



ALS Laboratory Group
ANALYTICAL CHEMISTRY & TESTING SERVICES



Submitted To: Joan Kessner
Washington Closure Hanford
2620 Fermi Avenue, MSIN H4-21
Richland, WA 99354

Test Report
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2/22/09



REFERENCE DATA:

Client Sample No.: J18HX2 through J18HX3
P.O. No.: Not Available
Sample Location: 100-B-28 and 100-B-31
Sample Type: Bulk
Method Reference: EPA-600/R-93/116
DCL Set ID No.: 09-A-0827
DCL Sample ID No.: 09-04456 through 09-04457
Sample Receipt Date: 2/20/09
Analysis Date: 2/22/09

We certify that the following samples were prepared and analyzed by Polarized Light Microscopy for asbestos and other fibrous constituents using EPA-600/R-93/116. The samples were acceptable upon receipt except where noted. The samples were examined under a stereomicroscope in a laboratory fume hood for general composition and phase separation. If needed, portions of the sample were removed and ground with a mortar and pestle before being mounted on a glass microscope slide. Mountings of representative portions of the material are prepared in one or more appropriate refractive index liquids (1.550, 1.605, 1.680) and examined by Polarized Light Microscopy*. Estimates of concentration are made on an area basis. The results of the analysis apply only to the materials analyzed and are summarized on the attached bulk asbestos analysis data sheets. ALS DataChem Laboratories will dispose of all bulk samples after 60 days unless other arrangements are made.

Anna Marie Ristich
Analyst

Tracey Earle
Reviewer

*Floor tiles, decorative paints, joint compounds, and cement materials require additional treatment in order to evaluate the concentration of small asbestos fibers bound in the material. Some samples may contain fibers that are not visible by PLM and can only be detected by electron microscopy techniques. Floor tiles are analyzed as homogeneous materials if insufficient mastic is present or if phases have been cross contaminated.

ALS DataChem Laboratories NVLAP Lab ID: 101917. Laboratory accreditation by the National Institute of Standards and Technology does not in any way constitute approval or endorsement by NVLAP, NIST, or any agency of the federal government.



**ALS DataChem Laboratories
Polarized Light Microscopy
Asbestos Analytical Report**

Client: Washington Closure Hanford
Location: 100-B-28 and 100-B-31

Client Sample ID:	J18HX2	J18HX3
DCL Sample ID:	09-04456	09-04457
Macroscopic Examination		
Accepted/Rejected:	Accepted	Accepted
Homogeneity:	Homog.	Homog.
Color:	Grey	Black
Texture:	Compact	Resns/Fibrs
Description:	Material	Material
Analysis:	PLM	PLM
Asbestiform Minerals		
% Chrysotile:		
% Amosite:		
% Crocidolite:		
% Tremolite - Actinolite:		
% Anthophyllite:		
% Total Asbestos:	ND	ND
Other Materials		
% Cellulose:		>10 ≤ 20
% Fiberglass:		
% Other Fibers:		>1 ≤ 3
% Resin/Binder:		
% Non Fibrous:	>90 ≤ 100	>70 ≤ 80

ND = None Detected Trace = <1%

Special Prep Procedures: None.

*Notes: P. O. #: Not Available.


Anna Marie Ristich
Microscopist

All values are in area percent by visual estimate. The Federal Register Vol. 55 No. 224 Tuesday Nov. 20 1990 Rules and Regulations states "... If the asbestos content is estimated to be less than 10% by a method other than point counting,... (the analysis) be repeated using the point counting technique by PLM." Any of the above samples can be reanalyzed by point counting at the client's request. Wherever possible, separate phases are analyzed and reported individually.

Washington Closure Hanford		CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST				RC-020-096		Page 1 of 1		
Collector C. Martinez		Company Contact C. Martinez		Telephone No. 509-539-2816		Project Coordinator KESSNER, JH		Price Code Data Turnaround		
Project Designation 100-BC Remaining Sites - Soil Full Protocol		Sampling Location 100-B-28 and 100-B-31		SAF No. <u>RC-020-028</u> <u>02/18/09</u>		RUSH				
Ice Chest No. FED EX BOX		Field Logbook No. EFL1173-15		COA R11BX72000		Method of Shipment fed ex				
Shipped To DataChem Laboratories - Cincinnati		Offsite Property No. A-090145		Bill of Lading/Air Bill No. See OSPC						
POSSIBLE SAMPLE HAZARDS/REMARKS None				Preservation	None					
Special Handling and/or Storage None 09-A-0827				Type of Container	G/P					
				No. of Container(s)	1					
				Volume	250g					
SAMPLE ANALYSIS				Asbestos-BULK-EPA						
Sample No.	Matrix *	Sample Date	Sample Time							
J18HX2 other solid	SOIL SOIL	02/12/09	1400	✓	04456					
J18HX3 other solid	SOIL SOIL	02/12/09	1345	✓	04457					
CHAIN OF POSSESSION				Sign/Print Names				SPECIAL INSTRUCTIONS		Matrix *
Relinquished By/Removed From T. Martinez		Date/Time 2-18-09	Received By/Stored In C. Martinez		Date/Time 1405	<p>Sampler unavailable to remove samples from controlled storage. Shipper removed samples from storage location taking custody of samples for shipment to lab.</p>				<ul style="list-style-type: none"> S=Soil SE=Settiment SO=Solid Sl=Sludge W = Water O=Oil A=Air DS=Drum Solids DL=Drum Liquids T=Tissue WI=Wipe L=Liquid V=Vegetation X=Other
Relinquished By/Removed From C. Martinez		Date/Time 1600	Received By/Stored In Shipping Facility		Date/Time 1600					
Relinquished By/Removed From Ship Fac. 28 J.E. Bernhart		Date/Time 1000	Received By/Stored In J.E. Bernhart		Date/Time 1000					
Relinquished By/Removed From J.E. Bernhart		Date/Time 2-19-09	Received By/Stored In FED EX		Date/Time					
Relinquished By/Removed From		Date/Time	Received By/Stored In J. O. Ausilio		Date/Time 2400					
Relinquished By/Removed From		Date/Time	Received By/Stored In		Date/Time					
LABORATORY SECTION	Received By	Title				Date/Time				
FINAL SAMPLE DISPOSITION	Disposal Method	Disposed By				Date/Time				