

WSCF
ANALYTICAL LABORATORY REPORT
ANALYSIS OF BULK SAMPLES FOR FIBER CONTENT



for

Bechtel Hanford Inc
Richland , WA 99352

Attention: SJ TRENT/D AYERS MSIN H9-03

Survey ID B99-007 (100DR/F)

Data Validator MK Hamilton
(Approved Signatory)



0051670

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Group#: 99000913
Report Date 1-jul-1999
bulk/rev.2

Waste Management Federal Services Hanford, Inc.
MSIN: S3-28
Richland, WA 99352 Phone 373-7167

WSCF
ANALYTICAL LABORATORY REPORT
ANALYSIS OF BULK SAMPLES FOR FIBER CONTENT

Your samples have been analyzed for fiber content using polarized light microscopy and dispersion staining in accordance with Industrial Hygiene Laboratory Procedure LA-519-403, based on 40 CFR Part 763, Subpart E, App. E and EPA method EPA/600/R-93/116. The results are attached.

This method provides a visual estimate of the percentage of each fiber type present. It is a semiquantitative method intended to identify materials containing > or = 1% asbestos fibers.* Reported fiber percentages for samples and sample layers are based on the samples as received by the laboratory. The laboratory cannot verify that these values are representative of the original material sampled.

~~mkH 7/1/99 See Note in Comments~~
The Waste Sampling and Characterization Facility, is accredited by the National Institute of Standards and Technology (NIST), National Voluntary Laboratory Accreditation Program (NVLAP), to analyze bulk samples for asbestos content. This accreditation does not constitute approval or endorsement of analytical results by NIST nor does it apply to other analyses performed by this laboratory.

If there are questions concerning this report, please contact the approved signatory listed on the cover page of this report.

* Because of the nonhomogeneous nature of soils, results will be reported using the following terms rather than percentages:

1. None - No asbestos fibers found.
2. Trace detectable - With extensive searching, a few fibers of the type indicated were found; concentration very low, well below 1%.
3. Obvious presence - Fibers easily found but overall concentration still low.
4. Significant presence - Fibers readily found; overall concentration may approach or exceed 1% level.

Polarized light microscopy (PLM) may not be the preferred method for identification of asbestos in floor tile. Most vinyl floor tiles marketed in the late sixties to mid-seventies contained asbestos milled so fine as to be below detection limits for PLM techniques. Tiles of that vintage, showing any detectable asbestos fibers should be considered to be asbestos-containing material. Non-detection of asbestos by PLM should not be considered conclusive proof that the tiles do not contain asbestos. Follow-up analysis by other techniques may be required.

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ANALYTICAL LABORATORY REPORT

Attention: SJ TRENT/D AYERS MSIN H9-03

Group #: 99000913

| Sample # | Client ID | Test Performed | Range | Result | Units | Analyst | Sampled | Received | Analyzed |
|----------|-----------|----------------|-------|--------|-------|---------|---------|----------|----------|
|----------|-----------|----------------|-------|--------|-------|---------|---------|----------|----------|

W991001134 BOVMC4

The following are the results of this test- Bulk Asbestos Layer 1

| | | | | | | |
|---------------------|-------|---|------|----------|----------|----------|
| Chrysotile Asbestos | 1-2 | % | dws1 | 06/07/99 | 06/07/99 | 06/10/99 |
| Cellulose | 80-90 | % | dws1 | 06/07/99 | 06/07/99 | 06/10/99 |

SAMPLE COMMENT--- 100% mixture of tar and coarse fiber bundles, asbestos is associated with a white coating on one side.
 SAMPLE COMMENT--- Sample reportedly from Sampling Location 100DR/F associated with 105F & 105DR ISS Project.
 SAMPLE COMMENT---

MDL=Minimum Detection Limit

RQ=Result Qualifier

B - The analyte was detected in the associated method blank.

J - Estimated value.

N - Identification is based on a mass spectral library search.

U - The analyte was analyzed for but not detected.

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Bechtel Hanford Inc

WSCF ANALYTICAL COMMENT REPORT

Attention: SJ TRENT/D AYERS MSIN H9-03

Group #: 99000913

| Sample # | Client ID | Lab Area | Test | Comment |
|------------|-----------|----------|-----------------------|--|
| | | VALGROUP | | Validated 7/1/99 by MK Hamilton, IH Coordinator. PLEASE NOTE: Laboratory bulk accreditation is currently provided by AIHA, not NIST as stated in the cover letter. |
| W99I001134 | BDVMC4 | LOGSAMP | | REC'D BY V SIMS 6/7/99 AND LOGGED BY MK GRANT 6/8/99. Sample submitted under SAF# B99-007. |
| | | TESTDATA | Bulk Asbestos Layer 1 | 100% mixture of tar and coarse fiber bundles, asbestos is associated with a white coating on one side. Sample reportedly from Sampling Location 100DR/F associated with 105F & 105DR ISS Project. |

Lab Areas: VALGROUP - Group Validation
LOGSAMP - Login for Sample

VALTEST - Test Validation
LOGTEST - Login for Tests

TESTDATA - Test Data Entry

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Exp # 49000712

| | | | | | | |
|---|--|---|---------------------------|--------------------------------------|------------|----------------------------------|
| Bechtel Hanford Inc. | | CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST | | | B99-007-12 | Page 1 of 1 |
| Collector Doug Bowers | | Company Contact J Adler | Telephone No. 373-4316 | Project Coordinator TRENT, SJ | Price Code | Data Turnaround 7 Days |
| Project Designation 105F & 105DR ISS Project - Other Solid | | Sampling Location 100DR/F | | SAF No. B99-007 | | |
| Ice Chest No. ERC 99-008 | | Field Logbook No. EFL 1133-7 | | Method of Shipment Hand Delivered | | |
| Shipped To Waste Samp. & Char. Fac. | | Offsite Property No. N/A | | Bill of Lading/Air Bill No. N/A | | |
| | | | | COA | | |

| | | | | | | | | | | | | | | | | | | | | |
|---------------------------------|---------------------|-------|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| POSSIBLE SAMPLE HAZARDS/REMARKS | Preservation | None | | | | | | | | | | | | | | | | | | |
| | Type of Container | G/P | | | | | | | | | | | | | | | | | | |
| | No. of Container(s) | 1 | | | | | | | | | | | | | | | | | | |
| Special Handling and/or Storage | Volume | ~ 10g | | | | | | | | | | | | | | | | | | |

SAMPLE ANALYSIS

| Sample No. | Matrix * | Sample Date | Sample Time | | | | | | | | | | | | | | | | | | |
|------------|-------------|-------------|-------------|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| BOVMCY | Other Solid | 6-7-99 | 1155 | X | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |
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PAISO-134

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|---------------------|--------------------------------|---------------------------|----------------------------|--------------------------|--|--|--|--|--|--|--|--|----------|--|-------|--|--|--|--|--|--------------|
| CHAIN OF POSSESSION | Sign/Print Names | | SPECIAL INSTRUCTIONS | | | | | | | | | | Matrix * | | | | | | | | |
| | Relinquished By Doug Bowers | Date/Time 6-7-99/1304 | Received By [Signature] | Date/Time 6/7/99/1304 | REMAINING SAMPLE STORED AT WSCF ASBESTOS LAB FOR AT LEAST 3 MONTHS, THEN DISCARDED AS ASBESTOS WASTE | | | | | | | | | | Soil | | | | | | |
| | Relinquished By [Signature] | Date/Time 6/7/99 13:04 | Received By m. Grant | Date/Time 6-7-99 1304 | | | | | | | | | | | Water | | | | | | |
| | Relinquished By | Date/Time | Received By DWSher | Date/Time 6/10/99 | | | | | | | | | | | Vapor | | | | | | |
| Relinquished By | Date/Time | Received By | Date/Time | Other Solid | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | Other Liquid |

| | | | | | |
|--------------------------|-----------------|--|-------------|-------|-----------|
| LABORATORY SECTION | Received By | results reported to client 6/10/99 DWS | | Title | |
| FINAL SAMPLE DISPOSITION | Disposal Method | | Disposed By | | Date/Time |