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SUBJECT: "ADEM Discharge Monitoring Rept for June 1993."

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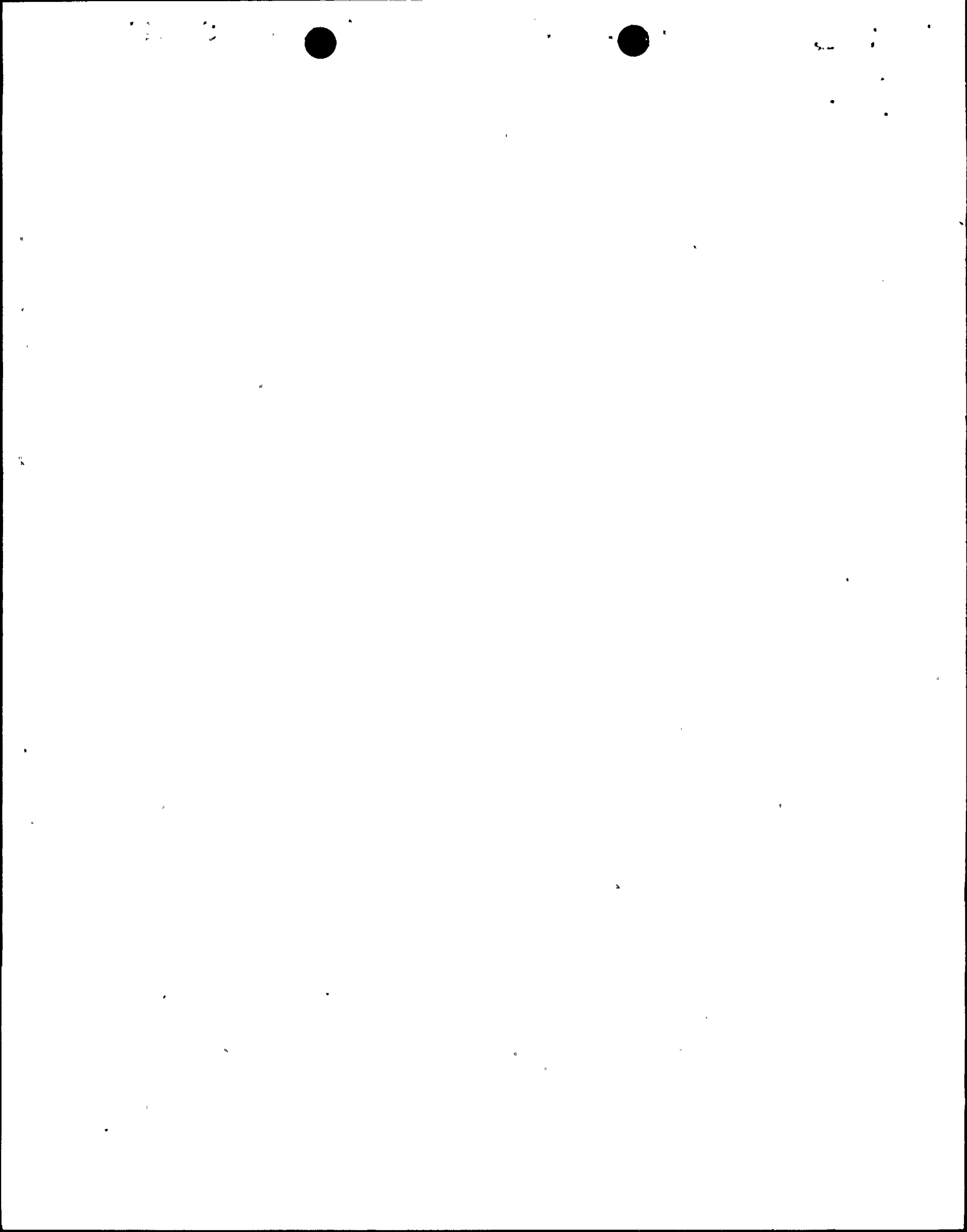
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INTERNAL:	ACRS		1	1	NRR/DRSS/PRPB11		2	2
	<del>REG FILE</del>	01	1	1	RGN2 DRSS/RPB		2	2
	RGN2	FILE 02	1	1				
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DISCHARGE MONITORING REPORT

NPDES NUMBER: AL0022080

PERMITTEE INFORMATION:

NAME: TENNESSEE VALLEY AUTHORITY

ADDRESS: WT 8B-K

FACILITY NAME: TVA-Browns Ferry Nuclear Plant

FACILITY CONTACT:

NAME: Abraham Loudermilk

PHONE: 632-6656

REPORTING PERIOD: June 1993

I certify under penalty of law that this discharge monitoring report, required by NPDES Permit Number AL0022080 for the reporting period of June 1, 1993 through June 30, 1993 and consisting of pages numbered 1 through 9 and which are dated July 27, 1993 was prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

*Abraham Loudermilk*  
SIGNATURE OF RESPONSIBLE INDIVIDUAL

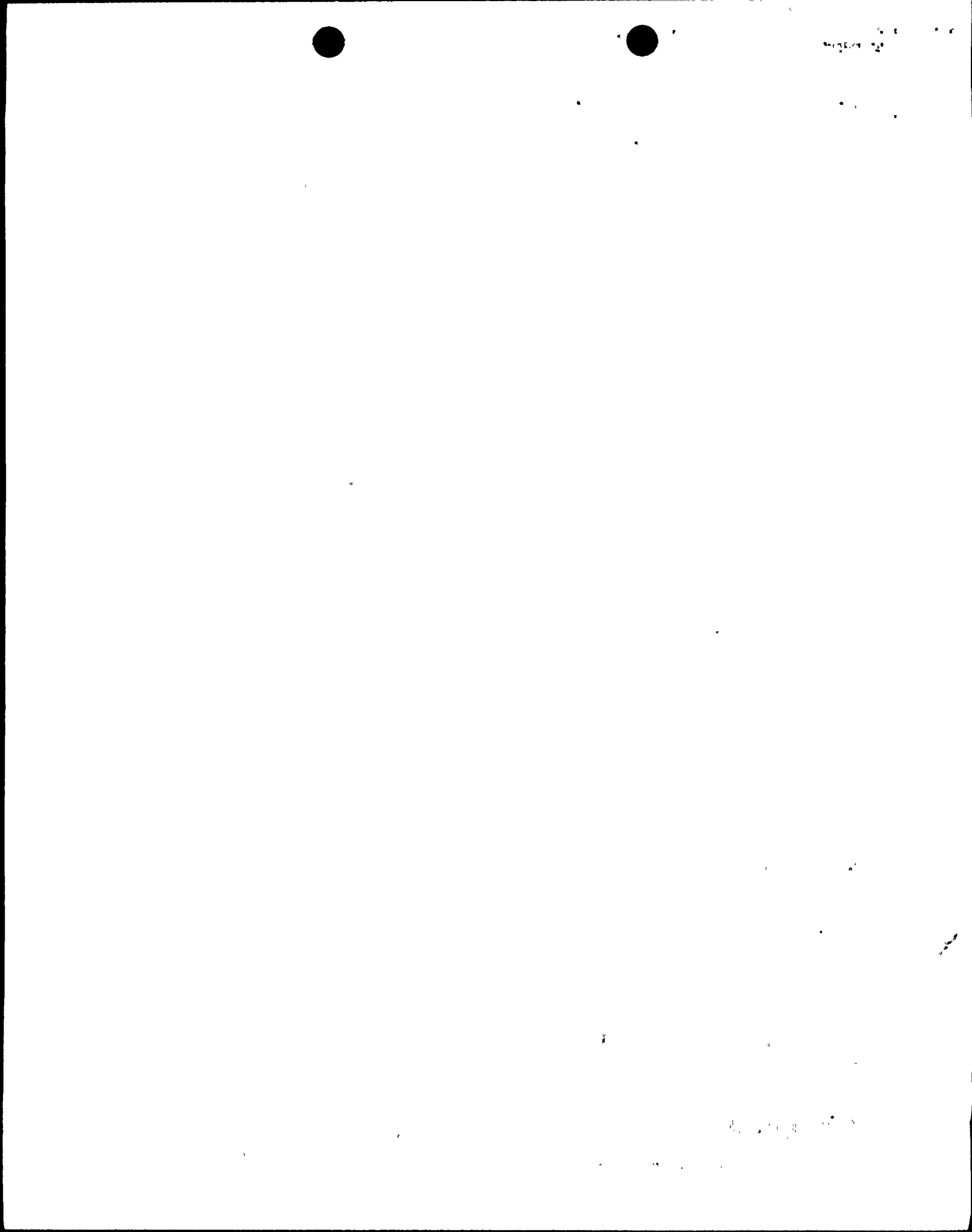
July 27, 1993  
DATE OF SIGNATURE

0056E  
020048

9308040317 930630  
PDR ADCK 05000269  
R PDR



*Handwritten initials/signature*  
LEAS  
0/1



ADEM DISCHARGE MONITORING REPORT

COMPANY : TVA - Browns Ferry Nuclear Plant

LOCATION :  MONTHLY  
U.S. Highway 72  
Athens, Alabama 35611

MONTH : JUNE, 1993

NPDES NO. AL0022080 MAJOR

DSN001

6 Hr Hourly

EFFECTIVE : 10-15-89

PARAM	Flow	pH	Cl,TA	Amb,RT	DRT	Temp,R	Temp	Temp	Hyd	6/ - Report Violations Only		
AVG	Mon	6.0 min	N/A	N/A	N/A	N/A	N/A	N/A	N/A	2/ 5/ - Measurement Frequency		
MAX	Mon	9.0	730	Mon	90 F	10 F	92 F	93 F	0.01	in your permit.		
FREQ	Cont	1/wk	6/	2/ 5/	1/day	1/day	1/day	1/day	1/wk			
UNITS	MGD	s.u.	PPD		deg. F	deg. F	deg. F.	deg. F	mg/L			
1	834.9	7.76		76.2	76.0	0.400	0.000	75.6	<.010			
2	834.9			74.8	75.2	0.600	0.000	75.3				
3	834.9			75.2	75.5	0.400	0.000	76.5				
4	834.9			75.8	76.3	0.600	0.000	77.3				
5	834.9			76.4	77.1	0.800	0.000	77.8				
6	834.9			76.3	77.2	0.900	0.000	78.8				
7	834.9			77.2	78.7	1.60	0.000	79.4				
8	834.9	8.00, 7.92		78.5	79.2	1.40	0.000	80.9	<.010	REPLICATE		
9	834.9			79.4	80.8	1.40	0.000	82.2				
10	834.9			80.4	81.7	1.50	0.000	83.4				
11	834.9			80.9	82.3	1.50	0.000	83.9				
12	834.9			81.3	82.8	1.80	0.000	83.5				
13	834.9			81.1	83.2	2.30	0.000	84.4				
14	834.9			82.3	84.0	2.20	0.000	85.0				
15	834.9	7.97		82.6	83.8	1.50	0.000	85.0	<.010			
16	834.9			82.6	83.8	1.40	0.000	84.5				
17	834.9			83.0	84.1	1.20	0.000	85.2				
18	834.9			82.9	84.4	1.40	0.000	85.5				
19	834.9			83.0	84.7	1.90	0.000	85.6				
20	834.9			82.9	85.2	2.50	0.000	85.7				
21	834.9			82.5	84.8	2.30	0.000	85.0				
22	834.9	8.24		82.4	84.1	2.20	0.000	84.6	<.010			
23	834.9			83.2	84.2	1.40	0.000	85.2				
24	834.9			83.5	84.6	1.50	0.000	85.3				
25	834.9			83.1	84.6	2.20	0.000	85.3				
26	834.9			82.3	84.3	2.30	0.000	84.5				
27	834.9			82.8	84.5	2.00	0.000	85.4				
28	834.9			82.7	84.7	2.30	0.000	85.4				
29	834.9	8.07		83.1	84.5	1.80	0.000	85.2	*	* Note: Discharge did not have the		
30	834.9			83.7	84.8	1.50	0.000	85.6		potential to contain hydrazine		
M AVG	834.9	7.99		80.7	82.0	1.56	0.000	82.9	<.010			
MAX	834.9	8.24		83.7	85.2	2.50	0.000	85.7	<.010			

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature of Responsible Official \_\_\_\_\_

Date \_\_\_\_\_

ADEM FORM 261 (B) 1/88



ADEM DISCHARGE MONITORING REPORT

COMPANY : TVA - Browns Ferry Nuclear Plant

LOCATION :  MONTHLY  
 U.S. Highway 72  
 Athens, Alabama 35611

MONTH : JUNE, 1993

NPDES NO. AL0022080 MAJOR

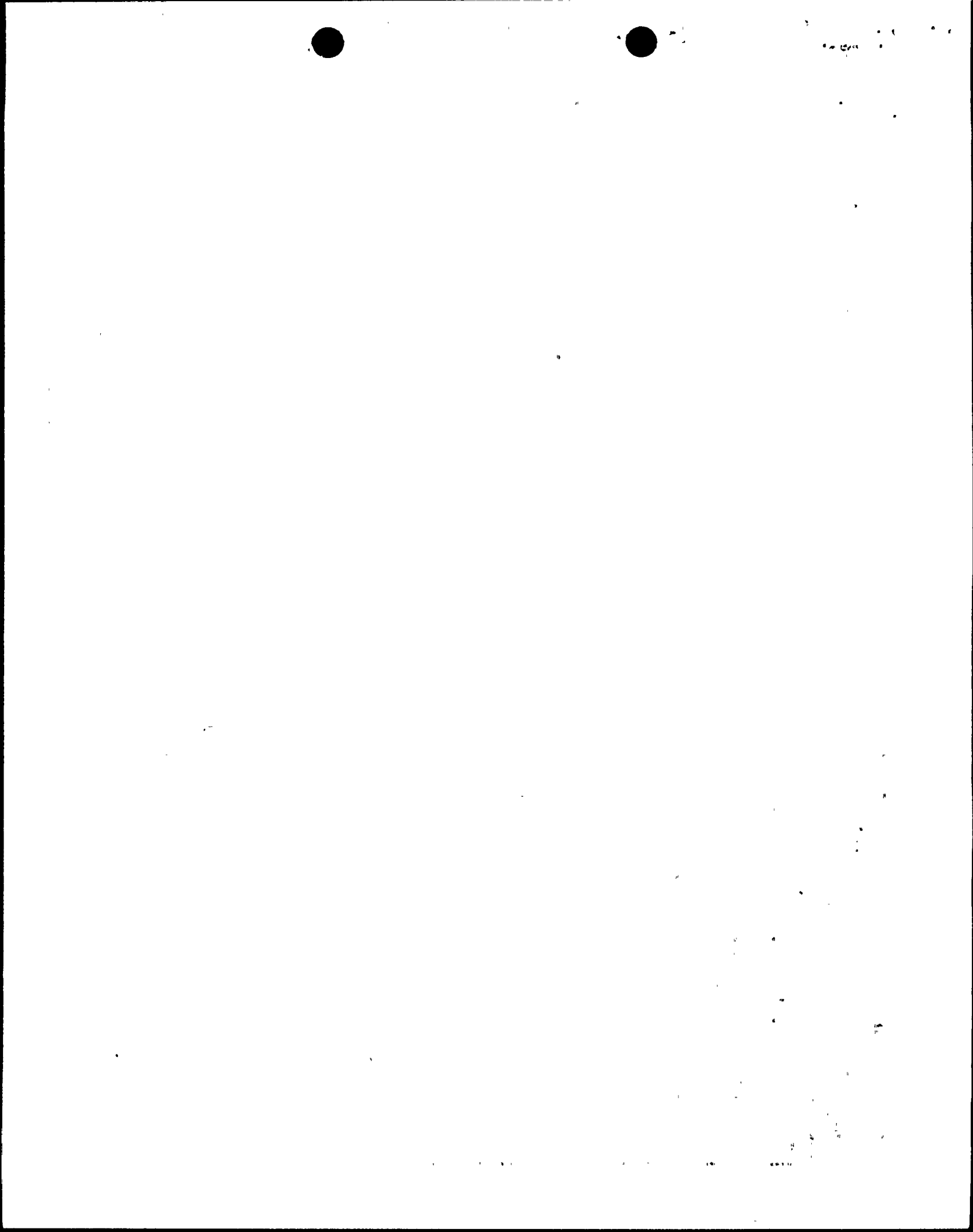
DSN001a (Formerly 103)

EFFECTIVE : 10-15-89

PARAM	Flow	O & G	TSS																	
AVG	Mon	15.0	30.0																	
MAX	Mon	20.0	100.0																	
FREQ	1/wk	1/wk	1/wk																	
UNITS	MGD	mg/l	mg/l																	
1																				
2																				
3																				
4	0.173	<5.00, <5.00	9.00, 9.00																	REPLICATE
5																				
6																				
7																				
8																				
9																				
10	0.113	<5.00	6.00																	
11																				
12																				
13																				
14																				
15																				
16																				
17	0.115	<5.00	28.0																	
18																				
19																				
20																				
21																				
22																				
23																				
24	.125	<5.00	7.00																	
25																				
26																				
27																				
28																				
29																				
30																				
M AVG	0.132	<5.00	11.8																	
MAX	0.173	<5.00	28.0																	

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Signature of Responsible Official \_\_\_\_\_ Date \_\_\_\_\_





ADEM DISCHARGE MONITORING REPORT

COMPANY : TVA - Browns Ferry Nuclear Plant

LOCATION :  MONTHLY  
 U.S. Highway 72  
 Athens, Alabama 35611

MONTH : JUNE, 1993

NPDES NO. AL0022080 MAJOR

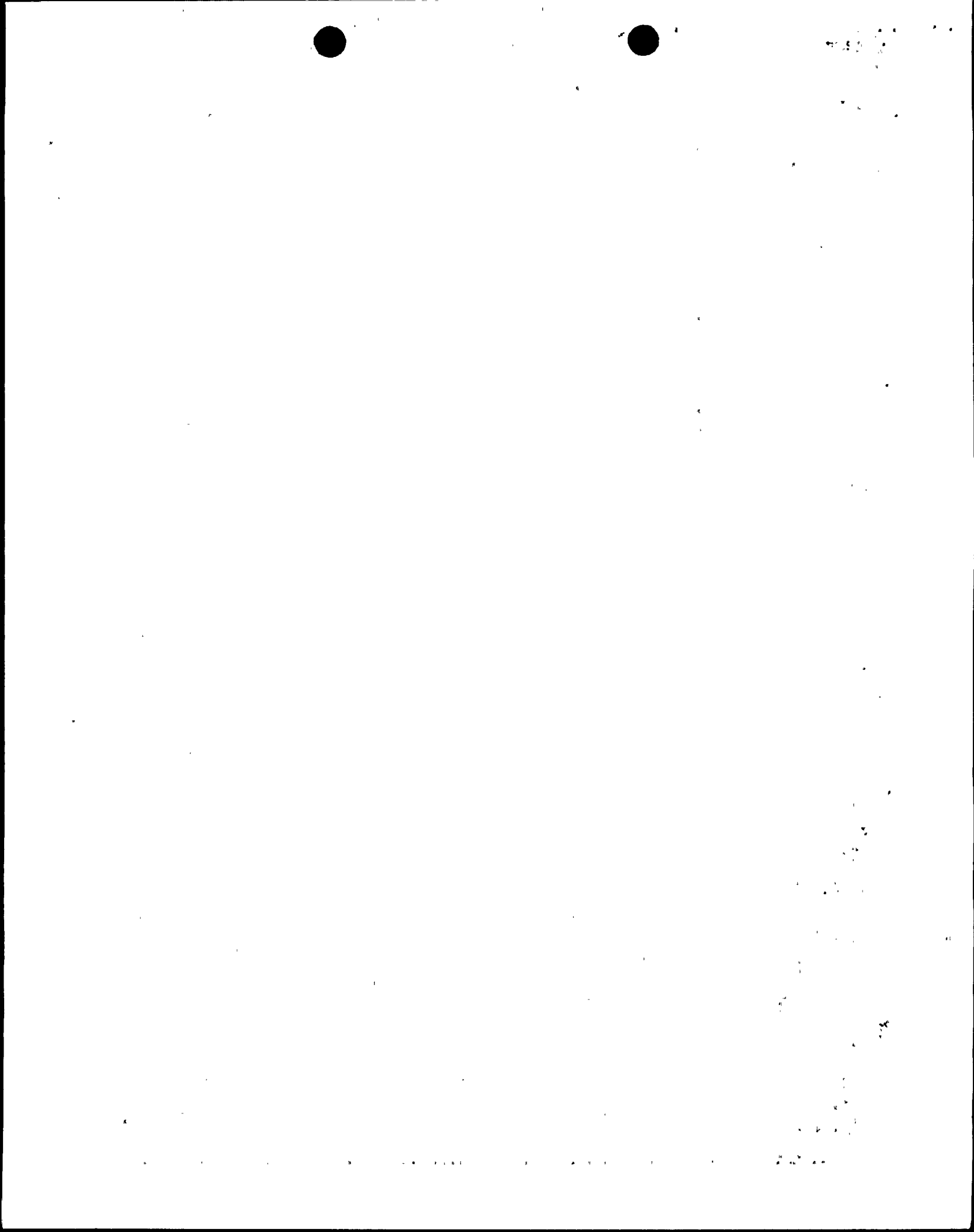
DSN001b

EFFECTIVE : 10-15-89

PARAM	Flow	O & G	TSS	Cu.T	Fe.T								
AVG	Mon	15.0	30.0	N/A	N/A								2/ Will be applicable only when chemical metal cleaning solutions are being used. The rest located in Permit
MAX	Mon	20.0	100.0	1.0	1.0	2/							
FREQ	1/Bat	2/wk	2/wk	1/Batch	1/Batch								
UNITS	MGD	mg/l	mg/l	mg/l	mg/l								
1	0.073	<5.00	<1.00										
2	0.068												
3	0.009												
4	0.068												
5	NONE												
6	0.031												
7	NONE												
8	0.024	<5.00	<1.00										
9	0.006												
10	NONE												
11	0.031	<5.00	<1.00										
12	0.030												
13	NONE												
14	0.030	<5.00	<1.00										
15	NONE												
16	0.031	<5.00	<1.00										
17	NONE												
18	0.031												
19	NONE												
20	0.030												
21	NONE												
22	0.031	<5.00	<1.00										
23	NONE												
24	0.025	<5.00	<1.00										
25	0.006												
26	0.017												
27	0.013												
28	NONE												
29	0.031	<5.00	<1.00										
30	NONE												
M AVG	0.031	<5.00	<1.00										
MAX	0.073	<5.00	<1.00										

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ADEM DISCHARGE MONITORING REPORT

COMPANY : TVA - Browns Ferry Nuclear Plant

LOCATION :  MONTHLY  
U.S. Highway 72  
Athens, Alabama 35611

MONTH : JUNE, 1993

NPDES NO. AL0022080 MAJOR

EFFECTIVE : 10-15-89

DSN001c (Formerly 107)

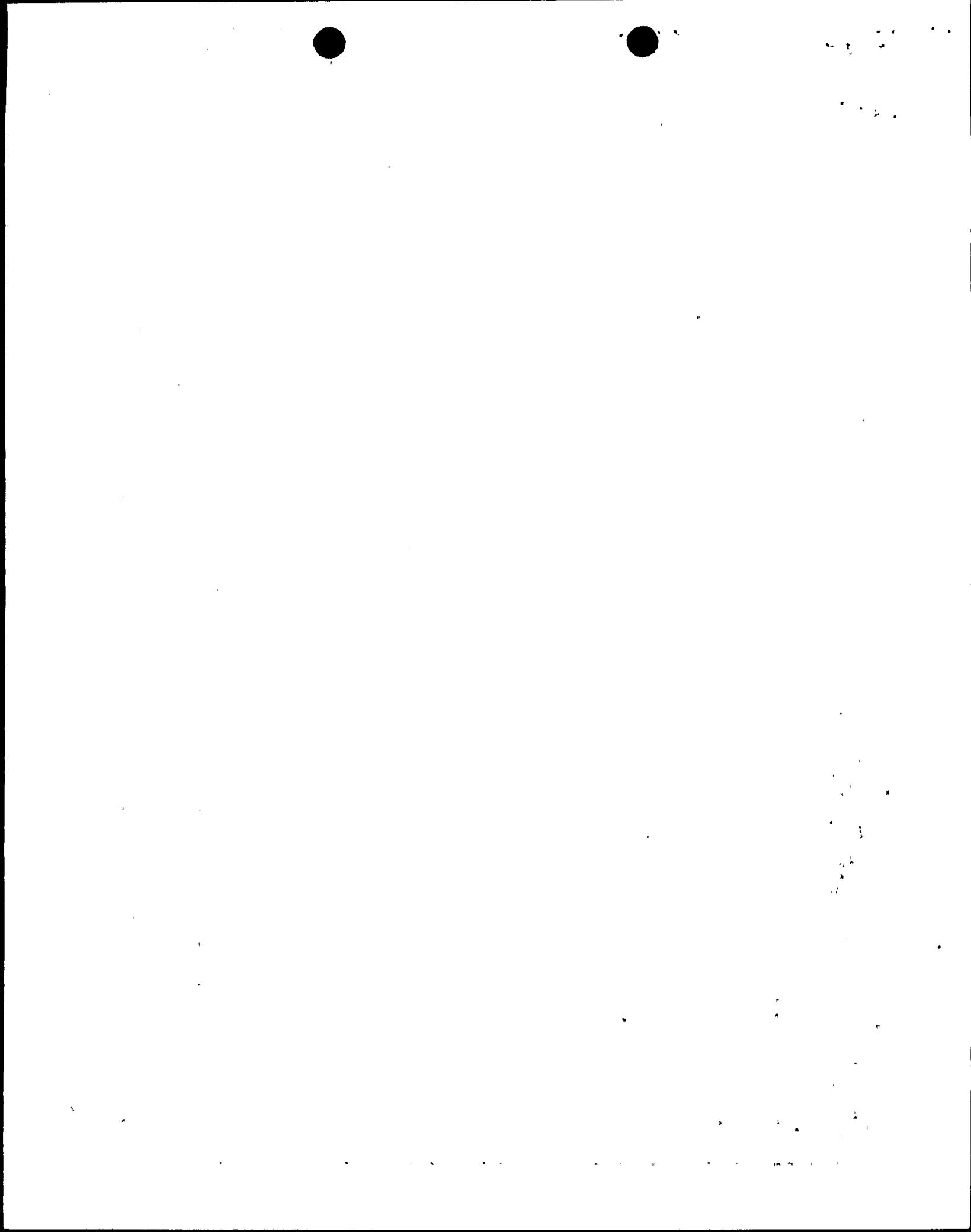
PARAM	Flow	O & G	TSS
AVG	Mon	15.0	30.0
MAX	Mon	20.0	100.0
FREQ	1/wk	1/wk	1/wk
UNITS	MGD	mg/l	mg/l
1			
2	0.00		
3			
4			
5			
6			
7			
8			
9	0.00		
10			
11			
12			
13			
14			
15			
16	5.9E-4	<5.00	3.60
17			
18			
19			
20			
21			
22			
23	5.4E-4	<5.00	6.00
24			
25			
26			
27			
28			
29			
30	0.00		
M AVG	2.3E-4	<5.00	4.80
MAX	5.9E-4	<5.00	6.00

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature of Responsible Official \_\_\_\_\_

Date \_\_\_\_\_

ADEM FORM 261 (B) 1/88



ADEM DISCHARGE MONITORING REPORT

COMPANY : TVA - Browns Ferry Nuclear Plant

LOCATION :  MONTHLY  
 U.S. Highway 72  
 Athens, Alabama 35611

MONTH : JUNE, 1993

NPDES NO. AL0022080 MAJOR

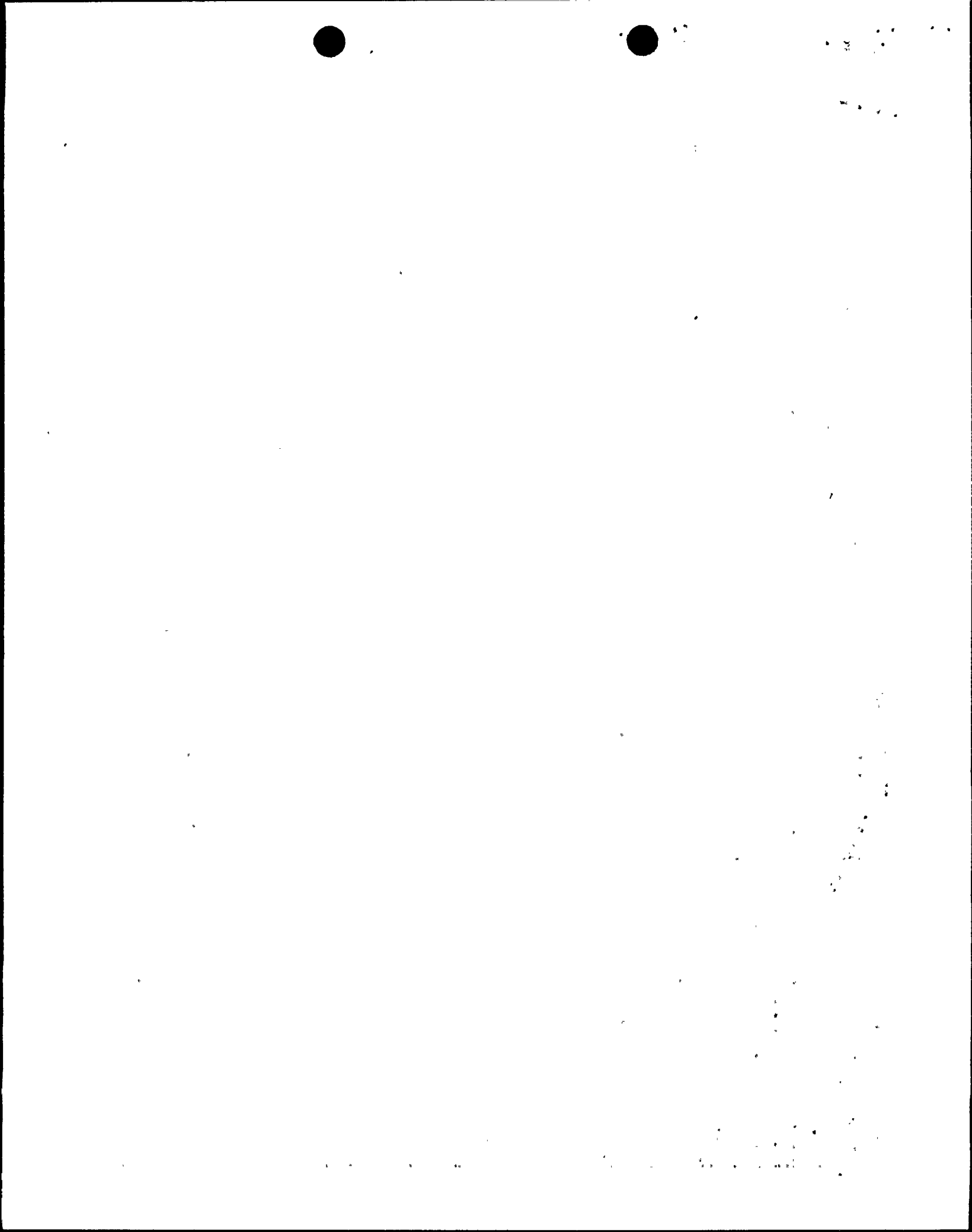
DSN001d (Formerly 110)

EFFECTIVE : 10-15-89

PARAM	Flow	O & G	TSS						
AVG	Mon	15.0	30.0						
MAX	Mon	20.0	100.0						
FREQ	1/wk	1/wk	1/wk						
UNITS	MGD	mg/l	mg/l						
1									
2	1.7E-4	<5.00	<1.00						
3									
4									
5									
6									
7									
8									
9	9.9E-4	<5.00	4.00						
10									
11									
12									
13									
14									
15									
16	3.4E-4	<5.00	<1.00						
17									
18									
19									
20									
21									
22									
23	3.6E-4	<5.00	<1.00						
24									
25									
26									
27									
28									
29									
30	1.4E-4	<5.00, <5.00	12.0, 5.00				REPLICATE		
M AVG	4.0E-4	<5.00	<4.00						
MAX	9.9E-4	<5.00	12.0						

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ADEM DISCHARGE MONITORING REPORT

COMPANY : TVA - Browns Ferry Nuclear Plant

LOCATION :  MONTHLY  
U.S. Highway 72  
Athens, Alabama 35611

MONTH : JUNE, 1993

NPDES NO. AL0022080 MAJOR

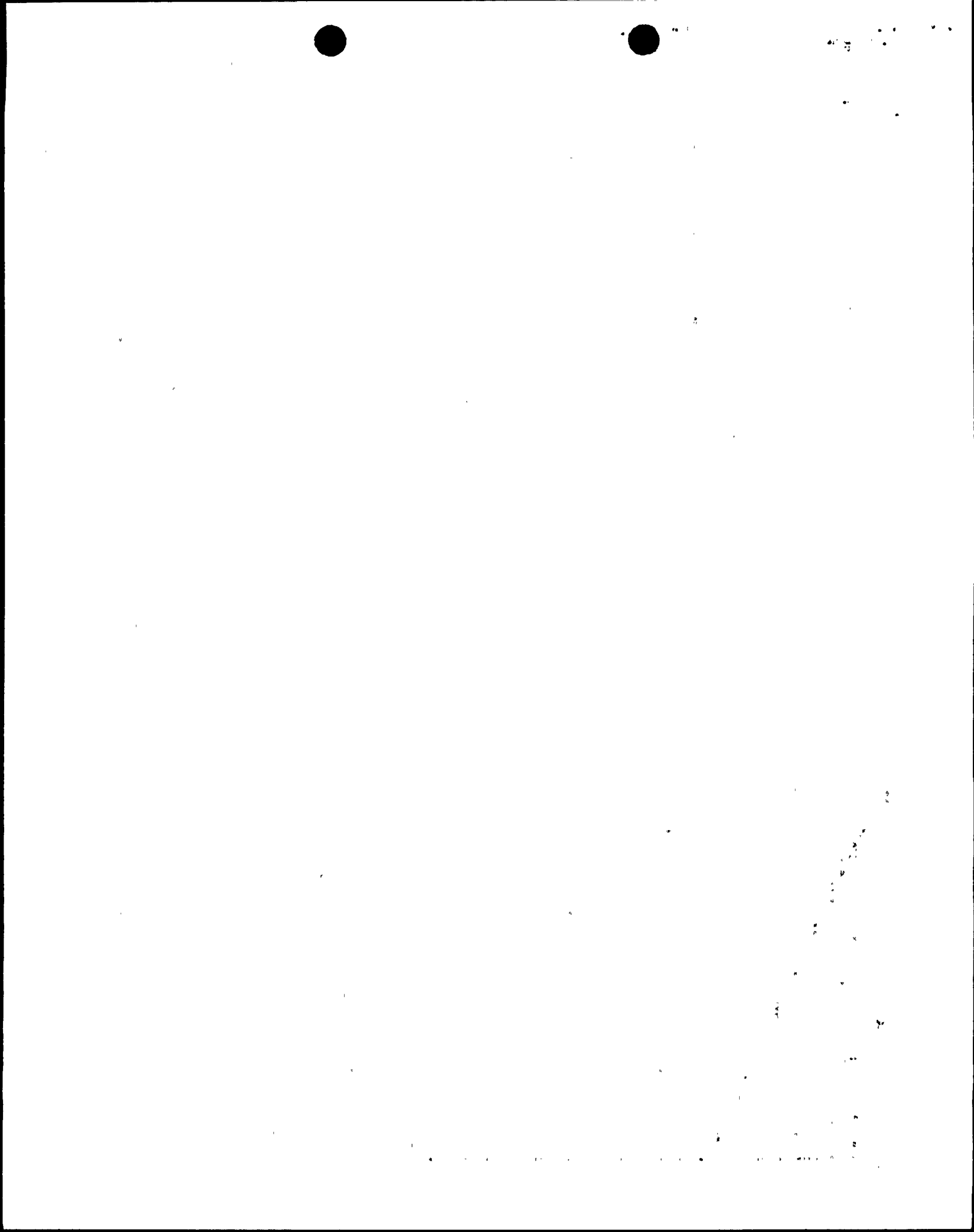
EFFECTIVE : 10-15-89

DSN002 (Formerly 102)

PARAM	Flow	pH	O & G	TSS	Hyd															
AVG	Mon	6.0 min	15.0	30.0	N/A															
MAX	Mon	9.0	20.0	100.0	0.01															
FREQ	1/Bat	1/Batch	1/Batch	2/Batch	1/Batch*	* Discharge no longer has the potential to contain Hydrazine														
UNITS	MGD	s.u.	mg/l	mg/l	mg/l															
1	0.176	7.66	10.0	<1.00																
2	0.176																			
3	0.176																			
4	0.176	8.11		<1.00																
5	NONE																			
6	NONE																			
7	NONE																			
8	NONE																			
9	NONE																			
10	NONE																			
11	NONE																			
12	NONE																			
13	NONE																			
14	NONE																			
15	NONE																			
16	NONE																			
17	NONE																			
18	NONE																			
19	NONE																			
20	NONE																			
21	NONE																			
22	NONE																			
23	NONE																			
24	NONE																			
25	NONE																			
26	NONE																			
27	NONE																			
28	0.235	8.02	<5.00	2.00																
29	0.235																			
30	0.235	7.60		2.00																
M AVG	0.201	7.85	<7.50	<1.50																
MAX	0.235	8.11	10.0	2.00																

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ADEM DISCHARGE MONITORING REPORT

COMPANY : TVA - Browns Ferry Nuclear Plant

LOCATION :  MONTHLY  
 U.S. Highway 72  
 Athens, Alabama 35611

MONTH : JUNE, 1993

NPDES NO. AL0022080 MAJOR

DSN005

EFFECTIVE : 10-15-89

PARAM	Flow	Temp																		
AVG	Mon	Mon																		
MAX	Mon	Mon																		
FREQ	1/wk	1/wk																		
UNITS	MGD	degrees F																		
1	NONE																			
2	6.48	78.5																		
3	NONE																			
4	NONE																			
5	NONE																			
6	NONE																			
7	NONE																			
8	NONE																			
9	NONE																			
10	NONE																			
11	NONE																			
12	NONE																			
13	NONE																			
14	NONE																			
15	NONE																			
16	NONE																			
17	NONE																			
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23	NONE																			
24	NONE																			
25	NONE																			
26	NONE																			
27	NONE																			
28	NONE																			
29	NONE																			
30	NONE																			
M AVG	6.48	78.5																		
MAX	6.48	78.5																		

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Signature of Responsible Official \_\_\_\_\_ Date \_\_\_\_\_



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Small, faint text or markings in the lower right quadrant.

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ADEM DISCHARGE MONITORING REPORT

COMPANY : TVA - Browns Ferry Nuclear Plant

LOCATION :  MONTHLY  
U.S. Highway 72  
Athens, Alabama 35611

MONTH : JUNE, 1993

NPDES NO. AL0022080 MAJOR

EFFECTIVE : 10-15-89

DSN011

PARAM	Flow	BOD (5)	TSS
AVG	Mon	30.0	90.0
MAX	Mon	45.0	135.0
FREQ	5/wk	2/mo	2/mo
UNITS	MGD	mg/l	mg/l
1	0.139		
2	0.159		
3	0.159		
4	0.159		
5			
6			
7	0.159		
8	0.159		
9	0.159		
10	0.159		
11	0.014		
12			
13			
14	0.159		
15	0.159	54.0	34.0
16	0.139		
17	0.118		
18	0.118		
19			
20			
21	0.602		
22	0.00		
23	0.00		
24	0.00		
25	0.00		
26			
27			
28	0.00		
29	0.00		
30			
M AVG	0.122	54.0	34.0
MAX	0.602	54.0	34.0

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Signature of Responsible Official \_\_\_\_\_ Date \_\_\_\_\_



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ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
WATER DIVISION - INDUSTRIAL BRANCH  
NONCOMPLIANCE NOTIFICATION FORM

PERMITTEE NAME: TENNESSEE VALLEY AUTHORITY - BROWNS FERRY NUCLEAR PLANT

PERMIT NUMBER: AL0022080

FACILITY LOCATION: Limestone County SW of Athens, Alabama

DMR REPORTING PERIOD: June 1993

1. DESCRIPTION OF DISCHARGE: The discharge covered by this notification is DSN 011, Treated Domestic Wastewater Effluent to the Tennessee River

NONCOMPLIANCE PARAMETER(S): BOD-5 Daily Maximum - 45mg/l. A sample collected on June 15, 1993 had a value of 54mg/l.

CAUSE OF NONCOMPLIANCE: (Attach additional pages if necessary) At the present time the cause of the non-compliance cannot be determined. The history of the lagoon has shown problems in the past with algae blooms, but the physical characteristics that are normally associated with algae blooms were not observed in the June 15 sample. Other possible causes are being investigated.

2. PERIOD OF NONCOMPLIANCE: (Include exact date(s) and time(s) or, if not corrected, the anticipated time the noncompliance is expected to continue): An informational sample collected June 8 from upstream of the discharge point showed a value of 22mg/l. The results of the June 15 sample were received on June 22, therefore the maximum duration of the non-compliance would be 14 days (June 8 - June 22, 1993).

3. DESCRIPTION OF STEPS TAKEN AND/OR BEING TAKEN TO REDUCE OR ELIMINATE THE NONCOMPLYING DISCHARGE AND TO PREVENT ITS RECURRENCE (attach additional pages if necessary):

1. Upon receipt of the sample results showing a non-compliance, discharge from the lagoon was terminated.
2. Aeration equipment has been installed and is operating.
3. Monitoring of the lagoon conditions is continuing. Releases from the lagoon will not resume until the BOD-5 stabilizes and is in compliance.
4. Contacts with ADEM experts and others with experience in sewage lagoon operations have been initiated to receive assistance in troubleshooting the causes of the problems and developing solutions.

M. P. Schmierbach, Manager, Environmental Quality  
NAME AND TITLE OF RESPONSIBLE OFFICIAL (type or print)

\_\_\_\_\_  
SIGNATURE OF RESPONSIBLE OFFICIAL

\_\_\_\_\_  
DATE SIGNED

