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WSCF
ANALYTICAL LABORATORY REPORT
ANALYSIS OF BULK SAMPLES FOR FIBER CONTENT

for

Bechtel Hanford, Inc.
MSIN H0-25
Richland, WA 99352

Attention: J. Kessner MSIN: H0-25

Survey ID B99-024-47

Data Validator 

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 JUN 10 2002
EDMC



Group#: 20020346
 Report Date 22-mar-2002
 bulk/rev.4

Fluor Hanford, Inc.
 MSIN: S3-28
 Richland, WA 99352

Phone 373-7403

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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 \geq 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.

The Waste Sampling and Characterization Facility is accredited by the American Industrial Hygiene Association (AIHA) to analyze bulk samples for asbestos content. This accreditation does not constitute approval or endorsement of analytical results by AIHA.

If there are questions concerning this report, please contact the data validator 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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WSCF ANALYTICAL LABORATORY REPORT

Attention: J. Kessner MSIN: H0-25

Group #: 20020346

Sample #	Client ID	Test Performed	Range	Result	Units	Analyst	Sampled	Received	Analyzed
W02I000417	B146R0	The following are the results of this test- Bulk Asbestos Layer 1							
			Non-Asbestos	100	NF %	sdb	03/13/02	03/13/02	03/14/02
		SAMPLE COMMENT---	85% non-homogeneous off-white insulation foam with grey rocks on one side, reportedly from 233S/200W.						
W02I000417	B146R0	The following are the results of this test- Bulk Asbestos Layer 2							
			Chrysotile Asbestos	<	1 %	sdb	03/13/02	03/13/02	03/14/02
			Cellulose	3-7	%	sdb	03/13/02	03/13/02	03/14/02
		SAMPLE COMMENT---	15% non-homogeneous black tar. Only 1 small bundle of Chrysotile asbestos found on tar surface.						
W02I000418	B146R1	The following are the results of this test- Bulk Asbestos Layer 1							
			Non-Asbestos	100	NF %	sdb	03/13/02	03/13/02	03/14/02
		SAMPLE COMMENT---	70% non-homogeneous off-white insulation foam, reportedly from 233S/200W.						
W02I000418	B146R1	The following are the results of this test- Bulk Asbestos Layer 2							
			Fiberglass	2-5	%	sdb	03/13/02	03/13/02	03/14/02
			Cellulose	3-8	%	sdb	03/13/02	03/13/02	03/14/02
		SAMPLE COMMENT---	30% non-homogeneous black tar.						

RDL - Reporting Detection Limit RDL is $\geq 2 \times MDL$
 RQ=Result Qualifier J - Estimated value.

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 Bechtel Hanford, Inc.

WSCF ANALYTICAL LABORATORY REPORT

Attention: J. Kessner MSIN: H0-25

Group #: 20020346

Sample #	Client ID	Test Performed	Range	Result	Units	Analyst	Sampled	Received	Analyzed
W021000419	B146R2	<u>The following are the results of this test- Bulk Asbestos Layer 1</u>							
			Non-Asbestos	100	NF %	sdb	03/13/02	03/13/02	03/14/02
		SAMPLE COMMENT---	85% non-homogeneous off-white insulation foam, with grey rocks on side side, reportedly from 233S/200W.						
W021000419	B146R2	<u>The following are the results of this test- Bulk Asbestos Layer 2</u>							
			Cellulose	3-8	%	sdb	03/13/02	03/13/02	03/14/02
		SAMPLE COMMENT---	15% non-homogeneous black tar.						
W021000420	B146R3	<u>The following are the results of this test- Bulk Asbestos Layer 1</u>							
			Non-Asbestos	100	NF %	sdb	03/13/02	03/13/02	03/14/02
		SAMPLE COMMENT---	70% non-homogeneous off-white insulation foam, reportedly from 233S/200W.						
W021000420	B146R3	<u>The following are the results of this test- Bulk Asbestos Layer 2</u>							
			Fiberglass	3-5	%	sdb	03/13/02	03/13/02	03/14/02
			Cellulose	3-7	%	sdb	03/13/02	03/13/02	03/14/02
		SAMPLE COMMENT---	30% non-homogenous black tar.						
W021000421	B146R4	<u>The following are the results of this test- Bulk Asbestos Layer 1</u>							
			Non-Asbestos	100	NF %	sdb	03/13/02	03/13/02	03/14/02
		SAMPLE COMMENT---	95% non-homogenous off-white insulation foam with grey rocks on one side, reportedly from 233S/200W.						

RDL - Reporting Detection Limit RDL is $\geq 2 \times$ MDL

RQ=Result Qualifier J - Estimated value.

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ANALYTICAL LABORATORY REPORT

Attention: J. Kessner MSIN: H0-25

Group #: 20020346

Sample #	Client ID	Test Performed	Range	Result	Units	Analyst	Sampled	Received	Analyzed
W021000421	B146R4	The following are the results of this test- Bulk Asbestos Layer 2							
		Fiberglass		3-5	%	sdb	03/13/02	03/13/02	03/14/02
		Cellulose		3-7	%	sdb	03/13/02	03/13/02	03/14/02
		SAMPLE COMMENT--- 5% non-homogenous black tar paper.							

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RQ=Result Qualifier J - Estimated value.

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WSCF ANALYTICAL COMMENT REPORT

Attention: J. Kessner MSIN: H0-25

Group #: 20020346

Sample #	Client ID	Lab Area	Test	Comment
W02I000417	B146R0	VALGROUP		Validated 3/22/02 by SD Bolling, IH Technical Manager. REC'D AND LOGGED BY MK GRANT 3/13/02. 85% non-homogeneous off-white insulation foam with grey rocks on one side, reportedly from 233S/200W. 15% non-homogeneous black tar. Only 1 small bundle of Chrysotile asbestos found on tar surface.
		LOGSAMP		
		TESTDATA	Bulk Asbestos Layer 1	
W02I000418	B146R1	TESTDATA	Bulk Asbestos Layer 2	70% non-homogeneous off-white insulation foam, reportedly from 233S/200W. 30% non-homogeneous black tar.
		TESTDATA	Bulk Asbestos Layer 1	
		TESTDATA	Bulk Asbestos Layer 2	
W02I000419	B146R2	TESTDATA	Bulk Asbestos Layer 1	85% non-homogeneous off-white insulation foam, with grey rocks on side side, reportedly from 233S/200W. 15% non-homogeneous black tar.
		TESTDATA	Bulk Asbestos Layer 2	
		TESTDATA	Bulk Asbestos Layer 1	
W02I000420	B146R3	TESTDATA	Bulk Asbestos Layer 2	70% non-homogeneous off-white insulation foam, reportedly from 233S/200W. 30% non-homogenous black tar.
		TESTDATA	Bulk Asbestos Layer 1	
		TESTDATA	Bulk Asbestos Layer 2	
W02I000421	B146R4	TESTDATA	Bulk Asbestos Layer 1	95% non-homogenous off-white insulation foam with grey rocks on one side, reportedly from 233S/200W. 5% non-homogenous black tar paper.
		TESTDATA	Bulk Asbestos Layer 2	
		TESTDATA	Bulk Asbestos Layer 1	

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

VALTEST - Test Validation
LOGTEST - Login for Tests

TESTDATA - Test Data Entry

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20020346

Bechtel Hanford Inc.		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST				B99-024-47	Page 1 of 1
Collector Doug Bowers	Company Contact Steve Trent	Telephone No. 372-9651	Project Coordinator TRENT, SJ		Price Code 9L	Data Turnaround 7 Days	
Project Designation 233-S Plutonium Concentration Facility Process Areas - Other		Sampling Location 233-S 200 west <i>South roof</i>	SAF No. B99-024		Air Quality <input type="checkbox"/>		
Ice Chest No. <i>EAC 96-082</i>	Field Logbook No. EFL1133-10	COA R233SP2800	Method of Shipment Gov vehicle				
Shipped To Waste Sampling & Characterization		Offsite Property No. <i>N/A</i>	Bill of Lading/Air Bill No. <i>N/A</i>				
POSSIBLE SAMPLE HAZARDS/REMARKS							
<i>Asbestos</i>							
Special Handling and/or Storage							
SAMPLE ANALYSIS							
Sample No.	Matrix *	Sample Date	Sample Time				
B146R0	<i>W025000417</i>	<i>3-13-02</i>	<i>0830</i>	<i>X</i>			
B146R1	<i>418</i>	<i>3-13-02</i>	<i>0840</i>	<i>X</i>			
B146R2	<i>419</i>	<i>3-13-02</i>	<i>0850</i>	<i>X</i>			
B146R3	<i>420</i>	<i>3-13-02</i>	<i>0900</i>	<i>X</i>			
B146R4	<i>421</i>	<i>3-13-02</i>	<i>0910</i>	<i>X</i>			
CHAIN OF POSSESSION				SPECIAL INSTRUCTIONS			
Relinquished By/Removed From <i>Doug Bowers</i>		Date/Time <i>3-13-02/0950</i>		Received By/Stored In <i>MK Grant</i>		Date/Time <i>3-13-02 0950</i>	
Relinquished By/Removed From <i>Storage</i>		Date/Time <i>3/14/02</i>		Received By/Stored In <i>SD Bolling</i>		Date/Time <i>3/14/02 900</i>	
Relinquished By/Removed From <i>SD Bolling</i>		Date/Time <i>3/14/02</i>		Received By/Stored In <i>Storage</i>		Date/Time	
Relinquished By/Removed From		Date/Time		Received By/Stored In		Date/Time	
Relinquished By/Removed From		Date/Time		Received By/Stored In		Date/Time	
Relinquished By/Removed From		Date/Time		Received By/Stored In		Date/Time	
LABORATORY SECTION				SPECIAL INSTRUCTIONS			
Received By		Title		Date/Time		Matrix *	
Disposal Method		Disposed By		Date/Time		<ul style="list-style-type: none"> S=Soil SE=Scudiment SO=Solid SL=Sludge W=Water O=Oil A=Air DS=Drum Solids DL=Drum Liquids T=Truss WI=Wipe L=Liquid V=Vegetation X=Other 	