Phase 2 Environmental Assessment of the Government Hill Wireless Station

Prepared by

EHS Alaska, Inc.

and

Shannon & Wilson, Inc.

December 11, 1997

Incorporated by reference as
Appendix E to the Government Hill Wireless Station
Historic Structure Report (HSR)



PHASE 2 ENVIRONMENTAL SITE ASSESSMENT GOVERNMENT HILL WIRELESS STATION 132/140 EAST MANOR AVENUE ANCHORAGE, ALASKA

Prepared for the
U.S. Department of the Interior
General Services Administration
And
The United States Geological Survey

Prepared by



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December 11, 1997

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EXECUTIVE SUMMARY

PHASE 2 ENVIRONMENTAL SITE ASSESSMENT GOVERNMENT HILL WIRELESS STATION 132/140 EAST MANOR AVENUE ANCHORAGE, ALASKA

INTRODUCTION

The Government Hill Wireless Station site and buildings located at 132/140 East Manor Avenue, in Anchorage, Alaska, were surveyed as part of a Phase 2 Environmental Site Assessment. The hazardous materials survey of the buildings was conducted by EHS-Alaska, Inc. The tank removal and subsurface soil investigation was conducted by Shannon & Wilson, Inc. The attached report contains the full details of the Phase 2 Environmental Site Assessment.

The floor structure has failed in portions of all three buildings and further rapid deterioration of the floor structure is anticipated due to the wet condition of the crawl spaces. The roofing at the chimneys of Buildings 1 and 2 was damaged by snow movement, and all three buildings are being damaged by water infiltration. Repair work to the structures will require disturbance of hazardous materials. A specific survey including destructive investigation for hazardous materials should be performed as part of the design work for any future repair work.

HAZARDOUS MATERIALS INSIDE THE BUILDINGS

Lead-containing paints were found on the interior and exterior of each building.

Fluorescent light ballasts in each building were found to contain polychlorinated biphenyls (PCBs). Other chemical hazards include the following mercury containing items: switches, thermostats and fluorescent light fixture tubes.

Asbestos-containing materials (ACM) were found in each building, typically including joint compound of the wall and ceiling finishes, flooring materials, cement asbestos board, roofing materials, and pipe insulation. The majority of the ACM was non-friable and not likely to release asbestos fibers unless disturbed. Friable ACM materials (considered to be more hazardous because they can be crushed and reduced to powder by hand pressure) were found in each building, but in smaller quantities.

The following non-friable asbestos-containing materials were found in Building #1: Red 12"x12" floor tile, cement asbestos board, wire insulation, sheet vinyl flooring, and roofing materials. The friable ACM found in Building 1 included pipe insulation in the crawl space of the west wing, furnace gaskets and furnace refractory insulation.

The following non-friable asbestos-containing materials were found in Building #2: Joint compound of gypsum wall board walls and ceilings, dark brown 9"x9" floor tile, cement asbestos

board, and roofing materials. The friable ACM found in Building 2 included pipe insulation in the crawl space, furnace gaskets, furnace refractory insulation and loose asbestos paper in the attic.

The following non-friable asbestos-containing materials were found in Building #3:, Joint compound of cellulose board walls and ceilings in north addition, joint compound of gypsum wall board walls and ceilings in south addition, cement asbestos board, and roofing materials. The friable ACM found in Building 3 included furnace and boiler gaskets, furnace and boiler refractory insulation, and pipe insulation in the basement and crawl space.

SUBSURFACE SITE INVESTIGATION AND TANK REMOVAL

Four soil borings were drilled in July and August 1997 at locations that were chosen to assess the potential impact on the property by the sources identified in the Phase 1 Environmental Site Assessment. Three borings were approximately 17 feet deep and one boring was extended to 39.5 feet, approximately 1 foot below the groundwater level. The three shallow borings did not contain concentrations of petroleum hydrocarbons or hazardous substances exceeding the applicable cleanup criteria. The deep boring contained concentrations of Diesel Range Organics (DRO) and methylene chloride above the applicable federal and state cleanup criteria in the soil and the groundwater at the groundwater level. The presence of contamination in the soil at the groundwater depth as well as in the groundwater raised the cleanup criteria for the site to Category A, (the most restrictive) according to Alaska Department of Environmental Conservation (ADEC) guidelines.

A dry well located at the north end of Building #1 (previously used as a garage) was investigated and contaminated soil was located at a depth of about 3 feet and likely to be deeper to an unknown depth. The concentrations of DRO and Residual Range Organics (RRO) were above the applicable cleanup criteria. The concentrations of polychlorinated biphenyls (PCBs) and lead in soil at the dry well were below the applicable cleanup criteria, but will greatly impact the cost of cleanup and disposal.

Two 500 gallon and one 300 gallon underground storage tanks (USTs) were removed in September 1997 from the site. Heating oil was removed from each of the tanks prior to tank removal. Samples from undisturbed soil surrounding each of the tanks were above the applicable cleanup criteria for DRO, and two samples from the soil around Tank 3 contained concentrations of benzene which were above the applicable cleanup criteria.

Refer to the attached Phase II Site Assessment report produced by Shannon & Wilson for more information on the tank removal and subsurface soil investigation. Due to the presence of documented contamination at the site, and most importantly in the groundwater, the Alaska Department of Environmental Conservation requires immediate notification of these results. At your request we will submit a copy of the Phase II report to the appropriate ADEC representative.

HAZARDOUS MATERIALS SURVEY REPORT GOVERNMENT HILL WIRELESS STATION 132/140 EAST MANOR AVENUE ANCHORAGE, ALASKA

PART 1, SURVEY INFORMATION

The Government Hill Wireless Station facilities located at 132/140 East Manor Avenue, in Anchorage, Alaska, was surveyed for the presence of asbestos-containing materials (ACM), lead-containing materials (LCM), and Chemical Hazards including Polychlorinated Biphenyls (PCBs). The inspection was conducted in September 1997 by Robert French of EHS-Alaska, Inc.

1.01 SITE COMPLEX DESCRIPTION

The Government Hill Wireless Station was originally constructed in 1917 by the Alaska Engineering Commission which is now the Alaska Railroad Corporation. The Wireless Station is listed on the Alaska Heritage Resources Survey and has been nominated for the National Register of Historic Places (NRHP). The Wireless Station served as the only communication link between Anchorage and the outside world until 1931. The Wireless Station was transferred to the Alaska Communication System in 1936, to the U.S. Army in 1952, and to the U.S. Air Force in 1962. Following the sale of the Alaska Communication System to RCA Alaska Communications, Inc. (RCA/Alascom) the site was leased to RCA from 1971 to 1976. The property was declared excess to the General Services Administration (GSA) in 1976 and GSA transferred the property to the United States Geological Survey (USGS) in 1976. The USGS occupied the buildings until 1985, and used it primarily as cold storage for drilling cores until 1994. The construction dates for the three buildings and their additions are in conflict from several different sources. The buildings are described separately below in Part 2.

1.02 STRUCTURAL CONCERNS

The crawl spaces of the buildings were typically shallow, unventilated and had dirt floors. Because the buildings have not been heated for the past decade or more, and because of additional stresses from storage of heavy drill cores of rock samples, portions of the floor structures are in advanced stages of decay caused by "dry-rot". The damage is limited, with areas in each building having failed. However, there is obvious evidence of further water damage presently occurring. There was water soaked subflooring in Building 2 with condensation and advanced visible fungal growth in the crawl spaces of all three buildings.

The lack of crawl space venting and water infiltration will require immediate attention to halt the on going deterioration. If deterioration is allowed to continue at it's present rate, more costly structural repairs may be required.

1.03 SURVEY OVERVIEW

The survey included comprehensive but limited bulk sampling of potentially hazardous materials. Because of the historic nature of the structures and the danger and difficulty of access, not all materials present in the building were sampled. Hazardous materials may exist which were not sampled. See part 1.05 below for more information on areas not surveyed.

The survey included sampling of materials suspected of containing asbestos, and sampling of painted materials to see if LCM was present. Nearly all surfaces in the buildings were coated with paint. The painted surfaces sampled included gypsum wall board, wood and metal surfaces.

1.04 ANALYSIS OVERVIEW

The suspected asbestos-containing materials were subjected to analysis using polarized light microscopy and dispersion staining (EPA method 600/M4-82-020). The asbestos content was reported as an estimated weight percentage. Asbestos samples were analyzed by RJ Lee Group, Inc. of San Leandro California, and Solar Environmental Services, Inc. of Anchorage, Alaska. Both laboratories are accredited by the National Voluntary Laboratory Accreditation Program (NVLAP) for bulk asbestos analysis. Only materials containing more than 1% total asbestos were classified as "asbestos-containing" based on Environmental Protection Agency (EPA) and Occupational Safety and Health Administration (OSHA) criteria.

The suspected lead-containing materials were subjected to analysis using digestion and atomic absorption (EPA method 7420). The lead content was reported as a weight percentage. Lead samples were analyzed by RJ Lee Group, Inc., of Monroeville Pennsylvania, an American Industrial Hygiene Association (AIHA) accredited laboratory.

1.05 AREAS NOT ACCESSED BY THIS SURVEY

Portions of the crawl spaces were not accessed during this survey because of the danger posed by the rotting timbers, and extremely limited space. The materials in those areas were assumed to be similar to the remainder of the surveyed areas. Because the survey included only limited destructive testing, materials inside walls, and ceiling/roof structures were typically not accessed by this survey.

The buildings had similar aluminum roofing installed within the past decade to prevent further deterioration of the building structures. That aluminum roofing had asbestos-containing sealants applied at penetrations. In all three buildings, the metal roofing had been installed over the existing roofing. Representative samples of the roofing materials were taken, however, not all areas of the existing roofing were accessible for inspection.

PART 2 BUILDING SURVEYS

2.01 DESCRIPTION OF BUILDING 1, "TEE SHAPED" BUILDING

The "Tee Shaped" building was reported to have been constructed in 1943 by the Black-Smith & Richards Appraisal Report. The 1990 Department of the Army Finding and Determination of Eligibility report listed the 3 buildings as having been constructed in 1930, 1934 and 1949, with no indication of which building was constructed at which time. The 1983 nomination to the NRHP listed the structure as being built prior to 1964. The presence of exterior siding between the west wing and the long section of the "Tee" and the changed structure in the attic and crawl space of the west wing indicate that the building may have been constructed in three phases. The initial phase appears to be the central section of the west wing, with the long garage and office section to the east and 18'-6" addition to the west being added prior to 1950. The concrete stem walls and slab with a "dry-well" to the north of the "Tee building" may indicate the presence of a carport or similar structure that has since been removed.

The long section of the "Tee" had poured concrete walls that extend up 4 feet from the concrete slab floor. The south portion of this building was renovated approximately in the early 1960's (based on millwork used) and had a wooden floor raised approximately 8 inches above the concrete slab, lowered gypsum board ceiling, and furred and insulated walls. The wood flooring in the south office had been covered with an asbestos-containing "peel-n-stick" type flooring. The east portion of the structure did not have any apparent structural damage, except where the roof thimble of the building furnace had been damaged by sliding snow. The joint compound of the south room in the long section of the "Tee" contained asbestos. The garage room of the north wing, did not have joint compound applied to the gypsum board. The joint compound of the furnace room did not contain asbestos.

The western wing of the building served most recently as a kitchen and service area and had gypsum board walls and ceilings, with asbestos-containing sheet vinyl flooring. The top layers of flooring may have concealed additional layers of flooring, as broken bits of vinyl asbestos tile were noted in the crawl space. The central area of the west wing had a dirt floored crawl space that was shallower than the west portion of the west wing. Part of the floor structure in the central portion of the west wing had sunk approximately 6 inches. The joint compound of the west wing contained asbestos.

Building 1 had an electric water heater located in the kitchen with exposed bare piping to the sink. The original iron domestic water piping in the central crawl space had been removed and replaced with uninsulated copper piping. There was friable asbestos-containing pipe insulation debris in that crawl space that is assumed to be associated with the removed piping.

Building 1 had been heated by a furnace located near the intersection of the "Tee". Ducts were concealed between the two ceiling surfaces in the south room, exposed below the upper ceiling in the north room, and were located in the attic space of the west wing. The air returned to the furnace through a wall grill. The oil fired furnace had been converted to gas probably at the same time as the other buildings, approximately 1980.

2.02 ASBESTOS SURVEY RESULTS, BUILDING 1

Asbestos field survey data sheets and laboratory reports are included as Appendix A. The drawing in Appendix C shows locations where the asbestos samples were taken. Refer to the field survey data sheets for additional sample information. The following table summarizes the asbestos survey results for Building 1.

Sample No.	Description/Location	Results
GH 997-1	Gypsum, mud & tape/S office, SE corner. Composite	<1% Chrysotile
	sample reported as <1% Chrysotile. Joint compound contained 2% Chrysotile.	(2% Chrysotile)
GH 997-2	Red brick pattern "self-stick", 12"x12" tile/S office at door	3 % Chrysotile
GH 997-3	Gypsum, mud & tape/Main S room, NE corner @ furnace room. Composite sample reported as <1% Chrysotile. Joint compound contained 2% Chrysotile.	<1% Chrysotile (2% Chrysotile)
GH 997-4	Cement fiber board/Furnace room, S wall	40% Chrysotile
GH 997-5	Gypsum, mud & tape/N room @ furnace room	None Detected
GH 997-6	Gypsum/N room, NW corner	None Detected
GH 997-7	Red brick pattern "self-stick" 12"x12" floor tile/S office @ W wall	4% Chrysotile
GH 997-8	Building paper/Exterior - under siding, SE corner	None Detected
GH 997-9	White, ropy gasket @ furnace/@ burner plate to furnace body	80% Chrysotile 5% Amosite
GH 997-10	White, waxy wire insul. /@ incand. light on fixture side	50% Chrysotile
GH 997-11	Rubbery wire insul. /@ incand. light on house side	None Detected
GH 997-12	Red woven wire insul. /@ fluor. light on fixture side	None Detected
GH 997-13	Gypsum, mud & tape/Behind door in toilet, W wing. Composite sample reported as <1% Chrysotile. Joint	<1% Chrysotile (2% Chrysotile)
GH 997-14	compound contained 2% Chrysotile. Light brown 1/4" chips SV /@ floor hatch in toilet, W wing	35% Chrysotile
GH 997-14 GH 997-15	Brown cove base mastic/Behind door in toilet, W wing	None Detected
GH 997-16	Tar paper underlayment/Between T+G & lap boards	None Detected
GH 997-10	White cardbd, pipe insul./In crawl space under toilet	85% Chrysotile
GH 997-17	Tar paper underlayment/Under toilet @ dry rot	None Detected
GH 997-19	White cardbd. pipe insul. /In crawl space off of pipe	95% Chrysotile
GH 997-19	Gray, jute backed linoleum/Patch on wall of toilet	None Detected
GH 997-20	Cove base & creamy mastic/W wing kitchen	None Detected
GH 997-22	Light brown 1/4" chip-sheet vinyl/@ hole in floor between west & east rooms, west wing	35% Chrysotile
GH 997-23	Cove base & creamy brown mastic/Middle room in W wing	None Detected
		- 20 P. D. V. V. BROZE B. D. S. CARLO D. C.
GH 997-24	Insul. @ incand. light & mastic/Kitchen, W wing	None Detected

Sample No.	Description/Location	Results
GH 997-26	Blown in mixed insul. /NW corner, kitchen	None Detected
GH 997-27	Brown crepe paper ceiling insul. /S side above kitchen	None Detected
GH 997-28	Blown in mixed insul. /Middle above kitchen	None Detected
GH 997-29	Gable end tar paper/W end of attic	None Detected
GH 997-30	Roof tar paper/Above hatch in kitchen	None Detected
GH 997-31	Brown crepe paper duct insul. /Above hatch in kitchen	None Detected
GH 997-32	Red & white floor tile with black mastic/In crawl space below kitchen	5% Chrysotile
GH 997-33	Roof tar paper/N wing above hatch	None Detected
GH 997-34	Blown in multi colored ceiling insul. /N wing, S of hatch	None Detected
GH 997-35	Blown in multi colored ceiling insul. /N wing, N of hatch	None Detected
GH 997-36	Celotex board ceiling/Above ceiling to S wing	None Detected
GH 997-37	Celotex board ceiling/Above ceiling to S wing	None Detected
GH 997-38	Window caulking/Furnace room window	<1% Chrysotile
GH 997-39	Black & gray roof patch/@ 3" pipe above kitchen	10% Chrysotile
GH 997-40	Black & silver roofing/Under metal roofing Composite sample contained 1% Chrysotile, Silver layer contained 10% Chrysotile.	1% Chrysotile
GH 997-41	Black & gray roof patching/@ elec. drop to Bldg. 1	15% Chrysotile
GH 997-Q1	Quality control sample to GH 997-2, Red brick pattern "self-stick", 12"x12" tile/S office at door	10% Chrysotile
GH 997-Q2	Quality control sample to GH 997-8, Building paper/Exterior - under siding, SE corner	None Detected
GH 997-Q3	Quality control sample to GH 997-28, Blown in mixed insul. /Middle above kitchen	None Detected

The following materials were found to contain asbestos:

M	aterial aterial	Asbestos content	
1.	Red brick pattern "self-stick", 12"x12" floor tile	4 % Chrysotile	
2.	Joint compound of gypsum wall board walls and ceiling of south and west wing	3% Chrysotile	
3.	Cement asbestos board on walls and ceiling of furnace room	40 % Chrysotile	
4.	Gaskets in furnace	80% Chrysotile	
		5% Amosite	
5.	High temperature wire insulation at incandescent light fixtures	50 % Chrysotile	
6.	Light brown 1/4" chips sheet vinyl flooring in west wing	35 % Chrysotile	
7.	White cardbd. pipe insulation in crawl space	95 % Chrysotile	
8.	Red vinyl asbestos tile, found in crawl space, assumed partly removed and concealed under sheet vinyl flooring in west wing	5 % Chrysotile	
9.	Roof patching compound on metal roofing	15 % Chrysotile	

The following materials were found to contain less than 1 percent asbestos:

1. Window caulking of older windows in north wing.

The following materials were assumed to contain asbestos:

- 1. Sealants on metal roofing.
- 2. Window caulking of west wing.
- 3. Concealed roofing materials.
- 4. Gaskets inside furnace, and concealed furnace refractory insulation.

2.03 LEAD SURVEY RESULTS, BUILDING 1

Lead field survey data sheets and laboratory reports are included as Appendix B. The drawing in Appendix C shows locations where lead samples were taken. Refer to the field survey data sheets for additional sample information. The following table summarizes the lead survey results for Building 1.

Sample No.	Description/Location	Results, % Lead
GH 997-L1	Green paint on gypsum/SE corner of S office	0.0603 %
GH 997-L2	Red paint, clear varnish on wood/@ floor, entry to S office	0.178 %
GH 997-L3	Gray & white paint on wood/S room @ rack supports	0.0718 %
GH 997-L4	White paint on gypsum/N room walls, NW corner	<0.013 % *
GH 997-L5	White paint on gypsum/S room ceiling, NW corner	0.00514 %
GH 997-L6	Green paint on wood trim/Behind door, W wing toilet	<0.012 % *
GH 997-L7	Green paint on gypsum/Behind door in toilet, W wing	<0.0055 % *
GH 997-L8	Exterior white paint on wood siding/SW corner of W wing	11.6 %
GH 997-L9	Ext. green trim paint on wood trim/NW corner of W wing	13.8 %
GH 997-L10	White paint on duct/Above furnace	7.48 %
GH 997-L11	White & silver paint on duct/@ branch to S wing	0.459 %
GH 997-L12	White & silver paint with silvery metal/@ joints of branch to S wing	27.7 %

^{* &}quot;<" indicates that the amount of lead present was less than the limit of detection for the analysis.

Interior finish materials typically contained detectable quantities of lead. The green paint in the west wing, and the white paint in the north wing contained less lead than the limit of detection for the analysis conducted.

The white and green exterior paints had high concentrations of lead.

Sample L12 appeared to contain solder from the joint of the ductwork, and therefore had a high concentration of lead.

Paints in Building 1 were typically in good condition, with peeling paint noted only in the west wing, and at the furnace chimney due to water leakage.

The following materials were assumed to contain lead, and were not sampled:

- 1. Solder joints of copper piping.
- 2. Lead flashing at roof penetrations.
- 3. Leaded joints of cast iron bell and spigot piping.

2.04 CHEMICAL HAZARDS SURVEY RESULTS, BUILDING 1

All types of fluorescent light fixtures were inspected at random for the presence of Poly chlorinated biphenyl (PCB) containing ballasts. None of the light ballasts in Building 1 had "NO PCBs" printed on their labels. Those ballasts are required by law to be assumed to contain PCBs unless they are tested (testing is more expensive than removal). Electrical switches and thermostats commonly contain mercury, as do fluorescent light tubes.

There was a total of 17, four tube fluorescent light fixtures and 1, two tube fluorescent light fixtures in Building 1.

2.05 DESCRIPTION OF BUILDING 2, NORTH BUILDING

The North Building was reported to have been constructed in 1943 by the Black-Smith & Richards Appraisal Report. The 1990 Department of the Army Finding and Determination of Eligibility report listed the 3 buildings as having been constructed in 1930, 1934 and 1949, with no indication of which building was constructed at which time. The 1983 nomination to the NRHP listed the structure as being built prior to 1964.

Building 2 was supported on wood timber pads with wood skirting that extended to the ground at the perimeter. The crawl space was partly ventilated by holes in the perimeter skirting, however the subflooring was saturated with water at the floor hatch in the furnace room. The center of the main room had been raised approximately 8 inches by differential movement. The remaining structure did not have any apparent structural damage, except where the roof thimble of the building furnace had been damaged by sliding snow.

Building 2 had asbestos-containing joint compound on the gypsum board walls and ceilings, with asbestos-containing vinyl tile flooring in the main room. The furnace room and former toilet had an older jute-backed linoleum flooring that did not contain asbestos. There was asbestos-containing pipe insulation on the cold water pipe in the crawl space. This pipe extended vertically out of the crawl space soil into the toilet room directly above. Building 2 did not have any hot water service.

Building 2 had been heated by a furnace located in the southwest furnace room. Uninsulated ducts were located in the attic space. The air returned to the furnace through a wall grill, with an additional air intake from the attic space. The oil fired furnace had been converted to gas

probably at the same time as the other buildings, approximately 1980. The attic was partly insulated with fiberglass and mineral wool insulation. Two sheets of friable asbestos-containing paper were noted in the attic space, and more may have been concealed under the insulation. The previous use of this paper was not apparent, but may have been used as a heat shield.

2.06 ASBESTOS SURVEY RESULTS, BUILDING 2

Asbestos field survey data sheets and laboratory reports are included as Appendix A. The drawing in Appendix C shows locations where the asbestos samples were taken. Refer to the field survey data sheets for additional sample information. The following table summarizes the asbestos survey results for Building 2.

Sample No.	Description/Location	Results
GH 997-42	Dark brown 9"x9" floor tile w/black mastic/NW corner	3% Chrysotile
GH 997-43	Gypsum, mud & tape/Center N. wall. Composite sample reported as <1% Chrysotile. Joint compound contained 3% Chrysotile.	<1% Chrysotile (3% Chrysotile)
GH 997-44	Dark brown 9"x9" floor/Center @ hump	3% Chrysotile
GH 997-45	Gypsum, mud & tape/Outside corner of furnace room. Composite sample reported as <1% Chrysotile. Joint compound contained 3% Chrysotile.	<1% Chrysotile (3% Chrysotile)
GH 997-46	Cement fiber board on wall/Furnace room wall	40% Chrysotile
GH 997-47	Window caulking/North window	1% Chrysotile
GH 997-48	Cement fiber board on floor/Under furnace	45% Chrysotile
GH 997-49	Rope gasket on RA side of furnace/Inside furnace	90% Chrysotile
GH 997-50	Gypsum, mud & tape/In toilet. Composite sample reported as <1% Chrysotile. Joint compound contained 3% Chrysotile.	<1% Chrysotile (3% Chrysotile)
GH 997-51	Soft gasket @ furnace clean-out/Room side of furnace	80% Chrysotile
GH 997-52	Grit surfaced tar paper floor underlay/@ floor hatch W side, very wet & soft above	None Detected
GH 997-53	Gray-reddish tar linoleum/@ floor hatch	None Detected
GH 997-54	Grit surfaced tar paper floor underlay/@ floor hatch, E side	None Detected
GH 997-55	Gray-reddish tar linoleum/N of furnace	None Detected
GH 997-56	Dark brown 9"x9" floor tile with light brown mastic/SE area	3% Chrysotile
GH 997-57	Gray wool ceiling insul. /S side of attic	None Detected
GH 997-58	Grit surfaced roofing with silver coating/south middle of attic, through knot hole. Composite sample reported as <1% Chrysotile, silver layer contained 10 % Chrysotile	<1% Chrysotile (10 % Chrysotile)
GH 997-59	Gray wool ceiling insul. /Middle of attic	None Detected
GH 997-60	Gray wool ceiling insul. /N side of attic	None Detected
GH 997-61	Tar paper @ siding/N side gable @ hatch	None Detected

Sample No.	Description/Location	Results
GH 997-62	White thin paper/Loose in attic	95% Chrysotile
GH 997-63	White thin paper/Loose in attic by hatch	95% Chrysotile
GH 997-Q4	Quality control sample to GH 997-55, Gray-reddish tar linoleum/N of furnace	None Detected

The following materials were found to contain asbestos:

Ma	nterial	Asbestos content
1.	Joint compound of gypsum wall board walls and ceiling	3% Chrysotile
2.	Cement asbestos board on walls and floor of furnace room	45 % Chrysotile
3.	Gaskets at furnace	90% Chrysotile
4.	Window caulking	1% Chrysotile
5.	Dark Brown 9"x9" floor tile	3% Chrysotile
6.	Silver coating on roofing below aluminum roofing	10% Chrysotile
7.	White thin paper, loose in attic, noted in 2 places, may be concealed elsewhere.	95% Chrysotile

The following materials were assumed to contain asbestos:

- 1. Sealants on metal roofing.
- 2. "Aircell" pipe insulation on piping extending out of dirt crawl space.
- 3. Concealed roofing materials.
- 4. Gaskets inside furnace, and concealed furnace refractory insulation.

2.07 LEAD SURVEY RESULTS, BUILDING 2

Lead field survey data sheets and laboratory reports are included as Appendix B. The drawing in Appendix C shows locations where lead samples were taken. Refer to the field survey data sheets for additional information on materials sampled, and detected quantities of lead. The following table summarizes the lead survey results for Building 2.

Sample No.	Description/Location	Results, % Lead
GH 997-L13	Greenish paint on gypsum/Center of N wall	0.0373 %
GH 997-L14	Greenish paint on wood window trim/NE window frame	0.206 %
GH 997-L15	Gray & blue floor paint on tar linoleum/Furnace room floor	0.670 %
GH 997-L16	White ceiling paint/@ paper joint tape center	0.0469 %

Interior finish materials typically contained detectable quantities of lead. The exterior paints were not sampled, but are assumed to contain a relatively high percentage of lead, similar to the exterior paint on the other two buildings.

Paints in Building 2 were typically in good condition, with peeling paint noted at holes in the ceiling of the main room, and in the furnace room where it was damaged by water leaks at the furnace flue.

The following materials were assumed to contain lead, and were not sampled:

- 1. Solder joints of copper piping.
- 2. Lead flashing at roof penetrations.
- 3. Leaded joints of cast iron bell and spigot piping.

2.08 CHEMICAL HAZARDS SURVEY RESULTS, BUILDING 2

All types of fluorescent light fixtures were inspected at random for the presence of Poly chlorinated biphenyl (PCB) containing ballasts. None of the light ballasts in Building 2 had "NO PCBs" printed on their labels. Electrical switches and thermostats commonly contain mercury, as do fluorescent light fixture tubes.

There was a total of 5, four tube fluorescent light fixtures and 2, two tube fluorescent light fixtures in Building 2.

2.09 DESCRIPTION OF BUILDING 3, WIRELESS BUILDING

The central portion of the Wireless Building was constructed in 1917. The building description in "Patterns of the Past, An Inventory of Anchorage's Historic Resources" incorrectly infers that the cupola was "re-centered", when in fact equal additions were constructed to the north and south of the original building. The 1983 nomination to the NRHP listed the south addition as being built prior to 1948, with the north addition being added in 1964. Those dates are partly confirmed by the aerial photographs from 1950 and 1964 and the presence of the original roofing and structure underneath the roofing for the north and south additions.

The original portion of the building had a concrete exterior foundation, apparently with central pier footings. The dirt floor of this crawl space was partly excavated to allow the installation of the perimeter heating piping. The flooring along the west wall has subsided at least 8 inches along the entire 28 foot length of the original building. The slumping of the west wall of the original structure is also evident at the eave line.

The north addition had a shallow foundation with an access hole from the exterior on the north side. The flooring structure had failed at the north east corner of the building due to dry-rot damage.

Building 3 had a mixture of finishes on walls and ceilings, consisting mainly of plywood and 1x3, 1x4, or 1x2 dimensional wood in the original portion, mixed with cellulose board, and small areas of gypsum wall board. The north addition had cellulose board walls and ceilings which had asbestos in the joint compound. The south addition had gypsum wall board walls and ceilings which had asbestos in the joint compound.

The flooring materials were covered with plywood or a hardboard in most areas of the main floor. The flooring materials were inspected at random, by prying up portions of the wood or hardboard covering. None of the flooring materials which were sampled in Building 3 contained asbestos, but areas of concealed flooring that were not sampled may exist. The original portion of the building had a jute backed linoleum flooring with a tar paper and horse hair underlayment. The north addition had a jute-backed linoleum flooring that was typically exposed. The south addition had a jute backed linoleum flooring with a gray paper underlayment that was concealed by both plywood and hardboard.

The south addition had a full height concrete basement divided into 3 rooms. An unusual 15 inch wide concrete wall in the south west corner of this basement extends through the first floor joist space to the wood flooring above, apparently as support for equipment that has since been removed. Although damp, the air circulation in the basement has prevented major deterioration of the wooden first floor structure of the south addition.

Building 3 had been heated by a furnace located in the southeast corner of the building. Uninsulated ducts were located in the rooms. The air returned to the furnace through a grill at the base of the furnace. The oil fired furnace had been converted to natural gas in approximately 1980. The basement housed an oil fired boiler which was installed in 1968. It is not known if this boiler replaced an earlier one, but the boiler was apparently abandoned when the furnace was installed in 1978.

There was asbestos-containing pipe insulation on the cold water pipe in the basement extending vertically out of the disconnected service entrance box. Building 3 had been served with hot water from an electric water heater.

The heating piping from the boiler was insulated in the basement area with an asbestos-containing "aircell" cardboard like insulation. Portions of the heating piping were uninsulated, and other portions had an asbestos-free cellular glass insulation that was adhered together with a white compound that was assumed to contain asbestos. This white compound was only noted at the center of the crawl space where it was inaccessible for sampling.

2.10 ASBESTOS SURVEY RESULTS, BUILDING 3

Asbestos field survey data sheets and laboratory reports are included as Appendix A. The drawing in Appendix C shows locations where the asbestos samples were taken. Refer to the field survey data sheets for additional sample information. The following table summarizes the asbestos survey results for Building 3.

Sample No.	Description/Location	Results
GH 997-64	Cellulose board on ceiling/NW room @ ceiling	None Detected
GH 997-65	Gray linoleum with jute backing-black mastic/NE room @ radiator holes	None Detected

Sample No.	Description/Location	Results
GH 997-66	Cellulose board on wall with joint compound/NE room, NE corner. Composite sample reported as <1% Chrysotile. Joint compound contained 2% Chrysotile.	<1% Chrysotile (2% Chrysotile)
GH 997-67	Gypsum board with joint compound/SE room. Composite sample reported as <1% Chrysotile. Joint compound contained 2% Chrysotile.	<1% Chrysotile (2% Chrysotile)
GH 997-68	Gray linoleum with jute backing-black mastic/NW room @ radiator holes	None Detected
GH 997-69	Heavier gray building paper/Former wall location, center W room	None Detected
GH 997-70	Shiny black building paper/Former wall location, center W room	None Detected
GH 997-71	Thin building paper/Beneath 1"x3" T & G flooring NW room @ radiator hole	None Detected
GH 997-72	Reddish jute backed linoleum with black tarpaper/Center West room at door to NW	None Detected
GH 997-73	Black tar paper & assumed horse hair underlayment/Center West room @ S column	None Detected
GH 997-74	Brown jute backed linoleum with white paper/Center west room @ S. column	None Detected
GH 997-75	Building paper with assumed horse hair/Exterior wall of Center west room	None Detected
GH 997-76	Reddish brown tarry linoleum/Former toilet, center west room	None Detected
GH 997-77	Shiny black building paper/Former toilet wall, center west room	None Detected
GH 997-78	Paper ply -1/4" (paper/wd/paper) patch @ former toilet wall, center west room	None Detected
GH 997-79	Hardboard floor/W side of S room, nailed down	None Detected
GH 997-80	Yellowish jute backed linoleum with gray underlay/W side of S room	None Detected
GH 997-81	Hardboard floor/S room by chimney, nailed down	None Detected
GH 997-82	Brown jute backed linoleum with gray underlay/S room by chimney	None Detected
GH 997-83	Gasket @ view hole/Rheem Model 4225-130EB, serial no. AD113 F3576 8124	None Detected
GH 997-84	Brown jute backed linoleum with gray underlay/@ door to toilet	None Detected
GH 997-85	Celotex board, no joint compound/E wall of W room	None Detected
GH 997-86	Celotex board, no joint compound/NW wall of S room	None Detected
GH 997-87	Gypsum board, no joint compound/NW wall of S room	None Detected

Sample No.	Description/Location	Results
GH 997-88	Tarpaper roofing with grit surface of original building /S side near cut through to S addition	25% Chrysotile
GH 997-89	Fiberglass with tarry vapor barrier/Attic of S addition	None Detected
GH 997-90	Fiberglass with tarry vapor barrier/Attic of original bldg.	None Detected
GH 997-91	Tarpaper roofing with grit surfacing of original bldg./N side near cut through to N addition	20% Chrysotile
GH 997-92	Fiberglass with tarry vapor barrier/Attic of N addition	None Detected
GH 997-93	Cloth & rubber wire insul. /Attic near hatch	None Detected
GH 997-94	Hardboard floor/Center NE room @ S door under plywood	None Detected
GH 997-95	Hardboard floor with black mastic/Center NE room @ S door-under #94	None Detected
GH 997-96	Black tar paper under hardboard/Center NE room @ N door	None Detected
GH 997-97	White window putty/NE windows, N. addition	None Detected
GH 997-98	White window putty/S window, W side original bldg.	None Detected
GH 997-99	Tar paper on exterior wall/Hole @ corner of old to S addition	None Detected
GH 997-100	Cellulose board @ exterior wall/Hole @ corner of old building to S addition	None Detected
GH 997-101	Cement fiberboard/By basement boiler	40% Chrysotile <1% Crocidolite
GH 997-102	"Aircell" pipe insul. /@ wood wall penet., center bsmt	90% Chrysotile
GH 997-103	"Mag" pipe insul. on fitting/@ capped tee, bsmt	40% Chrysotile 20% Crocidolite
GH 997-Q5	Quality control sample to GH 997-72, Reddish jute backed linoleum with black tarpaper/C. West room at door to NW	None Detected
GH 997-Q6	Quality control sample to GH 997-80, Yellowish jute backed linoleum with gray underlay/W side of S room	None Detected

The following materials were found to contain asbestos:

Ma	aterial	Asbestos content	
1.	Joint compound of cellulose board in north addition	2% Chrysotile	
2.	Joint compound of gypsum wall board at south addition	2% Chrysotile	
3.	Grit surfaced roofing of original building	25% Chrysotile	
4.	Cement asbestos board on wall & ceiling adjacent to boiler in basement	40 % Chrysotile <1% Crocidolite	
5.	"Aircell" pipe insulation on runs of heating pipe and domestic water piping in basement	90% Chrysotile	
6.	"Mag" hard and chalky insulation on fittings of heating and domestic water piping in basement.	40% Chrysotile 20% Crocidolite	

The following materials were assumed to contain asbestos.

- 1. Cement asbestos board lining of cabinet on east wall of south room.
- 2. Cement asbestos board lining of chimney stack through the roof.
- 3. Window caulking.
- 4. Sealants on metal roofing.
- 5. Concealed roofing materials.
- 6. Gaskets inside furnace and boiler, and concealed furnace and boiler refractory insulation.
- 7. Adhesive for cellular glass pipe insulation in crawl space.

2.11 LEAD SURVEY RESULTS, BUILDING 3

Lead field survey data sheets and laboratory reports are included as Appendix B. The drawing in Appendix C shows locations where lead samples were taken. Refer to the field survey data sheets for additional information on materials sampled, and detected quantities of lead. The following table summarizes the lead survey results for Building 3.

Sample No.	Description/Location	Results, % Lead
GH 997-L17	Off green paint on plywood/E central room, S wall	2.01 %
GH 997-L18	Off white ceiling paint on plywood/E central room, center	0.0714 %
GH 997-L19	Off green paint on cellulose board/NE room, E wall	1.36 %
GH 997-L20	Off green paint on wood/NE room, @ window trim	3.38 %
GH 997-L21	White paint on cellulose ceiling/Center of NW room	0.0999 %
GH 997-L22	Off green on wood/Center W room on base trim	0.523 %
GH 997-L23	Off green on wood/Former exterior trim 1'x2' T+G	0.651 %
GH 997-L24	Black & light green on wood/Center W room @ base trim	0.464 %
GH 997-L25	Off green & white on cellulose board/Center W room	0.495 %
GH 997-L26	Cream & brown paint on wood/3/4" vertical groove-former NW corner of center W room	0.287 %
GH 997-L27	White exterior paint on wood/Near S window, W side- original building	9.56 %
GH 997-L28	Green exterior trim paint on wood/Sill of N window, W side, original building	13.9 %
GH 997-L29	White & green flaky paint/Concrete N wall, bsmt	4.29 %
GH 997-L30	Gray paint on wood/Ceiling of W basement	3.68 %
GH 997-L31	White paint on wood/Center wall of basement	5.16 %

Interior finish materials typically contained detectable quantities of lead, with the highest concentrations found in the basement and the exterior paints.

The white and green exterior paints had high concentrations of lead.

Paints in Building 3 were typically in poor condition, with peeling paint noted throughout the building, apparently due to high moisture content in the building. The basement area in particular had peeling paint on all of the concrete walls.

The following materials were assumed to contain lead, and were not sampled:

- 1. Solder joints of copper piping.
- 2. Leaded joints of cast iron bell and spigot piping.
- 3. Lead flashing at roof penetrations.
- 4. Lead conduit for telephone and signal wiring.

2.12 CHEMICAL HAZARDS SURVEY RESULTS, BUILDING 3

All types of fluorescent light fixtures were inspected at random for the presence of Poly chlorinated biphenyl (PCB) containing ballasts. None of the light ballasts in Building 3 had "NO PCBs" printed on their labels. Electrical switches and thermostats commonly contain mercury, as do fluorescent light fixture tubes.

There was a total of 5, four tube fluorescent light fixtures and 12, two tube fluorescent light fixtures in Building 3.

PART 3, CONCLUSIONS AND RECOMMENDATIONS

3.01 ASBESTOS

Asbestos-containing materials are not required to be removed by any state or federal regulations. However their disturbance, handling and disposal is highly regulated. Owners and managers of buildings which have not been declared to be asbestos free are required to conduct a good faith survey for asbestos prior to any renovation or demolition. Owners and managers are further required to notify building occupants, maintenance and custodial workers of the presence of asbestos-containing materials so that they will not disturb the materials without proper training and protective equipment.

Because the buildings which comprise the Government Hill Wireless Station are not occupied, the requirements may be less stringent. However, access to areas of the buildings which contain damaged and friable asbestos should be restricted to those with proper training in recognizing asbestos and all visitors should avoid disturbance of any asbestos-containing materials.

State and federal laws regulate construction worker exposure to asbestos. The regulations also regulate the disposal of these materials. Worker exposure, controlled by rigidly established permissible exposure limits (PEL), is limited by requiring that engineering controls, personal protective equipment, and worker exposure monitoring be instituted any time asbestos is disturbed during building renovation work. The disposal of these materials is similarly restricted by regulations which license the disposal sites receiving them.

The Environmental Protection Agencies classifies two categories of ACM: friable and nonfriable. Friable materials are materials that can be crumbled to a powder by hand pressure. Nonfriable materials are materials such as floor tiles, roofing felts and coatings, gaskets and mastics that normally bind the asbestos fibers in some sort of matrix that prevents fiber release unless sanding, grinding, sawing or other similar types of abrading occurs.

Only non-friable ACM was found in the main ground floor areas of the buildings, but friable ACM was found in the basement of Building 3 and the crawl spaces of Buildings 1 and 2, as well as in the attic of Building 2.

The gypsum wall board of portions of each of the buildings had asbestos in the joint compound. The joint compound applied to the cellulose wall board of the north addition of Building 3 also contained asbestos. The wall board system as a whole contains less than 1 % asbestos when the wall board and joint compound was analyzed as a composite sample. OSHA requires the disturbance or removal of gypsum wall board or cellulose wall board with asbestos-containing joint compound to be conducted as Class II asbestos work.

The wall board with asbestos-containing joint compound can release asbestos fibers during dry demolition. The debris from the gypsum board can be disposed of under EPA criteria as ordinary construction waste, if allowed by the receiving landfill.

3.02 LEAD

Lead-containing materials are not required to be removed by any state or federal regulations and are thus similar to asbestos-containing materials. However their disturbance, handling and disposal is regulated. Owners and managers are required to notify building occupants, maintenance and custodial workers of the presence of lead-containing materials so that they will not disturb the materials without proper training and protective equipment.

Because the buildings which comprise the Government Hill Wireless Station are not occupied, the requirements may be less stringent. However, visitors should avoid disturbance of any lead-containing materials, and should wash any skin that has contacted lead-containing materials prior to eating or applying cosmetics.

State and federal laws regulate all construction work where employees may be exposed to lead. Even at low concentrations of lead, worker exposure to lead remains possible during demolition or disturbance of lead-containing materials. The contractor is required to monitor his/her workers to determine if they will be exposed to lead at or above the action level established in the regulation. Until this "initial determination" establishes that workers are not exposed above the permissible exposure limit, the contractor is required to provide workers with adequate personnel protection. Continued air and medical monitoring may be required if exposure is above the action level.

One hazard which lead paint potentially creates occurs when the lead becomes airborne and can then be inhaled. When the painted materials are cut, welded or otherwise disturbed the lead can become airborne. An additional hazard is the ingestion of lead paint chips that are not airborne. Lead particles may be released when building demolition or renovation activities disturb contaminated materials; consequently, the regulations have established work practices, exposure monitoring, and worker training requirements.

Lead paint stripping operations may create additional hazards due to the toxicity of the stripping chemicals. The application of heat guns for stripping operations may create an even greater hazard by promoting airborne lead fumes. Lead paint stripping may be required locally at cutting and welding operations on existing miscellaneous steel components.

Renovation or demolition projects would produce wastes with lead-containing paints. In order to classify the lead wastes as hazardous or non-hazardous for disposal purposes, TCLP (Toxicity Characteristic Leaching Procedure) tests are required by the EPA. The TCLP test determines the leachability of lead from the paint while adhered to the substrate. Currently, the maximum allowable leachate of lead in order to be classified as a non-hazardous waste is 5 milligrams of lead per liter of leachate (mg/l). Anything above this 5 mg/l level is classified as hazardous waste and must be disposed of at an approved permitted TSD (Transportation, Storage, Disposal) facility. There are no permitted hazardous waste disposal sites in Alaska. TCLP tests will need to be performed on representative samples of any renovation project wastes to determine the lead waste disposal requirements.

3.03 CHEMICAL HAZARDS

Polychlorinated Biphenyl containing and mercury-containing materials were identified in fluorescent light ballasts in each of the buildings. Mercury containing materials were identified in fluorescent light fixture tubes, electrical thermostats and switches in each of the buildings.

These materials typically present a hazard only when they are disturbed and contact the skin. Disposal of these materials are regulated by the EPA because improper disposal will contaminate the environment. PCB and mercury containing materials are required to be properly handled and packaged for disposal, but may remain in place until they are no longer in service.

Mercury containing wastes from fluorescent light tubes and switches will typically fail the TCLP test. Currently, the maximum allowable leachate of mercury in order to be classified as a non-hazardous waste is 0.2 milligrams of mercury per liter of leachate (mg/l). Anything above this 0.2 mg/l level is classified as hazardous waste and must be disposed of at an approved permitted TSD (Transportation, Storage, Disposal) facility.

PART 4, REGULATIONS

4.01 ASBESTOS

The Federal Occupational Safety and Health Administration (OSHA) and the State of Alaska Department of Labor (AKDOL) have adopted regulations applying to workplace activities involving asbestos. 29 CFR 1926.1101 sets permissible exposure limits; establishes contamination controls, work practices, and medical surveillance; and requires worker certification and protective equipment. AKDOL requires asbestos workers to be certified in accordance with Title 18, Chapters 61.600-790 of the Alaska Administration Code.

The Environmental Protection Agency (EPA) regulations (40 CFR 61) under the National Emission Standards for Hazardous Air Pollutants (NESHAP) established procedures for handling ACM during asbestos removal and waste disposal. These regulations require an owner (or the owner's contractor) to notify the EPA of asbestos removal operations and to establish responsibility for the removal, transportation, and disposal of asbestos.

The disposal of asbestos waste is regulated by the EPA, the State of Alaska Department of Environmental Conservation, and the disposal site operator. Wastes being transported to the disposal site must be sealed in double walled containers (double bagged) prior to disposal and must be accompanied by disposal permits and waste manifests.

4.02 LEAD

OSHA and AKDOL have adopted regulations applying to workplace activities involving lead. 29 CFR 1926.62 sets permissible exposure limits; establishes contamination controls, work practices, and medical surveillance; and requires worker training and protective equipment.

The EPA regulations, (40 CFR 260-272) under the Resource Conservation and Recovery Act (RCRA) established regulations for the handling, storage and disposal of hazardous materials. TCLP tests are required to be conducted in accordance with method 1311 of, Appendix II.

The Department of Transportation (DOT) regulations, (49 CFR 171-180) established regulations for the transportation of hazardous materials. All hazardous wastes must be accompanied by disposal permits and waste manifests.

4.03 CHEMICAL HAZARDS

The EPA regulations, (40 CFR 761) under the Toxic Substance Control Act (TSCA) established regulations for the handling, storage and disposal of Polychlorinated Biphenyl containing materials. The EPA regulations, (40 CFR 261) under the Resource Conservation and Recovery Act (RCRA) established regulations for the handling, storage and disposal of mercury-containing materials.

The Department of Transportation (DOT) regulations, (49 CFR 171-180) established regulations for the transportation of hazardous materials, including PCBs and mercury-containing materials. All hazardous wastes must be accompanied by disposal permits and waste manifests.

APPENDIX A

Asbestos Field Data Sheets and Laboratory Reports



Environmental Health Liences-Alaska, Inc. 10928 Eagle River Road, Suite 202, Eagle River, AK 99577-8052 (907) 694-1383 • (907) 694-1382 fax

	CHAIN OF CUSTODY	RECORD/FIEI	LD SURVEY I	DATA Pa	ge / of 9
FIELD COLLECTION DATE:	9-19-97 JOB#: 39		MATERIAL TY	LEAD QUANT	TITIES: 103
PROJECT NAME: Go	v. Hill Telegraph #	BULK ANALYSIS REQUESTED: (Circle	PLM PLM DUST	/TEM BULK/LEAD	TCLP / LEAD PPM
	Il Wireless Star.				
SPECIAL INSTRUCTIO				*	
Nobest Len COLLECTED BY (signature)	RJ Lee Gag. SELECTED LABORATORY		OKIFR	esult tak	- nove
Robert Frey	Daries			p due to	
1564 88EM	-ax 9/23/97 9:15/	7		results i	n
Fixiley SHIPPING METHOD	MALYST'SSIGNATURE	= gu	who of	2 30	
9509942074 COURIER (signature)					
PATETIME 10	m'				
SAMPLE ID	SAMPLE DESCRIPTION, (COLOR, MATERIAL TYPE, LAYERS,	FRIABILITY)	LOCATION/C (INCLUDING P	HOTO/XREF)	RESULTS
GH 997 - 1	Gyp, Mud + Tape		South office	e Blog 1	<1% -C Composite
MATL CONDITION: GOOD FAIR POOR	WATER: DAMAGE POTENTIAL: (LO, M. WATER: VIBRATION:	ED, HI) CONTACT:	1054	2% Chrys	
SH 997 2	Red Brick Pattern Stic 12"x12" tile	self- 9	suth office at Door		
MATL CONDITION: GOOD FAIR POOR	WATER: DAMAGE POTENTIAL: (LO, M. WATER: AIR: VIBRATION:		1095		
GH 997-3	Gyp, Mud + Tage	A a	lain South	Room Blog ,	Comensite
MATL CONDITION: GOOD FAIR POOR	DAMAGE POTENTIAL: (LO, MI WATER: AIR: VIBRATION:	ED, HD CONTACT:		2% Chrysotil	
GH997- 4	Cement Fiber Boo		imace Rm		40%
MATL CONDITION: GOOD FAIR POOR	DAMAGE POTENTIAL: (LO, MI WATER: AIR: VIBRATION:	ED, HI) 5	outh wall		Chrysotile
GH897 - 5	Gyp, Mud + Tap	e h	lorth Rom	Run Bldg 1	Nore
MATL CONDITION: GOOD FAIR POOR	WATER: DAMAGE POTENTIAL: (LO, MI	ED, HI) CONTACT:			Del Chig
GH997- 6	Gyp, Mad & Tap		orth Rm	Bldg 1	None
MATL, CONDITION: GOOD FAIR POOR	WATER: DAMAGE POTENTIAL: (LO, ME				
GH997- 7 MATL CONDITION: GOOD FAIR POOR	Red Brick latter Strick 12" x12" F DAMAGE POTENTIAL: (LO, ME WATER: AIR: VIBRATION:	F. T. 0	outh Offi it West u		Chrysotile
GH997-8	Bldg Pager	CONTACT:	sterior - us	de Bldg !	Hore Octestes
MATL CONDITION: GOOD FAIR POOR	WATER: DAMAGE POTENTIAL: (LO, ME	ED, HI) CONTACT:	dig SE c	and	venues.



Environmental Health Sciences-Alaska, Inc. 10928 Eagle River Road, Suite 202, Eagle River, AK 99577-8052 (907) 694-1383 • (907) 694-1382 fax

PROJECT NAME: GO	V. Hill Telegraph EAZ FACILITY: (Sou Hill unialose Se	
		-19-97 COLLECTED BY: F	read
SAMPLE ID	SAMPLE DESCRIPTION, (COLOR, MATERIAL TYPE, LAYERS, FRIABILITY)	LOCATION/COMMENTS	RESULTS
GH 997 - 9 MATL CONDITION: GOOD FAIR POOR	Whate ropy gasket at Funce DAMAGE POTENTIAL: (LO, MED, HI) WATER: AIR: VIBRATION: CONTACT:	At Burner plate Blds 1 to Aure Body Ph 11 13	80 % Chry 5% Amost
GH997 - 10 MATL CONDITION: GOOD FAIR POOR	White waxy wire instation DAMAGE POTENTIAL: (LO, MED, HT: WATER: AIR: VIBRATION: CONTACT:	At Incand. Light Blog 1 On Fixture Side Ph 1131	50% Chrysotile
GH997 - 11 MATL CONDITION: GOOD FAIR POOR	Pubber wire insul BAMAGE POTENTIAL: (LO, MED, H.) WATER: AIR: VIBRATION: CONTACT:	At Incard. Light Blog 1 on House side Ph 1131	Nove Detected
GH997 - 12 MATL CONDITION: GOOD FAIR POOR	Red Luoven Wire Mine DAMAGE POTENTIAL: (LO, MED, H) WATER: AIR: VIBRATION: CONTACT:	At Fluors. Logar Bldg 1 @ Fixture side Ph 1136	Nove Detected
GH 997 - 13 MATL CONDITION: GOOD FAIR POOR	Gyp, Mud + Taye DAMAGE POTENTIAL: (LO, MED, HI) WATER: AIR: VIBRATION: CONTACT:	behind down in Blog 1 Toilet, west wing 2% Chr	2170 Chry Composite
GH997 - 19 MATL CONDITION: GOOD FAIR POOR	Lt brown - 14" chips SV DAMAGE POTENTIAL: (LO, MED, HT) WATER: AIR: VIBRATION: CON ACT:	At Floor Hutch Bldg 1 in Toilet, west wis Ph 1307 2% Chrys. in	Chrysotele
GH997 - 15 MATL CONDITION: GOOD FAIR POOR	Boown Core Box Marie DAMAGE POTENTIAL: (LO, MED, HT) WATER: AIR: VIBRATION: CONTACT:	Berindon in Forler, West wing Blog 1	None
GH997 - 16 MATL CONDITION: GOOD FAIR POOR	Tan Paper under lay ment DAMAGE POTENTIAL: (LO, MED, HI) WATER: AIR: VIBRATION: CONTACT:	Boton faticle Bod + part THE + lap bols 5 up Ph 1307 Blog 1	None Detected
GH997- 17 MATL CONDITION: GOOD FAIR POOR	White Conditioned Theory DAMAGE POTENTIAL: (LO, MED. HI) WATER: AIR: VIBRATION: CONTACT:	In crawl space Ph 1317 Bldg 1	85 % Chrysotile
GH997-18 MATL CONDITION: GOOD FAIR POOR	tan Pape indular mat BAMAGE POTENTIAL: (LO, MED, HI! WATER: AIR: VIBRATION: CONTACT:	under toiler @ Dry Rot Ph 1319 Bldg 1	Nove Detected
SH997 - 19 MATL CONDITION: COOD FAIR FOOR	White Carloan Insul DAMAGE POTENTIAL: (LO, MED, HI) WATER: AIR: VIBRATION: CONTACT:	in crow space off of pipe Blog 1	95% Chrysotele
6H997 ~ 20 MATL CONDITION: GOOD FAIR POOR	Gray, Jute backed lincoleum DAMAGE POTENTIAL: (LO, MED, HI) WATER: AIR: VIBRATION: CONTACT:	on wall of triber Ph 1328 Blds /	None Detected



Environmental Health. Sciences-Alaska, Inc. 10928 Eagle River Road, Suite 202, Eagle River, AK 99577-8052 (907) 694-1383 • (907) 694-1382 fax

PROTECT NAME. (OC	FIELD SURVEY DATA (c		age <u>3</u> of <u>9</u>
	W Hill Telegraph EAZ FACILITY: (
		1-19-97 COLLECTED BY:	French
SAMPLE ID	SAMPLE DESCRIPTION, (COLOR, MATERIAL TYPE, LAYERS, FRIABILITY)	LOCATION/COMMENTS (INCLUDING PHOTO/XREF)	RESULTS
GH997 - 2/ MATL CONDITION: GOOD FAIR POOR	Cove Baset Martin Brown Creamy DAMAGE POTENTIAL: (LO, MED, HI) WATER: AIR: VIBRATION: CONTACT:	West wing testine Ph 1342 Bldg	None Detected
GH997 - 22 MATL CONDITION: GOOD FAIR POOR	L+ Brown Chip - Shift Vul.	At hole in Floor breen rooms	35 % Chrysote
GOOD FAIR POOR MATL CONDITION: GOOD FAIR POOR	Cove Base + creany brown wastes DAMAGE POTENTIAL: (LO, MED, HI)	Middle form in west wiss Blde	None Detected
SH997 - 24 MATL CONDITION: GOOD FAIR POOR	WATER: AIR: VIBRATION: CONTACT: Dreal @ Incard. I got + Martin DAMAGE POTENTIAL: (LO, MED, HI) WATER: AIR: VIBRATION: CONTACT:	pulchen, west wing Bldg 1	None Detected
SH997- 2-5 MATL CONDITION: GOOD FAIR POOR	Pint Fly Cly 12 Sul DAMAGE POTENTIAL: (LO, MED, HI) WATER: AIR: VIBRATION: CONTACT:	NW comer, kitchen Blog 1	None Detected
SH997- 25 MATL CONDITION: GOOD FAIR POOR	Blown in Mored Duene BAMAGE POTENTIAL: (LO, MED, HI) WATER: AIR: VIBRATION: CONTACT:	NW come, ketelan	None Detected
6H997 - 27 MATL CONDITION: GOOD FAIR POOR	Brown crepe paper ceily 19 Sul DAMAGE POTENTIAL: (LO, MED, HI) WATER: AIR: VIBRATION: CONTACT:	5 side above Kitcher 181ds 1	. Pore Detected
MATL CONDITION: GOOD FAIR POOR	Blown in Mixed Droul BAMAGE POTENTIAL: (LO, MED, HI) WATER: AIR: VIBRATION: CONTACT:	Middle above Krotiken.	Nove Detected
MATL CONDITION: GOOD FAIR POOR	Gable and tan Paper DAMAGE POTENTIAL: (LO, MED, HI) WATER: AIR: VIBRATION: CONTACT:	west end of Attire Blog 1	Nove Detected
2H997 - 30 MATL CONDITION: GOOD FAIR POOR	Roof ton Paper BAMAGE POTENTIAL: (LO, MED, HI) WATER: AIR: VIBRATION: CONTACT:	above March in Rithm Blog 1	None Detecte
MATL CONDITION:	Brown Crepe payers dust 15 Sul DAMAGE POTENTIAL: (LO, MED, HI) WATER: AIR: VIBRATION: CONTACT:	above Hatali is Kitchen Blog)	Nove Detectes
MATL CONDITION: GOOD FAIR POOR	Red +White Plan tile W/ Block Master DAMAGE POTENTIAL: (LO, MED, HI) WATER: AIR: VIBRATION: CONTACT:	In court space below Ketchen Blog of N.D. in Mastic	5% Chrysotil



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EHS-10/95

	FIELD SURVE	EY DATA (c	continued)	Pa	ge 4 of 9
PROJECT NAME: 60	u Hill Telegraph EAZ	FACILITY: C	ou . Hill Wire		
JOB NUMBER: 396		DATE: 9		The second secon	French
SAMPLE ID	SAMPLE DESCRIPTION, (COLOR, MATERIAL TYPE, LAYERS,	CHARLES NA	LOCATIO	N/COMMENTS G PHOTO/XREF)	RESULTS
GH997 - 33 MATL CONDITION: GOOD FAIR POOR	Roof ton Pages	ED, HI)	North Wie		None Detected
GOOD FAIR POOR GH997 - 39 MATL CONDITION: GOOD FAIR POOR	Blown tis Multe Ceiling Frank DAMAGE POTENTIAL: (LO, M. WATER: AIR: VIBRATION:	CONTACT:	North wi	Blog 1 ing southing Blog 1	None Detected
GH997- 35 MATL CONDITION: GOOD FAIR POOR	Blown in Multi- Ceiling Draul DAMAGE POTENTIAL: (LO, MI WATER: AIR: VIBRATION:	100	North u	rig North	Pore Petested
GH997 - 36 MATL CONDITION: GOOD FAIR POOR	Celoter Board C WATER: DAMAGE POTENTIAL: (LO, MI WATER: VIBRATION:	9	Above cly	to South Blog 1	None Detected
SH 297 - 37 MATL CONDITION: GOOD FAIR POOR	Colotes Board Co	ily	Apove cui	of to source,	Nove Detected
3M997 - 38 MATL CONDITION: GOOD FAIR POOR	Wiri dow Caulling BAMAGE POTENTIAL: (LO, ME WATER: VIBRATION:		Funace A	Coon Windows	<190 Choysotile
GH997 - 39 MATL CONDITION: GOOD FAIR POOR	Black + gray roof Black + gray roof BAMAGE POTENTIAL: (LO, ME WATER: AIR: VIBRATION:	patolis	@ 3" py above turn		10 % Chrysotele
6H997 -40 MATL CONDITION: GOOD FAIR POOR	Black + Silver room BAMAGE POTENTIAL: (LO, ME WATER: VIBRATION:	75 -	Condey M	Blog 1 10	170 chys. Composite
GM 997 - 41 MATL CONDITION: GOOD FAIR POOR	Black & gray 00. Black & gray 00. Black & gray 00. Black & gray 00. Black & gray 00.	of patching	@ Elec 1 Blds 1		1500 Chrysothle
3H997 - 42 MATL CONDITION: GOOD FAIR POOR	DK Brown 9+9 A W/ Block Hoistiz DAMAGE POTENTIAL: (LO. ME WATER: VIBRATION:	Prontile	NW com	of Blog Z	370 Chrysotile Mastro
6H997 - 43 MATL CONDITION: GOOD FAIR POOR	Gyp Mult Tape BAMAGE POTENTIAL: (LO, ME WATER: AIR: VIBRATION:	D, HI) CONTACT:	Cente 1 Ph 1555	". wall Bldg Z	2170 Composito 3% C in Join
SH997- 44	Ok Boran 9x9)		Center @	Hump	3 % Chrysotile
MATL CONDITION: GOOD FAIR POOR	WATER: DAMAGE POTENTIAL: (LO, ME	D, HI) CONTACT:	Ph 1554	Blog 2	



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	FIELD SURVEY DATA (continued)	Page 5 of 9
	ON Hill telegraph EAZ FACILITY:		
JOB NUMBER: 39	68-01-02 DATE: 9-	-19-97 COLLECTED BY:	French
SAMPLE ID	SAMPLE DESCRIPTION, (COLOR, MATERIAL TYPE, LAYERS, FRIABILITY)	LOCATION/COMMENTS (INCLUDING PHOTO/CREF)	RESULTS
GH997- 45 MATL CONDITION: GOOD FAIR POOR	By Must & Tage DAMAGE POTENTIAL: (LO, MED, HI)	Norm Bld	07.20
BM997-48	Cerrent Files Bd on Wall DAMAGE POTENTIAL: (LO, MED, HI)	Furore Ru work	Chrysotil
GOOD FAIR POOR GH997 - 47	WATER: AIR: VIBRATION: CONTACT:	North window	170 Chrysotil
MATL CONDITION: GOOD FAIR POOR	WATER: AIR: VIBRATION: CONTACT:	Ph 1606 Bldg	
GH997 - 48 MATL CONDITION: GOOD FAIR POOR	Cement Files Bol on Floor DAMAGE POTENTIAL: (LO, MED, HI) WATER: AIR: VIBRATION: CONTACT:	Ph 1605 Bldg	45% Chrysoti
GH997 - 49 MATL CONDITION: GOOD FAIR POOR	Rope Garhet on RA Side of Furse DAMAGE POTENTIAL: (LO. MED. HI)	Ph 1608 Blog 8	90070 Chrysotile
GH 997 - 50	Gyp Mad + Tayre DAMAGE POTENTIAL: (LO, MED, HI)	In Toiler Ph 1648 Blds	610% Composite
GOOD FAIR POOR GH997 - 51 MATL CONDITION:	Soft Gashet at Furace Clam-out DAMAGE POTENTIAL: (LO, MED, HI)	Rm side of Funace Ph 1650 Bld,	80 % Chrysotile
GM997 - 52 MATL CONDITION: GOOD FAIR POOR	Grit Surfaced ton pages Floor underlay BAMAGE POTENTIAL: (LO, MED, HI) WATER: AIR: VIBRATION: CONTACT:	Very Wet + sytaboo Blog.	e None Detected
GH997 - 53	Gray - redish ton liveoleun BAMAGE POTENTIAL: (LO. MED. HI) WATER: AIR: VIBRATION: CONTACT:	Not touse at Mar.	Nove Detected
GH997- 54 MATL CONDITION: GOOD FAIR POOR	Grit Surfaced tan page Floor Underlose, DAMAGE POTENTIAL: (LO, MED, HI) WATER: AIR: VIBRATION: CONTACT:	At Match, East six	Detected
GH997- 55	Gray - redish tar livedeum DAMAGE POTENTIAL: (LO, MED, HI)	NOB Furnee, Bldg	None Detected
GH 997 - 56	Dank Brown 949 Ploor tile	GE area	3%
GOOD FAIR POOR	WATER: DAMAGE POTENTIAL: (LO, MED, HI) AIR: VIBRATION: CONTACT:	Blog	EHS-10/95



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	FIELD SURVEY				ge 6 of 9
	V Hill Telegraph EA-2	FACILITY: 6	ov. Hill Wir	eless Sta	
JOB NUMBER: 396	18-01-02	DATE: 9-1	9-97	COLLECTED BY: /	French
SAMPLE ID	SAMPLE DESCRIPTION, (COLOR, MATERIAL TYPE, LAYERS, FR		LOCATION	COMMENTS PHOTO/XREF)	RESULTS
GH997- 57 MATL CONDITION: GOOD FAIR POOR	Gray Wool olg Ins. DAMAGE POTENTIAL: (LO, MED WATER: AIR: VIBRATION: CO		South side		Hone Detested
SH997-58 MATIL CONDITION: GOOD FAIR POOR	Brit Surfaced ros W/ Silver Coating DAMAGE POTENTIAL: (10, MED WATER: AIR: VIBRATION:	CONTACT:	South mi	Alle of Attac Blds 2 u	Composite 0% in Silver
GH997 - 59 MATL CONDITION: GOOD FAIR POOR	Gray Wool Clg Dus DAMAGE POTENTIAL: (LO, MED, WATER: AIR: VIBRATION:		Modelle Ph 10	of Attic Bldg 2	None Octested
GM997 - 60 MATL CONDITION: GOOD FAIR POOR	Gray Wool Cly Do MATER: DAMAGE POTENTIAL: (LO, MED. WATER: AIR: VIBRATION:		Nath si	ide of Attic Bl42	Nove Detected
GM997 - 61 MATL CONDITION: GOOD FAIR POOR	Tan Payer @ Sidia WATER: DAMAGE POTENTIAL: (LO, MED. WATER: VIBRATION: C		North si at Hotels	ide Gable Bldg Z	None Detected
G H997 - 62 MATL CONDITION: GOOD FAIR POOR	White thin Pages DAMAGE POTENTIAL: (LO, MED,		100se in		95% Chrysotil
GM997- 63 MATL CONDITION: GOOD FAIR POOR	White thin Pages		loose in . By Hatch		95% Chrysotil
GH997 - 64 MATL CONDITION: GOOD FAIR POOR	Cellulose Brad on C	clg		n @ ceiling Blog 3	Nove Detected
GH997 - 65 MATL CONDITION: GOOD FAIR FOOR	Gray Icicoleum w/ s barring - black wort DAMAGE POTENTIAL: (LO, MED.	Jute tee	NE Room Holy ph 1514	· @ Rodial	Detected lastic not Four
GH997 - 66 MATL CONDITION: GOOD FAIR POOR	DAMAGE POTENTIAL: (LO, MED,	HI)	NE Room Ph 1514	, NE Corre	Composite 2% C in Join
GH997 - 67 MATL CONDITION: COOD FAIR POOR	Gyp Bd w/ Joint WATER: DAMAGE POTENTIAL: (LO, MED. AIR: VIBRATION: CO	/	\$ B Room	Blog 3	< 1070 Composite 2% C in Join
GH997-68 MATL CONDITION: COOD FAIR POOR	Gray livicolean w/ Docking black most	Lute to	NW Room Holes. Ph 1536	at Roding Blog 3	None Octested



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_	FIELD SURVEY DATA (age Z of 9
the state of the s	v. Hill Telegraph E4-2 FACILITY:	Gov Hill Wireless Sta.	
JOB NUMBER: 396	8-01-02 DATE: 9	20-97 COLLECTED BY:	French
SAMPLE ID	SAMPLE DESCRIPTION, (COLOR, MATERIAL TYPE, LAYERS, FRIABILITY)	LOCATION/COMMENTS (INCLUDING PHOTO/XREF)	RESULTS
GH997- 69 MATL CONDITION: GOOD FAIR POOR	Heavier Gray Bldg Papers BAMAGE POTENTIAL: (LO, MED, HI) WATER: VIBRATION: CONTACT:	Forms wall location, Center West Room PG 1542 Blds 3	None Detected
GH997 - 70 MATL CONDITION: GOOD FAIR POOR	Block Bldg Pager DAMAGE POTENTIAL: (LO, MED, HI)	Center west Room Ph 1542 Bldg 3	None
SH997 - 7/	WATER: AIR: VIBRATION: CONTACT: This Blds lager DAMAGE POTENTIAL: (LO, MED, HI) WATER: AIR: VIBRATION: CONTACT:	Beneath 1x3 Floor NW Room @ Bldg 3 Radiator Hote Bldg 3	None Detectes
6H997 - 72 MATL CONDITION: GOOD FAIR POOR	Redish From the Jute Backed linedleum w/Black trup GLAMAGE POTENTIAL: (LO, MED, HI) WATER: AIR: VIBRATION: CONTACT:	Center West Koom at Door to NW Ph 1552 Bldg 3	None Detecte
CH997 - 73 MATL CONDITION: GOOD FAIR POOR	Black ton Paper + Horse hair? curder layount DAMAGE POTENTIAL: (LO, MED, HI) WATER: AIR: VIBRATION: CONTACT:	Center West @ S. Cokum Ph 155 Blog 3	None Detected
SH997 - 79 MATL CONDITION: GOOD FAIR POOR	Brown Lute Backer iù es/eam w/ white pages DAMAGE POTENTIAL: (LO, MED, HI) WATER: AIR: VIBRATION: CONTACT:	Center West room @ 5. Column Bldg 3	None Potestes
CH997 - 75 MATL CONDITION: GOOD FAIR POOR	Bldg Pages W/ Horse Hair: BAMAGE POTENTIAL: (LO, MED, HI) WATER: AIR: VIBRATION: CONTACT:	Room 1610 Bldg 3	Pore
GH997 - 76 MATL CONDITION: GOOD FAIR POOR	Redish Brown tarry livedless DAMAGE POTENTIAL: (LO, MED, HI) WATER: AIR: VIBRATION: CONTACT:	Former toilet, Center West Room Pa 16189 Blds 3	None Detected
MATL CONDITION: GOOD FAIR POOR	Shiring Black Bldg Pages BAMAGE POTENTIAL: (LO, MED, HI) WATER: AIR: VIBRATION: CONTACT:	Forms toilet wale Courter West Pur Ph 16 24 Blds 3	None Detecte
SH997 - 78 MATL CONDITION: GOOD FAIR FOOR	Paper Ply -1/4 Paper/wd/paper! WATER: DAMAGE POTENTIAL: (LO, MED, HI) WATER: VIBRATION: CONTACT:	Patch at Former Toilet wall, Center Wast 12m Bldg 3	Nove Detectes
MATL CONDITION: GOOD FAIR POOR	Mard board Flooring BAMAGE POTENTIAL: (LO, MED, HI) WATER: AIR: VIBRATION: CONTACT:	West State of Silzon Ph 16534 Bldg 3	111-
GH997 - 80	Yellowish Jute Backed I'vi es leum W/ Gray underlay DAMAGE POTENTIAL: (LO, MED, HD)	West Side of S. Room Ph 1654 Bld. 3	Nove Detected



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-	FIELD SURVEY DATA (8 of 9
PROJECT NAME: 60	v. Hill Telegraph EA-2 FACILITY:		
JOB NUMBER: 396	8-01-02 DATE: 9	-20-97 COLLECTED BY: Fre	ends
SAMPLE ID	SAMPLE DESCRIPTION, (COLOR, MATERIAL TYPE, LAYERS, FRIABILITY)	LOCATION/COMMENTS (INCLUDING PHOTO/XREF)	RESULTS
6H997 - 81	Hard board Ploaning DAMAGE POTENTIAL: (LO, MED, HD)	1000 may	Vone Retexted
GOOD FAIR POOR GH 997 - 82 MATL CONDITION: GOOD FAIR POOR	Brown, Jute Backed lined. W/ gray underlay DAMAGE POTENTIAL: (LO, MED, HI) WATER: AIR: VIBRATION: CONTACT:	South Room by Chimney	Sore Seletist
MATL CONDITION: GOOD FAIR POOR	Gashet at View hole BAMAGE POTENTIAL: (LO, MED, H) WATER: AIR: VIBRATION: CONTACT:	R4een Mod 4225-130EB N	Vore etectes
6H997 - 84 MATL CONDITION: GOOD FAIR POOR	Brown, Lute Backet ligeol. w/ Gray underlay DAMAGE POTENTIAL: (LO, MED, HI) WATER: AIR: VIBRATION: CONTACT:	Atdoor to toilet 0	v ore Eteste
6H 997 - 85 MATL CONDITION: GOOD FAIR POOR	celotes bd, no joint comp BAMAGE POTENTIAL: (LO, MED, HI) WATER: AIR: VIBRATION: CONTACT:	Luck	Vore
GH 997 - 86 MATL CONDITION: COOD FAIR POOR	Celofex bd , no joint comp BAMAGE POTENTIAL: (LO, MED, HI) WATER: AIR: VIBRATION: CONTACT:		Jove Texted
MATL CONDITION: COOD FAIR POOR	Gy/ Bd - ho joint comp BAMAGE POTENTIAL: (LO, MED, HI) WATER: VIBRATION: CONTACT:	1 to a sound town	vone textes
SH997 - 88 MATL CONDITION: COOD FAIR POOR	Tarpapa Roofing w/ grit Surf: DAMAGE POTENTIAL: (LO, MED. HI) WATER: AIR: VIBRATION: CONTACT:	3. Side near cut Thra 2	50% hyste
6H997 - 89	FB6 W/ Tarry Vapor Banta	Attro of S. Addu. D	ove etectes
	WATER: AIR: VIBRATION: CONTACT:	Blds 3	
	FB6 W Tarry Vapor Banis	ATTICE ON SILES	Pore Textes
SH997- 90 MATL CONDITION: COOD FAIR FOOR SH997 - 91 MATL CONDITION:	FB6 W Tarry Vapor Bancis WATER: DAMAGE POTENTIAL: (LO, MED, HI) WATER: VIBRATION: CONTACT: Tarpapa w/ grit surfacing DAMAGE POTENTIAL: (LO, MED, HI)	Ph 18:10 Blog 3 Niside of original Z	
3H997 - 9D MATL CONDITION: GOOD FAIR POOR SH997 - 91	FB6 W Tarry Vapor Baning DAMAGE POTENTIAL: (LO. MED. HI) WATER: AIR: VIBRATION: CONTACT: Tarpaper w/ grit surfacing	Ph 18:10 Blog 3 Ni Side of original original of original or	Texte.



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	FIELD SURVEY DATA (Page 9 of 9
	V HIVI Telegraph EA-2 FACILITY:	Gov Hill Wireless	Sta
JOB NUMBER: 396.		-21 COLLECT	EDBY: French
SAMPLE ID	SAMPLE DESCRIPTION, (COLOR, MATERIAL TYPE, LAYERS, FRIABILITY)	LOCATION/COMMENTS (INCLUDING PHOTO/XREF)	RESULTS
GH997- 93 MATL CONDITION: GOOD FAIR POOR	Cloth + rubben wire in sul DAMAGE POTENTIAL: (LO, MED, HI) WATER: AIR: VIBRATION: CONTACT:	Attor nem Ha	Bldg 3
GH997- 94 MATL CONDITION: COOD FAIR POOR	Hard board Flow DAMAGE POTENTIAL: (LO, MED, HI)	at S. door under	None
GH997 - 95 MATL CONDITION: GOOD FAIR POOR	MATER: AIR: VIBRATION: CONTACT: Hardboard Plan w/ black mast c DAMAGE POTENTIAL: (LO, MED, HI) WATER: AIR: VIBRATION: CONTACT:	Center NE room south door - nude	at None
GH997 - 96 MATL CONDITION: GOOD FAIR POOR	Black Tar Pages under hard board DAMAGE POTENTIAL: (LO, MED, HI) WATER: AIR: VIBRATION: CONTACT:	Center NE Room North door Ph 1234 E	at None Detectes
SH997 - 97	Window Putty, white	NE window N. ac	/
MATI_CONDITION: GOOD FAIR POOR	WATER: DAMAGE POTENTIAL: (LO, MED, HI) WATER: VIBRATION: CONTACT:	B	ldg3
MATL CONDITION: GOOD FAIR POOR	WINDOW PUTTY, White DAMAGE POTENTIAL: (LO, MED, HI) WATER: AIR: VIBRATION: CONTACT:	S window, west orig. Blds B	side None Detected
SH997 ~ 99 MATIL CONDITION: GOOD FAIR POOR	Tar Paper on Ext. Woll WATER: DAMAGE POTENTIAL: (LO, MED, HI) WATER: VIBRATION: CONTACT:	Ellero of old to Se	More Detectes
MATL CONDITION:	Cellulose Board @Ext. Wall DAMAGE POTENTIAL: (LO, MED, HI) WATER: AIR: VIBRATION: CONTACT:	Hole at come old to S. addu Bl	of None Detected
SH997 - 101	Cement Fiber Bd.	By Bsut Boiley	40% 0
MATL CONDITION: GOOD FAIR POOR	WATER: DAMAGE POTENTIAL: (LO, MED, HI) WATER: AIR: VIBRATION: CONTACT:	P4 13205 B1	dg 3
H997 - 102 MATL CONDITION: GOOD FAIR POOR	Aircell Pipe Insul BAMAGE POTENTIAL: (LO, MED, HI) WATER: AIR: VIBRATION: CONTACT:	At wood wall pere	tration 90% chayeote
H997 - 103	WATER: AIR: VIBRATION: CONTACT: "Mag" Pipe Insul on Fitting DAMAGE POTENTIAL: (LO, MED, HI) WATER: AIR: VIBRATION: CONTACT:	Ph 1328 B At wood wall pere Ph 1328 B At basted up Te Ph 1334 B	e 40% Crocio
MATL CONDITION: COOD FAIR POOR	DAMAGE POTENTIAL: (LO, MED, HD. WATER: AIR: VIBRATION: CONTACT:		

RJ Lee Group, Inc.

530 McCormick Street• San Leandro, CA 94577 (510) 567-0480 • FAX (510) 567-0488

September 26, 1997

Mr. Robert A. FrenchEnvironmental Health Sciences - Alaska, Inc.10928 Eagle River Road, Suite 202Eagle River, AK 99577-8052

RE:

PLM Standard Asbestos Analysis Results for Samples as Shown on Test Report

RJLeeGroup, Inc. Job No.: AOC709250 Client P.O./Job Number: 3968-01-02 Client Job Name/Location: 3968-01-02

Dear Mr. French:

Enclosed are the results from the polarized light microscopy (PLM) asbestos analysis of the above referenced sample(s). Sample(s) were analyzed in accordance with guidelines set forth in the EPA Method for the Determination of Asbestos in Bulk Building Materials, U.S. EPA/600/R-93/116 (7/93 Edition).

Test Report lists each sample identification number, gross sample description, sample location, type(s) and concentration of asbestos, type(s) and concentration of nonasbestos fibers, major components and concentration of nonfibrous material (NFM), sample run date, analyst, sample homogeneity, and a layer breakdown if applicable. All concentrations are given in area percents (visual estimation).

RJ Lee Group, Inc. is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP) (NVLAP Participant Number 1208-2) for bulk asbestos fiber analysis (PLM), and by the California Department of Health Services, Environmental Laboratory Accreditation Program (CALELAP) for bulk asbestos analysis. Neither the NVLAP Accreditation of this laboratory nor this report may be used to claim product endorsement by NVLAP or any agency of the United States government.

These results are submitted pursuant to RJ Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions and no responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the sample(s) covered by this report, RJ Lee Group will store the sample(s) for a period of ninety (90) days before discarding. A shipping and handling fee will be assessed for the return of any sample(s).

If you have any questions on this report or if RJ Lee Group, Inc. can be of further assistance, please do not hesitate to call.

Sincerely,

Scott Stotler Geologist

SS/dd Enclosure CT 6 1997

Project AOC709250

Sample Appearance	Sample Indianos / Sample Appearance Client Sample Number Chrysotile Amosite Crocidolite Anthophyllite Tremolite Actinolite Cellulose	r Chrysotile.	Amosite (Crocidolite An	thophyl	llite Tremolite A	ctinolite		Wool	Glass	Synmetic	Fibers	Omer Molliribrous Fibers Material	ribrous Synthetic Other Nourribrous Kun Date Glass Fibers Material Analyst
1646736CPL	GH-997-1	<1 %	ì			?	ŕ	10 %		,	i		% 06	9/24/97
White gypsum walll Layer Content:	White gypsum wallboard, white mud, white tape Layer Content: Mud: 2% Chrysotile; Other Layers: None Detected	e tape otile; Other La	ayers: No	me Detected		NFM: Qtz, Carb, Opaq, Gyp, Mica, Misc. Part.	Carb, Opa	q, Gyp, M	ica, Misc.	Part.			SS Non Homogeneous	SS
1646737CPL	GH-997-2	3%			,			% V	•			i	% L6	9/74/97
Red tile, grey mastic Layer Content:		tile; Mastic:	None Det	peted		NFM: Qtz, Carb, Binder, Opaq, Misc. Part.	Carb, Bind	ler, Opaq,	Misc. Part.					SS
1646738CPL White gypsum board Layer Content:	1646738CPL GH-997-3 <1 % White gypsum board, white mud, white tape Layer Content: Mud: 2% Chrysotile; Other Layers: None Detected	<1 % e otile; Other La	ayers: No	- one Detected		NFM: Qtz, Carb, Opaq, Gyp, Mica, Misc. Part.	- Carb, Opac	7 % q, Gyp, Mi	- ica, Misc.]	- Part.		,	93 % 9/24/97 SS Non Homogeneous	9/24/97 SS geneous
1646739CPL Gi Grey cement fiber board	GH-997-4 oard	40 %	1	10	•	- <1 % NFM: Qtz, Carb, Opaq, Misc. Part.	- Zarb, Opa	<1 %			× (1)		60 % 9/2/ SS Homogeneous	9/24/97 S.S cous
1646740CPL White gypsum board	1646740CPL GH-997-5 White gypsum board, white mud, tan tape		r Ç	Ŋ.		NFM: Qtz, Carb, Opaq, Gyp, Mica, Misc. Part.	- Carb, Opac	3 % q, Gyp, Mi	2 % ica, Misc. l	- Part.			95 % 9/24/97 SS Non Homogeneous	9/24/97 S.S geneous
1646741CPL White gypsum board	GH-997-6 d		÷			NFM: Qtz, Carb, Opaq, Gyp, Misc. Part.	- Zarb, Opa	5 % q, Gyp, Mi	sc. Part.		(1)		95 % 9/2 SS Homogeneous	9/24/97 SS cous
										1		1	1	

530 McCormick Street San Leandro, CA 94577

0 1997

TOO

RJ Lee Group, Inc.

Bay Area Lab

Samples received on: Tuesday, September 23, 1997

Friday, September 26, 1997 Scott Stotler, Geologist

Date

Authorized Signature.

Phone

(510) 567-0480 (510) 567-0488 Fax

Page: 1 of 18

		-			Asbestos	SS				Nonasbestos	estos			
Sample Number / Sample Appearance	Sample Number / Mineral Fibrous Sample Appearance Client Sample Number Chrysotile Amosite Crocidolite Anthophyllite Tremolite Actinolite Cellulose Wool Glass	r Chrysotile	Amosite	Crocidolite	Anthophy	lite Tremolite	Actinolite	Cellulose	Mineral Wool	Fibrous Glass	Synthetic Fibers	Other N Fibers	Mineral Fibrous Synthetic Other NonFibrous Run Date Wool Glass Fibers Fibers Material Analyst	Run Date Analyst
1646742CPL	CH-997-7	4 %	,	40		i	i	<1 %			i	,	96 % 9/24/97	9/24/97
Red tile, clear mastic	ic					NFM: Qtz, Carb, Binder, Opaq, Misc. Part.	Carb, Bi	nder, Opaq,	Misc. Part.					SS
Layer Content:	Tile: 4% Chrysotile; Mastic: None Detected	tile; Mastic:	None De	tected								122	Non Homogeneous	geneous
1646743CPL Brown paper	8- <i>L</i> 66-HD		ì		•	NFM: Qtz, Carb, Opaq, Misc. Part.	- Carb, Op	95 % oaq, Misc. Pa	, 4	4		i	- 5 % 9/24/97 SS Homogeneous	9/24/97 SS
1646744CPL GH-997 White/grey gasket at furnace	GH-997-9 tt furnace	% 08	2 %	į		- 10 % NFM: Qtz, Carb, Opaq, Misc. Part.	- Carb, Op	10 % aq, Misc. Pa	, ti	•	÷		5 % 9/24/97 SS	9/24/97 SS
1646745CPL	GH-997-10	20 %						20 %			- 1		Homogeneous 30 % 9/24/97	ous 9/24/97
Tan wire insulation						NFM: Qtz, Carb, Binder, Opaq, Misc. Part.	Carb, Bir	nder, Opaq,	Misc. Part.				SS	SS
1646746CPL	GH-997-11	ò				ŧ	,	<1 %		i	i	i	99+ % 9/24/97	9/24/97
White wire insulation	uo					NFM: Qtz, Carb, Binder, Opaq, Misc. Part.	Carb, Bir	nder, Opaq,	Misc. Part.					SS

Authorized Signature

75 % 9/24/97

5 %

NFM: Qtz, Carb, Binder, Opaq, Misc. Part.

20 %

GH-997-12

Red wire insulation 1646747CPL

Homogeneous

Homogeneous

Friday, September 26, 1997 Scott Stotler, Geologist

(510) 567-0480 (510) 567-0488 Phone Fax

530 McCormick Street San Leandro, CA 94577

0, 1997

100

RJ Lee Group, Inc.

Bay Area Lab

Samples received on: Tuesday, September 23, 1997

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Project AOC709250

Sample Number / Sample Appearance	Client Sample Numbe	T Chrysotile	Amosite	Crocidolite Ar	ASDESTOS- ite Anthophyllit	e Tremolite Actinolite Cellulose		Nonasbestos Fibrous Synthetic Glass Fibers	ic Other Fibers	Other NonFibrou	Nonasbestos
1646748CPL White gypsum boar	1646748CPL GH-997-13 White gypsum board, white mud, tan tape	<1 %			,		- Misc. Part.		,	95 %	9/24/97 SS
Layer Content;	Mud: 2% Chrysoule; Other Layers: None Detected GH-997-14	oule; Other I 35 %	ayers: No	one Detected		7				Non Homogeneous	geneous
Brown linoleum, brown mastic Layer Content: Linole	own mastic Linoleum: 35% Chrysotile; Mastic: 2% Chrysotile	Chrysotile; 1	Mastic: 2	% Chrysotile		NFM: Qtz, Carb, Binder, Opaq, Misc. Part.	. Part.			SS Non Homogeneous	SS Seneous
1646750CPL GE Brown cove base mastic	GH-997-15 astic	di.	1 61	14)		- <1 % NFM: Qtz, Carb, Binder, Opaq, Mica, Misc. Part.	, Misc. Part.	1	+	99+ % 9/24/97 S.S Homogeneous	9/24/97 SS ous
1646751CPL GH-997 Black tar paper underlayment	GH-997-16 rlayment	ř		i i	•	NFM: Qtz, Tar, Carb, Opaq, Misc. Part.	- -			70 % 972. SS Homogeneous	9/24/97 SS ous
1646752CPL White/tan insulation	GH-997-17	85%	è	40	ù	NFM: Qiz, Carb, Opaq, Misc. Part.	ţ	4	1	13 % 9/2v SS Homogeneous	9/24/97 SS cous
1646753CPL GH-997 Black tar paper underlayment	GH-997-18 rlayment	,	è		7	NFM: Qtz, Tar, Carb, Opaq, Misc. Part.		4		SS Homogeneous	9/24/97 S S cous

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Project AOC709250

Sample Number /	e Client Sample Nu	mber Chrysofile	Amoeite	Providelite	Asbestos-	Sample Number / Sample America Client Sample Number Chrisofile America Confidents Anthony, little Translite Assimplies Collines Wight	Mineral	-	Nonasbestos Fibrous Synthetic	Other 1	Nonasbestos	Run Date
1646754CPL White insulation	GH-997-19	95 %		,	- Tridomire	NFM: Qtz, Carb, Opaq, Misc. Part.	<1 %	, oldas		- LIDELS	FIDCIS FIDCIS FIDCIS AS 912. SS Homogeneous	9/24/97 SS
1646755CPL GH-997. Grey linoleum, brown mastic	GH-997-20 own mastic	÷	ì	e e	i.	NFM: Qtz, Carb, Binder, Opaq, Misc. Part.	30 % - nder, Opaq, Misc.	Part.	ď		70 % 9/24/97 SS Non Homogeneous	9/24/97 S.S geneous
1646756CPL GF Brown cove base mastic	GH-997-21 nastic		ř			- <1 % - NFM: Qtz, Carb, Binder, Opaq, Misc. Part.	<1 % -	Part.	4	1	99+ % 9/24/97 SS Non Homogeneous	9/24/97 S S ogeneous
1646757CPL GH-997-22 Brown sheet vinyl, brown mastic Layer Content: Sheet V	GH-997-22 , brown mastic Sheet Vinyl:	997-22 35 % Smastic Sheet Vinyl: 35% Chrysotile; Mastic: <1% Chrysotile	- Mastic:	- <1% Chrys	- otile	NFM: Qtz, Carb, Binder, Opaq, Misc. Part.	<1 % -	Part.	1		65 % 9/24/97 S S Non Homogeneous	9/24/97 S.S ogeneous
1646758CPL GE Brown cove base mastic	GH-997-23 nastic	į		4		- <1 % - NFM: Qtz, Carb, Binder, Opaq, Misc. Part.	<1 % -	Part.			99+ % 9/24/97 SS Non Homogeneous	9/24/97 SS geneous
1646759CPL GH-997-24 Yellow insulation, brown mastic	GH-997-24 brown mastic	in I		190		- <1 % 85 % NFM: Qtz, Carb, Binder, Opaq, Misc. Part.	<1 % 85 % ander, Opaq, Misc. P	Part.	-		15 % 9/24/97 SS Non Homogeneous	9/24/97 SS ogeneous
								1	,			

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Project AOC709250

CH-997-25	Sample Appearance	Sample Number / Sample Appearance Client Sample Number Chrysotile Amosite Crocidolite Anthophyllite Tremolite Actinolite Cellulose	mber Chrysotile	Amosite	Crocidolite	Anthophy	llite Tremolite	Actinolite	Cellulose	Mineral	Fibrous Glass	Synthetic Fibers	Other N Fibers	iynthetic Other NonFibrous Fibers Fibers Material	Fibrous Synthetic Other NonFibrous Run Date Glass Fibers Fibers Material Analyst
GH-997-26 NFM: Qtz, Carb, Opaq, Misc. Part. Homogen GH-997-27 NFM: Qtz, Tar, Carb, Opaq, Misc. Part. Homogen GH-997-28 NFM: Qtz, Tar, Carb, Opaq, Misc. Part. Homogen GH-997-29 Solution Solution Homogen GH-997-29 Solution Solution Solution GH-997-30 Solution Solution Solution Solution GH-997-30 Solution Solution	1646760CPL Pink fiberglass inst	GH-997-25 ulation	*	ì			- NFM: Qtz,	- Carb, Bin	2 % der, Opaq,	80 % Misc. Part.	·	4		18 % 9/2/ SS Homogeneous	9/24/97 SS sous
GH-997-27 80 %	1646761CPL Tan insulation	GH-997-26	•		1	į	NFM: Qtz,	- Carb, Ope	95 % iq, Misc. Pa	, ti		,		5 % 9/2. SS Homogeneous	9/24/97 SS
GH-997-28 NFM: Qtz, Carb, Opaq, Misc. Part. 50 % NFM: Qtz, Tar, Carb, Opaq, Misc. Part. GH-997-30 NFM: Qtz, Tar, Carb, Opaq, Misc. Part. NFM: Qtz, Tar, Carb, Opaq, Misc. Part.	1646762CPL Brown ceiling insul	GH-997-27 lation		2	1	i.	NFM: Qtz,	- Tar, Carb,	80 % Opaq, Mi	sc. Part.		i.		~	9/24/97 SS
NFM: Qtz, Tar, Carb, Opaq, Misc. Part. 50 % NFM: Qtz, Tar, Carb, Opaq, Misc. Part.	1646763CPL Tan insulation	GH-997-28	0	÷	ķ.		NFM: Qtz,	- Carb, Opa	98 % q, Misc. Pa	rt.	i.	4		2 % Homogene	9/24/97 SS sous
	1646764CPL Black tar paper	GH-997-29		4	4.1		NFM: Qiz,	- Tar, Carb,	50 % Opaq, Mi	sc. Part.	è	i .		8	9/24/97 SS
	1646765CPL Black roofing tar pa	GH-997-30	!	1	Ÿ	•	NFM: Qtz,	- Tar, Carb,	50 % Opaq, Mi	- ca, Misc. P	art.	i.		50 % Iomogene	9/24/97 SS eous

Samples received on: Tuesday, September 23, 1997 RJ Lee Group, Inc. Bay Area Lab

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Project AOC709250

Sample Appearance	Sample Appearance Client Sample Number Chrysotile Amosite Crocidolite Anthophyllite Tremolite Actinolite Cellulose	nber Chrysotile	Amosite (Crocidolite	Anthophy	llite Tremolite	Actinolite	Cellulose	Wool	Glass	Fibers 1	Fibers	Fibers Material	Glass Fibers Fibers Material Analyst
1646766CPL GH-99 Brown paper duct insulation	GH-997-31 sulation		,		1	NFM: Qtz, Tar, Carb, Opaq, Misc. Part.	. Tar, Carb	90 %, Opaq, Mis	c. Part.				10 % 9/2. SS Homogeneous	9/24/97 SS cous
1646767CPL GH-997-32 Red/white floor tile, black mastic Layer Content: Tile: 59	GH-997-32 , black mastic Tile: 5% Chry	997-32 5 % : mastic Tile: 5% Chrysotile; Mastic: None Detected	None Det	ected	ě	<1 % NFM: Qtz, Tar, Carb, Binder, Opaq, Misc. Part.	Tar, Carb	<1 % Binder, Op	- oaq, Misc.	- Part.		. 4	95 % 9/24/97 SS Non Homogeneous	9/24/97 S S geneous
1646768CPL Black roof tar paper	GH-997-33			1.	ì	30 % NFM: Qtz, Tar, Carb, Opaq, Misc. Part.	- Tar, Carb,	30 % Opaq, Mis	c. Part.				70 % 9/2. SS Homogeneous	9/24/97 SS 20us
1646769CPL (Tan ceiling insulation	GH-997-34 on	1	4	4.1	·	NFM: Qtz, Carb, Opaq, Misc. Part.	- Carb, Opa	95 % 1q, Misc. Pa	, -				5 % 9/2 SS Homogeneous	9/24/97 SS ous
1646770CPL G Tan ceiling insulation	GH-997-35 on		1	1	- A	- 95 % NFM: Qtz, Carb, Opaq, Misc. Part.	- Carb, Ope	95 % 1q, Misc. Pa	, ₊	į.	å		5 % 9/2. SS Homogeneous	9/24/97 SS cous
1646771CPL GH-99 White celotex board ceiling	GH-997-36 ceiling		i		·	NFM: Qtz, Carb, Binder, Opaq, Misc. Part.	- Carb, Bin	85 % der, Opaq, ¹	Misc. Part.				15 % 9/2. SS Homogeneous	9/24/97 SS cous
Samples received on	Samples received on: Tuesday, September 23,7997 F	er.23,7997E		1			Authorized	Authorized Signature_		Second Second	Seott Stotler, Geologist	Geologi		ĺ

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Sample Number / Sample Appearance	Client Sample Number	T Chrysotil	e Amosite	Crocidolit	Asbestos- ite Anthophylli	Sample Number / Sample Actinolite Cellulose Wool	-	Nonasbestos Fibrous Syntheti Glass Fibers	Stos ynthetic Fibers	Other N	Nonasbestos	Run Date
1646772CPL GH-99 White celotex board ceiling	GH-997-37 d ceiling		•			NFM: Qtz, Carb, Binder, Opaq, Misc. Part.	art.		,	1	15 % 9/2. SS Homogeneous	
1646773CPL G Grey window caulking	GH-997-38 cing	<1 %	÷		•	NFM: Qtz, Carb, Binder, Opaq, Misc. Part.	Misc. Part.				99+% 9/2 SS Homogeneous	9/24/97 SS cous
1646774CPL GH Black/grey roof patching	GH-997-39 cching	10 %	21	- 1	ì	- <1 % - NFM: Qtz, Tar, Carb, Opaq, Misc. Part.	isc. Part.		i		90 % 9/2/ SS Homogeneous	9/24/97 S.S cous
1646775CPL GH-9 Black roofing, sliver paint Layer Content:	GH-997-40 1 % er paint 10% Chrysotile; Black Roofing: None Detected	1 % % Chrysotile	;; Black R	oofing: N	- one Detected	- 20 % NFM: Qtz, Tar, Carb, Opaq, Misc. Part.	- isc. Part.	ő.	s (F		79 % 9/26/97 SS Non Homogeneous	9/26/97 SS sgeneous
1646776CPL GH Black/grey roof patching	GH-997-41 ching	15 %		į	i	<1 % - NFM: Qtz, Tar, Carb, Opaq, Misc. Part.	sc. Part.		4	, -	85 % 9/20 SS Homogeneous	9/26/97 SS cous
1646777CPL GH-997∠ Brown floor tile, black mastic Layer Content: Tile:	GH-997-42 3 % lack mastic Tile: 3% Chrysotile; Mastic: None Detected	3 % tile; Mastic:	None De	etected		NFM: Qtz, Tar, Carb, Binder, Opaq, Misc. Part.	- paq, Misc. P	art.	(in)		97 % 9/26/97 SS Non Homogeneous	9/26/97 S S sgeneous
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Scott Stotler, Geologist Friday, September 26, 1997

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Sample Appearance	Sample Appearance Client Sample Number Chrysotile Amosite Crocidolite Anthophyllite Tremolite Actinolite Cellulose Wool	er Chrysotile	Amosite (rocidolite An	thophy	lite Tremolite	Actinolite (Cellulose		Glass	Fibers	Fibers	Glass Fibers Fibers Material Analyst	Analyst
1646778CPL White gypsum, wh Layer Content:	1646778CPL GH-997-43 <1 % - - - White gypsum, white mud, white tape Layer Content: Mud: 3% Chrysotile; Other Layers: None Detected	<1 % sotile; Other La	ayers: No	- ne Detected		NFM: Qtz, Carb, Opaq, Gyp, Mica, Misc. Part.	- Carb, Opac	5 % 1, Gyp, Mi	ca, Misc. I	Part.		. ~	95 % 9/26/97 SS Non Homogeneous	9/26/97 SS ogeneous
1646779CPL GH-997~ Brown floor tile, black mastic Layer Content: Tile:	GH-997-44 3 % lack mastic Tile: 3% Chrysotile; Mastic: None Detected	3 % sotile; Mastic:	- None Dete	petced		NFM: Qtz, Tar, Carb, Binder, Opaq, Misc. Part.	- Tar, Carb,	<1 % Binder, Og	aq, Misc.	- Part.	4		97 % 9/26/97 SS Non Homogeneous	9/26/97 SS geneous
1646780CPL White gysum, whit Layer Content:	1646780CPL GH-997-45 <1 % White gysum, white mud, white tape Layer Content: Mud: 3% Chrysotile; Other Layers: None Detected	<1 % sotile; Other La	iyers: Nor	- ne Detected		NFM: Qtz, Carb, Opaq, Gyp, Mica, Misc. Part.	- Carb, Opaq	5 % I, Gyp, Mi	ca, Misc. F	art.		,	95 % 9/26/97 SS Non Homogeneous	9/26/97 SS ogeneous
1646781CPL GI Grey cement fiber board	GH-997-46 xoard	40 %	ř	i	i i	<1 % NFM: Qtz, Carb, Opaq, Misc. Part.	- Carb, Opaq	<1 % i, Misc. Par		7			60 % 9/20 SS Homogeneous	9/26/97 SS sous
1646782CPL Grey window caulking	GH-997-47 cing	1%	2.1	ï		- <1 % - NFM: Qtz, Carb, Binder, Opaq, Misc. Part.	- Carb, Bind	<1 % er, Opaq, l	- Misc. Part.		4		99 % 9/2 SS Homogeneous	9/26/97 S.S eous
1646783CPL GI Grey cement fiber board	GH-997-48 ooard	45 %			100	<1 % NFM: Qtz, Carb, Opaq, Misc. Part.	- Carb, Opaq	<1 %	4		14.1		SS % 9/20 SS Homogeneous	9/26/97 S.S ous
									/	IN	M	M		1

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Test Report-Environmental Health Sciences-AK

Polarized Light Analysis Results Project AOC709250

Sample Appearance	Sample Appearance Client Sample Number Chrysotile Amosite Crocidolite Anthophyllite Tremolite Actinolite Cellulose	er Chrysotile	Amosite (Crocidolite An	thophy	Ilite Tremolite A	ctinolite C	ellulose	Wool	Glass	Fibers	Fibers Fibers	Fibers Material	Glass Fibers Fibers Material Analyst
1646784CPL White rope gasket	GH-997-49	% 06	i.			NFM: Qtz, Carb, Opaq, Misc. Part.	- arb, Opaq	8 % , Misc. Pa	ن ن	,	4		2 % 9/20 S S Homogeneous	9/26/97 S.S sous
1646785CPL White gypsum, wh Layer Content:	1646785CPL GH-997-50 <1 %	<1 % otile; Other La	tyers: No	- ne Detected	d	NFM: Qtz, Carb, Opaq, Gyp, Mica, Misc. Part.	arb, Opaq	5 % Gyp, Mi	ca, Misc. l	Part.	4		95 % 9/26/97 SS Non Homogeneous	9/26/97 SS geneous
1646786CPL White furnace gasket	GH-997-51 et	% 08		i.		NFM: Qtz, Carb, Opaq, Gyp, Misc. Part.	arb, Opaq,	5 % Gyp, Mi	sc. Part.		9	,	15 % 9/2v SS Homogeneous	9/26/97 S S cous
1646787 CPL Black tar paper	GH-997-52	+			4.	- 20 % - NFM: Qtz, Tar, Carb, Opaq, Misc. Part.	ar, Carb, (20 % Opaq, Mis	. Part.	1	· (i		80 % 9/2 SS Homogeneous	9/26/97 SS ous
1646788CPL GH. Grey linoleum (tar paper)	GH-997-53 paper)	•			4	NFM: Qtz, Tar, Carb, Opaq, Misc. Part.	ar, Carb, C	40 % Opaq, Mise	. Part.		4		60 % 9/2 SS Homogeneous	9/26/97 SS cous
1646789CPL Black tar paper	GH-997-54		d	á	i	20 % - NFM: Qtz, Tar, Carb, Opaq, Misc. Part.	- ar, Carb, (20 % Opaq, Mise	Part.	. \			80 % 9/2 SS Homogeneous	9/26/97 SS cous
Samples received o	Samples received on: Tuesday, September 23, 1997	23.1997 E				A	Authorized Signature_	ignature_	1	Anday Son	Scott Stotler, Geologist Friday, September 26, 1997	Geologi oer 26, 1	∑ st 2997	1

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RJ Lee Group, Inc. Bay Area Lab

Test Report-Environmental Health Sciences-AK

Polarized Light Analysis Results Project AOC709250

Sample Number /					T YSOCOTOS	9	Mineral	Fibrous Syntheti	Synthetic	Other	Mineral Fibrous Synthetic Other NonFibrous Run Date	Run Date
Sample Appearance	Client Sample Number	r Chrysotile	Amosite (rocidolite	Anthophy	Sample Appearance Client Sample Number Chrysotile Amosite Crocidolite Anthophyllite Tremolite Actinolite Cellulose	Wool	Glass	Fibers	Fibers	Fibers Material	Analyst
1646790CPL	GH-997-55	į	į			30 %	ì	i	i	•	20 %	9/26/97
Grey linoleum, black mastic	ck mastic					NFM: Qtz, Tar, Carb, Opaq, Misc. Part.	isc. Part.					SS
											Non Homogeneous	geneous
1646791CPL	95-7997-56	3 %		,	1	- <1 %		,	ì	ij	97 %	9/26/97
Brown floor tile, brown mastic Layer Content: Tile:	rown mastic Tile: 3% Chrysotile; Mastic: None Detected	tile; Mastic:	None Det	ected		NFM: Qtz, Carb, Binder, Opaq, Misc. Part.	Misc. Part.				SS Non Homogeneous	SS
1646792CPL GH. Grey wool clg insulation	GH-997-57 lation			ė	,	- <1 % 9 NFM: Qtz, Carb, Opaq, Misc. Part.	99 % art.	i	i	4.	1 %	9/26/97 SS
											Homogeneous	sno
1646793CPL	GH-997-58	<1 %			÷	- 20%	i			ü	% 08	9/26/97
Black roofing, silver coating Layer Content: Silv	er coating Silver Coating: 10% Chrysotile; Roofing: None Detected	0% Chrysoti	le; Roofin	g: None I	Detected	NFM: Qtz, Tar, Carb, Binder, Opaq, Misc. Part.	paq, Misc.	Part.			SS Non Homogeneous	SS
1646794CPL GH. Grey wool clg insulation	GH-997-59 lation			ř	•	- <1 % 9	99 % art.		è		1% 9/2a SS Homogeneous	9/26/97 SS cous
1646795CPL GH Grey wool clg insulation	GH-997-60 lation	Ť	7		•	- <1 % 9 NFM: Qtz, Carb, Opaq, Misc. Part.	99 % art.	ì	Á		1 % 9/2/ SS Homogeneous	9/26/97 SS sous
						W-1		1	1	+		

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Project AOC709250

95 %		П	Analyst
GH-997-62 95 % GH-997-63 95 % GH-997-64		- 70 % 9/26/97 SS Non Homogeneous	76
95 %	NFM: Qtz, Carb, Opaq, Misc. Part.	- 5 % 9/26/97 SS Homogeneous	76
	5 % - <1 % - NFM: Qtz, Carb, Opaq, Misc. Part.	- 5 % 9/26/97 SS Homogeneous	76
	NFM: Qtz, Carb, Opaq, Misc. Part.	- 1 % 9/26/97 SS Homogeneous	76
	NFM: Qtz, Carb, Binder, Opaq, Misc. Part.	- 70 % 9/26/97 SS Homogeneous	76
1646801CPL GH-997-66 <1 % - - NFM: White joint compound, cellulose bd NFM: NFM: NFM: Layer Content: Joint Compound: 2% Chrysotile; Other Layer: None Detected		- 10 % 9/26/97 SS Non Homogeneous	76

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Sample Number / Sample Appearance	Sample Number / Minera Sample Appearance Client Sample Number Chrysotile Amosite Crocidolite Anthophyllite Tremolite Actinolite Cellulose Wool	ver Chrysotil	le Amosite	Crocidolit	e Anthophyllit	llite Tremolite	Actinolite	Cellulose	_	Fibrous Synthetic Glass Fibers	Synthetic Fibers	Other N Fibers	Other NonFibrous Fibers Material	Fibrous Synthetic Other NonFibrous Run Date Glass Fibers Fibers Material Analyst
1646802CPL White gypsum wal Layer Content:	1646802CPL GH-997-67 <1 % - - - White gypsum wallboard, white joint compound Compound - <th><1 % npound d: 2% Chrys</th> <th>sotile; Othe</th> <th>er Layer: N</th> <th>- Jone Detecto</th> <th>NFM: Qtz, Carb, Opaq, Gyp, Mica, Misc. Part.</th> <th>- Carb, Opi</th> <th>5 % aq, Gyp, Mi</th> <th>ica, Misc. l</th> <th>- Part.</th> <th></th> <th></th> <th>95 % 9/26/97 SS Non Homogeneous</th> <th>9/26/97 SS ogeneous</th>	<1 % npound d: 2% Chrys	sotile; Othe	er Layer: N	- Jone Detecto	NFM: Qtz, Carb, Opaq, Gyp, Mica, Misc. Part.	- Carb, Opi	5 % aq, Gyp, Mi	ica, Misc. l	- Part.			95 % 9/26/97 SS Non Homogeneous	9/26/97 SS ogeneous
1646803CPL GH-997 Grey linoleum, black mastic	GH-997-68 ck mastic	Á	. 1 -	•	i.	- 30% - NFM: Qtz, Carb, Binder, Opaq, Misc. Part.	- Carb, Bin	30 % der, Opaq,	- Misc. Part.	1			70 % 9/26/97 SS Non Homogeneous	9/26/97 SS logeneous
1646804CPL Grey paper	69-166-HD					99 % NFM: Qtz, Carb, Opaq, Misc. Part.	- Carb, Ope	99 % aq, Misc. Pa	, ₁		,		1 % 9/20 SS Homogeneous	9/26/97 SS eous
1646805 CPL Black paper	0 <i>L-1</i> 66-HD	17	i	1	ť	40 % - NFM: Qtz, Tar, Carb, Opaq, Misc. Part.	Tar, Carb,	40 % Opaq, Mis	c. Part.	4	3		60 % 9/26/97 SS Homogeneous	9/26/97 S.S ous
1646806CPL Brown paper	GH-997-71	, q		4	i	- 95 % NFM: Qtz, Carb, Opaq, Misc. Part.	- Carb, Opa	95 % iq, Misc. Par	. 4		4		5 % 9/2 SS Homogeneous	9/26/97 SS cous
1646807CPL GH-997. Red linoleum, black tar paper	GH-997-72 k tar paper	1	•	4	1	NFM: Qtz, Tar, Carb, Binder, Opaq, Misc. Part.	Tar, Carb,	40 % Binder, Op	- paq, Misc. 1	- Part.		. 4	60 % 9/26/97 SS Non Homogeneous	9/26/97 SS geneous

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Sample Number /	Client Sample Number	Chrysotile	Amosite (Procidolite Anthophyllia	thophyl	Sample Number / Sample Amostrance Client Sample Number Chrysofile Amostre Crocidolite Anthophyllite Tremolite Actinolite Cellulose	Mineral Wool	Fibrous	Fibrous Synthetic Glass Fibers	Other N Fibers	Fibrous Synthetic Other NonFibrous Run Date Glass Fibers Fibers Material Analyst	Run Date Analyst
1646808CPL Black tar paper	GH-997-73		i	1		NFM: Qtz, Tar, Carb, Opaq, Misc. Part.	Misc. Part.				40 % 9/2(SS Homogeneous	9/26/97 SS sous
1646809CPL Brown linoleum, w	1646809CPL GH-997-74 Brown linoleum, white paper (mastic not submitted)	- bmitted)	ě1	,	1	NFM: Qtz, Carb, Binder, Opaq, Misc. Part.	e paq, Misc. Part.		X		60 % 9/26/97 SS Non Homogeneous	9/26/97 SS ogeneous
1646810CPL G	GH-997-75 hair	i		T.	į.	- 60 % - NFM: Qtz, Tar, Carb, Opaq, Misc. Part.	Misc. Part.		i i		40 % 9/20 SS Homogeneous	9/26/97 SS cous
1646811CPL GH-99 Red linoleum, black mastic	GH-997-76 sk mastic	i.	. 1	10.	i		6 - , Misc. Part.	•		1	70 % 9/26/97 SS Non Homogeneous	9/26/97 SS 9geneous
1646812CPL Black paper	CH-997-77		į	1	i.	- 40 % - NFM: Qtz, Tar, Carb, Opaq, Misc. Part.	6 - , Misc. Part.			-	60 % 9/2 SS Homogeneous	9/26/97 S.S eous
1646813CPL Green paper, brown	1646813CPL GH-997-78 Green paper, brown wood, brown paper		1	ni 🤻	-1	NFM: Qtz, Carb, Opaq, Misc. Part.	sc. Part.	1		i	1 % 9/26/97 S S Non Homogeneous	9/26/97 S S geneous

Samples received on: Tuesday, September 23, 1997

RJ Lee Group, Inc.

Bay Area Lab

530 McCormick Street San Leandro, CA 94577 Page: 13 of 18

Scott Stotler, Geologist

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Date

Authorized Signature_

DEC 1 6

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530 McCormick Street San Leandro, CA 94577 Page: 13 of 18

RJ Lee Group, Inc. Bay Area Lab

Test Report-Environmental Health Sciences-AK

Polarized Light Analysis Results Project AOC709250

1646819CPL GH-997-73	Sample Number /	Client Sample Number	Clrrysotile	Amosite (rocidolite	Anthophyl	lite Tremolite Actinolite Cells	Mineral Mool	Glass	Fibers	Fibers Fibers	Mineral Fibrous Synthetic Other Four-Bous Kun Lake. Wool Glass Fibers Fibers Material Analyst	Analyst
40 % NFM: Qrz, Carb, Binder, Opaq, Misc. Part. 60 % NFM: Qrz, Tar, Carb, Opaq, Misc. Part. 40 % NFM: Qrz, Tar, Carb, Opaq, Misc. Part. 40 % NFM: Qrz, Tar, Carb, Opaq, Misc. Part. Scott Synfer, Gran. Authorized Signature Scott Synfer, Geolog Date	646808CPL	GH-997-73		4			NFM: Qiz, Tar, Carb, Opa	96 . q, Misc. Part.	,	·		40 % Homogene	9726/97 S.S Sous
H-997-75 H-997-76 H-997-76 H-997-76 NFM: Qz, Tar, Carb, Opaq, Misc. Part. 40 % NFM: Qz, Tar, Carb, Opaq, Misc. Part. NFM: Qz, Tar, Carb, Opaq, Misc. Part. NFM: Qz, Tar, Carb, Opaq, Misc. Part. NFM: Qz, Carb, Opaq, Misc. Part. Authorized Signanure Scott Signer. Geolog Date: — Friday, September 26,	1646809CPL Brown inoleum, w	GH-997-74 hire paper (mastic not sut	· Smitted)	·	40		NFM: Qu, Carb, Binder, 40	%		÷		60 % Non Homo	9726/97 SS geneous
30 % NFM: Qz, Tar, Carb, Opaq, Misc. Part. 40 % NFM: Qz, Tar, Carb, Opaq, Misc. Part. 99 % NFM: Qz, Carb, Opaq, Misc. Part. NFM: Qz, Carb, Opaq, Misc. Part. Authorized Signature Scott Styler, Geolog	1646810CPL Black paper, horse!	GH-997-75 kair			4		60 NFM: QE, Tar, Carb, Ope	9, Misc. Part.	9	. •		40 % Homogene	9/26/97 SS sous
40 % NFM: Qtz, Tar, Carb, Opaq, Misc. Part. 99 % NFM: Qtz, Carb, Opaq, Misc. Part. Authorized Signature Scott Synder, Geolo Date: Priday, September 26,	1646811CPL Red linoleum, blac	GH-997-76	·	÷	a.	Ŷ	30 NFM: Qtz, Tar, Curb, Opi	1% и, Misc. Part.		£*		70 % Non Hotts	9726/97 S.S ogeneous
99 % NFM: Qtz, Carb, Opaq, Misc. Part. Authorized Signature Scott Synder, Geolo Date Date	1646812CPL Black paper	GH-997-77	è	T.	i.		NFM: Qtz, Tar, Carb, Opv	1% . ng, Misc. Part.				60 % Homogene	9176/97 SS SOUS
Authorized Signature Scott Support Scott Support Scott Support Scott Support Support Scott Support Scott Support Support Scott Support Scott Support S	1646813CPL Green paper, brown	GH-997-78 n wood, brown paper	1.8	Ü		•	NFM: Qtz, Carb, Opaq, N	1% . fisc. Part.	6		1	1 % Non Home	9/26/97 S.S ogeneous
	Samples received	ол: Tuesday, September 2	23, 1997				Authorized Sig	nature Date	John Son		Geolo Dec 26, 0	Tage 1881	. 1

Project AOC709250

Sample Number / Sample Appearance C 1646814CPL (Brown flooring								T. Land	Fibrous Synthat	vinthetic	Other 1	VonFibrou	Mineral Fibrous Synthetic Other NonFibrous Run Date
1646814CPL Grown flooring	lient Sample Number	Chrysotile A	Amosite C	rocidolite Ar	thophyl	Sample Number / Sample Appearance Client Sample Number Chrysotile Amosite Crocidolite Anthophyllite Tremolite Actinolite Cellulose Wool	llulose	Wool (Glass	Fibers	Fihers	Fibers Fibers Material	Analyst
Brown flooring	GH-997-79					6	95 %					5 %	0
						NFM: Qtz, Carb, Binder, Opaq, Misc. Part.	, Opaq, M	lisc. Part.					SS
												Homogeneous	snoa
1646815CPL (08-266-НЭ	1	,	1	,	4	40% ~	<1 %	è	1	1	% 09	60 % 9/26/97
Yellow linoleum, brov	Yellow linoleum, brown mastic, grey underlay-ment	ay-ment				NFM: Qtz, Carb, Binder, Opaq, Misc. Part.	Opaq, M	lisc. Part.			1.5	Non Hom	SS Non Homogeneous
1646816CPL (GH-997-81	÷			ij	6	95 %		4		1	5%	9/26/97
Brown hardwood flooring	gu					NFM: Qtz, Carb, Binder, Opaq, Misc. Part.	Opaq, M	isc. Part.				SS Homogeneous	SS
1646817CPL (GH-997-82					4	40 %	4		L.		% 09	9/26/97
Brown linoleum, grey	Brown linoleum, grey underlay-ment (mastic not submitted)	not submitte	(p;			NFM: Qtz, Carb, Binder, Opaq, Misc. Part.	Opaq, M	isc. Part.				S.S. Non Homogeneous	SS
1646818CPL Brown gasket	GH-997-83	•	1.			- <1 % 9 NFM: Qtz, Carb, Opaq, Misc. Part.	<1 % 5	90 % rt.	ů.		5	10 %	9/26/97 SS
1646819CPL (GH-997-84	.)			ì	4	40 %					Homogeneous 60 % 9/20	sous 9/26/97
Brown linoleum, brow	Brown linoleum, brown mastic, grey underlay-ment	y-ment				NFM: Qtz, Carb, Binder, Opaq, Misc. Part.	Opaq, M	isc. Part.				SS Homogeneous	SS

530 McCormick Street San Leandro, CA 94577 Samples received on: Tuesday, September 23, 1997 1661 0 133 RJ Lee Group, Inc. Bay Area Lab

Authorized Signature. Date

Friday, September 26, 1997 Scort Stotler, Geologist

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Page: 14 of 18

Test Report-Environmental Health Sciences-AK

Polarized Light Analysis Results Project AOC709250

Sample Number / Sample Appearance (Sample Number / Sample Appearance Client Sample Number Chrysottle Amosite Crocidolite Anthophyllite Tremolite Actinolite Cellulose	Chrysotile	Amosite (Crocidolite	ite Anthophyllit	lite Tremolite Ac	tinolite Cellulos	Mineral Wool	Fibrous	Fibrous Synthetic Glass Fibers	Other Pibers	Mineral Fibrous Synthetic Other NonFibrous Run Date Wool Glass Fibers Fibers Material Analyst	Run Date Analyst
1646820CPL Green/brown celotex	1646820CPL GH-997-85 Green/brown celotex bd (no joint compound)		i			NFM: Qtz, Ca	NFM: Qtz, Carb, Binder, Opaq, Misc. Part.	, Misc. Part.				5 % 9/2/ SS Homogeneous	9/26/97 SS ous
1646821CPL Green/brown celotex	1646821CPL GH-997-86 Green/brown celotex bd (no joint compound)		i	ă.	i	- NFM: Qtz, Ca	95 % - NFM: Qtz, Carb, Binder, Opaq, Misc. Part.	- , Misc. Part.		0		5 % 9/2. SS Homogeneous	9/26/97 SS sous
1646822CPL GH-997-87 White gypsum bd (no joint compound	GH-997-87 Joint compound		2	1	•	NFM: Qtz, Ca	- 5% NFM: Qtz, Carb, Opaq, Gyp, Mica, Misc. Part.	- Mica, Misc.	- Part.		0	95 % 9/2c SS Homogeneous	9/26/97 S S Sous
1646823CPL GH-997-88 Black tar roofing, grit surfacing	GH-997-88 t surfacing	25 %	1	4		NFM: Qtz, Ta	20 % - NFM: Qtz, Tar, Carb, Opaq, Misc. Part.	- lisc. Part.	5		. 7	55 % 9/2 SS Homogeneous	9/26/97 S.S cous
1646824CPL GH-997-89 Yellow fiberglass, black vapor barrier	GH-997-89 sck vapor barrier	4		,	•	NFM: Qtz, Ta	30 % 20 % - NFM: Qtz, Tar, Carb, Binder, Opaq, Misc. Part.	20 % Opaq, Misc.	- Part.	4		50 % 9/26/97 SS Non Homogeneous	9/26/97 S S seneous
1646825CPL GH-997-90 Yellow fiberglass, black vapor barrier	GH-997-90 ack vapor barrier				ì	NFM: Qtz, Ta	- 10% 70% - NFM: Qtz, Tar, Carb, Binder, Opaq, Misc. Part.	70 % Opaq, Misc.	Part.			20 % 9/26/97 S S Non Homogeneous	9/26/97 SS rogeneous

Samples received on: Tuesday, September 23, 1997

RJ Lee Group, Inc. Bay Area Lab

San Leandro, CA 9
San Leandro, CA 9
San Leandro, CA 9
San Leandro, CA 9

530 McCormick Street San Leandro, CA 94577

Date

Authorized Signature.

Seoft Stotler, Geologist Friday, September 26, 1997

Phone (510) 567-0480 Fax (510) 567-0488

Project AOC709250

Sample Number / Sample Appearance Client Sample Number Chrysotile Amosite Crocidolite Anthophyllite Tremolite Actinolite Cellulose Wool	ber Chrysotile	Amosite	Crocidolite	Asuestos-	Uite Tremolite Actinolite Cell	-	Fibrous Syntheti Glass Fibers	Synthetic Fibers	Other N	Other NonFibrou Fibers Material	Fibrous Synthetic Other NonFibrous Run Date Glass Fibers Fibers Material Analyst
1646826CPL GH-997-91 Black tar paper, grit surfacing	20%	i	÷		NFM: Qtz, Tar, Carb, Opaq, Misc. Part.	20 % - Opaq, Misc. Part.	19		1	60 % 9/2/ SS Homogeneous	9/26/97 S.S sous
1646827CPL GH-997-92 Yellow fiberglass, black vapor barrier	•	i.	•	•	20 NFM: Qtz, Tar, Carb, Bin	20 % 50 % - Binder, Opaq, Misc. Part.	Part.	1	1	30 % 9/26/97 SS Non Homogeneous	9/26/97 S S sgeneous
1646828CPL GH-997-93 Black cloth, white insulation	0			•	5% <1% - NFM: Qtz, Tar, Carb, Binder, Opaq, Misc. Part.	5 % <1 % Sinder, Opaq, Misc	- Part.	,	. =	95 % 9/26/97 SS Non Homogeneous	9/26/97 S S ogeneous
1646829CPL GH-997-94 Brown hardwood floor	•	•	Y	i	NFM: Qtz, Carb, Binder, Opaq, Misc. Part.	95 % - r, Opaq, Misc. Part	6		,	5 % 9/2a SS Homogeneous	9/26/97 SS ous
1646830CPL GH-997-95 Brown hardwood floor, black mastic		•	1	ì	- 94% - NFM: Qtz, Tar, Carb, Binder, Opaq, Misc. Part.	% - ler, Opaq, Misc	Part.			6 % 9/26/97 S S Non Homogeneous	9/26/97 S S sgeneous
1646831CPL GH-997-96 Black tar paper	·	1	37		NFM: Qtz, Tar, Carb, Opaq, Misc. Part.	% - q, Misc. Part.		4		40 % 9/2 SS Homogeneous	9/26/97 SS ous
							/	-	,		

Samples received on: Tuesday, September 23, 1997

RJ Lee Group, Inc. Bay Area Lab

1681 a 1887

530 McCormick Street San Leandro, CA 94577

Date/

Authorized Signature_

Scott Stotler, Geologist Friday, September 26, 1997

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Page: 16 of 18

Project AOC709250

Sample Number / Sample Appearance Client Sample Number Chrysotile Amosite Crocidolite Anthophyllite Tremolite Actinolite Cellulose	nber Chrysotile	Amosite	Crocidolite	Anthophyllit	lite Tremolite Actinolite	Mineral Cellulose Wool		Fibrous Synthetic Other NonFibrous Run Date Glass Fibers Fibers Material Analyst	tic Other l	NonFibrous Material	Run Date Analyst
1646832CPL GH-997-97 White window putty	·		(x)		- <1 % - NFM: Qtz, Carb, Binder, Opaq, Misc. Part.	<1 %	. Part.	•		99+% 9/2/ SS Homogeneous	9/26/97 S S cous
1646833CPL GH-997-98 White window putty	v	£	4		- <1 % - NFM: Qtz, Carb, Binder, Opaq, Misc. Part.	<1 % -	. Part.	1		99+% 9/2/ SS Homogeneous	9/26/97 S.S sous
1646834CPL GH-997-99 Black tar paper		į		*	NFM: Qtz, Tar, Carb, Opaq, Misc. Part.	45 % - Opaq, Misc. Par	ť		4	55 % 9/2 SS Homogeneous	9/26/97 SS ous
1646835CPL GH-997-100 Brown cellulose board	i		4		- 99 % NFM: Qtz, Carb, Opaq, Misc. Part.	99 % -		•		1% 9/2 SS Homogeneous	9/26/97 SS ous
1646836CPL GH-997-101 Grey cement fiberboard	40 %		4 %		- <1 % - NFM: Qtz, Carb, Binder, Opaq, Misc. Part.	<1 % -	. Part.	•		SS Homogeneous	9/26/97 SS sous
1646837CPL GH-997-102 White pipe insulation	% 06	V)	4.1		- 1 % NFM: Qtz, Carb, Opaq, Misc. Part.	1% -				9 % 9/2 SS Homogeneous	9/26/97 SS ous
Samples received on: Tuesday, September 23, 1997	er 23, 1997				Authorized Signature Date	Signature	Mr.	Scott Stotler, Geologist Friday, September 26, 1997	rt, Geolog mber 26,	gist 1997	<i>h</i>

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530 McCormick Street San Leandro, CA 94577 Page: 17 of 18

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RJ Lee Group, Inc.

Test Report-Environmental Health Sciences-AK

Polarized Light Analysis Results Project AOC709250

Sample Number / Sample Appearance	ample Number / mole Appearance Client Sample Number Chrysotile Amosite Croci	Chrysotile Amo	Amosite C	rocidolite A	Asbestos	Asbestos	Actinolite	Pollulosa	Mineral	Nonasbestos	estosSynthetic	Other N	Mineral Fibrous Synthetic Other NonFibrous Run Date	Run Date
11	Ĭ	1		-	and and ame	ALCHIOTES .	ALTOURNA !	Commos	1001	Oldso	LIDGIS	LIDEIS	Mania	Alialyst
1646838CPL	GH-997-103	40 %	,	20 %				,	,	,			40 % 9/26/97	9/26/97
White pipe insulation	u)				-	NFM: Qtz, Carb, Opaq, Gyp, Misc. Part.	Carb, Opa	q, Gyp, M	isc. Part.					58
•												1	Iomogeneous	sno

Authorized Signature____

Date

Scott Stotler, Geologist Friday, September 26, 1997

Friday, September 26, 1997

Phone (510) 567-0480

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Samples received on: Tuesday, September 23, 1997

RJ Lee Group, Inc. Bay Area Lab

San Leandro, CA 94577

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Environmental Health Sciences-Alaska, Inc. 10928 Eagle River Road, Suite 202, Eagle River, AK 99577-8052 (907) 694-1383 • (907) 694-1382 fax

FIELD	CHAIN OF CUSTODY RECORD/F			
COLLECTION DATE:	9-19-97 JOB#: 3968-01-02	MATERIAL TY (ASBESTOS)	PE:(Circle) TOTAL LEAD QUANT	ITIES: 7
PROJECT NAME: 60	V. Hill Telegram EA ? REQUESTED:	Circle) PLM PLM DUST	/ TEM BULK / LEAD	CLP / LEAD PPN
the same of the sa		Routine	TURNAROUND: 3	
	E			1111
SPECIAL INSTRUCTIO	NS: FAX D/COC COMMEN	TS:		
Nobest Tre	Sola Elan Sear.			
Robert Free	SELECTED LABORATORY TONY OF DSICUL FR PROP 7	50/		
PRINTED NAME	SAMPLES ACCEPTED BY	1		
1564 88 IM CERT# AHERA#	VATERTIME DATESTIME			
SHIPPING METHOD	ANALYSTYS SIGNATURE			
Che 19 Chate	9/24/97 9:00A	7.3107.5		
DATE/TIME -23-77 6:	20 a	\$17-02	41	
SAMPLE ID	SAMPLE DESCRIPTION, (COLOR, MATERIAL TYPE, LAYERS, FRIABILITY)		COMMENTS PHOTO/XREF)	2 RESULTS
1.	Red Brick Pottern Self-stic			- Committee of the last of the
GH997-Q1	12"x12" tile	Diagi	_	Chrysotile
MATL CONDITION: GOOD FAIR POOR	DAMAGE POTENTIAL: (LO, MED, HI) WATER: AIR: VIBRATION: CONTACT:	Split from	south Office Sample Z	
2.	Blds Pages		- ander Blog.	
GH997 - Q2		Giding So	Ecorres	Detected
MATL CONDITION: GOOD FAIR POOR	WATER: DAMAGE POTENTIAL: (LO, MED, HI) WATER: AIR: VIBRATION: CONTACT:	Split From	Sample 8	
1400- 00	Blown in Mixed Freal	Above ceil	ly of Kitchen. Sough 28	None
GH997 - Q3	ALL CONTROL OF THE PARTY OF THE	(£	28	Vetectes
MATL. CONDITION: GOOD FAIR POOR	WATER: DAMAGE POTENTIAL: (LO, MED, HI) WATER: AIR: VIBRATION: CONTACT:	spect ron	- Softe Blog	
GH997 - Q4	Brown / Black / Redish Tar	NOB Ful	rvoce	None
MATL CONDITION:	Cineolem DAMAGE POTENTIAL: (LO, MED, HI)	Solt from Com	& EE Blode	Desertes
GOOD FAIR POOR 5.	WATER: AIR: VIBRATION: CONTACT:	Joseph Stan	ale 55 Blog ?	TAIL.
GH997- Q5	Redish dute Bashed linespen	Centes eve	St Koom @	None Detected
MATL. CONDITION:	cu/ black tangages under lay DAMAGE POTENTIAL: (LO, MED, HI) WATER: AIR: VIBRATION: CONTACT:	Solet from San	12 Bldg3	
GOOD FAIR POOR 6.	Vellowi'sh tute backed	Truet Se	10 - 0 0 -	None
GH997-Q6	Iniesteum w/ gray bunderlay	00001 210	Le of S. Room, and 10 Bldg 3	Detected
MATL CONDITION: GOOD FAIR POOR	DAMAGE POTENTIAL: (LO, MED, HI) WATER: AIR: VIBRATION: CONTACT:	Split from S	ayle 10 Bldg 3	
7.				
CHTOLZ-UT				1-
MATL CONDITION: GOOD FAIR POOR	WATER: DAMAGE POTENTIAL (LO, MED, HI) WATER: AIR: VIBRATION: CONTACT:			
8.				
MATL CONDITION:	, DAMAGE POTENTIAL: (LO, MED, HI)			
GOOD FAIR POOR	WATER: AIR: VIBRATION: CONTACT:			



SOLAR ENVIRONMENTAL SERVICES, INC.

1131 E. 76TH Ave., Ste. 102, Anchorage, Ak 99518 Phone (907) 349-7705/ Fax (907) 349-7944



Accredited Laborator

U.S. Dept. of Commerce-NIST

CERTIFICATE OF ANALYSIS

CLIENT:

ATTN:

Tom Swearingen, PhD

10298 Eagler River Road, Ste. 202

Eagle River, Ak 99577

PAGE:

1 of 2

Environmental Health Sciences-Ak

CLIENT ORDER#:

PROJECT NAME:

Govt. Hill Telegraph EA2

PROJECT NO: 3968-01-02

REPORT NO:

REPORT DATE: Sept. 25, 1997 Robert French-Client

COLLECTED BY:

DATE SAMPLED: Sept. 19, 1997 DATE RECEIVED: Sept. 24, 1997

DATE ANALYZED:

Sept. 24, 1997

191005

B97-0241

ANALYZED BY:

Tony Odsigue-SES

BULK ASBESTOS ANALYSIS REPORT

POLARIZED LIGHT MICROSCOPY (PLM) EPA METHOD 600R93116

LAB.#	CLIENT#	LOCATION/ DESCRIPTION/ (COLOR)	%ASBESTOS PRESENT	%OTHER FIBROUS MATERIALS	%NONFIBROUS MATERIALS
97531BO1146	GH997-Q1	Red-brick Pattern 12"x12" Bldg. 1 South Office (Red)	5-10%Chrysotile	1-3% Fibrous Glass	82-91%
97531BO1147	GH997-Q2	Bldg. Paper Exterior-under Bldg. siding SE Corner (Lt. brown)	None Detected	90-92% Cellulose 3-5% Synthetic	3-7%
97531BO1148	GH997-Q3	Brown in mixed Insulation Above Ceiling of kitchen, bldg 1 (Lt. Cream)	None Detected	90-95% Cellulose	5-10%
97531BO1149	GH997-Q4	Linoleum layer Brown/Black Reddish Tar Linoleum N. of Furnace Linoleum(Red/Black)	None Detected	55-60%Cellulose	40-45%

All quantitations are based on visual estimation unless point counting method, per NESHAP 40 CFR Part 61, is requested by client. Test report relates only to the items tested and must not be used by client to claim product endorsement by NVLAP or any Agency of the U.S. Government. Test report must not be reproduced except in full without the approval of SES and subject to SES general terms and conditions. Small asbestos fibers may be missed by PLM Method due to resolution limitations of the optical microscope. Therefore, None Detected and <1% PLM results cannot be guaranteed. Transmission Electron Microscopy (TEM) is recommended for confirmation.

REVIEWED AND APPROVED BY:

Torrijos, Chemist-I.H.

Date:

FORM# SES 1008 REVISED 5/22/96



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1131 E. 76TH Ave., Ste. 102, Anchorage, Ak 99518 Phone (907) 349-7705/ Fax (907) 349-7944



Accredited Laboratory

U.S. Dept. of Commerce-NIST

CERTIFICATE OF ANALYSIS

CLIENT:

ATTN:

PAGE:

Tom Swearingen, PhD

10298 Eagler River Road, Ste. 202

Eagle River, Ak 99577

Environmental Health Sciences-Ak

2 of 2

CLIENT ORDER#:

PROJECT NAME:

PROJECT NO: REPORT NO:

REPORT DATE:

COLLECTED BY:

DATE SAMPLED:

DATE RECEIVED: DATE ANALYZED:

ANALYZED BY:

191005

Govt. Hill Telegraph EA2

3968-01-02 B97-0241

Sept. 25, 1997

Robert French-Client

Sept. 19, 1997

Sept. 24, 1997

Sept. 24, 1997

Tony Odsigue-SES

BULK ASBESTOS ANALYSIS REPORT POLARIZED LIGHT MICROSCOPY (PLM) EPA METHOD 600R93116

LAB.#	CLIENT#	LOCATION/ DESCRIPTION/ (COLOR)	%ASBESTOS PRESENT	%OTHER FIBROUS MATERIALS	%NONFIBROUS MATERIALS
		Mastic layer Brown/Black Reddish Tar-bldg. 2 Linoleum N. of Furnace (Red/Black)	None Detected	3-5% Cellulose	95-97%
97531BO1150	GH997-Q5	Reddish linoleum with black tar paper Center W. Rm door to NW Bldg 3 (Red/Brown)	None Detected	35-40% Cellulose	60-65%
97531BQ1151	GH997-Q6	Yellowish Linoleum with gray underlay West side of S. Rm Bldg. 3 (Brown/Yellow/Gray)	None Detected	65-70% Cellulose	30-35%
97531BO1147QC	GH997-02QC	QUALITY CONTROL	None Detected	90-92% Cellulose 3-5% Synthetic	3-7%

All quantitations are based on visual estimation unless point counting method, per NESHAP 40 CFR Part 61, is requested by client. Test report relates only to the items tested and must not be used by client to claim product endorsement by NVLAP or any Agency of the U.S. Government. Test report must not be reproduced except in full without the approval of SES and subject to SES general terms and conditions. Small asbestos fibers may be missed by PLM Method due to resolution limitations of the optical microscope. Therefore, None Detected and <1% PLM results cannot be guaranteed. Transmission Electron Microscopy (TEM) is recommended for confirmation.

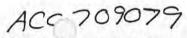
REVIEWED AND APPROVED BY:

Gracita Torrijos, Chemist-I.H.

FORM# SES 1008 REVISED 5/22/96

APPENDIX B

Lead Field Data Sheets and Laboratory Reports





Environmental Health Sciences-Alaska, Inc. 10928 Eagle River Road, Suite 202, Eagle River, AK 99577-8052 (907) 694-1383 • (907) 694-1382 fax

	CHAIN OF	CUSTODY	RECORD/F	TELD SURVE	Y DATA P	age / of 3
FIELD COLLECTION DATE:	7-19-97	_{ЈОВ#:} 39	68-01-0.	2 MATERIAL ASBESTOS	TYPE:(Clase) TOTAL QUAN	TITIES: 3/
PROJECT NAME: Gov			BULK ANALY	SIS	UST / TEM BULK / LEAD	TCLP (LEAD PPM)
FACILITY: Gov. Hil	wireless s	eta	DISPOSAL:	Routine	TURNAROUND:	3 days
SPECIAL INSTRUCTION	S:					
COLLECTED BY (signature) Robert France PRINTED NAME 1664 — 88DMP CERTIN AHERAN SHIPPING METHOD	SELECTED SELECTED SAMPLES A DATE/TIME ANALYST'S	LABORATORY CCEPTED BY	egevifi COMMEN	ITS:		
DATE/TIME	DATE					
SAMPLE ID		MPLE DESCRIPTION RIAL TYPE, LAYERS,		(INCLUI	TION/COMMENTS DING PHOTO/XREF)	RESULTS
GH997 - LI	Green Pain	nt on Gyp		GE corne	m of South Blds 1	0.0603 % lead
MATL. CONDITION: GOOD FAIR POOR	WATER: DAMAGE	POTENTIAL: (LO, M VIBRATION:	MED, HI) CONTACT:	Y		
CH997- L2 MATL CONDITION: GOOD FAIR POOR	an wor	et, Clean U el potential: (LO, M VIBRATION:		11000 500	entry to South	0:178% les
3. GH997- L3 MATL CONDITION: GOOD FAIR POOR	Gray + 4	POTENTIAL: (LO, N VIBRATION:	intan	South Rack sup	Room - at youth Bldg	0.0718% lead
GH997 - LY MATL CONDITION:	DAMAGE	epotential: (LO, N	424	North R NW con	som walls	(0.013%)
5. GH997- L5 MATL. CONDITION:			Gyp	youth F NW con	roon certs, an Blog	0.0051476 lead
6. GH 997 - L6 MATL CONDITION: GOOD FAIR POOR		e potential: (Lo, 1) VIBRATION:	100d	Behird . Toilet, h	Professional Control of the Control	
GH 997 - L7 MATL CONDITION: GOOD FAIR POOR	Green Pa		MED, HI) CONTACT:	Bornis a		2.0.00558 100
8. GM997-L8 MATL CONDITION: GOOD FAIR POOR	Exterior on woo	white	Paint	Sw con	an of west Bldg	11.6%



Environmental Health Sciences-Alaska, Inc. 10928 Eagle River Road, Suite 202, Eagle River, AK 99577-8052 (907) 694-1383 • (907) 694-1382 fax

	FIELD SURVEY DATA (continued) Pag	e_2 of 3
PROJECT NAME: 60	ou Hill Felegraph EAZ FACILITY:	Gov. Hill Wireless Sta	
JOB NUMBER: 396	//	10.0-	French
SAMPLE ID	SAMPLE DESCRIPTION, (COLOR, MATERIAL TYPE, LAYERS, FRIABILITY)	LOCATION/COMMENTS (INCLUDING PHOTO/CREF)	RESULTS
GH997-L9 MATL CONDITION: GOOD FAIR POOR	Exterior Green truin Paint on Wood DAMAGE POTENTIAL: (LO, MED, HI) WATER: AIR: VIBRATION: CONTACT:	NW corner of west wing, Blog !	13.8% 1end
GH 997- LIO	White Paint on Pust	store Fund	7,48% lead
MATL CONDITION: GOOD FAIR POOR	WATER: DAMAGE POTENTIAL: (LO, MED, HI) WATER: AIR: VIBRATION: CONTACT:	Blog J	
GH997 - LII MATL CONDITION: GOOD FAIR POOR	White + Silver faint on Don't DAMAGE POTENTIAL: (LO, MED, HI) WATER: AIR: VIBRATION: CONTACT:	at branch to South	0,459
GH 997- L12 MATL CONDITION: GOOD FAIR POOR	white & Silver paint of Silvery metal DAMAGE POTENTIAL: (LO, MED, HI) WATER: AIR: VIBRATION: CONTACT:	at joints of branch	27.7% lead
GH 997 - L13	Greenish paint on Gyp	Certinos N. Wall	0.03739 lead
MATL CONDITION: GOOD FAIR POOR	WATER: DAMAGE POTENTIAL: (LO, MED, HI) WATER: AIR: VIBRATION: CONTACT:	Bldg Z	10
GH997 - L19 MATL CONDITION: GOOD FAIR POOR	Greenian Paint on Wood Window from DAMAGE POTENTIAL: (LO, MED, HI) WATER: AIR: VIBRATION: CONTACT:	NE wirdow Frame Blog 2	0.206 % 120d
GH997 - LIS MATL CONDITION: GOOD FAIR POOR	Gray + Blue Floor Part on tow livedeun DAMAGE POTENTIAL: (LO, MED, HI) WATER: AIR: VIBRATION: CONTACT:	Farroce Pm Floor Bldg 2	0.670 % lead
SH997- LIG	White ceiling Paint DAMAGE POTENTIAL: (LO, MED, HI)	At Paper Soirt Hope Certer Blog 2	0.0469 9
6H997- L17	off green paint on ply	EX central Am, Swall	2.01 % lead
MATL CONDITION: GOOD FAIR POOR	WATER: AIR: VIBRATION: CONTACT:	Blog 3	
GH997-L18	of white oly paut on ply DAMAGE POTENTIAL: (LO, MED, HI)	EX central Ron, Center	0.0714%
GOOD FAIR POOR GH997 - L19 MATL CONDITION:	WATER: AIR: VIBRATION: CONTACT: Off green point on 24 Cellulo 2 b.A DAMAGE POTENTIAL: (LO, MED, HD)	NE Proom, East Wall	1.36%
3H997 - LZO	WATER: AIR: VIBRATION: CONTACT: Off green point on wood	NE Rm, at windows	3.3807
MATL CONDITION: GOOD FAIR POOR	DAMAGE POTENTIAL: (LO, MED, HI) WATER: AIR: VIBRATION: CONTACT:	Plota 3	2 4 19 19



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	FIELD SURVE		THE RESERVE AND ADDRESS OF THE PARTY OF THE		ge 3 of 3
PROJECT NAME: 600	Hell Telegraph EA-2	FACILITY:	Gov Hill Wi	ieless sta	_
JOB NUMBER: 396	8-01-02	DATE: 9	-20-97	COLLECTED BY: /	French
SAMPLE ID	SAMPLE DESCRIPTION, (COLOR, MATERIAL TYPE, LAYERS,			ON/COMMENTS NG PHOTO/XREF)	RESULTS
GH997- L21 MATL CONDITION: GOOD FAIR POOR	White point on selle on the sel	P.	Centin of	NW Bon Blog 3	0.0999
GH997-L22 MATL CONDITION: GOOD FAIR POOR	off green on wo DAMAGE POTENTIAL: (LO, M WATER: AIR: VIBRATION:	ed, hi) Contact:	Center Wes Base Thin	st Room on Bldg 3	0. 523 9 lead
3H997 - LJ3 MATL CONDITION: GOOD FAIR POOR	Off green on wo MATER: DAMAGE POTENTIAL: (LO, M WATER: VIBRATION:	ED, HI) CONTACT:	-Former e 1×2 +6	st tim? Blds 3	0.65/90
GH997 - L24 MATL CONDITION: GOOD FAIR POOR	Black + Ct green of DAMAGE POTENTIAL: (LO, M. WATER: AIR: VIBRATION:	- wood	Center us of base	vest Room	0.4649 lead
GH997 - LJS MATL CONDITION: GOOD FAIR POOR	off green + white Cellalose Bol DAMAGE POTENTIAL: (LO, M WATER: AIR: VIBRATION:		Center W	Post Room	0.495
GH997 - L26 MATL CONDITION: GOOD FAIR POOR	Cream + Brown On WOOd DAMAGE POTENTIAL: (LO, M WATER: AIR: VIBRATION:		3/4" vert. former NW Center west	com of,	0.287
GH997 - C27 MATL CONDITION: GOOD FAIR POOR	White extrict of wood DAMAGE POTENTIAL: (LO, M. WATER: AIR: VIBRATION:		Near So west side	eth windows - original Bldg 3	9.56
GH997 -L28 MATL CONDITION: GOOD FAIR POOR	Green Ext. Trum on Wood DAMAGE POTENTIAL: (LO, M WATER: AIR: VIBRATION:		Sill of N. side, orig	whidow, west. bldg. Bldg 3	1 end
GH997-L29 MATL CONDITION: GOOD FAIR POOR	White + green Plan DAMAGE POTENTIAL: (LO, M WATER: AIR: VIBRATION:	ky lant	Conc, K was	el Bout Bldg3	4,299
GH997 - L 30 MATL CONDITION: GOOD FAIR POOR	Gray Paint on U BAMAGE POTENTIAL: (LO, M WATER: AIR: VIBRATION:		Ceiling of	West Bout	3.68 To
GH997-L31 MATL CONDITION: COOD FAIR POOR		Nood	Center u	sall of Bsout Blog 3	5.16 % lead
MATI CONDITION: GOOD FAIR POOR	DAMAGE POTENTIAL: (LO, M WATER: AIR: VIBRATION:	ED, HI) CONTACT:			EHS-10/95

RJ Lee Group, Inc.

350 Hochberg Road Monroeville, PA 15146 Phone (412) 325-1776 Fax (412) 733-1799

LABORATORY REPORT

Environmental Health Sciences - Alaska, Inc.

10928 Eagle River Road, Suite 202 Eagle River, AK. 99577-8052

Robert French Attention:

FAX (907) 694-1382 (907) 694-1383

Lead in Paint - FLAA Analysis:

EPA SW846-7420

Method:

RJ Lee Group Job No.: Samples Received:

ACC709079 23-Sep-97

3968-01-02 26-Sep-97

Client Project: Report Date:

Gov. Hill Telegraph EAZ Southall-Fairbanks

												te C F TRYELL			100 F 1997		
	+-														***************************************		
D	Parts per	Million	603	1,780	718	< 130	51.4	< 120	<55	116,000	138,000	74,800	4,590	277,000	373	2,060	6,700
Lead	Weight	Percent	0.0603	0.178	0.0718	< 0.013	0.00514	< 0.012	< 0.0055	11.6	13.8	7.48	0.459	27.7	0.0373	0.206	0.670
	ntification	RJ Lee Group	0209137	0209138	0209139	0209140	0209141	0209142	0209143	0209144	0209145	0209146	0209147	0209148	0209149	0209150	0209151
	Sample Identification	Client	GH997-L1	GH997-L2	GH997-L3	GH997-L4	GH997-L5	GH997-L6	GH997-L7	GH997-L8	GH997-L9	GH997-L10	GH997-L11	GH997-L12	GH997-L13	GH997-L14	GH997-L15

0 Authorized Signard Authorized Date

> AIHA ELLAP #8204 CA ELAP #1970 PA DEP #02-396

Monroeville, PA - San Leandro, CA - Washington, DC - Houston, TX

469 20,100 714 13,600

0.0469 2.01

0209152 0209153 0209154

GH997-L16 GH997-L17 GH997-L18 GH997-L19

0209155

RJ Lee Group, Inc.

350 Hochberg Road Monroeville, PA 15146 Phone (412) 325-1776 Fax (412) 733-1799

LABORATORY REPORT

RJ Lee Group Job No.:

Samples Received:

Client Project: Report Date:

Environmental Health Sciences - Alaska, Inc. Robert French 10928 Eagle River Road, Suite 202 Eagle River, AK. 99577-8052 Attention:

FAX (907) 694-1382 (907) 694-1383

Lead in Paint - FLAA EPA SW846-7420

Analysis: Method:

Gov. Hill Telegraph EAZ Southall-Fairbanks ACC709079 3968-01-02 23-Sep-97 26-Sep-97

		Lead	ļ	
Sample Identification	ntification	Weight	Parts per	
Client	RJ Lee Group	Percent	Million	
3H997-L20	0209156	3.38	33,800	
GH997-L21	0209157	0.0999	666	
GH997-L22	0209158	0.523	5,230	
GH997-L23	0209159	0.651	6,510	
GH997-L24	0209160	0.464	4,640	
GH997-L25	0209161	0.495	4,950	TEN BUNDER
3H997-L26	0209162	0.287	2,870	0
GH997-L27	0209163	9.56	95,600	
GH997-L28	0209164	13.9	139,000	7661 9 130
GH997-L29	0209165	4.29	42,900	
3H997-L30	0209166	3.68	36,800	
3H997-L31	0209167	5.16	.51,600	

These results are submitted pursuant to RI Lee Group's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. No responsibility or liability is assumed for the manner in which the results are used or interpreted. Unless notified in writing to return the samples covered by this report, RI Lee Group will store the samples for a period of ninety (90) days before discarding. A shipping and handling fee will be assessed for the return of any samples.

1	
	1
Alan M. Levine, Manager	on I Miller Assistant Scientist
Alan J	Brandon

Kimberly S. DiNatale, Scientist

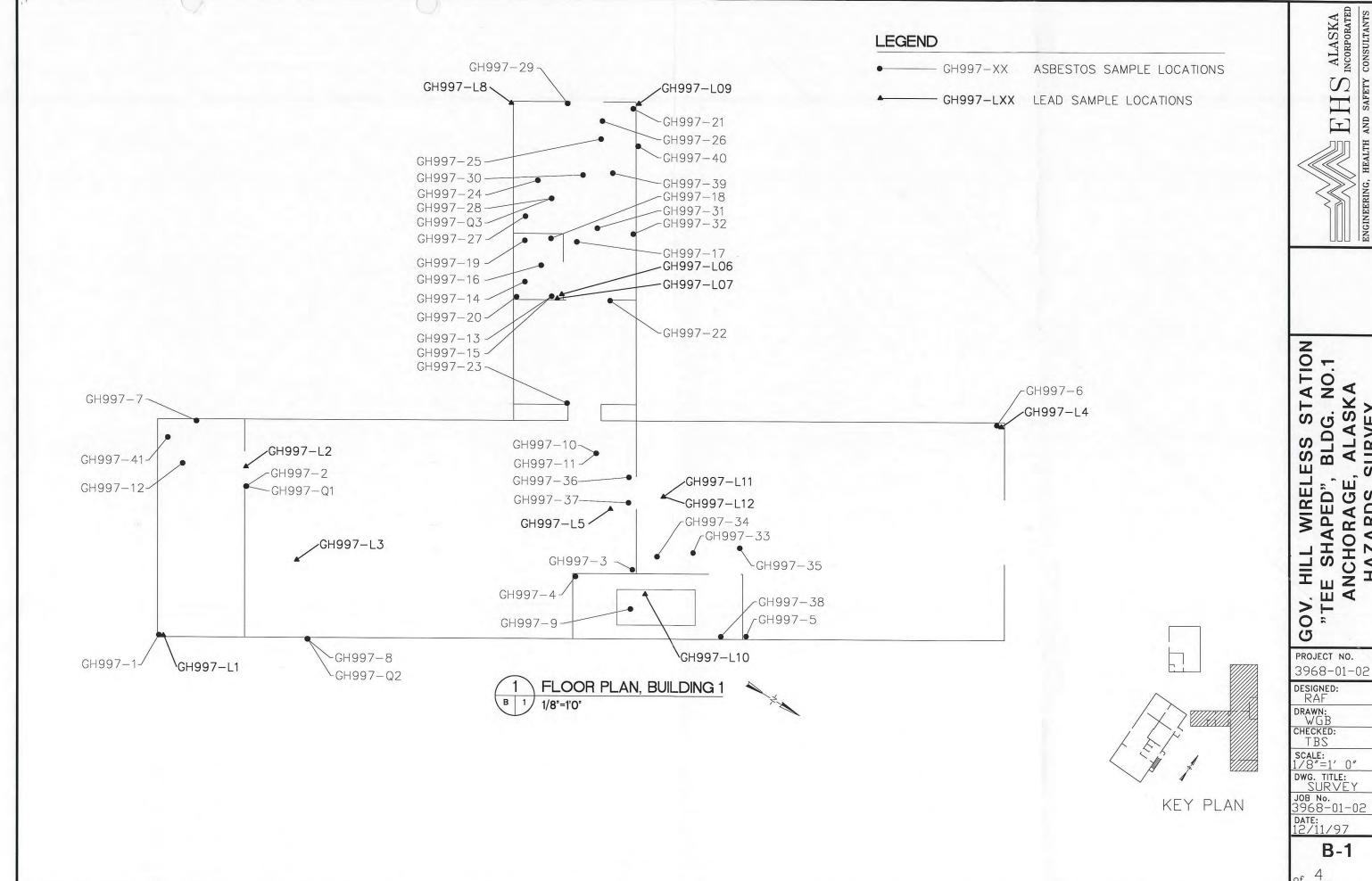
William E. Alexander, Assistant Chemist

Please direct inquiries to Barbara A. Smith in Client Services.

Authorized Signature J. M. Ill. Date

APPENDIX C

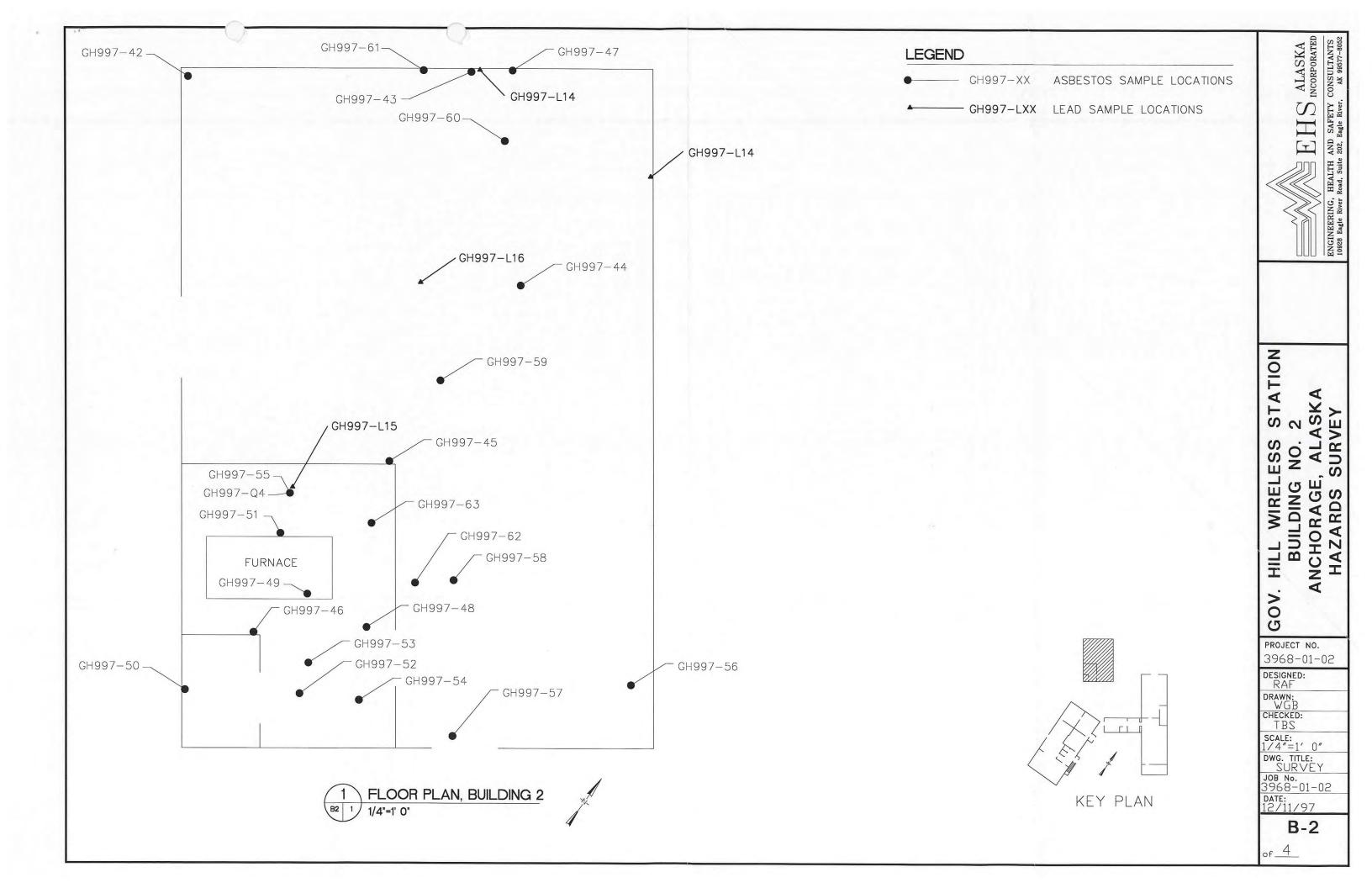
Floor Plans with Sample Locations

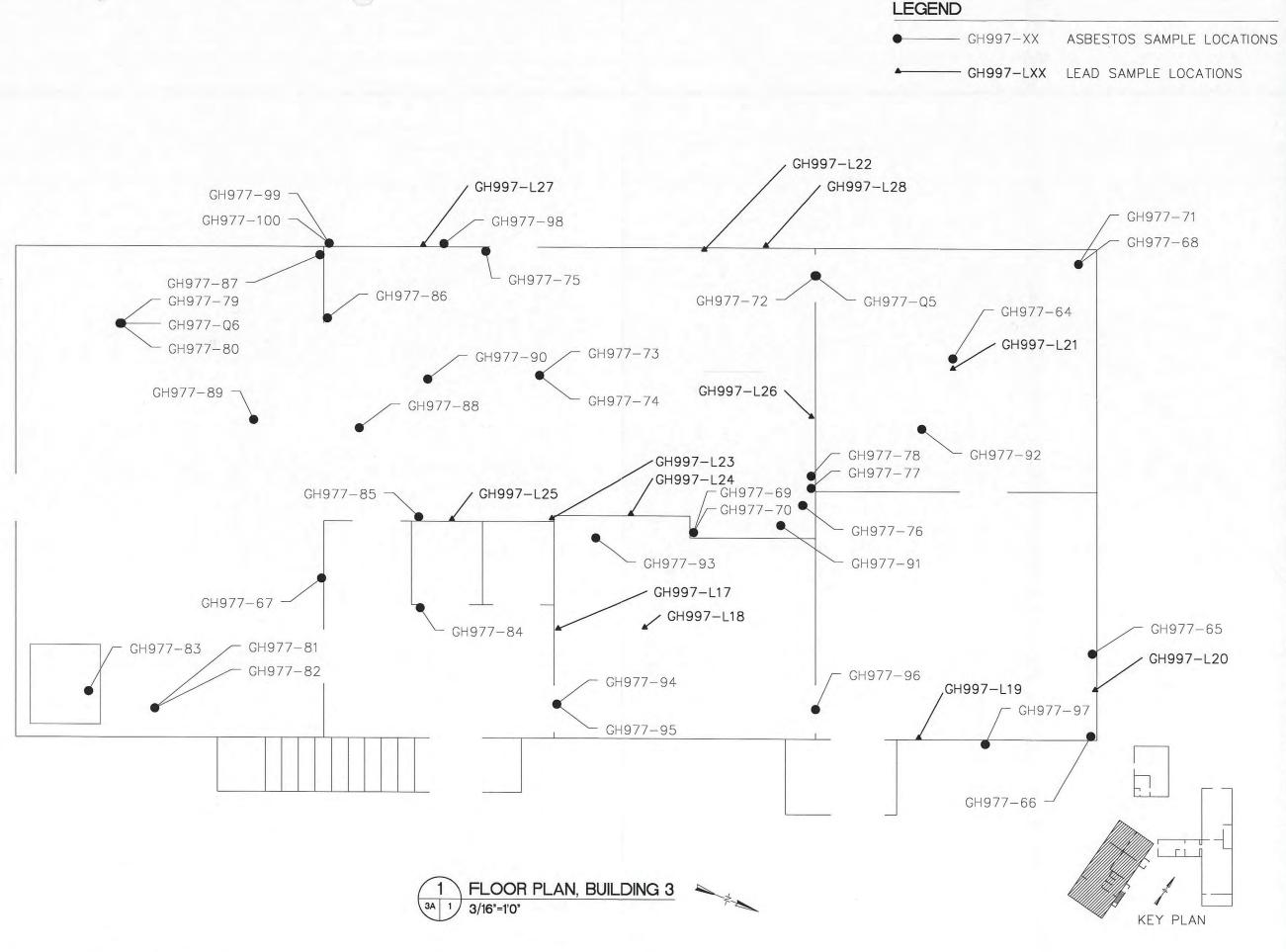


ENGINEERING, HEALTH AND SAFETY CONSULTANTS
10928 Eagle River Road, Suite 202, Eagle River, AK 99577-8052

GOV. HILL WIRELESS STATION "TEE SHAPED", BLDG. NO.1 ANCHORAGE, ALASKA HAZARDS SURVEY

PROJECT NO. 3968-01-02





HEALTH AND SAFETY CONSULTANTS
ROAG, SUITE 202, Eagle River, AK 99577-8052

ENGINEERING, HEALTH AND

GOV. HILL WIRELESS STATION
BUILDING NO. 3
ANCHORAGE, ALASKA
HAZARDS SURVEY

PROJECT NO. 3968-01-02

DESIGNED:
RAF

DRAWN:
WGB
CHECKED:
TBS
SCALE:
3/16"=1' 0"

3/16"=1' 0"

DWG. TITLE:

SURVEY

JOB No.

3968-01-02

DATE: 12/11/97

B-3A

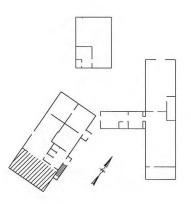
GH997-XX

ASBESTOS SAMPLE LOCATIONS

GH997-LXX LEAD SAMPLE LOCATIONS

GH997-L29 GH997-L30 GH997-L31 BOILER GH997-101 GH997-103 -GH997-102

> BASEMENT FLOOR PLAN, BUILDING 3 1/4"=1'0"



KEY PLAN

GOV. HILL WIRELESS STATION BUILDING NO. 3 ANCHORAGE, ALASKA HAZARDS SURVEY

ENGINEERING, HEALTH AND SAFETY CONSULTANTS
10928 Eagle River Road, Suite 202, Eagle River, AK 99577-8052

PROJECT NO. 3968-01-02 DESIGNED: RAF

RAF

DRAWN:
WGB

CHECKED:
TBS

SCALE:
1/4"=1' 0"

DWG. TITLE:
SURVEY
JOB No.
3968-01-02

DATE:
12/11/97

B-3B

of 4

APPENDIX D

Photographs of Potentially Hazardous Materials



Plate 1 Looking south in north room of Building 1. Gypsum wall board walls and ceiling without joint compound. Note ducts exposed with lead seal at seams, and concealed ducts in south room. South room has gypsum wall board walls and ceiling with asbestos-containing joint compound, and fluorescent light fixtures with PCB Ballasts.



Plate 2 Note debris and fungal growth in crawl space of west wing of Building 1.



Plate 3 White asbestos-containing pipe insulation debris under central crawl space of west wing of Building 1. Note copper pipe replaced insulated steel pipe.



Plate 4 Asbestos-containing gray fibrous patching on aluminum roofing of Building 1.



Plate 5 Cement asbestos board behind and below furnace in Building 2. Note rust stains on flooring and wet stains due to water leakage around furnace chimney.

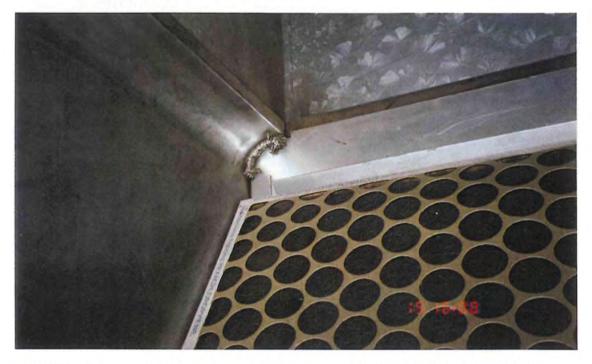


Plate 6 Asbestos-containing gasket in return air plenum of furnace in Building 2.



Plate 7 White asbestos-containing pipe insulation in crawl space of Building 2. Note wet floor beams, leaves blown into crawl space through wood skirting, and fungal growth.



Plate 8 Asbestos-containing white paper in attic of Building 2.



Plate 9 South room of Building 3. Note furnace with attached gas line and abandoned oil piping and filter. Note fluorescent lights with PCB-containing ballasts and shelved cabinet with cement asbestos board lining.



Plate 10 Peeling paint in bathroom of Building 3.



Plate 11 Exterior wall, west central room of Building 3. Note floor dropped 4 inches, exposing horse hair and tar paper between layers of wood. Note dry rot.



Plate 12 Crawl space from access hatch at stairs to basement, Building 3. Note moisture drops and fungal growth on wood structure.



Plate 13 Damaged white asbestos-containing pipe insulation in basement of Building 3.



Plate 14 Asbestos-containing grit surfaced roofing of original section of Building 3. Note lead flashing on plumbing vent pipe and "new" rafters laid on "old" roofing.