SDMS US EPA REGION V -1

SOME IMAGES WITHIN THIS DOCUMENT MAY BE ILLEGIBLE DUE TO BAD SOURCE DOCUMENTS.

#119953

REF 23

0009011

FACILITIES INSPECTION SECTION
INSPECTION REPORT FORM

Name of Company Westville Oil Company Date 6-5-79

City Westville County La Porte Telephone No.

Persons Contacted A. Carson, Paul Carson, Carl Carlson, Dr. D. Howard

Purpose of Inspection Sampling and routine inspection

Products re-refining oil products

No. of Employees 30 Receiving Stream Forbes Ditch-runoff

Source of water City No. of outfalls none per se

Sewage disposal City Waste flow

Permit No. none Certified Operator ?

Status: X Adequate Inadequate Undetermined-Submitted By R. Cleaton

Description of production, manufacturing operations, waste treatment facilities, liquid waste disposal, cooling water additives, boiler treatments, permit compliance. General remarks, comments, recommendations, conclusions.

This inspection was two-fold purpose. Sampling of ditches for contaminat and to determine how the plant is operating and status of construction of enclosing devices.

The Company has installed the culvert underneath the driveway and removed some of the oily dirt to the East of the Drive. Mr. Carson was waiting for contractor to show to give data and get bids for dikes for remainder of project. Ditches still oily as far as the STP outfall.

Sampled as per separate diagram with Dr. D. Howard of Howard Labs, Dayton Ohio , for determination of degree of contamination of ditches. Samples indicated on separte sheet and samples sent to Indy Labs.

Operation of the plant is the same. Slight film of oil on lagoon but only about 1/8 inch thick. Reported that new Pfaudler unit still not complete operative and major design changes by Pfaudler holding back 100 % operation. Condensate and other waters still going to ground and being collected by settling basins and pumped to lagoon. Yard graveled with heavy slag and oily surface appears to be contained by slag fill.

June 5, 1979

To: J. Snyder, R. Bailly
From: R. Cleaton

Subject: Combined Sampling-Westville Oil Co, Westville

The attached location chart shows the points sampled by the writer and Dr. D. Howard of Howard Laboratories on the above date.

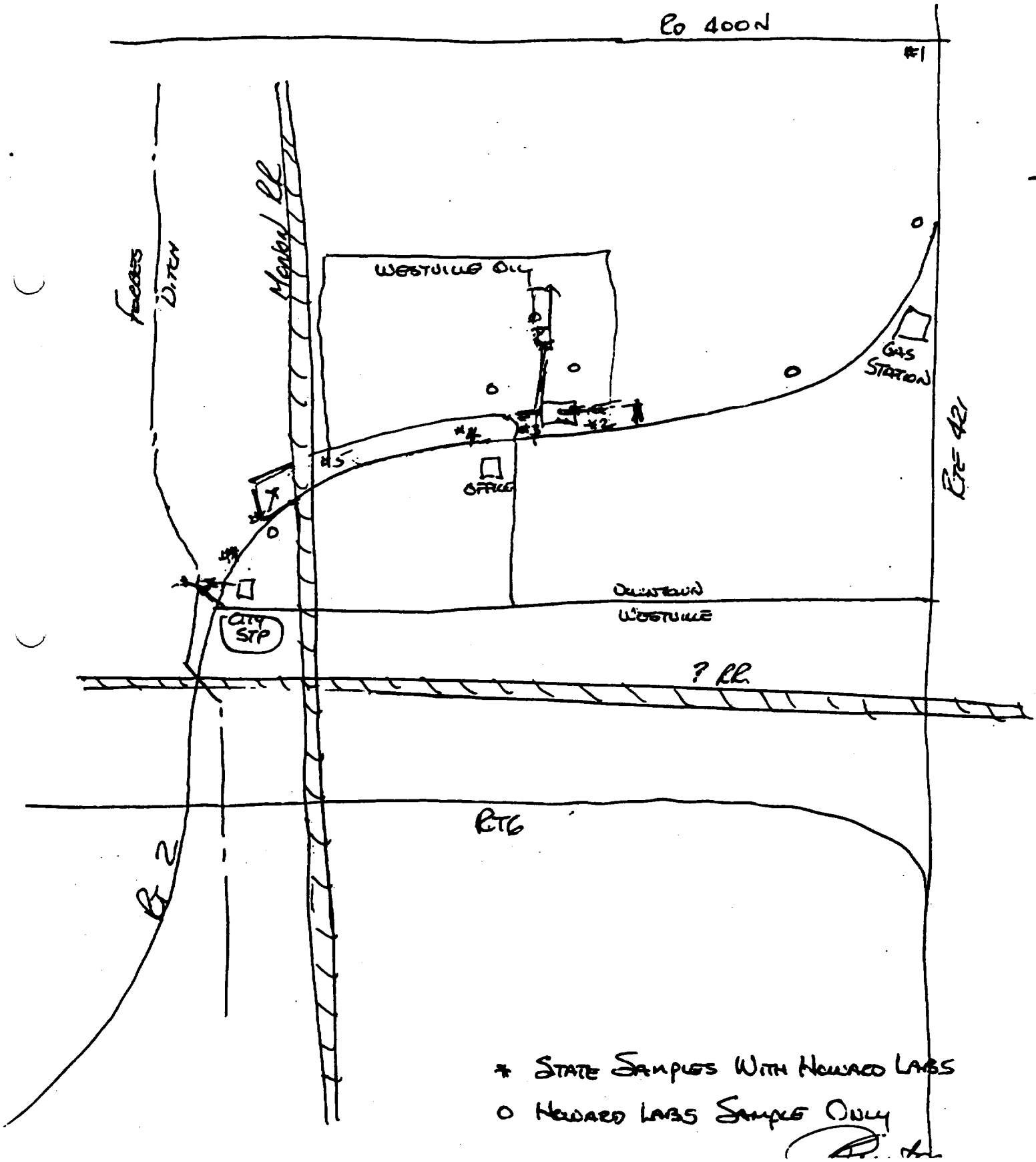
The sampling was done with Dr. Howard's soil sampler, a special device that took aprox a 1 inch core in a stainless tube. Samples were taken at the points indicated by repeatedly pushing the sampling device into the soil as deep as it was possible. A cross section was taken of the ditch in every case. Samples for each party were taken about 2 inches apart through this cross section.

I am returning the old map of the November 1978 sampling for the records. Samples were sent to Indpls via UPS

WESTVILLE OIL - PCB & METAL STUDY

JUNE 5, 1979

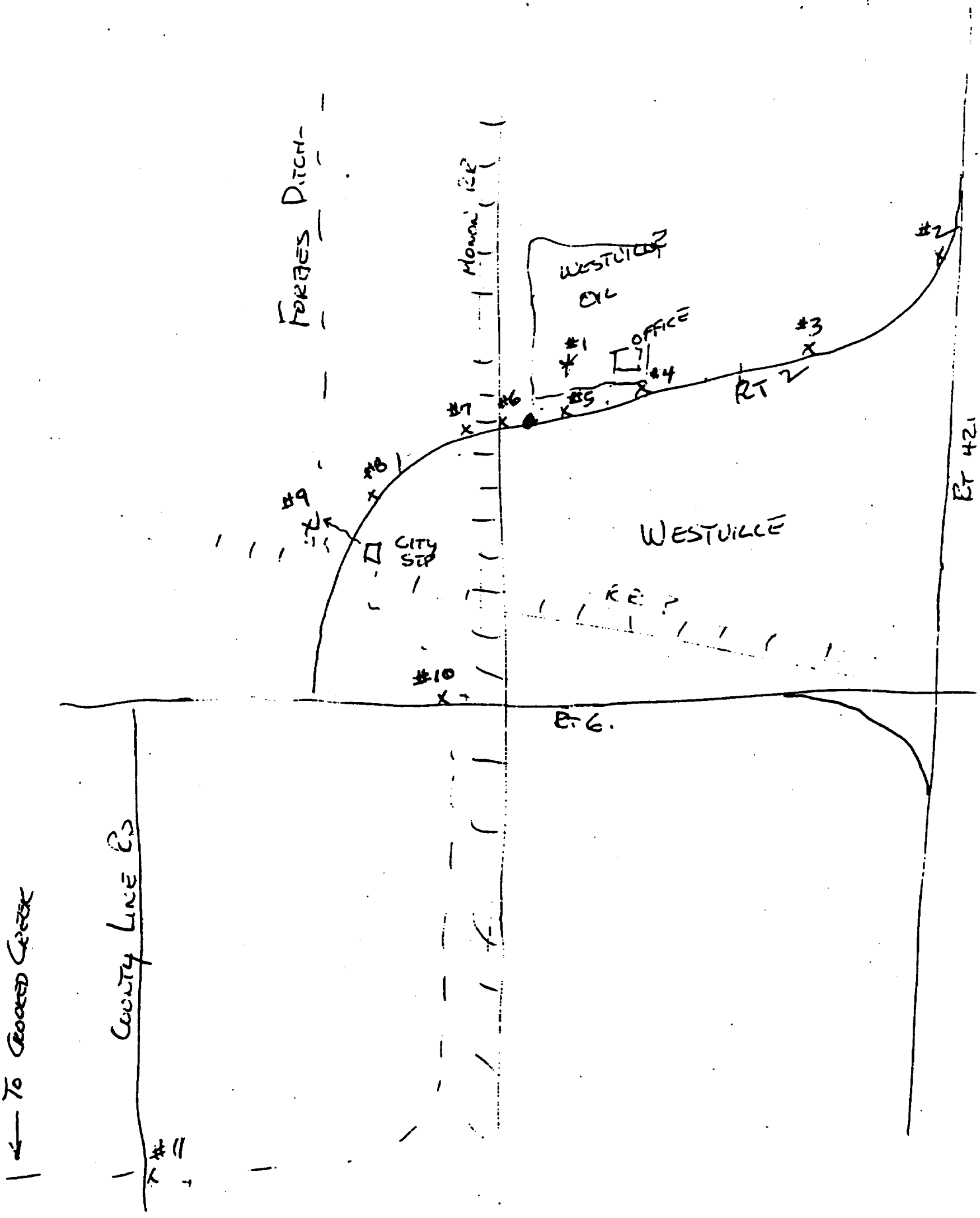
DIET SAMPLING DIAGRAM



WESTVILLE OIL PCB STUDY

11-7-78 7

SLUDGE SAMPLING - DIAGRAM



WATER SAMPLE IDENTIFICATION SHEET

Sample Site: Westville Oil Co.

Westville, Okla

Station Number: #1

Sample Date: 6 (Mo. 11-12) 5 (Day 13-14) '79 (Yr. 15-16) 1:20 AM/PM

Supervisor:

Collector(s): Richard Cleaton

Delivered to lab: 6 (Mo.) 6 (Day) '79 (Yr.) 3:40 AM/PM

By: L. Ray Bailey

Kind / Lot No. / Amount

Preservatives Added: Solvent rinse bailer

Sample Chlorinated: ____ Not Chlorinated: ✓ (Field / Lab)

No. of 1 Liter Plastic Bottles:

No. of 2 Liter Plastic Bottles:

No. of Bacteriological Bottles:

No. of Glass Jars or Bottles: 1

Total:

Standard Procedure Followed: (All) Some None

NPDES Number (1-7): ____ Outfall (8-10): ____

3 (17): 1. NPDES; 2. SPC-15; 3. WQ Study; 4. Pollution complaint; 5. Fish kill investigation

1 (18): 1. Industry; 2. Semi-Public; 3. Municipal; 4. Federal; 5. Public Water Supply; 6. State operation; 7. Other

1 (19): Sample Type — 1. Grab; 2. 24-hour comp.; 3. 8-hour comp.; 4. 24-hour flow comp.; 5. 8-hour flow comp.

Sample Interval (20):

(21): 0 - at outfall; 1 - above outfall; 2 - below outfall

Stream miles from outfall (22-26):

LAB INFORMATION

Lab No. L-170 Date JUN 6 1979 11:44 AM/PM (Mo. Day Yr.)

Rec'd by:

Temp of samples when received:

Comments: * REPORTED

CODE	PARAMETERS	UNIT	LAB DATA
28-32 00410	Alkalinity Total $CaCO_3$	mg/l	34-41
00610	Ammonia-N	mg/l	
01002	Arsenic T	ug/l	5,000 (D)
00310	BOD_5	mg/l	
01027	Cadmium T	ug/l	<1,500. (D)
00940	Chlorides	mg/l	
01032	Chromium-Hex	ug/l	
01034	Chromium-Tot	ug/l	14,000. (D)
00335	COD	mg/l	
01042	Copper	ug/l	
00720	Cyanide-CN	mg/l	
00951	Fluoride	mg/l	
01045	Iron T	ug/l	9800,000. (D)
01051	Lead T	ug/l	413,000. (D)
01055	Manganese	ug/l	
71900	Mercury	ug/l	35.2
01067	Nickel	ug/l	9.18
00630	NO_2+NO_3-N	mg/l	
00550	Oil & Grease 9,686	mg/l	5.2% by wt. *
00403	pH (lab)	S.U.	7.2 ★
32730	Phenol	ug/l	
00665	Phosphorus-P	mg/l	
00530	Solids - Susp	mg/l	
00500	Solids (total)	mg/l	92.0%
00945	Sulfate	mg/l	
	PCL	mg/l	<0.10 AS
00680	TOC	mg/l	
01092	Zinc	ug/l	179
31616	Fecal coliform	100 ml	
	PCBs	ug/l	0.78
	AS HR CLOR 1260		

★=PH Method - Standard methods for the examination of water and wastewater, 15th Ed. Col. 1, page 189.

SBH65-030

Card No. 27	I	I	I	I	I	I
Para. No. 28-32	00001	00010	00300	00400	50050	50060
	Time, hr	Temp, °C	DO	pH	Flow, MGD	Res. Chl. mg/l
34-41						
42-49						
50-57						
58-65						
Card No. 27	2	2	2	2	2	2
Para. No. 28-32	00001	00010	00300	00400	50050	50060
34-41						
42-49						
50-57						
58-65						

Card No. 27	3	3	3	3	3	3
Para. No. 28-32	00001	00010	00300	00400	50050	50060
34-41						
42-49						
50-57						
58-65						

PRESERVATION OF SAMPLES

Determination	Preservative		Size & Type of Container
General Chemistry:			
Acidity	MBAS		
Alkalinity	Nitrite-N		
BOD	Phosphorus, Ortho		
Calcium	pH		
Chloride	Residues	Iced or Refrigerated	2 liter plastic
Chlorine Residual			
Chromium, Hex.	Specific Cond.		
Color	Sulfate		
Fluoride	Tannin, Lignin		
Hardness	Turbidity		
Odor		Iced or Refrig.	500 ml glass
Pesticides			
PCB		Iced or Refrig.	Special solvent rinsed glass
Phthalate			
Metals:			
Aluminum	Manganese		
Arsenic	Nickel		
Cadmium	Potassium		
Chromium, Total	Sodium	5 ml HNO_3/liter	1 liter plastic
Copper	Silver		
Iron	Zinc		
Lead			
Nutrients:			
Nitrogen	COD		
Ammonia	TOC		
Nitrate	Phosphorus, Total	2 ml 50% H_2SO_4/liter	1 liter plastic
Organic			
Total			
Cyanide		1 ml 50% NaOH/liter	1 liter plastic
Mercury		20 ml (2.5% $K_2Cr_2O_7$ in 25% HNO_3)/liter	1 liter plastic
Sulfide		2 ml $Zn(C_2H_3O_2)_2$ (2N) per liter.	1 liter plastic
Oil & Grease		2 ml 50% H_2SO_4/500 ml	500 ml glass
Phenol		2 ml 50% H_2SO_4/liter	1 liter plastic

The preservatives used conform with EPA recommended procedures.

Storage at low temperature is perhaps the best way to preserve samples until the next day. Chemical preservatives are to be used only when they are shown not to interfere with the examination to be made. When used, they should be added to the sample bottle and in the exact amount per volume of sample recommended.

WATER SAMPLE IDENTIFICATION SHEET

Sample Site: Westville Oil Co.

Westville, In

Station Number: #6 #7

Sample Date: 6 (Mo. 11-12) 5 (Day 13-14) '79 (Yr. 15-16) 2:17 AM/PM

Supervisor:

Collector(s): Richard Cleaton

Delivered to lab: 6 (Mo.) 6 (Day) '79 (Yr.) 3:40 AM/PM

By:

	Kind	Lot No.	Amount
Preservatives Added:	~~solvent rinse bottle~~		

Sample Chlorinated ____ Not Chlorinated ✓

	Field	Lab
No. of 1 Liter Plastic Bottles		
No. of 2 Liter Plastic Bottles		
No. of Bacteriological Bottles		
No. of Glass Jars or Bottles	1	
Total		

Standard Procedure Followed (All) Some None

NPDES Number ____ (1-7) Outfall ____ (8-10)

3 (17)
1. NPDES
2. SPC-15
3. WQ Study
4. Pollution complaint
5. Fish kill investigation

1 (18)
1. Industry
2. Semi-Public
3. Municipal
4. Federal
5. Public Water Supply
6. State operation
7. Other

1 (19) Sample Type
1. Grab
2. 24-hour comp.
3. 8-hour comp.
4. 24-hour flow comp.
5. 8-hour flow comp.

____ (20) Sample Interval

____ (21)
0 - at outfall
1 - above outfall
2 - below outfall

____ (22-26) Stream miles from outfall

LAB INFORMATION

Lab No. 1301 Date JUN 8 1979 11:(?) Mo. Day Yr. AM/PM

Rec'd by

Temp of samples when received

REPORTED

Comments:

CODE	PARAMETERS	UNIT		LAB DATA
28-32 00410	Total Alkalinity CaCO3	mg/l		34-41
00610	Ammonia-N	mg/l		
01002	Arsenic TOT	~~ug/l~~ (mg/kg)	✓	9,000. (D)
00310	BOD5	mg/l		
01027	Cadmium TOT	~~ug/l~~ (mg/kg)	✓	3,000. (D)
00940	Chlorides	mg/l		
01032	Chromium-Hex	ug/l		
01034	Chromium-Tot	~~ug/l~~ (mg/kg)	✓	10,000. (D)
00335	COD	mg/l		
01042	Copper	ug/l		
00720	Cyanide-CN	mg/l		
00951	Fluoride	mg/l		
01045	Iron TOT	~~ug/l~~ (mg/kg)	✓	3,800,000. (D)
01051	Lead TOT	~~ug/l~~ (mg/kg)	✓	1,200,000. (D)
01055	Manganese	ug/l		
71900	Mercury	ug/l		
01067	Nickel	ug/l		
00630	NO_2+NO_3-N	mg/l		
00550	Oil & Grease	mg/l	✓	6.9% by wt
00403	pH (lab)	S.U.	✓	3.7 ★
32730	Phenol	ug/l		
00665	Phosphorus-P	mg/l		
00530	Solids - Susp	mg/l		
00500	Solids (total)	mg/l	✓	72.0% w/w
00945	Sulfate	mg/l		
~~00095~~	~~[illegible]~~ PCB	ug/g		2.9 as aroclor 1242
00680	TOC	mg/l		
01092	Zinc	ug/l		
31616	Fecal coliform	100 ml		
39519	PCB's	ug/g		3.0 as [illegible]

★: PH method - 50 ml soil sample to 150 ml water as recommended in the Methods of [illegible] [illegible], Vol 1, pg 21-29

SBH65-030

WATER LABORATORY

Card No. 27	I	I	I	I	I	I
Para. No. 28-32	00001	00010	00300	00400	50050	50060
	Time, hr	Temp, °C	DO	pH	Flow, MGD	Res. Chl. mg/l
34-41						
42-49						
50-57						
58-65						
Card No. 27	2	2	2	2	2	2
Para. No. 28-32	00001	00010	00300	00400	50050	50060
34-41						
42-49						
50-57						
58-65						

Card No. 27	3	3	3	3	3	3
Para. No. 28-32	00001	00010	00300	00400	50050	50060
34-41						
42-49						
50-57						
58-65						

PRESERVATION OF SAMPLES

Determination	Preservative		Size & Type of Container
General Chemistry:			
Acidity	MBAS		
Alkalinity	Nitrite-N		
BOD	Phosphorus, Ortho		
Calcium	pH		
Chloride	Residues	Iced or Refrigerated	2 liter plastic
Chlorine Residual			
Chromium, Hex.	Specific Cond.		
Color	Sulfate		
Fluoride	Tannin, Lignin		
Hardness	Turbidity		
Odor		Iced or Refrig.	500 ml glass
Pesticides PCB Phthalate		Iced or Refrig.	Special solvent rinsed glass
Metals:			
Aluminum	Manganese		
Arsenic	Nickel		
Cadmium	Potassium		
Chromium, Total	Sodium	5 ml HNO_3/liter	1 liter plastic
Copper	Silver		
Iron	Zinc		
Lead			
Nutrients:			
Nitrogen	COD		
Ammonia	TOC		
Nitrate	Phosphorus, Total	2 ml 50% H_2SO_4/liter	1 liter plastic
Organic			
Total			
Cyanide		1 ml 50% NaOH/liter	1 liter plastic
Mercury		20 ml (2.5% $K_2Cr_2O_7$ in 25% HNO_3)/liter	l liter plastic
Sulfide		2 ml $Zn(C_2H_3O_2)_2$ (2N) per liter.	1 liter plastic
Oil & Grease		2 ml 50% H_2SO_4/500 ml	500 ml glass
Phenol		2 ml 50% H_2SO_4/liter	1 liter plastic

The preservatives used conform with EPA recommended procedures.

Storage at low temperature is perhaps the best way to preserve samples until the next day. Chemical preservatives are to be used only when they are shown not to interfere with the examination to be made. When used, they should be added to the sample bottle and in the exact amount per volume of sample recommended.

WATER SAMPLE IDENTIFICATION SHEET

Sample Site: Westville Oil Co.

Westville, In

Station Number: #6

Sample Date: 6 (Mo. 11-12) 5 (Day 13-14) 79 (Yr. 15-16) 2:10 AM/PM (PM circled)

Supervisor: ____

Collector(s): Richard Claxton

Delivered to lab: 6 (Mo.) 6 (Day) '79 (Yr.) 3:40 AM/PM (PM circled)

By: L. Ray Bailey

	Kind	Lot No.	Amount
Preservatives Added:	~~solvent vinyl~~		
	~~bottle~~		

Sample Chlorinated ____ Not Chlorinated ____

	Field	Lab
No. of 1 Liter Plastic Bottles		
No. of 2 Liter Plastic Bottles		
No. of Bacteriological Bottles		
No. of Glass Jars or Bottles	1	
Total		

Standard Procedure Followed: All Some None

NPDES Number ____ (1-7) Outfall ____ (8-10)

3 (17)
1. NPDES
2. SPC-15
3. WQ Study
4. Pollution complaint
5. Fish kill investigation

1 (18)
1. Industry
2. Semi-Public
3. Municipal
4. Federal
5. Public Water Supply
6. State operation
7. Other

1 (19) Sample Type
1. Grab
2. 24-hour comp.
3. 8-hour comp.
4. 24-hour flow comp.
5. 8-hour flow comp.

____ (20) Sample Interval

____ (21)
0 - at outfall
1 - above outfall
2 - below outfall

____ (22-26) Stream miles from outfall

LAB INFORMATION

Lab No. 1300 Date JUN 6 1979 4:00 (Mo. Day Yr. AM/PM)

Rec'd by: [illegible]

Temp of samples when received ____

Comments: * = By [illegible]

REPORTED

CODE	PARAMETERS	UNIT		LAB DATA
28-32 00410	Alkalinity Total $CaCO_3$	mg/l		34-41
00610	Ammonia-N	mg/l		
01002	Arsenic TOT	~~ug/l~~ ug/g	✓	11000. (D)
00310	BOD_5	mg/l		
01027	Cadmium TOT	~~ug/l~~ ug/g	✓	<1100. (D)
00940	Chlorides	mg/l		
01032	Chromium-Hex	ug/l		
01034	Chromium-Tot	~~ug/l~~ ug/g	✓	17000. (D)
00335	COD	mg/l		
01042	Copper	ug/l		
00720	Cyanide-CN	mg/l		
00951	Fluoride	mg/l		
01045	Iron TOT	~~ug/l~~ ug/g	✓	13,000,000. (D)
01051	Lead TOT	~~ug/l~~ ug/g	✓	2200,000. (D)
01055	Manganese	ug/l		
71900	Mercury	ug/l		
01067	Nickel	ug/l		
00630	NO_2+NO_3-N	mg/l		
00550	Oil & Grease	mg/l	✓	29.5% by wt *
00403	pH (lab)	S.U.		3.9 ★
32730	Phenol	ug/l		
00665	Phosphorus-P	mg/l		
00530	Solids - Susp	mg/l		
00500	Solids (total)	mg/l	✓	92.2% w/w
00945	Sulfate	mg/l		
~~[illegible]~~	~~[illegible]~~ PCB	~~ug/l~~ ug/g		~~2.300 [illegible]~~
00680	TOC	mg/l		
01092	Zinc	ug/l		
31616	Fecal coliform	100 ml		
39519	PCB's	ug/g	✓	2.600 [illegible]

★ = [illegible] 5 g [illegible] to 15 [illegible] water as in [illegible] the method of [illegible] [illegible], Vol 1, page 18[illegible]

(D) = Digested EPA procedure.

SBH65-030
State Form 1400

WATER LABORATORY

Card No. 27	I	I	I	I	I	I
Para. No. 28-32	00001	00010	00300	00400	50050	50060
	Time, hr	Temp, °C	DO	pH	Flow, MGD	Res. Chl. mg/l
34-41						
42-49						
50-57						
58-65						
Card No. 27	2	2	2	2	2	2
Para. No. 28-32	00001	00010	00300	00400	50050	50060
34-41						
42-49						
50-57						
58-65						

Card No. 27	3	3	3	3	3	3
Para. No. 28-32	00001	00010	00300	00400	50050	50060
34-41						
42-49						
50-57						
58-65						

PRESERVATION OF SAMPLES

Determination	Preservative		Size & Type of Container
General Chemistry:			
Acidity Alkalinity BOD Calcium Chloride Chlorine Residual Chromium, Hex. Color Fluoride Hardness	MBAS Nitrite-N Phosphorus, Ortho pH Residues Specific Cond. Sulfate Tannin, Lignin Turbidity	Iced or Refrigerated	2 liter plastic
Odor		Iced or Refrig.	500 ml glass
Pesticides **PCB** **Phthalate**		Iced or Refrig.	Special solvent rinsed glass
Metals:			
Aluminum Arsenic Cadmium Chromium, Total Copper Iron Lead	Manganese Nickel Potassium Sodium Silver Zinc	5 ml HNO_3/liter	1 liter plastic
Nutrients:			
Nitrogen Ammonia Nitrate Organic Total	COD TOC Phosphorus, Total	2 ml 50% H_2SO_4/liter	1 liter plastic
Cyanide		1 ml 50% NaOH/liter	1 liter plastic
Mercury		20 ml (2.5% $K_2Cr_2O_7$ in 25% HNO_3)/liter	1 liter plastic
Sulfide		2 ml $Zn(C_2H_3O_2)_2$ (2N) per liter.	1 liter plastic
Oil & Grease		2 ml 50% H_2SO_4/500 ml	500 ml glass
Phenol		2 ml 50% H_2SO_4/liter	1 liter plastic

The preservatives used conform with EPA recommended procedures.

Storage at low temperature is perhaps the best way to preserve samples until the next day. Chemical preservatives are to be used only when they are shown not to interfere with the examination to be made. When used, they should be added to the sample bottle and in the exact amount per volume of sample recommended.

WATER SAMPLE IDENTIFICATION SHEET

Sample Site: Westville Oil Co.

Westville, Ia

Station Number: #5

Sample Date: Mo. (11-12) 6 Day (13-14) 5 Yr. (15-16) '79 AM/PM 1:56

Supervisor:

Collector(s): Richard Cleaton

Delivered to lab: Mo. 6 Day 6 Yr. 79 AM/PM 3:40

By:

Preservatives Added: Kind / Lot No. / Amount — Solvent used bottle

Sample Chlorinated: ____ Not Chlorinated: ✓

	Field	Lab
No. of 1 Liter Plastic Bottles		
No. of 2 Liter Plastic Bottles		
No. of Bacteriological Bottles		
No. of Glass Jars or Bottles	1	
Total		

Standard Procedure Followed: (All) Some None

NPDES Number (1-7): ____ Outfall (8-10): ____

17: 3 — 1. NPDES; 2. SPC-15; 3. WQ Study; 4. Pollution complaint; 5. Fish kill investigation

18: 1 — 1. Industry; 2. Semi-Public; 3. Municipal; 4. Federal; 5. Public Water Supply; 6. State operation; 7. Other

19: 1 — Sample Type: 1. Grab; 2. 24-hour comp.; 3. 8-hour comp.; 4. 24-hour flow comp.; 5. 8-hour flow comp.

20: ____ Sample Interval

21: ____ 0 - at outfall; 1 - above outfall; 2 - below outfall

22-26: ____ Stream miles from outfall

LAB INFORMATION

Lab No. 1277 Date JUN 6 Mo. Day Yr. AM/PM 4:00

Rec'd by

Temp of samples when received

Comments: * USEPA

CODE	PARAMETERS	UNIT		LAB DATA
28-32 00410	Alkalinity Total $CaCO_3$	mg/l		34-41
00610	Ammonia-N	mg/l		
01002	Arsenic TOT	ug/l	✓	13,000. (D)
00310	BOD_5	mg/l		
01027	Cadmium TOT	ug/l	✓	K800. (D)
00940	Chlorides	mg/l		
01032	Chromium-Hex	ug/l		
01034	Chromium-Tot	ug/l	✓	16,000. (D)
00335	COD	mg/l		
01042	Copper	ug/l		
00720	Cyanide-CN	mg/l		
00951	Fluoride	mg/l		
01045	Iron TOT	ug/l	✓	14,000,000. (D)
01051	Lead TOT	ug/l	✓	250,000. (D)
01055	Manganese	ug/l		
71900	Mercury	ug/l		
01067	Nickel	ug/l		
00630	NO_2+NO_3-N	mg/l		
00550	Oil & Grease	mg/l	✓	14.5% * Ingwit
00403	pH (lab)	S.U.	✓	4.0 ★
32730	Phenol	ug/l		
00665	Phosphorus-P	mg/l		
00530	Solids - Susp	mg/l		
00500	Solids (total)	mg/l	✓	79.0% *
00945	Sulfate	mg/l		
~~00000~~	~~TKN~~ PCB	ug/l		1.2 as 1242
00680	TOC	mg/l		
01092	Zinc	ug/l		
31616	Fecal coliform	100 ml		
39519	PCBs	ug/l	✓	2.1 as 1260
★	Method-5pp			

SBH65-030
State Form 1490

WATER LABORATORY

Card No. 27	I	I	I	I	I	I
Para. No. 28-32	00001	00010	00300	00400	50050	50060
	Time, hr	Temp, °C	DO	pH	Flow, MGD	Res. Chl. mg/l
34-41						
42-49						
50-57						
58-65						
Card No. 27	2	2	2	2	2	2
Para. No. 28-32	00001	00010	00300	00400	50050	50060
34-41						
42-49						
50-57						
58-65						

Card No. 27	3	3	3	3	3	3
Para. No. 28-32	00001	00010	00300	00400	50050	50060
34-41						
42-49						
50-57						
58-65						

PRESERVATION OF SAMPLES

Determination	Preservative		Size & Type of Container
General Chemistry:			
Acidity	MBAS		
Alkalinity	Nitrite-N		
BOD	Phosphorus, Ortho		
Calcium	pH		
Chloride	Residues	Iced or Refrigerated	2 liter plastic
Chlorine Residual			
Chromium, Hex.	Specific Cond.		
Color	Sulfate		
Fluoride	Tannin, Lignin		
Hardness	Turbidity		
Odor		Iced or Refrig.	500 ml glass
Pesticides			
PCB		Iced or Refrig.	Special solvent rinsed glass
Phthalate			
Metals:			
Aluminum	Manganese		
Arsenic	Nickel		
Cadmium	Potassium		
Chromium, Total	Sodium	5 ml HNO_3/liter	1 liter plastic
Copper	Silver		
Iron	Zinc		
Lead			
Nutrients:			
Nitrogen	COD		
Ammonia	TOC		
Nitrate	Phosphorus, Total	2 ml 50% H_2SO_4/liter	1 liter plastic
Organic			
Total			
Cyanide		1 ml 50% NaOH/liter	1 liter plastic
Mercury		20 ml (2.5% $K_2Cr_2O_7$ in 25% HNO_3)/liter	1 liter plastic
Sulfide		2 ml $Zn(C_2H_3O_2)_2$ (2N) per liter.	1 liter plastic
Oil & Grease		2 ml 50% H_2SO_4/500 ml	500 ml glass
Phenol		2 ml 50% H_2SO_4/liter	1 liter plastic

The preservatives used conform with EPA recommended procedures.

Storage at low temperature is perhaps the best way to preserve samples until the next day. Chemical preservatives are to be used only when they are shown not to interfere with the examination to be made. When used, they should be added to the sample bottle and in the exact amount per volume of sample recommended.

WATER SAMPLE IDENTIFICATION SHEET

Sample Site: Westville Oil Co.

Westville, In

Station Number: #4

Sample Date: 6 (Mo. 11-12) 5 (Day 13-14) '79 (Yr. 15-16) AM/PM (PM circled)

Supervisor: ______

Collector(s): Richard Claxton

Delivered to lab: 6 (Mo.) 6 (Day) '79 (Yr.) 3:40 AM/PM (PM circled)

By: L. Ray Bailey

	Kind	~~Lot~~ No.	Amount
Preservatives Added:	~~solvent rinse bottle~~		

Sample Chlorinated ______ Not Chlorinated ______

	Field	Lab
No. of 1 Liter Plastic Bottles		
No. of 2 Liter Plastic Bottles		
No. of Bacteriological Bottles		
No. of Glass Jars or Bottles	1	
Total		

Standard Procedure Followed: All Some None

NPDES Number ______ (1-7) Outfall ______ (8-10)

3 (17)
1. NPDES
2. SPC-15
3. WQ Study
4. Pollution complaint
5. Fish kill investigation

1 (18)
1. Industry
2. Semi-Public
3. Municipal
4. Federal
5. Public Water Supply
6. State operation
7. Other

1 (19) Sample Type
1. Grab
2. 24-hour comp.
3. 8-hour comp.
4. 24-hour flow comp.
5. 8-hour flow comp.

______ (20) Sample Interval

______ (21)
0 - at outfall
1 - above outfall
2 - below outfall

______ (22-26) Stream miles from outfall

CODE	PARAMETERS	UNIT		LAB DATA
28-32				34-41
00410	Alkalinity Total $CaCO_3$	mg/l		
00610	Ammonia-N	mg/l		
01002	Arsenic (T)	~~ug/l~~ ug/g	✓	7,000. (D)
00310	BOD_5	mg/l		
01027	Cadmium	~~ug/l~~ ug/g	✓	<1,000. (D)
00940	Chlorides	mg/l		
01032	Chromium-Hex	ug/l		
01034	Chromium-Tot	~~ug/l~~ ug/g	✓	18,000. (D)
00335	COD	mg/l		
01042	Copper	ug/l		
00720	Cyanide-CN	mg/l		
00951	Fluoride	mg/l		
01045	Iron (Tot)	~~ug/l~~ ug/g	✓	14,000,000. (D)
01051	Lead (T)	~~ug/l~~ ug/g	✓	410,000 (D)
01055	Manganese	ug/l		
71900	Mercury	ug/l		
01067	Nickel	ug/l		
00630	NO_2+NO_3-N	mg/l		
00550	Oil & Grease	mg/l	✓	17.4% by wt *
00403	pH (lab)	S.U.	✓	7.7 ★
32730	Phenol	ug/l		
00665	Phosphorus-P	mg/l		
00530	Solids - Susp	mg/l		
00500	Solids (total)	mg/l	✓	91.0 % w/w
00945	Sulfate	mg/l		
~~00625~~	~~TKN~~ PCB	~~mg/l~~ ug/g		0.43 aroclor 1242
00680	TOC	mg/l		
01092	Zinc	ug/l		
31616	Fecal coliform	100 ml		
39519	PCB's	ug/g	✓	0.50 [illegible]

★ = PH Method = 50ppm [illegible] water as [illegible] method of [illegible] 12/1/89

LAB INFORMATION

Lab No. 1298 Date JUN 6 1979 (Mo. Day Yr. AM/PM)

Rec'd by [illegible]

Temp of samples when received

REPORTED

Comments: * = By [illegible]

SBH65-030
State Form 1490

WATER LABORATORY

Card No. 27	1	1	1	1	1	1
Para. No. 28-32	00001	00010	00300	00400	50050	50060
	Time, hr	Temp. °C	DO	pH	Flow, MGD	Res. Chl. mg/l
34-41						
42-49						
50-57						
58-65						
Card No. 27	2	2	2	2	2	2
Para. No. 28-32	00001	00010	00300	00400	50050	50060
34-41						
42-49						
50-57						
58-65						

Card No. 27	3	3	3	3	3	3
Para. No. 28-32	00001	00010	00300	00400	50050	50060
34-41						
42-49						
50-57						
58-65						

PRESERVATION OF SAMPLES

Determination	Preservative		Size & Type of Container
General Chemistry:			
Acidity	MBAS		
Alkalinity	Nitrite-N		
BOD	Phosphorus, Ortho		
Calcium	pH		
Chloride	Residues	Iced or Refrigerated	2 liter plastic
Chlorine Residual			
Chromium, Hex.	Specific Cond.		
Color	Sulfate		
Fluoride	Tannin, Lignin		
Hardness	Turbidity		
Odor		Iced or Refrig.	500 ml glass
Pesticides			
PCB		Iced or Refrig.	Special solvent rinsed glass
Phthalate			
Metals:			
Aluminum	Manganese		
Arsenic	Nickel		
Cadmium	Potassium		
Chromium, Total	Sodium	5 ml HNO_3/liter	1 liter plastic
Copper	Silver		
Iron	Zinc		
Lead			
Nutrients:			
Nitrogen	COD		
Ammonia	TOC		
Nitrate	Phosphorus, Total	2 ml 50% H_2SO_4/liter	1 liter plastic
Organic			
Total			
Cyanide		1 ml 50% NaOH/liter	1 liter plastic
Mercury		20 ml (2.5% $K_2Cr_2O_7$ in 25% HNO_3)/liter	1 liter plastic
Sulfide		2 ml $Zn(C_2H_3O_2)_2$ (2N) per liter.	1 liter plastic
Oil & Grease		2 ml 50% H_2SO_4/500 ml	500 ml glass
Phenol		2 ml 50% H_2SO_4/liter	1 liter plastic

The preservatives used conform with EPA recommended procedures.

Storage at low temperature is perhaps the best way to preserve samples until the next day. Chemical preservatives are to be used only when they are shown not to interfere with the examination to be made. When used, they should be added to the sample bottle and in the exact amount per volume of sample recommended.

WATER SAMPLE IDENTIFICATION SHEET

Sample Site: Westville Oil Co.

Westville, Ind

Station Number: #3

Sample Date: 6 (Mo. 11-12) 5 (Day 13-14) '79 (Yr. 15-16) 1140 (AM/PM)

Supervisor:

Collector(s): Richard Cleator

Delivered to lab: 6 (Mo.) 6 (Day) '79 (Yr.) 3:40 (AM/PM)

By:

	Kind	Lot No.	Amount
Preservatives Added:	Solvent rinse		
	Acetone		

Sample Chlorinated: ____ Not Chlorinated: ✓

	Field	Lab
No. of 1 Liter Plastic Bottles		
No. of 2 Liter Plastic Bottles		
No. of Bacteriological Bottles		
No. of Glass Jars or Bottles	1	
Total		

Standard Procedure Followed: (All) Some None

NPDES Number: ____ (1-7) Outfall: ____ (8-10)

3 (17)
1. NPDES
2. SPC-15
3. WQ Study
4. Pollution complaint
5. Fish kill investigation

1 (18)
1. Industry
2. Semi-Public
3. Municipal
4. Federal
5. Public Water Supply
6. State operation
7. Other

1 (19) Sample Type
1. Grab
2. 24-hour comp.
3. 8-hour comp.
4. 24-hour flow comp.
5. 8-hour flow comp.

____ (20) Sample Interval

____ (21)
0 - at outfall
1 - above outfall
2 - below outfall

____ (22-26) Stream miles from outfall

LAB INFORMATION

Lab No. 1277 Date JUN 6 1979 1140 (Mo. Day Yr. AM/PM)

Rec'd by

Temp of samples when received

REPORTED

CODE	PARAMETERS	UNIT		LAB DATA
28-32 00410	Alkalinity Total $CaCO_3$	mg/l		34-41
00610	Ammonia-N	mg/l		
01002	Arsenic TOT	ug/l (mg/l)	✓	13,000. (D)
00310	BOD_5	mg/l		
01027	Cadmium TOT	ug/l (mg/l)	✓	2,000. (D)
00940	Chlorides	mg/l		
01032	Chromium-Hex	ug/l		
01034	Chromium-Tot	ug/l (mg/l)	✓	13,000. (D)
00335	COD	mg/l		
01042	Copper	ug/l		
00720	Cyanide-CN	mg/l		
00951	Fluoride	mg/l		
01045	Iron TOT	ug/l (mg/l)	✓	24,000,000. (D)
01051	Lead TOT	ug/l (mg/l)	✓	630,000. (D)
01055	Manganese	ug/l		
71900	Mercury	ug/l		
01067	Nickel	ug/l		
00630	NO_2+NO_3-N	mg/l		
00550	Oil & Grease	mg/l	✓	16.2% by wt. *
00403	pH (lab)	S.U.	✓	6.5 ★
32730	Phenol	ug/l		
00665	Phosphorus-P	mg/l		
00530	Solids - Susp	mg/l		
00500	Solids (total)	mg/l	✓	84.% w/w
00945	Sulfate	mg/l		
~~00000~~	~~NCP~~ PCB	ug/l		0.24 as 1242 (Aroclor)
00680	TOC	mg/l		
01092	Zinc	ug/l		
31616	Fecal coliform	100 ml		
39519	PCBs	ug/l	✓	1.6 as 1260 (Aroclor)

★-PH Method - 5gms of soil sample to 15 ml water in colorimetric Methods of analysis, Snell & Snell, Third Ed., Vol. 1, pp.

Comments: * = By

WATER LABORATORY

SBH65-030

Card No. 27	1	1	1	1	1	1
Para. No. 28-32	00001	00010	00300	00400	50050	50060
	Time, hr	Temp. °C	DO	pH	Flow, MGD	Res. Chl. mg/l
34-41						
42-49						
50-57						
58-65						

Card No. 27	2	2	2	2	2	2
Para. No. 28-32	00001	00010	00300	00400	50050	50060
34-41						
42-49						
50-57						
58-65						

Card No. 27	3	3	3	3	3	3
Para. No. 28-32	00001	00010	00300	00400	50050	50060
34-41						
42-49						
50-57						
58-65						

PRESERVATION OF SAMPLES

Determination	Preservative		Size & Type of Container
General Chemistry: Acidity, Alkalinity, BOD, Calcium, Chloride, Chlorine Residual, Chromium, Hex., Color, Fluoride, Hardness; MBAS, Nitrite-N, Phosphorus, Ortho, pH, Residues, Specific Cond., Sulfate, Tannin, Lignin, Turbidity		Iced or Refrigerated	2 liter plastic
Odor		Iced or Refrig.	500 ml glass
Pesticides, PCB, Phthalate		Iced or Refrig.	Special solvent rinsed glass
Metals: Aluminum, Arsenic, Cadmium, Chromium, Total, Copper, Iron, Lead; Manganese, Nickel, Potassium, Sodium, Silver, Zinc		5 ml HNO_3/liter	1 liter plastic
Nutrients: Nitrogen, Ammonia, Nitrate, Organic, Total	COD, TOC, Phosphorus, Total	2 ml 50% H_2SO_4/liter	1 liter plastic
Cyanide		1 ml 50% NaOH/liter	1 liter plastic
Mercury		20 ml (2.5% $K_2Cr_2O_7$ in 25% HNO_3)/liter	1 liter plastic
Sulfide		2 ml $Zn(C_2H_3O_2)_2$ (2N) per liter.	1 liter plastic
Oil & Grease		2 ml 50% H_2SO_4/500 ml	500 ml glass
Phenol		2 ml 50% H_2SO_4/liter	1 liter plastic

The preservatives used conform with EPA recommended procedures.

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