non-detect PLM result contains less than 0.5 percent asbestos by weight.

J.1.3 SUBSURFACE SOIL

As described in Section 3.0, 51 samples of subsurface soil were collected from 16 borings in Alviso. Five borings (Monitor Wells MW-001 through 0055) were drilled in areas of previous landfill activity, and groundwater monitor wells were installed in the borings. Five borings (Borings 007 through 011) were drilled at locations in Alviso suspected of having received soil fill. A background boring was drilled at air station 5 at

Agnews Hospital. Finally, soil samples were also collected, in coordination with Emcon Associates, during installation of monitor wells around the perimeter of the Marshland Landfill. Table J.5 summarizes the borings, sample depths, and analytical results. All samples were analyzed for asbestos by PLM, 20 samples were also analyzed for asbestos by TEM, and 13 samples were analyzed for Target Compound List (TCL) compounds to assess the potential for hazardous wastes. The samples results are tabulated in Appendix I and Table J.5.

Extent of Asbestos Contamination in Subsurface Soil

Asbestos was detected in the upper 1.5 feet of boring MW-001 located at the original discovery location at the foot of Liberty Street adjacent to the Guadalupe River levee. Traces of asbestos were also detected in boring MW-002, across Gold Street at the St. Claire landfill. Boring MW-004, drilled in the Guadalupe River levee (Figure 3-3), had a value of 7% asbestos by PLM at a depth of approximately 10 feet (Table J.5). This high value may be due to remnants of the Santos Landfill unearthed during levee construction in 1963. Borings MW-003 and 005 had no significant asbestos.

Of the soil borings (BOR 007-011), boring BOR-009 at Catherine and State streets had fairly high levels of asbestos (5% and 2% by PLM) at the surface and at 5 feet. Surface soil samples taken near boring 9 also showed detectable asbestos indicating that this area may have served as a stockpile location of serpentine soil fill during ring levee construction. The other soil borings in Alviso showed no significant asbestos levels (Table J.5).

The background soil boring at Agnews Hospital East was located at the edge of an agricultural field. The sample, taken from the upper 7 inches of soil, showed detectable asbestos (1% PLM and 0.08% by weight TEM). The background location was chosen based on its distance from the site (Figure 3-3) and the assumption that the soils are natural and in-place. The origin of the asbestos detected at this location is unknown. Additional surface samples were collected from the same location during Phase II; these results are discussed in Section J.1.5.

Asbestos was detected in Boring G3 and G5 at the Marshland Landfill (Table J.5). Boring G3 shows a TEM result of 0.3% (not detected by PLM) in the upper foot of soil, and Boring G5 shows a TEM result of 0.45% in the upper foot and 1.0% PLM at 16.5 feet. Minor amounts of asbestos were detected at depth by TEM in borings G6, G9, and G11 (Tables J.5) Although the borings are not located in the landfill itself, but around the perimeter, the field logs of the borings show that rubble and debris were encountered. The debris may be the source of the asbestos detected.

The asbestos present in the borings may also be due to asbestos-bearing fill rock or soils used as landfill cover or to construct the perimeter roads. The field logs of the borings note the presence of serpentine rock pebbles and fragments.

Extent of TCL Contamination in Subsurface Soil

Soil samples for Target Compound List (TCL) analysis were collected from each of the monitor well borings, located in or near former landfilling activities (Table J.5). The results of the analyses from the borings in Alviso (Monitor wells 1-5) show no obvious evidence of hazardous waste disposal; the isolated occurrences of detectable compounds can be attributed to laboratory contamination. The borings around the Marshland Landfill show small amounts of common volatile compounds.

The following is a summary of the TCL compounds detected:

- o Chloroform - One sample from 10 feet in Monitor well boring 3 showed 9 micrograms per kilogram (ppb) chloroform. This occurrence is assumed to be a laboratory contaminant, based on blank contamination (see Section J.1.1, Data Quality).

- o 4,4-DDD - A sample from 20 feet in Monitor well boring 4 showed 67.6 ppb of this pesticide compound. No other pesticide compound was detected in this boring, and Monitor well 5 from the same general area did not detect this compound. This occurrence could be attributed to either disposal in the Santos Landfill or pesticide use during previous agricultural activities in nearby fields, followed by disruption of the soils during river realignment.

- 2 - Butanone - The same sample in Monitor well boring 4 showed 21 ppb of 2-butanone. This is assumed to be a laboratory contaminant based on blank contamination results.

- 4,4-DDT and 4,4-DDE - The background boring showed concentrations of 129 ppb of 4,4-DDT and 126 ppb of 4,4-DDE. No other organic compounds were detected. The presence of these pesticides can be attributed to the use of the adjacent field for food crops.

- Various volatile compounds - Four of the Marshland Landfill borings showed detectable concentations of several volatile compounds. These are acetone, ethylbenzene, total xylenes, methylene chloride, 4-methyl-2-pentanone, and carbon disulfide. These are common laboratory contaminants, and may be due to blank contamination not indicative of site contamination.

- Inorganic compounds - Many inorganic compounds are present above detection limits. It should be noted, however, that the levels present are characteristic of the site soils since the levels are comparable to the background boring, and, in fact, are generally lower than average soil values compiled for the U.S. None of the inorganics, with the possible exception of antimony, are present at high enough levels to indicate a potential human health risk due to ingestion (EPA, 1987a).

J.1.4 RIVER SEDIMENTS

As described in Section 3.0, samples of Guadalupe River sediments were collected to screen for the presence of asbestos or hazardous constituents, which may have entered the river from the former site landfilling activities. Three samples of sediment were collected at locations successively downstream from Alviso, as shown on Figure 3-3. A sample was also collected upstream of the site, from the Highway 237 bridge crossing the river. All samples were analyzed by PLM, and samples 001 and 002, downstream of Alviso, were also analyzed by TEM. All sample results are presented in Appendix I.

Extent of Contamination - Asbestos

The only sample in which asbestos was detected by PLM is the upstream or control sample, at 1 percent. The two TEM samples downstream detected very small quantities of asbestos. These results would tend to indicate that the river sediments are not an important "sink" or source of asbestos.

Extent of Contamination - TCL

No TCL organic contaminants were detected in the sediment samples. Inorganic results are characteristic of the soils and rock which are the source of the sediments. The sediment inorganic results are similar to the background boring and the subsurface soils discussed in the previous section.

J.1.5 PHASE II SOIL RESULTS

As described in Section 3.0, additional soil samples were collected during the Phase II investigation to better define "background" soil characteristics for asbestos. The soil samples were analyzed for PLM and TEM asbestos. Results are presented in Appendix I.

Additional Background Samples

Two co-located soil samples were collected at the background boring location (Air Station 5) shown in Figure 3-3. These Phase II samples were collected from the upper inch of soil, while the Phase I background boring was a composite of the upper 7 inches of soil. Each of these co-located samples showed no detectable asbestos.

An additional background sample collected in the marsh, between the Environmental Education Center and Alviso, contained no detectable asbestos.

J.2 WATER INVESTIGATION RESULTS

Waters from the Guadalupe River and site monitor wells were analyzed for asbestos and Target Compound List (TCL) compounds. The Guadalupe River at Alviso is strongly influenced by tidal action due to its proximity to San Francisco Bay; surface waters are saline and similar in composition to Bay water. The shallow groundwater aquifer has been intruded by Bay water and is also highly saline. One well, G11, at Marshland Landfill showed significant evidence of TCE contamination. Analytical results for waters are tabulated in Appendix I. The results are discussed in more detail below.

J.2.1 DATA QUALITY - WATER

The data validation findings for TCL water sample data were exceedance of holding times, instrument calibration problems, blank contamination, and low spike recoveries. Items commonly cited in association with the inorganic water analyses were poor reproducibility of duplicate analyses, poor spike recoveries, and possible blank contamination. The data validation citations on the organic and inorganic compound analyses will not greatly affect the usefulness of this data since the TCL analyses were performed primarily to demonstrate the presence or absence of these compounds. The data validation results indicate it is highly unlikely that the analyses could miss actual organic or inorganic contamination, i.e., data quality is high enough that false negatives are unlikely. The analyses are therefore of sufficient quality to meet the primary data use.

Six groundwater and two surface water samples were analyzed for asbestos. QC samples submitted with these water samples were six rinsate or field blanks and three blind duplicate samples. Laboratory QC samples consisted of three laboratory method blanks and four laboratory duplicates. No check samples of known concentration or spiked samples were analyzed.

Water samples were analyzed for asbestos by transmission electron microscopy (TEM). The blank samples analyzed by the lab exhibited low concentrations of asbestos. The data validator considered the blank concentrations to be significantly less than the concentrations observed in the samples (Table J.7). Thus, blank contamination is not a concern. The other data validation citation was due to precision problems with a single sample. This sample failed a statistical test for the distribution of fibers throughout the filter. As a result, the concentration reported for this sample (Monitor well 1, 06/25/87) is considered only a general indicator of the concentrations present. In summary, the asbestos water samples passed data validation with few qualifications and, except for one sample, are considered valid for all uses.

A total of 6 duplicate sample results were analyzed to assess the precision of reported asbestos concentrations. The concentrations of duplicate pairs are shown in Table J.6. The average %RSD for these six duplicate pairs is 31%.

J.2.2 SURFACE WATER

As described in Section 3.0, samples of the Guadalupe River were collected both upstream and downstream of the former landfills to assess whether asbestos or other contaminants have impacted the river. One sample was collected slightly upstream from the site, at the Rt. 237 bridge, and one sample and a duplicate were collected from the Gold Street bridge (Figure 3-3), downstream from the former landfilling activities. The results of the analyses are summarized in Table J.8, and the results are presented in tabular form in Appendix I.

<u>Extent of Asbestos Contamination in Surface Water</u>

Asbestos results in total fibers (millions of fibers per liter) show that the upstream sample contained slightly more total asbestos than the downstream sample indicating no impact to the river from the site.

However, when only those fibers longer than 10 microns are examined, the downstream sample has 50 million fibers per liter, while the upstream sample contains no detectable fibers longer than 10 microns.

The Maximum Contaminant Level Goal (MCLG) proposed by EPA for asbestos in water is 7.1 million fibers per liter (mf/l) greater than 10 microns in length. If this criteria is applied, the value of 50 mf/l appears significant. However, the river is not used as a drinking water source, because of its salinity, and human contact through recreational use is very limited.

Extent of TCL Contamination in Surface Water

No organic contaminants were detected in surface water. The rinsate blank prepared at the site showed 16 ppb bis-(2-ethylhexyl)phthlate. The presence of this common plasticizer compound in the blank is assumed to be laboratory contamination. Inorganic results are consistent with saline Bay waters.

J.2.3 GROUNDWATER

As described in Section 3.0, the five wells installed by EPA in the Santos and St. Claire landfill areas (Figure 3-3) were sampled twice, in June 1987 and October 1987. A total of 17 groundwater samples, including blanks, were collected from these wells. Five of the monitor wells installed by EMCON at Marshland Landfill were sampled in November 1987. One EMCON well, G9, produced so little water that sufficient volume was available for volatiles analysis only. The results are summarized in Table J.8, and tabulated results are presented in Appendix I.

Extent of Asbestos Contamination in Groundwater

Asbestos was detected in all EPA Monitor wells, at levels similar to those reported in surface water. Fibers longer than 10 microns were only reported for EPA well 3. At the Marshland Landfill, asbestos was detected only in one well G5 at concentrations comparable to the levels found in EPA well 3.

The site groundwater asbestos levels are significantly higher than those reported by Hayward (1984) for wells drilled in or near serpentine deposits. However, the groundwater not used for drinking water supply or agriculture because of high salinity.

Extent of Contamination in Groundwater

No TCL organic contaminants were found in the EPA monitor wells; one rinsate blank contained 18 ppb of 2-butanone, assumed to be laboratory contamination. One EMCON well at the Marshland Landfill, well G11, contained 320 ppb of trichloroethene. This contaminant was not found in any of the blanks prepared during the sampling period. TCL inorganic results are consistent with saline Bay water intrusion of the shallow aquifer system.

J.3 AIR INVESTIGATION

Air samples were collected during the period July 24 to October 31, 1987 from a network of five monitoring stations using collection equipment as discussed in Section 3.2.1. Both 24-hour time-integrated and shorter episodic samples were collected. A total of 127 samples and duplicates and 25 blank samples were submitted for Phase I TEM asbestos analyses. As described in Section 3.2.1, two asbestos samplers operated simultaneously at each monitoring station. One of the samples comprising the pair was analyzed while the other was archived. A portion of the archived samples was submitted to a second laboratory for Phase II TEM asbestos analyses. Phase I and II analyses differed in the method of sample preparation and the fiber counting procedures. Phase I samples were prepared via the direct method while Phase II samples were prepared via the indirect method, as described in Section 3.3. The air data base is quite large, and several analyses have been performed to interpret the data. To assist in understanding this Section, Figure J-4 graphically shows the interrelationships of the various data sets.

Asbestos air sampling results were examined by several methods in an attempt to determine the processes which contribute to the measured asbestos concentrations. The first step in the analysis was an investigation of the data quality and usability of the data. For Phase I asbestos results, the dependence of concentrations observed during episodic samples were compared with wind speed, wind direction, and particulate concentrations. Similar comparisons were then performed for the 24-hour analyses. A statistical analysis of both the episopic and 24-hour samples was used to assess if asbestos concentrations within Alviso are significantly different from background concentrations. Similar analyses were repeated for the Phase II data. The section concludes with a summary of the major findings. Figures J-5 and J-6 clarify the interrelationship between the Phase I and Phase II data sets.

J.3.1 DATA QUALITY

Phase I and Phase II samples were analyzed by different laboratories following different sample preparation and analysis procedures, so a separate data quality evaluation is performed for each data set.

The data quality of the Phase I data was investigated by considering random and systematic errors. To assess the random errors present in individual air asbestos measurements, both field and laboratory duplicate samples were analyzed. A total of 21 field duplicate pairs were collected from side-by-side air samplers operating under identical flow conditions. In addition, 12 sample filters were split at the lab to form lab duplicates. Duplicate sample results for total structures, total fibers, and PCM equivalents (terms defined in Section 3.3) are presented in Table J.9. The average %RSD values calculated for total asbestos structures (35%) and total asbestos fibers (31%) are much lower than the average %RSD obtained for asbestos soil (Section J.1.1) analyses and similar to the average %RSD obtained for asbestos water analyses (Section J.2.1).

To further investigate the quality of the data, the precision (as measured by %RSD) of the asbestos analyses should be compared with the precision attained by other laboratories performing identical analyses on standards. This type of direct performance evaluation cannot be performed, however, since such performance data is not available. An indirect comparison of precision can be performed, however, by comparing the precision obtained for asbestos analyses to the precision historically obtained for the analysis of target compound list chemicals by EPA contract labs. Historically obtained %RSD ranges for analyses of compounds in water as presented in EPA's Data Quality Objectives Guidance Document are:

Class of Compounds	%RSD Range
Volatile Organics	11% - 31%
Semivolatile Organics	21% - 42%
Metals	7% - 32%

The average %RSD values obtained for asbestos fibers (31%) and asbestos structures (35%) are at the high end of the range of precision actually obtained for EPA contract lab samples. This comparison of precision values indicates that the variability of the asbestos data is high, however it is within or just outside the range of variability typically found in environmental data.

An additional check performed on the Phase I data was a comparison of Phase Contrast Microscopy equivalents measurements (PCMe) determined by TEM with actual PCM measurements. This comparison was made for 8 analyses of non-blank split samples. The concentrations obtained for these samples via the two methods are presented in Table J.10. An examination of these values indicates little correlation between PCM and PCMe concentrations. In general PCM concentrations are larger than the corresponding PCMe. This result may be due to the tendency of the PCM method to include non-asbestos fibers as part of the total asbestos fiber count since the method cannot distinguish fiber type. Two of the samples, however, contain greater PCMe than PCM concentrations. Thus, it is not possible to make general statements concerning the relative accuracy of the two methods.

A potential source of systematic error in the asbestos analysis is asbestos contamination of the filter media. The likelihood of filter contamination can be assessed through an examination of blank (unexposed filter media) samples. Trip (unopened filter canisters), field (filter media exposed briefly in the field), and lab (filter media kept in the lab) blank samples provided a total of 42 blank analyses. Of these 42 samples, only 4 (or approximately 10%) contained any asbestos fibers. Extrapolating from these samples, it is possible to state that in 90% of the air samples analyzed, no errors will be introduced by blank contamination. In the remaining 10% of the samples, blank contamination is possible. Since there is no method to determine exactly which samples might be affected by blank contamination, large reported concentrations were examined closely to assess whether the concentration might be due to blank contamination rather than actual atmospheric levels.

Due to the observed blank contamination, nearly all of the Phase I data received a "UJ" flag during data validation (Appendix I). The "UJ" qualifier indicates that sufficient asbestos fibers were not observed in the sample to state with certainty that the reported concentrations are not influenced by blank contamination. However, because the data appeared to be internally consistent (based on precision), data analysis, as described in the following sections, was performed.

The Phase II indirect air data set is much smaller than the Phase I data set; correspondingly, the number of samples available to assess data quality is also much smaller. Only one laboratory duplicate sample analysis was performed (Appendix I). On the basis of this duplicate, the %RSD for total structure analyses is 31% and the %RSD for PCM equivalent structures is 25%. These %RSD values are very similar to the average %RSD values determined for the direct method.

The Phase II data validation results indicated no major deficiencies in the ambient air data set. In particular, no significant blank contamination was observed so none of the samples was qualified with a "UJ" flag. An important data validation finding was that thousands of small calcium sulfate particles were present in the samples prepared by the direct method. These particles may have obscured asbestos fibers and caused an underestimation of asbestos concentrations in all directly prepared samples. The conclusion of the ambient data validation report was that with the exception of one sample that was termed an estimate, the data are considered valid and usable for all purposes.

The Phase II exposure experiment data set, however, was rejected during data validation since the laboratory did not follow the prescribed analysis procedure. As a result, the Phase II exposure data cannot be used for any purpose.

J.3.2 PHASE I SAMPLING RESULTS - PHYSICAL ANALYSIS

This section investigates the relationship between asbestos concentrations and physical variables such as wind speed. The purpose of this analysis is to explain site asbestos concentrations, and relate those concentrations to specific sources, if possible. Air samples were collected over 24 hours and shorter episodic periods during which wind speed and direction were consistent. The episodic results are considered first to assess the impact of wind direction on asbestos concentrations. The time-integrated 24-hour samples are then discussed. Figure J.5 graphically shows the types of analyses performed.

Asbestos structure and PCM equivalents (PCMe) results for Phase I analyses are presented in Appendix I. A major feature of these results is that PCMe fibers were only infrequently detected. As a result, any analysis of PCMe will produce uncertain conclusions. For this reason, the data analysis stressed total asbestos structure rather than PCMe fiber results.

J.3.2.1 Analysis of Episodic Samples - Summary

Wind Direction - Samples were collected from each of the five air sampling stations during nine episodic sampling events. Under ideal conditions, this would yield 45 asbestos analyses; however, due to sample overloading by particulates, 42 analyses were obtained. During 8 of the episodes, wind directions ranged from the west to the north (azimuth 270 to 360). During the remaining episode, wind direction ranged from east-northeast to south (azimuth 70 to 180). The wind directions and asbestos structure concentrations observed during each of the episodes are presented in Table J.11.

During the eight episodes with northwest winds, asbestos concentrations ranging from non-detect to more than 10,000 structures/m^3 were observed at Stations 2, 3, 4, and 5. The concentrations at Station 1 (upwind) ranged from non-detect to 4,200 structures/m^3. Based on these results, it appears that during constant northwest wind conditions, asbestos structure concentrations vary over a wide range at each of the five stations. Thus, northwest winds cannot be used to predict asbestos concentrations at any of the five stations.

The remaining episodic sample was collected during reverse flow conditions when the wind direction was approximately from the southeast. Under these conditions, Station 1, which is normally upwind, is downwind from Alviso. The largest episodic asbestos concentration at Station 1 was observed during these conditions; thus, reverse wind conditions may result in larger concentrations at Station 1. However, relatively high concentrations were observed at all five stations during this episode so other factors may be causing the observed relatively large asbestos concentrations. Based on this one episodic sample it is not possible to state conclusively that reverse conditions cause large asbestos concentrations at Station 1.

Wind Speed - The previous section demonstrates that wind direction does not, by itself, explain the asbestos concentrations observed. Information on wind speed, in conjunction with direction, may better explain the observed range of asbestos concentrations. During consistent northwest wind conditions, it is expected that as average wind speed increases, wind erosion and, hence, asbestos concentrations should also increase. To investigate this relationship, asbestos structure concentration was plotted against average wind speed for the eight northwesterly wind episodes (Figure J-7).

No relationship is observed between wind speed and asbestos in Figure J-7. Asbestos structure concentrations as large as 10,000 structures/m^3 occur at average wind speeds ranging from 2.5 to 15.5 mph. In addition, non-detectable asbestos concentrations occur at all wind speeds. Based on Figure J-7, it is concluded that wind speed does not, by itself, explain the range of observed asbestos concentrations.

Particulate Concentrations - Particulate concentrations, measured in terms of total suspended particulates (TSP) and respirable particulates (PM-10), are plotted against asbestos concentrations in Figures J-8 and J-9. Since asbestos fibers are a portion of the total amount of particulates in the air, it was expected (assuming the same source for asbestos and particulate matter) that as particulate matter concentrations increase, asbestos concentrations will also increase. The concentrations plotted in Figures J-8 and J-9 do not follow this expected relationship. Large asbestos concentrations occur over the entire range of particulate concentrations with the largest asbestos concentations corresponding to relatively low particulate concentrations. Particulate concentrations, therefore, cannot be used to predict asbestos concentrations, within this data set.

J.3.2.2 Analysis of 24 Hour Samples

Wind Speed - During the course of each 24-hour sample, wind direction shifts were large so no analysis of wind direction and asbestos concentration was performed. Wind speed and asbestos concentration were compared however. The plot of asbestos concentrations against wind speed averaged over the 24-hour sampling period (Figure J-10) indicates poor correlation. Wind speed cannot account for the range of observed asbestos concentrations.

Particulate Concentrations - Plots of 24-hour asbestos concentrations against TSP and PM-10 do not show positive correlation (Figure J-11 and J-12). Based on these figures particulate concentrations clearly do not account for the range of observed asbestos concentrations. Importantly, the largest particulate concentrations tend to correspond to lower than average asbestos structure concentrations. A possible explanation of this relationship may be that as particulate concentrations increase, asbestos structures become obscured and more difficult to identify. Thus, particulates may be influencing the asbestos concentrations and masking relationships between asbestos and other variables such as wind, speed, wind direction and TSP concentration.

J.3.2.3 Statistical Analysis of Phase I Air Data

The concentrations of asbestos structures observed at each of the five air monitoring stations were analyzed via statistical methodologies to point out significant features of the data. First, a qualitative discussion of the data and the observable relationships is provided. Basic statistics are then calculated and average upwind and downwind concentrations are compared. Finally, frequency distributions and a summary of the statistical results are given.

Qualitative Analysis of the Data - The first step in the statistical evaluation of the data set was a qualitative examination of the data to discern discrete populations, potential correlations, and the rough distribution of the data. Before performing this qualitative analysis all duplicate sample results were averaged to obtain a single concentration at each air station per sampling event. Non-statistical analyses of the air data (Section J.3.3.3) indicate no quantifiable difference between 24 hour and shorter episodic sample results that can be attributable to wind speed or direction; thus, in all statistical analyses no differentiation between episodic and 24 hour samples is made.

After averaging duplicate samples and examining the asbestos structure and PCMe concentrations it was observed that the concentrations at Stations 2, 3, and 4 tended to be greater than the concentrations at Station 1 (see data tables, Appendix I). Based on these concentration differences and the location of the samplers, three statistical populations were defined. The "up-wind" population was comprised of Station 1. Stations 2, 3, and 4 formed the "in-town" population and Station 5 formed the "down-wind" population. An important phase of the statistical analysis is testing for significant differences between these populations. The terms "up-wind" and "down-wind" applied to stations 1 and 5 indicate the location of these stations in relation to the town of Alviso considering the local prevailing wind direction. Station 1 is generally upwind of Alviso; however, reverse flow conditions which cause the station to be downwind of Alviso do occur. The terms up-wind and down-wind are therefore used as descriptive terms which do not exclude reverse flow.

The three in-town sampling stations were located in portions of Alviso which were likely to be impacted by specific sources of asbestos. If the concentrations observed at each of these three stations were due to specific nearby sources, then the concentrations observed at each station would be different. On the other hand, if asbestos concentrations are not due to very local sources, then similar concentrations would be expected at each of the three stations. Similarity among the concentrations at each of the three in-town stations is discussed below.

A qualitative examination of the air data presented in Appendix I indicates that there is very low correlation between asbestos structure or PCMe concentrations at the in-town stations. This qualitative observation can be quantified by calculating correlation coefficients on the asbestos concentrations observed at pairs of sampling stations. Performing this calculation on asbestos structure concentrations yields correlation coefficients of 0.08 between Stations 2 and 3; 0.06 between Stations 2 and 4; and 0.67 between Stations 3 and 4. A correlation coefficient of 1.0 indicates perfect linear correlation while a coefficient of 0 indicates no correlation. The measured correlation coefficients indicate that the structure concentrations observed at Station 2 are independent of the concentrations observed at Stations 3 and 4. However, there is some correlation between the concentrations observed at Stations 3 and 4. This result may indicate that the factors controlling the asbestos structure concentrations observed at Station 2 are different than the factors controlling the asbestos structure concentrations observed at Stations 3 and 4.

Basic Statistics - The statistics calculated on asbestos total structure concentrations measured at each station are the arithmetic average, the standard deviation, and the standard deviation of the sample mean. Similar statistics were not calculated for PCMe fibers since these fibers were detected very infrequently; thus, any statistics on PCMe fibers would be strongly influenced by whatever arbitary concentrations was assigned to detection limit samples. The arithmetic average provides an estimate of the average ambient asbestos structure concentration in the vicinity of the sampling stations over the three month sampling period. The average of asbestos concentrations from the in-town stations provides an estimate of the average ambient asbestos concentrations in Alviso. The total asbestos structures and PCMe asbestos statistics for each station are presented in Tables J.12 and J.13. An important feature of the reported average asbestos structure concentrations is that the average at each station is much lower than the concentrations reported in regionwide studies of asbestos in ambient air (Section 7.0).

To determine if a significant quantitative difference in asbestos structure concentration exists between upwind and in town stations, a paired difference analysis was performed. A paired difference is defined as the difference between the asbestos concentrations observed at a pair of stations during the same sampling period. If the average asbestos concentration at each of the two stations comprising the pair are equal, the average paired difference will be zero. A paired difference test thus determines whether the average concentration difference between the two stations is significantly different from zero. The test assumes that the individual differences are not correlated in time. This assumption is acceptable since no temporal correlation has been observed in asbestos concentrations.

The results of the paired difference analysis are presented in Table J.14. The quantities presented in this table are the count (number of differences for each pair of stations), the average difference, the standard deviation of the differences, and the standard deviation of the average or sample mean. These values are then used to calculate a standard variable, termed z, using the following relationship.

$$z = \bar{x}/s_x$$

where $\bar{x}$ = average difference

s_x = standard deviation of the average

The value of z is compared to tabulated critical values for Student's t distribution. The one-sided critical value at the 95% significance level is 1.72. As shown in Table J.14, the z values for the average difference between asbestos concentrations at Station 1 and each of Stations 2, 3, and 4 are greater than 1.72; thus, the difference is significant at the 95% level. Thus, a significant difference in asbestos structure concentration does exist between Station 1 and stations within Alviso. The magnitude of the concentration differences are the averages presented in Table J.14.

Analysis of Frequency Distributions - The analysis to this point has focused on the average properties of the data. The average concentration does not, by itself, adequately describe the properties of the observed asbestos concentrations. Figure J-13 presents the range (difference between minimum and maximum concentration) of observed total asbestos structure concentrations at each station in relation to the average concentration. This figure illustrates that the maximum asbestos structure concentration at the in-town stations is five to seven times as large as the respective average concentrations. At the upwind and downwind stations, the maximum concentration is approximately three times as large as the average. Since the maximum asbestos concentrations may pose significantly greater exposure risk than average concentrations, the rate of occurrence of large asbestos concentrations will be examined at each station.

To examine the rate of occurrence of large asbestos concentrations, the frequency distribution and percentiles of the distribution were examined. A frequency distribution provides a count of the number of concentrations observed within various specified ranges. The frequency distribution is represented pictorially as a histogram. Percentiles, which can be derived from frequency distributions, indicate the percentage of the data which are equal to or less than the percentile concentration. For example, 75% of the data are less than or equal to the 75th percentile concentration. The percentiles which will be examined are the 50th, 75th, and 90th. The 50th percentile is also known as the median and is occasionally used as a measure of central tendency instead of the arithmetic average. To investigate the largest likely concentration at each station, the maximum observed concentrations was also examined.

Histograms of asbestos structures are presented for each station in Figures J-14 and J-15. The Station 1 histogram indicates that 50% of the samples contain less than 1000 asbestos structures per cubic meter. As asbestos concentration increases a smaller percentage of the data set is observed. Finally, no concentrations are observed above 6000 structures/m^3. This histogram shape is common and is termed skewed to the right.

The histograms at Stations 2, 3, 4, and 5 show quite different shapes than Station 1. All four of these histograms show that approximately 45% of the observed concentrations are less than 1000 structures/m^3. As concentration increases, frequency decreases similar to Station 1; however, much larger concentrations are observed. Between 15 and 35% of the concentrations observed at Stations 2, 3, 4 and 5 are greater than 7000 structures/m^3 while none of the concentrations at Station 1 exceed 6000 structures/m^3.

These histograms show that on the majority of sampling days the concentrations observed at all five stations are similar. On 15 to 35% of the sampling days, however, much larger concentrations are observed at the in-town and downwind stations than at the upwind station. No pattern of large concentrations has been observed, since large asbestos concentrations cannot be correlated with wind speed, wind direction, particulate concentration, or the asbestos concentrations at other samplers. The results suggest that occasional large concentrations of unknown cause are observed at in-town stations, but not at the background station (Station 1).

Numerical confirmation of the histograms is provided by the percentiles of the asbestos structure concentrations (Table J.12). The median (50th percentile) structure concentration is similar across all 5 stations. At the 75th percentile, the in-town and downwind stations show higher concentrations than the upwind station. At the 90th percentile this trend becomes clear as the concentrations at the in-town and downwind stations are at least twice as large as the upwind concentration. The highest observed concentration in-town (28,000 structures/m^3) is over five times as large as the highest upwind concentration (5200 structures/m^3) and nearly three times as large as the largest down-wind concentration (10,500 structures/m^3).

The interpretation of these results is that on 50% of the sampling days there was no clear difference in concentrations between any of the stations. On 25% of the sampling days there was a slight difference between the upwind station and the remaining stations and on 10% of the days the concentrations at the in-town stations are clearly different from the upwind station. Finally, examining the maximum concentrations, larger concentrations are observed at the stations within Alviso than either up-wind or down-wind of Alviso. Thus, although the mechanism of asbestos entrainment into ambient air is not well-understood, the data indicate that under some conditions, higher concentrations of asbestos are observed within Alviso than either upwind or downwind of Alviso.

Ideally, the previous analysis should be repeated for PCMe fibers; however, such an analysis is not possible as PCMe fibers were so infrequently detected that all statistics are strongly dependent on whatever arbitrary concentration is assigned to the below detection limit samples. Hence, any calculated PCME statistics would not be meaningful.

J.3.3 PHASE II AMBIENT AIR DATA - DUPLICATE RESULTS

As discussed previously (Section J.3.2), the reported concentrations of ambient asbestos in the Phase I data set are problematic in several respects: lack of spatial or temporal correlation, reported concentrations lower (1 order of magnitude) than reported regional asbestos concentrations (Section 7.0), and the number of fibers counted on each filter so low that the quality of the data is questionable (Section J.3.1). Due to these factors it is possibile that the measured concentrations are not fully representative of the actual concentrations. To ensure that actual ambient asbestos concentrations have been measured, a portion of the asbestos air data was reanalyzed at an independent laboratory using a modified sample preparation technique and improved fiber counting procedures.

From the archived samples, a subset of 24 samples was prepared for analysis via the indirect method and the laboratory counting procedures were made more rigorous to improve data quality. Three of the samples were also prepared via the direct method. The reanalyzed direct samples were examined more thoroughly by viewing a larger portion of the filter than was required during the Phase I analysis. The purpose of the direct samples was to check the validity of the original direct analyses and investigate interlab variability.

The discussion of the Phase II data will consist of five sections. First, Phase I and Phase II analyses will be compared. This section is followed by a qualitative assessment of the Phase II results. The next three sections parallel the analysis of the Phase I data as Phase II asbestos concentrations are compared with wind speed and particulate concentrations and a statistical analysis of the Phase II data is performed. The steps taken in the analysis of Phase II data are shown in Figure J-6.

J.3.3.1 Comparison Between Indirect (Phase II) and Direct (Phase I) Air Analyses

A subset of 24 duplicate samples, analyzed in Phase I by the direct method, were analyzed in Phase II by the indirect method to determine total asbestos structures and PCMe fibers (Section 3.2.1). The samples selected for reanalysis were distributed among the five air sampling stations and over the range of measured concentrations to obtain a representative sample. This distribution among the stations is as follows:

Station #	Samples Reanalyzed
1	6
2	6
3	3
4	7
5	2

The exact samples reanalyzed and the direct and indirect analysis results for these samples are presented in Table J.15. The total asbestos structure information contained in this table is presented graphically in Figure J-16 which plots the directly and indirectly obtained asbestos concentrations for each sample. An important feature of this figure is that indirect analysis asbestos concentrations are expressed in millions of structures per cubic meter while direct analysis asbestos concentrations are expressed in tens of thousands of structures per cubic meter. The indirect analyses measured significantly higher quantities of asbestos than the direct analyses.

Figure J-16 indicates that no numerical relationship can be developed which relates the Phase I direct and the reanalyzed Phase II indirect asbestos structure results. Some of the largest indirect concentrations (above 1 million structures per cubic meter) correspond to very low or non-detectable direct concentrations. Conversely, the highest direct concentrations do not correspnd to high indirect concentrations. Thus, it is impossible to correct the Phase I direct asbestos data base to obtain equivalent indirect concentrations.

Table J.15 indicates that asbestos PCM equivalent structures (PCMe, or those structures longer than 5 microns which would have been detected as fibers using the PCM method) are also significantly higher when measured via the indirect method. Of the 24 samples, only three showed detectable PCMe structures in Phase I (direct method), while 23 of these samples contained detectable PCMe structures when analyzed by the indirect method in Phase II. Clearly, the indirect method is much more sensitive than the direct method for detecting PCMe structures.

J.3.3.2 Comparison Between Phase I and Phase II Direct Analyses

Three samples were reanalyzed via the direct method. This reanalysis was performed to determine if the original direct analyses are reproducible and to examine interlaboratory variability. The reanalyzed asbestos structure concentrations are graphically compared to the original concentrations in Figure J-17. Although only three samples were reanalyzed, it is possible, based on this figure, to observe that there is reasonable correlation between the original and reanalyzed direct asbestos structure concentrations. For each pair of samples it is possible to calculate the percentage relative standard deviation (%RSD). The average %RSD for these 3 reanalyzed samples, 38%, is very similar to the %RSD observed for Phase I duplicate samples (31%, Section J.3.1). As a result, the interlaboratory variability and intralaboratory variability for direct analyses are approximately equal, and it is reasonable to conclude that the Phase I direct analyses did not grossly over- or underestimate the asbestos structure concentration that can be determined by the direct method. As discussed in Section J.3.1, however, the direct analyses were hindered by the presence of thousands of small calcium sulfate particles which may have obscured asbestos fibers. Thus, although these two sets of direct measurements are roughly comparable, direct analyses may not provide a representative measure of ambient asbestos concentration at this site.

The original or Phase I direct PCMe results for the three samples indicated that two of the three samples contained no detectable PCMe fibers (termed structures in Phase II) while the third sample contained 8,000 structures/m^3 (Table J.15). The Phase II direct reanalysis results for these three samples indicate that low PCMe structure concentrations (<50 structures/m^3) are present in two of the three samples while the third sample contains 190 structures/m^3. The Phase II direct PCMe results are, thus, not comparable with the original Phase I direct PCMe results. The reanalyzed direct PCMe results appear more sensitive and precise than the original results since low PCMe concentrations (10 structures/m^3) are reported in the reanalyzed samples whereas the original analyses did not quantify concentrations less than 1000 structures/m^3. Based on this information, the reanalyzed direct PCMe analyses are believed to be superior to the original PCMe analyses.

J-3.3.3 Qualitative Assessment of Indirect Analyses

PCMe and total asbestos structure concentrations for the 24 Phase II indirect preparation samples can be compared through a scatterplot of PCMe versus total structure concentrations (Figure J-18). This scatterplot indicates that PCMe and total structure concentrations are positively correlated. This relationship, which was not observed in the Phase I data, indicates that the Phase II data are internally consistent and are more likely to provide representative determinations of asbestos PCMe concentrations than the Phase I analyses.

J-3.3.4 Comparison of Indirect Data with Wind Speed and Direction

In comparing asbestos concentration with wind speed it is expected that, if asbestos emissions are the result of wind erosion, and if other factors are held constant, as wind speed increases above a threshold value, an increase in asbestos concentration should occur. When the wind direction is oriented so that air moves from the vicinity of a source towards a sample station, an increased asbestos concentration is expected at the impacted station. To investigate the effects of wind direction and velocity on asbestos concentration, plots of these variables against Phase II asbestos concentrations were examined.

Wind Speed - Average wind speed over the sampling period was plotted against total asbestos structure concentration in Figure J-19. This plot indicates two potentially distinct asbestos populations. At concentrations below 600,000 structures/m^3 an apparent linear relationship between wind speed and asbestos concentration is shown. At asbestos concentrations exceeding 600,000 structures/m^3, no relationship between wind speed and concentration is apparent, indicating that large asbestos concentrations can occur at any wind speed. An interpretation of this relationship between wind speed and asbestos structure concentration is that wind is only one of several possible variables which influence the asbestos concentrations.

Asbestos PCMe concentrations (Figure J-20) do not exhibit any strong relationship with wind speed. Thus wind speed does not appear to be useful for predicting PCMe concentrations.

Wind Direction - Investigation of the relationship between wind direction and asbestos was accomplished by examining site specific meteorologic data. Wind direction data presented in Section 4.2 indicate that wind is predominantly from the northwest and is infrequently from the southeast. To analyze the impact of wind direction on concentration, four approximately equal percentage wind classes were developed based on predominant wind frequencies. The four classes defined and the frequency at which wind directions fall within these classes are follows:

CLASS DEFINITION

Class	Compass Azimuth	Direction	Frequency
1	304-326	NW	30%
2	236-304	WNW - SW	20%
3	326-34	NNW - NNE	31%
4	34-236	NE - SSW	19%

These four direction classes were designed to contain equivalent frequencies. Given the actual distribution of wind direction, the above classes come as close as possible to attaining this goal.

During the collection of each asbestos sample, wind direction was continuously recorded. Based on this continuous record the average hourly wind direction was determined. The hourly wind directions were then used to calculate the percentage of time that wind direction occurred within one of the four direction classes. For example, if the wind direction was from the northwest for 6 hours during a 24 hour sampling period then the frequency of Class 1 winds is 25% (6/24). The frequency of winds for other classes was similarly defined.

If asbestos concentration is a strong function of wind direction, a correlation between concentration and the frequency of winds from a given direction will be present. That is, if an asbestos source is located northwest of a particular station, asbestos concentration should increase as the frequency of northwest winds increases. This relation between asbestos concentration and wind direction was investigated through multiple regression. The output of the multiple regression determines whether wind direction is useful in predicting asbestos and, second, which wind directions are positively correlated with large asbestos concentrations. This analysis was performed independently at Stations 1, 2, and 4. Stations 3 and 5 were not analyzed via this process since too few reanalysis results (3 and 2 samples respectively) were available to apply the multiple regression method.

Application of the multiple regression method showed that wind direction cannot be used as a predictor of asbestos concentration. Strong positive correlations ($r>.7$) between wind direction class frequency and asbestos structure or PCM equivalant concentrations do not occur at any of the stations. Furthermore, the predictive power of the multiple regression equations, as measured by the multiple coefficient of determination is poor ($r^2<.4$) at all three stations. Asbestos soil sampling results indicate discrete asbestos sources exist; however, the wind direction data do not confirm that wind transport from the sources toward the air monitoring stations is a major factor in describing observed asbestos concentrations.

J.3.3.5 Comparison of Indirect Data and Particulate Concentrations

The Phase II asbestos concentrations measured at each location were compared to the particulate concentration measured at the same location over an identical sampling period. Investigation of the relationship between asbestos and particulate was undertaken to indicate if particulate concentration measurements can serve as a screening tool to predict asbestos concentrations. Also, the strength of the correlation between particulate and asbestos concentrations indicates whether asbestos and particulates are transported by identical or different combinations of wind speed and direction, and whether distinct sources of asbestos and particulates exist.

Basic Statistics - Basic statistics of particulate concentrations corresponding to the indirect samples are provided in Table J.16. Total suspended particulates (TSP) concentrations are largest at Stations 2 and 3 located within Alviso. Average TSP concentrations at those stations are up to twice as large as at upwind Station 1. Station 4 (located within Alviso) and Station 5 (the downwind station) have average concentrations intermediate to the average concentrations observed at Stations 1, 2, and 3.

PM-10 (or particulates less than 10 microns in aerodynamic diameter) average concentrations behave similarly to TSP concentrations in that the average concentrations at Stations 2 and 3 are larger than at Station 1. However, the magnitude of the difference is not as large. Average PM-10 concentrations at Station 4 and Station 1 are very similar while the PM-10 concentration at Station 5 is lower than the average at Station 1.

These statistics show that the distribution of average particulate concentrations among the stations is generally similar to the distribution of asbestos concentration among the stations. This relationship concerning average concentrations is an indication that particulate concentration may act as a predictor of asbestos.

Asbestos-Particulate Scatterplots - Four different scatterplots of asbestos (both PCMe and total structures) and particulates (both TSP and PM-10) were developed (Figures J-21 through J-24). Each of the plots presents an asbestos concentration and a particulate concentration for each re-analyzed sample. The plots depict reanalysis results regardless of station location, but distinct plotting symbols were used so that samples acquired from Station 1 (upwind), Stations 2, 3, and 4 (in-town), and Station 5 (downwind) can easily be recognized. Summary correlation statistics for each plot are provided in Table J.17.

The scatterplot between TSP and total asbestos structures (Figure J-21) indicates that mild linear correlation exists between these two variables. The correlation (r=.72) is not sufficiently strong to allow accurate prediction of asbestos from particulate concentration; however, the scatterplot indicates that TSP is a qualitative predictor of total asbestos structure concentration. For instance, when TSP exceed 100 $\mu g/m^3$, asbestos structures always exceed 600,000 structures/m^3 and often exceed 1,000,000 structures/m^3.

An important aspect of Figure J-21 is that the largest particulate and asbestos concentrations are observed at Stations 2, 3, and 4. Relatively high (>600,000 structures/m^3) asbestos levels are observed at Stations 1 (upwind) and 5 (downwind) on only two occasions. These two relatively high asbestos concentrations are also accompanied by relatively high particulate concentrations indicating that the relationship between particulates and asbestos structures is not strongly dependent on location.

The plot of PM-10 against total asbestos structures (Figure J-22) is similar to the previous plot for TSP. Asbestos and particulates are again related; however, the correlation between PM-10 and asbestos structures (r = .56) is less than the correlation between TSP and asbestos structures (r = .72).

The plot of TSP against asbestos PCMe structures (Figure J-23) indicates that TSP and PCMes are generally related. PCMe concentrations of three particular samples are much greater than would be expected based solely on

TSP concentration. The mechanism which causes the higher PCMe in these three samples is unknown; however, all three of these samples were from stations within Alviso. Thus the mechanism causing high PCMe may be related to the proximity of asbestos source material plus an unpredictable soil disturbance mechanism.

The plot of PM-10 against asbestos PCMe (Figure J-24) is nearly identical to Figure J-23. The great majority of the samples contain less than 1500 PCMe structures/m^3 and these samples show a linear relationship with PM-10. Again, however, there are three samples which do not fit the observed linear relationship.

Based on the scatterplots presented, TSP shows a stronger relationship with both asbestos structures and PCMe than does PM-10. Although the relationship between asbestos and TSP concentrations exists at all stations, the correlation is not sufficiently strong to allow accurate prediction of asbestos based on a measurement of particulate concentration. The relationship can, however, be used to qualitatively predict asbestos concentration. That is, if TSP concentration exceeds 100 $\mu g/m^3$, asbestos concentration will very likely exceed 500,000 structures/m^3 and will most likely be in the ranges of 1,000,000 to 1,500,000 structures/m^3. Thus, at this level of accuracy particulate concentrations could potentially be used as an asbestos screening tool.

J.3.3.6 Statistical Analysis of Phase II Data

The indirect analysis of 24 samples provides a small data set which can be used to address issues concerning the differences in concentration between stations. Due to the large number of variables which might influence asbestos concentrations, however, the data set is too small to reach any firm conclusions concerning the statistical significance of any concentration differences observed between stations. Thus the statistical analysis was restricted to a presentation of the concentrations observed and basic summary statistics. Confidence interval determination was not attempted since the assumptions implicit in defining these intervals are not valid and the number of data is too small to allow modification of the basic assumptions (i.e., normality and independence).

The total asbestos structures and PCM equivalent structures observed at each of the five stations are presented in Figures J-25 and J-26. Table J.18 presents numerical calculations of statistics summarizing the information presented in these figures. Asbestos structure concentrations are largest, in average, at Station 3 and smallest at Station 1 (upwind station). The average concentration at all three in-town stations (Stations 2, 3, and 4) are greater than the average concentrations at either Station 1 or Station 5 (downwind station). By combining the concentrations observed at Stations 2, 3, and 4, a single average concentration within town is obtained. This average concentration (71,100 structures/cubic meter) is 3.5 times larger than the average upwind concentration (21,300 structures/cubic meter).

The average asbestos concentrations at each station are influenced by atypically large concentrations which may be due to abnormal weather or soil disturbance conditions. For example, at Station 1 five of the six samples have concentrations less than 200,000 structures/m^3 while the remaining sample has a concentration of 850,000 structures/m^3. This large concentration is atypical, but there is no indication that it is an outlier. The occurence of these atypical values causes high variability in the data. This variability is expressed in the large spread between the smallest and largest concentrations observed at each station (Figure 5-22).

PCMe structure concentrations exhibit greater differences in average concentration between stations than do total asbestos structure concentrations (Table J.18). The average PCMe concentration at the stations within Alviso (1580 structures/m^3) is six times greater than the average concentration at the upwind station (260 structures/m^3). In addition, the average concentrations at in-town Stations 2 and 3 (2140 and 2040 structures/m^3) are nearly an order of magnitude greater than the average upwind concentration. The distribution of PCMe concentrations

(Figure J-26) indicates that concentrations less than 1500 structures/m^3 are common at all five stations. At the in-town stations, however, concentrations up to 8,500 structures/m^3 occasionally occur.

J.3.3.7 Phase II Activity Experiment Air Data

Activity-specific exposure experiments were conducted at three locations as described in Section 3.2.2. The air data collected during these experiments was rejected during data validation and, as a result, cannot be used to relate soil asbestos to air asbestos concentrations during actual activities.

J.3.4 SUMMARY OF AIR INVESTIGATION RESULTS

The major findings of the Phase I air data analysis are as follows:

- o PCM equivalent asbestos structures were infrequently detected.
- o Episodic asbestos concentrations were not strongly correlated with wind direction, wind speed, or particulate concentrations.
- o Asbestos 24 hour concentrations were not correlated with wind speed or particulate concentrations.
- o At large particulate concentrations, asbestos concentrations tend to decrease indicating that particulate matter may obscure asbestos fibers causing an underestimation of asbestos concentrations.
- o Asbestos concentrations were not strongly spatially or temporally correlated.
- o Statistically significant differences in average total asbestos structure concentration exist between Station 1 and the Stations 2, 3, and 4.
- o The average asbestos concentrations observed in air were less than concentrations observed during previous site studies.
- o Asbestos structure histograms demonstrate that large asbestos concentrations are more common at the stations within Alviso than either upwind or downwind of Alviso.

The major finding from the analysis of the Phase II air data are as follows:

- o No numerical relationship between direct and indirect asbestos structure concentrations can be developed.
- o A numerical relationship between direct and indirect asbestos PCMe structures can be developed; however, this relationship is suspect since it is based on a small data set containing only three samples.
- o Asbestos structure concentrations measured by the indirect method are up to 3 orders of magnitude greater than concentrations measured by the direct method.
- o Asbestos PCMe structure concentrations are quantified much more frequently via the indirect method than the direct method.
- o No strong relationship between total asbestos structures or PCMe structures and wind speed or direction is observed.
- o Total suspended particulates (TSP) and asbestos structure concentrations are positively correlated. TSP and PCMe concentrations are weakly positively correlated. TSP concentrations can be used to qualitatively predict asbestos concentration.
- o PM-10 particulate concentations are weakly correlated with asbestos concentrations.
- o The indirect Phase II analyses are apparently not impacted by particulate obscuration of asbestos fibers which probably caused the direct Phase I analyses to underestimate asbestos concentrations.
- o Total asbestos structures and PCMe structures are, on average, 3 to 6 times larger within Alviso than at the background stations. The absolute difference in structure concentration between the background stations and the stations within Alviso range from 340,000 to 590,000 structures/m^3 while the difference in PCMe structures ranges from 640 to 1900 structures/m^3.

TABLE J.1
DUPLICATE ANALYSIS RESULTS
ASBESTOS IN SOIL AND SEDIMENT
(ANALYSES BY TEM & PLM)

Co-located samples			Field Duplicates			Lab Duplicates		
Samples	Concentrations	%RSD	Samples	Concentrations	%RSD	Samples	Concentrations	%RSD
TEM Analyses:								
SL 5, 6	6.42 2.89	53.6	SL 10	0.013 0.010	18.4	SL 39	0.334 0.242	22.6
SL 12, 13	0.009 0.012	20.2	SL 20	0.135 0.004	133	SS 06	0.08 0.08	0
SL 21, 22	0.37 0.279	19.8	SL 40	0.044 0.387	113	SL 50	0.03 0.067	54
SL 25, 26	0.346 0.83	58.2				SS 02	0.011 0.011	0
SL 31, 32	0.056 0.066	11.6				SS 03	0.0016 0.0063	84.1
SL 33, 34	0.017 0.009	43.5						
SL 35, 36	0.325 0.144	54.6						
SL 40, 40, 41	0.044 0.387 0.22	79.0						
SL 42, 43	0.838 1.4	35.5						
SL 46, 47	0.103 0.25	58.9						
SL 57, 58	0.032 0.024	20.2						
PLM Analyses:								
SL 5, 6	6 8	20.2	SL 10	3 8	64.3	SL 36	ND ND	-
SL 8, 9	ND ND	-	SL 20	2 2	0	SS 09	5 5	0
SL 12, 13	ND ND	-	SL 30	ND ND	-	SL 38	2 2	0
SL 16, 17	ND ND	-	SL 40	1 ND	-	SL 42	3 3	0
SL 21, 22	ND 1	-				SD 04	ND ND	-
SL 23, 24	ND ND	-						
SL 25, 26	1 2	47.1						
SL 27, 28	ND ND	-						
SL 29, 30, 30	ND ND 1	-						
SL 31, 32	ND ND	-						
SL 33, 34	ND ND	-						
SL 35, 36	1 ND	-						
SL 37, 38	ND 2	-						
SL 40, 40, 41	2 1 ND	-						
SL 42, 43	3 8	64.3						
SL 46, 47	2 2	0						
SL 46, 47	ND ND	-						
SL 57, 58	1 ND	-						
Station 5 (additional background sample)	ND ND							

Table J.2
Soil Asbestos Standards Analyses

Analyses By TEM

Sample	Reported Concentration (R)	Actual Concentration (A)	% Bias	% RSD
DOHS STD-004	0.342	1.0	-65.0	69.4
DOHS STD-005	0.347	1.0	-65.3	68.6
Lab Dup.	0.321	1.0	-67.9	72.7
DOHS STD-002	0.25	.10	150	60.6
DOHS STD-003	21.4	5.0	328	87.9
DOHS STD-001	0.046	0.01	360	90.9

Analyses By PLM

Reported Concentration	Actual Concentration	% Bias	% RSD
9%	3%	200	70.7
50%	50%	0	0

R = Reported Concentration

A = Actual Concentration

%Bias = (R-A)/A

%RSD = 200 |R-A|/(1.414 (R+A))

TABLE 3.3

SUMMARY OF PHASE I SURFACE SOIL PLM ASBESTOS RESULTS

SAMPLE LOCATION	DUPLICATE SAMPLE	CO-LOCATED SAMPLE	ANALYSIS REQUESTED	ASBESTOS RESULT	COMMENTS
SL-014-001			PLM	26.0	Ring levee
SL-015-001			PLM	14.0	Ring levee
SL-043-001		CO-LOCATED WITH 042	PLM	8.0 J	Liberty/Catherine St.
SL-006-001		CO-LOCATED WITH 005	PLM	6.0 J	Alviso Marina
SL-005-001			PLM	6.0 J	Alviso Marina
SL-055-001			PLM	4.0 J	Field east of ring levee
SL-053-001			PLM	4.0 J	Field east of ring levee
SL-042-001			PLM	3.0 J	Liberty/Catherine St.
SL-056-001			PLM	2.0 J	Field east of ring levee
SL-045-001		CO-LOCATED WITH 044	PLM	2.0 J	Catherine St.
SL-044-001			PLM	2.0 J	Catherine St.
SL-040-001			PLM	2.0 J	
SL-038-001		CO-LOCATED WITH 037	PLM	2.0 J	
SL-026-001		CO-LOCATED WITH 025	PLM	2.0 J	
SL-020-002	SL-020-001		PLM	2.0 J	Street dust
SL-004-001			PLM	2.0 J	Alviso Marina
SL-057-001		CO-LOCATED WITH 058	PLM	1.0 J	
SL-050-001			PLM	1.0 J	
SL-041-001		CO-LOCATED WITH 040	PLM	1.0 J	
SL-035-001			PLM	1.0 J	
SL-030-002	SL-030-001		PLM	1.0 J	
SL-025-001			PLM	1.0 J	
SL-022-001		CO-LOCATED WITH 021	PLM	1.0 J	
SL-020-001			PLM	1.0 J	Street dust
SL-019-001			PLM	1.0 J	Street dust
SL-002-001			PLM	1.0 J	
SL-058-001			PLM	<1 ND	
SL-054-001			PLM	<1 ND	
SL-052-001			PLM	<1 ND	
SL-051-001			PLM	<1 ND	
SL-049-001			PLM	<1 ND	
SL-048-001			PLM	<1 ND	
SL-047-001		CO-LOCATED WITH 046	PLM	<1 ND	
SL-046-001			PLM	<1 ND	
SL-040-002	SL-040-001		PLM	<1 ND	
SL-039-001			PLM	<1 ND	
SL-037-001			PLM	<1 ND	
SL-036-001		CO-LOCATED WITH 035	PLM	<1 ND	
SL-034-001		CO-LOCATED WITH 033	PLM	<1 ND	
SL-033-001			PLM	<1 ND	
SL-032-001		CO-LOCATED WITH 031	PLM	<1 ND	
SL-031-001			PLM	<1 ND	
SL-030-001		CO-LOCATED WITH 029	PLM	<1 ND	
SL-029-001			PLM	<1 ND	
SL-028-001		CO-LOCATED WITH 027	PLM	<1 ND	

TABLE [illegible]

SUMMARY OF PHASE I SURFACE SOIL PLM ASBESTOS RESULTS (con't)

SAMPLE LOCATION	DUPLICATE SAMPLE	CO-LOCATED SAMPLE	ANALYSIS REQUESTED	ASBESTOS RESULT	COMMENTS
SL-027-001			PLM	<1 ND	
SL-026-001		CO-LOCATED WITH 023	PLM	<1 ND	
SL-023-001			PLM	<1 ND	
SL-021-001			PLM	<1 ND	
SL-018-001			PLM	<1 ND	
SL-017-001		CO-LOCATED WITH 016	PLM	<1 ND	
SL-016-001			PLM	<1 ND	
SL-013-001		CO-LOCATED WITH 012	PLM	<1 ND	
SL-012-001			PLM	<1 ND	
SL-011-001			PLM	<1 ND	
SL-010-002	SL-010-001		PLM	<1 ND	
SL-010-001			PLM	<1 ND	
SL-009-001		CO-LOCATED WITH 008	PLM	<1 ND	
SL-008-001			PLM	<1 ND	
SL-007-001			PLM	<1 ND	
SL-003-001			PLM	<1 ND	
SL-001-001			PLM	<1 ND	
STD-A			PLM	9.0	EPA R.T.I STANDARD -3.0%
STD-B			PLM	50.0	EPA R.T.I STANDARD -50.0%

TOTALS:

62 SAMPLES @ 40 LOCATIONS	4 FIELD DUPLICATES	18 CO-LOCATED SAMPLES

TABLE J.4

SUMMARY OF PHASE I SURFACE SOIL TEM ASBESTOS RESULTS

SAMPLE LOCATION	DUPLICATE SAMPLE	CO-LOCATED SAMPLE	ANALYSIS REQUESTED	ASBESTOS RESULT	COMMENTS
SL-014-001			TEM	102.000 J	Ring Levee
SL-005-001			TEM	6.420 J	Alviso Marina
SL-006-001		CO-LOCATED WITH 005	TEM	2.690 J	Alviso Marina
SL-043-001		CO-LOCATED WITH 042	TEM	1.400 J	Liberty/Catherine St.
SL-042-001			TEM	0.840 J	
SL-026-001		CO-LOCATED WITH 025	TEM	0.830 J	
SL-040-002	SL-040-001		TEM	0.390 J	
SL-021-001			TEM	0.370 J	
SL-025-001			TEM	0.350 J	
SL-035-001			TEM	0.320 J	
SL-022-001		CO-LOCATED WITH 021	TEM	0.280 J	
SL-047-001		CO-LOCATED WITH 046	TEM	0.250 J	
SL-039-001			TEM	0.242 J	Ring Levee
SL-041-001		CO-LOCATED WITH 040	TEM	0.220 J	
SL-036-001		CO-LOCATED WITH 035	TEM	0.144 J	
SL-019-001			TEM	0.140 J	
SL-020-001			TEM	0.155 J	
SL-046-001			TEM	0.103 J	
SL-032-001		CO-LOCATED WITH 031	TEM	0.070 J	
SL-001-001			TEM	0.066 J	
SL-053-001			TEM	0.064 J	
SL-031-001			TEM	0.056 J	
SL-040-001			TEM	0.044 J	
SL-057-001		CO-LOCATED WITH 058	TEM	0.032 J	
SL-050-001			TEM	0.030 J	
SL-058-001			TEM	0.024 J	
SL-033-001			TEM	0.017 J	
SL-010-001			TEM	0.013 J	
SL-013-001		CO-LOCATED WITH 012	TEM	0.012 J	
SL-002-001			TEM	0.012 J	
SL-010-002	SL-010-001		TEM	0.010 J	
SL-034-001		CO-LOCATED WITH 033	TEM	0.009 J	
SL-012-001			TEM	0.009 J	
SL-020-002	SL-020-001		TEM	0.004 J	
SL-048-001			TEM	0.003 J	
STD-001			TEM	0.046 J	CA DOHS STANDARD- 0.01%
STD-002			TEM	0.250 J	CA DOHS STANDARD- 0.1%
STD-003			TEM	21.400 J	CA DOHS STANDARD- 5.0%
STD-004			TEM	0.340	CA DOHS STANDARD- 1.0%
STD-005	STD-004		TEM	0.350	CA DOHS STANDARD- 1.0%
LAB. DUPE.	STD-004		TEM	0.321	LABORATORY DUPLICATE-1.0%

TOTALS:

35 SAMPLES BY TEM	3 FIELD DUPLICATES	11 CO-LOCATED DUPLICATES

TABLE J.5
SUMMARY OF SUBSURFACE SOIL SAMPLE RESULTS
ASBESTOS AND TARGET COMPOUND LIST (TCL) DATA

SUBSURFACE BORING NUMBER	SAMPLE NUMBER	SAMPLE DEPTH	QUALITY CONTROL SAMPLE INFO	PLM ASBESTOS RESULT	TEM ASBESTOS RESULT	TCL CONTAMINANTS RESULT
MONITOR WELL 1	SS-001-001	0 - 1.5		2.0 J	0.147 J	NA
(SS-MW-001)	SS-001-002	3.5 - 5.0		<1.0 ND	NA	NA
	SS-001-003	8.0 - 9.5		<1.0 ND	NA	NO SIGNIF. CONCEN.
	SS-001-004	8.0 - 9.5	DUPLICATE	<1.0 ND	NA	NO SIGNIF. CONCEN.
MONITOR WELL 2	SS-002-001	0 - 1.5		1.0 J	NA	NA
(SS-MW-002)	SS-002-002	0 - 1.5	DUPLICATE	<1.0 ND	0.042 J	NA
	SS-002-003	4.0 - 5.5		<1.0 ND	0.011 J	NA
	SS-002-004	9.0 - 10.5		<1.0 ND	NA	NO SIGNIF. CONCEN.
MONITOR WELL 3	SS-003-001	2.5 - 4.0		<1.0 ND	0.003 J	NA
(SS-MW-003)	SS-003-002	3.5 - 5.0		<1.0 ND	NA	NA
	SS-003-003	8.5 - 10.0		<1.0 ND	NA	NO SIGNIF. CONCEN.
	SS-003-004	2.5 - 4.0	DUPLICATE	<1.0 ND	0.0016 J	NA
MONITOR WELL 4	SS-004-001	0 - 1.5		<1.0 ND	NA	NA
(SS-MW-004)	SS-004-002	4.0 - 5.5		<1.0 ND	0.024 J	NA
	SS-004-003	9.0 - 10.5		7.0	NA	NA
	SS-004-004	14.0 - 15.5		<1.0 ND	NA	NA
	SS-004-005	19.0 - 20.5		<1.0 ND	NA	NO SIGNIF. CONCEN.
	SS-004-006	24.0 - 25.5		<1.0 ND	NA	NA
MONITOR WELL 5	SS-005-001	0 - 1.5		<1.0 ND	NA	NA
(SS-MW-005)	SS-005-002	4.0 - 5.5		<1.0 ND	0.004 J	NA
	SS-005-003	9.0 - 10.5		<1.0 ND	NA	NO SIGNIF. CONCEN.
BACKGROUND BORING (SS-MW-006)	SS-006-001	0 - 0.6	BACKGROUND	1.0 J	0.08 J	NO SIGNIF. CONCEN.
SOIL BORING 7	SS-007-001	0 - 1.5		<1.0 ND	NA	NA
(SS-BOR-007)	SS-007-002	4.0 - 5.5		<1.0 ND	0.013	NA
	SS-007-003	9.0 - 10.5		<1.0 ND	NA	NA
SOIL BORING 8	SS-008-001	0 - 1.5		<1.0 ND	NA	NA
(SS-BOR-008)	SS-008-002	3.5 - 5.0		<1.0 ND	0.036 J	NA
	SS-008-003	8.5 - 10.0		<1.0 ND	NA	NA
SOIL BORING 9	SS-009-001	0 - 1.5		5.0 J	NA	NA
(SS-BOR-009)	SS-009-002	4.0 - 5.5		2.0 J	0.474 J	NA
	SS-009-003	9.0 - 10.5		<1.0 ND	NA	NA

TABLE J.5 (con'd)
SUMMARY OF SUBSURFACE SOIL SAMPLE RESULTS
ASBESTOS AND TARGET COMPOUND LIST (TCL) DATA

SUBSURFACE BORING NUMBER	SAMPLE NUMBER	SAMPLE DEPTH	QUALITY CONTROL SAMPLE INFO	PLM ASBESTOS RESULT	TEM ASBESTOS RESULT	TCL CONTAMINANTS RESULT
SOIL BORING 10	SS-010-001	1.0 - 2.5		<1.0 ND	NA	NA
(SS-BOR-010)	SS-010-002	3.5 - 5.0		<1.0 ND	0.018 J	NA
	SS-010-003	8.5 - 10.0		<1.0 ND	NA	NA
	SS-010-004	3.5 - 5.0	DUPLICATE	<1.0 ND	0.010 J	NA
SOIL BORING 11	SS-011-001	0 - 1.5		<1.0 ND	NA	NA
(SS-BOR-011)	SS-011-002	4.0 - 5.5		<1.0 ND	0.003 J	NA
	SS-011-003	9.0 - 10.5		<1.0 ND	NA	NA
	SS-011-004	0 - 1.5	DUPLICATE	<1.0 ND	NA	NA
MARSHLAND BORING G3	SS-G03-001	0 - 1.0		<1.0 ND	0.300	NA
(SS-G3)	SS-G03-002	8.5 - 11.5		<1.0 ND	NA	NO SIGNIF. CONCEN.
MARSHLAND BORING G4	SS-G04-001	0 - 3.0		<1.0 ND	NA	NA
(SS-G4)						
MARSHLAND BORING G5	SS-G05-001	0 - 1.5		<1.0 ND	0.450	NA
(SS-G5)	SS-G05-002	16.4 - 16.5		1.0	NA	NA
	SS-G05-003	16.5 - 18.0		NA	NA	NO SIGNIF. CONCEN.
MARSHLAND BORING G6	SS-G06-001	0 - 1.5		<1.0 ND	NA	NA
(SS-G6)	SS-G06-002	4.5 - 5.5		<1.0 ND	0.010	NO SIGNIF. CONCEN.
	SS-G06-003	4.5 - 5.5	DUPLICATE	<1.0 ND	0.050	NO SIGNIF. CONCEN.
MARSHLAND BORING G9	SS-G09-001	0 - 1.5		<1.0 ND	NA	NA
(SS-G9)	SS-G09-002	3.3 - 5.3		<1.0 ND	0.170	NO SIGNIF. CONCEN.
MARSHLAND BORING G11	SS-G11-001	0 - 1.5		<1.0 ND	NA	NA
(SS-G11)	SS-G11-002	6.0 - 8.0		<1.0 ND	0.012	NO SIGNIF. CONCEN.

NA = NOT ANALYZED
ND = NOT DETECTED
NO SIGNIF. CONCEN. = NP SIGNIFICANT CONCENTRATION

Table J.6
Asbestos Duplicate Analyses
Ground and Surface Water

Sample	Type	Duplicate Pair Asbestos Concentrations (mf/L)	%RSD
SW-02	F	2160,3077	25
SW-02	L	3077,2575	13
GW-04	L	1867,2345	16
GW-05	F	209,318	29
GW13*	L	1.7,2.0	11
GWG5	F	70,320	91
		Average % RSD =	31%

Explanation:

Type - F = Field Duplicate

L = Lab Duplicate

GW13* - This sample is a Field Blank

%RSD - Percent Relative Standard Deviation

$$\%RSD = 200\ (|C_1 - C_2| / ((C_1 + C_2)\ \sqrt{2}))$$

C_1, C_2 = Concentration of Duplicates

mf/L - million fibers per liter

Table J.7
Asbestos Blank Analyses
Ground and Surface Water

Blank Type	Total Asbestos (mf/L)
F	2.0
F	2.0
L	ND
F	19
F	21
F	7
L	.0025
F	1.13
L	.013

Blank Type - F = field blank
L = Laboratory Method Blank
mf/L = million fibers/liters

TABLE J.3
SUMMARY OF WATER SAMPLE RESULTS
ASBESTOS AND TOXIC CONTAMINANT LIST (TCL) DATA

SAMPLE LOCATION	SAMPLE NUMBER	DATE COLLECTED	ASBESTOS (TOTAL FIBERS)	ASBESTOS (FIBERS >10 MICRONS)	TCL RESULT	COMMENTS
GUADALUPE RIVER (UPSTREAM)	SW-001-001	5/21/87	3266 MF/L	ND	NO SIGNIFICANT LEVELS DETECTED	Water asbestos results in millions of fibers per liter.
GUADALUPE RIVER (DOWNSTREAM)	SW-002-001	5/21/87	2160 MF/L	50 MF/L	NO SIGNIFICANT LEVELS DETECTED	
GUADALUPE RIVER (DOWNSTREAM DUPLICATE)	SW-002-002	5/21/87	3077 MF/L	ND	NO SIGNIFICANT LEVELS DETECTED	
RINSATE BLANK	SW-003-001	5/21/87	1.13 MF/L	ND	BNA	16 ppb bis(2-ethylhexyl)pathlate detected. Assumed to be laboratory contamination.
MONITOR WELL 1	GW-001-001	6/25/87	4774 MF/L	ND	NO SIGNIFICANT LEVELS DETECTED	
MONITOR WELL 1 (second round)	GW-001-002	10/7/87	NA	NA	NO SIGNIFICANT LEVELS DETECTED	
MONITOR WELL 2	GW-002-001	6/25/87	2471 MF/L	ND	NO SIGNIFICANT LEVELS DETECTED	
MONITOR WELL 2 (second round)	GW-002-002	10/7/87	NA	NA	NO SIGNIFICANT LEVELS DETECTED	
MONITOR WELL 2 (second round duplicate)	GW-002-003	10/7/87	NA	NA	NO SIGNIFICANT LEVELS DETECTED	
MONITOR WELL 5	GW-003-001	6/26/87	2211 MF/L	ND	NO SIGNIFICANT LEVELS DETECTED	
MONITOR WELL 3 (second round)	GW-003-002	10/8/87	NA	NA	NO SIGNIFICANT LEVELS DETECTED	
MONITOR WELL 4	GW-004-001	6/26/87	1867 MF/L	ND	NO SIGNIFICANT LEVELS DETECTED	
MONITOR WELL 5 (second round)	GW-004-002	10/8/87	NA	NA	NO SIGNIFICANT LEVELS DETECTED	

TABLE 3.6
SUMMARY OF WATER SAMPLE RESULTS
ASBESTOS AND TOXIC CONTAMINANT LIST (TCL) DATA

SAMPLE LOCATION	SAMPLE NUMBER	DATE COLLECTED	ASBESTOS (TOTAL FIBERS)	ASBESTOS (FIBERS >10 MICRONS)	TCL RESULT	COMMENTS
MONITOR WELL 3	GW-005-001	6/24/87	209 MF/L	8.4 MF/L	NO SIGNIFICANT LEVELS DETECTED	
MONITOR WELL 3 (first round duplicate)	GW-005-002	6/24/87	318 MF/L	ND	NO SIGNIFICANT LEVELS DETECTED	
MONITOR WELL 4 (second round)	GW-005-003	10/8/87	NA	NA	NO SIGNIFICANT LEVELS DETECTED	
RINSATE BLANK	GW-006-001	6/24/87	19 MF/L	ND	VOLATILE	18 ppb 2-Butanone detected; assumed to be laboratory contamination.
RINSATE BLANK	GW-006-002	10/07/87	NA	NA	NO SIGNIFICANT LEVELS DETECTED	
FIELD BLANK	GW-006-003	11/16/87	2 MF/L	ND	NO SIGNIFICANT LEVELS DETECTED	
RINSATE BLANK	GW-013-001	6/25/87	21 MF/L	ND	NO SIGNIFICANT LEVELS DETECTED	
RINSATE BLANK	GW-013-002	10/08/87	NA	NA	NO SIGNIFICANT LEVELS DETECTED	
FIELD BLANK	GW-013-003	11/17/87	1.7 MF/L	ND	NO SIGNIFICANT LEVELS DETECTED	
RINSATE BLANK	GW-014-001	6/26/87	7 MF/L	ND	NO SIGNIFICANT LEVELS DETECTED	
MARSHLAND LANDFILL WELL G3	GW-G3-001	11/16/87	NA	NA	NO SIGNIFICANT LEVELS DETECTED	
MARSHLAND LANDFILL WELL G5	GW-G5-001	11/17/87	320 MF/L	ND	NO SIGNIFICANT LEVELS DETECTED	
MARSHLAND LANDFILL WELL G5 (duplicate)	GW-G5-002	11/17/87	70 MF/L	10 MF/L	NO SIGNIFICANT LEVELS DETECTED	
MARSHLAND LANDFILL WELL G6	GW-G6-001	11/17/87	NA	NA	NO SIGNIFICANT LEVELS DETECTED	Very low yield;sample for full organics only.
MARSHLAND LANDFILL WELL G6	GW-G6-002	11/18/87	NA	NA	NO SIGNIFICANT LEVELS DETECTED	Very low yield; sample for metals only.
MARSHLAND LANDFILL WELL G9	GW-G9-001	11/18/87	NA	NA	NO SIGNIFICANT LEVELS DETECTED	Very low yield; sampled for volatiles only.
MARSHLAND LANDFILL WELL G11	GW-G11-001	11/16/87	NA	NA	volatile	320 ppb trichloroethene detected.

NA = NOT ANALYZED
ND = NOT DETECTED

TABLE J.9
AIR DUPLICATE DATA

Sample ID	Duplicate Type	Structures per Cubic Meter		%RSD	PCME per Cubic Meter		%RSD
1-004	Field	2800	2400	10.9	0	0	
2-004	Field	7800	6600	11.8	0	0	
2-039E	Field	1000	0		1000	0	
3-004	Field	7500	6900	5.9	0	600	
4-003	Field	1020	4800	50.9	0	0	
4-004	Field	3200	8000	60.6	0	1400	
4-010E	Field	0	0		0	0	
4-029E	Field	1500	5600	81.7	0	800	
4-030E	Field	0	1600		0	800	
4-036E	Field	3000	2000	28.3	0	0	
4-038E	Field	1000	0		0	0	
4-041E	Field	4400	5900	20.6	0	0	
4-042E	Field	0	1500		0	0	
4-045E	Field	1600	5500	69.1	1000	0	
4-049E	Field	0	0		0	0	
5-004	Field	0	3300		0	0	
5-036E	Field	0	8000		0	0	
5-041E	Field	0	3000		0	0	
5-042E	Field	14600	5900	60.0	0	0	
5-045E	Field	0	1000		0	0	
5-049E	Field	0	0		0	0	
3-041E	Lab	6200	6200	0.0	3100	0	
5-049E	Lab	0	0		0	0	
1-021	Lab	0	0		0	0	
3-025	Lab	0	0		0	0	
1-035	Lab	0	0		0	0	
3-047	Lab	0	0		0	0	
4-030E	Lab	0	0		0	0	
4-045E	Lab	1500	1600	4.6	1000	3000	70.7
2-023E	Lab	0	0		0	0	
5G-022	Lab	0	0		0	0	
1G-010E	Lab	0	0		0	0	
1A-003	Lab	3700	1900	45.5	900	0	
	Average %RSD Values			34.6			70.7

Table J.10
Comparison of PCM and PCME Analyses

Sample	PCM (Fibers/m^3)	PCME (Fibers/m^3)
AQ-2A-004	1,200	ND
AQ-3A-004	2,100	ND
AQ-3B-004	2,700	600
AQ-4A-004	2,900	ND
AQ-4B-004	2,100	1,400
AQ-5B-004	1,000	ND
AQ-2A-010E	1,300	2,300
AQ-2A-010E	1,600	2,300

PMC - Asbestos PCM fiber concentrations determined by Phase Contrast Microscopy.

PCME - PCM equivalent fibers determined by Transmission Electron Microscopy. Samples were prepared for analysis by the direct method.

Table J.11
Episodic Sample Results

Asbestos Concentrations
(structures/m^3)

Episode Date	Wind Direction (Azimuth)	Station 1	Station 2	Station 3	Station 4	Station 5
08/19/87	300-315	ND	8100	1500	ND	700
09/24/87	315-355	ND	2400	800	3100	800
09/25/87	320-360	1600	NA	ND	1000	NA
10/07/87	335-340	ND	9000	1800	2400	7,500
10/09/87	295-355	ND	1700	9720	1000	2,800
10/15/87	70-180	4600	4400	6200	5151	3,000
10/16/87	290-315	1500	16,500	ND	950	5,900
10/22/87	270-335	4200	NA	28,000	11,000	10,400
10/31/87	280-330	1500	ND	1500	600	ND

NA - SAMPLE NOT ANALYZED DUE TO OVERLOADING
ND - NO STRUCTURES OBSERVED
Duplicate concentrations aree averaged

Table J.12

Phase I

Basic Statistics on Asbestos Structures by Station
Concentrations in Structures/Cubic Meter

	Station 1	Station 2	Station 3	Station 4	Station 5	Stations 2, 3, 4 Combined
Count	22	22	22	22	22	66
Average	1550	3110	5024	2624	2931	3586
Standard Deviation	1574	3961	7698	2885	3430	5410
Std. Dev. of Mean	336	844	1641	615	731	666
Upper 95% Conf. Limit	2248	4867	8438	3903	4452	4891
Lower 95% Conf. Limit	852	1354	1610	1345	1410	2280
Median	950	1700	1500	1100	1780	
75th Percentile	2100	3400	6200	3400	2800	
90th Percentile	4200	8100	10300	7500	10000	
Maximum	5200	16500	28000	16000	10500	
Frequency Table						
<1000	11	10	10	10	10	
1000 to 2000	3	2	3	3	5	
2000 to 3000	4	2	1	2	2	
3000 to 4000	1	2	1	2	0	
4000 to 5000	2	1	0	0	0	
5000 to 6000	1	1	0	2	1	
6000 to 7000	0	0	1	0	0	
>7000	0	4	6	3	4	

Table J.13

Phase I

PCME Summmary Statistics by Station

	Station Number				
	1	2	3	4	5
Number of Samples	23	24	24	33	23
Number Detected	2	8	6	5	3
% Detected	8.7	33	25	15	13
Average (PCME/m^3)	2,350	1,725	3,070	920	970

Number of Samples = # of Samples Analyzed

Number Detected = # of Samples containing detectable PCME Fibers

Percentage Detected = Percentage of Samples containing detectable PCME Fibers

Average = Average of detectable concentrations

Table J.14

Paired Difference Analysis

	Pairs		
	Stations 1 and 2	Stations 1 and 3	Stations 1 and 4
Count	21	22	22
Average	1890	3490	1090
Standard Deviation	4220	7390	2454
Standard Error	926	1570	523
Standard Variable (z)	2.05	2.21	2.08

Concentrations in Asbestos Structures/m^3

Count	=	Number of pairs (n)
Average	=	Average difference (x)
Standard Deviation	=	Standard deviation of the differences (s)
Standard Error	=	$s/\sqrt{n} = S_x$
z	=	x/S_x

TABLE J.15

Comparison of Phase I and Phase II Asbestos Analysis

Indirect Analyses (Phase II)			Direct Analyses (Phase I)		
Sample ID	Total	PCME	Sample ID	Total	PCME
AQ-01B-009	140,000	310	AQ-01A-009	2,100	0
AQ-01B-015	43,000	90	AQ-01A-015	2,100	0
AQ-01B-025	850,000	860	AQ-01A-025	0	0
AQ-01B-026	8,100	0	AQ-01-026	0	0
AQ-01B-030	190,000	210	AQ-01-030E	1,600	0
AQ-01B-041	47,000	80	AQ-01A-041E	4,600	0
AQ-02B-010	540,000	430	AQ-02A-010E	9,000	2,300
AQ-02B-015	820,000	980	AQ-02A-015	3,400	0
AQ-02B-021	1,100,000	8,500	AQ-02A-021	0	0
AQ-02B-025	1,300,000	1,200	AQ-02A-025	900	0
AQ-02B-026	69,000	650	AQ-02A-026	0	0
AQ-02B-047	1,000,000	1,100	AQ-02A-047	2,600	0
AQ-03A-036	1,500,000	4,500	AQ-03B-036E	2,000	0
AQ-03B-035	830,000	1,300	AQ-03A-035	26,000	8,000
AQ-03B-040	180,000	310	AQ-03A-040	0	0
AQ-03B-043	1,500,000	7,600	AQ-03A-093	NA	NA
AQ-04A-015	990,000	600	AQ-04B-015	1,000	0
AQ-04A-021	420,000	710	AQ-04B-021	0	0
AQ-04A-025	230,000	510	AQ-04B-025	1,000	0
AQ-04B-009	330,000	390	AQ-04A-009	7,600	0
AQ-04B-026	47,000	140	AQ-04A-026	0	0
AQ-04B-035	1,800,000	3,300	AQ-04A-035	2,800	0
AQ-04B-047	220,000	630	AQ-04A-047	3,400	0
AQ-05B-009	690,000	1,100	AQ-05A-009	10,000	1,000
AQ-05B-015	65,000	40	AQ-05A-015	2,000	0
EMS Direct Analyses			Clayton Direct Analyses		
AQ-01B-009	2,300	10	AQ-01A-009	2,100	0
AQ-04B-009	2,300	30	AQ-04A-009	7,600	0
AQ-05B-009	16,000	190	AQ-05A-009	10,000	8,000

NOTES: 1) Clayton Environmental performed the Phase I analyses.
EMS performed the Phase II reanalysis.

2) A zero indicates no observable fibers.

3) Concentrations in asbestos structures/m^3

4) NA = Not analyzed due to overloading.

Table J.16

Phase II

Statistics on Particulate Data

Total Suspended Particulates

Station	Count	Average	Standard Deviation
1	4	57.3	20.4
2	5	132.7	44.2
3	3	102.2	34.9
4	7	73.4	25.6
5	2	90.7	39.0

PM-10

Station	Count	Average	Standard Deviation
1	4	47.4	30.3
2	5	59.9	20.0
3	3	66.9	22.7
4	7	48.1	20.3
5	2	35.6	8.2

Table J.17

Correlation Coefficients For
Asbestos and Particulate Scatterplots

	Correlation Matrix	
	TSP	PM 10
Asbestos Structures	.72	.56
PCM Equivalents	.54	.31

Values presented in the correlation matrix are correlation coefficients (r).

Example: The correlation coefficient between PCM and PC-10 concentrations is .31.

See Figures J-21 through J-24 for associated plots.

Table J.18

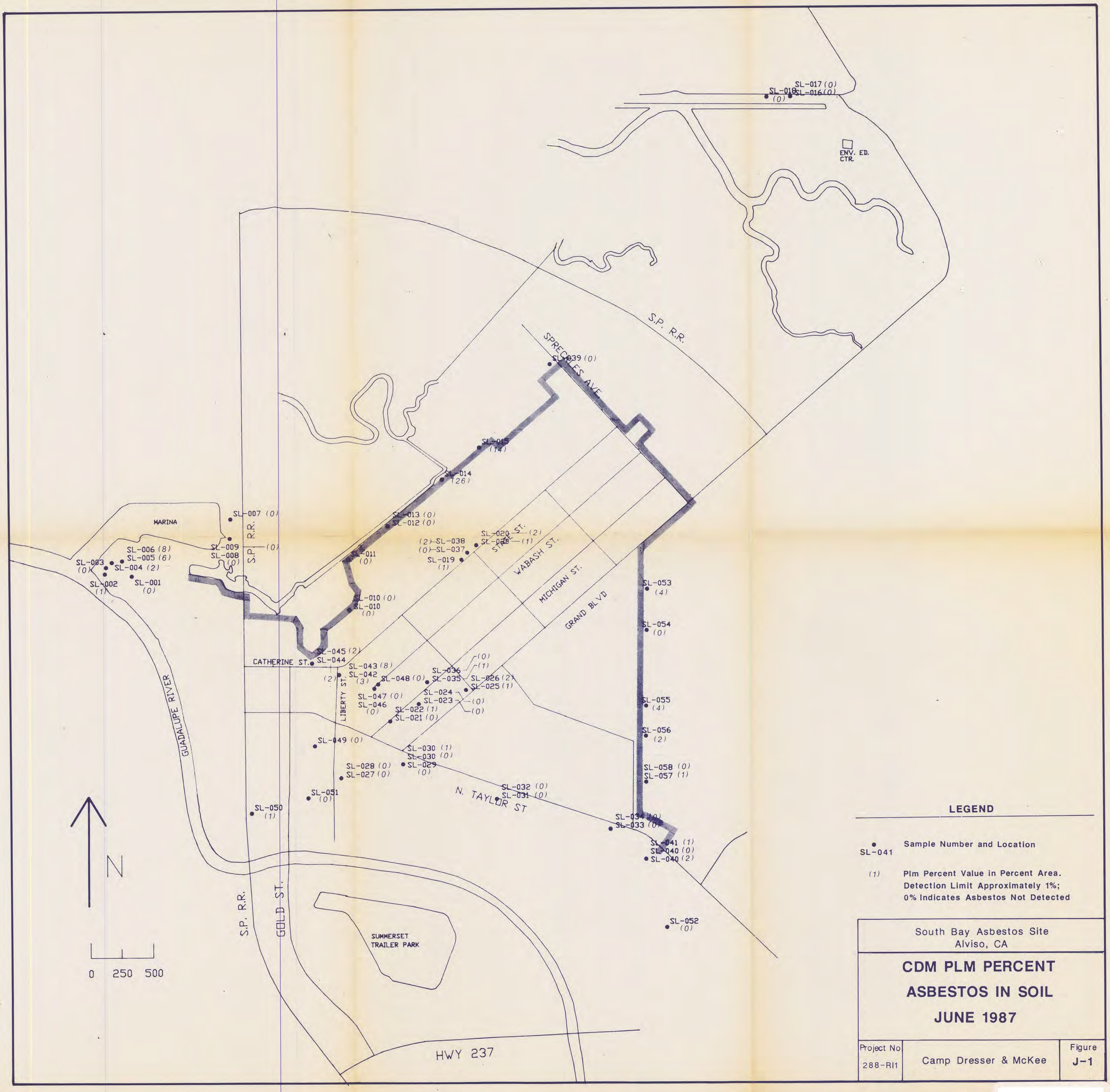
Basic Statistics on Phase II Asbestos Concentrations

Total Asbestos Structures

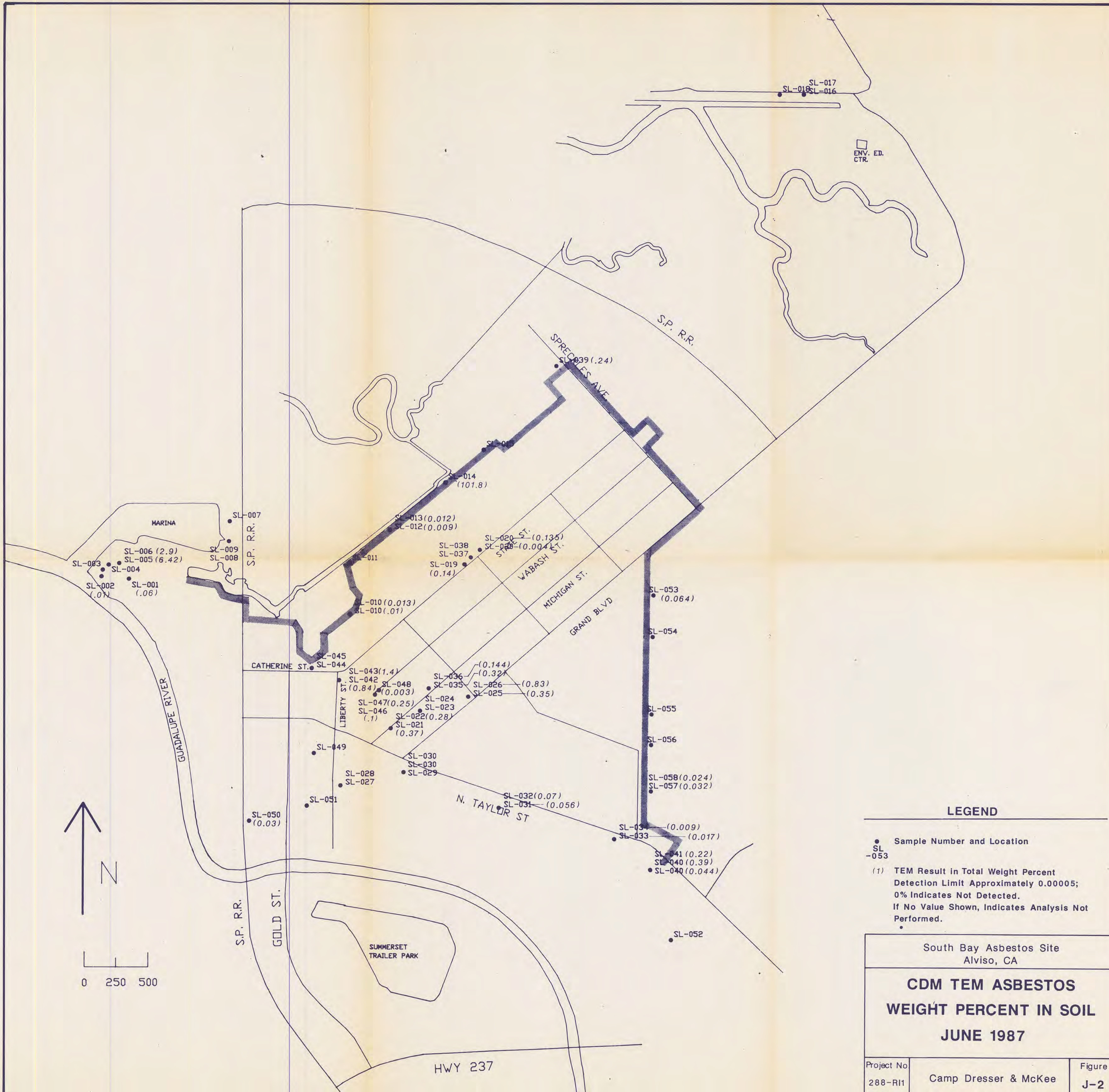
	Count	Average	Standard Deviation
Station 1	6	213,000	292,000
Stations 2,3,4	16	711,000	522,000
Station 5	2	378,000	313,000
Station 2	6	805,000	405,000
Station 3	3	837,000	539,000
Station 4	7	577,000	571,000

PCME Structures

	Count	Average	Standard Deviation
Station 1	6	260	290
Stations 2,3,4	16	1,580	2,110
Station 5	2	570	530
Station 2	6	2,140	2,850
Station 3	3	2,040	1,790
Station 4	7	900	1,000



SL-017 (0)
SL-018 (0)
SL-016 (0)
ENV. ED. CTR.
S.P. R.R.
SPRECKLES AVE.
SL-039 (0)
SL-015 (14)
SL-014 (26)
SL-013 (0)
SL-012 (0)
MARINA
SL-007 (0)
SL-009 (0)
SL-008 (0)
S.P. R.R.
SL-006 (8)
SL-005 (6)
SL-004 (2)
SL-003 (0)
SL-002 (1)
SL-001 (0)
SL-011 (0)
SL-010 (0)
SL-010 (0)
(2) SL-038
(0) SL-037
SL-019 (1)
SL-020 (2)
SL-060 (1)
STATE ST.
WABASH ST.
MICHIGAN ST.
GRAND BLVD
SL-053 (4)
SL-054 (0)
SL-045 (2)
CATHERINE ST.
SL-044
SL-043 (8)
SL-042 (2) (3)
SL-048 (0)
SL-036 (0)
SL-035 (1)
SL-026 (2)
SL-025 (1)
SL-024 (0)
SL-023 (0)
SL-047 (0)
SL-046 (0)
SL-022 (1)
SL-021 (0)
LIBERTY ST.
GUADALUPE RIVER
SL-055 (4)
SL-056 (2)
SL-049 (0)
SL-030 (1)
SL-030 (0)
SL-029 (0)
SL-028 (0)
SL-027 (0)
SL-058 (0)
SL-057 (1)
SL-032 (0)
SL-031 (0)
SL-051 (0)
N. TAYLOR ST
SL-050 (1)
SL-034 (0)
SL-033 (0)
SL-041 (1)
SL-040 (0)
SL-040 (2)
N
S.P. R.R.
GOLD ST.
SUMMERSET TRAILER PARK
SL-052 (0)
0 250 500
HWY 237
LEGEND
SL-041 Sample Number and Location
(1) Plm Percent Value in Percent Area. Detection Limit Approximately 1%; 0% Indicates Asbestos Not Detected
South Bay Asbestos Site
Alviso, CA
CDM PLM PERCENT
ASBESTOS IN SOIL
JUNE 1987
Project No 288-RI1
Camp Dresser & McKee
Figure J-1



LEGEND

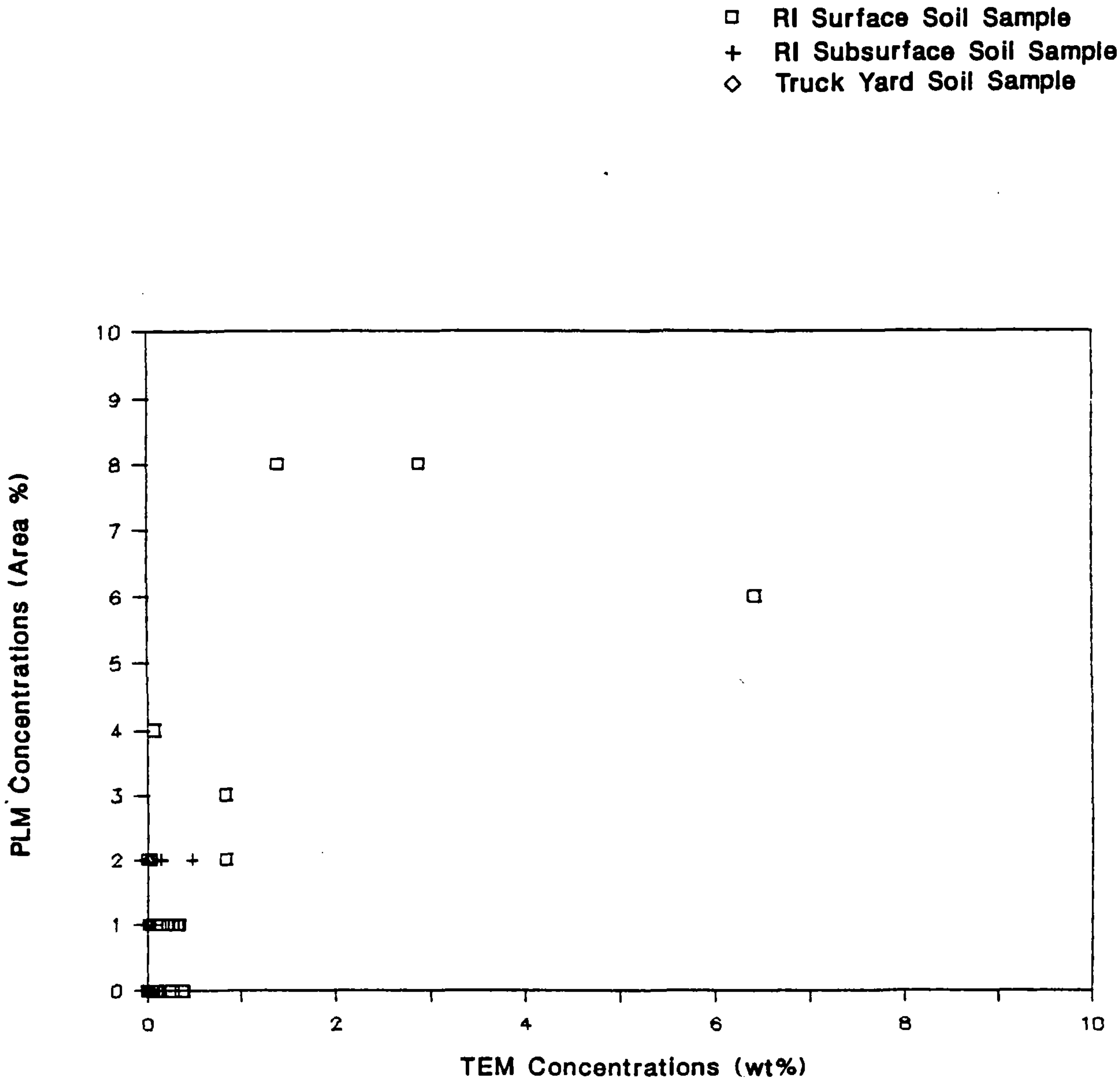
• SL-053 Sample Number and Location

(1) TEM Result in Total Weight Percent Detection Limit Approximately 0.00005; 0% Indicates Not Detected. If No Value Shown, Indicates Analysis Not Performed.

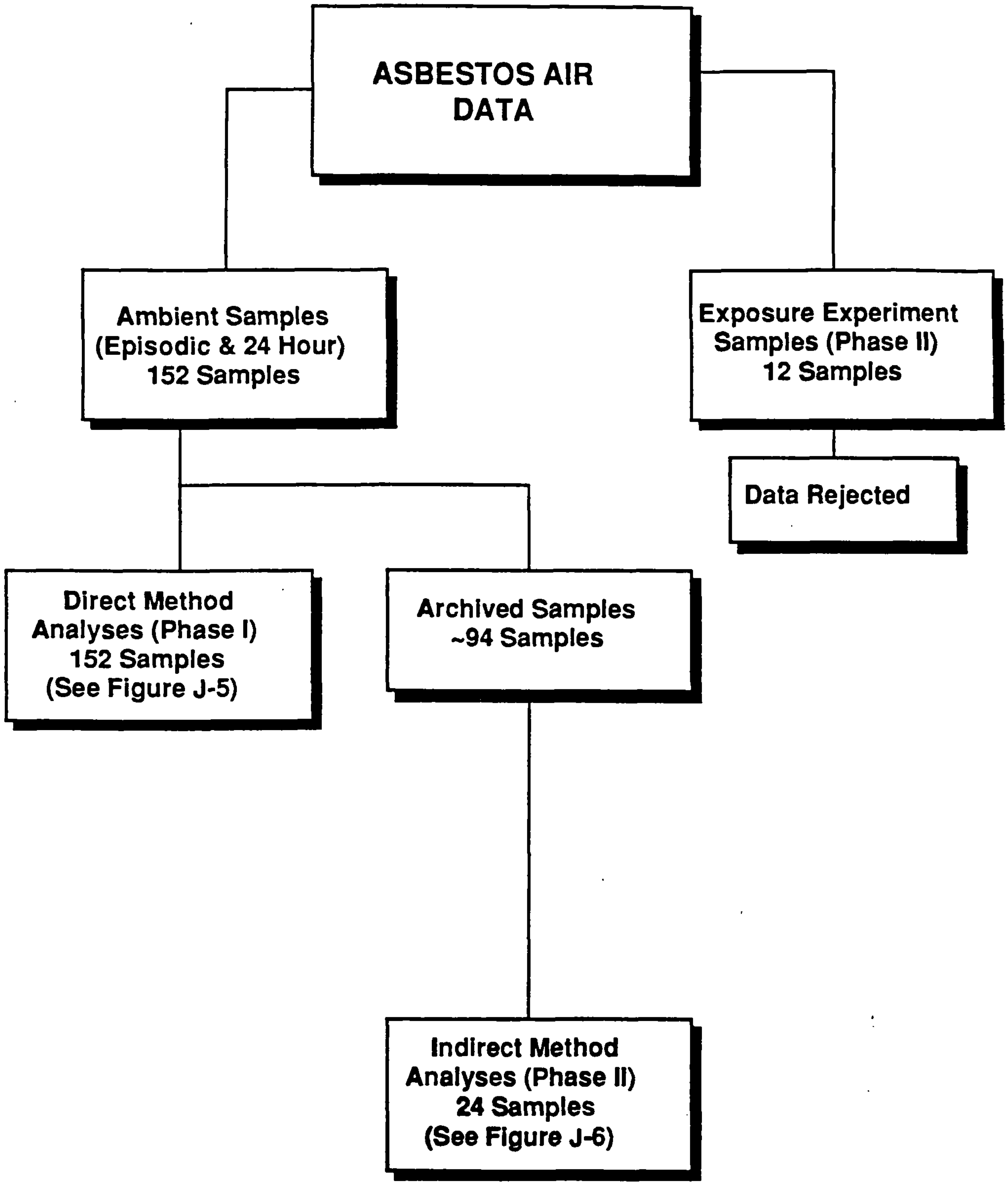
South Bay Asbestos Site
Alviso, CA

CDM TEM ASBESTOS WEIGHT PERCENT IN SOIL JUNE 1987

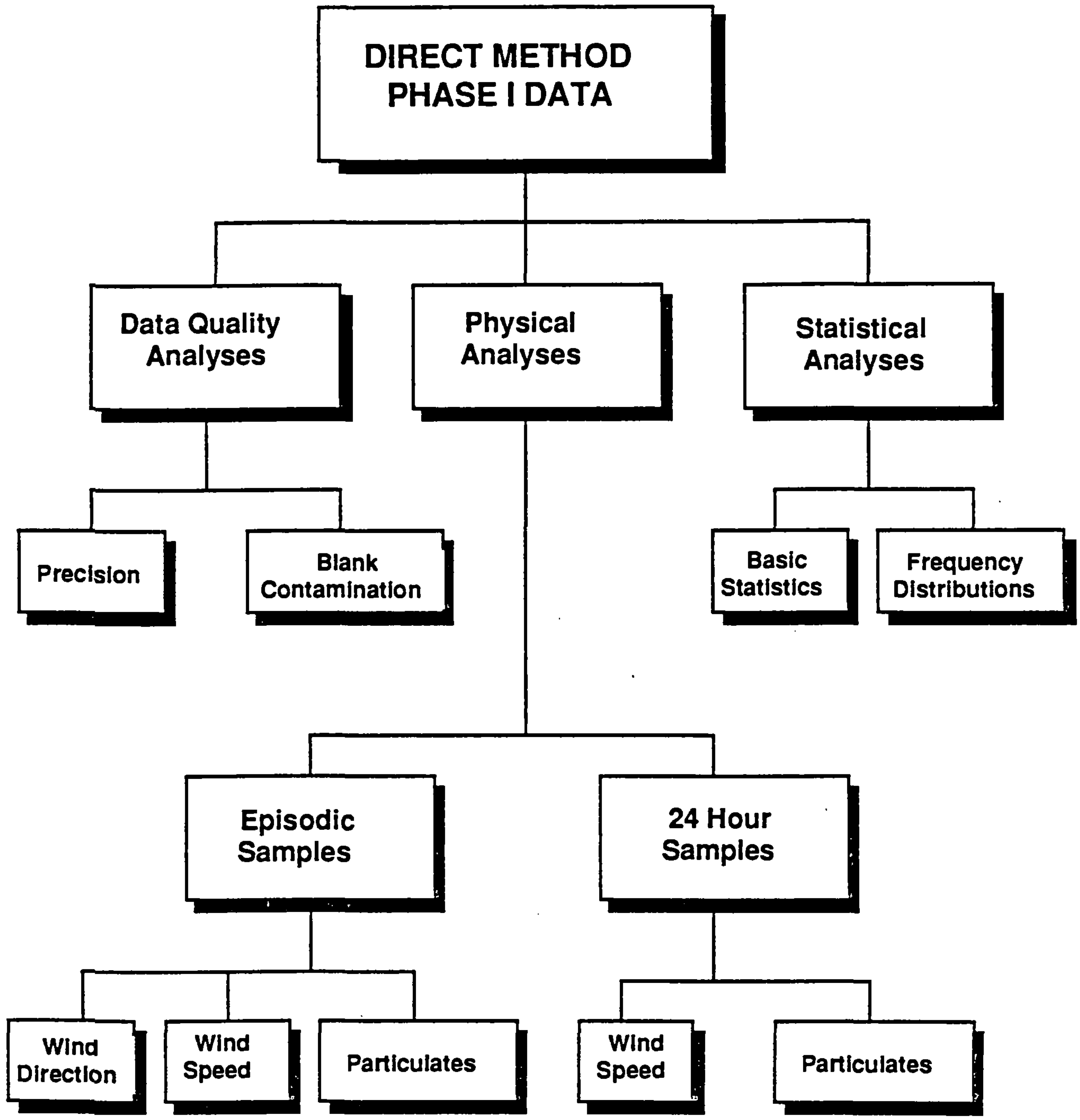
Project No		Figure
288-RI1	Camp Dresser & McKee	J-2



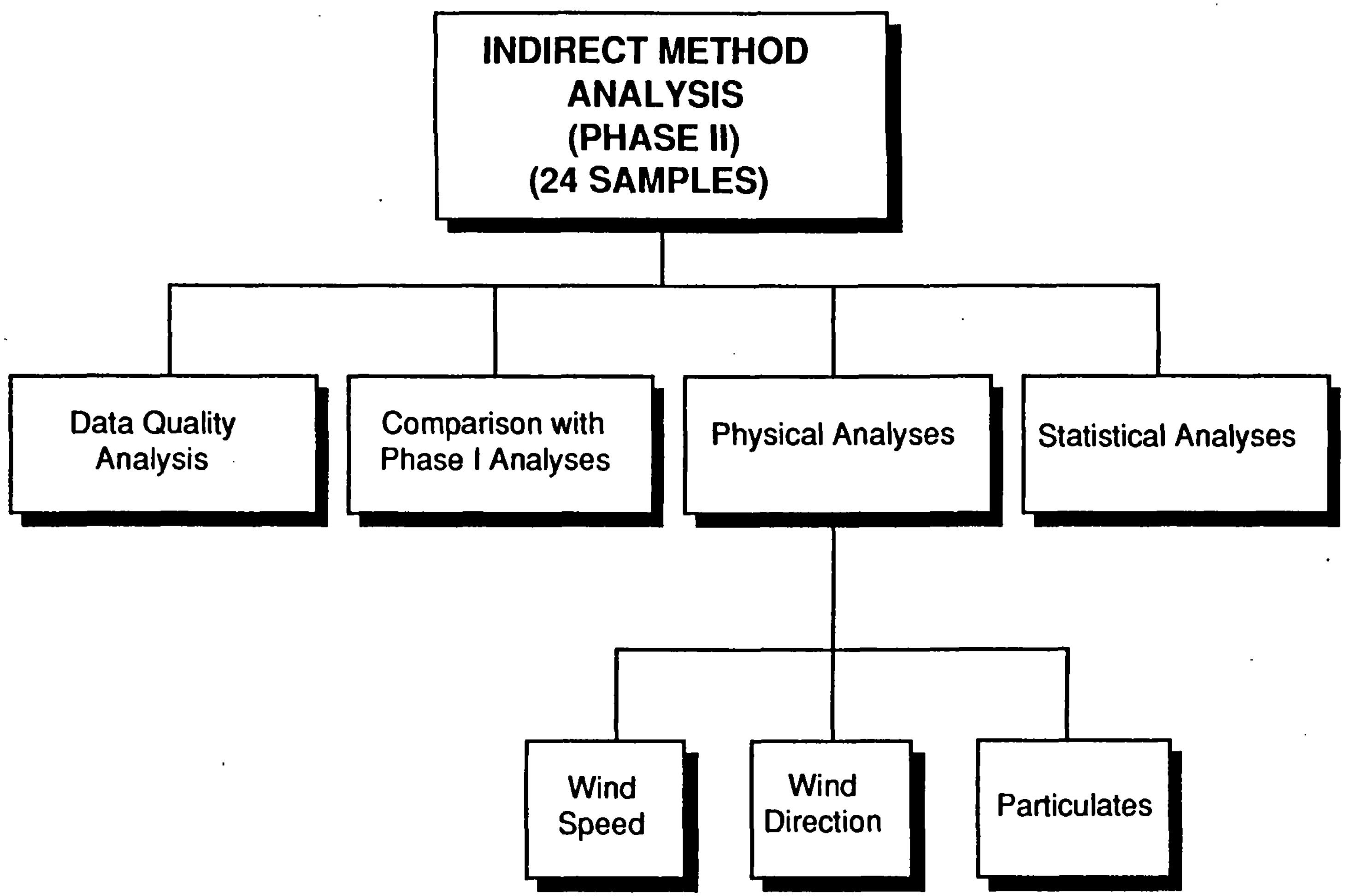
Project No. 288-RI1	South Bay Asbestos	PLM vs TEM SOIL RESULTS	Figure J-3
	Camp Dresser & McKee		



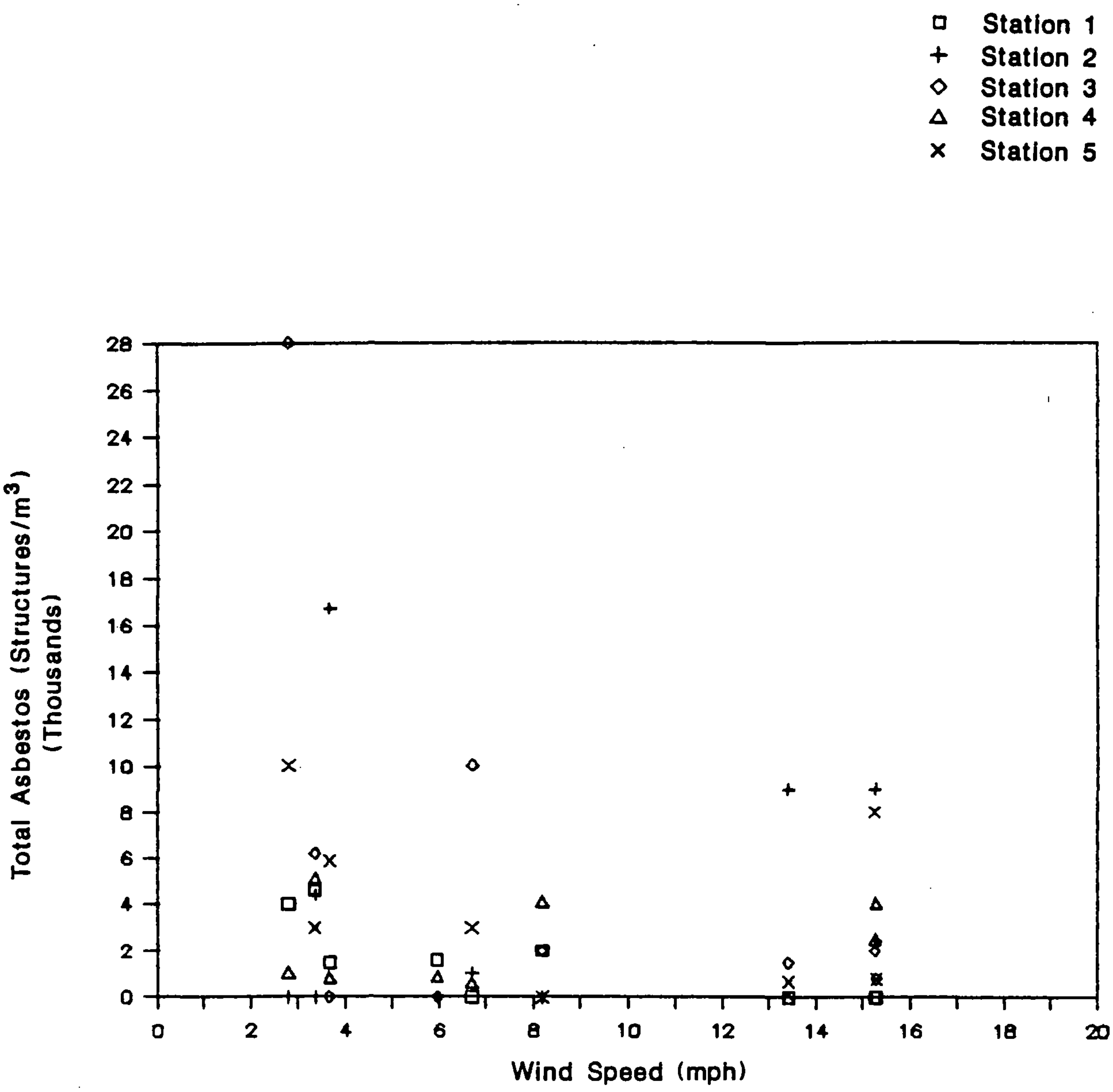
Project No. 288-RI1	South Bay Asbestos / Camp Dresser & McKee	Relationship of Air Data Analysis	Figure J-4



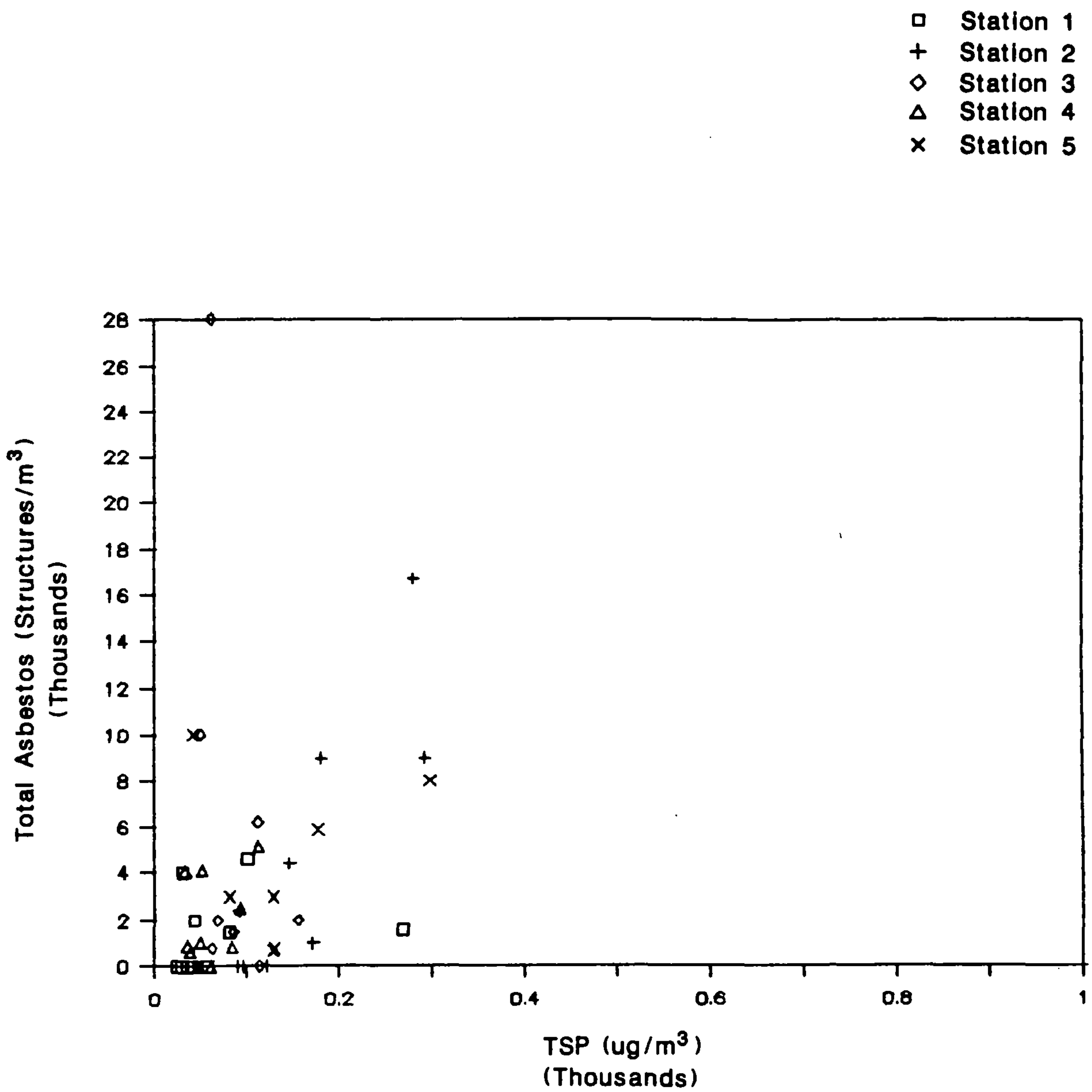
Project No.	South Bay Asbestos	Analyses Performed on Phase I Air Data	Figure
288-RI1	Camp Dresser & McKee		J-5



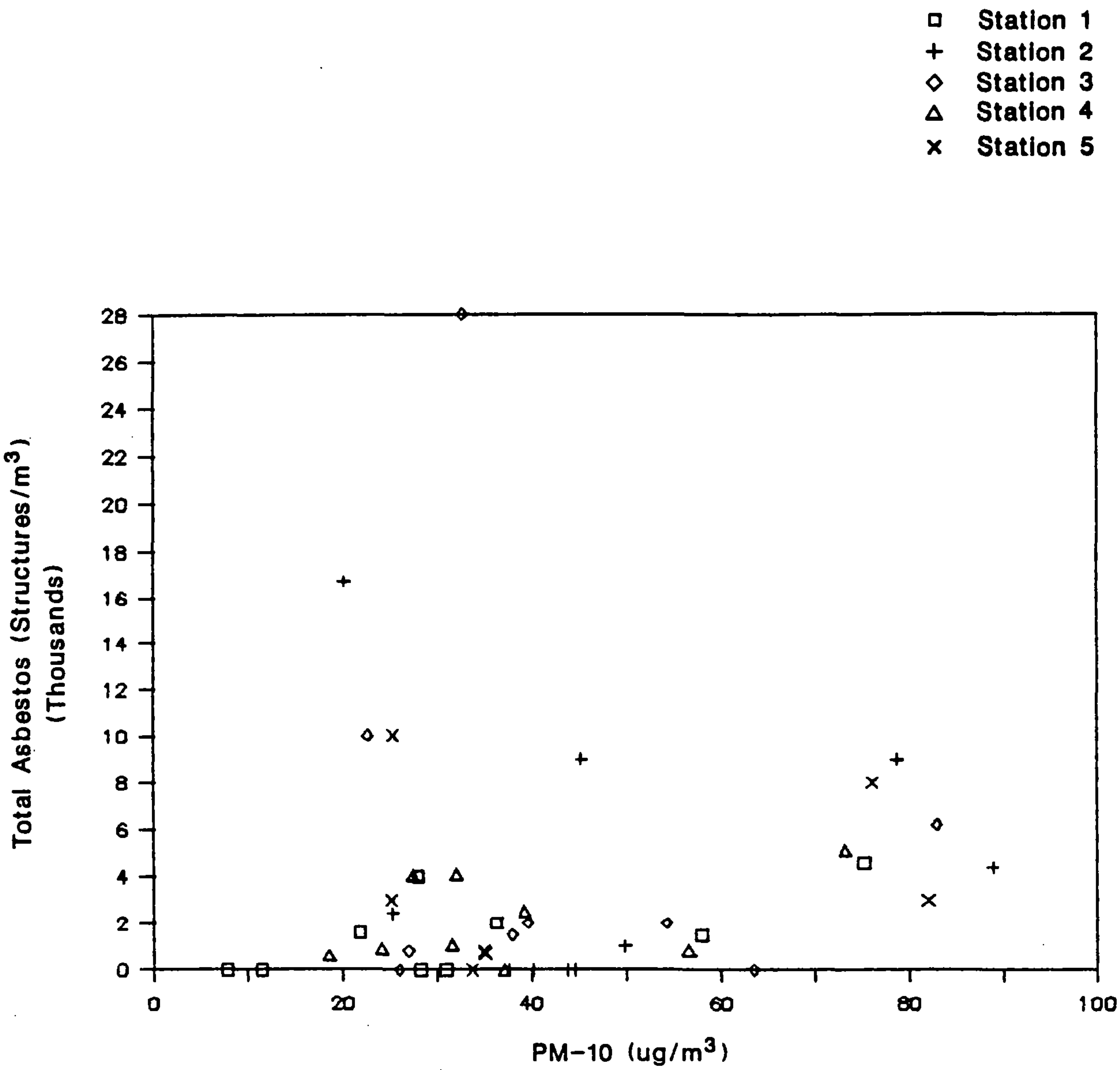
Project No.	South Bay Asbestos	Analyses Performed on Phase II Air Data	Figure
288-RI1	Camp Dresser & McKee		J-6



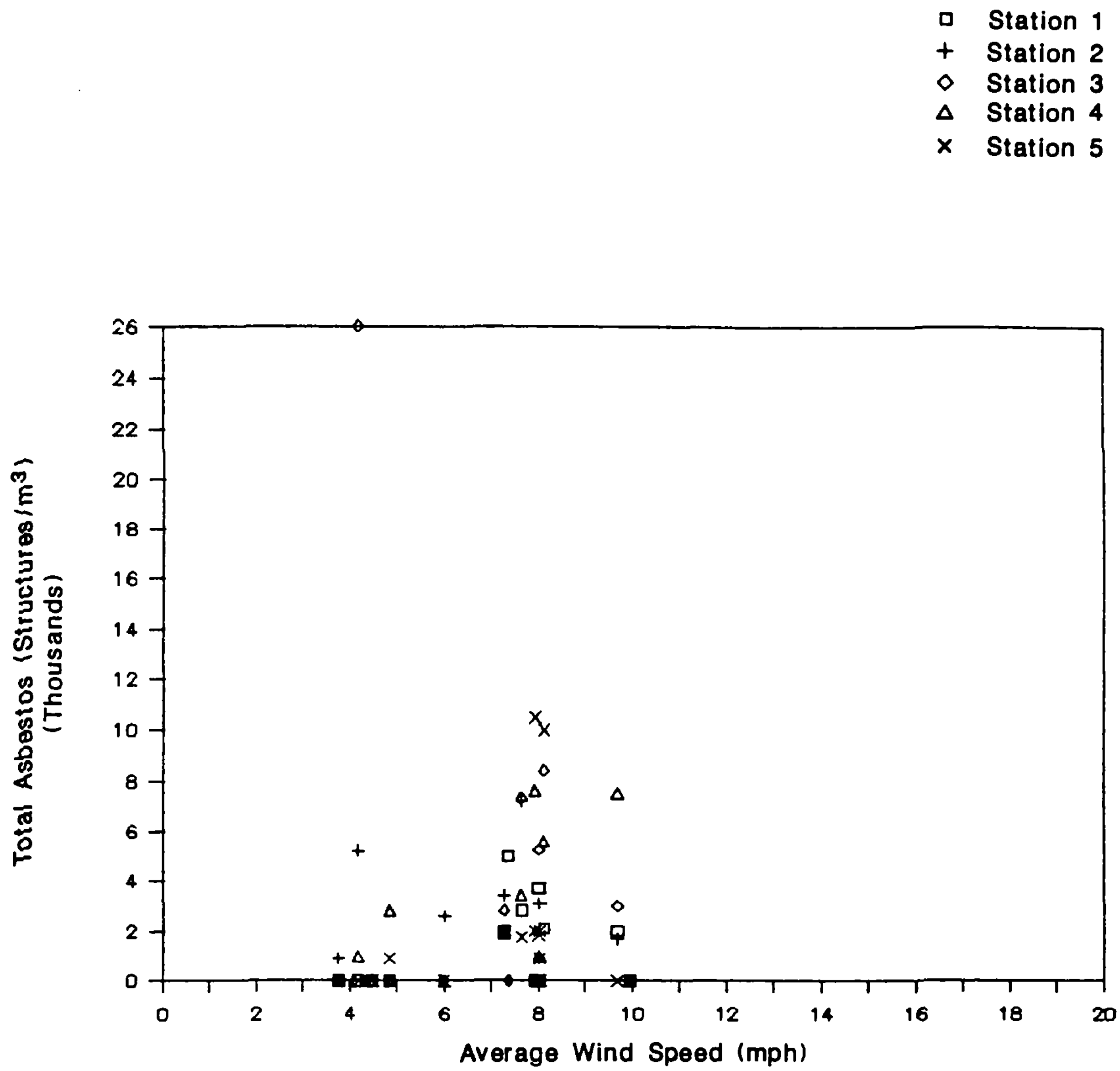
Project No. 288-RI1	South Bay Asbestos / Camp Dresser & McKee	EPISODIC ASBESTOS STRUCTURES vs WIND SPEED	Figure J-7



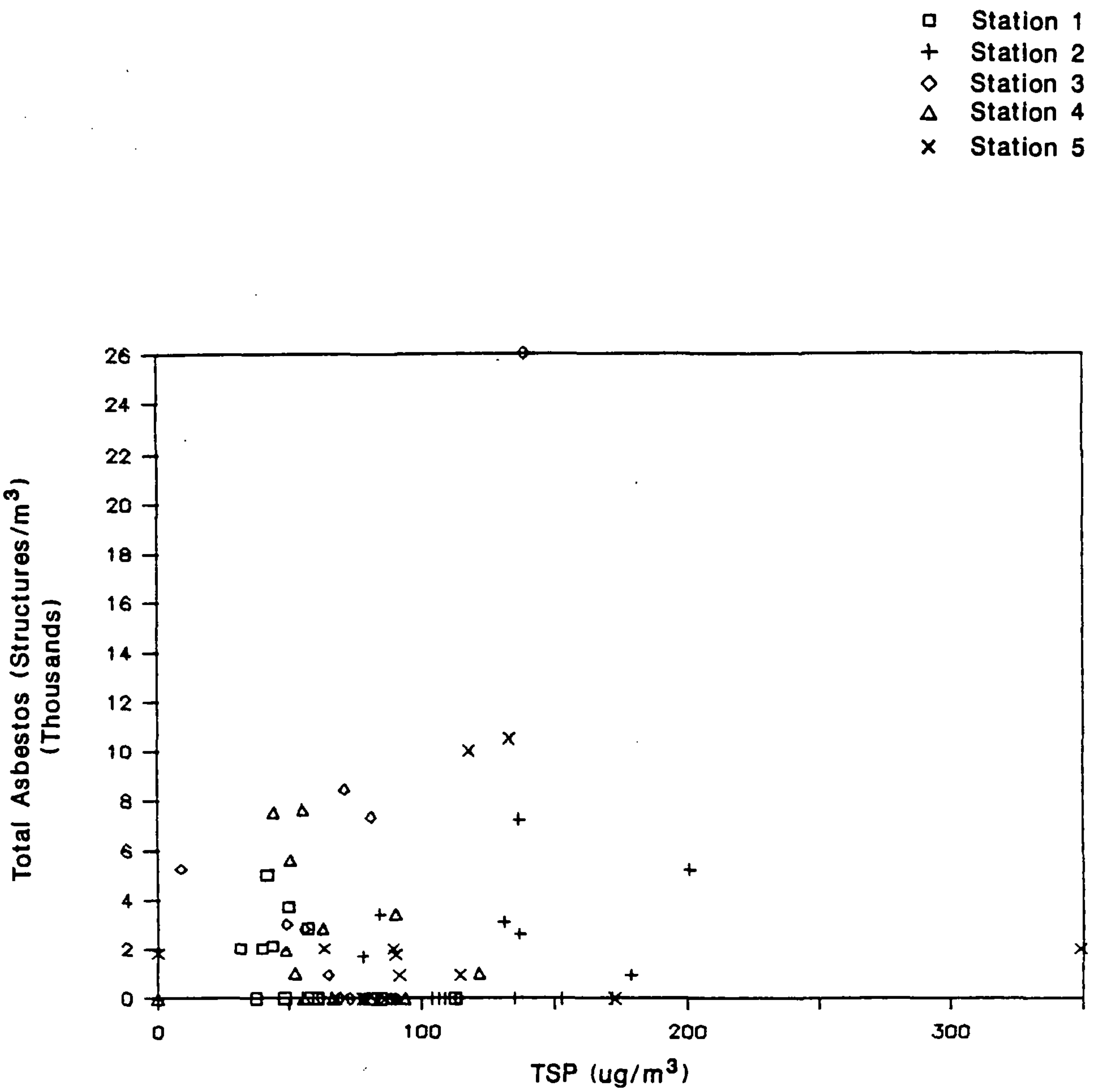
Project No. 288-RI1	South Bay Asbestos / Camp Dresser & McKee	EPISODIC ASBESTOS STRUCTURES vs TSP	Figure J-8



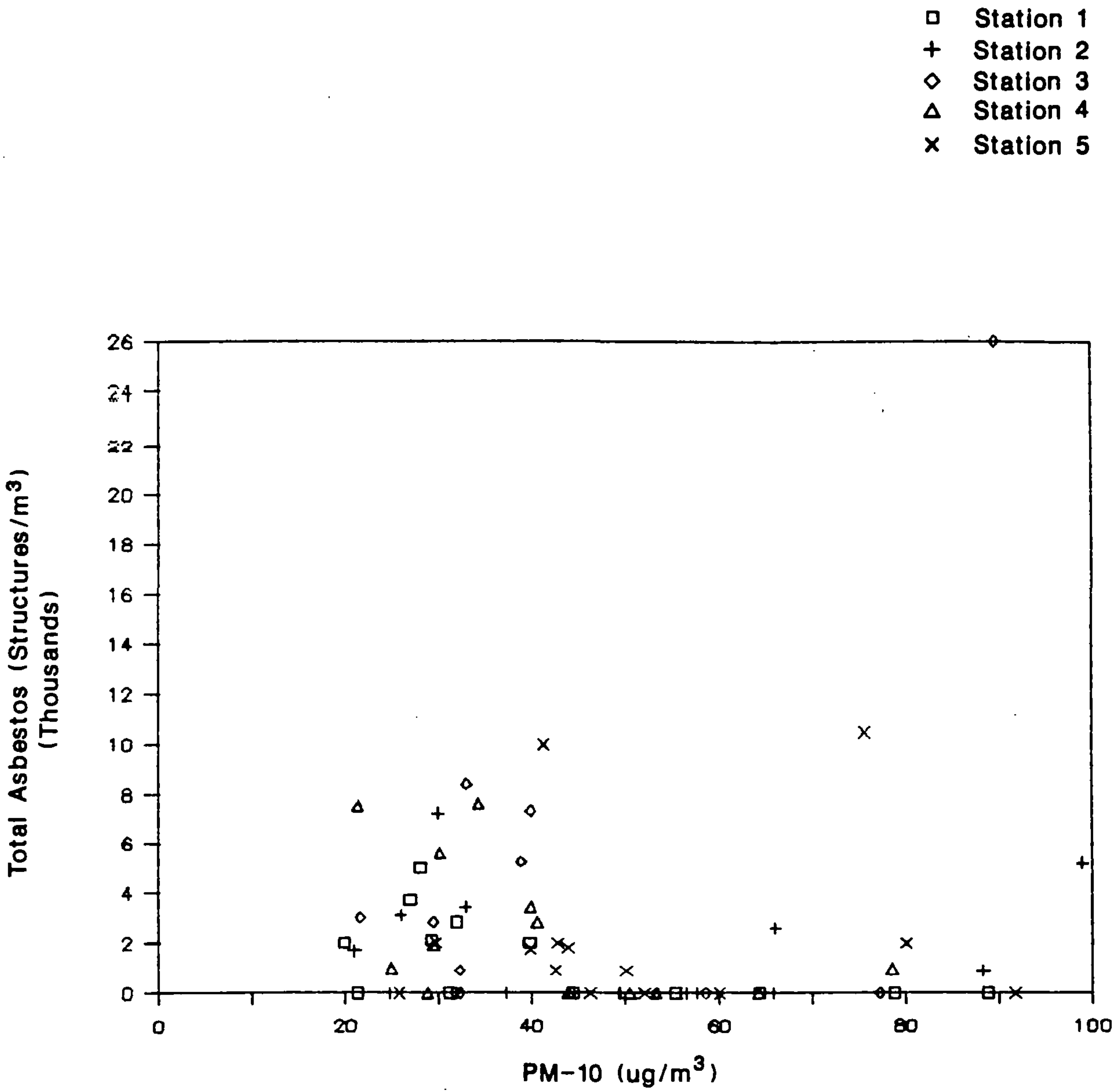
Project No.	South Bay Asbestos	EPISODIC ASBESTOS STRUCTURES vs PM-10	Figure
288-RI1	Camp Dresser & McKee		J-9



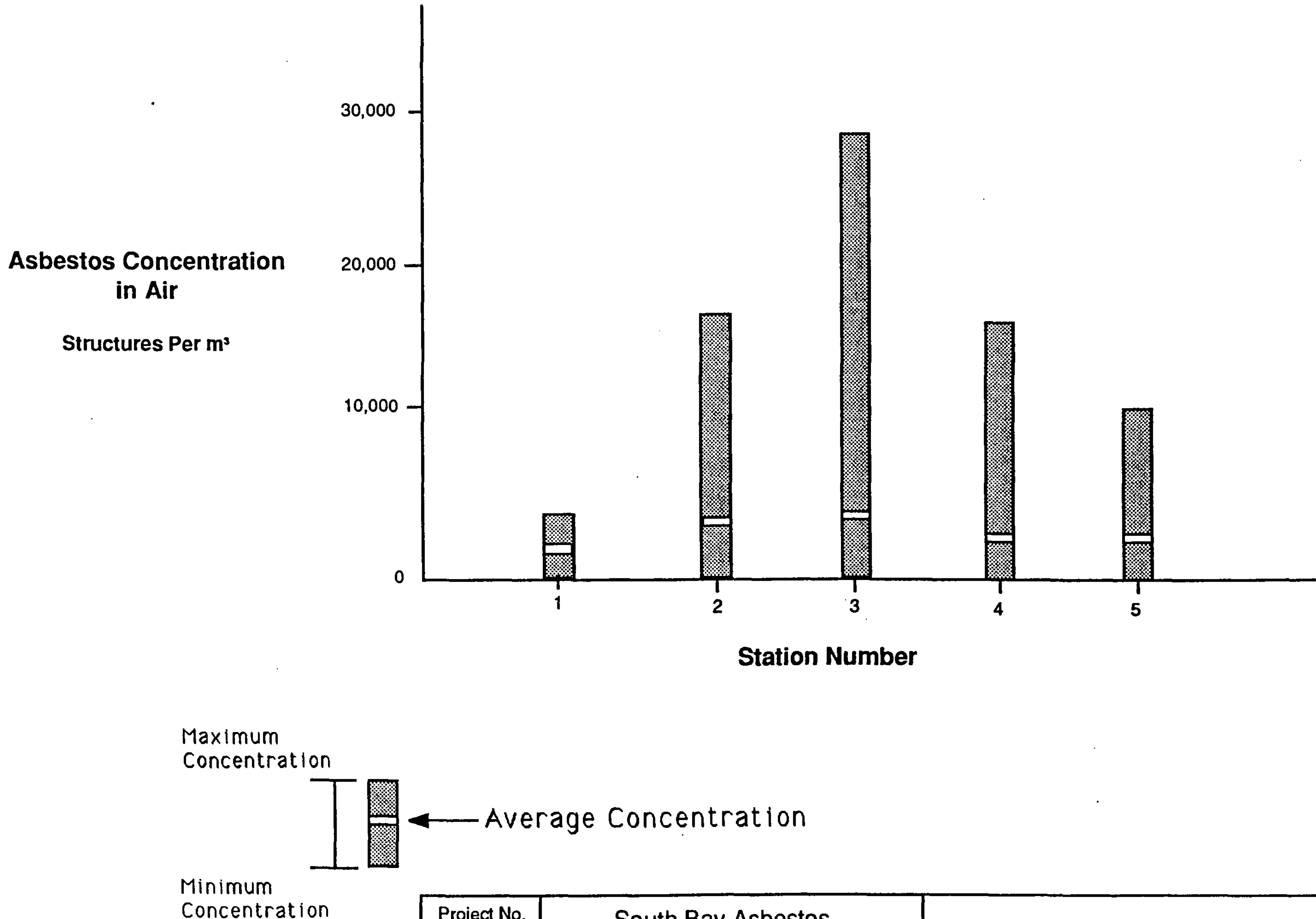
Project No.	South Bay Asbestos	24 HOUR ASBESTOS STRUCTURES vs WIND SPEED	Figure
288-RI1	Camp Dresser & McKee		J-10



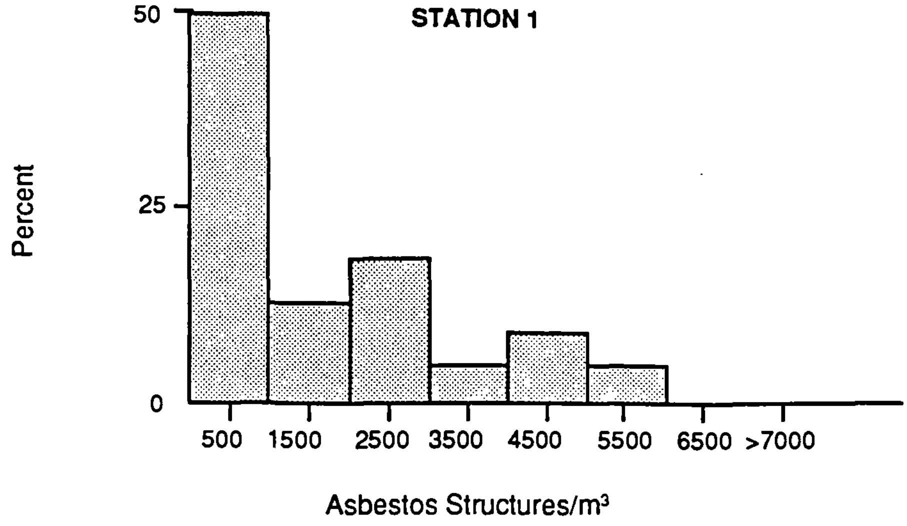
Project No.	South Bay Asbestos	24 HOUR ASBESTOS STRUCTURES vs TSP	Figure
288-RI1	Camp Dresser & McKee		J-11

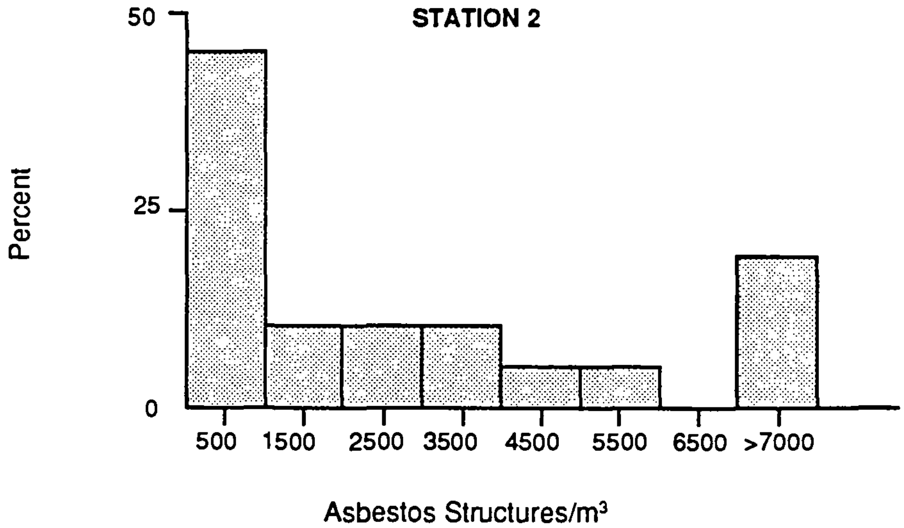


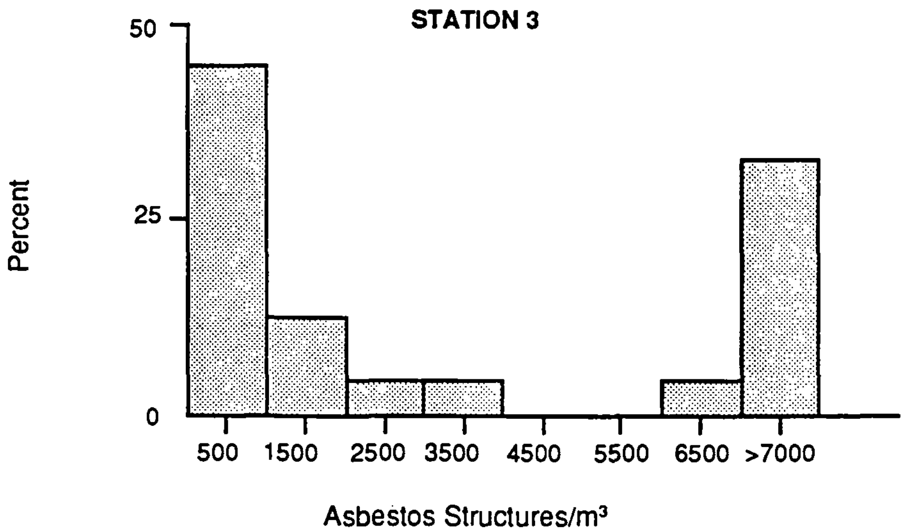
Project No.	South Bay Asbestos	24 HOUR ASBESTOS STRUCTURES vs PM-10	Figure
288-RI1	Camp Dresser & McKee		J-12



Project No.	South Bay Asbestos	Range of Phase I Asbestos Structure Concentrations	Figure
288-RI1	Camp Dresser & McKee		J-13

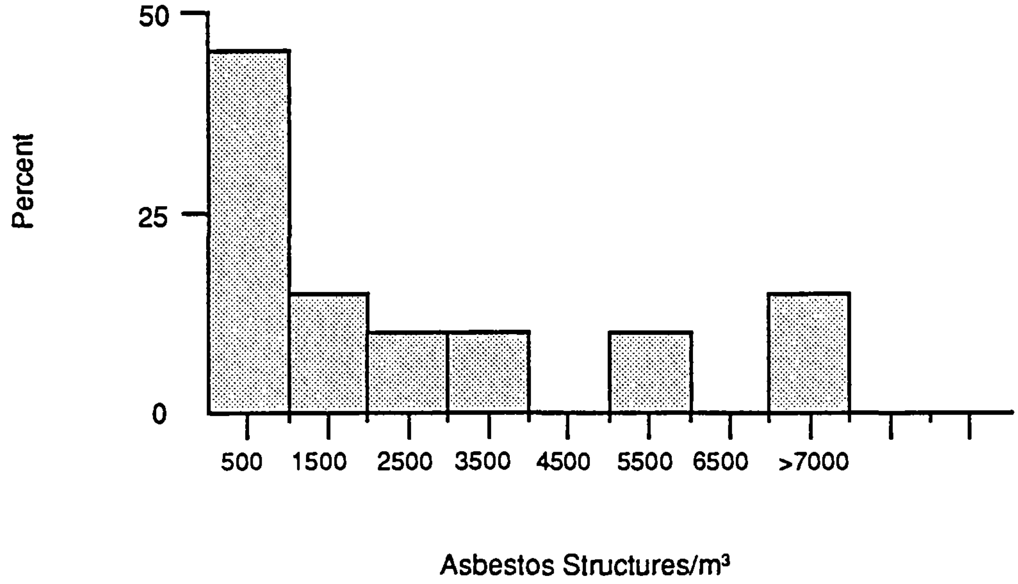






Project No.	South Bay Asbestos	HISTOGRAMS OF ASBESTOS STRUCTURE CONCENTRATIONS	Figure
288-RI1	Camp Dresser & McKee		J-14

STATION 4



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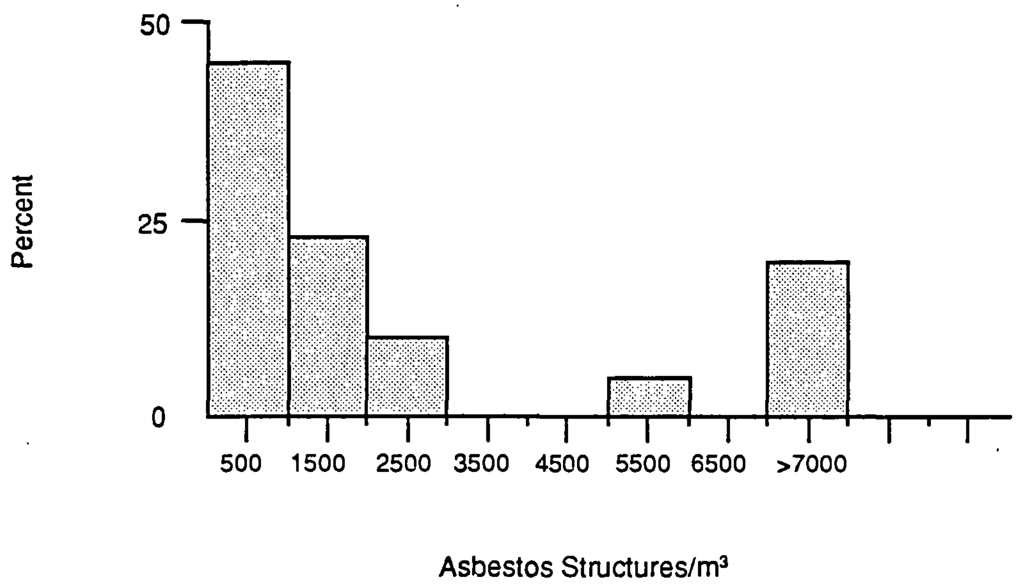
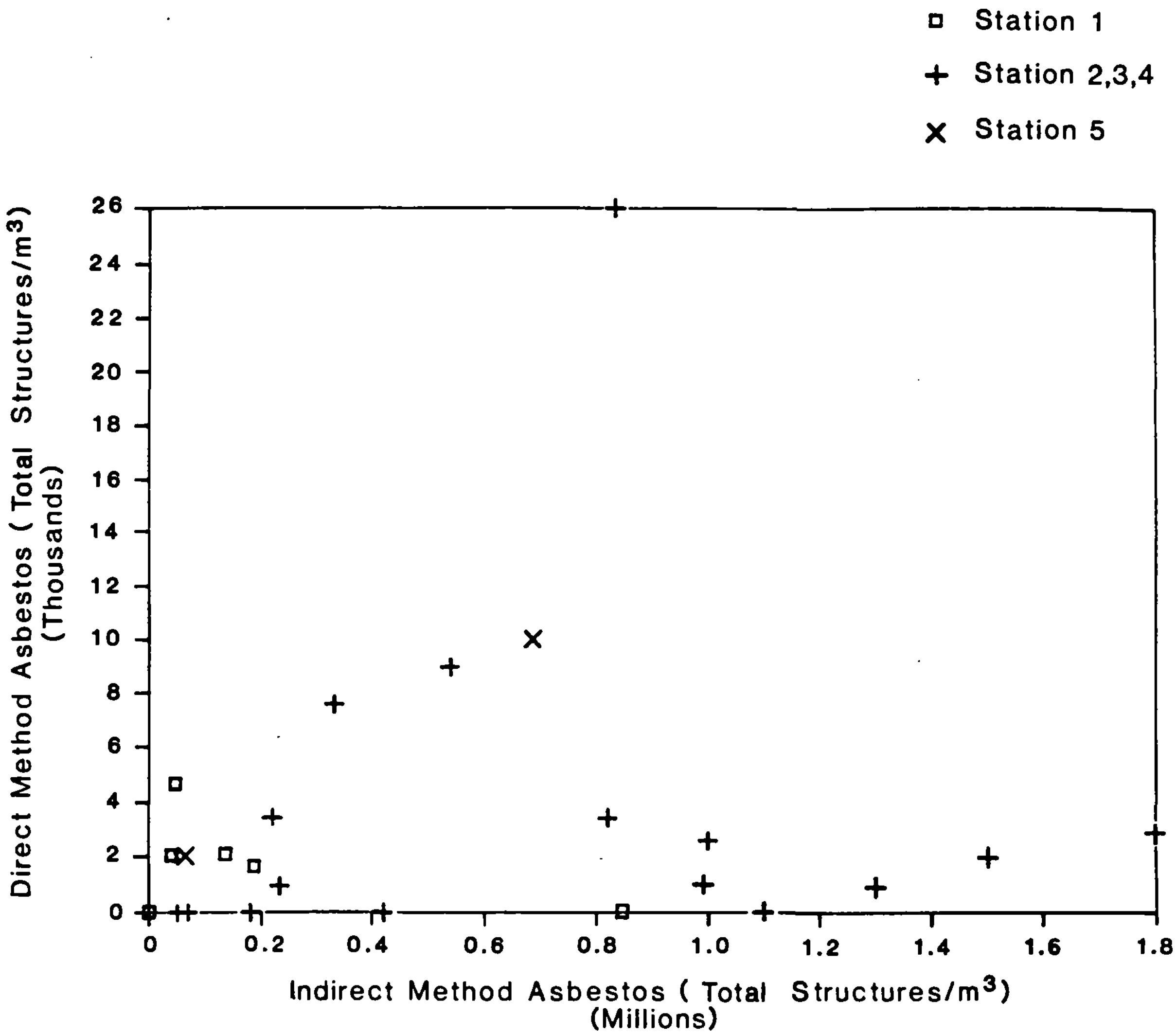
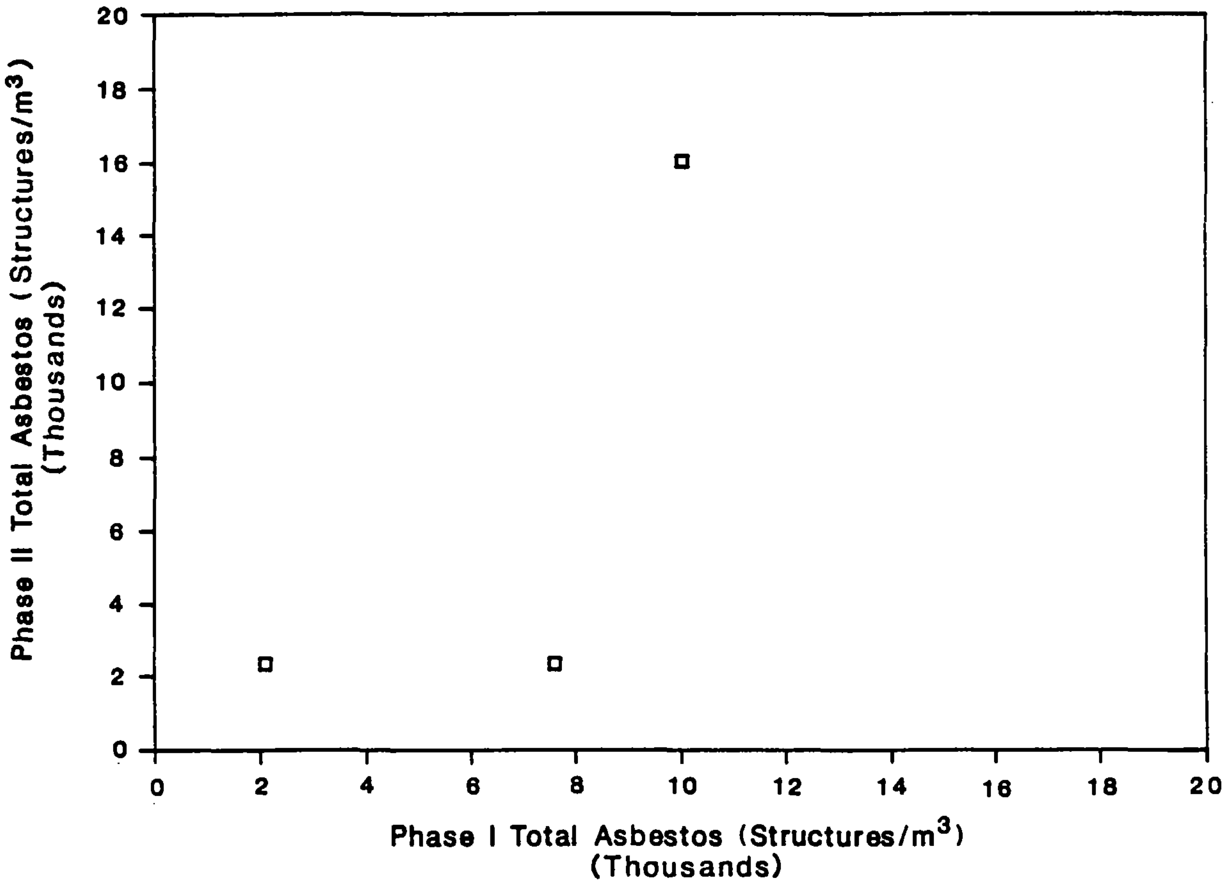


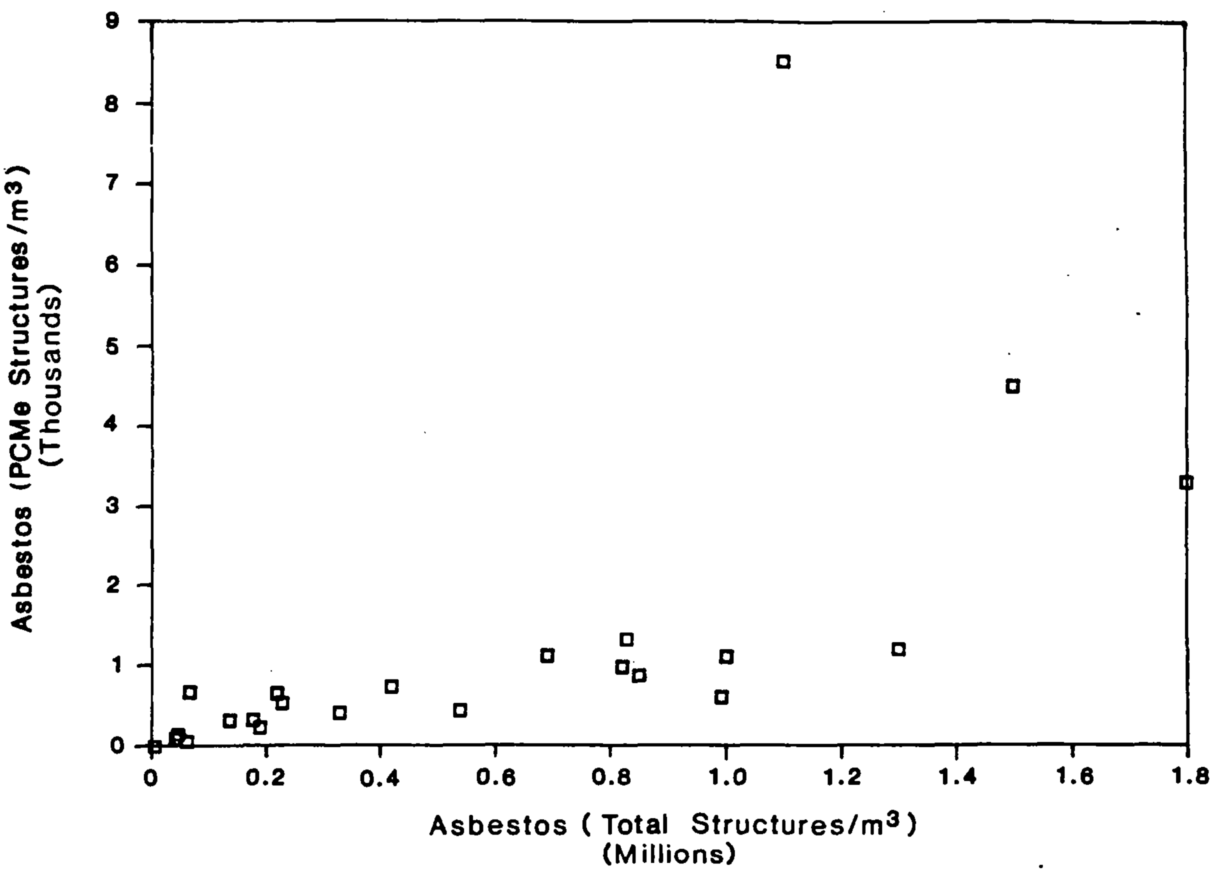
Project No.	South Bay Asbestos	HISTOGRAMS OF ASBESTOS STRUCTURE CONCENTRATIONS	Figure
288-RI1	Camp Dresser & McKee		J-15



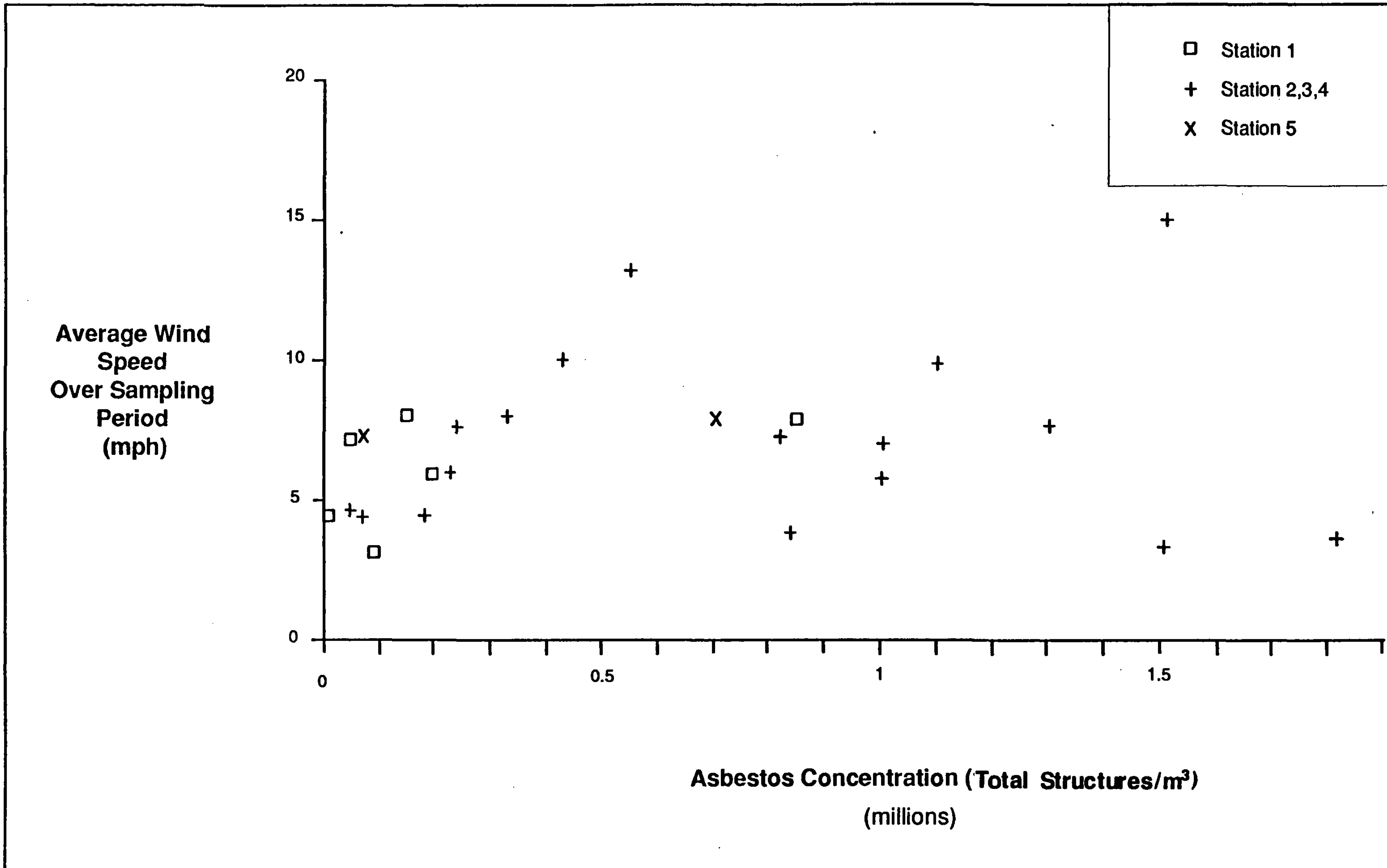
Project No. 288-RI1	South Bay Asbestos	DIRECT AND INDIRECT ANALYSIS COMPARISON	Figure J-16
	Camp Dresser & McKee		



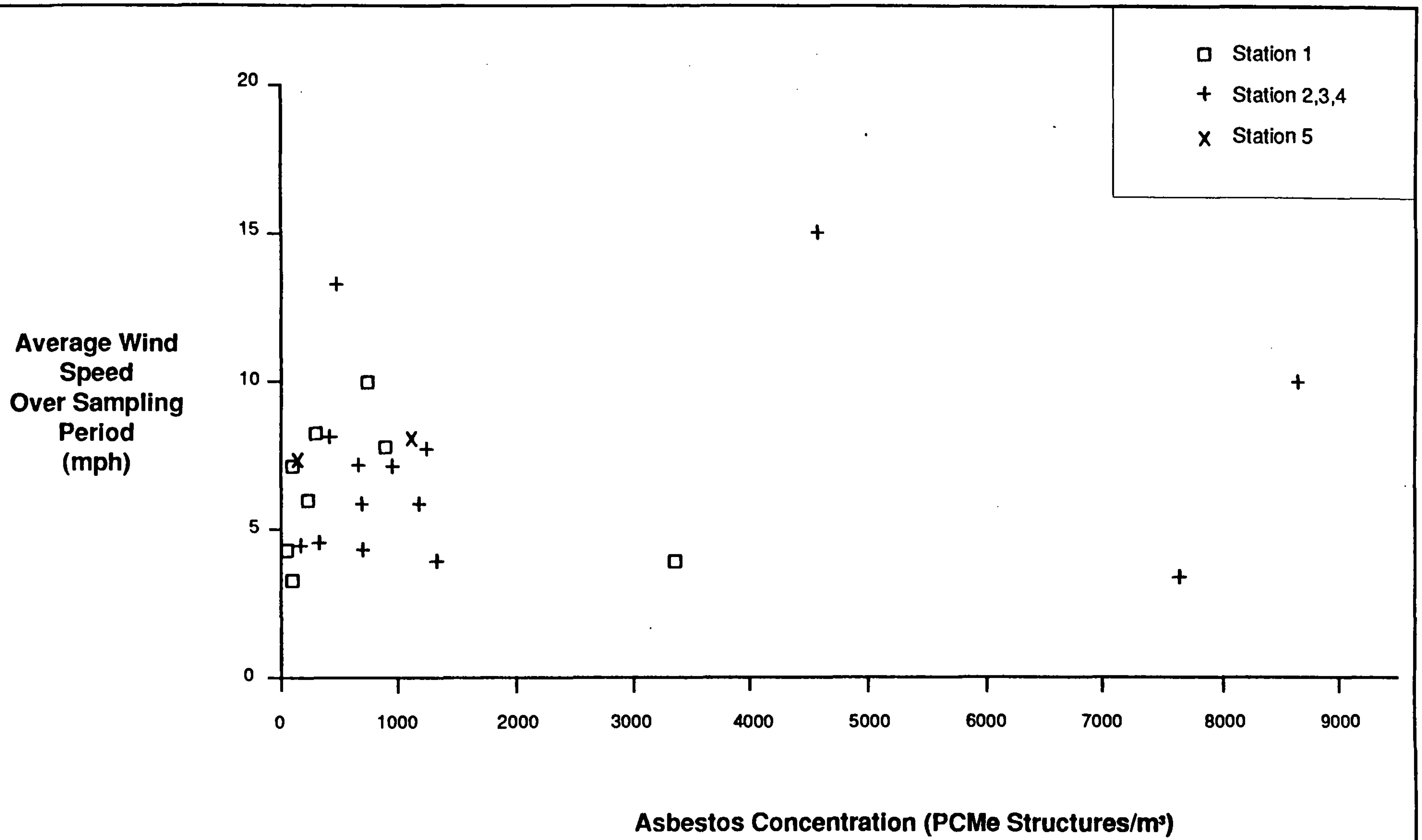
Project No.	South Bay Asbestos	COMPARISON BETWEEN DIRECT ANALYSES	Figure
288-RI1	Camp Dresser & McKee		J-17



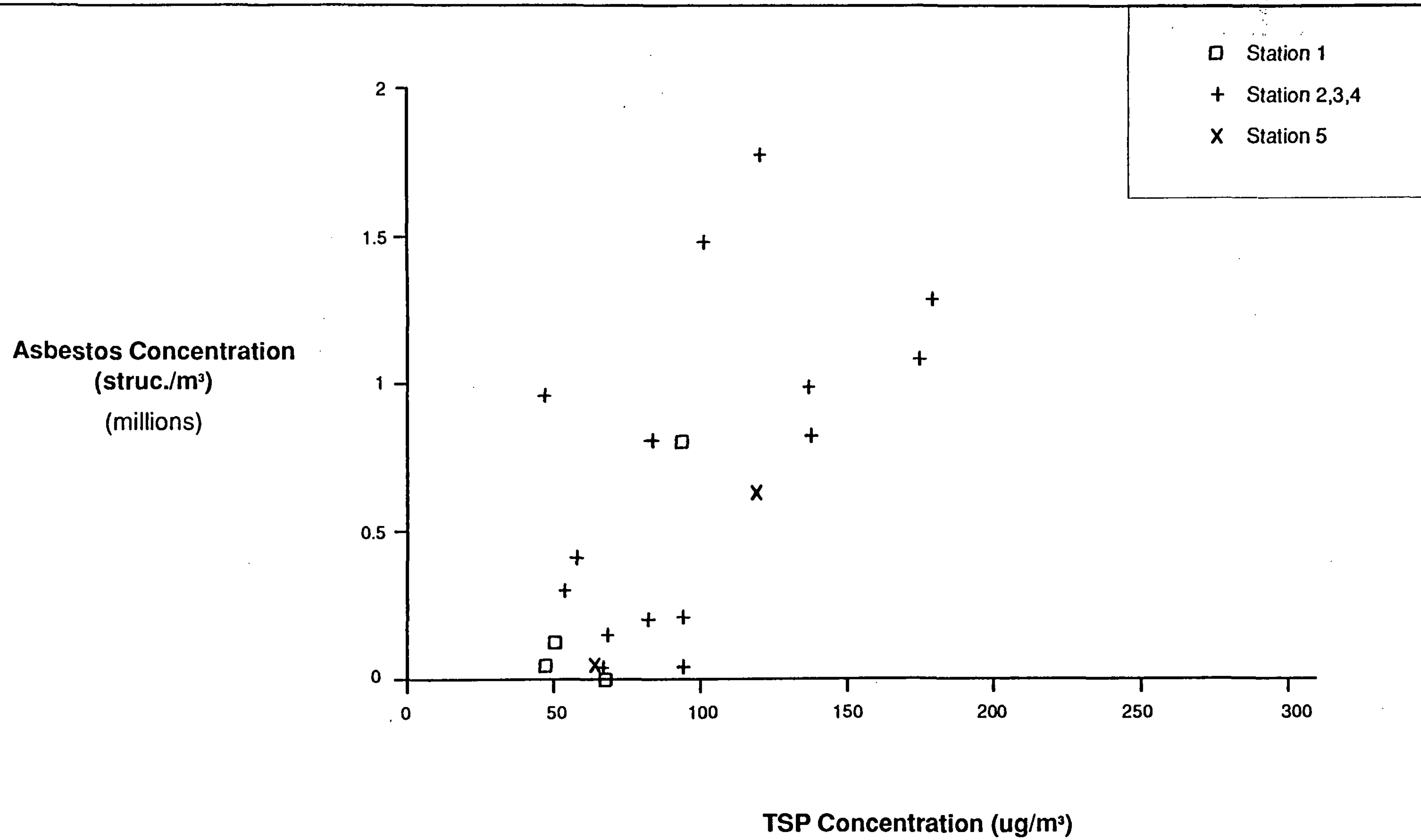
Project No.	South Bay Asbestos	Phase II	Figure
288-RI1	Camp Dresser & McKee	PCM EQUIVALENTS vs TOTAL STRUCTURES	J-18



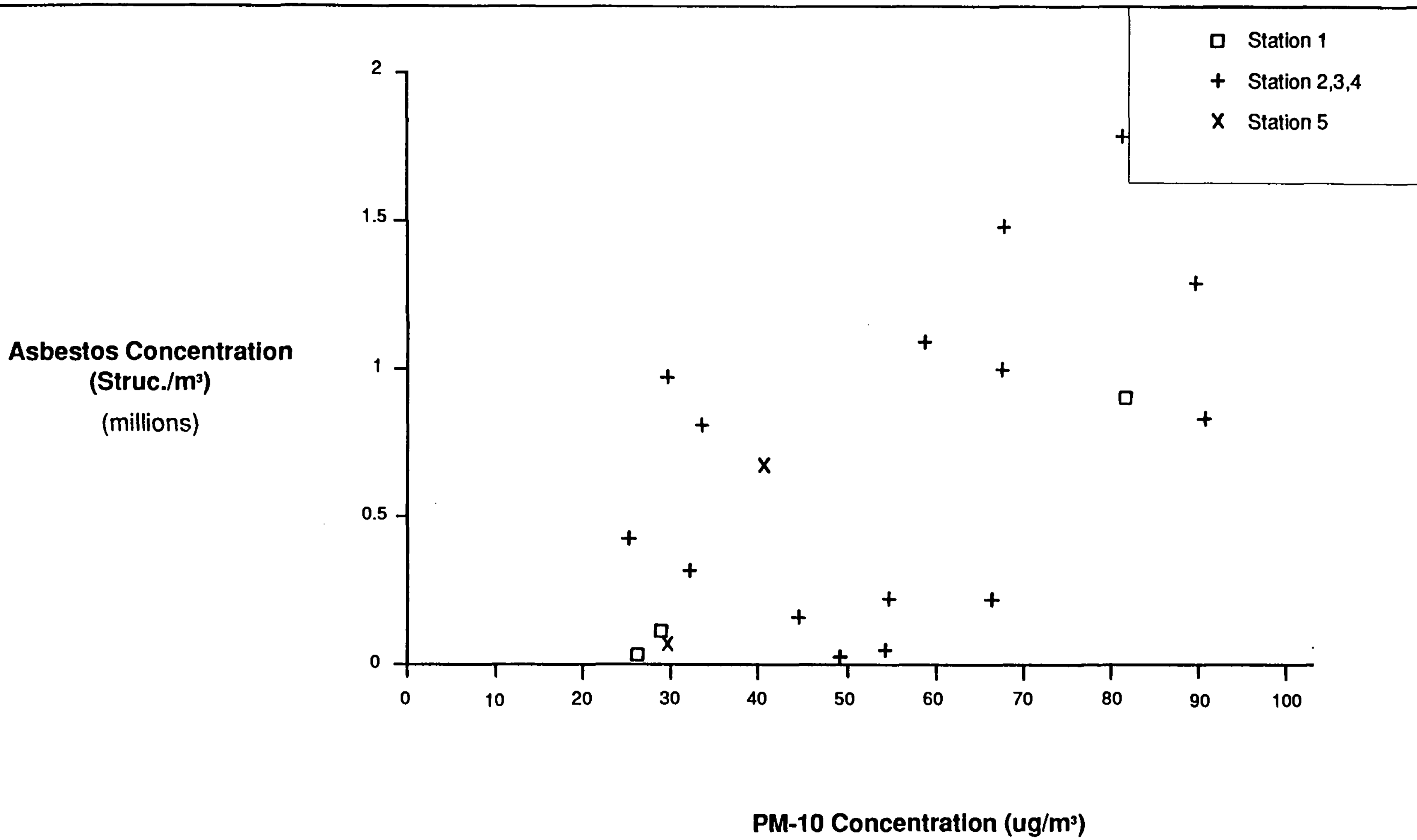
Project No. 288-RI1	South Bay Asbestos / Camp Dresser & McKee	**Phase II** AVERAGE WIND SPEED - TOTAL ASBESTOS SCATTERPLOT	Figure **J-19**



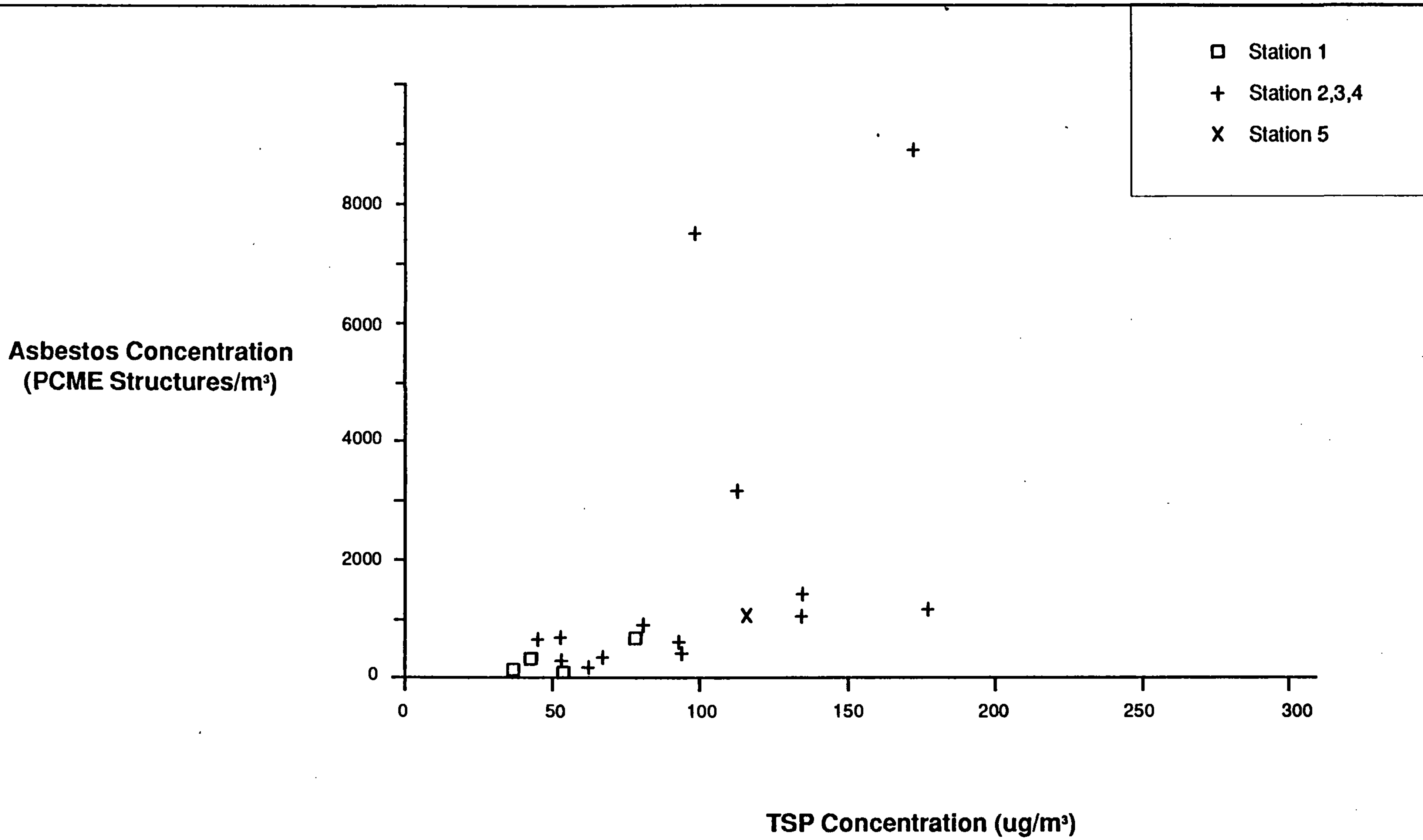
Project No.	South Bay Asbestos	Phase II	Figure
288-RI1	Camp Dresser & McKee	AVERAGE WIND SPEED – PCME SCATTERPLOT	J-20



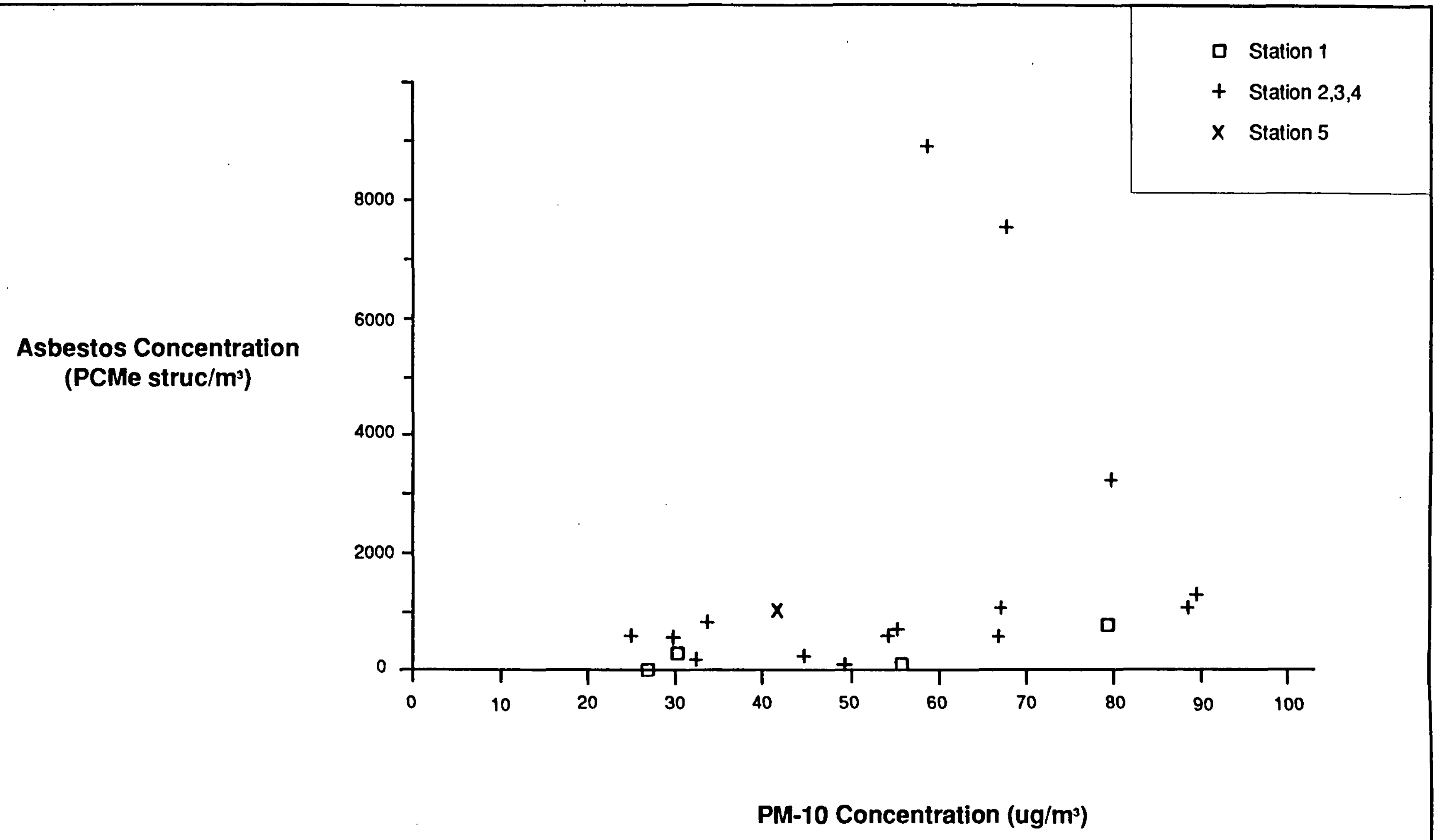
Project No. 288-RI1	South Bay Asbestos / Camp Dresser & McKee	Phase II TOTAL ASBESTOS — TSP SCATTERPLOT	Figure J-21



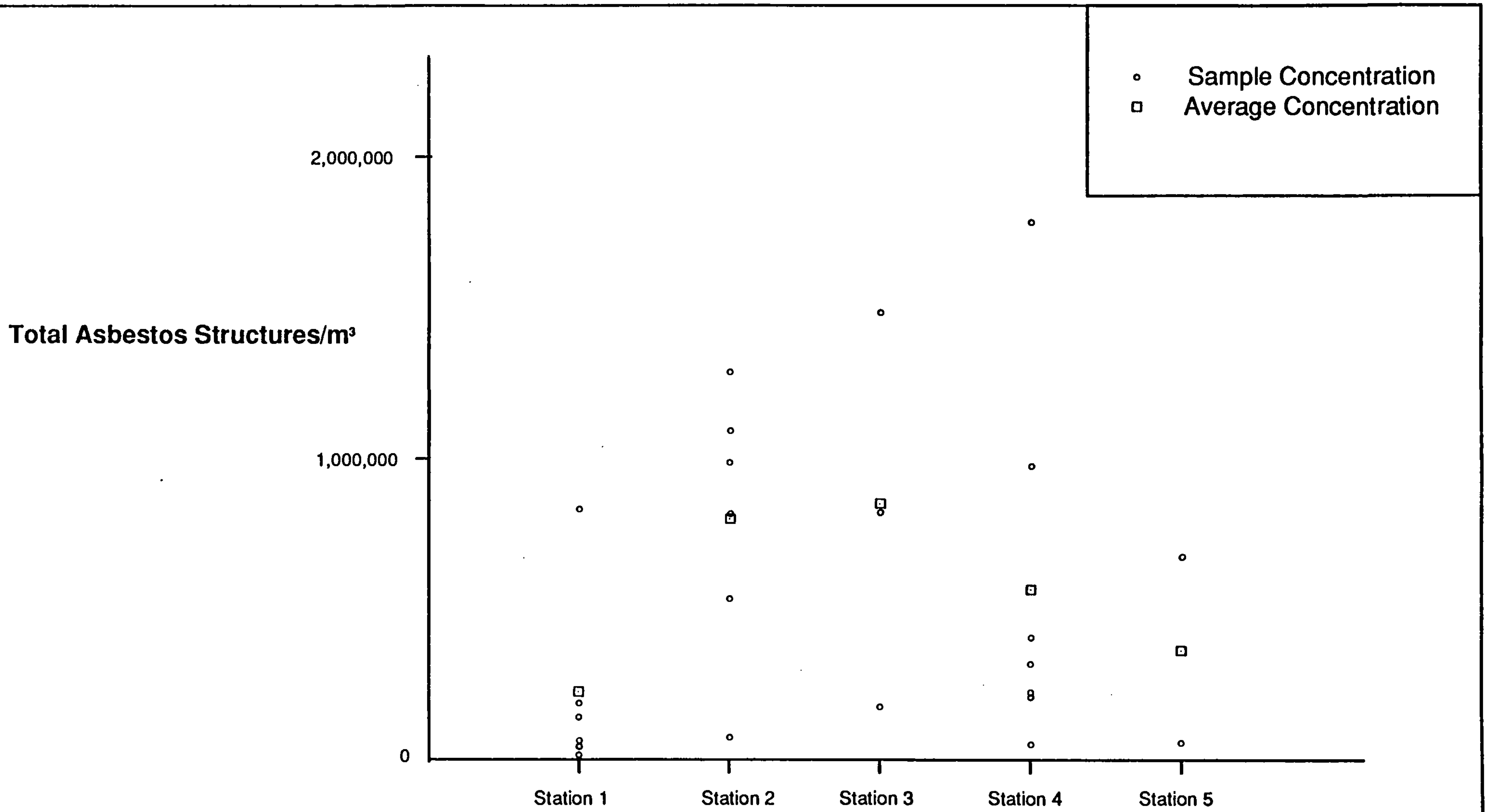
Project No.	South Bay Asbestos	Phase II	Figure
288-RI1	Camp Dresser & McKee	TOTAL ASBESTOS — PM-10 SCATTERPLOT	J-22



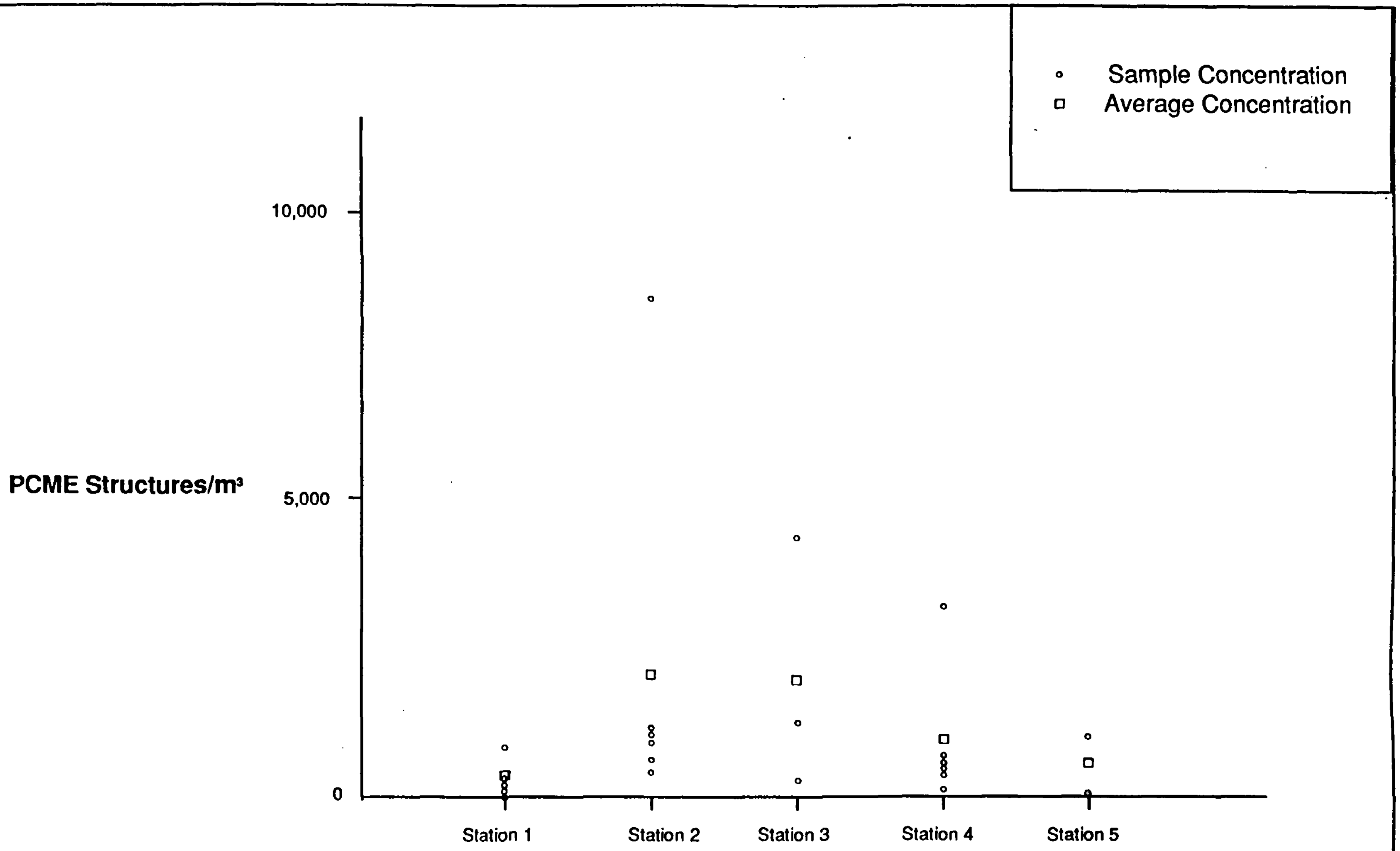
Project No.	South Bay Asbestos	Phase II	Figure
288-RI1	Camp Dresser & McKee	PCME-TSP SCATTERPLOT	J-23



Project No. 288-RI1	South Bay Asbestos / Camp Dresser & McKee	**Phase II** PCME-PM-10 SCATTERPLOT	Figure J-24



Project No.	South Bay Asbestos	DISTRIBUTION OF PHASE II TOTAL ASBESTOS STRUCTURE CONCENTRATIONS	Figure
288-RI1	Camp Dresser & McKee		J-25



Project No.	South Bay Asbestos	Distribution of Phase II Asbestos PCM Equivalent Concentrations	Figure
288-RI1	Camp Dresser & McKee		J-26

APPENDIX K

HUMAN HEALTH AND ENVIRONMENTAL IMPACTS OF EXPOSURE TO ENVIRONMENTAL ASBESTOS

TOXICITY PROFILE FOR ASBESTOS

1.0 EXECUTIVE SUMMARY

Health risks associated with environmental exposure to ambient asbestos fibers are of potential concern because of reported adverse effects from occupational exposure and because asbestos, as well as other mineral and synthetic particles with similar properties, is present in the environment. This toxicity profile on asbestos reviews available asbestos studies and regulatory support documents to develop a set of recommended health criteria for exposure to asbestos via inhalation and ingestion. Major findings and recommendations are as follows:

- The most significant route of exposure to asbestos fibers is usually via inhalation. Additionally, ingestion of asbestos can occur either directly (e.g., drinking water) or indirectly following inhalation.
- Although identification of the biologically active components (e.g., fractions characterized by length, diameter, or aspect ratio) of asbestos have not been conclusively defined, there is evidence that the most biologically active fibers are those with length >5 microns and aspect ratio >3. Shorter fibers, however, also appear to contribute to health impacts. To adequately characterize asbestos concentrations, transmission electron microscopy (TEM) is recommended. Comparison with existing health studies for which measurements were made by other methods requires careful consideration of conversion factors.
- Generally, concentrations in ambient air are reported as fibers per unit volume (f/ml) or fiber mass per unit volume ($\mu g/m^3$); reported concentrations are usually linked to fibers >5 microns in length and/or with certain microscopic characteristics.
- Assessment of exposure is complicated by uncertainties in current measurement techniques, as well as in the conversion factors among the measures of concentration obtained by various methods.
- For measurement of asbestos at hazardous waste sites, it is important that the analytical method used be sensitive, rapid, able to differentiate between asbestos and nonasbestos fibers, and be cost-effective.
- The carcinogenicity of asbestos following inhalation has been clearly established in humans and experimental animals. In humans, such evidence comes from occupationally exposed individuals. Inhalation exposure to asbestos can result in both lung cancer and mesothelioma.
- The carcinogenicity of asbestos following ingestion has not been conclusively demonstrated by direct studies; however, increases in gastrointestinal cancer in a number of cohorts of occupationally

exposed workers strongly suggest a link between inhalation and subsequent ingestion and the increased incidence of benign polyps in rats following oral ingestion provides "limited" evidence of carcinogenicity.

- The primary noncarcinogenic health effect of asbestos is asbestosis, a chronic lung disease associated with functional disabilities and early mortality. Development of asbestosis is associated only with high-level occupational exposure. For lower-level environmental exposure, cancer is considered a more appropriate end point for criteria development than asbestosis.

- Health criteria are developed for exposure to asbestos via inhalation based on a recent Airborne Asbestos Health Assessment Update (EPA 1986). The major uncertainties associated with developing health criteria for exposure to asbestos via inhalation include: (1) uncertainty associated with extrapolation from high occupational levels to much lower ambient levels, (2) difficulties associated with converting between results of different methods of measurement, and (3) questions involving the relevance of extrapolating dose-response data that may be based on different mineralogic and physical forms.

- Health criteria are developed for exposure to asbestos via ingestion based on an EPA (1985a) Drinking Water Criteria Document. This risk assessment was used by EPA as the basis for the drinking water proposed maximum contaminant level goal (MCLG). The major uncertainties associated with developing health criteria for exposure to asbestos via ingestion include: (1) lack of adequate dose-response data from human populations exposed via ingestion (2) uncertainty associated with converting from an inhalation risk to an ingestion risk, (3) the basis for the MCLG being an NTP ingestion study in which fibers >10 microns in length induced benign tumors, and (4) reconciliation between exposure criteria developed by different methods (i.e., NRC 1983b approach vs. EPA 1985a approach).

2.0 INTRODUCTION

Asbestos is a generic term referring to a family of naturally occurring hydrated silicates having a fibrous crystalline structure. Only six fibrous silicates are defined as asbestos fibers, and these fibers are classified under two basic mineral types, serpentine and amphibole. Chrysotile fibers belong to the serpentine group; actinolite, Cunningtonite-grunerite or amosite, anthophyllite, crocidolite, and tremolite fibers belong to the amphibole group. Chyrsotile fibers are composed of fibrils that are banded together. Each fibril is actually a rolled sheet of magnesium oxide-hydroxide octahedra bonded to a layer of silicon dioxide tetrahedra. Amphibole fibers consist of double chains of silicon-oxygen tetrahedra lying parallel to the vertical crystallographic axis and bound laterally by metallic ions (Selikoff and Lee 1978). Asbestos fibers are widely used for their high tensile strength and flexibility and for their noncombustible, nonconducting, and chemical-resistant properties. Chrysotile, amosite, anthophyllite, and crocidolite are of primary commercial importance, and therefore, most data exist for these fiber types.

Several of the physical and chemical properties of asbestiform fibers appear to be associated with causing adverse health effects. Longer, thinner fibers appear to be more pathogenic than shorter, thicker fibers. This particular fiber characteristic can be expressed quantitatively as the aspect ratio (i.e., the ratio of fiber length to fiber diameter). Other fiber characteristics that may be significant in pathogenicity include respirability (behavior of the fiber in the lung), durability, surface area, and surface chemistry. Health effects also appear better correlated with total fiber number than with asbestos mass, although limitations in the analytical techniques used to quantify asbestos concentrations color this observation.

This profile presents an assessment of health risks posed to the general population by low concentrations of asbestos present in the environment. The primary effects associated with exposure to asbestos are cancer (specifically lung cancer and mesothelioma) and asbestosis, which is characterized by fibrosis of the lung parenchyma. However, asbestosis is primarily observed in occupationally exposed individuals following long-term exposure to high levels of asbestos. Because the potential risk of cancer is more significant than the potential risk of asbestosis for the general population exposed to asbestos in the environment, cancer is the primary health effect discussed in this profile. A qualitative description of ecotoxicity is also included in the profile. The assessment of human health or environmental risk is based on the analysis of a number of authoritative reviews and regulatory support documents which have analyzed available asbestos studies, presented risk assessments, and/or recommended health risk criteria. These include the Airborne Asbestos Health Assessment Update (EPA 1986); Occupational Exposure to Asbestos, Tremolite, Anthophyllite, and Actinolite (OSHA 1986); Health Effects of Asbestos (CDHS 1986); Drinking Water Criteria Document for Asbestos (EPA 1985a); Asbestiform Fibers--Nonoccupational Health Risks (NRC 1984); Drinking Water and Health (NRC 1983b); Chronic Hazard Advisory Panel on Asbestos (CPSC 1983); Summary Workshop on Ingested Asbestos (EPA 1982); Assessment of Risks Posed by Exposure to Low Levels of Asbestos in the General Environment (Schneiderman et al. 1981); and the Ambient Water Quality Criteria for Asbestos (EPA 1980).

The profile is organized in eight major sections. Sections 1.0 and 2.0 contain the Executive Summary and Introduction, respectively. In Section 3.0, the primary routes of asbestos exposure in humans, inhalation and ingestion, are examined; the techniques used for the sampling and analyzing asbestos in the environment are discussed and evaluated; and estimates of environmental asbestos levels are presented. Section 4.0 contains a review of the carcinogenic and noncarcinogenic human health effects associated with occupational and environmental asbestos exposure. The results of studies conducted on animals experimentally exposed to asbestos are discussed in Section 5.0. Section 6.0 is a discussion of the applicabiity of quantitative health criteria for asbestos inhalation and ingestion; a summary of recommended and available health criteria are presented in tabular form in Section 7.0. Section 8.0 presents the ecotoxicological effects associated with asbestos in the environment.

3.0 ESTIMATES OF EXPOSURE

There are a number of different pathways by which asbestos can be released from a source and transported to points of potential exposure. Two of the most important pathways include (1) suspension in ambient air and subsequent airborne transport to exposure points followed by inhalation or inadvertent ingestion, and (2) release to water and subsequent aquatic transport to exposure points followed by ingestion. Potential receptors at environmental exposure points include humans and other local biota.

In humans, the primary route of exposure to asbestos fibers in air is via inhalation. Some of the inhaled fibers also can be translocated to the gastrointestinal tract by airway clearance mechanisms, and other fibers can be translocated to the pleural and peritoneal cavities by lymphatic drainage. Inhalation exposure can fall into the following four categories: (1) occupational, (2) community (near known sources), (3) consumer (use of manufactured products), and (4) general environmental. Because the highest asbestos exposures have been reported for relatively well-defined workplace populations, occupational exposure data are most frequently used in health hazard assessments for inhalation.

Ingestion is another potential route of exposure. Ingestion of asbestos can occur directly through the consumption of contaminated water, food, beverages, or soil, or ingestion can occur indirectly following inhalation of fibers because the exposed person can swallow nasal and bronchial secretions containing inhaled asbestos fibers.

The proper characterization of asbestos exposures requires structural and chemical information in addition to quantifying the concentration of fibers. Because of the variability in the characteristic properties of asbestos fibers, their detection and identification can often be difficult. Several methods have been developed for the identification and quantification of asbestos in air, water, and biological materials. Generally, asbestos concentrations are expressed as fibers per unit volume (f/ml) or fiber mass per unit volume

($\mu g/m^3$), and such concentrations are frequently linked to a particular fiber dimension (e.g., all fibers longer than 5 microns) and/or a particular measurement technique. It is necessary that the fiber characteristics examined reflect the fiber characteristics that influence fiber disposition and occurrence of human disease. Note that results of fiber counts from different analytical techniques will not necessarily agree because of inherent differences in methodologies (e.g., microscopic resolution and preparation techniques). Therefore, careful consideration must be given to conversion factors in comparing results from different studies using different techniques.

3.1 IDENTIFICATION OF BIOLOGICALLY ACTIVE FRACTIONS

It is important that the sampling and analytical techniques used to characterize asbestos levels in the environment consider the fiber characteristics that influence fiber disposition and the occurrence of human disease. These factors include fiber length, fiber diameter, aspect ratio (ratio of length to diameter), fiber number, stability of fibers *in vivo*, surface chemistry of the fiber, interactions between fiber and cell surfaces, fiber translocation and migration, overall fiber dose, and fiber type (Schneiderman et al. 1981, OSHA 1986). One of the difficulties in estimating asbestos exposure is that available information concerning the disposition of fibers following inhalation or ingestion is limited because of the difficulties involved in the assay of biological tissues for the substance.

3.1.1 INHALATION

Once in the body, inhaled asbestos may be removed from the ciliated airways by the mucociliary escalator. Asbestos fibers deposited in the lung parenchyma can be phagocytized by lung macrophages and then transported to the mucociliary escalator or to the lymphatic system where the fibers may be transported to sites throughout the body. Asbestos fibers may also be taken up by type I pneumocytes and may then be translocated to basement membrane, interstitial cells, and connective tissue within the lung (Brady and Hill 1981). This process reportedly is more common for fibers longer than the diameter of alveolar macrophages (>12 microns) (Lippmann et al. 1980).

In addition, two other pulmonary mechanisms may protect against asbestos toxicity, formation of asbestos bodies and long-term in situ fiber degradation. Approximately 10-30% of asbestos fibers retained in human lungs become coated with hemosiderin and mucopolysaccharide to form yellow-to-brown structures called asbestos bodies (Schneiderman et al. 1981). Asbestos bodies are believed to be created by lung macrophages and appear to exert a protective effect against fibrosis (Morgan and Seaton 1984). In situ fiber degradation appears to be effective primarily for chrysotile asbestos. Chrysotile has a tendency to partially dissolve in weakly acidic solutions, which can facilitate clearance from the lung (Morgan and Seaton 1984). The effects of asbestos fibers and asbestos bodies are not limited to one target organ; they have been found in almost every extrapulmonary tissue.

The length of asbestos fibers appears to play an important part in determining biological activity. The predominant fibers found in the lung parenchyma and in extrapulmonary organs are those shorter than 5 microns in length. However, in case of asbestosis, peribronchial and perivascular lesions generally contain both long and short fibers. Current data indicate that both long and short fibers may be biologically active to some extent and are suspect in producing human disease (Schneiderman et al. 1981). It has been suggested that the biological activity of longer fibers (75 μm) may be due to the inability of macrophages to completely engulf the fiber. Damage of the macrophage cellular membrane may cause a loss of macrophage mobility and lead to release of lysosomal enzymes and oxygen free-radicals from the macrophage, which in turn may damage alveolar epithelial cells and initiate fibrosis. In addition, the longer fibers may disrupt the normal proliferation and differentiation of lung fibroblasts either as a result of interacting directly with the fibroblast or as a result of macrophage secretions (CDHS 1986, OSHA 1986). It has been suggested that fibers less than 5 microns in length may be completely phagocytized in vivo, whereas those longer than 25 microns generally are not. Those fibers in the intermediate range may be only partially phagocytized or may cause thinning of the phagosomal membrane (Langer et al. 1974). Short fibers tend to be translocated more readily than long fibers and should therefore be expected to lodge in organs other than the lungs (Schneiderman et al. 1981).

The diameter of asbestos fibers also affects biological activity. The diameters considered most important in disease development range from 0.5-2.5 microns (Langer et al. 1974). When compared with "thin" fibers, "thick" (and long) fibers tend to produce less biological response. Reduction in fiber diameter tends to reflect an increase in particle number and surface area per unit mass of material. Based on these observations, when evaluating environmental samples, any fibers having diameters under several microns should be considered to be potentially active biologically (Langer et al. 1974).

Based on a review of a number of animal studies, OSHA (1986) concluded that a "clear relationship" exists between fiber dimension and disease potential. They noted that thin fibers (diameter <0.25 microns) with an aspect ratio of "at least" 3:1 and a length greater than 5 microns are more closely associated with elevated incidences of cancer and lung fibrosis than fibers of other dimensions. They suggest that such findings are consistent with current knowledge regarding lung clearance mechanisms (i.e., that shorter fibers are more easily phagocytized and removed from the lung tissue than longer fibers). Because of their occupational health significance, fibers with these dimensions are often referred to as NIOSH fibers.

In a study by Stanton et al. (1981), the effects of various sizes of fibrous materials, including many forms of asbestos, on the pleura of rats was investigated. Some fibrous glasses and all asbestos fiber types investigated produced malignant tumors. The most carcinogenic fibers were 0.25 microns or less in diameter and were greater than 8 microns in length. Fibers less than 8 microns in length appeared to be phagocytized. Fibers that were 1.5 microns or less in diameter and longer than 4 microns (aspect ratio $\geq$ 3) also showed a high correlation with carcinogenicity. Although the mechanisms of asbestos-induced carcinogenicity are not well characterized, there does appear to be general agreement in the literature on the "Stanton Hypothesis"—that longer, thinner fibers are likely to be more carcinogenic than shorter and/or thicker fibers (CDHS 1986, Stanton et al. 1981).

Although the "Stanton hypothesis" appears to have been generally accepted, its limitations also have been noted. First, it was developed as a model only for mesothelioma, although it also may be applicable to other asbestos-induced tumors. Second, Stanton et al. (1981) noted that narrow dimensional ranges of sized fibers were not available for study, that errors in the measurement of asbestos fibers were unavoidable because of clumping and fragmentation, and that fine chrysotile fibers were not studied because they could not be measured analytically with precision. Third, a critical fiber length below which there would be no carcinogenic activity has not been demonstrated. Fourth, whereas clearance of fibers shorter than 5 microns is more efficient than for longer fibers, such clearance is neither instantaneous nor total, permitting shorter fibers to interact for substantial periods with pulmonary and pleural cells. Fifth, most asbestos fibers found in the pleura are short (<5 microns) fine chrysotile, whereas mixed fiber types are found generally in the lung parenchyma. Finally, although fiber dimensions clearly affect carcinogenicity, the relationship of physical dimensions to deposition and translocation to the pleura and peritoneum in humans has not been well characterized (CDHS 1986).

In addition to fiber dimension, it has been suggested by some investigators that surface chemistry of asbestos fibers may be an important determinant of disease (OSHA 1986). Asbestos-induced cytotoxicity has been found to be initiated by the reaction of the fiber with the plasma membrane of respiratory epithelial cells (Mossman 1983). Some studies have suggested that recognition of asbestos fibers by phagocytes and their subsequent phagocytosis may be due to physicochemical affinities between the fiber and the phagocyte (OSHA 1986).

It has also been reported that modification of the fiber structure may affect biological reactivity of the asbestos fiber. Results of one study indicated that ball milling of experimental asbestos samples resulted in important changes in the structural and surface characteristics of asbestos fibers, which reportedly reduced their effect on cell membranes. Results of other studies have indicated that milling procedures change not only the size distribution, but also the shape and crystal structure of asbestos fibers (OSHA 1986).

Langer et al. (1979) noted that it is generally accepted that for two equivalent masses of asbestos having identical morphological and chemical properties, the sample with the greatest number of fibers tends to be most active biologically, although a correlation of activity and fiber number is probably not equivalent for all fiber types. However, an increase in fiber number accompanied by a decrease in fiber length may increase the potential for phagocytosis of particles in a given sample. This could result in a decreased residence time in the target organ and a concomitant reduction in carcinogenic potential. Other characteristics that may be altered as a result of a change in fiber size include surface properties, and bond and crystallographic characteristics. Thus, an increase in asbestos fiber number may in some cases increase and in others greatly decrease biological activity. Fiber retention also may be partially related to fiber stability in vivo. The degradation of chrysotile is greatest, followed by anthrophyllite, amosite, and crocidolite. However, the relationship of fiber stability to asbestos-related disease is not clear. Although the persistence of fibers in a target organ increases the period of cellular contact, the processes occurring during in situ fiber degradation may also produce adverse effects.

It has been difficult to assign a scale of relative pathogenicity to various asbestos types. This is related to many factors, including differences in physical characteristics within fibers of a particular asbestos type, changes in fiber characteristics during processing, and contamination of one type of asbestos with another type. It has been suggested that chrysotile is less hazardous than other asbestos types. However, high rates of lung cancer in asbestos workers have been related to all types of asbestos including chrysotile (Dement 1982, 1983a,b, EPA 1986). In addition, pleural and peritoneal mesotheliomas have been observed in workers exposed primarily to chrysotile, as well as to crocidolite and amosite (Schneiderman et al. 1981). OSHA (1986) reviewed a number of epidemiological studies concerning the toxicity and carcinogenicity of different asbestos types. OSHA concluded that, "all fiber types, alone or in combination, have been observed in studies to induce lung cancer, mesothelioma, and asbestosis in exposed workers with the exception of anthophyllite, which has been observed to induce lung cancer and asbestosis, but not mesothelioma."

It should be emphasized that there is still considerable controversy as to whether or not crocidolite or other amphibole asbestos types are more carcinogenic than chrysotile (EPA 1986). Great Britain, Canada, and Sweden, for example, have imposed far more rigid standards for crocidolite than other varieties of asbestos. In contrast, the United States has no special standard for any specific asbestos mineral. The question of fiber type was not addressed until the mid-1960's because analytical techniques used in epidemiological studies were unable to accurately characterize asbestos fiber types. This lack of information on fiber exposure by mineral type was recognized at the time of the 1964 New York Academy of Sciences Conference on Asbestos (Whipple and van Reyen 1965), and a recommendation was made that the importance of fiber type on the risk of developing asbestosis, carcinoma of the lung, and mesothelial tumors be investigated. In the ensuing years, considerable information was developed on the mortality experience of different groups exposed to different varieties of asbestos in different work processes. Unfortunately, the differential risk associated with different fiber types is still not completely understood (EPA 1986).

3.1.2 INGESTION

Specific data relating individual asbestos species and physical characteristics with biological activity via ingestion are lacking. Results of bioassays of amosite asbestos (McConnell 1983a,b) showed no evidence of carcinogenicity in experimental animals. Results of an NTP (1984) bioassay in rats provided some evidence that chrysotile fibers >10 microns in length, but not fibers <10 microns in length, may have some carcinogenic potential for the gastrointestinal tract. Results of a number of epidemiological studies of humans exposed to asbestos in drinking water, as reported by EPA (1985a), are inconclusive and provide no insight into identifying biologically active size fractions or mineral species of asbestos.

3.1.3 SUMMARY

Studies indicate that fiber length, fiber diameter, the ratio of length to diameter (aspect ratio), and mineralogic type may all be important in relating asbestos exposure to potential health risks. These parameters should be characterized when measuring asbestos exposure. At the same time, the current health database is not sufficient to fully quantify the extent that each of these factors contribute to adverse health effects. Approaches for assessing health risks to date have therefore focused on simpler schemes for characterizing asbestos exposure such as total fiber number or total mass concentration. These are useful provided that they are applied carefully so that the above factors are addressed at least indirectly. However, the best approach is to use the analytical techniques that allow characterization of the majority of the factors believed to determine health effects and thereby contribute to an enhanced database from which a refined understanding of asbestos toxicity may be derived.

3.2 ANALYTICAL TECHNIQUES

A number of different collection, identification, and quantification techniques are available to determine asbestos levels in environmental media. Much of the data used to relate exposure to asbestos with the risk of disease are obtained from epidemiologic studies of exposed workers. Estimates of exposure to asbestos in these worker populations generally were derived from optical microscopy (phase contrast) measurements of fibers >5 microns in length (3:1 ratio between length and width) or of total particulate matter. Electron microscopy techniques are often used to identify and quantify asbestos exposures, especially in environmental settings where concentrations are much lower than in occupational settings. In order to be able to relate environmental measurements to occupational studies for asbestos, it is necessary to understand the advantages and limitations of the various measurement techniques used, and to be able to convert results obtained using one technique to results that would be obtained using another technique.

3.2.1 COLLECTION TECHNIQUES

Collection of mineral particles for identification and counting is usually done by filtering the medium (air or water) through mixed cellulose ester (MCE) membrane (Millipore®) or perforated polycarbonate (Nucleopore®) filters, thereby concentrating them through deposition on the filter's surface. The effective minimum particle collection size in each of the membrane or collection techniques is less than 0.5 microns (Rudd 1978).

It should also be noted that collection of air samples for asbestos analysis poses special problems associated with the type of temporal sampling protocol employed. Elevated airborne concentrations of asbestos tend to be the result of episodic rather than continuous release processes. Consequently, sampling over a relatively short time period may give misleading results. Air sampling results may be more useful if more aggressive sampling techniques are used. For example, it may be possible to simulate conditions likely to produce worst case asbestos exposures and to sample the air during these times.

Handling of samples after collection may pose significant technical problems. For example, asbestos in aqueous samples may adhere to receptacles in which they are collected, and asbestos in airborne samples may cling to the filter cassette walls because of static charges; this can result in an overall underestimation of the asbestos fibers present. Conversely, disruption of dry or wet fibers during handling and transport may break the asbestos fibers present into more numerous, shorter or thinner fibers, which could result in an underestimate or overestimate of the asbestos fibers present depending on the sensitivity of the analytical technique used.

3.2.2 SAMPLE PREPARATION TECHNIQUES

To prepare samples for examination with a phase contrast light microscope (PCM), impingement, impaction, thermal precipitation, or membrane filter techniques are used. Particles deposited directly on microscope slides by impaction or thermal precipitation can be counted by light microscopy. However, a more even dispersion can be obtained by impinging a jet of dust-ladened air onto a surface that is submerged in a liquid. The liquid is then transferred from the impinger to a counting cell where the particles are allowed to settle so that they can be seen and counted in the same focal plane. Using the Millipore® filter collection technique, a portion of the filter may be rendered transparent before examination with PCM. Fibers with an aspect ratio of greater than 3:1 are counted on a prescribed representative area of the filter. One major limitation to the use of typical uncoated Millipore® filters is that as much as 80% of the fibers can be lost. Nucleopore® filters are generally preferred because, unlike the Millipore® filter, they have a smooth featureless surface which reduces filter loss (NRC 1983a). However, it should be noted that techniques are available for providing reliable conversions between these two collection methods.

Most sample preparation techniques used for examination of fibers using a transmission electron microscope (TEM) analysis involve either "direct" or "indirect" methods. In the direct technique, particulate asbestos deposits are transferred directly to the TEM grid by solvent dissolution of the Millipore® or Nucleopore® filter. In the indirect method, the filter is ashed and the residual material is resuspended in water by ultrasound or "rubbed" onto another filter for TEM examination. However, if the indirect sample preparation is used for TEM analysis, asbestos fibers may be broken by the ultrasonic treatment step, thereby increasing the number of fibers measured relative to the direct preparation technique. Under these conditions, mass concentration (as opposed to fiber count) should be the preferred measure of asbestos levels (EPA 1985b). Further, because the indirect method reduces the fibers to unit fibrils (thus enhancing homogeneity of the specimen and reducing scan time), information about the original nature of the fiber may be lost (NRC 1983a). Earlier specimen preparation methods for TEM also have been criticized because of particle losses during sample preparation, and because particulate deposits on the TEM grid were not sufficiently uniform to allow quantitative measurements. These limitations have generally been overcome by the more recent direct transfer techniques, which are generally accepted as the most reliable methods for preparation of TEM specimen grids (Chatfield 1983).

3.2.3 MASS AND COUNTING MEASUREMENT METHODS

Table 3-1 presents the major analytical methods used in the quantification and identification of asbestiform fibers. The two major measurement methods include mass and counting techniques. The earliest methods measured mass. In the gross mass (gravimetric) methods, airborne dust was collected by filtration, precipitation, or impaction, and the total dust was determined by weighing on analytical balances. X-ray diffraction techniques were used to identify mineral types present in the dust and magnesium analysis was used as an index of chrysotile asbestos content. When there was a need to collect and measure samples over short times, such as in the evaluation of controls or brief exposure episodes, the mass of the small amount of material could be measured by very sensitive piezoelectric or beta-absorption instruments (NRC 1983a).

Major drawbacks to these early analytical methods were the insensitivity of the x-ray method in the detection of small particles, the nonspecificity in the differentiation of chrysotile from other serpentine minerals, and the similar nonspecificity of the magnesium assay. Because much of the mass measured by gross mass methods consisted of particles too large to penetrate into the lung, techniques were often used to remove the larger particles before assay. The horizontal, parallel plate elutriator was preferred in the United Kingdom, whereas industrial hygienists in the United States tended to use small cyclone devices (NRC 1983a).

It should be noted that mass measurements account for all sizes of asbestos. Although there may be fibers of relatively small size, if sufficient numbers are present, these small fibers may add significantly to mass concentrations.

Counting methods are far more sensitive than mass determinations, since samples with too little mass to be weighed are usually adequate for counting by certain methods. Furthermore, since small particles far outnumber large particles, counting emphasizes the respirable dust. Lastly, fibers can be counted separately from other particles (NRC 1983a).

TABLE 3-1

ASBESTIFORM FIBER MEASUREMENT METHODS[a]

Measurement	Collection	Quantification	Identification
Mass, gross	High volume or personal sampling filter	Gravimetric	Mineral identification by x-ray; chrysotile identification by magnesium analysis
	Electrostatic precipitator	Gravimetric (piezoelectric)	Not applicable
	Impaction	Beta-absorption	Not applicable
Mass, respirable	Horizontal elutriator/ filter	Gravimetric	Mineral identification by x-ray; chrysotile identification by magnesium analysis
	Cyclone/filter	Gravimetric	Mineral identification by x-ray; chrysotile identification by magnesium analysis
Count	Impingement	Light microscope	Identification by morphology
	Impaction	Light microscope	Identification by morphology
	Thermal precipitator	Light microscope	Identification by morphology
	Membrane filter	Light microscope phase contrast	Identification by morphology; mineral identification by dispersion staining
	Membrane (Nucleopore®) filter	TEM,[b] SEM,[c] image recognition	Mineral identification by SAED;[d] chemical composition by EDXA[e]
	Membrane (Nucleopore®) filter	Light scattering	Identification of fibers by magnetic alignment

[a]Adapted from Burdett et al. 1980
[b]TEM - Transmission electron microscope
[c]SEM - Scanning electron microscope
[d]SAED - Selected area electron diffraction
[e]EDXA - Energy-dispersive x-ray analysis

Results of impinger counts are usually expressed in millions of particles per cubic foot; dust concentrations measured by other methods are typically expressed as particles or fibers per cubic centimeter. In some electron microscope techniques, fibers or dispersed fibrils are counted, and the results are then converted to units of mass per volume (NRC 1983a). A number of investigators have attempted to develop conversion factors for estimating the relative equivalency of different asbestos measurement methods that have been used in occupational settings. These relationships, as summarized in the NRC's (1983a) report on Asbestiform Fibers, are shown in Table 3-2. NRC (1983a) noted that the accuracy of the estimates is unknown, but is probably valid within about one order of magnitude. However, the conversion factors would be equivalent only in that they represent values that would be expected if paired measurements using different measurement techniques were made in an environment similar to that in which the conversion data were originally obtained.

3.2.4 QUANTIFICATION TECHNIQUES

Four major analytical methods are used for quantifying asbestos fibers: phase contrast light microscopy (PCM), polarized light microscopy (PLM), transmission electron microscopy (TEM), and scanning electron microscopy (SEM). PCM, which measures fibers per unit volume, has traditionally been used for counting fibers in the workplace. It has been used to measure fiber concentrations for fibers longer than 5 microns with a diameter of greater than 0.2–0.3 microns (the limit of resolution). Thus, fibers longer than 5 microns, but with diameters less than 0.2 microns, are not counted. Although fibers shorter than 5 microns with a diameter sufficient to be resolved may also be counted by this technique, a 5-micron cutoff has traditionally been employed when counting asbestos fibers by this technique. Additionally, PCM cannot distinguish asbestos from nonasbestos fibers of similar size and shape. Compared TEM and SEM, PCM is the least expensive, the most readily available, and involves the least sample preparation time (EPA 1985b). Although PCM is a practical technique for these reasons for routine use in the occupational environment, the method is too insensitive and nonspecific to be used to assess fiber exposure in the nonoccupational environment (NRC 1983a). It should be noted,

TABLE 3-2

RELATIONSHIPS AMONG METHODS OF MEASURING EXPOSURE TO ASBESTOS IN THE WORKPLACE

	Equivalent Values Expected from Various Measurement Methods			
Base Value[a]	Impinger (mppcf)	Phase Contrast Light Microscope (PCM) (>5 microns long fibers/cm^3)	Electron Microscope (EM) (EM fibers/cm^3)	Mass ($\mu g/m^3$)
1 mppcf (impinger)[b]	1	6	(360)[c]	(0.2)
1 >5 microns long fibers/cm^3 (PCM)[d]	0.17	1	60	0.03
1 EM fiber/cm^3 (EM count)	(0.0028)	0.017	1	0.0005
1 $\mu g/m^3$ (mass)	(5)	30[e]	2,000[f]	1

[a]Given the base value indicated in column 1, the other columns show the equivalent value to be expected from the indicated method. Thus, 1 mppcf by impinger would be equivalent to 6 >5 microns long fibers/cm^3 measured by PCM or 360 fibers/cm^3 measured by the EM. Numbers have been rounded.

[b]Collected in an impinger and counted at 100X light field. mppcf = millions of particles per cubic foot.

[c]Ratios in parentheses are calculated from other ratios.

[d]Collected on membrane filters and counted by PCM at 430X.

[e]This ratio converts to 30 LM fibers/ng versus the nominal 20 fibers/ng sometimes used.

[f]This ratio converts to 2,000 total EM fibers/ng.

Source: Adapted from NRC (1983a). The data for this table were obtained from workplace dust clouds or other environmental samples containing high concentrations of asbestos.

however, that PCM has generally been the technique used for exposure and risk estimates from which dose-response assessments are derived.

A second optical microscope technique, polarized light microscopy (PLM), suffers from some of the same limitations as PCM. It is predominantly limited to analysis of asbestos in bulk samples such as soil or rock. Among the advantages of PLM are sensitivity, rapidity, and the ability to identify the individual amphiboles. EPA has promulgated an official tentative method for PLM asbestos determination (40 CFR Part 763, Appendix A). Quantification is accomplished by counting the number of points on a superimposed reticle occupied by asbestos. The results are reported as area percent derived by dividing the number of points that contain asbestos by the total number of points. If three or fewer points are counted, the results from the standard 400-point grid are reported as <1% asbestos; thus, the quantification limit can be taken as four fibers in a sample.

Transmission electron microscopy (TEM) is most useful for measurements of asbestos in the ambient environment, where sensitive determinations of low concentrations are required. Quantification of samples with the newer TEM techniques yields estimates of fiber number, which can be converted to mass estimates, and allows greater resolution than the optical PCM technique. TEM has a resolution of 1 to 3 orders of magnitude more fibers than PCM techniques (OSHA 1986, EPA 1986). Consequently, counts based on TEM measurements are often more than 100 times greater than counts obtained by optical light microscopy (NRC 1983a). This includes fibers greater than 5 microns in length, thinner fibers (down to 0.25 nm in diameter), as well as total fibers (where TEM can resolve shorter fibers than PCM). TEM can be used to indicate the likely presence of asbestos in a population of fibers based on fiber shape and configuration alone. However, in order to confirm the identity of the fibers, chemical and/or crystal analysis is needed. Two identification techniques used with TEM are energy dispersive x-ray spectrometry (EDXA) and selective area electron diffraction (SAED). Although TEM is more sensitive to thin fibers and more specific for asbestos relative to PCM, it is less widely available, more costly, and involves more preparation and analysis time than PCM (EPA 1985b).

The majority of health studies on asbestos to date have relied on PCM or mass measurements as the analytical technique. Consequently, the utility of additional and more accurate information provided by TEM is limited by the need to compare it with criteria developed from studies where exposure was measured using less powerful techniques. It is not known if reevaluation of available exposure-response data would provide information useful for characterizing the biological activity of asbestos fibers <5 microns. However, collection of TEM data on environmental exposure to asbestos clearly would be useful in this regard as more experimental and epidemiological data are collected and evaluated.

EPA (1983) recently described an analytical method for measurement of asbestos fiber concentrations in water using TEM. In this method, fibers were classified by selected area electron diffraction and energy dispersive x-ray analysis. Among some of the cited limitations to this technique were (a) errors in identification of chrysotile fibers because of both instrumental limitations and the nature of some of the fibers; (b) difficulty in counting some individual fibers because of physical overlapping of the asbestos fibers; (c) inadequate dispersion of fibers in the water sample because of adhesion of fibers to the container walls; (d) contamination of the sample by extraneous fibers; and (e) increased fiber counts because of freezing of the water sample, which increased "fiber breakdown." It is important to note that sample handling techniques such as those described may alter the character of asbestos being analyzed. This is especially true in the preparation of liquid and solid samples. Sample handling techniques must therefore be considered when assessing health risks associated with asbestos.

A fourth analytical technique for quantification of asbestos is scanning electron microscopy (SEM). As an electron microscopic method, SEM has greater sensitivity to thin fibers and better specificity for asbestos as compared to optical light microscopy. Technically, however, it currently falls short of TEM's capabilities. SEM differs from TEM in that the fiber substrate mounted on the electron microscopy grid is considerably thicker. The thick substrate reflects and scatters electrons which are detected as "noise" by the microscope. As a result, the asbestos fiber being viewed must be larger than a

TEM-observed object in order to be seen. In terms of fiber dimensions, the limit of resolution obtained with SEM is a fiber diameter of 0.20 microns. SEM is less powerful than TEM in its ability to distinguish asbestos from other types of fibers; however, it is superior to PCM in its specificity for asbestos (EPA 1985b). Although the direct sample preparation method used for SEM provides little opportunity for contamination, the image resolution, contrast, and x-ray resolution of SEM have not been sufficient for precise mineralogical identification (NRC 1983a). Unlike PCM and TEM, no standardized protocol for sample preparation and analysis using SEM is currently available. Without standardized protocols, it is not possible to characterize analytical accuracy and reliability of SEM results. SEM analysis is generally more widely available than TEM, but less available than PCM. In addition, both cost and time of analysis using SEM are intermediate between PCM and TEM (EPA 1985b).

3.2.5 CONCLUSION

The ideal analytical method for asbestos should measure a characteristic, parameter, or index with biological relevance—that is, the measurement should be related to the risk of the disease end point being studied. Possible types of measurements might include, but not necessarily be limited to fiber number, mass, length, diameter, and mineral type. Because of evolution in understanding of asbestos toxicity, parameters that actually correlate with toxicity may not have been measured in past studies. Furthermore, standardization among sample preparation methods and analytical techniques are needed in order to allow comparisons of data from various laboratories. Much of the occupational exposure data on which current health risk estimates are based have been obtained using optical microscopy techniques. These techniques, however, are limited in their ability to identify specific types of asbestos fibers and to resolve short or thin fibers. Electron microscopy techniques, although more expensive, provide superior results with regard to characterization of fiber types and visualization of smaller fibers. Although it is currently thought that asbestos fibers greater than 5 microns in length are more biologically active than shorter fibers, the relative potency of different size fractions of asbestos has not been well characterized. One encouraging trend is the increasing use of TEM as the technique of choice when analyzing environmental concentrations of asbestos. This type of information in conjunction with newly developed experimental and epidemiological data (and possibly with reevaluation of older occupational data) is likely to eventually provide more insights into these issues.

3.3 CONVERSION FACTORS

To compare concentrations in the occupational environment which were usually determined by PCM and reported as NIOSH fiber counts to environmental concentrations determined by TEM and reported as total fiber number or mass, it is necessary to establish a conversion factor between fiber counts and fiber mass (EPA 1986).

Table 3-3 summarizes six sets of empirical data relating NIOSH fiber counts (longer than 5 microns) to the total mass of asbestos. From these data, various conversion factors have been estimated that relate fiber concentration in fibers per milliliter (f/ml) to airborne asbestos mass in micrograms per cubic meter ($\mu g/m^3$). The British Occupational Hygiene Society (1968) has stated that a "respirable" asbestos mass of 0.12 mg/m^3 is equivalent to 2 f/ml; this group did not report how this relationship was determined. However, EPA (1986) has stated that if the relationship was obtained from magnesium determinations in an aerosol, the weight determination "would likely be high" because of the presence of other nonfibrous magnesium-containing compounds in the aerosol. According to EPA (1986), such was the case in the work by Lynch et al. (1970) (Table 3-3), whose values for the conversion factor were "undoubtedly overestimates." It is also EPA's (1986) view that the data by Rohl et al. (1976) "are likely to be underestimates because of possible losses in the determination of mass by electron microscopy." No data were available on the procedures used to determine the mass of chrysotile in the study conducted by Davis et al. (1978) (Table 3-2). Since the data by these authors yielded lower chrysolite conversion values relative to other published estimates, their suggested conversion factor of 18 for amosite may also be low (EPA 1986).

TABLE 3-3

EMPIRICAL RELATIONSHIPS BETWEEN OPTICAL FIBER COUNTS AND MASS CONCENTRATIONS OF AIRBORNE CHRYSOTILE

Sampling Situation	Fiber[a] Counts (f/ml)	Mass Concentration ($\mu g/m^3$)	Conversion Factors $\frac{\mu g/m^3}{f/ml}$ or pg/f	
Textile factory: British Occupational Hygiene Society (1968) (weight vs. fiber count)	2	120	60	16
Air chamber monitoring: Davis et al. (1978)	1950	10,000	5	
Monitoring brake repair work: Rohl et al. (1976) Electron Microscopy (EM mass vs. fiber count)	0.1 to 4.7 (7 samples)	0.1 to 6.6	0.7 to 24[b] mean = 6	
Textile mill: Lynch et al. (1970)			150[c]	
Friction products manufacturing: Lynch et al. (1970)			70[c]	
Pipe manufacturing Lynch et al. (1970)			45[c]	

[a]All fiber counts used phase-contrast microscopy and enumerated fibers longer than 5 microns.

[b]Conversion factor may be low due to losses in electron microscopy processing.

[c]Conversion factor may be high because of overestimate of asbestos mass on the basis of total magnesium.

Source: EPA (1986).

In their Airborne Asbestos Health Assessment Update, EPA (1986) used a conversion factor of 30 $\mu g/m^3$ per f/ml. This conversion factor is the geometric mean of the range of conversion factors (5-150) noted in Table 3-3. EPA (1986) has acknowledged that the range of 5 to 150 for the conversion factor is "large", and any average value derived from it has a "large uncertainty"; the geometric standard deviation of this conversion value is 4, and this uncertainty also limits any extrapolation in which it is used. In addition to EPA (1986), other organizations have attempted to convert optical microscopy measurements to electron microscopy measurements. The California Department of Health Services (1986) concluded that appropriate "conversion factor ranges" are 100 to 1,000. Total TEM fibers/m^3 per one optical microscopy (PCM) fiber/m^3 (geometric center of range = 320) and 7-120 $\mu g/m^3$ as measured by TEM per one fiber/ml as measured by PCM (geometric mean = 30 $\mu g/m^3$ fiber ml). The Chronic Hazard Advisory Panel of the Consumer Product Safety Commission (1983) and the National Research Council (1984) have used conversion factors of 30 and 40 $\mu g/m^3$ per f/ml, respectively.

Recent experimental work has been conducted to extend the utility of PCM measurements by developing a technique for predicting concentrations of fibers <5 microns from existing PCM measurements of fibers 75 microns (Kiefer et al. 1987). These investigators found a linear relationship between the logarithm of SEM measurements and the logarithm of PCM counts, which they used to develop a predictive model. They suggested that the model would be most useful in evaluating retrospective studies where the only exposure information available was PCM fiber counts.

A number of factors complicate efforts to establish a single "appropriate" conversion factor. First, consistent relationships among asbestos measurement methods do not exist. The techniques are subject to analytical error, subjective bias, and environmental influence (including fiber type, age of asbestos material, dust contaminants, and magnification of error by extrapolation from filter samples to the environment). With respect to analytical error, for example, the electron microscope technique and its associated sampling and analytical techniques have an experimental error of approximately 15% to 30% of the measurement value. Relative standard deviations of 45% are not unusual in light microscope counts. In addition, measurements made in a particular environment at different times will vary because the actual concentrations vary. Second, the different techniques measure a variety of indices, which often do not remain in constant proportion to each other from sample to sample. For example, PCM fibers longer than 5 microns are counted as a single species, whereas shorter fibers are not counted at all. Therefore, a given fiber count obtained by this technique would undoubtedly represent a very different number of fibers and mass concentrations than the same fiber count obtained by electron microscopy. In some cases, reproducible conversion factors may be determined when large numbers of paired samples are analyzed by the various methods. However, these conversion factors usually cannot then be applied to samples obtained under a different set of conditions (NRC 1983a). Third, sample preparation techniques that are employed in electron microscopy can result in alterations in fiber size distribution. This in turn can lead to variability in proposed conversion factors (Schneiderman et al. 1981).

As suggested by this discussion, there is no universally accepted conversion factor (Schneiderman et al. 1983a). Further, conversion factors may not be applicable to samples obtained under different sets of conditions (NRC 1983a), and different conversion factors may be appropriate for crocidolite, chrysotile, and amosite asbestos (Rowe and Springer 1986). For risk assessment purposes, however, it should be recognized that the uncertainty associated with the use of conversion factors may be no greater than the uncertainty in other areas of the assessment.

3.4 ESTIMATES OF ENVIRONMENTAL EXPOSURE

Nicholson (1987) recently reviewed the extent of airborne asbestos occurrence in the nonoccupational environment. He noted that (aside from hazardous waste sites) the greatest ambient airborne exposures result from friable asbestos containing building materials. Table 3-4, reproduced from Nicholson (1987), tabulates the literature on ambient exposure levels. The State of California (CDHS 1986) has also reported ambient levels of asbestos ranging from 8 to 500 fibers/m^3. Lower levels of 8 to 80 fibers/m^3 were found at sites isolated

TABLE 3-4

SUMMARY OF AMBIENT AIR ASBESTOS CONCENTRATIONS

Sample Set	Collection Period	Number of Samples	Arithmetic Average Concentration ng/m³	Arithmetic Average Concentration f>5μm/l
Quarterly composites of 5-7 24-hour U.S. samples Nicholson 1971, Nicholson and Pundsack 1973)	1969-70	187	[a]3.3	--
Quarterly composites of 5-7 24-hour U.S. samples (EPA 1974)	1969-70	127	[a]3.4	--
16-hour samples of five U.S. cities (EPA 1974)	1974	34	[a]13	--
5-day samples of Paris, France (Sebastien et al. 1980)	1974-75	161	[a]0.96	--
5-day, 7-hour control samples for U.S. school study (Constant et al. 1983)	1980-81	31	[b]6.5	--
12-hour samples in Toronto, Ontario (Chatfield 1983)	1980-81	24	[c]0.83	([d])
12-hour samples in Southern Ontario (Chatfield 1983)	1980-81	48	[c]0.20	([d])
U.K. urban and rural background (Le Guen et al. 1983)	1979-81	8	<1-5	--
Long-term samples in three West German cities (Friedrichs et al. 1983)	1982	6	--	([c], [e])
Urban Switzerland (Litistorf et al. 1985)	1977	10	0.74	0.4
Rural Switzerland (Litistorf et al. 1987)	1981-83	10	0.23	([d])
Rural Austria (Felbermayer 1983)	1978-80	143	--	≤0.1

[a]Chrysotile.
[b]6, chrysotile; 0.5 amphibole.
[c]Exceptionally high sample contributed all the mass.
[d]Less than a detection limit of approximately 4 f/l.
[e]2.8, chrysolite; 2.6, amphibole.

Source: Nicholson (1987).

from known sources whereas higher levels of 50 to 500 fibers/m^3 were measured close to localized known sources.

4.0 DESCRIPTION OF HEALTH EFFECTS IN HUMANS

The carcinogenicity of asbestos following inhalation exposure has been clearly established in humans and experimental animals; the evidence in humans comes from data on occupationally exposed individuals (IARC 1977, NRC 1984, EPA 1986). Inhalation exposure to asbestos can result in lung cancer and mesothelioma (EPA 1986). The carcinogenicity of asbestos following ingestion has not been conclusively established; however there is available data from occupational studies that suggest a link between inhalation and subsequent ingestion of asbestos and gastrointestinal cancer. The primary noncarcinogenic health effect of asbestos in asbestosis, a chronic lung disease associated with functional disabilities and early mortality; however development of asbestosis is associated only with high-level occupational exposure.

4.1 CARCINOGENIC EFFECTS

Asbestos is recognized as carcinogenic to humans by the International Agency for Research on Cancer (IARC 1977) and by the Environmental Protection Agency (EPA 1985a). The strongest evidence for the carcinogenicity of asbestos in humans comes from epidemiological studies of occupationally exposed individuals. These studies have consistently linked exposure to asbestos with increased incidences of lung cancer and pleural and peritoneal mesothelioma. Several studies also have shown significantly increased cancer risks at other sites, particularly the gastrointestinal (GI) tract. The consistency and magnitude of the excess risks observed at these extrathoracic sites, however, are not as great as the risks for lung cancer and mesothelioma (EPA 1986).

A limited number of studies have suggested a possible association between increased incidence of human cancers and exposure to asbestos in nonoccupational settings. These studies have examined the occurrence of asbestos-related disease among family contacts of asbestos workers, residents living in the vicinity of asbestos facilities or other sources of ambient asbestos, and individuals living in areas where the drinking water supplies are known to contain relatively high concentrations of asbestos. However, these types of associations have not been extensively studied, and in many cases, results of the studies are inconclusive or equivocal. Furthermore, exposure data often are incomplete or lacking.

4.1.1 OCCUPATIONAL EXPOSURE

The association between excess cancer incidence and occupational exposure has been demonstrated in a large number of epidemiological studies. The largest and most recent of these studies, listed according to the type of fiber exposure and work circumstance, are summarized in Table 4-1. Lung cancer incidences were significantly elevated ($p<0.05$) in 30 of the 41 cohorts listed, and gastrointestinal cancers were significantly elevated in 10 cohorts.

Mesothelioma (pleural, peritoneal, and unspecified), a rare cancer in the general population, was reported relatively frequently in most cohorts of workers exposed to asbestos. Furthermore, strong exposure-response relationships were generally found for lung cancer and mesothelioma, and to a lesser extent for gastrointestinal cancers.

There is extensive evidence that asbestos is a cause of lung cancer in humans. However, there also is a substantial background lung cancer incidence in the general population, presumably due to exposure to other carcinogenic agents such as cigarette smoke or polluted air. Because lung tumors that occur in persons exposed to asbestos have no unique diagnostic features, it is not generally possible to determine if any specific lung tumor is related to exposure to asbestos or to some other agent. Consequently, a relative risk model is used to characterize the incidence of lung cancer associated with exposure to asbestos. Such a model is used in the description of mortality in terms of observed incidences in exposed populations and expected incidences in unexposed populations.

Analyses of data from a number of epidemiological studies (Nicholson et al. 1979, EPA 1986, Seidman 1984, Selikoff et al. 1979) suggest a number of generalizations with regard to the time- and age-dependence of exposure to asbestos and the incidence of lung cancer. After a latency period of

TABLE 4-1
OBSERVED AND EXPECTED DEATHS FROM ALL CAUSES, LUNG CANCER, GASTROINTESTINAL CANCER, AND MESOTHELIOMA IN 41 ASBESTOS-EXPOSED COHORTS

Fiber Type and Study	Sex	COHORT Total Number	COHORT % Un-traced	Years[a] of Follow-up	Years[b] from Onset	ALL DEATHS Obs.	ALL DEATHS Exp.	ALL DEATHS SMR[c]	LUNG CANCER[d] Obs.	LUNG CANCER[d] Exp.	LUNG CANCER[d] SMR	GI CANCER[d] Obs.	GI CANCER[d] Exp.	GI CANCER[d] SMR	Number of Mesotheliomas Pleural	Number of Mesotheliomas Peritoneal	Number of Mesotheliomas Unspec.	Other Cancers in Excess*
Chrysotile																		
Acheson et al. (1982)[e]	F	570	0.9	1951-80	10+	177	148.5	119	6	4.5	133	4	4.9	82	1	0		
Dement et al. (1983a,b)[e,g]	M	1261	2.1	1940-75	15+	245	152.5	161	33	9.8	336*	10	8.1	124	0	1		
McDonald et al. (1983a,b)[e,g]	M	2543		1938-77	20+	570	447.0	127	59	29.6	200*	26	17.1	152*	0	1		
McDonald et al. (1980)[f]	M	9767	10.0	1926-75	20+	3291	3019.3	109	230	184.0	125*	209	203.7	103	10	0		
McDonald et al. (1980)[f]	F	440	7.0	1926-75	20+	84			1	1.2	83				1	0		
Nicholson et. al. (1979)[f,h]	M	544	0.0	1961-77	20+	178	159.9	111	25	11.1	225*	10	9.5	105	1	0		
McDonald et. al. (1984)[e]	M	3177	3.5	1938-77	20+	803	740.1	109	73	49.1	149*	59	51.6	114	0[i]	0		
Rubino et al. (1979)[f]	M	952	2.0	1946-75	20+	220	160.2	137	9	8.7	103	15	14.5	103	1[j]	0		Larynx[k]
Weiss (1977)[e]	M	254	6.1	1945-74		66	108.8	61	4	4.3	93	4	3.8	105	0	0		
Predominantly chrysotile (>98%)																		
McDonald et al. (1983b)[e,l]	M	4137	2.7	1938-77	20+	895	821.1	109	53	50.5	105	54	47.9	113	10	4		
Robinson et al. (1979)[e,l]	M	2722	2.1	1940-75	0	912	741.3	123	49	36.1	136*	50	41.4	121	4	5	4	
Robinson et al. (1979)[e,l]	F	554	3.1	1940-75		128	88.3	145	14	1.7	824*	8	6.0	133	1	1	2	
Mancuso & El-Attar (1967)[e,l]	MF	1493		1940-64		330	139.7	236	33	14.8	223*	16	8.9	180*	1	8		
Peto (1977)[e]	M	822	3.2	1933-74	10+	293	224.9	130	49	22.9	214*	16	15.7	102	9	0		
Thomas et al. (1982)[e,m]	M	1592	3.3	1936-77	15+	261	243.2	107	22	25.8	85	14	14.1	99	2	0		
Amosite																		
Acheson et al. (1984)[e,n]	M	4820	0.5	1947-78		333	298.8	111	57	29.1	196*	19	17.1	111	4	1		
Seidman et al. (1979)[e]	M	820	4.6	1961-76	5+	528	397.2	133	83	21.9	380*	28	22.7	123	7	7		
Predominantly Crocidolite[o]																		
Acheson et al. (1982)[e]	F	757	2.4	1951-80	10+	219	203.5	107	13	6.6	197*	5	4.0	125	3	2		Ovary
Hobbs et al. (1980)[f]	M	6200	20.0	1938-78	15+	526	587.2	90	60	38.2	157*				17	0	14	
Jones et al. (1980)[e,p]	F	951	39.2	1941-78		166			12	6.3	190*	10	20.3	49	13	4		
Wignall & Fox (1982)[e,p]	F	523	6.5	1951-77	10+	133	139.0	96	10	3.7	273*	7	10.7	65	9	3		Ovary
McDonald & McDonald (1978)[e]	MF	199	11.6	1939-75		53			7	2.4[q]	292*				3	6		
Anthophyllite																		
Meurman et al. (1974)[f]	MF	1092	4.7	1936-69		248			21	12.6	167*	7	14.9	47	0	0		
Talc (Tremolite)																		
Kleinfeld et al. (1974)[f]	M	260		1944-69	15+	108			13	4.5	289*	7	6.9	101	0	1		
Brown et al. (1979)[f]	M	398	4.0	1947-75		74	61.3	120	9	3.0	270*	3	3.0	100	0	1[r]		

TABLE 4-1 (Continued)

Fiber Type and Study	Sex	COHORT Total Number	COHORT % Un-traced	Years of Follow-up	Years from Onset	ALL DEATHS Obs.	ALL DEATHS Exp.	ALL DEATHS SMR	LUNG CANCER Obs.	LUNG CANCER Exp.	LUNG CANCER SMR	GI CANCER Obs.	GI CANCER Exp.	GI CANCER SMR	Number of Mesotheliomas Pleural	Number of Mesotheliomas Peritoneal	Number of Mesotheliomas Unspec.	Other Cancers in Excess*
Mixed Exposures																		
Albin et al. (1984)[e]	M	598	3.8	1957-80	10+	172	157.4	109	12	6.6	183*	19	10.8	176*	4	0		
Berry & Newhouse (1983)[e]	M	7474		1942-80	10+	1339	1361.8	98	143	139.5	103	103	107.2	96	8	0		
Berry & Newhouse (1983)[e]	F	3708		1942-80	10+	229	328.0	91	6	11.3	53	29	27.4	106	2	0		
Elmes & Simpson (1977)e	M	170	2.9	1940-75		122	55.5	220	27	5	540*	13	1	1300*	8	5		
Finkelstein (1983)[e]	M	241	3.3	1963-80	15+	72	42.5	169	20	3.3	606*	4	2.5	160	6	5	11[s]	
Henderson & Enterline(1979)[e]	M	1075		1941-73	Ret.	78[i]	648.7	120	63	23.3	270*	55	39.9	138*	5	0		
Selikoff et al. (1979)[e]	M	17800		1967-76	20+	1946	1376.0	141	390	93.7	416*	89	53.2	167*	63	112		Kidney
Selikoff et al. (1979)[e]	M	632		1943-76	20+	469	319.9	147	93	13.1	710*	43[t]	14.8	291*	11	27		
Kleinfeld et al. (1967)[e]	M	152		1945-65	15+	46			10	1.4[n]	702*	5	1.8	278*	1	2		
Kolonel et al. (1980)[e]	M	4779	8.0	1950-70	20+	112	116.9	96	13	7.5	173				0[u]	0		
Newhouse & Berry (1979)[e]	M	4600		1936-75	10+	545	438.0	124	103	43.2	238*	40	34	118	19	27		
Newhouse & Berry (1979)[e]	F	922	23.0	1936-75	10+	200	118.0	169	27	3.2	843*	20	10.2	196*	13	8		
Nicholson (1976)[e]	MF	689	0.0	1959-71	20+	199	134.3	148	27	8.4	321*	13	5.0	260*	8	7		
Puntoni et al. (1979)[e]	M	42647		1960-75		1070	853.7	125	123	54.9	224*	66	48.6	136				Kidney, urinary organs & larynx
Rossiter & Coles (1980)[e]	M	6292	3.4	1947-78		1043	998.4	104	84	100.3	84	63	76.2	82			31	
Weill (1984)[e]	M	5645	25.0	1940-74	20+	601	890.1	68	51	49.2	104	25	50.1	50	0	0[v]		

[a]Time period during which individuals in cohort were employed and mortality data were collected.
[b]Years from onset of exposure individuals in cohort were followed.
[c]SMR = Standardized Mortality Ratio
[d]The deaths from lung cancer and gastrointestinal cancer are those designated on the certificate of death. The cases of mesothelioma are those determined from the review of all available evidence. Such cases are not included with the lung cancers.
[e]Industries studied include insulation application, shipyards, or manufacturing (e.g., inhalation, gas masks, textiles, friction products, cement, and mixed manufacturing processes).
[f]Industries studied include mining and milling.
[g]Two studies of the same plant but with different cohort definitions.
[h]The majority of this cohort would also be included in that of McDonald et al. (1980).
[i]No mesotheliomas were identified in the defined cohort. However, three mesotheliomas from this plant, two in women and one in an individual terminated prior to 1937, have been identified in the Tumor Registry of Connecticut (Teta et al. 1983).
[j]Death certificate diagnosis of mesothelioma based upon clinical findings and analysis of pleural fluid. No histological material was available for review.
[k]Significant at the 5 percent level in the entire cohort.
[l]Three studies of the same plant at different periods of time and with different cohort definitions. Between 3,000 and 6,000 tons of chrysotile were used annually. Amosite constituted less than 1 percent of the asbestos used except for a 3-year period, 1942-1944, when an average of 375 tons per year were used. Crocidolite usage was approximately 3-5 tons per year (Robinson et al. 1979).
[m]The factory operated between 1932 and 1980. Between 1932 and 1935 crocidolite and chrysotile asbestos were used; thereafter, only chrysotile. The two mesotheliomas in this study were in the group exposed to both chrysotile and crocidolite.

TABLE 4-1 (Continued)

[n]Amosite was the predominant fiber used. However, chrysotile was also used between 1946 and 1973.
[o]All of the groups in this category had a high exposure to crocidolite. In some cases, however, there was also a substantial exposure to chrysotile.
[p]Two cohorts at the same facility with different definitions and follow-up periods.
[q]Estimated as a proportion of deaths.
[r]May have had exposure to asbestos in the construction industry.
[s]Pleural mesothelioma or lung cancer.
[t]Number of deaths based upon a review of all medical evidence.
[u]No cases observed through the period of follow-up. Three cases have occurred subsequently.
[v]No cases occurred in the cohort as defined during the period of observation. Two occurred in individuals prior to 20 years from onset of employment and nine cases (8 pleural and 1 peritoneal) have developed subsequent to termination of follow-up (Weill 1984).

*p <0.05.

Source: Adapted from EPA 1986

approximately 10 to 20 years, there is a linear increase in relative risk of asbestos-related lung cancer. This increased relative risk is proportional to the time worked and, thus, to the cumulative asbestos exposure, and appears to be independent of age and the pre-existing underlying risk at the time of first exposure. In a study of insulation workers (Selikoff et al. 1979), the median time to death due to lung cancer from first exposure was approximately 32 years. However, a gradual decline in the relative risk of lung cancer beginning at about 35 years after initial exposure has been observed in some mortality studies. The reason for this phenomenon is not understood; however, it has been variously attributed to competing mortality from other asbestos-related diseases, earlier deaths among smokers from the study groups, gradual elimination of asbestos from the lung after cessation of exposure, selection processes such as differing exposure patterns, or differing biological susceptibilities.

A multiplicative effect of asbestos exposure and cigarette smoking in producing an increased lung cancer risk has been observed. For example, results of a study of 12,051 asbestos workers (Hammond et al. 1979) showed that lung cancer risks in both smokers and nonsmokers are increased by a factor of five as a result of exposure to asbestos. The lung cancer mortality rate for smoking controls (persons not exposed to asbestos) was approximately 11 times higher than for nonsmoking controls. The lung cancer mortality rate in smoking asbestos workers was therefore approximately 55 times greater than for nonsmoking controls. Corroborative data for the synergistic interaction of asbestos exposure and smoking have been reported in other studies (EPA 1986).

Because mesothelioma is a very rare form of cancer in the general population, reliable values for expected numbers of cases cannot be calculated. Consequently, an absolute risk model is most appropriate for characterizing the incidence of mesothelioma associated with exposure to asbestos. Such a model can be used to describe and predict lifetime risks based on summation of annual incidences of mesothelioma in asbestos-exposed populations. After a latency period of approximately 20 years, the incidence of asbestos-related mesothelioma increases according to a power function of time from onset of exposure. As observed for asbestos-related lung cancer, the absolute risk of death from mesothelioma appears to be independent of the age at which the exposure occurs. The median time to death due to mesothelioma from onset of exposure was found to be approximately 36 years in a large study of asbestos-exposed insulation workers (Selikoff et al. 1979). However, the increase in risk from mesothelioma with time from onset of exposure appears to lessen after approximately 40 years of exposure, and absolute risk appears to decline after about 50 years of exposure (Nicholson et al. 1982). It has been suggested that this effect may be the result of competing mortality from other asbestos-related diseases, misdiagnosis of disease in older individuals, statistical fluctuations associated with the lower incidences of mesothelioma, or selection processes such as differing exposure patterns. Mesothelioma incidences do not appear to be influenced by an interaction between cigarette smoking and exposure to asbestos.

A number of epidemiological studies have documented significant excess cancer risks at various gastrointestinal sites (EPA 1986). Studies that do not show this relationship generally have methodological problems or are not powerful enough to show a significant effect. The majority of positive studies show an excess of cancer at GI sites that is approximately 10% to 40% of the observed respiratory cancer excess. In addition, kidney and urinary tract cancers were found to be significantly elevated in two large studies (Selikoff et al. 1979, Puntoni et al. 1979), and excess ovarian cancers have been reported among female workers (Newhouse et al. 1972, Wignall and Fox 1982, Acheson et al. 1982).

Epidemiological data suggest that occupational exposure to amphiboles may be associated with a greater risk of mesothelioma than is exposure to chrysotile. The differences in mesothelioma risk are more pronounced for peritoneal than for pleural mesotheliomas. No clear risk differences related to fiber type have been demonstrated for lung cancer (OSHA 1986, EPA 1986). Some of the reported exposure response differences may be related to physical characteristics of different types of asbestos fibers. For example, crocidolite and amosite, which are amphiboles, tend to be long and thin, whereas chrysotile fibers tend to be curly. Long, thin fibers are more likely to reach the lung and lower respiratory system than curly fibers which present a larger cross-sectional area and are more likely to be trapped in the upper airways. The fate of different types of asbestos fibers once they reach the lung and lower respiratory system also may be important in determining their potential for causing disease. Crocidolite and amosite fibers tend not to be affected by the lung's weakly acid environment. However, chrysotile is more vulnerable to acid and shows a tendency to split into smaller fibers or to dissolve in the lung (Morgan and Seaton 1984). The influence of the factors noted above on asbestos-related disease incidence is not clear. Overall, the available epidemiological and animal evidence do not appear to establish a definitive risk differential for the various types of asbestos fibers.

There is some evidence to suggest a relationship between asbestos fiber dimension and carcinogenic potential. This is known as the Stanton hypothesis and is based on correlations between pleural sarcomas induced in rats and dimensions of fibers (Stanton et al. 1981). Long, thin fibers (>5 microns in length, aspect ratio >3) appear to elicit the greatest biological response. However, a critical fiber length below which there would be no carcinogenic activity has not been demonstrated. Fibers less than 5 microns in length appear to be capable of producing mesotheliomas (OSHA 1986, EPA 1986), and the results of one analysis have shown that carcinogenicity appears to be a continuous, increasing function of the aspect ratio (Bertrand and Pezerat 1980). A reanalysis of Stanton's data (Wylie et al. 1988) concludes that factors other than size and shape may play a role in asbestos carcinogenicity. Recent studies suggest that interactions between fibers and cell surfaces, in part, may also determine the course of asbestos-related disease (OSHA 1986). However, the mechanisms of fiber/cell interactions and their role in disease causation are not clearly understood.

4.1.2 NONOCCUPATIONAL EXPOSURE

Information concerning the occurrence of asbestos-related disease among persons not directly exposed at the workplace is limited. Although a number of studies have provided data that suggest an association between the occurrence of mesothelioma and residence near asbestos factories or in the household of an asbestos worker (Anderson et al. 1976, Anderson and Selikoff 1979, Newhouse and

Thomson 1965, Wagner et al. 1960), these studies are not individually convincing because of methodological inadequacies. Studies examining asbestos-related lung cancer among nonoccupationally exposed individuals have not been completed.

A number of epidemiological studies have examined the relationship between cancer incidence and the presence of asbestos fibers in drinking water. Municipal water for Duluth, Minnesota, obtained from Lake Superior, reportedly contains high asbestos concentrations related to deposition of mine tailings into the lake. The water supplies of several communities in Connecticut, Utah, and Escambia County, Florida contain elevated levels of asbestos as a result of the deterioration of asbestos-cement (AC) water mains over time. In the San Francisco Bay area and the Puget Sound area, some water supplies contain elevated concentrations of asbestos of natural origin. High concentrations of asbestos due to extensive mining operations have been identified in drinking water in Quebec, Canada. A brief summary of studies conducted in these areas follows.

Among residents of Duluth, Minnesota, elevated risk ratios (Duluth/comparison group) for GI cancers, particularly of the stomach, rectum, and pancreas, have been reported (Mason and McKay 1974, Levy et al. 1976, Sigurdson et al. 1981). However, results for this community have not been consistent over time.

Two epidemiological studies were conducted on relatively small populations in Quebec, Canada exposed to very high concentrations of chrysotile in drinking water. In one of these studies, examination of mortality rates by Wigle (1977) revealed excess incidences of stomach and lung cancer in males and pancreatic cancer in females. However, male mortality was likely to have been from occupational exposure. Although the pancreas has not been directly implicated as a site of excess cancer associated with exposure to asbestos, it should be noted that in some other studies, peritoneal mesotheliomas have been misdiagnosed as pancreatic cancers. In the other study (Toft et al. 1981), the excess stomach and lung cancers observed also were likely to be associated with occupational exposures.

A series of studies have examined cancer incidence in the San Francisco Bay Area. Part of the area is served by water containing relatively high asbestos concentrations. Significant correlations ($p<0.01$) were found between chrysotile asbestos concentrations in drinking water and the incidences of GI tract and prostate cancers (Kanarek et al. 1980, Conforti et al. 1981, Conforti 1983).

In the Puget Sound area, Polissar et al. (1982) found no convincing associations between high chrysotile asbestos concentrations in drinking water and GI tract cancers. However, the populations studied were relatively small. No convincing evidence for an increased cancer risk among individuals exposed to asbestos in drinking water was found in a subsequent case-control study conducted for a western Washington population (Polissar et al. 1983).

Studies of the use of AC pipe in public potable water supplies and GI cancer incidence have not, in general, provided convincing positive results (Harington et al. 1978, Meigs et al. 1980, Millette et al. 1983, Sadler et al. 1981). In a critical review of epidemiologic studies related to ingestion of asbestos, Marsh (1983) noted that one or more epidemiological studies have shown associations between asbestos in drinking water and cancer of the esophagus, stomach, small intestine, colon, rectum, gallbladder, pancreas, peritoneum, lungs, pleura, prostate, kidneys, brain, and thyroid, as well as leukemia. However, findings have been inconsistent and all studies had methodological weaknesses and limitations. The most common and important flaws involve the problems in classifying exposure to asbestos because population data rather than individual data were typically used. Consequently, no individual study or combination of studies provides data suitable for establishing exposure guidelines or risk estimates for ingestion of asbestos. Nevertheless, based on the results of a binomial probability analysis, Marsh (1983) concluded that the observed positive associations in males and females for cancers of the esophagus, stomach, pancreas, and prostate, were unlikely to be due to chance alone and thus may have a biological basis related to ingested asbestos. Cancers of the small intestine and leukemia were implicated to a lesser degree. Marsh (1983) suggested that these results were convincing enough that they should be considered carefully in developing protocols for future research and priorities for specific etiologic hypotheses that should be tested to establish risk levels for ingested asbestos.

4.2 NONCARCINOGENIC EFFECTS

Three types of noncarcinogenic effects of asbestos can be identified within the respiratory system: (1) an accumulation of fibers in lung tissue, (2) pleural plaques and thickening, and (3) diffuse pulmonary interstitial fibrosis, which can lead to disabling asbestosis (CPSC 1983). The first two of these three effects are generally considered to be markers of asbestos exposure but are not associated with adverse health effects. The only exception is pleural thickening, which can lead to disabling lung restrictions.

Asbestosis is a chronic disease characterized by breathlessness and impaired lung function and is associated with functional disability and early mortality (CPSC 1983). Asbestosis, as evidenced by irregular opacities in the lung, has been reported in 50-80 percent of individuals in groups with heavy occupational exposures beginning more than 20 years earlier (EPA 1986). It has been noted that in many circumstances, fibrosis progress continued after cessation of exposure.

All types of asbestos are capable of causing asbestosis. Mortality from asbestosis is substantial among occupationally exposed persons, but has not been reported among individuals not occupationally exposed (EPA 1986). This is because development of symptoms characteristic of asbestosis appears to require the fibrotic destruction of a substantial lung volume, which in turn depends on inhalation of quantities of asbestos not typically encountered outside of the occupational setting (CDHS 1986). These and other studies suggest that noncarcinogenic disease is not of importance at exposure levels found in environmental circumstances, and that at such exposures the primary risk consideration should be cancer rather than nonmalignant disease.

5.0 DESCRIPTION OF HEALTH EFFECTS IN EXPERIMENTAL ANIMALS

Experimental animal studies confirm the identification of asbestos-related diseases observed in humans (NRC 1984, EPA 1986). In addition, experimental animal studies provide important information, not available from human studies, on the disposition, clearance, and retention of fibers, as well as cellular changes at short times after exposure (EPA 1986). Unfortunately, one of the most important questions raised by human studies, that of the role of fiber type and size, is only partially answered by animal research (EPA 1986). Injection and implantation studies in animals have shown longer and thinner fibers to be more carcinogenic than shorter ones (EPA 1986). However, the size-dependence of the movement of fibers to mesothelial and other tissues is not fully elucidated, and the questions raised by human studies concerning the relative carcinogenicity of different asbestos varieties still remain (EPA 1986).

Investigators have induced lung tumors, mesothelioma, and fibrosis after administration of asbestos to animals by inhalation or by injection directly into the peritoneum or pleural space (EPA 1986). Results of bioassays in which asbestos was ingested (i.e., directly or via inhalation) are inconclusive (NRC 1984), although in a NTP (1984) bioassay a significant increase in benign epithelial neoplasms in the large intestine was interpreted as limited evidence that orally ingested chrysotile fibers may be carcinogenic (EPA 1985a).

The conclusions that can be drawn from animal bioassays are limited because: (1) in most of the experiments only one dose level was administered, (2) the dose administered was not always adequately characterized (e.g., fiber length and diameter), (3) the doses were expressed on a mass basis, whereas fiber counts would have been more helpful for purposes of quantitative risk assessment, (4) many of the studies suffered from an insufficient number of experimental animals and from an inadequate exposure time to asbestos, (5) studies were not always lifetime studies, (6) survival data were poor or not reported, (7) significant information on experimental protocols was missing, (8) systematic histological examinations were not performed on all animals, and (9) there are morphological and physiological differences between humans and experimental animals that can result in differences in asbestos fiber deposition, distribution, retention, and ultimate disposition, as well as toxicity.

The following discussion presents only a summary description of the most relevant bioassays.

5.1 INHALATION BIOASSAYS

The first unequivocal data that showed a relationship between asbestos inhalation and lung malignancy in laboratory animals were reported by Gross et al. (1967). These investigators exposed 132 male white rats to a mean concentration of 86 mg/m^3 chrysotile for 30 hours per week for lifetime. The control group consisted of 55 male white rats. Of 72 rats surviving for 16 months or longer, 19 developed adenocarcinoma, 4 developed squamous cell carcinoma, and 1 developed mesothelioma. No malignant tumors were found in 39 control animals. Information on average survival time was not available.

Reeves et al. (1971) exposed rats, rabbits, guinea pigs, and hamsters to 49 mg/m^3 chrysotile, crocidolite, or amosite for 16 hours per week for up to 2 years. Two squamous cell carcinomas were reported in 31 rats sacrificed after 2 years of exposure to crocidolite. No malignant tumors were reported in rabbits, guinea pigs, or hamsters nor in animals exposed to similar concentrations of chrysotile or amosite. No details of the pathological examination were given, and information on survival times was not provided. In a later study employing the same experimental protocol, Reeves et al. (1974) observed malignant tumors in 5%-14% of the rats that survived 18 months after exposure. Lung cancer and mesothelioma were produced by exposures to chrysotile, mesothelioma was produced in amosite-exposed rats, and lung cancer was produced by exposure to crocidolite. No malignant tumors were reported in control rats. Other species, including rabbits, guinea pigs, hamsters, and gerbils, exposed to these asbestos fiber types did not develop lung tumors. Two respiratory tumors were found in mice exposed to crocidolite, but one control mouse had the same tumor type. As in the earlier experiment, information on survival time was not provided. Therefore, it is not clear if a significant number of experimental animals (other than rats) survived to be at risk from late-developing tumors.

Studies by Reeves et al. (1974) also indicate that there are species and strain differences in fibrogenic response. After inhalation of chrysotile, granulomas (distinctive focal lesions formed as the result of an inflammatory reaction) and focal fibrosis have been observed in the rat and guinea pig but not in the mouse. The fibrogenic potential of chrysotile, which had been substantially reduced in length and possibly altered by milling, was much less than that of the amphiboles. Moreover, studies by Lee et al. (1981) showed a direct relationship between dosage of fibers and development of fibrosis in the rat, whereas less prominent changes occurred in the hamster and guinea pig.

Wagner et al. (1974) compared the carcinogenic effect of five different UICC (Union Internationale Contre le Cancer) asbestos samples (i.e., amosite, anthophyllite, crocidolite, Canadian chrysotile, and Rhodesian chrysotile). Wistar SPF rats were exposed to the five UICC asbestos fiber samples at concentrations from 10.1 to 14.7 mg/m^3 for the different fiber types. Exposure was 7 hours/day, 5 day/week for 1 day or 3, 6, 12, or 24 months. All of the animals were followed for lifetime. Survival times were not significantly affected by exposure. All fiber types induced adenocarcinoma and squamous cell carcinoma in the lung. Incidences were 11/146, 16/145, 16/141, 17/137, and 30/144, for the respective fiber types. Mesotheliomas were also induced. No tumors were found in control animals. In general, tumor incidence increased with length of exposure. The development of asbestosis, was also documented. However, it was found that animals with lung tumors had no evidence of asbestosis, or they had a minimal or slight case of asbestosis. Wagner et al. (1977) also compared the effects of inhalation of a superfine chrysotile to the effects of inhalation of a pure nonfibrous talc. One adenocarcinoma was found in 24 CO Wistar rats exposed to 10.8 mg/m^3 chrysotile for 37.5 hours per week for 12 months and observed for 24 months. No tumors were found in control animals exposed to nonfibrous talc.

Davis et al. (1978) exposed Wistar SPF rats to 2.0 or 10.0 mg/m^3 chrysotile, crocidolite, and amosite (equivalent to 430 to 1,950 f/ml) for 35 hours/week for about 45 weeks. Animals were sacrificed at 29 months. Twenty percent of the animals exposed to the high concentration of chrysotile developed malignant lung tumors. One out of 40 animals exposed to the low concentration of chrysotile developed a peritoneal mesothelioma. Neither amosite nor crocidolite induced malignant lung tumors in the rats. However, one animal exposed to the low crocidolite concentration did develop a pleural mesothelioma. No tumors were found in control animals.

5.2 INGESTION VIA INHALATION

Inhalation exposures result in concomitant GI exposures from asbestos that is swallowed after clearance from the bronchial tree. Although all inhalation experiments were focused on thoracic tumors, those of Wagner et al. (1974), Davis et al. (1978), and, to a limited extent, Gross et al. (1967) also included a search for tumors at extrathoracic sites. A limited number of these tumors were found, but no association could be made with asbestos exposure. The absence of significant carcinogenic effects in the GI tract from asbestos exposure in animals, in contrast to those suggested in humans, may be the result of the limitations of these bioassays (described above), the use of inappropriate animal models, unadjusted differences in the manner of characterizing asbestos exposure (PCM for inhalation studies versus TEM on liquids and solids in the animal studies), or differences in the mechanism of action.

5.3 INGESTION BIOASSAYS

A number of investigators have attempted to induce gastrointestinal tumors in animals by administering oral doses of asbestos (Gross et al. 1974, Gibel et al. 1976, Cunningham et al. 1977, Donham et al. 1980, Smith et al. 1980). Thus far, these studies have yielded negative or equivocal results. The result of three National Toxicology Program bioassays (NTP 1982a,b,c) were also negative, whereas the results of the NTP (1984) bioassay have been interpreted as providing limited evidence that ingested chrysotile asbestos fibers may be carcinogenic.

The results of a series of feeding experiments with different sources of chrysotile and crocidolite were reported by Gross et al. (1974). This paper incorporated data from unpublished results of various studies conducted by three laboratories. Animals fed asbestos by gavage in butter or margarine for up to 21 months failed to provide evidence of a carcinogenic effect. The experiments were flawed for the following reasons: The number or rats in the experimental groups was small, the doses of asbestos were limited, significant information on experimental protocol was missing, and systemic histological examination was not performed on a significant number of rats (Condie 1983). Furthermore, differences in the sample handling and analytical techniques associated with characterizing a solid matrix in terms of potential exposure may not have been adequately considered. Gibel et al. (1976) reported an increase in malignant tumors of the lung, kidney, liver, and reticuloendothelial system in rats fed asbestos filter material containing chrysotile. The control group had a similar incidence of liver tumors. There was no increase in intestinal tumors in either the control or treatment group. Filter material containing chrysotile was administered at 20 mg/day for lifetime. The filter material was composed of sulfated cellulose, a condensation resin, and chrysotile asbestos (53%). No information was provided regarding the size and shape of the asbestos fibers that were incorporated in the filter material. The authors stated that no conclusions could be made from their test results regarding the pathogenesis of the tumors caused by the oral intake of asbestos material. The relationship of this study to asbestos carcinogenicity was also confounded by the presence of several substances in the filter material, which were not clearly identified (Condie 1983).

Donham et al. (1980) reported equivocal results in a lifetime rat feeding study using a diet containing 10% chrysotile. Because of the high level of asbestos in the feed, a nonnutritive cellulose fiber control group was included. In this study, only the colon and rectum were examined microscopically. Three colon tumors were found in both treated and control groups. One mesothelioma was found in the treated group. There was evidence of penetration of asbestos into the colonic mucosa and possible cytotoxicity to the colonic tissues, which the investigators suggested may be related to induction of peritoneal mesothelioma.

Cunningham et al. (1977) conducted two limited feeding studies with male Wistar rats. Chrysotile asbestos (1% with 5% corn oil) was added to rat chow and fed to the animals for 24 or 30 months. In the first study, 10 rats were exposed to asbestos. Six of the seven rats autopsied were found to have tumors, whereas only one malignancy was observed in the control animals. In the larger study of 80 animals, equal numbers of malignant tumors were noted in the exposed and the control groups. The authors stated that trace amounts of asbestos can penetrate the walls of the gastrointestinal tract, but evidence that asbestos causes cancer by the oral route of administration was inconclusive.

Smith et al. (1980) reported that amosite administered to male and female hamsters via their drinking water did not significantly increase the incidence of cancer. Amosite was administered in drinking water at concentrations of 0.5, 5, and 50 mg/liter for a study duration of 23 months. Control animals received filtered drinking water. In the low and intermediate amosite exposure groups, four malignant tumors (one lung carcinoma, two stomach squamous cell carcinomas, and one peritoneal mesothelioma) were found. However, no malignancies were identified in the highest exposure group, and the authors did not attribute the observed malignancies to the asbestos exposure because of the absence of a consistent dose-response gradient.

Finally, McConnell et al. (1983a,b) reported on a number of studies conducted by the National Toxicology Program (NTP 1982a,b,c, 1984) in which hamsters and rats were fed diets containing different types of asbestos fibers at 1% of the diet for the lifetime of the animals, starting with the mothers of the test animals. In the NTP bioassays (1982a,b,c), hamsters were given amosite, short-range chrysotile, and intermediate range chrysotile; F344 rats were given amosite and tremolite (nonfibrous). Hamsters given chrysotile had an increase in adrenal cortical tumors and F344 rats given amosite had increased incidences of C-cell carcinomas of the thyroid and monocytic leukemia. None of these tumors were considered treatment related.

In the NTP (1984) bioassay, male rats ingesting intermediate range chrysotile fibers at 1% in the diet for lifetime, starting with the dams of the test animals, had a significant increase in benign epithelial neoplasms in the large intestine. This was interpreted as limited evidence that ingested chrysotile asbestos fibers may be carcinogenic (EPA 1985a).

6.0 DOSE-RESPONSE ASSESSMENT

When based on human data, risk assessments are typically derived from studies of human populations in which it is not possible to pre-select the participants, accurately establish the levels of exposure, or control for outside factors (e.g., presence of other contaminants). When based on animal bioassays, such assessments are typically derived from high dose, short-term exposure studies, not the low dose, long-term exposures from which criteria are set. Risk assessment thus frequently requires extrapolation between different routes of administration, extrapolation from animal to human effects, and extrapolation from test groups to the population at large. Despite such uncertainties, risk assessment can provide a quantitative estimate of health risks to the general population and permit the establishment of standards or action levels for controlling exposure.

There is general agreement on dose-response models for lung cancer and mesothelioma in a number of published quantitative risk assessments for nonoccupational or low-level exposures to asbestos, and similar risk estimates were generally related to selection of the specific studies considered in each risk assessment. It should be noted that some investigators (ORC 1984, ACA 1979a) calculated risk estimates using data from individual occupational studies and presented the results as a range of the individual results obtained. Other investigators (EPA 1986, CDHS 1986, CPSC 1983, NRC 1984), however, estimated risks at lower exposure levels by using average risk estimates based on a number of epidemiological studies of asbestos-exposed workers. This approach was used, in part, because of the great uncertainty regarding the identity, physical structure, and other characteristics of asbestos in both occupational settings and unstudied nonoccupational settings.

6.1 <u>INHALATION</u>

EPA (1986), in the Airborne Asbestos Health Assessment Update, described developments in studies of asbestos-related health effects since 1972. In addition, the potential excess cancer risks associated with inhalation of asbestos fibers at concentrations above background in nonoccupational environments were quantified. The following discussion is based primarily on the findings presented in the Health Assessment Update.

To obtain dose-response estimates at current or projected environmental asbestos concentrations, it is necessary to extrapolate from epidemiological data on deaths resulting from exposures to considerably higher concentrations of asbestos in the workplace. In the Airborne Asbestos Health Assessment Update, EPA (1986) used linear exposure-response relationships to estimate unit risks (cancer potency factors) for lung cancer and mesothelioma, and to calculate excess cancer risks at cumulative exposures 1/10 and 1/100 of those estimated for occupational settings.

Several epidemiological studies, which compare lung cancer mortality to the cumulative total dust exposure (typically measured using optical microscopy techniques and reported as mppcf-y or f-y/ml) in asbestos workplaces (Dement et al. 1982, Henderson and Enterline 1979, McDonald et al. 1980, 1983a,b, Finkelstein 1983, Seidman 1984), provide strong direct evidence for linearity of response, at least within the range of occupational exposure levels. Although the empirical data for mesothelioma are more limited, they also suggest a linear dose-response relationship (Jones et al. 1980, Hobbs et al. 1980, Finkelstein 1983). Furthermore, for theoretical reasons related to the physical interaction of asbestos with target cells, linear nonthreshold dose-response relationships are likely for this class of materials (Schneiderman et al. 1981).

Using a relative risk model for lung cancer and a linear dose-response relationship with no evidence of a threshold, the incidence of lung cancer can be expressed (EPA 1986) as

$$I_L (a,y,t,d,f) = I_E (a,y) [1 + K_L \times f \times d]$$

where

I_L (a,y,t,d,f) = lung cancer incidence observed or projected in a population of age a, observed in calendar period y, at t years from onset of asbestos exposure, and at average exposure intensity f;

I_E (a,y) = age- and calendar period-specific lung cancer incidence expected in the absence of exposure;

K_L = carcinogenic potency expressed as the fractional increase in lung cancer risk per unit of cumulative exposure in fiber-year/milliliter (f-y/ml);

f = intensity of exposure to all asbestos fibers longer than 5 microns (f/ml) as measured by optical microscopy; and

d = duration of exposure up to 10 years from observation of cancer (t, the time from onset of asbestos exposure, minus 10 years to allow for a minimum latency period).

According to this model, excess risk of lung cancer from asbestos exposure is proportional to the cumulative exposure (duration x intensity) and the underlying risk in the absence of exposure (e.g., smoking strongly influences the underlying risk). The time course of lung cancer is determined primarily by the time course of the underlying risk. If smoking data are available, I_L and I_E can be smoking-specific incidences.

Because mesothelioma is very rare in the general population, an absolute risk model is most appropriate for quantifying the dose-response relationship. Using an absolute risk model for mesothelioma and a linear dose-response relationship with no threshold, the incidence of mesothelioma for varying times of exposure can be expressed (EPA 1986) as

$$I_M(t,d,f) = K_M \times f\,[(T - 10)^3 - (T - 10 - d)^3] \quad \text{for } T > 10 + d$$

$$= K_M \times f\,(T - 10)^3 \quad \text{for } 10 + d > T > 10$$

$$= 0 \quad \text{for } 10 > T$$

where

I_M (t,d,f) = mesothelioma incidence at t years from onset of exposure, for duration d, at concentration f;

K_M = carcinogenic potency expressed as the incidence of mesothelioma per unit of exposure in f-y^3/ml;

f = intensity of exposure to all asbestos fibers longer than 5 microns (f/ml) as measured by optical microscopy;

T = time after first exposure in years; and

d = duration of exposure in years.

According to this model, the risk of death from mesothelioma is proportional to the cumulative exposure to asbestos and increases in proportion to the third power of time after onset of exposure. It is independent of age and cigarette smoking.

EPA (1986) used data from 14 epidemiological studies to calculate potency factors for lung cancer (K_L, the fractional increase in risk per f-y/ml exposure) along with estimates of statistical variation, adjustments for possible biases, and estimates of uncertainties associated with exposure determinations. The confidence intervals associated with K_L estimates for individual studies are wide. These uncertainties are primarily the result of uncertainty in exposure measurements and especially statistical variability associated with small data sets. Exposures to amphibole asbestos, chrysotile asbestos, and mixtures of asbestos fiber types were variously analyzed in these studies. Lower unit risks are generally associated with chrysotile mining and milling and to a lesser extent with friction product manufacturing compared with other manufacturing processes evaluated. These results may reflect differences in fiber size distributions before and after asbestos processing operations. The geometric mean value of K_L for the 14 studies evaluated is 0.0065 $(f\text{-}y/ml)^{-1}$; the geometric mean value of K_L for all studies except mining and milling operations (11 individual studies) is 0.010 $(f\text{-}y/ml)^{-1}$. Because mining and milling exposures are likely to be less typical of those experienced in the environment, EPA (1986) selected the value for K_L of 0.010 $(f\text{-}y/ml)^{-1}$ as the best estimate for environmental asbestos exposures. The 95% confidence limits for this value are 0.0040 and 0.027 (a multiplicative factor of 2.5) based on analysis of variance in the 11 studies from which the K_L was calculated. The 95% confidence limits for K_L that might be applied in any unstudied exposure circumstance are estimated to be a multiplicative factor of approximately 10.

Four epidemiological studies provided quantitative data suitable for calculation of potency factors for mesothelioma (K_M, the incidence per $f\text{-}y^3/ml$ exposure), and a number of other studies provided corroborative but less precise quantitative data. These studies also considered exposure to amphibole asbestos, to chrysotile asbestos, and to mixtures of asbestos fiber types. The ratios of a measure of mesothelioma risk to excess lung cancer risk were found to be approximately equal for these studies, suggesting that the same factors that affect K_L also affect K_M. However, other studies suggest that K_M may be greater among groups exposed to substantial quantities of crocidolite than among groups exposed to other fiber types. In addition, the risk of peritoneal mesothelioma appears to be lower from exposure to chrysotile than from exposure to either crocidolite or amosite, although misdiagnosis of the disease may be an important consideration. Finally, incidence rates for mesothelioma increase more rapidly with time from first exposure than those for lung cancer. Early exposures are therefore most important in determining lifetime risks, although effects are mostly expected later in life. After consideration of these and other factors, EPA (1986) calculated an average value for K_M of 1.0×10^{-8} $(f\text{-}y^3/ml)^{-1}$ from the available epidemiological studies as the best estimate for environmental exposures. Although it was not possible to determine directly the 95% confidence limits on K_M, a multiplicative factor of 5 was estimated for the average value of K_M, and a multiplicative factor of 20 was estimated for its application to any unstudied exposure circumstance.

Using a relative risk model for lung cancer and an absolute risk model for mesothelioma with the appropriate potency factors (K_L and K_M), EPA (1986) calculated best estimates of risks resulting from continuous exposures to 0.0001 or 0.01 f/ml asbestos. The values for continuous exposure were derived by multiplying risks obtained from occupational exposure data by 4.2, the ratio of total hours in a week to 40 hours. The value of 0.0001 f/ml is typical of urban ambient air and is equivalent to about 3 ng/m^3. The value of 0.01 f/ml (300 ng/m^3) has been measured in several environmental exposure circumstances. Measurements of environmental exposure to asbestos are summarized in the Airborne Health Assessment update prepared by EPA (1986).

The calculated lifetime risks of lung cancer and mesothelioma for various time periods are shown in Table 6-1. Risks from longer or shorter exposures and from concentrations other than 0.0001 or 0.01 f/ml can be estimated by directly scaling the data presented. The calculations use a lifetable approach in which the population at risk is continuously decreased by its calculated mortality from all causes. Different overall mortality rates for smokers and nonsmokers, as well as for males and females, result in different estimated mesothelioma risks by smoking and gender. Although EPA (1986) presented both smoking-specific and general population risks in the Asbestos Health Assessment Update, only general population risks are shown in Table 6-1.

The risks shown in Table 6-1 are best estimates for inhalation exposure to fibers released from a variety of asbestos products used in the United States. The 95% confidence limits on the risk estimates would be 0.1 and 10 times the reported values for lung cancer and 0.05 and 20 times the reported values for mesothelioma. As noted above, however, the reported best estimate may underestimate the mesothelioma risk associated with aerosols containing predominantly crocidolite asbestos. In some pure chrysotile exposure circumstances (e.g., mining and milling), the risk may be overestimated.

The risk estimates presented in the Asbestos Health Assessment Update compare reasonably well with results of other published quantitative risk estimates for nonoccupational or low exposures to asbestos (NRC 1984, CPSC 1983, ORC 1984, Schneiderman et al. 1984, ACA 1979a,b). There is general agreement on the models considered appropriate for estimation of lung cancer and mesothelioma risks, and differences generally were due to the choice of studies considered (Schneiderman et al. 1981, ORC 1984, CPSC 1983, NRC 1984, Doll and Peto 1985, OSHA 1986). It also is generally agreed that all risk estimates for environmental exposure to asbestos must be used cautiously because of the uncertainty associated with extrapolation from high occupational levels to much lower ambient levels, difficulties associated with converting between different methods of measurement, various problems associated with interpretation of the available medical data, and the potentially nonrepresentative nature of the available exposure estimates.

An alternative method of calculating risk uses the unit risk concept. EPA (1987a,b) used the information from EPA (1986) to calculate a unit risk, which will yield the excess cancer risk when multiplied by ambient concentrations. EPA (1987a,b) assumed that risks of mesothelioma and lung cancer were additive, that the population was 51% female and 49% male, that occupational exposure could be converted to environmental exposure using ratios of worker-to-general-population breathing rates, and that a conversion factor of 30 $\mu g/m^3$ = 1 f/ml was acceptable. This yielded a unit risk of 2.3186×10^{-1} $(f/ml)^{-1}$ for continuous lifetime exposure.

6.2 INGESTION

The scientific literature on health effects resulting from asbestos ingestion is not as well developed as that for asbestos inhalation. Very few studies were found in the available literature that investigated toxic, noncancer effects following ingestion of asbestos fibers (EPA 1985a). Studies of whether increased cancer incidence occurs due to direct asbestos ingestion include animal ingestion studies and epidemiological studies of ingestion of asbestos in drinking water. In addition, some inhalation studies have considered the ingestion of asbestos as a secondary route of exposure following inhalation. Given the lack of conclusive evidence in ingestion studies and the possible link between inhalation and ingestion, a risk assessment for asbestos ingestion must consider all available alternatives. Such a risk assessment could be based on human ingestion studies, animal ingestion studies, human studies of ingestion via inhalation, and animal studies of ingestion via inhalation.

6.2.1 HUMAN INGESTION STUDIES

Methodological weaknesses and limitations found in epidemiological studies of asbestos ingestion in drinking water lead to the conclusion that no individual study or aggregation of studies exists that would establish risk levels from ingested asbestos in drinking water (Marsh 1983). The most serious deficiency in the California Bay study which found a possible association between asbestos in drinking water and cancer incidence (Conforti 1983) was the substantial problems in classifying exposure because population data rather than individual data were used. Epidemiological studies also lack variability in exposure levels, thereby complicating development of dose-response relationships. The association observed in the California Bay study was not confirmed in the Puget Sound case-control type study which, unlike the California study, included assessment of exposures and outcomes for individuals rather than populations (Meek 1983). There are no studies relating uptake of asbestos in humans through pica or other routes of exposure by ingestion to the incidence of asbestos-related disease. Based on the available data, there appears to be insufficient evidence from human ingestion studies on which to base a risk assessment.

6.2.2 ANIMAL INGESTION STUDIES

The bulk of the evidence contained in the published studies indicates that the long-term, high-level exposure to various types of asbestos fibers failed to produce any definite, reproducible, organ-specific carcinogenic effects in animals (Condie 1983). Although comparisons between studies are complicated by different animal strains utilized, different dose levels or exposure conditions, and different types of asbestos employed, the majority of the asbestos ingestion studies were either negative or equivocal in establishing a cancer effect. Drawbacks to many of the studies include insufficient number of experimental animals, inadequate exposure time to asbestos, and inadequate characterization of the physical form of the asbestos administered.

Despite the failure to establish a carcinogenic effect unequivocally, a recent NTP (1984) bioassay found evidence of increased incidence of benign epithelial neoplasms in male rats following oral ingestion of chrysotile fibers. The study results are described more fully in Section 6.3. These results were interpreted by EPA (1985a) as limited evidence that ingested asbestos fibers may be carcinogenic. A risk assessment based on the NTP (1984) bioassay was performed by EPA (1985a) and subsequently adopted as the basis for establishing a maximum contaminant level goal (MCLG). The risk assessment is presented in Section 6.2.5.

6.2.3 HUMAN STUDIES OF INGESTION VIA INHALATION

Human studies of workers exposed to airborne asbestos unequivocally demonstrate an excess of gastrointestinal cancer in some of the groups surveyed (EPA 1980). A likely route of exposure to the gastrointestinal tract from such exposures is from the fibers cleared from the lung and bronchial tract and subsequently swallowed (EPA 1980). Using information on airborne exposures to workers, it is possible to estimate an approximate exposure level to the gastrointestinal tract from estimates of airborne asbestos concentrations.

Two organizations (EPA 1980, NRC 1983b) have based risk estimates for asbestos ingestion on human inhalation studies. Both studies were reviewed recently (EPA 1985a) as part of the EPA development of drinking water criteria for asbestos. The use of human inhalation studies for risk assessment is appropriate because they provided sufficient scientific evidence in comparison with the limited evidence found in direct ingestion studies. Section 7.2.5 "Risk Assessment" will summarize the NRC (1983b) analysis as the recommended model for estimation of human risk associated with asbestos ingestion.

6.2.4 ANIMAL STUDIES OF INGESTION VIA INHALATION

Since some evidence is presented in human inhalation studies for a correlation between asbestos inhalation and increased GI tract cancer incidence, it is reasonable to evaluate the usefulness of animal inhalation studies in conducting a risk assessment for asbestos ingestion. Arguments for the use of such studies are that (1) they provide another method of risk analysis and source of risk estimates, (2) they allow calculation of risk while eliminating many of the uncertainties inherent in epidemiological studies, and (3) they allow evaluation of the validity of animal-to-human risk extrapolations. Given the absence of significant carcinogenic effects in the GI tract following inhalation of asbestos by animals and the availability of human inhalation data, animal inhalation studies will not be utilized in the risk assessment for asbestos ingestion.

6.2.5 RISK ASSESSMENT

Two risk assessments will be evaluated. The first assessment is based on a 1983 National Research Council study (NRC 1983b) in which a model to predict the risk of GI cancer resulting from asbestos ingestion in drinking water was presented. This risk assessment was reviewed in 1985 by the EPA in its development of drinking water criteria for asbestos (EPA 1985a). The methodology for this risk assessment assumes ingestion following inhalation and is based on converting the observed risk of GI cancers in asbestos workers to risk of GI cancer from ingested asbestos fibers. The second risk assessment is based on the 1985 EPA analysis to derive drinking water draft criteria and a proposed drinking water MCLG. The 1985 EPA assessment was based on an extrapolation of an animal ingestion study conducted by NTP (1984). The NTP study had found an increase in benign epithelial neoplasms in male rats following ingestion of chrysotile fibers. NTP concluded that these results suggest that there was "some" evidence of carcinogenicity in male rats exposed to intermediate range chrysotile fibers. The resulting criteria were subsequently adopted as the basis for the MCLG by EPA.

In order to evaluate the 1983 NRC risk assessment, a number of steps should be clearly distinguished:

Step 1. Measurement of Dose and Adoption of Risk Model

The standard linear dose-effect model may be written

$$RR = 1 + a(\text{dose})$$

where

RR = relative risk for total GI cancers;

a = constant (increase relative risk per unit cumulative dose); and

dose = intensity x duration = (f)(y)/ml [f = number of fibers detected by light microscopy (i.e., longer than approximately 5 microns), and y = duration in years].

A linear dose-effect relationship for lung cancer and exposure to asbestos was most clearly shown by results reported by Henderson and Enterline (1979). For GI cancers, few data have been published to establish or refute linearity, even at high doses. There is a theoretical argument (Crump et al. 1976) that suggests that cancer incidence should vary approximately linearly with dose for low doses particularly when there is an appreciable background of carcinogenicity in unexposed populations. In this case, the assumption of a linear relationship between GI cancer and low dose exposure to asbestos appears reasonable.

Step 2. Conversion of Inhaled Dose to Ingested Dose

Since the excess GI cancers in the workers are assumed to be caused by the asbestos fibers that these workers swallowed rather than inhaled, the dose calculated in Step 1 must be converted to fibers swallowed. NRC estimated that:

Breathing 1 fiber/ml for 1 year = 588×10^6 fibers swallowed/year

where

588×10^6 fibers swallowed/year = 1 fiber breathed/ml x 10^6 ml/m^3 (a)(b)(c)(d);

a = 8 m^3 air breathed/day worked;

b = 5 days worked/week;

c = 49 weeks worked/year; and

d = 0.3 fibers swallowed/1 fiber breathed.

The value of 0.3 fibers swallowed/1 fiber breathed is based on animal studies (Morgan et al. 1975) and estimated for humans (Dement 1979). The EPA risk assessment to derive ambient water quality criteria (EPA 1980) used a ratio of 1.0. Although EPA recognized that this may be an overestimate, EPA concluded that this may be partly offset by fibers that are swallowed directly. The factor used by NRC, which does not allow for directly ingested asbestos, is more closely tied to current scientific data.

Step 3. Conversion of Number of Fibers Seen by Transmission Electron Microscope

Asbestos contamination of drinking water is measured in terms of number of fibers seen with transmission electron microscope (TEM) techniques. To convert from light microscope (LM) measurements used in airborne studies to TEM measurements, NRC used the following equation based on the report of Lynch et al. (1970).

$$1 \text{ LM fiber} = 50 \text{ TEM fibers}$$

EPA (1980) used a factor of 200 in its risk assessment. NRC concluded that higher estimates, such as those used by EPA, were not consistent with the industrial exposure data used in the risk assessment.

Based on the conversions in Steps 2 and 3, the RR for GI cancer for a person can be expressed as

$$RR = 1 + 0.05(h)$$

where h is the fiber dose in TEM f-y/ml the constant 0.05 is a "best fit" based on selected epidemiological studies (Selikoff et al. 1979, Seidman et al. 1979, EPA 1979, Newhouse and Berry 1979, Henderson and Enterline 1979).

The relative risk model incorporates the assumption that the effect of the agent is to multiply whatever background GI cancer rate exists. This effect can then be expressed in the more usual terms of excess GI cancer deaths caused by asbestos ingestion. Whereas the NRC assessment focused purely on increased GI cancer incidence, the EPA assessment (1980) calculated excess GI cancer incidence as a proportion of overall cancer incidence. NRC considered the inclusion of non-GI cancer deaths in the EPA assessment as a significant flaw in the EPA analysis.

The additional GI cancer risk levels (NRC 1983b) when expressed in terms of target risk concentrations for a 70-year life-span exposure of a white male (assuming that an individual consumes 2 liters of water per day) are 1,100 TEM fibers/liters for risk level of 10^{-7}, 11,000 TEM fibers/liter for risk level of 10^{-6}, and 110,000 TEM fibers/liter for risk level of 10^{-5}.

In order to evaluate the 1985 EPA risk assessment used to derive a proposed drinking water MCLG, the steps leading to establishment of cancer risk levels will be presented.

Step 1. Establishment of Animal Fiber Dose

A key assumption was that asbestos in dry diet would have the same effect as asbestos in water. To establish the daily dose

$$(0.38 \text{ kg} \times 0.05)(10{,}000 \text{ mg/kg of diet}) = 190 \text{ mg/day (or 500 mg/kg/day)}$$

where

0.38 kg = weight of male rat;

0.05 = rat consumes 5% of body weight/day; and

10,000 mg/kg = fibers make up 1% of diet.

In order to convert from a daily mass dose to a daily fiber dose, the following conversion was used:

$$500 \text{ mg/kg/day} \times 0.129\times10^{9} \text{ f/mg} = 6.45\times10^{10} \text{ f/kg/day}$$

where the conversion factor 0.129×10^{-9} f/mg is based on TEM measurements performed at the Illinois Institute of Technology Research Institute (NTP 1984).

Step 2. Establishment of Equivalent Human Dose

In order to determine the human equivalent dose, the EPA procedure has been to assume dosage equivalency on a dose/(body weight)$^{2/3}$ basis. The equivalent human dosage for a 70-kg human is

$$(6.45\times10^{10} \text{ f/kg bw rat/day})(70/0.380)^{-1/3} = 1.13\times10^{10} \text{ f/kg bw human/day}.$$

Since a 70-kg human is assumed to drink 2 liters of water per day, this dose is equivalent to the following concentration in drinking water

$$1.13\times10^{10} \text{ f/kg/day} \times 70 \text{ kg/day/2 liters} = 4.0\times10^{11} \text{ f/liter}$$

Step 3. Development of Maximum Likelihood Estimates

Since there is only a control and one dose level, the usual linearized multistage model is reduced to a single dose or one-hit model. The dependence on a single dose response should be considered a limitation in this assessment. Using the incidence of benign neoplasms, a key assumption, the 95% upper limit cancer potency factor (q_1^*) is 1.4×10^{-13} $(f/l)^{-1}$. Based on the q_1^*, the concentrations corresponding to target cancer risk levels are 7.1×10^5 TEM fibers/liter for a risk of 10^{-7}; 7.1×10^6 TEM fibers/liter for an exposure risk of 10^{-6}; and 7.1×10^7 TEM fibers/liter for a risk of 10^{-5}.

6.2.6 CONCLUSIONS

The EPA (1985a) criteria based on the derivation of the proposed Drinking Water MCLG are recommended for evaluation of risks from asbestos ingestion. Although the risk assessment based on the animal ingestion studies (EPA 1985a) resulted in criteria levels that are 100 times greater (less restrictive) than those derived using the inhalation exposure data, the proposed MCLG approach is consistent with EPA cancer risk assessment guidelines, which allow for inclusion of benign tumors. In addition, it is consistent with the legislative mandate of SARA, which directs that MCLGs be considered applicable to relevant and appropriate requirements (ARARs).

TABLE 6-1

CALCULATED LIFETIME RISKS PER 100,000 PERSONS OF DEATH FROM MESOTHELIOMA AND LUNG CANCER FROM CONTINUOUS ASBESTOS EXPOSURES[a]

	Concentration = 0.0001 f/ml Years of Exposure					Concentration = 0.01 f/ml Years of Exposure				
Age at Onset of Exposure	1	5	10	20	Life-time	1	5	10	20	Life-time
				Mesothelioma in Females						
0	0.1	0.7	1.2	2.0	2.8	14.6	67.1	120.8	196.0	275.2
10	0.1	0.4	0.8	1.2	1.5	9.4	42.6	75.5	118.7	152.5
20	0.1	0.3	0.4	0.7	0.8	5.6	25.1	43.5	65.7	78.8
30	0.0	0.1	0.2	0.3	0.4	3.1	13.3	22.4	31.9	35.7
50	0.0	0.0	0.0	0.0	0.0	0.6	2.1	3.2	3.9	3.9
				Lung Cancer in Females[b]						
0	0.0	0.0	0.1	0.2	0.5	1.0	4.6	9.2	18.5	52.5
10	0.0	0.0	0.1	0.2	0.4	1.0	4.6	9.2	18.6	43.4
20	0.0	0.0	0.1	0.2	0.3	1.0	4.6	9.2	18.2	34.3
30	0.0	0.0	0.1	0.2	0.3	1.0	4.6	9.0	16.7	25.1
50	0.0	0.0	0.1	0.1	0.1	0.7	3.1	5.5	8.1	8.8
				Mesothelioma in Males						
0	0.1	0.5	0.9	1.5	1.9	11.2	51.0	91.1	145.7	192.8
10	0.1	0.3	0.6	0.8	1.1	7.0	31.2	58.2	84.7	106.8
20	0.0	0.2	0.3	0.4	0.5	4.1	17.5	30.1	44.5	51.7
30	0.0	0.1	0.1	0.2	0.2	2.1	8.8	14.6	20.4	22.3
50	0.0	0.0	0.0	0.0	0.0	0.3	1.1	1.8	2.0	2.1
				Lung Cancer in Males[b]						
0	0.0	0.1	0.3	0.6	1.7	2.9	14.8	29.7	59.2	170.5
10	0.0	0.1	0.3	0.6	1.4	2.9	14.9	29.8	59.5	142.0
20	0.0	0.2	0.3	0.6	1.1	3.1	15.0	30.0	59.4	113.0
30	0.0	0.1	0.3	0.6	0.8	3.1	14.9	29.8	56.6	84.8
50	0.0	0.1	0.2	0.3	0.3	2.5	11.5	20.3	29.1	30.2

[a]The 95% upper confidence limit on the risk values for lung cancer for an unstudied exposure circumstance is about 10 times the tabulated values. The 95% upper confidence limit on the risk values for mesothelioma for an unstudied exposure circumstance is about 20 times the tabulated values.

[b]Mortality rates for smokers and nonsmokers differ. General population risks are shown, calculated for a population in which 67% of males and 33% of females smoke.

Source: EPA 1986

7.0 SUMMARY OF CRITERIA

Recommended criteria for exposure to asbestos by ingestion or inhalation are summarized in Table 7-1. These criteria are discussed in detail in Section 6.0, "Dose-Response Assessment." A number of other criteria for protection of individuals exposed in the workplace or in environmental settings have also been recommended by government agencies and other advisory groups. These criteria are presented for comparison in Table 7-2.

The criteria for exposure by inhalation to asbestos in ambient air shown in Table 7-1 are expressed in terms of PCM fibers per ml (i.e., fibers >5 microns in length, aspect ratio >3.1). These limitations are required primarily because the majority of available studies on which the criteria are based employed PCM analytical techniques. Thus, individual asbestos minerals could not be distinguished and were not considered separately. Further, although it appears that longer, thinner asbestos fibers have greater biological activity than shorter thicker fibers, the relative potency of different asbestos size factions has not been adequately characterized.

Because TEM is currently the accepted and well-established procedure for measuring asbestos in ambient air, consideration must be given to appropriate conversion factors. Asbestos counts, even when limited to the fraction greater than 5 microns, differ widely between PCM and TEM. One approach for conversion would be to count only those TEM fibers larger than 5 microns with aspect ratios greater than 3.1 but with a minimum diameter of 0.2 microns as well. Thus, a "PCM equivalent" fraction is generated. Another accepted approach is a two-step process beginning with converting fiber counts to mass per unit volume by the established procedure (Chatfield, 1983). Data from earlier studies are available to convert optical fiber counts (such as the inhalation criteria presented in the table) to mass concentrations as well. A value of 30 micrograms/m^3 per PCM f/ml is recommended and represents the geometric means of a range of literature derived conversion factors (see Chapter 3). Although a high degree of uncertainty is associated with this approach, it has the advantage of indirectly considering, to some extent, the contribution of

TABLE 7-1

RECOMMENDED CRITERIA FOR EXPOSURE TO ASBESTOS

Route and Type of Cancer	Exposure Assumption	Assumed Risk Levels and Corresponding Criteria		
		10^{-7}	10^{-6}	10^{-5}
Ingestion:[a]				
GI cancer[b]	Lifetime, 2 liters dw/day	$7.1x10^{5}$ f/l	$7.1x10^{6}$ f/l	$7.1x10^{7}$ f/l
Inhalation:[c]				
Males:				
Lung cancer	Lifetime	$5.9x10^{-7}$ f/ml	$5.9x10^{-6}$ f/ml	$5.9x10^{-5}$ f/ml
Mesothelioma	Lifetime	$5.2x10^{-7}$ f/ml	$5.2x10^{-6}$ f/ml	$5.9x10^{-5}$ f/ml
Females:				
Lung cancer	Lifetime	$1.9x10^{-6}$ f/ml	$1.9x10^{-5}$ f/ml	$1.9x10^{-4}$ f/ml
Mesothelioma	Lifetime	$3.6x10^{-7}$ f/ml	$3.6x10^{-6}$ f/ml	$3.6x10^{-5}$ f/ml

[a]Measurement of ingestion doses are based on TEM method.

[b]Based on oral ingestion in rats; associated $q_1^* = 1.4x10^{-13}$ $(f/l)^{-1}$.

[c]Measurement of inhalation exposures are based on optical microscopy counts (fibers longer than 5 microns). It is assumed that 30 $\mu g/m^3$ (as measured by TEM) equals 1 fiber/ml (as measured by optical microscopy). Risks for lifetime or shorter exposures may be obtained from the data presented in Table 7-1; determination of 95% confidence limits in these best estimate values are discussed in Section 6.0 and summarized in Table 6-1.

TABLE 7-2

SUMMARY OF ADDITIONAL ASBESTOS CRITERIA

OSHA Standard

PEL of a 0.2 f/cc as an 8-hour TWA

NIOSH Recommended Standards:

0.1 f/ml as an 8-hour TWA
0.5 f/ml as a 15-minute ceiling level

ACGIH Threshold Limit Value

Amosite, 0.5 fibers greater than 5 microns in length/ml
Chrysotile, 2 fibers greater than 5 microns in length/ml
Crocidolite, 0.2 fibers greater than 5 microns in length/ml
Other forms, 2 fibers greater than 5 microns in length/ml

Office of Air Quality Planning and Standards (EPA 1987a,b)

Risk	Concentrations
10^{-5}	4.3×10^{-5} fibers/ml
10^{-6}	4.3×10^{-6} fibers/ml
10^{-7}	4.3×10^{-7} fibers/ml

Ambient Water Quality Criteria (EPA 1980)

Risk	Concentrations
10^{-5}	300,000 fibers/liter
10^{-6}	30,000 fibers/liter
10^{-7}	3,000 fibers/liter

Drinking Water Criteria Draft

Risk	Concentrations	
	Best Estimate Values	95% Lower Limits
10^{-5}	1.3×10^{8} fibers/liter	7.1×10^{7}
10^{-6}	1.3×10^{7} fibers/liter	7.1×10^{6}
10^{-7}	1.3×10^{6} fibers/liter	7.1×10^{5}

Proposed Drinking Water MCLG is 7.1×10^{6} fibers/liter associated with a 1×10^{-6} risk. This criterion is limited to fibers > 10 microns in length.

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shorter fibers (< 5 microns) to overall risk. For example, if a given asbestos sample contains a relatively high proportion of shorter fibers, these fibers (although shorter than 5 microns) would contribute as a significantly to total asbestos mass after conversion.

Criteria presented for exposure via ingestion presented in Table 8-1 are expressed as total TEM fibers per unit volume. Again due to the limited database, different asbestos minerals are not considered separately. In general, the development of ingestion criteria is subject to the same limitations discussed in association with the inhalation criteria. Note that the apparent discrepancy between results of asbestos ingestion due to inhalation studies (represented by the first row of criteria in Table 8-1) and animal ingestion studies (represented by the second row of criteria) is still a subject to controversy. Some of the possible root causes of this discrepancy were identified in Chapter 3. A lack of proper consideration for differences in analytical measurements techniques between the two sets of studies or a differing biological mechanism of action are among such possibilities. Careful analysis of the original studies with respect to these specific concerns may better illuminate the source of the discrepancy.

Refinement of current risk assessment procedures for asbestos and establishment of health criteria with less inherent uncertainty will require development of better information on the carcinogenicity of fibers according to mineral species and size (length and width), information on deposition, clearance, and movement of asbestos in the body; information on release of asbestos to the environment and establishment of representative environmental measurement techniques, and development of exposure-response data more appropriate for environmental settings.

The OSHA, NIOSH, and ACGIH criteria presented in Table 7-2 are intended solely as an overview of other regulatory actions associated with asbestos. They are not directly comparable to criteria presented in Table 7-1. For example, the OSHA criterion is intended to protect workers occupationally exposed for 8 hours per day, 5 days per week, over 45 years. Additionally, OSHA standards are not based strictly on health considerations alone but take other factors into account as well.

The ambient water quality criteria developed by the EPA are derived from data on the increased incidence of peritoneal mesothelioma and GI tract cancer in humans exposed occupationally to asbestos. The derivation assumes that much or all of this increased disease incidence is caused by fibers ingested following clearance from the respiratory tract. The asbestos concentrations indicated in Table 7-2 are expressed as total fibers counted using electron microscopy analysis. The excess cancer risks associated with ingestion of 2 liters of water per day for a 70-year lifetime containing asbestos at the indicated concentrations are shown. The Drinking Water Draft criteria and Proposed Drinking Water MCLG shown in Table 7-2 are calculated from animal ingestion studies which considered the association between fiber length and carcinogenicity. The criteria are based on measurement of fibers >10 microns in length using electron microscopy techniques.

8.0 ECOTOXICITY

In this section, the fate and transport of asbestos fibers in the environment, as well as the toxic effects of asbestos fibers on aquatic life are presented. Only toxicity to aquatic life is considered; no data are available on the effects of asbestos on terrestrial wildlife although the results of rodent bioassays (Section 5.0) may be relevant for evaluation of terrestrial species. In addition, dose-response data are inadequate to recommend specific criteria for the protection of aquatic life.

8.1 FATE AND TRANSPORT

Asbestos fibers have very limited chemical reactivity but are susceptible to physical breakup into smaller and/or thinner fibers. Although the fibers are not soluble in water, cations may be leached from them leaving the silica structure behind (Choi and Smith 1972). The effect that leaching of cations has on the structural integrity of the crystal is unclear (EPA 1979). Acid leaching alters surface properties of chrysotile, but not of amphibole asbestos fibers (Seshan 1983).

Asbestos fibers from environmental samples obtained in California were found to be smaller in length and width than freshly mined fibers or fibers present in industrial applications (Bales et al. 1984). For example, in raw river water, fiber sizes ranged between 0.05-0.1 microns in width and 0.5-1.0 microns in length. Incorporating data concerning fiber size, density, and surface charge, Bales et al. (1984) modeled concentrations of chrysotile asbestos originating from naturally weathering rock in California water systems. Asbestos fiber concentrations in surface water were reduced by a factor of 10 as a result of passage through reservoirs with a retention time of 1 year. Reservoirs with a retention time of 3 years reduced asbestos concentrations by a factor of 1,000. The authors (Bales et al. 1984) attributed the reduction to coagulation and settling. In the same study, it was found that 86%-99.8% of asbestos fibers were removed by water treatment facilities that utilized coagulation and filtration methods. Amphibole fiber concentrations in Lake Superior resulting from mining activity in the western end of the lake are reduced by more than

30% during transport to the eastern end of the lake (EPA 1979). The long distance transport of intact chrysotile fibers has been noted in California water supplies (McGuire et al. 1982).

Asbestos fibers of all types are extremely persistent. They may disintegrate into smaller fibers, but complete dissolution or breakup has not been quantified. Lauth and Schurr (1983) noted that, although there are no serpentine formations in the Great Lakes basin, 80% of fibers in Lake Michigan are chrysotile asbestos. Chrysotile, which accounts for 95% of asbestos produced for commercial use, presumably enters the Great Lakes as a result of human activity in the area.

Both amphibole and chrysotile fibers can bioaccumulate (Batterman and Cook 1981, Belanger 1986). Chrysotile fibers are taken up by the gills of molluscs and move throughout the body to other tissues. Mussels do not depurate fibers from the intestinal lining (Halsband 1974). Belanger (1986) calculated laboratory bioconcentration factors (BCFs) for freshwater Asiatic clams (Corbicula sp.) of 0.3, 1.9, and 2 for gills, viscera, and whole clam tissue, respectively. Estimated environmental BCFs for Asiatic clams from a California aqueduct were <1, 64-100, and 1000-5000 for gills, viscera, and whole clam, respectively. The clams were estimated to be 2 years old and to have been exposed to up to 10^9 fibers/liter (f/liter). However, there was significant variation in background fiber concentration. Fiber dimensions were smaller in the field-exposed clam tissues than in the laboratory-exposed clams. Gills from field-exposed clams contained 800 f/mg, compared with 10^5 f/mg and 10^7 f/mg for viscera and whole clam tissues, respectively. This indicates that the fibers are highly mobile within tissues and tend to concentrate to high levels, at least in this species.

Fathead minnows (Pimephales promelas) exposed to 10^8 f/liter for 30 days in the laboratory, accumulated 77-110 f/mg in the liver and 178-386 f/mg in the kidney (Belanger 1986). Batterman and Cook (1981) suggest that the primary route of exposure of fish to amphiboles is via ingestion, based on studies of trout. They state that amphiboles are not taken up by the gills, but that data on chrysotile are less definitive. Batterman and Cook (1981) reported significant differences between fiber concentrations in both liver and kidney tissues but not in muscle tissues of fish from contaminated and clean areas. Laboratory exposure of fish did not result in large differences in tissue concentrations, which suggests that an unidentified exposure mechanism may be operating in the field. Batterman and Cook (1981) also observed a difference in fiber size in field- versus laboratory-exposed fish which may be related to differences in tissue uptake between laboratory and field. In this regard, Lauth and Schurr (1984) reported the presence of smaller fibers in alga cells than in the water from which they were taken.

Except for leaching in body fluid and stomach acid, biotransformation of asbestos fibers has not been observed.

8.2 AQUATIC TOXICITY

Asbestos fibers are acutely toxic only at very high concentrations. Larval Asiatic clams (Corbicula sp.) had significantly higher mortality rates than controls when exposed to chrysotile fiber concentrations between 10^2-10^8 f/liter. Fathead minnows exposed to 10^{12} f/liter for 96 hours or 10^8 f/liter for 30 days did not exhibit increased mortality over controls (Belanger 1986). Japanese medaka (pisces, Oryzias latipes) exposed to 10^{10} f/liter for 60 days experienced 100% mortality. Stewart and Schurr (1980) reported that maximum mortality of Artemia occurred between 10^7-10^8 f/liter.

Asbestos exposure can result in deleterious impacts on growth, reproduction, physiological equilibrium, and behavioral traits in algae. Exposure to chrysotile fibers at 1-1.5×10^6 f/liter for 48 hours resulted in severe clumping of cells of the algae Cryptamonas erosa (Lauth and Schurr 1983). It was postulated that this would result in loss of mobility and death due to settling out.

Adult and juvenile Asiatic clams exhibited reduced siphoning rate and shell growth when exposed to 10^5 f/liter for 30 days (Belanger 1986). Juvenile clams also had reduced weight gain at 10^4 f/liter in summer temperatures, and at 10^5 f/liter in winter temperatures. Weight gain of juvenile fathead minnows was reduced after 30 days exposure to between 10^6 and 10^8 f/liter. Length was not affected however (Belanger 1986). Larval medaka showed reduced growth after 14 days exposure to the same levels.

Coho salmon (Oncorhynchus kisutch) and green sunfish (Lepomis cyanellus) larvae exposed to 1-1.5x10^6 f/liter chrysotile for up to 86 days or 3x10^6 f/liter for up to 52 days did not exhibit reduced length or weight gain (Belanger et al. 1986). However the sunfish suffered severe scale and epidermal erosion from exposure to the high concentration. Histological examination of the lateral line and gills in the salmon revealed severe cytotoxicity in these tissues. As a result, equilibrium of the fish was severely impaired at the high dose. Both exposures resulted in elevated susceptibility to anesthetics. Tissue damage was also reported in the skin, intestinal tract, kidney, and liver of medaka following exposure to between 10^4 and 10^8 f/liter (Belanger 1986).

Asbestos fibers may have a direct toxic action resulting from physical interference with plasma membrane function or by direct damage to membranes. Fibers have been observed to cling to the outside of cells as well as pierce them (Lauth and Schurr 1984). The net negative surface charge of asbestos fibers may result in attraction to plasma membrane carboxylic acid residues (Harington et al., 1975). Interference with membrane surface functions would account for observed osmoregulatory impairment in clams (Belanger 1986).

The carcinogenicity of asbestos fibers in mammals is well established through laboratory animal experiments and human epidemiological studies. Asbestos exposure also results in tumor formation in fish and clams. Coho salmon developed tumorous swellings in the gills following exposure to 3x10^6 f/liter of chrysotile (Belanger et al. 1986), in addition to neoplastic cell abnormalities in epidermal tissue. Medaka developed epidermal tumors following exposure to 10^{10} f/liter. Mollies (Poecilia formosa) also developed epidermal hypertrophy after 6 months exposure to chrysotile (Woodhead et al. 1983).

The conclusions of the EPA Ambient Water Quality Criteria Document (EPA 1980) are that no statements concerning the acute or chronic toxicity of asbestos in freshwater or saltwater organisms can be made.

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APPENDIX

MODELS USED TO DETERMINE ACTIVITY RELATED CONCENTRATIONS OF AIRBORNE ASBESTOS

Summary of Models used to Determine Activity-Related Concentrations of Airborne Asbestos at Points of Potential Exposure

Contaminants were found in the surface soils in the Atlas/Coalinga area. Airborne particulate matter including asbestos could be generated from these areas during activities which are known to occur such as off-road vehicle driving on the site piles and agricultural tilling in the settling basin area. These activities may result in inhalation exposures to asbestos.

The method used to estimate exposures via activity-related pathways for these sites involves use of emission factors and the output of a box model. Contaminant emission rates are determined from the emission factors, the source extent, and the mass fraction of asbestos in the soil (assuming that PLM area% measured in the soil equals PLM weight%). The emission factors employed in these models were empirically derived through regression analysis of field test data (Cowherd et al., 1984). The contaminant emission rates are linked to a box model which predicts air concentrations on site.

In this appendix, emissions of dust generated by off-road vehicle activities on the site piles and by agricultural tilling activities in the settling basin area were estimated using models developed by Cowherd et al. (1984) and presented in EPA (1985). Also included in this appendix is a description of the simple box model used to estimate onsite concentrations of asbestos in the air generated by the activities discussed above.

Estimates of Dust and Asbestos Generated During Off-Road Vehicle Activities

Typical mechanical disturbances which may lead to emissions of dust and asbestos from soil to air include off-road vehicle traffic occurring as part of recreational activities on the sites.

The emission factor for vehicle traffic over the surface materials is represented by the following equation:

$$e_v = (0.85)(s/10)(S/24)^{0.8}(W/7)^{0.3}(w/6)^{1.2}[(365-p)/365]$$

where

e_v = emission factor per vehicle-kilometer of travel (VKT) (kg/VKT);
s = silt content of soils (%);
S = mean vehicle speed (km/hour);
W = mean vehicle weight (Mg);
w = mean number of wheels; and
p = number of days with at least 0.254 mm of precipitation per year.

Table 1 presents the input parameters of this model.

The emission rate for emissions of asbestos due to vehicle traffic, E_v, is estimated by multiplying the emission factor by the number of vehicle-kilometers of travel and, then, dividing by the number of days per year that vehicles will be traveling over the contaminated surface:

$$E_v = e_v A_v$$

where

E_v = emissions due to vehicle traffic (kg/sec);
e_v = emission factor due to vehicle traffic (kg/VKT); and
A_v = round trips per day x vehicles per round trip x distance per vehicle (km/sec).

The value for the vehicle-kilometers of travel (VKT) was obtained by assuming that the number of round trips was the number of times a vehicle travels the total circumference of the site piles. Vehicles were assumed to be on each site for 3 hours and 5 hours per day for the average and maximum exposures cases, respectively. Then, based on the speeds of the vehicles (both motorcycles and 4-wheel-drive trucks were evaluated for this exposure), the total number of miles traveled per day could be calculated. The circumference of the piles was calculated based on the area of the piles (17 acres for the Atlas tailings piles and 8 acres for the Coalinga tailings piles). The ratio of the total miles traveled per day to the circumference of the piles yielded the number of round trips per day. The results of this determination are presented in Table 1.

Estimates of Dust and Asbestos Generated During Agricultural Tilling Activities.

Emissions from agricultural tilling operations can be approximated by the equation below (EPA 1985):

$$e_a = k(5.38)(s)^{0.6}$$

where

e_a = emission factor (kg/hectare);
k = particle size multiplier (dimensionless);
s = silt content of soil (%).

The particle size multiplier, k, varies with aerodynamic particle size range and is conservatively assumed to be 1 (i.e., a value assigned for total suspended particulates) for the maximum case and 0.21 for the average case (i.e., a value assigned for respirable particles less than 10 um diameter) (Cowherd et al. 1984, EPA 1985). This equation is applicable to surface soil silt contents of 1.7 to 88 percent and to agricultural tilling of material from the surface with an implement traveling 8 to 10 km/hr. The average silt content of soils in the settling basin area was the average of values for clay/silt soils <0.075 mm measured in the area by Levine-Fricke. Maximum silt content of soils in the settling basin area was the average of values for coarse silt <0.04 mm measured in the area by WCC.

The emission rate for emissions due to agricultural tilling operations, E_a, is obtained by multiplying the emissions factor (e_a) by the equation below:

Number of tractors (4 & 8) x speed (2.78 m/s 10 km/hour) x path length 3 m

$$E_a = e_a(N)(S)(P)$$

where

E_a = emission rate due to agricultural tilling (kg/sec);
e_a = emission factor due to agricultural tilling (kg/m^2 = kg/hectare x 10^{-4} m^2/hectare);
N = number of tractors involved in tilling activities;
S = speed of each tractor (m/sec); and
P = path length of tractor (m).

Four and eight tractors traveling at 2.8/sec were assumed to be tilling the soil in the settling basin at a given time for the average and maximum cases, respectively. Table 1 presents the results of this model.

Asbestos-Specific Emission Rates.

Using the emission rates for each type of activity, asbestos-specific emission rates are determined with the following equation:

$$R = aE_{v \text{ or } a}$$

where

R = emission rate of asbestos (kg/sec);
$E_{v \text{ or } a}$ = annual emission rate for either vehicle traffic or agricultural tilling (kg/sec); and

a = mass fraction of asbestos in emissions (kg/kg, PLM weight%/100).

Asbestos concentrations in the soils of the study areas were used to calculate the mass fractions and are presented in Table 6-3 of the risk assessment text. The geometric mean and maximum concentrations were used to determine annual average and annual maximum asbestos emission rates, respectively. The calculated asbestos emission rates (presented in Table 1) are used as input to the box model discussed below.

Box Model

The asbestos emission rates discussed above were also used in conjunction with a box model to determine the asbestos concentrations at the source.

The box model assumes steady and spatially uniform conditions of dispersion so that the emissions from an area source are uniformly distributed throughout a box defined by the area of the source and the mixing height. The model requires that the emission rates are steady-state, that the wind vector is constant, and also that the crosswind distance of the area source is large with respect to the distance to the receptor. To meet these requirements, all emission rates for all sites were calculated for steady-state. For the Atlas and Coalinga sites, the wind speed was chosen based on meteorological monitoring data collected for each site during the remedial investigation. For the Atlas and Coalinga sites, the receptor location was assumed to be the site of the area source (i.e., the piles at the sites where off-road vehicle activity takes place). For the agricultural tilling activities, the wind speed was chosen based on National Weather Service records for Fresno, California, and the receptor location was the site of the area source.

The only condition left to determine is the height of the box. Box models used on an urban scale often use the height of the daytime mixing layer as the height of the box. For that definition to be appropriate, a downstream fetch on the order of tens of kilometers is required. The mean vertical displacement of emissions as function of stability and downwind distance is analogous to the mixing height used in larger-scale box models. This mean vertical height, and thus the height to be used in the box model was determined using the following equation presented by Pasquill (1975):

$$X = 6.25\, z_o[(H/z_o)\ln(H/z_o) - 1.58(H/z_o) + 1.58]$$

where:

X = downwind distance to receptor, m.

H = height of the box, m.

z_o= roughness height, m.

This expression is for a neutral stability, which as stated before will provide a first-order approximation to the annual average concentration. The value for z_o, the roughness height was chosen to be 0.03 m for individual area sources with open and grassy flat terrain, and few isolated obstacles. The downstream distance, X, was chosen to be the crosswind distance of the area being modeled, since the receptors were located on the site.

Having determined the appropriate box height, the concentrations on-site can be determined using:

$$C_i = Q_i/HWU$$

where:

C_i = The concentration on-site for the i^{th} contaminant, g/m^3.

Q_i = The emission rate of the i^{th} contaminant, g/m^2-s.

U = Average wind speed in the box, m/s.

H = Height of the box, m.

W = Crosswind area of the box, m.

The wind speed used for the Atlas site, the Coalinga site, and the settling basin were 2.98 m/s, 1.78 m/s, and 2.81 m/s, respectively. The dimension W was the crosswind or east-west length of the area source. For these sites, this length was assumed to be the square root of the source area. Input parameters to the box model are presented in Table 2, and resulting air concentrations are presented in the risk assessment.

TABLE 1

Input Parameters and Emission Rates for Asbestos Generation During Off-Road Vehicle Activities at the Atlas and Coalinga Sites

Parameter	Atlas		Coalinga	
	Average	Maximum	Average	Maximum
k	0.36	1	0.036	1
s (%)	30	50	6.8	50
<u>Trucks</u>:				
S (km/hr)	15	50	15	50
W (Mg)	1.5	2.3	1.5	2.3
w	4	4	4	4
e_v (kg/VKT)	0.273	5.69	0.062	9.33
#rd trips/day	50	250	70	400
#motorcyc/rd trp	2	5	2	5
Distance/cycle (km)	0.93	0.93	0.637	0.637
A_v	0.0011	0.0134	0.0010	0.015
E_v	2.95×10^{-6}	2.29×10^{-3}	4.3×10^{-6}	9.19×10^{-2}
<u>Motorcycles</u>:				
p (days)	50	50	50	50
S (km/hr)	1.5	40	15	40
W (Mg)	0.08	0.1	0.08	0.1
w	2	2	2	2
e_v	0.0248	0.358	0.006	0.588
#rd trips/day	50	250	70	300
#motorcyc/rd trp	2	5	2	5
Distance/cycle (km)	0.93	0.93	0.637	0.637
A_v	0.0011	0.011	0.0010	0.011
E_v	2.68×10^{-7}	1.16×10^{-4}	4.2×10^{-7}	4.33×10^{-3}

TABLE 2

Input Parameters for the Box Model

Location	W (m)	H (m)	U (m/s)	1/WHU (s/m^3)	z_o (m)
Atlas Site	180	7.4	2.98	5.04×10^{-4}	0.03
Coalinga Site	262	10	1.78	4.28×10^{-4}	0.03
Settling Basin	3,011	77	2.81	3.07×10^{-6}	0.03

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