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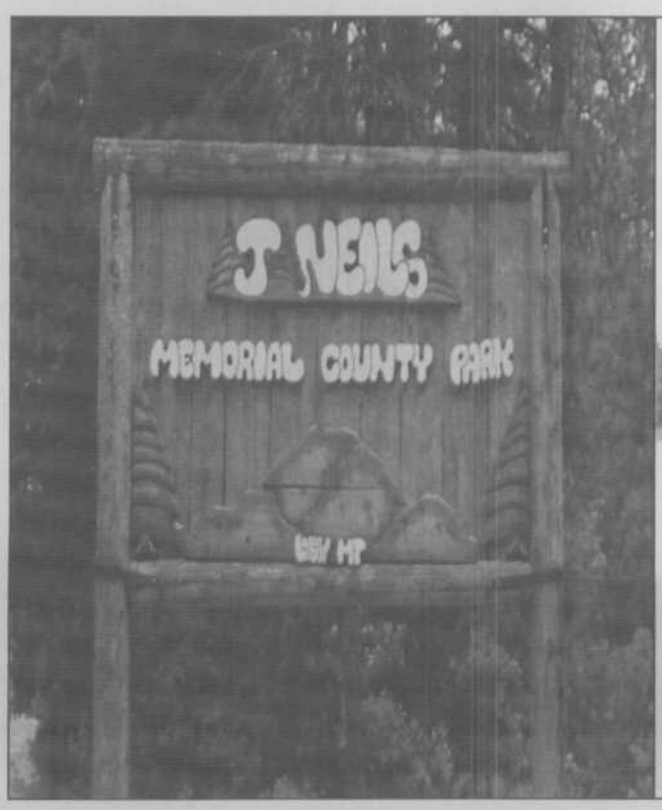
Contaminant Screening Study Libby Asbestos Site, Operable Unit 4 Libby, Montana

Final Summary Report for the J. Neils Park and Montana State Highway 37 Investigations, Revision 1

December 2005



Summary Report

FINAL (REVISION 1)

Final Summary Report for the J. Neils Park and Montana State Highway 37 Investigations, Revision 1 Contaminant Screening Study, Libby Asbestos Site, Operable Unit 4

December 15, 2005

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Prepared for:

U.S. Department of Transportation
Research and Special Programs Administration
John A. Volpe National Transportation Systems Center
Environmental Engineering Division, DTS-33
55 Broadway, Kendall Square
Cambridge, Massachusetts 02142

Prepared by:

CDM
1331 17th Street, Suite 1100
Denver, Colorado 80202

Final Summary Report for the J. Neils Park and Montana State Highway 37 Investigation, Revision 1 Contaminant Screening Study, Libby Asbestos Site, Operable Unit 4

Contract No.: DTRT57-05-D-30109

Prepared by: Nicole Bielecki Date: 12/15/05
Nicole Bielecki
CDM Project Scientist

Reviewed by: Jeff Montera Date: 12/15/05
FOR Geoff McKenzie
CDM Project Engineer

Reviewed by: Jeff Montera Date: 12/15/05
Jeff Montera
Project Manager/CDM Quality Assurance Coordinator

Approved by: Jim Christiansen Date: 12/15/04
Jim Christiansen
EPA Region 8 Remedial Project Manager

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Acronyms

bgs	below ground surface
CDM	CDM Federal Programs Corporation
CSF	close-support facility
CSS	contaminant screening study
EPA	U. S. Environmental Protection Agency
FSDS	Field Sample Data Sheet
Highway Site	Montana State Highway 37
IFF	Information Field Form
LA	Libby amphibole
Park Site	J. Neils Park
PLM	polarized light microscopy
QA/QC	quality assurance/quality control
QC	quality control
RI	remedial investigation
SAP	sampling and analysis plan
S/cc	structure per cubic centimeter
SRC	Syracuse Research Corporation
VE	visual area estimation
%	percent

Section 1
Introduction

The purpose of this report is to summarize contaminant screening study (CSS)/remedial investigation (RI) field activities conducted by CDM Federal Programs Corporation (CDM) at J. Neils Park (Park Site) and along Montana State Highway 37 (Highway Site) in Libby, Montana between August 2002 and May 2005. Figure 1-1 displays both site locations.

Consistent with other areas of Libby, Montana, vermiculite from Vermiculite Mountain may have been used as base and/or fill material throughout the J. Neils park paths, playground areas, sport fields, parking areas and concession areas. Visual inspections were performed and soil samples were collected, to determine if vermiculite and/or Libby amphibole (LA) asbestos are present in these areas of the park.

The selected sampling area along Montana State Highway 37 was used as a public thoroughfare, and as a route for transporting vermiculite ore from Vermiculite Mountain to the former export plant on the north side of the Kootenai River, and possibly into the city of Libby. A visual inspection was performed, and soil samples were collected along the 5 ½ mile stretch of highway to determine if vermiculite and/or LA asbestos are present along the highway. Following the receipt of the CSS soil sample results, the U. S. Environmental Protection Agency (EPA) requested a supplemental soil and stationary air sampling event.

All RI activities were conducted in accordance with the CSS Sampling and Analysis Plan, Revision 1 (SAP), (CDM 2003a) and Final Sampling and Analysis Plan Addendum for J. Neils Park and State Highway 37 (SAP Addendum) (CDM 2003b). Stationary air sampling was conducted in accordance with Final Draft Response Action Work Plan (CDM 2003c).

This summary report presents verbal interview information, visual inspection results, and site-specific air and surface soil sampling data to be used in RI decision making for the Park Site, and the Highway Site.

Section 2
Field Activities

The Park Site investigation consisted of a verbal interview, visual inspection for vermiculite, and surface soil sampling. The Highway Site investigation consisted of stationary air sampling, surface soil sampling and visual inspection for vermiculite during the sampling events. Unless noted in Section 3.1, all field documentation and sample collection procedures provided or referenced in the SAP Addendum (CDM 2003b) and Final Draft Response Action Work Plan (CDM 2003c) were followed. The following sections summarize field activities conducted at both sites.

2.1 J. Neils Park Investigation

2.1.1 Verbal Interview

An interview was conducted with Ms. Carol Ann Peltier of the Lincoln County Parks on August 6, 2002 to determine if there were any known locations of visible vermiculite on the park property. During the interview it was stated that the only insulated building on the property was the baseball field concession stand and it was not insulated with vermiculite. Ms. Peltier indicated that there were no other known areas of vermiculite on the Park Site property.

2.1.2 Visual Inspection

As part of the Park Site investigation the concession stand and other structures on the Park Site were inspected to determine if vermiculite-containing insulation or building materials were present. A visual inspection of the Park Site was also performed on August 6, 2002 to determine if any vermiculite was present on the site. A primary structure and property assessment information field form (IFF) was completed for the Park Site and is included in Appendix A. Park Site features are shown on Figure 2-1.

All structures on the Park Site were inspected by the CDM field team, and vermiculite insulation was not observed in any of the Park Site structures. A visual inspection of the Park Site was conducted and small amounts of vermiculite were observed on ball fields #3 and #4, between the site bathrooms and playground, and at the entrance to the horse arena (Figure 2-2).

In addition, vermiculite observed during soil sampling was noted in the field logbook and Field Sample Data Sheets (FSDS). Logbook pages and FSDS' for the Park Site investigation are included in Appendices B and C, respectively.

2.1.3 Soil Sampling

Soil sampling at the Park Site was conducted in two separate events: September 19-22, 2003, and March 8, 2005. Soil samples were collected, prepared, and analyzed in accordance with procedures presented or referenced in the SAP Addendum.

2.1.3.1 September 2003 Event

Sampling locations and results for the September 2003 sampling event are shown on Figure 2-2. The site was divided into four subareas including the pathways (i.e., horse path, walking path, and access road), the former airfield area, the forested area, and the areas where visible vermiculite was identified during the initial visual inspection.

Sample locations were selected for the pathways (horse path, walking path and entire access road) at 300-foot intervals. Each sample was a three-point composite, with one subsample being collected within the path, and the other two subsamples collected from each side of the path or road. If one side of the road could not be sampled due to obstacles, etc., a second subsample was collected approximately 15 feet from the sample location on the side of the road that could be sampled.

The site of the former airfield was divided into grids each approximately 250 feet by 200 feet. A five-point composite sample was collected from each grid square.

For the forested area, two sampling locations were chosen that were accessible and cleared. Each sample was a composite of five subsamples, one from the center location and four from 75 feet away from the center in each direction, north, south, east, and west. There was no evidence to indicate that the un-cleared forested area contained LA asbestos; therefore, only the cleared area was sampled, considering that this area would be the most likely place for introduced vermiculite.

In total, 67 composite surface soil samples were collected during the September 2003 investigation, three of which were field duplicates, from a depth of 0-6 inches (Figure 2-2). The results of all quality control (QC) samples will be addressed in a future data summary report. Of the 64 field (i.e., non-QC) samples; 26 were collected from the walking path, 9 from the horse path and 4 from the access road; 2 from the cleared areas of the forest; and 23 from the former airfield. No vermiculite was observed during the sampling event. Three samples had trace concentrations of LA asbestos (<0.2 percent [%]); all other samples collected during this investigation were non-detect for LA asbestos. Samples with detectable concentrations of LA asbestos are summarized in Table 2-1. All analytical results for the September event are included in Appendix D.

Table 2-1 Summary of Soil Samples Collected at J. Neils Park in September 2003 that Contain LA asbestos

Sample Index ID	Location	Depth (inches bgs)	LA asbestos (%)	Comments on Visible Vermiculite
CS-17306	Walking Path	0-6	<0.2	No visible vermiculite
CS-17344	Ball Field #1	0-6	<0.2	No visible vermiculite
CS-17355	Horse Path	0-6	<0.2	No visible vermiculite

bgs – below ground surface

2.1.3.2 March 2005 Event

Following the sampling event in September 2003, the city of Libby contacted EPA regarding maintenance they wanted to perform on the ball fields before the spring baseball season. Subsequently, CDM was tasked to collect samples from the infield portion of each ball field to further define the nature and extent of contamination. The four infields were sampled on March 8, 2005. Logbook pages and FSDS for this sampling event are in Appendices B and C, respectively.

Each infield was split into 3 sections and a five-point composite sample from 0-1 inches was collected from each section. Composite samples were collected from the right half of the field from home base to second base, the left half of the field from second base to home base, and the pitching mound.

A total of twelve samples were collected from the four ball fields. The analytical result of the sample collected from the pitching mound of Field #1 revealed <1% LA asbestos, and the analytical result of the sample collected from the pitching mound of Field #2 revealed trace (<0.2%) LA asbestos. All remaining infield samples were non-detect for LA asbestos. Although visible vermiculite was noted during the August 2002 visual inspection on ball Fields #3 and #4, vermiculite was not observed during the September 2003 or March 2005 sampling events. Table 2-2 lists the details for those samples where LA asbestos was detected. Sample locations and analytical results are presented on Figure 2-3. Analytical results for the March 2005 sampling event can be found in Appendix D.

Table 2-2 Summary of Soil Samples Collected at J. Neils Park in March 2005 that Contain LA asbestos

Sample Index ID	Location	Depth (inches bgs)	LA asbestos (%)	Comments on Visible Vermiculite
CS-20064	Ball Field #1	0-1	<0.2	No visible vermiculite
CS-20073	Ball Field #2	0-1	<1	No visible vermiculite

2.2 Montana State Highway 37 Investigation

2.2.1 Verbal Interview

A verbal interview was not conducted for the Highway Site because there was not an individual available to contact for an interview. Therefore, an IFF was not completed for this site. However, CDM contacted the Montana Department of Transportation and obtained a temporary permit for sampling along the highway. The permit was issued on July 21, 2003, with an end date of December 30, 2003. A copy of the request letter from CDM and a copy of the signed permit can be found in Appendix E. Per EPA's request, a permit was not required for the sampling conducted in May 2005.

2.2.2 Visual Inspection

A visual inspection was not completed prior to the sampling event due to the length of the segment to be sampled and the dense vegetation along the road. Visual observations were noted during the sampling activities and are summarized in Tables 2-4 and 2-5. Logbook notes and FSDS' for this field event are included in Appendices F and G, respectively.

2.2.3 Air Sampling

2.2.3.1 May 2005 Event

Air samples were not initially scoped as a part of the Highway 37 CSS sampling event. However, after finding that several soil samples collected in 2003 contained LA asbestos and relatively large amounts of visible vermiculite were observed along the highway, EPA requested that stationary air sampling be conducted along the same 5 ½ mile section of Highway 37. The intent of the sampling was to screen outdoor air near the highway for concentrations of LA asbestos that may be of immediate concern to people working on or living near the highway.

An event-specific SAP was not developed for this supplemental sampling because of the time sensitive nature of the sampling. Instead, air sampling and analysis standard operating procedures presented in the Final Draft Removal Action Work Plan were used (CDM 2003c).

A total of 11 air samples were collected from stationary pumps setup along Highway 37 on May 23, 2005. The 11 stationary pumps were staggered geographically and collected air samples over a minimum time period of eight hours. LA asbestos was not detected in any of the 11 air samples (Appendix H). Locations and results of these air samples are shown on Figure 2-4. Logbook pages and FSDS' are provided in Appendices F and G, respectively.

2.2.3.2 2001 Air Sampling

To further evaluate potential exposure resulting from contamination along Highway 37, CDM has included air sampling results from past sampling activities that have taken place along the highway. In 2001 a series of samples were collected on (1) people driving along Highway 37, (2) people driving behind trucks carrying contaminated materials from a remediation site to the Flyway or Screening Plant, and (3) people walking along Highway 37 while trucks were actively hauling contaminated materials. The primary purpose of these samples was to evaluate potential releases and exposures to cleanup workers and highway users that may have resulted from the transport of contaminated materials by EPA contractors during cleanup activities. However, the samples also provide some information regarding potential exposures that may result from disturbance of contaminated soils on the road shoulders by normal highway traffic.

Thirty-one samples were identified as being directly related and reasonably specific to vehicle or foot traffic along Highway 37. Of these 31 samples, 24 air samples were collected from individuals traveling in vehicles, and 7 were collected from individuals on foot. Two LA asbestos fibers were detected on one sample collected from a vehicle traveling behind a truck carrying contaminated materials. LA asbestos was not detected on any of the remaining air samples collected in 2001 along Highway 37.

Analytical results, including number of LA asbestos structures detected, analytical sensitivities and concentrations of structures per cubic centimeter (S/cc) are shown in Table 2-3. Analytical results of all air samples are included in Appendix H with their associated activities. Logbook pages and FSDS' for the 2001 air sampling are included in Appendices J and K, respectively.

Table 2-3 Summary of Air Samples Collected Along Highway 37 in 2001

Sample ID	Analysis Method	LA Structures Detected	Analytical Sensitivity	Concentration (S/cc)	Location Description
1R-05995	ISO	0	0.1279	< 0.1279	Drive from Plummer to Flyway; roundtrip
1R-05996	ISO	0	0.1088	< 0.1088	Drive from Plummer to Flyway; roundtrip
1R-05997	ISO	0	0.1186	< 0.1186	Drive from Plummer to Screening Plant; roundtrip
1R-05998	ISO	0	0.1231	< 0.1231	Drive from Plummer to Flyway; roundtrip
1R-05999	ISO	0	0.1165	< 0.1165	Drive from Plummer to Flyway; roundtrip
1R-06046	ISO	0	0.0577	< 0.0577	Walk from Mack's Mart to Screening Plant
1R-06047	ISO	0	0.1020	< 0.1020	Walk from 402 Highway 2 West to Mack's Mart
1R-06054	PCM	0	0.0490	< 0.0490	Drive from Plummer to Flyway then Screening Plant, following truck; roundtrip
1R-06055	PCM	0	0.0530	< 0.0530	Drive from Plummer to Flyway then Screening Plant, following truck; roundtrip
1R-06056	PCM	0	0.0490	< 0.0490	Drive from Plummer to Flyway then Screening Plant, following truck; roundtrip
1R-06057	PCM	0	0.0930	< 0.0930	Drive from Plummer to Flyway then Screening Plant, following truck; one-way
1R-06130	ISO	0	0.1238	< 0.1238	Drive from Plummer to Screening Plant, following truck; roundtrip
1R-06130	AHERA	2	0.0585	0.1170	Drive from Plummer to Screening Plant, following truck; roundtrip
1R-06131	ISO	0	0.1148	< 0.1148	Drive from Plummer to Flyway, following truck; roundtrip
1R-06132	ISO	0	0.0986	< 0.0986	Drive from Plummer to Flyway, following truck; roundtrip
1R-06141	ISO	0	0.1332	< 0.1332	Drive from Plummer to Flyway, following truck; roundtrip
1R-06142	ISO	0	0.1255	< 0.1255	Drive from Plummer to Flyway, following truck; roundtrip
1R-06143	ISO	0	0.2039	< 0.2039	Drive from Plummer to Flyway then Screening Plant, following truck; one-way
1R-06170	ISO	0	0.0673	< 0.0673	Drive from LHS to Flyway; roundtrip
1R-06171	ISO	0	0.0745	< 0.0745	Drive from LHS to Flyway; roundtrip
1R-06172	ISO	0	0.0745	< 0.0745	Drive from LHS to Flyway; roundtrip
1R-06782	ISO	0	0.0814	< 0.0814	Drive from LHS to Flyway, following truck; roundtrip
1R-06783	ISO	0	0.0714	< 0.0714	Drive from LHS to Flyway, following truck; roundtrip
1R-06784	ISO	0	0.1000	< 0.1000	Drive from LHS to Screening Plant, following truck; one-way
1R-06841	ISO	0	0.1372	< 0.1372	Drive from LHS to Flyway, following truck; roundtrip
1R-06842	ISO	0	0.1343	< 0.1343	Drive from LHS to Flyway, following truck; roundtrip
1R-06843	ISO	0	0.1372	< 0.1372	Drive from LHS to Flyway, following truck; roundtrip
1R-07011	ISO	0	0.0764	< 0.0764	Walking sample of truck route from LHS to flyway
1R-07012	ISO	0	0.0764	< 0.0764	Walking sample of truck route from LHS to flyway
1R-07013	ISO	0	0.0733	< 0.0733	Walking sample of truck route from LHS to flyway
1R-07014	ISO	0	0.0815	< 0.0815	Walking sample of truck route from LHS to flyway
1R-07015	ISO	0	0.3056	< 0.3056	Walking sample of truck route from LHS to flyway

2.2.4 Soil Sampling

Soil sampling along the Highway Site was conducted in two separate events: September 18-22, 2003, and May 23, 2005. Soil samples were collected, prepared, and analyzed in accordance with procedures presented or referenced in the SAP Addendum.

2.2.4.1 September 2003 Event

A 5 ½ mile long section of Montana State Highway 37 was sampled from the Burlington Northern Railroad track, approximately 1/8 of a mile south of the Kootenai River, to ½ mile south of the junction of the highway and Rainy Creek Road. The section extends in a southwest/northeast direction.

Locations of samples collected in September 2003 are shown on Figure 2-5. The Highway Site was divided into ¼-mile segments along the road with an additional two samples collected near the Kootenai River (CS-17158 and CS-17159). One sample was collected on each side of the highway at each ¼ mile interval. Each sample was a composite of 3 subsamples at depths of 0-6 inches, within 10 feet from the highway, and approximately 100 feet apart.

A visual inspection of the highway was performed during the sampling event. Vermiculite was observed at points along the highway, see Figure 2-5. There were 51 samples collected along the Highway Site, 3 of which were field duplicates. The results of all QC samples will be addressed in a future data summary report. Of the 48 field (i.e., non-QC) samples, 3 had concentrations of LA asbestos at <1%, 37 had trace (<0.2%) amounts of LA asbestos, and 8 were non-detect. Table 2-4 lists the details for those samples where LA asbestos was detected. FSDS' for this event can be found in Appendix G, and analytical results in Appendix I.

Table 2-4 Summary of Soil Samples Collected Along Highway 37 in September 2003 that Contain LA asbestos

Sample Index ID	Depth (inches bgs)	LA asbestos (%)	Comments on Visible Vermiculite
CS-16875	0-6	<0.2	No visible vermiculite
CS-16876	0-6	<0.2	No visible vermiculite
CS-16878	0-6	<0.2	No visible vermiculite
CS-16879	0-6	<0.2	No visible vermiculite
CS-16880	0-6	<1	Moderate to high amounts of vermiculite observed, mainly near 100' east of center subsample location
CS-17122	0-6	<0.2	A few flakes of vermiculite observed
CS-17124	0-6	<0.2	No visible vermiculite
CS-17125	0-6	<0.2	No visible vermiculite
CS-17126	0-6	<1	Moderate amounts of visible vermiculite at center subsample location and 100' east of center subsample location
CS-17127	0-6	<0.2	No visible vermiculite
CS-17128	0-6	<0.2	Vermiculite observed on west side of road
CS-17129	0-6	<0.2	No visible vermiculite
CS-17130	0-6	<1	Moderate amounts of vermiculite observed at center and 100' east of center location, trace amounts observed at 100' west of center location
CS-17131	0-6	<0.2	No visible vermiculite
CS-17133	0-6	<0.2	Moderate amounts of vermiculite observed at center and 100' east of center location, trace amounts observed at 100' west of center location
CS-17134	0-6	<0.2	No visible vermiculite
CS-17135	0-6	<0.2	Moderate amounts of vermiculite observed at all subsample locations
CS-17136	0-6	<0.2	One flake of vermiculite observed 100' west of center subsample location
CS-17138	0-6	<0.2	Moderate amounts of vermiculite observed at 100' west and 100' east of center subsample locations and trace amount of vermiculite observed at center subsample location
CS-17139	0-6	<0.2	No visible vermiculite
CS-17140	0-6	<0.2	No visible vermiculite
CS-17141	0-6	<0.2	No visible vermiculite

(Continued) Table 2-4 Summary of Soil Samples Collected Along Highway 37 in September 2003 that Contain LA asbestos

Sample Index ID	Depth (inches bgs)	LA asbestos (%)	Comments on Visible Vermiculite
CS-17142	0-6	<0.2	Trace amount of vermiculite observed at center subsample location and at 100' west of the center subsample location
CS-17143	0-6	<0.2	No visible vermiculite
CS-17144	0-6	<0.2	Moderate amount of vermiculite observed at 100' west of the center subsample location and trace amounts observed at 100' east of center subsample location
CS-17145	0-6	<0.2	Moderate amount of vermiculite observed at center and 100' west of center subsample location, trace amount of vermiculite observed at 100' east of center subsample location
CS-17147	0-6	<0.2	Moderate amount of vermiculite observed at all subsample locations
CS-17148	0-6	<0.2	Trace amount of vermiculite observed at all subsample locations
CS-17149	0-6	<0.2	Moderate amount of vermiculite observed at center subsample location and at 100' west of subsample location, trace amount of vermiculite observed at 100' east of center subsample location
CS-17150	0-6	<0.2	Trace amount of vermiculite observed at all subsample locations
CS-17151	0-6	<0.2	Moderate amount of vermiculite observed at center and 100' west of center subsample location
CS-17152	0-6	<0.2	No visible vermiculite
CS-17153	0-6	<0.2	Trace amount of vermiculite observed at all subsample locations
CS-17154	0-6	<0.2	Trace amount of vermiculite observed at 100' west of center subsample location
CS-17155	0-6	<0.2	Trace amount of vermiculite observed at center subsample location
CS-17156	0-6	<0.2	No visible vermiculite
CS-17157	0-6	<0.2	No visible vermiculite
CS-17158	0-6	<0.2	No visible vermiculite
CS-17159	0-6	<0.2	No visible vermiculite
CS-17160	0-6	<0.2	No visible vermiculite

bgs – below ground surface

2.2.4.2 May 2005 Event

Following the September 2003 sampling event, EPA requested the highway site be resampled to provide additional information regarding the distribution of contamination along the highway. Specifically, because initial samples were collected over a 0-6 inch depth interval, EPA could not determine definitively if contamination was located at the surface of the soils (i.e. 0-1 inch) or was limited to deeper locations (e.g. may be covered with road sand or other soil). For this purpose, twelve additional samples were collected along Highway 37 at locations approximating sample locations of the September 2003 sampling event. Locations of samples collected on May 23, 2005 are shown on Figure 2-4. Each sample was a composite of three subsamples, at depths of 0-1 inches to identify possible contamination specifically at the surface. Global positioning system points taken in 2003 were used to establish the appropriate center subsample locations of the 2005 samples. Each subsample was collected within 10 feet from the highway. Each sample included one subsample in the center and two other subsamples collected parallel to the highway and approximately 100 feet from the center subsample location.

Each of the twelve samples were split in the field and sent for different analyses at two separate laboratories. Twelve samples were analyzed by an onsite field laboratory using polarized light microscopy (PLM)-9002 in order to provide immediate results regarding surface contamination. The twelve field splits were sent to CDM's close-support facility (CSF) in Denver where they were dried, sieved, and ground to less than 250 microns in diameter before being sent for analysis using PLM-visual area estimation (VE). Analysis under method PLM-9002 has the benefit of a sooner turn around time because the soils do not have to be prepared and ground prior to analysis.

Both analytical methods segregate the concentrations of LA asbestos into one of three bins: non-detect, <1%, and ≥1%. However, sample preparation (i.e., drying, sieving, and grinding) allows the laboratory to better quantify LA asbestos at lower concentrations. As a result, soil samples analyzed using PLM-VE can be categorized into one of four bins: non-detect, trace (<0.2%), <1%, and ≥1%. An analytical result of <1% under PLM-9002 is comparable to analytical results under PLM-VE of <1% or <0.2%.

Of the twelve samples analyzed under PLM-9002, 11 had concentrations of <1% LA asbestos, while one of the samples was non-detect for LA asbestos. Each sample analyzed by PLM-VE had trace (<0.2%) amounts of LA asbestos. Sample details, analytical results, and analysis method are summarized on Table 2-5. A visual inspection of the highway was performed during the sampling event. Vermiculite was observed at varying quantities along the highway. Sample locations, analytical results, and concentrations of visible vermiculite are presented on Figure 2-4. FSDS' for this event can be found in Appendix G, and analytical results in Appendix I.

Table 2-5 Summary of Soil Samples Collected Along Highway 37 in May 2005

Sample Index ID	Depth (inches bgs)	Analytical Method	LA asbestos (%)	Comments on Visible Vermiculite
CS-20202	0-1	PLM-9002	<1	High amounts of vermiculite observed at center subsample location, moderate amounts 100' south of center, and trace amounts of vermiculite observed 100' north of center
CS-20203	0-1	PLM-VE	<0.2	Field split of CS-20202
CS-20204	0-1	PLM-9002	<1	Moderate amounts of vermiculite observed at center subsample location, and 100' south of center, and no visible vermiculite 100' north of center
CS-20205	0-1	PLM-VE	<0.2	Field split of CS-20204
CS-20222	0-1	PLM-9002	<1	No visible vermiculite
CS-20223	0-1	PLM-VE	<0.2	Field split of CS-20222
CS-20224	0-1	PLM-9002	<1	No visible vermiculite
CS-20225	0-1	PLM-VE	<0.2	Field split of CS-20224
CS-20226	0-1	PLM-9002	<1	Trace amounts of vermiculite observed at all three subsample locations
CS-20227	0-1	PLM-VE	<0.2	Field split of CS-20226
CS-20228	0-1	PLM-9002	<1	Trace amounts of vermiculite observed 100' north and south center subsample location, and no visible vermiculite at center subsample
CS-20229	0-1	PLM-VE	<0.2	Field split of CS-20228
CS-20230	0-1	PLM-9002	<1	No visible vermiculite
CS-20231	0-1	PLM-VE	<0.2	Field split of CS-20230
CS-20232	0-1	PLM-9002	ND	No visible vermiculite
CS-20233	0-1	PLM-VE	<0.2	Field split of CS-20232
CS-20234	0-1	PLM-9002	<1	Trace amounts of vermiculite observed at center subsample location and 100' north of center, and no visible vermiculite 100' south of center
CS-20235	0-1	PLM-VE	<0.2	Field split of CS-20234
CS-20236	0-1	PLM-9002	<1	No visible vermiculite
CS-20237	0-1	PLM-VE	<0.2	Field split of CS-20236
CS-20238	0-1	PLM-9002	<1	High amounts of vermiculite observed 100' north of center subsample location and trace amounts of visible vermiculite at center subsample and 100' south of center

Table 2-5 (continued) Summary of Soil Samples Collected Along Highway 37 in May 2005

CS-20239	0-1	PLM-VE	<0.2	Field split of CS-20238
CS-20240	0-1	PLM-9002	<1	Moderate amounts of vermiculite observed 100' south of center subsample location, trace amounts of visible vermiculite at center subsample, and no visible vermiculite 100' south of center
CS-20241	0-1	PLM-VE	<0.2	Field split of CS-20240

ND – non-detect

2.3 Soil Sample Processing and Analysis

Soil samples sent off site were prepared for PLM-VE analysis at the CSF in accordance with the CSF Soil Preparation Plan (CDM 2003d) or CSF Soil Preparation Plan, Revision 1 (CDM 2004), depending on the date of processing. After the soils were dried, sieved, and ground, samples were sent to one of five analytical labs and analyzed for LA asbestos using two techniques depending on the grain size: PLM-VE and PLM gravimetric (Syracuse Research Corporation [SRC] 2003). The coarse fraction is analyzed using a PLM gravimetric analysis and the fine fraction is analyzed using PLM-VE.

EPA is in the process of evaluating the accuracy and precision 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. For the purposes of this report, PLM-gravimetric results are not presented.

2.4 Comparison of Soil Samples Collected Along Highway 37

The twelve samples collected in the May 2005 sampling event confirmed the presence of LA asbestos. Table 2-6 shows the analytical results of the samples collected in May 2005 compared with the analytical results from the same relative location during the September 2003 sampling event.

Table 2-6 Comparison of 2003 and 2005 PLM-VE Soil Samples in Same Relative Locations Along Highway 37

2005 Sample Index ID	Depth (inches bgs)	LA asbestos (%)	2003 Sample Index ID	Depth (inches bgs)	LA asbestos (%)
CS-20203	0-1	<0.2	CS-16880	0-6	<1
CS-20205	0-1	<0.2	CS-16874	0-6	non-detect
CS-20223	0-1	<0.2	CS-17160	0-6	<0.2
CS-20225	0-1	<0.2	CS-17157	0-6	<0.2
CS-20227	0-1	<0.2	CS-17151	0-6	<0.2
CS-20229	0-1	<0.2	CS-17150	0-6	<0.2
CS-20231	0-1	<0.2	CS-17145	0-6	<0.2
CS-20233	0-1	<0.2	CS-17140	0-6	<0.2
CS-20235	0-1	<0.2	CS-17138	0-6	<0.2
CS-20237	0-1	<0.2	CS-17134	0-6	<0.2
CS-20239	0-1	<0.2	CS-17130	0-6	<1
CS-20241	0-1	<0.2	CS-17127	0-6	<0.2

Section 3
Quality Assurance/Quality Control

CDM has established a formal quality assurance program to ensure consistently high quality project deliverables. For work conducted by CDM in Libby, quality assurance/quality control (QA/QC) measures include the collection of 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 SAP Addendum and the implications of those deviations on project or data quality objectives.

3.1 Deviations from the Sampling and Analysis Plan Addendum

Two samples were collected from the cleared areas in the forested section of the Park Site, however three samples were selected in the SAP Addendum to be collected from the cleared areas. The third sample was inadvertently not collected.

Two samples were collected beyond Rainy Creek Road to further delineate the contamination south of Rainy Creek Road, however the SAP Addendum called for samples to only be collected up to the north side of Rainy Creek Road. All other requirements in the SAP Addendum were met without exception.

All air and soil samples collected during the May 2005 sampling event were outside the scope of the Final Sampling and Analysis Plan Addendum for J. Neils Park and State Highway 37 (CDM 2003b). Air samples were collected in accordance with the Final Draft Removal Action Work Plan (CDM 2003c). Soil samples were collected from locations approximating sample locations of the September 2003 sampling event using protocols outlined in the Final Sampling and Analysis Plan Addendum for J. Neils Park and State Highway 37 (CDM 2003b).

3.2 Achievement of Data Quality Objectives

The data quality objectives of this investigation were met.

3.3 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 Park Site and Highway Site.

Section 4
References

CDM 2003a. Final Sampling and Analysis Plan, Remedial Investigation, Contaminant Screening Study, Revision 1. May

_____. 2003b. Final Sampling and Analysis Plan Addendum for J. Neils Park and State Highway 37. July.

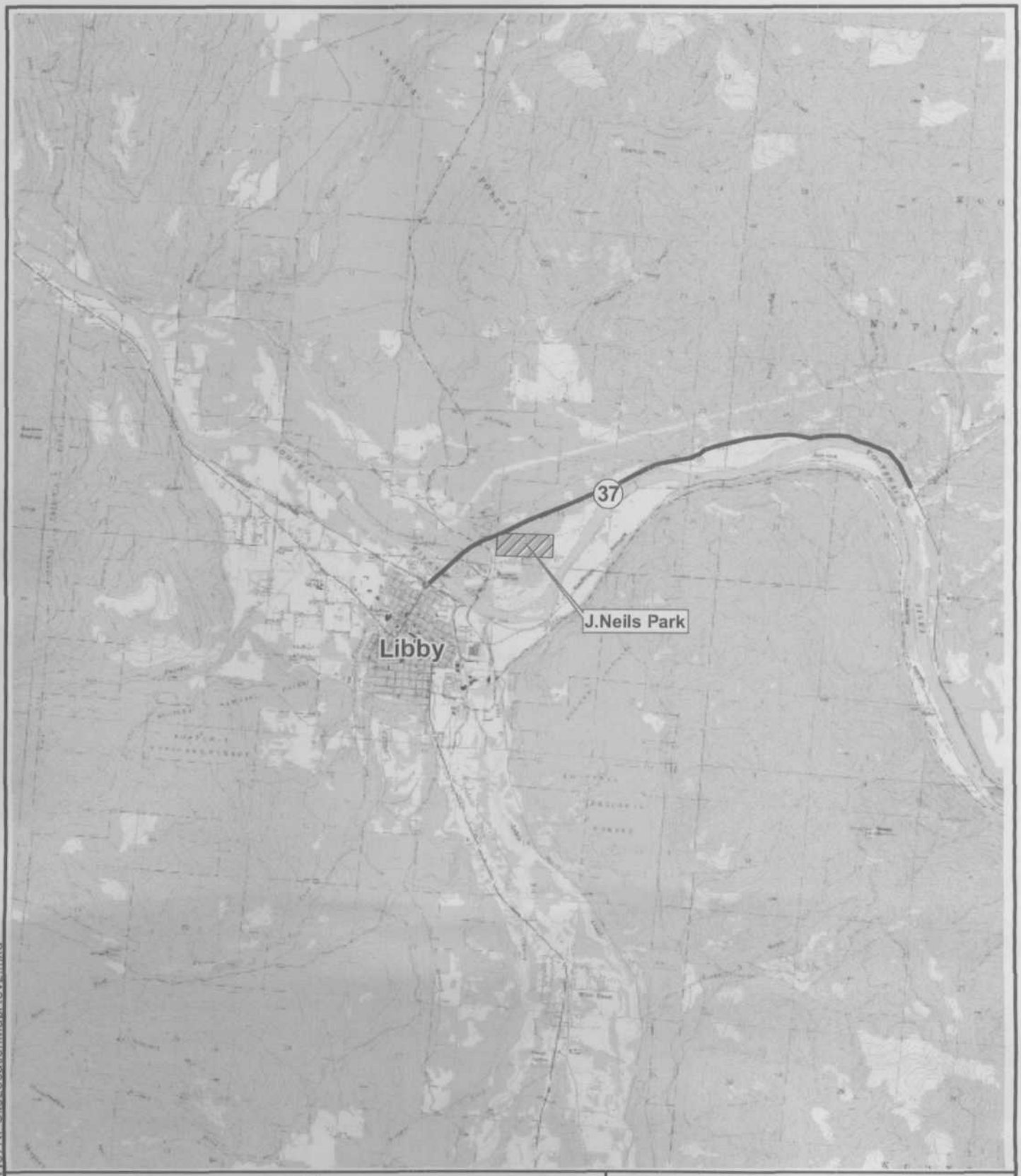
_____. 2003c. Final Draft Response Action Work Plan, Libby Asbestos Project, Libby, Montana. November.

_____. 2003d. Close Support Facility, Soil Preparation Plan, Libby, Montana Asbestos Project, Sample Processing. April.

_____. 2004. Close Support Facility, Soil Preparation Plan, Revision 1, Libby, Montana Asbestos Project, Sample Processing. March.

SRC. 2003. Analysis of Asbestos Fibers in Soil by Polarized Light Microscopy. SRC-LIBBY-03 (Rev. 0). March 3, 2003.

Figures



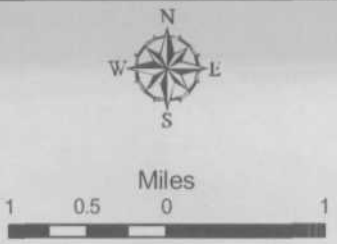


Figure 1-1

Site Location Map
J. Neils Park and Highway 37
Libby, Montana

CDM

Map Filename: figure1-1Hwy37NPSiteLocationMapRev2.mxd

Legend

- Grid
- Site Boundary
- Horse Path
- Walking Path
- Access Roads
- Buildings
- Existing Parking Area
- Horse Arena
- Remote Control Area
- Ice Rink
- Soccer Field

N
W E
S

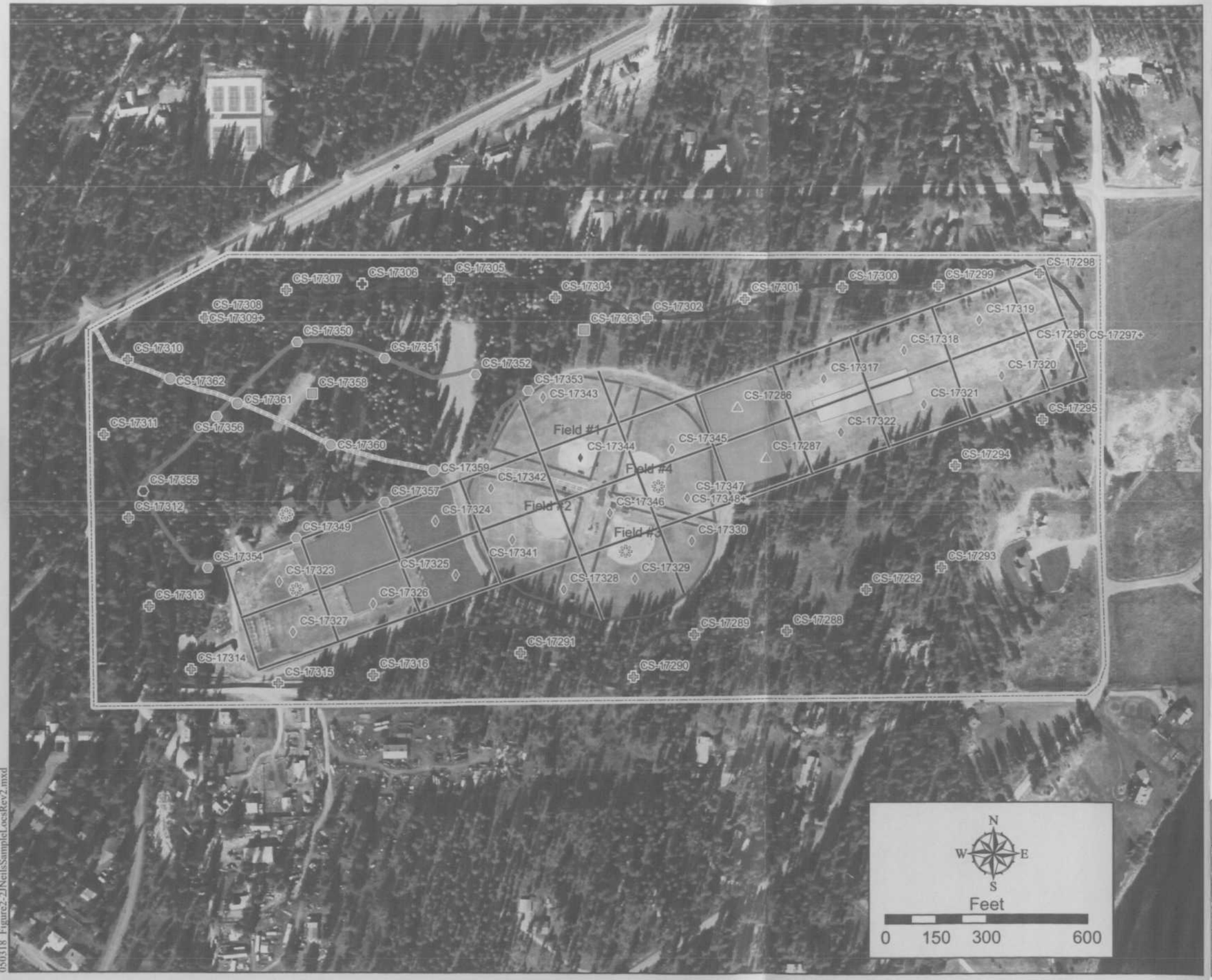
Feet
0 150 300 600

Figure 2-1

Site Feature Map
J. Neils Park
Libby, Montana

CDM

050318 Figure2-1JNeilsSiteFeature.mxd KS 3/18/05



050318 Figure2-2JNeilsSampleLocsRev2.mxd

Legend

- Site Boundary
- Horse Path
- Walking Path
- Access Roads
- Sampling Grid
- Baseball Infield/Outfield Outline
- Building
- Existing Parking Area
- Horse Arena
- Ice Rink
- Remote Control Area
- Soccer Field
- Visible Vermiculite (Observed in August 2002)
- \+ Indicates duplicate sample collected

Results by Area

- ND, Access Road
- ND, Air field
- ND, Forested Area
- ND, Horse Path
- ND, Former Air Field
- ND, Walking Path
- TR, Horse Path
- TR, Former Air Field
- TR, Walking Path

ND = Non Detect
TR = Trace (<0.2% LA)

Figure 2-2

Soil Sample Locations and Results Map
September 2003 Sampling Event
J. Neils Park
Libby, Montana

CDM

Legend

- Horse Path
- Walking Path
- Access Roads
- Ball Field Outline
- Building
- Existing Parking Area
- Soccer Field

March 2005 Soil Sample Results

- Non Detect
- Trace (<0.2% LA)
- < 1% LA

N W E S

Feet

0 75 150 300

Figure 2-3

Soil Sample Locations and Results Map for
March 2005 Sampling Event
J. Neils Park
Libby, Montana

CDM

050318_Figure2-3JNeilsSampleLocMarch05.mxd KS 3/25/05

Legend

Air Sample Results

- Non-Detect

Surface Soil Sample Results (0-1")

- Trace LA (<0.2%)
- J. Neils Park Boundary

Level Vermiculite Observed

- Trace
- Moderate
- High

N W E S

Feet

0 750 1,500 3,000

1 inch equals 2,000 feet

Figure 2-4

Air and Soil Sample Locations and Results Map
May 2005 Sampling Event
Montana State Highway 37
Libby, Montana

CDM

Legend

Surface Soil Sample Results (0-6")

- Non Detect
- Trace LA (<0.2%)
- < 1% LA
- J. Neils Park Boundary

Level Vermiculite Observed

- High
- Moderate
- Trace
- Flake

+ Indicates duplicate sample collected

N
W E
S

Feet
0 750 1,500 3,000

Figure 2-5

Soil Sample Locations and Results Map
September 2003 Sampling Event
Montana State Highway 37
Libby, Montana

CDM

050318 Figure2-4highway37Samp.mxd KS 8/11/05

Appendix A
Information Field Form for J. Neils Park

V AD- 000680 3/7/02

T. V. BD- 001365 VOID BD

☐ Soil samples collected (Date: _____)

LIBBY ASBESTOS PROJECT
Contaminant Screening Study
Primary Structure and Property Assessment Information Field Form

Field Logbook No.: 100096 Page No.: 98 Site Visit Date: 8-6-02

Address: J NEILS PARK HWY 37 N Structure Description: J NEILS PARK

Occupant: CAROL ANN PELTIER Phone Number: 293-7781 x 238

Owner (if different than occupant): LINCOLN COUNTY PARKS Phone Number: 293-7781 x 238

Sampling Team: GWEN POZEGA, TOM VANDERWEEL CDM

Field Form Check Completed by (100% of forms): Gwen D. Pozega CDM

Screening Field Check Completed by (2% of forms): _____

Data Item	Value	Notes
HOUSE ATTRIBUTES		
Property Description	Residential Industrial Commercial	COUNTY PARK
Surrounding Land Use	(Residential) Industrial (Commercial) School Mining Other: _____	
Year of Construction	1994-1995 Unknown	
Square Footage	100 ACRES — 72.5 ACRES, 22.5 ACRES OFF CHAMPION HAUL RD	
Construction Material	(Wood frame) Masonry/Stone Other: METAL	BUILDINGS ON PARK LAND
Number of Floors Above Ground	1 2 3 Other: NA	
Number of Rooms Per Floor Above Ground	1:____ 2:____ 3:____ Other: NA	
Basement	Yes (No)	
Heating Source	Wood/Coal Electric Propane/Gas (Other) SUN	
Heat Distribution	Forced air (Radiant) Other: _____	

(ROBERT)
GROUNDSKEEPER

BP 8/4/02

CSS INFORMATION FIELD FORM (Continued)

A.D.# 000680

Address: HWY 37 N

BD#_____

Data Item	Value	Notes
OCCUPANT INFORMATION		
Number of Adults/Employees	0 1 2 3 4 5-15 16-20 21-30 >30	VARIES
Number of Children	0 1 2 3 4 Other:_____	VARIES
Years at Location	<1 1-5 5-10 10-15 >15	8 YRS.
Was the residence/building remodeled?	Yes No If yes, When (years): <2 2-5 >5 Where: Attic Living Areas Garage Basement Other:_____	
Has resident/business purchased any Libby vermiculite materials from W.R. Grace in the past?	Yes No	
Has the property at this location been used for a for-profit enterprise of distributing, treating, storing, or disposing of Libby vermiculite?	Yes No	
Are there any known areas of exposed vermiculite?	Yes No If yes, Where: Ceiling Walls Floors Attic Other:_____	

AD# 000680

CSS INFORMATION FIELD FORM ntinued)

Address: Hwy 37 N.

BD#_____

Data Item	Value	Notes
INDOOR ASSESSMENT		
Vermiculite Insulation Past or Present	Attic: Yes (No) NA Unknown Walls: Yes (No) NA Unknown Basement: Yes No (NA) Unknown Crawl Space: Yes No (NA) Unknown Other:_____	Visual confirmation of current presence or absence required for attic.
Evidence of Physical Damage?	Yes (No)	
Evidence of Water Damage?	Yes (No)	
OUTDOOR ASSESSMENT		
Libby Amphibole Sources Present	Garden: Yes No (NA) Yard: Yes (No) NA Stockpiles: Yes No (NA) (Other:) BALLFEILDS #3+#4	BETWEEN BATHROOMS + PLAYGROUND, ENTRANCE TO HORSE ARENA. TRACE VERMICULITE OBSERVED
Proximity to Other Properties with Potential Sources of Libby Amphiboles	Next door Within same block Other:_____ (Unknown)	

AD # 000680

CSS INFORMATION FIELD FORM (Continued)

Address: Hwy. 37 N.

BD#

Data Item	Value		Notes
EXPOSURE ASSESSMENT			
Type and Frequency of Activity Near Vermiculite Material - Indoor	Frequency:	Once a day Once a week Once a month Once a year Not Applicable	Not Applicable applies when no vermiculite is present on the property.
	Duration of Contact:	<1 hour 1-2 hours 2-4 hours >4 hours Not Applicable	
	Extent of Contact:	Heavy Moderate Light Not Applicable	
Type and Frequency of Activity Near Vermiculite Material - Outdoor	Frequency: UNKNOWN	Once a day Once a week Once a month Once a year Not Applicable	Not Applicable applies when no vermiculite is present on the property. COUNTY PARK. MANY USERS -
	Duration of Contact: UNKNOWN	<1 hour 1-2 hours 2-4 hours >4 hours Not Applicable	
	Extent of Contact: UNKNOWN	Heavy Moderate Light Not Applicable	

CSS INFORMATION FIELD FORM ntinued)

AD # 000680

Address: Hwy 37 V.

BD#_____

Data Item	Value	Notes
CONTAMINANT SCREENING STUDY ASSESSMENT		
Occupant Information		
Is there any knowledge of former miners, close relative of miners, or any highly exposed persons living or visiting the property?	Yes No Unknown	
Is the resident, past or present, diagnosed with an asbestos related disease?	Yes No N/A Unknown	NO RESIDENTS
Indoor Information		
Does the interior have Zonolite attic insulation?	Yes No Unknown	
Did the interior ever have Zonolite attic insulation?	Yes No Unknown NA	NA applies if attic currently has ZAI.
Are there vermiculite additives in any of the building materials?	Yes No Unknown	NONE OBSERVED
Outdoor Information		
Is there any evidence of primary source materials at/or near the property?	Yes No Unknown	TRACE AMOUNTS
Could this have been tracked indoors or otherwise spread outdoors on the property?	Yes No Unknown	
Overall Assessment		
Are primary source materials present at the property?	Yes No	
Where are primary source materials located?	Inside Outside Both NA	

ADDITIONAL INFORMATION_____

CSS INFORMATION FIELD FORM (Continued)

HD # 000680

Address: Hwy. 37 N

BD#

FIELD DIAGRAM OF PROPERTY

Identify important features (i.e. drainage, trees, gardens, structures, flowerbeds, utility poles, known underground utilities, suspected Libby amphibole source areas, sample locations, etc).

NOT TO SCALE

SEE ATTACHED MAP

CSS INFORMATION FIELD FORM (Continued)

AD# 000680

Address: Hwy. 37 N

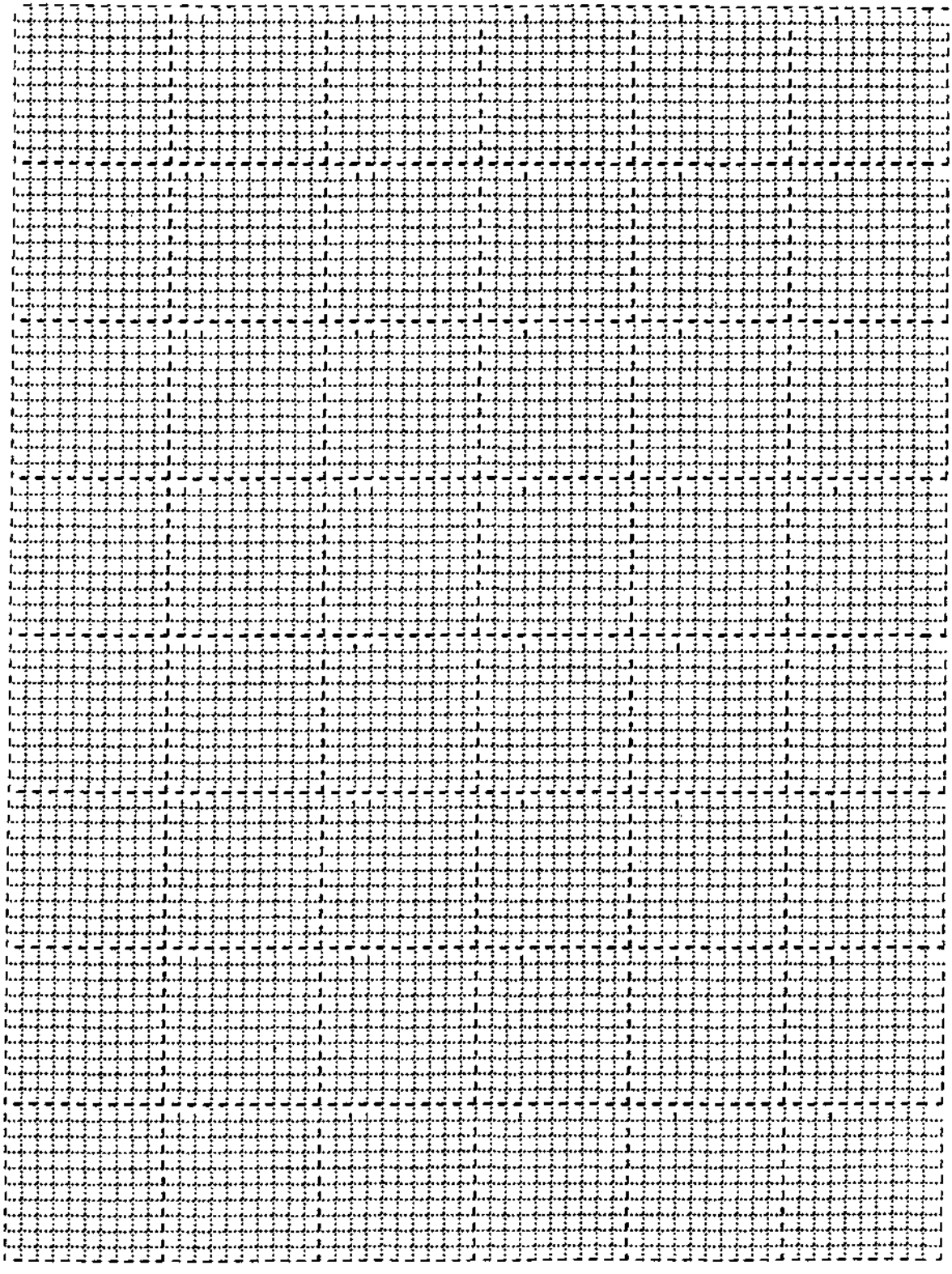
BD#_____

FIELD DIAGRAM OF PRIMARY STRUCTURE

Floor of House (circle): First Second Third Basement

Include approximate dimensions of rooms and floor covering type. Use more than one diagram if needed. Completed only if ZAI is present.

Scale: 1/10" = 1 foot



98

Location J. Neils Park Hwy 37 N Date 8/6/02

Project / Client VOLPE/EPA

LINCOLN COUNTY PARKS AND RECREATION BD001365
CAROL ANN PELTIER (DIRECTOR)

1300- MET WITH CAROL ANN PELTIER AT SITE. COMPLETE BD- 001365 CONSENT FORM AND INFORMATION FIELD FORM. ASSIGN FIELD FORM BD# 001365. BUILDINGS ON SITE ARE NOT INSULATED EXCEPT FOR BASEBALL FIELD CONCESSION STAND. BASEBALL FIELD CONCESSION STAND DOES NOT HAVE LVAI. WALKING PATH, HORSE TRAIL, skating rink, BALL FIELDS, HORSE ARENA, SOCCER FIELD, T/C FIELD, PARKING AREAS AND PLAYGROUND AREAS WERE WALKED AND CANVASED FOR VERMICULITE. VERMICULITE WAS OBSERVED IN TRACE AMOUNTS ON TWO BALLFIELDS AND A PLAYGROUND BY SERVICE AREAS AND AT SOUTH ENTRANCE TO HORSE ~~CORRAL~~ SOP 8/6/02 ARENA PHOTO TAKEN AND ~~PICTURE~~ MAP OF PARK OBTAINED FROM LINCOLN COUNTY.

Kevin D. Pugh
8/6/02

106

Location J NEILS PARK Hwy 37N Date 8/7/02.

Project / Client VOLPE/EPA

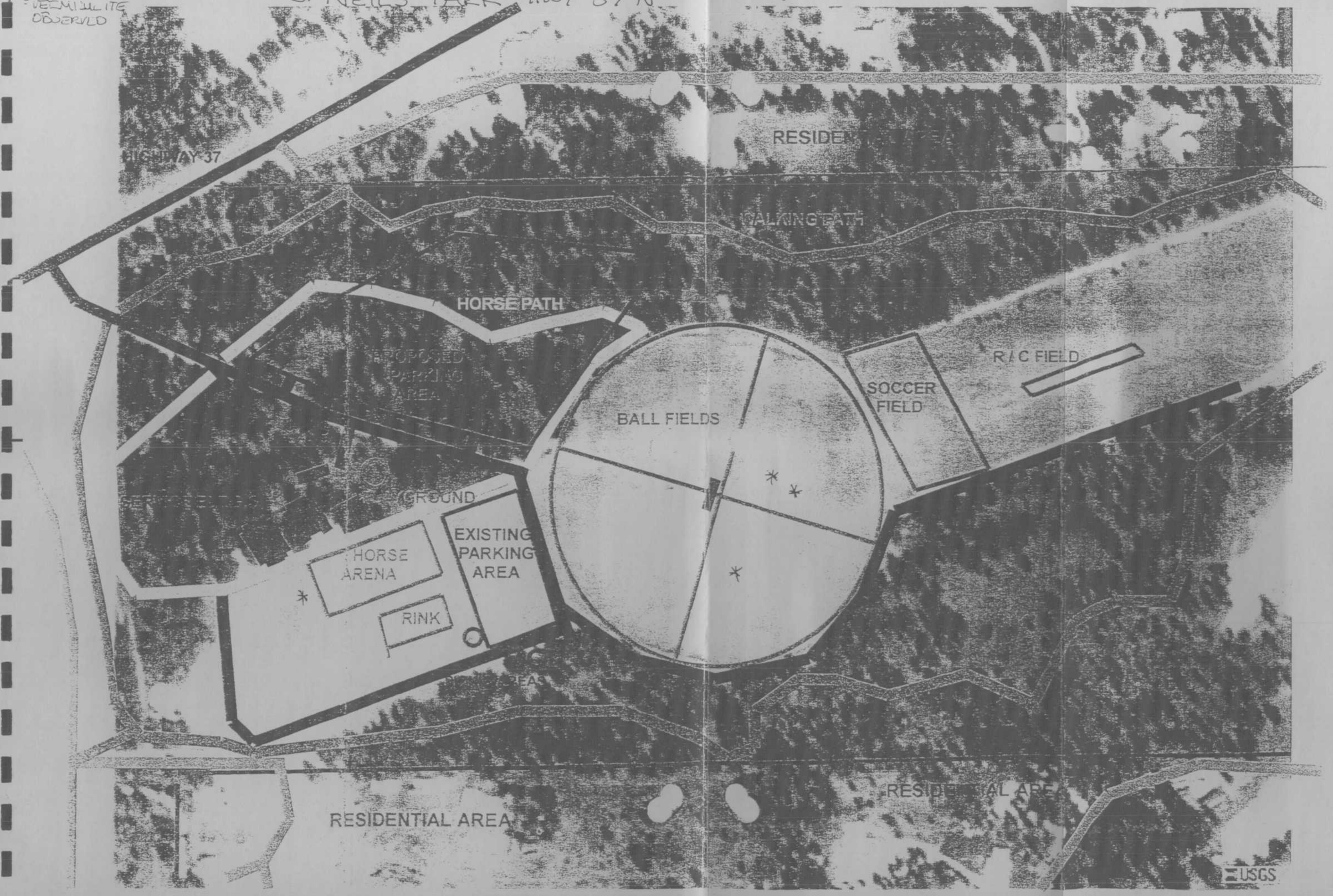
LATE ENTRY AD 000680

LATE ENTRY FOR PAGE # 98 FIELD BOOK #100096. **AD- 000680** BD #00365 VOIDED AND J NEILS PARK ASSIGNED AD # 000680. THIS IS DUE TO THE PARK BEING OWNED BY LINCOLN COUNTY. NO ACTUAL PHYSICAL ADDRESS FOR PARK. STRUCTURES ON SITE DO NOT CONTAIN LVAI.

8/7/02

VERMICULITE OBSERVED

J. NEILS PARK HWY 5 / N



Appendix B
Logbook Pages for J. Neils Park Sampling Events

Location J NEILS PARK Hwy 37 N Date 9/19/03

Project / Client LIBBY ASBESTOS / U.S. EPA REGION 8

LINCOLN COUNTY PARKS — AD-000680

0930 ARRIVE @ J. NEILS PARK - SOCCER — MARK LOCATIONS SG-7 & SG-14 - SAMPLE GRIDS ON SOCCER FIELDS. — M 9/19/03

0952

SG-7 CS- 17286 SP- 123669

FIELD DATA SHEET 005837 — 3 PT —

0957

SG-14 CS- 17287 SP- 123670

FIELD DATA SHEET - 005837 - 3 PT —

NO L.V. OBSERVED @ SAMPLE LOCATION SG-7 OR SG-14. M 9/19/03

GPS ID - T4A09193 - FOR SG-7, SG-14

1030 - START MARKING WALKING PATH LOCATIONS - and SAMPLING

1042

WP-21 CS- 17288 SP- 123671

FIELD DATA SHEET 005837

NO L.V. OBSERVED @ LOCATION WP-21

051

WP-20 CS- 17289 SP- 123672

FIELD DATA SHEET - 005837.38

NO L.V. OBSERVED @ LOCATION WP-20

ROBERT HUNT 9/19/03

Location J. NEILS PARK / Hwy 37 Date 9/19/03

Project / Client LIBBY ASBESTOS / U.S. EPA REGION 8

Lincoln County Parks AD-000680

1104
WP-19 CS- 17290 SP- 123673

FIELD DATA SHEET -005838

NO L.V. OBSERVED @ LOCATION WP-19

1117
WP-18 CS- 17291 SP- 123674

FIELD DATA SHEET -005838

NO L.V. OBSERVED @ LOCATION WP-18

1119
WP 22 CS- 17292 SP- 123675

FIELD DATA SHEET -005839

NO L.V. OBSERVED @ LOCATION WP 22

1137
WP-23 CS- 17293 SP- 123676

FIELD DATA SHEET 005839

NO L.V. OBSERVED @ LOCATION WP-23

1141
WP-24 CS- 17294 SP- 123677

FIELD DATA SHEET -005839

NO L.V. OBSERVED @ LOCATION WP-24

1322
WP25 CS- 17295 SP- 123678

FIELD DATA SHEET 005840

NO L.V. OBSERVED @ LOCATION WP 25

-ROBERT HUNT - 9/19/03

Location J. NEILS PARK Hwy 37 Date 9/19/03

Project / Client LIBBY ASBESTOS / U.S. EPA REGION 8

Lincoln County Parks AD-000680

1324
WP26 CS- 17296 SP- 123679

FIELD DATA SHEET 005840

NO L.V. OBSERVED @ LOCATION WP26

1329
WP26-Dup CS- 17297 SP- 123679

FIELD DATA SHEET 005840

NO L.V. OBSERVED @ LOCATION WP26-Dup

1343
WP-1 CS- 17298 SP- 123680

FIELD DATA SHEET 005841

NO L.V. OBSERVED @ LOCATION WP 1

1351
WP-2 CS- 17299 SP- 123881

FIELD DATA SHEET 005841

NO L.V. OBSERVED @ LOCATION WP-2

1359
WP-3 CS- 17300 SP- 123882

FIELD DATA SHEET ~~005842~~ 005841 ~~005859~~

NO L.V. OBSERVED @ LOCATION WP-3

1416
WP-4 CS- 17301 SP- 123883

FIELD DATA SHEET ~~005842~~ ~~005859~~ 005859

NO L.V. OBSERVED @ LOCATION WP-4

-ROBERT HUNT 9/19/03

90

Location J. Neils Park Hwy 37 Date 9/19/03

Project / Client LIBBY ASBESTOS / U.S EPA Region 8

LINCOLN COUNTY PARKS AO-000680

1419

WPs CS- 17302 SP- 123884

FIELD DATA SHEET 005859

NO LV. OBSERVED @ LOCATION

9/19/03

ROBERT HUST 9/19

93

Location J NEILS PARK / HIGHWAY 37 Date 9/20/03

Project / Client: LIBBY ASBESTOS / U.S. EPA REGION 8

LINCOLN COUNTY PARKS AD-000680

0905 - ARRIVE @ J. NEILS PARK - CONTINUE WITH SOIL SAMPLING ON WALKING PATH. MARK the REST OF the WALKING PATH LOCATIONS

0922
WP6 CS- 17304 SP- 123885
FIELD DATA SHEET 005860

0933
WP7 CS- 17305 SP- 123886
FIELD DATA SHEET 005860

0944
WP8 CS- 17306 SP- 123887
FIELD DATA SHEET 005860

* NO L.V. OBSERVED @ WP, WP7 WP8.

WP9
0957 CS- 17307 SP- 123888
FIELD DATA SHEET 005862

WP10
1001 CS- 17308 SP- 123889
FIELD DATA SHEET 005862

WP10-Dup
1007 CS- 17309 SP- 123889
FIELD DATA SHEET 005862

NO L.V. OBSERVED @ WP9 + WP-10

- ROBERT HUNT - 9/20/03

94

Location J. NEILS PARK Date 9/20/03

Project / Client LIBBY ASBESTOS / U.S. EPA Region 8

LINCOLN County PARKS AD-000680

1019 WP-11 CS- 17310 SP- 123890

FIELD DATA SHEET 005862 3 — 3PT

1024 WP-12 CS- 17311 SP- 123891

FIELD DATA SHEET 005862 3 — 3PT

1032 WP-13 CS- 17312 SP- 123892

FIELD DATA SHEET 005862 3 — 3PT

* NO L.V. @ LOCATIONS WP-11 WP-12 WP-13

1052 WP 14 CS- 17313 SP- 123893

FIELD DATA SHEET 005864 — 3PT

1104 BWP 15 CS- 17314 SP- 123894

FIELD DATA SHEET 005864 — 3PT

1112 WP 16 CS- 17315 SP- 123895

FIELD ~~BAM~~ DATA SHEET 005864 - 3PT

1119 WP 17 CS- 17316 SP- 123896

FIELD DATA SHEET 005865 - 3PT

NO L.V. @ LOCATION WP14, WP15, WP16, WP17

1125 - FINISHED SAMPLING WALKING BACK

- ROBERT HUNT - 9/20/03

Location J. NEILS PARK Date 9/20/03

Project / Client LIBBY ASBESTOS / U.S. EPA Region 8

LINCOLN County PARKS AD-000680

1130 - START MARKING (GPS ID T4A09203)

GRID LOCATIONS (MODEL MR RANGE FIELD)

- LOCATE GRID LOCATIONS 8, 9, 10, 11, 12 + 13 WITH TRIMBLE GPS UNIT.

1302 GRID 8 CS- 17317 SP- 123897

FIELD DATA SHEET 005865

1309 GRID 9 CS- 17318 SP- 123898

FIELD DATA SHEET 005865

1314 GRID 10 CS- 17319 SP- 123899

FIELD DATA SHEET 005866

1317 GRID 11 CS- 17320 SP- 123900

FIELD DATA SHEET 005866

1329 GRID 12 CS- 17321 SP- 123901

FIELD DATA SHEET 005866

1334 GRID 13 CS- 17322 SP- 123902

FIELD DATA SHEET 005867

NO L.V. OBSERVED @ LOCATIONS GRID 8, 9, 10, 11, 12, + 13

- ROBERT HUNT - 9/20/03

Location J. NEILS PARK Date 9/20/03

Project / Client LIBBY ASBESTOS / U.S. EPA REGION 8

LINCOLN COUNTY PARK AD-000680

1400 - MARK GRID LOCATIONS 2, 3, 18, 19, + 20 WITH TRIMBLE GPS UNIT. RM 9/20/03

1401 GRID 2 CS- 17323 SP- 123903

FIELD DATA SHEET 005867 — SPT

1417 GRID 3 CS- 17324 SP- 123904

FIELD DATA SHEET 005867 - SPT

1439 GRID 18 CS- 17325 SP- 123905

FIELD DATA SHEET ~~005867~~ 005868

1423 GRID 19 CS- 17326 SP- 123906

FIELD DATA SHEET 005868 — SPT

1419 GRID 20 CS- 17327 SP- 123907

FIELD DATA SHEET 005868 — SPT

* NO L.V. OBSERVES @ LOCATIONS G2, G3, G18, G19, G20 ~~RM 9/20/03~~

GPS ID. T4809203 ~~RM 9/20/03~~

1500. MOBILIZE TO BALL FIELDS - MARK GRID LOCATIONS 21, 22, + 23. RM 9/20/03

ROBERT HUNT 9/20/03

Location J. NEILS PARK Date 9/20/03

Project / Client LIBBY ASBESTOS / U.S. EPA REGION 8

LINCOLN COUNTY PARKS AD-000680

1515 GRID 21 CS- 17328 SP- 123908

FIELD DATA SHEET ~~005863~~ 005869

1519 GRID 22 CS- 17329 SP- 123909

FIELD DATA SHEET ~~005863~~ 005869

1524 GRID 23 CS- 17330 SP- 123910

FIELD DATA SHEET ~~005863~~ 005869

* NO L.V. OBSERVES @ LOCATIONS 21, 22, OR 23. RM 9/20/03

GPS ID T4809203 RM 9/20/03

1545. FINISHED @ J. NEILS PARK FOR THE DAY RM 9/20/03

9/20/03

ROBERT HUNT 9/20/03

Location CDM OFFICE Date 9/20/03

Project / Client LIBBY ASBESTOS / U.S. EPA Region 8

1550 - Arrive back @ CDM OFFICE. Begin ~~ED~~ m 9/20 END OF DAY ~~ACTIVITIES~~ ACTIVITIES m 9/20 checking paperwork, daily reports,

1555 - COLLECT EQUIPMENT BLANK FROM SILICA SAND LOT #229

CS- 17331 m 9/20 BD-002015

1710 - Relinquish samples on field data sheets 005860, 005862 005863, 005864, 005865 005866, 005867, 005868 005869, + 005871 to secure sample storage room. m 9/20/03 m 9/20/03

[signature] ROBERT HUNT

* Soil sampling ~~[illegible]~~ equipment was cleaned with alconox * m 9/20/03

1720 - FINISHED FOR THE DAY

[signature] 9/20/03

[signature] ROBERT HUNT 9/20/03

Location CDM OFFICE Date 9/22/03 m 9/22/03

Project / Client LIBBY ASBESTOS / U.S. EPA Region 8

NOTETAKER: ROBERT HUNT m 9/22/03

Personnel: CDM-BOB HUNT + Danny Zambrano + Rich Eustice m 9/20/03

Weather: partly cloudy + cold - (37°-0730) - forecast - high of 70°. partly cloudy. m 9/20/03

PPE: Level D modified

Instruments: TRIMBLE GPS UNIT m 9/20/03

Calibration: NA m 9/20/03

Activities: soil sampling @ J. ~~Neil~~ Neil Park in accordance with document "Contaminant, Screening Study, Libby Asbestos Site, Operable Unit 4, J. Neils / Hwy 37". m 9/22/03

0730 - Arrive onsite @ CDM OFFICE ~~0800 - AA m 9/22/03~~ - Begin daily ~~ACTIVITIES~~ ACTIVITIES m 9/22/03 - gathering paperwork - equipment, etc. m 9/20/03

0800 - Morning RI meeting 9/22/03

~~0828~~ 0845 - Arrive @ J. Neils Park mark locations SG 17, SG 16, SG 15 SG 4, SG 5, SG 6, SG 1 - TRIMBLE GPS UNIT - NOT WORKING (PDOP HIGH) - USING SCALE ON AERIAL PHOTO PAGE

[signature] - ROBERT HUNT 9/22/03

Location J. NEILS PARK Date 9/22/03
Project/Client LIBBY ASBESTOS/U.S. EPA Region 8
LINCOLN COUNTY PARKS AD-000680
OFF LOCATIONS. M 9/22/03

(0941)
SG17 CS- 17341 SP- 123921
FIELD DATA SHEET 005872 — 5PT —

(0943)
SG4 CS- 17342 SP- 123922
FIELD DATA SHEET 005872 — 5PT —

(0947)
SG1 CS- 17343 SP- 123923
FIELD DATA SHEET 005872 — 5PT —

(1013)
SG5 CS- 17344 SP- 123924
FIELD DATA SHEET 005873 — 5PT

(1033)
SG6 CS- 17345 SP- 123925
FIELD DATA SHEET 005873 — 5PT

(1031)
SG16 CS- 17346 SP- 123926
FIELD DATA SHEET — 005873 — 5PT

(1054)
SG15 CS- 17347 SP- 123927
FIELD DATA SHEET 005901 — 5PT

* NO L.W. OBSERVED ON BALL FIELDS
(GPS ID - T4A09223) M 9/22/03
— ROBERT HUNT - 9/22/03

Location J. NEILS PARK Date 9/22/03
Project/Client LIBBY ASBESTOS/U.S. EPA Region 8
Lincoln County PARKS AA-000680

(1102)
SG15 - Dup CS- 17348 SP- 123927
FIELD DATA SHEET 005901
1110 - HEAD BACK TO OFFICE TO PICK UP supplies - paper towels, BAGS, + pin flags. - NO PIN flags @ OFFICE - HEAD TO ACE TO BUY PIN ~~FLAGS~~ - FLAGS.
1130 - BACK @ ~~[illegible]~~ 9/22/03 J. NEILS PARK - MARKI HORSE PATH + ACCESS ROAD.
1305-1335 - LUNCH ~~M 9/22/03~~

(1357)
HP4 CS- 17350 SP- 123929
FIELD DATA SHEET 005902 — 3PT

(1407)
HP3 CS- 17351 SP- 123930
FIELD DATA SHEET 005902 - 3PT

(1404)
HP2 CS- 17352 SP- 123931
FIELD DATA SHEET 005902 - 3PT

(1358)
HP5 CS- 17349 SP- 123928
FIELD DATA SHEET 005901 - 3PT

— ROBERT HUNT 9/22/03

J. NEILS PARK 7/22/03
LIBBY ASBESTOS / U.S. EPA Region 8
Lincoln County Park AD-000680
AD 000680

1426 CS- 17353 SP- 123932
HP1
FIELD DATA SHEET 005903 — 3PT —

1417 CS- 17354 SP- 123933
HP2
FIELD DATA SHEET 005903 — 3PT —

1439 CS- 17355 SP- 123934
HP6
FIELD DATA SHEET 005903 — 3PT —

1441 CS- 17356 SP- 123935
HP5
FIELD DATA SHEET 005904 — 3PT —

1446 CS- 17357 SP- 123936
HP9
FIELD DATA SHEET 005904

* NO L.V. OBSERVED WHILE SAMPLING THE HORSE PATH

1451 CS- 17358 SP- 123937
RP1
FIELD DATA SHEET 005904 — 5PT —

1501 CS- 17359 SP- 123938
AR4
FIELD DATA SHEET 005905 — 3PT —

ROBERT HUNT — 7/22/03

J. NEILS PARK 7/22/03
LIBBY ASBESTOS / U.S. EPA Region 8
Lincoln County Parks AD-000680

1504 CS- 17360 SP- 123939
AR3
FIELD DATA SHEET 005905 — 3PT —

1511 CS- 17361 SP- 123940
AR2
FIELD DATA SHEET 005905 — 3PT —

1517 CS- 17362 SP- 123941
AR1
FIELD DATA SHEET 005906 — 3PT —

1534 CS- 17363 SP- 123942
RP2
FIELD DATA SHEET 005906 — 5PT —

* NO L.V. OBSERVED @ LOCATIONS RP1, AR4, AR3, AR2, AR1 + RP1 — 9/24/03
GPS FILES FOR RP's, HP's, AR's
TP1A02223 TP4B02223 — 9/22/03
1650 - FINISHED @ J. NEILS PARK
FINISHED COLLECTING SOIL SAMPLES

9/22/03

ROBERT HUNT — 9/22/03

Location J Neils Park Date 3-8-05

Project Client Libby Asbestos US EPA Region 8

Lincoln County Parks AD-000680

1330: Arrive to collect soil samples from the 4 ball fields. B. Shomp (author) + T. Sesti onsite. All work IAW CSS SAP REVISION 1, 2003. North ball field samples on FSDS-000633 include:

CS-20062	CS-20063	CS-20064
SP-125759	SP-125760	SP-126253

East ball field sample on FSDS-000634 include:

CS-20065	CS-20066	CS-20067
SP-126254	SP-126255	SP-126256

South ball field samples on FSDS-000635 include:

CS-20068	CS-20069	CS-20070
SP-126257	SP-126258	SP-126259

West ball field samples on FSDS-000636 include:

CS-20071	CS-20072	CS-20073
SP-126260	SP-126550	SP-126551

No L.V. observed while sampling. Level D modified PPE. Weather is 52°F + overcast.

1530: Finished onsite. BS 3-8-05

1545: Relinquish samples to Patty Kari

GPS file TSA03085

BSHP

3-8-05

Appendix C
Field Sample Data Sheets for J. Neils Park Sampling Events

Sheet No.: CSS-S- 005837

CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100275 Page No: 87 Sampling Date: 9/19/03

Address: J. Neils Park DW091903 Owner/Tenant: Lincoln County Parks

Business Name: _____

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

Sampling Team: (circle) CDM MACTEC Other _____ Names: Danny Zambrano / Rich Eustice Robert Hunt

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 17286	CS- 17287	CS- 17288
Location ID	SP- 123669	SP- 123670	SP- 123671
Sample Group	Park (SG-7)	Park (SG-14)	Park (WP-21)
Location Description (circle)	Back yard Front yard Side yard Driveway Sample Grid Other SG 7	Back yard Front yard Side yard Driveway Other Sample Grid 14	Back yard Front yard Side yard Driveway Other Walking Path - 21
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 3
Sample Time	0952	0957	1042
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments Note if vermiculite is visible in sampled area	BD- AD-000680 Center - No L.V. 75' N - No L.V. 75' S - No L.V. 75' E - No L.V. 75' W - No L.V.	BD- AD 000680 Center - No L.V. 75' N - No L.V. 75' S - No L.V. 75' E - No L.V. 75' W - No L.V.	BD- AD 000680 Center - No L.V. 10' N - No L.V. 10' S - No L.V.
Entered (LFO) ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____

For Field Team Completion (Provide Initials)	Completed by AJ	QC by D.Z

DW 091903

vs 052003

Sheet No.: CSS-S- 005838

CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100275 Page No: 87-88 Sampling Date: 9/19/03

Address: J. Neils Park Hwy 37 Owner/Tenant: Lincoln County Parks

Business Name: _____

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

Sampling Team: (circle) CDM MACTEC Other _____ Names: Danny Zambrano / Rich Eustice Robert Hunt

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 17289	CS- 17290	CS- 17291
Location ID	SP- 123672	SP- 123673	SP- 123674
Sample Group	PARK (WP 20)	PARK (WP-19)	PARK (WP-18)
Location Description (circle)	Back yard Front yard Side yard Driveway Other Walking Path 20	Back yard Front yard Side yard Driveway Other Walking Path 19	Back yard Front yard Side yard Driveway Other Walking Path 18
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 3	Grab Comp. # subsamples 3	Grab Comp. # subsamples 3
Sample Time	1051	1109	1117
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments Note if vermiculite is visible in sampled area	~~BD~~ AD 000680 Center - NO LIV 10' N - NO LIV 10' S - NO LIV	~~BD~~ AD 000680 Center - NO LIV 10' N NO LIV 10' S - NO LIV	~~BD~~ AD 000680 Center - NO LIV 10' N NO LIV 10' S - NO LIV
Entered (LFO) _____	Volpe: Entered _____ Validated _____	Volpe: Entered _____ Validated _____	Volpe: Entered _____ Validated _____

For Field Team Completion (Provide Initials)	Completed by RH	QC by D. Z

DW 091903

vs 052003

Sheet No.: CSS-S-005839

CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100275 Page No 88 Sampling Date: 9/19/03

Address: J. NEILS PARK ~~Hwy 37~~ DW 091903 Owner/Tenant: LINCOLN COUNTY PARKS

Business Name: ——

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

Sampling Team: (circle) CDM MACTEC Other ____ Names: Robert Hunt, Rich Eustice, DANNY ZAMBRANO

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 17292	CS- 17293	CS- 17294
Location ID	SP- 123675	SP- 123676	SP- 123677
Sample Group	PARK (WP-22)	PARK (WP-23)	PARK (WP-24)
Location Description (circle)	Back yard Front yard Side yard Driveway Other	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 3	Grab Comp. # subsamples 3	Grab Comp. # subsamples 3
Sample Time	1119	1137	1141
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments Note if vermiculite is visible in sampled area	~~BD~~ AD-000680 Center ~~Center~~ 9/19/03 - NO L.V 10' E - NO L.V 10' W NO L.V	~~BD~~ AD 000680 Center - NO L.V 10' E - NO L.V 10' W - NO L.V	~~BD~~ AD-000680 Center NO L.V 10' E NO L.V 10' W NO L.V
Entered (LFO) ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____

For Field Team Completion (Provide Initials)	Completed by AM	QC by D.Z

DW 091903

vs 052003

Sheet No.: CSS-S- 005840

CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100275 Page No: 89-90 Sampling Date: 9/19/03

Address: 1 Jt Neil's PARK ~~Hwy 37~~ DW 091903 Owner/Tenant: LINCOLN COUNTY PARKS

Business Name: _____

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

Sampling Team: (circle) CDM MACTEC Other _____ Names: DANNY ZABRANO / RICH EWS, ROBERT HUNT

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 17295 ✓	CS- 17296 ✓	CS- 17297 ✓
Location ID	SP- 123678	SP- 123679	SP- 123679
Sample Group	PARK (WP25)	PARK (WP26)	PARK (WP26 Dup)
Location Description (circle)	Back yard Front yard Side yard Driveway Other WALKING PATH 25	Back yard Front yard Side yard Driveway Other WALKING PATH 26	Back yard Front yard Side yard Driveway Other Walking Path 26
Category (circle)	FS FD of _____ Field Blank (lot or equipment)	FS FD of _____ Field Blank (lot or equipment)	FS FD of CS-17296 9/22/03 P.S. 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	1322	1324	1329
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments Note if vermiculite is visible in sampled area	~~BD~~ AA-000680 CENTER - NO LV 10' E - NO LV 10' W NO LV	~~BD~~ AA-000680 Center - NO LV 10' E - NO LV 10' W NO LV	~~BD~~ AA-000680 Center NO LV 10' E - NO LV 10' W - NO LV
Entered (LFO) ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____

For Field Team Completion (Provide Initials)	Completed by RM	QC by D.Z

DW 091903

vs 052003

Sheet No.: CSS-S- 005841

CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100275 Page No 90-91 Sampling Date: 9/10/03

Address: J NEILS PARK ~~Hwy 37 N~~ DW 091903 Owner/Tenant: LINCOLN COUNTY PARKS

Business Name: _____

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

Sampling Team: (circle) CDM MACTEC Other _____ Names: RICH EUSTICE / DANNY ZUMBERO / RUSSELL HUNT

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 17298 ✓	CS- 17299 ✓	CS- 17300 ✓
Location ID	SP- 123680	SP- 123881	SP- 123882
Sample Group	PARK (WP 1)	PARK (WP 2)	PARK (WP 3)
Location Description (circle)	Back yard Front yard Side yard Driveway Other WALKING PATH 1	Back yard Front yard Side yard Driveway Other WALKING PATH 2	Back yard Front yard Side yard Driveway Other WALKING PATH 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 3	Grab Comp. # subsamples 3	Grab Comp. # subsamples 3
Sample Time	1343	1351	1359
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments Note if vermiculite is visible in sampled area	~~BD~~ AD - 0006 EO CENTER - NO LIV 10' N - NO LIV 10' S - NO LIV	~~BD~~ AD - 0006 EO CENTER - NO LIV 10' N NO LIV 10' S NO LIV	~~BD~~ AD - 0006 EO CENTER - NO LIV 10' N - NO LIV 10' S NO LIV
Entered (LFO) DS	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____

For Field Team Completion (Provide Initials)	Completed by RH	QC by D.Z

DW 091903

vs 052003

Sheet No.: CSS-S- 005859

CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100275 Page No: 89-90 Sampling Date: 9/19/03

Address: J Neils Park ~~Hwy 37~~ DW 091903 Owner/Tenant: Lincoln County Parks

Business Name: _____

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

Sampling Team: (circle) CDM MACTEC Other _____ Names: Robert Hunt / Danny Zimbe Rich Eustice

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS-17301 ~~CS-17301~~ 9/19/03	CS-17302	
Location ID	SP-123883	SP-123884	
Sample Group	Park (WP 4)	Park (WP 5)	
Location Description (circle)	Back yard Front yard Side yard Driveway Other Walking Path 4	Back yard Front yard Side yard Driveway Other Walking Path 5	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 3	Grab Comp. # subsamples 3	Grab Comp. # subsamples ____
Sample Time	1416	1419	
Top Depth (in.)	0	0	
Bottom Depth (in.)	6	6	
Field Comments Note if vermiculite is visible in sampled area	~~BD~~ AD-000680 Center - No L.V. 10' E - No L.V. 10' W No L.V.	~~BD~~ AD-000680 Center - No L.V. 10' E - No L.V. 10' W. No L.V.	~~BD~~ AD-000680
Entered (LFO) ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____

For Field Team Completion (Provide Initials)	Completed by RH	QC by D.Z

DW 9.19.03

vs 052003

Sheet No.: CSS-S- 005860

CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

9/20/03

Scenario No.: NA Field Logbook No: 100275 Page No: 93 Sampling Date: ~~9/19/03~~ 9/20/03

Address: J Neils Park ~~Hwy 37N~~ Owner/Tenant: Lincoln County Parks

Business Name: ____

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

Sampling Team: (circle) CDM MACTEC Other ____ Names: Robert Hunt / Danny Zambrano Rich Eastice

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 17304	CS- 17305	CS- 17306
Location ID	SP- 123885	SP- 123886	SP- 123887
Sample Group	PARK (WP6)	PARK (WP7)	PARK (WP8)
Location Description (circle)	Back yard Front yard Side yard Driveway Other Area Walking Path 6	Back yard Front yard Side yard Driveway Other Walking Path 7	Back yard Front yard Side yard Driveway Other Walking Path 8
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 m 9/20 Comp. # subsamples 3	Grab m 9/20 Comp. # subsamples 3	Grab m 9/20 Comp. # subsamples 3
Sample Time	0922	0933	0944
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments Note if vermiculite is visible in sampled area	~~BD~~ AD-000680 Center - NO LIV 10' N NO LIV 10' S - NO LIV	~~BD~~ AD-000680 Center - NO LIV 10' N NO LIV 10' S NO LIV	~~BD~~ AD-000680 Center - NO LIV 10' N - NO LIV 10' S NO LIV
Entered (LFO) ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____

For Field Team Completion (Provide Initials)	Completed by RH	QC by RE

DW 09.20.03

vs 052003

Sheet No.: CSS-S- 005362

CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION
FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100275 Page No: 93 Sampling Date: 9/20/03

Address: J NEILS PARK Owner/Tenant: LINCOLN COUNTY PARKS

Business Name: ——

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

Sampling Team: (circle) (CDM) MACTEC Other _____ Names: ROBERT HUNT / DANNY ZAMBEAN RICH EUSTACE

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 17307	CS- 17308	CS- 17309
Location ID	SP- 123888	SP- 123889	SP- 123889
Sample Group	PARK (WP9)	PARK (WP10)	PARK (WP10-DUP)
Location Description (circle)	Back yard Front yard Side yard Driveway (Other) WALKING PATH 9	Back yard Front yard Side yard Driveway (Other) WALKING PATH 10	Back yard Front yard Side yard Driveway (Other) WALKING PATH 10
Category (circle)	(ES) FD of _____ Field Blank (lot or equipment)	(ES) FD of _____ Field Blank (lot or equipment)	~~ES~~ 9/22/03 (FD) of CS-17308 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	0957	1001	1007
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments Note if vermiculite is visible in sampled-area	~~BD-~~ AD 000680 CENTER - NO LIV 10'N - NO LIV 10'S - NO LIV	~~BD-~~ AD 000680 CENTER - NO LIV 10'N - NO LIV 10'S - NO LIV	~~BD-~~ AD 000680 CENTER - NO LIV 10'N - NO LIV 10'S - NO LIV.
Entered (LFO) ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____

For Field Team Completion (Provide Initials)	Completed by RH	QC by RE

DW 092003

vs 052003

Sheet No.: CSS-S- 005863

CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100275 Page No: 94 Sampling Date: 9/20/03

Address: J. NEILS PARK Owner/Tenant: LINCOLN COUNTY PARK

Business Name: _____

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

Sampling Team: (circle) CDM MACTEC Other _____ Names: ROBERT HUNT / DANNY ZAMBRANO RICH EUSKE

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 17310	CS- 17311	CS- 17312
Location ID	SP- 123890	SP- 123891	SP- 123892
Sample Group	PARK (WP 11)	PARK (WP 12)	PARK (WP 13)
Location Description (circle)	Back yard Front yard Side yard Driveway Other WALKING PATH 11	Back yard Front yard Side yard Driveway Other WALKING PATH 12	Back yard Front yard Side yard Driveway Other WALKING PATH 13
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	1019	1024	1032
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments Note if vermiculite is visible in sampled area	~~BD-~~ AD-000680 CENTER - NO LIV 10' E - NO LIV 10' W - NO LIV	~~BD-~~ AD-000680 CENTER - NO LIV 10' E - NO LIV 10' W - NO LIV	~~BD-~~ AD-000680 LIV CENTER - NO ~~LIV~~ 10' E - NO LIV 10' W NO LIV
Entered (LFO) ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____

For Field Team Completion (Provide Initials)	Completed by RH	QC by RE

DW 09/20/03

Sheet No.: CSS-S- 005864

CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100275 Page No: 94 Sampling Date: 9/20/03

Address: J NEILS PARK Owner/Tenant: LINCOLN COUNTY PARK

Business Name: _____

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

Sampling Team: (circle) CDM MACTEC Other _____ Names: Robert Hunt / Danny Zimbrun Rich Eustace

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 17313	CS- 17314	CS- 17315
Location ID	SP- 123893	SP- 123894	SP- 123895
Sample Group	Park (WP14)	Park (WP15)	Park (WP16)
Location Description (circle)	Back yard Front yard Side yard Driveway Other WALKING PATH 14	Back yard Front yard Side yard Driveway Other Walking Path 15	Back yard Front yard Side yard Driveway Other WALKING PATH 16
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	1052	1104	1112
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments Note if vermiculite is visible in sampled area	~~BD-~~ AD-000680 Center - NO LIV 10'E - NO LIV 10'W - NO LIV	~~BD-~~ AD 000680 Center - NO LIV 10'N - NO LIV. 10'S - NO LIV.	~~BD-~~ AD 000680 Center - NO LIV 10'N - NO LIV 10'S - NO LIV.
Entered (LFO) ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____

For Field Team Completion (Provide Initials)	Completed by RM	QC by [illegible]

DW 092003

vs 052003

Sheet No.: CSS-S- 005865

CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: ~~95~~ 100275 9/26 Page No: ~~95~~ 94-95 Sampling Date: 9/20/03

Address: J. NEILS PARK Owner/Tenant: LINCOLN COUNTY PARKS

Business Name: ——

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

Sampling Team: (circle) CDM MACTEC Other _____ Names: DANNY ZIMBRANO / ROBERT HUNT RICH EUSTICE

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 17316	CS- 17317	CS- 17318
Location ID	SP- 123896	SP- 123897	SP- 123898
Sample Group	PARK (WP 17)	PARK (SG 8)	PARK ~~(SG 9)~~ (SG 9)
Location Description (circle)	Back yard Front yard Side yard Driveway Other WALKING PATH 17	Back yard Front yard Side yard Driveway Other GRID 8	Back yard Front yard Side yard Driveway Other GRID 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 3	Grab Comp. # subsamples 5	Grab Comp. # subsamples 5
Sample Time	1119	1302	1309
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments Note if vermiculite is visible in sampled area	~~BD~~ AD-000680 Center - NO LV 10'N NO LIV 10'S NO LIV	~~BD~~ AD-000680 Center - NO LV 75'N NO LIV 75'S NO LIV 75'E NO LIV 75'W NO LIV	~~BD~~ AD-000680 Center - NO LIV 75'N - NO LIV 75'S NO LIV 75'E NO LIV 75'W NO LIV
Entered (LFO) ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____

For Field Team Completion (Provide Initials)	Completed by PM	QC by RE

DW 092003

Sheet No.: CSS-S- 005866

CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100275 Page No: 95 Sampling Date: 9/20/03

Address: J NEILS PARK (Owner)/Tenant: Lincoln County PARKS

Business Name: —

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

Sampling Team: (circle) (CDM) MACTEC Other _____ Names: ROBERT HUNT / DANNY ZAMBRANO RICH EUSTICE

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 17319	CS- 17320	CS-17321 ~~CS-17321~~ 9/20/03
Location ID	SP- 123899	SP- 123900	SP- 123901
Sample Group	~~G10~~ PARK (G10)	PARK (G11)	PARK (G12)
Location Description (circle)	Back yard Front yard Side yard Driveway (Other) GRID 10	Back yard Front yard Side yard Driveway (Other) GRID 11	Back yard Front yard Side yard Driveway (Other) GRID 12
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	1314	1317	1329
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments Note if vermiculite is visible in sampled area	~~BD~~ AD-000680 CENTER - NO L.V. 75'N NO L.V. 75'S NO L.V. 75'E NO L.V. 75'W NO L.V.	~~BD~~ AD-000680 CENTER - NO L.V. 75'N NO L.V. 75'S NO L.V. 75'E NO L.V. 75'W NO L.V.	~~BD~~ AD-000680 CENTER NO L.V. 75'N NO L.V. 75'S NO L.V. 75'E NO L.V. 75'W NO L.V.
Entered (LFO) _____	Volpe: Entered _____ Validated _____	Volpe: Entered _____ Validated _____	Volpe: Entered _____ Validated _____

For Field Team Completion (Provide Initials)	Completed by RH	QC by RE

DW 09/2003

vs 052003

Sheet No.: CSS-S- 005867

CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION
FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100275 Page No: 95-96 Sampling Date: 9/20/03

Address: J NEILS PARK Owner/Tenant: Lincoln County Parks

Business Name: _____

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

Sampling Team: (circle) CDM MACTEC Other _____ Names: ROBERT HUNT / DANNY ZIMBRONO RICH EUSTICE

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 17322	CS- 17323	CS- 17324
Location ID	SP- 123902	SP- 123903	SP- 123904
Sample Group	PARK (G13)	PARK (G2)	PARK (G3)
Location Description (circle)	Back yard Front yard Side yard Driveway Other GRID 13	Back yard Front yard Side yard Driveway Other GRID 2	Back yard Front yard Side yard Driveway Other GRID 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 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	1334	1401	1417
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments Note if vermiculite is visible in sampled area	~~BD~~ AD 000660 CENTER - NO LIV 75' N - NO LIV 75' S NO LIV 75' E - NO LIV 75' W - NO LIV	~~BD~~ AD 000680 CENTER - NO LIV 75' N - NO LIV 75' S - NO LIV 75' E - NO LIV 75' W - NO LIV	~~BD~~ AD 000660 CENTER - NO LIV 75' N - NO LIV 75' S - NO LIV 70' ~~75'~~ E - NO LIV 75 W NO LIV
Entered (LFO) ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____

For Field Team Completion (Provide Initials)	Completed by RH	QC by KE

DW 092003

vs 052003

Sheet No.: CSS-S- ~~0.15958~~

CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100275 Page No: 96 Sampling Date: 9/20/03

Address: J Neils PARK Owner/Tenant: Lincoln County Parks

Business Name: ——

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

Sampling Team: (circle) CDM MACTEC Other _____ Names: Danny Zambrino Rich Eustice Robert Hunt

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 17325	CS- 17326	CS- 17327
Location ID	SP- 123905	SP- 123906	SP- 123907
Sample Group	PARK (G18)	PARK (G19)	PARK (G20)
Location Description (circle)	Back yard Front yard Side yard Driveway Other GRID 18	Back yard Front yard Side yard Driveway Other GRID 19	Back yard Front yard Side yard Driveway Other GRID 20
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	~~1417~~ 1439	1423	1419
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	9	6
Field Comments Note if vermiculite is visible in sampled area	~~BD~~ AD-000GEO Center - NO L.V. 75'N - NO L.V. 75'S - NO L.V. 75'E NO L.V. 75'W NO L.V.	~~BD~~ AD-000GEO Center - NO L.V. 75'N - NO L.V. 75'S - NO L.V. 75'E - NO L.V. 75'W NO L.V.	~~BD~~ AD-000GEO Center - NO L.V. 75'N - NO L.V. 75'S - NO L.V. 75'E - NO L.V. 75'W - NO L.V.
Entered (LFO) ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____

For Field Team Completion (Provide Initials)	Completed by RH	QC by [illegible]

DW 09.20.03

vs 052003

Sheet No.: CSS-S- 005869

CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100275 Page No: 97 Sampling Date: 9/20/03

Address: J. Neils Park Owner/Tenant: Lincoln County Parks

Business Name: ——

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

Sampling Team: (circle) CDM MACTEC Other _____ Names: Robert Hunt / Danny Zambrano Rich Eustice

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 17328	CS- 17329	CS- 17330
Location ID	SP- 123908	SP- 123909	SP- 123910
Sample Group	Park (G21)	Park (G22)	Park (G23)
Location Description (circle)	Back yard Front yard Side yard Driveway Other Grid 21	Back yard Front yard Side yard Driveway Other Grid 22	Back yard Front yard Side yard Driveway Other Grid 23
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	1513	1519	1524
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments Note if vermiculite is visible in sampled area	~~BD~~ AD-000GEO Center - No LV 75 N - No LV 75 S - No LV 75 E - No LV 75 W - No LV	~~BD~~ AD-000GEO Center - No LV 75 N - No LV 75 S - No LV 75 E - No LV 75 W - No LV	~~BD~~ AD-000GEO Center - No LV 75 N - No LV 75 S - No LV 75 E - No LV 75 W - No LV
Entered (LFO) ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____

For Field Team Completion (Provide Initials)	Completed by RH	QC by [illegible]

DW 092003

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Sheet No.: CSS-S- 005872

CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: [illegible]275 Page No: 100 Sampling Date: 9/22/03

Address: J Neils Park Owner/Tenant: Lincoln County Park

Business Name: _____

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

Sampling Team: (circle) CDM MACTEC Other _____ Names: Robert Hunt, Rich Eustice, Danny Zambrano

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 17341	CS- 17342	CS- 17343
Location ID	SP- 123921	SP- 123922	SP- 123923
Sample Group	PARK (SG-17)	PARK (SG-~~14~~ 4)	PARK (SG-1)
Location Description (circle)	Back yard Front yard Side yard Driveway Other Area SG 7	Back yard Front yard Side yard Driveway Other Area ~~SG 4~~ SG 4	Back yard Front yard Side yard Driveway Other Area SG 1
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	0941	0943	0947
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments Note if vermiculite is visible in sampled area	~~BD~~ AD OUGEN CENTER - NO LIV 75' 28N - NO LIV 75'S - NO LIV 75'E NO LIV 75'W NO LIV	~~BD~~ AD OUGEN CENTER - NO LIV 75'N - NO LIV 75'S NO LIV 75'E NO LIV 75'W NO LIV	~~BD~~ AD OUGEN CENTER - NO LIV 20'N NO LIV 75'S NO LIV 75'E NO LIV 75'W NO LIV
Entered (LFO) ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____

For Field Team Completion (Provide Initials)	Completed by [illegible]	QC by [illegible]

DW 09-22-03

Sheet No.: CSS-S- 005873

CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100375 Page No: 100 Sampling Date: 9/22/03

Address: J. Neils Park Owner/Tenant: Lincoln County Parks

Business Name: ——

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

Sampling Team: (circle) CDM MACTEC Other _____ Names: Aiken Evance, Amy Zimbowe, Robert Hunt

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 17344	CS- 17345	CS- 17346
Location ID	SP- 123924	SP- 123925	SP- 123926
Sample Group	PARK (SG 5)	PARK (SG 6)	PARK (SG 6)
Location Description (circle)	Back yard Front yard Side yard Driveway Other Area SG 5	Back yard Front yard Side yard Driveway Other Area SG 6	Back yard Front yard Side yard Driveway Other Area SG 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	1013	1033	1031
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments Note if vermiculite is visible in sampled area	~~BD~~ ND COLLECTED CENTER - NO L.V 75'N - NO L.V 75'S - NO L.V 75'E - NO L.V 75'W NO L.V	~~BD~~ ND COLLECTED CENTER - NO L.V 75'N - NO L.V 75'S - NO L.V 75'E - NO L.V 75'W NO L.V	~~BD~~ ND COLLECTED CENTER - NO L.V 75'N - NO L.V 75'S - NO L.V 75'E - NO L.V 75'W NO L.V
Entered (LFO) ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____

For Field Team Completion (Provide Initials)	Completed by RH	QC by AR

DW 09.22.03

Sheet No.: CSS-S- 005901

CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100275 Page No 100-101 Sampling Date: 9/22/03

Address: J. Neils Park Owner/Tenant: Lincoln County Parks

Business Name: _____

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

Sampling Team: (circle) CDM MACTEC Other _____ Names: Robert Hunt Danny Zambrano Rich Eusike

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 17347	CS- 17348	CS- 17349
Location ID	SP- 123927	SP- 123927	SP- 123928
Sample Group	PARK SG15	~~PARK~~ PARK (SG15 dup)	PARK (HP8)
Location Description (circle)	Back yard Front yard Side yard Driveway Other Area SG15	Back yard Front yard Side yard Driveway Other Area ~~SG15~~ SG15	Back yard Front yard Side yard Driveway Other Area HP8
Category (circle)	FS FD of _____ Field Blank (lot or equipment)	~~FS~~ 1/4/22 FD of CS 17347 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 3
Sample Time	~~1513~~ 1/22/03 1054	1102	1358
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments Note if vermiculite is visible in sampled area	~~BD~~ AD 000680 Center - No LV 75 N - No LV 75 S - No LV 75 E - No LV 75 W - No LV	~~BD~~ AD 000680 Center - No LV 75 N - No LV 75 S - No LV 75 E - No LV 75 W - No LV	~~BD~~ AD-000680 Center - No LV 10 N - No LV 10 S - No LV
Entered (LFO) ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____

For Field Team Completion (Provide Initials)	Completed by [illegible]	QC by RE

DW 09.22.03

vs 052003

Sheet No.: CSS-S- 005902

CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION
FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 101275 Page No 101-102 Sampling Date: 9/22/03

Address: J. NEILS PARK Owner/Tenant: LINCOLN COUNTY PARKS

Business Name:

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

Sampling Team: (circle) (CDM) MACTEC Other _____ Names: ROBERT HUNT RICH EUSTICE DANNY ZAMBRANO

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 17350	CS- 17351	CS- 17352
Location ID	SP- 123929	SP- 123930	SP- 123931
Sample Group	Park (HP4)	Park (HP3)	Park (HP2)
Location Description (circle)	Back yard Front yard Side yard Driveway (Other) Area HP4	Back yard Front yard Side yard Driveway (Other) Area HP3	Back yard Front yard Side yard Driveway (Other) Area HP2
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	1357	1407	1404
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments Note if vermiculite is visible in sampled area	AD-00065 AD-00066 AD-00067 Center - NO LIV 10'N - NO LIV 10'S - NO LIV.	AD-00068 AD-00069 AD-00070 Center - NO LIV 10'N NO LIV 10'S NO LIV	AD-00066 AD-00065 AD-00067 Center - NO LIV 10'N - NO LIV 10'S - NO LIV
Entered (LFO) ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____

For Field Team Completion (Provide Initials)	Completed by RH	QC by RE

DW 09.22.03

Sheet No.: CSS-S- 005903

CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100275 Page No: 101-102 Sampling Date: 9/22/03

Address: J. Nelis Park Owner/Tenant: Lincoln County Park

Business Name: _____

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

Sampling Team: (circle) CDM MACTEC Other _____ Names: Robert Hunt Danny Zambrano Rich Eupice

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 17353	CS- 17354	CS- 17355
Location ID	SP- 123932	SP- 123933	SP- 123934
Sample Group	PARK (HP 1)	PARK (HP 7)	PARK (HP 6)
Location Description (circle)	Back yard Front yard Side yard Driveway Other Area HP 1	Back yard Front yard Side yard Driveway Other Area HP 7	Back yard Front yard Side yard Driveway Other Area HP 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 3	Grab Comp. # subsamples 3	Grab Comp. # subsamples 3
Sample Time	1426	1419	1439
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments Note if vermiculite is visible in sampled area	~~BD~~ AD-000680 Center - NO LIV. 10' N - NO LIV. 10' S - NO LIV.	~~BD~~ AD-000680 Center - NO LIV. 10' E - NO LIV. 10' W - NO LIV.	~~BD~~ AD-000680 Center - NO LIV 10' E - NO LIV 10' W NO LIV.
Entered (LFO) ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____

For Field Team Completion (Provide Initials)	Completed by [illegible]	QC by [illegible]

09.22.03

Sheet No.: CSS-S- 005904

CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100275 Page No: 102 Sampling Date: 9/22/03

Address: J Nelis Park Owner/Tenant: Lincoln County Parks

Business Name: ——

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

Sampling Team: (circle) CDM MACTEC Other ____ Names: Danny Zambrano Robert Hunt Rich Eustice

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 17356	CS- 17357	CS- 17358
Location ID	SP- 123935	SP- 123936	SP- 123937
Sample Group	PARK (HP5)	PARK (HP9)	PARK (RP1)
Location Description (circle)	Back yard Front yard Side yard Driveway Other Area HP5	Back yard Front yard Side yard Driveway Other AREA HP9	Back yard Front yard Side yard Driveway Other AREA RP1
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 5
Sample Time	1441	1446	1451
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments Note if vermiculite is visible in sampled area	~~BD~~ 9/22/03 AD-000680 CENTER - NO LIV. 10' E - NO LIV. 10' W - NO LIV.	~~BD~~ AD-000680 CENTER - NO LIV 10' N - NO LIV. 10' S - NO LIV.	~~BD~~ 9/22/03 CENTER - NO LIV. 75' N - NO LIV. 75' S - NO LIV. 75' E - NO LIV 75' W NO LIV.
Entered (LFO) ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____

For Field Team Completion (Provide Initials)	Completed by [illegible]	QC by [illegible]

DW 09.22.03

Sheet No.: CSS-S-~~0035~~ 0035

CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100275 Page No: 102-103 Sampling Date: 9/22/03

Address: 3 Nelis Park Owner/Tenant: Lincoln County Parks

Business Name: ——

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

Sampling Team: (circle) CDM MACTEC Other _____ Names: Rich Eustice Danny Zane Robert Hunt

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 17359	CS- 17360	CS-17361 ~~CS-17362~~ 9/22/03
Location ID	SP- 123938	SP- 123939	SP- 123940
Sample Group	Park (AR1)	Park (AR3)	Park (AR2)
Location Description (circle)	Back yard Front yard Side yard Driveway Other Area AR1	Back yard Front yard Side yard Driveway Other Area AR3	Back yard Front yard Side yard Driveway Other Area AR2
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	1501	1504	1511
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments Note if vermiculite is visible in sampled area	~~BD-9/01~~ AD-000680 Center - NO L.V 10' E - NO L.V 10' W - NO L.V	~~BD-9/01~~ AD-000681 Center - NO L.V 10' E - NO L.V 10' W - NO L.V	~~BD-9/01~~ AD-000682 Center - NO L.V 10' E - NO L.V 10' W - NO L.V
Entered (LFO) ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____

For Field Team Completion (Provide Initials)	Completed by RH	QC by RZ

DW 09.22.03

Sheet No.: CSS-S- 005906

CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100275 Page No: 103 Sampling Date: 9/22/03

Address: J NEILS PARK Owner/Tenant: LINCOLN COUNTY PARKS

Business Name: ——

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

Sampling Team: (circle) CDM MACTEC Other _____ Names: ROBERT HUNT RICH EUSTICE DANNY ZAMBRANO

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 17362	CS- 17363	
Location ID	SP- 123941	SP- 123942	
Sample Group	PARK (AR1)	PARK (AR RP2)	
Location Description (circle)	Back yard Front yard Side yard Driveway Other AREA AR1	Back yard Front yard Side yard Driveway Other AREA (RP2)	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 3	Grab Comp. # subsamples 5	Grab Comp. # subsamples _____
Sample Time	1514	1534	
Top Depth (in.)	0	0	
Bottom Depth (in.)	6	6	
Field Comments Note if vermiculite is visible in sampled area	~~BD~~ AD-000680 Center - NO L.V. 10'E - NO L.V. 10'W - NO L.V.	~~BD~~ AD-000680 CENTER - NO L.V. 75'N - NO L.V. 75'S - NO L.V. 75'E - NO L.V. 75'W - NO L.V.	BD- _____
Entered (LFO) _____	Volpe: Entered _____ Validated _____	Volpe: Entered _____ Validated _____	Volpe: Entered _____ Validated _____

For Field Team Completion (Provide Initials)	Completed by RH	QC by RE

DW 9.22.03

Sheet No.: S- 000633

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Field Logbook No: 100319 Page No: 112 Sampling Date: 3-8-05

Address: J Neils Park (Owner) Tenant: Lincoln County Parks

Business Name: ——

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

Sampling Team: MACTEC (CDM) Other _____ Names: B. Shoup, T. Sesti

Data Item	Sample 1	Sample 2	Sample 3
Index ID	AS 3-8-05 CS- 20062	CS- 20063	CS- 20064
Location ID	AS 3-8-05 SP- 125759	SP- 125760	SP- 126253
Sample Group	Park →		
Location Description (circle)	Back yard Front yard Side yard Driveway (Other) N ball field	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 5	Grab (Comp) # subsamples 5
Sample Time	1340	1345	AS ~~1349~~ 1347
Top Depth (in.)	0	0	0
Bottom Depth (in.)	1	1	1
Field Comments Note if vermiculite is visible in sampled area	~~BD~~ AD-000680 Home plate to 2nd base	~~BD~~ 2nd base to home plate	~~BD~~ → pitching mound + infield
Entered (LFO) ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____

For Field Team Completion (Provide Initials)	Completed by AS	QC by TJ

Sheet No. S- 00063

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Field Logbook No: 100319 Page No: 112 Sampling Date: 3-8-05

Address: J Neils Park Owner/Tenant: Lincoln County Parks

Business Name: —

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

Sampling Team: MACTEC CDM Other _____ Names: B. Shimp, T. Sesti

Data Item	Sample 1	Sample 2	Sample 3
Index ID	3-8-05 CS- 20065	CS- 20066	CS- 20067
Location ID	3-8-05 SP- 126254	SP- 126255	SP- 126256
Sample Group	Park		
Location Description (circle)	Back yard Front yard Side yard Driveway Other E ball field	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 5	Grab Comp # subsamples 5
Sample Time	1355	1400	1411
Top Depth (in.)	0	0	0
Bottom Depth (in.)	1	1	1
Field Comments Note if vermiculite is visible in sampled area	BD- AD-000680 Home plate to 2nd base	BD 2nd base to Home plate	BD- pitching mound + infield
Entered (LFO) ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____

For Field Team Completion (Provide Initials)	Completed by	QC by
		TB

Sheet No : S- 000633

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Field Logbook No: 150319 Page No: 112 Sampling Date: 3-8-05

Address: J Neils Park (Owner) Tenant: Lincoln County Parks

Business Name: —

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

Sampling Team: MACTEC (CDM) Other _____ Names: R. Sharp, T. Sesti

Data Item	Sample 1	Sample 2	Sample 3
Index ID	as 3-8-05 CS- 20068	CS- 20069	CS- 20070
Location ID	as 3-8-05 SP- 126257	SP- 126258	SP- 126259
Sample Group	Park →		
Location Description (circle)	Back yard Front yard Side yard Driveway (Other) S ball field	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 5	Grab (Comp) # subsamples 5
Sample Time	1418	1423	1432
Top Depth (in.)	0	0	0
Bottom Depth (in.)	1	1	1
Field Comments Note if vermiculite is visible in sampled area	BD AD -006630 Home plate to 2nd base	BD 2nd base to home plate	BD pitching mound + infield
Entered (LFO) ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____

For Field Team Completion (Provide Initials)	Completed by BS	QC by TJ

Sheet No : S- 000633

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Field Logbook No: 100319 Page No: 112 Sampling Date: 3-8-05

Address: J Neils Park Owner/Tenant: Lincoln County Parks

Business Name: ——

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

Sampling Team: MACTEC CDM Other _____ Names: B Sharpe, T. Sesti

Data Item	Sample 1	Sample 2	Sample 3
Index ID	BS 3-8-05 CS- 20071	CS- 20072	CS- 20073
Location ID	BS 3-8-05 SP- 126260	SP- 126550	SP- 126551
Sample Group	Park →		
Location Description (circle)	Back yard Front yard Side yard Driveway Other W ball field	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 5	Grab Comp # subsamples 5
Sample Time	1440	1446	1459
Top Depth (in.)	0	0	0
Bottom Depth (in.)	1	1	1
Field Comments Note if vermiculite is visible in sampled area	~~BD~~ AD-000680 Home plate to 2nd base	~~BD~~ 2nd base to home plate	~~BD~~ → pitching mound + infield
Entered (LFO) ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____

For Field Team Completion (Provide Initials)	Completed by BS	QC by TB

Appendix D
Analytical Results for September 2003 and March 2005 J. Neils Park Sampling Events

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-17286-FG		N/A	J Neils Park DW 091903	Park	Sample grid SG7	Soil-Like	soil	Field Sample	9/19/2003	PLM-VE	A	ND	ND
CS-17287-FG		N/A	J. Neils Park	Park	Sample grid 14	Soil-Like	soil	Field Sample	9/19/2003	PLM-VE	A	ND	ND
CS-17288-FG		N/A	J. Neils Park	Park	Walking path 21	Soil-Like	soil	Field Sample	9/19/2003	PLM-VE	A	ND	ND
CS-17289-FG		N/A	J. Neils Park	Park	Walking path 20	Soil-Like	soil	Field Sample	9/19/2003	PLM-VE	A	ND	ND
CS-17290-FG		N/A	J. Neils Park	Park	Walking path 19	Soil-Like	soil	Field Sample	9/19/2003	PLM-VE	A	ND	ND
CS-17291-FG		N/A	J. Neils Park	Park	Walking path 18	Soil-Like	soil	Field Sample	9/19/2003	PLM-VE	A	ND	ND
CS-17292-FG		N/A	J. Neils Park	Park	WP 22	Soil-Like	soil	Field Sample	9/19/2003	PLM-VE	A	ND	ND
CS-17293-FG		N/A	J. Neils Park	Park	WP 23	Soil-Like	soil	Field Sample	9/19/2003	PLM-VE	A	ND	ND
CS-17294-FG		N/A	J. Neils Park	Park	WP 24	Soil-Like	soil	Field Sample	9/19/2003	PLM-VE	A	ND	ND
CS-17295-FG		N/A	J. Neils Park	Park	Walking path 25	Soil-Like	soil	Field Sample	9/19/2003	PLM-VE	A	ND	ND
CS-17296-FG		N/A	J. Neils Park	Park	Walking path 26	Soil-Like	soil	Field Sample	9/19/2003	PLM-VE	A	ND	ND
CS-17297-FG	cs-17296	N/A	J. Neils Park	Park	Walking path 26	Soil-Like	soil	Field Duplicate	9/19/2003	PLM-VE	A	ND	ND
CS-17298-FG		N/A	J. Neils Park	Park	Walking path1	Soil-Like	soil	Field Sample	9/18/2003	PLM-VE	A	ND	ND
CS-17299-FG		N/A	J. Neils Park	Park	Walking path2	Soil-Like	soil	Field Sample	9/18/2003	PLM-VE	A	ND	ND
CS-17300-FG		N/A	J Neils Park DW 091903	Park	Walking path3	Soil-Like	soil	Field Sample	9/18/2003	PLM-VE	A	ND	ND
CS-17301-FG		N/A	J. Neils Park	Park	Walking path4	Soil-Like	soil	Field Sample	9/19/2003	PLM-VE	A	ND	ND
CS-17302-FG		N/A	J. Neils Park	Park	Walking path5	Soil-Like	soil	Field Sample	9/19/2003	PLM-VE	A	ND	ND
CS-17304-FG		N/A	J. Neils Park	Park	Area walking path 6	Soil-Like	soil	Field Sample	9/20/2003	PLM-VE	A	ND	ND
CS-17305-FG		N/A	J. Neils Park	Park	Walking path 7	Soil-Like	soil	Field Sample	9/20/2003	PLM-VE	A	ND	ND
CS-17306-FG		N/A	J. Neils Park	Park	Walking path 8	Soil-Like	soil	Field Sample	9/20/2003	PLM-VE	B1	TR	ND
CS-17307-FG		N/A	J. Neils Park	Park	Walking path 9	Soil-Like	soil	Field Sample	9/20/2003	PLM-VE	A	ND	ND
CS-17308-FG		N/A	J. Neils Park	Park	Walking path 10	Soil-Like	soil	Field Sample	9/20/2003	PLM-VE	A	ND	ND
CS-17309-FG	CS-17308	N/A	J. Neils Park	Park	Walking path 10	Soil-Like	soil	Field Duplicate	9/20/2003	PLM-VE	A	ND	ND
CS-17310-FG		N/A	J. Neils Park	Park	Walking path 11	Soil-Like	soil	Field Sample	9/20/2003	PLM-VE	A	ND	ND
CS-17311-FG		N/A	J. Neils Park	Park	Walking path 12	Soil-Like	soil	Field Sample	9/20/2003	PLM-VE	A	ND	ND
CS-17312-FG		N/A	J. Neils Park	Park	Walking path 13	Soil-Like	soil	Field Sample	9/20/2003	PLM-VE	A	ND	ND
CS-17313-FG		N/A	J. Neils Park	Park	Walking path 14	Soil-Like	soil	Field Sample	9/20/2003	PLM-VE	A	ND	ND
CS-17314-FG		N/A	J. Neils Park	Park	Walking path 15	Soil-Like	soil	Field Sample	9/20/2003	PLM-VE	A	ND	ND
CS-17315-FG		N/A	J. Neils Park	Park	Walking path 16	Soil-Like	soil	Field Sample	9/20/2003	PLM-VE	A	ND	ND
CS-17316-FG		N/A	J. Neils Park	Park	Walking path 17	Soil-Like	soil	Field Sample	9/20/2003	PLM-VE	A	ND	ND
CS-17317-FG		N/A	J. Neils Park	Park	Grid 8	Soil-Like	soil	Field Sample	9/20/2003	PLM-VE	A	ND	ND
CS-17318-FG		N/A	J. Neils Park	Park	Grid 9	Soil-Like	soil	Field Sample	9/20/2003	PLM-VE	A	ND	ND
CS-17319-FG		N/A	J. Neils Park	Park	Grid 10	Soil-Like	soil	Field Sample	9/20/2003	PLM-VE	A	ND	ND
CS-17320-FG		N/A	J. Neils Park	Park	Grid 11	Soil-Like	soil	Field Sample	9/20/2003	PLM-VE	A	ND	ND
CS-17321-FG		N/A	J. Neils Park	Park	Grid 12	Soil-Like	soil	Field Sample	9/20/2003	PLM-VE	A	ND	ND
CS-17322-FG		N/A	J. Neils Park	Park	Grid 13	Soil-Like	soil	Field Sample	9/20/2003	PLM-VE	A	ND	ND
CS-17323-FG		N/A	J. Neils Park	Park	Grid 2	Soil-Like	soil	Field Sample	9/20/2003	PLM-VE	A	ND	ND
CS-17324-FG		N/A	J. Neils Park	Park	Grid 3	Soil-Like	soil	Field Sample	9/20/2003	PLM-VE	A	ND	ND
CS-17325-FG		N/A	J. Neils Park	Park	Grid 18	Soil-Like	soil	Field Sample	9/20/2003	PLM-VE	A	ND	ND
CS-17326-FG		N/A	J. Neils Park	Park	Grid 19	Soil-Like	soil	Field Sample	9/20/2003	PLM-VE	A	ND	ND
CS-17327-FG		N/A	J. Neils Park	Park	Grid 20	Soil-Like	soil	Field Sample	9/20/2003	PLM-VE	A	ND	ND

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-17328-FG		N/A	J. Neils Park	Park	Grid 21	Soil-Like	soil	Field Sample	9/20/2003	PLM-VE	A	ND	ND
CS-17329-FG		N/A	J. Neils Park	Park	Grid 22	Soil-Like	soil	Field Sample	9/20/2003	PLM-VE	A	ND	ND
CS-17330-FG		N/A	J. Neils Park	Park	Grid 23	Soil-Like	soil	Field Sample	9/20/2003	PLM-VE	A	ND	ND
CS-17341-FG		N/A	J. Neils Park	Park	Area SG 7	Soil-Like	soil	Field Sample	9/22/2003	PLM-VE	A	ND	ND
CS-17342-FG		N/A	J. Neils Park	Park	Area SG4	Soil-Like	soil	Field Sample	9/22/2003	PLM-VE	A	ND	ND
CS-17343-FG		N/A	J. Neils Park	Park	Area SG1	Soil-Like	soil	Field Sample	9/22/2003	PLM-VE	A	ND	ND
CS-17344-FG		N/A	J. Neils Park	Park	Area SG5	Soil-Like	soil	Field Sample	9/22/2003	PLM-VE	B1	TR	ND
CS-17345-FG		N/A	J. Neils Park	Park	Area SG6	Soil-Like	soil	Field Sample	9/22/2003	PLM-VE	A	ND	ND
CS-17346-FG		N/A	J. Neils Park	Park	Area SG16	Soil-Like	soil	Field Sample	9/22/2003	PLM-VE	A	ND	ND
CS-17347-FG		N/A	J. Neils Park	Park	Area SG15	Soil-Like	soil	Field Sample	9/22/2003	PLM-VE	A	ND	ND
CS-17348-FG1	CS-17347	N/A	J. Neils Park	Park	Area SG15	Soil-Like	soil	Field Duplicate	9/22/2003	PLM-VE	A	ND	ND
CS-17349-FG1		N/A	J. Neils Park	Park	Area HP8	Soil-Like	soil	Field Sample	9/22/2003	PLM-VE	A	ND	ND
CS-17350-FG1		N/A	J. Neils Park	Park	Area HP4	Soil-Like	soil	Field Sample	9/22/2003	PLM-VE	A	ND	ND
CS-17351-FG1		N/A	J. Neils Park	Park	Area HP3	Soil-Like	soil	Field Sample	9/22/2003	PLM-VE	A	ND	ND
CS-17352-FG1		N/A	J. Neils Park	Park	Area HP2	Soil-Like	soil	Field Sample	9/22/2003	PLM-VE	A	ND	ND
CS-17353-FG1		N/A	J. Neils Park	Park	Area HP1	Soil-Like	soil	Field Sample	9/22/2003	PLM-VE	A	ND	ND
CS-17354-FG1		N/A	J. Neils Park	Park	Area HP7	Soil-Like	soil	Field Sample	9/22/2003	PLM-VE	A	ND	ND
CS-17355-FG1		N/A	J. Neils Park	Park	Area HP6	Soil-Like	soil	Field Sample	9/22/2003	PLM-VE	B1	TR	ND
CS-17356-FG1		N/A	J. Neils Park	Park	Area HP5	Soil-Like	soil	Field Sample	9/22/2003	PLM-VE	A	ND	ND
CS-17357-FG1		N/A	J. Neils Park	Park	Area HP9	Soil-Like	soil	Field Sample	9/22/2003	PLM-VE	A	ND	ND
CS-17358-FG1		N/A	J. Neils Park	Park	Area RP1	Soil-Like	soil	Field Sample	9/22/2003	PLM-VE	A	ND	ND
CS-17359-FG		N/A	J. Neils Park	Park	Area AR4	Soil-Like	soil	Field Sample	9/22/2003	PLM-VE	A	ND	ND
CS-17360-FG1		N/A	J. Neils Park	Park	Area AR3	Soil-Like	soil	Field Sample	9/22/2003	PLM-VE	A	ND	ND
CS-17361-FG1		N/A	J. Neils Park	Park	Area AR2	Soil-Like	soil	Field Sample	9/22/2003	PLM-VE	A	ND	ND
CS-17362-FG1		N/A	J. Neils Park	Park	Area AR1	Soil-Like	soil	Field Sample	9/22/2003	PLM-VE	A	ND	ND
CS-17363-FG		N/A	J. Neils Park	Park	Area (RP2)	Soil-Like	soil	Field Sample	9/22/2003	PLM-VE	A	ND	ND

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-20062-FG1		N/A	J. Neils Park	Park	N. Ballfield	Soil-Like	soil	Field Sample	3/8/2005	PLM-VE	A	ND	ND
CS-20063-FG1		N/A	J. Neils Park	Park	N. Ballfield	Soil-Like	soil	Field Sample	3/8/2005	PLM-VE	A	ND	ND
CS-20064-FG1		N/A	J. Neils Park	Park	N. Ballfield	Soil-Like	soil	Field Sample	3/8/2005	PLM-VE	B1	TR	ND
CS-20065-FG1		N/A	J. Neils Park	Park	E. Ballfield	Soil-Like	soil	Field Sample	3/8/2005	PLM-VE	A	ND	ND
CS-20066-FG1		N/A	J. Neils Park	Park	E. Ballfield	Soil-Like	soil	Field Sample	3/8/2005	PLM-VE	A	ND	ND
CS-20067-FG1		N/A	J. Neils Park	Park	E. Ballfield	Soil-Like	soil	Field Sample	3/8/2005	PLM-VE	A	ND	ND
CS-20068-FG1		N/A	J. Neils Park	Park	S. Ballfield	Soil-Like	soil	Field Sample	3/8/2005	PLM-VE	A	ND	ND
CS-20069-FG1		N/A	J. Neils Park	Park	S. Ballfield	Soil-Like	soil	Field Sample	3/8/2005	PLM-VE	A	ND	ND
CS-20070-FG1		N/A	J. Neils Park	Park	S. Ballfield	Soil-Like	soil	Field Sample	3/8/2005	PLM-VE	A	ND	ND
CS-20071-FG1		N/A	J. Neils Park	Park	W. Ballfield	Soil-Like	soil	Field Sample	3/8/2005	PLM-VE	A	ND	ND
CS-20072-FG1		N/A	J. Neils Park	Park	W. Ballfield	Soil-Like	soil	Field Sample	3/8/2005	PLM-VE	A	ND	ND
CS-20073-FG1		N/A	J. Neils Park	Park	W. Ballfield	Soil-Like	soil	Field Sample	3/8/2005	PLM-VE	B2	< 1	ND

Appendix E
Request Letter and Permit for Sampling Along Montana State Highway 37

Montana Department of Transportation

Encroachment Application And Permit

Printed on: July 21, 2003

Permit number	Permit type	Maintenance Division
455	TEMPORARY	KALISPELL

APPLICANT INFORMATION:

Name: ~~JEFF MANTERA~~ Virginia Dee Warren **Address:** 318 LOUISIANA AVENUE

City: LIBBY **State:** MT

Phone: 1-303-295-1237 **Zip:** 59923

Corporation Name: CDM FEDERAL PROGRAMS CORPORATION

Nature of Permit Desired:

COLLECTING OF SOIL SAMPLES ALONG THE RIGHT OF WAY OF MDT. THERE WILL BE APPROXIMATELY 20-30 QUART SAMPLES TAKEN.

ENCROACHMENT LOCATION INFORMATION:

Sign Route	Beginning Reference Point:	Ending Reference Point:
MT 37	000+0.800	006+0.000

County:	Township:	Range:	Section:	Qrtr. Sec:	Qrtr. Qrtr. Sec:
LINCOLN	T30N	R31W	3		

Comments:

1. THE AREA OF SAMPLING WILL BE ON MT 37 FROM KOOTENAI RIVER TO THE RAINY CREEK ROAD.
2. PERMITTEE IS REQUIRED TO LOCATE ALL UTILITIES AND ENCROACHMENTS CURRENTLY BURIED ON MDT RIGHT OF WAY IF NECESSARY.
3. APPROXIMATELY 20-30 QUART SIZE SAMPLES ARE BEING TAKEN.
4. ALL SAMPLED AREAS WILL BE FILLED OR SMOOTHED OUT.
5. CONTACT THE AREA SUPERVISOR, VAN SWEARINGEN AT 293-7921 TWENTY-FOUR HOURS IN ADVANCE OF WORK AND VAN OR ONE OF HIS DESIGNEE WILL BE ON SITE FOR INSPECTION.
6. THIS ENCROACHMENT IF FROM STATION 41+19 TO 413 +90.
7. PERMITTEE IS REQUIRED TO PROVIDE TRAFFIC CONTROL AND OR SIGNING AS NEEDED(SEE ATTACHMENT).

ENCROACHMENT PERMIT INFORMATION:

Application Date	Permit Issue Date	Permit End Date	Permit Class
21-JUL-03	21-JUL-03	30-DEC-03	D

Approved by: STEPHEN L. HERZOG

(Approval Signature)

V. Dee Warren

(Applicant Signature)

Montana Department of Transportation

Encroachment Application And Permit

Printed on: July 21, 2003

1 TERM. This permit shall be in full force and effect from the date hereof until revoked as herein provided.

2 REVOCATION. This permit may be revoked by State upon giving 45 days notice to Permittee by ordinary mail, directed to the address shown in the application hereto attached, but the State reserves the right to revoke this permit without giving said notice in the event Permittee breaks any of the conditions or terms set forth herein.

3 COMMENCMENT OF WORK. No work shall be commenced until Permittee notifies Field Maintenance Chief shown in application when he proposes to commence work.

4 CHANGES IN HIGHWAY. If State changes highway necessitating changes in structures or installations installed under this permit, Permittee shall make necessary changes without expense to State.

5 . STATE SAVED HARMLESS FROM CLAIMS. In accepting this permit the Permittee, its/his successors or assigns, agree to protect the State and save it harmless from all claims, actions or damage of every kind and description which may accrue to, or be suffered by, any person or persons, corporations or property by reason of the performance of any such work, character of materials used, or manner of installations, maintenance and operation or by the improper occupancy of said highway right of way, and in case any suit or action is brought against the State and arising out of, or by reason of any of the above causes, the Permittee, its/his successors or assigns, will, upon notice to it/him of the commencement of such action, defend the same at its/his sole cost and expense and satisfy any judgment which may be rendered against the State in any suit or action.

6 PROTECTION OF TRAFFIC. Insofar as the interests of the State and the traveling public are concerned, all work performed under this permit shall be done under the supervision of the Field Maintenance Chief of the Montana Department of Transportation and his authorized representatives, and he/they shall indicate the traffic control devices, the lighting thereof at night, placing of flagmen and watchmen, the acceptable manner in which traffic is to be handled, and shall specify to Permittee how road surface is to be replaced if it is disturbed during operations, but said supervision shall in no way operate to relieve or discharge Permittee from any of the obligations assumed by acceptance of this permit, and especially those set forth under Section 5 hereof.

7 HIGHWAY DAMAGE. If the work done under this permit interfers in any way with the drainage of the State highway affected, Permittee shall, at its/his own expense, make such provisions as the State may direct to take care of said drainage.

8 RUBBISH AND DEBRIS. Upon completion of work contemplated under this permit, all rubbish and debris shall be immediately removed and the roadway and roadside left in a neat and presentable condition satisfactory to the State.

9 WORK TO BE SUPERVISED BY THE STATE. All work contemplated under this permit shall be done under the supervision of an to the satisfaction of the authorized representative of the State, and the State hereby reserves the right to order the change of location or removal of any structure or installation authorized by this permit at any time, said changes or removal to be made at the sole expense of the Permittee.

10 STATES RIGHT NOT TO BE INTERFERED WITH. All such changes, reconstruction or relocation shall be done by Permittee in such a manner as will cause the least interference with any of the State's work, and the State shall in no wise be liable for any damage to the Permittee by reason of any such work by the State, its agents, contractors or representatives, or by the exercise of any right by the State upon the highways by the installations or structures placed under the permit.

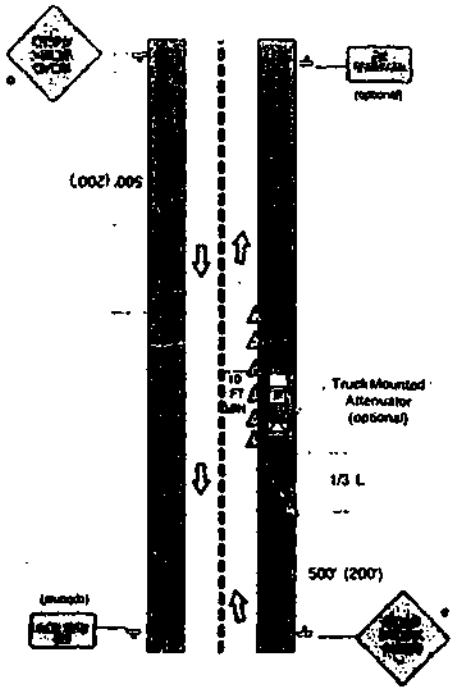
11 REMOVAL OF INSTALLATIONS OR STRUCTURES. Unless waived by the State, upon termination of this permit, the Permittee shall remove the installations or structures contemplated by this permit and restore the premises to the condition existing at the time of entering upon the same under this permit, reasonable and ordinary wear and tear and damage by the elements, or by circumstances over which the Permittee has no control, excepted.

12 MAINTENANCE AT EXPENSE OF PERMITTEE. Permittee shall maintain, at its/his sole expense the installations and structures which this permit is granted, in a condition satisfactory to the State.

13 STATE NOT LIABLE FOR DAMAGE TO INSTALLATIONS. In accepting this permit the Permittee agrees that any damage or injur done to said installations or structures by a contractor working for the State, or by any State employee engaged in construction, alteration, repair, maintenance or improvement of the State highway, shall be at the sole expense of the Permittee.

14 STATE TO BE REIMBURSED FOR REPAIRING ROADWAY. Upon being billed therefore Permittee agrees to reimburse State for any expense incurred in repairing surface of roadway due to settlement at installation, or for any other damage to roadway as a result of the work performed under this permit.

Shoulder Work With Minor Encroachment



NOTES:

1. The treatment shown may be used on a minor road having low speeds. For higher speed traffic conditions, a lane closure should be considered.
2. The procedure shown should be adequate to carry bi-directional traffic at reduced speed through the activity area, provided the lanes are at least ten feet wide.
3. Where the opposite shoulder is suitable for carrying traffic and of adequate width, traffic lanes may be shifted by use of closely spaced channelizing devices, provided ten-foot wide lanes are maintained.
4. Additional advance warning may be appropriate, such as a ROAD NARROWS sign.
5. Portable concrete barriers may be used along the work space.
6. The protection vehicle is optional if taper and channelizing devices are used. For short-duration work, the taper and channelizing devices are optional if the protection vehicle with an activated flashing yellow light is used.

***For Utility Operations Use: "UTILITY WORK AHEAD"**

CDM

1331 17th Street, Suite 1050
Denver, Colorado 80202
tel: 303 295-1237
fax: 303 295-1895

July, 2003

Mr. Steve Herzog
Kalispell Maintenance
P.O. Box 7308
Kalispell, Montana 59904
(406) 751-2000

Subject: Request for Encroachment Permit

Dear Mr. Herzog:

The intent of this letter is to request from you an encroachment permit for the activities described below.

CDM Federal Programs Corporation (CDM) is currently under contract with the United States Environmental Protection Agency (EPA) to perform Remedial Investigation (RI) activities in and around Libby, Montana. As part of these activities, CDM has planned to collect surface soil samples along the right of way of Montana State Highway 37 between T30N R31W Section 3 and T31N R30W Section 32. This sampling will consist of collecting surficial (i.e., 0-6 inches below ground surface) soil from the right of way areas using hand trowels. No large equipment will be used during these activities that may interfere with traffic. These activities are projected to take approximately five days and are scheduled to occur sometime between July 8, 2003 and December 31, 2003.

If you need addition information please contact me at 303-295-1237 or monterajg@cdm.com

Thank You,

Jeff Montera
Project Manager
CDM Federal Programs Corporation

cc: Document Control Files

Appendix F
Logbook Pages for Highway 37 Sampling Events

Location HIGHWAY 37 Date 9/16/03 67

Project / Client LBB4 ASBESTOS / U.S. EPA Region 8
MONTANA - DOT.

0945 - At River Runs through it location along Highway 37. Set up Road signs, (SHOULDER WORK AHEAD) @ 500' + Prepared to stop @ 200'. Mark location 24' - North + South of Highway 37

1022 - COLLECT sample 24 N - 3 POINT COMPOSITE — 9/16/03

CS- 16872 SP- 123621 — 9/16/03

1026 COLLECT Sample 24S - 3pt

CS- 16873 SP- 123622 — 9/16/03

FIELD DATA SHEET 005716 (CS-16872 CS-16873)

- NO L.V. OBSERVED in location 24.

~~GPS ID T4A09163~~ — 9/16/03

1105 SETTING UP @ LOCATION 23S + 23N HALFWAY BETWEEN RAINY CREEK RD + RIVER RUNS RD ~~THROUGH IT~~ — 9/16/03 Rainy Creek Rd is 0.4 mi FROM RIVER RUNS RD ~~through it R~~ — 9/16/03 LOCATION 25S 25N 1st @ the 0.2 mi MARK BETWEEN the two ROADS. — 9/16/03

9/16/03

3 - ROBERT HUNT 9/16/03

Location Highway 37 Date 9/16/03

Project / Client Libby Asbestos / U.S. EPA Region 8

Montana DOT

1115 · Mark sample locations - North + South of Highway 37.

~~1022~~ 1127 - Collect ~~[illegible]~~ 23N sample · 3PT

CS- 16874 SP- 123623

~~M 9/16/03~~ Field Data Sheet 005761

1129 CS- 16875 SP- 123624

~~24S~~ 23S

Field Data Sheet 005762

No L.V. observed @ location 23

1300 - Setting up on location 22 → location does not agree with GPS - Head back to office to check with Ian Fairweather. After looking over coordinates, Ian F. believes that the coordinates are referenced to points in Denver. The sampling team will begin with point 22 ~~, and~~ M 9/16/03 @ Rainy Creek Rd + move ~~[illegible]~~ South along Rt 37 in 1/4 mile intervals. M 9/16/03

1415 · Back @ location 23 · Set up cones + road signs, ~~M 9/16/03~~

[signature] - Robert Hunt - 9/16/03

Location Highway 37 Date 9/16/03

Project / Client Libby Asbestos / U.S. EPA Region 8

Montana DOT

1429 CS- 16876 SP- 123625

22N

Field Data Sheet ~~005761~~ 005762

1436 CS- 16877 SP- 123626

22S

Field Data Sheet - ~~005761~~ 005762

No L.V. observed @ location 22

GPS ID: T4A09163 - for location 22

1515 - Setting up on location 22 - park @ pull off + walk the rest of the way. M 9/16/03

1547 CS- 16878 SP- 123627

21N

Field Data Sheet 005818

1549 CS- 16879 SP- 123628

21S

Field Data Sheet ~~005818~~ 005819

No L.V. observed @ location ~~22~~ 21

1615 · Setting up on location 20S + 20N. RH 9/16/03

1632 ~~1639~~ CS- 16880 SP- 123629

20N

Field Data Sheet 005815

* Moderate - to high amounts of L.V.

[signature] - Robert Hunt - 9/16/03

GPS ID T4A09253 - 21N, 21S

70 Location HIGHWAY 37 . Date 9/16/03

Project / Client LIBBY ASBESTOS / U.S. EPA Region 8
MONTANA DOT

(1639) CS- 17121 SP- 123629
20N-DD
FIELD DATA SHEET 005819

* MODERATE TO HIGH AMOUNTS OF L.V.

(1642) CS- 17122 SP- 123630
20S
FIELD DATA SHEET ~~005814~~ 005819

* FEW FLAKES OF L.V. OBSERVED

1705 - DEPART LOCATION 20N & 20S

9/16/03

9/16/03 - ROBERT HUNT

Location COM OFFICE Date 9/16/03 71

Project / Client LIBBY ASBESTOS / U.S. EPA Region 8
MONTANA DOT

1715 - ARRIVE BACK @ COM OFFICE BEGIN END OF DAY ACTIVITIES - CHECKING PAPERWORK, DAILY REPORTS, ETC - -

(1730) EQUIPMENT BLANK CS- 17123 (BD-002015)
FIELD DATA SHEET 005820

EQUIPMENT BLANK COLLECTED FROM LOT # 229 - SILICA SAND

1735 - RELINQUISH SOIL SAMPLES ON FIELD DATA SHEETS 005716, 005762, 005818, 005819 + 005815 TO SECURE SAMPLE STORAGE ROOM.

ROBERT HUNT

1800 - FINISHED FOR THE DAY

9/16/03

ROBERT HUNT - 9/16/03

Location CDM OFFICE Date 9/17/03

Project / Client LIBBY ASBESTOS / U.S. EPA Region 8

NOTETAKER: ROBERT HUNT RH 9/17/03
Personnel: CDM - ROBERT HUNT + Danny Zambrano
Weather: cloudy - cold (40°) - forecast AM. RAIN - cloudy high of 56°
PPE: Level C / Level D modified
Instruments: TRIMBLE GPS UNIT
Calibration: NA 9/17/03
Activities: Soil sampling along Hwy 37 in accordance with document "Containment Screening study Libby Asbestos Site, Operable Unit 4, Libby, MT"

0730 - Arrive onsite @ CDM OFFICE
BEGIN DAILY ACTIVITIES - gathering paperwork + field equipment. RH 9/17/03

0815 - MORNING RI MEETING. RH 9/17/03
- MORNING HEALTH & SAFETY MEETING ON RABIES. RH 9/17/03

0905 - Arrive @ HIGHWAY 37 - IN VICINITY OF LOCATION 19.

9/17/03

ROBERT HUNT - 9/17/03

Location HIGHWAY 37 Date 9/17/03

Project / Client LIBBY ASBESTOS / U.S. EPA Region 8

MONTANA DOT

0905 Arrive @ location Highway 37 - location 19 - will collect a sample north & south of road

0959 - COLLECT SAMPLE, 19 N

CS- 17124 SP- 123631

FIELD DATA SHEET 005821

1001 CS- 17125 SP- 123632

145 (20N)

195 FIELD DATA SHEET 005821

+ NO L.V. OBSERVED @ location 19 (PS ID T4A09173) - FOR 19N, 19S +

245 RH 9/17/03

1045 - AT LOCATION 18S + 18N

1109 CS- 17126 SP- 123633

18N

FIELD DATA SHEET 005821

1112 CS- 17127 SP- 123634

18S

FIELD DATA SHEET 005822

GB - T4B09173

@ 18N location center subsample + 100' W subsample - moderate L.V. NO L.V. OBSERVED @ 18S location

ROBERT HUNT - 9/17/03

Location HIGHWAY 37 Date 9/17/03

Project / Client LIBBY ASBESTOS / U.S. EPA Region 8

MONTANA DOT

1140 MARK LOCATION 17N + 17S.

1256 SETTING UP ON location 17N + 17S. m 9/17/03

1310 17N CS- 17123 SP- 123635

FIELD DATA SHEET 005822

L.V. observed @ 100'W sub sample (MODERATE)

1313 17S CS- 17129 SP- 123636

FIELD DATA SHEET ~~005822~~ 005822

NO L.V. ~~OBSERVED~~ OBSERVED @ location 17S

GPS ID T4C09173 for location 17

1355 SETTING UP ON LOCATION 16N+16S.

1417 16N CS- 17130 SP- 123637

FIELD DATA SHEET 005823

* MODERATE AMOUNTS OF L.V. OBSERVED IN CENTER + 100'E SUBSAMPLE. TRACE IN 100'W.

1422 16S CS- 17131 SP- 123638

FIELD DATA SHEET 005823

1426 100 Dup CS- 17132 SP- 123638

FIELD DATA SHEET 005823

ROBERT HUNT 9/17/03

Location HIGHWAY 37 Date 9/17/03

Project / Client LIBBY ASBESTOS / U.S. EPA Region 8

MONTANA DOT

NO L.V. OBSERVED @ location 16S

GPS ID T4D09173 - FOR location 16

1505 SETTING UP ON LOCATION 15

GPS ID T4E09173

524 15N CS- 17133 SP- 123639

FIELD DATA SHEET 005824

MODERATE L.V. @ CENTER + 100'E - TRACE @ 100'W

GPS ID T4F09173

1527 15S CS- 17134 SP- 123640

FIELD DATA SHEET 005824

NO L.V. OBSERVED @ 15S. RH 9/17/03

1600 + SETTING UP ON LOCATION 14N+14S.

1621 14N CS- 17135 SP- 123641

FIELD DATA SHEET 005824

MODERATE L.V. @ all SUBSAMPLES (14N)

1623 14S CS- 17136 SP- 123642

FIELD DATA SHEET 005824

FLAKE OF L.V. @ 100'W SUBSAMPLE

GPS ID T4F09173 - FOR 14N + 14S

GPS ID T4G09173 FOR 24N, 23S, 23N, 20N, 20S. m 9/17/03

ROBERT HUNT 9/17/03

78

Location HIGHWAY 37 Date 9/18/03

Project / Client LIBBY ASBESTOS / U.S. EPA Region 8

MONTANA D.O.T

0830 - Arrive @ location 13N + 13S - mark sampling locations - set up signs + traffic cones

0857 CS- 17138 SP- 123643
13N

FIELD DATA SHEET - 005827

MODERATE L.V. @ 100'E + 100'W - TRACE LV @ Center

0903 CS- 17139 SP- 123644
13S

FIELD DATA SHEET 005827

NO L.V. @ location 13 S.

0930 - setting up @ location 12N + 12S

0943 CS- 17140 SP- 123645
12N

FIELD DATA SHEET - 005827

NO L.V. OBSERVED @ 12N

0949 CS- 17141 SP- 123646
12S

FIELD ~~DAT~~ MAKER DATA SHEET 005828

NO L.V. OBSERVED @ 12S

1005 - setting up on location 11N + 11S. - put up - road signs + traffic cones.

[signature] - ROBERT HUNT 9/18/03

Location HIGHWAY 37 Date 9/10/03

Project / Client LIBBY ASBESTOS / U.S. EPA REGION 8

MONTANA D.O.T

1010
11N CS- 17142 SP- 123647
FIELD DATA SHEET 005828
TRACE L.V. @ CENTER + 100' W SUBSAMPLE

1017
11S CS- 17143 SP- 123648
FIELD DATA SHEET 005828
TRACE L.V. IN 100' E SUBSAMPLE
GPS ID T4A09183 FOR 11N, 11S, 10S, 10N
1040 - SETTING UP ON LOCATION 10S+10N

1043
10N CS- 17144 SP- 123649
FIELD DATA SHEET 005829
TRACE L.V. @ 100' E. MODERATE L.V. @ 100' W

1046
10S CS- 17145 SP- 123650
FIELD DATA SHEET 005829

1049
10S-Dup CS- 17146 SP- 123650
FIELD DATA SHEET 005829
TRACE L.V. @ 100' E. MODERATE
L.V. @ CENTER + 100' W 9/10/03
GPS ID T4A09183 - FOR 10S FLOP

ROBERT HUNT 9/10/03

80

Location HIGHWAY 37 Date 9/18/03

Project / Client LIBBY ASBESTOS / U.S. EPA Region 8

MONTANA D.O.T

1108 · SETTING UP ON LOCATION 9S + 9N -
SET UP ROAD SIGNS + TRAFFIC CONES

1119
9N CS- 17147 SP- 123651

FIELD DATA SHEET 005830 — 3 pt —
MODERATE L.V. IN ALL 3 SUB SAMPLES

1124
9S CS- 17148 SP- 123652

FIELD DATA SHEET 005830 — 3 pt —
TRACE L.V. IN ALL SUBSAMPLES
GPS ID T4809183 — 9/18/03

1315 - ~~FINISHED~~ SETTING UP @
LOCATION 8S + 8N - SET UP ROAD
SIGNS + TRAFFIC CONES. 9/18

1331
8N CS- 17149 SP- 123653

FIELD DATA SHEET 005830
TRACE L.V. @ 100' E - MODERATE L.V. @ 100' W + C

1333
8S CS- 17150 SP- 123654

FIELD ~~DATA~~ SHEET 005830 9/18/03
TRACE L.V. @ all three subsample lo
GPS ID T4C09183 9/18/03

— RABERT HUNT · 9/18/03

Location HIGHWAY 37 Date 9/10/03 81

Project / Client LIBBY ASBESTOS / U.S. EPA Region 8

MONTANA DOT

1350 - SETTING UP @ LOCATION 7S+7N

SET UP TRAFFIC CONES & ROAD SIGNS.

(1359) CS- 17151 SP- 123655

7N

FIELD DATA SHEET 005831

MODERATE L.V. @ CENTER + 100'W - NO L.V. @ E

(1402) CS- 17152 SP- 123656

7S

FIELD DATA SHEET 005831

NO L.V. OBSERVED IN ANY SUBSAMPLES

GPS ID - T4C09183

430 - SETTING UP ON LOCATION 6S + 6N

(1437) CS- 17153 SP- 123657

6N

FIELD DATA SHEET 005832

TRACE L.V. @ all 3 SUBSAMPLES

(1441) CS- 17154 SP- 123658

6S

FIELD DATA SHEET 005832

TRACE L.V. @ 100'W. NO L.V @ CENTER + E

GPS ID T4D09183 - 6S + 6N

1500 - SETTING UP @ LOCATION 5S + 5N.

9/10/03 - ROBERT HUNT

ROBERT HUNT 9/10/03

82 Location HIGHWAY 37 Date 9/18/03

Project / Client LIBBY ASBESTOS / U.S. EPA Reg.

MONTANA DOT

1507 CS- 17155 SP- 123659

SN

FIELD DATA SHEET - 005832

TRACE L.V. @ CENTER SUB SAMPLE - NO @ 100 E

1509 CS- 17156 SP- 123660

SS

FIELD DATA SHEET - 005833

NO L.V. OBSERVED IN ANY SUB SAMPLES

GPS ID T4B09183 - FOR SN + SS

1530 - SETTING UP @ LOCATION 4N, 4S,

3N, 3S, → LOCATION 3N, 3S W @ RIVERSEDGE

LOCATION 3 IS PLACED 1/2 WAY BETWEEN RIVER

AND ~~OPPOSITE~~ WEST MARK OF LOCATION 4 - SUB SAMPLES

OF LOCATION 3 ARE COLLECTED 25' E OF

CENTER LOCATION. 9/18/03

1538 CS- 17157 SP- 123661

4N

FIELD DATA SHEET 005833

NO L.V. OBSERVED @ 4N LOCATION

1541 CS- 17158 SP- 123662

4S

FIELD DATA SHEET 005833

NO L.V. ~~OBSERVED~~ OBSERVED @ LOCATION 4S

GPS ID ~~T4E09183~~ T4E09193

ROBERT HUNT - 9/18/03

Location HIGHWAY 37 Date 9/18/03 83

Project / Client LIBBY ASBESTOS / U.S. EPA Region 8

MONTANA D.O.T

1554

3N CS- 17159 SP- 123663

FIELD-DATA SHEET 005834

NO L.V. OBSERVED @ LOCATION 3N

1559

3S CS- 17160 SP- 123664

FIELD DATA SHEET 005834

NO L.V. OBSERVED @ LOCATION 3S

GPS ID T4E09183

1605 SETTING UP ON LOCATION 1S 1W 9/18/03

1614 CS-17281

1N ~~CS- 17281~~ SP- 123665

FIELD DATA SHEET 005834

~~FIELD~~ NO L.V. OBSERVED @ LOCATION 1N

1619

1S CS- 17282 SP- 123666

FIELD DATA SHEET 005836

NO L.V. OBSERVED @ LOCATION 1S 1S

GPS ID T4F09183 FOR 1S 1N

1640- SETTING UP ON LOCATION 2S 2N

9/18/03

ROBERT HUNT 9/18/03

84 Location HIGHWAY 37 Date 9/18/03

Project Client LIBBY ASBESTOS / U.S. EPA R

MONTANA D.O.T.

(1644)

2N CS- 17283 SP- 123667

FIELD DATA SHEET 005836 — 3pt —

NO L.V. OBSERVED IN ANY SUBSAMPL

(1646)

2S CS- 17284 SP- 123668

FIELD DATA SHEET 005836 — 3pt —

NO L.V. OBSERVED IN ANY SUBSAMPL

GPS ID TH F09183

1700 FINISHED @ LOCATION 2S+2

WITH HIGHWAY 37 SAMPLING

9/18/03

ROBERT HUNT-91

Hwy 37 N, Right of Way 05-2305
Libby Asbestos USEPA Region 8
D.O.T. of Montana

0800 Arrived at hwy 37N to duplicate past soil sample methods. Personnel on site B. Hunt, N. Raines, and K. Fortner (author). Weather is partyclouds/sunny ~55°. ~~All work IAW PDI WP Final Draft 2003~~ All work IAW NR 052505 Final SAP Addendum for J. Neils Park and trail Highway 37. Level D PPE (Safety shoes) used. Sample method was a 3 point composite divided into a split sample using a mixing bowl. First composite was from previous GPS sampled point. 2nd and third composite was 100' north + south from previous GPS sampled point. KF 05-2305

Two previous GPS sample points did not match sampling plan. (CS-17140, CS-17138). Therefore we started at previous GPS sample point CS-17145 and used 1/4 mile increments to obtain the correct GPS points. KF 05-2305

Tools were cleaned between samples KF 05-2305

FSDS 910	CS-20222	CS-20223 SP-126921	
FSDS 910	CS-20224	SP-126922	KF 0523 05
FSDS 911	CS-20225	SP-126922	KF 05-2305
FSDS 911	CS-20226	CS-20227 SP-126923	
FSDS 912	CS-20228	CS-20229 SP-126924	
FSDS 912	CS-20230	SP126925	KF 05-2305
FSDS 913	CS-20231	SP-126925	KF 05-2305

KF 05-2305

Location Hwy 37N Right of way Date 05-~~24~~ 23-05

Project / Client Libby Asbestos US. EPA Region 8

D.O.T of Montana

FSDS 913	CS-20232 CS-20233 SP126926	05-24-05
FSDS 914	CS-20234 CS-20235 SP126927	05-24-05
FSDS 914	CS-20236 SP-126928	05-24-05
FSDS 915	CS-20237 SP-126928	05-24-05 KF
FSDS 915	CS-20238 CS-20239 SP126929	KF 05-24-05
FSDS 916	CS-20240 CS-20241 SP-126930	KF 05-24-05
FSDS 916	CS-20202 SP-126931	KF 05-24-05
FSDS 917	CS-20203 SP-126931	KF 05-24-05
FSDS 917	CS-20204 CS-20205 SP126932	KF 05-24-05

KF 05-24-05

GPS points were collected by P. Hunt at 10 preselected stationary air sample sites. Air sampling performed by D. Rapine & J. Rokowski.

L.V. was observed in numerous locations - CS-20203 - moderate to high L.V

CS-20204 - moderate L.V.

CS-20240 - trace to moderate L.V

~~CS-20241~~ [illegible] CS-20202 - trace - high L.V

CS-20238 - trace to high L.V.

CS-20234 - trace L.V.

KF 05-24-05

Location Hwy 37N Right of way Date 05-~~24~~ 23-05

Project / Client Libby Asbestos US EPA Region 8

D.O.T of Montana

KF 05-24-05

28 Highway 37N Right of Way
owner: DoT of Montana
Author: JR
Weather 60°

5-23-09
log# 100434

CS- 20242	SP- 126961	- River Run
CS- 20243	SP- 126962	- Rainy Creek
CS- 20244	SP- 126963	- 4.5 miles
CS- 20245	SP- 126964	- River Edge ~~1673~~
CS- 20246	SP- 126965	- 3.30 mile
CS- 20247	SP- 126966	- 37N, Sinter
CS- 20248	SP- 126967	#1673
CS- 20249	SP- 126968	- J. Neils
CS- 20250	SP- 126969	- Pipe Creek
CS- 20251	SP- 126970	- Park

0800 Arrive at River run with DR.
0805 pump set up and Started
0809 Rainy creek Started.
0815 4.5 mile marker started.
0820 Rivers Edge Started.
0824 3.30 mile marker Started.
0829 37N, south intersection pump Started.

Highway 37N Right of Way
owner: DoT of Montana
Author: JR

5-23-05 29
log# 100434

0832 House #1673 Sample Started.
0837 J. Neils Sample Started.
0840 Pipe Creek Sample Started.
0845 left Site
1435 arrived back on Site
1440 Stopped River run Sample.
1443 Stopped Rainy Creek Sample.
1447 Stopped 4.5 mile marker Sample.
1450 Stopped 37N, River Edge Southside Sample.
1453 Stopped 3.30 marker Sample.
1457 Stopped 37N Southside Sample.
1500 Stopped #1673 Sample
1504 Stopped J. Neils Sample.
1507 Stopped Pipe Creek Sample.
1510 Stopped Park Sample.
1600 DR turns Samples into CG.

JR 5-23-05

Appendix G
Field Sample Data Sheets for Highway 37 Sampling Events

REVISED

Sheet No.: CSS-S- 005761

CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100275 Page No: 67-68 Sampling Date: 9/16/03

Address: Highway 37N Right of Way Owner Tenant: D.O.T of Montana

Business Name: Grossman 12/10/04

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

Sampling Team: (circle) CDM MACTEC Other — Names: BOB Hunt Danny Zambrano

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 16872	CS- 16873	CS- 16874
Location ID	SP- 123621 DZ 9/16/03	SP- 123622 DZ 9/16/03	SP- 123623 DZ 9/16/03
Sample Group	ROAD (24N)	Road (24S)	Road (23N)
Location Description (circle)	Back yard Front yard Side yard Driveway Other Area 24N	Back yard Front yard Side yard Driveway Other Area 24S	Back yard Front yard Side yard Driveway Other Area (23N) DZ 9/16/03
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	1022	1026	1127
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments Note if vermiculite is visible in sampled area	BD- Center line 10' from RD ~~100'E - 100'W~~ NO LIV OBSERVED	BD- Center line - 10' from ~~RD - 100'E~~, 100'W NO LIV OBSERVED	BD- Center line - 10' from ~~RD - 100'E~~ 100'W NO LIV OBSERVED
Entered (LFO) JS	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____

For Field Team Completion (Provide Initials)	Completed by DZ	QC by RH

DW 091603

vs 052003

REVISED

Sheet No.: CSS-S- 005762

CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100275 Page No: 68/69 Sampling Date: 9/16/03

Address: Highway 37N - Right of Way Owner/Tenant: DOT of Montana

Business Name: JD 12/19/04

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

Sampling Team: (circle) CDM MACTEC Other — Names: BOB HUNT, DARRY ZANDERSON

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 16875 9/16/03	CS- 16876 9/16/03	CS- 16877 9/16/03
Location ID	SP- 123624 D2	SP- 123625 D2	SP- 123626 D2
Sample Group	Road (23 S)	Road (22 N)	Road (22 S)
Location Description (circle)	Back yard Front yard Side yard Driveway Other AREA (23 S)	Back yard Front yard Side yard Driveway Other AREA (22 N)	Back yard Front yard Side yard Driveway Other AREA 22 S
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	1129	1429	1436
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments Note if vermiculite is visible in sampled area	BD- CENTER LINE - 10' FROM RD 10' E - 10' W NO L.V. OBSERVED	BD- CENTER LINE - 10' FROM RD - 10' E, 10' W NO L.V OBSERVED	BD- CENTER LINE 10' FROM RD - 10' E - 10' W NO L.V. OBSERVED
Entered (LFO) DS	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____

For Field Team Completion (Provide Initials)	Completed by D.Z	QC by RH

DW 091603

vs 052003

REVISED

Sheet No.: CSS-S- 005818

CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100275 Page No: 69 Sampling Date: 9/16/03

Address: HIGHWAY 37N Right of Way Owner/Tenant: D.O.T of Montana DZ 9/16

Business Name: jb 12/9/04

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

Sampling Team: (circle) CDM MACTEC Other — Names: BOB HUNT DANNY ZAMBRANO

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 16878 9/16/03	CS- 16879 9/16/03	CS- 16880 9/16/03
Location ID	SP- 123627 DZ	SP- 123628 DZ	SP- 123629 DZ
Sample Group	Road (21 N)	Road (# 21 S)	Road # 20 N
Location Description (circle)	Back yard Front yard Side yard Driveway Other Area 21N	Back yard Front yard Side yard Driveway Other Area (21 S)	Back yard Front yard Side yard Driveway Other Area (20 N)
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	1547	1549	1632
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments Note if vermiculite is visible in sampled area	BD-____ NO L.V. OBSERVED Center line - 10' from RD 100' E + 100' W	BD-____ NO L.V. OBSERVED Center line - 10' from RD 100' E + 100' W	BD-____ Center line 10' from road - 100' E + 100' W for OTHER sub samples. MODERATE - TO HIGH AMOUNTS OF LY - mainly @ 100' E
Entered (LFO) JS	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____

For Field Team Completion (Provide Initials)	Completed by DZ	QC by PM

DW 091603

vs 052003

REVISED

Sheet No.: CSS-S- 005819

CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION
FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100275 Page No: 69/70 Sampling Date: 9/16/03

Address: Highway 37 N - Right of Way Owner/Tenant: D.O.T of Montana 12/9/04 JG

Business Name: _____

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

Sampling Team: (circle) CDM MACTEC Other ___ Names: BOB HUNT DANNY ZAMBRANO

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 17121	CS- 17122	
Location ID	SP- 123629	SP- 123630	
Sample Group	Road # 20 N-Rv	Road (20S)	
Location Description (circle)	Back yard Front yard Side yard Driveway Other Area 20	Back yard Front yard Side yard Driveway Other Area 20	Back yard Front yard Side yard Driveway Other
Category (circle)	FS FD of CS-16880 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	1639	1642	
Top Depth (in.)	0	0	
Bottom Depth (in.)	6	6	
Field Comments Note if vermiculite is visible in sampled area	BD- Center - 10' from road 100' E, 100' W moderate amounts of L.V. observed mainly @ 100' E sh-stmp	BD- Center - 100' - E ~~S1 frames~~ 100' - W Few flakes of L.V. observed	BD-
Entered (LFO)	Volpe: Entered ___ Validated ___	Volpe: Entered ___ Validated ___	Volpe: Entered ___ Validated ___

For Field Team Completion (Provide Initials)	Completed by D.Z	QC by RM

DW 091603

vs 052003

REVISED

Sheet No.: CSS-S- 005821

CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100275 Page No: 73 Sampling Date: 9/17/03

Address: Highway 37 N Right of Way ~~Owner~~/Tenant: D.O.T of Montana

Business Name: to 12/9/04

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

Sampling Team: (circle) (CDM) MACTEC Other ____ Names: BOB HUNT / DANNY ZAMBRANO

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 17124 ✓	CS- 17125 ✓	CS- 17126 ✓
Location ID	SP- 123631 DZ 9/17/03	SP- 123632 DZ 9/17/03	SP- 123633 DZ 9/17/03
Sample Group	ROAD (19 N)	ROAD (19 S)	ROAD (18 N)
Location Description (circle)	Back yard Front yard Side yard Driveway (Other) Area (19N)	Back yard Front yard Side yard Driveway (Other) Area (19 S)	Back yard Front yard Side yard Driveway (Other) Area (18N)
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	0959	1001	1109
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments Note if vermiculite is visible in sampled area	BD- ____ Center line 10' from road, 100' E + 100' W NO L.V. observed	BD- ____ Center line 10' from RD 100' E, + 100' W NO L.V. observed	BD- Sample 10' from RD center - moderate L.V 100' E - moderate L.V 100' W - NO L.V.
Entered (LFO) ps	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____

For Field Team Completion (Provide Initials)	Completed by DZ	QC by eh

LW 091703

vs 052003

REVISED

Sheet No.: CSS-S- 005822

CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION
FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100275 Page No: 74 Sampling Date: 9/17/03

Address: Highway 37N Highway 37 Right of Way Owner/Tenant: D.O.T of Montana

Business Name: 12/9/04

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

Sampling Team: (circle) CDM MACTEC Other — Names: ROB HUNT DANNY ZAMBRANO

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 17127	CS- 17128	CS- 17129
Location ID	SP- 123634	SP- 123635	SP- 123636
Sample Group	ROAD (18 S)	ROAD (17 N)	Road (17 S)
Location Description (circle)	Back yard Front yard Side yard Driveway Other Area (18 S)	Back yard Front yard Side yard Driveway Other Area (17N)	Back yard Front yard Side yard Driveway Other Area (17 S)
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	1112	1310	1313
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments Note if vermiculite is visible in sampled area	BD- sample 5' from RD CENTER - NO L.V. 100' E - NO L.V 100' W - NO L.V	BD- SAMPLE 10' from RD CENTER - NO LV 100' E NO LV 100' W NO LV on W side of RD	BD- SAMPLE 10' from RD CENTER - NO LV 100' E NO LV 100' W NO LV
Entered (LFO)	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____

For Field Team Completion (Provide Initials)	Completed by D.Z	QC by PM

DW 091703

vs 052003

REVISED

Sheet No.: CSS-S- 005823

CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100275 Page No: 74 Sampling Date: 9/17/03

Address: Highway 37N- Right of Way Owner/Tenant: D.O.T of Montana

Business Name: yb 12/9/04

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

Sampling Team: (circle) CDM MACTEC Other ___ Names: BOB HUNT DANNY ZAMBRANO

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 17130	CS- 17131	CS- 17132
Location ID	SP- 123637 DZ 9/17/03	SP- 123638 DZ 9/17/03	SP- 123638 DZ 9/17/03
Sample Group	ROAD (16 N)	ROAD (16 S)	ROAD (16 S) DUP
Location Description (circle)	Back yard Front yard Side yard Driveway Other Area (16 N)	Back yard Front yard Side yard Driveway Other Area (16 S)	Back yard Front yard Side yard Driveway Other AREA (16 S)
Category (circle)	FS FD of ___ Field Blank (lot or equipment)	FS FD of ___ Field Blank (lot or equipment)	FS 9/17/03 FD of CS-17131 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	~~13~~ 9/17/03 1417	1422	1426
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments Note if vermiculite is visible in sampled area	BD- ~~CM~~ sample 10' FROM RD CENTER - MODERATE L.V. 100' E - MODERATE L.V. 100' W - TRACE L.V.	BD- Sample 10' FROM RD, CENTER - NO L.V. 100' E - NO L.V. 100' W - NO L.V	BD- SAMPLE 10' FROM RD. CENTER - NO L.V. 100' E ~~10~~ NO L.V 100' W NO L.V.
Entered (LFO) ps	Volpe: Entered ___ Validated ___	Volpe: Entered ___ Validated ___	Volpe: Entered ___ Validated ___

For Field Team Completion (Provide Initials)	Completed by D.Z	QC by AH

DW 091703

vs 052003

Sheet No.: CSS-S- 005824

CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100275 Page No: 75 Sampling Date: 9/17/03

Address: Highway 37N - Right of Way Owner/Tenant: Montana DOT

Business Name: to 12/9/04

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

Sampling Team: (circle) CDM MACTEC Other _____ Names: Danny Zambrano, Robert Hunt

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 17133	CS- 17134	CS- 17135
Location ID	SP- 123639	SP- 123640	SP- 123641
Sample Group	Road (~~17~~ 15N)	Road (15S)	~~Road~~ Road (14S) (14N)
Location Description (circle)	Back yard Front yard Side yard Driveway Other Area 15N	Back yard Front yard Side yard Driveway Other Area 15S	Back yard Front yard Side yard Driveway Other Area 14N
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	1524	1527	1621
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments Note if vermiculite is visible in sampled area	BD- Sample 10' FROM RD CENTER - MODERATE L.V. 100' E - MODERATE L.V. 100' W - MODERATE L.V.	BD- Sample 10' FROM RD CENTER - NO L.V 100' E - NO L.V 100' W - NO L.V.	BD- Sample - 10' FROM RD CENTER - MODERATE L.V. 100' E - MODERATE L.V. 100' W - MODERATE L.V.
Entered (LFO) ps	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____

For Field Team Completion (Provide Initials)	Completed by RH	QC by RH

DW 091703

vs 052003

Sheet No.: CSS-S- 005825

CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION
FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100275 Page No: 75 Sampling Date: 9/17/03

Address: Highway 37 N - Right of Way Owner/Tenant: Montana D.O.T

Business Name: yb 12/9/04

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

Sampling Team: (circle) CDM MACTEC Other _____ Names: Robert Hunt, Danny Zambrano

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 17136 9/17/03 DZ		
Location ID	SP- 123642 9/17/03 DZ		
Sample Group	Road (145)		
Location Description (circle)	Back yard Front yard Side yard Driveway Other	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 3	Grab Comp. # subsamples ____	Grab Comp. # subsamples ____
Sample Time	1623		
Top Depth (in.)	0		
Bottom Depth (in.)	6		
Field Comments Note if vermiculite is visible in sampled area	BD- SAMPLE 10' FROM RD CENTER - NO L.V. 100' W - 1 FLAKE OF LV 100' E - NO L.V.	BD-	BD-
Entered (LFO) RS	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____

For Field Team Completion (Provide Initials)	Completed by D.Z	QC by RH

DZ 091703

vs 052003

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Sheet No.: CSS-S- 005827

CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 120275 Page No: 78 Sampling Date: 9/12/03

Address: Highway 37N - Right of way Owner/Tenant: Montana D.O.T

Business Name: JB 12/9/04

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

Sampling Team: (circle) CDM MACTEC Other _____ Names: BOB HUNT / DANNY ZAMBRANO

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 17138 9/12/03	CS- 17139 9/12/03	CS- 17140 9/12/03
Location ID	SP- 123643 DZ	SP- 123644 DZ	SP- 123645 DZ
Sample Group	ROAD (13 N)	ROAD (13 S)	ROAD (12 N)
Location Description (circle)	Back yard Front yard Side yard Driveway Other Area (13 N)	Back yard Front yard Side yard Driveway Other Area (13 S)	Back yard Front yard Side yard Driveway Other Area (12 N)
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	0957	0903	0943
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments Note if vermiculite is visible in sampled area	BD- SAMPLE 10' FROM RD center trace L.V. 100' E - MODERATE L.V. 100' W MODERATE L.V.	BD- Sample 10' FROM RD center - NO L.V 100' E - NO L.V 100' W NO L.V	BD- SAMPLE 10' FROM RD Center - NO L.V 100' E - NO L.V - 100' W NO L.V.
Entered (LFO) PS	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____

For Field Team Completion (Provide Initials)	Completed by EM	QC by D.Z

DW 091803

vs.052003

Sheet No.: CSS-S- 005828

CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION
FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 60275 Page No: 78-79 Sampling Date: 9/18/03

Address: HIGHWAY 37 Owner/Tenant: MONTANA D.O.T

Business Name: ——

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

Sampling Team: (circle) CDM MACTEC Other — Names: DANNY ZAMBANO, ROBERT HUNT

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 17141	CS- 17142	CS- 17143
Location ID	SP- 123646 DZ 9/18/03	SP- 123647 DZ 9/18/03	SP- 123648
Sample Group	ROAD (12 S)	ROAD (11 N)	ROAD (11 S)
Location Description (circle)	Back yard Front yard Side yard Driveway Other AREA (12 S)	Back yard Front yard Side yard Driveway Other AREA (11 N)	Back yard Front yard Side yard Driveway Other AREA (11 S)
Category (circle)	ES DZ 9/18/03 FD of ____ Field Blank (lot or equipment)	ES FD of ____ Field Blank (lot or equipment)	ES 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 DZ 9/18/03 Comp. # subsamples 3	Grab Comp. # subsamples 3	Grab 9/18/03 Comp. # subsamples 3
Sample Time	0949	1010	1017
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments Note if vermiculite is visible in sampled area	BD- Sample 10' from RD Center - NO LIV 100 E NO LIV 100 W NO LIV	BD- SAMPLE 10' FROM RD CENTER - LIV. (TRACE) 100' E - NO LIV. 100' W - TRACE LIV.	BD- Sample 10' FROM RD CENTER - NO LIV. 100' E ~~NO LIV~~ TRACE LIV 100' W NO LIV 9/18/03
Entered (LFO) PS	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____

For Field Team Completion (Provide Initials)	Completed by RM	QC by D.Z

DW 091803

vs 052003

Sheet No.: CSS-S- 005829

CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100275 Page No: 79 Sampling Date: 9/18/03

Address: HIGHWAY 37 Owner/Tenant: MONTANA DOT

Business Name: _____

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

Sampling Team: (circle) (CDM) MACTEC Other _____ Names: Danny Zimmerman, Robert Hunt

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 17144	CS- 17145	CS- 17146
Location ID	SP- 123649	SP- 123650	SP- 123650
Sample Group	Road (10N)	Road (10S)	Road (10S-Dup)
Location Description (circle)	Back yard Front yard Side yard Driveway (Other) Area 10N	Back yard Front yard Side yard Driveway (Other) Area 10S	Back yard Front yard Side yard Driveway (Other) Area 10S
Category (circle)	(FS) FD of _____ Field Blank (lot or equipment)	(FS) FD of _____ Field Blank (lot or equipment)	FS 9/19/03 (FD) of CS-17145 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	1046	1051
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments Note if vermiculite is visible in sampled area	BD- Sample 10' from RD Center - No Liv. 100' E - Trace Liv. 100' W - Moderate Liv.	BD- Sample 10' from RD Center - Moderate Liv 100' E Trace Liv. 100' W Moderate Liv	BD- Sample 10' from RD Center Moderate Liv. 100' E - Trace Liv 100' W - Moderate Liv
Entered (LFO) ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____

For Field Team Completion (Provide Initials)	Completed by RH	QC by DZ

DW 091803

vs 052003

REVISED

Sheet No.: CSS-S- 005830

CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100275 Page No: 80 Sampling Date: 9/18/03

Address: ~~Highway 3-D~~ Highway 37N - Right of Way Owner/Tenant: MONTANA D.O.T

Business Name: JB 12/3/04

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

Sampling Team: (circle) CDM MACTEC Other _____ Names: ROBERT HUNT, DANNY ZAMBRANO

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 17147	CS- 17148	CS- 17149
Location ID	SP- 123651	SP- 123652	SP- 123653
Sample Group	Road (9N)	Road (9S)	Road (8N)
Location Description (circle)	Back yard Front yard Side yard Driveway Other Area 9N	Back yard Front yard Side yard Driveway Other Area 9S	Back yard Front yard Side yard Driveway Other Area 8N
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	1119	1124	1331
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments Note if vermiculite is visible in sampled area	BD- Sample 10' From RD Center - Moderate L.V. 100' E Moderate L.V. 100' W Moderate L.V.	BD- Sample 10' From RD Center Trace L.V. 100' E Trace L.V. 100' W ~~Trace~~ Trace L.V. BL 9/16	BD- Sample 10' From Rd ~~From RD~~ BL 9/16 Center Moderate L.V. 100' E - Trace L.V. 100' W - Moderate L.V.
Entered (LFO) PS	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____

For Field Team Completion (Provide Initials)	Completed by RH	QC by D.Z

DW 091803

vs 052003

Sheet No.: CSS-S- 005831-

CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100275 Page No: 80-81 Sampling Date: 9/18/03

Address: HIGHWAY 37 N Right of Way Owner/Tenant: MONTANA DOT

Business Name: ~~JB 12/9/04~~

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

Sampling Team: (circle) CDM MACTEC Other _____ Names: ROBERT HUNT, DANNY ZAMBERNO

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 17150	CS- 17151	CS- 17152
Location ID	SP- 123654	SP- 123655	SP- 123656
Sample Group	Road (8S)	Road (7N)	Road (7S)
Location Description (circle)	Back yard Front yard Side yard Driveway Other Area 8S	Back yard Front yard Side yard Driveway Other Area 7N	Back yard Front yard Side yard Driveway Other Area 7S
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	1333	1359	1402
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments Note if vermiculite is visible in sampled area	BD- ~~Sample~~ Sample 10' from RD Center - trace LV 100' E trace LV 100' W trace LV	BD- SAMPLE 10' FROM RD CENTER - MODERATE LV 100' E - NO LV 100' W MODERATE LV	BD- Sample 10' From RD Center - NO LV 100' E - NO LV 100' W - NO LV
Entered (LFO) DS	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____

For Field Team Completion (Provide Initials)	Completed by RW	QC by D.Z

DW 09/8/03

vs 052003

REVISED

Sheet No.: CSS-S- 005832

CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100275 Page No: 81-82 Sampling Date: 9/18/03

Address: HIGHWAY 37N- Right of Way Owner/Tenant: MONTANA DOT

Business Name: 9/18/ 12/9/04

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

Sampling Team: (circle) CDM MACTEC Other _____ Names: ROBERT HUNT DANNY ~~ZAMBRANO~~ ZAMBRANO

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 17153	CS- 17154	CS- 17155
Location ID	SP- 123657	SP- 123658	SP- 123659
Sample Group	Road ~~(6N)~~ (6N)	Road (6S)	Road (5N)
Location Description (circle)	Back yard Front yard Side yard Driveway Other AREA 6N	Back yard Front yard Side yard Driveway Other AREA 6S	Back yard Front yard Side yard Driveway Other AREA 5N
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	1437	1441	1507
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments Note if vermiculite is visible in sampled area	BD- SAMPLE 10' FROM RD Center - TRACE L.V 100' E TRACE L.V 100' W TRACE L.V	BD- Sample 10' FROM RD Center - NO L.V. 100' E NO L.V. 100' W TRACE L.V	BD- SAMPLE 10' FROM RD Center - Trace LV 100' E - no LV 100' W - no LV
Entered (LFO) RS	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____

For Field Team Completion (Provide Initials)	Completed by AJ	QC by D.Z

OW 091803

vs 052003

Sheet No.: CSS-S- 005833

CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100275 Page No: 82 Sampling Date: 9/18/03

Address: HIGHWAY 37N - Right of Way Owner/Tenant: MONTANA DOT

Business Name: 30 12/9/04

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

Sampling Team: (circle) CDM MACTEC Other — Names: ROBERT HUNT DANNY ZAMBRANO

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 17156	CS- 17157	CS- 17158
Location ID	SP- 123660	SP- 123661	SP- 123662
Sample Group	Road (5S)	Road (4N)	Road (4S)
Location Description (circle)	Back yard Front yard Side yard Driveway Other AREA 5S	Back yard Front yard Side yard Driveway Other Area 4N	Back yard Front yard Side yard Driveway Other AREA 4S
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	1509	1538	1541
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	0
Field Comments Note if vermiculite is visible in sampled area	BD- Sample 10' FROM RD Center - No LV 100' E No LV 100' W No LV	BD- Sample 10' FROM RD Center - NO L.V. 100' E NO L.V. 100' W NO L.V.	BD- Sample 10' FROM RD CENTER - NO L.V. 100' E NO L.V. 100' W NO L.V.
Entered (LFO) PS	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____

For Field Team Completion (Provide Initials)	Completed by RH	QC by D.Z

DW 091803

vs 052003

Sheet No.: CSS-S- 005834

CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100257 Page No: 83 Sampling Date: 9/18/03

Address: HIGHWAY 37N-Right of Way Owner/Tenant: MONTANA D.O.T

Business Name: jh 12/9/04

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

Sampling Team: (circle) CDM MACTEC Other — Names: ROBERT HUNT DANNY ZAMBRANO

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 17159 ✓	CS- 17160 ✓	CS-17281 ✓ ~~CS- 17281~~ [illegible]
Location ID	SP- 123663	SP- 123664	SP- 123665
Sample Group	Road ~~3 Ft~~ DW 91803 (3N)	Road (3S)	Road (1N)
Location Description (circle)	Back yard Front yard Side yard Driveway Other Area 3N	Back yard Front yard Side yard Driveway Other Area 3S	Back yard Front yard Side yard Driveway Other Area 1N
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	1554	1559	1614
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments Note if vermiculite is visible in sampled area	BD-SAMPLE 10' FROM RD CENTER — NO L.V. 25' E - NO L.V. 25' W NO L.V.	BD-Sample 10' FROM RD CENTER - NO L.V. 25' E - NO L.V. 25' W NO L.V.	BD- SAMPLE 10' FROM ROAD. CENTER - NO L.V. 100' E - NO L.V. 100' W - NO L.V.
Entered (LFO) JS	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____

For Field Team Completion (Provide Initials)	Completed by RM	QC by D.Z

DW 091803

vs 052003

REVISED

Sheet No.: CSS-S- 005836

CONTAMINANT SCREENING STUDY/REMEDIAL INVESTIGATION

FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Scenario No.: NA Field Logbook No: 100275 Page No: 83-84 Sampling Date: 9/18/03

Address: HIGHWAY 37 N - Right of Way Owner/Tenant: MONTANA DOT

Business Name: JG 12/9/04

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

Sampling Team: (circle) CDM MACTEC Other ____ Names: ROBERT HUNT, DANNY ZAMBRANO

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 17282	CS- 17283	CS- 17284
Location ID	SP- 123666	SP- 123667	SP- 123668
Sample Group	Road (1S)	Road (2N)	Road (2S)
Location Description (circle)	Back yard Front yard Side yard Driveway Other Area 1S	Back yard Front yard Side yard Driveway Other Area 2N	Back yard Front yard Side yard Driveway Other Area 2S
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	1616	1644	1646
Top Depth (in.)	0	0	0
Bottom Depth (in.)	6	6	6
Field Comments Note if vermiculite is visible in sampled area	BD- Sample 10' from Rd Center - NO L.V. 100' E - NO L.V. 100' W - NO L.V.	BD- Sample 20' from Rd Center - no L.V. 100' E - no L.V. 100' W - no L.V. TC 9/19/03	BD- Sample Center - no L.V. 100' E - no L.V. 100' W - no L.V. TC 9/19/03
Entered (LFO) ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____

For Field Team Completion (Provide Initials)	Completed by RM	QC by DZ

DW 091803

vs 052003

Sheet No.: S- 000910

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Field Logbook No: 100429 Page No: 85-87 Sampling Date: 5/23/05

Address: Highway 37 N Right of Way Owner/Tenant: D.O.T. of Montana

Business Name: NA

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

Sampling Team: MACTEC (CDM) Other _____ Names: D. Hunt, K. Fortner, N. Baines

Data Item	Sample 1	Sample 2	Sample 3
Index ID	NA 052305 CS- 20222	CS- 20223	CS- 20224
Location ID	NA 052305 SP- 126921	SP- 126921	SP- 126922
Sample Group	Road	Road	Road
Location Description (circle)	Back yard Front yard Side yard Driveway (Other) Right of Way	Back yard Front yard Side yard Driveway (Other) Right of Way	Back yard Front yard Side yard Driveway (Other) Right of Way
Category (circle)	(FS) FD of _____ Field Blank (lot or equipment)	FS (SS) ~~FD~~ of CS-20222 NA 052305 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	1114	1114	1131
Top Depth (in.)	0	0	0
Bottom Depth (in.)	1	1	1
Field Comments Note if vermiculite is visible in sampled area	BD- NA 052305 No LV in sample in all 3 points Near CS-17160 PLM 9002	BD- NA 052305 No LV in sample in all 3 points Near CS-17160 PLM-VE PLM-GRAV	BD- NA 052305 - No LV in sample - No LV - No LV Near CS-17157 PLM 9002
Entered (LFO) ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____

For Field Team Completion (Provide Initials)	Completed by NK	QC by KF

vs 101503

Sheet No.: S- 000911

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Field Logbook No: 100429 Page No: 85-87 Sampling Date: 5/23/05

ddress: Highway 37 N Right of Way Owner/Tenant: D.O.T. of Montana

Business Name: NA

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

Sampling Team: MACTEC (CDM) Other _____ Names: D. Hunt, K. Fortner, N. Rainer

Data Item	Sample 1	Sample 2	Sample 3
Index ID	NA 052305 CS- 20225	CS- 20226	CS- 20227
Location ID	NA 052305 SP- 126922	SP- 126923	SP- 126923
Sample Group	Road	Road	Road
Location Description (circle)	Back yard Front yard Side yard Driveway (Other) Right of Way	Back yard Front yard Side yard Driveway (Other) Right of Way	Back yard Front yard Side yard Driveway (Other) Right of way
Category (circle)	FS (SS) ~~FD~~ of CS-20224 NA 052305 Field Blank (lot or equipment)	(FS) FD of _____ Field Blank (lot or equipment)	FS (SS) ~~FD~~ of CS-20226 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	1131	1155	1155
Top Depth (in.)	0	0	0
Bottom Depth (in.)	1	1	1
Field Comments Note if vermiculite is visible in sampled area	BQ- NA 052305 No LV in sample No LV No LV Near CS-17157 PLM-VE PLM-GRAV	BQ- NA 052305 Trace LV in all 3 points Near CS-17151 PLM 9002	BQ- NA 052305 Trace LV in all 3 points Near CS-17151 PLM-VE PLM-GRAV
Entered (LFO) ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____

For Field Team Completion (Provide Initials)	Completed by NH	QC by KF

vs 101503

Sheet No.: S- 000912

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Field Logbook No: 100429 Page No: 85-87 Sampling Date: 5/23/05

Address: Highway 37 N Right of Way Owner/Tenant: D.O.T. of Montana

Business Name: NA

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

Sampling Team: MACTEC (CDM) Other _____ Names: B. Hunt, K. Fortner, N. Rivers

Data Item	Sample 1	Sample 2	Sample 3
Index ID	NR 052305 CS- 20228	CS- 20229	CS- 20230
Location ID	NR 052305 SP- 126924	SP- 126924	SP- 126925
Sample Group	Road	Road	Road
Location Description (circle)	Back yard Front yard Side yard Driveway (Other) Right of Way	Back yard Front yard Side yard Driveway (Other) Right of Way	Back yard Front yard Side yard Driveway (Other) Right of Way
Category (circle)	(FS) FD of _____ Field Blank (lot or equipment)	FS ~~FD~~ of CS-20228 NR 052305 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	1254	1254	1310
Top Depth (in.)	0	0	0
Bottom Depth (in.)	1	1	1
Field Comments Note if vermiculite is visible in sampled area	BD- NR 052305 Center - No LV 100' South - Trace LV 100' North - Trace LV Near LS-17150 PLM-9003	BD- NR 052305 Center - No LV 100' South - Trace LV 100' North - Trace LV Near LS 17150 PLM-VE PLM-GRAY	BD- NR 052305 No LV in all 3 points Near LS-17145 PLM-9002
Entered (LFO) _____	Volpe: Entered _____ Validated _____	Volpe: Entered _____ Validated _____	Volpe: Entered _____ Validated _____

For Field Team Completion (Provide Initials)	Completed by NR	QC by KF

vs 101503

Sheet No.: S- 000913

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Field Logbook No: 100429 Page No: 85-87 Sampling Date: 05/23/05

Address: Hwy 37 N Right of Way Owner/Tenant: D.O.T. of Montana

Business Name: NA

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

Sampling Team: MACTEC (CDM) Other _____ Names: B. Hunt, K. Fortner, N. Raines

Data Item	Sample 1	Sample 2	Sample 3
Index ID	NR 052305 CS- 20231	CS- 20232	CS- 20233
Location ID	NR 052305 SP- 126925	SP- 126926	SP- 126926
Sample Group	Road	Road	Road
Location Description (circle)	Back yard Front yard Side yard Driveway (Other) Right of Way	Back yard Front yard Side yard Driveway (Other) Right of Way	Back yard Front yard Side yard Driveway (Other) Right of Way
Category (circle) NR 052305	(FS) (SS) FQ of CS-20230 Field Blank (lot or equipment)	(FS) FD of _____ Field Blank (lot or equipment)	FS (SS) NR 052305 FQ of CS-20232 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	1310	1333	1333
Top Depth (in.)	0	0	0
Bottom Depth (in.)	1	1	1
Field Comments Note if vermiculite is visible in sampled area	~~BD-~~ NR 052305 No LV in all 3 points Near CS-17145 PLM-VE PLM-GRAV	~~BD-~~ NR 052305 No LV in all 3 points PLM-9002	~~BD-~~ NR 052305 No LV in all 3 points PLM-VE PLM-GRAV
Entered (LFO) ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____

For Field Team Completion (Provide Initials)	Completed by NR	QC by KF

vs 101503

Sheet No.: S- 000914

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Field Logbook No: 100429 Page No: 85 - 87 Sampling Date: 05/23/05

Address: Hwy 37N Right of Way Owner/Tenant: D.O.T. of Montana

Business Name: NA

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

Sampling Team: MACTEC CDM Other _____ Names: B. Hunt, K. Fortner, N. Raines

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 20234 NA 05 0305	CS- 20235	CS- 20236
Location ID	SP- 126927 NA 05 0305	SP- 126927	SP- 126928
Sample Group	Road	Road	Road
Location Description (circle)	Back yard Front yard Side yard Driveway (Other) Right of Way	Back yard Front yard Side yard Driveway (Other) Right of way	Back yard Front yard Side yard Driveway (Other) Right of way
Category (circle)	(FS) FD of _____ Field Blank (lot or equipment)	FS (FD) NA 05 0305 FD of CS-20234 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	1403	1403	1450
Top Depth (in.)	0	0	0
Bottom Depth (in.)	1	1	1
Field Comments Note if vermiculite is visible in sampled area	~~BD-~~ NA 05 0305 Center - Trace LV 100' South - No LV 100' North - Trace LV PLM-9002	BD- NA 05 0305 Center - Trace LV 100' South - No LV 100' North - Trace LV PLM-VE PLM-GRAV	BD- NA 05 0305 No LV in all 3 points Near CS-17134 PLM-9002
Entered (LFO) ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____

For Field Team Completion (Provide Initials)	Completed by NR	QC by KF

vs 101503

Sheet No.: S- 000915

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Field Logbook No: 100429 Page No: 85-87 Sampling Date: 05-23-05

Address: Hwy 37N Right of Way Owner/Tenant: D.O.T. of Montana

Business Name: NA

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

Sampling Team: MACTEC (CDM) Other _____ Names: B. Hunt, N. Raines, K. Farmer

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 20237 NA 052305	CS- 20238	CS- 20239
Location ID	SP- 126928 NA 052305	SP- 126929	SP- 126929
Sample Group	Road	Road	Road
Location Description (circle)	Back yard Front yard Side yard Driveway (Other) Right of Way	Back yard Front yard Side yard Driveway (Other) Right of Way	Back yard Front yard Side yard Driveway (Other) Right of Way
Category (circle)	FS (SS) NF 05-23-05 ~~FD~~ of CS-20236 Field Blank (lot or equipment)	(FS) FD of _____ Field Blank (lot or equipment)	FS (SS) NF 05-23-05 ~~FD~~ of CS-20238 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	1450	1510	1510
Top Depth (in.)	0	0	0
Bottom Depth (in.)	1	1	1
Field Comments Note if vermiculite is visible in sampled area	BD- NA 052305 No LV in all 3 points Near CS-17134 PLM-VE PLM-GRAV	BD- NA 052305 center - Trace LV 100' S - Trace LV 100' N - ~~Moderate~~ High LV NA 052305 Near CS-17130 PLM-9002	BD- NA 052305 Center - Trace LV 100' S - Trace LV 100' N - ~~Moderate~~ High LV NA 052305 Near CS-17130 PLM-VE PLM-GRAV
Entered (LFO) ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____

For Field Team Completion (Provide Initials)	Completed by NR	QC by KF

vs 101503

Sheet No.: S- 000916

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Field Logbook No: 100429 Page No: 85-87 Sampling Date: 5/23/05

ddress: Highway 37 N Right of way Owner/Tenant: Montana D.O.T.

Business Name: NA

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

Sampling Team: MACTEC CDM Other _____ Names: B. Hunt, K. Fortner, N. Rines

Data Item	Sample 1	Sample 2	Sample 3
Index ID	CS- 20240	NA 052305 CS-20241	CS- 20202
Location ID	SP- 126930	NA 052305 SP- 126930	SP- 126931
Sample Group	Road	Road	Road
Location Description (circle)	Back yard Front yard Side yard Driveway (Other) Right of way	Back yard Front yard Side yard Driveway (Other) Right of way	Back yard Front yard Side yard Driveway (Other) Right of way
Category (circle)	(FS) FD of _____ Field Blank (lot or equipment)	FS (SS) FD of CS-20240 NA 052305 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	1530	1530	1547
Top Depth (in.)	0	0	0
Bottom Depth (in.)	1	1	1
Field Comments Note if vermiculite is visible in sampled area	BD- NA 052305 Center - Trace LV 100' S - No LV 100' N - Moderate LV Near CS-17127 PLM-9002	BD- NA 052305 Center - Trace LV 100' S - No LV 100' N - Moderate LV Near CS-17127 PLM-VE PLM-GRAY	BD- NA 052305 Center - High LV 100' S - Moderate LV 100' N - Trace LV Near CS-16890 PLM-9002
Entered (LFO) ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____

For Field Team Completion (Provide Initials)	Completed by NR	QC by KF

vs 101503

Sheet No.: S- 000917

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR SOIL

Field Logbook No: 100429 Page No: ~~87~~ 85-87 (NA 052305) Sampling Date: 05/23/05

Address: Hwy 37 N Right of Way Owner/Tenant: D.O.T. of Montana

Business Name: NA

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

Sampling Team: MACTEC (CDM) Other _____ Names: B. Hunt, N. Raines, K. Fortner

Data Item	Sample 1	Sample 2	Sample 3
Index ID	NA 052305 CS- 20203	CS- 20204	CS- 20205
Location ID	NA 052305 SP- 126931	SP- 126932	SP- 126932
Sample Group	Road	Road	Road
Location Description (circle)	Back yard Front yard Side yard Driveway (Other) Right of way	Back yard Front yard Side yard Driveway (Other) Right of way	Back yard Front yard Side yard Driveway (Other) Right of way
Category (circle)	FS (SS) KF 05-23-05 ~~FD~~ of CS-20202 Field Blank (lot or equipment)	(FS) FD of _____ Field Blank (lot or equipment)	FS (SS) KF 05-23-05 ~~FD~~ of CS-20204 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	1547	1602	1602
Top Depth (in.)	0	0	0
Bottom Depth (in.)	1	1	1
Field Comments Note if vermiculite is visible in sampled area	NA 052305 BD-_____ Center- High LV 100' S- Moderate LV 100' N- Trace LV Near LS-16880 PLM-VE PLM-GRAV	NA 052305 BD-_____ Center - Moderate LV 100' S - Moderate LV 100' N - No LV Near CS-16874 PLM-9002	NA 052305 BD-_____ Center- Moderate LV 100' S- Moderate LV 100' N- No LV Near LS 16874 PLM-VE PLM-GRAV
Entered (LFO) ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____

For Field Team Completion (Provide Initials)	Completed by NR	QC by KF

vs 101503

Sheet No.: SA-00200[illegible]

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR STATIONARY AIR

Field Logbook No: 100434 Page No: 28,29 Sampling Date: 5-23-05

Address: Highway 37 Right of way Owner/Tenant: Montana Dot

Business Name: N/A

Land Use: Residential School Commercial Mining Roadway Other ( )

Sampling Team: MACTEC CDM Other _____ Names: Repine, Rakowski

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	CS- 20242	CS- 20243	CS- 20244
Location ID	SP- 126961	SP- 126962	SP- 126963
Sample Group	Road	Road	Road.
Location Description	S of Intersection of River Runs through IT and Hwy 37	S of Intersection of Rainy creek Rd and Hwy 37.	4.5 Mile mark Pull out.
Category (circle)	FS FB-(field blank) LB-(lot blank)	FS FB-(field blank) LB-(lot blank)	FS FB-(field blank) LB-(lot 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- .46 PCM- 0.8	TEM- .45 PCM- 0.8	TEM- .45 PCM- 0.8
Flow Meter Type (circle)	Rotometer DryCal NA	Rotometer DryCal NA	Rotometer DryCal NA
Pump ID Number	691335	666523	626656
Flow Meter ID No.	100916-2	100916-2	100916-2
Start Date	5-23-05	5-23-05	5-23-05
Start Time	8:05	8:09	8:15
Start Flow (L/min)	3.14.	3.14	3.14
Stop Date	5-23-05	5-23-05	5-23-05
Stop Time	1440	1443	1447
Stop Flow (L/min)	3.14	3.14	3.37
Pump fault? (circle)	No Yes NA	No Yes NA	No Yes NA
MET Station onsite?	No Yes NA	No Yes NA	No Yes NA
Sample Type	Pre Post Clear 2nd Clear 3rd Clear NA	Pre Post Clear 2nd Clear 3rd Clear NA	Pre Post Clear 2nd Clear 3rd Clear NA
Field Comments			
Cassette Lot Number: 426W	Archive Blank (circle): Yes No	Archive Blank (circle): Yes No	Archive Blank (circle): Yes No
QC (Field Team) VD Entered (LFO) [illegible]	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____

For Field Team Completion (Provide Initials) DR JR	Completed by J.R	QC by [illegible]

Sheet No.: SA- 002005

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR STATIONARY AIR

Field Logbook No: 100434 Page No: 28, 29 Sampling Date: 5-23-05

Address: Highway 37N Right of way Owner/Tenant: Montana Dot

Business Name: N/A

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

Sampling Team: MACTEC (CDM) Other _____ Names: Repine, Rakowski

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	CS- 20245	CS- 20246	CS- 20247
Location ID	SP- 126964	SP- 126965	SP- 126966
Sample Group	Road	Road	Road
Location Description	S of Intersection of Rivers Edge Trailer court And Hwy 37N	West side of Hwy 37N At 3.30 mile marker.	S of Intersection of Mack Rd And Hw 37N
Category (circle)	(FS) FB-(field blank) LB-(lot blank)	(FS) FB-(field blank) LB-(lot blank)	(FS) FB-(field blank) LB-(lot 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 NA	(Rotometer) DryCal NA	(Rotometer) DryCal NA
Pump ID Number	691275	626620	666418
Flow Meter ID No.	100916-2	100916-2	100916-2
Start Date	5-23-05	5-23-05	5-23-05
Start Time	8:20	8:24	8:29
Start Flow (L/min)	3.14	3.14	3.14
Stop Date	5-23-05	5-23-05	5-23-05
Stop Time	1450	1453	1457
Stop Flow (L/min)	3.14	3.14	3.14
Pump fault? (circle)	(No) Yes NA	(No) Yes NA	(No) Yes NA
MET Station onsite?	(No) Yes NA	(No) Yes NA	(No) Yes NA
Sample Type	Pre Post Clear 2nd Clear 3rd Clear (NA)	Pre Post Clear 2nd Clear 3rd Clear (NA)	Pre Post Clear 2nd Clear 3rd Clear (NA)
Field Comments			
Cassette Lot Number: 426W	Archive Blank (circle): Yes (No)	Archive Blank (circle): Yes (No)	Archive Blank (circle): Yes (No)
QC (Field Team) Entered (LFO)	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____

For Field Team Completion (Provide Initials) DR, JR	Completed by J.R	QC by

Sheet No.: SA- 002000

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR STATIONARY AIR

Field Logbook No: 100434 Page No: 28, 29 Sampling Date: 5-23-05

Address: Highway 37N Right of Way Owner/Tenant: Montana DOT

Business Name: N/A

Land Use: Residential School Commercial Mining Roadway Other ( )

Sampling Team: MACTEC CDM Other _____ Names: Repine, Rakowski

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	CS- 20248	CS- 20249	CS- 20250
Location ID	SP- 126967	SP- 126968	SP- 126969
Sample Group	Road	Road	Road
Location Description	04.5.23-05 ~~5~~ 1675 04.5.23-05 S of Intersection of ~~1673~~ driveway 1673 and Hwy 37N	S of 04.5.23-05 Intersection of Entrance to J. Neils Park and Hwy 37N	S of Intersection of Pipe creek Rd and Hwy 37N
Category (circle)	FS FB-(field blank) LB-(lot blank)	FS FB-(field blank) LB-(lot blank)	FS FB-(field blank) LB-(lot 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 NA	Rotometer DryCal NA	Rotometer DryCal NA
Pump ID Number	691259	602269	691350
Flow Meter ID No.	100916-2	100916-2	100916-2
Start Date	5-23-05	5-23-05	5-23-05
Start Time	8:32	8:37	8:40
Start Flow (L/min)	3.14	3.14	3.14
Stop Date	5-23-05	5-23-05	5-23-05
Stop Time	1500	1504	1507
Stop Flow (L/min)	3.14	3.14	3.14
Pump fault? (circle)	No Yes NA	No Yes NA	No Yes NA
MET Station onsite?	No Yes NA	No Yes NA	No Yes NA
Sample Type	Pre Post Clear 2nd Clear 3rd Clear NA	Pre Post Clear 2nd Clear 3rd Clear NA	Pre Post Clear 2nd Clear 3rd Clear NA
Field Comments Cassette Lot Number: 426W	Archive Blank (circle): Yes No	Archive Blank (circle): Yes No	Archive Blank (circle): Yes No
QC (Field Team) CS Entered (LFO) JD	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____

For Field Team Completion (Provide Initials) DR, JR	Completed by J.R	QC by [illegible]

Sheet No.: SA- 00600

LIBBY FIELD SAMPLE DATA SHEET (FSDS) FOR STATIONARY AIR

Field Logbook No: 100434 Page No: 28, 29 Sampling Date: 5-23-05

Address: Highway ~~Hwy~~ 37 Right of Way Owner/Tenant: MONTANA DOT

Business Name: N/A

Land Use: Residential School Commercial Mining Roadway Other ( )

Sampling Team: MACTEC CDM Other _____ Names: Repetre, Rakowski

Data Item	Cassette 1	Cassette 2	Cassette 3
Index ID	CS- 20251		
Location ID	SP- 126970 JR 5-23-05		
Sample Group	Road.		
Location Description	S of Intersection of Park and Hwy 37N		
Category (circle)	FS FB-(field blank) LB-(lot blank)	FS FB-(field blank) LB-(lot blank)	FS FB-(field blank) LB-(lot 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 NA	Rotometer DryCal NA	Rotometer DryCal NA
Pump ID Number	691433		
Flow Meter ID No.	100916-2		
Start Date	5-23-05		
Start Time	8:43		
Start Flow (L/min) PA	~~5.43~~ 3.14		
Stop Date 5-23-05	5-23-05		
Stop Time	1510		
Stop Flow (L/min)	3.14		
Pump fault? (circle)	No Yes NA	No Yes NA	No Yes NA
MET Station onsite?	No Yes NA	No Yes NA	No Yes NA
Sample Type	Pre Post Clear 2nd Clear 3rd Clear NA	Pre Post Clear 2nd Clear 3rd Clear NA	Pre Post Clear 2nd Clear 3rd Clear NA
Field Comments Cassette Lot Number: 426N	Archive Blank (circle): Yes No	Archive Blank (circle): Yes No	DR 5-23-05 Archive Blank (circle): Yes No
QC (Field Team) CR Entered (LFO) JB	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____	Volpe: Entered ____ Validated ____

For Field Team Completion (Provide Initials) DR, JR	Completed by JR	QC by JB

Appendix H
Analytical Results for 2001 and 2005
Highway 37 Air Sampling

Sample ID	Sample Date	Sample Type	Analysis Method	LA Structures Detected	Analytical Sensitivity	Concentration (S/cc)	Location Description
1R-05995	7/17/2001	Personal	ISO	0	0.1279	< 0.1279	Drive from Plummer to Flyway; roundtrip
1R-05996	7/17/2001	Personal	ISO	0	0.1088	< 0.1088	Drive from Plummer to Flyway; roundtrip
1R-05997	7/18/2001	Personal	ISO	0	0.1186	< 0.1186	Drive from Plummer to Screening Plant; roundtrip
1R-05998	7/18/2001	Personal	ISO	0	0.1231	< 0.1231	Drive from Plummer to Flyway; roundtrip
1R-05999	7/18/2001	Personal	ISO	0	0.1165	< 0.1165	Drive from Plummer to Flyway; roundtrip
1R-06046	7/18/2001	Personal	ISO	0	0.0577	< 0.0577	Walk from Mack's Mart to Screening Plant
1R-06047	7/18/2001	Personal	ISO	0	0.1020	< 0.1020	Walk from 402 Highway 2 West to Mack's Mart
1R-06054	7/19/2001	Personal	PCM	0	0.0490	< 0.0490	Drive from Plummer to Flyway then Screening Plant, following truck; roundtrip
1R-06055	7/19/2001	Personal	PCM	0	0.0530	< 0.0530	Drive from Plummer to Flyway then Screening Plant, following truck; roundtrip
1R-06056	7/19/2001	Personal	PCM	0	0.0490	< 0.0490	Drive from Plummer to Flyway then Screening Plant, following truck; roundtrip
1R-06057	7/19/2001	Personal	PCM	0	0.0930	< 0.0930	Drive from Plummer to Flyway then Screening Plant, following truck; one-way
1R-06130	7/20/2001	Personal	ISO	0	0.1238	< 0.1238	Drive from Plummer to Screening Plant, following truck; roundtrip
1R-06130	7/20/2001	Personal	AHERA	2	0.0585	0.1170	Drive from Plummer to Screening Plant, following truck; roundtrip
1R-06131	7/20/2001	Personal	ISO	0	0.1148	< 0.1148	Drive from Plummer to Flyway, following truck; roundtrip
1R-06132	7/20/2001	Personal	ISO	0	0.0986	< 0.0986	Drive from Plummer to Flyway, following truck; roundtrip
1R-06141	7/21/2001	Personal	ISO	0	0.1332	< 0.1332	Drive from Plummer to Flyway, following truck; roundtrip
1R-06142	7/21/2001	Personal	ISO	0	0.1255	< 0.1255	Drive from Plummer to Flyway, following truck; roundtrip
1R-06143	7/21/2001	Personal	ISO	0	0.2039	< 0.2039	Drive from Plummer to Flyway then Screening Plant, following truck; one-way
1R-06170	7/26/2001	Personal	ISO	0	0.0673	< 0.0673	Drive from LHS to Flyway; roundtrip
1R-06171	7/26/2001	Personal	ISO	0	0.0745	< 0.0745	Drive from LHS to Flyway; roundtrip
1R-06172	7/26/2001	Personal	ISO	0	0.0745	< 0.0745	Drive from LHS to Flyway; roundtrip
1R-06782	8/1/2001	Personal	ISO	0	0.0814	< 0.0814	Drive from LHS to Flyway, following truck; reundtrip
1R-06783	8/1/2001	Personal	ISO	0	0.0714	< 0.0714	Drive from LHS to Flyway, following truck; roundtrip
1R-06784	8/1/2001	Personal	ISO	0	0.1000	< 0.1000	Drive from LHS to Screening Plant, following truck; one-way
1R-06841	8/3/2001	Personal	ISO	0	0.1372	< 0.1372	Drive from LHS to Flyway, following truck; roundtrip
1R-06842	8/3/2001	Personal	ISO	0	0.1343	< 0.1343	Drive from LHS to Flyway, following truck; roundtrip
1R-06843	8/3/2001	Personal	ISO	0	0.1372	< 0.1372	Drive from LHS to Flyway, following truck; roundtrip
1R-07011	8/4/2001	Personal	ISO	0	0.0764	< 0.0764	Walking sample of truck route from LHS to flyway
1R-07012	8/4/2001	Personal	ISO	0	0.0764	< 0.0764	Walking sample of truck route from LHS to flyway
1R-07013	8/4/2001	Personal	ISO	0	0.0733	0	Walking sample of truck route from LHS to flyway
1R-07014	8/4/2001	Personal	ISO	0	0.0815	0	Walking sample of truck route from LHS to flyway
1R-07015	8/4/2001	Personal	ISO	0	0.3056	0	Walking sample of truck route from LHS to flyway

*LHS - Libby High School

Sample ID	Sample Date	Sample Type	Analysis Method	LA Structures Detected	Analytical Sensitivity	Concentration (S/cc)	Location Description
CS-20242	5/23/2005	Stationary	AHERA	0	0.0048	< 0.0048	South of intersection of River Runs Through It and Highway 37N
CS-20243	5/23/2005	Stationary	AHERA	0	0.0048	< 0.0048	South of intersection of Rainy Creek Road and Highway 37N
CS-20244	5/23/2005	Stationary	AHERA	0	0.0046	< 0.0046	4.5 mile mark pull-out
CS-20245	5/23/2005	Stationary	AHERA	0	0.0048	< 0.0048	South of intersection of Rivers Edge Trailer Court and Highway 37N
CS-20246	5/23/2005	Stationary	AHERA	0	0.0049	< 0.0049	West side of Highway 37N at 3.30 mile marker
CS-20247	5/23/2005	Stationary	AHERA	0	0.0049	< 0.0049	South of intersection of Mack Road and Highway 37N
CS-20247	5/23/2005	Stationary	AHERA	0	0.0049	< 0.0049	South of intersection of Mack Road and Highway 37N
CS-20248	5/23/2005	Stationary	AHERA	0	0.0049	< 0.0049	South of intersection of driveway at 1673 and Highway 37N
CS-20249	5/23/2005	Stationary	AHERA	0	0.0049	< 0.0049	South of intersection of entrance to J. Neils Park and Highway 37N
CS-20250	5/23/2005	Stationary	AHERA	0	0.0049	< 0.0049	South of intersection of Pipe Creek Road & Highway 37N
CS-20251	5/23/2005	Stationary	AHERA	0	0.0049	< 0.0049	South of intersection of Park Street & Highway 37N

Appendix I
Analytical Results September 2003 and May 2005 Highway 37 Soil Sampling Events

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-16872-FG		N/A	Highway 37 N - Right of Way	Road	Area 24N	Soil-Like	soil	Field Sample	9/16/2003	PLM-VE	A	ND	ND
CS-16873-FG		N/A	Highway 37 N - Right of Way	Road	Area 24S	Soil-Like	soil	Field Sample	9/16/2003	PLM-VE	A	ND	ND
CS-16874-FG		N/A	Highway 37 N - Right of Way	Road	Area 23N	Soil-Like	soil	Field Sample	9/16/2003	PLM-VE	A	ND	ND
CS-16875-FG		N/A	Highway 37 N - Right of Way	Road	Area 23 S	Soil-Like	soil	Field Sample	9/16/2003	PLM-VE	B1	TR	ND
CS-16876-FG		N/A	Highway 37 N - Right of Way	Road	Area 22N	Soil-Like	soil	Field Sample	9/16/2003	PLM-VE	B1	TR	ND
CS-16877-FG		N/A	Highway 37 N - Right of Way	Road	Area 22S	Soil-Like	soil	Field Sample	9/16/2003	PLM-VE	A	ND	ND
CS-16878-FG		N/A	Highway 37 N - Right of Way	Road	Area 21N	Soil-Like	soil	Field Sample	9/16/2003	PLM-VE	B1	TR	ND
CS-16879-FG		N/A	Highway 37 N - Right of Way	Road	Area 21S	Soil-Like	soil	Field Sample	9/16/2003	PLM-VE	B1	TR	ND
CS-16880-FG		N/A	Highway 37 N - Right of Way	Road	Area 20N	Soil-Like	soil	Field Sample	9/16/2003	PLM-VE	B2	< 1	ND
CS-16880-FG		N/A	Highway 37 N - Right of Way	Road	Area 20N	Soil-Like	soil	Field Sample	9/16/2003	PLM-VE	B1	TR	ND
CS-17121-FG	CS-16880	N/A	Highway 37 N - Right of Way	Road	Area 20	Soil-Like	soil	Field Duplicate	9/16/2003	PLM-VE	B2	< 1	ND
CS-17122-FG		N/A	Highway 37 N - Right of Way	Road	Area 20	Soil-Like	soil	Field Sample	9/16/2003	PLM-VE	B1	TR	ND
CS-17124-FG		N/A	Highway 37 N - Right of Way	Road	Area 19N	Soil-Like	soil	Field Sample	9/17/2003	PLM-VE	B1	TR	ND
CS-17125-FG		N/A	Highway 37 N - Right of Way	Road	Area 19S	Soil-Like	soil	Field Sample	9/17/2003	PLM-VE	B1	TR	ND
CS-17126-FG		N/A	Highway 37 N - Right of Way	Road	Area 18N	Soil-Like	soil	Field Sample	9/17/2003	PLM-VE	B2	< 1	ND
CS-17127-FG		N/A	Highway 37 N - Right of Way	Road	Area 18S	Soil-Like	soil	Field Sample	9/17/2003	PLM-VE	B1	TR	ND
CS-17128-FG		N/A	Highway 37 N - Right of Way	Road	Area 17N	Soil-Like	soil	Field Sample	9/17/2003	PLM-VE	B1	TR	ND
CS-17129-FG		N/A	Highway 37 N - Right of Way	Road	Area 17S	Soil-Like	soil	Field Sample	9/17/2003	PLM-VE	B1	TR	ND
CS-17130-FG		N/A	Highway 37 N - Right of Way	Road	Area 16N	Soil-Like	soil	Field Sample	9/17/2003	PLM-VE	B2	< 1	ND
CS-17131-FG		N/A	Highway 37 N - Right of Way	Road	Area 16S	Soil-Like	soil	Field Sample	9/17/2003	PLM-VE	B1	TR	ND
CS-17132-FG	CS-17131	N/A	Highway 37 N - Right of Way	Road	Area 16S	Soil-Like	soil	Field Duplicate	9/17/2003	PLM-VE	B1	TR	ND
CS-17133-FG		N/A	Highway 37 N - Right of Way	Road	Area 15N	Soil-Like	soil	Field Sample	9/17/2003	PLM-VE	B1	TR	ND
CS-17134-FG		N/A	Highway 37 N - Right of Way	Road	Area 15S	Soil-Like	soil	Field Sample	9/17/2003	PLM-VE	B1	TR	ND
CS-17135-FG		N/A	Highway 37 N - Right of Way	Road	Area 14N	Soil-Like	soil	Field Sample	9/17/2003	PLM-VE	B1	TR	ND
CS-17136-FG		N/A	Highway 37 N - Right of Way	Road	Road (14S)	Soil-Like	soil	Field Sample	9/17/2003	PLM-VE	B1	TR	ND
CS-17138-FG		N/A	Highway 37 N - Right of Way	Road	Area 13N	Soil-Like	soil	Field Sample	9/18/2003	PLM-VE	B1	TR	ND
CS-17139-FG		N/A	Highway 37 N - Right of Way	Road	Area 13S	Soil-Like	soil	Field Sample	9/18/2003	PLM-VE	B1	TR	ND
CS-17140-FG		N/A	Highway 37 N - Right of Way	Road	Area 12N	Soil-Like	soil	Field Sample	9/18/2003	PLM-VE	B1	TR	ND
CS-17141-FG		N/A	Highway 37 N - Right of Way	Road	Area 12S	Soil-Like	soil	Field Sample	9/18/2003	PLM-VE	B1	TR	ND
CS-17142-FG		N/A	Highway 37 N - Right of Way	Road	Area 11N	Soil-Like	soil	Field Sample	9/18/2003	PLM-VE	B1	TR	ND
CS-17143-FG		N/A	Highway 37 N - Right of Way	Road	Area 11S	Soil-Like	soil	Field Sample	9/18/2003	PLM-VE	B1	TR	ND
CS-17144-FG		N/A	Highway 37 N - Right of Way	Road	Area 10N	Soil-Like	soil	Field Sample	9/18/2003	PLM-VE	B1	TR	ND
CS-17145-FG		N/A	Highway 37 N - Right of Way	Road	Area 10S	Soil-Like	soil	Field Sample	9/18/2003	PLM-VE	B1	TR	ND
CS-17146-FG	CS-17145	N/A	Highway 37 N - Right of Way	Road	Area 10S	Soil-Like	soil	Field Duplicate	9/18/2003	PLM-VE	B1	TR	ND
CS-17147-FG		N/A	Highway 37 N - Right of Way	Road	Area 9N	Soil-Like	soil	Field Sample	9/18/2003	PLM-VE	B1	TR	ND
CS-17148-FG		Co	Highway 37 N - Right of Way	Road	Area 9S	Soil-Like	soil	Field Sample	9/18/2003	PLM-VE	B1	TR	ND
CS-17149-FG		N/A	Highway 37 N - Right of Way	Road	Area 8N	Soil-Like	soil	Field Sample	9/18/2003	PLM-VE	B1	TR	ND
CS-17150-FG		N/A	Highway 37 N - Right of Way	Road	Area 8S	Soil-Like	soil	Field Sample	9/18/2003	PLM-VE	B1	TR	ND
CS-17151-FG		N/A	Highway 37 N - Right of Way	Road	Area 7N	Soil-Like	soil	Field Sample	9/18/2003	PLM-VE	B1	TR	ND
CS-17152-FG		N/A	Highway 37 N - Right of Way	Road	Area 7S	Soil-Like	soil	Field Sample	9/18/2003	PLM-VE	B1	TR	ND
CS-17153-FG		N/A	Highway 37 N - Right of Way	Road	Area 6N	Soil-Like	soil	Field Sample	9/18/2003	PLM-VE	B1	TR	ND
CS-17154-FG		N/A	Highway 37 N - Right of Way	Road	Area 6S	Soil-Like	soil	Field Sample	9/18/2003	PLM-VE	B1	TR	ND

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-17155-FG		N/A	Highway 37 N - Right of Way	Road	Area 5 N	Soil-Like	soil	Field Sample	9/18/2003	PLM-VE	B1	TR	ND
CS-17156-FG		N/A	Highway 37 N - Right of Way	Road	Area 5S	Soil-Like	soil	Field Sample	9/18/2003	PLM-VE	B1	TR	ND
CS-17157-FG		N/A	Highway 37 N - Right of Way	Road	Area 4N	Soil-Like	soil	Field Sample	9/18/2003	PLM-VE	B1	TR	ND
CS-17158-FG		N/A	Highway 37 N - Right of Way	Road	Area 4S	Soil-Like	soil	Field Sample	9/18/2003	PLM-VE	B1	TR	ND
CS-17159-FG		N/A	Highway 37 N - Right of Way	Road	Area 3N	Soil-Like	soil	Field Sample	9/18/2003	PLM-VE	B1	TR	ND
CS-17160-FG		N/A	Highway 37 N - Right of Way	Road	Area 3S	Soil-Like	soil	Field Sample	9/18/2003	PLM-VE	B1	TR	ND
CS-17281-FG		N/A	Highway 37 N - Right of Way	Road	Area 1N	Soil-Like	soil	Field Sample	9/18/2003	PLM-VE	A	ND	ND
CS-17282-FG		N/A	Highway 37 N - Right of Way	Road	Area 1S	Soil-Like	soil	Field Sample	9/18/2003	PLM-VE	A	ND	ND
CS-17283-FG		N/A	Highway 37 N - Right of Way	Road	Area 2N	Soil-Like	soil	Field Sample	9/18/2003	PLM-VE	A	ND	ND
CS-17284-FG		N/A	Highway 37 N - Right of Way	Road	Area 2S	Soil-Like	soil	Field Sample	9/18/2003	PLM-VE	A	ND	ND

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-20202-B		Co	Highway 37 N - Right of Way	Road	Right of way	Soil-Like	soil	Field Sample	5/23/2005	PLM-9002	B2	< 1	ND
CS-20203-C	cs-20202	Co	Highway 37 N - Right of Way	Road	Rght of way	Soil-Like	soil	Field Duplicate	5/23/2005	PLM-Grav	A	ND	ND
CS-20203-FG1	cs-20202	Co	Highway 37 N - Right of Way	Road	Rght of way	Soil-Like	soil	Field Duplicate	5/23/2005	PLM-VE	B1	TR	ND
CS-20204-B		Co	Highway 37 N - Right of Way	Road	Right of way	Soil-Like	soil	Field Sample	5/23/2005	PLM-9002	B2	< 1	ND
CS-20205-C	CS-20204	Co	Highway 37 N - Right of Way	Road	Right of way	Soil-Like	soil	Field Split	5/23/2005	PLM-Grav	A	ND	ND
CS-20205-FG1	CS-20204	Co	Highway 37 N - Right of Way	Road	Right of way	Soil-Like	soil	Field Split	5/23/2005	PLM-VE	B1	TR	ND
CS-20222-B		Co	Highway 37 N - Right of Way	Road	Right of way	Soil-Like	soil	Field Sample	5/23/2005	PLM-9002	B2	< 1	ND
CS-20223-C	cs-20222	Co	Highway 37 N - Right of Way	Road	Right of way	Soil-Like	soil	Field Split	5/23/2005	PLM-Grav	A	ND	ND
CS-20223-FG1	cs-20222	Co	Highway 37 N - Right of Way	Road	Right of way	Soil-Like	soil	Field Split	5/23/2005	PLM-VE	B1	TR	ND
CS-20224-B		Co	Highway 37 N - Right of Way	Road	Right of way	Soil-Like	soil	Field Sample	5/23/2005	PLM-9002	B2	< 1	ND
CS-20225-FG1	CS-20224	Co	Highway 37 N - Right of Way	Road	Right of way	Soil-Like	soil	Field Split	5/23/2005	PLM-VE	B1	TR	ND
CS-20226-B		Co	Highway 37 N - Right of Way	Road	Right of way	Soil-Like	soil	Field Sample	5/23/2005	PLM-9002	B2	< 1	ND
CS-20227-C	CS-20226	Co	Highway 37 N - Right of Way	Road	Right of way	Soil-Like	soil	Field Split	5/23/2005	PLM-Grav	A	ND	ND
CS-20227-FG1	CS-20226	Co	Highway 37 N - Right of Way	Road	Right of way	Soil-Like	soil	Field Split	5/23/2005	PLM-VE	B1	TR	ND
CS-20228-B		Co	Highway 37 N - Right of Way	Road	Right of way	Soil-Like	soil	Field Sample	5/23/2005	PLM-9002	B2	< 1	ND
CS-20229-C	CS-20228	Co	Highway 37 N - Right of Way	Road	Right of way	Soil-Like	soil	Field Split	5/23/2005	PLM-Grav	A	ND	ND
CS-20229-FG1	CS-20228	Co	Highway 37 N - Right of Way	Road	Right of way	Soil-Like	soil	Field Split	5/23/2005	PLM-VE	B1	TR	ND
CS-20230-B		Co	Highway 37 N - Right of Way	Road	Right of way	Soil-Like	soil	Field Sample	5/23/2005	PLM-9002	B2	< 1	ND
CS-20231-C	CS-20230	Co	Highway 37 N - Right of Way	Road	Right of way	Soil-Like	soil	Field Split	5/23/2005	PLM-Grav	A	ND	ND
CS-20231-FG1	CS-20230	Co	Highway 37 N - Right of Way	Road	Right of way	Soil-Like	soil	Field Split	5/23/2005	PLM-VE	B1	TR	ND
CS-20232-B		N/A	Highway 37 N - Right of Way	Road	Right of way	Soil-Like	soil	Field Sample	5/23/2005	PLM-9002	A	ND	ND
CS-20233-C	CS-20232	Co	Highway 37 N - Right of Way	Road	right of way	Soil-Like	soil	Field Split	5/23/2005	PLM-Grav	A	ND	ND
CS-20233-FG1	CS-20232	Co	Highway 37 N - Right of Way	Road	right of way	Soil-Like	soil	Field Split	5/23/2005	PLM-VE	B1	TR	ND
CS-20234-B		Co	Highway 37 N - Right of Way	Road	Right of way	Soil-Like	soil	Field Sample	5/23/2005	PLM-9002	B2	< 1	ND
CS-20235-C	CS-20234	Co	Highway 37 N - Right of Way	Road	Right of way	Soil-Like	soil	Field Split	5/23/2005	PLM-Grav	A	ND	ND
CS-20235-FG1	CS-20234	Co	Highway 37 N - Right of Way	Road	Right of way	Soil-Like	soil	Field Split	5/23/2005	PLM-VE	B1	TR	ND
CS-20236-B		Co	Highway 37 N - Right of Way	Road	Right of way	Soil-Like	soil	Field Sample	5/23/2005	PLM-9002	B2	< 1	ND
CS-20237-C	CS-20236	Co	Highway 37 N - Right of Way	Road	Right of way	Soil-Like	soil	Field Split	5/23/2005	PLM-Grav	A	ND	ND
CS-20237-FG1	CS-20236	Co	Highway 37 N - Right of Way	Road	Right of way	Soil-Like	soil	Field Split	5/23/2005	PLM-VE	B1	TR	ND
CS-20238-B		Co	Highway 37 N - Right of Way	Road	Right of way	Soil-Like	soil	Field Sample	5/23/2005	PLM-9002	B2	< 1	ND
CS-20239-C	CS-20238	Co	Highway 37 N - Right of Way	Road	Right of way	Soil-Like	soil	Field Split	5/23/2005	PLM-Grav	A	ND	ND
CS-20239-FG1	CS-20238	Co	Highway 37 N - Right of Way	Road	Right of way	Soil-Like	soil	Field Split	5/23/2005	PLM-VE	B1	TR	ND
CS-20240-B		Co	Highway 37 N - Right of Way	Road	Right of way	Soil-Like	soil	Field Sample	5/23/2005	PLM-9002	B2	< 1	ND
CS-20241-C	CS-20240	Co	Highway 37 N - Right of Way	Road	Right of way	Soil-Like	soil	Field Split	5/23/2005	PLM-Grav	A	ND	ND
CS-20241-FG1	CS-20240	Co	Highway 37 N - Right of Way	Road	Right of way	Soil-Like	soil	Field Split	5/23/2005	PLM-VE	B1	TR	ND

Appendix J
Logbook Pages for 2001 Air Sampling Data Collected During Plummer Elementary and Libby High School Remediations

 Location PLUMMER ELEM SCHOOL Date 14JUL01

Project / Client

CONTINUED

1717 SAMPLES RELINQUISHED TO COM SAMPLE COORDINATOR TERRY KILLER UNDER THE CHAIN OF CUSTODY.

REFER TO THE FOLLOWING FIELD DATA SHEETS

A-01R-000380 } PERIMETER AIR SAMPLES
A-01R-000381 }
A-01R-000382 }
A-01R-000383 } AMBIENT AIR SAMPLES
A-01R-000384 }
P-01R-000273 } PERSONAL AIR SAMPLES
P-01R-000274 }

14JUL01

 Location PLUMMER ELEM SCHOOL Date 17 JUL 01

Project / Client

SAMPLING TEAM: RES DAVE BRAUN, WADDY VASTINO

0815 RES ARRIVED ON SITE. TODAY A SERIES OF OF PERSONAL SAMPLES WILL BE TAKEN TO GET BACKGROUND LEVELS FOR A DEMOLITION ACTIVITY. THE TRUCK ROUTE BETWEEN PLUMMER SCHOOL AND THE FLYWAY SITE 6 SAMPLES OF Approximately 30 minute duration will be taken while driving the route considered. THE FIRST WILL BE TAKEN JUST FOLLOWING THE ROUTE. THE REMAINING FOUR WILL FOLLOW A 94 CHEVY TAHOE TO TRY AND SIMULATE FOLLOWING A TRUCK. ALSO ~~A PERIMETER SAMPLE~~ PERIMETER AND AMBIENT BACKGROUND SAMPLE WILL ALSO BE TAKEN ALONG LOCKAN HOOD ROAD DUE TO ANALYZER SAMPLE BEING DAMAGED. THE FOLLOWING SAMPLES WILL BE TAKEN TODAY

1R-05995, PERSONAL (EXCURSION) PUMP# 026640 CAL 1.82 L/min
1R-05996, PERSONAL (EXCURSION) PUMP# 026640 CAL 1.84 L/min
1R-05997, PERSONAL (EXCURSION) PUMP# 026640 CAL 1.81 L/min
1R-05998, PERSONAL (EXCURSION) PUMP# 026640 CAL 1.81 L/min
1R-05999, PERSONAL (EXCURSION) PUMP# 026640 CAL 1.82 L/min
1R-6000, PERSONAL FIELD BLANK
1R-6041, PERSONAL FIELD BLANK
1R-6042, AMBIENT (LOCKAN HOOD) PUMP 602938

17JUL01

Location PLUMMER ELEM SCHOOL Date 17JULY01

Project / Client

CONTINUED DB

calibrated 3.02 L/min
IR-06043, IR-06044 FIELD BLANKS FOR AMBIENT
ALL PUMPS CALIBRATED WITH ROTAMETER # 034719
0830 MET STATION: TEMP 49°F, WIND 0 mph BAR 27.90 in
HUM 85%, DEW 44°
0836 IR-06042 PUMP STARTED
0840 IR-06043, IR-06044 OPENED FOR 30 SECONDS,
CAPPED AND SEALED
0849 PUMP STARTED, STARTED DRIVING TO
DB ~~SCREE~~ FLYWAY VIA TRUCK ROUTE IR-05995
0904 REACHED FLYWAY ENTRANCE, TURNED AROUND
0917 IR-05995 PUMP STOPPED UPON RETURN TO
PLUMMER POST CAL 1.82 L/min
1028 IR-05996 PUMP STARTED, STARTED DRIVING
TO FLYWAY VIA TRUCK ROUTE. FOLLOWING
A 1999 CHEVY TAHOE SUV AS STAND IN
FOR TRUCK, LIGHT RAIN IN SPOTS
1045 REACHED FLYWAY ENTRANCE, TURNED AROUND
1045 EXPERIENCING LIGHT RAIN ON & OFF ALONG
ROUTE
1101 IR-05996 PUMP STOPPED UPON RETURN TO PLUMMER
POST CAL. 1.82 L/min
1355 HEAVY RAIN FALLING AT PLUMMER
1420 DUE TO RAIN WILL COMPLETE 3 REMAINING

DB 17JULY01

Location PLUMMER ELEM SCHOOL Date 17JULY01

Project / Client

CONTINUED DB

SAMPLES ON 18JULY, TO ALLOW ROADS TO
DRY (IR-05997, IR-05998, IR-05999)
1440 CDM PERSONNEL ON SITE TO GPS
PLOT AIR SAMPLING LOCATIONS
1546 IR-06042 PUMP STOPPED, POST CAL 3.02 L/min
1553 SAMPLES IR-06042, IR-06043,
IR-06043 ALL ~~SAMPLE~~ DB ACCOUNTED
FOR AND SEALED. PLACED UNDER
CHAIN OF CUSTODY
1610 SAMPLES TRANSPORTED TO CDM SAMPLE
COORDINATOR TO BE RELINQUISHED
UNDER THE CHAIN OF CUSTODY
1630 REMAINING SAMPLES ACCOUNTED
FOR AND LOCKED IN SAMPLE CABINET
FOR COMPLETION ON 18JULY01
1640 MET STATION: TEMP 72.4F WIND 5mph @ 250°
BAR 27.84 in, HUM 37%, DEW 38%
REFERENCE FIELD DATASHEET
P-01R-000275

[signature]

Location PLUMMER ELEM SCHOOL Date 18JULY01

~~Project / Client~~ 18JULY01 Tarl Bean

PES SAMPLING TEAM: OHLBROW JEREMY/[illegible]

0815 PES ARRIVED ON SITE. TODAY WE WILL COMPLETE REMAINING HAUL ROUTE SAMPLES AND AN ADDITIONAL 3 WALKING SAMPLES ALONG THE HAUL ROUTE AN APPROXIMATELY 30 min in DURATION

THE FOLLOWING SAMPLES WILL BE TAKEN TODAY

IA-05997 PERSONAL (BACK) PUMP#626640 CAL 1.82

IA-05998 PERSONAL (BACK) PUMP#626640 CAL 1.82

IA-05999 PERSONAL (BACK) PUMP#626640 CAL 1.82

IA-06000, IA-06041 FIELD BLANKS

IA-06045

IA-06046

IA-06047

0830 MET STATION: TEMP 51.5F WIND 0 MPH BAR 27.92 in↑ HUM 32% DEWPT 44

0835 COM ON SITE TO GPS PLOT PERIMETER OF SITE

0953 IA-06047 PUMP STARTED, INDIVIDUAL STARTED WALKING FROM COM/PES OFFICES TOWARD SCREENING PLANT VIA TRUCK ROUTE.

1005 IA-06045 PUMP STARTED, INDIVIDUAL STARTED WALKING FROM PLUMMER SCHOOL TO COM/PES OFFICE VIA TRUCK ROUTE

1028 IA-06047 PUMP STOPPED AT MACKS MINI MART

18JULY01

Location PLUMMER ELEM SCHOOL Date 18JULY01

Project / Client

CONTINUED

POST CAL 1.82 L/min

1036 IA-06045 PUMP STOPPED AT COM/PES OFFICE POST CAL 1.82 L/min

1104 IA-06046 PUMP ~~STOPPED~~ STARTED INDIVIDUAL BEGAN WALKING FROM MACKS MINI MART TOWARD SCREENING PLANT

1206 IA-06046 PUMP STOPPED AT SCREENING PLANT POST CAL 1.82 L/min

1427 IA-05997 PUMP STARTED, BEGAN DRIVING TO SCREEN PLANT FOLLOWING A '99 CHEVY TAHOE TO SIMULATE FOLLOWING A TRUCK

1457 IA-05997 PUMP STOPPED POST CAL 1.82 L/min UPON RETURN TO PLUMMER.

1500 MET STATION - TEMP 73°F WIND SPEED AT 2.35 BAR 27.88 in↑ HUM 28% DEW PT 40°

1504 IA-05998 PUMP STARTED, BEGAN DRIVING TOWARD THE FLYWAY VIA THE TRUCK ROUTE

1533 IA-05998 PUMP STOPPED POST CAL 1.82 L/min UPON ARRIVING BACK TO PLUMMER ELEM. SCHOOL

1534 IA-05999 PUMP STARTED BEGAN DRIVING TOWARD THE FLYWAY SEGMENT Following Chevy Tahoe

1535 IA-05999 PUMP STOPPED POST CAL 1.82 L/min UPON ARRIVAL AT PLUMMER SCHOOL

18JULY01

22 Location PLUMMER ELEM SCHOOL Date 18 JUL 01

Project / Client

CONTINUED DB

1020	MET STATION: TEMP 73.1 F WIND 3 mph @ 270
	BAR 27.88 → HUM 30% DEW 40F
1630	ALL SAMPLES ACCOUNTED FOR AND SEALED
	PLACED UNDER CHAIN OF CUSTODY
	RELINQUISHED TO CDM SAMPLE COORDINATOR
	TERRY HELLER UNDER CHAIN OF CUSTODY
	REFER TO THE FOLLOWING FIELD DATA SHEETS
	P-01R-000275
	P-01R-000276 BACKGROUND PERSONAL
	P-01R-000277 AIR SAMPLES
	P-01R-000278

David Brown 18 JULY 01

Location PLUMMER ELEM. SCHOOL Date 19 JULY 01 23

Project / Client DB David Brown

SAMPLING TEAM - PES INVESTIGATOR, JEREMY VASICKO

0630	ARRIVED ON SITE AT PLUMMER SCHOOL TODAY
	IS SCHEDULED FOR THE BEGINNING OF THE
	INITIAL REMOVAL OF SOIL. TODAY A FULL SET
	OF SAMPLES WILL BE TAKEN TO INCLUDE
	THE FOLLOWING 4 PERIMETER, 5 AMBIENT
	SAMPLES AND 4 PERSONAL SAMPLES (TWO FULL
	SHIFT, TWO EXCURSION) AN ADDITIONAL
	SET WILL BE RUN ON PES PERSONNEL
	FOLLOWING THE TRUCKS TO THE FLYWAY
	THE FOLLOWING SAMPLES WILL BE TAKEN TODAY
	1R-05942 PERIMETER (PES-1) PUMP# 612058 CAL 3.02 L/min
	1R-05943 PERIMETER (PES-2) PUMP# 612536 CAL 3.02 L/min
	1R-05944 PERIMETER (PES-3) PUMP# 612598 CAL 3.02 L/min
	1R-05945 PERIMETER (PES-4) PUMP# 612692 CAL 3.02 L/min
	1R-05946, 1R-05947 FIELD BLANKS FOR PERIMETERS
	1R-05948 AMBIENT (PES-5) PUMP# 612938 CAL 3.02 L/min
	1R-05949 AMBIENT (PES-6) PUMP# 612600 CAL 3.02 L/min
	1R-05950 AMBIENT (PES-7) PUMP# 612096 CAL 3.02 L/min
	1R-05951 AMBIENT (PES-8) PUMP# 612638 CAL 3.02 L/min
	1R-05952 AMBIENT (PES-9) PUMP# 612094 CAL 3.02 L/min
	1R-05953, 1R-05954 FIELD BLANKS FOR AMBIENT
	1R-06048 PERSONAL (FULL SHIFT) PUMP# 612729 CAL 1.83 L/min
	1R-06049 PERSONAL (EXCUR) PUMP# 616690 CAL 1.83 L/min
	1R-06050 PERSONAL (FULL SHIFT) PUMP# 602600 CAL 1.83 L/min

DB 19 JULY 01

Location PLUMMER ELEM SCHOOL Date 19JULY01

Project / Client

CONTINUED

	IR-06051, PERSONAL (EXCUR) PUMP #62658 CAL. 1.83 L/min
	IR-06052, IR-06053 FIELD BLANKS FOR PERSONALS
	IR-06054, PERSONAL (EXCUR) PUMP #612682 CAL. 1.83 L/min
	IR-06055, PERSONAL (EXCUR) PUMP #612682 CAL. 1.83 L/min
	IR-06056, PERSONAL (EXCUR) PUMP #612682 CAL. 1.83 L/min
	IR-06057, PERSONAL (EXCUR) PUMP #612682 CAL 1.83 L/min
	IR-06058, PERSONAL (EXCUR) PUMP #612682 CAL. 1.83 L/min
	IR-06059, IR-06060 ~~(EXCUR) PUMP #612682 CAL 1.83 L/min~~
	FIELD BLANKS FOR TRUCK FOLLOWING PERSONALS
	ALL PUMPS CALIBRATED WITH ROTAMETER #0347M
0655	IR-05992 PUMP STARTED (PES-9) CLEAN ROOM
0655	IR-05982 PUMP STARTED (PES-1) NORTH PERIMETER
0656	IR-05983 PUMP STARTED (PES-2) EAST PERIMETER
~~0656~~ 0656	IR-05991 PUMP STARTED (PES-8) NAFU
0657	IR-05984 PUMP STARTED (PES-3) SOUTH PERIMETER
0657	IR-05988 PUMP STARTED (PES-5) AMBIENT BY SCHOOL
0658	IR-05985 PUMP STARTED (PES-4) WEST PERIMETER
0659	IR-05989 PUMP STARTED (PES-6) SOUTH BY WALKING TRAIL
0659	IR-05990 PUMP STARTED (PES-7) FENCE ACROSS STREET
0705	MET STATION: TEMP 45°F, WIND 0MPH, BAR 2793 in
	HUM 74%, DEW PT 41°
0900	MET STATION: TEMP 51.8°F WIND 2MPH AT 40°
	BAR 2794 in HUM 71% DEW PT 43°
0932	IR-06048 PUMP STARTED PLACED ON WORKER AFTER

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Location PLUMMER ELEM SCHOOL Date 19JULY01

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CONTINUED

	DONNING LEVEL C PRE-
0935	STARTED DIGGING AWAITING TRUCKS
1040	TRUCKS ON SITE
1050	IR-06050 PUMP STARTED PLACED ON DRIVER
	(ARLENE JUNTENEN)
1053	FIRST TRUCK TO BE DONNING ~~LOADED~~ BACKING IN TO BE LOADED
1058	TRUCK STUCK IN LOOSE FILL
1105	MET STATION TEMP 64.6F, WIND 2MPH @ 20°
	BAR 27.90 ↓ HUM 46% DEW PT 43°
1107	DRIVER LEFT TRUCK TO ASSIST STUCK
	TRUCK (IR-06050)
1120	TRUCK UNSTUCK MOVE TO BE LOADED.
1120	IR-06050 RETURNED TO TRUCK.
1137	IR-06054 PUMP STARTED, FOLLOWING
	WHITE PETERBUILT DUMP TO FLYWAY
1140	DRIVER PULLED OVER TO ADJUST TARP
1155	IR06054 PUMP PAUSED WHEN REACHING
	FLYWAY WAITING FOR TRUCK TO
	PULL OUT OF DECON
1210	TRUCK HAS TO DECON AT SCREENING PLANT
	DUE TO PROBLEMS WITH PRESSURE WASHER
	AT FLYWAY DECON
1212	TRUCK STUCK IN LOOSE DIRT
1215	IR-06048 PUMP PAUSED FOR LUNCH

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Project / Client

CONTINUED

1255	IR-06054 PUMP STARTED AT SCREENING PLANT, FOLLOWING BACK TO PLUMMER
1307	IR-06054 PUMP STOPPED AT PLUMMER POST CAL 1.83 L/min
1330	IR-06048, IR-06049 PUMP STARTED PLACED ON WORKER AFTER DONNING LEVEL CPPE
1352	IR-06051 PUMP STARTED, PLACED ON DRIVER PRIOR TO LOADING
1400	IR-06049 PUMP STOPPED, DECONTAMINATED BY WIPPING DOWN WITH WET RAG POST CAL. 1.83 L/min
~~1505~~ 1405	MET STATION: 72.8°F, WIND 0 mph BAR. 27.86 in, HUM 32% DEW PT 43°
1417	IR-06055 PUMP STARTED, FOLLOWING JUNTENSEN TRUCK #5
1422	IR-06051 PUMP STOPPED POST CAL 1.83 L/min
1432	IR-06055 PUMP PAUSED AT FLY WAY
1443	IR-06055 PUMP STARTED AT SCREENING PLANT FOR RETURN
1456	IR-06055 PUMP STOPPED, POST CAL 1.83 L/min
1502	IR-06056 PUMP STARTED, FOLLOWING BLUE JEM DUMP TRUCK TO FLYWAY
1517	IR-06056 PUMP PAUSED AT FLYWAY
1522	IR-06056 PUMP STARTED AT SCREENING PLANT
1537	IR-06056 PUMP STOPPED AT PLUMMER, POST CAL 1.83 L/min
1555	MET STATION: 75.4° WIND 2mph @ 50°, BAR 27.85 in

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Location PLUMMER ELEM SCHOOL Date 19JULY01

Project / Client

CONTINUED

	HUM. 27%, DEWPT. 39°
1601	IR-06057 PUMP STARTED FOLLOWING TRUCK JUNTUNEN #9
1620	IR-05983 PUMP STOPPED, POST CAL 3.02
1625	IR-05984 PUMP STOPPED, POST CAL 3.02
1625	IR-06057 PUMP ~~STARTED~~ 20 JULY PAUSED AT FLYWAY
1626	IR-05989 PUMP STOPPED, POST CAL 3.02
1630	IR-05985 PUMP STOPPED, POST CAL 3.02
1631	IR-05989 PUMP STOPPED, POST CAL 3.02
1632	IR-06057 STOPPED, POST CAL 1.83 L/min TRUCK PARKED AFTER DECON AT SCREENING PLANT ONLY 18 min ON EXCURSION
1635	IR-05990 PUMP STOPPED, POST CAL 3.02 L/min
1639	IR-05992 PUMP STOPPED, POST CAL 3.02 L/min
1640	IR-05982 PUMP STOPPED, POST CAL 3.02 L/min
1640	IR-06050 PUMP STOPPED, POST CAL 1.83 L/min
1656	IR-05991 PUMP STOPPED, POST CAL 3.02 L/min
1710	IR-06048 PUMP STOPPED, POST CAL ~~3.02 L/min~~ 1.83 L/min DECONNED BEFORE PASSING TO CLEAN SIDE
1730	ALL SAMPLES ACCOUNTED FOR AND SEALED PLACED UNDER CHAIN OF CUSTODY SAMPLES RELINQUISHED TO CDM SAMPLE COORDINATOR TERRY KELLER

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Location PLUMMER HIGH SCHOOL Date [illegible]

Project / Client

CONTINUED

SAMPLE 1A-06058, 1A-06059 SUBMITTED AS BLANKS. ACCORDING TO FALLTER ENTRY, 1A-06060 TO BE USED. 20 ALL 21 REFER TO THE FOLLOWING FIELD DATA SHEET

A-01A-000385 } AMBIENT AIR
A-01A-000387 } PERSONAL SAMPLES
A-01A-000390
A-01A-000386 } PERIMETER AIR SAMPLES
A-01A-000387
A-01A-000279 } PERSONAL SAMPLES
A-01A-000280
A-01A-000281 } PERSONAL TRUCK FOLLOWING
A-01A-000282 } SAMPLES

[illegible] 10/26/[illegible]

Location PLUMMER HIGH SCHOOL Date [illegible] 29

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PES SAMPLING FOR: [illegible]

0630	PES [illegible] ON SITE AT PLUMMER HIGH BACKGROUND DETERMINATION WILL CONTINUE [illegible]					
	[illegible] FIVE AMBIENT, FOUR PERSONAL, AND THREE [illegible] TRUCK SAMPLES. ADDITIONAL SAMPLES [illegible] THE TRUCK MAY BE USED IF A SECOND					
	THE FOLLOWING SAMPLES WILL BE USED [illegible]					
	1A-06058, PERIMETER, (PES-1)	PUMP #612058	CAL	3.02	L/min	
	1A-06059, PERIMETER, (PES-2)	PUMP #602596	CAL	3.02	L/min	
	1A-06210, PERIMETER (PES-3)	PUMP #602598	CAL	3.02	L/min	
	1A-06211, PERIMETER (PES-4)	PUMP #612677	CAL	3.02	L/min	
	1A-06212, 1A-06213 FIELD BLANKS FOR PERIMETER					
	1A-06201, AMBIENT (PES-1)	PUMP #602595	CAL	3.02	L/min	
	1A-06202, AMBIENT (PES-2)	PUMP #612602	CAL	3.02	L/min	
	1A-06203, AMBIENT (PES-3)	PUMP #612688	CAL	3.02	L/min	
	1A-06204, AMBIENT (PES-4)	PUMP #612634	CAL	3.02	L/min	
	1A-06205, AMBIENT (PES-5)	PUMP #612099	CAL	3.02	L/min	
	1A-06206, 1A-06207 FIELD BLANKS FOR AMBIENT					
	1A-06060, PERSONAL (TRUCKER)	PUMP #602600	CAL	~~[illegible]~~ 1.83	L/min	
	1A-06121, PERSONAL (EXCA)	PUMP #626576	CAL	1.83	L/min	
	1A-06122, PERSONAL (~~[illegible]~~)	PUMP #[illegible]		FIELD BLANK		
	1A-06123, PERSONAL (TRUCKER)	PUMP #612729	CAL	1.83	L/min	
	1A-06124, PERSONAL (SKILLER)	PUMP #626640	CAL	1.83	L/min	
	1A-06125 PERSONAL FIELD BLANK			CHANGE		

Location PLUMMER ELEM SCHOOL Date 20 JULY 01

Project / Client

CONTINUED

	IR-06130, PERSONAL (TRUCK FOLLOWING) PUMP # 61265 CAL 1.83
	IR-06131, PERSONAL (TRUCK FOLLOWING) PUMP # [illegible] CAL 1.83
	IR-06132, PERSONAL (TRUCK FOLLOWING) PUMP # 61265 CAL 1.83
	IR-06133, IR-06134 FIELD BLANKS FOR TRUCK FOLLOW
0650	MET STATION: TEMP 43.5°F, WIND [illegible], BAR 27.90" HUM 30%, DEW PT 39°
0655	IR-06204 PUMP STARTED
0656	IR-06201 PUMP STARTED
0659	IR-06203 PUMP STARTED
0700	IR-06202 PUMP STARTED
0706	IR-06208 PUMP STARTED
0707	IR-06060 PUMP STARTED, PLACED ON DRIVER
0708	IR-06211 PUMP STARTED
0709	IR-06210 PUMP STARTED
0710	IR-06209 PUMP STARTED
0720	IR-06205 PUMP STARTED
0725	PUMP STARTED, PLACED ON WORKER AFTER DOWNING LEVEL C PPE.
0745	FIRST TRUCK DEPARTED
1000	MET STATION: TEMP 59.3°F, WIND 3mph @ [illegible], BAR 27.57" HUM 57%, DEW PT 41°
1050	IR-06130 PUMP STARTED, FOLLOWING TRUCK BLUE TEM TO SCREENING PLANT
1103	IR-06130 PUMP PAUSED AT SCREENING PLANT

[signature] 11/1/01

Location PLUMMER ELEM SCHOOL Date 20 JULY 01

Project / Client

CONTINUED

1114	~~[illegible]~~ IR-06131 PUMP STARTED FOR RETURN TRIP
1125	IR-06123 PUMP PAUSED FOR LUNCH WIPED DOWN WITH WET TOWEL PASSED TO CLEAN SIDE
1129	IR-06130 PUMP STOPPED, POST CAL 1.83 L/min
1243	IR-06123 PUMP STARTED, PLACED ON WORKER AFTER DOWNING LEVEL C PPE.
1255	MET STATION: TEMP 67.6° WIND 2mph @ 90° BAR 27.84" HUM 47% DEW PT 46°
1258	IR-06131, PUMP STARTED, FOLLOWING JUNTENEN US TO FLYWAY
1314	IR-06131, PUMP PAUSED AT FLYWAY
1322	IR-06131, PUMP STARTED FOR RETURN TRIP
1336	~~IR-06131~~ IR-06131 PUMP STOPPED, POST CAL 1.83
1340	IR-06124 PUMP STARTED PLACED ON WORKER
1354	IR-06121 PUMP STARTED, PLACED ON DRIVER
1354	IR-06132 PUMP STARTED, FOLLOWING TRUCK TO FLYWAY.
1414	IR-06132 PUMP PAUSED AT FLYWAY
1420	IR-06132 PUMP STARTED FOR RETURN
1420	IR-06124 PUMP STOPPED, POST CAL 1.83 L/min DISCONNECTED BEFORE PASSING TO CLEAN SIDE.
1424	IR-06121 PUMP STOPPED, POST CAL 1.83 L/min
1435	IR-06132 PUMP STOPPED, POST CAL 1.83 L/min

[signature] 11/1/01

Location PLUMMER ELEM SCHOOL Date 20JULY01

Project / Client

CONTINUED

1500	MET STATION: TEMP 76 [illegible] HEAD 1 MPH @ 100
	BAR 29.90 ↓ HUM 29% DEWPT 45°
1520	IR-06211 PUMP STOPPED POST CAL 3.02
1521	IR-06203 PUMP STOPPED POST CAL 3.02
1523	IR-06202 PUMP STOPPED POST CAL 3.02
1525	IR-06210 PUMP STOPPED, POST CAL 3.02
1527	IR-06209 PUMP STOPPED, POST CAL 3.02
1528	IR-06201 PUMP STOPPED, POST CAL 3.02
1530	IR-06205 PUMP STOPPED, POST CAL 3.02
1531	IR-06204 PUMP STOPPED, POST CAL 3.02
1535	IR-06208 PUMP STOPPED, POST CAL 3.02
1655	IR-06124, PUMP STOPPED, POST CAL 1.83 L/min
	DECONNED BEFORE PASSING TO CLEANSIDE
1700	ALL SAMPLES ACCOUNTED FOR AND SEALED THEN
	PLACED UNDER CHAIN OF CUSTODY
	SAMPLES RELINQUISHED TO CDM SAMPLE
	COORDINATOR TERRY KELLER
	REFER TO THE FOLLOWING FIELD DATA SHEETS
	A-01R-000429 } AMBIENT AIR SAMPLES
	A-01R-000430 }
	A-01R-000431 }
	A-01R-000432 } PERSONAL AIR SAMPLES
	A-01R-000433 }

20JULY01

Location PLUMMER ELEM SCHOOL Date 20 JULY 01

Project / Client

CONTINUED

P-01R-000283 }	PERSONAL AIR
P-01R-000284 }	SAMPLES
P-01R-000285 }	PERSONAL TRUCK
P-01R-000286 }	FOLLOWING SAMPLES

20JULY01

Location PLUMMER ELEM SCHOOL Date [illegible]

Project / Client [illegible]

SAMPLING FROM [illegible] OF [illegible]

0630 PERSONNEL ON SITE AT PLUMMER ELEM SCHOOL [illegible] EXCAVATION [illegible] REMOVAL ACTIVITIES CONTINUE TODAY. SAMPLES TO BE TAKEN INCLUDE FOUR PERIMETER SAMPLES, FOUR AMBIENT SAMPLES, FOUR PERSONAL SAMPLES (TWO ALL SHIFT, TWO EXCAVATION) AND THREE SAMPLES [illegible] TO THE 12 YARD SITE. THE FOLLOWING SAMPLES WILL BE TAKEN TODAY.

IA-0214, PERIMETER (PES-1) PUMP #[illegible] CAL 3.02 l/min
IA-0215, PERIMETER (PES-2), PUMP #[illegible] CAL 3.02 l/min
IA-0216, PERIMETER (PES-3) PUMP #[illegible] CAL 3.02 l/min
IA-0217, PERIMETER (PES-4) PUMP #[illegible] CAL 3.02 l/min
IA-0218, AMBIENT (PES-5) PUMP #[illegible] CAL 3.02 l/min
IA-0219, AMBIENT (PES-6) PUMP #[illegible] CAL 3.02 l/min
IA-0220, AMBIENT (PES-7) PUMP #[illegible] CAL 3.02 l/min
IA-0221, AMBIENT (PES-8) PUMP #[illegible] CAL 3.02 l/min
IA-0222, AMBIENT (PES-9) PUMP #[illegible] CAL 3.02 l/min
IA-0128, IA-0129 FIELD BLANKS FOR AMBIENT PERIMETER
IA-0135, IA-0136 PERSONAL (ALL SHIFT) PUMP #[illegible] CAL 1.83
IA-0136, PERSONAL (EXCAVATION) PUMP #[illegible] CAL 1.83
IA-0138, PERSONAL (ALL SHIFT) PUMP #[illegible] CAL 1.83
IA-0139, PERSONAL (EXCAVATION) PUMP #[illegible] CAL 1.83
IA-0137, IA-0140 FIELD BLANKS FOR PERSONALS
IA-0141, PERSONAL (ALL SHIFT) PUMP #[illegible] CAL 1.83

[illegible] 11/1/00

Location PLUMMER ELEM SCHOOL Date 21 JULY 01

Project / Client CONTINUED

IA-0142, PERSONAL (ALL SHIFT) PUMP #[illegible] CAL 1.83
IA-0143, PERSONAL (EXCAVATION) PUMP #[illegible] CAL 1.83
IA-0144, IA-0145 FIELD BLANKS FOR ALL PERSONAL
ALL PUMPS CALIBRATED WITH ROTAMETER 0534 HRS

0650 IA-0127 PUMP STARTED
0651 IA-0126 PUMP STARTED
0653 IA-0218 PUMP STARTED
0653 IA-0214 PUMP STARTED
0655 IA-0220 PUMP STARTED
0655 IA-0216 PUMP STARTED IA-0217
0656 IA-0221 PUMP STARTED
0657 IA-0215 PUMP STARTED
0659 IA-0219 PUMP STARTED
0700 MET STATION: TEMP 54°, WIND 0 MPH, BAR 29.49, HUM 85%, DEW 50°
0713 IA-0135 PUMP STARTED PLACED ON [illegible] POWERED BY [illegible] CAPE
0720 IA-0138 PUMP STARTED PLACED ON RECEIVER
0735 IA-0141 PUMP STARTED FOLLOWING TRUCK TO FLYWAY
0750 IA-0141 PUMP PAUSED AT FLYWAY
0758 IA-0141 PUMP STARTED FOR RETURN TO PLUMMER
0840 IA-0141 PUMP STOPPED AT PLUMMER POST. CAL 1.83
0940 IA-0142 PUMP STARTED, FOLLOWING TRUCK TO FLYWAY
GREY LIC DUMP TRUCK

[illegible] 11/1/00

Location PLUMMER ELEM SCHOOL Date 21 JULY 01

Project / Client

CONTINUED

0956	IR-06142 PUMP PAUSED AT FLYWAY
1005	IR-06142 PUMP STARTED FOR RETURN TO PLUMMER
1019	IR-06142 PUMP STOPPED AT PLUMMER POST CAL 1.83
1050	IR-06139 PUMP STARTED PLACED ON WORKER
1100	MET STATION: TEMP 72°F VIND 2MPH @ 40°
	BAR 29.95 HUM 50% DEWPT 52°
1120	IR-06139 PUMP STOPPED POST CAL 1.83 L/min
1153	IR-06135 PUMP PAUSED FOR LUNCH
1307	IR-06135, IR-06136 PUMPS STARTED PLACED
	ON WORKER AFTER DOWNING LEVEL CORE
1315	MET STATION: TEMP 72°F VIND 3MPH @ 0°
	BAR 29.93 HUM 50% DEWPT 51°
	LIGHT RAIN
1324	IR-06143 PUMP STARTED, FOLLOWING TRUCK TO
	FLYWAY BLUE JEM TRUCK
1335	IR-06143 PUMP PAUSED AT FLYWAY
1345	IR-06136 PUMP STOPPED, WIPED CLEAN BEFORE
	BEING PASSED TO CLEAN SIDE POST CAL 1.83
1347	IR-06143 PUMP STARTED AT FLYWAY
1350	IR-06143 PUMP STOPPED DRIVER NOT RETURNING
	TO PLUMMER PARKED AT SCREENING PLANT
	POST CAL 1.83 L/min
1353	IR-06138 PUMP STOPPED, TAKEN FROM DRIVER
	AND TRANSPORTED TO PLUMMER POST CAL 1.83 L/min

[signature] 11/1/01

Location PLUMMER ELEM SCHOOL Date 21 JULY 01

Project / Client

CONTINUED

1500	MET STATION: TEMP 72° VIND 2MPH @ 210
	BAR 29.92 in HUM 51% DEWPT 53°
1520	IR-06212 PUMP STOPPED, POST CAL 3.02 L/min
1522	IR-06211 PUMP STOPPED, POST CAL 3.02 L/min
1526	IR-06211 PUMP STOPPED, POST CAL 3.02 L/min
1527	IR-06211 PUMP STOPPED, POST CAL 3.02 L/min
1528	IR-06215 PUMP STOPPED, POST CAL 3.02 L/min
1531	IR-06216 PUMP STOPPED, POST CAL 3.02 L/min
1534	IR-06217 PUMP STOPPED, POST CAL 3.02 L/min
1536	IR-06216 PUMP STOPPED, POST CAL 3.02 L/min
1553	IR-06214 PUMP STOPPED, POST CAL 3.02 L/min
1616	LAST TRUCK LOADED, TOM THORNBURG OF
	CDM CONDUCTED VISUAL INSPECTION AND
	DETERMINED SITE TO BE CLEAN.
1645	IR-06135 PUMP STOPPED, DECONNECTED BEFORE
	BEING PASSED TO CLEAN SIDE. POST CAL 1.83 L/min
1650	ALL SAMPLES ACCOUNTED FOR AND SEALED PLACED
	UNDER CHAIN OF CUSTODY BY RES
	RELINQUISHED TO CDM SAMPLE COORDINATOR
	UNDER CHAIN OF CUSTODY.
	MONDAY 23 JULY 01 TO BEGIN BACKFILLING
	THE FORMER SKATING RING AREA.
	REFER TO THE FIELD DATA SHEETS ON THE
	FOLLOWING PAGE

[signature] 11/1/01

38 Location PLUMMER ELEM SCHOOL Date 21 JULY 01

Project / Client

CONTINUED DB

A-01A-000434
A-01A-000435 } PERIMETER + AMBIENT
A-01A-000436 AIR SAMPLES
A-01A-000437
P-01A-000287 } PERSONAL AIR SAMPLES
P-01A-000288
P-01A-000289 } PERSONAL TRUCK FOLLOWING
P-01A-000290 AIR SAMPLES

DB 21 JULY 01

Location PLUMMER ELEM SCHOOL Date 23 JULY 01 39

Project / Client

PBS SAMPLING CREW: DAVE BROWN, JEREMY VASELKO

0635 PBS PERSONNEL ON SITE AT PLUMMER SCHOOL
TODAYS ACTIVITIES INCLUDE BACK FILLING
THE REMOVAL AREA AND BREAKING DOWN
THE DECON AREA. TODAYS SAMPLES
ARE LIMITED TO THE FOUR PERIMETER
SAMPLES. THE FOLLOWING SAMPLES
WILL BE TAKEN TODAY.
1A-06146, PERIMETER (PBS-1) PUMP # 602058 CAL 3.05
1A-06147, PERIMETER (PBS-2) PUMP # 602556 CAL 3.05
1A-06148, PERIMETER (PBS-3) PUMP # 602554 CAL 3.05
1A-06149, PERIMETER (PBS-4) PUMP # 602697 CAL 3.05
1A-06150, 1A-06151 FIELD BLANKS FOR PERIMETER
ALL PUMPS CALIBRATED WITH ADMIRER 03-1279
0656 1A-06146 PUMP STARTED
0658 1A-06149 PUMP STARTED
0659 1A-06148 PUMP STARTED
0700 1A-06147 PUMP STARTED
0715 1A-06150, 1A-06151 CARTRIDGES PURGED FOR
30 SECONDS, CAPPED AND SEALED.
0730 FIRST TRUCK ON SITE TO BEGIN FILLING
0745 MET STATION: TEMP 52°F, WIND 1 MPH @ 80°
BAR 30.15" HUM 63% DEW PT 47°
1015 MET STATION: TEMP 63°F WIND 7 MPH @ 210°
BAR 30.11" HUM 63% DEW PT 50°

DB 23 JULY 01

44 Location Plumous Elem School Date 7/25/01

Project / Client

Continued Jeremy Vassilko

1419 - 1R-061160 pump stopped, post cal 3.05 L/min
1418 1R-061161 pump stopped, post cal 3.05 L/min
1445 All samples accounted for and sealed placed under chain of custody, samples relinquished to CDM sample coordinator Angela Foundsen. Refer to field data sheets
A-01R-000442 3 Perimeter
A-01R-000443 air samples

Jeremy Vassilko 7-25-01

Location PLUMMER ELEM SCHOOL & LIBBY HIGH SCHOOL Date 7/26/01 45

Project / Client

SAMPLING TEAM: PBS DAVE BROWN

0700 PBS ARRIVED ONSITE AT PLUMMER ELEM SCHOOL CONTRACTOR WILL CONTINUE BACK FILLING WITH PEA GRAVEL AND CONTINUE TRANSPORTING MATERIALS FOR SET UP AT LIBBY HIGH SCHOOL. TODAY FOUR SAMPLES WILL BE COLLECTED ALONG EDUCATION WAY AND IN THE HIGH SCHOOL PARKING LOT ALONG THE TRUCK HAUL ROUTE. THESE SAMPLES ARE:
1R-06164 BACKGROUND HS TRUCK ROUTE #1, PUMP # 612058
1R-06165, BACKGROUND, HS TRUCK ROUTE #2, PUMP # 602596
1R-06166, BACKGROUND HS TRUCK ROUTE #3 PUMP # 602598
1R-06167 BACKGROUND, HS TRUCK ROUTE #4, PUMP # 612097
ALL PUMPS CALIBRATED AT 3.05 L/min 3.5 L/min
WITH ROTAMETER 034219.
ADDITIONAL SAMPLES MAY BE TAKEN LATER BY DRIVING THE TRUCK ROUTE TO THE FLYWAY SITE. THEY WILL BE NOTED LATER
0800 REMOVED MET STATION FROM PLUMMER ELEM. SCHOOL FOR TRANSPORT TO LIBBY HIGH SCHOOL
1022 1R-06164, PUMPS STARTED PLACED IN BACK CORNER OF LOT
1024 1R-06165, PUMP STARTED PLACED AT LOT EXIT ON TO EDUCATION WAY
1030 1R-06166 PUMP STARTED, PLACED INTO WAY TO HWY 2

26 JUL 01

Location LIBBY HIGH SCHOOL Date 26 JULY 01

Project / Client

CONTINUED DB

14 1032	IR-06167 PUMP STARTED PLACED 15 YDS BACK
14	FROM HIGHWAY 2
1040	IR-06168, IR-06169 FIELD BLANKS OPENED
	FOR 30 SECONDS, RECAPPED AND SEALED
1100	Checked PUMPS ALL WORKING PROPERLY
1300	CHECKED PUMPS ALL WORKING PROPERLY
1400	IR-06170 PUMP STARTED, Pump # 612682
	CAL 1.57, BEGAN BACKGROUND Driving
	TRUCK ROUTE (LIBBY HIGH SCHOOL - FLYWAY)
1433	IR-06170 PUMP STOPPED AT LIBBY H.S. POST CAL 1.5
1500	IR-06171 PUMP STARTED, CAL 1.57 BEGAN
	TRUCK ROUTE
1530	IR-06171 PUMP STOPPED, POST CAL 1.57 L/min
1534	IR-06172 PUMP ~~STOPPED, POST~~ DB 26 JUL 01 STARTED,
	CAL 1.57, BEGAN TRUCK ROUTE.
1604	IR-06172 PUMP STOPPED, POST CAL 1.57 L/min
1622	IR-06164 PUMP STOPPED, POST CAL 3.51 L/min
1624	IR-06165 PUMP STOPPED, POST CAL 3.51 L/min
1628	IR-06166 PUMP STOPPED, POST CAL 3.51 L/min
1630	IR-06167 PUMP STOPPED, POST CAL 3.51 L/min
1700	SELECTED SAMPLING LOCATIONS FOR PERIMETERS
	AND AMBIENTS AT LIBBY HIGH SCHOOL
1806	IR-06177, PERIMETER BACKGROUND (LHS-1) STARTED
	PUMP# 612098 CAL 3.03 L/min

DB 26 JULY 01

Location LIBBY HIGH SCHOOL Date 26 JULY 01

Project / Client

CONTINUED DB

1808	IR-06178 PERIMETER BACKGROUND (LHS-2) STARTED
	PUMP # 626638 CAL 3.03 L/min
1809	IR-06179 PERIMETER BACKGROUND (LHS-3) STARTED
	PUMP # 626602 CAL 3.03 L/min
1812	IR-06180 PERIMETER BACKGROUND (LHS-4) STARTED
	PUMP 612088 CAL 3.03 L/min
1815	IR-06181 PERIMETER BACKGROUND (LHS-5) STARTED
	PUMP 602938 CAL 3.03 L/min
~~1820~~ DB 26 JUL 01	
1818	IR-06183 PERIMETER BACKGROUND (LHS-7) STARTED
	PUMP # 602600 CAL 3.03 L/min
1820	IR-06182 PERIMETER BACKGROUND (LHS-6) STARTED
	PUMP 626578 CAL 3.03 L/min
1822	IR-06184 PERIMETER BACKGROUND (LHS-8) STARTED
	PUMP 612729 CAL 3.03 L/min.
1830	IR-06185, IR-06186 FIELD BLANKS FOR PERIMETERS
	OPENED FOR 30 SECONDS CAPPED AND SEALED
	ALL PERIMETER BACKGROUND PUMPS CALIBRATED
	WITH ROTOMETER 00811 PUMPS TO BE RUN
	UNTILL A VOLUME OF ATLEAST 1200 L was pumped.
2359	ALL PERIMETER BACKGROUND PUMPS STILL
	RUNNING.
2359	ALL FURTHER ENTRIES FOR PERIMETER BACKGROUNDS
	WILL BE MADE IN LOG FOR 27 JULY 01

David Brown 27 JUL 00

Location LIBBY HIGH SCHOOL Date 31JULY01

Project / Client

CONTINUED DB

0 A-01A-555
A-01A-556
A-01A-557 } LHS PERIMETER & AMBIENT
A-01A-558 } AIR SAMPLES
A-01A-559
A-01A-560 - PBS AMBIENT AIR SAMPLE

David Brown 31JULY01

Location LIBBY HIGH SCHOOL Date 1AUG01

Project / Client ~~TARGET~~ DB David Brown

SAMPLING TEAM: PBS: DAVE BROWN, BRUCE SWIGER

0615 PBS ARRIVED ON SITE AT LIBBY HIGH SCHOOL TODAY WORK WILL CONTINUE ON REMOVING THE TARP AND VACUUMING UNDER THE BLEACHERS. TODAY 8 PERIMETER, 5 AMBIENT, 4 PERSONAL AND 3 TRUCK FOLLOWING SAMPLES WILL BE TAKEN, ~~TODAY~~ THE SAMPLES BELOW ARE TO BE TAKEN TODAY:

1A-06683, PERIMETER (LHS-1), PUMP#612658, CAL 3.05 L/min
1A-06684, PERIMETER (LHS-2), PUMP#626638, CAL 3.05 L/min
1A-06685, PERIMETER (LHS-3) PUMP#626607 CAL 3.05 L/min
1A-06686, PERIMETER (LHS-4) PUMP#612098, CAL 3.05 L/min
1A-06687, PERIMETER (LHS-5) PUMP#602958 CAL 3.05 L/min
1A-06688, PERIMETER (LHS-6) PUMP#626578 CAL 3.05 L/min
1A-06689, PERIMETER (LHS-7) PUMP#603600 CAL 3.05 L/min
1A-06690, PERIMETER (LHS-8) PUMP#612729 CAL 3.05 L/min
1A-06691, AMBIENT (LHS-9) PUMP#602596 CAL 3.05 L/min
1A-06692, AMBIENT (LHS-10) PUMP#612692 CAL 3.05 L/min
1A-06693, AMBIENT (LHS-11) PUMP#602598 CAL 3.05 L/min
1A-06694, AMBIENT (LHS-12) PUMP#612058 CAL 3.05 L/min
1A-06695, AMBIENT (LHS-13) PUMP#612692 CAL 3.05 L/min
1A-06696, 1A-06697 FIELD BLANKS
1A-06698, PERSONAL (POLISHEET) PUMP#626563 CAL 1.50 L/min
1A-06699, PERSONAL (EXCAVATOR) PUMP#508861 CAL 1.50 L/min
1A-06700, PERSONAL (POLISHEET) PUMP#603994 CAL 1.50 L/min

1AUG01

Project / Client

CONTINUED

C	1R-06782, PERSONAL (RECESSION) PUMP#626663 CAL 1.50
	1R-06782, PERSONAL (TRUCK FOLLOWING) PUMP#626664 CAL 1.50
	1R-06783, PERSONAL (TRUCK FOLLOWING) PUMP#626664 CAL 1.50
	1R-06784, PERSONAL (TRUCK FOLLOWING) PUMP#626664 CAL 1.50
	1R-06785, 1R-06786 FIELD BLANKS FOR TRUCK CHASING
	ALL PUMPS CALIBRATED WITH ROTOMETER #634719
0650	1R-06694 PUMP STARTED, PLACED ON WONDER WITH PUMPING
	LEVEL CAPPED.
0656	1R-06694 PUMP STOPPED
0704	1R-06700 PUMP STARTED, PLACED ON DARTWER
0722	1R-06683 PUMP STARTED
0724	1R-06695 PUMP STARTED
0728	1R-06684 PUMP STARTED
0729	1R-06685 PUMP STARTED
0731	1R-06693 PUMP STARTED
0734	1R-06692 PUMP STARTED
0736	1R-06690 PUMP STARTED
0737	1R-06691 PUMP STARTED
0738	1R-06689 PUMP STARTED
0740	1R-06688 PUMP STARTED
0742	1R-06687 PUMP STARTED
0743	1R-06686 PUMP STARTED
0900	MET STATION: 47°, IMPA @ 200°, 30.16, 97% Hum, 43° Dew Pt
1820 1820	DIRECTED TO PLACE AMBIENT PUMP ON ENTRANCE OF OFFICE TRIB

1AUG01

Project / Client

CONTINUED

1026	1R-06807 PUMP STARTED, AMBIENT (LHS-14) PUMP #
	602605 CAL 3.05 L/min
1030	MET STATION 60°F, 2mph @ 0°, 30.13" 65% Hum, 48° Dew Pt
1036	1R-06782 PUMP STARTED, FOLLOWING TRUCK TO FLYWAY
1111	1R-06782 PUMP PAUSED AT FLYWAY
1118	1R-06782 PUMP STARTED FOR A TURN TRIP
1132	1R-06782 PUMP STOPPED AT LHS, POST CAL 1.50
1155	1R-06694 PUMP PLACED ON LUNCH, CAPPED.
1307	1R-06698 PUMP STARTED, PLACED ON WONDER TO LEVEL C
1316	THE FOLLOWING CAN TO RUN TEST PITS, NEED PERSONAL
	AND AMBIENT SAMPLES RUN
1356	1R-06781 PUMP STARTED, PLACED ON DARTER
1356	1R-06689 PUMP STARTED, PLACED ON WONDER
1426	1R-06781 PUMP ~~STARTED~~, STOPPED, POST CAL 1.50 L/min
1429	1R-06689 PUMP STOPPED, POST CAL 1.50 L/min
1442	1R-06783 PUMP STARTED, FOLLOWING TRUCK TO FLYWAY
1457	1R-06783 PUMP PAUSED AT FLYWAY.
1500	THE FOLLOWING SAMPLES WILL BE RUN
	WHILE CON DICKS TEST PITS
	1R-06808, PERSONAL, PUMP # 626664, CAL 1.50 L/min
	1R-06809, PERSONAL, PUMP # 626603, CAL 1.5 L/min
	1R-06810, AMBIENT, PUMP # 602235, CAL 3.05 L/min
1500	1R-06810, PUMP STARTED
1504	1R-06783 PUMP STARTED FOR A RETURN TRIP TO LHS

1AUG01

Project / Client

CONTINUED

1505 IR-06809 PUMP STARTED PLACED ON [illegible]

1510 IR-06808 PUMP STARTED PLACED ON [illegible]

1521 IR-06783 PUMP STOPPED UPON RETURN TO LHS POST CAL [illegible]

1557 IR-06683 PUMP STOPPED POST CAL 3.05 L/min

1559 IR-06684 PUMP STOPPED POST CAL 3.11 ~~3.05~~ L/min

1601 IR-06685 PUMP STOPPED POST CAL 3.05 L/min

1603 IR-06784 PUMP STARTED FOLLOWING TRUCK #32 TO SCREENING PLANT

1603 IR-06693 PUMP STOPPED POST CAL 3.05 L/min

1607 IR-06690 PUMP STOPPED POST CAL 3.05 L/min

1609 IR-06691 PUMP STOPPED POST CAL 3.11 L/min

1611 IR-06689 PUMP STOPPED POST CAL 3.05 L/min

1613 IR-06688 PUMP STOPPED POST CAL 3.05 L/min

1616 IR-06687 PUMP STOPPED POST CAL 3.05 L/min

1618 IR-06686 PUMP STOPPED POST CAL 3.05 L/min

1626 IR-06784 PUMP STOPPED POST CAL 1.50 L/min

TRUCK ONLY COMPLETED ONE LEG OF TRIP AFTER UNLOADING AND GOING THROUGH DECON WE STOPPED FOR DAY AT THE SCREENING PLANT.

1628 IR-06700 PUMP STOPPED POST CAL 1.50

PUMP WAS PULLED FROM DRIVER WHEN HE PARKED HIS TRUCK AT SCREENING PLANT AT END OF DAY. WAS DECONNED, THEN

1AUG01

Project / Client

CONTINUED

BROUGHT BACK TO LHS FOR POST CAL.

1643 IR-06808 PUMP STOPPED - POST CAL 1.50 L/min

1644 IR-06694 PUMP STOPPED - POST CAL 3.11 L/min

1646 IR-06809 PUMP STOPPED - POST CAL ~~3.05 L/min~~

~~1651~~ 1.50 L/min AND WAS WIPED DOWN WITH A WET TOWEL BEFORE PASSING TO CLEAN SIDE.

1651 IR-06810 PUMP STOPPED POST CAL 3.05 L/min

1654 IR-06698 PUMP STOPPED AND DECONNED POST CAL 1.50 L/min.

1706 IR-06692 PUMP STOPPED POST CAL 3.05 L/min

1710 IR-06407 PUMP STOPPED POST CAL 3.05 L/min

1715 IR-06695 PUMP STOPPED POST CAL 3.05 L/min

1730 ALL SAMPLES ACCOUNTED FOR AND SEALED. PLACED UNDER CHAIN OF CUSTODY BY PES

RELINQUISHED BY PES TO CAM SAMPLE COORDINATOR ANGELA FRANKSEN UNDER THE CHAIN OF CUSTODY

REFER TO THE FOLLOWING FIELD DATA SHEETS.

A-01R-576 } PHOTOMETER AND AMOTENT
A-01R-577 } AIR SAMPLE.
A-01R-578 }

1AUG01

Location LIBBY HIGH SCHOOL Date 1 AUG 01

Project / Client

CONTINUED

A-01R-579 } PERIMETER AND AMBIENT
A-01R-580 } AIR SAMPLES.
A-01R-587 }
P-01R-000358 } PERSONAL AIR SAMPLES
P-01R-000359 }
P-01R-000360 } PERSONAL AIR (TRUCK FALLOUT)
P-01R-000361 } SAMPLES
P-01R-000364 } PERSONAL AIR SAMPLES
P-01R-000365 }

1 AUG 01

Location LIBBY HIGH SCHOOL Date 2 AUG 01

Project / Client

SAMPLING TEAM: PES DAVE BROWN BILLY SANDERS

0615 PES ARRIVED ON SITE AT LIBBY HIGH SCHOOL
TODAY WORK WILL CONTINUE ON THE
REMOVAL OF THE TRACK AND GUTTERS AS
WELL AS VACUUMING UNDER THE BLEACHERS
TODAY 8 PERIMETER SAMPLES, 7
AMBIENT SAMPLES, 4 PERSONAL (2
FULL SHIFT, 2 EXCURSION) AND 3 TRUCK
FOLLOWING SAMPLES WILL BE TAKEN
THE SAMPLES BELOW WILL BE TAKEN TODAY
1R-06787, PERIMETER (LHS-1) PUMP# 612098 CAL 3.05 L/min
1R-06788, PERIMETER (LHS-2) PUMP# 626636 CAL 3.05 L/min
1R-06789, PERIMETER (LHS-3) PUMP# 626602 CAL 3.05 L/min
1R-06790, PERIMETER (LHS-4) PUMP# 612088 CAL 3.05 L/min
1R-06791, PERIMETER (LHS-5) PUMP# 602938 CAL 3.05 L/min
1R-06792, PERIMETER (LHS-6) PUMP# 620578 CAL 3.05 L/min
1R-06793, PERIMETER (LHS-7) PUMP# 602600 CAL 3.05 L/min
1R-06794, PERIMETER (LHS-8) PUMP# 612729 CAL 3.05 L/min
1R-06795, ~~PERIMETER~~ AMBIENT (LHS-9) PUMP# 602596 CAL 3.05 L/min
1R-06796, AMBIENT (LHS-10) PUMP# 612682 CAL 3.05 L/min
1R-06797, AMBIENT (LHS-11) PUMP# 602598 CAL 3.05 L/min
1R-06798, AMBIENT (LHS-12) PUMP# 612058 CAL 3.05 L/min
1R-06799, AMBIENT (LHS-13) PUMP# 612697 CAL 3.05 L/min
1R-06800, 1R-06801 FIELD BLANKS FOR SAMPLES
1R-06802, PERSONAL (FULL) PUMP# 626640 CAL 1.50 L/min

2 AUG 01

Location LIBBY HIGH SCHOOL Date 2 AUG 01

Project / Client

CONTINUED

A-01R-584 } PERIMETER AND
A-01R-585 } AMBIENT AIR SAMPLES
A-01R-586 }
P-01R-000362 } PERSONAL AIR SAMPLES
P-01R-000363 }
P-01R-000375 } PERSONAL AIR SAMPLES FOLLOWING
P-01R-000376 } TRUCKS
P-01R-000381 } PERSONAL AIR SAMPLES
A-01R-000382 } TEST PIT EXCAVATION
D-01R-00001 } DUST SAMPLE (MICROVAC)

2 AUG 01

Location LIBBY HIGH SCHOOL Date 3 AUG 01

Project / Client

SAMPLING TEAM: PES DAVE BROWN, BRUCE SAWYER

0615 PES ARRIVED ON SITE AT LIBBY HIGH SCHOOL TODAY WORK WILL CONTINUE ON THE REMOVAL OF THE TRACK AND CONTAMINATED SOIL. TODAY 4 PERIMETER SAMPLES, 7 AMBIENT SAMPLES, 4 PERSONAL (2 FULL SHIFT, 2 EXCURSIONS) AND 3 TRUCK FOLLOWING SAMPLES WILL BE TAKEN. THE BELOW SAMPLES WILL BE COLLECTED TODAY

IR-06820,	PERIMETER (LHS-1)	PUMP# 612048	CAL 3.05	L/min
IR-06821,	PERIMETER (LHS-2)	PUMP# 626636	CAL 3.05	L/min
IR-06822,	PERIMETER (LHS-3)	PUMP# 626602	CAL 3.05	L/min
IR-06823,	PERIMETER (LHS-4)	PUMP# 612088	CAL 3.05	L/min
IR-06824,	PERIMETER (LHS-5)	PUMP# 602938	CAL 3.05	L/min
IR-06825,	PERIMETER (LHS-6)	PUMP# 626578	CAL 3.05	L/min
~~IR-06826,~~	~~AMBIENT PERIMETER (L~~			
IR-06826,	PERIMETER (LHS-7)	PUMP# 602600	CAL 3.05	L/min
IR-06827,	PERIMETER (LHS-8)	PUMP# 612729	CAL 3.05	L/min
IR-06828	AMBIENT (LHS-9)	PUMP# 602576	CAL 3.05	L/min
IR-06829,	AMBIENT (LHS-10)	PUMP# 612682	CAL 3.05	L/min
IR-06830,	AMBIENT (LHS-11)	PUMP# 602546	CAL 3.05	L/min
IR-06831,	AMBIENT (LHS-12)	PUMP# 612054	CAL 3.05	L/min
IR-06832,	AMBIENT (LHS-B)	PUMP# 612697	CAL 3.05	L/min
IR-06833,	AMBIENT (LHS-A)	PUMP# 602605	CAL 3.05	L/min
IR-06834,	AMBIENT (LHS-B)	PUMP# 626603	CAL 3.05	L/min

3 AUG 01

Location LIBBY HIGH SCHOOL Date 3 AUG 01

Project / Client

CONTINUED

	IR-06835, IR-06836 FIELD BLANKS
	IR-06837, PERSONAL (FULL SHIFT) PUMP #626640 CAL 1.50
	IR-06838, PERSONAL (EXCURSION) PUMP #608861 CAL 1.50
	IR-06839, PERSONAL (FULL SHIFT) PUMP #626563 CAL 1.50
	IR-06840, PERSONAL (EXCURSION) PUMP #602994 CAL 1.50
	IR-06841, PERSONAL (TRUCK FOLLOW), PUMP #626664 CAL 1.50
	IR-06842, PERSONAL (TRUCK FOLLOWING) PUMP #626664 CAL 1.50
	IR-06843, PERSONAL (TRUCK FOLLOWING) PUMP #626664 CAL 1.50
	IR-06844, IR-06845 (TRUCK FOLLOWING) ~~PUMP #626664 CAL 1.50~~ 3 AUG 01
	FIELD BLANKS FOR ~~PUMP~~ TRUCK FOLLOWING
	ALL PUMPS CALIBRATED WITH ROTAMETER 034719
0630	SAFETY MEETING
~~0645~~ 0647	IR-06839 PUMP STARTED PLACED ON DRIVER
0700	IR-06837 PUMP STARTED PLACED ON WORKER WEARING
	LEVEL C PPE
0701	IR-06831 PUMP STARTED
0716	IR-06827 PUMP STARTED
0718	IR-06828 PUMP STARTED
0719	IR-06826 PUMP STARTED
0721	IR-06833 PUMP STARTED
0722	IR-06825 PUMP STARTED
0723	IR-06820 PUMP STARTED
0724	IR-06824 PUMP STARTED
0724	IR-06832 PUMP STARTED

3 AUG 01

Location LIBBY HIGH SCHOOL Date 3 AUG 01

Project / Client

CONTINUED

0725	IR-06821 PUMP STARTED
0726	IR-06822 PUMP STARTED
0726	IR-06823 PUMP STARTED
0728	IR-06830 PUMP STARTED
0730	IR-06829 PUMP STARTED
0733	IR-06834 PUMP STARTED
0925	IR-06841 PUMP STARTED FOLLOWING TRUCK TO
	FLYWAY
0940	IR-06841 PUMP PAUSED AT FLYWAY
0943	IR-06841 PUMP STARTED FOR RETURN TO LHS
0950	IR-06839 PUMP STOPPED AND REMOVED FROM
	DRIVER TRUCK HAD MECHANICAL PROBLEMS
	AND DRIVER HAS BEEN TRYING TO REPAIR
	SAMPLE VOIDED
0950	IR-06840 SAMPLE VOIDED
0954	IR-06841 PUMP STOPPED, POST CAL 1.50
1151	IR-06837 PUMP PAUSED AND CAPPED FOR LUNCH
1256	IR-06837 PUMP STARTED AND PLACED ON WORKER
1342	IR-06842 PUMP STARTED, FOLLOWING TRUCK
1359	IR-06842 PUMP PAUSED AT FLYWAY
1405	IR-06842 PUMP STARTED FOR RETURN TO LHS
1407	IR-06836 PUMP STARTED PLACED ON WORKER
1419	IR-06842 PUMP ~~STARTED~~ STOPPED, POST CAL 1.50
1441	IR-06838 PUMP STOPPED, POST CAL 1.50, DECONNED

3 AUG 01

 Location LIBBY HIGH SCHOOL Date 3AUG01

Project / Client

CONTINUED DB

1459 ~~PRE SEALED 1459~~ IA-06843, PUMP STARTED FOLLOWING TRUCK
1514 IA-06843, PUMP SEALED AT FLYBY
1521 IA-06843, PUMP STARTED FOR RETURN TRIP TO LHS
1536 IA-06843, PUMP STOPPED AT LHS POST CAL 1.50 L/min
1549 IA-06827, PUMP STOPPED, POST CAL 3.05 L/min
1549 IA-06820, PUMP STOPPED, POST CAL 3.05 L/min
1552 IA-06826, PUMP STOPPED, POST CAL 3.15 L/min
1553 IA-06828, PUMP STOPPED, POST CAL 3.05 L/min
1555 IA-06821, PUMP STOPPED, POST CAL 3.05 L/min
1557 IA-06822, PUMP STOPPED, POST CAL 3.05 L/min
1534 ~~PRE SEALED~~ 3AUG01 LITE BATTERY IA-06825 PUMP STOPPED, POST CAL 3.05
1600 IA-06830, PUMP STOPPED, POST CAL 3.05 L/min
1603 IA-06829, PUMP STOPPED, POST CAL 3.05 L/min
1606 IA-06834, PUMP STOPPED, POST CAL 3.05 L/min
1605 IA-06833, PUMP STOPPED, POST CAL 3.11 L/min
1619 IA-06824, PUMP STOPPED, POST CAL 3.15 L/min
1621 IA-06823, PUMP STOPPED, POST CAL 3.25 L/min
1645 IA-06831, PUMP STOPPED, POST CAL 3.15 L/min
1652 IA-06832, PUMP STOPPED, POST CAL 3.05 L/min
1655 IA-06837, PUMP STOPPED, POST CAL 1.50 L/min
1715 ALL SAMPLES ACCOUNTED FOR AND SEALED
ALL PUMPS AND SAMPLING EQUIPMENT
DECONNED BEFORE BEING PASSED TO
CLEAN STOR SAMPLES TO BE RELINQUISHED

DB 3AUG01

 Location LIBBY HIGH SCHOOL Date 3AUG01

Project / Client

CONTINUED DB

TO TERRI KELLER, COR SAMPLE
COORDINATOR
AREA TO THE FOLLOWING FIELD
DATA SHEETS:
A-01R-588
A-01R-589
A-01R-590 } REATMETER & AMBIENT
A-01R-591 } AIR SAMPLE
A-01R-592
A-01R-593
P-01R-000377 } PERSONAL AIR SAMPLES
P-01R-000378
P-01R-000379 } TRUCK FOLLOWING SAMPLES
P-01R-000380

DB 3AUG01

Location LIBBY HIGH SCHOOL Date ~~4AUG01~~ 4AUG01

Project / Client [signature]

PBS SAMPLING TEAM - DAVE BROWN, BRUCE SARVEN

0615 PBS ARRIVED ON SITE AT LHS TODAY WORK WILL CONTINUE ON REMOVING THE TRACK AND SOILS TODAY 8 PERIMETER SAMPLES, 7 AMBIENT SAMPLES, AND 4 PERSONAL (2 FULL SHIFT, 2 EXCURSIONS) SAMPLES WILL BE COLLECTED IN ADDITION AN INDIVIDUAL WILL WALK ~~FROM~~ TO 4AUG01 FROM LHS TO THE SCREENING PLANT, THE EXACT # OF SAMPLES WILL DEPEND ON TIME OF THE WALK THE FOLLOWING SAMPLES WILL BE COLLECTED TODAY

1R-06849, PERIMETER (LHS-1) PUMP# 612098 CAL 3.05 L/min
1R-06850, PERIMETER (LHS-2) PUMP# 626638 CAL 3.05 L/min
1R-06851, PERIMETER (LHS-3) PUMP# 626602 CAL 3.05 L/min
1R-06852, PERIMETER (LHS-4) PUMP# 612088 CAL 3.05 L/min
1R-06853, PERIMETER (LHS-5) PUMP# 602938 CAL 3.05 L/min
1R-06854, PERIMETER (LHS-6) PUMP# 626578 CAL 3.05 L/min
1R-06855, PERIMETER (LHS-7) PUMP# 602600 CAL 3.05 L/min
1R-06856, PERIMETER (LHS-8) PUMP# 612729 CAL 3.05 L/min
1R-06857, ~~PERIMETER~~ AMBIENT (LHS-9) PUMP# 602596 CAL 3.05 L/min
1R-06858, AMBIENT (LHS-10) PUMP# 612682 CAL 3.05 L/min
1R-06859, AMBIENT (LHS-11) PUMP# 602598 CAL 3.05 L/min
1R-06860, AMBIENT (LHS-12) PUMP# 612055 CAL 3.05 L/min
1R-06861, AMBIENT (LHS-13) PUMP# 612697 CAL 3.05 L/min
1R-06862, AMBIENT (LHS-14) PUMP# 602605 CAL 3.05 L/min
1R-06863, AMBIENT (LHS-15) PUMP# 626603 CAL 3.05 L/min

[signature] 4AUG01

Location LIBBY HIGH SCHOOL Date 4AUG01

Project / Client

CONTINUED [signature]

1R-06864, 1R-06865 FIELD BLANKS
1R-06866 PERSONAL (FULL SHIFT) PUMP# 626640 CAL 1.50
1R-06867 PERSONAL (EXCURSION) PUMP# 626664 CAL 1.50
1R-06868 PERSONAL (FULL SHIFT) PUMP# 626563 CAL 1.50
1R-06869 PERSONAL (EXCURSION) PUMP# 602235 CAL 1.50
1R-07011 PERSONAL (WALKING TRUCK ROUTE) PUMP# 626664 CAL 1.50
1R-07012 PERSONAL (WALKING TRUCK ROUTE) PUMP# 626664 CAL 1.50
1R-07013 PERSONAL (WALKING TRUCK ROUTE) PUMP# 626664 CAL 1.50
1R-07014 PERSONAL (WALKING TRUCK ROUTE) PUMP# 626664 CAL 1.50
1R-07015 PERSONAL (WALKING TRUCK ROUTE) PUMP# 626664 CAL 1.50
1R-07017, 1R-07019 FIELD BLANKS FOR WALKING
ALL PUMPS CALIBRATED WITH ROTAMETER 034210

0630 SAFETY MEETING
0654 1R-06863 PUMP STARTED
0659 1R-06858 PUMP STARTED
0700 1R-06868 PUMP STARTED PLACED ON WORKER AFTER HE PUT ON LEVEL C PPE
0702 1R-06862 PUMP STARTED
0703 1R-06860 PUMP STARTED
0704 1R-06849 PUMP STARTED
0705 1R-06861 PUMP STARTED
0707 1R-06850 PUMP STARTED
0707 1R-06856 PUMP STARTED
0709 1R-06851 PUMP STARTED

[signature] 4AUG01

Location LIBBY HIGH SCHOOL Date 4AUG01

Project / Client

CONTINUED

0709	IR-06857 PUMP STARTED	
0710	IR-06855 PUMP STARTED	
0711	IR-06859 PUMP STARTED	
0713	IR-06866 PUMP STARTED	
0733	IR-06854 PUMP STARTED	
0735	IR-06853 PUMP STARTED	
0736	IR-06852 PUMP STARTED	
0945	BEGINNING WALKING SAMPLE OF TRUCK ROUTE	
	IR-07011 PUMP STARTED	
1017	IR-07011 PUMP STOPPED POST CAL 1.50 L/min	
1017	IR-07012 PUMP STARTED, WALKING	
1049	IR-07012 PUMP STOPPED POST CAL 1.50 L/min	
1049	IR-07013 PUMP STARTED, WALKING	
~~1022~~ 1122	IR-07013 PUMP STOPPED POST CAL 1.50 L/min	
1122	IR-07014 PUMP STARTED, WALKING	
1152	IR-07014 PUMP STOPPED, ~~WALKING~~ POST CAL 1.50	
1152	IR-07015 PUMP STARTED, WALKING	
1156	IR-06868 PUMP PAUSED AND CAPPED FOR LUNCH	
1200	IR-07015 PUMP STOPPED, POST CAL 1.50 L/min	
1230	IR-06864, IR-06865, IR-07017, IR-07019, BLANKS	
	OPENED FOR 30 SECONDS CAPPED AND SEALED	
1314	IR-06868 PUMP STARTED, AND PLACED ON WORKER	
1317	IR-06869 PUMP STARTED, PLACED ON WORKER	
1356	IR-06869 PUMP STOPPED, DECONNED, POST CAL 1.50 L/min	

4AUG01

Location LIBBY HIGH SCHOOL Date 4AUG01

Project / Client

CONTINUED

1407	~~PUMP~~ IN REWORK TO CONCERNS EXPRESSED	
	BY DRIVERS OF DUST IN TRUCKS TWO ADDITIONAL	
	SAMPLES WILL BE TAKEN ON DRIVERS TODAY.	
1407	IR-07016 PUMP STARTED (PUMP # 602599, CAL 1.50 L/min)	
	PLACED ON DRIVER	
1415	IR-07015 PUMP STARTED (PUMP # 602235, CAL 1.50 L/min)	
	PLACED ON DRIVER	
1454	IR-06861 6867 PUMP STARTED, PLACED ON DRIVER	
1526	IR-06867 PUMP STOPPED, POST CAL 1.50 L/min	
1517	IR-06863 PUMP STOPPED, POST CAL 3.18 L/min	
1550	IR-06858 PUMP STOPPED POST CAL 3.18 L/min	
1552	IR-06862 PUMP STOPPED, POST CAL 3.18 L/min	
1553	IR-06849 PUMP STOPPED, POST CAL 3.05 L/min	
1555	IR-06850 PUMP STOPPED, POST CAL 3.05	
1557	IR-06851 PUMP STOPPED, POST CAL 3.18 L/min	
1559	IR-06859 PUMP STOPPED, POST CAL 3.05 L/min	
1603	IR-06854 PUMP STOPPED, POST CAL 3.05 L/min	
1604	IR-06856 PUMP STOPPED, POST CAL 3.05 L/min	
1605	IR-06853 PUMP FOUND WITH LOW BATT	
	FAULT AND NOT RUNNING, COUNTER READ	
	262 min, POST CAL 3.18 L/min	
1606	IR-06857 PUMP STOPPED, POST CAL 3.05 L/min	
1608	IR-06852 PUMP STOPPED, POST CAL 3.18 L/min	
1608	IR-06855 PUMP STOPPED, POST CAL 3.05 L/min	

4AUG01

Location LIBBY HIGH SCHOOL Date 4AUG01

Project / Client

CONTINUED

1611	1R-07016	PUMP STOPPED, POST CAL	1.50 L/min
1611	1R-07018	PUMP STOPPED, POST CAL	1.50 L/min
1618	1R-06860	PUMP STOPPED, POST CAL	3.05 L/min
1623	1R-06860	PUMP STOPPED, POST CAL	1.50 L/min
1628	1R-06861	PUMP STOPPED, POST CAL	3.05 L/min
1648	1R-06868	PUMP STOPPED, POST CAL	1.50 L/min
1700	ALL SAMPLES ACCOUNTED FOR AND SEALED, ALL SAMPLE EQUIPMENT DECONNED. ALL SAMPLES PLACED UNDER THE CHAIN OF CUSTODY, TO BE RELINQUISHED TO CDM SAMPLE COORDINATOR TERRI KELLER. REFER TO THE FOLLOWING FIELD DATA SHEETS		

~~1R-06840~~ 4AUG01

A-01R-594
A-01R-595
A-01R-596 } PERIMETER AND AMBIENT SAMPLES
A-01R-597
A-01R-598
A-01R-599

P-01R-000383 } PERSONAL AIR SAMPLES
P-01R-000384

P-01R-000382
P-01R-000383 } TRUCK ROUTE WALK
P-01R-000386

4AUG01

Location LIBBY HIGH SCHOOL Date 4AUG01

Project / Client

CONTINUED

P-01R-000394 } PERSONAL AIR SAMPLE
P-01R-000395

4AUG01

Appendix K
Field Sample Data Sheets for 2001 Air Sampling Data Collected During Plummer Elementary and Libby High School Remediations

Sheet No. P-01R-000275

LIBBY MONTANA SITE INVESTIGATION
FIELD SAMPLE DATA SHEET FOR
PERSONAL AIR

Field Logbook No.: 100019
Address or Location: PLUMMER ELEM SCHOOL
Land Use Category: Residential (School) Commercial Mining (Other) Car)
Name of worker: Dave Brown SSN (last four digits): 8463
Activity: DRIVING FROM PLUMMER ELEM – FLYWAY SITE ROUNDTRIP
Site Visit Date: 7-17-01 Sampling Team: PES: Dave Brown, Jeremy Vasilko

Data Item	Cassette 1	Cassette 2	Cassette 3
Field ID Number			
Index ID	1R-05995	1R-05996	1R-05997
Category (circle)	(FS) Rep_____ Blank	(FS) Rep_____ Blank	(FS) Rep_____ Blank
Matrix Type (circle)	Indoor (Outdoor)	Indoor (Outdoor)	Indoor (Outdoor)
Location Description	Shoulder	Shoulder	SHOULDER
Flow Meter Type	Rotameter	Rotameter	ROTOMETER
Flow Meter ID No.	034719	034719	~~0~~ 034719
Pump ID Number	626640	626640	626640
Start-Date	7-17-01	7-17-01	7/18/01
Start-Time	0649	1026	1427
Start-Counter	NA	NA	NA
Start-Flow (L/min)	1.82	1.82	1.82
Stop-Date	7-17-01	7-17-01	7/18/01
Stop-Time	0917	1101	1457
Stop-Counter	NA	NA	NA
Stop-Flow (L/min)	1.82	1.82	1.82
Pump fault?	(No) Yes	(No) Yes	(No) Yes
MET Station onsite?	No (Yes)	No (Yes)	No (Yes)
Field Comment	28 min 51 L Exc	33 min 60L Exc	30 min 55L

Checked by:

Sheet No. P-01R-000276

LIBBY MONTANA SITE INVESTIGATION
FIELD SAMPLE DATA SHEET FOR
PERSONAL AIR

Field Logbook No.: 100019

Address or Location: PLUMMER ELEM. SCHOOL

Land Use Category: Residential (School) Commercial Mining (Other) Truck Route)

Name of worker: Jeremy Vasilko SSN (last four digits): 1501

Activity: DRIVING FROM PLUMMER ELEM TO FLYWAY SITE ROUNDTRIP

Site Visit Date: 7/18/01 Sampling Team: PES: J Vasilko D Brown

Data Item	Cassette 1	Cassette 2	Cassette 3
Field ID Number			
Index ID	1R-05998	1R-05999	1R-6000
Category (circle)	(FS) Rep_____ Blank	(FS) Rep_____ Blank	FS Rep_____ (Blank)
Matrix Type (circle)	Indoor (Outdoor)	Indoor (Outdoor)	Indoor Outdoor
Location Description	SHOULDER	SHOULDER	
Flow Meter Type	ROTAMETER	ROTAMETER	
Flow Meter ID No.	034719	034719	
Pump ID Number	612729	612729	
Start-Date	18JULY01	18JULY01	
Start-Time	1504	1534	
Start-Counter	NA	NA	
Start-Flow (L/min)	1.82	1.82	
Stop-Date	~~18JULY01~~ 18JULY01	18JULY01	
Stop-Time	1533	1605	
Stop-Counter	NA	NA	
Stop-Flow (L/min)	1.82	1.82	
Pump fault?	(No) Yes	(No) Yes	No Yes
MET Station onsite?	No (Yes)	No (Yes)	No Yes
Field Comment	29 min 53 L	31 min 56 L	

Checked by: [signature]

Sheet No. P-01R-000277

LIBBY MONTANA SITE INVESTIGATION
FIELD SAMPLE DATA SHEET FOR
PERSONAL AIR

Field Logbook No.: 100019

Address or Location: PLUMMER ELEM SCHOOL

Land Use Category: Residential (School) Commercial Mining (Other) Truck Route)

Name of worker: DAVE BROWN SSN (last four digits): 8463

Activity: ~~DRIVING~~ WALKING FROM PLUMMER ELEM SCHOOL - FLY WAY ROUNDTRIP

Site Visit Date: 7/18/01 Sampling Team: PES S Vasilko D Brown

Data Item	Cassette 1	Cassette 2	Cassette 3
Field ID Number			
Index ID	1R-06041	1R-06045	1R-06046
Category (circle)	FS Rep_____ (Blank)	(FS) Rep_____ Blank	(FS) Rep_____ Blank
Matrix Type (circle)	Indoor Outdoor	Indoor (Outdoor)	Indoor (Outdoor)
Location Description	NA	SHOULDER	SHOULDER
Flow Meter Type		ROTOMETER	ROTOMETER
Flow Meter ID No.		034719	034719
Pump ID Number		612729	612729
Start-Date		18JULY01	18JULY01
Start-Time		1005	1104
Start-Counter		NA	NA
Start-Flow (L/min)		~~1.83~~ 1.82	~~1.83~~ 1.82
Stop-Date		18JULY	18JULY01
Stop-Time		1036	1206
Stop-Counter		NA	NA
Stop-Flow (L/min)		~~1.82~~ 18JULY 1.82	1.82
Pump fault?	~~No~~ ~~Yes~~	(No) Yes	(No) Yes
MET Station onsite?	No ~~Yes~~	No (Yes)	No (Yes)
Field Comment	ARCHIVE	WALK FROM PLUMMER TO 402 HIGHWAY 2 WEST (COMPES OFFICE 31 min 56 L	WALK FROM MACKS MINIMART TO SCREENING PLANT 62 min 113 L

Checked by: [illegible]

LIBBY MONTANA SITE INVESTIGATION
FIELD SAMPLE DATA SHEET FOR
PERSONAL AIR

Field Logbook No.: 100019
Address or Location: PLUMMER ELEM SCHOOL
Land Use Category: Residential (School) Commercial Mining Other(HAUL ROUTE)
Name of worker: JEREMY VASILKO SSN (last four digits): 1501
Activity: WALKING HAUL ROUTE
Site Visit Date: 18JULY01 Sampling Team: PRS: DAVE BROWN, JEREMY VASILKO

Data Item	Cassette 1	Cassette 2	Cassette 3
Field ID Number			
Index ID	1R-06047	18JULY01	-
Category (circle)	(FS) Rep_____ Blank	FS Rep_____ Blank	FS Rep_____ Blank
Matrix Type (circle)	Indoor (Outdoor)	Indoor Outdoor	Indoor Outdoor
Location Description	SHOULDER		
Flow Meter Type	ROTOMETER		
Flow Meter ID No.	034719		
Pump ID Number	626640		
Start-Date	18JULY01		
Start-Time	~~08~~ 0953		
Start-Counter	NA		
Start-Flow (L/min)	1.82		
Stop-Date	18JULY01		
Stop-Time	1028		
Stop-Counter	NA		
Stop-Flow (L/min)	1.82		
Pump fault?	(No) Yes	No Yes	No Yes
MET Station onsite?	No (Yes)	No Yes	No Yes
Field Comment	WALKED FROM 402 HIGHWAY 2 WEST TO MACKS MINIMART 35min 64L		

Checked by:

LIBBY MONTANA SITE INVESTIGATION
FIELD SAMPLE DATA SHEET FOR
PERSONAL AIR

Field Logbook No.: 100019

Address or Location: PLUMMER ELEM SCHOOL

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

Name of worker: DAVE BROWN/JEREMY VASILKO SSN (last four digits): 4463 / 1501

Activity: FOLLOWING TRUCKS

Site Visit Date: 19JULY01 Sampling Team: ABS DAVE BROWN

Data Item	Cassette 1	Cassette 2	Cassette 3
Field ID Number			
Index ID	1R-06054	1R-06055	1R-06056
Category (circle)	(FS) Rep_____ Blank	(FS) Rep_____ Blank	(FS) Rep_____ Blank
Matrix Type (circle)	Indoor (Outdoor)	Indoor (Outdoor)	Indoor (Outdoor)
Location Description	SHOULDER	SHOULDER	SHOULDER
Flow Meter Type	ROTOMETER	ROTOMETER	ROTOMETER
Flow Meter ID No.	034719	034719	034719
Pump ID Number	612682	612682	612682
Start-Date	19JULY01	~~#17~~ 19JULY01	19JULY01
Start-Time	1137 / 1255	1417 / 1443	1502 / 1522
Start-Counter	NA	NA	NA
Start-Flow (L/min)	1.83	1.83	1.83
Stop-Date	19JULY01	19JULY01	19JULY01
Stop-Time	1155 / 1317	1432 / 1456	1517 / 1537
Stop-Counter	NA	NA	NA
Stop-Flow (L/min)	1.83	1.83	1.83
Pump fault?	(No) Yes	(No) Yes	(No) Yes
MET Station onsite?	No (Yes)	No (Yes)	No (Yes)
Field Comment	Following WHITE JEM DUMP TRUCK 30 min 55L	Following JUNTUNEN# 5. 28min 51L	FOLLOWING BLUE JEM TRUCK 30 min 55L

Sheet No. P-01R-000282

LIBBY MONTANA SITE INVESTIGATION
FIELD SAMPLE DATA SHEET FOR
PERSONAL AIR

Field Logbook No.: 100019

Address or Location: PLUMMER ELEM SCHOOL

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

Name of worker: DAVE BROWN / JEREMY VASTUKO SSN (last four digits): 8563 / 1501

Activity: FOLLOWING TRUCKS

Site Visit Date: 7-19-01 Sampling Team: PSS: JVAsilko DBrown

Data Item	Cassette 1	Cassette 2	Cassette 3
Field ID Number			
Index ID	1R-06057	1R-06058	1R-06059
Category (circle)	(FS) Rep____ Blank	FS Rep____ (Blank)	FS Rep____ (Blank)
Matrix Type (circle)	Indoor (Outdoor)	Indoor ~~Outdoor~~ 7-19-01	Indoor ~~Outdoor~~ 7-1901
Location Description	Shoulder	NA	NA
Flow Meter Type	Rotameter		
Flow Meter ID No.	034719		
Pump ID Number	612682		
Start-Date	19JULY01		
Start-Time	1609		
Start-Counter	NA		
Start-Flow (L/min)	~~1625~~ 1.83		
Stop-Date	19JULY01		
Stop-Time	1625		
Stop-Counter	NA		
Stop-Flow (L/min)	1.83		
Pump fault?	(No) Yes	No ~~Yes~~	No ~~Yes~~
MET Station onsite?	No (Yes)	~~No~~ 7-19-01 Yes	~~No~~ 7-19-01 Yes
Field Comment	Junburner #6 16min 29L		

DBrown

Sheet No. P-01R-000285

LIBBY MONTANA SITE INVESTIGATION
FIELD SAMPLE DATA SHEET FOR
PERSONAL AIR

Field Logbook No.: 100019
Address or Location: Plummer Elem School
Land Use Category: Residential (School) Commercial Mining Other( )
Name of worker: SUAsilleg, DBrown SSN (last four digits): 1501, 8463
Activity: Follow trucks to fly wall & back to Plummer
Site Visit Date: 20JULY01 Sampling Team: RES: DBrown SUasilleg

Data Item	Cassette 1	Cassette 2	Cassette 3
Field ID Number			
Index ID	1R-06130	1R-06131	1R-06132
Category (circle)	(FS) Rep_____ Blank	(FS) Rep_____ Blank	(FS) Rep_____ Blank
Matrix Type (circle)	Indoor (Outdoor)	Indoor (Outdoor)	Indoor (Outdoor)
Location Description	Shoulder	Shoulder	Shoulder
Flow Meter Type	Rotameter	Rotameter	Rotameter
Flow Meter ID No.	034719	034719	034719
Pump ID Number	612682	612682	612682
Start-Date	7-20-01	7-20-01	7-20-01
Start-Time	1050 / 1114	~~1114~~ 1258 / 1322	~~1254~~ 1354 / ~~1401~~ 1420
Start-Counter	NA	NA	NA
Start-Flow (L/min)	1.83	1.83	1.83
Stop-Date	7-20-01	7-20-01	7-20-01
Stop-Time	1103 / 1129	1314 / 1336	1414 / 1435
Stop-Counter	NA	NA	NA
Stop-Flow (L/min)	1.83	1.83	1.83
Pump fault?	(No) Yes	(No) Yes	(No) Yes
MET Station onsite?	No (Yes)	No (Yes)	No (Yes)
Field Comment	28 min 51L	30 min 55L	35 min 64L

7-20

Sheet No. P-01R-000289

LIBBY MONTANA SITE INVESTIGATION
FIELD SAMPLE DATA SHEET FOR
PERSONAL AIR

Field Logbook No.: 100019
Address or Location: Plummer Elem School
Land Use Category: Residential (School) Commercial Mining Other( )
Name of worker: Jeremy Vasilko / Dave Brown SSN (last four digits): 1501 / 8443
Activity: Following Trucks in car
Site Visit Date: 7/21/01 Sampling Team: PES: JVasilko, DBrown

Data Item	Cassette 1	Cassette 2	Cassette 3
Field ID Number			
Index ID	1R-06141	1R-06142	1R-06143
Category (circle)	(FS) Rep_____ Blank	(FS) Rep_____ Blank	(FS) Rep_____ Blank
Matrix Type (circle)	Indoor (Outdoor)	Indoor (Outdoor)	Indoor (Outdoor)
Location Description	Shoulder	Shoulder	Shoulder
Flow Meter Type	Rotometer	Rotometer	Rotometer
Flow Meter ID No.	034719	034719	034719
Pump ID Number	612682	612682	612682
Start-Date	7-21-01	7-21-01	7-21-01
Start-Time	0735 / 0758	0942 / 1005	1324 / 1347
Start-Counter	NA	NA	NA
Start-Flow (L/min)	1.83	1.83	1.83
Stop-Date	7-21-01	7-21-01	7-21-01
Stop-Time	0750 / 0810	0956 / 1019	1339 / 1350
Stop-Counter	NA	NA	NA
Stop-Flow (L/min)	1.83	1.83	1.83
Pump fault?	(No) Yes	(No) Yes	(No) Yes
MET Station onsite?	No (Yes)	No (Yes)	No (Yes)
Field Comment	27 min 49L WHITE JEEP	28 min 51L GREY LHC TRUCK	18 min 33L BLUE JEEP TRUCK

Sheet No. P-01R- 000331

LIBBY MONTANA SITE INVESTIGATION
FIELD SAMPLE DATA SHEET FOR
PERSONAL AIR

Field Logbook No.: 100019

Address or Location: LIBBY HIGH SCHOOL

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

Name of worker: DAVE BROWN SSN (last four digits): 4463

Activity: TRUCK ROUTE BACKGROUND SAMPLES

Site Visit Date: 26 JULY 01 Sampling Team: PES: DAVE BROWN, JEREMY VASILKO

Data Item	Cassette 1	Cassette 2	Cassette 3
Field ID Number			
Index ID	1R-06170	1R-06171	1R-06172
Category (circle)	(FS) Rep_____ Blank	(FS) Rep_____ Blank	(FS) Rep_____ Blank
Matrix Type (circle)	Indoor (Outdoor)	Indoor (Outdoor)	Indoor (Outdoor)
Location Description	SHOULDER	SHOULDER	SHOULDER
Flow Meter Type	ROTOMETER	ROTOMETER	ROTOMETER
Flow Meter ID No.	034719	034719	034719
Pump ID Number	612682	612687	612682
Start-Date	26JULY01	26JULY01	26JULY01
Start-Time	1400	1600	1534
Start-Counter	NA	NA	NA
Start-Flow (L/min)	1.57	1.57	1.57
Stop-Date	26JUL01	26JUL01	26JUL01
Stop-Time	1433	1530	1604
Stop-Counter	~~1433~~ NA	~~1530~~ NA	~~1604~~
Stop-Flow (L/min)	1.57	1.57	1.57
Pump fault?	(No) Yes	(No) Yes	(No) Yes
MET Station onsite?	(No) Yes	(No) Yes	(No) Yes
Field Comment	33min 52L	30min 47L	30min 47L

Sheet No. P-01R- 000360

LIBBY MONTANA SITE INVESTIGATION
FIELD SAMPLE DATA SHEET FOR
PERSONAL AIR

Field Logbook No.: 100019

Address or Location: LIBBY HIGH SCHOOL

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

Name of worker: DAVE BROWN SSN (last four digits): 6463

Activity: FOLLOWING TRUCKS

Site Visit Date: 1AUG01 Sampling Team: PES: DAVE BROWN, BRUCE SARVEN

Data Item	Cassette 1	Cassette 2	Cassette 3
Field ID Number			
Index ID	1R-06782	1R-06783	1R-06784
Category (circle)	(FS) Rep_____ Blank	(FS) Rep_____ Blank	(FS) Rep_____ Blank
Matrix Type (circle)	Indoor (Outdoor)	Indoor (Outdoor)	Indoor (Outdoor)
Location Description	ROTOMETER SHOULDER	ROTOMETER Shoulder	ROTOMETER Shoulder
Flow Meter Type	ROTOMETER	ROTOMETER	ROTOMETER
Flow Meter ID No.	034719	034719	034719
Pump ID Number	626664	626664	626664
Start-Date	1AUG01	1AUG01	1AUG01
Start-Time	1056 / 1119	1442 / 1504	1603
Start-Counter	NA	NA	NA
Start-Flow (L/min)	1.50	1.50	1.50
Stop-Date	1AUG01	1AUG 01	1AUG 01
Stop-Time	1111 / 1132	1457 / 1521	1626
Stop-Counter	NA	NA	NA
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)
Field Comment	FOLLOWING TRUCK #34 28 MINUTES 42 LITERS	FOLLOWING TRUCK #38 32 MINUTES 48 LITERS	FOLLOWING TRUCK #32 TO SCREENING PLANT 23 MINUTES (ONE WAY) 35 LITERS

Sheet No. P-01R- 000379

LIBBY MONTANA SITE INVESTIGATION
FIELD SAMPLE DATA SHEET FOR
PERSONAL AIR

Field Logbook No.: 100019

Address or Location: LIBBY HIGH SCHOOL

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

Name of worker: DAVE BROWN SSN (last four digits): 8463

Activity: FOLLOWING TRUCKS

Site Visit Date: 3AUG01 Sampling Team: PET: DAVE BROWN, BRUCE SAMUEL

Data Item	Cassette 1	Cassette 2	Cassette 3
Field ID Number			
Index ID	~~1R-06841~~	1R-06842	1R-06843
Category (circle)	(FS) Rep_____ Blank	(FS) Rep_____ Blank	(FS) Rep_____ Blank
Matrix Type (circle)	Indoor (Outdoor)	Indoor (Outdoor)	Indoor (Outdoor)
Location Description	SHOULDER	SHOULDER	SHOULDER
Flow Meter Type	ROTOMETER ~~034719~~ BI 8/2/01	ROTOMETER ~~034719~~ BI 8/2/01	ROTOMETER ~~034719~~ BI 8/2/01
Flow Meter ID No.	034719	034719	034719
Pump ID Number	626664	626664	626664
Start-Date	3AUG 01	3AUG 01	3AUG01
Start-Time	0925/0943	1342/1405	1459/1521
Start-Counter	NA	NA	NA
Start-Flow (L/min)	1.50	1.50	1.50
Stop-Date	3AUG 01	3AUG 01	3AUG 01
Stop-Time	0940/0958	1359/1419	~~1501~~ BI 8/3/01 / 1514/1536
Stop-Counter	NA	NA	NA
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)
Field Comment	30 MINUTES 45 LITERS FOLLOWING TRUCK ~~#34~~ #36 BI 8/15/01	FOLLOWING TRUCK #31 ~~72~~ BI 8/7/01 31 MINUTES ~~465 LITERS~~ 47L	FOLLOWING TRUCK #36 30 MINUTES 45 LITERS

Sheet No. P-01R-000392

LIBBY MONTANA SITE INVESTIGATION
FIELD SAMPLE DATA SHEET FOR
PERSONAL AIR

Field Logbook No.: 100019
Address or Location: LIBBY HIGH SCHOOL
Land Use Category: Residential (School) Commercial Mining Other( )
Name of worker: Justin LeClerc SSN (last four digits): 7636
Activity: WALKING TRUCK ROUTE
Site Visit Date: 4AUG 01 Sampling Team: PES: DAVE SAWYER, DAVE BROWN

Data Item	Cassette 1	Cassette 2	Cassette 3
Field ID Number			
Index ID	1R-07011	1R-07012	1R-07013 4AUG01
Category (circle)	(FS) Rep_____ Blank	(FS) Rep_____ Blank	(FS) Rep_____ Blank
Matrix Type (circle)	Indoor (Outdoor)	Indoor (Outdoor)	Indoor (Outdoor)
Location Description	SHOULDER	SHOULDER	SHOULDER
Flow Meter Type	ROTOMETER	ROTOMETER	ROTOMETER
Flow Meter ID No.	034719	034719	034719
Pump ID Number	626664	626664	626664
Start-Date	4AUG 01	4AUG 01	4AUG 01
Start-Time	0945	1017	1049
Start-Counter	NA	NA	NA
Start-Flow (L/min)	1.50	1.50	1.50
Stop-Date	4 AUG 01	4AUG 01	4 AUG 01
Stop-Time	10:17	1049	1122
Stop-Counter	NA	NA	NA
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)
Field Comment	32 MINUTES 48 LITERS	32 MINUTES 48 LITERS	33 MINUTES ~~49.5 LITERS~~ 4AUG 50 L

Sheet No. P-01R- 000393

LIBBY MONTANA SITE INVESTIGATION
FIELD SAMPLE DATA SHEET FOR
PERSONAL AIR

Field Logbook No.: 100019

Address or Location: LIBBY HIGH SCHOOL

Land Use Category: Residential School Commercial Mining Other( )

Name of worker: Justin Le Clerc SSN (last four digits): 7636

Activity: WALKING TRUCK ROUTE

Site Visit Date: 4AUG01 Sampling Team: ABS: BRUCE SARVEN, DAVE BROWN

Data Item	Cassette 1	Cassette 2	Cassette 3
Field ID Number			
Index ID	1R-07014	1R-07015	1R-07019
Category (circle)	FS Rep____ Blank	FS Rep____ Blank	FS Rep____ Blank
Matrix Type (circle)	Indoor Outdoor	Indoor Outdoor	Indoor Outdoor
Location Description	SHOULDER	SHOULDER	
Flow Meter Type	ROTOMETER	ROTOMETER	
Flow Meter ID No.	034719	034719	
Pump ID Number	626664	626664	
Start-Date	4AUG01	4AUG01	
Start-Time	1122	1152	
Start-Counter	~~4A~~ 8/4/01 NA	NA	
Start-Flow (L/min)	1.50	1.50	
Stop-Date	4AUG01	4AUG01	
Stop-Time	1152	1200	
Stop-Counter	NA	NA	
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
Field Comment	30 MINUTES 7 BS 8/4/01 45 LITERS	8 MINUTES 12 LITERS	OPENED FOR 30 SEC AND SEALED. 1230

JDB 4AUG