0082553

SAF-RC-075
100-D/DR Burial Grounds & Remaining Sites – Soil Full Protocol
FINAL DATA PACKAGE

COMPLETE COPY OF DATA PACKAGE TO:

Kathy Wendt H4-21 KW 7/9/09
INITIAL/DATE

COMMENTS:

SDG D9175010 SAF RC-075

Rad only ☑ Chem only Rad & Chem

☑ Complete Partial

Waste Site: 126-D-2, Verification I, excavation

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Report Identification Number: D9175010
Subcontract Number: S003827A00
Name of Industrial Hygienist: Gwen Whatley / Debbie Gothard / Henry Ruby / William Brasker
Laboratory Identification Number: DCHM
SAF#: RC-00~~1~~75 / RC-075-089
Sample Receipt Date: 06/24/2009

Sample Information

Sample Date	Customer Sample Number	Laboratory Sample Number	Method	Analytical Batch Identification	Sample Matrix
06/22/2009	J19088	9175010001	NIOSH 9002	31045	Bulk
06/22/2009	J19089	9175010002	NIOSH 9002	31045	Bulk
06/22/2009	J19090	9175010003	NIOSH 9002	31045	Bulk
06/22/2009	J19091	9175010004	NIOSH 9002	31045	Bulk
06/22/2009	J19092	9175010005	NIOSH 9002	31045	Bulk
06/22/2009	J19093	9175010006	NIOSH 9002	31045	Bulk
06/22/2009	J19094	9175010007	NIOSH 9002	31045	Bulk
06/22/2009	J19095	9175010008	NIOSH 9002	31045	Bulk
06/22/2009	J19096	9175010009	NIOSH 9002	31045	Bulk
06/22/2009	J19097	9175010010	NIOSH 9002	31045	Bulk
06/22/2009	J19098	9175010011	NIOSH 9002	31045	Bulk
06/22/2009	J19099	9175010012	NIOSH 9002	31045	Bulk
06/22/2009	J190B0	9175010013	NIOSH 9002	31045	Bulk

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Name: Peter P. Steen
Title: Chemist
Date: July 08, 2009

Report Identification Number: D9175010
Subcontract Number: S003827A00
Name of Industrial Hygienist: Gwen Whatley / Debbie Gothard / Henry Ruby / William Brasker
Laboratory Identification Number: DCHM
SAF#: RC-004 / RC-075-089
Sample Receipt Date: 06/24/2009

General Workorder Information: There are four samples in workorder 9175009 and 13 samples in workorder 9175010 which were analyzed for asbestos in bulk material. No problems were encountered with the receipt of these samples.

Method Summary: All samples were examined for homogeneity. Non-homogeneous samples were ground to ensure homogeneity. Distinct layers were analyzed separately. The samples were prepared and examined for asbestos fibers utilizing the procedures outlined in NIOSH method 9002 (4th edition). A polarizing light microscope equipped with a 10x and a 16x eyepiece was used for the analysis. The area percentage of asbestos was estimated microscopically by a visual estimation of the fibers with a length-to-width aspect ratio of 3:1 or greater. If present, asbestos identities were confirmed with the appropriate refractive index oils applying dispersion staining techniques.

Sample Preparation: All samples were prepared in accordance with NIOSH method 9002 (4th edition).

Initial and Continuing Calibration Verification Analysis: N/A

Initial and Continuing Calibration Blank Analysis: N/A

Method Blank Analysis: N/A

Dilution(s): N/A.

Laboratory Control Sample and Duplicate Analysis: One Laboratory Control Sample (LCS) was prepared and analyzed with the sample batch. The results were within the control limit of +/- one reporting range.

Replicate Analysis: Two samples were replicated with the analysis batch.

Flagging Codes: None

Nonconformance/Corrective Action Report (NC/CAR): N/A

Sample Calculation: Sample results are reported by a visual estimation of the area percentage of asbestos. If necessary, a gravimetric ashing procedure may be used to remove certain non-asbestos material from the sample; a percentage calculation is used to correct for the removal of the non-asbestos material.

Miscellaneous Comments:

9175010001: Brown, granular soil.
9175010002: Gray, granular soil.
9175010003: Gray, granular soil.
9175010004: Brown, granular soil.
9175010005: Gray/brown, granular soil.
9175010006: Dark gray, granular soil.
9175010007: Brown, granular soil.
9175010008: Brown, granular soil.
9175010009: Brown, granular soil.
9175010010: Brown, granular soil.
9175010011: Gray, granular soil.
9175010012: Gray, granular soil.
9175010013: Gray/brown, granular soil.

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Results

Report Identification Number: D9175010
Subcontract Number: S003827A00
Name of Industrial Hygienist: Gwen Whatley / Debbie Gothard / Henry Ruby / William Brasker
Laboratory Identification Number: DCHM
SAF#: RC-00~~1~~75 / RC-075-089
Sample Receipt Date: 06/24/2009

Customer Sample Number	Laboratory Sample Number	Date Analyzed	Chrysotile %		Amosite %		Crocidolite %	
J19088	9175010001	07/08/2009	<1	U	<1	U	<1	U
J19089	9175010002	07/08/2009	<1	U	<1	U	<1	U
J19090	9175010003	07/08/2009	<1	U	<1	U	<1	U
J19091	9175010004	07/08/2009	<1	U	<1	U	<1	U
J19092	9175010005	07/08/2009	<1	U	<1	U	<1	U
J19093	9175010006	07/08/2009	<1	U	<1	U	<1	U
J19094	9175010007	07/08/2009	<1	U	<1	U	<1	U
J19095	9175010008	07/08/2009	<1	U	<1	U	<1	U
J19096	9175010009	07/08/2009	<1	U	<1	U	<1	U
J19097	9175010010	07/08/2009	<1	U	<1	U	<1	U
J19098	9175010011	07/08/2009	<1	U	<1	U	<1	U
J19099	9175010012	07/08/2009	<1	U	<1	U	<1	U
J190B0	9175010013	07/08/2009	<1	U	<1	U	<1	U
Required Detection Limit (RDL)			1		1		1	

Customer Sample Number	Laboratory Sample Number	Date Analyzed	Actinolite/Tremolite %		Anthophyllite %	
J19088	9175010001	07/08/2009	<1	U	<1	U
J19089	9175010002	07/08/2009	<1	U	<1	U
J19090	9175010003	07/08/2009	<1	U	<1	U
J19091	9175010004	07/08/2009	<1	U	<1	U
J19092	9175010005	07/08/2009	<1	U	<1	U
J19093	9175010006	07/08/2009	<1	U	<1	U
J19094	9175010007	07/08/2009	<1	U	<1	U
J19095	9175010008	07/08/2009	<1	U	<1	U
J19096	9175010009	07/08/2009	<1	U	<1	U
J19097	9175010010	07/08/2009	<1	U	<1	U
J19098	9175010011	07/08/2009	<1	U	<1	U
J19099	9175010012	07/08/2009	<1	U	<1	U
J190B0	9175010013	07/08/2009	<1	U	<1	U
Required Detection Limit (RDL)			1		1	

Results

J - Parameter not detected above LOD
- Parameter between LOD and RDL
* - Not provided or unable to calculate
NA - Not Applicable

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QC Summary

Report Identification Number: D9175010
Subcontract Number: S003827A00
Name of Industrial Hygienist: Gwen Whatley / Debbie Gothard / Henry Ruby / William Brasker
Laboratory Identification Number: DCHM
SAF: RC-004 / RC-075-089
Sample Receipt Date: 06/24/2009

Batch ID: 31045

QC Sample ID	QC Type	Analyte	Units	Result	Parent Result	Target
QC107803	LCS	Amosite	%	30		23
QC107803	LCSD	Amosite	%	40		23
QC107803	LCS	Chrysotile	%	ND		ND
QC107803	LCSD	Chrysotile	%	ND		ND

MB - Method Blank
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MSD - Matrix Spike Duplicate
LD - Laboratory Duplicate

NA - Not Applicable
ND - Parameter not detected above LOD

LCS, LCSD Percent Rec. = (Result / Target) * 100.0
MS, MSD Percent Rec. = ((Result – Parent) / Target) * 100.0

LCS, LCSD Relative Percent Diff. = ((|LCS – LCSD|) / ((LCS + LCSD)/2.0)) * 100.
MS, MSD Relative Percent Diff. = ((|MS – MSD|) / ((MS+ MSD)/2.0)) * 100.
LD Relative Percent Diff. = ((|Parent – LD|) / ((Parent + LD)/2.0)) * 100

COC

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9175010

9175010 ...nford

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

RC-075-089 | Page 1 of 3

Collector: J Sellers	Company Contact: D.W.Shea	Telephone No.: 521-6014	Project Coordinator: KESSNER, JH
Project Designation: 100-D/DR Burial Grounds & Remaining Sites - Soil Full Prot	Sampling Location: 126-D-2, Verification I, excavation		SAF No.: RC-075
Ice Chest No.: GWSC-99	Field Logbook No.: EL-1607-6	COA: R126D22000	Method of Shipment: Fed Ex
Shipped To: DataChem Laboratories - Salt Lake City	Offsite Property No.: A090127		Bill of Lading/Air Bill No.: See OSPC

Price Code: 8L | Data Turnaround: 21days

POSSIBLE SAMPLE HAZARDS/REMARKS

Special Handling and/or Storage

Preservation	None
Type of Container	G/P
No. of Container(s)	1
Volume	250g
SAMPLE ANALYSIS	Asbestos Bulk - NIOSH 9002

Sample No.	Matrix *	Sample Date	Sample Time	Asbestos Bulk - NIOSH 9002
J19088	SOIL	6/22/09	0722	✓
J19089	SOIL		0739	✓
J19090	SOIL		0750	✓
J19091	SOIL		0804	✓
J19092	SOIL		0838	✓

CHAIN OF POSSESSION — Sign/Print Names

Relinquished By/Removed From	Date/Time	Received By/Stored In	Date/Time
J. Sellers Josh Sellers	6-22-09 1515	DWSHEA DWShea	6/22/09 1515
DWShea DWSHEA	6/22/09 1627	Fridge 3A	6/22/09 1627
Fridge 3A / J.E. Benfel	0930 6-23-09	J.E. Benfel	0930 6-23-09
J.E. Benfel WCH	1030 6-23-09	FED EX	
[illegible]		[illegible]	24Jun09/1011
R 331 [illegible]	24Jun09/1015		

SPECIAL INSTRUCTIONS

Sampler unavailable to remove samples from controlled storage. Shipper removed samples from storage location taking custody of samples for shipment to lab.

Matrix *: S=Soil, SE=Sediment, SO=Solid, SI=Sludge, W=Water, O=Oil, A=Air, DS=Drum Solids, DL=Drum Liquids, T=Tissue, WI=Wipe, L=Liquid, V=Vegetation, X=Other

LABORATORY SECTION	Received By: [illegible]	Title	Date/Time: 24Jun09/1011
FINAL SAMPLE DISPOSITION	Disposal Method	Disposed By	Date/Time

WCH-EE-011

KW

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Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		RC-075-089	Page 2 of 3
Collector: J Sellers	Company Contact: D.W.Shea	Telephone No.: 521-6014	Project Coordinator: KESSNER, JH	Price Code: 8L; Data Turnaround: 21 days
Project Designation: 100-D/DR Burial Grounds & Remaining Sites - Soil Full Prot	Sampling Location: 126-D-2, Verification I, excavation		SAF No.: RC-075	
Ice Chest No.: GWSC-99	Field Logbook No.: EL-1607-6	COA: R126D22000	Method of Shipment: Fed Ex	
Shipped To: DataChem Laboratories - Salt Lake City	Offsite Property No.: A090127		Bill of Lading/Air Bill No.: See OSPC	

POSSIBLE SAMPLE HAZARDS/REMARKS

Special Handling and/or Storage

Preservation	None										
Type of Container	G/P										
No. of Container(s)	1										
Volume	250g										
SAMPLE ANALYSIS	Asbestos Bulk - NIOSH 9002										

Sample No.	Matrix *	Sample Date	Sample Time									
J19093	SOIL	6/22/09	0855	✓								
J19094	SOIL	↓	0912	✓								
J19095	SOIL	↓	1002	✓								
J19096	SOIL	↓	1213	✓								
J19097	SOIL	↓	1238	✓								

CHAIN OF POSSESSION	Date/Time	Sign/Print Names	Date/Time
Relinquished By/Removed From: J. Sellers [signature]	6-22-09 1515	Received By/Stored In: DWShea DWShea	6/22/09 1515
Relinquished By/Removed From: DWShea DWSHEA	6/22/09 1627	Received By/Stored In: Fridge 3A	6/22/09 1627
Relinquished By/Removed From: Fridge 3A / J.E. Beckel	0930 6-23-09	Received By/Stored In: J.E. Beckel	0930 6-23-09
Relinquished By/Removed From: J.E. Beckel WXH	1030 6-23-09	Received By/Stored In: FED EX	
Relinquished By/Removed From: FedEx		Received By/Stored In: [signature]	24 June 09 1011
Relinquished By/Removed From: [signature]	24 June 09 1025	Received By/Stored In:	

SPECIAL INSTRUCTIONS

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LABORATORY SECTION	Received By: [signature]	Title	Date/Time: 24 June 09 1011
FINAL SAMPLE DISPOSITION	Disposal Method	Disposed By	Date/Time

WCH-EE-011

KW

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Washington Closure Hanford	CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST		RC-075-089	Page 2 of 2
Collector: J Sellers	Company Contact: D.W.Shea	Telephone No.: 521-6014	Project Coordinator: KESSNER, JH	Price Code: 8L / Data Turnaround: 21 days
Project Designation: 100-D/DR Burial Grounds & Remaining Sites - Soil Full Prot	Sampling Location: 126-D-2, Verification I, excavation		SAF No.: RC-075	
Ice Chest No.: GWSC-99	Field Logbook No.: EL-1607-6	COA: R126D22000	Method of Shipment: Fed Ex	
Shipped To: DataChem Laboratories - Salt Lake City	Offsite Property No.: A090127		Bill of Lading/Air Bill No.: See OSPC	

POSSIBLE SAMPLE HAZARDS/REMARKS

Special Handling and/or Storage

Preservation	None										
Type of Container	G/P										
No. of Container(s)	1										
Volume	250g										
SAMPLE ANALYSIS	Asbestos - Bulk - NIOSH 9002										

Sample No.	Matrix *	Sample Date	Sample Time										
J19098	SOIL	6/22/09	1256	✓									
J19099	SOIL	↓	1316	✓									
J19B0	SOIL		1002	✓									

CHAIN OF POSSESSION	Sign/Print Names	Date/Time	Received By/Stored In	Sign/Print Names	Date/Time
Relinquished By/Removed From	J. Sellers	6-22-09 1515	Received By/Stored In	DWSHEA	6/22/09 1515
Relinquished By/Removed From	DWSHEA	6/22/09 1627	Received By/Stored In	Fridge 3A	6/22/09 1627
Relinquished By/Removed From	Fridge 3A / J.E. Beckel	6-23-09 0950	Received By/Stored In	J.E. Beckel	6-23-09 0950
Relinquished By/Removed From	J.E. Beckel WCH	6-23-09 1030	Received By/Stored In	FED EX	
Relinquished By/Removed From			Received By/Stored In		24 Jun 09
Relinquished By/Removed From		24 Jun 09 1015	Received By/Stored In		

SPECIAL INSTRUCTIONS

Sampler unavailable to remove samples from controlled storage. Shipper removed samples from storage location taking custody of samples for shipment to lab.

Matrix *: S=Soil; SE=Sediment; 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

LABORATORY SECTION	Received By	Title	Date/Time
			24 Jun 09 1011

FINAL SAMPLE DISPOSITION	Disposal Method	Disposed By	Date/Time

WCH-EE-011

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2009-06-24-9175010-04

From: Origin ID: PSCA (509) 376-7768
SHIPPING DEPT
FLUOR HANFORD
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2355 STEVENS DR BLDG 1162
RICHLAND, WA 99352

FedEx Express

Ship Date: 23JUN09
ActWgt: 36.0 LB
CAD: 5851986/INET9060
Account#: S **********

Delivery Address Bar Code

SHIP TO: (801) 904-4302 BILL THIRD PARTY
KEVIN GRIFFITHS
DATA CHEM
960 LEVOY DR # A090125

SALT LAKE CITY, UT 84123

Ref # R1160D5 2000
Invoice #
PO #
Dept #

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