

FOR ACTION/INFORMATION 5-21-75 JGB

## INTERNAL DISTRIBUTION

## EXTERNAL DISTRIBUTION

✓ LOCAL PDR Athens, Al  
✓ TIC (ABERNATHY) (1)(2)(10) - NATIONAL LABS  
1 - NSIC (BUCHANAN) ✓ - W. PENNINGTON, Rm E-201 GT  
1 - ASLB 1 - CONSULTANTS  
1 - Newton Anderson NEWMARK/BLUME/AGBABIAN  
- ACRS ~~HEAVEN~~ SENT  
to a/c of art.

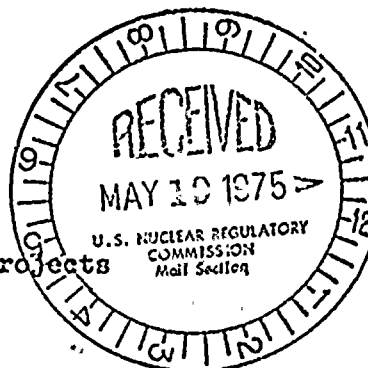
1 - PDR-SAN/LA/NY  
1 - BROOKHAVEN NAT LAB  
1 - G. ULRIKSON, ORNL  
1 - AGMED (RUTH GUSSMAN)  
Rm B-127 GT  
1 - J. D. RUNKLES, Rm E-201  
GT



50-258

50-2610

TENNESSEE VALLEY AUTHORITY  
CHATTANOOGA, TENNESSEE  
37401



Mr. Daniel R. Muller  
Assistant Director for Environmental Projects  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555

Dear Mr. Muller:

The purpose of this letter is to file the monthly fish impingement report for April 1975 for the Browns Ferry Nuclear Plant units 1 and 2 (Facility Operating Licenses DPR-33 and DPR-52) as required by the environmental technical specifications. The weekly counts were conducted and the appropriate weighting factors applied for April 1975. The data sheets with calculated fish impingement estimates are enclosed.

As required by the Browns Ferry Nuclear Plant Environmental Technical Specifications, the appropriate weighting factors were applied for April 1975. The scheduled bimonthly weighting factor evaluation was postponed until May 1 and 2, 1975, as a result of the present plant operational status. This interim time was used to assess probable pump activities for the months of May and June so an effective weighting factor evaluation can be conducted.

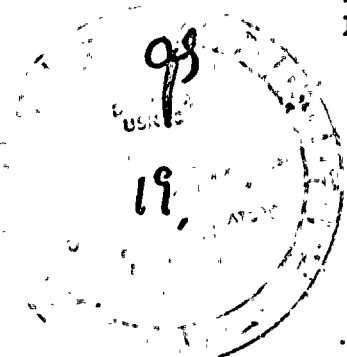
Very truly yours,

J. E. Gilleland  
Assistant Manager of Power

Enclosure  
CC (Enclosure):

Mr. Gerald R. Hooper  
District Fisheries Section  
Alabama Game and Fish Commission  
Department of Conservation and  
Natural Resources  
P.O. Box 366  
Decatur, Alabama 35601

Mr. Sam L. Spencer, Chief  
Fisheries Section  
Alabama Game and Fish Commission  
Department of Conservation and  
Natural Resources  
624 North Union Street  
Montgomery, Alabama 36104



50-2610



est Period From: . Time <u>9:00 A. M.</u> Date <u>4/1/75</u>		To Time <u>9:00 A. M.</u> Date <u>4/2/75</u>		Test Screen <u>10A</u>					
A		B		C		D		E	
<u>Species</u>	<u>Number Counted on Test Screen</u>	<u>Current Factor for Test Screen</u>	<u>Factor if One or More Pumps Out for 24 Hrs.</u>	<u>Factor for Partial Pump Operation During 24 Hr. Pd.</u>	<u>Estimate of Fish Impinged During 24 Hr. Pd.</u>				
Shad and Herring	<u>1,559</u>	<u>8.79</u>	<u>.58</u>		<u>7,948</u>				
Catfish	<u>9</u>	<u>8.79</u>	<u>.58</u>		<u>46</u>				
Bass	<u>0</u>	<u>8.79</u>	<u>.58</u>		<u>0</u>				
Largemouth	<u>0</u>	<u>8.79</u>	<u>.58</u>		<u>0</u>				
Smallmouth	<u>0</u>	<u>8.79</u>	<u>.58</u>		<u>0</u>				
Spotted	<u>0</u>	<u>8.79</u>	<u>.58</u>		<u>0</u>				
Crappie	<u>1</u>	<u>8.79</u>	<u>.58</u>		<u>5</u>				
Sunfish	<u>23</u>	<u>8.79</u>	<u>.58</u>		<u>117</u>				
Drum	<u>252</u>	<u>8.79</u>	<u>.58</u>		<u>1,285</u>				
Other	<u>40</u>	<u>8.79</u>	<u>.58</u>		<u>204</u>				
Total	<u>1,884</u>				<u>9,605</u>				

B Factors Screen				Pump Activity During Test Period			
	1AA 6.81		2AA 14.60	1A			
	1AB 7.63		2AB 17.14	1B			
	1BA 8.79		2BA 20.15	1C	OFF 24 hours		
	1BB 9.06		2BB 17.34	2A	OFF 24 hours		
	1CA 10.28		2CA 19.43	2B	OFF 24 hours		
	1CB 11.58		2CB 34.77	2C			
C Factors - Pumps out for 24 Hours							
Pump	1A = 0.72		2A = 0.87				
	1B = 0.78		2B = 0.89				
	1C = 0.82		2C = 0.92				
D Factors - Pumps out for X Hours							
Pump	1A = 0.28 x $\frac{x}{24}$		2A = 0.13 x $\frac{x}{24}$				
	1B = 0.22 x $\frac{x}{24}$		2B = 0.11 x $\frac{x}{24}$				
	1C = 0.18 x $\frac{x}{24}$		2C = 0.08 x $\frac{x}{24}$				
				To compute:			
				1. All pumps for 24 hours = A x B = E			
				2. One pump out for 24 hours = A x B x C = E			
				3. One pump out for X hours = A x B - (D x A x B)			
				= E			



Period From: Time <u>9 a.m.</u>		Date <u>4/3/75</u>	To Time <u>9 a.m.</u>	Date <u>4/4/75</u>	
Species	A Number Counted on Test Screen	B Current Factor for Test Screen	C Factor if One or More Pumps Out for 24 Hrs.	D Factor for Partial Pump Operation During 24 Hr. Pd.	E Estimate of Fish Impinged During 24 Hr. Pd.
Shad and Herring	<u>1,748</u>	<u>8.79</u>	<u>.53</u>		<u>8,912</u>
Catfish	<u>13</u>	<u>8.79</u>	<u>.53</u>		<u>66</u>
Crass					
Largemouth	<u>3</u>	<u>8.79</u>	<u>.58</u>		<u>15</u>
Smallmouth	<u>0</u>	<u>8.79</u>	<u>.58</u>		<u>0</u>
Spotted	<u>0</u>	<u>8.79</u>	<u>.58</u>		<u>0</u>
Crappie	<u>1</u>	<u>8.79</u>	<u>.58</u>		<u>5</u>
Unfish	<u>59</u>	<u>8.79</u>	<u>.58</u>		<u>301</u>
Trum	<u>277</u>	<u>8.79</u>	<u>.58</u>		<u>1,412</u>
Other	<u>43</u>	<u>8.79</u>	<u>.58</u>		<u>219</u>
Total	<u>2,144</u>				<u>10,930</u>

Factors Screen	1AA	6.81	2AA	14.60
	1AB	7.63	2AB	17.14
	1BA	8.79	2BA	20.15
	1BB	9.06	2BB	17.34
	1CA	10.28	2CA	19.43
	1CB	11.58	2CB	34.77

Factors - Pumps out for 24 Hours	Pump	1A = 0.72	2A = 0.87
		1B = 0.78	2B = 0.89
		1C = 0.82	2C = 0.92

Factors - Pumps out for X Hours	Pump	1A = 0.28 x $\frac{x}{24}$	2A = 0.13 x $\frac{x}{24}$
		1B = 0.22 x $\frac{x}{24}$	2B = 0.11 x $\frac{x}{24}$
		1C = 0.18 x $\frac{x}{24}$	2C = 0.08 x $\frac{x}{24}$

#### Pump Activity During Test Period

1A	
1B	
1C	Off 24 hours
2A	Off 24 hours
2B	Off 24 hours
2C	

- To compute:
1. All pumps for 24 hours =  $A \times B = E$
  2. One pump out for 24 hours =  $A \times B \times C = E$
  3. One pump out for X hours =  $A \times B - (D \times A \times B) = E$





Test Period From: Time 9 a.m. Date 4/6/75 To Time 9 a.m. Date 4/7/75 Test Screen 1BA

	A	B	C	D	E
Species	Number Counted on Test Screen	Current Factor for Test Screen	Factor if One or More Pumps Out for 24 Hrs.	Factor for Partial Pump Operation During 24 Hr. Pd.	Estimate of Fish Impinged During 24 Hr. Pd.
Shad and Herring	2,086	8.79	.61		11,185
Catfish	15	8.79	.61		80
Bass					
Largemouth	0	8.79	.61		0
Smallmouth	0	8.79	.61		0
Spotted	0	8.79	.61		0
Crappie	0	8.79	.61		0
Sunfish	15	8.79	.61		80
Drum	340	8.79	.61		1,823
Other	24	8.79	.61		129
Total	2,480				13,297

B Factors Screen

1AA 6.81	2AA 14.60
1AB 7.63	2AB 17.14
1BA 8.79	2BA 20.15
1BB 9.06	2BB 17.34
1CA 10.28	2CA 19.43
1CB 11.58	2CB 34.77

C Factors - Pumps out for 24 Hours

Pump	1A = 0.72	2A = 0.87
	1B = 0.78	2B = 0.89
	1C = 0.82	2C = 0.92

D Factors - Pumps out for X Hours

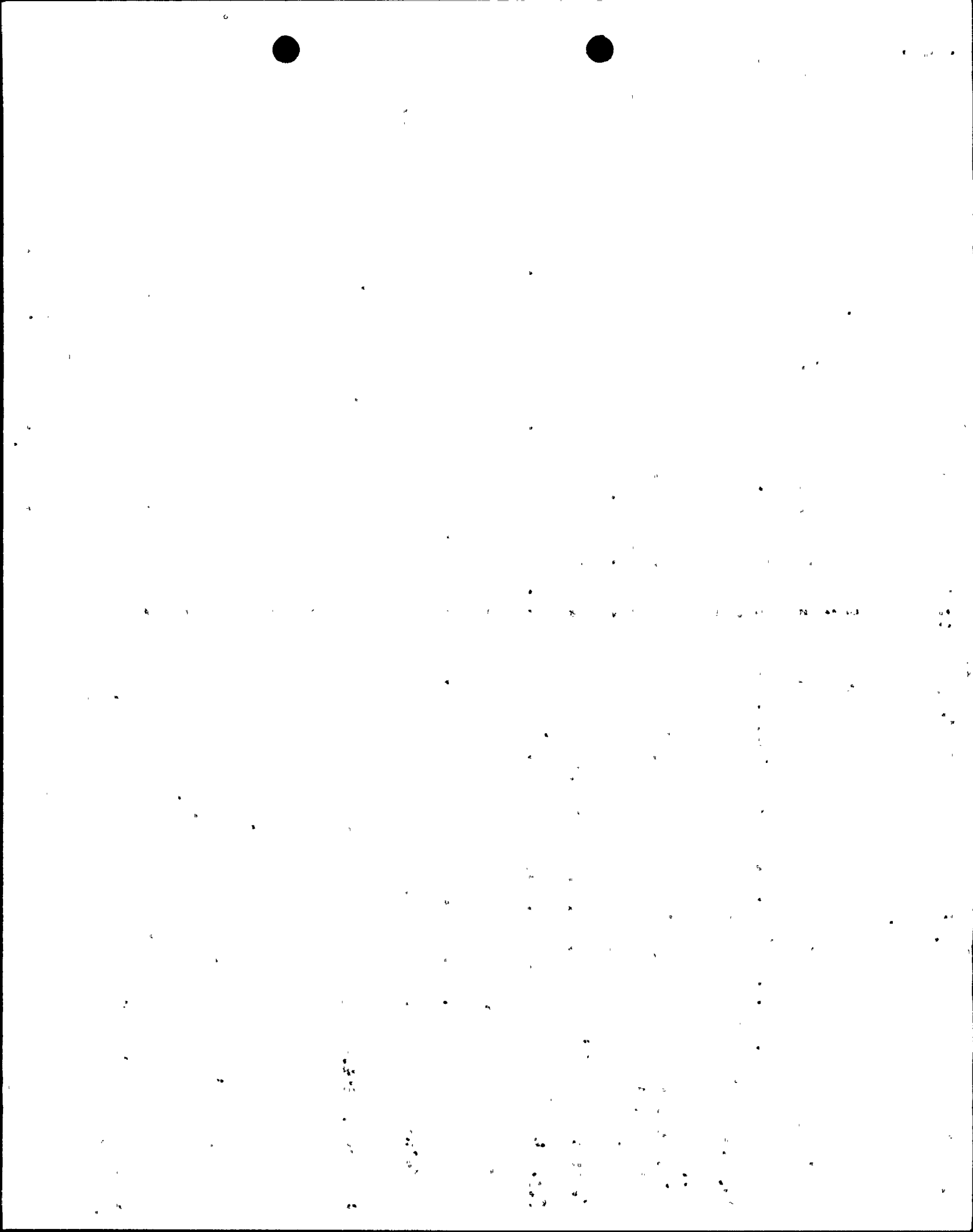
Pump	1A = 0.28 x $\frac{x}{24}$	2A = 0.13 x $\frac{x}{24}$
	1B = 0.22 x $\frac{x}{24}$	2B = 0.11 x $\frac{x}{24}$
	1C = 0.18 x $\frac{x}{24}$	2C = 0.08 x $\frac{x}{24}$

Pump Activity During Test Period

1A	
1B	
1C	Off 24 hrs.
2A	Off 24 hrs.
2B	
2C	Off 24 hrs.

To compute:

1. All pumps for 24 hours = A x B = E
2. One pump out for 24 hours = A x B x C = E
3. One pump out for X hours = A x B - (D x A x B) = E



Test Period From: Time 9:00 a.m. Date 4/8/75 To Time 9:00 a.m. Date 4/9/75 Test Screen 1 BA

	A	B	C	D	E
Species	Number Counted on Test Screen	Current Factor for Test Screen	Factor if One or More Pumps Out for 24 Hrs.	Factor for Partial Pump Operation During 24 Hr. Pd.	Estimate of Fish Impinged During 24 Hr. Pd.
Shad and Herring	1,591	8.79	.61		8,531
Catfish	12	8.79	.61		64
Bass	0	8.79	.61		0
Largemouth	0	8.79	.61		0
Smallmouth	0	8.79	.61		0
Spotted	0	8.79	.61		0
Crappie	5	8.79	.61		27
Sunfish	5	8.79	.61		27
Drum	168	8.79	.61		901
Other	19	8.79	.61		102
Total	1,800				9,652

B Factors Screen				Pump Activity During Test Period	
1AA	6.81	2AA	14.60	1A	
1AB	7.63	2AB	17.14	1B	
1BA	8.79	2BA	20.15	1C	Off 24 hrs.
1BB	9.06	2BB	17.34	2A	Off 24 hrs.
1CA	10.28	2CA	19.43	2B	
1CB	11.58	2CB	34.77	2C	Off 24 hrs.
C Factors - Pumps out for 24 Hours				To compute:	
Pump	1A = 0.72	2A = 0.87		1.	All pumps for 24 hours = A x B = E
	1B = 0.78	2B = 0.89		2.	One pump out for 24 hours = A x B x C = E
	1C = 0.82	2C = 0.92		3.	One pump out for X hours = A x B - (D x A x B)
D Factors - Pumps out for X Hours					
Pump	1A = 0.28 x $\frac{x}{24}$	2A = 0.13 x $\frac{x}{24}$			
	1B = 0.22 x $\frac{x}{24}$	2B = 0.11 x $\frac{x}{24}$			
	1C = 0.18 x $\frac{x}{24}$	2C = 0.08 x $\frac{x}{24}$			



Test Period From: Time 9:00 a.m. Date 4/10/75 To Time 9:00 a.m. Date 4/11/75 Test Screen 1BA

	A	B	C	D	E
Species	Number Counted on Test Screen	Current Factor for Test Screen	Factor if One or More Pumps Out for 24 Hrs.	Factor for Partial Pump Operation During 24 Hr. Pd.	Estimate of Fish Impinged During 24 Hr. Pd.
- Shad and Herring	1,112	8.79	.61		5,962
Catfish	7	8.79	.61		38
Bass					
Largemouth	0	8.79	.61		0
Smallmouth	0	8.79	.61		0
Spotted	0	8.79	.61		0
Crappie	1	8.79	.61		5
Sunfish	11	8.79	.61		59
Drum	90	8.79	.61		483
Other	18	8.79	.61		97
Total	1,239				6,644

B Factors Screen

1AA	6.81	2AA	14.60
1AB	7.63	2AB	17.14
1BA	8.79	2BA	20.15
1BB	9.06	2BB	17.34
1CA	10.28	2CA	19.43
1CB	11.58	2CB	34.77

C Factors - Pumps out for 24 Hours

Pump	1A = 0.72	2A = 0.87
	1B = 0.78	2B = 0.89
	1C = 0.82	2C = 0.92

D Factors - Pumps out for X Hours

Pump	1A = 0.28 x $\frac{x}{24}$	2A = 0.13 x $\frac{x}{24}$
	1B = 0.22 x $\frac{x}{24}$	2B = 0.11 x $\frac{x}{24}$
	1C = 0.18 x $\frac{x}{24}$	2C = 0.08 x $\frac{x}{24}$

Pump Activity During Test Period

1A \_\_\_\_\_

1B \_\_\_\_\_

1C Off 24 hrs. \_\_\_\_\_

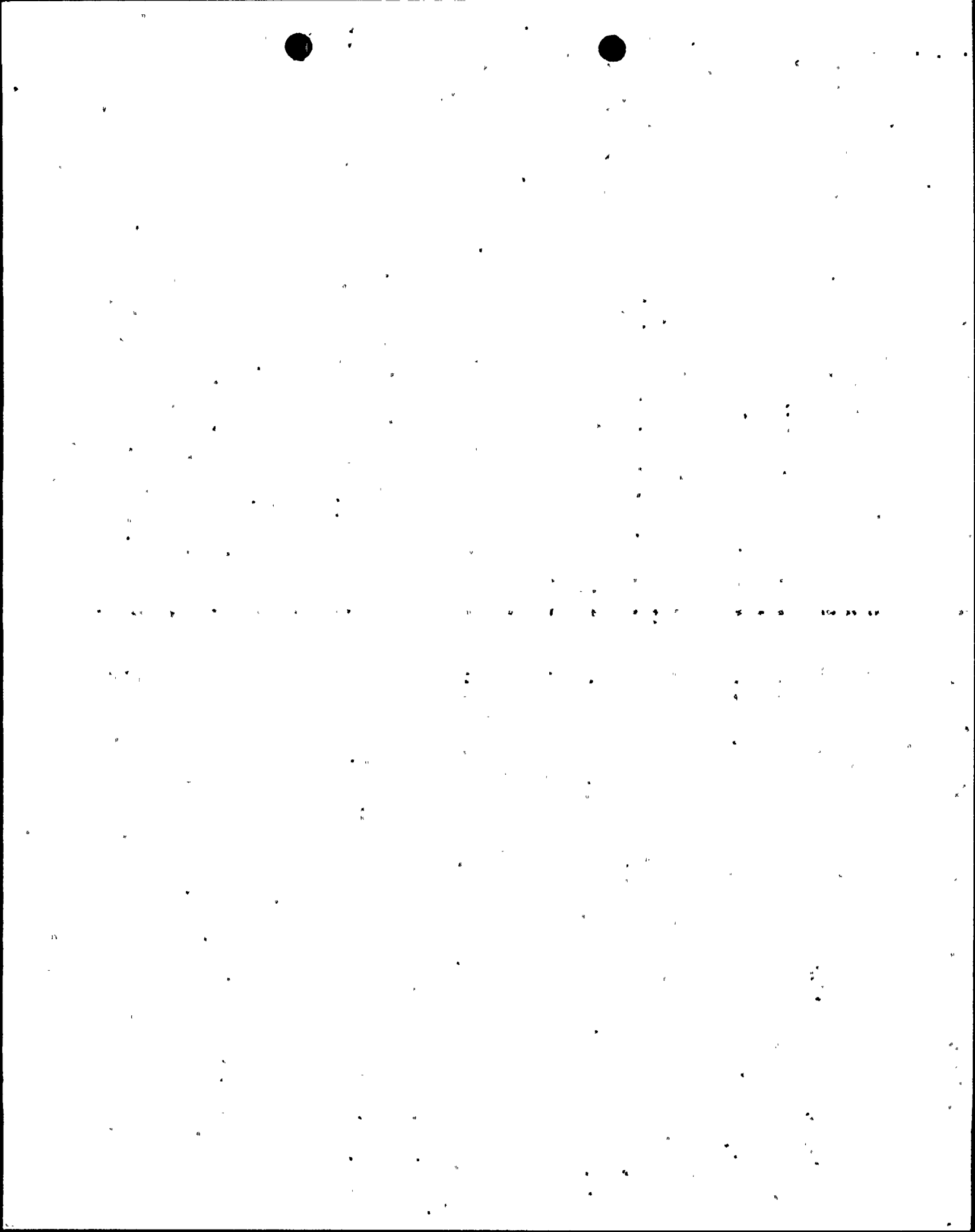
2A Off 24 hrs. \_\_\_\_\_

2B \_\_\_\_\_

2C Off 24 hrs. \_\_\_\_\_

To compute:

1. All pumps for 24 hours =  $A \times B = E$
2. One pump out for 24 hours =  $A \times B \times C = E$
3. One pump out for X hours =  $A \times B - (D \times A \times B) = E$



Test Period From: Time <u>12:00 p.m.</u>		Date <u>4/13/75</u>		To Time <u>12:00 p.m.</u>		Date <u>4/14/75</u>	
A		B		C		D	
Number Counted on Test Screen		Current Factor for Test Screen		Factor if One or More Pumps Out for 24 Hrs.		Factor for Partial Pump Operation During 24 Hr. Pd.	
Species						Estimate of Fish Impinged During 24 Hr. Pd.	
Shad and Herring		262		20.15		.335	
Catfish		15		20.15		.335	
Bass		0		20.15		.335	
Largemouth		0		20.15		.335	
Smallmouth		0		20.15		.335	
Spotted		0		20.15		.335	
Crappie		1		20.15		.335	
Sunfish		4		20.15		.335	
Drum		142		20.15		.335	
Other		28		20.15		.335	
Total		452				3,052	

#### B Factors Screen

1AA 6.81      2AA 14.60  
 1AB 7.63      2AB 17.14  
 1BA 8.79      2BA 20.15  
 1BB 9.06      2BB 17.34  
 1CA 10.28      2CA 19.43  
 1CB 11.58      2CB 34.77

#### C Factors - Pumps out for 24 Hours

Pump      1A = 0.72      2A = 0.87  
             1B = 0.78      2B = 0.89  
             1C = 0.82      2C = 0.92

#### D Factors - Pumps out for X Hours

Pump      1A =  $0.28 \times \frac{x}{24}$       2A =  $0.13 \times \frac{x}{24}$   
             1B =  $0.22 \times \frac{x}{24}$       2B =  $0.11 \times \frac{x}{24}$   
             1C =  $0.18 \times \frac{x}{24}$       2C =  $0.08 \times \frac{x}{24}$

#### Pump Activity During Test Period

1A Off 18.5 hrs.

1B Off 18.5 hrs.

1C Off 24 hrs.

2A Off 3.5 hrs.

2B Off 0 hrs.

2C Off 24 hrs.

To compute:

1. All pumps for 24 hours =  $A \times B = E$
2. One pump out for 24 hours =  $A \times B \times C = E$
3. One pump out for X hours =  $A \times B - (D \times A \times B) = E$





Test Period From: Time 9:00 a.m. Date 4/15/75 To Time 9:00 a.m. Date 4/16/75 Test Screen 1BA

	A	B	C	D	E
Species	Number Counted on Test Screen	Current Factor for Test Screen	Factor if One or More Pumps Out for 24 Hrs.	Factor for Partial Pump Operation During 24 Hr. Pd.	Estimate of Fish Impinged During 24 Hr. Pd.
- Shad and Herring	815	8.79	.5		3,583
Catfish	15	8.79	.5		66
Bass					
Largemouth	0	8.79	.5		0
Smallmouth	0	8.79	.5		0
Spotted	0	8.79	.5		0
Crappie	1	8.79	.5		4
Sunfish	7	8.79	.5		31
Drum	162	8.79	.5		712
Other	42	8.79	.5		185
Total	1,042				4,580

#### B Factors Screen

1AA 6.81    2AA 14.60  
 1AB 7.63    2AB 17.14  
 1BA 8.79    2BA 20.15  
 1BB 9.06    2BB 17.34  
 1CA 10.28    2CA 19.43  
 1CB 11.58    2CB 34.77

#### C Factors - Pumps out for 24 Hours

Pump    1A = 0.72    2A = 0.87  
          1B = 0.78    2B = 0.89  
          1C = 0.82    2C = 0.92

#### D Factors - Pumps out for X Hours

Pump    1A =  $0.28 \times \frac{x}{24}$     2A =  $0.13 \times \frac{x}{24}$   
          1B =  $0.22 \times \frac{x}{24}$     2B =  $0.11 \times \frac{x}{24}$   
          1C =  $0.18 \times \frac{x}{24}$     2C =  $0.08 \times \frac{x}{24}$

#### Pump Activity During Test Period

1A Off 0 hrs.

1B Off 0 hrs.

1C Off 24 hrs.

2A Off 24 hrs.

2B Off 24 hrs.

2C Off 24 hrs.

To compute: 1. All pumps for 24 hours =  $A \times B = E$   
 2. One pump out for 24 hours =  $A \times B \times C = E$   
 3. One pump out for X hours =  $A \times B - (D \times A \times B) = E$



Test Period From: Time 9:00 a.m. Date 4/17/75 To Time 9:00 a.m. Date 4/18/75 Test Screen 1BA

	A	B	C	D	E
Species	Number Counted on Test Screen	Current Factor for Test Screen	Factor if One or More Pumps Out for 24 Hrs.	Factor for Partial Pump Operation During 24 Hr. Pd.	Estimate of Fish Impinged During 24 Hr. Pd.
- Shad and Herring	425	8.79	.50		1,868
Catfish	14	8.79	.50		62
Bass					
Largemouth	0	8.79	.50		0
Smallmouth	0	8.79	.50		0
Spotted	0	8.79	.50		0
Crappie	2	8.79	.50		9
Sunfish	14	8.79	.50		62
Drum	142	8.79	.50		624
Other	25	8.79	.50		110
Total	622				2,735

B Factors Screen

1AA 6.81	2AA 14.60
1AB 7.63	2AB 17.14
1BA 8.79	2BA 20.15
1BB 9.06	2BB 17.34
1CA 10.28	2CA 19.43
1CB 11.58	2CB 34.77

C Factors - Pumps out for 24 Hours

Pump 1A = 0.72	2A = 0.87
1B = 0.78	2B = 0.89
1C = 0.82	2C = 0.92

D Factors - Pumps out for X Hours

Pump 1A = 0.28 x $\frac{x}{24}$	2A = 0.13 x $\frac{x}{24}$
1B = 0.22 x $\frac{x}{24}$	2B = 0.11 x $\frac{x}{24}$
1C = 0.18 x $\frac{x}{24}$	2C = 0.08 x $\frac{x}{24}$

#### Pump Activity During Test Period

1A \_\_\_\_\_

1B \_\_\_\_\_

1C OFF 24 hrs.

2A OFF 24 hrs.

2B OFF 24 hrs.

2C OFF 24 hrs.

To compute:

1. All pumps for 24 hours =  $A \times B = E$
2. One pump out for 24 hours =  $A \times B \times C = E$
3. One pump out for X hours =  $A \times B - (D \times A \times B) = E$



Test Period From: Time 9:00 a.m. Date 4/20/75 To Time 9:00 a.m. Date 4/21/75 Test Screen 1BA

	A	B	C	D	E
Species	Number Counted on Test Screen	Current Factor for Test Screen	Factor if One or More Pumps Out for 24 Hrs.	Factor for Partial Pump Operation During 24 Hr. Pd.	Estimate of Fish Impinged During 24 Hr. Pd.
Shad and Herring	176	8.79	.50		774
Catfish	17	8.79	.50		75
Bass					
Largemouth	0	8.79	.50		0
Smallmouth	0	8.79	.50		0
Spotted	0	8.79	.50		0
Crappie	0	8.79	.50		0
Sunfish	7	8.79	.50		31
Drum	124	8.79	.50		549
Other	25	8.79	.50		110
Total	349				1,535

B Factors Screen

1AA	6.81	2AA	14.60
1AB	7.63	2AB	17.14
1BA	8.79	2BA	20.15
1BB	9.06	2BB	17.34
1CA	10.28	2CA	19.43
1CB	11.58	2CB	34.77

C Factors - Pumps out for 24 Hours

Pump	1A = 0.72	2A = 0.87
	1B = 0.78	2B = 0.89
	1C = 0.82	2C = 0.92

D Factors - Pumps out for X Hours

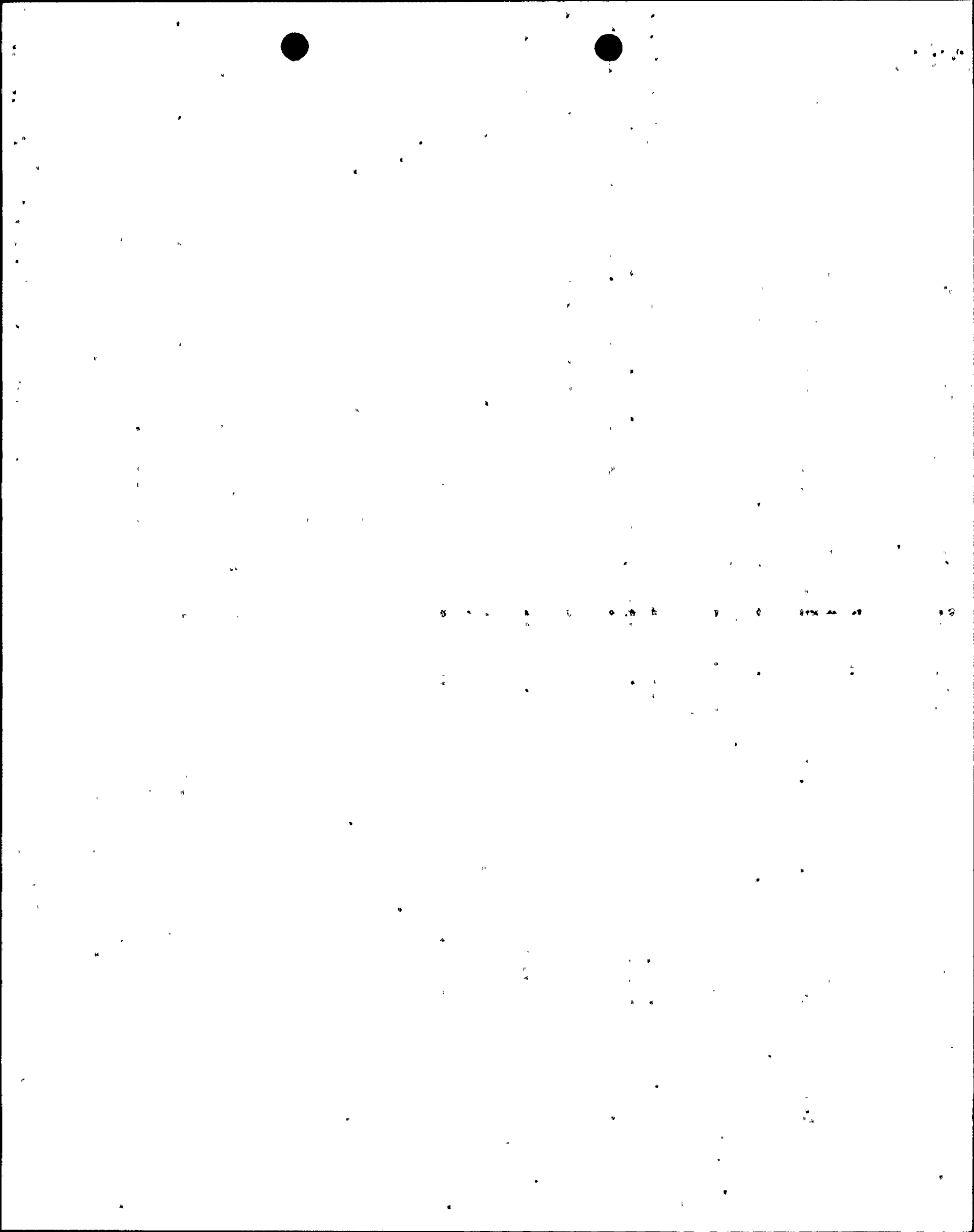
Pump	1A = $0.28 \times \frac{x}{24}$	2A = $0.13 \times \frac{x}{24}$
	1B = $0.22 \times \frac{x}{24}$	2B = $0.11 \times \frac{x}{24}$
	1C = $0.18 \times \frac{x}{24}$	2C = $0.08 \times \frac{x}{24}$

Pump Activity During Test Period

1A	
1B	
1C	OFF 24 hrs.
2A	OFF 24 hrs.
2B	OFF 24 hrs.
2C	OFF 24 hrs.

To compute:

1. All pumps for 24 hours =  $A \times B = E$
2. One pump out for 24 hours =  $A \times B \times C = E$
3. One pump out for X hours =  $A \times B - (D \times A \times B) = E$



Test Period From: Time 9:00 a.m. Date 4/22/75 To Time 9:00 a.m. Date 4/23/75 Test Screen 1BA

	A	B	C	D	E
Species	Number Counted on Test Screen	Current Factor for Test Screen	Factor if One or More Pumps Cut for 24 Hrs.	Factor for Partial Pump Operation During 24 Hr. Pd.	Estimate of Fish Impinged During 24 Hr. Pd.
Shad and Herring	125	8.79	.50		549
Catfish	19	8.79	.50		84
Bass	0	8.79	.50		0
Largemouth	0	8.79	.50		0
Smallmouth	0	8.79	.50		0
Spotted	0	8.79	.50		0
Crappie	2	8.79	.50		9
Sunfish	16	8.79	.50		70
Drum	69	8.79	.50		303
Other	14	8.79	.50		62
Total	245				1,077

B Factors Screen	1AA 6.81	2AA 14.60
	1AB 7.63	2AB 17.14
	1BA 8.79	2BA 20.15
	1BB 9.06	2BB 17.34
	1CA 10.28	2CA 19.43
	1CB 11.58	2CB 34.77

C Factors - Pumps out for 24 Hours			
Pump	1A = 0.72	2A = 0.87	
	1B = 0.78	2B = 0.89	
	1C = 0.82	2C = 0.92	

D Factors - Pumps out for X Hours			
Pump	1A = 0.28 x $\frac{x}{24}$	2A = 0.13 x $\frac{x}{24}$	
	1B = 0.22 x $\frac{x}{24}$	2B = 0.11 x $\frac{x}{24}$	
	1C = 0.18 x $\frac{x}{24}$	2C = 0.08 x $\frac{x}{24}$	

#### Pump Activity During Test Period

1A	
1B	
1C	Off 24 hours
2A	Off 24 hours
2B	Off 24 hours
2C	Off 24 hours

To compute:

1. All pumps for 24 hours = A x B = E
2. One pump out for 24 hours = A x B x C = E
3. One pump out for X hours = A x B - (D x A x B)





Test Period From: Time <u>9:00 a.m.</u>		Date <u>4/24/75</u>	To Time <u>9:00 a.m.</u>		Date <u>4/25/75</u>	Test Screen <u>1BA</u>
	A	B	C	D	E	
<u>Species</u>	<u>Number Counted on Test Screen</u>	<u>Current Factor for Test Screen</u>	<u>Factor if One or More Pumps Out for 24 Hrs.</u>	<u>Factor for Partial Pump Operation During 24 Hr. Pd.</u>	<u>Estimate of Fish Impinged During 24 Hr. Pd.</u>	
Shad and Herring	113	8.79	.50		496.	
Catfish	17	8.79	.50		75	
Bass	0	8.79	.50		0	
Largemouth	0	8.79	.50		0	
Smallmouth	0	8.79	.50		0	
Spotted	0	8.79	.50		0	
Crappie	2	8.79	.50		9	
Sunfish	23	8.79	.50		101	
Drum	63	8.79	.50		277	
Other	13	8.79	.50		57	
Total	231				1,015	

B Factors Screen

1AA 6.81	2AA 14.60
1AB 7.63	2AB 17.14
1BA 8.79	2BA 20.15
1BB 9.06	2BB 17.34
1CA 10.28	2CA 19.43
1CB 11.58	2CB 34.77

C Factors - Pumps out for 24 Hours

Pump 1A = 0.72	2A = 0.87
1B = 0.78	2B = 0.89
1C = 0.82	2C = 0.92

D Factors - Pumps out for X Hours

Pump 1A = 0.28 x $\frac{x}{24}$	2A = 0.13 x $\frac{x}{24}$
1B = 0.22 x $\frac{x}{24}$	2B = 0.11 x $\frac{x}{24}$
1C = 0.18 x $\frac{x}{24}$	2C = 0.08 x $\frac{x}{24}$

# Pump Activity During Test Period

1A \_\_\_\_\_

1B \_\_\_\_\_

1C Off 24 hours

2A Off 24 hours

2B Off 24 hours

2C Off 24 hours

To compute:

1. All pumps for 24 hours =  $A \times B = E$
2. One pump out for 24 hours =  $A \times B \times C = E$
3. One pump out for X hours =  $A \times B - (D \times A \times B)$



Test Period From: Time 9:00 a.m. Date 4/27/75 To Time 9:00 a.m. Date 4/28/75 Test Screen 1 BA

	A	B	C	D	E
<u>Species</u>	<u>Number Counted on Test Screen</u>	<u>Current Factor for Test Screen</u>	<u>Factor if One or More Pumps Out for 24 Hrs.</u>	<u>Factor for Partial Pump Operation During 24 Hr. Pd.</u>	<u>Estimate of Fish Impinged During 24 Hr. Pd.</u>
Shad and Herring	21	8.79	.50		92
Catfish	9	8.79	.50		40
Bass					
Largemouth	0	8.79	.50		0
Smallmouth	0	8.79	.50		0
Spotted	0	8.79	.50		0
Crappie	1	8.79	.50		4
Sunfish	9	8.79	.50		40
Drum	39	8.79	.50		171
Other	20	8.79	.50		88
Total	99				435

1AA 6.81	2AA 14.60
1AB 7.63	2AB 17.14
1BA 8.79	2BA 20.15
1BB 9.06	2BB 17.34
1CA 10.28	2CA 19.43
1CB 11.58	2CB 34.77

1A. \_\_\_\_\_

1B. \_\_\_\_\_

1C. Off 24 hours

2A. Off 24 hours

2B. Off 24 hours

2C. Off 24 hours

Pump	1A = 0.72	2A = 0.87
	1B = 0.78	2B = 0.89
	1C = 0.82	2C = 0.92

$$\begin{aligned} 1A &= 0.28 \times \frac{x}{24} & 2A &= 0.13 \times \frac{x}{24} \\ 1B &= 0.22 \times \frac{x}{24} & 2B &= 0.11 \times \frac{x}{24} \\ 1C &= 0.18 \times \frac{x}{24} & 2C &= 0.08 \times \frac{x}{24} \end{aligned}$$

To compute:

1. All pumps for 24 hours =  $A \times B = E$
2. One pump out for 24 hours =  $A \times B \times C = E$
3. One pump out for X hours =  $A \times B - (D \times A \times$   
 $= E$