



Environmental Solutions through Technology

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December 4, 1992

Mr. Chuck Schwer
Site Management Section
Department of Environmental Conservation
Vermont Agency of Natural Resources
103 South Main Street, West Building
Waterbury, VT 05671-0404

Subject: Draft Site Inspection Report
Beebe Road Dump
Derby, Vermont
W.A. No. 08-1JZZ
Reference No. 1-636-009-0-1J77, TDD No. 9107-13-ATS
CERCLIS No. VTD982748238

Dear Mr. Schwer:

A copy of the Draft Site Inspection Report for the Beebe Road Dump in Derby, VT is enclosed. Please review the report and send any comments you may have to Don Smith, EPA Site Assessment Manager, at the following address:

Superfund Support Section (HSS-CAN7)
U.S. EPA Waste Management Division
JFK Federal Building
Boston, MA 02203-2211

To enable TRCC to track the project, the letter should reference the Work Assignment No. 08-1JZZ and the TDD No. 9107-13-ATS. If comments are received by January 15, 1993, they can be considered for revision of this report under the current Work Assignment. Late and unaddressed comments will be made part of the TRCC project file.

If you have any questions, please do not hesitate to call.

Sincerely,

Paul A. Hughes
ARCS Program Manager

Enclosure

cc: S. Hayes (w/o enclosure)
D. Smith (w/o enclosure)

drsime.st

ARCS

Remedial Planning Activities at Selected Uncontrolled Hazardous Substance Disposal Sites in Region I



Environmental Protection Agency
Region I

ARCS Work Assignment No. 08-1JZZ

Beebe Road Dump
Derby, VT
VTD982748238
TDD# 9107-13-ATS

Site Inspection
Draft Report

December 1992

TRC
Companies, Inc.

TAMS Consultants, Inc.
PEI Associates, Inc.
Jordan Communications, Inc.

SITE INSPECTION
BEEBE ROAD DUMP

DERBY, VERMONT

VTD982748238

DRAFT REPORT

Prepared for

U.S. ENVIRONMENTAL PROTECTION AGENCY
Region I
90 Canal Street
Boston, Massachusetts 02203-2211

Work Assignment:	08-1JZZ
EPA Region:	I
Contract No.:	68-W9-0033 (ARCS)
TRCC Document No.:	A92-1598
TRCC Project No.:	1-636-009-0-1J77
TDD No.:	9107-13-ATS
TRCC Work Assignment Manager:	Diane Stallings
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Date Prepared:	December 3, 1992
Revision:	0

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TABLE OF CONTENTS

Section	Page
INTRODUCTION	1
SITE DESCRIPTION	1
SITE ACTIVITY/HISTORY	5
ENVIRONMENTAL SETTING	7
RESULTS	11
SUMMARY	16
REFERENCES	19
Appendices	Page
A Analytical Results from Previous Investigations	A-1
B Analytical Results from TRCC Sampling	B-1

TABLES

Number	Page
1 Source Evaluation	5
2 Hazardous Waste Quantity	6
3 Public Water Supply Sources Within Four Miles of the Beebe Road Dump	8
4 Private Well Usage Within Four Miles of the Beebe Road Dump	9
5 Approximate Residential Population Within 4 Miles of the Beebe Road Dump	9
6 Sample Summary-Beebe Road Dump	13
7 Sample Results Summary-Beebe Road Dump	14

FIGURES

Number	Page
1 Site Location	2
2 Site Sketch	4

INTRODUCTION

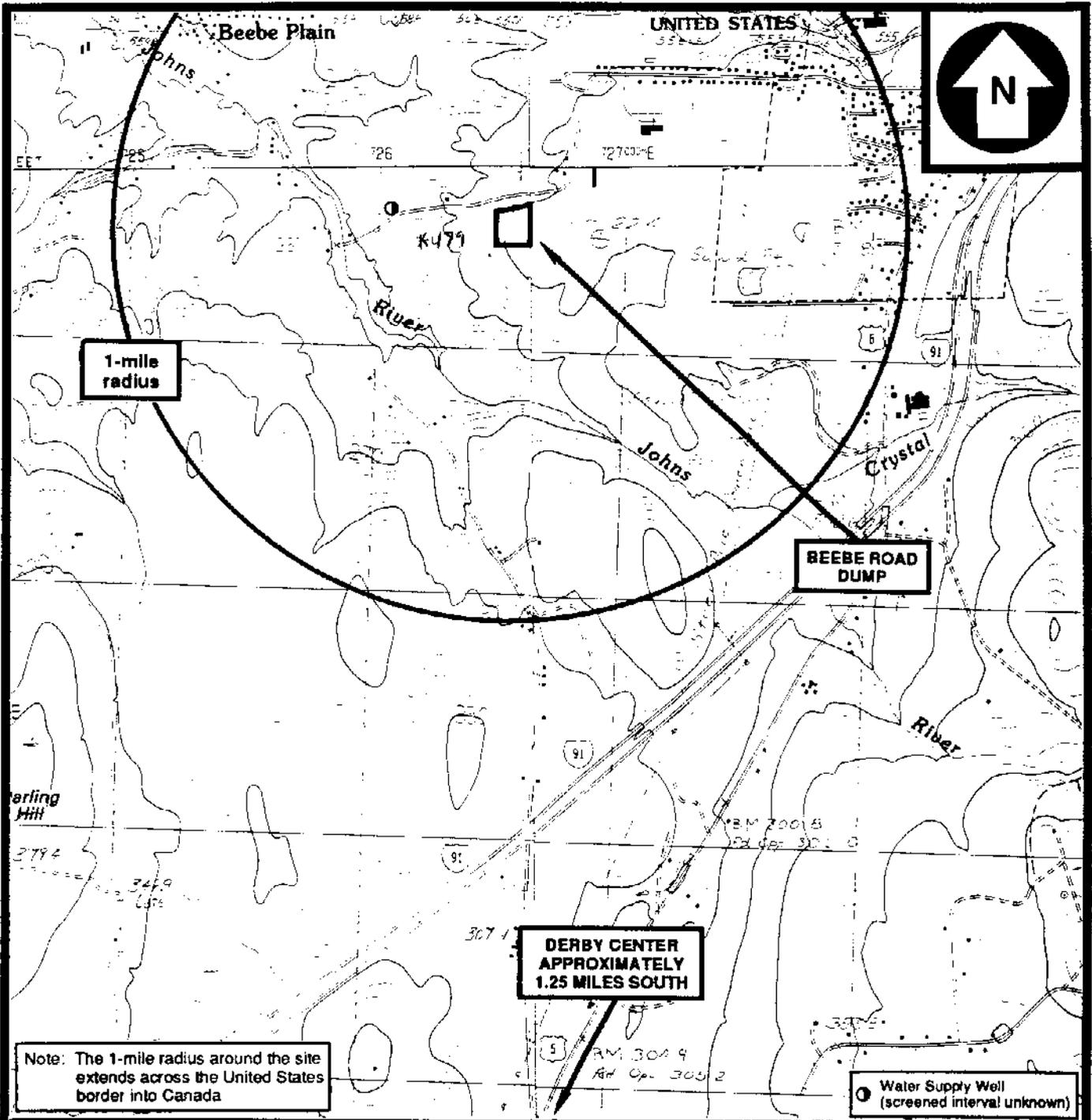
TRC Companies, Inc. (TRCC) was contracted by the Region I U.S. Environmental Protection Agency (EPA) Waste Management Division to perform a Site Inspection (SI) of the Beebe Road Dump located in Derby, Vermont. All tasks were conducted in accordance with Work Assignment No. 08-1JZZ under EPA Contract No. 68-W9-0033. A Preliminary Assessment of this property was completed by the Vermont Agency of Natural Resources on February 1988. A Site Inspection was initiated based upon information provided in the Preliminary Assessment.

Background information used in the preparation of this report was obtained through file searches conducted at the EPA, the Department of Environmental Conservation, Vermont Agency of Natural Resources (VT ANR) in Waterbury, Vermont and the town offices of Derby Vermont.

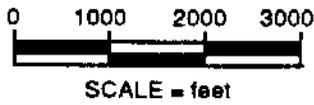
This Site Inspection report satisfies the guidelines developed under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, commonly referred to as Superfund. However, this document does not necessarily fulfill the requirements of other EPA regulations such as those under the Resource Conservation and Recovery Act (RCRA) or other federal, state, or local regulations. Site Inspections are intended to provide a preliminary screening of sites to facilitate EPA's assignment of site priorities. They are limited efforts and are intended to supersede more detailed investigations.

SITE DESCRIPTION

The Beebe Road Dump, also known locally as the Derby Landfill, is located at 44 59' 52" north latitude and 72 07' 33" west longitude (Figure 1) (VT ANR, 1988). The dump is located off of the Elm Street Extension in the town of Derby, Vermont approximately 1/4



BASE MAP IS A PORTION OF THE FOLLOWING U.S.G.S. 7.5' SERIES QUADRANGLES:
 NEWPORT, VT, 1986; WEST CHARLESTON, VT, 1986



QUADRANGLE LOCATION

LOCATION MAP

**BEEBE ROAD DUMP
 DERBY, VERMONT**

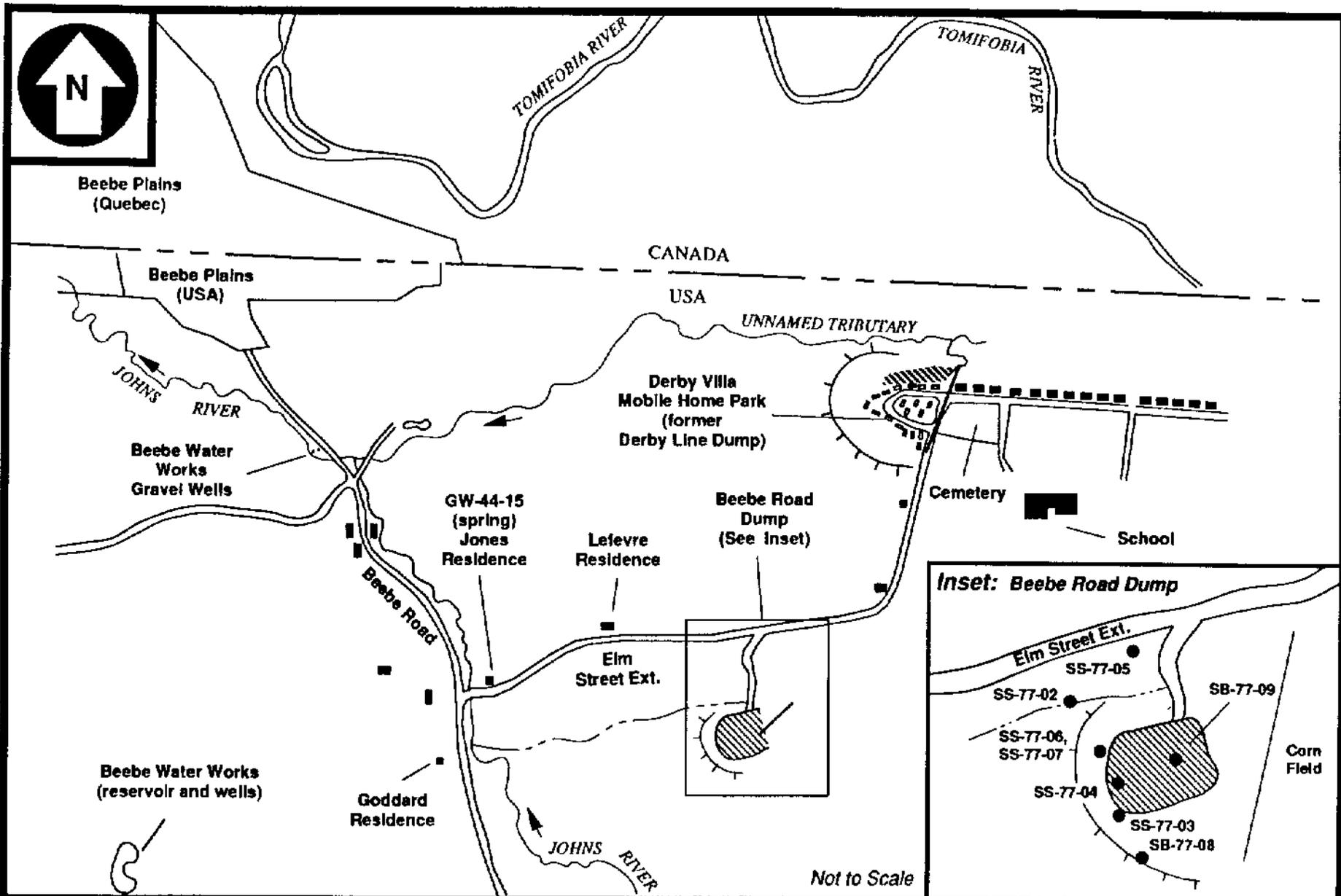


Figure 1.

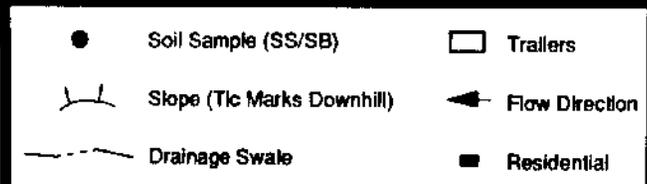
mile south of the Derby Line Dump and the United States - Canadian border (Figure 2). The Beebe Road Dump encompasses approximately five acres of land and is situated in a wooded area at the edge of a corn field. The property that the dump occupies and the cornfield adjacent to it are owned by Mr. Douglas Nelson of Derby, Vermont (TRCC, 1992). Mr. Nelson has owned the property since 1968 (VT ANR, 1988).

The Beebe Road dump was operated by the town of Derby, Vermont from approximately 1968 through 1973 and received household and commercial trash (VT ANR, 1988). During TRCC's field activities was noted that the dump area is very poorly developed and completely overgrown. Visible trash included old tires, barbed wire, bed springs, old wood, construction debris and empty five-gallon containers of agricultural herbicide, empty paint cans, granite blocks, furniture, a couple of household appliances, and empty rusted 55 gallon drums. No soil staining was visible around any of the empty 55 gallon drums and neither the drums nor the surrounding soil registered readings above background on the HNu photoionization detector. Furniture, tricycles, car doors and the bed of a pick-up truck which appeared to have been dumped recently, were noted along the dump's access road (TRCC, 1992). The entrance to the access road from Elm Street Extension is blocked with piles of soil, so access to the dump by means of a vehicle is significantly impeded. There are no fences around the dump area and access is possible by pedestrians (TRCC, 1992). Mr. Nelson told TRCC that he placed the piles of soil at the entrance of the access road to discourage people from dumping there (TRCC, 1992).

In 1988, the Hazardous Materials Division of the Department of Environmental Conservation for the State of Vermont conducted a Preliminary Assessment (PA) of the Beebe Road Dump under a cooperative agreement with the U.S. Environmental Protection Agency. The Preliminary Assessment revealed that Union Butterfield, a local tool manufacturer, allegedly disposed of hazardous waste at the Beebe Road Dump. Wastes potentially disposed at the site from Union Butterfield include barium chloride salt sludge and a treated alkaline cleaner. It is also known that Union Butterfield disposed of chromic acid and cyanide solid waste at an unidentified landfill which may have been the Beebe Road Dump. As a result, the property was added to the Comprehensive Environmental Response, Compensation and



4



SITE SKETCH
BEEBE ROAD DUMP
DERBY, VERMONT

TRC Companies, Inc.
Figure 2.

Liability Information System (CERCLIS) on January 1, 1989 (EPA, 1992a). Two other CERCLA sites are located in the town of Derby, Vermont (EPA, 1992a). One of the CERCLA sites is the Derby Line Dump, which was inspected by TRCC in conjunction with the Beebe Road Dump. Three RCRA notifiers are located in the town of Derby, Vermont and one RCRA notifier in the Village of Derby Line, Vermont (EPA, 1992b).

Table 1 presents all areas identified at the Beebe Road Dump that are potential sources of contamination, the containment factors associated with each source, and the relative location of each source (TRCC, 1992b,c).

TABLE 1. SOURCE EVALUATION		
Potential Source Area	Containment Factors	Spatial Location
Dump site area	none	south of access road

References: TRCC, 1992b,c

SITE ACTIVITY/HISTORY

The Beebe Road Dump was operated by the town of Derby, Vermont from approximately 1968 through July 1973. The property has been owned by Mr. Douglas Nelson since 1968 (VT ANR, 1988a). Records showing previous ownership of the property were not available at the Town of Derby Assessors Office. According to the Town Assessor the area was used as farmland before the dump was started (Ramuglia, 1992h). During its period of operation, the dump received household and commercial trash. A PA conducted by the Hazardous Materials Division of the Vermont Department of Environmental Conservation revealed that Union Butterfield, a tool manufacturer disposed of hazardous waste at the Beebe Road Dump (VT ANR, 1988a). According to the PA, Union Butterfield disposed of waste daily at the Beebe Road Dump. Waste generated by Union Butterfield and potentially disposed at the site included barium chloride salt sludge and a treated alkaline cleaner. It is also known that Union Butterfield disposed of chromic acid and cyanide solid waste at an unidentified landfill in the area which may have been the Beebe Road Dump (VT ANR, 1988a).

The town of Beebe, Quebec, Canada operates the Beebe Water Works, located in the United States, and derives a portion of their water supply from wells located less than one mile west of the Beebe Road Dump. In 1978, two bedrock wells which supplied the town of Beebe, Quebec were taken out of service due to the pumps burning out. At approximately the same time, a "white sticky stuff" was noticed clogging the strainers of homeowners drains. Despite this problem, the water was never tested (VT ANR, 1988b).

In February 1989, the Vermont Department of Health sampled three residential drinking water wells in the area of the Beebe Road Dump and two municipal wells that are part of the Beebe Quebec drinking water system (located in the United States). All wells were sampled for volatile organic compounds (VOCs), barium and thirteen other priority metals. No VOCs were detected in any of the wells, however, barium and four metals were detected (VT ANR, 1988a).

Table 2 summarizes the types of potentially hazardous substances which have been disposed, used or stored on the property.

TABLE 2. HAZARDOUS WASTE QUANTITY				
Substance	Quantity	Years of Use/Storage	Years of Disposal	Source Area
cyanide solid waste;	unknown	1968-1973	1968-1973	dump area
barium chloride salt sludge;	unknown	1968-1973	1968-1973	dump area
alkaline cleaners;	unknown	1968-1973	1968-1973	dump area
chromic acid	unknown	1968-1973	1968-1973	dump area

Reference: VT ANR 1988a,b

TRCC conducted a site reconnaissance of the Beebe Road Dump on July 23, 1992. During the reconnaissance it was noted that access off of Elm Street Extension to the dump area by means of a vehicle is no longer possible due to the presence of large piles of soil at the

entrance. Off of the west side of the road the land slopes to the west, forming a drainage swale that runs due west from the edge of the road. Along the access drainage swale area is household trash made up of furniture, car doors, the back of a pick-up truck, tricycles, and bottles and cans. None of this trash has any soil cover on it.

On August 3, 1992, TRCC conducted environmental sampling at the Beebe Road Dump. Eight soil samples, one ground water sample, one rinsate blank and one trip blank were collected during field activities. The ground water sample was collected from a homeowners well (spring) at the corner of Elm Street Extension and Beebe Road. The occupants of the house are Mr. and Mrs Jones and the mailing address is RR2 Box 290 Newport, Vermont. This same sample will be used as a data point in the Derby Line Dump Site Inspection Report. Refer to Figure 2 for TRCC's sample locations.

ENVIRONMENTAL SETTING

The Beebe Road Dump is located on a large broad flat glacial terrace of stratified drift known as a kame terrace. This terrace was developed as a depositional surface built in contact with glacial ice (VGS, 1970). There was no reference to the thickness of this kame terrace in any of the documents reviewed, but the Johns River, which drains this terrace has a difference in elevation in excess of sixty feet when compared to the top of the terrace (USGS, 1986). These thick deposits of stratified glacial drift provide the area with an excellent source of ground water, but few wells are drilled in the terrace or slopes of the terrace due to the availability of public water. Private wells within the Johns River valley are made up of overburden as well as bedrock wells (VT ANR, 1988a). Land use in the vicinity of the Beebe Road Dump is predominantly rural and agricultural (TRCC, 1992b).

Bedrock underlying the area is the Barton River Member of the Waits River Formation. The Waits River Formation is Devonian in age. The Barton River Member is made up of interbedded siliceous crystalline limestone and sericite-quartz-chlorite phyllite. Diopsidic limestone and cordierite hornfels are also present at contacts with granitic dikes and sills (Doll, 1961).

Under EPA direction, TRCC did not go beyond the border of the United States in determining population or possible receptors within a four mile radial distance from the Beebe Road Dump.

Drinking water in the area downgradient of the Beebe Road Dump is derived from private wells and artesian springs. The nearest well is located approximately 0.4 miles northwest of the Beebe Road Dump, on Elm Street Extension (VT ANR, 1988c). Based on available information, the depth of this well or screening interval could not be determined.

The Town of Derby Line receives water from the International Water Company. The Water Company draws water from Holland Pond which is located eight miles east of Derby. This company also services Rock Island, and Stampstede, Quebec, Canada (Ramuglia, 1992c).

Two public water supply sources are located within four miles of the Beebe Road Dump, supplying water to approximately 1,015 people (Ramuglia, 1992a,b,c,d,e). Table 3 summarizes the public water supply within four miles of the Beebe Road Dump. Table 4 lists private well usage within a four-mile radius of the dump. Values were derived through house counts and location of municipal water lines within specific areas (Ramuglia, 1992a,b,c,d,e.).

Distance/Direction from Beebe Road Dump	Source Name	Location of Source	Approximate Population Served*	Source Type
1.0 mi. northwest	Beebe Water Works	Beebe Plains VT	135	Overburden
2.0 mi. south	Derby Well Field	Derby, VT	880	Overburden
Total			1,015	

Sources: Ramuglia, 1992a,b,c,d,e

*Note that the appropriate population served includes only U.S. residents.

TABLE 4. PRIVATE WELL USAGE WITHIN FOUR MILES OF THE BEEBE ROAD DUMP	
Radial Distance from Beebe Road Dump (Miles)	Approximate Population Served by Private Wells*
0.00-0.25	3
0.25-0.50	8
0.50-1.00	294
1.00-2.00	435
2.00-3.00	402
3.00-4.00	75
Total	1,217

*Note that the total number of private well users includes only U.S. residents.

There are approximately 2,598 people living within four miles of the Beebe Road Dump. Estimates were based upon house counts within each distance rings. Table 5 summarizes the approximate population based on radial distance from the site.

TABLE 5. APPROXIMATE RESIDENTIAL POPULATION WITHIN 4 MILES OF THE BEEBE ROAD DUMP	
Radial Distance from Beebe Road Dump	Total Population*
Onsite	0
0.00-0.25	11
0.25-0.50	127
0.50-1.00	494
1.00-2.00	586
2.00-3.00	526
3.00-4.00	854
Total	2,598

Sources: U.S. Census Bureau, Ramuglia, 1992a

*Note that the total population includes only U.S. residents.

No surface water intakes for drinking water are located in the United States downstream of the Beebe Road Dump, or on the shore Lake Memphremagog in the United States (Ramuglia, 1992f,g). Surface water runoff from the dump area flows westward along a drainage swale that empties into the Johns River, approximately one-quarter mile away (TRCC, 1992b). The Johns River flows northward into Canada and then flows southwest back into the United States and empties into Lake Memphremagog. The surface water pathway of the Johns River downgradient of the dump area to Lake Memphremagog is approximately four miles (USGS, 1986). The majority of Lake Memphremagog is located in Canada and is drained by the Magog River which flows northward (Ramuglia, 1992g).

According to the United States Geological Survey of Vermont no gauging stations are located on the Johns River so the flow rate was approximated by comparing rivers of similar drainage basin areas. The John's River was approximated to flow at 32 cubic feet per second (Ramuglia, 1992g). The Johns River is used for recreational fishing, and is an important spawning ground for brown trout and salmon inhabiting Lake Memphremagog. Portions of the Johns River are listed as spawning grounds and are closed to fishing in April, May, and October (VT ANR, 1988a) The river was not stocked in 1992 and there are no fish hatcheries located on the river (VT FWS, 1992). Lake Memphremagog is used for recreational boating and fishing. The Lake was not stocked in 1992 but will be stocked in 1993 if Vermont Fish and Wildlife personnel determine that there are enough salmon available (VT FWS, 1992).

Approximately one-quarter acre of wetlands, primarily seasonably saturated palustrine broad leaf deciduous and palustrine forested are located within one-half mile of the property. In addition, small interspersed areas of wetland frontage totalling approximately 8 miles are located along the surface water pathway, including the shores of Lake Memphremagog. These interspersed areas along the Johns River and Lake Memphremagog are comprised of palustrine forested, scrub/shrub, and emergent wetlands (U.S D.O.I., 1977).

According to VT ANR, there are no occurrences of rare or endangered species in the area. In addition, the area is not known to be used by deer as wintering grounds (VT ANR, 1988a).

RESULTS

In February 1989, the Vermont Department of Health sampled three residential drinking water wells located downgradient of the Beebe Road Dump, and two municipal wells that are part of the Beebe, Quebec drinking water system and are located in the United States. All wells were sampled for VOCs, barium and thirteen priority metals (VT ANR, 1988a).

One residential well, the Lefevre's is located on Elm Street Extension. The second the Jones's, (actually is a spring) is located at the intersection of Beebe Road and Elm Street Extension, and the third, the Goddard's is located along Beebe Road. No VOCs were detected in any of the residential wells. However, metals were detected in all three wells. The Jones well, contained total barium at 5 micrograms per liter ($\mu\text{g/L}$), total chromium at 2 $\mu\text{g/L}$, and total copper at 25 $\mu\text{g/L}$. The Lefevre well contained two metals, total barium at 19 $\mu\text{g/L}$ and total copper at 3 $\mu\text{g/L}$. The Goddard well contained three metals, total chromium 3 $\mu\text{g/L}$, mercury 1.4 $\mu\text{g/L}$, and total copper 5 $\mu\text{g/L}$ (VT DWR, 1989). On April 27, 1989, the Vermont Department of Environmental Conservation resampled the Goddard well and analyzed it for mercury. No mercury was detected in this water sample (Landsman, 1989).

The two municipal gravel wells sampled by the State of Vermont, identified as Beebe East and Beebe West, were also found to contain no VOCs. Beebe West was found to contain only total barium at 11 $\mu\text{g/L}$, while Beebe East was found to contain total barium at 41 $\mu\text{g/L}$, total chromium at 20 $\mu\text{g/L}$, total copper at 8 $\mu\text{g/L}$, and total nickel at 95 $\mu\text{g/L}$ (VT DWR, 1989).

On August 3, 1992, TRCC collected eight soil samples (including one rinsate sample, one duplicate sample and one matrix spike/matrix spike duplicate sample) and one ground water sample (including one trip blank sample and one matrix spike/matrix spike duplicate sample). All samples were analyzed through the Contract Laboratory Program (CLP) for full Target Compound List (TCL) VOCs, semivolatile organic compounds which include base neutral/acid extractable organic compounds (BNAs), pesticides and polychlorinated biphenyls (PCBs),

USGS, 1986. 1:24,000 - Scale 7.5 x 15 Minute Topographic Maps of West Charleston VT Quadrangle, U.S. Geological Survey, Provisional Edition 1986, and Newport VT Quadrangle, U.S. Geological Survey, Provisional Edition 1986.

VT ANR, 1988a. Preliminary Assessment, Beebe Road Dump, Elm Street Extension, Derby VT, Hazardous Materials Management Division Department of Environmental Conservation Vermont Agency of Natural Resources, February 1988.

VT ANR, 1988b. Preliminary Assessment, Derby Line Dump, Derby Line VT, Hazardous Materials Management Division Department of Environmental Conservation Vermont Agency of Natural Resources, 1988.

VT DWR, 1989. Final Lab Report February 24, 1989. Samples of homeowner wells collected by M. Landsman, Vermont Department of Water Resources, February 21, 1989.

VT FWS, 1992. Telecon with Gloria Gerdes, District Office Chief Clerk, Vermont Fish and Wildlife Department, RE: Fisheries along the Johns River, Derby VT, November 11, 1992.

TABLE 6. SAMPLE SUMMARY-BEEBE ROAD DUMP
Samples Collected by TRCC on August 3, 1992

Sample Location	Matrix	Traffic Report Number	Time Collected	Remarks	Sample Source
SS-77-02	Soil	ADB67/MAAG85	1330	Grab 2-6"	Collected from drainage swale.
SS-77-03	Soil	ADB68/MAAG86	1350	Grab 3-5"	Adjacent to a pile of debris.
SS-77-04	Soil	ADB69/MAAG87	1425	Grab 3-5"	Adjacent to a pile of debris between SS-77 03 and 06.
SS-77-05	Soil	ADB70/MAAG88	1320	Grab 2-6"	Collected from an undisturbed location.
SS-77-06	Soil	ADB71/MAAG89	1355	Grab 2-6"	Collected 60 ft. NW of SS-77-03.
SS-77-07	Soil	ADB72/MAAG90	1360	Grab 2-6"	Duplicate of SS-77-06.
SB-77-08	Soil	ADB73/MAAG91	1400	Grab 24-36"	Collected 30 ft. east of SS-77-03.
SB-77-09	Soil	ADB74/MAAG92	1440	Grab 24-36"	Collected from center of landfill.
GW-44-15	Aqueous	SAO380/SAO385/MAAG84	1835	Grab	Homeowner at end of Elm St.Extension.
RB-77-10	Aqueous	ADB75/MAAG93	1202	Grab	Rinsate Blank for soil samples.
TB-44-16	Aqueous	SAO381	1153	Grab	Trip Blank.

middle of a large stand of cedar trees, was chosen as the reference sample for the soil matrix. A ground water sample could not be collected upgradient from the Beebe Road Dump because all homes upgradient of the dump are on town water, therefore, the ground water results were compared with SQLs and SDLs.

TABLE 7. SAMPLE RESULTS SUMMARY-BEEBE ROAD DUMP

Samples Collected by TRCC on August 3, 1992

Sample Location	Compound/Element	Sample Concentration	Reference Concentration
GW-44-15	Calcium	47200 µg/L	321 µg/L (SDL)
	Iron	24 µg/L	18 µg/L (SDL)
	Magnesium	5070 µg/L	210 µg/L (SDL)
	Manganese	15.1 µg/L	10 µg/L (SDL)
	Zinc	34.6 J µg/L	6 µg/L (SDL)
SS-77-02	Barium	73.6 mg/kg	17.8 mg/kg
	Cadmium	1.5 J mg/kg	1.06mg/kg(SDL)
	Calcium	2580 mg/kg	341 mg/kg
	Manganese	1220 mg/kg	149 mg/kg
SS-77-03	4,4'-DDE	9 J µg/kg	3.8 µg/kg (SQL)
	Calcium	2420 mg/kg	341 mg/kg
	Magnesium	6930 mg/kg	1870 mg/kg
	Potassium	559 J mg/kg	67.74mg/kg(SDL)
SS-77-04	4,4'-DDE	520 J µg/kg	390 µg/kg (SQL)
	4,4'-DDT	840 J µg/kg	390 µg/kg (SQL)
	Cadmium	1.5 J mg/kg	0.18mg/kg(SDL)
	Calcium	2710 mg/kg	341 mg/kg
SS-77-06	Barium	1420 mg/kg	17.8 mg/kg
	Cadmium	2.9 J mg/kg	0.91mg/kg(SDL)
	Calcium	3740 mg/kg	341 mg/kg
	Chromium	371 mg/kg	24.1 mg/kg
	Cobalt	37 mg/kg	4.4 mg/kg
	Copper	84.9 mg/kg	9.7 mg/kg
	Lead	67.4 J mg/kg	15.2 J mg/kg
	Vanadium	122 mg/kg	14.1 mg/kg
	Zinc	165 mg/kg	40.3 mg/kg
	Cyanide	7.7 mg/kg	1.4 mg/kg (SDL)

TABLE 7. (CONTINUED)			
Sample Location	Compound/Element	Sample Concentration	Reference Concentration
SS-77-07	Barium	1480 mg/kg	17.8 mg/kg
	Cadmium	3.1 J mg/kg	0.84mg/kg(SDL)
	Calcium	2990 mg/kg	341 mg/kg
	Chromium	273 mg/kg	24.1 mg/kg
	Cobalt	33.4 mg/kg	4.4 mg/kg
	Copper	57.1 mg/kg	9.7 mg/kg
	Lead	68 J mg/kg	15.2 J mg/kg
	Magnesium	5650 mg/kg	1870 mg/kg
	Vanadium	101 mg/kg	14.1 mg/kg
	Zinc	178 mg/kg	40.3 mg/kg
	Cyanide	7.0 mg/kg	1.4 mg/kg(SDL)
SS-77-08	Cadmium	1.5 J mg/kg	0.96mg/kg(SDL)
	Lead	49.7 J mg/kg	15.2 J mg/kg

- µg/kg - micrograms per kilogram
- J - quantitation is approximate due to limitations identified during the quality control review
- SQL - Sample Quantitation Limit
- SDL - Sample Detection Limit
- mg/kg - milligrams per kilogram

There were no VOCs, or semi-volatile organic compounds (SVOCs) detected in ground water sample GW-44-15, or in any of the soil samples.

Five inorganic elements, calcium (47200 micrograms per liter (µg/L)), iron (24 µg/L), magnesium (5070 µg/L), manganese (15.1 µg/L) and zinc (34.6 µg/L) were detected at concentrations exceeding SDLs in ground water sample GW-44-15.

Two pesticides, 4,4'-DDE (520 micrograms per kilogram [µg/kg]) and 4,4'-DDT (840 µg/kg) were detected in soil sample SS-77-04 at concentrations exceeding reference criteria. These results were derived from a dilution due to laboratory equipment calibration being out of range. One pesticide, 4,4'-DDE (9 µg/kg) was the only pesticide detected in soil sample SS-77-03 at a concentration exceeding the reference criteria.

Pesticides may be present due to the site's close proximity to the corn field.

Six soil samples contained inorganic elements at concentrations exceeding reference criteria. Soil sample SS-77-02 contained four metals, barium (73.6 mg/kg), cadmium (1.5 mg/kg), calcium (2580 mg/kg), and manganese (1220 mg/kg) at concentrations exceeding reference criteria. Soil sample SS-77-03 contained three metals, calcium (2420 mg/kg), magnesium (6930 mg/kg) and potassium (559 mg/kg) at concentrations exceeding reference criteria. Soil sample SS-77-04 contained calcium, (2710 mg/kg), and cadmium, (1.5 mg/kg), exceeding reference criteria. Soil samples SS-77-06 and SS-77-07 (duplicate) contained eleven metals, barium (1420-1480 mg/kg), calcium (2990-3740 mg/kg), chromium (273-371 mg/kg), cobalt (33.4-37 mg/kg), copper (57.1-84.9 mg/kg), lead (67.4-68 mg/kg), magnesium (5320-5650 mg/kg), vanadium (101-122 mg/kg), zinc (165-178 mg/kg), cadmium (2.9-3.1 mg/kg), and cyanide (7-7.7 mg/kg) detected above reference criteria.

Many metals are naturally occurring in soils, however, barium, chromium, and cyanide may be the result of Union Butterfield's disposal practices at the dump.

SUMMARY

The Beebe Road Dump, also known as the Derby Landfill was operated by the town of Derby Vermont from approximately 1968 through 1973. The dump is located off of the Elm Street Extension in the town of Derby, Vermont and encompasses approximately five acres of land in a wooded area on the edge of a corn field. The property that the dump occupies has been owned by Mr. Douglas Nelson of Derby, Vermont since 1968. During its period of operation the dump received household and commercial waste. Some of the commercial waste was disposed at the site by Union Butterfield, a tool manufacturer located on the Canadian border. Wastes from Union Butterfields included barium chloride salt sludge, chromic acid and a treated alkaline cleaner. It is also known that Union Butterfield disposed of chromic acid and cyanide solid waste at an unidentified landfill which may have been the Beebe Road Dump.

Ground water samples collected from local homeowners wells and public supply wells by the State of Vermont in 1989 contained metals.

The results of the TRCC sampling event of August 1992 indicate that no volatile or semi-volatile organic compounds were present in any of the soil samples collected at the Beebe Road Dump. In addition, no volatile or semi-volatile organic compounds were detected in a ground water sample collected from a spring located downgradient from the dump.

Two pesticides, 4,4'-DDE and 4,4'-DDT, were detected in two soil samples from the dump area. Both of these samples were collected adjacent to debris piles that contained empty cans of a corn herbicide. Empty containers of herbicide and pesticides in the soils would be expected due to the proximity of the corn field.

A total of thirteen inorganic elements were detected above the reference criteria in six out of the eight sampling locations. Barium ranging from 73.6 - 1480 mg/kg in three samples; calcium ranging from 2990 - 10400 mg/kg in six samples; chromium ranging from 273-371 mg/kg in two samples; cobalt ranging from 33.4 - 37 mg/kg in two samples; copper ranging from 57.1 - 84.9 mg/kg in two samples; lead ranging from 49.7 - 68 mg/kg in three samples; magnesium ranging from 5650 - 6930 mg/kg in two samples; manganese at 1220 mg/kg in one sample; vanadium ranging from 101 - 122 mg/kg in two samples; and zinc ranging from 165 - 178 mg/kg in two samples, cadmium ranging from 1.5 - 3.1 mg/kg was detected in five samples, potassium 559 mg/kg was detected in one sample, and cyanide ranging from 7 - 7.7 mg/kg was detected in two samples.

The inorganic elements detected in the soil samples could be a result of dumping from Union Butterfield. Barium and cyanide were both reported as being disposed at the Beebe Road dump or at some local dump. Other metals detected in the soil could also be from dumping practices of Union Butterfield.

The potential receptors of contamination from the Beebe Road Dump include approximately 2,598 people who consume drinking water drawn from wells located within four miles of the

dump. The closest well is approximately 0.4 miles downgradient from the dump. Within one mile of the dump, approximately 41 people derive their drinking water from private wells. In addition, approximately 2,598 people live within four miles of the site.

Based upon the number of people potentially exposed to ground water affected by the landfill and contaminated soils at the landfill, EPA recommends that continued investigative work under CERCLA be conducted at the Beebe Road Dump.

REFERENCES

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- Ramuglia (TRCC), 1992c. Telecon with Gilles Blais, International Water Company, Derby Line VT, RE: Municipal water supply of Derby Line VT, November 6, 1992.
- Ramuglia (TRCC), 1992d. Telecon with Curtis Brainard, Derby Center Water Department. RE: Municipal water supply for the town of Derby VT, November 9, 1992.
- Ramuglia (TRCC), 1992e. Telecon with Veronica Blouim, Secretary for the town of Beebe Quebec Canada. RE: Municipal water supply to Beebe Plains VT, November 11, 1992.
- Ramuglia, (TRCC) 1992f. Telecon with Roger Bartaw, Systems Operator, Newport VT Water Department. RE: Surface water intakes on Lake Memphremagog, November, 17, 1992.
- Ramuglia, (TRCC) 1992g. Telecon with Bob Brown, USGS VT. RE: Flow rate of Johns River, November 12, 1992.
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VT ANR, 1988a. Preliminary Assessment, Beebe Road Dump, Elm Street Extension, Derby VT, Hazardous Materials Management Division Department of Environmental Conservation Vermont Agency of Natural Resources, February 1988.

VT ANR, 1988b. Preliminary Assessment, Derby Line Dump, Derby Line VT, Hazardous Materials Management Division Department of Environmental Conservation Vermont Agency of Natural Resources, 1988.

VT DWR, 1989. Final Lab Report February 24, 1989. Samples of homeowner wells collected by M. Landsman, Vermont Department of Water Resources, February 21, 1989.

VT FWS, 1992. Telecon with Gloria Gerdes, District Office Chief Clerk, Vermont Fish and Wildlife Department, RE: Fisheries along the Johns River, Derby VT, November 11, 1992.

APPENDIX A

ANALYTICAL RESULTS FROM PREVIOUS INVESTIGATIONS

State of Vermont

Department of Fish and Wildlife
Department of Forests, Parks and Recreation
Department of Environmental Conservation
State Geologist
Natural Resources Conservation Council



AGENCY OF NATURAL RESOURCES
103 SOUTH MAIN STREET
Waterbury, Vermont 05676

Department of Environmental Conservation

22 May 1989

Mr. Ted Goddard
RFD #2
Newport, Vermont 05855

SUBJECT: Resampled water analysis for mercury

Dear Mr. Goddard,

Your water supply was resampled on 27 April 1989 by the Department of Environmental Conservation and analyzed for mercury which was detected in the last sampling in February.

Mercury was not detected in your water in the recent water analysis.

If you have any questions please contact me at (802)244-8702.

Truly yours,

A handwritten signature in black ink, appearing to read 'Michael Landsman', with a horizontal line extending to the right.

Michael Landsman
Environmental Technician

enc:

copy of lab results

FINAL LAB REPORT

DATE 04/12/89

LAB ID 41235 REPORT TO M/LANDSMAN DUE DATE 03/21/89

SOURCE LOCATION T. GODCARD COLLECTION DATE 02/21/89

PROGRAM 021-MULTI-SITE COOP AGREEMENT AMBIENT WATER SAMPLE Y

SUBMITTED BY M/LANDSMAN PHONE 244-8702 SUBMIT DATE 02/21/89 LEGAL NO

SAMPLE NOTES:

TEST CODE	TEST NAME	RESULT	UNIT OF MEASURE	REMARKS CODE	PROCESS DATE
M601	METHOD 601 TESTS	0	NONE	Z	02/22/89
M602	METHOD 602 TESTS	0	NONE	Z	02/22/89
A2	BARIUM TOTAL - FURNACE	< 5	UG/L		03/14/89
AS2	ARSENIC TOTAL - FURNACE	< 5	UG/L		03/06/89
D	CADMIUM TOTAL	< 1	UG/L		04/03/89
CR	CHROMIUM TOTAL	3	UG/L		04/03/89
B	LEAD TOTAL	< 5	UG/L		04/04/89
G	MERCURY TOTAL	1.4	UG/L		03/14/89
SE2	SELENIUM TOTAL - FURNACE	< 5	UG/L		03/08/89
G2	SILVER TOTAL - FURNACE	< 1.0	UG/L		03/08/89
SB2	ANTIMONY TOTAL - FURNACE	< 5.0	UG/L		03/10/89
E2	BERYLLIUM TOTAL - FURNACE	< 1.0	UG/L		04/07/89
U	COPPER TOTAL	5	UG/L		04/03/89
NI	NICKEL TOTAL	< 5	UG/L		04/03/89
L2	THALLIUM TOTAL - FURNACE	< 2.0	UG/L		03/10/89

FINAL LAB REPORT

DATE 04/12/89

LAB ID 41235

REPORT TO M/LANDSMAN

DUE DATE 03/21/89

ITEM ZINC TOTAL

69

UG/L

04/03/89

FINAL LAB REPORT

DATE 04/10/89

LAB ID 41237

REPORT TO M/LANDSMAN

DUE DATE 03/21/89

SOURCE LOCATION L. JONES

COLLECTION DATE 02/21/89

PROGRAM 021-MULTI-SITE COOP AGREEMENT

AMBIENT WATER SAMPLE Y

SUBMITTED BY M/LANDSMAN

PHONE 244-8702 SUBMIT DATE 02/21/89 LEGAL NO

SAMPLE NOTES:

TEST CODE	TEST NAME	RESULT	UNIT OF MEASURE	REMARKS CODE	PROCESS DATE
M601	METHOD 601 TESTS	0	NONE	Z	02/22/89
M602	METHOD 602 TESTS	0	NONE	Z	02/22/89
BA2	BARIIUM TOTAL - FURNACE	5	UG/L		03/14/89
AS2	ARSENIC TOTAL - FURNACE	< 5	UG/L		03/06/89
CD	CADMIUM TOTAL	< 1	UG/L		04/03/89
CR	CHROMIUM TOTAL	2	UG/L		04/03/89
PB	LEAD TOTAL	< 5	UG/L		04/04/89
HG	MERCURY TOTAL	< 0.2	UG/L		03/14/89
SE2	SELENIUM TOTAL - FURNACE	< 5	UG/L		03/08/89
AG2	SILVER TOTAL - FURNACE	< 1.0	UG/L		03/08/89
SB2	ANTIMONY TOTAL - FURNACE	< 5.0	UG/L		03/10/89
BE2	BERYLLIUM TOTAL - FURNACE	< 1.0	UG/L		04/07/89
CU	COPPER TOTAL	25	UG/L		04/03/89
NI	NICKEL TOTAL	< 5	UG/L		04/03/89
TL2	THALLIUM TOTAL - FURNACE	< 2.0	UG/L		03/10/89

FINAL LAB REPORT

DATE 04/10/89

LAB ID 41237

REPORT TO M/LANDSMAN

DUE DATE 03/21/89

ZN ZINC TOTAL

9

UG/L

04/03/89

MAY 17 1989

DEPT. OF WATER RESOURCES LAB MANAGEMENT SYSTEM

PAGE 1

FINAL LAB REPORT

DATE 05/15/89

LAB ID 42147 REPORT TO M/LANDSMAN DUE DATE 06/01/89
SOURCE LOCATION T. GODDARD E COLLECTION DATE 04/27/89
PROGRAM 021-MULTI-SITE CCOB AGREEMENT AMBIENT WATER SAMPLE Y
SUBMITTED BY M/LANDSMAN PHONE 244-8702 SUBMIT DATE 05/01/89 LEGAL AC
SAMPLE NOTES:

TEST CODE	TEST NAME	RESULT	UNIT OF MEASURE	REMARKS CODE	PROCESS DATE
THG	MERCURY TOTAL	< 0.2	UG/L		05/11/89

FINAL LAB REPORT

DATE 04/10/89

LAB ID 41236 REPORT TO M/LANDSMAN DUE DATE 03/21/89

SOURCE LOCATION C. LEFEVRE COLLECTION DATE 02/21/89

PROGRAM 021-MULTI-SITE COOP AGREEMENT AMBIENT WATER SAMPLE Y

SUBMITTED BY M/LANDSMAN PHONE 244-8702 SUBMIT DATE 02/21/89 LEGAL NO

SAMPLE NOTES:

TEST CODE	TEST NAME	RESULT	UNIT OF MEASURE	REMARKS CODE	PROCESS DATE
M601	METHOD 601 TESTS	0	NONE	Z	02/22/89
M602	METHOD 602 TESTS	0	NONE	Z	02/22/89
BA2	BARIUM TOTAL - FURNACE	19	UG/L		03/14/89
AS2	ARSENIC TOTAL - FURNACE	< 5	UG/L		03/06/89
CD	CADMIUM TOTAL	< 1	UG/L		04/03/89
CR	CHROMIUM TOTAL	< 2	UG/L		04/03/89
PB	LEAD TOTAL	< 5	UG/L		04/04/89
HG	MERCURY TOTAL	< 0.2	UG/L		03/14/89
SE2	SELENIUM TOTAL - FURNACE	< 5	UG/L		03/08/89
AG2	SILVER TOTAL - FURNACE	< 1.0	UG/L		03/08/89
SB2	ANTIMONY TOTAL - FURNACE	< 5.0	UG/L		03/10/89
BE2	BERYLLIUM TOTAL - FURNACE	< 1.0	UG/L		04/07/89
CU	COPPER TOTAL	3	UG/L		04/03/89
NI	NICKEL TOTAL	< 5	UG/L		04/03/89
TL2	THALLIUM TOTAL - FURNACE	< 2.0	UG/L		03/10/89

DEPT. OF WATER RESOURCES LAB MANAGEMENT SYSTEM

PAGE 2

FINAL LAB REPORT

DATE 04/10/89

LAB ID 41236

REPORT TO M/LANDSMAN

DUE DATE 03/21/89

IN ZINC TOTAL

4

UG/L

04/03/89

FINAL LAB REPORT

DATE 04/10/89

LAB ID 41238 REPORT TO M/LANDSMAN DUE DATE 03/21/89

SOURCE LOCATION BEEBE WEST COLLECTION DATE 02/21/89

PROGRAM 021-MULTI-SITE COOP AGREEMENT AMBIENT WATER SAMPLE Y

SUBMITTED BY M/LANDSMAN PHONE 244-8702 SUBMIT DATE 02/21/89 LEGAL NO

SAMPLE NOTES:

TEST CODE	TEST NAME	RESULT	UNIT OF MEASURE	REMARKS CODE	PROCESS DATE
M601	METHOD 601 TESTS	0	NONE	Z	02/22/89
M602	METHOD 602 TESTS	0	NONE	Z	02/22/89
TBA2	BARIUM TOTAL - FURNACE	11	UG/L		03/14/89
TAS2	ARSENIC TOTAL - FURNACE	< 5	UG/L		03/06/89
TCR	CADMIUM TOTAL	< 1	UG/L		04/03/89
TCH	CHROMIUM TOTAL	< 2	UG/L		04/03/89
TLEAD	LEAD TOTAL	< 5	UG/L		04/04/89
TMG	MERCURY TOTAL	< 0.2	UG/L		03/14/89
TSE2	SELENIUM TOTAL - FURNACE	< 5	UG/L		03/08/89
TSG2	SILVER TOTAL - FURNACE	< 1.0	UG/L		03/08/89
TSB2	ANTIMONY TOTAL - FURNACE	< 5.0	UG/L		03/10/89
TBE2	BERYLLIUM TOTAL - FURNACE	< 1.0	UG/L		04/07/89
TCU	COPPER TOTAL	< 2	UG/L		04/03/89
TNI	NICKEL TOTAL	< 5	UG/L		04/03/89
TTL2	THALLIUM TOTAL - FURNACE	< 2.0	UG/L		03/10/89

DEPT. OF WATER RESOURCES LAB MANAGEMENT SYSTEM

PAGE 2

FINAL LAB REPORT

DATE 04/10/89

AB ID 41238

REPORT TO M/LANDSMAN

DUE DATE 03/21/89

TZN ZINC TOTAL

19

UG/L

04/03/89

FINAL LAB REPORT

DATE 04/10/89

AB ID 41239 REPORT TO M/LANDSMAN DUE DATE 03/21/89

SOURCE LOCATION BEEBE EAST COLLECTION DATE 02/21/89

PROGRAM 021-MULTI-SITE COOP AGREEMENT AMBIENT WATER SAMPLE Y

SUBMITTED BY M/LANDSMAN PHONE 244-8702 SUBMIT DATE 02/21/89 LEGAL NO

SAMPLE NOTES:

TEST CODE	TEST NAME	RESULT	UNIT OF MEASURE	REMARKS CODE	PROCESS DATE
M601	METHOD 601 TESTS	0	NONE	Z	02/22/89
502	METHOD 602 TESTS	0	NONE	Z	02/22/89
*BA2	BARIUM TOTAL - FURNACE	41	UG/L		03/14/89
IAS2	ARSENIC TOTAL - FURNACE	< 5	UG/L		03/06/89
CD	CADMIUM TOTAL	< 1	UG/L		04/03/89
TCR	CHROMIUM TOTAL	20	UG/L		04/03/89
PB	LEAD TOTAL	< 5	UG/L		04/04/89
*HG	MERCURY TOTAL	< 0.2	UG/L		03/14/89
ISE2	SELENIUM TOTAL - FURNACE	< 5	UG/L		03/08/89
AG2	SILVER TOTAL - FURNACE	< 1.0	UG/L		03/08/89
TSB2	ANTIMONY TOTAL - FURNACE	< 5.0	UG/L		03/10/89
BE2	BERYLLIUM TOTAL - FURNACE	< 1.0	UG/L		04/07/89
TCU	COPPER TOTAL	8	UG/L		04/03/89
NI	NICKEL TOTAL	95	UG/L		04/03/89
*TL2	THALLIUM TOTAL - FURNACE	< 2.0	UG/L		03/10/89

FINAL LAB REPORT

DATE 04/10/89

LAB ID 41239

REPORT TO M/LANDSMAN

DUE DATE 03/21/89

TEST ZINC TOTAL

88

UG/L

04/03/89

APPENDIX B
ANALYTICAL RESULTS FROM TRCC SAMPLING
MARCH 1992

CLP VOLATILE ORGANIC ANALYSIS
CASE NO. 18562 SDG NO. ADB67
ANALYTICAL RESULTS

Sample Location	Beebe Road Dump	Beebe Road Dump	Beebe Road Dump					
Sample Number	SS-77-02	SS-77-03	SS-77-04	SS-77-05	SS-77-06	SS-77-07	SS-77-08	SS-77-09
Traffic Report Number	ADB67	ADB68	ADB69	ADB70	ADB71	ADB72	ADB73	ADB74
Remarks						Dup. of SS-77-06		
Sampling Date	8/3/92	8/3/92	8/3/92	8/3/92	8/3/92	8/3/92	8/3/92	8/3/92
Analysis Date	8/10/92	8/10/92	8/10/92	8/10/92	8/11/92	8/11/92	8/11/92	8/11/92
VOLATILE ORGANIC COMPOUND	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Chloromethane								
Bromomethane								
Vinyl Chloride								
Chloroethane								
Methylene Chloride								
Acetone								
Carbon Disulfide								
1,1-Dichloroethene								
1,1-Dichloroethane								
1,2-Dichloroethene (Total)							3 J	
Chloroform								
1,2-Dichloroethane								
2-Butanone								
1,1,1-Trichloroethane								
Carbon Tetrachloride								
Bromodichloromethane								
1,2-Dichloropropane								
cis-1,3-Dichloropropene								
Trichloroethene								
Dibromochloromethane							1 J	
1,1,2-Trichloroethane								
Benzene								
trans-1,3-Dichloropropene								
Bromoform								
4-Methyl-2-pentanone								
2-Hexanone								
Tetrachloroethene								
1,1,2,2-Tetrachloroethane								
Toluene								
Chlorobenzene								
Ethylbenzene								
Styrene								
Xylene (Total)								

A blank space indicates the compound was not detected.

J Quantitation is approximate due to limitations identified during the quality control review.

TABLE 2 Page 1 of 1
 CLP VOLATILE ORGANIC ANALYSIS
 CASE NO. 18562 SDG NO. ADB67
 SAMPLE QUANTITATION LIMITS

Sample Location	Beebe Road Dump	Beebe Road Dump	Beebe Road Dump					
Sample Number	SS-77-02	SS-77-03	SS-77-04	SS-77-05	SS-77-06	SS-77-07	SS-77-08	SS-77-09
Traffic Report Number	ADB67	ADB68	ADB69	ADB70	ADB71	ADB72	ADB73	ADB74
Remarks						Dup. of SS-77-06		
Percent Solids	81	86	84	78	89	89	92	90
VOLATILE ORGANIC COMPOUND	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Chloromethane	12	12	12	12	11	11	11	11
Bromomethane	12	12	12	12	11	11	11	11
Vinyl Chloride	12	12	12	12	11	11	11	11
Chloroethane	12	12	12	12	11	11	11	11
Methylene Chloride	17	12	13	15	11	12	12	11
Acetone	12	12	12	12	11	11	11	11
Carbon Disulfide	12	12	12	12	11	11	11	11
1,1-Dichloroethene	12	12	12	12	11	11	11	11
1,1-Dichloroethane	12	12	12	12	11	11	11	11
1,2-Dichloroethene (Total)	12	12	12	12	11	11	11	11
Chloroform	12	12	12	12	11	11	11	11
1,2-Dichloroethane	12	12	12	12	11	11	11	11
2-Butanone	12	12	12	12	11	11	11	11
1,1,1-Trichloroethane	12	12	12	12	11	11	11	11
Carbon Tetrachloride	12	12	12	12	11	11	11	11
Bromodichloromethane	12	12	12	12	11	11	11	11
1,2-Dichloropropane	12	12	12	12	11	11	11	11
cis-1,3-Dichloropropene	12	12	12	12	11	11	11	11
Trichloroethene	12	12	12	12	11	11	11	11
Dibromochloromethane	12	12	12	12	11	11	11	11
1,1,2-Trichloroethane	12	12	12	12	11	11	11	11
Benzene	12	12	12	12	11	11	11	11
trans-1,3-Dichloropropene	12	12	12	12	11	11	11	11
Bromoform	12	12	12	12	11	11	11	11
4-Methyl-2-pentanone	12	12	12	12	11	11	11	11
2-Hexanone	12	12	12	12	11	11	11	11
Tetrachloroethene	12	12	12	12	11	11	11	11
1,1,2,2-Tetrachloroethane	12	12	12	12	11	11	11	11
Toluene	12	12	12	12	11	11	11	11
Chlorobenzene	12	12	12	12	11	11	11	11
Ethylbenzene	12	12	12	12	11	11	11	11
Styrene	12	12	12	12	11	11	11	11
Xylene (Total)	12	12	12	12	11	11	11	11

CLP EXTRACTABLE ORGANIC ANALYSIS

CASE NO. 18562 SDG NO. ADB67

ANALYTICAL RESULTS

Sample Location	Beebe Road Dump	Beebe Road Dump	Beebe Road Dump					
Sample Number	SS-77-02	SS-77-03	SS-77-04	SS-77-05	SS-77-06	SS-77-07	SS-77-08	SS-77-09
Traffic Report Number	ADB67	ADB68	ADB69	ADB70	ADB71	ADB72	ADB73	ADB74
Remarks						Dup. of SS-77-06		
Sampling Date	8/3/92	8/3/92	8/3/92	8/3/92	8/3/92	8/3/92	8/3/92	8/3/92
Extraction Date	8/10/92	8/10/92	8/10/92	8/12/92	8/10/92	8/10/92	8/10/92	8/10/92
Analysis Date	8/17/92	8/17/92	8/17/92	8/18/92	8/18/92	8/18/92	8/18/92	8/18/92
SEMI-VOLATILE COMPOUND	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Phenol								
bis (2-Chloroethyl) ether								
2-Chlorophenol								
1,3-Dichlorobenzene								
1,4-Dichlorobenzene								
1,2-Dichlorobenzene								
2,2'-Oxybis(1-Chloropropane)								
2-Methylphenol								
4-Methylphenol								
N-Nitroso-di-n-propylamine								
Hexachloroethane								
Nitrobenzene								
Isophorone								
2-Nitrophenol								
2,4-Dimethylphenol								
bis (2-Chloroethoxy) methane								
2,4-Dichlorophenol								
1,2,4-Trichlorobenzene								
Naphthalene								
4-Chloroaniline								
Hexachlorobutadiene								
4-Chloro-3-methylphenol								
2-Methylnaphthalene								
Hexachlorocyclopentadiene								
2,4,6-Trichlorophenol								
2,4,5-Trichlorophenol								
?-Chloronaphthalene								
2-Nitroaniline								
Dimethylphthalate								
Acenaphthylene								
2,6-Dinitrotoluene								

CLP EXTRACTABLE ORGANIC ANALYSIS

CASE NO. 18562 SDG NO. ADB67

ANALYTICAL RESULTS

Sample Location	Beebe Road Dump	Beebe Road Dump	Beebe Road Dump					
Sample Number	SS-77-02	SS-77-03	SS-77-04	SS-77-05	SS-77-06	SS-77-07	SS-77-08	SS-77-09
Traffic Report Number	ADB67	ADB68	ADB69	ADB70	ADB71	ADB72	ADB73	ADB74
Remarks						Dup. of SS-77-06		
SEMI-VOLATILE COMPOUND	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg
3-Nitroaniline								
Acenaphthene								
2,4-Dinitrophenol								
4-Nitrophenol								
Dibenzofuran								
2,4-Dinitrotoluene								
Diethylphthalate	73 J							
4-Chlorophenyl-phenylether								
Fluorene								
4-Nitroaniline								
4,6-Dinitro-2-methylphenol								
N-Nitrosodiphenylamine								
4-Bromophenyl-phenylether								
Hexachlorobenzene								
Pentachlorophenol								
Phenanthrene					69 J	38 J		
Anthracene								
Carbazole								
Di-n-butylphthalate								
Fluoranthene					87 J	46 J		
Pyrene					75 J	45 J		
Butylbenzylphthalate								
3,3'-Dichlorobenzidine								
Benzo(a)anthracene								
Chrysene					67 J	40 J		
cis(2-Ethylhexyl)phthalate								
Di-n-octyl phthalate								
Benzo(b)fluoranthene					62 J	48 J		
Benzo(k)fluoranthene					44 J			
Benzo(a)pyrene						39 J		
Indeno (1,2,3-cd)pyrene					49 J	41 J		
Dibenz(a,h)anthracene								
Benzo(g,h,i)perylene								

A blank space indicates the compound was not detected.

J Quantitation is approximate due to limitations identified during the quality control review.

CLP EXTRACTABLE ORGANIC ANALYSIS

CASE NO. 18562 SDG NO. ADB67

SAMPLE QUANTITATION LIMITS

Sample Location	Beebe Road Dump	Beebe Road Dump	Beebe Road Dump					
Sample Number	SS-77-02	SS-77-03	SS-77-04	SS-77-05	SS-77-06	SS-77-07	SS-77-08	SS-77-09
Traffic Report Number	ADB67	ADB68	ADB69	ADB70	ADB71	ADB72	ADB73	ADB74
Remarks						Dup. of SS-77-06		
Percent Solids	81	86	84	78	89	89	92	90
SEMI-VOLATILE COMPOUND	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg
Phenol	410	380	390	420 UJ	370	370	360	370
bis (2-Chloroethyl) ether	410	380	390	420 UJ	370	370	360	370
2-Chlorophenol	410	380	390	420 UJ	370	370	360	370
1,3-Dichlorobenzene	410	380	390	420 UJ	370	370	360	370
1,4-Dichlorobenzene	410	380	390	420 UJ	370	370	360	370
1,2-Dichlorobenzene	410	380	390	420 UJ	370	370	360	370
2,2'-Oxybis(1-Chloropropane	410	380	390	420 UJ	370	370	360	370
2-Methylphenol	410	380	390	420 UJ	370	370	360	370
4-Methylphenol	410	380	390	420 UJ	370	370	360	370
N-Nitroso-di-n-propylamine	410	380	390	420 UJ	370	370	360	370
Hexachloroethane	410	380	390	420 UJ	370	370	360	370
Nitrobenzene	410	380	390	420 UJ	370	370	360	370
Isophorone	410	380	390	420 UJ	370	370	360	370
2-Nitrophenol	410	380	390	420 UJ	370	370	360	370
2,4-Dimethylphenol	410	380	390	420 UJ	370	370	360	370
bis (2-Chloroethoxy) methane	410	380	390	420 UJ	370	370	360	370
2,4-Dichlorophenol	410	380	390	420 UJ	370	370	360	370
1,2,4-Trichlorobenzene	410	380	390	420 UJ	370	370	360	370
Naphthalene	410	380	390	420 UJ	370	370	360	370
4-Chloroaniline	410	380	390	420 UJ	370	370	360	370
Hexachlorobutadiene	410	380	390	420 UJ	370	370	360	370
4-Chloro-3-methylphenol	410	380	390	420 UJ	370	370	360	370
2-Methylnaphthalene	410	380	390	420 UJ	370	370	360	370
Hexachlorocyclopentadiene	410	380	390	420 UJ	370	370	360	370
2,4,6-Trichlorophenol	410	380	390	420 UJ	370	370	360	370
2,4,5-Trichlorophenol	990	930	950	1000 UJ	900	900	870	890
2-Chloronaphthalene	410	380	390	420 UJ	370	370	360	370
2-Nitroaniline	990	930	950	1000 UJ	900	900	870	890
Dimethylphthalate	410	380	390	420 UJ	370	370	360	370
Acenaphthylene	410	380	390	420 UJ	370	370	360	370
2,6-Dinitrotoluene	410	380	390	420 UJ	370	370	360	370

UJ Quantitation limit is approximate due to limitations identified during the quality control review.

TABLE 4 Page 2 of 4
 CLP EXTRACTABLE ORGANIC ANALYSIS
 CASE NO. 18562 SDG NO. ADB67
 SAMPLE QUANTITATION LIMITS

Sample Location	Beebe Road Dump	Beebe Road Dump	Beebe Road Dump					
Sample Number	SS-77-02	SS-77-03	SS-77-04	SS-77-05	SS-77-06	SS-77-07	SS-77-08	SS-77-09
Traffic Report Number	ADB67	ADB68	ADB69	ADB70	ADB71	ADB72	ADB73	ADB74
Remarks						Dup. of SS-77-06		
Percent Solids	81	86	84	78	89	89	92	90
SEMI-VOLATILE COMPOUND	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg
3-Nitroaniline	990	930	950	1000 UJ	900	900	870	890
Acenaphthene	410	380	390	420 UJ	370	370	360	370
2,4-Dinitrophenol	990	930	950	1000 UJ	900	900	870	890
4-Nitrophenol	990	930	950	1000 UJ	900	900	870	890
Dibenzofuran	410	380	390	420 UJ	370	370	360	370
2,4-Dinitrotoluene	410	380	390	420 UJ	370	370	360	370
Diethylphthalate	410	380	390	420 UJ	370	370	360	370
4-Chlorophenyl-phenylether	410	380	390	420 UJ	370	370	360	370
Fluorene	410	380	390	420 UJ	370	370	360	370
4-Nitroaniline	990	930	950	1000 UJ	900	900	870	890
4,6-Dinitro-2-methylphenol	990	930	950	1000 UJ	900	900	870	890
N-Nitrosodiphenylamine	410	380	390	420 UJ	370	370	360	370
4-Bromophenyl-phenylether	410	380	390	420 UJ	370	370	360	370
Hexachlorobenzene	410	380	390	420 UJ	370	370	360	370
Pentachlorophenol	990	930	950	1000 UJ	900	900	870	890
Phenanthrene	410	380	390	420 UJ	370	370	360	370
Anthracene	410	380	390	420 UJ	370	370	360	370
Carbazole	410	380	390	420 UJ	370	370	360	370
Di-n-butylphthalate	410	380	390	420 UJ	370	370	360	370
Fluoranthene	410	380	390	420 UJ	370	370	360	370
Pyrene	410	380	390	420 UJ	370	370	360	370
Butylbenzylphthalate	410	380	390	420 UJ	370	370	360	370
3,3'-Dichlorobenzidine	410	380	390	420 UJ	370	370	360	370
Benzo(a)anthracene	410	380	390	420 UJ	370	370	360	370
Chrysene	410	380	390	420 UJ	370	370	360	370
bis(2-Ethylhexyl)phthalate	410	380	390	420 UJ	370	370	360	410
Di-n-octyl phthalate	410	380	390	420 UJ	370	370	360	370
Benzo(b)fluoranthene	410	380	390	420 UJ	370	370	360	370
Benzo(k)fluoranthene	410	380	390	420 UJ	370	370	360	370
Benzo(a)pyrene	410	380	390	420 UJ	370	370	360	370
Indeno (1,2,3-cd)pyrene	410	380	390	420 UJ	370	370	360	370
Dibenz(a,h)anthracene	410	380	390	420 UJ	370	370	360	370
Benzo(g,h,i)perylene	410	380	390	420 UJ	370	370	360	370

UJ Quantitation limit is approximate due to limitations identified during the quality control review.

CLP EXTRACTABLE ORGANIC ANALYSIS

CASE NO. 18562 SDG NO. ADB67

ANALYTICAL RESULTS

Sample Location	Beebe Road Dump	Beebe Road Dump	Beebe Road Dump					
Sample Number	SS-77-02	SS-77-03	SS-77-04	SS-77-05	SS-77-06	SS-77-07	SS-77-08	SS-77-09
Traffic Report Number	ADB67	ADB68	ADB69	ADB70	ADB71	ADB72	ADB73	ADB74
Remarks						Dup. of SS-77-06		
Sampling Date	8/3/92	8/3/92	8/3/92	8/3/92	8/3/92	8/3/92	8/3/92	8/3/92
Extraction Date	8/7/92	8/7/92	8/7/92	8/7/92	8/7/92	8/7/92	8/7/92	8/7/92
Analysis Date	9/6/92	9/6/92	9/6/92	9/6/92	9/6/92	9/6/92	9/6/92	9/6/92
PESTICIDE/PCB COMPOUND	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg
alpha-BHC								
beta-BHC								
delta-BHC								
gamma-BHC (Lindane)								
Heptachlor								
Aldrin								
Heptachlor epoxide								
Endosulfan I								
Dieldrin								
4,4'-DDE		9 J	520 J*	2.2 J				
Endrin								
Endosulfan II								
4,4'-DDD								
Endosulfan sulfate								
4,4'-DDT	3.8 J	10 J	840 J*	4.8 J				
Methoxychlor								
Endrin ketone								
Endrin aldehyde								
alpha-Chlordane								
gamma-Chlordane								
Toxaphene								
Aroclor-1016								
Aroclor-1221								
Aroclor-1232								
Aroclor-1242								
Aroclor-1248								
Aroclor-1254								
Aroclor-1260								

A blank space indicates the compound was not detected.

J Quantitation is approximate due to limitations identified during the quality control review.

* Value is taken from dilution.

TABLE 6 Page 1 of 2
 CLP EXTRACTABLE ORGANIC ANALYSIS
 CASE NO. 18562 SDG NO. ADB67
 SAMPLE QUANTITATION LIMITS

Sample Location	Beebe Road Dump	Beebe Road Dump	Beebe Road Dump					
Sample Number	SS-77-02	SS-77-03	SS-77-04	SS-77-05	SS-77-06	SS-77-07	SS-77-08	SS-77-09
Traffic Report Number	ADB67	ADB68	ADB69	ADB70	ADB71	ADB72	ADB73	ADB74
Remarks						Dup. of SS-77-06		
Percent Solids	81	86	84	78	89	89	92	90
PESTICIDE/PCB COMPOUND	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg	ug/Kg
alpha-BHC	2.1	2.0	20	2.2	1.9	1.9	1.8	1.9
beta-BHC	2.1	2.0	20	2.2	1.9	1.9	1.8	1.9
delta-BHC	2.1	2.0	20	2.2	1.9	1.9	1.8	1.9
gamma-BHC (Lindane)	2.1	2.0	20	2.2	1.9	1.9	1.8	1.9
Heptachlor	2.1	2.0	20	2.2	1.9	1.9	1.8	1.9
Aldrin	2.1	2.0	20	2.2	1.9	1.9	1.8	1.9
Heptachlor epoxide	2.1	2.0	20	2.2	1.9	1.9	1.8	1.9
Endosulfan I	2.1	2.0	20	2.2	1.9	1.9	1.8	1.9
Dieldrin	4.1	3.8	39	4.2	3.7	3.7	3.6	3.7
4,4'-DDE	4.1	3.8	390 *	4.2	3.7	3.7	3.6	3.7
Endrin	4.1	3.8	39	4.2	3.7	3.7	3.6	3.7
Endosulfan II	4.1	3.8	39	4.2	3.7	3.7	3.6	3.7
4,4'-DDD	4.1	3.8	39	4.2	3.7	3.7	3.6	3.7
Endosulfan sulfate	4.1	3.8	39	4.2	3.7	3.7	3.6	3.7
4,4'-DDT	4.1	3.8	390 *	4.2	3.7	3.7	3.6	3.7
Methoxychlor	21	20	200	22	19	19	18	19
Endrin ketone	4.1	3.8	39	4.2	3.7	3.7	3.6	3.7
Endrin aldehyde	4.1	3.8	39	4.2	3.7	3.7	3.6	3.7
alpha-Chlordane	2.1	2.0	20	2.2	1.9	1.9	1.8	1.9
gamma-Chlordane	2.1	2.0	20	2.2	1.9	1.9	1.8	1.9
Toxaphene	210	200	2000	22	19	19	18	19
Aroclor-1016	41	38	390	42	37	37	36	37
Aroclor-1221	83	78	800	86	75	75	73	75
Aroclor-1232	41	38	390	42	37	37	36	37
Aroclor-1242	41	38	390	42	37	37	36	37
Aroclor-1248	41	38	390	42	37	37	36	37
Aroclor-1254	41	38	390	42	37	37	36	37
Aroclor-1260	41	38	390	42	37	37	36	37

* Quantitation limit taken from dilution.

CLP EXTRACTABLE ORGANIC ANALYSIS

CASE NO. 18562 SDG NO. ADB67

ANALYTICAL RESULTS

Sample Location	Beebe Road Dump							
Sample Number	RB-77-10							
Traffic Report Number	ADB75							
Remarks	Rinsate							
Sampling Date	8/3/92							
Extraction Date	8/10/92							
Analysis Date	9/6/92							
PESTICIDE/PCB COMPOUND	ug/L							
alpha-BHC								
beta-BHC								
delta-BHC								
gamma-BHC (Lindane)								
Heptachlor								
Aldrin								
Heptachlor epoxide								
Endosulfan I								
Dieldrin								
4,4'-DDE								
Endrin								
Endosulfan II								
4,4'-DDD								
Endosulfan sulfate								
4,4'-DDT								
Methoxychlor								
Endrin ketone								
Endrin aldehyde								
alpha-Chlordane								
gamma-Chlordane								
Toxaphene								
Aroclor-1016								
Aroclor-1221								
Aroclor-1232								
Aroclor-1242								
Aroclor-1248								
Aroclor-1254								
Aroclor-1260								

A blank space indicates the compound was not detected.

CLP EXTRACTABLE ORGANIC ANALYSIS

CASE NO. 18562 SDG NO. ADB67

SAMPLE QUANTITATION LIMITS

Sample Location	Beebe Road Dump							
Sample Number	RB-77-10							
Traffic Report Number	ADB75							
Remarks	Rinsate							
Percent Solids	0							
PESTICIDE/PCB								
COMPOUND	ug/L							
alpha-BHC	0.054							
beta-BHC	0.054							
delta-BHC	0.054							
gamma-BHC (Lindane)	0.054							
Heptachlor	0.054							
Aldrin	0.054							
Heptachlor epoxide	0.054							
Endosulfan I	0.054							
Dieldrin	0.11							
4,4'-DDE	0.11							
Endrin	0.11							
Endosulfan II	0.11							
4,4'-DDD	0.11							
Endosulfan sulfate	0.11							
4,4'-DDT	0.11							
Methoxychlor	0.54							
Endrin ketone	0.11							
Endrin aldehyde	0.11							
alpha-Chlordane	0.054							
gamma-Chlordane	0.054							
Toxaphene	5.4							
Aroclor-1016	1.1							
Aroclor-1221	2.2							
Aroclor-1232	1.1							
Aroclor-1242	1.1							
Aroclor-1248	1.1							
Aroclor-1254	1.1							
Aroclor-1260	1.1							

CLP INORGANIC ANALYSIS
CASE NO. 18562 SDG NO. MAAG85
ANALYTICAL RESULTS

Sample Location	Beebe Road Dump	Beebe Road Dump	Beebe Road Dump						
Sample Number	SS-77-02	SS-77-03	SS-77-04	SS-77-05	SS-77-06	SS-77-07	SB-77-08	SB-77-09	
Traffic Report Number	MAAG85	MAAG86	MAAG87	MAAG88	MAAG89	MAAG90	MAAG91	MAAG92	
Remarks						Duplicate of SS-77-06			
Sampling Date	8/3/92	8/3/92	8/3/92	8/3/92	8/3/92	8/3/92	8/3/92	8/3/92	
Inorganic Elements	CRDL (ug/L)	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	
Aluminum	P 200	5190	5070	7850	5620	3730	3650	5240	3120
Antimony	P 60					9.2 J			
Arsenic	F 10	7.3	7.9	6.0	10.6 J	7.7 J	8.3	8.1	8.5
Barium	P 200	73.6	40.8	33.3	17.8	1420	1480	28.0	42.6
Beryllium	P 5								
Cadmium	P 5	1.5 J		1.5 J		2.9 J	3.1 J	1.5 J	
Calcium	P 5000	2580	2420	2710	341	3740	2990	10400	
Chromium	P 10	37.9	33.1	31.1	24.1	371	273	29.5	27.0
Cobalt	P 50	9.4	10.7	9.5	4.4	37.0	33.4	7.9	7.7
Copper	P 25	8.0	16.5	14.3 J	9.7	84.9	57.1	13.7	19.7
Iron	P 100	18600	17500	18600	17700	28300	30000	16500	13300
Lead	F 3	5.8 J	8.6 J	7.4 J	15.2 J	67.4 J	68.0 J	49.7 J	25.0 J
Magnesium	P 5000	3970	6930	5040	1870	5320	5650	4820	2510
Manganese	P 15	1220	371	382	149	408	398	299	261
Mercury	V 0.2								
Nickel	P 40	56.6 J	61.3 J	58.6 J	31.7 J	77.4 J	79.2 J	55.8 J	41.8 J
Potassium	P 5000		559 J						
Selenium	F 5				0.49 J				
Silver	P 10								
Sodium	P 5000								
Thallium	F 10								
Vanadium	P 50	11.0	12.9	15.6	14.1	122	101	11.4	9.3
Zinc	P 20	64.9	93.1	37.0	40.3	165	178	36.9	38.9
Cyanide	C 10					7.7	7.0		

Analytical Method
F Furnace
P ICP/Flame AA
V Cold Vapor
C Colorimetric

A blank space indicates the element was not detected.
J Quantitation is approximate due to limitations identified in the quality control review.

Sample Detection Limits for the elements listed above are reported in Table 2.

CLP INORGANIC ANALYSIS
CASE NO. 18562 SDG NO. MAAG85
SAMPLE DETECTION LIMITS

Sample Location	Beebe Road Dump	Beebe Road Dump	Beebe Road Dump	Beebe Road Dump					
Sample Number	SS-77-02	SS-77-03	SS-77-04	SS-77-05	SS-77-06	SS-77-07	SB-77-08	SB-77-09	
Traffic Report Number	MAAG85	MAAG86	MAAG87	MAAG88	MAAG89	MAAG90	MAAG91	MAAG92	
Remarks						Duplicate of SS-77-06			
Sampling Date	8/3/92	8/3/92	8/3/92	8/3/92	8/3/92	8/3/92	8/3/92	8/3/92	8/3/92
Percent Solids	78.6	86.7	83.6	78.8	89.1	89.4	92.2	93.8	
Inorganic Elements	IDL (ug/L)	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg
Aluminum	P 33.0	7.00	6.92	5.80	6.81	5.97	5.55	6.33	6.58
Antimony	P 51.0	10.81	10.70	8.97	10.52	9.23	8.58	9.79	10.16
Arsenic	F 1.0	0.20	0.15	0.19	0.20	0.19	0.17	0.17	0.19
Barium	P 2.0	0.42	0.42	0.35	0.41	0.36	0.34	0.38	0.40
Beryllium	P 1.0	0.21	0.21	0.18	0.21	0.18	0.17	0.19	0.20
Cadmium	P 5.0	1.06	1.05	0.88	1.03	0.91	0.84	0.96	1.00
Calcium	P 18.0	3.82	3.77	3.17	3.71	3.26	3.03	3.46	289.00
Chromium	P 9.0	1.91	1.89	1.58	1.86	1.63	1.51	1.73	1.79
Cobalt	P 10.0	2.12	2.10	1.76	2.06	1.81	1.68	1.92	1.99
Copper	P 6.0	1.27	1.26	1.06	1.24	1.09	1.01	1.15	1.20
Iron	P 6.0	1.27	1.26	1.06	1.24	1.09	1.01	1.15	1.20
Lead	F 1.0	0.20	0.15	0.19	0.20	0.19	0.17	0.17	0.19
Magnesium	P 63.0	13.36	13.21	11.08	13.00	11.40	10.60	12.09	12.55
Manganese	P 1.0	0.21	0.21	0.18	0.21	0.18	0.17	0.19	0.20
Mercury	V 0.2	0.12	0.12	0.12	0.13	0.11	0.11	0.11	0.11
Nickel	P 13.0	2.76	2.73	2.29	2.68	2.35	2.19	2.50	2.59
Potassium	P 323.0	147.00	67.74	455.00	161.00	281.00	199.00	282.00	996.00 UJ
Selenium	F 2.0	0.40	0.31	0.39	0.41	0.38	0.34 UJ	0.35	0.39 UJ
Silver	P 3.0	0.64	0.63	0.53	0.62	0.54	0.50	0.58	0.60
Sodium	P 42.0	32.70	21.60	53.50	33.00	63.10	48.30	53.60	23.10
Thallium	F 1.0	0.20	0.15	0.19	0.20	0.19	0.17	0.17	0.19
Vanadium	P 9.0	1.91	1.89	1.58	1.86	1.63	1.51	1.73	1.79
Zinc	P 5.0	1.06	1.05	0.88	1.03	0.91	0.84	0.96	1.00
Cyanide	C 10.0	1.59	1.44	1.50	1.59	1.40	1.40	1.36	1.33

Analytical Method

F Furnace AA P ICP/Flame AA V Cold Vapor C Colorimetric

Sample's wet weight (gms) digested	F	P	V	C	C	C	C	C	C
for Hg analysis		0.21	0.20	0.20	0.20	0.20	0.20	0.20	0.20
for ICP analysis		1.20	1.10	1.36	1.23	1.24	1.33	1.13	1.07
for furnace AA analysis		1.28	1.49	1.24	1.25	1.19	1.31	1.24	1.10
for Cyanide analysis		2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Volumes used preparing samples for analysis									
for Hg analysis		100 mls							
for ICP/AA analysis		200 mls							
for Cyanide analysis		250 mls							

UJ Value is undetected and the quantitation is approximate due to limitations identified in the quality control review.
R Value is rejected.

CLP VOLATILE ORGANIC ANALYSIS
CASE NO. 18562 SDG NO. ADB67
ANALYTICAL RESULTS

Sample Location	Beebe Road Dump							
Sample Number	RB-77-10							
Traffic Report Number	ADB75							
Remarks	Rinsate							
Sampling Date	8/3/92							
Analysis Date	8/7/92							
VOLATILE ORGANIC COMPOUND	ug/L							
Chloromethane								
Bromomethane								
Vinyl Chloride								
Chloroethane								
Methylene Chloride	6 J							
Acetone	24							
Carbon Disulfide								
1,1-Dichloroethene								
1,1-Dichloroethane								
1,2-Dichloroethene (Total)								
Chloroform	19							
1,2-Dichloroethane								
2-Butanone								
1,1,1-Trichloroethane								
Carbon Tetrachloride								
Bromodichloromethane								
1,2-Dichloropropane								
cis-1,3-Dichloropropene								
Trichloroethene								
Dibromochloromethane								
1,1,2-Trichloroethane								
Benzene								
trans-1,3-Dichloropropene								
Bromoform								
4-Methyl-2-pentanone								
2-Hexanone								
Tetrachloroethene								
1,1,2,2-Tetrachloroethane								
Toluene								
Chlorobenzene								
Ethylbenzene								
Styrene								
Xylene (Total)								

A blank space indicates the compound was not detected.

J Quantitation is approximate due to limitations identified during the quality control review.

TABLE 2 Page 2 of 2
 CLP VOLATILE ORGANIC ANALYSIS
 CASE NO. 18562 SDG NO. ADB67
 SAMPLE QUANTITATION LIMITS

Sample Location	Beebe Road Dump								
Sample Number	RB-77-10								
Traffic Report Number	ADB75								
Remarks	Rinsate								
Percent Solids	0								
VOLATILE ORGANIC COMPOUND	ug/L								
Chloromethane	10								
Bromomethane	10								
Vinyl Chloride	10								
Chloroethane	10								
Methylene Chloride	10								
Acetone	10								
Carbon Disulfide	10								
1,1-Dichloroethene	10								
1,1-Dichloroethane	10								
1,2-Dichloroethane (Total)	10								
Chloroform	10								
1,2-Dichloroethane	10								
2-Butanone	10								
1,1,1-Trichloroethane	10								
Carbon Tetrachloride	10								
Bromodichloromethane	10								
1,2-Dichloropropane	10								
cis-1,3-Dichloropropene	10								
Trichloroethene	10								
Dibromochloromethane	10								
1,1,2-Trichloroethane	10								
Benzene	10								
trans-1,3-Dichloropropene	10								
Bromoform	10								
4-Methyl-2-pentanone	10								
2-Hexanone	10								
Tetrachloroethene	10								
1,1,2,2-Tetrachloroethane	10								
Toluene	10								
Chlorobenzene	10								
Ethylbenzene	10								
Styrene	10								
Xylene (Total)	10								

CLP INORGANIC ANALYSIS
CASE NO. 18562 SDG NO. MAAG85
ANALYTICAL RESULTS

Sample Location	Beebe Road Dump								
Sample Number	RB-77-10								
Traffic Report Number	MAAG93								
Remarks	Rinsate								
Sampling Date	8/3/92								
Inorganic Elements	CRDL (ug/L)	ug/L							DQ
Aluminum	P 200	41.7							
Antimony	P 60								
Arsenic	F 10								
Barium	P 200								
Beryllium	P 5								
Cadmium	P 5								
Calcium	P 5000	300							
Chromium	P 10								
Cobalt	P 50								
Copper	P 25								
Iron	P 100	30.5							
Lead	F 3								
Magnesium	P 5000								
Manganese	P 15								
Mercury	V 0.2								
Nickel	P 40								
Potassium	P 5000								
Selenium	F 5								
Silver	P 10								
Sodium	P 5000	149							
Thallium	F 10								
Vanadium	P 50								
Zinc	P 20	21.2 J							
Cyanide	C 10								

Analytical Method
F Furnace
P ICP/Flame AA
V Cold Vapor
C Colorimetric

A blank space indicates the element was not detected.
J Quantitation is approximate due to limitations identified in the quality control review.

Sample Detection Limits for the elements listed above are reported in Table 2.

CLP INORGANIC ANALYSIS
CASE NO. 18562 SDG NO. MAAG85
SAMPLE DETECTION LIMITS

Sample Location	Beebe Road Dump								
Sample Number	RB-77-10								
Traffic Report Number	MAAG93								
Remarks	Rinsate								
Sampling Date	8/3/92								
Percent Solids	0.0								
Inorganic Elements	IDL (ug/L)	ug/L							
Aluminum	P 33.0	33.00							
Antimony	P 51.0	51.00							
Arsenic	F 1.0	1.00							
Barium	P 2.0	2.00							
Beryllium	P 1.0	1.00							
Cadmium	P 5.0	5.00							
Calcium	P 18.0	18.00							
Chromium	P 9.0	9.00							
Cobalt	P 10.0	10.00							
Copper	P 6.0	6.00							
Iron	P 6.0	6.00							
Lead	F 1.0	1.00							
Magnesium	P 63.0	63.00							
Manganese	P 1.0	1.00							
Mercury	V 0.2	0.20							
Nickel	P 13.0	13.00							
Potassium	P 323.0	323.00							
Selenium	F 2.0	2.00							
Silver	P 3.0	3.00							
Sodium	P 42.0	42.00							
Thallium	F 1.0	1.00							
Vanadium	P 9.0	9.00							
Zinc	P 5.0	5.00							
Cyanide	C 10.0	10.00							

Analytical Method

F Furnace AA P ICP/Flame AA V Cold Vapor C Colorimetric

Sample's wet weight (gms) digested									
for Hg analysis									
for ICP analysis									
for furnace AA analysis									
for Cyanide analysis									

Volumes used preparing samples for analysis	
for Hg analysis	100 ml
for ICP/AA analysis	200 ml
for Cyanide analysis	250 ml

UJ Value is undetected and the quantitation is approximate due to limitations identified in the quality control review.
R Value is rejected.

CLP EXTRACTABLE ORGANIC ANALYSIS

CASE NO. 18562 SDG NO. ADB67

ANALYTICAL RESULTS

Sample Location	Beebe Road Dump							
Sample Number	RB-77-10							
Traffic Report Number	ADB75							
Remarks	Rinsate Blank							
SEMI-VOLATILE COMPOUND	ug/L							
3-Nitroaniline								
Acenaphthene								
2,4-Dinitrophenol								
1-Nitrophenol								
Dibenzofuran								
2,4-Dinitrotoluene								
Diethylphthalate								
4-Chlorophenyl-phenylether								
Fluorene								
1-Nitroaniline								
4,6-Dinitro-2-methylphenol								
N-Nitrosodiphenylamine								
1-Bromophenyl-phenylether								
Hexachlorobenzene								
Pentachlorophenol								
Fluorene								
Anthracene								
Carbazole								
Di-n-butylphthalate								
Fluoranthene								
Pyrene								
Diethylbenzylphthalate								
2,3'-Dichlorobenzidine								
Benzo(a)anthracene								
Chrysene								
Di(2-Ethylhexyl)phthalate								
Di-n-octyl phthalate								
Benzo(b)fluoranthene								
Benzo(k)fluoranthene								
Benzo(a)pyrene								
Indeno (1,2,3-cd)pyrene								
Benzo(a,h)anthracene								
Benzo(g,h,i)perylene								

A blank space indicates the compound was not detected.

CLP EXTRACTABLE ORGANIC ANALYSIS

CASE NO. 18562 SDG NO. ADB67

SAMPLE QUANTITATION LIMITS

Sample Location	Beebe Road Dump								
Sample Number	RB-77-10								
Traffic Report Number	ADB75								
Remarks	Rinsate								
Percent Solids	0								
SEMI-VOLATILE COMPOUND	ug/L								
Phenol	11								
bis (2-Chloroethyl) ether	11								
2-Chlorophenol	11								
1,3-Dichlorobenzene	11								
1,4-Dichlorobenzene	11								
1,2-Dichlorobenzene	11								
2,2'-Oxybis(1-Chloropropane)	11								
2-Methylphenol	11								
4-Methylphenol	11								
N-Nitroso-di-n-propylamine	11								
Hexachloroethane	11								
Nitrobenzene	11								
Isophorone	11								
2-Nitrophenol	11								
2,4-Dimethylphenol	11								
bis (2-Chloroethoxy) methane	11								
2,4-Dichlorophenol	11								
1,2,4-Trichlorobenzene	11								
Naphthalene	11								
4-Chloroaniline	11								
Hexachlorobutadiene	11								
1-Chloro-3-methylphenol	11								
2-Methylnaphthalene	11								
Hexachlorocyclopentadiene	11								
2,4,6-Trichlorophenol	11								
2,4,5-Trichlorophenol	27								
2-Chloronaphthalene	11								
2-Nitroaniline	27								
Dimethylphthalate	11								
1-acenaphthylene	11								
2,6-Dinitrotoluene	11								

CLP EXTRACTABLE ORGANIC ANALYSIS

CASE NO. 18502 SDG NO. ADB67

ANALYTICAL RESULTS

Sample Location	Beebe Road Dump								
Sample Number	RB-77-10								
Traffic Report Number	ADB75								
Remarks	Rinsate Blank								
Sampling Date	8/3/92								
Extraction Date	8/10/92								
Analysis Date	8/25/92								
SEMI-VOLATILE COMPOUND	ug/L								
Phenol									
bis (2-Chloroethyl) ether									
2-Chlorophenol									
1,3-Dichlorobenzene									
1,4-Dichlorobenzene									
1,2-Dichlorobenzene									
2,2'-Oxybis(1-Chloropropane)									
2-Methylphenol									
4-Methylphenol									
N-Nitroso-di-n-propylamine									
Hexachloroethane									
Nitrobenzene									
Isophorone									
2-Nitrophenol									
2,4-Dimethylphenol									
bis (2-Chloroethoxy) methane									
2,4-Dichlorophenol									
1,2,4-Trichlorobenzene									
Naphthalene									
4-Chloroaniiline									
Hexachlorobutadiene									
4-Chloro-3-methylphenol									
2-Methylnaphthalene									
Hexachlorocyclopentadiene									
2,4,6-Trichlorophenol									
2,4,5-Trichlorophenol									
2-Chloronaphthalene									
2-Nitroaniline									
Dimethylphthalate									
Acenaphthylene									
2,6-Dinitrotoluene									

CLP EXTRACTABLE ORGANIC ANALYSIS

CASE NO. 18562 SDG NO. ADB67

SAMPLE QUANTITATION LIMITS

Sample Location	Beebe Road Dump								
Sample Number	RB-77-10								
Traffic Report Number	ADB75								
Remarks	Rinsate								
Percent Solids	0								
SEMI-VOLATILE COMPOUND	ug/L								
3-Nitroaniline	27								
Acenaphthene	11								
2,4-Dinitrophenol	27								
4-Nitrophenol	27								
Dibenzofuran	11								
2,4-Dinitrotoluene	11								
Diethylphthalate	11								
4-Chlorophenyl-phenylether	11								
Fluorene	11								
4-Nitroaniline	27								
4,6-Dinitro-2-methylphenol	27								
N-Nitrosodiphenylamine	11								
4-Bromophenyl-phenylether	11								
Hexachlorobenzene	11								
Pentachlorophenol	27								
Phenanthrene	11								
Anthracene	11								
Carbazole	11								
Di-n-butylphthalate	11								
Fluoranthene	11								
Pyrene	11								
Butylbenzylphthalate	11								
3,3'-Dichlorobenzidine	11								
Benzo(a)anthracene	11								
Chrysene	11								
bis(2-Ethylhexyl)phthalate	11								
Di-n-octyl phthalate	11								
Benzo(b)fluoranthene	11								
Benzo(k)fluoranthene	11								
Benzo(a)pyrene	11								
Indeno (1,2,3-cd)pyrene	11								
Dibenz(a,h)anthracene	11								
Benzo(g,h,i)perylene	11								

CLP VOLATILE ORGANIC ANALYSIS
CASE NO. 18568 SAS 7009A SDG NO. SAO377
ANALYTICAL RESULTS

Sample Location	Derby Line Dump	Derby Line Dump	Derby Line Dump	Derby Line Dump	Derby Line Dump			
Sample Number	RB-44-12	GW-44-13	GW-44-14	GW-44-15	TB-44-16			
Traffic Report Number	SAO377	SAO378	SAO379	SAO380	SAO381			
Remarks	Rinsate Blank		Dup. of GW-44-13		Trip Blank			
Sampling Date	8/3/92	8/3/92	8/3/92	8/3/92	8/3/92			
Analysis Date	8/6/92	8/6/92	8/6/92	8/6/92	8/6/92			
VOLATILE ORGANIC COMPOUND	ug/L	ug/L	ug/L	ug/L	ug/L			
Dichlorodifluoromethane								
Chloromethane								
Bromomethane								
Vinyl Chloride								
Chloroethane								
Methylene Chloride								
Acetone	23 J							
Carbon Disulfide								
1,1-Dichloroethene								
2,2-Dichloropropane								
1,1-Dichloroethane								
trans-1,2-Dichloroethene			0.08 J					
cis-1,2-Dichloroethene		5	6					
Bromochloromethane								
Chloroform	30 *				30 *			
1,2-Dichloroethane								
2-Butanone								
1,1,1-Trichloroethane								
Carbon Tetrachloride								
1,1-Dichloropropene								
Bromodichloromethane								
1,2-Dichloropropane								
cis-1,3-Dichloropropene								
Trichloroethene		26 *	27 *					
Dibromochloromethane								
1,2-Dibromoethane								
1,1,2-Trichloroethane								
Benzene								
Dibromomethane								
trans-1,3-Dichloropropene								
1,3-Dichloropropane								
Bromoform								
4-Methyl-2-pentanone								

A blank space indicates the compound was not detected.

J Quantitation is approximate due to limitations identified during the quality control review.

* Value obtained from dilution

CLP VOLATILE ORGANIC ANALYSIS
CASE NO. 18568 SAS 7009A SDG NO. SAO377

SAMPLE QUANTITATION LIMITS

Sample Location	Derby Line Dump	Derby Line Dump	Derby Line Dump	Derby Line Dump	Derby Line Dump			
Sample Number	RB-44-12	GW-44-13	GW-44-14	GW-44-15	TB-44-16			
Traffic Report Number	SAO377	SAO378	SAO379	SAO380	SAO381			
Remarks	Rinsate Blank		Dup. of GW-44-13		Trip Blank			
VOLATILE ORGANIC COMPOUND	ug/L	ug/L	ug/L	ug/L	ug/L			
Dichlorodifluoromethane	1	1	1	1	1			
Chloromethane	1	1	1	1	1			
Bromomethane	1	1	1	1	1			
Vinyl Chloride	1	1	1	1	1			
Chloroethane	1	1	1	1	1			
Methylene Chloride	1	1	1	1	1			
Acetone	5	5 R	5 R	5 R	5 R			
Carbon Disulfide	1	1	1	1	1			
1,1-Dichloroethene	1	1	1	1	1			
2,2-Dichloropropane	1	1	1	1	1			
1,1-Dichloroethane	1	1	1	1	1			
trans-1,2-Dichloroethene	1	1	1	1	1			
cis-1,2-Dichloroethene	1	1	1	1	1			
Bromochloromethane	1	1	1	1	1			
Chloroform	2 *	1	1	1	2 *			
1,2-Dichloroethane	1	1	1	1	1			
2-Butanone	5 R	5 R	5 R	5 R	5 R			
1,1,1-Trichloroethane	1	1	1	1	1			
Carbon Tetrachloride	1	1	1	1	1			
1,1-Dichloropropene	1	1	1	1	1			
Bromodichloromethane	1	1	1	1	1			
1,2-Dichloropropane	1	1	1	1	1			
cis-1,3-Dichloropropene	1	1	1	1	1			
Trichloroethene	1	2 *	2 *	1	1			
Dibromochloromethane	1	1	1	1	1			
1,2-Dibromoethane	1	1	1	1	1			
1,1,2-Trichloroethane	1	1	1	1	1			
Benzene	1	1	1	1	1			
Dibromomethane	1	1	1	1	1			
trans-1,3-Dichloropropene	1	1	1	1	1			
1,3-Dichloropropane	1	1	1	1	1			
Bromoform	1	1	1	1	1			
4-Methyl-2-pentanone	5 R	5 R	5 R	5 R	5 R			

* Quantitation limit obtained from dilution.

R Value is rejected.

CLP VOLATILE ORGANIC ANALYSIS
CASE NO. 18568 SAS 7009A SDG NO. SAO377
ANALYTICAL RESULTS

Sample Location	Derby Line Dump	Derby Line Dump	Derby Line Dump	Derby Line Dump	Derby Line Dump			
Sample Number	RB-44-12	GW-44-13	GW-44-14	GW-44-15	TB-44-16			
Traffic Report Number	SAO377	SAO378	SAO379	SAO380	SAO381			
Remarks	Rinsate Blank		Dup. of GW-44-13		Trip Blank			
Sampling Date	8/3/92	8/3/92	8/3/92	8/3/92	8/3/92			
Analysis Date	8/6/92	8/6/92	8/6/92	8/6/92	8/6/92			
VOLATILE ORGANIC COMPOUND	ug/L	ug/L	ug/L	ug/L	ug/L			
2-Hexanone								
Tetrachloroethene								
1,1,2,2-Tetrachloroethane								
Toluene					0.1 J			
Chlorobenzene								
1,1,1,2-Tetrachloroethane								
Ethylbenzene								
Styrene								
Xylene (Total)	0.2 J							
Isopropylbenzene								
Bromobenzene								
1,2,3-Trichloropropane								
n-Propylbenzene								
2-Chlorotoluene								
4-Chlorotoluene								
1,3,5-Trimethylbenzene								
tert-Butylbenzene								
1,2,4-Trimethylbenzene								
sec-Butylbenzene								
1,3-Dichlorobenzene								
1,2-Dichlorobenzene								
p-Isopropyltoluene								
n-Butylbenzene								
1,2-Dibromo-3-Chloropropane								
1,4-Dichlorobenzene	0.1 J							
1,2,4-Trichlorobenzene								
Naphthalene								
1,2,3-Trichlorobenzene								
Hexachlorobutadiene								
Trichlorofluoromethane								

A blank space indicates the compound was not detected.

J Quantitation is approximate due to limitations identified during the quality control review.

TABLE 2 Page 2 of 2
 CLP VOLATILE ORGANIC ANALYSIS
 CASE NO. 18568 SAS 7009A SDG NO. SAO377
 SAMPLE QUANTITATION LIMITS

Sample Location	Derby Line Dump	Derby Line Dump	Derby Line Dump	Derby Line Dump	Derby Line Dump			
Sample Number	RB-44-12	GW-44-13	GW-44-14	GW-44-15	TB-44-16			
Traffic Report Number	SAO377	SAO378	SAO379	SAO380	SAO381			
Remarks	Rinsate Blank		Dup. of GW-44-13		Trip Blank			
VOLATILE ORGANIC COMPOUND	ug/L	ug/L	ug/L	ug/L	ug/L			
2-Hexanone	5 R	5 R	5 R	5 R	5 R			
Tetrachloroethene	1	1	1	1	1			
1,1,2,2-Tetrachloroethane	1	1	1	1	1			
Toluene	1	1	1	1	1			
Chlorobenzene	1	1	1	1	1			
1,1,1,2-Tetrachloroethane	1	1	1	1	1			
Ethylbenzene	1	1	1	1	1			
Styrene	1	1	1	1	1			
Xylene (Total)	1	1	1	1	1			
Isopropylbenzene	1	1	1	1	1			
Bromobenzene	1	1	1	1	1			
1,2,3-Trichloropropane	1	1	1	1	1			
n-Propylbenzene	1	1	1	1	1			
2-Chlorotoluene	1	1	1	1	1			
4-Chlorotoluene	1	1	1	1	1			
1,3,5-Trimethylbenzene	1	1	1	1	1			
tert-Butylbenzene	1	1	1	1	1			
1,2,4-Trimethylbenzene	1	1	1	1	1			
sec-Butylbenzene	1	1	1	1	1			
1,3-Dichlorobenzene	1	1	1	1	1			
1,2-Dichlorobenzene	1	1	1	1	1			
p-Isopropyltoluene	1	1	1	1	1			
n-Butylbenzene	1	1	1	1	1			
1,2-Dibromo-3-Chloropropane	1 R	1 R	1 R	1 R	1 R			
1,4-Dichlorobenzene	1	1	1	1	1			
1,2,4-Trichlorobenzene	1	1	1	1	1			
Naphthalene	1	1	1	1	1			
1,2,3-Trichlorobenzene	1	1	1	1	1			
Hexachlorobutadiene	1	1	1	1	1			
Trichlorofluoromethane	1	1	1	1	1			

R Value is rejected.

CLP EXTRACTABLE ORGANIC ANALYSIS
CASE NO. 18573 SAS 6702Q SDG NO. SAO382
ANALYTICAL RESULTS

Sample Location	Derby Line Dump	Derby Line Dump	Derby Line Dump	Derby Line Dump				
Sample Number	RB-44-12	GW-44-13	GW-44-14	GW-44-15				
Traffic Report Number	SAO382	SAO383	SAO384	SAO385				
Remarks	Rinsate		Dup. of GW-44-13					
Sampling Date	8/03/92	8/03/92	8/03/92	8/03/92				
Extraction Date	08/05/92	08/05/92	08/05/92	08/05/92				
Analysis Date	08/07/92	08/07/92	08/07/92	08/07/92				
SEMI-VOLATILE COMPOUND	ug/L	ug/L	ug/L	ug/L				
Phenol								
bis (2-Chloroethyl) ether								
2-Chlorophenol								
1,3-Dichlorobenzene								
1,4-Dichlorobenzene								
1,2-Dichlorobenzene								
2,2'-Oxybis(1-Chloropropane)								
2-Methylphenol								
4-Methylphenol								
N-Nitroso-di-n-propylamine								
Hexachloroethane								
Vitrobenzene								
Isophorone								
2-Nitrophenol								
2,4-Dimethylphenol								
bis (2-Chloroethoxy) methane								
2,4-Dichlorophenol								
1,2,4-Trichlorobenzene								
Naphthalene								
1-Chloroaniline								
Hexachlorobutadiene								
4-Chloro-3-methylphenol								
2-Methylnaphthalene								
Hexachlorocyclopentadiene								
2,4,6-Trichlorophenol								
2,4,5-Trichlorophenol								
2-Chloronaphthalene								
2-Nitroaniline								
Dimethylphthalate								
Acenaphthylene								
2,6-Dinitrotoluene								

TABLE 4 Page 1 of 2
 CLP EXTRACTABLE ORGANIC ANALYSIS
 CASE NO. 18573 SAS 6702Q SDG NO. SAO382
 SAMPLE QUANTTATION LIMITS

Sample Location	Derby Line Dump	Derby Line Dump	Derby Line Dump	Derby Line Dump				
Sample Number	RB-44-12	GW-44-13	GW-44-14	GW-44-15				
Traffic Report Number	SAO382	SAO383	SAO384	SAO385				
Remarks	Rinsate		Dup. of GW-44-13					
SEMI-VOLATILE COMPOUND	ug/L	ug/L	ug/L	ug/L				
Phenol	5	5	5	5				
bis (2-Chloroethyl) ether	5	5	5	5				
2-Chlorophenol	5	5	5	5				
1,3-Dichlorobenzene	5	5	5	5				
1,4-Dichlorobenzene	5	5	5	5				
1,2-Dichlorobenzene	5	5	5	5				
2,2'-Oxybis(1-Chloropropane)	5	5	5	5				
2-Methylphenol	5	5	5	5				
4-Methylphenol	5	5	5	5				
N-Nitroso-di-n-propylamine	5	5	5	5				
Hexachloroethane	5	5	5	5				
Nitrobenzene	5	5	5	5				
Isophorone	5	5	5	5				
2-Nitrophenol	5	5	5	5				
2,4-Dimethylphenol	5	5	5	5				
bis (2-Chloroethoxy) methane	5	5	5	5				
2,4-Dichlorophenol	5	5	5	5				
1,2,4-Trichlorobenzene	5	5	5	5				
Naphthalene	5	5	5	5				
4-Chloroaniline	5	5	5	5				
Hexachlorobutadiene	5	5	5	5				
4-Chloro-3-methylphenol	5	5	5	5				
2-Methylnaphthalene	5	5	5	5				
Hexachlorocyclopentadiene	5	5	5	5				
2,4,6-Trichlorophenol	5	5	5	5				
2,4,5-Trichlorophenol	20	20	20	20				
2-Chloronaphthalene	5	5	5	5				
2-Nitroaniline	20	20	20	20				
Dimethylphthalate	5	5	5	5				
Acenaphthylene	5	5	5	5				
2,6-Dinitrotoluene	5	5	5	5				

CLP EXTRACTABLE ORGANIC ANALYSIS
CASE NO. 18573 SAS 6702Q SDG NO. SAO382
ANALYTICAL RESULTS

Sample Location	Derby Line Dump	Derby Line Dump	Derby Line Dump	Derby Line Dump				
Sample Number	RB-44-12	GW-44-13	GW-44-14	GW-44-15				
Traffic Report Number	SAO382	SAO383	SAO384	SAO385				
Remarks	Rinsate		Dup. of GW-44-13					
SEMI-VOLATILE COMPOUND	ug/L	ug/L	ug/L	ug/L				
3-Nitroaniline								
Acanaphthene								
2,4-Dinitrophenol								
4-Nitrophenol								
Dibenzofuran								
2,4-Dinitrotoluene								
Diethylphthalate								
4-Chlorophenyl-phenylether								
Fluorene								
4-Nitroaniline								
4,6-Dinitro-2-methylphenol								
N-Nitrosodiphenylamine								
4-Bromophenyl-phenylether								
Hexachlorobenzene								
Pentachlorophenol								
Phenanthrene								
Anthracene								
Carbazole								
Di-n-butylphthalate		0.5 J	4 J					
Fluoranthene								
Pyrene								
Butylbenzylphthalate								
3,3'-Dichlorobenzidine								
Benzo(a)anthracene								
Chrysene								
bis(2-Ethylhexyl)phthalate	1 J							
Di-n-octyl pthalate								
Benzo(b)fluoranthene								
Benzo(k)fluoranthene								
Benzo(a)pyrene								
Indeno (1,2,3-cd)pyrene								
Dibenz(a,h)anthracene								
Benzo(g,h,i)perylene								

A blank space indicates the compound was not detected.

TABLE 4 Page 2 of 2
 CLP EXTRACTABLE ORGANIC ANALYSIS
 CASE NO. 18573 SAS 6702Q SDG NO. SAO382

SAMPLE QUANTITATION LIMITS

Sample Location	Derby Line Dump	Derby Line Dump	Derby Line Dump	Derby Line Dump				
Sample Number	RB-44-12	GW-44-13	GW-44-14	GW-44-15				
Traffic Report Number	SAO382	SAO383	SAO384	SAO385				
Remarks	Rinsate		Dup. of GW-44-13					
Percent Solids								
SEMI-VOLATILE COMPOUND	ug/L	ug/L	ug/L	ug/L				
3-Nitroaniline	20	20	20	20				
Acenaphthene	5	5	5	5				
2,4-Dinitrophenol	20	20	20	20				
4-Nitrophenol	20	20	20	20				
Dibenzofuran	5	5	5	5				
2,4-Dinitrotoluene	5	5	5	5				
Diethylphthalate	5	5	5	5				
4-Chlorophenyl-phenylether	5	5	5	5				
Fluorene	5	5	5	5				
4-Nitroaniline	20	20	20	20				
4,6-Dinitro-2-methylphenol	20	20	20	20				
N-Nitrosodiphenylamine	5	5	5	5				
4-Bromophenyl-phenylether	5	5	5	5				
Hexachlorobenzene	5	5	5	5				
Pentachlorophenol	20	20	20	20				
Phenanthrene	5	5	5	5				
Anthracene	5	5	5	5				
Carbazole	5	5	5	5				
Di-n-butylphthalate	5	5	5	5				
Fluoranthene	5	5	5	5				
Pyrene	5	5	5	5				
Butylbenzylphthalate	5	5	5	5				
3,3'-Dichlorobenzidine	5 R	5 R	5 R	5 R				
Benzo(a)anthracene	5	5	5	5				
Chrysene	5	5	5	5				
bis(2-Ethylhexyl)phthalate	5	5	5	5				
Di-n-octyl phthalate	5	5	5	5				
Benzo(b)fluoranthene	5	5	5	5				
Benzo(k)fluoranthene	5	5	5	5				
Benzo(a)pyrene	5	5	5	5				
Indeno (1,2,3-cd)pyrene	5	5	5	5				
Dibenz(a,h)anthracene	5	5	5	5				
Benzo(g,h,i)perylene	5	5	5	5				

UJ Quantitation limit is approximate due to limitations identified during the quality control review.
 R Value is rejected.

CLP EXTRACTABLE ORGANIC ANALYSIS
CASE NO. 18573 SAS 6702Q SDG NO. SAO382
ANALYTICAL RESULTS

Sample Location	Derby Line Dump	Derby Line Dump	Derby Line Dump	Derby Line Dump				
Sample Number	RB-44-12	GW-44-13	GW-44-14	GW-44-15				
Traffic Report Number	SAO382	SAO383	SAO384	SAO385				
Remarks	Rinsate		Dup. of GW-44-13					
Sampling Date	8/03/92	8/03/92	8/03/92	8/03/92				
Extraction Date	8/05/92	8/05/92	8/05/92	8/05/92				
Analysis Date	8/10/92	8/10/92	8/11/92	8/11/92				
PESTICIDE/PCB COMPOUND	ug/L	ug/L	ug/L	ug/L				
alpha-BHC								
beta-BHC								
delta-BHC								
gamma-BHC (Lindane)								
Heptachlor	0.011 J							
Aldrin								
Heptachlor epoxide								
Endosulfan I								
Dieldrin								
4,4'-DDE								
Endrin								
Endosulfan II								
4,4'-DDD								
Endosulfan sulfate								
4,4'-DDT								
Methoxychlor								
Endrin ketone								
Endrin aldehyde								
alpha-Chlordane								
gamma-Chlordane								
Toxaphene								
Aroclor-1016								
Aroclor-1221								
Aroclor-1232								
Aroclor-1242								
Aroclor-1248								
Aroclor-1254								
Aroclor-1260								

A blank space indicates the compound was not detected.

J Quantitation is approximate due to limitations identified during the quality control review.

TABLE 6 Page 1 of 1
 CLP EXTRACTABLE ORGANIC ANALYSIS
 CASE NO. 18573 SAS 6702Q SDG NO. SAO382
 SAMPLE QUANTITATION LIMITS

Sample Location	Derby Line Dump	Derby Line Dump	Derby Line Dump	Derby Line Dump				
Sample Number	RB-44-12	GW-44-13	GW-44-14	GW-44-15				
Traffic Report Number	SAO382	SAO383	SAO384	SAO385				
Remarks	Rinsate		Dup. of GW-44-13					
PESTICIDE/PCB COMPOUND	ug/L	ug/L	ug/L	ug/L				
alpha-BHC	0.010	0.010	0.010	0.010				
beta-BHC	0.010	0.010	0.010	0.010				
delta-BHC	0.010	0.010	0.010	0.010				
gamma-BHC (Lindane)	0.010	0.010	0.010	0.010				
Heptachlor	0.010	0.010	0.010	0.010				
Aldrin	0.010	0.010	0.010	0.010				
Heptachlor epoxide	0.010	0.010	0.010	0.010				
Endosulfan I	0.010	0.010	0.010	0.010				
Dieldrin	0.020	0.020	0.020	0.020				
4,4'-DDE	0.020	0.020	0.020	0.020				
Endrin	0.020	0.020	0.020	0.020				
Endosulfan II	0.020	0.020	0.020	0.020				
4,4'-DDD	0.020	0.020	0.020	0.020				
Endosulfan sulfate	0.020	0.020	0.020	0.020				
4,4'-DDT	0.020	0.020	0.020	0.020				
Methoxychlor	0.10	0.10	0.10	0.10				
Endrin ketone	0.020	0.020	0.020	0.020				
Endrin aldehyde	0.020	0.020	0.020	0.020				
alpha-Chlordane	0.010	0.010	0.010	0.010				
gamma-Chlordane	0.010	0.010	0.010	0.010				
Toxaphene	1.0	1.0	1.0	1.0				
Aroclor-1016	0.20	0.20	0.20	0.20				
Aroclor-1221	0.40	0.40	0.40	0.40				
Aroclor-1232	0.20	0.20	0.20	0.20				
Aroclor-1242	0.20	0.20	0.20	0.20				
Aroclor-1248	0.20	0.20	0.20	0.20				
Aroclor-1254	0.20	0.20	0.20	0.20				
Aroclor-1260	0.20	0.20	0.20	0.20				

UJ Quantitation limit is approximate due to limitations identified during the quality control review.

CLP INORGANIC ANALYSIS
CASE NO. 18563 SDG NO. MAAG81
ANALYTICAL RESULTS

Sample Location	Derby Line Dump	Derby Line Dump	Derby Line Dump	Derby Line Dump				
Sample Number	RB-44-12	GW-44-13	GW-44-14	GW-44-15				
Traffic Report Number	MAAG81	MAAG82	MAAG83	MAAG84				
Remarks	Rinsate		Duplicate of GW-44-13					
Sampling Date	8/03/92	8/03/92	8/03/92	8/03/92				
Inorganic Elements	CRDL (ug/L)	ug/L	ug/L	ug/L	ug/L			
Aluminum	P 200		7310 J	9910 J				
Antimony	P 60							
Arsenic	F 10		73.0	95.3				
Barium	P 200		211	233				
Beryllium	P 5							
Cadmium	P 5							
Calcium	P 5000		69000	69800	47200			
Chromium	P 10		118 J	160 J				
Cobalt	P 50		26.2	30.9				
Copper	P 25		44.7 J	75.5 J				
Iron	P 100		32400	43400	24.0			
Lead	F 3		32.2 J	53.1 J				
Magnesium	P 5000		26300	27300	5070			
Manganese	P 15		788	932	15.1			
Mercury	V 0.2							
Nickel	P 40		106	127				
Potassium	P 5000		36300	36200				
Selenium	F 5							
Silver	P 10							
Sodium	P 5000	823	63300	62300				
Thallium	F 10							
Vanadium	P 50			31.7				
Zinc	P 20		166 J	254 J	34.6 J			
Cyanide	C 10		42.5 J	100 J				

Analytical Method

F Furnace
P ICP/Flame AA
V Cold Vapor
C Colorimetric

A blank space indicates the element was not detected.

J Quantitation is approximate due to limitations identified in the quality control review.

Sample Detection Limits for the elements listed above are reported in Table 2.

CLP INORGANIC ANALYSIS
CASE NO. 18563 SDG NO. MAAG81
SAMPLE DETECTION LIMITS

Sample Location	Derby Line Dump	Derby Line Dump	Derby Line Dump	Derby Line Dump				
Sample Number	RB-44-12	GW-44-13	GW-44-14	GW-44-15				
Traffic Report Number	MAAG81	MAAG82	MAAG83	MAAG84				
Remarks	Rinsate		Duplicate of GW-44-13					
Sampling Date	8/03/92	8/03/92	8/03/92	8/03/92				
Percent Solids	0.0	0.0	0.0	0.0				
Inorganic Elements	IDL (ug/L)	ug/L	ug/L	ug/L	ug/L			
Aluminum	P 111.0	111.00	111.00	111.00	111.00			
Antimony	P 35.0	35.00	60.00 UJ	60.00 UJ	60.00 UJ			
Arsenic	F 2.0	2.00	2.00	2.00	2.00			
Barium	P 14.0	14.00	14.00	14.00	14.00			
Beryllium	P 1.0	1.00	1.00	1.20 UJ	1.00			
Cadmium	P 3.0	3.00	3.00	3.00	3.00			
Calcium	P 321.0	321.00	321.00	321.00	321.00			
Chromium	P 9.0	9.00	9.00	9.00	9.00			
Cobalt	P 5.0	5.00	5.00	5.00	5.00			
Copper	P 14.0	14.00	14.00	14.00	25.00 UJ			
Iron	P 18.0	18.00	18.00	18.00	18.00			
Lead	F 2.0	2.00	2.00	2.00	2.00			
Magnesium	P 210.0	210.00	210.00	210.00	210.00			
Manganese	P 10.0	10.00	10.00	10.00	10.00			
Mercury	V 0.2	0.20	0.20	0.20	0.20			
Nickel	P 9.0	9.00	9.00	9.00	9.00			
Potassium	P 480.0	480.00	480.00	480.00	480.00			
Selenium	F 3.0	3.00	30.00 UJ	30.00 UJ	3.00 UJ			
Silver	P 9.0	9.00	13.80 UJ	17.30 UJ	9.00			
Sodium	P 390.0	390.00	390.00	390.00	2120.00			
Thallium	F 4.0	4.00	4.00 UJ	4.00	4.00			
Vanadium	P 16.0	16.00	16.00	16.00	16.00			
Zinc	P 6.0	6.00	6.00	6.00	6.00			
Cyanide	C 10.0	10.00	10.00	10.00	10.00			

Analytical Method

F Furnace AA P ICP/Flame AA V Cold Vapor C Colorimetric

Sample's wet weight (gms) digested							
for Hg analysis							
for ICP analysis							
for furnace AA analysis							
for Cyanide analysis							

volumes used preparing samples for analysis	
for Hg analysis	100 ml
for ICP/AA analysis	200 ml
for Cyanide analysis	250 ml

UJ Value is undetected and the quantitation is approximate due to limitations identified in the quality control review.