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NORTH CAROLINA
DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
DIVISION OF WASTE MANAGEMENT

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DEXTER R. MATTHEWS, DIRECTOR

NCDENR
NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES

July 31, 2008

Ms. Jennifer Wendel, RPM
US EPA Region IV Waste Division
Atlanta Federal Building
61 Forsyth St., 11th Floor
Atlanta, GA 30303-3104

Subject: Site Reassessment
Travenol Labs Inc (aka Baxter Healthcare Corp.)
EPA ID# NCD059140764
Marion, McDowell County, NC, 28752

Dear Ms. Wendel:

The following is a Site Reassessment Report (SRR) completed by the NC Superfund Section for the Travenol Labs Inc (aka Baxter Healthcare Corp.) site. Based on the lack of contaminants present on site, the site is recommended for no further remedial action planned under CERCLA.

Travenol Labs Inc (aka Baxter Healthcare Corp.) was selected for reassessment in response to a citizen petition. The site was added to CERCLIS in 1981 due the past disposal practices of solvent wastes on site (Ref. 1).

The site is located on Hwy 221 N, approximately 8 miles north of Marion, McDowell County, NC. Corresponding geographic coordinates for the site are 35.8358° north latitude and 81.9933° west longitude (Ref. 2).

Travenol Labs Inc began operations in Marion in 1972 (Ref. 3). In 1989, Travenol Labs Inc changed its name to Baxter Healthcare Corp. (Ref. 2). The plant, still in operation today, manufactures glucose, salt solutions, and other intravenous solutions for hospitals (Refs. 2, 3).

The majority of hazardous waste generated at the facility is paint and cleaning solvent waste. This waste is generated through touch up painting of the building and equipment. Included in this hazardous waste are varsol solvents, turpentine, and xylene. The company also operates a laboratory which generates a small amount of laboratory solvent waste (Refs. 2, 3).

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From 1972 to 1977, approximately 440 gallons of paint and laboratory solvents were disposed of outside the paint shop building along a gravel driveway. The waste was poured in a small graveled area approximately 1500 sq. ft. in size and allowed to evaporate into the air. Between 1977 and 1980, waste was accumulated and kept on site. No other spills have been known to have occurred at the site (Refs. 2, 3).

The site was added to CERCLIS on June 1, 1981 (Ref. 1). The site was inspected by EPA contractors in April 1982. No evidence of wastes or waste residues was observed. The site was recommended for no further action at the site; however, no environmental samples were collected (Ref. 4). A Preliminary Assessment (PA) was completed for the site in June 1986 by NC personnel. Because of past on-site disposal practices, a medium priority for further action was assigned to the site (Ref. 3). NC personnel completed a Site Screening Investigation (SSI) for the site in August 1989. An on-site monitoring well was found to contain chromium (20 micrograms per liter (ug/l)) and lead (40 ug/l); however, no contamination was found present in the on-site process well (Ref. 2). Based on the lack of contamination in the process well, the site was recommended for no further action under CERCLA and archived (Refs. 1, 2). The site was removed from CERCLIS in 1995 (Ref. 5).

A Groundwater Investigation, under the authority of the NC Inactive Hazardous Sites Branch (IHSB), was completed in January 1991. Following the removal of a 1,000-gallon underground storage tank (UST), gasoline contamination was detected in the soil and groundwater beneath the site. As a result of a groundwater probe survey, four monitoring wells were installed on site. October 1990 groundwater sampling results indicated no gasoline contaminants present above NC 2L Groundwater Standards (Ref. 6).

At the request of NC IHSB, additional investigation was conducted at the site. A Data Summary Report was completed in June 1992. Two subsurface soil samples were collected and one additional monitoring well was installed and sampled in the former solvent disposal area. Results indicated that no soil concentrations exceeded existing Resource Conservation and Recovery Act (RCRA) Action Levels. The only contaminant in groundwater which exceeded the NC 2L standard was chromium (82 ug/l). However, the federal Maximum Contaminant Level (MCL) for chromium was increased from 50 ug/l to 100 ug/l at the time this sampling occurred (Ref. 7). Based on the lack of contaminants present on site, the site was recommended for no further action status by NC IHSB (Ref. 8).

Baxter Healthcare Corp. has several active environmental permits: Air (#3711100116), NPDES (#NCG060030 and #NC0006564), and RCRA (#NCD059140764). One Notice of Violation (NOV) was issued under the NC Air Permit in 2007. Seven NOVs were issued under a NC NPDES Permit between 2002 and 2005. No other violations have been issued during the past five years (Refs. 9-13).

Overland flow from the site enters the North Fork Catawba River at the probable point of entry (PPE). Flow follows the North Fork Catawba River for approximately 10.5 miles, whereupon it enters Lake James. The remainder of the 15-mile surface water pathway lies in Lake James. According to National Wetlands Inventory Maps, the nearest HRS-qualifying wetland is approximately 0.4 miles downstream of the PPE along the North Fork Catawba River, at a length of

approximately 0.1 miles of wetland frontage (Ref. 14). There are no surface water intakes located along the 15-mile surface water pathway (Refs. 2, 14). The entire 15-mile surface water pathway is considered a fishery (Ref. 2).

Based on the lack of contaminants on-site, the Travenol Labs Inc (aka Baxter Healthcare Corp.) site is recommended for no further remedial action planned (NFRAP) under CERCLA. If you have any questions or comments, please feel free to contact me at melanie.bartlett@ncmail.net or (919) 508-8480

Sincerely,

Melanie Bartlett 7/31/08 Jim Bateson 8/12/08

Melanie Bartlett	Date	Jim Bateson, Head	Date
Environmental Engineer		Site Evaluation and Removal Branch	
NC Superfund Section		NC Superfund Section	

Attachments

cc: Scott Ross, File
Charlotte Jesneck (letter only)

References:

1. EPA Superfund Information Systems. March 24, 2008.
2. Nicholson, Bruce, NC Superfund Section. Site Screening Investigation Report. August 9, 1989.
3. McMorris, Cheryl A., NC Environmental Health Section. Preliminary Assessment Report. June 4, 1986.
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5. Robbins, Matthew J., US EPA. Memo to Travenol Labs Inc, Subject: Removal From EPA's CERCLIS Inventory. August 22, 1995.
6. Roche, Sean and Gorman, C. Thomas, CH2MHill. Groundwater Investigation. January 1991.
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8. Walch, John, NC Superfund Section. Memo to Charlotte Jesneck, Re: Close Out Summary. October 14, 1992.
9. EPA Facility Registry System. March 17, 2008.
10. EPA Enforcement & Compliance History Online. March 17, 2008.
11. Senate District 47 Water Quality NPDES Violations. March 11, 2008.
12. NC Division of Air Quality Criteria and Toxic Air Pollutant Point Source Emissions Report. March 24, 2008.
13. Hazardous Waste Files
14. Bartlett, Melanie, NC Superfund Section. Memo to File: Surface Water Pathway, Baxter Healthcare Corp. March 25, 2008.

REFERENCE 1

U.S. ENVIRONMENTAL PROTECTION AGENCY

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TRAVENOL LABS INC

Site Information

Site Info | Aliases | Operable Units | Contacts
Actions | Contaminants | Site-Specific Documents

This site has been archived from the inventory of active sites.

Site Name: TRAVENOL LABS INC
Street: HWY 221 N
City / State / ZIP: MARION, NC 28752

NPL Status: Not on the NPL
Non-NPL Status: NFRAP

EPA ID: NCD059140764
EPA Region: 04
County: MCDOWELL

Federal Facility Flag: Not a Federal Facility

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TRAVENOL LABS INC

Actions

Site Info | Aliases | Operable Units | Contacts
Actions | Contaminants | Site-Specific Documents

OU	Action Name	Qualifier	Lead	Actual Start	Actual Completion
00	DISCOVERY		F		06/01/1981
00	PRELIMINARY ASSESSMENT	L	F		10/01/1982
00	PRELIMINARY ASSESSMENT	L	S		07/15/1986
00	ARCHIVE SITE		EP		08/09/1989
00	SITE INSPECTION	N	S		08/09/1989

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REFERENCE 2

North Carolina Department of Human Resources
Division of Health Services
P.O. Box 2091 • Raleigh, North Carolina 27602-2091

James G. Martin, Governor
David T. Flaherty, Secretary

Ronald H. Levine, M.D., M.P.H.
State Health Director

August 9, 1989

Ms. Denise Bland
EPA NC CERCLA Project Officer
EPA Region IV Waste Division
345 Courtland Street, N.E.
Atlanta, Georgia 30365

Subj: Site Screening Investigation Report
Travenol Laboratories Site
Marion, McDowell County, NC 28752
NCD059140764

Dear Ms. Bland:

This letter confirms the transmittal of the Site Screening Investigation Report for the Travenol Laboratories Site near Marion, in McDowell County, NC.

The site has been owned since 1972 by Baxter Healthcare Corporation (Baxter changed its name from Travenol Laboratories in 1989). The plant manufactures intravenous solutions for hospitals. Baxter notified EPA of the site with a CERCLA 103(c) notification. The disposal site is a small area outside the plant paint shop where during the period from 1972 to 1977 it was Baxter's practice to pour solvents on the gravel road in back of the shop. Reportedly, 440 gallons of mostly paint solvents and a small quantity of laboratory solvents was disposed of over the 5-year period.

In 1982 and EPA contractor conducted a site investigation and recommended no further action. In 1986, a preliminary assessment conducted by the NC Solid and Hazardous Waste Management Branch recommended a medium priority for inspection. This report documents the findings of the March 28, 1989, Site Screening Investigation.

Sincerely,

Bruce Nicholson

Bruce Nicholson, Environmental Engineer
Division of Solid Waste Management
Superfund Section

BIN/let/travssi
cc: Kelly Cain

NORTH CAROLINA

DHR/DHS

Travenol Laboratories
NCD059140764
Screening Site Investigation

August 1989

CERCLA

By Bruce Nicholson
Environmental Engineer
SUPERFUND BRANCH
SOLID WASTE MANAGEMENT SECTION

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EXECUTIVE SUMMARY

The Travenol Laboratories Site is on the plant grounds of the Baxter Healthcare Corporation (formerly Travenol Laboratories, Inc.), a pharmaceuticals plant in a mountain valley on Highway 221, eight miles north of Marion, McDowell County, NC. In a CERCLA 103(c) notification, Baxter reports having disposed of 440 gallons of mostly paint solvent wastes and a small quantity of laboratory waste on a gravel road behind the paint shop between the years 1972 and 1977. The disposals were periodic and reportedly consisted of no more than 2 to 3 gallons per event. An EPA contractor conducted a site investigation in 1982 and recommended no further action be taken. However, a subsequent preliminary assessment report in 1986 recommended the site for further investigation. This report documents the site screening investigation that was conducted.

The disposal area has since been paved and suitable soil sampling location was not available. Samples were taken from a monitoring well 100 feet downgradient (the monitoring well was placed as a precaution for the future removal of nearby underground fuel oil tanks not the paint disposal area) and from a process water well (also the nearest well 700 feet from the site) that supplies process water and drinking water to the 2,400 Baxter employees. No significant contamination was found in either sample. The area around the paint shop appeared to be well kept, and there were no visible signs of contamination. Because of the age and occasional nature of the disposal, the nonpersistent nature of the wastes, and the lack of contamination in a downgradient well indicates that the problem at this site is minor. We conclude, as did the previous site investigation, that this site should be considered for the no further action category.

1.0 BACKGROUND

1.1 Site Location

The Travenol Laboratories Site is an operating pharmaceuticals plant that manufactures intravenous solutions. The plant is located on Highway 221 approximately eight miles north of Marion, McDowell County, NC, in the community of North Cove. The site coordinates are 35° 50′ 9" North latitude and 81° 59′ 36" West longitude (See Map 1, Appendix A).

1.2 Site Layout/Description

A diagram of the plant site is shown in Figure 1. The plant is bounded to the north and northwest by the North Fork Catawba River and to the southeast by the Clinchfield Railroad. The facility is very large with the production/warehouse building alone covering approximately 26 acres, but the area of disposal covers a small area of ground approximately 15 feet x 15 feet. The blueprint of the site is included in Appendix A, and the site is also shown on Map 1 in Appendix A. Photographs of the site and the sampling locations are shown in Figures 2 through 5. Seven on-site wells supply the process and drinking water needs for the site (1). The parameters for these wells are listed in Table 1-1 below. The locations of these wells are denoted on the site blueprint in Appendix A.

Table 1-1. Parameters of Baxter Healthcare Corporation Process Wells (1).

Well No.	Well Depth, Ft.	Diameter, Inches	Static Water Level, Ft. BLS
1	480	8	10.5
2	525	8	10.8
3	300	6	9
4	450	8	36
4a	350	6	11.3
5	230	8	11.5
9	289	10	23

1.3 Ownership History

Baxter Healthcare Corporation (Baxter) is the owner of the site. The plant was built in 1972, and Baxter has been its sole occupant. The name of the company has changed throughout that time. The plant started operation under the name Travenol Laboratories, Inc. in 1972. For a period of 2 months in 1972, the company was known as Baxter-Travenol before it reverted to Travenol Laboratories. The name remained Travenol Laboratories until 1987 when the name changed to Baxter Healthcare Corporation (2). The plant produces intravenous solutions for hospital use.

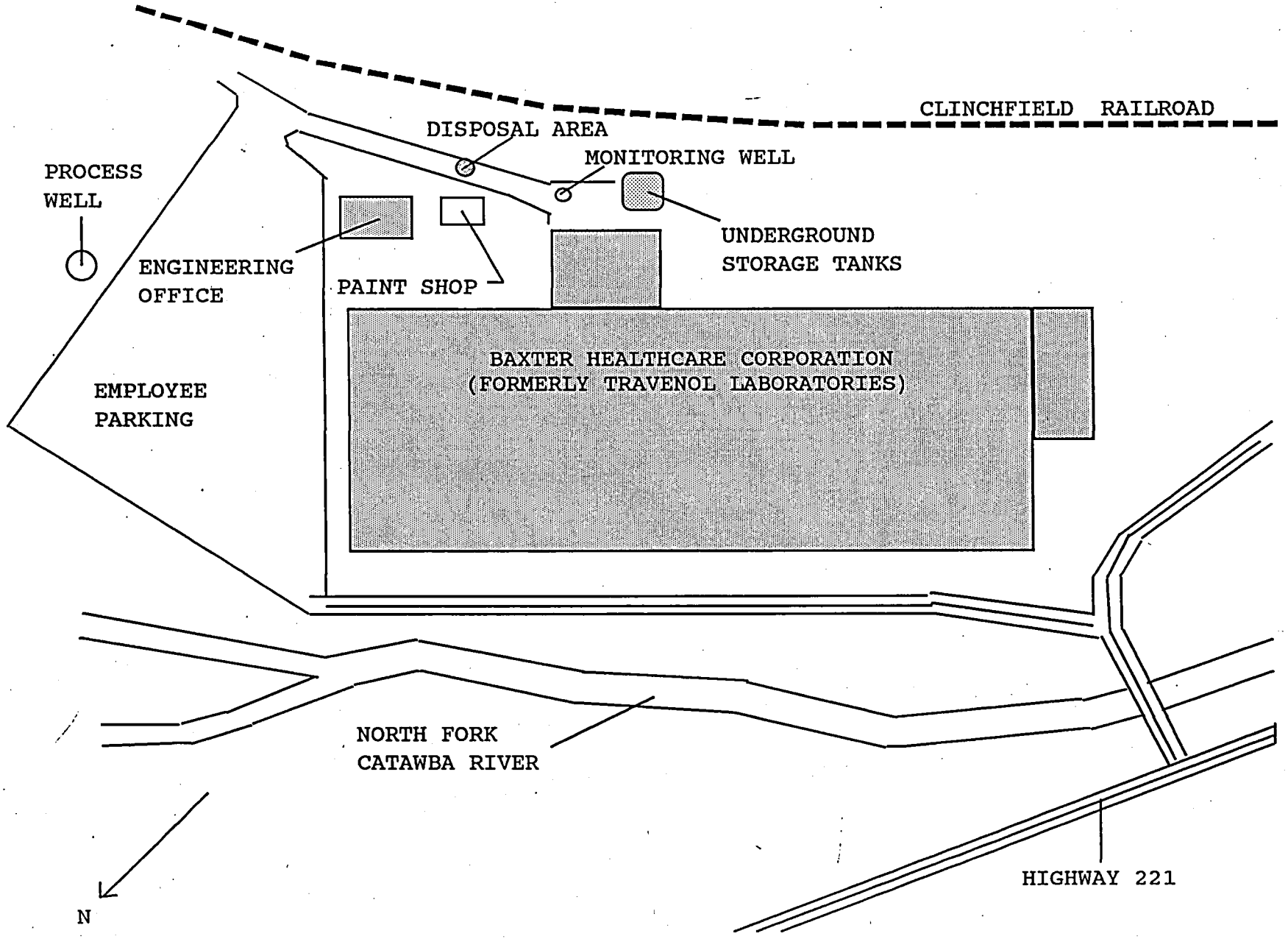

FIGURE 1. SITE LAYOUT OF TRAVENOL LABS

The area of disposal is in the northeast corner of the building. Between 1972 and 1977 a reported quantity of 440 gallons of waste paint shop solvents and a small amount of laboratory waste was disposed of on site (1,2,4). The disposal area was a gravel driveway behind the paint shop. Over the period of disposal, small quantities of the waste (reportedly no more than 2 to 3 gallons per event) were poured on the ground and allowed to evaporate. The gravel driveway has since been paved (1,4).

1.4 Permit and Regulatory History

Baxter filed a CERCLA 103(c) notification on April 29, 1981 (5). The site was inspected by Ecology and Environment, contractors for the U.S. EPA, on March 29, 1982. The gravelled area by this time had been paved over. The investigators found no evidence of waste or waste residues in the area and recommended no further action on the site. However, no samples were taken (3). A Preliminary Assessment conducted by Cheryl McMorris of the NC Superfund Branch on June 4, 1986, recommended a medium priority for inspection (4).

Baxter also filed a notification of Inactive Waste Disposal Site with the NC State Superfund Program on March 8, 1988 as required by the North Carolina General Statutes Section 130A-310.1(b) (1).

1.5 Remedial Actions To Date

No remedial action has taken place concerning the disposal of paint and laboratory wastes. Baxter is in the process of removing or has recently removed six underground storage tanks. Monitoring wells have been installed to assess these tanks and to date, no leak has been detected. Four of these are located approximately 200 feet south and east of the disposal area (2).

1.6 Summary Trip Report (5)

On March 28, 1989, Pat DeRosa and Bruce Nicholson conducted a site sampling visit to the Travenol Laboratories site. The weather was clear and warm with the temperature about 70°F. We met with the plant Environmental Coordinator, Mr. Phil Castro. We obtained a site layout map from Mr. Castro and discussed the well locations and reported disposal area. We toured the plant grounds in the area of the paint shop where the reported disposal took place. The disposal area was immediately outside the rear of the paint shop on the road that leads to the back of the plant. The road was paved and there was no clear area to take soil samples. However, Baxter had recently installed a system of three monitoring wells to monitor underground tanks (containing No. 5 fuel oil) near the disposal area. Baxter is planning to

remove these tanks in the near future and, according to Mr. Castro, the monitoring wells were installed as a precautionary measure to assess the status of the tanks prior to their removal. Monitoring Well No. 1 was upgradient of the tanks but approximately 100 feet downgradient of the disposal area.

A ground water sample was taken from Monitoring Well No. 1, and a background ground water sample was taken from a process water well (Process Well No. 3) located approximately 700 feet upgradient of the disposal area. These samples were submitted to the NC Laboratory of Public Health for organic and inorganic analyses.

2.0 ENVIRONMENTAL SETTING

2.1 Topography

The Travenol Laboratories site is located in the Blue Ridge physiographic province in northern McDowell County. The plant sits in an alluvial valley adjacent to the North Fork Catawba River. The valley floor is flat and the site is approximately 1,500 feet and in elevation. The mountain ridges surrounding the valley rise to nearly 3,700 feet (6).

2.2 Surface Water

The North Fork Catawba River runs by the Baxter plant. At its closest to the site, the river is 900 feet in a northerly direction, but the drainage pattern of the disposal area takes surface runoff to a storm sewer that empties into a ditch behind the plant along the railroad tracks (see Figure 1). The storm drain enters this ditch approximately 2,000 feet from the disposal area. This ditch then flows approximately 1,000 feet and enters the North Fork Catawba River to the southeast of the plant (11). From this point the North Fork Catawba flows 9.6 miles and enters Lake James (the head waters of the Catawba River (8). The 15-stream mile target distance limit ends in the middle of Lake James. There are no surface water intakes along this waterway, and Lake James is not used as a water supply (8). The nearest intake serves the city of Morganton. It is located on the Catawba River below Lake James is over 30 stream miles from the site (8).

The North Fork Catawba River is a Class C water body; suitable for fish propagation, secondary recreation, and agriculture (19). Also, the entire length of the 3 stream-mile target distance limit is classified as trout waters suitable for propagation and maintanance of stocked trout (19).

2.3 Geology, Soils, and Ground Water

The site resides in a valley drained by the North Fork Catawba River, and consequently, alluvial deposits may predominate. These alluvial deposits in the Catawba and Yadkin River Vallies can contain high percentages of clay (11). Saprolite tends to be thinner in the Blue Ridge region and thicker in the Piedmont region of McDowell County. Below the saprolite, the crystalline rock types in the area are quartzite and layered gneiss. The quartzite is characterized as the Upper Chilhowee formation made up of vitreous white to light gray quartzite interbedded with sandy metasiltstone and slate (12). The layered gneiss is distinguished by compositional layers that show considerable variation in mineral components. This rock type generally decays to various shades of red clay (11).

Residents who live near the site obtain drinking water from wells and springs. There is no municipal supply within the four-mile target distance limit. Baxter draws process and drinking water for the plant's 2,400 employees from seven operating wells on site. These wells range from 230 feet to 525 feet deep (1). A total of 1.5 million gallons are used daily from these wells (2). Many individual private wells near the North Cove area are much shallower, particularly those bored in alluvium. Four of the five area wells for which data is available are 40 feet deep or less (11).

Soil associations in the area include the Talladega-Chandler-Tate (TCT) and Hayesville-Cecil (HC). The TCT soil association is steeply sloped, well drained, loamy in texture and acid. Stones may be present in the Talladega and Chandler soils but are less common in the Tate soils. The HC soil association is steeply sloped and well drained, with a loamy surface and clayey subsurface. The soil is acid and has moderate agricultural production potential that may be limited by the slope (13).

2.4 Climate and Meteorology (13,14)

The pertinent meterological parameters for the Travenol site are shown in Table 2-1 below:

Table 2-1. Meteorological Data For the Marion Area of McDowell County, NC

Annual Precipitation	54 inches
Annual Evaporation	36 inches
Net Precipitation	18 inches
1-year, 24-hour rainfall	3.2 inches
Average Date of Last Freezing Temperature	April 21-May 1
Average Date of First Freezing Temperature	October 10-20
Mean Annual Wind Speed/Direction	7 m.p.h. from the NE

2.5 Land Use

The site is located in a rural area 8 miles north of Marion, NC (population, 3,684) (15). The rural community of North Cove is adjacent to the plant's northern property boundary. The community contains approximately two dozen residences and North Cove Elementary School. The school property adjoins Baxter's. The well for the school, which serves 185, is approximately 750 feet from the disposal area (6,7,15). Baxter is the largest employer in the area, but other manufacturing operations (mostly textiles or forest products) are scattered throughout the region. American

Thread Company (NCD003157377) is located in Woodlawn, NC, four miles southeast of the site. Much of the land in the area is is farmed. Christmas trees, tobacco, corn, and livestock are the major products.

2.6 Population Distribution

A house count on the USGS topographic map was performed for a four-mile radius around the Travenol Labs site. During the site visit it was determined that the houses on the USGS topographic map for the North Cove area were fairly accurate. Two additional houses were added to the houses already on the map based on the site visit. The results of the house count and community well data are shown in Table 2-2 below.

Table 2-2. Population Estimate For Travenol Labs Site (8)

Radius, miles	House Count	Residents Per House	Population	Cumulative Population
0-1	45	3.8	171	171
1-2	57	3.8	217	388
2-3	96	3.8	365	753
3-4	201	3.8	764	1,517

2.7 Water Supply

There are no municipal water systems within the target distance limit. Ground water is the only source of water for area residents. Private, community and corporate wells supply drinking water to the residents and employees in the area. The six on-site wells descibesd in Section 1.2 supply drinking water to 2,400 employees (1). In addition, there are three other community well systems within 4 miles. A house count from the USGS Topographic map was used to determine private well users, data from the NC Public Water Supply Branch was used to determine the location and number of community well users. The results of the house count and community well data are shown in Table 2-3 below.

Table 2-3. Ground Water Target Population For Travenol Labs Site (1,8,16)

Radius, miles	House Count Population	Community Well System Population	Baxter Employees	Total Population	Cumulative Population
0-1	171	185-a	2,400	2,756	2,756
1-2	217	0	--	217	2,973
2-3	365	96-b	--	461	3,344
3-4	764	475-c	--	1,239	4,673

[a] North Cove Elementary School
[b] Scenic Mobile Home Village (not included in house count)
[c] Woodlawn Heights Water System, Swiss Village Water System (not included in house count)

2.8 Critical Environments

The nearest critical habitat is that of *Hudsonia montana*, the mountain golden heather. This habitat is located east of the Linville River within the Linville Gorge Wilderness Area (17). The approximate boundary of this habitat is shown on the topographic map in Appendix A. The nearest part of this habitat is approximately 5 miles east of the site. However, this habitat is not in the same drainage basin and is unaffected by surface water drainage from the site (8).

3.0 WASTE TYPES AND QUANTITIES

Baxter reported disposal of 440 gallons of paint solvents and and a small amount of laboratory waste solvents during the five to six year period from 1972 through 1977 (2,3,4). The exact paint solvent is unknown; however, common paint solvents include toluene, xylene, petroleum naphtha, other petroleum distillates, and turpentine. The small quantity of laboratory solvents disposed include included reagents and solvents that contained nitrobenzene and pyridine (2,3,4). This waste was occasionally applied to this area at the rate of 2 to 3 gallons at a time (2).

4.0 LABORATORY DATA

Table 4-1 shows the inorganic analyses of the well samples which were taken during the March 28, 1989, site screening investigation. As is apparent from the data, no significant levels of inorganic contaminants were found. Similarly, no organic contaminants were found at levels significantly above background. Trace levels of some chlorinated species were found in the monitoring well sample, but the levels are below detection limits and can only be reported as estimated values. Further, there is no record of chlorinated solvent disposal taking place. The complete analysis data are presented in Appendix B.

Table 4-1. Results of Inorganic Analyses at Travenol Labs Site.

	- - - - Concentration, mg/l - - - -	
Substance	Monitoring Well #1	Process Well #3
Arsenic	<0.01	< 0.01
Cadmium	<0.005	< 0.005
Chromium	0.02	< 0.01
Lead	0.04	< 0.03
Mercury	<0.0002	< 0.0002
Selenium	<0.005	< 0.005
Silver	<0.05	< 0.05

5.0 TOXICOLOGICAL AND CHEMICAL CHARACTERISTICS

The petroleum distillates and aromatic compounds that may have been present in the paint solvents are not persistent compounds and may not be present after the 12 year period which has elapsed since the last disposal. Pyridine and nitrobenzene have SAX toxicity ratings of 3 and 3-2 respectively (18). However, the chemical structure of these chemicals would also tend to be nonpersistent. Chlorinated species, although there is no record of their disposal would be more persistent. They were detected at trace levels (below the detection limit). For more detailed information on the toxicity of the potential chemicals of concern, the reader is referred to Reference 16.

REFERENCES

1. Notification of An Inactive Hazardous Substance or Waste Disposal Site. Mr. Phil Castro, Baxter Healthcare Corporation, to Mr William Meyer, NC Solid Waste Management Section. March 8, 1989.

2. Telecon. Bruce Nicholson, NC Superfund Branch, with Phil Castro, Baxter Healthcare Corporation. July 31, 1989.

3. Letter and Attachments. Mr. Charles H. Lee, Ecology and Environment, to Mr. R. D. Stonebraker, U.S. EPA Region IV. April 19, 1982. North Carolina Cercla 103(c) Site Inspections.

4. Preliminary Assessment Report. Ms. Cheryl McMorris, NC Superfund Branch, to Ms. Denise Bland, U.S. EPA Region IV. June 4, 1986.

5. Site Sampling Visit Trip Report. Mr. Bruce Nicholson, NC Superfund Branch, to Ms. Denise Bland, U.S. EPA Region IV. April 4, 1989.

6. Telecon. Ms. Cheryl McMorris, NC Superfund Branch, with Mr. Keith Masters, NC Solid and Hazardous Waste Management Branch. April 15, 1986.

7. Hazardous Waste Database, NC Solid and Hazardous Waste Management Branch Alphabetical Listing of Hazardous Waste Facilities Excluding Small Generators. July 14, 1989.

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11. Geology and Ground-Water Resources of the Morganton Area, North Carolina, Ground Water Bulletin No. 12. North Carolina Department of Water Resources, Raleigh, NC. March 1967.

12. Geologic Map of North Carolina. Department of Natural Resources and Community Development. Compiled by the North Carolina Geological Survey, 1985.

References-con't.

13. North Carolina Atlas, Portrait of a Changing Southern State. University of North Carolina Press, Chapel Hill, NC. 1975.

14. Rainfall Frequency Atlas of the United States. Technical Paper No. 40, U.S. Department of Commerce, Washington, DC, 1963.

15. North Carolina State Government Statistical Abstract, 5th Edition. North Carolina State Data Center, Raleigh, NC. 1984.

16. Community and Noncommunity Public Water Supply Database. NC Public Water Supply Branch. July 17, 1989.

17. Letter and Attachments. Mr. Warren T. Parker, U.S. Fish and Wildlife Service, to Ms. Pat DeRosa, NC Superfund Branch. June 21, 1985. Endangered Species and Critical Habitats in North Carolina.

18. Dangerous Properties of Industrial Materials, 6th edition. N. I. Sax. Van Nostrand Rheinhold Company, 1984.

19. Classifications and Water Quality Standards Assigned to the Waters of the Catawba River Basin. NC Department of Natural Resources and Community Development, Raleigh, NC. June 30, 1989.

N. C. Department of Human Resources
Division of Health Services

SAMPLE ANALYSES REQUEST

State Laboratory of Public Health
P. O. Box 28047
306 N. Wilmington Street
Raleigh, 27611

Site Number NCD059140764 Field Sample Number 3271

Name of Site TRAVENOL LABS INC Site Location McDOWELL COUNTY

Collected By BRUCE NICHOLSON ID# 59 Date Collected 3/28/89 Time

Type of Sample:

Environmental	Concentrate
✓ Groundwater (1)	___ Solid (5)
___ Surface Water (2)	___ Liquid (6)
___ Soil (3)	___ Sludge (7)
___ Other (4)	___ Other (8)

Sample No. Monitoring Well #1

RECEIVED
SOLID WASTE MANAGEMENT SECTION
SUPERFUND BRANCH

INORGANIC CHEMISTRY

Extractables					
Parameter	Results mg/1	Parameter	Results mg/1	Parameter	Results mg/1
___ Arsenic		✓ Arsenic	<0.01	✓ Silver	<005
___ Barium		___ Barium		___ Sulfates	
___ Cadmium		✓ Cadmium	<0.005	___ Zinc	
___ Chromium		___ Chloride		___ Ph	
___ Lead		✓ Chromium	0.02	___ Conductivity	
___ Mercury		___ Copper		___ TDS	
___ Selenium		___ Fluoride		___ TOC	
___ Silver		___ Iron			
		✓ Lead	0.04		
		___ Manganese			
		✓ Mercury	<0.0002		
		___ Nitrate			
		✓ Selenium	<0.005		

ORGANIC CHEMISTRY

Parameter	Results mg/1	Parameter	Results mg/1	Parameter	Results mg/1
___ P&T:GC/MS		___ EDB		___ Methoxychlor	
___ Acid:B/N Ext.		___ PCB's		___ Toxaphene	
___ TOX		___ Petroleum		___ 2,4-D	
		___ Endrin		___ 2,4,5-TP (silvex)	
		___ Lindane			

MICROBIOLOGY

Parameter
___ (MF) Coliform Colonies/100mls
___ (MPN) Coliform Colonies/100mls

RADIOCHEMISTRY

Parameter	Results PCi/1
___ Gross Alpha	
___ Gross Beta	

Date Received ___ Date Reported 4/19/89

Date Extracted ___ Date Analyzed ___

Reported By ___ Lab Number 06663 AIR 407

DHS 3191 (Revised 7/85)

N. C. Department of Human Resources
Division of Health Services

SAMPLE ANALYSES REQUEST

State Laboratory of Public Health
P. O. Box 28047
306 N. Wilmington Street
Raleigh, 27611

Site Number NCD059140764 Field Sample Number 3272

Name of Site TRAVENOL LABS INC Site Location McDOWELL COUNTY

Collected By BRUCE NICHOLSON ID# 59 Date Collected 3/28/89 Time

RECEIVED APR 20 1989 SOLID WASTE MANAGEMENT SECTION SUPERFUND BRANCH

Type of Sample:

Environmental	Concentrate
✓ Groundwater (1)	___ Solid (5)
___ Surface Water (2)	___ Liquid (6)
___ Soil (3)	___ Sludge (7)
___ Other (4)	___ Other (8)

Comments: Sample No. 2 Process Well

INORGANIC CHEMISTRY

Extractables		Total			
Parameter	Results mg/1	Parameter	Results mg/1	Parameter	Results mg/1
___ Arsenic		✓ Arsenic	<0.01	✓ Silver	<0.05
___ Barium		___ Barium		___ Sulfates	
___ Cadmium		✓ Cadmium	<0.005	___ Zinc	
___ Chromium		___ Chloride		___ Ph	
___ Lead		✓ Chromium	<0.01	___ Conductivity	
___ Mercury		___ Copper		___ TDS	
___ Selenium		___ Fluoride		___ TOC	
___ Silver		___ Iron			
		✓ Lead	<0.03		
		___ Manganese			
		✓ Mercury	<0.0002		
		___ Nitrate			
		✓ Selenium	<0.005		

ORGANIC CHEMISTRY

Parameter	Results mg/1	Parameter	Results mg/1	Parameter	Results mg/1
___ P&T:GC/MS		___ EDB		___ Methoxychlor	
___ Acid:B/N Ext.		___ PCB's		___ Toxaphene	
___ TOX		___ Petroleum		___ 2,4-D	
		___ Endrin		___ 2,4,5-TP (silvex)	
		___ Lindane			

MICROBIOLOGY

Parameter
___ (MF) Coliform Colonies/100mls
___ (MPN) Coliform Colonies/100mls

RADIOCHEMISTRY

Parameter	Results PCi/1
___ Gross Alpha	
___ Gross Beta	

Date Received ___ Date Reported 4/19/89

Date Extracted ___ Date Analyzed ___

Reported By ___ Lab Number 06664 A.N. 407

SOLID AND HAZARDOUS WASTE MANAGEMENT BRANCH

Chain of Custody Record

Hazardous Waste Materials

APR 20 1989 SUPERFUND BRANCH SOLID WASTE MANAGEMENT

Location of Sampling: ____ Generator ____ Transporter ____ Treatment Fa
____ Storage Facility ____ Disposal Facility ____ Landfill
✓ Other: CERCLIS SITE

Company's Name Travenol Labs (Currently Baxter) Telephone (704) 756-4151

Address US Hwy 221 N. Marion NC 28752

Collector's Name [signature] Telephone (919) 733-2801
signature

Date Sampled 3/28/89 Time Sampled

Type of Process Generating Mixed Waste Paint Shop & Laboratory Waste Solvents

Field Information

~~INORGANIC SAMP~~

Groundwater samples for Inorganic Analysis

Field Sample No. 3271 3272

Chain of Possession:

	signature	title	inclusive date
1.	[signature]	Environmental Engineer	3/28/89 - 3/31/8
2.	Paul J. Childers	Chemist	3/30/89
3.			

Results reported

signature title date

Instructions: Complete all applicable information including signatures, and submit with analysis request forms.

N. C. Department of Human Resources
Division of Health Services

SAMPLE ANALYSES REQUEST

State Laboratory of Public Health
P. O. Box 28047
306 N. Wilmington Street
Raleigh, 27611

Site Number NCD059140764 Field Sample Number 43 ~~69~~ BIN

Name of Site TRAVENOL LABS INC Site Location McDOWELL COUNTY

Collected By BRUCE NICHOLSON ID# 59 Date Collected 3/28/89 Time

Type of Sample:

Environmental	Concentrate	Comments
✓ Groundwater (1)	___ Solid (5)	Sample No. 1
___ Surface Water (2)	___ Liquid (6)	Monitoring Well #1
___ Soil (3)	___ Sludge (7)	
___ Other (4)	___ Other (8)	

INORGANIC CHEMISTRY

Extractables		Total			
Parameter	Results mg/1	Parameter	Results mg/1	Parameter	Results mg/1
___ Arsenic		___ Arsenic		___ Silver	
___ Barium		___ Barium		___ Sulfates	
___ Cadmium		___ Cadmium		___ Zinc	
___ Chromium		___ Chloride		___ Ph	
___ Lead		___ Chromium		___ Conductivity	
___ Mercury		___ Copper		___ TDS	
___ Selenium		___ Fluoride		___ TOC	
___ Silver		___ Iron			
		___ Lead			
		___ Manganese			
		___ Mercury			
		___ Nitrate			
		___ Selenium			

ORGANIC CHEMISTRY

Parameter	Results mg/1	Parameter	Results mg/1	Parameter	Results mg/1
___ P&T:GC/MS		___ EDB		___ Methoxychlor	
✓ Acid:B/N Ext.		___ PCB's		___ Toxaphene	
___ TOX		✓ Petroleum		___ 2,4-D	
		___ Endrin		___ 2,4,5-TP (silvex)	
		___ Lindane			

MICROBIOLOGY

Parameter
___ (MF) Coliform Colonies/100mls
___ (MPN) Coliform Colonies/100mls

RADIOCHEMISTRY

Parameter	Results PCi/1
___ Gross Alpha	
___ Gross Beta	

Date Received 3-31-89 XB Date Reported 5-23-89

Date Extracted BNA 4-3-89 XB, aa, PW, mw Date Analyzed BNA 4-17-89 BD

Reported By John L. Neal Lab Number 900866

DHS 3191 (Revised 7/85)
Solid and Hazardous Waste (Review 7/87)

#900866 - 900870

Purpose: Enforcement and compliance with the N. C. Solid and Hazardous Waste Management Rules.

Preparation A sample analyses request form (DHS 3191) must be completed for each type of evaluation requested (e.g., inorganic, organic, microbiology, radiochemistry). For sampling conditions which require more than one (1) container (i.e., ground or surface water from landfills) a sample label must be affixed to one of the containers. The collector must then write the **site** and **sample** number on the duplicate.

Do not submit an analysis request sheet with no parameters indicated.

Equivalent measurements:

$$ppm = \mu g/ml = mg/l = \mu g/g = mg/kg$$
$$ppb = \mu g/l = \mu g/1000g = \mu g/kg$$

DEFINITIONS/INSTRUCTIONS

Site Number — A twelve-digit site/location identifier, assigned only by the district field representative.

Field Sample Number — A six-digit sample identifier which is pre-printed on the sample label.

Name of Site — Name of landfill, facility, etc.

Site Location — Address, street number, state road, etc.

Collected By — Name and ID of sample collector.

Date and Time Collected — Self-explanatory.

Environmental — A sample of a naturally occurring substance such as groundwater, surface water or soils which may be contaminated.

Concentrate — A sample of a waste, including but not limited to, sludges, resins, treatment effluents or drummed wastes.

Comments — Lists details regarding sample or sample point, including but limited to, phase separation, and/or odors.

Inorganic Chemistry — Check (✓) the desired parameters to be analyzed. Extractables are only performed on a solid or semi-solid. For routine landfill samples, check all parameters in the second and third columns.

Organic Chemistry — Check (✓) the desired parameter to be analyzed. If not listed, enter the name in the space provided.

Microbiology and Radiochemistry — The Raleigh office should be consulted prior to sampling for either of these.

Distribution:

1. Original to State Laboratory of Public Health

   Environmental Sciences Branch
   P. O. Box 28047
   Raleigh, NC 27611

2. Lab sends copy to Solid and Hazardous Waste Management Branch.
3. Solid and Hazardous Waste Management Branch sends copy to field person.

Disposition: This form may be destroyed in accordance with the Environmental Health, Solid and Hazardous Waste Section of the *Records Disposition Schedule* as published by the North Carolina Division of Archives and History.

Additional forms may be ordered from:

Solid and Hazardous Waste Management Branch
Division of Health Services
P. O. Box 2091
Raleigh, NC 27602-2091

N. C. Department of Human Resources
Division of Health Services

SAMPLE ANALYSES REQUEST

State Laboratory of Public Health
P. O. Box 28047
306 N. Wilmington Street
Raleigh, 27611

Site Number NCD059140764 Field Sample Number 4370

Name of Site TRAVENOL LABS INC Site Location McDOWELL COUNTY

Collected By BRUCE NICHOLSON ID# 59 Date Collected 3/28/89 Time

Type of Sample

Environmental	Concentrate	Comments
✓ Groundwater (1)	___ Solid (5)	Sample No. 1
___ Surface Water (2)	___ Liquid (6)	Monitoring Well #1
___ Soil (3)	___ Sludge (7)	
___ Other (4)	___ Other (8)	

INORGANIC CHEMISTRY

Extractables		Total			
Parameter	Results mg/1	Parameter	Results mg/1	Parameter	Results mg/1
___ Arsenic		___ Arsenic		___ Silver	
___ Barium		___ Barium		___ Sulfates	
___ Cadmium		___ Cadmium		___ Zinc	
___ Chromium		___ Chloride		___ Ph	
___ Lead		___ Chromium		___ Conductivity	
___ Mercury		___ Copper		___ TDS	
___ Selenium		___ Fluoride		___ TOC	
___ Silver		___ Iron			
		___ Lead			
		___ Manganese			
		___ Mercury			
		___ Nitrate			
		___ Selenium			

ORGANIC CHEMISTRY

Parameter	Results mg/1	Parameter	Results mg/1	Parameter	Results mg/1
✓ P&T:GC/MS		___ EDB		___ Methoxychlor	
___ Acid:B/N Ext.		___ PCB's		___ Toxaphene	
___ TOX		___ Petroleum		___ 2,4-D	
		___ Endrin		___ 2,4,5-TP (silvex)	
		___ Lindane			

MICROBIOLOGY

Parameter
___ (MF) Coliform Colonies/100mls
___ (MPN) Coliform Colonies/100mls

RADIOCHEMISTRY

Parameter	Results PCi/1
___ Gross Alpha	
___ Gross Beta	

Date Received 3-31-89 YB Date Reported

Date Extracted Date Analyzed PT 5-2-89 nw

Reported By Lab Number 900867

DHS 3191 (Revised 7/85)
Solid and Hazardous Waste (Revised 7/87)

N. C. Department of Human Resources
Division of Health Services

SAMPLE ANALYSES REQUEST

State Laboratory of Public Health
P. O. Box 28047
306 N. Wilmington Street
Raleigh, 27611

Site Number NCD059140764 Field Sample Number 4371
Name of Site TRAVENOL LABS INC Site Location McDOWELL COUNTY
Collected By BRUCE NICHOLSON ID# 59 Date Collected 3/28/89 Time

Type of Sample:

Environmental	Concentrate	Comments
✓ Groundwater (1)	___ Solid (5)	Sample No. 2
___ Surface Water (2)	___ Liquid (6)	Process Well #2
___ Soil (3)	___ Sludge (7)	
___ Other (4)	___ Other (8)	

INORGANIC CHEMISTRY

Extractables		Total			
Parameter	Results mg/1	Parameter	Results mg/1	Parameter	Results mg/1
___ Arsenic		___ Arsenic		___ Silver	
___ Barium		___ Barium		___ Sulfates	
___ Cadmium		___ Cadmium		___ Zinc	
___ Chromium		___ Chloride		___ Ph	
___ Lead		___ Chromium		___ Conductivity	
___ Mercury		___ Copper		___ TDS	
___ Selenium		___ Fluoride		___ TOC	
___ Silver		___ Iron			
		___ Lead			
		___ Manganese			
		___ Mercury			
		___ Nitrate			
		___ Selenium			

ORGANIC CHEMISTRY

Parameter	Results mg/1	Parameter	Results mg/1	Parameter	Results mg/1
___ P&T:GC/MS		___ EDB		___ Methoxychlor	
✓ Acid:B/N Ext.		___ PCB's		___ Toxaphene	
___ TOX		✓ Petroleum		___ 2,4-D	
		___ Endrin		___ 2,4,5-TP (silvex)	
		___ Lindane			

MICROBIOLOGY

Parameter
___ (MF) Coliform Colonies/100mls
___ (MPN) Coliform Colonies/100mls

RADIOCHEMISTRY

Parameter	Results PCi/1
___ Gross Alpha	
___ Gross Beta	

Date Received 3-31-89 XB Date Reported
Date Extracted BNA 4-13-89 XB, aa, mw Date Analyzed BNA 4-18-89 BD
Reported By Lab Number 900868

DHS 3191 (Revised 7/85)
Solid and Hazardous Waste (Revised 7/87)

N. C. Department of Human Resources
Division of Health Services

SAMPLE ANALYSES REQUEST

State Laboratory of Public Health
P. O. Box 28047
306 N. Wilmington Street
Raleigh, 27611

Site Number NCD059140764 Field Sample Number 4372
Name of Site TRAVENOL LABS INC Site Location McDOWELL COUNTY
Collected By BRUCE NICHOLSON ID# 59 Date Collected 3/28/89 Time

Type of Sample:

Environmental	Concentrate	Comments
✓ Groundwater (1)	___ Solid (5)	Sample No. 2
___ Surface Water (2)	___ Liquid (6)	Process Well No. 2
___ Soil (3)	___ Sludge (7)	
___ Other (4)	___ Other (8)	

INORGANIC CHEMISTRY

Extractables		Total			
Parameter	Results mg/1	Parameter	Results mg/1	Parameter	Results mg/1
___ Arsenic		___ Arsenic		___ Silver	
___ Barium		___ Barium		___ Sulfates	
___ Cadmium		___ Cadmium		___ Zinc	
___ Chromium		___ Chloride		___ Ph	
___ Lead		___ Chromium		___ Conductivity	
___ Mercury		___ Copper		___ TDS	
___ Selenium		___ Fluoride		___ TOC	
___ Silver		___ Iron			
		___ Lead			
		___ Manganese			
		___ Mercury			
		___ Nitrate			
		___ Selenium			

ORGANIC CHEMISTRY

Parameter	Results mg/1	Parameter	Results mg/1	Parameter	Results mg/1
✓ P&T:GC/MS		___ EDB		___ Methoxychlor	
___ Acid:B/N Ext.		___ PCB's		___ Toxaphene	
___ TOX		___ Petroleum		___ 2,4-D	
		___ Endrin		___ 2,4,5-TP (silvex)	
		___ Lindane			

MICROBIOLOGY

Parameter
___ (MF) Coliform Colonies/100mls
___ (MPN) Coliform Colonies/100mls

RADIOCHEMISTRY

Parameter	Results PCi/1
___ Gross Alpha	
___ Gross Beta	

Date Received 3-31-89 LB Date Reported
Date Extracted Date Analyzed PT 5-2-89 nw
Reported By Lab Number 900869

DHS 3191 (Revised 7/85)

N. C. Department of Human Resources
Division of Health Services

SAMPLE ANALYSES REQUEST

State Laboratory of Public Health
P. O. Box 28047
306 N. Wilmington Street
Raleigh, 27611

Site Number NCD059140764 Field Sample Number 4385
Name of Site TRAVENOL LABS INC Site Location McDOWELL COUNTY
Collected By BRUCE NICHOLSON ID# 59 Date Collected 3/28/89 Time

Type of Sample:

Environmental	Concentrate	Comments
✓ Groundwater (1)	___ Solid (5)	LAB BLANK
___ Surface Water (2)	___ Liquid (6)	
___ Soil (3)	___ Sludge (7)	
___ Other (4)	___ Other (8)	

INORGANIC CHEMISTRY

Extractables		Total			
Parameter	Results mg/1	Parameter	Results mg/1	Parameter	Results mg/1
___ Arsenic		___ Arsenic		___ Silver	
___ Barium		___ Barium		___ Sulfates	
___ Cadmium		___ Cadmium		___ Zinc	
___ Chromium		___ Chloride		___ Ph	
___ Lead		___ Chromium		___ Conductivity	
___ Mercury		___ Copper		___ TDS	
___ Selenium		___ Fluoride		___ TOC	
___ Silver		___ Iron			
		___ Lead			
		___ Manganese			
		___ Mercury			
		___ Nitrate			
		___ Selenium			

ORGANIC CHEMISTRY

Parameter	Results mg/1	Parameter	Results mg/1	Parameter	Results mg/1
✓ P&T:GC/MS		___ EDB		___ Methoxychlor	
___ Acid:B/N Ext.		___ PCB's		___ Toxaphene	
___ TOX		___ Petroleum		___ 2,4-D	
		___ Endrin		___ 2,4,5-TP (silvex)	
		___ Lindane			

MICROBIOLOGY

Parameter
___ (MF) Coliform Colonies/100mls
___ (MPN) Coliform Colonies/100mls

RADIOCHEMISTRY

Parameter	Results PCi/1
___ Gross Alpha	
___ Gross Beta	

Date Received 3-31-89 &P Date Reported
Date Extracted Date Analyzed PT 5-2-89 nw
Reported By Lab Number 900870

DHS 3191 (Revised 7/85)

DIVISION OF HEALTH SERVICES
SOLID AND HAZARDOUS WASTE MANAGEMENT BRANCH

Chain of Custody Record

Hazardous Waste Materials

Location of Sampling: ___ Generator ___ Transporter ___ Treatment Fac
___ Storage Facility ___ Disposal Facility ___ Landfill
✓ Other: CERCLIS SITE

Company's Name Travenol Labs (Currently Baxter) Telephone (704) 756-4151

Address US Hwy 221 N. Marion NC 28752

Collector's Name [signature] Telephone (919) 733-2801
signature

Date Sampled 3/28/89 Time Sampled ___

Type of Process Generating Mixed Waste Paint Shop & Laboratory Waste Solvents

Field Information

Ground water samples for organic analysis

Field Sample No. 4369 4370 4371 4372 4385 ___ ___

Chain of Possession:

1. [signature] Environmental Engineer 3/28/89 - 3/31/89
signature title inclusive dates

2. Lee C. Brewoot Chem. Analyst I 3-31-89
signature title inclusive dates

3. ___ ___ ___
signature title inclusive dates

Results reported

___ ___ ___
signature title date

Instructions: Complete all applicable information including signatures, and submit with analysis request forms.

STATE LABORATORY OF PUBLIC HEALTH
DIVISION OF HEALTH SERVICES, N.C. DEPARTMENT OF HUMAN RESOURCES
P.O. BOX 28047 - 306 N. WILMINGTON, ST., RALEIGH, N.C. 27611

ORGANIC CHEMICAL ANALYSIS

BASE/NEUTRAL AND ACID EXTRACTABLES	LAB NO	900866	900868				
	FIELD #	4369	4371				
COMPOUND	TYPE	(1)	(1)	( )	( )	( )	( )
	UNITS	µg/l ~~µg/kg~~	µg/l ~~µg/kg~~	µg/l µg/kg	µg/l µg/kg	µg/l µg/kg	µg/l µg/kg
N-nitrosodimethylamine	10/330	U	U				
bis(2-chloroethyl)ether							
2-chlorophenol							
phenol							
1,3-dichlorobenzene							
1,4-dichlorobenzene							
1,2-dichlorobenzene							
bis(2-chloroisopropyl)ether							
hexachloroethane							
N-nitroso-di-n-propylamine							
nitrobenzene							
isophorone							
2-nitrophenol							
2,4-dimethylphenol							
bis(2-chloroethoxy)methane							
2,4-dichlorophenol							
1,2,4-trichlorobenzene							
naphthalene							
hexachlorobutadiene							
4-chloro-m-cresol							
hexachlorocyclopentadiene							
2,4,6-trichlorophenol							
2-chloronaphthalene							
acenaphthylene							
dimethyl phthalate							
2,6-dinitrotoluene							
acenaphthene							
2,4-dinitrophenol	50/1650						
2,4-dinitrotoluene	10/330						
4-nitrophenol	50/1650						
fluorene	10/330						
4-chlorophenylphenylether							
diethyl phthalate							
4,6-dinitro-o-cresol	50/1650						
diphenylamine							
azobenzene							
4-bromophenylphenylether	10/330						
hexachlorobenzene	10/330						
pentachlorophenol	50/1650						
phenanthrene	10/330						
anthracene							
dibutyl phthalate							
fluoranthene							

MDL
H_2O/SOIL

J - Estimated value.
K - Actual value is known to be less than value given.
L - Actual value is known to be greater than value given.
U - Material was analyzed for but not detected. The number is the Minimum Detection Limit. MDL
NA - Not analyzed.
1/ - Tentative identification.
2/ - On NRDC List of Priority Pollutants.

N.C. Division of Health Services
DHS 3068-0 (4/86 Laboratory)

STATE LABORATORY OF PUBLIC HEALTH
DIVISION OF HEALTH SERVICES, N.C. DEPARTMENT OF HUMAN RESOURCES
P.O. BOX 28047 - 306 N. WILMINGTON, ST., RALEIGH, N.C. 27611

ORGANIC CHEMICAL ANALYSIS

BASE/NEUTRAL AND ACID EXTRACTABLES	LAB NO	900866	900868				
	FIELD #	4369	4371				
COMPOUND	TYPE	(I)	(I)	( )	( )	( )	( )
	UNITS	µg/l ~~µg/kg~~	µg/l ~~µg/kg~~	µg/l µg/kg	µg/l µg/kg	µg/l µg/kg	µg/l µg/kg
pyrene	10/330	U	U				
benzidine	50/1650						
butyl benzyl phthalate	10/330						
benz(a)anthracene							
chrysene							
3,3-dichlorobenzidine	50/1650						
bis(2-ethylhexyl)phthalate	10/330						
di-n-octyl phthalate	10/330						
benzo(b)fluoranthene	50/1650						
benzo(k)fluoranthene							
benzo(a)pyrene							
indeno(1,2,3-cd)pyrene							
dibenzo(a,h)anthracene							
benzo(g,h,i)perylene							
aniline	50/1650	U	U				
benzoic acid							
benzyl alcohol							
4-chloroaniline							
dibenzofuran	10/330						
2-methylnaphthalene							
2-methylphenol							
4-methylphenol							
2-nitroaniline	50/1650						
3-nitroaniline							
4-nitroaniline							
2,4,5-trichlorophenol							
HYDROCARBONS	+/-	slight (+)	(-)				

MDL
H_2O/501L

J - Estimated value.
K - Actual value is known to be less than value given.
L - Actual value is known to be greater than value given.
U - Material was analyzed for but not detected. The number is the Minimum Detection Limit. MDL
NA - Not analyzed.
1/ - Tentative identification.
2/ - On NRDC List of Priority Pollutants.

N.C. Division of Health Services
DHS 3068-0 (4/86 Laboratory)

STATE LABORATORY OF PUBLIC HEALTH
DIVISION OF HEALTH SERVICES, N.C. DEPARTMENT OF HUMAN RESOURCES
P.O. BOX 28047 - 306 N. WILMINGTON, ST., RALEIGH, N.C. 27611

ORGANIC CHEMICAL ANALYSIS

PURGEABLE COMPOUNDS	LAB NO	900867	900869	900870 lab blank			
	FIELD #	4370	4372	4385			
COMPOUND	TYPE	(1)	(1)	(4)	( )	( )	( )
	UNITS	µg/l µg/kg	µg/l µg/kg	µg/l µg/kg	µg/l µg/kg	µg/l µg/kg	µg/l µg/kg
chloromethane	5 ug/l	u	u	u			
bromomethane							
dichlorodifluoromethane							
vinyl chloride							
chloroethane							
methylene chloride							
trichlorofluoromethane							
ethene, 1,1-dichloro		trace					
ethane, 1,1-dichloro-		2J					
1,2-trans-dichloroethene		u					
chloroform		trace					
ethane, 1,2-dichloro-		u					
ethane, 1,1,1-trichloro-		1J					
carbontetrachloride		u					
bromodichloromethane							
propane, 1,2-dichloro-							
1,3-trans-dichloropropene							
trichloroethylene							
chlorodibromomethane							
benzene							
ethane, 1,1,2-trichloro-							
1,3-cis-dichloropropene							
2-chloroethyl vinyl ether							
bromoform							
ethane, 1,1,2,2-tetrachloro-							
ethene, tetrachloro-							
toluene							
chlorobenzene							
ethylbenzene							
acetone	5 ug/l	u	u	u			
2-butanone							
carbondisulfide							
2-hexanone							
4-methyl-2-pentanone							
styrene							
vinyl acetate							
xylenes (total)							

J - Estimated value.
K - Actual value is known to be less than value given.
L - Actual value is known to be greater than value given.
U - Material was analyzed for but not detected. The number is the Minimum Detection Limit.
NA - Not analyzed.
1/ - Tentative identification.
2/ - On NRDC List of Priority Pollutants.

N.C. Division of Health Services
DHS 3068-O (4/86 Laboratory)

REFERENCE 3

North Carolina Department of Human Resources
Division of Health Services
P.O. Box 2091 • Raleigh, North Carolina 27602-2091

James G. Martin, Governor
Phillip J. Kirk, Jr., Secretary

Ronald H. Levine, M.D., M.P.H.
State Health Director
919/733-3446

4 June 1986

Ms. Denise Bland
EPA NC CERCLA Project Officer
Air and Hazardous Material Division
345 Courtland Street, N.E.
Atlanta, GA 30365

Dear Ms. Bland:

SUBJECT: Preliminary Assessment Report
Travenol Laboratories, Inc. NCD 059140764
US 221 North
Marion, McDowell County, NC 28752

Enclosed please find the Preliminary Assessment report for the subject site. This priority is based on review of available data.

Travenol Laboratories, Inc. manufactures glucose, salt solutions, and other intravenous solutions for hospitals. The company started operating at the Marion site in 1972. The facility was newly constructed, and Travenol Labs has been the sole occupant.

The majority of the hazardous waste generated at the facility is paint and cleaning solvent waste. This waste is generated through touch up painting of the building and equipment. Included in this hazardous waste are varsol solvents, turpentine, and xylene. The company also operates a laboratory which generates a small amount of laboratory solvent waste. Approximately 4,000 gallons of hazardous waste (paint and laboratory waste) was generated in 1985. The waste is stored in 55 gallon drums on the outside of the building in a hazardous waste shed. The lab waste is then manifested to Pinewood, S.C. for disposal, and the paint solvents are shipped to Oldover in Virginia for incineration. The company has been employing these waste disposal methods since 1980. Prior to 1980 the laboratory chemicals and waste were kept in a warehouse on the site. Between 1972 and 1977 the paint solvent waste was disposed of outside of the building.

The waste was poured in a small graveled area and allowed to evaporate into the air. Approximately 440 gallons of the waste was disposed of in this manner. Between 1977 and 1980 the paint waste was accumulated and kept on site. Company officials voluntarily notified under CERCLA 103(c) on April 29, 1981 and told of the company's past waste disposal practices. The site was inspected on March 29, 1982 by Charles Lee and Gene Oliver of Ecology and Environment, Inc. for EPA. The investigators did not find any evidence of wastes or waste residues in the area. They recommended that no further action be initiated with regard to the site. Groundwater and soil were not sampled by the site investigators.

There are five underground storage tanks on site. Four of the tanks were installed in 1972 and one tank was installed approximately four years ago. Three of the four tanks installed in 1972 contain number six fuel oil and the other tank contains gasoline. Number one fuel oil is in the tank that was installed four years ago. According to company officials, they have not had problems with the tanks (leaking, etc.) since their installation.

The company obtains their water supply from five wells that are located on the site. The wells are monitored regularly by company personnel. According to plant officials, the wells have never been contaminated, however, the company is only required to monitor for bacteriological contamination and some minerals. They are not required to monitor for organics or metals. The depth of the wells range from 150 to 350 feet. There is also an on-site waste water treatment plant which treats sewage waste only.

Other than the solvent evaporation area, there are no records of spills on the site. Because of past on-site disposal practices a Medium priority is assigned to the site.

On 2 June 1986, this Preliminary Assessment was reviewed by CERCLA Unit personnel and by the following representatives from the North Carolina Department of Natural Resources and Community Development, Division of Environmental Management: Glenn Ross, Air Quality Section; Vince Schneider and Howard Bryant, Water Quality Section.

If you have any questions, please call me at (919) 733-2801.

Sincerely,

Cheryl A. McMorris, Environmental Chemist
Solid and Hazardous Waste Management Branch
Environmental Health Section

CM/tb/0249b

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART I - INFORMATION AND ASSESSMENT

II. IDENTIFICATION

01 STATE	02 SITE NUMBER
NC	D059140764

I. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER
Travenol Laboratories, Inc.	U.S. Hwy. 221 North

03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG DIST
Marion	NC	28752	McDowell	056	11

09 COORDINATES: LATITUDE 35° 50' 14" | LONGITUDE 82° 00' 03"

10 DIRECTIONS TO SITE (Starting from nearest public road) Take I-85 South to Winston Salem. In Winston Salem take I-40 west to Marion, NC. In Marion take Hwy 221 Nth. Site located about 12 mi. north of I-40, in North Cove, NC.

II RESPONSIBLE PARTIES

01 OWNER (If known)	02 STREET (Business, mailing, residential)
Travenol Laboratories, Inc.	Deerfield Road

03 CITY	04 STATE	05 ZIP CODE	06 TELEPHONE NUMBER
Deerfield	ILL	60015	(312) 348-2000

07 OPERATOR (If known and different from owner)	08 STREET (Business, mailing, residential)
Travenol Laboratories, Inc.	U.S. Hwy. 221 North

09 CITY	10 STATE	11 ZIP CODE	12 TELEPHONE NUMBER
Marion	NC	28752	(704) 756-4151

13 TYPE OF OWNERSHIP (Check one)
[X] A. PRIVATE [ ] B. FEDERAL: _____ (Agency) [ ] C. STATE [ ] D. COUNTY [ ] E. MUNICIPAL
[ ] F. OTHER: _____ (Specify) [ ] G. UNKNOWN

14 OWNER/OPERATOR NOTIFICATION ON FILE (Check all that apply) (CERCLA 103c)
[X] A. RCRA 3001 DATE RECEIVED: [ ] B. UNCONTROLLED WASTE SITE DATE RECEIVED [ ] C. NONE

IV. CHARACTERIZATION OF POTENTIAL HAZARD

01 ON SITE INSPECTION BY (Check all that apply)
[X] YES DATE 03/29/82 [ ] A. EPA [X] B. EPA CONTRACTOR [ ] C. STATE [ ] D. OTHER CONTRACTOR
[ ] E. LOCAL HEALTH OFFICIAL [ ] F. OTHER: _____
[ ] NO CONTRACTOR NAME(s): _____

02 SITE STATUS (Check one) (Not a TSD)
[ ] A. ACTIVE [X] B. INACTIVE [ ] C. UNKNOWN

03 YEARS OF OPERATION
1972 | currently operat. [ ] UNKNOWN
BEGINNING YEAR ENDING YEAR

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT. KNOWN, OR ALLEGED Travenol Labs., Inc. began operations at the Marion site in 1972, in a newly constructed facility. The company manufactures glucose, salt solutions, & other intravenous solutions for hospitals. The majority of the hazardous waste generated at the facility is paint

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION waste from touch up painting of the building & equipment. A small amount of laboratory solvent waste is generated. Between 1972 & 1977 the paint waste was disposed of be evaporating the waste outside in a graveled area on the site. Approx. 440 gallons of waste was disposed of in this manner. In 1982, an EPA inspection found the disposal area, uncontaminated. After 1979 the waste was shipped off-site for incineration. Five underground tanks containing fuel oil & gasoline have been on-site since 1972. 5 wells supply the site with water. A WWTP is on site to treat sewage waste. Classified as Generator.

V. PRIORITY ASSESSMENT

01 PRIORITY FOR INSPECTION (Check one. If high or medium is checked, complete Part 2 - Waste Information and Part 3 - Description of Hazardous Conditions and Incidents)
[ ] A. HIGH (Inspection required promptly) [X] B. MEDIUM (Inspection required) [ ] C. LOW (Inspection on time available basis) [ ] D. NONE (No further action needed, complete current disposition form)

VI. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NUMBER
Phil Castro, Environmental Coordinator	Travenol Laboratories, Inc.	(704) 756-4151

02 PERSON RESPONSIBLE FOR ASSESSMENT	05 AGENCY	ORGANIZATION	03 TELEPHONE NUMBER	08 DATE
Cheryl A. McMorris/Pat DeRosa	NC DHR/DHS	SHW Mgmt. Br.	(919) 733-2801	04/16/86

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 2 - WASTE INFORMATION

II. IDENTIFICATION

01 STATE	02 SITE NUMBER
NC	D059140764

II. WASTE STATES, QUANTITIES, AND CHARACTERS

01 PHYSICAL STATES (Check all that apply)

[ ] A SOLID
[ ] B. POWDER, FINES
[ ] C. SLUDGE
[ ] E. SLURRY
[X] F. LIQUID
[ ] G. GAS

02 WASTE QUANTITY AT SITE (Measures of waste quantities must be independent)

TONS
CUBIC YARDS
NO. OF DRUMS Unknown

03 WASTE CHARACTERISTICS (Check all that apply)

[X] A. TOXIC
[ ] B. CORROSIVE
[ ] C. RADIOACTIVE
[ ] D. PERSISTENT
[ ] E. SOLUBLE
[ ] F. INFECTIOUS
[ ] G. FLAMMABLE
[ ] IGNITABLE
[ ] I. HIGHLY VOLATILE
[ ] J. EXPLOSIVE
[ ] K. REACTIVE
[ ] L. INCOMPATIBLE
[ ] M. NOT APPLICABLE

III. WASTE TYPES

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			
OLW	OILY WASTE			
SOL	SOLVENTS	440	gallons	Combined paint and lab. waste
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS			
IOC	INORGANIC CHEMICALS			
ACD	ADICS			
BAS	BASES			
MES	HEAVY METALS			

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers)

CATEGORY	SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
SOL	Varsol solvents		stored in 55 gallon drums	Unknown	---
SOL	turpentine		prior to off-site	Unknown	---
SOL	Xylene	1330207	incineration	Unknown	---

V. FEEDSTOCKS (See Appendix for CAS numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS			FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION (Cite specific references, e. g. state files, sample analysis, reports

1. Permanent files, NC Solid and Haz. Waste Mgmt. Branch, Raleigh, NC.
2. USGS, 7.5' Quad., Little Switzerland, NC, 1979 and Ashford, NC, 1956.
3. Telephone conversation with Keith Masters, NC DHR/DHS, Solid and Haz. Waste Mgmt. Br., on 15 April 1986.
4. Telephone conversation with Phil Castro of Travenol Laboratories, Inc. on 16 April 1986.

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

II. IDENTIFICATION
01 STATE NC | 02 SITE NUMBER 005914076 4

III. HAZARDOUS CONDITIONS AND INCIDENTS

01 [X] A. GROUNDWATER CONTAMINATION — 02 [ ] OBSERVED (DATE: _____) [X] POTENTIAL [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED 2300 — 04 NARRATIVE DESCRIPTION Between 1972 and 1977 approximately 440 gallons of paint waste was disposed on site. The waste was poured into a graveled area and allowed to evaporate. Possible groundwater contamination due to these disposal practices.

01 [ ] B. SURFACE WATER CONTAMINATION — 02 [ ] OBSERVED (DATE: _____) [ ] POTENTIAL [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED _____ — 04 NARRATIVE DESCRIPTION

01 [ ] C. CONTAMINATION OF AIR — 02 [ ] OBSERVED (DATE: _____) [ ] POTENTIAL [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED _____ — 04 NARRATIVE DESCRIPTION

01 [ ] D. FIRE/EXPLOSIVE CONDITIONS — 02 [ ] OBSERVED (DATE: _____) [ ] POTENTIAL [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED _____ — 04 NARRATIVE DESCRIPTION

01 [ ] E. DIRECT CONTACT — 02 [ ] OBSERVED (DATE: _____) [ ] POTENTIAL [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED _____ — 04 NARRATIVE DESCRIPTION

01 [X] F. CONTAMINATION OF SOIL — 02 [ ] OBSERVED (DATE: _____) [X] POTENTIAL [ ] ALLEGED
03 AREA POTENTIALLY AFFECTED Unknown (Acres) — 04 NARRATIVE DESCRIPTION See II A above.

01 [X] G. DRINKING WATER CONTAMINATION — 02 [ ] OBSERVED (DATE: _____) [X] POTENTIAL [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED 2300 — 04 NARRATIVE DESCRIPTION There are five wells on the site and they are the main water supply for drinking purposes. If groundwater contamination occurred it is possible that the drinking water may have been affected.

01 [ ] H. WORKER EXPOSURE/INJURY — 02 [ ] OBSERVED (DATE: _____) [ ] POTENTIAL [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED _____ — 04 NARRATIVE DESCRIPTION

01 [ ] I. POPULATION EXPOSURE/INJURY — 02 [ ] OBSERVED (DATE: _____) [ ] POTENTIAL [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED _____ — 04 NARRATIVE DESCRIPTION

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

II. IDENTIFICATION
01 STATE NC | 02 SITE NUMBER D059140764

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 [ ] J. DAMAGE TO FLORA 02 [ ] OBSERVED (DATE: _____) [ ] POTENTIAL [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED _____ 04 NARRATIVE DESCRIPTION

01 [ ] K. DAMAGE TO FAUNA 02 [ ] OBSERVED (DATE: _____) [ ] POTENTIAL [ ] ALLEGED
04 NARRATIVE DESCRIPTION

01 [ ] L. CONTAMINATION OF FOOD CHAIN 02 [ ] OBSERVED (DATE: _____) [ ] POTENTIAL [ ] ALLEGED
04 NARRATIVE DESCRIPTION (Include name(s) of species)

01 [ ] M. UNSTABLE CONTAINMENT OF WASTE (Spills/runoff/standing leaking drums) 02 [ ] OBSERVED (DATE: _____) [ ] POTENTIAL [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED _____ 04 NARRATIVE DESCRIPTION

01 [ ] N. DAMAGE TO OFFSITE PROPERTY 02 [ ] OBSERVED (DATE: _____) [ ] POTENTIAL [ ] ALLEGED
04 NARRATIVE DESCRIPTION

01 [ ] O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPS 02 [ ] OBSERVED (DATE: _____) [ ] POTENTIAL [ ] ALLEGED
04 NARRATIVE DESCRIPTION

01 [ ] P. ILLEGAL/UNAUTHORIZED DUMPING 02 [ ] OBSERVED (DATE: _____) [ ] POTENTIAL [ ] ALLEGED
04 NARRATIVE DESCRIPTION

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

III. TOTAL POPULATION POTENTIALLY AFFECTED:

IV. COMMENTS

Groundwater and soil samples should be taken around the past disposal/evaporation area to determine if contamination occurred.

V. SOURCES OF INFORMATION (Site specific references, e. g., state files, sample analysis, reports)

See Part 2, Section VI.

REFERENCE 4

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT

REGION	SITE NUMBER (to be assigned by Hq)
04	NCCOOO/0020

GENERAL INSTRUCTIONS: Complete Sections I and III through XV of this form as completely as possible. Then use the information on this form to develop a Tentative Disposition (Section II). File this form in its entirety in the regional Hazardous Waste Log File. Be sure to include all appropriate Supplemental Reports in the file. Submit a copy of the forms to: U.S. Environmental Protection Agency; Site Tracking System; Hazardous Waste Enforcement Task Force (EN-335); 401 M St., SW; Washington, DC 20460.

I. SITE IDENTIFICATION

A. SITE NAME: TRAVENOL LABORATORIES, INC.

B. STREET (or other identifier): U.S. HWY. 221

C. CITY: MARION

D. STATE: NC

E. ZIP CODE: 28752

F. COUNTY NAME: McDOWELL

G. SITE OPERATOR INFORMATION

1. NAME: EDWARD J. OGLESBY, PLT. MGR.

2. TELEPHONE NUMBER:

3. STREET:

4. CITY:

5. STATE:

6. ZIP CODE:

H. ~~REALTY OWNER INFORMATION~~ (if different from operator of site)

1. NAME: CONTACT: RAYMOND T. MURPHY

2. TELEPHONE NUMBER: (312) 948-4952

3. CITY:

4. STATE:

5. ZIP CODE:

I. SITE DESCRIPTION: MEDICAL SUPPLY LAB

J. TYPE OF OWNERSHIP

☐ 1. FEDERAL ☐ 2. STATE ☐ 3. COUNTY ☐ 4. MUNICIPAL ☒ 5. PRIVATE

II. TENTATIVE DISPOSITION (complete this section last)

A. ESTIMATE DATE OF TENTATIVE DISPOSITION (mo., day, & yr.): 4/13/82

B. APPARENT SERIOUSNESS OF PROBLEM

☐ 1. HIGH ☐ 2. MEDIUM ☐ 3. LOW ☒ 4. NONE

C. PREPARER INFORMATION

1. NAME: GENE OLIVER, FIT

2. TELEPHONE NUMBER: 404-288-7711

3. DATE (mo., day, & yr.): 4/13/82

III. INSPECTION INFORMATION

A. PRINCIPAL INSPECTOR INFORMATION

1. NAME: CHARLES LEE

2. TITLE: GEOLOGIST

3. ORGANIZATION: E&E FIT

4. TELEPHONE NO. (area code & no.): 404-288-7711

B. INSPECTION PARTICIPANTS

1. NAME	2. ORGANIZATION	3. TELEPHONE NO.
CHARLES LEE	FIT	
GENE OLIVER	FIT	

C. SITE REPRESENTATIVES INTERVIEWED (corporate officials, workers, residents)

1. NAME	2. TITLE & TELEPHONE NO.	3. ADDRESS
ED OGLESBY	PLT. MGR.	
PHIL CASTRO	ENV. ENGR.	

ntinued From Front

III. INSPECTION INFORMATION *(continued)*

NERATOR INFORMATION *(sources of waste)*

1. NAME	2. TELEPHONE NO.	3. ADDRESS	4. WASTE TYPE GENERATED
RAU. LABS			

TRANSPORTER/HAULER INFORMATION

1. NAME	2. TELEPHONE NO.	3. ADDRESS	4. WASTE TYPE TRANSPORTED
N/A			

WASTE IS PROCESSED ON SITE AND ALSO SHIPPED TO OTHER SITES, IDENTIFY OFF-SITE FACILITIES USED FOR DISPOSAL.

1. NAME	2. TELEPHONE NO.	3. ADDRESS
N/A		

DATE OF INSPECTION *(mo., day, & yr.)*	H. TIME OF INSPECTION	I. ACCESS GAINED BY: *(credentials must be shown in all cases)*
3/29/82	1000	[X] 1. PERMISSION [ ] 2. WARRANT

ATHER *(describe)*

FAIR, COOL

IV. SAMPLING INFORMATION

rk 'X' for the types of samples taken and indicate where they have been sent e.g., regional lab, other EPA lab, contractor, c. and estimate when the results will be available.

1. SAMPLE TYPE	2. SAMPLE TAKEN *(mark 'X')*	3. SAMPLE SENT TO:	4. DATE RESULTS AVAILABLE
ROUNDWATER		N/A	
RFACE WATER			
WASTE			
R			
RUNOFF			
SPILL			
IL			
VEGETATION			
THER *(specify)*			

FIELD MEASUREMENTS TAKEN *(e.g., radioactivity, explosivity, PH, etc.)*

1. TYPE	2. LOCATION OF MEASUREMENTS	3. RESULTS
N/A		

Continued From Page 2

IV. SAMPLING INFORMATION (continued)

C. PHOTOS

1. TYPE OF PHOTOS
   - [ ] a. GROUND
   - [ ] b. AERIAL

2. PHOTOS IN CUSTODY OF: NONE : VETOED BY PLT. MGR.

D. SITE MAPPED?

- [ ] YES. SPECIFY LOCATION OF MAPS:

E. COORDINATES

1. LATITUDE (deg.-min.-sec.)
2. LONGITUDE (deg.-min.-sec.)

V. SITE INFORMATION

A. SITE STATUS

- [X] 1. ACTIVE (Those inductrial or municipal sites which are being used for waste treatment, storage, or disposal on a continuing basis, even if infrequently.)
- [ ] 2. INACTIVE (Those sites which no longer receive wastes.)
- [ ] 3. OTHER (specify): _____ (Those sites that include such incidents like "midnight dumping" where no regular or continuing use of the site for waste disposal has occurred.)

B. IS GENERATOR ON SITE?

- [ ] 1. NO
- [X] 2. YES (specify generator's four-digit SIC Code): _____

C. AREA OF SITE (in acres)

2.1

D. ARE THERE BUILDINGS ON THE SITE?

- [X] 1. NO
- [ ] 2. YES (specify):

VI. CHARACTERIZATION OF SITE ACTIVITY

Indicate the major site activity(ies) and details relating to each activity by marking 'X' in the appropriate boxes.

'X'	A. TRANSPORTER	'X'	B. STORER	'X'	C. TREATER	'X'	D. DISPOSER
	1. RAIL		1. PILE		1. FILTRATION		1. LANDFILL
	2. SHIP		2. SURFACE IMPOUNDMENT		2. INCINERATION		2. LANDFARM
	3. BARGE		3. DRUMS		3. VOLUME REDUCTION		3. OPEN DUMP
	4. TRUCK		4. TANK, ABOVE GROUND		4. RECYCLING/RECOVERY		4. SURFACE IMPOUNDMENT
	5. PIPELINE		5. TANK, BELOW GROUND		5. CHEM./PHYS./TREATMENT		5. MIDNIGHT DUMPING
	6. OTHER (specify):		6. OTHER (specify):		6. BIOLOGICAL TREATMENT		6. INCINERATION
					7. WASTE OIL REPROCESSING		7. UNDERGROUND INJECTION
					8. SOLVENT RECOVERY	X	8. OTHER (specify): EVAPORATION FROM GRAVEL
					9. OTHER (specify):		

E. SUPPLEMENTAL REPORTS: If the site falls within any of the categories listed below, Supplemental Reports must be completed. Indicate which Supplemental Reports you have filled out and attached to this for..

- [ ] 1. STORAGE
- [ ] 2. INCINERATION
- [ ] 3. LANDFILL
- [ ] 4. SURFACE IMPOUNDMENT
- [ ] 5. DEEP WELL
- [ ] 6. CHEM/BIO/PHYS TREATMENT
- [ ] 7. LANDFARM
- [ ] 8. OPEN DUMP
- [ ] 9. TRANSPORTER
- [ ] 10. RECYCLOR/RECLAIMER

VII. WASTE RELATED INFORMATION

A. WASTE TYPE

- [X] 1. LIQUID
- [ ] 2. SOLID
- [ ] 3. SLUDGE
- [ ] 4. GAS

B. WASTE CHARACTERISTICS

- [ ] 1. CORROSIVE
- [ ] 2. IGNITABLE
- [ ] 3. RADIOACTIVE
- [X] 4. HIGHLY VOLATILE
- [ ] 5. TOXIC
- [ ] 6. REACTIVE
- [ ] 7. INERT
- [ ] 8. FLAMMABLE
- [ ] 9. OTHER (specify):

C. WASTE CATEGORIES

1. Are records of wastes available? Specify items such as manifests, inventories, etc. below.

NO

 Continue On Reverse

Continued From Front

VII. WASTE RELATED INFORMATION *(continued)*

2. Estimate the amount *(specify unit of measure)* of waste by category; mark 'X' to indicate which wastes are present.

a. SLUDGE	b. OIL	c. SOLVENTS	d. CHEMICALS	e. SOLIDS	f. OTHER
AMOUNT	AMOUNT	AMOUNT 2440	AMOUNT	AMOUNT	AMOUNT
UNIT OF MEASURE	UNIT OF MEASURE	UNIT OF MEASURE GALLONS	UNIT OF MEASURE	UNIT OF MEASURE	UNIT OF MEASURE
(1) PAINT, PIGMENTS	X (1) OILY WASTES	X (1) HALOGENATED SOLVENTS	X (1) ACIDS	X (1) FLYASH	X (1) LABORATORY, PHARMACEUT.
(2) METALS SLUDGES	(2) OTHER *(specify)*:	X (2) NON-HALOGNTD. SOLVENTS	(2) PICKLING LIQUORS	(2) ASBESTOS	(2) HOSPITAL
(3) POTW		(3) OTHER *(specify)*:	(3) CAUSTICS	(3) MILLING/MINE TAILINGS	(3) RADIOACTIVE
(4) ALUMINUM SLUDGE		TRACES OF SOLVENTS USED IN CHEMICAL ANALYSIS	(4) PESTICIDES	(4) FERROUS SMELTING WASTES	(4) MUNICIPAL
(5) OTHER *(specify)*:		DUMPED OVER 5 YEAR PERIOD	(5) DYES/INKS	(5) NON-FERROUS SMLTG. WASTES	(5) OTHER *(specify)*:
			(6) CYANIDE	(6) OTHER *(specify)*:	
			(7) PHENOLS		
			(8) HALOGENS		
			(9) PCB		
			(10) METALS		
			(11) OTHER *(specify)*:		

3. LIST SUBSTANCES OF GREATEST CONCERN WHICH ARE ON THE SITE *(place in descending order of hazard)*

1. SUBSTANCE	2. FORM *(mark 'X')*			3. TOXICITY *(mark 'X')*				4. CAS NUMBER	5. AMOUNT	6. UNIT
	a. SOLID	b. LIQ.	c. VAPOR	a. HIGH	b. MED.	c. LOW	d. NONE			
PYRIDINE		X				X			TRACE	
NITROBENZENE		X				X			TRACE	

VIII. HAZARD DESCRIPTION

FIELD EVALUATION HAZARD DESCRIPTION: Place an 'X' in the box to indicate that the listed hazard exists. Describe the hazard in the space provided.

☐ A. HUMAN HEALTH HAZARDS

Continued From Page 4

VIII. HAZARD DESCRIPTION *(continued)*

☐ B. NON-WORKER INJURY/EXPOSURE

☐ C. WORKER INJURY/EXPOSURE

☐ D. CONTAMINATION OF WATER SUPPLY

☐ E. CONTAMINATION OF FOOD CHAIN

☐ F. CONTAMINATION OF GROUNDWATER

☐ G. CONTAMINATION OF SURFACE WATER

ntinued From Front

VIII. HAZARD DESCRIPTION (continued)

☐ H. DAMAGE TO FLORA/FAUNA

☐ I. FISH KILL

☐ J. CONTAMINATION OF AIR

☐ K. NOTICEABLE ODORS

☐ L. CONTAMINATION OF SOIL

☐ M. PROPERTY DAMAGE

Continued From Page 6

VIII. HAZARD DESCRIPTION *(continued)*

☐ N. FIRE OR EXPLOSION

☐ O. SPILLS/LEAKING CONTAINERS/RUNOFF/STANDING LIQUID

☐ P. SEWER, STORM DRAIN PROBLEMS

☐ Q. EROSION PROBLEMS

☐ R. INADEQUATE SECURITY

☐ S. INCOMPATIBLE WASTES

VIII. HAZARD DESCRIPTION *(continued)*

☐ T. MIDNIGHT DUMPING

☒ U. OTHER *(specify)*:

AREA NOW COVERED BY ASPHALT ACCESS ROAD WHOSE DRAINAGE RUNS TO PLANT WASTE TREATMENT SYSTEM

IX. POPULATION DIRECTLY AFFECTED BY SITE

A. LOCATION OF POPULATION	B. APPROX. NO. OF PEOPLE AFFECTED	C. APPROX. NO. OF PEOPLE AFFECTED WITHIN UNIT AREA	D. APPROX. NO. OF BUILDINGS AFFECTED	E. DISTANCE TO SITE *(specify units)*
1. IN RESIDENTIAL AREAS	0			
2. IN COMMERCIAL OR INDUSTRIAL AREAS	0			
3. IN PUBLICLY TRAVELLED AREAS	0			
4. PUBLIC USE AREAS *(parks, schools, etc.)*	0			

X. WATER AND HYDROLOGICAL DATA

A. DEPTH TO GROUNDWATER *(specify unit)*	B. DIRECTION OF FLOW	C. GROUNDWATER USE IN VICINITY
D. POTENTIAL YIELD OF AQUIFER	E. DISTANCE TO DRINKING WATER SUPPLY *(specify unit of measure)*	F. DIRECTION TO DRINKING WATER SUPPLY

G. TYPE OF DRINKING WATER SUPPLY

☐ 1. NON-COMMUNITY < 15 CONNECTIONS ☐ 2. COMMUNITY *(specify town)*: > 15 CONNECTIONS _____

☐ 3. SURFACE WATER ☐ 4. WELL

 Continue On Page 9

Continued From Page 8

X. WATER AND HYDROLOGICAL DATA *(continued)*

H. LIST ALL DRINKING WATER WELLS WITHIN A 1/4 MILE RADIUS OF SITE

1. WELL	2. DEPTH *(specify unit)*	3. LOCATION *(proximity to population/buildings)*	4. NON-COMMUNITY *(mark 'X')*	5. COMMUNITY *(mark 'X')*

I. RECEIVING WATER

1. NAME

☐ 2. SEWERS ☐ 3. STREAMS/RIVERS

☐ 4. LAKES/RESERVOIRS ☐ 5. OTHER *(specify)*:

6. SPECIFY USE AND CLASSIFICATION OF RECEIVING WATERS

XI. SOIL AND VEGITATION DATA

LOCATION OF SITE IS IN:

☐ A. KNOWN FAULT ZONE ☐ B. KARST ZONE ☐ C. 100 YEAR FLOOD PLAIN ☐ D. WETLAND

☐ E. A REGULATED FLOODWAY ☐ F. CRITICAL HABITAT ☐ G. RECHARGE ZONE OR SOLE SOURCE AQUIFER

XII. TYPE OF GEOLOGICAL MATERIAL OBSERVED

Mark 'X' to indicate the type*(s)* of geological material observed and specify where necessary, the component parts.

'X'	A. OVERBURDEN	'X'	B. BEDROCK *(specify below)*	'X'	C. OTHER *(specify below)*
	1. SAND				
	2. CLAY				
	3. GRAVEL				

XIII. SOIL PERMEABILITY

☐ A. UNKNOWN ☐ B. VERY HIGH *(100,000 to 1000 cm/sec.)* ☐ C. HIGH *(1000 to 10 cm/sec.)*

☐ D. MODERATE *(10 to .1 cm/sec.)* ☐ E. LOW *(.1 to .001 cm/sec.)* ☐ F. VERY LOW *(.001 to .00001 cm/sec.)*

G. RECHARGE AREA

☐ 1. YES ☐ 2. NO 3. COMMENTS:

H. DISCHARGE AREA

☐ 1. YES ☐ 2. NO 3. COMMENTS:

I. SLOPE

1. ESTIMATE % OF SLOPE

2. SPECIFY DIRECTION OF SLOPE, CONDITION OF SLOPE, ETC.

J. OTHER GEOLOGICAL DATA

 Continue On Reverse

Continued From Front

XIV. PERMIT INFORMATION

List all applicable permits held by the site and provide the related information.

A. PERMIT TYPE (e.g., RCRA, State, NPDES, etc.)	B. ISSUING AGENCY	C. PERMIT NUMBER	D. DATE ISSUED (mo., day, & yr.)	E. EXPIRATION DATE (mo., day, & yr.)	F. IN COMPLIANCE (mark 'X')		
					1. YES	2. NO	3. UNKNOWN

XV. PAST REGULATORY OR ENFORCEMENT ACTIONS

☐ NONE ☐ YES *(summarize in this space)*

NOTE: Based on the information in Sections III through XV, fill out the Tentative Disposition *(Section II)* information on the first page of this form.

CERCLA 103 (c) NOTIFICATION INSPECTION
TRAVENOL LABORATORIES, INC.
MARION, NC

General

The Travenol Laboratories, Inc. North Cove Facility, located on US Highway 221 outside Marion, NC, was inspected on the morning of March 29, 1982 by FIT members Charles Lee and Gene Oliver. Site representatives interviewed during this inspection were Phil Castro, the Plant Environmental Engineer, and Ed Oglesby, the Plant Manager.

Mr. Castro confirmed that during the period 1972 - 1977 approximately 440 gallons of general laboratory wastes containing traces of pyridine and nitrobenzene used as reagents were dumped onto a 1500 square foot area of gravel driveway behind the laboratory. These wastes were assumed to have evaporated immediately after they were dumped. Mr. Castro stated that the Travenol plant in Marion is engaged in the production of intravenous solutions for medical applications, and he showed us certificates documenting that current waste disposal is being handled by Triangle Resource Industries in Reidsville, North Carolina and by M&M Chemical Company in Gadsden, Alabama. In the past, wastes had also been disposed of by Chemical Waste Management in Emelle, Alabama.

Mr. Castro showed the inspectors the area behind the laboratory where the wastes had been dumped. This area is now part of a paved and curbed access road. Drainage from this road is channeled by underground sewers to the laboratory's waste treatment system. There was no apparent evidence of any wastes or waste residues in the area. Mr. Castro stated that the wastes had been dumped at the rate of two to three gallons at the time only.

Conclusions and Recommendations

This site presents no apparent hazardous waste related problem. The investigators recommend that no further action be initiated with regard to this site.

REFERENCE 5

DATE: August 22, 1995

SUBJECT: REMOVAL FROM EPA'S CERCLIS INVENTORY

FROM: Matthew J. Robbins, Brownfields Coordinator
Waste Management Division, Region IV

TO: TRAVENOL LABS INC
HWY 221 N
MARION
NC 28752

EPA has identified the Brownfields Initiative as one of the Agency's top priorities. The term "brownfields" refers to previously used properties that may lie vacant because potential contamination makes them unmarketable to the private sector. EPA has recently announced a comprehensive Brownfields strategy, including Pilot grants to municipalities, to stimulate economic revitalization.

One part of the strategy has been for EPA to review its complete inventory of Superfund sites. These sites have been screened and determined to require no remedial action under the Federal Superfund Program based on information available as well as on conditions and policies that currently exist. This is to notify you that EPA has removed your facility from EPA's computer inventory known as CERCLIS. THIS DOES NOT INDICATE THAT THE STATE HAS MADE A SIMILAR DETERMINATION.

If you have any questions, please call me at 404/347-5059 ext. 6214.

cc: State Agency

REFERENCE 6

Technical Report

Groundwater Investigation

for
Baxter Healthcare Corporation
North Cove Facility
Marion, North Carolina

This Document Has Been Prepared Under the Direction
of a Registered Professional Engineer

Prepared by

CH2M HILL

January 1991

Sean Roche, E.I.T.
Project Manager

C. Thomas Gorman, P.E.
Senior Consultant

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Appendix A. Groundwater Probe Survey Summary Report
Appendix B. Soil Boring Log Forms and Monitoring Well Drilling Reports
Appendix C. Complete Groundwater Analytical Report

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INTRODUCTION

This report summarizes the field activities and analytical results associated with an investigation of the nature and extent of groundwater contamination at the Baxter Healthcare Corporation (Baxter) North Cove facility in Marion, North Carolina (Figure 1).

Following the removal of a 1,000-gallon underground storage tank (UST) containing unleaded gasoline in April 1989, studies conducted by Law Engineering detected the presence of gasoline contamination in the soil and limited contamination in the groundwater beneath the site. The contaminated soil was successfully excavated and removed from the site in April 1990; however, further data were needed to assess the nature and extent of groundwater contamination and evaluate the need for remediation.

A phased approach to data collection was presented in the project work plan (CH2M HILL, 1990) and consisted of the following:

- Phase 1-- A groundwater and soil gas probe survey was made to estimate the plume boundary and help select locations for downgradient monitoring wells.

- Phase 2-- Additional monitoring wells were installed and sampled to measure groundwater gradients, to analyze groundwater quality, and in the case of contaminants being detected, to characterize the nature and extent of the plume.

The following sections present descriptions of the field procedures followed during the groundwater probe survey, monitoring well installation, and groundwater sampling. The analytical results are discussed and compared to the appropriate state and federal

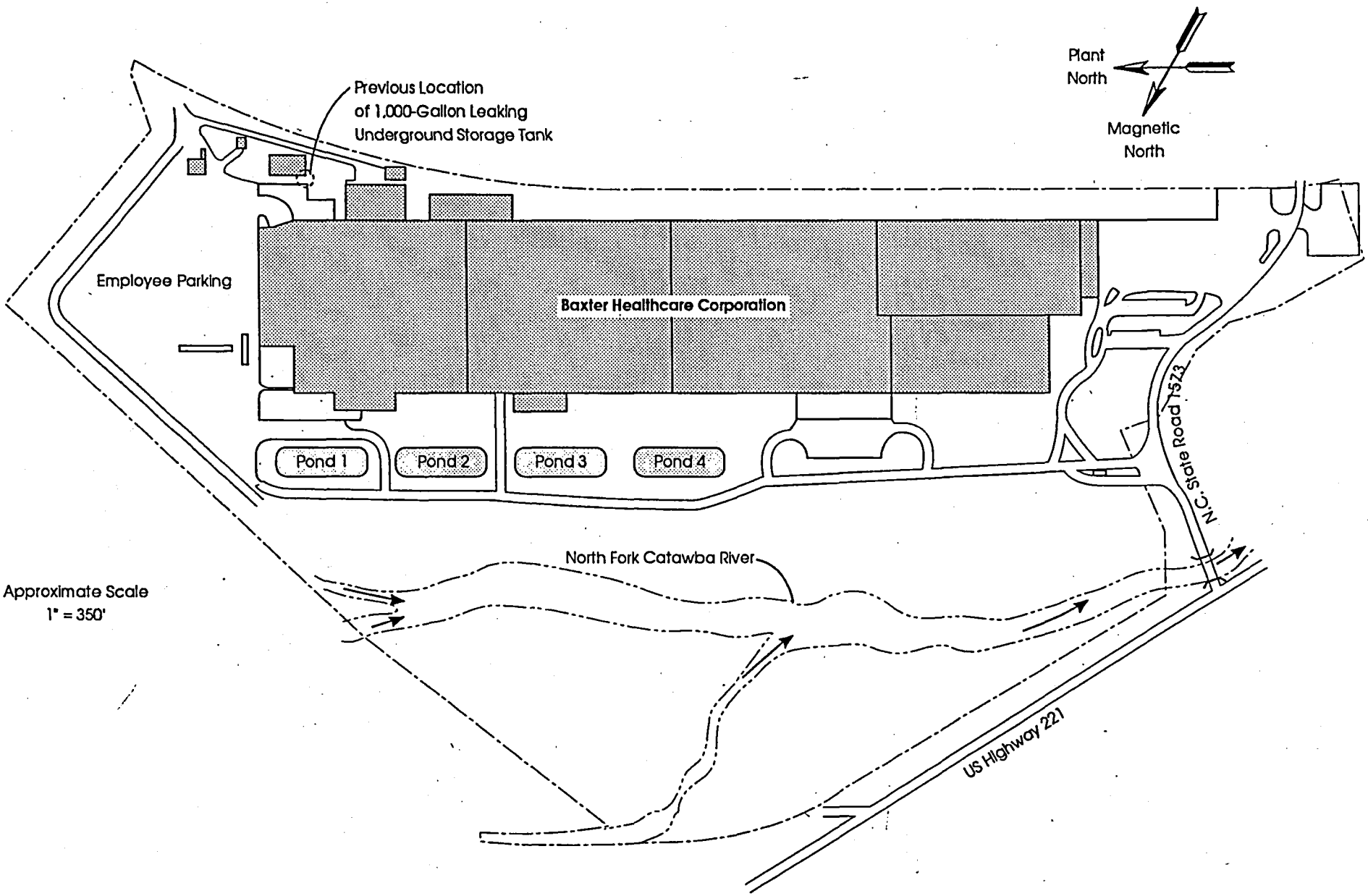

Figure 1: **Site Location Map**

Baxter Healthcare Corporation, North Cove Facility

regulatory standards. Finally, recommendations for further investigation and/or remediation of the site are provided.

FIELD ACTIVITIES

PHASE 1--GROUNDWATER PROBE SURVEY

On October 5, 1990, Tracer Research Corporation (TRC), under subcontract to CH2M HILL, performed a shallow groundwater/soil gas probe survey. The survey was performed under the direction of a CH2M HILL engineer. During the survey, four soil gas samples and five groundwater samples were collected and analyzed for the following volatile organic compounds (VOCs): benzene, toluene, ethylbenzene, xylenes (BTEX), and total hydrocarbons (THC). Soil gas and groundwater samples were analyzed in the field on a gas chromatograph equipped with a flame ionization detector (FID). Methodology and sampling procedures followed in the field are described in the report by TRC included as Appendix A.

The analytical results from the groundwater probe survey are summarized in Table 1. The probe sampling locations and THC concentrations detected at each sampling location are shown on Figure 2. None of the samples analyzed exceeded the maximum contaminant levels (MCLs) for BTEX constituents in groundwater as specified in the North Carolina Administrative Code (NCAC), Title 15, Subchapter 2L, Section .0200. One groundwater sample (GP-5), located in the loading dock area, had a THC concentration of 11 mg/l. Because of this THC concentration, analysis of this sample required dilution; as a result, the detection limit for benzene was increased to 4 ug/l. However, the analytical procedures are not comparable to EPA Method 602 or EPA Method 418.1. Therefore, these groundwater probe sample results should not be directly compared to the NCAC MCLs.

TABLE 1
SUMMARY OF ANALYTICAL RESULTS
FROM THE OCTOBER 5, 1990
GROUNDWATER/SOIL GAS PROBE SURVEY

Location	Benzene (ug/l)	Toluene (ug/l)	Ethyl-benzene (ug/l)	Xylenes (ug/l)	Total Hydrocarbons (mg/l)
GP-1 (c)	0.8	0.8	<0.8	<1	0.002
GP-2	<0.8	2	<0.8	8	0.008
GP-3	<0.8	<0.8	<0.8	<1	0.005
GP-5	<4	<4	<4	<7	11.0
GP-8	<0.8	7	<0.8	20	0.032
SGP-4 (d)	0.06	0.1	<0.07	1	0.001
SGP-6	<0.06	<0.07	<0.07	<0.08	<0.00007
SGP-7	<0.06	<0.07	<0.07	<0.08	0.0002
SGP-9	<0.06	<0.07	<0.07	<0.08	<0.00007
NCAC MCLs (a)	1	1,000	29	400	(b)

(a) Maximum Contaminant Levels for groundwater as specified in the North Carolina Administrative Code, Title 15, Subchapter 2L, Section .0200
(b) No MCL specified in the NCAC, as of November 1990.
(c) Groundwater Probe Sample
(d) Soil Gas Probe Sample
< Below Stated Method Detection Limit.

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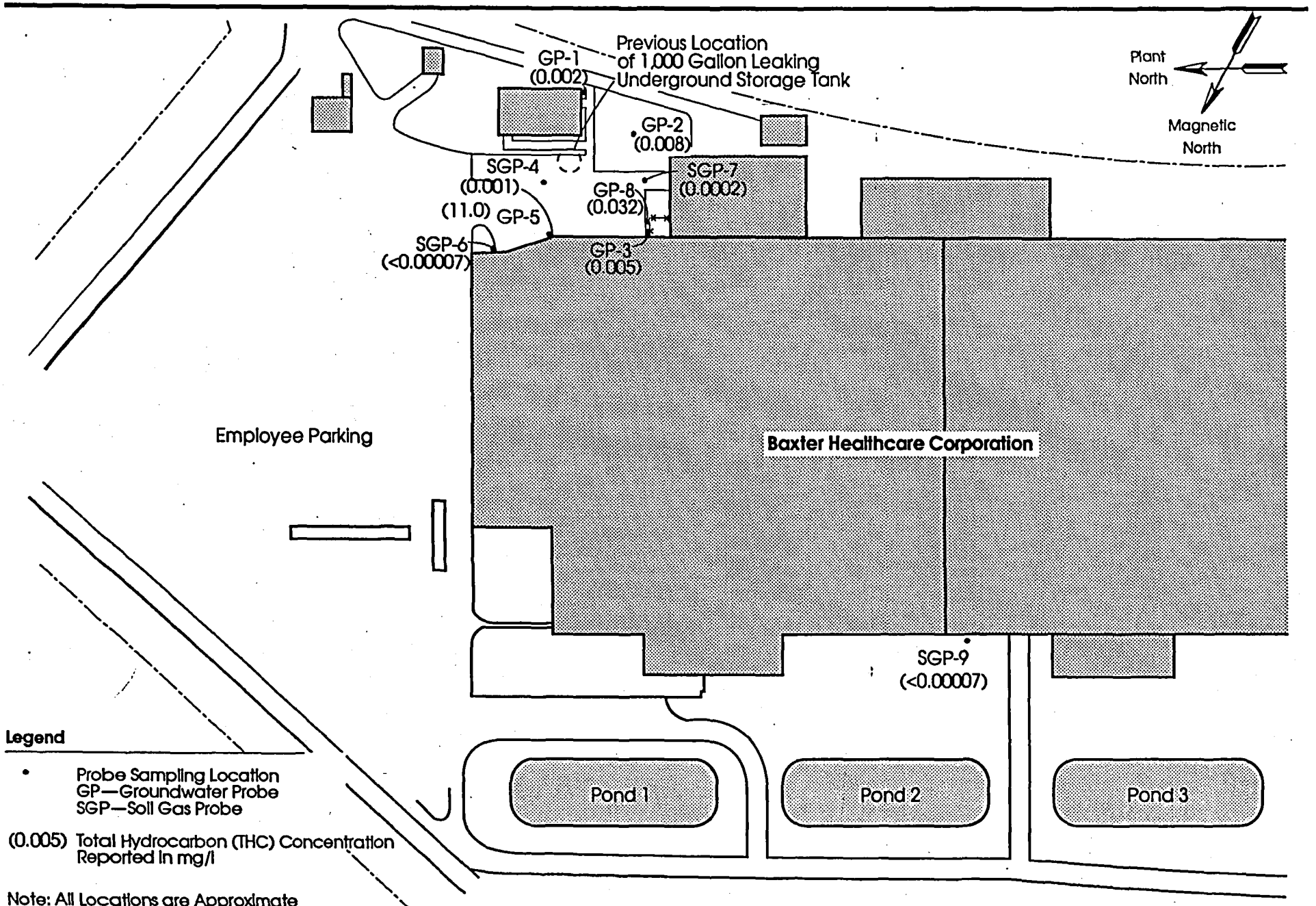

Figure 2: **October 25, 1990, Groundwater/Soil Gas Survey Results for THC**

Baxter Healthcare Corporation, North Cove Facility

CH2M HILL

PHASE 2--MONITORING WELL INSTALLATION

Following the groundwater probe survey, four monitoring wells (MW-4, MW-5, MW-6, and MW-7) were installed by Westinghouse Environmental and Geotechnical Services, Inc., under subcontract to CH2M HILL, at the Baxter North Cove facility using hollow-stem auger drilling techniques. The drilling and well installation activities were performed under the observation of a CH2M HILL engineer. Well locations were proposed in the monitoring well permit application submitted to the North Carolina Department of Environmental Management (NCDEM) on October 4, 1989, and were verbally approved prior to the start of drilling. Written approval was given in a letter dated October 10, 1990, for MW-4, -5, and -6. A separate monitoring/recovery well permit application was prepared and submitted to NCDEM for MW-7 on October 11, 1990. Verbal approval to proceed was given by NCDEM before drilling began. A separate monitoring/recovery well installation permit was transmitted in a letter dated November 2, 1990, for MW-7.

The wells were strategically positioned to provide site-specific information concerning the subsurface geology, the general direction of groundwater flow, and the quality of the groundwater. Split-spoon soil samples were collected from each borehole, according to ASTM D1586, at every 2.5 feet of depth, starting at ground surface. Split-spoon samplers were decontaminated before each use according to the procedure specified in the project work plan (CH2M HILL, 1990). The soil samples were examined in the field and were visually classified in accordance with ASTM D2488. Soil boring log forms, completed in the field by the engineer, are included in Appendix B.

The soil samples collected during drilling were used to define the subsurface stratigraphy. The materials encountered during the drilling of boreholes for MW-4, -5, -6, and -7 generally occur in three separate horizons. The top horizon, encountered from the surface to a depth of about 3 feet, is composed of silty sand with varying amounts of clay and gravel. The next horizon, encountered from depths of

approximately 3 to 9 feet, is composed of cobbles mixed within a silty sand matrix. The bottom horizon, encountered from depths of about 9 to 20 feet, is composed of a silty, fine sand with some gravel. As a result of the UST excavation, subsequent soil removal, and backfilling, the upper 9 feet of material at MW-7 is inconsistent with the horizons described above. Crushed rock was encountered from below the concrete slab to a depth of approximately 9 feet at MW-7. Complete descriptions of the soils encountered in each borehole are included in the soil boring log forms in Appendix B.

Three monitoring wells (MW-4, MW-5, and MW-6) were installed in the borings for the purpose of collecting groundwater samples. MW-7, which is located at the site of the previously removed leaking UST, was also designed and constructed to serve as a recovery well should remediation be required. The wells were installed with the top of screen approximately 2 feet above the static water level encountered during drilling. All well materials were decontaminated according to the procedures specified in the project work plan (CH2M HILL, 1990).

The three monitoring wells were constructed of 2-inch-diameter, Schedule 40 PVC casing with 2-inch-diameter, 0.01-inch factory slotted screen in the bottom 10 feet. The monitoring/recovery well was constructed of 4-inch-diameter, Schedule 80 PVC casing with 4-inch-diameter, 0.02-inch factory slotted screen in the bottom 15 feet. Monitoring well drilling reports containing specific well completion information for each well, including borehole diameter and depth, surface elevation, static water level, well construction method, and development details, are contained in Appendix B.

Commercially available fine filter sand was placed in the annulus around each well to a point approximately 1 foot above the top of screen. A bentonite seal 1 to 2 feet thick was placed above the sand pack and allowed to hydrate for a minimum of 30 minutes. The annulus above the bentonite seal was then grouted full to the land surface with neat cement grout.

MW-4, MW-5, and MW-6 were completed with locking caps and traffic-bearing flush mount covers. MW-7 was completed with a locking 2-by-2-foot traffic-bearing flush mount vault to allow room for a recovery system, as needed.

After installation and completion, the monitoring wells were developed to remove suspended solids and to gradate the sand pack. MW-4, -5, and -6 were developed using a decontaminated Teflon bailer. The volumes of water purged from MW-4, MW-5 and MW-6 were 55 gallons, 40 gallons, and 10 gallons, respectively. The purge water from these wells was discharged into 55-gallon drums, sealed, and stored at each well. In addition, potable water was used to flush MW-6 due to low yield. A foot pump consisting of 3/4-inch Teflon tubing with a bottom ball valve was used to develop MW-7. Purge water (105 gallons) was removed from MW-7 and discharged to a nearby storm drain leading to the plant wastewater treatment facility.

All development materials were decontaminated prior to use at each well according to procedures specified in the project work plan (CH2M HILL, 1990). Following development, the monitoring wells were allowed to equilibrate for a period of 1 week.

GROUNDWATER SAMPLING AND ANALYTICAL RESULTS

Before sample collection, water level elevations were recorded and the volume of water in each well was calculated to determine purge volumes. Five monitoring wells (existing well MW-3 and new wells MW-4, -5, -6, and -7) were purged and sampled.

The monitoring wells were initially purged using a Teflon bailer (before sampling) by removing a minimum of 3 to 5 well volumes from each well and continued until specific conductance, pH, and temperature stabilized. Specific conductance, pH, and temperature measurements were taken for each well volume purged.

Water level elevations were used to approximate the potentiometric surface and to estimate the general direction of shallow groundwater flow. Groundwater elevations ranged from 1462.42 to 1473.50 feet above mean sea level (msl). The depth to groundwater table, in the vicinity of the previously removed UST, ranged from approximately 2 to 4 feet below ground surface. The depth to groundwater table on the other side of the main building at MW-6 was approximately 15 feet below ground surface. The data indicate that groundwater at the site generally flows to the west-northwest toward the north fork of the Catawba River with a hydraulic gradient of approximately 0.019 foot/foot (Figure 3). Based on these observations, MW-3 and MW-6 are generally located downgradient of the former UST location. MW-7 is located at the former UST location.

The groundwater samples collected onsite were submitted for analysis to the CH2M HILL laboratory in Montgomery, Alabama. The groundwater samples were analyzed for VOCs by EPA Method 602 and total petroleum hydrocarbons (TPHs) by EPA Method 418.1.

The analytical results from the October 1990 groundwater sampling event are summarized in Table 2. The complete analytical report is included as Appendix C. Monitoring wells with detectable concentrations of TPH are shown on Figure 3.

Existing monitoring well MW-1 was not sampled because it is located upgradient of the contaminant source and has shown no detectable levels of BTEX in two previous sampling events in 1989 by Law Engineering (Law Engineering, 1990) (Table 3). No concentrations of BTEX above the NCAC MCLs were detected in the groundwater samples. In MW-3, interference from a petroleum compound resulted in an increased detection limit of 50 ug/l for all BTEX constituents. Methyl tert-butyl ether (MTBE) was detected at a concentration of 25 ug/l in one water sample (MW-7). The duplicate taken from MW-7 contained MTBE at a concentration of 21 ug/l.

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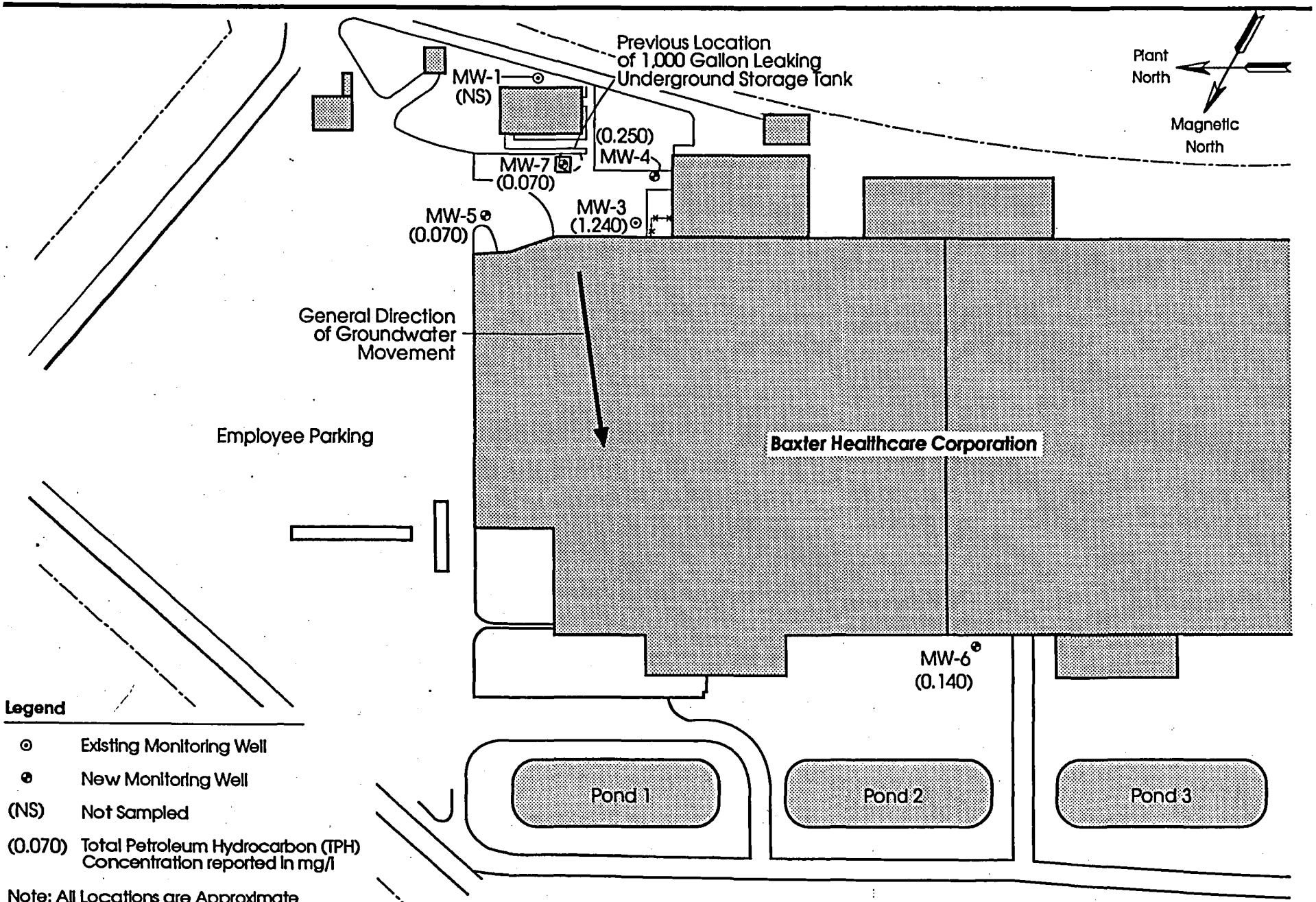

Figure 3: **October 25, 1990, Groundwater Sampling Results for TPH**

Baxter Healthcare Corporation, North Cove Facility

CH2M HILL

TABLE 2
SUMMARY OF ANALYTICAL RESULTS
FROM THE OCTOBER 25, 1990
GROUNDWATER SAMPLING

	EPA Method 602					EPA Method 418.1
Location	MTBE (ug/l)	Benzene (ug/l)	Toluene (ug/l)	Ethyl-benzene (ug/l)	Xylenes (ug/l)	Total Petroleum Hydrocarbons (mg/l)
MW-3	<50	<50	<50	<50	<50	1.240
MW-4	<1.0	<1.0	<1.0	<1.0	<1.0	0.250
MW-5	<1.0	<1.0	<1.0	<1.0	<1.0	0.070
MW-6	<1.0	<1.0	<1.0	<1.0	<1.0	0.140
MW-7	25	<1.0	<1.0	<1.0	<1.0	0.070
Duplicate	21	<1.0	<1.0	<1.0	<1.0	0.070
Bailer Blank	<1.0	<1.0	<1.0	<1.0	<1.0	<0.060
Travel Blank	<1.0	<1.0	<1.0	<1.0	<1.0	NA
Method Blank	<1.0	<1.0	<1.0	<1.0	<1.0	<0.050
NCAC MCLs (a)	(b)	1	1,000	29	400	(b)

(a) Maximum Contaminant Levels as specified in the North Carolina Administrative Code, Title 15, Subchapter 2L, Section .0200
(b) No MCL specified in the NCAC, as of November 1990.
< Below Stated Method Detection Limit.
NA Not Analyzed.

TABLE 3
ANALYTICAL RESULTS
PREVIOUS GROUNDWATER SAMPLING EVENTS

	June 2, 1989			December 18, 1989		
Constituents (1)	Well 1	Well 2	Well 3	Well 1	Well 2	Well 3
Benzene	ND (2)	2,400	6.6	ND	ND	ND
Toluene	ND	ND	7.3	ND	298	ND
Ethylbenzene	ND	5,100	11	ND	53.3	ND
Xylenes	ND	3,800	30	ND	123	ND

(1) Concentrations are in parts per billion (ppb)
(2) ND = Not Detected

Source:Law Engineering, 1990

SUMMARY OF FINDINGS AND CONCLUSIONS

The analytical results from the October 1990 groundwater sampling conducted at Baxter Healthcare Corporation's North Cove facility show no detectable concentrations of BTEX which exceed the NCAC MCLs. MTBE was detected in one well (MW-7 and duplicate) at concentrations of 25 ug/l and 21 ug/l, respectively. TPHs were detected in samples from all monitoring wells at concentrations ranging from 0.070 mg/l to 1.240 mg/l.

BTEX concentrations detected in this sampling round show a pronounced decreasing trend from previous sampling events by Law Engineering in 1989 (Law Engineering, 1990). This decreasing trend is attributable to the removal of the source of groundwater contamination, impacted soils, in April 1990. As a result, no groundwater remediation is recommended for the Baxter Healthcare North Cove facility at this time based on the following:

1) No detectable levels of BTEX exceeded the NCAC MCLs.

2) Detectable levels of MTBE were found in only one well (MW-7) near the former location of the leaking UST.

3) The source of groundwater contamination has been removed.

Quarterly sampling of the groundwater from MW-3, MW-4, MW-5, MW-6, and MW-7 for BTEX by EPA Method 602 and for TPH by Method 418.1, for a period of 1 year, is suggested. In addition, a gas chromatograph analysis by EPA Method SW8015 is proposed for the first round of samples collected from MW-3 to identify the petroleum compounds responsible for the interference during the recent sample analysis. If, after four quarters of sampling, MTBE and TPH concentrations continue to decrease, a

petition would be submitted to the State of North Carolina requesting that the site record be closed.

REFERENCES

1) CH2M HILL, September 1990. Project Work Plan for the Baxter North Cove Site, Marion North Carolina.

2) Law Engineering, 1990. First Addendum to Remedial Action Plan, for the Baxter Healthcare North Cove Plant, Marion, North Carolina.

Appendix A

CH2M HILL

Tracer Research Corporation

PREPARED FOR:

CH_2M Hill
229 Peachtree Street
Suite 300
Atlanta, Georgia 30303
(404)524-0152

SHALLOW SOIL GAS AND GROUNDWATER INVESTIGATION BAXTER NORTH CAVE FACILITY

MARION, NORTH CAROLINA

OCTOBER 1990

SUBMITTED BY:

758CH2M.SGW
2-90-758-S

Karen L. Guess

Tracer Research Corporation

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SOIL GAS SAMPLING PROCEDURES 3

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QUALITY ASSURANCE/QUALITY CONTROL PROCEDURES 6

APPENDIX A: CONDENSED DATA 8

INTRODUCTION

A shallow soil gas and groundwater investigation was performed by Tracer Research Corporation (TRC) at the Baxter North Cave Facility located in Marion, North Carolina. The investigation was conducted on October 5, 1990 under contract to CH_2M Hill. The purpose of the investigation was to delineate the extent of possible contamination in the groundwater.

During this survey, a total of 4 soil gas samples and 5 groundwater samples were collected and analyzed. Samples were analyzed for volatile organic compounds from the following suite:

COMPOUND	DETECTOR
benzene	FID
toluene	FID
ethylbenzene	FID
xylenes	FID
total hydrocarbons (THC)	FID

Xylenes are reported as the total of the three xylene isomers. Total hydrocarbons are reported as gasoline range compounds consisting of approximately C_4-C_9 aliphatic, alicyclic, and aromatic compounds.

The compounds in this suite were chosen as target compounds because of their suspected presence in the subsurface and amenability to soil gas technology. Soil gas and groundwater samples were screened on a gas chromatograph equipped with a flame ionization detector (FID).

SHALLOW SOIL GAS INVESTIGATION - METHODOLOGY

Shallow soil gas investigation refers to a method developed by TRC for investigating underground contamination from volatile organic chemicals (VOCs) such as industrial solvents, cleaning fluids and petroleum products by looking for their vapors in the shallow soil gas. The method involves pumping a small amount of soil gas out of the ground through a hollow probe driven into the ground and analyzing the gas for the presence of volatile contaminants. The presence of VOCs in shallow soil gas indicates the observed compounds may either be in the vadose zone near the probe or in groundwater below the probe. The soil gas technology is most effective in mapping low molecular weight halogenated solvent chemicals and petroleum hydrocarbons possessing high vapor pressures and low aqueous solubilities. These compounds readily partition out of the groundwater and into the soil gas as a result of their high gas/liquid partitioning coefficients. Once in the soil gas, VOCs diffuse vertically and horizontally through the soil to the ground surface where they dissipate into the atmosphere. The contamination acts as a source and the above ground atmosphere acts as a sink, and typically a concentration gradient develops between the two. The concentration gradient in soil gas between the source and ground surface may be locally distorted by hydrologic and geologic anomalies (e.g. clays, perched water); however, soil gas mapping generally remains effective because distribution of the contamination is usually broader in areal extent than the local geologic barriers and is defined using a large database. The presence of geologic obstructions on a small scale tends to create anomalies in the soil gas-groundwater correlation, but generally does not obscure the broader areal picture of the contaminant distribution.

Soil gas contaminant mapping helps to reduce the time and cost required to delineate underground contamination by volatile contaminants. The soil gas investigation does this by outlining the general areal extent of contamination. Conventional bore holes or observation wells are used to verify both the presence and extent of the subsurface

contamination as indicated in the soil gas survey. In this manner, soil gas contaminant mapping can assist in determining the placement of monitoring wells. Thus the likelihood of drilling unnecessary monitoring wells is reduced. The soil gas survey is not intended to be substitute for conventional methodology, but rather to enable conventional methods to be used efficiently.

EQUIPMENT

Tracer Research Corporation utilized a one ton Ford analytical van that was equipped with one gas chromatograph and two Spectra Physics computing integrators. In addition, the van had two built-in gasoline powered generators that provide the electrical power (110 volts AC) to operate all of the gas chromatographic instruments and field equipment. A specialized hydraulic mechanism consisting of two cylinders and a set of jaws was used to drive and withdraw the sampling probes. A hydraulic hammer was used to assist in driving probes past cobbles and through unusually hard soil.

SOIL GAS SAMPLING PROCEDURES

Sampling probes consisted of 7-14 foot lengths of 3/4 inch diameter hollow steel pipe that were fitted with detachable drive tips. Soil gas probes were advanced 2-13 feet below grade. Once inserted into the ground, the above-ground end of the sampling probes were fitted with a steel reducer and a length of polyethylene tubing leading to a vacuum pump. Gas flow was monitored by a vacuum gauge to insure that an adequate flow was obtained.

To adequately purge the volume of air within the probe, 2 to 5 liters of gas was evacuated with a vacuum pump. During the soil gas evacuation, samples were collected in a glass syringe by inserting a syringe needle through a silicone rubber segment in the evacuation line and down into the steel probe. Ten milliliters of gas were collected for immediate analysis in the TRC analytical field van. Soil gas was subsampled (duplicate

injections) in volumes ranging from 1 uL to 2 mL, depending on the VOC concentration at any particular location.

Sample probe vacuums ranged from 2-4 inches Hg. The maximum pump vacuum was measured at 18 inches Hg.

GROUNDWATER SAMPLING PROCEDURES

Sampling probes consisted of 7-14 foot lengths of 3/4 inch diameter hollow steel pipe. Groundwater samples were collected by driving the hollow probes with detachable drive points below the water table. Once at the desired depth the probe was withdrawn several inches to permit water inflow into the resulting hole. Groundwater samples were collected at depths of 4-5 feet below grade. Once inserted into the ground, the above-ground end of the sampling probes were fitted with a vacuum adaptor (metal reducer) and a length of polyethylene tubing leading to a vacuum pump. A vacuum of up to 18 inches of mercury was applied to the interior of the probe and open hole for 10 to 15 minutes or until the water was drawn up the probe. The water thus accumulated was then removed by drawing a vacuum on a 1/4 inch polyethylene tube inserted down the probe to the bottom of the open hole. Loss of volatile compounds by evaporation is accordingly reduced when water is induced to flow into the very narrow hole, because it can be sampled with little exposure to air. The polyethylene tubing was only used once and then discarded to avoid any cross-contamination problems.

Groundwater samples were collected in 40 mL VOC vials that are filled to exclude any air and then capped with Teflon-lined septa caps. Water samples were analyzed by injecting headspace in the sample container created by decanting off approximately half of the liquid in the bottle. Headspace analysis is the preferred technique when a large number of water samples are to be performed daily. The method is more time efficient for the measurement of volatile organics than direct injection because there is less chance for

semi-volatile and non-volatile organics to contaminate the system as there is with direct injection. Depending upon the partitioning coefficient of a given compound, the headspace analysis technique can also yield greater sensitivity than the direct injection technique. Both methods are similar in terms of precision and accuracy.

ANALYTICAL PROCEDURES

A Varian 3300 gas chromatograph was used for the soil gas and groundwater analyses. It was equipped with a flame ionization detector (FID). Compounds were separated on a 6' by 1/8" OD packed column with OV-101 as the stationary phase in a temperature controlled oven. Nitrogen was used as the carrier gas.

Hydrocarbon compounds detected in soil gas and groundwater were identified by chromatographic retention time. Quantification of compounds was achieved by comparison of the detector response of the sample with the response measured for calibration standards (external standardization). Instrument calibration checks were run periodically throughout the day and system blanks were run at the beginning of the day to check for contamination in the groundwater sampling equipment. Air samples were also routinely analyzed to check for background levels in the atmosphere.

The GC was calibrated for headspace analysis by decanting 10 to 20 mL off of the known aqueous standard so as to leave approximately the same amount of headspace that was in the water headspace samples. The bottle was then resealed and shaken vigorously for 30 seconds. An analysis of the headspace in the vial determined the Response Factor (RF) which was then used to accurately estimate water concentrations.

Detection limits for the compounds of interest were a function of the injection volume as well as the detector sensitivity for individual compounds. Thus the detection limit varied with the sample size. Generally, the larger the injection size the greater the sensitivity. However, peaks for compounds of interest were kept within the linear range of

the analytical equipment. If any compound had a high concentration, it was necessary to use small injections, and in some cases to dilute the sample to keep it within linear range. This may have caused decreased detection limits for other compounds in the analyses.

The detection limits for the hydrocarbon compounds in soil gas were approximately 0.07 ug/L. The detection limits for the hydrocarbon compounds in groundwater samples were approximately 0.8 ug/L. Detection limits were dependant upon the conditions of the measurement, in particular, the sample size. If any component being analyzed was not detected, the detection limit for that compound in that analysis is given as a "less than" value (e. g. < 0.1 ug/L). Detection limits obtained from GC analyses were calculated from the current response factor, the sample size, and the estimated minimum peak size (area) that would have been visible under the conditions of the measurement.

QUALITY ASSURANCE/QUALITY CONTROL PROCEDURES

Tracer Research Corporation's normal quality assurance procedures were followed in order to prevent any cross-contamination of soil gas and ground water samples. These procedures are described below:

- Steel probes are used only once during the day and then washed with high pressure soap and hot water spray or steam-cleaned to eliminate the possibility of cross-contamination. Enough probes are carried on each van to avoid the need to reuse any during the day.
- Probe adaptors (TRC's patented design) are used to connect the sample probe to the vacuum pump. The adaptor is designed to eliminate the possibility of exposing the sample stream to any part of the adaptor. Associated tubing connecting the adaptor to the vacuum pump is replaced periodically as needed during the job to insure cleanliness and good fit. At the end of each day the adaptor is cleaned with soap and water and baked in the GC oven.

- Silicone tubing (which acts as a septum for the syringe needle) is replaced as needed to insure proper sealing around the syringe needle. This tubing does not directly contact soil gas samples.
- Glass syringes are usually used for only one sample per day and are washed and baked out at night. If they must be used twice, they are purged with carrier gas (nitrogen) and baked out between probe samplings.
- Injector port septa through which soil gas samples are injected into the chromatograph are replaced on a daily basis to prevent possible gas leaks from the chromatographic column.
- Analytical instruments are calibrated each day by analytical standards from Chem Service, Inc. Calibration checks are also run after approximately every five soil gas sampling locations.
- Subsampling syringes are checked for contamination prior to sampling each day by injecting nitrogen carrier gas into the gas chromatograph.
- Prior to sampling each day, system blanks are run to check the sampling apparatus (probe, adaptor, 10 cc syringe) for contamination by drawing ambient air from above ground through the system and comparing the analysis to concurrently sampled ambient air analysis.
- All sampling and subsampling syringes are decontaminated each day and no such equipment is reused before being decontaminated each day and no such equipment is reused before being decontaminated. Microliter size subsampling syringes are reused only after a nitrogen carrier gas blank is run to insure it is not contaminated by the previous sample.
- Soil gas pumping is monitored by a vacuum gauge to insure that an adequate gas flow from the vadose zone is maintained. A reliable gas sample can be obtained if the vacuum gauge reading is at least 2" Hg less than the maximum pump vacuum.

APPENDIX A: CONDENSED DATA

CH2M HILL/BAXTER NORTH CAVE FACILITY/MARION, NORTH CAROLINA JOB#1-90-758-S
10/05/90
CONDENSED DATA

SAMPLE	BENZENE ug/l	TOLUENE ug/l	ETHYL BENZENE ug/l	XYLENES ug/l	THC ug/l
AIR	<0.4	<0.4	<0.4	<0.7	<0.4
GP-3-4'	<0.8	<0.8	<0.8	<1	5
GP-5-4'	<4	<4	<4	<7	11000*
GP-1-4'	0.8	0.8	<0.8	<1	2
GP-2-5'	<0.8	2	<0.8	8	8
GP-8-5'	<0.8	7	<0.8	20	32
AIR	<0.03	<0.03	<0.04	<0.04	<0.04
SGP-6-4'	<0.06	<0.07	<0.07	<0.08	<0.07
SGP-4-2'	0.06	0.1	<0.07	1	1
SGP-7-4'	<0.06	<0.07	<0.07	<0.08	0.2
SGP-9-13'	<0.06	<0.07	<0.07	<0.08	<0.07
AIR	<0.03	<0.03	<0.04	<0.04	0.8

* includes heavier compounds than C4-C9

Analyzed by: P. Bausman
Checked by: G. Santo
Proofed by: Karen L. Guess

Tracer Research Corporation

Appendix B

CH2M HILL

PROJECT NUMBER	BORING NUMBER
SAT30954.A0.20	MW-4 SHEET 1 OF 1

SOIL BORING LOG

PROJECT Baxter Healthcare LOCATION N. of Steam Room, Along Asphalt Drive
ELEVATION _____ DRILLING CONTRACTOR Westinghouse
DRILLING METHOD AND EQUIPMENT 2 1/4" ID HSA Drill and Sample, Ream with 4 1/4" ID, with CME 45 Drill Rig
WATER LEVEL AND DATE _____ START 10/9/90 FINISH 10/9/90 LOGGER S. Roche

DEPTH BELOW SURFACE (FT)	SAMPLE INTERVAL	SAMPLE TYPE AND NUMBER	SAMPLE RECOVERY (FT)	STANDARD PENETRATION TEST RESULTS 6" -6" -6" (N)	SOIL DESCRIPTION (SOIL NAME, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY, USCS GROUP SYMBOL)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS AND INSTRUMENTATION)
0	1.5	S-1	0.6	12-16-17 (33)	SILTY SAND WITH CLAY, (SM), GREYISH BROWN, MOIST, DENSE, QUARTZ ROCK FRAGMENTS AND ROUND STONES (1/2"-1 1/2"DIAMETER)	START DRILLING AT 1424 HNU = 0.2 PPM = BKGD, LEL = 0%
	3.0					MET REFUSAL AT ~2 1/2' DRILLED PILOT HOLE WITH 2 1/4" SOLID STEM AUGER, FOLLOWED WITH 4 1/4" AUGERS, DOWN TO 4 FT MET REFUSAL STOPPED FOR DAY AT 1500
	4.5	S-2	<1"	50/5"	NO SOIL RECOVERY, SEVERAL QUARTZ ROCK FRAGMENTS (1/4"-1 1/2"DIAMETER)	
5	5.0					
	6.5	S-3	0.7	41-11-17 (28)	SAND WITH SILT, (SP-SM), REDDISH BROWN, WET, MEDIUM DENSITY, GRAVEL (1/2"-1"DIAMETER)	START DRILLING AT 1045 AT 10/10/90 T = 1048 AT 3-4.5 FT INTERVAL HNU = 0 TO 5 (BKGD) MOISTURE IS MAKING IT BOUNCE HNU = OFF 3-4.5 SPOON ~150 PPM
	7.5					
	9.0	S-4	0.3	9-16-21 (37)	POORLY GRADED FINE SAND WITH GRAVEL, (SP), WHITE, WET, DENSE GRAVEL 1/2"-3/4" (QUARTZ FRAGMENTS)	T = 1102 AT 5-6.5 FT INTERVAL HNU = 300-350 PPM OUTSIDE OF SPOON WET, POSSIBLE WATER TABLE
10	10.0					T = 1119 AT 7.5-9 FT INTERVAL HNU = BKGD
	11.5	S-5	1.1	6-6-13 (19)	SILTY SAND, (SM), BLACK WITH LIGHT MOTTLING, MOIST, MEDIUM DENSITY ~30% SILT, SOME CLAY, FINE SAND, AND SOME GRAVEL (1/4"-1/2") WEATHERED FROM ROCK	T = 1159 AT 10-11.5 FT INTERVAL HNU = 3-4 PPM
	12.5					T = 1219 AT 12.5-14 FT INTERVAL HNU = 2-3 PPM ABOVE BKGD
	14.0	S-6	1.1	15-18-26 (44)	SILTY SAND, (SM), BLACK WITH LIGHT MOTTLING/LAYERING, MOIST, DENSE, SOME GRAVEL, 30-40% SILT, APPEARS TO BE WEATHERED FROM ROCK	T = 1240 FINISHED DRILLING WITH 2 1/4 ID HSA NOW WILL REAM HOLE WITH 4 1/4" ID T = 1312 REAMED TO 14 FT FINISH DRILLING
15						END OF HOLE AT 14 FT

PROJECT NUMBER	BORING NUMBER
SAT30954.A0.20	MW-5 SHEET 1 OF 1

SOIL BORING LOG

PROJECT Baxter Healthcare LOCATION N.E. Corner of Bldg., at Loading Dock Entrance
ELEVATION _____ DRILLING CONTRACTOR Westinghouse
DRILLING METHOD AND EQUIPMENT 2 1/4" ID HSA Drill and Sample, Ream with 4 1/4" ID, with CME 45 Drill Rig
WATER LEVEL AND DATE _____ START 10/11/90 FINISH 10/11/90 LOGGER S. Roche

DEPTH BELOW SURFACE (FT)	SAMPLE INTERVAL	SAMPLE TYPE AND NUMBER	SAMPLE RECOVERY (FT)	STANDARD PENETRATION TEST RESULTS 6"-6"-6" (N)	SOIL DESCRIPTION (SOIL NAME, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY, USCS GROUP SYMBOL)	COMMENTS (DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS AND INSTRUMENTATION)
0	1.5	S-1	0.8	8-18/ hammer not vertical	SILTY SAND, (SM), DARK BROWN, DRY, LOOSE, ROCK FRAGMENTS UP TO 1 1/2"	START DRILING AT 0915 HNU = 150-200 PPM, SEEMS ERRATIC MAY BE DUE TO MOISTURE IN SOIL T = 0924 AT 2.5 TO 4 FT INTERVAL HNU = MOISTURE IN SOIL EFFECTING READINGS—ROCK GRINDING NOISES DURING DRILLING T = 0947—SHEARED OFF BOLT IN DRILLING UNIVERSAL SHUT DOWN TO REPAIR T = 1131 RESUME DRILLING, AUGERS WOULD NOT GO THROUGH T = 1134 ROCK, ABANDON HOLE RESUME DRILLING AT 1208 T = 1321 AT 5.0 TO 6.5 INTERVAL HNU = 10-20 PPM OFF SPOON, ACTING ERRATIC NOTE: EASY DRILLING RESUME FROM ~5FT T = 1345 AT 7.5 TO 9.0 FT INTERVAL HNU = >20 PPM, MAY BE MOISTURE IN SOIL T = 1400 AT 10.0 TO 11.5 INTERVAL HNU = 20-50 PPM CONSTANTLY RISING, MAY NOT BE ACCURATE T = 1407 AT 12.5 TO 14.0 FT INTERVAL HNU = ROSE TO 160 PPM NO ODOR OF ANY KIND MAY BE DUE TO MOISTURE T = 1534 BEGIN REAMING WITH 4 1/4" HSA T = 1614 REAMED TO 14 FT
	2.5					
	4.0	S-2	0.6	27-29-34 (63)	SILTY SAND WITH ROCK FRAGMENTS, LIGHT BROWN/TAN, DRY TO MOIST, LOOSE, QUARTZ FRAGMENTS UP TO 1 3/4" DIAMETER (~20% SILT)	
	5.0					
5	6.5	S-3	0.9	5-8-14 (22)	SILTY SAND, (SM), BROWN WITH LIGHT LAYERING, MOIST, LOOSE-MEDIUM DENSITY, VERY FINE SAND	
	7.5					
	9.0	S-4	0.7	2-4-7 (11)	SANDY SILT, (ML), GREYISH BROWN WITH LIGHT LAYERING, MOIST, FIRM, LOOKS TO BE WEATHERED FROM ROCK, SOME ROCK FRAGMENTS, FINE SAND	
	10.0					
10	11.5	S-5	0.7	1-2-5 (7)	SILTY SAND, (SM), LIGHT BROWN, MOIST, LOOSE, FINE SAND (~15-20% SILT)	
	12.5					
	14.0	S-6	0.8	5-5-11 (16)	SILTY FINE SAND, (SM), LIGHT BROWN, MOIST, LOOSE TO MEDIUM DENSITY, (~45% SILT)	
15						END OF HOLE AT 14 FT

PROJECT NUMBER	BORING NUMBER
SAT30954.A0.20	MW-6 SHEET 1 OF 1

SOIL BORING LOG

PROJECT Baxter Healthcare LOCATION West Side of Plant Near Pump Station
ELEVATION DRILLING CONTRACTOR Westinghouse
DRILLING METHOD AND EQUIPMENT 2 1/4" ID HSA Drill and Sample, Ream with 4 1/4" ID, with CME 45 Drill Rig
WATER LEVEL AND DATE START 10/15/90 FINISH 10/15/90 LOGGER S. Roche

DEPTH BELOW SURFACE (FT)	SAMPLE INTERVAL	SAMPLE TYPE AND NUMBER	SAMPLE RECOVERY (FT)	STANDARD PENETRATION TEST RESULTS 6"-6"-6" (N)	SOIL DESCRIPTION: SOIL NAME, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY, USCS GROUP SYMBOL	COMMENTS: DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS AND INSTRUMENTATION
0	0					
	1.5	S-1	0.6	8-7-8 (15)	SILTY SAND, (SM), BROWN, MOIST, LOOSE-MEDIUM, SOME GRAVEL UP TO AN INCH IN DIAMETER,~ 45% SILT (FILL)	START DRILLING AT 1038 HNU = 17 PPM MAX
	2.5					
	4.0	S-2	0.8	20-34-15 (4.9)	SILTY SAND, (SM), BROWN, MOIST, MEDIUM DENSITY, SOME WET GRAVEL AT TOP, SILT 15-20% (FILL)	T = 1045 HNU = 80-100 PPM
	5.0					
5	6.5	S-3	1.5	8-5-6 (11)	SANDY SILT, (ML), REDDISH BROWN, MOIST, FIRM-STIFF, (FILL)	T = 1052 HNU = 400 PPM MAX
	7.5					
	9.0	S-4	1.5	4-2-3 (5)	SAND WITH SILT, (SP-SM), DARK GREY, MOIST, LOOSE, POORLY GRADED, MEDIUM SIZE	T = 1057 HNU = 80-100 PPM
	10.0					
10	11.5	S-5	0.5	4-3-3 (6)	SILTY SAND, (SM), DARK GREY, MOIST, LOOSE, 30-40% SILT	T = 1102 HNU = 80-100 PPM
	12.5					
	14.0	S-6	0.9	1-2-13 (28)	SILTY SAND, (SM),GREYISH TAN, WET, MEDIUM, WHITE MICA (SLIGHTLY COARSER SAND) 20-30% SILT	T = 1113 HNU = 300 PPM SUSTAINED NOTE: AT 14 1/2' STARTED HITTING ROCK
	15.0					
15	16.5	S-7	0.9	13-13-15 (28)	SILTY SAND, (SM), LIGHT BROWN/TAN, WET, MEDIUM DENSITY, ROCK FRAGMENTS, UP TO 1 1/2", 15-20% SILT	T = 1138 HNU = 1000-1500 PPM
	17.5					
	19.0	S-8	0.5'	48-49-50/3" (>100)	POORLY GRADED SAND WITH GRAVEL, (SP), WHITE/TAN, WET, VERY DENSE, FINE-MEDIUM SAND, GRAVEL UP TO 3/4"	T = 1204 HNU = >200 PPM
20	20.5	S-9	0.0	50/1.5"	NO RECOVERY	T = 1242
						1249 BROKE FOR LUNCH ALSO TO LET WATER FILL BOREHOLE 1412 BEGIN REAMING HOLE WITH 4 1/4" ID HSA 1500 MET REFUSAL AND STOPPED REAMING AT 19 FT
						END OF HOLE AT 19 FT

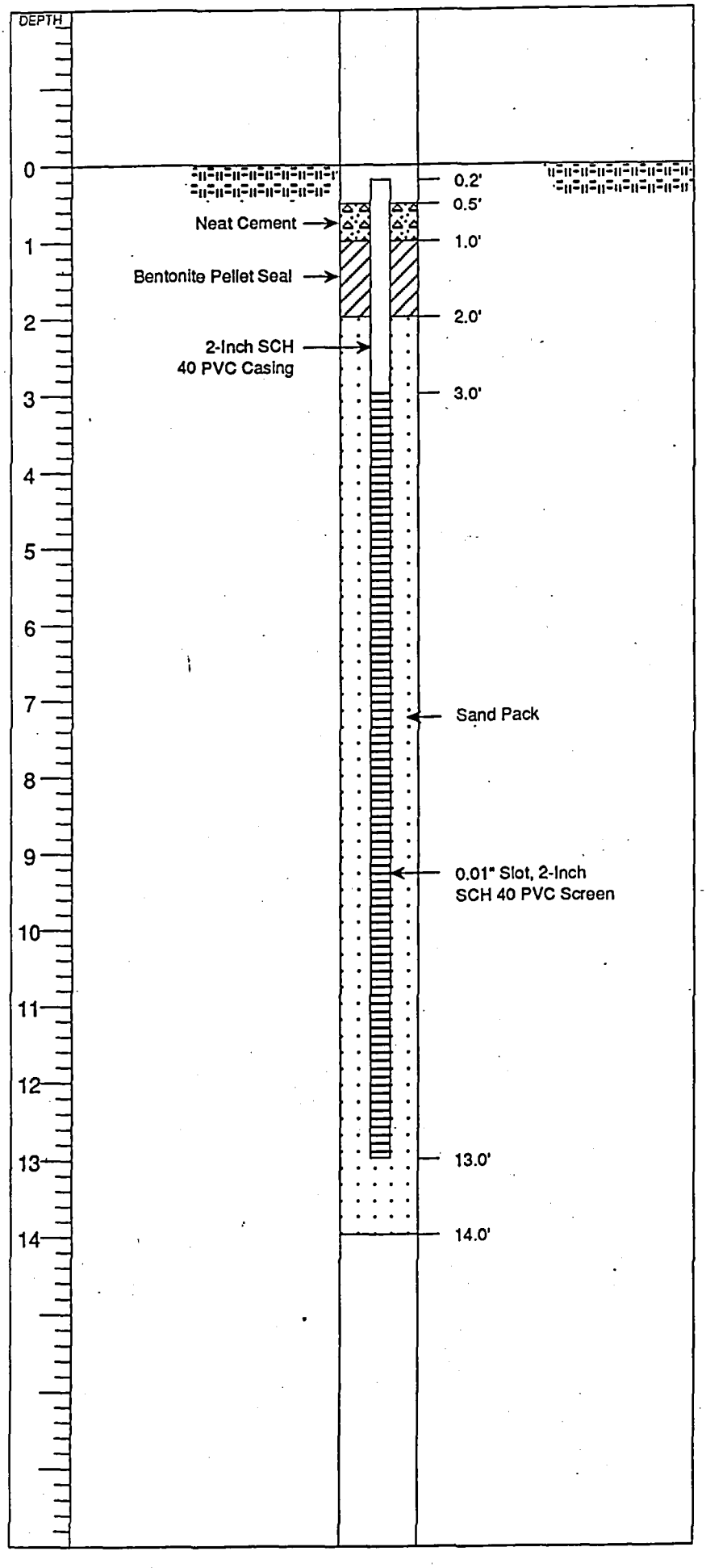
PROJECT NUMBER	BORING NUMBER
SAT30954.A0.20	MW-7 SHEET 1 OF 1

SOIL BORING LOG

PROJECT Baxter Healthcare LOCATION Old UST Site, N.E. Corner of Bldg.
ELEVATION DRILLING CONTRACTOR Westinghouse
DRILLING METHOD AND EQUIPMENT 2 1/4" ID HSA Drill and Sample, Ream with 6 1/4" ID HSA, with CME 45 Drill Rig
WATER LEVEL AND DATE START 10/16/90 FINISH 10/16/90 LOGGER S. Roche

DEPTH BELOW SURFACE (FT)	SAMPLE INTERVAL	SAMPLE TYPE AND NUMBER	SAMPLE RECOVERY (FT)	STANDARD PENETRATION TEST RESULTS 6"-6"-6" (N)	SOIL DESCRIPTION: SOIL NAME, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY, USCS GROUP SYMBOL	COMMENTS: DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS AND INSTRUMENTATION
0	0				SILTY SAND WITH GRAVEL, (SM), REDDISH BROWN, MOIST, LOOSE, COARSE SAND, GRAVEL UP TO 2" DIAMETER, ~40% SILT, (FILL)	START DRILLING AT 1600 T = 1520 HNU = 0.2 PPM = BKGD LEL = 0% AT BOREHOLE O2 = 20.8% AT BOREHOLE NOTE: WATER AT ~3 FT BGS
	1.6'					
					CRUSHED ROCK WITH SILT, WHITE AND BLACK, MOIST, LOOSE, COARSE SAND TO GRAVEL (1/2") SILT WHITE, (FILL)	
	5.0					
5	6.5	S-1	1.0	12-4-3 (7)	TOP 0.7': CRUSHED ROCK AS ABOVE, BOTTOM 0.3': SILTY SAND, (SM), RED/BROWN, MOIST, LOOSE, WITH GRAVEL UP TO 1.5", FINE SAND, (FILL)	T = 1605 HNU = 0.2 PPM = BKGD
	7.5					
	9.0	S-2	0.3	4-17-13 (30)	TOP 0.2': CRUSHED ROCK AS ABOVE BOTTOM 0.1': SILTY FINE SAND, (SM), BROWN/RED, MOIST-WET, MEDIUM DENSITY, (FILL)	T = 1614 HNU BKGD
	10.0					
10	11.5	S-3	0.75	3-4-6 (10)	SILTY SAND, (SM), RUSTY ORANGE AND GREY STRATIFICATION, MOIST, LOOSE, FINE SAND, (RESIDUAL SOILS), ~45% SILT, SOME GRAVEL UP TO 2" DIAMETER	T = 1624 HNU = 0.6 PPM
	12.5					
	14.0	S-4	1.0	6-7-12 (19)	NO RECOVERY	T = 1635
	15.0					
15	16.5	S-5	1.0	6-5-12 (17)	SILTY SAND, (SM), DARK GREY AND LIGHT BROWN MOTTLING, MOIST, MEDIUM DENSITY, FINE SAND, ~40% SILT	T = 1642 HNU = 0.2 PPM ABOVE BKGD
	17.5					
	19.0	S-6	1.5	5-9-14 (23)	SILTY SAND, (SM), RUSTY ORANGE/DARK GREY/WHITE MOTTLING, MOIST TO WET, MEDIUM DENSITY, VERY FINE SAND, 45-50% SILT	T = 1650 HNU = 9.0 PPM SUSTAINED BOTTOM OF HOLE AT 19 FT
20						T = 1730 BEGIN REAMING WITH 6 1/4" ID HSA T = 1800 REAMED TO 19 FT WITH 6 1/4" ID HSA
						END OF HOLE AT 19 FT

Monitor Well Drilling Report



PROJECT NO. SAT30954.A0.30

WELL: MW-4

LOCATION: North of Steam Room, Along Asphalt Drive

COUNTY: McDowell STATE: NC

GROUND ELEVATION: 1477.75' (msl)

TOP OF CASING ELEVATION: 1477.55' (msl)

BOREHOLE DIAMETER: 8-Inches

BOREHOLE DEPTH: 14-Feet

STATIC WATER LEVEL: 4.05-Feet Below TOC

DATE: 10-25-90

CONSTRUCTION: Hollow Stem Auger

DRILLER: Westinghouse Environmental and Geotechnical Services Inc.

DATE FINISHED: 10-10-90

WELL MATERIALS (TYPE AND LENGTH OR QUANTITY):

SURFACE CASING: None

CASING: 2.8 x 2-Inch SCH 40 PVC

SCREEN: 10' x 2-Inch-0.01" Slot SCH 40 PVC

SAND: Fine Filter Sand

SEAL: Bentonite Pellets

GROUT MIX: Neat Cement

PROTECTIVE COVER: Flush Mount

LOCK NUMBER: Master No. 0536

DEVELOPMENT:

METHOD: Bailing

DURATION: 2 Hours/55 Gallons

DATE: 10-18-90

WATER CLARITY: Turbid/Silty

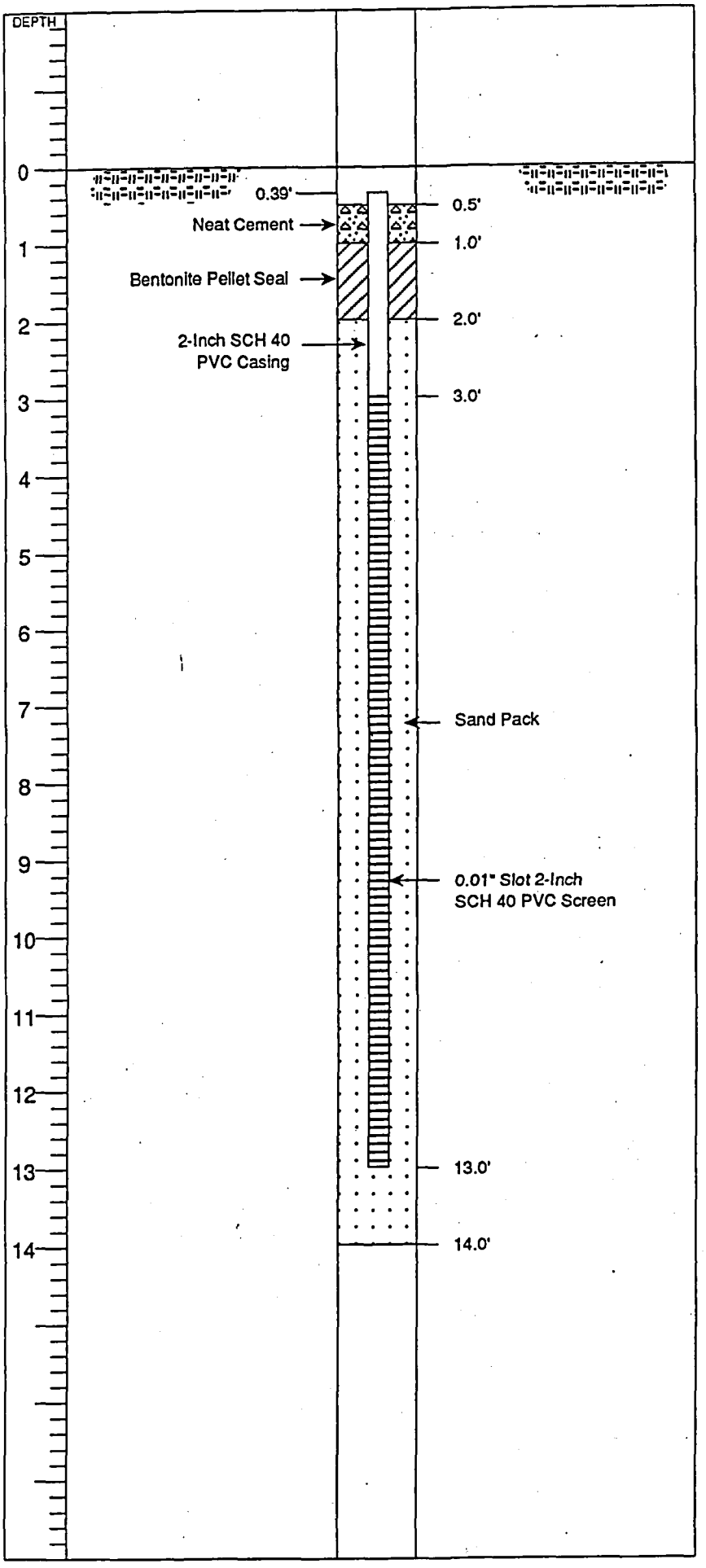
WATER SAMPLED FOR: BTEX and TPH

COMMENTS:

COMPILED BY: S. Roche

DATE: 12-10-90

Monitor Well Drilling Report



PROJECT NO. SAT30954.A0.30

WELL: MW-5

LOCATION: N.E. Corner of Main Building, in Asphalt Near Loading Dock Entrance

COUNTY: McDowell STATE: N.C.

GROUND ELEVATION: 1476.01' (msl)

TOP OF CASING ELEVATION: 1475.62' (msl)

BOREHOLE DIAMETER: 8-Inches

BOREHOLE DEPTH: 14-Feet

STATIC WATER LEVEL: 2.34-Feet Below TOC

DATE: 10-25-90

CONSTRUCTION: Hollow Stem Auger

DRILLER: Westinghouse Environmental and Geotechnical Services Inc.

DATE FINISHED: 10-11-90

WELL MATERIALS (TYPE AND LENGTH OR QUANTITY):

SURFACE CASING: None

CASING: 2.61' x 2-Inch SCH 40 PVC

SCREEN: 10' x 0.01" Slot x 2-Inch SCH 40 PVC

SAND: Fine Filter Sand

SEAL: Bentonite Pellets

GROUT MIX: Neat Cement

PROTECTIVE COVER: Flush Mount

LOCK NUMBER: Master No. 0536

DEVELOPMENT:

METHOD: Bailing

DURATION: 1.5 Hours/40 Gallons

DATE: 10-18-90

WATER CLARITY: Turbid/Silty

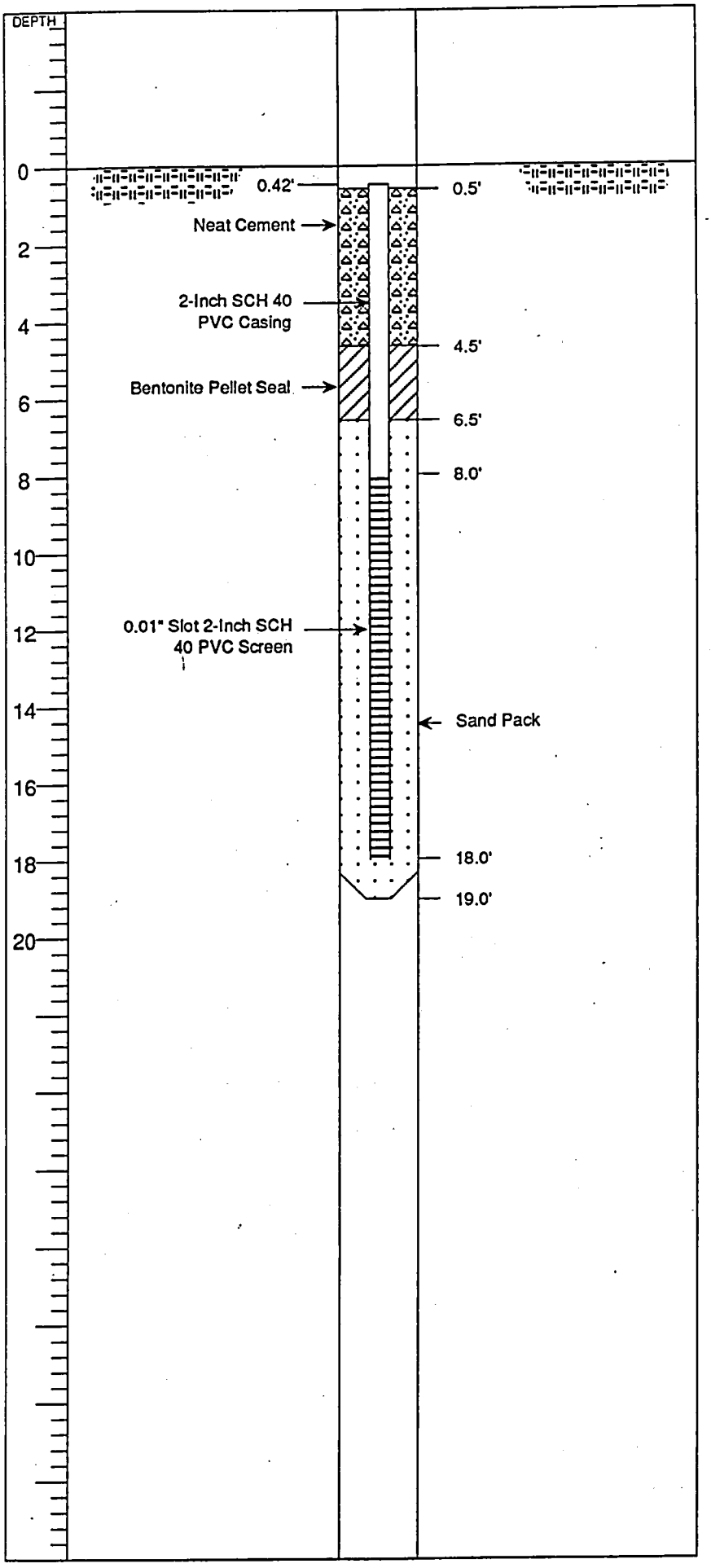
WATER SAMPLED FOR: BTEX and TPH

COMMENTS:

COMPILED BY: S. Roche

DATE: 12-10-90

Monitor Well Drilling Report



PROJECT NO. SAT30954.A0.30

WELL: MW-6

LOCATION: West Side of Main Building, Near Pump Station

COUNTY: McDowell STATE: N.C.

GROUND ELEVATION: 1477.54' (msl)

TOP OF CASING ELEVATION: 1477.12' (msl)

BOREHOLE DIAMETER: 8-Inches

BOREHOLE DEPTH: 18.5-Feet

STATIC WATER LEVEL: 14.70 Feet Below TOC

DATE: 10-25-90

CONSTRUCTION: Hollow Stem Auger

DRILLER: Westinghouse Environmental and Geotechnical Services Inc.

DATE FINISHED: 10-15-90

WELL MATERIALS (TYPE AND LENGTH OR QUANTITY):

SURFACE CASING: None

CASING: 7.58' x 2-Inch SCH 40 PVC

SCREEN: 10' x 0.01" Slot x 2-Inch SCH 40 PVC

SAND: Fine Filter Sand

SEAL: Bentonite Pellets

GROUT MIX: Neat Cement

PROTECTIVE COVER: Flush Mount

LOCK NUMBER: Master No. 0536

DEVELOPMENT:

METHOD: Bailing and Surging

DURATION: 3 Hours/10 Gallons

DATE: 10-18-90

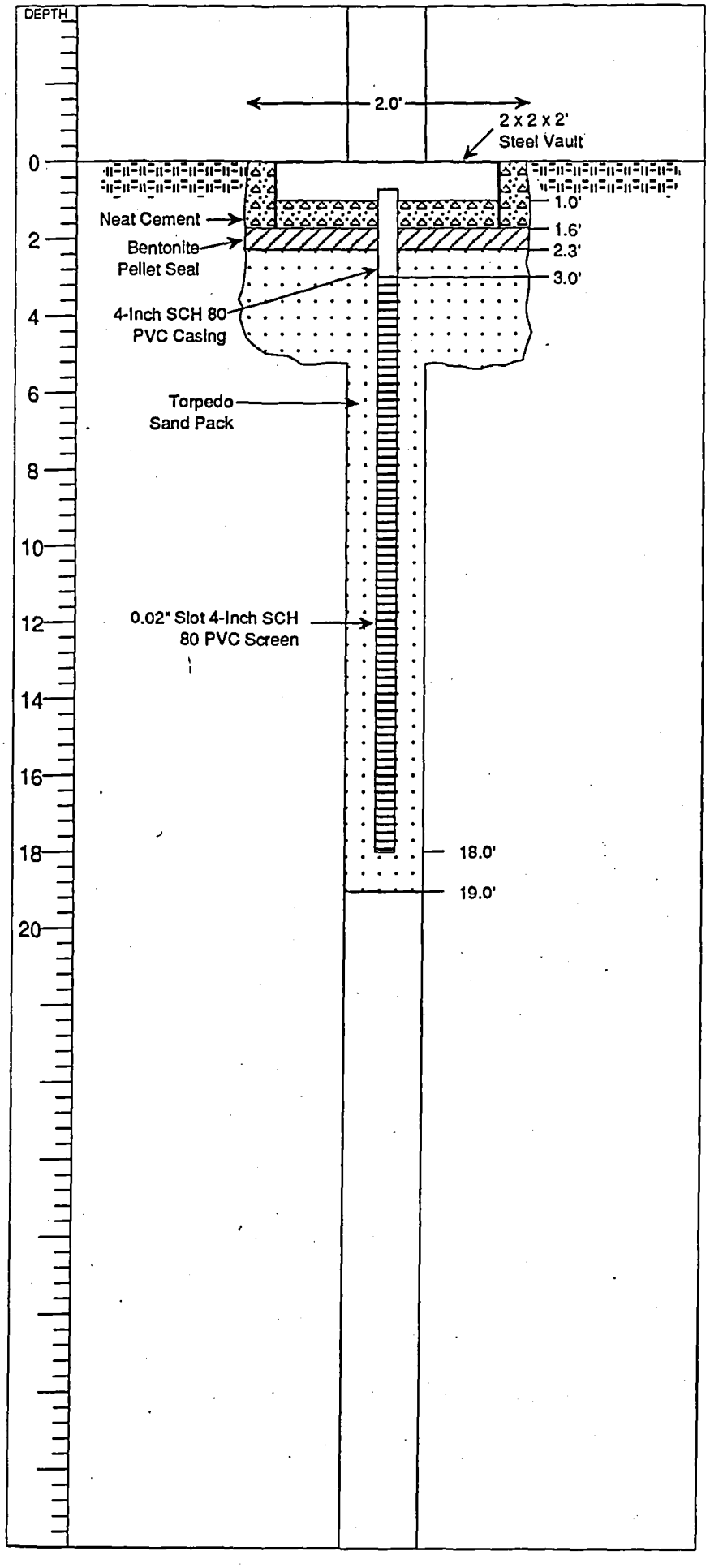
WATER CLARITY: Turbid/Silty

WATER SAMPLED FOR: BTEX and TPH

COMMENTS:

COMPILED BY: S. Roche

DATE: 12-10-90



Monitor Well Drilling Report

PROJECT NO. SAT30954.A0.30

WELL: MW-7

LOCATION: In Front of Animal House at Previously Removed UST Site

COUNTY: McDowell STATE: N.C.

GROUND ELEVATION: 1477.80' (msl)

TOP OF CASING ELEVATION: 1477.02' (msl)

BOREHOLE DIAMETER: 10-Inches

BOREHOLE DEPTH: 19-Feet

STATIC WATER LEVEL: 3.09-Feet Below TOC

DATE: 10-25-90

CONSTRUCTION: Hollow Stem Auger

DRILLER: Westinghouse Environmental and Geotechnical Services Inc.

DATE FINISHED: 10-16-90

WELL MATERIALS (TYPE AND LENGTH OR QUANTITY):

SURFACE CASING: None

CASING: 2.22' x 4-Inch SCH 40 PVC

SCREEN: 15' x 0.02" Slot x 4-Inch SCH 40 PVC

SAND: Torpedo Sand

SEAL: Bentonite Pellet

GROUT MIX: Neat Cement

PROTECTIVE COVER: 2' x 2' Flush Vault

LOCK NUMBER: Special Lock for Vault

DEVELOPMENT:

METHOD: Foot Pump—3/4" Tubing

DURATION: 2 1/2 Hours/105 Gallons

DATE: 10-18-90

WATER CLARITY: Turbid/Silty

WATER SAMPLED FOR: BTEX and TPH

COMMENTS:

COMPILED BY: S. Roche

DATE: 12-11-90

Appendix C

CH2M HILL

CH2M HILL

Engineers
Planners
Economists
Scientists

November 15, 1990

SAT30954.A0.20

List

List f

List

Samp: (

PURGI BI
Ar

Mr. Sean Roche
CH2M HILL/ATL
229 Peachtree Street, N.E.
Suite 300
Atlanta, GA 30303-1602

RE: Analytical Data for Baxter Healthcare Corp., Laboratory No. 17

Dear Mr. Roche:

On October 26, 1990, the CH2M Hill Montgomery Laboratory received e samples with a request for analysis of selected organic and inorgan parameters.

The analytical results and associated quality control data are encl No unusual difficulties were encountered during the analysis of the

The Purgeable Aromatics analysis was performed at our Gainesville, laboratory. A copy of their report is enclosed.

INOR N:
Ai

If you should have any questions concerning the data, please inquir

Sincerely,

Wanda L. Hall

for Craig Vinson
Laboratory Manager

Enclosures

cc: Mr. Robin Futch/ATL

Copy

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ANALYTICAL METHODOLOGY

Organic Analysis

llutants: Water, soil and waste samples are analyzed in accordance ı procedures described in Methods 608, 624, and 625, EPA-600/4-82-057); Methods 8080, 8240, and 8270, Test Methods for Evaluating Solid , 1986, SW-846, Third Edition; and methods outlined in the USEPA :ract Laboratory Program Statement of Work for Organics Analysis, ıary, 1988.

ıalysis (Safe Drinking Water Act): Water samples are analyzed in ›rdance with procedures described in Method 524.2, Federal Register R 46902), November 13, 1985.

ıd Phenoxyacid Herbicides: Samples are analyzed with procedures ıibed in Method 8150, Test Methods for Evaluating Solid Waste, 1986, 6, Third Edition.

ıphate Pesticides: Samples are analyzed in accordance with dures described in Methods 614 and 622, EPA-600/4-79-019 (1979) and thod 8140, Test Methods for Evaluating Solid Waste, 1986, SW-846, :d Edition.

ysis by GC: Samples are analyzed in accordance with procedures .ined in Method 604, Federal Register, 40 CFR, Part 136 y 1, 1987) and in Method 8040, Test Methods for Evaluating Solid , 1986, SW-846, Third Edition.

ır Aromatic Hydrocarbons (GC analysis): Samples are analyzed with dures described in Method 610, Federal Register, 40 CFR, Part 136 1, 1987) and in Method 8100, Test Methods for Evaluating Solid .e, 1986, SW-846, Third Edition.

ɔromide : Water samples are analyzed in accordance with edures outlined in Method 504, Federal Register (50 FR 46902), mber 13, 1985.

anes: Water samples are analyzed with procedures described in .od 501.2, Federal Register, Vol. 44, No. 231, Part II, ber 29, 1979.

Quality
Analytical Laboratories

2567 Fairlane Drive, P.O. Box 230548,
Montgomery, Alabama 36116

205.271.1444

ANALYTICAL METHODOLOGY

Organic Analysis

Priority Pollutants: Water, soil and waste samples are analyzed in accordance with procedures described in Methods 608, 624, and 625, EPA-600/4-82-057 (1982); Methods 8080, 8240, and 8270, Test Methods for Evaluating Solid Waste, 1986, SW-846, Third Edition; and methods outlined in the USEPA Contract Laboratory Program Statement of Work for Organics Analysis, February, 1988.

Volatile Analysis (Safe Drinking Water Act): Water samples are analyzed in accordance with procedures described in Method 524.2, Federal Register (50 FR 46902), November 13, 1985.

Chlorinated Phenoxyacid Herbicides: Samples are analyzed with procedures described in Method 8150, Test Methods for Evaluating Solid Waste, 1986, SW-846, Third Edition.

Organophosphate Pesticides: Samples are analyzed in accordance with procedures described in Methods 614 and 622, EPA-600/4-79-019 (1979) and in Method 8140, Test Methods for Evaluating Solid Waste, 1986, SW-846, Third Edition.

Phenol Analysis by GC: Samples are analyzed in accordance with procedures outlined in Method 604, Federal Register, 40 CFR, Part 136 (July 1, 1987) and in Method 8040, Test Methods for Evaluating Solid Waste, 1986, SW-846, Third Edition.

Polynuclear Aromatic Hydrocarbons (GC analysis): Samples are analyzed with procedures described in Method 610, Federal Register, 40 CFR, Part 136 (July 1, 1987) and in Method 8100, Test Methods for Evaluating Solid Waste, 1986, SW-846, Third Edition.

Ethylene Dibromide : Water samples are analyzed in accordance with procedures outlined in Method 504, Federal Register (50 FR 46902), November 13, 1985.

Trihalomethanes: Water samples are analyzed with procedures described in Method 501.2, Federal Register, Vol. 44, No. 231, Part II, November 29, 1979.

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EPA - DEFINED QUALIFIERS

ORGANICS

Definitions for the EPA-defined qualifiers:

U -- Indicates the compound was analyzed for but not detected. The number adjacent to the "U" qualifier indicates the quantitation limit for that compound. The detection limit can vary from sample to sample depending on dilution factors or percent moisture adjustment when indicated.

J -- Indicates an estimated value. This flag is used when the mass spectral data indicates the presence of a compound below the stated quantitation limit. The "J" qualifier is not used with pesticide results.

C -- This flag applies to pesticide results only. The "C" flag indicates the presence of this compound has been confirmed by GC/MS analysis.

B -- This flag is used when the analyte is found in the associated blank as well as the sample. This notation indicates possible blank contamination and suggests the data user evaluate these compounds and their amounts carefully.

E -- This flag applies to GC/MS only. The "E" qualifier indicates a compound may be above or below the linear range of the instrument. If the particular compound level is deemed above the linear calibration range, then the sample should be reanalyzed at an appropriate dilution. Therefore, the "E" qualified amount is an estimated concentration. The results for the dilution will be reported on a separate Form I and will be flagged with a "D" if the dilution brings the concentration within proper calibration.

D -- This flag identifies compounds which have been run at a dilution to bring the concentration of that compound within the linear range of the instrument. "D" qualifiers are only used for samples that have been run initially with results above acceptable ranges. For secondary dilutions the "DL" suffix is appended to the sample number on the Form I.

A -- Indicates the Tentatively Identified Compound (TIC) is a suspected aldol-condensation product.

X -- Indicates the compound concentration has been manually modified or the EPA qualifier has been manually modified or added.

JX -- The compound was detected and quantitated below the Contract Required Quantitation Limit.

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CLIENT SAMPLE ID QUALIFIERS

LEVEL 1

The qualifiers that GC/MS uses with the client sample ID are defined below:

DL -- Dilution Run

R -- Rerun (may be followed by a digit to indicate multiple reruns)

RD -- Diluted Rerun

RX -- Re-extraction Analysis

MS -- Matrix Spike (may be followed by a digit to indicate multiple matrix spikes within a sample set)

MSD -- Matrix Spike Duplicate (may be followed by a digit to indicate multiple matrix spike duplicates within a sample set)

QC_BLANK -- Method Blank (may be followed by an **S** for soils run at a low level, **W** for waters, or **SM** for soils run at a medium level) (letters may be followed by a digit to indicate multiple blanks of that type; if there are no letters the digit indicates multiple blanks).

These qualifiers allow GC/MS to have unique client sample ID's so that the client can get more accurate information from the data reported.

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Scientists

TABLE 1

SAMPLE CROSS-REFERENCE SUMMARY

CH2M HILL Laboratory No. 17102

CH2M HILL Sample No.	Sample Description			
17102001	SAMPLE MW-03	10/25/90	1310	GRAB
17102002	SAMPLE MW-04	10/25/90	1409	GRAB
17102003	SAMPLE MW-05	10/25/90	1210	GRAB
17102004	SAMPLE MW-06	10/25/90	1050	GRAB
17102005	SAMPLE MW-07	10/25/90	1513	GRAB
17102006	SAMPLE BDW-1	10/25/90		GRAB
17102007	SAMPLE RB-1	10/25/90	1540	GRAB
17102008	SAMPLE TRAVEL BLANK			

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CH2M HILL

REPORT OF ANALYTICAL RESULTS

Date: 11/15/90

Client: CH2M HILL/ATL
229 PEACHTREE STREET, N.E.,
SUITE 300
ATLANTA, GA 30303-1602
Atten: MR. SEAN ROCHE

Project Number: SAT30954.A0.20
BAXTER HEALTHCARE CORP
Laboratory Number: 17102
Date Received: 10/26/90

Sample Description: MW-03 1310 GRAB GROUND WATER
Laboratory Sample Number: 17102001 Date Collected: 10/25/90 Matrix: WATER

Analytical Parameter	Method	Det Limit	Result	Units	Ana Date
tert-Butyl methyl ether	EPA602	50	<50	ug/L	10/31/90
Benzene	EPA602	50	<50	ug/L	10/31/90
Toluene	EPA602	50	<50	ug/L	10/31/90
Chlorobenzene	EPA602	50	<50	ug/L	10/31/90
Ethylbenzene	EPA602	50	<50	ug/L	10/31/90
Total Xylenes	EPA602	50	<50	ug/L	10/31/90
1,3-Dichlorobenzene	EPA602	50	<50	ug/L	10/31/90
1,4-Dichlorobenzene	EPA602	50	<50	ug/L	10/31/90
1,2-Dichlorobenzene	EPA602	50	<50	ug/L	10/31/90
a,a,a-Trifluorotoluene - SS	EPA602	----	96	%rec	10/31/90
Fluorobenzene - SS	EPA602	----	NR	%rec	10/31/90

Results for non-aqueous matrices are based on dry sample weight unless noted otherwise.

COMMENT: NR = NOT REPORTED.

Reviewed by: Jus

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000001

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REPORT OF ANALYTICAL RESULTS

Client: CH2M HILL/ATL
229 PEACHTREE STREET, N.E.,
SUITE 300
ATLANTA, GA 30303-1602
Atten: MR. SEAN ROCHE

Project Number: SAT30954.A0.20
BAXTER HEALTHCARE CORP
Laboratory Number: 17102
Date Received: 10/26/90

Sample Description: MW-04 1409 GRAB
Laboratory Sample Number: 17102002 Date Collected: 10/25/90 Matrix: WATER

Analytical Parameter	Method	Det Limit	Result	Units	Ana Date
tert-Butyl methyl ether	EPA602	1.0	<1.0	ug/L	10/31/90
Benzene	EPA602	1.0	<1.0	ug/L	10/31/90
Toluene	EPA602	1.0	<1.0	ug/L	10/31/90
Chlorobenzene	EPA602	1.0	<1.0	ug/L	10/31/90
Ethylbenzene	EPA602	1.0	<1.0	ug/L	10/31/90
Total Xylenes	EPA602	1.0	<1.0	ug/L	10/31/90
1,3-Dichlorobenzene	EPA602	1.0	<1.0	ug/L	10/31/90
1,4-Dichlorobenzene	EPA602	1.0	<1.0	ug/L	10/31/90
1,2-Dichlorobenzene	EPA602	1.0	<1.0	ug/L	10/31/90
a,a,a-Trifluorotoluene - SS	EPA602	----	111	%rec	10/31/90
Fluorobenzene - SS	EPA602	----	NR	%rec	10/31/90

Results for non-aqueous matrices are based on dry sample weight unless noted otherwise.

COMMENT: NR = NOT REPORTED.

Reviewed by: JWS

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REPORT OF ANALYTICAL RESULTS

Client: CH2M HILL/ATL
229 PEACHTREE STREET, N.E.,
SUITE 300
ATLANTA, GA 30303-1602
Atten: MR. SEAN ROCHE

Project Number: SAT30954.A0.20
BAXTER HEALTHCARE CORP
Laboratory Number: 17102
Date Received: 10/26/90

Sample Description: MW-05 1210 GRAB
Laboratory Sample Number: 17102003 Date Collected: 10/25/90 Matrix: WATER

Analytical Parameter	Method	Det Limit	Result	Units	Ana Date
tert-Butyl methyl ether	EPA602	1.0	<1.0	ug/L	10/31/90
Benzene	EPA602	1.0	<1.0	ug/L	10/31/90
Toluene	EPA602	1.0	<1.0	ug/L	10/31/90
Chlorobenzene	EPA602	1.0	<1.0	ug/L	10/31/90
Ethylbenzene	EPA602	1.0	<1.0	ug/L	10/31/90
Total Xylenes	EPA602	1.0	<1.0	ug/L	10/31/90
1,3-Dichlorobenzene	EPA602	1.0	<1.0	ug/L	10/31/90
1,4-Dichlorobenzene	EPA602	1.0	<1.0	ug/L	10/31/90
1,2-Dichlorobenzene	EPA602	1.0	<1.0	ug/L	10/31/90
a,a,a-Trifluorotoluene - SS	EPA602	----	88	%rec	10/31/90
Fluorobenzene - SS	EPA602	----	NR	%rec	10/31/90

Results for non-aqueous matrices are based on dry sample weight unless noted otherwise.

COMMENT: NR = NOT REPORTED.

Reviewed by: JWS

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000003

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REPORT OF ANALYTICAL RESULTS

Client: CH2M HILL/ATL
229 PEACHTREE STREET, N.E.,
SUITE 300
ATLANTA, GA 30303-1602
Atten: MR. SEAN ROCHE

Project Number: SAT30954.A0.20
BAXTER HEALTHCARE CORP
Laboratory Number: 17102
Date Received: 10/26/90

Sample Description: MW-06 1050 GRAB
Laboratory Sample Number: 17102004 Date Collected: 10/25/90 Matrix: WATER

Analytical Parameter	Method	Det Limit	Result	Units	Ana Date
tert-Butyl methyl ether	EPA602	1.0	<1.0	ug/L	10/31/90
Benzene	EPA602	1.0	<1.0	ug/L	10/31/90
Toluene	EPA602	1.0	<1.0	ug/L	10/31/90
Chlorobenzene	EPA602	1.0	<1.0	ug/L	10/31/90
Ethylbenzene	EPA602	1.0	<1.0	ug/L	10/31/90
Total Xylenes	EPA602	1.0	<1.0	ug/L	10/31/90
1,3-Dichlorobenzene	EPA602	1.0	<1.0	ug/L	10/31/90
1,4-Dichlorobenzene	EPA602	1.0	<1.0	ug/L	10/31/90
1,2-Dichlorobenzene	EPA602	1.0	<1.0	ug/L	10/31/90
a,a,a-Trifluorotoluene - SS	EPA602	----	116	%rec	10/31/90
Fluorobenzene - SS	EPA602	----	NR	%rec	10/31/90

Results for non-aqueous matrices are based on dry sample weight unless noted otherwise.

COMMENT: NR = NOT REPORTED.

Reviewed by: _____

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2567 Fairlane Drive, P.O. Box 230548, Montgomery, Alabama 36116
205.271.1444

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REPORT OF ANALYTICAL RESULTS

Client: CH2M HILL/ATL
229 PEACHTREE STREET, N.E.,
SUITE 300
ATLANTA, GA 30303-1602
Atten: MR. SEAN ROCHE

Project Number: SAT30954.A0.20
BAXTER HEALTHCARE CORP
Laboratory Number: 17102
Date Received: 10/26/90

Sample Description: MW-07 1513 GRAB
Laboratory Sample Number: 17102005 Date Collected: 10/25/90 Matrix: WATER

Analytical Parameter	Method	Det Limit	Result	Units	Ana Date
tert-Butyl methyl ether	EPA602	1.0	25	ug/L	11/01/90
Benzene	EPA602	1.0	<1.0	ug/L	11/01/90
Toluene	EPA602	1.0	<1.0	ug/L	11/01/90
Chlorobenzene	EPA602	1.0	<1.0	ug/L	11/01/90
Ethylbenzene	EPA602	1.0	<1.0	ug/L	11/01/90
Total Xylenes	EPA602	1.0	<1.0	ug/L	11/01/90
1,3-Dichlorobenzene	EPA602	1.0	<1.0	ug/L	11/01/90
1,4-Dichlorobenzene	EPA602	1.0	<1.0	ug/L	11/01/90
1,2-Dichlorobenzene	EPA602	1.0	<1.0	ug/L	11/01/90
a,a,a-Trifluorotoluene - SS	EPA602	----	100	%rec	11/01/90
Fluorobenzene - SS	EPA602	----	NR	%rec	11/01/90

Results for non-aqueous matrices are based on dry sample weight unless noted otherwise.

COMMENT: NR = NOT REPORTED.

Reviewed by: JMS

INRPRPT(v900202)

000005

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REPORT OF ANALYTICAL RESULTS

Client: CH2M HILL/ATL
229 PEACHTREE STREET, N.E.,
SUITE 300
ATLANTA, GA 30303-1602
Atten: MR. SEAN ROCHE

Project Number: SAT30954.A0.20
BAXTER HEALTHCARE CORP
Laboratory Number: 17102
Date Received: 10/26/90

Sample Description: BDW-1 GRAB
Laboratory Sample Number: 17102006 Date Collected: 10/25/90 Matrix: WATER

Analytical Parameter	Method	Det Limit	Result	Units	Ana Date
tert-Butyl methyl ether	EPA602	1.0	21	ug/L	11/01/90
Benzene	EPA602	1.0	<1.0	ug/L	11/01/90
Toluene	EPA602	1.0	<1.0	ug/L	11/01/90
Chlorobenzene	EPA602	1.0	<1.0	ug/L	11/01/90
Ethylbenzene	EPA602	1.0	<1.0	ug/L	11/01/90
Total Xylenes	EPA602	1.0	<1.0	ug/L	11/01/90
1,3-Dichlorobenzene	EPA602	1.0	<1.0	ug/L	11/01/90
1,4-Dichlorobenzene	EPA602	1.0	<1.0	ug/L	11/01/90
1,2-Dichlorobenzene	EPA602	1.0	<1.0	ug/L	11/01/90
a,a,a-Trifluorotoluene - SS	EPA602	----	100	%rec	11/01/90
Fluorobenzene - SS	EPA602	----	NR	%rec	11/01/90

Results for non-aqueous matrices are based on dry sample weight unless noted otherwise.

COMMENT: NR = NOT REPORTED.

Reviewed by: JMS

INRPRPT(v900202)

CH2M HILL Quality Analytical Laboratories 2567 Fairlane Drive, P.O. Box 230548, Montgomery, Alabama 36116 205.271.1444

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REPORT OF ANALYTICAL RESULTS

Client: CH2M HILL/ATL
229 PEACHTREE STREET, N.E.,
SUITE 300
ATLANTA, GA 30303-1602
Atten: MR. SEAN ROCHE

Project Number: SAT30954.A0.20
BAXTER HEALTHCARE CORP
Laboratory Number: 17102
Date Received: 10/26/90

Sample Description: RB-1 1540 GRAB
Laboratory Sample Number: 17102007 Date Collected: 10/25/90 Matrix: WATER

Analytical Parameter	Method	Det Limit	Result	Units	Ana Date
tert-Butyl methyl ether	EPA602	1.0	<1.0	ug/L	11/01/90
Benzene	EPA602	1.0	<1.0	ug/L	11/01/90
Toluene	EPA602	1.0	<1.0	ug/L	11/01/90
Chlorobenzene	EPA602	1.0	<1.0	ug/L	11/01/90
Ethylbenzene	EPA602	1.0	<1.0	ug/L	11/01/90
Total Xylenes	EPA602	1.0	<1.0	ug/L	11/01/90
1,3-Dichlorobenzene	EPA602	1.0	<1.0	ug/L	11/01/90
1,4-Dichlorobenzene	EPA602	1.0	<1.0	ug/L	11/01/90
1,2-Dichlorobenzene	EPA602	1.0	<1.0	ug/L	11/01/90
a,a,a-Trifluorotoluene - SS	EPA602	----	99	%rec	11/01/90
Fluorobenzene - SS	EPA602	----	NR	%rec	11/01/90

Results for non-aqueous matrices are based on dry sample weight unless noted otherwise.

COMMENT: NR = NOT REPORTED.

Reviewed by: JWS

INRPRPT(v900202)

CH2M HILL Quality Analytical Laboratories 2567 Fairlane Drive, P.O. Box 230548, Montgomery, Alabama 36116 205.271.1444

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REPORT OF ANALYTICAL RESULTS

Client: CH2M HILL/ATL
229 PEACHTREE STREET, N.E.,
SUITE 300
ATLANTA, GA 30303-1602
Atten: MR. SEAN ROCHE

Project Number: SAT30954.A0.20
BAXTER HEALTHCARE CORP
Laboratory Number: 17102
Date Received: 10/26/90

Sample Description: TRAVEL BLANK
Laboratory Sample Number: 17102008 Date Collected: 10/25/90 Matrix: WATER

Analytical Parameter	Method	Det Limit	Result	Units	Ana Date
tert-Butyl methyl ether	EPA602	1.0	<1.0	ug/L	10/30/90
Benzene	EPA602	1.0	<1.0	ug/L	10/30/90
Toluene	EPA602	1.0	<1.0	ug/L	10/30/90
Chlorobenzene	EPA602	1.0	<1.0	ug/L	10/30/90
Ethylbenzene	EPA602	1.0	<1.0	ug/L	10/30/90
Total Xylenes	EPA602	1.0	<1.0	ug/L	10/30/90
1,3-Dichlorobenzene	EPA602	1.0	<1.0	ug/L	10/30/90
1,4-Dichlorobenzene	EPA602	1.0	<1.0	ug/L	10/30/90
1,2-Dichlorobenzene	EPA602	1.0	<1.0	ug/L	10/30/90
a,a,a-Trifluorotoluene - SS	EPA602	----	91	%rec	10/30/90
Fluorobenzene - SS	EPA602	----	NR	%rec	10/30/90

Results for non-aqueous matrices are based on dry sample weight unless noted otherwise.

COMMENT: NR = NOT REPORTED.

Reviewed by: _____

INRPRPT(v900202)

CH2M HILL Quality Analytical Laboratories 2567 Fairlane Drive, P.O. Box 230548, Montgomery, Alabama 36116 205.271.1444

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REPORT OF ANALYTICAL RESULTS

Client: CH2M HILL/ATL
229 PEACHTREE STREET, N.E.,
SUITE 300
ATLANTA, GA 30303-1602
Atten: MR. SEAN ROCHE

Project Number: SAT30954.A0.20
BAXTER HEALTHCARE CORP
Laboratory Number: 17102
Date Received: 10/26/90

Sample Description: METHOD BLANK
Laboratory Sample Number: 17102ZW1 Date Collected: 10/26/90 Matrix: WATER BLANK

Analytical Parameter	Method	Det Limit	Result	Units	Ana Date
tert-Butyl methyl ether	EPA602	1.0	<1.0	ug/L	10/30/90
Benzene	EPA602	1.0	<1.0	ug/L	10/30/90
Toluene	EPA602	1.0	<1.0	ug/L	10/30/90
Chlorobenzene	EPA602	1.0	<1.0	ug/L	10/30/90
Ethylbenzene	EPA602	1.0	<1.0	ug/L	10/30/90
Total Xylenes	EPA602	1.0	<1.0	ug/L	10/30/90
1,3-Dichlorobenzene	EPA602	1.0	<1.0	ug/L	10/30/90
1,4-Dichlorobenzene	EPA602	1.0	<1.0	ug/L	10/30/90
1,2-Dichlorobenzene	EPA602	1.0	<1.0	ug/L	10/30/90
a,a,a-Trifluorotoluene - SS	EPA602	----	89	%rec	10/30/90
Fluorobenzene - SS	EPA602	----	NR	%rec	10/30/90

Results for non-aqueous matrices are based on dry sample weight unless noted otherwise.

COMMENT: NR = NOT REPORTED.

Reviewed by: JMS

INRPRPT(v900202)

CH2M HILL Quality Analytical Laboratories 2567 Fairlane Drive, P.O. Box 230548, Montgomery, Alabama 36116 205.271.1444

Engineers
Planners
CH2M HILL Economists
Scientists

REPORT OF ANALYTICAL RESULTS

Client: CH2M HILL/ATL
229 PEACHTREE STREET, N.E.,
SUITE 300
ATLANTA, GA 30303-1602
Atten: MR. SEAN ROCHE

Project Number: SAT30954.A0.20
BAXTER HEALTHCARE CORP
Laboratory Number: 17102
Date Received: 10/26/90

Sample Description: METHOD BLANK 2
Laboratory Sample Number: 17102ZW2 Date Collected: 10/26/90 Matrix: WATER BLANK

Analytical Parameter	Method	Det Limit	Result	Units	Ana Date
tert-Butyl methyl ether	EPA602	1.0	<1.0	ug/L	11/01/90
Benzene	EPA602	1.0	<1.0	ug/L	11/01/90
Toluene	EPA602	1.0	<1.0	ug/L	11/01/90
Chlorobenzene	EPA602	1.0	<1.0	ug/L	11/01/90
Ethylbenzene	EPA602	1.0	<1.0	ug/L	11/01/90
Total Xylenes	EPA602	1.0	<1.0	ug/L	11/01/90
1,3-Dichlorobenzene	EPA602	1.0	<1.0	ug/L	11/01/90
1,4-Dichlorobenzene	EPA602	1.0	<1.0	ug/L	11/01/90
1,2-Dichlorobenzene	EPA602	1.0	<1.0	ug/L	11/01/90
a,a,a-Trifluorotoluene - SS	EPA602	----	99	%rec	11/01/90
Fluorobenzene - SS	EPA602	----	NR	%rec	11/01/90

Results for non-aqueous matrices are based on dry sample weight unless noted otherwise.

COMMENT: NR = NOT REPORTED.

Reviewed by: JMS

INRPRPT(v900202)

000010

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REPORT OF ANALYTICAL RESULTS

Date: 11/09/90

Client: CH2M HILL/ATL
229 PEACHTREE STREET, N.E.,
SUITE 300
ATLANTA, GA 30303-1602
Atten: MR. SEAN ROCHE

Project Number: SAT30954.A0.20
BAXTER HEALTHCARE CORP
Laboratory Number: 17102
Date Received: 10/26/90

Sample Description: MW-03 1310 GRAB GROUND WATER
Laboratory Sample Number: 17102001 Date Collected: 10/25/90 Matrix: WATER

Analytical Parameter	Method	Det Limit	Result	Units	Ana Date
Total Petroleum Hydrocarbons	EPA418.1	0.06	1.24	mg/L	11/02/90

Results for non-aqueous matrices are based on dry sample weight unless noted otherwise.

Reviewed by: _____

INRPRPT(v900202)

000011

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REPORT OF ANALYTICAL RESULTS

Client: CH2M HILL/ATL
229 PEACHTREE STREET, N.E.,
SUITE 300
ATLANTA, GA 30303-1602
Atten: MR. SEAN ROCHE

Project Number: SAT30954.A0.20
BAXTER HEALTHCARE CORP
Laboratory Number: 17102
Date Received: 10/26/90

Sample Description: MW-04 1409 GRAB
Laboratory Sample Number: 17102002 Date Collected: 10/25/90 Matrix: WATER

Analytical Parameter	Method	Det Limit	Result	Units	Ana Date
Total Petroleum Hydrocarbons	EPA418.1	0.06	0.25	mg/L	11/02/90

Results for non-aqueous matrices are based on dry sample weight unless noted otherwise.

Reviewed by: _____

INRPRPT(v900202)

CH2M HILL
Montgomery Environmental Laboratory
2567 Fairlane Drive, P.O. Box 230548, Montgomery, Alabama 36116
205.271.1444

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REPORT OF ANALYTICAL RESULTS

Client: CH2M HILL/ATL
229 PEACHTREE STREET, N.E.,
SUITE 300
ATLANTA, GA 30303-1602
Atten: MR. SEAN ROCHE

Project Number: SAT30954.A0.20
BAXTER HEALTHCARE CORP
Laboratory Number: 17102
Date Received: 10/26/90

Sample Description: MW-05 1210 GRAB
Laboratory Sample Number: 17102003 Date Collected: 10/25/90 Matrix: WATER

Analytical Parameter	Method	Det Limit	Result	Units	Ana Date
Total Petroleum Hydrocarbons	EPA418.1	0.06	0.07	mg/L	11/02/90

Results for non-aqueous matrices are based on dry sample weight unless noted otherwise.

Reviewed by: _____

INRPRPT(v900202)

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REPORT OF ANALYTICAL RESULTS

Client: CH2M HILL/ATL
229 PEACHTREE STREET, N.E.,
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Atten: MR. SEAN ROCHE

Project Number: SAT30954.A0.20
BAXTER HEALTHCARE CORP
Laboratory Number: 17102
Date Received: 10/26/90

Sample Description: MW-06 1050 GRAB
Laboratory Sample Number: 17102004 Date Collected: 10/25/90 Matrix: WATER

Analytical Parameter	Method	Det Limit	Result	Units	Ana Date
Total Petroleum Hydrocarbons	EPA418.1	0.06	0.14	mg/L	11/02/90

Results for non-aqueous matrices are based on dry sample weight unless noted otherwise.

Reviewed by: _____

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REPORT OF ANALYTICAL RESULTS

Client: CH2M HILL/ATL
229 PEACHTREE STREET, N.E.,
SUITE 300
ATLANTA, GA 30303-1602
Atten: MR. SEAN ROCHE

Project Number: SAT30954.A0.20
BAXTER HEALTHCARE CORP
Laboratory Number: 17102
Date Received: 10/26/90

Sample Description: MW-07 1513 GRAB
Laboratory Sample Number: 17102005 Date Collected: 10/25/90 Matrix: WATER

Analytical Parameter	Method	Det Limit	Result	Units	Ana Date
Total Petroleum Hydrocarbons	EPA418.1	0.06	0.07	mg/L	11/02/90

Results for non-aqueous matrices are based on dry sample weight unless noted otherwise.

Reviewed by: _____

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REPORT OF ANALYTICAL RESULTS

Date: 11/09/90

Client: CH2M HILL/ATL
229 PEACHTREE STREET, N.E.,
SUITE 300
ATLANTA, GA 30303-1602
Atten: MR. SEAN ROCHE

Project Number: SAT30954.A0.20
BAXTER HEALTHCARE CORP
Laboratory Number: 17102
Date Received: 10/26/90

Sample Description: BDW-1 GRAB
Laboratory Sample Number: 17102006 Date Collected: 10/25/90 Matrix: WATER

Analytical Parameter	Method	Det Limit	Result	Units	Ana Date
Total Petroleum Hydrocarbons	EPA418.1	0.06	0.07	mg/L	11/02/90

Results for non-aqueous matrices are based on dry sample weight unless noted otherwise.

Reviewed by: _____

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REPORT OF ANALYTICAL RESULTS

Client: CH2M HILL/ATL
229 PEACHTREE STREET, N.E.,
SUITE 300
ATLANTA, GA 30303-1602
Atten: MR. SEAN ROCHE

Project Number: SAT30954.A0.20
BAXTER HEALTHCARE CORP
Laboratory Number: 17102
Date Received: 10/26/90

Sample Description: RB-1 1540 GRAB
Laboratory Sample Number: 17102007 Date Collected: 10/25/90 Matrix: WATER

Analytical Parameter	Method	Det Limit	Result	Units	Ana Date
Total Petroleum Hydrocarbons	EPA418.1	0.06	<0.06	mg/L	11/02/90

Results for non-aqueous matrices are based on dry sample weight unless noted otherwise.

Reviewed by: _____

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000017

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REPORT OF ANALYTICAL RESULTS

Client: CH2M HILL/ATL
229 PEACHTREE STREET, N.E.,
SUITE 300
ATLANTA, GA 30303-1602
Atten: MR. SEAN ROCHE

Project Number: SAT30954.A0.20
BAXTER HEALTHCARE CORP
Laboratory Number: 17102
Date Received: 10/26/90

Sample Description: METHOD BLANK
Laboratory Sample Number: 17102ZW1 Date Collected: 10/26/90 Matrix: WATER BLANK

Analytical Parameter	Method	Det Limit	Result	Units	Ana Date
Total Petroleum Hydrocarbons	EPA418.1	0.05	<0.05	mg/L	11/02/90

Results for non-aqueous matrices are based on dry sample weight unless noted otherwise.

Reviewed by: _____

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Client: BAXTER HEALTHCARE CORP./NORTH COVE
Attention: SEAN ROCHE
Address: CH2M HILL ATLANTA OFFICE

Sample Number: 86505-12
Date Received: 10/29/90

Dear Client:

The Gainesville Organics Laboratory received your samples with a request for analysis of selected parameters.

The analytical results are enclosed. No unusual difficulties were encountered in the analyses.

If you should have any questions concerning the results please contact us. Thank you.

Sincerely,

Tom Emenhiser
Client Services

PLEASE ROUTE: 11/91
ER 11/14 LAB RECEPTIONIST
DIVISION MGR.
DATA ENTRY
DATA PACKAGE

000019

CH2M HILL
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CH2M Hill Organics Laboratory

Analytical Report

Report Contents

Sample Information

Definitions of Reporting Qualifiers

Description of Analytical Methods

Sample Quantitation Reports including Surrogate Recoveries

QA/QC Package Including:

- Initial Calibration (*)
- Continuing Calibration (Daily Standard) (*)
- Quantitation Reports for Organic-Free Water Blanks
- Matrix Spike/Matrix Spike Duplicate (*)
- Surrogate Control Charts (*)
- Chromatograms (*)
- Copy of Chain-of-Custody

(*) Information provided where appliciable or when requested.

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SAMPLE INFORMATION

Client: BAXTER HEALTHCARE CORP./NORTH COVE
Attention: SEAN ROCHE
Address: CH2M HILL ATLANTA OFFICE

Description: WATER SAMPLES
BAXTER-NORTH COVE
602 ANALYSIS
LMG #17102

Sample Number: 86505-12
Quantity: 8
Date Received: 10/29/90
Date Completed: 11/01/90
Date Reported: 11/08/90
Project Number: SAT 30954.A0.20
Number of Pages: 16

The information shown in this report is test data only and no interpretation of this data is intended or implied.

State of Alabama Certification No.: 40080

State of Florida Certification No.: 82112, E82124

Respectfully submitted,

Ward Dickens
Laboratory Manager

CH2M HILL
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Report of Analytical Data - Purgeable Aromatics

Client:	BAXTER HEALTHCARE CORP.	Laboratory:	GAINESVILLE	Date Sampled:	10/25/90
Project:	BAXTER - NORTH COVE	Lab Sample Id:	86505	Date Received:	10/29/90
Proj No:	SAT 30954.A0.20	% Moisture	0	Date Extracted:	N/A
Method:	602	Dilution Factor:	50	Date Analyzed:	10/31/90
Matrix:	WATER	Instrument ID:	GC#2	Analyst:	SS
Sampler:	SR & RF	Column:	J & W DB-1	Date Reported:	11/2/90

Client Sample ID/Description: MW-03 (LM #17102-1) (M,N)

CAS Number	Compound	Reporting Limit	Sample Result	Reporting Units
1634-04-4	tert-Butyl methyl ether	50	U	ug/L
71-43-2	Benzene	50	U	ug/L
108-88-3	Toluene	50	U	ug/L
108-90-7	Chlorobenzene	50	U	ug/L
100-41-4	Ethylbenzene	50	U	ug/L
N/A	Xylenes (Total)	50	U	ug/L
541-73-1	1,3-Dichlorobenzene	50	U	ug/L
106-46-7	1,4-Dichlorobenzene	50	U	ug/L
95-50-1	1,2-Dichlorobenzene	50	U	ug/L

98-08-8	a,a,a-Trifluorotoluene-SS	96	%rec

U = Compound analyzed for but not detected
SS = Surrogate Standard reported as percent recovery

Reviewed by: Charlie Jarman 11/8/90

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Report of Analytical Data - Purgeable Aromatics

Client:	BAXTER HEALTHCARE CORP.	Laboratory:	GAINESVILLE	Date Sampled:	10/25/90
Project:	BAXTER - NORTH COVE	Lab Sample Id:	86506	Date Received:	10/29/90
Proj No:	SAT 30954.A0.20	% Moisture	0.0	Date Extracted:	N/A
Method:	602	Dilution Factor:	1.0	Date Analyzed:	10/31/90
Matrix:	WATER	Instrument ID:	GC#1	Analyst:	SS
Sampler:	SR & RF	Column:	J & W DB-624	Date Reported:	11/1/90

Client Sample ID/Description: MW-04 (LM #17102-2)

CAS Number	Compound	Reporting Limit	Sample Result	Reporting Units
1634-04-4	tert-Butyl methyl ether	1.0	U	ug/L
71-43-2	Benzene	1.0	U	ug/L
108-88-3	Toluene	1.0	U	ug/L
108-90-7	Chlorobenzene	1.0	U	ug/L
100-41-4	Ethylbenzene	1.0	U	ug/L
N/A	Xylenes (Total)	1.0	U	ug/L
541-73-1	1,3-Dichlorobenzene	1.0	U	ug/L
106-46-7	1,4-Dichlorobenzene	1.0	U	ug/L
95-50-1	1,2-Dichlorobenzene	1.0	U	ug/L
98-08-8	a,a,a-Trifluorotoluene-SS		111	%rec

U = Compound analyzed for but not detected
SS = Surrogate Standard reported as percent recovery

Reviewed by: Jace Hargis 11/5/90

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Report of Analytical Data - Purgeable Aromatics

Client:	BAXTER HEALTHCARE CORP.	Laboratory:	GAINESVILLE	Date Sampled:	10/25/90
Project:	BAXTER - NORTH COVE	Lab Sample Id:	86507	Date Received:	10/29/90
Proj No:	SAT 30954.A0.20	% Moisture	0.0	Date Extracted:	N/A
Method:	602	Dilution Factor:	1.0	Date Analyzed:	10/31/90
Matrix:	WATER	Instrument ID:	GC#1	Analyst:	SS
Sampler:	SR & RF	Column:	J & W DB-624	Date Reported:	11/1/90

Client Sample ID/Description: MW-05 (LM #17102-3)

CAS Number	Compound	Reporting Limit	Sample Result	Reporting Units
1634-04-4	tert-Butyl methyl ether	1.0	U	ug/L
71-43-2	Benzene	1.0	U	ug/L
108-88-3	Toluene	1.0	U	ug/L
108-90-7	Chlorobenzene	1.0	U	ug/L
100-41-4	Ethylbenzene	1.0	U	ug/L
N/A	Xylenes (Total)	1.0	U	ug/L
541-73-1	1,3-Dichlorobenzene	1.0	U	ug/L
106-46-7	1,4-Dichlorobenzene	1.0	U	ug/L
95-50-1	1,2-Dichlorobenzene	1.0	U	ug/L

98-08-8	a,a,a-Trifluorotoluene-SS	88	%rec

U = Compound analyzed for but not detected
SS = Surrogate Standard reported as percent recovery

Reviewed by: Jace Hargis 11/5/90

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Report of Analytical Data - Purgeable Aromatics

Client:	BAXTER HEALTHCARE CORP.	Laboratory:	GAINESVILLE	Date Sampled:	10/25/90
Project:	BAXTER - NORTH COVE	Lab Sample Id:	86508	Date Received:	10/29/90
Proj No:	SAT 30954.A0.20	% Moisture	0.0	Date Extracted:	N/A
Method:	602	Dilution Factor:	1.0	Date Analyzed:	10/31/90
Matrix:	WATER	Instrument ID:	GC#1	Analyst:	SS
Sampler:	SR & RF	Column:	J & W DB-624	Date Reported:	11/1/90

Client Sample ID/Description: MW-06 (LM #17102-4)

CAS Number	Compound	Reporting Limit	Sample Result	Reporting Units
1634-04-4	tert-Butyl methyl ether	1.0	U	ug/L
71-43-2	Benzene	1.0	U	ug/L
108-88-3	Toluene	1.0	U	ug/L
108-90-7	Chlorobenzene	1.0	U	ug/L
100-41-4	Ethylbenzene	1.0	U	ug/L
N/A	Xylenes (Total)	1.0	U	ug/L
541-73-1	1,3-Dichlorobenzene	1.0	U	ug/L
106-46-7	1,4-Dichlorobenzene	1.0	U	ug/L
95-50-1	1,2-Dichlorobenzene	1.0	U	ug/L
98-08-8	a,a,a-Trifluorotoluene-SS		116	%rec

U = Compound analyzed for but not detected
SS = Surrogate Standard reported as percent recovery

Reviewed by: Jane Bargia 11/5/90

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Report of Analytical Data - Purgeable Aromatics

Client:	BAXTER HEALTHCARE CORP.	Laboratory:	GAINESVILLE	Date Sampled:	10/25/90
Project:	BAXTER - NORTH COVE	Lab Sample Id:	86509	Date Received:	10/29/90
Proj No:	SAT 30954.A0.20	% Moisture	0.0	Date Extracted:	N/A
Method:	602	Dilution Factor:	1.0	Date Analyzed:	11/1/90
Matrix:	WATER	Instrument ID:	GC#1	Analyst:	SS
Sampler:	SR & RF	Column:	J & W DB-624	Date Reported:	11/3/90

Client Sample ID/Description: MW-02 (LM #17102-5) (N)

CAS Number	Compound	Reporting Limit	Sample Result	Reporting Units
1634-04-4	tert-Butyl methyl ether	1.0	25	ug/L
71-43-2	Benzene	1.0	U	ug/L
108-88-3	Toluene	1.0	U	ug/L
108-90-7	Chlorobenzene	1.0	U	ug/L
100-41-4	Ethylbenzene	1.0	U	ug/L
N/A	Xylenes (Total)	1.0	U	ug/L
541-73-1	1,3-Dichlorobenzene	1.0	U	ug/L
106-46-7	1,4-Dichlorobenzene	1.0	U	ug/L
95-50-1	1,2-Dichlorobenzene	1.0	U	ug/L
98-08-8	a,a,a-Trifluorotoluene-SS		100	%rec

U = Compound analyzed for but not detected
SS = Surrogate Standard reported as percent recovery

Reviewed by: Jane Hargis 11/5/90

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Report of Analytical Data - Purgeable Aromatics

Client:	BAXTER HEALTHCARE CORP.	Laboratory:	GAINESVILLE	Date Sampled:	10/25/90
Project:	BAXTER - NORTH COVE	Lab Sample Id:	86510	Date Received:	10/29/90
Proj No:	SAT 30954.A0.20	% Moisture	0.0	Date Extracted:	N/A
Method:	602	Dilution Factor:	1.0	Date Analyzed:	11/1/90
Matrix:	WATER	Instrument ID:	GC#2	Analyst:	SS
Sampler:	SR & RF	Column:	J & W DB-1	Date Reported:	11/3/90

Client Sample ID/Description: BDW-1 (LM #17102-6) (N)

CAS Number	Compound	Reporting Limit	Sample Result	Reporting Units
1634-04-4	tert-Butyl methyl ether	1.0	21	ug/L
71-43-2	Benzene	1.0	U	ug/L
108-88-3	Toluene	1.0	U	ug/L
108-90-7	Chlorobenzene	1.0	U	ug/L
100-41-4	Ethylbenzene	1.0	U	ug/L
N/A	Xylenes (Total)	1.0	U	ug/L
541-73-1	1,3-Dichlorobenzene	1.0	U	ug/L
106-46-7	1,4-Dichlorobenzene	1.0	U	ug/L
95-50-1	1,2-Dichlorobenzene	1.0	U	ug/L
98-08-8	a,a,a-Trifluorotoluene-SS		100	%rec

U = Compound analyzed for but not detected
SS = Surrogate Standard reported as percent recovery

Reviewed by: Jane Stargis 11/5/90

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Report of Analytical Data - Purgeable Aromatics

Client:	BAXTER HEALTHCARE CORP.	Laboratory:	GAINESVILLE	Date Sampled:	10/25/90
Project:	BAXTER - NORTH COVE	Lab Sample Id:	86511	Date Received:	10/29/90
Proj No:	SAT 30954.A0.20	% Moisture	0.0	Date Extracted:	N/A
Method:	602	Dilution Factor:	1.0	Date Analyzed:	11/1/90
Matrix:	WATER	Instrument ID:	GC#2	Analyst:	SS
Sampler:	SR & RF	Column:	J & W DB-1	Date Reported:	11/3/90

Client Sample ID/Description: RB-1 (LM #17102-7)

CAS Number	Compound	Reporting Limit	Sample Result	Reporting Units
1634-04-4	tert-Butyl methyl ether	1.0	U	ug/L
71-43-2	Benzene	1.0	U	ug/L
108-88-3	Toluene	1.0	U	ug/L
108-90-7	Chlorobenzene	1.0	U	ug/L
100-41-4	Ethylbenzene	1.0	U	ug/L
N/A	Xylenes (Total)	1.0	U	ug/L
541-73-1	1,3-Dichlorobenzene	1.0	U	ug/L
106-46-7	1,4-Dichlorobenzene	1.0	U	ug/L
95-50-1	1,2-Dichlorobenzene	1.0	U	ug/L
98-08-8	a,a,a-Trifluorotoluene-SS		99	%rec

U = Compound analyzed for but not detected
SS = Surrogate Standard reported as percent recovery

Reviewed by: Jace Hargis 11/5/90

000028

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Report of Analytical Data - Purgeable Aromatics

Client:	BAXTER HEALTHCARE CORP.	Laboratory:	GAINESVILLE	Date Sampled:	10/25/90
Project:	BAXTER - NORTH COVE	Lab Sample Id:	86512	Date Received:	10/29/90
Proj No:	SAT 30954.A0.20	% Moisture	0.0	Date Extracted:	N/A
Method:	602	Dilution Factor:	1.0	Date Analyzed:	10/30/90
Matrix:	WATER	Instrument ID:	GC#1	Analyst:	SS
Sampler:	SR & RF	Column:	J & W DB-624	Date Reported:	11/1/90

Client Sample ID/Description: TRAVEL BLANK (LM #17102-8)

CAS Number	Compound	Reporting Limit	Sample Result	Reporting Units
1634-04-4	tert-Butyl methyl ether	1.0	U	ug/L
71-43-2	Benzene	1.0	U	ug/L
108-88-3	Toluene	1.0	U	ug/L
108-90-7	Chlorobenzene	1.0	U	ug/L
100-41-4	Ethylbenzene	1.0	U	ug/L
N/A	Xylenes (Total)	1.0	U	ug/L
541-73-1	1,3-Dichlorobenzene	1.0	U	ug/L
106-46-7	1,4-Dichlorobenzene	1.0	U	ug/L
95-50-1	1,2-Dichlorobenzene	1.0	U	ug/L
98-08-8	a,a,a-Trifluorotoluene-SS		91	%rec

U = Compound analyzed for but not detected
SS = Surrogate Standard reported as percent recovery

Reviewed by: Jane Hargis 11/5/90

000029

CH2M HILL
Gainesville
Environmental Laboratory
7201 N.W. 11th Place,
Gainesville, Florida 32605
904.331.2442
FAX 904.331.5320

Engineers
Planners
Economists
Scientists

Report of Analytical Data - Purgeable Aromatics

Client:	BAXTER HEALTHCARE CORP.	Laboratory:	GAINESVILLE	Date Sampled:	10/30/90
Project:	BAXTER - NORTH COVE	Lab Sample Id:	1VB1030A	Date Received:	N/A
Proj No:	SAT 30954.A0.20	% Moisture	0.0	Date Extracted:	N/A
Method:	602	Dilution Factor:	1.0	Date Analyzed:	10/30/90
Matrix:	WATER	Instrument ID:	GC#1	Analyst:	SS
Sampler:	N/A	Column:	J & W DB-624	Date Reported:	11/1/90

Client Sample ID/Description: OFW BLANK

CAS Number	Compound	Reporting Limit	Sample Result	Reporting Units
1634-04-4	tert-Butyl methyl ether	1.0	U	ug/L
71-43-2	Benzene	1.0	U	ug/L
108-88-3	Toluene	1.0	U	ug/L
108-90-7	Chlorobenzene	1.0	U	ug/L
100-41-4	Ethylbenzene	1.0	U	ug/L
N/A	Xylenes (Total)	1.0	U	ug/L
541-73-1	1,3-Dichlorobenzene	1.0	U	ug/L
106-46-7	1,4-Dichlorobenzene	1.0	U	ug/L
95-50-1	1,2-Dichlorobenzene	1.0	U	ug/L
98-08-8	a,a,a-Trifluorotoluene-SS		89	%rec

U = Compound analyzed for but not detected
SS = Surrogate Standard reported as percent recovery

Reviewed by: Jace Dargis 11/5/90

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Report of Analytical Data - Purgeable Aromatics

Client:	BAXTER HEALTHCARE CORP.	Laboratory:	GAINESVILLE	Date Sampled:	11/1/90
Project:	BAXTER - NORTH COVE	Lab Sample Id:	1VB1101A	Date Received:	N/A
Proj No:	SAT 30954.A0.20	% Moisture	0.0	Date Extracted:	N/A
Method:	602	Dilution Factor:	1.0	Date Analyzed:	11/1/90
Matrix:	WATER	Instrument ID:	GC#2	Analyst:	SS
Sampler:	N/A	Column:	J & W DB-1	Date Reported:	11/3/90

Client Sample ID/Description: OFW BLANK

CAS Number	Compound	Reporting Limit	Sample Result	Reporting Units
1634-04-4	tert-Butyl methyl ether	1.0	U	ug/L
71-43-2	Benzene	1.0	U	ug/L
108-88-3	Toluene	1.0	U	ug/L
108-90-7	Chlorobenzene	1.0	U	ug/L
100-41-4	Ethylbenzene	1.0	U	ug/L
N/A	Xylenes (Total)	1.0	U	ug/L
541-73-1	1,3-Dichlorobenzene	1.0	U	ug/L
106-46-7	1,4-Dichlorobenzene	1.0	U	ug/L
95-50-1	1,2-Dichlorobenzene	1.0	U	ug/L

98-08-8	a,a,a-Trifluorotoluene-SS	99	%rec

U = Compound analyzed for but not detected
SS = Surrogate Standard reported as percent recovery

Reviewed by: Jace Hargis 11/5/90

000031

CH2M HILL
Gainesville Environmental Laboratory
7201 N.W. 11th Place, Gainesville, Florida 32605
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CH2M HILL QUALITY ANALYTICS

CHAIN OF CUSTODY RECORD

TPH-D
TPH-X
GVE2 TO LGN

PROJECT NUMBER	PROJECT NAME
SAT 30954.A0.20	BAXTER-NORTH COVE

CLIENT NAME: BAXTER HEALTHCARE CORP

PROJECT MANAGER: Sean Roche/ATL

COPY TO: R. Futch/ATL

REQUESTED COMP. DATE: STANDARD TURNAROUND

SAMPLING REQUIREMENTS: SDWA ☐ NPDES ☐ RCRA ☐ OTHER ☑

CLIENT ADDRESS AND PHONE NUMBER:

ANALYSES REQUESTED: 418.1, 602

STA NO.	DATE	TIME	COMP	GRAB	SOIL	SAMPLE DESCRIPTIONS (12 CHARACTERS)	# OF CONTAINERS 418.1	602	LAB ID
MW-03	10-25-90	1310		X		groundwater	1	2	001
MW-04	10-25-90	1409		X			1	2	002
MW-05	10-25-90	1210		X			1	2	003
MW-06	10-25-90	1050		X			1	2	004
MW-07	10-25-90	1513		X			1	2	005
BDW-1	10-25-90			X			1	2	006
RB-1	10-25-90	1540		X			1	2	007
						TRAVEL BLANK		2	008
							7	16	
						Method Blank	✓	✓	ZW1

FOR LAB USE ONLY

LAB# ~~17002~~ 10/26/90

LAB# 17102

PROJECT NO. SAT 30954.A0.20

ACK ER 10/29/90 VERIFIED 10/29/90 JHS

QUOTE# BS 10/29

NO. OF SAMP PG 1 OF 1

REMARKS

ANALYSIS EPA602 ~~GVE2 to LGN~~

QC LEVEL 1 DATE DUE 11/14/90

REPORT TO E. BAMUCHAK/LMG

035 225 84 2501

LAB LGN ~~ANS~~

Bus

SAMPLED BY AND TITLE	DATE/TIME	RELINQUISHED BY	DATE/TIME
Sean Roche, Robin Futch	10-25-90 1050-1540	Sean Roche, Robin Futch	10-25-90 1630
RECEIVED BY:	DATE/TIME	RELINQUISHED BY:	DATE/TIME
RECEIVED BY:	DATE/TIME	RELINQUISHED BY: AMSileo to LGN	DATE/TIME 10/26/90 1000
RECEIVED BY LAB: Penelope Eleftheriadis	DATE/TIME 10-26-90 0855	SAMPLE SHIPPED VIA UPS BUS FED-EX HAND OTHER ____	AIR BILL# 6775280400

HAZWRAP/NEESA Y (N)

QC LEVEL 2 3

COC yes ICE yes

ANA REQ yes TEMP 0°

CUST SEAL yes Ph <2

SAMPLE COND. WATER

REMARKS

ENTERED INTO LIMS 10/26/90 COC REVIEWED 10/26/90

AAQ42030

REV 6/89 FORM 340

000032

REFERENCE 7

RECEIVED
AUG 07 1992
SUPERFUND SECTION

Technical Memorandum

Data Summary Report

for

Baxter Healthcare Corporation
North Cove Facility
Marion, North Carolina

Prepared by

CH2M HILL

June 1992

PREPARED FOR: Baxter Healthcare Corporation.

PREPARED BY: CH2M HILL

DATE: June 26, 1992

SUBJECT: Data Summary Report for the
Laboratory and Paint Solvent Disposal Site
Baxter North Cove Facility
Marion, North Carolina

PROJECT: ATL33279.A0.05

Contents

Introduction and Site Background
Field Sampling and Analysis
Analytical Results
Conclusions
References
Attachment 1—Soil Boring Log and Monitor Well Drilling Report
Attachment 2—Analytical Results

Introduction and Site Background

Baxter Healthcare Corporation (Baxter) manufactures intravenous solutions at its Parenterals Division North Cove Facility. The facility is located just east of the junction of U.S. Highway 221 and State Road No. 1573 along the Catawba River north of Marion, North Carolina (Figure 1).

CH2M HILL previously performed a groundwater investigation associated with the removal of a leaking underground storage tank (UST) at the Baxter North Cove Facility (CH2M HILL, 1991). As part of this previous investigation, four groundwater monitoring wells were installed (MW-4, MW-5, MW-6, and MW-7). Figure 2 shows the location of these wells and the general direction of groundwater flow based on water level measurements taken on October 25, 1990.

The purpose of this project was to collect additional data requested by the North Carolina Department of Environment, Health, and Natural Resources, Division of Solid Waste Management (NCDSWM) to be used in evaluating the listing status of an abandoned solvent disposal area at the North Cove Facility. From 1974 to 1977, laboratory

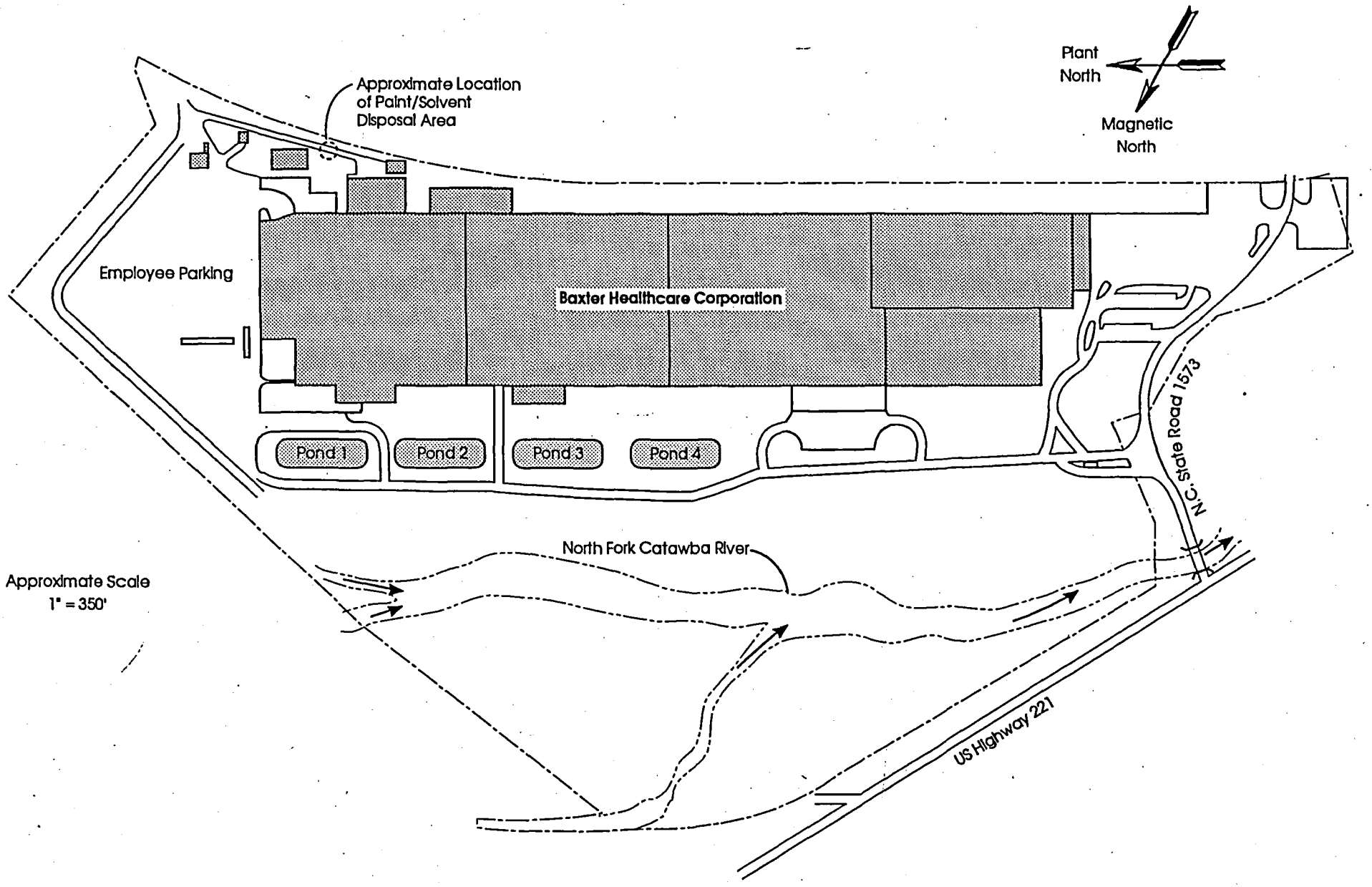


Figure 1: **Site Location Map**
Baxter Healthcare Corporation, North Cove Facility

ATL33279.A0.05 Revised 6/3/92 bsw

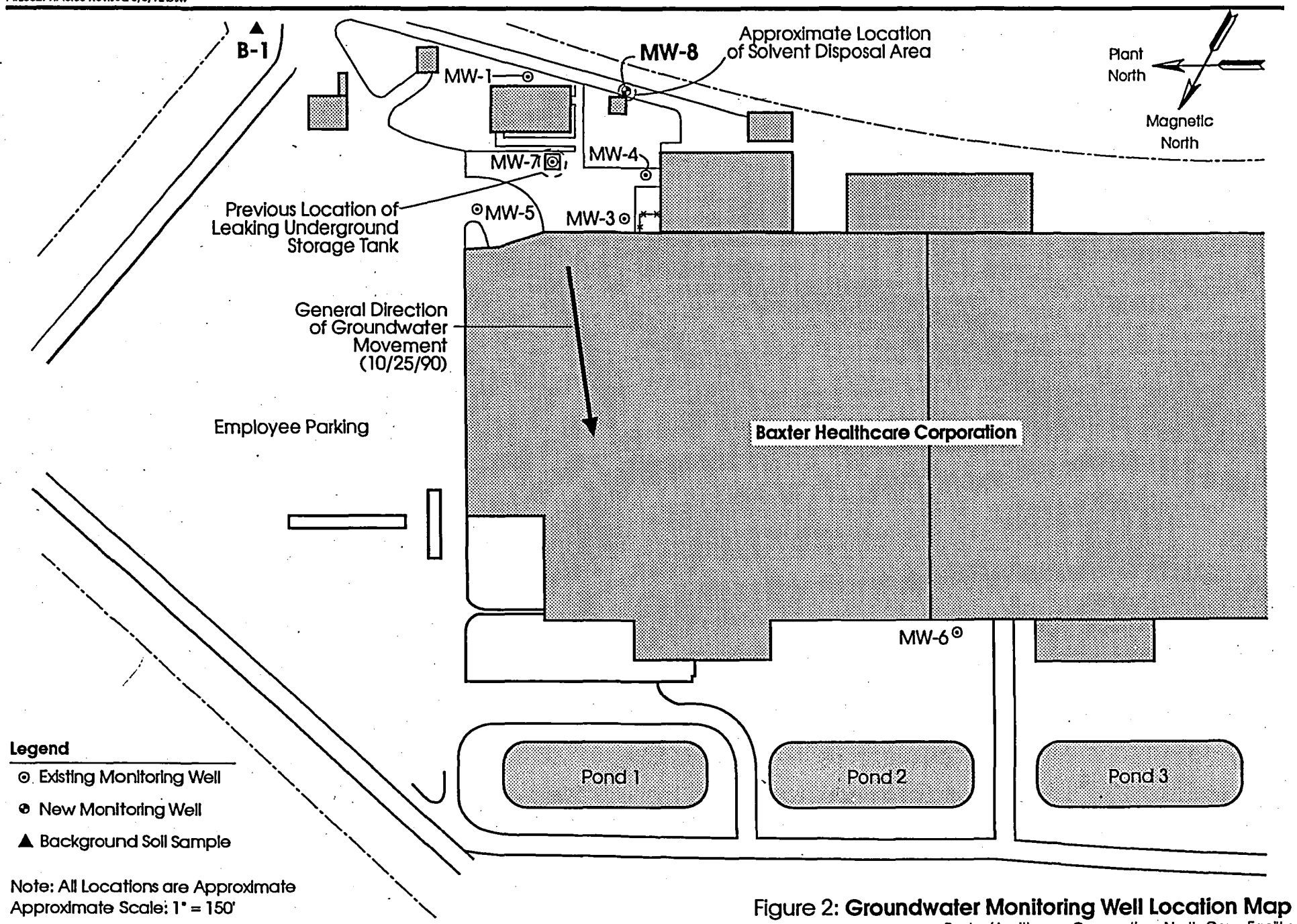


Figure 2: **Groundwater Monitoring Well Location Map**
Baxter Healthcare Corporation, North Cove Facility

CH2M HILL

and paint solvents were disposed of on a gravel road behind the project engineering area. This solvent disposal area is currently included on the North Carolina State Superfund list. Baxter has petitioned the State to delist this site. In its correspondence to Baxter dated November 15, 1991, NCDSWM requested the collection of additional analytical information prior to making a decision regarding the site listing status. CH2M HILL was retained by Baxter to collect and analyze samples of the soil and groundwater from the abandoned solvent disposal area.

Following a review of the analytical results from the soil and groundwater samples recently collected from the Baxter North Cove Facility and subsequent discussions with both NCDSWM and U.S. Environmental Protection Agency (EPA) Region IV Water Quality Standards personnel, it is the opinion of CH2M HILL that this site should be delisted.

This technical memorandum (TM) documents the soil sampling, well installation, and groundwater sampling performed at the Baxter North Cove Facility. In addition, field data, analytical results, and conclusions regarding the NCDSWM listing status are presented.

Field Sampling and Analysis

On February 24, 1992, a groundwater monitoring well (MW-8) was installed in the central portion of the abandoned solvent disposal area as requested by NCDSWM (Figure 2). The monitoring well was installed to a depth of 15 feet below ground surface, screened in the bottom 10 feet. Two subsurface soil samples were collected, prior to the well installation, using a split-spoon sampling device. One sample was collected from 0 to 2 feet and the other from 4 to 8 feet below ground surface. A soil boring log and a well completion report were completed in the field by the CH2M HILL representative and are included as Attachment 1.

The following day, the monitoring well was developed and sampled with a teflon bailer. Approximately 60 gallons (33 well volumes) were removed from MW-8 prior to sampling. A background soil sample (B-1) was also collected on February 25, 1992, at a depth interval from 6 to 8 inches below ground surface (see Figure 2). The background soil sample was located in an undeveloped portion of the site, outside the operations area, and upslope from the abandoned solvent disposal site. This background sample was collected for the purpose of establishing residual concentrations and to compare with soils collected from the disposal site.

Both the soil and groundwater samples were analyzed for volatile organic and semi-volatile organic compounds, priority pollutant metals, and cyanide as requested by NCDSWM. Well installation, sample collection, preservation, and handling techniques used in the field were performed in accordance with the Sampling and Analysis Plan (SAP) (CH2M HILL, 1992).

Following a review of the initial sampling results, MW-8 was resampled on April 23, 1992, and analyzed for chromium (total and dissolved), hexavalent chromium, and total suspended solids (TSS) to provide a better understanding of the physical nature of the chromium detected in the initial groundwater sample. The analytical results of both sampling events are summarized by media and compared with state and federal criteria in Tables 1 and 2. The complete laboratory data packages are included as Attachment 2.

Analytical Results

Volatiles, semivolatiles, and metals were detected in the soil; however, no soil concentrations exceeded existing Resource Conservation and Recovery Act (RCRA) Action Levels (see Table 1). The semivolatiles detected in the soils are probably attributable to the asphalt road surface which now covers the abandoned disposal area.

Volatiles and metals were detected in the groundwater from MW-8; however, no concentrations exceeded the current North Carolina Water Quality Standards (see Table 2). The methylene chloride detected is attributable to laboratory contamination, as it was detected at similar concentrations in both the rinsate and travel blanks.

The only exception noted was for total chromium (unfiltered). Total chromium (unfiltered) was detected at concentrations of 82 and 125 ug/l, respectively, during the initial and follow-up sampling events. The Maximum Contaminant Level (MCL) for chromium is currently 50 ug/l; however, EPA is raising the MCL to 100 ug/l effective July 31, 1992. The North Carolina Water Quality Standard for chromium is 50 ug/l for filtered samples. The filtered sample collected on April 23, 1992, had no detectable (>10 ug/l) levels of chromium. The TSS measured in the unfiltered groundwater from MW-8 was 3,810 mg/l. Hexavalent chromium was also below the detection limit (<40 ug/l) in groundwater analyzed from the follow-up sampling event.

Conclusions

Based on the samples analyzed, no soil or groundwater remediation is recommended. The groundwater, although quite turbid, contained no contaminants at levels that exceeded North Carolina Water Quality Standards. The chromium detected in the initial unfiltered sample from MW-8 was shown, by additional sampling, to be entirely attributable to suspended solids and not the result of leaching from the soils to the groundwater. Furthermore, no hexavalent chromium was detected, and trivalent chromium is inert, relatively insoluble, and strongly adsorbs to solid surfaces (e.g., soil particles) (EPA, 1989). The turbidity of the unfiltered groundwater from MW-8 is related to monitoring well construction and development techniques which differ from those used for water supply wells. As a result, the turbidity measured in the groundwater sample (3,810 mg/l) was an order of magnitude above that allowed for drinking water (500 mg/l). In addition, private water supply wells are typically screened at much greater depths than 15 feet below ground surface.

Table 1
Baxter Soils Analytical Results

Parameter	RCRA Action Level[a]	Concentration[b]		
		SB-1 (0-2')	SB-2 (4-8') DL[c]	BKGD-1 (6-8")
Volatile Organic Compounds (μg/kg)				
Methylene Chloride	90,000	16 B	37 B	24 B
Acetone	800,000	310 B	18,000	70 B
Chloroform	100,000	3 BJ	7 BJ	2 BJ
Semivolatile Organic Compounds (μg/kg)				
Naphthalene*		86 J		
2-Methylnaphthalene		67 J		
Acenaphthene*		200 J		
Dibenzofuran		160 J		
Fluorene*		300 J		
Phenanthrene*		2200		
Anthracene*		700		
Di-n-Butylphthatlate	8,000,000	120 J	110 J	54 J
Benzo(a)Anthracene*		1000		
Chrysene*		120 J		
Bis(2-ethylhexyl)phthalate	50,000	130 J	350 J	100 J
Benzo(b)Fluorathene*		490		
Benzo(k)Fluorathene*		490		
Benzo(a)Pyrene*		770		
Indeno(1,2,3-cd)Pyrene*		420		
Dibenzo(a,h)Anthracene*		220 J		
Benzo(g,h,i)Perylene*		470		
Metals (mg/kg)				
Cadmium	40		5.6	
Chromium	400[d]	16.7	22.0	8.2
Copper		16.0	15.7	8.3
Nickel		14.7	25.3	
Lead		7.2	16.0	10.4
Silver	400		20.4	
Zinc		59.0	37.0	23.9

(a)40 CFR 264.521(a)(2)(i-iv)
(b)Laboratory Qualifiers are as follows:
B = Analyte found in associated laboratory blank sample(s)
J = Estimated value
(c)DL refers to the dilution of the original sample, which was required to bring the analytes within method detection ranges.
(d)The value cited applies to hexavalent chromium.
(*)Indicates Polynuclear Aromatic Hydrocarbons (PAHs)

Table 2
Baxter Groundwater Analytical Results

Parameter	Drinking Water Standards[a]	NC Water Quality Standards[b]	Concentration[c]	
			MW-8	MW-8[d]
Volatile Organic Compounds (μg/l)				
Methylene Chloride		5	7 B	N/A[e]
Acetone			7 BJ	N/A
Toluene	2,000 "p"	1,000	2 J	N/A
Ethylbenzene	700 "p"	29	5	N/A
Xylene (total)	10,000 "p"	400	21	N/A
Semivolatile Organic Compounds (μg/l)				
No Semivolatile Organic Compounds Detected				
Metals (μg/l)				
Beryllium			6.2	
Unfiltered Chromium	50 "f", 100 "p",[f]		82.0	125
Filtered Chromium		50	N/A	<10
Hexavalent Chromium			N/A	<40
Copper	1,300 "p"	1,000	146	N/A
Nickel		150	138	N/A
Lead	50 "f"	50	15	N/A
Zinc	5,000 "f"[g]	5,000	306	N/A
Conventional Parameters (μg/l)				
Total Suspended Solids			N/A	3,810,000

(a) U.S. EPA Drinking Water Standards where "f" = final and "p" = proposed. Unless otherwise noted, Maximum Contaminant Levels (MCLs) are cited.
(b) North Carolina Classifications and Water Quality Standards Applicable to the Groundwaters of North Carolina, Title 15, Subchapter 2L, Section .0202 Water Quality Standards
(c) Laboratory Qualifiers are as follows:
B = Analyte found in associated laboratory blank sample(s)
J = Estimated value
(d) Analytical results from resampling MW-8 on April 23, 1992.
(e) N/A—Not analyzed
(f) The proposed MCL for chromium will become effective July 31, 1992, (40 CFR 141.62).
(g) Secondary MCL

It is our opinion, based on the analytical data and the conclusions stated above, that the abandoned solvent disposal site at the Baxter North Cove Facility should be delisted from the North Carolina State Superfund list.

References

CH2M HILL, *Technical Report: Groundwater Investigation,* for Baxter Healthcare Corporation, North Cove Facility, North Carolina, February 1991.

CH2M HILL, *Sampling and Analysis Plan* for Baxter Healthcare Corporation, North Cove Facility, North Carolina, February 1992.

U.S. Environmental Protection Agency, EPA/625/4-89/019, *Seminar Publication—Transport and Fate of Contaminants in the Subsurface,* September 1989.

Attachment 1

CH2M HILL

PROJECT NUMBER	BORING NUMBER	
ATL33279.A0.03	MW-8	SHEET 1 OF 1

SOIL BORING LOG

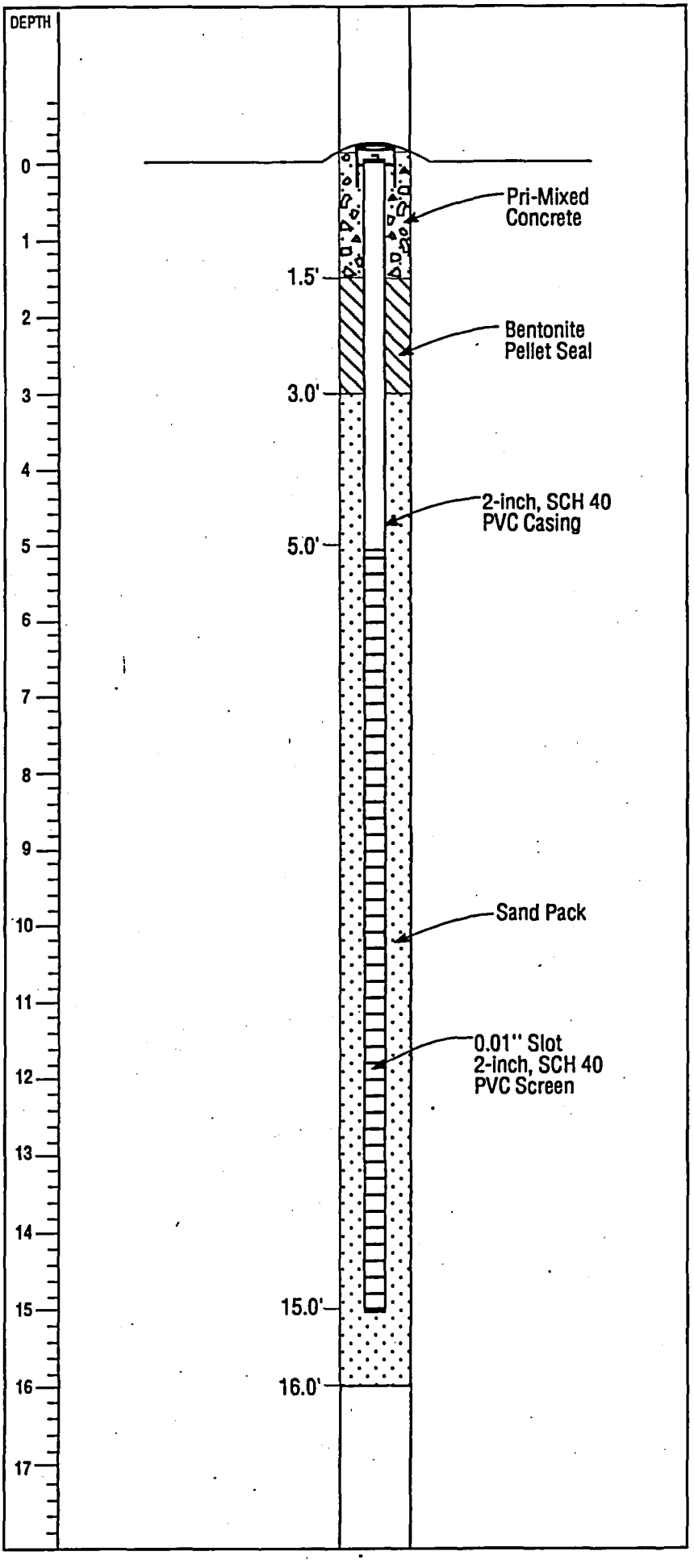
PROJECT Baxter Healthcare LOCATION Behind Paint Shed in Asphalt Road

ELEVATION unknown DRILLING CONTRACTOR ATEC Associates, Inc.

DRILLING METHOD AND EQUIPMENT 4 1/4-inch ID HSA, Mobil B-61 rotary drill rig

WATER LEVELS 4.63 below TOC (2/25/92) START 02/24/92 FINISH 02/25/ 92 LOGGER S. Roche

DEPTH BELOW SURFACE (FT)	SAMPLE INTERVAL	SAMPLE NUMBER AND TYPE	SAMPLE RECOVERY	STANDARD PENETRATION TEST RESULTS 6"-6"-6" (N)	SOIL DESCRIPTION: SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY	COMMENTS: DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS AND INSTRUMENTATION
	0–2	S-1	1.4	12-30-32-50/3" (62)	SILTY SAND with CLAY (SC) REDDISH BROWN, DRY, DENSE, QUARTZ ROCK FRAGMENTS (0.5-1.5" DIA.), MEDIUM GRAINED	1745 START DRILLING BH / BZ / SPOON HNU= - / 0 ppm / 0.1 ppm LEL= - / 0% / 0%
	2–4					
5	4–6	S-2	0.5	15-27-35-50/3" (62)	SAND WITH SILT, (SP-SM), BROWN, MOIST-WET, DENSE, QUARTZ ROCK FRAGMENTS (0.5-1.5" DIA.), POORLY GRADED, MEDIUM GRAINED	1804 BH / BZ / SPOON HNU= - / 0 ppm / 2 ppm LEL= - / 0% / 0% NOTE: TIP OF SPOON WET AT 4-6'
	6–8	S-3	0.4	not recorded	as S-2 above	1815 DROVE ANOTHER SPOON TO GET ADDITIONAL SAMPLE TO FILL JARS BH / BZ / SPOON HNU= - / - / 1 ppm LEL= - / - / 0%
	8–9					
10	9–11	S-4	0.9	11-20-17-8 (37)	SILTY SAND, (SM), REDDISH BROWN, WET, DENSE, ROCK FRAGMENTS (0.5-1.5" DIA.), MEDIUM GRAINED, APPROX. 30% SILT	1826 BH / BZ / SPOON HNU= 2-3 ppm / 0 ppm / 1 ppm LEL= 0% / 0% / 0%
	11–14					
15	14–16	S-5	0.9	15-16-16-21 (32)	SILTY SAND, (SM), REDDISH BROWN, WET, DENSE, ROCK FRAGMENTS (0.5-2.0" DIA.), MEDIUM GRAINED, 30 - 40 % SILT	1834 BH / BZ / SPOON HNU= 5-7 ppm / 0 ppm / 1 ppm LEL= 0% / 0% / 0%
					END OF BORING = 16 FEET BGS	
20						
25						



Monitor Well Drilling Report

PROJECT NO. ATL33279.A0.04

WELL: MW-8

LOCATION: In the center of asphalt road behind paint shed southwest of Engineering Building

COUNTY: McDowell STATE: N.C.

GROUND ELEVATION:

TOP OF CASING ELEVATION:

BOREHOLE DIAMETER: 8-inches

BOREHOLE DEPTH: 16 feet

STATIC WATER LEVEL: 4.60 feet below TOC

DATE: 2/25/92

CONSTRUCTION: Hollow Stem Augers

DRILLER: ATEC Associates, Inc. Raleigh, NC (Sanford Sweeting)

DATE FINISHED: 2/25/92

WELL MATERIALS (TYPE AND LENGTH OR QUANTITY)

SURFACE CASING: N/A

CASING: 5 feet x 2-inch SCH 40 PVC

SCREEN: 10 feet x 0.01-inch slot x 2-inch SCH 40 PVC

SAND: Torpedo sand

SEAL: Bentonite Pellet (1/4-inch Dia.)

GROUT MIX: Pri-Mix Concrete

PROTECTIVE COVER: Flush Mount

LOCK NUMBER: Master No.

DEVELOPMENT:

METHOD: Bailing

DURATION: ≈ 1 hour/60 gallons

DATE: 2/25/92

WATER CLARITY: Turbid/Silty-Brown

WATER SAMPLED FOR: VOC (8240), Semi-VOC (8270), P.P. Metals, and Cyanide

COMMENTS:

COMPLETED BY: Sean Roche

DATE: 2/26/92

Attachment 2

Engineers
Planners
Economists
Scientists

March 19, 1992

ATL33279.A0.03

Mr. Sean Roche
CH2M HILL/ATL
229 Peachtree St., NE
Suite 300
Atlanta, Georgia 30303-1602

RE: Analytical Data for Baxter Healthcare Corp./Cercla,
LMG Laboratory No. 21045

Dear Mr. Roche:

On February 27, 1992, the CH2M HILL Montgomery Laboratory received six samples with a request for analysis of selected organic and inorganic parameters.

The analytical results and associated quality control data are enclosed. Any unusual difficulties encountered during the analyses of these samples are discussed in the case narratives.

If you should have any questions concerning the data, please inquire.

The CH2M HILL policy is to store samples for up to 30 days after reporting. If you desire, our laboratory will maintain your samples for a longer period at a cost of $5.00 per sample per month. Samples determined to be hazardous can either be returned to you or disposed of at a cost of $25.00 per sample.

Sincerely,

Wanda L. Hall

Wanda L. Hall
Data Package Supervisor

Enclosures

Engineers
Planners
CH2M HILL Economists
Scientists

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ANALYTICAL METHODS

Organic Analysis

Priority Pollutants: Water, soil and waste sample are analyzed in accordance with procedures described in Methods 608, 624, and 625, EPA-600/4-82-057 (1982); Methods 8080, 8240, and 8270, Test Methods for Evaluating Solid Waste, 1986, SW-846, Third Edition; and methods outlined in the USEPA Contract Laboratory Program Statement of Work for Organics Analysis, February, 1988.

Volatile Analysis (Safe Drinking Water Act): Water samples are analyzed in accordance with procedures described in Method 524.2, Federal Register (50 FR 46902), November 13, 1985.

Chlorinated Phenoxyacid Herbicides: Samples are analyzed in accordance with procedures described in Method 8150, Test Methods for Evaluating Solid Waste, 1986, SW-846, Third Edition.

Organophosphorous Pesticides: Samples are analyzed in accordance with procedures described in Methods 614 and 622, EPA-600/4-79-019 (1979) and in Method 8140, Test Methods for Evaluating Solid Waste, 1986, SW-846, Third Edition.

Phenolic Acid Analysis by GC: Samples are analyzed in accordance with procedures described in Method 604, Federal Register, 40 CFR, Part 136 (July 1, 1987) and in Method 8040, Test Methods for Evaluating Solid Waste, 1986, SW-846, Third Edition.

Polynuclear Aromatic Hydrocarbons (GC analysis): Samples are analyzed in accordance with procedures described in Method 610, Federal Register, 40 CFR, Part 136 (July 1, 1987) and in Method 8100, Test Methods for Evaluating Solid Waste, 1986, SW-846, Third Edition.

Ethylene Dibromide: Water samples are analyzed in accordance with procedures described in Method 504, Federal Register, (50 FR 46902), November 13, 1985.

Trihalomethanes: Water samples are analyzed in accordance with procedures described in Method 501.2, Federal Register, Vol. 44, No. 231, Part II, November 29, 1979.

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EPA - DEFINED QUALIFIERS

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Definitions for the EPA-defined qualifiers:

U -- Indicates the compound was analyzed for but not detected. The number adjacent to the "U" qualifier indicates the quantitation limit for that compound. The detection limit can vary from sample to sample depending on dilution factors or percent moisture adjustment when indicated.

J -- Indicates an estimated value. This flag is used when the mass spectral data indicates the presence of a compound below the stated quantitation limit. The "J" qualifier is not used with pesticide results.

C -- This flag applies to pesticide results only. The "C" flag indicates the presence of this compound has been confirmed by GC/MS analysis.

B -- This flag is used when the analyte is found in the associated blank as well as the sample. This notation indicates possible blank contamination and suggests the data user evaluate these compounds and their amounts carefully.

E -- This flag applies to GC/MS only. The "E" qualifier indicates a compound may be above or below the linear range of the instrument. If the particular compound level is deemed above the linear calibration range, then the sample should be reanalyzed at an appropriate dilution. Therefore, the "E" qualified amount is an estimated concentration. The results for the dilution will be reported on a separate Form I and will be flagged with a "D" if the dilution brings the concentration within proper calibration.

D -- This flag identifies compounds which have been run at a dilution to bring the concentration of that compound within the linear range of the instrument. "D" qualifiers are only used for samples that have been run initially with results above acceptable ranges. For secondary dilutions the "DL" suffix is appended to the sample number on the Form I.

A -- Indicates the Tentatively Identified Compound (TIC) is a suspected aldol-condensation product.

X -- Indicates the compound concentration has been manually modified or the EPA qualifier has been manually modified or added.

JX -- The compound was detected and quantitated below the Contract Required Quantitation Limit.

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CLIENT SAMPLE ID QUALIFIERS

LEVEL 1

The qualifiers that GC/MS and GC use with the client sample ID are defined below:

DL -- Dilution Run

R -- Rerun (may be followed by a digit to indicate multiple reruns)

RD -- Diluted Rerun

RX -- Re-extraction Analysis

MS -- Matrix Spike (may be followed by a digit to indicate multiple matrix spikes within a sample set)

MSD -- Matrix Spike Duplicate (may be followed by a digit to indicate multiple matrix spike duplicates within a sample set)

QC_BLANK -- Method Blank (may be followed by a "W" for waters, "S" for soils run at a low level, or "SM" for soils run at a medium level -- these letters may be followed by a digit to indicate multiple blanks of that type; if there are no letters, the digit indicates multiple blanks).

These qualifiers allow GC/MS and GC to have unique client sample ID's so that the client can get more accurate information from the data reported.

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TABLE 1

SAMPLE CROSS-REFERENCE SUMMARY

CH2M HILL Laboratory No. 21045

CH2M HILL Sample No.	Sample Description			
21045001	SB-1(0-2FT)	02/24/92	1745	SOIL
21045002	SB-2(4-8FT)	02/24/92	1815	SOIL
21045003	RB-1 WATER	02/25/92	1155	GRAB
21045004	BKGD-1(6"-8")	02/25/92	1240	SOIL
21045005	MW-8-WATER	02/25/92	1340	GRAB
21045006	TRAVEL BLANK	02/25/92		GRAB

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CASE NARRATIVE FOR VOLATILE MASS SPECTROMETRY SAMPLES

LABORATORY: CH2M HILL LABORATORIES CLIENT: BAXTER HEALTHCARE CORP.

CASE NO. : N/A CONTRACT NO.: N/A

LAB NO. : 21045 SDG NO.: N/A

I. RECEIPT

A. DATE: February 27, 1992

B. SAMPLE INFORMATION

LAB ID	CLIENT ID	SAMPLE MATRIX	DATE SAMPLED	EXTRACTION DATE	ANALYSIS DATE
21045001	SB-1(0-2FT)	SOIL	02/24/92	NA	03/05/92
21045002	SB-2(4-8FT)	SOIL	02/24/92	NA	03/05/92
21045002DL	SB-2(4-8FT)DL	SOIL	02/25/92	03/06/92	03/06/92
21045003	RB-1-WATER	WATER	02/25/92	NA	03/05/92
21045004	BKGD-1(6"-8")	SOIL	02/25/92	NA	03/05/92
21045005	MW-8-WATER	WATER	02/25/92	NA	03/05/92
21045006	TRAVEL BLANK	WATER	02/25/92	NA	03/05/92
L03062B1	QC_BLANK_SM	SOIL	NA	03/06/92	03/06/92
X03052B1	QC_BLANK_W	WATER	NA	NA	03/05/92
Y03052B1	QC_BLANK_S	SOIL	NA	NA	03/05/92

C. Documentation Exceptions : Tentatively Identified Compounds were not requested as part of this analysis. Therefore, these forms will not be included.

No exceptions were encountered.

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II. EXTRACTION

A. Holding Times: All holding times were met. Sample 21045002DL was analyzed using medium level soil protocols.

B. Extraction Exceptions : No exceptions were encountered.

III. ANALYSIS

A. Holding times: All holding times were met.

B. Analytical Exceptions : Unless otherwise indicated, all water volatile samples were analyzed using the HCl-preserved vial.

The original analysis of sample 21045002 showed target compounds above the calibration range. The sample was diluted and reanalyzed. The results of both analyses have been reported.

No other exceptions were encountered.

IV. QUALITY CONTROL

A. Method Blank : All associated method blanks met acceptable QC criteria.

B. Surrogate Recoveries : All samples met acceptable QC limits.

C. Matrix Spike Results : Matrix spike results have not been reported with this contract.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Herb Kelly 3/19/92

Herb Kelly Date
Manager, Organic Division

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METHYLENE CHLORIDE/ACETONE SUMMARY

Due to the level of target compounds, the following samples required large dilutions for analysis. As required by the Statement of Work, these dilution factors have been applied, without background subtraction, to all detected compounds, particularly methylene chloride and acetone. As methylene chloride and acetone are common laboratory contaminants, the following table is being provided to present a more accurate perspective of these compounds. Included in the table is 1) the amount of methylene chloride and acetone, detected at the instrument, prior to multiplication by the dilution factor; and 2) the amount of methylene chloride and acetone for that particular sample's laboratory method blank.

SAMPLE	METHYLENE CHLORIDE	ACETONE	METHOD BLANK	METHYLENE CHLORIDE	ACETONE
21045001	6 ug/Kg	120 ug/Kg	Y03052B1	4 ug/Kg	3 ug/Kg
21045002	7 ug/Kg	1200 ug/Kg	Y03052B1	4 ug/Kg	3 ug/Kg
21045002DL	6 ug/Kg	130 ug/Kg	L03062B1	5 ug/Kg	10 U

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ORGANICS ANALYSIS DATA SHEET

Laboratory Name:	CH2M HILL/MGM	Concentration:	LOW	Date Extracted:	
Lab Sample ID:	21045001	Sample Matrix:	SOIL	Date Analyzed:	03/05/92
Client Sample ID:	SB-1(0-2FT)	Percent Moisture:	7.0	Dilution Factor:	2.5

VOLATILE (8240) COMPOUNDS

CAS Number		ug/Kg		CAS Number		ug/Kg	
74-87-3	Chloromethane	27	U	75-25-2	Bromoform	13	U
74-83-9	Bromomethane	27	U	591-78-6	2-Hexanone	27	U
75-01-4	Vinyl Chloride	27	U	108-10-1	4-Methyl-2-Pentanone	27	U
75-00-3	Chloroethane	27	U	127-18-4	Tetrachloroethene	13	U
75-09-2	Methylene Chloride	16	B	79-34-5	1,1,2,2-Tetrachloroethane	13	U
67-64-1	Acetone	310	B	108-88-3	Toluene	13	U
75-15-0	Carbon Disulfide	13	U	108-90-7	Chlorobenzene	13	U
75-69-4	Trichlorofluoromethane	13	U	100-41-4	Ethylbenzene	13	U
75-35-4	1,1-Dichloroethene	13	U	100-42-5	Styrene	13	U
75-34-3	1,1-Dichloroethane	13	U	1330-20-7	Xylene (total)	13	U
540-59-0	1,2-Dichloroethene (total)	13	U	541-73-1	1,3-Dichlorobenzene	13	U
67-66-3	Chloroform	3	BJ	106-46-7	1,4-Dichlorobenzene	13	U
107-06-2	1,2-Dichloroethane	13	U	95-50-1	1,2-Dichlorobenzene	13	U
78-93-3	2-Butanone	27	U	107-02-8	Acrolein	270	U
71-55-6	1,1,1-Trichloroethane	13	U	74-88-4	Iodomethane	27	U
56-23-5	Carbon Tetrachloride	13	U	107-13-1	Acrylonitrile	270	U
108-05-4	Vinyl Acetate	27	U	74-95-3	Dibromomethane	13	U
75-27-4	Bromodichloromethane	13	U	97-63-2	Ethyl Methacrylate	13	U
78-87-5	1,2-Dichloropropane	13	U	96-18-4	1,2,3-Trichloropropane	13	U
10061-01-5	cis-1,3-Dichloropropene	13	U	110-57-6	Trans-1,4-Dichloro-2-Butene	13	U
79-01-6	Trichloroethene	13	U				
124-48-1	Dibromochloromethane	13	U		Toluene-d8 - SS	104	
79-00-5	1,1,2-Trichloroethane	13	U		Bromofluorobenzene - SS	107	
71-43-2	Benzene	13	U		1,2-Dichloroethane-d4 - SS	107	
10061-02-6	trans-1,3-Dichloropropene	13	U				
110-75-8	2-Chloroethylvinylether	27	U				

U - Compound analyzed for but not detected.
B - Compound was detected in QC blank.
J - Reported value less than quantitation limit.
SS - Surrogate Standard reported as percent recovery.

Form I

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ORGANICS ANALYSIS DATA SHEET

boratory Name:	CH2M HILL/MGM	Concentration:	LOW	Date Extracted:	
b Sample ID:	21045002	Sample Matrix:	SOIL	Date Analyzed:	03/05/92
lient Sample ID:	SB-2(4-8FT)	Percent Moisture:	9.0	Dilution Factor:	5.0

VOLATILE (8240) COMPOUNDS

AS Number		ug/Kg		CAS Number		ug/Kg	
1-87-3	Chloromethane	55	U	75-25-2	Bromoform	27	U
4-83-9	Bromomethane	55	U	591-78-6	2-Hexanone	55	U
5-01-4	Vinyl Chloride	55	U	108-10-1	4-Methyl-2-Pentanone	55	U
-00-3	Chloroethane	55	U	127-18-4	Tetrachloroethene	27	U
-09-2	Methylene Chloride	37	B	79-34-5	1,1,2,2-Tetrachloroethane	27	U
7-64-1	Acetone	6500	BE	108-88-3	Toluene	27	U
5-15-0	Carbon Disulfide	27	U	108-90-7	Chlorobenzene	27	U
-69-4	Trichlorofluoromethane	27	U	100-41-4	Ethylbenzene	27	U
5-35-4	1,1-Dichloroethene	27	U	100-42-5	Styrene	27	U
5-34-3	1,1-Dichloroethane	27	U	1330-20-7	Xylene (total)	27	U
0-59-0	1,2-Dichloroethene (total)	27	U	541-73-1	1,3-Dichlorobenzene	27	U
-66-3	Chloroform	7	BJ	106-46-7	1,4-Dichlorobenzene	27	U
07-06-2	1,2-Dichloroethane	27	U	95-50-1	1,2-Dichlorobenzene	27	U
-93-3	2-Butanone	55	U	107-02-8	Acrolein	550	U
-55-6	1,1,1-Trichloroethane	27	U	74-88-4	Iodomethane	55	U
6-23-5	Carbon Tetrachloride	27	U	107-13-1	Acrylonitrile	550	U
08-05-4	Vinyl Acetate	55	U	74-95-3	Dibromomethane	27	U
-27-4	Bromodichloromethane	27	U	97-63-2	Ethyl Methacrylate	27	U
7-5	1,2-Dichloropropane	27	U	96-18-4	1,2,3-Trichloropropane	27	U
0061-01-5	cis-1,3-Dichloropropene	27	U	110-57-6	Trans-1,4-Dichloro-2-Butene	27	U
-01-6	Trichloroethene	27	U				
4-48-1	Dibromochloromethane	27	U		Toluene-d8 - SS	100	
9-00-5	1,1,2-Trichloroethane	27	U		Bromofluorobenzene - SS	101	
1-43-2	Benzene	27	U		1,2-Dichloroethane-d4 - SS	103	
0061-02-6	trans-1,3-Dichloropropene	27	U				
10-75-8	2-Chloroethylvinylether	55	U				

E - Concentration exceeded calibration range.
U - Compound analyzed for but not detected.
B - Compound was detected in QC blank.
J - Reported value less than quantitation limit.
SS - Surrogate Standard reported as percent recovery.

Form I

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ORGANICS ANALYSIS DATA SHEET

Laboratory Name:	CH2M HILL/MGM	Concentration:	MED	Date Extracted:	03/06/92
Lab Sample ID:	21045002DL	Sample Matrix:	SOIL	Date Analyzed:	03/06/92
Client Sample ID:	SB-2(4-8FT)DL	Percent Moisture:	9.0	Dilution Factor:	1.0

VOLATILE (8240) COMPOUNDS

CAS Number		ug/Kg		CAS Number		ug/Kg	
74-87-3	Chloromethane	1400	U	75-25-2	Bromoform	690	U
74-83-9	Bromomethane	1400	U	591-78-6	2-Hexanone	1400	U
75-01-4	Vinyl Chloride	1400	U	108-10-1	4-Methyl-2-Pentanone	1400	U
75-00-3	Chloroethane	1400	U	127-18-4	Tetrachloroethene	690	U
75-09-2	Methylene Chloride	880	B	79-34-5	1,1,2,2-Tetrachloroethane	690	U
67-64-1	Acetone	18000		108-88-3	Toluene	690	U
75-15-0	Carbon Disulfide	690	U	108-90-7	Chlorobenzene	690	U
75-69-4	Trichlorofluoromethane	690	U	100-41-4	Ethylbenzene	690	U
75-35-4	1,1-Dichloroethene	690	U	100-42-5	Styrene	690	U
75-34-3	1,1-Dichloroethane	690	U	1330-20-7	Xylene (total)	690	U
540-59-0	1,2-Dichloroethene (total)	690	U	541-73-1	1,3-Dichlorobenzene	690	U
67-66-3	Chloroform	200	BJ	106-46-7	1,4-Dichlorobenzene	690	U
107-06-2	1,2-Dichloroethane	690	U	95-50-1	1,2-Dichlorobenzene	690	U
78-93-3	2-Butanone	1400	U	107-02-8	Acrolein	14000	U
71-55-6	1,1,1-Trichloroethane	690	U	74-88-4	Iodomethane	1300	U
56-23-5	Carbon Tetrachloride	690	U	107-13-1	Acrylonitrile	14000	U
108-05-4	Vinyl Acetate	1400	U	74-95-3	Dibromomethane	690	U
75-27-4	Bromodichloromethane	690	U	97-63-2	Ethyl Methacrylate	690	U
[illegible]7-5	1,2-Dichloropropane	690	U	96-18-4	1,2,3-Trichloropropane	690	U
10061-01-5	cis-1,3-Dichloropropene	690	U	110-57-6	Trans-1,4-Dichloro-2-Butene	690	U
79-01-6	Trichloroethene	690	U				
124-48-1	Dibromochloromethane	690	U		Toluene-d8 - SS	103	
79-00-5	1,1,2-Trichloroethane	690	U		Bromofluorobenzene - SS	85	
71-43-2	Benzene	690	U		1,2-Dichloroethane-d4 - SS	98	
10061-02-6	trans-1,3-Dichloropropene	690	U				
110-75-8	2-Chloroethylvinylether	1400	U				

U - Compound analyzed for but not detected.
B - Compound was detected in QC blank.
J - Reported value less than quantitation limit.
SS - Surrogate Standard reported as percent recovery.

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Laboratory Name:	CH2M HILL/MGM	Concentration:	LOW	Date Extracted:	
Lab Sample ID:	21045003	Sample Matrix:	WATER	Date Analyzed:	03/05/92
Client Sample ID:	RB-1 WATER	Percent Moisture:		Dilution Factor:	1.0

VOLATILE (8240) COMPOUNDS

CAS Number		ug/L		CAS Number		ug/L	
74-87-3	Chloromethane	10	U	75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U	591-78-6	2-Hexanone	10	U
75-01-4	Vinyl Chloride	10	U	108-10-1	4-Methyl-2-Pentanone	10	U
75-00-3	Chloroethane	10	U	127-18-4	Tetrachloroethene	5	U
75-09-2	Methylene Chloride	6	B	79-34-5	1,1,2,2-Tetrachloroethane	5	U
67-64-1	Acetone	9	BJ	108-88-3	Toluene	5	U
75-15-0	Carbon Disulfide	5	U	108-90-7	Chlorobenzene	5	U
75-69-4	Trichlorofluoromethane	5	U	100-41-4	Ethylbenzene	5	U
75-35-4	1,1-Dichloroethene	5	U	100-42-5	Styrene	5	U
75-34-3	1,1-Dichloroethane	5	U	1330-20-7	Xylene (total)	5	U
540-59-0	1,2-Dichloroethene (total)	5	U	541-73-1	1,3-Dichlorobenzene	5	U
67-66-3	Chloroform	1	BJ	106-46-7	1,4-Dichlorobenzene	5	U
107-06-2	1,2-Dichloroethane	5	U	95-50-1	1,2-Dichlorobenzene	5	U
78-93-3	2-Butanone	10	U	107-02-8	Acrolein	100	U
71-55-6	1,1,1-Trichloroethane	5	U	74-88-4	Iodomethane	10	U
56-23-5	Carbon Tetrachloride	5	U	107-13-1	Acrylonitrile	100	U
108-05-4	Vinyl Acetate	10	U	74-95-3	Dibromomethane	5	U
75-27-4	Bromodichloromethane	5	U	97-63-2	Ethyl Methacrylate	5	U
7. 7-5	1,2-Dichloropropane	5	U	96-18-4	1,2,3-Trichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U	110-57-6	Trans-1,4-Dichloro-2-Butene	5	U
79-01-6	Trichloroethene	5	U				
124-48-1	Dibromochloromethane	5	U		Toluene-d8 - SS	104	
79-00-5	1,1,2-Trichloroethane	5	U		Bromofluorobenzene - SS	113	
71-43-2	Benzene	5	U		1,2-Dichloroethane-d4 - SS	107	
10061-02-6	trans-1,3-Dichloropropene	5	U				
110-75-8	2-Chloroethylvinylether	10	U				

U - Compound analyzed for but not detected.
B - Compound was detected in QC blank.
J - Reported value less than quantitation limit.
SS - Surrogate Standard reported as percent recovery.

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Laboratory Name:	CH2M HILL/MGM	Concentration:	LOW	Date Extracted:	
Lab Sample ID:	21045004	Sample Matrix:	SOIL	Date Analyzed:	03/05/92
Client Sample ID:	BKGD-1(6-8)	Percent Moisture:	18.0	Dilution Factor:	1.0

VOLATILE (8240) COMPOUNDS

CAS Number		ug/Kg		CAS Number		ug/Kg	
74-87-3	Chloromethane	12	U	75-25-2	Bromoform	6	U
74-83-9	Bromomethane	12	U	591-78-6	2-Hexanone	12	U
75-01-4	Vinyl Chloride	12	U	108-10-1	4-Methyl-2-Pentanone	12	U
75-00-3	Chloroethane	12	U	127-18-4	Tetrachloroethene	6	U
75-09-2	Methylene Chloride	24	B	79-34-5	1,1,2,2-Tetrachloroethane	6	U
67-64-1	Acetone	70	B	108-88-3	Toluene	6	U
75-15-0	Carbon Disulfide	1	J	108-90-7	Chlorobenzene	6	U
75-69-4	Trichlorofluoromethane	6	U	100-41-4	Ethylbenzene	6	U
75-35-4	1,1-Dichloroethene	6	U	100-42-5	Styrene	6	U
75-34-3	1,1-Dichloroethane	6	U	1330-20-7	Xylene (total)	3	J
540-59-0	1,2-Dichloroethene (total)	6	U	541-73-1	1,3-Dichlorobenzene	6	U
67-66-3	Chloroform	2	BJ	106-46-7	1,4-Dichlorobenzene	6	U
107-06-2	1,2-Dichloroethane	6	U	95-50-1	1,2-Dichlorobenzene	6	U
78-93-3	2-Butanone	12	U	107-02-8	Acrolein	120	U
71-55-6	1,1,1-Trichloroethane	6	U	74-88-4	Iodomethane	12	U
56-23-5	Carbon Tetrachloride	6	U	107-13-1	Acrylonitrile	120	U
108-05-4	Vinyl Acetate	12	U	74-95-3	Dibromomethane	6	U
75-27-4	Bromodichloromethane	6	U	97-63-2	Ethyl Methacrylate	6	U
7[illegible]-5	1,2-Dichloropropane	6	U	96-18-4	1,2,3-Trichloropropane	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U	110-57-6	Trans-1,4-Dichloro-2-Butene	6	U
79-01-6	Trichloroethene	6	U				
124-48-1	Dibromochloromethane	6	U		Toluene-d8 - SS	109	
79-00-5	1,1,2-Trichloroethane	6	U		Bromofluorobenzene - SS	107	
71-43-2	Benzene	6	U		1,2-Dichloroethane-d4 - SS	106	
10061-02-6	trans-1,3-Dichloropropene	6	U				
110-75-8	2-Chloroethylvinylether	12	U				

U - Compound analyzed for but not detected.
B - Compound was detected in QC blank.
J - Reported value less than quantitation limit.
SS - Surrogate Standard reported as percent recovery.

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ORGANICS ANALYSIS DATA SHEET

Laboratory Name:	CH2M HILL/MGM	Concentration:	LOW	Date Extracted:	
Lab Sample ID:	21045005	Sample Matrix:	WATER	Date Analyzed:	03/05/92
Client Sample ID:	MW-8 WATER	Percent Moisture:		Dilution Factor:	1.0

VOLATILE (8240) COMPOUNDS

CAS Number		ug/L		CAS Number		ug/L	
74-87-3	Chloromethane	10	U	75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U	591-78-6	2-Hexanone	10	U
75-01-4	Vinyl Chloride	10	U	108-10-1	4-Methyl-2-Pentanone	10	U
75-00-3	Chloroethane	10	U	127-18-4	Tetrachloroethene	5	U
75-09-2	Methylene Chloride	7	B	79-34-5	1,1,2,2-Tetrachloroethane	5	U
67-64-1	Acetone	7	BJ	108-88-3	Toluene	2	J
75-15-0	Carbon Disulfide	5	U	108-90-7	Chlorobenzene	5	U
75-69-4	Trichlorofluoromethane	5	U	100-41-4	Ethylbenzene	5	
75-35-4	1,1-Dichloroethene	5	U	100-42-5	Styrene	5	U
75-34-3	1,1-Dichloroethane	5	U	1330-20-7	Xylene (total)	21	
540-59-0	1,2-Dichloroethene (total)	5	U	541-73-1	1,3-Dichlorobenzene	5	U
67-66-3	Chloroform	5	BU	106-46-7	1,4-Dichlorobenzene	5	U
107-06-2	1,2-Dichloroethane	5	U	95-50-1	1,2-Dichlorobenzene	5	U
78-93-3	2-Butanone	10	U	107-02-8	Acrolein	100	U
71-55-6	1,1,1-Trichloroethane	5	U	74-88-4	Iodomethane	10	U
56-23-5	Carbon Tetrachloride	5	U	107-13-1	Acrylonitrile	100	U
108-05-4	Vinyl Acetate	10	U	74-95-3	Dibromomethane	5	U
75-27-4	Bromodichloromethane	5	U	97-63-2	Ethyl Methacrylate	5	U
78-87-5	1,2-Dichloropropane	5	U	96-18-4	1,2,3-Trichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U	110-57-6	Trans-1,4-Dichloro-2-Butene	5	U
79-01-6	Trichloroethene	5	U				
124-48-1	Dibromochloromethane	5	U		Toluene-d8 - SS	101	
79-00-5	1,1,2-Trichloroethane	5	U		Bromofluorobenzene - SS	103	
71-43-2	Benzene	5	U		1,2-Dichloroethane-d4 - SS	104	
10061-02-6	trans-1,3-Dichloropropene	5	U				
110-75-8	2-Chloroethylvinylether	10	U				

U - Compound analyzed for but not detected.
B - Compound was detected in QC blank.
J - Reported value less than quantitation limit.
SS - Surrogate Standard reported as percent recovery.

Form I

CH2M HILL Quality Analytical Laboratories 2567 Fairlane Drive, P.O. Box 230548, Montgomery, Alabama 36116 205.271.1444

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ORGANICS ANALYSIS DATA SHEET

Laboratory Name:	CH2M HILL/MGM	Concentration:	LOW	Date Extracted:	
Lab Sample ID:	21045006	Sample Matrix:	WATER	Date Analyzed:	03/05/92
Client Sample ID:	TRAVEL BLANK	Percent Moisture:		Dilution Factor:	1.0

VOLATILE (8240) COMPOUNDS

CAS Number		ug/L		CAS Number		ug/L	
4-87-3	Chloromethane	10	U	75-25-2	Bromoform	5	U
4-83-9	Bromomethane	10	U	591-78-6	2-Hexanone	10	U
75-01-4	Vinyl Chloride	10	U	108-10-1	4-Methyl-2-Pentanone	10	U
5-00-3	Chloroethane	10	U	127-18-4	Tetrachloroethene	5	U
5-09-2	Methylene Chloride	14	B	79-34-5	1,1,2,2-Tetrachloroethane	5	U
67-64-1	Acetone	8	BJ	108-88-3	Toluene	5	U
5-15-0	Carbon Disulfide	5	U	108-90-7	Chlorobenzene	5	U
5-69-4	Trichlorofluoromethane	1	J	100-41-4	Ethylbenzene	5	U
75-35-4	1,1-Dichloroethene	5	U	100-42-5	Styrene	5	U
75-34-3	1,1-Dichloroethane	5	U	1330-20-7	Xylene (total)	5	U
40-59-0	1,2-Dichloroethene (total)	5	U	541-73-1	1,3-Dichlorobenzene	5	U
7-66-3	Chloroform	5	BU	106-46-7	1,4-Dichlorobenzene	5	U
107-06-2	1,2-Dichloroethane	5	U	95-50-1	1,2-Dichlorobenzene	5	U
8-93-3	2-Butanone	10	U	107-02-8	Acrolein	100	U
1-55-6	1,1,1-Trichloroethane	5	U	74-88-4	Iodomethane	10	U
56-23-5	Carbon Tetrachloride	5	U	107-13-1	Acrylonitrile	100	U
108-05-4	Vinyl Acetate	10	U	74-95-3	Dibromomethane	5	U
5-27-4	Bromodichloromethane	5	U	97-63-2	Ethyl Methacrylate	5	U
7-5	1,2-Dichloropropane	5	U	96-18-4	1,2,3-Trichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U	110-57-6	Trans-1,4-Dichloro-2-Butene	5	U
9-01-6	Trichloroethene	5	U				
24-48-1	Dibromochloromethane	5	U		Toluene-d8 - SS	98	
79-00-5	1,1,2-Trichloroethane	5	U		Bromofluorobenzene - SS	100	
71-43-2	Benzene	5	U		1,2-Dichloroethane-d4 - SS	102	
0061-02-6	trans-1,3-Dichloropropene	5	U				
110-75-8	2-Chloroethylvinylether	10	U				

U - Compound analyzed for but not detected.
B - Compound was detected in QC blank.
J - Reported value less than quantitation limit.
SS - Surrogate Standard reported as percent recovery.

Form I

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ORGANICS ANALYSIS DATA SHEET

Laboratory Name:	CH2M HILL/MGM	Concentration:	LOW	Date Extracted:	
Lab Sample ID:	X03052B1	Sample Matrix:	WATER	Date Analyzed:	03/05/92
Client Sample ID:	QC BLANK W	Percent Moisture:		Dilution Factor:	1.0

VOLATILE (8240) COMPOUNDS

CAS Number		ug/L		CAS Number		ug/L	
74-87-3	Chloromethane	10	U	75-25-2	Bromoform	5	U
74-83-9	Bromomethane	10	U	591-78-6	2-Hexanone	10	U
75-01-4	Vinyl Chloride	10	U	108-10-1	4-Methyl-2-Pentanone	10	U
75-00-3	Chloroethane	10	U	127-18-4	Tetrachloroethene	5	U
75-09-2	Methylene Chloride	4	BJ	79-34-5	1,1,2,2-Tetrachloroethane	5	U
67-64-1	Acetone	3	BJ	108-88-3	Toluene	5	U
75-15-0	Carbon Disulfide	5	U	108-90-7	Chlorobenzene	5	U
75-69-4	Trichlorofluoromethane	5	U	100-41-4	Ethylbenzene	5	U
75-35-4	1,1-Dichloroethene	5	U	100-42-5	Styrene	5	U
75-34-3	1,1-Dichloroethane	5	U	1330-20-7	Xylene (total)	5	U
540-59-0	1,2-Dichloroethene (total)	5	U	541-73-1	1,3-Dichlorobenzene	5	U
67-66-3	Chloroform	1	BJ	106-46-7	1,4-Dichlorobenzene	5	U
107-06-2	1,2-Dichloroethane	5	U	95-50-1	1,2-Dichlorobenzene	5	U
78-93-3	2-Butanone	10	U	107-02-8	Acrolein	100	U
71-55-6	1,1,1-Trichloroethane	5	U	74-88-4	Iodomethane	10	U
56-23-5	Carbon Tetrachloride	5	U	107-13-1	Acrylonitrile	100	U
108-05-4	Vinyl Acetate	10	U	74-95-3	Dibromomethane	5	U
75-27-4	Bromodichloromethane	5	U	97-63-2	Ethyl Methacrylate	5	U
7-5	1,2-Dichloropropane	5	U	96-18-4	1,2,3-Trichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U	110-57-6	Trans-1,4-Dichloro-2-Butene	5	U
79-01-6	Trichloroethene	5	U				
124-48-1	Dibromochloromethane	5	U		Toluene-d8 - SS	105	
79-00-5	1,1,2-Trichloroethane	5	U		Bromofluorobenzene - SS	104	
71-43-2	Benzene	5	U		1,2-Dichloroethane-d4 - SS	101	
10061-02-6	trans-1,3-Dichloropropene	5	U				
110-75-8	2-Chloroethylvinylether	10	U				

U - Compound analyzed for but not detected.
B - Compound was detected in QC blank.
J - Reported value less than quantitation limit.
SS - Surrogate Standard reported as percent recovery.

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ORGANICS ANALYSIS DATA SHEET

...oratory Name:	CH2M HILL/MGM	Concentration:	LOW	Date Extracted:	
...b Sample ID:	Y03052B1	Sample Matrix:	SOIL	Date Analyzed:	03/05/92
...lient Sample ID:	QC BLANK S	Percent Moisture:	0.0	Dilution Factor:	1.0

VOLATILE (8240) COMPOUNDS

CAS Number		ug/Kg		CAS Number		ug/Kg	
...-87-3	Chloromethane	10	U	75-25-2	Bromoform	5	U
...4-83-9	Bromomethane	10	U	591-78-6	2-Hexanone	10	U
...5-01-4	Vinyl Chloride	10	U	108-10-1	4-Methyl-2-Pentanone	10	U
...-00-3	Chloroethane	10	U	127-18-4	Tetrachloroethene	5	U
...-09-2	Methylene Chloride	10	B	79-34-5	1,1,2,2-Tetrachloroethane	5	U
...7-64-1	Acetone	7	BJ	108-88-3	Toluene	5	U
...-15-0	Carbon Disulfide	5	U	108-90-7	Chlorobenzene	5	U
...-69-4	Trichlorofluoromethane	5	U	100-41-4	Ethylbenzene	5	U
...5-35-4	1,1-Dichloroethene	5	U	100-42-5	Styrene	5	U
...5-34-3	1,1-Dichloroethane	5	U	1330-20-7	Xylene (total)	5	U
...0-59-0	1,2-Dichloroethene (total)	5	U	541-73-1	1,3-Dichlorobenzene	5	U
...-66-3	Chloroform	1	BJ	106-46-7	1,4-Dichlorobenzene	5	U
...07-06-2	1,2-Dichloroethane	5	U	95-50-1	1,2-Dichlorobenzene	5	U
...-93-3	2-Butanone	10	U	107-02-8	Acrolein	100	U
...-55-6	1,1,1-Trichloroethane	5	U	74-88-4	Iodomethane	10	U
...6-23-5	Carbon Tetrachloride	5	U	107-13-1	Acrylonitrile	100	U
...08-05-4	Vinyl Acetate	10	U	74-95-3	Dibromomethane	5	U
...-27-4	Bromodichloromethane	5	U	97-63-2	Ethyl Methacrylate	5	U
...7-5	1,2-Dichloropropane	5	U	96-18-4	1,2,3-Trichloropropane	5	U
...001-01-5	cis-1,3-Dichloropropene	5	U	110-57-6	Trans-1,4-Dichloro-2-Butene	5	U
...-01-6	Trichloroethene	5	U				
...4-48-1	Dibromochloromethane	5	U		Toluene-d8 - SS	103	
...79-00-5	1,1,2-Trichloroethane	5	U		Bromofluorobenzene - SS	98	
...-43-2	Benzene	5	U		1,2-Dichloroethane-d4 - SS	105	
...061-02-6	trans-1,3-Dichloropropene	5	U				
...10-75-8	2-Chloroethylvinylether	10	U				

U - Compound analyzed for but not detected.
B - Compound was detected in QC blank.
J - Reported value less than quantitation limit.
SS - Surrogate Standard reported as percent recovery.

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ORGANICS ANALYSIS DATA SHEET

Laboratory Name:	CH2M HILL/MGM	Concentration:	MED	Date Extracted:	03/06/92
Lab Sample ID:	L03062B1	Sample Matrix:	SOIL	Date Analyzed:	03/06/92
Client Sample ID:	QC BLANK SM	Percent Moisture:	0.0	Dilution Factor:	1.0

VOLATILE (8240) COMPOUNDS

CAS Number		ug/Kg		CAS Number		ug/Kg	
74-87-3	Chloromethane	1200	U	75-25-2	Bromoform	620	U
74-83-9	Bromomethane	1200	U	591-78-6	2-Hexanone	1200	U
75-01-4	Vinyl Chloride	1200	U	108-10-1	4-Methyl-2-Pentanone	1200	U
75-00-3	Chloroethane	1200	U	127-18-4	Tetrachloroethene	620	U
75-09-2	Methylene Chloride	680	B	79-34-5	1,1,2,2-Tetrachloroethane	620	U
67-64-1	Acetone	1200	U	108-88-3	Toluene	620	U
75-15-0	Carbon Disulfide	620	U	108-90-7	Chlorobenzene	620	U
75-69-4	Trichlorofluoromethane	620	U	100-41-4	Ethylbenzene	620	U
75-35-4	1,1-Dichloroethene	620	U	100-42-5	Styrene	620	U
75-34-3	1,1-Dichloroethane	620	U	1330-20-7	Xylene (total)	620	U
540-59-0	1,2-Dichloroethene (total)	620	U	541-73-1	1,3-Dichlorobenzene	620	U
67-66-3	Chloroform	170	BJ	106-46-7	1,4-Dichlorobenzene	620	U
107-06-2	1,2-Dichloroethane	620	U	95-50-1	1,2-Dichlorobenzene	620	U
78-93-3	2-Butanone	1200	U	107-02-8	Acrolein	12000	U
71-55-6	1,1,1-Trichloroethane	620	U	74-88-4	Iodomethane	1200	U
56-23-5	Carbon Tetrachloride	620	U	107-13-1	Acrylonitrile	12000	U
108-05-4	Vinyl Acetate	1200	U	74-95-3	Dibromomethane	620	U
75-27-4	Bromodichloromethane	620	U	97-63-2	Ethyl Methacrylate	620	U
7-5	1,2-Dichloropropane	620	U	96-18-4	1,2,3-Trichloropropane	620	U
10061-01-5	cis-1,3-Dichloropropene	620	U	110-57-6	Trans-1,4-Dichloro-2-Butene	620	U
79-01-6	Trichloroethene	620	U				
124-48-1	Dibromochloromethane	620	U		Toluene-d8 - SS	103	
79-00-5	1,1,2-Trichloroethane	620	U		Bromofluorobenzene - SS	89	
71-43-2	Benzene	620	U		1,2-Dichloroethane-d4 - SS	98	
10061-02-6	trans-1,3-Dichloropropene	620	U				
110-75-8	2-Chloroethylvinylether	1200	U				

U - Compound analyzed for but not detected.
B - Compound was detected in QC blank.
J - Reported value less than quantitation limit.
SS - Surrogate Standard reported as percent recovery.

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CH2M HILL Quality Analytical Laboratories 2567 Fairlane Drive, P.O. Box 230548, Montgomery, Alabama 36116 205.271.1444 MTP

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CASE NARRATIVE FOR SEMIVOLATILE MASS SPECTROMETRY SAMPLES

LABORATORY: CH2M HILL LABORATORIES CLIENT: BAXTER HEALTHCARE CORP.

CASE NO. : N/A CONTRACT NO.: N/A

LAB NO. : 21045 SDG NO.: N/A

I. RECEIPT

A. DATE: February 27, 1992

B. SAMPLE INFORMATION

LAB ID	CLIENT ID	SAMPLE MATRIX	DATE SAMPLED	EXTRACTION DATE	ANALYSIS DATE
21045001	SB-1(0-2FT)	SOIL	02/24/92	02/27/92	03/04/92
21045002	SB-2(4-8FT)	SOIL	02/24/92	02/27/92	03/04/92
21045003	RB-1-WATER	WATER	02/25/92	02/28/92	03/12/92
21045004	BKGD-1(6-8_)	SOIL	02/25/92	02/27/92	03/04/92
21045005	MW-8-WATER	WATER	02/25/92	02/28/92	03/13/92
S02272B1	QC_BLANK_S	SOIL	NA	02/27/92	03/04/92
W02282B1	QC_BLANK_W	WATER	NA	02/28/92	03/12/92

C. Documentation Exceptions : Tentatively Identified Compounds were not requested as part of this analysis. Therefore, these forms will not be included.

No exceptions were encountered.

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II. EXTRACTION

A. Holding Times: All holding times were met.

B. Extraction Exceptions : No exceptions were encountered.

III. ANALYSIS

A. Holding times: All holding times were met.

B. Analytical Exceptions : No exceptions were encountered.

IV. QUALITY CONTROL

A. Method Blank : All associated method blanks met acceptable QC criteria.

B. Surrogate Recoveries : All samples met acceptable QC limits.

C. Matrix Spike Results : Matrix spike results have not been reported with this contract.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Herb Kelly 3/19/92
Herb Kelly Date
Manager, Organic Division

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Laboratory Name:	CH2M HILL/MGM	Concentration:	LOW	Date Extracted:	02/27/92
Lab Sample ID:	21045001	Sample Matrix:	SOIL	Date Analyzed:	03/04/92
Client Sample ID:	SB-1(0-2FT)	Percent Moisture:	9.0	Dilution Factor:	1.0

SEMIVOLATILE (8270) COMPOUNDS

CAS Number		ug/Kg		CAS Number		ug/Kg	
62-75-9	N-Nitrosodimethylamine	360	U	100-02-7	4-Nitrophenol	1800	U
108-95-2	Phenol	360	U	132-64-9	Dibenzofuran	160	J
62-53-3	Aniline	360	U	121-14-2	2,4-Dinitrotoluene	360	U
111-44-4	bis(2-Chloroethyl)Ether	360	U	84-66-2	Diethylphthalate	360	U
95-57-8	2-Chlorophenol	360	U	7005-72-3	4-Chlorophenyl-phenylether	360	U
541-73-1	1,3-Dichlorobenzene	360	U	86-73-7	Fluorene	300	J
106-46-7	1,4-Dichlorobenzene	360	U	100-10-6	4-Nitroaniline	1800	U
100-51-6	Benzyl Alcohol	360	U	534-52-1	4,6-Dinitro-2-Methylphenol	1800	U
95-50-1	1,2-Dichlorobenzene	360	U	86-30-6	N-Nitrosodiphenylamine (1)	360	U
95-48-7	2-Methylphenol	360	U	122-66-7	1,2-Diphenylhydrazine	360	U
39638-32-9	bis(2-Chloroisopropyl)Ether	360	U	101-55-3	4-Bromophenyl-phenylether	360	U
106-44-5	4-Methylphenol	360	U	118-74-1	Hexachlorobenzene	360	U
621-64-7	N-Nitroso-Di-n-Propylamine	360	U	87-86-5	Pentachlorophenol	1800	BU
67-72-1	Hexachloroethane	360	U	85-01-8	Phenanthrene	2200	
98-95-3	Nitrobenzene	360	U	120-12-7	Anthracene	700	
78-59-1	Isophorone	360	U	84-74-2	Di-n-Butylphthalate	120	J
88-75-5	2-Nitrophenol	360	U	206-44-0	Fluoranthene	360	U
105-67-9	2,4-Dimethylphenol	360	U	92-87-5	Benzidine	1800	U
65-85-0	Benzoic Acid	1800	U	129-00-0	Pyrene	360	U
111-91-1	bis(2-Chloroethoxy)Methane	360	U	85-68-7	Butylbenzylphthalate	360	U
120-83-2	2,4-Dichlorophenol	360	U	91-94-1	3,3'-Dichlorobenzidine	730	U
120-82-1	1,2,4-Trichlorobenzene	360	U	56-55-3	Benzo(a)Anthracene	1000	
91-20-3	Naphthalene	86	J	218-01-9	Chrysene	120	J
106-47-8	4-Chloroaniline	360	U	117-81-7	bis(2-Ethylhexyl)Phthalate	130	J
87-68-3	Hexachlorobutadiene	360	U	117-84-0	Di-n-Octyl Phthalate	360	U
59-50-7	4-Chloro-3-Methylphenol	360	U	205-99-2	Benzo(b)Fluoranthene	490	
91-57-6	2-Methylnaphthalene	67	J	207-08-9	Benzo(k)Fluoranthene	490	
77-47-4	Hexachlorocyclopentadiene	360	U	50-32-8	Benzo(a)Pyrene	770	
88-06-2	2,4,6-Trichlorophenol	360	U	193-39-5	Indeno(1,2,3-cd)Pyrene	420	
95-95-4	2,4,5-Trichlorophenol	1800	U	53-70-3	Dibenz(a,h)Anthracene	220	J
91-58-7	2-Chloronaphthalene	360	U	191-24-2	Benzo(g,h,i)Perylene	470	
88-74-4	2-Nitroaniline	1800	U	109-06-8	2-Picoline	1800	U
131-11-3	Dimethylphthalate	360	U	66-27-3	Methyl methanesulfonate	360	U
208-96-8	Acenaphthylene	360	U	62-50-0	Ethyl methanesulfonate	360	U
606-20-2	2,6-Dinitrotoluene	360	U	98-86-2	Acetophenone	360	U
99-09-2	3-Nitroaniline	1800	U	100-75-4	N-Nitrosopiperidine	360	U
83-32-9	Acenaphthene	200	J	122-09-8	Phenyl-tert-butylamine	1800	U
51-28-5	2,4-Dinitrophenol	1800	U	87-65-0	2,6-Dichlorophenol	360	U
				924-16-3	N-Nitroso-di-n-butylamine	360	U

(1) - Cannot be separated from diphenylamine.
U - Compound analyzed for but not detected.
B - Compound was detected in QC blank.
J - Reported value less than quantitation limit.

Form I

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ORGANICS ANALYSIS DATA SHEET

Laboratory Name:	CH2M HILL/MGM	Concentration:	LOW	Date Extracted:	02/27/92
Lab Sample ID:	21045001	Sample Matrix:	SOIL	Date Analyzed:	03/04/92
Client Sample ID:	SB-1(0-2FT)	Percent Moisture:	9.0	Dilution Factor:	1.0

SEMIVOLATILE (8270) COMPOUNDS

CAS Number		ug/Kg		CAS Number	ug/Kg
5-94-3	1,2,4,5-Tetrachlorobenzene	1800	U		
08-93-5	Pentachlorobenzene	1800	U		
134-32-7	1-Naphthylamine	1800	U		
1-59-8	2-Naphthylamine	1800	U		
0-13-1	1-Chloronaphthalene . . .	360	U		
58-90-2	2,3,4,6-Tetrachlorophenol	360	U		
122-39-4	Diphenylamine	360	U		
2-44-2	Phenacetin	360	U		
2-67-1	4-Aminobiphenyl	1800	U		
32-68-8	Pentachloronitrobenzene .	1800	U		
3950-58-5	Pronamide	360	U		
0-11-7	p-Dimethylaminoazobenzene	360	U		
57-97-6	7,12-Dimethylbenz(a)Anthrac	360	U		
5-49-5	3-Methylcholanthrene . . .	360	U		
	Nitrobenzene-d5 - SS . . .	88			
	2-Fluorobiphenyl - SS . .	81			
	Terphenyl-d14 - SS	70			
	Phenol-d5 - SS	72			
	2-Fluorophenol - SS . . .	79			
	2,4,6-Tribromophenol - SS	69			

U - Compound analyzed for but not detected.
B - Compound was detected in QC blank.
J - Reported value less than quantitation limit.
SS - Surrogate Standard reported as percent recovery.

Form I

CH2M HILL
Quality Analytical Laboratories
2567 Fairlane Drive, P.O. Box 230548, Montgomery, Alabama 36116
205.271.1444

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ORGANICS ANALYSIS DATA SHEET

Laboratory Name:	CH2M HILL/MGM	Concentration:	LOW	Date Extracted:	02/27/92
Lab Sample ID:	21045002	Sample Matrix:	SOIL	Date Analyzed:	03/04/92
Client Sample ID:	SB-2(4-8FT)	Percent Moisture:	16.0	Dilution Factor:	1.0

SEMIVOLATILE (8270) COMPOUNDS

CAS Number		ug/Kg		CAS Number		ug/Kg	
[illegible]-75-9	N-Nitrosodimethylamine	390	U	100-02-7	4-Nitrophenol	1900	U
[illegible]08-95-2	Phenol	390	U	132-64-9	Dibenzofuran	390	U
62-53-3	Aniline	390	U	121-14-2	2,4-Dinitrotoluene	390	U
[illegible]1-44-4	bis(2-Chloroethyl)Ether	390	U	84-66-2	Diethylphthalate	390	U
[illegible]-57-8	2-Chlorophenol	390	U	7005-72-3	4-Chlorophenyl-phenylether	390	U
541-73-1	1,3-Dichlorobenzene	390	U	86-73-7	Fluorene	390	U
[illegible]06-46-7	1,4-Dichlorobenzene	390	U	100-10-6	4-Nitroaniline	1900	U
[illegible]0-51-6	Benzyl Alcohol	390	U	534-52-1	4,6-Dinitro-2-Methylphenol	1900	U
[illegible]5-50-1	1,2-Dichlorobenzene	390	U	86-30-6	N-Nitrosodiphenylamine (1)	390	U
95-48-7	2-Methylphenol	390	U	122-66-7	1,2-Diphenylhydrazine	390	U
[illegible]638-32-9	bis(2-Chloroisopropyl)Ether	390	U	101-55-3	4-Bromophenyl-phenylether	390	U
[illegible]6-44-5	4-Methylphenol	390	U	118-74-1	Hexachlorobenzene	390	U
621-64-7	N-Nitroso-Di-n-Propylamine	390	U	87-86-5	Pentachlorophenol	1900	BU
[illegible]7-72-1	Hexachloroethane	390	U	85-01-8	Phenanthrene	390	U
[illegible]-95-3	Nitrobenzene	390	U	120-12-7	Anthracene	390	U
78-59-1	Isophorone	390	U	84-74-2	Di-n-Butylphthalate	110	J
88-75-5	2-Nitrophenol	390	U	206-44-0	Fluoranthene	390	U
[illegible]5-67-9	2,4-Dimethylphenol	390	U	92-87-5	Benzidine	1900	U
[illegible]5-0	Benzoic Acid	1900	U	129-00-0	Pyrene	390	U
111-91-1	bis(2-Chloroethoxy)Methane	390	U	85-68-7	Butylbenzylphthalate	390	U
[illegible]0-83-2	2,4-Dichlorophenol	390	U	91-94-1	3,3'-Dichlorobenzidine	790	U
[illegible]0-82-1	1,2,4-Trichlorobenzene	390	U	56-55-3	Benzo(a)Anthracene	390	U
91-20-3	Naphthalene	390	U	218-01-9	Chrysene	390	U
[illegible]06-47-8	4-Chloroaniline	390	U	117-81-7	bis(2-Ethylhexyl)Phthalate	350	J
[illegible]7-68-3	Hexachlorobutadiene	390	U	117-84-0	Di-n-Octyl Phthalate	390	U
59-50-7	4-Chloro-3-Methylphenol	390	U	205-99-2	Benzo(b)Fluoranthene	390	U
91-57-6	2-Methylnaphthalene	390	U	207-08-9	Benzo(k)Fluoranthene	390	U
[illegible]7-47-4	Hexachlorocyclopentadiene	390	U	50-32-8	Benzo(a)Pyrene	390	U
[illegible]-06-2	2,4,6-Trichlorophenol	390	U	193-39-5	Indeno(1,2,3-cd)Pyrene	390	U
95-95-4	2,4,5-Trichlorophenol	1900	U	53-70-3	Dibenz(a,h)Anthracene	390	U
[illegible]1-58-7	2-Chloronaphthalene	390	U	191-24-2	Benzo(g,h,i)Perylene	390	U
[illegible]-74-4	2-Nitroaniline	1900	U	109-06-8	2-Picoline	1900	U
131-11-3	Dimethylphthalate	390	U	66-27-3	Methyl methanesulfonate	390	U
208-96-8	Acenaphthylene	390	U	62-50-0	Ethyl methanesulfonate	390	U
[illegible]6-20-2	2,6-Dinitrotoluene	390	U	98-86-2	Acetophenone	390	U
[illegible]-09-2	3-Nitroaniline	1900	U	100-75-4	N-Nitrosopiperidine	390	U
83-32-9	Acenaphthene	390	U	122-09-8	Phenyl-tert-butylamine	1900	U
[illegible]1-28-5	2,4-Dinitrophenol	1900	U	87-65-0	2,6-Dichlorophenol	390	U
				924-16-3	N-Nitroso-di-n-butylamine	390	U

(1) - Cannot be separated from diphenylamine.
U - Compound analyzed for but not detected.
B - Compound was detected in QC blank.
- Reported value less than quantitation limit.

Form I

CH2M HILL Quality Analytical Laboratories 2567 Fairlane Drive, P.O. Box 230548, Montgomery, Alabama 36116 205.271.1444 MTP

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ORGANICS ANALYSIS DATA SHEET

Laboratory Name:	CH2M HILL/MGM	Concentration:	LOW	Date Extracted:	02/27/92
Lab Sample ID:	21045002	Sample Matrix:	SOIL	Date Analyzed:	03/04/92
Client Sample ID:	SB-2(4-8FT)	Percent Moisture:	16.0	Dilution Factor:	1.0

SEMIVOLATILE (8270) COMPOUNDS

CAS Number		ug/Kg		CAS Number	ug/Kg
6-94-3	1,2,4,5-Tetrachlorobenzene	1900	U		
08-93-5	Pentachlorobenzene	1900	U		
134-32-7	1-Naphthylamine	1900	U		
1-59-8	2-Naphthylamine	1900	U		
0-13-1	1-Chloronaphthalene . . .	390	U		
58-90-2	2,3,4,6-Tetrachlorophenol	390	U		
122-39-4	Diphenylamine	390	U		
2-44-2	Phenacetin	390	U		
92-67-1	4-Aminobiphenyl	1900	U		
82-68-8	Pentachloronitrobenzene .	1900	U		
3950-58-5	Pronamide	390	U		
0-11-7	p-Dimethylaminoazobenzene	390	U		
57-97-6	7,12-Dimethylbenz(a)Anthrac	390	U		
6-49-5	3-Methylcholanthrene . . .	390	U		
	Nitrobenzene-d5 - SS . . .	92			
	2-Fluorobiphenyl - SS . .	99			
	Terphenyl-d14 - SS	95			
	Phenol-d5 - SS	71			
	2-Fluorophenol - SS . . .	87			
	2,4,6-Tribromophenol - SS	87			

U - Compound analyzed for but not detected.
B - Compound was detected in QC blank.
J - Reported value less than quantitation limit.
SS - Surrogate Standard reported as percent recovery.

Form I

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ORGANICS ANALYSIS DATA SHEET

Laboratory Name: CH2M HILL/MGM
Lab Sample ID: 21045003
Client Sample ID: RB-1 WATER

Concentration: LOW
Sample Matrix: WATER
Percent Moisture: _____

Date Extracted: 02/28/92
Date Analyzed: 03/12/92
Dilution Factor: 1.0

SEMIVOLATILE (8270) COMPOUNDS

CAS Number		ug/L		CAS Number		ug/L	
2-75-9	N-Nitrosodimethylamine	10	U	100-02-7	4-Nitrophenol	50	U
08-95-2	Phenol	10	U	132-64-9	Dibenzofuran	10	U
62-53-3	Aniline	10	U	121-14-2	2,4-Dinitrotoluene	10	U
11-44-4	bis(2-Chloroethyl)Ether	10	U	84-66-2	Diethylphthalate	10	U
5-57-8	2-Chlorophenol	10	U	7005-72-3	4-Chlorophenyl-phenylether	10	U
541-73-1	1,3-Dichlorobenzene	10	U	86-73-7	Fluorene	10	U
106-46-7	1,4-Dichlorobenzene	10	U	100-10-6	4-Nitroaniline	50	U
00-51-6	Benzyl Alcohol	10	U	534-52-1	4,6-Dinitro-2-Methylphenol	50	U
5-50-1	1,2-Dichlorobenzene	10	U	86-30-6	N-Nitrosodiphenylamine (1)	10	U
95-48-7	2-Methylphenol	10	U	122-66-7	1,2-Diphenylhydrazine	10	U
9638-32-9	bis(2-Chloroisopropyl)Ether	10	U	101-55-3	4-Bromophenyl-phenylether	10	U
06-44-5	4-Methylphenol	10	U	118-74-1	Hexachlorobenzene	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U	87-86-5	Pentachlorophenol	50	U
7-72-1	Hexachloroethane	10	U	85-01-8	Phenanthrene	10	U
8-95-3	Nitrobenzene	10	U	120-12-7	Anthracene	10	U
78-59-1	Isophorone	10	U	84-74-2	Di-n-Butylphthalate	10	U
88-75-5	2-Nitrophenol	10	U	206-44-0	Fluoranthene	10	U
05-67-9	2,4-Dimethylphenol	10	U	92-87-5	Benzidine	50	U
5-0	Benzoic Acid	50	U	129-00-0	Pyrene	10	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U	85-68-7	Butylbenzylphthalate	10	U
20-83-2	2,4-Dichlorophenol	10	U	91-94-1	3,3'-Dichlorobenzidine	20	U
20-82-1	1,2,4-Trichlorobenzene	10	U	56-55-3	Benzo(a)Anthracene	10	U
91-20-3	Naphthalene	10	U	218-01-9	Chrysene	10	U
106-47-8	4-Chloroaniline	10	U	117-81-7	bis(2-Ethylhexyl)Phthalate	4	J
7-68-3	Hexachlorobutadiene	10	U	117-84-0	Di-n-Octyl Phthalate	10	U
9-50-7	4-Chloro-3-Methylphenol	10	U	205-99-2	Benzo(b)Fluoranthene	10	U
91-57-6	2-Methylnaphthalene	10	U	207-08-9	Benzo(k)Fluoranthene	10	U
7-47-4	Hexachlorocyclopentadiene	10	U	50-32-8	Benzo(a)Pyrene	10	U
8-06-2	2,4,6-Trichlorophenol	10	U	193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
95-95-4	2,4,5-Trichlorophenol	50	U	53-70-3	Dibenz(a,h)Anthracene	10	U
91-58-7	2-Chloronaphthalene	10	U	191-24-2	Benzo(g,h,i)Perylene	10	U
8-74-4	2-Nitroaniline	50	U	109-06-8	2-Picoline	50	U
131-11-3	Dimethylphthalate	10	U	66-27-3	Methyl methanesulfonate	10	U
208-96-8	Acenaphthylene	10	U	62-50-0	Ethyl methanesulfonate	10	U
606-20-2	2,6-Dinitrotoluene	10	U	98-86-2	Acetophenone	10	U
99-09-2	3-Nitroaniline	50	U	100-75-4	N-Nitrosopiperidine	10	U
83-32-9	Acenaphthene	10	U	122-09-8	Phenyl-tert-butylamine	50	U
51-28-5	2,4-Dinitrophenol	50	U	87-65-0	2,6-Dichlorophenol	10	U
				924-16-3	N-Nitroso-di-n-butylamine	10	U

(1) - Cannot be separated from diphenylamine.
U - Compound analyzed for but not detected.
B - Compound was detected in QC blank.
- Reported value less than quantitation limit.

Form I

CH2M HILL
Quality Analytical Laboratories
2567 Fairlane Drive, P.O. Box 230548, Montgomery, Alabama 36116
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ORGANICS ANALYSIS DATA SHEET

Laboratory Name:	CH2M HILL/MGM	Concentration:	LOW	Date Extracted:	02/28/92
Lab Sample ID:	21045003	Sample Matrix:	WATER	Date Analyzed:	03/12/92
Client Sample ID:	RB-1 WATER	Percent Moisture:		Dilution Factor:	1.0

SEMIVOLATILE (8270) COMPOUNDS

CAS Number		ug/L		CAS Number	ug/L
[illegible]-94-3	1,2,4,5-Tetrachlorobenzene	50	U		
608-93-5	Pentachlorobenzene	50	U		
134-32-7	1-Naphthylamine	50	U		
[illegible]-59-8	2-Naphthylamine	50	U		
[illegible]-13-1	1-Chloronaphthalene . . .	10	U		
58-90-2	2,3,4,6-Tetrachlorophenol	10	U		
122-39-4	Diphenylamine	10	U		
[illegible]-44-2	Phenacetin	10	U		
92-67-1	4-Aminobiphenyl	50	U		
82-68-8	Pentachloronitrobenzene .	50	U		
950-58-5	Pronamide	10	U		
[illegible]-11-7	p-Dimethylaminoazobenzene	10	U		
57-97-6	7,12-Dimethylbenz(a)Anthrac	10	U		
[illegible]-49-5	3-Methylcholanthrene . . .	10	U		
	Nitrobenzene-d5 - SS . . .	78			
	2-Fluorobiphenyl - SS . .	51			
	Terphenyl-d14 - SS	86			
	Phenol-d5 - SS	23			
	2-Fluorophenol - SS . . .	40			
	2,4,6-Tribromophenol - SS	65			

U - Compound analyzed for but not detected.
B - Compound was detected in QC blank.
J - Reported value less than quantitation limit.
SS - Surrogate Standard reported as percent recovery.

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CH2M HILL Quality Analytical Laboratories 2567 Fairlane Drive, P.O. Box 230548, Montgomery, Alabama 36116 205.271.1444 MTP

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ORGANICS ANALYSIS DATA SHEET

Laboratory Name:	CH2M HILL/MGM	Concentration:	LOW	Date Extracted:	02/27/92
Lab Sample ID:	21045004	Sample Matrix:	SOIL	Date Analyzed:	03/04/92
Client Sample ID:	BKGD-1(6-8)	Percent Moisture:	18.0	Dilution Factor:	1.0

SEMIVOLATILE (8270) COMPOUNDS

CAS Number		ug/Kg		CAS Number		ug/Kg	
2-75-9	N-Nitrosodimethylamine	400	U	100-02-7	4-Nitrophenol	2000	U
08-95-2	Phenol	400	U	132-64-9	Dibenzofuran	400	U
62-53-3	Aniline	400	U	121-14-2	2,4-Dinitrotoluene	400	U
11-44-4	bis(2-Chloroethyl)Ether	400	U	84-66-2	Diethylphthalate	400	U
5-57-8	2-Chlorophenol	400	U	7005-72-3	4-Chlorophenyl-phenylether	400	U
541-73-1	1,3-Dichlorobenzene	400	U	86-73-7	Fluorene	400	U
06-46-7	1,4-Dichlorobenzene	400	U	100-10-6	4-Nitroaniline	2000	U
00-51-6	Benzyl Alcohol	400	U	534-52-1	4,6-Dinitro-2-Methylphenol	2000	U
95-50-1	1,2-Dichlorobenzene	400	U	86-30-6	N-Nitrosodiphenylamine (1)	400	U
95-48-7	2-Methylphenol	400	U	122-66-7	1,2-Diphenylhydrazine	400	U
9638-32-9	bis(2-Chloroisopropyl)Ether	400	U	101-55-3	4-Bromophenyl-phenylether	400	U
06-44-5	4-Methylphenol	400	U	118-74-1	Hexachlorobenzene	400	U
521-64-7	N-Nitroso-Di-n-Propylamine	400	U	87-86-5	Pentachlorophenol	2000	BU
7-72-1	Hexachloroethane	400	U	85-01-8	Phenanthrene	400	U
8-95-3	Nitrobenzene	400	U	120-12-7	Anthracene	400	U
78-59-1	Isophorone	400	U	84-74-2	Di-n-Butylphthalate	54	J
88-75-5	2-Nitrophenol	400	U	206-44-0	Fluoranthene	400	U
05-67-9	2,4-Dimethylphenol	400	U	92-87-5	Benzidine	2000	U
5-0	Benzoic Acid	2000	U	129-00-0	Pyrene	400	U
111-91-1	bis(2-Chloroethoxy)Methane	400	U	85-68-7	Butylbenzylphthalate	400	U
20-83-2	2,4-Dichlorophenol	400	U	91-94-1	3,3'-Dichlorobenzidine	800	U
20-82-1	1,2,4-Trichlorobenzene	400	U	56-55-3	Benzo(a)Anthracene	400	U
91-20-3	Naphthalene	400	U	218-01-9	Chrysene	400	U
06-47-8	4-Chloroaniline	400	U	117-81-7	bis(2-Ethylhexyl)Phthalate	100	J
7-68-3	Hexachlorobutadiene	400	U	117-84-0	Di-n-Octyl Phthalate	400	U
59-50-7	4-Chloro-3-Methylphenol	400	U	205-99-2	Benzo(b)Fluoranthene	400	U
91-57-6	2-Methylnaphthalene	400	U	207-08-9	Benzo(k)Fluoranthene	400	U
7-47-4	Hexachlorocyclopentadiene	400	U	50-32-8	Benzo(a)Pyrene	400	U
8-06-2	2,4,6-Trichlorophenol	400	U	193-39-5	Indeno(1,2,3-cd)Pyrene	400	U
95-95-4	2,4,5-Trichlorophenol	2000	U	53-70-3	Dibenz(a,h)Anthracene	400	U
91-58-7	2-Chloronaphthalene	400	U	191-24-2	Benzo(g,h,i)Perylene	400	U
8-74-4	2-Nitroaniline	2000	U	109-06-8	2-Picoline	2000	U
131-11-3	Dimethylphthalate	400	U	66-27-3	Methyl methanesulfonate	400	U
208-96-8	Acenaphthylene	400	U	62-50-0	Ethyl methanesulfonate	400	U
06-20-2	2,6-Dinitrotoluene	400	U	98-86-2	Acetophenone	400	U
9-09-2	3-Nitroaniline	2000	U	100-75-4	N-Nitrosopiperidine	400	U
83-32-9	Acenaphthene	400	U	122-09-8	Phenyl-tert-butylamine	2000	U
1-28-5	2,4-Dinitrophenol	2000	U	87-65-0	2,6-Dichlorophenol	400	U
				924-16-3	N-Nitroso-di-n-butylamine	400	U

(1) - Cannot be separated from diphenylamine.
U - Compound analyzed for but not detected.
B - Compound was detected in QC blank.
- Reported value less than quantitation limit.

Form I

CH2M HILL Quality Analytical Laboratories 2567 Fairlane Drive, P.O. Box 230548, Montgomery, Alabama 36116 205.271.1444 MTP

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ORGANICS ANALYSIS DATA SHEET

Laboratory Name: CH2M HILL/MGM
Lab Sample ID: 21045004
Client Sample ID: BKGD-1(6-8)

Concentration: LOW
Sample Matrix: SOIL
Percent Moisture: 18.0

Date Extracted: 02/27/92
Date Analyzed: 03/04/92
Dilution Factor: 1.0

SEMIVOLATILE (8270) COMPOUNDS

CAS Number		ug/Kg		CAS Number	ug/Kg
95-94-3	1,2,4,5-Tetrachlorobenzene	2000	U		
608-93-5	Pentachlorobenzene	2000	U		
134-32-7	1-Naphthylamine	2000	U		
91-59-8	2-Naphthylamine	2000	U		
90-13-1	1-Chloronaphthalene . . .	400	U		
58-90-2	2,3,4,6-Tetrachlorophenol	400	U		
122-39-4	Diphenylamine	400	U		
62-44-2	Phenacetin	400	U		
92-67-1	4-Aminobiphenyl	2000	U		
82-68-8	Pentachloronitrobenzene .	2000	U		
23950-58-5	Pronamide	400	U		
60-11-7	p-Dimethylaminoazobenzene	400	U		
57-97-6	7,12-Dimethylbenz(a)Anthrac	400	U		
56-49-5	3-Methylcholanthrene . . .	400	U		
	Nitrobenzene-d5 - SS . . .	89			
	2-Fluorobiphenyl - SS . .	92			
	Terphenyl-d14 - SS	70			
	Phenol-d5 - SS	77			
	2-Fluorophenol - SS . . .	75			
	2,4,6-Tribromophenol - SS	87			

U - Compound analyzed for but not detected.
B - Compound was detected in QC blank.
J - Reported value less than quantitation limit.
SS - Surrogate Standard reported as percent recovery.

Form I

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ORGANICS ANALYSIS DATA SHEET

Laboratory Name: CH2M HILL/MGM
Lab Sample ID: 21045005
Client Sample ID: MW-8 WATER

Concentration: LOW
Sample Matrix: WATER
Percent Moisture: _____

Date Extracted: 02/28/92
Date Analyzed: 03/13/92
Dilution Factor: 1.0

SEMIVOLATILE (8270) COMPOUNDS

CAS Number		ug/L		CAS Number		ug/L	
62-75-9	N-Nitrosodimethylamine	10	U	100-02-7	4-Nitrophenol	50	U
108-95-2	Phenol	10	U	132-64-9	Dibenzofuran	10	U
62-53-3	Aniline	10	U	121-14-2	2,4-Dinitrotoluene	10	U
111-44-4	bis(2-Chloroethyl)Ether	10	U	84-66-2	Diethylphthalate	10	U
95-57-8	2-Chlorophenol	10	U	7005-72-3	4-Chlorophenyl-phenylether	10	U
541-73-1	1,3-Dichlorobenzene	10	U	86-73-7	Fluorene	10	U
106-46-7	1,4-Dichlorobenzene	10	U	100-10-6	4-Nitroaniline	50	U
100-51-6	Benzyl Alcohol	10	U	534-52-1	4,6-Dinitro-2-Methylphenol	50	U
95-50-1	1,2-Dichlorobenzene	10	U	86-30-6	N-Nitrosodiphenylamine (1)	10	U
95-48-7	2-Methylphenol	10	U	122-66-7	1,2-Diphenylhydrazine	10	U
39638-32-9	bis(2-Chloroisopropyl)Ether	10	U	101-55-3	4-Bromophenyl-phenylether	10	U
106-44-5	4-Methylphenol	10	U	118-74-1	Hexachlorobenzene	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U	87-86-5	Pentachlorophenol	50	U
67-72-1	Hexachloroethane	10	U	85-01-8	Phenanthrene	10	U
98-95-3	Nitrobenzene	10	U	120-12-7	Anthracene	10	U
78-59-1	Isophorone	10	U	84-74-2	Di-n-Butylphthalate	10	U
88-75-5	2-Nitrophenol	10	U	206-44-0	Fluoranthene	10	U
105-67-9	2,4-Dimethylphenol	10	U	92-87-5	Benzidine	50	U
65-0	Benzoic Acid	50	U	129-00-0	Pyrene	10	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U	85-68-7	Butylbenzylphthalate	10	U
120-83-2	2,4-Dichlorophenol	10	U	91-94-1	3,3'-Dichlorobenzidine	20	U
120-82-1	1,2,4-Trichlorobenzene	10	U	56-55-3	Benzo(a)Anthracene	10	U
91-20-3	Naphthalene	10	U	218-01-9	Chrysene	10	U
106-47-8	4-Chloroaniline	10	U	117-81-7	bis(2-Ethylhexyl)Phthalate	10	U
87-68-3	Hexachlorobutadiene	10	U	117-84-0	Di-n-Octyl Phthalate	10	U
59-50-7	4-Chloro-3-Methylphenol	10	U	205-99-2	Benzo(b)Fluoranthene	10	U
91-57-6	2-Methylnaphthalene	10	U	207-08-9	Benzo(k)Fluoranthene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U	50-32-8	Benzo(a)Pyrene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U	193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
95-95-4	2,4,5-Trichlorophenol	50	U	53-70-3	Dibenz(a,h)Anthracene	10	U
91-58-7	2-Chloronaphthalene	10	U	191-24-2	Benzo(g,h,i)Perylene	10	U
88-74-4	2-Nitroaniline	50	U	109-06-8	2-Picoline	50	U
131-11-3	Dimethylphthalate	10	U	66-27-3	Methyl methanesulfonate	10	U
208-96-8	Acenaphthylene	10	U	62-50-0	Ethyl methanesulfonate	10	U
606-20-2	2,6-Dinitrotoluene	10	U	98-86-2	Acetophenone	10	U
99-09-2	3-Nitroaniline	50	U	100-75-4	N-Nitrosopiperidine	10	U
83-32-9	Acenaphthene	10	U	122-09-8	Phenyl-tert-butylamine	50	U
51-28-5	2,4-Dinitrophenol	50	U	87-65-0	2,6-Dichlorophenol	10	U
				924-16-3	N-Nitroso-di-n-butylamine	10	U

(1) - Cannot be separated from diphenylamine.
U - Compound analyzed for but not detected.
B - Compound was detected in QC blank.
- Reported value less than quantitation limit.

Form I

CH2M HILL Quality Analytical Laboratories 2567 Fairlane Drive, P.O. Box 230548, Montgomery, Alabama 36116 205.271.1444 MTP

Engineers
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ORGANICS ANALYSIS DATA SHEET

Laboratory Name: CH2M HILL/MGM
Lab Sample ID: 21045005
Client Sample ID: MW-8 WATER

Concentration: LOW
Sample Matrix: WATER
Percent Moisture: _____

Date Extracted: 02/28/92
Date Analyzed: 03/13/92
Dilution Factor: 1.0

SEMIVOLATILE (8270) COMPOUNDS

CAS Number		ug/L		CAS Number	ug/L
5-94-3	1,2,4,5-Tetrachlorobenzene	50	U		
08-93-5	Pentachlorobenzene	50	U		
134-32-7	1-Naphthylamine	50	U		
1-59-8	2-Naphthylamine	50	U		
0-13-1	1-Chloronaphthalene . . .	10	U		
58-90-2	2,3,4,6-Tetrachlorophenol	10	U		
122-39-4	Diphenylamine	10	U		
2-44-2	Phenacetin	10	U		
2-67-1	4-Aminobiphenyl	50	U		
82-68-8	Pentachloronitrobenzene .	50	U		
3950-58-5	Pronamide	10	U		
0-11-7	p-Dimethylaminoazobenzene	10	U		
57-97-6	7,12-Dimethylbenz(a)Anthrac	10	U		
6-49-5	3-Methylcholanthrene . . .	10	U		
	Nitrobenzene-d5 - SS . . .	74			
	2-Fluorobiphenyl - SS . .	46			
	Terphenyl-d14 - SS	81			
	Phenol-d5 - SS	24			
	2-Fluorophenol - SS . . .	39			
	2,4,6-Tribromophenol - SS	60			

U - Compound analyzed for but not detected.
B - Compound was detected in QC blank.
J - Reported value less than quantitation limit.
SS - Surrogate Standard reported as percent recovery.

Form I

CH2M HILL
Quality Analytical Laboratories
2567 Fairlane Drive, P.O. Box 230548, Montgomery, Alabama 36116
205.271.1444

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Scientists

ORGANICS ANALYSIS DATA SHEET

aboratory Name:	CH2M HILL/MGM	Concentration:	LOW	Date Extracted:	02/27/92
ab Sample ID:	S02272B1	Sample Matrix:	SOIL	Date Analyzed:	03/04/92
:lient Sample ID:	QC BLANK S	Percent Moisture:	0.0	Dilution Factor:	1.0

SEMIVOLATILE (8270) COMPOUNDS

CAS Number		ug/Kg		CAS Number		ug/Kg	
2-75-9	N-Nitrosodimethylamine	330	U	100-02-7	4-Nitrophenol	1600	U
08-95-2	Phenol	330	U	132-64-9	Dibenzofuran	330	U
52-53-3	Aniline	330	U	121-14-2	2,4-Dinitrotoluene	330	U
11-44-4	bis(2-Chloroethyl)Ether	330	U	84-66-2	Diethylphthalate	330	U
5-57-8	2-Chlorophenol	330	U	7005-72-3	4-Chlorophenyl-phenylether	330	U
541-73-1	1,3-Dichlorobenzene	330	U	86-73-7	Fluorene	330	U
106-46-7	1,4-Dichlorobenzene	330	U	100-10-6	4-Nitroaniline	1600	U
00-51-6	Benzyl Alcohol	330	U	534-52-1	4,6-Dinitro-2-Methylphenol	1600	U
5-50-1	1,2-Dichlorobenzene	330	U	86-30-6	N-Nitrosodiphenylamine (1)	330	U
95-48-7	2-Methylphenol	330	U	122-66-7	1,2-Diphenylhydrazine	330	U
39638-32-9	bis(2-Chloroisopropyl)Ether	330	U	101-55-3	4-Bromophenyl-phenylether	330	U
06-44-5	4-Methylphenol	330	U	118-74-1	Hexachlorobenzene	330	U
621-64-7	N-Nitroso-Di-n-Propylamine	330	U	87-86-5	Pentachlorophenol	180	BJ
7-72-1	Hexachloroethane	330	U	85-01-8	Phenanthrene	330	U
8-95-3	Nitrobenzene	330	U	120-12-7	Anthracene	330	U
78-59-1	Isophorone	330	U	84-74-2	Di-n-Butylphthalate	330	U
38-75-5	2-Nitrophenol	330	U	206-44-0	Fluoranthene	330	U
05-67-9	2,4-Dimethylphenol	330	U	92-87-5	Benzidine	1600	U
5-0	Benzoic Acid	1600	U	129-00-0	Pyrene	330	U
111-91-1	bis(2-Chloroethoxy)Methane	330	U	85-68-7	Butylbenzylphthalate	330	U
20-83-2	2,4-Dichlorophenol	330	U	91-94-1	3,3'-Dichlorobenzidine	660	U
20-82-1	1,2,4-Trichlorobenzene	330	U	56-55-3	Benzo(a)Anthracene	330	U
91-20-3	Naphthalene	330	U	218-01-9	Chrysene	330	U
106-47-8	4-Chloroaniline	330	U	117-81-7	bis(2-Ethylhexyl)Phthalate	330	U
7-68-3	Hexachlorobutadiene	330	U	117-84-0	Di-n-Octyl Phthalate	330	U
9-50-7	4-Chloro-3-Methylphenol	330	U	205-99-2	Benzo(b)Fluoranthene	330	U
91-57-6	2-Methylnaphthalene	330	U	207-08-9	Benzo(k)Fluoranthene	330	U
7-47-4	Hexachlorocyclopentadiene	330	U	50-32-8	Benzo(a)Pyrene	330	U
8-06-2	2,4,6-Trichlorophenol	330	U	193-39-5	Indeno(1,2,3-cd)Pyrene	330	U
95-95-4	2,4,5-Trichlorophenol	1600	U	53-70-3	Dibenz(a,h)Anthracene	330	U
91-58-7	2-Chloronaphthalene	330	U	191-24-2	Benzo(g,h,i)Perylene	330	U
8-74-4	2-Nitroaniline	1600	U	109-06-8	2-Picoline	1600	U
131-11-3	Dimethylphthalate	330	U	66-27-3	Methyl methanesulfonate	330	U
208-96-8	Acenaphthylene	330	U	62-50-0	Ethyl methanesulfonate	330	U
06-20-2	2,6-Dinitrotoluene	330	U	98-86-2	Acetophenone	330	U
9-09-2	3-Nitroaniline	1600	U	100-75-4	N-Nitrosopiperidine	330	U
83-32-9	Acenaphthene	330	U	122-09-8	Phenyl-tert-butylamine	1600	U
1-28-5	2,4-Dinitrophenol	1600	U	87-65-0	2,6-Dichlorophenol	330	U
				924-16-3	N-Nitroso-di-n-butylamine	330	U

(1) - Cannot be separated from diphenylamine.
U - Compound analyzed for but not detected.
B - Compound was detected in QC blank.
J - Reported value less than quantitation limit.

Form I

CH2M HILL Quality Analytical Laboratories 2567 Fairlane Drive, P.O. Box 230548, Montgomery, Alabama 36116 205.271.1444

Engineers
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ORGANICS ANALYSIS DATA SHEET

Laboratory Name:	CH2M HILL/MGM	Concentration:	LOW	Date Extracted:	02/27/92
Lab Sample ID:	S02272B1	Sample Matrix:	SOIL	Date Analyzed:	03/04/92
Client Sample ID:	QC BLANK S	Percent Moisture:	0.0	Dilution Factor:	1.0

SEMIVOLATILE (8270) COMPOUNDS

CAS Number		ug/Kg		CAS Number	ug/Kg
6-94-3	1,2,4,5-Tetrachlorobenzene	1600	U		
08-93-5	Pentachlorobenzene	1600	U		
134-32-7	1-Naphthylamine	1600	U		
1-59-8	2-Naphthylamine	1600	U		
0-13-1	1-Chloronaphthalene . . .	330	U		
58-90-2	2,3,4,6-Tetrachlorophenol	330	U		
122-39-4	Diphenylamine	330	U		
2-44-2	Phenacetin	330	U		
2-67-1	4-Aminobiphenyl	1600	U		
32-68-8	Pentachloronitrobenzene .	1600	U		
3950-58-5	Pronamide	330	U		
0-11-7	p-Dimethylaminoazobenzene	330	U		
57-97-6	7,12-Dimethylbenz(a)Anthrac	330	U		
56-49-5	3-Methylcholanthrene . . .	330	U		

	Nitrobenzene-d5 - SS . . .	79			
	2-Fluorobiphenyl - SS . .	86			
	Terphenyl-d14 - SS	93			
	Phenol-d5 - SS	61			
	2-Fluorophenol - SS . . .	61			
	2,4,6-Tribromophenol - SS	78			

U - Compound analyzed for but not detected.
B - Compound was detected in QC blank.
J - Reported value less than quantitation limit.
SS - Surrogate Standard reported as percent recovery.

Form I

CH2M HILL Quality Analytical Laboratories 2567 Fairlane Drive, P.O. Box 230548, Montgomery, Alabama 36116 205.271.1444 MTP

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ORGANICS ANALYSIS DATA SHEET

Laboratory Name:	CH2M HILL/MGM	Concentration:	LOW	Date Extracted:	02/28/92
Lab Sample ID:	W02282B1	Sample Matrix:	WATER	Date Analyzed:	03/12/92
Client Sample ID:	QC BLANK W	Percent Moisture:		Dilution Factor:	1.0

SEMIVOLATILE (8270) COMPOUNDS

CAS Number		ug/L		CAS Number		ug/L	
[illegible]-75-9	N-Nitrosodimethylamine	10	U	100-02-7	4-Nitrophenol	50	U
[illegible]08-95-2	Phenol	10	U	132-64-9	Dibenzofuran	10	U
62-53-3	Aniline	10	U	121-14-2	2,4-Dinitrotoluene	10	U
[illegible]11-44-4	bis(2-Chloroethyl)Ether	10	U	84-66-2	Diethylphthalate	10	U
[illegible]-57-8	2-Chlorophenol	10	U	7005-72-3	4-Chlorophenyl-phenylether	10	U
541-73-1	1,3-Dichlorobenzene	10	U	86-73-7	Fluorene	10	U
[illegible]06-46-7	1,4-Dichlorobenzene	10	U	100-10-6	4-Nitroaniline	50	U
[illegible]0-51-6	Benzyl Alcohol	10	U	534-52-1	4,6-Dinitro-2-Methylphenol	50	U
[illegible]5-50-1	1,2-Dichlorobenzene	10	U	86-30-6	N-Nitrosodiphenylamine (1)	10	U
95-48-7	2-Methylphenol	10	U	122-66-7	1,2-Diphenylhydrazine	10	U
[illegible]638-32-9	bis(2-Chloroisopropyl)Ether	10	U	101-55-3	4-Bromophenyl-phenylether	10	U
[illegible]6-44-5	4-Methylphenol	10	U	118-74-1	Hexachlorobenzene	10	U
621-64-7	N-Nitroso-Di-n-Propylamine	10	U	87-86-5	Pentachlorophenol	50	U
[illegible]7-72-1	Hexachloroethane	10	U	85-01-8	Phenanthrene	10	U
[illegible]-95-3	Nitrobenzene	10	U	120-12-7	Anthracene	10	U
78-59-1	Isophorone	10	U	84-74-2	Di-n-Butylphthalate	10	U
88-75-5	2-Nitrophenol	10	U	206-44-0	Fluoranthene	10	U
[illegible]5-67-9	2,4-Dimethylphenol	10	U	92-87-5	Benzidine	50	U
[illegible]5-0	Benzoic Acid	50	U	129-00-0	Pyrene	10	U
111-91-1	bis(2-Chloroethoxy)Methane	10	U	85-68-7	Butylbenzylphthalate	10	U
[illegible]0-83-2	2,4-Dichlorophenol	10	U	91-94-1	3,3'-Dichlorobenzidine	20	U
[illegible]0-82-1	1,2,4-Trichlorobenzene	10	U	56-55-3	Benzo(a)Anthracene	10	U
91-20-3	Naphthalene	10	U	218-01-9	Chrysene	10	U
[illegible]06-47-8	4-Chloroaniline	10	U	117-81-7	bis(2-Ethylhexyl)Phthalate	10	U
[illegible]7-68-3	Hexachlorobutadiene	10	U	117-84-0	Di-n-Octyl Phthalate	10	U
[illegible]9-50-7	4-Chloro-3-Methylphenol	10	U	205-99-2	Benzo(b)Fluoranthene	10	U
91-57-6	2-Methylnaphthalene	10	U	207-08-9	Benzo(k)Fluoranthene	10	U
[illegible]7-47-4	Hexachlorocyclopentadiene	10	U	50-32-8	Benzo(a)Pyrene	10	U
[illegible]8-06-2	2,4,6-Trichlorophenol	10	U	193-39-5	Indeno(1,2,3-cd)Pyrene	10	U
95-95-4	2,4,5-Trichlorophenol	50	U	53-70-3	Dibenz(a,h)Anthracene	10	U
[illegible]1-58-7	2-Chloronaphthalene	10	U	191-24-2	Benzo(g,h,i)Perylene	10	U
[illegible]8-74-4	2-Nitroaniline	50	U	109-06-8	2-Picoline	50	U
131-11-3	Dimethylphthalate	10	U	66-27-3	Methyl methanesulfonate	10	U
208-96-8	Acenaphthylene	10	U	62-50-0	Ethyl methanesulfonate	10	U
[illegible]06-20-2	2,6-Dinitrotoluene	10	U	98-86-2	Acetophenone	10	U
[illegible]9-09-2	3-Nitroaniline	50	U	100-75-4	N-Nitrosopiperidine	10	U
83-32-9	Acenaphthene	10	U	122-09-8	Phenyl-tert-butylamine	50	U
[illegible]1-28-5	2,4-Dinitrophenol	50	U	87-65-0	2,6-Dichlorophenol	10	U
				924-16-3	N-Nitroso-di-n-butylamine	10	U

(1) - Cannot be separated from diphenylamine.
U - Compound analyzed for but not detected.
[illegible] - Compound was detected in QC blank.
- Reported value less than quantitation limit.

Form I

CH2M HILL
Quality Analytical Laboratories
2567 Fairlane Drive, P.O. Box 230548, Montgomery, Alabama 36116
205.271.1444

CH2M HILL Engineers Planners Economists Scientists

ORGANICS ANALYSIS DATA SHEET

Laboratory Name:	CH2M HILL/MGM	Concentration:	LOW	Date Extracted:	02/28/92
Lab Sample ID:	W02282B1	Sample Matrix:	WATER	Date Analyzed:	03/12/92
Client Sample ID:	QC BLANK W	Percent Moisture:		Dilution Factor:	1.0

SEMIVOLATILE (8270) COMPOUNDS

CAS Number		ug/L		CAS Number	ug/L
95-94-3	1,2,4,5-Tetrachlorobenzene	50	U		
608-93-5	Pentachlorobenzene	50	U		
134-32-7	1-Naphthylamine	50	U		
91-59-8	2-Naphthylamine	50	U		
90-13-1	1-Chloronaphthalene . . .	10	U		
58-90-2	2,3,4,6-Tetrachlorophenol	10	U		
122-39-4	Diphenylamine	10	U		
62-44-2	Phenacetin	10	U		
92-67-1	4-Aminobiphenyl	50	U		
82-68-8	Pentachloronitrobenzene .	50	U		
23950-58-5	Pronamide	10	U		
60-11-7	p-Dimethylaminoazobenzene	10	U		
57-97-6	7,12-Dimethylbenz(a)Anthrac	10	U		
56-49-5	3-Methylcholanthrene . . .	10	U		
	Nitrobenzene-d5 - SS . . .	64			
	2-Fluorobiphenyl - SS . .	57			
	Terphenyl-d14 - SS	82			
	Phenol-d5 - SS	33			
	2-Fluorophenol - SS . . .	48			
	2,4,6-Tribromophenol - SS	81			

U - Compound analyzed for but not detected.
B - Compound was detected in QC blank.
J - Reported value less than quantitation limit.
SS - Surrogate Standard reported as percent recovery.

Form I

CH2M HILL Quality Analytical Laboratories 2567 Fairlane Drive, P.O. Box 230548, Montgomery, Alabama 36116 205.271.1444 MTP

Engineers
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CASE NARRATIVE
Cations

Batch Number: 21045

Client/Project: BAXTER HEALTHCARE CORPORATION

I. Holding Time:
All holding times were met.

II. Analysis:

A. Blanks:
All acceptance criteria were met.

B. Calibration:
All acceptance criteria were met.

C. ICP Interference Check Sample:
All acceptance criteria were met.

D. Spike Sample Analysis:
All acceptance criteria were met.

E. Duplicate Sample Analysis:
All acceptance criteria were met.

F. Laboratory Control Sample Analysis:
All acceptance criteria were met.

G. ICP Serial Dilution:
Not required for this level QC.

H. Other:
None.

III. I certify that this data package is in compliance with the terms and conditions agreed to by the client and CH2M HILL, both technically and for completeness, for other than the conditions detailed above.

SIGNED: _____ DATE: 19 MAR 92
Kevin A. Sanders
Inorganic Division Manager

CH2M HILL Quality Analytical Laboratories 2567 Fairlane Drive, P.O. Box 230548, Montgomery, Alabama 36116 205.271.1444

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CASE NARRATIVE
General Chemistry

Batch Number: 21045

Client/Project: BAXTER HEALTHCARE CORPORATION

I. Holding Time: All criteria were met.

II. Analysis:

A.	Calibration:	Acceptance criteria met.
B.	Blanks:	Acceptance criteria met.
C.	Matrix Spike:	Acceptance criteria met.
D.	Duplicate Analysis:	Acceptance criteria met.
E.	Lab Control Sample:	Acceptance criteria met.
F.	Other:	None.

III. I certify that this data package is in compliance with the terms and conditions agreed to by the client and CH2M HILL, both technically and for completeness, for other than the conditions detailed above.

SIGNED: _____ DATE: 19MAR92

Kevin A. Sanders
Inorganic Division Manager

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Scientists

REPORT OF ANALYTICAL RESULTS

Date: 03/19/92

Client: CH2M HILL/ATL
229 PEACHTREE STREET, N.E.,
SUITE 300
ATLANTA, GA 30303-1602
Atten: MR. SEAN ROCHE

Project Number: ATL33279.A0.03
BAXTER HEALTHCARE CORP./CERCLA
Laboratory Number: 21045
Date Received: 02/27/92

Sample Description: SB-1(0-2FT) 1745
Laboratory Sample Number: 21045001 Date Collected: 02/24/92 Matrix: SOIL

Analytical Parameter	Method	Rep Limit	Result	Units	Ana Date
Silver	EPA200.7/SW6010	2.2	<2.2	mg/kg	03/14/92
Arsenic	EPA206.2/SW7060	2.2	<2.2	mg/kg	03/17/92
Beryllium	EPA200.7/SW6010	1.1	<1.1	mg/kg	03/14/92
Cadmium	EPA200.7/SW6010	1.1	<1.1	mg/kg	03/14/92
Cyanide, Distilled	EPA335.2	0.6	<0.6	mg/kg	03/08/92
Chromium	EPA200.7/SW6010	2.2	16.7	mg/kg	03/14/92
Copper	EPA200.7/SW6010	5.5	16.0	mg/kg	03/17/92
Mercury	SW7471	0.10	<0.10	mg/Kg	03/06/92
Nickel	EPA200.7/SW6010	8.8	14.7	mg/kg	03/14/92
Lead	EPA239.2/SW7421	0.7	7.2	mg/kg	03/18/92
Antimony	EPA200.7/SW6010	13.2	<13.2	mg/kg	03/14/92
Selenium	EPA270.2/SW7740	1.1	<1.1	mg/kg	03/13/92
Thallium	EPA279.2/SW7841	2.2	<2.2	mg/kg	03/15/92
Zinc	EPA200.7/SW6010	4.4	59.0	mg/kg	03/14/92

Results for non-aqueous matrices are based on dry sample weight unless noted otherwise.

Reviewed by: _____

INRPRPT(v910124)

CH2M HILL Quality Analytical Laboratories 2567 Fairlane Drive, P.O. Box 230548, Montgomery, Alabama 36116 205.271.1444

Engineers
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REPORT OF ANALYTICAL RESULTS

Date: 03/19/92

Client: CH2M HILL/ATL
229 PEACHTREE STREET, N.E.,
SUITE 300
ATLANTA, GA 30303-1602
Atten: MR. SEAN ROCHE

Project Number: ATL33279.A0.03
BAXTER HEALTHCARE CORP./CERCLA
Laboratory Number: 21045
Date Received: 02/27/92

Sample Description: SB-2(4-8FT) 1815
Laboratory Sample Number: 21045002 Date Collected: 02/24/92 Matrix: SOIL

Analytical Parameter	Method	Rep Limit	Result	Units	Ana Date
Silver	EPA200.7/SW6010	2.4	20.4	mg/Kg	03/13/92
Arsenic	EPA206.2/SW7060	2.4	<2.4	mg/kg	03/14/92
Beryllium	EPA200.7/SW6010	1.2	<1.2	mg/Kg	03/13/92
Cadmium	EPA200.7/SW6010	1.2	5.6	mg/Kg	03/13/92
Cyanide, Distilled	EPA335.2	0.6	<0.6	mg/kg	03/08/92
Chromium	EPA200.7/SW6010	2.4	22.0	mg/Kg	03/13/92
Copper	EPA200.7/SW6010	6.0	15.7	mg/Kg	03/13/92
Mercury	SW7471	0.12	<0.12	mg/Kg	03/06/92
Nickel	EPA200.7/SW6010	9.6	25.3	mg/Kg	03/13/92
Lead	EPA239.2/SW7421	2.9	16.0	mg/kg	03/12/92
Antimony	EPA200.7/SW6010	14.5	<14.5	mg/Kg	03/13/92
Selenium	EPA270.2/SW7740	1.2	<1.2	mg/kg	03/13/92
Thallium	EPA279.2/SW7841	2.4	<2.4	mg/kg	03/15/92
Zinc	EPA200.7/SW6010	4.8	37.0	mg/Kg	03/13/92

Results for non-aqueous matrices are based on dry sample weight unless noted otherwise.

Reviewed by: _____

INRPRPT(v910124)

CH2M HILL Quality Analytical Laboratories
2567 Fairlane Drive, P.O. Box 230548, Montgomery, Alabama 36116
205.271.1444

Engineers
Planners
CH2M HILL Economists
Scientists

REPORT OF ANALYTICAL RESULTS

Date: 03/19/92

Client: CH2M HILL/ATL
229 PEACHTREE STREET, N.E.,
SUITE 300
ATLANTA, GA 30303-1602
Atten: MR. SEAN ROCHE

Project Number: ATL33279.A0.03
BAXTER HEALTHCARE CORP./CERCLA
Laboratory Number: 21045
Date Received: 02/27/92

Sample Description: RB-1 WATER 1155 GRAB
Laboratory Sample Number: 21045003 Date Collected: 02/25/92 Matrix: WATER

Analytical Parameter	Method	Rep Limit	Result	Units	Ana Date
Silver	EPA200.7/SW6010	10.0	<10.0	ug/L	03/13/92
Arsenic	EPA206.2/SW7060	10	<10	ug/L	03/14/92
Beryllium	EPA200.7/SW6010	5.0	<5.0	ug/L	03/13/92
Cadmium	EPA200.7/SW6010	5.0	<5.0	ug/L	03/13/92
Cyanide, Distilled	EPA335.2	5.0	<5.0	ug/L	03/08/92
Chromium	EPA200.7/SW6010	10.0	<10.0	ug/L	03/13/92
Copper	EPA200.7/SW6010	25.0	<25.0	ug/L	03/13/92
Mercury	EPA245.1/SW7470	0.2	<0.2	ug/L	03/16/92
Nickel	EPA200.7/SW6010	40.0	<40.0	ug/L	03/13/92
Lead	EPA239.2/SW7421	3	<3	ug/L	03/16/92
Antimony	EPA200.7/SW6010	60.0	<60.0	ug/L	03/13/92
Selenium	EPA270.2/SW7740	5	<5	ug/L	03/13/92
Thallium	EPA279.2/SW7841	10	<10	ug/L	03/15/92
Zinc	EPA200.7/SW6010	20.0	<20.0	ug/L	03/13/92

Results for non-aqueous matrices are based on dry sample weight unless noted otherwise.

Reviewed by: _____

INRPRPT(v910124)

CH2M HILL Quality Analytical Laboratories 2567 Fairlane Drive, P.O. Box 230548, Montgomery, Alabama 36116 205.271.1444

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REPORT OF ANALYTICAL RESULTS

Date: 03/19/92

Client: CH2M HILL/ATL
229 PEACHTREE STREET, N.E.,
SUITE 300
ATLANTA, GA 30303-1602
Atten: MR. SEAN ROCHE

Project Number: ATL33279.A0.03
BAXTER HEALTHCARE CORP./CERCLA
Laboratory Number: 21045
Date Received: 02/27/92

Sample Description: BKGD-1(6-8") 1240
Laboratory Sample Number: 21045004 Date Collected: 02/25/92 Matrix: SOIL

Analytical Parameter	Method	Rep Limit	Result	Units	Ana Date
Silver	EPA200.7/SW6010	2.5	<2.5	mg/Kg	03/13/92
Arsenic	EPA206.2/SW7060	2.5	<2.5	mg/kg	03/14/92
Beryllium	EPA200.7/SW6010	1.2	<1.2	mg/Kg	03/13/92
Cadmium	EPA200.7/SW6010	1.2	<1.2	mg/Kg	03/13/92
Cyanide, Distilled	EPA335.2	0.6	<0.6	mg/kg	03/08/92
Chromium	EPA200.7/SW6010	2.5	8.2	mg/Kg	03/13/92
Copper	EPA200.7/SW6010	6.2	8.3	mg/Kg	03/13/92
Mercury	SW7471	0.12	<0.12	mg/Kg	03/06/92
Nickel	EPA200.7/SW6010	9.9	<9.9	mg/Kg	03/13/92
Lead	EPA239.2/SW7421	0.7	10.4	mg/kg	03/12/92
Antimony	EPA200.7/SW6010	14.9	<14.9	mg/Kg	03/13/92
Selenium	EPA270.2/SW7740	1.2	<1.2	mg/kg	03/13/92
Thallium	EPA279.2/SW7841	2.5	<2.5	mg/kg	03/15/92
Zinc	EPA200.7/SW6010	5.0	23.9	mg/Kg	03/13/92

Results for non-aqueous matrices are based on dry sample weight unless noted otherwise.

Reviewed by: _____

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REPORT OF ANALYTICAL RESULTS

Date: 03/19/92

Client: CH2M HILL/ATL
229 PEACHTREE STREET, N.E.,
SUITE 300
ATLANTA, GA 30303-1602
Atten: MR. SEAN ROCHE

Project Number: ATL33279.A0.03
BAXTER HEALTHCARE CORP./CERCLA
Laboratory Number: 21045
Date Received: 02/27/92

Sample Description: MW-8 WATER 1340 GRAB
Laboratory Sample Number: 21045005 Date Collected: 02/25/92 Matrix: WATER

Analytical Parameter	Method	Rep Limit	Result	Units	Ana Date
Silver	EPA200.7/SW6010	10.0	<10.0	ug/L	03/13/92
Arsenic	EPA206.2/SW7060	10	<10	ug/L	03/14/92
Beryllium	EPA200.7/SW6010	5.0	6.2	ug/L	03/13/92
Cadmium	EPA200.7/SW6010	5.0	<5.0	ug/L	03/13/92
Cyanide, Distilled	EPA335.2	5.0	<5.0	ug/L	03/08/92
Chromium	EPA200.7/SW6010	10.0	82.0	ug/L	03/13/92
Copper	EPA200.7/SW6010	25.0	146	ug/L	03/13/92
Mercury	EPA245.1/SW7470	0.2	<0.2	ug/L	03/16/92
Nickel	EPA200.7/SW6010	40.0	138	ug/L	03/13/92
Lead	EPA239.2/SW7421	3	15	ug/L	03/16/92
Antimony	EPA200.7/SW6010	60.0	<60.0	ug/L	03/13/92
Selenium	EPA270.2/SW7740	5	<5	ug/L	03/13/92
Thallium	EPA279.2/SW7841	10	<10	ug/L	03/15/92
Zinc	EPA200.7/SW6010	20.0	306	ug/L	03/13/92

Results for non-aqueous matrices are based on dry sample weight unless noted otherwise.

Reviewed by: _____

INRPRPT(v910124)

CH2M HILL
Quality Analytical Laboratories
2567 Fairlane Drive, P.O. Box 230548, Montgomery, Alabama 36116
205.271.1444

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REPORT OF ANALYTICAL RESULTS

Date: 03/19/92

Client: CH2M HILL/ATL
229 PEACHTREE STREET, N.E.,
SUITE 300
ATLANTA, GA 30303-1602
Atten: MR. SEAN ROCHE

Project Number: ATL33279.A0.03
BAXTER HEALTHCARE CORP./CERCLA
Laboratory Number: 21045
Date Received: 02/27/92

Sample Description: METHOD BLANK
Laboratory Sample Number: 21045ZW1 Date Collected: 02/27/92 Matrix: WATER

Analytical Parameter	Method	Rep Limit	Result	Units	Ana Date
Silver	EPA200.7/SW6010	10.0	<10.0	ug/L	03/13/92
Arsenic	EPA206.2/SW7060	10	<10	ug/L	03/14/92
Beryllium	EPA200.7/SW6010	5.0	<5.0	ug/L	03/13/92
Cadmium	EPA200.7/SW6010	5.0	<5.0	ug/L	03/13/92
Cyanide, Distilled	EPA335.2	5.0	<5.0	ug/L	03/08/92
Chromium	EPA200.7/SW6010	10.0	<10.0	ug/L	03/13/92
Copper	EPA200.7/SW6010	25.0	<25.0	ug/L	03/13/92
Mercury	EPA245.1/SW7470	0.2	<0.2	ug/L	03/16/92
Nickel	EPA200.7/SW6010	40.0	<40.0	ug/L	03/13/92
Lead	EPA239.2/SW7421	3	<3	ug/L	03/16/92
Antimony	EPA200.7/SW6010	60.0	<60.0	ug/L	03/13/92
Selenium	EPA270.2/SW7740	5	<5	ug/L	03/13/92
Thallium	EPA279.2/SW7841	10	<10	ug/L	03/15/92
Zinc	EPA200.7/SW6010	20.0	<20.0	ug/L	03/13/92

Results for non-aqueous matrices are based on dry sample weight unless noted otherwise.

Reviewed by: _____

INRPRPT(v910124)

CH2M HILL Quality Analytical Laboratories 2567 Fairlane Drive, P.O. Box 230548, Montgomery, Alabama 36116 205.271.1444

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REPORT OF ANALYTICAL RESULTS

Date: 03/19/92

Client: CH2M HILL/ATL
229 PEACHTREE STREET, N.E.,
SUITE 300
ATLANTA, GA 30303-1602
Atten: MR. SEAN ROCHE

Project Number: ATL33279.A0.03
BAXTER HEALTHCARE CORP./CERCLA
Laboratory Number: 21045
Date Received: 02/27/92

Sample Description: METHOD BLANK
Laboratory Sample Number: 21045ZS1 Date Collected: 02/27/92 Matrix: SOIL

Analytical Parameter	Method	Rep Limit	Result	Units	Ana Date
Silver	EPA200.7/SW6010	2.0	<2.0	mg/kg	03/13/92
Arsenic	EPA206.2/SW7060	2.0	<2.0	mg/kg	03/14/92
Beryllium	EPA200.7/SW6010	1.0	<1.0	mg/kg	03/13/92
Cadmium	EPA200.7/SW6010	1.0	<1.0	mg/kg	03/13/92
Cyanide, Distilled	EPA335.2	5.0	<5.0	mg/kg	03/08/92
Chromium	EPA200.7/SW6010	2.0	<2.0	mg/kg	03/13/92
Copper	EPA200.7/SW6010	20.0	<20.0	mg/kg	03/17/92
Mercury	SW7471	0.1	<0.1	mg/Kg	03/06/92
Nickel	EPA200.7/SW6010	8.0	<8.0	mg/kg	03/13/92
Lead	EPA239.2/SW7421	0.6	<0.6	mg/kg	03/12/92
Antimony	EPA200.7/SW6010	12.0	<12.0	mg/kg	03/13/92
Selenium	EPA270.2/SW7740	1.0	<1.0	mg/kg	03/13/92
Thallium	EPA279.2/SW7841	2.0	<2.0	mg/kg	03/15/92
Zinc	EPA200.7/SW6010	4.0	<4.0	mg/kg	03/13/92

Results for non-aqueous matrices are based on dry sample weight unless noted otherwise.

Reviewed by: _____

INRPRPT(v910124)

CH2M HILL Quality Analytical Laboratories 2567 Fairlane Drive, P.O. Box 230548, Montgomery, Alabama 36116 205.271.1444

CH HILL QUALITY ANALYTICS

CHAIN OF CUSTODY RECORD

(704)-756 4157

PROJECT NUMBER	PROJECT NAME
ATL33279.A0.03	BAXTER / CERCLA

CLIENT NAME: BAXTER HEALTHCARE CORP.

PROJECT MANAGER: SEAN ROCHE/ATL

COPY TO:

REQUESTED COMP. DATE: STANDARD TURNAROUND

SAMPLING REQUIREMENTS: SDWA ☐ NPDES ☐ RCRA ☐ OTHER ____

CLIENT ADDRESS AND PHONE NUMBER: HWY 221, NORTH COVE NORTH CAROLINA 28752

FOR LAB USE ONLY: LAB# 21045

LAB#

PROJECT NO. ATL 33279.A0.03

ACK 2/28 VERIFIED 2/27/92

QUOTE# BS

NO. OF SAMP PG 1 OF 1

ANALYSES REQUESTED

STA NO.	DATE	TIME	COMP	GRAB	SOIL	SAMPLE DESCRIPTIONS (12 CHARACTERS)	# OF CONTAINERS	VOC (8240) 40ml vial	SEMI-VOC (8270) 2-8 ounce	Priority Poll. Metals 500ml plastic	Cyanide (2) ambers	Cyanide 500ml plastic	VOC (8240)-4 oz	SEMI-VOC (8270)	Pr. Metals & Cyanide		LAB ID	REMARKS
1	2/24/92	1745			X	SB-1 (0-2FT)	4						2	1	1	soil	001	* #002 - 8oz jars labeled
2	2/24/92	1815			X	SB-2 (4-8FT)	4	(3)	(1)	(2)	(1)		2	1	1	soil	002	"SB-2 (6-8FT)"
3	2/25/92	1155		X		RB-1 - WATER	7	3	1	2	1					water	003	* #003 - CN- recd in 2L Amber
4	2/25/92	1240			X	BKGD-1 (6"-8")	4		(1)	(2)		(1)	2	1	1	soil	004	metal recd in 2 500ml nalgene
5	2/25/92	1340		X		MW-6 - WATER	10	3	1	2		4				water	005	bottles & 1 VOA Vial recd Broken
						TRAVEL BLANK	2	2								↓	006	* #005 → Metals in 2 nalgene
							31											bottles & CN- in 4 nalgene bottles
																		~~#005 Sample Vial~~ PH 2/27/92
										✓	✓	✓					251	~~Sample PH = 10~~ PH 2/27/92
						Method Blank									✓		2W1	

SAMPLED BY AND TITLE	DATE/TIME	RELINQUISHED BY	DATE/TIME
Sean J Roche	2/25/92 / 1340	Sean J Roche / 1440	2/25/92 /
RECEIVED BY:	DATE/TIME	RELINQUISHED BY:	DATE/TIME
RECEIVED BY:	DATE/TIME	RELINQUISHED BY:	DATE/TIME
RECEIVED BY LAB: Pamela Whitworth	DATE/TIME 2/27/92 0930	SAMPLE SHIPPED VIA: UPS BUS FED-EX HAND OTHER ____	AIR BILL# 6775389762

HAZWRAP/NEESA Y (N)

QC LEVEL (1) 2 3

COC	yes	ICE	yes
ANA REQ	yes	TEMP	4°C
CUST SEAL	no	Ph	see above
SAMPLE COND.	water & soil -		

REMARKS

ENTERED INTO LIMS PH 2/27/92 COC REVIEWED PH 2/27/92

C2F416258

REV 6/89 FORM 340

000039

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May 15, 1992

ATL33279.A0.06

Mr. Sean Roche
CH2M HILL/ATL
115 Perimeter Center Place
Suite 700
Atlanta, Georgia 30346-1278

RE: Analytical Data for Baxter Healthcare, LMG Laboratory No. 21540

Dear Mr. Roche:

On April 24, 1992, the CH2M HILL Montgomery Laboratory received one sample with a request for analysis of selected inorganic parameters.

The analytical results and associated quality control data are enclosed. Any unusual difficulties encountered during the analysis of your samples are discussed in the case narratives.

Under CH2M HILL policy, your samples will be stored for up to 30 days after reporting. If you have not given us prior instructions for disposal, we will contact you if any samples require disposal as hazardous waste.

CH2M HILL Laboratories appreciate your business and look forward to serving your analytical needs again. If you should have any questions concerning the data, or if you need additional information, please call.

Sincerely,

Wanda L. Hall

Wanda L. Hall
Data Package Supervisor

Enclosures

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CLIENT SAMPLE CROSS-REFERENCE

CH2M HILL Laboratory No. 21540

LMG Sample No.	Client ID
21540001	MW-8

CH2M HILL
Quality Analytical Laboratories
2567 Fairlane Drive, P.O. Box 230548, Montgomery, Alabama 36116
205.271.1444

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CASE NARRATIVE
Cations

Lab Number: 21540

Client/Project: BAXTER HEALTHCARE

I. Holding Time:
All holding times were met.

II. Digestion Exceptions:
None.

III. Analysis:

A. Calibration:
All acceptance criteria were met.

B. Blanks:
All acceptance criteria were met.

C. ICP Interference Check Sample:
All acceptance criteria were met.

D. Spike Sample(s):
All acceptance criteria were met.

E. Duplicate Sample(s):
All acceptance criteria were met.

F. Laboratory Control Sample(s):
All acceptance criteria were met.

G. ICP Serial Dilution:
Not required for this level QC.

H. Other:
None.

IV. Documentation Exceptions:
None.

V. I certify that this data package is in compliance with the terms and conditions agreed to by the client and CH2M HILL, both technically and for completeness, except for the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

SIGNED: Joe Basile for Kevin A. Sanders DATE: 5/15/92
Inorganics Division Manager

000001

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CASE NARRATIVE
General Chemistry

Lab Number: 21540

Client/Project: BAXTER HEALTHCARE

I. Holding Time:
All holding times were met.

II. Analysis:

A. Calibration:
All acceptance criteria were met.

B. Blanks:
All acceptance criteria were met.

C. Matrix Spike Sample(s):
All acceptance criteria were met.

D. Duplicate Sample(s):
All acceptance criteria were met.

E. Lab Control Sample(s):
All acceptance criteria were met.

F. Other:
None.

III. Documentation Exceptions:
None.

IV. I certify that this data package is in compliance with the terms and conditions agreed to by the client and CH2M HILL, both technically and for completeness, except for the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee, as verfied by the following signature.

SIGNED: Joe Basile for Kevin A. Sanders DATE: 5/15/92
Inorganics Division Manager

CH2M HILL Quality Analytical Laboratories 2567 Fairlane Drive, P.O. Box 230548, Montgomery, Alabama 36116 205.271.1444

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REPORT OF ANALYTICAL RESULTS

Date: 05/15/92

Client: CH2M HILL/ATL
115 PERIMETER CENTER PLACE
SUITE 700
ATLANTA, GA 30346-1278
Atten: MR. SEAN ROCHE

Project Number: ATL33279.A0.06
BAXTER HEALTHCARE
Laboratory Number: 21540
Date Received: 04/24/92

Sample Description: MW-8 1430 GRAB
Laboratory Sample Number: 21540001 Date Collected: 04/23/92 Matrix: WATER

Analytical Parameter	Method	Rep Limit	Result	Units	Ana Date
Chromium	EPA200.7/SW6010	10.0	125	ug/L	05/08/92
Soluble Chromium	EPA200.7/SW6010	10.0	<10.0	ug/L	05/08/92
Hexavalent Chromium	SM312B/SW7196	40	<40	ug/L	04/24/92
Total Suspended Solids	EPA160.2	4	3810	mg/L	04/29/92

Results for non-aqueous matrices are based on dry sample weight unless noted otherwise.

Reviewed by: JB

INRPRPT(v910124)

CH2M HILL Quality Analytical Laboratories 2567 Fairlane Drive, P.O. Box 230548, Montgomery, Alabama 36116 205.271.1444

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REPORT OF ANALYTICAL RESULTS

Date: 05/15/92

Client: CH2M HILL/ATL
115 PERIMETER CENTER PLACE
SUITE 700
ATLANTA, GA 30346-1278
Atten: MR. SEAN ROCHE

Project Number: ATL33279.A0.06
BAXTER HEALTHCARE
Laboratory Number: 21540
Date Received: 04/24/92

Sample Description: METHOD BLANK
Laboratory Sample Number: 21540ZW1 Date Collected: 04/24/92 Matrix: WATER

Analytical Parameter	Method	Rep Limit	Result	Units	Ana Date
Chromium	EPA200.7/SW6010	10.0	<10.0	ug/L	05/08/92
Soluble Chromium	EPA200.7/SW6010	10.0	<10.0	ug/L	05/08/92
Hexavalent Chromium	SM312B/SW7196	40	<40	ug/L	04/24/92
Total Suspended Solids	EPA160.2	4	<4	mg/L	04/29/92

Results for non-aqueous matrices are based on dry sample weight unless noted otherwise.

Reviewed by: JB

INRPRPT(v910124)

CH2M HILL Quality Analytical Laboratories
2567 Fairlane Drive, P.O. Box 230548, Montgomery, Alabama 36116
205.271.1444

CH2M HILL

QUALITY ANALYTICAL LABORATORIES

CHAIN OF CUSTODY RECORD AND AGREEMENT TO PERFORM SERVICES

CH2M HILL Project #: ATL33279.A0.06

Purchase Order #:

Project Name: BAXTER HEALTHCARE

Company Name/CH2M HILL Office:

Project Manager & Phone #: Mr. [✓] Ms. [ ] SEAN ROCHE 404-604-9182

Report Copy to:

Requested Completion Date: STD

Sampling Requirements: SDWA [ ] NPDES [ ] RCRA [ ] OTHER ____

Sample Disposal: Dispose [✓] Return [ ]

SHADED AREA – FOR LAB USE ONLY

Lab 1 #: 21540

Lab 2 #:

Quote #:

Kit Request #: 910621

Project #: ATL 33279.A0.06

No. of Samples: 1

Page: 1 of 1

COC Rev: 4/24/92 Login: 4/24/92 04698585 LIMS Ver: 03 4/27/92 Ack Gen: 4/27

Sampling Date	Sampling Time	Type COMP	Type GRAB	Matrix WATER	Matrix SOIL	CLIENT SAMPLE ID (9 CHARACTERS)	# OF CONTAINERS	LAB TEST CODES: CRA DIGW DIG2	TSS CRHEX	CR7 FILTR SDIGW DIG7	ANALYSES REQUESTED: Cr - total	Cr - Diss.	TSS, Cr	Cr - Dissolved Needs to be filtered by lab within 24 hrs	REMARKS	LAB 1 ID	LAB 2 ID
4/23/92	1430		X	X		MW-8	3	1	1	1	1	1	1	1		001	
						TOTAL	3										
						Method blank										2W1	

000005

Sampled By & Title (Please sign and print name)	Date/Time
Sean Roche	4/23/92/1430

Relinquished By (Please sign and print name)	Date/Time
Sean Roche	4/23/92

Received By (Please sign and print name)	Date/Time

Relinquished By (Please sign and print name)	Date/Time

Received By (Please sign and print name)	Date/Time

Relinquished By (Please sign and print name)	Date/Time

Received By (Please sign and print name)	Date/Time
[illegible]	4/24/92 0930

Shipped Via: UPS BUS (Fed-Ex) Hand Other ____

Shipping #: 3117358042

Work Authorized By (Please sign and print name):

Remarks: Please filter Cr-Diss. in 1-liter Plastic Jar

HAZWRAP/NESSA: Y (N)

QC Level: (1) 2 3 Other: ____

COC Rec: yes ICE: yes

Ana Req: yes TEMP: 4°C

Cust Seal: NO Ph: <2

Instructions and Agreement Provisions on Reverse Side

DISTRIBUTION: ORIGINAL - LAB, Yellow - LAB, Pink - Client

CH2M HILL TRANSMITTAL

TO: NORTH CAROLINA - DEPT. OF ENVIRONMENT HEALTH, AND NATURAL RESOURCES - DIVISION OF SOLID WASTE MANAGEMENT. 401 OBERLIN ROAD RALEIGH, NC 27605

FROM: CH2M HILL / SEAN ROCHE 229 PEACHTREE ST. N.E. SUITE 300 ATLANTA GA 30303

ATTN: CHARLOTTE JESNECK

DATE: 3/13/92

RE: BAXTER HEALTHCARE SITE - PREVIOUS WORK

PROJECT NUMBER: ATL 33279.A0.03

RECEIVED MAR 17 1992 SUPERFUND SECTION

WE ARE SENDING YOU

- ☐ ATTACHED
- ☐ UNDER SEPARATE COVER VIA
- ☐ SHOP DRAWINGS
- ☑ DOCUMENTS
- ☐ TRACINGS
- ☐ PRINTS
- ☐ SPECIFICATIONS
- ☐ CATALOGS
- ☐ COPY OF LETTER
- ☐

QUANTITY	DESCRIPTION
1	COPY OF TECHNICAL REPORT -- GROUNDWATER INVESTIGATION
1	SET OF ALL GROUND WATER MEASUREMENT TO DATE

IF MATERIAL RECEIVED IS NOT AS LISTED, PLEASE NOTIFY US AT ONCE

REMARKS: IF I CAN PROVIDE ANY FURTHER INFORMATION, PLEASE CALL AT 404 522-0300

Sean J. Roche

COPY TO

REV 1/87 FORM 6

WATER LEVELS SUMMARY

WELL ID	ELEVATION AT TOC (FT)	WATER LEVEL MEASUREMENT (FT)	DATE	WATER LEVEL ELEVATION (FT)
MW-1	1480 a	5.38	10/25/88	
		2.80	06/62/89	
		3.00 b	10/12/90	
		2.89 b	10/25/90	
MW-2	1480 a	7.16	10/25/88	
		3.90	06/62/89	
MW-3	1480 a	7.19	10/25/88	
		4.30	06/62/89	
		3.21 b	10/12/90	
		4.20 b	10/25/90	
		4.47	03/25/91	
		3.16 b	02/25/92	
MW-4	1477.55	2.55 b	10/12/90	1475
		2.80 b	10/18/90	1474.75
		4.05 b	10/25/90	1473.5
		4.25	03/25/91 ×	1473.3
		2.15 b	02/25/92	1475.4
MW-5	1475.62	2.36 b	10/12/90	1473.26
		2.33 b	10/18/90	1473.29
		2.34 b	10/25/90	1473.28
		2.23	03/25/91 ×	1473.39
		2.58 b	02/25/92	1473.04
MW-6	1477.12	14.45 b	10/18/90	1462.67
		14.70 b	10/25/90	1462.42
		14.9 b	03/25/91	1462.22
MW-7	1477.12	2.87 b	10/18/90	1474.25
		3.09 b	10/25/90	1474.03
		3.30	03/25/91 ×	1473.82
		2.85 b	02/25/92	1474.27
MW-8	--	4.63 b	02/25/92	

footnotes:

(a) Approximate groundsurface elevation from Law report (10/15/89).

(b) Measurement taken during rain event.

REFERENCE 8

October 14, 1992

MEMORANDUM

TO: Charlotte Jesneck, Head
Inactive Hazardous Sites Branch

FROM: John Walch, Environmental Engineer JW
Inactive Hazardous Sites Branch

RE: Close Out Summary
Baxter Healthcare Corporation/Travenol Labs
Marion, McDowell County
NCD 059140764

The Baxter Healthcare Corporation facility was the location of an abandoned solvent disposal area. From approximately 1974 until 1977, laboratory an paint solvents were discarded on the gravel road behind the engineering area of the facility.

In 1991 Baxter petitioned the State to be delisted from the State Priority List. On November 15, 1991, Lee Crosby of the Superfund Section sent a letter to Baxter requesting that additional information be provided prior to delisting the Site. Baxter's consultant CH^2MHill installed a temporary monitoring well in the center of the former disposal area on February 24, 1992. Subsequent analyses of soil and groundwater samples obtained from this well did not reveal any evidence of hazardous waste contamination at the Site. Results of the soil analyses did reveal the presence of PAH's in the soil, however the overwhelming majority of these compounds were detected in the 0 - 2 ft range and can be attributed to the asphalt road which now covers the former disposal area.

In 1989, a 1,000 gallon UST used for gasoline storage was removed from an area adjacent to the former solvent disposal location. Upon removal of the UST a leak was identified. In April 1990, gasoline contaminated soil was removed from the Site. The soil removal and subsequent groundwater monitoring of the Site was and is being done under the supervision of DEM. Because there is no evidence of hazardous waste contamination of the former disposal area, this Site is recommended for no further action status.

REFERENCE 9

http://oaspub.epa.gov/enviro/fii_query_dtl.disp_program_facility?p_registry_id=110022404753
Last updated on Monday, March 17th, 2008.

Facility Registry System (FRS)

You are here: EPA Home Envirofacts FRS Report

Facility Detail Report

Report an Error

FRS

Facility Name:	BAXTER HEALTHCARE CORP
Location Address:	65 PITT STATION ROAD
Supplemental Address:	
City Name:	MARION
State	NC
County Name:	MC DOWELL
ZIP/Postal Code:	28752
EPA Region:	04
Congressional District Number:	
Legislative District Number:	
HUC Code:	
Federal Facility:	
US Mexico Border Indicator:	NO
Tribal Land :	NO
Latitude:	35.831473
Longitude:	-82.000875
Method:	ADDRESS MATCHING-HOUSE NUMBER
Reference Point Description:	
Duns Number:	
Registry ID:	110022404753

Map this facility

Environmental Interests

Information System	Information System ID	Environmental Interest Type	Data Source	Last Updated Date	Supplemental Environmental Interests:
AIRS/AFS	3711100116	AIR SYNTHETIC MINOR (ACTIVE)	AIRS/AFS	10/14/2007	

Facility Mailing Addresses

Affiliation Type	Delivery Point	City Name	State	Postal Code	Information System
FACILITY MAILING ADDRESS	65 PITT STATION ROAD	MARION	NC	287521390	AIRS/AFS

NAICS Codes

No NAICS Codes returned.

SIC Codes

Data Source	SIC Code	Description	Primary
AIRS/AFS	2834	PHARMACEUTICAL PREPARATIONS	

Contacts

Affiliation Type	Full Name	Office Phone	Information System	Mailing Address
COMPLIANCE CONTACT	JACK MARTINDALE	8287566734	AIRS/AFS	

Organizations

Affiliation Type	Name	DUNS Number	Information System	Mailing Address
OWNER/OPERATOR		059140764	AIRS/AFS	

Alternative Names

No Alternative Names returned.

Query executed on: MAR-17-2008

http://oaspub.epa.gov/enviro/multisys2.get_list?facility_uin=110022404753
Last updated on Monday, March 17th, 2008.

Envirofacts Data Warehouse

You are here: EPA Home Envirofacts Multisystem Report

MultiSystem Report

Report an Error

Envirofacts

BAXTER HEALTHCARE CORP
65 PITT STATION ROAD
MARION, NC 28752

Map this facility

EPA Facility Information

This query was executed on MAR-17-2008

AIRS / AFS Information

PLANT NAME:	BAXTER HEALTHCARE CORP	**COMPLIANCE SYSTEM PLANT ID:**	00116
AFS PLANT ID:	00116		
LATITUDE:	0	**LONGITUDE:**	0
DUNS NUMBER:	059140764	**PRINCIPAL PRODUCT:**	
INVENTORY YEAR:		**EMERGENCY CONTROL:**	
CLASS CODE:	POT EMISSIONS BELOW MAJR SOURCE THRESHOLDS IF COMPLIES WITH FED REGS/LIMITS	**COMPLIANCE STATUS:**	IN COMPLIANCE WITH PROCEDURAL REQUIREMENTS

The current AIRS/AFS database does not have any pollutant data for this facility.

&cas_num=&program_search=1&report=1&page_no=1&output_sql_switch=TRUE&database_type=AIRS%2FAFS

Last updated on Monday, March 17th, 2008.

Air Releases (AIRS/AFS)

You are here: EPA Home Envirofacts AIRS/AFS Query Results

Query Results

Report an Error

AIRS/AFS

Consolidated facility information (from multiple EPA systems) was searched to select facilities

SCSC ID: Beginning With: 3711100116

Results are based on data extracted on FEB-20-2008

Note: Click on the underlined CORPORATE LINK value for links to that company's environmental web pages.
Click on the underlined MAPPING INFO value to obtain mapping information for the facility.
Click on the underlined Stacks or Points to see detailed pollutant information for the facility.

Go To Bottom Of The Page

Facility Information

Facility Information	PLANT NAME	STREET ADDRESS	CITY NAME	COUNTY	STATE	ZIP CODE	MAPPING INFO	CORPORATE LINK
View Facility Information	BAXTER HEALTHCARE CORP	65 PITT STATION ROAD	MARION	MC DOWELL	NC	28752	MAP	No

Go To Top Of The Page

Total Number of Facilities Displayed: 1

http://oaspub.epa.gov/enviro/fii_query_dtl.disp_program_facility?p_registry_id=110007659685
Last updated on Monday, March 17th, 2008.

Facility Registry System (FRS)

You are here: EPA Home Envirofacts FRS Report

Facility Detail Report

Report an Error

FRS

Facility Name:	BAXTER HEALTHCARE CORP
Location Address:	HWY 221 NORTH
Supplemental Address:	NORTH COVE
City Name:	MARION
State	NC
County Name:	MCDOWELL
ZIP/Postal Code:	287521390
EPA Region:	04
Congressional District Number:	11
Legislative District Number:	
HUC Code:	03050101
Federal Facility:	
US Mexico Border Indicator:	NO
Tribal Land :	NO
Latitude:	35.792777
Longitude:	-82.018888
Method:	INTERPOLATION-MAP
Reference Point Description:	FACILITY CENTROID
Duns Number:	059140764
Registry ID:	110007659685

Map this facility

Environmental Interests

Information System	Information System ID	Environmental Interest Type	Data Source	Last Updated Date	Supplemental Environmental I
TRIS	28752BXTRHHWY22	TRI REPORTER	TRI REPORTING FORM	06/29/2007	
NEI	NEI43626	CRITERIA AND HAZARDOUS AIR POLLUTANT INVENTORY	NEI		
RCRAINFO	NCD059140764	SQG (ACTIVE)	NOTIFICATION (RCRA)	12/07/2005	ICIS-ENFORCEMENT/CC ACTIVITY

PCS	NCG060030	NPDES NON-MAJOR	NPDES PERMIT	03/19/2007	
PCS	NC0006564	NPDES MAJOR	NPDES PERMIT	12/12/1994	

Facility Mailing Addresses

Affiliation Type	Delivery Point	City Name	State	Postal Code	Information System
PRIMARY MAILING ADDRESS	PO BOX 1390	MARION	NC	28752	PCS
FACILITY MAILING ADDRESS	PO BOX 1390	MARION	NC	28752	RCRAINFO
OWNER	PO BOX 1390	MARION	NC	287521390	RCRAINFO
FACILITY MAILING ADDRESS	PO BOX 139065 PITT STATION RD	MARION	NC	28752	TRIS
REGULATORY CONTACT	PO BOX 1390	MARION	NC	28752	RCRAINFO

NAICS Codes

Data Source	NAICS Code	Description	Primary
NEI	325412	PHARMACEUTICAL PREPARATION MANUFACTURING.	

SIC Codes

Data Source	SIC Code	Description	Primary
NEI	2834	PHARMACEUTICAL PREPARATIONS	
TRIS	2834	PHARMACEUTICAL PREPARATIONS	
PCS	2834	PHARMACEUTICAL PREPARATIONS	
PCS	2834	PHARMACEUTICAL PREPARATIONS	
TRIS	2824	MANMADE ORGANIC FIBERS, EXCEPT CELLULOSIC	

Contacts

Affiliation Type	Full Name	Office Phone	Information System	Mailing Address
REGULATORY CONTACT	JACK MARTINDALE	8287566734X	RCRAINFO	View
COGNIZANT OFFICIAL	TONY JOHNSON	8287566530	PCS	
PERMITTING CONTACT		X	RCRAINFO	
COGNIZANT OFFICIAL	JACK MARTINDALE, EHS SUPERVISO	8287566734	PCS	
PUBLIC CONTACT	JACK MARTINDALE	8287566734	TRIS	

Organizations

Affiliation Type	Name	DUNS Number	Information System	Mailing Address
OPERATOR	BAXTER HEALTHCARE CORPORATION		RCRAINFO	
OWNER	BAXTER HEALTHCARE CORPORATION		RCRAINFO	View

Alternative Names

No Alternative Names returned.

Query executed on: MAR-17-2008

Additional information for CERCLIS or TRI sites:

This information resource is not maintained, managed, or owned by the Environmental Protection Agency (EPA) or the Envirofacts Support Team. Neither the EPA nor the Envirofacts Support Team is responsible for their content or site operation. The Envirofacts Warehouse provides this reference only as a convenience to our Internet users.

- National Library of Medicine (NLM) EXIT EPA TOXMAP

http://oaspub.epa.gov/enviro/multisys2.get_list?facility_uin=110007659685
Last updated on Monday, March 17th, 2008.

Envirofacts Data Warehouse

You are here: EPA Home Envirofacts Multisystem Report

MultiSystem Report

Report an Error

Envirofacts

BAXTER HEALTHCARE CORP
HWY 221 NORTH
MARION, NC 287521390

Map this facility

EPA Facility Information

This query was executed on MAR-17-2008

Toxic Releases for Reporting Year 2006

TRI FACILITY ID: 28752BXTRHHWY22

There were no SIC Codes reported to EPA for this facility.

Chemicals Transferred to other Sites

CHEMICAL NAME	TRI CHEM ID	DOCUMENT	RELEASE AMOUNTS LBS/YR	RELEASE BASIS CODE	TYPE OF WASTE MANAGEMENT	TRA S N
DI(2-ETHYLHEXYL) PHTHALATE	000117817	1306204642274	27473	MASS BALANCE CALCULATIONS		MCD COU LANI

Chemicals Released to Air

CHEMICAL NAME	TRI CHEM ID	DOCUMENT	RELEASE AMOUNTS LBS/YR	RELEASE BASIS CODE	FUGITIVE OR STACK INDICATOR
DI(2-ETHYLHEXYL) PHTHALATE	000117817	1306204642274	342	PUBLISHED EMISSION FACTORS	STACK OR POINT EMISSIONS

Chemicals Released via Underground Injection

There was no data of this type reported for this facility.

Chemicals Released to Land

There was no data of this type reported for this facility.

Chemicals Released to Surface Water

There was no data of this type reported for this facility.

Additional Information can be obtained from the Toxics Release Inventory System TRIS Query.
Additional links for TRI:

This information resource is not maintained, managed, or owned by the Environmental Protection Agency (EPA) or the Envirofacts Support Team. Neither the EPA nor the Envirofacts Support Team is responsible for their content or site operation. The Envirofacts Warehouse provides this reference only as a convenience to our Internet users.

- National Library of Medicine (NLM) EXIT EPA TOXMAP
- The Environmental Defense Fund's (EDF) Chemical Scorecard has on-line environmental information regarding this EXIT EPA facility's reported TRI releases.

Water Discharge Permit Information (PCS)

As of June 6th, 2006, pending migration to a new system, the data for the Permit Compliance System (PCS) will remain frozen in Envirofacts for the following states: MA, NH, RI, VI, PR, DC, MD, IN, NM, UT, HI, AK, ID

NPDES: NC0006564
SIC CODE: 2834 **SIC DESCRIPTION:** PHARMACEUTICAL PREPARATIONS

This facility has permits to discharge the following chemical/substances through the points (pipes) listed in the table below:

PARAMETER CODE	PARAMETER DESCRIPTION	NUMBER OF DISCHARGE POINTS
00010	TEMPERATURE, WATER DEG. CENTIGRADE	1
00095	SPECIFIC CONDUCTANCE	1
00300	OXYGEN, DISSOLVED (DO)	1
00310	BOD, 5-DAY (20 DEG. C)	1
00340	OXYGEN DEMAND, CHEM. (HIGH LEVEL) (COD)	1
00400	PH	1
00530	SOLIDS, TOTAL SUSPENDED	1
00556	OIL AND GREASE FREON EXTR-GRAV METH	1
00600	NITROGEN, TOTAL (AS N)	1
00610	NITROGEN, AMMONIA TOTAL (AS N)	1
00665	PHOSPHORUS, TOTAL (AS P)	1
31616	COLIFORM, FECAL MF, M-FC BROTH,44.5C	1
50050	FLOW, IN CONDUIT OR THRU TREATMENT PLANT	1
50060	CHLORINE, TOTAL RESIDUAL	1
TGP3B	P/F STATRE 7DAY CHR CERIODAPHNIA	1
THP3B	CHV STATRE 7DAY CHR CERIODAPHNIA	1

Additional Information can be obtained from Water Discharge Permit Infomation PCS Query.

Water Discharge Permit Information (PCS)

As of June 6th, 2006, pending migration to a new system, the data for the Permit Compliance System (PCS) will remain frozen in Envirofacts for the following states: MA, NH, RI, VI, PR, DC, MD, IN, NM, UT, HI, AK, ID

NPDES: NCG060030
SIC CODE: 2834 **SIC DESCRIPTION:** PHARMACEUTICAL PREPARATIONS

The current PCS database does not have permitted discharge data for this facility.

LIST OF NAICS CODES AND DESCRIPTIONS

Additional Information can be obtained from Water Discharge Permit Infomation PCS Query.

RCRAInfo

HANDLER ID: NCD059140764

NAICS CODE	NAICS DESCRIPTION
325412	Pharmaceutical Preparation Manufacturing
3152	Cut and Sew Apparel Manufacturing

HANDLER / FACILITY CLASSIFICATION

HANDLER TYPE
Small Generator

No Process Information is available for the facility listed above.

Additional Information can be obtained from Resource Conservation and Recovery Information RCRAInfo Query.

http://oaspub.epa.gov/enviro/tris_control.tris_print?tris_id=28752BXTRHHWY22
Last updated on Monday, March 17th, 2008.

Toxics Release Inventory (TRI)

You are here: EPA Home Envirofacts TRI Envirofacts Report

Envirofacts Report

TRI

Report an Error

Query executed on MAR-17-2008
Results are based on data extracted on FEB-21-2008

Click on "View Facility Information" to view EPA Facility information for the facility.

Facility Name:	BAXTER HEALTHCARE CORP	Mailing Name:	BAXTER HEALTHCARE CORP		
Address:	65 PITT STATION RD HWY 221 N MARION NC 28752	Mailing Address:	PO BOX 139065 PITT STATION RD MARION NC 28752		
County:	MCDOWELL	Region:	4		
Facility Information:	View Facility Information	TRI ID:	28752BXTRHHWY22	DUNS Number:	005146311
		FRS ID	110007659685		
TRI Preferred Latitude:	35.836389	TRI Preferred Longitude:	81.999722		
Public Contact:	JACK MARTINDALE	Phone:	8287566734		
Parent Company:	BAXTER HEALTHCARE CORP	Parent DUNS:	005146311		

Starting with Reporting Year 2006, TRI Facilities began reporting NAICS codes, instead of SIC codes, to identify their Primary Business Activities.

NAICS Codes for 2006

NAICS CODE	PRIMARY	NAICS DESCRIPTION
325412	YES	Pharmaceutical Preparation Manufacturing

The above information comes from 2006, which was the last year NAICS code data was reported for this facility. The earliest NAICS code data on file for this facility was reported in 2006.

Map this facility

Map this facility using one of Envirofact's mapping utilities.

Besides TRI, this facility also does the following:

- has permits to discharge to water

More information about these additional regulatory aspects of this facility can be found by pressing the other regulatory data button below.

Other Regulatory Data

Total Aggregate Releases of TRI Chemicals to the Environment:

For all releases estimated as a range, the mid-point of the range was used in these calculations. This table summarizes the releases reported by the facility. ***NR*** *- signifies nothing reported by this facility for the corresponding medium.*

Total Aggregate Releases of TRI Chemicals excluding Dioxin and Dioxin-like Compounds (Measured in Pounds)

Media	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996	1
Air Emissions	342	368	250	250	250	250	250	500	500	500	500	
Surface Water Discharges	NR	NR	NR	NR	NR	NR	NR	655	1500	1500	2000	2
Releases to Land	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	
Underground Injection	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	
Total On-Site Releases	342	368	250	250	250	250	250	1155	2000	2000	2500	2
Transfer Off-Site to Disposal	27473	35245	29977	28497	32322	29667	9290	8797	6031	3800	3800	3
Total Releases	27815	35613	30227	28747	32572	29917	9540	9952	8031	5800	6300	5

Graphic Summary of this Table

Total Aggregate Releases of Dioxin and Dioxin-like Compounds (Measured in Grams)

Media	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996	1995
Air Emissions	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NF
Surface Water Discharges	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NF

Releases to Land	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NF
Underground Injection	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NF
Total On-Site Releases	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NF
Transfer Off-Site to Disposal	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NF
Total Releases	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NF

Graphic Summary of this Table

TRI Chemicals Reported on Form A:

Please note that there were no chemicals reported on Form A for this facility

NOTE:
All chemicals reported below have release or transfer amounts greater than zero. To see a list of all chemicals reported by this facility click here.

Names and Amounts of Chemicals Released to the Environment by Year.

For all releases estimated as a range, the mid-point of the range was used in these calculations. ***NR*** *- signifies nothing reported for this facility by the corresponding medium. Rows with all "0" or "NR" values were not listed.*

Chemical Name	Media	Unit Of Measure	2006	2005	2004	2003	2002	2001	2000	199
AMMONIA (TRI Chemical ID: 007664417)	AIR STACK	Pounds	NR	NR	NR	NR	NR	NR	NR	25
AMMONIA (TRI Chemical ID: 007664417)	DISP NON METALS	Pounds	NR	NR	NR	NR	NR	NR	NR	50
AMMONIA (TRI Chemical ID: 007664417)	LAND TREA	Pounds	NR	NR	NR	NR	NR	NR	NR	N
AMMONIA (TRI Chemical ID: 007664417)	WATER	Pounds	NR	NR	NR	NR	NR	NR	NR	65
CHLORINE (TRI Chemical ID: 007782505)	AIR FUG	Pounds	NR	NR	NR	NR	NR	NR	NR	N
DI(2-ETHYLHEXYL) PHTHALATE (TRI Chemical ID: 000117817)	AIR FUG	Pounds	NR	NR	NR	NR	NR	NR	NR	N
DI(2-ETHYLHEXYL) PHTHALATE (TRI Chemical ID:	AIR STACK	Pounds	342	368	250	250	250	250	250	25

000117817)										
DI(2-ETHYLHEXYL) PHTHALATE (TRI Chemical ID: 000117817)	DISP NON METALS	Pounds	27473	35245	29977	28497	32322	29667	9290	829
SODIUM SULFATE (SOLUTION) (TRI Chemical ID: 007757826)	DISP NON METALS	Pounds	NR	NR	NR	NR	NR	NR	NR	N
SODIUM SULFATE (SOLUTION) (TRI Chemical ID: 007757826)	LAND TREA	Pounds	NR	NR	NR	NR	NR	NR	NR	N
SODIUM SULFATE (SOLUTION) (TRI Chemical ID: 007757826)	WATER	Pounds	NR	NR	NR	NR	NR	NR	NR	N
SULFURIC ACID (1994 AND AFTER "ACID AEROSOLS" ONLY) (TRI Chemical ID: 007664939)	AIR STACK	Pounds	NR	NR	NR	NR	NR	NR	NR	N

Discharge of Chemicals into Streams or Bodies of Water:

For all releases estimated as a range, the mid-point of the range was used in these calculations. Rows with Release Amount equal to "0" were not listed.

Chemical Name	Year	Unit Of Measure	Release Amount	Stream Or Body of Water
AMMONIA (TRI Chemical ID: 007664417)	1991	Pounds	250	NORTH FORK CATAWABA
AMMONIA (TRI Chemical ID: 007664417)	1990	Pounds	750	NORTH FORK CATAWABA
AMMONIA (TRI Chemical ID: 007664417)	1989	Pounds	750	NORTH FORK CATAWABA
AMMONIA (TRI Chemical ID: 007664417)	1988	Pounds	750	NORTH FORK CATAWABA
AMMONIA (TRI Chemical ID: 007664417)	1987	Pounds	750	NORTH FORK CATAWABA

AMMONIA (TRI Chemical ID: 007664417)	1992	Pounds	750	NORTH FORK CATAWABA A
AMMONIA (TRI Chemical ID: 007664417)	1999	Pounds	655	NORTH FORK CATAWBA
AMMONIA (TRI Chemical ID: 007664417)	1998	Pounds	1500	NORTH FORK CATAWBA
AMMONIA (TRI Chemical ID: 007664417)	1997	Pounds	1500	NORTH FORK CATAWBA
AMMONIA (TRI Chemical ID: 007664417)	1996	Pounds	2000	NORTH FORK CATAWBA
AMMONIA (TRI Chemical ID: 007664417)	1995	Pounds	2000	NORTH FORK CATAWBA
AMMONIA (TRI Chemical ID: 007664417)	1994	Pounds	750	NORTH FORK CATAWBA
AMMONIA (TRI Chemical ID: 007664417)	1993	Pounds	750	NORTH FORK CATAWBA
SODIUM SULFATE (SOLUTION) (TRI Chemical ID: 007757826)	1987	Pounds	487746	NORTH FORK CATAWABA RIVER

Transfer of Chemicals to Off-Site Locations other than POTWs:

Please note that transfer amounts are not included in release totals shown above. For all releases estimated as a range, the mid-point of the range was used in these calculations. Rows with Total Transfer Amount equal to "0" were not listed.

Chemical Name	Year	Unit Of Measure	Total Transfer Amount	Transfer Site Name and Address	Type Of Waste Management
AMMONIA (TRI Chemical ID: 007664417)	1999	Pounds	250	ADDINGTON ENVIRONMENTAL 500 LANDFILL RD. MOUNT GILEAD, NC 27306	Landfill/Disposal Surface Impoundment
AMMONIA (TRI Chemical ID: 007664417)	1999	Pounds	250	FOOTHILLS ENVIRONMENTAL 2800 CHERAW RD. LENOIR, NC 28645	Landfill/Disposal Surface Impoundment

AMMONIA (TRI Chemical ID: 007664417)	1998	Pounds	250	ADDINGTON ENVIRONMENTAL 500 LANDFILL RD. MOUNT GILEAD, NC 27306	Landfill/Disposal Surface Impoundment
AMMONIA (TRI Chemical ID: 007664417)	1998	Pounds	250	BAXTER HEALTHCARE CORP. HWY. 221 S MARION, NC 28752	Land Treatment
AMMONIA (TRI Chemical ID: 007664417)	1997	Pounds	250	HENRY BROWN RTE. 3 BOX 227 MARION, NC 28752	Land Treatment
AMMONIA (TRI Chemical ID: 007664417)	1997	Pounds	250	BAXTER HEALTHCARE CORP. HWY. 221 S. MARION, NC 28752	Land Treatment
AMMONIA (TRI Chemical ID: 007664417)	1996	Pounds	250	HENRY BROWN RTE. 3 BOX 227 MARION, NC 28752	Land Treatment
AMMONIA (TRI Chemical ID: 007664417)	1996	Pounds	250	BAXTER HEALTHCARE CORP. HWY. 221 S MARION, NC 28752	Land Treatment
AMMONIA (TRI Chemical ID: 007664417)	1995	Pounds	5	BOYD PHILIPS RTE. 3 BOX 253 MARION, NC 28752	Land Treatment
AMMONIA (TRI Chemical ID: 007664417)	1995	Pounds	250	HENRY BROWN RTE. 3 BOX 227 MARION, NC 28752	Land Treatment
AMMONIA (TRI Chemical ID: 007664417)	1995	Pounds	250	BAXTER HEALTHCARE CORP. P.O. BOX 1390	Land Treatment

				HWY. 221 S. MARION, NC 28752	
AMMONIA (TRI Chemical ID: 007664417)	1994	Pounds	5	BOYD PHILLIPS RTE. 3, BOX 253 MARION, NC 28752	Land Treatment
AMMONIA (TRI Chemical ID: 007664417)	1994	Pounds	250	BAXTER HEALTHCARE CORP. HWY. 221 SOUTH MARION, NC 28752	Land Treatment
AMMONIA (TRI Chemical ID: 007664417)	1994	Pounds	5	RON ENGLISH RTE. 3, BOX 227 MARION, NC 28752	Land Treatment
AMMONIA (TRI Chemical ID: 007664417)	1994	Pounds	5	HENRY BROWN RTE. 3, BOX 227 MARION, NC 28752	Land Treatment
AMMONIA (TRI Chemical ID: 007664417)	1993	Pounds	250	DEAN CHAPMAN RTE. 3, BOX 227 MARION, NC 28752	Land Treatment
AMMONIA (TRI Chemical ID: 007664417)	1993	Pounds	250	BAXTER HEALTHCARE CORP. HWY. 221 S., P.O. BOX 1390 MARION, NC 28752	Land Treatment
AMMONIA (TRI Chemical ID: 007664417)	1993	Pounds	250	ROM ENGLISH RTE. 3, BOX 227 MARION, NC 28752	Land Treatment
AMMONIA (TRI Chemical ID: 007664417)	1993	Pounds	250	HENRY BROWN RTE. 3, BOX 227 MARION, NC 28752	Land Treatment

AMMONIA (TRI Chemical ID: 007664417)	1993	Pounds	250	BOYD PHILLIPS RTE. 3, BOX 253 MARION, NC 28752	Land Treatment
AMMONIA (TRI Chemical ID: 007664417)	1992	Pounds	250	BOYD PHILLIPS RTE. 3 BOX 253 MARION, NC 28752	Land Treatment
AMMONIA (TRI Chemical ID: 007664417)	1992	Pounds	250	OLGA BURLESON RTE. 3 BOX 523 MARION, NC 28752	Land Treatment
AMMONIA (TRI Chemical ID: 007664417)	1992	Pounds	250	ROM ENGLISH RTE. 3 BOX 227 MARION, NC 28752	Land Treatment
AMMONIA (TRI Chemical ID: 007664417)	1992	Pounds	250	DEAN CHAPMAN RTE. 3 BOX 227 MARION, NC 28752	Land Treatment
AMMONIA (TRI Chemical ID: 007664417)	1992	Pounds	250	HENRY BROWN RTE. 3 BOX 227 MARION, NC 28752	Land Treatment
AMMONIA (TRI Chemical ID: 007664417)	1992	Pounds	250	BAXTER HEALTHCARE CORP. P.O. BOX 1390, HWY. 221 SOUTH MARION, NC 28752	Land Treatment
AMMONIA (TRI Chemical ID: 007664417)	1991	Pounds	250	OLGA BURLESON RTE. 3 BOX 523 MARION, NC 28752	Land Treatment
AMMONIA (TRI Chemical ID: 007664417)	1991	Pounds	250	ROM ENGLISH RTE. 3 BOX 227 MARION, NC 28752	Land Treatment
AMMONIA (TRI Chemical ID: 007664417)	1991	Pounds	250	DEAN CHAPMAN RTE. 3 BOX 227 MARION, NC	Land Treatment

				28752	
AMMONIA (TRI Chemical ID: 007664417)	1990	Pounds	250	JOHN ENGLISH HWY. 221 N. CLINCHFIELD, NC 28752	Land Treatment
AMMONIA (TRI Chemical ID: 007664417)	1990	Pounds	250	OLGA BURLESON RTE. 3 BOX 523 MARION, NC 28752	Land Treatment
AMMONIA (TRI Chemical ID: 007664417)	1990	Pounds	750	ROM ENGLISH RTE. 3 BOX 227 MARION, NC 28752	Land Treatment
AMMONIA (TRI Chemical ID: 007664417)	1990	Pounds	250	DEAN CHAPMAN RTE. 3 BOX 227 MARION, NC 28752	Land Treatment
AMMONIA (TRI Chemical ID: 007664417)	1989	Pounds	750	ROM ENGLISH RTE. 3 BOX 227 MARION, NC 28752	Land Treatment
AMMONIA (TRI Chemical ID: 007664417)	1989	Pounds	250	DEAN CHAPMAN RTE. 3 OX 227 MARION, NC 28752	Land Treatment
AMMONIA (TRI Chemical ID: 007664417)	1989	Pounds	250	JOHN ENGLISH HWY. 221 N. MARION, NC 28752	Land Treatment
AMMONIA (TRI Chemical ID: 007664417)	1989	Pounds	250	OLGA BURLESON RTE. 3 BOX 523 MARION, NC 28752	Land Treatment
AMMONIA (TRI Chemical ID: 007664417)	1988	Pounds	250	DEAN CHAPMAN RTE. 3 BOX 227 MARION, NC 28752	Land Treatment
AMMONIA (TRI Chemical ID: 007664417)	1988	Pounds	250	JOHN ENGLISH HWY. 221 N. MARION, NC 28752	Land Treatment

Summary of Waste Management Activites

Summary of Waste Management Activites excluding Dioxin and Dioxin-like Compounds

(Measured in Pounds)

This facility did not report any waste management activites for non Dioxin-like Compounds.

Summary of Waste Management Activites for Dioxin and Dioxin-like Compounds (Measured in Grams)

This facility did not report any waste management activites for Dioxin and Dioxin-like Compounds.

Chemicals Under Waste Management:

This facility did not report any chemicals as being treated, recycled, or used in energy recovery.

Transfer of Chemicals to Publicly Owned Treatment Works (POTW):

This facility did not transfer any chemicals to a Publicly Owned Treatment Works (POTW).

Non Production Releases:

This facility did not report any Non-Production releases.

Additional links for TRI:

This information resource is not maintained, managed, or owned by the Environmental Protection Agency (EPA) or the Envirofacts Support Team. Neither the EPA nor the Envirofacts Support Team is responsible for their content or site operation. The Envirofacts Warehouse provides this reference only as a convenience to our Internet users.

- National Library of Medicine (NLM) EXIT EPA TOXMAP
- The Environmental Defense Fund's (EDF) Chemical Scorecard has on-line environmental information regarding this EXIT EPA facility's reported TRI releases.

5=&programe=&program_search=2&report=1&page_no=1&output_sql_switch=TRUE&database_type=RCRAINFO

Last updated on Monday, March 17th, 2008.

Resource Conservation and Recovery Act (RCRAInfo)

You are here: EPA Home Envirofacts RCRAInfo Query Results

Query Results

Report an Error

RCRAInfo

Data Disclaimer

Only RCRAInfo facility information was searched to select facilities

Handler ID: Beginning With: NCD059140764

Results are based on data extracted on JUN-08-2006

Note: Click on the underlined CORPORATE LINK value for links to that company's environmental web pages.
Click on the underlined MAPPING INFO value to obtain mapping information for the facility.

Go To Bottom Of The Page

HANDLER NAME:	BAXTER HEALTHCARE CORP	HANDLER ID:	NCD059140764
STREET:	HWY 221 NORTH	FACILITY INFORMATION:	View Facility Information
CITY:	MARION	CORPORATE LINK:	No
STATE:	NC	COUNTY:	MCDOWELL
ZIP CODE:	28752	MAPPING INFO:	MAP
EPA REGION:	4		

CONTACT INFORMATION

NAME	STREET	CITY	STATE	ZIP CODE	PHONE	TYPE OF CONTACT
SCOTT FERGON	PO BOX 1390	MARION	NC	28752	8287566531	Public

LIST OF NAICS CODES AND DESCRIPTIONS

NAICS CODE	NAICS DESCRIPTION
325412	Pharmaceutical Preparation Manufacturing
3152	Cut and Sew Apparel Manufacturing

Go To Top Of The Page

Total Number of Facilities Displayed: 1

=2&npvalue=3&npvalue=4&npvalue=5&rvalue=12&npvalue=6&npvalue=7&npvalue=9&npvalue=10&npvalue=11

Last updated on Monday, March 17th, 2008.

Water Discharge Permits (PCS)

You are here: EPA Home Envirofacts PCS

Detailed Reports

Report an Error

PCS

Results are based on data extracted on FEB-22-2008

Facility

FACILITY NAME (1) :	Baxter Healthcare Corporation	**NPDES :**	NCG060030
FACILITY NAME (2) :			
STREET 1 :	US Hwy 221 N	**SIC CODE :**	2834 = PHARMACEUTICAL PREPARATIONS
CITY :	MARION TOWN	**MAJOR / MINOR :**	
COUNTY NAME :	MCDOWELL	**TYPE OF OWNERSHIP :**	PRI = PRIVATE
STATE :	NC	**INDUSTRY CLASS :**	P
ZIP CODE :	28752	**ACTIVITY STATUS :**	A = Active
REGION :	04	**INACTIVE DATE :**	
LATITUDE :	+3549440		
LONGITUDE :	-08200000	**TYPE OF PERMIT ISSUED :**	S = STATE
LAT/LON CODE OF ACCURACY :	1 = NEAREST 10TH OF A SECOND	**PERMIT ISSUED DATE :**	01-NOV-2007
LAT/LON METHOD :	A = MAP INTERPOLATION	**PERMIT EXPIRED DATE :**	31-OCT-2012
LAT/LON SCALE :		**ORIGINAL PERMIT ISSUE DATE :**	04-JUN-1993
LAT/LON DATUM :	1 = NAD27		
LAT/LON DESCRIPTION :	01099		
USGS HYDRO BASIN CODE :		**STREAM SEGMENT :**	
FLOW :	0	**MILEAGE IND :**	
RECEIVING STREAM CLASS CODE :		**FEDERAL GRANT IND :**	
RECEIVING WATERS :	North Fork Catawba River	**FINAL LIMITS IND :**	F = FINAL
PRETREATMENT CODE :			

SLUDGE INDICATOR :		**SLUDGE CLASS FAC IND :**	
SLUDGE RELATED PERMIT NUM :		**ANNUAL DRY SLUDGE PROD :**	
MAILING NAME :	Baxter Healthcare Corporation		
MAILING STREET (1) :	PO Box 1390	**MAILING STREET (2) :**	
MAILING CITY :	Marion	**MAILING STATE :**	NC
MAILING ZIP CODE :	28752		
SLUDGE COMMERCIAL HANDLER :			
SLUDGE HANDLER STREET (1) :		**SLUDGE HANDLER STREET (2) :**	
SLUDGE HANDLER CITY :		**SLUDGE HANDLER STATE :**	
SLUDGE HANDLER ZIP CODE :			
COGNIZANT OFFICIAL :	Jack Martindale, EHS Superviso	**COGNIZANT OFFICIAL TEL :**	828-756-6734

Permit Documents

FACILITY NAME (1) : Baxter Healthcare Corporation **NPDES :** NCG060030
FACILITY NAME (2) :

No Permit Documents Found.

Permit Tracking

FACILITY NAME (1) :	Baxter Healthcare Corporation	**NPDES :**	NCG060030
FACILITY NAME (2) :		**PERMIT ISSUED BY :**	S = STATE
PERMIT ISSUED DATE :	01-NOV-2007	**ORIGINAL DATE OF ISSUE :**	04-JUN-1993
PERMIT EXPIRED DATE :	31-OCT-2012		

Permit Tracking Events:

EVENT CODE	EVENT DESCRIPTION	ACTUAL DATE
P5099	PERMIT EXPIRED	31-OCT-2012
P4099	PERMIT ISSUED	01-NOV-2007
P1099	APPLICATION RECEIVED	19-MAR-2007

Inspections

FACILITY NAME (1) : Baxter Healthcare Corporation **NPDES :** NCG060030
FACILITY NAME (2) :

No Inspections Found.

Outfalls/Pipe Schedules

FACILITY NAME (1) : Baxter Healthcare Corporation **NPDES :** NCG060030
FACILITY NAME (2) :

No PCS Pipe Schedule Information Found.

Measurements and Violations

FACILITY NAME (1): Baxter Healthcare Corporation **NPDES :** NCG060030
FACILITY NAME (2):

No PCS Measurements and Violations Information Found.

Enforcement Actions

FACILITY NAME (1): Baxter Healthcare Corporation **NPDES :** NCG060030
FACILITY NAME (2):

No PCS Enforcement Actions Found.

Evidentiary Hearings

FACILITY NAME (1) : Baxter Healthcare Corporation **NPDES :** NCG060030
FACILITY NAME (2) :

No PCS Evidentiary Hearing Information Found.

Pretreatment Inspections/Audits

FACILITY NAME (1) : Baxter Healthcare Corporation **NPDES :** NCG060030
FACILITY NAME (2) :

No PCS Pretreatment Inspections Found.

=2&npvalue=3&npvalue=4&npvalue=5&rvalue=12&npvalue=6&npvalue=7&npvalue=9&npvalue=10&npvalue=11

Last updated on Monday, March 17th, 2008.

Water Discharge Permits (PCS)

You are here: EPA Home Envirofacts PCS

Detailed Reports

Report an Error

PCS

Results are based on data extracted on FEB-22-2008

Facility

FACILITY NAME (1) :	Baxter Healthcare Corporation	**NPDES :**	NC0006564
FACILITY NAME (2) :			
STREET 1 :	US Hwy 221 N	**SIC CODE :**	2834 = PHARMACEUTICAL PREPARATIONS
CITY :	MARION TOWN	**MAJOR / MINOR :**	M = Major
COUNTY NAME :	MCDOWELL	**TYPE OF OWNERSHIP :**	PRI = PRIVATE
STATE :	NC	**INDUSTRY CLASS :**	P
ZIP CODE :	28752	**ACTIVITY STATUS :**	A = Active
REGION :	04	**INACTIVE DATE :**	
LATITUDE :	+3547340		
LONGITUDE :	-08201080	**TYPE OF PERMIT ISSUED :**	S = STATE
LAT/LON CODE OF ACCURACY :	1 = NEAREST 10TH OF A SECOND	**PERMIT ISSUED DATE :**	24-JAN-2005
LAT/LON METHOD :	A = MAP INTERPOLATION	**PERMIT EXPIRED DATE :**	31-JAN-2010
LAT/LON SCALE :	3 = 24,000	**ORIGINAL PERMIT ISSUE DATE :**	28-FEB-1979
LAT/LON DATUM :	1 = NAD27		
LAT/LON DESCRIPTION :	01099		
USGS HYDRO BASIN CODE :		**STREAM SEGMENT :**	0058
FLOW :	1.2	**MILEAGE IND :**	04730
RECEIVING STREAM CLASS CODE :		**FEDERAL GRANT IND :**	
RECEIVING WATERS :	North Fork Catawba River	**FINAL LIMITS IND :**	F = FINAL
PRETREATMENT CODE :			

SLUDGE INDICATOR :		**SLUDGE CLASS FAC IND :**	
SLUDGE RELATED PERMIT NUM :		**ANNUAL DRY SLUDGE PROD :**	
MAILING NAME :	Baxter Healthcare Corporation		
MAILING STREET (1) :	PO Box 1390	**MAILING STREET (2) :**	
MAILING CITY :	Marion	**MAILING STATE :**	NC
MAILING ZIP CODE :	28752		
SLUDGE COMMERCIAL HANDLER :			
SLUDGE HANDLER STREET (1) :		**SLUDGE HANDLER STREET (2) :**	
SLUDGE HANDLER CITY :		**SLUDGE HANDLER STATE :**	
SLUDGE HANDLER ZIP CODE :			
COGNIZANT OFFICIAL :	Tony Johnson	**COGNIZANT OFFICIAL TEL :**	828-756-6530

Permit Documents

FACILITY NAME (1) : Baxter Healthcare Corporation **NPDES :** NC0006564
FACILITY NAME (2) :

Text of the actual NPDES Permit: NPDES PERMIT (pdf file)
Background and Rationale used to develop the NPDES permit: FACT SHEET (pdf file)

Permit Tracking

FACILITY NAME (1) :	Baxter Healthcare Corporation	**NPDES :**	NC0006564
FACILITY NAME (2) :		**PERMIT ISSUED BY :**	S = STATE
PERMIT ISSUED DATE :	24-JAN-2005	**ORIGINAL DATE OF ISSUE :**	28-FEB-1979
PERMIT EXPIRED DATE :	31-JAN-2010		

Permit Tracking Events:

EVENT CODE	EVENT DESCRIPTION	ACTUAL DATE
P5099	PERMIT EXPIRED	31-JAN-2010

P4099	PERMIT ISSUED	24-JAN-2005
P3099	DRAFT PERMIT/PUBLIC NOTICE	08-NOV-2004
P1099	APPLICATION RECEIVED	15-JUN-2004

Inspections

FACILITY NAME (1) : Baxter Healthcare Corporation **NPDES :** NC0006564
FACILITY NAME (2) :

INSPECTION TYPE	DATE OF INSPECTION	INSPECTION PERFORMED BY
C = COMPLIANCE EVAL (NON-SAMPLING)	15-MAY-2007	S = STATE
B = COMPLIANCE BIOMONITORING	15-MAY-2007	S = STATE
C = COMPLIANCE EVAL (NON-SAMPLING)	02-AUG-2006	S = STATE
S = COMPLIANCE SAMPLING	18-JAN-2006	S = STATE
C = COMPLIANCE EVAL (NON-SAMPLING)	20-JUN-2005	S = STATE
C = COMPLIANCE EVAL (NON-SAMPLING)	23-JUN-2004	S = STATE
B = COMPLIANCE BIOMONITORING	14-OCT-2003	S = STATE
C = COMPLIANCE EVAL (NON-SAMPLING)	12-DEC-2002	S = STATE
C = COMPLIANCE EVAL (NON-SAMPLING)	21-FEB-2002	S = STATE
S = COMPLIANCE SAMPLING	31-JAN-2001	S = STATE
S = COMPLIANCE SAMPLING	31-MAY-2000	S = STATE
A = PERFORMANCE AUDIT	20-MAY-1999	S = STATE
B = COMPLIANCE BIOMONITORING	15-OCT-1998	S = STATE
S = COMPLIANCE SAMPLING	19-JUN-1998	S = STATE
S = COMPLIANCE SAMPLING	18-JUN-1997	S = STATE
A = PERFORMANCE AUDIT	12-MAR-1996	S = STATE
S = COMPLIANCE SAMPLING	08-JUN-1995	S = STATE
S = COMPLIANCE SAMPLING	14-FEB-1995	S = STATE
S = COMPLIANCE SAMPLING	25-MAY-1994	S = STATE
S = COMPLIANCE SAMPLING	17-MAR-1994	S = STATE
B = COMPLIANCE BIOMONITORING	03-MAY-1993	S = STATE
S = COMPLIANCE SAMPLING	06-JAN-1993	S = STATE
S = COMPLIANCE SAMPLING	04-FEB-1992	S = STATE
A = PERFORMANCE AUDIT	30-JAN-1991	R = EPA (REGIONAL)
S = COMPLIANCE SAMPLING	11-OCT-1990	S = STATE

S = COMPLIANCE SAMPLING	31-JAN-1990	S = STATE
B = COMPLIANCE BIOMONITORING	28-APR-1989	S = STATE
C = COMPLIANCE EVAL (NON-SAMPLING)	16-MAR-1989	S = STATE
S = COMPLIANCE SAMPLING	21-OCT-1987	S = STATE
C = COMPLIANCE EVAL (NON-SAMPLING)	05-SEP-1986	S = STATE
S = COMPLIANCE SAMPLING	09-APR-1986	S = STATE

Outfalls/Pipe Schedules

FACILITY NAME (1) :	Baxter Healthcare Corporation	**NPDES :**	NC0006564
FACILITY NAME (2) :		**OUTFALL TYPE :**	
PIPE NUMBER :	001	**ACTIVITY STATUS:**	A = ACTIVE
REPORT DESIGNATOR :	1	**LATITUDE:**	+3550010
PIPE SET QUALIFIER :	9	**LONGITUDE :**	-08200010
INACTIVE DATE :		**LAT/LON ACCURACY :**	3 = NEAREST 10 SECONDS
INIT LIMITS START DATE :		**LAT/LON METHOD :**	
INIT LIMITS END DATE :		**LAT/LON SCALE :**	
INTERIM LIMITS START DATE :		**LAT/LON DATUM :**	
INTERIM LIMITS END DATE :		**LAT/LON DESCRIPTION :**	
FINAL LIMITS START DATE :	01-MAR-2005	**USGS HYDRO BASIN CODE :**	
FINAL LIMITS END DATE :	31-JAN-2010	**PIPE STREAM SEGMENT :**	
INIT SUBM. DATE(EPA) :		**RECEIVING STREAM CLASS CD :**	
SUBMISSION UNITS (EPA) :		**MILEAGE INDICATOR :**	
UNITS IN EPA SUBM. PERIOD :	0	**PIPE DESCRIPTION :**	Effluent
INIT SUBM. DATE (STATE) :	28-APR-2005		
SUBMISSION UNITS (STATE) :	M = MONTHS		
UNITS IN STATE SUBM. PERIOD :	1		

INIT REPORTING DATE :	01-MAR-2005
REPORTING UNITS :	M = MONTHS
UNITS IN REPORTING PERIOD :	1

FACILITY NAME (1) :	Baxter Healthcare Corporation	**NPDES :**	NC0006564
FACILITY NAME (2) :		**OUTFALL TYPE :**	
PIPE NUMBER :	001	**ACTIVITY STATUS:**	A = ACTIVE
REPORT DESIGNATOR :	X	**LATITUDE:**	+3547340
PIPE SET QUALIFIER :	9	**LONGITUDE :**	-08201080
INACTIVE DATE :		**LAT/LON ACCURACY :**	3 = NEAREST 10 SECONDS
INIT LIMITS START DATE :		**LAT/LON METHOD :**	
INIT LIMITS END DATE :		**LAT/LON SCALE :**	
INTERIM LIMITS START DATE :		**LAT/LON DATUM :**	
INTERIM LIMITS END DATE :		**LAT/LON DESCRIPTION :**	
FINAL LIMITS START DATE :	01-MAR-2005	**USGS HYDRO BASIN CODE :**	
FINAL LIMITS END DATE :	31-JAN-2010	**PIPE STREAM SEGMENT :**	
INIT SUBM. DATE(EPA) :		**RECEIVING STREAM CLASS CD :**	
SUBMISSION UNITS (EPA) :		**MILEAGE INDICATOR :**	
UNITS IN EPA SUBM. PERIOD :	0	**PIPE DESCRIPTION :**	Effluent
INIT SUBM. DATE (STATE) :	28-FEB-2005		
SUBMISSION UNITS (STATE) :	M = MONTHS		
UNITS IN STATE SUBM. PERIOD :	1		
INIT REPORTING DATE :	01-JAN-2005		
REPORTING UNITS :	M = MONTHS		
UNITS IN REPORTING PERIOD :	1		

Measurements and Violations

FACILITY NAME (1):	Baxter Healthcare Corporation	**NPDES :**	NC0006564
FACILITY NAME (2):		**LIMIT TYPE :**	5 = FINAL
PIPE NUMBER :	001	**SEASON NUM :**	0
REPORT DESIGNATOR :	1	**PARAMETER CODE:**	00010 = TEMPERATURE, WATER DEG. CENTIGRADE
PIPE SET QUALIFIER :	9	**MONITORING LOCATION :**	1 = EFFLUENT GROSS VALUE
MODIFICATION NUM :	0		

MONITORING PERIOD END DATE	DISCHARGE IND	QTY MAXIMUM	QTY AVERAGE	CONC MAXIMUM	CONC AVERAGE	CONC MINIMUM	DE
30-NOV-2007				021.0000	018.5000	015.0000	
31-OCT-2007				026.0000	022.9565	019.0000	
30-SEP-2007				026.0000	024.7894	023.0000	
31-AUG-2007				029.0000	027.1304	026.0000	
31-JUL-2007				028.0000	025.6190	024.0000	
30-JUN-2007				027.0000	025.7619	024.0000	
31-MAY-2007				025.0000	023.3181	021.0000	

30-APR-2007				024.0000	020.5500	017.0000	
31-MAR-2007				024.0000	019.7727	016.0000	
28-FEB-2007				019.0000	016.9000	014.0000	
31-JAN-2007				021.0000	017.2727	015.0000	
31-DEC-2006				022.0000	017.1578	014.0000	
30-NOV-2006				022.0000	019.6000	018.0000	
31-OCT-2006				024.0000	022.0454	019.0000	
30-SEP-2006				026.0000	024.6000	022.0000	
31-AUG-2006				029.0000	027.0000	024.0000	

31-JUL-2006				028.0000	026.6000	024.0000
30-JUN-2006				026.0000	024.6818	022.0000
31-MAY-2006				025.0000	021.8181	020.0000
30-APR-2006				023.0000	020.9473	018.0000
31-MAR-2006				022.0000	017.5217	015.0000
28-FEB-2006				018.0000	016.3500	015.0000
31-JAN-2006				020.0000	017.0000	014.0000
31-DEC-2005				019.0000	015.7500	013.0000
30-NOV-2005				022.2000	019.3350	016.1000
31-OCT-2005				025.0000	022.3333	018.0000

30-SEP-2005				027.0000	025.3809	024.0000
31-AUG-2005				028.0000	026.6956	025.0000
31-JUL-2005				029.0000	026.6500	024.0000
30-JUN-2005				028.0000	025.2727	022.0000
31-MAY-2005				024.0000	022.3809	019.0000
30-APR-2005				023.0000	020.4285	016.0000
31-MAR-2005				020.0000	017.4545	014.0000

FACILITY NAME (1):	Baxter Healthcare Corporation	**NPDES :**	NC0006564
FACILITY NAME (2):		**LIMIT TYPE :**	5 = FINAL
PIPE NUMBER :	001	**SEASON NUM :**	0
REPORT DESIGNATOR :	1	**PARAMETER CODE:**	00095 = SPECIFIC CONDUCTANCE
PIPE SET QUALIFIER :	9	**MONITORING LOCATION :**	1 = EFFLUENT GROSS VALUE
MODIFICATION NUM :	0		

MONITORING PERIOD END	DISCHARGE IND	QTY MAXIMUM	QTY AVERAGE	CONC MAXIMUM	CONC AVERAGE	CONC MINIMUM	DE

DATE						
30-NOV-2007				00001348	00001197	0984.000
31-OCT-2007				00001485	00001308	00001069
30-SEP-2007				00001359	00001145	0990.000
31-AUG-2007				00001339	00001089	0992.000
31-JUL-2007				00001450	00001219	0989.000
30-JUN-2007				00001266	00001209	00001138
31-MAY-2007				00001309	00001196	0982.000
30-APR-2007				00001275	00001146	0962.000
31-MAR-2007				00001256	00001147	00001028
28-FEB-2007				00001244	00001141	0974.000

31-JAN-2007				00001410	00001071	0680.000
31-DEC-2006				00001232	00001137	00001063
30-NOV-2006				00001327	00001144	0635.000
31-OCT-2006				00001272	00001115	0869.000
30-SEP-2006				00001235	00001097	0924.000
31-AUG-2006				00001397	00001203	00001040
31-JUL-2006				00001440	00001267	0762.000
30-JUN-2006				00001641	00001311	00001087
31-MAY-2006				00001629	00001388	0932.000
30-APR-2006				00001678	00001510	00001365

31-MAR-2006				00001590	00001486	00001346
28-FEB-2006				00001569	00001341	00001042
31-JAN-2006				00001562	00001138	0743.000
31-DEC-2005				00001546	00001224	0796.000
30-NOV-2005				00001277	00001071	0684.000
31-OCT-2005				00001258	00001105	0979.000
30-SEP-2005				00001173	0967.692	0823.000
31-AUG-2005				00001272	00001083	0964.000
31-JUL-2005				00001273	00001071	0962.000

30-JUN-2005				00001264	00001111	0939.000
31-MAY-2005				00001326	00001255	00001079
30-APR-2005				00001377	00001296	00001179
31-MAR-2005				00001336	00001192	00001032

FACILITY NAME (1):	Baxter Healthcare Corporation	**NPDES :**	NC0006564
FACILITY NAME (2):		**LIMIT TYPE :**	5 = FINAL
PIPE NUMBER :	001	**SEASON NUM :**	0
REPORT DESIGNATOR :	1	**PARAMETER CODE:**	00300 = OXYGEN, DISSOLVED (DO)
PIPE SET QUALIFIER :	9	**MONITORING LOCATION :**	1 = EFFLUENT GROSS VALUE
MODIFICATION NUM :	0		

MONITORING PERIOD END DATE	DISCHARGE IND	QTY MAXIMUM	QTY AVERAGE	CONC MAXIMUM	CONC AVERAGE	CONC MINIMUM	DE
30-NOV-2007				09.20000	08.35050	06.50000	
31-OCT-2007				09.00000	07.87608	06.94000	
30-SEP-2007				08.24000	07.53157	07.08000	

31-AUG-2007				07.61000	07.10826	06.00000
31-JUL-2007				08.57000	07.42619	06.40000
30-JUN-2007				08.69000	07.30000	04.31000
31-MAY-2007				08.55000	07.83363	06.85000
30-APR-2007				09.23000	08.26400	07.40000
31-MAR-2007				09.36000	08.43545	06.67000
28-FEB-2007				09.97000	08.98050	08.08000
31-JAN-2007				09.95000	09.05727	08.07000
31-DEC-2006				010.0100	08.81315	07.80000
30-NOV-2006				09.30000	07.97150	05.21000

31-OCT-2006				09.00000	07.93227	07.27000
30-SEP-2006				08.05000	07.51800	06.00000
31-AUG-2006				07.50000	06.87739	06.34000
31-JUL-2006				07.81000	07.18200	06.80000
30-JUN-2006				08.50000	07.65636	06.64000
31-MAY-2006				09.20000	08.18181	07.33000
30-APR-2006				09.27000	07.98105	06.77000
31-MAR-2006				09.76000	08.43608	07.17000
28-FEB-2006				09.90000	08.64750	07.43000
31-JAN-2006				09.50000	08.58476	07.75000

31-DEC-2005				09.70000	08.71250	08.05000
30-NOV-2005				09.21000	08.09000	06.93000
31-OCT-2005				09.70000	07.92000	07.10000
30-SEP-2005				08.15000	06.98333	06.19000
31-AUG-2005				08.15000	07.17521	06.10000
31-JUL-2005				08.16000	06.78950	05.47000
30-JUN-2005				08.02000	07.06136	05.91000
31-MAY-2005				08.54000	07.71285	06.57000
30-APR-2005				09.89000	07.86047	06.75000

31-MAR-2005				09.57000	08.44000	07.66000

FACILITY NAME (1):	Baxter Healthcare Corporation	**NPDES :**	NC0006564
FACILITY NAME (2):		**LIMIT TYPE :**	5 = FINAL
PIPE NUMBER :	001	**SEASON NUM :**	0
REPORT DESIGNATOR :	1	**PARAMETER CODE:**	00310 = BOD, 5-DAY (20 DEG. C)
PIPE SET QUALIFIER :	9	**MONITORING LOCATION :**	1 = EFFLUENT GROSS VALUE
MODIFICATION NUM :	0		

MONITORING PERIOD END DATE	DISCHARGE IND	QTY MAXIMUM	QTY AVERAGE	CONC MAXIMUM	CONC AVERAGE	CONC MINIMUM	DE
30-NOV-2007		027.6000	09.50000				
31-OCT-2007		026.6000	02.04615				
30-SEP-2007		023.5000	04.86666				
31-AUG-2007		020.8000	03.18666				
31-JUL-2007		05.90000	0.491667				
30-JUN-2007		026.0000	09.97692				

31-MAY-2007		027.2000	09.22857			
30-APR-2007		028.2000	011.6166			
31-MAR-2007		0102.600	048.0071			
28-FEB-2007		024.8000	013.8000			
31-JAN-2007		015.3000	01.17692			
31-DEC-2006		026.2000	08.56923			
30-NOV-2006		043.5000	04.90714			
31-OCT-2006		033.3000	09.02500			
30-SEP-2006		019.6000	01.50769			
31-AUG-2006		034.6000	06.81428			

31-JUL-2006		023.6000	03.73333				
30-JUN-2006		039.5000	011.3285				
31-MAY-2006		020.0000	02.69230				
30-APR-2006		030.3000	014.6833				
31-MAR-2006		044.2000	013.0866				
28-FEB-2006		074.5000	036.6583				
31-JAN-2006		045.3000	032.8500				
31-DEC-2005		094.0000	036.3571				
30-NOV-2005		015.2000	01.16923				
31-OCT-2005		024.5000	02.04166				

30-SEP-2005		030.4000	05.82142				
31-AUG-2005		034.4000	012.1000				
31-JUL-2005		031.8000	07.10000				
30-JUN-2005		037.9000	022.2071				
31-MAY-2005		030.7000	08.95833				
30-APR-2005		016.6000	01.27692				
31-MAR-2005		097.0000	036.4428				

FACILITY NAME (1):	Baxter Healthcare Corporation	**NPDES :**	NC0006564
FACILITY NAME (2):		**LIMIT TYPE :**	5 = FINAL
PIPE NUMBER :	001	**SEASON NUM :**	0
REPORT DESIGNATOR :	1	**PARAMETER CODE:**	00340 = OXYGEN DEMAND, CHEM. (HIGH LEVEL) (COD)
PIPE SET QUALIFIER :	9	**MONITORING LOCATION :**	1 = EFFLUENT GROSS VALUE

MODIFICATION NUM : 0

MONITORING PERIOD END DATE	DISCHARGE IND	QTY MAXIMUM	QTY AVERAGE	CONC MAXIMUM	CONC AVERAGE	CONC MINIMUM	DE
30-NOV-2007		0103.600	059.8450				
31-OCT-2007		0100.800	051.2913				
30-SEP-2007		0123.300	058.4631				
31-AUG-2007		099.7000	049.8652				
31-JUL-2007		0121.900	045.5818				
30-JUN-2007		0123.800	061.9238				
31-MAY-2007		0100.100	057.7227				
30-APR-2007		0104.100	050.6714				
31-MAR-2007		0383.800	0169.323				

28-FEB-2007		0118.200	070.2250			
31-JAN-2007		080.6000	046.3782			
31-DEC-2006		0142.600	064.6666			
30-NOV-2006		0198.100	066.4350			
31-OCT-2006		0189.900	075.4863			
30-SEP-2006		083.5000	055.3500			
31-AUG-2006		0177.500	085.8434			
31-JUL-2006		093.6000	053.3523			
30-JUN-2006		095.1000	056.3318			
31-MAY-2006		0112.100	040.6000			

30-APR-2006		0115.100	074.2150				
31-MAR-2006		0148.100	080.4217				
28-FEB-2006		0235.300	0150.735				
31-JAN-2006		0217.700	0144.713				
31-DEC-2005		0319.000	0143.119				
30-NOV-2005		0135.100	066.6619				
31-OCT-2005		0314.800	053.6190				
30-SEP-2005		0183.500	064.4523				
31-AUG-2005		0125.400	053.0260				

31-JUL-2005		0101.700	068.6857			
30-JUN-2005		0150.100	091.7545			
31-MAY-2005		091.1000	044.4772			
30-APR-2005		0129.400	057.0571			
31-MAR-2005		0360.300	0101.943			

FACILITY NAME (1):	Baxter Healthcare Corporation	**NPDES :**	NC0006564
FACILITY NAME (2):		**LIMIT TYPE :**	5 = FINAL
PIPE NUMBER :	001	**SEASON NUM :**	0
REPORT DESIGNATOR :	1	**PARAMETER CODE:**	00400 = PH
PIPE SET QUALIFIER :	9	**MONITORING LOCATION :**	1 = EFFLUENT GROSS VALUE
MODIFICATION NUM :	0		

MONITORING PERIOD END DATE	DISCHARGE IND	QTY MAXIMUM	QTY AVERAGE	CONC MAXIMUM	CONC AVERAGE	CONC MINIMUM	DE
30-NOV-2007				07.40000		07.00000	
31-OCT-2007				07.40000		07.10000	

30-SEP-2007				07.40000		07.10000
31-AUG-2007				07.30000		07.10000
31-JUL-2007				07.30000		07.00000
30-JUN-2007				07.40000		07.10000
31-MAY-2007				07.70000		07.10000
30-APR-2007				07.30000		07.10000
31-MAR-2007				07.40000		07.10000
28-FEB-2007				07.40000		07.10000
31-JAN-2007				07.45000		07.03000
31-DEC-2006				07.50000		07.10000

30-NOV-2006				07.70000		07.00000
31-OCT-2006				07.30000		07.05000
30-SEP-2006				07.32000		07.05000
31-AUG-2006				07.34000		07.02000
31-JUL-2006				07.34000		07.08000
30-JUN-2006				07.30000		07.07000
31-MAY-2006				07.29000		07.09000
30-APR-2006				07.24000		07.03000
31-MAR-2006				08.70000		07.06000
28-FEB-2006				07.34000		07.05000

31-JAN-2006				07.45000		07.13000	
31-DEC-2005				07.58000		07.17000	
30-NOV-2005				07.65000		07.17000	
31-OCT-2005				07.83000		07.10000	
30-SEP-2005				07.36000		07.05000	
31-AUG-2005				07.39000		07.01000	
31-JUL-2005				07.38000		07.05000	
30-JUN-2005				07.35000		07.11000	
31-MAY-2005				07.44000		07.10000	

30-APR-2005				07.38000		07.13000
31-MAR-2005				07.43000		07.16000

FACILITY NAME (1):	Baxter Healthcare Corporation	**NPDES :**	NC0006564
FACILITY NAME (2):		**LIMIT TYPE :**	5 = FINAL
PIPE NUMBER :	001	**SEASON NUM :**	0
REPORT DESIGNATOR :	1	**PARAMETER CODE:**	00530 = SOLIDS, TOTAL SUSPENDED
PIPE SET QUALIFIER :	9	**MONITORING LOCATION :**	1 = EFFLUENT GROSS VALUE
MODIFICATION NUM :	0		

MONITORING PERIOD END DATE	DISCHARGE IND	QTY MAXIMUM	QTY AVERAGE	CONC MAXIMUM	CONC AVERAGE	CONC MINIMUM	DE
30-NOV-2007		042.0000	022.8200				
31-OCT-2007		075.0000	034.7304				
30-SEP-2007		085.0000	035.5631				
31-AUG-2007		030.6000	016.7130				
31-JUL-2007		036.7000	017.0636				

30-JUN-2007		050.5000	027.7428				
31-MAY-2007		064.6000	032.3909				
30-APR-2007		048.0000	030.3095				
31-MAR-2007		0135.400	075.3000				
28-FEB-2007		069.2000	042.3500				
31-JAN-2007		044.0000	023.3608				
31-DEC-2006		087.8000	031.2809				
30-NOV-2006		034.1000	012.1700				
31-OCT-2006		068.5000	036.6681				
30-SEP-2006		053.5000	023.9300				

31-AUG-2006		081.8000	032.2260				
31-JUL-2006		0103.100	032.3761				
30-JUN-2006		058.1000	033.3636				
31-MAY-2006		058.8000	019.7826				
30-APR-2006		059.8000	028.2100				
31-MAR-2006		085.2000	030.1913				
28-FEB-2006		0149.000	065.6200				
31-JAN-2006		0131.800	066.7090				
31-DEC-2005		0232.700	066.6000				
30-NOV-2005		081.1000	022.8476				

31-OCT-2005		090.5000	016.9571				
30-SEP-2005		067.3000	024.8428				
31-AUG-2005		053.3000	019.0727				
31-JUL-2005		040.7000	022.3000				
30-JUN-2005		089.3000	048.6363				
31-MAY-2005		033.5000	017.2954				
30-APR-2005		089.8000	024.6190				
31-MAR-2005		0117.600	033.9217				

FACILITY NAME (1):	Baxter Healthcare Corporation	**NPDES :**	NC0006564
FACILITY NAME (2):		**LIMIT TYPE :**	5 = FINAL
PIPE NUMBER :	001	**SEASON NUM :**	0

REPORT DESIGNATOR : 1

PIPE SET QUALIFIER : 9

MODIFICATION NUM : 0

PARAMETER CODE: 00556 = OIL & GREASE

MONITORING LOCATION : 1 = EFFLUENT GROSS VALUE

MONITORING PERIOD END DATE	DISCHARGE IND	QTY MAXIMUM	QTY AVERAGE	CONC MAXIMUM	CONC AVERAGE	CONC MINIMUM	DE
30-NOV-2007		0.000000	0.000000				
31-OCT-2007		0.000000	0.000000				
30-SEP-2007		0.000000	0.000000				
31-AUG-2007		0.000000	0.000000				
31-JUL-2007		0.000000	0.000000				
30-JUN-2007		0.000000	0.000000				
31-MAY-2007		0.000000	0.000000				
30-APR-2007		0.000000	0.000000				

31-MAR-2007		048.0000	012.0000				
28-FEB-2007		0.000000	0.000000				
31-JAN-2007		0.000000	0.000000				
31-DEC-2006		0.000000	0.000000				
30-NOV-2006		03.00000	0.750000				
31-OCT-2006		0.000000	0.000000				
30-SEP-2006		0.000000	0.000000				
31-AUG-2006		0.000000	0.000000				
31-JUL-2006		0.000000	0.000000				
30-JUN-2006		0.000000	0.000000				

31-MAY-2006		0.000000	0.000000				
30-APR-2006		0.000000	0.000000				
31-MAR-2006		0.000000	0.000000				
28-FEB-2006		045.8000	011.4500				
31-JAN-2006		046.8000	023.6000				
31-DEC-2005		058.3000	011.6600				
30-NOV-2005		0.000000	0.000000				
31-OCT-2005		0.000000	0.000000				
30-SEP-2005		0.000000	0.000000				
31-AUG-2005		0.000000	0.000000				

31-JUL-2005		0.000000	0.000000				
30-JUN-2005	8 = OTHER						
31-MAY-2005		0.000000	0.000000				
30-APR-2005	8 = OTHER						
31-MAR-2005	8 = OTHER						

FACILITY NAME (1):	Baxter Healthcare Corporation	**NPDES :**	NC0006564
FACILITY NAME (2):		**LIMIT TYPE :**	5 = FINAL
PIPE NUMBER :	001	**SEASON NUM :**	0
REPORT DESIGNATOR :	1	**PARAMETER CODE:**	00600 = NITROGEN, TOTAL (AS N)
PIPE SET QUALIFIER :	9	**MONITORING LOCATION :**	1 = EFFLUENT GROSS VALUE
MODIFICATION NUM :	0		

MONITORING PERIOD END DATE	DISCHARGE IND	QTY MAXIMUM	QTY AVERAGE	CONC MAXIMUM	CONC AVERAGE	CONC MINIMUM	DE
30-NOV-2007				09.30000	09.30000	09.30000	

31-OCT-2007				016.7000	016.7000	016.7000
30-SEP-2007				024.1000	024.1000	024.1000
31-AUG-2007				018.0000	018.0000	018.0000
31-JUL-2007				08.20000	08.20000	08.20000
30-JUN-2007				017.0000	017.0000	017.0000
31-MAY-2007				014.0000	014.0000	014.0000
30-APR-2007				014.0000	014.0000	014.0000
31-MAR-2007				012.0000	012.0000	012.0000
28-FEB-2007				017.0000	017.0000	017.0000
31-JAN-2007				012.0000	012.0000	012.0000

31-DEC-2006				04.90000	04.90000	04.90000
30-NOV-2006				032.0000	032.0000	032.0000
31-OCT-2006				024.0000	024.0000	024.0000
30-SEP-2006				08.60000	08.60000	08.60000
31-AUG-2006				016.0000	016.0000	016.0000
31-JUL-2006				016.0000	016.0000	016.0000
30-JUN-2006				029.0000	029.0000	029.0000
31-MAY-2006				026.0000	013.0000	0.000000
30-APR-2006				035.0000	035.0000	035.0000
31-MAR-2006				044.0000	044.0000	044.0000

28-FEB-2006				030.0000	030.0000	030.0000
31-JAN-2006				026.0000	026.0000	026.0000
31-DEC-2005				014.0000	014.0000	014.0000
30-NOV-2005				025.0000	025.0000	025.0000
31-OCT-2005				020.0000	020.0000	020.0000
30-SEP-2005				09.70000	09.70000	09.70000
31-AUG-2005				08.60000	08.60000	08.60000
31-JUL-2005				025.0000	025.0000	025.0000
30-JUN-2005				06.40000	06.40000	06.40000
31-MAY-2005				0.000000	0.000000	0.000000

30-APR-2005				09.00000	09.00000	09.00000
31-MAR-2005				014.0000	014.0000	014.0000

FACILITY NAME (1):	Baxter Healthcare Corporation	**NPDES :**	NC0006564
FACILITY NAME (2):		**LIMIT TYPE :**	5 = FINAL
PIPE NUMBER :	001	**SEASON NUM :**	0
REPORT DESIGNATOR :	1	**PARAMETER CODE:**	00610 = NITROGEN, AMMONIA TOTAL (AS N)
PIPE SET QUALIFIER :	9	**MONITORING LOCATION :**	1 = EFFLUENT GROSS VALUE
MODIFICATION NUM :	0		

MONITORING PERIOD END DATE	DISCHARGE IND	QTY MAXIMUM	QTY AVERAGE	CONC MAXIMUM	CONC AVERAGE	CONC MINIMUM	DE
30-NOV-2007				0.000000	0.000000	0.000000	
31-OCT-2007				0.000000	0.000000	0.000000	
30-SEP-2007				0.000000	0.000000	0.000000	
31-AUG-2007				0.000000	0.000000	0.000000	
31-JUL-2007				0.000000	0.000000	0.000000	

30-JUN-2007				0.140000	0.070000	0.000000
31-MAY-2007				0.000000	0.000000	0.000000
30-APR-2007				0.300000	0.150000	0.000000
31-MAR-2007				0.290000	0.145000	0.000000
28-FEB-2007				0.000000	0.000000	0.000000
31-JAN-2007				0.330000	0.165000	0.000000
31-DEC-2006				0.120000	0.060000	0.000000
30-NOV-2006				0.000000	0.000000	0.000000
31-OCT-2006				0.000000	0.000000	0.000000
30-SEP-2006				0.000000	0.000000	0.000000

31-AUG-2006				0.000000	0.000000	0.000000
31-JUL-2006				0.000000	0.000000	0.000000
30-JUN-2006				0.000000	0.000000	0.000000
31-MAY-2006				0.000000	0.000000	0.000000
30-APR-2006				0.110000	0.055000	0.000000
31-MAR-2006				0.130000	0.065000	0.000000
28-FEB-2006				0.000000	0.000000	0.000000
31-JAN-2006				0.000000	0.000000	0.000000
31-DEC-2005				01.50000	0.750000	0.000000
30-NOV-2005				0.240000	0.120000	0.000000

31-OCT-2005				0.160000	0.130000	0.100000
30-SEP-2005				0.140000	0.070000	0.000000
31-AUG-2005				0.000000	0.000000	0.000000
31-JUL-2005				0.000000	0.000000	0.000000
30-JUN-2005				0.000000	0.000000	0.000000
31-MAY-2005				0.000000	0.000000	0.000000
30-APR-2005				0.300000	0.150000	0.000000
31-MAR-2005				0.000000	0.000000	0.000000

FACILITY NAME (1):	Baxter Healthcare Corporation	**NPDES :**	NC0006564
FACILITY NAME (2):		**LIMIT TYPE :**	5 = FINAL
PIPE NUMBER :	001	**SEASON NUM :**	0

REPORT DESIGNATOR : 1

PIPE SET QUALIFIER : 9

MODIFICATION NUM : 0

PARAMETER CODE: 00665 = PHOSPHORUS, TOTAL (AS P)

MONITORING LOCATION : 1 = EFFLUENT GROSS VALUE

MONITORING PERIOD END DATE	DISCHARGE IND	QTY MAXIMUM	QTY AVERAGE	CONC MAXIMUM	CONC AVERAGE	CONC MINIMUM	DE
30-NOV-2007				01.00000	01.00000	01.00000	
31-OCT-2007				05.30000	05.30000	05.30000	
30-SEP-2007				0.630000	0.630000	0.630000	
31-AUG-2007				0.870000	0.870000	0.870000	
31-JUL-2007				0.960000	0.960000	0.960000	
30-JUN-2007				01.22000	01.22000	01.22000	
31-MAY-2007				01.66000	01.66000	01.66000	
30-APR-2007				01.34000	01.34000	01.34000	

31-MAR-2007				01.40000	01.40000	01.40000
28-FEB-2007				0.940000	0.940000	0.940000
31-JAN-2007				01.43000	01.43000	01.43000
31-DEC-2006				01.10000	01.10000	01.10000
30-NOV-2006				01.01000	01.01000	01.01000
31-OCT-2006				01.32000	01.32000	01.32000
30-SEP-2006				01.27000	01.27000	01.27000
31-AUG-2006				01.54000	01.54000	01.54000
31-JUL-2006				01.55000	01.55000	01.55000
30-JUN-2006				01.70000	01.70000	01.70000

31-MAY-2006				01.71000	01.58000	01.45000
30-APR-2006				01.82000	01.82000	01.82000
31-MAR-2006				02.30000	02.30000	02.30000
28-FEB-2006				01.65000	01.65000	01.65000
31-JAN-2006				01.36000	01.36000	01.36000
31-DEC-2005				01.07000	01.07000	01.07000
30-NOV-2005				0.970000	0.970000	0.970000
31-OCT-2005				01.82000	01.82000	01.82000
30-SEP-2005				01.19000	01.19000	01.19000
31-AUG-2005				01.30000	01.30000	01.30000

31-JUL-2005				02.58000	02.58000	02.58000
30-JUN-2005				01.90000	01.90000	01.90000
31-MAY-2005				01.24000	01.24000	01.24000
30-APR-2005				0.000000	0.000000	0.000000
31-MAR-2005				01.32000	01.32000	01.32000

FACILITY NAME (1):	Baxter Healthcare Corporation	**NPDES :**	NC0006564
FACILITY NAME (2):		**LIMIT TYPE :**	5 = FINAL
PIPE NUMBER :	001	**SEASON NUM :**	0
REPORT DESIGNATOR :	1	**PARAMETER CODE:**	31616 = COLIFORM, FECAL MF, M-FC BROTH,44.5C
PIPE SET QUALIFIER :	9	**MONITORING LOCATION :**	1 = EFFLUENT GROSS VALUE
MODIFICATION NUM :	0		

MONITORING PERIOD END DATE	DISCHARGE IND	QTY MAXIMUM	QTY AVERAGE	CONC MAXIMUM	CONC AVERAGE	CONC MINIMUM	DE
30-NOV-2007				026.0000	02.45011	0.000000	

31-OCT-2007				04.00000	01.18017	0.000000
30-SEP-2007				0.000000	01.00000	0.000000
31-AUG-2007				08.00000	01.23772	0.000000
31-JUL-2007				09.00000	01.22931	0.000000
30-JUN-2007				014.0000	03.28524	0.000000
31-MAY-2007				020.0000	02.21213	0.000000
30-APR-2007				027.0000	03.98470	0.000000
31-MAR-2007				041.0000	08.24793	0.000000
28-FEB-2007				021.0000	04.73400	0.000000
31-JAN-2007				04.00000	01.26985	0.000000

31-DEC-2006				06.00000	01.49027	0.000000
30-NOV-2006				056.0000	02.51016	0.000000
31-OCT-2006				04.00000	01.45577	0.000000
30-SEP-2006				011.0000	01.55377	0.000000
31-AUG-2006				088.0000	02.29932	0.000000
31-JUL-2006				07.00000	01.26389	0.000000
30-JUN-2006				045.0000	04.78986	0.000000
31-MAY-2006				041.0000	01.65806	0.000000
30-APR-2006				03.00000	01.23007	0.000000
31-MAR-2006				03.00000	01.09587	0.000000

28-FEB-2006				017.0000	03.08196	0.000000
31-JAN-2006				053.0000	02.43625	0.000000
31-DEC-2005				0236.000	04.08210	0.000000
30-NOV-2005				069.0000	01.89056	0.000000
31-OCT-2005				01.00000	01.00000	0.000000
30-SEP-2005				07.00000	01.26389	0.000000
31-AUG-2005				012.0000	02.17151	0.000000
31-JUL-2005				031.0000	01.97199	0.000000
30-JUN-2005				09.00000	01.38954	0.000000
31-MAY-2005				07.00000	01.79552	0.000000

30-APR-2005				0192.000	02.40187	0.000000
31-MAR-2005				035.0000	02.19555	0.000000

FACILITY NAME (1):	Baxter Healthcare Corporation	**NPDES :**	NC0006564
FACILITY NAME (2):		**LIMIT TYPE :**	5 = FINAL
PIPE NUMBER :	001	**SEASON NUM :**	0
REPORT DESIGNATOR :	1	**PARAMETER CODE:**	50050 = FLOW, IN CONDUIT OR THRU TREATMENT PLANT
PIPE SET QUALIFIER :	9	**MONITORING LOCATION :**	1 = EFFLUENT GROSS VALUE
MODIFICATION NUM :	0		

MONITORING PERIOD END DATE	DISCHARGE IND	QTY MAXIMUM	QTY AVERAGE	CONC MAXIMUM	CONC AVERAGE	CONC MINIMUM	DE
30-NOV-2007		01.15000	0.834333				
31-OCT-2007		01.24000	0.845484				
30-SEP-2007		01.29000	0.813000				
31-AUG-2007		01.23000	0.869677				
31-JUL-2007		01.15000	0.779355				

30-JUN-2007		01.19000	0.874333				
31-MAY-2007		01.12000	0.847742				
30-APR-2007		01.14000	0.833667				
31-MAR-2007		01.20000	0.906774				
28-FEB-2007		01.10000	0.876786				
31-JAN-2007		01.38000	0.923548				
31-DEC-2006		01.09000	0.850645				
30-NOV-2006		01.19000	0.831333				
31-OCT-2006		01.27000	0.966129				
30-SEP-2006		01.21000	0.921000				

31-AUG-2006		01.20000	0.958710				
31-JUL-2006		01.17000	0.800323				
30-JUN-2006		01.05000	0.848333				
31-MAY-2006		01.08000	0.800000				
30-APR-2006		01.03000	0.747000				
31-MAR-2006		01.04000	0.774194				
28-FEB-2006		01.05000	0.828929				
31-JAN-2006		01.24000	0.843871				
31-DEC-2005		01.25000	0.780000				

30-NOV-2005		01.13000	0.841333			
31-OCT-2005		01.20000	0.818387			
30-SEP-2005		01.28000	0.956667			
31-AUG-2005		01.40000	0.943548			
31-JUL-2005		01.37000	0.926774			
30-JUN-2005		01.25000	0.923333			
31-MAY-2005		0.950000	0.759677			
30-APR-2005		01.05000	0.770000			
31-MAR-2005		01.20000	0.855806			

FACILITY NAME (1): Baxter Healthcare Corporation

NPDES : NC0006564

FACILITY NAME (2):

LIMIT TYPE : 5 = FINAL

PIPE NUMBER : 001
REPORT DESIGNATOR : 1
PIPE SET QUALIFIER : 9
MODIFICATION NUM : 0
SEASON NUM : 0
PARAMETER CODE: 50060 = CHLORINE, TOTAL RESIDUAL
MONITORING LOCATION : 1 = EFFLUENT GROSS VALUE

MONITORING PERIOD END DATE	DISCHARGE IND	QTY MAXIMUM	QTY AVERAGE	CONC MAXIMUM	CONC AVERAGE	CONC MINIMUM	DE
30-NOV-2007	8 = OTHER						
31-OCT-2007	8 = OTHER						
30-SEP-2007	8 = OTHER						
31-AUG-2007	8 = OTHER						
31-JUL-2007	8 = OTHER						
30-JUN-2007	8 = OTHER						
31-MAY-2007	8 = OTHER						
30-APR-2007	8 = OTHER						

31-MAR-2007	8 = OTHER						
28-FEB-2007	8 = OTHER						
31-JAN-2007	8 = OTHER						
31-DEC-2006	8 = OTHER						
30-NOV-2006	8 = OTHER						
31-OCT-2006	8 = OTHER						
30-SEP-2006	8 = OTHER						
31-AUG-2006	8 = OTHER						
31-JUL-2006	8 = OTHER						
30-JUN-2006	8 = OTHER						

31-MAY-2006	8 = OTHER						
30-APR-2006	8 = OTHER						
31-MAR-2006	8 = OTHER						
28-FEB-2006	8 = OTHER						
31-JAN-2006	8 = OTHER						
31-DEC-2005	8 = OTHER						
30-NOV-2005	8 = OTHER						
31-OCT-2005	8 = OTHER						
30-SEP-2005	8 = OTHER						

31-AUG-2005	8 = OTHER						
31-JUL-2005	8 = OTHER						
30-JUN-2005	8 = OTHER						
31-MAY-2005	8 = OTHER						
30-APR-2005	8 = OTHER						
31-MAR-2005	8 = OTHER						

FACILITY NAME (1):	Baxter Healthcare Corporation	**NPDES :**	NC0006564
FACILITY NAME (2):		**LIMIT TYPE :**	5 = FINAL
PIPE NUMBER :	001	**SEASON NUM :**	Q
REPORT DESIGNATOR :	1	**PARAMETER CODE:**	TGP3B = P/F STATRE 7DAY CHR CERIODAPHNIA
PIPE SET QUALIFIER :	9	**MONITORING LOCATION :**	1 = EFFLUENT GROSS VALUE
MODIFICATION NUM :	0		

MONITORING PERIOD END DATE	DISCHARGE IND	QTY MAXIMUM	QTY AVERAGE	CONC MAXIMUM	CONC AVERAGE	CONC MINIMUM	DE
30-NOV-2007				01.00000	01.00000	01.00000	

31-AUG-2007				01.00000	01.00000	01.00000
31-MAY-2007				01.00000	01.00000	01.00000
28-FEB-2007				01.00000	01.00000	01.00000
30-NOV-2006				01.00000	01.00000	01.00000
31-AUG-2006				01.00000	01.00000	01.00000
31-MAY-2006				01.00000	01.00000	01.00000
28-FEB-2006				01.00000	01.00000	01.00000
30-NOV-2005				01.00000	01.00000	01.00000
31-AUG-2005				01.00000	01.00000	01.00000
31-MAY-2005				01.00000	01.00000	01.00000

FACILITY NAME (1):	Baxter Healthcare Corporation	**NPDES :**	NC0006564
FACILITY NAME (2):		**LIMIT TYPE :**	5 = FINAL
PIPE NUMBER :	001	**SEASON NUM :**	0
REPORT DESIGNATOR :	1	**PARAMETER CODE:**	THP3B = CHV STATRE 7DAY CHR CERIODAPHNIA
PIPE SET QUALIFIER :	9	**MONITORING LOCATION :**	1 = EFFLUENT GROSS VALUE
MODIFICATION NUM :	0		

MONITORING PERIOD END DATE	DISCHARGE IND	QTY MAXIMUM	QTY AVERAGE	CONC MAXIMUM	CONC AVERAGE	CONC MINIMU
30-NOV-2007	8 = OTHER					
31-OCT-2007	8 = OTHER					
30-SEP-2007	8 = OTHER					
31-AUG-2007	8 = OTHER					
31-JUL-2007	8 = OTHER					
30-JUN-2007	8 = OTHER					

31-MAY-2007	8 = OTHER					
30-APR-2007	8 = OTHER					
31-MAR-2007	8 = OTHER					
28-FEB-2007	8 = OTHER					
31-JAN-2007	8 = OTHER					
31-DEC-2006	8 = OTHER					
30-NOV-2006	8 = OTHER					
31-OCT-2006	8 = OTHER					
30-SEP-2006	8 = OTHER					
31-AUG-2006	8 = OTHER					

31-JUL-2006	8 = OTHER					
30-JUN-2006	8 = OTHER					
31-MAY-2006	8 = OTHER					
30-APR-2006	8 = OTHER					
31-MAR-2006	8 = OTHER					
28-FEB-2006	9 = MONITORING IS CONDITIONAL/NOT REQ THIS MP					
31-JAN-2006	8 = OTHER					
31-DEC-2005	8 = OTHER					
30-NOV-2005	8 = OTHER					
31-OCT-2005	8 = OTHER					

30-SEP-2005	8 = OTHER					
31-AUG-2005	8 = OTHER					
31-JUL-2005	9 = MONITORING IS CONDITIONAL/NOT REQ THIS MP					
30-JUN-2005	8 = OTHER					
31-MAY-2005	8 = OTHER					
30-APR-2005	8 = OTHER					
31-MAR-2005	8 = OTHER					

Enforcement Actions

FACILITY NAME (1): Baxter Healthcare Corporation **NPDES :** NC0006564
FACILITY NAME (2):

ACTION	ACTION TYPE	ACTION DATE	STATUS	STATUS DATE	RESPONSE DUE DATE	DOCKET NUMBER	D SO
A1 = CWA PENALTY AO PA	S = STATE	07-MAR-2005	CL = CLOSED - BACK INTO COMPLIANCE	18-APR-2005		LV20050102	

A1 = CWA PENALTY AO PA	S = STATE	27-SEP-2004	CL = CLOSED - BACK INTO COMPLIANCE	18-OCT-2004		LV20040446
A1 = CWA PENALTY AO PA	S = STATE	17-DEC-2003	CL = CLOSED - BACK INTO COMPLIANCE	04-FEB-2004		LV20030821
A1 = CWA PENALTY AO PA	S = STATE	25-FEB-2003	CL = CLOSED - BACK INTO COMPLIANCE	25-FEB-2003		LV20030078
AE = PENALTY AO ISSUED BY STATE =A1PF	S = STATE	07-FEB-2003	CL = CLOSED - BACK INTO COMPLIANCE	25-FEB-2003		LV03078
AE = PENALTY AO ISSUED BY STATE =A1PF	S = STATE	16-DEC-2002	CL = CLOSED - BACK INTO COMPLIANCE	13-JAN-2003		LV02672
AE = PENALTY AO ISSUED BY STATE =A1PF	S = STATE	16-APR-2002	CL = CLOSED - BACK INTO COMPLIANCE	10-MAY-2002		LV02098

Evidentiary Hearings

FACILITY NAME (1) : Baxter Healthcare Corporation **NPDES :** NC0006564
FACILITY NAME (2) :

No PCS Evidentiary Hearing Information Found.

Pretreatment Inspections/Audits

FACILITY NAME (1) : Baxter Healthcare Corporation **NPDES :** NC0006564
FACILITY NAME (2) :

No PCS Pretreatment Inspections Found.

http://oaspub.epa.gov/enviro/fii_query_dtl.disp_program_facility?p_registry_id=110018599603
Last updated on Monday, March 17th, 2008.

Facility Registry System (FRS)

You are here: EPA Home Envirofacts FRS Report

Facility Detail Report

Report an Error

FRS

Facility Name:	BAXTER HEALTHCARE CORPORATION
Location Address:	US HIGHWAY 221 NORTH
Supplemental Address:	
City Name:	MARION
State	NC
County Name:	MCDOWELL
ZIP/Postal Code:	28752
EPA Region:	04
Congressional District Number:	
Legislative District Number:	
HUC Code:	
Federal Facility:	
US Mexico Border Indicator:	NO
Tribal Land :	NO
Latitude:	
Longitude:	
Method:	
Reference Point Description:	
Duns Number:	
Registry ID:	110018599603

Map this facility

Environmental Interests

Information System	Information System ID	Environmental Interest Type	Data Source	Last Updated Date	Supplemental Environmental Interests:
NC-FITS	69	STATE MASTER	NC-FITS		-115DA4YG00M29W84AY3X8BBP8 WASTEWATER FACILITY -300 AIR PROGRAM

Facility Mailing Addresses

Affiliation Type	Delivery Point	City Name	State	Postal Code	Information System
FACILITY CONTACT	P O BOX 1390	MARION	NC	28752	NC-FITS

PERMIT CONTACT	P O BOX 1390	MARION	NC	28752	NC-FITS
AUTHORIZED CONTACT	P O BOX 1390	MARION	NC	28752	NC-FITS

NAICS Codes

Data Source	NAICS Code	Description	Primary
NC-FITS	325412	PHARMACEUTICAL PREPARATION MANUFACTURING.	

SIC Codes

Data Source	SIC Code	Description	Primary
NC-FITS	2834	PHARMACEUTICAL PREPARATIONS	

Contacts

Affiliation Type	Full Name	Office Phone	Information System	Mailing Address
AUTHORIZED CONTACT	BATCHELOR PHIL	(828) 756-6530	NC-FITS	View
FACILITY CONTACT	CASTRO PHIL	(828) 756-6527	NC-FITS	View
PERMIT CONTACT	CASTRO PHIL	(828) 756-6527	NC-FITS	View

Organizations

No Organizations returned.

Alternative Names

No Alternative Names returned.

Query executed on: MAR-17-2008

http://oaspub.epa.gov/enviro/multisys2.get_list?facility_uin=110018599603
Last updated on Monday, March 17th, 2008.

Envirofacts Data Warehouse

You are here: EPA Home Envirofacts Multisystem Report

MultiSystem Report

Report an Error

Envirofacts

BAXTER HEALTHCARE CORPORATION
US HIGHWAY 221 NORTH
MARION, NC 28752

Map this facility

EPA Facility Information

This query was executed on MAR-17-2008

REFERENCE 10

Enforcement & Compliance History Online (ECHO)

Detailed Facility Report

Map | Report Error | Data Dictionary

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US Environmental Protection Agency - Office of Enforcement and Compliance Assurance

Facility Permits and Identifiers

Data Dictionary

Statute	System	Source ID	Facility Name	Street Address	City	State	Zip
	FRS	110022404753	BAXTER HEALTHCARE CORP	65 PITT STATION ROAD	MARION	NC	28752
CAA	AFS	3711100116	BAXTER HEALTHCARE CORP	65 PITT STATION ROAD	MARION	NC	28752

Facility Characteristics

Data Dictionary

Statute	Source ID	Universe	Status	Areas	Permit Expiration Date	Latitude/ Longitude	Indian Country?	SIC Codes	NAICS Codes
	110022404753					LRT: 35.831473 , -82.000875	No		
CAA	3711100116	Synthetic Minor (Fed. Rep.)	Operating	SIP			NA	2834	

If the CWA permit is past its expiration date, this normally means that the permitting authority has not yet issued a new permit. In these situations, the expired permit is normally administratively extended and kept in effect until the new permit is issued.

For the RCRA program, activities that contribute to an overall facility status of Active are displayed in parentheses using the acronym HPACS, where H indicates handler activities, P - permitting, A - corrective action, C - converter, and S - state-specific. More information is available in the Data Dictionary.

Inspection and Enforcement Summary Data

Data Dictionary

Statute	Source ID	Insp. Last 05Yrs	Date of Last Inspection	Formal Enf Act Last 05 Yrs	Penalties Last 05 Yrs
CAA	3711100116	4	09/11/2007	0	$00

Compliance Monitoring History (05 years)

Data Dictionary

Statute	Source ID	Inspection Type	Lead Agency	Date	Finding
CAA	3711100116	STATE CONDUCTED FCE/ON-SITE	State	03/03/2004	
CAA	3711100116	STATE CONDUCTED FCE/ON-SITE	State	12/03/2004	
CAA	3711100116	STATE CONDUCTED FCE/ON-SITE	State	01/05/2006	
CAA	3711100116	STATE CONDUCTED FCE/ON-SITE	State	09/11/2007	

Entries in *italics* are not considered inspections in official counts.

Compliance Summary Data

Data Dictionary

Information on the nature of alleged violations is available on the FAQ page.

Statute	Source ID	Current SNC/HPV?	Description	Current As Of	Qtrs in NC (of 12)
CAA	3711100116	NO		02/16/2008	2

Three Year Compliance Status by Quarter

Data Dictionary

Violations shown in a given quarter do not necessarily span the entire 3 months. Information on the nature of alleged violations is available on the FAQ page, and information on the duration of non-compliance is available at the end of this report.

AIR Compliance Status											
Statute:Source ID CAA: 3711100116	QTR1 Apr-Jun05	QTR2 Jul-Sep05	QTR3 Oct-Dec05	QTR4 Jan-Mar06	QTR5 Apr-Jun06	QTR6 Jul-Sep06	QTR7 Oct-Dec06	QTR8 Jan-Mar07	QTR9 Apr-Jun07	QTR10 Jul-Sep07	QTR11 Oct-De
HPV History											
Program/Pollutant in Current Violation											
SIP	C-CERT	C-CERT	C-CERT	C-CERT	C-CERT	C-CERT	C-CERT	C-CERT	V-PROCED	V-PROCED	C-PRO

High Priority Violator (HPV) History section: "Unaddr" means the facility has not yet been addressed with a formal enforcement action. "Addrs"means the facility has been addressed with a formal enforcement action, but its violations have not been resolved. Lead Agency designated can be US EPA, State, Both, or No Lead Determined. If HPV History is blank, then the facility was not a High Priority Violator. C=Compliance; V=Violation; S=Compliance Schedule.

Notices of Violation or Informal Enforcement - AFS, PCS, ICIS-NPDES, RCRAInfo (05 year history)

Data Dictionary

Statute	Source ID	Type of Action	Lead Agency	Date
CAA	3711100116	STATE NOV ISSUED	State	02/06/2007

Formal Enforcement Actions - (05 year history)

AFS, PCS, RCRAInfo, NCDB

Data Dictionary

Statute	Source ID	Type of Action	Lead Agency	Date	Penalty	Penalty Description
- No data records returned.						

In some cases, formal enforcement actions may be entered both at the initiation and final stages of the action. These may appear more than once above. Entries in *italics* are not "formal" actions under the PCS definitions but are either the initiation of an action or penalties assessed as a result of a previous action. This section includes US EPA and State formal enforcement actions under CAA, CWA and RCRA.

ICIS

Data Dictionary

Primary Law/Section	Case Number	Case Type	Lead Agency	Case Name	Issued/Filed Date	Settlement Date	Federal Penalty	State/Local Penalty	SEP Cost	Comp Action Cost
- No data records returned.										

Federal enforcement actions and penalties shown in this section are from the Integrated Compliance Information System (ICIS-FE&C). These actions may duplicate records in the Formal Enforcement Actions section.

Demographic Profile of Surrounding Area (3 Miles)

Data Dictionary

Radius of Area:	N/A	Land Area:	N/A	Households in area:	N/A
- No data records returned.					

Please note: Entries in gray denote records that are not federally required to be reported to EPA. These data may not be reliable.

Notice About Duration of Violations -- The duration of violations shown on this report is an estimate of the actual duration of the

violations that might be alleged or later determined in a legal proceeding. For example, the start date of the violation as shown in the ECHO database is normally when the government first became aware of the violation, not the first date that the violation occurred, and the facility may have corrected the violation before the end date shown. In some situations, violations may have been corrected by the facility, but EPA or the State has not verified the correction of these violations. In other situations, EPA does not remove the violation flag until an enforcement action has been resolved.

Map

This report was generated by the Integrated Data for Enforcement Analysis (IDEA) system, which updates its information from program databases monthly. The data were last updated: AFS: 02/16/2008. FRS: 02/14/2008.

Some regulated facilities have expressed an interest in explaining data shown in the Detailed Facility Reports in ECHO. Please check company web sites for such explanations.

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Enforcement & Compliance History Online (ECHO)

Detailed Facility Report

Map Report Error Data Dictionary

For Public Release - Unrestricted Dissemination Report Generated on 03/17/2008
US Environmental Protection Agency - Office of Enforcement and Compliance Assurance

Facility Permits and Identifiers

Data Dictionary

Statute	System	Source ID	Facility Name	Street Address	City	State	Zip
	FRS	110007659685	BAXTER HEALTHCARE CORP	HWY 221 NORTH	MARION	NC	28752
CWA	PCS	NCG060030	Baxter Healthcare Corporation	US Hwy 221 N	MARION TOWN	NC	28752
CWA	PCS	NC0006564	Baxter Healthcare Corporation	US Hwy 221 N	MARION TOWN	NC	28752
RCRA	RCR	NCD059140764	BAXTER HEALTHCARE CORP	HWY 221 NORTH	MARION	NC	28752
EP313	TRI	28752BXTRHHWY22	BAXTER HEALTHCARE CORP	65 PITT STATION RD HWY 221 N	MARION	NC	28752

Facility Characteristics

Data Dictionary

Statute	Source ID	Universe	Status	Areas	Permit Expiration Date	Latitude/ Longitude	Indian Country?	SIC Codes	NAICS Codes
	110007659685					LRT: 35.792777 , -82.018888	No		
CWA	NCG060030	Minor	Active		10/31/2012	35.8289 , -82.0000	No	2834	
CWA	NC0006564	Major	Active		01/31/2010	35.7928 , -82.0189	No	2834	
RCRA	NCD059140764	SQG	Active (H)				No		325412
EP313	28752BXTRHHWY22					35.8364 , -81.9997	NA	2834	

If the CWA permit is past its expiration date, this normally means that the permitting authority has not yet issued a new permit. In these situations, the expired permit is normally administratively extended and kept in effect until the new permit is issued.

Permit documents for NPDES permit NC0006564 are available online: Final permit, Fact sheet

For the RCRA program, activities that contribute to an overall facility status of Active are displayed in parentheses using the acronym HPACS, where H indicates handler activities, P - permitting, A - corrective action, C - converter, and S - state-specific. More information is available in the Data Dictionary.

Inspection and Enforcement Summary Data

Data Dictionary

Statute	Source ID	Insp. Last 05Yrs	Date of Last Inspection	Formal Enf Act Last 05 Yrs	Penalties Last 05 Yrs
CWA	NCG060030	0	Never	0	$00
CWA	NC0006564	8	05/15/2007	6	$6,600
RCRA	NCD059140764	3	08/23/2005	0	$00

Compliance Monitoring History (05 years)

Data Dictionary

Statute	Source ID	Inspection Type	Lead Agency	Date	Finding
CWA	NC0006564	COMPLIANCE EVAL (NON-SAMPLING)	State	12/12/2002	
CWA	NC0006564	COMPLIANCE BIOMONITORING	State	10/14/2003	
CWA	NC0006564	COMPLIANCE EVAL (NON-SAMPLING)	State	06/23/2004	
CWA	NC0006564	COMPLIANCE EVAL (NON-SAMPLING)	State	06/20/2005	
CWA	NC0006564	COMPLIANCE SAMPLING	State	01/18/2006	
CWA	NC0006564	COMPLIANCE EVAL (NON-SAMPLING)	State	08/02/2006	
CWA	NC0006564	COMPLIANCE BIOMONITORING	State	05/15/2007	
CWA	NC0006564	COMPLIANCE EVAL (NON-SAMPLING)	State	05/15/2007	
RCRA	NCD059140764	COMPLIANCE EVALUATION INSPECTION ON-SITE	EPA	05/23/2005	Violations Or Compliance Issues Were Found
RCRA	NCD059140764	COMPLIANCE EVALUATION INSPECTION ON-SITE	State	05/23/2005	Violations Or Compliance Issues Were Found
RCRA	NCD059140764	COMPLIANCE SCHEDULE EVALUATION	State	08/23/2005	No Violations Or Compliance Issues Were Found

Entries in *italics* are not considered inspections in official counts.

Compliance Summary Data

Data Dictionary

Information on the nature of alleged violations is available on the FAQ page.

Statute	Source ID	Current SNC/HPV?	Description	Current As Of	Qtrs in NC (of 12)
CWA	NCG060030	N/A		Jul-Sep07	
CWA	NC0006564	NO		Jul-Sep07	2
RCRA	NCD059140764	No		02/11/2008	2

Three Year Compliance Status by Quarter

Data Dictionary

Violations shown in a given quarter do not necessarily span the entire 3 months. Information on the nature of alleged violations is available on the FAQ page, and information on the duration of non-compliance is available at the end of this report.

CWA/NPDES Compliance Status												
Statute:Source ID CWA:NC0006564		QTR1 Oct-Dec04	QTR2 Jan-Mar05	QTR3 Apr-Jun05	QTR4 Jul-Sep05	QTR5 Oct-Dec05	QTR6 Jan-Mar06	QTR7 Apr-Jun06	QTR8 Jul-Sep06	QTR9 Oct-Dec06	QTR10 Jan-Mar07	(/
Non-compliance in Quarter		Yes	No	No	Yes	No	No	No	No	No	No	N
SNC/RNC Status »					N(RptViol)							
Effluent Violations by NPDES Parameter: Get violation charts: all violations (click on parameter names for individual parameter charts)												
Discharge point:001												
OIL & GREASE	Mthly	7%										
	NMth	22%										

Effluent Violations are displayed as highest percentage by which the permit limit was exceeded for the quarter.**Bold, large**print indicates Significant Non-compliance (SNC) effluent violations.**Shaded boxes** indicate unresolved SNC violations.

RCRA Compliance Status												
Statute:Source ID RCRA: NCD059140764		QTR1 Apr-Jun05	QTR2 Jul-Sep05	QTR3 Oct-Dec05	QTR4 Jan-Mar06	QTR5 Apr-Jun06	QTR6 Jul-Sep06	QTR7 Oct-Dec06	QTR8 Jan-Mar07	QTR9 Apr-Jun07	QTR10 Jul-Sep07	Q Oc
Facility Level Status		In Viol	In Viol	Compl	Compl	Compl	Compl	Compl	Compl	Compl	Compl	Co

Type of Violation	Agency											
Generators - General	EPA	05/23/05	08/23/05									
Generators - General	EPA	05/23/05	08/23/05									
Generators - General	EPA	05/23/05	08/23/05									
Generators - General	EPA	05/23/05	08/23/05									

The first date displayed for a RCRA Violation corresponds to the violation determination date, and the next to the resolution date (if the violation has been resolved).

Notices of Violation or Informal Enforcement - AFS, PCS, ICIS-NPDES, RCRAInfo (05 year history)

Data Dictionary

Statute	Source ID	Type of Action	Lead Agency	Date
RCRA	NCD059140764	WRITTEN INFORMAL	State	07/18/2005

Formal Enforcement Actions - (05 year history)

AFS, PCS, RCRAInfo, NCDB

Data Dictionary

Statute	Source ID	Type of Action	Lead Agency	Date	Penalty	Penalty Description
CWA	NC0006564	PENALTY AO ISSUED BY STATE =A1PF	State	12/16/2002	$350	
CWA	NC0006564	PENALTY AO ISSUED BY STATE =A1PF	State	02/07/2003	$1,350	
CWA	NC0006564	CWA PENALTY AO PA	State	02/25/2003	$1,350	
CWA	NC0006564	CWA PENALTY AO PA	State	12/17/2003	$1,600	
CWA	NC0006564	CWA PENALTY AO PA	State	09/27/2004	$1,600	
CWA	NC0006564	CWA PENALTY AO PA	State	03/07/2005	$350	

In some cases, formal enforcement actions may be entered both at the initiation and final stages of the action. These may appear more than once above. Entries in *italics* are not "formal" actions under the PCS definitions but are either the initiation of an action or penalties assessed as a result of a previous action. This section includes US EPA and State formal enforcement actions under CAA, CWA and RCRA.

ICIS

Data Dictionary

Primary Law/Section	Case Number	Case Type	Lead Agency	Case Name	Issued/Filed Date	Settlement Date	Federal Penalty	State/Local Penalty	SEP Cost	Comp Action Cost
- No data records returned.										

Federal enforcement actions and penalties shown in this section are from the Integrated Compliance Information System (ICIS-FE&C). These actions may duplicate records in the Formal Enforcement Actions section.

Environmental Conditions

Data Dictionary

Permit ID	Watershed	Watershed Name	Receiving Waters	Section 303(d) Listing?	Combined Sewer System?
NC0006564	03050101	Upper Catawba. N.C., S.C.	North Fork Catawba River	NO	No

Demographic Profile of Surrounding Area (3 Miles)

Data Dictionary

Open more detailed information in a new window (links leave ECHO): 1 Mi 3 Mi or 5 Mi.
This section provides demographic information regarding the community surrounding the facility. ECHO compliance data alone are not sufficient to determine whether violations at a particular facility had negative impacts on public health or the environment. Statistics are

based upon the 2000 US Census data, and are accurate to the extent that the facility latitude and longitude listed below are correct. The latitude and longitude are obtained from the EPA Locational Reference Table(LRT) when available.

Radius of Area:	3 Miles	Land Area:	97.28%	Households in area:	498
Center Latitude:	35.792778	Water Area:	2.72%	Housing units in area:	610
Center Longitude:	-82.018889	Population Density:	44.84/sq. mi.	Households On Public Assistance:	9
Total Persons:	1,233	Percent Minority:	6.08%	Persons Below Poverty Level:	135

Race Breakdown	Persons (%)	Age Breakdown:	Persons (%)
White:	1,182 (95.86%)	Child 5 years and less:	92 (7.46%)
African-american:	22 (1.78%)	Minors 17 years and younger:	300 (24.33%)
Hispanic-Origin:	48 (3.89%)	Adults 18 years and older:	933 (75.67%)
Asian/Pacific Islander:	5 (0.41%)	Seniors 65 years and older:	157 (12.73%)
American Indian:	(0.00%)		
Other/Multiracial:	25 (2.03%)		

Education Level (Persons 25 & older)	Persons (%)	Income Breakdown:	Households (%)
Less than 9th grade:	28 (3.91%)	Less than $15,000:	90 (18.07%)
9th-12th grades:	124 (17.32%)	$15,000-$25,000:	71 (14.26%)
High School Diploma:	314 (43.85%)	$25,000-$50,000:	190 (38.15%)
Some College/2-yr:	132 (18.44%)	$50,000-$75,000:	98 (19.68%)
B.S./B.A. or more:	118 (16.48%)	Greater than $75,000:	42 (8.43%)

Please note: Entries in gray denote records that are not federally required to be reported to EPA. These data may not be reliable.

Notice About Duration of Violations -- The duration of violations shown on this report is an estimate of the actual duration of the violations that might be alleged or later determined in a legal proceeding. For example, the start date of the violation as shown in the ECHO database is normally when the government first became aware of the violation, not the first date that the violation occurred, and the facility may have corrected the violation before the end date shown. In some situations, violations may have been corrected by the facility, but EPA or the State has not verified the correction of these violations. In other situations, EPA does not remove the violation flag until an enforcement action has been resolved.

Map

This report was generated by the Integrated Data for Enforcement Analysis (IDEA) system, which updates its information from program databases monthly. The data were last updated: PCS: 02/16/2008. RCRAInfo: 02/11/2008. FRS: 02/14/2008. TRI: 07/13/2007. ICIS: 02/14/2008.

Some regulated facilities have expressed an interest in explaining data shown in the Detailed Facility Reports in ECHO. Please check company web sites for such explanations.

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http://oaspub.epa.gov/enviro/pcs_det_reports.detail_report?npdesid=NCG060030
Last updated on Monday, March 17th, 2008.

Water Discharge Permits (PCS)

You are here: EPA Home Envirofacts PCS

Detailed Reports

Report an Error

PCS

This page was created on MAR-17-2008
Results are based on data extracted on FEB-22-2008

Facility Information

FACILITY NAME(1) : Baxter Healthcare Corporation **NPDES :** NCG060030
FACILITY NAME(2) :

Select from the reports listed below *(Defaults to All Reports)*:

- ☑ Facility
- ☑ Permit Documents
- ☑ Permit Tracking
- ☑ Inspections
- ☑ Outfalls/Pipe Schedules
- ☑ Limits ◉ Short Format ○ Long Format
- ☑ Measurements and Violations
- ☑ Compliance Schedules and Violations
- ☑ Evidentiary Hearings
- ☑ Pretreatment Inspections/Audits
- ☑ Pretreatment Performance Summary

Search Clear

http://oaspub.epa.gov/enviro/pcs_det_reports.detail_report?npdesid=NC0006564
Last updated on Monday, March 17th, 2008.

Water Discharge Permits (PCS)

You are here: EPA Home Envirofacts PCS

Detailed Reports

PCS

Report an Error

This page was created on MAR-17-2008
Results are based on data extracted on FEB-22-2008

Facility Information

FACILITY NAME(1) : Baxter Healthcare Corporation **NPDES :** NC0006564
FACILITY NAME(2) :

Select from the reports listed below *(Defaults to All Reports):*

- ☑ Facility
- ☑ Permit Documents
- ☑ Permit Tracking
- ☑ Inspections
- ☑ Outfalls/Pipe Schedules
- ☑ Limits ◉ Short Format ○ Long Format
- ☑ Measurements and Violations
- ☑ Compliance Schedules and Violations
- ☑ Evidentiary Hearings
- ☑ Pretreatment Inspections/Audits
- ☑ Pretreatment Performance Summary

Search Clear

http://oaspub.epa.gov/enviro/tris_control.tris_print?tris_id=28752BXTRHHWY22
Last updated on Monday, March 17th, 2008.

Toxics Release Inventory (TRI)

You are here: EPA Home Envirofacts TRI Envirofacts Report

Envirofacts Report

TRI

Report an Error

Query executed on MAR-17-2008
Results are based on data extracted on FEB-21-2008

Click on "View Facility Information" to view EPA Facility information for the facility.

Facility Name:	BAXTER HEALTHCARE CORP	Mailing Name:	BAXTER HEALTHCARE CORP		
Address:	65 PITT STATION RD HWY 221 N MARION NC 28752	Mailing Address:	PO BOX 139065 PITT STATION RD MARION NC 28752		
County:	MCDOWELL	Region:	4		
Facility Information:	View Facility Information	TRI ID:	28752BXTRHHWY22	DUNS Number:	005146311
		FRS ID	110007659685		
TRI Preferred Latitude:	35.836389	TRI Preferred Longitude:	81.999722		
Public Contact:	JACK MARTINDALE	Phone:	8287566734		
Parent Company:	BAXTER HEALTHCARE CORP	Parent DUNS:	005146311		

Starting with Reporting Year 2006, TRI Facilities began reporting NAICS codes, instead of SIC codes, to identify their Primary Business Activities.

NAICS Codes for 2006

NAICS CODE	PRIMARY	NAICS DESCRIPTION
325412	YES	Pharmaceutical Preparation Manufacturing

The above information comes from 2006, which was the last year NAICS code data was reported for this facility. The earliest NAICS code data on file for this facility was reported in 2006.

Map this facility

Map this facility using one of Envirofact's mapping utilities.

Besides TRI, this facility also does the following:

- has permits to discharge to water

More information about these additional regulatory aspects of this facility can be found by pressing the other regulatory data button below.

Other Regulatory Data

Total Aggregate Releases of TRI Chemicals to the Environment:

For all releases estimated as a range, the mid-point of the range was used in these calculations. This table summarizes the releases reported by the facility. ***NR*** *- signifies nothing reported by this facility for the corresponding medium.*

Total Aggregate Releases of TRI Chemicals excluding Dioxin and Dioxin-like Compounds (Measured in Pounds)

Media	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996	1
Air Emissions	342	368	250	250	250	250	250	500	500	500	500	
Surface Water Discharges	NR	NR	NR	NR	NR	NR	NR	655	1500	1500	2000	2
Releases to Land	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	
Underground Injection	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	
Total On-Site Releases	342	368	250	250	250	250	250	1155	2000	2000	2500	2
Transfer Off-Site to Disposal	27473	35245	29977	28497	32322	29667	9290	8797	6031	3800	3800	3
Total Releases	27815	35613	30227	28747	32572	29917	9540	9952	8031	5800	6300	5

Graphic Summary of this Table

Total Aggregate Releases of Dioxin and Dioxin-like Compounds (Measured in Grams)

Media	2006	2005	2004	2003	2002	2001	2000	1999	1998	1997	1996	1995
Air Emissions	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NF
Surface Water Discharges	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NF

Releases to Land	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NF
Underground Injection	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NF
Total On-Site Releases	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NF
Transfer Off-Site to Disposal	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NF
Total Releases	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NF

Graphic Summary of this Table

TRI Chemicals Reported on Form A:

Please note that there were no chemicals reported on Form A for this facility

NOTE:
All chemicals reported below have release or transfer amounts greater than zero. To see a list of all chemicals reported by this facility click here.

Names and Amounts of Chemicals Released to the Environment by Year.

For all releases estimated as a range, the mid-point of the range was used in these calculations. ***NR*** *- signifies nothing reported for this facility by the corresponding medium. Rows with all "0" or "NR" values were not listed.*

Chemical Name	Media	Unit Of Measure	2006	2005	2004	2003	2002	2001	2000	199
AMMONIA (TRI Chemical ID: 007664417)	AIR STACK	Pounds	NR	NR	NR	NR	NR	NR	NR	25
AMMONIA (TRI Chemical ID: 007664417)	DISP NON METALS	Pounds	NR	NR	NR	NR	NR	NR	NR	50
AMMONIA (TRI Chemical ID: 007664417)	LAND TREA	Pounds	NR	NR	NR	NR	NR	NR	NR	N
AMMONIA (TRI Chemical ID: 007664417)	WATER	Pounds	NR	NR	NR	NR	NR	NR	NR	65
CHLORINE (TRI Chemical ID: 007782505)	AIR FUG	Pounds	NR	NR	NR	NR	NR	NR	NR	N
DI(2-ETHYLHEXYL) PHTHALATE (TRI Chemical ID: 000117817)	AIR FUG	Pounds	NR	NR	NR	NR	NR	NR	NR	N
DI(2-ETHYLHEXYL) PHTHALATE (TRI Chemical ID:	AIR STACK	Pounds	342	368	250	250	250	250	250	25

000117817)										
DI(2-ETHYLHEXYL) PHTHALATE (TRI Chemical ID: 000117817)	DISP NON METALS	Pounds	27473	35245	29977	28497	32322	29667	9290	829
SODIUM SULFATE (SOLUTION) (TRI Chemical ID: 007757826)	DISP NON METALS	Pounds	NR	NR	NR	NR	NR	NR	NR	N
SODIUM SULFATE (SOLUTION) (TRI Chemical ID: 007757826)	LAND TREA	Pounds	NR	NR	NR	NR	NR	NR	NR	N
SODIUM SULFATE (SOLUTION) (TRI Chemical ID: 007757826)	WATER	Pounds	NR	NR	NR	NR	NR	NR	NR	N
SULFURIC ACID (1994 AND AFTER "ACID AEROSOLS" ONLY) (TRI Chemical ID: 007664939)	AIR STACK	Pounds	NR	NR	NR	NR	NR	NR	NR	N

Discharge of Chemicals into Streams or Bodies of Water:

For all releases estimated as a range, the mid-point of the range was used in these calculations. Rows with Release Amount equal to "0" were not listed.

Chemical Name	Year	Unit Of Measure	Release Amount	Stream Or Body of Water
AMMONIA (TRI Chemical ID: 007664417)	1991	Pounds	250	NORTH FORK CATAWABA
AMMONIA (TRI Chemical ID: 007664417)	1990	Pounds	750	NORTH FORK CATAWABA
AMMONIA (TRI Chemical ID: 007664417)	1989	Pounds	750	NORTH FORK CATAWABA
AMMONIA (TRI Chemical ID: 007664417)	1988	Pounds	750	NORTH FORK CATAWABA
AMMONIA (TRI Chemical ID: 007664417)	1987	Pounds	750	NORTH FORK CATAWABA

AMMONIA (TRI Chemical ID: 007664417)	1992	Pounds	750	NORTH FORK CATAWABA A
AMMONIA (TRI Chemical ID: 007664417)	1999	Pounds	655	NORTH FORK CATAWBA
AMMONIA (TRI Chemical ID: 007664417)	1998	Pounds	1500	NORTH FORK CATAWBA
AMMONIA (TRI Chemical ID: 007664417)	1997	Pounds	1500	NORTH FORK CATAWBA
AMMONIA (TRI Chemical ID: 007664417)	1996	Pounds	2000	NORTH FORK CATAWBA
AMMONIA (TRI Chemical ID: 007664417)	1995	Pounds	2000	NORTH FORK CATAWBA
AMMONIA (TRI Chemical ID: 007664417)	1994	Pounds	750	NORTH FORK CATAWBA
AMMONIA (TRI Chemical ID: 007664417)	1993	Pounds	750	NORTH FORK CATAWBA
SODIUM SULFATE (SOLUTION) (TRI Chemical ID: 007757826)	1987	Pounds	487746	NORTH FORK CATAWABA RIVER

Transfer of Chemicals to Off-Site Locations other than POTWs:

Please note that transfer amounts are not included in release totals shown above. For all releases estimated as a range, the mid-point of the range was used in these calculations. Rows with Total Transfer Amount equal to "0" were not listed.

Chemical Name	Year	Unit Of Measure	Total Transfer Amount	Transfer Site Name and Address	Type Of Waste Management
AMMONIA (TRI Chemical ID: 007664417)	1999	Pounds	250	ADDINGTON ENVIRONMENTAL 500 LANDFILL RD. MOUNT GILEAD, NC 27306	Landfill/Disposal Surface Impoundment
AMMONIA (TRI Chemical ID: 007664417)	1999	Pounds	250	FOOTHILLS ENVIRONMENTAL 2800 CHERAW RD. LENOIR, NC 28645	Landfill/Disposal Surface Impoundment

AMMONIA (TRI Chemical ID: 007664417)	1998	Pounds	250	ADDINGTON ENVIRONMENTAL 500 LANDFILL RD. MOUNT GILEAD, NC 27306	Landfill/Disposal Surface Impoundment
AMMONIA (TRI Chemical ID: 007664417)	1998	Pounds	250	BAXTER HEALTHCARE CORP. HWY. 221 S MARION, NC 28752	Land Treatment
AMMONIA (TRI Chemical ID: 007664417)	1997	Pounds	250	HENRY BROWN RTE. 3 BOX 227 MARION, NC 28752	Land Treatment
AMMONIA (TRI Chemical ID: 007664417)	1997	Pounds	250	BAXTER HEALTHCARE CORP. HWY. 221 S. MARION, NC 28752	Land Treatment
AMMONIA (TRI Chemical ID: 007664417)	1996	Pounds	250	HENRY BROWN RTE. 3 BOX 227 MARION, NC 28752	Land Treatment
AMMONIA (TRI Chemical ID: 007664417)	1996	Pounds	250	BAXTER HEALTHCARE CORP. HWY. 221 S MARION, NC 28752	Land Treatment
AMMONIA (TRI Chemical ID: 007664417)	1995	Pounds	5	BOYD PHILIPS RTE. 3 BOX 253 MARION, NC 28752	Land Treatment
AMMONIA (TRI Chemical ID: 007664417)	1995	Pounds	250	HENRY BROWN RTE. 3 BOX 227 MARION, NC 28752	Land Treatment
AMMONIA (TRI Chemical ID: 007664417)	1995	Pounds	250	BAXTER HEALTHCARE CORP. P.O. BOX 1390	Land Treatment

				HWY. 221 S. MARION, NC 28752	
AMMONIA (TRI Chemical ID: 007664417)	1994	Pounds	5	BOYD PHILLIPS RTE. 3, BOX 253 MARION, NC 28752	Land Treatment
AMMONIA (TRI Chemical ID: 007664417)	1994	Pounds	250	BAXTER HEALTHCARE CORP. HWY. 221 SOUTH MARION, NC 28752	Land Treatment
AMMONIA (TRI Chemical ID: 007664417)	1994	Pounds	5	RON ENGLISH RTE. 3, BOX 227 MARION, NC 28752	Land Treatment
AMMONIA (TRI Chemical ID: 007664417)	1994	Pounds	5	HENRY BROWN RTE. 3, BOX 227 MARION, NC 28752	Land Treatment
AMMONIA (TRI Chemical ID: 007664417)	1993	Pounds	250	DEAN CHAPMAN RTE. 3, BOX 227 MARION, NC 28752	Land Treatment
AMMONIA (TRI Chemical ID: 007664417)	1993	Pounds	250	BAXTER HEALTHCARE CORP. HWY. 221 S., P.O. BOX 1390 MARION, NC 28752	Land Treatment
AMMONIA (TRI Chemical ID: 007664417)	1993	Pounds	250	ROM ENGLISH RTE. 3, BOX 227 MARION, NC 28752	Land Treatment
AMMONIA (TRI Chemical ID: 007664417)	1993	Pounds	250	HENRY BROWN RTE. 3, BOX 227 MARION, NC 28752	Land Treatment

AMMONIA (TRI Chemical ID: 007664417)	1993	Pounds	250	BOYD PHILLIPS RTE. 3, BOX 253 MARION, NC 28752	Land Treatment
AMMONIA (TRI Chemical ID: 007664417)	1992	Pounds	250	BOYD PHILLIPS RTE. 3 BOX 253 MARION, NC 28752	Land Treatment
AMMONIA (TRI Chemical ID: 007664417)	1992	Pounds	250	OLGA BURLESON RTE. 3 BOX 523 MARION, NC 28752	Land Treatment
AMMONIA (TRI Chemical ID: 007664417)	1992	Pounds	250	ROM ENGLISH RTE. 3 BOX 227 MARION, NC 28752	Land Treatment
AMMONIA (TRI Chemical ID: 007664417)	1992	Pounds	250	DEAN CHAPMAN RTE. 3 BOX 227 MARION, NC 28752	Land Treatment
AMMONIA (TRI Chemical ID: 007664417)	1992	Pounds	250	HENRY BROWN RTE. 3 BOX 227 MARION, NC 28752	Land Treatment
AMMONIA (TRI Chemical ID: 007664417)	1992	Pounds	250	BAXTER HEALTHCARE CORP. P.O. BOX 1390, HWY. 221 SOUTH MARION, NC 28752	Land Treatment
AMMONIA (TRI Chemical ID: 007664417)	1991	Pounds	250	OLGA BURLESON RTE. 3 BOX 523 MARION, NC 28752	Land Treatment
AMMONIA (TRI Chemical ID: 007664417)	1991	Pounds	250	ROM ENGLISH RTE. 3 BOX 227 MARION, NC 28752	Land Treatment
AMMONIA (TRI Chemical ID: 007664417)	1991	Pounds	250	DEAN CHAPMAN RTE. 3 BOX 227 MARION, NC	Land Treatment

				28752	
AMMONIA (TRI Chemical ID: 007664417)	1990	Pounds	250	JOHN ENGLISH HWY. 221 N. CLINCHFIELD, NC 28752	Land Treatment
AMMONIA (TRI Chemical ID: 007664417)	1990	Pounds	250	OLGA BURLESON RTE. 3 BOX 523 MARION, NC 28752	Land Treatment
AMMONIA (TRI Chemical ID: 007664417)	1990	Pounds	750	ROM ENGLISH RTE. 3 BOX 227 MARION, NC 28752	Land Treatment
AMMONIA (TRI Chemical ID: 007664417)	1990	Pounds	250	DEAN CHAPMAN RTE. 3 BOX 227 MARION, NC 28752	Land Treatment
AMMONIA (TRI Chemical ID: 007664417)	1989	Pounds	750	ROM ENGLISH RTE. 3 BOX 227 MARION, NC 28752	Land Treatment
AMMONIA (TRI Chemical ID: 007664417)	1989	Pounds	250	DEAN CHAPMAN RTE. 3 OX 227 MARION, NC 28752	Land Treatment
AMMONIA (TRI Chemical ID: 007664417)	1989	Pounds	250	JOHN ENGLISH HWY. 221 N. MARION, NC 28752	Land Treatment
AMMONIA (TRI Chemical ID: 007664417)	1989	Pounds	250	OLGA BURLESON RTE. 3 BOX 523 MARION, NC 28752	Land Treatment
AMMONIA (TRI Chemical ID: 007664417)	1988	Pounds	250	DEAN CHAPMAN RTE. 3 BOX 227 MARION, NC 28752	Land Treatment
AMMONIA (TRI Chemical ID: 007664417)	1988	Pounds	250	JOHN ENGLISH HWY. 221 N. MARION, NC 28752	Land Treatment

Summary of Waste Management Activites

Summary of Waste Management Activites excluding Dioxin and Dioxin-like Compounds

(Measured in Pounds)

This facility did not report any waste management activites for non Dioxin-like Compounds.

Summary of Waste Management Activites for Dioxin and Dioxin-like Compounds (Measured in Grams)

This facility did not report any waste management activites for Dioxin and Dioxin-like Compounds.

Chemicals Under Waste Management:

This facility did not report any chemicals as being treated, recycled, or used in energy recovery.

Transfer of Chemicals to Publicly Owned Treatment Works (POTW):

This facility did not transfer any chemicals to a Publicly Owned Treatment Works (POTW).

Non Production Releases:

This facility did not report any Non-Production releases.

Additional links for TRI:

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- National Library of Medicine (NLM) EXIT EPA TOXMAP
- The Environmental Defense Fund's (EDF) Chemical Scorecard has on-line environmental information regarding this EXIT EPA facility's reported TRI releases.

NPDES Effluent Charts

Search Criteria

Permit ID: NC0006564
Discharge points:
Parameters:
Monitoring locations: Effluents only
Outfall types: Effluents only
Sampling periods:
Charts selection: Violations only
Dates: 2004.10.01 – 2007.09.30

Download

Search Criteria

Permit ID: NC0006564
Discharge points:
Parameters:
Monitoring locations: Effluents only
Outfall types: Effluents only
Sampling periods:
Charts selection: Violations only
Dates: 2004.10.01 – 2007.09.30

Download

REFERENCE 11

Senate District 47

Assessed Party	Permit	County	Case Type	Case Year	Case Number	Penalty	Costs	Total	CPA Date	Director's Remission	EMC Remission	Settlement	Amount Paid	Case Closed
Coats American Inc-Marion Plant	NC0004243	McDowell	LV	2005	304	1,125.00	100.00	1,225.00	8/31/05					
	Limits Violations of NPDES Permit													
	NC0004243	McDowell	LV	2005	305	1,000.00	100.00	1,100.00	8/31/05					
	Limits Violations of NPDES Permit													
2 Total Assessed Penalties for Coats American Inc-Marion Plant														
Baxter Healthcare Corporation-Baxter Healthcare Corporation	NC0006564	McDowell	LV	2002	133	1,250.00	100.00	1,350.00	5/13/02				1,350.00	7/11/05
	Limits Violations of NPDES Permit													
	NC0006564	McDowell	LV	2002	672	250.00	100.00	350.00	12/16/02				350.00	1/13/03
	Limits Violations of NPDES Permit													
	NC0006564	McDowell	LV	2002	98	1,250.00	100.00	1,350.00	4/16/02				1,350.00	5/10/02
	Limits Violations of NPDES Permit													
	NC0006564	McDowell	LV	2003	78	1,250.00	100.00	1,350.00	2/7/03				1,350.00	2/25/03
	Limits Violations of NPDES Permit													
	NC0006564	McDowell	LV	2003	821	1,500.00	100.00	1,600.00	12/17/03	1,600.00				2/4/04
	Limits Violations of NPDES Permit													
	NC0006564	McDowell	LV	2004	446	1,500.00	100.00	1,600.00	9/27/04				1,600.00	10/18/04
	Limits Violations of NPDES Permit													
	NC0006564	McDowell	LV	2005	102	250.00	100.00	350.00	3/7/05				350.00	4/18/05
	Limits Violations of NPDES Permit													
7 Total Assessed Penalties for Baxter Healthcare Corporation-Baxter Healthcare Corporation														
Town of Burnsville-Burnsville WWTP	NC0020290	Yancey	LV	2001	292	250.00	50.00	300.00	8/20/01				300.00	10/24/01
	Limits Violations of NPDES Permit													
	NC0020290	Yancey	LV	2004	231	500.00	100.00	600.00	6/17/04				600.00	7/12/04
	Limits Violations of NPDES Permit													
2 Total Assessed Penalties for Town of Burnsville-Burnsville WWTP														
Town of Old Fort-Old Fort WWTP	NC0021229	McDowell	LV	2002	423	250.00	100.00	350.00	9/17/02	350.00				12/4/02
	Limits Violations of NPDES Permit													
	NC0021229	McDowell	LV	2004	493	750.00	100.00	850.00	10/4/04	500.00			350.00	1/12/05
	Limits Violations of NPDES Permit													
	NC0021229	McDowell	LV	2005	93	250.00	100.00	350.00	3/7/05				350.00	3/21/05
	Limits Violations of NPDES Permit													
3 Total Assessed Penalties for Town of Old Fort-Old Fort WWTP														
Town of Spruce Pine-Spruce Pine WWTP	NC0021423	Mitchell	TX	2001	26	1,000.00	124.24	1,124.24	6/26/01					7/9/01
	Aquatic Toxicity Requirement Violations of NPDES Permit													

REFERENCE 12

North Carolina Department of Environment and Natural Resources

Division of Air Quality

North Carolina Criteria and Toxic Air Pollutant Point Source Emissions Report

We continue to work on ways to make this report better for the users and to provide more explanations as to how the data are collected, limitations, caveats, etc. Please provide any comments or suggestions to EIUG Reports DENR.DAQ.Emission_Inventory_UG@lists.ncmail.net Thank you.

Note: *Data here represents permitted point sources only, as reported to North Carolina Department of Environment and Natura. Division of Air Quality.*
The facility name search parameter is case insensitive. The results will return all facilities whose name contains the text you en characters like apostrophe (') and comma (,) do count towards this search.

Facility Name: **County:** Show All Counties Search for a Facility

Perform State and County Queries Instead

Calendar Year: Show Calendar Year 2005

Baxter Healthcare Corp
65 Pitt Station Road
P.O. Box 1390
Marion, NC 28752
McDowell County

Pollutant	CAS Code	Assumed Emissions Reported - 2003
Criteria Pollutants		**Tons**
CO	CO	2.7
NOx	NOx	12.5
PM(TSP)	TSP	1.6
PM10	PM10	1.2
PM2.5	PM2.5	0.5
SO2	SO2	3.4
VOC (Meeting Federal Definition as photochemically reactive)	VOC	57.1
Hazardous/Toxic Pollutants		**Pounds**
Acetaldehyde	75-07-0	0.1
Acrolein	107-02-8	0
Antimony & Compounds (total mass, inc elemental SB)	SBC	0.6
Antimony Unlisted Compounds (Component of SBC - Specify)	SBC-Other	0.6
Arsenic & Compounds (total mass of elemental AS, arsine and all inorganic compounds)	ASC (7778394)	0.16
Arsenic Unlisted Compounds (Component of ASC - Specify)	ASC-Other	0.16
Benzene	71-43-2	4.4
Benzo(a)pyrene (Component of 83329/POMTV & 56553/7PAH)	50-32-8	0
Beryllium & compounds (Total mass)	BEC	0
Beryllium Compound, Unlisted (Specify & Component of BEC)	BEC-Other	0
Cadmium & compounds (total mass inc elemental metal)	CDC	0.05

Cadmium Unlisted Compounds (Specify & Component of CDC)	CDC-Other	0.05
Chromium - All/Total (Inc Chromium (VI) categories, metal and Others)	CRC	0.1
Chromium Unlisted Compounds (Specify & Component of CRC)	CRC-Other	0.1
Cobalt Unlisted Compound (Specify & Component of COC)	COC-Other	0.7
Cobalt compounds	COC	0.7
Ethyl benzene	100-41-4	0
Fluorides (sum of all fluoride compounds)	16984-48-8	4.6
Formaldehyde	50-00-0	5.7
Hydrogen chloride (hydrochloric acid)	7647-01-0	0.6
Lead Unlisted Compounds (Specify and Component of PBC)	PBC-Other	0.2
Lead and Lead compounds	PBC	0.2
Manganese & compounds	MNC	0.4
Manganese Unlisted Compounds (Specify & Component of MNC)	MNC-Other	0.4
Mercury & Compounds - all total mass, inc Hg Vapor	HGC	0.014
Mercury Unlisted Compounds (Specify & Component of HGC)	HGC-Other	0.014
Methyl chloroform	71-55-6	0
Naphthalene (Component of 83329/POMTV)	91-20-3	0.9
Nickel & Compounds, sum total mass, inc elemental	NIC	10
Nickel Unlisted Compounds (Specify & Component of 373024/NIC)	NIC-Other	10
Phosphorus Metal, Yellow or White	7723-14-0	1.2
Polycyclic Organic Matter (7 PAH Compounds for NIF)	56553/7PAH	0
Polycyclic Organic Matter (Inc PAH, dioxins, etc. NC & AP 42 historic)	POM	1.4
Polycyclic Organic Matter (Specific Compounds from OAQPS for TV)	83329/POMTV	0.9
Selenium Compounds	SEC	0.1
Toluene	108-88-3	2.4
Xylene	1330-20-7	1.1

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North Carolina Department of Environment and Natural Resources

Division of Air Quality

North Carolina Criteria and Toxic Air Pollutant Point Source Emissions Report

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Note: *Data here represents permitted point sources only, as reported to North Carolina Department of Environment and Natura. Division of Air Quality.*
The facility name search parameter is case insensitive. The results will return all facilities whose name contains the text you en characters like apostrophe ('), and comma (,) do count towards this search.

Facility Name: **County:** Show All Counties Search for a Facility

Perform State and County Queries Instead

Calendar Year: Show Calendar Year 2006

Baxter Healthcare Corp
65 Pitt Station Road
P.O. Box 1390
Marion, NC 28752
McDowell County

Pollutant	CAS Code	Assumed Emissions Reported - 2003
Criteria Pollutants		**Tons**
CO	CO	2.7
NOx	NOx	12.5
PM(TSP)	TSP	1.6
PM10	PM10	1.2
PM2.5	PM2.5	0.5
SO2	SO2	3.4
VOC (Meeting Federal Definition as photochemically reactive)	VOC	57.1
Hazardous/Toxic Pollutants		**Pounds**
Acetaldehyde	75-07-0	0.1
Acrolein	107-02-8	0
Antimony & Compounds (total mass, inc elemental SB)	SBC	0.6
Antimony Unlisted Compounds (Component of SBC - Specify)	SBC-Other	0.6
Arsenic & Compounds (total mass of elemental AS, arsine and all inorganic compounds)	ASC (7778394)	0.16
Arsenic Unlisted Compounds (Component of ASC - Specify)	ASC-Other	0.16
Benzene	71-43-2	4.4
Benzo(a)pyrene (Component of 83329/POMTV & 56553/7PAH)	50-32-8	0
Beryllium & compounds (Total mass)	BEC	0
Beryllium Compound, Unlisted (Specify & Component of BEC)	BEC-Other	0
Cadmium & compounds (total mass inc elemental metal)	CDC	0.05

Cadmium Unlisted Compounds (Specify & Component of CDC)	CDC-Other	0.05
Chromium - All/Total (Inc Chromium (VI) categories, metal and Others)	CRC	0.1
Chromium Unlisted Compounds (Specify & Component of CRC)	CRC-Other	0.1
Cobalt Unlisted Compound (Specify & Component of COC)	COC-Other	0.7
Cobalt compounds	COC	0.7
Ethyl benzene	100-41-4	0
Fluorides (sum of all fluoride compounds)	16984-48-8	4.6
Formaldehyde	50-00-0	5.7
Hydrogen chloride (hydrochloric acid)	7647-01-0	0.6
Lead Unlisted Compounds (Specify and Component of PBC)	PBC-Other	0.2
Lead and Lead compounds	PBC	0.2
Manganese & compounds	MNC	0.4
Manganese Unlisted Compounds (Specify & Component of MNC)	MNC-Other	0.4
Mercury & Compounds - all total mass, inc Hg Vapor	HGC	0.014
Mercury Unlisted Compounds (Specify & Component of HGC)	HGC-Other	0.014
Methyl chloroform	71-55-6	0
Naphthalene (Component of 83329/POMTV)	91-20-3	0.9
Nickel & Compounds, sum total mass, inc elemental	NIC	10
Nickel Unlisted Compounds (Specify & Component of 373024/NIC)	NIC-Other	10
Phosphorus Metal, Yellow or White	7723-14-0	1.2
Polycyclic Organic Matter (7 PAH Compounds for NIF)	56553/7PAH	0
Polycyclic Organic Matter (Inc PAH, dioxins, etc. NC & AP 42 historic)	POM	1.4
Polycyclic Organic Matter (Specific Compounds from OAQPS for TV)	83329/POMTV	0.9
Selenium Compounds	SEC	0.1
Toluene	108-88-3	2.4
Xylene	1330-20-7	1.1

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REFERENCE 13

JW 9/20/05

Hazardous Waste Compliance Data Entry Form – Side A

EPA ID Number: NCD059140764

Facility Name: ~~Baxter Healthcare Corporation~~ **City:** Marion, McDowell County, NC

EVALUATION DATA New: X Change: ___ Delete: ___

	Mo./Day/Yr.	Type:
~~Date:~~	~~5/23/05~~	~~CEI~~
Date:	8/23/05	CSE

Inspector ID #: 030 Reason: 01 14

Evaluation Comments: In compliance with Ticket NOV Docket #2005-205.

SNC DETERMINATION: If this evaluation resulted in a SNC determination, fill in this block. (NOTE: SNC determinations are SNY/SNN evaluations. The SNY/SNN evaluation can also be submitted later on a separate form.)

Facility is (Check one)

- a SNC (SNY evaluation) Docket # _____

or

- no longer a SNC (SNN eval.) _____

YES / NO CSE ONLY

Waste Involved	Volume	Exposure Media (a, gw, sw, s)	Distance to Residences	Number of People involved	Distance to On-site Wells	Distance to Off-site wells

1 Type: GPT Date Determined: 5/23/05 Class: __

Priority: ___ Branch: 01 Person: 030

Return to Compliance: 8/22/05 *Scheduled* 8/23/05 *Actual*

Reg. Type: SR Reg. Description: 40 CFR 272.34(c)(1)(i) ref. 40 CFR 265.171

Comment:

#2 Type: GPT Date Determined: 5/23/05 Class: __

Priority:___ Branch:1 Person: 030

Return to Compliance: 8/22/05 *Scheduled* 8/23/05 *Actual*

Reg. Type: SR Reg. Description: 40 CFR 262.34(d)(4) ref. 40 CFR 262.34(a)(3)

Comment:

#3 Type: UWH Date Determined: 5/23/05 Class: __

Priority:___ Branch:1 Person: 030

Return to Compliance: 8/22/05 *Scheduled* 8/23/05 *Actual*

Reg. Type: SR Reg. Description: 40 CFR 273.13(d)(1)

Comment:

#4 Type: Date Determined: 5/23/05 Class: __

Priority:___ Branch:1 Person: 030

Return to Compliance: 8/22/05 *Scheduled* 8/23/05 *Actual*

Reg. Type: SR Reg. Description: 40 CFR 279.22(c)(1)

Comment:

RCRA REINSPECTION REPORT

X = VIOLATION NOTED NA = NOT APPLICABLE

Facility Name: Baxter Healthcare Corporation North Cove Plant
Location: Hwy. 221 North, Marion, N.C. 28752
Mailing Address: PO Box 1390, Marion, N.C. 28752
EPA ID#: NCD059140764 **Phone Number:** 828/756-6531
Contact/Title: Mr. Scott Fergon - Manager Environmental, Health, and Safety
Reinspection Date: 8/23/05 **Initial Inspection:** 5/23/05
Status: SQG **Type of Inspection:** CSE
Inspector(s): Brent Burch (030).
Present at Inspection: Michael Fisher, and Brent Burch.

Type of Business: Baxter Healthcare Corporation North Cove Plant is a manufacturer of intravenous solution bags. Operations include sealing, filling, over bagging, and shipping. Hazardous waste is generated from maintenance painting and lab waste. The facility is notified with the Hazardous Waste Section as a SQG. The facility is connected to an on-site water supply system and operates a permitted wastewater treatment plant. The facility has approximately 2400 employees working three shifts per day. The facility has been in operation at this location for 33 years.

Manifests: Approved Transporters ? N/A Approved TSDF ? N/A
Filled Out Correctly ? N/A Signed Copies ? N/A
LDR Notification Attached ? N/A

Inspection Records:
Evidence that inspections are conducted: N/A.
Inspections on Storage Area: N/A.
Inspections on H.W. Tanks: N/A
Inspections on Ancillary Equipment: N/A

Contingency Plan:
Information posted by the telephone? N/A.

Agreements with Emergency Responders? N/A.

Training Records:
Evidence Employees have been Trained? N/A.

Emergency Preparedness:
Not reviewed during reinspection.

Satellite Accumulation Area(s):
Location(s): There were two 1-gallon containers located in the Lab that were being used to accumulate silver chloride. The containers were labeled. The container located at #2 was leaking into the

secondary containment pan. According to Mr. Fergon the container is checked at the end of 1st shift so the facility was unaware of the leak until our inspection. **At the time of the reinspection the 1-gallon container being used to accumulate waste silver chloride had been placed on the countertop so that the container was visible at all times. The container was closed and no releases were observed. The container was labeled. The violation has been corrected.**

Satellite Containers: Closed? Yes
Labeled/Contents Identified? Yes
< 55 Gallons? Yes
Releases? **No**

Storage Area(s):

Description(s): The facility maintains a <180-day hazardous waste storage area in a metal building located outside the main manufacturing area. The metal building has a concrete floor. A fire extinguisher, spill control equipment, and telephone were located in the area. At the time of the inspection there were 2 55-gallon containers of hazardous waste in storage. The containers were labeled as "Hazardous Waste." The oldest date on a container was 12/9/04 (165 days). Additionally, there were numerous small lab pack wastes stored on a rack in the area that were only labeled as Hazardous, not "Hazardous Waste." All the containers were dated, and closed. No releases were observed on the containers or in the area. **At the time of the reinspection there were four 55-gallon containers and numerous lab pack wastes in storage. All containers were labeled as "Hazardous Waste." All the containers were dated, closed, and no releases were observed in the area. Additionally, the facility has reprinted all labels with the words "Hazardous Waste." All the labels that only had the word "Hazardous" printed on them, have been destroyed to prevent their accidental use. The violation has been corrected.**

Containers: Closed? Yes Aisle Space? Yes Labeled? **Yes**
Dated? Yes Evidence of Release? No
< 180 Days? Yes Good Condition? Yes

Other Units:

Description of Unit(s): **1)** The facility maintains a diked concrete pad for the storage of used oil. At the time of the inspection there were 10 containers of used oil being stored on the pad. Two 55-gallon containers and one 300-gallon container were not labeled as "Used Oil." No releases were observed on the containers or in the area. **At the time of the reinspection there were two 55-gallon containers and one 300-gallon container of used oil being stored on**

the pad. All the containers were labeled as "Used Oil." The violation has been corrected.

2) The facility maintains an area in the Store Room for the accumulation and storage of Universal Waste Lamps. At the time of the inspection there were 11 boxes of universal waste lamps. Three of the boxes were found open. All the boxes were labeled and dated. No lamps had been in storage over 1 year. **At the time of the reinspection there were six boxes of universal waste lamps in storage. All the containers were labeled as "Universal Waste Lamps", and closed. The violation has been corrected.**

External Facility Condition: Good Condition.

VIOLATIONS:

1. **40 CFR 262.34(c)(1)(i) referenced at 40 CFR 265.171 - If a container holding hazardous waste is not in good condition or if it begins to leak, the owner or operator must transfer the hazardous waste from this container to a container that is in good condition, or manage the waste in some other way that complies with the requirements of this part.** Baxter Healthcare is in violation of 40 CFR 262.34(c)(1)(i) referenced at 40 CFR 265.171 in that a container holding hazardous waste began to leak, and the facility did not transfer the waste to a container that is in good condition. Specifically, a container located in the Lab that was being used to accumulate silver chloride was observed leaking at the time of the inspection, and the waste being accumulated in the container was not transferred to a container in good condition. In order to correct the violation the facility must transfer hazardous waste from a leaking container to a container that is in good condition, or manage the waste in some other way that complies with the requirements of this part. **At the time of the reinspection the 1-gallon container being used to accumulate waste silver chloride had been placed on the countertop so that the container was visible at all times. The container was closed and no releases were observed. The container was labeled. The violation has been corrected.**

2. **40 CFR 262.34(d)(4) referenced at 40 CFR 262.34(a)(3) - While being accumulated on-site, each container and tank is labeled or marked clearly with the words, "Hazardous Waste."** Baxter Healthcare is in violation of 40 CFR 262.34(d)(4)

ref. 40 CFR 262.34(a)(3) in that containers being used to accumulate hazardous waste were not labeled or marked clearly with the words, "Hazardous Waste." Specifically, numerous small lab pack wastes stored on a rack in the <180-day hazardous waste storage area were only labeled as Hazardous, not "Hazardous Waste." In order to correct the violation the facility must ensure that all containers being used to accumulate hazardous waste are labeled or clearly marked with the words "Hazardous Waste." **At the time of the reinspection there were four 55-gallon containers and numerous lab pack wastes in storage. All containers were labeled as "Hazardous Waste." All the containers were dated, closed, and no releases were observed in the area. Additionally, the facility has reprinted all labels with the words "Hazardous Waste." All the labels that only had the word "Hazardous" printed on them, have been destroyed to prevent their accidental use. The violation has been corrected.**

3. **40 CFR 273.13(d)(1) - A small quantity handler of universal waste must contain any lamp in containers or packages that are structurally sound, adequate to prevent breakage, and compatible with the contents of lamps. Such containers and packages must remain closed to prevent leakage, spillage or damage that could cause leakage under reasonably foreseeable conditions.** Baxter Healthcare is in violation of 40 CFR 273.12(d)(1) in that containers being used to store spent lamps were not closed. Specifically, three boxes located in the Store Room that were being used to accumulate spent lamps were found open. In order to correct the violation the facility must ensure that containers being used to store spent lamps remain closed to prevent leakage, spillage or damage that could cause leakage under reasonably foreseeable conditions. **At the time of the reinspection there were six boxes of universal waste lamps in storage. All the containers were labeled as "Universal Waste Lamps", and closed. The violation has been corrected.**

4. **40 CFR 279.22(c)(1) - Containers and aboveground tanks used to store used oil at generator facilities must be labeled or marked clearly with the words "Used Oil."** Baxter Healthcare is in violation of 40 CFR 279.22(c)(1) in that they failed to label containers being used to store used oil with the words "Used Oil." Specifically, the facility failed to label two 55-gallon containers and one 300 gallon container

with the words "Used Oil." All the containers were being used to store used oil in the used oil storage area. In order to correct the violation, the facility must ensure that containers being used to store used oil are labeled or clearly marked with the words "Used Oil." **At the time of the reinspection there were two 55-gallon containers and one 300-gallon container of used oil being stored on the pad. All the containers were labeled as "Used Oil." The violation has been corrected.**

The facility was found to be in compliance with Ticket NOV Docket #2005-205.

8/29/05
Inspector (Date)

sent by regular mail
Facility Contact (Date)

Medication Delivery Division

Baxter Healthcare Corporation
P.O. Box 1390
Marion, NC 28752

Baxter

August 17, 2005

Mr. Brent Burch
North Carolina Division of Environmental Management
P.O. Box 1427
Andrews, NC 28901

RE: Response to Notice of Violation
EPA ID#:NCD059140764
Docket #: 2005-205
Inspection Date: May 23, 2005

Dear Sir:
Please accept the following as documentation of compliance for the violations noted during the above reference inspection.

1. Citation

   40 CFR 262.34(c)(1)(i) referenced at 40 CFR 265.171 - If a container holding hazardous waste is not in good condition or if it begins to leak, the owner or operator must transfer the hazardous waste from this container to a container that is in good condition, or manage the waste in some other way that complies with the requirements of this part.

   Baxter Healthcare is in violation of 40 CFR 262.34(c)(1)(i) in that the facility did not transfer the waste to a container that is in good condition. Specifically, a container located in the Lab that was being used to accumulate silver chloride was observed leaking at the time of the inspection, and the waste being accumulated in the container was not transferred to a container in good condition. In order to correct the violation, the facility must transfer hazardous waste from a leaking container to a container that is in good condition, or manage the waste in some other way that complies with the requirements of this part.

   Corrective Action Taken

   The silver chloride ($AgCl_2$) waste solution that overflowed from the primary storage container and into the secondary containment tray was transferred into a properly labeled primary storage container. The primary storage container that had overflowed was decanted so that additional $AgCl_2$ waste solution could be placed into primary container.

Preventive Action Taken

The $AgCl_2$ waste solution container that overflowed has been removed from beneath the laboratory counter and relocated to the laboratory countertop next to the analytical process that generates the $AgCl_2$ waste solution. By locating the $AgCl_2$ waste container on the countertop, laboratory personnel can visually verify that the container has sufficient capacity for additional $AgCl_2$ waste solution. The $AgCl_2$ waste container is placed in a secondary containment tray and is labeled as silver chloride waste / hazardous waste. The container is kept closed per the requirements. (Photo 1)

Two other $AgCl_2$ hazardous waste satellite collection areas located in other areas of the laboratory are beneath the laboratory countertop. Due to space constraints, it was not feasible to relocate these containers to the laboratory countertop. However, to aid visual inspection of the containers, the solid doors beneath the countertop have been installed with clear viewing windows. The viewing windows will allow laboratory personnel to easily inspect and verify that the containers have sufficient capacity for additional $AgCl_2$ waste solution.

The laboratory procedures have been updated to reflect the $AgCl_2$ waste management changes and the laboratory personnel have been trained on the revised $AgCl_2$ waste management procedure.

Baxter believes that these actions will prevent future overfilling of the $AgCl_2$ waste containers.

2. Citation

40 CFR 262.34(d)(4) referenced at 40 CFR 262.34(a)(3) - While being accumulated on-site, each container and tank is labeled or marked clearly with the words "Hazardous Waste."

Baxter Healthcare is in violation of 40 CFR 262.34(d)(4) referenced at 40 CFR 262.34(a) in that containers being used to accumulate hazardous waste were not labeled or marked clearly with the words, "Hazardous Waste." Specifically, numerous small lab pack wastes stored on a rack in the 180-day hazardous waste storage area were only labeled as Hazardous, not "Hazardous Waste." In order to correct the violation, the facility must ensure that all containers being used to accumulate hazardous waste are labeled or clearly marked with the words "Hazardous Waste."

Corrective Action Taken

Lab pack wastes stored in the 180-day hazardous waste storage area were inspected to verify that they were labeled as "Hazardous Waste." Any lab pack wastes identified as being improperly labeled as "Hazardous" were relabeled as "Hazardous Waste."

Preventive Action Taken

Labels used to identify lab pack waste as hazardous were reprinted with the words "Hazardous Waste." Any labels that only had the word "Hazardous" were removed from the 180-day hazardous waste storage area and were destroyed to prevent their accidental use.

In addition, the Weekly Hazardous Waste Management Inspection form has been modified to verify that all lab pack waste stored in the 180-day hazardous waste storage area are clearly labeled as "Hazardous Waste."

Baxter believes these actions will prevent future mislabeling of the lab pack waste.

3. Citation

40 CFR 273.13(d)(1) - A small quantity handler of universal waste must contain any lamp in containers or packages that are structurally sound, adequate to prevent breakage, and compatible with the contents of lamps. Such containers and packages must remain close to prevent leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.

Baxter Healthcare is in violation of 40 CFR 273.12(d)(1) in that containers being used to store spent lamps were not closed. Specifically, three boxes located in the Store Room that were being used to accumulate spent lamps were found open. In order to correct the violation, the facility must ensure that containers being used to store spent lamps remain closed to prevent leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.

Corrective Action Taken

The three open boxes used to store spent lamps identified during the inspection were securely closed (Photo 2). In addition, proper management practices of the used lamps were reviewed with the personnel responsible for their collection and storage.

Preventive Action Taken

The universal waste storage areas are now included in the Weekly Hazardous Waste Management Inspection. Inspectors will verify that storage containers are properly labeled and closed.

Baxter believes these actions will prevent the improper storage of used lamps in open containers.

4. Citation

40 CFR 279.22(c)(1) - Containers and aboveground tanks used to store used oil at generator facilities must be labeled or marked clearly with the words "Used Oil."

Baxter Healthcare is in violation of 40 CFR 279.22(c)(1) in that they failed to label containers being used to store used oil with the words "Used Oil." Specifically, the facility failed to label two 55-gallon containers and one 300-gallon container with the words "Used Oil." All the containers were being used to store used oil in the used oil storage area. In order to correct the violation, the facility must ensure that containers being used to store used oil are labeled or clearly marked with the words "Used Oil."

Corrective Action Taken

The two 55-gallon containers and one 300-gallon container have been labeled with the words "Used Oil." (Photos 3 and 4) Labeling requirements for the used oil drums were reviewed with the personnel who manage used oil at the facility.

Preventive Action Taken

Inspection of the used oil drums for properly labeling is now included in a routine inspection of the area completed by the facilities engineering group.

Baxter believes these actions will prevent the use of unlabeled drums for the storage of used oil.

Should you have any questions or suggestions concerning this matter please call me at (828) 756-6531.

Sincerely,

Scott Fergon

Scott Fergon, CIH
Manager Environmental, Health and Safety
Baxter Healthcare North Cove Plant

8/13/05

Hazardous Waste Compliance Data Entry Form – Side A

EPA ID Number: NCD059140764

Facility Name: ~~Baxter Healthcare Corporation~~ **City:** Marion, McDowell County, NC

EVALUATION DATA New: X Change: ___ Delete: ___

	Mo./Day/Yr.	Type:
~~Date:~~	5/23/05	CEI
Date:		

1f

~~Inspector~~ ID #: 030 Reason: 01

Evaluation Comments: Ticket NOV Docket #2005-205 was issued to the facility.

SNC DETERMINATION: If this evaluation resulted in a SNC determination, fill in this block. (NOTE: SNC determinations are SNY/SNN evaluations. The SNY/SNN evaluation can also be submitted later on a separate form.)

Facility is (Check one)

- a SNC (SNY evaluation) Docket # _____

or

- no longer a SNC (SNN eval.) _____

YES / NO CSE ONLY

Waste Involved	Volume	Exposure Media (a, gw, sw, s)	Distance to Residences	Number of People involved	Distance to On-site Wells	Distance to Off-site wells

1 Type: GPT Date Determined: 5/23/05 Class: __

Priority: ___ Branch: 01 Person: 030

Return to Compliance: 8/22/05
Scheduled *Actual*

Reg. Type: SR Reg. Description: 40 CFR 272.34(c)(1)(i) ref. 40 CFR 265.171

Comment:

#2 Type: GPT Date Determined: 5/23/05 Class: __

Priority:___ Branch:1 Person: 030

Return to Compliance: 8/22/05
Scheduled *Actual*

Reg. Type: SR Reg. Description: 40 CFR 262.34(d)(4) ref. 40 CFR 262.34(a)(3)

Comment:

#3 Type: UWH Date Determined: 5/23/05 Class: __

Priority:___ Branch:1 Person: 030

Return to Compliance: 8/22/05
Scheduled *Actual*

Reg. Type: SR Reg. Description: 40 CFR 273.13(d)(1)

Comment:

#4 Type: Date Determined: 5/23/05 Class: __

Priority:___ Branch:1 Person: 030

Return to Compliance: 8/22/05
Scheduled *Actual*

Reg. Type: SR Reg. Description: 40 CFR 279.22(c)(1)

Comment:

NCDENR

North Carolina Department of Environment and Natural Resources

Michael F. Easley, Governor

William G. Ross Jr., Secretary

Waste Management Division
Hazardous Waste Section

NOTICE OF VIOLATION

To: Baxter Healthcare Corporation
Address: P.O. Box 1390
Marion, N.C. 28752
EPA ID#:NCD059140764

Docket #: 2005-205
Inspection Date: May 23, 2005
Facility Type: Small Quantity Generator

On December 18, 1980, the State of North Carolina, Hazardous Waste Section (State) was authorized to operate the State RCRA hazardous waste program under the Solid Waste Management Act (ACT), N.C.G.S. 130A, Article 9 and rules promulgated thereto at 15A NCAC 13A (Rules) in lieu of the federal RCRA program.

On May 23, 2005, Mr. Brent Burch representing the N.C. Hazardous Waste Section, and Mr. John Goodwin representing USEPA Region 4/RECB inspected your facility for compliance with RCRA Sections 3005 and 3007, 40 Code of Federal Regulations (CFR) Parts 260 - 266, 268, 270 and 273, and the Rules Governing Hazardous Waste in North Carolina. During that inspection the following violations were noted:

Citation	Specifics
1.	**40 CFR 262.34(c)(1)(i) referenced at 40 CFR 265.171** – If a container holding hazardous waste is not in good condition or if it begins to leak, the owner or operator must transfer the hazardous waste from this container to a container that is in good condition, or manage the waste in some other way that complies with the requirements of this part.
2.	**40 CFR 262.34(d)(4) referenced at 40 CFR 262.34(a)(3)** – While being accumulated on-site, each container and tank is labeled or marked clearly with the words, "Hazardous Waste."
3.	**40 CFR 273.13(d)(1)** – A small quantity handler of universal waste must contain any lamp in containers or packages that are structurally sound, adequate to prevent breakage, and compatible with the contents of lamps. Such containers and packages must remain closed to prevent leakage, spillage or damage that could cause leakage under reasonably foreseeable conditions.
4.	**40 CFR 279.22(c)(1)** – Containers and aboveground tanks used to store used oil at generator facilities must be labeled or marked clearly with the words "Used Oil."

You are hereby required to comply with the noted violation(s) by August 22, 2005. Please send documentation of compliance to Mr. Brent Burch, NCDENR, P.O. Box 1427, Andrews, N.C. 28901. If compliance with the violation(s) noted above are not met, pursuant to N.C.G.S. 130A-22(a) and 15A NCAC 13B .0701-.0707, an administrative penalty of up to $25,000.00 per day may be assessed for violation of the hazardous waste law or regulations.

7/18/05
(Date)

N.C. Hazardous Waste Section

I, Brent Burch, hereby certify that I have personally served a copy of this notice on: Mr. Scott Fergon at Baxter Healthcare Corporation North Cove Plant, P.O. Box 1390, Marion, N.C. 28752 on July 18, 2005.

sent certified mail
(Recipient Signature)

copies to: field files
central files
John C. Goodwin, USEPA

RCRA INSPECTION REPORT

X = VIOLATION NOTED NA = NOT APPLICABLE

Facility Name: Baxter Healthcare Corporation North Cove Plant
Location: Hwy. 221 North, Marion, N.C. 28752
Mailing Address: PO Box 1390, Marion, N.C. 28752
EPA ID#: NCD059140764 **Phone Number:** 828/756-6531
Contact/Title: Mr. Scott Fergon - Manager Environmental, Health, and Safety
Inspection Date: 5/23/05 **Last Inspection:** 1/25/99
Status: SQG **Type of Inspection:** CEI
Inspector(s): Brent Burch (030).
Present at Inspection: Scott Fergon, Bill Withrow, John Goodwin, and Brent Burch.
Type of Business: Baxter Healthcare Corporation North Cove Plant is a manufacturer of intravenous solution bags. Operations include sealing, filling, over bagging, and shipping. Hazardous waste is generated from maintenance painting and lab waste. The facility is notified with the Hazardous Waste Section as a CEG, but based on waste generated per month at the site, the facility should be a SQG. The facility is connected to an on-site water supply system and operates a permitted wastewater treatment plant. The facility has approximately 2400 employees working three shifts per day. The facility has been in operation at this location for 33 years.

Manifests: Approved Transporters ? Yes Approved TSDF ? Yes
Filled Out Correctly ? Yes Signed Copies ? Yes
LDR Notification Attached ? No

Inspection Records:
Evidence that inspections are conducted: Yes; The facility provided documentation that inspections of the containers of hazardous waste are being conducted and documented weekly.
Inspections on Storage Area: Yes.
Inspections on H.W. Tanks: N/A
Inspections on Ancillary Equipment: N/A

Contingency Plan:
Information posted by the telephone? Yes. The facility also maintains a written contingency plan. A change in the Primary Emergency Coordinator needs to be made to the plan.

Agreements with Emergency Responders? Yes. The facility has made arrangements with Marion Dispatcher, Ashford Fire Dept., Woodlawn Fire Dept., McDowell Emergency Medical Services, and McDowell Hospital.

Training Records:
Evidence Employees have been Trained? Mr. Fergon indicated that employees had been trained in hazardous waste management.

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Facility Name: Baxter Healthcare Corporation North Cove Plant
EPA ID#: NCD059140764 **Inspection Date:** 5/23/05

Emergency Preparedness:
Facility Maintained and Operated to Prevent Releases? Yes.

Internal Communications or Alarm Present? Yes; The facility has an alarm to initiate evacuation.

Portable Fire Extinguishers and/or Fire Control Equipment? Yes; the facility has fire extinguishers. The extinguishers are checked by the facility security weekly.

Spill Control Equipment: The facility has spill control equipment.

Adequate Water Volume, Foam Equipment or Auto Sprinklers? Yes. Sprinklers, reisers and valves are checked by Factory Mutual annually.

Equipment/Alarms Tested and Maintained? Yes. According to Mr. Fergon the equipment and alarms are tested.

All Personnel Handling HW have Access to Alarm/Device? Yes. There was a telephone to be used as a communication device located in the <180-day storage area.

Adequate Aisle Space in Areas of Facility Operation? Yes.

Satellite Accumulation Area(s):
Location(s): There were two 1-gallon containers located in the Lab that were being used to accumulate silver chloride. The containers were labeled. The container located at #2 was leaking into the secondary containment pan. According to Mr. Fergon the container is checked at the end of 1st shift so the facility was unaware of the leak until our inspection.
Satellite Containers: Closed? Yes
Labeled/Contents Identified? Yes
< 55 Gallons? Yes
Releases? No

Storage Area(s):
Description(s): The facility maintains a <180-day hazardous waste storage area in a metal building located outside the main manufacturing area. The metal building has a concrete floor. A fire extinguisher, spill control equipment, and telephone were located in the area. At the time of the inspection there were 2 55-gallon containers of hazardous waste in storage. The containers were labeled as "Hazardous Waste." The oldest date on a container

was 12/9/04 (165 days). Additionally, there were numerous small lab pack wastes stored on a rack in the area that were only labeled as Hazardous, not "Hazardous Waste." All the containers were dated, and closed. No releases were observed on the containers or in the area.

Containers: Closed? Yes Aisle Space? Yes Labeled? No
Dated? Yes Evidence of Release? Yes
< 180 Days? Yes Good Condition? Yes

Other Units:
Description of Unit(s): 1) The facility maintains a diked concrete pad for the storage of used oil. At the time of the inspection there were 10 containers of used oil being stored on the pad. Two 55-gallon containers and one 300-gallon container were not labeled as "Used Oil." No releases were observed on the containers or in the area.

2) The facility maintains an area in the Store Room for the accumulation and storage of Universal Waste Lamps. At the time of the inspection there were 11 boxes of universal waste lamps. Three of the boxes were found open. All the boxes were labeled and dated. No lamps had been in storage over 1 year.

External Facility Condition: Good Condition.

VIOLATIONS:

1. **40 CFR 262.34(c)(1)(i) referenced at 40 CFR 265.171 - If a container holding hazardous waste is not in good condition or if it begins to leak, the owner or operator must transfer the hazardous waste from this container to a container that is in good condition, or manage the waste in some other way that complies with the requirements of this part.** Baxter Healthcare is in violation of 40 CFR 262.34(c)(1)(i) referenced at 40 CFR 265.171 in that a container holding hazardous waste began to leak, and the facility did not transfer the waste to a container that is in good condition. Specifically, a container located in the Lab that was being used to accumulate silver chloride was observed leaking at the time of the inspection, and the waste being accumulated in the container was not transferred to a container in good condition. In order to correct the violation the facility must transfer hazardous waste from a leaking container to a container that is in good condition, or manage the waste in some other way that complies with the requirements of this

part.

2. **40 CFR 262.34(d)(4) referenced at 40 CFR 262.34(a)(3) - While being accumulated on-site, each container and tank is labeled or marked clearly with the words, "Hazardous Waste."** Baxter Healthcare is in violation of 40 CFR 262.34(d)(4) ref. 40 CFR 262.34(a)(3) in that containers being used to accumulate hazardous waste were not labeled or marked clearly with the words, "Hazardous Waste." Specifically, numerous small lab pack wastes stored on a rack in the <180-day hazardous waste storage area were only labeled as Hazardous, not "Hazardous Waste." In order to correct the violation the facility must ensure that all containers being used to accumulate hazardous waste are labeled or clearly marked with the words "Hazardous Waste."

3. **40 CFR 273.13(d)(1) - A small quantity handler of universal waste must contain any lamp in containers or packages that are structurally sound, adequate to prevent breakage, and compatible with the contents of lamps. Such containers and packages must remain closed to prevent leakage, spillage or damage that could cause leakage under reasonably foreseeable conditions.** Baxter Healthcare is in violation of 40 CFR 273.12(d)(1) in that containers being used to store spent lamps were not closed. Specifically, three boxes located in the Store Room that were being used to accumulate spent lamps were found open. In order to correct the violation the facility must ensure that containers being used to store spent lamps remain closed to prevent leakage, spillage or damage that could cause leakage under reasonably foreseeable conditions.

4. **40 CFR 279.22(c)(1) - Containers and aboveground tanks used to store used oil at generator facilities must be labeled or marked clearly with the words "Used Oil."** Baxter Healthcare is in violation of 40 CFR 279.22(c)(1) in that they failed to label containers being used to store used oil with the words "Used Oil." Specifically, the facility failed to label two 55-gallon containers and one 300 gallon container with the words "Used Oil." All the containers were being used to store used oil in the used oil storage area. In order to correct the violation, the facility must ensure that containers being used to store used oil are labeled or clearly marked with the words "Used Oil."

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Facility Name: Baxter Healthcare Corporation North Cove Plant
EPA ID#: NCD059140764 **Inspection Date:** 5/23/05

Ticket NOV Docket #2005-205 was issued to the facility.

7/18/05
Inspector (Date)

sent by certified mail
Facility Contact (Date)

NCD059140764 BAXTER HEALTHCARE CORP

County: MCDOWELL | Source Type: I | Seq. Number: 15.00 | Receive Date: 07-Dec-2005

Location Address: HWY 221 NORTH MARION, NC 28752	Mailing Address: PO BOX 1390 MARION, NC 28752

Contact Person For Source Information	JACK MARTINDALE (828) 756-6734	PO BOX 1390 MARION, NC 28752 US

Owner (current)
BAXTER HEALTHCARE CORPORATION — PO BOX 1390 MARION, NC 287521390 — Type: P
From: To: Phone: (704) 756-4151

Operator (current)
BAXTER HEALTHCARE CORP — Type: P
From: 01/01/1978 To: Phone:

Land Type: P | Non Notifier: E | Commercial Availability: U | Tsd Date:
Accessibility: | No. Employees: | State District:

Regulated Waste Activities

Hazardous Waste Generator Status - Federal: Small Quantity Generator; State: Small Quantity Generator

Transfer Facility: U

Other Hazardous Waste Generator Activities
- Importer Activity: No
- Mixed Waste Generator: No

Transporter Activity: No
TSD Activity: No
Recycler Activity: No

Exempt Boiler and/or Industrial Furnace
- Small Quantity Onsite Burner Exemption: No
- Smelting, melting, Refining Furnace Exemption: No

Used Oil Activities

Used Oil Transport Activity
- Transporter: No
- Transfer Facility: No

Used Oil Processor and/or Re-refiner Activity
- Processor: No
- Refiner No

Off-Specification Used Oil Burner: No

Used Oil Fuel Marketer Activity
- Marketer who direct shipment off-specification used oil to off-specification used oil burner: No
- Marketer who first claims the used oil meets the specifications: No

Underground Injection Control: No

Destination Facility for Universal Waste: No

REFERENCE 14

March 25, 2008

MEMO

To: File

From: Melanie Bartlett Melanie Bartlett

Subject: Baxter Healthcare Corp
Marion, McDowell County, NC
Surface Water Pathway

According to topographic maps, the North Fork Catawba River divides the site. Overland flow enters the North Fork Catawba River at the PPE. Flow follows the North Fork Catawba River for approximately 10.5 miles, whereupon it enters Lake James. The remainder of the 15-miles surface water pathway lies in Lake James.

According to National Wetlands Inventory Maps, the nearest HRS-qualifying wetland is approximately 0.4 miles downstream of the PPE along the North Fork Catawba River, at a length of approximately 0.1 miles of frontage.

Per the NC Source Water Assessment Program, there are no surface water intakes located along the 15-mile surface water pathway.