Hercules Incorporated
West 7th Street
P.O. Box 1937
Hattiesburg, MS 39401
(601) 545-3450

November 2, 1983

Mr. Dwight K. Wylie, P.E. Chief
Air Division
Bureau of Pollution Control
P. O. Box 10385
Jackson, Mississippi 39209

Dear Dwight:

Re your November 8, 1982 letter, please find the attached emissions data concerning the woodwaste boilers for ~~September~~ OCT 1983.

We will incorporate our new permit requirements into next months report.

Very truly yours,

Charles Jordan
Environmental Supervisor

CSJ:sw

Attachments

HERCULES

RECEIVED
OCT 20 REC'D
DEPT OF NATURAL RESOURCE
BUREAU OF POLLUTION CONTROL

Hercules Incorporated
West 7th Street
P.O. Box 1937
Hattiesburg, MS 39401
(601) 545-3450

October 18, 1983

Mr. Dwight K. Wylie, P.E. Chief
Air Division
Bureau of Pollution Control
P. O. Box 10385
Jackson, Mississippi 39209

Dear Dwight:

Re your November 8, 1982 letter, please find the attached emissions data concerning the woodwaste boilers for September, 1983.

Very truly yours,

Charles Jordan
Environmental Supervisor

CSJ:bs

Attachments

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 9-1-31

7-3

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
			710	5 Sec	2						
			725	5 Sec	2						

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 9-1-83

3-11

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 9/1/13

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
	None			None			None			None	

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 9-2-83
2/3

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
						1:30	≤5sec.	(1)	11:15	15sec.	(1)

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 9-2-83

3/11 SHIFT

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
	Out		5:15	2-sec	1	2:45	2-sec	1	10:20	3-sec	2
			7:10	3-sec	1	6:55	3-sec	2			
			7:24	2-sec	1						
			8:10	2-sec	1						
			8:13	3sec	1						

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

<u>OPACITY EVALUATION - WOOD BURNING BOILERS</u>

Date [illegible]

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
						12:25	1 sec	2	1:35	1 sec	2
						12:34	1 sec	1	1:06	2 sec	1
						12:38	1 sec	4			

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date [illegible]

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
—	—	—	—	—	—	—	—	—	—	—	—

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 9-3-83
3/11

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note

NOTES:

1. Load change.
2. Fuel oil adjustment
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 9/3/83

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
12:25	1 [illegible]	2									
1:17	1 Lee	1									
1:19	1 Lee	4									

NOTES:

1. Load change.
2. Fuel oil adjustment
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date [illegible]

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
9:25	20-Sec.	1	7:10	20-Sec.	1	7:15	20-Sec.	1	8:18	15-Sec.	1
11:00	25-Sec.	1	7:15	15-Sec.	1	7:20	15-Sec.	1	8:20	20-Sec.	1
			8:00	20-Sec.	1	7:30	20-Sec	1	10:00	10-Sec.	1

NOTES:

1. Load change.
2. Fuel oil adjustmen
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 9-4-83
3/11

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
7:10	2-sec	1		—			—			—	

NOTES:

1. Load change.
2. Fuel oil adjustmer
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date [illegible]

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
11:33	1-Sec	1							12:18	1-Sec	2

NOTES:

1. Load change.
2. Fuel oil adjustme
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 9/5/83

7/3 Shift

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
7:10	15-Sec.	2	10:55		1						
9:23	20-Sec.	1									
9:25	10-Sec.	1									

NOTES:

1. Load change.
2. Fuel oil adjustment
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 9/5/83

3/11

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
4:05	2-sec	1		—			—			—	
9:02	3-sec	1									

NOTES:

1. Load change.
2. Fuel oil adjustment
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 9/5/73

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note

NOTES:

1. Load change.
2. Fuel oil adjustment
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 9/6/83
7/3 Shift

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
7:55	10-Sec.	2									
11:00	15-Sec.	1									
11:05	10-Sec.	1									
11:12											

NOTES:

1. Load change.
2. Fuel oil adjustment
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 7-6-83
3/11 SHIFt

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
		—		—			—			—	

NOTES:

1. Load change.
2. Fuel oil adjustment
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 9/6/83

11/7

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
	None		8:38	[illegible]	1		None			None	

NOTES:

1. Load change.
2. Fuel oil adjustment
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 9/7/83
7/3

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
—	—	—	—	—	—	—	—	—	—	—	—

NOTES:

1. Load change.
2. Fuel oil adjustment
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 9-7-8[illegible]
3/11 SHIFT

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
	—	—	—	—		—	—		3:58	3-sec	2

NOTES:

1. Load change.
2. Fuel oil adjustment
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 9-8-83

7-3

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
0720	5 Sec	1									
0730	5 Sec	1									
0915	5 Sec	2									

NOTES:

1. Load change.
2. Fuel oil adjustment
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 9/8/83
3/11

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
—	—	—	—	—	—	—	—	—	—	—	—

NOTES:

1. Load change.
2. Fuel oil adjustment
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 7-8-83

11-2

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
						2150	10 sec	[illegible]			

NOTES:

1. Load change.
2. Fuel oil adjustment
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 9/9/83
1/3 Shift

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
			9:30	15-Sec.	2	10:00	10-Sec.	2			

NOTES:

1. Load change.
2. Fuel oil adjustment
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 9/7/12

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
						8:30	2-Sec	3			
						8:38	1-Sec	5			

3/11

NOTES:

1. Load change.
2. Fuel oil adjustment
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 9-9-83
11-7

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
						2145	1 min	(3)			

NOTES:

1. Load change.
2. Fuel oil adjustment
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 9-10-83
7/3

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
8:05	2-Sec	2									
			—	—	—	—	—	—	—	—	—

NOTES:

1. Load change.
2. Fuel oil adjustment
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

Date 9/10/93 3/11

OPACITY EVALUATION - WOOD BURNING BOILERS

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note

NOTES:

1. Load change.
2. Fuel oil adjustment
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 7-10-83

11-7

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note

NOTES:

1. Load change.
2. Fuel oil adjustment
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 9-11-83
7/3 SHIFT

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
—	—	—	—	—	—	—	—	—	—	—	—

NOTES:

1. Load change.
2. Fuel oil adjustment
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 3/11/83

3/11

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
						6:58	1 Sec	1			
						10:12	1 Sec	1			

NOTES:

1. Load change.
2. Fuel oil adjustment
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 9-11-83

11-7

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
						10:45	5 sec.	(1)			

NOTES:

1. Load change.
2. Fuel oil adjustment
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 9-28-83
[illegible]

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
9:40	3-Sec	2	8:45	3-Sec	1	—	—	—	—	—	—
			9:35	4-Sec	3						
			10:50	6-Sec	1						

NOTES:

1. Load change.
2. Fuel oil adjustment
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 9/12/83

3/11

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
3:25	1-Sec	1	10:07	1-Sec	1	3:50	2-Sec	1			
			10:12	1-Sec	2						

NOTES:

1. Load change.
2. Fuel oil adjustment
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 9-12-83
11/7

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
						4:42	10 c	3			
						4:55	5 c	2			

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 9/13/83
7/3 SHIFT

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
—	—	—	9:31	2-sec	1	7:20	2-sec	1	—	—	—
			11:27	1-sec	2	11:27	1-sec	1			

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 9/13/93
3/11

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
			6:12	1-Sec	3	5:38	4-Sec	1	5:10	1-Sec	3

NOTES:

1. Load change.
2. Fuel oil adjustment
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 9-13-83
11-7

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
			5:00	15 c	1						

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 9-14-93
7/3 SHIFT

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
—	—	—	9:40	2-SEC	2	8:50	2-SEC	2	—	—	—
			9:58	2-SEC	2	9:10	3-SEC	1			
			1:03	3-SEC	1	9:15	2-SEC	1			

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 9/14/83

3/11

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
3:30	15-Sec.	2	4:00	20-Sec.	2						
			4:30	15-Sec.	2						
			8:30	20-Sec.	2						

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 9/14/83
11/7 (Shift)

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note

NOTES:

1. Load change.
2. Fuel oil adjustment
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 9-15-83

7-3

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
8:25	[illegible]	(3)	1:35	[illegible]	3	7:35	10 sec.	(2)	1:00	[illegible]	1
			3:05	[illegible]	6	8:03	55 min	(1)			
			12:25	[illegible]	6	11:45	10 m	6			
						12:15	28 M	6			

NOTES:

1. Load change.
2. Fuel oil adjustment
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.
6. wet wood

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 9/15/83
3/11 SHIFT

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
9 00	5 M	6	—		—	9:15	2 sec	1	2 30	[illegible]	1
									9:50	[illegible]	1
									[illegible]	1:05	1
									[illegible]	1:05	2

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 9/15/83
11/7 Shift

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
			11:30	15-Sec.	2				5:40	[illegible]	1

NOTES:

1. Load change.
2. Fuel oil adjustment
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 9-16-83

7/35 #2FT

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
11:02	2-sec	1	8:40	2-sec	1	7:25	4 sec	1			
12:23	2-sec	1	8:45	3-sec	1	7:27	3-sec	1			
			9:00	2-sec	1	10:58	2-sec	2			
			1:30	2 sec	1	11:15	2 sec	1			
						1:15	2-sec	1			
						1:50	1-sec	1			

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 9-16-83
3/11

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
	0			0			0			0	

NOTES:

1. Load change.
2. Fuel oil adjustment
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 9/17/83

7/3

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 9-17-83
3/11

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
5:10	15 c	2	6:15	10 c	2				7:00	5 c	1

NOTES:

1. Load change.
2. Fuel oil adjustment
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 9/17/83

11/7

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
—	—	—	—	—	—	—	—	—	—	—	—

NOTES:

1. Load change.
2. Fuel oil adjustment
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 9/18/82

2/3

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
7:30	1-Sec	1	10:01	1-Sec	1						
9:12	1-Sec	3									

NOTES:

1. Load change.
2. Fuel oil adjustment
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 9-18-83
3/11

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
			4:45	5 e	1						

NOTES:

1. Load change.
2. Fuel oil adjustment
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 9/18/83
11/7

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
—	—	—	—	—	—	—	—	—	—	—	—

NOTES:

1. Load change.
2. Fuel oil adjustment
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 9/19/83
7/3 Shift

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
			7:15	1-Sec	3						
			8:30	1-Sec	1						
			7:55	1-Sec	1						
			8:17	1-Sec	1						
			8:30	1-Sec	1						
			8:43	1-Sec	1						
			1:20	1-Sec	1						
			1:36	1-Sec	1						
			1:46	1-Sec	1						
			2:05	1-Sec	1						

NOTES:

1. Load change.
2. Fuel oil adjustment
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 9/19/83
3/11

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
			7:15	15 e	1						

NOTES:

1. Load change.
2. Fuel oil adjustment
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 9-19-83

11/7

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
			1:00	10-Sec.	1	2:30	10-Sec.	1			
						3:00	15-Sec.	1			

NOTES:

1. Load change.
2. Fuel oil adjustment
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 9/30/83

1/3

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
9:49	1-Sec	4	8:27	6-Sec	1	7:30	1-Sec	1	9:34	1-Sec	2
11:00	1-Sec	4	8:50	3-Sec	1	7:35	1-Sec	1			
11:03	2-Sec	2	1:13	1-Sec	1	7:40	2-Sec	1			
11:04	1-Sec	2	1:50	2-Sec	1	7:50	3-Sec	1			
11:05	1-Sec	1	2:30	2-Sec	1	8:00	2-Sec	1			
11:07	2-Sec	1				8:15	3-Sec	1			
11:08	1-Sec	1				8:17	3-Sec	1			
11:15	2-Sec	1				8:25	1-Sec	1			

NOTES:

1. Load change.
2. Fuel oil adjustment
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 9/20/83 3/11

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
			3:15	10 c	2	6:35	5 c				
						6:45	15 c				

NOTES:

1. Load change.
2. Fuel oil adjustment
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 9/20/83

11/7

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
12:20	15-Sec.	3				12:00	15-Sec.	1			
						12:15	10-Sec.	1			

NOTES:

1. Load change.
2. Fuel oil adjustment
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 9/21/83

7/3

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
9:45	1-Sec	1				1:43	1-Sec	1	12:00	1-Sec	1
10:54	1-Sec	2									
12:28	1-Sec	2									
12:55	1-Sec	2									
1:00	1-Sec	2									

NOTES:

1. Load change.
2. Fuel oil adjustment
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 9/21/83
3/11

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
			2:20	20 c	4.						
			2:40	15 c	3						
			6:20	18 c	5						

NOTES:

1. Load change.
2. Fuel oil adjustment
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 8-21-83
[illegible] SHIFT

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
3-30	4-sec	2	10-[illegible]	3-sec	2	11-20	2-sec	2	—	—	—
3-35	3-sec	1				12-35	3-sec	2			
						12-25	2-sec	1			
						3-31	4sec	1			

NOTES:

1. Load change.
2. Fuel oil adjustment
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 9/22/83
7-3

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
631	10 Sec.	6	630	10 Sec.	6	1245	10 Sec.	6			
930	10 Sec	6	810	10 Sec	6						

NOTES:

1. Load change.
2. Fuel oil adjustment
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

6 Solvent
Adjustment

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 9/22/83
3/11

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
			3:00	7-sec	1						
			3:04	7-sec	1						
			3:24	1-sec	2						

NOTES:

1. Load change.
2. Fuel oil adjustment
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 9-22-83
11/7

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
5:50	2-Sec	1	4:55	3-Sec	1						

NOTES:

1. Load change.
2. Fuel oil adjustmen
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 7/23/83
7/3

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
11:25	7-2	1	6:50	—	—						
			11:02	—	—						

NOTES:

1. Load change.
2. Fuel oil adjustment
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 9/23/83

3/11

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
			5:25	15-Sec.	1						
			6:30	20-Sec.	1						
			6:35	20-Sec.	1						
			6:40	15-Sec.	1						

NOTES:

1. Load change.
2. Fuel oil adjustment
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 9/23/83
11/7 Shift

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
—	—	—	—	—	—	—	—	—	12:20	10-Sec.	3
									2:30	15-Sec.	1

NOTES:

1. Load change.
2. Fuel oil adjustment
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 9/24/83
7/3 Shift

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
			11:08	15 c	2						

NOTES:

1. Load change.
2. Fuel oil adjustment
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 9 22 73
7/3 SHIFT

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
—	—	—	12:03	1 sec	1	—	off	—	—	—	—
			12:31	6 sec	1						

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 9-24-83
11-7

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
			4:35	10-sec.	3						
			4:45	15-Sec.	3						

NOTES:

1. Load change.
2. Fuel oil adjustment
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 9-25-83
7-3

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
	0			0			0			0	

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 9-26-83
3/11

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
4:10	10-Sec	3	4:55	25-Sec	3						
4:20	10-Sec	3									
4:22	8-Sec	3									

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 9-25-83
11/7 SHIFT

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
—	—	—	1:55	2-sec	1	—	out	—	—	—	—
			1:59	1-sec	1						
			2:00	3-sec	1						
			5:55	2-sec	1						

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 9-26-83
7-3

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
			8:20	10 c	1						
			8:25	6 c	1						
			9:20	5 c	1						

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 9-26-83
3/11

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
—	—	—	—	—	—	—	—	—	—	—	—

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 9-26-73
~~11-7 SHIFT~~

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
			2.50	3 Sec	2	—	~~out~~	—			

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 9-27-83
7-3

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
10:45	5 c	2									

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 9-27-83
3/11

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
H:55	5 c	1	8 05	8 c	1						
			8 20	10 c	1						

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date [illegible]

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
2:35	2 sec	1	—	—	—	12:10	3 sec	2	—	—	—
3:22	3 sec	2				12:27	2 sec	2			
4:15	2 sec	1				12:35	1 sec	1			
						1:40	2 sec	1			

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 9-28-83

7-3

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
	0			0			0			0	

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 7/28/83
3/11

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
7:20	1-Sec	3				7:10	1-Sec	3			
						7:35	1-Sec	2			
						7:37	1-Sec	3			
						7:52	1-Sec	4			
						8:03	1-Sec	2			
						9:23	1-Sec	6			

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 9/20/83
1/3

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
—	—	—	—	—	—	—	—	—	—	—	—

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 9-29-83

7-3

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
						700	58	1			

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 9-29-83

3-11

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
6:30	5c	1									

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 9-29-83
11/7

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
2:40	1-sec	1	2:30	1-sec	1						
2:45	1-sec	1	2:33	1-sec	1						
2:50	1-sec	2	2:38	3-sec	1						
3:00	2-sec	1									

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 7/30/83 2/3

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
		0			0			0			0

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 9-30-83
3/11

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
5:15	2-sec	1	5:22	3-sec	1	—	—	—	—	—	—
5:20	3-sec	1									
5:24	4-sec	2									
5:26	3sec	1									
5:37	2sec	2									

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 9/30/83 11/3

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
			1:30	1-sec	1	5:10	2-sec	1			
			1:44	1-sec	1						

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 2/3

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
9:00	10-Sec.	2	8:30	15-Sec.	2	8:00	20-Sec.	2			
10:30	20-Sec.	2	10:00	25-Sec.	3	8:35	20-Sec.	1			
						9:05	15-Sec.	2			

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 10/3/83
3/11

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
3:29	3-sec	1			0	3:45	2-sec	1			0
4:27	2-sec	1				3:50	2-sec	1			
5:40	1-sec	3				4:25	2-sec	1			
5:59	4-sec	2									

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 10/31/73
11/2

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
2:15	2-Sec	2	1:45	2-Sec	6	6:10	2-Sec	1			
2:12	1-Sec	2	1:42	8-Sec	6	6:15	1-Sec	1			

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.
6. To much Rosin on belt.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 10/30/83
3/3

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
8:15	8-Sec.	2	11:30	15-Sec.	2				10:00	10-Sec.	2
									10:10	15-Sec.	2

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 10/30/83
3/11

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
5:50	4-sec	2			0			0	4:55	2-sec	2
									4:59	2-sec	2
									9:18	3-sec	2
									9:25	6-sec	1

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

Date 10/30/83
11/7

OPACITY EVALUATION - WOOD BURNING BOILERS

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 10/29/92

2/3

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
12:00	10-Sec.	2	9:45	15-Sec.	2				11:00	10-Sec.	2

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 12/29/83
3/11

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
5:30	2-sec	1	5:35	2-sec	2			0	9:14	4-sec	2
			5:40	2-sec	1				9:16	6-sec	1
			6:03	2-sec	1						

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 10/29/83
1/2

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
						11:15	2-hr	1			

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 10/28/83

2/3

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
8:50	10 c	2									
10:00	15 c	1									
10:08	10 c	2									
10:40	15 c	1									

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 10-28-83

3/11

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
3:40	2-sec	1			0	9:40	2 sec	1	9:20	2-sec	2
3:45	3-sec	1									
4:25	4-sec	1									
4:50	2-sec	1									
5:25	4-sec	1									
5:40	3-sec	1									

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date ~~10/28/83~~ 11/7

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
						11:43	4-Sec	6	11:25	3-Sec	2
									11:40	3-Sec	6

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.
6. To much Rosin on belt at one time.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 10/27/83

3/3

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
[illegible]	5 Sec	6	1015	5 Sec	6				650	5 Sec	2
1031	5 Sec	6	1012	5 Sec	6				102[illegible]	5 Sec	6
			1030	5 Sec	6						

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

6 - LIGHT DRY SHAVINGS

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 10-27-83
3/11

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
5:50	5 c	1	7:15	20 c	1	8:55	10 c	1	9:15	15 c	2

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 10/27/83
11/7

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
2:25	1-Sec	1				3:20	2-Sec	1	2:15	1-Sec	1
						6:17	1-Sec	2	6:19	2-Sec	6
						6:19	1-Sec	2			

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

6 Wood

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 10-26-83
7-3

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
						10:05	15	3			

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 10-26-83
3/11

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
3:00	8-Sec.	2							6:50	10-Sec.	2

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 10/26/83

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
2:45	2-sec	2							4:50	2-sec	3
									6:30	3-sec	5

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 10/25/83

7/3 Shift

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
7:40	20	1				1:15	5	1	7-20	15	2
11:15	15	3							1:14	10	2

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 10-25-83
3/11

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
			4:00	10-Sec.	2				3:00	10-Sec.	2

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 10/25/83
11/7 SHIFT

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
2:24	6-sec	2	1:05	4-sec	1			0			OUT
2:26	2-sec	2	1:13	2-sec	1						
			1:35	3-sec	1						
			5:07	2-sec	1						
			5:11	2-sec	2						

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 10/24/83
7/3

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
						7:20	20 c	1	7:25	15 c	2
						10:45	5 c		7:40	10 c	1

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 10-24-83

3/11

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
		0	7:25	6-Sec	1	3:27	4-Sec	2	7:35	4-Sec	1
						3:31	3-Sec	2			
						7:10	6-Sec	1			
						7:25	4-Sec	1			
						7:58	3-Sec	1			

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 10/24/83

11/7 Shift

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
—	—	—	1:05	7-Sec.	2	—	—	—	—	—	—

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 10/2/83

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
6:5[illegible]	[illegible]	1				3:30	3 hr	3			
						7:52	3 hrs	2			

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date [illegible]

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
			7:35	10-Sec.	2				6:30	10-Sec.	

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date [illegible]

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
		0			0	2:45	2 SEC	1			0

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date [illegible]

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 10-2?-83
3/11

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
8:00	8-Sec.	2	6:30	10-Sec.	2				4:00	10-Sec.	2

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 10/22/83
11/7

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
4:15	2-sec	2	11:45	2-sec	2	1:13	6-sec	1	11:40	2-sec	2
4:20	3-sec	2	5:45	2-sec	1						

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 1/13/83 7/3

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
11:30	7	1				11:05	15 c	2			
						2:25	10	2			

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 10-22-78
3/11

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
	-	-	5:30	10-Sec.	2	-	-	-	4:00	8-Sec.	2

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 10/23/83

1/2 Shift

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
		0	11:59	1-Sec	1	4:55	5-Sec	1	5:05	6-Sec	2
			12:10	4-Sec	1				5:35	4-Sec	2

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 10/20/83

7-3

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
7:10	5 Sec	2				7:15	10 Sec	3			

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 10/30/[illegible]

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
									3:40	3 sec	3
									6:00	2 sec	2
									6:56	5 sec	6

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

To much resin on belt.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 12/21/83
11-7 SHIFT

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
		0			0	1:[illegible]	2-sec	1	3:45	3-sec	1
						2:18	3-sec	1			
						2:20	4-sec	1			
						2:50	2-sec	2			

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 10/19/83

7/3

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
7:20	1-sec	2	7:50	2-sec	6	8:25	2-sec	6	7:08	2-sec	1
8:12	1-sec	1	7:51	1-sec	6	8:26	2-sec	6	[illegible]	3-sec	2
8:23	1-sec	1	7:55	3-sec	6	8:42	3-sec	2			
			8:01	2-sec	6						
			8:03	Instrument man	7						
			8:18	1-sec	6						

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

6-To much rosin on belt

Date 10/19/73
3/11

OPACITY EVALUATION - WOOD BURNING BOILERS

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
2:45	20 c	3				7:50	15 c	3	3:20	10 c	2
						7:55	10 c	2	7:10	5 c	1
									7:25	5 c	1
									8:48	10 c	2
									9:30	15 c	2

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 10-19-83
11/7

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
4:45	2-sec	2			0	1:20	4-sec	2			0
						1:27	2-sec	2			
						2:15	3-sec	2			
						3:02	2-sec	1			
						4:05	3-sec	1			

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 10/18/83

7/3

Shift

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
7:57	1 sec	2	7:05	1 sec	3	9:45	—	3			
7:59	1 sec	1									
11:03	1 sec	1									
11:42	1 sec	1									

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 10/8/[illegible] 7/[illegible]

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
7:20	10	1	10:25	10	1	7:25	15	2			

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 10-18-83

11-7 SHIFT

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
—	—	—	—	—	—	—	—	—	—	—	—

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date [illegible]

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
			7:50	1 Sec	3						
			7:51	1 Sec	3						
			1:40	1 Sec	1						
			1:50	—	6						
			2:39	—	6						

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.
6. To much Rosin on belt.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 10/16/93 3/11

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
4:35	10 c	2	5:45	15 c	1						
			7:08	5 c	1						
			7:38	10 c	1						

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 10/17/83
11/2

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
—	—	—	—	—	—	—	—	—	—	—	—

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 10/16/83

7/3 Shift

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
1:57	1-Sec	2									

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 10/16/83
3/11

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
4:53	15 c		5:25	20 c	3	9:28	15 c	2			

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 10/16/83
11/7

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
						11:00	10-Sec.	2			

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 10/5/83

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
			1:55	1 sec	2	10:52	1 sec	2			

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date [illegible]

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
4:20	10 e	1									
5:40	5 c	1									
5:48	15	2									

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 10/15/83

11/7 Shift

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
—	—	—	—	—	—	—	—	—	—	—	—

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 12/14/83
7/3 SHIFT

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
						7:15	3-sec	2			
						8:45	2-sec	2			
						10:15	2-sec	1			

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 10-14-83

3/11

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
			9:55	20 c	1						

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 10/14/83
11/7
Shift

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
—	—	—	—	—	—	—	—	—	—	—	—

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 10/14/83

7-3

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
715	5 Sec	2	700	1 Min	7	730	1 Min	6			
900	5 Sec	2	Meter	was	worked	1105	1 Min	4			
1050	5 Sec	1	on	when	5						
			Reason on	for Meter.	39 Min						

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.
6. Fly Ash Hopper Open
7. Light Out

OPACITY EVALUATION - WOOD BURNING BOILERS

Date [illegible]

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
4:02	3-sec	1	8:45	4-sec	3	3:40	2-sec	2	8:35	2-sec	1
			8:50	6-sec	4						

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 10/13/83

11/7 Shift

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
						12:20	10-Sec.	2	2:00	10-Sec.	1

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 12-15-83
7-3

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
		0	8:03	2-sec	1	7:26	2-sec	2	9:20	3-sec	1
			—			7:55	2-sec	2			

Not working on chart
Boiler out for repairs

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 10/12/83

3-11

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
			6:30	1-sec	2	3:44	4-sec	1	3:46	1-sec	3
			7:30	1-sec	4	6:17	1-sec	1	3:50	1-sec	3
			9:05	1-sec	4				4:03	2-sec	3
									6:15	2-sec	2
									6:25	1-sec	1

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 10/12/83
11/7

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
—	—	—	out of order			—	—	—	—	—	—

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 10-11-83

7-3 SHIFT

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
		0		-	0			0	12:35	2-sec	1

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 10/11/83

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
2:03	1-sec	1				6:45	1-sec	1	6:48	2-sec	1
						7:50	1-sec	3	6:50	1-sec	2
						7:56	1-sec	1	6:53	2-sec	2

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 10/[illegible]

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
1130	10c	2	11:20	5c	1	11:10	10e	2			
1125	15	2	1146	7c	2	1125	12	2			
1155	10	2				1134	5c	1			

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 10-10-83
7/3 SHIFt

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
		0			0	7:20	3-5 SEC	2			0

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 10/20/93

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
6:55	1-sec	1				9:20	1-sec	4	10:15	4-sec	1
7:00	1-sec	1				9:25	1-sec	2	10:17	2-sec	1
6:45	1-sec	1				9:27	1-sec	2			
7:12	1-sec	2				9:30	1-sec	1			
7:14	1-sec	1				9:32	1-sec	3			
7:50	1-sec	1									

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date [illegible]10/[illegible] 11/7

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
12:15	20 s	3									
5:50	15 s	1									

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 10-9-83
7-3

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
		0			0			0			0

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date [illegible]

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 10-9-83
1V7

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
11:05	5 c	1									

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 10-8-83
7-3

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
1057	3-sec	2			0			0			0

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 10/8/83
3/

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
						3:00	[illegible]	/			

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 10/8/93
11/1

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
	0			0			0			0	

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 10-7-83
7-3

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
—	—	—	—	—	—	—	—	—	—	—	—

NOTES:

1. Load change.
2. Fuel oil adjustment
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 10/7/83

3/11
Shift

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
4:30	1 sec	3				6:30	1-sec	1			

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 10/7/82
11/7

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
	0			0			0			0	

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 10-6-83

7-3

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 10/6/83

3/11

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
4:00	15-Sec.	2	—	—	—	—	—	—	—	—	—
5:00	10-Sec.	2									

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 10/6/83
11/7
Shift

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
3:10	15 c	3									
3:15	10 c	2									
3:25	15 c	2									

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 10/5/83

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
12:00	20-Sec.	1	11:30	20-Sec.	2						

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 10-5-83
3/11

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
3:3[illegible]	3 sec	2			0			0	6:25	4 sec	2
5:05	2-sec	1									
5:[illegible]	1 sec	1									
[illegible]:35	3-sec	1									

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 10-5-83
1117

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
						12:00	15c	3			

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 12/4/83

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
—	—	—	—	—	—	—	—	—	12:30	10-Sec.	2

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 10/4/83
3/11

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
4:20	4-sec	2			0			0			0
7:13	3-sec	1									

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 10/4/82

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
11:15	1 Sec	2				2:00	1 Sec	3			
						6:30	1 Sec	4			

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 10/3/83

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
						8:00	15-Sec.	2			
						8:15	20-Sec.	2			
						8:30	15-Sec.	2			

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 10/3/83
3/11

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
3:55	3-sec	2	8:25	4 sec	1	7:45	4-sec	2	4:50	2-sec	1
4:35	2-sec	1				8:23	2-sec	2			
4:45	4 sec	2									
6:45	3-sec	2									
7:00	4 sec	2									
7:40	3-sec	1									

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 10/13/83 1/7

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
2:52	2-sec	1	2:25	2-sec	1	3:05	2-sec	1			
			2:28	2-sec	1	3:06	1-sec	2			
			2:38	1-sec	1						

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date [illegible]

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
—	—	—	—	—	—	—	—	—	—	—	—

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 10-2-83
11/7 SHIFT

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
		0			0	2:45	3-Sec	2	3:05	2-Sec	1

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date [illegible]

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
[illegible]	[illegible]	2			[illegible]			[illegible]			[illegible]

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 10/1/83

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
10:00	20-Sec.	1	8:30	15-Sec.	1	–	–	–	–	–	–

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 10-1-93
3/11 SHIFT

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
		0			0	8:58	4-SEC	1			0

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date [illegible]

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

B. B. Golden

Visible Emissions Evaluation Record

Plant Name: Hercules Inc

Address: W 7th Street

City: H'burg, Miss

Emission Point: ______

Date: 9-1-83

Is emission point operation normal ? ______

V. E. Observer: Howell Russ

Certification Expiration: 10-21-83

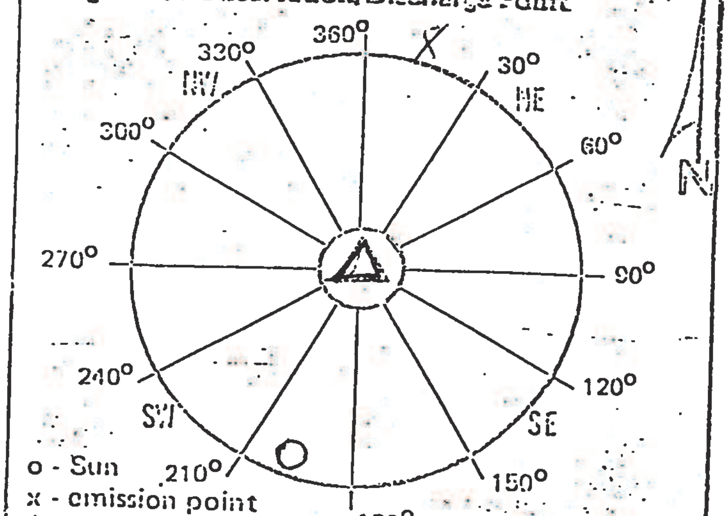
Set No.	Time Start	Time End	Opacity Sum	Opacity Average
North Stack	12 30 pm	12 35	660	27.5

Overall Average: ______

	Initial	Final
Distance to discharge	1 1/2 Length	
Direction to discharge	N.E.	
Height of observation point		
Height of discharge		
Plume color	Gray	
Plume background	Blue	
Water vapor in plume ?		
Wind direction (from)	N.E.	
Wind speed	[illegible] MPH	
Ambient temperature	89	
Discharge temperature		
Sky conditions	[illegible]	

Min.	Seconds 0	15	30	45
0	20	20	20	20
1	20	20	20	20
2	25	25	25	25
3	30	30	30	30
4	30	30	30	30
5	40	40	40	40
0				
1				
2				
3				
4				
5				
0				
1				
2				
3				
4				
5				

Diagram Of Observation/Discharge Point



o - Sun
x - emission point
△ observer

Remarks: ______

Received By: ______

Visible Emissions Evaluation Record

Plant Name: Hercules INC

Address: W 7th Street

City: H'burg, Miss

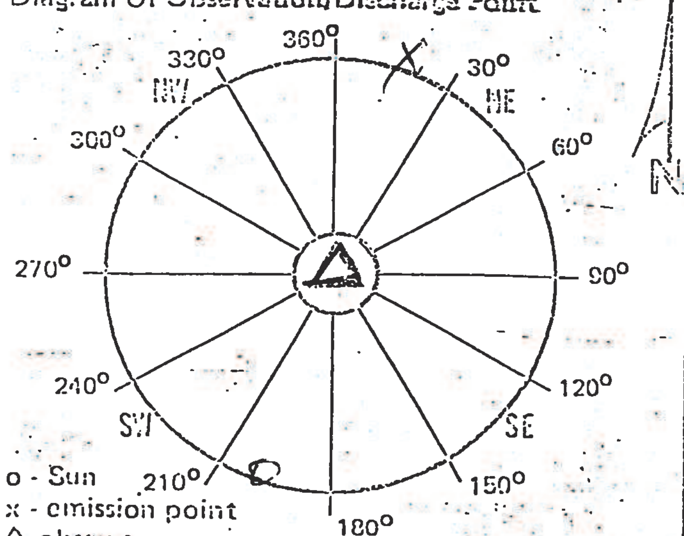
Emission Point:

Date: 9-1-83

Is emission point operation normal ?

	Initial	Final
Distance to discharge	1 1/2	Lengths
Direction to discharge	N.E.	
Height of observation point		
Height of discharge		
Plume color	Gray	
Plume background	Blue	
Water vapor in plume ?		
Wind direction (from)	N.E.	
Wind speed	5 mph	
Ambient temperature	89	
Discharge temperature		
Sky conditions	P.Cloudy	

Diagram Of Observation/Discharge Point



V. E. Observer: Howell Russ

Certification Expiration: 10-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
South Stack	12:30 pm	12:35	160	6.7

Overall Average:

Min.	Seconds 0	15	30	45
0	5	5	5	5
1	5	5	5	5
2	5	5	5	5
3	10	10	10	10
4	10	10	10	10
5	10	10	10	10
0				
1				
2				
3				
4				
5				
0				
1				
2				
3				
4				
5				

Remarks:

Received By:

Visible Emissions Evaluation Record

Plant Name: Hercules Inc

Address: W 7th Street

City: H'burg, Miss

Emission Point:

Date: 9-2-83

Is emission point operation normal ?

V. E. Observer: Howell Russ

Certification Expiration: 11-21-83

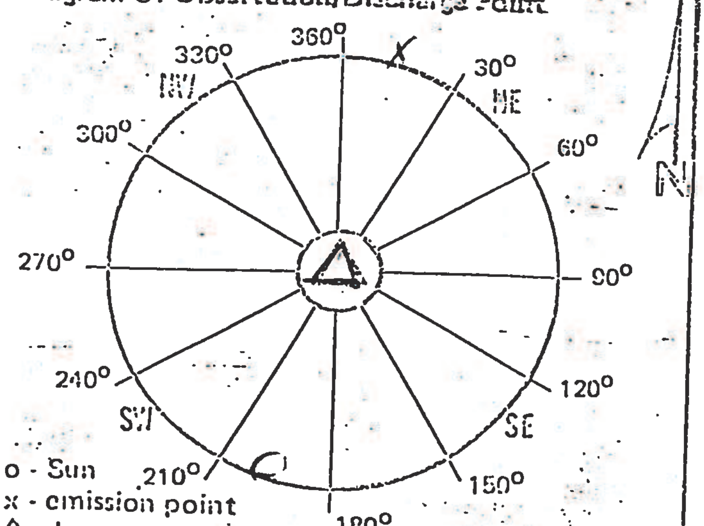
Set No.	Time Start	Time End	Opacity Sum	Opacity Average
South Stack	12:05 pm	12:10 pm	120	5

Overall Average:

	Initial	Final
Distance to discharge	1 1/2 Lengths	
Direction to discharge	N.E.	
Height of observation point		
Height of discharge		
Plume color	Gray	
Plume background	Blue	
Water vapor in plume ?		
Wind direction (from)	N.E	
Wind speed	5 MPH	
Ambient temperature	87	
Discharge temperature		
Sky conditions	P Cloudy	

Min.	Seconds 0	15	30	45
0	5	5	5	5
1	5	5	5	5
2	5	5	5	5
3	5	5	5	5
4	5	5	5	5
5	5	5	5	5
0				
1				
2				
3				
4				
5				
0				
1				
2				
3				
4				
5				

Diagram Of Observation/Discharge Point



o - Sun
x - emission point
Δ observer

Remarks:

Received By:

B.B. Golden

Visible Emissions Evaluation Record

Plant Name: Hercules Inc

Address: N' 7th Street

City: H'burg, Miss

Emission Point: ________

Date: 9-2-83

Is emission point operation normal ? ________

V. E. Observer: Howell Reese

Certification Expiration: 10-21-83

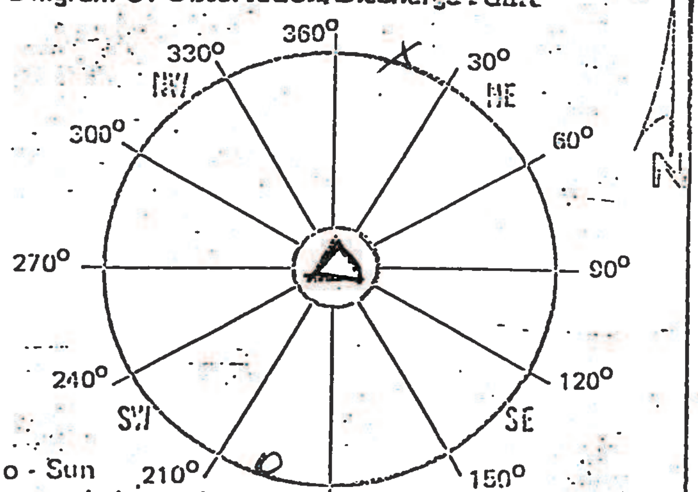
Set No.	Time Start	Time End	Opacity Sum	Opacity Average
North Stack	12:05 pm	12:10 pm	440	18.3

	Initial	Final
Distance to discharge	1 1/2	Lengths
Direction to discharge	N.E	
Height of observation point		
Height of discharge		
Plume color	Gray	
Plume background	Blue	
Water vapor in plume ?		
Wind direction (from)	N.E	
Wind speed	5 MPH	
Ambient temperature	87	
Discharge temperature		
Sky condition	P Cldy	

Overall Average: ________

Min.	Seconds 0	15	30	45
0	15	15	15	15
1	10	10	10	10
2	15	15	15	15
3	15	15	15	15
4	20	20	20	20
5	20	20	20	20
0				
1				
2				
3				
4				
5				
0				
1				
2				
3				
4				
5				

Diagram Of Observation/Discharge Point



o - Sun
x - emission point
Δ observer

Remarks: ________

Received By: ________

Visible Emissions Evaluation Record

Plant Name: Hercules Inc

Address: W 7th Street

City: H'burg

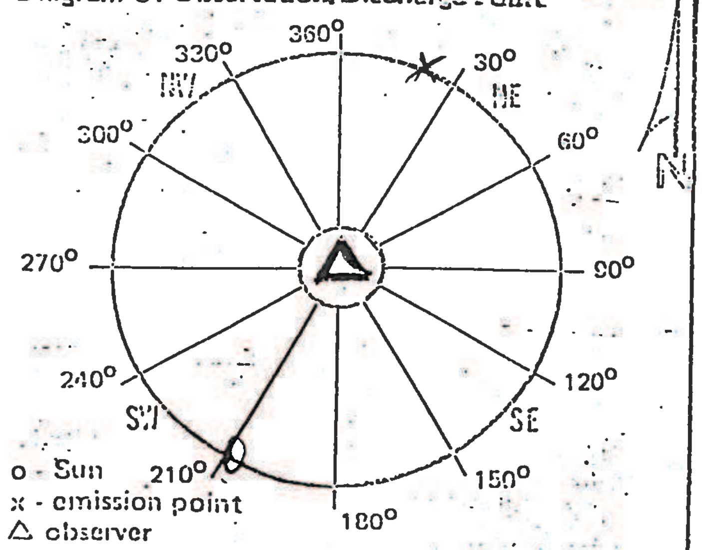
Emission Point:

Date: 9-6-83

Is emission point operation normal ?

	Initial	Final
Distance to discharge	1/2	
Direction to discharge	NE	
Height of observation point		
Height of discharge		
Plume color	Black & Brown	
Plume background	Gray	
Water vapor in plume ?		
Wind direction (from)	SW	
Wind speed	5 MPH	
Ambient temperature	83°	
Discharge temperature		
Sky conditions	Cloudy	

Diagram Of Observation/Discharge Point



V. E. Observer: Carroll Lowery

Certification Expiration: 10-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
North	1:50 Pm	1:56 Pm	495	20.6

Overall Average:

Min.	Seconds 0	15	30	45
0	20	20	20	20
1	20	20	20	15
2	20	20	25	30
3	20	15	20	15
4	20	20	25	25
5	25	25	20	15
0				
1				
2				
3				
4				
5				
0				
1				
2				
3				
4				
5				

Remarks:

Received By:

Visible Emissions Evaluation Record

Plant Name: Hercules Inc

Address: W 7th Street

City: H'burg

Emission Point: ______

Date: 9-6-83

Is emission point operation normal ? ______

V. E. Observer: Carroll Faulkner

Certification Expiration: 10-21-83

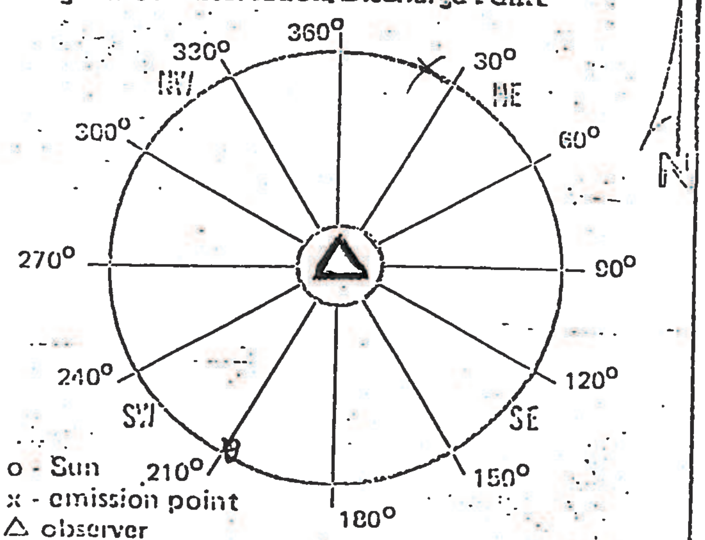
Set No.	Time Start	Time End	Opacity Sum	Opacity Average
South				
	1:50Pm	1:56Pm	545	22.7

Overall Average: ______

	Initial	Final
Distance to discharge	1/2 b	
Direction to discharge	NE	
Height of observation point		
Height of discharge		
Plume color	Black + Brown	
Plume background	Gray	
Water vapor in plume ?		
Wind direction (from)	SW	
Wind speed	5 MPH	
Ambient temperature	83°	
Discharge temperature		
Sky conditions	Cloudy	

Min.	Seconds 0	15	30	45
0	20	20	20	20
1	25	25	25	20
2	25	25	25	25
3	20	20	20	20
4	20	25	25	25
5	25	25	25	20
0				
1				
2				
3				
4				
5				
0				
1				
2				
3				
4				
5				

Diagram Of Observation/Discharge Point



Remarks: ______

Received By: ______

Visible Emissions Evaluation Record

Plant Name: Hercules Inc

Address: W 7th Street

City: H'by

Emission Point:

Date: 9. 7. 83

Is emission point operation normal ?

V. E. Observer: Carroll Lindey

Certification Expiration: 10-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
North	1:53 PM	2:01 PM	375	15.6

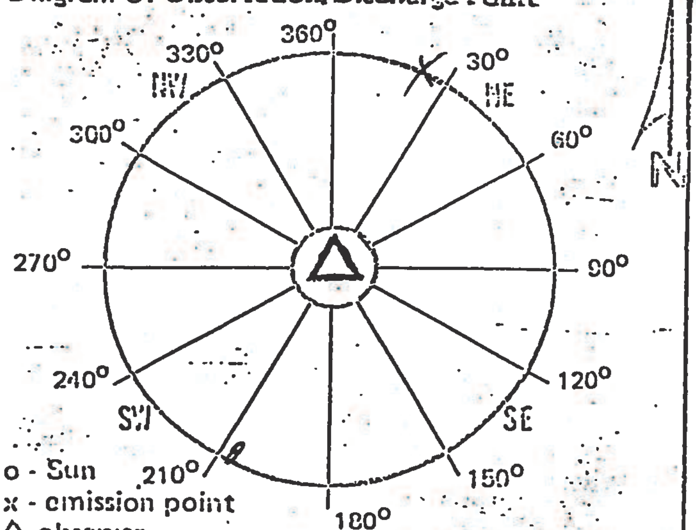
Overall Average:

	Initial	Final
Distance to discharge	1/2 L	
Direction to discharge	NE	
Height of observation point		
Height of discharge		
Plume color	Black	
Plume background	Gray	
Water vapor in plume ?		
Wind direction (from)	SW	
Wind speed	20 MPH	
Ambient temperature	80°F	
Discharge temperature		
Sky conditions	Cloudy	

Seconds

Min.	0	15	30	45
0	15	15	15	15
1	15	15	15	10
2	15	15	15	15
3	15	15	20	20
4	20	15	15	15
5	15	15	15	15
0	95	90	95	95
1				
2				
3				
4				
5				
0				
1				
2				
3				
4				
5				

Diagram Of Observation/Discharge Point



o - Sun
x - emission point
△ observer

Remarks:

Received By:

Visible Emissions Evaluation Record

Plant Name: Hercules Inc

Address: W 7th Street

City: H'by

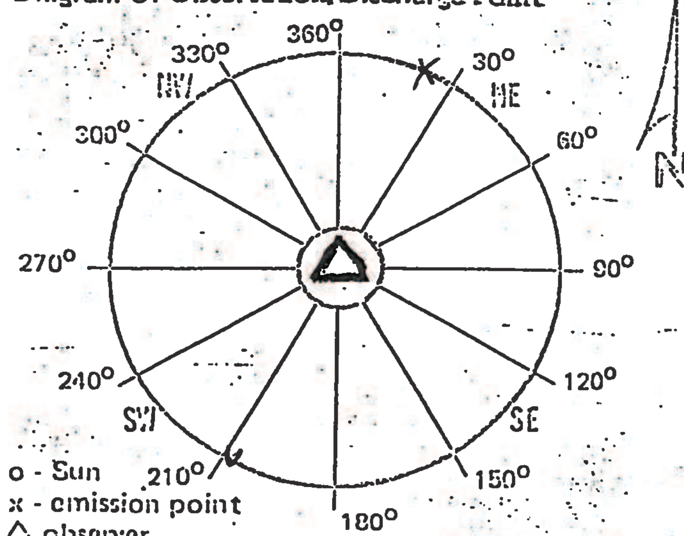
Emission Point:

Date: 9-7-83

Is emission point operation normal ?

	Initial	Final
Distance to discharge	1½ L	
Direction to discharge	NE	
Height of observation point		
Height of discharge		
Plume color	Black	
Plume background	Gray	
Water vapor in plume ?		
Wind direction (from)	S W	
Wind speed	20 MPH	
Ambient temperature	80	
Discharge temperature		
Sky conditions	Cloudy	

Diagram Of Observation/Discharge Point



V. E. Observer: Carroll Lowery

Certification Expiration: 10-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
South	1:05 Am	2:01 Am	280	11.7

Overall Average: 11

Min.	Seconds 0	15	30	45
0	10	10	10	10
1	10	15	15	15
2	15	15	15	15
3	10	10	10	10
4	15	10	10	10
5	10	10	10	10
0	70	70	70	70
1				
2				
3				
4				
5				
0				
1				
2				
3				
4				
5				

Remarks:

Received By:

Visible Emissions Evaluation Record

Plant Name: Hercules Inc

Address: W 7th Street

City: H'bg

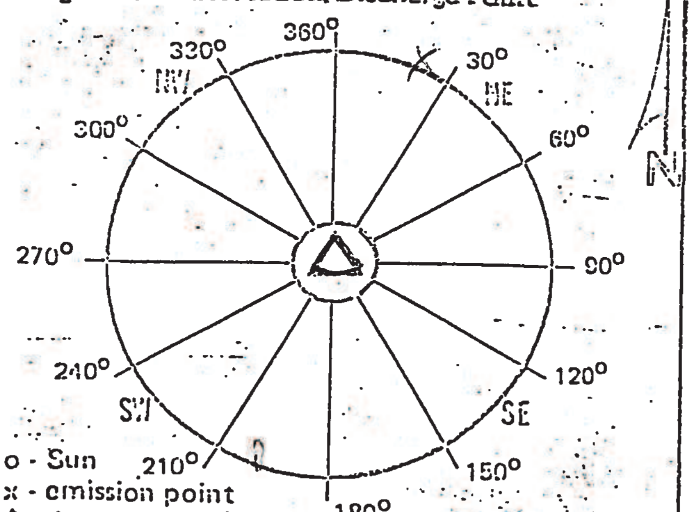
Emission Point:

Date: 9-8-83

Is emission point operation normal ?

	Initial	Final
Distance to discharge	1Kft	
Direction to discharge	NE	
Height of observation point		
Height of discharge		
Plume color	Brown	
Plume background	Gray	
Water vapor in plume ?		
Wind direction (from)	S	
Wind speed	5 mph	
Ambient temperature	90°	
Discharge temperature		
Sky conditions	Pc	

Diagram Of Observation/Discharge Point



o - Sun
x - emission point
Δ observer

V. E. Observer: [illegible]

Certification Expiration: 10-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
North	1:35 Pm	1:41 Pm	190	7.9

Overall Average:

Min.	Seconds 0	15	30	45
0	5	5	10	10
1	10	5	5	5
2	5	10	10	10
3	10	10	15	10
4	10	10	10	5
5	5	5	5	5
0				
1				
2				
3				
4				
5				
0				
1				
2				
3				
4				
5				

Remarks:

Received By:

Visible Emissions Evaluation Record

Plant Name: Hercules Inc

Address: W 7th Street

City: H'by

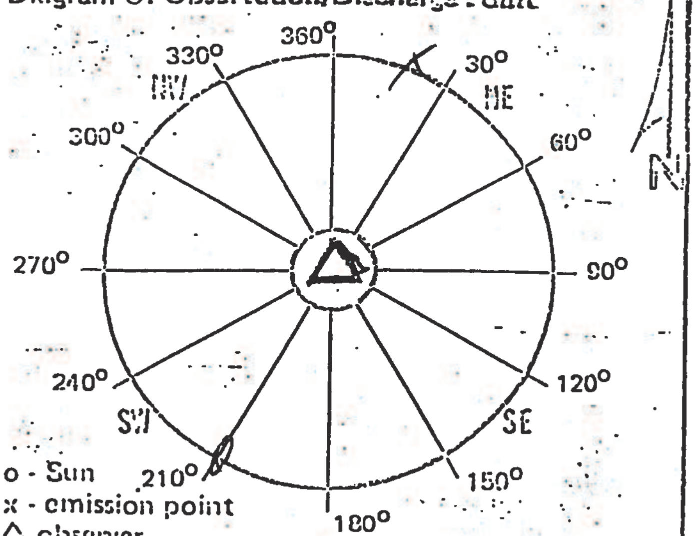
Emission Point:

Date: 9-9-83

Is emission point operation normal ?

	Initial	Final
Distance to discharge	1½ L	
Direction to discharge	NE	
Height of observation point		
Height of discharge		
Plume color	Brown	
Plume background	Blue	
Water vapor in plume ?		
Wind direction (from)	S	
Wind speed	5 mph	
Ambient temperature	90°	
Discharge temperature		
Sky conditions	Pk	

Diagram Of Observation/Discharge Point



o - Sun
x - emission point
△ observer

V. E. Observer: Carroll Lawing

Certification Expiration: 10-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
North	1:40 PM	1:46 PM		

Overall Average: 14

Min.	0	15	30	45
0	20	20	15	10
1	15	15	15	15
2	15	15	15	10
3	10	10	10	10
4	15	15	15	15
5	15	15	15	15
0				
1				
2				
3				
4				
5				
0				
1				
2				
3				
4				
5				

Remarks:

Received By:

Visible Emissions Evaluation Record

Plant Name: Hercules Inc

Address: 47th Street

City: H'by

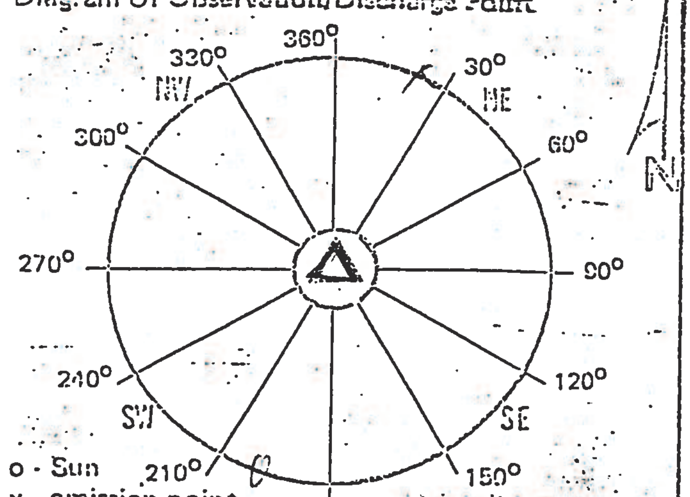
Emission Point:

Date: 9-8-83

Is emission point operation normal ?

	Initial	Final
Distance to discharge	1½ L	
Direction to discharge	NE	
Height of observation point		
Height of discharge		
Plume color	Brown	
Plume background	Grey	
Water vapor in plume ?		
Wind direction (from)	S	
Wind speed	5 mph	
Ambient temperature	90°	
Discharge temperature		
Sky conditions	P.C.	

Diagram Of Observation/Discharge Point



o - Sun
x - emission point
△ observer

V. E. Observer: Carroll Lowery

Certification Expiration: 10-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
South	1:35 PM	1:41 PM	260	10.8

Overall Average:

Min.	0	15	30	45
0	10	10	10	10
1	10	10	10	10
2	10	10	10	10
3	10	15	15	15
4	15	15	15	10
5	10	10	5	5
0				
1				
2				
3				
4				
5				
0				
1				
2				
3				
4				
5				

Remarks:

Received By:

Visible Emissions Evaluation Record

Plant Name: Hercules Inc

Address: W 7th Street

City: H'dg

Emission Point: 1

Date: 9-9-83

Is emission point operation normal ?

V. E. Observer: [illegible signature]

Certification Expiration: 10-21-83

Set No.	Time		Opacity	
	Start	End	Sum	Average
South	1:40 Pm	1:46 Pm	270	11.3

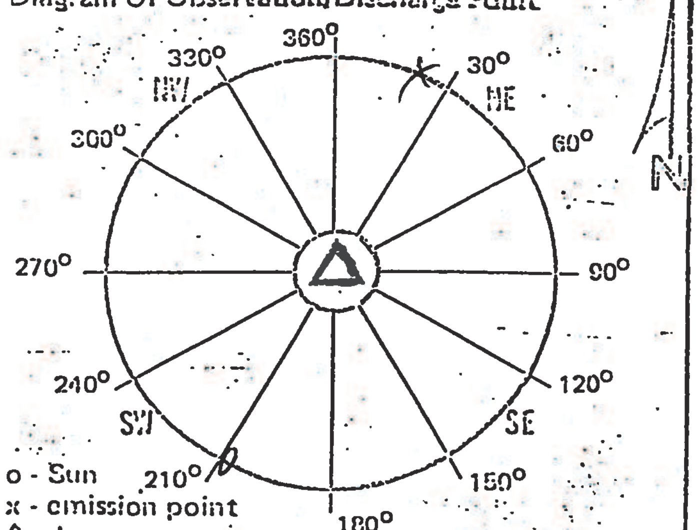
Overall Average: 11

	Initial	Final
Distance to discharge	1/2 L	
Direction to discharge	NE	
Height of observation point		
Height of discharge		
Plume color	Brown	
Plume background	Blue	
Water vapor in plume ?		
Wind direction (from)	S	
Wind speed	5 MPH	
Ambient temperature	90°	
Discharge temperature		
Sky conditions	Pc	

Seconds

Min.	0	15	30	45
0	15	15	10	10
1	10	10	10	10
2	10	10	10	10
3	10	10	10	10
4	10	10	10	15
5	15	15	15	10
0				
1				
2				
3				
4				
5				
0				
1				
2				
3				
4				
5				

Diagram Of Observation/Discharge Point



o - Sun
x - emission point
△ observer

Remarks:

Received By:

Visible Emissions Evaluation Record

Plant Name: Hercules Inc

Address: W 7th Street

City: H'burg, Miss

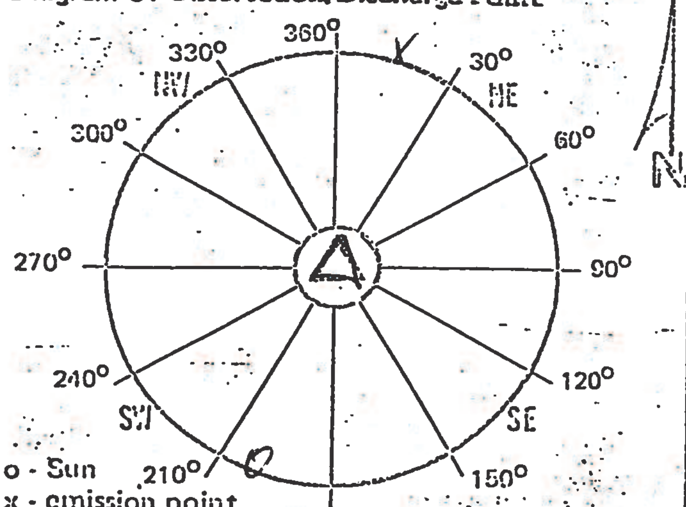
Emission Point:

Date: 9-12-83

Is emission point operation normal ?

	Initial	Final
Distance to discharge	1 1/2 Lengths	
Direction to discharge	N.E.	
Height of observation point		
Height of discharge		
Plume color	Gray	
Plume background	Gray	
Water vapor in plume ?		
Wind direction (from)	N.E.	
Wind speed	5 MPH	
Ambient temperature	84	
Discharge temperature		
Sky conditions	Cloudy	

Diagram Of Observation/Discharge Point



o - Sun
x - emission point
△ observer

V. E. Observer: Howell Russ

Certification Expiration: 10-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
South Stack	12:20 pm	12:25 pm	240	10

Overall Average:

Min.	0	15	30	45
0	10	10	10	10
1	10	10	10	10
2	10	10	10	10
3	10	10	10	10
4	10	10	10	10
5	10	10	10	10
0				
1				
2				
3				
4				
5				
0				
1				
2				
3				
4				
5				

Remarks:

Received By:

B.B. GOLDEN

Visible Emissions Evaluation Record

Plant Name: HERCULES. INC

Address: W 7th Street

City: H'burg, Miss

Emission Point: ______

Date: 9-12-83

Is emission point operation normal ? ______

V. E. Observer: Howell Russ

Certification Expiration: 10-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
North Stack	12^{20} pm	12^{25} pm	320	13.3

	Initial	Final
Distance to discharge	1 1/2 Lengths	
Direction to discharge	N.E.	
Height of observation point		
Height of discharge		
Plume color	Gray	
Plume background	Gray	
Water vapor in plume ?		
Wind direction (from)	N.E	
Wind speed	5 MPH	
Ambient temperature	84	
Discharge temperature		
Sky conditions	Cloudy	

Overall Average: ______

Min.	0	15	30	45
0	15	15	15	15
1	15	15	15	15
2	10	10	10	10
3	10	10	10	10
4	15	15	15	15
5	15	15	15	15
0				
1				
2				
3				
4				
5				
0				
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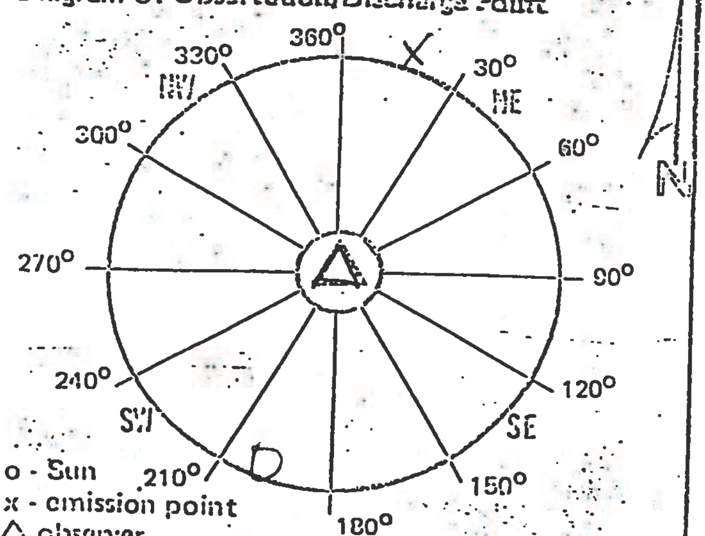
3				
4				
5				

Diagram Of Observation/Discharge Point



o - Sun
x - emission point
△ observer

Remarks: ______

Received By: ______

Visible Emissions Evaluation Record

Plant Name: Hercules Inc

Address: W 7th Street

City: H'burg, Miss

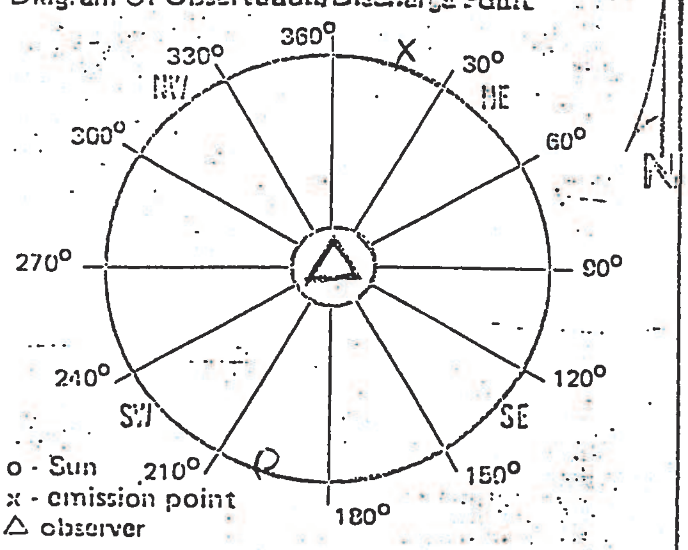
Emission Point: ____________

Date: 9-13-83

Is emission point operation normal ? ____________

	Initial	Final
Distance to discharge	1 1/2	Lengths
Direction to discharge	N.E	
Height of observation point		
Height of discharge		
Plume color	Gray	
Plume background	Gray	
Water vapor in plume ?		
Wind direction (from)	N.E	
Wind speed	5MPH	
Ambient temperature	78	
Discharge temperature		
Sky conditions	Cloudy	

Diagram Of Observation/Discharge Point



o - Sun
x - emission point
△ observer

V. E. Observer: Howell Russ

Certification Expiration: 10-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
North Stack	12 35 pm	12 40 pm	660	27.5

Overall Average: ____________

Min.	Seconds 0	15	30	45
0	30	30	30	30
1	35	35	35	35
2	30	30	30	30
3	25	25	25	25
4	25	25	25	25
5	20	20	20	20
0				
1				
2				
3				
4				
5				
0				
1				
2				
3				
4				
5				

Remarks: ____________

Received By: ____________

Visible Emissions Evaluation Record

Plant Name: HERCULES INC

V. E. Observer: Howell Russ

Address: W 7th Street

Certification Expiration: 10-21-83

City: H'burg, Miss

Emission Point:

Date: 9-13-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
South Stack	12 35 pm	12 40 pm	180	7.5

Overall Average:

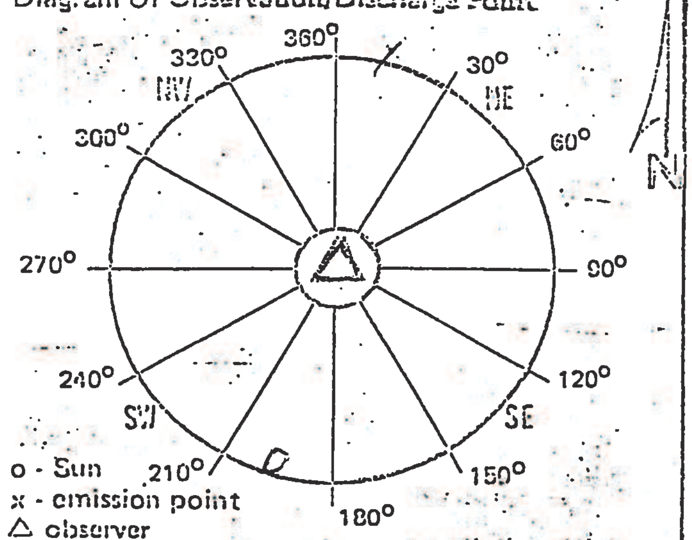
[illegible]

Is emission point operation normal ?

	Initial	Final
Distance to discharge	1 1/2 Lengths	
Direction to discharge	N.E	
Height of observation point		
Height of discharge		
Plume color	Gray	
Plume background	Gray	
Water vapor in plume ?		
Wind direction (from)	N E	
Wind speed	5 MPH	
Ambient temperature	78	
Discharge temperature		
Sky conditions	Cloudy	

Min.	0	15	30	45
0	5	5	5	5
1	10	10	10	10
2	5	5	5	5
3	5	5	5	5
4	10	10	10	10
5	10	10	10	10
0				
1				
2				
3				
4				
5				
0				
1				
2				
3				
4				
5				

Diagram Of Observation/Discharge Point



Remarks:

Received By:

Visible Emissions Evaluation Record

Plant Name: [illegible]

Address: [illegible] 2nd Street

City: [illegible]

Emission Point: ______

Date: 9-14-83

Is emission point operation normal ? ______

V. E. Observer: [illegible]

Certification Expiration: [illegible]

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
South	12:40pm	12:46pm	380	15.8

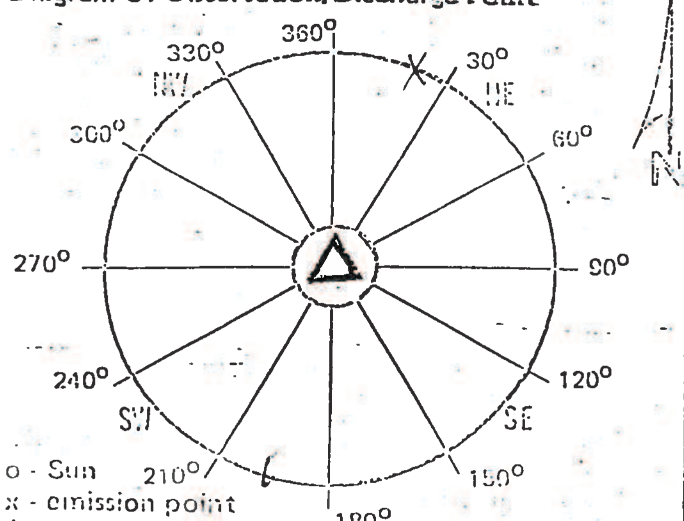
Overall Average: ______

	Initial	Final
Distance to discharge	1/2 L.	
Direction to discharge	NE	
Height of observation point		
Height of discharge		
Plume color	Black	
Plume background	Gray	
Water vapor in plume ?		
Wind direction (from)	SE	
Wind speed	10 MPH	
Ambient temperature	90°	
Discharge temperature		
Sky conditions	Cloudy	

Min.	0	15	30	45
0	15	15	15	20
1	15	15	15	15
2	15	15	15	15
3	20	20	15	15
4	15	15	15	20
5	15	15	15	15
0				
1				
2				
3				
4				
5				
0				
1				
2				
3				
4				
5				

Seconds

Diagram Of Observation/Discharge Point



o - Sun
x - emission point
△ observer

Remarks: ______

Received By: ______

Visible Emissions Evaluation Record

Plant Name: Hercules Inc

Address: W 7th Street

City: H'burg, Miss

Emission Point:

Date: 9-14-83

Is emission point operation normal ?

V. E. Observer: Howell Russ

Certification Expiration: 10 21-83

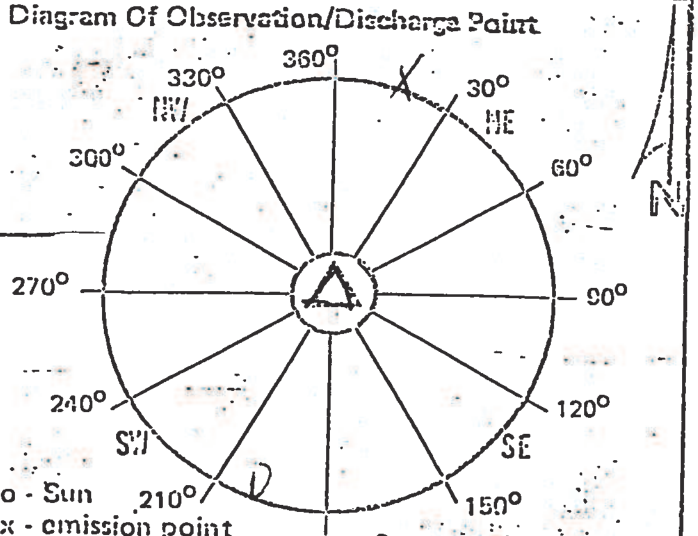
Set No.	Time Start	Time End	Opacity Sum	Opacity Average
North Stack	12 35 PM	12 40 PM	180	7.5

	Initial	Final
Distance to discharge	1 1/2 Lengths	
Direction to discharge	N.E.	
Height of observation point		
Height of discharge		
Plume color	Gray	
Plume background	Blue	
Water vapor in plume ?		
Wind direction (from)	N.E.	
Wind speed	5 MPH	
Ambient temperature	75	
Discharge temperature		
Sky conditions	P Cloudy	

Overall Average:

Min.	Seconds 0	15	30	45
0	10	10	10	10
1	10	10	10	10
2	5	5	5	5
3	5	5	5	5
4	10	10	10	10
5	5	5	5	5
0				
1				
2				
3				
4				
5				
0				
1				
2				
3				
4				
5				

Diagram Of Observation/Discharge Point



o - Sun
x - emission point
△ observer

Remarks:

Received By:

B. B. Golden

Visible Emissions Evaluation Record

Plant Name: HERCULES INC

Address: W. 7th STREET

City: H'burg Miss

Emission Point:

Date: 9-14-83

Is emission point operation normal ?

V. E. Observer: Howell Russ

Certification Expiration: 10-21-83

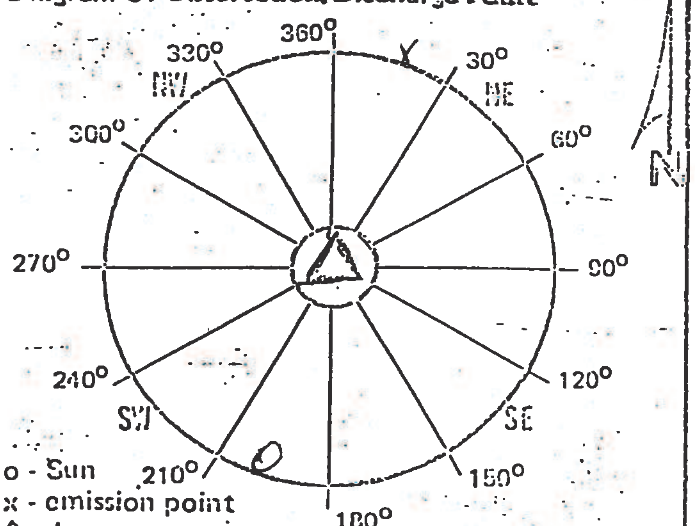
Set No.	Time Start	Time End	Opacity Sum	Opacity Average
South Stack	12:35 pm	12:40 pm	580	24.2

Overall Average:

	Initial	Final
Distance to discharge	1 1/2 Lengths	
Direction to discharge	N.E.	
Height of observation point		
Height of discharge		
Plume color	Gray	
Plume background	Blue	
Water vapor in plume ?		
Wind direction (from)	N.E	
Wind speed	5 MPH	
Ambient temperature	75	
Discharge temperature		
Sky conditions	P. Cloudy	

Min.	Seconds 0	15	30	45
0	15	15	15	15
1	20	20	20	20
2	25	25	25	25
3	30	30	30	30
4	30	30	30	30
5	25	25	25	25
0				
1				
2				
3				
4				
5				
0				
1				
2				
3				
4				
5				

Diagram Of Observation/Discharge Point



o - Sun
x - emission point
△ observer

Remarks:

Received By:

Visible Emissions Evaluation Record

Plant Name: HERCULES INC

Address: W 7th Street

City: H'burg, Miss

Emission Point:

Date: 9-15-83

V. E. Observer: Howell R[illegible]

Certification Expiration: 11-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
South Stack	12:05 pm	12:10 pm	300	12.5

Is emission point operation normal ?

	Initial	Final
Distance to discharge	1 1/2 Lengths	
Direction to discharge	N.E.	
Height of observation point		
Height of discharge		
Plume color	Grey	
Plume background	Blue	
Water vapor in plume ?		
Wind direction (from)	NW	
Wind speed	5 mph	
Ambient temperature	70	
Discharge temperature		
Sky conditions	Clear	

Overall Average:

Min.	Seconds 0	15	30	45
0	20	20	20	20
1	15	15	15	15
2	10	10	10	10
3	10	10	10	10
4	10	10	10	10
5	10	10	10	10
0				
1				
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3				
4				
5				
0				
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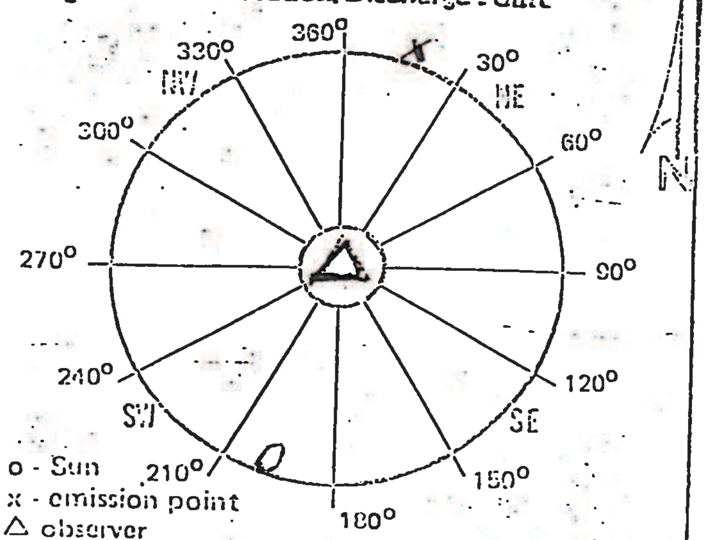
5				

Diagram Of Observation/Discharge Point



Remarks:

Received By:

B.B. Golden

Visible Emissions Evaluation Record

Plant Name: Hercules Inc

Address: W 7th Street

City: H'burg, Miss

Emission Point:

Date: 9-15-83

Is emission point operation normal ?

V. E. Observer: Howell Russ

Certification Expiration: 10-31-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
North Stack	12:05 pm	12:16 pm	760	31.7

Overall Average:

	Initial	Final
Distance to discharge	1 1/2 Lengths	
Direction to discharge	N.E.	
Height of observation point		
Height of discharge		
Plume color	Gray	
Plume background	Blue	
Water vapor in plume ?		
Wind direction (from)	N.W.	
Wind speed	5 mph	
Ambient temperature	70	
Discharge temperature		
Sky conditions	Clear	

Min.	Seconds 0	15	30	45
0	30	30	30	30
1	35	35	35	35
2	35	35	35	35
3	35	35	35	35
4	30	30	30	30
5	25	25	25	25
0				
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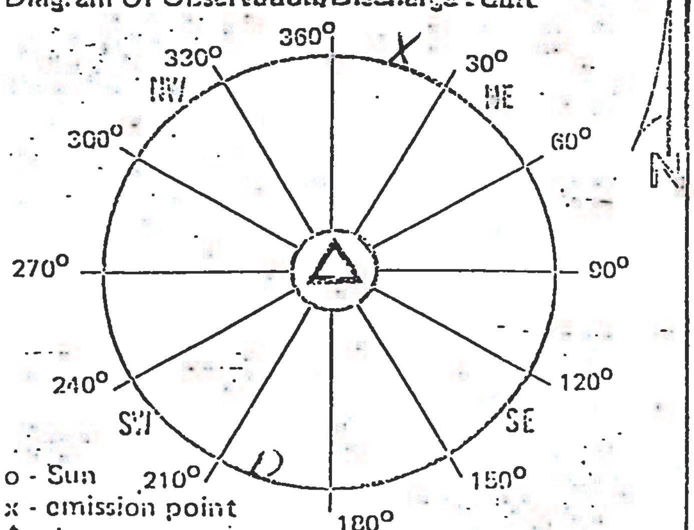
Diagram Of Observation/Discharge Point



o - Sun
x - emission point
△ observer

Remarks:

Received By:

Visible Emissions Evaluation Record

Plant Name: Hercules Inc.

Address: W 7th Street

City: H Burg, Miss

Emission Point: ______

Date: 9-16-83

Is emission point operation normal ? ______

V. E. Observer: Howell Ross

Certification Expiration: 10-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
South Stack	11 05 AM	11 10 AM	440	18.3

	Initial	Final
Distance to discharge	1 1/2 Lengths	
Direction to discharge	N.E	
Height of observation point		
Height of discharge		
Plume color	Gray	
Plume background	Blue	
Water vapor in plume ?		
Wind direction (from)	S.W	
Wind speed	5 MPH	
Ambient temperature	75	
Discharge temperature		
Sky conditions	Clear	

Overall Average: ______

Min.	Seconds 0	15	30	45
0	20	20	20	20
1	20	20	20	20
2	25	25	25	25
3	20	20	15	15
4	10	10	15	10
5	20	15	15	15
0				
1				
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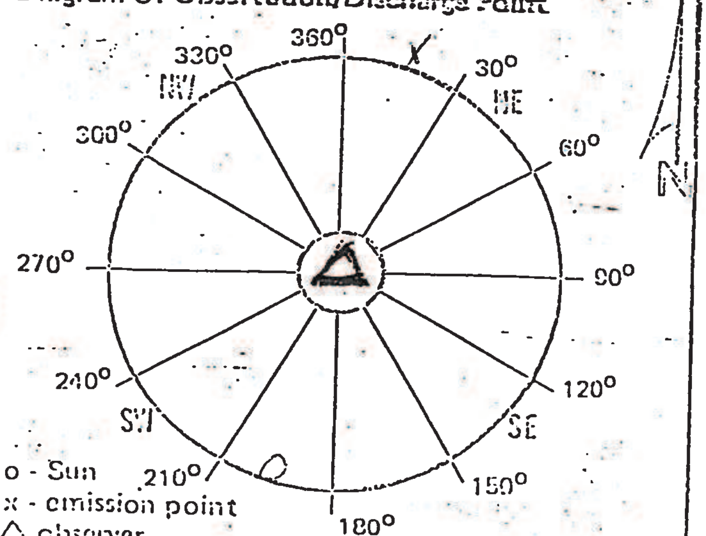
3				
4				
5				

Diagram Of Observation/Discharge Point



o - Sun
x - emission point
△ observer

Remarks: ______

Received By: ______

B. B. Golden

Visible Emissions Evaluation Record

Plant Name: Hercules Inc

Address: W 7th Street

City: H'burg, Miss

Emission Point:

Date: 9-16-83

Is emission point operation normal ?

V. E. Observer: [illegible]

Certification Expiration: 11-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
North Stack	11:05 am	11:10 am	455	19

Overall Average:

	Initial	Final
Distance to discharge	1 1/2 Lengths	
Direction to discharge	N-E	
Height of observation point		
Height of discharge		
Plume color	Gray	
Plume background	Blue	
Water vapor in plume ?		
Wind direction (from)	SW	
Wind speed	5 MPH	
Ambient temperature	75	
Discharge temperature		
Sky conditions	Clear	

Min.	Seconds 0	15	30	45
0	20	20	20	20
1	15	15	15	15
2	20	20	20	20
3	25	20	15	15
4	15	20	20	15
5	25	20	20	25
0				
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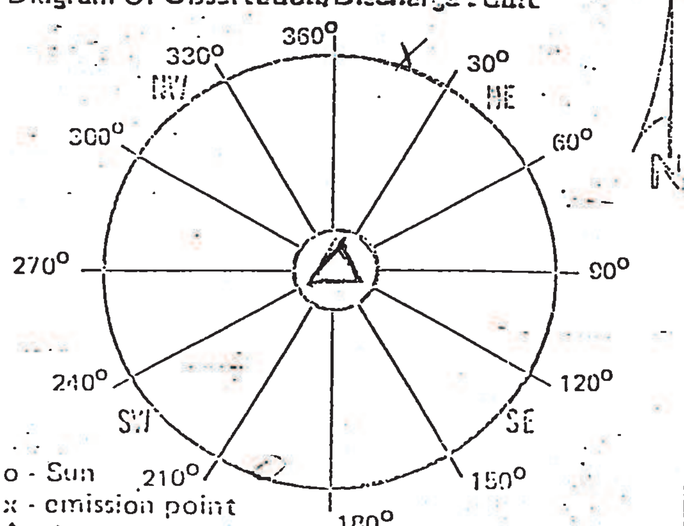
Diagram Of Observation/Discharge Point



o - Sun
x - emission point
△ observer

Remarks:

Received By:

Visible Emissions Evaluation Record

Plant Name: Hercules Inc

Address: [illegible] 7th Street

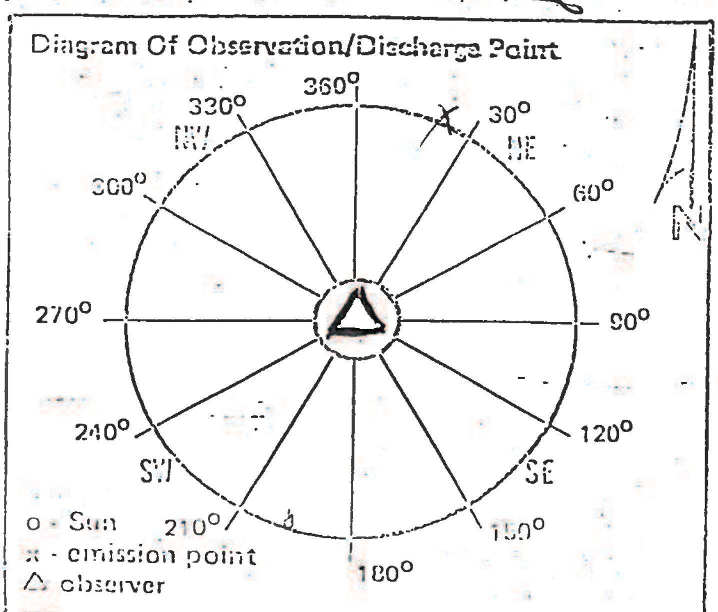
City: [illegible]

Emission Point: ______

Date: 9-19-83

Is emission point operation normal ? ______

	Initial	Final
Distance to discharge	1/2 L	
Direction to discharge	NE	
Height of observation point		
Height of discharge		
Plume color	Black	
Plume background	Gray	
Water vapor in plume ?		
Wind direction (from)	SE	
Wind speed	10 mph	
Ambient temperature	90°	
Discharge temperature		
Sky conditions	Cloudy	



V. E. Observer: [illegible]

Certification Expiration: 12-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
[illegible]	12:40pm	12:46pm	250	10.4

Overall Average: ______

Min.	0	15	30	45
0	10	10	10	10
1	10	10	10	10
2	10	10	10	10
3	10	10	10	10
4	10	20	10	10
5	10	10	10	10
0				
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4				
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Remarks: ______

Received By: ______

Visible Emissions Evaluation Record

Plant Name: Hercules [illegible]

Address: [illegible] 7 2nd Street

City: [illegible]

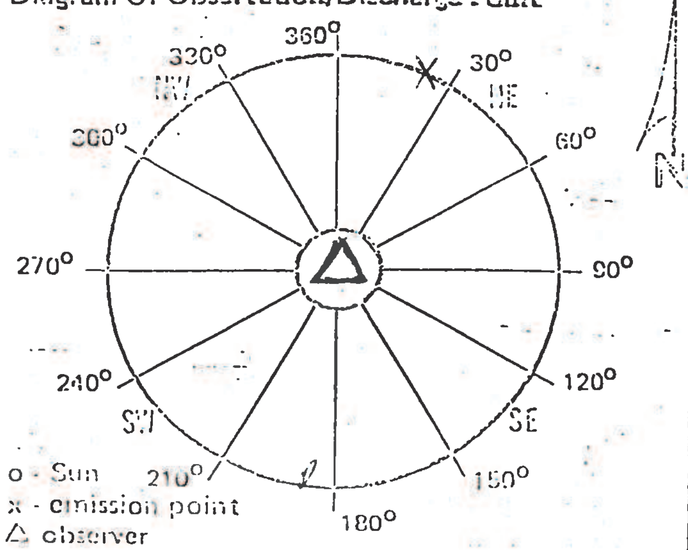
Emission Point:

Date: 9-20-83

Is emission point operation normal ?

	Initial	Final
Distance to discharge	1½ L	
Direction to discharge	NE	
Height of observation point		
Height of discharge		
Plume color	Black	
Plume background	Grey	
Water vapor in plume ?		
Wind direction (from)	SE	
Wind speed	5 MPH	
Ambient temperature	82°	
Discharge temperature		
Sky conditions	[illegible]	

Diagram Of Observation/Discharge Point



o - Sun
x - emission point
△ observer

V. E. Observer: [illegible]

Certification Expiration: [illegible]

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
South	12:35 PM	12:41 PM	580	24.2

Overall Average:

Min.	0	15	30	45
0	20	10	15	20
1	20	20	25	25
2	30	30	25	30
3	30	25	25	25
4	25	25	25	25
5	25	25	25	30
0				
1				
2				
3				
4				
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0				
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4				
5				

Remarks:

Received By:

Visible Emissions Evaluation Record

Plant Name: Hercules Inc

Address: [illegible] 7th Street

City: H'burg

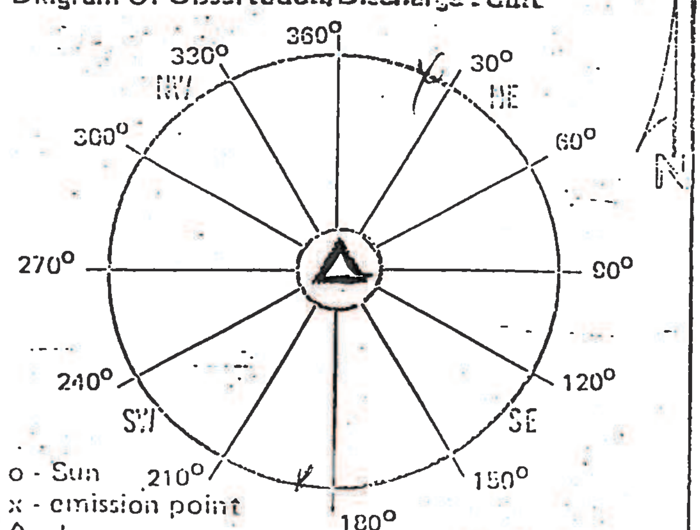
Emission Point:

Date: 9-20-83

Is emission point operation normal ?

	Initial	Final
Distance to discharge	1½ L.	
Direction to discharge	NE	
Height of observation point		
Height of discharge		
Plume color	Black	
Plume background	Grey	
Water vapor in plume ?		
Wind direction (from)	SE	
Wind speed	5 MPH	
Ambient temperature	82°c	
Discharge temperature		
Sky conditions	Cloudy	

Diagram Of Observation/Discharge Point



o - Sun
x - emission point
△ observer

V. E. Observer: Carroll Lowery

Certification Expiration: 10-21-85

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
North	12:35 PM	12:41 PM	485	20.2

Overall Average:

Min.	Seconds 0	15	30	45
0	20	15	15	20
1	15	15	20	20
2	25	20	20	25
3	20	20	20	20
4	20	20	20	20
5	20	20	20	20
0				
1				
2				
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4				
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5				

Remarks:

Received By:

Visible Emissions Evaluation Record

Plant Name: Hercules Inc

Address: W 7th Street

City: H'ty

Emission Point:

Date: 9-21-83

Is emission point operation normal ?

V. E. Observer: [illegible signature]

Certification Expiration: 10-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
South Stack	12:55Pm	1:01Pm	1070	44.6

Overall Average:

	Initial	Final
Distance to discharge	1K ft	
Direction to discharge	NE	
Height of observation point		
Height of discharge		
Plume color	Black+Brown	
Plume background	Gray	
Water vapor in plume ?		
Wind direction (from)	N	
Wind speed	20 mph	
Ambient temperature	55°	
Discharge temperature		
Sky conditions	Cloudy	

Seconds

Min.	0	15	30	45
0	25	30	25	30
1	40	35	30	25
2	40	50	40	50
3	[illegible]	[illegible]	55	45
4	40	50	60	55
5	50	55	60	65
0				
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4				
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0				
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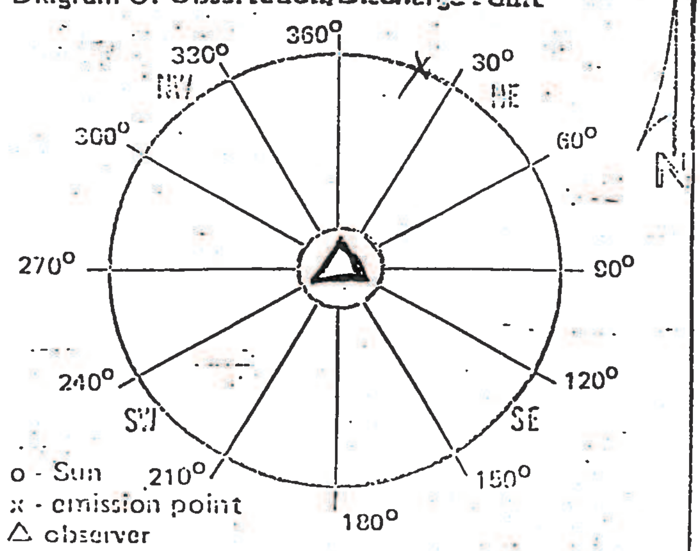
4				
5				

Diagram Of Observation/Discharge Point



Remarks:

Received By:

Visible Emissions Evaluation Record

Plant Name: Hercules Inc

Address: W. 7th Street

City: Hbg

Emission Point: ______

Date: 9-21-83

Is emission point operation normal ? ______

V. E. Observer: Carroll Lowery

Certification Expiration: 10-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
North Stack	12:55 Pm	1:01 Pm	775	32.3

Overall Average: ______

	Initial	Final
Distance to discharge	1/2 L	
Direction to discharge	NE	
Height of observation point		
Height of discharge		
Plume color		
Plume background		
Water vapor in plume ?		
Wind direction (from)	N	
Wind speed	20 mph	
Ambient temperature	55°	
Discharge temperature		
Sky conditions	Cloudy	

Seconds

Min.	0	15	30	45
0	20	20	25	20
1	25	30	30	30
2	35	25	30	45
3	40	45	[illegible]	[illegible]
4	30	40	35	40
5	30	30	30	30
0				
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4				
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4				
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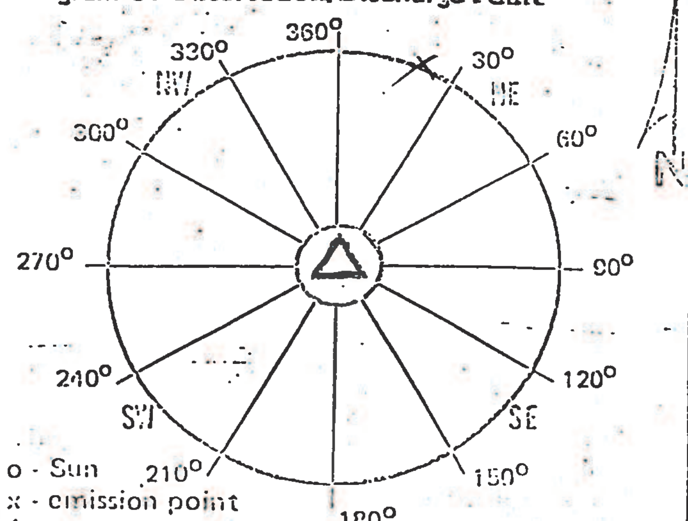
Diagram Of Observation/Discharge Point



o - Sun
x - emission point
△ observer

Remarks: ______

Received By: ______

Visible Emissions Evaluation Recc

Plant Name: Hercules Inc

Address: W 7th Street

City: H'burg

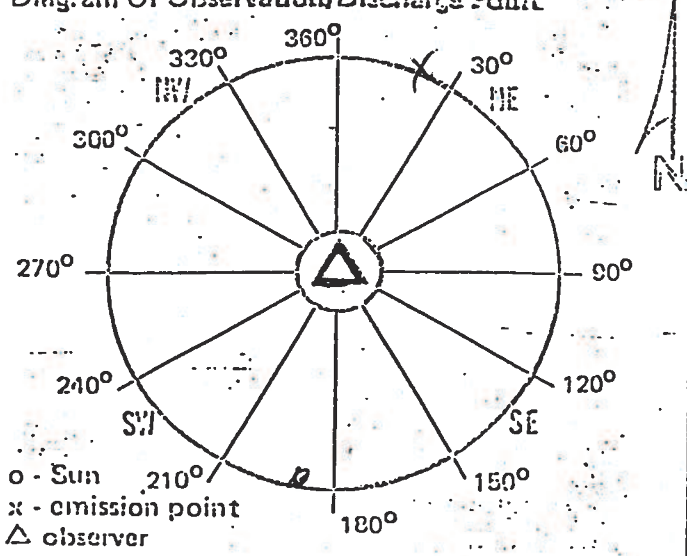
Emission Point:

Date: 9-22-83

Is emission point operation normal ?

	Initial	Final
Distance to discharge	1 Bl.	
Direction to discharge	NE	
Height of observation point		
Height of discharge		
Plume color	Brown	
Plume background	Blue	
Water vapor in plume ?		
Wind direction (from)	NE	
Wind speed	10 MPH	
Ambient temperature	68°	
Discharge temperature		
Sky conditions	FAIR	

Diagram Of Observation/Discharge Point



V. E. Observer: Carroll Lowery

Certification Expiration: 10-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
South Stack	12:30 PM	12:41 PM	445	18.5

Overall Average:

Min.	Seconds 0	15	30	45
0	15	15	15	20
1	15	15	15	15
2	15	50	20	15
3	10	10	15	20
4	20	20	20	20
5	25	20	20	20
0				
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4				
5				
0				
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3				
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5				

Remarks:

Received By:

Visible Emissions Evaluation Rec

Plant Name: Hercules Inc

Address: W 7th Street

City: H'burg

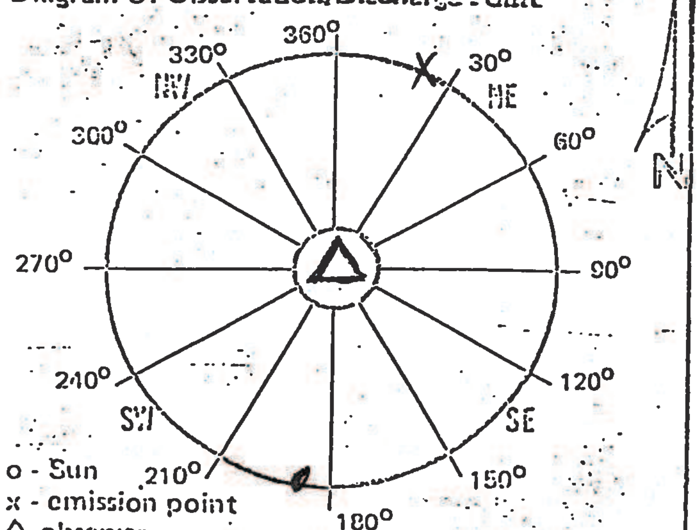
Emission Point:

Date: 9-22-83

Is emission point operation normal ?

	Initial	Final
Distance to discharge	1 1/2	
Direction to discharge	NE	
Height of observation point		
Height of discharge		
Plume color	Brown	
Plume background	Blue	
Water vapor in plume ?	—	
Wind direction (from)	NE	
Wind speed	10 mph	
Ambient temperature	68°	
Discharge temperature		
Sky conditions	FAIR	

Diagram Of Observation/Discharge Point



o - Sun
x - emission point
△ observer

V. E. Observer: Carroll Lowery

Certification Expiration: 10-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
North Stack	12:35 PM	12:41 PM	340	14.2

Overall Average:

Min.	Seconds 0	15	30	45
0	15	15	15	10
1	15	15	15	15
2	15	10	10	15
3	10	10	15	15
4	15	15	15	15
5	10	10	15	15
0				
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4				
5				
0				
1				
2				
3				
4				
5				

Remarks:

Received By:

Visible Emissions Evaluation Rec

Plant Name: Hercules Inc

Address: W 7th street

City: H'by

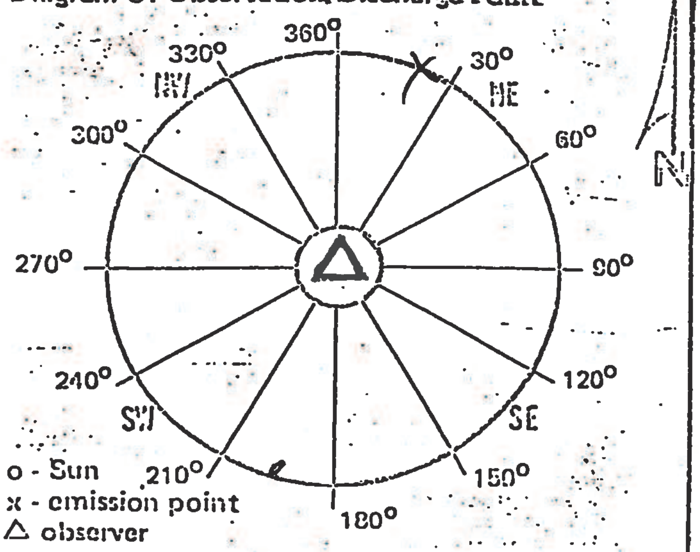
Emission Point:

Date: 9-23-83

Is emission point operation normal ?

	Initial	Final
Distance to discharge	1 1/2 L	
Direction to discharge	NE	
Height of observation point		
Height of discharge		
Plume color	Brown	
Plume background	Blue	
Water vapor in plume ?		
Wind direction (from)	NE	
Wind speed	5 mPH	
Ambient temperature	79°	
Discharge temperature		
Sky conditions	FAIR	

Diagram Of Observation/Discharge Point



o - Sun
x - emission point
△ observer

V. E. Observer: Carroll Lowery

Certification Expiration: 10-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
South Stack	12:55 Pm	1:01 Pm	355	14.8

Overall Average:

Min.	0	15	30	45
0	20	15	20	10
1	15	10	10	10
2	10	10	10	15
3	15	15	15	20
4	20	20	15	10
5	15	15	10	20
0				
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3				
4				
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4				
5				

Remarks:

Received By:

Visible Emissions Evaluation Record

Plant Name: Hercules Inc

Address: W 7th Street

City: H'by

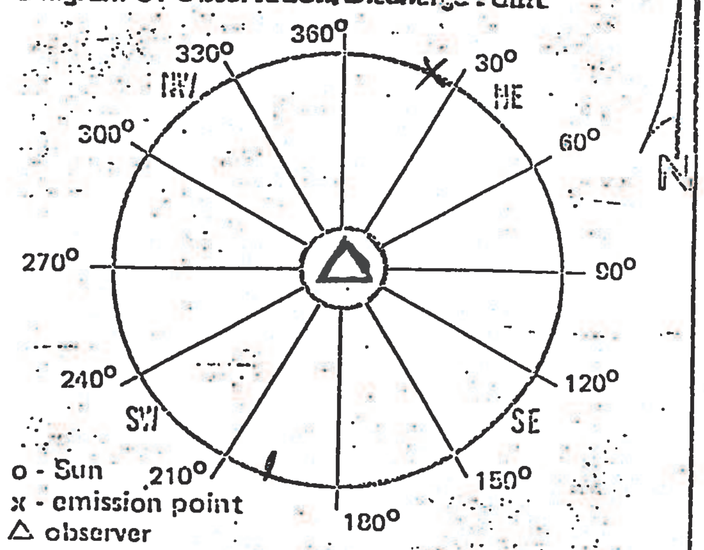
Emission Point:

Date: 9-23-83

Is emission point operation normal ?

	Initial	Final
Distance to discharge	1/4 L	
Direction to discharge	NE	
Height of observation point		
Height of discharge		
Plume color	Brown	
Plume background	Blue	
Water vapor in plume ?		
Wind direction (from)	NE	
Wind speed	5 mph	
Ambient temperature	79°	
Discharge temperature		
Sky conditions	FAIR	

Diagram Of Observation/Discharge Point



V. E. Observer: Carroll Lowery

Certification Expiration: 10-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
North Stack	12:50 PM	1:01 PM	325	13.5

Overall Average:

Min.	0	15	30	45
0	10	15	10	10
1	10	5	5	5
2	5	10	10	20
3	30	35	30	20
4	15	15	10	10
5	10	10	10	10
0				
1				
2				
3				
4				
5				
0				
1				
2				
3				
4				
5				

Remarks:

Received By:

Visible Emissions Evaluation Record

Plant Name: Hercules INC

Address: W 7th Street

City: H'burg, Miss

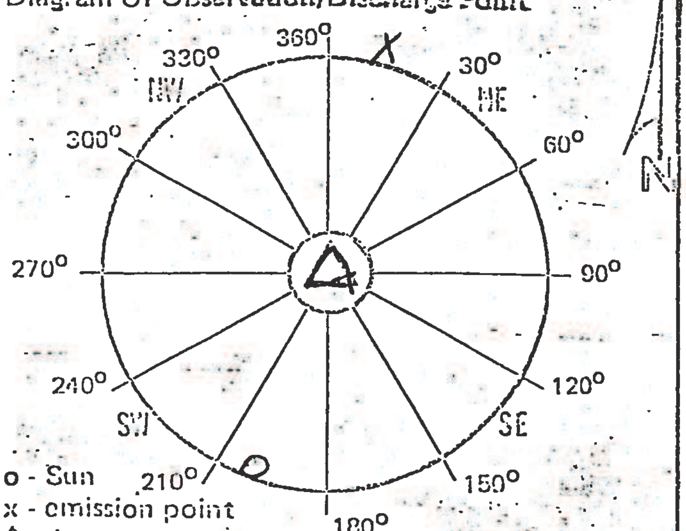
Emission Point: ______

Date: 9-26-83

Is emission point operation normal ? ______

	Initial	Final
Distance to discharge	1 1/2 Lengths	
Direction to discharge	N.E	
Height of observation point		
Height of discharge		
Plume color	Gray	
Plume background	Gray	
Water vapor in plume ?		
Wind direction (from)	N.E.	
Wind speed	5MPH	
Ambient temperature	85	
Discharge temperature		
Sky conditions	P.Cloudy	

Diagram Of Observation/Discharge Point



o - Sun
x - emission point
△ observer

V. E. Observer: Howell Russ

Certification Expiration: 10-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
South Stack	1 50 pm	1 55 pm	280	11.7

Overall Average: 11

Min.	0	15	30	45
0	15	15	10	15
1	15	20	20	20
2	10	10	10	10
3	10	10	10	10
4	10	10	10	10
5	10	10	10	10
0				
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3				
4				
5				
0				
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2				
3				
4				
5				

Remarks: ______

Received By: ______

B. B. Golden

Visible Emissions Evaluation Record

Plant Name: Hercules INC

Address: W 7th Street

City: H'burg, Miss

Emission Point:

Date: 9-26-83

Is emission point operation normal ?

V. E. Observer: Howell Russ

Certification Expiration: 10-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
North Stack	1 50 PM	1 55 PM	220	9.2

Overall Average:

	Initial	Final
Distance to discharge	1 1/2 Lengths	
Direction to discharge	N.E	
Height of observation point		
Height of discharge		
Plume color	Gray	
Plume background	Gray	
Water vapor in plume ?		
Wind direction (from)	N.E	
Wind speed	5MPH	
Ambient temperature	83	
Discharge temperature		
Sky conditions	P. Cloudy	

Min.	Seconds 0	15	30	45
0	5	5	5	5
1	10	10	10	10
2	10	10	10	10
3	10	10	10	10
4	10	10	10	10
5	10	10	10	10
0				
1				
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4				
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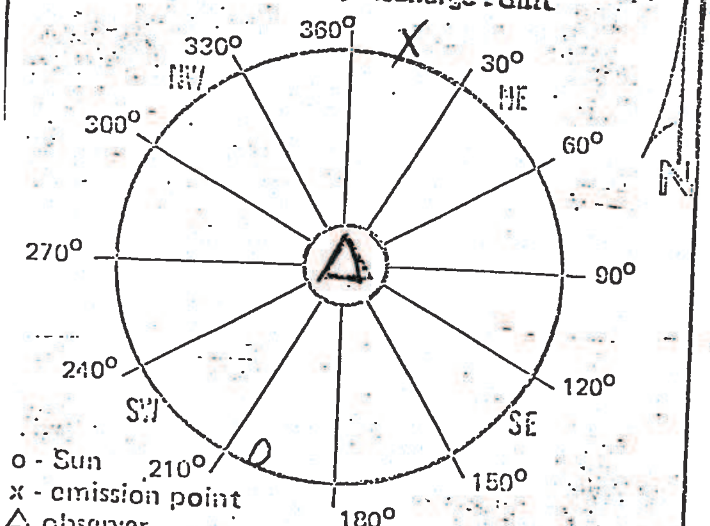
4				
5				

Diagram Of Observation/Discharge Point



o - Sun
x - emission point
△ observer

Remarks:

Received By:

Visible Emissions Evaluation Record

Plant Name: Hercules Inc

Address: W 7th Street

City: H'berg Miss

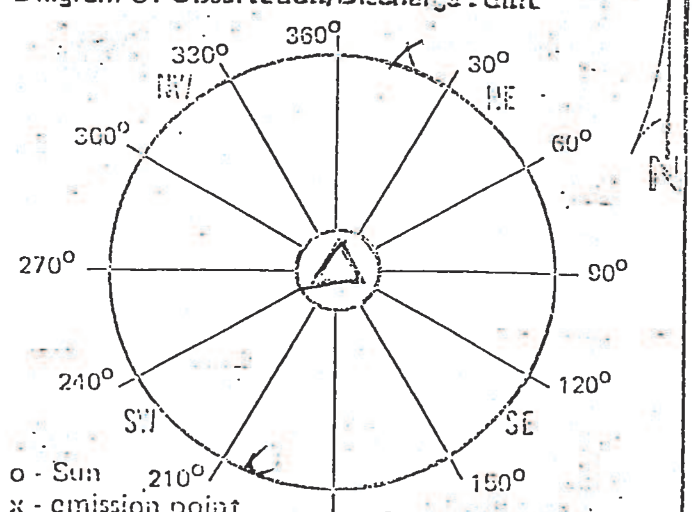
Emission Point:

Date: 9-27-83

Is emission point operation normal ?

	Initial	Final
Distance to discharge	1 1/2 Lengths	
Direction to discharge	N.E.	
Height of observation point		
Height of discharge		
Plume color	Gray	
Plume background	Blue	
Water vapor in plume ?		
Wind direction (from)	NW	
Wind speed	5 MPH	
Ambient temperature	84	
Discharge temperature		
Sky conditions	Clear	

Diagram Of Observation/Discharge Point



o - Sun
x - emission point
△ observer

V. E. Observer: Howell Russ

Certification Expiration: 10-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
North Stack	1 45 PM	1 50 PM	240	10

Overall Average:

Min.	Seconds 0	15	30	45
0	10	10	10	10
1	10	10	10	10
2	10	10	10	10
3	10	10	10	10
4	10	10	10	10
5	10	10	10	10
0				
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4				
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2				
3				
4				
5				

Remarks:

Received By:

B. B. Golden

Visible Emissions Evaluation Record

Plant Name: Hercules Inc.

Address: W 7th Street

City: H'burg, Miss

Emission Point: ______

Date: 9-27-83

Is emission point operation normal ? ______

V. E. Observer: Howell Russ

Certification Expiration: 10-21-83

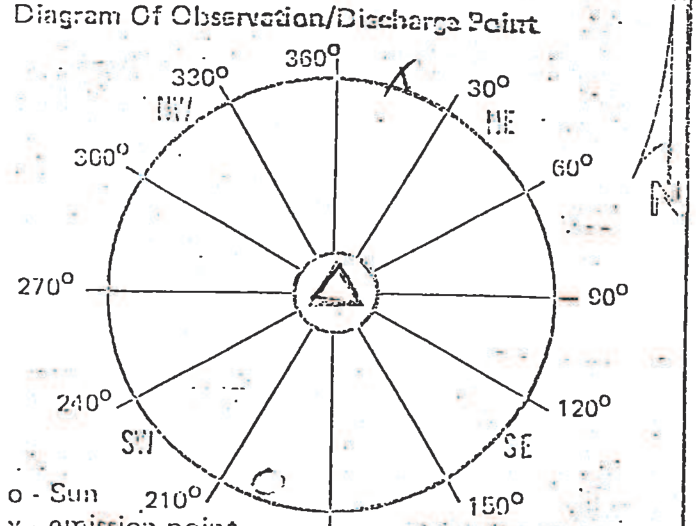
Set No.	Time Start	Time End	Opacity Sum	Opacity Average
South Stack	1:45 pm	1:50 pm	340	14.2

Overall Average: ______

	Initial	Final
Distance to discharge	1 1/2 Lengths	
Direction to discharge	N.E	
Height of observation point		
Height of discharge		
Plume color	Gray	
Plume background	Blue	
Water vapor in plume ?		
Wind direction (from)	N.W.	
Wind speed	5 MPH	
Ambient temperature	84	
Discharge temperature		
Sky conditions	Clear	

Min.	Seconds 0	15	30	45
0	15	15	15	15
1	15	15	15	15
2	10	10	10	10
3	15	15	15	15
4	15	15	15	15
5	15	15	15	15
0				
1				
2				
3				
4				
5				
0				
1				
2				
3				
4				
5				

Diagram Of Observation/Discharge Point



o - Sun
x - emission point
△ observer

Remarks: ______

Received By: ______

B. B. Cohen

Visible Emissions Evaluation Record

Plant Name: Hercules Inc

Address: W 7th Street

City: H'burg, Miss

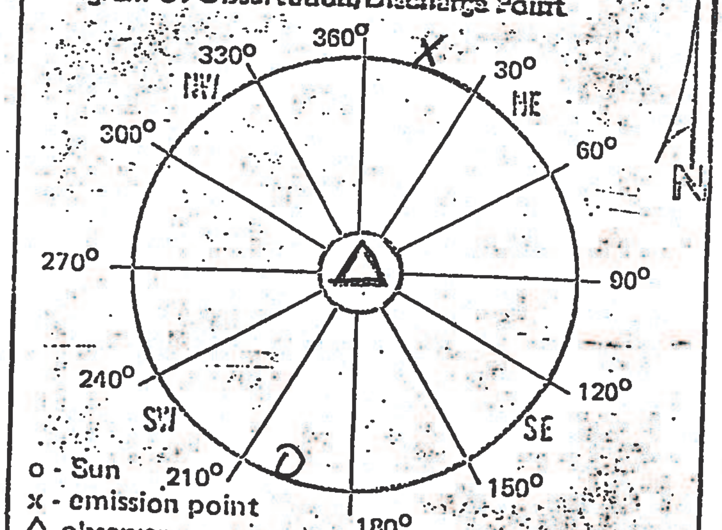
Emission Point:

Date: 9-28-83

Is emission point operation normal ?

	Initial	Final
Distance to discharge	1 1/2 Lengths	
Direction to discharge	N.E	
Height of observation point		
Height of discharge		
Plume color	Gray	
Plume background	Blue	
Water vapor in plume ?		
Wind direction (from)	SW	
Wind speed	5mph	
Ambient temperature	80	
Discharge temperature		
Sky conditions	Clear	

Diagram Of Observation/Discharge Point



o - Sun
x - emission point
△ observer

V. E. Observer: Howell Russ

Certification Expiration: 10-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
South Stack	12:50 PM	12:55 pm	310	12.9

Overall Average:

Min.	Seconds 0	15	30	45
0	15	15	10	10
1	15	15	15	15
2	10	10	20	20
3	15	15	15	15
4	10	10	10	10
5	10	10	10	10
0				
1				
2				
3				
4				
5				
0				
1				
2				
3				
4				
5				

Remarks:

Received By:

Visible Emissions Evaluation Record

Plant Name: HERCULES INC

Address: W 7th STREET

City: H'burg Miss

Emission Point:

Date: 9-28-83

V. E. Observer: Howell Rives

Certification Expiration: 10-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
North Stack	12 50 pm	12 55 pm	400	16.7

Is emission point operation normal ?

	Initial	Final
Distance to discharge	1 1/2 Lengths	
Direction to discharge	N.E.	
Height of observation point		
Height of discharge		
Plume color	GRAY	
Plume background	Blue	
Water vapor in plume ?		
Wind direction (from)	SW	
Wind speed	5MPH	
Ambient temperature	80	
Discharge temperature		
Sky conditions	Clear	

Overall Average:

Min.	Seconds 0	15	30	45
0	20	20	20	20
1	15	15	15	15
2	15	15	15	15
3	20	20	20	20
4	15	15	20	20
5	15	15	10	10
0				
1				
2				
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4				
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0				
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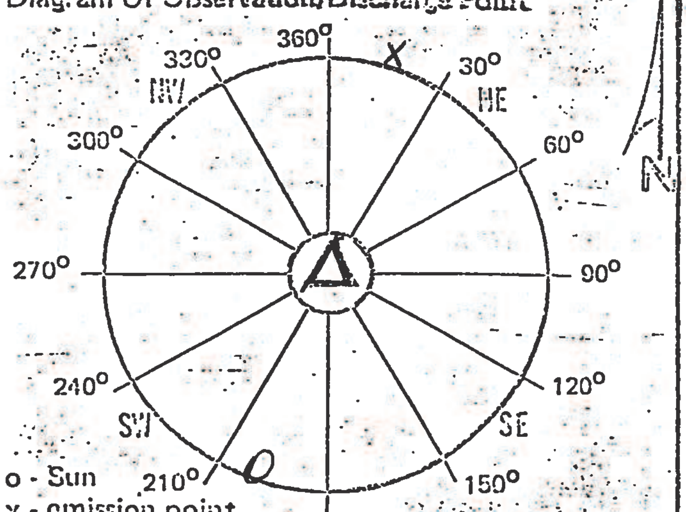
Diagram Of Observation/Discharge Point



o - Sun
x - emission point
△ observer

Remarks:

Received By:

B. B. Goldman

Visible Emissions Evaluation Record

Plant Name: Hercules INC

Address: W 7th Street

City: H'burg, Miss

Emission Point:

Date: 9-29

Is emission point operation normal ?

V. E. Observer: Howell Ricks

Certification Expiration: 10-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
North Stack	1:05 pm	1:10 PM	300	12.5

Overall Average:

	Initial	Final
Distance to discharge	1 1/2 Lengths	
Direction to discharge	N.E.	
Height of observation point		
Height of discharge		
Plume color	Gray	
Plume background	Blue	
Water vapor in plume ?		
Wind direction (from)	S.W	
Wind speed	5MPH	
Ambient temperature	80	
Discharge temperature		
Sky conditions	Clear	

Min.	Seconds 0	15	30	45
0	10	10	10	10
1	10	10	10	10
2	10	10	10	10
3	15	15	15	15
4	15	15	15	15
5	15	15	15	15
0				
1				
2				
3				
4				
5				
0				
1				
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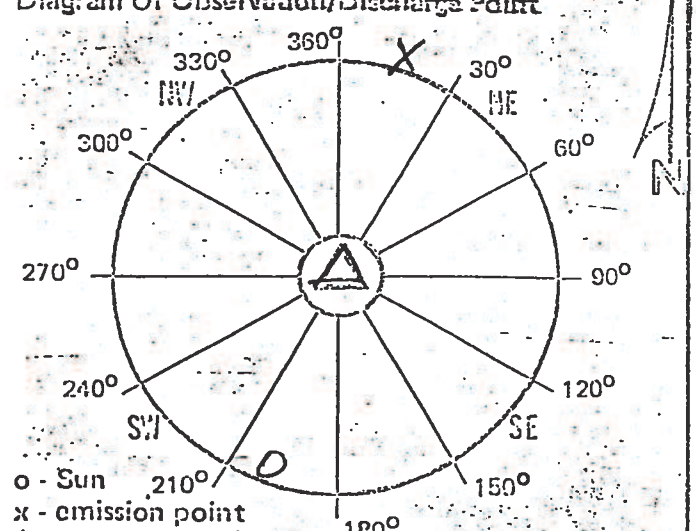
3				
4				
5				

Diagram Of Observation/Discharge Point



o - Sun
x - emission point
△ observer

Remarks:

Received By:

Visible Emissions Evaluation Record

Plant Name: Hercules INC

Address: 10 7th Street

City: H'burg, Miss

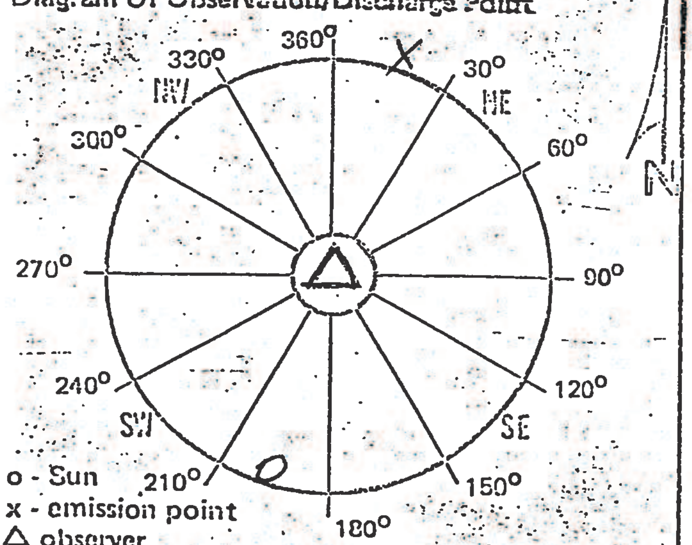
Emission Point:

Date: 9-29-83

Is emission point operation normal ?

	Initial	Final
Distance to discharge	1 1/2 Lengths	
Direction to discharge	N-E	
Height of observation point		
Height of discharge		
Plume color	Gray	
Plume background	Blue	
Water vapor in plume ?		
Wind direction (from)	SW	
Wind speed	5MPH	
Ambient temperature	80	
Discharge temperature		
Sky conditions	Clear	

Diagram Of Observation/Discharge Point



V. E. Observer: Howell Russ

Certification Expiration: 10-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
South Stack	1:05 pm	1:10 PM	240	10

Overall Average:

Min.	Seconds 0	15	30	45
0	10	10	10	10
1	10	10	10	10
2	10	10	10	10
3	10	10	10	10
4	10	10	10	10
5	10	10	10	10
0				
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0				
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5				

Remarks:

Received By:

B. B. Bollew

Visible Emissions Evaluation Record

Plant Name: Hercules INC

Address: W 7th Street

City: H'burg, Miss

Emission Point:

Date: 9-30-83

Is emission point operation normal ?

V. E. Observer: Howell Russ

Certification Expiration: 10-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
North Stack	1:00 pm	1:05 pm	500	20.8

	Initial	Final
Distance to discharge	1 ½	Lengths
Direction to discharge	N.E	
Height of observation point		
Height of discharge		
Plume color	Gray	
Plume background	Blue	
Water vapor in plume ?		
Wind direction (from)	SW	
Wind speed	5MPH	
Ambient temperature	70°	
Discharge temperature		
Sky conditions	Clear	

Overall Average:

Min.	Seconds 0	15	30	45
0	20	20	20	20
1	25	25	25	25
2	25	25	25	25
3	20	20	20	20
4	15	15	15	15
5	20	20	20	20
0				
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0				
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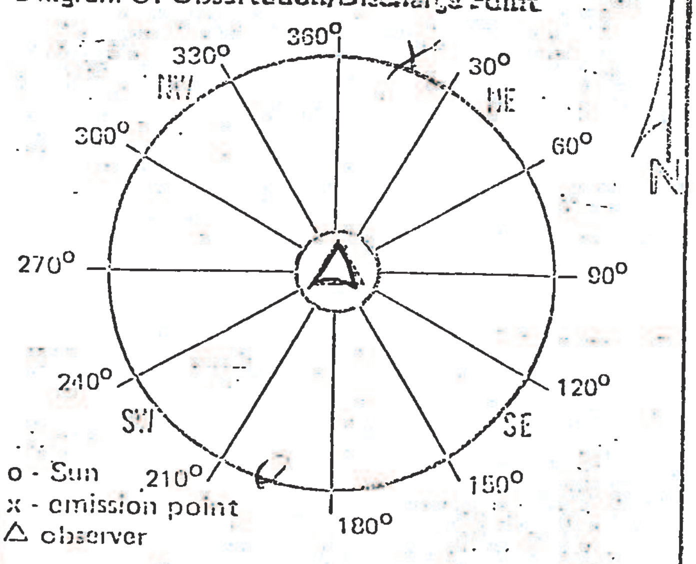
Diagram Of Observation/Discharge Point



Remarks:

Received By:

Visible Emissions Evaluation Record

Plant Name: Hercules Inc

Address: W 7th Street

City: H'burg, Miss

Emission Point:

Date: 9-30-83

Is emission point operation normal ?

V. E. Observer: Howell Russ

Certification Expiration: 10-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
South Stack	1 00 pm	10 5 pm	220	9.2

Overall Average:

	Initial	Final
Distance to discharge	1 1/2 Lengths	
Direction to discharge	N.E	
Height of observation point		
Height of discharge		
Plume color	Gray	
Plume background	Blue	
Water vapor in plume ?		
Wind direction (from)	Sw	
Wind speed	5MPH	
Ambient temperature	80°	
Discharge temperature		
Sky conditions	Clear	

Min.	Seconds 0	15	30	45
0	10	10	10	10
1	10	10	10	10
2	10	10	10	10
3	10	10	10	10
4	5	5	5	5
5	10	10	10	10
0				
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4				
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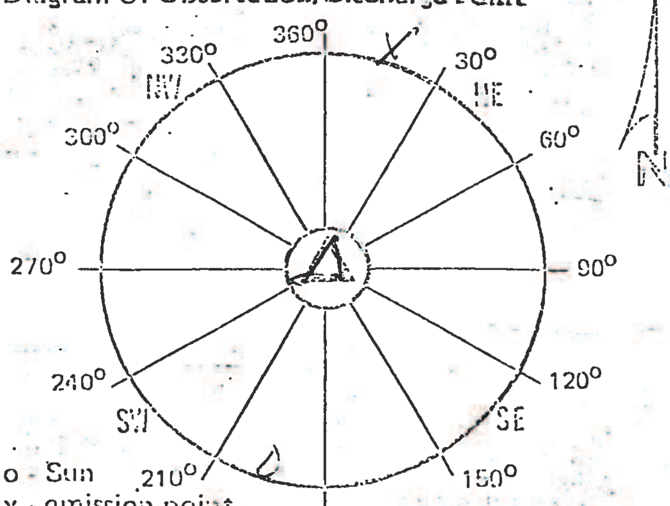
3				
4				
5				

Diagram Of Observation/Discharge Point



o - Sun
x - emission point
△ observer

Remarks:

Received By:

B.B. Golden'

Visible Emissions Evaluation Record

Plant Name: Hercules Inc

Address: W 7th Street

City: H'burg, Miss

Emission Point:

Date: 8-31-83

Is emission point operation normal ?

	Initial	Final
Distance to discharge	1 1/2 Lengths	
Direction to discharge	N.E	
Height of observation point		
Height of discharge		
Plume color	Gray	
Plume background	Blue	
Water vapor in plume ?		
Wind direction (from)	N.E	
Wind speed	5 MPH	
Ambient temperature	87	
Discharge temperature		
Sky conditions	Clear	

V. E. Observer: Howell Rives

Certification Expiration: 10-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
South Stack	11 30 AM	11 35 am	400	16.7

Overall Average:

Min.	Seconds 0	15	30	45
0	10	10	10	10
1	15	15	15	15
2	20	20	20	20
3	30	30	30	30
4	30	30	30	30
5	25	25	25	[illegible]
0				
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3				
4				
5				
0				
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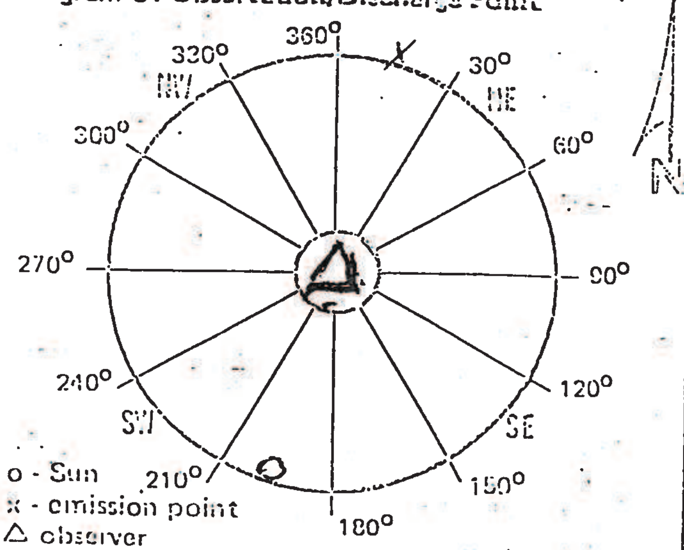
3				
4				
5				

Diagram Of Observation/Discharge Point



o - Sun
x - emission point
△ observer

Remarks:

Received By:

Visible Emissions Evaluation Record

Plant Name: Hercules Inc.

Address: W 7th Street

City: H'burg Miss

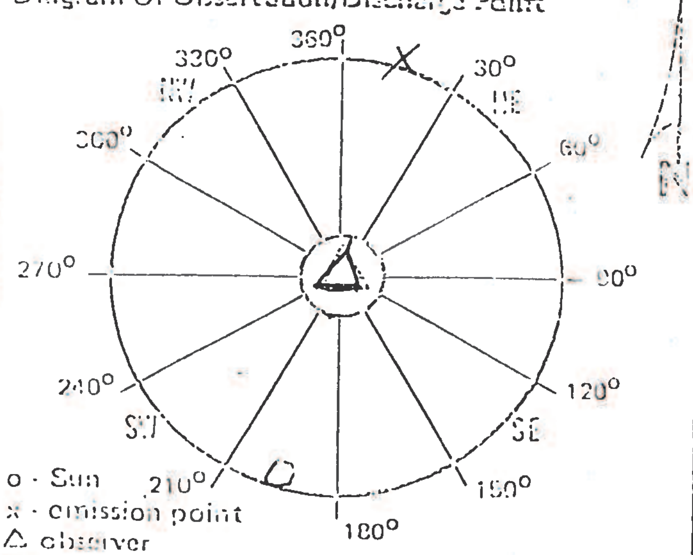
Emission Point:

Date: 8-31-83

Is emission point operation normal ?

	Initial	Final
Distance to discharge	1 1/2 length	
Direction to discharge	N.E	
Height of observation point		
Height of discharge		
Plume color	Gray	
Plume background	Blue	
Water vapor in plume ?		
Wind direction (from)	N.E	
Wind speed	5 Mph	
Ambient temperature	87	
Discharge temperature		
Sky conditions	Clear	

Diagram Of Observation/Discharge Point



V. E. Observer: Howell Russ

Certification Expiration: 10-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
North Stack	11 30 am	11 35 Am	380	15.8

Overall Average:

Min.	Seconds 0	15	30	45
0	20	20	20	20
1	15	15	15	15
2	15	15	15	15
3	15	15	15	15
4	15	15	15	15
5	15	15	15	15
0				
1				
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4				
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0				
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3				
4				
5				

Remarks:

Received By:

B. B. Golden

Visible Emissions Evaluation Record

Plant Name: Hercules Inc

Address: IN 7th Street

City: H'burg, Miss

Emission Point:

Date: 8-30-83

Is emission point operation normal ?

V. E. Observer: Howell Russ

Certification Expiration: 10-21-83

Set No.	Time		Opacity	
	Start	End	Sum	Average
North Stack	12:05 pm	12:10 pm	200	8.3

Overall Average:

	Initial	Final
Distance to discharge	1 1/2 Lengths	
Direction to discharge	N.E	
Height of observation point		
Height of discharge		
Plume color	Gray	
Plume background	Blue	
Water vapor in plume ?		
Wind direction (from)	N.E	
Wind speed	5 MPH	
Ambient temperature	89	
Discharge temperature		
Sky conditions	P. Cloudy	

	Seconds			
Min.	0	15	30	45
0	10	10	10	10
1	5	5	5	5
2	5	5	5	5
3	10	10	10	10
4	10	10	10	10
5	10	10	10	10
0				
1				
2				
3				
4				
5				
0				
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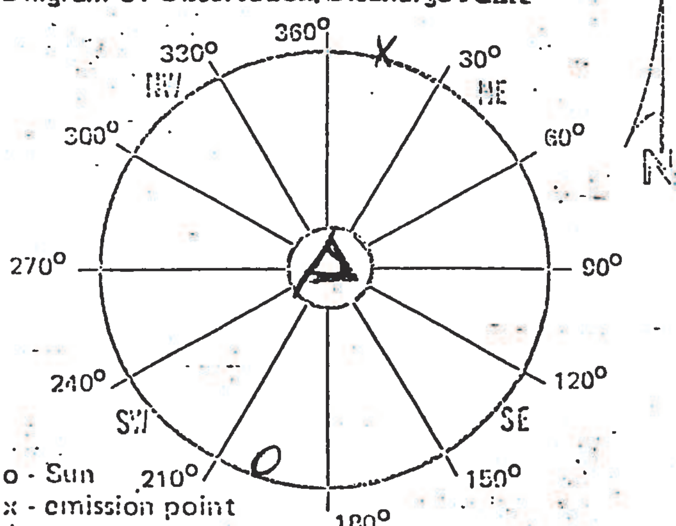
3				
4				
5				

Diagram Of Observation/Discharge Point



o - Sun
x - emission point
△ observer

Remarks:

Received By:

Visible Emissions Evaluation Record

Plant Name: HERCULES INC

Address: W 7th Street

City: H'burg Miss

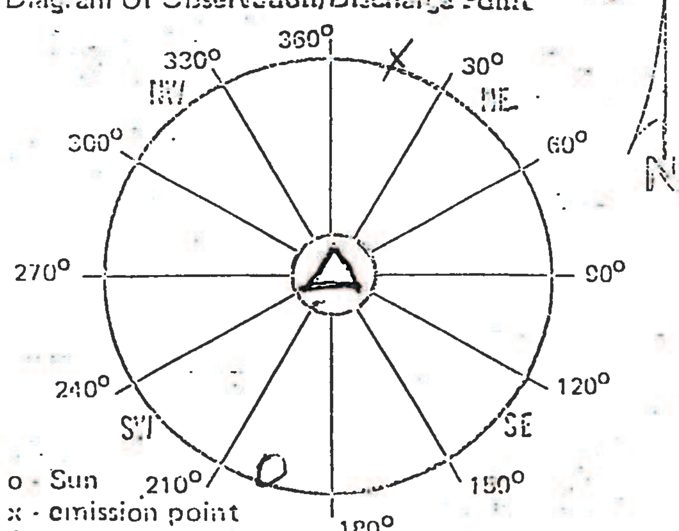
Emission Point: ______

Date: 8-30-83

Is emission point operation normal ? ______

	Initial	Final
Distance to discharge	1 1/2 Lengths	
Direction to discharge	N/E	
Height of observation point		
Height of discharge		
Plume color	Gray	
Plume background	Blue	
Water vapor in plume ?		
Wind direction (from)	N E	
Wind speed	5 MPH	
Ambient temperature	89	
Discharge temperature	[illegible]	
Sky conditions	P Cloudy	

Diagram Of Observation/Discharge Point



o - Sun
x - emission point
△ observer

V. E. Observer: Howell Russ

Certification Expiration: 10-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
South Stack	12:05 pm	12:10 pm	120	5

Overall Average: ______

Min.	Seconds 0	15	30	45
0	5	5	5	5
1	5	5	5	5
2	5	5	5	5
3	5	5	5	5
4	5	5	5	5
5	5	5	5	5
0				
1				
2				
3				
4				
5				
0				
1				
2				
3				
4				
5				

Remarks: ______

Received By: ______

B.B. Golden

Visible Emissions Evaluation Record

Plant Name: Hercules Inc.

Address: W 7th Street

City: H'burg, Miss

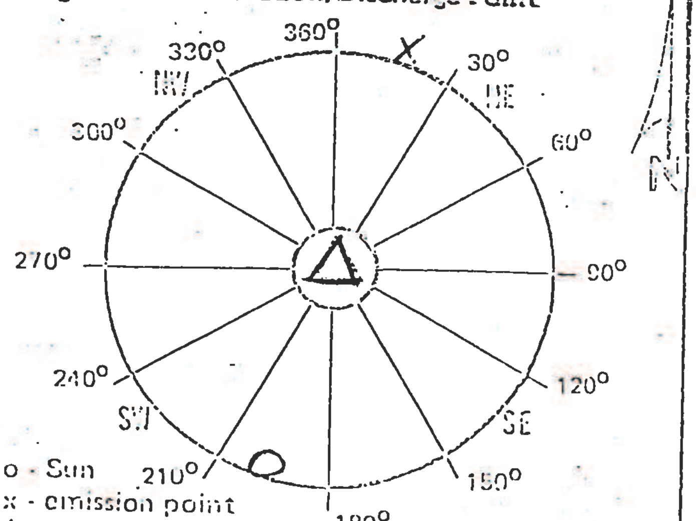
Emission Point:

Date: 8-29-83

Is emission point operation normal ?

	Initial	Final
Distance to discharge	1 1/2 Lengths	
Direction to discharge	N.E.	
Height of observation point		
Height of discharge		
Plume color	Gray	
Plume background	Gray	
Water vapor in plume ?		
Wind direction (from)	N.E.	
Wind speed	5 MPH	
Ambient temperature	69°	
Discharge temperature		
Sky conditions	P. Cloudy	

Diagram Of Observation/Discharge Point



V. E. Observer: Howell Ruse

Certification Expiration: 11-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
South Stack	12^00 pm	12^05 pm	120	5

Overall Average:

Min.	0	15	30	45
0	5	5	5	5
1	5	5	5	5
2	5	5	5	5
3	5	5	5	5
4	5	5	5	5
5	5	5	5	5
0				
1				
2				
3				
4				
5				
0				
1				
2				
3				
4				
5				

Remarks:

Received By:

Visible Emissions Evaluation Record

Plant Name: HERCULES INC

Address: W 7th Street

City: H'burg, Miss

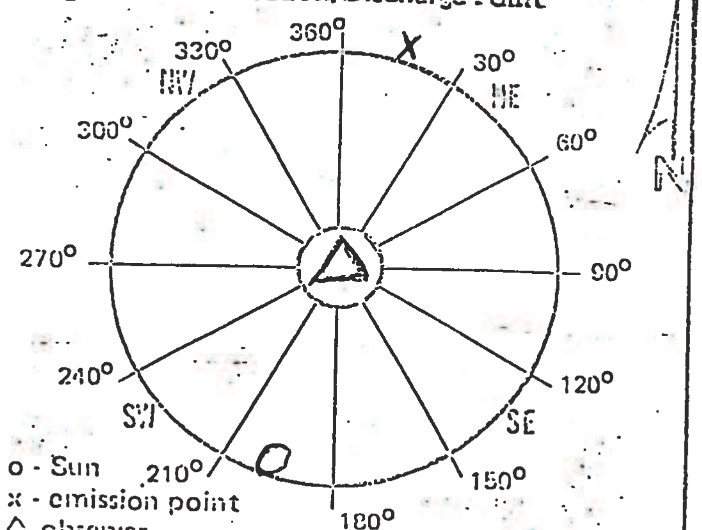
Emission Point:

Date: 8-29-83

Is emission point operation normal ?

	Initial	Final
Distance to discharge	1 1/2	Lengths
Direction to discharge	N-E	
Height of observation point		
Height of discharge		
Plume color	GRAY	
Plume background	GRAY	
Water vapor in plume ?		
Wind direction (from)	N.E	
Wind speed	5 MPH	
Ambient temperature	84	
Discharge temperature		
Sky conditions	P. Cloudy	

Diagram Of Observation/Discharge Point



o - Sun
x - emission point
△ observer

V. E. Observer: Howell Ru...

Certification Expiration: 10-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Avera...
North Stack	12:00 am	12:05 pm	240	10

Overall Average:

Min.	0	15	30	4...
0	10	10	10	10
1	10	10	10	10
2	10	10	10	10
3	10	10	10	10
4	10	10	10	10
5	10	10	10	10
0				
1				
2				
3				
4				
5				
0				
1				
2				
3				
4				
5				

Remarks:

Received By:

Visible Emissions Evaluation Record

Plant Name: Hercules Inc

Address: W 7th Street

City: H'ly

Emission Point:

Date: 8-26-83

Is emission point operation normal ?

V. E. Observer: Carroll Lowery

Certification Expiration: 10-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
Tenth	12:55pm	1:01pm	260	21.7

Overall Average:

	Initial	Final
Distance to discharge	1½ L	
Direction to discharge	NE	
Height of observation point		
Height of discharge		
Plume color	Brown	
Plume background	Grey	
Water vapor in plume ?		
Wind direction (from)	NW	
Wind speed	5 MPH	
Ambient temperature	85°	
Discharge temperature		
Sky conditions	Cloudy	

Seconds

Min.	0	15	30	45
0	10	10	10	10
1	15	15	15	15
2	10	10	10	10
3	10	10	10	10
4	10	10	10	10
5	10	10	10	10
0				
1				
2				
3				
4				
5				
0				
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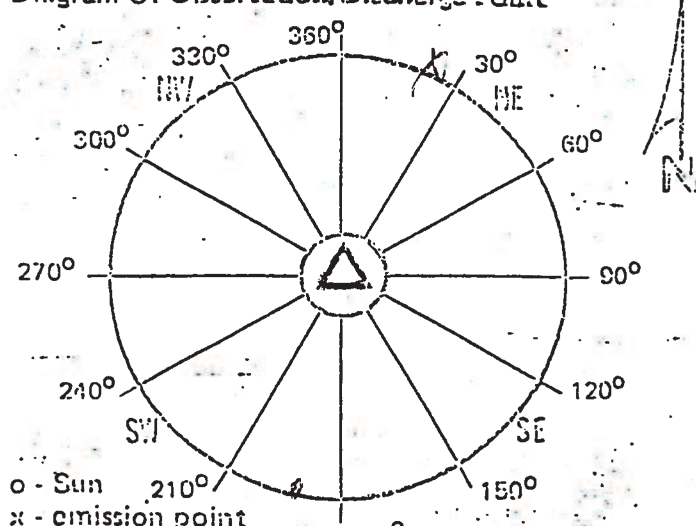
3				
4				
5				

Diagram Of Observation/Discharge Point



o - Sun
x - emission point
△ observer

Remarks:

Received By:

Visible Emissions Evaluation Record

Plant Name: Hercules Inc

Address: W 7th Street

City: H'bg

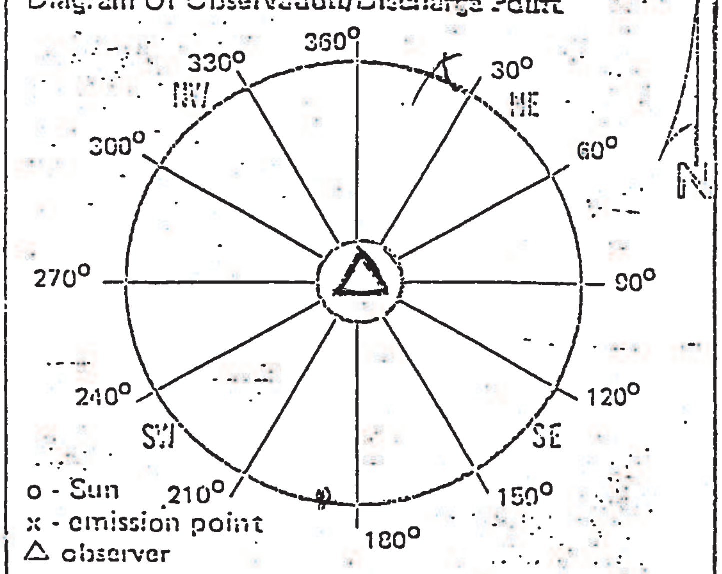
Emission Point:

Date: 8-26-83

Is emission point operation normal ?

	Initial	Final
Distance to discharge	1½ L	
Direction to discharge	NE	
Height of observation point		
Height of discharge		
Plume color	Brown	
Plume background	Gray	
Water vapor in plume ?		
Wind direction (from)	NW	
Wind speed	5 mph	
Ambient temperature	85°	
Discharge temperature		
Sky conditions	Cloudy	

Diagram Of Observation/Discharge Point



V. E. Observer: [signature]

Certification Expiration: 10-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
North	12:53 pm	1:01 pm	445	37.1

Overall Average:

Min.	0	15	30	45
0	20	15	15	20
1	20	20	20	15
2	15	15	15	20
3	25	20	20	20
4	15	15	20	20
5	20	20	20	20
0				
1				
2				
3				
4				
5				
0				
1				
2				
3				
4				
5				

Remarks:

Received By:

Visible Emissions Evaluation Record

Plant Name: Hercules Inc

Address: W 7th Street

City: H'bg

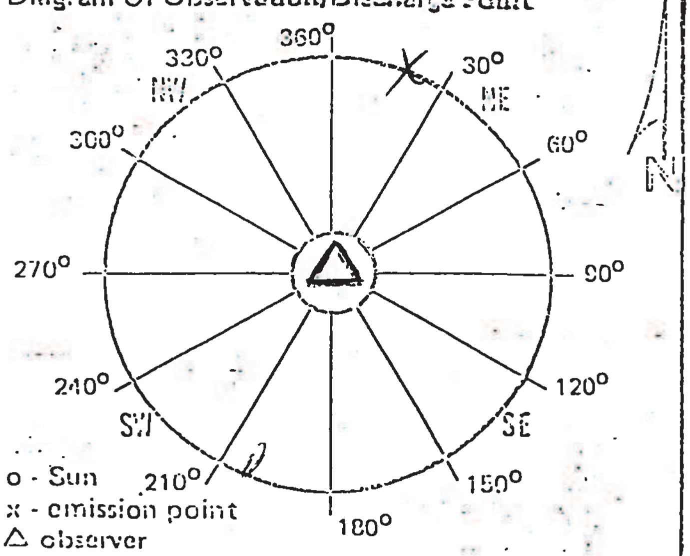
Emission Point:

Date: 8-20-83

Is emission point operation normal ?

	Initial	Final
Distance to discharge	1 bl	
Direction to discharge	NE	
Height of observation point		
Height of discharge		
Plume color	Brown	
Plume background	Gray	
Water vapor in plume ?		
Wind direction (from)	S	
Wind speed	5MPH	
Ambient temperature	95	
Discharge temperature		
Sky conditions	PC	

Diagram Of Observation/Discharge Point



o - Sun
x - emission point
△ observer

V. E. Observer: Carroll Lowery

Certification Expiration: 10-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
South	1:40Pm	1:46Pm	440	18.3

Overall Average:

Min.	Seconds 0	15	30	45
0	15	15	15	15
1	15	15	15	15
2	20	20	20	15
3	15	15	20	20
4	20	20	20	25
5	25	25	20	20
0				
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3				
4				
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0				
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4				
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Remarks:

Received By:

Visible Emissions Evaluation Record

Plant Name: Hercules Inc

Address: W 7th Street

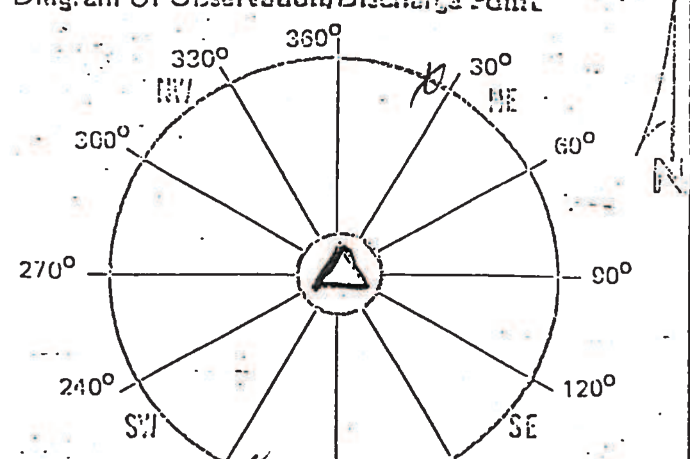
City: H'ly

Emission Point:

Date: 8-25-83

Is emission point operation normal ?

	Initial	Final
Distance to discharge	1 yd	
Direction to discharge	NE	
Height of observation point		
Height of discharge		
Plume color	Brown	
Plume background	Grey	
Water vapor in plume ?		
Wind direction (from)	S	
Wind speed	5 mph	
Ambient temperature	95	
Discharge temperature		
Sky conditions	P.C.	



o - Sun
x - emission point
△ observer

V. E. Observer: [illegible]

Certification Expiration: 10-31-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
North	11:40pm	11:46pm	360	15.0

Overall Average:

Min.	Seconds 0	15	30	45
0	15	15	15	15
1	15	15	15	20
2	20	15	15	15
3	15	15	15	15
4	15	15	15	15
5	10	10	15	15
0				
1				
2				
3				
4				
5				
0				
1				
2				
3				
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Remarks:

Received By:

Visible Emissions Evaluation Record

Plant Name: Hercules Inc

Address: W 7th Street

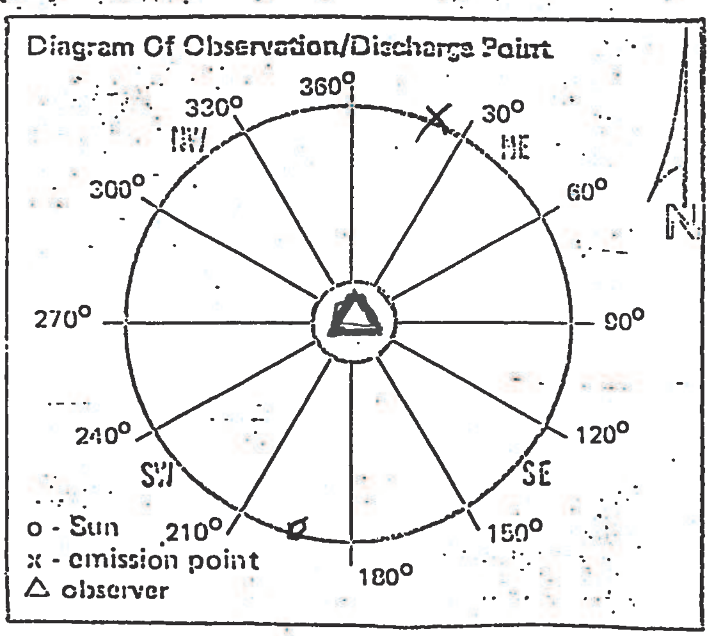
City: H'by

Emission Point:

Date: 8-24-83

Is emission point operation normal ?

	Initial	Final
Distance to discharge	1½ L	
Direction to discharge	NE	
Height of observation point		
Height of discharge		
Plume color	Brown & Black	
Plume background	Gray	
Water vapor in plume ?		
Wind direction (from)	SE	
Wind speed	5 MPH	
Ambient temperature	91°	
Discharge temperature		
Sky conditions	P.C.	



V. E. Observer: Carroll Lowery

Certification Expiration: 10-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
South	1:00 Pm	1:06 Pm	210	8.8

Overall Average:

Min.	Seconds 0	15	30	45
0	10	10	10	10
1	10	10	5	5
2	10	10	10	10
3	10	5	10	10
4	10	10	10	5
5	5	5	10	10
0				
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Remarks:

Received By:

Visible Emissions Evaluation Record

Plant Name: Hercules Inc

Address: W 7th Street

City: H'bg

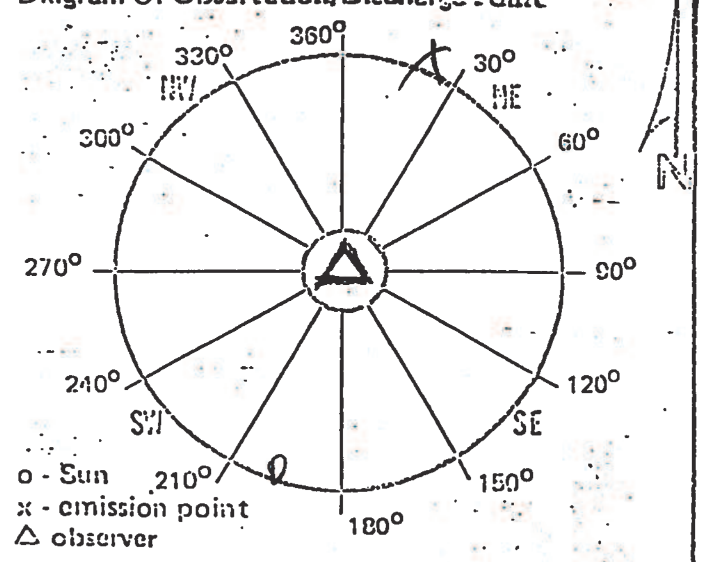
Emission Point:

Date: 8.24.83

Is emission point operation normal ?

	Initial	Final
Distance to discharge	1½ L	
Direction to discharge	NE	
Height of observation point		
Height of discharge		
Plume color	Brown & Black	
Plume background	Gray	
Water vapor in plume ?		
Wind direction (from)	SE	
Wind speed	5 MPH	
Ambient temperature	91	
Discharge temperature		
Sky conditions	P.C.	

Diagram Of Observation/Discharge Point



V. E. Observer: Carroll Lowrey

Certification Expiration: 10.21.83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
North	1:00 Pm	1:06 Pm	370	15.4

Overall Average:

Min.	0	15	30	45
0	15	15	15	20
1	20	15	10	10
2	10	15	25	20
3	15	10	10	10
4	25	20	15	10
5	10	10	25	20
0				
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3				
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Remarks:

Received By:

Visible Emissions Evaluation Record

Plant Name: Hercules Inc.

Address: W 7th Street

City: H'burg

Emission Point:

Date: 8-23-83

Is emission point operation normal ?

V. E. Observer: [illegible]

Certification Expiration: 10-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
South	1:30pm	1:36pm	250	10.4

Overall Average:

	Initial	Final
Distance to discharge	½ mi	
Direction to discharge	NE	
Height of observation point		
Height of discharge		
Plume color	Black+Brown	
Plume background	Gray	
Water vapor in plume ?		
Wind direction (from)	S	
Wind speed		
Ambient temperature	92°	
Discharge temperature		
Sky conditions	Cloudy	

Seconds

Min.	0	15	30	45
0	10	10	10	10
1	10	10	10	10
2	10	10	10	15
3	15	10	10	10
4	10	10	10	10
5	10	10	10	10
0				
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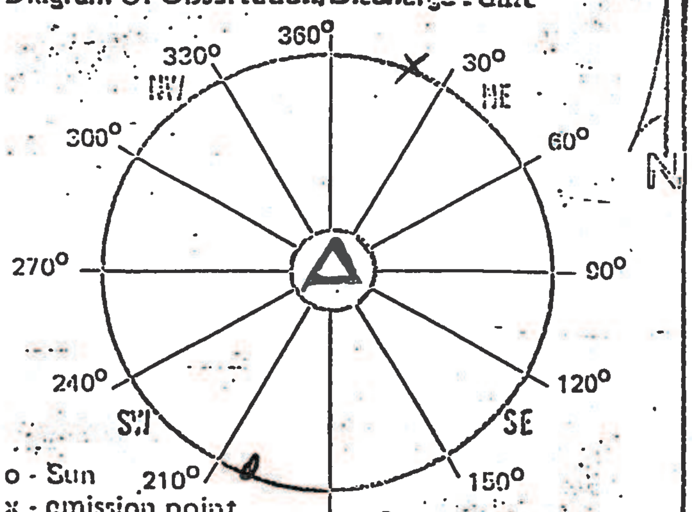
Diagram Of Observation/Discharge Point



o - Sun
x - emission point
△ observer

Remarks:

Received By:

Visible Emissions Evaluation Record

Plant Name: Hercules Inc

Address: W 7th Street

City: H'bg

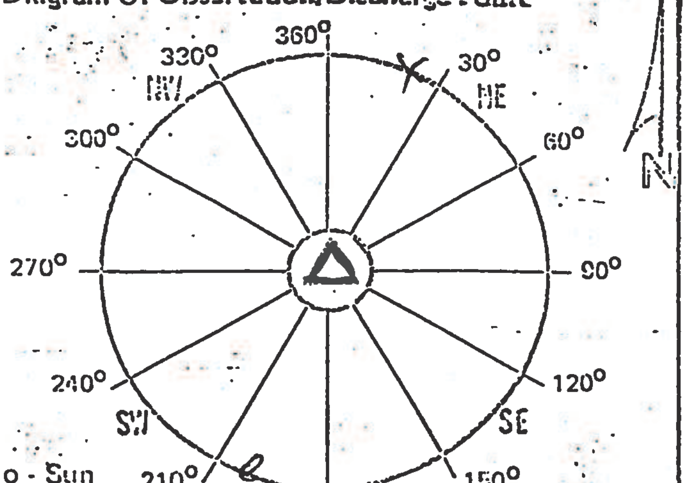
Emission Point:

Date: 8-23-83

Is emission point operation normal ?

	Initial	Final
Distance to discharge	15ft	
Direction to discharge	NE	
Height of observation point		
Height of discharge		
Plume color	Black+Blue	
Plume background	Gray	
Water vapor in plume ?		
Wind direction (from)	S	
Wind speed		
Ambient temperature	92°	
Discharge temperature		
Sky conditions	Cloudy	

Diagram Of Observation/Discharge Point



o - Sun
x - emission point
△ observer

V. E. Observer: [illegible]

Certification Expiration: 10-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
North	1:30pm	1:36pm	360	15.0

Overall Average:

Min.	0	15	30	45
0	15	15	15	15
1	15	15	15	15
2	15	15	15	15
3	15	15	15	15
4	15	15	15	15
5	15	15	15	15
0				
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Remarks:

Received By:

Visible Emissions Evaluation Record

Plant Name: Hercules Inc

Address: W 7th Street

City: H'burg

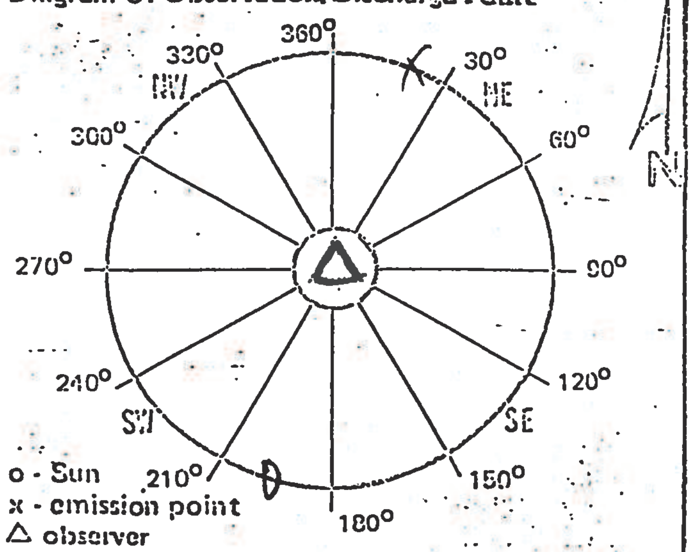
Emission Point: /

Date: 8-22-83

Is emission point operation normal ? ______

	Initial	Final
Distance to discharge	1/2 M	
Direction to discharge	NE	
Height of observation point		
Height of discharge		
Plume color	Black + Brown	
Plume background	Gray	
Water vapor in plume ?		
Wind direction (from)	SE	
Wind speed	5 MPH	
Ambient temperature	85°	
Discharge temperature		
Sky conditions	Cloudy	

Diagram Of Observation/Discharge Point



V. E. Observer: Carroll Lowery

Certification Expiration: ______

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
South	12:55 Pm	1:01 Pm	445	18.5

Overall Average: ______

Min.	0	15	30	45
0	15	20	20	15
1	15	20	20	20
2	15	15	20	20
3	20	20	20	15
4	20	20	15	15
5	20	20	20	20
0				
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Remarks: ______

Received By: ______

Visible Emissions Evaluation Record

Plant Name: Hercules Inc

Address: W 7th Street

City: H'ly

Emission Point:

Date: 8-22-83

V. E. Observer: Carroll [illegible]

Certification Expiration: 10-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
North	12:[illegible] pm	1:01 pm	390	16.3

Overall Average:

Is emission point operation normal ?

	Initial	Final
Distance to discharge	1/2 L	
Direction to discharge	NE	
Height of observation point		
Height of discharge		
Plume color	Black + Brown	
Plume background	Gray	
Water vapor in plume ?		
Wind direction (from)	SE	
Wind speed	5 MPH	
Ambient temperature	85°	
Discharge temperature		
Sky conditions	Cloudy	

Min.	0	15	30	45
0	15	15	15	15
1	15	15	15	15
2	15	15	20	20
3	20	20	20	15
4	15	15	15	15
5	15	15	15	20
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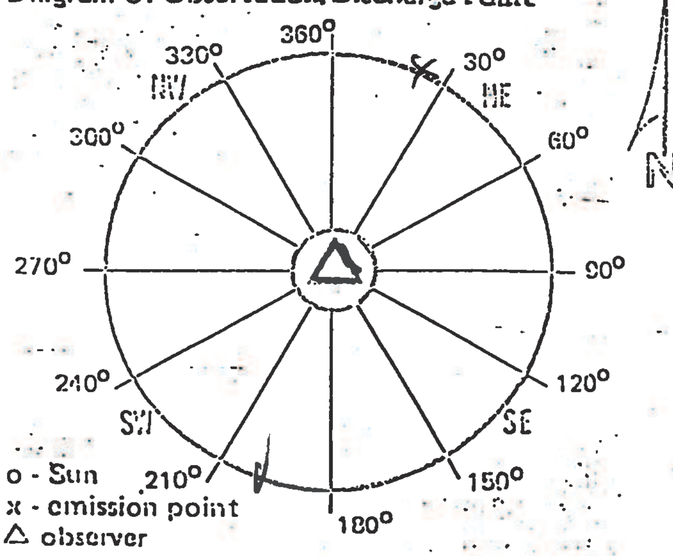
Diagram Of Observation/Discharge Point



Remarks:

Received By:

B. B Golden

Visible Emissions Evaluation Record

Plant Name: Hercules INC

Address: W 7th Street

City: H'burg, Miss

Emission Point:

Date: 8-18-83

Is emission point operation normal ?

V. E. Observer: Howell Russ

Certification Expiration: 10-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
North Stack	10 25 Am	10 30 Am	890	37.1

Overall Average:

	Initial	Final
Distance to discharge	1 1/2 Lengths	
Direction to discharge	N-E	
Height of observation point		
Height of discharge		
Plume color	Gray	
Plume background	Blue	
Water vapor in plume ?		
Wind direction (from)	SW	
Wind speed	5 MPH	
Ambient temperature	87	
Discharge temperature		
Sky conditions	P Cloudy	

Min.	0	15	30	45
0	50	50	40	40
1	40	40	40	40
2	35	35	35	35
3	40	50	50	50
4	40	30	25	25
5	25	25	25	25
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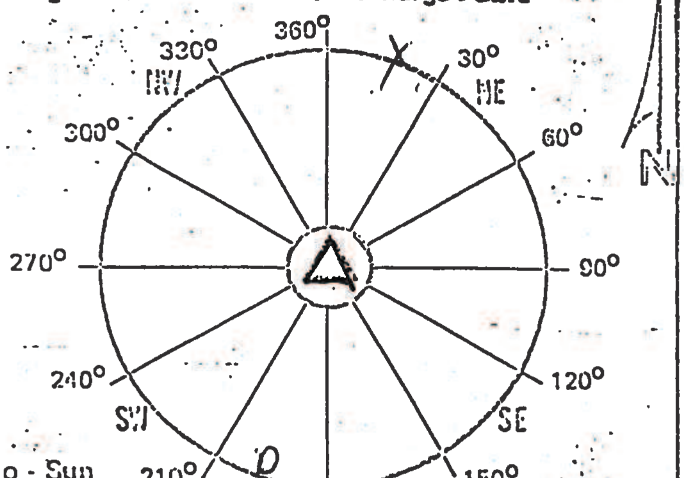
Diagram Of Observation/Discharge Point



o - Sun
x - emission point
△ observer

Remarks:

Received By:

Visible Emissions Evaluation Record

Plant Name: HERCULES INC

Address: W 7th STREET

City: H'burg, Miss

Emission Point:

Date: 8-18-83

Is emission point operation normal ?

V. E. Observer: Howell Russ

Certification Expiration: 10-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
South Stack	10:25 AM	10:30 AM	120	5

Overall Average:

	Initial	Final
Distance to discharge	1 1/2 Lengths	
Direction to discharge	N.E	
Height of observation point		
Height of discharge		
Plume color	Grey	
Plume background	Blue	
Water vapor in plume ?		
Wind direction (from)	S. N	
Wind speed	5 MPH	
Ambient temperature	87	
Discharge temperature		
Sky conditions	P. Cloudy	

Min.	0	15	30	45
0	5	5	5	5
1	5	5	5	5
2	5	5	5	5
3	5	5	5	5
4	5	5	5	5
5	5	5	5	5
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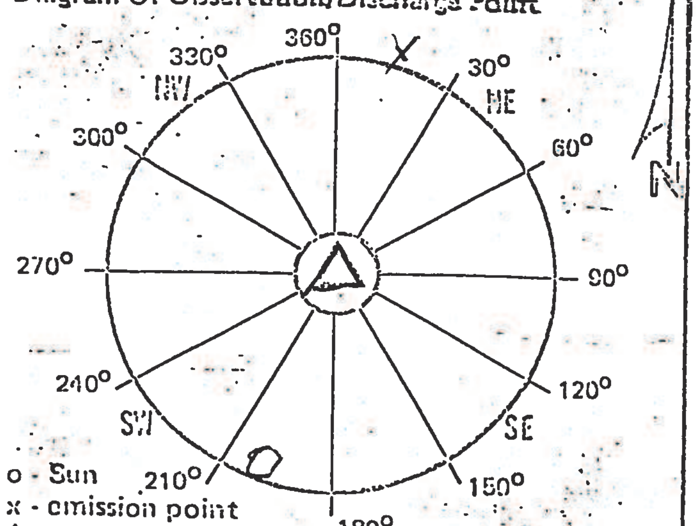
Diagram Of Observation/Discharge Point



o - Sun
x - emission point
△ observer

Remarks:

Received By:

B. B. Golden

Visible Emissions Evaluation Record

Plant Name: Hercules INC

Address: W 7th Street

City: H'burg, Miss

Emission Point: ______

Date: 8-17-83

Is emission point operation normal ? ______

V. E. Observer: Howell Ruis

Certification Expiration: 10-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
1 North Stack	12^{45} pm	12^{50} pm	415	17.3

	Initial	Final
Distance to discharge	1 1/2	Lengths
Direction to discharge	N.E.	
Height of observation point		
Height of discharge		
Plume color	Gray	
Plume background	Gray	
Water vapor in plume ?		
Wind direction (from)	S.E.	
Wind speed	5 MPH	
Ambient temperature	89°	
Discharge temperature		
Sky conditions	P. Cloudy	

Overall Average: ______

Min.	Seconds 0	15	30	45
0	15	20	20	20
1	15	15	15	15
2	15	15	15	15
3	20	20	20	20
4	15	15	15	15
5	20	20	20	20
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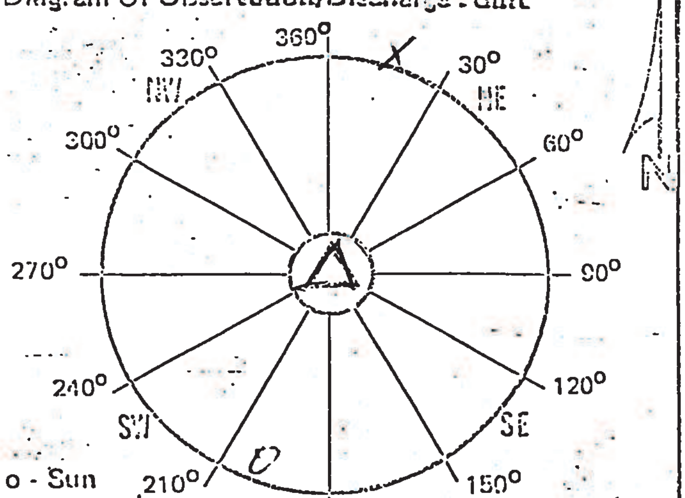
Diagram Of Observation/Discharge Point



o - Sun
x - emission point
△ observer

Remarks: ______

Received By: ______

Visible Emissions Evaluation Record

Plant Name: Hercules, Inc

Address: W. 7th Street

City: H'burg, Minn

Emission Point:

Date: 8-17-83

Is emission point operation normal?

V. E. Observer: Howell Russ

Certification Expiration: 10-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
South Stack	12:45 pm	12:50 pm	160	6.7

	Initial	Final
Distance to discharge	1 1/2 Lengths	
Direction to discharge	N.E.	
Height of observation point		
Height of discharge		
Plume color	Grey	
Plume background	Gray	
Water vapor in plume?		
Wind direction (from)	S.E.	
Wind speed	5 MpH	
Ambient temperature	89°	
Discharge temperature		
Sky conditions	P. Cloudy	

Overall Average:

Min.	Seconds 0	15	30	45
0	10	10	10	10
1	10	10	10	10
2	5	5	5	5
3	5	5	5	5
4	5	5	5	5
5	5	5	5	5
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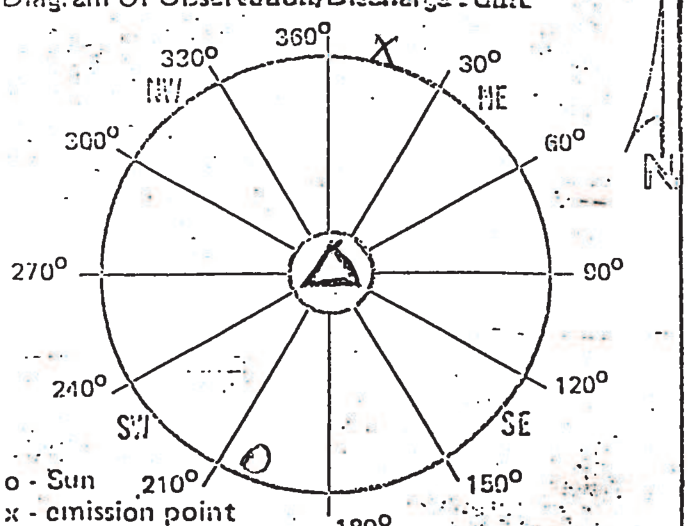
Diagram Of Observation/Discharge Point



o - Sun
x - emission point
△ observer

Remarks:

Received By:

Charles Jordan

Visible Emissions Evaluation Record

Plant Name: Hercules Inc

Address: W 7th Street

City: H'burg, Miss

Emission Point:

Date: 8-16-83

Is emission point operation normal ?

V. E. Observer: Howell Russ

Certification Expiration: 10-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
South Stack	12^05 pm	12^20 pm	280	11.7

Overall Average:

	Initial	Final
Distance to discharge	1 1/2 Lengths	
Direction to discharge	N.E.	
Height of observation point		
Height of discharge		
Plume color	Gray	
Plume background	Gray	
Water vapor in plume ?		
Wind direction (from)	S.W.	
Wind speed	5 MPH	
Ambient temperature	89	
Discharge temperature		
Sky conditions	P. Cloudy	

Seconds

Min.	0	15	30	45
0	10	10	10	10
1	10	10	10	10
2	10	10	10	10
3	10	10	10	10
4	10	10	10	10
5	20	20	20	20
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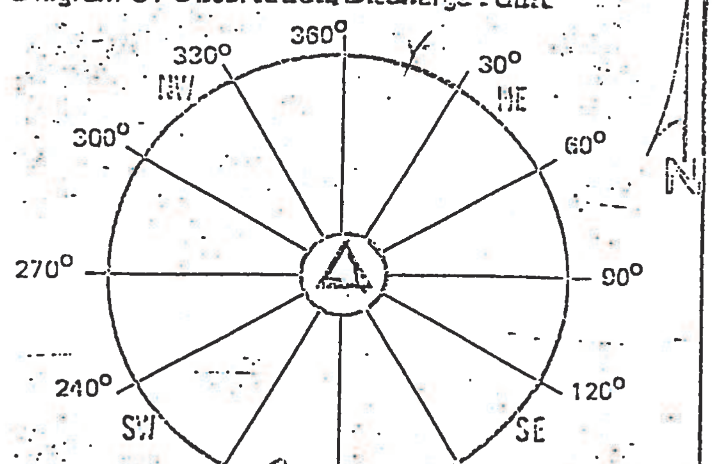
Diagram Of Observation/Discharge Point



o - Sun
x - emission point
△ observer

Remarks:

Received By:

Visible Emissions Evaluation Record

Plant Name: Hercules Inc.

V. E. Observer: Howell Rus

Address: W 7th Street

Certification Expiration: 10-21-83

City: H'burg, Miss

Emission Point:

Date: 9-16-83

Is emission point operation normal ?

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
North Stack	12 05 pm	12 10 pm	120	5

Overall Average:

	Initial	Final
Distance to discharge	1 1/2 Lengths	
Direction to discharge	N.E.	
Height of observation point		
Height of discharge		
Plume color	Gray	
Plume background	Gray	
Water vapor in plume ?		
Wind direction (from)	S.W.	
Wind speed	5 MPH	
Ambient temperature	89	
Discharge temperature		
Sky conditions	P Cloudy	

Min.	Seconds 0	15	30	45
0	5	5	5	5
1	5	5	5	5
2	5	5	5	5
3	5	5	5	5
4	5	5	5	5
5	5	5	5	5
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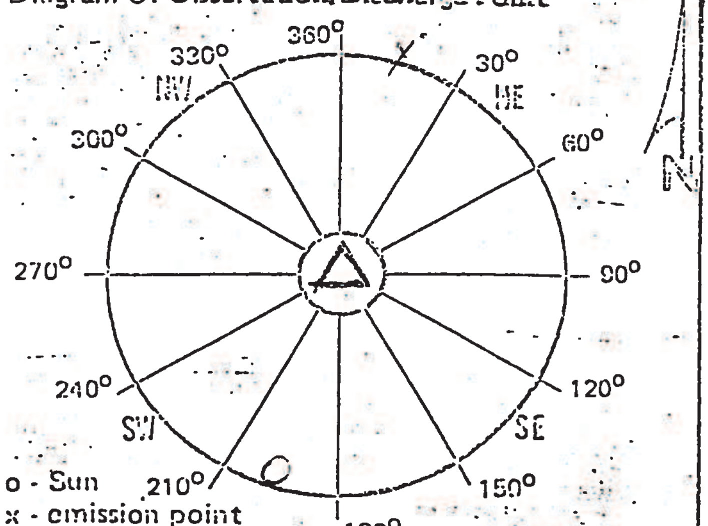
Diagram Of Observation/Discharge Point



o - Sun
x - emission point
△ observer

Remarks:

Received By:

B.B. Golden

Visible Emissions Evaluation Record

Plant Name: Hercules Inc

Address: W 7th Street

City: H'burg, Miss

Emission Point:

Date: 8-15-83

Is emission point operation normal ?

V. E. Observer: Harold Rose

Certification Expiration: 11-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
South stack	12 15 pm	12 20 pm	400	16.7

	Initial	Final
Distance to discharge	1 1/2 Lengths	
Direction to discharge	N.E	
Height of observation point		
Height of discharge		
Plume color	Gray	
Plume background	Gray	
Water vapor in plume ?		
Wind direction (from)	S.W	
Wind speed	5MPH	
Ambient temperature	90°	
Discharge temperature		
Sky conditions	P Cloudy	

Overall Average:

Min.	Seconds 0	15	30	45
0	15	15	15	15
1	15	15	15	15
2	15	15	15	15
3	20	20	20	20
4	20	20	20	20
5	15	15	15	15
0				
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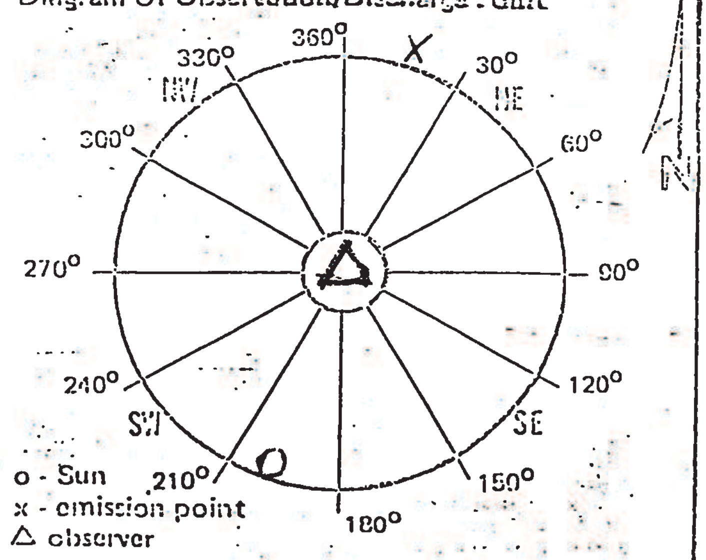
Diagram Of Observation/Discharge Point



Remarks:

Received By:

Visible Emissions Evaluation Record

Plant Name: HERCULES. INC.

Address: W 7th STREET

City: H'burg, Miss

Emission Point:

Date: 8-15-83

Is emission point operation normal ?

V. E. Observer: Howell Russ

Certification Expiration: 10-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
North Stack	12:15 PM	12:20 pm	140	5.8

	Initial	Final
Distance to discharge	1 1/2 Lengths	
Direction to discharge	N.E	
Height of observation point		
Height of discharge		
Plume color	Gray	
Plume background	Gray	
Water vapor in plume ?		
Wind direction (from)	S.W	
Wind speed	5MPH	
Ambient temperature	90°	
Discharge temperature		
Sky conditions	P. Cloudy	

Overall Average:

Min.	Seconds 0	15	30	45
0	5	5	5	5
1	5	5	5	5
2	5	5	5	5
3	5	5	5	5
4	5	5	5	5
5	10	10	10	10
0				
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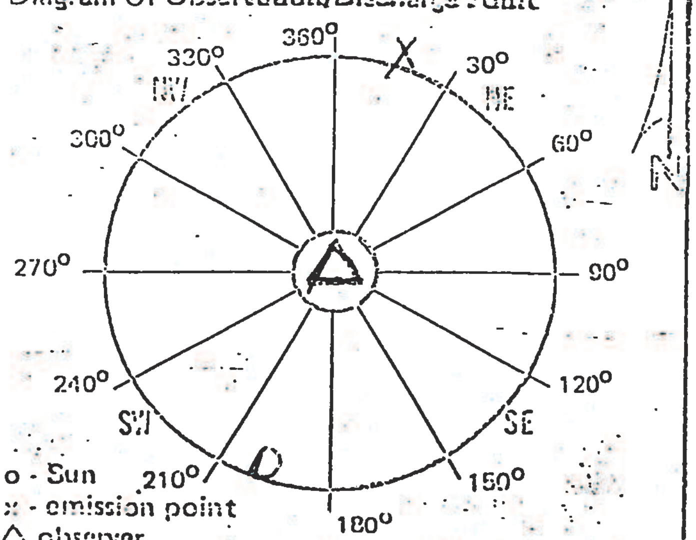
Diagram Of Observation/Discharge Point



Remarks:

Received By:

Visible Emissions Evaluation Record

Plant Name: Hercules Inc

Address: W 7th Street

City: H'ly

Emission Point:

Date: 8-12-83

Is emission point operation normal ?

V. E. Observer: Carroll Lowery

Certification Expiration: 10-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
Tenth	12:45 Am	12:51 Am	200	8.3

Overall Average:

	Initial	Final
Distance to discharge	1/4	
Direction to discharge	NE	
Height of observation point		
Height of discharge		
Plume color	Brown + White	
Plume background	Blue + Grey	
Water vapor in plume ?		
Wind direction (from)	SW	
Wind speed	5 MPH	
Ambient temperature	90°	
Discharge temperature		
Sky conditions	PC	

Min.	Seconds 0	15	30	45
0	10	10	10	10
1	10	10	10	5
2	5	5	5	5
3	10	10	5	5
4	5	10	10	10
5	10	10	10	10
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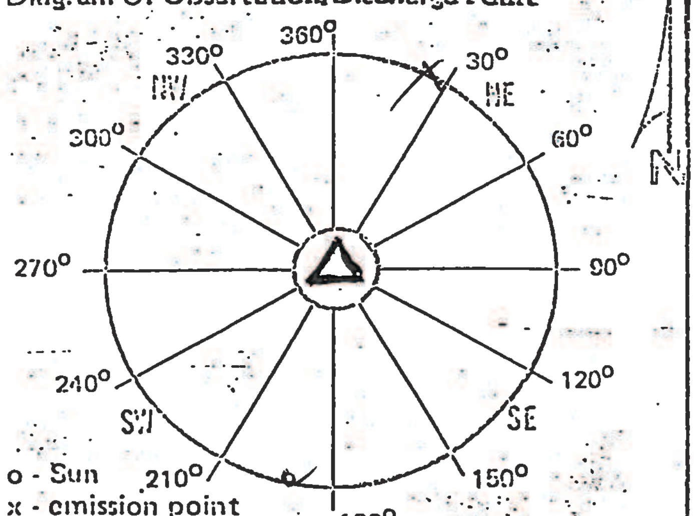
Diagram Of Observation/Discharge Point



o - Sun
x - emission point
△ observer

Remarks:

Received By:

Visible Emissions Evaluation Record

Plant Name: Hercules Inc

Address: W 7th Street

City: H'by

Emission Point:

Date: 8-12-83

Is emission point operation normal ?

V. E. Observer: [illegible signature]

Certification Expiration: 10-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
North	12:45Pm	12:51Pm	215	9.0

	Initial	Final
Distance to discharge	1/2 L	
Direction to discharge	NE	
Height of observation point		
Height of discharge		
Plume color	Brown & White	
Plume background	Blue & Gray	
Water vapor in plume ?		
Wind direction (from)	SW	
Wind speed	5 MPH	
Ambient temperature	90°...	
Discharge temperature		
Sky conditions	P.C.	

Overall Average:

Min.	0	15	30	45
0	10	10	10	10
1	10	10	10	5
2	5	5	5	5
3	5	10	10	10
4	10	10	10	10
5	10	10	10	15
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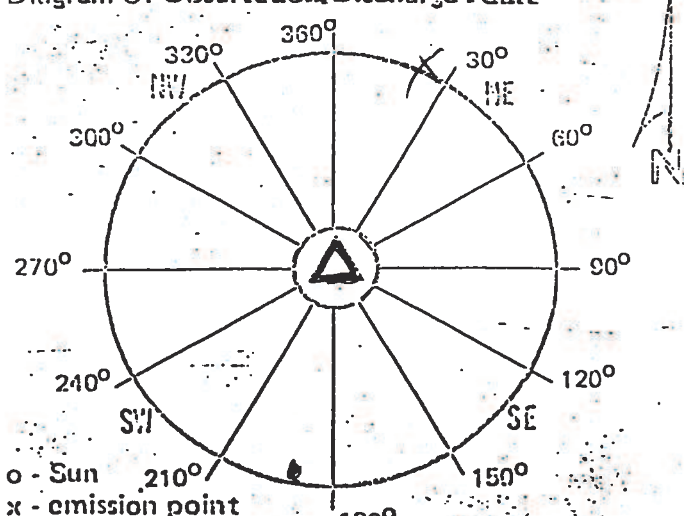
Diagram Of Observation/Discharge Point



o - Sun
x - emission point
△ observer

Remarks:

Received By:

Visible Emissions Evaluation Record

Plant Name: Hercules Inc

Address: W 7th Street

City: H'bg

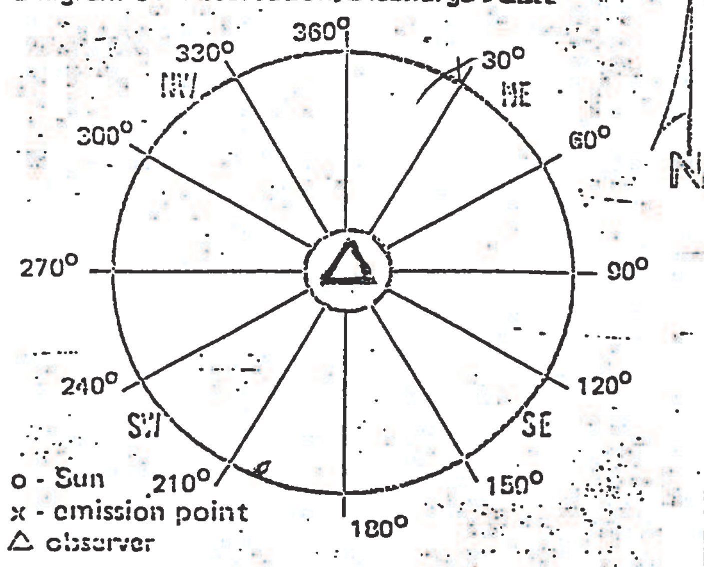
Emission Point:

Date: 8-11-83

Is emission point operation normal ?

	Initial	Final
Distance to discharge	1½ L	
Direction to discharge	NE	
Height of observation point		
Height of discharge		
Plume color	White & Brown	
Plume background	Gray & Blue	
Water vapor in plume ?		
Wind direction (from)	SW	
Wind speed	5MPH	
Ambient temperature	91	
Discharge temperature		
Sky conditions	Clr	

Diagram Of Observation/Discharge Point



V. E. Observer: Carroll Lowery

Certification Expiration: 10-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
South	12:45Pm	12:51Pm	790	32.9

Overall Average:

Min.	Seconds 0	15	30	45
0	30	30	35	20
1	20	25	30	30
2	30	30	30	30
3	30	25	30	35
4	30	40	45	45
5	40	40	45	40
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Remarks:

Received By:

Visible Emissions Evaluation Record

Plant Name: Hercules Inc

Address: W 7th Street

City: H'ly

Emission Point: ______

Date: 8-11-83

Is emission point operation normal ? ______

V. E. Observer: Carroll Lewey

Certification Expiration: 10-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
North	12:45PM	12:51PM	210	8.8

Overall Average: ______

	Initial	Final
Distance to discharge	1kL	
Direction to discharge	NE	
Height of observation point		
Height of discharge		
Plume color	White & Brown	
Plume background	Gray & Blue	
Water vapor in plume ?		
Wind direction (from)	SW	
Wind speed	5MPH	
Ambient temperature	91°	
Discharge temperature		
Sky conditions	P.C.	

Min.	0	15	30	45
0	20	20	20	10
1	10	15	15	10
2	10	10	5	5
3	5	5	5	5
4	5	5	5	5
5	5	5	5	5
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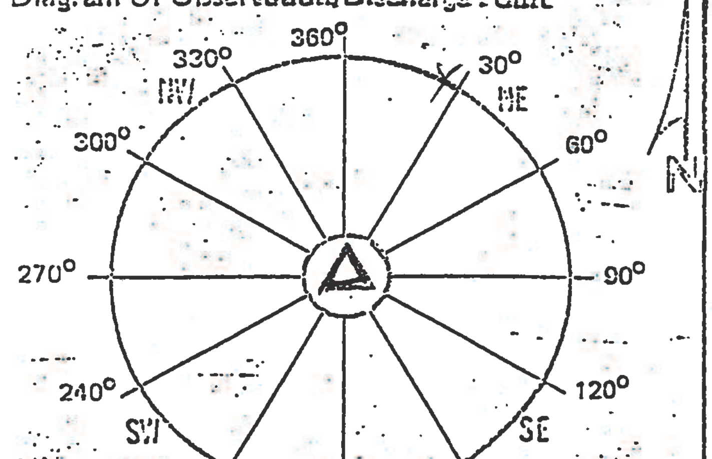
Diagram Of Observation/Discharge Point



o - Sun
x - emission point
△ observer

Remarks: ______

Received By: ______

Visible Emissions Evaluation Record

Plant Name: Hercules Inc.

Address: W 7th Street

City: H'by

Emission Point:

Date: 8-10-83

Is emission point operation normal ?

V. E. Observer: Carroll Lowery

Certification Expiration: 10-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
South	1:30pm	1:36pm	430	17.9

Overall Average:

	Initial	Final
Distance to discharge	1½L	
Direction to discharge	NE	
Height of observation point		
Height of discharge		
Plume color	Black/Brown	
Plume background	Gray	
Water vapor in plume ?		
Wind direction (from)	SW	
Wind speed	5 mph	
Ambient temperature	93°	
Discharge temperature		
Sky conditions	PC	

Min.	Seconds 0	15	30	45
0	15	15	20	20
1	20	20	15	15
2	15	20	20	15
3	15	15	15	15
4	20	20	20	20
5	20	20	20	20
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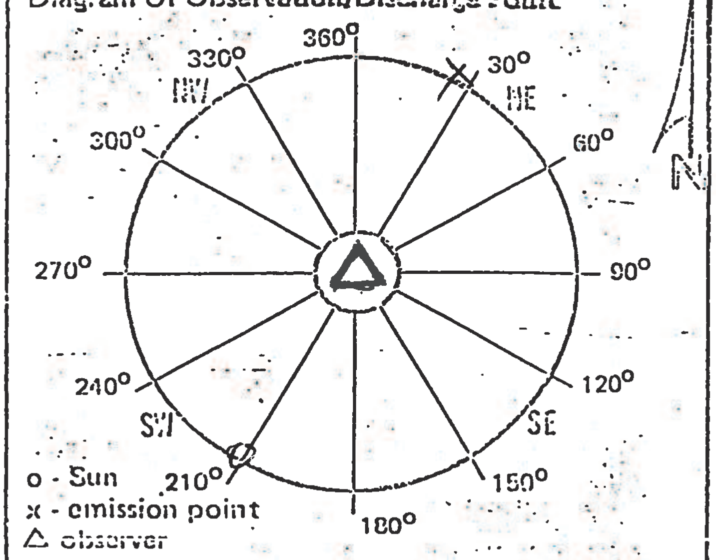
Diagram Of Observation/Discharge Point



Remarks:

Received By:

Visible Emissions Evaluation Record

Plant Name: Hercules Inc.

Address: W 7th Street

City: H'by

Emission Point:

Date: 8-10-83

Is emission point operation normal ?

V. E. Observer: Carroll Lewis

Certification Expiration: 10-21-83

Set No.	Time		Opacity	
	Start	End	Sum	Average
North	1:30Pm	1:36Am	240	10.0

Overall Average:

	Initial	Final
Distance to discharge	1½ L	
Direction to discharge	NE	
Height of observation point		
Height of discharge		
Plume color	Brown + Black	
Plume background	Gray	
Water vapor in plume ?		
Wind direction (from)	∅ SW	
Wind speed	5 mph	
Ambient temperature	93 c	
Discharge temperature		
Sky conditions	Pc	

Min.	Seconds 0	15	30	45
0	10	10	10	10
1	10	10	10	10
2	10	10	10	10
3	10	10	10	10
4	10	10	10	10
5	10	10	10	10
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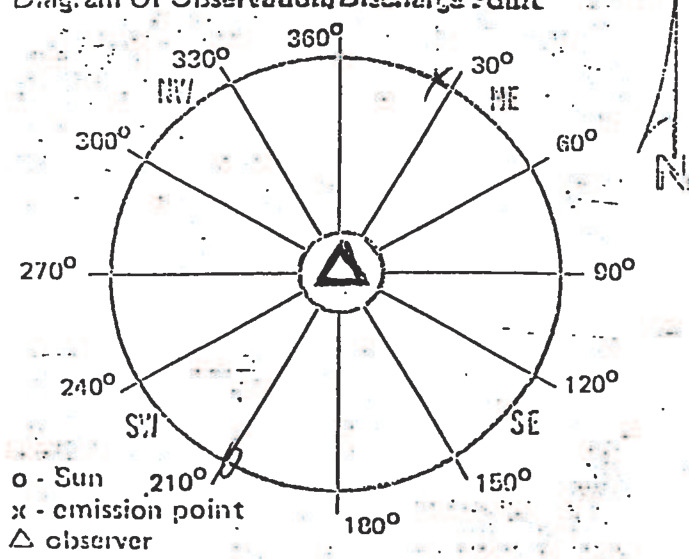
Diagram Of Observation/Discharge Point



Remarks:

Received By:

Visible Emissions Evaluation Record

Plant Name: Hercules Inc.

Address: 10 7th Street

City: H'bg

Emission Point:

Date: 8-9-83

Is emission point operation normal ?

	Initial	Final
Distance to discharge	1½ L	
Direction to discharge	NE	
Height of observation point		
Height of discharge		
Plume color	Brown+Black	
Plume background	Gray	
Water vapor in plume ?		
Wind direction (from)	S	
Wind speed	5 MPH	
Ambient temperature	93°	
Discharge temperature		
Sky conditions	P.C.	

V. E. Observer: Carroll Lowery

Certification Expiration: 10/21/83

Set No.	Time		Opacity	
	Start	End	Sum	Average
South	12:40pm	12:46pm	275	11.5

Overall Average:

11

Min.	Seconds 0	15	30	45
0	15	15	15	15
1	15	10	10	10
2	10	10	10	10
3	10	10	10	15
4	15	15	10	10
5	10	10	10	5
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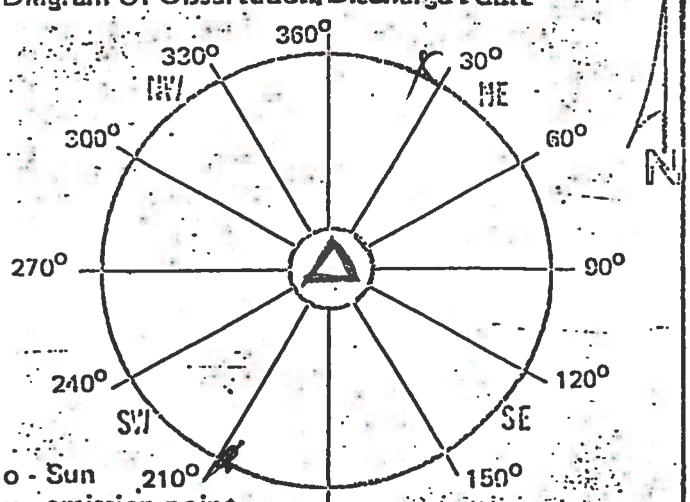
Diagram Of Observation/Discharge Point



o - Sun
x - emission point
△ observer

Remarks:

Received By:

Visible Emissions Evaluation Record

Plant Name: Hercules Inc

Address: W 7th Street

City: H'by

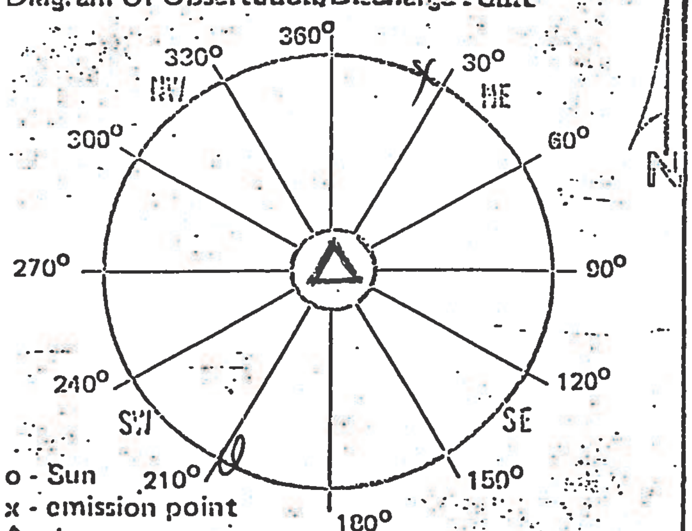
Emission Point:

Date: 8-9-83

Is emission point operation normal ?

	Initial	Final
Distance to discharge	1/2 L	
Direction to discharge	NE	
Height of observation point		
Height of discharge		
Plume color	Brown + Black + White	
Plume background	Gray	
Water vapor in plume ?		
Wind direction (from)	~~[illegible]~~	
Wind speed	5 MPH	
Ambient temperature	93°	
Discharge temperature		
Sky conditions	Pt.	

Diagram Of Observation/Discharge Point



V. E. Observer: Carroll Lowery

Certification Expiration: 10-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
North	12:40pm	12:~~[illegible]~~pm	1550	64.6

Overall Average:

Min.	Seconds 0	15	30	45
0	10	10	10	25
1	15 white	5 white	~~25~~ 5 white	5 white
2	75 white	100	90	100
3	50	100	90	70
4	90	100	100	100
5	100	100	100	100
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Remarks:

Received By:

Visible Emissions Evaluation Record

Plant Name: Hercules Inc.

Address: W 7th Street

City: H'ly

Emission Point:

Date: 8-8-83

V. E. Observer: Carroll Lowery

Certification Expiration: 10-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
South	1:25 PM	1:31 PM	285	11.9

Is emission point operation normal ?

	Initial	Final
Distance to discharge	1½ L	
Direction to discharge	NE	
Height of observation point		
Height of discharge		
Plume color	Black	
Plume background	Gray	
Water vapor in plume ?		
Wind direction (from)	SE	
Wind speed	5 MPH	
Ambient temperature	91°	
Discharge temperature		
Sky conditions	PC	

Overall Average:

Min.	0	15	30	45
0	10	10	15	10
1	10	10	10	10
2	10	10	10	15
3	15	15	15	15
4	15	15	15	10
5	10	10	10	10
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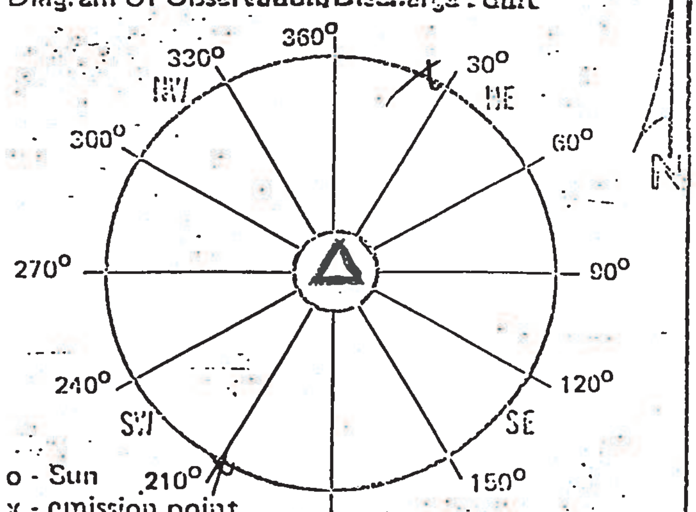
Diagram Of Observation/Discharge Point



o - Sun
x - emission point
△ observer

Remarks:

Received By:

Visible Emissions Evaluation Record

Plant Name: Hercules Inc.

Address: W 7th Street

City: H'burg

Emission Point:

Date: 8-8-83

Is emission point operation normal ?

V. E. Observer: Carroll Lowery

Certification Expiration: 10-21-85

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
North	1:25 Pm	1:31 Pm	295	12.3

Overall Average:

	Initial	Final
Distance to discharge	1/4 E	
Direction to discharge	NE	
Height of observation point		
Height of discharge		
Plume color	Black	
Plume background	Gray	
Water vapor in plume ?		
Wind direction (from)	SE	
Wind speed	5 m/H	
Ambient temperature	91°	
Discharge temperature		
Sky conditions	PC	

Min.	Seconds 0	15	30	45
0	15	15	20	10
1	10	10	10	10
2	10	25	15	15
3	10	10	10	10
4	15	15	10	10
5	10	10	10	10
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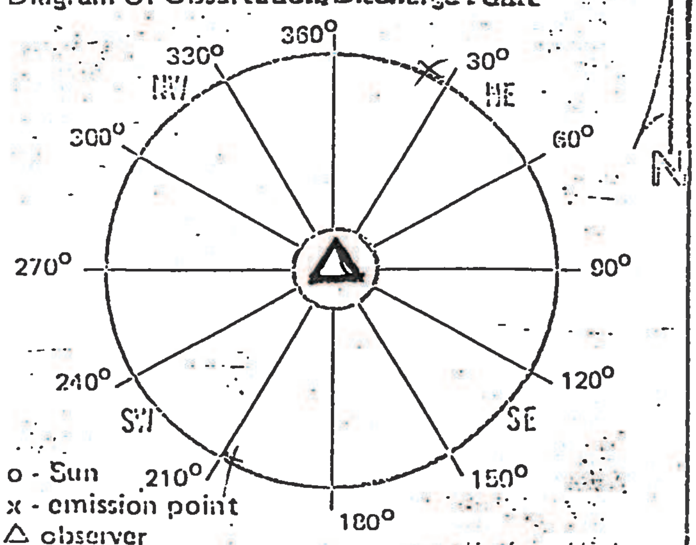
Diagram Of Observation/Discharge Point



Remarks:

Received By:

B. B. Golden

Visible Emissions Evaluation Record

Plant Name: Hercules INC

Address: W 7th Street

City: H'burg, Miss

Emission Point:

Date: 8-5-83

Is emission point operation normal ?

V. E. Observer: Howell Russ

Certification Expiration: 10-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
North Stack	12⁴⁵ pm	12⁵⁰ pm	820	34.2

Overall Average:

	Initial	Final
Distance to discharge	1 1/2 Lengths	
Direction to discharge	NE	
Height of observation point		
Height of discharge		
Plume color	Gray	
Plume background	Gray	
Water vapor in plume ?		
Wind direction (from)	S.W	
Wind speed	5 MPH	
Ambient temperature	84	
Discharge temperature		
Sky conditions	P Cloudy	

Min.	Seconds 0	15	30	45
0	30	30	30	30
1	35	35	35	35
2	35	35	35	35
3	35	35	35	35
4	35	35	35	35
5	35	35	35	35
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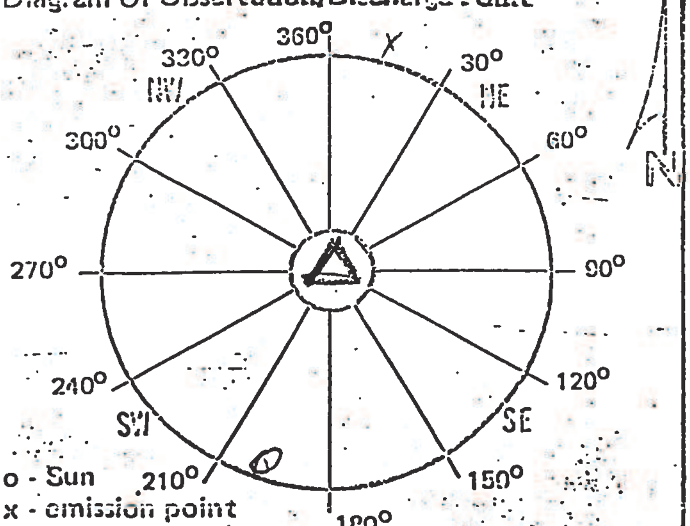
Diagram Of Observation/Discharge Point



o - Sun
x - emission point
△ observer

Remarks:

Received By:

Visible Emissions Evaluation Record

Plant Name: Hercules INC.

Address: W 7th Street

City: H'burg, Miss

Emission Point:

Date: 8-5-83

Is emission point operation normal ?

V. E. Observer: Howell Russ

Certification Expiration: 10-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
South Stack	12:45 pm	12:50 pm	260	10.8

	Initial	Final
Distance to discharge	1 1/2 Lengths	
Direction to discharge	N-E	
Height of observation point		
Height of discharge		
Plume color	Gray	
Plume background	Gray	
Water vapor in plume ?		
Wind direction (from)	S.W	
Wind speed	5MPH	
Ambient temperature	89	
Discharge temperature		
Sky conditions	P. Cloudy	

Overall Average:

Min.	Seconds 0	15	30	45
0	15	15	15	15
1	10	10	10	10
2	10	10	10	10
3	10	10	10	10
4	10	10	10	10
5	10	10	10	10
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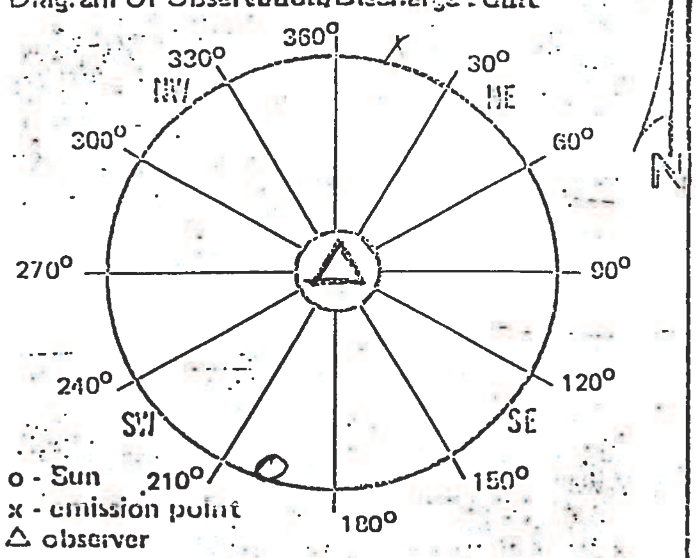
Diagram Of Observation/Discharge Point



Remarks:

Received By:

Tom Bradley

Visible Emissions Evaluation Record

Plant Name: Hercules INC

Address: W 7th Street

City: H'burg, Miss

Emission Point:

Date: 8-5-83

Is emission point operation normal ?

V. E. Observer: Howell Russ

Certification Expiration: 10-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
North Stack	12^45 PM	12^50 PM	820	34.2

Overall Average:

	Initial	Final
Distance to discharge	1 1/2 Lengths	
Direction to discharge	NE	
Height of observation point		
Height of discharge		
Plume color	Gray	
Plume background	Gray	
Water vapor in plume ?		
Wind direction (from)	S.W.	
Wind speed	5 MPH	
Ambient temperature	84	
Discharge temperature		
Sky conditions	P Cloudy	

Min.	Seconds 0	15	30	45
0	30	30	30	30
1	35	35	35	35
2	35	35	35	35
3	35	35	35	35
4	35	35	35	35
5	35	35	35	35
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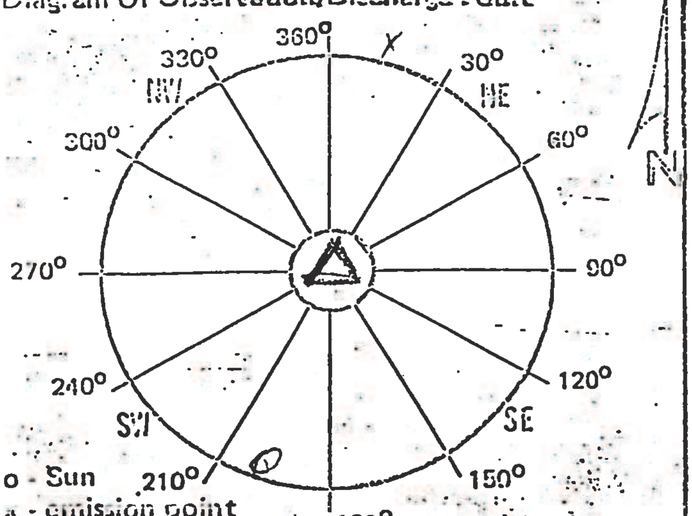
Diagram Of Observation/Discharge Point



o - Sun
x - emission point
△ observer

Remarks:

Received By:

Visible Emissions Evaluation Record

Plant Name: Hercules INC.

Address: W 7th Street

City: H'burg, Miss

Emission Point:

Date: 8-5-83

Is emission point operation normal ?

V. E. Observer: Howell Pruss

Certification Expiration: 10-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
South Stack	12 45 pm	12 50 pm	260	10.8

Overall Average:

	Initial	Final
Distance to discharge	1 1/2 Lengths	
Direction to discharge	N.E	
Height of observation point		
Height of discharge		
Plume color	Gray	
Plume background	Gray	
Water vapor in plume ?		
Wind direction (from)	S.W	
Wind speed	5 MPH	
Ambient temperature	89	
Discharge temperature		
Sky conditions	P. Cloudy	

Min.	Seconds 0	15	30	45
0	15	15	15	15
1	10	10	10	10
2	10	10	10	10
3	10	10	10	10
4	10	10	10	10
5	10	10	10	10
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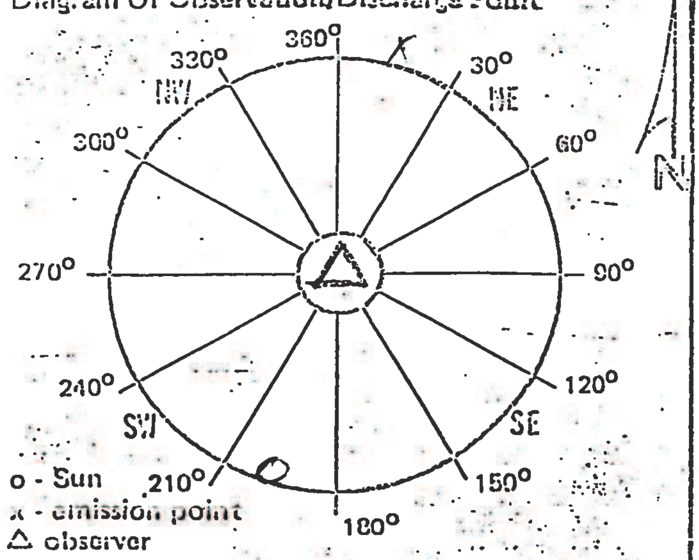
Diagram Of Observation/Discharge Point



Remarks:

Received By:

B. B. Golden

Visible Emissions Evaluation Record

Plant Name: Hercules Inc.

Address: W 7th Street

City: H'burg Miss

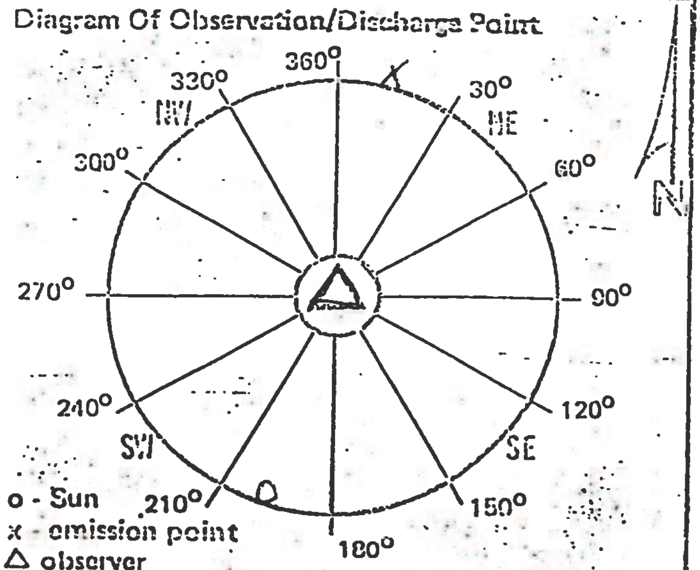
Emission Point:

Date: 8-4-83

Is emission point operation normal ?

	Initial	Final
Distance to discharge	1 1/2	Lengths
Direction to discharge	N+E	
Height of observation point		
Height of discharge		
Plume color	Gray	
Plume background	Gray	
Water vapor in plume ?		
Wind direction (from)	S.E	
Wind speed	5 MPH	
Ambient temperature	86	
Discharge temperature		
Sky conditions	P Cloudy	

Diagram Of Observation/Discharge Point



V. E. Observer: Howell Russ

Certification Expiration: 10-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
South Stack	11 Am 50	11 Am 55	380	15.8

Overall Average:

Min.	0	15	30	45
0	10	10	10	10
1	15	15	15	15
2	15	15	15	15
3	20	20	20	20
4	20	20	20	20
5	15	15	15	15
0				
1				
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Remarks:

Received By:

Visible Emissions Evaluation Record

Plant Name: HERCULES INC.

Address: W 7th STREET

City: H'burg Miss

Emission Point: ______

Date: 8-4-83

Is emission point operation normal ? ______

V. E. Observer: Howell Russ

Certification Expiration: 10-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
North Stack	11 50 AM	11 55 AM	240	10

Overall Average: ______

	Initial	Final
Distance to discharge	1 1/2 Lengths	
Direction to discharge	N.E	
Height of observation point		
Height of discharge		
Plume color	Gray	
Plume background	Gray	
Water vapor in plume ?		
Wind direction (from)	S.E	
Wind speed	5 MPH	
Ambient temperature	86	
Discharge temperature		
Sky conditions	P. Cloudy	

Min.	Seconds 0	15	30	45
0	10	10	10	10
1	10	10	10	10
2	10	10	10	10
3	10	10	10	10
4	10	10	10	10
5	10	10	10	10
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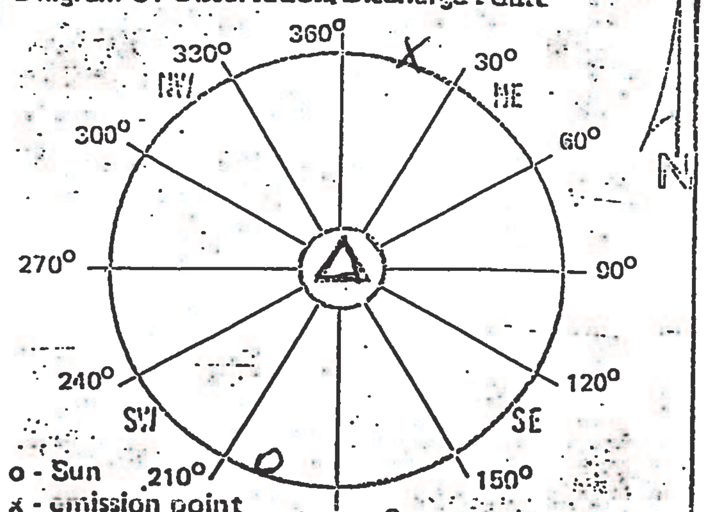
Diagram Of Observation/Discharge Point



o - Sun
x - emission point
Δ observer

Remarks: ______

Received By: ______

B. B. Golden

Visible Emissions Evaluation Record

Plant Name: Hercules Inc

Address: W 7th Street

City: H'burg Miss

Emission Point:

Date: 8-3-83

Is emission point operation normal ?

V. E. Observer: Howell Russ

Certification Expiration: 10-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
South Stack	1245 pm	12:50 pm	260	10.8

	Initial	Final
Distance to discharge	1 1/2	Lengths
Direction to discharge	NE	
Height of observation point		
Height of discharge		
Plume color	Gray	
Plume background	Gray	
Water vapor in plume ?		
Wind direction (from)	SE	
Wind speed	5 MPH	
Ambient temperature	86	
Discharge temperature		
Sky conditions	P. Cloudy	

Overall Average:

Min.	Seconds 0	15	30	45
0	5	5	5	5
1	10	10	10	10
2	10	10	10	10
3	15	15	15	15
4	10	10	10	10
5	15	15	15	15
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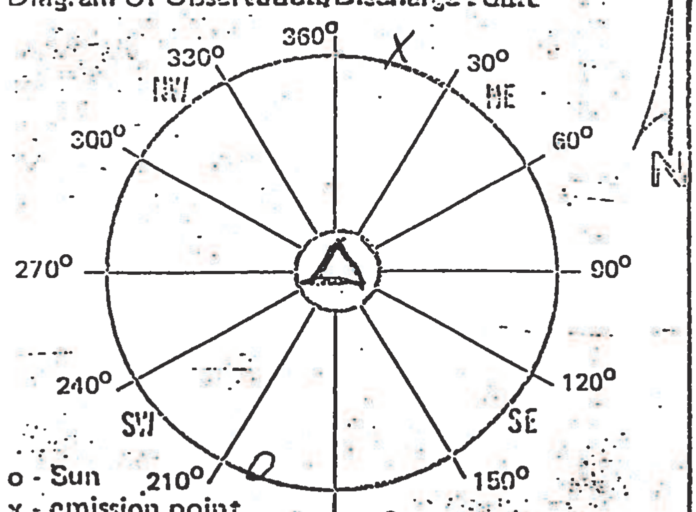
Diagram Of Observation/Discharge Point



o - Sun
x - emission point
△ observer

Remarks:

Received By:

Visible Emissions Evaluation Record

Plant Name: Hercules Inc.
Address: W 7th Street
City: H'burg, Miss
Emission Point:
Date: 8-3-83
Is emission point operation normal ?

V. E. Observer: Howell Russ
Certification Expiration: 10-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
North Stack	12^45 pm	12^50 pm	520	21.7

	Initial	Final
Distance to discharge	1 1/2 Lengths	
Direction to discharge	N.E.	
Height of observation point		
Height of discharge		
Plume color	Gray	
Plume background	Gray	
Water vapor in plume ?		
Wind direction (from)	S.E	
Wind speed	5MPH	
Ambient temperature	86	
Discharge temperature		
Sky conditions	P.Cloudy	

Overall Average:

Min.	Seconds 0	15	30	45
0	20	20	20	20
1	25	25	25	25
2	15	15	15	15
3	25	25	25	25
4	20	20	20	20
5	25	25	25	25
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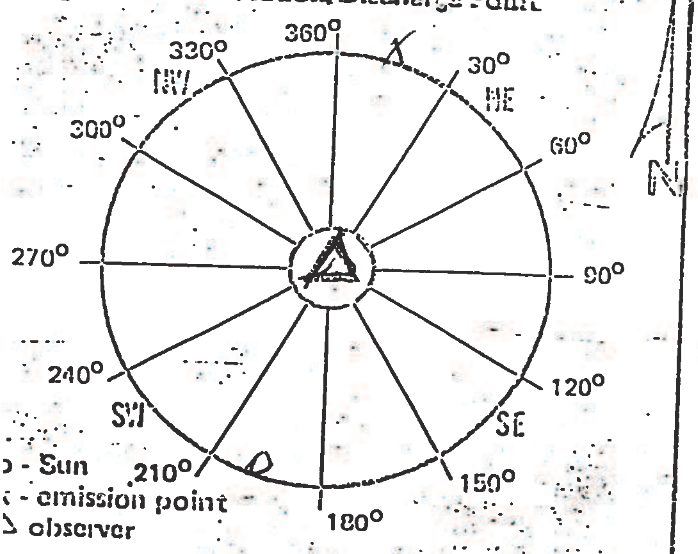
Diagram Of Observation/Discharge Point



Remarks:

Received D...

B. B Golden

Visible Emissions Evaluation Record

Plant Name: Hercules INC.

Address: W 7th Street

City: H'burg, Miss

Emission Point:

Date: 8-2-83

Is emission point operation normal ?

	Initial	Final
Distance to discharge	1 1/2	Lengths
Direction to discharge	N.E	
Height of observation point		
Height of discharge		
Plume color	Gray	
Plume background	Gray	
Water vapor in plume ?		
Wind direction (from)	SW	
Wind speed	5 MPH	
Ambient temperature	85	
Discharge temperature		
Sky conditions	Cloudy	

V. E. Observer: Howell Ruse

Certification Expiration: 10-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
North Stack	12:55	1:00 pm	320	13.3

Overall Average:

Min.	Seconds 0	15	30	45
0	15	15	15	15
1	20	20	20	20
2	10	10	10	10
3	15	15	15	15
4	10	10	10	10
5	10	10	10	10
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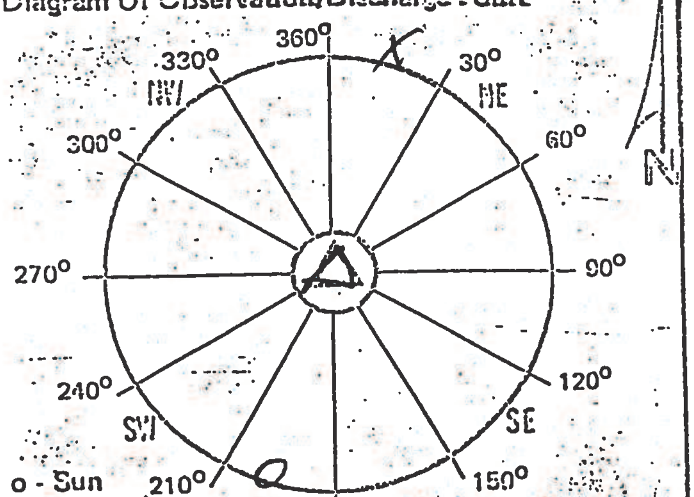
5				

Diagram Of Observation/Discharge Point



o - Sun
x - emission point
△ observer

Remarks:

Received By:

Visible Emissions Evaluation Record

Plant Name: Hercules Inc

Address: W 7th Street

City: Hattiesburg, Miss

Emission Point:

Date: 8-2-83

Is emission point operation normal ?

V. E. Observer: Howell Russ

Certification Expiration: 10-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
South Stack	12:55 pm	1:00 pm	280	11.7

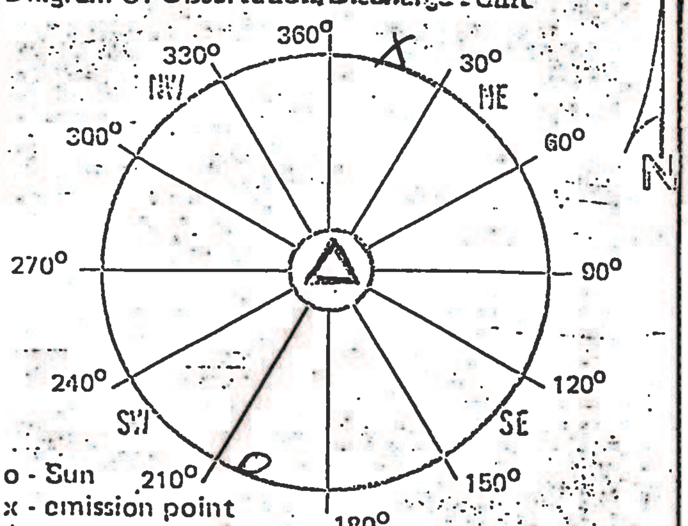
Overall Average: 11

	Initial	Final
Distance to discharge	1 1/2 Lengths	
Direction to discharge	NE	
Height of observation point		
Height of discharge		
Plume color	Gray	
Plume background	Gray	
Water vapor in plume ?		
Wind direction (from)	SW	
Wind speed	5MPH	
Ambient temperature	85	
Discharge temperature		
Sky conditions	Cloudy	

Seconds

Min.	0	15	30	45
0	10	10	10	10
1	10	10	10	10
2	10	10	10	10
3	10	10	10	10
4	15	15	15	15
5	15	15	15	15
0				
1				
2				
3				
4				
5				
0				
1				
2				
3				
4				
5				

Diagram Of Observation/Discharge Point



o - Sun
x - emission point
△ observer

Remarks:

Received By:

B. B Co New

Visible Emissions Evaluation Record

Plant Name: Hercules Inc

Address: W 7th Street

City: H'burg, Miss

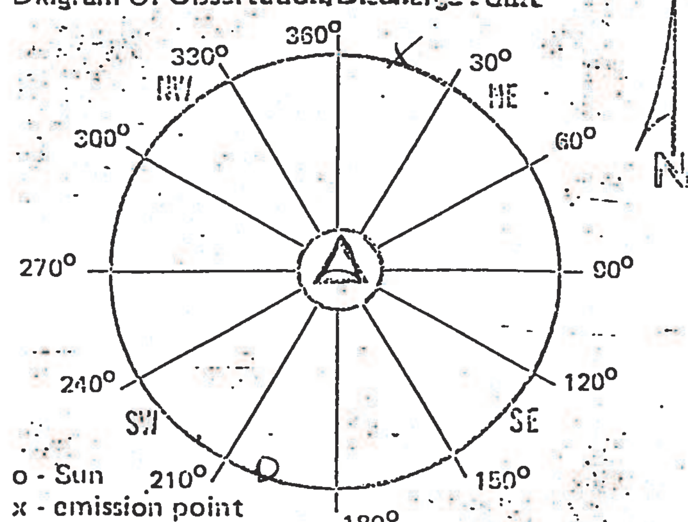
Emission Point:

Date: 8-1-83

Is emission point operation normal ?

	Initial	Final
Distance to discharge	1 1/2 Lengths	
Direction to discharge	N.E	
Height of observation point		
Height of discharge		
Plume color	Black	
Plume background	Gray	
Water vapor in plume ?		
Wind direction (from)	N.W	
Wind speed	5 MPH	
Ambient temperature	78	
Discharge temperature		
Sky conditions	Cloudy	

Diagram Of Observation/Discharge Point



o - Sun
x - emission point
△ observer

V. E. Observer: Howell Ruse

Certification Expiration: 10-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
North Stack	12 30 pm	12 35 pm	790	32.9

Overall Average:

Min.	Seconds 0	15	30	45
0	25	25	20	20
1	35	35	35	35
2	40	40	40	40
3	30	30	30	30
4	35	35	35	35
5	35	35	35	35
0				
1				
2				
3				
4				
5				
0				
1				
2				
3				
4				
5				

Remarks:

Received By:

Visible Emissions Evaluation Record

Plant Name: Hercules Inc

Address: W 7th Street

City: H'burg Miss

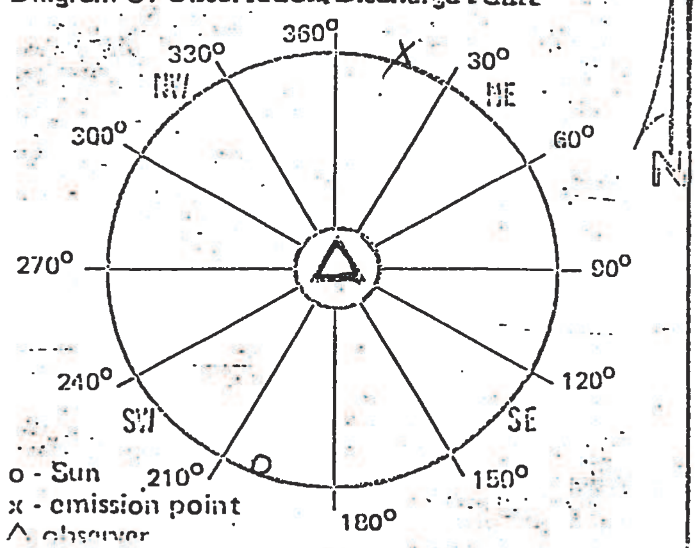
Emission Point:

Date: 8-1-83

Is emission point operation normal ?

	Initial	Final
Distance to discharge	1 1/2	Lengths
Direction to discharge	N.E.	
Height of observation point		
Height of discharge		
Plume color	Black	
Plume background	Gray	
Water vapor in plume ?		
Wind direction (from)	S.W	
Wind speed	5 MPH	
Ambient temperature	78	
Discharge temperature		
Sky conditions	Cloudy	

Diagram Of Observation/Discharge Point



o - Sun
x - emission point
△ observer

V. E. Observer: Howell Russ

Certification Expiration: 10-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
South Stack	12:30 pm	12:35 pm	260	10.8

Overall Average:

Min.	Seconds 0	15	30	45
0	15	15	15	15
1	10	10	10	10
2	10	10	10	10
3	10	10	10	10
4	10	10	10	10
5	10	10	10	10
0				
1				
2				
3				
4				
5				
0				
1				
2				
3				
4				
5				

Remarks:

Received By:

HERCULES

Hercules Incorporated
West 7th Street
P.O. Box 1937
Hattiesburg, MS 39401
(601) 545-3450

September 8, 1983

SEP - 9 REC'D
DEPT. OF NATURAL RESOURCE
BUREAU OF POLLUTION CONTROL

Mr. Dwight K. Wylie, P.E. Chief
Air Division
Bureau of Pollution Control
P. O. Box 10385
Jackson, Mississippi 39209

Dear Dwight:

Re your November 8, 1982 letter, please find the attached emissions data concerning the woodwaste boilers for August 1983.

We will continue to submit ths data on a monthly basis.

Very truly yours,

Charles Jordan

Charles Jordan
Environmental Supervisor

CSJ:ml

Attachments

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 8-1-83
7-3

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
	0			0			0			0	

NOTES:

1. Load change.
2. Fuel oil adjustment
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note

Date 8/1/83
3/11

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 2-1-83
11/7

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
	[illegible]			[illegible]			[illegible]			[illegible]	

NOTES:

1. Load change.
2. Fuel oil adjustment
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 8-2-83
7-3

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
9:05	5 c	1									
11:05	10 c	1									

NOTES:

1. Load change.
2. Fuel oil adjustment
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 8-2-85

3/11

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
						1:20	20 Sec.	3	8:[illegible]	10 Sec.	2
						4:30	15 Sec.	1			
						5:00	20 Sec.	1			

NOTES:

1. Load change.
2. Fuel oil adjustment
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 7-2-8[illegible]

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
11:40	3-sec	2	1-48	1-sec	1	5-10	4-sec	2			
12:45	1-sec	1	1-50	2-sec	2	5-15	2-sec	3			
1:05	2-sec	1	2:40	3-sec	3	5-30	2-sec	1			
1:10	3-sec	4	2:20	4-sec	1						

NOTES:

1. Load change.
2. Fuel oil adjustment
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 8-3-83
7-3

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
9:55	10 '	1									

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

Date 8-3-83
3/11

OPACITY EVALUATION - WOOD BURNING BOILERS

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
						8:55	20-Sec.	1	4:30	7-Sec.	2
						9:50	10-Sec.	1	4:35	5-Sec.	2

NOTES:

1. Load change.
2. Fuel oil adjustment
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 8/3/83

11/7

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
11:45	1-Sec	3	12:05	1-Sec	1						
11:50	1-Sec	1									
12:15	1-Sec	1									
12:17	1-Sec	2									
12:23	1-Sec	1									

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 8-11-83

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 8/12/83

3/11

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
6:06	1-sec	1	2:45	1-sec	1	5:45	1-sec	1			
6:10	1-sec	1				5:50	1-sec	1			
7:05	1-sec	2				8:40	2-sec	1			
						8:43	1-sec	3			
						9:30	1-sec	2			
						10:00	1-sec	4			

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 8-12-83
11-7

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
1:00	15 c	1	3:15	10 c	1	11:10	20 c	2			
						12:25	10 c	1			

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 8-13-83
7/3

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
10:3[illegible]	2-sec	1		None		7:50	2sec	1		out	

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 8/13/83

3/11

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
7:00	1-sec	1	7:07	1-sec	1				Out		
7:15	1-sec	1	7:10	1-sec	1						

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 8-13-83
11-7

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
	0			0			0			0	

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 8-14-93
7/3

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
1135	2-sec	1		0			out			out	

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 2/4/93
3/11

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
			8:35	1-Sec	3						

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 8 - 14 - 8
11-7

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
			10:55	20 '	2						
			12:50	10 '	1						

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 8-15-83

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
15:10	2-sec	1		0			0			out	

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 8-15-93
3/11

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 8-15-83
11-7

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
	0			0			0			0	

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 8-16-83
2/3

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
7:55	1 sec	2		0			0			off	
9:30	9 sec	1									

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 8/1/83

3/11

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
6:30	2 sec	1	3:45	2-sec	1						
			3:55	1-sec	1						

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 8-16-83
11-7

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
12:00	20 c	1				3:10	10 c	1			

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date [illegible]

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
7:30	2-sec	1									
9:35	1-sec	1									
11:55	1-sec	1									
12:00	3-sec	3									

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 8/17/83

3/11

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
6:30	2-sec	1	7:00	2-sec	2						
7:05	1-sec	2	7:22	1-sec	1						
7:25	1-sec	2									
8:10	1-sec	1									
9:20	1-sec	2									

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 8/17/83

11/7

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
12:00	10-Sec.	1							12:30	20-Sec.	2
12:30	15-Sec.	1							12:45	15-Sec.	1
12:50	20-Sec.	2									
2:00	10-Sec.	1									
3:35	15-Sec.										

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 8-19-83
11/7

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
			12:10	20-Sec.	3	3:00	15-Sec.	3			
			12:15	20-Sec.	3						
			2:29	15-Sec.	1						

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 8/18/83

7/3

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
8:55	1 sec	1				7:20	1 Sec.	2			
8:56	1 sec	1				7:21	5 Sec	1			
8:58	1 Sec	1				7:25	5 Sec	1			
8:59	1 sec	1				7:32	3 sec	1			
10:00	5 Sec	2				10:30	4 sec	2			
10:28	2 Sec.	[illegible]									

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 7-18-83

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
4:20	2-sec	1									
4:35	4-sec	1									
4:55	2-sec	1									
8:40	3-sec	2									

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 8/18/83

11/7

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
2:05	8-Sec.	1	12:23	25-Sec.	3	2:24	7-Sec.	3			
5:30	25-Sec.	1	12:31	3-Sec.	3						
5:35	20-Sec.	2	12:45	20-Sec.	3						
5:15	19-Sec.	1	1:15	20-Sec.	2						

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 8-15-90
7/3

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
			9 sec	/		6:45	2 sec	2			
						6:55	4 sec	3			

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 8/20/83

1/3

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 8-20-83
3/11

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
3:50	15c	1									

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 8-20-83
11/7

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
—	—	—	—	—	—	—	—	—	—	—	—

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 8/21/83
7/3

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
—	—	—	—	—	—	—	—	—	—	—	—

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 8/21/83

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 2/20/83

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 8-19-93
3/11

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
	0			0			0			0	

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 8/22/93 7/3

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
11:10	3-Sec	1		None			None			None	

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 8-22-85
3/11

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
8:30	15 c	3									

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 8-22-83

11/7

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
3:35	20-Sec	3	12:35	25-Sec.	3	1:10	20-Sec.	1			
			12:36	20-Sec.	3						
			12:45	20-Sec.	3						

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 7/23/83

7/3

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
6:55	1-Sec	1									
7:48	1-Sec	1									
7:49	1-Sec	1									
10:45	1-Sec	1									
10:55	1-Sec	3									

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
2:55	15 c	2									
3:15	10 c	2									

Date 8-25-83
3/11

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 8-23-83

11/7

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
1:32	15-Sec.	2	1:10	15-Sec.	1						
1:40	10-Sec.	1	2:50	20-Sec.	3						
			2:55	15-Sec.	3						
			3:20	20-Sec.	3						
			3:25	15-Sec.	3						

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 7/24/82

3/11

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
9:45	15 c	1									

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 8-24-83
11/7

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
12:[illegible]	2-Sec	1	3:02	2-Sec	1	1:05	2-SEC	1		0	
12:[illegible]	2-Sec	1									

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 8/24/83

7/3 Shift

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
10:37	1-Sec	2	7:38	2-Sec	1						
10:37	1-Sec	1	7:40	2-Sec	1						
10:41	1-Sec	2									

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 8-25-83

7-3

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note

NOTES:

1. Load change.
2. Fuel oil adjustment
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 8.25.83

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
2:58	2-sec	1				3:25	4-sec	2			
4:10	4-sec	1									
5:30	3-sec	1									

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 7/25/83
3/4

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
	0			0			0		9:10	3-sec	2

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 8/21/93

2/3

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
10:25	1-Sec	1	11:25	2-Sec	1						
			11:30	1-Sec	1						
			11:35	1-Sec	1						
			11:50	2-Sec	1						
			12:15	2-Sec	1						

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 8/26/83

3/11

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
3:45	20-Sec.	2	6:30	15-Sec.	3				4:00	15-Sec.	2
5:00	15-Sec.	1	7:15	20-Sec.	3				5:15	20-Sec.	2
			8:10		1						

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 6-26-93

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
									11:50	6-Sec	1

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 8-27-83

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
7:17	10 c	1							11:05	15 c	1
7:20	5 c	1									

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 8/27/83 3/11

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
3:00	10-Sec.	2	4:30	20-Sec	1						
4:00	20-Sec	2	5:30	15-Sec	3						
6:00	25-Sec.	1	5:35	20-Sec	3						
9:25	15-Sec.	1									

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 8-27-83
11/7

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
			1:55	2-sec	1	1:40	2-sec	1			
			2:05	3-sec	2	2:58	3-sec	2			
			3:30	4-sec	2						

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 8-22-83
7-3

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
7:20	10	1									

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 8/28/83
3/11

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
—	—	—	—	—	—	—	—	—	—	—	—

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 8-28-83
1/7

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
—	0	—	—	0	—	—	0	—	—	0	—

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 8-29-83

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
8:30	10 Sec.	(2)									
9:50	10 Sec.	(2)									

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 8/29/83

3/11 Shift

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
4:00	15-Sec.	2									
6:00	20-Sec.	1	5:00	15-Sec.	1						
8:30	15-Sec.	2	10:20	20-Sec.	1						

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 1-29-83
11/7 SHIFT

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
[illegible]	[illegible]	3	[illegible]	[illegible]	1	0	0	0	0	0	0

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 8-30-83
7/3

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date [illegible] 93
3/11

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
6:50	4 sec	1	0	-	0	0	0	0	0	0	0
7:30	6 sec	3									
7:35	3 sec	2									

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 8/30/83
11/7

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
1:15	25-sec.	1	11:15	25-Sec.	1				11:55	15-Sec.	3
			11:19	15-Sec.	1						

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 8-31-89

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 8/31/83 3/11

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
			6:30	20-Sec.	1						
			6:40	15-Sec.	1						
			7:00	20-Sec.	1						

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

OPACITY EVALUATION - WOOD BURNING BOILERS

Date 9/1/93

Boiler No. 1			Boiler No. 2			Boiler No. 3			Boiler No. 4		
Time	Duration	Note	Time	Duration	Note	Time	Duration	Note	Time	Duration	Note
			1:50	2 sec	1	4:05	1 sec	4			
			2:10	2 sec	1						

NOTES:

1. Load change.
2. Fuel oil adjustment.
3. Cleaning furnace.
4. Meter defect.
5. Cleaning meter lenses.

Visible Emissions Evaluation Record

Plant Name: Hercules Inc

Address: W 7th Street

City: H'by

Emission Point:

Date: 6-22-83

V. E. Observer: Carroll Lowery

Certification Expiration: 10-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
South	2:40 PM	2:46 PM	255	10.6

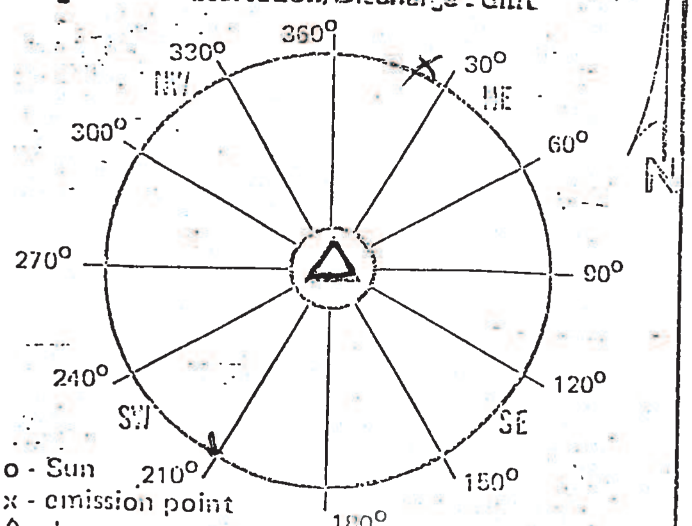
Overall Average:

Is emission point operation normal ?

	Initial	Final
Distance to discharge	1½ L	
Direction to discharge	NE	
Height of observation point		
Height of discharge		
Plume color	Brown	
Plume background	Blue	
Water vapor in plume ?		
Wind direction (from)	S	
Wind speed	5 MPH	
Ambient temperature	82	
Discharge temperature		
Sky conditions	P.C.	

Min.	Seconds 0	15	30	45
0	10	10	10	10
1	10	10	10	10
2	10	10	15	15
3	10	10	15	10
4	10	10	10	10
5	10	10	10	10
0				
1				
2				
3				
4				
5				
0				
1				
2				
3				
4				
5				

Diagram Of Observation/Discharge Point



o - Sun
x - emission point
△ observer

Remarks:

Received By:

Visible Emissions Evaluation Record

Plant Name: Hercules Inc.

Address: 10 7th Street

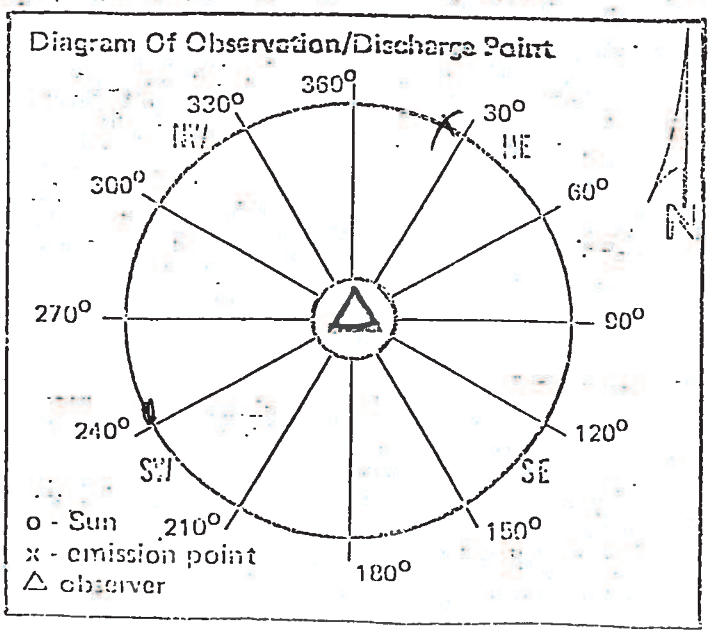
City: H'burg

Emission Point:

Date: 6-22-83

Is emission point operation normal ?

	Initial	Final
Distance to discharge	1½ L	
Direction to discharge	NE	
Height of observation point		
Height of discharge		
Plume color	Brown	
Plume background	Blue	
Water vapor in plume ?		
Wind direction (from)	S	
Wind speed	5 MPH	
Ambient temperature	82°	
Discharge temperature		
Sky conditions	Cl	



V. E. Observer: Carroll Sawdey

Certification Expiration: 10-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
North	2:40 Am	2:46 Am	335	14.0

Overall Average:

Min.	Seconds 0	15	30	45
0	10	15	15	20
1	20	20	20	15
2	10	10	15	15
3	10	10	15	15
4	15	15	15	15
5	10	10	10	10
0				
1				
2				
3				
4				
5				
0				
1				
2				
3				
4				
5				

Remarks:

Received By:

Visible Emissions Evaluation Record

Plant Name: Hercules Inc

Address: W 7th Street

City: H'ly

Emission Point:

Date: 6-21-83

Is emission point operation normal ?

V. E. Observer: Carroll Sewdery

Certification Expiration: 10-21-83

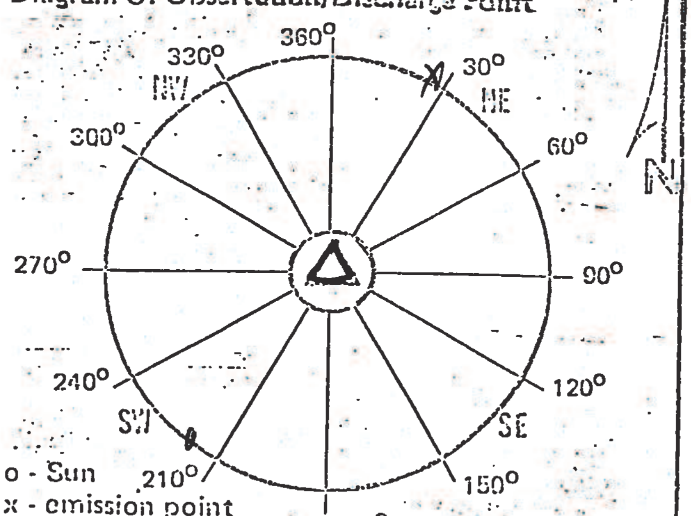
Set No.	Time Start	Time End	Opacity Sum	Opacity Average
South	2:40 Pm	2:46 Pm	150	6.3

Overall Average:

	Initial	Final
Distance to discharge	1/2 L	
Direction to discharge	NE	
Height of observation point		
Height of discharge		
Plume color	Brown	
Plume background	Gray	
Water vapor in plume ?		
Wind direction (from)	SE	
Wind speed	10 mPH	
Ambient temperature	78°	
Discharge temperature		
Sky conditions	Cloudy	

Min.	Seconds 0	15	30	45
0	10	10	10	10
1	10	5	5	5
2	5	10	10	5
3	10	5	10	5
4	5	0	0	0
5	5	5	5	5
0				
1				
2				
3				
4				
5				
0				
1				
2				
3				
4				
5				

Diagram Of Observation/Discharge Point



o - Sun
x - emission point
△ observer

Remarks:

Received By:

Visible Emissions Evaluation Record

Plant Name: Hercules Inc.

Address: W 7th Street

City: H'by

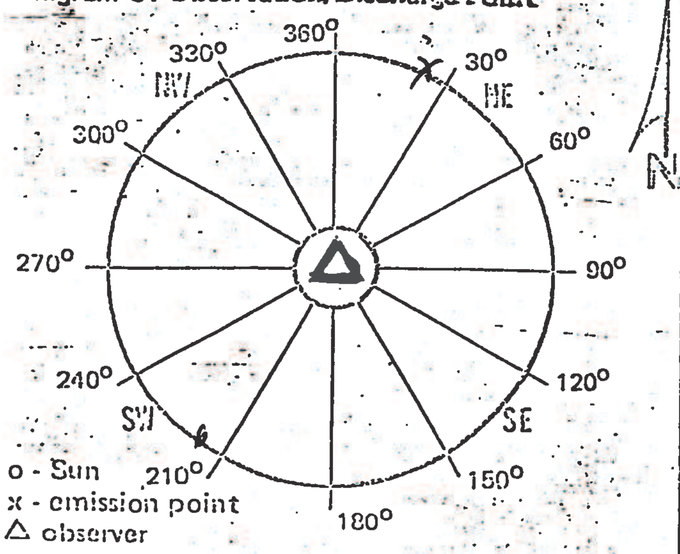
Emission Point:

Date: 6-21-83

Is emission point operation normal ?

	Initial	Final
Distance to discharge	1½L	
Direction to discharge	NE	
Height of observation point		
Height of discharge		
Plume color	Brown	
Plume background	Gray	
Water vapor in plume ?		
Wind direction (from)	SE	
Wind speed	10 mPH	
Ambient temperature	78°	
Discharge temperature		
Sky conditions	Cloudy	

Diagram Of Observation/Discharge Point



V. E. Observer: Carroll Lowery

Certification Expiration: 10-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
North	2:40 Pm	2:46 Pm	255	10.6

Overall Average:

Min.	Seconds 0	15	30	45
0	15	15	15	20
1	20	15	10	10
2	10	15	15	10
3	15	10	10	10
4	5	5	5	5
5	5	5	5	5
0				
1				
2				
3				
4				
5				
0				
1				
2				
3				
4				
5				

Remarks:

Received By:

Visible Emissions Evaluation Record

Plant Name: Hercules Inc.

Address: W 7th Street

City: H'by

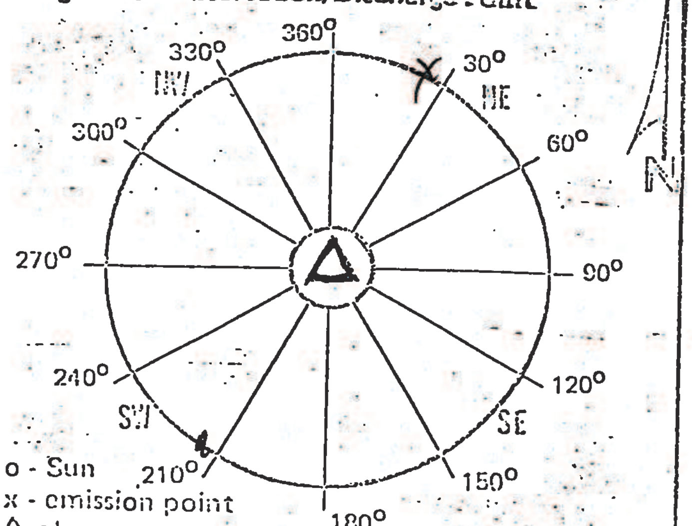
Emission Point:

Date: 6-20-83

Is emission point operation normal?

	Initial	Final
Distance to discharge	1 ½ L	
Direction to discharge	NE	
Height of observation point		
Height of discharge		
Plume color	Brown	
Plume background	Gray	
Water vapor in plume?		
Wind direction (from)	S	
Wind speed	5 mph	
Ambient temperature	79°	
Discharge temperature		
Sky conditions	Cloudy	

Diagram Of Observation/Discharge Point



o - Sun
x - emission point
△ observer

V. E. Observer: Carroll Sewell

Certification Expiration: 10-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
South	2:45 Pm	2:57 Pm	315	13.1

Overall Average:

Min.	0	15	30	45
0	15	15	15	15
1	15	15	10	15
2	15	20	15	15
3	10	10	10	10
4	10	10	10	10
5	10	15	15	15
0				
1				
2				
3				
4				
5				
0				
1				
2				
3				
4				
5				

Remarks:

Received By:

Visible Emissions Evaluation Record

Plant Name: Hercules Inc.

Address: W 7th Street

City: Hlly

Emission Point:

Date: 6-28-83

Is emission point operation normal ?

V. E. Observer: [signature]

Certification Expiration: 10-21-83

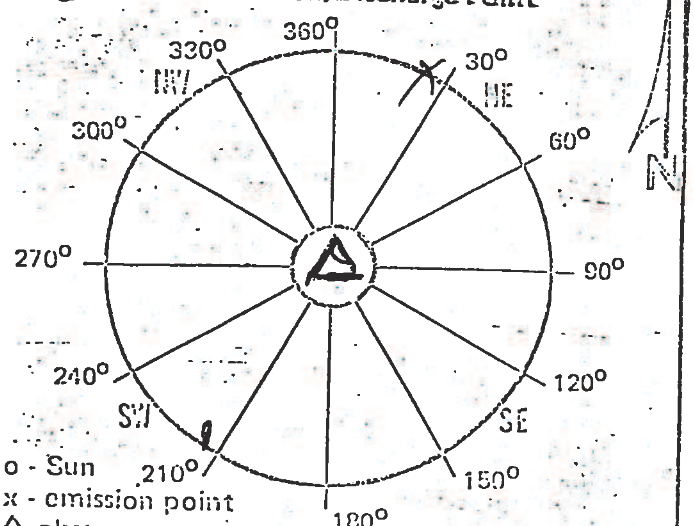
Set No.	Time Start	Time End	Opacity Sum	Opacity Average
North	2:45 Pm	2:51 Pm	380	15.8

Overall Average:

	Initial	Final
Distance to discharge	1/2 L	
Direction to discharge	NE	
Height of observation point		
Height of discharge		
Plume color	Brown	
Plume background	Gray	
Water vapor in plume ?	—	
Wind direction (from)	S	
Wind speed	5 mph	
Ambient temperature	79°c	
Discharge temperature		
Sky conditions	Cloudy	

Min.	Seconds 0	15	30	45
0	15	15	20	15
1	15	15	15	20
2	20	20	15	15
3	15	15	15	15
4	15	15	15	15
5	15	15	15	15
0				
1				
2				
3				
4				
5				
0				
1				
2				
3				
4				
5				

Diagram Of Observation/Discharge Point



o - Sun
x - emission point
△ observer

Remarks:

Received By:

Visible Emissions Evaluation Record

Plant Name: Hercules Inc

Address: W 7th Str

City: H'bg

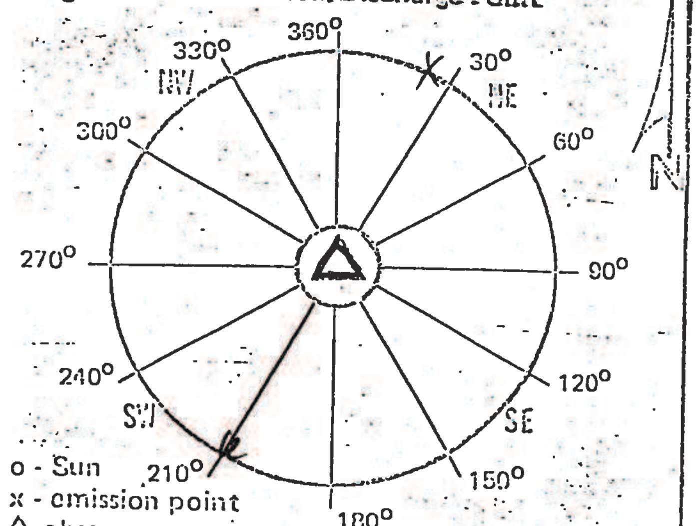
Emission Point:

Date: 6-17-83

Is emission point operation normal ?

	Initial	Final
Distance to discharge	Wal	
Direction to discharge	NE	
Height of observation point		
Height of discharge		
Plume color	Brown/Black	
Plume background	Gray	
Water vapor in plume ?		
Wind direction (from)	SW	
Wind speed	5 M/H	
Ambient temperature	85°	
Discharge temperature		
Sky conditions	Cloudy	

Diagram Of Observation/Discharge Point



o - Sun
x - emission point
△ observer

V. E. Observer: Carroll Lowery

Certification Expiration: 10-21-83

Set No.	Time		Opacity	
	Start	End	Sum	Average
Tenth	1:40 Pm	1:51 Pm	220	9.2

Overall Average:

Min.	Seconds 0	15	30	45
0	10	10	10	10
1	10	10	10	10
2	10	10	10	10
3	5	5	10	10
4	10	5	5	10
5	10	10	10	10
0				
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3				
4				
5				
0				
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4				
5				

Remarks:

Received By:

Visible Emissions Evaluation Record

Plant Name: Hercules Inc

Address: W 7 th Street

City: H'ly

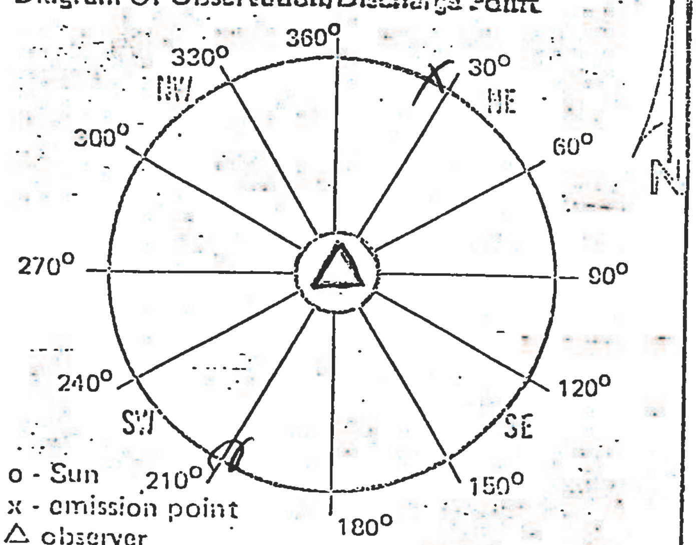
Emission Point:

Date: 6-17-83

Is emission point operation normal ?

	Initial	Final
Distance to discharge	1/4 L	
Direction to discharge	NE	
Height of observation point		
Height of discharge		
Plume color	Brown & Black	
Plume background	Gray	
Water vapor in plume ?		
Wind direction (from)	SW	
Wind speed	5 MPH	
Ambient temperature	85°c	
Discharge temperature		
Sky conditions	Cloudy	

Diagram Of Observation/Discharge Point



o - Sun
x - emission point
△ observer

V. E. Observer: Carroll Swiney

Certification Expiration: 10-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
NORTH	1:40 PM	1:51 PM	255	10.6

Overall Average:

Min.	Seconds 0	15	30	45
0	15	15	15	10
1	10	10	10	10
2	10	10	10	10
3	10	10	10	10
4	10	10	10	10
5	10	10	10	10
0				
1				
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Remarks:

Received By:

Visible Emissions Evaluation Record

Plant Name: Hercules Inc

Address: W 7th Street

City: H'bg

Emission Point: ______

Date: 6-15-83

Is emission point operation normal ? ______

V. E. Observer: Russell Lowery

Certification Expiration: 10-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
South	2:20 PM	2:26 PM	335	14.0

Overall Average: ______

	Initial	Final
Distance to discharge	1½ L	
Direction to discharge	NE	
Height of observation point		
Height of discharge		
Plume color	Black + Brown	
Plume background	Gray	
Water vapor in plume ?		
Wind direction (from)	S	
Wind speed	5 MPH	
Ambient temperature		
Discharge temperature		
Sky conditions	P.C.	

Min.	Seconds .0	15	30	45
0	15	10	10	10
1	10	10	15	15
2	15	20	20	15
3	15	15	20	20
4	20	15	15	10
5	10	10	10	10
0				
1				
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4				
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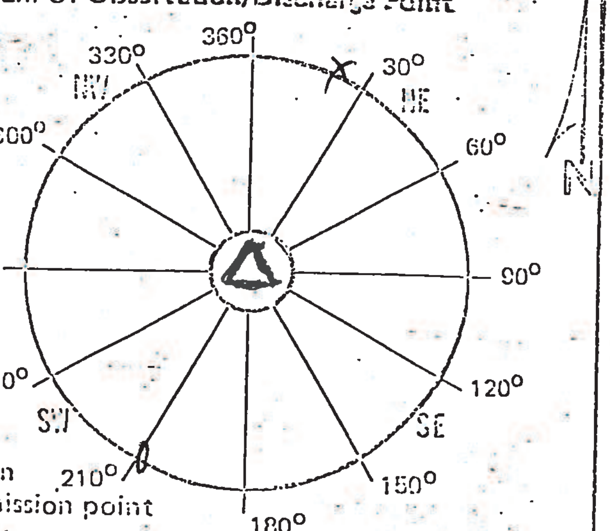
Diagram Of Observation/Discharge Point



Remarks: ______

Received By: ______

Visible Emissions Evaluation Record

Plant Name: Hercules Inc

Address: W 7th Street

City: H'bg

Emission Point:

Date: 6-15-83

Is emission point operation normal ?

V. E. Observer: Carroll Lowery

Certification Expiration: 10-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
North	2:20 Pm	2:26 Pm	650	27.1

Overall Average:

	Initial	Final
Distance to discharge	1/2 L	
Direction to discharge	NE	
Height of observation point		
Height of discharge		
Plume color	Black & Brown	
Plume background	Gray	
Water vapor in plume ?		
Wind direction (from)	S	
Wind speed	Stead	
Ambient temperature	83°	
Discharge temperature		
Sky conditions	Pc	

Min.	Seconds 0	15	30	45
0	50	60	40	20
1	25	20	20	25
2	25	60	30	20
3	20	20	20	20
4	20	20	20	20
5	20	25	25	25
0				
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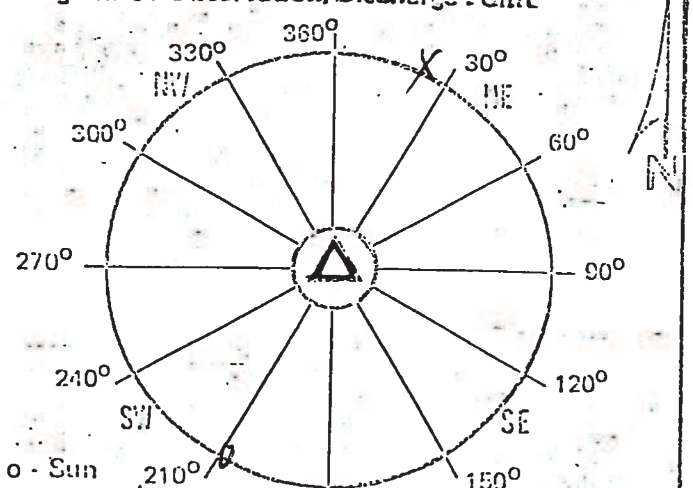
Diagram Of Observation/Discharge Point



o - Sun
x - emission point
△ observer

Remarks:

Received By:

Visible Emissions Evaluation Record

Plant Name: Hercules Inc

Address: W 7th Street

City:

Emission Point:

Date: 6-16-83

Is emission point operation normal ?

	Initial	Final
Distance to discharge	1/2 L	
Direction to discharge	NE	
Height of observation point		
Height of discharge		
Plume color	Brown & Black	
Plume background	Gray	
Water vapor in plume ?		
Wind direction (from)	S	
Wind speed	5 MPH	
Ambient temperature	89°	
Discharge temperature		
Sky conditions	Clr	

V. E. Observer: Carroll Lindsey

Certification Expiration: 10-21-85

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
South	2:25 pm	2:31 pm	355	14.8

Overall Average:

Min.	Seconds 0	15	30	45
0	10	10	10	15
1	15	10	15	15
2	15	15	15	15
3	15	15	15	15
4	10	10	15	15
5	20	20	20	20
0				
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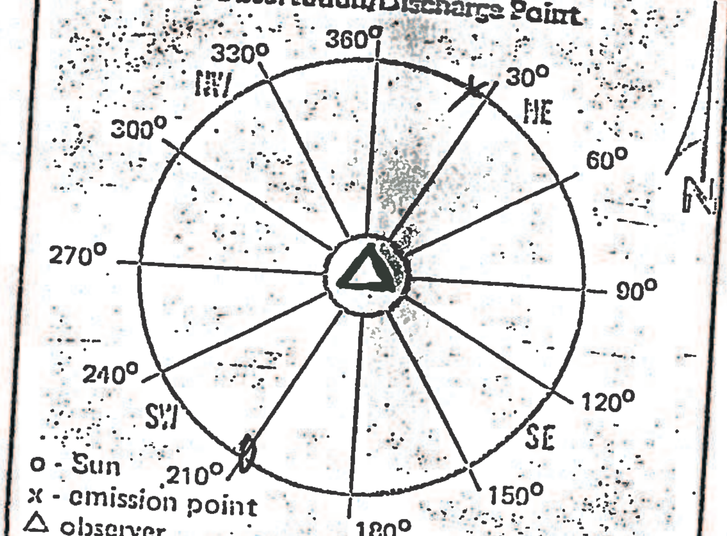
Diagram Of Observation/Discharge Point



o - Sun
x - emission point
△ observer

Remarks:

Received By:

Visible Emissions Evaluation Record

Plant Name: Hercules Inc

Address: W 7th Street

City: H'burg

Emission Point:

Date: 6-16-83

Is emission point operation normal ?

V. E. Observer: Carroll Lowery

Certification Expiration: 10-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
North	2:25pm	2:31 pm	415	17.3

Overall Average:

	Initial	Final
Distance to discharge	1KL	
Direction to discharge	NE	
Height of observation point		
Height of discharge		
Plume color	Brown Black	
Plume background	Gray	
Water vapor in plume ?		
Wind direction (from)	S	
Wind speed	5 mph	
Ambient temperature	89°	
Discharge temperature		
Sky conditions	P.C.	

Min.	Seconds 0	15	30	45
0	15	15	15	15
1	15	15	15	15
2	15	15	15	15
3	15	20	20	15
4	15	20	20	20
5	20	25	25	20
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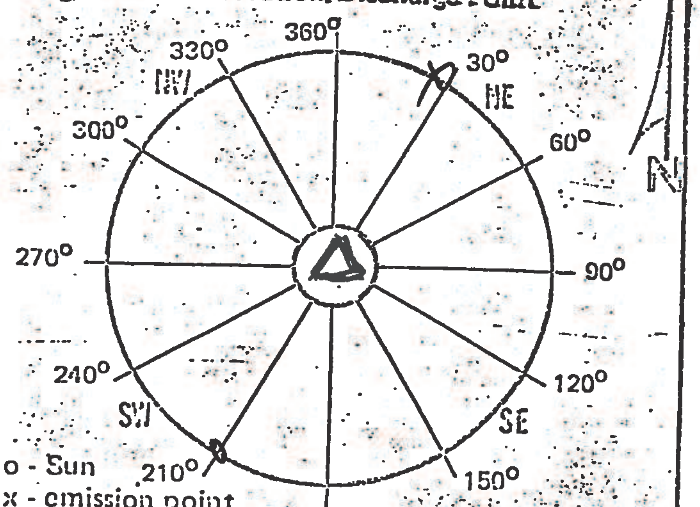
Diagram Of Observation/Discharge Point



o - Sun
x - emission point
△ observer

Remarks:

Received By:

Visible Emissions Evaluation Record

Plant Name: Hercules Inc

Address: W 7th Street

City: H'by

Emission Point:

Date: 6-14-83

Is emission point operation normal ?

V. E. Observer: Carroll Lowery

Certification Expiration: 10-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
South	2:15 PM	2:21 PM	355	14.8

Overall Average:

	Initial	Final
Distance to discharge	1½ L	
Direction to discharge	NE	
Height of observation point		
Height of discharge		
Plume color	Black+Brown	
Plume background	Gray	
Water vapor in plume ?		
Wind direction (from)	SE	
Wind speed	5MPH	
Ambient temperature	84°	
Discharge temperature		
Sky conditions	Pc	

Min.	Seconds 0	15	30	45
0	20	20	20	20
1	20	20	20	15
2	15	10	10	10
3	15	15	15	10
4	10	10	10	10
5	15	15	15	15
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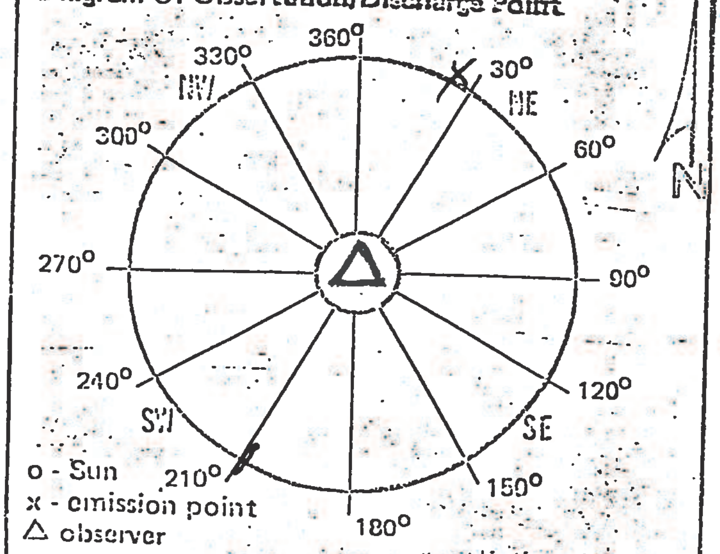
Diagram Of Observation/Discharge Point



Remarks:

Received By:

Visible Emissions Evaluation Record

Plant Name: Hercules Inc.

Address: W 7th Street

City: H'bg

Emission Point:

Date: 6-14-83

Is emission point operation normal ?

	Initial	Final
Distance to discharge	1/2 L	
Direction to discharge	NE	
Height of observation point		
Height of discharge		
Plume color	Black/Brown	
Plume background	Gray	
Water vapor in plume ?		
Wind direction (from)	SE	
Wind speed	5 MPH	
Ambient temperature	84'	
Discharge temperature		
Sky conditions	Pc	

V. E. Observer: Carroll Lackey

Certification Expiration: 10-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
North	2:15 Am	2:21 Am	340	14.2

Overall Average:

Min.	Seconds 0	15	30	45
0	10	10	5	5
1	10	5	10	20
2	20	25	25	20
3	15	15	15	15
4	15	15	15	20
5	20	10	10	10
0				
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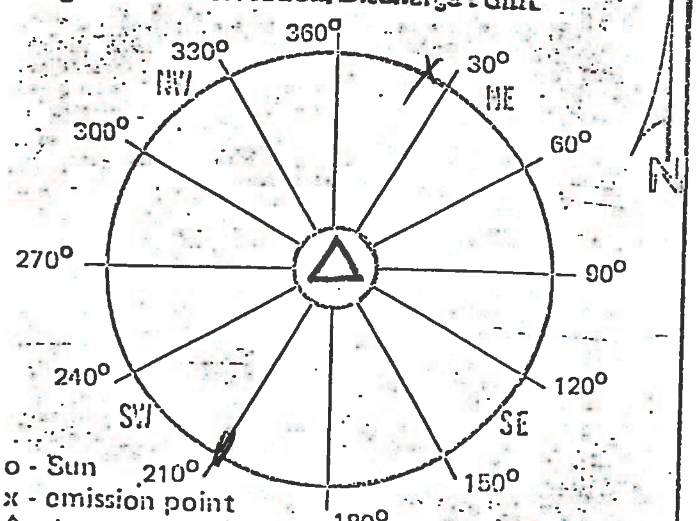
Diagram Of Observation/Discharge Point



o - Sun
x - emission point
△ observer

Remarks:

Received By:

Visible Emissions Evaluation Record

Plant Name: Hercules Inc

Address: W 7th Street

City: H'by

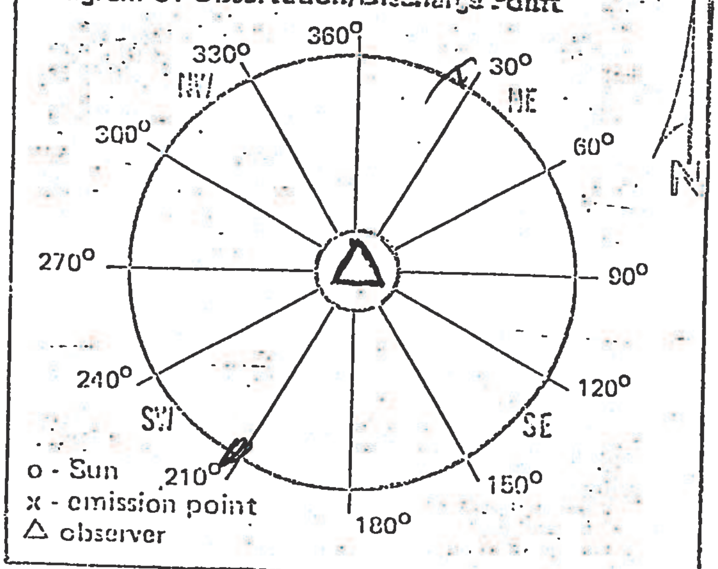
Emission Point:

Date: 6-13-83

Is emission point operation normal ?

	Initial	Final
Distance to discharge	1/4	
Direction to discharge	NE	
Height of observation point		
Height of discharge		
Plume color	Brown	
Plume background	Gray	
Water vapor in plume ?		
Wind direction (from)	South-east	
Wind speed	5 MPH	
Ambient temperature	89'	
Discharge temperature		
Sky conditions	P/c	

Diagram Of Observation/Discharge Point



V. E. Observer: Carroll Lindsey

Certification Expiration: 10-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
South	2:10Pm	2:16Pm	190	7.9

Overall Average:

Min.	Seconds 0	15	30	45
0	5	5	5	5
1	5	5	5	5
2	5	5	10	10
3	10	10	10	10
4	10	10	10	10
5	10	10	10	10
0				
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Remarks:

Received By:

Visible Emissions Evaluation Record

Plant Name: Hercules Inc

Address: W 7th Street

City: H'lg

Emission Point:

Date: 6-13-83

Is emission point operation normal ?

V. E. Observer: Carroll Lowery

Certification Expiration: 10-21-83

Set No.	Time Start	Time End	Opacity Sum	Opacity Average
North	2:10 Am	2:16 Am	80	3.3

Overall Average:

	Initial	Final
Distance to discharge	1/2 L	
Direction to discharge	NE	
Height of observation point		
Height of discharge		
Plume color	Brown	
Plume background	Grey	
Water vapor in plume ?		
Wind direction (from)	South East	
Wind speed	5 mph	
Ambient temperature	89°	
Discharge temperature		
Sky conditions	Pc	

Min.	Seconds 0	15	30	45
0	5	5	5	0
1	0	0	5	0
2	0	0	0	0
3	5	5	5	5
4	5	5	5	5
5	5	5	5	5
0				
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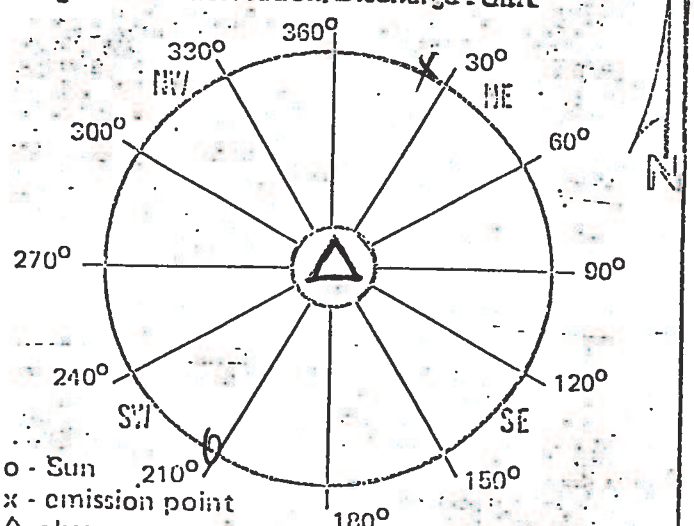
Diagram Of Observation/Discharge Point



o - Sun
x - emission point
△ observer

Remarks:

Received By:

Visible Emissions Evaluation Rec

Plant Name: Hercules Inc.

Address: W 7th Street

City: H'burg

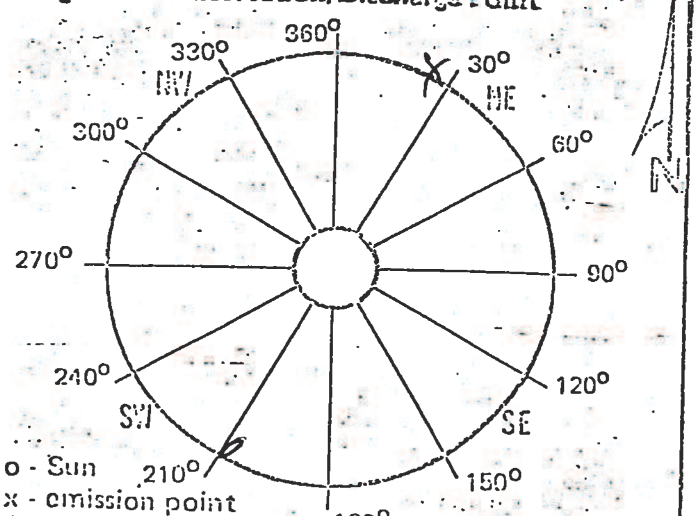
Emission Point:

Date: 6-10-83

Is emission point operation normal ?

	Initial	Final
Distance to discharge	1½ L.	
Direction to discharge	NE	
Height of observation point		
Height of discharge		
Plume color	White & Brown	
Plume background	Gray & Blue	
Water vapor in plume ?		
Wind direction (from)	SE	
Wind speed	5 MP	
Ambient temperature	83	
Discharge temperature		
Sky conditions	P. Cl	

Diagram Of Observation/Discharge Point



o - Sun
x - emission point
△ observer

V. E. Observe

Certification

Set No.

St

South 2:0

Overall Averag

Min.	
0	5
1	0
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5

Remarks:

Received By:

ERROR: ioerror
OFFENDING COMMAND: imagemask

STACK:

-mark-
-savelevel-
-mark-
-savelevel-