

OTHER — —

TO: — Bill Burwell
 FROM: — Ron Devitt
 SUBJECT Upper Rock Creek, Black Diamond

State of
 Washington
 Department
 of Ecology



DATE October 24, 1972

Introduction

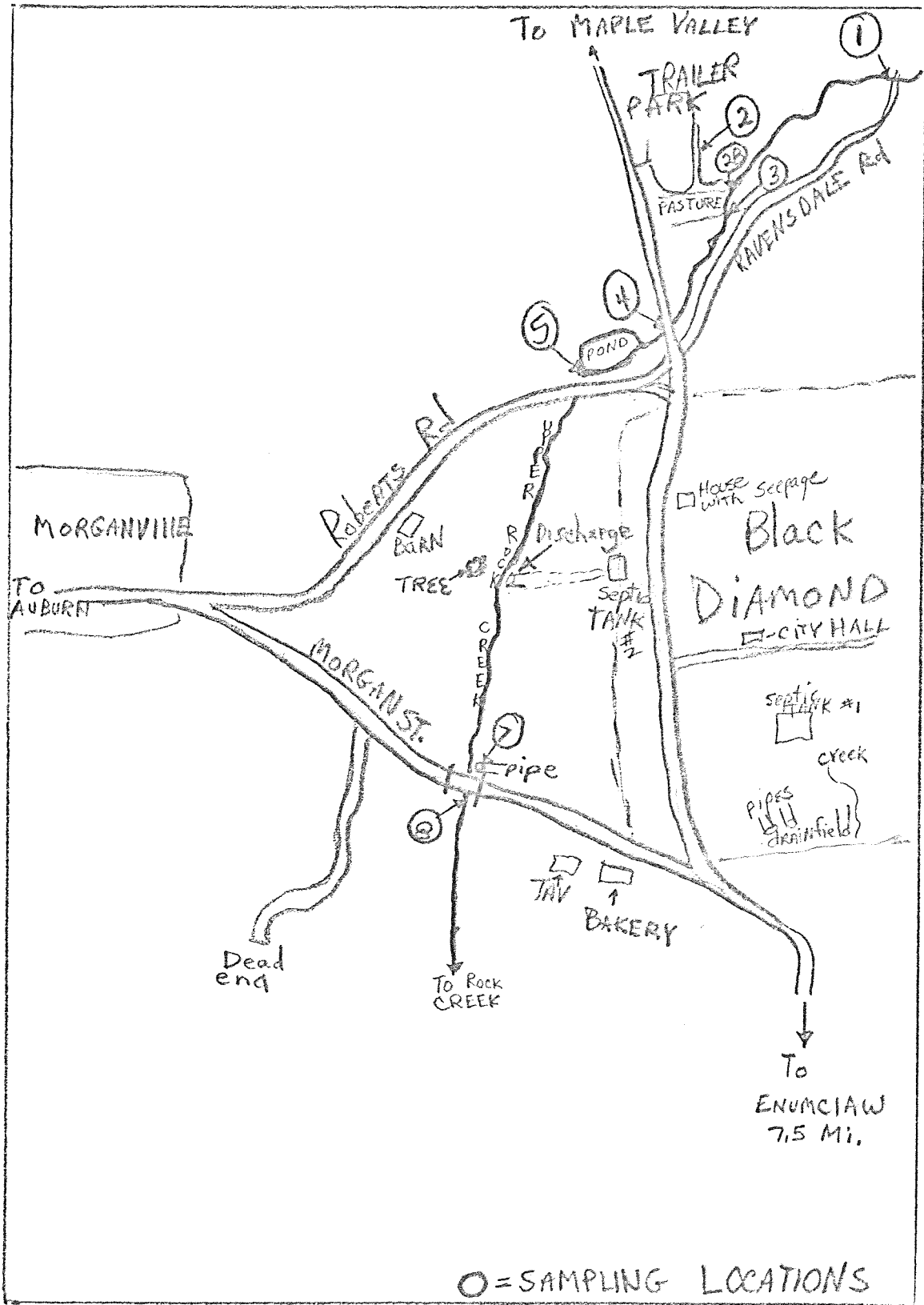
In response to your memo of 9-12-72, requesting a survey on Upper Rock Creek in the Black Diamond area, samples and pictures were taken on 10-10 and 10-11, 1972.

Station Location

The following stations were established to show existing water quality and sources of contamination:

- STATION #1: (Control) Upstream intersection of creek with Ravensdale Road.
- STATION #2: Drainage ditch in Cedar Brook Mobile Home Park
- STATION #2B: Creek at fence dividing Cedar Brook from pasture
- STATION #3: Creek below pasture at new electric fence
- STATION #4: Creek at intersection of Ravensdale Road and Highway 169
- STATION #5: Pond created by dam in creek at Roberts Road
- STATION #6: Not sampled
- STATION #7: Drainage from pipe to creek upstream side of Morgan Street bridge (road from bakery to Morganville)
- STATION #8: Creek downstream of Morgan Street

The overall relationship of these stations is shown on the attached map.



UPPER ROCK CREEK BLACK DIAMOND

DATA

STATION

FIELD RESULTS	1	2	2B	3	4	5	7	8
Dissolved Oxygen	9.7	0.0	--	7.5	8.8	8.3	--	--
Temperature C	11	11	--	---	9.5	11	--	--
LAB RESULTS								
Total Coliform	350	>800	>800	>800	500	>800	>4,000	--
Fecal Coliform	<40	>60,000	4,000	1,200	<40	330	53,000	70,000
ammonia-N (unfiltered)	.10	.13	--	.18	.08	.12	.14	--
ammonia-N filtered	ND	.01	--	.02	<.01	.02	.05	--
BOD	2	51	--	<4	<2	<4	--	--
COD	15	135	--	19	<5	26	--	--

Temperature: degrees centigrade
 Coliform: colonies/100mls
 other values: ppm

Discussion

On 10-10-72, I sampled the ditch which is on the east side of Cedar Brook Mobile Home Park, a foul odor was evident. Data indicates that this was due to septic tank seepage.

The ditch is not fenced; children and household pets have free access to it. The fecal coliform values of greater than 60,000 colonies/100 mls indicates a gross health hazard. The residents of the park should be made aware of this danger.

Data from Station 2B indicates that this seepage is entering the creek and violating State Water Quality Standards. Between Stations 2B and 3, about 20 tame ducks were observed in and around the creek. About 10 geese were also in the pasture. With the background level of fecal coliform so high at Station 2B, it was impossible to determine the effects of the waterfowl, although logic would dictate that they do add to the coliform problem. Data from Station 4 indicates that the coliform die off rapidly, and the creek recovers very quickly.

The high fecal coliform at Station 5 indicates that there is possibly an influence above the pond that went unnoticed during the survey. Since the pond is a park and is presumably used by the general public, a potential health problem exists (fecal coliform values were 330 colonies/100 mls).

On the upstream side of the Morgan Street bridge, there is a pipe, (Station 7) discharging sewage to the creek. On 10-10-72, drainage from this pipe had greater than 53,000 fecal colonies/100 mls. On 10-11-72, the creek (Station 8) had 70,000 fecal colonies/100 mls.

Besides the discharge from this pipe, the effluent from the municipal septic tank located off Park Street also discharges to the creek. Slimemold-like material is growing in the creek below the outfall.

The other municipal septic tank on the southeast side of town, is known as Lawson Hill Disposal. The drainfield below the junction box was driven over by a vandal in a vehicle. Pipes were broken and lengths stolen. The sewage flows from the ends of two of the four branches of the drainfield, above ground, and percolates into aggregate. The area is said to have been a mine area, filled with cinders and aggregate. The effluent from this drainfield was dyed but I was unable to determine where or if it entered the small drainage which passes nearby.

On the eastside of Highway 169 in Black Diamond between the school and the junction with Roberts road, sewage or septic tank seepage flows out of the front yard of a residence across the sidewalk and down the highway to a storm sewer. I did not determine if this drainage entered the creek.

Conclusion

Serious health hazards exist in the Black Diamond area. Data proves violation of Water Quality Standards caused by:

1. Septic tank seepage from Cedar Brook Mobile Park.
2. Pipe at Morgan Street.

If necessary, we can take coliform samples immediately above and below the municipal septic tank discharge to demonstrate violation of the standards by the west municipal septic tank.

RCD:dc

cc: King County Health Department
Ron Pine
Files

MEMORANDUM
Department of Ecology

Information
For Action
Permit
Other

Check

TO: Pete Hildebrandt & Ron Pine

DATE: September 12, 1972

FROM: Bill Burwell *WXB*

SUBJECT: REQUEST FOR SURVEY, UPPER ROCK CREEK, BLACK DIAMOND

OBJECTIVE

1. To determine if waste discharges from Cedarbrook Mobile Home Park, Black Diamond, are entering State waters.
2. To determine general quality and possible areas of concern with regards to water quality in the north branch of Rock Creek, Black Diamond.
3. To determine if wastes from two municipal septic tanks are entering the creek.

BACKGROUND

1. A complaint has been received concerning the water quality in a small pond located just west of State Highway 169 on Roberts Road. Total coliform counts of 340, 510, and 720 per 100 ml were noted by the King County Health Department on August 14, 1972. An additional complaint was made against Cedarbrook Mobile Home Park located in the watershed above the pond.

An investigation indicated that drainage from septic tanks (25 to 30 tanks in the 110 space park) in Cedarbrook Park is entering the creek by way of a drainage ditch. The effluent has the color, odor and high coliform (by "Coli-Count") of domestic sewage. See attached map.

2. Two municipal type septic tanks serve portions of Black Diamond. These are owned and operated by an organization formed by the users. These have had histories of failing drain fields, odors and above ground seepage. The location of each is indicated on the map.

ENTITY CONTACT

City of Black Diamond, Water Superintendent, phone TU 6-2560. He can assist you in locating.

EXPECTED RESULTS

1. Is Cedarbrook Mobile Home Park contributing to the pollution of the north branch of Rock Creek and the small artificial pond on the stream?

September 12, 1972

-2-

Memo to Pete Hildebrandt &
Ron Pine

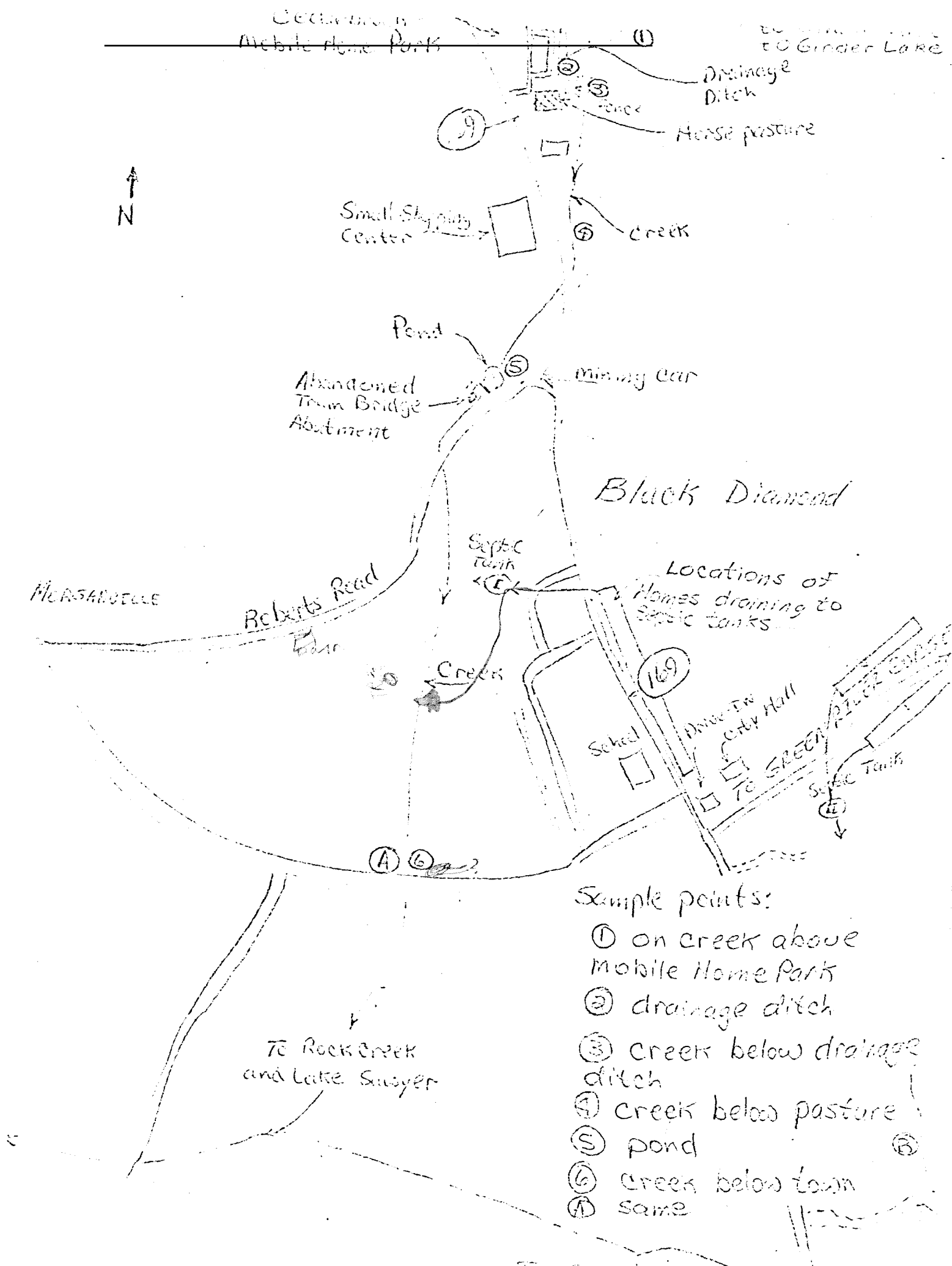
2. Is drainage from a horse pasture between Cedarbrook and the pond contributing?
3. Are effluents from the municipal type septic tanks entering the north and/or south branch of Rock Creek?
4. Sampling

<u>Pt</u>	<u>Tests</u>
1	Cl, NO ₃ , NH ₃ , BOD, D.O., Fecal Coliform
2	same as 1
3	same as 1
4	same as 1
5	same as 1
6	same as 1
A	Dye test from septic tank I
B	Cl, NO ₃ , NH ₃ , BOD, D.O., Fecal Coliform Dye test from septic tank II
C	same as B

COMPLETED BY November 30, 1972

BB:mk

7-11-72 dd



Sample points:

- ① on creek above mobile Home Park
- ② drainage ditch
- ③ creek below drainage ditch
- ④ creek below pasture
- ⑤ pond
- ⑥ creek below town
- Ⓐ same
- Ⓑ



Sagehen

Morgan Hill

Black Diamond

Jones L

Black Diamond Lake

Kerr's ranch

16

15

14

21

22

23

PAVING DALE 9.3 MI. 20
3211
(CUMBERLAND) 16.24 IV SW
3140
FRUNGL W 7.5 MI.
3233
17.50
53

STATE OF WASHINGTON
DEPARTMENT OF ECOLOGY

WATER QUALITY LABORATORY

DATA SUMMARY

ORIGINAL TO:
R. Devitt
 COPIES TO:

 LAB FILES

Source BLACK DIAMONDS

Collected By RED

Date Collected 10-10

Goal, Pro./Obj. _____

Log Number:	2237	20	21	22	23	24	25	26			STORET
Station:	1	2	2B	3	4	5	7	8			
pH											00403
Turbidity (JTU)											00070
Conductivity (umhos/cm)@25°C											00095
COD	15	135	-	19	<5	26					00340
BOD (5 day)	2	51	-	<4	<2	<4					00310
Total Coliform (Col./100ml)	350	>800	>800	>800	500	>800	>4000				31504
Fecal Coliform (Col./100ml)	<40	>60000	4000	1,200	<40	330	53000	70,000			31616
NO3-N (Filtered)											00620
NO2-N (Filtered)	ND	.01	-	.02	<.01	.02	.05				00615
NH3-N (Unfiltered)	.10	13	-	.18	.08	.12	.14				00610
T. Kjeldahl-N (Unfiltered)											00625
O-PO4-P (Filtered)											00671
Total Phos.-P (Unfiltered)											00665
Total Solids											00500
Total Non Vol. Solids											
Total Suspended Solids											00530
Total Sus. Non Vol. Solids											

Note: All results are in PPM unless otherwise specified. ND is "None Detected"
 Convert those marked with a * to PPB (PPM X 10³) prior to entry into STORET

Summary By Stephen J. Ball Date 10-18-72