1073552 - R8 SDMS

Contaminant Screening Study
Libby Asbestos Site, Operable Unit 4
Libby, Montana

Draft Summary Report Revision No.1 for the Former Stimson Lumber Company Area Investigations

May 2005

Summary Report

Response Action Contract
for Remedial, Enforcement Oversight, and Non-Time
Critical Removal Activities at Sites of Release or
Threatened Release of Hazardous Substances
in EPA Region 8

U.S. EPA Contract No. 68-W5-0022

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Acronyms

AHERA	Asbestos Hazard Emergency Response Act
ASTM	American Society for Testing and Materials
bgs	below ground surface
BMX	bicycle motocross
BZ	breathing zone
CDM	CDM Federal Programs Corporation
CFR	Code of Federal Regulations
CSF	close support facility
CSS	contaminant screening study
DQO	data quality objective
EL	excursion limit
EMSL	EMSL Analytical Laboratories, Inc.
EPA	U.S. Environmental Protection Agency
EWS	extended work shift
f/cc	fibers per cubic centimeter
FJ	finger joint
ISO	International Organization for Standardization
LA	Libby amphibole
LPA	Lincoln County Port Authority
lpm	liters per minute
MCE	mixed cellulose ester
MCS	MCS Environmental
mm	millimeter
ND	non-detect
NIOSH	National Institute for Occupational Safety and Health
OSHA	Occupational Safety and Health Administration
PCM	phase contrast microscopy
PEL	permissible exposure limit
PES	Pacific Environmental Services
PLM	polarized light microscopy
QA/QC	quality assurance/quality control
QC	quality control
RI	remedial investigation
SAP	sampling and analysis plan
SOP	standard operating procedure
SRC	Syracuse Research Corporation
Stimson	Stimson Lumber Company
TWA	time-weighted average
VE	visual area estimation

%	percent
"	inch
cm^2	square centimeters
µm	micron

Section 1
Introduction

The purpose of this report is to summarize the investigation activities conducted by CDM Federal Programs Corporation (CDM) and its subcontractor Pacific Environmental Services (PES) at the former Stimson Lumber Company property between May 2002 and July 2004.

Historical information regarding the Stimson property suggests that vermiculite products were used at, or transported to, the property at various times and at various locations. Additionally, vermiculite insulation was installed in structures which were used during daily plant operations. It is believed that these products contain varying levels of Libby Amphibole (LA) asbestos.

Multiple sampling events have occurred onsite.

- Dust sampling was conducted by PES in May 2002 at a shed in the former nursery area.
- Personal air, stationary air, and dust sampling was conducted in September 2002 in areas where vermiculite was known to have been or suspected of being present.
- CSS site wide soil sampling was conducted in October 2002.
- CSS soil sampling was conducted in May 2004 at the proposed location for a bicycle motocross (BMX) track.
- CSS soil sampling was conducted in July 2004 at the proposed location for a demolition derby track.

This summary report presents verbal interview information, visual inspection results, and site-specific personal air, ambient air, microvacuum dust, and soil sampling data from these various events to be used in RI decision making for the site.

1.1 Site Location

The former Stimson Lumber Company property is situated in the eastern section of Libby, Montana on U.S. Highway 2 South (Figure 1-1). Stimson Lumber Company operated at the location until 2004. In 2004 the property was bought by the Lincoln County Port Authority (LPA) which is currently in the process of redeveloping the site.

The property is approximately 200 acres in size and is occupied by various buildings, processing plants, and storage sheds including the central maintenance facility, plywood plant, finger joint building, truck barn, office, and others. For investigation purposes the property was divided into eight sub-areas (Figure 1-2):

1. Former Popping Plant
2. Railroad Spur
3. Lumber Yard
4. Log Storage Yard
5. Southwest Area
6. Former Champion International Tree Nursery
7. Sprinkler Field
8. Superfund Site

These divisions were made based on assumed contaminant and environmental setting. The Sprinkler Field and Superfund Site sub-areas are part of another Superfund site, were not visited by CDM, and will not be discussed further in this report.

File Path: c:\projects\libby\libby_gis\aprs\stimson_sampling.apr

800 0 800 1600 Feet

Map Created November, 2002

CDM

N

LEGEND

Stimson Lumber Property

Figure 1-1
Site Location Map
Stimson Lumber Company
Libby, MT

File Path: c:\projects\libby\libby_gis\aprx\stimson_sampling.aprx

70 0 70 140 Feet

Map Created November, 2002

CDM

N

LEGEND

Stimson Lumber Property

Areas of Concern

Outdoor Samples

Figure 1-2
Stimson Lumber Company
Plywood Plant, Employee Parking Lot,
Finger Joint Building
Libby, MT

Section 2
Verbal Interview and Visual Inspection

2.1 Verbal Interview

A site visit (meeting) was conducted on September 28, 2001 by Mr. David Schroeder (CDM site manager), Mr. Greg Parana (PES field manager), and Dr. Chris Weis (U.S. Environmental Protection Agency [EPA] regional toxicologist). Stimson Lumber Company personnel present during this meeting included Mr. Fred Sturgess (Libby complex manager), Ms. Veronica Bovee (health and safety coordinator), Mr. John Chopot (environmental manager), and Mr. Barry Brown (local union #2581 president). The site meeting included interviews with current employees and a walk-through of three sub-areas (Former Popping Plant, Railroad Spur, and Former Champion International Tree Nursery), the central maintenance building, and the plywood plant. The following information was gathered at this meeting.

The unpaved parking area used by Stimson Lumber Company employees (part of the Former Popping Plant sub-area) was once used as an aboveground storage area for uncontainerized vermiculite ore. Vermiculite ore was stockpiled directly on the native soil surface and may have contaminated the area with measurable amounts of asbestos mineral fibers. The area was converted to a parking lot in 1990.

The Railroad Spur sub-area, located near the Former Popping Plant location, was used for shipping raw and processed vermiculite material to and from the Site. It is suspected that this section of the railroad is contaminated with Libby asbestos from loading/unloading operations and transportation.

A landscaping nursery (i.e., Former Champion International Tree Nursery sub-area) was previously located along the southern boundary of the Site. It is believed that un-exfoliated, or raw vermiculite product, was introduced to this area for use as a growth media and fill material. Currently the sub-area remains a vacant lot with sparse vegetation. At the time of the interviews the area was used to stockpile log yard debris collected from 1991 through 1997.

The central maintenance building (located in the Southwest Area sub-area) was insulated with vermiculite insulation. This structure is equipped with a large gantry crane that traverses the length of the building. Movement of this crane causes vibration within the structure and release of small amounts of vermiculite insulation from around seams and joints of the clapboard walls.

The plywood plant (part of the Stimson Lumber Company sub-area), at the time of the interviews, was used for processing plywood. According to historical records, vermiculite insulation was used as an insulator for the plywood dryers. The Big Dryer #1 is the dryer of concern. According to Stimson Lumber Company employees, the Big Dryer #1 was modified in 1986-87 and it is believed that vermiculite material was added to the concrete, as well as sandwiched between the

top of the dryer and the concrete layer. The Little Dryer #2 was modified in 1996 and does not contain any vermiculite material.

No other verbal interviews were conducted for the subsequent investigations.

2.2 Visual Inspection

As part of the air and dust sampling conducted in September 2002, buildings were inspected to determine if vermiculite containing insulation or building materials were present in structures. The results of the building inspections are discussed in Section 4.

In addition, during all soil sampling activities observations were noted in logbooks and on FSDS regarding any vermiculite observed. The specifics of vermiculite observed during soil sampling are discussed in Section 5.

Section 3
Air Sampling

3.1 Personal Air Sampling

A total of 124 personal breathing zone (BZ) samples from 10 Stimson employees were collected in accordance with Property Specific Sampling and Analysis Plan (SAP), Air and Dust Sampling for the Stimson Lumber Company, Libby Asbestos Site, OU4 Libby, Montana 2002a [Stimson SAP (CDM 2002a)]. Ninety-seven air samples were collected for the duration of the work activity between September 10 and September 16, 2002. The results of these samples were then calculated as time-weighted averages (TWAs) for the full shift (8, 10, or 12 hours) and compared to the Occupational Safety and Health Administration (OSHA) permissible exposure limit (PEL) and/or the OSHA extended work shift PEL for asbestos. Twenty-seven samples were collected for 30 minutes (approximately) and compared to OSHA's 30-minute excursion limit (EL) for asbestos.

3.1.1 Sample Locations

Personal air sampling locations and tasks were selected during the pre-sampling facility visit on September 9, 2002. All locations and tasks were approved by EPA as presented in the Stimson SAP (CDM 2002a). These tasks represent normal and general duties typically performed by Stimson employees. Sampling locations and associated tasks at each location are summarized below:

- Plywood plant (Figure 1-2)
  - Dryer tender 1 – performed oversite on the dryers, troubleshooting, temperature, and steam tracking
  - Dryer feeder 2 – fed boards into dryer, general housekeeping
  - Dryer off bearer 3 – sorted and tended boards coming out of dryer
  - Plugger 4 – operated plugger machine
  - Green chain puller 5 – sorted wood from lathe along green chain
- Central maintenance building (Figure 1-2)
  - Mechanics (two employees) – performed repairs and maintenance on facility vehicles and machinery
- Finger joint building (Figure 1-2)
  - FJ utility – worked at all stations throughout FJ plant, including general housekeeping and forklift operation

- Log storage yard (Figure 1-2)
  - Wagner operator - operated Wagner Lumberjack, unloading and moving logs throughout log yard and to plywood plant area

Table 3-1 presents the number and type of samples collected at each task and location during the sampling activities.

Table 3-1. Task-Based Samples Collected

Location	Task	No. of Samples Collected	
		Duration of Full Shift	30-Minute Excursion
Plywood Plant	Dryer tender	11	3
	Dryer feeder	12	3
	Dryer off bearer	11	3
	Plugger	9	3
	Green chain puller	13	3
Central Maintenance	Mechanic 1	6	3
	Mechanic 2	7	3
Finger joint	Finger joint utility	16	3
Log Yard	Wagner operator	12	3

3.1.2 Sample Collection

Personal air samples were collected on Stimson employees between September 10 and September 16, 2002. All samples were collected in accordance with the EPA Standard Operating Procedure (SOP) *2015 Asbestos Sampling* (Appendix A). Sample volume requirements were in accordance with OSHA *Construction Standard for Asbestos, 29 CFR 1926.1101*. All air sampling pumps were calibrated from 1.5 to 2.03 liters per minute (lpm) prior to the sampling period and again at the end of the sampling period. Air samples were collected using 0.8 micron (µm) open-faced 25 millimeter (mm) mixed cellulose ester (MCE) filters, as described in the Stimson SAP (CDM 2002a). All cassettes were visually inspected approximately every 2 hours during sampling to ensure cassettes were not overloaded.

Due to a higher level of airborne particulates than anticipated, cassettes were changed more frequently than every 2 hours in an effort to prevent sample overload.

For all samples collected during this investigation, (personal, ambient, and microvacuum dust), field blanks were submitted at the rate of 10 percent and/or a minimum of two field blanks per sample batch per day. Field blanks were prepared at the time of sampling at the sampling location by removing the cassette cap for 30 seconds and then replacing the cap. A total of 26 field blanks were collected. All field blank cassettes originated from the field sampling cassette lot. One half of the field blanks submitted each day were analyzed, the remaining half were archived for later analysis if necessary. All field blanks analyzed during this investigation were non-

detect (ND) for LA asbestos Field blank results are included in the Libby database printout presented in Appendix E.

Prior to receipt of new sampling cassettes in the field, a new unused cassette was sent to the laboratory. Results from these lot blanks determined the background asbestos structure concentration for the lot of cassettes. Specific cassette lot blanks analyzed during this project included 25mm three-piece cassettes with 0.8 µm MCE filters for Lot Numbers 21078 and 4583. All lot blanks analyzed during this investigation were ND for LA asbestos. Lot blank results are included in the Libby database printout presented in Appendix E.

Each employee selected to wear a pump was given a brief description of the purpose of personal sampling, as well as an explanation of the sampling procedure. This explanation included instruction to contact the sampling technician immediately if there were any problems with the sampling pump (e.g., pump falling off or stopping, or cassette loss or damage). This information was provided to each employee in writing and reviewed in person. Each of the selected employees provided their name, last 4 digits of their social security number (for sample tracking purposes), and job title on a form, which they signed and dated on the first day of sampling. A copy of this form is attached in Appendix B.

Employees wore pumps clipped to either the waistline of their pants, their own belt, or a belt that was provided. Tubing ran up their backs to the cassette, which was clipped to the collar or neckline of the employee's shirt, within the BZ, as described in the Stimson SAP (CDM 2002a). Clips or tape were sometimes used to secure tubing to the back of the employee's shirt, to prevent it from snagging or being caught on equipment. Employees were advised that the cassette must stay within their BZ for the duration of sample collection. Employees were questioned at the intervals when cassettes were visually inspected and at the end of each shift to determine if there were any problems with the sampling pump or cassette.

3.1.3 Sample Analysis

Air samples were analyzed by EMSL Analytical, Inc. (EMSL) in Libby, Montana, and Westmont, New Jersey; Reservoirs Environmental Services in Denver, Colorado, and/or Hygeia in Sierra Madre, California. All samples were analyzed in accordance with the ISO 10312, Air Quality - *Determination of Asbestos Fibers – Direct Transfer Transmission Electron Microscopy Method, 1995;* National Institute for Occupational Safety and Health (NIOSH) *Method 7400, Asbestos and other Fibers by Phase Contrast Microscopy (PCM);* and/or Appendix A of the EPA *Asbestos - Containing Materials in Schools: Final Rule and Notice.* If an air sample was determined to be overloaded, it was not analyzed.

Samples were maintained under chain of custody procedures. After sample collection was completed, EPA custody labels were completed and affixed to each sampling cassette. Sample information was entered on chain of custody forms, and changes in sample custody noted on the form. Samples were relinquished to the sample coordinator and submitted for laboratory analysis. Any samples not immediately

relinquished to the sample coordinator were secured in the sample storage cabinet. Samples were either hand-delivered to the EMSL onsite laboratory in Libby, Montana, or shipped via Federal Express to an offsite laboratory.

3.1.4 Summary of Results

The personal air samples were collected based on task. Each task was sampled for 3 consecutive days, for the duration of the work shift. One excursion limit sample was collected from each employee sampled on each of his or her 3 sampling days. A summary of TWA sample results, including calculated extended work shift values, is presented in Table 3-2. Extended work shift (EWS) permissible exposure limits were determined using a standard OSHA formula (American Industrial Hygiene Journal 2000). A summary of excursion limit sample results is presented in Table 3-3. A complete Libby database printout of personal air sample results is attached in Appendix E.

Personal air samples were collected on two employees in the Central Maintenance building: Mechanic 1 and Mechanic 2. Both central maintenance employees worked an 8-hour shift each sampling day. LA asbestos structures were detected by TEM AHERA analysis on one of the six samples (SL-00018) collected on Mechanic 1. LA asbestos structures were detected by TEM AHERA analysis on two of the seven samples (SL-00012 and SL-00054) collected on Mechanic 2. TWA calculation based on the PCM analysis results showed no exposures above the OSHA PEL.

Personal air samples were collected on one employee in the FJ building: FJ Utility. FJ Utility worked a 10-hour shift each sampling day. LA asbestos structures were detected by TEM AHERA analysis on one of the 16 samples collected on FJ Utility, SL-00051. One sample, SL-00198, was overloaded for PCM analysis, and therefore TWA calculation was not possible for that date. TWA calculation based on the PCM analysis results for the remaining dates showed no exposures above the PEL.

Personal air samples were collected on one employee in the Log yard: Wagner operator. The Wagner operator worked an 8-hour shift each sampling day. LA asbestos structures were detected by TEM AHERA analysis on one of the twelve samples collected on the Wagner Operator, SL-00055. Two samples, SL- 00166 and SL-00189, which were collected on September 16th were overloaded for PCM analysis, and therefore TWA calculation was not possible for that date. TWA calculation based on the PCM analysis results for the remaining dates showed no exposures above the PEL. EWS TWA calculation based on the PCM analysis results for the remaining dates showed no exposures above the calculated EWA PEL.

Five employees were sampled in the Plywood Plant: Dryer Feeder, Dryer Tender, Dryer Off bearer, Green Chain Puller, and Plugger. The Dryer Feeder, Dryer Tender, and Dryer Off bearer worked 12-hour shifts the first 2 sampling days, and a 6-hour shift the 3rd day. The Green Chain Puller worked 10-hour shifts each of the 3 sampling days, and the Plugger worked 8-hour shifts each of the 3 days.

LA asbestos structures were not detected by TEM AHERA analysis on any of the 11 samples collected on the Dryer Feeder. TWA calculation based on the PCM analysis results showed no exposures above the PEL. EWS TWA calculation based on the PCM analysis results showed no exposures above the calculated EWS PEL.

Of the 11 samples collected on the Dryer Tender, LA asbestos structures were detected by TEM AHERA analysis on one sample, SL-00159. The TWA calculation based on the PCM analysis results for the remaining sampling dates showed one exposure above the PEL. The calculated extended work shift TWA for September 14, 2002, was <0.087 f/cc, which is above the calculated extended work shift PEL of 0.07 f/cc. However, this overexposure is not conclusive, because the high limit of detection does not allow for a valid comparison between the values.

LA asbestos structures were not detected by TEM AHERA analysis on any of the 11 samples collected on the Dryer Off bearer. TWA calculation based on the PCM analysis results showed no exposures above the PEL. EWS TWA calculation based on the PCM analysis results showed no exposures above the calculated EWS PEL.

LA asbestos structures were not detected by TEM AHERA analysis on any of the 13 samples collected on the Green Chain Puller. TWA calculation based on the PCM analysis results for all sampling dates showed one exposure above the PEL. The calculated extended work shift TWA for September 14, 2002, was 0.129 f/cc, which is above the calculated extended work shift PEL of 0.08 f/cc. However, this overexposure is not conclusive, because the high limit of detection does not allow for a valid comparison between the values.

Asbestos fibers were detected by TEM AHERA analysis on one of the nine samples collected on the Plugger, SL-00078. TWA calculation based on the PCM analysis results for the remaining dates showed no exposures above the PEL.

All excursion limit samples collected on Stimson employees showed PCM results significantly lower than the OSHA-defined excursion limit of 1.0 f/cc. LA asbestos structures were detected on two excursion limit samples by TEM AHERA analysis: Samples SL-00026 and SL-00052. SL-00026 was collected on Mechanic 2 in central maintenance on September 11, 2002. SL-00052 was collected on the Wagner operator on September 12, 2002. LA asbestos structures were not detected on the remaining excursion limit samples by TEM AHERA analysis. A summary of excursion limit sample results is presented in Table 3-3.

ISO 10312 results for all personal samples are presented in Appendix E.

3.2 Ambient Air Sampling

A total of 43 ambient air samples were collected between September 10 and September 18, 2002. These samples were collected inside buildings and outdoors to determine general background asbestos concentration levels at the Stimson facility. All locations were approved by EPA prior to sampling.

3.2.1 Sample Locations

As presented in the Stimson SAP (CDM 2002a), ambient air sampling was conducted in three facility buildings on the Stimson property. These buildings included the plywood plant, central maintenance building, and the FJ building (Figure 1-2). Ambient air sampling was also conducted at two outdoor locations on the Stimson property and included the employee parking lot (near the former popping plant) (Figure 1-2) and the log yard (Figure 1-2). Samples were collected during normal daily operations while facility equipment was operational. Sampling locations are summarized in Table 3-4.

Table 3-4. Ambient Air Sampling Locations

Location	Sample Location	No. of Samples
Central Maintenance (BD-002098)	Center of machine shop	1
	Center of south end of building	1
	East side center of building	1
	North end center of building	3
	Replicate – north end center of building	3
Plywood Plant (BD-002099)	Outside de-barker cab	1
	Green chain exterior wall opposite supervisor's office	4
	Plugger alley next to plugger No. 9	4
	Dryers next to post at feed end	4
	Spreaders at post near pre-press	3
	Inside de-barker cab	1
Finger Joint building (BD-002097)	Outside lunch room in main plant area	2
	Near entrance to feeder No. 2 room	2
	Near former lunch room	2
Employee Parking Lot	Southeast corner	1
	Northwest corner	1
	Center of south side of lot	1
	In railroad tracks, north of roadway	1
Log Yard	Outside log truck scale shed	2
	Outside storage shed	1
	At trailer crane by fire pond	2
	Near head gate	2

3.2.2 Sample Collection

All ambient air samples collected between September 11 and September 18, 2002, were collected according to the EPA *SOP 2015 Asbestos Sampling* (Appendix A). All ambient air sampling pumps were calibrated prior to the sampling period and again at the end of the sampling period. Air samples were collected using 0.8 µm open-faced 25mm MCE filters. All air sampling cassettes were inspected during sampling to determine if file overloading was occurring.

All field blanks analyzed during this investigation were ND for LA asbestos. Field blank results are included in the Libby database printout presented in Appendix E.

Specific cassette lot blanks analyzed during this project included MCE filters for lot numbers 21078 and 4583. All lot blanks analyzed during this investigation were ND for LA asbestos. Lot blank results are included in the Libby database printout presented in

Appendix E. As a means of assessing sample variability during ambient air sampling, three replicate samples from the central maintenance building were collected.

3.2.3 Sample Analysis

Air samples were analyzed by EMSL in Libby, Montana, and Westmont, New Jersey; Reservoirs Environmental Services in Denver, Colorado, and/or Hygeia in Sierra Madre, California. All samples were analyzed by ISO 10312, Air Quality - *Determination of Asbestos Fibers - Direct Transfer Transmission Electron Microscopy Method, 1995*; NIOSH *Method 7400, Asbestos and other Fibers by Phase Contrast Microscopy (PCM)*; and/or Appendix A of EPA *Asbestos - Containing Materials in Schools: Final Rule and Notice.*

Samples were maintained under chain of custody procedures. After sample collection was completed, EPA custody labels were completed and affixed to each sampling cassette. Sample information was entered on chain of custody forms, and changes in sample custody noted on the form. Samples were relinquished to the sample coordinator and submitted for laboratory analysis. Any samples not immediately relinquished to the sample coordinator were maintained under chain of custody. Samples were either hand-delivered to the EMSL onsite laboratory in Libby, Montana, or shipped via Federal Express to an offsite laboratory.

3.2.4 Summary of Results

A total of 42 stationary air samples were collected and analyzed from Stimson buildings. A summary of stationary sample locations and results, including PCM and TEM AHERA analysis results, is presented in Table 3-5. A complete list of results, including those for ISO 10312 analysis, is presented in Appendix E.

Of the nine samples collected in the central maintenance building, fibers were not detected at levels at or above 0.01 f/cc by PCM analysis. LA asbestos structures were detected on one of the nine samples (SL-00223) by TEM AHERA analysis, collected at the center of the north end of the building.

Of the 15 samples collected throughout the plywood plant, fibers were detected at values at greater than 0.01 f/cc by PCM analysis in seven samples. Three of the samples, SL-00079, SL-00092, and SL-00107, were located along the green chain exterior wall, opposite the supervisor's office. Two samples, SL-00243 and SL-00245, were located at the spreaders, at a post near the pre-press. The remaining three samples at or above 0.01 f/cc were SL - 00092, SL - 00106, and SL-00215. SL-00092 was located at plugger alley, next to plugger No. 9; SL-00106 was located at the dryers, at a post near the feed end; and SL-00215 was located in the debarker cab. LA asbestos structures were not detected in any of the 15 samples by TEM AHERA analysis.

On five of the six samples collected in the FJ building, fibers were not detected at levels at or above 0.01 f/cc by PCM analysis. The sixth sample, SL-00196, collected near the entrance to feeder No. 2 room, was overloaded by PCM analysis. LA asbestos structures were detected in two of the six samples by TEM AHERA analysis,

SL-00162 and SL-00163. SL-00162 was collected outside the lunch room in the main plant area, and SL-00163 was collected near the entrance to feeder No. 2 room.

Of the four samples collected in the employee parking lot, fibers were not detected at levels at or above 0.01 f/cc by PCM analysis. LA asbestos structures were not detected in any of the four samples by TEM AHERA analysis.

Of the seven samples collected in the log yard, fibers were not detected at levels at or above 0.01 f/cc by PCM analysis. LA asbestos structures were not detected on any of the seven samples by TEM AHERA analysis.

Table 3-2
Personal Air Sampling - TWA Extended Work Shift (EWS) Results

Building	Task	Sample Date	Index ID	PCM Lab Result (f/cc)	TEM AHERA Lab Result (S/cc) *	Sample Time (min)	Work Shift (Hrs)	TWA ** 8-Hr (f/cc)	TWA-EWS (f/cc)	PEL-EWS (f/cc)
Central Maintenance	Mechanic 1	10-Sep-02	SL-00002	< 0.005	ND	291	8	< 0.006	NA	NA
			SL-00011	< 0.008	ND	164				
Central Maintenance	Mechanic 1	10-Sep-02	SL-00018	< 0.005	0.005	291	8	< 0.006	NA	NA
			SL-00031	< 0.008	ND	166				
Central Maintenance	Mechanic 1	10-Sep-02	SL-00041	< 0.008	ND	173	8	< 0.006	NA	NA
			SL-00053	< 0.009	ND	146				
Central Maintenance	Mechanic 2	10-Sep-02	SL-00003	0.009	ND	292	8	< 0.008	NA	NA
			SL-00012	< 0.008	0.009	167				
Central Maintenance	Mechanic 2	11-Sep-02	SL-00019	< 0.004	ND	302	8	< 0.044	NA	NA
			SL-00032	< 0	ND	167				
Central Maintenance	Mechanic 2	12-Sep-02	SL-00042	0.008	ND	174	8	< 0.011	NA	NA
			SL-00048	0.021	ND	123				
			SL-00054	< 0.009	0.013	143				
Finger Joint	FJ Utility	10-Sep-02	SL-00001	0.03	ND	293	10	< 0.028	< 0.026	0.08
			SL-00009	0.02	ND	158				
			SL-00014	< 0.012	ND	115				
Finger Joint	FJ Utility	11-Sep-02	SL-00017	< 0.135	ND	147	10	< 0.086	< 0.055	0.08
			SL-00029	< 0.161	ND	123				
			SL-00035	0.015	ND	115				
Finger Joint	FJ Utility	12-Sep-02	SL-00040	0.035	ND	144	10	< 0.030	< 0.029	0.08
			SL-00045	< 0.013	ND	100				
			SL-00047	0.039	ND	55				
			SL-00051	0.023	0.013	117				
			SL-00057	0.017	ND	97				
			SL-00063	< 0.02	ND	69				
Finger Joint	FJ Utility	16-Sep-02	SL-00161	0.187	ND	157	10	overloaded	overloaded	0.08
			SL-00183	0.279	ND	126				
			SL-00198	overloaded	ND	173				
			SL-00206	0.059	ND	116				
Log Yard	Wagner Operator	10-Sep-02	SL-00005	< 0.088	ND	204	8	< 0.043	NA	NA
			SL-00010	< 0.01	ND	129				
			SL-00013	< 0.009	ND	143				
Log Yard	Wagner Operator	11-Sep-02	SL-00027	< 0.058	ND	172	8	< 0.026	NA	NA
			SL-00030	< 0.007	ND	198				
			SL-00033	< 0.012	ND	111				
Log Yard	Wagner Operator	12-Sep-02	SL-00044	< 0.141	ND	127	8	< 0.081	NA	NA
			SL-00050	< 0.163	ND	110				
			SL-00055	0.018	0.015	96				
			SL-00058	< 0.012	ND	109				
Log Yard	Wagner Operator	16-Sep-02	SL-00166	overloaded	ND	121	8	overloaded	NA	NA
			SL-00189	overloaded	ND	143				
Plywood Plant	Dryer Offbearer	13-Sep-02	SL-00076	0.031	ND	188	12	< 0.037	< 0.032	0.07
			SL-00086	0.05	ND	139				
			SL-00104	< 0.01	ND	180				
			SL-00116	0.025	ND	118				
Plywood Plant	Dryer Offbearer	14-Sep-02	SL-00125	< 0.014	ND	124	12	< 0.094	< 0.086	0.07
			SL-00137	< 0.014	ND	128				
			SL-00146	0.084	ND	90				
			SL-00147	0.106	ND	126				
			SL-00153	0.109	ND	189				
Plywood Plant	Dryer Offbearer	16-Sep-02	SL-00160	0.05	ND	189	12	< 0.036	0.017	0.07
			SL-00187	0.048	ND	162				

Table 3-2
Personal Air Sampling - TWA Extended Work Shift (EWS) Results

Building	Task	Sample Date	Index ID	PCM Lab Result (f/cc)	TEM AHERA Lab Result (S/cc) *	Sample Time (min)	Work Shift (Hrs)	TWA ** 8-Hr (f/cc)	TWA-EWS (f/cc)	PEL-EWS (f/cc)
Plywood Plant	Plugger	13-Sep-02	SL-00078	0.04	0.015	132	8	0.035	NA	NA
			SL-00088	0.039	ND	93				
			SL-00099	0.038	ND	204				
Plywood Plant	Plugger	14-Sep-02	SL-00131	< 0.015	ND	121	8	<0.039	NA	NA
			SL-00141	< 0.015	ND	119				
			SL-00143	0.077	ND	195				
Plywood Plant	Plugger	16-Sep-02	SL-00165	0.048	ND	143	8	0.053	NA	NA
			SL-00188	0.113	ND	125				
			SL-00199	0.027	ND	169				
Plywood Plant	Dryer Feeder	13-Sep-02	SL-00074	0.034	ND	191	12	0.041	0.037	0.07
			SL-00085	0.029	ND	150				
			SL-00105	0.043	ND	39				
			SL-00101	0.024	ND	147				
			SL-00115	0.03	ND	118				
Plywood Plant	Dryer Feeder	14-Sep-02	SL-00124	< 0.015	ND	120	12	< 0.060	<0.055	0.07
			SL-00134	< 0.014	ND	127				
			SL-00144	0.066	ND	119				
			SL-00150	0.035	ND	94				
			SL-00152	0.072	ND	197				
Plywood Plant	Dryer Feeder	16-Sep-02	SL-00157	0.026	ND	190	12	0.016	0.008	0.07
			SL-00185	0.018	ND	159				
Plywood Plant	Green Chain Puller	13-Sep-02	SL-00075	0.05	ND	179	10	0.056	0.054	0.08
			SL-00083	0.032	ND	166				
			SL-00093	0.036	ND	154				
			SL-00114	0.087	ND	79				
Plywood Plant	Green Chain Puller	14-Sep-02	SL-00123	< 0.015	ND	119	10	0.128	0.129	0.08
			SL-00133	< 0.014	ND	127				
			SL-00142	0.062	ND	114				
			SL-00148	0.128	ND	99				
			SL-00151	0.255	ND	149				
Plywood Plant	Green Chain Puller	16-Sep-02	SL-00158	0.059	ND	190	10	0.054	0.055	0.08
			SL-00184	0.037	ND	176				
			SL-00200	0.026	ND	111				
			SL-00207	0.039	ND	134				
Plywood Plant	Dryer Tender	13-Sep-02	SL-00073	0.015	ND	196	12	0.032	0.031	0.07
			SL-00084	0.016	ND	269				
			SL-00110	0.044	ND	120				
			SL-00117	0.026	ND	113				
Plywood Plant	Dryer Tender	14-Sep-02	SL-00126	< 0.014	ND	124	12	< 0.093	< 0.087	0.07
			SL-00138	< 0.015	ND	117				
			SL-00145	0.095	ND	113				
			SL-00149	0.054	ND	135				
			SL-00154	0.125	ND	185				
Plywood Plant	Dryer Tender	16-Sep-02	SL-00159	0.024	0.014	187	12	0.022	0.011	0.07
			SL-00186	0.039	ND	160				

* - ND indicates no Libby amphibole structures detected by TEM AHERA analysis
** - TWA measured against PEL of 0.1 f/cc, accordance with OSHA 1926.1101
NA - Indicates no extended work shift (EWS) PEL is required
AHERA - Asbestos Hazardous Emergency Response Act
EWS - Extended work shift
f/cc - Fibers per cubic centimeter
Hr - Hour
min - Minutes
PCM - Phase contrast microscopy
S/cc - Structures per cubic centimeter
TEM - Transmission electron microscopy

Table 3-3 Excursion Air Sampling Results

					PCM	TEM AHERA
Building	Task	Sample Date	Index ID	Sample Time (min)	Lab Result * (f/cc)	Lab Result ** (S/cc)
Central Maintenance	Mechanic 1	9/10/2002	SL-00008	31	< 0.043	ND
Central Maintenance	Mechanic 1	9/11/2002	SL-00025	30	< 0.044	ND
Central Maintenance	Mechanic 1	9/12/2002	SL-00043	32	< 0.041	ND
Central Maintenance	Mechanic 2	9/10/2002	SL-00007	30	< 0.044	ND
Central Maintenance	Mechanic 2	9/11/2002	SL-00026	30	< 0.044	0.049
Central Maintenance	Mechanic 2	9/12/2002	SL-00056	35	< 0.038	ND
Finger Joint	FJ Utility	9/10/2002	SL-00004	34	0.064	ND
Finger Joint	FJ Utility	9/11/2002	SL-00028	31	< 0.043	ND
Finger Joint	FJ Utility	9/12/2002	SL-00046	30	< 0.044	ND
Log Yard	Wagner Operator	9/10/2002	SL-00006	32	< 0.041	ND
Log Yard	Wagner Operator	9/11/2002	SL-00034	35	< 0.038	ND
Log Yard	Wagner Operator	9/12/2002	SL-00052	30	< 0.044	0.049
Plywood Plant	Dryer Feeder	9/13/2002	SL-00103	31	0.078	ND
Plywood Plant	Dryer Feeder	9/14/2002	SL-00135	30	< 0.044	ND
Plywood Plant	Dryer Feeder	9/16/2002	SL-00191	31	< 0.043	ND
Plywood Plant	Dryer Offbearer	9/13/2002	SL-00113	30	< 0.044	ND
Plywood Plant	Dryer Offbearer	9/14/2002	SL-00136	30	< 0.044	ND
Plywood Plant	Dryer Offbearer	9/16/2002	SL-00194	33	< 0.040	ND
Plywood Plant	Dryer Tender	9/13/2002	SL-00109	30	< 0.044	ND
Plywood Plant	Dryer Tender	9/14/2002	SL-00139	32	< 0.041	ND
Plywood Plant	Dryer Tender	9/16/2002	SL-00193	31	< 0.043	ND
Plywood Plant	Green Chain Puller	9/13/2002	SL-00100	30	< 0.044	ND
Plywood Plant	Green Chain Puller	9/14/2002	SL-00132	30	< 0.044	ND
Plywood Plant	Green Chain Puller	9/16/2002	SL-00192	30	< 0.044	ND
Plywood Plant	Plugger	9/13/2002	SL-00095	32	< 0.041	ND
Plywood Plant	Plugger	9/14/2002	SL-00140	36	< 0.037	ND
Plywood Plant	Plugger	9/16/2002	SL-00190	30	< 0.044	ND

* Result measured against Excursion Limit of 1.0 f/cc, in accordance with OSHA 1926.1101
** ND indicates no Libby amphibole structures detected by TEM AHERA analysis
AHERA - Asbestos Hazardous Emergency Response Act
f/cc - Fibers per cubic centimeter
min - Minutes
PCM - Phase contrast microscopy
S/cc - Structures per cubic centimeter
TEM - Transmission electron microscopy

Table 3-5
Stationary Air Sampling Results

					PCM	TEM AHERA
Building	Location Description	Index ID	Sample Date	Sample Time (min)	Lab Result (f/cc)	Lab Result * (S/cc)
Central Maintenance	Center of machine shop	SL-00020	9/11/2002	480	< 0.001	ND
Central Maintenance	Center of south end of building	SL-00021	9/11/2002	490	< 0.001	ND
Central Maintenance	East side of center of building	SL-00022	9/11/2002	491	< 0.001	ND
Central Maintenance	Center of north end of building	SL-00023	9/11/2002	479	< 0.001	ND
Central Maintenance	Center of north end of building	SL-00024	9/11/2002	479	< 0.001	ND
Plywood Plant	Green chain, exterior wall opposite supervisor's office	SL-00079	9/13/2002	184	0.01	ND
Plywood Plant	Plugger Alley, next to Plugger No. 9	SL-00081	9/13/2002	168	0.009	ND
Plywood Plant	Dryers, at post a feed end, near control panel	SL-00082	9/13/2002	135	0.005	ND
Plywood Plant	Dryers, at post a feed end, near control panel	SL-00090	9/13/2002	93	0.006	ND
Plywood Plant	Green chain, exterior wall opposite supervisor's office	SL-00091	9/13/2002	110	0.006	ND
Plywood Plant	Plugger Alley, next to Plugger No. 9	SL-00092	9/13/2002	72	0.021	ND
Plywood Plant	Dryers, at post a feed end, near control panel	SL-00094	9/13/2002	108	0.008	ND
Plywood Plant	Plugger Alley, next to Plugger No. 9	SL-00096	9/13/2002	137	0.005	ND
Plywood Plant	Green chain, exterior wall opposite supervisor's office	SL-00102	9/13/2002	87	0.014	ND
Plywood Plant	Dryers, at post a feed end, near control panel	SL-00106	9/13/2002	247	0.011	ND
Plywood Plant	Green chain, exterior wall opposite supervisor's office	SL-00107	9/13/2002	248	0.026	ND
Plywood Plant	Plugger Alley, next to Plugger No. 9	SL-00111	9/13/2002	242	0.008	ND
Plywood Plant	Debarker cab	SL-00215	9/17/2002	436	0.077	ND
Plywood Plant	Spreaders, at post near pre-press	SL-00243	9/18/2002	190	0.018	ND
Plywood Plant	Spreaders, at post near pre-press	SL-00245	9/18/2002	247	0.041	ND
Employee Parking Lot	Southeast corner	SL-00127	9/14/2002	465	0.001	ND
Employee Parking Lot	Center of south side of lot	SL-00128	9/14/2002	465	0.001	ND
Employee Parking Lot	Northwest corner	SL-00129	9/14/2002	457	0.001	ND
Employee Parking Lot	In railroad tracks, north of roadway	SL-00130	9/14/2002	459	0.002	ND
Finger Joint	Outside lunch room, in main plant area	SL-00162	9/16/2002	267	0.002	0.004
Finger Joint	Near entrance to Feeder No. 2 room	SL-00163	9/16/2002	266	0.001	0.004
Finger Joint	Near former lunch room	SL-00164	9/16/2002	266	0.004	ND
Finger Joint	Outside lunch room, in main plant area	SL-00195	9/16/2002	221	0.002	ND
Finger Joint	Near entrance to Feeder No. 2 room	SL-00196	9/16/2002	219	Overload	ND
Finger Joint	Near former lunch room	SL-00197	9/16/2002	218	0.005	ND
Log Yard	Outside log yard log truck scale shed	SL-00167	9/16/2002	233	0.001	ND
Log Yard	Outside log yard storage shed	SL-00168	9/16/2002	406	0.001	ND
Log Yard	At trailer crane by fire pond	SL-00181	9/16/2002	209	0.002	ND
Log Yard	Along service road, near head gate	SL-00182	9/16/2002	150	< 0.002	ND
Log Yard	Outside log yard log truck scale shed	SL-00203	9/16/2002	188	0.002	ND
Log Yard	At trailer crane by fire pond	SL-00204	9/16/2002	193	0.002	ND
Log Yard	Along service road, near head gate	SL-00244	9/18/2002	424	0.001	ND
Central Maintenance	Center of north end of building	SL-00213	9/17/2002	218	< 0.001	ND
Central Maintenance	Center of north end of building	SL-00214	9/17/2002	218	< 0.001	ND
Central Maintenance	Center of north end of building	SL-00222	9/17/2002	293	0.001	ND
Central Maintenance	Center of north end of building	SL-00223	9/17/2002	293	0.001	0.003

* ND - Indicates no Libby amphibole structures detected by TEM AHERA analysis
AHERA - Asbestos Hazardous Emergency Response Act
f/cc - Fibers per cubic centimeter
min - Minutes
PCM - Phase contrast microscopy
S/cc - Structures per cubic centimeter
TEM - Transmission electron microscopy

Section 4
Microvacuum Dust Sampling

4.1 May 2002 Sampling Event

A total of 2 microvacuum dust samples were collected from the shed in the former nursery area at Stimson on May 2, 2002, as well as one blank. The dust samples were composite samples consisting of three 100 centimeters squared (cm^2) sub-samples per cassette. All locations were approved by EPA prior to sampling.

4.1.1 Sample Locations

The microvacuum dust samples collected from the shed were composites taken from the concrete floor (1-06850) and the standing wood and debris removed from the walls (1-06857). An overview of the entire property is shown on Figure 1-2.

4.1.2 Sample Collection

All microvacuum dust samples collected on May 2, 2002 were collected in accordance with the American Society for Testing Materials (ASTM) Standard D-5755-95, Standard Test Method for Microvacuum Sampling and Indirect Analysis Dust by Transmission Electron Microscopy for Asbestos Structure Number Concentrations. Up to three separate 100 cm^2 areas per cassette for a total of up to 300 cm^2 per cassette. Samples were collected in each 100 cm^2 area for 2 minutes or until all visible dust had been removed. Sampling was performed using 0.45 μm MCE filters. All sampling pumps were calibrated from 2.03 to 2.05 lpm prior to the sampling period and again at the end of the sampling period.

All field blanks analyzed during this investigation were ND for LA asbestos. Field blank results are included in the Libby database printouts presented in Appendix D.

4.1.3 Sample Analysis

Air samples were analyzed by EMSL Analytical, Inc. in Libby, Montana, and Westmont, New Jersey; Reservoirs Environmental Services in Denver, Colorado, and/or Hygeia in Sierra Madre, California. All samples were analyzed in accordance with the ISO 10312, Air Quality - *Determination of Asbestos Fibers – Direct Transfer Transmission Electron Microscopy Method, 1995.*

Samples were maintained under chain of custody procedures. After sample collection was completed, EPA custody labels were completed and affixed to each sampling cassette. Sample information was entered on chain of custody forms, and changes in sample custody noted on the form. Samples were relinquished to the CDM sample coordinator to be submitted for laboratory analysis. Any samples not immediately relinquished to the sample coordinator were secured in the sample storage cabinet. Samples were either hand-delivered to the EMSL onsite laboratory in Libby, Montana, or shipped via Federal Express to an offsite laboratory.

4.1.4 Summary of Results

LA structures were detected in only one of the samples collected in the former nursery area shed. Analysis identified 5,853 LA structures with lengths between 0.5 µm and 5 µm and 1,171 LA structures with lengths between 5 µm and 10 µm in sample 1-06857. This sample was a composite of locations atop of standing wood piles in the east and west ends of the main room, along with a ground level horizontal beam on the south wall. Sample 1-06850 was ND for any LA structures.

4.2 September 2002 Sampling Event

A total of 36 microvacuum dust samples were collected from buildings at Stimson. Stimson employees identified buildings as containing vermiculite or not containing vermiculite. One microvacuum dust sample was collected from each building not known to contain vermiculite. Up to five microvacuum dust samples were collected from each building known to contain vermiculite. All locations were approved by EPA prior to sampling.

4.2.1 Sample Locations

Microvacuum dust samples were collected from several buildings at Stimson. An overview of the entire property is shown on Figure 1-2.

Buildings that contain identified vermiculite in which five microvacuum dust samples were collected were:

- Central Maintenance Facility (BD-002098)
  - Machine shop
  - South end of central maintenance building
  - Center of central maintenance building
  - Northern end of central maintenance building
  - Supervisor's office and break room
- Plywood Plant (BD-002099)
  - Break room and office at finish end
  - Plugger area
  - Spreaders and finish end
  - Green chain
  - Dryer area

Buildings that do not contain vermiculite in which two microvacuum dust samples were collected:

- Finger joint building (BD-002097)
  - Former lunchroom (now parts storage)
  - Doorways & entrances

- Truck barn (BD-002110)
  - North side
  - South end of building
- Stimson office (BD-002269)
  - First floor
  - Second floor
- Buildings that do not contain vermiculite in which one microvacuum dust sample was collected:
  - Log yard break building (BD-002100)
  - Log yard storage building (BD-002101)
  - Log yard oil storage shed (BD-002102)
  - Log yard pump house (BD-002103)
  - Log yard truck scale shed (BD-002104)
  - Irrigation building (BD-002105)
  - Diesel fire pump house (BD-002106)
  - Double wide trailer (BD-002107)
  - Electric pump house (BD-002108)
  - Guard station at Libby Creek Bridge (BD-002109)
  - Steel storage (BD-002111)
  - Fire hall (BD-002112)
  - Wagner shed (BD-002260)
  - Electric motor shed (BD-002261)
  - Astrodome (BD-002262)
  - Pipe shed (BD-002263)
  - Storage & locomotive shed (BD-002264)
  - Power house office (BD-002265)
  - Power house (BD-002266)
  - Lumber kilns (BD-002267)
  - Shed 12 (BD-002268)

4.2.2 Sample Collection

All microvacuum dust samples collected between September 12 and September 18, 2002, were collected in accordance with the method and procedures described in Section 4.1.2.

All field blanks analyzed during this investigation returned results of ND, or no structures detected at or above the detection limit for the analytical method. Field blank results are included in the Libby database printouts presented in Appendix E. Specific cassette lot blanks analyzed during this project included filters from Lot Number 410FKA.

All lot blanks analyzed during this investigation returned results of ND, or no fibers detected at or above the detection limit for the analytical method. Lot blank results are included in the Libby database printout presented in Appendix E.

4.2.3 Sample Analysis

Air samples were analyzed and their custody maintained in accordance with the method and procedures described in Section 4.1.3.

4.2.4 Summary of Results

LA structures were detected in two of the samples collected in the central maintenance building (BD-002098). Analysis identified 8,823 LA structures with lengths between 0.5 µm and 5 µm in sample SL-00061, which was a composite of one location in each of the Cummins engine room, Cat engine room, and large jack stand in the main work area. Analytical results indicate 882 LA structures with lengths between 0.5 µm and 5 µm were detected on SL-00064, which was a composite of three locations in the supervisor's office and break room (Table 4-1). Additionally, sample results for SL-00059 identified 4,412 LA structures with lengths between 0.5 µm and 5 µm. Composites for this sample were collected in the machine shop.

LA structures were detected in one of the samples collected in the truck barn (BD-002110). Results identified 1,971 LA structures with length between 0.5 µm and 5 µm and 986 LA structures with length between 5 µm and 10 µm were detected on SL-00225, which was a composite of three locations on the south side of the truck barn. No LA structures were detected in the samples collected on the north side of the truck barn (BD-002110, SL-00224) (Table 4-1).

LA structures were detected on both of the samples collected in the Stimson office building (BD-002269). Results for sample SL-00241 identified 263 LA structures with lengths between 0.5 µm and 5 µm, which was a composite of three locations on the first floor of the Stimson office building. Analysis also identified 131 LA structures with lengths between 0.5 µm and 5 µm in sample SL-00242, which was a composite of three locations on the second floor of the Stimson office building (BD-002269).

Analytical results presented 4,411.6 LA structures with lengths between 0.5 µm and 5 µm on four samples:

- SL-00171, a composite of three locations in the log yard oil storage building (BD-002102)
- SL-00174, a composite of three locations on the irrigation building floor (BD-002105)
- SL-00175, a composite of three locations in the diesel fire pump house (BD-002106)
- SL-00177, a composite of three locations on the electric pump house floor (BD-002108)

Analysis of sample SL-00228 identified 394 LA structures with lengths between 0.5 µm and 5 µm, which was a composite of two locations in the Wagner shed (BD-002260).

Analysis identified 329 LA structures with lengths between 0.5 µm and 5 µm in sample SL-00229, which was a composite of three locations in the electric motor shed (BD-002261).

Analytical results of sample SL-00232 identified 376 LA structures with lengths between 0.5 µm and 5 µm and 376 LA structures with length between 5 µm and 10 µm, which was a composite of three locations in the storage and locomotive shed (BD-002264).

LA structures were not detected on samples collected in the following buildings:

- Plywood plant (BD-002099)
- Finger joint building (BD-002097)
- Log yard break building (BD-002100)
- Log yard storage building (BD-002101)
- Log yard pump house (BD-002103)
- Log yard truck scale shed (BD-002104)
- Double wide trailer (BD-002107)
- Guard station at Libby Creek bridge (BD-002109)
- Steel storage (BD-002111)
- Fire hall (BD-002112)
- Astrodome (BD-002262)
- Pipe shed (BD-002263)
- Power house office (BD-002265)
- Power house (BD-002266)
- Lumber kilns (BD-002267)
- Shed 12 (BD-002268)

Table 4-1
Microvacuum Dust Sampling Results

					Lab Results *			
				Sample Area	Excluded Structures	Libby Amphibole		
Building	Location Description	Index ID	Subsample Locations (100 cm2)	(cm2)	Diameter > 0.5 µm	Length 0.5 µm to 5 µm	Length 5 µm to 10 µm	Length > 10 µm
Central Maintenance	Machine shop	SL-00059	Floor in front of sliding door to main area Floor in front of rear sliding door, opposite above Blade on large fan stored in rear corner	300	0	4,411.6	0	0
Central Maintenance	South end of CM building	SL-00060	On workbench near machine shop door In front of third vehicle door from south end Center of fourth vehicle area from south end	300	0	0	0	0
Central Maintenance	Center of CM building	SL-00061	Workbench in rear of Cummins Engine Room Between 5th vehicle door from south & Cat engine room Top of large jack stand near door	300	0	8,823.1	0	0
Central Maintenance	North end of CM building	SL-00062	On shelf in warehouse in NE corner of building On top shelf in NE corner of main work area Floor in center of north end of building	300	0	0	0	0
Central Maintenance	Supervisor's office and break room	SL-00064	Top of CB unit in supervisor's office Top of refrigerator in break room Top of soda machine in break room	300	0	882.3	0	0
Finger Joint	Former lunch room	SL-00065	Floor in front of front door Floor in front of rear door On shelf to left of front door	300	0	0	0	0
Finger Joint	Doorways & entrances	SL-00066	Floor at pedestrian entrance to break room Floor at west vehicle door Floor at entrance to wrap & stack area, from main area	300	0	0	0	0
Log Yard Break Building	NA	SL-00169	Floor at entrance Floor, doorway between rooms Top of microwave oven	300	0	0	0	0
Log Yard Storage Shed	NA	SL-00170	Floor at entrance Floor, center of room Top of workbench	300	0	0	0	0
Log Yard - Oil Storage	NA	SL-00171	Floor at entrance Floor, near end of tank On shelf	300	0	4,411.6	0	0
Log Yard - Pump House	NA	SL-00172	Floor at entrance Floor next to engine base On engine base	300	0	0	0	0
Log Yard - Log truck scale shed	NA	SL-00173	First floor - floor at entrance First floor - desktop Second floor - doorjamb	300	0	0	0	0
Irrigation Building	NA	SL-00174	Floor at entrance Floor of doorway between rooms Floor near center of front (entrance) room	300	0	4,411.6	0	0
Diesel Fire	NA	SL-00175	Floor at entrance Top of cabinet Floor next to pump	300	0	4,411.6	0	0
Pump House Double Wide Trailer	NA	SL-00176	Floor at entrance Floor in front of kitchen area cabinets Floor at bathroom entrance	300	0	0	0	0
Electric Pump House	NA	SL-00177	Floor at front entrance Floor at entrance to extension room Floor at rear entrance	300	0	4,411.6	0	0
Guard Station at Libby Creek Bridge - North Gate	NA	SL-00178	Floor at entrance Floor at counter to left of door (when looking into booth) Countertop to right of door	300	0	0	0	0
Plywood Plant	Break rooms & offices at finish end	SL-00217	Break room, floor near door to plant Second floor - shift super office, floor near entrance First floor - floor near entrance to plant, NW corner	300	0	0	0	0
Plywood Plant	Plugger Area	SL-00218	Floor near Plugger No. 1 Floor near Plugger No. 9, storage side Floor near turntable	300	0	0	0	0

Table 4-1
Microvacuum Dust Sampling Results

					Lab Results *			
				Sample Area	Excluded Structures	Libby Amphibole		
Building	Location Description	Index ID	Subsample Locations (100 cm2)	(cm2)	Diameter > 0.5 µm	Length 0.5 µm to 5 µm	Length 5 µm to 10 µm	Length > 10 µm
Plywood Plant	Spreaders and finish end	SL-00219	Floor near spreaders	200	0	0	0	0
			Floor near spreaders					
Plywood Plant	Green chain	SL-00220	Floor along center of chain, plant side	300	0	0	0	0
			Floor outside lunch/smoking area					
			Floor near lathe					
Plywood Plant	Dryer area	SL-00221	Floor near entrance/break room/restrooms	300	0	0	0	0
			Floor near feeder for little dryer					
			Floor at offbearer end, under belt					
Truck Barn	North Side	SL-00224	Floor near entrance	300	0	0	0	0
			Top of workbench/storage box					
			Floor towards rear of building					
Truck Barn	South Side	SL-00225	Horizontal beam on dividing wall	200	0	1,971.3	985.7	0
			Doorjamb floor					
Steel Storage	NA	SL-00226	Concrete floor	300	0	0	0	0
			Horizontal beam on dividing wall					
			Pipe stored in shed					
Fire Hall	NA	SL-00227	Floor at vehicle entrance	300	0	0	0	0
			Top of workbench					
			Third step up on stairs to second floor					
Wagner Shed	NA	SL-00228	Horizontal beam on side wall	200	0	394.3	0	0
			Shelf on rear wall					
Electric Motor Shed	NA	SL-00229	Floor at overhead door entrance	300	0	328.6	0	0
			On storage shelf					
			Second floor at entrance to storage area					
Astrodome	NA	SL-00230	Hoizontal beam on long wall	300	0	0	0	0
			Floor near exposed corner					
			Horizontal base beam on short wall					
Pipe Shed	NA	SL-00231	Floor in front of door	300	0	0	0	0
			Top of workbench					
			Top of storage shelf					
Storage & Locomotive Shed	NA	SL-00232	Floor at center doorway	300	0	375.5	375.5	0
			Top of storage bin					
			Between train rail tracks					
Power House Office	NA	SL-00237	Floor in front of door	200	0	0	0	0
			Top of refrigerator					
Power House	NA	SL-00238	Floor in front of door near office	300	0	0	0	0
			Floor in front of door near diesel tanks					
			Horizontal beam in garage					
Lumber Kilns	NA	SL-00239	Floor of infeed at first bay	300	0	0	0	0
			Floor in center of bay No. 15					
			Floor in center of tunnel of north side					
Shed 12	NA	SL-00240	Floor at north entrance	300	0	0	0	0
			Horizontal beam on wall					
			Floor at top of ramp to FJ building					
Stimson Office Building	First Floor	SL-00241	Floor at back entrance	300	0	262.8	0	0
			Floor mat at front entrance					
			Top of stairs to conference room					
Stimson Office Building	Second Floor	SL-00242	Floor at back entrance	300	0	131.4	0	0
			Floor in front of men's room					
			Top of refrigerator					
Nursery Shed	Concrete Floor	1-06850	Center of main section	300	0	0	0	0
			West end of main section					
			West room, center of floor					
Nursery Shed	Standing wood, debris removed from walls	1-06857	Top of wood piles at east end of main section	300	0	5,853.1	1,170.6	0
			Top of wood pile at west end of main section					
			South wall, west room on ground level, horizontal beam					

* - Laboratory also reports chrysotile and other amphiboles
NA - Not available
cm^2 - Square centimeters
µm - Micrometer

Section 5
Soil Sampling

5.1 CSS Soil Sampling Activities

Soil sampling at Stimson was designed for the quantification of relative LA abundance in soils throughout the site following all rationale, data quality objectives, quality assurance procedures, and SOPs from the *Final Sampling and Analysis Plan (SAP) for the Remedial Investigation (RI) Contaminant Screening Study (CSS), Libby Asbestos Site, OU4* (CDM 2002b). For purposes of this investigation a site-specific SAP addendum was developed to the CSS SAP: *Final SAP Addendum for the Stimson Lumber Company Area, Libby Asbestos Site, OU4* (CDM 2002c). All soil investigation work was conducted in accordance with this SAP addendum.

This section discusses the field activities and sample results associated with the three CSS/RI investigative sampling events conducted at Stimson:

- October 2002, CSS site wide soil sampling
- May 2004, CSS soil sampling for proposed location for BMX track
- July 2004, CSS soil sampling for proposed location for demolition derby track

All soil samples collected during these events were processed at CDM's close support facility (CSF) in Denver in accordance with the soil preparation plan (CDM 2004a) and analyzed for LA asbestos using two techniques: polarized light microscopy (PLM) visual area estimation (VE) and the PLM gravimetric method (Syracuse Research Corporation [SRC] 2003). The EPA is in the process of evaluating the accuracy and replicatability of each of these methods. However, based on EPA's performance evaluation study to date, PLM-VE results are currently being used to make project remediation decisions. Therefore, for the purposes of this report, only PLM-VE results are presented.

5.1.1 October 2002 Site Wide Soil Sampling Event

Site wide soil sampling was conducted between October 14 and October 18, 2002 at the Stimson Lumber Company in accordance with the Final SAP addendum for the Stimson Lumber Company Area (CDM 2002c). All sampling procedures detailed in the SAP were followed without exception unless detailed in Section 6.

5.1.1.1 Sample Locations

To adequately characterize LA abundance in soils throughout Stimson, the site was divided into eight subareas (Figure 1-2): former popping plant, railroad spur, lumber yard, log storage yard, southwest area, former Champion International tree nursery, sprinkler field, and Champion International Superfund site. The Champion International Superfund site was appointed Superfund status due to groundwater

contamination resulting from wood preservative processing and is not associated with LA contamination. Remediation efforts for the groundwater contamination are currently ongoing. These divisions were made based on assumed contaminant concentrations, land use, and environmental setting. During this investigation, no sampling was conducted within the sprinkler field or the Champion International Superfund site subareas as a result of ongoing remediation, and therefore, these subareas will not be discussed.

Surface and subsurface samples were collected from each subarea as presented in Table 5-2.

5.1.1.2 Sample Collection

A total of 129 field samples and 9 field duplicates were collected from six subareas described in the Final SAP addendum for the Stimson Lumber Company Area (CDM 2002c). Of the 129 field samples collected, 103 were surface samples collected from 0-6 inches (") below ground surface (bgs) and 26 were subsurface samples collected from 48-60" bgs. Vermiculite was not observed in any of the samples collected during this investigation. Table 5-1 summarizes the analytical results for each sample as well as identifying the sample type (composite versus grab), number of subsamples, sample depths, and sample locations.

5.1.1.3 Sample Results

Of the 129 field samples collected, three had detectable levels of LA. Samples CS-09294 and CS-09595 had trace amounts of Libby amphibole (LA) (< 0.2 percent [%]) and CS-09658 had concentrations of LA < 1%. Figure 5-1 shows the location of all samples collected during this event. Each sample with a detection of LA is discussed below.

- Sample CS-09294 was collected as a 5 point composite sample from 0-6" bgs in the Southwest Area in a grid just north and across the street from the fire pond. No visible vermiculite was observed in this sample.

- Sample CS-09595 was collected as a 5 point composite sample from 0-6" bgs in the Former Champion International Tree Nursery Area near the center of the sub area. No visible vermiculite was observed in this sample.

- Sample CS-09658 was collected as a 3 point composite sample from 48-60" bgs in the Former Popping Plant area in the area of the railroad spur.

Logbook notes and field sample data sheets are provided in Appendix F.

5.1.2 May 2004 BMX Track Soil Sampling Event

In response to redevelopment plans by the Lincoln County Port Authority, who purchased the Stimson Lumber Company property in 2004, EPA requested additional sampling for LA asbestos in soils to be conducted. Sampling was conducted on May 15, 2004 at an area where a BMX track was being proposed. The proposed location of the track is located near the southeastern boundary of the former Stimson Lumber Company (Figure 5-2). A site visit to the area prior to sampling revealed that construction of the track had begun before the area was sampled. The area had been graded by a bulldozer for the track outline.

The sampling plan for this area was described in a letter from CDM to EPA dated May 10, 2004 (CDM 2004b) and is included in Appendix G. All samples for this effort were collected and analyzed in accordance with the Final SAP addendum for the Stimson Lumber Company Area (CDM 2002c). All sampling procedures detailed in the SAP and letter, were followed without exception unless detailed in Section 6.

5.1.2.1 Sample Locations

On May 15, 2004, a total of 21 field samples and one field duplicate were collected from 16 grids covering the proposed BMX track area (Figure 5-2).

5.1.2.2 Sample Collection

Of the 21 field samples collected, eight were surface samples collected from 0-1" bgs, 8 were surface samples collected from 2-6" bgs, three were collected from randomly selected stockpiles formed during the bulldozing activities at 2-6" below the surface, and two were subsurface samples collected from 6-12" bgs. Table 5-3 summarizes the analytical results for each sample as well as identifying the sample type, number of subsamples, sample depths, sample locations, and locations where visible vermiculite was observed.

5.1.2.3 Sample Results

All samples collected were non-detect for LA. Vermiculite was observed at four sample locations: Grid #6 in the 0-1" bgs and 6-12" bgs samples, Grid #3 in the 6-12" bgs sample, and Grid #4 in the 2-6" bgs sample. Figure 5-2 shows the location of all samples collected during this event. Logbook notes and field sample data sheets are provided in Appendix H.

5.1.3 July 2004 Demolition Derby Track Soil Sampling Event

In response to redevelopment plans by LPA, additional sampling for LA asbestos in soils was conducted in July 2004 in an area where a demolition derby track was proposed. The proposed location is located near the southeastern boundary of

the former Stimson Lumber Company just north of the area proposed for the BMX track (Figure 5-3).

The proposed sampling plan for this area was described in a letter from CDM to EPA dated July 1, 2004 (CDM 2004c) and is included in Appendix I. All samples for this effort were collected and analyzed in accordance with Final SAP addendum for the Stimson Lumber Company Area (CDM 2002c). All sampling procedures detailed in the SAP and letter, were followed without exception.

5.1.3.1 Sample Locations

On July 1, 2004, 19 field samples were collected from 9 200-ft by 200-ft grids covering the area of the demolition derby track (Figure 5-3).

5.1.3.2 Sample Collection

Of the 19 field samples collected, nine were 5 point composite surface samples collected from 0-1" bgs, nine were 5 point composite surface samples collected from 2-6" bgs, and one was a 5 point composite subsurface sample collected from 6-12" bgs with each subsample coming from one of 5 randomly selected grids.

5.1.3.3 Sample Results

Of the 19 field samples collected, one (CS-18583) had LA at a trace level (< 0.2%). All other samples were non-detect for LA and vermiculite was not observed during the sampling activities. Table 5-5 summarizes the analytical results for each sample as well as identifying the sample type, number of subsamples, sample depths, and sample locations. Figure 5-3 shows the location of all samples collected during this event. Logbook notes and field sample data sheets are provided in Appendix J.

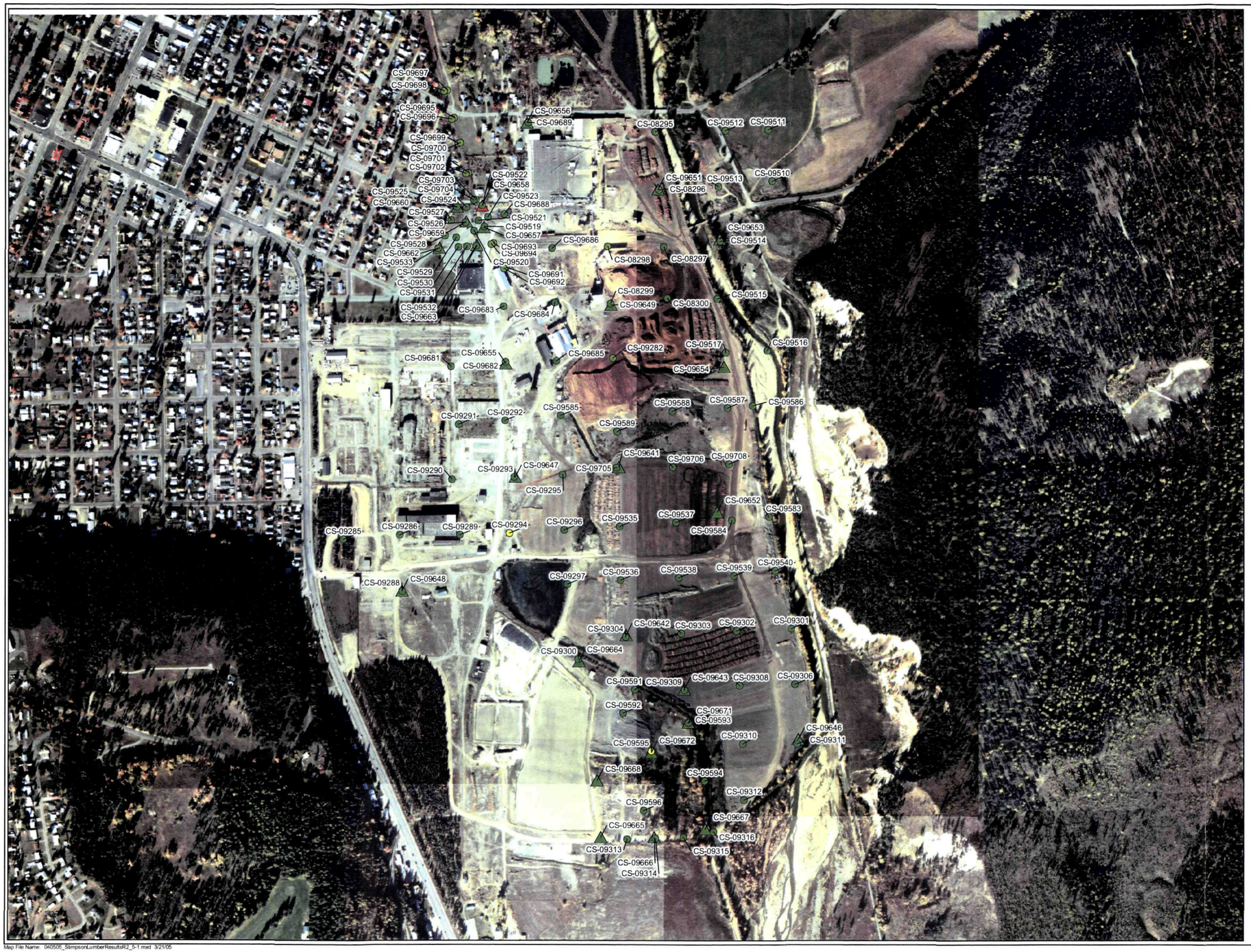


Figure 5 - 1

Soil Sample Results
October 2002

Stimson Lumber Company
Libby Asbestos Project
Libby, Montana

Legend

Soil Sample Result

- Trace (<0.2% Libby Amphibole) 0 - 6 inches
- Non-detect, 0 - 6 inches
- < 1% Libby Amphibole, 48 - 60 inches
- Non-detect, 48 - 60 inches

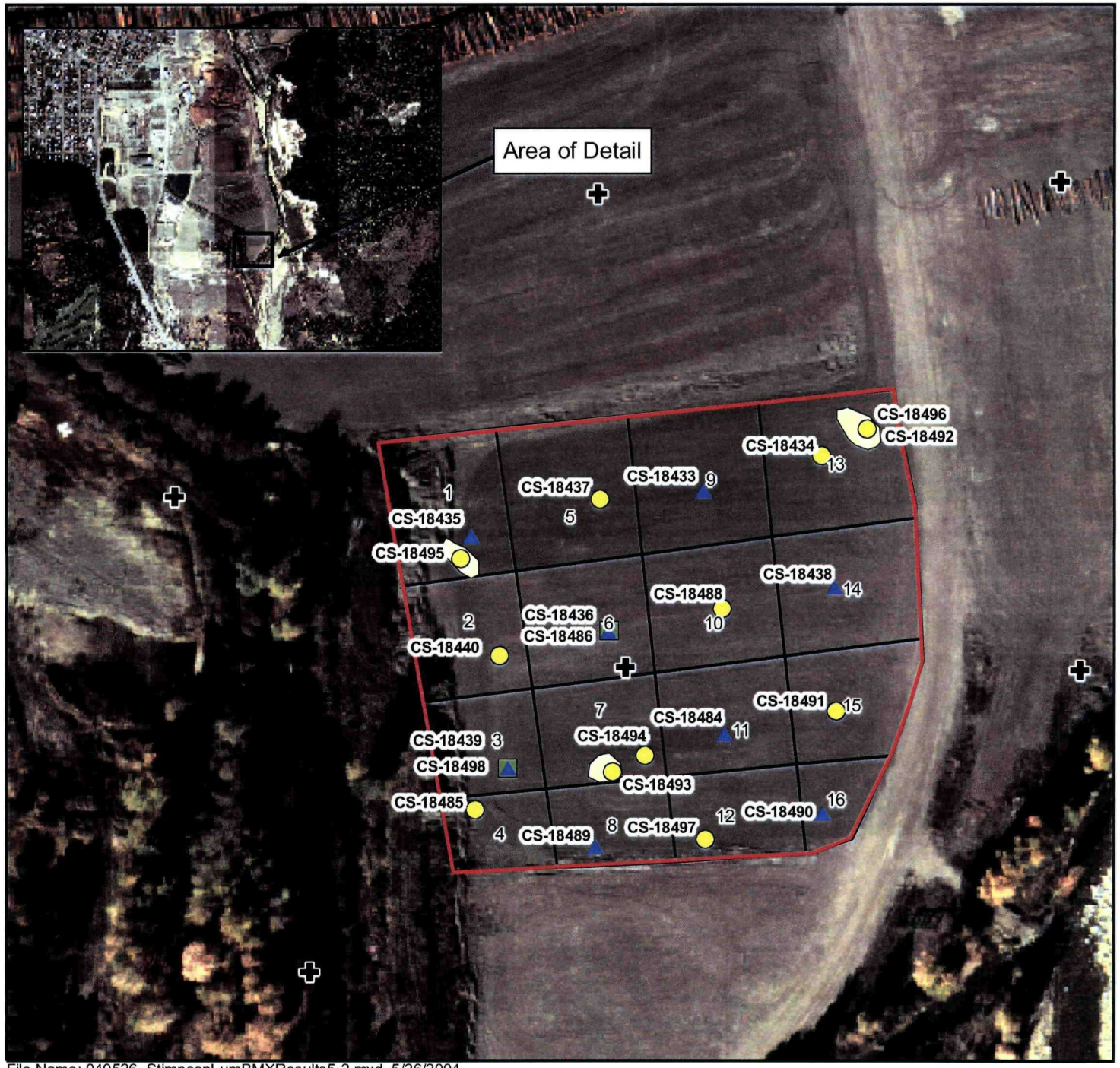
N
W E
S

Feet

0 250 500 1,000 1,500

CDM

Map File Name: 040505_StimpsonLumberResultsR2_5-1.mxd 3/21/05



File Name: 040526_StimpsonLumBMXResults5-2.mxd 5/26/2004

Figure 5 - 2
BMX Track
Soil Sampling Locations
May 15, 2004

Stimson Lumber Company
Libby Asbestos Project
Libby, Montana

Legend

- 0-1 inches
- 2-6 inches
- 6-12 inches
- October 2002 Sample Location (non-detect, 0-6 inches)
- Approximate BMX Track Boundary
- Sampling Grid (Approx. 100 x 100 Feet)
- Stockpile

N
W E
S

Feet
0 50 100 200

CDM

Figure 5 - 3
Demolition Derby Track
Soil Sampling Locations July 1, 2004

Stimson Lumber Company
Libby Asbestos Project
Libby, Montana

CDM

Table 5-1 Summary of Soil Sample Results for Site Wide Soil Sampling, October 2002

Sample ID	Parent ID	Sample Group	Matrix	Category	Sample Type	Number of Subsamples	Top Depth (in bgs)	Bottom Depth (in bgs)	Sample Date	PLM			
										Method	LA Bin	LA (%)	C (%)
CS-09519-FG		Former Popping Plant	Surface soil	Field Sample	Composite	5	0	6	10/15/2002	PLM-VE	A	ND	ND
CS-09520-FG		Former Popping Plant	Surface soil	Field Sample	Composite	5	0	6	10/15/2002	PLM-VE	A	ND	ND
CS-09521-FG		Former Popping Plant	Surface soil	Field Sample	Composite	5	0	6	10/15/2002	PLM-VE	A	ND	ND
CS-09522-FG		Former Popping Plant	Surface soil	Field Sample	Composite	5	0	6	10/15/2002	PLM-VE	A	ND	ND
CS-09523-FG		Former Popping Plant	Surface soil	Field Sample	Composite	5	0	6	10/15/2002	PLM-VE	A	ND	ND
CS-09524-FG		Former Popping Plant	Surface soil	Field Sample	Composite	5	0	6	10/15/2002	PLM-VE	A	ND	ND
CS-09525-FG		Former Popping Plant	Surface soil	Field Sample	Composite	5	0	6	10/15/2002	PLM-VE	A	ND	ND
CS-09526-FG		Former Popping Plant	Surface soil	Field Sample	Composite	5	0	6	10/15/2002	PLM-VE	A	ND	ND
CS-09527-FG		Former Popping Plant	Surface soil	Field Sample	Composite	5	0	6	10/15/2002	PLM-VE	A	ND	ND
CS-09528-FG		Former Popping Plant	Surface soil	Field Sample	Composite	5	0	6	10/15/2002	PLM-VE	A	ND	ND
CS-09529-FG		Former Popping Plant	Surface soil	Field Sample	Composite	5	0	6	10/15/2002	PLM-VE	A	ND	ND
CS-09530-FG		Former Popping Plant	Surface soil	Field Sample	Composite	5	0	6	10/15/2002	PLM-VE	A	ND	ND
CS-09531-FG		Former Popping Plant	Surface soil	Field Sample	Composite	5	0	6	10/15/2002	PLM-VE	A	ND	ND
CS-09532-FG		Former Popping Plant	Surface soil	Field Sample	Composite	5	0	6	10/15/2002	PLM-VE	A	ND	ND
CS-09533-FG		Former Popping Plant	Surface soil	Field Sample	Composite	5	0	6	10/15/2002	PLM-VE	A	ND	ND
CS-09534-FG	CS-09533	Former Popping Plant	Surface soil	Field Duplicate	Composite	5	0	6	10/15/2002	PLM-VE	A	ND	ND
CS-09657-FG1		Former Popping Plant	Subsurface soil	Field Sample	Composite	3	48	60	10/16/2002	PLM-VE	A	ND	ND
CS-09658-FG1		Former Popping Plant	Subsurface soil	Field Sample	Composite	3	48	60	10/16/2002	PLM-VE	B2	< 1	ND
CS-09659-FG1		Former Popping Plant	Subsurface soil	Field Sample	Composite	5	48	60	10/16/2002	PLM-VE	A	ND	ND
CS-09660-FG		Former Popping Plant	Subsurface soil	Field Sample	Composite	5	48	60	10/17/2002	PLM-VE	A	ND	ND
CS-09661-FG	CS-09660	Former Popping Plant	Subsurface soil	Field Duplicate	Composite	5	48	60	10/17/2002	PLM-VE	A	ND	ND
CS-09662-FG		Former Popping Plant	Subsurface soil	Field Sample	Composite	5	48	60	10/17/2002	PLM-VE	A	ND	ND
CS-09663-FG		Former Popping Plant	Subsurface soil	Field Sample	Composite	5	48	60	10/16/2002	PLM-VE	A	ND	ND
CS-09301-FG		Log Storage Yard	Surface soil	Field Sample	Composite	5	0	6	10/15/2002	PLM-VE	A	ND	ND
CS-09302-FG		Log Storage Yard	Surface soil	Field Sample	Composite	5	0	6	10/15/2002	PLM-VE	A	ND	ND
CS-09303-FG		Log Storage Yard	Surface soil	Field Sample	Composite	5	0	6	10/15/2002	PLM-VE	A	ND	ND
CS-09304-FG		Log Storage Yard	Surface soil	Field Sample	Composite	5	0	6	10/15/2002	PLM-VE	A	ND	ND
CS-09306-FG1		Log Storage Yard	Surface soil	Field Sample	Composite	5	0	6	10/16/2002	PLM-VE	A	ND	ND
CS-09307-FG1	CS-09306	Log Storage Yard	Surface soil	Field Duplicate	Composite	5	0	6	10/16/2002	PLM-VE	A	ND	ND
CS-09308-FG1		Log Storage Yard	Surface soil	Field Sample	Composite	5	0	6	10/16/2002	PLM-VE	A	ND	ND
CS-09309-FG1		Log Storage Yard	Surface soil	Field Sample	Composite	5	0	6	10/16/2002	PLM-VE	A	ND	ND
CS-09310-FG1		Log Storage Yard	Surface soil	Field Sample	Composite	5	0	6	10/16/2002	PLM-VE	A	ND	ND
CS-09311-FG1		Log Storage Yard	Surface soil	Field Sample	Composite	5	0	6	10/16/2002	PLM-VE	A	ND	ND
CS-09312-FG1		Log Storage Yard	Surface soil	Field Sample	Composite	5	0	6	10/16/2002	PLM-VE	A	ND	ND
CS-09535-FG		Log Storage Yard	Surface soil	Field Sample	Composite	5	0	6	10/15/2002	PLM-VE	A	ND	ND
CS-09536-FG		Log Storage Yard	Surface soil	Field Sample	Composite	5	0	6	10/15/2002	PLM-VE	A	ND	ND
CS-09537-FG		Log Storage Yard	Surface soil	Field Sample	Composite	5	0	6	10/15/2002	PLM-VE	A	ND	ND
CS-09538-FG		Log Storage Yard	Surface soil	Field Sample	Composite	5	0	6	10/15/2002	PLM-VE	A	ND	ND
CS-09539-FG		Log Storage Yard	Surface soil	Field Sample	Composite	5	0	6	10/15/2002	PLM-VE	A	ND	ND
CS-09540-FG		Log Storage Yard	Surface soil	Field Sample	Composite	5	0	6	10/15/2002	PLM-VE	A	ND	ND
CS-09583-FG1		Log Storage Yard	Surface soil	Field Sample	Composite	5	0	6	10/15/2002	PLM-VE	A	ND	ND
CS-09584-FG1		Log Storage Yard	Surface soil	Field Sample	Composite	5	0	6	10/15/2002	PLM-VE	A	ND	ND
CS-09585-FG1		Log Storage Yard	Surface soil	Field Sample	Composite	5	0	6	10/16/2002	PLM-VE	A	ND	ND
CS-09586-FG1		Log Storage Yard	Surface soil	Field Sample	Composite	5	0	6	10/16/2002	PLM-VE	A	ND	ND
CS-09587-FG1		Log Storage Yard	Surface soil	Field Sample	Composite	5	0	6	10/16/2002	PLM-VE	A	ND	ND
CS-09588-FG1		Log Storage Yard	Surface soil	Field Sample	Composite	5	0	6	10/16/2002	PLM-VE	A	ND	ND
CS-09589-FG1		Log Storage Yard	Surface soil	Field Sample	Composite	5	0	6	10/16/2002	PLM-VE	A	ND	ND

Table 5-1 Summary of Soil Sample Results for Site Wide Soil Sampling, October 2002

Sample ID	Parent ID	Sample Group	Matrix	Category	Sample Type	Number of Subsamples	Top Depth (in bgs)	Bottom Depth (in bgs)	Sample Date	PLM			
										Method	LA Bin	LA (%)	C (%)
CS-09590-FG1	CS-09589	Log Storage Yard	Surface soil	Field Duplicate	Composite	5	0	6	10/16/2002	PLM-VE	A	ND	ND
CS-09641-FG1		Log Storage Yard	Subsurface soil	Field Sample	Composite	5	48	60	10/14/2002	PLM-VE	A	ND	ND
CS-09642-FG1		Log Storage Yard	Subsurface soil	Field Sample	Composite	5	48	60	10/14/2002	PLM-VE	A	ND	ND
CS-09643-FG1		Log Storage Yard	Subsurface soil	Field Sample	Composite	5	48	60	10/14/2002	PLM-VE	A	ND	ND
CS-09646-FG		Log Storage Yard	Subsurface soil	Field Sample	Composite	5	48	60	10/15/2002	PLM-VE	A	ND	ND
CS-09652-FG		Log Storage Yard	Subsurface soil	Field Sample	Composite	5	48	60	10/15/2002	PLM-VE	A	ND	ND
CS-09705-FG1		Log Storage Yard	Surface soil	Field Sample	Composite	5	0	6	10/15/2002	PLM-VE	A	ND	ND
CS-09706-FG1		Log Storage Yard	Surface soil	Field Sample	Composite	5	0	6	10/15/2002	PLM-VE	A	ND	ND
CS-09707-FG1	CS-09706	Log Storage Yard	Surface soil	Field Duplicate	Composite	5	0	6	10/15/2002	PLM-VE	A	ND	ND
CS-09708-FG1		Log Storage Yard	Surface soil	Field Sample	Composite	5	0	6	10/15/2002	PLM-VE	A	ND	ND
CS-08295-FG		Lumber Yard	Surface soil	Field Sample	Composite	5	0	6	10/14/2002	PLM-VE	A	ND	ND
CS-08296-FG		Lumber Yard	Surface soil	Field Sample	Composite	5	0	6	10/14/2002	PLM-VE	A	ND	ND
CS-08297-FG		Lumber Yard	Surface soil	Field Sample	Composite	5	0	6	10/14/2002	PLM-VE	A	ND	ND
CS-08298-F		Lumber Yard	Surface soil	Field Sample	Composite	5	0	6	10/14/2002	PLM-VE	A	ND	ND
CS-08299-FG		Lumber Yard	Surface soil	Field Sample	Composite	5	0	6	10/14/2002	PLM-VE	A	ND	ND
CS-08300-FG		Lumber Yard	Surface soil	Field Sample	Composite	5	0	6	10/14/2002	PLM-VE	A	ND	ND
CS-09281-F		Lumber Yard	Surface soil	Field Sample	Composite	5	0	6	10/14/2002	PLM-VE	A	ND	ND
CS-09282-F		Lumber Yard	Surface soil	Field Sample	Composite	5	0	6	10/14/2002	PLM-VE	A	ND	ND
CS-09510-FG		Lumber Yard	Surface soil	Field Sample	Composite	5	0	6	10/14/2002	PLM-VE	A	ND	ND
CS-09511-FG		Lumber Yard	Surface soil	Field Sample	Composite	5	0	6	10/14/2002	PLM-VE	A	ND	ND
CS-09512-FG		Lumber Yard	Surface soil	Field Sample	Composite	5	0	6	10/14/2002	PLM-VE	A	ND	ND
CS-09513-FG		Lumber Yard	Surface soil	Field Sample	Composite	5	0	6	10/14/2002	PLM-VE	A	ND	ND
CS-09514-FG		Lumber Yard	Surface soil	Field Sample	Composite	5	0	6	10/14/2002	PLM-VE	A	ND	ND
CS-09515-FG		Lumber Yard	Surface soil	Field Sample	Composite	5	0	6	10/14/2002	PLM-VE	A	ND	ND
CS-09516-FG		Lumber Yard	Surface soil	Field Sample	Composite	5	0	6	10/14/2002	PLM-VE	A	ND	ND
CS-09517-FG		Lumber Yard	Surface soil	Field Sample	Composite	5	0	6	10/14/2002	PLM-VE	A	ND	ND
CS-09649-FG		Lumber Yard	Subsurface soil	Field Sample	Composite	5	48	60	10/15/2002	PLM-VE	A	ND	ND
CS-09650-FG	CS-09649	Lumber Yard	Subsurface soil	Field Duplicate	Composite	5	48	60	10/15/2002	PLM-VE	A	ND	ND
CS-09651-FG		Lumber Yard	Subsurface soil	Field Sample	Composite	5	48	60	10/15/2002	PLM-VE	A	ND	ND
CS-09653-FG1		Lumber Yard	Subsurface soil	Field Sample	Composite	5	48	60	10/16/2002	PLM-VE	A	ND	ND
CS-09654-FG1		Lumber Yard	Subsurface soil	Field Sample	Composite	5	48	60	10/16/2002	PLM-VE	A	ND	ND
CS-09655-FG1		Lumber Yard	Subsurface soil	Field Sample	Composite	5	48	60	10/16/2002	PLM-VE	A	ND	ND
CS-09656-FG1		Lumber Yard	Subsurface soil	Field Sample	Composite	3	48	60	10/16/2002	PLM-VE	A	ND	ND
CS-09681-FG1		Lumber Yard	Surface soil	Field Sample	Grab	NA	0	6	10/14/2002	PLM-VE	A	ND	ND
CS-09682-FG1		Lumber Yard	Surface soil	Field Sample	Composite	5	0	6	10/14/2002	PLM-VE	A	ND	ND
CS-09683-FG		Lumber Yard	Surface soil	Field Sample	Composite	5	0	6	10/14/2002	PLM-VE	A	ND	ND
CS-09684-FG		Lumber Yard	Surface soil	Field Sample	Composite	5	0	6	10/14/2002	PLM-VE	A	ND	ND
CS-09685-FG		Lumber Yard	Surface soil	Field Sample	Composite	5	0	6	10/14/2002	PLM-VE	A	ND	ND
CS-09686-FG		Lumber Yard	Surface soil	Field Sample	Composite	5	0	6	10/14/2002	PLM-VE	A	ND	ND
CS-09687-FG	CS-09686	Lumber Yard	Surface soil	Field Duplicate	Composite	5	0	6	10/14/2002	PLM-VE	A	ND	ND
CS-09688-FG		Lumber Yard	Surface soil	Field Sample	Grab	NA	0	6	10/14/2002	PLM-VE	A	ND	ND
CS-09689-FG		Lumber Yard	Surface soil	Field Sample	Grab	NA	0	6	10/14/2002	PLM-VE	A	ND	ND
CS-09313-FG		Former Champion Intl. Tree Nursery	Surface soil	Field Sample	Composite	5	0	6	10/16/2002	PLM-VE	A	ND	ND
CS-09314-FG		Former Champion Intl. Tree Nursery	Surface soil	Field Sample	Composite	5	0	6	10/16/2002	PLM-VE	A	ND	ND
CS-09315-FG		Former Champion Intl. Tree Nursery	Surface soil	Field Sample	Composite	5	0	6	10/16/2002	PLM-VE	A	ND	ND

Table 5-1 Summary of Soil Sample Results for Site Wide Soil Sampling, October 2002

Sample ID	Parent ID	Sample Group	Matrix	Category	Sample Type	Number of Subsamples	Top Depth (in bgs)	Bottom Depth (in bgs)	Sample Date	PLM			
										Method	LA Bin	LA (%)	C (%)
CS-09316-FG		Former Champion Intl. Tree Nursery	Surface soil	Field Sample	Composite	5	0	6	10/16/2002	PLM-VE	A	ND	ND
CS-09591-FG		Former Champion Intl. Tree Nursery	Surface soil	Field Sample	Composite	5	0	6	10/16/2002	PLM-VE	A	ND	ND
CS-09592-FG		Former Champion Intl. Tree Nursery	Surface soil	Field Sample	Composite	5	0	6	10/16/2002	PLM-VE	A	ND	ND
CS-09593-FG		Former Champion Intl. Tree Nursery	Surface soil	Field Sample	Composite	5	0	6	10/16/2002	PLM-VE	A	ND	ND
CS-09594-FG		Former Champion Intl. Tree Nursery	Surface soil	Field Sample	Composite	5	0	6	10/16/2002	PLM-VE	A	ND	ND
CS-09595-FG		Former Champion Intl. Tree Nursery	Surface soil	Field Sample	Composite	5	0	6	10/16/2002	PLM-VE	B1	TR	ND
CS-09596-FG		Former Champion Intl. Tree Nursery	Surface soil	Field Sample	Composite	5	0	6	10/16/2002	PLM-VE	A	ND	ND
CS-09664-FG		Former Champion Intl. Tree Nursery	Subsurface soil	Field Sample	Composite	5	48	60	10/16/2002	PLM-VE	A	ND	ND
CS-09665-FG		Former Champion Intl. Tree Nursery	Subsurface soil	Field Sample	Composite	5	48	60	10/16/2002	PLM-VE	A	ND	ND
CS-09666-FG		Former Champion Intl. Tree Nursery	Subsurface soil	Field Sample	Composite	5	48	60	10/17/2002	PLM-VE	A	ND	ND
CS-09667-FG		Former Champion Intl. Tree Nursery	Subsurface soil	Field Sample	Composite	5	48	60	10/17/2002	PLM-VE	A	ND	ND
CS-09668-FG		Former Champion Intl. Tree Nursery	Subsurface soil	Field Sample	Composite	5	48	60	10/17/2002	PLM-VE	A	ND	ND
CS-09671-FG		Former Champion Intl. Tree Nursery	Subsurface soil	Field Sample	Composite	5	48	60	10/18/2002	PLM-VE	A	ND	ND
CS-09672-FG		Former Champion Intl. Tree Nursery	Subsurface soil	Field Sample	Composite	5	48	60	10/18/2002	PLM-VE	A	ND	ND
CS-09673-FG	CS-09672	Former Champion Intl. Tree Nursery	Subsurface soil	Field Duplicate	Composite	5	48	60	10/18/2002	PLM-VE	A	ND	ND
CS-09300-FG		Former Champion Intl. Tree Nursery	Surface soil	Field Sample	Composite	5	0	6	10/15/2002	PLM-VE	A	ND	ND
CS-09691-FG		Railroad Spur	Surface soil	Field Sample	Composite	3	0	6	10/15/2002	PLM-VE	A	ND	ND
CS-09692-FG		Railroad Spur	Surface soil	Field Sample	Composite	3	0	6	10/15/2002	PLM-VE	A	ND	ND
CS-09693-FG		Railroad Spur	Surface soil	Field Sample	Composite	3	0	6	10/15/2002	PLM-VE	A	ND	ND
CS-09694-FG		Railroad Spur	Surface soil	Field Sample	Composite	3	0	6	10/15/2002	PLM-VE	A	ND	ND
CS-09695-FG		Railroad Spur	Surface soil	Field Sample	Composite	3	0	6	10/15/2002	PLM-VE	A	ND	ND
CS-09696-FG		Railroad Spur	Surface soil	Field Sample	Composite	3	0	6	10/15/2002	PLM-VE	A	ND	ND
CS-09697-FG		Railroad Spur	Surface soil	Field Sample	Composite	3	0	6	10/15/2002	PLM-VE	A	ND	ND
CS-09698-FG		Railroad Spur	Surface soil	Field Sample	Composite	3	0	6	10/15/2002	PLM-VE	A	ND	ND
CS-09699-FG		Railroad Spur	Surface soil	Field Sample	Composite	3	0	6	10/15/2002	PLM-VE	A	ND	ND
CS-09700-FG		Railroad Spur	Surface soil	Field Sample	Composite	3	0	6	10/15/2002	PLM-VE	A	ND	ND
CS-09701-FG		Railroad Spur	Surface soil	Field Sample	Composite	3	0	6	10/15/2002	PLM-VE	A	ND	ND
CS-09702-FG		Railroad Spur	Surface soil	Field Sample	Composite	3	0	6	10/15/2002	PLM-VE	A	ND	ND
CS-09703-FG1		Railroad Spur	Surface soil	Field Sample	Composite	2	0	6	10/15/2002	PLM-VE	A	ND	ND
CS-09704-FG1		Railroad Spur	Surface soil	Field Sample	Composite	2	0	6	10/15/2002	PLM-VE	A	ND	ND
CS-09284-FG		Southwest Area	Surface soil	Field Sample	Composite	5	0	6	10/15/2002	PLM-VE	A	ND	ND
CS-09285-FG		Southwest Area	Surface soil	Field Sample	Composite	5	0	6	10/15/2002	PLM-VE	A	ND	ND
CS-09286-FG		Southwest Area	Surface soil	Field Sample	Composite	5	0	6	10/15/2002	PLM-VE	A	ND	ND
CS-09287-FG	CS-09286	Southwest Area	Surface soil	Field Duplicate	Composite	5	0	6	10/15/2002	PLM-VE	A	ND	ND
CS-09288-FG		Southwest Area	Surface soil	Field Sample	Composite	5	0	6	10/15/2002	PLM-VE	A	ND	ND
CS-09289-FG		Southwest Area	Surface soil	Field Sample	Composite	5	0	6	10/15/2002	PLM-VE	A	ND	ND

Table 5-1 Summary of Soil Sample Results for Site Wide Soil Sampling, October 2002

Sample ID	Parent ID	Sample Group	Matrix	Category	Sample Type	Number of Subsamples	Top Depth (in bgs)	Bottom Depth (in bgs)	Sample Date	PLM			
										Method	LA Bin	LA (%)	C (%)
CS-09290-FG		Southwest Area	Surface soil	Field Sample	Composite	5	0	6	10/15/2002	PLM-VE	A	ND	ND
CS-09291-FG		Southwest Area	Surface soil	Field Sample	Composite	5	0	6	10/15/2002	PLM-VE	A	ND	ND
CS-09292-FG		Southwest Area	Surface soil	Field Sample	Composite	5	0	6	10/15/2002	PLM-VE	A	ND	ND
CS-09293-FG		Southwest Area	Surface soil	Field Sample	Composite	5	0	6	10/15/2002	PLM-VE	A	ND	ND
CS-09294-FG		Southwest Area	Surface soil	Field Sample	Composite	5	0	6	10/15/2002	PLM-VE	B1	TR	ND
CS-09295-FG		Southwest Area	Surface soil	Field Sample	Composite	5	0	6	10/15/2002	PLM-VE	A	ND	ND
CS-09296-FG		Southwest Area	Surface soil	Field Sample	Composite	5	0	6	10/15/2002	PLM-VE	A	ND	ND
CS-09297-FG		Southwest Area	Surface soil	Field Sample	Composite	5	0	6	10/15/2002	PLM-VE	A	ND	ND
CS-09647-FG		Southwest Area	Subsurface soil	Field Sample	Composite	5	48	60	10/15/2002	PLM-VE	A	ND	ND
CS-09648-FG		Southwest Area	Subsurface soil	Field Sample	Composite	5	48	60	10/15/2002	PLM-VE	A	ND	ND

Notes:

in- inches
bgs- below ground surface
PLM- polarized light microscopy
VE- visual estimation
LA- Libby amphibole
C- Chrysotile
%- percent
ND- non-detect
TR- trace

Table 5-2 Summary of Soil Samples Collected Versus Estimated for Site Wide Soil Sampling, October 2002

Subarea	Surface Samples (0-6" bgs)		Subsurface Samples (48-60" bgs)	
	Estimated	Collected	Estimated	Collected
1. Former Popping Plant	15	15	6	6
2. Railroad Spur	≈20	14	0	0
3. Lumber Yard	24	24	6	6
4. Log Storage Yard	26	26	5	5
5. Southwest Area	23	13	4	2
6. Former Champion International Tree Nursery	14	11	7	7
7. Sprinkler Field	0	0	0	0
8. Champion International Superfund Site	0	0	0	0
Total	**122**	**103**	**28**	**26**

Total Number Estimated = 150
Total Number Collected = 129

Notes:
"- inches
bgs- bleow ground surface

Table 5-3 Summary of Soil Sample Results for BMX Track Sampling, May 2004

Sample ID	Parent ID	Sample Group (Grid #)	Matrix	Category	Sample Type	Number of Subsamples	Top Depth (in bgs)	Bottom Depth (in bgs)	Sample Date	PLM						Field Comments Regarding Visible Vermiculite in Sample
										Method	LA Bin	LA (%)		C (%)		
CS-18433-FG1		9	Surface soil	Field Sample	Composite	5	0	1	5/15/2004	PLM-VE	A	ND		ND		No vermiculite observed
CS-18434-FG1		13	Surface soil	Field Sample	Composite	5	2	6	5/15/2004	PLM-VE	A	ND		ND		No vermiculite observed
CS-18435-FG1		1	Surface soil	Field Sample	Composite	5	0	1	5/15/2004	PLM-VE	A	ND		ND		No vermiculite observed
CS-18436-FG1		6	Surface soil	Field Sample	Composite	5	0	1	5/15/2004	PLM-VE	A	ND		ND		Vermiculite observed
CS-18437-FG1		5	Surface soil	Field Sample	Composite	5	2	6	5/15/2004	PLM-VE	A	ND		ND		No vermiculite observed
CS-18438-FG1		14	Surface soil	Field Sample	Composite	5	0	1	5/15/2004	PLM-VE	A	ND		ND		No vermiculite observed
CS-18439-FG1		3	Surface soil	Field Sample	Composite	5	0	1	5/15/2004	PLM-VE	A	ND		ND		No vermiculite observed
CS-18440-FG1		2	Surface soil	Field Sample	Composite	5	2	6	5/15/2004	PLM-VE	A	ND		ND		No vermiculite observed
CS-18484-FG1		11	Surface soil	Field Sample	Composite	5	0	1	5/15/2004	PLM-VE	A	ND		ND		No vermiculite observed
CS-18485-FG1		4	Surface soil	Field Sample	Composite	5	2	6	5/15/2004	PLM-VE	A	ND		ND		Trace vermiculite observed
CS-18486-FG1		6	Subsurface soil	Field Sample	Composite	4	6	12	5/15/2004	PLM-VE	A	ND		ND		Trace vermiculite observed
CS-18488-FG1		10	Surface soil	Field Sample	Composite	5	2	6	5/15/2004	PLM-VE	A	ND		ND		No vermiculite observed
CS-18489-F		8	Surface soil	Field Sample	Composite	5	0	1	5/15/2004	PLM-VE	A	ND		ND		No vermiculite observed
CS-18490-FG1		16	Surface soil	Field Sample	Composite	5	0	1	5/15/2004	PLM-VE	A	ND		ND		No vermiculite observed
CS-18491-FG1		15	Surface soil	Field Sample	Composite	5	2	6	5/15/2004	PLM-VE	A	ND		ND		No vermiculite observed
CS-18492-FG1		Stockpile in Grid 13	Surface soil	Field Sample	Composite	2	2	6	5/15/2004	PLM-VE	A	ND		ND		No vermiculite observed
CS-18493-FG1		Stockpile in Grid 7	Surface soil	Field Sample	Composite	2	2	6	5/15/2004	PLM-VE	A	ND		ND		No vermiculite observed
CS-18494-FG1		7	Surface soil	Field Sample	Composite	5	2	6	5/15/2004	PLM-VE	A	ND		ND		No vermiculite observed
CS-18495-FG1		Stockpile in Grid 1	Surface soil	Field Sample	Composite	2	2	6	5/15/2004	PLM-VE	A	ND		ND		No vermiculite observed
CS-18496-FG1	CS-18492	Stockpile in Grid 13	Surface soil	Field Duplicate	Composite	2	2	6	5/15/2004	PLM-VE	A	ND		ND		No vermiculite observed
CS-18497-FG1		12	Surface soil	Field Sample	Composite	5	2	6	5/15/2004	PLM-VE	A	ND		ND		No vermiculite observed
CS-18498-FG1		3	Subsurface soil	Field Sample	Composite	4	6	12	5/15/2004	PLM-VE	A	ND		ND		Trace vermiculite observed

Notes:

in- inches
bgs- below ground surface
PLM- polorized light microscopy
VE- visual estimation
LA- Libby amphibole
C- Chrysotile
%- percent
ND- non-detect
TR- trace

Table 5-4 Summary of Soil Samples Collected Versus Estimated for BMX Track Soil Sampling, May 2004

Grid Number	Surface Samples (0-1" bgs)		Surface Samples (2-6" bgs)		Subsurface Samples (6-12" bgs)		Subsurface Samples (12-24" bgs)	
	Estimated	Collected	Estimated	Collected	Estimated	Collected	Estimated	Collected
1	1	1	0	1	0	0	1	0
2	1	0	0	1	0	0	1	0
3	1	1	0	0	0	1	1	0
4	1	0	0	1	0	0	1	0
5	1	0	0	1	0	0	1	0
6	1	1	0	0	0	1	1	0
7	1	0	0	2	0	0	1	0
8	1	1	0	0	0	0	1	0
9	1	1	0	0	0	0	1	0
10	0	0	0	1	0	0	0	0
11	0	1	0	0	0	0	0	0
12	0	0	0	1	0	0	0	0
13	0	0	0	2	0	0	0	0
14	0	1	0	0	0	0	0	0
15	0	0	0	1	0	0	0	0
16	0	1	0	0	0	0	0	0
Total	**9**	**8**	**0**	**11**	**0**	**2**	**9**	**0**

Total Number Estimated = 18
Total Number Collected = 21

Notes:
Only 9 grids were proposed in the BMX letter (CDM 2004a).
"- inches
bgs- below ground surface

Table 5-5 Summary of Soil Sample Results for Demolition Derby Track Sampling, July 2004

Sample ID	Parent ID	Sample Group (Grid #)	Matrix	Category	Sample Type	Number of Subsamples	Top Depth (in bgs)	Bottom Depth (in bgs)	Sample Date	PLM					
										Method	LA Bin	LA (%)		C (%)	
CS-18581-FG1		1	Surface soil	Field Sample	Composite	5	0	1	7/1/2004	PLM-VE	A	ND		ND	
CS-18582-FG1		1	Surface soil	Field Sample	Composite	5	2	6	7/1/2004	PLM-VE	A	ND		ND	
CS-18583-FG1		2	Surface soil	Field Sample	Composite	5	0	1	7/1/2004	PLM-VE	B1	TR		ND	
CS-18584-FG1		2	Surface soil	Field Sample	Composite	5	2	6	7/1/2004	PLM-VE	A	ND		ND	
CS-18585-FG1		2,4,6,7,9	Surface soil	Field Sample	Composite	5	6	12	7/1/2004	PLM-VE	A	ND		ND	
CS-18586-FG1		3	Surface soil	Field Sample	Composite	5	0	1	7/1/2004	PLM-VE	A	ND		ND	
CS-18587-FG1		3	Surface soil	Field Sample	Composite	5	2	6	7/1/2004	PLM-VE	A	ND		ND	
CS-18588-FG1		4	Surface soil	Field Sample	Composite	5	0	1	7/1/2004	PLM-VE	A	ND		ND	
CS-18589-FG1		4	Surface soil	Field Sample	Composite	5	2	6	7/1/2004	PLM-VE	A	ND		ND	
CS-18590-FG1		5	Surface soil	Field Sample	Composite	5	0	1	7/1/2004	PLM-VE	A	ND		ND	
CS-18591-FG1		5	Surface soil	Field Sample	Composite	5	2	6	7/1/2004	PLM-VE	A	ND		ND	
CS-18592-FG1		6	Surface soil	Field Sample	Composite	5	0	1	7/1/2004	PLM-VE	A	ND		ND	
CS-18593-FG1		6	Surface soil	Field Sample	Composite	5	2	6	7/1/2004	PLM-VE	A	ND		ND	
CS-18594-FG1		7	Surface soil	Field Sample	Composite	5	0	1	7/1/2004	PLM-VE	A	ND		ND	
CS-18595-FG1		7	Surface soil	Field Sample	Composite	5	2	6	7/1/2004	PLM-VE	A	ND		ND	
CS-18596-FG1		8	Surface soil	Field Sample	Composite	5	0	1	7/1/2004	PLM-VE	A	ND		ND	
CS-18597-FG1		8	Surface soil	Field Sample	Composite	5	2	6	7/1/2004	PLM-VE	A	ND		ND	
CS-18598-FG1		9	Surface soil	Field Sample	Composite	5	0	1	7/1/2004	PLM-VE	A	ND		ND	
CS-18599-FG1		9	Surface soil	Field Sample	Composite	5	2	6	7/1/2004	PLM-VE	A	ND		ND	

Notes:

in- inches
bgs- below ground surface
PLM- polorized light microscopy
VE- visual estimation
LA- Libby amphibole
C- Chrysotile
%- percent
ND- non-detect
TR- trace

Section 6
Quality Assurance/Quality Control

CDM has established a formal quality assurance program to ensure consistently high quality project deliverables under its Response Action Contract with EPA. The field quality assurance program was designed in accordance with CDM's RAC VIII *Quality Management Plan,* Revision 1 (CDM 2002d). For work conducted by CDM in Libby, quality assurance/quality control (QA/QC) measures include the collection of quality control (QC) samples (such as soil duplicate samples and equipment blanks), implementation of a laboratory quality assurance program, review of project reports by a CDM-approved quality assurance staff member, and an auditing component to assess the effectiveness of the quality assurance program. The following sections describe deviations from the Stimson Lumber Company SAP (CDM 2002a), Addendum and the implications of those deviations on project or data quality objectives.

6.1 Deviations During Air and Dust Sample Collection

All sampling was completed in accordance with the *Property Specific Sampling and Analysis Plan (SAP), Air and Dust Sampling for Stimson Lumber Company, Libby Asbestos Project, Libby, Montana* (CDM 2002a). Deviations from the SAP are addressed in Section 6.1.1 and 6.1.2.

6.1.1 Deviations During Air Sample Collection

According to the Stimson Lumber Company SAP (CDM2002a), approximately four ambient samples were to be collected at each specific sampling location. This number was changed to collect samples more representative of normal working conditions in each location. Additional samples were collected in the larger buildings. Five ambient samples were collected in the central maintenance building and the plywood plant, and three samples in the FJ building.

Normal work activities at Stimson generated significant amounts of airborne particulates. In an effort to collect more representative ambient air samples and prevent filter overload, less than the standard volume of air (4,000 liters) for 33 ambient air samples was collected. Also, less than 4,000 liters was collected during sample recollection. Samples were recollected when the laboratory indicated that previous samples collected in that location were overloaded.

On September 11, 2002, ambient samples were collected in the central maintenance building. Greater than 4,000 liters of air was collected for these samples, but there was concern about sample overload since the filters appeared to be more than 30 percent loaded by visual inspection. On September 16, 2002, samples were recollected in the same location. Less than 4,000 liters of air was collected for the resampling to prevent sample overload.

On September 13, 2002, ambient samples were collected in the plywood plant. On that date, there were high levels of visible airborne dust throughout the plant. Sample

cassettes were changed out at less than 4,000 liters to prevent filter overloading. Plant employees and Ms. Bovee later explained that the bag house was not functioning properly on that date. The bag house collects airborne particulates from the plant. On September 13, 2002, the "bags" were overfull, which resulted in higher than normal levels of airborne dust in the plant. According to Ms. Bovee, the bags were changed out on September 15, 2002. Samples were recollected near the spreaders on September 18, 2002. Less than 4,000 liters of air was collected to avoid filter overloading.

The debarker is located outside the plant building but generates a significant amount of sawdust during normal operation. On September 13, 2002, samples were collected outside the debarker's operator cab in the very dusty environment of the debarker. These cassettes were changed out at less than 4,000 liters. A sample was recollected inside the debarker cab on September 17, 2002. Less than 4,000 liters of air was collected to avoid filter overloading. Ambient air sampling cassettes collected in the FJ building and log yard were changed out at less than 4,000 liters to avoid filter overloading.

According to the Stimson Lumber Company SAP (2002a), replicate ambient air samples were to be collected at a rate of one per sampling location. In two locations (log yard and parking lot), insufficient electrical supply made replicate sampling infeasible. In addition, replicate samples collected in the plywood plant were among those that were overloaded and unreadable. As a result, three readable replicate samples were analyzed during this project.

All personal air samples were collected in accordance with the Stimson Lumber Company SAP (CDM 2002a).

6.1.2 Deviations During Dust Sample Collection

The Stimson Lumber Company SAP (CDM 2002a) stated that one dust sample was to be collected in buildings that do not contain identified vermiculite. In three such buildings, two dust samples were collected. Due to the large size of these buildings, two samples would better characterize the interior of the building space.

6.1.3 Corrective Actions

In an effort to prevent ambient air sample overload and prevent indirect sample preparation, samples were recollected using reduced total sample volumes and/or collected with multiple representative samples.

6.2 Deviations During Soil Sample Collection

All sampling was completed in accordance with the *Final Sampling and Analysis Plan (SAP) for the Remedial Investigation (RI) Contaminant Screening Study (CSS), Libby Asbestos Site, OU4. Libby, Montana* (2002b) and the site specific *Final SAP Addendum for the Stimson Lumber Company Area, Libby Asbestos Site, OU4* (CDM 2002c). Deviations from the SAP and SAP addendum are addressed in Sections 6.2.1 and 6.2.2.

6.2.1 October 2002 Site Wide Soil Sampling Event

All sampling procedures detailed in the SAP addendum (CDM 2002c) were followed except the number of collected samples compared to the number of estimated samples. Table 5-2 summarizes the number of surface and subsurface samples collected versus the number estimated in the SAP addendum (CDM 2002c). Differences in the number of samples collected versus the number of samples estimated for each sub area are explained below.

Railroad Spur
The SAP addendum (CDM 2002c) called for 20 surface samples to be collected along the railroad spur; 14 samples were actually collected. Composite samples were collected along the railroad spur to 900 feet north of the former popping plant location (just to the north of 5th Street). Because no vermiculite was observed in the area of the spur north of the popping plant and a distance of 900 feet had already been sampled, additional surface soil samples were not collected.

This deviation does not impact the data quality objectives (DQOs) for this event, because all samples north of the popping plan were non-detect for vermiculite.

Southwest Area
The SAP addendum (CDM 2002c) called for 23 surface and four subsurface samples to be collected in the southwest sub area. Thirteen surface and two subsurface samples were collected during the investigation. Seven of the proposed surface soil sampling locations were located within the Champion International Corporation Superfund Site and three were located in a wooded area in the southwest portion of this subarea that was not owned by Stimson; these 10 samples were not collected due to their location on an existing Superfund site and private property that was not part of Stimson. Two of the proposed subsurface locations were also located within the Champion International Corporation Superfund Site and were not sampled.

This deviation does not impact the DQOs for this event, because all areas owned by Stimson Lumber were sampled.

Former Champion International Tree Nursery
The SAP addendum (CDM 2002c) called for 14 surface samples to be collected in the former Champion International tree nursery area; 11 samples were actually collected. Three of the proposed surface soil sampling locations were located within the Champion International Corporation Superfund Site and were not sampled.

This deviation does not impact the DQOs for this event, because all areas owned by Stimson Lumber were sampled.

6.2.2 May 2004 BMX Track Soil Sampling Event

All sampling procedures detailed in the SAP addendum (CDM 2002c) and the BMX sampling letter (CDM 2004b), were followed except where discussed below.

BMX Track Area and Grid Layout
The BMX sampling letter (CDM 2004b) indicates the track measures approximately 90,000 ft^2, as taken from aerial photographs of the area, and a grid system of 9 100-ft by 100-ft grids be applied to the area for sample collection.

When field personnel arrived to begin placing the sampling grids for sampling in the track area, the actual area of the track was found to cover approximately 140,000 ft^2. Due to the larger size of the track area, a grid system of 16 grids was applied to the area for sample collection. Twelve of the grids measured 100-ft by 100-ft, and 4 grids were approximately 50-ft by 100-ft. Figure 5-2 shows the grid system used to sample the track area.

This deviation does not impact the DQOs for this event, because all areas of the proposed track location were sampled.

Number and Depth of Samples Collected
The BMX sampling letter (CDM 2004b) proposed one 5-point composite surface (0 to 6 ") soil sample and one 5-point composite subsurface (12 to 24 ") soil sample be collected from each of nine grids during sampling. As stated above, initial measurements indicated the track area would be included within 9 100-ft by 100-ft grids and this would result in the collection of 18 samples (one surface and one subsurface sample from each of nine grids).

As stated above when field personnel arrived to begin placing the sampling grids for sampling in the track area, the actual area of the track was found to cover approximately 140,000 ft^2. Due to the larger size of the track area, a grid system of 16 grids was applied to the area for sample collection. The following changes to the sampling procedures were made due to the larger size of the track area:

- To minimize the number of samples collected, but still allow for adequate characterization of the area, one 5 point composite surface sample from 0-1" bgs was collected from eight of the 16 grids.

- In addition to minimizing the number of samples to be collected, the depth to which soils were disturbed during the bulldozing activities was difficult to determine, as a result one 5 point composite surface sample from 2-6" bgs was collected from eight of the 16 grids where samples from 0-1" bgs were not collected.

- Two 5 point composite subsurface samples from 6-12" bgs were collected from two grids (#3 and #6) where vermiculite was observed at this depth. Only two samples were collected from this depth in order to minimize the number of samples collected, but still allow for adequate characterization of the area and because the depth to which soils were disturbed during the bulldozing activities was difficult to determine.

- Samples were not collected from 12-24" bgs because the depth to which soils were disturbed during the bulldozing activities was difficult to determine.

This deviation does not impact the DQOs for this event, because all areas of the proposed track location were sampled.

Table 5-4 summarizes the number of samples proposed for collection in the BMX sampling letter (CDM 2004b) versus the samples collected.

Stockpile Samples
Due to the bulldozing activities before sampling occurred, several piles of soil removed were located in the track area. One 5 point composite surface sample from 2-6" below the surface of each stockpile was collected from three randomly selected stockpiles.

This deviation does not impact the DQOs for this event, because all areas of the proposed track location were sampled.

6.2.3 Corrective Actions

Since none of the deviations during any CSS soil sampling events at Stimson Lumber impacted the DQOs, there were no corrective actions required.

6.3 Achievement of Data Quality Objectives

The data quality objectives of all air, dust, and soil sampling investigations were met.

6.4 Discussion of Quality Control Results

Laboratory analysis of the lot blanks indicated asbestos fiber counts were below the detection limit of the analytical method. Laboratory analysis of the field blanks indicated asbestos fiber counts were below the detection limit of the analytical method. The QC results indicate that the sampling cassettes were not contaminated with asbestos when received from the supplier and that cassettes were not contaminated when they were handled in the field.

Laboratory analysis of the replicate ambient air samples indicated that the replicate sample results were within ±10 percent of the adjacent ambient air sample. The results of the replicate samples indicate that sample variability was within an acceptable range.

6.5 Data Validation and Reporting

None of the analytical data contained in this report was further validated beyond that performed by the laboratory as part of their QA/QC program. Therefore, it is assumed that the raw data are useable for their intended purpose, which is to determine the extent of LA asbestos contamination at the former Stimson Lumber Company property.

Section 7
References

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Appendix A
EPA SOP 2015

ASBESTOS SAMPLING

SOP#: 2015
DATE: 11/17/94
REV. #: 0.0

1.0 SCOPE AND APPLICATION

Asbestos has been used in many commercial products including building materials such as flooring tiles and sheet goods, paints and coatings, insulation, and roofing asphalts. These products and others may be found at hazardous waste sites hanging on overhead pipes, contained in drums, abandoned in piles, or as part of a structure. Asbestos tailing piles from mining operations can also be a source of ambient asbestos fibers. Asbestos is a known carcinogen and requires air sampling to assess airborne exposure to human health. This Standard Operating Procedure (SOP) provides procedures for asbestos air sampling by drawing a known volume of air through a mixed cellulose ester (MCE) filter. The filter is then sent to a laboratory for analysis. The U.S. Environmental Protection Agency/Environmental Response Team (U.S. EPA/ERT) uses one of four analytical methods for determining asbestos in air. These include: U.S. EPA's Environmental Asbestos Assessment Manual, Superfund Method for the Determination of Asbestos in Ambient Air for Transmission Electron Microscopy (TEM)[1]; U.S. EPA's Modified Yamate Method for TEM[2]; National Institute for Occupational Safety and Health (NIOSH) Method 7402 (direct method only) for TEM; and NIOSH Method 7400 for Phase Contrast Microscopy (PCM)[3]. Each method has specific sampling and analytical requirements (i.e., sample volume and flow rate) for determining asbestos in air.

The U.S. EPA/ERT typically follows procedures outlined in the TEM methods for determining mineralogical types of asbestos in air and for distinguishing asbestos from non-asbestos minerals. The Phase Contrast Microscopy (PCM) method is used by U.S. EPA/ERT as a screening tool since it is less costly than TEM. PCM cannot distinguish asbestos from non-asbestos fibers, therefore the TEM method may be necessary to confirm analytical results. For example, if an action level for the presence of fibers has been set and PCM analysis indicates that the action level has been exceeded, then TEM analysis can be used to quantify and identify asbestos structures through examination of their morphology crystal structures (through electron diffraction), and elemental composition (through energy dispersive X-ray analysis). In this instance samples should be collected for both analyses in side by side sampling trains (some laboratories are able to perform PCM and TEM analysis from the same filter). The Superfund method is designed specifically to provide results suitable for supporting risk assessments at Superfund sites, it is applicable to a wide range of ambient air situations at hazardous waste sites. U.S. EPA's Modified Yamate Method for TEM is also used for ambient air sampling due to high volume requirements. The PCM and TEM NIOSH analytical methods require lower sample volumes and are typically used indoors; however, ERT will increase the volume requirement for outdoor application.

Other Regulations pertaining to asbestos have been promulgated by U.S. EPA and OSHA. U.S. EPA's National Emission Standards for Hazardous Air Pollutants (NESHAP) regulates asbestos-containing waste materials. NESHAP establishes management practices and standards for the handling of asbestos and emissions from waste disposal operations (40 CFR Part 61, Subparts A and M). U.S. EPA's 40 CFR 763 (July 1, 1987)[4] and its addendum 40 CFR 763 (October 30, 1987)[4] provide comprehensive rules for the asbestos abatement industry. State and local regulations on these issues vary and may be more stringent than federal requirements. The OSHA regulations in 29 CFR 1910.1001 and 29 CFR 1926.58 specify work practices and safety equipment such as respiratory protection and protective clothing when handling asbestos. The OSHA standard for an 8-hour, time-weighted average (TWA) is 0.2 fibers/cubic centimeters of air. This standard pertains to fibers with a length-to-width ratio of 3 to 1 with a fiber length >5 μm[5,6]. An action level of 0.1 fiber/cc (one-half the OSHA standard) is the level U.S. EPA has established in which employers must initiate such activities as air monitoring, employee training, and

medical surveillance[5,6].

These are standard (i.e., typically applicable) operating procedures which may be varied or changed as required, dependent upon site conditions, equipment limitations or limitations imposed by the procedure. In all instances, the ultimate procedures employed should be documented and associated with the final report.

Mention of trade names or commercial products does not constitute U.S. EPA endorsement or recommendation for use.

2.0 METHOD SUMMARY

Prior to sampling, the site should be characterized by identifying on-site as well as off-site sources of airborne asbestos. The array of sampling locations and the schedule for sample collection, is critical to the success of an investigation. Generally, sampling strategies to characterize a single point source are fairly straightforward, while multiple point sources and area sources increase the complexity of the sampling strategy. It is not within the scope of this SOP to provide a generic asbestos air sampling plan. Experience, objectives, and site characteristics will dictate the sampling strategy.

During a site investigation, sampling stations should be arranged to distinguish spatial trends in airborne asbestos concentrations. Sampling schedules should be fashioned to establish temporal trends. The sampling strategy typically requires that the concentration of asbestos at the source (worst case) or area of concern (downwind), crosswind, as well as background (upwind) contributions be quantified. See Table 1 (Appendix A) for U.S. EPA/ERT recommended sampling set up for ambient air. Indoor asbestos sampling requires a different type of strategy which is identified in Table 2 (Appendix A). It is important to establish background levels of contaminants in order to develop a reference point from which to evaluate the source data. Field blanks and lot blanks can be utilized to determine other sources.

Much information can be derived from each analytical method previously mentioned. Each analytical method has specific sampling requirements and produce results which may or may not be applicable to a specific sampling effort. The site sampling objectives should be carefully identified so as to select the most appropriate analytical method. Additionally, some preparation (i.e., lot blanks results) prior to site sampling may be required, these requirements are specified in the analytical methods.

3.0 SAMPLE PRESERVATION, CONTAINERS, HANDLING, AND STORAGE

3.1 Sample Preservation

No preservation is required for asbestos samples.

3.2 Sample Handling, Container and Storage Procedures

1. Place a sample label on the cassette indicating a unique sampling number. Do not put sampling cassettes in shirt or coat pockets as the filter can pick up fibers. The original cassette box is used to hold the samples.

2. Wrap the cassette individually in a plastic sample bag. Each bag should be marked indicating sample identification number, total volume, and date.

3. The wrapped sampling cassettes should be placed upright in a rigid container so that the cassette cap is on top and cassette base is on bottom. Use enough packing material to prevent jostling or damage. Do not use vermiculite as packing material for samples. If possible, hand carry to lab.

4. Provide appropriate documentation with samples (i.e., chain of custody and requested analytical methodology).

4.0 INTERFERENCES AND POTENTIAL PROBLEMS

Flow rates exceeding 16 liters/minute (L/min) which could result in filter destruction due to (a) failure of its physical support under force from the increased pressure drop; (b) leakage of air around the filter mount so that the filter is bypassed, or (c) damage to the asbestos structures due to increased impact velocities.

4.1 U.S. EPA's Superfund Method

4.1.1 Direct-transfer TEM Specimen Preparation Methods

Direct-Transfer TEM specimen preparation methods have the following significant interferences:

- The achievable detection limit is restricted by the particulate density on the filter, which in turn is controlled by the sampled air volume and the total suspended particulate concentration in the atmosphere being sampled.
- The precision of the result is dependent on the uniformity of the deposit of asbestos structures on the sample collection filter.
- Air samples must be collected so that they have particulate and fiber loadings within narrow ranges. If too high a particulate loading occurs on the filter, it is not possible to prepare satisfactory TEM specimens by a direct-transfer method. If too high a fiber loading occurs on the filter, even if satisfactory TEM specimens can be prepared, accurate fiber counting will not be possible.

4.1.2 Indirect TEM Specimen Preparation Methods

Indirect TEM specimen preparation methods have the following interferences:

- The size distribution of asbestos structures is modified.
- There is increased opportunity for fiber loss or introduction of extraneous contamination.
- When sample collection filters are ashed, any fiber contamination in the filter medium is concentrated on the TEM specimen grid.

It can be argued that direct methods yield an under-estimate of the asbestos structure concentration because many of the asbestos fibers present are concealed by other particulate material with which they are associated. Conversely, indirect methods can be considered to yield an over-estimate because some types of complex asbestos structures disintegrate during the preparation, resulting in an increase in the numbers of structures counted.

4.2 U.S. EPA's Modified Yamate Method for TEM

High concentrations of background dust interfere with fiber identification.

4.3 NIOSH Method for TEM

Other amphibole particles that have aspect ratios greater than 3:1 and elemental compositions similar to the asbestos minerals may interfere in the TEM analysis. Some non-amphibole minerals may give electron diffraction patterns similar to amphiboles. High concentrations of background dust interfere with fiber identification.

4.4 NIOSH Method for PCM

PCM cannot distinguish asbestos from non-asbestos fibers; therefore, all particles meeting the counting criteria are counted as total asbestos fibers. Fiber less than 0.25 um in length will not be detected by this method. High levels of non-fibrous dust particles may obscure fibers in the field of view and increase the detection limit.

5.0 EQUIPMENT/MATERIALS

5.1 Sampling Pump

The constant flow or critical orifice controlled sampling pump should be capable of a flow-rate and pumping time sufficient to achieve the desired volume of air sampled.

The lower flow personal sampling pumps generally provide a flow rate of 20 cubic centimeters/minute (cc/min) to 4 L/min. These pumps are usually battery powered. High flow pumps are utilized when flow rates between 2 L/min to 20 L/min are required. High flow pumps are used for short sampling periods so as to obtain the desired sample volume. High flow pumps usually run on AC power and can be plugged into a nearby outlet. If an outlet is not available then a generator should be obtained. The generator should be positioned downwind from the sampling pump. Additional voltage may be required if more than one pump is plugged into the same generator. Several

electrical extension cords may be required if sampling locations are remote.

The recommended volume for the Superfund method (Phase I) requires approximately 20 hours to collect. Such pumps typically draw 6 amps at full power so that 2 lead/acid batteries should provide sufficient power to collect a full sample. The use of line voltage, where available, eliminates the difficulties associated with transporting stored electrical energy.

A stand should be used to hold the filter cassette at the desired height for sampling and the filter cassette shall be isolated from the vibrations of the pump.

5.2 Filter Cassette

The cassettes are purchased with the required filters in position, or can be assembled in a laminar flow hood or clean area. When the filters are in position, a shrink cellulose band or adhesive tape should be applied to cassette joints to prevent air leakage.

5.2.1 TEM Cassette Requirements

Commercially available field monitors, comprising 25 mm diameter three-piece cassettes, with conductive extension cowls shall be used for sample collection. The cassette must be new and not previously used. The cassette shall be loaded with an MCE filter of pore size 0.45 µm, and supplied from a lot number which has been qualified as low background for asbestos determination. The cowls should be constructed of electrically conducting material to minimize electrostatic effects. The filter shall be backed by a 5 µm pore size MCE filter (Figure 1, Appendix B).

5.2.2 PCM Cassette Requirements

NIOSH Method 7400, PCM involves using a 0.8 to 1.2 µm mixed cellulose ester membrane, 25 mm diameter, 50 mm conductive cowl on cassette (Figure 2, Appendix B). Some labs are able to perform PCM and TEM analysis on the same filter; however, this should be discussed with the laboratory prior to sampling.

5.3 Other Equipment

- Inert tubing with glass cyclone and hose barb
- Whirlbags (plastic bags) for cassettes
- Tools - small screw drivers
- Container - to keep samples upright
- Generator or electrical outlet (may not be required)
- Extension cords (may not be required)
- Multiple plug outlet
- Sample labels
- Air data sheets
- Chain of Custody records

6.0 REAGENTS

Reagents are not required for the preservation of asbestos samples.

7.0 PROCEDURES

7.1 Air Volumes and Flow Rates

Sampling volumes are determined on the basis of how many fibers need to be collected for reliable measurements. Therefore, one must estimate how many airborne fibers may be in the sampling location.

Since the concentration of airborne aerosol contaminants will have some effect on the sample, the following is a suggested criteria to assist in selecting a flow rate based on real-time aerosol monitor (RAM) readings in milligrams/cubic meter (mg/m^3).

	Concentration	Flow Rate
• Low RAM readings:	<6.0 mg/m^3	11-15. L/min
• Medium RAM readings:	>6.0 mg/m$_3$	7.5 L/min
• High RAM readings:	>10. mg/m^3	2.5 L/min

In practice, pumps that are available for environmental sampling at remote locations operate under a maximum load of approximately 12 L/min.

7.1.1 U.S. EPA's Superfund Method

The Superfund Method incorporates an indirect preparation procedure to provide flexibility in the amount of deposit that be can be tolerated on the sample filter and to allow for the selective concentration of asbestos prior to analysis. To minimize contributions to background contamination from asbestos present in the plastic matrices of membrane filters while allowing for sufficient quantities of asbestos to be collected, this method also requires the collection of a larger volume of air per unit area of filter than has traditionally been collected

for asbestos analysis. Due to the need to collect large volumes of air, higher sampling flow rates are recommended in this method than have generally been employed for asbestos sampling in the past. As an alternative, samples may be collected over longer time intervals. However, this restricts the flexibility required to allow samples to be collected while uniform meteorological conditions prevail.

The sampling rate and the period of sampling should be selected to yield as high a sampled volume as possible, which will minimize the influence of filter contamination. Wherever possible, a volume of 15 cubic meters (15,000 L) shall be sampled for those samples intended for analysis only by the indirect TEM preparation method (Phase 1 samples). For those samples to be prepared by both the indirect and the direct specimen preparation methods (Phase 2 samples), the volumes must be adjusted so as to provide a suitably-loaded filter for the direct TEM preparation method. One option is to collect filters at several loadings to bracket the estimated optimum loading for a particular site. Such filters can be screened in the laboratory so that only those filters closest to optimal loading are analyzed. It has been found that the volume cannot normally exceed 5 cubic meters (5000 L) in an urban or agricultural area, and 10 cubic meters (10,000 L) in a rural area for samples collected on a 25 mm filter and prepared by a direct-transfer technique.

An upper limit to the range of acceptable flow rates for this method is 15 L/min. At many locations, wind patterns exhibit strong diurnal variations. Therefore, intermittent sampling (sampling over a fixed time interval repeated over several days) may be necessary to accumulate 20 hours of sampling time over constant wind conditions. Other sampling objectives also may necessitate intermittent sampling. The objective is to design a sampling schedule so that samples are collected under uniform conditions throughout the sampling interval. This method provides for such options. Air volumes collected on Phase I samples are maximized (<16 L/min). Air volumes collected on Phase 2 samples are limited to provide optimum loading for filters to be prepared by a direct-transfer procedure.

7.1.2 U.S. EPA's Modified Yamate Method for TEM

U.S. EPA's TEM method requires a minimum volume of 560 L and a maximum volume of 3,800 L in order to obtain an analytical sensitivity of 0.005 structures/cc. The optimal volume for TEM is 1200 L to 1800 L. These volumes are determined using a 200 mesh EM grid opening with a 25-mm filter cassette. Changes in volume would be necessary if a 37-mm filter cassette is used since the effective area of a 25 mm (385 sq mm) and 37 mm (855 sq m) differ.

7.1.3 NIOSH Method for TEM and PCM

The minimum recommended volume for TEM and PCM is 400 L at 0.1 fiber/cc. Sampling time is adjusted to obtain optimum fiber loading on the filter. A sampling rate of 1 to 4 L/min for eight hours (700 to 2800 L) is appropriate in non-dusty atmospheres containing 0.1 fiber/cc. Dusty atmospheres i.e., areas with high levels of asbestos, require smaller sample volumes (<400 L) to obtain countable samples.

In such cases, take short, consecutive samples and average the results over the total collection time. For documenting episodic exposures, use high flow rates (7 to 16 L/min) over shorter sampling times. In relatively clean atmospheres where targeted fiber concentrations are much less than 0.1 fiber/cc, use larger sample volumes (3,000 to 10,000 L) to achieve quantifiable loadings. Take care, however, not to overload the filter with background dust. If > 50% of the filter surface is covered with particles, the filter may be too overloaded to count and will bias the measured fiber concentration. Do not exceed 0.5 mg total dust loading on the filter.

7.2 Calibration Procedures

In order to determine if a sampling pump is measuring the flow rate or volume of air correctly, it is necessary to calibrate the instrument. Sampling pumps should be calibrated immediately before and after each use. Preliminary calibration should be conducted using a primary calibrator such as a soap bubble type calibrator, (e.g., a Buck Calibrator, Gilibrator, or equivalent primary calibrator) with a representative filter cassette installed between the pump and the calibrator. The representative sampling cassette can be reused for calibrating other pumps that will be used for asbestos sampling. The same cassette lot used for sampling should also be used for the calibration. A sticker should be affixed to the outside of the extension cowl marked "Calibration Cassette."

A rotameter can be used provided it has been recently precalibrated with a primary calibrator. Three separate constant flow calibration readings should be obtained both before sampling and after sampling. Should the flow rate change by more than 5% during the sampling period, the average of the pre- and post-calibration rates will be used to calculate the total sample volume. The sampling pump used shall provide a non-fluctuating air-flow through the filter, and shall maintain the initial volume flow-rate to within ± 10% throughout the sampling period. The mean value of these flow-rate measurements shall be used to calculate the total air volume sampled. A constant flow or critical orifice controlled pump meets these requirements. If at any time the measurement indicates that the flow-rate has decreased by more than 30%, the sampling shall be terminated. Flexible tubing is used to connect the filter cassette to the sampling pump.Sampling pumps can be calibrated prior to coming on-site so that time is saved when performing on-site calibration.

7.2.1 Calibrating a Personal Sampling Pump with an Electronic Calibrator

1. See Manufacturer's manual for operational instructions.

2. Set up the calibration train as shown in (Figure 3, Appendix B) using a sampling pump, electronic calibrator, and a representative filter cassette. The same lot sampling cassette used for sampling should also be used for calibrating.

3. To set up the calibration train, attach one end of the PVC tubing (approx. 2 foot) to the cassette base; attach the other end of the tubing to the inlet plug on the pump. Another piece of tubing is attached from the cassette cap to the electronic calibrator.

4. Turn the electronic calibrator and sampling pump on. Create a bubble at the bottom of the flow chamber by pressing the bubble initiate button. The bubble should rise to the top of the flow chamber. After the bubble runs its course, the flow rate is shown on the LED display.

5. Turn the flow adjust screw or knob on the pump until the desired flow rate is attained.

6. Perform the calibration three times until the desired flow rate of ± 5% is attained.

7.2.2 Calibrating a Rotameter with an Electronic Calibrator

1. See manufacturer's manual for operational instructions.

2. Set up the calibration train as shown in (Figure 4, Appendix B) using a sampling pump, rotameter, and electronic calibrator.

3. Assemble the base of the flow meter with the screw provided and tighten in place. The flow meter should be mounted within 6° vertical.

4. Turn the electronic calibrator and sampling pump on.

5. Create a bubble at the bottom of the flow chamber by pressing the bubble initiate button. The bubble should rise to the top of the flow chamber. After the bubble runs its course, the flow rate is shown on the LED display.

6. Turn the flow adjust screw or knob on the pump until the desired flow rate is attained.

7. Record the electronic calibrator flow rate reading and the corresponding rotameter reading. Indicate these values on the rotameter (sticker). The rotameter should be able to work within the desired flow range. Readings can also be calibrated for 10 cm^3 increments for Low Flow rotameters, 500 cm^3 increments for medium flow rotameters and 1 liter increments for high flow rotameters.

8. Perform the calibration three times until the desired flow rate of ± 5% is attained. Once on site, a secondary calibrator, i.e., rotameter may be used to calibrate sampling pumps.

7.2.3 Calibrating a Personal Sampling Pump with a Rotameter

1. See manufacturer's manual for Rotameter's Operational Instructions.

2. Set up the calibration train as shown in (Figure 5, Appendix B) using a rotameter, sampling pump, and a representative sampling cassette.

3. To set up the calibration train, attach one end of the PVC tubing (approx. 2 ft) to the cassette base; attach the other end of the tubing to the inlet plug on the pump. Another piece of tubing is attached from the cassette cap to the rotameter.

4. Assemble the base of the flow meter with the screw provided and tighten in place. The flow meter should be mounted within 6° vertical.

5. Turn the sampling pump on.

6. Turn the flow adjust screw (or knob) on the personal sampling pump until the float ball on the rotameter is lined up with the precalibrated flow rate value. A sticker on the rotameter should indicate this value.

7. A verification of calibration is generally performed on-site in the clean zone immediately prior to the sampling.

7.3. Meteorology

It is recommended that a meteorological station be established. If possible, sample after two to three days of dry weather and when the wind conditions are at 10 mph or greater. Record wind speed, wind direction, temperature, and pressure in a field logbook. Wind direction is particularly important when monitoring for asbestos downwind from a fixed source.

7.4 Ambient Sampling Procedures

7.4.1 Pre-site Sampling Preparation

1. Determine the extent of the sampling effort, the sampling methods to be employed, and the types and amounts of equipment and supplies needed.

2. Obtain necessary sampling equipment and ensure it is in working order and fully charged (if necessary).

3. Perform a general site survey prior to site entry in accordance with the site specific Health and Safety plan.

4. Once on-site the calibration is performed in the clean zone. The calibration procedures are listed in Section 7.2.

5. After calibrating the sampling pump, mobilize to the sampling location.

7.4.2 Site Sampling

1. To set up the sampling train, attach the air intake hose to the cassette base. Remove the cassette cap (Figure 6 and 7, Appendix B). The cassette should be positioned downward, perpendicular to the wind

2. If AC or DC electricity is required then turn it on. If used, the generator should be placed 10 ft. downwind from the sampling pump.

3. Record the following in a field logbook: date, time, location, sample identification number, pump number, flow rate, and cumulative time.

4. Turn the pump on. Should intermittent sampling be required, sampling filters must be covered between active periods of sampling. To cover the sample filter: turn the cassette to face upward, place the cassette cap on the cassette, remove the inlet plug from the cassette cap, attach a rotameter to the inlet opening of the cassette cap to measure the flow rate, turn off the sampling pump, place the inlet plug into the inlet opening on the cassette cap. To resume sampling: remove the inlet plug, turn on the sampling pump, attach a rotameter to measure the flow rate, remove the cassette cap, replace the inlet plug in the cassette cap and invert the cassette, face downward and perpendicular to the wind.

5. Check the pump at sampling midpoint if sampling is longer than 4 hours. The generators may need to be regased depending on tank size. If a filter darkens in appearance or if loose dust is seen in the filter, a second sample should be started.

6. At the end of the sampling period, orient the cassette up, turn the pump off.

7. Check the flow rate as shown in Section 7.2.3. When sampling open-faced, the sampling cap should be replaced before post calibrating. Use the same cassette used for sampling for post calibration (increase dust/fiber loading may have altered the flow rate.

8. Record the post flow rate.

9. Record the cumulative time or run.

10. Remove the tubing from the sampling cassette. Still holding the cassette upright, replace the inlet plug on the cassette cap and the outlet plug on the cassette base.

7.4.3. Post Site Sampling

1. Follow handling procedures in Section 3.2, steps 1-4.

2. Obtain an electronic or hard copy of meteorological data which occurred during the sampling event. Record weather: wind speed, ambient temperature, wind direction, and precipitation. Obtaining weather data several days prior to the sampling event can also be useful.

7.5 Indoor Sampling Procedures

PCM analysis is used for indoor air samples. When analysis shows total fiber count above the OSHA action level 0.1 f/cc then TEM (U.S. EPA's Modified Yamate Method) is used to identify asbestos from non-asbestos fibers.

Sampling pumps should be placed four to five feet above ground level away from obstructions that may influence air flow. The pump can be placed on a table or counter. Refer to Table 2 (Appendix A) for a summary of indoor sampling locations and rationale for selection.

Indoor sampling utilizes high flow rates to increased sample volumes (2000 L for PCM and 2800 to 4200 L for TEM) in order to obtain lower detection limits below the standard, (i.e., 0.01 f/cc or lower [PCM] and 0.005 structures/cc or lower [TEM]).

7.5.1 Aggressive Sampling Procedures

Sampling equipment at fixed locations may fail to detect the presence of asbestos fibers. Due to limited air movement, many fibers may settle out of the air onto the floor and other surfaces and may not be captured on the filter. In the past, an 8-hour sampling period was recommended to cover various air circulation conditions. A quicker and more effective way to capture asbestos fibers is to circulate the air artificially so that the fibers remain airborne during sampling. The results from this sampling option typifies worst case condition. This is referred to as aggressive air sampling for asbestos. Refer to Table 2 for sample station locations.

1. Before starting the sampling pumps, direct forced air (such as a 1-horsepower leaf blower or large fan) against walls, ceilings, floors, ledges, and other surfaces in the room to initially dislodge fibers from surfaces. This should take at least 5 minutes per 1000 sq. ft. of floor.

2. Place a 20-inch fan in the center of the room. (Use one fan per 10,000 cubic feet of room space.) Place the fan on slow speed and point it toward the ceiling.

3. Follow procedures in Section 7.4.1 and 7.4.2 (Turn off the pump and then the fan(s) when sampling is complete.).

4. Follow handling procedures in Section 3.2, steps 1-4.

8.0 CALCULATIONS

The sample volume is calculated from the average flow rate of the pump multiplied by the number of minutes the pump was running (volume = flow rate X time in minutes). The sample volume should be submitted to the laboratory and identified on the chain of custody for each sample (zero for lot, field and trip blanks).

The concentration result is calculated using the sample volume and the numbers of asbestos structures reported after the application of the cluster and matrix counting criteria.

9.0 QUALITY ASSURANCE/ QUALITY CONTROL

Follow all QA/QC requirements from the laboratories as well as the analytical methods.

9.1 TEM Requirements

1. Examine lot blanks to determine the background asbestos structure concentration.

2. Examine field blanks to determine whether there is contamination by extraneous asbestos structures during specimen preparation.

3. Examine of laboratory blanks to determine if contamination is being introduced during critical phases of the laboratory program.

4. To determine if the laboratory can satisfactorily analyze samples of known asbestos structure concentrations, reference filters shall be examined. Reference filters should be maintained as part of the laboratory's Quality Assurance program.

5. To minimize subjective effects, some specimens should be recounted by a different microscopist.

6. Asbestos laboratories shall be accredited by the National Voluntary Laboratory Accreditation Program.

7. At this time, performance evaluation samples for asbestos in air are not available for Removal Program Activities.

9.2 PCM Requirements

1. Examine reference slides of known concentration to determine the analyst's ability to satisfactorily count fibers. Reference slides should be maintained as part of the laboratory's quality assurance program.

2. Examine field blanks to determine if there is contamination by extraneous structures during sample handling.

3. Some samples should be relabeled then submitted for counting by the same analyst to determine possible bias by the analyst.

4. Participation in a proficiency testing program such as the AIHA-NIOSH proficiency analytical testing (PAT) program.

10.0 DATA VALIDATION

Results of quality control samples will be evaluated for contamination. This information will be utilized to qualify the environmental sample results accordingly with the project's data quality objectives.

11.0 HEALTH AND SAFETY

When working with potentially hazardous materials, follow U.S. EPA, OSHA, and corporate health and safety procedures. More specifically, when entering an unknown situation involving asbestos, a powered air purifying respirator (PAPR) (full face-piece) is necessary in conjunction with HEPA filter cartridges. See applicable regulations for action level, PEL, TLV, etc. If previous sampling indicates asbestos concentrations are below personal health and safety levels, then Level D personal protection is adequate.

12.0 REFERENCES

(1) Environmental Asbestos Assessment Manual, Superfund Method for the Determination of Asbestos in Ambient Air, Part 1: Method, EPA/540/2-90/005a, May 1990, and Part 2: Technical Background Document, EPA/540/2-90/005b, May 1990.

(2) Methodology for the Measurement of Airborne Asbestos by Electron Microscopy, EPA's Report No. 68-02-3266, 1984, G. Yamate, S.C. Agarwal, and R. D. Gibbons.

(3) National Institute for Occupational Safety and Health. NIOSH Manual of Analytical Method. Third Edition. 1987.

(4) U.S. Environmental Protection Agency. Code of Federal Regulations 40 CFR 763. July 1, 1987. Code of Federal Regulations 40 CFR 763 Addendum. October 30, 1987.

(5) U.S. Environmental Protection Agency. Asbestos-Containing Materials in Schools; Final Rule and Notice. 52 FR 41826.

(6) Occupational Safety and Health Administration. *Code of Federal Regulations* 29 CFR 1910.1001. Washington, D.C. 1987.

APPENDIX A

Tables

TABLE 1. SAMPLE STATIONS FOR OUTDOOR SAMPLING		
Sample Station Location	Sample Numbers	Rationale
Upwind/Background[1]	Collect a minimum of two simultaneous upwind/background samples 30° apart from the prevailing windlines.	Establishes background fiber levels.
Downwind	Deploy a minimum of 3 sampling stations in a 180 degree arc downwind from the source.	Indicates if asbestos is leaving the site.
Site Representative and/or Worst Case	Obtain one site representative sample which shows average condition on-site or obtain worst case sample (optional).	Verify and continually confirm and document selection of proper levels of worker protection.

[1] More than one background station may be required if the asbestos originates from different sources.

APPENDIX A (Cont'd)

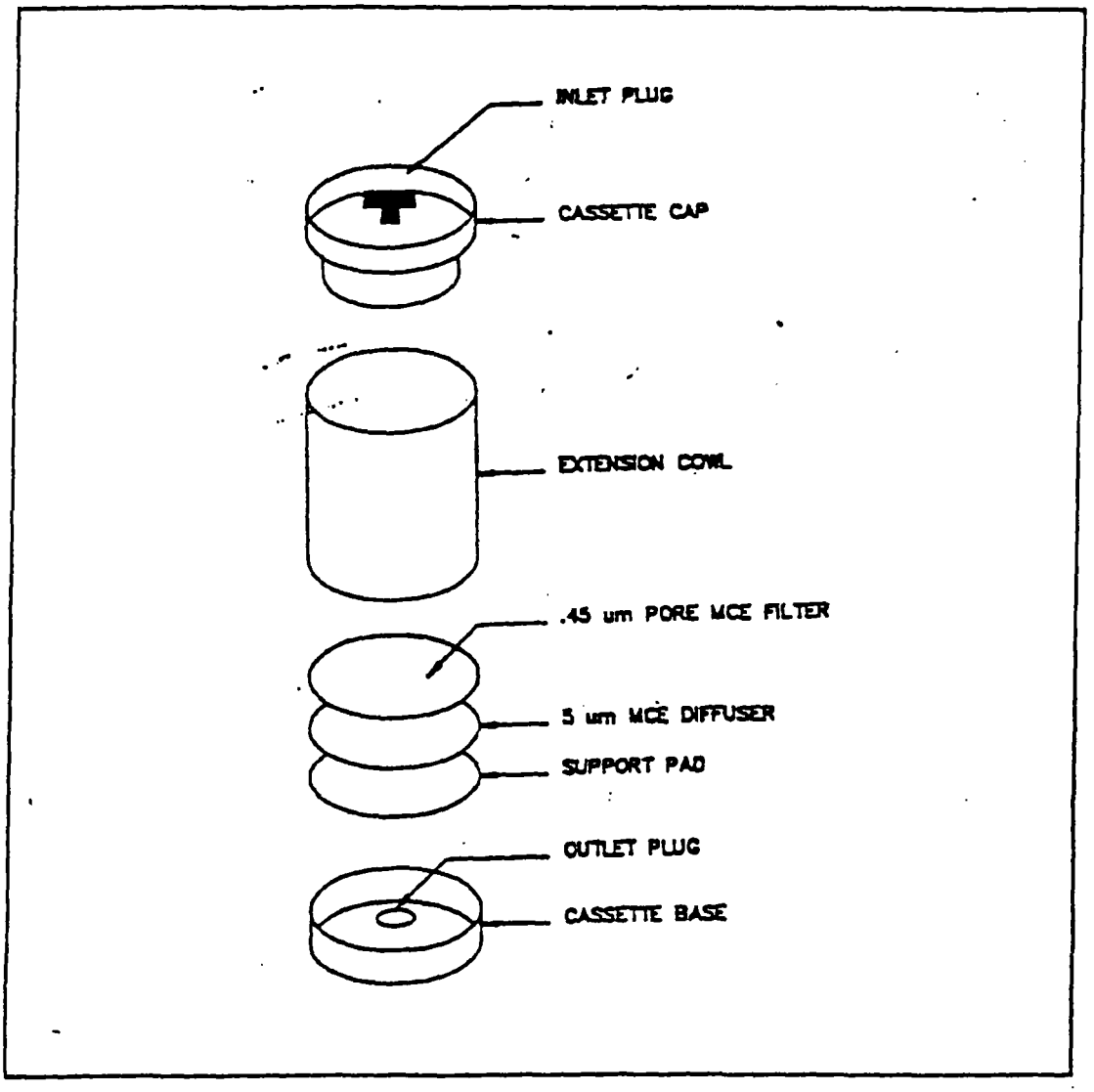
Tables

TABLE 2 SAMPLE STATIONS FOR INDOOR SAMPLING		
Sample Station Location	Sample Numbers	Rationale
Indoor Sampling	If a work site is a single room, disperse 5 samplers throughout the room. If the work site contains up to 5 rooms, place at least one sampler in each room. If the work site contains more than 5 rooms, select a representative sample of the rooms.	Establishes representative samples from a homogeneous area.
Upwind/Background	If outside sources are suspected, deploy a minimum of two simultaneous upwind/background samples 30° apart from the prevailing windlines.	Establish whether indoor asbestos concentrations are coming from an outside source.
Worst Case	Obtain one worst case sample, i.e., aggressive sampling (optional).	Verify and continually confirm and document selection of proper levels of worker protection.

APPENDIX B

Figures

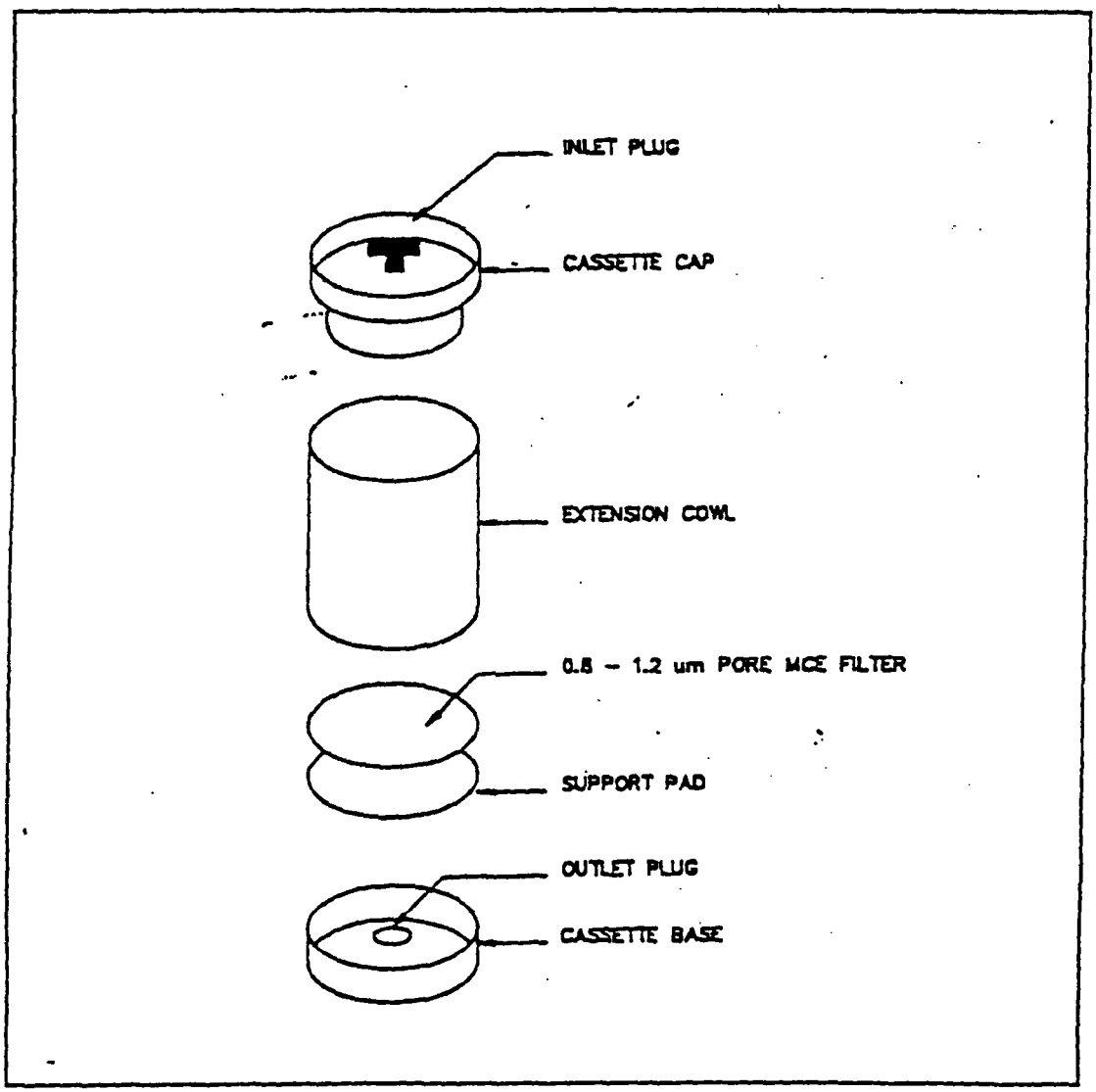
FIGURE 1. Transmission Electron Microscopy Filter Cassette



APPENDIX B (Cont'd)

Figures

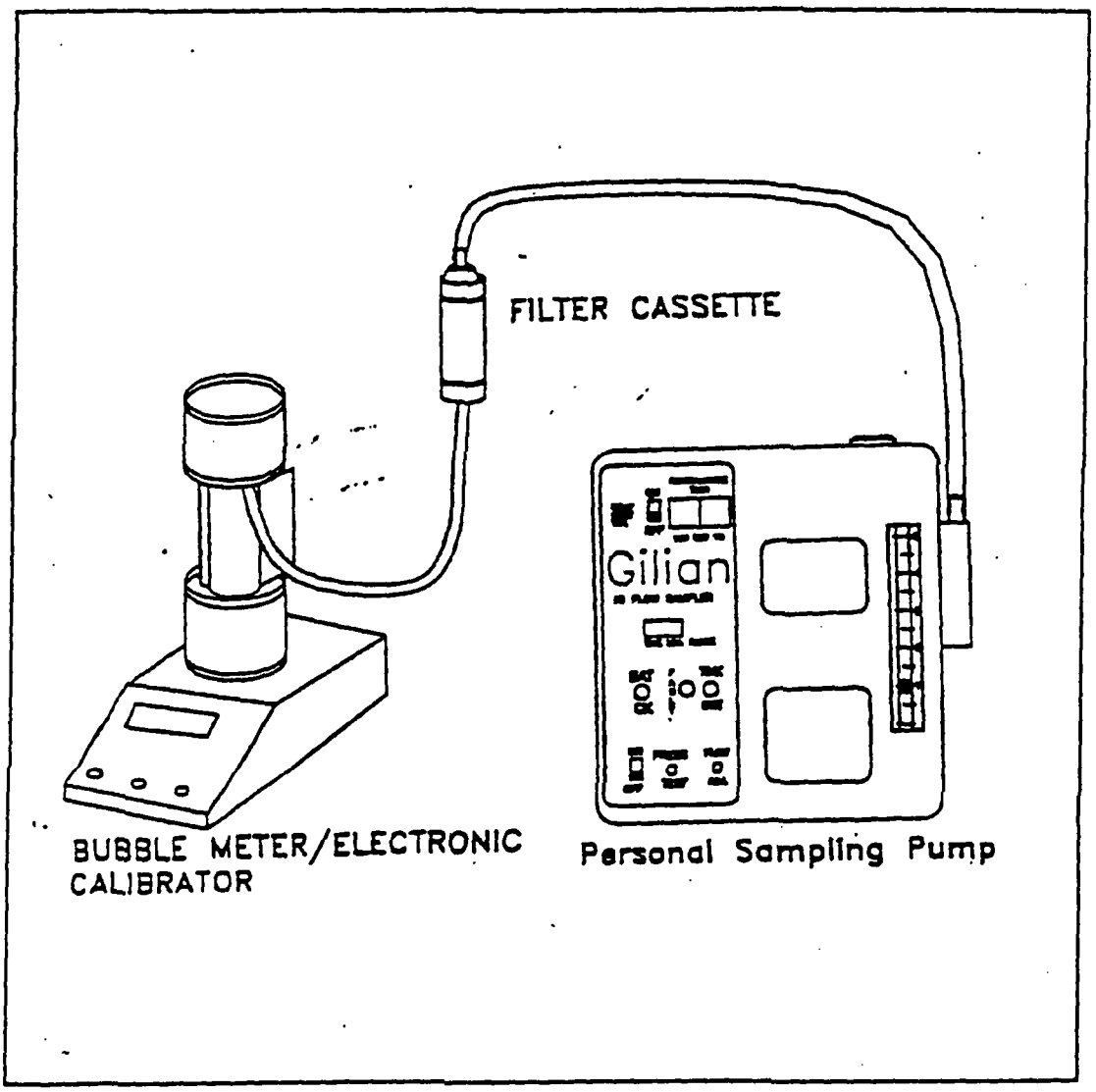
FIGURE 2. Phase Contrast Microscopy Filter Cassette



APPENDIX B (Cont'd)

Figures

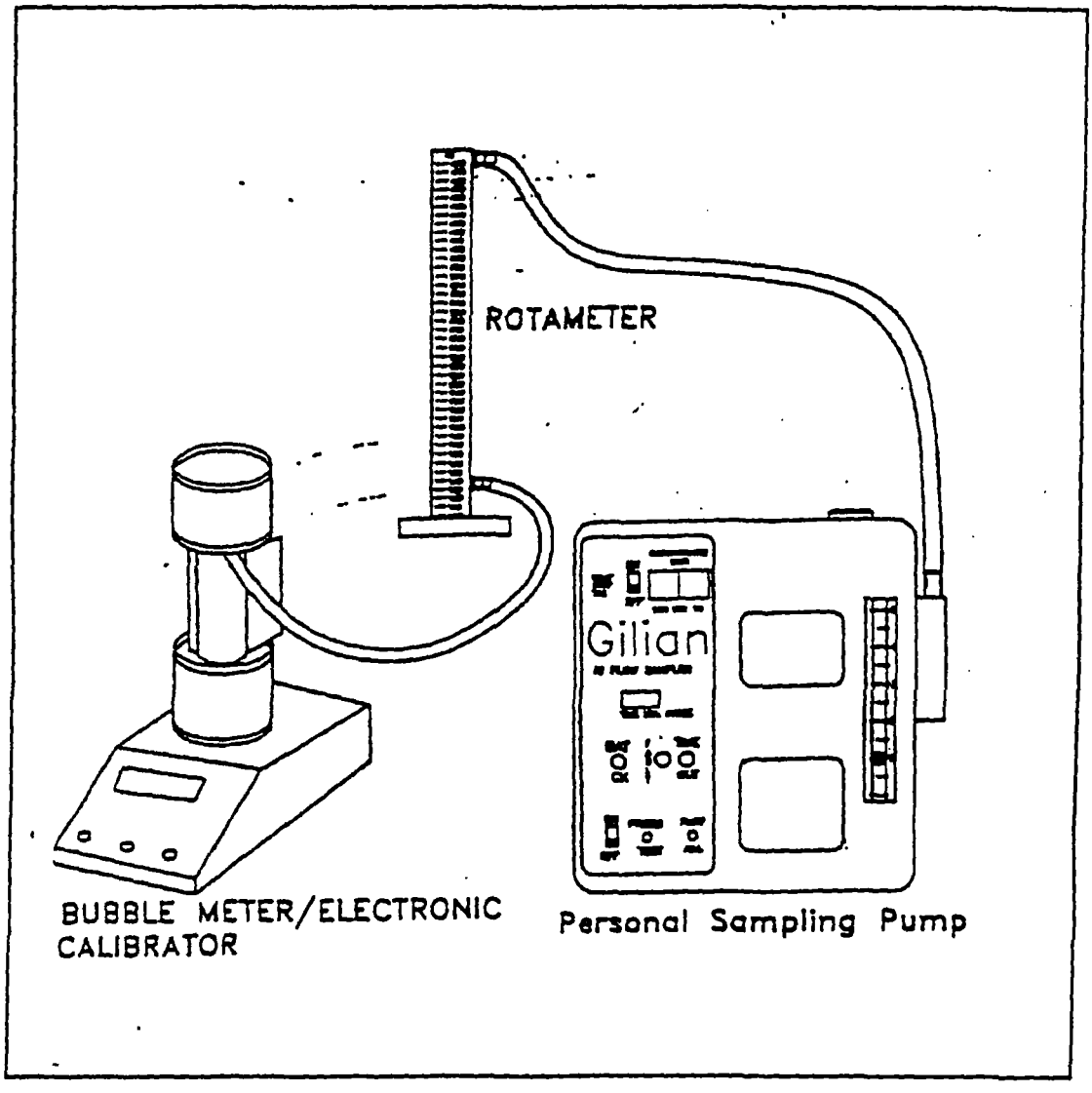
FIGURE 3. Calibrating a Personal Sampling Pump with a Bubble Meter



APPENDIX B (Cont'd)

Figures

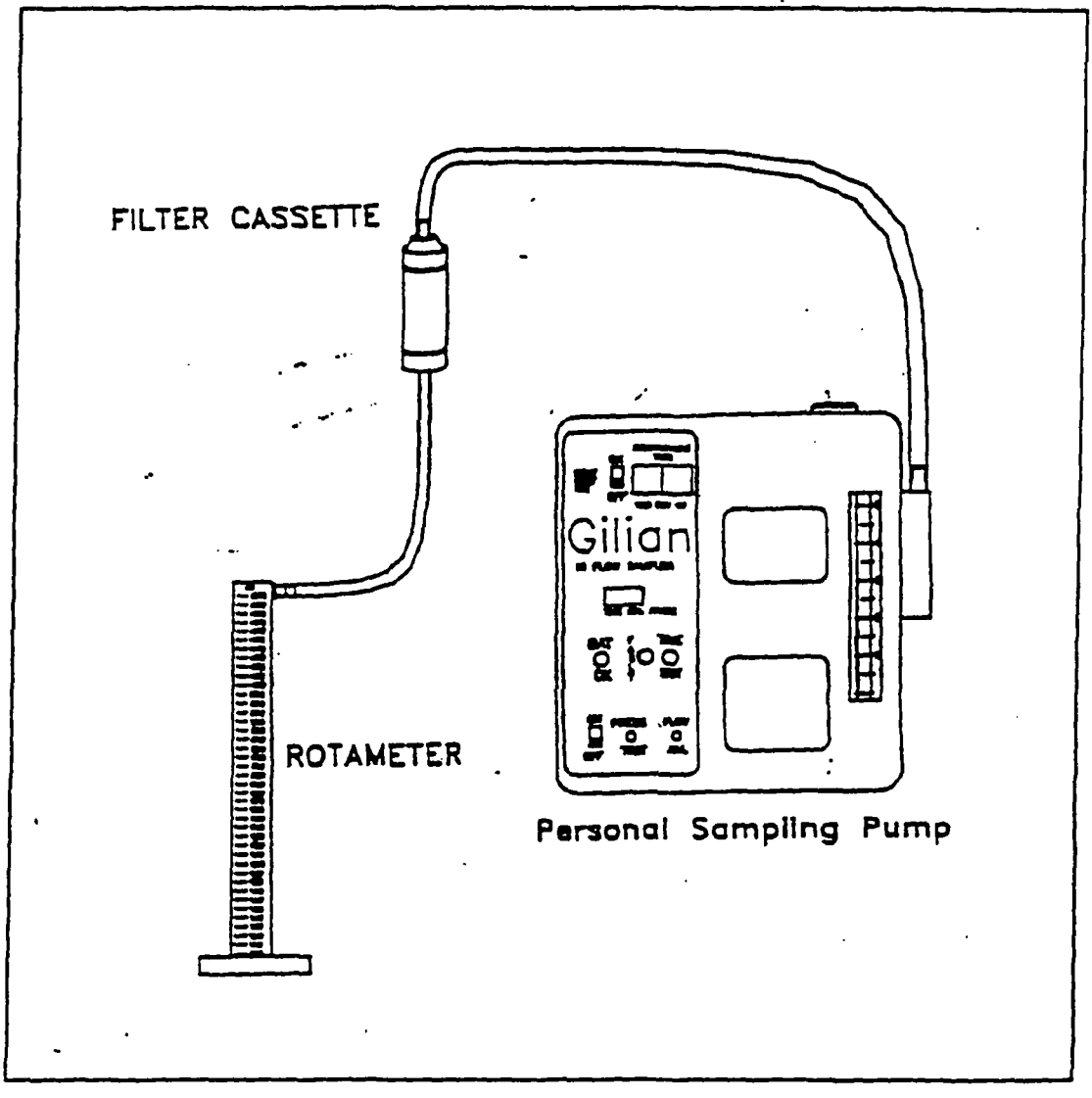
FIGURE 4. Calibrating a Rotameter with a Bubble Meter



APPENDIX B (Cont'd)

Figures

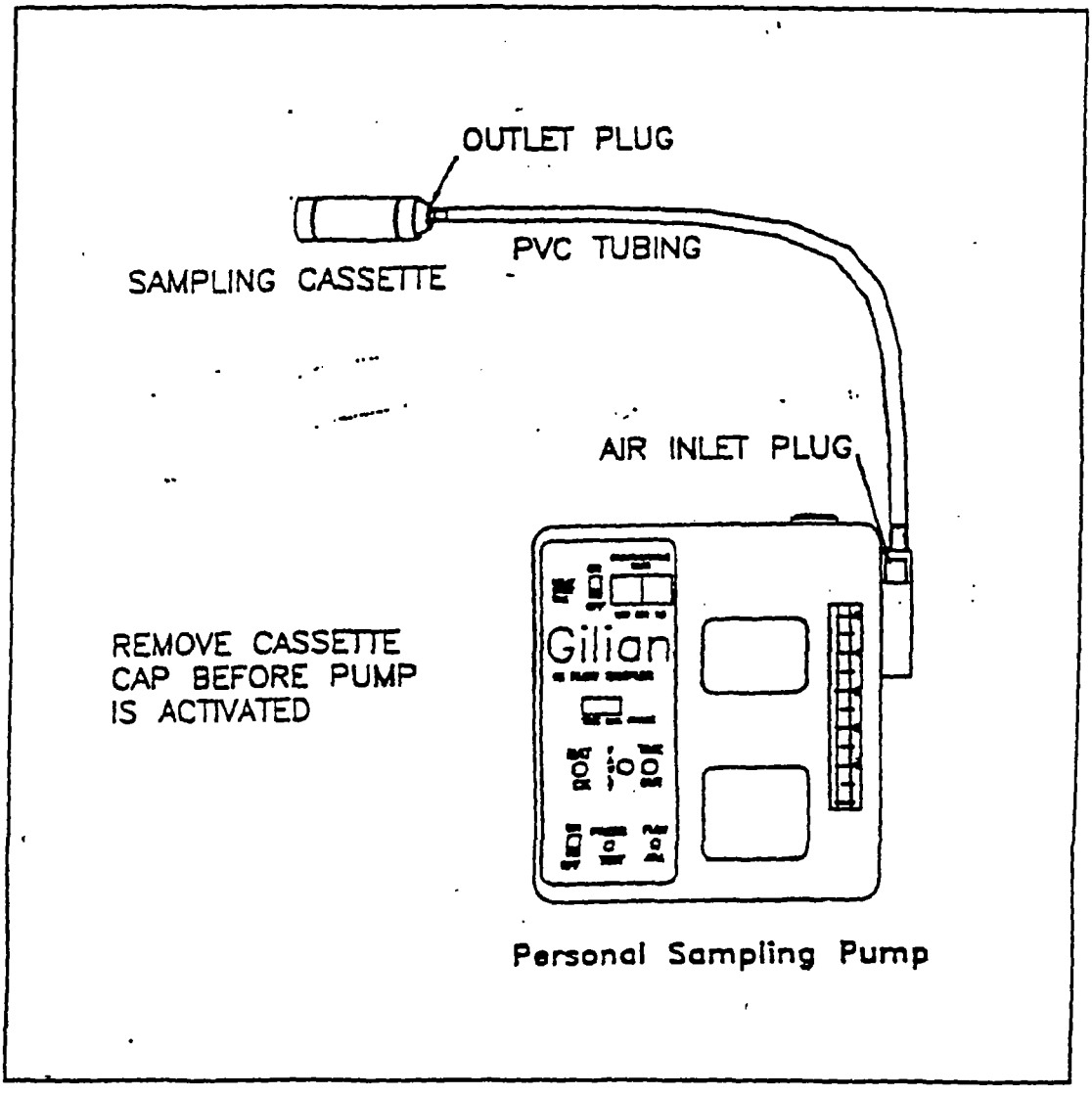
FIGURE 5. Calibrating a Sampling Pump with a Rotameter



APPENDIX B (Cont'd)

Figures

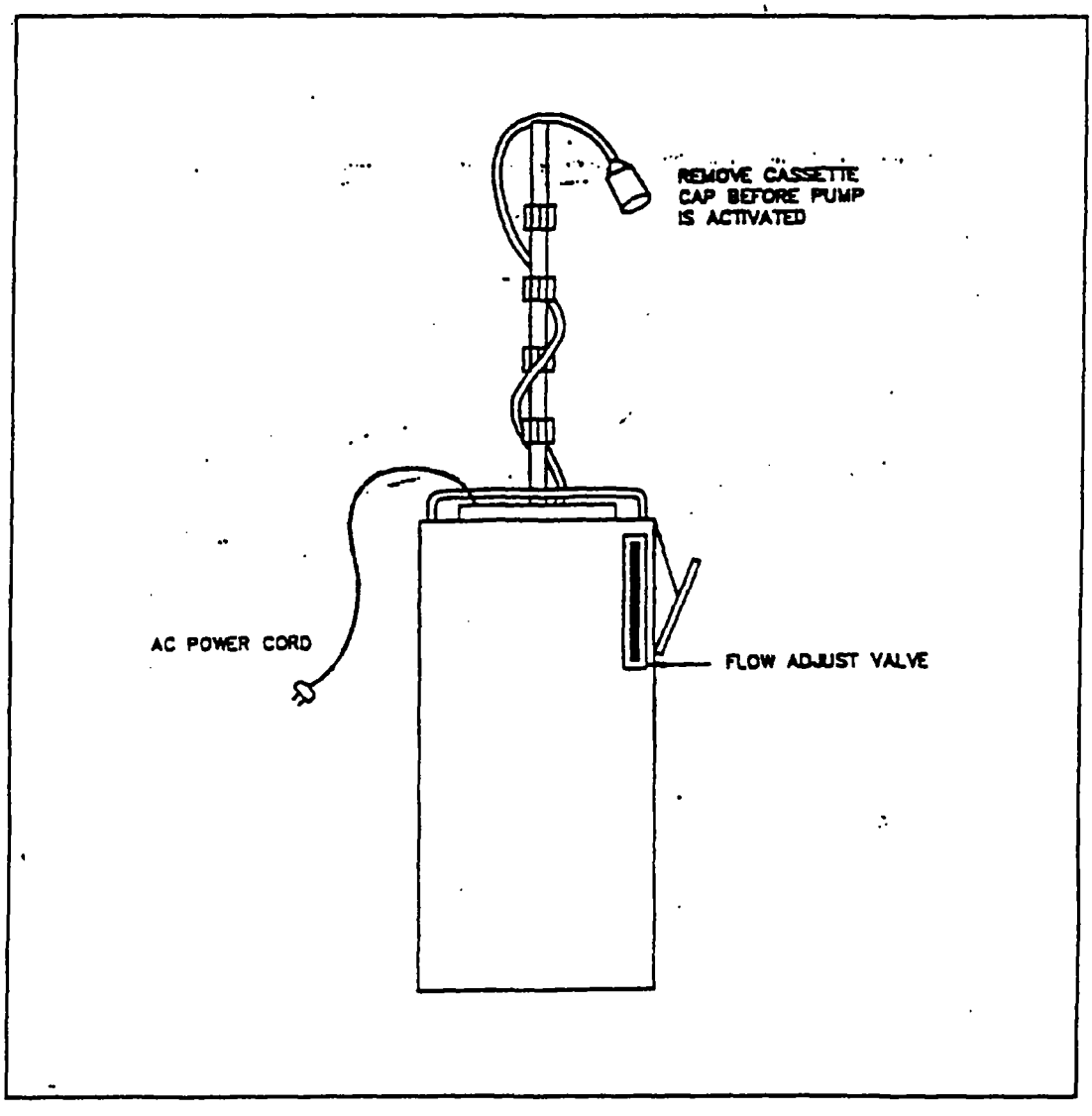
FIGURE 6. Personal Sampling Train for Asbestos



APPENDIX B (Cont'd)

Figures

FIGURE 7. High Flow Sampling Train for Asbestos



Appendix B
Employee Orientation Form

Personal Air Sampling

There are a few important points to remember when wearing a personal sampling pump:

1) The cassette needs to be located in your breathing zone (near mouth & nose) throughout your workday. It should be attached to your lapel, or in a comparable location. Please do not move (or remove) the cassette without the assistance of the technician. The technician will pause the pump prior to and during breaks and lunch.

2) Please advise the technician as soon as possible if there are ANY irregularities with the pump or cassette. Examples include:

- Cassette falls off or is damaged
- Pump falls off, stops running, or is damaged
- Hose is cut or damaged

This will enable the technician to adjust, restart, or replace your pump as necessary to provide an accurate, valid representation of the air sampled.

3) Please advise the technician of any non-routine occurrences during the workday. This would include any accidents, unusual outages, variations in standard procedures, assignment to a different task, or any other changes to your normal daily routine. You will not be penalized for any of these changes – it ensures that we collect valid air samples.

Please sign to acknowledge review of these items.

Signature _____ 7:30

Printed Name Jesse L. Nixon

Last four digits of SSN (for sample tracking purposes) _____

Task Plugger

Date 9-14-02

1.30

Personal Air Sampling

There are a few important points to remember when wearing a personal sampling pump:

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Please sign to acknowledge review of these items.

Signature Linda A Hull

Printed Name LINDA A HULL

Last four digits of SSN (for sample tracking purposes) _____

Task Plugger Operator

Date 9-13-02

Personal Air Sampling

There are a few important points to remember when wearing a personal sampling pump:

1) The cassette needs to be located in your breathing zone (near mouth & nose) throughout your workday. It should be attached to your lapel, or in a comparable location. Please do not move (or remove) the cassette without the assistance of the technician. The technician will pause the pump prior to and during breaks and lunch.

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Please sign to acknowledge review of these items.

Signature Christopher Benefield

Printed Name Christopher Benefield

Last four digits of SSN (for sample tracking purposes) _____

Task Green chain Puller

Date 9-13-02

lief

Personal Air Sampling

There are a few important points to remember when wearing a personal sampling pump:

1) The cassette needs to be located in your breathing zone (near mouth & nose) throughout your workday. It should be attached to your lapel, or in a comparable location. Please do not move (or remove) the cassette without the assistance of the technician. The technician will pause the pump prior to and during breaks and lunch.

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Please sign to acknowledge review of these items.

Signature James Cummings

Printed Name James Cummings

Last four digits of SSN (for sample tracking purposes) _____ _____

Task DRyer OFF Bearer

Date 9/13/02

Personal Air Sampling

There are a few important points to remember when wearing a personal sampling pump:

1) The cassette needs to be located in your breathing zone (near mouth & nose) throughout your workday. It should be attached to your lapel, or in a comparable location. Please do not move (or remove) the cassette without the assistance of the technician. The technician will pause the pump prior to and during breaks and lunch.

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Please sign to acknowledge review of these items.

Signature Doug Jellesed

Printed Name Doug Jellesed

Last four digits of SSN (for sample tracking purposes) _____

Task Dryer Tender

Date 9-13-02

1:30

Personal Air Sampling

There are a few important points to remember when wearing a personal sampling pump:

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Please sign to acknowledge review of these items.

Signature Vernon C Drake

Printed Name Vernon Drake

Last four digits of SSN (for sample tracking purposes) _____

Task Dryer feeder

Date Sept 13, 02

Personal Air Sampling

There are a few important points to remember when wearing a personal sampling pump:

1) The cassette needs to be located in your breathing zone (near mouth & nose) throughout your workday. It should be attached to your lapel, or in a comparable location. Please do not move (or remove) the cassette without the assistance of the technician. The technician will pause the pump prior to and during breaks and lunch.

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Please sign to acknowledge review of these items.

Signature Daniel R. Goyen

Printed Name Daniel R. Goyen

Last four digits of SSN (for sample tracking purposes) _____

Task Wagner operator

Date Sept-10-02

r - noon
10, 2:30

Personal Air Sampling

There are a few important points to remember when wearing a personal sampling pump:

1) The cassette needs to be located in your breathing zone (near mouth & nose) throughout your workday. It should be attached to your lapel, or in a comparable location. Please do not move (or remove) the cassette without the assistance of the technician. The technician will pause the pump prior to and during breaks and lunch.

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Please sign to acknowledge review of these items.

Signature Wilfred C. Johnson Jr.

Printed Name WILFRED C. JOHNSON, JR.

Last four digits of SSN (for sample tracking purposes) _____

Task MECHANIC

Date SEPT. 10, 02

8 - noon
1, 2:30

Personal Air Sampling

There are a few important points to remember when wearing a personal sampling pump:

1) The cassette needs to be located in your breathing zone (near mouth & nose) throughout your workday. It should be attached to your lapel, or in a comparable location. Please do not move (or remove) the cassette without the assistance of the technician. The technician will pause the pump prior to and during breaks and lunch.

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Please sign to acknowledge review of these items.

Signature Glenn L. Garrison

Printed Name Glenn L. Garrison

Last four digits of SSN (for sample tracking purposes) ___ ___

Task MECHANIC

Date Sept 10, 02

Aaron - 11 am lunch

Personal Air Sampling

There are a few important points to remember when wearing a personal sampling pump:

1) The cassette needs to be located in your breathing zone (near mouth & nose) throughout your workday. It should be attached to your lapel, or in a comparable location. Please do not move (or remove) the cassette without the assistance of the technician. The technician will pause the pump prior to and during breaks and lunch.

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This will enable the technician to adjust, restart, or replace your pump as necessary to provide an accurate, valid representation of the air sampled.

3) Please advise the technician of any non-routine occurrences during the workday. This would include any accidents, unusual outages, variations in standard procedures, assignment to a different task, or any other changes to your normal daily routine. You will not be penalized for any of these changes – it ensures that we collect valid air samples.

Please sign to acknowledge review of these items.

Signature Aaron Brown

Printed Name Aaron Brown

Last four digits of SSN (for sample tracking purposes) _____

Task F/T utility

Date 9-10-02

Appendix C
American Society for Testing and Materials
D-5755-95

Designation: D 5755 – 95

AMERICAN SOCIETY FOR TESTING AND MATERIALS
1916 Race St. Philadelphia, Pa 19103
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if not listed in the current combined index, will appear in the next edition.

Standard Test Method for Microvacuum Sampling and Indirect Analysis of Dust by Transmission Electron Microscopy for Asbestos Structure Number Concentrations[1]

This standard is issued under the fixed designation D 5755; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

1. Scope

1.1 This test method covers a procedure to (*a*) identify asbestos in dust and (*b*) provide an estimate of the concentration of asbestos in the sampled dust reported as the number of asbestos structures per unit area of sampled surface.

1.1.1 If an estimate of the asbestos mass is to be determined, the user is referred to Test Method D 5756.

1.2 This test method describes the equipment and procedures necessary for sampling, by a microvacuum technique, non-airborne dust for levels of asbestos structures. The non-airborne sample is collected inside a standard filter membrane cassette from the sampling of a surface area for dust which may contain asbestos.

1.2.1 This procedure uses a microvacuuming sampling technique. The collection efficiency of this technique is unknown and will vary among substrates. Properties influencing collection efficiency include surface texture, adhesiveness, electrostatic properties and other factors.

1.3 Asbestos identified by transmission electron microscopy (TEM) is based on morphology, selected area electron diffraction (SAED), and energy dispersive X-ray analysis (EDXA). Some information about structure size is also determined.

1.4 This test method is generally applicable for an estimate of the concentration of asbestos structures starting from approximately 1000 asbestos structures per square centimetre.

1.4.1 The procedure outlined in this test method employs an indirect sample preparation technique. It is intended to disperse aggregated asbestos into fundamental fibrils, fiber bundles, clusters, or matrices that can be more accurately quantified by transmission electron microscopy. However, as with all indirect sample preparation techniques, the asbestos observed for quantification may not represent the physical form of the asbestos as sampled. More specifically, the procedure described neither creates nor destroys asbestos, but it may alter the physical form of the mineral fibers.

1.5 The values stated in SI units are to be regarded as the standard. The values given in parentheses are for information only.

1.6 *This standard does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.*

2. Referenced Documents

2.1 *ASTM Standards:*

D 1193 Specification for Reagent Water[2]

D 1739 Test Method for the Collection and Measurement of Dustfall (Settleable Particulate Matter)[3]

D 3195 Practice for Rotameter Calibration[3]

D 3670 Guide for Determination of Precision and Bias of Methods of Committee D-22[3]

D 5756 Test Method for Microvacuum Sampling and Indirect Analysis of Dust by Transmission Electron Microscopy for Asbestos Mass Concentration[3]

3. Terminology

3.1 *Definitions:*

3.1.1 *asbestiform*—a special type of fibrous habit in which the fibers are separable into thinner fibers and ultimately into fibrils. This habit accounts for greater flexibility and higher tensile strength than other habits of the same mineral. For more information on asbestiform mineralogy, see Refs (1),[4] (2) and (3).

3.1.2 *asbestos*—a collective term that describes a group of naturally occurring, inorganic, highly fibrous, silicate dominated minerals, which are easily separated into long, thin, flexible fibers when crushed or processed.

DISCUSSION—Included in the definition are the asbestiform varieties of: serpentine (chrysotile); riebeckite (crocidolite); grunerite (grunerite asbestos); anthophyllite (anthophyllite asbestos); tremolite (tremolite asbestos); and actinolite (actinolite asbestos). The amphibole mineral compositions are defined according to nomenclature of the International Mineralogical Association (3).

Asbestos	Chemical Abstract Service No.[5]
Chrysotile	12001-29-5
Crocidolite	12001-28-4
Grunerite Asbestos	12172-73-5
Anthophyllite Asbestos	77536-67-5
Tremolite Asbestos	77536-68-6
Actinolite Asbestos	77536-66-4

3.1.3 *fibril*—a single fiber that cannot be separated into

[1] This test method is under the jurisdiction of ASTM Committee D-22 on Sampling and Analysis of Atmospheres and is the direct responsibility of Subcommittee D22.07 on Sampling and Analysis of Asbestos.

Current edition approved August 15, 1995. Published October 1995.

[2] Annual Book of ASTM Standards, Vol 11.01.

[3] Annual Book of ASTM Standards, Vol 11.03.

[4] The boldface numbers in parentheses refer to the list of references at the end of this test method.

[5] The non-asbestiform varieties of the minerals indicated in 3.1.3 have different Chemical Abstract Service (CAS) numbers.

smaller components without losing its fibrous properties or appearance.

3.2 *Descriptions of Terms Specific to This Standard:*

3.2.1 *aspect ratio*—the ratio of the length of a fibrous particle to its average width.

3.2.2 *bundle*—a structure composed of three or more fibers in a parallel arrangement with the fibers closer than one fiber diameter to each other.

3.2.3 *cluster*—a structure with fibers in a random arrangement such that all fibers are intermixed and no single fiber is isolated from the group; groupings of fibers must have more than two points touching.

3.2.4 *debris*—materials that are of an amount and size (particles greater than 1 mm in diameter) that can be visually identified as to their source.

3.2.5 *dust*—any material composed of particles in a size range of ≤1 mm and large enough to settle by virtue of their weight from the ambient air (see definition for settleable particulate matter in Test Method D 1739).

3.2.6 *fiber*—a structure having a minimum length of 0.5 µm, an aspect ratio of 5:1 or greater, and substantially parallel sides (4).

3.2.7 *fibrous*—of a mineral composed of parallel, radiating, or interlaced aggregates of fibers, from which the fibers are sometimes separable. That is, the crystalline aggregate may be referred to as fibrous even if it is not composed of separable fibers, but has that distinct appearance. The term fibrous is used in a general mineralogical way to describe aggregates of grains that crystallize in a needle-like habit and appear to be composed of fibers. Fibrous has a much more general meaning than asbestos. While it is correct that all asbestos minerals are fibrous, not all minerals having fibrous habits are asbestos.

3.2.8 *indirect preparation*—a method in which a sample passes through one or more intermediate steps prior to final filtration.

3.2.9 *matrix*—a structure in which one or more fibers, or fiber bundles that are touching, are attached to, or partially concealed by a single particle or connected group of non-fibrous particles. The exposed fiber must meet the fiber definition (see 3.2.6).

3.2.10 *structures*—a term that is used to categorize all the types of asbestos particles which are recorded during the analysis (such as fibers, bundles, clusters, and matrices). Final results of the test are always expressed in asbestos structures per square centimetre.

4. Summary of Test Method

4.1 The sample is collected by vacuuming a known surface area with a standard 25 or 37 mm air sampling cassette using a plastic tube that is attached to the inlet orifice which acts as a nozzle. The sample is transferred from inside the cassette to an aqueous solution of known volume. Aliquots of the suspension are then filtered through a membrane. A section of the membrane is prepared and transferred to a TEM grid using the direct transfer method. The asbestiform structures are identified, sized, and counted by TEM, using SAED and EDXA at a magnification of 15 000 to 20 000X.

5. Significance and Use

5.1 This microvacuum sampling and indirect analysis method is used for the general testing of non-airborne dust samples for asbestos. It is used to assist in the evaluation of dust that may be found on surfaces in buildings such as ceiling tiles, shelving, electrical components, duct work, carpet, etc. This test method provides an index of the concentration of asbestos structures in the dust per unit area analyzed as derived from a quantitative TEM analysis.

5.1.1 This test method does not describe procedures or techniques required to evaluate the safety or habitability of buildings with asbestos-containing materials, or compliance with federal, state, or local regulations or statutes. It is the user's responsibility to make these determinations.

5.1.2 At present, a single direct relationship between asbestos-containing dust and potential human exposure does not exist. Accordingly, the user should consider these data in relationship to other available information in their evaluation.

5.2 This test method uses the definition, settleable particulate material, found in Test Method D 1739 as the definition of dust. This definition accepts all particles small enough to pass through a 1 mm (No. 18) screen. Thus, a single, large asbestos containing particle(s) (from the large end of the particle size distribution) dispersed during sample preparation may result in anomalously large asbestos concentration results in the TEM analyses of that sample. It is, therefore, recommended that multiple independent samples are secured from the same area, and a minimum of three samples analyzed by the entire procedure.

6. Interferences

6.1 The following minerals have properties (that is, chemical or crystalline structure) which are very similar to asbestos minerals and may interfere with the analysis by causing a false positive to be recorded during the test. Therefore, literature references for these materials must be maintained in the laboratory for comparison to asbestos minerals so that they are not misidentified as asbestos minerals.

6.1.1 *Antigorite.*

6.1.2 *Palygorskite (Attapulgite).*

6.1.3 *Halloysite.*

6.1.4 *Pyroxenes.*

6.1.5 *Sepiolite.*

6.1.6 *Vermiculite scrolls.*

6.1.7 *Fibrous talc.*

6.1.8 Hornblende and other amphiboles other than those listed in 3.1.2.

6.2 Collecting any dust particles greater than 1 mm in size in this test method may cause an interference and, therefore, must be avoided.

7. Materials and Equipment

7.1 *Purity of Reagents*—Reagent grade chemicals shall be used in all tests. Unless otherwise indicated, it is intended that all reagents conform to the specifications of the Committee on Analytical Reagents of the American Chemical Society, where such specifications are available. Other grades may be used, provided it is first ascertained that the reagent is of sufficiently high purity to permit its use without

lessening the accuracy of the determination.[6]

7.2 *Transmission Electron Microscope (TEM)*, an 80 to 120 kV TEM, capable of performing electron diffraction, with a fluorescent screen inscribed with calibrated gradations, is required. The TEM must be equipped with energy dispersive X-ray spectroscopy (EDXA) and it must have a scanning transmission electron microscopy (STEM) attachment or be capable of producing a spot size of less than 250 nm in diameter in crossover.

7.3 *Energy Dispersive X-ray System (EDXA).*

7.4 *High Vacuum Carbon Evaporator*, with rotating stage.

7.5 *High Efficiency Particulate Air (HEPA)*, filtered negative flow hood.

7.6 *Exhaust or Fume Hood.*

7.7 *Particle-free Water* (ASTM Type II, see Specification D 1193).

7.8 *Glass Beakers* (50 mL).

7.9 *Glass Sample Containers*, with wide mouth screw cap (200 mL) or equivalent sealable container (height of the glass sample container should be approximately 13 cm high by 6 cm wide).

7.10 *Waterproof Markers.*

7.11 *Forceps* (tweezers).

7.12 *Ultrasonic Bath*, table top model (100 W).

7.13 *Graduated Pipettes* (1, 5, 10 mL sizes), glass or plastic.

7.14 *Filter Funnel*, either 25 mm or 47 mm, glass or disposable. Filter funnel assemblies, either glass or disposable plastic, and using either a 25 mm or 47 mm diameter filter.

7.15 *Side Arm Filter Flask*, 1000 mL.

7.16 *Mixed Cellulose Ester (MCE) Membrane Filters*, 25 or 47 mm diameter, ≤0.22 µm and 5 µm pore size.

7.17 *Polycarbonate (PC) Filters*, 25 or 47 mm diameter, ≤0.2 µm pore size.

7.18 *Storage Containers*, for the 25 or 47 mm filters (for archiving).

7.19 *Glass Slides*, approximately 76 by 25 mm in size.

7.20 *Scalpel Blades*, No. 10, or equivalent.

7.21 *Cabinet-type Desiccator*, or low temperature drying oven.

7.22 *Chloroform*, reagent grade.

7.23 *Acetone*, reagent grade.

7.24 *Dimethylformamide (DMF).*

7.25 *Glacial Acetic Acid.*

7.26 *1-methyl-2-pyrrolidone.*

7.27 *Plasma Asher*, low temperature.

7.28 *pH Paper.*

7.29 *Air Sampling Pump*, low volume personal-type, capable of achieving a flow rate of 1 to 5 L/min.

7.30 *Rotameter.*

7.31 *Air Sampling Cassettes*, 25 mm or 37 mm, containing 0.8 µm or smaller pore size MCE or PC filters.

7.32 *Cork Borer*, 7 mm.

7.33 *Non-Asbestos Mineral*, references as outlined in 6.1.

7.34 *Asbestos Standards*, as outlined in 3.1.2.

7.35 *Tygon*[7] *Tubing*, or equivalent.

7.36 *Small Vacuum Pump*, that can maintain a pressure of 92 kPa.

7.37 *Petri Dishes*, large glass, approximately 90 mm in diameter.

7.38 *Jaffe Washer*, stainless steel or aluminum mesh screen, 30 to 40 mesh, and approximately 75 mm by 50 mm in size.

7.39 *Copper TEM Finder Grids*, 200 mesh.

7.40 *Carbon Evaporator Rods.*

7.41 *Lens Tissue.*

7.42 *Ashless Filter Paper Filters*, 90 mm diameter.

7.43 *Gummed Paper Reinforcement Rings.*

7.44 *Wash Bottles*, plastic.

7.45 *Reagent Alcohol*, HPLC Grade (Fisher A995 or equivalent).

7.46 *Opening Mesh Screen*, plastic, 1.0 by 1.0 mm, (Spectra-Mesh #146410 or equivalent).

7.47 *Diffraction Grating Replica.*

8. Sampling Procedure for Microvacuum Technique

8.1 For sampling asbestos-containing dust in either indoor or outdoor environments, commercially available cassettes must be used. Air monitoring cassettes containing 25 mm or 37 mm diameter mixed cellulose ester (MCE) or polycarbonate (PC) filter membranes with a pore size less than or equal to 0.8 µm are required (7.31). The number of samples collected depends upon the specific circumstances of the study.

8.2 Maintain a log of all pertinent sampling information and sampling locations.

8.3 Sampling pumps and flow indicators shall be calibrated using a certified standard apparatus or assembly (see Practice D 3195 and 7.29).

8.4 Record all calibration information (5).

8.5 Perform a leak check of the sampling system at each sampling site by activating the pump (7.29) with the closed sampling cassette in line. Any air flow shows that a leak is present that must be eliminated before initiating the sampling operation.

8.6 Attach the sampling cassette to the sampling pump at the outlet side of the cassette with plastic tubing (7.35). The plastic tubing must be long enough in that the sample areas can be reached without interference from the sampling pump. Attach a clean, approximately 25.4 mm long piece of plastic tubing (6.35 mm internal diameter) directly to the inlet orifice. Use this piece of tubing as the sampling nozzle. Cut the sampling end of the tubing at a 45° angle as illustrated in Fig. 1. The exact design of the nozzle is not critical as long as some vacuum break is provided to avoid simply pushing the dust around on the surface with the nozzle rather than vacuuming it into the cassette. The internal diameter of the nozzle and flow rate of the pump may vary as long as the air velocity is 100 (±10) cm/s. This air velocity calculation is based on an internal sampling tube diameter of 6.35 mm at a flow rate of 2 L/min.

8.7 Measure and determine the sample area of interest. A

[6] *Reagent Chemicals, American Chemical Society Specifications*, American Chemical Society, Washington, DC. For suggestions on the testing of reagents not listed by the American Chemical Society, see *Analar Standards for Laboratory Chemicals*, BDH Ltd., Poole, Dorset, U.K., and the *United States Pharmacopeia and National Formulary*, U.S. Pharmaceutical Convention, Inc. (USPC).

[7] Tygon is a registered trademark of the DuPont Co.

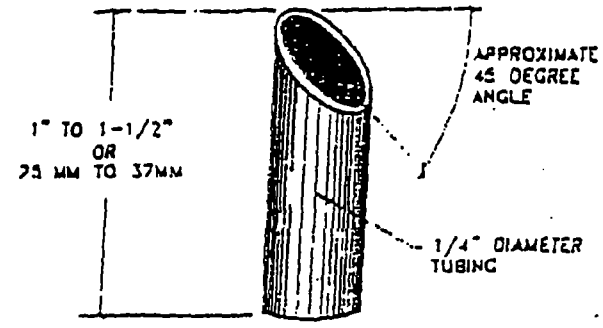

FIG. 1 Example of the Tubing Nozzle

sample area of 100 cm² is vacuumed until there is no visible dust or particulates matter remaining. Perform a minimum of two orthogonal passes on the surface within a minimum of 2 min of sampling time. Avoid scraping or abrading the surface being sampled. (Do not sample any debris or dust particles greater than 1 mm in diameter (see 4.2).) Smaller or larger areas can be sampled, if needed. For example, some surfaces of interest may have a smaller area than 100 cm². Less dusty surfaces may require vacuuming of larger areas. Unlike air samples, the overloading of the cassettes with dust will not be a problem. As defined in 3.2.5, only dust shall be collected for this analysis.

8.8 At the end of sample collection, invert the cassette so that the nozzle inlet faces up before shutting off the power to the pump. The nozzle is then sealed with a cassette end-plug and the cassette/nozzle taped or appropriately packaged to prevent separation of the nozzle and cassette assembly. A second option is the removal of the nozzle from the cassette, then plugging of the cassette and shipment of the nozzle (also plugged at both ends) sealed in a separate closeable plastic bag. A third option is placing the nozzle inside the cassette for shipment. The nozzle is always saved and rinsed because a significant percentage of the dust drawn from a lightly loaded surface may adhere to the inside walls of the tubing.

8.9 Check that all samples are clearly labeled, that all dust sampling information sheets are completed, and that all pertinent information has been enclosed, in accordance with laboratory quality control practices, before transfer of the samples to the laboratory. Include an unused cassette and nozzle as a field blank.

8.10 Wipe off the exterior surface of the cassettes with disposable wet towels (baby wipes) prior to packaging for shipment.

9. Sample Shipment

9.1 Ship dust samples to an analytical laboratory in a sealed container, but separate from any bulk or air samples. The cassettes must be tightly sealed and packed in a material free of fibers or dust to minimize the potential for contamination. Plastic "bubble pack" is probably the most appropriate material for this purpose.

10. Sample Preparation

10.1 Under a negative flow HEPA hood (7.5), carefully wet-wipe the exterior of the cassettes to remove any possible contamination before taking cassettes into a clean preparation area.

10.2 Perform sample preparation in a clean facility that has a separate work area from both the bulk and air sample preparation areas.

10.3 Initial specimen preparation shall take place in a clean HEPA filtered negative pressure hood to avoid any possible contamination of the laboratory or personnel, or both, by the potentially large number of asbestos structures in an asbestos-containing dust sample. Cleanliness of the preparation area hoods is measured by the cumulative process blank concentrations (see Section 11).

10.4 All sample preparation steps 10.4.1 through 10.4.6 shall take place in the dust preparation area inside a HEPA hood.

10.4.1 Remove the upper plug from the sample cassette and carefully introduce approximately 10 mL solution of a 50/50 mixture of particle-free water and reagent alcohol into the cassette using a plastic wash bottle (7.44). If the plugged nozzle was left attached to the cassette, then remove the plug and introduce the water/alcohol solution into the cassette through the tubing, and then remove the tubing, if it is visibly clean.

10.4.2 Replace the upper plug or the sample cap and lightly shake the dust suspension by hand for 3 s.

10.4.3 Remove the entire cap of the cassette and pour the suspension through a 1.0 by 1.0 mm opening screen (7.46) into a pre-cleaned 200 mL glass specimen bottle (7.9). All visible traces of the sample contained in the cassette shall be rinsed through the screen into the specimen bottle with a plastic wash bottle containing the 50/50 solution of particle-free water and alcohol. Repeat this procedure two additional times for a total of three washings. Next, rinse the nozzle two or three times through the screen into the specimen bottle with the 50/50 mixture of water and alcohol. Typically, the total amount of the 50/50 mixture used in the rinse is 50 to 75 mL. Discard the 1.0 by 1.0 mm screen and bring the volume of solution in the specimen bottle up to the 100 mL mark on the side of the bottle with particle-free water only.

10.4.4 Adjust the pH of the suspension to 3 to 4 using a 10.0 % solution of acetic acid. Use pH paper for testing. Filter the suspension within 24 h to avoid problems associated with bacterial and fungal growth.

10.4.5 Use either a disposable plastic filtration unit or a glass filtering unit (7.14) for filtration of aliquots of the suspension. The ability of an individual filtration unit to produce a uniform distribution may be tested by the filtration of a colored particulate suspension such as diluted India ink (suspension of carbon black).

10.4.5.1 If a disposable plastic filtration unit is used, then unwrap a new disposable plastic filter funnel unit (either 25 or 47 mm diameter) and remove the tape around the base of the funnel. Remove the funnel and discard the top filter supplied with the apparatus, retaining the coarse polypropylene support pad in place. Assemble the unit with the adapter and a properly sized neoprene stopper, and attach the funnel to the 1000 mL side-arm vacuum flask (7.15). Place a 5.0 µm pore size MCE (backing filter) on the support pad. Wet it with a few mL of particle-free water and place an MCE (7.16) or PC filter (≤0.22 µm pore size) (7.17) on top of the backing filter. Apply a vacuum (7.36), ensuring

that the filters are centered and pulled flat without air bubbles. Any irregularities on the filter surface requires the discard of that filter. After the filter has been seated properly, replace the funnel and reseal it with the tape. Return the flask to atmospheric pressure.

10.4.5.2 If a glass filtration unit is used, place a 5 µm pore size MCE (backing filter) on the glass frit surface. Wet the filter with particle-free water, and place an MCE or PC filter (≤0.22 µm pore size) on top of the backing filter. Apply a vacuum, ensuring that the filters are centered and pulled flat without air bubbles. Replace the filters if any irregularities are seen on the filter surface. Before filtration of each set of sample aliquots, prepare a blank filter by filtration of 50 mL of particle-free water. If aliquots of the same sample are filtered in order of increasing concentration, the glass filtration unit need not be washed between filtration. After completion of the filtration, do not allow the filtration funnel assembly to dry because contamination is then more difficult to remove. Wash any residual suspension from the filtration assembly by holding it under a flow of water, then rub the surface with a clean paper towel soaked in a detergent solution. Repeat the cleaning operation, and then rinse two times in particle-free water.

10.4.6 With the flask at atmospheric pressure, add 20 mL of particle-free water into the funnel. Cover the filter funnel with its plastic cover if the disposable filtering unit is used.

10.4.7 Briefly hand shake (3 s) the capped bottle with the sample suspension, then place it in a tabletop ultrasonic bath (7.12) and sonicate for 3.0 min. Maintain the water level in the sonicator at the same height as the solution in sample bottle. The ultrasonic bath shall be calibrated as described in 20.5. The ultrasonic bath must be operated at equilibrium temperature. After sonicating, return the sample bottle to the work surface of the HEPA hood. Preparation steps 10.4.8 through 10.4.14 shall be carried out in this hood.

10.4.8 Shake the suspension lightly by hand for 3 s, then let it rest for 2.0 min to allow large particles to settle to the bottom of the bottle or float to the surface.

10.4.9 Estimate the amount of liquid to be withdrawn to produce an adequate filter preparation. Experience has shown that a light staining of the filter surface will yield a suitable preparation for analysis. Filter at least 1.0 mL, but no more than half the total volume. If after examination in the TEM, the smallest volume measured (1.0 mL) (7.13) yields an overloaded sample, then perform additional serial dilutions of the suspension. If it is estimated that less than 1.0 mL of solution has to be filtered because of the density of the suspension, perform a serial dilution.

10.4.9.1 If serial dilutions are required, repeat step 10.4.8 before the serial dilution portion is taken. Do not re-sonicate the original solution or any serial dilutions. The recommended procedure for a serial dilution is to mix 10 mL of the sample solution with 90 mL of particle-free water in a clean sample bottle to obtain a 1:10 serial dilution. Follow good laboratory practices when performing dilutions.

10.4.10 Insert a new disposable pipette halfway into the sample suspension and withdraw a portion. Avoid pipetting any of the large floating or settled particles. Uncover the filter funnel and dispense the mixture from the pipette into the water in the funnel.

10.4.11 Apply vacuum to the flask and draw the mixture through the filter.

10.4.12 Discard the pipette.

10.4.13 Disassemble the filtering unit and carefully remove the sample filter with fine tweezers (7.11). Place the completed sample filter particle side up, into a precleaned, labeled, disposable, plastic petri dish (7.48) or other similar container.

10.4.14 In order to ensure that an optimally-loaded filter is obtained, it is recommended that filters be prepared from several different aliquots of the dust suspension. For this series of filters, it is recommended that the volume of each aliquot of the original suspension be a factor of five higher than the previous one. If the filters are prepared in order of increasing aliquot volume, all of the filters for one sample can be prepared using one plastic disposable filtration unit, or without cleaning of glass filtration equipment between individual filtration. Before withdrawal of each aliquot from the sample, shake the suspension without additional sonification and allow to rest for 2 min.

10.4.15 There are many practical methods for drying MCE filters. The following are two examples that can be used: (1) dry MCE filters for at least 12 h (over desiccant) in an airtight cabinet-type desiccator (7.21); (2) to shorten the drying time (if desired), remove a plug of the damp filter and attach it to a glass slide (7.19) as described in 12.1.2 and 12.1.3. Place the slide with a filter plug or filter plugs (up to eight plugs can be attached to one slide) on a bed of desiccant, in the desiccator for 1 h.

10.4.16 PC filters do not require lengthy drying before preparation, but shall be placed in a desiccator for at least 30 min before preparation.

10.5 Prepare TEM specimens from small sections of each dried filter using the appropriate direct transfer preparation method.

11. Blanks

11.1 Prepare sample blanks that include both a process blank (50 mL of particle-free water) for each set of samples analyzed and one unused filter from each new box of sample filters (MCE or PC) used in the laboratory. If glass filtering units are used, prepare and analyze a process blank each time the filtering unit is cleaned. Blanks will be considered contaminated, if after analysis, they are shown to contain more than 53 asbestos structures per square millimetre. This generally corresponds to three or four asbestos structures found in ten grid openings. The source of the contamination must be found before any further analysis can be performed. Reject samples that were processed along with the contaminated blanks and prepare new samples after the source of the contamination is found.

11.2 Prepare field blanks which are included with sample sets in the same manner as the samples, to test for contamination during the sampling, shipping, handling, and preparation steps of the method.

12. TEM Specimen Preparation of Mixed Cellulose Ester (MCE) Filters

NOTE 1—Use of either the acetone or the dimethylformamide-acetic acid method is acceptable.

12.1 *Acetone Fusing Method:*

12.1.1 Remove a section (a plug) from any quadrant of the sample and blank filters. Sections can be removed from the filters using a 7 mm cork borer (7.32). The cork borer must be wet wiped after each time a section is removed.

12.1.2 Place the filter section (particle side up) on a clean microscope slide. Affix the filter section to the slide with a gummed page reinforcement (7.43), or other suitable means. Label the slide with a glass scribing tool or permanent marker (7.10).

12.1.3 Prepare a fusing dish from a glass petri dish (7.37) and a metal screen bridge (7.38) with a pad of five to six ashless paper filters (7.42) and place in the bottom of the petri dish (4). Place the screen bridge on top of the pad and saturate the filter pads with acetone. Place the slide on top of the bridge in the petri dish and cover the dish. Wait approximately 5 min for the sample filter to fuse and clear.

12.2 *Dimethylformamide-Acetic Acid Method:*

12.2.1 Place a drop of clearing solution that consists of 35 % dimethylformamide (DMF), 15 % glacial acetic acid, and 50 % Type II water (v/v) on a clean microscope slide. Gauge the amount used so that the clearing solution just saturates the filter section.

12.2.2 Carefully lay the filter segment, sample surface upward, on top of the solution. Bring the filter and solution together at an angle of about 20° to help exclude air bubbles. Remove any excess clearing solution. Place the slide in an oven or on a hot plate, in a fume hood, at 65 to 70°C for 10 min.

12.3 Plasma etching of the collapsed filter is required.

12.3.1 The microscope slide to which the collapsed filter pieces are attached is placed in a plasma asher (7.27). Because plasma ashers vary greatly in their performance, both from unit to unit and between different positions in the asher chamber, it is difficult to specify the exact conditions that must be used. Insufficient etching will result in a failure to expose embedded fibers, and too much etching may result in the loss of particles from the filter surface. To determine the optimum time for ashing, place an unused 25 mm diameter MCE filter in the center of a glass microscope slide. Position the slide approximately in the center of the asher chamber. Close the chamber and evacuate to a pressure of approximately 40 Pa, while admitting oxygen to the chamber at a rate of 8 to 20 cm^3/min. Adjust the tuning of the system so that the intensity of the plasma is maximized. Determine the time required for complete oxidation of the filter. Adjust the system parameters to achieve complete oxidation of the filter in a period of approximately 15 min. For etching of collapsed filters, use these operating parameters for a period of 8 min. For additional information on calibration, see the *USEPA Asbestos-Containing Materials in Schools* (4) or *NIST/NVLAP Program Handbook for Airborne Asbestos Analysis* (6) documents.

12.3.2 Place the glass slide containing the collapsed filters into the low-temperature plasma asher, and etch the filter.

12.4 Carbon coating of the collapsed and etched filters is required.

12.4.1 Carbon coating must be performed with a high-vacuum coating unit (7.4), capable of less than 10^{-4} torr (13 MPa) pressure. Units that are based on evaporation of carbon filaments in a vacuum generated only by an oil rotary pump have not been evaluated for this application and shall not be used. Carbon rods (7.40) used for evaporators shall be sharpened with a carbon rod sharpener to a neck of about 4 mm in length and 1 mm in diameter. The rods are installed in the evaporator in such a manner that the points are approximately 100 to 120 mm from the surface of the microscope slide held in the rotating device.

12.4.2 Place the glass slide holding the filters on the rotation device, and evacuate the evaporator chamber to a vacuum of at least 13 MPa. Perform the evaporation in very short bursts, separated by 3 to 4 s to allow the electrodes to cool. An alternate method of evaporation is by using a slow continuous applied current. An experienced analyst can judge the thickness of the carbon film to be applied. Conduct tests on unused filters first. If the carbon film is too thin, large particles will be lost from the TEM specimen, and there will be few complete and undamaged grid openings on the specimen.

12.4.2.1 If the coating is too thick, it will lead to a TEM image that is lacking in contrast, and the ability to obtain electron diffraction patterns will be compromised. The carbon film shall be as thin as possible and still remain intact on most of the grid openings of the TEM specimen.

12.5 *Preparation of the Jaffe Washer*—The precise design of the Jaffe washer is not considered important, so any one of the published designs may be used (7, 8). One such washer consists of a simple stainless steel bridge contained in a glass petri dish.

12.5.1 Place several pieces of lens tissue (7.41) on the stainless steel bridge. The pieces of lens tissue shall be large enough to completely drape over the bridge and into the solvent. In a fume hood, fill the petri dish with acetone (or DMF) until the height of the solvent is brought up to contact the underside of the metal bridge as illustrated in Fig. 2.

12.6 *Placing the Specimens into the Jaffe Washer:*

12.6.1 Place the TEM grids (7.39) shiny side up on a piece of lens tissue or filter paper so that individual grids can be easily picked up with tweezers.

12.6.2 Prepare three grids from each sample.

12.6.2.1 Using a curved scalpel blade (7.20), excise at least two square (3 mm by 3 mm) pieces of the carbon-coated MCE filter from the glass slide.

12.6.2.2 Place the square filter piece carbon-side up on top of a TEM specimen grid.

12.6.2.3 Place the whole assembly (filter/grid) on the saturated lens tissue in the Jaffe washer.

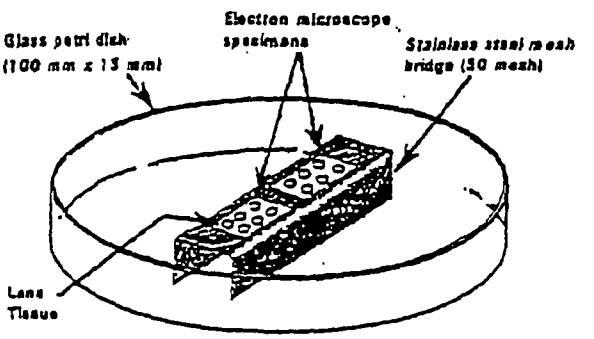

FIG. 2 Example of Design of Solvent Washer (Jaffe Washer)

12.6.2.4 Place the three TEM grid sample filter preparations on the same piece of lens tissue in the Jaffe washer.

12.6.2.5 Place the lid on the Jaffe washer and allow the system to stand for several hours.

12.7 Alternately, place the grids on a low level (petri dish filled to the ⅛ mark) DMF Jaffe washer for 60 min. Add enough solution of equal parts DMF/acetone to fill the washer to the screen level. Remove the grids after 30 min if they have cleared, that is, all filter material has been removed from the carbon film, as determined by inspection in the TEM.

12.8 Carefully remove the grids from the Jaffe washer, allowing the grids to dry before placing them in a clean marked grid box.

13. TEM Specimen Preparation of Polycarbonate (PC) Filter

13.1 Cover the surface of a clean microscope slide with two strips of double-sided adhesive tape.

13.2 Cut a strip of filter paper slightly narrower than the width of the slide. Position the filter paper strip on the center of the length of the slide.

13.3 Using a clean, curved scalpel blade, cut a strip of the PC filter approximately 25 by 6 mm. Use a rocking motion of the scalpel blade to avoid tearing the filter. Place the PC strip particle side up on the slide perpendicular to the long axis of the slide. The ends of the PC strip must contact the double sided adhesive tape. Each slide can hold several PC strips. With a glass marker, label each PC strip with the individual sample number.

13.4 Carbon coat the PC filter strips as discussed in 12.4.2. PC filters do not require etching.

NOTE 2: Caution—Do not overheat the filter sections while carbon coating.

13.5 Prepare a Jaffe washer as described in 12.5, but fill the washer with chloroform or 1-methyl-2-pyrrolidone to the level of the screen.

13.6 Using a clean curved scalpel blade, excise three, 3-mm square filter pieces from each PC strip. Place the filter squares carbon side up on the shiny side of a TEM grid. Pick up the grid and filter section together and place them on the lens tissue in the Jaffe washer.

13.7 Place the lid on the Jaffe washer and rest the grids in place for at least 4 h. Best results are obtained with longer wicking times, up to 12 h.

13.8 Carefully remove the grids from the Jaffe washer, allowing the grids to dry before placing them in a clean, marked grid box.

14. Grid Opening Measurements

14.1 TEM grids must have a known grid opening area. Determine this area as follows:

14.2 Measure at least 20 grid openings in each of 20 random 75 to 100 μm (200-mesh) copper grids for a total of 400 grid openings for every 1000 grids used, by placing the 20 grids on a glass slide and examining them under the optical microscope. Use a calibrated graticule to measure the average length and width of the 20 openings from each of the individual grids. From the accumulated data, calculate the average grid opening area of the 400 openings.

14.3 Grid area measurements can also be made at the TEM at a calibrated screen magnification of between 15 000 and 20 000X. Typically measure one grid opening for each grid examined. Measure grid openings in both the x and y directions and calculate the area.

14.4 Pre-calibrated TEM grids are also acceptable for this test method.

15. TEM Method

15.1 Microscope settings: 80 to 120 kV, 15 000 to 20 000X screen magnification for analysis (7.2).

15.2 Analyze two grids for each sample. Analyze one-half of the sample area on one sample grid preparation and the remaining half on a second sample grid preparation.

15.3 *Determination of Specimen Suitability:*

15.3.1 Carefully load the TEM grid, carbon side facing up (in the TEM column) with the grid bars oriented parallel/perpendicular to the length of the specimen holder. Use a hand lens or loupe, if necessary. This procedure will line up the grid with the X and y translation directions of the microscope. Insert the specimen holder into the microscope.

15.3.2 Scan the entire grid at low magnification (250X to 1000X) to determine its suitability for high magnification analysis as specified in 15.3.3.

15.3.3 Grids are acceptable for analysis if the following conditions are met:

15.3.3.1 The fraction of grid openings covered by the replica section is at least 50 %.

15.3.3.2 Relative to that section of the grid covered by the carbon replica, the fraction of intact grid openings is greater than 50 %.

15.3.3.3 The fractional area of undissolved filter is less than 10 %.

15.3.3.4 The fraction of grid openings with overlapping or folded replica film is less than 50 %.

15.3.3.5 At least 20 grid openings that have no overlapping or folded replica, are less than 5 % covered with holes and have less than 5 % opaque area due to incomplete filter dissolution.

15.4 *Determination of Grid Opening Suitability:*

15.4.1 If the grid meets acceptance criteria, choose a grid opening for analysis from various areas of the grid so that the entire grid is represented. Determine the suitability of each individual grid opening prior to the analysis.

15.4.2 The individual grid opening must have less than 5 % holes over its area.

15.4.3 Grid openings must be less than 25 % covered with particulate matter.

15.4.4 Grid openings must be uniformly loaded.

15.5 Observe and record the orientation of the grid at 80 to 150X, on a grid map record sheet along with the location of the grid openings that are examined for the analysis. If indexed grids are used, a grid map is not required, but the identifying coordinates of the grid square must be recorded.

16. Recording Data Rules

16.1 Record on the count sheet any continuous grouping of particles in which an asbestos fiber is detected. Classify asbestos structures as fibers, bundles, clusters, or matrices as defined in 5.2.

16.2 Use the criteria for fiber, bundle, cluster, and matrix identification, as described in the *USEPA Asbestos-Containing*

Materials in Schools document (4). Record, for each AHERA structure identified, the length and width measurements.

16.3 Record NSD (No Structures Detected) when no structures are detected in the grid opening.

16.4 Identify structures classified as chrysotile identified by either electron diffraction or X-ray analysis (7.3) and recorded on a count sheet. Verify at least one out of every ten chrysotile structures by X-ray analysis.

16.5 Structures classified as amphiboles by X-ray analysis and electron diffraction are recorded on the count sheet. For more information on identification, see Yamate, et al, (7) or Chatfield and Dillon (8).

16.6 Record a typical electron diffraction pattern for each type of asbestos observed for each group of samples (or a minimum of every five samples) analyzed. Record the micrograph number on the count sheet. Record at least one X-ray spectrum for each type of asbestos observed per sample. Attach the print-outs to the back of the count sheet. If the X-ray spectrum is stored, record the file and disk number on the count sheet.

16.7 *Counting Rules:*

16.7.1 At a screen magnification of between 15 000 and 20 000X evaluate the grids for the most concentrated sample loading; reject the sample if it is estimated to contain more than 50 asbestos structures per grid opening. Proceed to the next lower concentrated sample until a set of grids are obtained that have less than 30 asbestos structures per grid opening.

16.8 *Analytical Sensitivity*—An analytical sensitivity of approximately 1000 asbestos structures per square centimetre (calculated for the detection of a single asbestos structure) has been designed for this analysis. This sensitivity can be achieved by increasing the amount of liquid filtered, increasing the number of grid openings analyzed, or decreasing the size of the final filter. Occasionally, due to high particle loadings or high asbestos concentration, this analytical sensitivity cannot be practically achieved and stopping rules apply.

16.9 *Limit of Detection*—The limit of detection for this method is defined as, at a minimum, the counting of four asbestos structures during the TEM analysis. If less than four asbestos structures are counted during the analysis then the analytical result which will be reported will be less than the limit of detection and a "less than" sign (<) will appear before the number. All data shall be provided in the laboratory report.

16.10 *Stopping Rules:*

16.10.1 The analysis is stopped upon the completion of the grid square that achieves an analytical sensitivity of less than 1000 asbestos structures per square centimetre.

16.10.2 If an analytical sensitivity of 1000 asbestos structures per square centimetre cannot be achieved after analyzing ten grid openings then stop on grid opening No. 10 or the grid opening which contains the 100th asbestos structure, whichever comes first. A minimum of four grid squares shall be analyzed for each sample.

16.10.2.1 If the analysis is stopped because of the 100th structure rule, the entire grid square containing the 100th structure must be counted.

16.11 After analysis, remove the grids from the TEM, and replace them in the appropriate grid storage holder.

17. Sample Storage

17.1 The washed-out sample cassettes can be discarded after use.

17.2 Sample grids and unused filter sections (7.18) must be stored for a minimum of one year.

18. Reporting

18.1 Report the following information for each dust sample analyzed:

18.1.1 Concentration in structures/cm^2.

18.1.2 The analytical sensitivity.

18.1.3 Types of asbestos present.

18.1.4 Number of asbestos structures counted.

18.1.5 Effective filtration area.

18.1.6 Average size of the TEM grid openings that were counted.

18.1.7 Number of grid openings examined.

18.1.8 Sample dilution used.

18.1.9 Area of the surface sampled.

18.1.10 Listing of size data for each structure counted.

18.1.11 A copy of the TEM count sheet or a complete listing of the raw data. An example of a typical count sheet is shown in Appendix X1.

18.2 Determine the amount of asbestos in any accepted sample using the following formula:

$$\frac{EFA \times 100\ mL \times \#STR}{GO \times GOA \times V \times SPL} = \text{asbestos structures/cm}^2 \qquad (1)$$

where:

$\#STR$ = number of asbestos structures counted,

EFA = effective filter area of the final sampling filter, mm^2,

GO = number of grid openings counted,

GOA = average grid opening area, mm^2,

SPL = surface area sampled, cm^2, and

V = volume of sample filtered in step 10.4.9, representing the actual volume taken from the original 100 mL suspension, mL.

19. Quality Control/Quality Assurance

19.1 In general, the laboratory's quality control checks are used to verify that a system is performing according to specifications regarding accuracy and consistency. In an analytical laboratory, spiked or known quantitative samples are normally used. However, due to the difficulties in preparing known quantitative asbestos samples, routine quality control testing focuses on re-analysis of samples (duplicate recounts).

19.1.1 Re-analyze samples at a rate of 1/10 of the sample sets (one out of every ten samples analyzed not including laboratory blanks). The re-analysis shall consist of a second sample preparation obtained from the final filter.

19.2 In addition, quality assurance programs must follow the criteria shown in the *USEPA Asbestos-Containing Materials in Schools* document (4) and in the *NIST/NVLAP Program Handbook for Airborne Asbestos Analysis* document (6). These documents describe sample custody, sample preparation, blank checks for contamination, calibration, sample analysis, analyst qualifications, and technical facilities.

20. Calibrations

20.1 Perform calibrations of the instrumentation on a

regular basis, and retain these records in the laboratory, in accordance with the laboratory's quality assurance program.

20.2 Record calibrations in a log book along with dates of calibration and the attached backup documentation.

20.3 A calibration list for the instrument is as follows:

20.3.1 *TEM:*

20.3.1.1 Check the alignment and the systems operation. Refer to the TEM manufacturer's operational manual for detailed instructions.

20.3.1.2 Calibrate the camera length of the TEM in electron diffraction (ED) operating mode before ED patterns of unknown samples are observed. Camera length can be measured by using a carbon coated grid on which a thin film of gold has been sputtered or evaporated. A thin film of gold is evaporated on the specimen TEM grid to obtain zone-axis ED patterns superimposed with a ring pattern from the polycrystalline gold film. In practice, it is desirable to optimize the thickness of the gold film so that only one or two sharp rings are obtained on the superimposed ED pattern. Thick gold films will tend to mask weak diffraction spots from the fibrous particles. Since the unknown d-spacings of most interest in asbestos analysis are those which lie closest to the transmitted beam, multiple gold rings from thick films are unnecessary. Alternatively, a gold standard specimen can be used to obtain an average camera constant calculated for that particular instrument and can then be used for ED patterns of unknowns taken during the corresponding period.

20.3.1.3 Perform magnification calibration at the fluorescent screen. This calibration must be performed at the magnification used for structure counting. Calibration is performed with a grating replica (7.47) (for example, one containing at least 2160 lines/mm).

(*a*) Define a field of view on the fluorescent screen. The field of view must be measurable or previously inscribed with a scale or concentric circles (all scales should be metric).

(*b*) Frequency of calibration will depend on the service history of the particular microscope.

(*c*) Check the calibration after any maintenance of the microscope that involves adjustment of the power supply to the lens or the high voltage system or the mechanical disassembly of the electron optical column (apart from filament exchange).

(*d*) The analyst must ensure that the grating replica is placed at the same distance from the objective lens as the specimen.

(*e*) For instruments that incorporate a eucentric tilting specimen stage, all specimens and the grating replica must be placed at the eucentric position.

20.3.1.4 The smallest spot size of the TEM must be checked.

(*a*) At the crossover point, photograph the spot size at a screen magnification of 15 000 to 20 000X. An exposure time of 1 s is usually adequate.

(*b*) The measured spot size must be less than or equal to 250 nm.

20.4 *EDXA:*

20.4.1 The resolution and calibration of the EDXA must be verified.

20.4.1.1 Collect a standard EDXA Cu peak from the Cu [illegible] channel number for the Cu peak and be certain that readings are within ±10 eV.

20.4.2 Collect a standard EDXA of crocidolite asbestos (NIST SRM 1866).

20.4.2.1 The elemental analysis of the crocidolite must resolve the Na peak.

20.4.3 Collect a standard EDXA of chrysotile asbestos.

20.4.3.1 The elemental analysis of chrysotile must resolve both Si and Mg on a single chrysotile fiber.

20.5 Ultrasonic bath calibration shall be performed as follows:

20.5.1 Fill the bath water to a level equal to the height of suspension in the glass sample container that will be used for the dust analysis. Operate the bath until the water reaches the equilibrium temperature.

20.5.2 Place 100 mL of water (at approximately 20°C) in another 200-mL glass sample container, and record its temperature.

20.5.3 Place the sample container in the water in the ultrasonic bath (with the power turned off). After 60 s, remove the glass container and record its temperature.

20.5.4 Place 100 mL of water (at approximately 20°C) in another 200-mL glass sample container, and record its temperature.

20.5.5 Place the second sample container into the water in the ultrasonic bath (with the power turned on). After 60 s, remove the glass container and record its temperature.

20.5.6 Calculate the rate of energy deposition into the sample container using the following formula:

$$R = 4.185 \times \sigma \times \rho \times \frac{(\theta_2 - \theta_1)}{t} \qquad (2)$$

where:

4.185 = Joules/cal,

R = energy deposition, watts/mL,

θ_1 = temperature rise with the ultrasonic bath not operating, °C,

θ_2 = temperature rise with the ultrasonic bath operating, °C,

t = time in seconds, 60 s (20.5.3 and 20.5.5),

σ = specific heat of the liquid in the glass sample container, 1.0 cal/g, and

ρ = density of the liquid in the glass sample container, 1.0 g/cm^3.

20.5.7 Adjust the operating conditions of the bath so that the rate of energy deposition is in the range of 0.08 to 0.12 MW/m^3, as defined by this procedure.

21. Precision and Bias

21.1 *Precision*—The precision of the procedure in this test method is being determined using round robin data from participating laboratories.

21.2 *Bias*—Since there is no accepted reference material suitable for determining the bias of the procedure in this test method, bias has not been determined (see Specification D 3670).

NOTE 3—Round robin data is under development and will be presented as a research report.

22. Keywords

22.1 asbestos; microvacuuming; settled dust; TEM

APPENDIX

(Nonmandatory Information)

X1. DUST SAMPLE ANALYSIS

X1.1 See Figs. X1.1 and X1.2 for the dust analysis worksheet and the TEM count sheet.

DUST SAMPLE ANALYSIS

Client:		Accelerating Voltage:	
Sample ID:		Indicated Mag:	KX
Job Number:		Screen Mag:	KX
Date Sample Analyzed:	- -	Microscope:	1 2 3 4 5
Number of Openings/Grids Counted:		Filter Type:	
Grid Accepted, 600X:	Yes No	Filter Size:	
Percent Loading:	%	Filter Pore Size (μm):	
Grid Box #1:		Grid Opening:	1) μm x μm
			2) μm x μm

Analyst: _____

Reviewer: _____ Counting Rules: AHERA LEVEL II

Calculation Data:

Effective Filter Area in mm^2:	(EFA)	
Number of Grid Openings Counted:	(GO)	
Avderage Grid Opening Area in mm^2:	(GOA)	
Volume of sample Filtered in ml:	(V)	
Surface area Sampled in cm^2:	(SPL)	
Number of Asbestos Structures Counted:*	(#STR)	

* If the number of asbestos structures counted is less than or equal to 4, enter 4 structures as the limit of detection here.

FORMULA FOR CALCULATION OF ASBESTOS STRUCTURES "DUST" PER CM^2:

$$\frac{EFA \times 100 \times \#STR}{GO \times GOA \times V \times SPL} = \text{(Asbestos Structures per } cm^2\text{)}$$

Results for Total Asbestos Structures: _____ (Structures per cm^2)

Results for Structures ≥ microns: _____ (Structures per cm^2)

FIG. X1.1 Dust Sample Analysis Work Sheet

D 5755

Job Number: _____

Structure #	Grid # Square #	Type	Structure	Length Microns	Width Microns	Confirmation		
						Morph.	SAED	EDS

Note: Keys to Abbreviations Used in Figure:

Type:			Structure:			Others:		
C	=	Chrysotile	F	=	Fiber	NSD	=	No Structures Detected
AM	=	Amosite	B	=	Bundle	Morph	=	Morphology
CR	=	Crocidolite	C	=	Cluster	SAED	=	Selected Area Electron Diffraction
AC	=	Actinolite	M	=	Matrix	EDS	=	Energy Dispersive X-Ray Spectroscopy
TR	=	Tremolite				ER	=	Inter-Row Spacing
AN	=	Anthophyllite				NP	=	No Pattern
N	=	Non Asbestos						

FIG. X1.2 TEM Count Sheet

REFERENCES

(1) Steel, E. and Wylie, A., "Mineralogical Characteristics of Asbestos," in *Geology of Asbestos Deposits*, Riordon, P. H., Ed., SME-AIME, 1981, pp. 93–101.

(2) Zussman, J., "The Mineralogy of Asbestos," in *Asbestos: Properties, Applications and Hazards*, John Wiley and Sons, 1979, pp. 45–67.

(3) Leake, B. E., "Nomenclature of Amphiboles," *American Mineralogist*, Vol 63, 1978, pp. 1023–1052.

(4) "*USEPA Asbestos-Containing Materials in Schools: Final Rule and Notice*," *Federal Register*, 40 CFR Part 763, Appendix A to Sub-part E, Oct. 30, 1987.

(5) OSHA, *OSHA Technical Manual, OSHA Instruction CPL 2-20B*, Directorate of Technical Support, U.S. Department of Labor, Washington, DC 20210, Feb. 5, 1990, pp. 1–8 to 1–11.

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Appendix D
Field Logbook Notes, Sample Data Sheets, and Analytical Data Sheets, Dust Sampling
May 2002

LIBBY MONTANA FIELD SAMPLE DATA SHEET

DUST

Scenario No.: NA Field Logbook No: 100054 Page No: 86 Sampling Date: 5/2/02

Address: 875 Hwy 2 S Owner/Tenant: Stimson Lumber

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Sampling Team: (PES) CDM Other ____ Names: Greg Parana Jim Henderson

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	1-06850	1-06857	1-06858
Location ID	AD-000667	AD-000667	AD-000667
Sample Group	Shed	Shed	~~Shed~~ Blank JP 5/2/02
Location Description	Concrete Floor	Standing wood, debris removed from walls	Blank
Category (circle)	(FS) Blank	(FS) Blank	FS (Blank)
Matrix Type (circle)	(Building), Vehicle, NA Other ____	(Building), Vehicle, NA Other ____	Building, Vehicle (NA) Other ____
Vermiculite Present? (circle)	Yes (No)	Yes (No)	Yes No
Will samples be archived due to presence of vermiculite? (circle)	Yes (No)	[illegible] (No)	Yes No
Sample Area (cm^2) (circle)	300	300	300
Filter Diameter (circle)	(25mm) 37mm	(25mm) 37mm	25mm 37mm
Pore Size (circle)	(TEM-.45) PCM-.08	(TEM-.45) PCM-.08	TEM-.45 PCM-.08
Flow Meter Type (circle)	(Rotometer) Dry-Cal	(Rotometer) Dry-Cal	Rotometer Dry-Cal
Pump ID Number	~~034719~~ 512856 JP 5/2/02	602077	JP 5/2/02
Flow Meter ID No.	034719	034719	
Start Date	5/2/02	5/2/02	
Start Time	1306 1308 1310	1301 1309 1311	
Start Flow (L/min)	2.05	2.05	
Stop Date	5/2/02	5/2/02	
Stop Time	1308 1310 1312	1309 1311 1313	
Stop Flow (L/min)	2.05	2.05	
Pump fault? (circle)	(No) Yes	(No) Yes	No Yes
Field Comments	100 cm^2 - Center of main section 100 cm^2 - West end of main 100 cm^2 - West room, center of floor	100 cm^2 - top of wood piles at East end of main 100 cm^2 - top of wood pile @ West end of main. 100 cm^2 - South wall, west room on ground level behind stat beam	100 cm^2 100 cm^2 100 cm^2
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Location 875 Hwy 2 S. Date 5/2/02

Project / Client: Stimson Lumber / CDM / VOLPE

PES - Greg Tarana Jim Henderson

1300 Arrived on site for Phase I Sampling, Partly cloudy, windy, 50°F. Upon arrival we met with Richard Shimer who drove us to the former nursery site for St. Regis, where the shed to be sampled was located. Richard is the Central Services Mgr. We sampled the concrete floor, standing wood, debris removed from walls, all inside the building. Reference FSDS # D001029, 001028, COC # 002519.

1306 1-06850 collected

1307 1-06857 ↓

Blanks 1-06849, 1-06858

James Henderson 5/2/02

Chain of [illegible]tody Record | Libby Asbest[illegible]vestigation | 002519

U.S. Environmental Protection Agency, Region VIII
999 18th Street, Suite 300
Denver, CO 80202-2413

Send to: EMSL [illegible] 5/6/02
[illegible]

via: ☐ hand delivery ☑ shipped 5/6/02

Project (circle 1): Phase I Phase II Removal Action

Sample Placed in Cooler/Bag	Index ID	Sample Date	Sample Time	Sample Matrix (S=Soil; W=Waste; D=Dust; A=Air; B=Bulk Insulation)	Sample Type (G=Grab; C=Composite)	Volume (L)	Analysis Request*	Comments	Sample Received by Lab
☐	1-06347	5/3/02	N/A	D	N/A	300	ISO-10312		☑
☐	1-06348					↓			☑
☑	1-06349					0			☑
☐	1-06350					300			☑
☑	1-06357					↓			☑
☐	1-06358	↓	↓	↓	↓	0	↓	Archive	☑
☐									☐
☐									☐
☐									☐
☐									☐

*Phase I: Air: preparation method EPA/540/2-90/005a, analytical method ISO 10312. Dust: preparation method ASTM D5755-95, analytical method ISO 10312. Solid PLM: preparation and analysis by ISSI-LIBBY-01/NIOSH 9002. Soil IR: preparation and analysis method ISSI-LIBBY-02. Soil TEM: preparation method EPA/540/R-97/028, analytical method ISSI-LIBBY-01/ISO 10312.
Phase II: Personal Air, Stationary Air, and Dust Samples: PCM (by NIOSH 7400), TEM (by Modified ISO 10312 – Phase 2 QAPP, approved 2/01), or TEM (AHERA) method. Bulk Insulation and Soil: PLM.

Total Number of Samples 6

END OF SUBMITTAL

Additional Comments: 24 hour TAT 5/6/02 & 3-day TAT

Relinquished by (Signature and Company)	Date/Time	Received by (Signature and Company)	Date/Time	Sample Condition upon Receipt
[signature] PES	1235 5/3/02	[signature] COM	1235 5/3/02	Sample/C
[signature] COM	5/4/02 5/6/02 5/3/02-1235	1337 [signature]	5/6/02	[illegible]

March 20, 2002 Copies: Pink - Retained by sampler; Yellow - Retained by laboratory; White - Included in analytical report

Stimson Lumber
Concrete Floor

USEPA REGION 8 LIBBY SITE INVESTIGATION

TEM Asbestos Structure Count – ISO 10312

SAMPLE ID	Analyzed	PARAMETERS		
EPA Sample Number	1-06850	Effective filter area	1295.0	mm2
Lab Sample Number	270200044-0004	Indirect factor	6.25E-02	
Sample Type	Dust	Number of Grid Openings	10	
Category	Field	Grid opening area	0.0059	mm2
Prep	Indirect	Volume (L) or Area (cm2)	300	cm2
Counting Rules	10312	Sensitivity	1.17E+03	s/cm2

COUNTS

Class	LA	OA	C	PCME
a	0	0	0	
b	0	0	0	
c	0	0	0	
d	0	0	0	
e	0	0	0	
f	0	0	0	
Total	0	0	0	0
Check	OK	OK	OK	
Grand total	0	OK		

LOADING (s/cm2)

Class	LA	OA	C	PCME
a	<DL	<DL	<DL	
b	<DL	<DL	<DL	
c	<DL	<DL	<DL	
d	<DL	<DL	<DL	
e	<DL	<DL	<DL	
f	<DL	<DL	<DL	
Total	<DL	<DL	<DL	<DL

RISK (air only)

Class	LA	OA	C	PCME
a				
b				
c				
d				
e				
f				
Total				

Toxicity factors

Berman and Crump Feb 15, 1999

Type	Amphiboles		Chrysotile	
length (um)	5-10	>10	5-10	>10
Unit Risk (f/cc)-1	5.74E-02	1.89E+01	2.20E-03	6.86E-01

IRIS (PCME)

Unit Risk (f/cc)-1	0.23

Type	Class	Length	Width	Aspect ratio
LA = Libby-type amphibole	a			<5
OA = Other amphibole	b	<.5		>= 5
C = Chrysotile	c		>.5	>= 5
	d	>=.5 to < 5	<=.5	>= 5
	e	5 to 10	<=.5	>= 5
	f	>10	<=.5	>= 5

Timber lumber
standing wood debris
removed from walls

USEPA REGION 8 LIBBY SITE INVESTIGATION
TEM Asbestos Structure Count – ISO 10312

SAMPLE ID	Analyzed
EPA Sample Number	1-06857
Lab Sample Number	270200044-0005
Sample Type	Dust
Category	Field
Prep	Indirect
Counting Rules	10312

PARAMETERS	
Effective filter area	1295.0 mm2
Indirect factor	6.25E-02
Number of Grid Openings	10
Grid opening area	0.0059 mm2
Volume (L) or Area (cm2)	300 cm2
Sensitivity	1.17E+03 s/cm2

COUNTS

Class	LA	OA	C	PCME
a	0	0	1	
b	0	0	0	
c	0	0	0	
d	5	0	6	
e	1	0	1	
f	0	0	0	
Total	6	0	8	3
Check	OK	OK	OK	
Grand total	14	OK		

LOADING (s/cm2)

Class	LA	OA	C	PCME
a	<DL	<DL	1.17E+03	
b	<DL	<DL	<DL	
c	<DL	<DL	<DL	
d	5.85E+03	<DL	7.02E+03	
e	1.17E+03	<DL	1.17E+03	
f	<DL	<DL	<DL	
Total	7.02E+03	<DL	9.36E+03	3.51E+03

RISK (air only)

Class	LA	OA	C	PCME
a				
b				
c				
d				
e				
f				
Total				

Toxicity factors

Berman and Crump Feb 15, 1999

Type	Amphiboles		Chrysotile	
length (um)	5-10	>10	5-10	>10
Unit Risk (f/cc)-1	5.74E-02	1.89E+01	2.20E-03	6.86E-01

IRIS (PCME)

Unit Risk (f/cc)-1	0.23

Type	Class	Length	Width	Aspect ratio
LA = Libby-type amphibole	a			<5
OA = Other amphibole	b	<.5		>= 5
C = Chrysotile	c		>.5	>= 5
	d	>=.5 to < 5	<=.5	>= 5
	e	5 to 10	<=.5	>= 5
	f	>10	<=.5	>= 5

Phase 1 Air, Dust, Water

												ISO Concentrations (Air = structures/cc)(Dust = structures/cm²)																	
												Actinolite						Chrysotile						Other Amphiboles					
												Excluded Structures			Structures Detected			Excluded Structures			Structures Detected			Excluded Structures			Structures Detected		
Sample ID	Scenario	Task	Property Group (Location)	Sample Group	Location Description (Sub Location)	Media Type	Matrix	Sample Type	Category	Date	Grid Openings	Aspect Ratio < 5:1	Length < 0.5 u	Diameter > 0.5u	Length 0.5 to 5 u	Length 5 to 10 u	Length > 10 u	Aspect Ratio < 5:1	Length < 0.5 u	Diameter > 0.5u	Length 0.5 to 5 u	Length 5 to 10 u	Length > 10 u	Aspect Ratio < 5:1	Length < 0.5 u	Diameter > 0.5u	Length 0.5 to 5 u	Length 5 to 10 u	Length > 10 u
1-06850	N/A		875 Highway 2 South	Shed	Concrete floor	Dust	Building		Field Sample	5/2/2002	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-06857	N/A		875 Highway 2 South	Shed	Standing wood, debris removed from walls	Dust	Building		Field Sample	5/2/2002	10	0	0	0	5853.107	1170.621	0	1295	0	0	7770	1295	0	0	0	0	0	0	0

IndexID values: IN ('1-06850','1-06857')

ote: The report excludes all Lab QC results, such as those associated with Lab Blanks, Lab Duplicates, Re-Preparation, Re-count Same, Re-count Different, Verified Analysis, etc.

													ISO Concentrations (Air = structures/cc)(Dust = structures/cm²) (METHOD - ISO 10312)																				
													Libby Amphiboles (LA)								Chrysotile (C)							Other Amphiboles (OA)							
													Excluded Structures			Structures Detected					Excluded Structures			Structures Detected				Excluded Structures			Structures Detected				
Sample ID	Property Group (Location)	Sample Group	Location Description (Sub Location)	Media Type	Matrix	Sample Type	Category	Pre Post Clear	Vol (air=L)/ Area (dust=cm²)	Sample Date	Grid Open Ings	Filter Status Non Analyzed	Aspect Ratio < 5:1	Length < 0.5 u	Dia-meter > 0.5u	Length 0.5 to 5 u	Length 5 to 10 u	Length > 10 u	Total Conc. LA	Total Count LA	Aspect Ratio < 5:1	Length < 0.5 u	Dia-meter > 0.5u	Length 0.5 to 5 u	Length 5 to 10 u	Length > 10 u	Total Conc. C	Total Count C	Aspect Ratio < 5:1	Length < 0.5 u	Dia-meter > 0.5u	Length 0.5 to 5 u	Length 5 to 10 u	Length > 10 u	Total Conc. OA	Total Count OA
1-06850	875 Highway 2 S - Stimson Lumber	Shed	Concrete floor	Dust	Building		Field Sample	N/A	300	5/2/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1-06857	875 Highway 2 S - Stimson Lumber	Shed	Standing wood debris removed from walls	Dust	Building		Field Sample	N/A	300	5/2/2002	10		0	0	0	5,853	1,171	0	7,024	6	1,295	0	0	7,770	1,295	0	10 360	8	0	0	0	0	0	0	0	0

Criteria:

Appendix E
Field Logbook Notes, Sample Data Sheets, and Analytical Data Sheets, Air and Dust Sampling
September 2002

Sheet No.: P-000004

LIBBY MONTANA FIELD SAMPLE DATA SHEET

PERSONAL AIR

Scenario No.: NA Field Logbook No: 100117 Page No: 14-17 Sampling Date: 9/10/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Sampling Team: PES CDM Other _____ Names: PETRAK/REPINE

Land Use: Residential School Commercial Mining Roadway Other ( )

Person Sampled: WILFRED JOHNSON SSN: ask: MECHANIC

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	SL- 00002	SL- 00008	SL- 00011
Location ID	BD- 002098	BD-002098	BD-002098
Sample Group	BUILDING	BUILDING	BUILDING
Location Description	SHOULDER	SHOULDER	SHOULDER
Category (circle)	FS Blank Rep_____	FS Blank Rep_____	FS Blank Rep_____
Matrix Type (circle)	Indoor Outdoor NA	Indoor Outdoor NA	Indoor Outdoor NA
Filter Diameter (circle)	25mm 37mm	25mm 37mm	25mm 37mm
Pore Size (circle)	TEM- .45 PCM- 0.8	TEM- .45 PCM- 0.8	TEM- .45 PCM- 0.8
Flow Meter Type (circle)	Rotometer DryCal	Rotometer DryCal	Rotometer DryCal
Pump ID Number	626753	602608	626753
Flow Meter ID No.	34719	34719	34719
Start Date	9/10/02	9/10/02	9/10/02
Start Time	0707	0912	1239
Start Flow (L/min)	2.03	2.03	2.03
Stop Date	9/10/02	9/10/02	9/10/02
Stop Time	1158	0943	1523
Stop Flow (L/min)	2.03	2.03	2.03
Pump fault?	No Yes	No Yes	No Yes
MET Station onsite?	No Yes	No Yes	No Yes
Sample Type	TWA EXC NA	TWA EXC NA	TWA EXC NA
Field Comments	291 min x 2.03 LPM = 591 L mechanic also worked outdoors.	~~Installing~~ 9/10/02 Working on brake pads - front brakes Ford pickup, grinding, parts cleaner 31 min, 63 L	164 min x 2.03 LPM = 333 L
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

JP 9/10/02

v.02.1.3.2

Sheet No.: P- 000085

LIBBY MONTANA FIELD SAMPLE DATA SHEET
PERSONAL AIR

Scenario No.: NA Field Logbook No: 100117 Page No: 14-17 Sampling Date: 9/10/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Sampling Team: (PES) CDM Other ____ Names: PETRAK/REPINE

Land Use: Residential School Commercial Mining Roadway Other ( )

Person Sampled: GLENN L. GARRISON SSN: Task: MECHANIC

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	SL- 00003	SL- 00007	SL- 00012
Location ID	BD-002098	BD-002098	BD-002098
Sample Group	BUILDING	BUILDING	BUILDING
Location Description	SHOULDER	SHOULDER	SHOULDER
Category (circle)	(FS) Blank Rep____	(FS) Blank Rep____	(FS) Blank Rep____
Matrix Type (circle)	(Indoor) Outdoor NA	(Indoor) Outdoor NA	(Indoor) Outdoor NA
Filter Diameter (circle)	(25mm) 37mm	(25mm) 37mm	(25mm) 37mm
Pore Size (circle)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)
Flow Meter Type (circle)	(Rotometer) DryCal	(Rotometer) DryCal	(Rotometer) DryCal
Pump ID Number	602598	626509	602598
Flow Meter ID No.	34719	34719	34719
Start Date	9/10/02	9/10/02	9/10/02
Start Time	0708	1022	1237
Start Flow (L/min)	2.03	2.03	2.03
Stop Date	9/10/02	9/10/02	9/10/02
Stop Time	1200	1052	1524
Stop Flow (L/min)	2.03	2.03	2.03
Pump fault?	(No) Yes	(No) Yes	(No) Yes
MET Station onsite?	(No) Yes	(No) Yes	(No) Yes
Sample Type	(TWA) EXC NA	TWA (EXC) NA	(TWA) EXC NA
Field Comments	292 min x 2.03 LPM 593 L	mechanic ~~changed~~ air filter on heavy equip, repaired hydraulics on excavator. 30 min, 61 L	167 min x 2.03 LPM = 339 L
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

√ 9/10/02

SS 021302

Sheet No.: P-000086

LIBBY MONTANA FIELD SAMPLE DATA SHEET
PERSONAL AIR

Scenario No.: NA Field Logbook No: 100117 Page No: 14-17 Sampling Date: 9/10/02

Address: 875 HIGHWAY 2, ~~STIMSON~~ SOUTH map 9/10/02 Owner/Tenant: STIMSON LUMBER

Sampling Team: PES CDM Other _____ Names: PETRAIC/REPINE

Land Use: Residential School Commercial Mining Roadway Other ( )

Person Sampled: AARON BROWN SSN: _____ Task: FJ UTILITY

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	SL- 00001	SL- 00004	SL- 00009
Location ID	BD- 002097	BD-002097	BD-002097
Sample Group	BUILDING	BUILDING	BUILDING
Location Description	SHOULDER	SHOULDER	SHOULDER
Category (circle)	FS Blank Rep_____	FS Blank Rep_____	FS Blank Rep_____
Matrix Type (circle)	Indoor Outdoor NA	Indoor Outdoor NA	Indoor Outdoor NA
Filter Diameter (circle)	25mm 37mm	25mm 37mm	25mm 37mm
Pore Size (circle)	TEM- .45 PCM- 0.8	TEM- .45 PCM- 0.8	TEM- .45 PCM- 0.8
Flow Meter Type (circle)	Rotometer DryCal	Rotometer DryCal	Rotometer DryCal
Pump ID Number	626666	626509	626666
Flow Meter ID No.	34719	34719	34719
Start Date	9/10/02	9/10/02	9/10/02
Start Time	0605 / 0725	9/10/02 0726 ~~0728~~	1123
Start Flow (L/min)	2.03 / 2.03	2.03	2.03
Stop Date	9/10/02	9/10/02	9/10/02
Stop Time	0720 / 1103	0800	1401
Stop Flow (L/min)	2.03 / 2.03	2.03	2.03
Pump fault?	No Yes	No Yes	No Yes
MET Station onsite?	No Yes	No Yes	No Yes
Sample Type	TWA EXC NA	TWA EXC NA	TWA EXC NA
Field Comments	75 min + 218 min = 293 min x 2.03 LPM = 595 L	34 min 69 L	158 min x 2.03 LPM = 321 L
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

JMP 9/10/02

Sheet No.: P- 000087

LIBBY MONTANA FIELD SAMPLE DATA SHEET
PERSONAL AIR

Scenario No.: NA Field Logbook No: 100117 Page No: 14-17 Sampling Date: 9/10/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Sampling Team: (PES) CDM Other ____ Names: PETRAK/REPINE

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Person Sampled: DANIEL GOYEN SSN: ____ Task: WAGNER OPERATOR

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	SL- 00005 AD- 000686	SL- 00006	SL- 00010
Location ID		AD-000686	AD-000686
Sample Group	PROPERTY	PROPERTY	PROPERTY
Location Description	SHOULDER	SHOULDER	SHOULDER
Category (circle)	(FS) Blank Rep____	(FS) Blank Rep____	(FS) Blank Rep____
Matrix Type (circle)	Indoor (Outdoor) NA	Indoor (Outdoor) NA	Indoor (Outdoor) NA
Filter Diameter (circle)	(25mm) 37mm	(25mm) 37mm	(25mm) 37mm
Pore Size (circle)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)
Flow Meter Type (circle)	(Rotometer) DryCal	(Rotometer) DryCal	(Rotometer) DryCal
Pump ID Number	626526	626509	626526
Flow Meter ID No.	34719	34719	34719
Start Date	9/10/02	9/10/02	9/10/02
Start Time	~~0815~~ 0814 ~~0714~~	0815 ~~0715~~	1138
Start Flow (L/min)	2.03	2.03	2.03
Stop Date	9/10/02	9/10/02	9/10/02
Stop Time	1138	0847	1347
Stop Flow (L/min)	2.03	2.03	2.03
Pump fault?	(No) Yes	(No) Yes	(No) Yes
MET Station onsite?	(No) Yes	(No) Yes	(No) Yes
Sample Type	(TWA) EXC NA	TWA (EXC) NA	(TWA) EXC NA
Field Comments	204 min x 2.03 L/min = 414 L	32 min x 2.03 LPM = 65 L	129 min x 2.03 LPM = 262 L
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

VJP 9/10/02

Sheet No.: P-000088

LIBBY MONTANA FIELD SAMPLE DATA SHEET
PERSONAL AIR

Scenario No.: NA Field Logbook No: ~~100117~~ 100117 9/10/02 Page No: 14-17 Sampling Date: 9/10/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Sampling Team: PES CDM Other _____ Names: PETRAK/REPINE

Land Use: Residential School Commercial Mining Roadway Other ( )

Person Sampled: DANIEL GOYEN SSN: Task: WAGNER OPERATOR

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	SL- 00013		
Location ID	AD-000686		
Sample Group	PROPERTY		
Location Description	SHOULDER		
Category (circle)	FS Blank Rep_____	FS Blank Rep_____	FS Blank Rep_____
Matrix Type (circle)	Indoor Outdoor NA	Indoor Outdoor NA	Indoor Outdoor NA
Filter Diameter (circle)	25mm 37mm	25mm 37mm	25mm 37mm
Pore Size (circle)	TEM- .45 PCM- 0.8	TEM- .45 PCM- 0.8	TEM- .45 PCM- 0.8
Flow Meter Type (circle)	Rotometer DryCal	Rotometer DryCal	Rotometer DryCal
Pump ID Number	626526		
Flow Meter ID No.	34719		
Start Date	9/10/02		
Start Time	1347		
Start Flow (L/min)	2.03		
Stop Date	9/10/02		
Stop Time	1610		
Stop Flow (L/min)	2.03		
Pump fault?	No Yes	No Yes	No Yes
MET Station onsite?	No Yes	No Yes	No Yes
Sample Type	TWA EXC NA	TWA EXC NA	TWA EXC NA
Field Comments	143 min X 2.03 LPM = 290 L		
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

[signature] 9/10/02

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√ MP 9/10/02

vs 021302

Sheet No.: P-_____

000089
000089

LIBBY MONTANA FIELD SAMPLE DATA SHEET
PERSONAL AIR

Scenario No.: NA Field Logbook No: 100117 Page No: 14-17 Sampling Date: 9/10/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Sampling Team: (PES) CDM Other _____ Names: PETRAK/REPINE

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Person Sampled: AARON BROWN SSN: Task: FJ UTILITY

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	SL- 00014	SL- 00015	SL- 00016
Location ID	BD-002097	NA mwp 9/10/02	NA mwp 9/10/02
Sample Group	~~PROTECT~~ mwp 9/10/02 BUILDING	BLANK	BLANK
Location Description	SHOULDER	N/A mwp 9/10/02	NA mwp 9/10/02
Category (circle)	(FS) Blank Rep_____	FS (Blank) Rep_____	FS (Blank) Rep_____
Matrix Type (circle)	(Indoor) Outdoor NA	Indoor Outdoor (NA)	Indoor Outdoor (NA)
Filter Diameter (circle)	(25mm) 37mm	(25mm) 37mm	(25mm) 37mm
Pore Size (circle)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)
Flow Meter Type (circle)	(Rotometer) DryCal	Rotometer DryCal mwp 9/10/02	Rotometer DryCal
Pump ID Number	6266666		
Flow Meter ID No.	34719		
Start Date	9/10/02		
Start Time	1418		
Start Flow (L/min)	2.03		
Stop Date	9/10/02		
Stop Time	1613		
Stop Flow (L/min)	2.03		
Pump fault?	(No) Yes	No Yes	No Yes
MET Station onsite?	(No) Yes	No Yes	No Yes
Sample Type	(TWA) EXC NA	TWA EXC NA	TWA EXC NA
Field Comments	115 min X 2.03 LPM ~~= 234 L~~ mwp = 233 L 9/10/02		
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

vs 021302

Vgp 9/10/02

Sheet No.: P- 000090

LIBBY MONTANA FIELD SAMPLE DATA SHEET

PERSONAL AIR

Scenario No.: NA Field Logbook No: 100117 Page No: 19-23 Sampling Date: 9/11/02

Address: 575 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Sampling Team: (PES) CDM Other ____ Names: PETRAK/REPINE

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Person Sampled: AARON BROWN SSN Task: FJ UTILITY

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	SL- 00017	SL- 00028	SL- 00029
Location ID	BD-002097	BD-002097	BD-002097
Sample Group	BUILDING	BUILDING	BUILDING
Location Description	SHOULDER	SHOULDER	SHOULDER
Category (circle)	(FS) Blank Rep____	(FS) Blank Rep____	(FS) Blank Rep____
Matrix Type (circle)	(Indoor) Outdoor NA	(Indoor) Outdoor NA	(Indoor) Outdoor NA
Filter Diameter (circle)	(25mm) 37mm	(25mm) 37mm	(25mm) 37mm
Pore Size (circle)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)
Flow Meter Type (circle)	(Rotometer) DryCal	(Rotometer) DryCal	(Rotometer) DryCal
Pump ID Number	6266666	6266675	6266666
Flow Meter ID No.	34719	34719	34719
Start Date	9/11/02	9/11/02	9/11/02
Start Time	0603	0845 ~~0831~~	1157 ~~0930~~
Start Flow (L/min)	2.03	2.03	2.03
Stop Date	9/11/02	9/11/02	9/11/02
Stop Time	0830	0916	1400
Stop Flow (L/min)	2.03	2.03	2.03
Pump fault?	(No) Yes	(No) Yes	(No) Yes
MET Station onsite?	(No) Yes	(No) Yes	(No) Yes
Sample Type	(TWA) EXC NA	TWA (EXC) NA	(TWA) EXC NA
Field Comments	147 min x 2.03 LPM = 298 L	GRATER STAND Equip. problems - line stopped for approx 10min 31 min, 63L	123 min x 2.03 lpm = 250L
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

vs 021302

9/11/02

Sheet No.: P- 000091

LIBBY MONTANA FIELD SAMPLE DATA SHEET
PERSONAL AIR

Scenario No.: NA Field Logbook No: 100117 Page No: 19-23 Sampling Date: 9/11/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Sampling Team: (PES) CDM Other ____ Names: PETRAK/REPINE

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Person Sampled: WILFRED JOHNSON SSN: Task: MECHANIC

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	SL- 00018	SL- 00025	SL- 00031
Location ID	BD-002098	BD-002098	BD-002098
Sample Group	BUILDING	BUILDING	BUILDING
Location Description	SHOULDER	SHOULDER	SHOULDER
Category (circle)	(FS) Blank Rep____	(FS) Blank Rep____	(FS) Blank Rep____
Matrix Type (circle)	(Indoor) Outdoor NA	(Indoor) Outdoor NA	(Indoor) Outdoor NA
Filter Diameter (circle)	(25mm) 37mm	(25mm) 37mm	(25mm) 37mm
Pore Size (circle)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)
Flow Meter Type (circle)	(Rotometer) DryCal	(Rotometer) DryCal	(Rotometer) DryCal
Pump ID Number	602598	626509	602598
Flow Meter ID No.	34719	34719	34719
Start Date	9/11/02	9/11/02	9/11/02
Start Time	0704	1018	1237
Start Flow (L/min)	2.03	2.03	2.03
Stop Date	9/11/02	9/11/02	9/11/02
Stop Time	1155	1048	1523
Stop Flow (L/min)	2.03	2.03	2.03
Pump fault?	(No) Yes	(No) Yes	(No) Yes
MET Station onsite?	(No) Yes	(No) Yes	(No) Yes
Sample Type	(TWA) EXC NA	TWA (EXC) NA	(TWA) EXC NA
Field Comments	291 min x 2.03 LPM = 591 L	Mechanic swept area in shop 30 min x 2.03 lpm = 61 L	1660 min x 2.03 lpm = 337 L Worked on pickup engine
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

9/11/02

vs 021302

Sheet No.: P- ~~000~~092

LIBBY MONTANA FIELD SAMPLE DATA SHEET
PERSONAL AIR

Scenario No.: NA Field Logbook No: 100117 Page No: 19-23 Sampling Date: 9/11/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Sampling Team: (PES) CDM Other _____ Names: PETRAK/REPINE

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Person Sampled: GLENN L. GARRISON SSN: _____ Task: MECHANIC

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	SL- 00019	SL- 00026	SL- 00032
Location ID	BD-002098	BD-002098	BD-002098
Sample Group	BUILDING	BUILDING	BUILDING
Location Description	SHOULDER	SHOULDER	SHOULDER
Category (circle)	(FS) Blank Rep_____	(FS) Blank Rep_____	(FS) Blank Rep_____
Matrix Type (circle)	(Indoor) Outdoor NA	(Indoor) Outdoor NA	(Indoor) Outdoor NA
Filter Diameter (circle)	(25mm) 37mm	(25mm) 37mm	(25mm) 37mm
Pore Size (circle)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)
Flow Meter Type (circle)	(Rotometer) DryCal	(Rotometer) DryCal	(Rotometer) DryCal
Pump ID Number	602608	626526	602608
Flow Meter ID No.	34719	34719	34719
Start Date	9/11/02	9/11/02	9/11/02
Start Time	0700	1239	1238
Start Flow (L/min)	2.03	2.03	2.03
Stop Date	9/11/02	9/11/02	9/11/02
Stop Time	1202	1369	~~1308~~ 1525
Stop Flow (L/min)	2.03	2.03	2.03
Pump fault?	(No) Yes	(No) Yes	(No) Yes
MET Station onsite?	(No) Yes	(No) Yes	(No) Yes
Sample Type	(TWA) EXC NA	TWA (EXC) NA	(TWA) EXC NA
Field Comments	302 min x 2.03 lpm = 613 L swept floor, inventoried warehouse,	Mechanic cleaning parts from rolling equip. 30 min, 61 L	Mechanic working on Wagner lumber jack 167 min x 2.03 lpm = 339 L
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

9/11/02

vs 021302

Sheet No.: P- ~~000~~093

LIBBY MONTANA FIELD SAMPLE DATA SHEET
PERSONAL AIR

Scenario No.: NA Field Logbook No: 100117 Page No: 19-23 Sampling Date: 9/11/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Sampling Team: (PES) CDM Other _____ Names: PETRAK/REPINE

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Person Sampled: DANIEL GOYEN SSN: _ Task: WAGNER OPERATOR

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	SL- 00027	SL- 00030	SL- 00033
Location ID	AD-~~0068~~ 0000686 (map 9/11/02)	AD-0000686	AD-000686
Sample Group	PROPERTY	PROPERTY	PROPERTY
Location Description	SHOULDER	SHOULDER	SHOULDER
Category (circle)	(FS) Blank Rep_____	(FS) Blank Rep_____	(FS) Blank Rep_____
Matrix Type (circle)	Indoor (Outdoor) NA	Indoor (Outdoor) NA	Indoor (Outdoor) NA
Filter Diameter (circle)	(25mm) 37mm	(25mm) 37mm	(25mm) 37mm
Pore Size (circle)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)
Flow Meter Type (circle)	(Rotometer) DryCal	(Rotometer) DryCal	(Rotometer) DryCal
Pump ID Number	626753	626753	626753
Flow Meter ID No.	34719	34719	34719
Start Date	9/11/02	9/11/02	9/11/02
Start Time	~~0803~~ 0800 (map 9/11/02)	1052	~~1400~~ 1410 (map 9/11/02)
Start Flow (L/min)	2.03	2.03	2.03
Stop Date	9/11/02	9/11/02	9/11/02
Stop Time	1052	~~1400~~ 1410 (map 9/11/02)	1601
Stop Flow (L/min)	2.03	2.03	2.03
Pump fault?	(No) Yes	(No) Yes	(No) Yes
MET Station onsite?	(No) Yes	(No) Yes	(No) Yes
Sample Type	(TWA) EXC NA	(TWA) EXC NA	(TWA) EXC NA
Field Comments	172 min X 2.03 lpm = 349 L	198 min X 2.03 lpm = 402 L	111 min X 2.03 lpm = 225 L
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

vs 021302

9/11/02

Sheet No.: P- 000094

LIBBY MONTANA FIELD SAMPLE DATA SHEET-

PERSONAL AIR

Scenario No.: NA Field Logbook No: 100117 Page No: 19-23 Sampling Date: 9/11/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Sampling Team: (PES) CDM Other ____ Names: PETRAK/REPINE

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Person Sampled: AARON BROWN SSN: ____ Task: FJ UTILITY

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	SL- 00035		
Location ID	BD-002097		
Sample Group	BUILDING		
Location Description	SHOULDER		
Category (circle)	(FS) Blank Rep____	FS Blank Rep____	FS Blank Rep____
Matrix Type (circle)	(Indoor) Outdoor NA	Indoor Outdoor NA	Indoor Outdoor NA
Filter Diameter (circle)	(25mm) 37mm	25mm 37mm	25mm 37mm
Pore Size (circle)	TEM- .45 (PCM- 0.8)	TEM- .45 PCM- 0.8	TEM- .45 PCM- 0.8
Flow Meter Type (circle)	(Rotometer) DryCal	Rotometer DryCal	Rotometer DryCal
Pump ID Number	6266666		
Flow Meter ID No.	34719		
Start Date	9/11/02		
Start Time	1418		
Start Flow (L/min)	2.03		
Stop Date	9/11/02		
Stop Time	1613		
Stop Flow (L/min)	2.03		
Pump fault?	(No) Yes	No Yes	No Yes
MET Station onsite?	(No) Yes	No Yes	No Yes
Sample Type	(TWA) EXC NA	TWA EXC NA	TWA EXC NA
Field Comments	115 min X 2.03 lpm = 233 L		
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

9/11/02

vs 021502

Sheet No.: P-000095

LIBBY MONTANA FIELD SAMPLE DATA SHEET
PERSONAL AIR

Scenario No.: NA Field Logbook No: 100117 Page No: 19-23 Sampling Date: 9/11/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Sampling Team: (PES) CDM Other ____ Names: PETRAK/REPINE

Land Use: Residential School (Commercial) Mining Roadway Other (

Person Sampled: DANIEL GOYEN SSN: Task: WAGNER ~~OPER~~ OPERATOR map 9/11/02

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	SL- 00034	SL- 00036	SL- 00037
Location ID	AD-001686	NA map 9/11/02	NA map 9/11/02
Sample Group	PROPERTY	BLANK	BLANK
Location Description	SHOULDER	NA map 9/11/02	NA map 9/11/02
Category (circle)	(FS) Blank Rep____	FS (Blank) Rep____	FS (Blank) Rep____
Matrix Type (circle)	Indoor (Outdoor) NA	Indoor Outdoor (NA)	Indoor Outdoor (NA)
Filter Diameter (circle)	(25mm) 37mm	(25mm) 37mm	(25mm) 37mm
Pore Size (circle)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)
Flow Meter Type (circle)	(Rotometer) DryCal	~~Rotometer~~ ~~DryCal~~ map 9/11/02	~~Rotometer~~ DryCal map 9/11/02
Pump ID Number	626509		
Flow Meter ID No.	34719		
Start Date	9/11/02		
Start Time	map 9/11/02 1418		
Start Flow (L/min)	2.03		
Stop Date	9/11/02		
Stop Time	1445		
Stop Flow (L/min)	2.03		
Pump fault?	(No) Yes	No Yes	No Yes
MET Station onsite?	(No) Yes	No Yes	No Yes
Sample Type	TWA (EXC) NA	TWA EXC NA	TWA EXC NA
Field Comments	35 min x 2.03 lpm = 71 L		
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

9/11/02

vs 021302

Sheet No.: P-000090

LIBBY MONTANA FIELD SAMPLE DATA SHEET

PERSONAL AIR

Scenario No.: NA Field Logbook No: 100117 Page No: 24-29 Sampling Date: 9/12/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Sampling Team: (PES) CDM Other _____ Names: PETRAK/REPINE

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Person Sampled: AARON BROWN SSN: ___ Task: F4 UTILITY

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	SL- 00040	SL- 00045	SL- 00046
Location ID	BD-002097	BD-002097	BD-002097
Sample Group	BUILDING	BUILDING	BUILDING
Location Description	SHOULDER	SHOULDER	SHOULDER
Category (circle)	(FS) Blank Rep_____	(FS) Blank Rep_____	(FS) Blank Rep_____
Matrix Type (circle)	(Indoor) Outdoor NA	(Indoor) Outdoor NA	(Indoor) Outdoor NA
Filter Diameter (circle)	(25mm) 37mm	(25mm) 37mm	(25mm) 37mm
Pore Size (circle)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)
Flow Meter Type (circle)	(Rotometer) DryCal	(Rotometer) DryCal	(Rotometer) DryCal
Pump ID Number	626675	626675	626753
Flow Meter ID No.	34719	34719	34719
Start Date	9/12/02	9/12/02	9/12/02
Start Time	0601	0825	1005
Start Flow (L/min)	2.03	2.03	2.03
Stop Date	~~9/11/02~~ 9/12/02	9/12/02	9/12/02
Stop Time	0825	1005	1035
Stop Flow (L/min)	2.03	2.03	2.03
Pump fault?	(No) Yes	(No) Yes	(No) Yes
MET Station onsite?	(No) Yes	(No) Yes	(No) Yes
Sample Type	(TWA) EXC NA	(TWA) EXC NA	TWA (EXC) NA
Field Comments	144 min X 2.03 lpm = 292 L changed due to visible dust on filter	100 min X 2.03 lpm = 203 L changed due to visible dust on filter	30 min x 2.03 lpm = 61 L lumber stack: wrap area
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

9/12/02

vs 021302

Sheet No.: P-000097

LIBBY MONTANA FIELD SAMPLE DATA SHEET
PERSONAL AIR

Scenario No.: NA Field Logbook No: 100117 Page No: 24-29 Sampling Date: 9/12/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Sampling Team: PES CDM Other _____ Names: PETRAK/REPINE

Land Use: Residential School Commercial Mining Roadway Other ( )

Person Sampled: WILFRED JOHNSON SSN: Task: MECHANIC

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	SL- 00041	SL- 00043	SL- 00049
Location ID	BD-002098	BD-002098	BD-002098
Sample Group	BUILDING	BUILDING	BUILDING
Location Description	SHOULDER	SHOULDER	SHOULDER
Category (circle)	FS Blank Rep_____	FS Blank Rep_____	FS Blank Rep_____
Matrix Type (circle)	Indoor Outdoor NA	Indoor Outdoor NA	Indoor Outdoor NA
Filter Diameter (circle)	25mm 37mm	25mm 37mm	25mm 37mm
Pore Size (circle)	TEM- .45 PCM- 0.8	TEM- .45 PCM- 0.8	TEM- .45 PCM- 0.8
Flow Meter Type (circle)	Rotometer DryCal	Rotometer DryCal	Rotometer DryCal
Pump ID Number	626666	626753	626666 JB 9/16/02
Flow Meter ID No.	34719	34719	34719
Start Date	9/12/02	9/12/02	9/12/02
Start Time	0703	0720	0956
Start Flow (L/min)	2.03	2.03	2.03
Stop Date	9/12/02	9/12/02	9/12/02
Stop Time	0956	0752	1200
Stop Flow (L/min)	2.03	2.03	2.03
Pump fault?	No Yes	No Yes	No Yes
MET Station onsite?	No Yes	No Yes	No Yes
Sample Type	TWA EXC NA	TWA EXC NA	TWA EXC NA
Field Comments	map 9/12/02 Servicing ~~Serving~~ pickup trucks, other vehicles, including Wagner Lumberjack 173 min x 2.03 lpm = 351 L	Working on Wagner Lumberjack 32 min x 2.03 lpm = 65 L	servicing vehicles 124 min x 2.03 lpm = 252 L
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

VOID

[signature] 9/12/02

Lab reported filter damaged on 9/16/02. Sample voided

vs 021302

Sheet No.: PU00098

LIBBY MONTANA FIELD SAMPLE DATA SHEET
PERSONAL AIR

Scenario No.: NA Field Logbook No: 100117 Page No: 24-29 Sampling Date: 9/12/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Sampling Team: (PES) CDM Other ____ Names: PETRAK/REPINE

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Person Sampled: GLENN L GARRISON SSN: Task: MECHANIC

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	SL- 00042	SL- 00048	SL- 00054
Location ID	BD-002098	BD-002098	BD-002098
Sample Group	BUILDING	BUILDING	BUILDING
Location Description	SHOULDER	SHOULDER	SHOULDER
Category (circle)	(FS) Blank Rep____	(FS) Blank Rep____	(FS) Blank Rep____
Matrix Type (circle)	(Indoor) Outdoor NA	(Indoor) Outdoor NA	(Indoor) Outdoor NA
ilter Diameter (circle)	(25mm) 37mm	(25mm) 37mm	(25mm) 37mm
Pore Size (circle)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)
Flow Meter Type (circle)	(Rotometer) DryCal	(Rotometer) DryCal	(Rotometer) DryCal
Pump ID Number	602598	602598	602598
Flow Meter ID No.	34719	34719	34719
Start Date	9/12/02	9/12/02	9/12/02
Start Time	0701	0955	1300
Start Flow (L/min)	2.03	2.03	2.03
Stop Date	9/12/02	9/12/02	9/12/02
Stop Time	0955	1158	1523
Stop Flow (L/min)	2.03	2.03	~~2.03~~ 2.18
Pump fault?	(No) Yes	(No) Yes	(No) Yes
MET Station onsite?	(No) Yes	(No) Yes	(No) Yes
Sample Type	(TWA) EXC NA	(TWA) EXC NA	(TWA) EXC NA
Field Comments	Misc tasks, water truck, filled oil tank, lumberjack 174 min x 2.03 lpm = 353 L	water truck, lumberjack 123 min x 2.03 lpm = 250 L	Water truck, lumberjack 143 min x 2.11 L/min = 302
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

9/12/02

vs 021302

Sheet No.: P-000099

LIBBY MONTANA FIELD SAMPLE DATA SHEET

PERSONAL AIR

Scenario No.: NA Field Logbook No: 100117 Page No: 24-29 Sampling Date: 9/12/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Sampling Team: (PES) CDM Other ____ Names: PETRAK/REPINE

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Person Sampled: DANIEL GOYEN SSN: Task: WAGNER OPERATOR

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	SL- 00044	SL- 00050	SL- 00052
Location ID	AD-000686	AD-000686	AD-000686
Sample Group	PROPERTY	PROPERTY	PROPERTY
Location Description	SHOULDER	SHOULDER	SHOULDER
Category (circle)	(FS) Blank Rep____	(FS) Blank Rep____	(FS) Blank Rep____
Matrix Type (circle)	Indoor (Outdoor) NA	Indoor (Outdoor) NA	Indoor (Outdoor) NA
Filter Diameter (circle)	(25mm) 37mm	(25mm) 37mm	(25mm) 37mm
Pore Size (circle)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)
Flow Meter Type (circle)	(Rotometer) DryCal	(Rotometer) DryCal	(Rotometer) DryCal
Pump ID Number	026509	026509	026753
Flow Meter ID No.	34719	34719	34719
Start Date	9/12/02	9/12/02	9/12/02
Start Time	0808	1017	1135
Start Flow (L/min)	2.03	2.03	2.03
Stop Date	9/12/02	9/12/02	9/12/02
Stop Time	1015	1207	1205
Stop Flow (L/min)	2.03	2.03	2.03
Pump fault?	(No) Yes	(No) Yes	(No) Yes
MET Station onsite?	(No) Yes	(No) Yes	(No) Yes
Sample Type	(TWA) EXC NA	(TWA) EXC NA	TWA (EXC) NA
Field Comments	127 min x 2.03 lpm = 258 L	110 min x 2.03 lpm = 223 L	30 min x 2.03 lpm = 61 L
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

9/12/02

vs 021302

Sheet No.: P- 000100

LIBBY MONTANA FIELD SAMPLE DATA SHEET
PERSONAL AIR

Scenario No.: NA Field Logbook No: 100117 Page No: 24-29 Sampling Date: 9/12/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Sampling Team: (PES) CDM Other ____ Names: PETRAK/REANE

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Person Sampled: AARON BROWN SSN: Task: FJ UTILITY

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	SL- 00047	SL- 00051	SL- 00057
Location ID	BD-002097	BD-002097	BD-002097
Sample Group	BUILDING	BUILDING	BUILDING
Location Description	SHOULDER	SHOULDER	SHOULDER
Category (circle)	(FS) Blank Rep____	(FS) Blank Rep____	(FS) Blank Rep____
Matrix Type (circle)	(Indoor) Outdoor NA	(Indoor) Outdoor NA	(Indoor) Outdoor NA
ilter Diameter (circle)	(25mm) 37mm	(25mm) 37mm	(25mm) 37mm
Pore Size (circle)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)
Flow Meter Type (circle)	(Rotometer) DryCal	(Rotometer) DryCal	(Rotometer) DryCal
Pump ID Number	626675	626675	626675
Flow Meter ID No.	34719	34719	34719
Start Date	9/12/02	9/12/02	9/12/02
Start Time	1005	1130	1327
Start Flow (L/min)	2.03	2.03	2.03
Stop Date	9/12/02	9/12/02	9/12/02
Stop Time	1100	1327	1504
Stop Flow (L/min)	2.03	2.03	2.03
Pump fault?	(No) Yes	(No) Yes	(No) Yes
MET Station onsite?	(No) Yes	(No) Yes	(No) Yes
Sample Type	(TWA) EXC NA	(TWA) EXC NA	(TWA) EXC NA
Field Comments	Normal ops paused to work on a special order - 150 ft long 2x12! Went outside bldg in process. Changed due to visible debris.	Part of shift included driving forklift outside part of bldg. Also, long board again, Changed due to visible debris	Part of shift included driving forklift loading metals outside bldg. Also swept bldg floor. Changed due to visible debris
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___
	55 min X 2.03 lpm = 112 L	117 min X 2.03 lpm = 238 L	97 min X 2.03 lpm = 197 L

vs 021302

Sheet No.: P- 000101

LIBBY MONTANA FIELD SAMPLE DATA SHEET
PERSONAL AIR

Scenario No.: NA Field Logbook No: 100117 Page No: 24-29 Sampling Date: 9/12/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Sampling Team: (PES) CDM Other ____ Names: PESRAK/REPINE

Land Use: Residential School Commercial Mining Roadway Other ( )

Person Sampled: DANIEL GOYEN SSN: ____ Task: WAGNER OPERATOR

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	SL- 00055	SL- 00058	
Location ID	AD-000686	AD-000686	
Sample Group	PROPERTY	PROPERTY	
Location Description	SHOULDER	SHOULDER	
Category (circle)	(FS) Blank Rep____	(FS) Blank Rep____	FS Blank Rep____
Matrix Type (circle)	Indoor (Outdoor) NA	Indoor (Outdoor) NA	Indoor Outdoor NA
Filter Diameter (circle)	(25mm) 37mm	(25mm) 37mm	25mm 37mm
Pore Size (circle)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)	TEM- .45 PCM- 0.8
Flow Meter Type (circle)	(Rotometer) DryCal	(Rotometer) DryCal	Rotometer DryCal
Pump ID Number	626509	626509	
Flow Meter ID No.	34719	34719	
Start Date	9/12/02	9/12/02	
Start Time	1207 / 1315	1415	
Start Flow (L/min)	2.03 / 2.03	2.03	
Stop Date	9/12/02	9/12/02	
Stop Time	1243 / 1415	1604	
Stop Flow (L/min)	2.03 / 2.03	2.03	
Pump fault?	(No) Yes	(No) Yes	No Yes
MET Station onsite?	(No) Yes	(No) Yes	No Yes
Sample Type	(TWA) EXC NA	(TWA) EXC NA	TWA EXC NA
Field Comments	36 min + 60 min = 96 min x 2.03 lpm = 195 L	109 min x 2.03 L/min 221 L	
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

9/12/02

vs 021302

Sheet No.: P- 000102

LIBBY MONTANA FIELD SAMPLE DATA SHEET
PERSONAL AIR

Scenario No.: NA Field Logbook No: 100117 Page No: 24-29 Sampling Date: 9/12/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Sampling Team: (PES) CDM Other _____ Names: PETRAK/REPINE

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Person Sampled: WILFRED JOHNSON SSN: _____ Task: MECHANIC

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	SL- 00053		
Location ID	BD-002098		
Sample Group	BUILDING		
Location Description	SHOULDER		
Category (circle)	(FS) Blank Rep_____	FS Blank Rep_____	FS Blank Rep_____
Matrix Type (circle)	(Indoor) Outdoor NA	Indoor Outdoor NA	Indoor Outdoor NA
Filter Diameter (circle)	(25mm) 37mm	25mm 37mm	25mm 37mm
Pore Size (circle)	TEM- .45 (PCM- 0.8)	TEM- .45 PCM- 0.8	TEM- .45 PCM- 0.8
Flow Meter Type (circle)	(Rotometer) DryCal	Rotometer DryCal	Rotometer DryCal
Pump ID Number	C026666		
Flow Meter ID No.	34719		
Start Date	9/12/02		
Start Time	1258		
Start Flow (L/min)	2.03		
Stop Date	9/12/02		
Stop Time	1524		
Stop Flow (L/min)	2.03		
Pump fault?	(No) Yes	No Yes	No Yes
MET Station onsite?	(No) Yes	No Yes	No Yes
Sample Type	(TWA) EXC NA	TWA EXC NA	TWA EXC NA
Field Comments	Steam cleaning, work on rig 146 min x 2.03 L/min = 296 L		
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

VP 9/23/02

vs 021302

Sheet No.: P- 000103

LIBBY MONTANA FIELD SAMPLE DATA SHEET
PERSONAL AIR

Scenario No.: NA Field Logbook No: 100117 Page No: 24-29 Sampling Date: 9/12/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Sampling Team: (PES) CDM Other ____ Names: PETRAK/REPINE

Land Use: Residential School Commercial Mining Roadway Other ( )

Person Sampled: GLENN L. GARRISON SSN: ____ Task: MECHANIC

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	SL- 00056	SL- 00071	SL- 00072
Location ID	BD-002098	NA mof 9/12/02	NA mof 9/12/02
Sample Group	BUILDING	BLANK	BLANK
Location Description	SHOULDER	NA mof 9/12/02	NA mof 9/12/02
Category (circle)	(FS) Blank Rep____	FS (Blank) Rep____	FS (Blank) Rep____
Matrix Type (circle)	(Indoor) Outdoor NA	Indoor Outdoor (NA)	Indoor Outdoor (NA)
Filter Diameter (circle)	(25mm) 37mm	25mm 37mm	25mm 37mm
Pore Size (circle)	TEM- .45 (PCM- 0.8)	TEM- .45 PCM- 0.8	TEM- .45 PCM- 0.8
Flow Meter Type (circle)	(Rotometer) DryCal	Rotometer DryCal	Rotometer DryCal
Pump ID Number	626753		
Flow Meter ID No.	34719		
Start Date	9/12/02		
Start Time	mof 9/12/02 ~~1300~~ 1323		
Start Flow (L/min)	2.03		
Stop Date	9/12/02		
Stop Time	1358		
Stop Flow (L/min)	2.03		
Pump fault?	(No) Yes	No Yes	No Yes
MET Station onsite?	(No) Yes	No Yes	No Yes
Sample Type	TWA (EXC) NA	TWA EXC NA	TWA EXC NA
Field Comments	Working on Wagner Lumberjack 35 min * 2.03 lpm = 71 L		
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Melissa A. Petrak 9/12/02

9/12/02

vs 021302

Sheet No.: P000104

LIBBY MONTANA FIELD SAMPLE DATA SHEET
PERSONAL AIR

Scenario No.: NA Field Logbook No: 100117 Page No: 24-29 Sampling Date: 9/12/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Sampling Team: PES CDM Other _____ Names: PETRAK/REPINE

Land Use: Residential School Commercial Mining Roadway Other ( )

Person Sampled: AARON BROWN SSN: _ Task: FJ UTILITY

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	SL- 00063	SL- 00069	SL- 00070
Location ID	BD-002097	NA mop 9/12/02	NA mop 9/12/02
Sample Group	BUILDING	BLANK	BLANK
Location Description	SHOULDER	NA mop 9/12/02	NA mop 9/12/02
Category (circle)	FS Blank Rep_____	FS Blank Rep_____	FS Blank Rep_____
Matrix Type (circle)	Indoor Outdoor NA	Indoor Outdoor NA	Indoor Outdoor NA
Filter Diameter (circle)	25mm 37mm	25mm 37mm	25mm 37mm
Pore Size (circle)	TEM- .45 PCM- 0.8	TEM- .45 PCM- 0.8	TEM- .45 PCM- 0.8
Flow Meter Type (circle)	Rotometer DryCal	Rotometer DryCal	Rotometer DryCal
Pump ID Number	626675		
Flow Meter ID No.	34719		
Start Date	9/12/02		
Start Time	1504		
Start Flow (L/min)	2.03		
Stop Date	9/12/02		
Stop Time	1613		
Stop Flow (L/min)	1.88		
Pump fault?	No Yes	No Yes	No Yes
MET Station onsite?	No Yes	No Yes	No Yes
Sample Type	TWA EXC NA	TWA EXC NA	TWA EXC NA
Field Comments	Swept bldg floor. 69min x1.96 L/m 135 L		
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Melissa A Petrak 9/12/02

Melissa A Petrak 9/12/02

JP 9/23/02

vs 021302

Sheet No.: P- 000105

LIBBY MONTANA FIELD SAMPLE DATA SHEET
PERSONAL AIR

Scenario No.: NA Field Logbook No: 100117 Page No: 30-36 Sampling Date: 9/13/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Sampling Team: (PES) CDM Other _____ Names: PETRAK/REPINE

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Person Sampled: JAMES CUMMINGS SSN: Task: DRYER OFFBEARER

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	SL- 00076	SL- 00086	SL- 00104
Location ID	BD-002099	BD-002099	BD-002099
Sample Group	BUILDING	BUILDING	BUILDING
Location Description	SHOULDER	SHOULDER	SHOULDER
Category (circle)	(FS) Blank Rep_____	(FS) Blank Rep_____	(FS) Blank Rep_____
Matrix Type (circle)	(Indoor) Outdoor NA	(Indoor) Outdoor NA	(Indoor) Outdoor NA
Filter Diameter (circle)	(25mm) 37mm	(25mm) 37mm	(25mm) 37mm
Pore Size (circle)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)
Flow Meter Type (circle)	(Rotometer) DryCal	(Rotometer) DryCal	(Rotometer) DryCal
Pump ID Number	6266666	6266666	6266666
Flow Meter ID No.	34719	34719	34719
Start Date	9/13/02	9/13/02	9/13/02
Start Time	0623	0931	~~1450~~ 1248
Start Flow (L/min)	2.03	2.03	1.50
Stop Date	9/13/02	9/13/02	9/13/02
Stop Time	0931	1150	1548
Stop Flow (L/min)	2.03	2.03	1.50
Pump fault?	(No) Yes	(No) Yes	(No) Yes
MET Station onsite?	(No) Yes	(No) Yes	(No) Yes
Sample Type	(TWA) EXC NA	(TWA) EXC NA	(TWA) EXC NA
Field Comments	188 min x 2.03 lpm = 382 L Changed due to visible filter on debris	Changed due to visible debris on filter 139 min X 2.03 lpm = 282 L	Visible dust on filter 180 min X 1.50 lpm = 270 L
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

9/13/02

vs 021302

Sheet No.: P-LX001106

LIBBY MONTANA FIELD SAMPLE DATA SHEET

PERSONAL AIR

Scenario No.: NA Field Logbook No: 100117 Page No: 30-36 Sampling Date: 9/13/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Sampling Team: (PES) CDM Other ____ Names: PETRAK/REPINE

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Person Sampled: LINDA HULL SSN: Task: PLUGGER ~~OPERAT~~ OPERATOR

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	SL- 00078	SL- 00088	SL- 00095
Location ID	BD-002099	BD-002099	BD-002099
Sample Group	BUILDING	BUILDING	BUILDING
Location Description	SHOULDER	SHOULDER	SHOULDER
Category (circle)	(FS) Blank Rep____	(FS) Blank Rep____	(FS) Blank Rep____
Matrix Type (circle)	(Indoor) Outdoor NA	(Indoor) Outdoor NA	(Indoor) Outdoor NA
ilter Diameter (circle)	(25mm) 37mm	(25mm) 37mm	(25mm) 37mm
Pore Size (circle)	TEM-.45 (PCM-0.8)	TEM-.45 (PCM-0.8)	TEM-.45 (PCM-0.8)
Flow Meter Type (circle)	(Rotometer) DryCal	(Rotometer) DryCal	(Rotometer) DryCal
Pump ID Number	626753	626753	602608
Flow Meter ID No.	34719	34719	34719
Start Date	9/13/02	9/13/02	9/13/02
Start Time	0745	0957	1050
Start Flow (L/min)	2.03	2.03	2.03
Stop Date	9/13/02	9/13/02	9/13/02
Stop Time	0957	11:30	1122
Stop Flow (L/min)	2.03	2.03	2.03
Pump fault?	(No) Yes	(No) Yes	(No) Yes
MET Station onsite?	(No) Yes	(No) Yes	(No) Yes
Sample Type	(TWA) EXC NA	(TWA) EXC NA	TWA (EXC) NA
Field Comments	132 min x 2.03 lpm = 268 L Changed due to visible debris on filter ✓	Changed due to visible debris on filter 93 min x 2.03 lpm = 189 L ✓	32 min X 2.03 lpm = 65 L ✓
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

9/13/02

vs 021302

Sheet No.: 000107

LIBBY MONTANA FIELD SAMPLE DATA SHEET
PERSONAL AIR

Scenario No.: NA Field Logbook No: 100117 Page No: 30-36 Sampling Date: 9/13/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Sampling Team: (PES) CDM Other ____ Names: PETRAK/REPINE

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Person Sampled: VERNON DRAKE SSN: Task: DRYER FEEDER

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	SL- 00074	SL- 00085	SL- 00105
Location ID	BD-002099	BD-002099	BD-002099
Sample Group	BUILDING	BUILDING	BUILDING
Location Description	SHOULDER	SHOULDER	SHOULDER
Category (circle)	(FS) Blank Rep____	(FS) Blank Rep____	(FS) Blank Rep____
Matrix Type (circle)	(Indoor) Outdoor NA	(Indoor) Outdoor NA	(Indoor) Outdoor NA
Filter Diameter (circle)	(25mm) 37mm	(25mm) 37mm	(25mm) 37mm
Pore Size (circle)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)
Flow Meter Type (circle)	(Rotometer) DryCal	(Rotometer) DryCal	(Rotometer) DryCal
Pump ID Number	6266675	6266675	6266675
Flow Meter ID No.	34719	34719	34719
Start Date	9/13/02	9/13/02	9/13/02
Start Time	0612	0925	~~1155~~ ~~1234~~ 1155
Start Flow (L/min)	2.03	2.03	~~2.03~~ 2.03
Stop Date	9/13/02	9/13/02	9/13/02
Stop Time	0923	1155	1234
Stop Flow (L/min)	2.03	2.03	2.03
Pump fault?	(No) Yes	(No) Yes	(No) Yes
MET Station onsite?	(No) Yes	(No) Yes	(No) Yes
Sample Type	(TWA) EXC NA	(TWA) EXC NA	(TWA) EXC NA
Field Comments	191 min x 2.03 lpm = 388 L Changed due to visible filter on debris	Changed due to visible debris on filter 150 min x 2.03 lpm = 305 L	Changed due to visible debris on filter 39 min x 2.03 = 79 L
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

9/13/02

vs 021302

Sheet No.: 000108

LIBBY MONTANA FIELD SAMPLE DATA SHEET

PERSONAL AIR

Scenario No.: NA Field Logbook No: 100117 Page No: 30-36 Sampling Date: 9/13/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Sampling Team: (PES) CDM Other ____ Names: PETRAK/REPINE

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Person Sampled: CHRISTOPHER BENEFIELD SSN: Task: GREENCHAIN PULLER

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	SL- 00075	SL- 00083	SL- 00093
Location ID	BD-002099	BD-002099	~~BD-002099~~ BD-002099
Sample Group	BUILDING	BUILDING	BUILDING
Location Description	SHOULDER	SHOULDER	SHOULDER
Category (circle)	(FS) Blank Rep____	(FS) Blank Rep____	(FS) Blank Rep____
Matrix Type (circle)	(Indoor) Outdoor NA	(Indoor) Outdoor NA	(Indoor) Outdoor NA
ilter Diameter (circle)	(25mm) 37mm	(25mm) 37mm	(25mm) 37mm
Pore Size (circle)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)
Flow Meter Type (circle)	(Rotometer) DryCal	(Rotometer) DryCal	(Rotometer) DryCal
Pump ID Number	6266566	6266566	6266566
Flow Meter ID No.	34719	34719	34719
Start Date	9/13/02	9/13/02	9/13/02
Start Time	0615	0914	~~1200~~ 1240
Start Flow (L/min)	2.03	2.03	1.50
Stop Date	9/13/02	9/13/02	9/13/02
Stop Time	0914	1200	1514
Stop Flow (L/min)	2.03	2.03	1.50
Pump fault?	(No) Yes	(No) Yes	(No) Yes
MET Station onsite?	(No) Yes	(No) Yes	(No) Yes
Sample Type	(TWA) EXC NA	(TWA) EXC NA	(TWA) EXC NA
Field Comments	179 min x 2.03 lpm = 363 L Changed due to visible filter on debris	Changed due to visible debris in cassette 166 min x 2.03 lpm = 337 L	Driving forklift around plant for part of sampling time. light dust on filter 154 min x 1.50 lpm = 231 L
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

9/13/02

vs 021302

Sheet No.: P000109

LIBBY MONTANA FIELD SAMPLE DATA SHEET

PERSONAL AIR

Scenario No.: NA Field Logbook No: 100117 Page No: 30-36 Sampling Date: 9/13/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Sampling Team: (PES) CDM Other ____ Names: PETRAK/REPINE

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Person Sampled: DOUG JELLESED SSN: ____ Task: DRYER TENDER

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	SL- 00073	SL- 00084	SL- 00109
Location ID	BD-002099	BD-002099	BD-002099
Sample Group	BUILDING	BUILDING	BUILDING
Location Description	SHOULDER	SHOULDER	SHOULDER
Category (circle)	(FS) Blank Rep____	(FS) Blank Rep____	(FS) Blank Rep____
Matrix Type (circle)	(Indoor) Outdoor NA	(Indoor) Outdoor NA	(Indoor) Outdoor NA
ilter Diameter (circle)	(25mm) 37mm	(25mm) 37mm	(25mm) 37mm
Pore Size (circle)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)
Flow Meter Type (circle)	(Rotometer) DryCal	(Rotometer) DryCal	(Rotometer) DryCal
Pump ID Number	602598	602598	602608
Flow Meter ID No.	34719	34719	34719
Start Date	9/13/02	9/13/02	9/13/02
Start Time	0602	0919	1349
Start Flow (L/min)	2.03	2.03	2.03
Stop Date	9/13/02	9/13/02	9/13/02
Stop Time	0918	1348	1419
Stop Flow (L/min)	2.03	2.03	2.03
Pump fault?	(No) Yes	(No) Yes	(No) Yes
MET Station onsite?	(No) Yes	(No) Yes	(No) Yes
Sample Type	(TWA) EXC NA	(TWA) EXC NA	TWA (EXC) NA
Field Comments	196 min X 2.03 lpm = 398 L ✓ Changed due to visible debris on filter ✓	~~the~~ light dust on filter 269 min X 2.03 lpm = 546 L ✓	Dryer jammed during ~~a~~ time 30 min X 2.03 lpm = 61 L ✓
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

9/13/02

vs 021302

Sheet No.: P- ~~000~~110

LIBBY MONTANA FIELD SAMPLE DATA SHEET
PERSONAL AIR

Scenario No.: NA Field Logbook No: 100117 Page No: 30-36 Sampling Date: 9/13/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Sampling Team: (PES) CDM Other _____ Names: PETRAK/REPINE

Land Use: Residential School Commercial Mining Roadway Other ( )

Person Sampled: LINDA HULL SSN: _____ Task: PLUGGER OPERATOR

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	SL- 00099	SL- 00118	SL- 00119
Location ID	BD-002099	~~NA~~ map 9/13/02	~~NA~~ map 9/13/02
Sample Group	BUILDING	BLANK	BLANK
Location Description	SHOULDER	~~NA~~ map 9/13/02	~~NA~~ map 9/13/02
Category (circle)	(FS) Blank Rep_____	FS (Blank) Rep_____	FS (Blank) Rep_____
Matrix Type (circle)	(Indoor) Outdoor NA	Indoor Outdoor (NA)	Indoor Outdoor (NA)
Filter Diameter (circle)	(25mm) 37mm	25mm 37mm	25mm 37mm
Pore Size (circle)	TEM- .45 (PCM- 0.8)	TEM- .45 PCM- 0.8	TEM- .45 PCM- 0.8
Flow Meter Type (circle)	(Rotometer) DryCal	Rotometer DryCal	Rotometer DryCal
Pump ID Number	026753		
Flow Meter ID No.	34719		
Start Date	9/13/02		
Start Time	~~1130~~ 1158		
Start Flow (L/min)	~~2.03~~ 2.03		
Stop Date	9/13/02		
Stop Time	1522		
Stop Flow (L/min)	2.18		
Pump fault?	(No) Yes	No Yes	No Yes
MET Station onsite?	(No) Yes	No Yes	No Yes
Sample Type	(TWA) EXC NA	TWA EXC NA	TWA EXC NA
Field Comments	light dust on filter 204 min x 2.11 lpm = 430 L		
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

9/13/02

vs 021302

Sheet No.: P- 000111

LIBBY MONTANA FIELD SAMPLE DATA SHEET

PERSONAL AIR

Scenario No.: NA Field Logbook No: 100117 Page No: 30-36 Sampling Date: 9/13/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Sampling Team: (PES) CDM Other ____ Names: PETRAK/REPINE

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Person Sampled: VERNON DRAKE SSN ____ Task: DRYER FEEDER

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	SL- 00101	SL- 00103	SL- 00115
Location ID	BD-002099	BD-002099	BD-002099
Sample Group	BUILDING	BUILDING	BUILDING
Location Description	SHOULDER	SHOULDER	SHOULDER
Category (circle)	(FS) Blank Rep____	(FS) Blank Rep____	(FS) Blank Rep____
Matrix Type (circle)	(Indoor) Outdoor NA	(Indoor) Outdoor NA	(Indoor) Outdoor NA
Filter Diameter (circle)	(25mm) 37mm	(25mm) 37mm	(25mm) 37mm
Pore Size (circle)	TEM-.45 (PCM-0.8)	TEM-.45 (PCM-0.8)	TEM-.45 (PCM-0.8)
Flow Meter Type (circle)	(Rotometer) DryCal	(Rotometer) DryCal	(Rotometer) DryCal
Pump ID Number	626675	602608	626675
Flow Meter ID No.	34719	34719	34719
Start Date	9/13/02	9/13/02	9/13/02
Start Time	1315	1315	1542
Start Flow (L/min)	1.50	2.03	1.50
Stop Date	9/13/02	9/13/02	9/13/02
Stop Time	~~1317~~ 1542	1346	1740
Stop Flow (L/min)	~~1.50~~ 1.50	2.03	1.50
Pump fault?	(No) Yes	(No) Yes	(No) Yes
MET Station onsite?	(No) Yes	(No) Yes	(No) Yes
Sample Type	(TWA) EXC NA	TWA (EXC) NA	(TWA) EXC NA
Field Comments	light dust on filter 147 min X 1.50 lpm = 221 L	31 min X 2.03 lpm = 63 L	light dust on filter 118 min X 1.50 lpm = 177 L
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

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vs 021302

Sheet No.: P 000112

LIBBY MONTANA FIELD SAMPLE DATA SHEET
PERSONAL AIR

Scenario No.: NA Field Logbook No: 100117 Page No: 30-36 Sampling Date: 9/13/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Sampling Team: (PES) CDM Other ____ Names: PETRAK/REPINE

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Person Sampled: CHRISTOPHER BENEFIELD SSN: ____ Task: GREENCHAIN PULLER

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	SL- 00100	SL- 00114	
Location ID	BD-002099	BD-002099	
Sample Group	BUILDING	BUILDING	
Location Description	SHOULDER	SHOULDER	
Category (circle)	(FS) Blank Rep____	(FS) Blank Rep____	FS Blank Rep____
Matrix Type (circle)	(Indoor) Outdoor NA	(Indoor) Outdoor NA	Indoor Outdoor NA
Filter Diameter (circle)	(25mm) 37mm	(25mm) 37mm	25mm 37mm
Pore Size (circle)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)	TEM- .45 PCM- 0.8
Flow Meter Type (circle)	(Rotometer) DryCal	(Rotometer) DryCal	Rotometer DryCal
Pump ID Number	602608	6265166	
Flow Meter ID No.	34719	9/13/02 ~~34~~ 34719	
Start Date	9/13/02	9/13/02	
Start Time	1240	1514	
Start Flow (L/min)	2.03	1.50	
Stop Date	9/13/02	9/13/02	
Stop Time	1310	1633	
Stop Flow (L/min)	2.03	1.50	
Pump fault?	(No) Yes	(No) Yes	No Yes
MET Station onsite?	(No) Yes	(No) Yes	No Yes
Sample Type	TWA (EXC) NA	(TWA) EXC NA	TWA EXC NA
Field Comments	30 min x 2.03 lpm = 61L	79 min x 1.50 lpm = 119L	
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

9/13/02

vs 021302

Sheet No.: P-000113

LIBBY MONTANA FIELD SAMPLE DATA SHEET
PERSONAL AIR

Scenario No.: NA Field Logbook No: 100117 Page No: 30-36 Sampling Date: 9/13/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Sampling Team: (PES) CDM Other _____ Names: PETRAK/REPINE

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Person Sampled: JAMES CUMMINGS SSN: __ Task: DRYER OFFBEARER

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	SL- 00113	SL- 00116	SL- 00120
Location ID	BD-002099	BD-002099	NA map 9/13/02
Sample Group	BUILDING	BUILDING	BLANK
Location Description	SHOULDER	SHOULDER	NA map 9/13/02
Category (circle)	(FS) Blank Rep_____	(FS) Blank Rep_____	FS (Blank) Rep_____
Matrix Type (circle)	(Indoor) Outdoor NA	(Indoor) Outdoor NA	Indoor Outdoor (NA)
ilter Diameter (circle)	(25mm) 37mm	(25mm) 37mm	25mm 37mm
Pore Size (circle)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)	TEM- .45 PCM- 0.8
Flow Meter Type (circle)	(Rotometer) DryCal	(Rotometer) DryCal	Rotometer DryCal
Pump ID Number	602608	6266666	
Flow Meter ID No.	34719	34719	
Start Date	9/13/02	9/13/02	
Start Time	1426	1548	
Start Flow (L/min)	2.03	1.50	
Stop Date	9/13/02	9/13/02	
Stop Time	1456	1746	
Stop Flow (L/min)	2-03	1.50	
Pump fault?	(No) Yes	(No) Yes	No Yes
MET Station onsite?	(No) Yes	(No) Yes	No Yes
Sample Type	TWA (EXC) NA	(TWA) EXC NA	TWA EXC NA
Field Comments	30 min x 2.03 lpm = 61 L	light dust on filter 118 min x 1.50 lpm = 177 L	
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

9/13/02

vs 021302

Sheet No.: PUUUI14

LIBBY MONTANA FIELD SAMPLE DATA SHEET

PERSONAL AIR

Scenario No.: NA Field Logbook No: 100117 Page No: 30-36 Sampling Date: 9/13/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Sampling Team: (PES) CDM Other ____ Names: PETRAK/REPINE

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Person Sampled: DOUG JELLESED SSN: Task: DRYER TENDER

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	SL- 00110	SL- 00117	
Location ID	BD-002099	BD-002099	
Sample Group	BUILDING	BUILDING	
Location Description	SHOULDER	SHOULDER	
Category (circle)	(FS) Blank Rep____	(FS) Blank Rep____	FS Blank Rep____
Matrix Type (circle)	(Indoor) Outdoor NA	(Indoor) Outdoor NA	Indoor Outdoor NA
Filter Diameter (circle)	(25mm) 37mm	(25mm) 37mm	25mm 37mm
Pore Size (circle)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)	TEM- .45 PCM- 0.8
Flow Meter Type (circle)	(Rotometer) DryCal	(Rotometer) DryCal	Rotometer DryCal
Pump ID Number	602598	602598	
Flow Meter ID No.	34719	34719	
Start Date	9/13/02	9/13/02	
Start Time	1349	1549	
Start Flow (L/min)	1.50	1.50	
Stop Date	9/13/02	9/13/02	
Stop Time	1549	~~1740~~ 1742	
Stop Flow (L/min)	1.50	1.50	
Pump fault?	(No) Yes	(No) Yes	No Yes
MET Station onsite?	(No) Yes	(No) Yes	No Yes
Sample Type	(TWA) EXC NA	(TWA) EXC NA	TWA EXC NA
Field Comments	light dust on filter 120 min x 1.50 lpm = 180 L	113 min x 1.50 lpm = 170 L	
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

9/13/02

vs 021302

Sheet No.: P- 000115

LIBBY MONTANA FIELD SAMPLE DATA SHEET
PERSONAL AIR

Scenario No.: NA Field Logbook No: 10D17 Page No: 37-41 Sampling Date: 9/14/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Sampling Team: (PES) CDM Other ____ Names: PETRAK/REPINE/BROWN

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Person Sampled: CHRISTOPHER BENFIELD SSN: ____ Task: GREEN CHAIN PULLER

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	SL- 00142	SL- 00148	SL- 00151
Location ID	BD-002099	BD-002099	BD-002099
Sample Group	BUILDING	BUILDING	BUILDING
Location Description	SHOULDER	SHOULDER	SHOULDER
Category (circle)	(FS) Rep____ Blank	(FS) Rep____ Blank	(FS) Rep____ Blank
Matrix Type (circle)	(Indoor) Outdoor NA	(Indoor) Outdoor NA	(Indoor) Outdoor NA
Filter Diameter (circle)	(25mm) 37mm	(25mm) 37mm	(25mm) 37mm
Pore Size (circle)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)
Flow Meter Type (circle)	(Rotometer) DryCal	(Rotometer) DryCal	(Rotometer) DryCal
Pump ID Number	626509	626509	626509
Flow Meter ID No.	34719	34719	34719
Start Date	9/14/02	9/14/02	9/14/02
Start Time	1007	1225	1404
Start Flow (L/min)	1.50	1.50	1.50
Stop Date	9/14/02	9/14/02	9/14/02
Stop Time	1201	1404	1633
Stop Flow (L/min)	1.50	1.50	1.50
Pump fault?	(No) Yes	(No) Yes	(No) Yes
MET Station onsite?	(No) Yes	(No) Yes	(No) Yes
Sample Type	(TWA) EXC NA	(TWA) EXC NA	(TWA) EXC NA
Field Comments	worker not wearing pump for ~last 10 min of time 114 min x 1.50 = 171 L	99 min x 1.50 lpm = 149 L	149 min x 1.50 lpm = 224 L
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

9/14/02

vs 021302

Sheet No.: P-000116

LIBBY MONTANA FIELD SAMPLE DATA SHEET
PERSONAL AIR

Scenario No.: NA Field Logbook No: 100117 Page No: 37-41 Sampling Date: 9/14/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Sampling Team: (PES) CDM Other ____ Names: PETRAK/REPINE/BROWN

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Person Sampled: VERNON DRAKE SSN: ____ Task: DRYER FEEDER

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	SL- 00144	SL- 00150	SL- 00152
Location ID	BD002099	BD-002099	BD-002099
Sample Group	BUILDING	BUILDING	BUILDING
Location Description	SHOULDER	SHOULDER	SHOULDER
Category (circle)	(FS) Blank Rep____	(FS) Blank Rep____	(FS) Blank Rep____
Matrix Type (circle)	(Indoor) Outdoor NA	(Indoor) Outdoor NA	(Indoor) Outdoor NA
ilter Diameter (circle)	(25mm) 37mm	(25mm) 37mm	(25mm) 37mm
Pore Size (circle)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)
Flow Meter Type (circle)	(Rotometer) DryCal	(Rotometer) DryCal	(Rotometer) DryCal
Pump ID Number	626526	626526	626526
Flow Meter ID No.	34719	34719	34719
Start Date	9/14/02	9/14/02	9/14/02
Start Time	1011	1236	1410
Start Flow (L/min)	1.50	1.50	1.50
Stop Date	9/14/02	9/14/02	9/14/02
Stop Time	1210	1410	1727
Stop Flow (L/min)	1.50	1.50	1.50
Pump fault?	(No) Yes	(No) Yes	(No) Yes
MET Station onsite?	(No) Yes	(No) Yes	(No) Yes
Sample Type	(TWA) EXC NA	(TWA) EXC NA	(TWA) EXC NA
Field Comments	119 min x 1.50 lpm = 179 L	94 min x 1.50 lpm = 141 L	197 min x 1.5 lpm = 296 L
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

9/14/02

vs 021302

Sheet No.: P- 000117

LIBBY MONTANA FIELD SAMPLE DATA SHEET
PERSONAL AIR

Scenario No.: NA Field Logbook No: 10D117 Page No: 37-41 Sampling Date: 9/14/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Sampling Team: (PES) CDM Other ____ Names: PETRAK/REPINE/BROWN

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Person Sampled: DOUG JELLESED SSN: Task: DRYER TENDER

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	SL- 00145	SL- 00149	SL- 00154
Location ID	BD-002099	BD-002099	BD-002099
Sample Group	BUILDING	BUILDING	BUILDING
Location Description	SHOULDER	SHOULDER	SHOULDER
Category (circle)	(FS) Blank Rep____	(FS) Blank Rep____	(FS) Blank Rep____
Matrix Type (circle)	(Indoor) Outdoor NA	(Indoor) Outdoor NA	(Indoor) Outdoor NA
Filter Diameter (circle)	(25mm) 37mm	(25mm) 37mm	(25mm) 37mm
Pore Size (circle)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)
Flow Meter Type (circle)	(Rotometer) DryCal	(Rotometer) DryCal	(Rotometer) DryCal
Pump ID Number	6266666	6266666	6266666
Flow Meter ID No.	34719	34719	34719
Start Date	9/14/02	9/14/02	9/14/02
Start Time	1012	1205	1420
Start Flow (L/min)	1.50	1.50	1.50
Stop Date	9/14/02	9/14/02	9/14/02
Stop Time	1205	1420	1725
Stop Flow (L/min)	1.50	1.50	1.50
Pump fault?	No Yes	(No) Yes	(No) Yes
MET Station onsite?	(No) Yes	(No) Yes	(No) Yes
Sample Type	(TWA) EXC NA	(TWA) EXC NA	(TWA) EXC NA
Field Comments	113 min X 1.50 lpm = 170 L	135 min X 1.5 lpm = 203 L	185 min X 1.50 lpm = 278 L
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

! Yp 9/23/02

vs 021302

Sheet No.: P-000118

LIBBY MONTANA FIELD SAMPLE DATA SHEET

PERSONAL AIR

Scenario No.: NA Field Logbook No: 100117 Page No: 37-41 Sampling Date: 9/14/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Sampling Team: (PES) CDM Other _____ Names: PETRAK/REPINE/BROWN

Land Use: Residential School Commercial Mining Roadway Other ( )

Person Sampled: JAMES CUMMINGS SSN: _ Task: DRYER OFFBEAKER

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	SL- 00146	SL- 00147	SL- 00153
Location ID	BD-002099	BD-002099	BD-002099
Sample Group	BUILDING	BUILDING	BUILDING
Location Description	SHOULDER	SHOULDER	SHOULDER
Category (circle)	(FS) Blank Rep_____	(FS) Blank Rep_____	(FS) Blank Rep_____
Matrix Type (circle)	(Indoor) Outdoor NA	(Indoor) Outdoor NA	(Indoor) Outdoor NA
Filter Diameter (circle)	(25mm) 37mm	(25mm) 37mm	(25mm) 37mm
Pore Size (circle)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)
Flow Meter Type (circle)	(Rotometer) DryCal	(Rotometer) DryCal	(Rotometer) DryCal
Pump ID Number	6260566	6260566	6260566
Flow Meter ID No.	34719	34719	34719
Start Date	9/14/02	9/14/02	9/14/02
Start Time	1020	1208	1414
Start Flow (L/min)	1.50	1.50	1.50
Stop Date	9/14/02	9/14/02	9/14/02
Stop Time	1150	1414	1723
Stop Flow (L/min)	1.50	1.50	1.50
Pump fault?	(No) Yes	(No) Yes	(No) Yes
MET Station onsite?	(No) Yes	(No) Yes	(No) Yes
Sample Type	(TWA) EXC NA	(TWA) EXC NA	(TWA) EXC NA
Field Comments	light dust on filter Also rotating onto composer as relief. 90 min X 1.50 = 135 L	126 min X 1.50 lpm = 189 L	189 min X 1.5 lpm = 284 L
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

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vs 021302

Sheet No.: P- 000119

LIBBY MONTANA FIELD SAMPLE DATA SHEET
PERSONAL AIR

Scenario No.: NA Field Logbook No: 100117 Page No: 37-41 Sampling Date: 9/14/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Sampling Team: (PES) CDM Other ____ Names: PETRAK/REPINE

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Person Sampled: JESSE L NIXON SSN: ____ Task: PLUGGER

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	SL- 00143	SL- 00155	SL- 00156
Location ID	BD-002099	NA ~~BD-002099~~ mcp 9/14/02	NA mcp 9/14/02
Sample Group	BDILDING	~~BUILDING~~ mcp 9/14/02 BLANK	BLANK
Location Description	SHOULDER	NA: mcp 9/14/02	NA mcp 9/14/02
Category (circle)	(FS) Blank Rep____	FS (Blank) Rep____	FS (Blank) Rep____
Matrix Type (circle)	(Indoor) Outdoor NA	Indoor Outdoor (NA)	Indoor Outdoor (NA)
Filter Diameter (circle)	(25mm) 37mm	25mm 37mm	25mm 37mm
Pore Size (circle)	TEM- .45 (PCM- 0.8)	TEM- .45 PCM- 0.8	TEM- .45 PCM- 0.8
Flow Meter Type (circle)	(Rotometer) DryCal	Rotometer DryCal	Rotometer DryCal
Pump ID Number	602598		
Flow Meter ID No.	34719		
Start Date	9/14/02		
Start Time	12.00		
Start Flow (L/min)	1.50		
Stop Date	9/14/02		
Stop Time	1515		
Stop Flow (L/min)	1.50		
Pump fault?	(No) Yes	No Yes	No Yes
MET Station onsite?	(No) Yes	No Yes	No Yes
Sample Type	(TWA) EXC NA	TWA EXC NA	TWA EXC NA
Field Comments	195 min X 1.50 lpm = 293 L		
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

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Sheet No.: P-_____ 000120

LIBBY MONTANA FIELD SAMPLE DATA SHEET

PERSONAL AIR

Scenario No.: NA Field Logbook No: 100117 Page No: 44-49 Sampling Date: 9/16/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Sampling Team: (PES) CDM Other _____ Names: PERAK/REPINE

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Person Sampled: CHRISTOPHER BENEFIELD SSN: Task: GREEN CHAIN PULLER

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	SL- 00158	SL- 00184	SL- 00192
Location ID	BD-002099	BD-002099	BD-002099
Sample Group	BUILDING	BUILDING	BUILDING
Location Description	SHOULDER	SHOULDER	SHOULDER
Category (circle)	(FS) Blank Rep_____	(FS) Blank Rep_____	(FS) Blank Rep_____
Matrix Type (circle)	(Indoor) Outdoor NA	(Indoor) Outdoor NA	(Indoor) Outdoor NA
Filter Diameter (circle)	(25mm) 37mm	(25mm) 37mm	(25mm) 37mm
Pore Size (circle)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)
Flow Meter Type (circle)	(Rotometer) DryCal	(Rotometer) DryCal	(Rotometer) DryCal
Pump ID Number	626753	626753	612682
Flow Meter ID No.	34719	34719	34719
Start Date	9/16/02	9/16/02	9/16/02
Start Time	0555	0905	1131
Start Flow (L/min)	1.50	1.50	2.03
Stop Date	9/16/02	9/16/02	9/16/02
Stop Time	0905	1201	1201
Stop Flow (L/min)	1.50	1.50	2.03
Pump fault?	(No) Yes	(No) Yes	(No) Yes
MET Station onsite?	(No) Yes	(No) Yes	(No) Yes
Sample Type	(TWA) EXC NA	(TWA) EXC NA	TWA (EXC) NA
Field Comments	190 min X1.50 lpm = 285 L	176 min X1.50 lpm = 264 L	9/16/02 30 min X2.03 lpm = 61 L
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

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vs 021302

Sheet No.: P-000121

LIBBY MONTANA FIELD SAMPLE DATA SHEET
PERSONAL AIR

Scenario No.: NA Field Logbook No: 160117 Page No: 44-49 Sampling Date: 9/16/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Sampling Team: (PES) CDM Other ____ Names: PETRAK/REPINE

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Person Sampled: VERNON DRAKE SSN: Task: DRYER FEEDER

Data Item	Cassette 1	Cassette 2.	Cassette 3
Index ID	SL- 00157	SL- 00185	SL- 00191
Location ID	BD-002099	BD-002099	BD-002099
Sample Group	BUILDING	BUILDING	BUILDING
Location Description	SHOULDER	SHOULDER	SHOULDER
Category (circle)	(FS) Blank Rep____	(FS) Blank Rep____	(FS) Blank Rep____
Matrix Type (circle)	(Indoor) Outdoor NA	(Indoor) Outdoor NA	(Indoor) Outdoor NA
Filter Diameter (circle)	(25mm) 37mm	(25mm) 37mm	(25mm) 37mm
Pore Size (circle)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)
Flow Meter Type (circle)	(Rotometer) DryCal	(Rotometer) DryCal	(Rotometer) DryCal
Pump ID Number	6266666	6266666	602608
Flow Meter ID No.	34719	34719	34719
Start Date	9/16/02	9/16/02	9/16/02
Start Time	0558	0908	1058
Start Flow (L/min)	1.50	1.50	2.03
Stop Date	9/16/02	9/16/02	9/16/02
Stop Time	0908	1147	1129
Stop Flow (L/min)	1.50	1.50	2.03
Pump fault?	(No) Yes	(No) Yes	(No) Yes
MET Station onsite?	(No) Yes	(No) Yes	(No) Yes
Sample Type	(TWA) EXC NA	(TWA) EXC NA	TWA (EXC) NA
Field Comments	190 min x 1.50 lpm = 285 L	159 min x 1.50 lpm = 239 L	31 min x 2.03 lpm = 63 L
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

JJb 9/23/02

vs 021302

LIBBY MONTANA FIELD SAMPLE DATA SHEET
PERSONAL AIR

Scenario No.: NA Field Logbook No: 100117 Page No: 37-41 Sampling Date: 9/14/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Sampling Team: (PES) CDM Other ____ Names: PETRAK/REPINE/BROWN

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Person Sampled: CHRISTOPHER BENFIELD SSN: Task: GREEN CHAIN PULLER

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	SL- 00123	SL- 00132	SL- 00133
Location ID	BD-002099	BD-02099	BD-02099
Sample Group	BUILDING	BUILDING	BUILDING
Location Description	SHOULDER	SHOULDER	SHOULDER
Category (circle)	(FS) Blank Rep____	(FS) Blank Rep____	(FS) Blank Rep____
Matrix Type (circle)	(Indoor) Outdoor NA	(Indoor) Outdoor NA	(Indoor) Outdoor NA
Filter Diameter (circle)	(25mm) 37mm	(25mm) 37mm	(25mm) 37mm
Pore Size (circle)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)
Flow Meter Type (circle)	(Rotometer) DryCal	(Rotometer) DryCal	(Rotometer) DryCal
Pump ID Number	626509	~~626753~~ 626675	626509
Flow Meter ID No.	34719	34719	34719
Start Date	9/14/02	9/14/02	9/14/02
Start Time	0601	0844	0800
Start Flow (L/min)	1.50	2.03	1.50
Stop Date	9/14/02	9/14/02	9/14/02
Stop Time	0800	0914	1007
Stop Flow (L/min)	1.50	2.03	1.50
Pump fault?	(No) Yes	(No) Yes	(No) Yes
MET Station onsite?	(No) Yes	(No) Yes	(No) Yes
Sample Type	(TWA) EXC NA	TWA (EXC) NA	(TWA) EXC NA
Field Comments	dust on filter 119 min x 1.50 lpm = 179 L	30 min x 2.03 lpm = 61 L	127 min x 1.50 lpm = 191 L
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

9/14/02

vs 021302

Sheet No.: P- 000123

LIBBY MONTANA FIELD SAMPLE DATA SHEET
PERSONAL AIR

Scenario No.: NA Field Logbook No: 100117 Page No: 37-41 Sampling Date: 9/14/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Sampling Team: (PES) CDM Other ____ Names: PETRAK/REPINE/BROWN

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Person Sampled: VERNON DRAKE SSN: Task: DRYER FEEDER

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	SL- 00124	SL- 00134	SL- 00135
Location ID	BD-002099	BD-002099	BD-002099
Sample Group	BUILDING	BUILDING	BUILDING
Location Description	SHOULDER	SHOULDER	SHOULDER
Category (circle)	(FS) Blank Rep____	(FS) Blank Rep____	(FS) Blank Rep____
Matrix Type (circle)	(Indoor) Outdoor NA	(Indoor) Outdoor NA	(Indoor) Outdoor NA
ilter Diameter (circle)	(25mm) 37mm	(25mm) 37mm	(25mm) 37mm
Pore Size (circle)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)
Flow Meter Type (circle)	(Rotometer) DryCal	(Rotometer) DryCal	Rotometer DryCal
Pump ID Number	626526	626526	626753
Flow Meter ID No.	9/14/02 ~~9/14/02~~ 34719	34719	34719
Start Date	9/14/02	9/14/02	9/14/02
Start Time	0604	0804	0806
Start Flow (L/min)	1.50	1.50	~~1.50~~ 2.03
Stop Date	9/14/02	9/14/02	9/14/02
Stop Time	0804	1011	0836
Stop Flow (L/min)	1.50	1.50	2.03
Pump fault?	(No) Yes	(No) Yes	(No) Yes
MET Station onsite?	(No) Yes	(No) Yes	(No) Yes
Sample Type	(TWA) EXC NA	(TWA) EXC NA	TWA (EXC) NA
Field Comments	dust on filter 120 min x 1.50 lpm = 180 L	~~dust~~ 9/14/02 1.50 9/14/02 127 min x ~~2.03~~ lpm = 191 L dust on filter	30 min x 2.03 lpm = 61 L
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

9/14/02

vs 021302

LIBBY MONTANA FIELD SAMPLE DATA SHEET
PERSONAL AIR

Scenario No.: NA Field Logbook No: 100117 Page No: 37-41 Sampling Date: 9/14/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Sampling Team: (PES) CDM Other _____ Names: PETRAK/REPINE/BROWN

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Person Sampled: JAMES CUMMINGS SSN: _ Task: DRYER OFFBEARER

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	SL- 00125	SL- 00136	SL- 00137
Location ID	BD-002099	BD-002099	BD-002099
Sample Group	BUILDING	BUILDING	BUILDING
Location Description	SHOULDER	SHOULDER	SHOULDER
Category (circle)	(FS) Blank Rep_____	(FS) Blank Rep_____	(FS) Blank Rep_____
Matrix Type (circle)	(Indoor) Outdoor NA	(Indoor) Outdoor NA	(Indoor) Outdoor NA
Filter Diameter (circle)	(25mm) 37mm	(25mm) 37mm	(25mm) 37mm
Pore Size (circle)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)
Flow Meter Type (circle)	(Rotometer) DryCal	(Rotometer) DryCal	(Rotometer) DryCal
Pump ID Number	6266566	6266675	6266566
Flow Meter ID No.	34719	34719	34719
Start Date	9/14/02	9/14/02	9/14/02
Start Time	0608	0812	0812
Start Flow (L/min)	1.50	2.03	1.50
Stop Date	9/14/02	9/14/02	9/14/02
Stop Time	0812	0842	1020
Stop Flow (L/min)	1.50	2.03	1.50
Pump fault?	(No) Yes	(No) Yes	(No) Yes
MET Station onsite?	(No) Yes	(No) Yes	(No) Yes
Sample Type	(TWA) EXC NA	TWA (EXC) NA	(TWA) EXC NA
Field Comments	dust on filter 124 min X 1.50 lpm ~~= 182 L~~ 9/14/02 ~~182 L~~ = 186 L	30 min X 2.03 lpm = 61 L	128 min X 1.50 lpm = 192 L
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

9/14/02

Sheet No.: P-000125

LIBBY MONTANA FIELD SAMPLE DATA SHEET
PERSONAL AIR

Scenario No.: NA Field Logbook No: 100117 Page No: 37-41 Sampling Date: 9/14/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Sampling Team: (PES) CDM Other ____ Names: PETRAK/REPINE/BROWN

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Person Sampled: DOUG JELLESED SSN: ____ Task: DRYER TENDER

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	SL- 00126	SL- 00138	SL- 00139
Location ID	BD-002099	BD-002099	BD-002099
Sample Group	BUILDING	BUILDING	BUILDING
Location Description	SHOULDER	SHOULDER	SHOULDER
Category (circle)	(FS) Blank Rep____	(FS) Blank Rep____	(FS) Blank Rep____
Matrix Type (circle)	(Indoor) Outdoor NA	(Indoor) Outdoor NA	(Indoor) Outdoor NA
ilter Diameter (circle)	(25mm) 37mm	(25mm) 37mm	(25mm) 37mm
Pore Size (circle)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)
Flow Meter Type (circle)	(Rotometer) DryCal	(Rotometer) DryCal	(Rotometer) DryCal
Pump ID Number	6266666	6266666	6266753
Flow Meter ID No.	34719	34719	34719
Start Date	9/14/02	9/14/02	9/14/02
Start Time	0611	0815	0838
Start Flow (L/min)	1.50	1.50	2.03
Stop Date	9/14/02	9/14/02	9/14/02
Stop Time	0815	1012	09:10
Stop Flow (L/min)	1.50	1.50	2.03
Pump fault?	(No) Yes	(No) Yes	(No) Yes
MET Station onsite?	(No) Yes	(No) Yes	(No) Yes
Sample Type	(TWA) EXC NA	(TWA) EXC NA	TWA (EXC) NA
Field Comments	dust on filter 124 min x 1.50 lpm = 186 L	dust on filter 117 min x 1.50 lpm = 176 L	32 min x 2.03 lpm = 65 L
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Jyp 9/23/02

vs 021302

Sheet No.: F-000126

LIBBY MONTANA FIELD SAMPLE DATA SHEET

PERSONAL AIR

Scenario No.: NA Field Logbook No: 100117 Page No: 37-41 Sampling Date: 9/14/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Sampling Team: (PES) CDM Other ____ Names: PETRAK/REPINE/BROWN

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Person Sampled: JESSE L. NIXON SSN: Task: PLUGGER

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	SL- 00131	SL- 00140	SL- 00141
Location ID	BD-~~02099~~ 002099 mcf 9/14/02	BD-~~02099~~ 002099 mcf 9/14/02	~~BD-02099~~ BD- 002099 mcf 9/14/02
Sample Group	BUILDING	BUILDING	BUILDING
Location Description	SHOULDER	SHOULDER	SHOULDER
Category (circle)	(FS) Blank Rep____	(FS) Blank Rep____	(FS) Blank Rep____
Matrix Type (circle)	(Indoor) Outdoor NA	(Indoor) Outdoor NA	(Indoor) Outdoor NA
Filter Diameter (circle)	(25mm) 37mm	(25mm) 37mm	(25mm) 37mm
Pore Size (circle)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)
Flow Meter Type (circle)	(Rotometer) DryCal	(Rotometer) DryCal	(Rotometer) DryCal
Pump ID Number	6002598	6026753	6002598
Flow Meter ID No.	34719	34719	34719
Start Date	9/14/02	9/14/02	9/14/02
Start Time	0730	0922	0931
Start Flow (L/min)	1.50	2.03	1.50
Stop Date	9/14/02	9/14/02	9/14/02
Stop Time	0931	0958	1130
Stop Flow (L/min)	1.50	2.03	1.50
Pump fault?	(No) Yes	(No) Yes	(No) Yes
MET Station onsite?	(No) Yes	(No) Yes	(No) Yes
Sample Type	(TWA) EXC NA	TWA (EXC) NA	(TWA) EXC NA
Field Comments	121 min x 1.50 lpm = 182L	36 min X 2.03 lpm = 73L	119 min x 1.50 lpm = 179L light dust on filter
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

9/14/02

vr 021302

Sheet No.: P-000127

LIBBY MONTANA FIELD SAMPLE DATA SHEET
PERSONAL AIR

Scenario No.: NA Field Logbook No: 100117 Page No: 44-49 Sampling Date: 9/16/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Sampling Team: (PES) CDM Other ____ Names: PETRAK/REPINE

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Person Sampled: DOUG JELLESED SSN: ____ Task: DRYER TENDER

Data Item	Cassette 1	Cassette 2.	Cassette 3
Index ID	SL- 00159	SL- 00186	SL- 00193
Location ID	BD-002099	BD-002099	BD-002099
Sample Group	BUILDING	BUILDING	BUILDING
Location Description	SHOULDER	SHOULDER	SHOULDER
Category (circle)	(FS) Blank Rep____	(FS) Blank Rep____	(FS) Blank Rep____
Matrix Type (circle)	(Indoor) Outdoor NA	(Indoor) Outdoor NA	(Indoor) Outdoor NA
Filter Diameter (circle)	(25mm) 37mm	(25mm) 37mm	(25mm) 37mm
Pore Size (circle)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)
Flow Meter Type (circle)	(Rotometer) DryCal	(Rotometer) DryCal	(Rotometer) DryCal
Pump ID Number	6026566	6026566	6026608
Flow Meter ID No.	34719	34719	34719
Start Date	9/16/02	9/16/02	9/16/02
Start Time	0603	0910	1027
Start Flow (L/min)	1.50	1.50	2.03
Stop Date	9/16/02	9/16/02	9/16/02
Stop Time	0910	1150	1058
Stop Flow (L/min)	1.50	1.50	2.03
Pump fault?	(No) Yes	(No) Yes	(No) Yes
MET Station onsite?	(No) Yes	(No) Yes	(No) Yes
Sample Type	(TWA) EXC NA	(TWA) EXC NA	TWA (EXC) NA
Field Comments	187 min x 1.50 lpm = 281 L ✓	160 min x 1.50 lpm = 240 L ✓	31 min x 2.03 lpm = 63 L ✓
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

✓ 9/23/02

vs 021302

Sheet No.: P-000128

LIBBY MONTANA FIELD SAMPLE DATA SHEET

PERSONAL AIR

Scenario No.: NA Field Logbook No: 100117 Page No: 44-49 Sampling Date: 9/16/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON ~~LUMBER~~ LUMBER

Sampling Team: (PES) CDM Other ____ Names: PETRAK/REPINE

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Person Sampled: JAMES CUMMINGS SSN: ____ Task: DRYER OFFBEARER

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	SL- 00160	SL- 00187	SL- 00194
Location ID	BD-002099	BD-002099	BD-002099
Sample Group	BUILDING	BUILDING	BUILDING
Location Description	SHOULDER	SHOULDER	SHOULDER
Category (circle)	(FS) Blank Rep____	(FS) Blank Rep____	(FS) Blank Rep____
Matrix Type (circle)	(Indoor) Outdoor NA	(Indoor) Outdoor NA	(Indoor) Outdoor NA
Filter Diameter (circle)	(25mm) 37mm	(25mm) 37mm	(25mm) 37mm
Pore Size (circle)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)
Flow Meter Type (circle)	(Rotometer) DryCal	(Rotometer) DryCal	(Rotometer) DryCal
Pump ID Number	602598	602598	612682
Flow Meter ID No.	34719	34719	34719
Start Date	9/16/02	9/16/02	9/16/02
Start Time	0405	0914	1024
Start Flow (L/min)	1.50	1.50	2.03
Stop Date	9/16/02	9/16/02	9/16/02
Stop Time	0914	1156	1057
Stop Flow (L/min)	1.50	1.50	2.03
Pump fault?	(No) Yes	(No) Yes	(No) Yes
MET Station onsite?	(No) Yes	(No) Yes	(No) Yes
Sample Type	(TWA) EXC NA	(TWA) EXC NA	TWA (EXC) NA
Field Comments	189 min X 1.50 lpm = 284 L ✓	162 min X 1.50 lpm = 243 L ✓	33 min X 2.03 lpm = 67 L ✓
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

✓ gp 9/23/02

vs 021302

Sheet No.: F-000129

LIBBY MONTANA FIELD SAMPLE DATA SHEET
PERSONAL AIR

Scenario No.: NA Field Logbook No: 100117 Page No: 44-49 Sampling Date: 9/16/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Sampling Team: (PES) CDM Other ____ Names: PETRAK/REPINE

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Person Sampled: AARON BROWN SSN: ____ Task: FJ UTILITY

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	SL- 00161	SL- 00183	SL- 00198
Location ID	~~BUIBD~~-002097	BD-002097	~~BD~~-002097
Sample Group	BUILDING	BUILDING	BUILDING
Location Description	SHOULDER	SHOULDER	SHOULDER
Category (circle)	(FS) Blank Rep____	(FS) Blank Rep____	(FS) Blank Rep____
Matrix Type (circle)	(Indoor) Outdoor NA	(Indoor) Outdoor NA	(Indoor) Outdoor NA
ilter Diameter (circle)	(25mm) 37mm	(25mm) 37mm	(25mm) 37mm
Pore Size (circle)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)
Flow Meter Type (circle)	(Rotometer) DryCal	(Rotometer) DryCal	(Rotometer) DryCal
Pump ID Number	626675	626675	626675
Flow Meter ID No.	34719	34719	34719
Start Date	9/16/02	9/16/02	9/16/02
Start Time	0617	0854	1122
Start Flow (L/min)	1.50	1.50	1.50
Stop Date	9/16/02	9/16/02	9/16/02
Stop Time	0854	1100	1415
Stop Flow (L/min)	1.50	1.50	1.50
Pump fault?	(No) Yes	(No) Yes	(No) Yes
MET Station onsite?	(No) Yes	(No) Yes	(No) Yes
Sample Type	(TWA) EXC NA	(TWA) EXC NA	(TWA) EXC NA
Field Comments	157 min x 1.50 lpm = 236 L ✓	126 min x 1.50 lpm = 189 L ✓	173 min x 1.50 lpm = 260 L ✓
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

JJP 9/23/02

vs 021302

Sheet No.: F- 000130

LIBBY MONTANA FIELD SAMPLE DATA SHEET

PERSONAL AIR

Scenario No.: NA Field Logbook No: 100117 Page No: 4449 Sampling Date: 9/16/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Sampling Team: (PES) CDM Other ____ Names: PETRAK/REANE

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Person Sampled: JESSE L. NIXON SSN: ____ Task: ~~PD~~ PLUGGER

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	SL- 00165	SL- 00188	SL- 00190
Location ID	BD-002099	BD-002099	BD-002099
Sample Group	BUILDING	BUILDING	BUILDING
Location Description	SHOULDER	SHOULDER	SHOULDER
Category (circle)	(FS) Blank Rep____	(FS) Blank Rep____	(FS) Blank Rep____
Matrix Type (circle)	(Indoor) Outdoor NA	(Indoor) Outdoor NA	(Indoor) Outdoor NA
Filter Diameter (circle)	(25mm) 37mm	(25mm) 37mm	(25mm) 37mm
Pore Size (circle)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)
Flow Meter Type (circle)	(Rotometer) DryCal	(Rotometer) DryCal	(Rotometer) DryCal
Pump ID Number	626509	626509	612682
Flow Meter ID No.	34719	34719	34719
Start Date	9/16/02	9/16/02	9/16/02
Start Time	0731	0954	1100
Start Flow (L/min)	1.50	1.50	2.03
Stop Date	9/16/02	9/16/02	9/16/02
Stop Time	0954	~~1147~~ 1159	1130
Stop Flow (L/min)	1.50	~~1.50~~ 1.50	2.03
Pump fault?	(No) Yes	(No) Yes	(No) Yes
MET Station onsite?	(No) Yes	(No) Yes	(No) Yes
Sample Type	(TWA) EXC NA	(TWA) EXC NA	TWA (EXC) NA
Field Comments	143 min X 1.50 lpm = 215 L ✓	125 min X 1.50 lpm = 188 L ✓	30 min X 2.03 lpm = 61 L ✓
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

✓ 9/23/02

vs 021302

Sheet No.: F- 000151

LIBBY MONTANA FIELD SAMPLE DATA SHEET
PERSONAL AIR

Scenario No.: NA Field Logbook No: 100117 Page No: 44-49 Sampling Date: 9/16/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Sampling Team: (PES) CDM Other ____ Names: PETRAK/REPINE

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Person Sampled: DANIEL GOYEN SSN: ____ Task: WAGNER OPERATOR

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	SL- 00166	SL- 00189	
Location ID	AD-000686	AD-000686	
Sample Group	PROPERTY	PROPERTY	
Location Description	SHOULDER	SHOULDER	
Category (circle)	(FS) Blank Rep____	(FS) Blank Rep____	FS Blank Rep____
Matrix Type (circle)	Indoor (Outdoor) NA	Indoor (Outdoor) NA	Indoor Outdoor NA
Filter Diameter (circle)	(25mm) 37mm	(25mm) 37mm	25mm 37mm
Pore Size (circle)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)	TEM- .45 PCM- 0.8
Flow Meter Type (circle)	(Rotometer) DryCal	(Rotometer) DryCal	Rotometer DryCal
Pump ID Number	626526	626526	
Flow Meter ID No.	34719	34719	
Start Date	9/16/02	9/16/02	
Start Time	0805	1006	
Start Flow (L/min)	1.50	1.50	
Stop Date	9/16/02	9/16/02	
Stop Time	10:06	1229	
Stop Flow (L/min)	1.50	1.50	
Pump fault?	(No) Yes	(No) Yes	No Yes
MET Station onsite?	(No) Yes	(No) Yes	No Yes
Sample Type	(TWA) EXC NA	(TWA) EXC NA	TWA EXC NA
Field Comments	dust on filter 121 min X 1.50 lpm = 182L ✓	light dust on filter 143 min X 1.50 lpm = 215L ✓	
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

9/16/02

9/16/02

9/16/02

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vs 021302

Sheet No.: P- 000152

LIBBY MONTANA FIELD SAMPLE DATA SHEET

PERSONAL AIR

Scenario No.: NA Field Logbook No: 100117 Page No: 44-49 Sampling Date: 9/16/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Sampling Team: (PES) CDM Other ____ Names: PETRAK/REPINE

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Person Sampled: CHRISTOPHER BENEFIELD SSN: Task: GREEN CHAIN PULLER

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	SL- 00200	SL- 00207	
Location ID	BD-002099	BD-002000	
Sample Group	BUILDING	BUILDING	
Location Description	SHOULDER	SHOULDER	
Category (circle)	(FS) Blank Rep____	(FS) Blank Rep____	FS Blank Rep____
Matrix Type (circle)	(Indoor) Outdoor NA	(Indoor) Outdoor NA	Indoor Outdoor NA
Filter Diameter (circle)	(25mm) 37mm	(25mm) 37mm	25mm 37mm
Pore Size (circle)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)	TEM- .45 PCM- 0.8
Flow Meter Type (circle)	(Rotometer) DryCal	(Rotometer) DryCal	Rotometer DryCal
Pump ID Number	626753	626753	
Flow Meter ID No.	34719	34719	
Start Date	9/16/02	9/16/02	
Start Time	1226	1417	
Start Flow (L/min)	1.50	1.50	
Stop Date	9/16/02	9/16/02	
Stop Time	1417	1631	
Stop Flow (L/min)	1.50	1.50	
Pump fault?	(No) Yes	(No) Yes	No Yes
MET Station onsite?	(No) Yes	(No) Yes	No Yes
Sample Type	(TWA) EXC NA	(TWA) EXC NA	TWA EXC NA
Field Comments	111 min x 1.50 lpm = 167L	134 min x 1.50 lpm = 201 L	
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

9/16/02

Sheet No.: P- 000199

LIBBY MONTANA FIELD SAMPLE DATA SHEET

PERSONAL AIR

Scenario No.: NA Field Logbook No: 100117 Page No: 44-49 Sampling Date: 9/16/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Sampling Team: (PES) CDM Other ____ Names: PETRAK/REPINE

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Person Sampled: JESSE L NIXON SSN: Task: PLUGGER

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	SL- 00199		
Location ID	BD-002099		
Sample Group	BUILDING		
Location Description	SHOULDER		
Category (circle)	(FS) Blank Rep____	FS Blank Rep____	FS Blank Rep____
Matrix Type (circle)	(Indoor) Outdoor NA	Indoor Outdoor NA	Indoor Outdoor NA
Filter Diameter (circle)	(25mm) 37mm	25mm 37mm	25mm 37mm
Pore Size (circle)	TEM- .45 (PCM- 0.8)	TEM- .45 PCM- 0.8	TEM- .45 PCM- 0.8
Flow Meter Type (circle)	(Rotometer) DryCal	Rotometer DryCal	Rotometer DryCal
Pump ID Number	6260509		
Flow Meter ID No.	34719		
Start Date	9/16/02		
Start Time	1226		
Start Flow (L/min)	1.50		
Stop Date	9/16/02		
Stop Time	9/16/02 1515		
Stop Flow (L/min)	1.50		
Pump fault?	(No) Yes	No Yes	No Yes
MET Station onsite?	(No) Yes	No Yes	No Yes
Sample Type	(TWA) EXC NA	TWA EXC NA	TWA EXC NA
Field Comments	169 min X 1.50 lpm = 254 L		
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

9/16/02

vs 021302

Sheet No.: P- 000134

LIBBY MONTANA FIELD SAMPLE DATA SHEET

PERSONAL AIR

Scenario No.: NA Field Logbook No: 100117 Page No: 44-49 Sampling Date: 9/16/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Sampling Team: (PES) CDM Other ____ Names: PETRAK/REPINE

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Person Sampled: AARON BROWN SSN: ____ Task: FJ UTILITY

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	SL- 00206		
Location ID	BD-002097		
Sample Group	BUILDING		
Location Description	SHOULDER		
Category (circle)	(FS) Blank Rep____	FS Blank Rep____	FS Blank Rep____
Matrix Type (circle)	(Indoor) Outdoor NA	Indoor Outdoor NA	Indoor Outdoor NA
Filter Diameter (circle)	(25mm) 37mm	25mm 37mm	25mm 37mm
Pore Size (circle)	TEM- .45 (PCM- 0.8)	TEM- .45 PCM- 0.8	TEM- .45 PCM- 0.8
Flow Meter Type (circle)	(Rotometer) DryCal	Rotometer DryCal	Rotometer DryCal
Pump ID Number	6260675		
Flow Meter ID No.	34719		
Start Date	9/16/02		
Start Time	1415		
Start Flow (L/min)	1.50		
Stop Date	9/16/02		
Stop Time	1611		
Stop Flow (L/min)	1.50		
Pump fault?	(No) Yes	No Yes	No Yes
MET Station onsite?	(No) Yes	No Yes	No Yes
Sample Type	(TWA) EXC NA	TWA EXC NA	TWA EXC NA
Field Comments	116 min X 1.50 lpm = 174 L		
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

9/16/02

vs 021302

Sheet No.: P-000135

LIBBY MONTANA FIELD SAMPLE DATA SHEET
PERSONAL AIR

Scenario No.: NA Field Logbook No: 100117 Page No: 44-49 Sampling Date: 9/16/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Sampling Team: (PES) CDM Other ____ Names: PETRAK/REPINE

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Person Sampled: NA SSN: NA Task: NA

Data Item	Cassette 1	Cassette 2.	Cassette 3
Index ID	SL- 00208	SL- 00209	
Location ID	NA map 9/16/02	NA map 9/16/02	
Sample Group	BLANK	BLANK	
Location Description	NA map 9/16/02	NA map 9/16/02	
Category (circle)	FS (Blank) Rep____	FS (Blank) Rep____	FS Blank Rep____
Matrix Type (circle)	Indoor Outdoor (NA)	Indoor Outdoor (NA)	Indoor Outdoor NA
ilter Diameter (circle)	25mm 37mm	25mm 37mm	25mm 37mm
Pore Size (circle)	TEM- .45 PCM- 0.8	TEM- .45 PCM- 0.8	TEM- .45 PCM- 0.8
Flow Meter Type (circle)	Rotometer DryCal	Rotometer DryCal	Rotometer DryCal
Pump ID Number			
Flow Meter ID No.			
Start Date			
Start Time			
Start Flow (L/min)			
Stop Date			
Stop Time			
Stop Flow (L/min)			
Pump fault?	No Yes	No Yes	No Yes
MET Station onsite?	No Yes	No Yes	No Yes
Sample Type	TWA EXC NA	TWA EXC NA	TWA EXC NA
Field Comments			
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Melissa A Petrak 9/16/02

Melissa A Petrak 9/16/02

Melissa A Petrak 9/16/02

JJP 9/23/02

vs 021302

Sheet No.: P- 000136

LIBBY MONTANA FIELD SAMPLE DATA SHEET

PERSONAL AIR

Scenario No.: NA Field Logbook No: 100117 Page No: 44-49 Sampling Date: 9/16/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Sampling Team: (PES) CDM Other ____ Names: PETRAK/REDINE

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Person Sampled: N/A SSN: N/A Task: N/A

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	SL- 00210	SL- 00211	SL- 00212
Location ID	NA map 9/16/02	NA map 9/16/02	NA map 9/16/02
Sample Group	BLANK	BLANK	BLANK
Location Description	NA map 9/16/02	NA map 9/16/02	NA map 9/16/02
Category (circle)	FS (Blank) Rep____	FS (Blank) Rep____	FS (Blank) Rep____
Matrix Type (circle)	Indoor Outdoor (NA)	Indoor Outdoor (NA)	Indoor Outdoor NA
Filter Diameter (circle)	25mm 37mm	25mm 37mm	25mm 37mm
Pore Size (circle)	TEM- .45 PCM- 0.8	TEM- .45 PCM- 0.8	TEM- .45 PCM- 0.8
Flow Meter Type (circle)	Rotometer DryCal	Rotometer DryCal	Rotometer DryCal
Pump ID Number			
Flow Meter ID No.			
Start Date			
Start Time			
Start Flow (L/min)			
Stop Date			
Stop Time			
Stop Flow (L/min)			
Pump fault?	No Yes	No Yes	No Yes
MET Station onsite?	No Yes	No Yes	No Yes
Sample Type	TWA EXC NA	TWA EXC NA	TWA EXC NA
Field Comments			
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Melissa A. Petrak 9/16/02

Melissa A. Petrak 9/16/02

Melissa A. Petrak 9/16/02

✓ JP 9/23/02

vs 021302

Sheet No.: P-000141

LIBBY MONTANA FIELD SAMPLE DATA SHEET

PERSONAL AIR

Scenario No.: NA Field Logbook No: ~~100116~~ 100117 9/14/02 Page No: 37-41 Sampling Date: 9/14/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Sampling Team: PES CDM Other ____ Names: PETRAK / REPINE / BROWN

Land Use: Residential School Commercial Mining Roadway Other ( )

Person Sampled: N/A SSN: N/A Task: N/A

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	SL- 00201	SL- 00202	
Location ID	NA	NA	
Sample Group	BLANK	BLANK	
Location Description	N/A	N/A	
Category (circle)	FS Blank Rep____	FS Blank Rep____	FS Blank Rep____
Matrix Type (circle)	Indoor Outdoor NA	Indoor Outdoor NA	Indoor Outdoor NA
Filter Diameter (circle)	25mm 37mm	25mm 37mm	25mm 37mm
Pore Size (circle)	TEM- .45 PCM- 0.8	TEM- .45 PCM- 0.8	TEM- .45 PCM- 0.8
Flow Meter Type (circle)	Rotometer DryCal	Rotometer DryCal	Rotometer DryCal
Pump ID Number			
Flow Meter ID No.			
Start Date			
Start Time			
Start Flow (L/min)			
Stop Date			
Stop Time			
Stop Flow (L/min)			
Pump fault?	No Yes	No Yes	No Yes
MET Station onsite?	No Yes	No Yes	No Yes
Sample Type	TWA EXC NA	TWA EXC NA	TWA EXC NA
Field Comments			
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

9/14/02

9/14/02

9/14/02

9/23/02

vs 021302

Location VARIOUS IN LIBBY Date 9/7/02

Project / Client SPENCER/EMSL/EPA/VOLPE/CDM

SAMPLING TEAM: PES/BROWN/PETRAK/[illegible]

1-07208, CASSETTE FELL APART AND EXPOSED FILTER FELL ON GROUND. SAMPLE VOIDED.

1800 SAMPLES TO OFFICE, PAPERWORK COMPLETED; SAMPLES PLACED UNDER COC AND RELINQUISHED TO CDM SAMPLE COORDINATOR

[signature] 9/7/02

Location CDM OFFICE TRAILER Date 9/9/02

Project / Client STIMSON LUMBER

SAMPLING TEAM - PES: PETRAK/PERINE, [signature]

0700 TO OFFICE TO PREP FOR STIMSON MEETING AT 9:00 AM.

0800 FROM GREG PARANA - MEETING MOVED TO 1030 AM.

0900 REVIEWED SAP.

1015 TO STIMSON FOR MEETING, INCLUDING SITE WALKTHROUGH

1230 RETURNED FROM STIMSON. CONTINUED STIMSON PREP - GATHERED FORMS, REQUESTED SAMPLE INDEX ID LABELS FROM TERRY KELLER, REVIEWED SAP

1700 REVIEWED FIELD DATA SHEETS FOR JIM HENDERSON, DAVE BROWN.

[signature] 9/9/02

Location STIMSON LUMBER Date 9/10/02

Project / Client STIMSON LUMBER

SAMPLING TEAM - PES: PETRAK / RIPPINE

0530	TO OFFICE FOR SAMPLING PUMPS, SUPPLIES (DAMON TO SP FOR TUBING)
0545	TO STIMSON LUMBER - MET DAMON
18	MET VERONICA BOVEE TO START PERSONAL SAMPLES
0600	REVIEWED PERSONAL SAMPLING INFO SHEET
0605	STARTED SAMPLE SL-00001 - PERSONAL ON AARON BROWN AT FINGERJOINT BUILDING. CALIBRATED TO 2.03 LPM.
0630	TO CENTRAL MAINTENANCE.
0650	REVIEWED PERSONAL SAMPLING INFO SHEET
0707	STARTED SAMPLE ~~SL-0002~~ SL-00002 PERSONAL ON WILFRED JOHNSON. CAL TO 2.03 LPM.
0708	STARTED SAMPLE SL-00003 PERSONAL ON GLENN L. GARRISON. CALIBRATED TO 2.03 LPM.
0715	TO FINGERJOINT BLDG
0720	AARON BROWN ON BREAK - PAUSED SAMPLE
0725	RE-STARTED SAMPLE SL-00001
0726	STARTED SAMPLE SL-00004 CAL TO 2.03 LPM. EXCURSION LIMIT ON A. BROWN (FJ)
0800	DAMON COLLECTED SAMPLE SL-00004.
0800	PETRAK MET WAGNER OPERATOR DANIEL GOYEN TO REVIEW PERSONAL SAMPLING INFO SHEET.
0814	STARTED SAMPLE SL-00005 PERSONAL ON D. GOYEN. CALIBRATED TO 2.03 LPM.

Location STIMSON LUMBER Date 9/10/02

Project / Client STIMSON LUMBER

SAMPLING TEAM - PES: PETRAK / RIPPINE

0815	STARTED SAMPLE SL-00006, EXCURSION LIMIT ON D. GOYEN (WALKED UP) CALIBRATED TO 2.03 LPM.
0847	COLLECTED SAMPLE SL-00006 FLOW RATE 2.03 LPM.
0912	STARTED SAMPLE SL-00008, EXCURSION LIMIT ON W. JOHNSON (CM) CALIBRATED TO 2.03 LPM. W. JOHNSON WORK INCLUDED WORKING ON PICKUP TRUCK FRONT BRAKES GRINDING USING ~~TOOL~~ PARTS CLEANER
0943	COLLECTED SAMPLE SL-00008, FLOW RATE 2.03 LPM.
1000	WEATHER - PARTLY CLOUDY LIGHT BREEZE TEMP ~50°F BUILDING (BD) NUMBERS ASSIGNED TO FINGERJOINT BLDG - BD002097 TO CENTRAL MAINT - BD-002098.
1022	STARTED SAMPLE SL-00007, EXCURSION LIMIT ON GARRISON, (CM) CALIBRATED TO 2.03 LPM.
1052	COLLECTED SAMPLE SL-00007, FLOW RATE 2.03 LPM

Location STIMSON LUMBER Date 9/10/02

Project/Client STIMSON LUMBER

SAMPLING TEAM/PES: PETRAK/REPINE

1103	COLLECTED SAMPLE SL-00001, FLOW RATE 2.03 LPM-
1123	STARTED SAMPLE SL-00009, PERSONAL ON A. BROWN, (FJ BLDG) CALIBRATED TO 2.03 LPM.
1138	COLLECTED SAMPLE SL-00005, FLOW RATE 2.03 LPM.
1138	STARTED SAMPLE SL-00010, PERSONAL ON GOYEN, (WAGNER OP) CALIBRATED TO 2.03 LPM.
1158	COLLECTED SAMPLE SL-00002, FLOW RATE 2.03 LPM
1200	STOPPED SAMPLE SL-00003, FLOW RATE 2.03 LPM.
1237	STARTED SAMPLE SL-00012, PERSONAL ON GARRISON (CM), CAL TO 2.03 LPM.
1239	STARTED SAMPLE SL-00011, PERSONAL ON JOHNSON (CM), CAL TO 2.03 LPM.
1347	STOPPED SAMPLE SL-00010, CHECKED FLOW.
1347	STARTED SAMPLE SL-00013, PERSONAL ON GOYEN, CALIBRATED BEFORE START.
1401	STOPPED SAMPLE SL-00009, CHECKED FLOW.
1418	STARTED SAMPLES SL-00014, PERSONAL ON A. BROWN, AFTER CALIBRATED.

mad 9/10/02

Location STIMSON LUMBER Date 9/10/02

Project/Client STIMSON LUMBER

SAMPLING TEAM - PES: PETRAK, REPINE

1430	WEATHER - SUNNY, WARM (70's)
1523	STOPPED SAMPLE SL-00011, CHECKED FLOW RATE, NO CHANGE
1524	STOPPED SAMPLE SL-00012, CHECKED FLOW RATE - NO CHANGE
1610	STOPPED SAMPLE SL-00013, CHECKED FLOW RATE - NO CHANGE.
1613	STOPPED SAMPLE SL-00014, CHECKED FLOW RATE - NO CHANGE.
1630	TO OFFICE

ALL SAMPLING CONDUCTED IN ACCORDANCE WITH PROPERTY SPECIFIC SAMPLING AND ANALYSIS PLAN, AIR AND DUST SAMPLING FOR STIMSON LUMBER COMPANY, LIBBY ASBESTOS PROJECT, LIBBY, MONTANA, DATED AUG 23, 2002.

SAMPLING EQUIPMENT & MATERIALS USED

PUMPS - 20-VOL - SKC MODEL 224-PCXR4

S/N 626509	626526
602608	626600
626753	626575
602598	626566
626636	626675

CASSETTES: AIR - 0.8 μm - LOT # 21678 mad 9/10/02

MICROVACS - 0.45 μ - LOT # 410FKA

Location STIMSON LUMBER Date 9/10/02

Project / Client STIMSON LUMBER

SAMPLING TEAM-PES: PETRAK, REPINE, Melissa A. Petrak

1/4" ID tygon tubing

HIGH-VOLS: GAST MODEL 153-306-G557X

S/N 12688 12882 08913

08911 0891

ALL SAMPLES CALIBRATED WITH ROTOMETER # 34719, LAST CALIBRATED WITH DRY-CAL STD FLOW CELL DRY CELL 1SC REV D S1521 BAGE DC 18 REV D 202 B1610 ON SEPTEMBER 4, 2002.

1730 REFERENCE FSDS P-000084, 85, 86, -87, -88, 89.

SAMPLES PLACED UNDER COC NO. 003580, 003581 AND RELINQUISHED TO CDM SAMPLE COORDINATOR.

Melissa A. Petrak 9/10/02

Location STIMSON LUMBER Date 9/11/02

Project / Client STIMSON LUMBER

SAMPLING TEAM-PES: PETRAK/REPINE, Melissa A. Petrak

ALL SAMPLING WILL BE CONDUCTED IN ACCORDANCE WITH PROPERTY SPECIFIC SAMPLING ~~AIR~~ mp 9/11/02 AND ANALYSIS PLAN, AIR AND DUST SAMPLING FOR STIMSON LUMBER COMPANY, LIBBY ASBESTOS PROJECT, LIBBY, MONTANA, DATED AUG 23, 2002.

0530 TO CDM TRAILER TO RETRIEVE PUMPS

0545 TO STIMSON LUMBER

0603 STARTED SAMPLE SL-00017, PERSONAL ON AARON BROWN (FI), AFTER CALIBRATION

0610 TO CENTRAL MAINTENANCE - SET UP SAMPLING LOCATIONS FOR 4 AMBIENTS + 1 REPLICATE, PREPPED PERSONAL SAMPLES (TWA & EL)

0700 STARTED SAMPLE SL-00019, PERSONAL ON GARRISON (CM), AFTER CALIBRATION

0704 STARTED SAMPLE SL-00015, PERSONAL ON JOHNSON (CM), AFTER CAL.

0707 STARTED SAMPLE SL-00023, ~~PERSONAL~~ mp 9/11/02 AMBIENT IN CENTER OF NORTH END

0707 OF BUILDING AFTER CAL.

STARTED SAMPLE SL-00021, AMBIENT IN CENTER OF NORTH END, AFTER CAL.

mp 9/11/02

Location STIMSON LUMBER Date 9/11/02

Project / Client STIMSON LUMBER

SAMPLING TEAM - PES: PETRAK, REPINE

0707 STARTED SAMPLE SL-00021, AMBIENT IN CENTER OF SOUTH END, AFTER CAL.

0708 STARTED SAMPLE SL-00020, AMBIENT IN CENTER OF MACHINE SHOP, AFTER CAL.

0708 STARTED SAMPLE SL-00022, AMBIENT ON EAST SIDE OF CENTER, AFTER CAL.

0715 TO WAGNER LUMBERJACK SHED TO MEET ~~OPEAT~~ wmp 9/11/02 OPERATOR TO WEAR PERSONAL.

~~0803~~ 0800 wmp 9/11/02 STARTED SAMPLE SL-00027, PERSONAL ON GOYEN (WAGNER OP), AFTER CAL.

0830 STOPPED SAMPLE SL-00017, VISIBLE DEBRIS ON FILTER, CHECKED FLOW RATE - NO CHANGE.

~~0830~~ wmp 9/11/02 ~~STARTED SAMPLE SL-00029, PERSONAL ON BROWN (FJ), AFTER CALIBRATION~~ PUMP FAULT, DID NOT RUN RESTART

~~0831~~ 0845 wmp 9/11/02 STARTED SAMPLE SL-00028, EXCURSION LIMIT ON BROWN (FJ), AFTER CAL.

0855 CHECKED IN WITH VERONICA BOVEE - ADVISED HER OF SAMPLES RUNNING, ASKED ABOUT AREAS/TIMES OF CONCERN FOR EXCURSION LIMIT SAMPLES. ANSWERS:
FJ - BACK ROOM WHERE WOOD WRAPPED
CM - WHEN CRANE RUNNING
LY - CLOSE TO END OF DAY

wmp 9/11/02 ~~9/10~~ 9/10/02

Location STIMSON LUMBER Date 9/11/02

Project / Client STIMSON LUMBER

SAMPLING TEAM - PES: PETRAK, REPINE

0910 STOPPED wmp 9/11/02 SAMPLE SL-00028, CHECKED FLOW RATE - NO CHANGE

0930 CHECKED AMBIENTS IN CM - ALL RUNNING

1010 CHECKED FLOW RATE ON AMBIENTS IN CM - ALL UNCHANGED

1015 CHECKED W/MECHANIC JOHNSON - OVERHEAD ~~CREP~~ wmp 9/11/02 CRANE IN CM HAS BEEN RUN TODAY.

1018 STARTED SAMPLE SL-00025, EXCURSION LIMIT wmp 9/11/02 ON JOHNSON, AFTER CALIBRATION.

1048 STOPPED SAMPLE SL-00025, CHECKED FLOW RATE - NO CHANGE.

1055 CRANE RUN IN CM BLDG.

1052 STOPPED SAMPLE SL-00027, FLOW RATE CHECKED, NO CHANGE

1052 STARTED SAMPLE SL-00030, PERSONAL ON GOYEN (WAGNER), AFTER CALIBRATION.

1155 STOPPED SAMPLE SL-00018, CHECKED FLOW RATE - NO CHANGE

1157 STARTED SAMPLE SL-00029, PERSONAL ON BROWN wmp 9/11/02 (FJ), AFTER CAL.

1202 STOPPED SAMPLE SL-00019, CHECKED FLOW RATE - NO CHANGE

wmp 9/11/02

Location STIMSON LUMBER Date 9/11/02

Project/Client STIMSON LUMBER

SAMPLING TEAM-PES: PETRAK, REPINE

1220	WEATHER-SUNNY, LIGHT VARIABLE BREEZE, WARM (UPPER 70'S)
1237	STARTED SAMPLE SL-00031, PERSONAL ON JOHNSON(CM). AFTER CALIBRATION
1238	STARTED SAMPLE SL-00032, PERSONAL ON GARRISON(CM), AFTER CALIBRATION
1239	STARTED SAMPLE SL-00026, EXCURSION LIMIT ON GARRISON(CM), AFTER CAL.
1300	CHECKED FLOW RATES ON AMBIENTS IN CM - ALL UNCHANGED + ALSO NOTE LARGE CEILING EXHAUST FAN AT SOUTH END OF BLDG RUNNING.
1306 1309	STOPPED SAMPLE SL-00026, CHECKED FLOW RATE, UNCHANGED
1400	STOPPED SAMPLE SL-00029, CHECK FLOW, NO CHANGE
1410	STOPPED SL-00030, CHECKED FLOW RATE, NO CHANGE.
1410	STARTED SAMPLE SL-00033, PERSONAL ON GOYEN, AFTER CALIBRATION
1410	CALIBRATED & STARTED SAMPLE SL-00034, EXCURSION LIMIT ON GOYEN
1418	CALIBRATED & STARTED SAMPLE SL-00035, PERSONAL ON BROWN (F).
1445	STOPPED SL-00034, CHECKED FLOW, NO CHANGE
1500	NOTE - WATER TRUCK HAS BEEN WATERING THE LOGYARD TODAY

mrp 9/11/02

Location STIMSON LUMBER Date 9/11/02

Project/Client STIMSON LUMBER

SAMPLING TEAM-PES: PETRAK, REPINE

1500	WELDING OCCURING IN CM, NEAR SL-00025, SL-00024
1506	STOPPED SL-00023, CHECKED FLOW RATE, NO Δ.
1506	STOPPED SL-00024, CHECKED FLOW RATE, NO Δ.
1508	STOPPED SL-00020, CHECKED FLOW RATE, NO Δ.
1517	STOPPED SL-00021, CHECKED FLOW RATE, NO Δ.
1519	STOPPED SL-00022, CHECKED FLOW RATE, NO Δ
1523	STOPPED SL-00031, CHECKED FLOW RATE, NO Δ.
1525	STOPPED SL-00032 CHECKED FLOW RATE, NO Δ
1601	STOPPED SL-00033 CHECKED FLOW RATE, NO Δ.
1613	STOPPED SL-00035, CHECKED FLOW RATE, NO Δ.
1630	TO OFFICE TO COMPLETE PAPERWORK.
1730	SAMPLES SEALED, PLACED UNDER COC #'S 003624 003625, 003626

REFERENCE FSDS

P-000090, 91, 92, 93, 94, 95

A-000061, 60, 65

NOTES REGARDING SAMPLES:

SL-00032, PERSONAL ON GARRISON SAMPLE CASSETTE CONTAINS SIGNIFICANT DUST. GARRISON WORKED ON WAGNER LUMBERJACK, WHICH IS DUSTY FROM FIELD WORK.

SL-00023, SL-00024 - AMBIENTS IN CM WELDING DONE NEAR THESE SAMPLES (~10-15 ft) DURING THE AFTERNOON

1822 SAMPLES RELINQUISHED TO CDM mrp 9/11/02

Location STIMSON LUMBER Date 9/12/02

Project / Client STIMSON LUMBER

SAMPLING TEAM - PES: PETRAK/REPINE

ALL SAMPLING WILL BE CONDUCTED IN ACCORDANCE WITH PROPERTY SPECIFIC SAMPLING AND ANALYSIS PLAN, AIR AND DUST SAMPLING FOR STIMSON LUMBER COMPANY, LIBBY ASBESTOS PROJECT, LIBBY, MONTANA, DATED AUG 23, 2002.

NOTE: NEW LOT OF CASSETTES: ZEFON ANALYTICAL, 25 mm, 0.8 µm MCE filters, PCM cassettes, Lot #4583

0530 TO CDM Trailer to retrieve pumps & supplies

0545 To Stimson Lumber

0601 Started sample SL-00040, personal on A. Brown (FJ), after calibration.

0701 Calibrated & started sample SL-00042, personal on G. Garrison (CM).

0703 Calibrated & started sample SL-00041, personal on W. Johnson (CM). He will be servicing vehicles, beginning with a Wagner Lumberjack (some outside work time).

0720 Calibrated & started SL-00043, excursion limit on Johnson (CM). He will be working on a Wagner lumberjack

0752 Stopped SL-00043, checked flow rate, no Δ.

0808 Calibrated & started SL-00044, personal on Goyen (Wagner Op).

MAP 9/12/02

Location STIMSON LUMBER Date 9/12/02

Project / Client STIMSON LUMBER

SAMPLING TEAM - PES: PETRAK/REPINE

0825 Stopped SL-00040, checked flow rate, no Δ.

0825 Calibrated & started SL-00045, personal on Brown (FJ).

0955 Stopped SL-00042, checked flow rate, no Δ.

0955 Started SL-00048, personal on Garrison after calibration.

0956 Stopped SL-00041, checked flow rate, no Δ

0956 Calibrated & started SL-00049, personal on Johnson

1005 Stopped SL-00045, checked flow rate, no Δ.

1005 Calibrated & started SL-00046, personal on Brown (FJ)

1005 Calibrated & started SL-00047, ~~personal~~ excursion limit on Brown (FJ)

1015 Stopped SL-00044, checked flow rate, no Δ

1017 Calibrated & started SL-00050, personal on Goyen (Wagner).

1045 Normal ops suspended in FJ for special project.

1100 Stopped SL-00047, due to visible dust on filter, checked flow rate, no Δ.

1130 Started SL-00051, personal on Brown (FJ) after calibration.

1135 Started SL-00052, excursion on Goyen (Wagner) after calibration

MAP 9/12/02

Location STIMSON LUMBER Date 9/12/02

Project / Client STIMSON LUMBER

SAMPLING TEAM-PES: PETRAK, REPLIN [signature]

NOTE: Water truck running sporadically in logyard today. It only runs when an operator is available, according to Veronica.

1158 Stopped SL-00048, checked flow rate, no Δ.

1200 Stopped SL-00049, checked flow rate, no Δ.

1205 Stopped SL-00052, checked flow rate, no Δ.

1207 Stopped SL-00050, checked flow rate, no Δ.

1207 Started SL-00055, personal on Goyen, after calibration.

1243 Paused SL-00055, check flow rate, no Δ.

1258 Started sample SL-00053 on Johnson, after calibration.

1300 Started sample SL-00054 on Garrison, after calibration.

Johnson & Garrison (CM) took longer lunch than usual to go help with 167' board at FJ.

1315 Re-started SL-00055, after calibration.

1323 Started SL-00056, excursion on Garrison, after calibration.

1327 Stopped ~~SL-002097~~ SL-00051, checked flow rate, no Δ. [initials] 9/12/02

1327 Started SL-00057, personal on Brown (FJ), after calibration.

[initials] 9/12/02

Location STIMSON LUMBER Date 9/12/02

Project / Client STIMSON LUMBER

SAMPLING TEAM-PES: PETRAK, REPLIN [signature]

1330 Checked in with Veronica.

Advised her of overloaded filter on Goyen - okayed rerun tomorrow.

Advised of welding fumes affecting SL-00023, 24 - okayed rerun next week.

Advised of potential overload on SL-00032. Okayed rerun.

Requested site map and building list to aid in microvac collection planning.

Asked permission to collect microvacs on Sunday, she okayed it.

1358 Stopped SL-00056, checked flow rate, no Δ.

1415 Stopped SL-00055, checked flow rate, no Δ.

1415 Calibrated & started SL-00058, personal on Goyen (Wagner).

1426 Collected microvac dust sample in CM Machine Shop - composite of 3-100 cm² locations, each for 2 min. SL-00059

1435 Collected SL-00060, microvac dust in CM 31dg, south end - composite of 3-100 cm² locations 2 min each.

[initials] 9/12/02

Location STIMSON LUMBER Date 9/12/02

Project / Client STIMSON LUMBER

SAMPLING TEAM - PES: PETRAK, REP [signature]

1445 Collected SL-00061, microvac dust in center of CM bldg - composite of three 100 cm² locations, 2 min each.

1456 Collected SL-00062, microvac dust at northern end of CM bldg - composite of 3-100 cm² locations, 2 min each.

1504 Stopped SL-00057, checked flow, no Δ.

~~1512 Collected SL-00061~~ map 9/12/02

1504 Started SL-00063, personal on Brown (FJ), after calibration.

1512 Collected SL-00064, microvac dust in CM bldg, supervisor's office and break room, composite of 3-100 cm² areas, 2 min each.

map ~~1523~~ 9/12/02 Pre- and post-calibrate pump to 2.03 lpm for each microvac.

1523 Stopped SL-00054, checked flowrate, changed to 2.18 lpm ~~no Δ~~ map 9/12/02

1524 Stopped SL-00053, checked flow rate, no Δ.

1535 Collected ~~SL-002097~~ map 9/12/02, SL-00065, microvac dust sample in FJ Bldg, former lunchroom (now part storage), composite of 3-100 cm² areas, 2 min each.

1546 Collected SL-000066, FJ bldg microvac dust sample, composite of 3-100 cm² locations, 2 min each. map 9/12/02

Location STIMSON LUMBER Date 9/12/02

Project / Client STIMSON LUMBER

SAMPLING TEAM - PES: PETRAK, REP [signature]

Pre- & post-calibrate pump to 2.03 lpm for each microvac.

1604 Stopped SL-00058, checked flow rate, no Δ.

1613 Stopped SL-00063, checked flowrate, changed to 1.88 LPM.

NOTE: Personal samples changed at less than four hours considered at risk for overloading due to visible debris on filter.

Weather: Sunny, hot (low 90's), occasional light breeze

1630 To office to complete paperwork. Lab has advised of several overloaded filters for the past two days - will note and adjust sample time in an effort to reduce additional overloads.

1800 Paperwork complete.

1830 Samples placed under COC's 3627, 3649, 3650, 3651 and relinquished to CDM sample coordinator.

Refer to FSDS D-~~0017~~ map 9/13/02 001070, 1071, 1072

P-000096, 97, 98, 99, 100, 101, 102, 103, 104

[signature] 9/12/02

Location STIMSON LUMBER Date 9/13/02

Project/Client STIMSON LUMBER

SAMPLING TEAM-PES: PETRAK/REPINE

ALL SAMPLING WILL BE CONDUCTED IN ACCORDANCE WITH PROPERTY SPECIFIC SAMPLING AND ANALYSIS PLAN, AIR AND DUST SAMPLING FOR STIMSON LUMBER COMPANY, LIBBY ASBESTOS PROJECT, LIBBY, MONTANA, DATED AUG 23, 2002.

0530 To office to retrieve pumps

0545 To Stimson - met Veronica at front office for escort to Plywood Plant

0602 Calibrated & started SL-00073, personal on Jellesed (Dryer tender).

0612 Calibrated & started SL-00074, personal on Drake (Dryer feeder).

0615 Calibrated & started SL-00075, personal on Benefield (Green Chain puller).

0623 Calibrated & started SL-00076, personal on Cummings (Dryer Offbearer).

0651 Calibrated & started SL-00077, ambient just outside Debarker Cab.

0711 Calibrated & started SL-00079, ambient at Green Chain.

0724 Calibrated & started SL-00080 ambient at spreaders

0735 Calibrated & started SL-00081 ambient at ~~singlers~~ pluggers.

nap 9/13/02

Location STIMSON LUMBER Date 9/13/02

Project/Client STIMSON LUMBER

SAMPLING TEAM: PES/PETRAK/REPINE

0745 Calibrated & started SL-00078, personal on Hull (Plugger Op.)

0752 Calibrated & started SL-00082, ambient at dryers.

0800 Repine to check cassettes, Petrak to office for additional supplies.

0914 Stopped SL-00075 due to visible debris on filter - checked flow rate, no Δ.

0914 Calibrated & started SL-00083 personal on Green Chain Puller.

0918 Stopped SL-00073 - visible debris. Checked flow rate - no Δ.

0919 Calibrated & started SL-00084, personal on tender.

0923 Stopped SL-00074 - visible debris. Checked flow rate, no Δ.

0925 Calibrated & started SL-00085, personal on feeder.

0931 Stopped SL-00076 - visible debris. Checked flow rate, no Δ.

0931 Calibrated & started SL-00086, personal on offbearer.

0943 Stopped SL-00077 - significant visible debris, Checked flow rate no Δ

Location STIMSON LUMBER Date 9/13/07

Project / Client STIMSON LUMBER

SAMPLING TEAM: PES / PETRAK / [illegible]

0946	Calibrated & started SL-00087, ambient at debarker cab.
0957	Calibrated & started SL-00088.

Samples cassettes are being changed out very frequently, due to visible debris on the filter, which indicates potential overloading. This is a deviation from the SAP, which indicates that ambient samples should be run for 7-8 hours at a flow rate of 10.0 LPM. The Plywood Plant is extremely dusty. A significant amount of airborne particulates (dust, sawdust, wood bits) is visible to the naked eye.

1001	Stopped SL-00080, checked flow rate, no Δ
1001	Calibrated & started SL-00080.
1007	Stopped SL-00082, checked flow rate, no Δ.
	Calibrated & started SL-00090.
1015	Stopped SL-00079, check flow rate, changed to 9.85 LPM.
	Calibrated & started SL-00091.
1023	Stopped SL-00081, checked flow, no change.
	Calibrated & started SL-00092.
1050	Calibrated & started SL-00095.

[illegible] 9/13/07

Location STIMSON LUMBER Date 9/13/07

Project / Client STIMSON LUMBER

SAMPLING TEAM - PES: PETRAK, [illegible]

1105	Stopped SL-00089, check flow rate, no Δ.
1105	Calibrated & started SL-00098.
1115	Stopped SL-00087, checked flow rate, no Δ.
	Calibrated & started SL-00097.
1122	Stopped SL-00095, checked flow rate, no Δ.
1130	Stopped SL-00088, checked flow rate, no Δ.
1135	Stopped ~~SL-00098~~ SL-00092, checked flow rate, no Δ.
~~1140~~ 1135	Started & calibrated SL-00096
1140	Stopped SL-00090, checked flow rate, no Δ.
	Calibrated & started SL-00094.
1150	Stopped SL-00086, checked flow rate, no Δ
1155	Stopped SL-00085, checked flow rate, no Δ.
1155	Calibrated & started SL-00105.
1158	Calibrated & started SL-00099.
1200	Stopped SL-00083, checked flow rate, no Δ.
1205	Stopped SL-00091, checked flow rate, no Δ.
	Calibrated & started SL-00102.

Consulted with Greg Parana regarding overloaded samples. He changed dropped flow rate for personals to 1.5 lpm. Set 1200 L as target for ambients. Will start new ambients in same locations with a flow rate of 5 lpm and allow to run for 4 hours.

Location STIMSON LUMBER Date 9/13/02

Project / Client STIMSON LUMBER

SAMPLING TEAM-PES: PETRAK, [illegible]

achieve desired 1200 L. Will set flow rate for remaining personals to 1.5 lpm in the plywood plant.

1234 Stopped SL-00105 checked flow rate, no Δ.

1240 Calibrated & started SL-00100.

1248 Calibrated & started SL-00104.

1310 Stopped SL-00100, checked flow rate, no Δ.

1315 Calibrated & started SL-00101.

Calibrated & started SL-00103.

1328 Stopped SL-00094, checked flow rate, no Δ.

Calibrated & started SL-00106.

1332 Stopped SL-00102, checked flow rate, no Δ.

Calibrated & started SL-00107.

1340 Stopped SL-00098, checked flow rate, no Δ.

Calibrated & started SL-00108.

1346 Stopped SL-00103, checked flow rate, no Δ.

1348 Stopped SL-00084, checked flow rate, no Δ.

1349 Calibrated & started SL-00109.

Calibrated & started SL-00110.

1352 Stopped SL-00096, checked flow rate, no Δ.

Calibrated & started SL-00111.

1403 Stopped SL-00097, checked flow rate, changed to 10.30 LPM.

Calibrated & started SL-00112.

[illegible] 9/14/02

Location STIMSON LUMBER Date 9/13/02

Project / Client STIMSON LUMBER

SAMPLING TEAM-PES: PETRAK, REPINE

WEATHER: Sunny, hot (90's), occasional light breeze

1419 Stopped SL-00102, checked flow rate, no Δ.

1426 Calibrated & started SL-00113.

1456 Stopped SL-00113, checked flow rate, no Δ.

1514 Stopped SL-00093, checked flow rate, no Δ.

1514 Calibrated & started SL-00114.

1522 Stopped SL-00099, checked flow rate, changed to 2.18 LPM.

1542 Stopped SL-00101, checked flow rate, no Δ.

1542 Calibrated & started SL-00115.

1548 Stopped SL-00104, checked flow rate, no Δ.

Calibrated & started SL-00116.

1549 Stopped SL-00110, checked flow rate, no Δ.

Calibrated & started SL-00117.

1633 Stopped SL-00114, checked flow rate, no Δ.

1735 Stopped SL-00106, checked flow rate, changed to 5.22 LPM.

1740 Stopped SL-00107, checked flow rate, changed to 5.22 LPM.

1740 Stopped SL-00115, checked flow rate, no Δ.

1742 Stopped SL-00117, checked flow rate, no Δ.

1746 Stopped SL-00116, checked flow rate, no Δ.

9/13/02

Location STIMSON LUMBER Date 9/13/02

Project / Client STIMSON LUMBER

SAMPLING TEAM - PES: PETRAK, REPINE [signature]

1746 Stopped SL-00108, checked flow rate, no Δ.
1754 Stopped SL-00111, checked flow rate, no Δ.
1802 Stopped SL-00112, checked flow rate, changed to 5.22 LPM.
1810 To office to complete paperwork.
1830 Samples custody sealed.
18 1900 Samples secured in log room.
9/14/02
Reference FSDS:
A-000062, 63, 64, 66, 67, 68, 69, 70
P-000105, 106, 107, 108, 109, 110, 111, 112, 113, 114.
ROC's -

As noted earlier, sampling procedures did deviate from the SAP, with respect to flow rate and sample duration for the ambient samples. Conditions in the Plywood Plant are extremely dusty, with many airborne particulates, and sample filters became overloaded very quickly. Both flow rate and sample durations were adjusted in an effort to prevent filter overload.

[signature] 9/13/02

Location STIMSON LUMBER Date 9/14/02

Project / Client STIMSON LUMBER

SAMPLING TEAM - PES: PETRAK, REPINE [signature]

ALL SAMPLING WILL BE CONDUCTED IN ACCORDANCE WITH PROPERTY SPECIFIC SAMPLING AND ANALYSIS PLAN, AIR AND DUST SAMPLING FOR STIMSON LUMBER COMPANY, LIBBY ASBESTOS PROJECT, LIBBY, MONTANA, DATED AUG 23, 2002.

0530 To office to retreive pumps.
0545 To Stimson, Plywood Plant.
0601 Calibrated & started SL-00123.
0604 Calibrated & started SL-00124.
0608 Calibrated & started SL-00125.
0611 Calibrated & started SL-00126.

Will set up four ambient samples in the employee parking lot. They will be powered by generators - two generators each powering two high volume pumps, placed as allowed by extension cords. One ~~pump~~ generator will be located on the south side of the lot, and one on the north side of the lot. One pump will be in the area between the railroad tracks which cross through the lot at Veronica's request.

0642 Calibrated & started SL-00127.

[signature] 9/14/02

Location STIMSON LUMBER Date 9/14/02

Project / Client STIMSON LUMBER

SAMPLING TEAM - PETRAK, RERINE, BROWN

0643	Calibrated & started SL-00128.
0647	Calibrated & started SL-00129.
0647	Calibrated & started SL-00130.
0730	Calibrated & started SL-00131.
0800	Stopped SL-00123, checked flow rate, no Δ. Calibrated & started SL-00133.
0804	Stopped SL-00124, checked flow rate, no Δ. Calibrated & started SL-00134.
0806	Calibrated & started SL-00135.
0812	Stopped SL-00125, checked flow rate, no Δ. Calibrated & started SL-00136. Calibrated & started SL-00137.
0815	Stopped SL-00126, checked flow rate, no Δ. Calibrated & started SL-00138.
0836	Stopped SL-00135, checked flow rate, no Δ.
0838	Calibrated & started SL-00139.
0842	Stopped SL-00136, checked flow rate, no Δ.
0844	Calibrated & started SL-00132.
0910	Stopped SL-00137, checked flow rate, no Δ
0914	Stopped SL-00132, checked flow rate, no Δ.
0922	Calibrated & started SL-00140.
0931	Stopped SL-00131, checked flow rate, no Δ. Calibrated & started SL-00141.
	Advised Mike Grasso of CDM that

mep 9/14/02

Location STIMSON LUMBER Date 9/14/02

Project / Client STIMSON LUMBER

SAMPLING TEAM - PES: PETRAK, RERINE, BROWN

	there are four samples with SP numbers. These sample locations need to be recorded in GPS.
0958	Stopped SL-00140, checked flow rate, no Δ.
1007	Stopped SL-00133, checked flow rate, no Δ Calibrated & started SL-00142.
1011	Stopped SL-00134 checked flow rate, no Δ.
1011	Calibrated & started SL-00144.
1012	Stopped SL-00138, checked flow rate, no Δ.
1012	Calibrated & started SL-00145.
1020	Stopped SL-00137 checked flow rate, no Δ. Calibrated & started SL-00146.
	Grasso is on-site to record sample locations in GPS. Accompanied him to parking lot to identify sample locations and provide required information.
1115	To Veronica's office - advised her all samples running, changing out personals approx every two hours. Veronica provided a Stimson Lumber site drawing, with corrections - she has drawn in buildings that are not in the CAD file. Will meet with

mep 9/14/02

Location STIMSON LUMBER Date 9/13/02

Project / Client STIMSON LUMBER

PES SAMPLING TEAM: PETRAK, REPINE, BROWN

Grasso next week to provide him with that information.

1130 Stopped SL-00141, checked flow rate, no Δ.
Will start next sample after lunch break.

1150 Stopped SL-00146, checked flow rate, no Δ.
Will start next sample after lunch break.

1200 Calibrated & started SL-00143.

1201 Stopped SL-00142, checked flow rate, no Δ.
Will start next sample after lunch break.

1205 Stopped SL-00145, checked flow rate, no Δ.
Calibrated & started SL-00149.

1208 Calibrated & started SL-00147.

1210 Stopped SL-00144, checked flow rate, no Δ.
Will start next sample after lunch break.

1225 Calibrated & started SL-00148.

1230 Paused & calibrated SL-00129, SL-00130.
Needed to stop generator to add gasoline.

1236 Calibrated & started SL-00150.

1240 Calibrated & started SL-00129, SL-00130.

1404 Stopped SL-00148, checked flow rate, no Δ.
Calibrated & started ~~SL-00144~~ SL-00151.

1410 Stopped SL-00150, checked flow rate, no Δ.
Calibrated & started SL-00152.

1414 Stopped SL-00147, checked flow rate, no Δ.

mwp 9/14/02

Location STIMSON LUMBER Date 9/14/02

Project / Client STIMSON LUMBER

PES SAMPLING TEAM: PETRAK, REPINE, BROWN

1414 Calibrated & started SL-00153.

1420 Stopped SL-00149, checked flow rate, no Δ.
Calibrated & started SL-00154.

1427 Stopped SL-00127, checked flow rate, no Δ.

1428 Stopped SL-00128, checked flow rate, no Δ

1434 Stopped SL-00129, checked flow rate,
changed to 10.15 LPM.

1436 Stopped SL-00130, checked flow rate, no Δ.

1515 Stopped SL-00143, checked flow rate, no Δ.

WEATHER: Sunny, hot, occasional light breeze.

1633 Stopped SL-00151, checked flow rate, no Δ.

1723 Stopped SL-00153, checked flow rate, no Δ.

1725 Stopped SL-00154, checked flow rate, no Δ.

1727 Stopped SL-00152, checked flow rate, no Δ.

1730 To office to complete paperwork.
Samples placed under chain of custody and secured in log room.

Reference FSDS

P-000115, 116, 117, 118, 119, 122, 123, 124, 125, 126, 141

A-000073, 000074

COC's-003551, 3552, 3553, 3554, 3083, 3084, 3671

mwp 9/14/02

9/14/02

Location STIMSON LUMBER Date 9/15/02

Project / Client STIMSON LUMBER

PES SAMPLING TEAM: PETRAK [signature]

1230	To office to retrieve pumps
1300	To Stimson to collect microvac dust samples.
1330	Collected SL-00169, composite of three locations in BD-002100 logyard break room. Pre & post calibrate
1345	Collected SL-00170, composite of three locations in BD-~~002102~~ 002101 logyard storage shed. Pre & post calibration
1358	Collected SL-00171, composite of three locations in BD-002102, logyard gasoline shed. Pre & post calibration.
1416	Collected SL-00172, composite of three locations in BD-002103, logyard pump house. Pre & post calibration
1438	Collected SL-00173, composite of three locations in BD-002104, logyard log truck scale shed. Pre & post calibration
1504	Collected SL-00174, composite of three locations in BD-002105, Irrigation building. Pre & post calibration.
1527	Collected SL-00175, composite of three locations in BD-002106, Diesel Fire Pump House. Pre & post calibration.

WEATHER: Sunny, hot, occasional breeze [signature] 9/15/02

Location STIMSON LUMBER Date 9/15/02

Project / Client STIMSON LUMBER

PES SAMPLING TEAM: PETRAK [signature]

1545	Collected SL-00176, composite of three locations in BD-002107 double wide trailer office. Pre & post calibration
1606	Collected SL-00177, composite of three locations in BD-002108, electrical pump house. Pre & post calibration
1624	Collected SL-00178, composite of three locations in BD-002109, Guard Station at Libby Creek Bridge. Pre & post calibration.
1630	To office to complete paperwork. Samples placed under chain of custody and secured in log room cabinet.

Reference FSDS [signature]
D-001073, 1074, ~~1075~~, 1076, 1077
CoC's 3701, 3702.

[signature] 9/15/02

Location STIMSON LUMBER Date 9/16/02

Project / Client STIMSON LUMBER

PES SAMPLING TEAM: PETRAK, REFINE

ALL SAMPLING WILL BE CONDUCTED IN ACCORDANCE WITH PROPERTY SPECIFIC SAMPLING AND ANALYSIS PLAN, AIR AND DUST SAMPLING FOR STIMSON LUMBER COMPANY, LIBBY ASBESTOS PROJECT, LIBBY, MONTANA, DATED AUG 23, 2002

(also applies to samples collected 9/15/02).

0530 To office to retrieve pumps

0545 To Stimson - Plywood Plant

0555 Calibrated & started SL-00158.

0558 Calibrated & started SL-00157

0603 Calibrated & started SL-00159

0605 Calibrated & started SL-00160

0610 To FJ Building to run three ambients and one personal (rerun due to overloads collected last week).

0617 Calibrated & started SL-00161.

0623 Calibrated & started SL-00162.

0628 Calibrated & started SL-00163.

0630 Calibrated & started SL-00164

0731 Calibrated & started SL-00165.

0752 Will run logyard ambient samples today - were scheduled for later in the week, but rain is forecast

mep 9/16/02

Location STIMSON LUMBER Date 9/16/02

Project / Client STIMSON LUMBER

PES SAMPLING TEAM: PETRAK, REFINE

0752 Calibrated & started SL-00167

0801 Calibrated & started SL-00168

0805 Calibrated & started SL-00166 - rerun of personal due to overloads last week

0815 Calibrated & started SL-00181.

0820 Met with Veronica - requested use of generator for fourth logyard sample and discussed location. Advised her of today's sampling activities. She wants to meet with Greg later in the week to review work completed.

0854 Stopped SL-00161, checked flow rate, no Δ. Calibrated & started SL-00183.

0905 Stopped SL-00158, checked flow rate, no Δ. Calibrated & started SL-00184.

0908 Stopped SL-00157, checked flow rate, no Δ. Calibrated & started SL-00185.

0910 Stopped SL-00159, checked flow rate, no Δ. Calibrated & started SL-00186

0914 Stopped SL-00160, checked flow rate, no Δ. Calibrated & started SL-00187.

0925 Calibrated & started SL-00182.

0954 Stopped SL-00165, checked flow rate, no Δ. Calibrated & started SL-00188.

mep 9/16/02

Location STIMSON LUMBER Date 9/16/02

Project / Client STIMSON LUMBER

PES SAMPLING TEAM: PETRAK, [illegible]

1006	Stopped SL-00166, checked flow rate, no Δ.
	Calibrated & started SL-00189.
1024	Calibrated & started SL-00194
1027	Calibrated & started SL-00193
1050	Stopped SL-00162, checked flow rate, no Δ.
	Calibrated & started SL-00195.
1054	Stopped SL-00163, checked flow rate, no Δ.
	Calibrated & started SL-00196.
1056	Stopped SL-00164, checked flow rate, no Δ.
1056	Calibrated & started SL-00197.
1057	Stopped SL-00194, checked flow rate, no Δ.
1058	Stopped SL-00193, checked flow rate, no Δ.
	Calibrated & started SL-00191.
1100	Stopped SL-00183, checked flow rate, no Δ.
	Calibrated & started SL-00190.
1122	Calibrated & started SL-00198.
1129	Stopped SL-00191, checked flow rate, no Δ.
1130	Stopped SL-00190, checked flow rate, no Δ
1131	Calibrated & started SL-00192.
1144	Stopped SL-00181, checked flow rate, no Δ.
	Calibrated & started SL-00204.
1145	Stopped SL-00167, checked flow rate, no Δ.
	Calibrated & started SL-00203.
1147	Stopped SL-00185, checked flow rate, no Δ.
1150	Stopped SL-00186, checked flow rate, no Δ.

wp 9/16/02

Location STIMSON LUMBER Date 9/16/02

Project / Client STIMSON LUMBER

PES SAMPLING TEAM: PETRAK, [illegible]

1155	Stopped SL-00182, checked flow rate, no Δ.
1155	Calibrated & started SL-00205.
1156	Stopped SL-00187, checked flow rate, no Δ.
	Dryer operators are done for the day, so they will not have any more personal samples collected.
1159	Stopped SL-00188, checked flow rate, no Δ
1201	Stopped SL-00184, checked flow rate, no Δ.
	Stopped SL-00192, checked flow rate, no Δ.
1226	Calibrated & started SL-00200.
	Calibrated & started SL-00199.
1229	Stopped SL-00189, checked flow rate, no Δ.
	Wagner operator done for the day, so no more personal samples on him.
	WEATHER: Mostly cloudy, cool (60's), occasional light breeze.
1415	Stopped SL-00198, checked flow rate, no Δ.
1415	Calibrated & started SL-00206.
1417	Stopped SL-00200, no flow Δ. Calibrated SL-00207.
1431	Stopped SL-00195, checked flow rate, no Δ
1433	Stopped SL-00196, checked flow rate, no Δ.
1434	Stopped SL-00197, checked flow rate, no Δ
1450	Sample SL-00205 will be voided. The generator stopped at an unknown time, so sample time cannot be determined.

wp 9/16/02

Location STIMSON LUMBER Date 9/16/02

Project / Client STIMSON LUMBER

PES SAMPLING TEAM: PERR [illegible]

Sample will be rerun tomorrow with a different generator.

1447 Stopped SL-00168, checked flow rate, changed to 10.15 lpm.

1453 Stopped SL-00203, checked flow rate, changed to 10.23 lpm.

1457 Stopped SL-00204, checked flow rate, no Δ.

1515 Stopped SL-00199, checked flow rate, no Δ.

1611 Stopped SL-00206, checked flow rate, no Δ.

1631 Stopped SL-00207, checked flow rate, no Δ.
Asked Green Chain supervisor about potential causes of higher levels of dust on Friday. He said most likely due to bag house, which is part of the ventilation system. The bags were either full or not working properly, but were fixed over the weekend.

1645 To office to complete paperwork. 11 personals + 2 blanks will be sent to the mobile lab - all other samples, including the microvacs collected on 9/15/02 will be sent offsite.

[illegible] 9/16/02

Location STIMSON LUMBER Date 9/16/02

Project / Client STIMSON LUMBER

PES SAMPLING TEAM: [illegible]

1830 Samples placed under COC, and relinquished to ~~[illegible]~~ 9/16/02 CDM sample coordinator.

Reference FSDS

P-000121, 127, 128, 129, 130, 131, 132, 133, 134, 135, 000136, 120

A-000075, 76, 77, 78, 79

COC's-003701, 3702, 3716, 3729, 3669, 3670, 3718, 3719, 3722

VOIDED COC's-3717, 3723, 3724

[illegible] 9/16/02

Location STIMSON LUMBER Date 9/17/02

Project / Client STIMSON LUMBER

PES SAMPLING TEAM: PETRAK, R

ALL SAMPLING WILL BE CONDUCTED IN ACCORDANCE WITH PROPERTY SPECIFIC SAMPLING AND ANALYSIS PLAN, AIR AND DUST SAMPLING FOR STIMSON LUMBER COMPANY, LIBBY ASBESTOS PROJECT, LIBBY, MONTANA, DATED AUG 23, 2002.

0530 To office to retrieve pumps

0550 To Stimson-Central Maintenance

Two ambient samples (one field sample and one duplicate) will be run in Central Maintenance. The previous run of these samples was affected by welding done nearby during sample collection.

0612 Calibrated & started SL-00213
Calibrated & started SL-00214.

0620 To Plywood Plant

One ambient sample will be collected in the Debarker cab. A sample was previously collected outside the cab, but high dust levels overloaded the sample filter and made it unreadable. The sample will be collected using a low volume pump running at approx

MRP 9/17/02

Location STIMSON LUMBER Date 9/17/02

Project / Client STIMSON LUMBER

PES SAMPLING TEAM: PETRAK, R

3 lpm. This deviation from the SAP is intended to prevent sample overload.

0631 Calibrated & started SL-00215

One ambient sample will be collected in the Spreader area. Previous samples were overloaded by high dust levels. Repairs or cleaning of the bag house have reduced dust levels in the plant, hopefully enabling a usable sample to be collected.

0645 Calibrated & started SL-00216.

One ambient sample was scheduled to be collected at an outdoor location in the lagoon today. Rain showers this morning have prevented this sample collection. If the weather clears, the sample may be collected later in the day.

0808 Collected SL-00217, composite of three locations in BD-002099, Plywood Plant, break rooms & offices at finish end.

Pre & post calibration

MRP 9/17/02

Location STIMSON LUMBER Date 9/17/02

Project / Client STIMSON LUMBER

PES SAMPLING TEAM: PETRAK/REPINE

0820 Collected SL-00218, composite of three locations in BD-002099 Plywood Plant, Plugger Area. Pre & post calibration.

0835 Collected SL-00219, composite of two locations in BD-002099, Plywood Plant, spreaders & finish end Pre & post calib.

0943 Collected SL-00220, composite of three locations in Plywood Plant, Green Chain, Pre & post calibration.

0850 Collected SL-00221, composite of three locations in Plywood Plant, Dryer Area. Pre & post calibration.

0900 Petrak to meeting w/ Veronica Bovee and Greg Parana to review project status.

Advised of reruns in debarker cab - with low vol pump - will be a deviation, but unable to collect readable sample at 4000 L.

Advised of rerun in spreader area. Again, will gather minimum 1200 L to ensure readable samples.

Advised rerun personals on Wagner Op and FJ Utility.

map 9/17/02

Location STIMSON LUMBER Date 9/17/02

Project / Client STIMSON LUMBER

PES SAMPLING TEAM: PETRAK/REPINE

Reviewed buildings to be dust sampled.

Okayed NO SAMPLE in the following buildings (as labeled on plant dwg)

→ shed near diesel fire pump house

→ outhouse near double-wide trailer

→ portajohns in logyard

→ Bob's Firewood bldgs

→ Truck Port (parking near main office)

→ shed next to Fire Hall

→ Old Wigwam Burner (confined space)

→ Drum Screen

→ Chip Net

→ Blower Room

→ Chip Bins

→ Nursery Bldg (previously sampled)

Chip loads for Plywood & Sawmill should be investigated to determine sampling necessity.

Discussed Bag House function and affect on sample results. The bag house collects fines from the saws & sanders. When bags are too full may be excess particulates in plant. Bags were changed/cleaned on Sunday, 9/15. ~~Ex~~ 9/17/02 This may explain excessive airborne particulate levels

map 9/17/02

Location STIMSON LUMBER Date 9/17/02

Project / Client STIMSON LUMBER

PES SAMPLING TEAM: PETRAK/PEPINE (L) [illegible]

and sample overloading on Fri & Sat.
Veronica inquired about sample results, especially Central Maintn Parana will forward request to Dave Schroeder.
Agreed to inform D closeout on Thurs, 9/19.

0950 Stopped SL-00213, checked flow rate, no Δ
Stopped SL-00214, checked flow rate, no Δ

1000 Calibrated & started SL-00222
Calibrated & started SL-00223.

1022 Collected SL-00224, composite of two locations in BD-002110, truck barn.
Pre & post calibration.

1030 Collected SL-00225, composite of two locations in BD-002110, truck barn.
Pre & post calibration.

1045 Collected SL-00226, composite of three locations in BD-002111, steel storage.
Pre & post calibration

1103 Collected SL-00227, composite of three locations in BD-002112, Fire Hall.
Pre & post calibration.

1111 Collected SL-00228, composite of two locations in BD-002260, Wagner Shed.
Pre & post calibration

WEATHER: SHOWERS, to PARTLY CLOUDY, COOL [illegible] 9/17/02

Location STIMSON LUMBER Date 9/17/02

Project / Client STIMSON LUMBER

PES SAMPLING TEAM: PETRAK/PEPINE (L) [illegible]

1122 Collected SL-00229, composite of three locations in BD-002261, Electric Motor Shed. Pre & post calibration.

1347 Stopped SL-00215, checked flow rate, no Δ.

1400 WEATHER: Mostly cloudy, cool, occasional slight breeze

1407 Collected SL-00230, composite of three locations in BD-002262, Astrodome.
Pre & post calibration

1420 Collected SL-00231, composite of three locations in BD-002263, Pipe shed.
Pre & post calibration.

1437 Collected SL-00232, composite of three locations in BD-002264, Storage & locomotive Shed
Pre & post calibration

1440 Sampling pump cord bumped loose in soilert, cutting off power to pump.
Sample stopped at unknown time - Sample will be VOIDED SL-00216.

1453 Stopped SL-00222, checked flow rate, changed to 10.08 lpm.
Stopped SL-00223, checked flow rate, no change

[illegible] 9/17/02

Location STIMSON LUMBER Date 9/17/02

Project / Client STIMSON LUMBER

PES SAMPLING TEAM: PETRAK, REPINE, [illegible]

1515 To office to complete paperwork.
Samples custody sealed and secured in log room.
Remaining samples from 9/14/02 removed from log room, placed under chain of custody, and relinquished to CDM sample coordinator.
The following samples collected on 9/13/02 are suspected overloads, and will be archived pending analysis of subsequent samples for the identified locations:

SL-00077	SL-00097
SL-00080	SL-00098
SL-00087	SL-00108
SL-00089	SL-00112

Terry Keller will advise lab to archive and alter COC as needed.
Reference FSDS's
A-000080, 81, 82
D-001078, 79, 80, 81, 82, 83
CoCs-3553, 3554

[illegible] 9/17/02

Location STIMSON LUMBER Date 9/18/02

Project / Client STIMSON LUMBER

PES SAMPLING TEAM: PETRAK, REPINE, [illegible]

ALL SAMPLING WILL BE CONDUCTED IN ACCORDANCE WITH PROPERTY SPECIFIC SAMPLING AND ANALYSIS PLAN AIR AND DUST SAMPLING FOR STIMSON LUMBER COMPANY, LIBBY ASBESTOS PROJECT, LIBBY, MONTANA, DATED AUG 23 2002.
0730 To office to retrieve pumps
0745 To Stimson
Will review ambient samples in Plywood Plant-Spreader area, and in the log yard, near the head gate. The Spreader sample may not collect 4000 L in an effort to prevent sample filter overload
0834 Calibrated, started SL-00243
0857 Calibrated & started SL-00244
0935 Collected SL-00237 composite of two locations in BD-002205 Power House office Pre & Post calibration
0945 Collected SL-00238 composite of three locations in Power House Pre & post calibration
1015 Collected SL-00239 composite of three locations in the abandoned Lumber Kilns. Pre & post cal

[illegible] 9/18/02

Location STIMSON LUMBER Date 9/18/02

Project / Client STIMSON LUMBER

PES SAMPLING TEAM: PETRAK, REPINE [signature]

1030 Consulted with Veronica. Shed 12 should be considered a separate building from FJ, and therefore sampled separately.

1036 Collected SL-00240 composite of three locations in BD-002268, Shed 12. Prep & ~~post~~ post calibration

1050 Repine refueled generator for SL-0244.

1110 Collected SL-00241, composite of three locations in Stimson Office, 1st floor. BD-002269. Pre & post calibration

1121 Collected SL-00242, composite of three locations in BD-002269, Stimson Office, 2nd floor. Pre & post calibration.

1144 Stopped SL-00243, checked flow rate, no Δ.

1145 Calibrated & started SL-00245.

~~1301~~ 1303 Stopped SL-00244, checked flow rate, changed to 10.23 lpm

Calibrated to 10.00 lpm, started SL-00244.

1552 Stopped SL-00245, checked flow rate, no Δ.

1601 Stopped SL-00244, checked flow rate, no Δ.

1615 to office to complete paper work.

WEATHER: SUNNY, WARM, BREEZY

MAP 9/18/02

Location STIMSON LUMBER Date 9/18/02

Project / Client STIMSON LUMBER

PES SAMPLING TEAM: PETRAK, REPINE [signature]

Microvac samples combined with samples secured in log room yesterday (9/17/02) placed under COC, and relinquished to CDM sample coordinator.

Ambient samples combined with sampled secured in log room yesterday placed under COC, and relinquished to CDM sample coordinator

Checked chip bins near plywood plant - they are essentially hoppers on legs and will not be microvac sampled because they are not really buildings and unsafe to enter

Reference FSDs:

D-001084, 1085

A-000083

COCs-003772, 3773, 3774, 3775, ~~3553~~ ~~3553~~ ~~3554~~

[signature] 9/18/02

[signature] 9/18/02

Location STIMSON LUMBER Date 9/19/02

Project / Client STIMSON LUMBER

PES SAMPLING TEAM: PETER [illegible]

0700 ~~0800~~ 9/19/02 Organized & reviewed data for Stimson Lumber.
Prepared Completion list, indicating collected samples, individuals wearing personal samples, dates of sample collection
Took copy of completion list to Veronica Boree - she was in a meeting, so left in her mailbox.

1700 Offsite - will drive Libby to Kalispell for departure tomorrow.

[illegible] 9/19/02

Location Nixon Pit Date 9/27/02

Project / Client Nixon Pit

CDM SAMPLING TEAM: KRISTEN SLOAN
KARIN HAINZ HAUSEN

1530 Arrived @ Nixon Pit, started setting up. Pits already partially started by Nixon Pit employee.

1540 Collected Asbestos sample.
1R-15663 in first test pit, 0-12 ft
grab sample. 54,000 cy

1546 Collected Asbestos sample.
1R-15664 2nd test pit 0-13 ft
grab sample. 57,000 cy

1550. Collected Asbestos sample
1R-15665 3rd test pit 0-9 ft
grab sample - 60,000 cy.

SP# 118539 location / 1R-15663
SP# 118540 location / 1R-15664
SP# 118541 location / 1R-15665

1557 Collected Asbestos sample 0-9 ft
1R-15666 SP-118542 At 7th pit location
grab sample 63,000 cy.

1601. Collected Asbestos sample 0-9 ft
1R-15667 SP- 118543 At 5th pit
grab sample 66,000 cy

1605 Collected Asbestos sample 0-10 ft
1R-15668 SP- 118544 At 6th pit
grab sample 69,000 cy

Note: The report excludes all Lab QC results, such as those associated with Lab Blanks, Lab Duplicates, Re-Preparation, Re-count Same, Re-count Different, Verified Analysis, etc.

													AHERA / ASTM 5755																
											PCM (METHOD - NIOSH 7400)		Libby Amphiboles (LA)				Chrysotile (C)				Other Amphiboles (OA)				Total Asbestos				
Sample ID	Property Group (Location)	Sample Group	Location Description (Sub Location)	Media Type	Matrix	Sample Type	Category	Pre Post Clear	Vol (L)/ Area (cm²)	Sample Date	Fibers/CC	Filter Status Non Analyzed	S<5u	S>5u	Asb load (S/mm2)	Asb conc (Air = S/cc) or (Dust = S/cm2)	S<5u	S>5u	Asb load (S/mm2)	Asb conc (Air = S/cc) or (Dust = S/cm2)	S<5u	S>5u	Asb load (S/mm2)	Asb conc (Air = S/cc) or (Dust = S/cm2)	Asbestos Type Identified	S<5u	S>5u	Asb load (S/mm2)	Asb conc (Air = S/cc) or (Dust = S/cm2)
SL-00001	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	595	9/10/2002	0.03															0	0	< 7.75	< 0.0050
SL-00002	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	591	9/10/2002	< 0.005															0	0	< 7.75	< 0.0050
SL-00003	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	593	9/10/2002	0.009															0	0	< 7.75	< 0.0050
SL-00004	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	69	9/10/2002	0.064															0	0	< 7.75	< 0.0433
SL-00005	875 Highway 2 S - Stimson Lumber	Property	Shoulder	Air	Outdoor	Personal	Field Sample	N/A	414	9/10/2002		Overloaded														0	0	< 0	< 0
SL-00005	875 Highway 2 S - Stimson Lumber	Property	Shoulder	Air	Outdoor	Personal	Field Sample	N/A	414	9/10/2002																0	0	< 31.01	< 0.0970
SL-00006	875 Highway 2 S - Stimson Lumber	Property	Shoulder	Air	Outdoor	Personal	Field Sample	N/A	65	9/10/2002	< 0.041															0	0	< 7.75	< 0.0459
SL-00007	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	61	9/10/2002	< 0.044															0	0	< 7.75	< 0.0489
SL-00008	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	63	9/10/2002	< 0.043															0	0	< 7.75	< 0.0474
SL-00009	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	321	9/10/2002	0.02															0	0	< 7.75	< 0.0093
SL-00010	875 Highway 2 S - Stimson Lumber	Property	Shoulder	Air	Outdoor	Personal	Field Sample	N/A	262	9/10/2002	< 0.01															0	0	< 7.75	< 0.0114
SL-00011	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	333	9/10/2002	< 0.008															0	0	< 7.75	< 0.0090
SL-00012	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	339	9/10/2002	< 0.008														LA	0	2	15.50	0.0176
SL-00013	875 Highway 2 S - Stimson Lumber	Property	Shoulder	Air	Outdoor	Personal	Field Sample	N/A	290	9/10/2002	< 0.009															0	0	< 7.75	< 0.0103
SL-00014	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	233	9/10/2002	< 0.012															0	0	< 7.75	< 0.0128
SL-00017	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	298	9/11/2002																0	0	< 31.01	< 0.1347
SL-00017	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	298	9/11/2002		Overloaded														0	0	< 0	< 0
SL-00018	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	591	9/11/2002	< 0.005														LA	0	2	15.50	0.0100
SL-00019	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	613	9/11/2002	< 0.004															0	0	< 7.75	< 0.0049
SL-00025	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	61	9/11/2002	< 0.044															0	0	< 7.75	< 0.0489
SL-00026	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	61	9/11/2002	< 0.044														LA	0	2	15.50	0.0978
SL-00027	875 Highway 2 S - Stimson Lumber	Property	Shoulder	Air	Outdoor	Personal	Field Sample	N/A	349	9/11/2002																0	0	< 15.50	< 0.0575
SL-00027	875 Highway 2 S - Stimson Lumber	Property	Shoulder	Air	Outdoor	Personal	Field Sample	N/A	349	9/11/2002		Overloaded														0	0	< 0	< 0
SL-00028	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	63	9/11/2002	< 0.043															0	0	< 7.75	< 0.0474
SL-00029	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	250	9/11/2002																0	0	< 31.01	< 0.1606
SL-00029	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	250	9/11/2002		Overloaded														0	0	< 0	< 0
SL-00030	875 Highway 2 S - Stimson Lumber	Property	Shoulder	Air	Outdoor	Personal	Field Sample	N/A	402	9/11/2002	< 0.007															0	0	< 7.75	< 0.0074
SL-00031	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	337	9/11/2002	< 0.008															0	0	< 7.75	< 0.0089
SL-00032	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	339	9/11/2002		Overloaded														0	0	< 0	< 0
SL-00032	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	339	9/11/2002																0	0	< 31.01	< 0.1185
SL-00033	875 Highway 2 S - Stimson Lumber	Property	Shoulder	Air	Outdoor	Personal	Field Sample	N/A	225	9/11/2002	< 0.012															0	0	< 7.75	< 0.0133
SL-00034	875 Highway 2 S - Stimson Lumber	Property	Shoulder	Air	Outdoor	Personal	Field Sample	N/A	71	9/11/2002	< 0.038															0	0	< 7.75	< 0.0420
SL-00035	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	233	9/11/2002	0.015															0	0	< 7.75	< 0.0128
SL-00040	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	292	9/12/2002	0.035															0	0	< 7.75	< 0.0102
SL-00041	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	351	9/12/2002	0.008															0	0	< 10.10	< 0.0111
SL-00042	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	353	9/12/2002	0.008															0	0	< 10.10	< 0.0110
SL-00043	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	65	9/12/2002	< 0.041															0	0	< 10.10	< 0.0598
SL-00044	875 Highway 2 S - Stimson Lumber	Property	Shoulder	Air	Indoor	Personal	Field Sample	N/A	258	9/12/2002																0	0	< 31.01	< 0.1556
SL-00044	875 Highway 2 S - Stimson Lumber	Property	Shoulder	Air	Indoor	Personal	Field Sample	N/A	258	9/12/2002		Overloaded														0	0	< 0	< 0
SL-00045	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	203	9/12/2002	< 0.013															0	0	< 7.75	< 0.0147
SL-00046	875 Highway 2 S - Stimson Lumber	Building		Air	Indoor	Personal	Field Sample	N/A	61	9/12/2002	< 0.044															0	0	< 7.75	< 0.0489
SL-00047	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	112	9/12/2002	0.039															0	0	< 7.75	< 0.0266
SL-00048	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	250	9/12/2002	0.021															0	0	< 10.10	< 0.0156
SL-00050	875 Highway 2 S - Stimson Lumber	Property	Shoulder	Air	Indoor	Personal	Field Sample	N/A	223	9/12/2002																0	0	< 31.01	< 0.1801
SL-00050	875 Highway 2 S - Stimson Lumber	Property	Shoulder	Air	Indoor	Personal	Field Sample	N/A	223	9/12/2002		Overloaded														0	0	< 0	< 0
SL-00051	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	238	9/12/2002	0.023														LA	2	0	15.50	0.0250
SL-00052	875 Highway 2 S - Stimson Lumber	Property	Shoulder	Air	Outdoor	Personal	Field Sample	N/A	61	9/12/2002	< 0.044														LA	2	0	15.50	0.0978
SL-00053	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	296	9/12/2002	< 0.009															0	0	< 10.10	< 0.0131
SL-00054	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	302	9/12/2002	< 0.009		0	1	10.10	0.0129	0	0	< 10.10	< 0.0129	0	0	< 10.10	< 0.0129		0	1	10.10	0.0129
SL-00055	875 Highway 2 S - Stimson Lumber	Property	Shoulder	Air	Outdoor	Personal	Field Sample	N/A	195	9/12/2002	0.018														LA	0	2	15.50	0.0306
SL-00056	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	71	9/12/2002	< 0.038															0	0	< 10.10	< 0.0548
SL-00057	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	197	9/12/2002	0.017															0	0	< 7.75	< 0.0151
SL-00058	875 Highway 2 S - Stimson Lumber	Property	Shoulder	Air	Outdoor	Personal	Field Sample	N/A	221	9/12/2002	< 0.012															0	0	< 7.75	< 0.0135
SL-00063	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	135	9/12/2002	< 0.02															0	0	< 7.75	< 0.0221
SL-00073	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	398	9/13/2002	0.015															0	0	< 10.10	< 0.0098
SL-00074	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	388	9/13/2002	0.034															0	0	< 10.10	< 0.0100
SL-00075	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	363	9/13/2002	0.05															0	0	< 10.10	< 0.0107
SL-00076	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	382	9/13/2002	0.031															0	0	< 10.10	< 0.0102
SL-00078	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	268	9/13/2002	0.04		1	0	10.10	0.0145	0	0	< 10.10	< 0.0145	0	0	< 10.10	< 0.0145		1	0	10.10	0.0145
SL-00083	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	337	9/13/2002	0.032															0	0	< 10.10	< 0.0115
SL-00084	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	546	9/13/2002	0.016															0	0	< 10.10	< 0.0071
SL-00085	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	305	9/13/2002	0.029															0	0	< 10.10	< 0.0128
SL-00086	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	282	9/13/2002	0.05															0	0	< 10.10	< 0.0136
SL-00088	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	189	9/13/2002	0.039															0	0	< 10.10	< 0.0206
SL-00093	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	231	9/13/2002	0.036															0	0	< 10.10	< 0.0168
SL-00095	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	65	9/13/2002	< 0.041															0	0	< 10.10	< 0.0598
SL-00099	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	430	9/13/2002	0.038															0	0	< 10.10	< 0.0090
SL-00100	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	61	9/13/2002	< 0.044															0	0	< 10.10	< 0.0638
SL-00101	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	221	9/13/2002	0.024															0	0	< 10.10	< 0.0176
SL-00103	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	63	9/13/2002	0.078															0	0	< 10.10	< 0.0617
SL-00104	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	270	9/13/2002	< 0.01															0	0	< 10.10	< 0.0144
SL-00105	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	79	9/13/2002	0.043															0	0	< 10.10	< 0.0492
SL-00109	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	61	9/13/2002	< 0.044															0	0	< 10.10	< 0.0638
SL-00110	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	180	9/13/2002	0.044															0	0	< 10.10	< 0.0216
SL-00113	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	61	9/13/2002	< 0.044															0	0	< 10.10	< 0.0638
SL-00114	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	119	9/13/2002	0.087															0	0	< 10.10	< 0.0327
SL-00115	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	177	9/13/2002	0.03															0	0	< 10.10	< 0.0220
SL-00116	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	177	9/13/2002	0.025															0	0	< 10.10	< 0.0220
SL-00117	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	170	9/13/2002	0.026															0	0	< 10.10	< 0.0229
SL-00123	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	179	9/14/2002	< 0.015															0	0	< 7.75	< 0.0167
SL-00124	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	180	9/14/2002	< 0.015															0	0	< 7.75	< 0.0166
SL-00125	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	186	9/14/2002	< 0.014															0	0	< 7.75	< 0.0160
SL-00126	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	186	9/14/2002	< 0.014															0	0	< 7.75	< 0.0160
SL-00131	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	182	9/14/2002	< 0.015															0	0	< 7.75	< 0.0164
SL-00132	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	61	9/14/2002	< 0.044															0	0	< 7.75	< 0.0489
SL-00133	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	191	9/14/2002	< 0.014															0	0	< 7.75	< 0.0156
SL-00134	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	191	9/14/2002	< 0.014															0	0	< 7.75	< 0.0156
SL-00135	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	61	9/14/2002	< 0.044															0	0	< 7.75	< 0.0489
SL-00136	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	61	9/14/2002	< 0.044															0	0	< 7.75	< 0.0489
SL-00137	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	192	9/14/2002	< 0.014															0	0	< 7.75	< 0.0155
SL-00138	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	176	9/14/2002	< 0.015															0	0	< 7.75	< 0.0170
SL-00139	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	65	9/14/2002	< 0.041															0	0	< 7.75	< 0.0459
SL-00140	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	73	9/14/2002	< 0.037															0	0	< 7.75	< 0.0409

Criteria.

												AHERA / ASTM 5755																
											PCM (METHOD - NIOSH 7400)		Libby Amphiboles (LA)				Chrysotile (C)				Other Amphiboles (OA)				Total Asbestos			
Sample ID	Property Group (Location)	Sample Group	Location Description (Sub Location)	Media Type	Matrix	Sample Type	Category	Pre Post Clear	Vol (L)/ Area (cm²)	Sample Date	Fibers/CC	Filter Status Non Analyzed	S<5u	S>5u	Asb load (S/mm2)	Asb conc (Air = S/cc) or (Dust = S/cm2)	S<5u	S>5u	Asb load (S/mm2)	Asb conc (Air = S/cc) or (Dust = S/cm2)	S<5u	S>5u	Asb load (S/mm2)	Asb conc (Air = S/cc) or (Dust = S/cm2)	Asbestos Type Identified	S<5u	S>5u	Asb load (S/mm2)	Asb conc (Air = S/cc) or (Dust = S/cm2)
SL-00141	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	179	9/14/2002	< 0.015															0	0	< 7.75	< 0.0167
SL-00142	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	171	9/14/2002	0.062															0	0	< 7.75	< 0.0175
SL-00143	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	293	9/14/2002	0.077															0	0	< 7.75	< 0.0102
SL-00144	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	179	9/14/2002	0.066															0	0	< 7.75	< 0.0167
SL-00145	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	170	9/14/2002	0.095															0	0	< 7.75	< 0.0176
SL-00146	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	135	9/14/2002	0.084															0	0	< 7.75	< 0.0221
SL-00147	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	189	9/14/2002	0.106															0	0	< 7.75	< 0.0158
SL-00148	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	149	9/14/2002	0.128															0	0	< 7.75	< 0.0200
SL-00149	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	203	9/14/2002	0.054															0	0	< 7.75	< 0.0147
SL-00150	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	141	9/14/2002	0.035															0	0	< 7.75	< 0.0212
SL-00151	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	224	9/14/2002	0.255															0	0	< 7.75	< 0.0133
SL-00152	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	296	9/14/2002	0.072															0	0	< 7.75	< 0.0101
SL-00153	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	284	9/14/2002	0.109															0	0	< 7.75	< 0.0105
SL-00154	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	278	9/14/2002	0.125															0	0	< 7.75	< 0.0107
SL-00157	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	285	9/16/2002	0.026															0	0	< 10.20	< 0.0138
SL-00158	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	285	9/16/2002	0.059															0	0	< 7.75	< 0.0105
SL-00159	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	281	9/16/2002	0.024														C	1	0	10.20	0.0140
SL-00160	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	284	9/16/2002	0.05															0	0	< 10.20	< 0.0138
SL-00161	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	236	9/16/2002	0.187															0	0	< 7.75	< 0.0126
SL-00165	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	215	9/16/2002	0.048															0	0	< 7.75	< 0.0139
SL-00166	875 Highway 2 S - Stimson Lumber	Property	Shoulder	Air	Indoor	Personal	Field Sample	N/A	182	9/16/2002		Overloaded														0	0	< 0	< 0
SL-00166	875 Highway 2 S - Stimson Lumber	Property	Shoulder	Air	Indoor	Personal	Field Sample	N/A	182	9/16/2002																0	0	< 77.52	< 0.5516
SL-00183	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	189	9/16/2002	0.279															0	0	< 7.75	< 0.0158
SL-00184	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	264	9/16/2002	0.037															0	0	< 7.75	< 0.0113
SL-00185	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	239	9/16/2002	0.018															0	0	< 10.20	< 0.0164
SL-00186	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	240	9/16/2002	0.039															0	0	< 10.20	< 0.0164
SL-00187	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	243	9/16/2002	0.048															0	0	< 10.20	< 0.0162
SL-00188	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	188	9/16/2002	0.113															0	0	< 7.75	< 0.0159
SL-00189	875 Highway 2 S - Stimson Lumber	Property	Shoulder	Air	Outdoor	Personal	Field Sample	N/A	215	9/16/2002																0	0	< 31.01	< 0.1868
SL-00189	875 Highway 2 S - Stimson Lumber	Property	Shoulder	Air	Outdoor	Personal	Field Sample	N/A	215	9/16/2002		Overloaded														0	0	< 0	< 0
SL-00190	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	61	9/16/2002	< 0.044															0	0	< 7.75	< 0.0489
SL-00191	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	63	9/16/2002	< 0.043															0	0	< 10.20	< 0.0624
SL-00192	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	61	9/16/2002	< 0.044															0	0	< 7.75	< 0.0489
SL-00193	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	63	9/16/2002	< 0.043															0	0	< 10.20	< 0.0624
SL-00194	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	67	9/16/2002	< 0.04															0	0	< 10.20	< 0.0586
SL-00196	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	260	9/16/2002		Overloaded														0	0	< 0	< 0
SL-00198	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	260	9/16/2002																0	0	< 31.01	< 0.1544
SL-00199	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	254	9/16/2002	0.027															0	0	< 10.20	< 0.0155
SL-00200	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	167	9/16/2002	0.026															0	0	< 10.20	< 0.0235
SL-00206	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	174	9/16/2002	0.059															0	0	< 10.20	< 0.0226
SL-00207	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	201	9/16/2002	0.039															0	0	< 10.20	< 0.0195

Criteria:

													ISO Concentrations (Air = structures/cc)(Dust = structures/cm²) (METHOD - ISO 10312)																							
													Libby Amphiboles (LA)								Chrysotile (C)								Other Amphiboles (OA)							
													Excluded Structures			Structures Detected					Excluded Structures			Structures Detected					Excluded Structures			Structures Detected				
Sample ID	Property Group (Location)	Sample Group	Location Description (Sub Location)	Media Type	Matrix	Sample Type	Category	Pre Post Clear	Vol (air=L)/ Area (dust=cm²)	Sample Date	Grid Openings	Filter Status Non Analyzed	Aspect Ratio < 5:1	Length < 0.5 u	Diameter > 0.5u	Length 0.5 to 5 u	Length 5 to 10 u	Length > 10 u	Total Conc. LA	Total Count LA	Aspect Ratio < 5:1	Length < 0.5 u	Diameter > 0.5u	Length 0.5 to 5 u	Length 5 to 10 u	Length > 10 u	Total Conc. C	Total Count C	Aspect Ratio < 5:1	Length < 0.5 u	Diameter > 0.5u	Length 0.5 to 5 u	Length 5 to 10 u	Length > 10 u	Total Conc. OA	Total Count OA
SL-00150	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	141	9/14/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00151	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	224	9/14/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00152	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	296	9/14/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00153	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	284	9/14/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00154	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	278	9/14/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00157	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	285	9/16/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00158	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	285	9/16/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00159	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	281	9/16/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00160	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	284	9/16/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00161	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	236	9/16/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00165	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	215	9/16/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00166	875 Highway 2 S - Stimson Lumber	Property	Shoulder	Air	Indoor	Personal	Field Sample	N/A	182	9/16/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00183	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	189	9/16/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00184	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	264	9/16/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00185	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	239	9/16/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00186	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	240	9/16/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00187	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	243	9/16/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00188	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	188	9/16/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00189	875 Highway 2 S - Stimson Lumber	Property	Shoulder	Air	Outdoor	Personal	Field Sample	N/A	215	9/16/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00190	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	81	9/16/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00191	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	63	9/16/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00192	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	61	9/16/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00193	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	63	9/16/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00194	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	67	9/16/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00198	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	260	9/16/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00199	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	254	9/16/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00200	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	187	9/16/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00206	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	174	9/16/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00207	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	201	9/16/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Criteria:

Note: The report excludes all Lab QC results, such as those associated with Lab Blanks, Lab Duplicates, Re-Preparation, Re-count Same, Re-count Different, Verified Analysis, etc.

ISO Concentrations (Air = structures/cc)(Dust = structures/cm²) (METHOD - ISO 10312)

Sample ID	Property Group (Location)	Sample Group	Location Description (Sub Location)	Media Type	Matrix	Sample Type	Category	Pre Post Clear	Vol (air=L)/ Area (dust=cm²)	Sample Date	Grid Openings	Filter Status Non Analyzed	Libby Amphiboles (LA) Excluded Structures: Aspect Ratio < 5:1	LA Excluded: Length < 0.5 u	LA Excluded: Diameter > 0.5u	LA Structures Detected: Length 0.5 to 5 u	LA Detected: Length 5 to 10 u	LA Detected: Length > 10 u	Total Conc. LA	Total Count LA	Chrysotile (C) Excluded Structures: Aspect Ratio < 5:1	C Excluded: Length < 0.5 u	C Excluded: Diameter > 0.5u	C Structures Detected: Length 0.5 to 5 u	C Detected: Length 5 to 10 u	C Detected: Length > 10 u	Total Conc. C	Total Count C	Other Amphiboles (OA) Excluded Structures: Aspect Ratio < 5:1	OA Excluded: Length < 0.5 u	OA Excluded: Diameter > 0.5u	OA Structures Detected: Length 0.5 to 5 u	OA Detected: Length 5 to 10 u	OA Detected: Length > 10 u	Total Conc. OA	Total Count OA
SL-00001	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	595	9/10/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00002	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	591	9/10/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00003	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	593	9/10/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00004	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	69	9/10/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00005	875 Highway 2 S - Stimson Lumber	Property	Shoulder	Air	Outdoor	Personal	Field Sample	N/A	414	9/10/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00006	875 Highway 2 S - Stimson Lumber	Property	Shoulder	Air	Outdoor	Personal	Field Sample	N/A	65	9/10/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00007	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	61	9/10/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00008	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	63	9/10/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00009	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	321	9/10/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00010	875 Highway 2 S - Stimson Lumber	Property	Shoulder	Air	Outdoor	Personal	Field Sample	N/A	262	9/10/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00011	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	333	9/10/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00012	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	339	9/10/2002	10		0	0	0	0.0413	0	0	0.0413	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00013	875 Highway 2 S - Stimson Lumber	Property	Shoulder	Air	Outdoor	Personal	Field Sample	N/A	290	9/10/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00014	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	233	9/10/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00017	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	298	9/11/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00018	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	591	9/11/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00019	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	613	9/11/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00025	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	61	9/11/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00026	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	61	9/11/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00027	875 Highway 2 S - Stimson Lumber	Property	Shoulder	Air	Outdoor	Personal	Field Sample	N/A	349	9/11/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00028	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	63	9/11/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00029	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	250	9/11/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00030	875 Highway 2 S - Stimson Lumber	Property	Shoulder	Air	Outdoor	Personal	Field Sample	N/A	402	9/11/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00031	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	337	9/11/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00032	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	339	9/11/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00033	875 Highway 2 S - Stimson Lumber	Property	Shoulder	Air	Outdoor	Personal	Field Sample	N/A	225	9/11/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00034	875 Highway 2 S - Stimson Lumber	Property	Shoulder	Air	Outdoor	Personal	Field Sample	N/A	71	9/11/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00035	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	233	9/11/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00040	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	292	9/12/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00041	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	351	9/12/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00042	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	353	9/12/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00043	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	65	9/12/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00044	875 Highway 2 S - Stimson Lumber	Property	Shoulder	Air	Indoor	Personal	Field Sample	N/A	258	9/12/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00045	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	203	9/12/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00046	875 Highway 2 S - Stimson Lumber	Building		Air	Indoor	Personal	Field Sample	N/A	61	9/12/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00047	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	112	9/12/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00048	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	250	9/12/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00050	875 Highway 2 S - Stimson Lumber	Property	Shoulder	Air	Indoor	Personal	Field Sample	N/A	223	9/12/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00051	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	238	9/12/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00052	875 Highway 2 S - Stimson Lumber	Property	Shoulder	Air	Outdoor	Personal	Field Sample	N/A	61	9/12/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00053	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	296	9/12/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00054	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	302	9/12/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00055	875 Highway 2 S - Stimson Lumber	Property	Shoulder	Air	Outdoor	Personal	Field Sample	N/A	195	9/12/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00056		Building		Air		Personal	Field Sample	N/A	71	9/12/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00057	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	197	9/12/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00058	875 Highway 2 S - Stimson Lumber	Property	Shoulder	Air	Outdoor	Personal	Field Sample	N/A	221	9/12/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00063	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	135	9/12/2002	10		0.0310	0	0	0	0	0	0.0310	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00073	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	398	9/13/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00074	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	388	9/13/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00075	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	363	9/13/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00076	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	382	9/13/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00078	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	268	9/13/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00083	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	337	9/13/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00084	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	546	9/13/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00085	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	305	9/13/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00086	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	282	9/13/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00088	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	189	9/13/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00093	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	231	9/13/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00095	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	65	9/13/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00099	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	430	9/13/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00100	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	61	9/13/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00101	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	221	9/13/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00103	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	63	9/13/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00104	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	270	9/13/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00105	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	79	9/13/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00109	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	61	9/13/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00110	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	180	9/13/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00113	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	61	9/13/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00114	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	119	9/13/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00115	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	177	9/13/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00116	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	177	9/13/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00117	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	170	9/13/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00123	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	179	9/14/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00124	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	180	9/14/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00125	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	186	9/14/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00126	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	186	9/14/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00131	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	182	9/14/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00132	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	61	9/14/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00133	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	191	9/14/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00134	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	191	9/14/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00135	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	61	9/14/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00136	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	61	9/14/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00137	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	192	9/14/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00138	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	176	9/14/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00139	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	65	9/14/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00140	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	73	9/14/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00141	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	179	9/14/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00142	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	171	9/14/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00143	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	293	9/14/2002	10		0.0143	0	0	0	0	0	0.0143	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00144	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	179	9/14/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00145	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	170	9/14/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00146	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	135	9/14/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00147	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	189	9/14/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00148	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	149	9/14/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00149	875 Highway 2 S - Stimson Lumber	Building	Shoulder	Air	Indoor	Personal	Field Sample	N/A	203	9/14/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Criteria:

Note: The report excludes all Lab QC results, such as those associated with Lab Blanks, Lab Duplicates, Re-Preparation, Re-count Same, Re-count Different, Verified Analysis, etc.

													ISO Concentrations (Air = structures/cc)(Dust = structures/cm²) (METHOD - ISO 10312)																			
													Libby Amphiboles (LA)								Chrysotile (C)							Other Amphiboles (OA)						
													Excluded Structures			Structures Detected				Excluded Structures			Structures Detected				Excluded Structures			Structures Detected			
Sample ID	Property Group (Location)	Sample Group	Location Description (Sub Location)	Media Type	Matrix	Sample Type	Category	Pre Post Clear	Vol (air=L)/ Area (dust=cm²)	Sample Date	Grid Open ings	Filter Status Non Analyzed	Aspect Ratio < 5:1	Length < 0.5 u	Dia-meter > 0.5u	Length 0.5 to 5 u	Length 5 to 10 u	Length > 10 u	Total Conc. LA	Total Count LA	Aspect Ratio < 5:1	Length < 0.5 u	Dia-meter > 0.5u	Length 0.5 to 5 u	Length 5 to 10 u	Length > 10 u	Total Conc. C	Total Count C	Aspect Ratio < 5:1	Length < 0.5 u	Dia-meter > 0.5u	Length 0.5 to 5 u	Length 5 to 10 u	Length > 10 u	Total Conc. OA	Total Count OA
SL-00059	875 Highway 2 S - Stimson Lumber	Building	Machine shop in central maintainance building	Dust	Building		Field Sample	N/A	300	9/12/2002	10		0	0	0	4,412	0	0	4,412	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00060	875 Highway 2 S - Stimson Lumber	Building	South end of CM building	Dust	Building		Field Sample	N/A	300	9/12/2002	10		882	0	0	0	0	0	882	1	0	0	0	3,891	0	0	3,891	3	0	0	0	0	0	0	0	0
SL-00061	875 Highway 2 S - Stimson Lumber	Building	Center of CM building	Dust	Building		Field Sample	N/A	300	9/12/2002	10		0	0	0	8,823	0	0	8,823	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00062	875 Highway 2 S - Stimson Lumber	Building	Northern end of CM bldg	Dust	Building		Field Sample	N/A	300	9/12/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00064	875 Highway 2 S - Stimson Lumber	Building	Spervisor's office and break room, CM building	Dust	Building		Field Sample	N/A	300	9/12/2002	10		0	0	0	882	0	0	882	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00065	875 Highway 2 S - Stimson Lumber	Building	Fingerjoint bldg former lunch room (now storage)	Dust	Building		Field Sample	N/A	300	9/12/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00066	875 Highway 2 S - Stimson Lumber	Building	Fingerjoint bldg doorways and entrances	Dust	Building		Field Sample	N/A	300	9/12/2002	10		0	0	0	0	0	0	0	0	0	0	0	1,297	0	0	1,297	1	0	0	0	0	0	0	0	0
SL-00169	875 Highway 2 S - Stimson Lumber	Building	Logyard break building	Dust	Building		Field Sample	N/A	300	9/15/2002	10		0	0	0	0	0	0	0	0	0	0	0	1,297	0	0	1,297	1	0	0	0	0	0	0	0	0
SL-00170	875 Highway 2 S - Stimson Lumber	Building	Logyard storage	Dust	Building		Field Sample	N/A	300	9/15/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00171	875 Highway 2 S - Stimson Lumber	Building	Logyard - oil storage shed	Dust	Building		Field Sample	N/A	300	9/15/2002	10		0	0	0	4,412	0	0	4,412	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00172	875 Highway 2 S - Stimson Lumber	Building	Logyard - pump house	Dust	Building		Field Sample	N/A	300	9/15/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00173	875 Highway 2 S - Stimson Lumber	Building	Logyard-log truck scale shed	Dust	Building		Field Sample	N/A	300	9/15/2002	10		882	0	0	0	0	0	882	1	0	0	0	2,594	0	0	2,594	2	0	0	0	0	0	0	0	0
SL-00174	875 Highway 2 S - Stimson Lumber	Building	Irrigation building	Dust	Building		Field Sample	N/A	300	9/15/2002	10		0	0	0	4,412	0	0	4,412	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
SL-00175	875 Highway 2 S - Stimson Lumber	Building	Diesel fire pump house	Dust	Building		Field Sample	N/A	300	9/15/2002	10		4,412	0	0	4,412	0	0	8,823	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00176	875 Highway 2 S - Stimson Lumber	Building	Double wide trailer	Dust	Building		Field Sample	N/A	300	9/15/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
SL-00177	875 Highway 2 S - Stimson Lumber	Building	Electric pump house	Dust	Building		Field Sample	N/A	300	9/15/2002	10		0	0	0	4,412	0	0	4,412	1	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0
SL-00178	875 Highway 2 S - Stimson Lumber	Building	Guard station at Libby Creek bridge	Dust	Building		Field Sample	N/A	300	9/15/2002	10		44,116	0	0	0	0	0	44,116	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
SL-00217	875 Highway 2 S - Stimson Lumber	Building	Plywood plant break rooms & offices at finish end	Dust	Building		Field Sample	N/A	300	9/17/2002	10		0	0	0	0	0	0	0	0	0	0	0	962	0	0	962	1	0	0	0	0	0	0	0	0
SL-00218	875 Highway 2 S - Stimson Lumber	Building	Playwood plant, plugger area	Dust	Building		Field Sample	N/A	300	9/17/2002	10		0	0	0	0	0	0	0	0	0	0	0	962	0	0	962	1	0	0	0	0	0	0	0	0
SL-00219	875 Highway 2 S - Stimson Lumber	Building	Playwood plant spreaders and finish end	Dust	Building		Field Sample	N/A	200	9/17/2002	10		0	0	0	0	0	0	0	0	0	0	0	23,088	12,506	8,658	44,252	46	0	0	0	0	0	0	0	0
SL-00220	875 Highway 2 S - Stimson Lumber	Building	Green chair	Dust	Building		Field Sample	N/A	300	9/17/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00221	875 Highway 2 S - Stimson Lumber	Building	Dryer area	Dust	Building		Field Sample	N/A	300	9/17/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00224	875 Highway 2 S - Stimson Lumber	Building	Truck barn, North side	Dust	Building		Field Sample	N/A	300	9/17/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00225	875 Highway 2 S - Stimson Lumber	Building	Truck barn, south end of bldg	Dust	Building		Field Sample	N/A	200	9/17/2002	10		0	0	0	1,971	986	0	2,957	3	0	0	0	962	0	0	962	1	0	0	0	0	0	0	0	0
SL-00226	875 Highway 2 S - Stimson Lumber	Building	Steel storage	Dust	Building		Field Sample	N/A	300	9/17/2002	10		526	0	0	0	0	0	526	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00227	875 Highway 2 S - Stimson Lumber	Building	Fire hall	Dust	Building		Field Sample	N/A	300	9/17/2002	10		526	0	0	0	0	0	526	1	0	0	0	0	481	0	481	1	0	0	0	0	0	0	0	0
SL-00228	875 Highway 2 S - Stimson Lumber	Building	Wagner shed	Dust	Building		Field Sample	N/A	200	9/17/2002	10		0	0	0	394	0	0	394	1	0	0	0	481	0	0	481	1	0	0	0	0	0	0	0	0
SL-00229	875 Highway 2 S - Stimson Lumber	Building	Electric motor shed	Dust	Building		Field Sample	N/A	300	9/17/2002	10		0	0	0	329	0	0	329	1	0	0	0	321	0	0	321	1	0	0	0	329	329	0	657	2
SL-00230	875 Highway 2 S - Stimson Lumber	Building	Astro dome	Dust	Building		Field Sample	N/A	300	9/17/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00231	875 Highway 2 S - Stimson Lumber	Building	Pipe shed	Dust	Building		Field Sample	N/A	300	9/17/2002	10		0	0	0	0	0	0	0	0	0	0	0	7,696	962	0	8,658	9	0	0	0	0	0	0	0	0
SL-00232	875 Highway 2 S - Stimson Lumber	Building	Storage and Locomotive Shed	Dust	Building		Field Sample	N/A	300	9/17/2002	10		0	0	0	375	375	0	751	2	0	0	0	321	0	0	321	1	375	0	0	375	751	0	1,502	4
SL-00237	875 Highway 2 S - Stimson Lumber	Building	Power office house	Dust	Building		Field Sample	N/A	200	9/18/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00238	875 Highway 2 S - Stimson Lumber	Building	Power house	Dust	Building		Field Sample	N/A	300	9/18/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00239	875 Highway 2 S - Stimson Lumber	Building	Lumber kilns	Dust	Building		Field Sample	N/A	300	9/18/2002	10		0	0	0	0	0	0	0	0	0	0	0	5,772	481	1,924	8,177	17	0	0	0	0	0	0	0	0
SL-00240	875 Highway 2 S - Stimson Lumber	Building	Shed 12	Dust	Building		Field Sample	N/A	300	9/18/2002	10		0	0	0	0	0	0	0	0	0	0	0	1,924	0	0	1,924	2	0	0	0	0	0	0	0	0
SL-00241	875 Highway 2 S - Stimson Lumber	Building	Stimson office 1st floor	Dust	Building		Field Sample	N/A	300	9/18/2002	10		131	0	0	263	0	0	394	3	0	0	0	0	0	0	0	0	131	0	131	263	131	0	657	5
SL-00242	875 Highway 2 S - Stimson Lumber	Building	Stimson office 2nd floor	Dust	Building		Field Sample	N/A	300	9/18/2002	10		0	0	0	131	0	0	131	1	0	0	0	412	0	0	412	3	0	0	0	0	0	0	0	0

Criteria:

Sheet No.: A-_____

LIBBY MONTANA FIELD SAMPLE DATA SHEET
STATIONARY AIR

Scenario No.: NA Field Logbook No: 100117 Page No: 19-23 Sampling Date: 9/11/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Sampling Team: (PES) CDM Other _____ Names: PETRAK/REPINE

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	SL- 00020	SL- 00021	SL- 00022
Location ID	BD-002098	BD-002098	BD-002098
Sample Group	BUILDING	BUILDING	BUILDING
Location Description	CENTER OF MACHINE SHOP	CENTER OF SOUTH END OF BUILDING	EAST SIDE OF CENTER OF BUILDING
Category (circle)	(FS) Blank Rep_____	(FS) Blank Rep_____	(FS) Blank Rep_____
Matrix Type (circle)	(Indoor) Outdoor NA	(Indoor) Outdoor NA	(Indoor) Outdoor NA
Filter Diameter (circle)	(25mm) 37mm	(25mm) 37mm	(25mm) 37mm
Pore Size (circle)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)
Flow Meter Type (circle)	(Rotometer) DryCal	(Rotometer) DryCal	(Rotometer) DryCal
Pump ID Number	08911	12881	0891
Flow Meter ID No.	34719	34719	34719
Start Date	9/11/02	9/11/02	9/11/02
Start Time	0708	0707	0708
Start Flow (L/min)	10.00	10.00	10.00
Stop Date	9/11/02	9/11/02	9/11/02
Stop Time	1508	1517	1519
Stop Flow (L/min)	10.00	10.00	10.00
Pump fault? (circle)	(No) Yes	(No) Yes	(No) Yes
MET Station onsite?	(No) Yes	(No) Yes	(No) Yes
Pre/Post (circle)	Pre Post Clear (NA)	Pre Post Clear (NA)	Pre Post Clear (NA)
Field Comments	480 min x 10.00 lpm = 4800 L	~~480 min x 10~~ mg 9/11/02 490 min x 10.00 lpm = 4900L	491 min x 10.00 lpm = 4910 L
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

9/11/02

vs 021302

Sheet No.: A- 000001

LIBBY MONTANA FIELD SAMPLE DATA SHEET
STATIONARY AIR

Scenario No.: NA Field Logbook No: 100117 Page No: 19-23 Sampling Date: 9/11/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Sampling Team: (PES) CDM Other _____ Names: PERAK/REPINE

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	SL- 00023	SL- 00024	SL- 00038
Location ID	BD-002098	BD-002098	NA map 9/11/02
Sample Group	BUILDING	BUILDING	BLANK.
Location Description	CENTER OF NORTH END OF BUILDING	CENTER OF NORTH END OF BUILDING	NA map 9/11/02
Category (circle)	(FS) Blank Rep_____	~~FS~~ map 9/11/02 Blank Rep SL-00023	FS (Blank) Rep_____
Matrix Type (circle)	(Indoor) Outdoor NA	(Indoor) Outdoor NA	Indoor Outdoor (NA)
Filter Diameter (circle)	(25mm) 37mm	(25mm) 37mm	(25mm) 37mm
Pore Size (circle)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)
Flow Meter Type (circle)	(Rotometer) DryCal	(Rotometer) DryCal	~~Rotometer~~ DryCal map 9/11/02
Pump ID Number	12882	08913	
Flow Meter ID No.	34719	34719	
Start Date	9/11/02	9/11/02	
Start Time	0707	0707	
Start Flow (L/min)	10.00	10.00	
Stop Date	9/11/02	9/11/02	
Stop Time	1506	1506	
Stop Flow (L/min)	10.00	10.00	
Pump fault? (circle)	(No) Yes	(No) Yes	No Yes
MET Station onsite?	(No) Yes	(No) Yes	No
Pre/Post (circle)	Pre Post Clear (NA)	Pre Post Clear (NA)	Pre Post Clear NA
Field Comments	479 min X10.00 lpm = 4790 L Welding done near this sample	479 min X 10.00 lpm = 4790 L Welding done near this sample.	
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

9/11/02

vs 021302

Sheet No.: A-

LIBBY MONTANA FIELD SAMPLE DATA SHEET
STATIONARY AIR

Scenario No.: NA Field Logbook No: 100117 Page No: 30-36 Sampling Date: 9/13/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Sampling Team: (PES) CDM Other _____ Names: PODRAK/REPINE

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	~~SL- 00077~~	SL- 00079	~~SL- 00080~~
Location ID	BD- 002099	BD-002099	BD-002099
Sample Group	BUILDING	BUILDING	BUILDING
Location Description	Just outside door of debarker cab Plywood Plant	Green chain exterior wall, opposite supervisor's office Plywood Plant	Spreaders, at column near pre-press Plywood Plant
Category (circle)	(FS) Blank Rep_____	(FS) Blank Rep_____	(FS) Blank Rep_____
Matrix Type (circle)	Indoor (Outdoor) NA	(Indoor) Outdoor NA	(Indoor) Outdoor NA
Filter Diameter (circle)	(25mm) 37mm	(25mm) 37mm	(25mm) 37mm
Pore Size (circle)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)
Flow Meter Type (circle)	(Rotometer) DryCal	(Rotometer) DryCal	(Rotometer) DryCal
Pump ID Number	08911 VOID 10/1/02	12881	12882 VOID 10/1/02
Flow Meter ID No.	34719	34719	34719
Start Date	9/13/02	9/13/02	9/13/02
Start Time	0651	0711	0724
Start Flow (L/min)	10.00	10.00	10.00
Stop Date	9/13/02	9/13/02	9/13/02
Stop Time	0943	1015	1001
Stop Flow (L/min)	10.00	9.85	10.00
Pump fault? (circle)	(No) Yes	(No) Yes	(No) Yes
MET Station onsite?	(No) Yes	(No) Yes	(No) Yes
Pre/Post (circle)	Pre Post Clear (NA)	Pre Post Clear (NA)	Pre Post Clear (NA)
Field Comments	Changed due to visible debris on filter	Changed due to visible debris on filter	Ceiling exhaust fans running near sample
	~~172 min x 10.00 lpm = 1720 L~~	~~184 min x 10.00 lpm = 1840 L~~	Changed due to visible debris on filter ~~157 min x 10.00 lpm = 1570 L~~
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___
	POSSIBLE OVERLOADED	154 min x 9.93 L/min 1527 L	POSSIBLE OVERLOADED

vs 021302

DD 9/13/02

Sheet No.: A- 000003

LIBBY MONTANA FIELD SAMPLE DATA SHEET
STATIONARY AIR

Scenario No.: NA Field Logbook No: 100117 Page No: 30-36 Sampling Date: 9/13/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Sampling Team: (PES) CDM Other _____ Names: PETRAK/REPINE

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	SL- 00081	SL- 00082	SL- 00087
Location ID	BD-002090	BD-002099	BD-002090
Sample Group	BUILDING	BUILDING	BUILDING
Location Description	9/13/02 In Plugger Alley, next to Plugger #9 Plywood Plant	Dryers, next to post at feed end Plywood Plant	Debarker just outside cab door Plywood Plant
Category (circle)	(FS) Blank Rep_____	(FS) Blank Rep_____	(FS) Blank Rep_____
Matrix Type (circle)	(Indoor) Outdoor NA	(Indoor) Outdoor NA	Indoor (Outdoor) NA
Filter Diameter (circle)	(25mm) 37mm	(25mm) 37mm	(25mm) 37mm
Pore Size (circle)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)
Flow Meter Type (circle)	(Rotometer) DryCal	(Rotometer) DryCal	(Rotometer) DryCal
Pump ID Number	08911	08913	08911
Flow Meter ID No.	34719	34719	34719
Start Date	9/13/02	9/13/02	9/13/02
Start Time	0735	9/13/02 ~~0757~~ ~~0775~~	9/13/02 ~~0994~~ 0946
Start Flow (L/min)	10.00	10.00	10.00
Stop Date	9/13/02	9/13/02	9/13/02
Stop Time	1023	1007	1115
Stop Flow (L/min)	10.00	10.00	10.00
Pump fault? (circle)	(No) Yes	(No) Yes	(No) Yes
MET Station onsite?	(No) Yes	(No) Yes	(No) Yes
Pre/Post (circle)	Pre Post Clear (NA)	Pre Post Clear (NA)	Pre Post Clear (NA)
Field Comments	Changed due to visible debris on filter	Changed due to visible debris on filter	Changed due to visible debris of filter
	168 min x 10.00 lpm = 1680 L ✓	135 min x 10.00 lpm = 1350 L ✓	89 min x 10.00 lpm = 890 L ✓
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___
	POSSIBLY OVERLOADED	POSSIBLY OVERLOADED	OVER LOAD.

VOID 10/1/02

DD 9/13/02

vs 021302

Sheet No.: A- 000007

LIBBY MONTANA FIELD SAMPLE DATA SHEET

STATIONARY AIR

Scenario No.: NA Field Logbook No: 100117 Page No: 30-36 Sampling Date: 9/13/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Land Use: Residential School Commercial Mining Roadway Other ( )

Sampling Team: PES CDM Other _____ Names: PETRAK/REPINE

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	~~SL- 00089~~	SL- 00090	SL- 00091
Location ID	~~BD-020~~ BD-002099	BD-002099	BD-002099
Sample Group	BUILDING	BUILDING	BUILDING
Location Description	Spreaders, at post near pre-press Plywood Plant	Dryers, at post at feed end Plywood Plant	Green chain, along exterior wall opposite supervisor's office Plywood Plant
Category (circle)	FS Blank Rep_____	FS Blank Rep_____	FS Blank Rep_____
Matrix Type (circle)	Indoor Outdoor NA	Indoor Outdoor NA	Indoor Outdoor NA
Filter Diameter (circle)	25mm 37mm	25mm 37mm	25mm 37mm
Pore Size (circle)	TEM- .45 PCM- 0.8	TEM- .45 PCM- 0.8	TEM- .45 PCM- 0.8
Flow Meter Type (circle)	Rotometer DryCal	Rotometer DryCal	Rotometer DryCal
Pump ID Number	12882	08913	12881
Flow Meter ID No.	34719	34719	34719
Start Date	9/13/02	9/13/02	9/13/02
Start Time	1001	1007	1015
Start Flow (L/min)	10.00	10.00	10.00
Stop Date	9/13/02	9/13/02	9/13/02
Stop Time	1105	1140	1205
Stop Flow (L/min)	10.00	10.00	10.00
Pump fault? (circle)	No Yes	No Yes	No Yes
MET Station onsite?	No Yes	No Yes	No Yes
Pre/Post (circle)	Pre Post Clear NA	Pre Post Clear NA	Pre Post Clear NA
Field Comments	Changed due to visible debris on filter 64 min x 10.00 lpm = 640 L	Changed due to visible debris on filter 93 min x 10.00 lpm = 930 L	Changed due to visible debris on filter 110 min x 10.00 lpm = 1100 L
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

VOID 10/1/02

Ceiling exhaust fans running near sample

DB 9/13/02

vs 021302

Sheet No.: A- 000083

LIBBY MONTANA FIELD SAMPLE DATA SHEET
STATIONARY AIR

Scenario No.: N/A Field Logbook No: 100117 Page No: 15-23 Sampling Date: 9/11/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Sampling Team: (PES) CDM Other _____ Names: PETRAK / REPINE

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	SL- 00039		
Location ID	N/A		
Sample Group	BLANK		
Location Description	N/A		
Category (circle)	FS (Blank) Rep_____	FS Blank Rep_____	FS Blank Rep_____
Matrix Type (circle)	Indoor Outdoor (NA)	Indoor Outdoor NA	Indoor Outdoor NA
Filter Diameter (circle)	(25mm) 37mm	25mm 37mm	25mm 37mm
Pore Size (circle)	TEM- .45 (PCM- 0.8)	TEM- .45 PCM- 0.8	TEM- .45 PCM- 0.8
Flow Meter Type (circle)	Rotometer DryCal	Rotometer DryCal	Rotometer DryCal
Pump ID Number			
Flow Meter ID No.			
Start Date			
Start Time			
Start Flow (L/min)			
Stop Date			
Stop Time			
Stop Flow (L/min)			
Pump fault? (circle)	No Yes	No Yes	No Yes
MET Station onsite?	No Yes	No Yes	No Yes
Pre/Post (circle)	Pre Post Clear NA	Pre Post Clear NA	Pre Post Clear NA
Field Comments			
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

9/11/02

9/11/02

9/11/02

9/11/02

vs 021302

Sheet No.: A- 000000

LIBBY MONTANA FIELD SAMPLE DATA SHEET

STATIONARY AIR

Scenario No.: NA Field Logbook No: 100117 Page No: 30-36 Sampling Date: 9/13/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Land Use: Residential School Commercial Mining Roadway Other ( )

Sampling Team: PES CDM Other _____ Names: PETRAK/REPINE

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	SL- 00122		
Location ID	NA mgp 9/13/02		
Sample Group	BLANK		
Location Description	NA mgp 9/13/02		
Category (circle)	FS Blank Rep_____	FS Blank Rep_____	FS Blank Rep_____
Matrix Type (circle)	Indoor Outdoor NA	Indoor Outdoor NA	Indoor Outdoor NA
Filter Diameter (circle)	25mm 37mm	25mm 37mm	25mm 37mm
Pore Size (circle)	TEM- .45 PCM- 0.8	TEM- .45 PCM- 0.8	TEM- .45 PCM- 0.8
Flow Meter Type (circle)	Rotometer DryCal	Rotometer DryCal	Rotometer DryCal
Pump ID Number			
Flow Meter ID No.			
Start Date			
Start Time			
Start Flow (L/min)			
Stop Date			
Stop Time			
Stop Flow (L/min)			
Pump fault? (circle).	No Yes	No Yes	No Yes
MET Station onsite?	No Yes	No Yes	No Yes
Pre/Post (circle)	Pre Post Clear NA	Pre Post Clear NA	Pre Post Clear NA
Field Comments			
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Melissa A Petrak 9/13/02

Melissa A Petrak 9/13/02

vs 021302

Sheet No.: A- 000067

LIBBY MONTANA FIELD SAMPLE DATA SHEET

STATIONARY AIR

Scenario No.: NA Field Logbook No: 100117 Page No: 30-36 Sampling Date: 9/13/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Sampling Team: (PES) CDM Other _____ Names: PETRAK/REPINE

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	SL- 00092	~~SL- 00097~~	~~SL- 00098~~
Location ID	mgp 9/13/02 ~~BD0020~~ BD-002099	BD-002099	BD-002099
Sample Group	BUILDING	BUILDING	BUILDING
Location Description	Pluggers, at post next to Plugger #9 Plywood Plant	Debarker, just outside cab door Plywood Plant	Spreaders, at post near pre-press Plywood Plant
Category (circle)	(FS) Blank Rep_____	(FS) Blank Rep_____	(FS) Blank Rep_____
Matrix Type (circle)	(Indoor) Outdoor NA	mgp 9/13/02 ~~Indoor~~ (Outdoor) NA	(Indoor) Outdoor NA
Filter Diameter (circle)	(25mm) 37mm	(25mm) 37mm	(25mm) 37mm
Pore Size (circle)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)
Flow Meter Type (circle)	(Rotometer) DryCal	(Rotometer) DryCal	(Rotometer) DryCal
Pump ID Number	0891	08911	12882
Flow Meter ID No.	34719	34719	34719
Start Date	9/13/02	9/13/02	9/13/02
Start Time	1023	1115	1105
Start Flow (L/min)	10.00	10.00	10.00
Stop Date	9/13/02	9/13/02	9/13/02
Stop Time	1135 mgp 9/13/02	1403	1340
Stop Flow (L/min)	~~10.03~~ 10.00	10.30	10.00
Pump fault? (circle)	(No) Yes	(No) Yes	(No) Yes
MET Station onsite?	(No) Yes	(No) Yes	(No) Yes
Pre/Post (circle)	Pre Post Clear (NA)	Pre Post Clear (NA)	Pre Post Clear (NA)
Field Comments	Changed due to visible debris on filter	Visible debris on filter	Visible debris on filter
	72 ~~min~~ min x 10.00 lpm mgp 9/13/02 = 720L ✓	ave lpm = 10.15 lpm 168 min x 10.15 lpm = 1705 L ✓	155 min x 10.00 lpm = 1550 L ✓
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

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Sheet No.: A- 000068

LIBBY MONTANA FIELD SAMPLE DATA SHEET
STATIONARY AIR

Scenario No.: NA Field Logbook No: 100117 Page No: 30-36 Sampling Date: 9/13/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Sampling Team: (PES) CDM Other _____ Names: PETRAK/REPINE

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	SL- 00094	SL- 00096	SL- 00102
Location ID	BD-002099	BD-002099	BD-002099
Sample Group	BUILDING	BUILDING	BUILDING
Location Description	Dryers, at post at feed end Plywood Plant	Pluggers, at post next to Plugger #9 Plywood Plant	Green chain, along exterior wall opposite supervisor's office Plywood Plant
Category (circle)	(FS) Blank Rep_____	(FS) Blank Rep_____	(FS) Blank Rep_____
Matrix Type (circle)	(Indoor) Outdoor NA	(Indoor) Outdoor NA	(Indoor) Outdoor NA
Filter Diameter (circle)	(25mm) 37mm	(25mm) 37mm	(25mm) 37mm
Pore Size (circle)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)
Flow Meter Type (circle)	(Rotometer) DryCal	(Rotometer) DryCal	(Rotometer) DryCal
Pump ID Number	08913	0891	12881
Flow Meter ID No.	34719	34719	34719
Start Date	9/13/02	9/13/02	9/13/02
Start Time	1140	1135	1205
Start Flow (L/min)	10.00	10.00	10.00
Stop Date	9/13/02	9/13/02	9/13/02
Stop Time	1328	1352	1332
Stop Flow (L/min)	10.00	10.15	10.00
Pump fault? (circle)	(No) Yes	(No) Yes	(No) Yes
MET Station onsite?	(No) Yes	(No) Yes	(No) Yes
Pre/Post (circle)	Pre Post Clear (NA)	Pre Post Clear (NA)	Pre Post Clear (NA)
Field Comments	Visible debris on filter 108 min x 10.00 lpm = 1080 L	Visible debris on filter ave lpm = 10.08 137 min x 10.08 lpm = 1381 L	Light dust on filter 87 min x 10.00 lpm = 870 L
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

POSSIBLY OVERLOADED

9/13/02

vs 021302

Sheet No.: A-_____

LIBBY MONTANA FIELD SAMPLE DATA SHEET
STATIONARY AIR

Scenario No.: NA Field Logbook No: 100117 Page No: 30-36 Sampling Date: 9/13/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Sampling Team: (PES) CDM Other _____ Names: PETRAK/REPINE

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	SL- 00106	SL- 00107	SL- 00108
Location ID	BD-002099	BD-002099	BD-002099
Sample Group	BUILDING	BUILDING	BUILDING
Location Description	Dryers, at post at feed end Plywood Plant	Green chain, along exterior wall opposite Supervisor's office Plywood Plant	Spreaders, at post near pre-press Plywood Plant
Category (circle)	(FS) Blank Rep_____	(FS) Blank Rep_____	(FS) Blank Rep_____
Matrix Type (circle)	(Indoor) Outdoor NA	(Indoor) Outdoor NA	(Indoor) Outdoor NA
Filter Diameter (circle)	(25mm) 37mm	(25mm) 37mm	(25mm) 37mm
Pore Size (circle)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)
Flow Meter Type (circle)	(Rotometer) DryCal	(Rotometer) DryCal	(Rotometer) DryCal
Pump ID Number	08913	12881	12882
Flow Meter ID No.	34719	34719	34719
Start Date	9/13/02	9/13/02	9/13/02
Start Time	1328	1332	1340
Start Flow (L/min)	5.07	5.07	5.07
Stop Date	9/13/02	9/13/02	9/13/02
Stop Time	1735	1740	1746
Stop Flow (L/min)	~~5.20~~ 5.22	5.22	5.07
Pump fault? (circle)	(No) Yes	(No) Yes	(No) Yes
MET Station onsite?	(No) Yes	(No) Yes	(No) Yes
Pre/Post (circle)	Pre Post Clear (NA)	Pre Post Clear (NA)	Pre Post Clear (NA)
Field Comments	visible debris on filter 247 min x 5.15 lpm = 1272 L	~~light dust on filt~~ 9/13/02 ave lpm = 5.15 lpm 248 min x 5.15 lpm = 1277 L	246 min x ~~5.05~~ 5.07 lpm = 1247 L
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

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vs 021302

Sheet No.: A- 000070

LIBBY MONTANA FIELD SAMPLE DATA SHEET
STATIONARY AIR

Scenario No.: NA Field Logbook No: 100117 Page No: 30-36 Sampling Date: 9/13/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Sampling Team: (PES) CDM Other _____ Names: PETRAK/REPINE

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	SL- 00111	SL- 00112	SL- 00121
Location ID	BD-002099	BD-002099	NA map 9/13/02
Sample Group	BUILDING	BUILDING	BLANK
Location Description	Pluggers, at post next to Plugger #9 Plywood Plant	Debarker, just outside lab Plywood Plant	NA map 9/13/02
Category (circle)	(FS) Blank Rep_____	(FS) Blank Rep_____	FS (Blank) Rep_____
Matrix Type (circle)	(Indoor) Outdoor NA	Indoor (Outdoor) NA	Indoor Outdoor (NA)
Filter Diameter (circle)	(25mm) 37mm	(25mm) 37mm	25mm 37mm
Pore Size (circle)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)	TEM- .45 PCM- 0.8
Flow Meter Type (circle)	(Rotometer) DryCal	(Rotometer) DryCal	Rotometer DryCal
Pump ID Number	0891	08911	
Flow Meter ID No.	34719	34719	
Start Date	9/13/02	9/13/02	
Start Time	~~5.0~~ 1352	1403	
Start Flow (L/min)	5.07	5.07	
Stop Date	9/13/02	9/13/02	
Stop Time	1754	1802	
Stop Flow (L/min)	5.07	5.22	
Pump fault? (circle)	(No) Yes	(No) Yes	No (Yes)
MET Station onsite?	(No) Yes	(No) Yes	No Yes
Pre/Post (circle)	Pre Post Clear (NA)	Pre Post Clear (NA)	Pre Post Clear NA
Field Comments	242 min X 5.07 lpm = 1227 L	ave lpm = 5.15 lpm ~~238 min X 5.15 lpm = 1226 L~~ 239 min x 5.15 1231 L	
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Melissa A. Petrak 9/13/02

vs 021302

Sheet No.: A- 000073

LIBBY MONTANA FIELD SAMPLE DATA SHEET

STATIONARY AIR

Scenario No.: NA Field Logbook No: 100117 Page No: 37-41 Sampling Date: 9/14/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Land Use: Residential School Commercial Mining Roadway Other ( )

Sampling Team: PES CDM Other _____ Names: PETRAK/REPINE/BROWN

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	SL- 00127	SL- 00128	SL- 00129
Location ID	SP- 116631	SP- 116632	SP- 116633
Sample Group	PROPERTY	PROPERTY	PROPERTY
Location Description	Employee parking lot, ~~northeast corner~~ map 9/14/02 southeast corner	Employee parking lot, south side, center of side	Employee parking lot, northwest corner
Category (circle)	FS Blank Rep_____	FS Blank Rep_____	FS Blank Rep_____
Matrix Type (circle)	Indoor Outdoor NA	Indoor Outdoor NA	Indoor Outdoor NA
Filter Diameter (circle)	25mm 37mm	25mm 37mm	25mm 37mm
Pore Size (circle)	TEM- .45 PCM- 0.8	TEM- .45 PCM- 0.8	TEM- .45 PCM- 0.8
Flow Meter Type (circle)	Rotometer DryCal	Rotometer DryCal	Rotometer DryCal
Pump ID Number	12881	12882	0891
Flow Meter ID No.	34719	34719	34719
Start Date	9/14/02	9/14/02	9/14/02
Start Time	0642	0643	0647 1240
Start Flow (L/min)	10.00	10.00	10.00 10.00
Stop Date	9/14/02	9/14/02	9/14/02
Stop Time	1427	1428	1230 1434
Stop Flow (L/min)	10.00	10.00	10.00 10.15
Pump fault? (circle)	No Yes	No Yes	No Yes
MET Station onsite?	No Yes	No Yes	No Yes
Pre/Post (circle)	Pre Post Clear NA	Pre Post Clear NA	Pre Post Clear NA
Field Comments	465min x 10.00L/min 4650L	465min x 10.00 L/min 4650L	paused to refuel generator 343min x 10.L/min = 3430L 114min x 10.08L/min = ~~1140~~ 9/14/02 ~~4,570L~~ 1141
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

4579L

vs 021302

9/14/02

Sheet No.: A- 000017

LIBBY MONTANA FIELD SAMPLE DATA SHEET

STATIONARY AIR

Scenario No.: NA Field Logbook No: 100117 Page No: 37-41 Sampling Date: 9/14/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Sampling Team: (PES) CDM Other _____ Names: PETRAK/REPINE/BROWN

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	SL- 00130		
Location ID	SP- 116634		
Sample Group	PROPERTY		
Location Description	Employee parking lot, in railroad tracks, north of roadway		
Category (circle)	(FS) Blank Rep_____	FS Blank Rep_____	FS Blank Rep_____
Matrix Type (circle)	Indoor (Outdoor) NA	Indoor Outdoor NA	Indoor Outdoor NA
Filter Diameter (circle)	(25mm) 37mm	25mm 37mm	25mm 37mm
Pore Size (circle)	TEM- .45 (PCM- 0.8)	TEM- .45 PCM- 0.8	TEM- .45 PCM- 0.8
Flow Meter Type (circle)	(Rotometer) DryCal	Rotometer DryCal	Rotometer DryCal
Pump ID Number	08911		
Flow Meter ID No.	31719		
Start Date	9/14/02		
Start Time	0647 / 1240		
Start Flow (L/min)	10.00 / 10.00		
Stop Date	9/14/02		
Stop Time	1230 / 1436		
Stop Flow (L/min)	10.00 / 10.00		
Pump fault? (circle)	(No) Yes	No Yes	No Yes
MET Station onsite?	(No) Yes	(No) Yes	No Yes
Pre/Post (circle)	Pre Post Clear (NA)	Pre Post Clear (NA)	Pre Post Clear NA
Field Comments	343min x 10.00L/min = 3430L 116min x 10.00 L/min = 1160L 4590L		
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

9/14/02

9/14/02

9/14/02

9/14/02

9/14/02

vs 021302

Sheet No.: A- 000073

LIBBY MONTANA FIELD SAMPLE DATA SHEET

STATIONARY AIR

Scenario No.: NA Field Logbook No: 100117 Page No: 44 Sampling Date: 9/16/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Sampling Team: (PES) CDM Other _____ Names: PETRAK/REPINE

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	SL- 00162	SL- 00163	SL- 00164
Location ID	BD-002097	BD-002097	BD-002097
Sample Group	BUILDING	BUILDING	BUILDING
Location Description	OUTSIDE LUNCH RM IN MAIN PLANT ~~AREA~~ AREA · Finger Joint	NEAR ENTRANCE TO FEEDER #2 ROOM Finger Joint	NEAR FORMER LUNCH ROOM Finger Joint
Category (circle)	(FS) Blank Rep_____	(FS) Blank Rep_____	(FS) Blank Rep_____
Matrix Type (circle)	(Indoor) Outdoor NA	(Indoor) Outdoor NA	(Indoor) Outdoor NA
Filter Diameter (circle)	(25mm) 37mm	(25mm) 37mm	(25mm) 37mm
Pore Size (circle)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)
Flow Meter Type (circle)	(Rotometer) DryCal	(Rotometer) DryCal	(Rotometer) DryCal
Pump ID Number	08911	12881	0891
Flow Meter ID No.	34719	34719	34719
Start Date	9/16/02	9/16/02	9/16/02
Start Time	0623	0628	0630
Start Flow (L/min)	10.00	10.00	10.00
Stop Date	9/16/02	9/16/02	9/16/02
Stop Time	1050	1054	1056
Stop Flow (L/min)	10.00	10.00	10.00
Pump fault? (circle)	(No) Yes	(No) Yes	(No) Yes
MET Station onsite?	(No) Yes	(No) Yes	(No) Yes
Pre/Post (circle)	Pre Post Clear (NA)	Pre Post Clear (NA)	Pre Post Clear (NA)
Field Comments	dust on filter 267 min x 10.00 lpm = 2670 L ✓	dust on filter 266 min x 10.00 lpm = 2660 L ✓	dust on filter 266 min x 10.00 lpm = 2660 L ✓
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

vs 021302

10/4/02

Sheet No.: A- 000070

LIBBY MONTANA FIELD SAMPLE DATA SHEET

STATIONARY AIR

Scenario No.: NA Field Logbook No: 100117 Page No: 44 Sampling Date: 9/16/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Sampling Team: (PES) CDM Other _____ Names: PETRAK/REPINE

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	SL- 00167	SL- 00168	SL- 00181
Location ID	SP- 116635	SP- 116636	SP- 116637
Sample Group	PROPERTY	PROPERTY	PROPERTY
Location Description	OUTSIDE LOGYARD LOG TRUCK SCALE SHED	OUTSIDE LOGYARD STORAGE SHED	~~AT~~ TRAILER CRANE BY FIRE POND
Category (circle)	(FS) Blank Rep_____	(FS) Blank Rep_____	(FS) Blank Rep_____
Matrix Type (circle)	Indoor (Outdoor) NA	Indoor (Outdoor) NA	Indoor (Outdoor) NA
Filter Diameter (circle)	(25mm) 37mm	(25mm) 37mm	(25mm) 37mm
Pore Size (circle)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)
Flow Meter Type (circle)	(Rotometer) DryCal	(Rotometer) DryCal	(Rotometer) DryCal
Pump ID Number	08913	12882	05913
Flow Meter ID No.	34719	34719	34719
Start Date	9/16/02	9/16/02	9/16/02
Start Time	0752	0801	0815
Start Flow (L/min)	10.00	10.00	10.00
Stop Date	9/16/02	9/16/02	9/16/02
Stop Time	1145	1447	1144
Stop Flow (L/min)	10.00	10.15	10.00
Pump fault? (circle)	(No) Yes	(No) Yes	(No) Yes
MET Station onsite?	(No) Yes	(No) Yes	(No) Yes
Pre/Post (circle)	Pre Post Clear (NA)	Pre Post Clear (NA)	Pre Post Clear (NA)
Field Comments	dust on filter 233 min x 10.00 lpm = 2330 L	~~406 min x 10.08 lpm~~ ~~DR 9-17-02~~ ~~= 4097 L~~ 406 min x 10.08 4092 L	dust on filter 209 min x 10.00 lpm 2090 L
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

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JYP 10/4/02

Sheet No.: A- 000077

LIBBY MONTANA FIELD SAMPLE DATA SHEET

STATIONARY AIR

Scenario No.: NA Field Logbook No: 100117 Page No: 44 Sampling Date: 9/16/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Sampling Team: (PES) CDM Other _____ Names: PETRAK/REPINE

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	SL- 00182 SP- 116638	SL- 00195	SL- 00196
Location ID		BD-002097	BD-002097
Sample Group	PROPERTY	BUILDING	BUILDING
Location Description	LOGYARD-NEAR HEAD GATE	OUTSIDE LUNCH RM IN MAIN PLANT AREA Finger Joint	NEAR ENTRANCE TO FEEDER #2 RM Finger Joint
Category (circle)	(FS) Blank Rep_____	(FS) Blank Rep_____	(FS) Blank Rep_____
Matrix Type (circle)	Indoor (Outdoor) NA	(Indoor) Outdoor NA	(Indoor) Outdoor NA
Filter Diameter (circle)	(25mm) 37mm	(25mm) 37mm	(25mm) 37mm
Pore Size (circle)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)
Flow Meter Type (circle)	(Rotometer) DryCal	(Rotometer) DryCal	(Rotometer) DryCal
Pump ID Number	08912	C8911	12881
Flow Meter ID No.	34719	34719	34719
Start Date	9/16/02	9/16/02	9/16/02
Start Time	0925	1050	1054
Start Flow (L/min)	10.00	10.00	10.00
Stop Date	9/16/02	9/16/02	9/16/02
Stop Time	1155	1431	1433
Stop Flow (L/min)	10.00	9.92	10.00
Pump fault? (circle)	(No) Yes	(No) Yes	(No) Yes
MET Station onsite?	(No) Yes	(No) Yes	(No) Yes
Pre/Post (circle)	Pre Post Clear (NA)	Pre Post Clear (NA)	Pre Post Clear (NA)
Field Comments	dust on filter 150 min x 10.00 lpm = 1500 L ✓	dust on filter 221 min x 9.96 lpm = 2201 L ✓	dust on filter 219 min x 10.00 lpm = 2190 L ✓
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

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Sheet No.: A- 000078

LIBBY MONTANA FIELD SAMPLE DATA SHEET
STATIONARY AIR

Scenario No.: NA Field Logbook No: 100117 Page No: 44 Sampling Date: 9/16/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Sampling Team: (PES) CDM Other _____ Names: PERAK/REPINE

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	SL- 00197	SL- 00203	SL- 00204
Location ID	SD-002097	SP-116635	SP-116637
Sample Group	BUILDING	PROPERTY	PROPERTY
Location Description	NEAR FORMER LUNCH ROOM Finger joint	OUTSIDE LOG YARD LOG TRUCK SCALE SHED	AT TRAILER CRANE BY FIRE POND
Category (circle)	(FS) Blank Rep_____	(FS) Blank Rep_____	(FS) Blank Rep_____
Matrix Type (circle)	(Indoor) Outdoor NA	Indoor (Outdoor) NA	Indoor (Outdoor) NA
Filter Diameter (circle)	(25mm) 37mm	(25mm) 37mm	(25mm) 37mm
Pore Size (circle)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)
Flow Meter Type (circle)	(Rotometer) DryCal	(Rotometer) DryCal	(Rotometer) DryCal
Pump ID Number	0891	08913	05913
Flow Meter ID No.	34719	34719	34719
Start Date	9/16/02	9/16/02	9/16/02
Start Time	1056	1145	1144
Start Flow (L/min)	10.00	10.00	10.00
Stop Date	9/16/02	9/16/02	9/16/02
Stop Time	1434	1453	1457
Stop Flow (L/min)	10.00	~~10.00~~ 9/16/02 10.23	10.00
Pump fault? (circle)	(No) Yes	(No) Yes	(No) Yes
MFT Station onsite?	(No) Yes	(No) Yes	(No) Yes
Pre/Post (circle)	Pre Post Clear (NA)	Pre Post Clear (NA)	Pre Post Clear (NA)
Field Comments	dust on filter 218 min x 10.00 lpm = 2180L ✓	light dust on filter 188 min x ~~10.11~~ 10.12 lpm = ~~1901 L~~ 1903 L ✓	193 min x 10.00 lpm = 1930L ✓
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

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✓ 10/4/02

Sheet No.: A-000079

LIBBY MONTANA FIELD SAMPLE DATA SHEET
STATIONARY AIR

Scenario No.: NA Field Logbook No: 100117 Page No: 44 Sampling Date: 9/16/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Sampling Team: (PES) CDM Other _____ Names: PETRAK/REPINE

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	SL- 00205		
Location ID	SP-116635		
Sample Group	PROPERTY		
Location Description	NEAR HEAD GATE - LOGYARD		
Category (circle)	(FS) Blank Rep_____	FS Blank Rep_____	FS Blank Rep_____
Matrix Type (circle)	Indoor (Outdoor) NA	Indoor Outdoor NA	Indoor Outdoor NA
Filter Diameter (circle)	(25mm) 37mm	25mm 37mm	25mm 37mm
Pore Size (circle)	TEM- .45 (PCM- 0.8)	TEM- .45 PCM- 0.8	TEM- .45 PCM- 0.8
Flow Meter Type (circle)	(Rotometer) DryCal	Rotometer DryCal	Rotometer DryCal
Pump ID Number	08912		
Flow Meter ID No.	34719		
Start Date	9/16/02		
Start Time	1155		
Start Flow (L/min)	10.00		
Stop Date	9/16/02		
Stop Time			
Stop Flow (L/min)			
Pump fault? (circle)	No Yes	No Yes	No Yes
MET Station onsite?	No Yes	No Yes	No Yes
Pre/Post (circle)	Pre Post Clear (NA)	Pre Post Clear NA	Pre Post Clear NA
Field Comments	Sample voided - generator stopped at unknown time.		
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

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Sheet No.: A- 000080

LIBBY MONTANA FIELD SAMPLE DATA SHEET
STATIONARY AIR

Scenario No.: NA Field Logbook No: 100117 Page No: 50 Sampling Date: 9/17/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Sampling Team: (PES) CDM Other _____ Names: PETRAK/REPINE

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	SL- 00213	SL- 00214	SL- 00215
Location ID	BD-002098	BD-002098	~~BD-002098~~ BD-002099
Sample Group	BUILDING	BUILDING	BUILDING
Location Description	CENTRAL MAINT- CENTER OF NORTH END OF BLDG	CENTRAL MAINT- CENTER OF NORTH END OF BLDG	DEBARKER CAB
Category (circle)	(FS) Blank Rep_____	FS Blank (Rep) SL-00213	(FS) Blank Rep_____
Matrix Type (circle)	(Indoor) Outdoor NA	(Indoor) Outdoor NA	(Indoor) Outdoor NA
Filter Diameter (circle)	(25mm) 37mm	(25mm) 37mm	(25mm) 37mm
Pore Size (circle)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)
Flow Meter Type (circle)	(Rotometer) DryCal	(Rotometer) DryCal	(Rotometer) DryCal
Pump ID Number	12882	08913	612608 2
Flow Meter ID No.	34719	34719	34719
Start Date	9/17/02	9/17/02	9/17/02
Start Time	0612	0612	0631
Start Flow (L/min)	10.00	10.00	3.02
Stop Date	9/17/02	9/17/02	9/17/02
Stop Time	0950	0950	1347
Stop Flow (L/min)	10.00	10.00	3.02
Pump fault? (circle)	(No) Yes	(No) Yes	(No) Yes
MET Station onsite?	(No) Yes	(No) Yes	(No) Yes
Pre/Post (circle)	Pre Post Clear (NA)	Pre Post Clear (NA)	Pre Post Clear (NA)
Field Comments	218 min X 10.00 lpm = 2180 L	218 min X 10.00 lpm = 2180 L	436 min X 3.02 lpm = 1317 L
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

vs 021302

10/4/02

Sheet No.: ~~00023~~ 81 1 F 8/10

LIBBY MONTANA FIELD SAMPLE DATA SHEET
STATIONARY AIR

Scenario No.: NA Field Logbook No: 100117 Page No: 50 Sampling Date: ~~9/16/02~~ 9/17/02 wmp 9/19/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Land Use: Residential School Commercial Mining Roadway Other ( )

Sampling Team: PES CDM Other _____ Names: PETRAK/REPINE

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	SL- 00216	SL- 00222	SL- 00223
Location ID	BD-002099	BD-002098	BD-002098
Sample Group	BUILDING	BUILDING	BUILDING
Location Description	At post near pre-press-Spreaders. Plywood ~~Plant~~	CENTRAL MAINT-CENTER ON NORTH END OF BLDG	CENTRAL MAINT-CENTER OF NORTH END OF BLDG
Category (circle)	FS Blank Rep_____	FS Blank Rep_____	wmp 9/17/02 FS Blank Rep_____
Matrix Type (circle)	Indoor Outdoor NA	Indoor Outdoor NA	Indoor Outdoor NA
Filter Diameter (circle)	25mm 37mm	25mm 37mm	25mm 37mm
Pore Size (circle)	TEM- .45 PCM- 0.8	TEM- .45 PCM- 0.8	TEM- .45 PCM- 0.8
Flow Meter Type (circle)	Rotometer DryCal	Rotometer DryCal	Rotometer DryCal
Pump ID Number	08912	12882	08913
Flow Meter ID No.	34719	34719	34719
Start Date	9/17/02	9/17/02	9/17/02
Start Time	0645	1000	1000
Start Flow (L/min)	10.00	10.00	10.00
Stop Date	9/17/02	9/17/02	9/17/02
Stop Time		1453	1453
Stop Flow (L/min)		10.08	10.00
Pump fault? (circle)	No Yes	No Yes	No Yes
MET Station onsite?	No Yes	No Yes	No Yes
Pre/Post (circle)	Pre Post Clear NA	Pre Post Clear NA	Pre Post Clear NA
Field Comments	Sampling pump cord buried at unknown sample - SAMPLE VOIDED	Mechanics worked on vehicles all day - water truck, loader, truck 293 min x 10.04 lpm = 2942 L	see SL-00222. 293 min x 10.00 lpm = 2930 L
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

✓ yp 10/4/02

vs 021302

LIBBY MONTANA FIELD SAMPLE DATA SHEET

STATIONARY AIR

Scenario No.: NA Field Logbook No: 100117 Page No: 50 Sampling Date: 9/17/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Sampling Team: (PES) CDM Other _____ Names: PETRAK / REPINE

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	SL- 00235	SL- 00236	
Location ID	NA map 9/17/02	NA map 9/17/02	
Sample Group	BLANK	BLANK	
Location Description	NA map 9/17/02	NA map 9/17/02	
Category (circle)	FS (Blank) Rep____	FS (Blank) Rep____	FS Blank Rep____
Matrix Type (circle)	Indoor Outdoor (NA)	Indoor Outdoor (NA)	Indoor Outdoor NA
Filter Diameter (circle)	(25mm) 37mm	(25mm) 37mm	25mm 37mm
Pore Size (circle)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)	TEM- .45 PCM- 0.8
Flow Meter Type (circle)	Rotometer DryCal	Rotometer DryCal	Rotometer DryCal
Pump ID Number			
Flow Meter ID No.			
Start Date			
Start Time			
Start Flow (L/min)			
Stop Date			
Stop Time			
Stop Flow (L/min)			
Pump fault? (circle)	No Yes	No Yes	No Yes
MET Station onsite?	No Yes	No Yes	No Yes
Pre/Post (circle)	Pre Post Clear NA	Pre Post Clear NA	Pre Post Clear NA
Field Comments			
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Melissa A Petrak 9/17/02

Melissa A Petrak 9/17/02

Melissa A Petrak 9/17/02

JHB 10/4/02

vs 021302

LIBBY MONTANA FIELD SAMPLE DATA SHEET 000085

STATIONARY AIR

Scenario No.: NA Field Logbook No: 100117 Page No: 57 Sampling Date: 9/18/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Sampling Team: (PES) CDM Other _____ Names: PETRAK/REPINE

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	SL- 00243	SL- 00244	SL- 00245
Location ID	BD-002099	SP-116638	BD-002099
Sample Group	BUILDING	PROPERTY	BUILDING
Location Description	PLYWOOD PLANT SPREADERS, POST NEAR PRE-PRESS	LOGYARD, ALONG SERVICE RD. NEAR HEADGATE	PLYWOOD PLANT, SPREADERS, POST NEAR PRE-PRESS
Category (circle)	(FS) Blank Rep_____	(FS) Blank Rep_____	(FS) Blank Rep_____
Matrix Type (circle)	(Indoor) Outdoor NA	(Indoor) Outdoor NA	(Indoor) Outdoor NA
Filter Diameter (circle)	(25mm) 37mm	(25mm) 37mm	(25mm) 37mm
Pore Size (circle)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)	TEM- .45 (PCM- 0.8)
Flow Meter Type (circle)	(Rotometer) DryCal	(Rotometer) DryCal	(Rotometer) DryCal
Pump ID Number	12882	08913	12882
Flow Meter ID No.	34719	34719	34719
Start Date	9/18/02	9/18/02	9/18/02
Start Time	0834	0857 / 1303	1145
Start Flow (L/min)	10.00	10.00 / 10.00	~~10.00~~ 5.07
Stop Date	9/18/02	9/18/02	9/18/02
Stop Time	~~10~~ 1144	1303 / ~~15~~ 1601	~~1352~~ 1552
Stop Flow (L/min)	10.00	10.23 / 10.00	5.07
Pump fault? (circle)	(No) Yes	(No) Yes	(No) Yes
MET Station onsite?	(No) Yes	(No) Yes	(No) Yes
Pre/Post (circle)	Pre Post Clear (NA)	Pre Post Clear (NA)	Pre Post Clear (NA)
Field Comments	visible dust on filter 190 min x 10.00 lpm = 1900 L	246 min x 10.12 lpm = 2490 L ~~179 min x 10.00 lpm = 1790 L~~ ~~total = 4280 L~~	247 min x 5.07 lpm = 1252 L
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

178 min x 10.00 L/min
1780 L
4270 L

vs 021302

9/18/02

Air, Dust (PCM & AHERA-ASTM)

4/22/2005, 5:36 PM

Note: The report excludes all Lab QC results, such as those associated with Lab Blanks, Lab Duplicates, Re-Preparation, Re-count Same, Re-count Different, Verified Analysis, etc.

											PCM (METHOD - NIOSH 7400)	AHERA / ASTM 5755																	
													Libby Amphiboles (LA)				Chrysotile (C)				Other Amphiboles (OA)				Total Asbestos				
Sample ID	Property Group (Location)	Sample Group	Location Description (Sub Location)	Media Type	Matrix	Sample Type	Category	Pre Post Clear	Vol (L) Area (cm²)	Sample Date	Fibers/CC	Filter Status Non Analyzed	S<5u	S>5u	Asb load (S/mm2)	Asb conc (Air = S/cc) or (Dust = S/cm2)	S<5u	S>5u	Asb load (S/mm2)	Asb conc (Air = S/cc) or (Dust = S/cm2)	S<5u	S>5u	Asb load (S/mm2)	Asb conc (Air = S/cc) or (Dust = S/cm2)	Asbestos Type Identified	S<5u	S>5u	Asb load (S/mm2)	Asb conc (Air = S/cc) or (Dust = S/cm2)
SL-00020	875 Highway 2 S - Stimson Lumber	Building	Center of machine shop	Air	Indoor	Stationary	Field Sample	N/A	4800	9/11/2002	< 0.001															0	0	< 22.73	< 0.0018
SL-00021	875 Highway 2 S - Stimson Lumber	Building	Center of south end of building	Air	Indoor	Stationary	Field Sample	N/A	4900	9/11/2002	< 0.001															0	0	< 22.73	< 0.0018
SL-00022	875 Highway 2 S - Stimson Lumber	Building	East side of center of building	Air	Indoor	Stationary	Field Sample	N/A	4910	9/11/2002	< 0.001															0	0	< 22.73	< 0.0018
SL-00023	875 Highway 2 S - Stimson Lumber	Building	Center of north end of building	Air	Indoor	Stationary	Field Sample	N/A	4790	9/11/2002	< 0.001															0	0	< 22.73	< 0.0018
SL-00024	875 Highway 2 S - Stimson Lumber	Building	Center of north end of building	Air	Indoor	Stationary	Field Replicate	N/A	4790	9/11/2002	< 0.001															0	0	< 22.73	< 0.0018
SL-00079	875 Highway 2 S - Stimson Lumber	Building	Green chain exterior wall opposite supervisor's	Air	Indoor	Stationary	Field Sample	N/A	1827	9/13/2002	0.01															0	0	< 25.25	< 0.0053
SL-00081	875 Highway 2 S - Stimson Lumber	Building	Plugger alley next to plugger #9, plywood plant	Air	Indoor	Stationary	Field Sample	N/A	1680	9/13/2002	0.009															0	0	< 20.20	< 0.0046
SL-00082	875 Highway 2 S - Stimson Lumber	Building	Dryers next to post at feed end, plywood plant	Air	Indoor	Stationary	Field Sample	N/A	1350	9/13/2002	0.005															0	0	< 16.84	< 0.0048
SL-00090	875 Highway 2 S - Stimson Lumber	Building	Dryers at post of feed end. Plywood plant	Air	Indoor	Stationary	Field Sample	N/A	930	9/13/2002	0.006															0	0	< 12.63	< 0.0052
SL-00091	875 Highway 2 S - Stimson Lumber	Building	Green chain along exterior wall opposite...	Air	Indoor	Stationary	Field Sample	N/A	1100	9/13/2002	0.006															0	0	< 14.43	< 0.0051
SL-00092	875 Highway 2 S - Stimson Lumber	Building	Pluggers at post next to plugger #9	Air	Indoor	Stationary	Field Sample	N/A	720	9/13/2002	0.021															0	0	< 10.10	< 0.0054
SL-00094	875 Highway 2 S - Stimson Lumber	Building	Dryers at post at feed end	Air	Indoor	Stationary	Field Sample	N/A	1080	9/13/2002	0.008															0	0	< 14.58	< 0.0052
SL-00096	875 Highway 2 S - Stimson Lumber	Building	Pluggers at post next to plugger #9	Air	Indoor	Stationary	Field Sample	N/A	1381	9/13/2002	0.005															0	0	< 17.01	< 0.0047
SL-00102	875 Highway 2 S - Stimson Lumber	Building	Green chain along ext. wall opposite super. office	Air	Indoor	Stationary	Field Sample	N/A	870	9/13/2002	0.014															0	0	< 11.34	< 0.0050
SL-00106	875 Highway 2 S - Stimson Lumber	Building	Dryers at post feed end	Air	Indoor	Stationary	Field Sample	N/A	1272	9/13/2002	0.011															0	0	< 16.84	< 0.0051
SL-00107	875 Highway 2 S - Stimson Lumber	Building	Green chain along ext. wall oppos. superv. office	Air	Indoor	Stationary	Field Sample	N/A	1277	9/13/2002	0.026															0	0	< 16.84	< 0.0051
SL-00111	875 Highway 2 S - Stimson Lumber	Building	Pluggers at post next to plugger #9	Air	Indoor	Stationary	Field Sample	N/A	1227	9/13/2002	0.008															0	0	< 16.84	< 0.0053
SL-00127	875 Highway 2 S - Stimson Lumber	Property	Employee parking lot, southeast corner	Air	Outdoor	Stationary	Field Sample	N/A	4650	9/14/2002	0.001															0	0	< 19.38	< 0.0016
SL-00128	875 Highway 2 S - Stimson Lumber	Property	Employee parking lot, south side, center of side	Air	Outdoor	Stationary	Field Sample	N/A	4650	9/14/2002	0.001															0	0	< 19.38	< 0.0016
SL-00129	875 Highway 2 S - Stimson Lumber	Property	Employee parking lot, northeast corner	Air	Outdoor	Stationary	Field Sample	N/A	4579	9/14/2002	0.001															0	0	< 19.38	< 0.0016
SL-00130	875 Highway 2 S - Stimson Lumber	Property	Employee parking lot, in railroad tracks	Air	Outdoor	Stationary	Field Sample	N/A	4590	9/14/2002	0.002															0	0	< 19.38	< 0.0016
SL-00162	875 Highway 2 S - Stimson Lumber	Building	Outside lunch RM in main plant area - finger joint	Air	Indoor	Stationary	Field Sample	N/A	2670	9/16/2002	0.002																		
SL-00163	875 Highway 2 S - Stimson Lumber	Building	Near entrance to feeder # 2 room - finger joint	Air	Indoor	Stationary	Field Sample	N/A	2660	9/16/2002															LA	0	2	51.02	0.0074
SL-00164	875 Highway 2 S - Stimson Lumber	Building	Near former lunch room, finger joint	Air	Indoor	Stationary	Field Sample	N/A	2660	9/16/2002	0.004															0	0	< 25.51	< 0.0037
SL-00167	875 Highway 2 S - Stimson Lumber	Property	Outside logyard log truck scale shed	Air	Outdoor	Stationary	Field Sample	N/A	2330	9/16/2002	0.001															0	0	< 25.51	< 0.0042
SL-00168	875 Highway 2 S - Stimson Lumber	Property	Outside logyard storage shed	Air	Outdoor	Stationary	Field Sample	N/A	4092	9/16/2002	0.001															0	0	< 25.51	< 0.0024
SL-00181	875 Highway 2 S - Stimson Lumber	Property	At trailer crane	Air	Outdoor	Stationary	Field Sample	N/A	2090	9/16/2002	0.002															0	0	< 25.51	< 0.0047
SL-00182	875 Highway 2 S - Stimson Lumber	Property	Logyard near head gate	Air	Outdoor	Stationary	Field Sample	N/A	1500	9/16/2002	< 0.002															0	0	< 20.41	< 0.0052
SL-00195	875 Highway 2 S - Stimson Lumber	Building	Outside lunch rm. in main plant area, finger joint	Air	Indoor	Stationary	Field Sample	N/A	2201	9/16/2002	0.002															0	0	< 25.51	< 0.0045
SL-00196	875 Highway 2 S - Stimson Lumber	Building	Near entrance to feeder # 2 room, finger joint	Air	Indoor	Stationary	Field Sample	N/A	2190	9/16/2002																0	0	< 25.51	< 0.0045
SL-00197	875 Highway 2 S - Stimson Lumber	Building	Near former lunch room - finger joint	Air	Indoor	Stationary	Field Sample	N/A	2180	9/16/2002	0.005															0	0	< 25.51	< 0.0045
SL-00203	875 Highway 2 S - Stimson Lumber	Property	Outside logyard log truck scale shed	Air	Outdoor	Stationary	Field Sample	N/A	1903	9/16/2002	0.002															0	0	< 25.51	< 0.0052
SL-00204	875 Highway 2 S - Stimson Lumber	Property	At trailer crane	Air	Outdoor	Stationary	Field Sample	N/A	1930	9/16/2002	0.002															0	0	< 25.51	< 0.0051
SL-00213	875 Highway 2 S - Stimson Lumber	Building	Central main, center of North end of bldg	Air	Indoor	Stationary	Field Sample	N/A	2180	9/17/2002	< 0.001															0	0	< 19.38	< 0.0034
SL-00214	875 Highway 2 S - Stimson Lumber	Building	Central main, center of north end of bldg	Air	Indoor	Stationary	Field Replicate	N/A	2180	9/17/2002	< 0.001															0	0	< 19.38	< 0.0034
SL-00215	875 Highway 2 S - Stimson Lumber	Building	Debarker cab	Air	Indoor	Stationary	Field Sample	N/A	1317	9/17/2002	0.077															0	0	< 15.50	< 0.0045
SL-00222	875 Highway 2 S - Stimson Lumber	Building	Central maint, center on north end of bldg	Air	Indoor	Stationary	Field Sample	N/A	2942	9/17/2002	0.001															0	0	< 19.38	< 0.0025
SL-00223	875 Highway 2 S - Stimson Lumber	Building	Central maint, center of north end of bldg	Air	Indoor	Stationary	Field Replicate	N/A	2930	9/17/2002	0.001														C	1	0	19.38	0.0025
SL-00243	875 Highway 2 S - Stimson Lumber	Building	Plywood plant spreaders post near pre-press	Air	Indoor	Stationary	Field Sample	N/A	1900	9/18/2002	0.018															0	0	< 19.38	< 0.0039
SL-00244	875 Highway 2 S - Stimson Lumber	Property	Log yard along service road near head gate	Air	Indoor	Stationary	Field Sample	N/A	4270	9/18/2002	0.001															0	0	< 19.38	< 0.0017
SL-00245	875 Highway 2 S - Stimson Lumber	Building	Plywood plant, spreaders, post near pre-press	Air	Indoor	Stationary	Field Sample	N/A	1252	9/18/2002	0.041															0	0	< 15.50	< 0.0048

Criteria:

Note: The report excludes all Lab QC results, such as those associated with Lab Blanks, Lab Duplicates, Re-Preparation, Re-count Same, Re-count Different, Verified Analysis, etc.

													ISO Concentrations (Air = structures/cc)(Dust = structures/cm²) (METHOD - ISO 10312)																					
													Libby Amphiboles (LA)								Chrysotile (C)								Other Amphiboles (OA)							
													Excluded Structures			Structures Detected					Excluded Structures			Structures Detected					Excluded Structures			Structures Detected				
Sample ID	Property Group (Location)	Sample Group	Location Description (Sub Location)	Media Type	Matrix	Sample Type	Category	Pre Post Clear	Vol (air=L)/ Area (dust=cm²)	Sample Date	Grid Openings	Filter Status Non Analyzed	Aspect Ratio < 5:1	Length < 0.5 u	Diameter > 0.5u	Length 0.5 to 5 u	Length 5 to 10 u	Length > 10 u	Total Conc. LA	Total Count LA	Aspect Ratio < 5:1	Length < 0.5 u	Diameter > 0.5u	Length 0.5 to 5 u	Length 5 to 10 u	Length > 10 u	Total Conc. C	Total Count C	Aspect Ratio < 5:1	Length < 0.5 u	Diameter > 0.5u	Length 0.5 to 5 u	Length 5 to 10 u	Length > 10 u	Total Conc. OA	Total Count OA
SL-00020	875 Highway 2 S - Stimson Lumber	Building	Center of machine shop	Air	Indoor	Stationary	Field Sample	N/A	4800	9/11/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00021	875 Highway 2 S - Stimson Lumber	Building	Center of south end of building	Air	Indoor	Stationary	Field Sample	N/A	4900	9/11/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00022	875 Highway 2 S - Stimson Lumber	Building	East side of center of building	Air	Indoor	Stationary	Field Sample	N/A	4910	9/11/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00023	875 Highway 2 S - Stimson Lumber	Building	Center of north end of building	Air	Indoor	Stationary	Field Sample	N/A	4790	9/11/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00024	875 Highway 2 S - Stimson Lumber	Building	Center of north end of building	Air	Indoor	Stationary	Field Replicate	N/A	4790	9/11/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00079	875 Highway 2 S - Stimson Lumber	Building	Green chain exterior wall opposite supervisor's..	Air	Indoor	Stationary	Field Sample	N/A	1827	9/13/2002	10		0	0	0.0022	0	0	0	0.0022	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00081	875 Highway 2 S - Stimson Lumber	Building	Plugger alley next to plugger #9, plywood plant	Air	Indoor	Stationary	Field Sample	N/A	1680	9/13/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00082	875 Highway 2 S - Stimson Lumber	Building	Dryers next to post at feed end, plywood plant	Air	Indoor	Stationary	Field Sample	N/A	1350	9/13/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00090	875 Highway 2 S - Stimson Lumber	Building	Dryers at post of feed end Plywood plant	Air	Indoor	Stationary	Field Sample	N/A	930	9/13/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00091	875 Highway 2 S - Stimson Lumber	Building	Green chain along exterior wall opposite .	Air	Indoor	Stationary	Field Sample	N/A	1100	9/13/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00092	875 Highway 2 S - Stimson Lumber	Building	Pluggers at post next to plugger #9	Air	Indoor	Stationary	Field Sample	N/A	720	9/13/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00094	875 Highway 2 S - Stimson Lumber	Building	Dryers at post at feed end	Air	Indoor	Stationary	Field Sample	N/A	1080	9/13/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00096	875 Highway 2 S - Stimson Lumber	Building	Pluggers at post next to plugger #9	Air	Indoor	Stationary	Field Sample	N/A	1381	9/13/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00102	875 Highway 2 S - Stimson Lumber	Building	Green chain along ext. wall opposite super office	Air	Indoor	Stationary	Field Sample	N/A	870	9/13/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00106	875 Highway 2 S - Stimson Lumber	Building	Dryers at post feed end	Air	Indoor	Stationary	Field Sample	N/A	1272	9/13/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00107	875 Highway 2 S - Stimson Lumber	Building	Green chain along ext wall oppos superv office	Air	Indoor	Stationary	Field Sample	N/A	1277	9/13/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00111	875 Highway 2 S - Stimson Lumber	Building	Pluggers at post next to plugger #9	Air	Indoor	Stationary	Field Sample	N/A	1227	9/13/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00127	875 Highway 2 S - Stimson Lumber	Property	Employee parking lot, southeast corner	Air	Outdoor	Stationary	Field Sample	N/A	4650	9/14/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00128	875 Highway 2 S - Stimson Lumber	Property	Employee parking lot, south side, center of side	Air	Outdoor	Stationary	Field Sample	N/A	4650	9/14/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00129	875 Highway 2 S - Stimson Lumber	Property	Employee parking lot, northeast corner	Air	Outdoor	Stationary	Field Sample	N/A	4579	9/14/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00130	875 Highway 2 S - Stimson Lumber	Property	Employee parking lot, in railroad tracks	Air	Outdoor	Stationary	Field Sample	N/A	4590	9/14/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00162	875 Highway 2 S - Stimson Lumber	Building	Outside lunch RM in main plant area - finger joint	Air	Indoor	Stationary	Field Sample	N/A	2670	9/16/2002	10		0	0	0.0015	0	0	0	0.0015	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00163	875 Highway 2 S - Stimson Lumber	Building	Near entrance to feeder # 2 room - finger joint	Air	Indoor	Stationary	Field Sample	N/A	2660	9/16/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00164	875 Highway 2 S - Stimson Lumber	Building	Near former lunch room, finger joint	Air	Indoor	Stationary	Field Sample	N/A	2660	9/16/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00167	875 Highway 2 S - Stimson Lumber	Property	Outside logyard log truck scale shed	Air	Outdoor	Stationary	Field Sample	N/A	2330	9/16/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00168	875 Highway 2 S - Stimson Lumber	Property	Outside logyard storage shed	Air	Outdoor	Stationary	Field Sample	N/A	4092	9/16/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00181	875 Highway 2 S - Stimson Lumber	Property	At trailer crane	Air	Outdoor	Stationary	Field Sample	N/A	2090	9/16/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00182	875 Highway 2 S - Stimson Lumber	Property	Logyard near head gate	Air	Outdoor	Stationary	Field Sample	N/A	1500	9/16/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00195	875 Highway 2 S - Stimson Lumber	Building	Outside lunch rm in main plant area, finger joint	Air	Indoor	Stationary	Field Sample	N/A	2201	9/16/2002	10		0	0	0.0241	0	0	0	0.0241	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00196	875 Highway 2 S - Stimson Lumber	Building	Near entrance to feeder # 2 room, finger joint	Air	Indoor	Stationary	Field Sample	N/A	2190	9/16/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00197	875 Highway 2 S - Stimson Lumber	Building	Near former lunch room - finger joint	Air	Indoor	Stationary	Field Sample	N/A	2180	9/16/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00203	875 Highway 2 S - Stimson Lumber	Property	Outside logyard log truck scale shed	Air	Outdoor	Stationary	Field Sample	N/A	1903	9/16/2002	10		0.0021	0	0	0	0	0	0.0021	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00204	875 Highway 2 S - Stimson Lumber	Property	At trailer crane	Air	Outdoor	Stationary	Field Sample	N/A	1930	9/16/2002	10		0	0	0	0.0020	0	0	0.0020	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00213	875 Highway 2 S - Stimson Lumber	Building	Central main, center of North end of bldg	Air	Indoor	Stationary	Field Sample	N/A	2180	9/17/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00214	875 Highway 2 S - Stimson Lumber	Building	Central main, center of north end of bldg	Air	Indoor	Stationary	Field Replicate	N/A	2180	9/17/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00215	875 Highway 2 S - Stimson Lumber	Building	Debarker cab	Air	Indoor	Stationary	Field Sample	N/A	1317	9/17/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00222	875 Highway 2 S - Stimson Lumber	Building	Central maint, center on north end of bldg	Air	Indoor	Stationary	Field Sample	N/A	2942	9/17/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00223	875 Highway 2 S - Stimson Lumber	Building	Central maint, center of north end of bldg	Air	Indoor	Stationary	Field Replicate	N/A	2930	9/17/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00243	875 Highway 2 S - Stimson Lumber	Building	Plywood plant spreaders post near pre-press	Air	Indoor	Stationary	Field Sample	N/A	1900	9/18/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00244	875 Highway 2 S - Stimson Lumber	Property	Log yard along service road near head gate	Air	Indoor	Stationary	Field Sample	N/A	4270	9/18/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SL-00245	875 Highway 2 S - Stimson Lumber	Building	Plywood plant, spreaders, post near pre-press	Air	Indoor	Stationary	Field Sample	N/A	1252	9/18/2002	10		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Criteria:

Sheet No.: D- 001070

LIBBY MONTANA FIELD SAMPLE DATA SHEET

DUST

Scenario No.: NA Field Logbook No: 100117 Page No: 27-28 Sampling Date: 9/12/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Sampling Team: (PES) CDM Other _____ Names: PETRAK/REPINE

Data Item	Cassette 1			Cassette 2			Cassette 3		
Index ID	SL- 00059			SL- 00060			SL- 00061		
Location ID	BD-002098			BD-002098			BD-002098		
Sample Group	~~BUID~~ BUILDING			BUILDING			BUILDING		
Location Description	Machine shop in Central Maintenance(M) Building			South end of CM building			Center of CM building		
Category (circle)	(FS) Blank			(FS) Blank			(FS) Blank		
Matrix Type (circle)	(Building) Vehicle. NA Other _____			(Building) Vehicle. NA Other _____			(Building) Vehicle, NA Other _____		
Vermiculite Present? (circle)	(Yes) No			(Yes) No			(Yes) No		
Will samples be archived due to presence of vermiculite? (circle)	Yes (No)			Yes (No)			Yes (No)		
Sample Area (cm^2) (circle)	100 200 (300)			100 200 (300)			100 200 (300)		
Filter Diameter (circle)	(25mm) 37mm			(25mm) 37mm			(25mm) 37mm		
Pore Size (circle)	(TEM- .45) PCM- 0.8			(TEM-. 45) PCM- 0.8			(TEM- .45) PCM- 0.8		
Flow Meter Type (circle)	(Rotometer) Dry-Cal			(Rotometer) Dry-Cal			(Rotometer) Dry-Cal		
Pump ID Number	626753			626753			626753		
Flow Meter ID No.	34719			34719			34719		
Start Date	9/12/02			9/12/02			9/12/02		
Start Time	1426	1428	1430	1435	1437	1439	1445	1447	1449
Start Flow (L/min)	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.03
Stop Date	9/12/02			9/12/02			9/12/02		
Stop Time	1428	1430	1432	1437	1439	1441	1447	1449	1451
Stop Flow (L/min)	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.03
Pump fault? (circle)	(No) Yes			(No) Yes			(No) Yes		
Field Comments	100 cm^2 In front of sliding door to main area 100 cm^2 In front of rear sliding door (across from) 100 cm^2 Blade on large fan stored in rear corner			100 cm^2 On workbench near machine shop door 100 cm^2 In front of 3rd vehicle door from South end 100 cm^2 Center of 4th vehicle area from South end			100 cm^2 Work bench in rear of Cummins Engine room 100 cm^2 Center of area between 5th vehicle door from S & Cat Engine Room 100 cm^2 Top of large jacks stand near door		
	Entered ___ Validated ___			Entered ___ Validated ___			Entered ___ Validated ___		

vs 022002

Vp 10/4/02

Sheet No.: D- 001071

LIBBY MONTANA FIELD SAMPLE DATA SHEET
DUST

Scenario No.: NA Field Logbook No: 100117 Page No: 27-28 Sampling Date: 9/12/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Sampling Team: (PES) CDM Other _____ Names: PETRAK/REPINE

Data Item	Cassette 1			Cassette 2			Cassette 3		
Index ID	SL- 00062			SL- 00064			SL- 00065		
Location ID	BD-002098			BD-002098			BD-002097		
Sample Group	BUILDING			BUILDING			BUILDING		
Location Description	Northern end of CM bldg			Supervisor's office and break room, CM bldg			Fingerjoint Bldg. Former lunch room (now parts storage)		
Category (circle)	(FS) Blank			(FS) Blank			(FS) Blank		
Matrix Type (circle)	(Building) Vehicle, NA Other _____			(Building) Vehicle, NA Other _____			(Building) Vehicle, NA Other _____		
Vermiculite Present? (circle)	(Yes) No			(Yes) No			~~Yes~~ 9/12/02 (No)		
Will samples be archived due to presence of vermiculite? (circle)	Yes (No)			Yes (No)			Yes (No)		
Sample Area (cm²) (circle)	100 200 (300)			100 200 (300)			100 200 (300)		
Filter Diameter (circle)	(25mm) 37mm			(25mm) 37mm			(25mm) 37mm		
Pore Size (circle)	(TEM- .45) PCM- 0.8			(TEM-.45) PCM- 0.8			(TEM-.45) PCM- 0.8		
Flow Meter Type (circle)	(Rotometer) Dry-Cal			(Rotometer) Dry-Cal			(Rotometer) Dry-Cal		
Pump ID Number	626753			626753			626753		
Flow Meter ID No.	34719			34719			34719		
Start Date	9/12/02			9/12/02			9/12/02		
Start Time	1456	1458	1500	1512	1514	1516	1535	1537	1539
Start Flow (L/min)	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.03
Stop Date	9/12/02			9/12/02			9/12/02		
Stop Time	1458	1500	1502	1514	1516	1518	1537	1539	1541
Stop Flow (L/min)	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.03
Pump fault? (circle)	(No) Yes			(No) Yes			(No) Yes		
Field Comments	100 cm² On shelf in warehouse in NE corner of bldg 100 cm² On top shelf in NE corner of main work area 100 cm² Floor in center of north end of bldg			100 cm² Top of CB unit in supervisor's office 100 cm² Top of refrigerator in break room 100 cm² Top of soda machine in break room			100 cm² ~~In front~~ on floor, in front of front door 100 cm² On floor, in front of rear door 100 cm² On shelf to left of front door		
	Entered ___ Validated ___			Entered ___ Validated ___			Entered ___ Validated ___		

vs 022002

VP 10/4/02

Sheet No.: D- 001072

LIBBY MONTANA FIELD SAMPLE DATA SHEET

DUST

Scenario No.: NA Field Logbook No: 100117 Page No: 27-28 Sampling Date: 9/12/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Sampling Team: (PES) CDM Other _____ Names: PETRAK/REPINE

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	SL- 00066	SL- 00067	SL- 00068
Location ID	BD-002097	~~BD-~~ NA 9/12/02	NA 9/12/02
Sample Group	~~D~~ BUILDING	BLANK	BLANK
Location Description	Fingerjoint Bldg, doorways & entrances	NA 9/12/02	NA 9/12/02
Category (circle)	(FS) Blank	FS (Blank)	FS (Blank)
Matrix Type (circle)	(Building), Vehicle, NA Other _____	Building, Vehicle, (NA) Other _____	Building, Vehicle, (NA) Other _____
Vermiculite Present? (circle)	Yes (No)	Yes No	Yes No
Will samples be archived due to presence of vermiculite? (circle)	Yes (No)	Yes 9/12/02	Yes No 9/12/02
Sample Area (cm^2) (circle)	100 200 (300)	100 200 300	100 200 300
Filter Diameter (circle)	(25mm) 37mm	(25mm) 37mm	(25mm) 37mm
Pore Size (circle)	(TEM- .45) PCM- 0.8	(TEM- .45) PCM- 0.8	(TEM- .45) PCM- 0.8
Flow Meter Type (circle)	(Rotometer) Dry-Cal	Rotometer Dry-Cal	Rotometer Dry-Cal
Pump ID Number	6226753		
Flow Meter ID No.	34719		
Start Date	9/12/02		
Start Time	1546 1548 1550		
Start Flow (L/min)	2.03 2.03 2.03		
Stop Date	9/12/02		
Stop Time	1548 1550 1552		
Stop Flow (L/min)	2.03 2.03 2.03		
Pump fault? (circle)	(No) Yes	No Yes	No Yes
Field Comments	100 cm^2 On floor at pedestrian entrance to break room. 100 cm^2 On floor at west vehicle door 100 cm^2 On floor at entrance to wrap/stack area from bldg	100 cm^2 100 cm^2 100 cm^2	100 cm^2 100 cm^2 100 cm^2
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

vs 022002

Typ 10/4/02

Sheet No.: D- 001073

LIBBY MONTANA FIELD SAMPLE DATA SHEET

DUST

Scenario No.: NA Field Logbook No: 100117 Page No: 42-43 Sampling Date: 9/15/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Sampling Team: (PES) CDM Other _____ Names: PETRAC

Data Item	Cassette 1			Cassette 2			Cassette 3		
Index ID	SL- 00169			SL- 00170			SL- 00171		
Location ID	BD- 002100			BD- 002101			BD- 002102		
Sample Group	BUILDING			BUILDING			BUILDING		
Location Description	LOGYARD BREAK BUILDING			LOGYARD-STORAGE			LOGYARD- ~~GASOLINE SHED~~ OIL STORAGE SHED map 9/15/02		
Category (circle)	(FS) Blank			(FS) Blank			(FS) Blank		
Matrix Type (circle)	(Building) Vehicle, NA Other _____			(Building) Vehicle, NA Other _____			(Building) Vehicle, NA Other _____		
Vermiculite Present? (circle)	Yes (No)			Yes (No)			Yes (No)		
Will samples be archived due to presence of vermiculite? (circle)	Yes (No)			Yes (No)			Yes (No)		
Sample Area (cm^2) (circle)	100 200 (300)			100 200 (300)			100 200 (300)		
Filter Diameter (circle)	(25mm) 37mm			(25mm) 37mm			(25mm) 37mm		
Pore Size (circle)	(TEM- .45) PCM- 0.8			(TEM- .45) PCM- 0.8			(TEM- .45) PCM- 0.8		
Flow Meter Type (circle)	(Rotometer) Dry-Cal			(Rotometer) Dry-Cal			(Rotometer) Dry-Cal		
Pump ID Number	6266666			6266666			6266666		
Flow Meter ID No.	34719			34719			34719		
Start Date	9/15/02			9/15/02			9/15/02		
Start Time	1330	1332	1336	1345	1347	1351	1358	1400	1402
Start Flow (L/min)	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.03
Stop Date	9/15/02			9/15/02			9/15/02		
Stop Time	1332	1334	1338	1347	1349	1353	1400	1402	1404
Stop Flow (L/min)	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.03
Pump fault? (circle)	(No) Yes			(No) Yes			(No) Yes		
Field Comments	100 cm^2 Entrance doorway floor 100 cm^2 Floor doorway between rooms 100 cm^2 Top of microwave oven file floor			100 cm^2 Entance floor 100 cm^2 center of floor 100 cm^2 Top of workbench → wood floor			100 cm^2 Entrance floor 100 cm^2 Floor near end of tank 100 cm^2 On shelf → wood floor		
	Entered ___ Validated ___			Entered ___ Validated ___			Entered ___ Validated ___		

vs 022002

Vyp 10/4/02

Sheet No.: D- ~~001074~~

LIBBY MONTANA FIELD SAMPLE DATA SHEET

DUST

Scenario No.: NA Field Logbook No: 100117 Page No: 42-43 Sampling Date: 9/15/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Sampling Team: (PES) CDM Other _____ Names: PETRAK

Data Item	Cassette 1			Cassette 2			Cassette 3		
Index ID	SL- 00172			SL- 00173			SL- 00174		
Location ID	BD- 002103			BD- 002104			BD- 002105		
Sample Group	BUILDING			BUILDING			BUILDING		
Location Description	LOG YARD- PUMP HOUSE			LOG YARD- LOG TRUCK SCALE SHED			IRRIGATION BLDG		
Category (circle)	(FS) Blank			(FS) Blank			(FS) Blank		
Matrix Type (circle)	(Building) Vehicle, NA Other _____			(Building) Vehicle, NA Other _____			(Building) Vehicle, NA Other _____		
Vermiculite Present? (circle)	Yes (No)			Yes (No)			Yes (No)		
Will samples be archived due to presence of vermiculite? (circle)	Yes (No)			Yes (No)			Yes (No)		
Sample Area (cm^2) (circle)	100	200	(300)	100	200	(300)	100	200	(300)
Filter Diameter (circle)	(25mm)	37mm		(25mm)	37mm		(25mm)	37mm	
Pore Size (circle)	(TEM- .45)	PCM- 0.8		(TEM-.45)	PCM- 0.8		(TEM- .45)	PCM- 0.8	
Flow Meter Type (circle)	(Rotometer)	Dry-Cal		(Rotometer)	Dry-Cal		(Rotometer)	Dry-Cal	
Pump ID Number	0266666			0266666			0266666		
Flow Meter ID No.	34719			34719			34719		
Start Date	9/15/02			9/15/02			9/15/02		
Start Time	1416	1418	1420	1438	1440	1442	1504	1506	1508
Start Flow (L/min)	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.03
Stop Date	9/15/02			9/15/02			9/15/02		
Stop Time	1418	1420	1422	1440	1442	1444	1506	1508	1510
Stop Flow (L/min)	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.03
Pump fault? (circle)	(No) Yes			(No) Yes			(No) Yes		
Field Comments	100 cm^2 Entrance floor 100 cm^2 Floor next to engine base 100 cm^2 On engine base → concrete floor			100 cm^2 1st floor- entrance floor 100 cm^2 1st floor- desktop 100 cm^2 2nd floor- door jamb - tile floor w/rubber mats			100 cm^2 Entrance floor 100 cm^2 Floor of doorway between rooms 100 cm^2 near center of doorway room		
	Entered ___ Validated ___			Entered ___ Validated ___			Entered ___ Validated ___		

vs 022002

Jyp 10/4/02

wood floor w/covering

Sheet No.: D- 001019

LIBBY MONTANA FIELD SAMPLE DATA SHEET
DUST

Scenario No.: NA Field Logbook No: 100117 Page No: 42-43 Sampling Date: 9/15/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Sampling Team: (PES) CDM Other _____ Names: PERAK

Data Item	Cassette 1			Cassette 2			Cassette 3		
Index ID	SL- 00175			SL- 00176			SL- 00177		
Location ID	BD- 002106			BD- 002107			BD- 002108		
Sample Group	BUILDING			BUILDING			BUILDING		
Location Description	DIESEL FIRE PUMP HOUSE			DOUBLE WIDE TRAILER			ELECTRIC PUMP HOUSE		
Category (circle)	(FS) Blank			(FS) Blank			(FS) Blank		
Matrix Type (circle)	(Building) Vehicle, NA Other _____			(Building) Vehicle, NA Other _____			(Building) Vehicle, NA Other _____		
Vermiculite Present? (circle)	Yes (No)			Yes (No)			Yes (No)		
Will samples be archived due to presence of vermiculite? (circle)	Yes (No)			Yes (No)			Yes (No)		
Sample Area (cm^2) (circle)	100 200 (300)			100 200 (300)			100 200 (300)		
Filter Diameter (circle)	(25mm) 37mm			(25mm) 37mm			(25mm) 37mm		
Pore Size (circle)	(TEM- .45) PCM- 0.8			(TEM- .45) PCM- 0.8			(TEM- .45) PCM- 0.8		
Flow Meter Type (circle)	(Rotometer) Dry-Cal			(Rotometer) Dry-Cal			(Rotometer) Dry-Cal		
Pump ID Number	6266666			6266666			6266666		
Flow Meter ID No.	34719			34719			34719		
Start Date	9/15/02			9/15/02			9/15/02		
Start Time	1527	1529	1531	1545	1547	1549	~~1406~~ 1606	~~1408~~ 1608	~~1410~~ 1610 mwp 9/15/02
Start Flow (L/min)	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.03
Stop Date	9/15/02			9/15/02			9/15/02		
Stop Time	1529	1531	1533	1547	1549	1551	~~1408~~ 1608	~~1410~~ 1610	~~1412~~ 1612 mwp 9/15/02
Stop Flow (L/min)	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.03
Pump fault? (circle)	(No) Yes			(No) Yes			(No) Yes		
Field Comments	100 cm^2 Entrance floor 100 cm^2 Floor next to pump 100 cm^2 Top of cabinet → all concrete floors, walls			100 cm^2 Entrance floor 100 cm^2 Floor in front of kitchen area cabinets 100 cm^2 Floor at bathroom entrance			100 cm^2 Front entrance floor 100 cm^2 Floor at entrance to extended room 100 cm^2 Rear entrance floor		
	Entered ___ Validated ___			Entered ___ Validated ___			Entered ___ Validated ___		

VS 022002

JYP 10/4/02

Sheet No.: D- 001011

LIBBY MONTANA FIELD SAMPLE DATA SHEET

DUST

Scenario No.: NA Field Logbook No: 100117 Page No: 42-43 Sampling Date: 9/15/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Sampling Team: (PES) CDM Other _____ Names: PETRAK

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	SL- 00178	SL- 00179	SL- 00180
Location ID	BD- 002109	map 9/15/02	map 9/15/02
Sample Group	BUILDING	BLANK	BLANK
Location Description	GUARD STATION AT LIBBY CREEK BRIDGE- NORTH GATE	map 9/15/02	map 9/15/02
Category (circle)	(FS) Blank	FS (Blank)	FS (Blank)
Matrix Type (circle)	(Building) Vehicle. NA Other _____	Building, Vehicle, (NA) Other _____	Building, Vehicle (NA) Other _____
Vermiculite Present? (circle)	Yes (No)	Yes No	Yes No
Will samples be archived due to resence of vermiculite? (circle)	Yes (No)	Yes No map 9/15/02	Yes map 9/15/02
Sample Area (cm^2) (circle)	100 200 (300)	100 200 300	100 200 300
Filter Diameter (circle)	(25mm) 37mm	(25mm) 37mm	(25mm) 37mm
Pore Size (circle)	(TEM- .45) PCM- 0.8	(TEM-. 45) PCM- 0.8	(TEM-.45) PCM- 0.8
Flow Meter Type (circle)	(Rotometer) Dry-Cal	Rotometer Dry-Cal	Rotometer Dry-Cal
Pump ID Number	626666		
Flow Meter ID No.	34719		
Start Date	9/15/02		
Start Time	1624 ~~1424~~ / 1626 ~~1426~~ / 1628 ~~1428~~ map 9/15/02		
Start Flow (L/min)	2.03 / 2.03 / 2.03		
Stop Date	9/15/02		
Stop Time	1626 ~~1426~~ / 1628 ~~1428~~ / 1630 ~~1430~~ map 9/15/02		
Stop Flow (L/min)	2.03 / 2.03 / 2.03		
Pump fault? (circle)	(No) Yes		No Yes
Field Comments	100 cm^2 Entrance floor 100 cm^2 Floor at counter to left of door (looking in) 100 cm^2 Counter top to right of door	100 cm^2 100 cm^2 100 cm^2	100 cm^2 100 cm^2 100 cm^2
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

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[illegible] 9/15/02

[illegible] 9/15/02

[illegible] 10/4/02

Sheet No.: D- 001070

LIBBY MONTANA FIELD SAMPLE DATA SHEET

DUST

Scenario No.: NA Field Logbook No: 100117 Page No: 50-56 Sampling Date: 9/17/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Sampling Team: (PES) CDM Other _____ Names: PETRAK/REPINE

Data Item	Cassette 1			Cassette 2			Cassette 3		
Index ID	SL- 00217			SL- 00218			SL- 00219		
Location ID	BD-~~002098~~ 002099			BD-~~002098~~ 002099			BD-~~002098~~ 002099		
Sample Group	BUILDING			BUILDING			BUILDING		
Location Description	Plywood Plant Break rooms & offices at finish end			Plywood Plant, Plugger area			Plywood Plant, spreaders and finish end		
Category (circle)	(FS)	Blank		(FS)	Blank		(FS)	Blank	
Matrix Type (circle)	(Building) Vehicle, NA Other _____			(Building) Vehicle, NA Other _____			(Building) Vehicle, NA Other _____		
Vermiculite Present? (circle)	(Yes)	No		(Yes)	No		(Yes)	No	
Will samples be archived due to resence of vermiculite? (circle)	Yes	(No)		Yes	(No)		Yes	(No)	
Sample Area (cm^2) (circle)	100	200	(300)	100	200	(300)	100	(200)	~~300~~
Filter Diameter (circle)	(25mm)	37mm		(25mm)	37mm		(25mm)	37mm	
Pore Size (circle)	(TEM- .45)	PCM- 0.8		(TEM- .45)	PCM- 0.8		(TEM- .45)	PCM- 0.8	
Flow Meter Type (circle)	(Rotometer)	Dry-Cal		(Rotometer)	Dry-Cal		(Rotometer)	Dry-Cal	
Pump ID Number	6265666			6265666			6265666		
Flow Meter ID No.	34719			34719			34719		
Start Date	9/17/02			9/17/02			9/17/02		
Start Time	0808	0810	~~0812~~	0820	0822	0824	0835	0837	~~0839~~
Start Flow (L/min)	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.03	~~2.03~~
Stop Date	9/17/02			9/17/02			9/17/02		
Stop Time	0810	0812	0814	0822	0824	0826	0837	0839	~~0841~~
Stop Flow (L/min)	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.03	~~2.03~~
Pump fault? (circle)	(No)	Yes		(No)	Yes		(No)	Yes	
Field Comments	100 cm^2: Break room, floor near door to plant 100 cm^2: 2nd fl, Supervisors office, floor near entrance 100 cm^2: Floor near entrance to plant, NW corner			100 cm^2: Floor near Plugger #1 100 cm^2: Floor near Plugger #9, storage side 100 cm^2: Floor near turntable			100 cm^2: Floor near spreaders 100 cm^2: Floor near ~~100 cm^2~~: Cassette loaded - only 200 cm^2 sampled		
	Entered ___ Validated ___			Entered ___ Validated ___			Entered ___ Validated ___		

AS 022002

9/20/02

Sheet No.: D- 001073

LIBBY MONTANA FIELD SAMPLE DATA SHEET

DUST

Scenario No.: NA Field Logbook No: 100117 Page No: 50-56 Sampling Date: 9/17/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Land Use: Residential School Commercial Mining Roadway Other ( )

Sampling Team: PES CDM Other _____ Names: PETRAK/REPINE

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	SL- 00220	SL- 00221	SL- 00224
Location ID	BD-002099	BD-002099	BD- 002110
Sample Group	BUILDING	BUILDING	BUILDING
Location Description	Green chain	Dryer area	Truck barn, north side
Category (circle)	FS Blank	FS Blank	FS Blank
Matrix Type (circle)	Building, Vehicle, NA Other _____	Building, Vehicle, NA Other _____	Building, Vehicle, NA Other _____
Vermiculite Present? (circle)	Yes No	Yes No	Yes No
Will samples be archived due to presence of vermiculite? (circle)	Yes No	Yes No	Yes No
Sample Area (cm^2) (circle)	100 200 300	100 200 300	100 ~~200~~ 300
Filter Diameter (circle)	25mm 37mm	25mm 37mm	25mm 37mm
Pore Size (circle)	TEM- .45 PCM- 0.8	TEM- .45 PCM- 0.8	TEM- .45 PCM- 0.8
Flow Meter Type (circle)	Rotometer Dry-Cal	Rotometer Dry-Cal	Rotometer Dry-Cal
Pump ID Number	626566	626566	626566
Flow Meter ID No.	34719	34719	34719
Start Date	9/17/02	9/17/02	9/17/02
Start Time	0843 0845 0847	0850 0852 0854	1022 1024 1026
Start Flow (L/min)	2.03 2.03 2.03	2.03 2.03 2.03	2.03 2.03 2.03
Stop Date	9/17/02	9/17/02	9/17/02
Stop Time	0845 0847 0849	0852 0854 0856	1024 1026 1028
Stop Flow (L/min)	2.03 2.03 2.03	2.03 2.03 2.03	2.03 2.03 2.03
Pump fault? (circle)	No Yes	No Yes	No Yes
Field Comments	100 cm^2 Floor along center of chain, plant side 100 cm^2 Floor outside lunch/smoking area 100 cm^2 Floor near lathe	100 cm^2 Floor near entrance/break rm/rest rms 100 cm^2 Floor near feeder for little dryer 100 cm^2 Floor at off bearer end, under belt	100 cm^2 Floor near entrance 100 cm^2 Top of workbench/storage box 100 cm^2 Floor ~~top~~ towards rear of bldg 9/14/02
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

vs 022002

VJB 10/4/02

FIELD COMMENTS FROM FSDS # 0-001079

INDEX ID #

SL - 00220 — 100 cm² - FLOOR ALONG CENTER CHAIN, PLANT SIDE
100 cm² - FLOOR OUTSIDE LUNCH / SMOKING AREA
100 cm² - FLOOR NEAR LATHE

SL-00221 — 100 cm² - FLOOR NEAR ENTRANCE / BREAK RM / REST RMS
100 cm² - FLOOR NEAR FEEDER FOR LITTLE DRYER
100 cm² - FLOOR AT OFF BEADER END, UNDER BELT

SL-00224 — 100 cm² - FLOOR NEAR ENTRANCE
100 cm² - TOP OF WORK BENCH / STORAGE BOX
100 cm² - FLOOR TOWARDS REAR OF BLDG.

Sheet No.: D- 002000

LIBBY MONTANA FIELD SAMPLE DATA SHEET

DUST

Scenario No.: NA Field Logbook No: 100117 Page No: 50-56 Sampling Date: 9/17/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Sampling Team: (PES) CDM Other _____ Names: PETRAK/REPINE

Data Item	Cassette 1			Cassette 2			Cassette 3		
Index ID	SL- 00225			SL- 00226			SL- 00227		
Location ID	BD-002110			BD- 002111			BD- 002112		
Sample Group	BUILDING			BUILDING			BUILDING		
Location Description	Truck barn, south end of bldg			STEEL STORAGE			FIRE HALL		
Category (circle)	(FS) Blank			(FS) Blank			(FS) Blank		
Matrix Type (circle)	(Building) Vehicle, NA Other _____			(Building) Vehicle, NA Other _____			(Building) Vehicle, NA Other _____		
Vermiculite Present? (circle)	(Yes) No			Yes (No)			Yes (No)		
Will samples be archived due to presence of vermiculite? (circle)	Yes (No)			Yes (No)			Yes (No)		
Sample Area (cm^2) (circle)	100 (200) 300			100 200 (300)			100 200 (300)		
Filter Diameter (circle)	(25mm) 37mm			(25mm) 37mm			(25mm) 37mm		
Pore Size (circle)	(TEM-.45) PCM- 0.8			(TEM-.45) PCM- 0.8			(TEM-.45) PCM- 0.8		
Flow Meter Type (circle)	(Rotometer) Dry-Cal			(Rotometer) Dry-Cal			(Rotometer) Dry-Cal		
Pump ID Number	6265666			6265666			6265666		
Flow Meter ID No.	34719			34719			34719		
Start Date	9/17/02			9/17/02			9/17/02		
Start Time	1030	1032	~~1/10/4/02~~	1045	1047	1049	1103	1105	1107
Start Flow (L/min)	2.03	2.03		2.03	2.03	2.03	2.03	2.03	2.03
Stop Date	9/17/02			9/17/02			9/17/02		
Stop Time	1032	1034	~~1/10/4/02~~	1047	1049	1051	1105	1107	1109
Stop Flow (L/min)	2.03	2.03		2.03	2.03	2.03	2.03	2.03	2.03
Pump fault? (circle)	(No) Yes			(No) Yes			(No) Yes		
Field Comments	100 cm² Horizontal beam on dividing wall 100 cm² Door jamb floor 100 cm²			100 cm² Concrete floor 100 cm² Horizontal beam on dividing wall 100 cm² Pipe stored in shed			100 cm² Floor at vehicle entrance 100 cm² Top of workbench 100 cm² 3rd step up on stairs to 2nd floor		
	Entered ___ Validated ___			Entered ___ Validated ___			Entered ___ Validated ___		

vs 022002

JHP 10/4/02

Sheet No.: D- _____

LIBBY MONTANA FIELD SAMPLE DATA SHEET

DUST

Scenario No.: NA Field Logbook No: 100117 Page No: 50-56 Sampling Date: 9/17/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Sampling Team: (PES) CDM Other _____ Names: PETRAK/REPINE

Data Item	Cassette 1			Cassette 2			Cassette 3		
Index ID	SL- 00228			SL- 00229			SL- 00230		
Location ID	BD- 002260			BD- 002261			BD- 002262		
Sample Group	BUILDING			BUILDING			BUILDING		
Location Description	WAGNER SHED			ELECTRIC MOTOR SHED			ASTRODOME		
Category (circle)	(FS)	Blank		(FS)	Blank		(FS)	Blank	
Matrix Type (circle)	(Building) Vehicle, NA Other _____			(Building) Vehicle, NA Other _____			(Building) Vehicle, NA Other _____		
Vermiculite Present? (circle)	Yes	(No)		Yes	(No)		Yes	(No)	
Will samples be archived due to presence of vermiculite? (circle)	Yes	(No)		Yes	(No)		Yes	(No)	
Sample Area (cm²) (circle)	100	(200)	300	100	200	(300)	100	200	(300)
Filter Diameter (circle)	(25mm)	37mm		(25mm)	37mm		(25mm)	37mm	
Pore Size (circle)	(TEM- .45)	PCM- 0.8		(TEM-.45)	PCM- 0.8		(TEM- .45)	PCM- 0.8	
Flow Meter Type (circle)	(Rotometer)	Dry-Cal		(Rotometer)	Dry-Cal		(Rotometer)	Dry-Cal	
Pump ID Number	6260566			6260566			6260566		
Flow Meter ID No.	34719			34719			34719		
Start Date	9/17/02			9/17/02			9/17/02		
Start Time	1111	1113	~~JP 10/4/02~~	1122	1124	1126	1407	1409	1411
Start Flow (L/min)	2.03	2.03		2.03	2.03	2.03	2.03	2.03	2.03
Stop Date	9/17/02			9/17/02			9/17/02		
Stop Time	1113	1115	~~JP 10/4/02~~	1124	1126	1128	1409	1411	1413
Stop Flow (L/min)	2.03	2.03		2.03	2.03	2.03	2.03	2.03	2.03
Pump fault? (circle)		(No)	Yes	~~2.03~~	(No)	Yes		(No)	Yes
Field Comments	100 cm² Horizontal beam on side wall 100 cm² Shelf on rear wall 100 cm²			100 cm² Floor at overhead door entrance 100 cm² On storage shelf 100 cm² 2nd floor-at entrance to storage area			100 cm² Horizontal beam on long wall 100 cm² Floor near exposed corner 100 cm² Horizontal base beam on short wall		
	Entered ___ Validated ___			Entered ___ Validated ___			Entered ___ Validated ___		

vs 022002

✓ JP 10/4/02

Sheet No.: D- 001002

LIBBY MONTANA FIELD SAMPLE DATA SHEET

DUST

Scenario No.: NA Field Logbook No: 100117 Page No: 50-56 Sampling Date: 9/17/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Land Use: Residential School Commercial Mining Roadway Other ( )

Sampling Team: PES CDM Other _____ Names: PETRAK/REPINE

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	SL- 00231	SL- 00232	
Location ID	BD- 002263	BD- 002264	
Sample Group	BUILDING	BUILDING	
Location Description	PIPESHED	STORAGE SHED & LOCOMOTIVE SHED	
Category (circle)	FS Blank	FS Blank	FS Blank
Matrix Type (circle)	Building, Vehicle, NA Other _____	Building, Vehicle, NA Other _____	Building, Vehicle, NA Other _____
Vermiculite Present? (circle)	Yes No	Yes No	Yes No
Will samples be archived due to resence of vermiculite? (circle)	Yes No	Yes No	Yes No
Sample Area (cm^2) (circle)	100 200 300	100 200 300	100 200 300
Filter Diameter (circle)	25mm 37mm	25mm 37mm	25mm 37mm
Pore Size (circle)	TEM- .45 PCM- 0.8	TEM- .45 PCM- 0.8	TEM- .45 PCM- 0.8
Flow Meter Type (circle)	Rotometer Dry-Cal	Rotometer Dry-Cal	Rotometer Dry-Cal
Pump ID Number	626566	626566	
Flow Meter ID No.	34719	34719	
Start Date	9/17/02	9/17/02	
Start Time	1420 1422 1424	1437 1439 1441	
Start Flow (L/min)	2.03 2.03 2.03	2.03 2.03 2.03	
Stop Date	9/17/02	9/17/02	
Stop Time	1422 1424 1426	1439 1441 1443	
Stop Flow (L/min)	2.03 2.03 2.03	2.03 2.03 2.03	
Pump fault? (circle)	No Yes	No Yes	No Yes
Field Comments	100 cm^2 Floor in front of door 100 cm^2 Top of workbench 100 cm^2 Top of storage shelf	100 cm^2 Floor at center doorway 100 cm^2 Top of storage bin 100 cm^2 Between train track rails	100 cm^2 100 cm^2 100 cm^2
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Quantitative Scale 9/17/02

vs 022002

JYD 10/4/02

Sheet No.: D- 001083

LIBBY MONTANA FIELD SAMPLE DATA SHEET

DUST

Scenario No.: NA Field Logbook No: 100117 Page No: 50-56 Sampling Date: 9/17/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Land Use: Residential School Commercial Mining Roadway Other ( )

Sampling Team: PES CDM Other _____ Names: PETRAK/REPINE

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	SL- 00233	SL- 00234	
Location ID	NA map 9/17/02	NA map 9/17/02	
Sample Group	BLANK	BLANK	
Location Description	NA map 9/17/02	NA map 9/17/02	
Category (circle)	FS Blank	FS Blank	FS Blank
Matrix Type (circle)	Building, Vehicle NA Other _____	Building, Vehicle NA Other _____	Building, Vehicle, NA Other _____
Vermiculite Present? (circle)	Yes No	Yes No	Yes No
Will samples be archived due to resence of vermiculite? (circle)	Yes map 9/17/02	Yes map 9/17/02	Yes No
Sample Area (cm^2) (circle)	100 200 300	100 200 300	100 200 300
Filter Diameter (circle)	25mm 37mm	25mm 37mm	25mm 37mm
Pore Size (circle)	TEM- .45 PCM- 0.8	TEM- .45 PCM- 0.8	TEM- .45 PCM- 0.8
Flow Meter Type (circle)	Rotometer Dry-Cal	Rotometer Dry-Cal	Rotometer Dry-Cal
Pump ID Number			
Flow Meter ID No.			
Start Date			
Start Time			
Start Flow (L/min)			
Stop Date			
Stop Time			
Stop Flow (L/min)			
Pump fault? (circle)	No Yes	No Yes	No Yes
Field Comments	100 cm^2 100 cm^2 100 cm^2	100 cm^2 100 cm^2 100 cm^2	100 cm^2 100 cm^2 100 cm^2
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Melissa A. Petrak 9/17/02

Melissa A. Petrak 9/17/02

Melissa A. Petrak 9/17/02

vs 022002

JYB 10/4/02

Sheet No.: D- 001084

LIBBY MONTANA FIELD SAMPLE DATA SHEET

DUST

Scenario No.: NA Field Logbook No: 160117 Page No: 57 Sampling Date: 9/18/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Sampling Team: (PES) CDM Other _____ Names: PETRAK/REPINE

Data Item	Cassette 1			Cassette 2			Cassette 3		
Index ID	SL- 00237			SL- 00238			SL- 00239		
Location ID	BD- 002265			BD- 002266			BD- 002267		
Sample Group	BUILDING			BUILDING					
Location Description	POWER ~~PLANT~~ OFFICE HOUSE. wp 9/18/02			POWER ~~PLANT~~ HOUSE. 9/18/02 wp			~~KILNS~~ wp 9/18/02 LUMBER KILNS		
Category (circle)	(FS) Blank			(FS) Blank			(FS) Blank		
Matrix Type (circle)	(Building) Vehicle, NA Other _____			(Building) Vehicle, NA Other _____			(Building) Vehicle, NA Other _____		
Vermiculite Present? (circle)	Yes (No)			Yes (No)			Yes (No)		
Will samples be archived due to presence of vermiculite? (circle)	Yes (No)			Yes (No)			Yes (No)		
Sample Area (cm²) (circle)	100 (200) 300			100 200 (300)			100 200 (300)		
Filter Diameter (circle)	(25mm) 37mm			(25mm) 37mm			(25mm) 37mm		
Pore Size (circle)	(TEM- .45) PCM- 0.8			(TEM- .45) PCM- 0.8			(TEM- .45) PCM- 0.8		
Flow Meter Type (circle)	(Rotometer) Dry-Cal			(Rotometer) Dry-Cal			(Rotometer) Dry-Cal		
Pump ID Number	6260509			6260509			6260509		
Flow Meter ID No.	34719			34719			34719		
Start Date	9/18/02			9/18/02			9/18/02		
Start Time	0935	0937	~~wp 9/18/02~~	0945	0947	0949	1015	1020	1027
Start Flow (L/min)	2.03	2.03		2.03	2.03	2.03	2.03	2.03	2.03
Stop Date	9/18/02			9/18/02			9/18/02		
Stop Time	0937	0939	~~wp 9/18/02~~	0947	0949	0951	1017	1022	1029
Stop Flow (L/min)	2.03	2.03		2.03	2.03	2.03	2.03	2.03	2.03
Pump fault? (circle)	(No) Yes			(No) Yes			(No)		
Field Comments	100 cm² Floor in front of door 100 cm² Top of refrigerator 100 cm²			100 cm² Floor in front of door near office 100 cm² Floor in front of door near ~~water~~ diesel tanks wp 9/18/02 100 cm² Horizontal beam in garage			100 cm² Floor of hood at first bay 100 cm² Floor in center of bay #15 100 cm² Floor in center of tunnel on north side		
	Entered ___ Validated ___			Entered ___ Validated ___			Entered ___ Validated ___		

vs 022002

Sheet No.: D- 001085

LIBBY MONTANA FIELD SAMPLE DATA SHEET

DUST

Scenario No.: NA Field Logbook No: 102117 Page No: 57 Sampling Date: 9/18/02

Address: 875 HIGHWAY 2 SOUTH Owner/Tenant: STIMSON LUMBER

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Sampling Team: (PES) CDM Other _____ Names: PETRAK/REPINE

Data Item	Cassette 1			Cassette 2			Cassette 3		
Index ID	SL- 00240			SL- 00241			SL- 00242		
Location ID	BD- 002268			BD- 002269			BD- 002269		
Sample Group	BUILDING			BUILDING			BUILDING		
Location Description	SHED 12			STIMSON OFFICE 1ST FLOOR			STIMSON OFFICE 2ND FLOOR		
Category (circle)	(FS)	Blank		(FS)	Blank		(FS)	Blank	
Matrix Type (circle)	(Building), Vehicle, NA Other _____			(Building), Vehicle, NA Other _____			(Building), Vehicle, NA Other _____		
Vermiculite Present? (circle)	Yes	(No)		Yes	(No)		Yes	(No)	
Will samples be archived due to presence of vermiculite? (circle)	Yes	(No)		Yes	(No)		Yes	(No)	
Sample Area (cm^2) (circle)	100	200	(300)	100	200	(300)	100	200	(300)
Filter Diameter (circle)	(25mm)	37mm		(25mm)	37mm		(25mm)	37mm	
Pore Size (circle)	(TEM- .45)	PCM- 0.8		(TEM- .45)	PCM- 0.8		(TEM- .45)	PCM- 0.8	
Flow Meter Type (circle)	(Rotometer)	Dry-Cal		(Rotometer)	Dry-Cal		(Rotometer)	Dry-Cal	
Pump ID Number	6226509			6226509			6226509		
Flow Meter ID No	34719			34719			9/18/02 ~~341~~ 34719		
Start Date	9/18/02			9/18/02			9/18/02		
Start Time	1036	1038	1042	1110	1112	1114	1121	1123	1125
Start Flow (L/min)	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.03
Stop Date	9/18/02			9/18/02			9/18/02		
Stop Time	1038	1040	1044	1112	1114	1116	1123	1125	1127
Stop Flow (L/min)	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.03	2.03
Pump shutoff [illegible]	(No)			(No)			(No)		
Field Comments	100 cm^2 Floor at north entrance 100 cm^2 Horizontal beam on wall 100 cm^2 Floor at top of ramp to F1			100 cm^2 Floor at back entrance (tile & mat) 100 cm^2 Floor mat at front entrace 100 cm^2 Top of stairs to conference rm (on tile)			100 cm^2 Floor at back entrance - tile 100 cm^2 Floor in front of mens room tile 100 cm^2 Top of refrigerator		
	Entered ___ Validated ___			Entered ___ Validated ___			Entered ___ Validated ___		

vs 022002

Jyp 10/4/02

Appendix F
Field Logbook Notes, Sample Data Sheets, and Analytical Data Sheets, Site Wide Soil Sampling
October 2002

Sheet No.: CSS (S) - 003871

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: N/A Field Logbook No: 100144 Page No: 46 Sampling Date: 10/14/02

Address: 875 Hwy 2 So. Owner: Stimson Lumber

Business Name: N/A

Land Use: (circle) Residential School Commercial Mining Roadway Other ( )

Sampling Team: (circle) CDM PES Other _____ Names: R. Roberts, S. Robles

Data Item	Sample 1 RR 10/14/02	Sample 2	Sample 3
Index ID	CS- 09510		
Location ID	SP- 119458		
Sample Group	Lumber Yard		
Location Description (circle)	Back yard Front yard Side yard Other Stimson	Back yard Front yard Side yard Other _____	Back yard Front yard Side yard Other _____
Category (circle)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	Surface Soil Other _____	Surface Soil Other _____	Surface Soil Other _____
Type (circle)	Grab Comp. # subsamples 5	Grab Comp. # subsamples _____	Grab Comp. # subsamples _____
Sample Time	1155		
Top Depth (in.)	0		
Bottom Depth (in.)	6		
Field Comments	BD-_____ N 10' S 10' E 10' W 10'		
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Field Team	Initial
Completed by	RR
QC by	S.R.

DW 10/15/02

Sheet No.: CSS (S) - 003872

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100144 Page No: 47 Sampling Date: 10/14/02

Address: 875 Hwy 2 So Owner: Stimson Lumber

Business Name: NA

Land Use: (circle) Residential School (Commercial) Mining Roadway Other ( )

Sampling Team: (circle) (CDM) PES Other _____ Names: R. Roberts, S. Robles

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 09511		
Location ID	SP- 119459		
Sample Group	Lumber Yard		
Location Description (circle)	Back yard Front yard Side yard (Other) Stimson	Back yard Front yard Side yard Other _____	Back yard Front yard Side yard Other _____
Category (circle)	(FS) FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	(Surface Soil) Other _____	Surface Soil Other _____	Surface Soil Other _____
Type (circle)	Grab (Comp.) # subsamples 5	Grab Comp. # subsamples ____	Grab Comp. # subsamples ____
Sample Time	1330		
Top Depth (in.)	0		
Bottom Depth (in.)	6		
Field Comments	BD-_____ N 10' S 10' E 10' W 10'		
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Field Team	Initial
Completed by	RR
QC by	SP

DW 01503

Sheet No.: CSS (S) - 003873

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100144 Page No: 48 Sampling Date: 10/14/02

Address: 875 Hwy 2 So. Owner: Stimson Lumber

Business Name: NA

Land Use: (circle) Residential School Commercial Mining Roadway Other ( )

Sampling Team: (circle) CDM PES Other _____ Names: R. Roberts, S. Rohdes

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 09512		
Location ID	SP- 119460		
Sample Group	Lumber Yard		
Location Description (circle)	Back yard Front yard Side yard Other Stimson	Back yard Front yard Side yard Other _____	Back yard Front yard Side yard Other _____
Category (circle)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	Surface Soil Other _____	Surface Soil Other _____	Surface Soil Other _____
Type (circle)	Grab Comp. # subsamples 5	Grab Comp. # subsamples _____	Grab Comp. # subsamples _____
Sample Time	1406		
Top Depth (in.)	0		
Bottom Depth (in.)	6		
Field Comments	BD-_____ N 10' S 10' E 10' W 10'		
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Field Team	Initial
Completed by	RR
QC by	S. R.

Sheet No.: CSS (S) - 003874

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100144 Page No: 49 Sampling Date: 10/14/02

Address: 875 Hwy 2 So Owner: Stimson Lumber

Business Name: NA

Land Use: (circle) Residential School Commercial Mining Roadway Other ( )

Sampling Team: (circle) CDM PES Other _____ Names: R. Roberts, S. Robles

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 09513		
Location ID	SP- 119461		
Sample Group	Lumber Yard		
Location Description (circle)	Back yard Front yard Side yard Other Stimson	Back yard Front yard Side yard Other _____	Back yard Front yard Side yard Other _____
Category (circle)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	Surface Soil Other _____	Surface Soil Other _____	Surface Soil Other _____
Type (circle)	Grab Comp. # subsamples 5	Grab Comp. # subsamples _____	Grab Comp. # subsamples _____
Sample Time	1433		
Top Depth (in.)	0		
Bottom Depth (in.)	6		
Field Comments moved Sample point 14' East of wood pile/ firewood.	BD-_____ N 10' S 10' E 10' W 10'		
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Field Team	Initial
Completed by	RR
QC by	S.R

DW 10.15.02

Sheet No.: CSS (S) - 003875

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100144 Page No: 50 Sampling Date: 10/14/02

Address: 875 Hwy 2 So. Owner: Stimson Lumber

Business Name: NA

Land Use: (circle) Residential School Commercial Mining Roadway Other ( )

Sampling Team: (circle) CDM PES Other _____ Names: R. Roberts, S. Robles

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 09514		
Location ID	SP- 119462		
Sample Group	Lumber Yard		
Location Description (circle)	Back yard Front yard Side yard Other Stimson	Back yard Front yard Side yard Other _____	Back yard Front yard Side yard Other _____
Category (circle)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	Surface Soil Other _____	Surface Soil Other _____	Surface Soil Other _____
Type (circle)	Grab Comp. # subsamples 5	Grab Comp. # subsamples ____	Grab Comp. # subsamples ____
Sample Time	1505		
Top Depth (in.)	0		
Bottom Depth (in.)	6		
Field Comments	BD-_____ N 10' S 10' E 10' W 10'		
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Field Team	Initial
Completed by	RR
QC by	S. R.

D.W. 7.15.02

Sheet No.: CSS (S) - ~~0035~~ 00386

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: N/A Field Logbook No: 100146 Page No: 18 Sampling Date: 10-14-02

Address: 875 US Hwy 2 South Owner: Stimpson Lumber

Business Name: Stimpson Lumber

Land Use: (circle) Residential School Commercial Mining Roadway Other ( )

Sampling Team: (circle) CDM PES Other _____ Names: Victor Contreras, Walter Smith

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 08295		
Location ID	SP- 119242		
Sample Group	Lumber Yard		
Location Description (circle)	Back yard Front yard Side yard Other Stimpson	Back yard Front yard Side yard Other _____	Back yard Front yard Side yard Other _____
Category (circle)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	Surface Soil Other _____	Surface Soil Other _____	Surface Soil Other _____
Type (circle)	Grab Comp. # subsamples 5	Grab Comp. # subsamples ____	Grab Comp. # subsamples ____
Sample Time	1145		
Top Depth (in.)	0		
Bottom Depth (in.)	6		
Field Comments	BD- N/A SA3-2 moved sample 30' away from river. Subsamples 10' away of sample. N. S. E. W.		
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Field Team	Initial
Completed by	W.S.
QC by	V.C.

DW 11.15.02

Sheet No.: CSS (S) - ~~003877~~

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: N/A Field Logbook No: 100146 Page No: 19 Sampling Date: 10-14-02

Address: 875 U.S. HWY 2 SOUTH Owner: STIMPSON LUMBER

Business Name: STIMPSON LUMBER

Land Use: (circle) Residential School (Commercial) Mining Roadway Other ( )

Sampling Team: (circle) (CDM) PES Other _____ Names: VICTOR CONTRERAS, WALTER SMITH

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 08296		
Location ID	SP- 119243		
Sample Group	LUMBER YARD		
Location Description (circle)	Back yard Front yard Side yard (Other) STIMPSON	Back yard Front yard Side yard Other _____	Back yard Front yard Side yard Other _____
Category (circle)	(FS) FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	(Surface Soil) Other _____	Surface Soil Other _____	Surface Soil Other _____
Type (circle)	Grab (Comp.) # subsamples 5	Grab Comp. # subsamples ____	Grab Comp. # subsamples ____
Sample Time	1205		
Top Depth (in.)	0		
Bottom Depth (in.)	6		
Field Comments	BD- N/A SAS-7 SUBSAMPLED 10' AWAY FROM CENTER N, E, S, W. ALSO SAMPLE CENTER.		
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Field Team	Initial
Completed by	WS
QC by	V.C.

DW 2.15.02

Sheet No.: CSS (S) - ~~003878~~

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: N/A Field Logbook No: 100146 Page No: 20 Sampling Date: 10-14-02

Address: 875 US HWY 2 SOUTH Owner: STIMPSON LUMBER

Business Name: STIMPSON LUMBER

Land Use: (circle) Residential School (Commercial) Mining Roadway Other ( )

Sampling Team: (circle) (CDM) PES Other _____ Names: VICTOR CONTRERAS, WALTER SMITH

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 08297		
Location ID	SP- 119244		
Sample Group	LUMBER YARD		
Location Description (circle)	Back yard Front yard Side yard (Other) STIMPSON	Back yard Front yard Side yard Other _____	Back yard Front yard Side yard Other _____
Category (circle)	(FS) FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	(Surface Soil) Other _____	Surface Soil Other _____	Surface Soil Other _____
Type (circle)	Grab (Comp.) # subsamples 5	Grab Comp. # subsamples ____	Grab Comp. # subsamples ____
Sample Time	1335		
Top Depth (in.)	0		
Bottom Depth (in.)	6		
Field Comments	BD- N/A SA3-9 COLLECTED SUBSAMPLES 10' AWAY FROM CENTER. N, E, S, W;		
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Field Team	Initial
Completed by	WS
QC by	V.C.

10-15-02

Sheet No.: CSS (S) - 003879

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: N/C Field Logbook No: 100146 Page No: 21 Sampling Date: 10-17-02

Address: 875 U.S. HWY 2 SOUTH Owner: STIMPSON LUMBER

Business Name: STIMPSON LUMBER

Land Use: (circle) Residential School Commercial Mining Roadway Other ( )

Sampling Team: (circle) CDM PES Other _____ Names: VICTOR CONTRERAS, WALTER SMITH

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 08298		
Location ID	SP- 119245		
Sample Group	LUMBER YARD		
Location Description (circle)	Back yard Front yard Side yard Other STIMPSON	Back yard Front yard Side yard Other _____	Back yard Front yard Side yard Other _____
Category (circle)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	Surface Soil Other _____	Surface Soil Other _____	Surface Soil Other _____
Type (circle)	Grab Comp # subsamples 5	Grab Comp. # subsamples ____	Grab Comp # subsamples ____
Sample Time	1400		
Top Depth (in.)	0		
Bottom Depth (in.)	6		
Field Comments	BD- N/A SA3-10 COLLECTED SUB SAMPLES 10' AWAY FROM SAMPLE. N, E, S, W.		
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Field Team	Initial
Completed by	W.S
QC by	VC.

DLC 10.5.02

Sheet No.: CSS (S) - 003880

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: N/A Field Logbook No: 100146 Page No: 22 Sampling Date: 10-11-02

Address: 875 U.S. HWY 2 SOUTH Owner: STIMPSON LUMBER

Business Name: STIMPSON LUMBER

Land Use: (circle) Residential School Commercial Mining Roadway Other ( )

Sampling Team: (circle) CDM PES Other _____ Names: VICTOR CONTRERAS, WALTER SMITH

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 08299		
Location ID	SP- 119246		
Sample Group	LUMBER YARD		
Location Description (circle)	Back yard Front yard Side yard Other STIMPSON	Back yard Front yard Side yard Other _____	Back yard Front yard Side yard Other _____
Category (circle)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	Surface Soil Other _____	Surface Soil Other _____	Surface Soil Other _____
Type (circle)	Grab Comp. # subsamples 5	Grab Comp. # subsamples ____	Grab Comp. # subsamples ____
Sample Time	1419		
Top Depth (in.)	0		
Bottom Depth (in.)	6		
Field Comments	BD- N/A SA3-15 COLLECTED SUBSAMPLES 10' FROM CENTER. N, E, S, W		
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Field Team	Initial
Completed by	W.S.
QC by	V.C.

DW 10.15.02

Sheet No.: CSS (S) - 003881

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: N/A Field Logbook No: 100146 Page No: 23 Sampling Date: 10-14-02

Address: 875 US Hwy 2 South Owner: STIMPSON LUMBER @ 10.15.02

Business Name: STIMPSON LUMBER @ 10.15.02

Land Use: (circle) Residential School (Commercial) Mining Roadway Other ( )

Sampling Team: (circle) (CDM) PES Other _____ Names: VICTOR CONTRERAS, WALTER SMITH

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 08300		
Location ID	SP- 119247		
Sample Group	LUMBER YARD		
Location Description (circle)	Back yard Front yard Side yard @ 10.15.02 (Other) STIMPSON	Back yard Front yard Side yard Other _____	Back yard Front yard Side yard Other _____
Category (circle)	(FS) FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	(Surface Soil) Other _____	Surface Soil Other _____	Surface Soil Other _____
Type (circle)	Grab (Comp.) # subsamples 5	Grab Comp. # subsamples ____	Grab Comp. # subsamples ____
Sample Time	1444		
Top Depth (in.)	0		
Bottom Depth (in.)	6		
Field Comments	BD- N/A SAB-16 COLLECTED SUBSAMPLES 10' AWAY FROM CENTER N, E, S, W!		
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Field Team	Initial
Completed by	[illegible]
QC by	V.C.

DW 10.15.02

Sheet No.: CSS (S) 003882

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: N/A Field Logbook No: 100146 Page No: 24 Sampling Date: 10-14-02

Address: 875 US HWY 2 South Owner: Stimpson Lumber @10-15-02

Business Name: Stimpson Lumber @10-15-02

Land Use: (circle) Residential School (Commercial) Mining Roadway Other ( )

Sampling Team: (circle) (CDM) PES Other _____ Names: Victor Contreras, William Smith

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 09281 10-14-02		
Location ID	SP- 119248		
Sample Group	Lumber Yard		
Location Description (circle)	Back yard Front yard Side yard (Other) Stimpson @10-15-02	Back yard Front yard Side yard Other _____	Back yard Front yard Side yard Other _____
Category (circle)	(FS) FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	(Surface Soil) Other _____	Surface Soil Other _____	Surface Soil Other _____
Type (circle)	Grab (Comp. #) subsamples 5	Grab Comp. # subsamples _____	Grab Comp. # subsamples _____
Sample Time	1510		
Top Depth (in.)	0		
Bottom Depth (in.)	6		
Field Comments	BD- N/A SAS-20 Collected subsamples 10' away from center N, E, S, W.		
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Field Team	Initial
Completed by	WS
QC by	VC

Sheet No.: CSS (S) - ~~003883~~ 3

LOC # 4131

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: N/A Field Logbook No: 10246 Page No: 25 Sampling Date: 10-14-02

Address: 875 US HWY 2 SOUTH Owner: STIMPSON LUMBER @ 10.15.02

Business Name: STIMPSON LUMBER @ 10.15.02

Land Use: (circle) Residential School (Commercial) Mining Roadway Other ( )

Sampling Team: (circle) (CDM) PES Other _____ Names: VICTOR CONTRERAS, WALTER SMITH

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 09282		
Location ID	SP- 119249		
Sample Group	LUMBER YARD		
Location Description (circle)	Back yard Front yard Side yard (Other) STIMPSON @ 10.15.02	Back yard Front yard Side yard Other _____	Back yard Front yard Side yard Other _____
Category (circle)	(FS) FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	(Surface Soil) Other _____	Surface Soil Other _____	Surface Soil Other _____
Type (circle)	Grab (Comp.) # subsamples 5	Grab Comp. # subsamples ____	Grab Comp. # subsamples ____
Sample Time	1528		
Top Depth (in.)	0		
Bottom Depth (in.)	6		
Field Comments	BD- N/A SAE-21 COLLECTED SUBSAMPLES FROM CENTER 10' AWAY, N, E, S, W.		
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Field Team	Initial
Completed by	WS
QC by	V.C.

DW 10.15.02

Sheet No.: CSS (S) - 003884

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: N/A Field Logbook No: 00146 Page No: 26 Sampling Date: 10-14-02

Address: N/A Owner: N/A

Business Name: N/A

Land Use: (circle) Residential School Commercial Mining Roadway Other (N/A)

Sampling Team: (circle) CDM PES Other _____ Names: VICTOR CONTRERAS, and LARK SMITH

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 09283 WS 10-14-02		
Location ID	N/A		
Sample Group	BLANK		
Location Description (circle)	Back yard Front yard Side yard Other N/A	Back yard Front yard Side yard Other _____	Back yard Front yard Side yard Other _____
Category (circle)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	Surface Soil Other SILICA SAND	Surface Soil Other _____	Surface Soil Other _____
Type (circle)	Grab Comp. # subsamples ____	Grab Comp. # subsamples ____	Grab Comp. # subsamples ____
Sample Time	1715		
Top Depth (in.)	N/A		
Bottom Depth (in.)	N/A		
Field Comments	BD- N/A EQUIPMENT BLANK		
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Field Team	Initial
Completed by	WS
QC by	VC.

DW 15.02

Sheet No.: CSS (S) - 003885

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: N/A Field Logbook No: 100146 Page No: 68 Sampling Date: 10-15-02

Address: 875 US. Hwy 6 South Owner: STIMSON LUMBER

Business Name: STIMSON LUMBER

Land Use: (circle) Residential School Commercial Mining Roadway Other ( )

Sampling Team: (circle) CDM PES Other _____ Names: VICTOR CONTRERAS, WALTER SMITH

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 09284		
Location ID	SP- 119250		
Sample Group	Southwest AREA		
Location Description (circle)	Back yard Front yard Side yard Other STIMSON	Back yard Front yard Side yard Other _____	Back yard Front yard Side yard Other _____
Category (circle)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	Surface Soil Other _____	Surface Soil Other _____	Surface Soil Other _____
Type (circle)	Grab Comp. # subsamples 5	Grab Comp. # subsamples ____	Grab Comp. # subsamples ____
Sample Time	0716		
Top Depth (in.)	0		
Bottom Depth (in.)	6		
Field Comments	BD- N/A SAS-11 N' 10' E' 10' S' 10' W' 10'		
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Field Team	Initial
Completed by	WS.
QC by	V.C.

DW 10.16.02

Sheet No.: CSS (S) - 003886

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: N/A Field Logbook No: 100146 Page No: 29, 30 Sampling Date: 10-15-02

Address: 875 U.S. HWY 5 South Owner: STIMSON LUMBER

Business Name: STIMSON LUMBER

Land Use: (circle) Residential School Commercial Mining Roadway Other ( )

Sampling Team: (circle) CDM PES Other _____ Names: VICTOR CONTRERAS, WALTER SMITH

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 09285	CS- 09286	CS- 09287
Location ID	SP- 119251	SP- 119252	SP- 119252
Sample Group	Southwest AREA	Southwest AREA	Southwest AREA
Location Description (circle)	Back yard Front yard Side yard Other STIMSON	Back yard Front yard Side yard Other STIMSON	Back yard Front yard Side yard Other STIMSON
Category (circle)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)	FS FD of CS-09286 Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	Surface Soil Other _____	Surface Soil Other _____	Surface Soil Other _____
Type (circle)	Grab Comp. # subsamples 5	Grab Comp. # subsamples 5	Grab Comp. # subsamples 5
Sample Time	0936	1003	1009
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments	BD- N/A SAS-10 N'=10' E'=10' S'=10' W'=10'	SAS-9 N'=10' E'=10' S'=8' W'=10'	SAS-9 N'=10' E'=10' S'=8' W'=10'
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Field Team	Initial
Completed by	W.S
QC by	V.C.

DW 10/16/02

Sheet No.: CSS (S) - 003887

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: N/A Field Logbook No: 100146 Page No: 31, 32, 33 Sampling Date: 10-15-02

Address: 875 U.S. HWY 2 South Owner: STIMSON LUMBER

Business Name: STIMSON LUMBER

Land Use: (circle) Residential School (Commercial) Mining Roadway Other ( )

Sampling Team: (circle) (CDM) PES Other _____ Names: VICTOR CONTRERAS, WALTER SMITH

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 09288 10-15-02	CS- 09289 10-15-02	CS- 09290 10-15-02
Location ID	SP- 119253	SP- 119254	SP- 119527
Sample Group	Southwest AREA	Southwest AREA	Southwest AREA
Location Description (circle)	Back yard Front yard Side yard (Other) STIMSON	Back yard Front yard Side yard (Other) STIMSON	Back yard Front yard Side yard (Other) STIMSON
Category (circle)	(FS) FD of _____ Field Blank (lot or equipment)	(FS) FD of _____ Field Blank (lot or equipment)	(FS) FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	(Surface Soil) Other _____	(Surface Soil) Other _____	(Surface Soil) Other _____
Type (circle)	Grab (Comp.) # subsamples 5	Grab (Comp.) # subsamples 5	Grab (Comp.) # subsamples 5
Sample Time	1038	1049	1116
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments	BD- N/A SAS-12 N' = 10' E' = 10' S' = 10' W' = 10'	SAS-8 N' = 10' E' = 10' S' = 10' W' = 10'	SAS-3 N' = 10' E' = 10' S' = 10' W' = 8'
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Field Team	Initial
Completed by	NS
QC by	VC

DW 10/02

Sheet No.: CSS (S) - 003888

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: N/A Field Logbook No: 100146 Page No: 34, 35, 36 Sampling Date: 10-15-02

Address: 875 US. HWY 9 SOUTH Owner: STIMSON LUMBER

Business Name: STIMSON LUMBER

Land Use: (circle) Residential School (Commercial) Mining Roadway Other ( )

Sampling Team: (circle) (CDM) PES Other _____ Names: VICTOR CONTRERAS, WALTER SMITH

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 09291	CS- 09292	CS- 09293
Location ID	SP- 119528	SP- 119529	SP- 119530
Sample Group	SOUTHWEST AREA	SOUTHWEST AREA	SOUTHWEST AREA
Location Description (circle)	Back yard Front yard Side yard (Other) STIMSON	Back yard Front yard Side yard (Other) STIMSON	Back yard Front yard Side yard (Other) STIMSON
Category (circle)	(FS) FD of _____ Field Blank (lot or equipment)	(FS) FD of _____ Field Blank (lot or equipment)	(FS) FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	(Surface Soil) Other _____	(Surface Soil) Other _____	(Surface Soil) Other _____
Type (circle)	Grab (Comp) # subsamples 5	Grab (Comp.) # subsamples 5	Grab (Comp) # subsamples 5
Sample Time	1140	1246	1327
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments	BD- N/A SA5- 2 N: 10' WEST SIDE UNDER PAVE- E: 10' MENT. S: 10' MOVED SAMPLE W: 7' LOCATION 52' TO THE EAST.	SA5-1 WEST SIDE UNDER PAVE- N: 10' MENT. E: 10' S: 10' W: 7'	SA5-4 MOVED SAMPLE N: 10' LOCATION 60' TO E: 10' THE EAST. S: 10' W: 10'
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Field Team	Initial
Completed by	WS
QC by	V.C.

DW 10/16/02

Sheet No.: CSS (S) - 003918

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100128 Page No: 54 Sampling Date: 10/14/02

Address: 875 US HIGHWAY 2 SOUTH Owner: STIMSON LUMBER COMPANY

Business Name: STIMSON LUMBER COMPANY

Land Use: (circle) Residential School Commercial Mining Roadway Other ( )

Sampling Team: (circle) CDM PES Other _____ Names: CHRIS WORTHINGTON
CHRIS ZELBNAK

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 09641		
Location ID	SP- 119543		
Sample Group	LOG STORAGE		
Location Description (circle)	Back yard Front yard Side yard Other STIMSON	Back yard Front yard Side yard Other _____	Back yard Front yard Side yard Other _____
Category (circle)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	Surface Soil Other SUB SURFACE SOIL	Surface Soil Other _____	Surface Soil Other _____
Type (circle)	Grab Comp. # subsamples 5	Grab Comp. # subsamples ____	Grab Comp. # subsamples ____
Sample Time	1216		
Top Depth (in.)	48"		
Bottom Depth (in.)	60"		
Field Comments	BD- NA WESTERN SAMPLE POINT OFFSET 1 FOOT TOWARDS THE EAST (CENTER POINT)		
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Field Team	Initial
Completed by	CAW
QC by	CZ

10/14/02

DCW 10.15.02

Sheet No.: CSS (S)- 003920

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: N/A Field Logbook No: 100146 Page No: 37, 38, 39 Sampling Date: 10-15-02

Address: 875 U.S. Hwy 2 South Owner: STIMPSON LUMBER

Business Name: STIMPSON LUMBER

Land Use: (circle) Residential School Commercial Mining Roadway Other ( )

Sampling Team: (circle) CDM PES Other _____ Names: VICTOR CONTRERAS, ALICE SONETTE

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 09294	CS- 09295	CS- 09296
Location ID	SP- 119531	SP- 119532	SP- 119533
Sample Group	Southwest AREA	Southwest AREA	Southwest AREA
Location Description (circle)	Back yard Front yard Side yard Other STIMPSON	Back yard Front yard Side yard Other STIMSON	Back yard Front yard Side yard Other STIMSON
Category (circle)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless otherwise noted)	Surface Soil Other _____	Surface Soil Other _____	Surface Soil Other _____
Type (circle)	Grab Comp # subsamples 5	Grab Comp # subsamples 5	Grab Comp # subsamples 5
Sample Time	1352	1407	1419
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments	BD- N/A SAS-7 N.' = 10 E.' = 10' S.' = 10' W.' = 10'	SAS-5 N.' = 10' E.' = 10' S.' = 10' W.' = 10'	SAS-6 N.' = 10' E.' = 10' S.' = 10' W.' = 10'
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Field Team	Initial
Completed by	LNS
QC by	V.C.

Sheet No.: CSS (S) - 003921

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100133 Page No: 93 Sampling Date: 10-14-02

Address: 875 S. Hwy 2 Owner: Stimson Lumber Co.

Business Name: Stimson Lumber

Land Use: (circle) Residential School Commercial Mining Roadway Other ( )

Sampling Team: (circle) CDM PES Other _____ Names: Bob Tolford, Jeff Montera

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 09681 BT 10-14-02		
Location ID	SP- 119575		
Sample Group	Lumber Yard ~~SLA1-24~~ DJ 10.14.02		
Location Description (circle)	Back yard Front yard Side yard Other Stimson	Back yard Front yard Side yard Other _____	Back yard Front yard Side yard Other _____
Category (circle)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	Surface Soil Other _____	Surface Soil Other _____	Surface Soil Other _____
Type (circle)	Grab Comp. # subsamples ____	Grab Comp. # subsamples ____	Grab Comp. # subsamples ____
Sample Time	1232		
Top Depth (in.)	0"		
Bottom Depth (in.)	6"		
Field Comments	~~BD-002349~~ BT 10-14-02 SLA1-24 no composite could be collected due to surrounding asphalt		
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

10-14-02

Field Team	Initial
Completed by	BT
QC by	JM

DJ 10.15.02

Sheet No.: CSS (S) - ~~003922~~

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100133 Page No: 105 Sampling Date: 10-15-02

Address: 875 US Hwy 2 South Owner: Stimson Lumber

Business Name: Stimson Lumber

Land Use: (circle) Residential School (Commercial) Mining Roadway Other ( )

Sampling Team: (circle) (CDM) PES Other _____ Names: Bob Tolford, Jeff Montera - CDM

Data Item	Sample 1	Sample 2	Sample 3
Index ID	DW 10-16-02 ~~SP-119583~~ CS-09691		
Location ID	SP-119583 ~~CS-09691~~ DW 10-16-02		
Sample Group	DW 10-16-02 ~~RR~~ Railroad Spur		
Location Description (circle)	Back yard Front yard Side yard Other Stimson	Back yard Front yard Side yard Other _____	Back yard Front yard Side yard Other _____
Category (circle)	(FS) FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	(Surface Soil) Other _____	Surface Soil Other _____	Surface Soil Other _____
Type (circle)	Grab (Comp.) # subsamples 3	Grab Comp. # subsamples ____	Grab Comp. # subsamples ____
Sample Time	0913		
Top Depth (in.)	0		
Bottom Depth (in.)	6		
Field Comments	BD-_____ SA2-13 NW 10' SE 10'		
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

BT 10-15-02

10-15-02

By 10-15-02

Field Team	Initial
Completed by	BS
QC by	JM

DW 10-16-02

Sheet No.: CSS (S) - 003923

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100133 Page No: 105 Sampling Date: 10-15-02

Address: 875 US Hwy 2 South Owner: Stimson Lumber

Business Name: Stimson Lumber

Land Use: (circle) Residential School (Commercial) Mining Roadway Other ( )

Sampling Team: (circle) (CDM) PES Other _____ Names: Bob Tilford, Jeff Montera

Data Item	Sample 1	Sample 2	Sample 3
Index ID	DW 10-16-02 ~~SP-119584~~ CS-09692 BT 10-15-02	BT 10-15-02	
Location ID	SP-119584 ~~CS-09692~~ DW 10-16-02 BT 10-15-02		
Sample Group	Burlington Northern Railroad ~~RR~~ Spur		
Location Description (circle)	Back yard Front yard Side yard Other Stimson	Back yard Front yard Side yard Other _____	Back yard Front yard Side yard Other _____
Category (circle)	(FS) BT 10-15-02 FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	(Surface Soil) Other _____	Surface Soil Other _____	Surface Soil Other _____
Type (circle)	Grab (Comp.) # subsamples 3	Grab Comp. # subsamples ____	Grab Comp. # subsamples ____
Sample Time	0924		
Top Depth (in.)	0		
Bottom Depth (in.)	6		
Field Comments	BD-_____ SA2-14 NW 10' SE 10'		
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Field Team	Initial
Completed by	BT
QC by	TM

DW 10-16-02

Sheet No.: CSS (S) - 003924

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100 133 Page No: 106 Sampling Date: 10-15-02

Address: 875 US Hwy 2 South Owner: Stimson Lumber

Business Name: Stimson Lumber

Land Use: (circle) Residential School (Commercial) Mining Roadway Other ( )

Sampling Team: (circle) (CDM) PES Other _____ Names: Bob Tolford, Jeff Montera - CDM

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 09693 BT 10-15-02	CS- 09694 BT 10-15-02	
Location ID	SP- 119585	SP- 119586	
Sample Group	@ Railroad RR Spur	@ Railroad RR Spur	
Location Description (circle)	Back yard Front yard Side yard Other Stimson	Back yard Front yard Side yard Other Stimson	Back yard Front yard Side yard Other _____
Category (circle)	(FS) FD of _____ Field Blank (lot or equipment)	(FS) FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	(Surface Soil) Other _____	(Surface Soil) Other _____	Surface Soil Other _____
Type (circle)	Grab (Comp.) # subsamples 3	Grab (Comp.) # subsamples 3	Grab Comp. # subsamples ____
Sample Time	0950	0954	BT 10-15-02
Top Depth (in.)	0	0	
Bottom Depth (in.)	6	6	
Field Comments	BD-_____ SA2-11 NW 10' SE 10'	SA2-12 NW 10' SE 10'	
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Field Team	Initial
Completed by	BT
QC by	JM

DW 10-16-02

Sheet No.: CSS (S) - 003925

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100133 Page No: 107 BT 10-15-02 Sampling Date: 10-15-02

Address: 875 US Hwy 2 South Owner: Stimson Lumber

Business Name: Stimson Lumber

Land Use: (circle) Residential School (Commercial) Mining Roadway Other ( )

Sampling Team: (circle) (CDM) PES Other _____ Names: Bob Tolford, Jeff Montera

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 09695 BT 10-15-02	CS- 09696 BT 10-15-02	CS- 09697 BT 10-15-02
Location ID	SP- 119587	SP- 119588	SP- 119589
Sample Group	Burlington railroad RR spur	Burlington railroad RR spur	Burlington railroad RR Spur
Location Description (circle)	Back yard Front yard Side yard (Other) Stimson	Back yard Front yard Side yard (Other) Stimson	Back yard Front yard Side yard Other Stimson
Category (circle)	(FS) FD of _____ Field Blank (lot or equipment)	(FS) FD of _____ Field Blank (lot or equipment)	(FS) FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	(Surface Soil) Other _____	(Surface Soil) Other _____	(Surface Soil) Other _____
Type (circle)	Grab (Comp. #) subsamples 3	Grab (Comp. #) subsamples 3	Grab (Comp. #) subsamples 3
Sample Time	1043	1054	1124
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments	BD- _____ BT 10-15-02 ~~SA2-12~~ NW 10' SA2-3 SE 10'	NW 10' SA2-4 SE 10'	N 10' SA2-1 S 10'
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Field Team	Initial
Completed by	BT
QC by	JM

DW 10/16/02

Sheet No.: CSS (S) - 003926

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100133 Page No: 107 & 108 Sampling Date: 10-15-02

Address: 875 U.S. Hwy 2 South Owner: Stimson Lumber Co.

Business Name: Stimson Lumber Co.

Land Use: (circle) Residential School (Commercial) Mining Roadway Other ( )

Sampling Team: (circle) (CDM) PES Other _____ Names: Bob Tolford, Jeff Montera - CDM

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 09698 BT 10-15-02	CS- 09699 BT 10-15-02	CS- 09700 BT 10-15-02
Location ID	SP- 119590	SP- 119591	SP- 119592
Sample Group	(Former railroad) RR Spur	(Former railroad) RR Spur	(Former railroad) RR Spur
Location Description (circle)	Back yard Front yard Side yard (Other) Stimson	Back yard Front yard Side yard Other Stimson	Back yard Front yard Side yard Other Stimson
Category (circle)	(FS) ~~FD of~~ BT 10.15.02 Field Blank (lot or equipment)	(FS) FD of _____ Field Blank (lot or equipment)	(FS) FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	(Surface Soil) Other _____	(Surface Soil) Other _____	(Surface Soil) Other _____
Type (circle)	Grab (Comp. #) subsamples 3	Grab (Comp. #) subsamples 3	Grab (Comp. #) subsamples 3
Sample Time	1132	1157	1203
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments	BD-_____ SA2-2 N 10' S 10'	SA2-6 NW 10' SE 10'	SA2-5 NW 10' SE 10'
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Field Team	Initial
Completed by	BT
QC by	JM

DW 10.16.02

Sheet No.: CSS (S) - 003927

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100128 Page No: 55 Sampling Date: 10/14/02

Address: 875 US HIGHWAY 2 SOUTH Owner: STIMSON LUMBER COMPANY

Business Name: STIMSON LUMBER COMPANY

Land Use: (circle) Residential School Commercial Mining Roadway Other ( )

Sampling Team: (circle) CDM PES Other _____ Names: CHRIS WORTHINGTON, CHRIS ZELIZNAK

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 09642		
Location ID	SP- 119544		
Sample Group	~~PROPERTY~~ X 10/15/02 Leg. Storage		
Location Description (circle)	Back yard Front yard Side yard Other STIMSON	Back yard Front yard Side yard Other _____	Back yard Front yard Side yard Other _____
Category (circle)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	Surface Soil Other SUBSURFACE SOIL	Surface Soil Other _____	Surface Soil Other _____
Type (circle)	Grab Comp # subsamples 5	Grab Comp. # subsamples _____	Grab Comp. # subsamples _____
Sample Time	1515		
Top Depth (in.)	48"		
Bottom Depth (in.)	60"		
Field Comments	BD- NA WESTERN POINT WAS REFUSAL OFFSET TO EAST, COULD ONLY COLLECT SAMPLE TO 2½ FEET		
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Field Team	Initial
Completed by	CAW
QC by	CZ

10/14/02

DW 11/15/02

Sheet No.: CSS (S) - 003930

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100144 Page No: 501 RR 10/14/02 Sampling Date: 10/14/02

Address: 875 Hwy 2 So. Owner: Stimson Lumber

Business Name: NA

Land Use: (circle) Residential School Commercial Mining Roadway Other ( )

Sampling Team: (circle) CDM PES Other _____ Names: R. Roberts, S. Rokles

Data Item	Sample 1 RR 10/14/02	Sample 2	Sample 3
Index ID	CS- 09515		
Location ID	SP- 119463		
Sample Group	Lumber Yard		
Location Description (circle)	Back yard Front yard Side yard Other Stimson	Back yard Front yard Side yard Other _____	Back yard Front yard Side yard Other _____
Category (circle)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	Surface Soil Other _____	Surface Soil Other _____	Surface Soil Other _____
Type (circle)	Grab Comp. # subsamples 5	Grab Comp. # subsamples ____	Grab Comp. # subsamples ____
Sample Time	1547		
Top Depth (in.)	0		
Bottom Depth (in.)	6		
Field Comments RR 10/14/02 Moved point ~35' ~~east~~ west out of Libby Creek	BD-_____ N S E W		
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Field Team	Initial
Completed by	RR
QC by	S.R.

DW 10.15.02

- Sheet No.: CSS (S) - 003931

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100144 Page No: 52 Sampling Date: 10/14/02

Address: 875 Hwy 2 So. Owner: Stimson Lumber

Business Name: NA

Land Use: (circle) Residential School Commercial Mining Roadway Other ( )

Sampling Team: (circle) CDM PES Other _____ Names: R. Roberts, S. Robles

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 09516		
Location ID	SP- 119464		
Sample Group	Lumber Yard		
Location Description (circle)	Back yard Front yard Side yard Other Stimson	Back yard Front yard Side yard Other _____	Back yard Front yard Side yard Other _____
Category (circle)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	Surface Soil Other _____	Surface Soil Other _____	Surface Soil Other _____
Type (circle)	Grab Comp. # subsamples 5	Grab Comp. # subsamples ____	Grab Comp. # subsamples ____
Sample Time	1629		
Top Depth (in.)	0		
Bottom Depth (in.)	6		
Field Comments	BD-_____ N 10' S 10' E 10' W 10'		
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Field Team	Initial
Completed by	RR
QC by	S. R.

DW 7.15.02

Sheet No.: CSS (S) - 003932

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100144 Page No: 53 Sampling Date: 10/14/02

Address: 875 Hwy 2 So. Owner: Stimson Lumber

Business Name: NA

Land Use: (circle) Residential School Commercial Mining Roadway Other ( )

Sampling Team: (circle) CDM PES Other _____ Names: R. Roberts, S. Robles

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 09517		
Location ID	SP- 119465		
Sample Group	Lumber Yard		
Location Description (circle)	Back yard Front yard Side yard Other Stimson	Back yard Front yard Side yard Other _____	Back yard Front yard Side yard Other _____
Category (circle)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	Surface Soil Other _____	Surface Soil Other _____	Surface Soil Other _____
Type (circle)	Grab Comp. # subsamples 5	Grab Comp. # subsamples ____	Grab Comp. # subsamples ____
Sample Time	1651		
Top Depth (in.)	0		
Bottom Depth (in.)	6		
Field Comments	BD-_____ N 10' S 10' E 10' W 10'		
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Field Team	Initial
Completed by	RR
QC by	S.R.

RR 10/14/02

10/15/02

Sheet No.: CSS (S) - 003933

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100144 Page No: 54 Sampling Date: 10/14/02

Address: NA Owner: NA

Business Name: NA

Land Use: (circle) Residential School Commercial Mining Roadway Other (NA)

Sampling Team: (circle) CDM PES Other _____ Names: R. Roberts, S. Robles

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 09518		
Location ID	NA		
Sample Group	Blank		
Location Description (circle)	Back yard Front yard Side yard Other NA	Back yard Front yard Side yard Other _____	Back yard Front yard Side yard Other _____
Category (circle)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	Surface Soil Other SILICA SAND	Surface Soil Other _____	Surface Soil Other _____
Type (circle)	Grab Comp. # subsamples ____	Grab Comp. # subsamples ____	Grab Comp. # subsamples ____
Sample Time	1744		
Top Depth (in.)	NA		
Bottom Depth (in.)	NA		
Field Comments	BD- NA		
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Field Team	Initial
Completed by	RR
QC by	S.R.

DW 2.15.02

Sheet No.: CSS (S) - 003934

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100144 Page No: 56 Sampling Date: 10/15/02

Address: 875 US Hwy 2 So. Owner: Stimson Lumber

Business Name: NA

Land Use: (circle) Residential School (Commercial) Mining Roadway Other ( )

Sampling Team: (circle) (CDM) PES Other _____ Names: R. Roberts, S. Robbins

Data Item	SAI-5 Sample 1 RR 10/15/02	SAI-11 Sample 2 RR 10/15/02	SAI-6 Sample 3 RR 10/15/02
Index ID	CS- 09519	CS- 09520	CS- 09521
Location ID	SP- 119466	SP- 119467	SP- 119468
Sample Group	Former Popping Plant	Former Popping Plant	Former Popping Plant
Location Description (circle)	Back yard Front yard Side yard (Other) Stimson	Back yard Front yard Side yard (Other) Stimson	Back yard Front yard Side yard (Other) Stimson
Category (circle)	(FS) FD of _____ Field Blank (lot or equipment)	(FS) FD of _____ Field Blank (lot or equipment)	(FS) FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	(Surface Soil) Other _____	(Surface Soil) Other _____	(Surface Soil) Other _____
Type (circle)	Grab (Comp.) # subsamples 5	Grab (Comp.) # subsamples 5	Grab (Comp.) # subsamples 5
Sample Time	0914	0935	0956
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments	BD-_____ N 10' S 10' E 10' W 10'	N 6' S 6' E 6' W 6' Vehicle in the way. Subs 6' from center.	N 6' S 6' E 6' W 6' Edge of road. Moved 6' west of original center point. Subs 6' from center
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Field Team	Initial
Completed by	RR
QC by	S.R.

DW 10/16/02

Sheet No.: CSS (S) - 003935

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100144 Page No: 56 Sampling Date: 10/15/02

Address: 875 U.S. Hwy 2 So. Owner: Stimson Lumber

Business Name: NA

Land Use: (circle) Residential School Commercial Mining Roadway Other ( )

Sampling Team: (circle) CDM PES Other _____ Names: R. Roberts, S. Robles

Data Item	SA1-3 Sample 1	SA1-4 Sample 2	SA1-2 Sample 3
Index ID	CS- 09522	CS- 09523	CS- 09524
Location ID	SP- 119469	SP- 119470	SP- 119471
Sample Group	Former Popping Plant	Former Popping Plant	Former Popping Plant
Location Description (circle)	Back yard Front yard Side yard Other Stimson	Back yard Front yard Side yard Other Stimson	Back yard Front yard Side yard Other Stimson
Category (circle)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	Surface Soil Other _____	Surface Soil Other _____	Surface Soil Other _____
Type (circle)	Grab Comp. # subsamples 5	Grab Comp. # subsamples 5	Grab Comp. # subsamples 5
Sample Time	1020	1045	1131
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments	BD-_____ N 6' S 6' E 6' W 6' Small area. Subs 6' feet from center.	N 6' S 6' E 6' W 6' Original point on road. moved 14' SW. Small area. Subs. 6' from center	N 10' S 10' E 10' W 10'
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Field Team	Initial
Completed by	RR
QC by	S.R

DW 10.16.02

Sheet No.: CSS (S) - 003936

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100144 Page No: 57 Sampling Date: 10/15/02

Address: 875 U.S. Hwy 2 So. Owner: Stimson Lumber

Business Name: NA

Land Use: (circle) Residential School Commercial Mining Roadway Other ( )

Sampling Team: (circle) CDM PES Other _____ Names: R. Robuck, S. Robles

Data Item	G SA-1 Sample 1 RR 10/15/02	H SA-7 Sample 2 RR 10/15/02	I SA-8 Sample 3 RR 10/15/02
Index ID	CS- 09525	CS- 09526	CS- 09527
Location ID	SP- 119472	SP- 119473	SP- 119474
Sample Group	Former Popping Plant	Former Popping Plant	Former Popping Plant
Location Description (circle)	Back yard Front yard Side yard Other Stimson	Back yard Front yard Side yard Other Stimson	Back yard Front yard Side yard Other Stimson
Category (circle)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	Surface Soil Other _____	Surface Soil Other _____	Surface Soil Other _____
Type (circle)	Grab Comp # subsamples 5	Grab Comp # subsamples 5	Grab Comp # subsamples 5
Sample Time	1150	1220	1241
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments	BD-_____ N 10' S 10' E 10' W 10'	N 6' S 6' E 6' W 6' Between vehicles Subs 6' from center point.	N 6' S 6' E 6' W 6' Move point inside fence ~14' East. Subs 6' from center point
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Field Team	Initial
Completed by	RR
QC by	S.R

DW 10.16.02

Sheet No.: CSS (S) - 003937

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100144 Page No: 57 Sampling Date: 10/15/02

Address: 875 U.S. Hwy 2 So. Owner: Stimson Lumber

Business Name: NA

Land Use: (circle) Residential School Commercial Mining Roadway Other ( )

Sampling Team: (circle) CDM PES Other _____ Names: R. Roberts, S. Robles

Data Item	J SA1-9 Sample 1 RR 10/15/02	K SA1-10 Sample 2 RR 10/15/02	L SA1-14 Sample 3 RR 10/15/02
Index ID	CS- 09528	CS- 09529	CS- 09530
Location ID	SP- 119475	SP- 119476	SP- 119477
Sample Group	Former Popping Plant	Former Popping Plant	Former Popping Plant
Location Description (circle)	Back yard Front yard Side yard Other Stimson	Back yard Front yard Side yard Other Stimson	Back yard Front yard Side yard Other Stimson
Category (circle)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	Surface Soil Other _____	Surface Soil Other _____	Surface Soil Other _____
Type (circle)	Grab Comp. # subsamples 5	Grab Comp. # subsamples 5	Grab Comp. # subsamples 5
Sample Time	RR 10/15/02 ~~1556~~ 1256	1315	1330
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments	BD- N 10' S 10' E 10' W 10' Point outside fence. Move ~28' East onto property.	N 10' S 10' E 10' W 10' Point on road moved 20' west.	N 10' S 10' E 10' W 10' Point on road. Move 20' North
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Field Team	Initial
Completed by	RR
QC by	S.R.

DW 10.16.02

Sheet No.: CSS (S) - 003938

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100144 Page No: 57-58 Sampling Date: 10/15/02

Address: 875 U.S. Hwy 2 So. Owner: Stimson Lumber

Business Name: NA

Land Use: (circle) Residential School Commercial Mining Roadway Other ( )

Sampling Team: (circle) CDM PES Other _____ Names: R. Roberts, S Rankes

Data Item	SA1-13 Sample 1 (N) RR 10/15/02	SA1-12 Sample 2 (N) RR 10/15/02	SA1-15 Sample 3 (O) RR 10/15/02
Index ID	CS- 09531	CS- 09532	CS- 09533
Location ID	SP- 119478	SP- 119479	SP- 119480
Sample Group	Former Popping Plant	Former Popping Plant	Former Popping Plant
Location Description (circle)	Back yard Front yard Side yard Other Stimson	Back yard Front yard Side yard Other Stimson	Back yard Front yard Side yard Other Stimson
Category (circle)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	Surface Soil Other _____	Surface Soil Other _____	Surface Soil Other _____
Type (circle)	Grab Comp. # subsamples 5	Grab Comp. # subsamples 5	Grab Comp. # subsamples 5
Sample Time	1350	1403	1415
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments	BD- Point on road N 10' moved 30' NE S 10' Equidistant E 10' SA1-14 and W 10' SA1-12	N 6' Between vehicles S 6' and fence. E 6' Subs are 6' W 6' from center point.	N 10' S 10' E 10' W 10'
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Field Team	Initial
Completed by	RR
QC by	S.R.

DCW 10/16/02

Sheet No.: CSS (S) - 003939

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100144 Page No: 58 Sampling Date: 10/15/02

Address: 875 U.S. Hwy 2 So Owner: Stimson Lumber

Business Name: NA

Land Use: (circle) Residential School (Commercial) Mining Roadway Other ( )

Sampling Team: (circle) (CDM) PES Other _____ Names: R. Roberts, S. Robles

Data Item	SA1-15 Dup. Sample 1	Sample 2	Sample 3
Index ID	CS- 09534		
Location ID	SP- 119480		
Sample Group	Former Popping Plant		
Location Description (circle)	Back yard Front yard Side yard (Other) Stimson	Back yard Front yard Side yard Other _____	Back yard Front yard Side yard Other _____
Category (circle)	FS (FD) of CS-09533 Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	(Surface Soil) Other _____	Surface Soil Other _____	Surface Soil Other _____
Type (circle)	Grab (Comp) # subsamples 5	Grab Comp. # subsamples ____	Grab Comp. # subsamples ____
Sample Time	1420		
Top Depth (in.)	0		
Bottom Depth (in.)	6		
Field Comments	BD-_____ NE 10' SW 10' SE 10' NW 10'		
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Field Team	Initial
Completed by	RR
QC by	S.R.

DW 10/10/02

Sheet No.: CSS (S) - 003940

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100144 Page No: 59 Sampling Date: 10/15/02

Address: 875 U.S. Hwy 2 So Owner: Stimson Lumber

Business Name: NA

Land Use: (circle) Residential RR 10/15/02 School Commercial Mining Roadway Other ( )

Sampling Team: (circle) CDM PES Other _____ Names: R. Roberts, S. Robles

Data Item	P SA4-12 Sample 1 RR 10/15/02	Q SA4-13 Sample 2 RR 10/15/02	R SA4-11 Sample 3 RR 10/15/02
Index ID	CS- 09535	CS- 09536	CS- 09537
Location ID	SP- 119481	SP- 119482	SP- 119483
Sample Group	Log Storage Yard	Log Storage Yard	Log Storage Yard
Location Description (circle)	Back yard Front yard Side yard Other Stimson	Back yard Front yard Side yard Other Stimson	Back yard Front yard Side yard Other Stimson
Category (circle)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	Surface Soil Other _____	Surface Soil Other _____	Surface Soil Other _____
Type (circle)	Grab Comp. # subsamples 5	Grab Comp. # subsamples 5	Grab Comp # subsamples 5
Sample Time	1533	1555	1620
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments	BD-_____ N 10' S 10' E 10' W 10'	N 10' S 10' E 10' W 10' Point under logs. moved 15' West.	N 10' S 10' E 10' W 10'
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Field Team	Initial
Completed by	RR
QC by	S. R.

DW 10-16-02

Sheet No.: CSS (S) 003941

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100144 Page No: 59 Sampling Date: 10/15/02

Address: 875 U.S. Hwy 2 So. Owner: Stimson Lumber

Business Name: NA

Land Use: (circle) Residential School Commercial Mining Roadway Other ( )

Sampling Team: (circle) CDM PES Other _____ Names: R. Robert, S. Robles

Data Item	SA4-14 S Sample 1 RR 10/15/02	SA4-15 T Sample 2 RR 10/15/02	SA4-16 U Sample 3 RR 10/15/02
Index ID	CS- 09538	CS- 09539	CS- 09540
Location ID	SP- 119484	SP- 119485	SP- 119486
Sample Group	Log Storage Yard	Log Storage Yard	Log Storage Yard
Location Description (circle)	Back yard Front yard Side yard Other Stimson	Back yard Front yard Side yard Other Stimson	Back yard Front yard Side yard Other Stimson
Category (circle)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	Surface Soil Other _____	Surface Soil Other _____	Surface Soil Other _____
Type (circle)	Grab Comp # subsamples 5	Grab Comp # subsamples 5	Grab Comp # subsamples 5
Sample Time	1635	1652	1710
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments	BD-_____ N 10' S 10' E 10' W 10'	N 10' S 10' E 10' W 10'	N 10' S 10' E 10' W 10' Point is in Libby Creek. Moved 100' West and 12' North.
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Field Team	Initial
Completed by	RR
QC by	S.R.

DW 10/16/02

Sheet No.: CSS (S) - 003942

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100144 Page No: 60 Sampling Date: 10/15/02

Address: 875 US Hwy 2 So. Owner: Stimson Lumber

Business Name: NA

Land Use: (circle) Residential School Commercial Mining Roadway Other ( )

Sampling Team: (circle) CDM PES Other _____ Names: R. Roberts, S. Robles

Data Item	SA4-9 Sample 1	SA4-10 Sample 2	Sample 3
Index ID	CS- 09583	CS- 09584	
Location ID	SP- 119487	SP- 119488	
Sample Group	Log Storage Yard	Log Storage Yard	
Location Description (circle)	Back yard Front yard Side yard Other Stimson	Back yard Front yard Side yard Other Stimson	Back yard Front yard Side yard Other
Category (circle)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	Surface Soil Other _____	Surface Soil Other _____	Surface Soil Other _____
Type (circle)	Grab Comp. # subsamples 5	Grab Comp. # subsamples 5	Grab Comp. # subsamples ____
Sample Time	1723	1738	
Top Depth (in.)	0	0	
Bottom Depth (in.)	6	6	
Field Comments	BD- Point is in Libby Creek. Moved 130' west. N 10' S 10' E 10' W 10	N 10' S 10' E 10' W 10'	
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Field Team	Initial
Completed by	RL
QC by	S.R

DW 10-16-02

Sheet No.: CSS (S) - 003943

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100144 Page No: 63 Sampling Date: 10/16/02

Address: 875 U.S. Hwy 2 So. Owner: Stimson Lumber

Business Name: NA

Land Use: (circle) Residential School Commercial Mining Roadway Other ( )

Sampling Team: (circle) CDM PES Other _____ Names: R. Roberts, S. Robles

Data Item	A SA4-5 Sample 1 RR 10/16/02	B SA4-1 Sample 2 RR 10/16/02	C SA4-2 Sample 3 RR 10/16/02
Index ID	CS- 09585	CS- 09586	CS- 09587
Location ID	SP- 119489	SP- 119490	SP- 119491
Sample Group	Log Storage Yard	Log Storage Yard	Log Storage Yard
Location Description (circle)	Back yard Front yard Side yard Other Stimson	Back yard Front yard Side yard Other Stimson	Back yard Front yard Side yard Other Stimson
Category (circle)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	Surface Soil Other _____	Surface Soil Other _____	Surface Soil Other _____
Type (circle)	Grab Comp. # subsamples 5	Grab Comp. # subsamples 5	Grab Comp # subsamples 5
Sample Time	0910	1005	1016
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments	BD-_____ N 10' S 10' E 10' W 10'	N 10' S 10' E 10' W 10 Point in Libby Creek. Move 127' W onto edge of road	N 10' S 10' E 10' W 10'
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Field Team	Initial
Completed by	R.R.
QC by	S.R.

DW 10.17.02

Sheet No.: CSS (S) - 003944

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100144 Page No: 63-64 Sampling Date: 10/16/02

Address: 875 U.S. Hwy 2 So. Owner: Stimson Lumber

Business Name: NA

Land Use: (circle) Residential School Commercial Mining Roadway Other ( )

Sampling Team: (circle) CDM PES Other _____ Names: R. Roberts, S. Robles

Data Item	SA4-3 D Sample 1 RR 10/16	SA4-4 E Sample 2 RR 10/16	SA4-4 DUP Sample 3 RR 10/16
Index ID	CS- 09588	CS- 09589	CS- 09590
Location ID	SP- 119492	SP- 119493	SP- 119493
Sample Group	Log Storage Yard	Log Storage Yard	Log Storage Yard
Location Description (circle)	Back yard Front yard Side yard Other Stimson	Back yard Front yard Side yard Other Stimson	Back yard Front yard Side yard Other Stimson
Category (circle)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)	FS FD of CS-09589 Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	Surface Soil Other _____	Surface Soil Other _____	Surface Soil Other _____
Type (circle)	Grab Comp. # subsamples 5	Grab Comp. # subsamples 5	Grab Comp. # subsamples 5
Sample Time	1035	1100	1112
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments	BD-_____ N 10' S 10' E 10' W 10	N 10' S 10' E 10' W 10' Point on top of bark pile. Move 125' South	NE 10' SE 10' NW 10' SW 10'
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Field Team	Initial
Completed by	RR
QC by	S.R

DW 2.17.

Sheet No.: CSS (S) - 003945

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100144 Page No: 65 Sampling Date: 10/16/02

Address: 375 US Hwy 2 South Owner: Stimson Lumber

Business Name: Stimson Lumber

Land Use: (circle) Residential School (Commercial) Mining Roadway Other ( )

Sampling Team: (circle) (CDM) PES Other _____ Names: Saul Robles, Randy Roberts

Data Item	F SAG-2 Sample 1	G SAG-4 Sample 2	H SAG-5 Sample 3
Index ID	CS- 09591	CS- 09592	CS- 09593
Location ID	SP- 119494	SP- 119735	SP- 119736
Sample Group	Nursery	Nursery	Nursery
Location Description (circle)	Back yard Front yard Side yard Other Stimson	Back yard Front yard Side yard Other Stimson	Back yard Front yard Side yard Other Stimson
Category (circle)	(FS) FD of _____ Field Blank (lot or equipment)	(FS) FD of _____ Field Blank (lot or equipment)	(FS) FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	(Surface Soil) Other _____	(Surface Soil) Other _____	(Surface Soil) Other _____
Type (circle)	Grab (Comp. #) subsamples 5	Grab (Comp. #) subsamples 5	Grab (Comp. #) subsamples 5
Sample Time	1415	1425	1435
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments	BD-_____ N 10' S 10' E 10' W 10'	N 10' S 10' E 10' W 10'	N 10' S 10' E 10' W 10'
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Field Team	Initial
Completed by	RR
QC by	S.R.

DW 10.17.02

Sheet No.: CSS (S) - ~~003946~~

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100144 Page No: _____ Sampling Date: 10-16-02

Address: 875 US Hwy 2 South Owner: Stimson Lumber Co.

Business Name: Stimson Lumber

Land Use: (circle) Residential School (Commercial) Mining Roadway Other ( )

Sampling Team: (circle) (CDM) PES Other _____ Names: Saul Rebles, Randy Roberts

Data Item	SA6-6 Sample 1 (I)	SA6-7 Sample 2 (J)	SA6-11 Sample 3 (K)
Index ID	CS- 09594	CS- 09595	CS- 09596
Location ID	SP- 119737	SP- 119738	SP- 119739
Sample Group	Nursery	Nursery	Nursery
Location Description (circle)	Back yard Front yard Side yard (Other) Stimson	Back yard Front yard Side yard (Other) Stimson	Back yard Front yard Side yard (Other) Stimson
Category (circle)	(FS) FD of _____ Field Blank (lot or equipment)	(FS) FD of _____ Field Blank (lot or equipment)	(FS) FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	(Surface Soil) Other _____	(Surface Soil) Other _____	(Surface Soil) Other _____
Type (circle)	Grab (Comp) # subsamples 5	Grab (Comp) # subsamples 5	Grab (Comp) # subsamples 5
Sample Time	1500	1515	1510
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments	BD-_____ N 10' S 10' E 10' W 10'	N 10' S 10' E 10' W 10'	N 10' S 10' E 10' W 10'
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Field Team	Initial
Completed by	RR
QC by	S.R.

DW 10-17-02

Sheet No.: CSS (S) 003947

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100144 Page No: _____ Sampling Date: 10/16/02

Address: NA Owner: NA

Business Name: NA

Land Use: (circle) Residential School Commercial Mining Roadway Other (NA)

Sampling Team: (circle) CDM PES Other _____ Names: R. Roberts, S. Robles

Data Item	Sample 1 RR / 10/16/02	Sample 2	Sample 3
Index ID			
Location ID	NA		
Sample Group	Blank		
Location Description (circle)	Back yard Front yard Side yard Other NA	Back yard Front yard Side yard Other _____	Back yard Front yard Side yard Other _____
Category (circle)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	Surface Soil Other Water	Surface Soil Other _____	Surface Soil Other _____
Type (circle)	Grab Comp. # subsamples _____	Grab Comp. # subsamples _____	Grab Comp. # subsamples _____
Sample Time	1710		
Top Depth (in.)	NA		
Bottom Depth (in.)	NA		
Field Comments	~~BD-~~ _____ RR 10/16/02		
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Field Team	Initial
Completed by	RR
QC by	S.R.

DW 10.17.02

Sheet No.: CSS (S) - 003951

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100133 Page No: 96 Sampling Date: 10-14-02

Address: 875 US Hwy 2 South Owner: Stimson Lumber Co.

Business Name: Stimson Lumber

Land Use: (circle) Residential School Commercial Mining Roadway Other ( )

Sampling Team: (circle) CDM PES Other _____ Names: Rich Bifold, Jeff Montero

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 09682 BT 10-14-02		
Location ID	SP- 119576		
Sample Group	Lumber Yard		
Location Description (circle)	Back yard Front yard Side yard Other ~~Lumber yard~~ Stimson BT 10-14-02	Back yard Front yard Side yard Other _____	Back yard Front yard Side yard Other _____
Category (circle)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	Surface Soil Other _____	Surface Soil Other _____	Surface Soil Other _____
Type (circle)	Grab Comp. # subsamples 5	Grab Comp. # subsamples ____	Grab Comp. # subsamples ____
Sample Time	1402		
Top Depth (in.)	0"		
Bottom Depth (in.)	6"		
Field Comments	BD-_____ 10-14-02 Sta 3 ~~24~~ BT -23 N 0° E N 10° E N 90° W S 0° W all 10' from centroid.		
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

BT 10-14-02

Field Team	Initial
Completed by	BT
QC by	JM

DW 10.15.02

Sheet No.: CSS (S) - 003952

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100133 Page No: 99 Sampling Date: 10-14-02

Address: ~~Stimson Lumber~~ @ 10.14.02 / 875 US Hwy 2 S. Owner: Stimson Lumber Co.

Business Name: Stimson Lumber

Land Use: (circle) Residential School Commercial Mining Roadway Other ( )

Sampling Team: (circle) CDM PES Other _____ Names: Bob Tolford, Jeff Montera

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 09685		
Location ID	SP- 119579 BT 10-14-02	BT 10-14-02	
Sample Group	Lumber Yard		
Location Description (circle)	Back yard Front yard Side yard Other Stimson	Back yard Front yard Side yard Other _____	Back yard Front yard Side yard Other _____
Category (circle)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	Surface Soil Other _____	Surface Soil Other _____	Surface Soil Other _____
Type (circle)	Grab Comp. # subsamples 5	Grab Comp. # subsamples ____	Grab Comp. # subsamples ____
Sample Time	1527		
Top Depth (in.)	0		
Bottom Depth (in.)	6		
Field Comments	BD-_____ SA3-22 N 0° E N 90° E S 0° W S 90° W 10' from centroid		
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Field Team	Initial
Completed by	BT
QC by	JM

DW 10.15.02

Sheet No.: CSS (S) - 003953

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100133 Page No: 102 Sampling Date: 10-14-02

Address: 875 US Hwy 2 South Owner: Stimson Lumber Co.

Business Name: Stimson Lumber

Land Use: (circle) Residential School (Commercial) Mining Roadway Other ( )

Sampling Team: (circle) (CDM) PES Other _____ Names: Bob Telford, Jeff Montera

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 09689 AT 10-14-02		
Location ID	SP- 119582		
Sample Group	Lumber Yard		
Location Description (circle)	Back yard Front yard Side yard Other Stimson	Back yard Front yard Side yard Other _____	Back yard Front yard Side yard Other _____
Category (circle)	(FS) FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	(Surface Soil) Other _____	Surface Soil Other _____	Surface Soil Other _____
Type (circle)	Grab (Comp. # subsamples 5	Grab Comp. # subsamples ____	Grab Comp. # subsamples ____
Sample Time	1650		
Top Depth (in.)	0		
Bottom Depth (in.)	6		
Field Comments	BD-_____ ~~AT 10-14-02~~ AT 10-14-02 N 0° 8' E N 110° 5' E AT 10-14-02 S 10° 10' W S 100° ~~W (10')~~ 10' W AT 10-14-02		
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Field Team	Initial
Completed by	BT
QC by	JM

DW 10.15.02

Sheet No.: CSS (S) - 003954

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100133 Page No: 101 Sampling Date: 10-14-02

Address: 875 US Hwy 2 South Owner: Stimson Lumber Co.

Business Name: Stimson Lumber Co.

Land Use: (circle) Residential School Commercial Mining Roadway Other ( )

Sampling Team: (circle) CDM PES Other _____ Names: Bob Bolford, Jeff Montera

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 09688		
Location ID	SP- 119581		
Sample Group	Lumber Yard		
Location Description (circle)	Back yard Front yard Side yard Other Stimson	Back yard Front yard Side yard Other _____	Back yard Front yard Side yard Other _____
Category (circle)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	Surface Soil Other _____	Surface Soil Other _____	Surface Soil Other _____
Type (circle)	Grab Comp. # subsamples ____	Grab Comp. # subsamples ____	Grab Comp. # subsamples ____
Sample Time	1633		
Top Depth (in.)	0		
Bottom Depth (in.)	6		
Field Comments	BD-_____ SA3-12 Sample is located in parking lot that is mostly asphalt - composite not possible.		
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

BT 10-14-02

Field Team	Initial
Completed by	BT
QC by	JM

DW 10.15.02

Sheet No.: CSS (S) - 003955

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: 1A Field Logbook No: 100193 Page No: 100 Sampling Date: 10-14-02

Address: 875 US Hwy 2 S Owner: Stimson Lumber Co.

Business Name: Stimson Lumber

Land Use: (circle) Residential School Commercial Mining Roadway Other ( )

Sampling Team: (circle) CDM PES Other _____ Names: Bob Tolford, Jeff Montera

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 09686 BT 10-14-02	CS- 09687 BT 10-14-02	
Location ID	SP- 119580	SP- 119580	
Sample Group	Lumber Yard	Lumber Yard	
Location Description (circle)	Back yard Front yard Side yard Other Stimson	Back yard Front yard Side yard Other Stimson	Back yard Front yard Side yard Other
Category (circle)	FS FD of _____ Field Blank (lot or equipment)	FS FD of CS-09686 Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	Surface Soil Other _____	Surface Soil Other _____	Surface Soil Other _____
Type (circle)	Grab Comp. # subsamples 5	Grab Comp. # subsamples 5	Grab Comp. # subsamples _____
Sample Time	1554	1559	
Top Depth (in.)	0	0	
Bottom Depth (in.)	6	6	
Field Comments	BD-_____ SA3-11 N 0° 10' E N 90° 23' E S 0° 15' W S 90° 10' W	same as before ~~diff~~ 10-14-02	
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Field Team	Initial
Completed by	BT
QC by	JM

DW 10.15.02

Sheet No.: CSS (S) -003956

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100133 Page No: 98 Sampling Date: 10-14-02

Address: 875 US Hwy 2 South Owner: Stimson Lumber Co.

Business Name: Stimson Lumber

Land Use: (circle) Residential School Commercial Mining Roadway Other ( )

Sampling Team: (circle) CDM PES Other _____ Names: Bob Tolford, Jeff Montera

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 09684		
Location ID	SP- 119578 BT 10-14-02	BT 10-14-02	
Sample Group	Lumber Yard		
Location Description (circle)	Back yard Front yard Side yard Other Stimson	Back yard Front yard Side yard Other _____	Back yard Front yard Side yard Other _____
Category (circle)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	Surface Soil Other _____	Surface Soil Other _____	Surface Soil Other _____
Type (circle)	Grab Comp. # subsamples 5	Grab Comp. # subsamples ____	Grab Comp. # subsamples ____
Sample Time	1458		
Top Depth (in.)	0		
Bottom Depth (in.)	6		
Field Comments	BD-_____ N 0° 10' E SA3-14 N 90° 10' E S 0° 10' W S 90° 10' W		
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Field Team	Initial
Completed by	BT
QC by	JM

DW 10-15-02

Sheet No.: CSS (S) - ~~003957~~

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100133 Page No: 97 Sampling Date: 10-14-02

Address: 875 US Hwy 2 South Owner: Stimson Lumber Co.

Business Name: Stimson Lumber

Land Use: (circle) Residential School (Commercial) Mining Roadway Other ( )

Sampling Team: (circle) (CDM) PES Other _____ Names: Bob Tolford, Jeff Montera

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 09683 BT 10-14-02		
Location ID	SP- 119577	BT 10-14-02	
Sample Group	Lumber Yard		
Location Description (circle)	Back yard Front yard Side yard (Other) Stimson	Back yard Front yard Side yard Other _____	Back yard Front yard Side yard Other _____
Category (circle)	(FS) FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	(Surface Soil) Other _____	Surface Soil Other _____	Surface Soil Other _____
Type (circle)	Grab (Comp. # subsamples 5	Grab Comp. # subsamples ____	Grab Comp. # subsamples ____
Sample Time	1433		
Top Depth (in.)	0		
Bottom Depth (in.)	6		
Field Comments	BD-_____ SA3-13 N 20° 10' E N 110° 10' E S 20° 10' W S 110° 10' W		
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Field Team	Initial
Completed by	BT
QC by	Jm

DW 10.15.02

Sheet No.: CSS (S) - 003958

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100133 Page No: 103 Sampling Date: 10-14-02

Address: ~~875 US Hwy 2 South~~ NA Owner: N/A

BT 10-14-02

Business Name: NA

Land Use: (circle) Residential School Commercial Mining Roadway Other (NA)

Sampling Team: (circle) CDM PES Other _____ Names: Bob Tolford

Data Item	Sample 1	Sample 2	Sample 3
Index ID 10/14/02 PO	CS- 09690	BT 10-14-02	
Location ID	NA		
Sample Group	blank		
Location Description (circle)	Back yard Front yard Side yard Other N/A	Back yard Front yard Side yard Other _____	Back yard Front yard Side yard Other _____
Category (circle)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	Surface Soil Other Silica Sand	Surface Soil Other _____	Surface Soil Other _____
Type (circle)	Grab Comp. # subsamples ____	Grab Comp. # subsamples ____	Grab Comp. # subsamples ____
Sample Time	1742		
Top Depth (in.)	NA		
Bottom Depth (in.)	NA		
Field Comments	BD-_____ equipment blank from Lot # 229		
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Field Team	Initial
Completed by	BT
QC by	PO

DW 10.15.02

Sheet No.: CSS (S) - ~~003966~~

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100128 Page No: 57 Sampling Date: 10/14/02

Address: 875 US HIGHWAY 2 SOUTH Owner: STIMSON LUMBER COMPANY

Business Name: STIMSON LUMBER COMPANY

Land Use: (circle) Residential School Commercial Mining Roadway Other ( )

Sampling Team: (circle) CDM PES Other _____ Names: CHRIS WORTHINGTON
CHRIS ZELINNAK

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 09643 CAW 10/14/02		
Location ID	SP- 119545		
Sample Group	~~PROPERTY~~ QC 10/15/02 LCG	Storage	
Location Description (circle)	Back yard Front yard Side yard Other STIMSON	Back yard Front yard Side yard Other _____	Back yard Front yard Side yard Other _____
Category (circle)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	Surface Soil Other SUB SURFACE SOIL	Surface Soil Other _____	Surface Soil Other _____
Type (circle)	Grab Comp. # subsamples 5	Grab Comp. # subsamples _____	Grab Comp. # subsamples _____
Sample Time	1545 CAW 10/14/02		
Top Depth (in.)	48"		
Bottom Depth (in.)	60"		
Field Comments	BD- NA		
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Field Team	Initial
Completed by	CAW
QC by	CZ

DW 10.15.02

Sheet No.: CSS (S) - ~~003967~~

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

CAW 10/15/02

Scenario No.: NA Field Logbook No: 100128 Page No: 62 Sampling Date: 10/~~14~~ 15/02

Address: 875 US HIGHWAY 2 SOUTH Owner: STIMSON LUMBER COMPANY

Business Name: STIMSON LUMBER COMPANY

Land Use: (circle) Residential School Commercial Mining Roadway Other ( )

Sampling Team: (circle) CDM PES Other _____ Names: CHRIS WORTHINGTON
CHRIS ZELIZNAK

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS-09646		
Location ID	SP- 119546 CAW 10/15/02		
Sample Group	~~PROPERTY~~ CAW 10/15/02 ~~LOG STORAGE~~ YARD		
Location Description (circle)	Back yard Front yard Side yard Other _____	Back yard Front yard Side yard Other _____	Back yard Front yard Side yard Other _____
Category (circle)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)	FS 10/15/02 CAW FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	Surface Soil Other SUBSURFACE SOIL	Surface Soil Other _____	Surface Soil Other _____
Type (circle)	Grab Comp. # subsamples 5	Grab Comp. # subsamples _____	Grab Comp. # subsamples _____
Sample Time	0954		
Top Depth (in.)	46"		
Bottom Depth (in.)	60"		
Field Comments	BD- _____ 10/15/02 - SOUTH ~~SAMPLE POINT OFFSET ONE FOOT NORTH~~ DUE TO REFUSAL - CENTER SAMPLE POINT COLLECTED FROM ~~48"~~ 40"-52" DUE TO REFUSAL CAW 10/15/02		
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

N - 10'
S - 11'
E - 10'
W - 10'

Field Team	Initial
Completed by	CAW
QC by	CZ

DW 10/16/02

Sheet No.: CSS (S) - 003968

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100128 Page No: 59 Sampling Date: 10/14/02

Address: NA Owner: NA

Business Name: NA

Land Use: (circle) Residential School Commercial Mining Roadway Other (NA)

Sampling Team: (circle) CDM PES Other _____ Names: CHRIS WORTHINGTON
CHRIS ZELIZNAK

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS-09644	CS- 09645 CAW 10/14/02	
Location ID	NA	NA	
Sample Group	BLANK	BLANK	
Location Description (circle)	Back yard Front yard Side yard Other NA	Back yard Front yard Side yard Other NA	Back yard Front yard Side yard Other 10/14/02
Category (circle)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	Surface Soil Other SILICA SAND	Surface Soil Other SILICA SAND	Surface Soil Other
Type (circle)	Grab Comp. # subsamples ____	Grab Comp. # subsamples ____	Grab Comp. # subsamples ____
Sample Time	1800	1802	
Top Depth (in.)	NA	NA	
Bottom Depth (in.)	NA	NA	
Field Comments	BD- MACRO CORE EQUIPMENT BLANK FROM LOT # 229	BOWL & TROWEL EQUIPMENT BLANK FROM LOT # 229	
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Field Team	Initial
Completed by	CAW
QC by	CZ

DW 10.15.02

Sheet No.: CSS (S) - 003969

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100128 Page No: 63-68 9 CAW 10/15/02 Sampling Date: 10/15/02

Address: 875 US HIGHWAY 2 SOUTH Owner: STIMSON LUMBER COMPANY

Business Name: STIMSON LUMBER COMPANY

Land Use: (circle) Residential School Commercial Mining Roadway Other ( )

Sampling Team: (circle) CDM PES Other _____ Names: CHRIS WORTHINGTON, CHRIS ZELIZNAK

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 09647 CAW 10/15/02	CS- 09648 CAW 10/15/02	CS- 09649 CAW 10/15/02
Location ID	SP- 119547	SP- 119548	SP- 119549
Sample Group	SOUTH WEST AREA	SOUTH WEST AREA	LUMBER YARD
Location Description (circle)	Back yard Front yard Side yard Other STIMSON LUMBER	Back yard Front yard Side yard Other STIMSON LUMBER	Back yard Front yard Side yard Other STIMSON LUMBER
Category (circle)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	Surface Soil Other SUB SURFACE SOIL	Surface Soil Other SUB SURFACE SOIL	Surface Soil Other SUB SURFACE SOIL
Type (circle)	Grab Comp # subsamples 5	Grab Comp # subsamples 5	Grab Comp. # subsamples 5
Sample Time	1123	1222	1456
Top Depth (in.)	48"	48"	48"
Bottom Depth (in.)	60"	60"	60"
Field Comments	BD-_____ N - 10' S - 10' E - 10' W - 10'	N - 10' S - 10' E - 10' W - 10'	~~EASTERN SAMPLE POINT OFFSET ONE FOOT EASTWARD DUE TO REFUSAL~~ CAW 10/15/02 N - 10' S - 10' W - 10' E - 11'
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Field Team	Initial
Completed by	CAW
QC by	CZ

DW 10/16/02

Sheet No.: CSS (S) - ~~003970~~

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: Nit Field Logbook No: 10025 Page No: 68-73 Sampling Date: 10/15/02

Address: 875 US HIGHWAY 2 SOUTH Owner: STIMSON LUMBER COMPANY

Business Name: STIMSON LUMBER COMPANY

Land Use: (circle) Residential School Commercial Mining Roadway Other ( )

Sampling Team: (circle) CDM PES Other _____ Names: CHRIS WORTHINGTON
CHRIS ZELIZNAK

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 09650	CS- 09651	CS- 09652
	CZ 10/15/02		
Location ID	SP- 119550	SP- 119551	SP- 119552
		CZ 10/15/02	
Sample Group	LUMBER YARD	LUMBER YARD	LOG STORAGE YARD
Location Description (circle)	Back yard Front yard Side yard Other STIMSON LUMBER	Back yard Front yard Side yard Other STIMSON LUMBER	Back yard Front yard Side yard Other STIMSON LUMBER
Category (circle)	FS FD of CS-09649 Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	Surface Soil Other SUB SURFACE SOIL	Surface Soil Other SUB SURFACE SOIL	Surface Soil Other SUB SURFACE SOIL
Type (circle)	Grab Comp. # subsamples 5	Grab Comp. # subsamples 5	Grab Comp. # subsamples 5
Sample Time	1512	1621	1740
Top Depth (in.)	48"	48"	48"
Bottom Depth (in.)	60"	60"	60"
Field Comments	BD-_____ -NORTH, SOUTH CENTERS WEST SAMPLE POINT ARE OFFSET LOCT TOWARDS EAST -EAST SAMPLE POINT OFFSET 11 FEET EAST & SOUTH CAW	NORTH SAMPLE 10/15/02 POINT IS OFFSET 11 FEET OFF CENTER S - 10' E - 10' W - 10' N - 11' CAW	N - 10' S - 10' E - 10' W - ~~10~~ 11' CAW 10/15/02
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

N - 11'
S - 11'
E - 11'
W - 11

Field Team	Initial
Completed by	CAW
QC by	CZ

DW 10/16/03

Sheet No.: CSS (S) - 003972 ~~003972~~ 10/16/

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100133 Page No: 109 Sampling Date: 10-15-02

Address: 875 US Hwy. 2 South Owner: Stimson Lumber Co.

Business Name: Stimson Lumber Co.

Land Use: (circle) Residential School Commercial Mining Roadway Other ( )

Sampling Team: (circle) CDM MACTEC Other _____ Names: Bob Tolford, Jeff Montera

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 09701 BT 10-15-02	CS- 09702 BT 10-15-02	CS- 09703 BT 10-15-02
Location ID	SP- 119593	SP- 119594	SP- 119595
Sample Group	10-16-02 RR Spur	10-16-02 RR Spur	10-16-02 RR Spur
Location Description (circle)	Back yard Front yard Side yard Other Stimson	Back yard Front yard Side yard Other Stimson	Back yard Front yard Side yard Other Stimson
Category (circle)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	Surface Soil Other _____	Surface Soil Other _____	Surface Soil Other _____
Type (circle)	Grab Comp. # subsamples 3	Grab Comp. # subsamples _____	Grab Comp. # subsamples ~~3~~ 2 BT 10-15-02
Sample Time	1339	1347	1410
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments	BD-_____ SA2-7 NW 10' SE 10'	SA2-8 NW 10' SE 10'	SA2-9 NW 10' no 3rd point - asphalt road fresen
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Field Team	Initial
Completed by	BT
QC by	JM

DW 10/16/02

Sheet No.: CSS (S) - ~~003973~~

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100133 Page No: 109 & 110 Sampling Date: 10-15-02

Address: 875 U.S. Hwy 2 South Owner: Stimson Lumber Co.

Business Name: Stimson Lumber Co.

Land Use: (circle) Residential School (Commercial) Mining Roadway Other ( )

Sampling Team: (circle) (CDM) MACTEC Other _____ Names: Bob Bilford, Jeff Montera

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 09704 BT 10-15-02	CS- 09705 BT 10-15-02	CS- 09706 BT 10-15-02
Location ID	SP- 119596	SP- 119597	SP- 119598
Sample Group	RR Spur	Log Yard	Log Yard
Location Description (circle)	Back yard Front yard Side yard (Other) Stimson	Back yard Front yard Side yard (Other) Stimson	Back yard Front yard Side yard (Other) Stimson
Category (circle)	(FS) FD of _____ Field Blank (lot or equipment)	(FS) FD of _____ Field Blank (lot or equipment)	(FS) FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	(Surface Soil) Other _____	(Surface Soil) Other _____	(Surface Soil) Other _____
Type (circle)	Grab (Comp. #) subsamples 2	Grab (Comp. #) subsamples 5	Grab (Comp. #) subsamples 5
Sample Time	1416	~~1416~~ 1512	1540
Top Depth (in.)	0	BT 10-15-02 0	0
Bottom Depth (in.)	6	6	6
Field Comments	BD-_____ BT-10-15-02 SA2-~~8~~10 NW 10' 3rd point not taken due to asphalt road's presence	SA4-6 N 10' E 10' S 10' W 10'	SA4-7 NW 10' NE 10' SW 10' SE 10'
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Field Team	Initial
Completed by	BT
QC by	JM

DW 10.16.02

Sheet No.: CSS (S) -003974

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100139 Page No: 110+111 Sampling Date: 10-15-02

Address: 875 U.S. Hwy 2 South Owner: Stimson Lumber

Business Name: Stimson Lumber Co.

Land Use: (circle) Residential School Commercial Mining Roadway Other ( )

Sampling Team: (circle) CDM MACTEC Other _____ Names: Bob Tolford, Jeff Montera

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 09707	CS- 09708	
Location ID	SP- 119598	SP- 119599	
Sample Group	Log yard	Log Yard	
Location Description (circle)	Back yard Front yard Side yard Other Stimson	Back yard Front yard Side yard Other Stimson	Back yard Front yard Side yard Other _____
Category (circle)	FS FD of ~~CS-09706~~ CS-09706 Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	Surface Soil Other _____	Surface Soil Other _____	Surface Soil Other _____
Type (circle)	Grab Comp. # subsamples 5	Grab Comp. # subsamples 5	Grab Comp. # subsamples ____
Sample Time	1544	1608	
Top Depth (in.)	0	0	
Bottom Depth (in.)	6	6	
Field Comments	BD-_____ SA4-7 NW 10' NE 10' SW 10' SE 10'	SA4-8 NE 10' NW 10' SE 10' SW 10'	
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Field Team	Initial
Completed by	BT
QC by	JM

DW 10/16/02

Sheet No.: CSS (S) - 003930

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100128 Page No: 77-81 Sampling Date: 10/10/02

Address: 875 US HIGHWAY 2 SOUTH Owner: STIMSON LUMBER COMPANY

Business Name: STIMSON LUMBER COMPANY

Land Use: (circle) Residential School Commercial Mining Roadway Other ( )

Sampling Team: (circle) CDM MACTEC Other _____ Names: CHRIS WORTHINGTON CHRIS SELIZNAK

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 09653	CS- 09654	CS- 09655
Location ID	SP- 119553	SP- 119554	SP- 119555
Sample Group	LUMBER YARD	LUMBER YARD	LUMBER YARD
Location Description (circle)	Back yard Front yard Side yard Other STIMSON	Back yard Front yard Side yard Other STIMSON	Back yard Front yard Side yard Other STIMSON
Category (circle)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	Surface Soil Other SUBSURFACE SOIL	Surface Soil Other SUBSURFACE SOIL	Surface Soil Other SUBSURFACE SOIL
Type (circle)	Grab Comp. # subsamples 5	Grab Comp. # subsamples 5	Grab Comp. # subsamples 5
Sample Time	0954	1054	1220
Top Depth (in.)	48"	48"	48"
Bottom Depth (in.)	60"	60"	60"
Field Comments	BD-_____ N - 10' SOUTH SAMPLE S - 10' COLLECTED FROM E - 10' 32"-40" DUE W - 11' TO ROCK REFUSAL	N - 10' S - 10' E - 11' W - 10'	N - 10' S - 11' E - 10' W - 10'
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Field Team	Initial
Completed by	CAW
QC by	CZ

DW 10/17/02

Sheet No.: CSS (S) - ~~003981~~

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100128 Page No: 83-86 Sampling Date: 10/10/02

Address: 875 US HIGHWAY 2 SOUTH Owner: STIMSON LUMBER COMPANY

Business Name: STIMSON LUMBER COMPANY

Land Use: (circle) Residential School (Commercial) Mining Roadway Other ( )

Sampling Team: (circle) (CDM) MACTEC Other _____ Names: CHRIS WORTHINGTON
CHRIS ZELIZNIAK

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 09656	CS- 09657	CS- 09658
Location ID	SP- 119556	SP- 119557	SP- 119558
Sample Group	LUMBER YARD	FORMER POPPING PLANT	FORMER POPPING PLANT
Location Description (circle)	Back yard Front yard Side yard (Other) STIMSON	Back yard Front yard Side yard (Other) STIMSON	Back yard Front yard Side yard (Other) STIMSON
Category (circle)	(FS) FD of _____ Field Blank (lot or equipment)	(FS) FD of _____ Field Blank (lot or equipment)	(FS) FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	Surface Soil (Other) SUBSURFACE SOIL	Surface Soil (Other) SUBSURFACE SOIL	Surface Soil (Other) SUBSURFACE SOIL
Type (circle)	Grab (Comp.) # subsamples ~~5~~ 3 CAW 10/10/02	Grab (Comp.) # subsamples 3	Grab (Comp.) # subsamples 5
Sample Time	1425	1501	1555
Top Depth (in.)	48"	48"	48"
Bottom Depth (in.)	60"	60"	~~52"~~ 60" CAW 10/10/02
Field Comments	BD- _____ CAW 10/10/02 N- 10' ~~CAW 10/10/02~~ OBSTRUCTIONS S- 10' ON EAST & C- 0 WEST SIDES NO SAMPLE COLLECTED AS PER SAP	CAW 10/10/02 ~~A~~ W - 10' CAW 10/10/02 ~~S~~ E - 10' 0 - 0"	N - 10' S - 10' E - 10' W - 10'
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Field Team	Initial
Completed by	CAW
QC by	CZ

DW 10.17.02

Sheet No.: CSS (S) - ~~003983~~

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100128 Page No: 87 Sampling Date: 10/16/02

Address: 875 US HIGHWAY 2 SOUTH Owner: STIMSON LUMBER COMPANY

Business Name: STIMSON LUMBER COMPANY

Land Use: (circle) Residential School Commercial Mining Roadway Other ( )

Sampling Team: (circle) CDM MACTEC Other _____ Names: CHRIS WORTHINGTON
CHRIS ZELIZNAK

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 09659 10/16/02		
Location ID	SP- 119559		
Sample Group	FORMER POPPING PLANT		
Location Description (circle)	Back yard Front yard Side yard Other STIMSON	Back yard Front yard Side yard Other _____	Back yard Front yard Side yard Other _____
Category (circle)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	Surface Soil Other SUBSURFACE SOIL	Surface Soil Other _____	Surface Soil Other _____
Type (circle)	Grab Comp. # subsamples 5	Grab Comp. # subsamples _____	Grab Comp. # subsamples _____
Sample Time	1650		
Top Depth (in.)	48"		
Bottom Depth (in.)	60"		
Field Comments	BD- _____ N - 10' S - 10' E - 10' W - 10'		
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Field Team	Initial
Completed by	CAW
QC by	CZ

10/16/02

DW 17.02

Sheet No.: CSS (S) - ~~003984~~

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100128 Page No: 92-94 10/17/02 CRW Sampling Date: 10/17/02

Address: 815 US HIGHWAY 2 SOUTH Owner: STIMSON LUMBER COMPANY

Business Name: STIMSON LUMBER COMPANY

Land Use: (circle) Residential School Commercial Mining Roadway Other ( )

Sampling Team: (circle) CDM MACTEC Other _____ Names: CHRIS WORTHINGTON CHRIS ZELIZNAK

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 09660 CRW 10/17/02	CS- 09661 CRW 10/17/02	CS- 09662 CRW 10/17/02
Location ID	SP- 119560	SP- 119560	SP- 119561
Sample Group	FORMER POPPING PLANT	FORMER POPPING PLANT	FORMER POPPING PLANT
Location Description (circle)	Back yard Front yard Side yard Other STIMSON	Back yard Front yard Side yard Other STIMSON	Back yard Front yard Side yard Other STIMSON
Category (circle)	FS FD of _____ Field Blank (lot or equipment)	FS FD of CS-09660 Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	Surface Soil Other SUBSURFACE SOIL	Surface Soil Other SUBSURFACE SOIL	Surface Soil Other SUBSURFACE SOIL
Type (circle)	Grab Comp. # subsamples 5	Grab Comp. # subsamples 5	Grab Comp. # subsamples 5
Sample Time	1001	1030	1032
Top Depth (in.)	48"	48"	48"
Bottom Depth (in.)	60"	60"	60"
Field Comments	BD-_____ N - 10' S - 10' E - 11' W - 10'	N - 10' S - 10' E - 11' W - 10'	N - 10' S - 10' E - 10' W - 9'
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Field Team	Initial
Completed by	CRW
QC by	CX

DW 10.18.02

Sheet No.: CSS (S) - ~~003985~~

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100128 Page No: 95-98 Sampling Date: 10/16/02

Address: 875 US HIGHWAY 2 SOUTH Owner: STIMSON LUMBER COMPANY

Business Name: STIMSON LUMBER COMPANY

Land Use: (circle) Residential School Commercial Mining Roadway Other ( )

Sampling Team: (circle) CDM MACTEC Other _____ Names: CHRIS WORTHINGTON
CHRIS ZELIZNAK

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 09663 10/17/02	CS- 09664 10/17/02	CS- 09665 10/17/02
Location ID	SP- 119562	SP- 119563	SP- 119564
Sample Group	FORMER POPPING PLANT	FORMER TREE NURSERY	FORMER TREE NURSERY
Location Description (circle)	Back yard Front yard Side yard Other STIMSON	Back yard Front yard Side yard Other STIMSON	Back yard Front yard Side yard Other STIMSON
Category (circle)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	Surface Soil Other SUBSURFACE SOIL	Surface Soil Other SUBSURFACE SOIL	Surface Soil Other SUBSURFACE SOIL
Type (circle)	Grab Comp. # subsamples 5	Grab Comp. # subsamples 5	Grab Comp. # subsamples 5
Sample Time	1133	1406	1452
Top Depth (in.)	48"	48"	48"
Bottom Depth (in.)	60"	60"	60"
Field Comments	BD-_____ N - 10' S - 10' E - 10' W - 10'	N - 10' S - 10' E - 10' W - 10'	N - 10' S - 10' E - 10' W - 10'
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Field Team	Initial
Completed by	CAW
QC by	CZ

DW 10.18.02

Sheet No.: CSS (S) - ~~003986~~

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

CAW 10/17/02

Scenario No.: NA Field Logbook No: 100128 Page No: 49-101 Sampling Date: 10/16/17/02

Address: 875 US HIGHWAY 2 SOUTH Owner: STIMSON LUMBER COMPANY

Business Name: STIMSON LUMBER COMPANY

Land Use: (circle) Residential School Commercial Mining Roadway Other ( )

Sampling Team: (circle) CDM MACTEC Other _____ Names: C. WORTHINGTON C. ZELIZNAK

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 09666	CS- 09667	CS- 09668
Location ID	SP- 119565	SP- 119566	SP- 119567
Sample Group	FORMER TREE NURSERY	FORMER TREE NURSERY	FORMER TREE NURSERY
Location Description (circle)	Back yard Front yard Side yard Other STIMSON	Back yard Front yard Side yard Other STIMSON	Back yard Front yard Side yard Other STIMSON
Category (circle)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	Surface Soil Other SUBSURFACE SOIL	Surface Soil Other SUBSURFACE SOIL	Surface Soil Other SUBSURFACE SOIL
Type (circle)	Grab Comp. # subsamples 5	Grab Comp. # subsamples 5	Grab Comp. # subsamples 5
Sample Time	1533	1622	1712
Top Depth (in.)	48"	48"	48"
Bottom Depth (in.)	60"	60"	60"
Field Comments	BD-_____ N-10' S-10' E-10' W-10'	N-10' S-10' E-10' W-10'	N-10' S-10' E-10' W-10'
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Field Team	Initial
Completed by	CAW
QC by	CZ

DCW 10/18/02

Sheet No.: CSS (S) - ~~003987~~

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100128 Page No: 102 Sampling Date: 10/17/02

Address: NA Owner: NA

Business Name: NA

Land Use: (circle) Residential School Commercial Mining Roadway Other (NA)

Sampling Team: (circle) CDM MACTEC Other _____ Names: CHRIS WORTHINGTON
CHRIS ZELIZNAK

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 09669 10/17/02	CS- 09670	
Location ID	NA	NA	
Sample Group	BLANK	BLANK	
Location Description (circle)	Back yard Front yard Side yard Other NA	Back yard Front yard Side yard Other NA	Back yard Front yard Side yard Other
Category (circle)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	Surface Soil Other SILICA SAND	Surface Soil Other SILICA SAND	Surface Soil Other
Type (circle)	Grab Comp. # subsamples ____	Grab Comp. # subsamples ____	Grab Comp. # subsamples ____
Sample Time	1749	1746	
Top Depth (in.)	NA	NA	
Bottom Depth (in.)	NA	NA	
Field Comments	BD-_____ EQUIPMENT BLANK FROM TROWEL & BOWL LOT #	EQUIPMENT BLANK FROM MACRO BORE LINER LOT #	
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Field Team	Initial
Completed by	CRW
QC by	CZ

DW 10.18.02

Sheet No.: CSS_(S) - 003988

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100128 Page No: 105-107 Sampling Date: 10/18/02

Address: 875 US HIGHWAY 2 SOUTH Owner: STIMSON LUMBER COMPANY

Business Name: STIMSON LUMBER COMPANY

Land Use: (circle) Residential School Commercial Mining Roadway Other ( )

Sampling Team: (circle) CDM MACTEC Other _____ Names: CHRIS WORTHINGTON CHRIS ZELIZNIAK

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 09671	CS- 09672	CS- 09673
Location ID	SP- 119568	SP- 119569	SP- 119569
Sample Group	FORMER TREE NURSERY	FORMER TREE NURSERY	FORMER TREE NURSERY
Location Description (circle)	Back yard Front yard Side yard Other STIMSON	Back yard Front yard Side yard Other STIMSON	Back yard Front yard Side yard Other STIMSON
Category (circle)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)	FS FD of CS-09672 Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	Surface Soil Other SUB SURFACE SOIL	Surface Soil Other SUB SURFACE SOIL	Surface Soil Other SUB SURFACE SOIL
Type (circle)	Grab Comp. # subsamples 5	Grab Comp. # subsamples 5	Grab Comp. # subsamples 5
Sample Time	1029	1131	1200
Top Depth (in.)	48"	48"	48"
Bottom Depth (in.)	60"	60"	60"
Field Comments	BD-_____ N- 10' S- 10' E- 10' W- 10'	N- 10' S- 10' E- 10' W- 10'	N- 11' S- 11' E- 11' W- 9'
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Field Team	Initial
Completed by	CAW
QC by	CZ

DW 10.21.02

Sheet No.: CSS (S) - 003994

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: N/A Field Logbook No: 170146 Page No: 40,41,42 Sampling Date: 10-15-02

Address: 875 U.S HWY 2 South Owner: STIMSON LUMBER

Business Name: STIMSON LUMBER

Land Use: (circle) Residential School Commercial Mining Roadway Other ( )

Sampling Team: (circle) CDM MACTEC Other _____ Names: VICTOR CONTRERAS, WALTER SMITH

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 09297 WS 10-15-02	CS- 09298 WS 10-15-02	CS- 09299 WS 10-15-02
Location ID	SP- 119534	SP- 119535	SP- 119536
Sample Group	Southwest AREA	FORMER TREE NURSERY ~~Southwest AREA~~ WS 10-15-02	FORMER TREE NURSERY ~~Southwest AREA~~ WS 10-15-02
Location Description (circle)	Back yard Front yard Side yard Other STIMSON	Back yard Front yard Side yard Other STIMSON	Back yard Front yard Side yard Other STIMSON
Category (circle)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	Surface Soil Other _____	Surface Soil Other _____	Surface Soil Other _____
Type (circle)	Grab Comp. # subsamples 5	Grab Comp. # subsamples 5	Grab Comp. # subsamples 5
Sample Time	1435	1510	1523
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments	BD- N/A SA5-14 N' = 10' E' = 10' S' = 10' W' = 10'	WS 10-15-02 ~~SA5-21~~ SA6-3 N' = 10' E' = 10' S' = 10' W' ~~10~~ 7' WS 10-15-02	WS 10-15-02 ~~SA5-22~~ SA6-8 N' = 10' E' = 10' S' = 10' W' = 10' MOVED SAMPLE LOCATION 63' TO THE EAST.
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Field Team	Initial
Completed by	WS
QC by	VC

VOID

VOID

10/16

DW 10-16-02

Sheet No.: CSS (S) - 003995

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: N/A Field Logbook No: 100146 Page No: 43,44,45 Sampling Date: 10-15-02

Address: 875 US HWY 2 SOUTH Owner: STIMSON LUMBER

Business Name: STIMSON LUMBER

Land Use: (circle) Residential School (Commercial) Mining Roadway Other ( )

Sampling Team: (circle) (CDM) MACTEC Other _____ Names: VICTOR CONTRERAS, WALTER SMITH

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 09300 WS 10-15-02	CS- 09301 WS 10-15-02	CS- 09302 WS 10-15-02
Location ID	SP- 119537	SP- 119538	SP- 119539
Sample Group	FORMER MGE NURSERY	LOG YARD	LOG YARD
Location Description (circle)	Back yard Front yard Side yard (Other) STIMSON	Back yard Front yard Side yard (Other) STIMSON	Back yard Front yard Side yard (Other) STIMSON
Category (circle)	(FS) FD of _____ Field Blank (lot or equipment)	(FS) FD of _____ Field Blank (lot or equipment)	(FS) FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	(Surface Soil) Other _____	(Surface Soil) Other _____	(Surface Soil) Other _____
Type (circle)	Grab (Comp.) # subsamples 5	Grab (Comp.) # subsamples 5	Grab (Comp.) # subsamples 5
Sample Time	1540	1608	1630
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments	BD- N/A SA6-1 N: 10' E: 10' S: 10' W: 10'	SA4-17 N: 10' E: 10' S: 10' W: 10	SA4-18 MOVED SAMPLE LOCATION 5' TO THE NORTH N: 10' E: 10' S: 10' W: 10'
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Field Team	Initial
Completed by	W.S.
QC by	V.C.

DW 10-02

Sheet No.: CSS (S) - 003996

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: N/A Field Logbook No: 100146 Page No: 46, 47 Sampling Date: 10-15-02

Address: 875 U.S. HWY 2 SOUTH Owner: STIMSON LUMBER

Business Name: STIMSON LUMBER

Land Use: (circle) Residential School Commercial Mining Roadway Other ( )

Sampling Team: (circle) CDM MACTEC Other _____ Names: VICTOR CONTRERAS, WALTER SMITH

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 09303 WS 10-15-02	CS- 09304 WS 10-15-02	
Location ID	SP- 119540 WS 10-15-02	SP- 119541 WS 10-15-02	
Sample Group	LOG YARD	LOG YARD	
Location Description (circle)	Back yard Front yard Side yard Other STIMSON	Back yard Front yard Side yard Other STIMSON	Back yard Front yard Side yard Other
Category (circle)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	Surface Soil Other _____	Surface Soil Other _____	Surface Soil Other _____
Type (circle)	Grab Comp. # subsamples 5	Grab Comp. # subsamples 5	Grab Comp. # subsamples
Sample Time	1646	WS 10-15-02 1705	
Top Depth (in.)	0	0	
Bottom Depth (in.)	6	6	
Field Comments	BD- N/A SA4-19 N' = 10' E' = 10' S' = 10' W' = 10'	SA4-20 N' = 10' E' = 10' S' = 10' W' = 10'	
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Field Team	Initial
Completed by	WS
QC by	VC

Sheet No.: CSS (S) - 003997

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: N/A Field Logbook No: 100176 Page No: 48 Sampling Date: 10-15-02

Address: N/A Owner: N/A

Business Name: N/A

Land Use: (circle) Residential School Commercial Mining Roadway Other (N/A)

Sampling Team: (circle) CDM MACTEC Other _____ Names: VICTOR CONTRERAS, WALTER SMITH

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 09305		
Location ID	N/A		
Sample Group	BLANK		
Location Description (circle)	Back yard Front yard Side yard Other N/A	Back yard Front yard Side yard Other _____	Back yard Front yard Side yard Other _____
Category (circle)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	Surface Soil Other SILICA SAND	Surface Soil Other _____	Surface Soil Other _____
Type (circle)	Grab Comp. # subsamples ____	Grab Comp. # subsamples ____	Grab Comp. # subsamples ____
Sample Time	1730		
Top Depth (in.)	N/A		
Bottom Depth (in.)	N/A		
Field Comments	BD-EQUIPMENT BLANK		
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Field Team	Initial
Completed by	W.S.
QC by	V.C.

DW 10.16.02

Sheet No.: CSS (S) - 003998

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: N/A Field Logbook No: 100146 Page No: 50,51 Sampling Date: 10-16-03

Address: 825 CLS. HWY 2 SOUTH Owner: STIMSON LUMBER

Business Name: STIMSON LUMBER

Land Use: (circle) Residential School (Commercial) Mining Roadway Other ( )

Sampling Team: (circle) (CDM) MACTEC Other _____ Names: VICTOR CONTIGIANI, WALTER SMITH

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 09306 10-16-03	CS- 09307 10-16-03	CS- 09308 10-16-03
Location ID	SP- 119542 10-16-03	SP- 119542 10-16-03	SP- 119655 10-16-03
Sample Group	LOG YARD	LOG YARD	LOG YARD
Location Description (circle)	Back yard Front yard Side yard (Other) STIMSON	Back yard Front yard Side yard (Other) STIMSON	Back yard Front yard Side yard (Other) STIMSON
Category (circle)	(FS) FD of _____ Field Blank (lot or equipment)	FS (FD of CS-09306) Field Blank (lot or equipment)	(FS) FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	(Surface Soil) Other _____	(Surface Soil) Other _____	(Surface Soil) Other _____
Type (circle)	Grab (Comp) # subsamples 5	Grab (Comp) # subsamples 5	Grab (Comp) # subsamples 5
Sample Time	0920	0930	0944
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments	BD- N/A SA4-23 N' = 10' E' = 10' S' = 10' W' = 10'	SA4-23 DUPLICATE N' = 10' E' = 10' S' = 10' W' = 10'	SA4-22 N' = 10' E' = 10' S' = 10' W' = 10'
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Field Team	Initial
Completed by	WS
QC by	VC.

DW 10-17

Sheet No.: CSS (S) ~~003999~~

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: N/A Field Logbook No: 100146 Page No: 53, 53, 54 Sampling Date: 10.16.02

Address: 875 ~~STIM~~ U.S. HWY 2 SOUTH Owner: STIMSON LUMBER

Business Name: STIMSON LUMBER

Land Use: (circle) Residential School Commercial Mining Roadway Other ( )

Sampling Team: (circle) CDM MACTEC Other _____ Names: VICTOR CONTRERAS, WALTER SMITH

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 09309	CS- 09310	CS- 09311
Location ID	SP- 119656	SP- 119657	SP- 119658
Sample Group	COG YARD	COG YARD	COG YARD
Location Description (circle)	Back yard Front yard Side yard Other STIMSON	Back yard Front yard Side yard Other STIMSON	Back yard Front yard Side yard Other STIMSON
Category (circle)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	Surface Soil Other _____	Surface Soil Other _____	Surface Soil Other _____
Type (circle)	Grab Comp. # subsamples 5	Grab Comp. # subsamples 5	Grab Comp. # subsamples 5
Sample Time	1025	1047	1116
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments	BD- N/A SA4-21 N' = 10' E' = 10' S' = 10' W' = 10'	SA4-25 N' = 10' E' = 10' S' = 10' W' = 10'	SA4-24 N' = 10' E' = 10' S' = 10' W' = 10'
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Field Team	Initial
Completed by	W.S
QC by	V.C.

DW 10.17.02

Sheet No.: CSS (S) 004000

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: N/A Field Logbook No: 100146 Page No: 55,56,57 Sampling Date: 10 16 02

Address: 875 US HWY 2 SOUTH Owner: STIMSON LUMBER

Business Name: STIMSON LUMBER

Land Use: (circle) Residential School (Commercial) Mining Roadway Other ( )

Sampling Team: (circle) (CDM) MACTEC Other _____ Names: VICTOR CONTRERAS, WALTER SMITH

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 09312 WS 10/16/02	CS- 09313 WS 10/16/02	CS- 09314 WS 10/16/02
Location ID	SP- 119659	SP- 119660	SP- 119661
Sample Group	COE YARD	FORMER TREE NURSERY	FORMER TREE NURSERY
Location Description (circle)	Back yard Front yard Side yard (Other) STIMSON	Back yard Front yard Side yard (Other) STIMSON	Back yard Front yard Side yard (Other) STIMSON
Category (circle)	(FS) FD of _____ Field Blank (lot or equipment)	(FS) FD of _____ Field Blank (lot or equipment)	(FS) FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	(Surface Soil) Other _____	(Surface Soil) Other _____	(Surface Soil) Other _____
Type (circle)	Grab (Comp.) # subsamples 5	Grab (Comp.) # subsamples 5	Grab (Comp.) # subsamples 5
Sample Time	1318	1347	1405
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments	BD- N/A SA4-26 N.' = 10' E.' = 10' S.' = 10' W.' = 10'	SA6-10 N.' = 10' E.' = 10' S.' = 10' W.' = 10'	SA6-12 N.' = 10' E.' = 10' S.' = 10' W.' = 10'
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Field Team	Initial
Completed by	W.S.
QC by	V.C.

DW 10.17.02

Sheet No.: CSS (S) ~~004001~~

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: N/A Field Logbook No: 100146 Page No: 58 Sampling Date: 10-16-02

Address: 875 US HWY 2 SOUTH Owner: STIMSON LUMBER

Business Name: STIMSON LUMBER

Land Use: (circle) Residential School (Commercial) Mining Roadway Other ( )

Sampling Team: (circle) (CDM) MACTEC Other _____ Names: VICTOR CONTRERAS, WALTER SMITH

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 09315 WS 10-16-02	CS- 09316 WS 10-16-02	
Location ID	SP- 119662	SP- 119663	
Sample Group	FORMER TREE NURSERY	FORMER TREE NURSERY	
Location Description (circle)	Back yard Front yard Side yard (Other) STIMSON	Back yard Front yard Side yard (Other) STIMSON	Back yard Front yard Side yard Other
Category (circle)	(FS) FD of _____ Field Blank (lot or equipment)	(FS) FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	(Surface Soil) Other _____	(Surface Soil) Other _____	Surface Soil Other _____
Type (circle)	Grab (Comp.) # subsamples 5	Grab (Comp.) # subsamples 5	Grab Comp. # subsamples
Sample Time	1422	1444	
Top Depth (in.)	0	0	
Bottom Depth (in.)	6	6	
Field Comments	BD- N/A SA6-13 N.' = 10' E.' = 10' S.' = 10' W.' = 10'	SA6-14 MOVED SAMPLE 85' NORTH. WS N.' = 10' E.' = 10' S.' = 10' W.' = ~~8'~~ 7' WS 10-16-02	
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Field Team	Initial
Completed by	WS
QC by	VC

OW 10.17.02

Sheet No.: CSS (S) - 004002

CONTAMINANT SCREENING STUDY

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: N/A Field Logbook No: 100146 Page No: 100 Sampling Date: 10-16-02

Address: N/A Owner: N/A

Business Name: N/A

Land Use: (circle) Residential School Commercial Mining Roadway Other (N/A)

Sampling Team: (circle) CDM MACTEC Other _____ Names: VICTOR CONTRERAS, WALTER SMITH

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 09317 3.5 10-16-02		
Location ID	N/A		
Sample Group	BLANK		
Location Description (circle)	Back yard Front yard Side yard Other N/A	Back yard Front yard Side yard Other _____	Back yard Front yard Side yard Other _____
Category (circle)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	Surface Soil Other SILICA SAND	Surface Soil Other _____	Surface Soil Other _____
Type (circle)	Grab Comp. # subsamples ____	Grab Comp. # subsamples ____	Grab Comp. # subsamples ____
Sample Time	1705		
Top Depth (in.)	N/A		
Bottom Depth (in.)	N/A		
Field Comments	BD- EQUIPMENT BLANK		
	Entered ___ Validated ___	Entered ___ Validated ___	Entered ___ Validated ___

Field Team	Initial
Completed by	WS
QC by	VC

DW 10-17-02

vs 091002

Note: The report excludes all Lab QC results, such as those associated with Lab Blanks, Lab Duplicates, Re-Preparation, Re-count Same, Re-count Different, Verified Analysis, etc.

Sample ID	Parent ID	Scenario	Property Group (Location)	Sample Group	Location Description (Sub Location)	Media Type	Matrix	Category	Sample Date	PLM Method	PLM LA Bin	PLM LA (%)	PLM C (%)
CS-08295-C		N/A	875 Highway 2 S - Stimson Lumber	Lumber Yard	Stimpson	Soil-Like	Surface soil	Field Sample	10/14/2002	PLM-Grav	A	ND	ND
CS-08295-FG		N/A	875 Highway 2 S - Stimson Lumber	Lumber Yard	Stimpson	Soil-Like	Surface soil	Field Sample	10/14/2002	PLM-VE	A	ND	ND
CS-08296-C		N/A	875 Highway 2 S - Stimson Lumber	Lumber Yard	Stimpson	Soil-Like	Surface soil	Field Sample	10/14/2002	PLM-Grav	A	ND	ND
CS-08296-FG		N/A	875 Highway 2 S - Stimson Lumber	Lumber Yard	Stimpson	Soil-Like	Surface soil	Field Sample	10/14/2002	PLM-VE	A	ND	ND
CS-08297-C		N/A	875 Highway 2 S - Stimson Lumber	Lumber Yard	Stimpson	Soil-Like	Surface soil	Field Sample	10/14/2002	PLM-Grav	A	ND	ND
CS-08297-FG		N/A	875 Highway 2 S - Stimson Lumber	Lumber Yard	Stimpson	Soil-Like	Surface soil	Field Sample	10/14/2002	PLM-VE	A	ND	ND
CS-08298-F		N/A	875 Highway 2 S - Stimson Lumber	Lumber Yard	Stimpson	Soil-Like	Surface soil	Field Sample	10/14/2002	PLM-VE	A	ND	ND
CS-08299-C		N/A	875 Highway 2 S - Stimson Lumber	Lumber Yard	Stimpson	Soil-Like	Surface soil	Field Sample	10/14/2002	PLM-Grav	A	ND	ND
CS-08299-FG		N/A	875 Highway 2 S - Stimson Lumber	Lumber Yard	Stimpson	Soil-Like	Surface soil	Field Sample	10/14/2002	PLM-VE	A	ND	ND
CS-08300-C		N/A	875 Highway 2 S - Stimson Lumber	Lumber Yard	Stimpson	Soil-Like	Surface soil	Field Sample	10/14/2002	PLM-Grav	A	ND	ND
CS-08300-FG		N/A	875 Highway 2 S - Stimson Lumber	Lumber Yard	Stimpson	Soil-Like	Surface soil	Field Sample	10/14/2002	PLM-VE	A	ND	ND
CS-09281-F		N/A	875 Highway 2 S - Stimson Lumber	Lumber Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/14/2002	PLM-VE	A	ND	ND
CS-09282-F		N/A	875 Highway 2 S - Stimson Lumber	Lumber Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/14/2002	PLM-VE	A	ND	ND
CS-09284-C		N/A	875 Highway 2 S - Stimson Lumber	Southwest Area	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-Grav	A	ND	ND
CS-09284-FG		N/A	875 Highway 2 S - Stimson Lumber	Southwest Area	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-VE	A	ND	ND
CS-09285-C		N/A	875 Highway 2 S - Stimson Lumber	Southwest Area	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-Grav	A	ND	ND
CS-09285-FG		N/A	875 Highway 2 S - Stimson Lumber	Southwest Area	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-VE	A	ND	ND
CS-09286-C		N/A	875 Highway 2 S - Stimson Lumber	Southwest Area	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-Grav	A	ND	ND
CS-09286-FG		N/A	875 Highway 2 S - Stimson Lumber	Southwest Area	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-VE	A	ND	ND
CS-09287-C	CS-09286	N/A	875 Highway 2 S - Stimson Lumber	Southwest Area	Stimson	Soil-Like	Surface soil	Field Duplicate	10/15/2002	PLM-Grav	A	ND	ND
CS-09287-FG	CS-09286	N/A	875 Highway 2 S - Stimson Lumber	Southwest Area	Stimson	Soil-Like	Surface soil	Field Duplicate	10/15/2002	PLM-VE	A	ND	ND
CS-09288-C		N/A	875 Highway 2 S - Stimson Lumber	Southwest Area	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-Grav	A	ND	ND
CS-09288-FG		N/A	875 Highway 2 S - Stimson Lumber	Southwest Area	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-VE	A	ND	ND
CS-09289-C		N/A	875 Highway 2 S - Stimson Lumber	Southwest Area	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-Grav	A	ND	ND
CS-09289-FG		N/A	875 Highway 2 S - Stimson Lumber	Southwest Area	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-VE	A	ND	ND
CS-09290-C		N/A	875 Highway 2 S - Stimson Lumber	Southwest Area	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-Grav	A	ND	ND
CS-09290-FG		N/A	875 Highway 2 S - Stimson Lumber	Southwest Area	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-VE	A	ND	ND
CS-09291-C		N/A	875 Highway 2 S - Stimson Lumber	Southwest Area	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-Grav	A	ND	ND
CS-09291-FG		N/A	875 Highway 2 S - Stimson Lumber	Southwest Area	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-VE	A	ND	ND
CS-09292-C		N/A	875 Highway 2 S - Stimson Lumber	Southwest Area	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-Grav	A	ND	ND
CS-09292-FG		N/A	875 Highway 2 S - Stimson Lumber	Southwest Area	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-VE	A	ND	ND
CS-09293-C		N/A	875 Highway 2 S - Stimson Lumber	Southwest Area	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-Grav	A	ND	ND
CS-09293-FG		N/A	875 Highway 2 S - Stimson Lumber	Southwest Area	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-VE	A	ND	ND
CS-09294-C		N/A	875 Highway 2 S - Stimson Lumber	Southeast Area	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-Grav	A	ND	ND
CS-09294-FG		N/A	875 Highway 2 S - Stimson Lumber	Southeast Area	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-VE	B1	TR	ND
CS-09295-C		N/A	875 Highway 2 S - Stimson Lumber	Southwest Area	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-Grav	A	ND	ND
CS-09295-FG		N/A	875 Highway 2 S - Stimson Lumber	Southwest Area	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-VE	A	ND	ND
CS-09296-C		N/A	875 Highway 2 S - Stimson Lumber	Southwest Area	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-Grav	A	ND	ND
CS-09296-FG		N/A	875 Highway 2 S - Stimson Lumber	Southwest Area	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-VE	A	ND	ND
CS-09297-C		N/A	875 Highway 2 S - Stimson Lumber	Southwest Area	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-Grav	A	ND	ND
CS-09297-FG		N/A	875 Highway 2 S - Stimson Lumber	Southwest Area	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-VE	A	ND	ND
CS-09300-C		N/A	875 Highway 2 S - Stimson Lumber		Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-Grav	A	ND	ND
CS-09300-FG		N/A	875 Highway 2 S - Stimson Lumber		Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-VE	A	ND	ND
CS-09301-C		N/A	875 Highway 2 S - Stimson Lumber	Log Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-Grav	A	ND	ND
CS-09301-FG		N/A	875 Highway 2 S - Stimson Lumber	Log Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-VE	A	ND	ND
CS-09302-C		N/A	875 Highway 2 S - Stimson Lumber	Log Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-Grav	A	ND	ND
CS-09302-FG		N/A	875 Highway 2 S - Stimson Lumber	Log Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-VE	A	ND	ND
CS-09303-C		N/A	875 Highway 2 S - Stimson Lumber	Log Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-Grav	A	ND	ND
CS-09303-FG		N/A	875 Highway 2 S - Stimson Lumber	Log Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-VE	A	ND	ND
CS-09304-C		N/A	875 Highway 2 S - Stimson Lumber	Log Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-Grav	A	ND	ND
CS-09304-FG		N/A	875 Highway 2 S - Stimson Lumber	Log Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-VE	A	ND	ND
CS-09306-C		N/A	875 Highway 2 S - Stimson Lumber	Log Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/16/2002	PLM-Grav	A	ND	ND
CS-09306-FG1		N/A	875 Highway 2 S - Stimson Lumber	Log Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/16/2002	PLM-VE	A	ND	ND
CS-09307-C	CS-09306	N/A	875 Highway 2 S - Stimson Lumber	Log Yard	Stimson	Soil-Like	Surface soil	Field Duplicate	10/16/2002	PLM-Grav	A	ND	ND
CS-09307-FG1	CS-09306	N/A	875 Highway 2 S - Stimson Lumber	Log Yard	Stimson	Soil-Like	Surface soil	Field Duplicate	10/16/2002	PLM-VE	A	ND	ND
CS-09308-C		N/A	875 Highway 2 S - Stimson Lumber	Log Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/16/2002	PLM-Grav	A	ND	ND
CS-09308-FG1		N/A	875 Highway 2 S - Stimson Lumber	Log Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/16/2002	PLM-VE	A	ND	ND
CS-09309-C		N/A	875 Highway 2 S - Stimson Lumber	Log Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/16/2002	PLM-Grav	A	ND	ND
CS-09309-FG1		N/A	875 Highway 2 S - Stimson Lumber	Log Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/16/2002	PLM-VE	A	ND	ND

Criteria:

Soil-Like & Sediment

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Sample ID	Parent ID	Scenario	Property Group (Location)	Sample Group	Location Description (Sub Location)	Media Type	Matrix	Category	Sample Date	PLM Method	PLM LA Bin	PLM LA (%)	PLM C (%)
CS-09310-C		N/A	875 Highway 2 S - Stimson Lumber	Log Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/16/2002	PLM-Grav	A	ND	ND
S-09310-FG1		N/A	875 Highway 2 S - Stimson Lumber	Log Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/16/2002	PLM-VE	A	ND	ND
S-09311-C		N/A	875 Highway 2 S - Stimson Lumber	Log Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/16/2002	PLM-Grav	A	ND	ND
CS-09311-FG1		N/A	875 Highway 2 S - Stimson Lumber	Log Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/16/2002	PLM-VE	A	ND	ND
S-09312-C		N/A	875 Highway 2 S - Stimson Lumber	Log Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/16/2002	PLM-Grav	A	ND	ND
S-09312-FG1		N/A	875 Highway 2 S - Stimson Lumber	Log Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/16/2002	PLM-VE	A	ND	ND
CS-09313-C		N/A	875 Highway 2 S - Stimson Lumber		Stimson	Soil-Like	Surface soil	Field Sample	10/16/2002	PLM-Grav	A	ND	ND
CS-09313-FG		N/A	875 Highway 2 S - Stimson Lumber		Stimson	Soil-Like	Surface soil	Field Sample	10/16/2002	PLM-VE	A	ND	ND
S-09314-C		N/A	875 Highway 2 S - Stimson Lumber		Stimson	Soil-Like	Surface soil	Field Sample	10/16/2002	PLM-Grav	A	ND	ND
S-09314-FG		N/A	875 Highway 2 S - Stimson Lumber		Stimson	Soil-Like	Surface soil	Field Sample	10/16/2002	PLM-VE	A	ND	ND
CS-09315-C		N/A	875 Highway 2 S - Stimson Lumber		Stimson	Soil-Like	Surface soil	Field Sample	10/16/2002	PLM-Grav	A	ND	ND
CS-09315-FG		N/A	875 Highway 2 S - Stimson Lumber		Stimson	Soil-Like	Surface soil	Field Sample	10/16/2002	PLM-VE	A	ND	ND
S-09316-C		N/A	875 Highway 2 S - Stimson Lumber		Stimson	Soil-Like	Surface soil	Field Sample	10/16/2002	PLM-Grav	A	ND	ND
S-09316-FG		N/A	875 Highway 2 S - Stimson Lumber		Stimson	Soil-Like	Surface soil	Field Sample	10/16/2002	PLM-VE	A	ND	ND
CS-09510-C		N/A	875 Highway 2 S - Stimson Lumber	Lumber Yard	Stimpson	Soil-Like	Surface soil	Field Sample	10/14/2002	PLM-Grav	A	ND	ND
CS-09510-FG		N/A	875 Highway 2 S - Stimson Lumber	Lumber Yard	Stimpson	Soil-Like	Surface soil	Field Sample	10/14/2002	PLM-VE	A	ND	ND
S-09511-FG		N/A	875 Highway 2 S - Stimson Lumber	Lumber Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/14/2002	PLM-VE	A	ND	ND
S-09512-C		N/A	875 Highway 2 S - Stimson Lumber	Lumber Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/14/2002	PLM-Grav	A	ND	ND
CS-09512-FG		N/A	875 Highway 2 S - Stimson Lumber	Lumber Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/14/2002	PLM-VE	A	ND	ND
S-09513-C		N/A	875 Highway 2 S - Stimson Lumber	Lumber Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/14/2002	PLM-Grav	A	ND	ND
S-09513-FG		N/A	875 Highway 2 S - Stimson Lumber	Lumber Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/14/2002	PLM-VE	A	ND	ND
CS-09514-C		N/A	875 Highway 2 S - Stimson Lumber	Lumber Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/14/2002	PLM-Grav	A	ND	ND
CS-09514-FG		N/A	875 Highway 2 S - Stimson Lumber	Lumber Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/14/2002	PLM-VE	A	ND	ND
S-09515-C		N/A	875 Highway 2 S - Stimson Lumber	Lumber Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/14/2002	PLM-Grav	A	ND	ND
S-09515-FG		N/A	875 Highway 2 S - Stimson Lumber	Lumber Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/14/2002	PLM-VE	A	ND	ND
CS-09516-C		N/A	875 Highway 2 S - Stimson Lumber	Lumber Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/14/2002	PLM-Grav	A	ND	ND
CS-09516-FG		N/A	875 Highway 2 S - Stimson Lumber	Lumber Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/14/2002	PLM-VE	A	ND	ND
S-09517-C		N/A	875 Highway 2 S - Stimson Lumber	Lumber Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/14/2002	PLM-Grav	A	ND	ND
S-09517-FG		N/A	875 Highway 2 S - Stimson Lumber	Lumber Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/14/2002	PLM-VE	A	ND	ND
CS-09519-FG		N/A	875 Highway 2 S - Stimson Lumber	Former Popping Plant	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-VE	A	ND	ND
S-09520-FG		N/A	875 Highway 2 S - Stimson Lumber	Former Popping Plant	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-VE	A	ND	ND
S-09521-FG		N/A	875 Highway 2 S - Stimson Lumber	Former Popping Plant	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-VE	A	ND	ND
S-09522-FG		N/A	875 Highway 2 S - Stimson Lumber	Former Popping Plant	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-VE	A	ND	ND
CS-09523-FG		N/A	875 Highway 2 S - Stimson Lumber	Former Popping Plant	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-VE	A	ND	ND
S-09524-FG		N/A	875 Highway 2 S - Stimson Lumber	Former Popping Plant	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-VE	A	ND	ND
S-09525-FG		N/A	875 Highway 2 S - Stimson Lumber	Former Popping Plant	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-VE	A	ND	ND
CS-09526-FG		N/A	875 Highway 2 S - Stimson Lumber	Former Popping Plant	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-VE	A	ND	ND
CS-09527-FG		N/A	875 Highway 2 S - Stimson Lumber	Former Popping Plant	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-VE	A	ND	ND
S-09528-C		N/A	875 Highway 2 S - Stimson Lumber	Former Popping Plant	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-Grav	A	ND	ND
S-09528-FG		N/A	875 Highway 2 S - Stimson Lumber	Former Popping Plant	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-VE	A	ND	ND
CS-09529-C		N/A	875 Highway 2 S - Stimson Lumber	Former Popping Plant	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-Grav	A	ND	ND
CS-09529-FG		N/A	875 Highway 2 S - Stimson Lumber	Former Popping Plant	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-VE	A	ND	ND
S-09530-C		N/A	875 Highway 2 S - Stimson Lumber	Former Popping Plant	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-Grav	A	ND	ND
S-09530-FG		N/A	875 Highway 2 S - Stimson Lumber	Former Popping Plant	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-VE	A	ND	ND
CS-09531-C		N/A	875 Highway 2 S - Stimson Lumber	Former Popping Plant	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-Grav	A	ND	ND
S-09531-FG		N/A	875 Highway 2 S - Stimson Lumber	Former Popping Plant	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-VE	A	ND	ND
S-09532-C		N/A	875 Highway 2 S - Stimson Lumber	Former Popping Plant	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-Grav	A	ND	ND
CS-09532-FG		N/A	875 Highway 2 S - Stimson Lumber	Former Popping Plant	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-VE	A	ND	ND
CS-09533-C		N/A	875 Highway 2 S - Stimson Lumber	Former Popping Plant	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-Grav	A	ND	ND
S-09533-FG		N/A	875 Highway 2 S - Stimson Lumber	Former Popping Plant	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-VE	A	ND	ND
S-09534-C	CS-09533	N/A	875 Highway 2 S - Stimson Lumber	Former Popping Plant	Stimson	Soil-Like	Surface soil	Field Duplicate	10/15/2002	PLM-Grav	A	ND	ND
CS-09534-FG	CS-09533	N/A	875 Highway 2 S - Stimson Lumber	Former Popping Plant	Stimson	Soil-Like	Surface soil	Field Duplicate	10/15/2002	PLM-VE	A	ND	ND
CS-09535-C		N/A	875 Highway 2 S - Stimson Lumber	Log Storage Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-Grav	A	ND	ND
S-09535-FG		N/A	875 Highway 2 S - Stimson Lumber	Log Storage Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-VE	A	ND	ND
S-09536-C		N/A	875 Highway 2 S - Stimson Lumber	Log Storage Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-Grav	A	ND	ND
CS-09536-FG		N/A	875 Highway 2 S - Stimson Lumber	Log Storage Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-VE	A	ND	ND
S-09537-C		N/A	875 Highway 2 S - Stimson Lumber	Log Storage Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-Grav	A	ND	ND
S-09537-FG		N/A	875 Highway 2 S - Stimson Lumber	Log Storage Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-VE	A	ND	ND
CS-09538-C		N/A	875 Highway 2 S - Stimson Lumber	Log Storage Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-Grav	A	ND	ND
CS-09538-FG		N/A	875 Highway 2 S - Stimson Lumber	Log Storage Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-VE	A	ND	ND

Criteria:

Soil-Like & Sediment

Sample ID	Parent ID	Scenario	Property Group (Location)	Sample Group	Location Description (Sub Location)	Media Type	Matrix	Category	Sample Date	PLM			
										Method	LA Bin	LA (%)	C (%)
CS-09539-C		N/A	875 Highway 2 S - Stimson Lumber	Log Storage Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-Grav	A	ND	ND
S-09539-FG		N/A	875 Highway 2 S - Stimson Lumber	Log Storage Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-VE	A	ND	ND
S-09540-C		N/A	875 Highway 2 S - Stimson Lumber	Log Storage Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-Grav	A	ND	ND
CS-09540-FG		N/A	875 Highway 2 S - Stimson Lumber	Log Storage Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-VE	A	ND	ND
S-09583-C		N/A	875 Highway 2 S - Stimson Lumber	Log Storage Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-Grav	A	ND	ND
S-09583-FG1		N/A	875 Highway 2 S - Stimson Lumber	Log Storage Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-VE	A	ND	ND
S-09584-C		N/A	875 Highway 2 S - Stimson Lumber	Log Storage Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-Grav	A	ND	ND
CS-09584-FG1		N/A	875 Highway 2 S - Stimson Lumber	Log Storage Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-VE	A	ND	ND
S-09585-C		N/A	875 Highway 2 S - Stimson Lumber	Log Storage Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/16/2002	PLM-Grav	A	ND	ND
S-09585-FG1		N/A	875 Highway 2 S - Stimson Lumber	Log Storage Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/16/2002	PLM-VE	A	ND	ND
CS-09586-C		N/A	875 Highway 2 S - Stimson Lumber	Log Storage Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/16/2002	PLM-Grav	A	ND	ND
CS-09586-FG1		N/A	875 Highway 2 S - Stimson Lumber	Log Storage Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/16/2002	PLM-VE	A	ND	ND
S-09587-C		N/A	875 Highway 2 S - Stimson Lumber	Log Storage Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/16/2002	PLM-Grav	A	ND	ND
S-09587-FG1		N/A	875 Highway 2 S - Stimson Lumber	Log Storage Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/16/2002	PLM-VE	A	ND	ND
CS-09588-C		N/A	875 Highway 2 S - Stimson Lumber	Log Storage Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/16/2002	PLM-Grav	A	ND	ND
CS-09588-FG1		N/A	875 Highway 2 S - Stimson Lumber	Log Storage Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/16/2002	PLM-VE	A	ND	ND
S-09589-FG1		N/A	875 Highway 2 S - Stimson Lumber	Log Storage Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/16/2002	PLM-VE	A	ND	ND
S-09590-C	CS-09589	N/A	875 Highway 2 S - Stimson Lumber	Log Storage Yard	Stimson	Soil-Like	Surface soil	Field Duplicate	10/16/2002	PLM-Grav	A	ND	ND
CS-09590-FG1	CS-09589	N/A	875 Highway 2 S - Stimson Lumber	Log Storage Yard	Stimson	Soil-Like	Surface soil	Field Duplicate	10/16/2002	PLM-VE	A	ND	ND
S-09591-C		N/A	875 Highway 2 S - Stimson Lumber	Nursery	Stimson	Soil-Like	Surface soil	Field Sample	10/16/2002	PLM-Grav	A	ND	ND
S-09591-FG		N/A	875 Highway 2 S - Stimson Lumber	Nursery	Stimson	Soil-Like	Surface soil	Field Sample	10/16/2002	PLM-VE	A	ND	ND
CS-09592-C		N/A	875 Highway 2 S - Stimson Lumber	Nursery	Stimson	Soil-Like	Surface soil	Field Sample	10/16/2002	PLM-Grav	A	ND	ND
CS-09592-FG		N/A	875 Highway 2 S - Stimson Lumber	Nursery	Stimson	Soil-Like	Surface soil	Field Sample	10/16/2002	PLM-VE	A	ND	ND
S-09593-C		N/A	875 Highway 2 S - Stimson Lumber	Nursery	Stimson	Soil-Like	Surface soil	Field Sample	10/16/2002	PLM-Grav	A	ND	ND
S-09593-FG		N/A	875 Highway 2 S - Stimson Lumber	Nursery	Stimson	Soil-Like	Surface soil	Field Sample	10/16/2002	PLM-VE	A	ND	ND
CS-09594-C		N/A	875 Highway 2 S - Stimson Lumber	Nursery	Stimson	Soil-Like	Surface soil	Field Sample	10/16/2002	PLM-Grav	A	ND	ND
CS-09594-FG		N/A	875 Highway 2 S - Stimson Lumber	Nursery	Stimson	Soil-Like	Surface soil	Field Sample	10/16/2002	PLM-VE	A	ND	ND
S-09595-C		N/A	875 Highway 2 S - Stimson Lumber	Nursery	Stimson	Soil-Like	Surface soil	Field Sample	10/16/2002	PLM-Grav	A	ND	ND
S-09595-FG		N/A	875 Highway 2 S - Stimson Lumber	Nursery	Stimson	Soil-Like	Surface soil	Field Sample	10/16/2002	PLM-VE	B1	TR	ND
CS-09596-FG		N/A	875 Highway 2 S - Stimson Lumber	Nursery	Stimson	Soil-Like	Surface soil	Field Sample	10/16/2002	PLM-VE	A	ND	ND
S-09641-C		N/A	875 Highway 2 S - Stimson Lumber	Log Storage	Stimson	Soil-Like	Subsurface soil	Field Sample	10/14/2002	PLM-Grav	A	ND	ND
S-09641-FG1		N/A	875 Highway 2 S - Stimson Lumber	Log Storage	Stimson	Soil-Like	Subsurface soil	Field Sample	10/14/2002	PLM-VE	A	ND	ND
S-09642-C		N/A	875 Highway 2 S - Stimson Lumber	Log Storage	Stimson	Soil-Like	Subsurface soil	Field Sample	10/14/2002	PLM-Grav	A	ND	ND
CS-09642-FG1		N/A	875 Highway 2 S - Stimson Lumber	Log Storage	Stimson	Soil-Like	Subsurface soil	Field Sample	10/14/2002	PLM-VE	A	ND	ND
S-09643-C		N/A	875 Highway 2 S - Stimson Lumber	Log Storage	Stimson	Soil-Like	Subsurface soil	Field Sample	10/14/2002	PLM-Grav	A	ND	ND
S-09643-FG1		N/A	875 Highway 2 S - Stimson Lumber	Log Storage	Stimson	Soil-Like	Subsurface soil	Field Sample	10/14/2002	PLM-VE	A	ND	ND
CS-09646-FG		N/A	875 Highway 2 S - Stimson Lumber	Log Storage Yard		Soil-Like	Subsurface soil	Field Sample	10/15/2002	PLM-VE	A	ND	ND
CS-09647-FG		N/A	875 Highway 2 S - Stimson Lumber	Southwest Area	Stimson lumber	Soil-Like	Subsurface soil	Field Sample	10/15/2002	PLM-VE	A	ND	ND
S-09648-FG		N/A	875 Highway 2 S - Stimson Lumber	Southwest Area	Stimson lumber	Soil-Like	Subsurface soil	Field Sample	10/15/2002	PLM-VE	A	ND	ND
S-09649-FG		N/A	875 Highway 2 S - Stimson Lumber	Lumber Yard	Stimson lumber	Soil-Like	Subsurface soil	Field Sample	10/15/2002	PLM-VE	A	ND	ND
CS-09650-FG	CS-09649	N/A	875 Highway 2 S - Stimson Lumber	Lumber Yard	Stimson lumber	Soil-Like	Subsurface soil	Field Duplicate	10/15/2002	PLM-VE	A	ND	ND
S-09651-FG		N/A	875 Highway 2 S - Stimson Lumber	Lumber Yard	Stimson lumber	Soil-Like	Subsurface soil	Field Sample	10/15/2002	PLM-VE	A	ND	ND
S-09652-FG		N/A	875 Highway 2 S - Stimson Lumber	Log Storage Yard	Stimson Lumber	Soil-Like	Subsurface soil	Field Sample	10/15/2002	PLM-VE	A	ND	ND
S-09653-C		N/A	875 Highway 2 S - Stimson Lumber	Lumber Yard	Stimson	Soil-Like	Subsurface soil	Field Sample	10/16/2002	PLM-Grav	A	ND	ND
CS-09653-FG1		N/A	875 Highway 2 S - Stimson Lumber	Lumber Yard	Stimson	Soil-Like	Subsurface soil	Field Sample	10/16/2002	PLM-VE	A	ND	ND
S-09654-C		N/A	875 Highway 2 S - Stimson Lumber	Lumber Yard	Stimson	Soil-Like	Subsurface soil	Field Sample	10/16/2002	PLM-Grav	A	ND	ND
S-09654-FG1		N/A	875 Highway 2 S - Stimson Lumber	Lumber Yard	Stimson	Soil-Like	Subsurface soil	Field Sample	10/16/2002	PLM-VE	A	ND	ND
CS-09655-FG1		N/A	875 Highway 2 S - Stimson Lumber	Lumber Yard	Stimson	Soil-Like	Subsurface soil	Field Sample	10/16/2002	PLM-VE	A	ND	ND
CS-09656-C		N/A	875 Highway 2 S - Stimson Lumber	Lumber Yard	Stimson	Soil-Like	Subsurface soil	Field Sample	10/16/2002	PLM-Grav	A	ND	ND
S-09656-FG1		N/A	875 Highway 2 S - Stimson Lumber	Lumber Yard	Stimson	Soil-Like	Subsurface soil	Field Sample	10/16/2002	PLM-VE	A	ND	ND
S-09657-C		N/A	875 Highway 2 S - Stimson Lumber	Former Popping Plant	Stimson	Soil-Like	Subsurface soil	Field Sample	10/16/2002	PLM-Grav	A	ND	ND
CS-09657-FG1		N/A	875 Highway 2 S - Stimson Lumber	Former Popping Plant	Stimson	Soil-Like	Subsurface soil	Field Sample	10/16/2002	PLM-VE	A	ND	ND
S-09658-C		N/A	875 Highway 2 S - Stimson Lumber	Former Popping Plant	Stimson	Soil-Like	Subsurface soil	Field Sample	10/16/2002	PLM-Grav	A	ND	ND
S-09658-FG1		N/A	875 Highway 2 S - Stimson Lumber	Former Popping Plant	Stimson	Soil-Like	Subsurface soil	Field Sample	10/16/2002	PLM-VE	B2	< 1	ND
S-09659-C		N/A	875 Highway 2 S - Stimson Lumber	Former Popping Plant	Stimson	Soil-Like	Subsurface soil	Field Sample	10/16/2002	PLM-Grav	A	ND	ND
CS-09659-FG1		N/A	875 Highway 2 S - Stimson Lumber	Former Popping Plant	Stimson	Soil-Like	Subsurface soil	Field Sample	10/16/2002	PLM-VE	A	ND	ND
S-09660-C		N/A	875 Highway 2 S - Stimson Lumber	Former Popping Plant	Stimson	Soil-Like	Subsurface soil	Field Sample	10/17/2002	PLM-Grav	A	ND	ND
S-09660-FG		N/A	875 Highway 2 S - Stimson Lumber	Former Popping Plant	Stimson	Soil-Like	Subsurface soil	Field Sample	10/17/2002	PLM-VE	A	ND	ND
CS-09661-C	CS-09660	N/A	875 Highway 2 S - Stimson Lumber	Former Popping Plant	Stimson	Soil-Like	Subsurface soil	Field Duplicate	10/17/2002	PLM-Grav	A	ND	ND
CS-09661-FG	CS-09660	N/A	875 Highway 2 S - Stimson Lumber	Former Popping Plant	Stimson	Soil-Like	Subsurface soil	Field Duplicate	10/17/2002	PLM-VE	A	ND	ND

Criteria:

Soil-Like & Sediment

Sample ID	Parent ID	Scenario	Property Group (Location)	Sample Group	Location Description (Sub Location)	Media Type	Matrix	Category	Sample Date	PLM Method	PLM LA Bin	PLM LA (%)	PLM C (%)
CS-09662-C		N/A	875 Highway 2 S - Stimson Lumber	Former Popping Plant	Stimson	Soil-Like	Subsurface soil	Field Sample	10/17/2002	PLM-Grav	A	ND	ND
CS-09662-FG		N/A	875 Highway 2 S - Stimson Lumber	Former Popping Plant	Stimson	Soil-Like	Subsurface soil	Field Sample	10/17/2002	PLM-VE	A	ND	ND
CS-09663-C		N/A	875 Highway 2 S - Stimson Lumber	Former Popping Plant	Stimson	Soil-Like	Subsurface soil	Field Sample	10/16/2002	PLM-Grav	A	ND	ND
CS-09663-FG		N/A	875 Highway 2 S - Stimson Lumber	Former Popping Plant	Stimson	Soil-Like	Subsurface soil	Field Sample	10/16/2002	PLM-VE	A	ND	ND
CS-09664-C		N/A	875 Highway 2 S - Stimson Lumber		Stimson	Soil-Like	Subsurface soil	Field Sample	10/16/2002	PLM-Grav	A	ND	ND
CS-09664-FG		N/A	875 Highway 2 S - Stimson Lumber		Stimson	Soil-Like	Subsurface soil	Field Sample	10/16/2002	PLM-VE	A	ND	ND
CS-09665-C		N/A	875 Highway 2 S - Stimson Lumber		Stimson	Soil-Like	Subsurface soil	Field Sample	10/16/2002	PLM-Grav	A	ND	ND
CS-09665-FG		N/A	875 Highway 2 S - Stimson Lumber		Stimson	Soil-Like	Subsurface soil	Field Sample	10/16/2002	PLM-VE	A	ND	ND
CS-09666-C		N/A	875 Highway 2 S - Stimson Lumber		Stimson	Soil-Like	Subsurface soil	Field Sample	10/17/2002	PLM-Grav	A	ND	ND
CS-09666-FG		N/A	875 Highway 2 S - Stimson Lumber		Stimson	Soil-Like	Subsurface soil	Field Sample	10/17/2002	PLM-VE	A	ND	ND
CS-09667-C		N/A	875 Highway 2 S - Stimson Lumber		Stimson	Soil-Like	Subsurface soil	Field Sample	10/17/2002	PLM-Grav	A	ND	ND
CS-09667-FG		N/A	875 Highway 2 S - Stimson Lumber		Stimson	Soil-Like	Subsurface soil	Field Sample	10/17/2002	PLM-VE	A	ND	ND
CS-09668-C		N/A	875 Highway 2 S - Stimson Lumber		Stimson	Soil-Like	Subsurface soil	Field Sample	10/17/2002	PLM-Grav	A	ND	ND
CS-09668-FG		N/A	875 Highway 2 S - Stimson Lumber		Stimson	Soil-Like	Subsurface soil	Field Sample	10/17/2002	PLM-VE	A	ND	ND
CS-09671-C		N/A	875 Highway 2 S - Stimson Lumber		Stimson	Soil-Like	Subsurface soil	Field Sample	10/18/2002	PLM-Grav	A	ND	ND
CS-09671-FG		N/A	875 Highway 2 S - Stimson Lumber		Stimson	Soil-Like	Subsurface soil	Field Sample	10/18/2002	PLM-VE	A	ND	ND
CS-09672-C		N/A	875 Highway 2 S - Stimson Lumber		Stimson	Soil-Like	Subsurface soil	Field Sample	10/18/2002	PLM-Grav	A	ND	ND
CS-09672-FG		N/A	875 Highway 2 S - Stimson Lumber		Stimson	Soil-Like	Subsurface soil	Field Sample	10/18/2002	PLM-VE	A	ND	ND
CS-09673-C	CS-09672	N/A	875 Highway 2 S - Stimson Lumber		Stimson	Soil-Like	Subsurface soil	Field Duplicate	10/18/2002	PLM-Grav	A	ND	ND
CS-09673-FG	CS-09672	N/A	875 Highway 2 S - Stimson Lumber		Stimson	Soil-Like	Subsurface soil	Field Duplicate	10/18/2002	PLM-VE	A	ND	ND
CS-09681-C		N/A	875 Highway 2 S - Stimson Lumber	Lumber Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/14/2002	PLM-Grav	A	ND	ND
CS-09681-FG1		N/A	875 Highway 2 S - Stimson Lumber	Lumber Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/14/2002	PLM-VE	A	ND	ND
CS-09682-C		N/A	875 Highway 2 S - Stimson Lumber	Lumber Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/14/2002	PLM-Grav	A	ND	ND
CS-09682-FG1		N/A	875 Highway 2 S - Stimson Lumber	Lumber Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/14/2002	PLM-VE	A	ND	ND
CS-09683-C		N/A	875 Highway 2 S - Stimson Lumber	Lumber Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/14/2002	PLM-Grav	A	ND	ND
CS-09683-FG		N/A	875 Highway 2 S - Stimson Lumber	Lumber Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/14/2002	PLM-VE	A	ND	ND
CS-09684-C		N/A	875 Highway 2 S - Stimson Lumber	Lumber Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/14/2002	PLM-Grav	A	ND	ND
CS-09684-FG		N/A	875 Highway 2 S - Stimson Lumber	Lumber Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/14/2002	PLM-VE	A	ND	ND
CS-09685-C		N/A	875 Highway 2 S - Stimson Lumber	Lumber Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/14/2002	PLM-Grav	A	ND	ND
CS-09685-FG		N/A	875 Highway 2 S - Stimson Lumber	Lumber Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/14/2002	PLM-VE	A	ND	ND
CS-09686-C		N/A	875 Highway 2 S - Stimson Lumber	Lumber Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/14/2002	PLM-Grav	A	ND	ND
CS-09686-FG		N/A	875 Highway 2 S - Stimson Lumber	Lumber Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/14/2002	PLM-VE	A	ND	ND
CS-09687-C	CS-09686	N/A	875 Highway 2 S - Stimson Lumber	Lumber Yard	Stimson	Soil-Like	Surface soil	Field Duplicate	10/14/2002	PLM-Grav	A	ND	ND
CS-09687-FG	CS-09686	N/A	875 Highway 2 S - Stimson Lumber	Lumber Yard	Stimson	Soil-Like	Surface soil	Field Duplicate	10/14/2002	PLM-VE	A	ND	ND
CS-09688-C		N/A	875 Highway 2 S - Stimson Lumber	Lumber Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/14/2002	PLM-Grav	A	ND	ND
CS-09688-FG		N/A	875 Highway 2 S - Stimson Lumber	Lumber Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/14/2002	PLM-VE	A	ND	ND
CS-09689-C		N/A	875 Highway 2 S - Stimson Lumber	Lumber Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/14/2002	PLM-Grav	A	ND	ND
CS-09689-FG		N/A	875 Highway 2 S - Stimson Lumber	Lumber Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/14/2002	PLM-VE	A	ND	ND
CS-09691-C		N/A	875 Highway 2 S - Stimson Lumber	Railroad Spur	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-Grav	A	ND	ND
CS-09691-FG		N/A	875 Highway 2 S - Stimson Lumber	Railroad Spur	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-VE	A	ND	ND
CS-09692-C		N/A	875 Highway 2 S - Stimson Lumber	Railroad Spur	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-Grav	A	ND	ND
CS-09692-FG		N/A	875 Highway 2 S - Stimson Lumber	Railroad Spur	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-VE	A	ND	ND
CS-09693-C		N/A	875 Highway 2 S - Stimson Lumber	Railroad Spur	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-Grav	A	ND	ND
CS-09693-FG		N/A	875 Highway 2 S - Stimson Lumber	Railroad Spur	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-VE	A	ND	ND
CS-09694-C		N/A	875 Highway 2 S - Stimson Lumber	Railroad Spur	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-Grav	A	ND	ND
CS-09694-FG		N/A	875 Highway 2 S - Stimson Lumber	Railroad Spur	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-VE	A	ND	ND
CS-09695-C		N/A	875 Highway 2 S - Stimson Lumber	Railroad Spur	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-Grav	A	ND	ND
CS-09695-FG		N/A	875 Highway 2 S - Stimson Lumber	Railroad Spur	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-VE	A	ND	ND
CS-09696-C		N/A	875 Highway 2 S - Stimson Lumber	Railroad Spur	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-Grav	A	ND	ND
CS-09696-FG		N/A	875 Highway 2 S - Stimson Lumber	Railroad Spur	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-VE	A	ND	ND
CS-09697-C		N/A	875 Highway 2 S - Stimson Lumber	Railroad Spur	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-Grav	A	ND	ND
CS-09697-FG		N/A	875 Highway 2 S - Stimson Lumber	Railroad Spur	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-VE	A	ND	ND
CS-09698-C		N/A	875 Highway 2 S - Stimson Lumber	Railroad Spur	Stimson Lumber	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-Grav	A	ND	ND
CS-09698-FG		N/A	875 Highway 2 S - Stimson Lumber	Railroad Spur	Stimson Lumber	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-VE	A	ND	ND
CS-09699-C		N/A	875 Highway 2 S - Stimson Lumber	Railroad Spur	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-Grav	A	ND	ND
CS-09699-FG		N/A	875 Highway 2 S - Stimson Lumber	Railroad Spur	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-VE	A	ND	ND
CS-09700-C		N/A	875 Highway 2 S - Stimson Lumber	Railroad Spur	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-Grav	A	ND	ND
CS-09700-FG		N/A	875 Highway 2 S - Stimson Lumber	Railroad Spur	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-VE	A	ND	ND
CS-09701-C		N/A	875 Highway 2 S - Stimson Lumber	Railroad Spur	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-Grav	A	ND	ND
CS-09701-FG		N/A	875 Highway 2 S - Stimson Lumber	Railroad Spur	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-VE	A	ND	ND

Criteria:

Soil-Like & Sediment

Sample ID	Parent ID	Scenario	Property Group (Location)	Sample Group	Location Description (Sub Location)	Media Type	Matrix	Category	Sample Date	PLM			
										Method	LA Bin	LA (%)	C (%)
CS-09702-C		N/A	875 Highway 2 S - Stimson Lumber	Railroad Spur	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-Grav	A	ND	ND
S-09702-FG		N/A	875 Highway 2 S - Stimson Lumber	Railroad Spur	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-VE	A	ND	ND
S-09703-C		N/A	875 Highway 2 S - Stimson Lumber	Railroad Spur	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-Grav	A	ND	ND
CS-09703-FG1		N/A	875 Highway 2 S - Stimson Lumber	Railroad Spur	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-VE	A	ND	ND
CS-09704-C		N/A	875 Highway 2 S - Stimson Lumber	Spur	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-Grav	A	ND	ND
S-09704-FG1		N/A	875 Highway 2 S - Stimson Lumber	Spur	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-VE	A	ND	ND
CS-09705-C		N/A	875 Highway 2 S - Stimson Lumber	Log Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-Grav	A	ND	ND
CS-09705-FG1		N/A	875 Highway 2 S - Stimson Lumber	Log Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-VE	A	ND	ND
S-09706-C		N/A	875 Highway 2 S - Stimson Lumber	Log Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-Grav	A	ND	ND
S-09706-FG1		N/A	875 Highway 2 S - Stimson Lumber	Log Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-VE	A	ND	ND
CS-09707-C	CS-09706	N/A	875 Highway 2 S - Stimson Lumber	Log Yard	Stimson	Soil-Like	Surface soil	Field Duplicate	10/15/2002	PLM-Grav	A	ND	ND
CS-09707-FG1	CS-09706	N/A	875 Highway 2 S - Stimson Lumber	Log Yard	Stimson	Soil-Like	Surface soil	Field Duplicate	10/15/2002	PLM-VE	A	ND	ND
S-09708-C		N/A	875 Highway 2 S - Stimson Lumber	Log Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-Grav	A	ND	ND
S-09708-FG1		N/A	875 Highway 2 S - Stimson Lumber	Log Yard	Stimson	Soil-Like	Surface soil	Field Sample	10/15/2002	PLM-VE	A	ND	ND

Criteria:

100128

"Rite in the Rain"
ALL-WEATHER
Environmental
FIELD BOOK
No. 550

Libby Asbestos Project
CSS Soil

9/17/02 to 10/24/02

Libby Asbestos Project
CDM/PES Contractor Logbook

Return To:
Dave Schroeder
318 Louisiana Avenue
Libby, MT 59923
406-293-8595

Every Page:

- Initial and date all pages
- Sign and date last entry of the day
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- NO blank lines

Daily Entries:

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136	LIST OF EVENTS	10/23/02
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138	LIST OF EVENTS	
139	565 TERRACE VIEW ROAD	
140	711 COMMERCE WAY - BUILDING #1	
141	711 COMMERCE WAY - BUILDING #3	
142	LIST OF EVENTS	
143	86 WOODLAND AVE.	
144	114 THREE CORNERS ROAD #38	
145	100 CREST STREET	
146	100 CREST STREET	10/24/02

10/22/02
CHRIS ZELIZNAK

Location Date

Project / Client LIBBY ASBESTOS EPA/VOLPE

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10/22/02
CHRIS ZELIZNAK

Location LIBBY, MT Date 10/14/02

Project / Client LIBBY ASBESTOS EPA/VOLPE

MORNING MEETING

0800 ARRIVED AT CDM FIELD OFFICE FOR MORNING MEETING & HEALTH & SAFETY TALK.

WEATHER: 30° CLEAR HIGH ~55°

CREW: CHRIS ZELIZNAK (CDM) & CHRIS WORTHINGTON

AUTHOR: CHRIS ZELIZNAK (CDM)

PROCEDURE: SAMPLING PROCEDURE OUTLINED IN CONTAMINANT SCREENING STUDY, LIBBY ASBESTOS SITE, OPERABLE UNIT 4, LIBBY, MT. FINAL SAP ADDENDUM FOR THE STIMSTON LUMBER CO AREA.

EQUIPMENT: TRIMBLE MODEL TSC1 S/N 0220190058
KODAK CAMERA DX3500 S/N KCKA121503931

PPE: MODIFIED LEVEL D W/ LEVEL C IN NURSERY AREA

08:30 PLANNING MEETING IN CDM FIELD OFFICE FOR STIMSON SURFICIAL & SUBSURFACE SOIL SAMPLING. CZ 10/14/02

09:~~35~~ 25 STIMSON SAMPLING TEAMS DEPART CDM FIELD OFFICE FOR STIMSON LUMBER CO.

09:35 ARRIVED AT STIMSON LUMBER CO. OFFICE FOR HEALTH & SAFETY

Location STIMSON LUMBER CO Date 10/14/02

Project / Client LIBBY ASBESTOS EPA/VOLPE

HEALTH & SAFETY MEETING

MEETING

10:00 COMPLETED H&S MEETING. WENT OUTSIDE FOR GPS TRAINING W/ MG.

10:56 COMPLETED GPS TRAINING & BEGIN SAMPLING. SUBSURFACE SOIL TEAM CONSISTING OF CHRIS ZELIZNAK (CDM), CHRIS WORTHINGTON (CDM), EDWARD HUBBERT & TOM ~~COURTIG~~ COURTRIGHT (ESN-ROCKY MOUNTAIN). IN ADDITION, JEFF MONTERA (PM-CDM) ACCOMPANIES US FOR ~~THE~~ FIRST FEW SAMPLES. CZ 10/14/02

10/14/02
CHRIS ZELIZNAK

Location STIMSON LUMBER Date 10/14/02

Project / Client LIBBY ASBESTOS EPA/VOLPE

SA4-6

11:12 EH & TC (ESN) AND CZ, CW, & TM. ARRIVE AT SAMPLE SA4-6 IN THE LOG STORAGE YARD. ESN COLLECTS FIVE(5) SUBSURFACE SOIL SAMPLES (CENTER POINT, N, E, S, & W) FROM 48-60" BGS. CZ ASSIGNS SP & CS #S

SP- 119543

CZ 10/14/02

CS- 09641

CZ 10/14/02

COC# 004150 FIELD FORM # CSS(S)-003918

GPS FILE # T3A10122. 4 CZ 10/14/02 CZ 10/12/02

12:09 ESN HAS REFUSAL ON FINAL COMPOSITE SAMPLE (W SAMPLE FROM SA4-6). CZ DIRECTS ESN TO ATTEMPT SAMPLE FROM 9' OFF CENTER ALONG WEST LINE.

CZ 10/12/02 ~~12:6~~ 12:16 ESN COLLECTS FINAL COMPOSITE SAMPLE CZ 10/14/02 & CW COMPLETES SOIL HOMOGENIZATION & COLLECTION PROCESS. COMPLETE SAMPLING & DEMOB AT 12:28.

10/14/02
CHRIS ZELIZNAK

Location STIMSON LUMBER Date 10/14/02

Project / Client LIBBY ASBESTOS EPA/VOLPE

SA4-20

12:41 ESN & CDM SUBSURFACE SAMPLING TEAM ARRIVE AT SAMPLE LOCATION SA4-20 IN THE LOG STORAGE YARD. ESN COLLECTS FIVE(5) SUBSURFACE SOIL SAMPLES (N, E, S, CENTER POINT, W) FROM 48-60" BGS. CZ ASSIGNS SP & CS #S

SP- 119544

COC# 004150

F.F. # CSS(S)-003927

CZ 10/14/02

CS- 09642

GPS FILE # T3B10142.

CZ 10/14/02

13:13 ESN BREAKS DRIVE HEAD FOR MACROBARREL. BEGIN REPAIRS - (NOTE: FINAL MACROBARREL WAS DRIVEN TO FULL SAMPLE DEPTH PRIOR TO BREAKAGE - WILL BE COLLECTED ONCE REPAIRS ARE MADE.)

13:35 AFTER MUTIPLE ATTEMPTS TO PULL MACROBARREL, ESN & CDM BREAK FOR LUNCH.

4 CZ 10/14/02

15:36 RETURNED TO SITE & EQUIPMENT REPAIRS

15:07 ESN DEEMS MACROBORE LOST IN PLACE DRILL NEW SAMPLING POINT 8' FROM

10/14/02

Location STIMSON LUMBER Date 10/14/02

Project / Client LIBBY ASBESTOS EPA/VOLPE

SA4-20

CENTER POINT TO WEST.

15:14 ESN HITS REFUSAL IN REVISED WEST COMPOSITE SAMPLE LOCATION AT ~3.5'. AFTER DISCUSSION W/ JM, IT WAS DECIDED TO COLLECT MACROBORE FROM THIS HORIZON (30-42"). WHEN ~~SLEV~~ SLEEVE WAS RETRIEVED, 30" OF SAMPLE WAS COLLECTED (COMPACTION REDUCED SAMPLE THICKNESS). BASED ON DEPTH OF MACROBORE BGS, BOTTOM 1' OF SAMPLE WAS LOGGED AS 30-42".

CZ 10/14/02

15:15 CW COLLECTS COMPOSITE SAMPLE, HOMOGENIZES SAMPLE & COMPLETES COLLECTION PROCESS. DEMOB TO NEXT HOLE AT 15:23.

10/14/02
CHRIS ZELIZNAK

Location STIMSON LUMBER Date 10/14/02

Project / Client LIBBY ASBESTOS EPA/VOLPE

SA4-21

15:44 ARRIVED AT SAMPLE SA4-21 IN THE LOG STORAGE YARD. ESN COLLECTS FIVE (5) SUBSURFACE SOIL SAMPLES (CENTER POINT, E, N, W & S) FROM 48-60" BGS. CZ ASSIGNS SP & CS #S

LOC#: 004150 SP- 119545

F.F.: CSS(5)-003966

GPSFILE: ~~T3E10142~~ T5A10142 CZ 10/14/02

CZ 10/14/02 CS- 09643

CZ 10/14/02

16:15 CW COLLECTS COMPOSITE SAMPLE, HOMOGENIZES IT, & COMPLETES COLLECTION. DEMOB TO NEXT HOLE AT 15:40.

10/14/02
CHRIS ZELIZNAK

Location STIMSTON LUMBER Date 10/14/02

Project / Client LIBBY ASBESTOS EPA/VOLPE

SA4-10

16:01 ARRIVE AT SA4-10 IN THE LOG STORAGE YARD. ESN ~~COLLECTS FIVE (5) COMPOSITE SAMPLES~~ CZ 10/14/02 CZ 10/14/02 ATTEMPTS TO COLLECT COMPOSITE SAMPLES, HOWEVER, ROAD BED TOO COMPACTED, — REFUSAL. ATTEMPT TO MOVE CENTER POINT 50' TO EAST. ESN HAS MACROBORE REFUSAL AT 2' IN FIRST CZ 10/14/02 BOREHOLE. RADIO BATTERY IS DRAINED, SO CW HEADS OUT TO FIND ANOTHER SOIL SAMPLING TEAM & A GOOD RADIO TO CALL J.M. CZ 10/14/02

16:51 AFTER CONSULTING W/ J.M. RE: MACROBORE REFUSAL AT SA4-10, IT IS DECIDED TO MOVE SAMPLE LOCATION AN ADDITIONAL 50' TO THE EAST, OUT OF THE HIGH TRAFFIC AREA. THE NEW LOCATION IS 100' EAST OF THE ORIGINAL LOCATION.

17:01 ESN BEGINS COLLECTING FIVE(5) COMPOSITE SAMPLES CW, — REFUSAL. AFTER SPEAKING W/ EH & TC (ESN) IT IS DECIDED TO END DAY TO PROTECT RIG (HYDRAULIC OIL TEMP AT 110° ~ 30° ABOVE NORMAL OPERATING TEMP)

10/14/02
CHRIS ZELIZNAK

Location STIMSON LUMBER Date 10/14/02

Project / Client LIBBY ASBESTOS EPA/VOLPE

LIST OF EVENTS

WILL BEGIN AT SA4-24 IN A.M.

17:36 LEAVE SITE FOR OFFICE.

17:48 ARRIVE AT OFFICE.

18:00 CW & CZ COLLECT ~~RINSA~~ CZ 10/14/02 FIELD BLANK FROM SHOE, CATCHER, & ACETATE MACROBORE LINER. CZ ASSIGNS ~~SP~~ CZ 10/17/02 CS #S.

COC# 004150 CZ 10/14/02 CS- 09644

F.F. #CSS(S)-003968

18:02 CW & CZ COLLECT FIELD BLANK FROM SAMPLING TROWEL & BOWL. CZ ASSIGNS ~~SP~~ CZ 10/17/02 CS #S.

COC# 004150 CZ 10/14/02 CS- 09645

FF#CSS(S)-003968

PHOTO LOG (LATE ENTRY)

PHOTO	DIR	LOCATION	INIT.
1	SE	SA4-20 BROKEN DRIVE HEAD	CZ
2	E	SA4-20	CZ

10/14/02
CHRIS ZELIZNAK

Location STIMSON LUMBER Date 10/15/02

Project / Client LIBBY ASBESTOS EPA/VOLPE

CDM MORNING MEETING / PHOTOLOG

08:00 ARRIVED AT CDM FIELD OFFICE FOR MORNING MEETING & HEALTH & SAFETY TALK. CZ 10/16/02

WEATHER: CLEAR & 40; HIGHS IN 50's

CREW: CHRIS ZELIZNAK (CDM), CHRIS WORTHINGTON (CDM), EDWARD HUBBERT (ESN), & TOM COURTRIGHT (ESN). CZ 10/15/02

AUTHOR: CHRIS ZELIZNAK (CDM) CZ 10/15/02

PROCEDURE: SAMPLING PROCEDURE OUTLINED IN CONTAMINANT SCREENING STUDY, LIBBY ASBESTOS SITE, OPERABLE UNIT 4, LIBBY, MT. FINAL SAP ADDENDUM FOR THE STIMSON LUMBER CO. AREA.

EQUIPMENT: TRIMBLE MODEL TSC1 S/N 0220170759
KODAK CAMERA DX3500 S/N KCKA121503931

PPE: MODIFIED LEVEL D W/ MODIFIED LEVEL C IN NURSERY AREA. CZ 10/15/02

PHOTO LOG

PHOTO	DIR	LOCATION	INT
1	NA	SA5-4-CENTER BH	CZ

10/15/02
CHRIS ZELIZNAK

Location STIMSON LUMBER Date 10/15/02

Project / Client LIBBY ASBESTOS EPA VOLPE

CDM MORNING MEETING - STIMSON

08:45 CZ 10/15/02 ~~KICK~~ BRIEFING MEETING FOR TODAY'S ACTIVITIES AT STIMSON FIRE HOUSE - SUBSURFACE SOIL TEAM WILL COLLECT SUBSURFACE SOIL (S.S.) SAMPLES FROM SA4-24 & SA5-4, SA5-12 TO START. ADDITIONAL SAMPLES WILL BE COLLECTED WHEN TASK IS COMPLETED.

10/15/02
CHRIS ZELIZNAK

Location STIMSON LUMBER Date 10/15/02

Project / Client LIBBY ASBESTOS EPA/VOLPE

SA4-24

09:13 AFTER WARMING UP GEOPROBE (MODEL 54DT) FOR APPROXIMATELY 10 MINUTES, ESN BEGINS SUBSURFACE SOIL SAMPLING AT S.S. SAMPLE LOCATION SA4-24. FIVE (5) S.S. SAMPLES WILL BE COLLECTED (S, W, N, CENTER POINT, E)

09:20 ESN HITS REFUSAL IN S BOREHOLE AT ~2'. CW DIRECTS ESN TO MOVE SAMPLE POINT 1' TO N. SAMPLE POINT COLLECTED SUCCESSFULLY FROM 9' S OF CENTERPOINT.

09:42 ESN SUCCESSFULLY COLLECTS W & N COMPOSITE S.S. SAMPLES. CZ 10/15/02 DURING COLLECTION OF ~~#~~ THE CENTER POINT ~~SUBS~~ CZ 10/15/02 SAMPLE, ESN HIT REFUSAL AT 52". SAMPLE HORIZON FROM THIS SAMPLE WILL BE 40-52". CZ 10/15/02

09:48 ESN SUCCESSFULLY COLLECTS FINAL SAMPLE (E). CZ 10/15/02

09:54 CW HOMOGENIZES COMPOSITE SAMPLE & COLLECTS SAMPLE. CZ ASSIGNS SP & CS #s

SP- 119546 CZ 10/15/02 CS - 09646

COC#: 004151 F.F.: CSS(S) - 003967

GPS FILE: T5A10152

10/15/02 CHRIS ZELIZNAK

Location STIMSON LUMBER Date 10/15/02

Project / Client LIBBY ASBESTOS EPA/VOLPE

SA5-4

10:06 SUBSURFACE SOIL SAMPLE TEAM MOBS FROM SA4-24 TO SA5-4. UPON ARRIVAL, COM DETERMINED THAT THE ORIGINAL SAMPLE CENTERPOINT WAS DIRECTLY OVER THE MAIN SITE WATER LINE. JM ARRIVES ONSITE & CZ REQUESTS THAT HE CONTACT GLEN DOUBEK (SITE CONTACT) FOR ASSISTANCE RE: NEW PLACEMENT. CZ 10/15/02

10:31 GD ARRIVES ONSITE. HE ~~RECOMME~~ CZ 10/15/02 RECOMMENDS MOVING THE SAMPLE LOCATION TO THE EAST. CZ & CW MOVE THE CENTERPOINT 50' TO THE E.

10:41 ESN BEGINS SUBSURFACE SOIL SAMPLING AT S.S. SAMPLE LOCATION SA5-4. FIVE (5) S.S. SAMPLES WILL BE COLLECTED (W, N, CENTER POINT, E, S). AT 41" BGS, A 2" THICK PRODUCT (PETROLEUM PRODUCT) ODOR WAS NOTED AS WELL CZ 10/15/02 AS STAINING IN THE (W, N, CENTER) & SOUTH SAMPLES; IT WAS NOT OBSERVED IN THE E. SAMPLE. CZ TAKES PHOTO (#1) OF PRODUCT LAYER FROM CENTER BOREHOLE.

10/15/02 CHRIS ZELIZNAK

Location STIMSON LUMBER Date 10/15/02

Project / Client LIBBY ASBESTOS EPA/VOLPE

SA5-4

11:22 ESN SUCCESSFULLY COLLECTS FINAL SUBSURFACE SOIL SAMPLE. CZ 10/15/02

11:23 CW HOMOGENIZES COMPOSITE SAMPLE & COLLECTS SAMPLE. CZ ASSIGNS SP & CS #s

SP- 119547 **CS- 09647**

CZ 10/15/02

COC#: 004151 F.F.: CSS(S)-003969

GPS FILE: TSB10152

11:27 ESN DEMOBS & MOBS TO SA5-12 AFTER DECONNING EQUIPMENT.

11:39 CZ & CW COMPLETE SAMPLING PROCEDURE & DEMOB FROM SITE TO SA5-12.

10/15/02
CHRIS ZERZNAK

Location STIMSON LUMBER Date 10/15/02

Project / Client LIBBY ASBESTOS EPA VOLPE

SA5-12

11:41 CZ & CW ARRIVE AT SA5-12; ESN IS AT STAKE WAITING FOR GPS POINT. CZ LOCATES POINT, ESN ASSISTS LOCATING SAMPLE POINTS.

11:50 ESN BEGINS COLLECTING FIVE (5) S.S. SAMPLES (N, CENTER POINT, E, S, & W) FROM 48-60" BGS HORIZON. IN ADDITION, ~~CW & CZ WILL COLLECT~~ CZ 10/15/02 ~~THE DUPLICATE AT THIS LOCATION.~~ CZ 10/15/02 ~~EACH SAMPLING POINT WILL BE~~ CZ 10/15/02 ~~OFFSET TO THE EAST 1'.~~

12:49 ESN COMPLETES COLLECTION OF ORIGINAL ~~& DUPLICATE SAMPLES~~ SAMPLE CZ 10/15/02, CZ 10/15/02

12:52 CW HOMOGENIZES COMPOSITE SAMPLE, CZ 10/15/02 ~~HOMOGENIZES DUPLICATE SAMPLE, &~~ COLLECTS COMPOSITE SAMPLE. CZ ASSIGNS SP & CS #s. CZ 10/15/02

SP- 119548 **CS- 09648**

CZ 10/15/02

~~12:50 CW COLLECTS DUPLICATE SAMPLE~~ CZ 10/15/02 ~~SAMPLE TIME WILL BE NOTED AS 13:40~~ CZ 10/15/02 ~~ON COC. CZ ASSIGNS SP & CS #s.~~

12:35 CDM & ESN LEAVE SITE FOR LUNCH

13:20 RETURN TO WORK.

10/15/02 CHRIS ZERZNAK

Location STIMSON LUMBER Date 10/15/02

Project / Client LIBBY ASBESTOS EPA/VOLPE

SA5-12

NOTE: CDM INTENDED TO COLLECT DUPLICATE SAMPLE AT SA5-12. HOWEVER, DUE TO COMMUNICATION ERROR W/ ESN, GEOPROBE SAMPLING WAS CONDUCTED IN NORMAL FASHION, AS OPPOSED TO COLLECTING TWO(2) SAMPLES AT EACH POINT, OFFSET FROM EACH OTHER. ERROR WAS RECOGNIZED & LOGBOOK WAS CORRECTED ACCORDINGLY ON PREVIOUS PAGE. CZ 10/15/02

1325 CDM & ESN DECON & DEMOB FROM SA5-12 TO SA3-15.

10/15/02 CHRIS ZELIZNAK

Location STIMSON LUMBER Date 10/15/02

Project / Client LIBBY ASBESTOS EPA/VOLPE

SA3-15

13:45 CZ & CW LOCATE SAMPLE COORDINATES & MAP OUT SAMPLE LOCATION.

13:59 ESN ARRIVES AT SA3-15 W/ GEOPROBE; SET UP FOR SAMPLING.

14:02 ESN COLLECTS FIRST MACROBORE (S). CZ & EH DETERMINE THAT THIS SHOULD BE AN ACCEPTABLE LOCATION FOR DUPLICATE. CZ MARKS EACH SAMPLE LOCATION W/ A DUPLICATE SAMPLE LOCATION 1' TO E. CZ 10/15/02

14:08 ESN COLLECTS FIRST DUPLICATE MACROBORE (S). CONTINUE COLLECTING THE ADDITIONAL FOUR(4) SAMPLES & DUPLICATES FROM 48-60" HORIZON (BGS) AT W, CENTER POINT, N, & E). CZ 10/15/02 CZ 10/15/02

14:41 ESN HAS REFUSAL @ THE MACROBORE IN THE EAST BOREHOLE AT ~12". ATTEMPT TO COLLECT SAMPLE FROM 9' E OF CENTER POINT — UNSUCCESSFUL. ATTEMPT TO COLLECT SAMPLE FROM 10' E OF CENTER POINT BIASED 1' N —

10/15/02 CHRIS ZELIZNAK

Location STIMSON LUMBER Date 10/15/02

Project / Client LIBBY ASBESTOS EPA/VOLPE

SA3-15

UNSUCCESSFUL. CZ & EH DECIDE TO TRY 11' E OF CENTER POINT - SUCCESSFUL. COLLECT E DUPLICATE SAMPLE FROM 12' E OF CENTER POINT. - UNSUCCESSFUL

14:52 CW COLLECTS FINAL ORIGINAL SAMPLE, HOMOGENIZES, & COLLECTS SAMPLE. CZ ASSIGNS SP & CS #S. CZ 10/15/02

SP- 119549 CZ 10/15/02 **CS- 09649**

COC#: 004151 FF: CSS(S) - 003969

GPS FILE #: T5D10152 CZ 10/15/02

14:53 ESN TAKES BREAK TO LET HYDRAULIC OIL COOL DOWN. CZ 10/15/02

15:04 ESN ATTEMPTS TO COLLECT E DUPLICATE SAMPLE 11' E OF CENTER, BIASED S 1'. ATTEMPT SUCCESSFUL CZ 10/15/02

15:12 CW COLLECTS FINAL DUPLICATE SAMPLE, HOMOGENIZES, & PACKAGES SAMPLE. CZ ASSIGNS SP & CS #S CZ 10/15/02

SP- 119550 CZ 10/15/02 **CS- 09650**

WILL NOTE ON COC THAT DUPLICATE SAMPLE WAS COLLECTED AT 15:30.

COC# 004151 FF: CSS(S) - 003970

10/15/02 CHRIS ZEZIZNAK

Location STIMSON LUMBER Date 10/15/02

Project / Client LIBBY ASBESTOS EPA/VOLPE

SA5-12

LATE ENTRY: PAGE 65 - DID NOT INCLUDE ~~SP & C~~ CZ 10/15/02 COC, FF, OR GPS FILE NUMBER, FOR SP-119548/CS-09648. THEY ARE:

COC# 004151 FF: CSS(S) - 003969

GPS FILE # T5C10152. CZ 10/15/02

15:15 ESN & COM BEGIN DECON & DEMOB FROM SA3-15. MOB TO SA3-7.

10/15/02 CHRIS ZEZIZNAK

Location STIMSON LUMBER Date 10/15/02

Project / Client LIBBY ASBESTOS EPA/VOLPE

SA3-7

15:32 CZ ARRIVES NEAR SA3-7. HOWEVER LOG PILE IS LOCATED DIRECTLY OVER POINT. CZ REPOSITIONS POINT 20' TO W. CZ 10/15/02

15:48 ESN COLLECTS FIRST MACROBORE(N), THEN CONTINUE TO COLLECT FOUR (4) ADDITIONAL S.S. SAMPLES (CENTER POINT, S, W, E) FROM 48-60" BGS.

15:54 ESN HITS REFUSAL AT ~18" IN CENTER POINT. CZ MOVES CENTER POINT 1' S. CZ 10/15/02 SUCCESSFUL COLLECTION. CZ REASSIGNS NEW COORDINATES FOR SA3-7. ADDITIONALLY (N) S.S. SAMPLE LOCATION IS NOW 11' FROM CENTER. ALL ADDITIONAL POINTS (S, E, & W) ARE REPOSITIONED ACCORDINGLY.)

16:16 ESN SUCCESSFULLY COLLECTS FINAL S.S. SAMPLE AT SA3-7.

16:21 CW HOMOGENIZES ALL FIVE(5) S.S SAMPLES & PACKAGES SAMPLE. CZ ASSIGNS SP & CS#S CZ 10/15/02

SP- 119551 CS- 09651

COC#: 004151 F.F.: CSS(S)-003970

GPS FILE#: TSE10152

CHRIS ZELIZNAK 10/15/02

Location STIMSON LUMBER Date 10/15/02

Project / Client LIBBY ASBESTOS EPA/VOLPE

SA3-7

16:25 ESN & COM DECON EQUIPMENT & DEMOB FROM SA3-7 TO SA4-10.

CHRIS ZELIZNAK 10/15/02

Location STIMSON LUMBER Date 10/15/02
Project/Client LIBBY ASBESTOS EPA/VOLPE
SA4-10

16:36 CZ & CW ARRIVE AT SA4-10. SUFFICIENT LOGS HAVE BEEN MOVED WEST OF THE ORIGINAL SAMPLING POINT (SEE NOTES PAGE 58 FROM 10/14/02) TO PERMIT SAMPLING IN LOG STORAGE YARD. CENTER POINT FOR SAMPLE WAS MOVED 120' DUE WEST, OFF OF THE ROAD. S.S. SAMPLE POINTS WERE MAPPED OUT & ESN PREPARES TO COLLECT SAMPLES.

16:47 ESN BEGINS PROBING FIRST LOCATION (W), THEN COLLECT REST OF COMPOSITE SAMPLES (S, CENTER POINT, N, & E) FROM 48-60" BGS.

16:56 ESN HAS REFUSAL OF MACROBORE AT ~22" IN S BOREHOLE. CZ DIRECTS EH TO COLLECT NEW S S.S. SAMPLE 9' S OF CENTER.

17:12 ESN HAS REFUSAL OF CENTER POINT MACROBORE AT 24", CZ DIRECTS EH TO COLLECT NEW CENTER POINT SAMPLE 1' E OF ORIGINAL. CZ WILL COLLECT NEW COORDINATES. FURTHERMORE, NEW MEASUREMENTS FOR W MACROBORE: 11' OFF CENTER & S 10' OFF CENTER,

10/15/02 CHRIS ZELIZNAK

Location STIMSON LUMBER Date 10/15/02
Project/Client LIBBY ASBESTOS EPA/VOLPE
SA4-10

BIASED 1' WEST. CZ & CW REPOSITION N & E POINTS BASED ON NEW CENTER POINT. CZ GETS NEW COORDINATES.

17:30 RANDY ROBERTS ARRIVES ONSITE. HE TELLS CZ THAT HIS GPS BATTERIES ARE RUNNING LOW. HE REQUESTS THAT CZ LOCATE SA4-10 & LOG POINT FOR HIM. CZ LOCATES SA4-10 (ORIGINAL LOCATION) & LOGS POINT AS T5G10152.

17:32 ESN COMPLETES COLLECTION OF N & E MACROBORE S.S. SAMPLE LOCATIONS.

17:40 CW HOMOGENIZES ALL FIVE (5) S.S. SAMPLES & PACKAGES SAMPLE. CZ ASSIGNS SP & CS #S

SP- 119552 CZ 10/15/02 CS- 09652

COC#: 004151 F.F.: CSS(S)-003970
GPS FILE #: T5F10152 CZ 10/15/02

17:42 ESN ~~LEAVES SITE~~ CZ 10/15/02 DECONS EQUIPMENT PARKS GEOPROBE OUT OF WAY OF TRAFFIC, & LEAVES SITE FOR DAY.

10/15/02 CHRIS ZELIZNAK

Location STIMSON LUMBER Date 10/15/02

Project / Client LIBBY ASBESTOS EPA/VOLPE

SA4-10

17:47 CZ & CW DECON EQUIPMENT & DEMOB FROM SA4-10 FOR OFFICE.

18:00 CZ & CW RETURN TO OFFICE & COMPLETE PAPERWORK. END OF DAY

10/15/02
CHRIS ZELIZNAK

Location LIBBY, MT Date 10/16/02

Project / Client LIBBY ASBESTOS EPA/VOLPE

CDM MORNING MEETING/PHOTO LOG

0800 ARRIVED AT CDM FIELD OFFICE FOR MORNING MEETING & HEALTH & SAFETY TALK. CZ 10/16/02

WEATHER: FOGGY & 40; HIGHS IN 60'S

CREW: CHRIS ZELIZNAK (CDM), CHRIS WORTHINGTON (CDM), EDWARD HUBBERT (ESN) & TOM COURTRIGHT (ESN).

AUTHOR: CHRIS ZELIZNAK (CDM) CZ 10/16/02

PROCEDURE: SAMPLING PROCEDURE OUTLINED IN CONTAMINANT SCREENING STUDY, LIBBY ASBESTOS SITE, OPERABLE UNIT 4, LIBBY, MT. FINAL SAP ADDENDUM FOR THE STIMSON LUMBER CO. AREA.

EQUIPMENT: TRIMBLE MODEL TSC1 S/N 0220110759
KODAK CAMERA DX 3500 S/N KCKA121505781

PPE: MODIFIED LEVEL D W/ MODIFIED LEVEL C IN NURSERY AREA.

PHOTO LOG

PHOTO	DIR	LOCATION	INT
1	S	SA3-19 ORIGINAL	CZ
2	W	SA3-19 ORIGINAL	CZ
3	S	SA3-19 NEW	CZ

10/16/02
CHRIS ZELIZNAK

Location STIMSON LUMBER Date 10/16/02

Project / Client LIBBY ASBESTOS EPA/VOLPE

STIMSON LUMBER MORNING MEETING

08:32 ARRIVE AT STIMSON LUMBER Co. SITE FOR MEETING W/ GLEN DOUBEK (STIMSON SITE CONTACT). WILL RADIO HIM WHEN WE ARE READY TO COLLECT SA3-19, SA3-24, & SA3-1 DUE TO SUBSURFACE OBSTRUCTIONS AND HIGH TRAFFIC AREAS. GD OKS PLAN. CZ 10/16/02

08:50 CZ & CW LEAVE STIMSON FIRE HOUSE TO MEET UP W/ ESN CREW AT FIRST LOCATION FOR TODAY (SA3-8).

Chris Zelizniak 10/16/02 CHRIS ZELIZNAK

Location STIMSON LUMBER Date 10/16/02

Project / Client LIBBY ASBESTOS EPA/VOLPE

SA3-8

08:59 CZ & CW ARRIVE AT SA3-8 LOCATION & MEET UP W/ ESN CREW. ADDITIONALLY BOB TOLFORD ACCOMPANIES US THIS MORNING UNTIL JM ARRIVES ONSITE TODAY. CZ 10/16/02 (TO CZ 10/16/02)

09:05 CZ LOCATES SAMPLE W/ GPS. CW & CZ MARK OUT POINTS & WAIT FOR ESN TO ARRIVE W/ GEOPROBE. DUE TO ORIGINAL POSITION OF POINT, CZ RELOCATES SA3-8 TO A POINT 15' N31°W OF ORIGINAL & LOCATES W/ GPS & RELOCATES PERIPHERAL POINTS

09:25 ESN COMPLETES RIG WARM-UP & COLLECTS FIRST MACROBORE (N), THEN CONTINUE TO COLLECT FOUR (4) ADDITIONAL SUBSURFACE SOIL (S.S.) SAMPLES (W, CENTERPOINT, E, S)

09:33 ESN HITS REFUSAL IN W MACROBORE AT 30". ATTEMPT TO COLLECT NEW SAMPLE 11' W OF CENTERPOINT — SUCCESSFUL. CONTINUE MACROBORE SAMPLING. CZ 10/16/02

09:51 ESN HITS REFUSAL IN FINAL MACROBORE

Chris Zelizniak 10/16/02 CHRIS ZELIZNAK

Location STIMSON LUMBER Date 10/16/02

Project / Client LIBBY ASBESTOS EPA/VOLPE

SA3-8

AT 42". BASED ON PREVIOUS SAMPLE (SA4-20 ON 10/14/02 - SEE PG 56) CZ COLLECTS MACROBORE FOR SAMPLING SAMPLE HORIZON FOR S MACROBORE 30-42". CZ 10/14/02

09:54 CW HOMOGENIZES ALL FIVE(5) S.S. SAMPLES & PACKAGES SAMPLE. CZ ASSIGNS SP & CS #S. CZ 10/16/02

SP- 119553 CS- 09653

CZ 10/16/02

COC#: 009152 F.F. #- CSS(S)-003980

GPS FILE#: ~~TSA10/002~~ CZ 10/16/02 TSA10162

09:58 ESN DECONS EQUIPMENT & DEMOBS FROM SA3-8 TO SA3-19.

09:59 CZ CALLS GD TO MEET SUBSURFACE SOIL SAMPLING TEAM AT SA3-19. OK.

10:08 CZ, CW, & BT DECON EQUIPMENT & DEMOB FROM SA3-8 TO SA3-19.

10/16/02 CHRIS ZELIZNAK

Location STIMSON LUMBER Date 10/16/02

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SA3-19

10:07 CW, CZ, & BT ARRIVE AT SA3-19 & MEET W/ ESN. CZ 10/16/02

10:09 GD ARRIVES ONSITE.

10:10 CZ LOCATES SA3-19 POINT. IT IS ADJACENT TO THE ROADWAY & A STEEP BANK LEADING TO THE LUMBER STORAGE AREA. NOT AN ACCEPTABLE S.S. SAMPLE LOCATION. CZ RELOCATES SA3-19 S.S. SAMPLE LOCATION 100' S09°E FROM ORIGINAL LOCATION. CZ LOCATES NEW POINT W/ GPS, THEN MEASURE OUT PERIPHERAL POINTS. CZ 10/16/02

10:27 ESN BEGINS COLLECTING FIRST MACROPROBE (CENTER POINT) THEN CONTINUES TO COLLECT FOUR (4) ADDITIONAL S.S. SAMPLES (W, S, E, & N)

SAMPLE	TIME	RECOVERY	SAMPLE HORIZON	POSITION
CENTER	10:27	34"	48-60"	0
W	10:32	25"	48-60"	10'
S	10:36	34"	48-60"	10'
E	10:41	REFUSAL AT 21"		10'
~~N~~ E	10:47	32"	48-60"	11'
N	10:51	26"	48-60"	10'

CZ 10/16/02

10/16/02 CHRIS ZELIZNAK

Location STIMSON LUMBER Date 10/16/02
Project/Client LIBBY ASBESTOS EPA/VOLPE
SA3-19

10:54 CW HOMOGENIZES ALL FIVE(5) S.S. SAMPLES & PACKAGES SAMPLE. CZ ASSIGNS SP & CS #S CZ 10/16/02

SP- 119554 CS- 09654

CZ 10/16/02

COC#: 004152 F.F.#: ~~003980~~ CZ 10/16/02 CSS(S)-003980

GPS FILE #: T5B10162 CZ 10/16/02

10:59 ESN DECONS EQUIPMENT & DEMOBS FROM SA3-19 TO SA3-23. WHILE EH TAKES RIG TO POINT, TC LEAVES SITE FOR DIESEL. CZ 10/16/02

11:00 CZ & CW COMPLETE EQUIPMENT DECON & DEMOB FROM SA3-19 TO SA3-23.

10/16/02
CHRIS ZELIZNAK

Location STIMSON LUMBER Date 10/16/02
Project/Client LIBBY ASBESTOS EPA/VOLPE
SA3-23

11:45 AFTER MOBING TO SA3-23 & WAITING FOR TC TO RETURN W/DIESEL FOR GEOPROBE & FUELING, CZ LOCATES S.S. SAMPLE LOCATION & PREPARE TO SAMPLE. CZ 10/16/02

11:58 ESN BEGINS COLLECTING FIRST MACROPROBE S.S. SAMPLE (CENTERPOINT). THEN CONTINUES TO COLLECT FOUR (4) ADDITIONAL SAMPLES (E, S, W, & N).

SAMPLE	TIME	RECOVERY	SAMPLE HORIZON	POSITION
CENTER	11:59	40"	48-60"	0
E	12:04	36"	48-60"	10'
S	12:07	NO RECOVERY	48-60"	10'
S	12:09	38"	48-60"	11'
W	12:13	38"	48-60"	10'
N	12:19	38"	48-60"	10

12:20 CW HOMOGENIZES ALL FIVE(5) S.S. SAMPLES & PACKAGES SAMPLE. CZ ASSIGNS SP & CS #S. CZ 10/16/02

SP- 119555 CS- 09655

CZ 10/16/02

COC#: 004152 F.F. #: CSS(S) - 003980

GPS FILE #: T5C10162 CZ 10/16/02

12:21 ESN DECONS EQUIPMENT, COM

10/16/02 CHRIS ZELIZNAK

Location STIMSON LUMBER Date 10/16/02

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SA3-23

DECONS EQUIPMENT & DEMOBS.

12:31 CDM & ESN BREAK FOR LUNCH.

13:26 CDM & ESN ~~[illegible]~~ CZ 10/16/02 RETURN TO SITE; MOBILIZE TO SA3-1.

Chris Zelizniak 10/16/02 CHRIS ZELIZNAK

Location STIMSON LUMBER Date 10/16/02

Project / Client LIBBY ASBESTOS EPA/VOLPE

SA3-1

13:32 CW & CZ RETURN TO OFFICE AS PER DW'S REQUEST. ESN MOBS GEOPROBE TO SA3-1. CZ 10/16/02

13:50 CW & CZ RETURN TO SITE. CZ LOCATES COORDINATES FOR SA3-1. ORIGINAL POINT DIRECTLY ABOVE SEWER LINE. CZ MOVES CENTER POINT 15' TO EAST. DUE TO POSITION OF WATER LINE TO EAST AND SEWER LINE TO WEST, ONLY CENTER POINT, N, & S SAMPLES WILL BE COLLECTED AS PER RAIL SPUR SAMPLING INSTRUCTIONS.

14:10 ESN BEGINS COLLECTING FIRST MACROPROBE S.S. SAMPLE(S) THEN CONTINUES TO COLLECT TWO (2) ADDITIONAL SAMPLES (CENTERPOINT & N)

SAMPLE	TIME	RECOVERY	SAMPLE HORIZON	POSITION
S	14:11	20"	48-60"	10'
CENTER	14:19	33"	48-60"	0
N	14:23	31"	48-60"	10'

14:25 CW HOMOGENIZES THREE (3) S.S. SAMPLES & PACKAGES SAMPLE. CZ ASSIGNS SP & CS #S

Chris Zelizniak 10/16/02 CHRIS ZELIZNAK

Location STIMSON LUMBER Date 10/16/02

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SA3-1

SP- 119556 CS- 09656

CZ 10/16/02

COC#: 004152 F.F.#: CSS(S)-003981

GPS FILE#: TSD10162 CZ 10/16/02

14:28 ESN DECONS EQUIPMENT & DEMOBS FROM SA3-1 TO SA1-5. CZ 10/16/02

14:35 CW & CZ DECON EQUIPMENT & DEMOB FROM SA3-1 TO SA1-5.

10/16/02 CHRIS ZELIZNAK

Location STIMSON LUMBER Date 10/16/02

Project / Client LIBBY ASBESTOS EPA/VOLPE

SA1-5

14:39 CDM & ESN ARRIVE AT SA1-5. ADDITIONALLY GD & JM ARRIVE ONSITE. CZ LOCATES COORDINATES FOR SA1-5, THEN MARK OUT TWO (2) PERIPHERAL POINTS ALONG TRACKS (PARALLEL) AS PER RAIL SPUR SAMPLING INSTRUCTIONS.

14:49 ESN BEGINS COLLECTING FIRST MACROPROBE S.S. SAMPLE (CENTER POINT) THEN CONTINUES TO COLLECT TWO(2) ADDITIONAL SAMPLES (~~N~~W & E). CZ 10/16/02

SAMPLE	TIME	RECOVERY	SAMPLE HORIZON	POSITION
CENTER CZ 10/16/02	14:50	39"	48-60"	0
~~N~~W	14:55	30"	48-60"	10'
E	14:59	32"	48-60"	10'

15:01 CW HOMOGENIZES THREE (3) S.S. SAMPLES & PACKAGES SAMPLE. CZ ASSIGNS SP & CS #s CZ 10/16/02

SP- 119557 CS- 09657

CZ 10/16/02

COC#: 004152 F.F.#: CSS(S)-003981

GPS FILE#: TSE10162 CZ 10/16/02

15:05 ESN & CDM DECON EQUIPMENT & DEMOB FROM SA1-5 TO SA1-3.

10/16/02 CHRIS ZELIZNAK

Location STIMSON LUMBER Date 10/16/02

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SA1-3

15:11 CDM & ESN ARRIVE AT SA1-3. CZ LOCATES COORDINATES W/ GPS & LOCATE PERIPHERAL POINTS. ESN PREPARES TO SAMPLE CZ 10/17/02

15:19 ESN BEGINS COLLECTING FIRST MACROBORE S.S. SAMPLE (CENTER POINT) THEN CONTINUES TO COLLECT FOUR(4) ADDITIONAL SAMPLES (W, N, S, E).

SAMPLE	TIME	RECOVERY	SAMPLE HORIZON	POSITION
CENTER	15:21	0"	40-52"	0
CENTER	15:27	31"	48-60"	0
W	15:34	22"	48-60"	10'
N	15:40	13"	48-60"	10'
S	15:46	36"	48-60"	10'
E	15:51	30"	48-60"	10'

15:55 CZ CZW 10/16/02 HOMOGENIZES FIVE (5) S.S. SAMPLES & PACKAGES SAMPLE. CZ ASSIGNS SP & CS #s CZ 10/16/02

SP- 119558 CS- 09658

CZ 10/16/02

COC#: 004152 F.F.#: CSS(S)-003981

GPS FILE#: T5F10162 CZ 10/16/02

16:05 ESN & CDM DECON EQUIPMENT & DEMOB FROM SA1-3 TO SA1-7. CZ 10/16/02

10/16/02 CHRIS ZELIZNAK

Location STIMSON LUMBER Date 10/16/02

Project / Client LIBBY ASBESTOS EPA/VOLPE

SA1-7

16:10 JM RETURNS TO SITE W/ WATER; ESN & CDM TAKE BREAK CZ 10/16/02

16:24 CZ ARRIVES AT SA1-7. CZ LOCATES COORDINATES W/ GPS & LOCATE PERIPHERAL POINTS. ESN PREPARES TO SAMPLE.

16:29 ESN BEGINS COLLECTING FIRST MACROBORE S.S. SAMPLE (CENTER POINT) THEN CONTINUES COLLECTING FOUR(4) ADDITIONAL SAMPLES (W, N, E, S).

SAMPLE	TIME	RECOVERY	SAMPLE HORIZON	POSITION
CENTER	16:30	40"	48-60"	0
W	16:34	37"	48-60"	10'
N	16:38	29"	48-60"	10'
E	16:42	37"	48-60"	10'
S	16:47	40"	48-60"	10'

16:50 CW HOMOGENIZES FIVE (5) S.S. SAMPLES & PACKAGES SAMPLE. CZ ASSIGNS SP & CS #S. CZ 10/16/02

SP- 119559 CS- 09659

CZ 10/16/02

COC#: 004152 F.F.#: CSS(S)-003983

GPS FILE#: T5G10162 CZ

16:51 ESN & CDM DECON EQUIPMENT & DEMOB FROM SA1-7. ~~END OF D~~ CZ 10/16/02

10/16/02 CHRIS ZELIZNAK

Location STIMSON LUMBER Date 10/16/02

Project / Client LIBBY ASBESTOS EPA/VOLPE
SA1-7

17:00 ESN LEAVES SITE FOR DAY. CDM RETURNS TO OFFICE TO COMPLETE PAPERWORK & SUBMIT SAMPLES.

17:30 END OF DAY.

Chris Zeliznak
10/16/02

Location STIMSON LUMBER Date 10/17/02 CZ 10/17/02

Project / Client LIBBY ASBESTOS EPA/VOLPE

MORNING MEETING

0800 ARRIVED AT CAM FIELD OFFICE FOR MORNING MEETING & HEALTH & SAFETY TALK. CZ 10/17/02

WEATHER: FOGGY & 38°; HIGHS IN 60'S

CREW: CHRIS ZELIZNAK (CDM), CHRIS WORTHINGTON (CDM), EDWARD HUBBERT (~~CDM~~ ESN) CZ 10/17/02 & TOM COURTRIGHT (ESN)

AUTHOR: CHRIS ZELIZNAK (CDM) CZ 10/17/02

PROCEDURE: SAMPLING PROCEDURE OUTLINED IN CONTAMINANT SCREENING STUDY LIBBY ASBESTOS SITE, OPERABLE UNIT 4, LIBBY, MT. FINAL SAP ADDENDUM FOR THE STIMSON LUMBER CO. AREA. CZ 10/17/02

EQUIPMENT: TRIMBLE MODEL TSC1 S/N
KODAK CAMERA DX3500 S/N KCKA1L1503931

PPE: MODIFIED LEVEL D W/ MODIFIED LEVEL C IN NURSERY AREA.

Chris Zeliznak
10/17/02
CHRIS ZELIZNAK

Location STIMSON LUMBER Date 10/17/02

Project / Client LIBBY ASBESTOS EPA/VOLPE
STIMSON LUMBER

08:41 CZ & CW ARRIVE AT CITY HALL PARKING LOT TO CONTINUE STIMSON LUMBER SUBSURFACE SOIL (S.S.) SAMPLING (FORMER POPPING PLANT AREA). TODAYS ACTIVITIES INCLUDE SAMPLING SA1-1 SA1-15, & SA1-12 TO COMPLETE SAMPLING THE SUBAREA & CONTINUE TO THE NURSERY SUBAREA.

08:48 MEET UP W/ ESN CREW (EH & TC) & JM (CDM) WILL BE ACCOMPANYING US TODAY. CZ 10/17/02

PHOTO LOG

PHOTO	DIR	LOCATION	INT.
1	NA	SA1-15-E W/VERM	CZ
2	NA	SA1-15-CENTER W/VERM	CZ
3	NA	SA1-15-W W/VERM	CZ

10/17/02
CHRIS ZELIZNAK

Location STIMSON LUMBER Date 10/17/02

Project / Client LIBBY ASBESTOS EPA/VOLPE

SA1-1

08:49 CDM LOCATES POINT SA1-1 & MEASURES OUT PERIPHERAL POINTS. ESN PREPARES TO SAMPLE & COLLECT DUPLICATE. CZ 10/17/02

09:05 ESN BEGINS COLLECTING FIRST MACROBORE S.S. SAMPLE (CENTERPOINT) THEN CONTINUES TO COLLECT ~~FOUR (4)~~ GRIDLITOL NINE (9) ADDITIONAL S.S. SAMPLES (W, N, S, E).

SAMPLE	TIME	RECOVERY	SAMPLE HORIZON	POSITION
CENTER	09:06	25"	48-60"	0
W	09:10	36"	48-60"	10'
W (DUP)	09:14	38"	48-60"	10' (D)
CENTER (DUP)	09:17	19"	48-60"	0 (D)
N	09:25	35"	48-60"	10'
N (DUP)	09:27	38"	48-60"	10' (D)
S	09:32	24"	48-60"	10'
S (DUP)	09:36	23"	48-60"	10' (D)
E	09:43	POOR RECOVERY (SEE NOTE BELOW)	48-60"	10'
E ~~(DUP)~~ CZ 10/17/02	09:49	(SEE NOTE)	48-60"	10.5'
E	09:55	25"	48-60"	10'
E (DUP)	09:58	24"	48-60"	10.5'

10:01 CW HOMOGENIZES TEN (10) S.S. SAMPLES (ORIGINAL & DUPLICATES) & PACKAGES EACH SAMPLE ACCORDING TO DUPLICATE SAMPLING PROTOCOL. DEVIATIONS NOTED

10/17/02 CHRIS ZELIZNAK

Location STIMSON LUMBER Date 10/17/02

Project / Client LIBBY ASBESTOS EPA/VOLPE

SA1-1

IN SAMPLING INCLUDE COLLECTING DUPLICATE CZ 10/17/02 CENTER POINT SAMPLE AFTER COLLECTING N & N DUPLICATE SAMPLING & COLLECTING E & E DUPLICATE SAMPLES FROM 10' E OF CENTER & BIASED 1' & 1.5' NORTH DUE TO INCOMPLETE SAMPLE RETRIEVAL IN FIRST TWO ATTEMPTS (LOST LOWERMOST 1' OF SAMPLE DURING SAMPLE RETRIEVAL DUE TO FINE SEDIMENTS & LACK OF SAND CATCHER ON MACROBORE. ESN COLLECTED NEXT SAMPLES (SAMPLES COLLECTED FOR HOMOGENIZATION) USING SAND CATCHERS.) AND LOCATION OF DRAINAGE PIPE EAST OF 10' SAMPLING POINT (COULD NOT SAMPLE FROM 11').

10:10 CZ ASSIGNS SP & CS #'s FOR ORIGINAL & DUPLICATE S.S. SAMPLES — CZ 10/17/02

SP- 119560 **CS- 09660**

COC#: 004216

FF#: CSS(S)-003984 CZ 10/17/02 **CS- 09661**

GPS FILE #: T1A10172 — CZ 10/17/02

10:13 CDM & ESN DECON EQUIPMENT & DEMOB FROM SA1-1 TO SA1-15.

CZ 10/17/02 CHRIS ZELIZNAK

Location STIMSON LUMBER Date 10/17/02

Project / Client LIBBY ASBESTOS EPA/VOLPE

SA1-15

10:15 CDM & ESN ARRIVE AT SA1-15. CZ LOCATES COORDINATES W/GPS & CREW LOCATES PERIPHERAL POINTS. ESN PREPARES TO SAMPLE. CZ 10/17/02

10:25 ESN BEGINS COLLECTING FIRST MACROBORE S.S. SAMPLE (CENTERPOINT) THEN CONTINUES TO COLLECT FOUR (4) ADDITIONAL SAMPLES (S, E, W, N).

SAMPLE	TIME	RECOVERY	SAMPLE HORIZON	POSITION
CENTER	10:27	35"	48-60"	0
S	10:30	9"	48-60"	10'
E SEE NOTE	10:34	42"	48-60"	10'
W CZ 10/17/02	10:39	34"	48-60"	9'
N	10:43		48-60"	10'

10:44 JM OBSERVES VERMICULITE IN EAST SAMPLE FROM 24"-31" HORIZON (FROM BOTTOM OF ACETATE SLEEVE), IT WAS OBSERVED AGAIN IN THE CENTER SAMPLE FROM 21"-26" HORIZON (FROM BOTTOM OF ACETATE SLEEVE), FROM 24" TO 29" IN ~~EAST~~ WEST CZ 10/17/02 SAMPLE, & FROM 33" TO 37" IN N SAMPLE, NOT OBSERVED IN S SAMPLE (POOR RECOVERY). CW TAKES THREE PHOTOGRAPHS (#1-E, #2-CENTER &

10/17/02 CHRIS ZELIZNAK

Location STIMSON LUMBER Date 10/17/02

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SA1-15

#3-WEST). ALL OBSERVED VERMICULITE WAS COLLECTED FROM SLEEVES & BAGGED FOR DISPOSAL.

10:50 CW HOMOGENIZES FIVE(5) S.S SAMPLES & PACKAGES SAMPLE. CZ ASSIGNS SP & CS #S. CZ 10/17/02

SP- 119561 **CS- 09662**

CZ 10/17/02

COC #: 004216 F.F. #: CSS(S) - 003984

GPS FILE #: TIB 10/72 CZ 10/17/02

11:00 ESN & CDM DECON EQUIPMENT & DEMOB FROM SA1-15 TO SA1-12.

10/17/02 CHRIS ZELIZNAK

Location STIMSON LUMBER Date 10/17/02

Project / Client LIBBY ASBESTOS EPA/VOLPE

SA1-12

11:09 CDM & ESN ARRIVE AT SA1-12. CZ LOCATES COORDINATES W/ GPS & CREW LOCATES PERIPHERAL POINTS.

CZ 10/17/02 ~~11:11~~ ESN PREPARES TO SAMPLE. CZ 10/17/02

11:11 ESN BEGINS COLLECTING FIRST MACROBORE S.S. SAMPLE (CENTER POINT) THEN CONTINUES TO COLLECT FOUR(4) ADDITIONAL SAMPLES (W, N, E, S). CZ 10/17/02

SAMPLE	TIME	RECOVERY	SAMPLE HORIZON	POSITION
CENTER	11:12	39"	48-60"	0
W	11:16	41"	48-60"	10'
N	11:20	36"	48-60"	10'
E	11:24	37"	48-60"	10'
S	11:28	37"	48-60"	10'

11:25 CZ OBSERVES VERMICULITE IN E SAMPLE FROM 26"-31" (MEASURED FROM BOTTOM OF ACETATE SLEEVE). NOT OBSERVED IN ANY OF OTHER FOUR(4) SUBSAMPLES. CZ 10/17/02

11:33 CW HOMOGENIZES FIVE(5) S.S. SAMPLES & PACKAGES SAMPLE. CZ ASSIGNS CS & SP #'S. CZ 10/17/02

SP- 119562

CS- 09663

CZ 10/17/02

10/17/02 CHRIS ZELIZNAK

Location STIMSON LUMBER Date 10/17/02

Project / Client LIBBY ASBESTOS EPA / VOLPE

SA1-12

COC#: 004216 F.F.#: CSS(S)-003985

GPS FILE #: TTC10172 CZ 10/17/02

11:40 COM & ESN DECON EQUIPMENT & DEMOB FROM SA1-12 TO NURSERY AREA & BREAK FOR LUNCH.

13:10 COM & ESN RETURN TO SITE; ESN STOPS AT SA4-20 TO ATTEMPT RETRIEVAL OF MACROBORE LEFT IN GROUND (SEE PAGE 55). - SUCCESSFUL. ESN BACK FILLS BOREHOLE & MOBS TO SA6-1. CZ 10/17/02

Chris Zelizniak 10/17/02 CHRIS ZELIZNAK

Location STIMSON LUMBER Date 10/17/02

Project / Client LIBBY ASBESTOS EPA/VOLPE

SA6-1

13:24 CZ & CW ARRIVE AT SA6-1. CZ LOCATES COORDINATES W/GPS & CW LOCATE PERIPHERAL POINTS. ESN PREPARES TO SAMPLE. CZ 10/17/02

13:37 ESN BEGINS COLLECTING FIRST S.S. SAMPLE (CENTERPOINT), THEN CONTINUE TO COLLECT FOUR (4) ADDITIONAL SAMPLES (N, W, S, E).

SAMPLE	TIME	RECOVERY	SAMPLE HORIZON	POSITION
CENTER	13:39	44"	48-60"	0
N	13:49	35"	48-60"	10'
W	13:53	36"	48-60"	10'
S	13:58	42"	48-60"	10'
E	14:03	38"	48-60"	10'

14:06 CW HOMOGENIZES FIVE (5) S.S. SAMPLES & PACKAGES SAMPLE. CZ ASSIGNS SP & CS #s CZ 10/17/02

SP- 119563

CS- 09664

CZ 10/17/02

COC#: 004216 F.F.#: CSS(S)-003985

GPS FILE#: TTD10172 CZ 10/17/02

14:12 ESN & CW DECON EQUIPMENT & DEMOB FROM SA6-1 TO SA6-19 CZ 10/17/02

Chris Zelizniak 10/17/02 CHRIS ZELIZNAK

Location STIMSON LUMBER Date 10/17/02

Project / Client LIBBY ASBESTOS EPA/VOLPE

SA6-9

14:26 CDM & ESN ARRIVE AT SA6-9. CZ LOCATES POINT W/GPS & CREW LOCATE PERIPHERAL POINTS. ESN PREPARES TO SAMPLE. CZ 10/17/02

14:30 ESN BEGINS COLLECTING FIRST MACROBORE S.S. SAMPLE (CENTERPOINT) THEN COLLECTS FOUR(4) ADDITIONAL SAMPLES (E, S, W, & N). CZ 10/17/02

SAMPLE	TIME	RECOVERY	SAMPLE HORIZON	POSITION
CENTER	14:31	25"	48-60"	0
E	14:36	25"	48-60"	10'
S	14:40	34"	48-60"	10'
W	14:45	24"	48-60"	10'
N	14:48	20"	48-60"	10'

14:52 CW HOMOGENIZES FIVE(5) S.S. SAMPLES & PACKAGES SAMPLE. CZ ASSIGNS SP & CS #'S CZ 10/17/02

SP- 119564 CS- 09665

CZ 10/17/02

COC#: 004216 F.F.#: CSS(S)-003985

GPS FILE #: TIE10172 CZ 10/17/02

15:00 CDM & ESN ~~RETURN~~ CZ 10/17/02 DECON EQUIPMENT & DEMOB FROM SA6-9 TO SA6-~~8~~ 12 CZ 10/17/02.

10/17/02 CHRIS ZELIZNAK

Location STIMSON LUMBER Date 10/17/02

Project / Client LIBBY ASBESTOS EPA/VOLPE

SA6-12

15:02 CDM & ESN ARRIVE AT SA6-12. CZ LOCATES POINT W/GPS & CREW LOCATE PERIPHERAL POINTS. ESN PREPARES TO SAMPLE CZ 10/17/02

15:06 ESN BEGINS COLLECTING FIRST MACROBORE S.S. SAMPLE (CENTER POINT) THEN COLLECTS FOUR(4) ADDITIONAL SAMPLES (W, S, E, & N) CZ 10/17/02

SAMPLE	TIME	RECOVERY	SAMPLE HORIZON	POSITION
CENTER	15:09	39"	48-60"	0
W	15:16	32"	48-60"	10'
S	15:20	36"	48-60"	10'
E	15:25	36"	48-60"	10'
N	15:29	29"	48-60	10'

15:33 CW HOMOGENIZES FIVE(5) S.S. SAMPLES & PACKAGES SAMPLE. CZ ASSIGNS SP & CS #'S CZ 10/17/02

SP- 119565 CS- 09666

CZ 10/17/02

COC#: 004216 F.F.#: CSS(S)-003986

GPS FILE#: TIF10172 CZ 10/17/02

15:40 CDM & ESN DECON EQUIPMENT & DEMOB FROM SA6-12 TO SA6-14.

10/17/02 CHRIS ZELIZNAK

Location STIMSON LUMBER Date 10/17/02

Project / Client LIBBY ASBESTOS EPA/VOLPE

SA6-14

CZ 10/17/02

~~14~~ 15:44 CDM & ESN ARRIVE AT SA6-14. CZ LOCATES POINT W/GPS COORDINATES & CREW LOCATE PERIPHERAL POINTS. ESN PREPARES TO SAMPLE — CZ 10/17/02

15:58 ESN BEGINS COLLECTING FIRST MACROPROBE S.S. SAMPLE (CENTERPOINT) THEN COLLECTS FOUR (4) ADDITIONAL SAMPLES (W, N, E, & S) — CZ 10/17/02

SAMPLE	TIME	RECOVERY	SAMPLE HORIZON	POSITION
CENTER	15:59	39"	48-60"	0
W	16:03	32"	48-60"	10'
N	16:08	42"	48-60"	10'
E	16:12	22"	48-60"	10'
S	16:18	42"	48-60"	10'

CZ 10/17/02

16:22 CW HOMOGENIZES FIVE (5) S.S. SAMPLES & PACKAGES SAMPLE. CZ ASSIGNS SP & CS #S. — CZ 10/17/02

SP- 119566

CS- 09667

CZ 10/17/02

COC#: 004216 F.F.#: CSS(S) - 003986

GPS FILE #: TIG10172 — CZ 10/17/02

16:26 CDM & ESN DECON EQUIPMENT & DEMOB FROM SA6-14 TO SA6-8 — 10/17/02

CHRIS ZELIZNAK

Location STIMSON LUMBER Date 10/17/02 101

Project / Client LIBBY ASBESTOS EPA/VOLPE

SA6-8

16:33 CDM & ESN ARRIVE AT SA6-8. CZ LOCATES CENTERPOINT W/GPS & CREW LOCATE PERIPHERAL POINTS. ESN PREPARES TO SAMPLE. — CZ 10/17/02

16:41 ESN BEGINS COLLECTING FIRST MACROBORE S.S. SAMPLE (CENTER POINT), THEN COLLECTS FOUR (4) ADDITIONAL SAMPLES (E, N, W, & S).

SAMPLE	TIME	RECOVERY	SAMPLE HORIZON	POSITION
CENTER	16:46	37"	44-56"	0
E	16:53	31"	48-60"	10'
N	16:58	30"	48-60"	10'
W	17:03	50"	48-60"	10'
S	17:08	41"	48-60"	10'

17:12 CW HOMOGENIZES FIVE (5) S.S. SAMPLES & PACKAGES SAMPLE. CZ ASSIGNS SP & CS #S. — CZ 10/17/02

SP- 119567

CS- 09668

CZ 10/17/02

COC#: 004216 F.F.#: CSS(S) - 003986

GPS FILE#: TIH10172 — CZ 10/17/02

17:15 CDM & ESN DECON EQUIPMENT & DEMOB FROM SA6-8 TO NURSERY EXCLUSION DECON ZONE. — CZ 10/17/02

10/17/02 CHRIS ZELIZNAK

Location STIMSON LUMBER Date 10/17/02

Project / Client LIBBY ASBESTOS EPA/VOLPE

LIST OF EVENTS

17:20 CDM LEAVES SITE FOR FIELD OFFICE ESN LEAVES SITE FOR DAY. CZ 10/17/02

17:26 CDM ARRIVES AT FIELD OFFICE

17:46 CW & CZ COLLECT FIELD BLANK FROM SHOE, CATCHER, & ACETATE MACROBORE LINER. CZ ASSIGNS CS #. CZ 10/17/02

CZ

CS- 09670 COC#: 004217

F.F.#: CSS(S)-003987

17:49 CW & CZ COLLECT FIELD BLANK FROM SAMPLING TROWEL & BOWL. CZ ASSIGNS CS#. CZ 10/17/02

CS- 09669 COC#: 004216

F.F.#: CSS(S)-003987

17:55 CW & CZ COMPLETE PAPERWORK & SUBMIT SAMPLES. CZ 10/17/02

18:00 END OF DAY

Chris Zelizniak 10/17/02

Location STIMSON LUMBER Date 10/18/02

Project / Client LIBBY ASBESTOS EPA/VOLPE

MORNING MEETING

0800 ARRIVE AT CDM FIELD OFFICE FOR MORNING MEETING & HEALTH & SAFETY TALK CZ 10/18/02

WEATHER: FOGGY & 31°, HIGHS IN UPPER 60'S

CREW: CHRIS ZELIZNAK (CDM), CHRIS WORTHINGTON (CDM), EDWARD HUBBERT (ESN), & TOM COUTRIGHT (ESN)

AUTHOR: CHRIS ZELIZNAK (CDM)

PROCEDURE: SAMPLING PROCEDURE OUTLINED IN CONTAMINANT SCREENING STUDY LIBBY ASBESTOS SITE, OPERABLE UNIT 4, LIBBY, MT. FINAL SAP ADDENDUM FOR THE STIMSON LUMBER CO. AREA. CZ 10/18/02

EQUIPMENT: TRIMBLE MODEL TSC1 S/N KODAK DX3500 S/N KCKA121503931

PPE: MODIFIED LEVEL C IN NURSERY AREA.

Chris Zelizniak 10/18/02 CHRIS ZELIZNAK

Location STIMSON LUMBER Date 10/18/02

Project / Client LIBBY ASBESTOS EPA/VOLPE

H&S MEETING

08:30 CDM & ESN MEET JEFF MONTERA & GLEN OOBEK AT STIMSON FIRE HALL FOR PLANNING MEETING TO ENTER NURSERY AREA TODAY IN LEVEL C.

08:50 WARM-UP MEETING & HEAD TO NURSERY; BEGIN PREPPING EQUIPMENT & PERSONNEL FOR ENTRY. CZ 10/18/02

CZ 10/18/02 CHRIS ZELIZNAK

Location STIMSON LUMBER Date 10/18/02

Project / Client LIBBY ASBESTOS EPA/VOLPE

SA6-5

09:55 CDM & ESN ARRIVE AT SA6-5. CZ LOCATES POINT W/GPS & CREW LOCATE PERIPHERAL POINTS. ESN PREPARES TO SAMPLE. CZ 10/18/02

10:00 ESN BEGINS COLLECTING FIRST MACROPROBE S.S. SAMPLE (CENTER POINT) THEN COLLECTS FOUR (4) ADDITIONAL SAMPLES (N, E, W, & S) CZ 10/18/02

SAMPLE	TIME	RECOVERY	SAMPLE HORIZON	POSITION
CENTER	10:02	38"	48-60"	0
N	10:10	31"	48-60"	10'
E	10:16	48"	48-60"	10'
W	10:21	35"	48-60"	10'
S	10:25		48-60"	10'

10:29 CW HOMOGENIZES FIVE(5) S.S. SAMPLES & PACKAGES SAMPLE. CZ ASSIGNS SP & CS #S. CZ 10/18/02

SP- 119568

CS- 09671

CZ 10/18/02

COC#: 004218 F.F.#: CSS(S)-003988

GPS FILE #: TIA 10182

10:37 CDM & ESN MOB FROM SA6-5 TO SA 6-7.

10/18/02 CHRIS ZELIZNAK

Location STIMSON LUMBER Date 10/18/02

Project/Client LIBBY ASBESTOS EPA/VOLPE

SA6-7

10:42 CDM & ESN ARRIVE AT SA6-7. CZ LOCATES POINT W/GPS & CREW LOCATE PERIPHERAL POINTS. ESN PREPARES TO SAMPLE.

10:45 ESN BEGINS COLLECTING FIRST MACROPROBE S.S. SAMPLE FROM CENTER POINT, THEN CONTINUES TO COLLECT NINE (9) ADDITIONAL SAMPLES (W, S, E, & N) CZ 10/18/02

10:50 CZ RELINQUISHES LOGBOOK TO JM.

Position	Sample	Time	Recovery	Sample Horizon
	Center Jm			
0	Center Dup. Jm	10:50	37"	48-60"
1' Q Jm	Center Dup	10:54	47"	48-60"
10'	West	10:58	43"	48-60"
9'	West Dup	11:03	43"	48-60"
10	South	11:06	39"	48-60"
11'	South Dup	11:09	35"	48-60"
10'	East	11:13	36"	48-60"
11'	East Dup	11:15	34"	48-60"
10'	North	11:21	38"	48-60"
11'	North Dup	11:27	40"	48-60"

11:30 Jm RELINQUISHES LOGBOOK to CZ

Location STIMSON LUMBER Date 10/18/02

Project/Client LIBBY ASBESTOS EPA VOLPE

SA6-7

11:31 CW HOMOGENIZES TEN (10) S.S. SAMPLES & PACKAGES SAMPLE & DUP CZ ASSIGNS SP & CS #S CZ 10/18/02

SP- 119569 CS- 09672 CS- 09673

CZ 10/18/02

COC # 004218 F.F. # CSS(S)-003988

GPS FILE #: T1B10182

11:32 CDM & ESN MOB OUT OF NURSERY AREA TO DECON ZONE.

CDM & ESN COMPLETE DECON PROCEDURE FOR EQUIPMENT & PERSONNEL.

12:30 ALL PERSONNEL & EQUIPMENT DECONNED; ALL PERSONNEL OUT OF DECON. ESN LEAVES RIG TO AIR DRY DURING LUNCH.

12:50 CDM & ESN LEAVE SITE FOR LUNCH.

12:45 RETURN TO SITE. CDM COLLECTS PPE TRASH & TAKES IT TO OFFICE; ESN LOADS GEOPROBE ON TRAILER & RETURNS TO OFFICE.

10/22/02
CHRIS ZELIZNAK

LIBBY ASBESTOS PROJECT
CSS SOIL
FIELD BOOK #100133

Location Lumber Yard @ Stinson Date 10-14-02

Project / Client Libby Asbestos / VOLPE-EPA Region 8

~~BDH on 2nd~~ BT 10-14-02 (No BDH to be used)

120 Navigate close to point 24 which in reality is on other side of locked fence.

232 Collect "Lumber Yard SA3-24"

CS- 09681

BT 10-14-02

SP- 119575

~~BH 10-14~~ BT 10-14-02

COC: 004157 GPS file#: T6A10142

A composite was not collected. A grab sample was collected instead as there was asphalt surrounding what other wise would have been the "centroid". No vermiculite observed. Field Sheet CSS(S)-003921

96

Location Stimson - Lumber Yard Date 10-14-02

Project / Client Libby Asbestos - Volpe-EPA Region 8

Bob Tolford, Jeff Montera (CDM)

1345 Navigate to ~~SA3-22~~ ~~23~~ SLA3-23 (AT-10-14-02)

1402 SP- 119576 (AT 10-14-02) CS- 09682

→ Collect SLA3-23 5 points.

N 0° E 10'

N 90° E 10'

N 90° W 10'

S 0° W 10'

No visible vermiculite. Sample collection conducted in accordance with SAP: Libby Asbestos OU4 Final SAP and Addendum for Stimson Lumber Co. SAP

COC: 004157 GPS file# T6B10142

Field Sheet # CSS(S) 003951

1414 Depart for next site

Bob Tolford

Location Stimson – Lumber Yard Date 10-14-02

Project / Client Libby Asbestos – Volpe-Region 8

Bob Tolford, Jeff Montera (CDM)

1416 Navigate to ~~SLA 3-23-13~~ SA 3-13 BT-10-14-02

Jeff establishes 5 composite points. Centroid will be 20' to the NE of SA 3-13 pre-determined location; original is on concrete pad.

1433 Collect SA 3-13 SP- 119577 BT 10-14-02 CS- 09683

COC ~~0014~~ BT 10-14-02 004157 Field Sheet: 003957

GPS File # T6C 10142

No visible vermiculite. Sample collection was conducted in accordance with Libby Asbestos OU4 Final SAP, and Addendum for Stimson Lumber SAP.

1444 Depart for next site.

Bob Tolford

98

Location Stimson, Lumber Yard Date 10-14-02

Project / Client Libby Asbestos / Volpe - EPA Region 8
Bob Tolford, Jeff Montera - (CDM)

1445 Navigate to SA3-14

1455 AT SA3-14, centroid is located in what appears to be freshly graded fill. Jeff establishes centroid, + 4 other composite points.

1458 SP- 119578 CS- 09684
collect SA3-14

COC: 4157 Field Sheet: 003956

GPS file # T60 10146

Sampling conducted by Jeff Montera in accordance with Libby Asbestos OU4 Final SAP, and Stimson Lumber SAP Addendum.

Depart for next site.

Location Stimson, Lumber Yard Date 10-14-02

Project / Client Libby Asbestos (Volpe - EPA Region 8
Bob Telford, Jeff Montero - CDM

1521 At SA3-22, Jeff Montero establishes composite points. Sampling will be in accordance with Libby OU4 SAP, and Stimson Lumber SAP addendum.

SP- 119579 CS- 09685

1527 collect SA3-22

COC: 4157 Field Sheet: 3952

GPS File#: T6E 10142

1541 Depart for next site.

100

Location Stimson, Lumber Yard Date 10-14-02

Project: Client Libby Asbestos / Volpe - EPA Region 4

Bob Telford, Jeff Montera - CDM

1544 Arrive near SA 3-11. Jeff Montera collects sample (+ duplicate) in accordance with Libby OU4 SAP, and Stimson Lumber Addendum to SAP.

1554 collect SA3-11 SP- 119580 CS- 09686

1559 duplicate of SA3-11 SP- 119580 CS- 09687

AT 10-14-02

Field form: 3955 COC: 4157

GPS file#: T6F10142

AT 10-14-02 ~~1509~~ 1609 Depart for water break. Done at site.

Location Stimson Lumber Yard Date 10-14-02

Project Client Libby Asbestos / Volpe - EPA Region 8

Bob Tolford, Jeff Montera - CPM

1621 ~~1521~~ BT 10-14-02 Arrive at ~~SLA~~ SA3-12 area

BT 10-14-02 ~~1625~~ 1625 Navigate to SA3-12. Jeff Montera selects composite ~~points~~. ~~collects~~ BT 10-14-02 Jeff will also collect the samples in accordance with the Libby Asbestos OU4 Final SAP, and the Stimson Lumber SAP Addendum.

1633 collect SP- 119581 BT 10-14-02 CS- 09688

SA3-12

This sample location is in a black topped (asphalt) parking lot. Composite sample is not possible so a grab sample will be collected.

1643 Depart site COC: 4157

GPS file #: T6G10142 Field form: 3954

102

Location Stimson Lumber Date 10-14-02

Project / Client Libby Asbestos / Volpe - EPA Region 8

Bob Telford, Jeff Montera - CDM

1645 Arrive at SA3-1 Jeff Montera sets about establing 5 composit points in accordance with Libby Asbestos OU4 SAP, and the Stimson Lumber SAP Addendum.

1650 collect SA3-1 SP- 119582 CS- 09689

COC: 4457 Field sheet#: 3953

GPS file#: T6H10142

no vermiculite noted

BT 10-14-02

Location: Libby, ~~Ashes~~ Montana Date: 10-14-02

Project: Client: Libby Asbestos / Volpe - EPA Region 8

Bob Tolford, Jeff Montera - COR

1710 Dee Warren arrives at SA3-1. I will accompany her back to office to collect our equipment blank.

1720 Depart Stimson Lumber for office.

1731 arrive @ office

1742 collect field blank CS- 09690 BT 10-14-02

field form: 3958 COC: 4157

1805 Logbook closed for the day.

Location Stimson Lumber Date 10-15-02

Project / Client Libby Asbestos / Volpe - EPA Region 8

Bob Tolford, Jeff Montera - CDM

0845 Met with ~~Greg~~ BT 10.15.02 Glen Dobek of Stimson Lumber for briefing of todays activities. Jeff + I will sample along the RR spur, and lines owned by Stimson lumber.

0858 At SA2-13 area, ~~We~~ BT 10.15.02 Jeff navigates to the sampling point.

0907 SA2-13 location is established, Jeff digs the 3 holes in accordance with the SAP for SA2-13, and for SA2-14 on opposite sides of the RR track

SA2-13 SP- 119583 BT 10.15.02 CS- 09691 field form# 3922
0913

SA2-14 SP- 119584 BT 10-15-02 CS- 09692 field form# 3923
0924

~~Field form#~~ BT 10.15.02 COC# 4156

GPS file T3 A10152

0933 depart for next site

Bob Tolford

Location Stimson Lumber Date 10-15-02

Project / Client Libby Asbestos / Volpe - EPA Region 8

Bob Tolford, Jeff Montera - CDM

0845 Met with ~~Greg~~ BT 10.15.02 Glen Dobek of Stimson Lumber for briefing of todays activities. Jeff + I will sample along the RR spur, and lines owned by Stimson lumber.

0858 At SA2-13 area, ~~the~~ BT 10.15.02 Jeff navigates to the sampling point.

0907 SA2-13 location is established, Jeff digs the 3 holes in accordance with the SAP for SA2-13, and for SA2-14 on opposite sides of the RR track

SA2-13 SP- 119583 BT 10.15.02 CS- 09691 field form# 3922
0913

SA2-14 SP- 119584 BT 10.15.02 CS- 09692 field form# 3923
0924

~~Field form#~~ BT 10.15.02 COC# 4156

GPS file T3A10152

0933 depart for next site

Bob Tolford

106

Location Stimson Lumber Date 10-15-02

Project / Client Libby Asbestos / Volpe - EPA Region 8

Bob Tolford, Jeff Montera - CDM

0943 At ~~STA2~~ AT 10.15.02 SA2-11 (and 12), Jeff Montera digs sample points. He will collect samples in accordance with the Libby Asbestos OU4 SAP, and the SAP Addendum for Stimson Lumber.

SA2-11 SP- 119585 AT-10-15-02 CS- 09693

0950

SA2-12 SP- 119586 AT 10-15-02 CS- 09694

0954

Field sheet # 3924 COC# 4156

GPS file: T3 B10152

1014 ~~Navigate to next set of points SA2-9 and SA2-10.~~

AT 10-15-02

1015 Depart this site (SA2-11 & 12) for subsurface team's location.

1020 At Subsurface soil team location, Jeff Montera advises team that it is ok to put more than one sample on the field sheets.

1027 Depart Stimson for a beverage break.

1038 Return to site to locate SA3 & 4.

Bob Tolford

Location Stimson Lumber Date 10-15-02

Project / Client Libby Asbestos / Volpe - EPA Reg. 8

Bob Tolford, Jeff Montera - CDM

1043 SA2-3 is located. Jeff will collect samples in accordance with Libby OU4 SAP, and the SAP Stimson Lumber Addendum

BT 10-15-02

1043 SA2-3 SP- 119587 BT 10-15-02 CS- 09695

~~SA2-3~~ BT 10-15-02

1054 SP- 119588 BT 10-15-02 CS- 09696

SA2-4

Field form#: 3925 Coc#4156

GPS file# T3C10152

1118 Navigated to SA2-1 (&2), Jeff Montera will collect samples in accordance with Libby Asbestos Site OU4 SAP, and the SAP Addendum for Stimson Lumber.

1124 SP- 119589 BT 10-15-02 CS- 09697 field form 3925

SA2-1

1132 SP- 119590 BT 10-15-02 CS- 09698 field form# 3926

SA2-2

Coc# 4156

GPS file# T6 D10152

BT 10-15-02

108

Location Stimson Lumber Date 10-15-02

Project / Client Libby Asbestos / Volpe - EPA Region 8
Bob Tolford, Jeff Montera - CDM

1145 Navigate to SA2-5 (&6). Jeff Montera establishes the compossit points for both, and collects samples (will collect samples) in accordance with the Libby Asbestos OU4 SAP, and the addendum for Stimson Lumber.

1157 AT 10-15-02 ~~SLA~~ SA2-6 SP- 119591 AT 10-15-02 CS- 09699

1203 SA2-5 SP- 119592 AT 10-15-02 CS- 09700

field Sheet 3926 COC#: 4156

GPS file#: ~~T3~~ T3E10152 AT 10.15.02

1225 depart site to check on other teams

1235 Go to office for supplies.

1250 Break for lunch.

1321 Done with lunch, return to site

1329 At Stimson Lumber - RR Spur.

1332 B. Tolford Navigates to SA2-7 & 8.

Location Stimson Lumber Date 10.15.02

Project / Client Libby Asbestos / Volpe - EPA Region 8
Bob Bolford, Jeff Montera - CDM

1335 Jeff Montera establishes composite points for
SA2-7 & SA2-8. Jeff will collect
samples in accordance with the Libby Asbestos
Final (OU4) SAP, and the SAP addendum for
Stimson Lumber.

1339 SA2-7 SP- 119593 BT 10.15.02 CS- 09701

1347 SA2-8 SP- 119594 BT 10.15.02 CS- 09702

field sheet: 3972 COC#: 4155

GPS file #: T3F10152

1352 Navigate to next set of Points: SA2-9 (& SA2-10) BT 10.15.02

1410 SA2-9 SP- 119595 BT 10.15.02 CS- 09703 field sheet# 3972

1416 SA2-10 SP- 119596 BT 10.15.02 CS- 09704 field sheet# 3973

COC#: 4155

GPS file #: T3G10152

1430 Depart present location.

1437 Arrive @ geoprobe crew's location. Work for them
is progressing well.

1439 Depart Geoprobe zone; head to logyard area.

110

Location Stimson Lumber Date 10-15-02

Project / Client Libby Asbestos / Volpe - EPA Region 8

Bob Tolford, Jeff Montera - CDM

1446 Arrive at Log yard area; I will navigate to SA4-6, SA4-7, and SA4-8 while Jeff goes to visit Walt Smith's Soils team for a few minutes

1507 Jeff returns. Jeff establishes his composite points for SA4-6. Sampling, he will employ the methodology outlined in the Libby Asbestos Final (004) SAP, and SAP addendum for Stimson Lumber.

1512 SP- 119597 HT 10-15-02 CS- 09705

SA4-6

Field Sheet: 3973 COC#: 4155

1524 Done sampling - But not GPS'ed yet.

GPS file # T3H 10152

1535 At SA4-7, Jeff establishes composite sample points. He will collect the sample in the above stated manner. This will be collected in duplicate.

1540 SP- 119598 HT 10-15-02 CS- 09706 field sheet 3973

SA4-7

1544 SP- 119598 HT 10-15-02 CS- 09707 field sheet 3974

SA4-7 dupl

COC#: 4155

GPS file# T3I 10152 I had to take off wrong sticker + replace with correct sticker - HT 10-15-02

1600 Depart for next sample point.

Location Stimson Lumber Date 10-15-02

Project / Client Libby Asbestos / Volpe - EPA Region 8

Bob Tolford, Jeff Montera - CDM

1604 At SA 4-8, Jeff Montera establishes composite points for the soil sample that he will be collecting in accordance with the Libby Asbestos Site OU 4 Final SAP, and Addendum to SAP for Stimson Lumber.

1608 SP- 119599 BT 10-15-02 CS- 09708

AT 10-15-02 SA 4-8

field sheet 3974 COC#: 4155

GPS file #: T3J10152

1621 Depart ~~Log~~ AT 10-15-02 Logyard to find geoprobe crew. They are heading towords Logyard, so we go to their next set up to observe their technique. Crew is from ESN's Colorado office.

1724 Depart geoprobe crew area, return to office.

1737 Samples handed over to processing crew.

1740 Logbook closed for the day.

[signature]

Location Stimson Lumber Date 10-16-02

Project Client Libby Asbestos / Volpe - EPA Region 8

Bob Tolford - CSM - note keeper.

Weather today: 27° @ 6:00 AM, high of 65° predicted. Su

0800 Morning meeting, including HRS [illegible] on Propane [illegible] safety. Jeff Montera will be in a meeting here @ the office from 8:30 AM until about 1000 hrs. He will catch up with the Stimson Lumber sampling teams afterwards

0910 I go to Stimson Lumber and meet with Mr. Glen Dobek of Stimson to let him know that Jeff will be joining the rest of the sampling crew around 1000 A.M. I will be with the Geoprobe crew overseers (Chris Worthington and Chris Zeliznak (CSM) in the meantime.

0945 Geoprobe crew has just retrieved the 4th of 5 points at SA3-8, subarea 3.

0953 5th sleeve recovered from SA3-8. See Logbook # 100128, for details of Geoprobe crews' activities. ES, V Inc. probe crew: Tom Courtright, Ed Hubbe

1010 Geoprobe crew is at next sample locat SA3-19.

1025 Jeff Montera arrives on the scene

1045 Jeff Montera departs to go speak with International paper Co representative about acce to their properties.

1058 B. Tolford departs Stimson Lumber proper

Bob Tol

Location Stimson Lumber Date 10/16/02

Project / Client Libby Asbestos / Volpe - EPA Region 8

Bob Polford - CDM

1058 (cont.) to purchase hot coffee for Geoprobe crew.

1109 Return to Stimson property.

1116 At SA3-19, Geoprobe crew is done, and preparing to mobilize to SA3-23.

1153 Chris Zeliznak has established the points for SA 3-23. Glen Dobek (Stimson) is with us to ensure we stay away from nearby fiber optic line.

1228 Done @ this location, Geoprobe crew + I break for lunch.

1331 Back @ Stimson property, I meet with Jeff Montera who asks me to stay with Saul Robles and Randy Roberts who are dressing out in level C to collect samples in Subarea 6 - the Nursery area.

1410 Randy and Saul go to 1st point.

1446 Saul brings 1st 3 samples. I decon the bowls + trowels for Saul.

1451 Saul returns to rejoin Randy for collection of more samples in level C.

NOTE: These sampling activities are recorded in logbook # 100144 which Randy & Saul have been using.

1454 Randy + Saul have progressed beyond my view. I am not dressed out in level C + must

Bob Polford

Location Stimson Lumber Co. Date 10-16-02

Project / Client Libby Asbestos / Volpe - EPA Region 8
Bob Tolford - CDM

1454 (Cont) remain at the decon area/clean zone.

1507 I have visual contact with Saul + Randy.

1512 Saul + Randy are heading towards the drop zone with final samples.

1546 Level C PPE is double bagged, equipment deconned and we go to the fire station. Walt + Victor have joined us as they are finished.

1555 At fire station, Jeff joins us. All surface soils are complete for the day. Walt, Victor, Saul and Randy will go to the office.

1605 At Geoprobe crew's location, they have not finished at SA1-7, but will get started on it shortly.

1621 Crew commences work @ SA1-7.

See Logbook # 100128 for details of this Geoprobe sampling. Jeff Montera and I are here with Chris Worthington and Chris Zeliznak of CDM, the 2 Chrises are working with the Geoprobe (Environmental Services Network - ESN) employees: Tom Courtwright & Ed Hubbard.

1656 Jeff + I leave for office as crew wraps it up.

1701 Logbook closed for the day

100144

"Rite in the Rain"®
ALL-WEATHER
Environmental
FIELD BOOK
No. 550

Libby Asbestos Project
CSS Soil
10/9/02 to 10/24/02

"Rite in the Rain"
ALL-WEATHER WRITING PAPER

Libby Asbestos Project
CDM/Mactec Contractor Logbook

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Daily Entries:
- Author
- Date/Time
- Weather
- Activities
- Persons on team
- Level of PPE
- Title of governing document
- Serial numbers of equipment

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74	CDM Field Trailer	10/18/02
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77	958 Mountain Meadow Rd.	
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90	902 E. Lincoln Blvd.	
91	416 W. 4th St.	
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93	569 E. Thomas St.	
94	111 Ave. B	
95	CDM Field Trailer	
96	CDM Field Trailer	10/21/02
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98	10779 Hwy 37 N.	
99	13068 Hwy 37 N.	
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114	1875 Snowshoe Rd.	
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117	6703 Farm to Market Rd.	
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END OF LOG BOOK

Location 346 Granite Ave Date 10/9/02

Project / Client Libby Asbestos VOLPE/EPA Region 8

Steve Byington BD-002626

1435 Arrive 346 Granite Ave.

GPS BD# only. ~~RR 10/9/02~~

GPS FILE: T1E10082 ~~RR 10/9/02~~

1440 Leave site.

RR 10/9/02

10/9/02 Randall Roberts Randall Roberts

Location Stimson Lumber Date 10/14/02
Project / Client Libby Asbestos VOLPE/EPA Region 8

0935 Arrive Stimson Lumber 875 Hwy 2 So. for morning meeting and HOS information on sampling at this site.
1010 Move to Fire Hall to practice navigation using GPS units.
1115 Move to Subarea 3 Lumber Yard to sample assigned points SA3-4-87, 8, 17, 18, 19. ~~PR 10/14/02~~
1155 Collect SA3-5 ~~PR 10/14/02~~
1204 Decon equipment ~~PR 10/14/02~~
1210 Leave site. Lunch.

CS- 09510 / SP- 119458 S. Pt.
FSDS- 003871 COC-004129
GPS FILE: T1A10142

PR 10/14/02

10/14/02 Randall Roberts Randall Roberts

Location 875 Hwy 2 So. Date 10/14/02
Project / Client Libby Asbestos VOLPE/EPA Region 8
Stimson Lumber

1316 Arrive 875 Hwy 2 So. S. Robles will sample per CSS SAP. Decon equip between samples. ~~PR 10/14/02~~

1330 SA3-4 | CS- 09511 | SP- 119459 S. Pt.
FSDS-003872 | COC-004129

GPS FILE: T1B10142 | No verific. seen sampling. ~~PR 10/14/02~~

1332 Decon equipment. ~~PR 10/14/02~~
1345 Leave site.

PR 10/14/02

10/14/02 Randall Roberts Randall Roberts

Location 875 Hwy 2 So. Date 10/14/02

Project / Client Libby Asbestos VOLPE/EPA Region 8

Stimson Lumber

1400 Arrive SA3-3. S. Robles will collect sample per CSS SAP.

SA3-3	CS- 09512	SP- 119460
1406	FSDS-003873	COC-004129

5 pt.

GPS FILE: T100142 No vermic. seen.

1413 Decon equipment.

1415 Move to next sample.

RR 10/14/02

10/14/02 Randall Roberts Randall Roberts

Location 875 Hwy 2 So. Date 10/14/02

Project / Client Libby Asbestos VOLPE/EPA Region 8

Stimson Lumber

1421 Arrive SA3-6. S. Robles will collect sample per CSS SAP. Will move center collection point 14' East because original is under a wooden deck used to hold firewood that is being cut.

SA3-6	CS- 09513	SP- 119461
1433	FSDS-003874	COC-004129

5 pt.

GPS FILE: T1D10142 No vermic seen.

1441 Decon equipment

1445 Move to next point.

RR 10/14/02

10/14/02 Randall Roberts Randall Roberts

Location 875 Hwy 2 So. Date 10/14/02

Project / Client Libby Asbestos VOLPE/EPA Region 8
Stimson Lumber

1449 Arrive SA3-8. S. Robles will sample per CSS SAP. ~~PR 10/14/02~~

SA3-8	CS- 09514	SP- 119462 5 pt.
1505	FSDS-003875	COC-009129

GPS FILE: TIE10142 No vermic seen.

1515 Decon equipment.
1520 Move to next point.

PR 10/14/02

10/14/02 Randall Roberts Randall Roberts

Location 875 Hwy 2 So. Date 10/14/02

Project / Client Libby Asbestos VOLPE/EPA Region 8
Stimson Lumber

1537 Arrive SA3-17. Move collection point ~35' West to get it out of Libby Creek. S. Robles will collect sample per CSS SAP. ~~PR 10/14/02~~

SA3-17	CS- 09515	SP- 119463 5 pt.
1547	FSDS-003930	COC-009129

GPS FILE: TIE10142 No vermic. seen.

1555 Decon equipment.
1600 Move to next point.

PR 10/14/02

10/14/02 Randall Roberts Randall Roberts

Location 875 Hwy 2 So. Date 10/14/02

Project / Client Libby Asbestos VOLPE/EPA Region 8
Stimson Lumber

1616 Arrive SA3-18. S. Robles will Collect Sample Per CSS SAP.

SA3-18 1629	CS- 09516	SP- 119464	5 pt.
	FSDS-003931	COC-004129	

GPS FILE: T1G10142 No vermic. seen.

1638 Decon equipment.
1640 Move to next point.

RR 10/14/02

10/14/02 Randall Roberts Randall Roberts

Location 875 Hwy 2 So. Date 10/14/02

Project / Client Libby Asbestos VOLPE/EPA Region 8
Stimson Lumber

1646 Arrive SA3-19. S. Robles will collect Sample Per CSS SAP.

SA3-19 1651	CS- 09517	SP- 119465	5 pt.
	FSDS-003932	COC-004129	

GPS FILE: T1H10142 No vermic. seen.

1657 Decon equipment.
1700 Move to next point.

RR 10/14/02

10/14/02 Randall Roberts Randall Roberts

Location CDM Field Trailer Date 10/14/02
Project / Client Libby Asbestos VOLPE/EPA Region 8

1733 Arrive CDM Field Trailer

1744	CS- 09518 ~~RR 10/14/02~~ ~~RR 10/14/02~~
	FSDS-003933 COC-004129

1750 Relinquish samples, finish paperwork and prepare for tomorrow. ~~RR 10/14/02~~
1815 Leave site.

RR 10/14/02

10/14/02 Randall Roberts Randall Roberts

Location CDM Field Trailer Date 10/15/02
Project / Client Libby Asbestos VOLPE/EPA Region 8

Author: Randall Roberts ~~RR 10/15/02~~
Personnel: Randall Roberts, Saul Robles
Weather: Clear, calm Lo° 29 Hi 62° ~~RR 10/15/02~~
PPE: Modified Level D. ~~RR 10/15/02~~
Instruments: Trimble #1 ~~RR 10/15/02~~
Calibration: NA ~~RR 10/15/02~~
Activities: Soil sampling under CSS SAP Libby Asbestos. ~~RR 10/15/02~~
0800 Morning meeting and H&S talk on frost bite. ~~RR 10/15/02~~
0837 Leave site.

RR 10/15/02

10/15/02 Randall Roberts Randall Roberts

Location 875 U.S. Hwy 2 So. Date 10/15/02

Project / Client Libby Asbestos VOLPE/EPA Region 8

Stimson Lumber

0845 Arrive Fire Hall for morning meeting. Will be sampling Subarea 1.
0905 Arrive Subarea 1 Former Popping Plant. S. Robles will collect samples per CSS SAP. Decon between samples.

SA1-5 0914 TIA10152	CS- 09519	SP- 119466	5 pt.
	FSDS-003934	Coc-004130	
SA1-11 TIB10152 0935	CS- 09520	SP- 119467	5 pt.
	FSDS 003934	Coc-004130	
SA-6 0956 TIC10152	CS- 09521	SP- 119468	5 pt.
	FSDS-003934	Coc-004130	
SA1-3 1020 TID10152	CS- 09522	SP- 119469	5 pt.
	FSDS-003935	Coc-004130	
SA1-4 1045 TIE10152	CS- 09523	SP- 119470	5 pt.
	FSDS-003935	Coc-004130	
SA1-2 1131 TIF10152	CS- 09524	SP- 119471	5 pt.
	FSDS-003938	Coc-004130	

10/15/02 Randall Roberts Random Runs

Location 875 U.S. Hwy 2 So. Date 10/15/02

Project / Client Libby Asbestos VOLPE/EPA Region 8

Stimson Lumber

SA-1 1150 TIG10152	CS- 09525	SP- 119472	5 pt.
	FSDS-003936	Coc-004130	
SA-7 TIH10152 1220	CS- 09526	SP- 119473	5 pt.
	FSDS-003936	Coc-004130	
SA1-8 1241 TII10152	CS- 09527	SP- 119474	5 pt.
	FSDS-003936	Coc-004130	
SA1-9 1256 TIJ10152	CS- 09528	SP- 119475	5 pt.
	FSDS-003937	Coc-004130	
SA1-10 1315 TIK10152	CS- 09529	SP- 119476	5 pt.
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	FSDS-003937	Coc-004153	
SA1-13 1350 TIM10152	CS- 09531	SP- 119478	5 pt.
	FSDS-003938	Coc-004153	
SA1-12 1403 TIN10152	CS- 09532	SP- 119479	5 pt.
	FSDS-003938	Coc-004153	

10/15/02 Randall Roberts Random Runs

Location 875 U.S. Hwy 2 So. Date 10/15/02

Project / Client Libby Asbestos VOLPE/EPA Region 8

Stimson Lumber

SA1-15 1415 RM	CS- 09533 10/15/02	SP- 119480 5 pt.
TI010152	FSDS-003938	Coc-004153
SA1-15 Dup. 1420	CS- 09534	SP- 119480 5 pt.
	FSDS-003939	Coc-004153

1438 Leave site. Lunch

RM 10/15/02

10/15/02 Randall Roberts Randall Roberts

Location 875 U.S. Hwy 2 So. Date 10/15/02

Project / Client Libby Asbestos VOLPE/EPA Region 8

Stimson Lumber

1522 Arrive Subarea 4. S. Robles will collect samples per CSS SAP. Decon equipment between samples.

SA4-12 1533 RM	CS- 09535 10/15/02	SP- 119481 5 pt.
TIP10152	FSDS-003940	Coc-004153
SA4-13 1555	CS- 09536	SP- 119482 5 pt.
TIQ10152	FSDS-003940	Coc-004153
SA4-11 1620	CS- 09537	SP- 119483 5 pt.
TIR10152	FSDS-003940	Coc-004153
SA4-14 1635	CS- 09538	SP- 119484 5 pt.
TIS10152	FSDS-003941	Coc-004153
SA4-15 1652	CS- 09539	SP- 119485 5 pt.
TIT10152	FSDS-003941	Coc-004154
SA4-16 1710	CS- 09540	SP- 119486 5 pt.
TIU10152	FSDS-003941	Coc-004154
SA4-9 1723	CS- 09583	SP- 119487 5 pt.
TIV10152	FSDS-003942	Coc-004154

10/15/02 Randall Roberts Randall Roberts

Location 875 U.S. Hwy 2 So. Date 10/15/02

Project / Client Libby Asbestos VOLPE/EPA Region 8
Stimson Lumber

SA4-10 1738	CS- 09584	SP- 119488 5 pt.
15G10152	FSDS-003942	CGC-004154

1745 Leave site.

RR 10/25/02

10/15/02 Randall Roberts Randall Roberts

Location CDM Field Trailer Date 10/15/02

Project / Client Libby Asbestos VOLPE/EPA Region 8

1752 Arrive CDM Field Trailer
1754 Relinquish samples, finish paperwork and prepare for tomorrow. RR 10/15/02
1820 Leave site.

RR 10/15/02

10/15/02 Randall Roberts Randall Roberts

Location CDM Field Trailer Date 10/16/02
Project / Client Libby Asbestos VOLPE/EPA Region 8

Author: Randall Roberts ~~RR 10/16/02~~
Personnel: Randall Roberts, Saul Robles
Weather: Clear, Calm Lo 24° Hi 64°
PPE: Modified Level D. ~~RR 10/16/02~~
Instruments: Trimble #1 ~~RR 10/16/02~~
Calibration: NA ~~RR 10/16/02~~
Activities: Soil Sampling under Libby Asbestos CSS SAP. ~~RR 10/16/02~~
0800 Morning meeting and H&S talk on barbecue safety.
0853 Leave site.

RR 10/16/02

10/16/02 Randall Roberts Randall Roberts

Location 875 U.S. Hwy 2 So. Date 10/16/02
Project / Client Libby Asbestos VOLPE/EPA Region 8
Stimson Lumber

0900 Arrive Subarea 4. S. Robles will collect samples per CSS SAP. Decon equipment between samples.

SA4-5 0910	CS- 09585	SP- 119489 5 pt.
TIA10162	FSDS-003943	COC-004182
SA4-1 1005	CS- 09586	SP- 119490 5 pt.
TIB10162	FSDS-003943	COC-004182
SA4-2 1015	CS- 09587	SP- 119491 5 pt.
TIC10162	FSDS-003943	COC-004182
SA4-3 1035	CS- 09588	SP- 119492 5 pt.
TID10162	FSDS-003944	COC-004182
SA4-4 1100	CS- 09589	SP- 119493 5 pt.
TIE10162	FSDS-003944	COC-004182

1122 Leave site. Lunch

RR 10/16/02

10/16/02 Randall Roberts Randall Roberts

Location 875 U.S. Hwy 2 So. Date 10/16/02

Project / Client Libby Asbestos VOLPE/EPA Region 8
Stimson Lumber

SA4-4 Dup. 1112	CS- 09590	SP- 119493	5 pt.
	FSDS-003944	Coc-004182	

10/16/02 Randall Roberts Randall Roberts

Location 875 U.S. Hwy 2 So. Date 10/16/02

Project / Client Libby Asbestos VOLPE/EPA Region 8
Stimson Lumber

1330 Arrive Subarea 6. Sampling will be done in Level C. S. Parker will collect samples per CSS SAP. R. Roberts will GPS points. Decon between samples. B. Tolford will support in decon area.

SA6-2 1415	CS- 09591	SP- 119494	5 pt.
TIF10162	FSDS-003945	Coc-004183	
SA6-4 1425	CS- 09592	SP- 119735	5 pt.
TIG10162	FSDS-003945	Coc-004183	
SA6-5 1435	CS- 09593	SP- 119736	5 pt.
TIH10162	FSDS-003945	Coc-004183	
SA6-6 1500	CS- 09594	SP- 119737	5 pt.
TII10162	FSDS-003946	Coc-004183	
SA6-7 1515	CS- 09595	SP- 119738	5 pt.
TIJ10162	FSDS-003946	Coc-004183	
SA6-11 1510	CS- 09596	SP- 119739	5 pt.
TIK10162	FSDS-003946	Coc-004183	

10/16/02 Randall Roberts Randall Roberts

RR 10/16/02

100146

"Rite in the Rain"
ALL-WEATHER
Environmental
FIELD BOOK
No. 550

Libby Asbestos Project
CSS Soil

10/12/02 to 10/31/02

"Rite in the Rain"
ALL-WEATHER WRITING PAPER

Libby Asbestos Project
CDM/Mactec Contractor Logbook

Return to:
Dave Schroeder
318 Louisiana Avenue
Libby, MT 59923
406-293-8595

Every Page:
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- Date/Time
- Weather
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Chris Zelznak
10/24/02
CHRIS ZELZNAK

Location SA3-2 STIMPSON LUMBER Date 10-14-02

Project / Client LIBBY ASBESTOS - VOLPE/EPA

G.P.S. FILE # ~~T4A10142~~ T4A10142.

1104 ARRIVED IN AREA SA3-2. HAD TO WAIT FOR THE POOP TO DROP. COLLECT SAMPLE AT 1145. THE SAMPLE WAS MOVED 30' AWAY FROM THE RIVER. ORIGINAL LOCATION WAS IN THE WATER.

SA3-2 **CS- 08295** WS 10-14-02 **SP- 119242**

1145 5-POINT

F.O.S. 003876 COC-004131

DECONTAMINATED EQUIPMENT AFTER SAMPLING

WALTER SMITH

10-14-02

Location SA3-7 STIMPSON LUMBER Date 10-14-02

Project / Client LIBBY ASBESTOS - VOLPE/EPA

G.P.S. FILE # T4B10142.

1205 - COLLECTED FIVE SUBSAMPLES FROM SA3-7.

SA3-7 **CS- 08296** WS 10-14-02 **SP- 119243**

1205 5-POINT

F.O.S. 003877 COC-004131

DECONTAMINATED EQUIPMENT AFTER EACH SAMPLE. LEFT FOR LUNCH AT 1215. RETURNED FROM LUNCH AT 1245.

WALTER SMITH

10-14-02

20

Location SA3-9 STIMPSON LUMBER Date 10-14-02

Project / Client LIBBY ASBESTOS - VOLPE/EPA

GPS. FILE# T4C10142.

1335 - COLLECTED FIVE SUBSAMPLES FROM SA3-9.

SA3-9 1335 CS- 08297 SP- 119244 WS 10-14-02 5-POINT

F.D.S 003878 COC-004131

DECONTAMINATED EQUIPMENT AFTER SAMPLING

WALTER SMITH

10-14-02

21

Location SA3-10 STIMPSON LUMBER Date 10-14-02

Project / Client LIBBY ASBESTOS - VOLPE/EPA

GPS. FILE# T4D10142.

1400 - COLLECTED FIVE SUBSAMPLES FROM SA3-10.

SA3-10 1400 CS- 08298 SP- 119245 WS 10-14-02 5-POINT

F.D.S. 003879 COC-004131

DECONTAMINATED EQUIPMENT AFTER SAMPLING.

WALTER SMITH

10-14-02

Location SA3-15 STIMPSON LUMBER Date 10-14-02

Project / Client LIBBY ASBESTOS - VOLPE/EPA

G.P.S. FILE # T4E10142.

1419 - COLLECTED FIVE SUBSAMPLES FROM SA3-15.

SA3-15 CS- 08299 WS 10-14-02 SP- 119246

1419 5-POINT

FDS. 003880 COC- 004131

DECONTAMINATED EQUIPMENT AFTER SAMPLING

WALTER SMITH

10-14-02

Location SA3-16 STIMPSON LUMBER Date 10.14.02

Project / Client LIBBY ASBESTOS - VOLPE/EPA

G.P.S. FILE # T4F10142

1444 - COLLECTED FIVE SUBSAMPLES FROM SA3-16.

SA3-16 CS- 08300 WS 10-14-02 SP- 119247

1444 5-POINT

FDS. 003881 COC- 004131

DECONTAMINATED EQUIPMENT AFTER SAMPLING

WALTER SMITH

10-14-02

Location SA8-20 STIMPSON LUMBER Date 10-14-02

Project / Client LIBBY ASBESTOS - VOLPE/EPA

G.P.S. FILE #T4G10142.

1510-COLLECTED FIVE SUBSAMPLES FROM SA3-20

SA3-20 SP- 119248

1510 CS- 09281 10-14-02 5-POINT

FOS 003882 COC-004131

DECONTAMINATED EQUIPMENT AFTER SAMPLING.

WALTER SMITH

10-14-02

Location SA3-21 STIMPSON LUMBER Date 10-14-02

Project / Client LIBBY ASBESTOS - VOLPE/EPA

G.P.S. FILE #T4H10142.

1528-COLLECTED FIVE SUBSAMPLES FROM SA3-21.

SA3-21 SP- 119249

1528 CS- 09282 10-14-02 5-POINT

FOS 003883 COC-004131

DECONTAMINATED EQUIPMENT AFTER SAMPLING. SPOKE WITH JEFF MONTERA AND HE ADVISED TO HELP OUT SOILS & LEFT STIMPSON LUMBER AT 1710 TO COM OFFICE TO COMPLETE PAPERWORK AND DO EQUIPMENT BLANK.

WALTER SMITH

10-14-02

Location COM OFFICE Date 10-14-02

Project / Client LIBBY ASBESTOS - VOLPE/EPA

EQUIPMENT BLANK

CS- 09283 WS 10-14-02 P.O.S. 003884

COC-004131

LEFT OFFICE AT ~1900

WALTER SMITH

10-14-02

Location COM OFFICE Date 10-15-02

Project / Client LIBBY ASBESTOS - VOLPE/EPA

AUTHOR - WALTER SMITH

DATE/TIME - 10/15/2/0800.

WEATHER - SUNNY 30°; FORECAST 60°

ACTIVITIES - CSS SOIL SAMPLING. STIMSON LUMBER.

LEVEL OF PROTECTION - MODIFIED LEVEL D.

DOCUMENTS - CSS SAP

EQUIPMENT - TRIMBLE UNIT 4.

WALTER SMITH

10-15-02

28

Location SA5-11 STIMSON LUMBER Date 10-15-02

Project / Client LIBBY ASBESTOS - VOLPE/EPA

G.P.S. FILE# T4A10152.

0916 - COLLECTED FIVE SUBSAMPLES FROM SA5-11.

SA5-11 SP- 119250

0916 CS- 09284 WS 10-15-02 5 POINT

F.D.S. 003885 COC - 004132

DECONTAMINATED EQUIPMENT AFTER SAMPLING.

WALTER SMITH

10-15-02

29

Location SA5-10 STIMSON LUMBER Date 10-15-02

Project / Client LIBBY ASBESTOS - VOLPE/EPA

G.P.S. FILE# T4B10152.

0936 - COLLECTED FIVE SUBSAMPLES FROM SA5-10

SA5-10 SP- 119251

0936 CS- 09285 WS 10-15-02 5-POINT

F.D.S. 003886 COC - 004132

DECONTAMINATED EQUIPMENT AFTER SAMPLING.

WALTER SMITH

10-15-02

Location SA5-9 STIMSON LUMBER Date 10-15-02

Project / Client LIBBY ASBESTOS - VOLPE / EPA

G.P.S. FILE # T4C10152.

1003 - COLLECT SAMPLE AND DUPLICATE FROM SA5-9

SA5-9 SP- 119252

1003 CS- 09286 WS 10-15-02 5-POINT

FDS 003886 COC- 004132

SA5-9 SP- 119252

DUPLICATE CS- 09287 WS 10-15-02 5-POINT

1009 FDS 003886 COC-004132

DECONTAMINATED EQUIPMENT AFTER EACH SAMPLE.

WALTER SMITH

10-15-02

Location SA5-12 STIMSON LUMBER Date 10-15-02

Project / Client LIBBY ASBESTOS - VOLPE / EPA

GPS FILE # T4D10152.

1028 - COLLECTED FIVE SUBSAMPLES FROM SA5-12

SA5-12 SP- 119253

1028 CS- 09288 WS 10-15-02 5-POINT

FDS. 003887 COC- 004132

DECONTAMINATED EQUIPMENT AFTER SAMPLING.

WALTER SMITH

10-15-02

Location SA5-8 STIMSON LUMBER Date 10-15-02

Project / Client LIBBY ASBESTOS - VOLPE / EPA

GPS FILE# T4E10152.

1049 - COLLECTED FIVE SUBSAMPLES FROM SA5-8.

SA5-8 SP- 119254

1049 CS- 09289 5-POINT

FDS 003887 COC-004132

DECONTAMINATED EQUIPMENT AFTER SAMPLING.

Walter Smith

10-15-02

Location SA5-3 STIMSON LUMBER Date 10-15-02

Project / Client LIBBY ASBESTOS - VOLPE / EPA

GPS FILE# T4E10152.

1116 - COLLECTED FIVE SUBSAMPLES FROM SA5-3

SA5-3

1116 CS- 09290 SP- 119527 5-POINT

FDS 003887 COC-004132

DECONTAMINATED EQUIPMENT AFTER SAMPLING.

Walter Smith

10-15-02

34

Location SA5-2 STIMSON LUMBER Date 10-15-02

Project / Client LIBBY ASBESTOS - VOLPE / EPA

G.P.S. FILE # TAG10152

1140 - COLLECTED FIVE SUB SAMPLES FROM SA5-2

SA5-2 5-POINT

1140 CS- 09291 SP- 119528

10-15-02

F.D.S. 003888 COC- 004132

DECONTAMINATED EQUIPMENT AFTER SAMPLING

WALTER SMITH

10-15-02

35

Location SA5-1 STIMSON LUMBER Date 10-15-02

Project / Client LIBBY ASBESTOS - VOLPE / EPA

G.P.S. FILE # TAG10152

1246 - COLLECTED FIVE SUBSAMPLES FROM SA5-1

SA5-1 5-POINT

1246 CS- 09292 SP- 119529

10-15-02

F.D.S. 003888 COC- 004132

DECONTAMINATED EQUIPMENT AFTER SAMPLING.

WALTER SMITH

10-15-02

Location SA5-4 STIMSON LUMBER Date 10-15-02

Project / Client LIBBY ASBESTOS - VOLPE/EPA

G.P.S. FILE # T4I10152.

1327 - COLLECTED FIVE SUBSAMPLES FROM SA5-4 -

SA5-4
1327

CS- 09293 WS 10-15-02 SP- 119530
5-POINT

FDS 003888 COC-004132

DECONTAMINATED EQUIPMENT AFTER SAMPLING.

WALTER SMITH

10-15-02

Location SA5-7 STIMSON LUMBER Date 10-15-02

Project / Client LIBBY ASBESTOS - VOLPE/EPA

G.P.S. FILE # T4J10152.

1352 - COLLECTED FIVE SUBSAMPLES FROM SA5-7.

SA5-7
1352

CS- 09294 WS 10-15-02 SP- 119531
5-POINT

FDS. 003920 COC-004133

DECONTAMINATED EQUIPMENT AFTER SAMPLING.

WALTER SMITH

10-15-02

Location SA5-5 South STIMSON LUMBER Date 10-15-02

Project / Client LIBBY ASBESTOS - VOLPE / EPA

GPS FILE # T4K10152

1407 - COLLECTED FIVE SUBSAMPLES FROM SA5-5.

SA5-5 1407 CS- 09295 WS 10-15-02 SP- 119532 5-POINT

FDS. 003920 COC- 004133

DECONTAMINATED EQUIPMENT AFTER SAMPLING.

WALTER SMITH

10-15-02

Location SA5-6 STIMSON LUMBER Date 10-15-02

Project / Client LIBBY ASBESTOS - VOLPE / EPA

GPS FILE # T4L10152

1419 - COLLECTED FIVE SUBSAMPLES FROM SA5-6

WS 10-15-02 SA5-6 1419 CS- 09296 WS 10-15-02 SP- 119533 5-POINT

FDS. 003920 COC- 004133

DECONTAMINATED EQUIPMENT AFTER SAMPLING.

WALTER SMITH

10-15-02

40

Location SA5-14 STIMSON LUMBER Date 10-15-02

Project / Client LIBBY ASBESTOS - VOLPE/EPA

G.P.S FILE # T4M10152

1435 - COLLECTED FIVE SUBSAMPLES FROM SA5-14.

SA5-14.

1435

CS- 09297 WS 10-15-02 SP- 119534

5-POINT

F.D.S. 003994 COC- 004133

DECONTAMINATED EQUIPMENT AFTER SAMPLING.

WALTER SMITH 10-15-02

10-15-02

41

Location ~~SA5-21~~ SA6-3 WS 10-15-02 STIMSON LUMBER Date 10-15-02

Project / Client LIBBY ASBESTOS - VOLPE/EPA

G.P.S. FILE # T4N10152

1510 - COLLECTED FIVE SUBSAMPLES FROM ~~SA5-21~~ SA6-3 WS 10-15-02

~~SA5-21~~ WS 10-15-02

SA6-3

1510

CS- 09298 WS 10-15-02 SP- 119535

5-POINT

F.D.S. 003994 COC- 004133

DECONTAMINATED EQUIPMENT AFTER SAMPLING.

WALTER SMITH

10-15-02

42

Location SA6-8 STIMSON LUMBER Date 10-15-02

Project / Client LIBBY ASBESTOS - VOLPE / EPA

GRS FILE # 74010152

1523 - COLLECTED FIVE SUBSAMPLES FROM SA6-8

SA6-8 1523 CS- 09299 WS 10-15-02 SP- 119536 5-POINT

FDS 003994 COC- 004133

DECONTAMINATED EQUIPMENT AFTER SAMPLING. WE WERE NOT ABLE TO COLLECT SA5-21, SA5-22, SA5-23 DUE TO THESE POINTS BEING IN THE CHAMPION SPRINKLER FIELD. JEFF MONTANA MADE THIS ~~DECISION~~ WS 10-15-02 DECISION. WE THEN MOVED TO SAG-3, SA6-8, AND SA6-1.

WALTER SMITH

10-15-02

43

Location SA6-1 STIMSON LUMBER Date 10-15-02

Project / Client LIBBY ASBESTOS - VOLPE / EPA

GRS FILE # 74P10152.

1540 - COLLECTED FIVE SUBSAMPLES FROM SA6-1

SA6-1 1540 CS- 09300 WS 10-15-02 SP- 119537 5-POINT

FDS. 003995 COC- 004133

DECONTAMINATED EQUIPMENT AFTER SAMPLING.

WALTER SMITH

10-15-02

Location SA4-17 STIMSON LUMBER Date 10-15-02

Project / Client LIBBY ASBESTOS - VOLPE/EPA

G.P.S. FILE# T4Q10152.

1608 - COLLECTED FIVE SUBSAMPLES FROM SA4-17.

SA4-17

1608 CS- 09301 WJS 10-15-02 SP- 119538 5-POINT

F.D.S 003995 COC- 004133

DECONTAMINATED EQUIPMENT AFTER SAMPLING.

WALTER SMITH

10-15-02

Location SA4-18 STIMSON LUMBER Date 10-15-02

Project / Client LIBBY ASBESTOS - VOLPE/EPA

G.P.S. FILE# T4R10152.

1630 - COLLECTED FIVE SUBSAMPLES FROM SA4-18.

SA4-18

1630 CS- 09302 WJS 10-15-02 SP- 119539 5-POINT

F.D.S. 003995 COC- 004133

DECONTAMINATED EQUIPMENT AFTER SAMPLING.

WALTER SMITH

10-15-02

Location SA4-19 STIMSON LUMBER Date 10-15-02

Project / Client GIBBY ASBESTOS - VOLPE/EPA

GPS FILE # T4510152.

1646 - COLLECTED FIVE SUBSAMPLES FROM SA4-19.

SA4-19
1646 CS- 09303 WS 10-15-02 SP- 119540 5 POINT

FDS 003996 COC - 004133.

DECONTAMINATED EQUIPMENT AFTER SAMPLING.

WALTER SMITH

10-15-02

Location SA4-20 STIMSON LUMBER Date 10-15-02

Project / Client GIBBY ASBESTOS - VOLPE/EPA

GPS FILE # T4T10152.

1705 - COLLECTED SOIL SAMPLES FROM SA4-20

SA4-20
1705 CS- 09304 WS 10-15-02 SP- 119541 5-POINT

FDS 003996 COC-004134

DECONTAMINATED EQUIPMENT AFTER SAMPLING.

WALTER SMITH

10-15-02

Location CDM OFFICE Date 10-15-02

Project / Client LIBBY ASBESTOS / VOLPE / EPA

EQUIPMENT BLANK

EQUIPMENT BLANK CS- 09305 WS 10-15-02 FDS. 003997 COC - 004134

LEFT OFFICE AT ~1900.

WALTER SMITH

10-15-02

Location CDM OFFICE Date 10-16-02

Project / Client LIBBY ASBESTOS - VOLPE / EPA

AUTHOR - WALTER SMITH

DATE/TIME - 101602/0800

WEATHER - CLOUDY 26°, FORECAST 06°.

ACTIVITIES - CSS SOIL SAMPLING STIMSON.

PERSONNEL - VICTOR CONTRERAS, WALTER SMITH

LEVEL OF PPE - MODIFIED LEVEL D.

DOCUMENT - CSS SAP

EQUIPMENT - TRIMBLE UNIT 4.

0800 - MORNING MEETING. HEALTH & SAFETY TALK BY RICHARD EUSTICE. LEFT OFFICE AT 0833 AND HEADED FOR STIMSON LUMBER.

WALTER SMITH

10-16-02

Location SA4-23 STIMSON Date 10-16-02

Project / Client LIBBY ASBESTOS - VOLPE/EPA

G.P.S. FILE # T4A10162.

0910 - COLLECTED FIVE SUBSAMPLES FROM SA4-23

SA4-23
0920 CS- 09306 WS 10-16-02 SP- 119542 5-POINT

F.D.S. 003998 COC-004174

ALSO A DUPLICATE WAS COLLECTED.

SA4-23 CS- 09307 WS 10-16-02 SP- 119542 5-POINT
DUPLICATE

DECONTAMINATED EQUIPMENT AFTER SAMPLING.

WALTER SMITH

10-16-02

Location SA4-22 STIMSON Date 10-16-02

Project / Client LIBBY ASBESTOS - VOLPE/EPA

G.P.S. FILE # T4B10162.

0944 - COLLECTED FIVE SUBSAMPLES FROM SA4-22

SA4-22
0944 CS- 09308 WS 10-16-02 SP- 119655 5-POINT

FDS. 003998 COC. 004174

DECONTAMINATED EQUIPMENT AFTER SAMPLING.

WALTER SMITH

10-16-02

52

Location SA4-21 STIMSON Date 10-16-02

Project / Client LIBBY ASBESTOS - VOLPE/EPA

G.P.S. FILE # T4C10162

1025 - COLLECTED FIVE SUBSAMPLES FROM SA4-21

SA4-21
1025 CS- 09309 WS 10-16-02 SP- 119656
5-POINT

F.P.S. 00 3999 COC-004174

DECONTAMINATED EQUIPMENT AFTER SAMPLING.

WALTER SMITH

10-16-02

53

Location SA4-25 STIMSON Date 10-16-02

Project / Client LIBBY ASBESTOS - VOLPE/EPA

G.P.S. FILE # T4D10162

1047 - COLLECTED FIVE SUBSAMPLES FROM SA4-25

SA4-25
1047 CS- 09310 WS 10-16-02 SP- 119657
5-POINT

F.P.S. 00 3999 COC-004174

DECONTAMINATED EQUIPMENT AFTER SAMPLING.

WALTER SMITH

10-16-02

54

Location SA4-24 STIMSON Date 10-16-02

Project / Client LIBBY ASBESTOS - VOLPE / EPA

G.P.S. FILE# T4E10162.

1116 - COLLECTED FIVE SUBSAMPLES FROM SA4-24

SA4-24
1116 CS- 09311 WS 10-16-02 SP- 119658
SPIKE

F.D.S. 003999 COC- 004174

DECONTAMINATED EQUIPMENT AFTER SAMPLING. WENT TO LUNCH AT 1158. WENT TO COM OFFICE AT 1227 FOR A MEETING WITH JEFF MONTBRIAN. LEFT COM OFFICE AT 1311.

WALTER SMITH

10-16-02

55

Location SA4-26 STIMSON Date 10-16-02

Project / Client LIBBY ASBESTOS - VOLPE / EPA

G.P.S. FILE# T4F10162

1318 - COLLECTED FIVE SUBSAMPLES FROM SA4-26

SA4-26
1318 CS- 09312 WS 10-16-01 SP- 119659
SPIKE

F.D.S. 004000 COC: 004174

DECONTAMINATED EQUIPMENT AFTER SAMPLING.

WALTER SMITH

10-16-02

Location SAG-10 STIMSON Date 10-16-02

Project / Client LIBBY ASBESTOS - VOLPE/EPA

GPS FILE # T4G10162

1347 - COLLECTED FIVE SUBSAMPLES FROM SAG-10

SAG-10
1347

CS- 09313 WS 10-16-02 SP- 119660 5-POINT

FDS 004000 COC 004174

DECONTAMINATED EQUIPMENT AFTER SAMPLING

WALTER SMITH

10-16-02

Location SAG-12 STIMSON Date 10-16-02

Project / Client LIBBY ASBESTOS - VOLPE/EPA

GPS FILE # T4H10162

1405 - COLLECTED FIVE SUBSAMPLES FROM SAG-12

SAG-12
1405

CS- 09314 WS 10-16-02 SP- 119661 5-POINT

FDS 004000 COC-004174

DECONTAMINATED EQUIPMENT AFTER SAMPLING.

WALTER SMITH

10-16-02

Location SAG-13 STIMSON Date 10-16-02

Project / Client LIBBY ASBESTOS - VOLPE / EPA

GPS FILE # T4I 10162

1422 - COLLECTED FIVE SUBSAMPLES FROM SA6-13

SA6-13
1422

CS- 09315 WS 10-16-02 SP- 119662 5-POINT

FOS 004001 COC-004174

DECONTAMINATED EQUIPMENT AFTER SAMPLING.

WALTER SMITH

10-16-02

Location SA6-14 STIMSON Date 10-16-02

Project / Client LIBBY ASBESTOS - VOLPE / EPA

GPS FILE # T4I 10162

1444 - COLLECTED FIVE SUBSAMPLES FROM SA6-14

SA6-14
1444

CS- 09316 WS 10-16-02 SP- 119663 5-POINT

F.O.S. 004001 COC-004175

DECONTAMINATED EQUIPMENT AFTER SAMPLING. WENT TO HELP OUT OTHER STIMSON CREW AT THE FORMER TREE NURSERY.

Location CDM OFFICE Date 10-16-02

Project / Client LIBBY ASBESTOS - VOLPE/EPA

EQUIPMENT BLANK

CS- 09317 W.S. 10-16-02 F.D.S. 004002

C.O.C. 004175

Walter L Smith

10-16-02

Location CDM OFFICE Date 10-17-02

Project / Client LIBBY ASBESTOS - VOLPE/EPA

AUTHOR - WALTER SMITH

DATE/TIME - 101702/0800.

WEATHER - CLOUDY 28°, FORECAST 62°

ACTIVITIES - CSS SOIL SAMPLING

PERSONNEL - VICTOR CONTRERAS, BOB TOLFORD, WALTER SMITH

LEVEL OF PPE - MODIFIED LEVEL D.

DOCUMENTS - CSS SAP

EQUIPMENT - TRIMBLE UNIT 5

0800 - MORNING MEETING. HEALTH & SAFETY TALK. ANOTHER MEETING WITH DEE WARREN FOR REFRESHER ON SOIL SAMPLING. LEFT CDM OFFICE AT 0921.

Walter Smith

10-17-02

Appendix G
Stimson Lumber Additional Sampling Letter for BMX Track Sampling from CDM to EPA
May 10, 2004

CDM

May 10, 2004

Mr. Jim Christiansen
U.S. Environmental Protection Agency
999 18th Street, Suite 500
Denver, Colorado

Subject: Stimson Lumber Additional Sampling - Track/Garden Plots

Dear Mr. Christiansen:

The purpose of this letter is to propose a sampling plan for two areas on the former Stimson Lumber Company property that the Lincoln County Port Authority is proposing for re-development. According to the Lincoln County Port Authority, some local all terrain vehicle (ATV) and motocross clubs are planning for the construction of an off-road bicycle track near the south eastern boundary of the former Stimson Lumber Company property. In addition, a local garden club is planning to delineate an area on the property for a community garden. A recent site visit conducted by CDM revealed that construction on the track had already begun. The area had been graded by a bulldozer for the track outline. There was no indication that any work had started in the proposed garden area.

During the 2002 Contaminant Screening Study (CSS), an extensive sampling effort was conducted within the boundaries of the former Stimson Lumber Company property. Details of this sampling event can be found in the Final Sampling and Analysis Plan Addendum for the Stimson Lumber Company Area (CDM, August 2002). Results of this sampling effort are illustrated on Figure 1. A total of 127 soil samples were collected from the property. Results are available for 113 of those samples. For the samples where results are available, all but three were nondetect for Libby amphibole (LA) asbestos (Figure 1).

The proposed track area measures approximately 90,000 square feet (ft^2) (Figure 2). One surface (0 to 6 inches) soil sample was previously collected near the area where the track will be constructed (Figure 1). Analytical results for that sample were non-detect for LA. To further delineate the area, CDM proposes that a 100-ft by 100-ft grid system be applied to the track area for additional sampling. Within each 1,000 ft^2 grid, one 5-point composite surface (0 to 1 inch) and one 5-point composite subsurface (12 to 24 inches) sample should be collected. This would results in a total of 18 samples being collected within the proposed track area.

CDM

The proposed garden area measures approximately 90 ft by 90 ft (Figure 3). No previous samples were collected within that area. CDM proposes that one 5-point composite surface (0 to 1 inch) and one 5-point composite subsurface (12 to 24 inches) soil sample be collected within the proposed garden boundary. This would result in a total of 2 soil samples being collected from the proposed garden area.

All samples proposed for this effort should be collected and analyzed in accordance with the Final Sampling and Analysis Plan, Remedial Investigation, Contaminant Screening Study, Revision 1 (CDM, May 2003). Because all previous soil samples collected in and around the proposed track and garden areas were non-detect, it is recommended that this sampling effort be conducted in level D personal protective equipment (PPE).

If all soil sample results from this effort are non-detect for LA, construction of the track and the garden can proceed without further action. However, if any results are greater than non-detect, CDM suggests that work within that site be monitored using personal and perimeter air monitoring during construction activities. Personal air monitors should be worn by construction crew members for up to a week and be analyzed by TEM AHERA for LA. If during monitoring any LA is detected, work should be ceased and construction activities re-evaluated with EPA. Perimeter air monitors should be set up down wind for all work activity throughout construction. Similarly, if any LA is detected, work should be ceased and construction re-evaluated with EPA.

Please feel free to contact me at 720-264-1116 with any questions you may have regarding this matter.

Sincerely,

E-Signed by Jeff G. Montera
VERIFY authenticity with ApproveIt

Jeff Montera
Project Manager
CDM Federal Programs Corporation

Appendix H
Field Logbook Notes, Field Sample Data Sheets, and Analytical Data Sheets, BMX Track Sampling, May 2004

Sheet No.: S- 00127

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Field Logbook No: 100319 Page No: 18-20 Sampling Date: 5-15-04

Address: 875 HWY 2 S (Owner)/Tenant: LINCOLN COUNTY PORT AUTHORITY

Business Name: STIMSON LUMBER COMPANY

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Sampling Team: MACTEC (CDM) Other _____ Names: LAMMERS, SPIELMAN

Data Item	6 Sample 1 ~~13~~ DJ 5.15.04	5 Sample 2 ~~12~~ DJ 5.15.04	14 Sample 3
Index ID	CS-18436 ~~ID-01884~~ DJ 5.20.04	CS-18437 ~~ID-01885~~ DJ 5.20.04	CS-18438 ~~ID-01886~~ DJ 5.20.04
Location ID	SP- 124924	SP- 124925	SP- 124926
Sample Group	PROPERTY	PROPERTY	PROPERTY
Location Description (circle)	Back yard Front yard Side yard Driveway Other BIKE TRACK	Back yard Front yard Side yard Driveway Other BIKE TRACK	Back yard Front yard Side yard Driveway Other BIKE TRACK
Category (circle)	(FS) FD of _____ Field Blank (lot or equipment)	(FS) FD of _____ Field Blank (lot or equipment)	(FS) FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	(Surface Soil) Other _____	(Surface Soil) Other _____	(Surface Soil) Other _____
Type (circle)	Grab Comp. # subsamples _____	Grab Comp. # subsamples _____	Grab Comp. # subsamples _____
Sample Time	~~08:40~~ DJ 5.15.04 07:40	~~08:42~~ DJ 5.15.04 07:42	~~08:52~~ DJ 5.15.04 07:52
Top Depth (in.)	0	2	0
Bottom Depth (in.)	1	6	1
Field Comments: Note if vermiculite is visible in sampled area	~~BD-~~ possible vermiculite observed	~~BD- DJ 5.15.04~~ No vermiculite	~~BD-~~ No vermiculite
Entered (LFO) JS	Volpe: Entered _____ Validated _____	Volpe: Entered _____ Validated _____	Volpe: Entered _____ Validated _____

For Field Team Completion (Provide Initials)	Completed by DJ	QC by:

Sheet No.: S- 00128

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Field Logbook No: 100319 Page No: K-20 Sampling Date: 5-15-04

dress: 875 HWY 2 S Owner/Tenant: LINCOLN COUNTY PORT AUTHORITY

Business Name: STIMSON LUMBER COMPANY

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Sampling Team: MACTEC (CDM) Other _____ Names: LAMMERS, SPIELMAN

Data Item	Sample 1 3	2 Sample 2	11 Sample 3
Index ID	CS-18439 ~~1D-01887~~ DS 5-20-04	CS-18440 ~~1D-01888~~ DS 5-20-04	CS-18484 ~~1D-01889~~ DS 5-20-04
Location ID	SP- 124927	SP- 124928	SP- 124929
Sample Group	PROPERTY	PROPERTY	PROPERTY
Location Description (circle)	Back yard Front yard Side yard Driveway Other BIKE TRACK	Back yard Front yard Side yard Driveway Other BIKE TRACK	Back yard Front yard Side yard Driveway Other BIKE TRACK
Category (circle)	(FS) FD of _____ Field Blank (lot or equipment)	(FS) FD of _____ Field Blank (lot or equipment)	(FS) FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless otherwise noted)	(Surface Soil) Other _____	(Surface Soil) Other _____	(Surface Soil) Other _____
Type (circle)	Grab (Comp.) # subsamples 5	Grab (Comp.) # subsamples 5	Grab (Comp.) # subsamples 5
Sample Time	0800	0805	0810
Top Depth (in.)	0	2	0
Bottom Depth (in.)	1	6	1
Field Comments Note if vermiculite is visible in sampled area	~~BD~~ No vermiculite	~~BD~~ ~~DS 5-15-04~~ No vermiculite	~~BD~~ No vermiculite
Entered (LFO) DS	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____

For Field Team Completion (Provide initials)	Completed by: DS	QC by DS

vs 101503

Sheet No.: S- 00124

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Field Logbook No: 100319 Page No: 18-20 Sampling Date: 5-15.04

dress: 875 HWY 2 S Owner/Tenant: LINCOLN COUNTY PORT AUTHORITY

Business Name: STIMSON LUMBER COMPANY

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Sampling Team: MACTEC (CDM) Other _____ Names: LAMMERS, SPIELMAN

Data Item	Sample 1 10	Sample 2 8	16 Sample 3
Index ID	CS-18488 ~~ID-01890~~ DS 5-20-04	CS-18489 ~~ID-01891~~ DS 5-20-04	CS-18490 ~~ID-01892~~ DS 5-20-04
Location ID	SP- 124930	SP- 124931	SP- 124932
Sample Group	PROPERTY	PROPERTY	PROPERTY
Location Description (circle)	Back yard Front yard Side yard Driveway Other BIKE TRACK	Back yard Front yard Side yard Driveway Other BIKE TRACK	Back yard Front yard Side yard Driveway Other BIKE TRACK
Category (circle)	(FS) FD of _____ Field Blank (lot or equipment)	(FS) FD of _____ Field Blank (lot or equipment)	(FS) FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless otherwise noted)	(Surface Soil) Other _____	(Surface Soil) Other _____	(Surface Soil) Other _____
Type (circle)	Grab Comp. # subsamples ____	Grab Comp. # subsamples ____	Grab Comp. # subsamples ____
Sample Time	08:22	08:30	08:40
Top Depth (in.)	2	0	0
Bottom Depth (in.)	6	1	1
Field Comments Note if vermiculite is visible in sampled area	~~BD-~~ NO VERMICULITE	~~BD- DS 5-15-04~~ NO VERMICULITE	~~BD~~ No Vermiculite
Entered (LFO) DS	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____

For Field Team Completion (Provide Initials)	Completed by: DS	QC by DS

Sheet No.: S- 00150

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Field Logbook No: 100319 Page No: 18-20 Sampling Date: 5-15-04

Address: 875 HWY 2 S Owner/Tenant: LINCOLN COUNTY PORT AUTHORITY

Business Name: STIMSON LUMBER COMPANY

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Sampling Team: MACTEC (CDM) Other _____ Names: LAMMERS, SPIELMAN, SUPERNAUGH

Data Item	Sample 1 15	Sample 2 PILE 13	Sample 3 PILE 7
Index ID	CS-18491 ~~ID-01893~~ DS 5-20-04	CS-18492 ~~ID-01894~~ DS 5-20-04	CS-18493 ~~ID-01895~~ DS 5-20-04
Location ID	SP- 124933	SP- 124934	SP- 124935
Sample Group	PROPERTY	PROPERTY	PROPERTY
Location Description (circle)	Back yard Front yard Side yard Driveway Other BIKE TRACK	Back yard Front yard Side yard Driveway Other BIKE TRACK	Back yard Front yard Side yard Driveway Other BIKE TRACK
Category (circle)	(FS) FD of _____ Field Blank (lot or equipment)	(FS) FD of _____ Field Blank (lot or equipment)	(FS) FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	(Surface Soil) Other _____	(Surface Soil) Other _____	(Surface Soil) Other _____
Type (circle)	Grab (Comp) # subsamples 5	Grab (Comp) # subsamples 2	Grab (Comp) # subsamples 2
Sample Time	08:45	08:50	08:52
Top Depth (in.)	2	2	2
Bottom Depth (in.)	6	6	6
Field Comments: Note if vermiculite is visible in sampled area	~~BD-~~ No Vermiculite	~~BD- DS 5-15-04~~ No vermiculite	~~BD-~~ No Vermiculite
Entered (LFO) PS	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____

For Field Team Completion (Provide Initials)	Completed by: DS	QC by PS

Sheet No.: S- 00131

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Field Logbook No: 100319 Page No: 18-20 Sampling Date: 5-15-04

dress: 875 HWY 2 S Owner/Tenant: LINCOLN COUNTY PORT AUTHORITY

Business Name: STIMSON LUMBER COMPANY

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Sampling Team: MACTEC (CDM) Other _____ Names: LAMMERS, SPIELMAN, SUPERNAUGH

Data Item	Sample 1 7	Sample 2 PILE 1	Sample 3 PILE 13
Index ID	CS-18494 ~~ID-01896~~ DS 5.20.04	CS-18495 ~~ID-01897~~ DS 5.20.04	CS-18496 ~~ID-01898~~ DS 5.20.04
Location ID	SP- 124936	SP- 124937	~~SP- 124938~~ DS 5.15.04 SP-124934
Sample Group	PROPERTY	PROPERTY	PROPERTY
Location Description (circle)	Back yard Front yard Side yard Driveway Other BIKE TRACK	Back yard Front yard Side yard Driveway Other BIKE TRACK	Back yard Front yard Side yard Driveway Other BIKE TRACK
Category (circle)	(FS) FD of _____ Field Blank (lot or equipment)	(FS) FD of _____ Field Blank (lot or equipment)	(FS) DS 5.15.04 (FD) of ID-01894 Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	(Surface Soil) Other _____	(Surface Soil) Other _____	(Surface Soil) Other _____
Type (circle)	Grab (Comp.) # subsamples 5	Grab (Comp.) # subsamples 2	Grab (Comp.) # subsamples 2
Sample Time	08:55	09:00	09:05
Top Depth (in.)	2	2	2
Bottom Depth (in.)	6	6	6
Field Comments Note if vermiculite is visible in sampled area	~~BD-~~ No Vermiculite	~~BD- DS 5.15.04~~ No Vermiculite	~~BD-~~ No Vermiculite
Entered (LFO) DS	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____

For Field Team Completion (Provide Initials)	Completed by : DS	QC by DS

ps 5.15.04 Sheet No.: S- 00132

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Field Logbook No: 100319 Page No: 18-24 Sampling Date: 5-15-04

Address: 875 HWY 2 S (Owner)/Tenant: LINCOLN COUNTY PORT AUTHORITY

Business Name: STIMSON LUMBER COMPANY

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Sampling Team: MACTEC (CDM) Other _____ Names: LAMMERS, SPIELMAN, SUPERNAUGH

CS-18485 5/20/04 p.s.

Data Item	Sample 1 12	Sample 2 4	Sample 3 6
Index ID	CS-18497 ~~ID-01899~~ DS 5.20.04	~~CS-18485~~ ~~ID-01900~~ DS-5.20.04	CS-18486 ~~ID-01901~~ DS 5.20.04
Location ID	SP-124939	SP-124940	SP-124941
Sample Group	PROPERTY	PROPERTY	PROPERTY
Location Description (circle)	Back yard Front yard Side yard Driveway Other BIKE TRACK	Back yard Front yard Side yard Driveway Other BIKE TRACK	Back yard Front yard Side yard Driveway Other BIKE TRACK
Category (circle)	(FS) FD of _____ Field Blank (lot or equipment)	(FS) FD of _____ Field Blank (lot or equipment)	(FS) FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	(Surface Soil) Other _____	(Surface Soil) Other _____	(Surface Soil) Other _____
Type (circle)	Grab (Comp.) # subsamples 5	Grab (Comp.) # subsamples 5	Grab (Comp.) # subsamples 4
Sample Time	09:14	09:25	09:5
Top Depth (in.)	2	2	17 6
Bottom Depth (in.)	6	6	12
Field Comments · Note if vermiculite is visible in sampled area	~~BD-~~ _____ No vermiculite	~~BD-~~ ~~DS 5.15.04~~ Trace vermiculite (very small flakes)	~~BD-~~ _____ Trace Vermiculite. (very small flakes)
Entered (LFO) ps	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____

For Field Team Completion (Provide Initials)	Completed by DS	QC by ps

Sheet No.: S- 00133

DS 5-15-04

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Field Logbook No: 100319 Page No: 18-21 Sampling Date: 5-15-04

Address: 875 HWY 2 S (Owner)/Tenant: LINCOLN COUNTY PORT AUTHORITY

Business Name: STIMSON LUMBER COMPANY

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Sampling Team: MACTEC (CDM) Other _____ Names: LAMMERS, SPIELMAN, SPERLAUGH

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS-18498 ~~ID-01902~~ DS 5.20.04	~~ID-01903~~ ~~DS 5-20-04~~	~~ID-01904~~ ~~DS 5-20-04~~
Location ID	SP- 124942	SP- 124943	SP- 124944
Sample Group	PROPERTY	PROPERTY	PROPERTY
Location Description (circle)	Back yard Front yard Side yard Driveway Other BIKE TRACK	Back yard Front yard Side yard Driveway Other BIKE TRACK	Back yard Front yard Side yard Driveway Other BIKE TRACK
Category (circle)	(FS) FD of _____ Field Blank (lot or equipment)	(FS) FD of _____ Field Blank (lot or equipment)	(FS) FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless otherwise noted)	(Surface Soil) Other _____	(Surface Soil) Other _____	(Surface Soil) Other _____
Type (circle)	Grab (Comp.) # subsamples 4	Grab Comp. # subsamples	Grab Comp. # subsamples
Sample Time	10:08		
Top Depth (in.)	6		
Bottom Depth (in.)	12		
Field Comments: Note if vermiculite is visible in sampled area	~~BD-~~ Trace Vermiculite	~~BD-~~ DS 5-15-04	~~BD-~~
Entered (LFO) DS	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____

For Field Team Completion (Provide Initials)	Completed by DS	QC by DS

18

Location 875 Hwy 2S Date 5.15.04

Project / Client LIBBY ASBESTOS PROJECT EPA REG 8 VOLPE

STIMSON BIKE TRACK AREA

07:00 ON SITE FOR CDM - SUPERNAUGH, SPIELMAN, LAMMERS. SPIELMAN IS AUTHOR, WEATHER IS COOL ~50°, SUNNY. SOIL SAMPLING PERFORMED IN LEVEL "D" PPE, IAW CSS FINAL SAP REV 1, RAWP (CDM 2003), HEALTH + SAFETY PLAN. SAMPLE EQUIPMENT DECONTAMINATED BETWEEN SAMPLING

GRID 9 0-1" 07:20	SP- 124921	1D- 01881
GRID 13 2-6" 07:27	SP- 124922	1D- 01882
GRID 1 0-1" 07:31	SP- 124923	1D- 01883
GRID 6 0-1" 07:40	SP- 124924	1D- 01884
GRID 5 2-6" 07:42	SP- 124925	1D- 01885
GRID 14 0-1" 07:52	SP- 124926	1D- 01886
GRID 3 0-1" 08:00	SP- 124927	1D- 01887
GRID 2 2-6" 08:05	SP- 124928	1D- 01888

DAVID SPIELMAN — 5.15.04 — DSP

Location 875 Hwy 2S Date 5.15.04 19

Project / Client LIBBY ASBESTOS PROJECT EPA REG 8 VOLPE

STIMSON BIKE TRACK AREA

GRID 11 0-1" 08:10	SP- 124929	1D- 01889
GRID 10 2-6" 08:22	SP- 124930	1D- 01890
GRID 8 0-1" 08:30	SP- 124931	1D- 01891
GRID 16 0-1" 08:40	SP- 124932	1D- 01892
GRID 15 08:45 2-6"	SP- 124933	1D- 01893
PILE 13 08:50 2-6"	SP- 124934	1D- 01894
PILE 7 2-6" 08:52	SP- 124935	1D- 01895
GRID 7 2-6" 08:55	SP- 124936	1D- 01896
PILE 1 2-6" 09:05	SP- 124937	1D- 01897
PILE 13 2-6" DUPLICATE	SP- 124938	1D- 01898
GRID 12 09:14 2-6"	SP- 124939	1D- 01899

DAVID SPIELMAN — 5.15.04 — DSP

20 Location 875 HWY 25 Date 5-15-04

Client LIBBY ASBESTOS PROJECT EPA REC-C VOLPE

STIMSON BIKE TRACK AREA

GRID 4 2-6" 09:25	SP- 124940	1D- 01900
GRID 6 6-12" 09:55	SP- 124941	1D- 01901
GRID 3 6-12" 10:08	SP- 124942	1D- 01902

- Area comprised of glacial till/outwash (rounded river stone) - sandy and clayey layers at surface and at depth. Sandy material has significant tiny vermiculite flakes, appears to be naturally occurring
- All Grid/Sample locations marked on site map included in file

10:20 OFF SITE TO OFFICE

LATE ENTRY 5-15-04
GPS# TSA 05154

DS 5-15-04

LATE ENTRY DS 5-15-04
FSDS# 000126, 000127, 000128, 000129
000130, 000131, 000132, 000133

[signature] — 5-15-04 — D SHELMAN

21

Location FIELD OFFICE Date 5.20.04 23

Project / Client LIBBY ASBESTOS PROJECT EPA REGION VOLPE

STIMSON BIKE TRACK SAMPLING

16:10 SPIELMAN IS AUTHOR - CSS INDEX ID'S WILL BE USED TO REPLACE THE I-D INDEX ID'S AT THE 5/15/04 BIKE TRACK SAMPLING EVENT. I-D NUMBERS WERE USED IN ERROR, CSS NUMBERS WERE REQUIRED FOR TRACKING PURPOSES 5.20.04

CS- 18433	ID- 01881
CS- 18434	ID- 01882
CS- 18435	ID- 01883
CS- 18436	ID- 01884
CS- 18437	ID- 01885
CS- 18438	ID- 01886
CS- 18439	ID- 01887
CS- 18440	ID- 01888
CS- 18484	ID- 01889

5.20.04

-ALL I-D SAMPLES ARE NOW VOID-

DAVID SPIELMAN — 5.20.04 — David Spielman

24

FIELD OFFICE Date 5.20.04

Project Client LIBBY ASBESTOS PROJECT EPA REG 8 VOLPE

STIMSON BIKE TRACK SAMPLING

CS- 18485	ID - 01900
CS- 18486	ID - 01901
CS- 18487	ID - 01902
CS- 18488	ID - 01890
CS- 18489	ID - 01891
CS- 18490	ID - 01892
CS- 18491	ID - 01893
CS- 18492	ID - 01894
CS- 18493	ID - 01895
CS- 18494	ID - 01896
CS- 18495	ID - 01897
CS- 18496	ID - 01898

ALL I-D SAMPLES ARE NOW VOID

DAVID SPIELMAN — 5.20.04 — [signature]

25

FIELD OFFICE Date 5.20.04

Project Client LIBBY ASBESTOS PROJECT

CS- 18497	ID - 01899
CS- 18498	ID - 01902

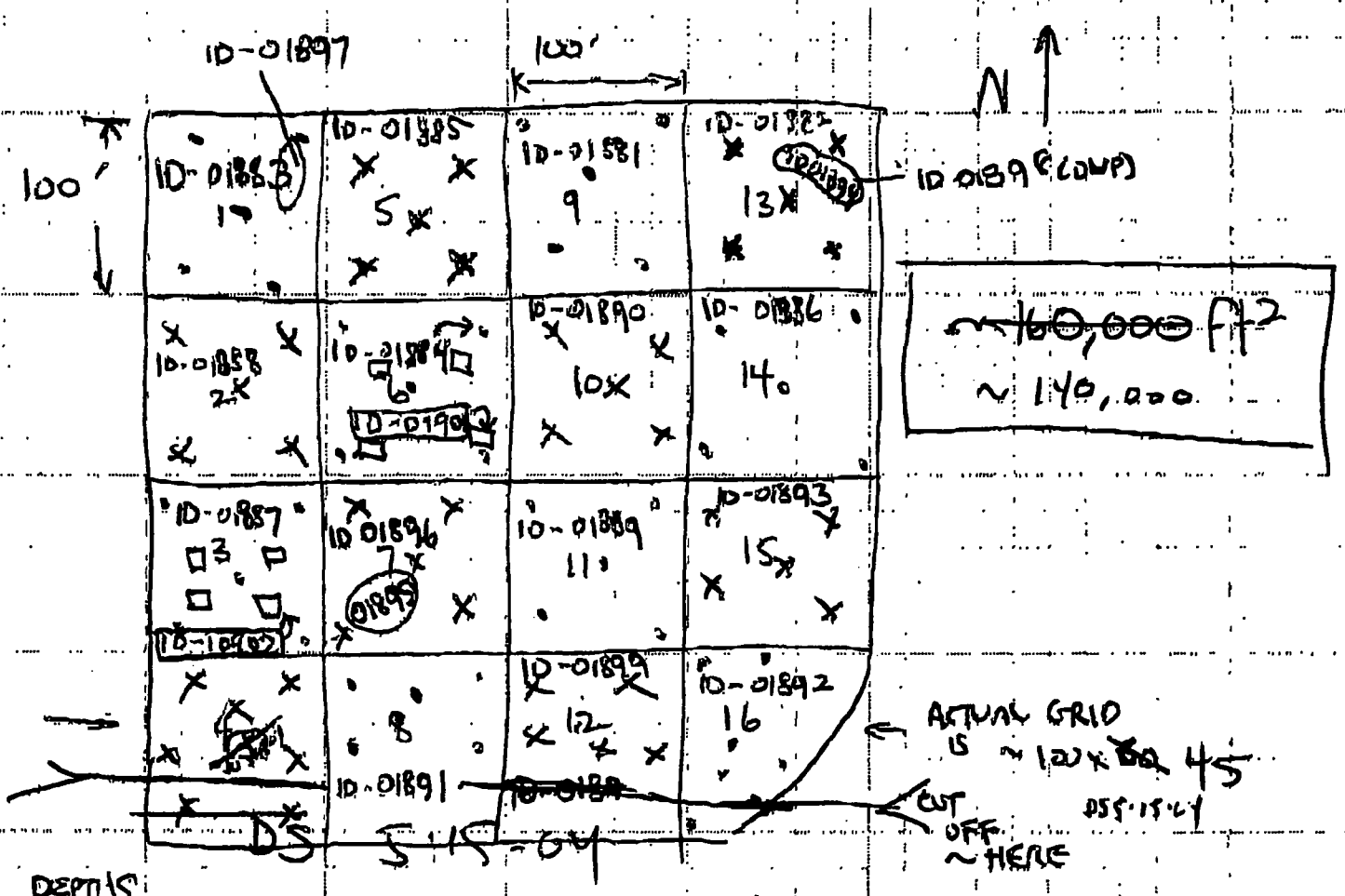
FSDS SHEETS 000126, 000127, 000128, 000129, 000130, 000131, 000132, 000133 ALSO CORRECTED FOR NEW CS INDEX ID'S - PATTY STRONG REVISED DATABASE

ALL I-D SAMPLES ARE NOW VOID

DAVID SPIELMAN — 5.20.04 — [signature]

PROJECT _____ JOB NO. _____ DATE _____
COMPUTED BY _____ CHECKED BY _____ DATE CHECKED _____
CLIENT _____ PAGE NO. _____

STIMSON SAMPLING PLAN - BIKE TRACK - SAMPLING MAP



DEPTHS

0 - 1" 1,9 2,10 6,14 3,11 4,12 8,16

2 - 6" 5,13 3,10 7,15 4,12

6 - 12" MAY 2,3 11,9 (UNLESS WE SEE VOIDS)

PILES ~~4 RANDOM~~ 3 RANDOM

DS 5-15-04

ID - XXXXX = SAMPLE #

GPS COLLECTION CHECK

1 5 9 13
2 6 10 14
3 7 11 15
9 8 12 16

Soil-Like & Sediment

4/25/2005, 11:42 AM

Note: The report excludes all Lab QC results, such as those associated with Lab Blanks, Lab Duplicates, Re-Preparation, Re-count Same, Re-count Different, Verified Analysis, etc.

Sample ID	Parent ID	Scenario	Property Group (Location)	Sample Group	Location Description (Sub Location)	Media Type	Matrix	Category	Sample Date	PLM			
										Method	LA Bin	LA (%)	C (%)
CS-18433-C		N/A	875 Highway 2 S - Stimson Lumber	Property	Bike track	Soil-Like	Surface soil	Field Sample	5/15/2004	PLM-Grav	A	ND	ND
CS-18433-FG1		N/A	875 Highway 2 S - Stimson Lumber	Property	Bike track	Soil-Like	Surface soil	Field Sample	5/15/2004	PLM-VE	A	ND	ND
CS-18434-C		N/A	875 Highway 2 S - Stimson Lumber	Property	Bike track	Soil-Like	Surface soil	Field Sample	5/15/2004	PLM-Grav	A	ND	ND
CS-18434-FG1		N/A	875 Highway 2 S - Stimson Lumber	Property	Bike track	Soil-Like	Surface soil	Field Sample	5/15/2004	PLM-VE	A	ND	ND
CS-18435-C		N/A	875 Highway 2 S - Stimson Lumber	Property	Bike track	Soil-Like	Surface soil	Field Sample	5/15/2004	PLM-Grav	A	ND	ND
CS-18435-FG1		N/A	875 Highway 2 S - Stimson Lumber	Property	Bike track	Soil-Like	Surface soil	Field Sample	5/15/2004	PLM-VE	A	ND	ND
CS-18436-C		N/A	875 Highway 2 S - Stimson Lumber	Property	Bike track	Soil-Like	Surface soil	Field Sample	5/15/2004	PLM-Grav	A	ND	ND
CS-18436-FG1		N/A	875 Highway 2 S - Stimson Lumber	Property	Bike track	Soil-Like	Surface soil	Field Sample	5/15/2004	PLM-VE	A	ND	ND
CS-18437-C		N/A	875 Highway 2 S - Stimson Lumber	Property	Bike track	Soil-Like	Surface soil	Field Sample	5/15/2004	PLM-Grav	A	ND	ND
CS-18437-FG1		N/A	875 Highway 2 S - Stimson Lumber	Property	Bike track	Soil-Like	Surface soil	Field Sample	5/15/2004	PLM-VE	A	ND	ND
CS-18438-C		N/A	875 Highway 2 S - Stimson Lumber	Property	Bike track	Soil-Like	Surface soil	Field Sample	5/15/2004	PLM-Grav	A	ND	ND
CS-18438-FG1		N/A	875 Highway 2 S - Stimson Lumber	Property	Bike track	Soil-Like	Surface soil	Field Sample	5/15/2004	PLM-VE	A	ND	ND
CS-18439-C		N/A	875 Highway 2 S - Stimson Lumber	Property	Bike track	Soil-Like	Surface soil	Field Sample	5/15/2004	PLM-Grav	A	ND	ND
CS-18439-FG1		N/A	875 Highway 2 S - Stimson Lumber	Property	Bike track	Soil-Like	Surface soil	Field Sample	5/15/2004	PLM-VE	A	ND	ND
CS-18440-C		N/A	875 Highway 2 S - Stimson Lumber	Property	Bike track	Soil-Like	Surface soil	Field Sample	5/15/2004	PLM-Grav	A	ND	ND
CS-18440-FG1		N/A	875 Highway 2 S - Stimson Lumber	Property	Bike track	Soil-Like	Surface soil	Field Sample	5/15/2004	PLM-VE	A	ND	ND
CS-18484-C		N/A	875 Highway 2 S - Stimson Lumber	Property	Bike track	Soil-Like	Surface soil	Field Sample	5/15/2004	PLM-Grav	A	ND	ND
CS-18484-FG1		N/A	875 Highway 2 S - Stimson Lumber	Property	Bike track	Soil-Like	Surface soil	Field Sample	5/15/2004	PLM-VE	A	ND	ND
CS-18485-C		N/A	875 Highway 2 S - Stimson Lumber	Property	Bike track	Soil-Like	Surface soil	Field Sample	5/15/2004	PLM-Grav	A	ND	ND
CS-18485-FG1		N/A	875 Highway 2 S - Stimson Lumber	Property	Bike track	Soil-Like	Surface soil	Field Sample	5/15/2004	PLM-VE	A	ND	ND
CS-18486-C		N/A	875 Highway 2 S - Stimson Lumber	Property	Bike track	Soil-Like	Surface soil	Field Sample	5/15/2004	PLM-Grav	A	ND	ND
CS-18486-FG1		N/A	875 Highway 2 S - Stimson Lumber	Property	Bike track	Soil-Like	Surface soil	Field Sample	5/15/2004	PLM-VE	A	ND	ND
CS-18488-C		N/A	875 Highway 2 S - Stimson Lumber	Property	Bike track	Soil-Like	Surface soil	Field Sample	5/15/2004	PLM-Grav	A	ND	ND
CS-18488-FG1		N/A	875 Highway 2 S - Stimson Lumber	Property	Bike track	Soil-Like	Surface soil	Field Sample	5/15/2004	PLM-VE	A	ND	ND
CS-18489-C		N/A	875 Highway 2 S - Stimson Lumber	Property	Bike track	Soil-Like	Surface soil	Field Sample	5/15/2004	PLM-Grav	A	ND	ND
CS-18489-F		N/A	875 Highway 2 S - Stimson Lumber	Property	Bike track	Soil-Like	Surface soil	Field Sample	5/15/2004	PLM-VE	A	ND	ND
CS-18490-C		N/A	875 Highway 2 S - Stimson Lumber	Property	Bike track	Soil-Like	Surface soil	Field Sample	5/15/2004	PLM-Grav	A	ND	ND
CS-18490-FG1		N/A	875 Highway 2 S - Stimson Lumber	Property	Bike track	Soil-Like	Surface soil	Field Sample	5/15/2004	PLM-VE	A	ND	ND
CS-18491-C		N/A	875 Highway 2 S - Stimson Lumber	Property	Bike track	Soil-Like	Surface soil	Field Sample	5/15/2004	PLM-Grav	A	ND	ND
CS-18491-FG1		N/A	875 Highway 2 S - Stimson Lumber	Property	Bike track	Soil-Like	Surface soil	Field Sample	5/15/2004	PLM-VE	A	ND	ND
CS-18492-C		N/A	875 Highway 2 S - Stimson Lumber	Property	Bike track	Soil-Like	Surface soil	Field Sample	5/15/2004	PLM-Grav	A	ND	ND
CS-18492-FG1		N/A	875 Highway 2 S - Stimson Lumber	Property	Bike track	Soil-Like	Surface soil	Field Sample	5/15/2004	PLM-VE	A	ND	ND
CS-18493-C		N/A	875 Highway 2 S - Stimson Lumber	Property	Bike track	Soil-Like	Surface soil	Field Sample	5/15/2004	PLM-Grav	A	ND	ND
CS-18493-FG1		N/A	875 Highway 2 S - Stimson Lumber	Property	Bike track	Soil-Like	Surface soil	Field Sample	5/15/2004	PLM-VE	A	ND	ND
CS-18494-C		N/A	875 Highway 2 S - Stimson Lumber	Property	Bike track	Soil-Like	Surface soil	Field Sample	5/15/2004	PLM-Grav	A	ND	ND
CS-18494-FG1		N/A	875 Highway 2 S - Stimson Lumber	Property	Bike track	Soil-Like	Surface soil	Field Sample	5/15/2004	PLM-VE	A	ND	ND
CS-18495-C		N/A	875 Highway 2 S - Stimson Lumber	Property	Bike track	Soil-Like	Surface soil	Field Sample	5/15/2004	PLM-Grav	A	ND	ND
CS-18495-FG1		N/A	875 Highway 2 S - Stimson Lumber	Property	Bike track	Soil-Like	Surface soil	Field Sample	5/15/2004	PLM-VE	A	ND	ND
CS-18496-C	1D-01894	N/A	875 Highway 2 S - Stimson Lumber	Property	Bike track	Soil-Like	Surface soil	Field Duplicate	5/15/2004	PLM-Grav	A	ND	ND
CS-18496-FG1	1D-01894	N/A	875 Highway 2 S - Stimson Lumber	Property	Bike track	Soil-Like	Surface soil	Field Duplicate	5/15/2004	PLM-VE	A	ND	ND
CS-18497-C		N/A	875 Highway 2 S - Stimson Lumber	Property	Bike track	Soil-Like	Surface soil	Field Sample	5/15/2004	PLM-Grav	A	ND	ND
CS-18497-FG1		N/A	875 Highway 2 S - Stimson Lumber	Property	Bike track	Soil-Like	Surface soil	Field Sample	5/15/2004	PLM-VE	A	ND	ND
CS-18498-C		N/A	875 Highway 2 S - Stimson Lumber	Property	Bike track	Soil-Like	Surface soil	Field Sample	5/15/2004	PLM-Grav	A	ND	ND
CS-18498-FG1		N/A	875 Highway 2 S - Stimson Lumber	Property	Bike track	Soil-Like	Surface soil	Field Sample	5/15/2004	PLM-VE	A	ND	ND

Criteria:

Appendix I
Investigation Strategy for the Proposed Demolition Derby Plot
Letter from CDM to EPA
July 1, 2004

CDM

July 1, 2004

Mr. Jim Christiansen
U.S. Environmental Protection Agency
999 18th Street, Suite 500
Denver, Colorado 80215

Subject: Investigation Strategy for the Proposed Demolition Derby Plot at the Former Stimson Lumber Site.

Dear Mr. Christiansen,

The purpose of this memorandum is to propose a modification to the sampling plan utilized for delineation and sampling of the proposed off-road bicycle track on the former Stimson Lumber Company property. As you will recall, CDM conducted soil sampling in May to characterize the area that the Lincoln County Port Authority had proposed for an off-road bicycle track. Since that time the Port Authority has informed EPA that a plot directly north of the area sampled, measuring approximately 360,000ft^2, is being proposed for a demo-derby track. CDM proposed the following modification to the sampling plan to characterize this new area for presence of LA asbestos in soils:

- Identify sampling locations using a 200-ft by 200-ft grid system.
- Within each 40,000 ft^2 grid, collect one 5-point composite surface sample (0 to 1 inch) and one 5-point composite subsurface sample (2 to 6 inch).
- From 5 randomly selected grids, collect one 5-point composite sample at depth (6 to 12 inches).
- This would result in a total of 24 samples being collected within the proposed demolition derby track area.

All samples need to be collected in accordance with the Final Sampling and Analysis Plan, Remedial Investigation, Contaminant Screening Study, Revision 1 (CDM, May 2003). In addition, since all previous soil samples collected in and around the proposed area are non-detect, it is recommended that this sampling effort be conducted in level D personal protective equipment (PPE).

If all soil sample results from this effort are non-detect for LA, construction of the track can proceed without further action. However, if any results are greater than non-detect, CDM suggests that work within that site be monitored using personal and perimeter air monitoring during construction activities. Personal air monitors should be worn for up to a week and be analyzed by TEM AHERA for LA. If during monitoring any LA is detected, work should be

CDM

ceased and construction re-evaluated with EPA. Perimeter air monitors should be set up down wind for all work activity throughout construction. Once again, if any LA is detected, work should be ceased and construction re-evaluated with EPA.

Please feel free to contact me at 720-264-1116 with any questions you may have regarding this matter.

Sincerely,

E-Signed by Jeff G. Montera
VERIFY authenticity with ApproveIt

Jeff Montera
Project Manager
CDM Federal Programs Corporation

cc: Tim Wall
Anni Autio
Scott Supernaugh
Tommy Cook
Paul Lammers

Appendix J
Field Logbook Notes, Field Sample Data Sheets, and Analytical Data Sheets, Demolition Derby Sampling, July 2004

Sheet No.: S- 000240

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Field Logbook No: 100315 Page No: 49 Sampling Date: 7-1-04

Address: 875 Hwy 25 Owner/Tenant: ~~Stimson~~ Port Authority DR 7-1-04

Business Name: ~~875 Hwy 25~~ DR 7-1-04

Land Use: Residential School Commercial Mining Roadway Other ( )

Sampling Team: MACTEC CDM Other _____ Names: Repine, VANderweel, PARANA.

Data Item	Sample 1 DR7-1-04	Sample 2 DR7-1-04	Sample 3 DR7-1-04
Index ID	CS- 18581	CS- 18582	CS- 18583
Location ID	SP- 124968	SP- 124969	SP- 124970
Sample Group	property	property	property
Location Description (circle)	Back yard Front yard Side yard Driveway Other 1	Back yard Front yard Side yard Driveway Other 1	Back yard Front yard Side yard Driveway Other 2
Category (circle)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless otherwise noted)	Surface Soil Other _____	Surface Soil Other _____	Surface Soil Other _____
Type (circle)	Grab Comp. # subsamples 5	Grab Comp. # subsamples 5	Grab Comp. # subsamples 5
Sample Time	9:00	DR 7-1-04 ~~9:00~~ 9:04	10:03
Top Depth (in.)	0	2	0
Bottom Depth (in.)	1	6	1
Field Comments Note if vermiculite is visible in sampled area	BD- _____ samples collected in proposed Demolition Derby Track	BD- _____	BD- _____
Entered (LFO)	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____

For Field Team Completion (Provide Initials)	Completed by DR	QC by

vs 101503

Sheet No.: S- 000241

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Field Logbook No: 100315 Page No: 49 Sampling Date: 7-1-04

Address: 875 Hwy 25 Owner/Tenant: ~~Stimson~~ Port Authority DR 7-1-04

Business Name: ~~875 Hwy 25~~ DR 7-1-04

Land Use: Residential School Commercial Mining Roadway Other ( )

Sampling Team: MACTEC CDM Other _____ Names: Repine, Pariana, Vanderweed

Data Item	DR 7-1-04 Sample 1	DR 7-1-04 Sample 2	DR 7-1-04 Sample 3
Index ID	CS- 18584	CS- 18585	CS- 18586
Location ID	SP- 124971	SP- 124972	SP- 124973
Sample Group	Property	property	property
Location Description (circle)	Back yard Front yard Side yard Driveway Other 2	Back yard Front yard Side yard Driveway Other 2, 4, 6, 7, 9	Back yard Front yard Side yard Driveway Other 3
Category (circle)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless otherwise noted)	Surface Soil Other _____	Surface Soil Other _____	Surface Soil Other _____
Type (circle)	Grab Comp. # subsamples 5	Grab Comp. # subsamples 5	Grab Comp. # subsamples 5
Sample Time	DR 7-1-04 10:00	DR 7-1-04 10:06	10:12.
Top Depth (in.)	6 2	12 6	0
Bottom Depth (in.)	6	12	1
Field Comments Note if vermiculite is visible in sampled area	BD- _____ Samples collected. Inv. proposed. Demolition Derby Tracks.	BD- _____	BD- _____
Entered (LFO) JB	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____

9	6	3
8	5	2
7	4	1

N, E, W, S

For Field Team Completion (Provide Initials)	Completed by DR	QC by

Sheet No.: S- 000242

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Field Logbook No: 100315 Page No: 49 Sampling Date: 7-1-04

Address: 875 Hwy 2S Owner/Tenant: ~~Stimson~~ Port Authority DR 7-1-04

Business Name: N/A

Land Use: Residential School Commercial Mining Roadway Other ( )

Sampling Team: MACTEC CDM Other _____ Names: Repine, Parana, Vanderweel

Data Item	DR 7-1-04 Sample 1	DR 7-1-04 Sample 2	DR 7-1-04 Sample 3
Index ID	CS- 18587	CS- 18588	CS- 18589
Location ID	SP- 124974	SP- 124975	SP- 124976
Sample Group	property	property	property
Location Description (circle)	Back yard Front yard Side yard Driveway Other 3	Back yard Front yard Side yard Driveway Other 4	Back yard Front yard Side yard Driveway Other 4
Category (circle)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	Surface Soil Other _____	Surface Soil Other _____	Surface Soil Other _____
Type (circle)	Grab Comp. # subsamples 5	Grab Comp. # subsamples 5	Grab Comp. # subsamples 5
Sample Time	10:14	10:27	10:30
Top Depth (in.)	2	0	2
Bottom Depth (in.)	6	1	6
Field Comments Note if vermiculite is visible in sampled area	BD-_____ Samples collected in proposed Demolition Derby Track	BD-_____	BD-_____
Entered (LFO) JB	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____

For Field Team Completion (Provide Initials)	Completed by DR	QC by

vs 101503

Sheet No.: S- 000243

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Field Logbook No: 100315 Page No: 49 Sampling Date: 7-1-04

Address: 875 Hwy 2S Owner/Tenant: ~~Stimson~~ Port Authority

Business Name: N/A DR 7-1-04

Land Use: Residential School Commercial Mining Roadway Other ( )

Sampling Team: MACTEC CDM Other _____ Names: Repine, Vanderweel, Parana

DR 7-1-04 7-1-04 DR DR 7-1-04

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 18590	CS- 18591	CS- 18592
Location ID	SP- 124977	SP- 124978	SP- 124979
Sample Group	property	property	property
Location Description (circle)	Back yard Front yard Side yard Driveway Other 5	Back yard Front yard Side yard Driveway Other 5	Back yard Front yard Side yard Driveway Other 6
Category (circle)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	Surface Soil Other _____	Surface Soil Other _____	Surface Soil Other _____
Type (circle)	Grab Comp. # subsamples 5	Grab Comp. # subsamples 5	Grab Comp. # subsamples 5
Sample Time	11:10	11:14	11:28
Top Depth (in.)	0	2	0
Bottom Depth (in.)	1	6	1
Field Comments Note if vermiculite is visible in sampled area	BD-_____ Samples collected in proposed Demolition Derby Track	BD-_____	BD-_____
Entered (LFO) JB	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____

For Field Team Completion (Provide Initials)	Completed by DR	QC by

NO.219 MAR.17.2005 4:57PM CDM

Sheet No.: S- 000244

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Field Logbook No: 100315 Page No: 49 Sampling Date: 7-1-04

Address: 875 Hwy 2 S Owner/Tenant: Port Authority

Business Name: NIH

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Sampling Team: MACTEC (CDM) Other _____ Names: Repine, Vanderweel, Parana

Data Item 07/04	Sample 1	Sample 2	Sample 3
Index ID	CS- 18593	CS- 18594	CS- 18595
Location ID	SP- 124980	SP- 124760	SP-125081
Sample Group	property	property	property
Location Description (circle)	Back yard Front yard Side yard Driveway Other 6	Back yard Front yard Side yard Driveway Other 7	Back yard Front yard Side yard Driveway Other 7
Category (circle)	(FS) FD of _____ Field Blank (lot or equipment)	(FS) FD of _____ Field Blank (lot or equipment)	(FS) FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless otherwise noted)	(Surface Soil) Other _____	(Surface Soil) Other _____	(Surface Soil) Other _____
Type (circle)	(Grab) DR 7-1-04 (Comp. # subsamples 5)	(Grab) DR 7-1-04 (Comp. # subsamples 5)	Grab (Comp. # subsamples 5)
Sample Time	11:29	11:35	11:38
Top Depth (in.)	2	0	2
Bottom Depth (in.)	6	1	6
Field Comments. Note if vermiculite is visible in sampled area	BD-_____ Samples collected in proposed Demolition Derby Track	BD-_____	BD-_____
Entered (LFO)	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____

For Field Team Completion (Provide Initials)	Completed by DR:	QC by

vs 101503

MAR. 17. 2005 4:57PM CDM NO. 219 P. 6/8

Sheet No.: S- 000245

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Field Logbook No: 100315 Page No: 49 Sampling Date: 7-1-04

Address: 875 Hwy 25 Owner/Tenant: Port Authority

Business Name: N/A

Land Use: Residential School (Commercial) Mining Roadway Other ( )

Sampling Team: MACTEC (CDM) Other _____ Names: Repine, vanderweel, Parawa

Data Item DR 7-1-04	Sample 1	DR 7-1-04 Sample 2 DR	7-1-04 Sample 3
Index ID	CS- 18596	CS- 18597	CS- 18598
Location ID	SP-125081	SP-125082 ~~SP-125084~~ DR 7/1/04	SP-125083
Sample Group	property	property	property
Location Description (circle)	Back yard Front yard Side yard Driveway Other 8	Back yard Front yard Side yard Driveway Other 8	Back yard Front yard Side yard Driveway Other 9
Category (circle)	(FS) FD of _____ Field Blank (lot or equipment)	(FS) FD of _____ Field Blank (lot or equipment)	(FS) FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	(Surface Soil) Other _____	(Surface Soil) Other _____	(Surface Soil) Other _____
Type (circle)	Grab (Comp. # subsamples 5)	Grab (Comp. # subsamples 5)	Grab (Comp. # subsamples 5)
Sample Time	11:50	11:52	12:00
Top Depth (in.)	0	2	0
Bottom Depth (in.)	DR 7-1-04 ~~0~~ 1	6	1
Field Comments Note if vermiculite is visible in sampled area	BD-_____ Samples collected in proposed Demolition Derby Track	BD-_____	BD-_____ →
Entered (LFO) JD	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____

For Field Team Completion (Provide Initials)	Completed by DR	QC by

vs 101503

Sheet No.: S- 000201

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Field Logbook No: 100315 Page No: 47, Sampling Date: 7-1-04

dress: 875 Hwy 25 Owner/Tenant: Port Authority

Business Name: W/A

Land Use: Residential School Commercial Mining Roadway Other ( )

Sampling Team: MACTEC CDM Other _____ Names: Repine, Vanderweel, Parana

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS-18599		
Location ID	SP-125084		
Sample Group	property		
Location Description (circle)	Back yard Front yard Side yard Driveway Other 9	Back yard Front yard Side yard Driveway Other _____	Back yard Front yard Side yard Driveway Other _____
Category (circle)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)
Matrix Type (Surface soil unless other wise noted)	Surface Soil Other _____	Surface Soil Other _____	Surface Soil Other _____
Type (circle)	Grab Comp. # subsamples 5	Grab Comp. # subsamples ____	Grab Comp. # subsamples ____
Sample Time	12:00		
Top Depth (in.)	2		
Bottom Depth (in.)	6		
Field Comments Note if vermiculite is visible in sampled area	BD-_____ Samples collected in proposed Demolition Derby Track	BD-_____ DR 7-7-04	BD-_____
Entered (LFO) JB	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____

For Field Team Completion (Provide Initials)	Completed by DR	QC by

vs 101503

Soil-Like & Sediment

4/25/2005, 11:43 AM

Note: The report excludes all Lab QC results, such as those associated with Lab Blanks, Lab Duplicates, Re-Preparation, Re-count Same, Re-count Different, Verified Analysis, etc.

Sample ID	Parent ID	Scenario	Property Group (Location)	Sample Group	Location Description (Sub Location)	Media Type	Matrix	Category	Sample Date	PLM Method	PLM LA Bin	PLM LA (%)	PLM C (%)
CS-18581-C		N/A	875 Highway 2 S - Stimson Lumber	Property	1	Soil-Like	Surface soil	Field Sample	7/1/2004	PLM-Grav	A	ND	ND
CS-18581-FG1		N/A	875 Highway 2 S - Stimson Lumber	Property	1	Soil-Like	Surface soil	Field Sample	7/1/2004	PLM-VE	A	ND	ND
CS-18582-C		N/A	875 Highway 2 S - Stimson Lumber	Property	1	Soil-Like	Surface soil	Field Sample	7/1/2004	PLM-Grav	A	ND	ND
CS-18582-FG1		N/A	875 Highway 2 S - Stimson Lumber	Property	1	Soil-Like	Surface soil	Field Sample	7/1/2004	PLM-VE	A	ND	ND
CS-18583-C		N/A	875 Highway 2 S - Stimson Lumber	Property	2	Soil-Like	Surface soil	Field Sample	7/1/2004	PLM-Grav	A	ND	ND
CS-18583-FG1		N/A	875 Highway 2 S - Stimson Lumber	Property	2	Soil-Like	Surface soil	Field Sample	7/1/2004	PLM-VE	B1	TR	ND
CS-18584-C		N/A	875 Highway 2 S - Stimson Lumber	Property	2	Soil-Like	Surface soil	Field Sample	7/1/2004	PLM-Grav	A	ND	ND
CS-18584-FG1		N/A	875 Highway 2 S - Stimson Lumber	Property	2	Soil-Like	Surface soil	Field Sample	7/1/2004	PLM-VE	A	ND	ND
CS-18585-C		N/A	875 Highway 2 S - Stimson Lumber	Property	2,4,6,7,9	Soil-Like	Surface soil	Field Sample	7/1/2004	PLM-Grav	A	ND	ND
CS-18585-FG1		N/A	875 Highway 2 S - Stimson Lumber	Property	2,4,6,7,9	Soil-Like	Surface soil	Field Sample	7/1/2004	PLM-VE	A	ND	ND
CS-18586-C		N/A	875 Highway 2 S - Stimson Lumber	Property	3	Soil-Like	Surface soil	Field Sample	7/1/2004	PLM-Grav	A	ND	ND
CS-18586-FG1		N/A	875 Highway 2 S - Stimson Lumber	Property	3	Soil-Like	Surface soil	Field Sample	7/1/2004	PLM-VE	A	ND	ND
CS-18587-C		N/A	875 Highway 2 S - Stimson Lumber	Property	3	Soil-Like	Surface soil	Field Sample	7/1/2004	PLM-Grav	A	ND	ND
CS-18587-FG1		N/A	875 Highway 2 S - Stimson Lumber	Property	3	Soil-Like	Surface soil	Field Sample	7/1/2004	PLM-VE	A	ND	ND
CS-18588-C		N/A	875 Highway 2 S - Stimson Lumber	Property	4	Soil-Like	Surface soil	Field Sample	7/1/2004	PLM-Grav	A	ND	ND
CS-18588-FG1		N/A	875 Highway 2 S - Stimson Lumber	Property	4	Soil-Like	Surface soil	Field Sample	7/1/2004	PLM-VE	A	ND	ND
CS-18589-C		N/A	875 Highway 2 S - Stimson Lumber	Property	4	Soil-Like	Surface soil	Field Sample	7/1/2004	PLM-Grav	A	ND	ND
CS-18589-FG1		N/A	875 Highway 2 S - Stimson Lumber	Property	4	Soil-Like	Surface soil	Field Sample	7/1/2004	PLM-VE	A	ND	ND
CS-18590-C		N/A	875 Highway 2 S - Stimson Lumber	Property	5	Soil-Like	Surface soil	Field Sample	7/1/2004	PLM-Grav	A	ND	ND
CS-18590-FG1		N/A	875 Highway 2 S - Stimson Lumber	Property	5	Soil-Like	Surface soil	Field Sample	7/1/2004	PLM-VE	A	ND	ND
CS-18591-C		N/A	875 Highway 2 S - Stimson Lumber	Property	5	Soil-Like	Surface soil	Field Sample	7/1/2004	PLM-Grav	A	ND	ND
CS-18591-FG1		N/A	875 Highway 2 S - Stimson Lumber	Property	5	Soil-Like	Surface soil	Field Sample	7/1/2004	PLM-VE	A	ND	ND
CS-18592-C		N/A	875 Highway 2 S - Stimson Lumber	Property	6	Soil-Like	Surface soil	Field Sample	7/1/2004	PLM-Grav	A	ND	ND
CS-18592-FG1		N/A	875 Highway 2 S - Stimson Lumber	Property	6	Soil-Like	Surface soil	Field Sample	7/1/2004	PLM-VE	A	ND	ND
CS-18593-C		N/A	875 Highway 2 S - Stimson Lumber	Property	6	Soil-Like	Surface soil	Field Sample	7/1/2004	PLM-Grav	A	ND	ND
CS-18593-FG1		N/A	875 Highway 2 S - Stimson Lumber	Property	6	Soil-Like	Surface soil	Field Sample	7/1/2004	PLM-VE	A	ND	ND
CS-18594-C		N/A	875 Highway 2 S - Stimson Lumber	Property	7	Soil-Like	Surface soil	Field Sample	7/1/2004	PLM-Grav	A	ND	ND
CS-18594-FG1		N/A	875 Highway 2 S - Stimson Lumber	Property	7	Soil-Like	Surface soil	Field Sample	7/1/2004	PLM-VE	A	ND	ND
CS-18595-C		N/A	875 Highway 2 S - Stimson Lumber	Property	7	Soil-Like	Surface soil	Field Sample	7/1/2004	PLM-Grav	A	ND	ND
CS-18595-FG1		N/A	875 Highway 2 S - Stimson Lumber	Property	7	Soil-Like	Surface soil	Field Sample	7/1/2004	PLM-VE	A	ND	ND
CS-18596-C		N/A	875 Highway 2 S - Stimson Lumber	Property	8	Soil-Like	Surface soil	Field Sample	7/1/2004	PLM-Grav	A	ND	ND
CS-18596-FG1		N/A	875 Highway 2 S - Stimson Lumber	Property	8	Soil-Like	Surface soil	Field Sample	7/1/2004	PLM-VE	A	ND	ND
CS-18597-C		N/A	875 Highway 2 S - Stimson Lumber	Property	8	Soil-Like	Surface soil	Field Sample	7/1/2004	PLM-Grav	A	ND	ND
CS-18597-FG1		N/A	875 Highway 2 S - Stimson Lumber	Property	8	Soil-Like	Surface soil	Field Sample	7/1/2004	PLM-VE	A	ND	ND
CS-18598-C		N/A	875 Highway 2 S - Stimson Lumber	Property	9	Soil-Like	Surface soil	Field Sample	7/1/2004	PLM-Grav	A	ND	ND
CS-18598-FG1		N/A	875 Highway 2 S - Stimson Lumber	Property	9	Soil-Like	Surface soil	Field Sample	7/1/2004	PLM-VE	A	ND	ND
CS-18599-C		N/A	875 Highway 2 S - Stimson Lumber	Property	9	Soil-Like	Surface soil	Field Sample	7/1/2004	PLM-Grav	A	ND	ND
CS-18599-FG1		N/A	875 Highway 2 S - Stimson Lumber	Property	9	Soil-Like	Surface soil	Field Sample	7/1/2004	PLM-VE	A	ND	ND

Criteria:

Port Authority

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Location 875 Hwy 2 S. Date 7-1-04

Project / Client Epa/Volpe

Author Amon Repine D Repine com.

Weather 72°F Rain on/off over sampling period. → (DR)

Gov Doc CARAP, Ramp. → (DR)

Activity Gridding off. Demo Derby track Into 200 Ft² Grid sand collecting two 5 point composit samples In each grid. Depth Are. "0-1" And "2-6". With one 5 point composite. 6-12 Inches. this sample will be collected In 5 different grids, one sample per grid. Grids that this ~~sample~~ sample DR 7-1-04 was collected ~~TS~~ DR 7-1-04 Are. 2, 4, 6, 7?

Equipment GPS, Spud Bar, small shovel poly Bags, cooler, Hudson sprayer. pick Axe. → (DR)

9:00 onsite to collect samples Ref FSPS S-000 241 - 245, 201

12:00 Sampling completed. → (DR)

13:00 Samples locked In Patty Strongs offices. → (DR)

13:05 out of log Book. →

D Repine 7-1-04