

WATER QUALITY STATUS REPORT

**POTLATCH RIVER
Idaho**

1975-1976

Report No. WQ-23

December 1978

**Department of Health & Welfare
Division of Environment**

WATER QUALITY STATUS REPORT

#23

POTLATCH RIVER
Idaho

1975-1976

Study Conducted By:

H. Edwin Tulloch

December 1978

Department of Health & Welfare
Division of Environment
Statehouse
Boise, Idaho 83720

T A B L E O F C O N T E N T S

	<u>Page</u>
LIST OF TABLES AND FIGURES.....	ii
ABSTRACT.....	1
INTRODUCTION.....	2
METHODS AND MATERIALS.....	4
POINT SOURCES.....	5
RESULTS AND DISCUSSION.....	9
CONCLUSIONS.....	12
RECOMMENDATIONS.....	12
LITERATURE CITED.....	13
APPENDICES	
Appendix A - Tables and Figures.....	A-1
Appendix B - Raw Data Summarized in STORET Inventory.....	B-1

L I S T O F T A B L E S A N D F I G U R E S

		<u>Page</u>
 <u>Tables</u>		
1	Potlatch River Pollutant Loadings, Nov. 4, 1975.....	A-1
2	Potlatch River Pollutant Loadings, May 24, 1976.....	A-2
3	Potlatch River Tributaries-Selected Water Quality Parameters, Nov. 4, 1975, and May 24, 1976.....	A-3
4	Potlatch River Point Source Discharges-Selected Water Quality Parameters, Nov. 4, 1975, and May 24, 1976.....	A-4
5	Potlatch River-Selected Water Quality Parameters.....	A-5 & A-6
6	Potlatch River-Stations and Flows.....	A-7
 <u>Figures</u>		
1	Location of Stream Sampling Locations on the the Potlatch River.....	3
2	Dissolved Oxygen (percent saturation) in the Potlatch River on Nov. 4, 1975, and May 24, 1976.....	A-8
3	Total Phosphorus Concentration in the Potlatch River on Nov. 4, 1975, and May 24, 1976.....	A-9
4	Orthophosphate Concentrations in the Potlatch River on Nov. 4, 1975, and May 24, 1976.....	A-10
5	Total Kjeldahl Nitrogen Concentrations in the Potlatch River on Nov. 4, 1975, and May 24, 1976.....	A-11
6	Fecal Coliform Concentrations in the Potlatch River on Nov. 4, 1975, and May 24, 1976.....	A-12

A B S T R A C T

Water quality samples were collected from the Potlatch River drainage during low flows (November 4, 1975) and high flows (May 24, 1976). Samples were obtained at seven main river stations, eight tributaries and five point sources.

Municipal sewage treatment plants did not significantly impact receiving water quality with the possible exception of low dissolved oxygen found in the Troy sewage treatment plant effluent. Total phosphorus and total solids being discharged by the FILTROL clay mining operation near Bovill did have a noticeable impact on the Potlatch River.

Nonpoint sources in the tributaries of Big Bear Creek, Middle Potlatch Creek, East Fork, and Little Potlatch Creek contributed substantial amounts of total solids, nutrients, and total coliform bacteria to the river. Along the lower river, nonpoint sources are mainly related to erosion from dryland farming in the Palouse region.

I N T R O D U C T I O N

The Potlatch River originates to the north and east of the City of Bovill, Idaho. The drainage basin covers approximately 540 square miles and traverses the southern half of Latah County in a southwesterly direction before draining into the Clearwater River east of Lewiston, Idaho. Bovill, Deary, Troy, Juliaetta and Kendrick are the principal communities located in the river basin (See Figure 1).

The river basin is characterized by forested areas in the river segment above Deary and steep basaltic canyons in the lower segment with the upper plateaus formed in loess soils.

Land uses include logging and clay mining near and above Deary. Dryland farming of wheat, barley, peas and lentils occurs on the upper plateaus of the lower river.

Previous water quality data has been collected by the Idaho Department of Health and Welfare, Division of Environment (IDHW-DOE) at a trend analysis station, the Potlatch River at Arrow (River Mile (RM) 0.1) on a monthly basis from 1971 through 1975.

The purpose of this study undertaken by IDHW-DOE in 1975-1976 was to assess Potlatch River water quality and to identify the influence of nonpoint source pollution.

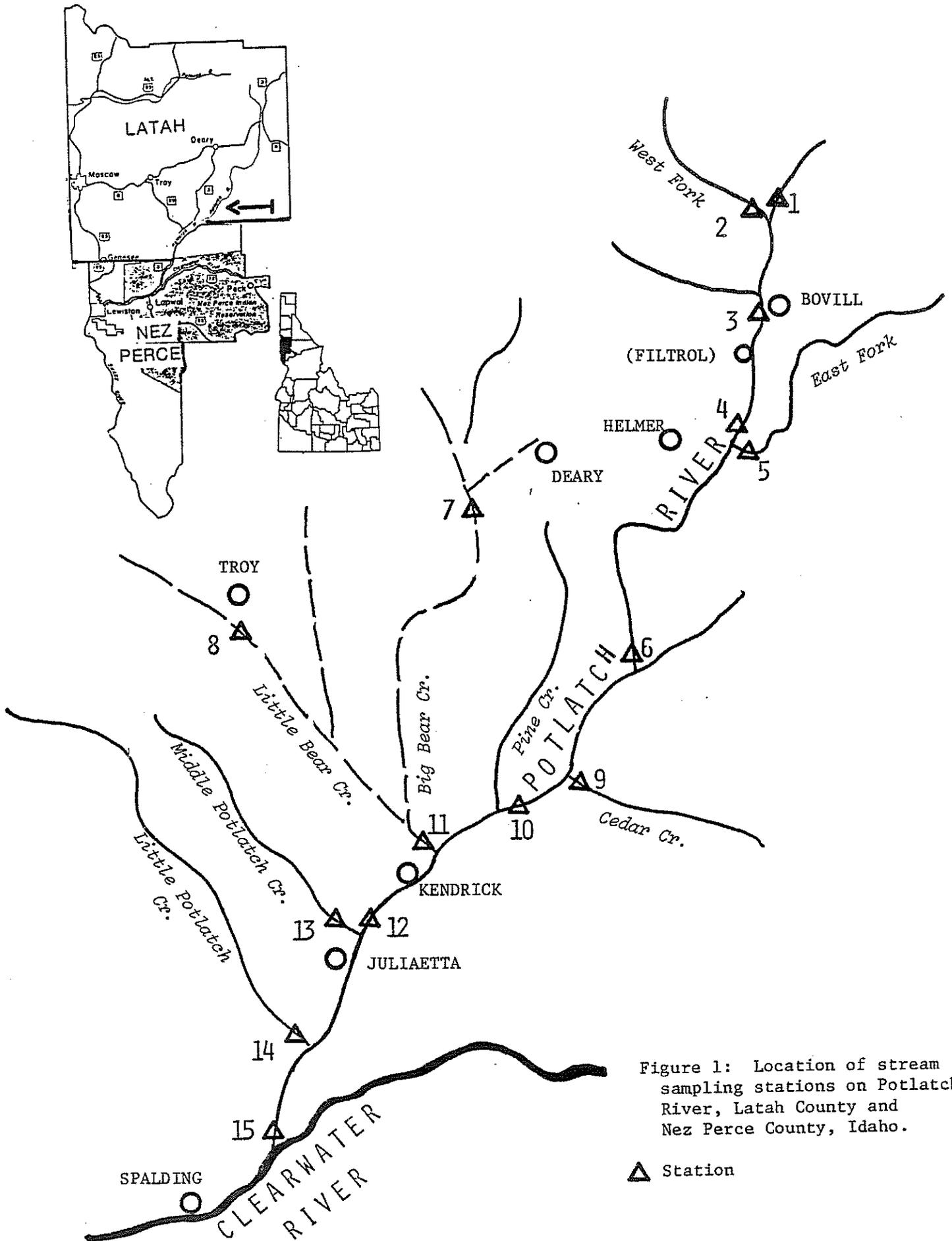


Figure 1: Location of stream sampling stations on Potlatch River, Latah County and Nez Perce County, Idaho.

▲ Station

IDHW-DOE has designated the Potlatch River from the source to mouth as Class A₂. Idaho State Water Quality Standards and Wastewater Treatment Requirements (IDECS, 1973) require a water body so designated as protected for the following uses: livestock watering, salmonid fish spawning and rearing, other fish and aquatic life, hunting and wildlife, recreation and aesthetics.

M E T H O D S & M A T E R I A L S

Twenty sites were sampled during low streamflow conditions on November 4, 1975, and again during high streamflow conditions on May 24, 1976. Sites were selected to determine the effects of tributaries and known point sources on the main river. Sampling sites are depicted in Figure 1 and specific locations are listed in Table 6.

Samples collected for bacteriological and chemical analysis were preserved and submitted to the IDHW laboratories at Lewiston and Boise, respectively. Preservation and analytical procedures are as prescribed in Standard Methods 13th Edition.

Field measurements included measurements of dissolved oxygen (D.O.) and temperature using a Yellow Springs Instrument (Model 54) D.O. Meter. The pH was measured with an Orion Specific Ion Meter. Streamflows were determined using the cross-sectional area-velocity method with a Gurley flow meter.

The following parameters were monitored during this study:

Temperature	Chloride
Dissolved Oxygen	Ammonia
pH	Nitrate
Biochemical Oxygen Demand	Nitrite
Chemical Oxygen Demand	Total Kjeldahl Nitrogen
Total Solids	Ortho-phosphate
Suspended Solids	Total Inorganic Phosphate
Conductivity	Total Phosphorus
Alkalinity	Total Coliform Bacteria
Hardness	Fecal Coliform Bacteria

P O I N T S O U R C E S

Several point sources have been identified which discharge directly to the Potlatch River system. Each discharger has been issued a National Pollutant Discharge Elimination System (NPDES) permit which prescribes treatment requirements and sets forth compliance schedules for meeting applicable treatment requirements as well as State Water Quality Standards.

Listed below are the point sources identified and the effluent limitations prescribed for each.

INDUSTRIAL

FILTROL CORPORATION

Type of operation: Clay mining and milling

Type of discharge: Runoff from the active mine pit and those mine pits which have not been reclaimed.

Wastewater treatment: A series of settling ponds with discharges to Potlatch River at RM 47.5. Drainage from the active mine pit is discharged via an intermittent tributary to the Potlatch River at RM 44.0 with no treatment.

Effluent limitations: For the period beginning March 6, 1975, and lasting through November 30, 1979.

Turbidity	--	5 JTU, net over receiving water
pH	--	6.0 - 9.0 s.u.

MUNICIPAL

BOVILL - Population 343

Type of operation: Municipal sewage treatment

Type of treatment: One cell, three acre lagoon without disinfection which discharges at RM 46.0.

Effluent limitations: For the period beginning March 27, 1974, and lasting through December 31, 1976.

	<u>Daily Average</u>		<u>Daily Maximum</u>	
BOD ₅ mg/l (lbs/day)	60	(23)	90	(34)
SS mg/l (lbs/day)	70	(26)	105	(39)
pH (s.u.)	6.0-9.0			

DEARY - Population 411

Type of operation: Municipal sewage treatment

Type of treatment: Two cell 4.6 acre lagoon with no disinfection. Effluent is discharged to Mt. Deary Creek, a tributary to Big Bear Creek. However, during a NPDES compliance inspection in October 1976, it was observed that the lagoon effluent did not reach Big Bear Creek.

Effluent limitations: For the period beginning March 27, 1974, and lasting through December 31, 1976.

	<u>Daily Average</u>		<u>Daily Maximum</u>	
BOD ₅ mg/l (lbs/day)	60	(26)	90	(39)
SS mg/l (lbs/day)	70	(30)	105	(45)
pH (s.u.)	6.0-9.0			

TROY - Population 541

Type of operation: Municipal sewage treatment

Type of treatment: A Smith & Loveless "Oxigest" package plant utilizing an activated sludge process with effluent disinfection. Effluent is discharged to Little Bear Creek.

Effluent limitations: For the period beginning August 2, 1974, and lasting through January 31, 1976.

	<u>Daily Average</u>		<u>Weekly Average</u>	
BOD ₅ mg/l (lbs/day)	30	(20)	45	(30)
SS mg/l (lbs/day)	30	(20)	45	(30)
Fecal Coliform (#/100 ml)	200		400	
Flow (MGD)	.08			
pH (s.u.)	6.0-9.0			

KENDRICK - Population 426

Type of operation: Municipal sewage treatment

Type of treatment: Two cell 1.3 acre lagoon with chlorine contact basin (no disinfection, however) with effluent discharge to Potlatch River at RM 12.5.

Effluent limitations: For the period beginning August 27, 1976, and lasting through June 30, 1977.

	<u>Monthly Average</u>		<u>Weekly Average</u>	
BOD ₅ mg/l (lbs/day)	60	(40)	90	(60)
SS mg/l (lbs/day)	70	(40)	105	(60)
pH (s.u.)	6.0-9.0			

JULIAETTA - Population 423

Type of operation: Municipal sewage treatment

Type of treatment: Mechanical extended aeration with slow sand filtration and effluent disinfection. Effluent will be discharged near RM 10 upon completion of treatment works in December 1976. Prior to this time the community was served by individual subsurface disposal systems (individual septic tank and drainfields).

Effluent limitations: For the period beginning September 27, 1974, through December 31, 1976.

	<u>Monthly Average</u>		<u>Weekly Average</u>	
BOD ₅ mg/l (lbs/day)	30	(15)	45	(23)
SS mg/l (lbs/day)	30	(15)	45	(23)
pH (s.u.)	6.0-9.0			
Fecal Coliform (#/100 ml)	50		100	
Flow (MGD)	.06			

R E S U L T S & D I S C U S S I O N

Loadings for tributaries and point sources for selected parameters are shown in Tables 1 and 2. Water quality parameters are listed in Table 3 for tributaries, Table 4 for point sources, and Table 5 for Potlatch River stations. Summaries of all water quality data for stream stations are shown in Appendix A. Figures 3 through 6 depict nutrient concentrations in relation to tributaries and point sources.

According to Idaho Water Quality Standards and Wastewater Treatment Requirements (IDECS, 1973), the dissolved oxygen concentration shall not be less than 6 mg/l or 90% of saturation, whichever is greater. Violations of the 90% standard were observed on November 4, 1975 (Figure 2) at the following locations:

Potlatch River above Bovill	RM 51.7	88%
Potlatch River at Bovill	RM 46.1	86%
Potlatch River above Juliaetta	RM 10.6	78%

In addition, effluents at two of the five municipal sewage treatment plants were sampled and found low in dissolved oxygen.

Bovill STP	11-4-75	1.2 mg/l
	5-24-76	0.8 mg/l
Troy STP	11-4-75	0.4 mg/l

The Troy sewage treatment plant (STP) discharges to Little Bear Creek which has very low flows in the summer. The low dissolved oxygen levels in the effluent may be expected to cause standard violations in this stream at certain periods.

Big Bear Creek, the East Fork, and Middle Potlatch Creek all contributed significant amounts of total solids to the river system during this survey (Tables 1, 2). Sediments in the above tributaries caused the increases observed. The 161% and 118% increases measured in the East Fork on November 4, 1975, and May 24, 1976, cannot be explained in relation to pollution sources, although they were the largest increases above upstream loadings observed.

Soil erosion rates averaging 25-40 tons per acre per year have been documented in the Palouse farming country (IDHW, 1977). Although it is not known how much of this soil actually enters surface streams, it is thought to be a substantial amount (SCS, personal communication).

Substantial increases above upstream loadings in nutrients (nitrogen and phosphorus compounds) were also observed in the East Fork, Middle Potlatch Creek, and Little Potlatch Creek during this study (Tables 1 & 2). Because there are no known point sources along these tributaries, sediment transport of nutrients from nonpoint sources is believed responsible for the observed nutrient loadings.

Filtrol Corporation's clay mining operation near Bovill discharged significant amounts of total solids and total phosphorus on May 24, 1976. The 163% increase in total phosphorus above the upstream loading (Table 2) is reflected in the increase in ambient river total phosphorus concentration to 0.08 mg/l in May, 1976 (Figure 3).

The discharge of water from the active mining operation during spring runoff accounted for the total solids increase. Although past NPDES monitoring data

demonstrated violations of permit turbidity limits and Idaho Water Quality Standards and Wastewater Treatment Requirements (IDECS, 1973) for turbidity, no such violations were observed during this survey.

With the exception of the possible dissolved oxygen violations in Little Bear Creek below the Troy sewage treatment plant, all other point sources did not impact Potlatch River water quality during this study.

The State Class A₂ total coliform bacteria standard of 1000 coliform bacteria per 100 milliliters (ml) was violated at several of the main river stations on November 4, 1975 (Table 5). The West Fork and Middle Potlatch Creek as well as the Little Potlatch Creek were also in violation on the November survey (Table 3).

The Kendrick STP effluent was measured at 81000/100 ml total coliforms on May 24, 1976, and the Filtrol discharge was measured at 9400/100 ml and 3800/100 ml on November 1975 and May 1976, respectively. The Filtrol discharge was not derived from a fecal source, however.

Total coliform data for the trend analysis station at the Potlatch River mouth indicates a geometric mean of 1130/100 ml during the period 1971-1975.

The State fecal coliform standard (IDECS, 1973) for Class A₂ waters of 500/100 ml for a single sample was not violated. However, approximately one-half of the Potlatch River samples exceeded 50/100 ml (Figure 6). The Kendrick STP effluent was measured at 20900/100 ml on May 24, 1976, although it did not cause a downstream increase in fecal coliform bacteria.

C O N C L U S I O N S

Potlatch River water quality is adversely affected by significant contributions of solids, nutrients, and total coliform bacteria by the East Fork, Middle Potlatch Creek, and Little Potlatch Creek.

Sediment erosion from dryland farming in the Big Bear Creek, Middle Potlatch Creek, and Little Potlatch Creek subdrainages has been well documented by the Soil Conservation Service. These sediments probably act as a carrier mechanism for the total solids, nutrients, and total coliform bacteria.

Point sources did not adversely affect ambient river quality. The Filtrol clay mining operation near Bovill can contribute solids and phosphorus to the river when discharging.

R E C O M M E N D A T I O N S

Because of the important role nonpoint source pollution plays in the Potlatch River system, strong emphasis should be placed on nonpoint source abatement programs. Implementation of best management practices (BMP) and resource management systems (RMS) is essential if reductions in soil erosion rates and improvements in water quality are to be accomplished.

Intensive year-round monitoring is necessary to identify specific nonpoint problem areas related to dryland farming, livestock grazing and silvicultural activities of the Potlatch River system.

L I T E R A T U R E C I T E D

American Public Health Association, 1971.

Standard Methods For The Examination Of Water and Wastewater,
13th Edition. American Public Health Assoc., Washington D.C. 874 pp.

Idaho Department of Environmental & Community Services. 1973.

Water Quality Standards & Wastewater Treatment Requirements.
IDECS, Boise, 19pp

Idaho Department of Health & Welfare. 1977

Idaho - A Program For Nonpoint Source Pollution Control.
IDHW, Division of Environment. 112 pp.

A P P E N D I X A:

Tables and Figures

TABLE 1

POTLATCH RIVER POLLUTANT LOADINGS*

NOVEMBER 4, 1975

	TOTAL	SOLIDS	TOTAL	NITROGEN	TOTAL	PHOSPHORUS
	Loading lbs/day	% Increase	Loading lbs/day	% Increase	Loading lbs/day	% Increase
BOVILL STP	--	--	2.29	1	0.41	6
FILTROL CORP.	31.19	.4	0.86	.4	0.03	.4
EAST FORK	9344.72	161	364.63	154	10.99	121
CEDAR CREEK	3947.82	14	97.92	14	4.53	15
BIG BEAR CR.	5691.55	23	176.09	16	6.90	32
KENDRICK STP	64.05	.2	3.09	3	0.90	4
MIDDLE POTLATCH CR.	7393.83	20	160.98	15	7.94	31
LITTLE POTLATCH CR.	5352.28	14	90.04	8	2.80	11

*NOTE: The % increase is a ratio of the increase in loading in the tributary or effluent to the loading at the Potlatch River station located upstream.

TABLE 2

POTLATCH RIVER POLLUTANT LOADINGS*

May 24, 1976

	TOTAL	SOLIDS	TOTAL	NITROGEN	TOTAL	PHOSPHORUS
	Loading lbs/day	% Increase	Loading lbs/day	% Increase	Loading lbs/day	% Increase
BOVILL STP	13.84	.01	0.63	< .01	0.17	1
FILTROL CORP.	10597.64	45	13.43	2	24.59	163
EAST FORK	59238.18	118	468.83	136	33.85	93
CEDAR CREEK	9399.68	8	70.89	10	5.17	8
BIG BEAR CR.	13097.97	12	100.42	11	10.19	11
KENDRICK STP		No Discharge		No Discharge		No Discharge
MIDDLE POTLATCH CR.	17685.14	13	209.09	21	10.79	9
LITTLE POTLATCH CR.	10613.65	8	448.04	46	4.31	4

*NOTE: The % increase is a ratio of the increase in loading in the tributary or effluent to the loading at the Potlatch River station located upstream.

TABLE 3

POTLATCH RIVER TRIBUTARIES

SELECTED WATER QUALITY PARAMETERS

November 4, 1975 & May 24, 1976

		FLOW (cfs)	BOD ₅ mg/l	Suspended Solids mg/l	Fecal Coliform #/100 ml	Total Coliform #/100 ml
EAST FORK	Nov.	34			100	200
	May	157	3	3	14	500
WEST FORK	Nov.	19	3	5	240	8400
	May	34		6	<2	280
CEDAR CREEK	Nov.	12	2	4	100	200
	May	16		3	52	480
BIG BEAR CREEK	Nov.	16	5	4	<20	400
	May	27		3	24	320
LITTLE POTLATCH CR.	Nov.	5	2.5	6	200	4000
	May	10		5	80	840
MIDDLE POTLATCH CR.	Nov.	9	1	8	40	2000
	May	20		7	62	200

TABLE 4

POTLATCH RIVER POINT SOURCE DISCHARGES

SELECTED WATER QUALITY PARAMETERS

November 4, 1975 & May 24, 1976

		FLOW (MGD)	BOD ₅ mg/l	SUSPENDED SOLIDS mg/l	FECAL COLIFORM #/100 ml	TOTAL COLIFORM #/100 ml
BOVILL STP	Nov.		11	14		
	May		45	72	74	3200
DEARY STP	Nov.	.03	13	10	160	4200
	May	.03	19	18	10	400
TROY STP	Nov.	.08	12	9	<10	<20
	May	.08	70	82		
KENDRICK STP	Nov.	.03	13	21	20900	81000
	May		No Discharge			
FILTRON	Nov.	.02		39		9400
	May	1.94	1.5	202	100	3800

TABLE 5

POTLATCH RIVER

SELECTED WATER QUALITY PARAMETERS (*)

Station	Date	Total Colif	Fecal Colif	BOD ₅	SS	D.O.	pH	Temp. °C	Turb FTU	µmhos Sp. Cond.	Alk.
Potlatch River above Bovill, RM 51.7	11-75	5000	40	4	5	10.3	6.7	5.0	3	45	28
	5-76	420	4		8	9.4	6.7	11.2	7.7	34	20
Potlatch River at Bovill, RM 46.1	11-75	5800	180	4	5	9.8	6.7	6.1	5.4	43	24
	5-76	700	10		7	8.8	6.7	14.0	7.5	35	20
Potlatch River at Potlatch Meadows, RM 40.3	11-75	800	120	3	8	11.4	6.9	4.0	8.5	46	28
	5-76	1430	100		21	8.8	6.7	14.0	7.5	31	24
Potlatch River at Boulder Creek, RM 36.6	11-75	10600	100	4	9	10.6	7.0	7.0	9.5	51	32
	5-76	280	8		17	9.6	7.1	13.0	32	38	20
Potlatch River above Pine Creek, RM 19.0	11-75	6000	300	3	6	11.4	7.2	6.0	6.0	50	28
	5-76	320	32		4	9.9	7.3	12.0	14	40	24
Potlatch River above Juliaette, RM 10.6	11-75	1600	60	3	6	8.6	7.4	10.0	7	62	38
	5-76	280	68		7	10.9	7.2	12.5	14	53	32
Potlatch River at Mouth, RM 0.1	11-75	6000	40	2	6	11.3	7.1	6.0	7.3	82	48
	5-76	560	24		9	11.2	7.9	11.0	8.8	63	36

(*) All values are in milligrams per liter unless otherwise indicated.

TABLE 5 (continued)

Station	Date	NH ₃	NO ₂	NO ₃	TKN	O PO ₄	TIP	T-P	Vol Sol.	Vol Susp Sol.	Tot. Sol	Flow cfs	COD	DO % Satur.
Potlatch R. above Bovill, RM 51.7	11-75	0.47	.001	<.01	0.9	.01	0.16	.06	31	16	73	3.9		88
	5-76	0.05	.008	<.01	0.8	.03	0.16	.05	20	< 2	64	27	118	94
Potlatch R. at Bovill, RM 46.1	11-75	0.58	.001	<.01	1.2	.02	0.17	.06	24	17	59	22		86
	5-76	0.03	.013	<.01	1.8	.04	0.11	.04	24	< 2	63	69	3	94
Potlatch R. at Potlatch Mds., RM 40.3	11-75	0.82	.002	<.01	1.0	.01	0.17	.07	16	9	45	24		95
	5-76	0.03	.073	<.01	0.65	.30	0.31	.08	62	4	111	84	3	94
Potlatch R. at Boulder Cr., RM 36.6	11-75	0.46	.001	<.01	1.1	.03	0.21	.07	19	17	63	81		95
	5-76	0.03	.035	<.01	0.43	.19	0.50	.05	51	4	88	250	7	100
Potlatch R. above Pine Cr., RM 19.0	11-75	0.51	.001	<.01	1.5	.05	0.11	.04	5	6	46	100		93
	5-76	0.04	.020	<.01	0.60	0.11	0.19	.07	22	7	82	250	29	95
Potlatch R. above Juliaette, RM 10.6	11-75	0.24	.002	<.01	1.4	.04	0.10	.04	18	1	58	120		78
	5-76	0.06	.018	<.01	0.56	.30	0.23	.08	20	<2	88	280	29	106
Potlatch R. at Mouth, RM 0.1	11-75	0.39	.002	<.01	1.2	.06	0.10	.04	19	5	74	150		93
	5-76	0.04	.009	0.17	0.43	.02	0.14	.05	17	7	88	320	29	105

NOTE: Ammonia as mg/l NH₃, nitrite as mg/l NO₂, nitrate as mg/l NO₃, Total Kjeldahl Nitrogen (TKN) as mg/l N, ortho-phosphate as mg/l PO₄, Total Inorganic Phosphate (TIP) as mg/l PO₄, Total Phosphorus (T-P) as mg/l P.

TABLE 6
 POTLATCH RIVER
 STATIONS AND FLOWS (cfs)

Stream Station #	River Mile	STORET #	Station	11-4-75 Low Flow	5-24-76 High Flow
1	51.7	2020053	Potlatch R. above Bovill (Hwy 3)	3.9	27
2	51.3	2020054	West Fork Potlatch R. near mouth	19	34
3	46.1	2020055	Potlatch R. at Bovill (Hwy 3)	22	69
	46.0		Bovill Lagoon Effluent	0.02	0.02
	44		Filtrol Corp.	0.03	3.00
4	40.3	2020057	Potlatch R. at Potlatch Meadows	24	24
5	40.2	2020061	East Fork Potlatch R. at mouth	34	157
6	36.6	2020056	Potlatch R. at Boulder Cr.	81	250
			Deary Lagoon Effluent	0.05	0.05
7		2020062	Big Bear Cr. below Deary	4.1	17
			Troy STP Effluent	0.12	0.12
8		2020063	Little Bear Cr. below Troy	1.6	25
9	20.7	2020058	Cedar Cr. at mouth	12	16
10	19.0	2020060	Potlatch R. above Pine Cr.	100	250
11	14.2	2020066	Big Bear Cr. at mouth	16	27
	12.5		Kendrick Lagoon Overflow	0.04	none
12	10.6	2020067	Potlatch R. above Juliaetta	120	280
13	10.1	2020064	Middle Potlatch Cr. at mouth	9.2	20
14	5.2	2020065	Little Potlatch Cr. at mouth	5.2	10
15	0.1	2020059	Potlatch R. at mouth	150	320

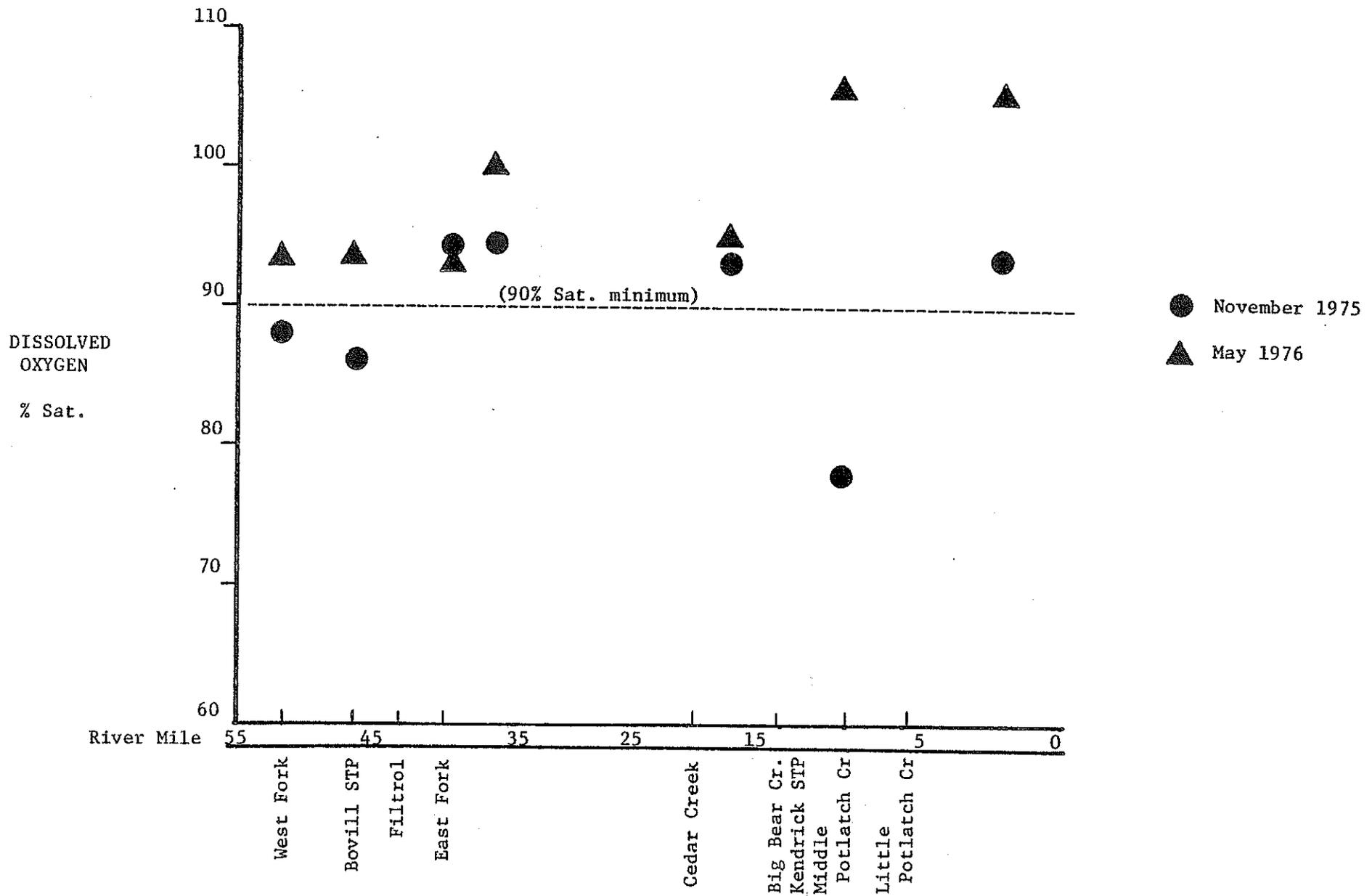


Figure 2: Dissolved oxygen (percent saturation) in the Potlatch River on Nov. 4, 1975, and May 24, 1976. Symbols depict main river sampling stations.

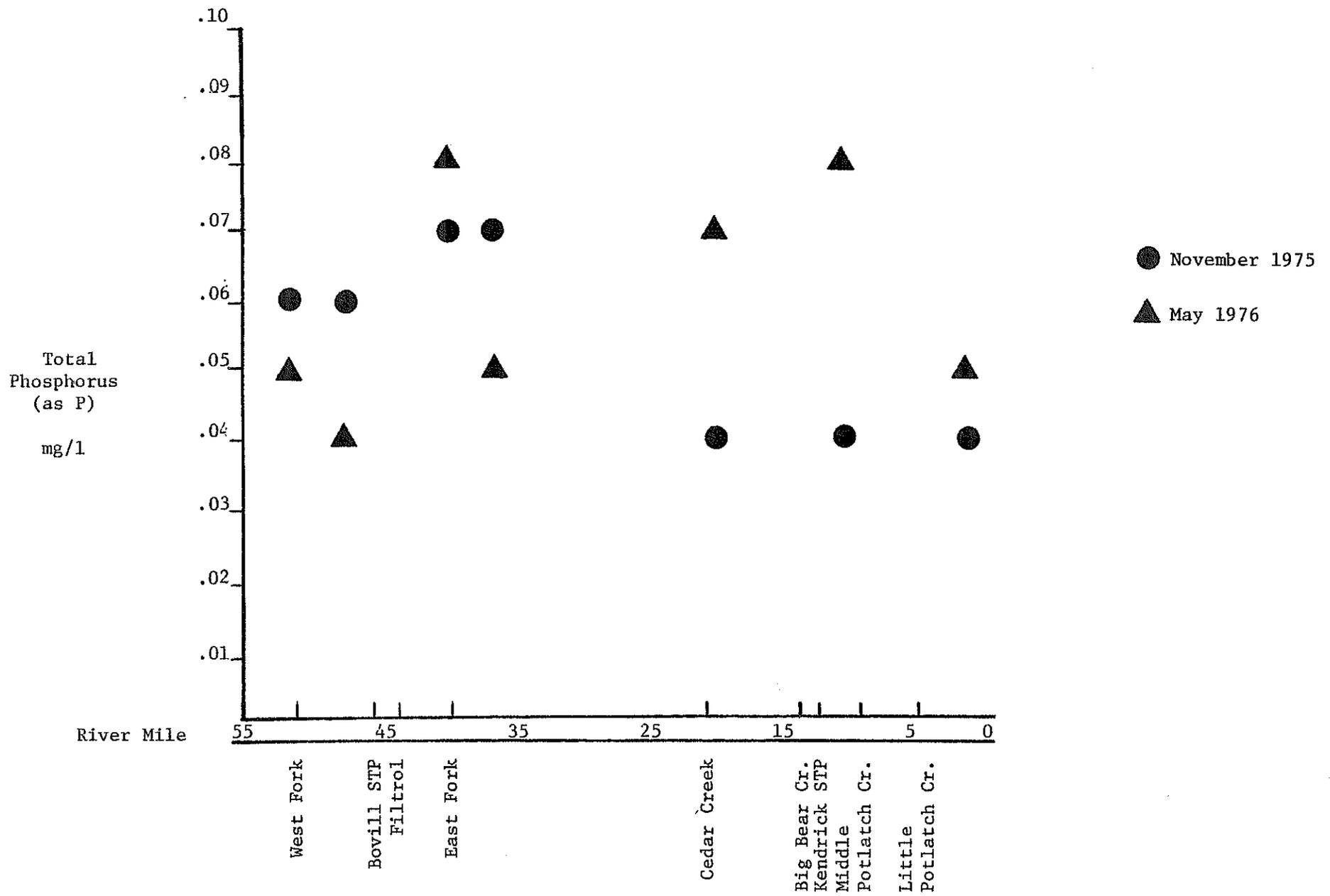


Figure 3: Total phosphorus concentration in the Potlatch River on November 4, 1975 and May 24, 1976. Symbols depict main river sampling stations.

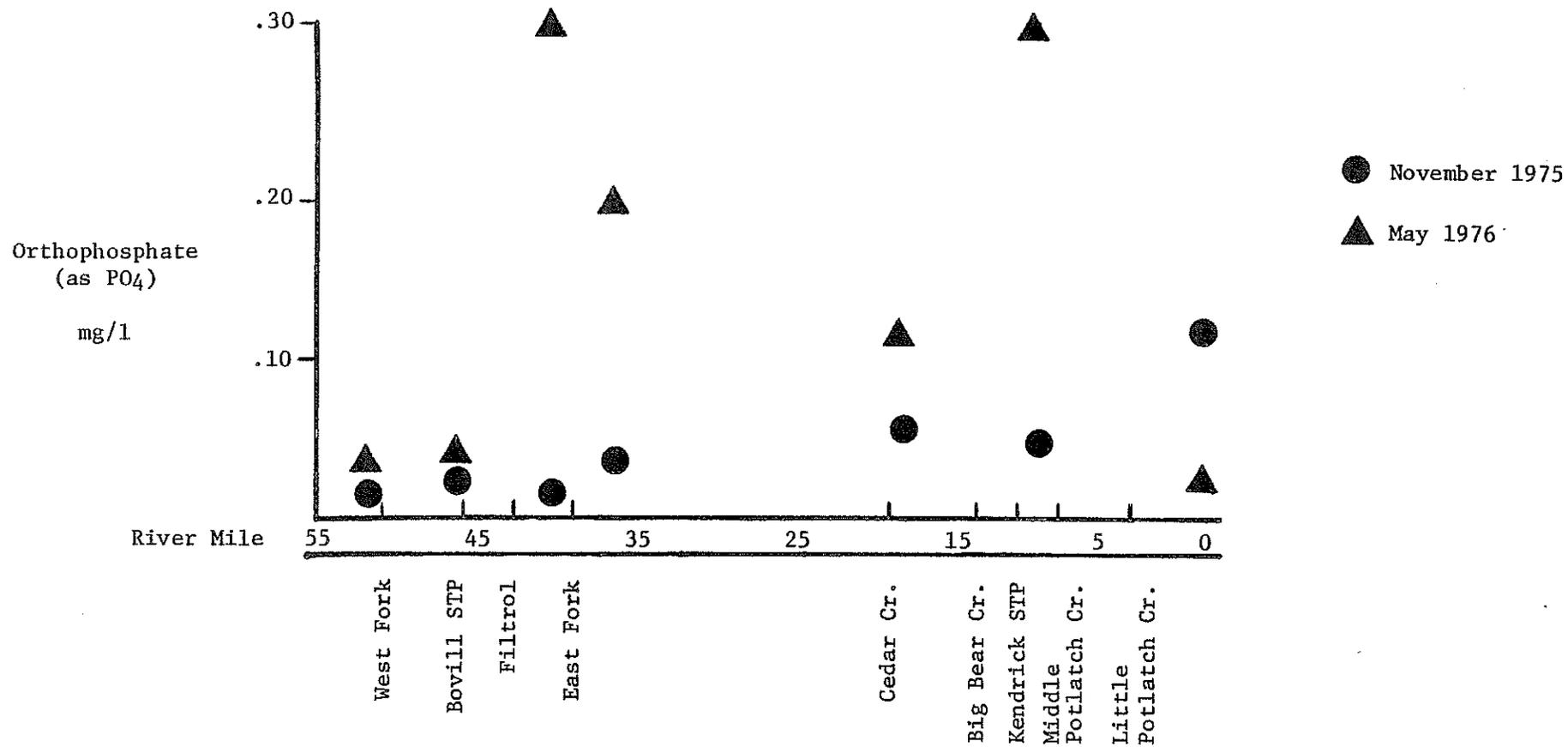


Figure 4: Orthophosphate concentrations in the Potlatch River on November 4, 1975, and May 24, 1976. Symbols depict main river sampling stations.

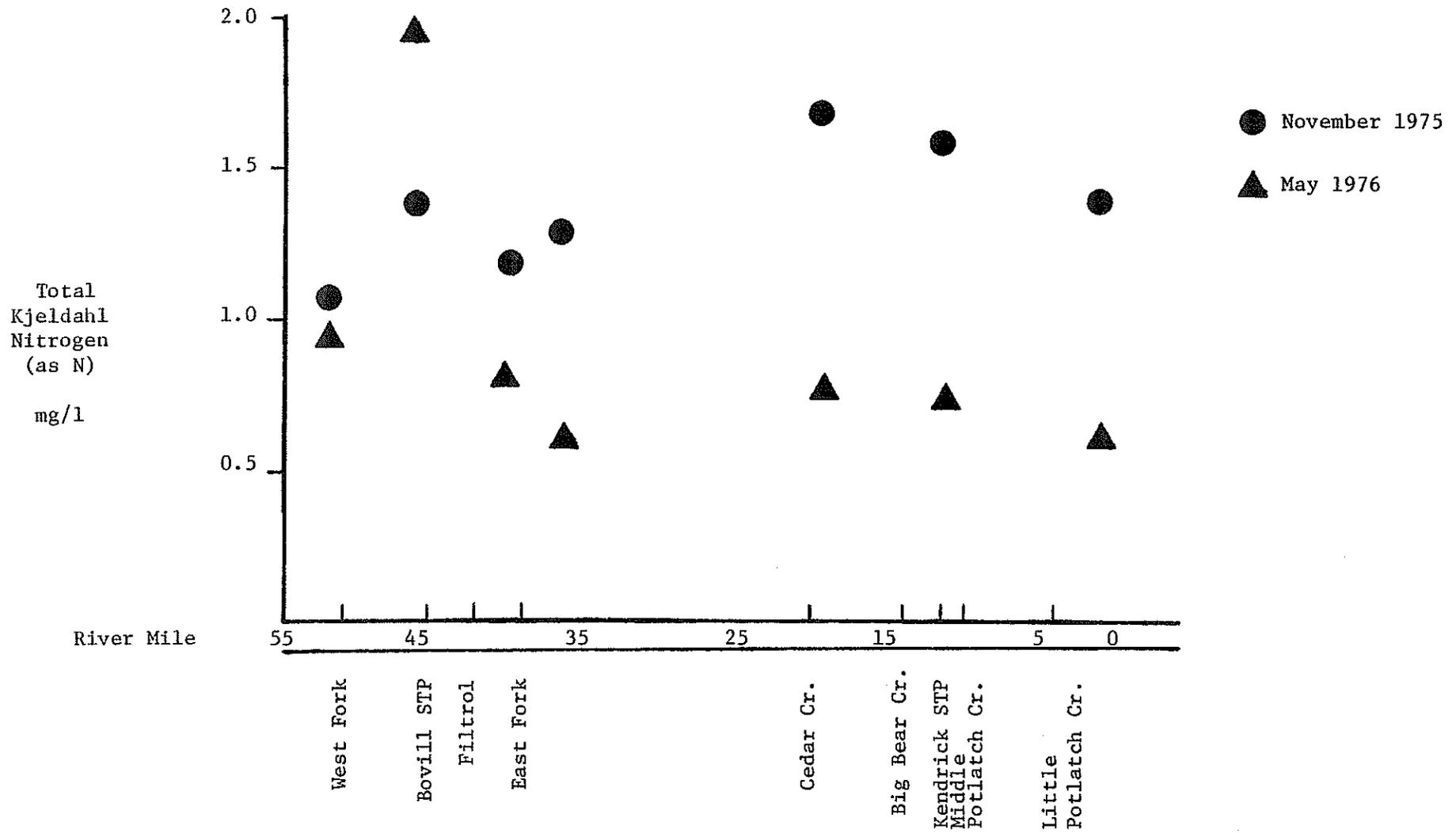


Figure 5: Total Kjeldahl Nitrogen concentrations in the Potlatch River on November 4, 1975, and May 24, 1976. Symbols depict main river sampling stations.

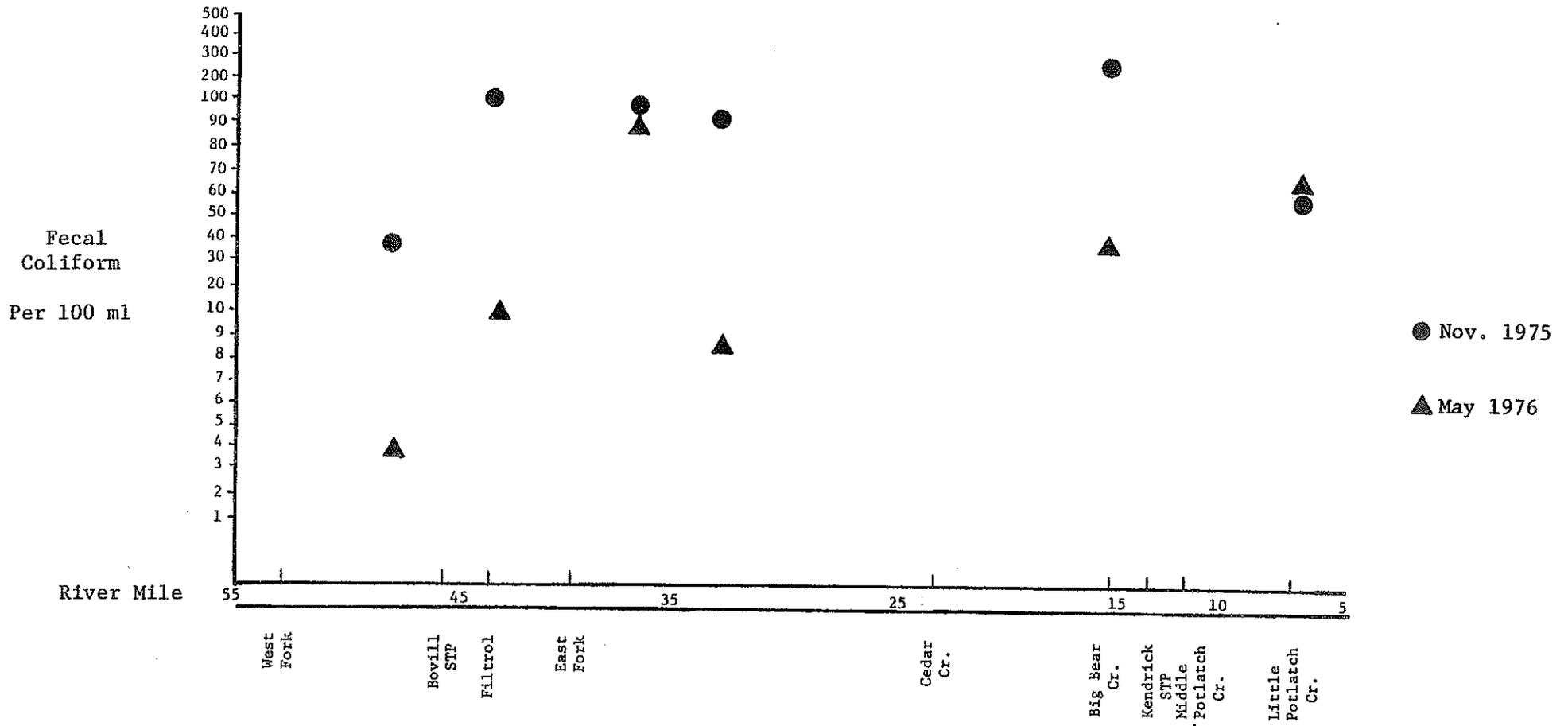


Figure 6: Fecal coliform concentrations in the Potlatch River on November 4, 1975, and May 24, 1976. Symbols depict main river sampling stations.

A P P E N D I X B:

Raw Data Summarized In
STORET Inventory

2020053
 46 54 40.0 116 23 20.0 5
 POTLATCH RIVER ABOVE BOVIL
 16057 IDAHO
 PACIFIC NORTHWEST
 UPPER SNAKE RIVER BASIN
 21IDSURV 760520 04001004
 0000 CLASS 00

/TYP/AMBNT/STREAM

INDEX 1310001 002740 01350 0490
 MILES 0324.30 0139.30 015.10 051.70

PARAMETER	TEMP	CENT	NUMBER	MEAN	VARIANCE	STAN DEV	COEF VAR	STAND ER	MAXIMUM	MINIMUM	BEG DATE	END DATE
00010 WATER			2	8.10000	19.2200	4.38407	.541243	3.10000	11.2000	5.00000	75/11/03	76/05/24
00061 STREAM	FLOW,	INST-CFS	2	15.4500	266.805	16.3342	1.05723	11.5500	27.0000	3.90000	75/11/03	76/05/24
00070 TURB	JKSN	JTU	2	5.35000	11.0450	3.32340	.621197	2.35000	7.70000	3.00000	75/11/03	76/05/24
00095 CONDUCTVY	AT 25C	MICROMHO	2	39.5000	60.5000	7.77817	.196916	5.50000	45.0000	34.0000	75/11/03	76/05/24
00300 DO		MG/L	2	9.85000	.405029	.636419	.064611	.450016	10.3000	9.40000	75/11/03	76/05/24
00400 PH		SU	2	6.70000	.152E-04	.000000	.000000	.000000	6.70000	6.70000	75/11/03	76/05/24
00403 LAB	PH	SU	2	7.20000	.319992	.565678	.078566	.399995	7.60000	6.80000	75/11/03	76/05/24
00410 T ALK	CACO3	MG/L	2	24.0000	32.0000	5.65685	.235702	4.00000	28.0000	20.0000	75/11/03	76/05/24
00500 RESIDUE	TOTAL	MG/L	2	68.5000	40.5000	6.36396	.092904	4.50000	73.0000	64.0000	75/11/03	76/05/24
00505 RESIDUE	TOT VOL	MG/L	2	25.5000	60.5000	7.77017	.305026	5.50000	31.0000	20.0000	75/11/03	76/05/24
00535 RESIDUE	VOL NPLT	MG/L	2	9.00000	98.0000	9.89949	1.09994	7.00000	16.0000	2.00000	75/11/03	76/05/24
00625 TOT KJEL	N	MG/L	2	.850000	.005001	.070718	.083198	.050005	.900000	.800000	75/11/03	76/05/24
00650 T P04	P04	MG/L	2	.160000	.372E-08	.000000	.000000	.000000	.160000	.160000	75/11/03	76/05/24
00660 ORTHOP04	P04	MG/L	2	.020000	.000200	.014142	.707107	.010000	.030000	.010000	75/11/03	76/05/24
00665 PHOS-TOT		MG/L P	2	.055000	.000050	.007071	.128571	.005000	.060000	.050000	75/11/03	76/05/24
00900 TOT HARD	CACO3	MG/L	1	20.0000					20.0000	20.0000	76/05/24	76/05/24
00940 CHLORIDE	CL	MG/L	2	2.00000	.000000	.000000		.000000	2.00000	2.00000	75/11/03	76/05/24
31501 TOT COLI	MPHENDO	/100ML	1	5000.00					5000.00	5000.00	75/11/03	75/11/03
31616 FEC COLI	MPH-FCBR	/100ML	1	40.0000					40.0000	40.0000	75/11/03	75/11/03
71845 AMMONIA	TOT-NH4	MG/L	2	.260000	.088200	.296985	1.14225	.210000	.470000	.050000	75/11/03	76/05/24
71850 NITRATE	TOT-NO3	MG/L	2	.010000	.145E-10	.000000		.000000	.010000	.010000	75/11/03	76/05/24
71855 NITRITE	TOT-NO2	MG/L	2	.004500	.000024	.004950	1.09994	.003500	.008000	.001000	75/11/03	76/05/24

2020054
 46 54 35.0 116 23 45.0 5
 POTLATCH RIVER WEST FK MOUTH
 16057 IDAHO
 PACIFIC NORTHWEST
 UPPER SNAKE RIVER BASIN
 21IDSURV 760520 04001004
 0000 CLASS 00

/TYP/AMBNT/STREAM

INDEX 1310001 002740 01350 0490 0610
 MILES 0324.30 0139.30 015.10 051.30 000.10

PARAMETER	TEMP	CENT	NUMBER	MEAN	VARIANCE	STAN DEV	COEF VAR	STAND ER	MAXIMUM	MINIMUM	BEG DATE	END DATE
00010 WATER			2	9.35000	37.8450	6.15183	.657950	4.35000	13.7000	5.00000	75/11/03	76/05/24
00061 STREAM	FLOW,	INST-CFS	2	26.5000	112.500	10.6066	.400289	7.50000	34.0000	19.0000	75/11/03	76/05/24
00070 TURB	JKSN	JTU	2	6.00000	.500000	.707107	.117851	.500000	6.50000	5.50000	75/11/03	76/05/24
00095 CONDUCTVY	AT 25C	MICROMHO	2	38.2500	.125000	.353553	.009243	.250000	38.5000	38.0000	75/11/03	76/05/24
00300 DO		MG/L	2	9.70000	1.28012	1.13142	.116642	.800038	10.5000	8.90000	75/11/03	76/05/24
00400 PH		SU	2	6.70000	.152E-04	.000000	.000000	.000000	6.70000	6.70000	75/11/03	76/05/24
00403 LAB	PH	SU	2	7.05000	.244995	.494970	.070208	.349997	7.40000	6.70000	75/11/03	76/05/24
00410 T ALK	CACO3	MG/L	2	28.0000	32.0000	5.65685	.202030	4.00000	32.0000	24.0000	75/11/03	76/05/24
00500 RESIDUE	TOTAL	MG/L	2	67.0000	2.00000	1.41421	.021108	1.00000	68.0000	66.0000	75/11/03	76/05/24
00505 RESIDUE	TOT VOL	MG/L	2	29.0000	2.00000	1.41421	.048766	1.00000	30.0000	28.0000	75/11/03	76/05/24
00535 RESIDUE	VOL NPLT	MG/L	2	13.5000	84.5000	9.19239	.680918	6.50000	20.0000	7.00000	75/11/03	76/05/24
00625 TOT KJEL	N	MG/L	2	1.20000	.953E-06	.000000	.000000	.000000	1.20000	1.20000	75/11/03	76/05/24
00650 T P04	P04	MG/L	2	.150000	.001800	.042427	.282844	.030000	.180000	.120000	75/11/03	76/05/24
00660 ORTHOP04	P04	MG/L	2	.030000	.232E-09	.000000	.000000	.000000	.030000	.030000	75/11/03	76/05/24
00665 PHOS-TOT		MG/L P	2	.055000	.000450	.021213	.385695	.015000	.070000	.040000	75/11/03	76/05/24
00900 TOT HARD	CACO3	MG/L	1	16.0000					16.0000	16.0000	76/05/24	76/05/24
00940 CHLORIDE	CL	MG/L	2	2.00000	.000000	.000000		.000000	2.00000	2.00000	75/11/03	76/05/24
31501 TOT COLI	MPHENDO	/100ML	1	8400.00					8400.00	8400.00	75/11/03	75/11/03
31616 FEC COLI	MPH-FCBR	/100ML	1	240.000					240.000	240.000	75/11/03	75/11/03
71845 AMMONIA	TOT-NH4	MG/L	2	.340000	.180000	.424260	1.24783	.300000	.640000	.040000	75/11/03	76/05/24
71850 NITRATE	TOT-NO3	MG/L	2	.010000	.145E-10	.000000		.000000	.010000	.010000	75/11/03	76/05/24
71855 NITRITE	TOT-NO2	MG/L	2	.004500	.000013	.003536	.785675	.002500	.007000	.002000	75/11/03	76/05/24

2020055
 46 51 25.0 116 24 05.0 5
 POTLATCH RIVER AT BOVIL
 16057 IDAHO
 PACIFIC NORTHWEST
 UPPER SNAKE RIVER BASIN
 21IDSURV 760520 04001004
 0000 CLASS 00

/TYPA/AMBNT/STREAM

INDEX 1310001 002740 01350 0490
 MILES 0324.30 0139.30 015.10 046.10

PARAMETER	NUMBER	MEAN	VARIANCE	STAN DEV	COEF VAR	STAND ER	MAXIMUM	MINIMUM	BEG DATE	END DATE
00010 WATER TEMP CENT	2	10.0500	31.2052	5.58616	.555837	3.95001	14.0000	6.10000	75/11/03	76/05/24
00061 STREAM FLOW INST-CFS	2	45.5000	1104.50	33.2340	.730418	23.5000	69.0000	22.0000	75/11/03	76/05/24
00070 TURB JKSN JTU	2	6.45000	2.20500	1.48493	.230221	1.05000	7.50000	5.40000	75/11/03	76/05/24
00095 CONDUCTVY AT 25C MICROMHO	2	39.0000	32.0000	5.65685	.145048	4.00000	43.0000	35.0000	75/11/03	76/05/24
00300 DO NG/L	2	9.30000	.500122	.707193	.076042	.500061	9.80000	8.80000	75/11/03	76/05/24
00400 PH SU	2	6.70000	-.152E-04	.000000	.000000	.000000	6.70000	6.70000	75/11/03	76/05/24
00403 LAB PH SU	2	7.25000	.404999	.636395	.087779	.449999	7.70000	6.80000	75/11/03	76/05/24
00410 T ALK CACO3 NG/L	2	22.0000	8.00000	2.82843	.128565	2.00000	24.0000	20.0000	75/11/03	76/05/24
00500 RESIDUE TOTAL NG/L	2	61.0000	8.00000	2.82843	.046368	2.00000	63.0000	59.0000	75/11/03	76/05/24
00505 RESIDUE TOT VOL NG/L	2	24.0000	.000000	.000000	.000000	.000000	24.0000	24.0000	75/11/03	76/05/24
00535 RESIDUE VOL NPLT NG/L	2	9.50000	112.500	10.6066	1.11648	7.50000	17.0000	2.00000	75/11/03	76/05/24
00625 TOT KJEL N NG/L	2	1.000000	.080000	.282843	.282843	.200000	1.20000	.800000	75/11/03	76/05/24
00650 T P04 P04 NG/L	2	.140000	.001800	.042427	.303047	.030000	.170000	.110000	75/11/03	76/05/24
00660 ORTHOP04 P04 NG/L	2	.030000	.000200	.014142	.471405	.010000	.040000	.020000	75/11/03	76/05/24
00665 PHOS-TOT NG/L P	2	.050000	.000200	.014142	.282845	.010000	.060000	.040000	75/11/03	76/05/24
00900 TOT HARD CACO3 NG/L	1	20.0000					20.0000	20.0000	76/05/24	76/05/24
00940 CHLORIDE CL NG/L	2	2.00000	.000000	.000000	.000000	.000000	2.00000	2.00000	75/11/03	76/05/24
31501 TOT COLI MPINENDO /100ML	1	5800.00					5800.00	5800.00	75/11/03	75/11/03
31616 FEC COLI MPH-FCBR /100ML	1	180.000					180.000	180.000	75/11/03	75/11/03
38260 MBAS NG/L	1	.080000					.080000	.080000	76/05/24	76/05/24
71845 AMMONIA TOT-NH4 NG/L	2	.305000	.151250	.388909	1.27511	.275000	.580000	.030000	75/11/03	76/05/24
71850 NITRATE TOT-NO3 NG/L	2	.010000	-.145E-10	.000000	.000000	.000000	.010000	.010000	75/11/03	76/05/24
71855 NITRITE TOT-NO2 NG/L	2	.007000	.000072	.008485	1.21218	.006000	.013000	.001000	75/11/03	76/05/24

2020056
 46 46 35.0 116 27 25.0 5
 POTLATCH RIVER BOULDER CR BRIDGE
 16057 IDAHO
 PACIFIC NORTHWEST
 UPPER SNAKE RIVER BASIN
 21IDSURV 760520 04001004
 0000 CLASS 00

/TYPA/AMBNT/STREAM

INDEX 1310001 002740 01350 0490
 MILES 0324.30 0139.30 015.10 036.60

PARAMETER	NUMBER	MEAN	VARIANCE	STAN DEV	COEF VAR	STAND ER	MAXIMUM	MINIMUM	BEG DATE	END DATE
00010 WATER TEMP CENT	2	10.0000	18.0000	4.24264	.424264	3.00000	13.0000	7.00000	75/11/03	76/05/24
00061 STREAM FLOW INST-CFS	2	165.500	14280.5	119.501	.722061	84.5000	250.000	81.0000	75/11/03	76/05/24
00070 TURB JKSN JTU	2	20.7500	253.125	15.9099	.766742	11.2500	32.0000	9.50000	75/11/03	76/05/24
00095 CONDUCTVY AT 25C MICROMHO	2	44.5000	84.5000	9.19239	.206570	6.50000	51.0000	38.0000	75/11/03	76/05/24
00300 DO NG/L	2	10.1000	.500046	.707139	.070014	.500023	10.6000	9.60000	75/11/03	76/05/24
00400 PH SU	2	7.05000	.005020	.070853	.010050	.050101	7.10000	7.00000	75/11/03	76/05/24
00403 LAB PH SU	2	7.45000	.245010	.494985	.066441	.350007	7.80000	7.10000	75/11/03	76/05/24
00410 T ALK CACO3 NG/L	2	26.0000	72.0000	8.48528	.326357	6.00000	32.0000	20.0000	75/11/03	76/05/24
00500 RESIDUE TOTAL NG/L	2	75.5000	312.500	17.6777	.234141	12.5000	88.0000	63.0000	75/11/03	76/05/24
00505 RESIDUE TOT VOL NG/L	2	35.0000	512.000	22.6274	.646497	16.0000	51.0000	19.0000	75/11/03	76/05/24
00535 RESIDUE VOL NPLT NG/L	2	10.5000	84.5000	9.19239	.875466	6.50000	17.0000	4.00000	75/11/03	76/05/24
00625 TOT KJEL N NG/L	2	.764999	.224450	.473762	.619297	.335000	1.10000	.430000	75/11/03	76/05/24
00650 T P04 P04 NG/L	2	.355000	.042050	.205061	.577637	.145000	.500000	.210000	75/11/03	76/05/24
00660 ORTHOP04 P04 NG/L	2	.110000	.012800	.113137	1.02852	.080000	.190000	.030000	75/11/03	76/05/24
00665 PHOS-TOT NG/L P	2	.060000	.000200	.014142	.235704	.010000	.070000	.050000	75/11/03	76/05/24
00900 TOT HARD CACO3 NG/L	1	16.0000					16.0000	16.0000	76/05/24	76/05/24
00940 CHLORIDE CL NG/L	2	3.00000	2.00000	1.41421	.471404	1.00000	4.00000	2.00000	75/11/03	76/05/24
31501 TOT COLI MPINENDO /100ML	1	10600.0					10600.0	10600.0	75/11/03	75/11/03
31616 FEC COLI MPH-FCBR /100ML	1	100.000					100.000	100.000	75/11/03	75/11/03
71845 AMMONIA TOT-NH4 NG/L	2	.245000	.092450	.304056	1.24104	.235000	.460000	.030000	75/11/03	76/05/24
71850 NITRATE TOT-NO3 NG/L	2	.010000	-.145E-10	.000000	.000000	.000000	.010000	.010000	75/11/03	76/05/24
71855 NITRITE TOT-NO2 NG/L	2	.018000	.000578	.024042	1.33565	.017000	.035000	.001000	75/11/03	76/05/24

2020057
 46 47 50.0 116 25 45.0 5
 POTLATCH RIVER POTLATCH MEADOWS
 16057 IDAHO
 PACIFIC NORTHWEST
 UPPER SNAKE RIVER BASIN
 21IDSURV 760520 04001004
 0000 CLASS 00

/TYPA/AMBNT/STREAM

INDEX 1310001 002740 01350 0490
 MILES 0324.30 0139.30 015.10 040.30

PARAMETER	NUMBER	MEAN	VARIANCE	STAN DEV	COEF VAR	STAND ER	MAXIMUM	MINIMUM	BEG DATE	END DATE
00010 WATER TEMP CENT	2	9.00000	50.0000	7.07107	.785674	5.00000	14.0000	4.00000	75/11/05	76/05/24
00061 STREAM FLOW INST-CFS	2	54.0000	1800.00	42.4264	.785674	30.0000	84.0000	24.0000	75/11/05	76/05/24
00070 TURB JKSH JTU	2	33.2500	1225.12	35.0018	1.05268	24.7500	50.0000	8.50000	75/11/05	76/05/24
00095 CONDUCTVY AT 25C MICROMHO	2	38.5000	112.500	10.6066	.275496	7.50000	46.0000	31.0000	75/11/05	76/05/24
00300 DO NG/L	2	10.1500	3.12523	1.76783	.174171	1.25005	11.4000	8.90000	75/11/05	76/05/24
00400 PH SU	2	7.00000	.020004	.141436	.020205	.100011	7.10000	6.90000	75/11/05	76/05/24
00403 LAB PH SU	2	7.25000	.604996	.777815	.107285	.549998	7.80000	6.70000	75/11/05	76/05/24
00410 T ALK CACO3 NG/L	2	26.0000	8.00000	2.82843	.108786	2.00000	28.0000	24.0000	75/11/05	76/05/24
00500 RESIDUE TOTAL NG/L	2	78.0000	2178.00	46.6690	.598321	33.0000	111.000	45.0000	75/11/05	76/05/24
00505 RESIDUE TOT VOL NG/L	2	39.0000	1058.00	32.5269	.834023	23.0000	62.0000	16.0000	75/11/05	76/05/24
00535 RESIDUE VOL WPLT NG/L	2	6.50000	12.5000	3.53553	.543928	2.50000	9.00000	4.00000	75/11/05	76/05/24
00625 TOT KJEL N NG/L	2	.825000	.061251	.247489	.299986	.175001	1.00000	.650000	75/11/05	76/05/24
00650 T P04 P04 NG/L	2	.240000	.009800	.098995	.412478	.070000	.310000	.170000	75/11/05	76/05/24
00660 ORTHOP04 P04 NG/L	2	.155000	.042050	.205061	1.32297	.145000	.300000	.010000	75/11/05	76/05/24
00665 PHOS-TOT NG/L P	2	.075000	.000050	.007071	.094282	.005000	.080000	.070000	75/11/05	76/05/24
00900 TOT HARD CACO3 NG/L	1	8.00000					8.00000	8.00000	76/05/24	76/05/24
00940 CHLORIDE CL NG/L	2	2.00000	.000000	.000000		.000000	2.00000	2.00000	75/11/05	76/05/24
31501 TOT COLI MPINENDO /100ML	1	800.000					800.000	800.000	75/11/05	75/11/05
31616 FEC COLI MPN-FCBR /100ML	1	120.000					120.000	120.000	75/11/05	75/11/05
38260 NNAS NG/L	1	.080000					.080000	.080000	76/05/24	76/05/24
71845 AMMONIA TOT-NH4 NG/L	2	.425000	.312050	.558614	1.31439	.395000	.820000	.030000	75/11/05	76/05/24
71850 NITRATE TOT-NO3 NG/L	2	.0100000	.145E-10	.000000		.000000	.010000	.010000	75/11/05	76/05/24
71855 NITRITE TOT-NO2 NG/L	2	.037500	.002520	.050205	1.33879	.035500	.073000	.002000	75/11/05	76/05/24

2020058
 46 39 10.0 116 32 50.0 5
 CEDAR CREEK
 16057 IDAHO
 PACIFIC NORTHWEST
 UPPER SNAKE RIVER BASIN
 21IDSURV 760520 04001004
 0000 CLASS 00

/TYPA/AMBNT/STREAM

INDEX 1310001 002740 01350 0490 0320
 MILES 0324.30 0139.30 015.10 020.70 000.10

PARAMETER	NUMBER	MEAN	VARIANCE	STAN DEV	COEF VAR	STAND ER	MAXIMUM	MINIMUM	BEG DATE	END DATE
00010 WATER TEMP CENT	2	8.39999	11.5202	3.39414	.404065	2.40002	10.8000	6.00000	75/11/05	76/05/25
00061 STREAM FLOW INST-CFS	2	14.0000	8.00000	2.82843	.202030	2.00000	16.0000	12.0000	75/11/05	76/05/25
00070 TURB JKSH JTU	2	7.00000	18.0000	4.24264	.606091	3.00000	10.0000	4.00000	75/11/05	76/05/25
00095 CONDUCTVY AT 25C MICROMHO	2	80.2000	121.680	11.0309	.137542	7.79999	88.0000	72.4000	75/11/05	76/05/25
00300 DO NG/L	2	11.2000	.320099	.565773	.050515	.400062	11.6000	10.8000	75/11/05	76/05/25
00400 PH SU	2	8.10000	.720047	.848556	.104760	.600020	8.70000	7.50000	75/11/05	76/05/25
00403 LAB PH SU	2	7.55000	.245010	.494985	.065561	.350007	7.90000	7.20000	75/11/05	76/05/25
00410 T ALK CACO3 NG/L	2	46.0000	8.00000	2.82843	.061488	2.00000	48.0000	44.0000	75/11/05	76/05/25
00500 RESIDUE TOTAL NG/L	2	85.0000	1152.00	33.9411	.399307	24.0000	109.000	61.0000	75/11/05	76/05/25
00505 RESIDUE TOT VOL NG/L	2	21.5000	180.500	13.4350	.624885	9.50000	31.0000	12.0000	75/11/05	76/05/25
00535 RESIDUE VOL WPLT NG/L	2	4.00000	8.00000	2.82843	.707107	2.00000	6.00000	2.00000	75/11/05	76/05/25
00625 TOT KJEL N NG/L	2	.885000	.026451	.162638	.183772	.115002	1.00000	.770000	75/11/05	76/05/25
00650 T P04 P04 NG/L	2	.175000	.000050	.007071	.040405	.005000	.180000	.170000	75/11/05	76/05/25
00660 ORTHOP04 P04 NG/L	2	.120000	.000200	.014143	.117854	.010000	.130000	.110000	75/11/05	76/05/25
00665 PHOS-TOT NG/L P	2	.065000	.000050	.007072	.108799	.005001	.070000	.060000	75/11/05	76/05/25
00900 TOT HARD CACO3 NG/L	1	40.0000					40.0000	40.0000	76/05/25	76/05/25
00940 CHLORIDE CL NG/L	2	2.00000	.000000	.000000		.000000	2.00000	2.00000	75/11/05	76/05/25
31501 TOT COLI MPINENDO /100ML	1	200.000					200.000	200.000	75/11/05	75/11/05
31616 FEC COLI MPN-FCBR /100ML	1	100.000					100.000	100.000	75/11/05	75/11/05
71845 AMMONIA TOT-NH4 NG/L	2	.185000	.054450	.233345	1.26133	.165000	.350000	.020000	75/11/05	76/05/25
71850 NITRATE TOT-NO3 NG/L	2	.090000	.009800	.098995	1.09994	.070000	.160000	.020000	75/11/05	76/05/25
71855 NITRITE TOT-NO2 NG/L	2	.007500	.000000	.006364	.848529	.004500	.012000	.003000	75/11/05	76/05/25

2020059
 46 28 35.0 116 46 00.0 5
 POTLATCH RIVER AT MOUTH
 16069 IDAHO
 PACIFIC NORTHWEST
 UPPER SNAKE RIVER BASIN
 21IDSURV 760520 04001004
 0000 CLASS 00

/TYPA/AMBNT/STREAM

INDEX 1310001 002740 01350 0490
 MILES 0324.30 0139.30 015.10 000.20

PARAMETER	NUMBER	MEAN	VARIANCE	STAN DEV	COEF VAR	STAND ER	MAXIMUM	MINIMUM	BEG DATE	END DATE
00010 WATER TEMP CENT	2	8.50000	12.5000	3.53553	.415945	2.50000	11.0000	6.00000	75/11/06	76/05/25
00061 STREAM FLOW, INST-CFS	2	235.000	14450.0	120.208	.511524	85.0000	320.000	150.000	75/11/06	76/05/25
00070 TURB JKSN JTU	2	8.05000	1.12511	1.06071	.131765	.750036	8.80000	7.30000	75/11/06	76/05/25
00095 CONDUCTVY AT 25C MICRONHO	2	72.5000	180.5000	13.4350	.185311	9.50000	82.0000	63.0000	75/11/06	76/05/25
00300 DO NG/L	2	11.2500	.005310	.072870	.006477	.051527	11.3000	11.2000	75/11/06	76/05/25
00400 PH SU	2	7.50000	.320007	.565692	.075426	.400005	7.90000	7.10000	75/11/06	76/05/25
00403 LAB PH SU	2	7.90000	.080002	.282846	.035803	.200002	8.10000	7.70000	75/11/06	76/05/25
00410 T ALK CACO3 NG/L	2	42.0000	72.0000	8.48528	.202030	6.00000	48.0000	36.0000	75/11/06	76/05/25
00500 RESIDUE TOTAL NG/L	2	81.0000	98.0000	9.89949	.122216	7.00000	88.0000	74.0000	75/11/06	76/05/25
00505 RESIDUE TOT VOL NG/L	2	18.0000	2.00000	1.41421	.078567	1.00000	19.0000	17.0000	75/11/06	76/05/25
00535 RESIDUE VOL NFLT NG/L	1	5.00000					5.00000	5.00000	75/11/06	75/11/06
00625 TOT KJEL N NG/L	2	.815000	.296450	.544472	.668064	.385000	1.20000	.430000	75/11/06	76/05/25
00650 T P04 P04 NG/L	2	.120000	.000800	.028284	.235704	.020000	.140000	.100000	75/11/06	76/05/25
00660 ORTHOPO4 P04 NG/L	2	.040000	.000800	.028284	.707106	.020000	.060000	.020000	75/11/06	76/05/25
00665 PHOS-TOT NG/L P	2	.045000	.000050	.007071	.157142	.005000	.050000	.040000	75/11/06	76/05/25
00900 TOT HARD CACO3 NG/L	1	28.0000					28.0000	28.0000	76/05/25	76/05/25
00940 CHLORIDE CL NG/L	2	2.00000	.000000	.000000		.000000	2.00000	2.00000	75/11/06	76/05/25
31501 TOT COLI HFIMENDO /100ML	1	6000.00					6000.00	6000.00	75/11/06	75/11/06
31616 FEC COLI HFM-FCBR /100ML	1	40.0000					40.0000	40.0000	75/11/06	75/11/06
71845 AMMONIA TOT-NH4 NG/L	2	.215000	.061250	.247487	1.15110	.175000	.390000	.040000	75/11/06	76/05/25
71850 NITRATE TOT-NO3 NG/L	2	.090000	.012800	.113137	1.25708	.080000	.170000	.010000	75/11/06	76/05/25
71855 NITRITE TOT-NO2 NG/L	2	.005500	.000025	.004950	.899956	.003500	.009000	.002000	75/11/06	76/05/25

2020060
 46 38 20.0 116 34 05.0 5
 POTLATCH RIVER ABOVE PINE CR.
 16057 IDAHO
 PACIFIC NORTHWEST
 UPPER SNAKE RIVER BASIN
 21IDSURV 760520 04001004
 0000 CLASS 00

/TYPA/AMBNT/STREAM

INDEX 1310001 002740 01350 0490
 MILES 0324.30 0139.30 015.10 019.00

PARAMETER	NUMBER	MEAN	VARIANCE	STAN DEV	COEF VAR	STAND ER	MAXIMUM	MINIMUM	BEG DATE	END DATE
00010 WATER TEMP CENT	2	9.00000	18.0000	4.24264	.471404	3.00000	12.0000	6.00000	75/11/05	76/05/25
00061 STREAM FLOW, INST-CFS	2	175.000	11250.0	106.066	.606092	75.0000	250.000	100.000	75/11/05	76/05/25
00070 TURB JKSN JTU	2	10.0000	32.0000	5.65685	.565685	4.00000	14.0000	6.00000	75/11/05	76/05/25
00095 CONDUCTVY AT 25C MICRONHO	2	45.0000	50.0000	7.07107	.157135	5.00000	50.0000	40.0000	75/11/05	76/05/25
00300 DO NG/L	2	10.6500	1.12523	1.06077	.099603	.750077	11.4000	9.90000	75/11/05	76/05/25
00400 PH SU	2	7.25000	.005005	.070745	.009758	.050024	7.30000	7.20000	75/11/05	76/05/25
00403 LAB PH SU	2	7.50000	.180008	.424273	.056570	.300007	7.80000	7.20000	75/11/05	76/05/25
00410 T ALK CACO3 NG/L	2	26.0000	8.00000	2.82843	.108786	2.00000	28.0000	24.0000	75/11/05	76/05/25
00500 RESIDUE TOTAL NG/L	2	64.0000	648.000	25.4558	.397747	18.0000	82.0000	46.0000	75/11/05	76/05/25
00505 RESIDUE TOT VOL NG/L	2	13.5000	144.500	12.0208	.890431	8.50000	22.0000	5.00000	75/11/05	76/05/25
00535 RESIDUE VOL NFLT NG/L	2	6.50000	.500000	.707107	.108786	.500000	7.00000	6.00000	75/11/05	76/05/25
00625 TOT KJEL N NG/L	2	1.05000	.405004	.636399	.606095	.450002	1.50000	.600000	75/11/05	76/05/25
00650 T P04 P04 NG/L	2	.150000	.003200	.056569	.377124	.040000	.190000	.110000	75/11/05	76/05/25
00660 ORTHOPO4 P04 NG/L	2	.080000	.001800	.042427	.530332	.030000	.110000	.050000	75/11/05	76/05/25
00665 PHOS-TOT NG/L P	2	.055000	.000450	.021213	.385695	.015000	.070000	.040000	75/11/05	76/05/25
00900 TOT HARD CACO3 NG/L	1	20.0000					20.0000	20.0000	76/05/25	76/05/25
00940 CHLORIDE CL NG/L	2	2.95000	1.80501	1.34351	.455426	.950002	3.90000	2.00000	75/11/05	76/05/25
31501 TOT COLI HFIMENDO /100ML	1	6000.00					6000.00	6000.00	75/11/05	75/11/05
31616 FEC COLI HFM-FCBR /100ML	1	300.000					300.000	300.000	75/11/05	75/11/05
71845 AMMONIA TOT-NH4 NG/L	2	.275000	.110450	.332340	1.20851	.235000	.510000	.040000	75/11/05	76/05/25
71850 NITRATE TOT-NO3 NG/L	2	.010000	.145E-10	.000000		.000000	.010000	.010000	75/11/05	76/05/25
71855 NITRITE TOT-NO2 NG/L	2	.010500	.000180	.013435	1.27952	.009500	.020000	.001000	75/11/05	76/05/25

2020061
 46 47 50.0 116 25 45.0 5
 POTLATCH RIVER EAST FK MOUTH
 16057 IDAHO
 PACIFIC NORTHWEST
 UPPER SNAKE RIVER BASIN
 21IDSURV 760520 04001004
 0000 CLASS 00

/TYPE/AMOUNT/STREAM

INDEX 1310001 002740 01350 0490 0460
 MILES 0324.30 0139.30 015.10 040.20 000.10

PARAMETER	NUMBER	MEAN	VARIANCE	STAN DEV	COEF VAR	STAND ER	MAXIMUM	MINIMUM	BEG DATE	END DATE
00010 WATER TEMP CENT	2	7.95000	31.2050	5.58614	.702660	3.95000	11.9000	4.00000	75/11/05	76/05/24
00061 STREAM FLOW, INST-CFS	2	95.5000	7564.50	86.9741	.910724	61.5000	157.000	34.0000	75/11/05	76/05/24
00070 TURB JKSJ JTU	2	5.75000	.125000	.353553	.061488	.250000	6.00000	5.50000	75/11/05	76/05/24
00095 CONDUCTVY AT 25C MICROMHO	2	44.4500	111.005	10.5359	.237028	7.45000	51.9000	37.0000	75/11/05	76/05/24
00300 DO MG/L	2	10.6000	1.28003	1.13138	.106734	.800009	11.4000	9.80000	75/11/05	76/05/24
00400 PH SU	2	7.10000	.000000	.000000	.000000	.000000	7.10000	7.10000	75/11/05	76/05/24
00403 LAB PH SU	2	7.20000	.499985	.707096	.098208	.499992	7.70000	6.70000	75/11/05	76/05/24
00410 T ALK CACO3 MG/L	2	30.0000	72.0000	8.48528	.282843	6.00000	36.0000	24.0000	75/11/05	76/05/24
00500 RESIDUE TOTAL MG/L	2	60.5000	180.500	13.4350	.222067	9.50000	70.0000	51.0000	75/11/05	76/05/24
00505 RESIDUE TOT VOL MG/L	2	38.5000	1104.50	33.2340	.863221	23.5000	62.0000	15.0000	75/11/05	76/05/24
00535 RESIDUE VOL NPLT MG/L	2	5.50000	24.5000	4.94975	.899954	3.50000	9.00000	2.00000	75/11/05	76/05/24
00625 TOT KJEL N MG/L	2	1.01000	.480203	.692967	.686106	.490001	1.50000	.520000	75/11/05	76/05/24
00650 T P04 P04 MG/L	2	.135000	.000450	.021214	.157137	.015000	.150000	.120000	75/11/05	76/05/24
00660 ORTHOP04 P04 MG/L	2	.045000	.002450	.049497	1.09994	.035000	.080000	.010000	75/11/05	76/05/24
00665 PHOS-TOT MG/L P	2	.050000	.000200	.014142	.282845	.010000	.060000	.040000	75/11/05	76/05/24
00900 TOT HARD CACO3 MG/L	1	24.0000					24.0000	24.0000	76/05/24	76/05/24
00940 CHLORIDE CL MG/L	2	2.00000	.000000	.000000	.000000	.000000	2.00000	2.00000	75/11/05	76/05/24
31501 TOT COLI NFINENDO /100ML	1	200.000					200.000	200.000	75/11/05	75/11/05
31616 FEC COLI NFM-PCBR /100ML	1	100.000					100.000	100.000	75/11/05	75/11/05
71845 AMMONIA TOT-NH4 MG/L	2	.250000	.105800	.325269	1.30108	.230000	.480000	.020000	75/11/05	76/05/24
71050 NITRATE TOT-NO3 MG/L	2	.010000	.145E-10	.000000	.000000	.000000	.010000	.010000	75/11/05	76/05/24
71855 NITRITE TOT-NO2 MG/L	2	.002500	.000004	.002121	.848527	.001500	.004000	.001000	75/11/05	76/05/24

2020062
 46 47 05.0 116 36 05.0 5
 POTLATCH RIVER BIG BEAR BL DEARY
 16057 IDAHO
 PACIFIC NORTHWEST
 UPPER SNAKE RIVER BASIN
 21IDSURV 760520 04001004
 0000 CLASS 00

/TYPE/AMOUNT/STREAM

INDEX 1310001 002740 01350 0490 0230
 MILES 0324.30 0139.30 015.10 014.20 016.40

PARAMETER	NUMBER	MEAN	VARIANCE	STAN DEV	COEF VAR	STAND ER	MAXIMUM	MINIMUM	BEG DATE	END DATE
00010 WATER TEMP CENT	2	10.3000	24.5001	4.94976	.480560	3.50001	13.8000	6.80000	75/11/04	76/05/24
00061 STREAM FLOW, INST-CFS	2	10.5500	83.2050	9.12168	.864634	6.45000	17.0000	4.10000	75/11/04	76/05/24
00070 TURB JKSJ JTU	2	11.5000	4.50000	2.12132	.184463	1.50000	13.0000	10.0000	75/11/04	76/05/24
00095 CONDUCTVY AT 25C MICROMHO	2	58.1000	52.0234	7.21273	.124143	5.10017	63.2000	53.0000	75/11/04	76/05/24
00300 DO MG/L	2	10.0000	41.4050	6.43467	1.15940	4.55000	10.1000	10.0000	75/11/04	76/05/24
00400 PH SU	2	7.15000	.044998	.212128	.029668	.149997	7.30000	7.00000	75/11/04	76/05/24
00403 LAB PH SU	2	7.70000	.020004	.141436	.018368	.100011	7.80000	7.60000	75/11/04	76/05/24
00410 T ALK CACO3 MG/L	2	32.0000	.000000	.000000	.000000	.000000	32.0000	32.0000	75/11/04	76/05/24
00500 RESIDUE TOTAL MG/L	2	83.0000	18.0000	4.24264	.051116	3.00000	86.0000	80.0000	75/11/04	76/05/24
00505 RESIDUE TOT VOL MG/L	2	36.0000	162.000	12.7279	.353553	9.00000	45.0000	27.0000	75/11/04	76/05/24
00535 RESIDUE VOL NPLT MG/L	2	7.00000	50.0000	7.07107	1.01015	5.00000	12.0000	2.00000	75/11/04	76/05/24
00625 TOT KJEL N MG/L	2	.860000	.231199	.480832	.559107	.340000	1.20000	.520000	75/11/04	76/05/24
00650 T P04 P04 MG/L	2	.240000	.003200	.056568	.235702	.040000	.280000	.200000	75/11/04	76/05/24
00660 ORTHOP04 P04 MG/L	2	.055000	.002450	.049497	.899954	.035000	.090000	.020000	75/11/04	76/05/24
00665 PHOS-TOT MG/L P	2	.090000	.372E-08	.000000	.000000	.000000	.090000	.090000	75/11/04	76/05/24
00900 TOT HARD CACO3 MG/L	1	20.0000					20.0000	20.0000	76/05/24	76/05/24
00940 CHLORIDE CL MG/L	2	2.00000	.000000	.000000	.000000	.000000	2.00000	2.00000	75/11/04	76/05/24
31501 TOT COLI NFINENDO /100ML	1	2000.00					2000.00	2000.00	75/11/04	75/11/04
31616 FEC COLI NFM-PCBR /100ML	1	2.00000					2.00000	2.00000	75/11/04	75/11/04
71845 AMMONIA TOT-NH4 MG/L	2	.405000	.296450	.544472	1.34438	.385000	.790000	.020000	75/11/04	76/05/24
71050 NITRATE TOT-NO3 MG/L	2	.030000	.345E-10	.000000	.000000	.000000	.030000	.010000	75/11/04	76/05/24
71855 NITRITE TOT-NO2 MG/L	2	.008000	.000072	.003405	1.06066	.006000	.014000	.002000	75/11/04	76/05/24

2020063
 46 43 50.0 116 45 25.0 5
 POTLATCH RIVER LITTLE BR DL TROY
 16057 IDAHO
 PACIFIC NORTHWEST
 UPPER SNAKE RIVER BASIN
 21IDSURV 760520 04001004
 0000 CLASS 00

/TYP/AMNNT/STREAM

INDEX	1310001	002740	01350	0490	0230	0010	0050												
MILES	0324.30	0139.30	015.10	014.20	001.20	004.50	05.60	PARAMETER	NUMBER	MEAN	VARIANCE	STAN DEV	COEF VAR	STAND ER	MAXIMUM	MINIMUM	BEG DATE	END DATE	
00010	WATER	TEMP	CENT					2	8.75000	28.1250	5.30330	.606091	3.75000	12.5000	5.00000	75/11/04	76/05/24		
00061	STREAM	FLOW,	INST-CFS					2	13.3000	273.780	16.5463	1.24408	11.7000	25.0000	1.60000	75/11/04	76/05/24		
00070	TURB	JKSH	JTU					2	11.0000	2.00000	1.41421	.128565	1.00000	12.0000	10.0000	75/11/04	76/05/24		
00095	CNDUCTVY	AT 25C	MICRONH0					2	86.0000	3042.00	55.1543	.641329	39.0000	125.000	47.0000	75/11/04	76/05/24		
00300	DO		MG/L					2	10.2500	.845291	.919397	.089697	.650112	10.9000	9.60000	75/11/04	76/05/24		
00400	PH		SU					2	7.20000	.079987	.282819	.039280	.199983	7.40000	7.00000	75/11/04	76/05/24		
00403	LAB	PH	SU					2	7.20000	.319992	.565678	.078566	.399995	7.60000	6.80000	75/11/04	76/05/24		
00410	T ALK	CACO3	MG/L					2	42.0000	200.000	14.1421	.336717	10.0000	52.0000	32.0000	75/11/04	76/05/24		
00500	RESIDUE	TOTAL	MG/L					2	92.5000	144.500	12.0208	.129955	8.50000	101.000	84.0000	75/11/04	76/05/24		
00505	RESIDUE	TOT VOL	MG/L					2	31.5000	.500000	.707107	.022448	.500000	32.0000	31.0000	75/11/04	76/05/24		
00535	RESIDUE	VOL NFLT	MG/L					2	10.5000	84.5000	9.19239	.875466	6.50000	17.0000	4.00000	75/11/04	76/05/24		
00625	TOT KJEL	N	MG/L					2	1.38500	.756453	.869743	.627974	.615002	2.00000	.770000	75/11/04	76/05/24		
00650	T P04	P04	MG/L					2	1.01500	.594050	.770747	.759357	.545000	1.56000	.470000	75/11/04	76/05/24		
00660	ORTHOPO4	P04	MG/L					2	1.24000	1.25865	1.01504	.890001	2.13000	.350000	75/11/04	76/05/24			
00665	PHOS-TOT		MG/L P					2	.380000	.080000	.282843	.744323	.200000	.580000	.180000	75/11/04	76/05/24		
00900	TOT HARD	CACO3	MG/L					1	8.00000					8.00000	8.00000	76/05/24	76/05/24		
00940	CHLORIDE	CL	MG/L					2	3.95000	7.60500	2.75772	.698156	1.95000	5.90000	2.00000	75/11/04	76/05/24		
31501	TOT COLI	MPIMENDO	/100ML					1	5200.00					5200.00	5200.00	75/11/04	75/11/04		
31616	FEC COLI	MPM-FCBR	/100ML					1	2.00000					2.00000	2.00000	75/11/04	75/11/04		
71845	AMMONIA	TOT-NH4	MG/L					2	.995000	1.11005	1.05359	1.05888	.745000	1.74000	.250000	75/11/04	76/05/24		
71850	NITRATE	TOT-NO3	MG/L					2	.325000	.186050	.431335	1.32718	.305000	.630000	.020000	75/11/04	76/05/24		
71855	NITRITE	TOT-NO2	MG/L					2	.040500	.000545	.023335	.576162	.016500	.057000	.024000	75/11/04	76/05/24		

2020064
 46 34 40.0 116 42 05.0 5
 POTLATCH RIVER MID POTLAT CR.
 16057 IDAHO
 PACIFIC NORTHWEST
 UPPER SNAKE RIVER BASIN
 21IDSURV 760520 04001004
 0000 CLASS 00

/TYP/AMNNT/STREAM

INDEX	1310001	002740	01350	0490	0490														
MILES	0324.30	0139.30	015.10	010.10	000.10	PARAMETER	NUMBER	MEAN	VARIANCE	STAN DEV	COEF VAR	STAND ER	MAXIMUM	MINIMUM	BEG DATE	END DATE			
00010	WATER	TEMP	CENT				2	9.35000	5.44505	2.33346	.249568	1.65001	11.0000	7.70000	75/11/06	76/05/25			
00061	STREAM	FLOW,	INST-CFS				2	14.6000	58.3201	7.63676	.523066	5.40000	20.0000	9.20000	75/11/06	76/05/25			
00070	TURB	JKSH	JTU				2	8.50000	2.00000	1.41421	.166378	1.00000	9.50000	7.50000	75/11/06	76/05/25			
00095	CNDUCTVY	AT 25C	MICRONH0				2	169.000	50.0000	7.07107	.041841	5.00000	174.000	164.000	75/11/06	76/05/25			
00300	DO		MG/L				2	12.2500	.245361	.495340	.040436	.500258	12.6000	11.9000	75/11/06	76/05/25			
00400	PH		SU				2	8.55000	.005142	.071709	.008387	.050706	8.60000	8.50000	75/11/06	76/05/25			
00403	LAB	PH	SU				2	8.20000	.080093	.283008	.034513	.200117	8.40000	8.00000	75/11/06	76/05/25			
00410	T ALK	CACO3	MG/L				2	98.0000	648.000	25.4558	.259753	18.0000	116.000	80.0000	75/11/06	76/05/25			
00500	RESIDUE	TOTAL	MG/L				2	156.500	112.500	10.6066	.067774	7.50000	164.000	149.000	75/11/06	76/05/25			
00505	RESIDUE	TOT VOL	MG/L				2	36.0000	18.0000	4.24264	.117851	3.00000	39.0000	33.0000	75/11/06	76/05/25			
00535	RESIDUE	VOL NFLT	MG/L				2	5.50000	24.5000	4.94975	.899954	3.50000	9.00000	2.00000	75/11/06	76/05/25			
00625	TOT KJEL	N	MG/L				2	.925000	.151250	.388909	.420442	.275000	1.29000	.650000	75/11/06	76/05/25			
00650	T P04	P04	MG/L				2	.380000	.028800	.169706	.446594	.120000	.500000	.260000	75/11/06	76/05/25			
00660	ORTHOPO4	P04	MG/L				2	.255000	.001250	.035356	.138650	.025000	.280000	.230000	75/11/06	76/05/25			
00665	PHOS-TOT		MG/L P				2	.130000	.001800	.042427	.326358	.030000	.160000	.100000	75/11/06	76/05/25			
00900	TOT HARD	CACO3	MG/L				1	104.000					104.000	104.000	76/05/25	76/05/25			
00940	CHLORIDE	CL	MG/L				2	3.00000	2.00000	1.41421	.471404	1.00000	4.00000	2.00000	75/11/06	76/05/25			
31501	TOT COLI	MPIMENDO	/100ML				1	2000.00					2000.00	2000.00	75/11/06	75/11/06			
31616	FEC COLI	MPM-FCBR	/100ML				1	40.0000					40.0000	40.0000	75/11/06	75/11/06			
71845	AMMONIA	TOT-NH4	MG/L				2	.255000	.101250	.318198	1.24783	.225000	.480000	.030000	75/11/06	76/05/25			
71850	NITRATE	TOT-NO3	MG/L				2	1.38000	.064801	.254561	.184464	.180002	1.56000	1.20000	75/11/06	76/05/25			
71855	NITRITE	TOT-NO2	MG/L				2	.031500	.001513	.038891	1.23463	.027500	.059000	.004000	75/11/06	76/05/25			

2020065
 46 31 25.0 116 44 00.0 5
 POTLATCH RIVER LIT POTL CR HWY 3
 16069 IDAHO
 PACIFIC NORTHWEST
 UPPER SNAKE RIVER BASIN
 21IDSURV 760520 04001004
 0000 CLASS 00

/TYP/ANNT/STREAM

INDEX	1310001	002740	01350	0490	0070														
MILES	0324.30	0139.30	015.10	005.20	000.10	PARAMETER	NUMBER	MEAN	VARIANCE	STAN DEV	COEF VAR	STAND ER	MAXIMUM	MINIMUM	BEG DATE	END DATE			
00010	WATER	TEMP	CENT				2	8.14999	17.4052	4.17195	.511896	2.95002	11.1000	5.20000	75/11/06	76/05/25			
00061	STREAM	FLOW,	INST-CFS				2	7.60000	11.5200	3.39412	.446594	2.40000	10.0000	5.20000	75/11/06	76/05/25			
00070	TURB	JKSN	JTU				2	12.6000	109.520	10.4652	.830570	7.40000	20.0000	5.20000	75/11/06	76/05/25			
00095	CONDUCTVY	AT 25C	MICROMHO				2	225.000	1458.00	38.1838	.169706	27.0000	252.000	198.000	75/11/06	76/05/25			
00300	DO		MG/L				2	12.2000	.720215	.848655	.069562	.600090	12.8000	11.6000	75/11/06	76/05/25			
00400	PH		SU				2	8.60000	.020050	.141598	.016465	.100125	8.70000	8.50000	75/11/06	76/05/25			
00403	LAB	PH	SU				2	8.30000	.180130	.424417	.051135	.300108	8.60000	8.00000	75/11/06	76/05/25			
00410	T ALK	CACO3	MG/L				2	122.000	200.000	14.1421	.115919	10.0000	132.000	112.000	75/11/06	76/05/25			
00500	RESIDUE	TOTAL	MG/L				2	194.000	18.0000	4.24264	.021869	3.00000	197.000	191.000	75/11/06	76/05/25			
00505	RESIDUE	TOT VOL	MG/L				2	46.0000	18.0000	4.24264	.092231	3.00000	49.0000	43.0000	75/11/06	76/05/25			
00535	RESIDUE	VOL WPLT	MG/L				2	4.00000	.000000	.000000	.000000	.000000	4.00000	4.00000	75/11/06	76/05/25			
00625	TOT KJEL	N	MG/L				2	.900000	.180000	.424264	.471405	.300000	1.20000	.600000	75/11/06	76/05/25			
00650	T P04	P04	MG/L				2	.255000	.006050	.077782	.305026	.055000	.310000	.200000	75/11/06	76/05/25			
00660	ORTHOPO4	P04	MG/L				2	.110000	.000000	.028284	.257131	.020000	.130000	.090000	75/11/06	76/05/25			
00665	PHOS-TOT		MG/L P				2	.090000	.000200	.014142	.157135	.010000	.100000	.080000	75/11/06	76/05/25			
00900	TOT HARD	CACO3	MG/L				1	120.000					120.000	120.000	76/05/25	76/05/25			
00940	CHLORIDE	CL	MG/L				2	2.00000	.000000	.000000	.000000	.000000	2.00000	2.00000	75/11/06	76/05/25			
31501	TOT COLI	MPINENDO	/100ML				1	400.000					400.000	400.000	75/11/06	75/11/06			
31616	FEC COLI	MPH-PCBR	/100ML				1	200.000					200.000	200.000	75/11/06	75/11/06			
71845	AMMONIA	TOT-NH4	MG/L				2	.145000	.022050	.148492	1.02408	.105000	.250000	.040000	75/11/06	76/05/25			
71850	NITRATE	TOT-NO3	MG/L				2	4.60000	16.1312	4.01637	.873124	2.84000	7.44000	1.76000	75/11/06	76/05/25			
71855	NITRITE	TOT-NO2	MG/L				2	.054500	.005304	.072832	1.33637	.051500	.106000	.003000	75/11/06	76/05/25			

2020066
 46 37 10.0 116 38 45.0 5
 POTLATCH RIVER BIG BEAR AT MOUTH
 16057 IDAHO
 PACIFIC NORTHWEST
 UPPER SNAKE RIVER BASIN
 21IDSURV 760520 04001004
 0000 CLASS 00

/TYP/ANNT/STREAM

INDEX	1310001	002740	01350	0490	0230														
MILES	0324.30	0139.30	015.10	014.20	000.20	PARAMETER	NUMBER	MEAN	VARIANCE	STAN DEV	COEF VAR	STAND ER	MAXIMUM	MINIMUM	BEG DATE	END DATE			
00010	WATER	TEMP	CENT				2	10.2500	.125000	.353553	.034493	.250000	10.5000	10.0000	75/11/05	76/05/25			
00061	STREAM	FLOW,	INST-CFS				2	21.5000	60.5000	7.77817	.361775	5.50000	27.0000	16.0000	75/11/05	76/05/25			
00070	TURB	JKSN	JTU				2	7.50000	12.5000	3.53553	.471404	2.50000	10.0000	5.00000	75/11/05	76/05/25			
00095	CONDUCTVY	AT 25C	MICROMHO				2	58.6000	752.723	27.4358	.468188	19.4000	78.0000	39.2000	75/11/05	76/05/25			
00300	DO		MG/L				2	11.0500	.045181	.212559	.019236	.150302	11.2000	10.9000	75/11/05	76/05/25			
00400	PH		SU				2	8.00000	.500000	.707107	.088388	.500000	8.50000	7.50000	75/11/05	76/05/25			
00403	LAB	PH	SU				2	7.75000	.404999	.636395	.082115	.449999	8.20000	7.30000	75/11/05	76/05/25			
00410	T ALK	CACO3	MG/L				2	46.0000	8.00000	2.82843	.061488	2.00000	48.0000	44.0000	75/11/05	76/05/25			
00500	RESIDUE	TOTAL	MG/L				2	78.0000	288.000	16.9706	.217571	12.0000	66.0000	66.0000	75/11/05	76/05/25			
00505	RESIDUE	TOT VOL	MG/L				2	18.0000	50.0000	7.07107	.392837	5.00000	23.0000	13.0000	75/11/05	76/05/25			
00535	RESIDUE	VOL WPLT	MG/L				2	5.00000	8.00000	2.82843	.565685	2.00000	7.00000	3.00000	75/11/05	76/05/25			
00625	TOT KJEL	N	MG/L				2	1.22500	.661250	.813173	.663815	.575000	1.80000	.650000	75/11/05	76/05/25			
00650	T P04	P04	MG/L				2	.190000	.000000	.000000	.000000	.000000	.190000	.190000	75/11/05	76/05/25			
00660	ORTHOPO4	P04	MG/L				2	.150000	.005000	.070711	.471404	.050000	.200000	.100000	75/11/05	76/05/25			
00665	PHOS-TOT		MG/L P				2	.075000	.000050	.007071	.094282	.005000	.080000	.070000	75/11/05	76/05/25			
00900	TOT HARD	CACO3	MG/L				1	32.0000					32.0000	32.0000	76/05/25	76/05/25			
00940	CHLORIDE	CL	MG/L				2	2.95000	1.80501	1.34351	.455426	.950002	3.90000	2.00000	75/11/05	76/05/25			
31501	TOT COLI	MPINENDO	/100ML				1	400.000					400.000	400.000	75/11/05	75/11/05			
31616	FEC COLI	MPH-PCBR	/100ML				1	20.0000					20.0000	20.0000	75/11/05	75/11/05			
71845	AMMONIA	TOT-NH4	MG/L				2	.125000	.022050	.148492	1.08794	.105000	.230000	.020000	75/11/05	76/05/25			
71850	NITRATE	TOT-NO3	MG/L				2	.010000	.1458-10	.000000	.000000	.000000	.010000	.010000	75/11/05	76/05/25			
71855	NITRITE	TOT-NO2	MG/L				2	.006000	.000032	.005657	.942810	.004000	.010000	.002000	75/11/05	76/05/25			

2020067
 46 35 05.0 116 42 05.0 5
 POTLATCH RIVER POTL AB JULIAETTA
 16057 IDAHO
 PACIFIC NORTHWEST
 UPPER SNAKE RIVER BASIN
 21IDSURV 760520 04001004
 0000 CLASS 00

/TYP/AMNT/STREAM

INDEX 1310001 002740 01350 0490
 MILES 0324.30 0139.30 015.10 010.60

PARAMETER	NUMBER	MEAN	VARIANCE	STAN DEV	COEF VAR	STAND ER	MAXIMUM	MINIMUM	BEG DATE	END DATE
00010 WATER TEMP CENT	2	11.2500	3.12500	1.76777	.157135	1.25000	12.5000	10.0000	75/11/05	76/05/25
00061 STREAM FLOW, INST-CFS	2	200.000	12800.0	113.137	.565685	80.0000	280.000	120.000	75/11/05	76/05/25
00070 TURB JKSM JTU	2	10.5000	24.5000	4.94975	.471404	3.50000	14.0000	7.00000	75/11/05	76/05/25
00095 CONDUCTVY AT 25C MICRONHO	2	57.5000	40.5000	6.36396	.110678	4.50000	62.0000	53.0000	75/11/05	76/05/25
00300 DO NG/L	2	9.74999	2.64526	1.62643	.166813	1.15006	10.9000	8.60000	75/11/05	76/05/25
00400 PH SU	2	7.30000	.020004	.141436	.019375	.100011	7.40000	7.20000	75/11/05	76/05/25
00403 LAB PH SU	2	7.45000	.245010	.494985	.066441	.350007	7.80000	7.10000	75/11/05	76/05/25
00410 T ALK CACO3 NG/L	2	35.0000	18.0000	4.24264	.121218	3.00000	38.0000	32.0000	75/11/05	76/05/25
00500 RESIDUE TOTAL NG/L	2	73.0000	450.000	21.2132	.290592	15.0000	88.0000	58.0000	75/11/05	76/05/25
00505 RESIDUE TOT VOL NG/L	2	19.0000	2.00000	1.41421	.074432	1.00000	20.0000	18.0000	75/11/05	76/05/25
00535 RESIDUE VOL NPLT NG/L	2	1.50000	.500000	.707107	.471404	.500000	2.00000	1.00000	75/11/05	76/05/25
00625 TOT KJEL N NG/L	2	.980000	.352800	.593970	.606092	.420000	1.40000	.560000	75/11/05	76/05/25
00650 T P04 P04 NG/L	2	.165000	.008450	.091924	.557114	.065000	.230000	.100000	75/11/05	76/05/25
00660 ORTHOPO4 P04 NG/L	2	.170000	.033800	.183848	1.08146	.130000	.300000	.040000	75/11/05	76/05/25
00665 PHOS-TOT NG/L P	2	.060000	.000800	.028284	.471405	.020000	.080000	.040000	75/11/05	76/05/25
00900 TOT HARD CACO3 NG/L	1	20.0000					20.0000	20.0000	76/05/25	76/05/25
00940 CHLORIDE CL NG/L	2	2.00000	.000000	.000000		.000000	2.00000	2.00000	75/11/05	76/05/25
31501 TOT COLI MPINENDO /100ML	1	1600.00					1600.00	1600.00	75/11/05	75/11/05
31616 FEC COLI MPN-FCBR /100ML	1	60.0000					60.0000	60.0000	75/11/05	75/11/05
71845 AMMONIA TOT-NH4 NG/L	2	.150000	.016200	.127279	.848529	.090000	.240000	.060000	75/11/05	76/05/25
71850 NITRATE TOT-NO3 NG/L	2	.010000	.145E-10	.000000		.000000	.010000	.010000	75/11/05	76/05/25
71855 NITRITE TOT-NO2 NG/L	2	.010000	.000128	.011314	1.13137	.008000	.018000	.002000	75/11/05	76/05/25