APPENDIX 3

HOMOGENEOUS MATERIALS LIST

APPENDIX 3

HOMOGENEOUS MATERIAL AREA I.D. NUMBER (HMG#) REFERENCE LIST

UNIT I.D. # DESCRIPTION

Surfacing

SF 1.X Sprayed - on finish
SF 2.X Troweled - on finish
SF 4.X Other surfacing

UNIT I.D. # DESCRIPTION

Thermal

SF 5.X Cloth wrap at seams/joints
SF 6.X Breaching
SF 7.X Duct insulation
SF 8.X Tank insulation
LF 9.X Block pipe insulation - Block PI
EA 10.X Hard mud fitting (HMF) and joints associated with block PI
LF 11.X Corrugated pipe insulation - Corr.PI
EA 12.X Hard mud fitting (HMF) and joints associated with corrugated PI
LF 13.X Compressed pipe insulation - Comp.PI
EA 14.X Hard mud fitting (HMF) associated with compressed PI
15.X Hard mud fitting (HMF) associated with fiberglass or other misc. insulation
EX 16.X Joint with white sealant on ends
LF 17.X Tarpaper pipe insulation
LF 18.X Troweled-on pipe insulation
SF/EA 19.X Finish mud
56.X Other thermal

PIPE AND JOINT PARAMETERS

Pipe and Joint OD ≤ 6"
Pipe and Joint OD ≥ 6" but ≤ 10"
Pipe and Joint OD >

UNIT I.D. # DESCRIPTION

Miscellaneous

SF 20.X Vinyl floor tile - VFT
SF 21.X Floor tile mastic
SF 22.X Linoleum (sheet vinyl)
SF 23.X Drywall, mud, tape (walls and ceiling) - GWB
SF 24.X Plaster (walls and ceiling)
SF 25.X Lay-in ceiling tile - Lay-in CT
SF 26.X Spline ceiling tile - Spline CT
SF 27.X Glue-on ceiling tile - Glue-on CT
SF 28.X Ceiling tile glue - CT glue
SF 29.X Cement asbestos board CAB
SF 30.X Cement asbestos pipe
SF 31.X Cement asbestos shingles - CAB
SF 32.X Cove base
SF 33.X Cove base mastic
EA 34.X Vibration joint cloth - VJC
LF 35.1 Caulking
SF 36.X Mortar
SF 37.X Asphalt roof shingles
SF 38.X Rolled roofing
SF 39.X Asphalt and gravel roofing
SF 40.X Cant strip
LF 41.X Weatherproofing sealant
SF 42.X Tar patch
LF 43.X Tar patch
EA 44.X Firedoors
LF 45.X Duct sealant
SF 46.X Debris
LF 47.X Window putty
SF 48.X Tarpaper
LF 49.X Tape
LF 50.X Wire insulation
EA 51.X Contact shields
EA 52.X Elevator brake shoes
SF 53.X Dust
54.X Blown-in insulation
55.X Other miscellaneous

APPENDIX 4

MATERIAL AREA SPREADSHEET

173830\11\Asbestos\Bldg-193.asb

MATERIAL AREA SPREADSHEET
(Type 1)

Alpha Engineering Group, Inc.

Date: 4-26-93

Project Name: NSPS, Seattle Comprehensive Asbestos Survey

Project No: 17-3830-11

Surveyor(s): EXE

Building Name/Number: 2

Facility Usage: Reserve Training

MKS

Floor	HMG #	Material Description	Location	Qty	CR	DM	%	FR	EP	PE
1	9.1	Block PI	Room 155	202 LF	1	10 LF	Y	Y	1.	OT
1	10.1	HMF A/W Block PI	Room 155	32 EA	3	2 EA	Y	Y	1	OT
1	11.1	Corrugated PI	Room 155	12 LF	2	1 LF	Y	Y	1	OT
1	12.1	HMF A/W Corr. PI	Room 155	2 EA	2	1 EA	Y	Y	1	OT
1	13.1	Comp. PI	Room 155	120 LF	3	50 LF	Y	Y	2	OT
1	14.1	HMF A/W Comp. PI	Room 155	17 EA	2	4 EA	Y	Y	2	OT
1	46.1	Block PI Debris	Room 155 Loft	60 SF	1	60 SF	Y	Y	2	OT
1	47.1	Window Putty	Room 155	2700 LF	2	40 LF	N	N	1	OT
		No Suspect Materials	Room 156							
1	9.1	Block PI	Room 157	5 LF	3	Ø	Y	N	3	OT
1	10.1	HMF A/W Block PI	Room 157	1 EA	3	Ø	Y	N	3	OT
1	13.1	Comp PI	Room 157	68 LF	2	4 SF	Y	Y	3	OT
1	14.1	HMF A/W comp PI	Room 157	4 EA	2	2 SF	Y	Y	3	OT
1	29.1	CAB	Room 157	800 SF	3	Ø	Y	N	3	OT

LEGEND:

Qty. = Quantity		CR = Condition Rating		DM = Damage Quantity		% = Percentage & Type Asbestos		FR = Friable		EP = Exposure Potential		PE = Personnel Exposed	
SF	Sq. Ft.	1	Poor	SF	Square Ft	C	Chrysotile	Y	Yes	1	High	GP	General Public
LF	Lineal Ft	2	Moderate	LF	Lineal Ft	A	Amosite	N	No	2	Moderate	OW	Office Worker
EA	Each	3	Good	EA	Each	T	Tremolite			3	Low	JA	Janitor
						AC	Actinolite					CO	Contractor
						CR	Crocidolite					AL	All
						AN	Anthophyllite					OT	Other

MATERIAL AREA SPREADSHEET
(Type 1)

Alpha Engineering Group, Inc.

Date: 4-26-93

Project Name: NSPS, Seattle Comprehensive Asbestos Survey

Project No: 17-3830-11

Surveyor(s): EXE MRS

Building Name/Number:

Facility Usage: Reserve Training

Floor	HMG #	Material Description	Location	Qty	CR	DM	%	FR	EP	PE
1	9.1	Block PI	Room 159	23 LF	3	1 LF	Y	Y	1	OT
1	10.1	HMF A/W Block PI	Room 159	9 EA	3	Ø	Y	N	2	OT
1	47.1	Window Putty	Room 159	132 LF	3	4 LF	N	N	1	OT
		No Suspect Materials	Room 158							
1	20.1	12X12 Brown VFT	Rooms 160, 160 A, 160 B	1184 SF	3	Ø	Y	N	1	AL
1	9.1	Block PI	Room 160 A	8 LF	3	Ø	Y	N	3	AL
1	10.1	HMF A/W Block PI	Room 160 A	2 EA	3	Ø	Y	N	3	AL
1	9.1	Block PI	Room 161, 161 A	92 LF	2	3 LF	Y	Y	1	OW
1	10.1	HMF A/W Block PI	Room 161, 161 A	4 EA	3	Ø	Y	N	1	OW
1	20.2	12X12 TAN VFT	Room 161, 161 A	1425 SF	2	10 SF	Y	N	1	AL
1	11.1	CORR. PI	Room 161 A	17 LF	2	3 LF	Y	Y	1	OW
1	12.1	HMF A/W CORR. PI	Room 161 A	4 EA	3	Ø	Y	N	1	OW
1	47.1	Window Putty	Rooms 161 A, 168	456 LF	2	20 LF	N	N	1	OW
1	15.1	HMF A/W F/G Pipe	Room 168	5 EA	3	Ø	N	N	3	OT

LEGEND:

Qty. = Quantity		CR = Condition Rating		DM = Damage Quantity		% = Percentage & Type Asbestos		FR = Friable		EP = Exposure Potential		PE = Personnel Exposed	
SF	Sq. Ft.	1	Poor	SF	Square Ft	C	Chrysotile	Y	Yes	1	High	GP	General Public
LF	Lineal Ft	2	Moderate	LF	Lineal Ft	A	Amosite	N	No	2	Moderate	OW	Office Worker
EA	Each	3	Good	EA	Each	T	Tremolite			3	Low	JA	Janitor
						AC	Actinolite					CO	Contractor
						CR	Crocidolite					AL	All
						AN	Anthophyllite					OT	Other

MATERIAL AREA SPREADSHEET
(Type 1)

Alpha Engineering Group, Inc.

Date: 4-26-93

Project Name: NSPS, Seattle Comprehensive Asbestos Survey

Project No: 17-3830-11

Surveyor(s): EKZ MKS

Building Name/Number: 2

Facility Usage: Reserve Training

Floor	HMG #	Material Description	Location	Qty	CR	DM	%	FR	EP	PE
1	9.1	Block PI	Room 165	3 LF	1	2 LF	Y	Y	3	OT
1	10.1	HMF	Room 165	2 EA	2	1	Y	Y	3	OT
1	9.1	Block PI	Room 169	130 LF	2	6 LF	Y	Y	2	OT
1	11.1	Corr. PI	Room 169	20 LF	3	Ø	Y	N	3	OT
1	10.1	HMF A/W Block PI	Room 169	32 EA	2	3 EA	Y	Y	2	OT
1	9.1	Block PI	Room 169A	83 LF	3	1 LF	Y	Y	1	OW
1	10.1	HMF A/W Block PI	Room 169A	16 EA	3	1 EA	Y	Y	1	OW
✓ 1	11.1	Corr. PI	Room 169A	12 LF	1	8 LF	Y	Y	1	AL
1	12.1	HMF A/W Corr. PI	Room 169A	3 EA	3	1 EA	Y	Y	1	AL
1	47.1	Window Putty	Room 169A	264 LF	2	20 LF	N	N	1	OW
1	9.1	Block PI	Room 170	19 LF	2	2 LF	Y	Y	3	OT
1	10.1	HMF A/W Block PI	Room 170	6 EA	3	Ø	Y	N	3	OT
1	9.1	Block PI	Room 155	62 LF	2	3 SF	Y	Y	1	OT
1	10.1	HMF A/W Block PI	Room 155	9 EA	3	1 EA	Y	Y	1	OT

LEGEND:

Qty. = Quantity		CR = Condition Rating		DM = Damage Quantity		% = Percentage & Type Asbestos		FR = Friable		EP = Exposure Potential		PE = Personnel Exposed	
SF	Sq. Ft.	1	Poor	SF	Square Ft	C	Chrysotile	Y	Yes	1	High	GP	General Public
LF	Lineal Ft	2	Moderate	LF	Lineal Ft	A	Amosite	N	No	2	Moderate	OW	Office Worker
EA	Each	3	Good	EA	Each	T	Tremolite			3	Low	JA	Janitor
						AC	Actinolite					CO	Contractor
						CR	Crocidolite					AL	All
						AN	Anthophyllite					OT	Other

MATERIAL AREA SPREADSHEET
(Type 1)

Alpha Engineering Group, Inc.

Date: 4-26-93

Project Name: NSPS, Seattle Comprehensive Asbestos Survey

Project No: 17-3830-11

Surveyor(s): EXE MKS

Building Name/Number: 2

Facility Usage: Reserve training

Floor	HMG #	Material Description	Location	Qty	CR	DM	%	FR	EP	PE
1	47.1	Window Putty	Room 155	2808 LF	2	60 SF	N	N	1	AL
1	20.3	12X12 Beige VFT	Rooms 163, 173	788 SF	1	1 SF	N	N	1	AL
1	29.1	Cement Asbestos Board	Room 155	3200 SF	3	Ø	Y	N	3	OT
1	29.1	Cement Asbestos Board	Room 150	2400 SF	2	20 SF	Y	N	1	OT
1	29.1	Cement Asbestos Board	Room 169	240 SF	1	20 SF	Y	N	1	AL
2	20.3	12X12 Beige VFT	Rooms 274, 277, 276	1502 SF	3	Ø	Y	N	1	AL
2	9.1	Block PI	Room 276	90 LF	1	6 LF	N	Y	1	AL
2	10.1	Hmf A/W Block PI	Room 276	10 EA	2	2 EA	Y	Y	1	AL
2	13.1	Comp. PI	Room 276	58 LF	2	5 LF	Y	Y	2	AL
2	14.1	Hmf A/W Comp. PI	Room 276	4 EA	3	1 EA	Y	N	2	AL
2	29.1	Cement Asbestos Board	Room 276	748 SF	3	Ø	Y	N	2	AL
2	29.1	Cement Asbestos Board	Room 273	748 SF	2	12 SF	Y	N	2	AL
2	20.3	12X12 Beige VFT	Room 273	1290 SF	3	1 SF	Y	N	1	AL
2	9.1	Block PI	Room 273	81 LF	2	4 LF	Y	Y	1	AL

LEGEND:

Qty. = Quantity		CR = Condition Rating		DM = Damage Quantity		% = Percentage & Type Asbestos		FR = Friable		EP = Exposure Potential		PE = Personnel Exposed	
SF	Sq. Ft	1	Poor	SF	Square Ft	C	Chrysotile	Y	Yes	1	High	GP	General Public
LF	Lineal Ft	2	Moderate	LF	Lineal Ft	A	Amosite	N	No	2	Moderate	OW	Office Worker
EA	Each	3	Good	EA	Each	T	Tremolite			3	Low	JA	Janitor
						AC	Actinolite					CO	Contractor
						CR	Crocidolite					AL	All
						AN	Anthophyllite					OT	Other

MATERIAL AREA SPREADSHEET
(Type 1)

Alpha Engineering Group, Inc.

Date: 4-26-93

Project Name: NSPS, Seattle Comprehensive Asbestos Survey

Project No: 17-3830-11

Surveyor(s): EXE MKS

Building Name/Number: 2

Facility Usage: Reserve training

Floor	HMG #	Material Description	Location	Qty	CR	DM	%	FR	EP	PE
2	13.1	Comp. PI	Room 273	58 LF	2	3 LF	Y	Y	1	AL
2	14.1	HMF A/W Comp. PI	Room 273	4 EA	3	Ø	Y	Y	1	AL
2	10.1	HMF A/W Block PI	Room 273	13 EA	2	3 EA	Y	Y	1	AL
2	20.5	9X9 Brown VFT	S. Stairwell landing, Room 275	60 SF	2	2 SF	Y	Y	1	AL
3	20.4	9X9 Black VFT	Room 3-A	135 SF	2	5 SF	Y	Y	1	OW
1	9.1	Block PI	Room 150	1128 LF	2	20 LF	Y	Y	2	AL
1	10.1	HMF A/W Block PI	Room 150	160 EA	3	4 EA	Y	Y	2	AL
1	9.2	Block PI (>6-10")	Room 150	132 LF	2	10 LF	Y	Y	2	AL
1	10.2	HMF A/W Block PI	Room 150	19 EA	3	1 EA	Y	Y	2	AL
1	9.1	Block PI	Room 122, 151	460 LF	2	8 LF	Y	Y	2	OT
1	10.1	HMF A/W Block PI	Room 122	128 EA	2	12 EA	Y	Y	2	OT
1	9.2	Block PI (>6-10")	Room 122, 151	90 LF	2	2 LF	Y	Y	1	OT
1	10.2	HMF A/W Block PI	Room 122, 151	12 EA	3	2 EA	Y	Y	2	OT
1	46.1	Block PI Debris	Room 122	2 LF	1	2 LF	Y	Y	2	OT

LEGEND:

Qty. = Quantity		CR = Condition Rating		DM = Damage Quantity		% = Percentage & Type Asbestos		FR = Friable		EP = Exposure Potential		PE = Personnel Exposed	
SF	Sq. Ft.	1	Poor	SF	Square Ft	C	Chrysotile	Y	Yes	1	High	GP	General Public
LF	Lineal Ft	2	Moderate	LF	Lineal Ft	A	Amosite	N	No	2	Moderate	OW	Office Worker
EA	Each	3	Good	EA	Each	T	Tremolite			3	Low	JA	Janitor
						AC	Actinolite					CO	Contractor
						CR	Crocidolite					AL	All
						AN	Anthophyllite					OT	Other

MATERIAL AREA SPREADSHEET
(Type 1)

Alpha Engineering Group, Inc.

Date: 4-27-93

Project Name: NSPS, Seattle Comprehensive Asbestos Survey

Project No: 17-3830-11

Surveyor(s): EXE

Building Name/Number: 2

Facility Usage: Reserve Training

MKS

Floor	HMG #	Material Description	Location	Qty	CR	DM	%	FR	EP	PE
1	13.1	Comp. PI	Room 122, 151	124 LF	2	3 LF	Y	Y	3	OT
1	14.1	HMF A/W Comp PI	Room 122, 151	13 EA	3	Ø	Y	N	3	OT
1	9.1	Block PI	Room 112	80 LF	1	2 LF	Y	Y	3	OT
1	10.1	HMF A/W Block PI	Room 112	24 EA	2	3 EA	Y	Y	3	OT
1	9.1	Block PI	Room 103 above ceiling	114 LF	2	3 LF	Y	Y	3	OT
1	10.1	HMF A/W Block PI	Room 103 above ceiling	26 EA	1	6 EA	Y	Y	3	OT
1	9.1	Block PI	Room 101	2 LF	3	Ø	Y	N	3	GP
1	10.1	HMF A/W Block PI	Room 101	3 EA	3	Ø	Y	N	3	GP
1	20.6	12X12 White VFT	Room 101, 113	450 SF	3	1 SF	N	N	1	AL
1	33.1	Cove Base Mastic	Room 113	9 SF	2	3 SF	Y	N	1	AL
1	9.1	Block PI	Room 134	80 LF	2	4 LF	Y	Y	2	OT
1	10.1	HMF A/W Block PI	Room 134	11 EA	2	4 EA	Y	Y	2	OT
1	24.1	Plaster	Room 134				N	N	1	OT
1	9.1	Block PI	Room 135	8 LF	2	2 LF	Y	Y	1	OT

LEGEND:

Qty. = Quantity		CR = Condition Rating		DM = Damage Quantity		% = Percentage & Type Asbestos		FR = Friable		EP = Exposure Potential		PE = Personnel Exposed	
SF	Sq. Ft.	1	Poor	SF	Square Ft	C	Chrysotile	Y	Yes	1	High	GP	General Public
LF	Lineal Ft	2	Moderate	LF	Lineal Ft	A	Amosite	N	No	2	Moderate	OW	Office Worker
EA	Each	3	Good	EA	Each	T	Tremolite			3	Low	JA	Janitor
						AC	Actinolite					CO	Contractor
						CR	Crocidolite					AL	All
						AN	Anthophyllite					OT	Other

MATERIAL AREA SPREADSHEET
(Type 1)

Alpha Engineering Group, Inc.

Date: 4-27-93

Project Name: NSPS, Seattle Comprehensive Asbestos Survey

Project No: 17-3830-11

Surveyor(s): EXE

Building Name/Number: 2

Facility Usage: Reserve Training

mks

Floor	HMG #	Material Description	Location	Qty	CR	DM	%	FR	EP	PE
1	10.1	Hmt a/w Block PI	Room 135	5 EA	2	2 EA	Y	Y	1	OT
1	11.1	Corr. PI	Room 135	1 LF	1	1 LF	Y	Y	1	OT
1	12.1	Hmt a/w Corr. PI	Room 135	2 EA	2	1 EA	Y	Y	1	OT
1	9.1	Block PI	Room 133	5 LF	3	Ø	Y	N	3	OW
1	20.3	12X12 Beige VFT	Room 115	100 SF	3	1 LF	Y	N	1	AL
1	15.2	Hmt a/w Fiberglass PI	Rooms 100, 140, 141	88 EA	3	Ø	N	N	3	OT
1	9.1	Block PI	Rooms 100, 140, 123	373 LF	2	12 LF	Y	Y	1	OT
1	10.1	Hmt a/w Block PI	Rooms 100, 140, 123	80 EA	2	6 EA	Y	Y	1	OT
1	9.2	Block PI (26-10")	Rooms 100, 140	183 LF	2	4 LF	Y	Y	1	OT
1	10.2	Hmt a/w Block PI (26-10")	Rooms 100, 140,	36 EA	2	4 EA	Y	Y	1	OT
1	15.2	Hmt a/w Fiberglass PI	Rooms 123, 124, 125, 126, 129	73 EA	1	3 EA	N	Y	3	OT
1	27.1	Glue-on CT	Room 128	340 SF	1	100 SF	N	Y	3	OT
1	20.1	9X9 Green VFT	Rooms 124, 142, 143, 149	2308 SF	3	1 SF	Y	N	3	OT
1	10.1	Hmt a/w Block PI	Room 129 A	2 EA	1	1 EA	Y	Y	3	OT

LEGEND:

Qty. = Quantity		CR = Condition Rating		DM = Damage Quantity		% = Percentage & Type Asbestos		FR = Friable		EP = Exposure Potential		PE = Personnel Exposed	
SF	Sq. Ft.	1	Poor	SF	Square Ft	C	Chrysotile	Y	Yes	1	High	GP	General Public
LF	Lineal Ft	2	Moderate	LF	Lineal Ft	A	Amosite	N	No	2	Moderate	OW	Office Worker
EA	Each	3	Good	EA	Each	T	Tremolite			3	Low	JA	Janitor
						AC	Actinolite					CO	Contractor
						CR	Crocidolite					AL	All
						AN	Anthophyllite					OT	Other

MATERIAL AREA SPREADSHEET
(Type 1)

Alpha Engineering Group, Inc.

Date: 4-29-93

Project Name: NSPS, Seattle Comprehensive Asbestos Survey

Project No: 17-3830-11

Surveyor(s): EXE MKS

Building Name/Number: 2

Facility Usage: Reserve Training

Floor	HMQ #	Material Description	Location	Qty	CR	DM	%	FR	EP	PE
1	46.1	Block PI Debris	Room 129A Loft	2 SF	1	2 SF	Y	Y	3	OT
1	47.1	Window Putty	Room 128, 130	3220 LF	2	40 SF	N	N	1	OT
✓1	9.1	Block PI	Room 130	256	1	20 LF	Y	Y	1	OT
✓1	10.1	HMF A/W Block PI	Room 130	64 EA	1	8 EA	Y	Y	1	OT
1	13.1	Comp PI	Room 130	365 LF	2	12 LF	Y	Y	2	OT
1	14.1	HMF A/W Comp PI	Room 130	90 EA	1	18 EA	Y	Y	2	OT
1	15.1	HMF A/W Fiberglass PI	Room 130	29 EA	3	1 EA	Y	Y	2	OT
1	9.1	Block PI	Rooms 142, 143, 144, 147, 148, 149	366 LF	2	6 LF	Y	Y	1	OT
1	10.1	HMF A/W Block PI	Rooms 142, 143, 144, 147, 148, 149	73 EA	2	6 EA	Y	Y	1	OT
1	9.2	Block PI (>6'-10")	Rooms 142, 144, 143, 132	82 LF	2	6 LF	Y	Y	2	OT
1	10.2	HMF A/W Block PI (>6'-10")	Rooms 142, 143, 144, 132	15 EA	3	1 EA	Y	Y	2	OT
1	15.1	HMF A/W Fiberglass PI	Rooms 142, 143, 144,	26 EA	3	Ø	Y	N	2	OT
1	47.1	Window Putty	Rooms 142, 143, 144, 147, 148	2300 LF	3	Ø	N	N	1	OT
1	51.1	Contact Shields	Room 144	4 SF	3	Ø	Y	N	1	OT

LEGEND:

Qty. = Quantity		CR = Condition Rating		DM = Damage Quantity		% = Percentage & Type Asbestos		FR = Friable		EP = Exposure Potential		PE = Personnel Exposed	
SF	Sq. Ft.	1	Poor	SF	Square Ft	C	Chrysotile	Y	Yes	1	High	GP	General Public
LF	Lineal Ft	2	Moderate	LF	Lineal Ft	A	Amosite	N	No	2	Moderate	OW	Office Worker
EA	Each	3	Good	EA	Each	T	Tremolite			3	Low	JA	Janitor
						AC	Actinolite					CO	Contractor
						CR	Crocidolite					AL	All
						AN	Anthophyllite					OT	Other

MATERIAL AREA SPREADSHEET
(Type 1)

Alpha Engineering Group, Inc.

Date: 4-29-93

Project Name: NSPS, Seattle Comprehensive Asbestos Survey

Project No: 17-3830-11

Surveyor(s): EXL

Building Name/Number: 2

Facility Usage: Reserve Training

mks

Floor	HMG #	Material Description	Location	Qty	CR	DM	%	FR	EP	PE
1	13.1	Comp PI	Room 147	215 LF	2	4 LF	Y	Y	2	AL
1	14.1	Hmf A/w Comp PI	Room 147	68 EA	2	6 EA	Y	Y	2	AL
✓ 1	9.1	Block PI	Rooms 131, 132, 132A	246 LF	1	26 LF	Y	Y	1	OT
1	10.1	Hmf A/w Block PI	Rooms 131, 132, 132A	63 EA	2	9 EA	Y	Y	1	OT
1	15.1	Hmf A/w Fiberglass PI	Rooms 131, 132, 132A	59 EA	3	Ø	Y	N	2	OT
1	13.1	Comp PI	Rooms 131, 132, 132A	51 LF	1	3 LF	Y	Y	2	OT
1	14.1	Hmf A/w Comp PI	Rooms 131, 132, 132A	7 EA	1	1 EA	Y	Y	2	OT
1	47.1	window Putty	Rooms 131, 132, 132A	2230 LF	1	Ø	N	N	1	OT
1	9.1	Block PI	Rooms 146, 126, 126A	60 LF	3	Ø	Y	N	1	OT
1	10.1	Hmf A/w Block PI	146, 126, 126A	31 EA	2	4 EA	Y	Y	1	OT
1	9.2	Block PI (>6-10")	146, 126, 126A	60 LF	2	10 LF	Y	Y	2	OT
1	10.2	Hmf A/w Block PI >6-10"	146, 126, 126A	14 EA	1	3 EA	Y	Y	2	OT
1	9.3	Block PI >10"	146, 126, 126A	78 LF	2	9 LF	Y	Y	2	OT
1	10.3	Hmf A/w Block PI >10"	146, 126, 126A	15 EA	3	Ø	Y	Ø	2	OT

LEGEND:

Qty. = Quantity		CR = Condition Rating		DM = Damage Quantity		% = Percentage & Type Asbestos		FR = Friable		EP = Exposure Potential		PE = Personnel Exposed	
SF	Sq. Ft.	1	Poor	SF	Square Ft	C	Chrysotile	Y	Yes	1	High	GP	General Public
LF	Lineal Ft	2	Moderate	LF	Lineal Ft	A	Amosite	N	No	2	Moderate	OW	Office Worker
EA	Each	3	Good	EA	Each	T	Tremolite			3	Low	JA	Janitor
						AC	Actinolite					CO	Contractor
						CR	Crocidolite					AL	All
						AN	Anthophyllite					OT	Other

MATERIAL AREA SPREADSHEET
(Type 1)

Alpha Engineering Group, Inc.

Date: 4-29-93

Project Name: NSPS, Seattle Comprehensive Asbestos Survey

Project No: 17-3830-11

Surveyor(s): EXE MKS

Building Name/Number: 2

Facility Usage: Reserve Training

Floor	HMG #	Material Description	Location	Qty	CR	DM	%	FR	EP	PE
1	34.1	Vibration Joint Cloth	Room 126	2 SF	3	Ø	Y	N	2	OT
1	15.1	Hmf A/w Fiberglass PI	Rooms 146, 126, 126A	35 EA	3	Ø	Y	N	2	OT
1	9.1	Block PI	Room: 121 And Above 120	620 LF	1	26 LF	Y	Y	1	OT
1	10.1	Hmf A/w Block PI	Room 121 And Above 120	130 EA	2	27 EA	Y	Y	1	OT
1	11.1	Cork PI	Room 121 And Above 120	163 LF	2	10 LF	Y	Y	2	OT
1	12.1	Hmf A/w Corr. PI	Room 121 And Above 120	22 EA	2	3 EA	Y	Y	2	OT
1	13.1	Comp. PI	Room 121 And Above 120	237 LF	1	4 LF	Y	Y	2	OT
1	14.1	Hmf A/w Comp PI	Room 121 And Above 120	17 EA	1	2 EA	Y	Y	2	OT
1	15.1	Hmf A/w Fiberglass	Room 121 And Above 120	4 EA	3	Ø	Y	N	2	OT
1	46.1	Block PI Debris	Above Room 120	2 SF	1	2 SF	Y	Y	2	OT
1	46.1	Block PI/HMF Debris	Above ceiling of Room 103	48 SF	1	48 SF	Y	Y	3	OT
2	20.7	9x9 Green VFT	Rooms 220, 221, 222, 223, 224, 226, 227	3296 SF	3	Ø	Y	N	2	OT
2	20.7	9x9 Green VFT	Rooms 225, 230, 230A, 230B, 231	1960 SF	3	Ø	Y	N	2	OT
2	20.7	9x9 Green VFT	Room: 231A, 231B, 232, 232A, 232B	1060 SF	3	Ø	Y	N	2	OT

LEGEND:

Qty. = Quantity
SF Sq. Ft.
LF Lineal Ft
EA Each

CR = Condition Rating
1 Poor
2 Moderate
3 Good

DM = Damage Quantity
SF Square Ft
LF Lineal Ft
EA Each

% = Percentage & Type Asbestos
C Chrysotile
A Amosite
T Tremolite
AC Actinolite
CR Crocidolite
AN Anthophyllite

FR = Friable
Y Yes
N No

EP = Exposure Potential
1 High
2 Moderate
3 Low

PE = Personnel Exposed
GP General Public
OW Office Worker
JA Janitor
CO Contractor
AL All

MATERIAL AREA SPREADSHEET
(Type 1)

Alpha Engineering Group, Inc.

Date: 4-29-93

Project Name: NSPS, Seattle Comprehensive Asbestos Survey

Project No: 17-3830-11

Surveyor(s):

Building Name/Number: 2

Facility Usage: Reserve Training

Floor	HMG #	Material Description	Location	Qty	CR	DM	%	FR	EP	PE
2	20.7	9x9 Green VFT	Rooms 233, 234, 235, 263, 264, 266	2970 SF	3	Ø	Y	N	2	OT
2	20.7	9X9 Green VFT	Rooms 265, 260, 261, 262, 250	770 SF	3	Ø	Y	N	2	OT
2	20.8	12X12 Brown VFT	Rooms 200, 201, 203A, 203B, 204	2250 SF	3	Ø	Y	N	2	OT
2	20.9	12X12 Brown VFT	Rooms 209, 240, 242, 248	1706 SF	3	Ø	Y	N	2	OT
2	20.9	12X12 Brown VFT	Rooms 253, 254, 254A, 255, 256	2506 SF	3	Ø	Y	N	2	OT
2	22.1	Brown Linoleum	Rooms 242, 241, 240, 208, 251, 252	2096 SF	3	Ø	Y	N	2	OT
2	22.1	Brown Linoleum	Rooms 254, 254A, 253, 248, 246	1142 SF	3	Ø	Y	N	2	OT
2	22.1	Brown Linoleum	Rooms 245, 213, 206, 205, 249	1312 SF	3	Ø	Y	N	2	OT
2	22.1	Brown Linoleum	Rooms 207, 256, 255, 247	2166 SF	3	Ø	Y	N	2	
2	22.2	Brown Jute Back linoleum	Room 241	280 SF	3	Ø	Y	N	3	
2	15.1	1HMF A/W Fiberglass PI	Room 200	1 EA	3	Ø	Y	N	3	
2	27.1	Glue-on CT	Rooms 222, 221, 225	1770 SF	1	40%	N	Y	2	
2	28.1	CT Glue	Rooms 222, 221, 225	1770 SF	3	Ø	N	N	3	
2	47.1	Window Putty	Rooms 222, 221, 223, 224, 226, 227	2250 LF	3	10%	N	N	1	OT

LEGEND:

Qty. = Quantity		CR = Condition Rating		DM = Damage Quantity		% = Percentage & Type Asbestos		FR = Friable		EP = Exposure Potential		PE = Personnel Exposed	
SF	Sq. Ft.	1	Poor	SF	Square Ft	C	Chrysotile	Y	Yes	1	High	GP	General Public
LF	Lineal Ft	2	Moderate	LF	Lineal Ft	A	Amosite	N	No	2	Moderate	OW	Office Worker
EA	Each	3	Good	EA	Each	T	Tremolite			3	Low	JA	Janitor
						AC	Actinolite					CO	Contractor
						CR	Crocidolite					AL	All
						AN	Anthophyllite					OT	Other

MATERIAL AREA SPREADSHEET
(Type 1)

Alpha Engineering Group, Inc.

Date: 4-30-93

Project Name: NSPS, Seattle Comprehensive Asbestos Survey

Project No: 17-3830-11

Surveyor(s): EXE MKS

Building Name/Number: 2

Facility Usage: RESERVE TRNG

Floor	HMG #	Material Description	Location	Qty	CR	DM	%	FR	EP	PE
2	9.1	Block PI	Room 241	3 LF	3	Ø	Y	N	1	OT
2	10.1	HMF A/W Block PI	Room 241	1 EA	3	Ø	Y	N	1	OT
1	9.1	Block PI	Room 100 Above Rooms 241,242	92 LF	1	3LF	Y	Y	3	OT
1	10.1	HMF A/W Block PI	Room 100 Above Rooms 241,242	22 EA	1	4 EA	Y	Y	3	OT
1	46.1	Block PI/HMF Debris	Room 100 Above Rooms 241,242	50 SF	1	50SF	Y	Y	3	OT
2	9.1	Block PI	Room 267	28 LF	3	Ø	Y	N	3	
2	10.1	HMF A/W Block PI	Room 267	8 EA	3	Ø	Y	N	3	
2	9.1	Block PI	Room 246	8 LF	2	1 LF	Y	Y	1	
✓ 2	10.1	HMF A/W Block PI	Room 246	1 EA	1	1 EA	Y	Y	1	
2	9.2	Block PI >6-10"	Room 208	55 LF	2	5LF	Y	Y	3	
2	10.2	HMF A/W Block PI	Room 208	11 EA	3	1 EA	Y	Y	3	
2	25.1	2X4 Lay-in CT	Rooms 204, 200, 203A, 229	950 SF	3	Ø	N	Y	2	
2	25.2	2X4 Lay-in CT	Rooms, 200, 203, 230, 203B, 231, 232A	1336 SF	3	Ø	N	Y	2	
2	25.3	2X4 Lay-in CT	Rooms 232, 232B, 231A, 231B,	720 SF	3	Ø	N	Y	1	

LEGEND:

Qty. = Quantity		CR = Condition Rating		DM = Damage Quantity		% = Percentage & Type Asbestos		FR = Friable		EP = Exposure Potential		PE = Personnel Exposed	
SF	Sq. Ft.	1	Poor	SF	Square Ft	C	Chrysotile	Y	Yes	1	High	GP	General Public
LF	Lineal Ft	2	Moderate	LF	Lineal Ft	A	Amosite	N	No	2	Moderate	OW	Office Worker
EA	Each	3	Good	EA	Each	T	Tremolite			3	Low	JA	Janitor
						AC	Actinolite					CO	Contractor
						CR	Crocidolite					AL	All
						AN	Anthophyllite					OT	Other

MATERIAL AREA SPREADSHEET
(Type 1)

Alpha Engineering Group, Inc.

Date: 5-4-93

Project Name: NSPS, Seattle Comprehensive Asbestos Survey

Project No: 17-3830-11

Surveyor(s): EXE MKS

Building Name/Number: 2

Facility Usage: Reserve Training

Floor	HMG #	Material Description	Location	Qty	CR	DM	%	FR	EP	PE
2	47.1	Window Putty	Rooms 140E, 229, 230A, 231A	520 LF	3	Ø	N	N	3	
2	47.1	Window Putty	Rooms 232, 232B, 233, 234, 235, 266	2030 LF	3	Ø	N	N	3	
2	47.1	Window Putty	Rooms 263, 267, 256, 255,	3200 LF	3	6	N	N	3	
3	8.1	Tank insulation	Attic over N. Sect of Bldg	47 SF	2	2 LF	Y	Y	2	
3	9.1	Block PI 0-6"	Attic over N.W. Section of Bldg.	184 LF	1	30 LF	Y	Y	2	
3	10.1	HMF A/W Block PI	Attic over N.W. Section of Bldg.	54 EA	2	6 EA	Y	Y	2	
3	9.2	Block PI >6-10"	Attic over N.W. Section of Bldg.	34 LF	3	Ø	Y	N	3	
3	10.2	HMF A/W Block PI	Attic over N.W. Section of Bldg	5 EA	3	Ø	Y	N	3	
3	15.1	HMF A/W Fiberglass PI	Attic over N.W. Section of Bldg	11 EA	3	Ø	Y	N	3	
4	51.2	Elevator Electrical Panel	Elevator Mechanical Room	12 SF	3	Ø	Y	N	3	
√3	56.1	Block PI Debris	Attic over N.W. Section of Bldg	150 SF	1	150 SF	Y	Y	1	OT
2	9.1	≤6 Block PI	Room 278	140 LF	3	2 LF	Y	Y	3	
2	10.1	≤6 HMF A/W Block PI	Room 278	40 EA	3	Ø	Y	N	3	
2	20.3	12X12 Beige VFT	Room 278	1466 SF	3	Ø	N	N	3	

LEGEND:

Qty. = Quantity		CR = Condition Rating		DM = Damage Quantity		% = Percentage & Type Asbestos		FR = Friable		EP = Exposure Potential		PE = Personnel Exposed	
SF	Sq. Ft.	1	Poor	SF	Square Ft	C	Chrysotile	Y	Yes	1	High	GP	General Public
LF	Lineal Ft	2	Moderate	LF	Lineal Ft	A	Amosite	N	No	2	Moderate	OW	Office Worker
EA	Each	3	Good	EA	Each	T	Tremolite			3	Low	JA	Janitor
						AC	Actinolite					CO	Contractor
						CR	Crocidolite					AL	All
						AN	Anthophyllite						

MATERIAL AREA SPREADSHEET
(Type 1)

Alpha Engineering Group, Inc.

Date: 05/11/93

Project Name: NSPS, Seattle Comprehensive Asbestos Survey

Project No: 17-3830-11

Surveyor(s): GRS MKS

Building Name/Number: 2

Facility Usage: HANGAR/OFFICES

Floor	HMG #	Material Description	Location	Qty	CR	DM	%	FR	EP	PE
2	20.12	12"X12" GREEN VFT	Rm's 41, A, 19, 37, 40, B, 20	3768	3	5 SF	Y	N	3	OT
2	21.12	BLACK FLOOR TILE MASTIC	Rm's 41, A, 19, 37, 40, B, 20	3768	3	0	Y	N	3	CO
2	25.1	2'X4' LAY IN CT	Rm's 41, A, 40, B, 38, 37	2546 SF	3	0	N	Y	3	OT
2	47.1	Window PUTTY	Rm's 41, 40, B	1800 LF	2	10 LF	N	N	3	OT
2	9.1	≤6" BLOCK PI	Rm 40	23 LF	3	0	Y	N	3	OT
2	10.1	≤6" HMF	Rm 40	1 EA	3	0	Y	N	3	OT
2	9.1	≤6" BLOCK PI	Rm 40, E. SIDE, ABOVE CT.	2 LF	2	1 LF	Y	Y	2	CO
2	20.3	12"X12" BEIGE	Rm 39	118 SF	3	0	N	N	3	OT
2	21.3	BLK FLOOR TILE MASTIC	Rm 39	118 SF	3	0	N	N	3	CO
2	20.1	12"X12" BRN. VFT	ENTRY TO Rm 38	80 SF	3	0	Y	N	3	OT
2	21.1	BLK FLOOR TILE MAST	ENTRY TO Rm 38	80 SF	3	0	N	N	3	CO
2	20.11	12"X12" BEIGE VFT	Rms: 21, 23-27, 6, 29 (6, 23, 27 under carpet) 18, 5, 12	5361 SF	3	0	Y	N	3	OT
2	21.11	BLK FLOOR TILE MASTIC	Rms: 21, 23-27, 6, 29, 18, 5, 12	5361 SF	3	0	Y	N	3	CO
2	1.0	CEILING TEXTURE	Rms 21, 16-18, 12, 20, 22-28, 6, 7, 9, 2, 3, 10, 11, 29	9,124	2	100 SF	N	Y	2	OT

LEGEND:

Qty. = Quantity		CR = Condition Rating		DM = Damage Quantity		% = Percentage & Type Asbestos		FR = Friable		EP = Exposure Potential		PE = Personnel Exposed	
SF	Sq. Ft.	1	Poor	SF	Square Ft	C	Chrysotile	Y	Yes	1	High	GP	General Public
LF	Lineal Ft	2	Moderate	LF	Lineal Ft	A	Amosite	N	No	2	Moderate	OW	Office Worker
EA	Each	3	Good	EA	Each	T	Tremolite			3	Low	JA	Janitor
						AC	Actinolite					CO	Contractor
						CR	Crocidolite					AL	All
						AN	Anthophyllite						

MATERIAL AREA SPREADSHEET
(Type 1)

Alpha Engineering Group, Inc.

Date: 5-11-93

Project Name: NSPS, Seattle Comprehensive Asbestos Survey

Project No: 17-3830-11

Surveyor(s): GRS MKS

Building Name/Number: 2

Facility Usage: RESV. Training

Floor	HMG #	Material Description	Location	Qty	CR	DM	%	FR	EP	PE
2	9.1	≤6" BLOCK PI	Rm 20	12 LF	2	2 LF	Y	Y	2	OW
2	10.1	≤6" HMF	Rm 20	2 EA	2	1 EA	Y	Y	2	OW
2	46.1	DEBRIS	N. WALL, W. SIDE Rm 20	4 SF	.1	4 SF	Y	Y	1	OW
2	9.1	≤6" BLOCK PI	Rm 35	9 LF	3	0	Y	N	3	OW
2	10.1	≤6" HMF	Rm 35	3 EA	3	0	Y	N	3	OW
2	20.7	9"x9" Green & BLK VFT.	Rm 35	420 SF	3	0	Y	N	3	OW
2	21.7	BLK FLOOR TILE MASTIC	Rm 35	420 SF	3	0	Y	N	3	CO
2	29.1	CAB PANEL	Rm 278	912 SF	3	0	Y	N	3	OT
2	13.1	≤6" COMP. PI	Rm 278	43 LF	2	2 LF	Y	Y	2	OW
2	14.1	≤6" HMF	Rm 278	4 EA	3	0	Y	N	3	OW
3	9.1	≤6" BLOCK PI	OVER Rm's 39, 23, 13, 11	130 LF	2	25 LF	Y	Y	2	CO
3	10.1	≤6" HMF	OVER Rm's 39, 23, 13, 11	20 EA	2	8 EA	Y	Y	2	CO
3	46.1	DEBRIS	OVER Rm's 39, 23, 13, 11	50 SF	1	50 SF	Y	Y	1	CO
3	1.0	CEILING TEXT. OVERSPRAY	ATTIC FROM Rm 41 TO 1 THROUGHOUT ATTIC ON FLEX CONDUIT	500 LF	2	0	N	Y	2	CO

LEGEND:

Qty. = Quantity		CR = Condition Rating		DM = Damage Quantity		% = Percentage & Type Asbestos		FR = Friable		EP = Exposure Potential		PE = Personnel Exposed	
SF	Sq. Ft.	1	Poor	SF	Square Ft	C	Chrysotile	Y	Yes	1	High	GP	General Public
LF	Lineal Ft	2	Moderate	LF	Lineal Ft	A	Amosite	N	No	2	Moderate	OW	Office Worker
EA	Each	3	Good	EA	Each	T	Tremolite			3	Low	JA	Janitor
						AC	Actinolite					CO	Contractor
						CR	Crocidolite					AL	All
						AN	Anthophyllite						

MATERIAL AREA SPREADSHEET
(Type 1)

Alpha Engineering Group, Inc.

Date: 5-11-93

Project Name: NSPS, Seattle Comprehensive Asbestos Survey

Project No: 17-3830-11

Surveyor(s): GRS MKS

Building Name/Number: 2

Facility Usage: RESV TRAINING

Floor	HMG #	Material Description	Location	Qty	CR	DM	%	FR	EP	PE
2	29.1	CAB PANEL (HEAT SHIELD)	ON COFFEE POT STAND, RM 36	10 SF	3	0	Y	N	3	OW
2	27.1	12" X 12" GLUED CT	RM'S 1 & 4	880 SF	3	0	N	Y	3	OW
2	28.1	CT GLUE	RM'S 1 & 4	880 SF	3	0	Y	N	3	CO
PENTHOUSE	29.1	CAB PANELS	PENTHOUSE 1-4	1400 SF	3	0	Y	N	3	CO
PENTHOUSE	9.1	≤6" BLOCK PI	PENTHOUSE 1-4	39 LF	1	39 LF	Y	Y	1	CO
PENTHOUSE	10.1	≤6" HMF	PENTHOUSE 1-4	22 EA	1	22 EA	Y	Y	1	CO
PENTHOUSE	46.1	DEBRIS	PENTHOUSE 1-4	520 SF	1	520 SF	Y	Y	1	CO
EXTERIOR	29.2	CORR. CAB	EXTERIOR, FL. 1-3 & PENTHOUSES	14,770 SF	3	20 SF	Y	N	3	OT
EXTERIOR	29.1	CAB PANELS	EXTERIOR W. SIDE OF BLDG	250 SF	3	0	Y	N	3	OT
2	47.2	WINDOW PUTTY	N. WALL RM 224	2 EA	3	0	Y	N	1	AL
ROOF	38.2	ROLLED ROOFING	OVER RM 249, E. BAY 100		3	0	Y	N	3	CO

LEGEND:

Qty. = Quantity
SF Sq. Ft
LF Lineal Ft
EA Each

CR = Condition Rating
1 Poor
2 Moderate
3 Good

DM = Damage Quantity
SF Square Ft
LF Lineal Ft
EA Each

% = Percentage & Type Asbestos
C Chrysotile
A Amosite
T Tremolite
AC Actinolite
CR Crocidolite
AN Anthophyllite

FR = Friable
Y Yes
N No

EP = Exposure Potential
1 High
2 Moderate
3 Low

PE = Personnel Exposed
GP General Public
OW Office Worker
JA Janitor
CO Contractor
AL All

APPENDIX 5

BULK SAMPLE DATA SHEETS

BULK SAMPLE DATA SUMMARY AND CHAIN OF CUSTODY RECORD

Alpha Engineering Group, Inc.

Date: 4-26-93

305605

Project Name: NSPS, Seattle
Comprehensive Asbestos Survey

Project No: 17383011

Surveyor(s): EXE

Building Name/Number: 2

Facility Usage: Reserve Training

MKS

Sample No.	HMG #	Material Description	Sample Location	Asbestos Detected Yes	Asbestos Detected No
001	9.1	Block PI (<6")	S.W. Corner Room 155	45%A 8%C	
002	11.1	Corrugated PI (<6")	S.W. Corner of Room 155	65%C	
003	12.1	HMF A/W Corr. PI	S.W. Corner of Room 155	35%A 20%C	
004	13.1	Comp. PI	S. Wall of Room 155 in Loft	12%C	
005	14.1	HMF A/W Comp. PI	S. Wall of Room 155 in Loft	30%A 30%C	
006	14.1	HMF A/W Comp PI	E. Wall of Room 155 in Loft	30%A 35%C	
007	13.1	Comp PI	E. Wall of Room 155 in Loft	5%C	
008	46.1	Block P.I Debris	N.E. Corner Room 155 Loft	40%A 25%C	
009	46.1	Block PI Debris	S.E. Corner Room 155 Loft	15%A 10%C	
010	47.1	Window Putty	E. Wall Room 155	0	✓
011	47.1	Window Putty	S.W. Room 155	0	✓
012	20.1	12X12 Brown VFT	Doorway to Room 160B	6%C	

LEGEND

Yes
- C = Chrysotile
- A = Amosite
- T = Tremolite
- AC = Actinolite
- CR = Crocidolite
- AN = Anthophyllite

No
- X = None Detected

CHAIN OF CUSTODY RECORD

Page 1 of 11

Turnaround: ____ Rush ____ 3 day ____ 24 hr ✓ 5 day

PLM Analysis
Fax Results
Dispose of Samples After 6 Months

	Name	Date	Time		Name	Date	Time
Relinquished by:	Michael [signature]	5-12-93	1600	Received by:	[signature]	5/12/93	1600
Relinquished by:	[signature]	5/13/93	1200	Received by:	[signature]	5/17/93	
Relinquished by:				Received by:			

BULK SAMPLE DATA SUMMARY AND CHAIN OF CUSTODY RECORD

Alpha Engineering Group, Inc.

Date: 4-26-93

Project Name: NSPS, Seattle
Comprehensive Asbestos Survey

Project No: 17383011

305605

Surveyor(s): EXE

Building Name/Number: 2

Facility Usage: Reserve Training

MKS

Sample No.	HMG #	Material Description	Sample Location	Asbestos Detected Yes	Asbestos Detected No
	21.1	~~Brown~~ ~~yellow~~ VFT MASTIC	DOORWAY to Room 160 B	O	✓
013	20.1	12X12 BROWN VFT	N.E. Corner of Room 160	4%C	
	21.1	yellow VFT MASTIC	N.E. Corner of Room 160	O	✓
014	20.2	12X12 TAN VFT	N.E. Corner of Room 161	2%C	
	21.2	BROWN VFT MASTIC	N.E. Corner of Room 161	O	✓
015	20.2	12X12 TAN VFT	W wall of Room 161	2%C	
		BROWN VFT MASTIC	W. WALL of Room 161	O	✓
016	10.1	HMF A/W Block PI	E wall of room 161A	35%A 30%	
017	9.1	Block PI	E WALL of Room 161A	35%A 30%	
018	11.1	CORK. PI	S. WALL of Room 161A	60%C	
019	11.1	CORK. PI	S. WALL of Room 161A (QC)	37%C	
020	12.1	HMF A/W CORK. P.I.	S.W. Corner of Room 161A	40%A 30%C	

EGEND

'es
- C = Chrysotile
- A = Amosite
- T = Tremolite
- AC = Actinolite
- CR = Crocidolite
- AN = Anthophyllite

lo
- X = None Detected

CHAIN OF CUSTODY RECORD

Page 2 of 11

Turnaround: ____ Rush ____ 3 day; ____ 24 hr ✓ 5 day

PLM Analysis
Fax Results
Dispose of Samples After 6 Months

	Name	Date	Time		Name	Date	Time
Relinquished by:	Michael Arnold	5-12-93	1600	Received by:	R. Lindenwood	5/12/93	1600
Relinquished by:	R. Lindenwood	5/13/93	1200	Received by:	Lindsay Ayers	5/17	
Relinquished by:				Received by:			

BULK SAMPLE DATA SUMMARY AND CHAIN OF CUSTODY RECORD

Alpha Engineering Group, Inc.

Date: 4-26-93

305605

Project Name: NSPS, Seattle
Comprehensive Asbestos Survey

Project No: 17383011

Surveyor(s): EXE

Building Name/Number: 2

Facility Usage: Reserve Training

MKS

Sample No.	HMG #	Material Description	Sample Location	Asbestos Detected Yes	Asbestos Detected No
021	24.1	Plaster	Room 168, N. End of Sink Chase	0	✓
022	15.1	HMF a/w Fiberglass PI	S.W. Corner of Room 168	0	✓
023	15.1	HMF a/w Fiberglass PI	S. Wall of Room 168	0	✓
024	23.1	Drywall	S. Wall of Room 170	0	✓
025	29.1	Cement Asbestos Board	N.W. Corner of Room 155 (ceiling)	40%C	
026	29.1	Cement Asbestos Board	W. Wall of Room 109	40%C	
027	29.2	Corrugated Cement Asbestos Board	W. Wall of Room 109	30%C	
028	20.3	12x12 Beige VFT	N. Wall of Room 163	0	✓
	21.3	Black VFT Mastic	N. Wall of Room 163	0	✓
029	20.3	12x12 Beige VFT	S.E. Corner Room 163	0	✓
	21.3	Black VFT Mastic	S.E. Corner of Room 163	0	✓
030	20.3	12x12 Beige VFT	S.E. Corner of Room 163	0	✓

LEGEND

Yes
- C = Chrysotile
- A = Amosite
- T = Tremolite
- AC = Actinolite
- CR = Crocidolite
- AN = Anthophyllite

No
- X = None Detected

CHAIN OF CUSTODY RECORD

Page 3 of 11

Turnaround: ____ Rush ____ 3 day; ____ 24 hr ✓ 5 day

PLM Analysis
Fax Results
Dispose of Samples After 6 Months

Relinquished by: [illegible] 5-12-93 1600 (Name / Date / Time)
Received by: [illegible] 5/12/93 1600 (Name / Date / Time)

Relinquished by: [illegible] 5/12/93 1200 (Name / Date / Time)
Received by: [illegible] 5/17 (Name / Date / Time)

Relinquished by: ____ (Name / Date / Time)
Received by: ____ (Name / Date / Time)

BULK SAMPLE DATA SUMMARY AND CHAIN OF CUSTODY RECORD

Alpha Engineering Group, Inc.

Date: 4-27-93

305605

Project Name: NSPS, Seattle
Comprehensive Asbestos Survey

Project No: 17383011

Surveyor(s): EXE MKS

Building Name/Number: 2

Facility Usage: Reserve Training

Sample No.	HMG #	Material Description	Sample Location	Asbestos Detected Yes	Asbestos Detected No
	20.3	Black VFT Mastic	Doorway to Room 160B	0	✓
031	20.4	9X9 Black VFT	Room 3-A	20%C	
	21.4	Brown VFT Mastic	Room 3-A	0	✓
032	20.4	9X9 Black VFT	Room 3-A	20%C	
	21.4	Brown VFT Mastic	Room 3-A	0	✓
033	20.5	9X9 Brown VFT	S. Stairwell Landing	25%C	
	21.5	Black VFT Mastic	S. Stairwell Landing	35%C	
034	20.5	9X9 Brown VFT	Room 275	30%C	
	21.5	Black VFT Mastic	Room 275	35%C	
035	20.6	12X12 White VFT	N.W. Corner of Room 101	0	✓
	21.6	Black VFT Mastic	N.W. Corner of Room 101	30%C	
036	20.6	12X12 White VFT	E. Wall of Room 113	0	✓
	21.6	" " "	" " "	10%C	

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LEGEND

Yes
- C = Chrysotile
- A = Amosite
- T = Tremolite
- AC = Actinolite
- CR = Crocidolite
- AN = Anthophyllite

No
- X = None Detected

CHAIN OF CUSTODY RECORD

Turnaround: ____ Rush ____ 3 day; ____ 24 hr ____ 5 day

PLM Analysis
Fax Results
Dispose of Samples After 6 Months

	Name	Date	Time
Relinquished by:	[illegible]	5-11-93	1600
Relinquished by:	[illegible]	5/13/93	1200
Relinquished by:			
Received by:	[illegible]	5/12/93	1600
Received by:	[illegible]		
Received by:			

BULK SAMPLE DATA SUMMARY AND CHAIN OF CUSTODY RECORD

Alpha Engineering Group, Inc.

Date: 4-27-93

Project Name: NSPS, Seattle
Comprehensive Asbestos Survey

305606

Project No: 17383011

Surveyor(s): EXE

Building Name/Number: 2

Facility Usage: Reserve Training

MKS

Sample No.	HMG #	Material Description	Sample Location	Asbestos Detected Yes	Asbestos Detected No
	21.6	Black VFT Mastic	E. Wall of Room 113	10%C	
037	33.1	Brown/Black Cove Base Mastic	W. wall of Room 113	4%C	
038	33.1	Brown/Black Cove Base Mastic	N. Wall of Room 113	5%C	
039	10.2	HMF A/W Block PI (>6-10")	N. wall of Room 122	40%C	
040	9.2	Block PI (>6-10")	N. wall of Room 122	5%A 35%C 3%CR	
041	10.2	HMF A/W Block PI (>6-10")	N. Wall of Room 122	20%A 30%C	
042	9.2	Block PI (>6-10")	Center Section of Room 122	50%	
043	24.1	Wall/Ceiling Plaster	W. Side of Room 134	0	✓
044	15.1	HMF A/W Fiberglass PI	N. wall of Room 140	25%A	
045	15.1	HMF A/W Fiberglass PI	E. Wall, N. Section of Room 140	4%C	
046	10.2	HMF A/W Block PI (>6-10")	N.E. Corner of Room 140	80%C	
047	10.2	HMF A/W Block PI (>6-10")	N.E. Corner of Room 140	1%A 25%C	

LEGEND

Yes
- C = Chrysotile
- A = Amosite
- T = Tremolite
- AC = Actinolite
- CR = Crocidolite
- AN = Anthophyllite

No
- X = None Detected

CHAIN OF CUSTODY RECORD

Turnaround: ____ Rush ____ 3 day ____ 24 hr ✓ 5 day

PLM Analysis
Fax Results
Dispose of Samples After 6 Months

Relinquished by: Michael B. Smith 5-12-93 1600 (Name / Date / Time)
Received by: [illegible] 5/12/93 1600 (Name / Date / Time)

Relinquished by: [illegible] 5/12/93 1200 (Name / Date / Time)
Received by: Lindy [illegible] 5/14 (Name / Date / Time)

Relinquished by: ____ (Name / Date / Time)
Received by: ____ (Name / Date / Time)

BULK SAMPLE DATA SUMMARY AND CHAIN OF CUSTODY RECORD

Alpha Engineering Group, Inc.

Date: 4-29-93

305666

Project Name: NSPS, Seattle
Comprehensive Asbestos Survey

Project No: 17383011

Surveyor(s): EXE
MKS

Building Name/Number: 2

Facility Usage: Reserve Training

Sample No.	HMG #	Material Description	Sample Location	Asbestos Detected Yes	Asbestos Detected No
048	20.7	9x9 Green VFT	S.W. Corner of Room 124	4%C	
	21.7	Black VFT Mastic	S.W. Corner of Room 124	5%C	
049	27.1	Glue-on CT	W. wall of Room 128	0	✓
	28.1	CT Glue	West wall of Room 128	2%C	
050	27.1	Glue-on CT	E. wall of Room 128	0	✓
	28.1	CT Glue	E. wall of Room 128	3%	
051	47.1	Window Putty	W. wall of Room 130	0	✓
052	20.7	9x9 Green VFT	W. wall of Room 142	6%C	
	21.7	Black VFT Mastic	W. wall of Room 142	10%C	
053	51.1	Contact Shield	N. wall of Room	15%C	
054	51.1	Contact Shield	N. wall of Room	20%C	
055	9.3	Block PI >10"	S. Section of Room 146	35%C	

LEGEND

Yes
- C = Chrysotile
- A = Amosite
- T = Tremolite
- AC = Actinolite
- CR = Crocidolite
- AN = Anthophyllite

No
- X = None Detected

CHAIN OF CUSTODY RECORD

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Turnaround: ____ Rush ____ 3 day ____ 24 hr ✓ 5 day

PLM Analysis
Fax Results
Dispose of Samples After 6 Months

Relinquished by: [signature] 5-12-93 1600 (Name / Date / Time) Received by: [signature] 5/12/93 1600 (Name / Date / Time)

Relinquished by: [signature] 5/13/93 1200 (Name / Date / Time) Received by: [signature] 5/14 (Name / Date / Time)

Relinquished by: ____ (Name / Date / Time) Received by: ____ (Name / Date / Time)

BULK SAMPLE DATA SUMMARY AND CHAIN OF CUSTODY RECORD

Alpha Engineering Group, Inc.

Date: 4-29-93

Project Name: NSPS, Seattle
Comprehensive Asbestos Survey

305604

Project No: 17383011

Surveyor(s): EXE

Building Name/Number: 2

Facility Usage: RESERVE TRAINING

MKS

Sample No.	HMG #	Material Description	Sample Location	Asbestos Detected Yes	Asbestos Detected No
056	10.3	HMF A/W Block PI >10"	S. Section of Room 146	35.7%C	
057	9.3	Block PI >10"	Room 126A, Center of Room	45%C	
058	10.3	HMF A/W Block PI >10"	Center of Room 126A	65%	
059	10.3	HMF A/W Block PI >10"	Center of Room 126A	65%	
060	34.1	VJC	Room 126 at Door to Room 126A	80%C	
061	34.1	VJC	Room 126 at Door to Room 126A	80%C	
062	11.1	CORR PI	Room 121, over Room 120	65%C	
063	12.1	HMF A/W CORR PI	Room 121, over Room 120	60%C	
064	11.1	CORR PI	Room 121, over Room 120	65%C	
065	12.1	HMF A/W CORR PI	Room 121, over Room 120	5%A 50%C	
066	20.8	12x12 Brown VFT	Room 202 Door to Room 220	6%C	
	21.8	Black VFT Mastic	Room 202, Door to Room 220	20%C	

LEGEND

Yes
- C = Chrysotile
- A = Amosite
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- AC = Actinolite
- CR = Crocidolite
- AN = Anthophyllite

No
- X = None Detected

CHAIN OF CUSTODY RECORD

Turnaround: ____ Rush ____ 3 day ____ 24 hr ____ 5 day

PLM Analysis
Fax Results
Dispose of Samples After 6 Months

Relinquished by: [illegible] 5-12-93 1600 (Name / Date / Time)
Received by: [illegible] 5/12/93 1600 (Name / Date / Time)

Relinquished by: [illegible] 5/12/93 1200 (Name / Date / Time)
Received by: [illegible] 5/14 (Name / Date / Time)

Relinquished by: ____ (Name / Date / Time)
Received by: ____ (Name / Date / Time)

BULK SAMPLE DATA SUMMARY AND CHAIN OF CUSTODY RECORD

Alpha Engineering Group, Inc.

Date: 4-29-93

Project Name: NSPS, Seattle
Comprehensive Asbestos Survey

Project No: 17383011 305606

Surveyor(s): EXE

Building Name/Number: 2

Facility Usage: Reserve Training MKS

Sample No.	HMG #	Material Description	Sample Location	Asbestos Detected Yes	Asbestos Detected No
067	20.8	12X12 Brown VFT	Doorway to Room 229	6%C	
	21.8	Black VFT Mastic	Doorway to Room 229	0	✓
068	20.9	12X12 Brown VFT	W. Wall of Room 242	0	✓
	21.9	Black VFT Mastic	W. Wall of Room 242	15%C	
069	22.1	Brown Linoleum	W. Wall of Room 242	2%C	
070	22.2	Brown Jute Back linoleum	S.E. Corner of Room 241	0	✓
071	22.2	Brown Jute Back linoleum	N.W. Corner of Room 241	0	✓
072	22.1	Brown Linoleum	S.W. Corner of Room 251	0	✓
073	20.9	12X12 Brown VFT	E. Doorway of Room 256	20%C	
	21.9	Black VFT Mastic	E. Doorway to Room 256	0	✓
074	24.1	Ceiling Plaster	S. Section of Room 201	0	✓
075	27.1	12X12 Glue-on CT	N. Wall of Room 222	0	✓

LEGEND

Yes
- C = Chrysotile
- A = Amosite
- T = Tremolite
- AC = Actinolite
- CR = Crocidolite
- AN = Anthophyllite

No
- X = None Detected

CHAIN OF CUSTODY RECORD

Turnaround: ____ Rush ____ 3 day; ____ 24 hr ✓ 5 day

PLM Analysis
Fax Results
Dispose of Samples After 6 Months

Relinquished by: [signature] 5-12-93 1600 (Name / Date / Time)
Received by: [signature] 5/12/93 1600 (Name / Date / Time)

Relinquished by: [signature] 5/13/93 1200 (Name / Date / Time)
Received by: [signature] 5/14 (Name / Date / Time)

Relinquished by: ____ (Name / Date / Time)
Received by: ____ (Name / Date / Time)

BULK SAMPLE DATA SUMMARY AND CHAIN OF CUSTODY RECORD

Alpha Engineering Group, Inc.

Date: 5-4-93

Project Name: NSPS, Seattle
Comprehensive Asbestos Survey

Project No: 17383011

Surveyor(s): EXE
MKS

Building Name/Number: 2

Facility Usage: Reserve Training

Sample No.	HMG #	Material Description	Sample Location	[illegible]	[illegible]
	28.	CT Glue	N. Wall of Room 222	0	✓
076	47.2	Window Putty	N. Wall of Room 224	2%C	
077	25.1	2X4 Lay-in CT	Center of Room 203A	0	✓
078	25.2	2X4 Lay-in CT	Center of Room 203	0	✓
079	25.2	2X4 Lay-in CT	Room 200 at door to 230	0	✓
080	25.1	2X4 Lay-in CT	Room 204 At Room 233	0	✓
081	25.3	2X4 Lay-in CT	N.E. Corner of Room 232	0	✓
082	25.3	2X4 Lay-in CT	S.E. Corner of Room 232B	0	✓
083	8.1	Tank insulation	Attic over Room 243	32%C	
084	8.1	Tank insulation	Attic over Room 243	18%C	
085	51.2	Elevator Electrical Panel	Elevator Mech. Room	40%C	
086	51.2	Elevator Electrical Panel	Elevator Mech. Room	30%C	

LEGEND

Yes
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- AC = Actinolite
- CR = Crocidolite
- AN = Anthophyllite

No
- X = None Detected

CHAIN OF CUSTODY RECORD

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Turnaround: ____ Rush ____ 3 day ____ 24 hr ✓ 5 day

PLM Analysis
Fax Results
Dispose of Samples After 6 Months

Relinquished by: [signature] 5-12-93 1600 (Name / Date / Time) Received by: [signature] 5/12/93 1600 (Name / Date / Time)

Relinquished by: [signature] 5/13/93 1200 (Name / Date / Time) Received by: (Name / Date / Time)

Relinquished by: (Name / Date / Time) Received by: (Name / Date / Time)

BULK SAMPLE DATA SUMMARY AND CHAIN OF CUSTODY RECORD

Alpha Engineering Group, Inc.

Date: 05-11-93

Project Name: NSPS, Seattle
Comprehensive Asbestos Survey

Project No: 17383011

Surveyor(s): GRS MKS

Building Name/Number: 2

Facility Usage: RESV. TRAINING

Sample No.	HMG #	Material Description	Sample Location	Asbestos Detected Yes	Asbestos Detected Inc.
087	20.12	12"x12" GREEN VFT	W. SIDE OF Rm 41	39%C	
	21.12	BLACK FLOOR TILE MASTIC	W. SIDE OF Rm 41	15%C	
088	20.12	12"x12" GREEN VFT	OUTSIDE OF RM 39	2%C	
	21.12	BLK FLOOR TILE MASTIC	OUTSIDE OF Rm 39	15%C	
089	1.0	CEILING TEXTURE	OVER Rm 20	0	
090	1.0	CEILING TEXTURE	OVER Rm 20	0	✓
091	1.0	CEILING TEXTURE	N. SIDE OF Rm 21	0	✓
092	20.11	12"x 12" BEIGE VFT	W. SIDE OF Rm 12	15%C	
	21.11	BLK. FLOOR TILE MASTIC	W. SIDE OF Rm 12	30%C	
093	20.11	12"x12" BEIGE VFT	STAIRWELL E. OF Rm 35	15%C	
	21.11	BLK FLOOR TILE MASTIC	STAIR WELL E. OF Rm 35	20%C	
094	22.2	BLK STAIR TREAD	STAIRWELL E. OF Rm 35	0	✓

LEGEND

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No
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CHAIN OF CUSTODY RECORD

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Turnaround: ____ Rush ____ 3 day; ____ 24 hr ✓ 5 day

PLM Analysis
Fax Results
Dispose of Samples After 6 Months

Relinquished by: [signature] 5-12-93 1600 — Name / Date / Time
Received by: [signature] 5/12/93 1600 — Name / Date / Time

Relinquished by: [signature] 5/13/93 1200 — Name / Date / Time
Received by: ____ Name / Date / Time

Relinquished by: ____ Name / Date / Time
Received by: ____ Name / Date / Time

BULK SAMPLE DATA SUMMARY AND CHAIN OF CUSTODY RECORD

Alpha Engineering Group, Inc.

Date: 5-11-93

Project Name: NSPS, Seattle
Comprehensive Asbestos Survey

Project No: 17383011

Surveyor(s): GRS

Building Name/Number: 2

Facility Usage: RESV. TRAINING

MKS

Sample No.	HMG #	Material Description	Sample Location	Asbestos Detected Yes	Asbestos Detected No
095	22.2	STAIR TREAD	STAIRWELL E. OF RM 35	0	✓
096	23.1	GWB (DRYWALL)	EAST WALL OF RM 267	0	✓
097	23.1	GWB (DRYWALL)	HALL OUTSIDE RM 211	0	✓
098	38.1	ROLLED ROOFING	OVER HALL 19 (ROOF)	0	✓
099	38.2	ROLLED ROOFING	OVER EAST END BAY 100 (ROOF)	2% C.	✓
100	38.2	ROLLED ROOFING	OVER RM 249 (ROOF)	2% C	
101	38.1	ROLLED ROOFING	OVER RM 233 (ROOF)	0	✓

LEGEND

Yes
- C = Chrysotile
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- CR = Crocidolite
- AN = Anthophyllite

No
- X = None Detected

CHAIN OF CUSTODY RECORD

Turnaround: ____ Rush ____ 3 day ____ 24 hr ✓ 5 day

PLM Analysis
Fax Results
Dispose of Samples After 6 Months

Relinquished by: [signature] 5-12-93 1600 (Name / Date / Time)

Received by: [signature] 5/12/93 1600 (Name / Date / Time)

Relinquished by: [signature] 5/13/93 1200 (Name / Date / Time)

Received by: (Name / Date / Time)

Relinquished by: (Name / Date / Time)

Received by: (Name / Date / Time)