



Monday, April 11, 2016

Barry Stephens, PE
Director
Tennessee Department of Environment and Conservation
Division of Air Pollution Control
401 Church Street, 9th Floor, L & C Annex
Nashville, TN 37243-1531

Dear Mr. Stephens;

Enclosed are smoke readings recorded from observations of our baghouses here at GerdaU Ameristeel, Jackson Tennessee Steel Mill. They include all readings taken from January 1, 2016 through March 31, 2016, on both baghouses and the canopy.

Also enclosed are copies of each certified visible emission re-certification card for your records.

If you have any questions or comments please call me at 731-423-5274.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Will Ownby', with a stylized flourish at the end.

Will Ownby
Environmental Manager
GerdaU Ameristeel U.S. Inc.
Jackson Tennessee Steel Mill

Log 9
Log of Opacity Observations for Source 02 for Compliance Purposes
Outlet Baghouse 1

	Date	Time Start	Time Stop	Read By	Mode of Operation	Sky Conditions	Wind MPH	6Min Avg	Prod. Day	Comments
	1-Jan-16								0	No Production
	2-Jan-16								0	No Production
	3-Jan-16								0	No Production
	4-Jan-16								0	No Production
x	5-Jan-16	10:15 AM	10:33 AM	RH	Melting	Clear	0-10	0.00%	1	
x	6-Jan-16	10:25 AM	10:43 AM	RH	Melting	Clear	0-10	0.00%	1	
x	7-Jan-16	09:45 AM	10:03 AM	RH	Melting	Cloudy	0-10	0.00%	1	
x	8-Jan-16	10:15 AM	10:33 AM	RH	Melting	Cloudy	0-10	0.00%	1	
x	9-Jan-16	09:20 AM	09:38 AM	MT	Melting	Cloudy	0-5	0.00%	1	
	10-Jan-16								0	No Production
	11-Jan-16								1	No Daylight Operations
x	12-Jan-16	10:00 AM	10:18 AM	MJ	Melting	Clear	0-5	0.00%	1	
x	13-Jan-16	11:15 AM	11:33 AM	MJ	Melting	Clear	5-10	0.00%	1	
x	14-Jan-16	10:00 AM	10:18 AM	MJ	Melting	Clear	10-15	0.00%	1	
x	15-Jan-16	10:05 AM	10:23 AM	MJ	Melting	Cloudy	5-10	0.00%	1	
x	16-Jan-16	12:30 PM	12:48 PM	TP	Melting	Cloudy	5-10	0.00%	1	
	17-Jan-16								0	No Production
	18-Jan-16								1	No Daylight Operations
x	19-Jan-16	08:40 AM	08:58 AM	RH	Melting	Cloudy	0-10	0.00%	1	
x	20-Jan-16	10:10 AM	10:28 AM	RH	Melting	Cloudy	0-10	0.00%	1	
x	21-Jan-16	12:45 PM	01:03 PM	RH	Melting	Cloudy	0-10	0.00%	1	
x	22-Jan-16	09:25 AM	09:43 AM	RH	Melting	Cloudy	0-10	0.00%	1	
x	23-Jan-16	08:40 AM	08:58 AM	MT	Melting	Clear	10-15	0.00%	1	
	24-Jan-16								0	No Production
	25-Jan-16								0	No Production
x	26-Jan-16	11:00 AM	11:18 AM	MJ	Melting	Cloudy	5-10	0.00%	1	
x	27-Jan-16	10:30 AM	10:48 AM	MJ	Melting	Clear	5-10	0.00%	1	
x	28-Jan-16	11:10 AM	11:28 AM	MJ	Melting	Clear	0-5	0.00%	1	
x	29-Jan-16	09:30 AM	09:48 AM	MJ	Melting	Clear	0-5	0.00%	1	
x	30-Jan-16	02:00 PM	02:18 PM	TP	Melting	Clear	15-20	0.00%	1	
	31-Jan-16								0	No Production
	1-Feb-16								1	No Daylight Operations
x	2-Feb-16	10:00 AM	10:18 AM	RH	Melting	Cloudy	0-10	0.00%	1	
x	3-Feb-16	10:00 AM	10:18 AM	RH	Melting	Clear	0-10	0.00%	1	
x	4-Feb-16	10:10 AM	10:28 AM	RH	Melting	Clear	0-10	0.00%	1	
x	5-Feb-16	11:00 AM	11:18 AM	RH	Melting	Clear	0-10	0.00%	1	
	6-Feb-16								0	No Production
	7-Feb-16								0	No Production
	8-Feb-16								0	No Production
x	9-Feb-16	11:35 AM	11:53 AM	MJ	Melting	Cloudy	5-10	0.00%	1	
x	10-Feb-16	11:00 AM	11:18 AM	MJ	Melting	Clear	5-10	0.00%	1	
x	11-Feb-16	09:40 AM	09:58 AM	mj	Melting	Clear	0-5	0.00%	1	
x	12-Feb-16	10:15 AM	10:33 AM	MJ	Melting	Clear	0-5	0.00%	1	
x	13-Feb-16	12:40 PM	12:58 PM	TP	Melting	Clear	5-10	0.00%	1	
	14-Feb-16								0	No Production
	15-Feb-16								1	No Daylight Operations
x	16-Feb-16	10:15 AM	10:33 AM	RH	Melting	Cloudy	0-10	0.00%	1	
x	17-Feb-16	01:30 PM	01:48 PM	RH	Melting	Clear	0-10	0.00%	1	
x	18-Feb-16	09:42 AM	10:00 AM	RH	Melting	Clear	0-10	0.00%	1	
x	19-Feb-16	01:40 PM	01:58 PM	MJ	Melting	Clear	10-15	0.00%	1	
	20-Feb-16								0	No Production
	21-Feb-16								0	No Production
	22-Feb-16								1	No Daylight Operations
x	23-Feb-16	09:30 AM	09:48 AM	MJ	Melting	Cloudy	5-10	0.00%	1	
x	24-Feb-16	12:50 PM	01:08 PM	MJ	Melting	Cloudy	5-10	0.00%	1	
x	25-Feb-16	10:10 AM	10:28 AM	MJ	Melting	Cloudy	5-10	0.00%	1	
x	26-Feb-16	10:20 PM	10:38 PM	MJ	Melting	Clear	5-10	0.00%	1	
x	27-Feb-16	12:40 PM	12:58 PM	TP	Melting	Clear	15-20	0.00%	1	
	28-Feb-16								0	No Production
	29-Feb-16								1	No Daylight Operations
x	1-Mar-16	10:05 AM	10:23 AM	RH	Melting	Cloudy	0-10	0.00%	1	
x	2-Mar-16	10:00 AM	10:18 AM	RH	Melting	Clear	0-10	0.00%	1	
x	3-Mar-16	09:35 AM	09:53 AM	RH	Melting	Cloudy	0-10	0.00%	1	
x	4-Mar-16	10:00 AM	10:18 AM	RH	Melting	Cloudy	0-10	0.00%	1	
	5-Mar-16								0	No Production
	6-Mar-16								0	No Production
	7-Mar-16								1	No Daylight Operations
x	8-Mar-16	11:05 AM	11:23 AM	RH	Melting	Clear	0-10	0.00%	1	
x	9-Mar-16	12:15 PM	12:33 PM	MJ	Melting	Cloudy	5-10	0.00%	1	
x	10-Mar-16	10:00 AM	10:18 AM	MJ	Melting	Cloudy	5-10	0.00%	1	
x	11-Mar-16	08:00 AM	08:18 AM	MJ	Melting	Cloudy	5-10	0.00%	1	
	12-Mar-16								0	No Production
	13-Mar-16								0	No Production
	14-Mar-16								1	No Daylight Operations
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x	17-Mar-16	10:15 AM	10:33 AM	RH	Melting	Clear	0-10	0.00%	1	
x	18-Mar-16	10:20 AM	10:38 AM	MJ	Melting	Clear	5-10	0.00%	1	
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	20-Mar-16								0	No Production
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	26-Mar-16								0	No Production
	27-Mar-16								0	No Production
	28-Mar-16								1	No Daylight Operations
x	29-Mar-16	09:25 AM	09:43 AM	RH	Melting	Clear	0-10	0.00%	1	
x	30-Mar-16	11:00 AM	11:18 AM	RH	Melting	Cloudy	0-10	0.00%	1	
	31-Mar-16								0	No Production

56

66

56 reading/66 production days - 100% production days monitored
10 - No Daylight Production

Log 9
Log of Opacity Observations for Source 02 for Compliance Purposes
Outlet Baghouse 2

	Date	Time Start	Time Stop	Read By	Mode of Operation	Sky Conditions	Wind MPH	6Min Avg	Prod. Day	Comments
	1-Jan-16								0	No Production
	2-Jan-16								0	No Production
	3-Jan-16								0	No Production
	4-Jan-16								0	No Production
x	5-Jan-16	10:15 AM	10:33 AM	RH	Melting	Clear	0-10	0.00%	1	
x	6-Jan-16	10:25 AM	10:43 AM	RH	Melting	Clear	0-10	0.00%	1	
x	7-Jan-16	09:45 AM	10:03 AM	RH	Melting	Cloudy	0-10	0.00%	1	
x	8-Jan-16	10:15 AM	10:33 AM	RH	Melting	Cloudy	0-10	0.00%	1	
x	9-Jan-16	09:20 AM	09:38 AM	MT	Melting	Cloudy	0-5	0.00%	1	
	10-Jan-16								0	No Production
	11-Jan-16								1	No Daylight Operations
x	12-Jan-16	10:00 AM	10:18 AM	MJ	Melting	Clear	0-5	0.00%	1	
x	13-Jan-16	11:15 AM	11:33 AM	MJ	Melting	Clear	5-10	0.00%	1	
x	14-Jan-16	10:00 AM	10:18 AM	MJ	Melting	Clear	10-15	0.00%	1	
x	15-Jan-16	10:05 AM	10:23 AM	MJ	Melting	Cloudy	5-10	0.00%	1	
x	16-Jan-16	12:30 PM	12:48 PM	TP	Melting	Cloudy	5-10	0.00%	1	
	17-Jan-16								0	No Production
	18-Jan-16								1	No Daylight Operations
x	19-Jan-16	08:40 AM	08:58 AM	RH	Melting	Cloudy	0-10	0.00%	1	
x	20-Jan-16	10:10 AM	10:28 AM	RH	Melting	Cloudy	0-10	0.00%	1	
x	21-Jan-16	12:45 PM	01:03 PM	RH	Melting	Cloudy	0-10	0.00%	1	
x	22-Jan-16	09:25 AM	09:43 AM	RH	Melting	Cloudy	0-10	0.00%	1	
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x	3-Feb-16	10:00 AM	10:18 AM	RH	Melting	Clear	0-10	0.00%	1	
x	4-Feb-16	10:10 AM	10:28 AM	RH	Melting	Clear	0-10	0.00%	1	
x	5-Feb-16	11:00 AM	11:18 AM	RH	Melting	Clear	0-10	0.00%	1	
	6-Feb-16								0	No Production
	7-Feb-16								0	No Production
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x	10-Feb-16	11:00 AM	11:18 AM	MJ	Melting	Clear	5-10	0.00%	1	
x	11-Feb-16	09:40 AM	09:58 AM	MJ	Melting	Clear	0-5	0.00%	1	
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x	24-Feb-16	12:50 PM	01:08 PM	MJ	Melting	Cloudy	5-10	0.00%	1	
x	25-Feb-16	10:10 AM	10:28 AM	MJ	Melting	Cloudy	5-10	0.00%	1	
x	26-Feb-16	10:20 AM	10:38 AM	MJ	Melting	Clear	5-10	0.00%	1	
x	27-Feb-16	12:40 PM	12:58 PM	TP	Melting	Clear	15-20	0.00%	1	
	28-Feb-16								0	No Production
	29-Feb-16								1	No Daylight Operations
x	1-Mar-16	10:05 AM	10:23 AM	RH	Melting	Cloudy	0-10	0.00%	1	
x	2-Mar-16	10:00 AM	10:18 AM	RH	Melting	Clear	0-10	0.00%	1	
x	3-Mar-16	09:35 AM	09:53 AM	RH	Melting	Cloudy	0-10	0.00%	1	
x	4-Mar-16	10:00 AM	10:18 AM	RH	Melting	Cloudy	0-10	0.00%	1	
	5-Mar-16								0	No Production
	6-Mar-16								0	No Production
	7-Mar-16								1	No Daylight Operations
x	8-Mar-16	11:05 AM	11:23 AM	RH	Melting	Clear	0-10	0.00%	1	
x	9-Mar-16	12:15 PM	12:33 PM	MJ	Melting	Cloudy	5-10	0.00%	1	
x	10-Mar-16	10:00 AM	10:18 AM	MJ	Melting	Cloudy	5-10	0.00%	1	
x	11-Mar-16	08:00 AM	08:18 AM	MJ	Melting	Cloudy	5-10	0.00%	1	
	12-Mar-16								0	No Production
	13-Mar-16								0	No Production
	14-Mar-16								1	No Daylight Operations
x	15-Mar-16	09:40 AM	09:58 AM	RH	Melting	Clear	0-10	0.00%	1	
x	16-Mar-16	11:00 AM	11:18 AM	RH	Melting	Clear	0-10	0.00%	1	
x	17-Mar-16	10:15 AM	10:33 AM	RH	Melting	Clear	0-10	0.00%	1	
x	18-Mar-16	10:20 AM	10:38 AM	MJ	Melting	Clear	5-10	0.00%	1	
	19-Mar-16								0	No Production
	20-Mar-16								0	No Production
	21-Mar-16								1	No Daylight Operations
x	22-Mar-16	10:30 AM	10:48 AM	MJ	Melting	Clear	5-10	0.00%	1	
x	23-Mar-16	08:35 AM	08:53 AM	MJ	Melting	Cloudy	5-10	0.00%	1	
x	24-Mar-16	08:20 AM	08:38 AM	MJ	Melting	Cloudy	10-15	0.00%	1	
x	25-Mar-16	08:10 AM	08:28 AM	MJ	Melting	Cloudy	5-10	0.00%	1	
	26-Mar-16								0	No Production
	27-Mar-16								0	No Production
	28-Mar-16								1	No Daylight Operations
x	29-Mar-16	09:25 AM	09:43 AM	RH	Melting	Clear	0-10	0.00%	1	
x	30-Mar-16	11:00 AM	11:18 AM	RH	Melting	Cloudy	0-10	0.00%	1	
	31-Mar-16								0	No Production

56

66

56 reading/66 production days - 100% production days monitored
10 - No Daylight Production

Log 9
Log of Opacity Observations for Source 02 for Compliance Purposes
Outlet Meltshop Canopy

	Date	Time Start	Time Stop	Read By	Mode of Operation	Sky Conditions	Wind MPH	6Min Avg	Prod. Day	Comments
	1-Jan-16								0	No Production
	2-Jan-16								0	No Production
	3-Jan-16								0	No Production
	4-Jan-16								0	No Production
x	5-Jan-16	10:15 AM	10:21 AM	RH	Melting	Clear	0-10	0.00%	1	
x	6-Jan-16	10:25 AM	10:31 AM	RH	Melting	Clear	0-10	0.00%	1	
x	7-Jan-16	09:45 AM	09:51 AM	RH	Melting	Cloudy	0-10	0.00%	1	
x	8-Jan-16	10:15 AM	10:21 AM	RH	Melting	Cloudy	0-10	0.00%	1	
x	9-Jan-16	09:20 AM	09:26 AM	MT	Melting	Cloudy	0-5	0.00%	1	
	10-Jan-16								0	No Production
	11-Jan-16								1	No Daylight Operations
x	12-Jan-16	10:00 AM	10:06 AM	MJ	Melting	Clear	0-5	0.00%	1	
x	13-Jan-16	11:15 AM	11:21 AM	MJ	Melting	clear	5-10	0.00%	1	
x	14-Jan-16	10:00 AM	10:06 AM	MJ	Melting	Clear	10-15	0.00%	1	
x	15-Jan-16	10:05 AM	10:11 AM	MJ	Melting	Cloudy	5-10	0.00%	1	
x	16-Jan-16	12:30 PM	12:36 PM	TP	Melting	Cloudy	5-10	0.00%	1	
	17-Jan-16								0	No Production
	18-Jan-16								1	No Daylight Operations
x	19-Jan-16	08:40 AM	08:46 AM	RH	Melting	Cloudy	0-10	0.00%	1	
x	20-Jan-16	10:10 AM	10:16 AM	RH	Melting	Cloudy	0-10	0.00%	1	
x	21-Jan-16	12:45 PM	12:51 PM	RH	Melting	Cloudy	0-10	0.00%	1	
x	22-Jan-16	09:25 AM	09:31 AM	RH	Melting	Cloudy	0-10	0.00%	1	
x	23-Jan-16	08:40 AM	08:46 AM	MT	Melting	Clear	10-15	0.00%	1	
	24-Jan-16								0	No Production
	25-Jan-16								0	No Production
x	26-Jan-16	11:00 PM	11:06 PM	MJ	Melting	Cloudy	5-10	0.00%	1	
x	27-Jan-16	10:30 AM	10:36 AM	MJ	Melting	Clear	5-10	0.00%	1	
x	28-Jan-16	11:10 AM	11:16 AM	MJ	Melting	Clear	0-5	0.00%	1	
x	29-Jan-16	09:30 AM	09:36 AM	MJ	Melting	Clear	0-5	0.00%	1	
x	30-Jan-16	02:00 PM	02:06 PM	TP	Melting	Clear	15-20	0.00%	1	
	31-Jan-16								0	No Production
	1-Feb-16								1	No Daylight Operations
x	2-Feb-16	10:00 AM	10:06 AM	RH	Melting	Cloudy	0-10	0.00%	1	
x	3-Feb-16	10:00 AM	10:06 AM	RH	Melting	Clear	0-10	0.00%	1	
x	4-Feb-16	10:10 AM	10:16 AM	RH	Melting	Clear	0-10	0.00%	1	
x	5-Feb-16	11:00 AM	11:06 AM	RH	Melting	Clear	0-10	0.00%	1	
	6-Feb-16								0	No Production
	7-Feb-16								0	No Production
	8-Feb-16								0	No Production
x	9-Feb-16	11:35 AM	11:41 AM	MJ	Melting	Cloudy	5-10	0.00%	1	
x	10-Feb-16	11:00 AM	11:06 AM	MJ	Melting	Clear	5-10	0.00%	1	
x	11-Feb-16	09:40 AM	09:46 AM	MJ	Melting	Clear	0-5	0.00%	1	
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	21-Feb-16								0	No Production
	22-Feb-16								1	No Daylight Operations
x	23-Feb-16	09:30 AM	09:36 AM	MJ	Melting	Cloudy	5-10	0.00%	1	
x	24-Feb-16	12:50 PM	12:56 PM	MJ	Melting	Cloudy	5-10	0.00%	1	
x	25-Feb-16	10:10 AM	10:16 AM	MJ	Melting	Cloudy	5-10	0.00%	1	
x	26-Feb-16	10:20 AM	10:26 AM	MJ	Melting	Clear	5-10	0.00%	1	
x	27-Feb-16	12:40 PM	12:46 PM	TP	Melting	Clear	15-20	0.00%	1	
	28-Feb-16								0	No Production
	29-Feb-16								1	No Daylight Operations
x	1-Mar-16	10:05 AM	10:11 AM	RH	Melting	Cloudy	0-10	0.00%	1	
x	2-Mar-16	10:00 AM	10:06 AM	RH	Melting	Clear	0-10	0.00%	1	
x	3-Mar-16	09:35 AM	09:41 AM	RH	Melting	Cloudy	0-10	0.00%	1	
x	4-Mar-16	10:00 AM	10:06 AM	RH	Melting	Cloudy	0-10	0.00%	1	
	5-Mar-16								0	No Production
	6-Mar-16								0	No Production
	7-Mar-16								1	No Daylight Operations
x	8-Mar-16	11:05 AM	11:11 AM	RH	Melting	Clear	0-10	0.00%	1	
x	9-Mar-16	12:15 PM	12:21 PM	MJ	Melting	Cloudy	5-10	0.00%	1	
x	10-Mar-16	10:00 AM	10:06 AM	MJ	Melting	Cloudy	5-10	0.00%	1	
x	11-Mar-16	08:00 AM	08:06 AM	MJ	Melting	Cloudy	5-10	0.00%	1	
	12-Mar-16								0	No Production
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	14-Mar-16								1	No Daylight Operations
x	15-Mar-16	09:40 AM	09:46 AM	RH	Melting	Clear	0-10	0.00%	1	
x	16-Mar-16	11:00 AM	11:06 AM	RH	Melting	Clear	0-10	0.00%	1	
x	17-Mar-16	10:15 AM	10:21 AM	RH	Melting	Clear	0-10	0.00%	1	
x	18-Mar-16	10:20 AM	10:26 AM	MJ	Melting	Clear	5-10	0.00%	1	
	19-Mar-16								0	No Production
	20-Mar-16								0	No Production
	21-Mar-16								1	No Daylight Operations
x	22-Mar-16	10:30 AM	10:36 AM	MJ	Melting	Clear	5-10	0.00%	1	
x	23-Mar-16	08:35 AM	08:41 AM	MJ	Melting	Cloudy	5-10	0.00%	1	
x	24-Mar-16	08:20 AM	08:26 AM	MJ	Melting	Cloudy	10-15	0.00%	1	
x	25-Mar-16	08:10 AM	08:16 AM	MJ	Melting	Cloudy	5-10	0.00%	1	
	26-Mar-16								0	No Production
	27-Mar-16								0	No Production
	28-Mar-16								1	No Daylight Operations
x	29-Mar-16	09:25 AM	09:31 AM	RH	Melting	Clear	0-10	0.00%	1	
x	30-Mar-16	11:00 AM	11:06 AM	RH	Melting	Cloudy	0-10	0.00%	1	
	31-Mar-16								0	No Production

GNL 941

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME			OBSERVATION DATE		START TIME	STOP TIME
Gerdau AmeriSteel			1-6-16		10:25 Am	10:43 Am
ADDRESS			SEC	0	15	30
801 Gerdau AmeriSteel Rd			MIN	0	0	0
CITY			1	0	0	0
STATE			2	0	0	0
ZIP			3	0	0	0
PHONE			4	0	0	0
SOURCE ID NUMBER			5	0	0	0
(731) 424-5600			6	0	0	0
57-0189-01			7	0	0	0
PROCESS EQUIPMENT			8	0	0	0
Electric Arc Furnace			9	0	0	0
OPERATING MODE			10	0	0	0
CONTROL EQUIPMENT			11	0	0	0
Baghouse 1 & 2			12	0	0	0
OPERATING MODE			13	0	0	0
Continuous			14	0	0	0
DESCRIBE EMISSION POINT			15	0	0	0
START Outlet on top of Baghouse			16	0	0	0
HEIGHT ABOVE GROUND LEVEL			17	0	0	0
START 76 ft STOP 76 ft			18	0	0	0
HEIGHT RELATIVE TO OBSERVER			19	0	0	0
START 76 ft STOP 76 ft			20	0	0	0
DISTANCE FROM OBSERVER			21	0	0	0
START 380 ft STOP 380 ft			22	0	0	0
DIRECTION FROM OBSERVER			23	0	0	0
START North STOP North			24	0	0	0
DESCRIBE VISIBLE EMISSIONS			25	0	0	0
START			26	0	0	0
EMISSION COLOR			27	0	0	0
IF WATER DROPLET PLUME:			28	0	0	0
START			29	0	0	0
STOP			30	0	0	0
ATTACHED ☐ DETACHED ☐						
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED						
START Outlet (exit) STOP Outlet (exit)						
DESCRIBE PLUME BACKGROUND						
START Sky STOP Sky						
BACKGROUND COLOR						
START white STOP white						
SKY CONDITIONS						
START clear STOP clear						
WIND SPEED						
START 10 mph STOP 10 mph						
WIND DIRECTION						
START N STOP N						
AMBIENT TEMP.						
START 36° STOP 36°						
WET BULB TEMP.						
RH, percent						
SOURCE LAYOUT SKETCH						
DRAW NORTH ARROW						
APPLICABLE OPACITY STANDARD						
3 % OPACITY						
EPA METHOD 9 ☒ TVEE METHOD 2 ☐						
TVEE METHOD 1 ☐ TVEE METHOD 3 ☐						
AVERAGE OPACITY FOR HIGHEST PERIOD						
20						
NUMBER OF READING ABOVE % WERE						
20						
COMMENTS						
OBSERVER'S NAME (PRINT)						
Roydell Herron						
OBSERVER'S SIGNATURE						
Roydell Herron						
DATE						
1-6-14						
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS						
ORGANIZATION						
Gerdau AmeriSteel						
CERTIFICATION EXPIRATION DATE						
5-16-14						
SIGNATURE						
VERIFIED BY						
State Of Tennessee/Carl Koontz						
DATE						
11-14-15						

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau AmeriSteel			OBSERVATION DATE 1-7-16		START TIME 9:45 Am	STOP TIME 10:03 Am
ADDRESS 801 Gerdau AmeriSteel Rd			SEC MIN	0	15	30
CITY Jackson			STATE TN		ZIP 38305	
PHONE (731) 424-5600			SOURCE ID NUMBER 57-0189-01		COMMENTS	
PROCESS EQUIPMENT Electric Arc Furnace			OPERATING MODE melt			
CONTROL EQUIPMENT Baghouse 1 & 2			OPERATING MODE Continuous			
DESCRIBE EMISSION POINT START Outlet on top of Baghouse						
HEIGHT ABOVE GROUND LEVEL START 76 ft STOP 76 ft			HEIGHT RELATIVE TO OBSERVER START 76 ft STOP 76 ft			
DISTANCE FROM OBSERVER START 380 ft STOP 380 ft			DIRECTION FROM OBSERVER START North STOP North			
DESCRIBE VISIBLE EMISSIONS						
START			STOP			
EMISSION COLOR			IF WATER DROPLET PLUME:			
START			STOP			
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED						
START Outlet (exit)			STOP Outlet (exit)			
DESCRIBE PLUME BACKGROUND						
START Sky			STOP Sky			
BACKGROUND COLOR			SKY CONDITIONS			
START gray STOP gray			START cloudy STOP cloudy			
WIND SPEED			WIND DIRECTION			
START 0-10 mph STOP 0-10 mph			START W STOP W			
AMBIENT TEMP.			WET BULB TEMP.		RH, percent	
START 45.0 STOP 45.0						
SOURCE LAYOUT SKETCH			DRAW NORTH ARROW			
APPLICABLE OPACITY STANDARD			EPA METHOD 9		TVEE METHOD 2	
3 % OPACITY						
AVERAGE OPACITY FOR HIGHEST PERIOD			NUMBER OF READING ABOVE % WERE			
0 0						
COMMENTS			OBSERVER'S NAME (PRINT)			
			Roydell Herron			
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			OBSERVER'S SIGNATURE		DATE	
SIGNATURE			Roydell Herron		1-7-16	
TITLE			ORGANIZATION		CERTIFICATION EXPIRATION DATE	
			Gerdau AmeriSteel		5-16-16	
DATE			VERIFIED BY		DATE	
			State Of Tennessee (Carl Koontz)		11-16-15	

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME			OBSERVATION DATE				START TIME		STOP TIME	
Gerdau AmeriSteel			1-8-16				10:55 AM		10:33 AM	
ADDRESS			SEC	0	15	30	45	COMMENTS		
801 Gerdau AmeriSteel Rd			MIN							
CITY			1	0	0	0	0			
JACKSON			2	0	0	0	0			
STATE			3	0	0	0	0			
TN			4	0	0	0	0			
ZIP			5	0	0	0	0			
38305			6	0	0	0	0			
PHONE			7	0	0	0	0			
(731) 424-5600			8	0	0	0	0			
SOURCE ID NUMBER			9	0	0	0	0			
57-0189-01			10	0	0	0	0			
PROCESS EQUIPMENT			11	0	0	0	0			
Electric Arc Furnace			12	0	0	0	0			
OPERATING MODE			13	0	0	0	0			
melt			14	0	0	0	0			
CONTROL EQUIPMENT			15	0	0	0	0			
Baghouse 1 & 2			16	0	0	0	0			
OPERATING MODE			17	0	0	0	0			
Continuous			18	0	0	0	0			
DESCRIBE EMISSION POINT			19	0	0	0	0			
START Outlet on top of Baghouse			20	0	0	0	0			
HEIGHT ABOVE GROUND LEVEL			21	0	0	0	0			
START 76 ft STOP 76 ft			22	0	0	0	0			
HEIGHT RELATIVE TO OBSERVER			23	0	0	0	0			
START 76 ft STOP 76 ft			24	0	0	0	0			
DISTANCE FROM OBSERVER			25	0	0	0	0			
START 380 ft STOP 380 ft			26	0	0	0	0			
DIRECTION FROM OBSERVER			27	0	0	0	0			
START North STOP North			28	0	0	0	0			
DESCRIBE VISIBLE EMISSIONS			29	0	0	0	0			
START			30	0	0	0	0			
STOP			31	0	0	0	0			
EMISSION COLOR			32	0	0	0	0			
IF WATER DROPLET PLUME:			33	0	0	0	0			
START			34	0	0	0	0			
STOP			35	0	0	0	0			
ATTACHED ☐ DETACHED ☐			36	0	0	0	0			
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			37	0	0	0	0			
START Outlet (exit)			38	0	0	0	0			
STOP Outlet (exit)			39	0	0	0	0			
DESCRIBE PLUME BACKGROUND			40	0	0	0	0			
START Sky			41	0	0	0	0			
STOP Sky			42	0	0	0	0			
BACKGROUND COLOR			43	0	0	0	0			
SKY CONDITIONS			44	0	0	0	0			
START gray			45	0	0	0	0			
STOP cloudy			46	0	0	0	0			
WIND SPEED			47	0	0	0	0			
WIND DIRECTION			48	0	0	0	0			
START 10 mph			49	0	0	0	0			
STOP 10 mph			50	0	0	0	0			
AMBIENT TEMP.			51	0	0	0	0			
WET BULB TEMP.			52	0	0	0	0			
RH, percent			53	0	0	0	0			
START 50°			54	0	0	0	0			
STOP 50°			55	0	0	0	0			
SOURCE LAYOUT SKETCH			56	0	0	0	0			
DRAW NORTH ARROW			57	0	0	0	0			
			58	0	0	0	0			
SUN LOCATION LINE 140°			59	0	0	0	0			
COMMENTS			60	0	0	0	0			
OBSERVER'S NAME (PRINT)			Roy Allen Herron							
OBSERVER'S SIGNATURE			Roy Allen Herron							
DATE			1-8-16							
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			ORGANIZATION							
SIGNATURE			Gerdau AmeriSteel							
TITLE			State Of Tennessee/Carl Koontz							
DATE			5-16-16							
CERTIFICATION EXPIRATION DATE			11-16-15							

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau AmeriSteel			OBSERVATION DATE 1-9-16				START TIME 9:20a-		STOP TIME 9:38a-	
ADDRESS 801 Gerdau AmeriSteel Rd			SEC MIN		0	15	30	45	COMMENTS	
			1	0	0	0	0			
CITY Jackson			STATE TN		ZIP 38305					
PHONE (731) 424-5600			SOURCE ID NUMBER 57-0189-01							
PROCESS EQUIPMENT Electric Arc Furnace			OPERATING MODE Melting							
CONTROL EQUIPMENT Baghouse 1 & 2			OPERATING MODE Continuous							
DESCRIBE EMISSION POINT Outlet on top of Baghouse										
HEIGHT ABOVE GROUND LEVEL START 76 ft STOP 76 ft			HEIGHT RELATIVE TO OBSERVER START 76 ft STOP 76 ft							
DISTANCE FROM OBSERVER START 380 ft STOP 380 ft			DIRECTION FROM OBSERVER START North STOP North							
DESCRIBE VISIBLE EMISSIONS START ✓ STOP ✓										
EMISSION COLOR START ✓ STOP ✓			IF WATER DROPLET PLUME: START ✓ STOP ✓							
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED START Outlet (exit) STOP Outlet (exit)										
DESCRIBE PLUME BACKGROUND START Sky STOP Sky										
BACKGROUND COLOR START Gray STOP Gray			SKY CONDITIONS START Cloudy STOP Cloudy							
WIND SPEED START 0-5 STOP 0-5			WIND DIRECTION START S STOP S							
AMBIENT TEMP. START 54° STOP 54°			WET BULB TEMP.		RH, percent					
SOURCE LAYOUT SKETCH DRAW NORTH ARROW										
Diagram description: A sketch showing the 'X' emission point at the top, a line pointing down to the 'OBSERVER'S POSITION' (a triangle), and a dashed line labeled 'SUN LOCATION LINE' at an angle. A north arrow points up. Wind direction is indicated by an arrow pointing right.										
COMMENTS										
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS										
SIGNATURE TITLE			DATE		OBSERVER'S NAME (PRINT) Mark Thompson		OBSERVER'S SIGNATURE <i>Mark Thompson</i>		DATE 1-9-16	
					ORGANIZATION Gerdau AmeriSteel		CERTIFICATION EXPIRATION DATE 5-13-16			
					VERIFIED BY State Of Tennessee/Carl Koontz		DATE 11-13-15			

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME			OBSERVATION DATE		START TIME		STOP TIME	
Gerdau AmeriSteel			1-12-16		10:00AM		10:18AM	
ADDRESS			SEC		MIN		COMMENTS	
801 Gerdau AmeriSteel Rd			0		15		30	
CITY			45					
Jackson			TN		38305			
PHONE			SOURCE ID NUMBER					
(731) 424-5600			57-0189-01					
PROCESS EQUIPMENT			OPERATING MODE					
Electric Arc Furnace			Melt					
CONTROL EQUIPMENT			OPERATING MODE					
Baghouse 1 & 2			Continuous					
DESCRIBE EMISSION POINT								
START			STOP					
Outlet on top of Baghouse								
HEIGHT ABOVE GROUND LEVEL			HEIGHT RELATIVE TO OBSERVER					
START 76 ft STOP 76 ft			START 76 ft STOP 76 ft					
DISTANCE FROM OBSERVER			DIRECTION FROM OBSERVER					
START 380 ft STOP 380 ft			START North STOP North					
DESCRIBE VISIBLE EMISSIONS								
START			STOP					
EMISSION COLOR			IF WATER DROPLET PLUME?					
START			STOP					
ATTACHED ☐ DETACHED ☐								
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED								
START			STOP					
Outlet (exit)			Outlet (exit)					
DESCRIBE PLUME BACKGROUND								
START			STOP					
Sky			Sky					
BACKGROUND COLOR			SKY CONDITIONS					
START Blue STOP Blue			START Clear STOP Clear					
WIND SPEED			WIND DIRECTION					
START 0.5 mph STOP 0.5 mph			START N STOP N					
AMBIENT TEMP.			WET BULB TEMP.		RH, percent			
START 44 STOP 44								
SOURCE LAYOUT SKETCH			DRAW NORTH ARROW					
APPLICABLE OPACITY STANDARD			EPA METHOD 9 ☒		TVEE METHOD 2 ☐			
3 % OPACITY			TVEE METHOD 1 ☐		TVEE METHOD 3 ☐			
AVERAGE OPACITY FOR HIGHEST PERIOD			NUMBER OF READING ABOVE % WERE					
0			0					
COMMENTS			OBSERVER'S NAME (PRINT)		DATE			
			Mike Johnson		1-12-16			
			OBSERVER'S SIGNATURE		DATE			
			[Signature]		5-13-16			
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			ORGANIZATION		CERTIFICATION EXPIRATION DATE			
SIGNATURE			Gerdau AmeriSteel		11-13-15			
TITLE			VERIFIED BY		DATE			
			State Of Tennessee/Carl Koontz					

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME			OBSERVATION DATE		START TIME		STOP TIME	
Gerdau AmeriSteel			1-13-14		11:15 AM		11:33 AM	
ADDRESS			SEC		MIN		COMMENTS	
801 Gerdau AmeriSteel Rd			0		15		30	
CITY			45					
Jackson			0		0		0	
STATE			0		0		0	
TN			0		0		0	
ZIP			0		0		0	
38305			0		0		0	
PHONE			0		0		0	
(731) 424-5600			0		0		0	
SOURCE ID NUMBER			0		0		0	
57-0189-01			0		0		0	
PROCESS EQUIPMENT			0		0		0	
Electric Arc Furnace			0		0		0	
OPERATING MODE			0		0		0	
Melt			0		0		0	
CONTROL EQUIPMENT			0		0		0	
Baghouse 1 & 2			0		0		0	
OPERATING MODE			0		0		0	
Continuous			0		0		0	
DESCRIBE EMISSION POINT			0		0		0	
START Outlet on top of Baghouse			0		0		0	
HEIGHT ABOVE GROUND LEVEL			0		0		0	
START 76 ft STOP 76 ft			0		0		0	
HEIGHT RELATIVE TO OBSERVER			0		0		0	
START 76 ft STOP 76 ft			0		0		0	
DISTANCE FROM OBSERVER			0		0		0	
START 380 ft STOP 380 ft			0		0		0	
DIRECTION FROM OBSERVER			0		0		0	
START North STOP North			0		0		0	
DESCRIBE VISIBLE EMISSIONS			0		0		0	
START			0		0		0	
STOP			0		0		0	
EMISSION COLOR			0		0		0	
IF WATER DROPLET PLUME:			0		0		0	
START			0		0		0	
STOP			0		0		0	
ATTACHED ☐ DETACHED ☐			0		0		0	
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			0		0		0	
START Outlet (exit)			0		0		0	
STOP Outlet (exit)			0		0		0	
DESCRIBE PLUME BACKGROUND			0		0		0	
START Sky			0		0		0	
STOP Sky			0		0		0	
BACKGROUND COLOR			0		0		0	
START Blue STOP Blue			0		0		0	
SKY CONDITIONS			0		0		0	
START Clear STOP Clear			0		0		0	
WIND SPEED			0		0		0	
START 5-10 mph STOP 5-10 mph			0		0		0	
WIND DIRECTION			0		0		0	
START N STOP N			0		0		0	
AMBIENT TEMP.			0		0		0	
START 44° STOP 44°			0		0		0	
WET BULB TEMP.			0		0		0	
RH, percent			0		0		0	
SOURCE LAYOUT SKETCH			0		0		0	
DRAW NORTH ARROW			0		0		0	
			0		0		0	
APPLICABLE OPACITY STANDARD			0		0		0	
EPA METHOD 9 ☒ TVEE METHOD 2 ☐			0		0		0	
3 % OPACITY			0		0		0	
TVEE METHOD 1 ☐ TVEE METHOD 3 ☐			0		0		0	
AVERAGE OPACITY FOR HIGHEST PERIOD			0		0		0	
NUMBER OF READING ABOVE % WERE			0		0		0	
COMMENTS			0		0		0	
OBSERVER'S NAME (PRINT)			0		0		0	
Mike Johnson			0		0		0	
OBSERVER'S SIGNATURE			0		0		0	
DATE			0		0		0	
1-13-14			0		0		0	
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			0		0		0	
ORGANIZATION			0		0		0	
Gerdau AmeriSteel			0		0		0	
VERIFIED BY			0		0		0	
State Of Tennessee (Carl Kuntz)			0		0		0	
SIGNATURE			0		0		0	
DATE			0		0		0	
5-13-14			0		0		0	
TITLE			0		0		0	
DATE			0		0		0	
11-13-15			0		0		0	

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME			OBSERVATION DATE		START TIME		STOP TIME	
Gerdau AmeriSteel			1-14-16		10:00 am		10:18 AM	
ADDRESS			SEC	0	15	30	45	COMMENTS
801 Gerdau AmeriSteel Rd			MIN					
CITY			1	0	0	0	0	
JACKSON			2	0	0	0	0	
STATE			3	0	0	0	0	
TN			4	0	0	0	0	
ZIP			5	0	0	0	0	
38305			6	0	0	0	0	
PHONE			7	0	0	0	0	
(731) 424-5600			8	0	0	0	0	
SOURCE ID NUMBER			9	0	0	0	0	
57-0189-01			10	0	0	0	0	
PROCESS EQUIPMENT			11	0	0	0	0	
Electric Arc Furnace			12	0	0	0	0	
OPERATING MODE			13	0	0	0	0	
Melt			14	0	0	0	0	
CONTROL EQUIPMENT			15	0	0	0	0	
Baghouse 1 & 2			16	0	0	0	0	
OPERATING MODE			17	0	0	0	0	
Continuous			18	0	0	0	0	
DESCRIBE EMISSION POINT			19	0	0	0	0	
START Outlet on top of Baghouse			20	0	0	0	0	
HEIGHT ABOVE GROUND LEVEL			21	0	0	0	0	
START 76 ft STOP 76 ft			22	0	0	0	0	
HEIGHT RELATIVE TO OBSERVER			23	0	0	0	0	
START 76 ft STOP 76 ft			24	0	0	0	0	
DISTANCE FROM OBSERVER			25	0	0	0	0	
START 380 ft STOP 380 ft			26	0	0	0	0	
DIRECTION FROM OBSERVER			27	0	0	0	0	
START North STOP North			28	0	0	0	0	
DESCRIBE VISIBLE EMISSIONS			29	0	0	0	0	
START			30	0	0	0	0	
STOP			31	0	0	0	0	
EMISSION COLOR			32	0	0	0	0	
START			33	0	0	0	0	
STOP			34	0	0	0	0	
IF WATER DROPLET PLUME?			35	0	0	0	0	
ATTACHED ☐ DETACHED ☐			36	0	0	0	0	
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			37	0	0	0	0	
START Outlet (exit)			38	0	0	0	0	
STOP Outlet (exit)			39	0	0	0	0	
DESCRIBE PLUME BACKGROUND			40	0	0	0	0	
START Sky			41	0	0	0	0	
STOP Sky			42	0	0	0	0	
BACKGROUND COLOR			43	0	0	0	0	
START Blue			44	0	0	0	0	
STOP Blue			45	0	0	0	0	
SKY CONDITIONS			46	0	0	0	0	
START Clear			47	0	0	0	0	
STOP Clear			48	0	0	0	0	
WIND SPEED			49	0	0	0	0	
START 10-15 mph			50	0	0	0	0	
STOP 10-15 mph			51	0	0	0	0	
WIND DIRECTION			52	0	0	0	0	
START N			53	0	0	0	0	
STOP N			54	0	0	0	0	
AMBIENT TEMP.			55	0	0	0	0	
START 55°			56	0	0	0	0	
STOP 55°			57	0	0	0	0	
WET BULB TEMP.			58	0	0	0	0	
RH, percent			59	0	0	0	0	
SOURCE LAYOUT SKETCH			60	0	0	0	0	
DRAW NORTH ARROW			61	0	0	0	0	
			62	0	0	0	0	
SUN LOCATION LINE 140° OBSERVER'S POSITION X EMISSION POINT			63	0	0	0	0	
SUN WIND PLUME AND STACK			64	0	0	0	0	
COMMENTS			65	0	0	0	0	
APPLICABLE OPACITY STANDARD			66	0	0	0	0	
3 % OPACITY			67	0	0	0	0	
EPA METHOD 9 ☒ TVEE METHOD 2 ☐			68	0	0	0	0	
TVEE METHOD 1 ☐ TVEE METHOD 3 ☐			69	0	0	0	0	
AVERAGE OPACITY FOR HIGHEST PERIOD			70	0	0	0	0	
NUMBER OF READING ABOVE %WERE			71	0	0	0	0	
00			72	0	0	0	0	
OBSERVER'S NAME (PRINT)			73	0	0	0	0	
Mike Johnson			74	0	0	0	0	
OBSERVER'S SIGNATURE			75	0	0	0	0	
Mike Johnson			76	0	0	0	0	
DATE			77	0	0	0	0	
1-14-16			78	0	0	0	0	
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			79	0	0	0	0	
ORGANIZATION			80	0	0	0	0	
Gerdau AmeriSteel			81	0	0	0	0	
CERTIFICATION EXPIRATION DATE			82	0	0	0	0	
5-13-16			83	0	0	0	0	
SIGNATURE			84	0	0	0	0	
TITLE			85	0	0	0	0	
DATE			86	0	0	0	0	
State Of Tennessee/Carl Kocintz			87	0	0	0	0	
DATE			88	0	0	0	0	
11-13-15			89	0	0	0	0	

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

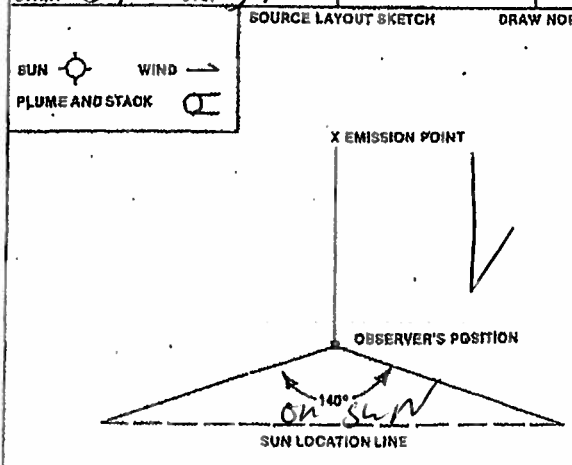
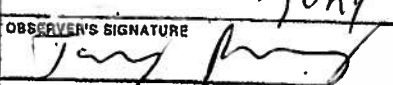
VISIBLE EMISSION OBSERVATION

SOURCE NAME			OBSERVATION DATE		START TIME		STOP TIME	
Gerdau AmeriSteel			1-15-16		10:05 AM		10:23 AM	
ADDRESS			SEC	5	15	30	45	COMMENTS
801 Gerdau AmeriSteel Rd			MIN					
CITY	STATE	ZIP	1	0	0	0	0	
Jackson	TN	38305	2	0	0	0	0	
PHONE	SOURCE ID NUMBER		3	0	0	0	0	
(731) 424-5600	57-0189-01		4	0	0	0	0	
PROCESS EQUIPMENT		OPERATING MODE	5	0	0	0	0	
Electric Arc Furnace		Melt	6	0	0	0	0	
CONTROL EQUIPMENT		OPERATING MODE	7	0	0	0	0	
Baghouse 1 & 2		Continuous	8	0	0	0	0	
DESCRIBE EMISSION POINT			9	0	0	0	0	
START Outlet on top of Baghouse			10	0	0	0	0	
HEIGHT ABOVE GROUND LEVEL		HEIGHT RELATIVE TO OBSERVER	11	0	0	0	0	
START 76 ft STOP 76 ft		START 76 ft STOP 76 ft	12	0	0	0	0	
DISTANCE FROM OBSERVER		DIRECTION FROM OBSERVER	13	0	0	0	0	
START 380 ft STOP 380 ft		START North STOP North	14	0	0	0	0	
DESCRIBE VISIBLE EMISSIONS			15	0	0	0	0	
START STOP			16	0	0	0	0	
EMISSION COLOR		IF WATER DROPLET PLUME:	17	0	0	0	0	
START STOP		ATTACHED ☐ DETACHED ☐	18	0	0	0	0	
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			19	0	0	0	0	
START Outlet (exit) STOP Outlet (exit)			20	0	0	0	0	
DESCRIBE PLUME BACKGROUND			21	0	0	0	0	
START Sky STOP Sky			22	0	0	0	0	
BACKGROUND COLOR		SKY CONDITIONS	23	0	0	0	0	
START Gray STOP Gray		START Cloudy STOP Cloudy	24	0	0	0	0	
WIND SPEED		WIND DIRECTION	25	0	0	0	0	
START 5-10 mph STOP 5-10 mph		START S STOP S	26	0	0	0	0	
AMBIENT TEMP.		WET BULB TEMP.	27	0	0	0	0	
START 53° STOP 53°		RH, percent	28	0	0	0	0	
SOURCE LAYOUT SKETCH			29	0	0	0	0	
DRAW NORTH ARROW			30	0	0	0	0	
			APPLICABLE OPACITY STANDARD					EPA METHOD 9 ☒ TVEE METHOD 2 ☐
			3 % OPACITY					TVEE METHOD 1 ☐ TVEE METHOD 3 ☐
			AVERAGE OPACITY FOR HIGHEST PERIOD					NUMBER OF READING ABOVE % WERE
			0/0					
COMMENTS			OBSERVER'S NAME (PRINT)					
			Mike Johnson					
			OBSERVER'S SIGNATURE					DATE
			Mike Johnson					1-15-16
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			ORGANIZATION					CERTIFICATION EXPIRATION DATE
SIGNATURE			Gerdau AmeriSteel					5-13-16
TITLE			VERIFIED BY					DATE
			State Of Tennessee/Carl Koontz					11-13-15

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau AmeriSteel			OBSERVATION DATE 1-16-16				START TIME 12:30 PM		STOP TIME 12:48 PM	
ADDRESS 801 Gerdau AmeriSteel Rd			SEC MIN	0	15	30	45	COMMENTS		
CITY Jackson			1	0	0	0	0			
STATE TN			2	0	0	0	0			
ZIP 38305			3	0	0	0	0			
PHONE (731) 424-5600			4	0	0	0	0			
SOURCE ID NUMBER 57-0189-01			5	0	0	0	0			
PROCESS EQUIPMENT Electric Arc Furnace			6	0	0	0	0			
OPERATING MODE melting			7	0	0	0	0			
CONTROL EQUIPMENT Baghouse 1 & 2			8	0	0	0	0			
OPERATING MODE Continuous			9	0	0	0	0			
DESCRIBE EMISSION POINT Outlet on top of Baghouse			10	0	0	0	0			
START HEIGHT ABOVE GROUND LEVEL 76 ft			11	0	0	0	0			
STOP HEIGHT ABOVE GROUND LEVEL 76 ft			12	0	0	0	0			
START HEIGHT RELATIVE TO OBSERVER 76 ft			13	0	0	0	0			
STOP HEIGHT RELATIVE TO OBSERVER 76 ft			14	0	0	0	0			
DISTANCE FROM OBSERVER 380 ft			15	0	0	0	0			
STOP DISTANCE FROM OBSERVER 380 ft			16	0	0	0	0			
DIRECTION FROM OBSERVER North			17	0	0	0	0			
STOP DIRECTION FROM OBSERVER North			18	0	0	0	0			
DESCRIBE VISIBLE EMISSIONS Wavy line			19	0	0	0	0			
START EMISSION COLOR Wavy line			20	0	0	0	0			
STOP EMISSION COLOR Wavy line			21	0	0	0	0			
IF WATER DROPLET PLUME Wavy line			22	0	0	0	0			
ATTACHED ☐ DETACHED ☐			23	0	0	0	0			
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED Outlet (exit)			24	0	0	0	0			
STOP POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED Outlet (exit)			25	0	0	0	0			
DESCRIBE PLUME BACKGROUND Sky			26	0	0	0	0			
STOP DESCRIBE PLUME BACKGROUND Sky			27	0	0	0	0			
BACKGROUND COLOR Gray			28	0	0	0	0			
STOP BACKGROUND COLOR Gray			29	0	0	0	0			
WIND SPEED 5 to 10			30	0	0	0	0			
STOP WIND SPEED 5 to 10			31	0	0	0	0			
WIND DIRECTION N			32	0	0	0	0			
STOP WIND DIRECTION N			33	0	0	0	0			
AMBIENT TEMP. 39°			34	0	0	0	0			
STOP AMBIENT TEMP. 39°			35	0	0	0	0			
WET BULB TEMP.			36	0	0	0	0			
RH, percent			37	0	0	0	0			
SOURCE LAYOUT SKETCH 			38	0	0	0	0			
DRAW NORTH ARROW 			39	0	0	0	0			
APPLICABLE OPACITY STANDARD 3 % OPACITY			40	0	0	0	0			
EPA METHOD 9 ☐ TVEE METHOD 2 ☐			41	0	0	0	0			
TVEE METHOD 1 ☐ TVEE METHOD 3 ☐			42	0	0	0	0			
AVERAGE OPACITY FOR HIGHEST PERIOD 0			43	0	0	0	0			
NUMBER OF READING ABOVE % WERE 0			44	0	0	0	0			
OBSERVER'S NAME (PRINTED) Tony Penix			45	0	0	0	0			
OBSERVER'S SIGNATURE 			46	0	0	0	0			
DATE 1-16-16			47	0	0	0	0			
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			48	0	0	0	0			
ORGANIZATION Gerdau AmeriSteel			49	0	0	0	0			
CERTIFICATION EXPIRATION DATE 5-16-16			50	0	0	0	0			
VERIFIED BY State Of Tennessee/Carl Koontz			51	0	0	0	0			
DATE 1-16-15			52	0	0	0	0			
SIGNATURE Tony Penix			53	0	0	0	0			
TITLE State Of Tennessee/Carl Koontz			54	0	0	0	0			
DATE 1-16-15			55	0	0	0	0			

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME			OBSERVATION DATE				START TIME		STOP TIME	
Gerdau AmeriSteel			1-19-16				8:40 AM		8:58 AM	
ADDRESS			SEC		MIN		COMMENTS			
801 Gerdau AmeriSteel Rd										
CITY			STATE		ZIP					
Jackson			TN		38305					
PHONE			SOURCE ID NUMBER							
(731) 424-5600			57-0189-01							
PROCESS EQUIPMENT			OPERATING MODE							
Electric Arc Furnace			melt							
CONTROL EQUIPMENT			OPERATING MODE							
Baghouse 1 & 2			Continuous							
DESCRIBE EMISSION POINT										
START			STOP							
Outlet on top of Baghouse										
HEIGHT ABOVE GROUND LEVEL			HEIGHT RELATIVE TO OBSERVER							
START 76 ft STOP 76 ft			START 76 ft STOP 76 ft							
DISTANCE FROM OBSERVER			DIRECTION FROM OBSERVER							
START 380 ft STOP 380 ft			START North STOP North							
DESCRIBE VISIBLE EMISSIONS										
START			STOP							
EMISSION COLOR			IF WATER DROPLET PLUME:							
START			STOP							
ATTACHED ☐ DETACHED ☐										
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED										
START Outlet (exit)			STOP Outlet (exit)							
DESCRIBE PLUME BACKGROUND										
START Sky			STOP Sky							
BACKGROUND COLOR			SKY CONDITIONS							
START gray STOP gray			START cloudy STOP cloudy							
WIND SPEED			WIND DIRECTION							
START 0-10 mph STOP 0-10 mph			START W STOP W							
AMBIENT TEMP.			WET BULB TEMP.		RH, percent					
START 15° STOP 15°										
SOURCE LAYOUT SKETCH			DRAW NORTH ARROW							
COMMENTS										
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS										
SIGNATURE			OBSERVER'S NAME (PRINT)		DATE					
			Roydell Herron		1-19-16					
TITLE			ORGANIZATION		CERTIFICATION EXPIRATION DATE					
			Gerdau AmeriSteel		5-16-16					
DATE			VERIFIED BY		DATE					
			State Of Tennessee/Carl Koontz		11-16-15					

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau AmeriSteel			OBSERVATION DATE 1-20-16		START TIME 10:10 AM	STOP TIME 10:28 AM
ADDRESS 801 Gerdau AmeriSteel Rd			SEC MIN	0	15	30
			45	COMMENTS		
CITY Jackson	STATE TN	ZIP 38305	1	0	0	0
PHONE (731) 424-5600	SOURCE ID NUMBER 57-0189-01		2	0	0	0
PROCESS EQUIPMENT Electric Arc Furnace	OPERATING MODE melt		3	0	0	0
CONTROL EQUIPMENT Baghouse 1 & 2	OPERATING MODE Continuous		4	0	0	0
DESCRIBE EMISSION POINT Outlet on top of Baghouse			5	0	0	0
HEIGHT ABOVE GROUND LEVEL START 76 ft STOP 76 ft	HEIGHT RELATIVE TO OBSERVER START 76 ft STOP 76 ft		6	0	0	0
DISTANCE FROM OBSERVER START 380 ft STOP 380 ft	DIRECTION FROM OBSERVER START North STOP North		7	0	0	0
DESCRIBE VISIBLE EMISSIONS			8	0	0	0
START	STOP		9	0	0	0
EMISSION COLOR	IF WATER DROPLET PLUME:		10	0	0	0
START	STOP		11	0	0	0
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			12	0	0	0
START Outlet (exit)	STOP Outlet (exit)		13	0	0	0
DESCRIBE PLUME BACKGROUND			14	0	0	0
START Sky	STOP Sky		15	0	0	0
BACKGROUND COLOR	SKY CONDITIONS		16	0	0	0
START gray STOP gray	START cloudy STOP cloudy		17	0	0	0
WIND SPEED	WIND DIRECTION		18	0	0	0
START 0-10 mph STOP 0-10 mph	START W STOP W		19			
AMBIENT TEMP.	WET BULB TEMP.	RH, percent	20			
START 32° STOP 32°			21			
SOURCE LAYOUT SKETCH DRAW NORTH ARROW			22			
			23			
			24			
			25			
			26			
			27			
			28			
			29			
			30			
APPLICABLE OPACITY STANDARD			EPA METHOD 9		TVEE METHOD 2	
3 % OPACITY			TVEE METHOD 1		TVEE METHOD 3	
AVERAGE OPACITY FOR HIGHEST PERIOD			NUMBER OF READING ABOVE % WERE			
0 0			0 0			
COMMENTS			OBSERVER'S NAME (PRINT)			
			Boydell Herron			
			OBSERVER'S SIGNATURE			
			Boydell Herron			
			DATE			
			1-20-16			
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			ORGANIZATION			
			Gerdau AmeriSteel			
SIGNATURE			VERIFIED BY			
			State Of Tennessee/Carl Koontz			
TITLE			DATE			
			11-16-15			

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME			OBSERVATION DATE				START TIME	STOP TIME	
Gerdau AmeriSteel			1-21-16				12:45pm	1:03pm	
ADDRESS			SEC	0	15	30	45	COMMENTS	
801 Gerdau AmeriSteel Rd			MIN						
CITY	STATE	ZIP	1	0	0	0	0		
Jackson	TN	38305	2	0	0	0	0		
PHONE	SOURCE ID NUMBER		3	0	0	0	0		
(731) 424-5600	57-0189-01		4	0	0	0	0		
PROCESS EQUIPMENT		OPERATING MODE	5	0	0	0	0		
Electric Arc Furnace		<i>melt</i>	6	0	0	0	0		
CONTROL EQUIPMENT		OPERATING MODE	7	0	0	0	0		
Baghouse 1 & 2		Continuous	8	0	0	0	0		
DESCRIBE EMISSION POINT			9	0	0	0	0		
START Outlet on top of Baghouse			10	0	0	0	0		
HEIGHT ABOVE GROUND LEVEL		HEIGHT RELATIVE TO OBSERVER	11	0	0	0	0		
START 76 ft STOP 76 ft		START 76 ft STOP 76 ft	12	0	0	0	0		
DISTANCE FROM OBSERVER		DIRECTION FROM OBSERVER	13	0	0	0	0		
START 380 ft STOP 380 ft		START North STOP North	14	0	0	0	0		
DESCRIBE VISIBLE EMISSIONS			15	0	0	0	0		
START		STOP	16	0	0	0	0		
EMISSION COLOR		IF WATER DROPLET PLUME:	17	0	0	0	0		
START		ATTACHED ☐ DETACHED ☐	18	0	0	0	0		
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			19	0	0	0	0		
START Outlet (exit)		STOP Outlet (exit)	20	0	0	0	0		
DESCRIBE PLUME BACKGROUND			21	0	0	0	0		
START Sky		STOP Sky	22	0	0	0	0		
BACKGROUND COLOR		SKY CONDITIONS	23	0	0	0	0		
START gray STOP gray		START Cloudy STOP Cloudy	24	0	0	0	0		
WIND SPEED		WIND DIRECTION	25	0	0	0	0		
START 0-10 mph STOP 0-10 mph		START W STOP W	26	0	0	0	0		
AMBIENT TEMP.		WET BULB TEMP.	27	0	0	0	0		
START 32° STOP 32°		RH, percent	28	0	0	0	0		
SOURCE LAYOUT SKETCH			29	0	0	0	0		
DRAW NORTH ARROW			30	0	0	0	0		
			APPLICABLE OPACITY STANDARD					EPA METHOD 9 ☒	TYEE METHOD 2 ☐
			3 % OPACITY					TYEE METHOD 1 ☐	TYEE METHOD 3 ☐
			AVERAGE OPACITY FOR HIGHEST PERIOD					NUMBER OF READING ABOVE % WERE	
			0 0						
COMMENTS			OBSERVER'S NAME (PRINT)						
			Roydell Herron						
			OBSERVER'S SIGNATURE						
			Roydell Herron						
			DATE						
			1-21-16						
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			ORGANIZATION						
			Gerdau AmeriSteel						
SIGNATURE			CERTIFICATION EXPIRATION DATE						
			5-16-16						
TITLE			VERIFIED BY						
			State Of Tennessee (Carl Koontz)						
			DATE						
			11-16-15						

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME			OBSERVATION DATE		START TIME		STOP TIME	
Gerdau AmeriSteel			1-22-14		9:25 AM		9:43 AM	
ADDRESS			SEC		MIN		COMMENTS	
801 Gerdau AmeriSteel Rd			0		0			
CITY			15		20			
JACKSON			45		0			
STATE			0		0			
TN			0		0			
ZIP			0		0			
38305			0		0			
PHONE			0		0			
(731) 424-5600			0		0			
SOURCE ID NUMBER			0		0			
57-0189-01			0		0			
PROCESS EQUIPMENT			0		0			
Electric Arc Furnace			0		0			
OPERATING MODE			0		0			
BAGHOUSE 1 & 2			0		0			
OPERATING MODE			0		0			
Continuous			0		0			
DESCRIBE EMISSION POINT			0		0			
START Outlet on top of Baghouse			0		0			
HEIGHT ABOVE GROUND LEVEL			0		0			
START 76 ft STOP 76 ft			0		0			
HEIGHT RELATIVE TO OBSERVER			0		0			
START 76 ft STOP 76 ft			0		0			
DISTANCE FROM OBSERVER			0		0			
START 380 ft STOP 380 ft			0		0			
DIRECTION FROM OBSERVER			0		0			
START North STOP North			0		0			
DESCRIBE VISIBLE EMISSIONS			0		0			
START			0		0			
EMISSION COLOR			0		0			
IF WATER DROPLET PLUME:			0		0			
START			0		0			
STOP			0		0			
ATTACHED ☐ DETACHED ☒			0		0			
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			0		0			
START Outlet (exit) STOP Outlet (exit)			0		0			
DESCRIBE PLUME BACKGROUND			0		0			
START Sky STOP Sky			0		0			
BACKGROUND COLOR			0		0			
SKY CONDITIONS			0		0			
START gray STOP gray			0		0			
WIND SPEED			0		0			
WIND DIRECTION			0		0			
START 0-10 mph STOP 0-10 mph			0		0			
AMBIENT TEMP.			0		0			
WET BULB TEMP.			0		0			
RH, percent			0		0			
START 30° STOP 30°			0		0			
SOURCE LAYOUT SKETCH			0		0			
DRAW NORTH ARROW			0		0			
SUN LOCATION LINE			0		0			
OBSERVER'S POSITION			0		0			
APPLICABLE OPACITY STANDARD			0		0			
EPA METHOD 9 ☒ TVEE METHOD 2 ☐			0		0			
3 % OPACITY			0		0			
TVEE METHOD 1 ☐ TVEE METHOD 3 ☐			0		0			
AVERAGE OPACITY FOR HIGHEST PERIOD			0		0			
NUMBER OF READING ABOVE % WERE			0		0			
OBSERVER'S NAME (PRINT)			0		0			
ROYAL H. HERRON			0		0			
OBSERVER'S SIGNATURE			0		0			
ROYAL H. HERRON			0		0			
DATE			0		0			
1-22-14			0		0			
ORGANIZATION			0		0			
GERDAU AMERI-STEEL			0		0			
VERIFIED BY			0		0			
STATE OF TENNESSEE / CARL KOONTZ			0		0			
DATE			0		0			
11-16-15			0		0			

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau AmeriSteel			OBSERVATION DATE 1-23-16			START TIME 8:40am		STOP TIME 8:58am	
ADDRESS 801 Gerdau AmeriSteel Rd			SEC MIN		0	15	30	45	COMMENTS
CITY Jackson			STATE TN		ZIP 38305				
PHONE (731) 424-5600			SOURCE ID NUMBER 57-0189-01						
PROCESS EQUIPMENT Electric Arc Furnace			OPERATING MODE Melting						
CONTROL EQUIPMENT Baghouse 1 & 2			OPERATING MODE Continuous						
DESCRIBE EMISSION POINT Outlet on top of Baghouse									
START									
HEIGHT ABOVE GROUND LEVEL START 76 ft STOP 76 ft			HEIGHT RELATIVE TO OBSERVER START 76 ft STOP 76 ft						
DISTANCE FROM OBSERVER START 380 ft STOP 380 ft			DIRECTION FROM OBSERVER START North STOP North						
DESCRIBE VISIBLE EMISSIONS									
START									
EMISSION COLOR Blue			IF WATER DROPLET PLUME: START STOP						
ATTACHED ☐ DETACHED ☐									
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED Outlet (exit)									
DESCRIBE PLUME BACKGROUND Sky									
BACKGROUND COLOR Blue			SKY CONDITIONS Clear						
WIND SPEED 10-15			WIND DIRECTION N						
AMBIENT TEMP. 28°			WET BULB TEMP.		RH, percent				
SOURCE LAYOUT SKETCH DRAW NORTH ARROW									
SUN LOCATION LINE									
COMMENTS									
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS									
SIGNATURE TITLE			DATE		OBSERVER'S NAME (PRINT) Mark Thompson				
ORGANIZATION Gerdau AmeriSteel			DATE 1-23-16		OBSERVER'S SIGNATURE Mark Thompson				
VERIFIED BY State Of Tennessee/Carl Koontz			DATE 11-13-15		CERTIFICATION EXPIRATION DATE 5-13-16				

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME			OBSERVATION DATE		START TIME		STOP TIME	
Gerdau AmeriSteel			1-26-16		11:00 AM		11:18 AM	
ADDRESS			SEC		MIN		COMMENTS	
801 Gerdau AmeriSteel Rd			0		15		30	
CITY			0		45			
JACKSON			0		0			
STATE			0		0			
TN			0		0			
ZIP			0		0			
38305			0		0			
PHONE			0		0			
(731) 424-5600			0		0			
SOURCE ID NUMBER			0		0			
57-0189-01			0		0			
PROCESS EQUIPMENT			0		0			
Electric Arc Furnace			0		0			
OPERATING MODE			0		0			
Melt			0		0			
CONTROL EQUIPMENT			0		0			
Baghouse 1 & 2			0		0			
OPERATING MODE			0		0			
Continuous			0		0			
DESCRIBE EMISSION POINT			0		0			
START Outlet on top of Baghouse			0		0			
HEIGHT ABOVE GROUND LEVEL			0		0			
START 76 ft STOP 76 ft			0		0			
HEIGHT RELATIVE TO OBSERVER			0		0			
START 76 ft STOP 76 ft			0		0			
DISTANCE FROM OBSERVER			0		0			
START 380 ft STOP 380 ft			0		0			
DIRECTION FROM OBSERVER			0		0			
START North STOP North			0		0			
DESCRIBE VISIBLE EMISSIONS			0		0			
START			0		0			
STOP			0		0			
EMISSION COLOR			0		0			
IF WATER DROPLET PLUME:			0		0			
START			0		0			
STOP			0		0			
ATTACHED ☐ DETACHED ☐			0		0			
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			0		0			
START Outlet (exit) STOP Outlet (exit)			0		0			
DESCRIBE PLUME BACKGROUND			0		0			
START Sky STOP Sky			0		0			
BACKGROUND COLOR			0		0			
START Gray STOP Gray			0		0			
SKY CONDITIONS			0		0			
START Cloudy STOP Cloudy			0		0			
WIND SPEED			0		0			
START 5-10 mph STOP 5-10 mph			0		0			
WIND DIRECTION			0		0			
START N STOP N			0		0			
AMBIENT TEMP.			0		0			
START 39° STOP 39°			0		0			
WET BULB TEMP.			0		0			
RH, percent			0		0			
SOURCE LAYOUT SKETCH			0		0			
DRAW NORTH ARROW			0		0			
			0		0			
APPLICABLE OPACITY STANDARD			0		0			
EPA METHOD 9 ☐ TVEE METHOD 2 ☐			0		0			
3 % OPACITY			0		0			
TVEE METHOD 1 ☐ TVEE METHOD 3 ☐			0		0			
AVERAGE OPACITY FOR HIGHEST PERIOD			0		0			
NUMBER OF READING ABOVE % WERE			0		0			
COMMENTS			0		0			
OBSERVER'S NAME (PRINT)			0		0			
Mike Johnson			0		0			
OBSERVER'S SIGNATURE			0		0			
Mike Johnson			0		0			
DATE			0		0			
1-26-16			0		0			
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			0		0			
ORGANIZATION			0		0			
Gerdau AmeriSteel			0		0			
CERTIFICATION EXPIRATION DATE			0		0			
5-13-16			0		0			
SIGNATURE			0		0			
TITLE			0		0			
DATE			0		0			
11-13-15			0		0			

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME			OBSERVATION DATE		START TIME		STOP TIME	
Gerdau AmeriSteel			1-27-16		10:30 AM		10:48 AM	
ADDRESS			SEC		MIN		COMMENTS	
801 Gerdau AmeriSteel Rd			0		15		30	
CITY			45					
Jackson			0		0		0	
STATE			0		0		0	
TN			0		0		0	
ZIP			0		0		0	
38305			0		0		0	
PHONE			0		0		0	
(731) 424-5600			0		0		0	
SOURCE ID NUMBER			0		0		0	
57-0189-01			0		0		0	
PROCESS EQUIPMENT			0		0		0	
Electric Arc Furnace			0		0		0	
OPERATING MODE			0		0		0	
Melt			0		0		0	
CONTROL EQUIPMENT			0		0		0	
Baghouse 1 & 2			0		0		0	
OPERATING MODE			0		0		0	
Continuous			0		0		0	
DESCRIBE EMISSION POINT			0		0		0	
START Outlet on top of Baghouse			0		0		0	
HEIGHT ABOVE GROUND LEVEL			0		0		0	
START 76 ft STOP 76 ft			0		0		0	
HEIGHT RELATIVE TO OBSERVER			0		0		0	
START 76 ft STOP 76 ft			0		0		0	
DISTANCE FROM OBSERVER			0		0		0	
START 380 ft STOP 380 ft			0		0		0	
DIRECTION FROM OBSERVER			0		0		0	
START North STOP North			0		0		0	
DESCRIBE VISIBLE EMISSIONS			0		0		0	
START			0		0		0	
STOP			0		0		0	
EMISSION COLOR			0		0		0	
IF WATER DROPLET PLUME:			0		0		0	
START			0		0		0	
STOP			0		0		0	
ATTACHED ☐ DETACHED ☐			0		0		0	
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			0		0		0	
START Outlet (exit) STOP Outlet (exit)			0		0		0	
DESCRIBE PLUME BACKGROUND			0		0		0	
START Sky STOP Sky			0		0		0	
BACKGROUND COLOR			0		0		0	
START Blue STOP Blue			0		0		0	
SKY CONDITIONS			0		0		0	
START Clear STOP Clear			0		0		0	
WIND SPEED			0		0		0	
START 5-10 mph STOP 5-10 mph			0		0		0	
WIND DIRECTION			0		0		0	
START N STOP N			0		0		0	
AMBIENT TEMP.			0		0		0	
START 40° STOP 40°			0		0		0	
WET BULB TEMP.			0		0		0	
RH, percent			0		0		0	
SOURCE LAYOUT SKETCH			0		0		0	
DRAW NORTH ARROW			0		0		0	
			0		0		0	
APPLICABLE OPACITY STANDARD			0		0		0	
EPA METHOD 9 ☒ TVEE METHOD 2 ☐			0		0		0	
3 % OPACITY			0		0		0	
TVEE METHOD 1 ☐ TVEE METHOD 3 ☐			0		0		0	
AVERAGE OPACITY FOR HIGHEST PERIOD			0		0		0	
NUMBER OF READING ABOVE % WERE			0		0		0	
OBSERVER'S NAME (PRINT)			0		0		0	
Mike Johnson			0		0		0	
OBSERVER'S SIGNATURE			0		0		0	
Mike Johnson			0		0		0	
DATE			0		0		0	
1-27-16			0		0		0	
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			0		0		0	
ORGANIZATION			0		0		0	
Gerdau AmeriSteel			0		0		0	
CERTIFICATION EXPIRATION DATE			0		0		0	
5-13-16			0		0		0	
SIGNATURE			0		0		0	
DATE			0		0		0	
11-13-15			0		0		0	
VERIFIED BY			0		0		0	
State Of Tennessee Carl Koonz			0		0		0	

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau AmeriSteel		OBSERVATION DATE 1-28-16		START TIME 10:10 AM		STOP TIME 11:28 AM	
ADDRESS 801 Gerdau AmeriSteel Rd		SEC MIN		0	15	30	45
CITY Jackson		STATE TN		ZIP 38305		COMMENTS	
PHONE (731) 424-5600		SOURCE ID NUMBER 57-0189-01		1		0 0 0 0	
PROCESS EQUIPMENT Electric Arc Furnace		OPERATING MODE Heat		2		0 0 0 0	
CONTROL EQUIPMENT Baghouse 1 & 2		OPERATING MODE Continuous		3		0 0 0 0	
DESCRIBE EMISSION POINT Outlet on top of Baghouse		4		0		0 0 0 0	
HEIGHT ABOVE GROUND LEVEL START 76 ft STOP 76 ft		HEIGHT RELATIVE TO OBSERVER START 76 ft STOP 76 ft		5		0 0 0 0	
DISTANCE FROM OBSERVER START 380 ft STOP 380 ft		DIRECTION FROM OBSERVER START North STOP North		6		0 0 0 0	
DESCRIBE VISIBLE EMISSIONS		7		0		0 0 0 0	
START		STOP		8		0 0 0 0	
EMISSION COLOR		IF WATER DROPLET PLUME		9		0 0 0 0	
START		STOP		10		0 0 0 0	
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED		ATTACHED ☐ DETACHED ☐		11		0 0 0 0	
START Outlet (exit)		STOP Outlet (exit)		12		0 0 0 0	
DESCRIBE PLUME BACKGROUND		13		0		0 0 0 0	
START Sky		STOP Sky		14		0 0 0 0	
BACKGROUND COLOR		SKY CONDITIONS		15		0 0 0 0	
START Blue		STOP Blue		16		0 0 0 0	
WIND SPEED		WIND DIRECTION		17		0 0 0 0	
START 0-5 mph		STOP 5 mph		18		0 0 0 0	
AMBIENT TEMP.		WET BULB TEMP.		19			
START 44°		STOP 44°		20			
RH, percent		21					
SOURCE LAYOUT SKETCH		DRAW NORTH ARROW		22			
				23			
				24			
COMMENTS		APPLICABLE OPACITY STANDARD		EPA METHOD 9 ☒		TVEE METHOD 2 ☐	
		3 % OPACITY		TVEE METHOD 1 ☐		TVEE METHOD 3 ☐	
		AVERAGE OPACITY FOR HIGHEST PERIOD		NUMBER OF READING ABOVE % WERE		0 0	
		OBSERVER'S NAME (PRINT)		OBSERVER'S SIGNATURE		DATE	
		Mike Johnson				1-28-16	
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS		ORGANIZATION		CERTIFICATION EXPIRATION DATE			
SIGNATURE		Gerdau AmeriSteel		5-12-16			
TITLE		VERIFIED BY		DATE			
		State Of Tennessee/Carl Kuntz		11-13-15			

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau AmeriSteel			OBSERVATION DATE 1-29-14			START TIME 9:30am		STOP TIME 9:48am	
ADDRESS 801 Gerdau AmeriSteel Rd			SEC MIN		0	15	30	45	COMMENTS
CITY Jackson			STATE TN		ZIP 38305				
PHONE (731) 424-5600			SOURCE ID NUMBER 57-0189-01						
PROCESS EQUIPMENT Electric Arc Furnace			OPERATING MODE Hot						
CONTROL EQUIPMENT Baghouse 1 & 2			OPERATING MODE Continuous						
DESCRIBE EMISSION POINT Outlet on top of Baghouse									
HEIGHT ABOVE GROUND LEVEL START 76 ft STOP 76 ft			HEIGHT RELATIVE TO OBSERVER START 76 ft STOP 76 ft						
DISTANCE FROM OBSERVER START 380 ft STOP 380 ft			DIRECTION FROM OBSERVER START North STOP North						
DESCRIBE VISIBLE EMISSIONS									
START			STOP						
EMISSION COLOR			IF WATER DROPLET PLUME						
START			STOP						
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED									
START Outlet (exit)			STOP Outlet (exit)						
DESCRIBE PLUME BACKGROUND									
START Sky			STOP Sky						
BACKGROUND COLOR			SKY CONDITIONS						
START Blue STOP Blue			START Clear STOP Clear						
WIND SPEED			WIND DIRECTION						
START 0 mph STOP 0 mph			START S STOP S						
AMBIENT TEMP.			WET BULB TEMP.		RH, percent				
START 47° STOP 47°									
SOURCE LAYOUT SKETCH			DRAW NORTH ARROW						
APPLICABLE OPACITY STANDARD			EPA METHOD 9 ☒ TVEE METHOD 2 ☐						
3 % OPACITY			TVEE METHOD 1 ☐ TVEE METHOD 3 ☐						
AVERAGE OPACITY FOR HIGHEST PERIOD			NUMBER OF READING ABOVE % WERE						
COMMENTS			OBSERVER'S NAME (PRINT) Mike Johnson						
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			OBSERVER'S SIGNATURE Mike Johnson						
SIGNATURE			DATE 1-29-14						
TITLE			ORGANIZATION Gerdau AmeriSteel						
DATE			CERTIFICATION EXPIRATION DATE 5-13-16						
VERIFIED BY State Of Tennessee/Carl Koontz			DATE 11-13-15						

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME			OBSERVATION DATE				START TIME	STOP TIME
Gerdau AmeriSteel			1-30-16				2:00 PM	2:18 PM
ADDRESS			SEC	0	15	30	45	COMMENTS
801 Gerdau AmeriSteel Rd			MIN					
CITY	STATE	ZIP	1	0	0	0	0	
Jackson	TN	38305	2	0	0	0	0	
PHONE	SOURCE ID NUMBER		3	0	0	0	0	
(731) 424-5600	57-0189-01		4	0	0	0	0	
PROCESS EQUIPMENT		OPERATING MODE	5	0	0	0	0	
Electric Arc Furnace		Melting	6	0	0	0	0	
CONTROL EQUIPMENT		OPERATING MODE	7	0	0	0	0	
Baghouse 1 & 2		Continuous	8	0	0	0	0	
DESCRIBE EMISSION POINT			9	0	0	0	0	
START Outlet on top of Baghouse			10	0	0	0	0	
HEIGHT ABOVE GROUND LEVEL		HEIGHT RELATIVE TO OBSERVER	11	0	0	0	0	
START 76 ft STOP 76 ft		START 76 ft STOP 76 ft	12	0	0	0	0	
DISTANCE FROM OBSERVER		DIRECTION FROM OBSERVER	13	0	0	0	0	
START 380 ft STOP 380 ft		START North STOP North	14	0	0	0	0	
DESCRIBE VISIBLE EMISSIONS			15	0	0	0	0	
START		STOP	16	0	0	0	0	
EMISSION COLOR		IF WATER DROPLET PLUME:	17	0	0	0	0	
START		ATTACHED ☐ DETACHED ☐	18	0	0	0	0	
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			19					
START Outlet (exit)		STOP Outlet (exit)	20					
DESCRIBE PLUME BACKGROUND			21					
START Sky		STOP Sky	22					
BACKGROUND COLOR		SKY CONDITIONS	23					
START Blue STOP Blue		START Clear STOP Clear	24					
WIND SPEED		WIND DIRECTION	25					
START 15 to 20 STOP 15 to 20		START SW STOP SW	26					
AMBIENT TEMP.		WET BULB TEMP.	27					
START 69 STOP 69		RH, percent	28					
SOURCE LAYOUT SKETCH			29					
DRAW NORTH ARROW			30					
			APPLICABLE OPACITY STANDARD 3 % OPACITY					EPA METHOD 9 ☐ TVEE METHOD 2 ☐ TVEE METHOD 1 ☐ TVEE METHOD 3 ☐
			AVERAGE OPACITY FOR HIGHEST PERIOD 0					NUMBER OF READING ABOVE % WERE 0
COMMENTS			OBSERVER'S NAME (PRINT)					
			Tony Perry					
			OBSERVER'S SIGNATURE					
			[Signature]					
			DATE					
			1-30-16					
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			ORGANIZATION					
			Gerdau AmeriSteel					
SIGNATURE			VERIFIED BY					
			State Of Tennessee/Carl Koontz					
TITLE			DATE					
			11-14-15					

VISIBLE EMISSION OBSERVATION

SOURCE NAME				OBSERVATION DATE				START TIME		STOP TIME	
Gerdau AmeriSteel				2-2-16				10:00 AM		10:18 AM	
ADDRESS				SEC				COMMENTS			
801 Gerdau AmeriSteel Rd				MIN							
				0							
				15							
				20							
				45							
CITY				1							
Jackson				2							
STATE				3							
TN				4							
ZIP				5							
38305				6							
PHONE				7							
(731) 424-5600				8							
SOURCE ID NUMBER				9							
57-0189-01				10							
PROCESS EQUIPMENT				11							
Electric Arc Furnace				12							
OPERATING MODE				13							
melt				14							
CONTROL EQUIPMENT				15							
Baghouse 1 & 2				16							
OPERATING MODE				17							
Continuous				18							
DESCRIBE EMISSION POINT				19							
START Outlet on top of Baghouse				20							
HEIGHT ABOVE GROUND LEVEL				21							
START 76 ft STOP 76 ft				22							
HEIGHT RELATIVE TO OBSERVER				23							
START 76 ft STOP 76 ft				24							
DISTANCE FROM OBSERVER				25							
DIRECTION FROM OBSERVER				26							
START 380 ft STOP 380 ft				27							
START North STOP North				28							
DESCRIBE VISIBLE EMISSIONS				29							
START				30							
STOP											
EMISSION COLOR											
IF WATER DROPLET PLUME											
START											
STOP											
ATTACHED ☐ DETACHED ☐											
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED											
START Outlet (exit)											
STOP Outlet (exit)											
DESCRIBE PLUME BACKGROUND											
START Sky											
STOP Sky											
BACKGROUND COLOR											
SKY CONDITIONS											
START gray STOP gray											
START cloudy STOP cloudy											
WIND SPEED											
WIND DIRECTION											
START 0-10 mph STOP 0-10 mph											
START W STOP W											
AMBIENT TEMP.											
WET BULB TEMP.											
RH, percent											
START 70.0 STOP 70.7											
SOURCE LAYOUT SKETCH				DRAW NORTH ARROW							
BUN											
WIND											
PLUME AND STACK											
COMMENTS				OBSERVER'S NAME (PRINT)				OBSERVER'S SIGNATURE			
				Royale H. Herron				Royale H. Herron			
				OBSERVER'S SIGNATURE				DATE			
				Royale H. Herron				2-2-16			
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS				ORGANIZATION				CERTIFICATION EXPIRATION DATE			
				Gerdau AmeriSteel				5-14-16			
SIGNATURE				VERIFIED BY				DATE			
				State Of Tennessee				11-16-15			
TITLE				State Of Tennessee							
				Carl Koontz							

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME			OBSERVATION DATE				START TIME	STOP TIME
Gerdau AmeriSteel			2-3-16				10:00 AM	10:18 AM
ADDRESS			SEC	0	15	30	45	COMMENTS
801 Gerdau AmeriSteel Rd			MIN					
CITY	STATE	ZIP	1	0	0	0	0	
Jackson	TN	38305	2	0	0	0	0	
PHONE	SOURCE ID NUMBER		3	0	0	0	0	
(731) 424-5600	57-0189-01		4	0	0	0	0	
PROCESS EQUIPMENT		OPERATING MODE	5	0	0	0	0	
Electric Arc Furnace		melt	6	0	0	0	0	
CONTROL EQUIPMENT		OPERATING MODE	7	0	0	0	0	
Baghouse 1 & 2		Continuous	8	0	0	0	0	
DESCRIBE EMISSION POINT			9	0	0	0	0	
START Outlet on top of Baghouse			10	0	0	0	0	
HEIGHT ABOVE GROUND LEVEL		HEIGHT RELATIVE TO OBSERVER	11	0	0	0	0	
START 76 ft STOP 76 ft		START 76 ft STOP 76 ft	12	0	0	0	0	
DISTANCE FROM OBSERVER		DIRECTION FROM OBSERVER	13	0	0	0	0	
START 380 ft STOP 380 ft		START North STOP North	14	0	0	0	0	
DESCRIBE VISIBLE EMISSIONS			15	0	0	0	0	
START		STOP	16	0	0	0	0	
EMISSION COLOR		IF WATER DROPLET PLUME:	17	0	0	0	0	
START		STOP	18	0	0	0	0	
ATTACHED ☐ DETACHED ☐			19					
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			20					
START Outlet (exit)		STOP Outlet (exit)	21					
DESCRIBE PLUME BACKGROUND			22					
START Sky		STOP Sky	23					
BACKGROUND COLOR		SKY CONDITIONS	24					
START white STOP white		START clear STOP clear	25					
WIND SPEED		WIND DIRECTION	26					
START 0-10 mph STOP 0-10 mph		START W STOP W	27					
AMBIENT TEMP.		WET BULB TEMP.	28					
START 50° STOP 50°		RH, percent	29					
SOURCE LAYOUT SKETCH			30					
DRAW NORTH ARROW								
APPLICABLE OPACITY STANDARD			EPA METHOD 9 ☒		TVEE METHOD 2 ☐			
3 % OPACITY			TVEE METHOD 1 ☐		TVEE METHOD 3 ☐			
AVERAGE OPACITY FOR HIGHEST PERIOD			NUMBER OF READING ABOVE % WERE					
COMMENTS			OBSERVER'S NAME (PRINT)		O O			
			Roy dell Herron					
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			OBSERVER'S SIGNATURE		DATE			
			Roy dell Herron		2-3-16			
SIGNATURE			ORGANIZATION		CERTIFICATION EXPIRATION DATE			
			Gerdau AmeriSteel		5-16-16			
TITLE			VERIFIED BY		DATE			
			State Of Tennessee Carl Koonitz		11-16-15			

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau AmeriSteel			OBSERVATION DATE 2-4-16			START TIME 10:10 Am		STOP TIME 10:28 Am	
ADDRESS 801 Gerdau AmeriSteel Rd			SEC MIN		0	15	30	45	COMMENTS
CITY Jackson	STATE TN	ZIP 38305	1		0	0	0	0	
PHONE (731) 424-5600	SOURCE ID NUMBER 57-0189-01		2		0	0	0	0	
PROCESS EQUIPMENT Electric Arc Furnace		OPERATING MODE mett	3		0	0	0	0	
CONTROL EQUIPMENT Baghouse 1 & 2		OPERATING MODE Continuous	4		0	0	0	0	
DESCRIBE EMISSION POINT Outlet on top of Baghouse			5		0	0	0	0	
HEIGHT ABOVE GROUND LEVEL START 76 ft STOP 76 ft			6		0	0	0	0	
HEIGHT RELATIVE TO OBSERVER START 76 ft STOP 76 ft			7		0	0	0	0	
DISTANCE FROM OBSERVER START 380 ft STOP 380 ft			8		0	0	0	0	
DIRECTION FROM OBSERVER START North STOP North			9		0	0	0	0	
DESCRIBE VISIBLE EMISSIONS			10		0	0	0	0	
START			11		0	0	0	0	
STOP			12		0	0	0	0	
EMISSION COLOR			13		0	0	0	0	
IF WATER DROPLET PLUME			14		0	0	0	0	
START			15		0	0	0	0	
STOP			16		0	0	0	0	
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			17		0	0	0	0	
START Outlet (exit)			18		0	0	0	0	
STOP Outlet (exit)			19		0	0	0	0	
DESCRIBE PLUME BACKGROUND			20		0	0	0	0	
START Sky			21		0	0	0	0	
STOP Sky			22		0	0	0	0	
BACKGROUND COLOR			23		0	0	0	0	
START white			24		0	0	0	0	
STOP white			25		0	0	0	0	
WIND SPEED			26		0	0	0	0	
START 0-10 mph			27		0	0	0	0	
STOP 0-10 mph			28		0	0	0	0	
WIND DIRECTION			29		0	0	0	0	
START W			30		0	0	0	0	
STOP W									
AMBIENT TEMP.									
START 46°									
STOP 46°									
WET BULB TEMP.									
RH, percent									
SOURCE LAYOUT SKETCH									
DRAW NORTH ARROW									

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau AmeriSteel			OBSERVATION DATE 2-5-16		START TIME 11:00 Am	STOP TIME 11:18 Am
ADDRESS 801 Gerdau AmeriSteel Rd			SEC MIN	0	15	30
CITY Jackson			STATE TN		ZIP 38305	
PHONE (731) 424-5600			SOURCE ID NUMBER 57-0189-01			
PROCESS EQUIPMENT Electric Arc Furnace			OPERATING MODE melt			
CONTROL EQUIPMENT Baghouse 1 & 2			OPERATING MODE Continuous			
DESCRIBE EMISSION POINT Outlet on top of Baghouse						
HEIGHT ABOVE GROUND LEVEL START 76 ft STOP 76 ft			HEIGHT RELATIVE TO OBSERVER START 76 ft STOP 76 ft			
DISTANCE FROM OBSERVER START 380 ft STOP 380 ft			DIRECTION FROM OBSERVER START North STOP North			
DESCRIBE VISIBLE EMISSIONS						
START _____ STOP _____						
EMISSION COLOR			IF WATER DROPLET PLUME?			
START _____ STOP _____			ATTACHED ☐ DETACHED ☐			
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED						
START Outlet (exit) STOP Outlet (exit)						
DESCRIBE PLUME BACKGROUND						
START Sky STOP Sky						
BACKGROUND COLOR			SKY CONDITIONS			
START blue STOP blue			START clear STOP clear			
WIND SPEED			WIND DIRECTION			
START 0-10 mph STOP 0-10 mph			START W STOP W			
AMBIENT TEMP.			WET BULB TEMP.		RH, percent	
START 50° STOP 50°						
SOURCE LAYOUT SKETCH			DRAW NORTH ARROW			
SUN WIND PLUME AND STACK						
COMMENTS						
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS						
SIGNATURE			OBSERVER'S NAME (PRINT)		DATE	
TITLE			OBSERVER'S SIGNATURE		DATE	
DATE			ORGANIZATION		CERTIFICATION EXPIRATION DATE	
			Gerdau AmeriSteel		5-16-16	
			State Of Tennessee (Carl Koonz)		11-16-15	

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau AmeriSteel			OBSERVATION DATE 2-9-16				START TIME 11:35 AM		STOP TIME 11:53 AM	
ADDRESS 801 Gerdau AmeriSteel Rd			SEC MIN		0	15	30	45	COMMENTS	
					0	0	0	0		
CITY Jackson	STATE TN	ZIP 38305	1		0	0	0	0		
PHONE (731) 424-5600			2		0	0	0	0		
SOURCE ID NUMBER 57-0189-01			3		0	0	0	0		
PROCESS EQUIPMENT Electric Arc Furnace			4		0	0	0	0		
OPERATING MODE Hot			5		0	0	0	0		
CONTROL EQUIPMENT Baghouse 1 & 2			6		0	0	0	0		
OPERATING MODE Continuous			7		0	0	0	0		
DESCRIBE EMISSION POINT Outlet on top of Baghouse			8		0	0	0	0		
HEIGHT ABOVE GROUND LEVEL START 76 ft STOP 76 ft			9		0	0	0	0		
HEIGHT RELATIVE TO OBSERVER START 76 ft STOP 76 ft			10		0	0	0	0		
DISTANCE FROM OBSERVER START 380 ft STOP 380 ft			11		0	0	0	0		
DIRECTION FROM OBSERVER START North STOP North			12		0	0	0	0		
DESCRIBE VISIBLE EMISSIONS			13		0	0	0	0		
START			14		0	0	0	0		
STOP			15		0	0	0	0		
EMISSION COLOR			16		0	0	0	0		
IF WATER DROPLET PLUME:			17		0	0	0	0		
START			18		0	0	0	0		
STOP			19		0	0	0	0		
ATTACHED ☐ DETACHED ☒			20		0	0	0	0		
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			21		0	0	0	0		
START Outlet (exit)			22		0	0	0	0		
STOP Outlet (exit)			23		0	0	0	0		
DESCRIBE PLUME BACKGROUND			24		0	0	0	0		
START Sky			25		0	0	0	0		
STOP Sky			26		0	0	0	0		
BACKGROUND COLOR			27		0	0	0	0		
START Gray			28		0	0	0	0		
STOP Gray			29		0	0	0	0		
WIND SPEED			30		0	0	0	0		
START 5-10			31		0	0	0	0		
STOP 5-10 mph			32		0	0	0	0		
WIND DIRECTION			33		0	0	0	0		
START N			34		0	0	0	0		
STOP N			35		0	0	0	0		
AMBIENT TEMP.			36		0	0	0	0		
START 28°			37		0	0	0	0		
STOP 28°			38		0	0	0	0		
WET BULB TEMP.			39		0	0	0	0		
RH, percent			40		0	0	0	0		
SOURCE LAYOUT SKETCH			41		0	0	0	0		
DRAW NORTH ARROW			42		0	0	0	0		
			43		0	0	0	0		
			44		0	0	0	0		
			45		0	0	0	0		
			46		0	0	0	0		
			47		0	0	0	0		
			48		0	0	0	0		
			49		0	0	0	0		
			50		0	0	0	0		
			51		0	0	0	0		
			52		0	0	0	0		
			53		0	0	0	0		
			54		0	0	0	0		
			55		0	0	0	0		
			56		0	0	0	0		
			57		0	0	0	0		
			58		0	0	0	0		
			59		0	0	0	0		
			60		0	0	0	0		
			61		0	0	0	0		
			62		0	0	0	0		
			63		0	0	0	0		
			64		0	0	0	0		
			65		0	0	0	0		
			66		0	0	0	0		
			67		0	0	0	0		
			68		0	0	0	0		
			69		0	0	0	0		
			70		0	0	0	0		
			71		0	0	0	0		
			72		0	0	0	0		
			73		0	0	0	0		
			74		0	0	0	0		
			75		0	0	0	0		
			76		0	0	0	0		
			77		0	0	0	0		
			78		0	0	0	0		
			79		0	0	0	0		
			80		0	0	0	0		
			81		0	0	0	0		
			82		0	0	0	0		
			83		0	0	0	0		
			84		0	0	0	0		
			85		0	0	0	0		
			86		0	0	0	0		
			87		0	0	0	0		
			88		0	0	0	0		
			89		0	0	0	0		
			90		0	0	0	0		
			91		0	0	0	0		
			92		0	0	0	0		
			93		0	0	0	0		
			94		0	0	0	0		
			95		0	0	0	0		
			96		0	0	0	0		
			97		0	0	0	0		
			98		0	0	0	0		
			99		0	0	0	0		
			100		0	0	0	0		

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

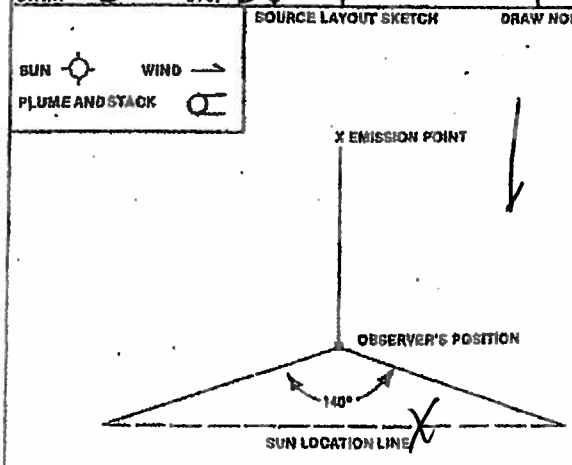
VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau AmeriSteel			OBSERVATION DATE 8-10-14		START TIME 11:00 AM	STOP TIME 11:18 AM
ADDRESS 801 Gerdau AmeriSteel Rd			SEC MIN	0	15	30
CITY Jackson			STATE TN		ZIP 38305	
PHONE (731) 424-5600			SOURCE ID NUMBER 57-0189-01		COMMENTS	
PROCESS EQUIPMENT Electric Arc Furnace			OPERATING MODE Melt			
CONTROL EQUIPMENT Baghouse 1 & 2			OPERATING MODE Continuous			
DESCRIBE EMISSION POINT Outlet on top of Baghouse						
HEIGHT ABOVE GROUND LEVEL START 76 ft STOP 76 ft			HEIGHT RELATIVE TO OBSERVER START 76 ft STOP 76 ft			
DISTANCE FROM OBSERVER START 380 ft STOP 380 ft			DIRECTION FROM OBSERVER START North STOP North			
DESCRIBE VISIBLE EMISSIONS						
START			STOP			
EMISSION COLOR			IF WATER DROPLET PLUME			
START			STOP			
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED						
START Outlet (exit)			STOP Outlet (exit)			
DESCRIBE PLUME BACKGROUND						
START Sky			STOP Sky			
BACKGROUND COLOR			SKY CONDITIONS			
START Blue STOP Blue			START Clear STOP Clear			
WIND SPEED			WIND DIRECTION			
START 5-10 mph STOP 5-10 mph			START N STOP N			
AMBIENT TEMP.			WET BULB TEMP.		RH, percent	
START 28° STOP 28°						
SOURCE LAYOUT SKETCH			DRAW NORTH ARROW			
COMMENTS						
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS						
SIGNATURE			OBSERVER'S NAME (PRINT)		DATE	
TITLE			OBSERVER'S SIGNATURE		DATE	
DATE			ORGANIZATION		CERTIFICATION EXPIRATION DATE	
			State Of Tennessee		5-13-16	
			VERIFIED BY		DATE	
			State Of Tennessee		11-13-15	

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

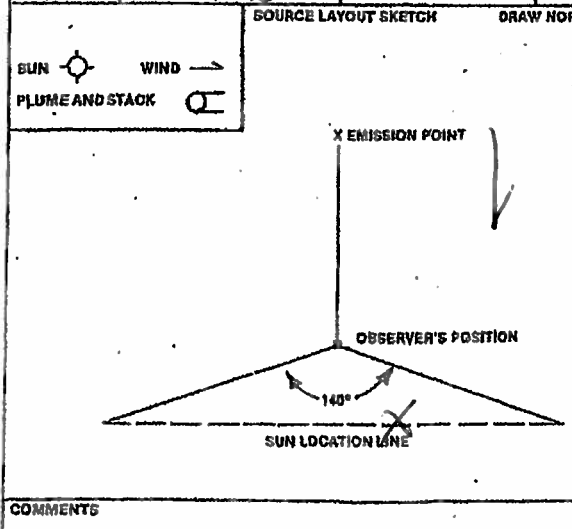
VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau AmeriSteel		OBSERVATION DATE 2-11-16		START TIME 9:40 AM		STOP TIME 9:58 AM	
ADDRESS 801 Gerdau AmeriSteel Rd		CITY Jackson		STATE TN		ZIP 38305	
PHONE (731) 424-5600		SOURCE ID NUMBER 57-0189-01		PROCESS EQUIPMENT Electric Arc Furnace		OPERATING MODE Melt	
CONTROL EQUIPMENT Baghouse 1 & 2		OPERATING MODE Continuous		DESCRIBE EMISSION POINT Outlet on top of Baghouse		START 76 ft STOP 76 ft	
HEIGHT ABOVE GROUND LEVEL 76 ft		HEIGHT RELATIVE TO OBSERVER 76 ft		DISTANCE FROM OBSERVER 380 ft		DIRECTION FROM OBSERVER North	
DESCRIBE VISIBLE EMISSIONS START _____ STOP _____		EMISSION COLOR Blue		IF WATER DROPLET PLUME? NO		ATTACHED ☐ DETACHED ☐	
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED Outlet (exit)		DESCRIBE PLUME BACKGROUND Sky		SKY CONDITIONS Clear		WIND DIRECTION N	
WIND SPEED 0-5 mph		WET BULB TEMP. 36'		RH, percent		AMBIENT TEMP.	
SOURCE LAYOUT SKETCH 		DRAW NORTH ARROW 1		APPLICABLE OPACITY STANDARD 3 % OPACITY		EPA METHOD 9 ☐ TVEE METHOD 2 ☐	
COMMENTS		OBSERVER'S NAME (PRINT) Mike Johnson		OBSERVER'S SIGNATURE Mike Johnson		DATE 2-11-16	
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS		ORGANIZATION Gerdau AmeriSteel		VERIFIED BY State Of Tennessee/Carl Rootz		CERTIFICATION EXPIRATION DATE 5-13-16	
SIGNATURE TITLE		DATE		DATE 11-13-15			

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau AmeriSteel			OBSERVATION DATE 2-12-16			START TIME 10:15 AM		STOP TIME 10:33 AM	
ADDRESS 801 Gerdau AmeriSteel Rd			SEC MIN		0	15	30	45	COMMENTS
					0	0	0	0	
CITY Jackson	STATE TN	ZIP 38305	2		0	0	0	0	
PHONE (731) 424-5600	SOURCE ID NUMBER 57-0189-01		3		0	0	0	0	
PROCESS EQUIPMENT Electric Arc Furnace		OPERATING MODE Mut	4		0	0	0	0	
CONTROL EQUIPMENT Baghouse 1 & 2		OPERATING MODE Continuous	5		0	0	0	0	
DESCRIBE EMISSION POINT Outlet on top of Baghouse			6		0	0	0	0	
HEIGHT ABOVE GROUND LEVEL START 76 ft STOP 76 ft			7		0	0	0	0	
HEIGHT RELATIVE TO OBSERVER START 76 ft STOP 76 ft			8		0	0	0	0	
DISTANCE FROM OBSERVER START 380 ft STOP 380 ft			9		0	0	0	0	
DIRECTION FROM OBSERVER START North STOP North			10		0	0	0	0	
DESCRIBE VISIBLE EMISSIONS			11		0	0	0	0	
START _____ STOP _____			12		0	0	0	0	
EMISSION COLOR _____			13		0	0	0	0	
IF WATER DROPLET PLUME: _____			14		0	0	0	0	
START _____ STOP _____ ATTACHED ☐ DETACHED ☐			15		0	0	0	0	
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			16		0	0	0	0	
START Outlet (exit) STOP Outlet (exit)			17		0	0	0	0	
DESCRIBE PLUME BACKGROUND			18		0	0	0	0	
START Sky STOP Sky			19		0	0	0	0	
BACKGROUND COLOR Blue/White SKY CONDITIONS Clear			20		0	0	0	0	
WIND SPEED 0 mph WIND DIRECTION N			21		0	0	0	0	
AMBIENT TEMP. 43° WET BULB TEMP. _____ RH, percent _____			22		0	0	0	0	
START 43° STOP 43°			23		0	0	0	0	
SOURCE LAYOUT SKETCH 			24		0	0	0	0	
DRAW NORTH ARROW 1			25		0	0	0	0	
APPLICABLE OPACITY STANDARD 3 % OPACITY			26		0	0	0	0	
EPA METHOD 9 ☐ TVEE METHOD 2 ☐			27		0	0	0	0	
TVEE METHOD 1 ☐ TVEE METHOD 3 ☐			28		0	0	0	0	
AVERAGE OPACITY FOR HIGHEST PERIOD			29		0	0	0	0	
NUMBER OF READING ABOVE % WERE 0 0			30		0	0	0	0	
COMMENTS			OBSERVER'S NAME (PRINT) Mike Johnson						
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			OBSERVER'S SIGNATURE Mike Johnson						
SIGNATURE			DATE 2-12-16						
TITLE			ORGANIZATION Gerdau AmeriSteel						
DATE			CERTIFICATION EXPIRATION DATE 5-13-16						
			VERIFIED BY State Of Tennessee/Carl Koonitz						
			DATE 11-13-15						

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau AmeriSteel			OBSERVATION DATE 2-13-16		START TIME 12:40 PM	STOP TIME 12:58 PM
ADDRESS 801 Gerdau AmeriSteel Rd			SEC MIN	0	15	30
CITY Jackson			STATE TN		ZIP 38305	
PHONE (731) 424-5600			SOURCE ID NUMBER 57-0189-01		COMMENTS	
PROCESS EQUIPMENT Electric Arc Furnace			OPERATING MODE			
CONTROL EQUIPMENT Baghouse 1 & 2			OPERATING MODE Continuous			
DESCRIBE EMISSION POINT Outlet on top of Baghouse			START		STOP	
HEIGHT ABOVE GROUND LEVEL START 76 ft STOP 76 ft			HEIGHT RELATIVE TO OBSERVER START 76 ft STOP 76 ft			
DISTANCE FROM OBSERVER START 380 ft STOP 380 ft			DIRECTION FROM OBSERVER START North STOP North			
DESCRIBE VISIBLE EMISSIONS			START		STOP	
EMISSION COLOR Blue			IF WATER DROPLET PLUME: ☐ ATTACHED ☐ DETACHED			
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED Outlet (exit)			START		STOP	
DESCRIBE PLUME BACKGROUND Sky			SKY CONDITIONS Clear			
WIND SPEED 5 to 10			WIND DIRECTION NE			
AMBIENT TEMP. 33°			WET BULB TEMP.		RH, percent	
SUN LOCATION LINE			DRAW NORTH ARROW			
SOURCE LAYOUT SKETCH			OBSERVER'S POSITION			
COMMENTS			OBSERVER'S NAME (PRINT) Tony Perry			
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			OBSERVER'S SIGNATURE Tony Perry		DATE 2-13-16	
SIGNATURE			ORGANIZATION Gerdau AmeriSteel		CERTIFICATION EXPIRATION DATE 5-16-16	
TITLE			VERIFIED BY State Of Tennessee (Carl Koontz)		DATE 11-16-15	

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau AmeriSteel			OBSERVATION DATE 2-16-16				START TIME 10:15 AM		STOP TIME 10:33 AM	
ADDRESS 801 Gerdau AmeriSteel Rd			SEC MIN		0	15	30	45	COMMENTS	
CITY Jackson			STATE TN		ZIP 38305					
PHONE (731) 424-5600			SOURCE ID NUMBER 57-0189-01							
PROCESS EQUIPMENT Electric Arc Furnace			OPERATING MODE melt							
CONTROL EQUIPMENT Baghouse 1 & 2			OPERATING MODE Continuous							
DESCRIBE EMISSION POINT Outlet on top of Baghouse										
HEIGHT ABOVE GROUND LEVEL START 76 ft STOP 76 ft			HEIGHT RELATIVE TO OBSERVER START 76 ft STOP 76 ft							
DISTANCE FROM OBSERVER START 380 ft STOP 380 ft			DIRECTION FROM OBSERVER START North STOP North							
DESCRIBE VISIBLE EMISSIONS										
START			STOP							
EMISSION COLOR			IF WATER DROPLET PLUME?							
START			STOP							
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED										
START Outlet (exit)			STOP Outlet (exit)							
DESCRIBE PLUME BACKGROUND										
START Sky			STOP Sky							
BACKGROUND COLOR			SKY CONDITIONS							
START gray STOP gray			START cloudy STOP cloudy							
WIND SPEED			WIND DIRECTION							
START 10-15 mph STOP 0-10 mph			START W STOP W							
AMBIENT TEMP.			WET BULB TEMP.		RH, percent					
START 45° STOP 45°										
SOURCE LAYOUT SKETCH			DRAW NORTH ARROW							
APPLICABLE OPACITY STANDARD			EPA METHOD 9		TVEE METHOD 2					
3 % OPACITY										
AVERAGE OPACITY FOR HIGHEST PERIOD			TVEE METHOD 1		TVEE METHOD 3					
0 0										
NUMBER OF READING ABOVE %WERE										
COMMENTS			OBSERVER'S NAME (PRINT)							
			Roy dell Herron							
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			OBSERVER'S SIGNATURE		DATE					
			Roy dell Herron		2-16-16					
SIGNATURE			ORGANIZATION		CERTIFICATION EXPIRATION DATE					
			Gerdau AmeriSteel		5-16-14					
TITLE			VERIFIED BY		DATE					
			State Of Tennessee		11-14-15					

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME			OBSERVATION DATE		START TIME		STOP TIME	
Gerdau AmeriSteel			2-17-14		1:30 Pm		1:48 Pm	
ADDRESS			SEC	0	15	30	45	COMMENTS
801 Gerdau AmeriSteel Rd			MIN					
CITY	STATE	ZIP	1	0	0	0	0	
Jackson	TN	38305	2	0	0	0	0	
PHONE	SOURCE ID NUMBER		3	0	0	0	0	
(731) 424-5600	57-0189-01		4	0	0	0	0	
PROCESS EQUIPMENT		OPERATING MODE	5	0	0	0	0	
Electric Arc Furnace		melt	6	0	0	0	0	
CONTROL EQUIPMENT		OPERATING MODE	7	0	0	0	0	
Baghouse 1 & 2		Continuous	8	0	0	0	0	
DESCRIBE EMISSION POINT			9	0	0	0	0	
START Outlet on top of Baghouse			10	0	0	0	0	
HEIGHT ABOVE GROUND LEVEL		HEIGHT RELATIVE TO OBSERVER	11	0	0	0	0	
START 76 ft STOP 76 ft		START 76 ft STOP 76 ft	12	0	0	0	0	
DISTANCE FROM OBSERVER		DIRECTION FROM OBSERVER	13	0	0	0	0	
START 380 ft STOP 380 ft		START North STOP North	14	0	0	0	0	
DESCRIBE VISIBLE EMISSIONS			15	0	0	0	0	
START		STOP	16	0	0	0	0	
EMISSION COLOR		IF WATER DROPLET PLUME	17	0	0	0	0	
START		STOP	18	0	0	0	0	
ATTACHED ☐ DETACHED ☐			19	0	0	0	0	
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			20					
START Outlet (exit)		STOP Outlet (exit)	21					
DESCRIBE PLUME BACKGROUND			22					
START Sky		STOP Sky	23					
BACKGROUND COLOR		SKY CONDITIONS	24					
START white STOP white		START clear STOP clear	25					
WIND SPEED		WIND DIRECTION	26					
START 0-10 mph STOP 0-10 mph		START W STOP W	27					
AMBIENT TEMP.		WET BULB TEMP.	28					
START 46° STOP 46°		RH, percent	29					
SOURCE LAYOUT SKETCH			30					
DRAW NORTH ARROW								
SUN WIND PLUME AND STACK								
APPLICABLE OPACITY STANDARD			EPA METHOD 9 ☒		TVEE METHOD 2 ☐			
3 % OPACITY			TVEE METHOD 1 ☐		TVEE METHOD 3 ☐			
AVERAGE OPACITY FOR HIGHEST PERIOD			NUMBER OF READING ABOVE % WERE		0/0			
COMMENTS			OBSERVER'S NAME (PRINT)					
			Royalell Herron					
			OBSERVER'S SIGNATURE					
			Royalell Herron					
			DATE					
			2-17-14					
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			ORGANIZATION					
			Gerdau AmeriSteel					
SIGNATURE			CERTIFICATION EXPIRATION DATE					
			5-16-16					
TITLE			VERIFIED BY					
			State Of Tennessee/Carl Koontz					
			DATE					
			11-16-15					

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau AmeriSteel			OBSERVATION DATE 2-18-16			START TIME 9:42 Am		STOP TIME 10:00 Am	
ADDRESS 801 Gerdau AmeriSteel Rd			SEC MIN		0	15	30	45	COMMENTS
CITY Jackson			STATE TN		ZIP 38305				
PHONE (731) 424-5600			SOURCE ID NUMBER 57-0189-01						
PROCESS EQUIPMENT Electric Arc Furnace			OPERATING MODE <i>melt</i>						
CONTROL EQUIPMENT Baghouse 1 & 2			OPERATING MODE Continuous						
DESCRIBE EMISSION POINT Outlet on top of Baghouse									
START 76 ft			STOP 76 ft						
HEIGHT ABOVE GROUND LEVEL			HEIGHT RELATIVE TO OBSERVER						
START 76 ft			STOP 76 ft						
DISTANCE FROM OBSERVER			DIRECTION FROM OBSERVER						
START 380 ft			STOP 380 ft						
START North			STOP North						
DESCRIBE VISIBLE EMISSIONS									
START			STOP						
EMISSION COLOR			IF WATER DROPLET PLUME						
START			STOP						
ATTACHED ☐			DETACHED ☐						
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED									
START Outlet (exit)			STOP Outlet (exit)						
DESCRIBE PLUME BACKGROUND									
START Sky			STOP Sky						
BACKGROUND COLOR <i>blue here</i>			SKY CONDITIONS						
START <i>white</i>			STOP <i>white</i>						
WIND SPEED			WIND DIRECTION						
START <i>0-10 mph</i>			STOP <i>0-10 mph</i>						
AMBIENT TEMP.			WET BULB TEMP.						
START <i>60°</i>			STOP <i>60°</i>						
RH, percent									
SOURCE LAYOUT SKETCH			DRAW NORTH ARROW						
APPLICABLE OPACITY STANDARD			EPA METHOD 9 ☒ TVEE METHOD 2 ☐						
3 % OPACITY			TVEE METHOD 1 ☐ TVEE METHOD 3 ☐						
AVERAGE OPACITY FOR HIGHEST PERIOD			NUMBER OF READING ABOVE % WERE						
			00						
COMMENTS			OBSERVER'S NAME (PRINT) Roydell Herron						
			OBSERVER'S SIGNATURE <i>Roydell Herron</i>						
			DATE 2-18-16						
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			ORGANIZATION Gerdau AmeriSteel						
SIGNATURE			CERTIFICATION EXPIRATION DATE 5-16-16						
TITLE			VERIFIED BY State Of Tennessee (Carl Kootz)						
			DATE 11-16-15						

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau AmeriSteel			OBSERVATION DATE 2-19-14				START TIME 1:40pm		STOP TIME 1:58pm	
ADDRESS 801 Gerdau AmeriSteel Rd			MIN	SEC	0	15	30	45	COMMENTS	
CITY Jackson	STATE TN	ZIP 38305	1		0	0	0	0		
PHONE (731) 424-5600	SOURCE ID NUMBER 57-0189-01		2		0	0	0	0		
PROCESS EQUIPMENT Electric Arc Furnace		OPERATING MODE Melt	3		0	0	0	0		
CONTROL EQUIPMENT Baghouse 1 & 2		OPERATING MODE Continuous	4		0	0	0	0		
DESCRIBE EMISSION POINT Outlet on top of Baghouse			5		0	0	0	0		
START HEIGHT ABOVE GROUND LEVEL 76 ft STOP 76 ft			6		0	0	0	0		
START HEIGHT RELATIVE TO OBSERVER 76 ft STOP 76 ft			7		0	0	0	0		
DISTANCE FROM OBSERVER 380 ft STOP 380 ft			8		0	0	0	0		
DIRECTION FROM OBSERVER North STOP North			9		0	0	0	0		
DESCRIBE VISIBLE EMISSIONS			10		0	0	0	0		
START _____ STOP _____			11		0	0	0	0		
EMISSION COLOR _____			12		0	0	0	0		
IF WATER DROPLET PLUME: _____			13		0	0	0	0		
START _____ STOP _____			14		0	0	0	0		
ATTACHED ☐ DETACHED ☐			15		0	0	0	0		
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			16		0	0	0	0		
START Outlet (exit) STOP Outlet (exit)			17		0	0	0	0		
DESCRIBE PLUME BACKGROUND			18		0	0	0	0		
START Sky STOP Sky			19		0	0	0	0		
BACKGROUND COLOR			20		0	0	0	0		
START Blue STOP Blue			21		0	0	0	0		
WIND SPEED			22		0	0	0	0		
START 10-15 mph STOP 10-15 mph			23		0	0	0	0		
WIND DIRECTION			24		0	0	0	0		
START S STOP S			25		0	0	0	0		
AMBIENT TEMP.			26		0	0	0	0		
START 70° STOP 70°			27		0	0	0	0		
WET BULB TEMP.			28		0	0	0	0		
RH, percent			29		0	0	0	0		
SOURCE LAYOUT SKETCH			30		0	0	0	0		
DRAW NORTH ARROW										
SUN WIND PLUME AND STACK										
COMMENTS			APPLICABLE OPACITY STANDARD 3 % OPACITY							
			EPA METHOD 9 ☐ TVEE METHOD 2 ☐ TVEE METHOD 1 ☐ TVEE METHOD 3 ☐							
			AVERAGE OPACITY FOR HIGHEST PERIOD 0							
			NUMBER OF READING ABOVE %WERE 0							
OBSERVER'S NAME (PRINT) Mike Johnson			DATE 2-19-14							
OBSERVER'S SIGNATURE Mike Johnson			CERTIFICATION EXPIRATION DATE 5-13-14							
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			ORGANIZATION Gerdau AmeriSteel							
SIGNATURE			VERIFIED BY State Of Tennessee/Carl Koontz							
TITLE			DATE 11-13-15							

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau AmeriSteel		OBSERVATION DATE 2-23-16		START TIME 9:30 AM		STOP TIME 9:48 AM	
ADDRESS 801 Gerdau AmeriSteel Rd		CITY Jackson		STATE TN		ZIP 38305	
PHONE (731) 424-5600		SOURCE ID NUMBER 57-0189-01		PROCESS EQUIPMENT Electric Arc Furnace		OPERATING MODE Melt	
CONTROL EQUIPMENT Baghouse 1 & 2		OPERATING MODE Continuous		DESCRIBE EMISSION POINT Outlet on top of Baghouse		START 76 ft STOP 76 ft	
HEIGHT ABOVE GROUND LEVEL 76 ft		HEIGHT RELATIVE TO OBSERVER 76 ft		DISTANCE FROM OBSERVER 380 ft		DIRECTION FROM OBSERVER North	
DESCRIBE VISIBLE EMISSIONS		START		STOP		IF WATER DROPLET PLUME	
EMISSION COLOR		START		STOP		ATTACHED ☐ DETACHED ☐	
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED		START		STOP		OUTLET (exit)	
DESCRIBE PLUME BACKGROUND		START		STOP		Sky	
BACKGROUND COLOR		START		STOP		Gray	
WIND SPEED		START		STOP		5-10 mph	
WIND DIRECTION		START		STOP		N	
AMBIENT TEMP.		START		STOP		52°	
WET BULB TEMP.		START		STOP		52°	
RH, percent		START		STOP			
SUN ☐ WIND ☐		PLUME AND STACK ☐		SOURCE LAYOUT SKETCH		DRAW NORTH ARROW	
X EMISSION POINT		OBSERVER'S POSITION		SUN LOCATION LINE		NO SUN	
COMMENTS		OBSERVER'S NAME (PRINT)		OBSERVER'S SIGNATURE		DATE	
		Mike Johnson		Mike Johnson		2-23-16	
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS		ORGANIZATION		CERTIFICATION EXPIRATION DATE		DATE	
SIGNATURE		Gerdau AmeriSteel		5-13-16		11-13-15	
TITLE		VERIFIED BY		DATE			
		State Of Tennessee		Carl Koonitz			

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau AmeriSteel			OBSERVATION DATE 2-24-16		START TIME 12:50pm	STOP TIME 1:08pm
ADDRESS 801 Gerdau AmeriSteel Rd			SEC MIN	0	15	30
CITY Jackson			STATE TN		ZIP 38305	
PHONE (731) 424-5600			SOURCE ID NUMBER 57-0189-01		COMMENTS	
PROCESS EQUIPMENT Electric Arc Furnace			OPERATING MODE Melt			
CONTROL EQUIPMENT Baghouse 1 & 2			OPERATING MODE Continuous			
DESCRIBE EMISSION POINT START Outlet on top of Baghouse						
HEIGHT ABOVE GROUND LEVEL START 76 ft STOP 76 ft			HEIGHT RELATIVE TO OBSERVER START 76 ft STOP 76 ft			
DISTANCE FROM OBSERVER START 380 ft STOP 380 ft			DIRECTION FROM OBSERVER START North STOP North			
DESCRIBE VISIBLE EMISSIONS						
START _____ STOP _____						
EMISSION COLOR			IF WATER DROPLET PLUME			
START _____ STOP _____			ATTACHED ☐ DETACHED ☐			
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED						
START Outlet (exit) STOP Outlet (exit)						
DESCRIBE PLUME BACKGROUND						
START Sky STOP Sky						
BACKGROUND COLOR			SKY CONDITIONS			
START Gray STOP Gray			START Cloudy STOP Cloudy			
WIND SPEED			WIND DIRECTION			
START 5-10 mph STOP 5-10 mph			START N STOP N			
AMBIENT TEMP.			WET BULB TEMP.		RH, percent	
START 37° STOP 37°						
SOURCE LAYOUT SKETCH			DRAW NORTH ARROW			
APPLICABLE OPACITY STANDARD			EPA METHOD 9 ☒		TVEE METHOD 2 ☐	
3 % OPACITY			TVEE METHOD 1 ☐		TVEE METHOD 3 ☐	
AVERAGE OPACITY FOR HIGHEST PERIOD			NUMBER OF READING ABOVE % WERE			
00						
COMMENTS			OBSERVER'S NAME (PRINT) Mike Johnson			
			OBSERVER'S SIGNATURE <i>Mike Johnson</i>		DATE 2-24-16	
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			ORGANIZATION Gerdau AmeriSteel		CERTIFICATION EXPIRATION DATE 5-13-16	
SIGNATURE			VERIFIED BY State Of Tennessee / Carl Koonz		DATE 11-13-15	
TITLE						
DATE						

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau AmeriSteel			OBSERVATION DATE 2-25-14		START TIME 10:10AM	STOP TIME 10:28AM
ADDRESS 801 Gerdau AmeriSteel Rd			MIN	SEC	COMMENTS	
			1	0	0	
CITY Jackson			2	0	0	
STATE TN			3	0	0	
ZIP 38305			4	0	0	
PHONE (731) 424-5600			5	0	0	
SOURCE ID NUMBER 57-0189-01			6	0	0	
PROCESS EQUIPMENT Electric Arc Furnace			7	0	0	
OPERATING MODE Melt			8	0	0	
CONTROL EQUIPMENT Baghouse 1 & 2			9	0	0	
OPERATING MODE Continuous			10	0	0	
DESCRIBE EMISSION POINT Outlet on top of Baghouse			11	0	0	
START			12	0	0	
HEIGHT ABOVE GROUND LEVEL START 76 ft STOP 76 ft			13	0	0	
HEIGHT RELATIVE TO OBSERVER START 76 ft STOP 76 ft			14	0	0	
DISTANCE FROM OBSERVER START 380 ft STOP 380 ft			15	0	0	
DIRECTION FROM OBSERVER START North STOP North			16	0	0	
DESCRIBE VISIBLE EMISSIONS			17	0	0	
START			18	0	0	
EMISSION COLOR			19	0	0	
IF WATER DROPLET PLUME			20	0	0	
START			21	0	0	
ATTACHED ☐ DETACHED ☐			22	0	0	
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			23	0	0	
START Outlet (exit) STOP Outlet (exit)			24	0	0	
DESCRIBE PLUME BACKGROUND			25	0	0	
START Sky STOP Sky			26	0	0	
BACKGROUND COLOR			27	0	0	
START Blue/White STOP Blue/White			28	0	0	
SKY CONDITIONS			29	0	0	
START Cloudy STOP Cloudy			30	0	0	
WIND SPEED						
START 5-10 mph STOP 5-10 mph						
WIND DIRECTION						
START W STOP W						
AMBIENT TEMP.						
START 43° STOP 43°						
WET BULB TEMP.						
RH, percent						
SOURCE LAYOUT SKETCH						
DRAW NORTH ARROW						
APPLICABLE OPACITY STANDARD						
3 % OPACITY						
EPA METHOD 9						
TVEE METHOD 1						
TVEE METHOD 2						
AVERAGE OPACITY FOR HIGHEST PERIOD						
0 0						
NUMBER OF READING ABOVE % WERE						
COMMENTS						
OBSERVER'S NAME (PRINT)						
Mike Johnson						
OBSERVER'S SIGNATURE						
Mike Johnson						
DATE						
2-25-14						
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS						
ORGANIZATION						
Gerdau AmeriSteel						
VERIFIED BY						
State Of Tennessee/Carl Koon						
SIGNATURE						
DATE						
11-13-15						

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

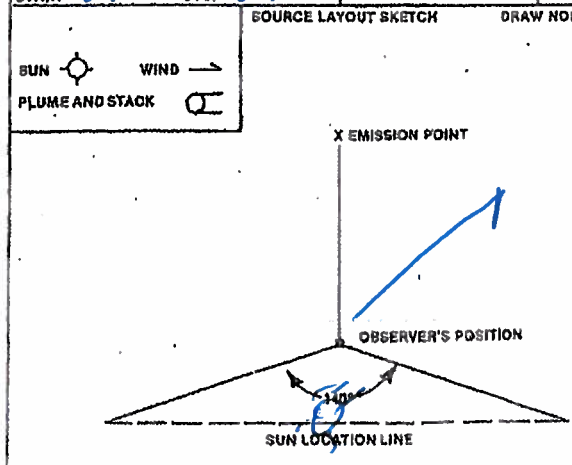
VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau AmeriSteel			OBSERVATION DATE 2-26-14		START TIME 10:20 AM	STOP TIME 10:38 AM
ADDRESS 801 Gerdau AmeriSteel Rd			SEC MIN	5	15	20
			45	COMMENTS		
CITY Jackson			1	0	0	0
STATE TN			2	0	0	0
ZIP 38305			3	0	0	0
PHONE (731) 424-5600			4	0	0	0
SOURCE ID NUMBER 57-0189-01			5	0	0	0
PROCESS EQUIPMENT Electric Arc Furnace			6	0	0	0
OPERATING MODE Melt			7	0	0	0
CONTROL EQUIPMENT Baghouse 1/2			8	0	0	0
OPERATING MODE Continuous			9	0	0	0
DESCRIBE EMISSION POINT Outlet on top of Baghouse			10	0	0	0
START			11	0	0	0
HEIGHT ABOVE GROUND LEVEL START 76 ft STOP 76 ft			12	0	0	0
HEIGHT RELATIVE TO OBSERVER START 76 ft STOP 76 ft			13	0	0	0
DISTANCE FROM OBSERVER START 380 ft STOP 380 ft			14	0	0	0
DIRECTION FROM OBSERVER START North STOP North			15	0	0	0
DESCRIBE VISIBLE EMISSIONS			16	0	0	0
START			17	0	0	0
EMISSION COLOR			18	0	0	0
IF WATER DROPLET PLUME			19	0	0	0
START			20	0	0	0
STOP			21	0	0	0
ATTACHED ☐ DETACHED ☐			22	0	0	0
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			23	0	0	0
START Outlet (exit)			24	0	0	0
STOP Outlet (exit)			25	0	0	0
DESCRIBE PLUME BACKGROUND			26	0	0	0
START Sky			27	0	0	0
STOP Sky			28	0	0	0
BACKGROUND COLOR			29	0	0	0
START Blue			30	0	0	0
STOP Blue						
WIND SPEED						
START 5-10 mph						
STOP 5-10 mph						
WIND DIRECTION						
START W						
STOP W						
AMBIENT TEMP.						
START 50°						
STOP 50°						
WET BULB TEMP.						
RH, percent						
SOURCE LAYOUT SKETCH						
DRAW NORTH ARROW						
SUN LOCATION LINE 140° X EMISSION POINT OBSERVER'S POSITION 1						
APPLICABLE OPACITY STANDARD						
3 % OPACITY						
AVERAGE OPACITY FOR HIGHEST PERIOD						
NUMBER OF READING ABOVE % WERE						
OBSERVER'S NAME (PRINT)						
Mike Johnson						
OBSERVER'S SIGNATURE						
Mike Johnson						
DATE						
2-26-14						
ORGANIZATION						
Gerdau AmeriSteel						
CERTIFICATION EXPIRATION DATE						
5-13-16						
VERIFIED BY						
State Of Tennessee/Carl Koontz						
DATE						
11-13-15						

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau AmeriSteel			OBSERVATION DATE 2-27-16				START TIME 12:40 PM		STOP TIME 12:58 PM	
ADDRESS 801 Gerdau AmeriSteel Rd			MIN		SEC	0	15	30	45	COMMENTS
CITY Jackson			STATE TN		ZIP 38305					
PHONE (731) 424-5600			SOURCE ID NUMBER 57-0189-01							
PROCESS EQUIPMENT Electric Arc Furnace			OPERATING MODE melting							
CONTROL EQUIPMENT Baghouse 1 & 2			OPERATING MODE Continuous							
DESCRIBE EMISSION POINT Outlet on top of Baghouse										
START 76 ft STOP 76 ft			HEIGHT ABOVE GROUND LEVEL		HEIGHT RELATIVE TO OBSERVER					
DISTANCE FROM OBSERVER 380 ft STOP 380 ft					DIRECTION FROM OBSERVER North STOP North					
DESCRIBE VISIBLE EMISSIONS START  STOP 										
EMISSION COLOR Blue STOP Blue			IF WATER DROPLET PLUME: START  STOP 							
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED START Outlet (exit) STOP Outlet (exit)										
DESCRIBE PLUME BACKGROUND START Sky STOP Sky										
BACKGROUND COLOR START Blue STOP Blue			SKY CONDITIONS START clear STOP clear							
WIND SPEED START 15 to 20 STOP 15 to 20			WIND DIRECTION START SW STOP SW							
AMBIENT TEMP. START 64° STOP 64°			WET BULB TEMP.		RH, percent					
SOURCE LAYOUT SKETCH 			DRAW NORTH ARROW 							
APPLICABLE OPACITY STANDARD 3 % OPACITY			EPA METHOD 9 ☒		TVEE METHOD 2 ☐					
AVERAGE OPACITY FOR HIGHEST PERIOD 0			TVEE METHOD 1 ☐		TVEE METHOD 3 ☐					
NUMBER OF READING ABOVE % WERE 0										
OBSERVER'S NAME (PRINT) Tony Perry			OBSERVER'S SIGNATURE 		DATE 2-27-16					
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			ORGANIZATION Gerdau AmeriSteel		CERTIFICATION EXPIRATION DATE 5-16-16					
SIGNATURE State Of Tennessee			VERIFIED BY Carl Koontz		DATE 11-16-15					

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

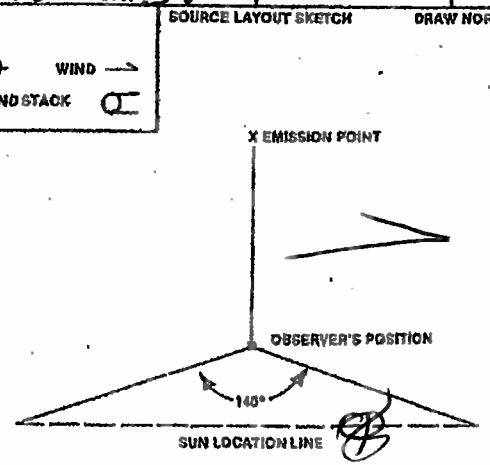
VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau AmeriSteel			OBSERVATION DATE 3-1-16				START TIME 10:05 Am		STOP TIME 10:23 Am	
ADDRESS 801 Gerdau AmeriSteel Rd			SEC MIN		0	15	30	45	COMMENTS	
CITY Jackson			STATE TN		ZIP 38305					
PHONE (731) 424-5600			SOURCE ID NUMBER 57-0189-01							
PROCESS EQUIPMENT Electric Arc Furnace			OPERATING MODE melt							
CONTROL EQUIPMENT Baghouse 1 & 2			OPERATING MODE Continuous							
DESCRIBE EMISSION POINT Outlet on top of Baghouse										
HEIGHT ABOVE GROUND LEVEL START 76 ft STOP 76 ft			HEIGHT RELATIVE TO OBSERVER START 76 ft STOP 76 ft							
DISTANCE FROM OBSERVER START 380 ft STOP 380 ft			DIRECTION FROM OBSERVER START North STOP North							
DESCRIBE VISIBLE EMISSIONS										
START			STOP							
EMISSION COLOR			IF WATER DROPLET PLUME?							
START			STOP							
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED										
START Outlet (exit) STOP Outlet (exit)										
DESCRIBE PLUME BACKGROUND										
START Sky STOP Sky										
BACKGROUND COLOR										
START gray STOP gray										
WIND SPEED										
START 0-10 mph STOP 0-10 mph										
WIND DIRECTION										
START W STOP W										
AMBIENT TEMP.			WET BULB TEMP.		RH, percent					
START 67° STOP 67°										
SOURCE LAYOUT SKETCH			DRAW NORTH ARROW							
APPLICABLE OPACITY STANDARD			EPA METHOD 9 ☐ TVEE METHOD 2 ☐							
3 % OPACITY			TVEE METHOD 1 ☐ TVEE METHOD 3 ☐							
AVERAGE OPACITY FOR HIGHEST PERIOD			NUMBER OF READING ABOVE % WERE							
			0 0							
OBSERVER'S NAME (PRINT)			DATE							
Royde H Herron			3-1-16							
OBSERVER'S SIGNATURE			CERTIFICATION EXPIRATION DATE							
Royde H Herron			5-1-18							
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			ORGANIZATION							
SIGNATURE			Gerdau AmeriSteel							
TITLE			VERIFIED BY							
			State Of Tennessee Carl Koontz							
			DATE							
			11-16-15							

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau AmeriSteel			OBSERVATION DATE 3-2-14		START TIME 10:00 Am	STOP TIME 10:18 Am
ADDRESS 801 Gerdau AmeriSteel Rd			SEC MIN 0 15 30 45		COMMENTS	
CITY Jackson	STATE TN	ZIP 38305	1	0	0	0
PHONE (731) 424-5600	SOURCE ID NUMBER 57-0189-01		2	0	0	0
PROCESS EQUIPMENT Electric Arc Furnace		OPERATING MODE <i>smelt</i>	3	0	0	0
CONTROL EQUIPMENT Baghouse 1 & 2		OPERATING MODE Continuous	4	0	0	0
DESCRIBE EMISSION POINT Outlet on top of Baghouse			5	0	0	0
HEIGHT ABOVE GROUND LEVEL START 76 ft STOP 76 ft	HEIGHT RELATIVE TO OBSERVER START 76 ft STOP 76 ft		6	0	0	0
DISTANCE FROM OBSERVER START 380 ft STOP 380 ft	DIRECTION FROM OBSERVER START North STOP North		7	0	0	0
DESCRIBE VISIBLE EMISSIONS			8	0	0	0
START	STOP		9	0	0	0
EMISSION COLOR	IF WATER DROPLET PLUME		10	0	0	0
START	STOP		11	0	0	0
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			12	0	0	0
START Outlet (exit)	STOP Outlet (exit)		13	0	0	0
DESCRIBE PLUME BACKGROUND			14	0	0	0
START Sky	STOP Sky		15	0	0	0
BACKGROUND COLOR <i>blue</i>	SKY CONDITIONS <i>clear</i>		16	0	0	0
START <i>white</i> STOP <i>white</i>	START <i>clear</i> STOP <i>clear</i>		17	0	0	0
WIND SPEED START 0-10 mph STOP 0-10 mph	WIND DIRECTION START W STOP W		18	0	0	0
AMBIENT TEMP. START 50 STOP 50	WET BULB TEMP.	RH, percent	19			
SOURCE LAYOUT SKETCH DRAW NORTH ARROW 			20			
SUN LOCATION LINE			21			
COMMENTS			22			
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			23			
SIGNATURE			24			
TITLE			25			
DATE			26			
APPLICABLE OPACITY STANDARD 3 % OPACITY			27			
AVERAGE OPACITY FOR HIGHEST PERIOD			28			
NUMBER OF READING ABOVE %WERE			29			
OBSERVER'S NAME (PRINT) Roydell Herron			30			
OBSERVER'S SIGNATURE <i>Roydell Herron</i>			DATE 3-2-14			
ORGANIZATION Gerdau AmeriSteel			CERTIFICATION EXPIRATION DATE 5-16-16			
VERIFIED BY State Of Tennessee/Carl Kootz			DATE 12-16-15			

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME			OBSERVATION DATE				START TIME	STOP TIME
Gerdau AmeriSteel			3-3-14				9:35 Am	9:53 Am
ADDRESS			MIN	SEC	0	15	30	45
801 Gerdau AmeriSteel Rd								COMMENTS
CITY			1					
JACKSON			2					
STATE			3					
TN			4					
ZIP			5					
38305			6					
PHONE			7					
(731) 424-5600			8					
SOURCE ID NUMBER			9					
57-0189-01			10					
PROCESS EQUIPMENT			11					
Electric Arc Furnace			12					
OPERATING MODE			13					
melt			14					
CONTROL EQUIPMENT			15					
Baghouse 1 & 2			16					
OPERATING MODE			17					
Continuous			18					
DESCRIBE EMISSION POINT			19					
START Outlet on top of Baghouse			20					
HEIGHT ABOVE GROUND LEVEL			21					
START 76 ft STOP 76 ft			22					
HEIGHT RELATIVE TO OBSERVER			23					
START 76 ft STOP 76 ft			24					
DISTANCE FROM OBSERVER			25					
START 380 ft STOP 380 ft			26					
DIRECTION FROM OBSERVER			27					
START North STOP North			28					
DESCRIBE VISIBLE EMISSIONS			29					
START			30					
EMISSION COLOR			31					
IF WATER DROPLET PLUME			32					
START			33					
STOP			34					
ATTACHED ☐ DETACHED ☐			35					
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			36					
START Outlet (exit) STOP Outlet (exit)			37					
DESCRIBE PLUME BACKGROUND			38					
START Sky STOP Sky			39					
BACKGROUND COLOR			40					
START gray STOP gray			41					
SKY CONDITIONS			42					
START cloudy STOP cloudy			43					
WIND SPEED			44					
START 0-10 mph STOP 0-10 mph			45					
WIND DIRECTION			46					
START W STOP W			47					
AMBIENT TEMP.			48					
START 40° STOP 40°			49					
WET BULB TEMP.			50					
RH, percent			51					
SOURCE LAYOUT SKETCH			52					
DRAW NORTH ARROW			53					
			54					
SUN WIND PLUME AND STACK			55					
COMMENTS			56					
OBSERVER'S NAME (PRINT)			57					
Roydell Herrow			58					
OBSERVER'S SIGNATURE			59					
Roydell Herrow			60					
DATE			61					
3-3-14			62					
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			63					
ORGANIZATION			64					
Gerdau AmeriSteel			65					
VERIFIED BY			66					
State Of Tennessee/Carl Koontz			67					
SIGNATURE			68					
TITLE			69					
DATE			70					
11-14-15			71					

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau AmeriSteel			OBSERVATION DATE 3-4-16			START TIME 10:00 Am		STOP TIME 10:18 Am	
ADDRESS 801 Gerdau AmeriSteel Rd			SEC MIN		0	15	30	45	COMMENTS
CITY Jackson	STATE TN	ZIP 38305	1		0	0	0	0	
PHONE (731) 424-5600	SOURCE ID NUMBER 57-0189-01		2		0	0	0	0	
PROCESS EQUIPMENT Electric Arc Furnace		OPERATING MODE melting	3		0	0	0	0	
CONTROL EQUIPMENT Baghouse 1 & 2		OPERATING MODE Continuous	4		0	0	0	0	
DESCRIBE EMISSION POINT Outlet on top of Baghouse			5		0	0	0	0	
HEIGHT ABOVE GROUND LEVEL START 76 ft STOP 76 ft			6		0	0	0	0	
HEIGHT RELATIVE TO OBSERVER START 76 ft STOP 76 ft			7		0	0	0	0	
DISTANCE FROM OBSERVER START 380 ft STOP 380 ft			8		0	0	0	0	
DIRECTION FROM OBSERVER START North STOP North			9		0	0	0	0	
DESCRIBE VISIBLE EMISSIONS			10		0	0	0	0	
START			11		0	0	0	0	
STOP			12		0	0	0	0	
EMISSION COLOR			13		0	0	0	0	
IF WATER DROPLET PLUME			14		0	0	0	0	
START			15		0	0	0	0	
STOP			16		0	0	0	0	
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			17		0	0	0	0	
START Outlet (exit)			18		0	0	0	0	
STOP Outlet (exit)			19		0	0	0	0	
DESCRIBE PLUME BACKGROUND			20		0	0	0	0	
START Sky			21		0	0	0	0	
STOP Sky			22		0	0	0	0	
BACKGROUND COLOR			23		0	0	0	0	
SKY CONDITIONS			24		0	0	0	0	
START gray STOP gray			25		0	0	0	0	
START cloudy STOP cloudy			26		0	0	0	0	
WIND SPEED			27		0	0	0	0	
WIND DIRECTION			28		0	0	0	0	
START 0-10 mph STOP 0-10 mph			29		0	0	0	0	
START W STOP W			30		0	0	0	0	
AMBIENT TEMP.			31		0	0	0	0	
WET BULB TEMP.			32		0	0	0	0	
RH, percent			33		0	0	0	0	
START 60 STOP 60			34		0	0	0	0	
SOURCE LAYOUT SKETCH			35		0	0	0	0	
DRAW NORTH ARROW			36		0	0	0	0	
			37		0	0	0	0	
			38		0	0	0	0	
			39		0	0	0	0	
			40		0	0	0	0	
COMMENTS			APPLICABLE OPACITY STANDARD		EPA METHOD 9		TVEE METHOD 2		
			3 % OPACITY		TVEE METHOD 1		TVEE METHOD 3		
			AVERAGE OPACITY FOR HIGHEST PERIOD		NUMBER OF READING ABOVE % WERE				
			OBSERVER'S NAME (PRINT)		OBSERVER'S SIGNATURE		DATE		
			Royale Herron		Royale Herron		3-4-16		
			ORGANIZATION		CERTIFICATION EXPIRATION DATE				
			Gerdau AmeriSteel		5-16-16				
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			VERIFIED BY		DATE				
SIGNATURE			State Of Tennessee		Carl Kowitz		11-16-15		
TITLE									
DATE									

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME			OBSERVATION DATE				START TIME		STOP TIME	
Gerdau AmeriSteel			3-8-16				11:05 Am		11:23 Am	
ADDRESS			SEC		MIN		COMMENTS			
801 Gerdau AmeriSteel Rd										
CITY			STATE		ZIP					
Jackson			TN		38305					
PHONE			SOURCE ID NUMBER							
(731) 424-5600			57-0189-01							
PROCESS EQUIPMENT			OPERATING MODE							
Electric Arc Furnace			melt							
CONTROL EQUIPMENT			OPERATING MODE							
Baghouse 1 & 2			Continuous							
DESCRIBE EMISSION POINT										
START Outlet on top of Baghouse										
HEIGHT ABOVE GROUND LEVEL			HEIGHT RELATIVE TO OBSERVER							
START 76 ft STOP 76 ft			START 76 ft STOP 76 ft							
DISTANCE FROM OBSERVER			DIRECTION FROM OBSERVER							
START 380 ft STOP 380 ft			START North STOP North							
DESCRIBE VISIBLE EMISSIONS										
START			STOP							
EMISSION COLOR			IF WATER DROPLET PLUME							
START			STOP							
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED										
START Outlet (exit)			STOP Outlet (exit)							
DESCRIBE PLUME BACKGROUND										
START Sky			STOP Sky							
BACKGROUND COLOR			SKY CONDITIONS							
START blue			STOP white							
WIND SPEED			WIND DIRECTION							
START 0-10 mph			STOP 0-10 mph							
AMBIENT TEMP.			WET BULB TEMP.		RH, percent					
START 65°			STOP 65°							
SOURCE LAYOUT SKETCH			DRAW NORTH ARROW							
COMMENTS										
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS										
SIGNATURE			OBSERVER'S NAME (PRINT)		DATE					
TITLE			OBSERVER'S SIGNATURE		DATE					
			Gerdau AmeriSteel		3-8-16					
			State Of Tennessee		5-16-16					
			VERIFIED BY		DATE					
			Carl Koontz		11-16-15					

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME			OBSERVATION DATE				START TIME	STOP TIME
Gerdau AmeriSteel			3-9-14				12:15pm	12:33pm
ADDRESS			SEC	0	15	30	45	COMMENTS
801 Gerdau AmeriSteel Rd			MIN					
CITY			1	0	0	0	0	
STATE			2	0	0	0	0	
ZIP			3	0	0	0	0	
PHONE			4	0	0	0	0	
(731) 424-5600			5	0	0	0	0	
SOURCE ID NUMBER			6	0	0	0	0	
57-0189-01			7	0	0	0	0	
PROCESS EQUIPMENT			8	0	0	0	0	
Electric Arc Furnace			9	0	0	0	0	
OPERATING MODE			10	0	0	0	0	
Melt			11	0	0	0	0	
CONTROL EQUIPMENT			12	0	0	0	0	
Baghouse 1 & 2			13	0	0	0	0	
OPERATING MODE			14	0	0	0	0	
Continuous			15	0	0	0	0	
DESCRIBE EMISSION POINT			16	0	0	0	0	
START Outlet on top of Baghouse			17	0	0	0	0	
HEIGHT ABOVE GROUND LEVEL			18	0	0	0	0	
START 76 ft STOP 76 ft			19	0	0	0	0	
HEIGHT RELATIVE TO OBSERVER			20	0	0	0	0	
START 76 ft STOP 76 ft			21	0	0	0	0	
DISTANCE FROM OBSERVER			22	0	0	0	0	
START 380 ft STOP 380 ft			23	0	0	0	0	
DIRECTION FROM OBSERVER			24	0	0	0	0	
START North STOP North			25	0	0	0	0	
DESCRIBE VISIBLE EMISSIONS			26	0	0	0	0	
START			27	0	0	0	0	
STOP			28	0	0	0	0	
EMISSION COLOR			29	0	0	0	0	
IF WATER DROPLET PLUME?			30	0	0	0	0	
START			31	0	0	0	0	
STOP			32	0	0	0	0	
ATTACHED ☐ DETACHED ☐			33	0	0	0	0	
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			34	0	0	0	0	
START Outlet (exit)			35	0	0	0	0	
STOP Outlet (exit)			36	0	0	0	0	
DESCRIBE PLUME BACKGROUND			37	0	0	0	0	
START Sky			38	0	0	0	0	
STOP Sky			39	0	0	0	0	
BACKGROUND COLOR			40	0	0	0	0	
START Gray STOP Gray			41	0	0	0	0	
WIND SPEED			42	0	0	0	0	
START 5-10 STOP 5-10			43	0	0	0	0	
WIND DIRECTION			44	0	0	0	0	
START W STOP W			45	0	0	0	0	
AMBIENT TEMP.			46	0	0	0	0	
START 70° STOP 70°			47	0	0	0	0	
WET BULB TEMP.			48	0	0	0	0	
RH, percent			49	0	0	0	0	
SOURCE LAYOUT SKETCH			50	0	0	0	0	
DRAW NORTH ARROW			51	0	0	0	0	
			52	0	0	0	0	
SUN WIND PLUME AND STACK			53	0	0	0	0	
X EMISSION POINT OBSERVER'S POSITION SUN LOCATION LINE			54	0	0	0	0	
COMMENTS			55	0	0	0	0	
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			56	0	0	0	0	
SIGNATURE			57	0	0	0	0	
TITLE			58	0	0	0	0	
DATE			59	0	0	0	0	
OBSERVER'S NAME (PRINT)			60	0	0	0	0	
Mike Johnson			61	0	0	0	0	
OBSERVER'S SIGNATURE			62	0	0	0	0	
Mike Johnson			63	0	0	0	0	
ORGANIZATION			64	0	0	0	0	
Gerdau AmeriSteel			65	0	0	0	0	
VERIFIED BY			66	0	0	0	0	
State Of Tennessee/Carl Koonitz			67	0	0	0	0	
CERTIFICATION EXPIRATION DATE			68	0	0	0	0	
5-13-14			69	0	0	0	0	
DATE			70	0	0	0	0	
11-13-12			71	0	0	0	0	

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau AmeriSteel		OBSERVATION DATE 3-10-16		START TIME 10:00 AM		STOP TIME 10:18 AM	
ADDRESS 801 Gerdau AmeriSteel Rd		SEC MIN		6		15	
CITY Jackson		STATE TN		ZIP 38305		COMMENTS	
PHONE (731) 424-5600		SOURCE ID NUMBER 57-0189-01		1		0	
PROCESS EQUIPMENT Electric Arc Furnace		OPERATING MODE Multi		2		0	
CONTROL EQUIPMENT Baghouse 1 & 2		OPERATING MODE Continuous		3		0	
DESCRIBE EMISSION POINT Outlet on top of Baghouse		START		4		0	
HEIGHT ABOVE GROUND LEVEL START 76 ft STOP 76 ft		HEIGHT RELATIVE TO OBSERVER START 76 ft STOP 76 ft		5		0	
DISTANCE FROM OBSERVER START 380 ft STOP 380 ft		DIRECTION FROM OBSERVER START North STOP North		6		0	
DESCRIBE VISIBLE EMISSIONS		START		7		0	
EMISSION COLOR		IF WATER DROPLET PLUME:		8		0	
START		STOP		9		0	
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED		ATTACHED ☐ DETACHED ☐		10		0	
START Outlet (exit)		STOP Outlet (exit)		11		0	
DESCRIBE PLUME BACKGROUND		START		12		0	
Sky		Sky		13		0	
BACKGROUND COLOR		SKY CONDITIONS		14		0	
START Gray STOP Gray		START Cloudy STOP Cloudy		15		0	
WIND SPEED		WIND DIRECTION		16		0	
START 5-10 mph STOP 5-10 mph		START S STOP S		17		0	
AMBIENT TEMP.		WET BULB TEMP.		18		0	
START 62° STOP 62°		RH, percent		19		0	
SOURCE LAYOUT SKETCH		DRAW NORTH ARROW		20		0	
				21		0	
APPLICABLE OPACITY STANDARD		EPA METHOD 9 ☒ TVEE METHOD 2 ☐		22		0	
3 % OPACITY		TVEE METHOD 1 ☐ TVEE METHOD 3 ☐		23		0	
AVERAGE OPACITY FOR HIGHEST PERIOD		NUMBER OF READING ABOVE % WERE		24		0	
COMMENTS		OBSERVER'S NAME (PRINT)		25		0	
		Mike Johnson		26		0	
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS		OBSERVER'S SIGNATURE		27		0	
SIGNATURE		Mike Johnson		28		0	
TITLE		ORGANIZATION		29		0	
		Gerdau AmeriSteel		30		0	
DATE		VERIFIED BY		DATE		DATE	
		State Of Tennessee / Carl Koon		3-10-16		5-13-16	
						11-13-15	

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau AmeriSteel		OBSERVATION DATE 3-11-16		START TIME 8:00 AM		STOP TIME 8:18 AM	
ADDRESS 801 Gerdau AmeriSteel Rd		CITY Jackson		STATE TN		ZIP 38305	
PHONE (731) 424-5600		SOURCE ID NUMBER 57-0189-01		PROCESS EQUIPMENT Electric Arc Furnace		OPERATING MODE Melt	
CONTROL EQUIPMENT Baghouse 1 & 2		OPERATING MODE Continuous		DESCRIBE EMISSION POINT Outlet on top of Baghouse		START 76 ft STOP 76 ft	
HEIGHT ABOVE GROUND LEVEL 76 ft		HEIGHT RELATIVE TO OBSERVER 76 ft		DISTANCE FROM OBSERVER 380 ft		DIRECTION FROM OBSERVER North	
DESCRIBE VISIBLE EMISSIONS		START		STOP		EMISSION COLOR	
START		STOP		ATTACHED ☐ DETACHED ☐		POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED	
START		STOP		OUTLET (exit)		OUTLET (exit)	
DESCRIBE PLUME BACKGROUND		START		STOP		BACKGROUND COLOR	
START		STOP		SKY CONDITIONS		START	
STOP		STOP		WIND SPEED		WIND DIRECTION	
START		STOP		START		STOP	
AMBIENT TEMP.		WET BULB TEMP.		RH, percent		START	
STOP		STOP		STOP		STOP	
SUN  WIND 		SOURCE LAYOUT SKETCH		DRAW NORTH ARROW		PLUME AND STACK 	
X EMISSION POINT		OBSERVER'S POSITION		SUN LOCATION LINE		100°	
APPLICABLE OPACITY STANDARD		EPA METHOD 9 ☒		TVEE METHOD 2 ☐		TVEE METHOD 1 ☐	
3 % OPACITY		TVEE METHOD 3 ☐		TVEE METHOD 8 ☐		AVERAGE OPACITY FOR HIGHEST PERIOD	
0		6		NUMBER OF READING ABOVE % WERE		0	
OBSERVER'S NAME (PRINT)		DATE		OBSERVER'S SIGNATURE		CERTIFICATION EXPIRATION DATE	
Mike Johnson		3-11-16		Mike Johnson		5-13-16	
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS		ORGANIZATION		VERIFIED BY		DATE	
SIGNATURE		Gerdau AmeriSteel		State Of Tennessee		11-13-15	
TITLE		DATE		DATE		DATE	

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME			OBSERVATION DATE				START TIME	STOP TIME
Gerdau AmeriSteel			3-15-16				9:40 Am	9:58 Am
ADDRESS			SEC	0	15	30	45	COMMENTS
801 Gerdau AmeriSteel Rd			MIN					
CITY	STATE	ZIP	1	0	0	0	0	
Jackson	TN	38305	2	0	0	0	0	
PHONE	SOURCE ID NUMBER		3	0	0	0	0	
(731) 424-5600	57-0189-01		4	0	0	0	0	
PROCESS EQUIPMENT		OPERATING MODE	5	0	0	0	0	
Electric Arc Furnace		melt	6	0	0	0	0	
CONTROL EQUIPMENT		OPERATING MODE	7	0	0	0	0	
Baghouse 1 & 2		Continuous	8	0	0	0	0	
DESCRIBE EMISSION POINT			9	0	0	0	0	
START Outlet on top of Baghouse			10	0	0	0	0	
HEIGHT ABOVE GROUND LEVEL		HEIGHT RELATIVE TO OBSERVER	11	0	0	0	0	
START 76 ft STOP 76 ft		START 76 ft STOP 76 ft	12	0	0	0	0	
DISTANCE FROM OBSERVER		DIRECTION FROM OBSERVER	13	0	0	0	0	
START 380 ft STOP 380 ft		START North STOP North	14	0	0	0	0	
DESCRIBE VISIBLE EMISSIONS			15	0	0	0	0	
START		STOP	16	0	0	0	0	
EMISSION COLOR		IF WATER DROPLET PLUME?	17	0	0	0	0	
START		STOP	18	0	0	0	0	
ATTACHED ☐ DETACHED ☐			19					
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			20					
START Outlet (exit)		STOP Outlet (exit)	21					
DESCRIBE PLUME BACKGROUND			22					
START Sky		STOP Sky	23					
BACKGROUND COLOR		SKY CONDITIONS	24					
START white STOP white		START clear STOP clear	25					
WIND SPEED		WIND DIRECTION	26					
START 0-5 mph STOP 0-10 mph		START W STOP W	27					
AMBIENT TEMP.		WET BULB TEMP.	28					
START 70° STOP 70°		RH, percent	29					
SOURCE LAYOUT SKETCH			30					
DRAW NORTH ARROW								
SUN WIND PLUME AND STACK								
APPLICABLE OPACITY STANDARD			EPA METHOD 9 ☒		TVEE METHOD 2 ☐			
3 % OPACITY			TVEE METHOD 1 ☐		TVEE METHOD 3 ☐			
AVERAGE OPACITY FOR HIGHEST PERIOD			0		0			
NUMBER OF READING ABOVE % WERE								
OBSERVER'S NAME (PRINT)			Roydell Herron					
OBSERVER'S SIGNATURE			Roydell Herron					
DATE			3-15-16					
ORGANIZATION			Gerdau AmeriSteel					
CERTIFICATION EXPIRATION DATE			5-14-16					
VERIFIED BY			State Of Tennessee/Carl Koontz					
DATE			11-16-15					

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau AmeriSteel		OBSERVATION DATE 3-16-16		START TIME 11:00 AM		STOP TIME 11:18 AM	
ADDRESS 801 Gerdau AmeriSteel Rd		SEC MIN		0		15	
CITY Jackson		STATE TN		ZIP 38305		COMMENTS	
PHONE (731) 424-5600		SOURCE ID NUMBER 57-0189-01		1		0 0 0 0	
PROCESS EQUIPMENT Electric Arc Furnace		OPERATING MODE melt		2		0 0 0 0	
CONTROL EQUIPMENT Baghouse 1 & 2		OPERATING MODE Continuous		3		0 0 0 0	
DESCRIBE EMISSION POINT Outlet on top of Baghouse		4		0 0 0 0			
HEIGHT ABOVE GROUND LEVEL START 76 ft STOP 76 ft		5		0 0 0 0			
HEIGHT RELATIVE TO OBSERVER START 76 ft STOP 76 ft		6		0 0 0 0			
DISTANCE FROM OBSERVER START 380 ft STOP 380 ft		7		0 0 0 0			
DIRECTION FROM OBSERVER START North STOP North		8		0 0 0 0			
DESCRIBE VISIBLE EMISSIONS		9		0 0 0 0			
START		10		0 0 0 0			
EMISSION COLOR		11		0 0 0 0			
IF WATER DROPLET PLUME:		12		0 0 0 0			
START		13		0 0 0 0			
STOP		14		0 0 0 0			
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED		15		0 0 0 0			
START Outlet (exit)		16		0 0 0 0			
STOP Outlet (exit)		17		0 0 0 0			
DESCRIBE PLUME BACKGROUND		18		0 0 0 0			
START Sky		19		0 0 0 0			
STOP Sky		20		0 0 0 0			
BACKGROUND COLOR		21		0 0 0 0			
START blue		22		0 0 0 0			
STOP blue		23		0 0 0 0			
WIND SPEED		24		0 0 0 0			
START 0-10 mph		25		0 0 0 0			
STOP 0-10 mph		26		0 0 0 0			
WIND DIRECTION		27		0 0 0 0			
START W		28		0 0 0 0			
STOP W		29		0 0 0 0			
AMBIENT TEMP.		30		0 0 0 0			
START 64°							
STOP 64°							
WET BULB TEMP.							
RH, percent							
SOURCE LAYOUT SKETCH		DRAW NORTH ARROW					
COMMENTS		APPLICABLE OPACITY STANDARD		EPA METHOD 9		TVEE METHOD 2	
		3 % OPACITY		TVEE METHOD 1		TVEE METHOD 3	
		AVERAGE OPACITY FOR HIGHEST PERIOD		NUMBER OF READING ABOVE % WERE		0 0	
		OBSERVER'S NAME (PRINT)		OBSERVER'S SIGNATURE		DATE	
		Roydell Herron		Roydell Herron		3-16-16	
		ORGANIZATION		CERTIFICATION EXPIRATION DATE			
		Gerdau AmeriSteel		5-16-16			
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS		VERIFIED BY		DATE			
SIGNATURE		State Of Tennessee/Carl Koontz		11-16-15			
TITLE							
DATE							

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME			OBSERVATION DATE				START TIME		STOP TIME	
Gerdau AmeriSteel			3-17-14				10:15 Am		10:33 Am	
ADDRESS			SEC				COMMENTS			
801 Gerdau AmeriSteel Rd			MIN							
			0 15 30 45							
CITY			1							
Jackson			2							
STATE			3							
TN			4							
ZIP			5							
38305			6							
PHONE			7							
(731) 424-5600			8							
SOURCE ID NUMBER			9							
57-0189-01			10							
PROCESS EQUIPMENT			11							
Electric Arc Furnace			12							
OPERATING MODE			13							
melt			14							
CONTROL EQUIPMENT			15							
Baghouse 1 & 2			16							
OPERATING MODE			17							
Continuous			18							
DESCRIBE EMISSION POINT			19							
START Outlet on top of Baghouse			20							
HEIGHT ABOVE GROUND LEVEL			21							
START 76 ft STOP 76 ft			22							
HEIGHT RELATIVE TO OBSERVER			23							
START 76 ft STOP 76 ft			24							
DISTANCE FROM OBSERVER			25							
START 380 ft STOP 380 ft			26							
DIRECTION FROM OBSERVER			27							
START North STOP North			28							
DESCRIBE VISIBLE EMISSIONS			29							
START			30							
STOP			31							
EMISSION COLOR			32							
IF WATER DROPLET PLUME			33							
START			34							
STOP			35							
ATTACHED ☐ DETACHED ☐			36							
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			37							
START Outlet (exit)			38							
STOP Outlet (exit)			39							
DESCRIBE PLUME BACKGROUND			40							
START Sky			41							
STOP Sky			42							
BACKGROUND COLOR			43							
START blue			44							
STOP white			45							
SKY CONDITIONS			46							
START clear			47							
STOP clear			48							
WIND SPEED			49							
START 0-10 mph			50							
STOP 0-10 mph			51							
WIND DIRECTION			52							
START W			53							
STOP W			54							
AMBIENT TEMP.			55							
START 68.0			56							
STOP 68.0			57							
WET BULB TEMP.			58							
RH, percent			59							
SOURCE LAYOUT SKETCH			60							
DRAW NORTH ARROW			61							
			62							
			63							
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			246							
			247							

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

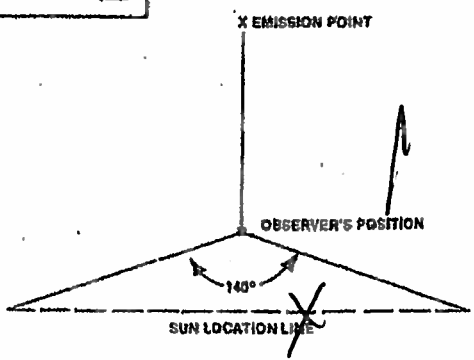
VISIBLE EMISSION OBSERVATION

SOURCE NAME			OBSERVATION DATE				START TIME		STOP TIME	
Gerdau AmeriSteel			3-18-14				10:20 AM		10:38 AM	
ADDRESS			MIN	SEC	0	15	30	45	COMMENTS	
801 Gerdau AmeriSteel Rd			1	0	0	0	0			
CITY	STATE	ZIP	2	0	0	0	0			
Jackson	TN	38305	3	0	0	0	0			
PHONE	SOURCE ID NUMBER		4	0	0	0	0			
(731) 424-5600	57-0189-01		5	0	0	0	0			
PROCESS EQUIPMENT		OPERATING MODE	6	0	0	0	0			
Electric Arc Furnace		Must	7	0	0	0	0			
CONTROL EQUIPMENT		OPERATING MODE	8	0	0	0	0			
Baghouse 1 & 2		Continuous	9	0	0	0	0			
DESCRIBE EMISSION POINT			10	0	0	0	0			
START Outlet on top of Baghouse			11	0	0	0	0			
HEIGHT ABOVE GROUND LEVEL		HEIGHT RELATIVE TO OBSERVER	12	0	0	0	0			
START 76 ft STOP 76 ft		START 76 ft STOP 76 ft	13	0	0	0	0			
DISTANCE FROM OBSERVER		DIRECTION FROM OBSERVER	14	0	0	0	0			
START 380 ft STOP 380 ft		START North STOP North	15	0	0	0	0			
DESCRIBE VISIBLE EMISSIONS			16	0	0	0	0			
START		STOP	17	0	0	0	0			
EMISSION COLOR		IF WATER DROPLET PLUME	18	0	0	0	0			
START		STOP	19	0	0	0	0			
ATTACHED ☐ DETACHED ☐			20							
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			21							
START Outlet (exit)		STOP Outlet (exit)	22							
DESCRIBE PLUME BACKGROUND			23							
START Sky		STOP Sky	24							
BACKGROUND COLOR		SKY CONDITIONS	25							
START Blue STOP Blue		START Clear STOP Clear	26							
WIND SPEED		WIND DIRECTION	27							
START 5-10 mph STOP 5-10 mph		START W STOP W	28							
AMBIENT TEMP.		WET BULB TEMP.	29							
START 63° STOP 63°		RH, percent	30							
SOURCE LAYOUT SKETCH			APPLICABLE OPACITY STANDARD							
DRAW NORTH ARROW			EPA METHOD 9 ☐ TVEE METHOD 2 ☐							
			3 % OPACITY							
			TVEE METHOD 1 ☐ TVEE METHOD 3 ☐							
			AVERAGE OPACITY FOR HIGHEST PERIOD							
			NUMBER OF READING ABOVE % WERE							
COMMENTS			OBSERVER'S NAME (PRINT)							
			Mike Johnson							
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			OBSERVER'S SIGNATURE							
			Mike Johnson							
SIGNATURE			ORGANIZATION							
			Gerdau AmeriSteel							
TITLE			VERIFIED BY							
			State Of Tennessee (Carl Koonin)							
DATE			DATE							
			3-18-14							
			CERTIFICATION EXPIRATION DATE							
			5-13-14							
			DATE							
			11-13-15							

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau AmeriSteel			OBSERVATION DATE 3-22-16			START TIME 10:30 AM		STOP TIME 10:48 AM	
ADDRESS 801 Gerdau AmeriSteel Rd			SEC MIN		5	15	20	45	COMMENTS
CITY Jackson			STATE TN		ZIP 38305				
PHONE (731) 424-5600			SOURCE ID NUMBER 57-0189-01						
PROCESS EQUIPMENT Electric Arc Furnace			OPERATING MODE Melt						
CONTROL EQUIPMENT Baghouse 1 & 2			OPERATING MODE Continuous						
DESCRIBE EMISSION POINT Outlet on top of Baghouse									
HEIGHT ABOVE GROUND LEVEL START 76 ft STOP 76 ft			HEIGHT RELATIVE TO OBSERVER START 76 ft STOP 76 ft						
DISTANCE FROM OBSERVER START 380 ft STOP 380 ft			DIRECTION FROM OBSERVER START North STOP North						
DESCRIBE VISIBLE EMISSIONS									
START _____ STOP _____									
EMISSION COLOR			IF WATER DROPLET PLUME:						
START _____ STOP _____			ATTACHED ☐ DETACHED ☐						
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED									
START Outlet (exit) STOP Outlet (exit)									
DESCRIBE PLUME BACKGROUND									
START Sky STOP Sky									
BACKGROUND COLOR			SKY CONDITIONS						
START Blue STOP Blue			START Clear STOP Clear						
WIND SPEED			WIND DIRECTION						
START 5-10 mph STOP 5-10 mph			START S STOP S						
AMBIENT TEMP.			WET BULB TEMP.		RH, percent				
START 58° STOP 58°									
SUN  WIND 			SOURCE LAYOUT SKETCH		DRAW NORTH ARROW				
PLUME AND STACK 									
									
COMMENTS									
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS									
SIGNATURE			OBSERVER'S NAME (PRINT)		DATE				
TITLE			OBSERVER'S SIGNATURE		DATE				
			Gerdau AmeriSteel		3-22-16				
			VERIFIED BY		CERTIFICATION EXPIRATION DATE				
			State Of Tennessee/Carl Koonitz		5/3/16				
					DATE				
					11-13-15				

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau AmeriSteel			OBSERVATION DATE 3-23-14				START TIME 8:35am		STOP TIME 8:53am	
ADDRESS 801 Gerdau AmeriSteel Rd			SEC MIN	5	15	20	45	COMMENTS		
CITY Jackson			1	0	0	6	0			
STATE TN			2	0	0	0	0			
ZIP 38305			3	0	0	0	0			
PHONE (731) 424-5600			4	0	0	0	0			
SOURCE ID NUMBER 57-0189-01			5	0	0	0	0			
PROCESS EQUIPMENT Electric Arc Furnace			6	0	0	0	0			
OPERATING MODE Hot			7	0	0	0	0			
CONTROL EQUIPMENT Baghouse 1 & 2			8	0	0	0	0			
OPERATING MODE Continuous			9	0	0	0	0			
DESCRIBE EMISSION POINT Outlet on top of Baghouse			10	0	0	0	0			
HEIGHT ABOVE GROUND LEVEL START 76 ft STOP 76 ft			11	0	0	0	0			
HEIGHT RELATIVE TO OBSERVER START 76 ft STOP 76 ft			12	0	0	0	0			
DISTANCE FROM OBSERVER START 380 ft STOP 380 ft			13	0	0	0	0			
DIRECTION FROM OBSERVER START North STOP North			14	0	0	0	0			
DESCRIBE VISIBLE EMISSIONS			15	0	0	0	0			
START			16	0	0	0	0			
STOP			17	0	0	0	0			
EMISSION COLOR			18	0	0	0	0			
IF WATER DROPLET PLUME			19	0	0	0	0			
START			20	0	0	0	0			
STOP			21	0	0	0	0			
ATTACHED ☐ DETACHED ☐			22	0	0	0	0			
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			23	0	0	0	0			
START Outlet (exit)			24	0	0	0	0			
STOP Outlet (exit)			25	0	0	0	0			
DESCRIBE PLUME BACKGROUND			26	0	0	0	0			
START Sky			27	0	0	0	0			
STOP Sky			28	0	0	0	0			
BACKGROUND COLOR			29	0	0	0	0			
START Gray			30	0	0	0	0			
STOP Gray			31	0	0	0	0			
SKY CONDITIONS			32	0	0	0	0			
START Cloudy			33	0	0	0	0			
STOP Cloudy			34	0	0	0	0			
WIND SPEED			35	0	0	0	0			
START 5-10mph			36	0	0	0	0			
STOP 5-10mph			37	0	0	0	0			
WIND DIRECTION			38	0	0	0	0			
START S			39	0	0	0	0			
STOP S			40	0	0	0	0			
AMBIENT TEMP			41	0	0	0	0			
START 58°			42	0	0	0	0			
STOP 58°			43	0	0	0	0			
WET BULB TEMP.			44	0	0	0	0			
RH, percent			45	0	0	0	0			
SOURCE LAYOUT SKETCH			46	0	0	0	0			
DRAW NORTH ARROW			47	0	0	0	0			
			48	0	0	0	0			
			49	0	0	0	0			
COMMENTS			50	0	0	0	0			
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			APPLICABLE OPACITY STANDARD 3 % OPACITY							
SIGNATURE			OBSERVER'S NAME (PRINT) Mike Johnson							
TITLE			OBSERVER'S SIGNATURE Mike Johnson							
DATE			DATE 3-22-16							
ORGANIZATION			CERTIFICATION EXPIRATION DATE 5-13-16							
VERIFIED BY			NUMBER OF READING ABOVE % WERE 0 0							
DATE			DATE 11-13-15							

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

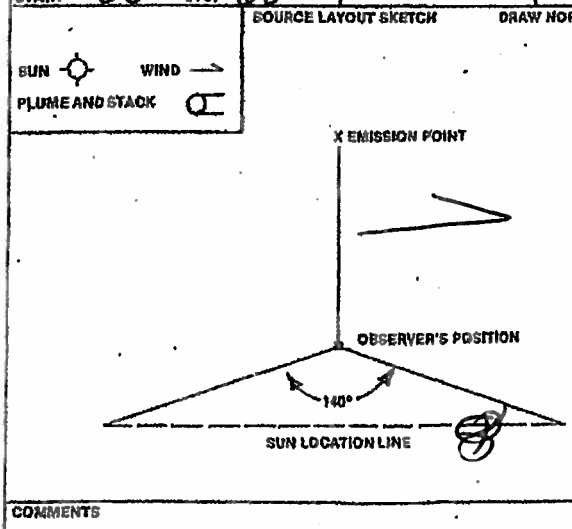
VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau AmeriSteel			OBSERVATION DATE 3-25-16				START TIME 8:10 AM		STOP TIME 8:28 AM	
ADDRESS 801 Gerdau AmeriSteel Rd			SEC	0	15	30	45	COMMENTS		
			MIN							
CITY Jackson			1	0	0	0	0			
STATE TN			2	0	0	0	0			
ZIP 38305			3	0	0	0	0			
PHONE (731) 424-5600			4	0	0	0	0			
SOURCE ID NUMBER 57-0189-01			5	0	0	0	0			
PROCESS EQUIPMENT Electric Arc Furnace			6	0	0	0	0			
OPERATING MODE Melt			7	0	0	0	0			
CONTROL EQUIPMENT Baghouse 1 & 2			8	0	0	0	0			
OPERATING MODE Continuous			9	0	0	0	0			
DESCRIBE EMISSION POINT Outlet on top of Baghouse			10	0	0	0	0			
START 76 ft STOP 76 ft			11	0	0	0	0			
HEIGHT ABOVE GROUND LEVEL			12	0	0	0	0			
HEIGHT RELATIVE TO OBSERVER			13	0	0	0	0			
START 76 ft STOP 76 ft			14	0	0	0	0			
DISTANCE FROM OBSERVER			15	0	0	0	0			
DIRECTION FROM OBSERVER			16	0	0	0	0			
START 380 ft STOP 380 ft			17	0	0	0	0			
START North STOP North			18	0	0	0	0			
DESCRIBE VISIBLE EMISSIONS			19							
START			20							
EMISSION COLOR			21							
IF WATER DROPLET PLUME			22							
START			23							
STOP			24							
ATTACHED ☐ DETACHED ☐			25							
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			26							
START Outlet (exit) STOP Outlet (exit)			27							
DESCRIBE PLUME BACKGROUND			28							
START Sky STOP Sky			29							
BACKGROUND COLOR			30							
START Gray STOP Gray			31							
SKY CONDITIONS			32							
START Cloudy STOP Cloudy			33							
WIND SPEED			34							
START 5-10 mph STOP 5-10 mph			35							
WIND DIRECTION			36							
START N STOP N			37							
AMBIENT TEMP.			38							
START 42° STOP 42°			39							
WET BULB TEMP.			40							
RH, percent			41							
SOURCE LAYOUT SKETCH			42							
DRAW NORTH ARROW			43							
			44							
			45							
APPLICABLE OPACITY STANDARD			46							
3 % OPACITY			47							
EPA METHOD 9 ☒ TVEE METHOD 2 ☐			48							
TVEE METHOD 1 ☐ TVEE METHOD 3 ☐			49							
AVERAGE OPACITY FOR HIGHEST PERIOD			50							
NUMBER OF READING ABOVE % WERE			51							
0 0			52							
COMMENTS			53							
OBSERVER'S NAME (PRINT)			54							
Mike Johnson			55							
OBSERVER'S SIGNATURE			56							
Mike Johnson			57							
DATE			58							
3-25-16			59							
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			60							
ORGANIZATION			61							
Gerdau AmeriSteel			62							
VERIFIED BY			63							
State Of Tennessee/Carl Kohnz			64							
DATE			65							
11-13-14			66							
SIGNATURE			67							
TITLE			68							
DATE			69							

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau AmeriSteel		OBSERVATION DATE 3-29-16		START TIME 9:25 AM		STOP TIME 9:43 AM	
ADDRESS 801 Gerdau AmeriSteel Rd		CITY Jackson		STATE TN		ZIP 38305	
PHONE (731) 424-5600		SOURCE ID NUMBER 57-0189-01		PROCESS EQUIPMENT Electric Arc Furnace		OPERATING MODE melt	
CONTROL EQUIPMENT Baghouse 1 & 2		OPERATING MODE Continuous		DESCRIBE EMISSION POINT Outlet on top of Baghouse			
HEIGHT ABOVE GROUND LEVEL START 76 ft STOP 76 ft		HEIGHT RELATIVE TO OBSERVER START 76 ft STOP 76 ft		DISTANCE FROM OBSERVER START 380 ft STOP 380 ft		DIRECTION FROM OBSERVER START North STOP North	
DESCRIBE VISIBLE EMISSIONS START STOP		EMISSION COLOR START STOP		IF WATER DROPLET PLUME START STOP		ATTACHED ☐ DETACHED ☐	
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED START Outlet (exit) STOP Outlet (exit)		DESCRIBE PLUME BACKGROUND START Sky STOP Sky		BACKGROUND COLOR START white STOP white		SKY CONDITIONS START clear STOP clear	
WIND SPEED START 0-10 mph STOP 0-10 mph		WIND DIRECTION START W STOP W		AMBIENT TEMP. START 60° STOP 60°		WET BULB TEMP. RH, percent	
SOURCE LAYOUT SKETCH 		DRAW NORTH ARROW 1		APPLICABLE OPACITY STANDARD 3 % OPACITY		EPA METHOD 9 ☐ TVEE METHOD 2 ☐	
COMMENTS		OBSERVER'S NAME (PRINT) Roydell Herron		OBSERVER'S SIGNATURE Roydell Herron		DATE 3-29-16	
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS		ORGANIZATION Gerdau AmeriSteel		CERTIFICATION EXPIRATION DATE 5-16-16		NUMBER OF READING ABOVE % WERE 0/0	
SIGNATURE State Of Tennessee		DATE 11-16-15		VERIFIED BY Carl Koontz		DATE	

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME			OBSERVATION DATE				START TIME		STOP TIME	
Gerdau AmeriSteel			3-30-14				11:00 AM		11:18 AM	
ADDRESS			MIN	SEC	0	15	30	45	COMMENTS	
801 Gerdau AmeriSteel Rd			1	0	0	0	0			
CITY	STATE	ZIP	2	0	0	0	0			
Jackson	TN	38305	3	0	0	0	0			
PHONE	SOURCE ID NUMBER		4	0	0	0	0			
(731) 424-5600	57-0189-01		5	0	0	0	0			
PROCESS EQUIPMENT		OPERATING MODE	6	0	0	0	0			
Electric Arc Furnace		<i>melt</i>	7	0	0	0	0			
CONTROL EQUIPMENT		OPERATING MODE	8	0	0	0	0			
Baghouse 1 & 2		Continuous	9	0	0	0	0			
DESCRIBE EMISSION POINT			10	0	0	0	0			
START Outlet on top of Baghouse			11	0	0	0	0			
HEIGHT ABOVE GROUND LEVEL		HEIGHT RELATIVE TO OBSERVER	12	0	0	0	0			
START 76 ft STOP 76 ft	START 76 ft STOP 76 ft		13	0	0	0	0			
DISTANCE FROM OBSERVER		DIRECTION FROM OBSERVER	14	0	0	0	0			
START 380 ft STOP 380 ft	START North STOP North		15	0	0	0	0			
DESCRIBE VISIBLE EMISSIONS			16	0	0	0	0			
START	STOP		17	0	0	0	0			
EMISSION COLOR	IF WATER DROPLET PLUME?		18	0	0	0	0			
START	STOP		19	0	0	0	0			
ATTACHED ☐ DETACHED ☐			20	0	0	0	0			
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			21	0	0	0	0			
START Outlet (exit)	STOP Outlet (exit)		22	0	0	0	0			
DESCRIBE PLUME BACKGROUND			23	0	0	0	0			
START Sky	STOP Sky		24	0	0	0	0			
BACKGROUND COLOR	SKY CONDITIONS		25	0	0	0	0			
START gray STOP gray	START cloudy STOP cloudy		26	0	0	0	0			
WIND SPEED	WIND DIRECTION		27	0	0	0	0			
START 0-10 mph STOP 0-10 mph	START W STOP W		28	0	0	0	0			
AMBIENT TEMP.	WET BULB TEMP.	RH, percent	29	0	0	0	0			
START 70.0 STOP 70.0			30	0	0	0	0			
SOURCE LAYOUT SKETCH			DRAW NORTH ARROW							
APPLICABLE OPACITY STANDARD			EPA METHOD 9 ☐ TVEE METHOD 2 ☐							
3 % OPACITY			TVEE METHOD 1 ☐ TVEE METHOD 3 ☐							
AVERAGE OPACITY FOR HIGHEST PERIOD			NUMBER OF READING ABOVE % WERE							
0 0			0 0							
COMMENTS			OBSERVER'S NAME (PRINT)							
			Roydell Herron							
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			OBSERVER'S SIGNATURE							
			Roydell Herron							
SIGNATURE			DATE							
			3-30-14							
TITLE			ORGANIZATION							
			Gerdau AmeriSteel							
DATE			VERIFIED BY							
			State Of Tennessee/Carl Koontz							
			DATE							
			1/14-15							

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau AmeriSteel			OBSERVATION DATE 1-5-16			START TIME 10:15 Am		STOP TIME 10:33 Am	
ADDRESS 801 Gerdau AmeriSteel Rd			SEC MIN	0	15	30	45	COMMENTS	
CITY Jackson			STATE TN		ZIP 38305				
PHONE (731) 424-5600			SOURCE ID NUMBER 57-0189-01						
PROCESS EQUIPMENT Electric Arc Furnace			OPERATING MODE melt						
CONTROL EQUIPMENT Baghouse 1 & 2			OPERATING MODE Continuous						
DESCRIBE EMISSION POINT Outlet on top of Baghouse									
HEIGHT ABOVE GROUND LEVEL START 76 ft STOP 76 ft			HEIGHT RELATIVE TO OBSERVER START 76 ft STOP 76 ft						
DISTANCE FROM OBSERVER START 380 ft STOP 380 ft			DIRECTION FROM OBSERVER START North STOP North						
DESCRIBE VISIBLE EMISSIONS									
START			STOP						
EMISSION COLOR			IF WATER DROPLET PLUME:						
START			STOP						
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED									
START Outlet (exit)			STOP Outlet (exit)						
DESCRIBE PLUME BACKGROUND									
START Sky			STOP Sky						
BACKGROUND COLOR			SKY CONDITIONS						
START blue			STOP white						
WIND SPEED			WIND DIRECTION						
START 0-10 mph			STOP W						
AMBIENT TEMP.			WET BULB TEMP.						
START 40°			RH, percent						
STOP 40°									
SOURCE LAYOUT SKETCH			DRAW NORTH ARROW						
COMMENTS									
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS									
SIGNATURE			OBSERVER'S NAME (PRINT) Royalel Herron						
TITLE			OBSERVER'S SIGNATURE Royalel Herron						
DATE			DATE 1-5-14						
			ORGANIZATION Gerdau AmeriSteel						
			CERTIFICATION EXPIRATION DATE 5-16-16						
			VERIFIED BY State Of Tennessee Carl Koontz						
			DATE 11-14-5						

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME				OBSERVATION DATE				START TIME		STOP TIME	
Gerdau AmeriSteel				1-6-16				10:25 AM		10:43 AM	
ADDRESS				SEC		MIN		COMMENTS			
801 Gerdau AmeriSteel Rd											
CITY		STATE		ZIP							
Jackson		TN		38305							
PHONE		SOURCE ID NUMBER									
(731) 424-5600		57-0189-01									
PROCESS EQUIPMENT				OPERATING MODE							
Electric Arc Furnace				melt							
CONTROL EQUIPMENT				OPERATING MODE							
Baghouse 1 & 2				Continuous							
DESCRIBE EMISSION POINT											
START Outlet on top of Baghouse											
HEIGHT ABOVE GROUND LEVEL				HEIGHT RELATIVE TO OBSERVER							
START 76 ft STOP 76 ft				START 76 ft STOP 76 ft							
DISTANCE FROM OBSERVER				DIRECTION FROM OBSERVER							
START 380 ft STOP 380 ft				START North STOP North							
DESCRIBE VISIBLE EMISSIONS											
START				STOP							
EMISSION COLOR				IF WATER DROPLET PLUME:							
START				STOP		ATTACHED ☐ DETACHED ☐					
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED											
START Outlet (exit)				STOP Outlet (exit)							
DESCRIBE PLUME BACKGROUND											
START Sky				STOP Sky							
BACKGROUND COLOR				SKY CONDITIONS							
START blue				STOP blue		START clear STOP clear					
WIND SPEED				WIND DIRECTION							
START 0-10 mph STOP 0-10 mph				START N STOP N							
AMBIENT TEMP.				WET BULB TEMP.		RH, percent					
START 36 STOP 36											
SOURCE LAYOUT SKETCH				DRAW NORTH ARROW							
COMMENTS											
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS											
SIGNATURE				OBSERVER'S NAME (PRINT)		DATE					
				Roy deHerron		1-6-16					
TITLE				OBSERVER'S SIGNATURE		CERTIFICATION EXPIRATION DATE					
				Roy deHerron		5-16-16					
DATE				ORGANIZATION		DATE					
				Gerdau AmeriSteel		7-16-15					
VERIFIED BY				State Of Tennessee							
				Carl Koontz							

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau AmeriSteel			OBSERVATION DATE 1-7-16			START TIME 9:45 Am		STOP TIME 10:03 Am	
ADDRESS 801 Gerdau AmeriSteel Rd			SEC MIN		0	15	30	45	COMMENTS
			1		0	0	0	0	
CITY Jackson			STATE TN		ZIP 38305				
PHONE (731) 424-5600			SOURCE ID NUMBER 57-0189-01		2		0		
PROCESS EQUIPMENT Electric Arc Furnace			OPERATING MODE melt		3		0		
CONTROL EQUIPMENT Baghouse 1 & 2			OPERATING MODE Continuous		4		0		
DESCRIBE EMISSION POINT Outlet on top of Baghouse			5		0		0		
HEIGHT ABOVE GROUND LEVEL START 76 ft STOP 76 ft			HEIGHT RELATIVE TO OBSERVER START 76 ft STOP 76 ft		6		0		
DISTANCE FROM OBSERVER START 380 ft STOP 380 ft			DIRECTION FROM OBSERVER START North STOP North		7		0		
DESCRIBE VISIBLE EMISSIONS			8		0		0		
START			STOP		9		0		
EMISSION COLOR			IF WATER DROPLET PLUME:		10		0		
START			STOP		11		0		
ATTACHED ☐ DETACHED ☐			POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED		12		0		
START Outlet (exit) STOP Outlet (exit)			DESCRIBE PLUME BACKGROUND		13		0		
START Sky STOP Sky			BACKGROUND COLOR		14		0		
START gray STOP gray			SKY CONDITIONS		15		0		
WIND SPEED			WIND DIRECTION		16		0		
START 0-10 mph STOP 0-10 mph			START W STOP W		17		0		
AMBIENT TEMP.			WET BULB TEMP.		18		0		
START 45° STOP 45°			RH, percent		19		0		
SUN ☐ WIND ☐			SOURCE LAYOUT SKETCH		20				
PLUME AND STACK ☐			DRAW NORTH ARROW		21				
					22				
					23				
					24				
					25				
					26				
					27				
					28				
					29				
					30				
COMMENTS			APPLICABLE OPACITY STANDARD		EPA METHOD 9 ☒		TVEE METHOD 2 ☐		
			3 % OPACITY		TVEE METHOD 1 ☐		TVEE METHOD 3 ☐		
			AVERAGE OPACITY FOR HIGHEST PERIOD		NUMBER OF READING ABOVE % WERE		0 0		
			OBSERVER'S NAME (PRINT)		OBSERVER'S SIGNATURE		DATE		
			Roydell Herron		Roydell Herron		1-7-16		
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			ORGANIZATION		CERTIFICATION EXPIRATION DATE				
SIGNATURE			Gerdau AmeriSteel		5-16-16				
TITLE			VERIFIED BY		DATE				
			State Of Tennessee (Carl Koontz)		11-16-15				

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

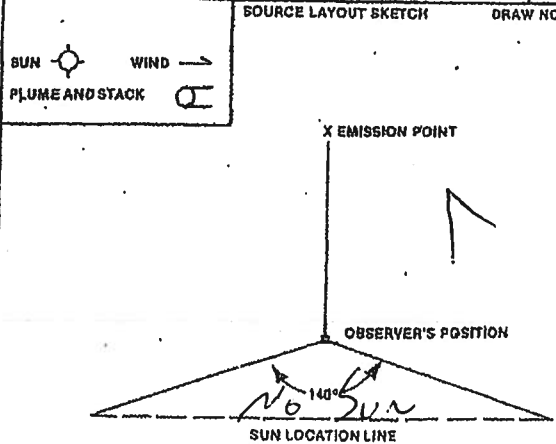
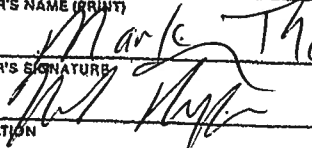
VISIBLE EMISSION OBSERVATION

SOURCE NAME			OBSERVATION DATE				START TIME	STOP TIME
Gerdau AmeriSteel			1-8-16				10:15 AM	10:33 AM
ADDRESS			SEC	0	15	30	45	COMMENTS
801 Gerdau AmeriSteel Rd			MIN					
CITY			1	0	0	0	0	
JACKSON			2	0	0	0	0	
STATE			3	0	0	0	0	
TN			4	0	0	0	0	
ZIP			5	0	0	0	0	
38305			6	0	0	0	0	
PHONE			7	0	0	0	0	
(731) 424-5600			8	0	0	0	0	
SOURCE ID NUMBER			9	0	0	0	0	
57-0189-01			10	0	0	0	0	
PROCESS EQUIPMENT			11	0	0	0	0	
Electric Arc Furnace			12	0	0	0	0	
OPERATING MODE			13	0	0	0	0	
Control Equipment			14	0	0	0	0	
Baghouse 1 & 2			15	0	0	0	0	
OPERATING MODE			16	0	0	0	0	
Continuous			17	0	0	0	0	
DESCRIBE EMISSION POINT			18	0	0	0	0	
START Outlet on top of Baghouse			19	0	0	0	0	
HEIGHT ABOVE GROUND LEVEL			20	0	0	0	0	
START 76 ft STOP 76 ft			21	0	0	0	0	
HEIGHT RELATIVE TO OBSERVER			22	0	0	0	0	
START 76 ft STOP 76 ft			23	0	0	0	0	
DISTANCE FROM OBSERVER			24	0	0	0	0	
START 380 ft STOP 380 ft			25	0	0	0	0	
DIRECTION FROM OBSERVER			26	0	0	0	0	
START North STOP North			27	0	0	0	0	
DESCRIBE VISIBLE EMISSIONS			28	0	0	0	0	
START			29	0	0	0	0	
STOP			30	0	0	0	0	
EMISSION COLOR			31	0	0	0	0	
IF WATER DROPLET PLUME:			32	0	0	0	0	
START			33	0	0	0	0	
STOP			34	0	0	0	0	
ATTACHED ☐ DETACHED ☐			35	0	0	0	0	
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			36	0	0	0	0	
START Outlet (exit)			37	0	0	0	0	
STOP Outlet (exit)			38	0	0	0	0	
DESCRIBE PLUME BACKGROUND			39	0	0	0	0	
START Sky			40	0	0	0	0	
STOP Sky			41	0	0	0	0	
BACKGROUND COLOR			42	0	0	0	0	
SKY CONDITIONS			43	0	0	0	0	
START gray STOP gray			44	0	0	0	0	
START cloudy STOP cloudy			45	0	0	0	0	
WIND SPEED			46	0	0	0	0	
WIND DIRECTION			47	0	0	0	0	
START 0-10 mph STOP 0-10 mph			48	0	0	0	0	
START W STOP W			49	0	0	0	0	
AMBIENT TEMP.			50	0	0	0	0	
WET BULB TEMP.			51	0	0	0	0	
RH, percent			52	0	0	0	0	
START 50° STOP 50°			53	0	0	0	0	
SOURCE LAYOUT SKETCH			54	0	0	0	0	
DRAW NORTH ARROW			55	0	0	0	0	
			56	0	0	0	0	
SUN WIND PLUME AND STACK			57	0	0	0	0	
COMMENTS			58	0	0	0	0	
OBSERVER'S NAME (PRINT)			59	0	0	0	0	
Raydell Herron			60	0	0	0	0	
OBSERVER'S SIGNATURE			61	0	0	0	0	
Raydell Herron			62	0	0	0	0	
DATE			63	0	0	0	0	
1-8-16			64	0	0	0	0	
ORGANIZATION			65	0	0	0	0	
Gerdau AmeriSteel			66	0	0	0	0	
VERIFIED BY			67	0	0	0	0	
State Of Tennessee (Carl Koontz)			68	0	0	0	0	
DATE			69	0	0	0	0	
11-16-15			70	0	0	0	0	

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau AmeriSteel			OBSERVATION DATE 1-9-16		START TIME 9:20a	STOP TIME 9:38a
ADDRESS 801 Gerdau AmeriSteel Rd			MIN	SEC	0	15
					30	45
CITY Jackson			COMMENTS			
STATE TN						
ZIP 38305						
PHONE (731) 424-5600						
SOURCE ID NUMBER 57-0189-01						
PROCESS EQUIPMENT Electric Arc Furnace						
OPERATING MODE						
CONTROL EQUIPMENT Baghouse 1 & 2						
OPERATING MODE Continuous						
DESCRIBE EMISSION POINT Outlet on top of Baghouse						
HEIGHT ABOVE GROUND LEVEL START 76 ft STOP 76 ft						
HEIGHT RELATIVE TO OBSERVER START 76 ft STOP 76 ft						
DISTANCE FROM OBSERVER START 380 ft STOP 380 ft						
DIRECTION FROM OBSERVER START North STOP North						
DESCRIBE VISIBLE EMISSIONS START STOP						
EMISSION COLOR START STOP						
IF WATER DROPLET PLUME: START STOP						
ATTACHED ☐ DETACHED ☐						
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED START Outlet (exit) STOP Outlet (exit)						
DESCRIBE PLUME BACKGROUND START Sky STOP Sky						
BACKGROUND COLOR START Gray STOP Gray						
SKY CONDITIONS START Cloudy STOP Cloudy						
WIND SPEED START 0-5 STOP 0-5						
WIND DIRECTION START S STOP S						
AMBIENT TEMP. START 54° STOP 54°						
WET BULB TEMP.						
RH, percent						
SOURCE LAYOUT SKETCH 			DRAW NORTH ARROW 			
SUN  WIND 						
PLUME AND STACK 						
COMMENTS						
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			APPLICABLE OPACITY STANDARD 3 % OPACITY			
SIGNATURE			EPA METHOD 9 ☒ TVEE METHOD 2 ☐			
TITLE			TVEE METHOD 1 ☐ TVEE METHOD 3 ☐			
DATE			AVERAGE OPACITY FOR HIGHEST PERIOD 0			
			NUMBER OF READINGS ABOVE 0			
			OBSERVER'S NAME (PRINT) Mark Thompson			
			OBSERVER'S SIGNATURE 			
			DATE 1-9-16			
			ORGANIZATION Gerdau AmeriSteel			
			CERTIFICATION EXPIRATION DATE 5-13-16			
			VERIFIED BY State Of Tennessee/Carl Koontz			
			DATE 11-13-15			

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME			OBSERVATION DATE			START TIME		STOP TIME	
Gerdau AmeriSteel			1-12-14			10:00AM		10:18AM	
ADDRESS			SEC	0	15	30	45	COMMENTS	
801 Gerdau AmeriSteel Rd			MIN						
CITY			1	0	0	0	0		
Jackson			2	0	0	0	0		
STATE			3	0	0	0	0		
TN			4	0	0	0	0		
ZIP			5	0	0	0	0		
38305			6	0	0	0	0		
PHONE			7	0	0	0	0		
(731) 424-5600			8	0	0	0	0		
SOURCE ID NUMBER			9	0	0	0	0		
57-0189-01			10	0	0	0	0		
PROCESS EQUIPMENT			11	0	0	0	0		
Electric Arc Furnace			12	0	0	0	0		
OPERATING MODE			13	0	0	0	0		
Melt			14	0	0	0	0		
CONTROL EQUIPMENT			15	0	0	0	0		
Baghouse 1 & 2			16	0	0	0	0		
OPERATING MODE			17	0	0	0	0		
Continuous			18	0	0	0	0		
DESCRIBE EMISSION POINT			19	0	0	0	0		
START Outlet on top of Baghouse			20	0	0	0	0		
HEIGHT ABOVE GROUND LEVEL			21	0	0	0	0		
START 76 ft STOP 76 ft			22	0	0	0	0		
HEIGHT RELATIVE TO OBSERVER			23	0	0	0	0		
START 76 ft STOP 76 ft			24	0	0	0	0		
DISTANCE FROM OBSERVER			25	0	0	0	0		
START 380 ft STOP 380 ft			26	0	0	0	0		
DIRECTION FROM OBSERVER			27	0	0	0	0		
START North STOP North			28	0	0	0	0		
DESCRIBE VISIBLE EMISSIONS			29	0	0	0	0		
START			30	0	0	0	0		
STOP			31	0	0	0	0		
EMISSION COLOR			32	0	0	0	0		
IF WATER DROPLET PLUME:			33	0	0	0	0		
START			34	0	0	0	0		
STOP			35	0	0	0	0		
ATTACHED ☐ DETACHED ☐			36	0	0	0	0		
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			37	0	0	0	0		
START Outlet (exit)			38	0	0	0	0		
STOP Outlet (exit)			39	0	0	0	0		
DESCRIBE PLUME BACKGROUND			40	0	0	0	0		
START Sky			41	0	0	0	0		
STOP Sky			42	0	0	0	0		
BACKGROUND COLOR			43	0	0	0	0		
START Blue			44	0	0	0	0		
STOP Blue			45	0	0	0	0		
SKY CONDITIONS			46	0	0	0	0		
START Clear			47	0	0	0	0		
STOP Clear			48	0	0	0	0		
WIND SPEED			49	0	0	0	0		
START 2-5 mph			50	0	0	0	0		
STOP 2-5 mph			51	0	0	0	0		
WIND DIRECTION			52	0	0	0	0		
START N			53	0	0	0	0		
STOP N			54	0	0	0	0		
AMBIENT TEMP.			55	0	0	0	0		
START 44			56	0	0	0	0		
STOP 44			57	0	0	0	0		
WET BULB TEMP.			58	0	0	0	0		
RH, percent			59	0	0	0	0		
SOURCE LAYOUT SKETCH			60	0	0	0	0		
DRAW NORTH ARROW			61	0	0	0	0		
			62	0	0	0	0		
			63	0	0	0	0		
COMMENTS			64	0	0	0	0		
OBSERVER'S NAME (PRINT)			65	0	0	0	0		
Mike Johnson			66	0	0	0	0		
OBSERVER'S SIGNATURE			67	0	0	0	0		
Mike Johnson			68	0	0	0	0		
DATE			69	0	0	0	0		
1-12-14			70	0	0	0	0		
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			71	0	0	0	0		
SIGNATURE			72	0	0	0	0		
Gerdau AmeriSteel			73	0	0	0	0		
VERIFIED BY			74	0	0	0	0		
State Of Tennessee/Carl Koontz			75	0	0	0	0		
DATE			76	0	0	0	0		
11-13-15			77	0	0	0	0		

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau AmeriSteel			OBSERVATION DATE 1-13-14			START TIME 11:15 AM		STOP TIME 11:33 AM	
ADDRESS 801 Gerdau AmeriSteel Rd			SEC MIN	0	15	30	45	COMMENTS	
CITY Jackson			1	0	0	0	0		
STATE TN			2	0	0	0	0		
ZIP 38305			3	0	0	0	0		
PHONE (731) 424-5600			4	0	0	0	0		
SOURCE ID NUMBER 57-0189-01			5	0	0	0	0		
PROCESS EQUIPMENT Electric Arc Furnace			6	0	0	0	0		
OPERATING MODE Meet			7	0	0	0	0		
CONTROL EQUIPMENT Baghouse 1 & 2			8	0	0	0	0		
OPERATING MODE Continuous			9	0	0	0	0		
DESCRIBE EMISSION POINT Outlet on top of Baghouse			10	0	0	0	0		
START HEIGHT ABOVE GROUND LEVEL 76 ft			11	0	0	0	0		
STOP HEIGHT ABOVE GROUND LEVEL 76 ft			12	0	0	0	0		
START DISTANCE FROM OBSERVER 380 ft			13	0	0	0	0		
STOP DISTANCE FROM OBSERVER 380 ft			14	0	0	0	0		
START DIRECTION FROM OBSERVER North			15	0	0	0	0		
STOP DIRECTION FROM OBSERVER North			16	0	0	0	0		
DESCRIBE VISIBLE EMISSIONS			17	0	0	0	0		
START EMISSION COLOR Blue			18	0	0	0	0		
STOP EMISSION COLOR Blue			19	0	0	0	0		
IF WATER DROPLET PLUME: ATTACHED ☐ DETACHED ☐			20	0	0	0	0		
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED START Outlet (exit) STOP Outlet (exit)			21	0	0	0	0		
DESCRIBE PLUME BACKGROUND START Sky STOP Sky			22	0	0	0	0		
BACKGROUND COLOR START Blue STOP Blue			23	0	0	0	0		
SKY CONDITIONS START Clear STOP Clear			24	0	0	0	0		
WIND SPEED START 5-10 mph STOP 5-10 mph			25	0	0	0	0		
WIND DIRECTION START N STOP N			26	0	0	0	0		
AMBIENT TEMP. START 44° STOP 44°			27	0	0	0	0		
WET BULB TEMP.			28	0	0	0	0		
RH, percent			29	0	0	0	0		
SOURCE LAYOUT SKETCH DRAW NORTH ARROW			30	0	0	0	0		
			APPLICABLE OPACITY STANDARD 3 % OPACITY EPA METHOD 9 ☒ TVEE METHOD 2 ☐ TVEE METHOD 1 ☐ TVEE METHOD 3 ☐ AVERAGE OPACITY FOR HIGHEST PERIOD 0 % NUMBER OF READING ABOVE % WERE 0						
COMMENTS			OBSERVER'S NAME (PRINT) Mike Johnson						
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			OBSERVER'S SIGNATURE <i>Mike Johnson</i>						
SIGNATURE			DATE 1-13-16						
TITLE			ORGANIZATION Gerdau AmeriSteel						
DATE			CERTIFICATION EXPIRATION DATE 5-13-16						
			VERIFIED BY State Of Tennessee/Carl Kozitz						
			DATE 1-13-15						

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME			OBSERVATION DATE		START TIME		STOP TIME	
Gerdau AmeriSteel			1-14-16		10:00am		10:18AM	
ADDRESS			SEC	0	15	30	45	COMMENTS
801 Gerdau AmeriSteel Rd			MIN					
CITY			1	0	0	0	0	
JACKSON			2	0	0	0	0	
STATE			3	0	0	0	0	
TN			4	0	0	0	0	
ZIP			5	0	0	0	0	
38305			6	0	0	0	0	
PHONE			7	0	0	0	0	
(731) 424-5600			8	0	0	0	0	
SOURCE ID NUMBER			9	0	0	0	0	
57-0189-01			10	0	0	0	0	
PROCESS EQUIPMENT			11	0	0	0	0	
Electric Arc Furnace			12	0	0	0	0	
OPERATING MODE			13	0	0	0	0	
Melt			14	0	0	0	0	
CONTROL EQUIPMENT			15	0	0	0	0	
Baghouse 1 & 2			16	0	0	0	0	
OPERATING MODE			17	0	0	0	0	
Continuous			18	0	0	0	0	
DESCRIBE EMISSION POINT			19	0	0	0	0	
Outlet on top of Baghouse			20	0	0	0	0	
HEIGHT ABOVE GROUND LEVEL			21	0	0	0	0	
START 76 ft STOP 76 ft			22	0	0	0	0	
DISTANCE FROM OBSERVER			23	0	0	0	0	
START 380 ft STOP 380 ft			24	0	0	0	0	
DIRECTION FROM OBSERVER			25	0	0	0	0	
START North STOP North			26	0	0	0	0	
DESCRIBE VISIBLE EMISSIONS			27	0	0	0	0	
START			28	0	0	0	0	
STOP			29	0	0	0	0	
EMISSION COLOR			30	0	0	0	0	
IF WATER DROPLET PLUME:			31	0	0	0	0	
ATTACHED ☐ DETACHED ☐			32	0	0	0	0	
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			33	0	0	0	0	
START Outlet (exit) STOP Outlet (exit)			34	0	0	0	0	
DESCRIBE PLUME BACKGROUND			35	0	0	0	0	
START Sky STOP Sky			36	0	0	0	0	
BACKGROUND COLOR			37	0	0	0	0	
START Blue STOP Blue			38	0	0	0	0	
SKY CONDITIONS			39	0	0	0	0	
START Clear STOP Clear			40	0	0	0	0	
WIND SPEED			41	0	0	0	0	
START 10/15 mph STOP 10/15 mph			42	0	0	0	0	
WIND DIRECTION			43	0	0	0	0	
START N STOP N			44	0	0	0	0	
AMBIENT TEMP.			45	0	0	0	0	
START 55° STOP 55°			46	0	0	0	0	
WET BULB TEMP.			47	0	0	0	0	
RH, percent			48	0	0	0	0	
SOURCE LAYOUT SKETCH			49	0	0	0	0	
DRAW NORTH ARROW			50	0	0	0	0	
			51	0	0	0	0	
			52	0	0	0	0	
APPLICABLE OPACITY STANDARD			53	0	0	0	0	
3 % OPACITY			54	0	0	0	0	
EPA METHOD 9 ☒ TVEE METHOD 2 ☐			55	0	0	0	0	
TVEE METHOD 1 ☐ TVEE METHOD 3 ☐			56	0	0	0	0	
AVERAGE OPACITY FOR HIGHEST PERIOD			57	0	0	0	0	
NUMBER OF READING ABOVE % WERE			58	0	0	0	0	
COMMENTS			59	0	0	0	0	
			60	0	0	0	0	
OBSERVER'S NAME (PRINT)			Mike Johnson					
OBSERVER'S SIGNATURE			Mike Johnson					
DATE			1-14-16					
ORGANIZATION			Gerdau AmeriSteel					
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			VERIFIED BY					
SIGNATURE			State Of Tennessee/Carl Rooniz					
TITLE								
DATE			11-13-15					

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

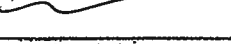
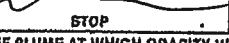
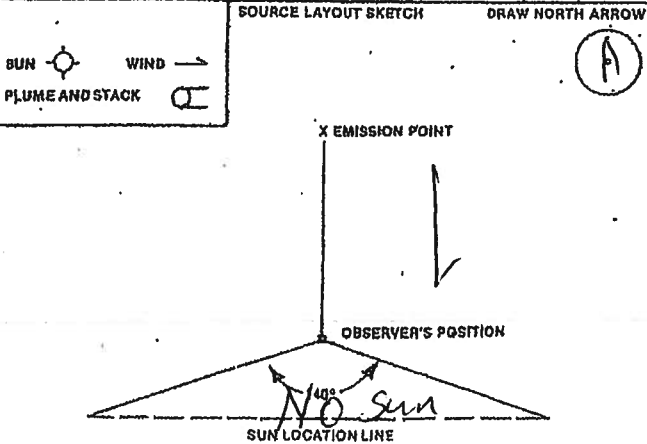
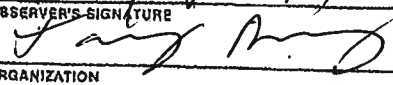
VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau AmeriSteel			OBSERVATION DATE 1-15-16			START TIME 10:05AM		STOP TIME 10:23AM	
ADDRESS 801 Gerdau AmeriSteel Rd			SEG MIN		0	15	30	45	COMMENTS
CITY Jackson			STATE TN		ZIP 38305				
PHONE (731) 424-5600			SOURCE ID NUMBER 57-0189-01						
PROCESS EQUIPMENT Electric Arc Furnace			OPERATING MODE Melt						
CONTROL EQUIPMENT Baghouse 1 & 2			OPERATING MODE Continuous						
DESCRIBE EMISSION POINT Outlet on top of Baghouse									
HEIGHT ABOVE GROUND LEVEL START 76 ft STOP 76 ft			HEIGHT RELATIVE TO OBSERVER START 76 ft STOP 76 ft						
DISTANCE FROM OBSERVER START 380 ft STOP 380 ft			DIRECTION FROM OBSERVER START North STOP North						
DESCRIBE VISIBLE EMISSIONS									
START _____ STOP _____									
EMISSION COLOR			IF WATER DROPLET PLUME:						
START _____ STOP _____			ATTACHED ☐ DETACHED ☐						
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED									
START Outlet (exit) STOP Outlet (exit)									
DESCRIBE PLUME BACKGROUND									
START Sky STOP Sky									
BACKGROUND COLOR			SKY CONDITIONS						
START Gray STOP Gray			START Cloudy STOP Cloudy						
WIND SPEED			WIND DIRECTION						
START 5-10 mph STOP 5-10 mph			START S STOP S						
AMBIENT TEMP.			WET BULB TEMP. RH, percent						
START 53° STOP 53°									
SOURCE LAYOUT SKETCH			DRAW NORTH ARROW						
COMMENTS									
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			OBSERVER'S NAME (PRINT) Mike Johnson						
SIGNATURE			OBSERVER'S SIGNATURE <i>Mike Johnson</i>						
TITLE			ORGANIZATION Gerdau AmeriSteel						
DATE			VERIFIED BY State Of Tennessee / Capt. Koontz						
			EPA METHOD 9 ☒ TVEE METHOD 2 ☐						
			TVEE METHOD 1 ☐ TVEE METHOD 3 ☐						
			AVERAGE OPACITY FOR HIGHEST PERIOD 3 % OPACITY						
			NUMBER OF READING ABOVE % WERE 00						
			DATE 1-15-16						
			CERTIFICATION EXPIRATION DATE 5-13-16						
			DATE 11-13-15						

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau AmeriSteel			OBSERVATION DATE 1-16-16		START TIME 12:30 PM	STOP TIME 12:48 PM
ADDRESS 801 Gerdau AmeriSteel Rd			SEG MIN	0	15	30
			45	COMMENTS		
CITY Jackson	STATE TN	ZIP 38305	1	0	0	0
PHONE (731) 424-5600	SOURCE ID NUMBER 57-0189-01		2	0	0	0
PROCESS EQUIPMENT Electric Arc Furnace	OPERATING MODE melting		3	0	0	0
CONTROL EQUIPMENT Baghouse 1 & 2	OPERATING MODE Continuous		4	0	0	0
DESCRIBE EMISSION POINT Outlet on top of Baghouse			5	0	0	0
HEIGHT ABOVE GROUND LEVEL START 76 ft STOP 76 ft	HEIGHT RELATIVE TO OBSERVER START 76 ft STOP 76 ft		6	0	0	0
DISTANCE FROM OBSERVER START 380 ft STOP 380 ft	DIRECTION FROM OBSERVER START North STOP North		7	0	0	0
DESCRIBE VISIBLE EMISSIONS START  STOP 			8	0	0	0
EMISSION COLOR START  STOP 			9	0	0	0
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED START Outlet (exit) STOP Outlet (exit)			10	0	0	0
DESCRIBE PLUME BACKGROUND START Sky STOP Sky			11	0	0	0
BACKGROUND COLOR START Gray STOP Gray			12	0	0	0
WIND SPEED START 5 to 10 STOP 5 to 10			13	0	0	0
WIND DIRECTION START N STOP N			14	0	0	0
AMBIENT TEMP. START 39° STOP 39°			15	0	0	0
WET BULB TEMP. RH, percent			16	0	0	0
SOURCE LAYOUT SKETCH 			17	0	0	0
DRAW NORTH ARROW 			18	0	0	0
APPLICABLE OPACITY STANDARD 3 % OPACITY			19	0	0	0
AVERAGE OPACITY FOR HIGHEST PERIOD 0			20	0	0	0
NUMBER OF READING ABOVE % WERE 0			21	0	0	0
COMMENTS			22	0	0	0
OBSERVER'S NAME (PRINT) Tony Perry			23	0	0	0
OBSERVER'S SIGNATURE 			24	0	0	0
DATE 1-16-16			25	0	0	0
ORGANIZATION Gerdau AmeriSteel			26	0	0	0
CERTIFICATION EXPIRATION DATE 5-16-16			27	0	0	0
VERIFIED BY State Of Tennessee/Carl Koontz			28	0	0	0
DATE 11-16-16			29	0	0	0
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			30	0	0	0
SIGNATURE						
TITLE						
DATE						

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau AmeriSteel			OBSERVATION DATE 1-19-14			START TIME 7:40 AM		STOP TIME 8:58 AM	
ADDRESS 801 Gerdau AmeriSteel Rd			SEC MIN		0	15	30	45	COMMENTS
CITY Jackson			STATE TN		ZIP 38305				
PHONE (731) 424-5600			SOURCE ID NUMBER 57-0189-01						
PROCESS EQUIPMENT Electric Arc Furnace			OPERATING MODE melt						
CONTROL EQUIPMENT Baghouse 1 & 2			OPERATING MODE Continuous						
DESCRIBE EMISSION POINT Outlet on top of Baghouse									
START 76 ft			STOP 76 ft						
HEIGHT ABOVE GROUND LEVEL			HEIGHT RELATIVE TO OBSERVER						
START 76 ft			STOP 76 ft						
DISTANCE FROM OBSERVER			DIRECTION FROM OBSERVER						
START 380 ft			STOP 380 ft						
DESCRIBE VISIBLE EMISSIONS									
START Outlet (exit)			STOP Outlet (exit)						
EMISSION COLOR									
IF WATER DROPLET PLUME:									
START Attached			STOP Attached						
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED									
START Outlet (exit)			STOP Outlet (exit)						
DESCRIBE PLUME BACKGROUND									
START Sky			STOP Sky						
BACKGROUND COLOR									
SKY CONDITIONS									
START gray			STOP gray						
WIND SPEED									
WIND DIRECTION									
START W			STOP W						
AMBIENT TEMP.									
WET BULB TEMP.									
RH, percent									
START 15°			STOP 15°						
SOURCE LAYOUT SKETCH			DRAW NORTH ARROW						
APPLICABLE OPACITY STANDARD			EPA METHOD 9 ☒ TVEE METHOD 2 ☐						
3 % OPACITY			TVEE METHOD 1 ☐ TVEE METHOD 3 ☐						
AVERAGE OPACITY FOR HIGHEST PERIOD			NUMBER OF READING ABOVE % WERE						
COMMENTS			OBSERVER'S NAME (PRINT) Roydell Herrow						
OBSERVER'S SIGNATURE Roydell Herrow			DATE 1-19-14						
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			ORGANIZATION Gerdau AmeriSteel						
SIGNATURE State Of Tennessee			CERTIFICATION EXPIRATION DATE 5-16-14						
TITLE			DATE 11-16-15						

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME				OBSERVATION DATE				START TIME		STOP TIME	
Gerdau AmeriSteel				1-20-14				10:10 AM		10:28 AM	
ADDRESS				SEC		MIN		COMMENTS			
801 Gerdau AmeriSteel Rd				0		18		30		45	
CITY				1		2		3		4	
Jackson				0		0		0		0	
STATE				3		4		5		6	
TN				0		0		0		0	
ZIP				5		6		7		8	
38305				0		0		0		0	
PHONE				6		7		8		9	
(731) 424-5600				0		0		0		0	
SOURCE ID NUMBER				10		11		12		13	
57-0189-01				0		0		0		0	
PROCESS EQUIPMENT				14		15		16		17	
Electric Arc Furnace				0		0		0		0	
OPERATING MODE				18		19		20		21	
melt				0		0		0		0	
CONTROL EQUIPMENT				22		23		24		25	
Baghouse 1 & 2				0		0		0		0	
OPERATING MODE				26		27		28		29	
Continuous				0		0		0		0	
DESCRIBE EMISSION POINT				30		31		32		33	
START				34		35		36		37	
Outlet on top of Baghouse				0		0		0		0	
HEIGHT ABOVE GROUND LEVEL				38		39		40		41	
START				42		43		44		45	
76 ft				0		0		0		0	
STOP				46		47		48		49	
76 ft				0		0		0		0	
DISTANCE FROM OBSERVER				50		51		52		53	
START				54		55		56		57	
380 ft				0		0		0		0	
STOP				58		59		60		61	
380 ft				0		0		0		0	
DIRECTION FROM OBSERVER				62		63		64		65	
START				66		67		68		69	
North				0		0		0		0	
STOP				70		71		72		73	
North				0		0		0		0	
DESCRIBE VISIBLE EMISSIONS				74		75		76		77	
START				78		79		80		81	
Emission Color				82		83		84		85	
IF WATER DROPLET PLUME:				86		87		88		89	
START				90		91		92		93	
STOP				94		95		96		97	
ATTACHED ☐ DETACHED ☐				98		99		100		101	
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED				102		103		104		105	
START				106		107		108		109	
Outlet (exit)				0		0		0		0	
STOP				110		111		112		113	
Outlet (exit)				0		0		0		0	
DESCRIBE PLUME BACKGROUND				114		115		116		117	
START				118		119		120		121	
Sky				0		0		0		0	
STOP				122		123		124		125	
Sky				0		0		0		0	
BACKGROUND COLOR				126		127		128		129	
START				130		131		132		133	
gray				0		0		0		0	
STOP				134		135		136		137	
gray				0		0		0		0	
SKY CONDITIONS				138		139		140		141	
START				142		143		144		145	
cloudy				0		0		0		0	
STOP				146		147		148		149	
cloudy				0		0		0		0	
WIND SPEED				150		151		152		153	
START				154		155		156		157	
8-10 mph				0		0		0		0	
STOP				158		159		160		161	
10 mph				0		0		0		0	
WIND DIRECTION				162		163		164		165	
START				166		167		168		169	
W				0		0		0		0	
STOP				170		171		172		173	
W				0		0		0		0	
AMBIENT TEMP.				174		175		176		177	
START				178		179		180		181	
32°				0		0		0		0	
STOP				182		183		184		185	
32°				0		0		0		0	
WET BULB TEMP.				186		187		188		189	
RH, percent				190		191		192		193	
SOURCE LAYOUT SKETCH				194		195		196		197	
DRAW NORTH ARROW				198		199		200		201	
BUN  WIND 				202		203		204		205	
PLUME AND STACK 				206		207		208		209	
X EMISSION POINT				210		211		212		213	
OBSERVER'S POSITION				214		215		216		217	
SUN LOCATION LINE				218		219		220		221	
APPLICABLE OPACITY STANDARD				222		223		224		225	
3 % OPACITY				226		227		228		229	
EPA METHOD 9				230		231		232		233	
TVEE METHOD 2				234		235		236		237	
TVEE METHOD 1				238		239		240		241	
TVEE METHOD 3				242		243		244		245	
AVERAGE OPACITY FOR HIGHEST PERIOD				246		247		248		249	
NUMBER OF READING ABOVE % WERE				250		251		252		253	
COMMENTS				254		255		256		257	
OBSERVER'S NAME (PRINT)				258		259		260		261	
Royall Herron				262		263		264		265	
OBSERVER'S SIGNATURE				266		267		268		269	
Royall Herron				270		271		272		273	
DATE				274		275		276		277	
1-20-14				278		279		280		281	
ORGANIZATION				282		283		284		285	
Gerdau AmeriSteel				286		287		288		289	
VERIFIED BY				290		291		292		293	
State Of Tennessee Carl Koontz				294		295		296		297	
DATE				298		299		300		301	
1-14-15				302		303		304		305	
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS				306		307		308		309	
SIGNATURE				310		311		312		313	
TITLE				314		315		316		317	
DATE				318		319		320		321	

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME			OBSERVATION DATE			START TIME		STOP TIME	
Gerdau AmeriSteel			1-21-14			12:45 PM		1:03 PM	
ADDRESS			SEC	0	15	30	45	COMMENTS	
801 Gerdau AmeriSteel Rd			MIN						
CITY			1	0	0	0	0		
JACKSON			2	0	0	0	0		
STATE			3	0	0	0	0		
TN			4	0	0	0	0		
ZIP			5	0	0	0	0		
38305			6	0	0	0	0		
PHONE			7	0	0	0	0		
(731) 424-5600			8	0	0	0	0		
SOURCE ID NUMBER			9	0	0	0	0		
57-0189-01			10	0	0	0	0		
PROCESS EQUIPMENT			11	0	0	0	0		
Electric Arc Furnace			12	0	0	0	0		
OPERATING MODE			13	0	0	0	0		
melt			14	0	0	0	0		
CONTROL EQUIPMENT			15	0	0	0	0		
Baghouse 1 & 2			16	0	0	0	0		
OPERATING MODE			17	0	0	0	0		
Continuous			18	0	0	0	0		
DESCRIBE EMISSION POINT			19	0	0	0	0		
START			20	0	0	0	0		
Outlet on top of Baghouse			21	0	0	0	0		
HEIGHT ABOVE GROUND LEVEL			22	0	0	0	0		
START 76 ft STOP 76 ft			23	0	0	0	0		
HEIGHT RELATIVE TO OBSERVER			24	0	0	0	0		
START 76 ft STOP 76 ft			25	0	0	0	0		
DISTANCE FROM OBSERVER			26	0	0	0	0		
START 380 ft STOP 380 ft			27	0	0	0	0		
DIRECTION FROM OBSERVER			28	0	0	0	0		
START North STOP North			29	0	0	0	0		
DESCRIBE VISIBLE EMISSIONS			30	0	0	0	0		
START			31	0	0	0	0		
EMISSION COLOR			32	0	0	0	0		
IF WATER DROPLET PLUME:			33	0	0	0	0		
START			34	0	0	0	0		
STOP			35	0	0	0	0		
ATTACHED ☐ DETACHED ☐			36	0	0	0	0		
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			37	0	0	0	0		
START			38	0	0	0	0		
Outlet (exit)			39	0	0	0	0		
STOP			40	0	0	0	0		
Outlet (exit)			41	0	0	0	0		
DESCRIBE PLUME BACKGROUND			42	0	0	0	0		
START			43	0	0	0	0		
Sky			44	0	0	0	0		
STOP			45	0	0	0	0		
Sky			46	0	0	0	0		
BACKGROUND COLOR			47	0	0	0	0		
START			48	0	0	0	0		
gray			49	0	0	0	0		
STOP			50	0	0	0	0		
gray			51	0	0	0	0		
WIND SPEED			52	0	0	0	0		
START			53	0	0	0	0		
8-10 mph			54	0	0	0	0		
STOP			55	0	0	0	0		
10 mph			56	0	0	0	0		
WIND DIRECTION			57	0	0	0	0		
START			58	0	0	0	0		
W			59	0	0	0	0		
STOP			60	0	0	0	0		
W			61	0	0	0	0		
AMBIENT TEMP.			62	0	0	0	0		
START			63	0	0	0	0		
32°			64	0	0	0	0		
STOP			65	0	0	0	0		
32°			66	0	0	0	0		
WET BULB TEMP.			67	0	0	0	0		
RH, percent			68	0	0	0	0		
SOURCE LAYOUT SKETCH			69	0	0	0	0		
DRAW NORTH ARROW			70	0	0	0	0		
			71	0	0	0	0		
			72	0	0	0	0		
			73	0	0	0	0		
			74	0	0	0	0		
			75	0	0	0	0		
			76	0	0	0	0		
			77	0	0	0	0		
			78	0	0	0	0		
			79	0	0	0	0		
			80	0	0	0	0		
			81	0	0	0	0		
			82	0	0	0	0		
			83	0	0	0	0		
			84	0	0	0	0		
			85	0	0	0	0		
			86	0	0	0	0		
			87	0	0	0	0		
			88	0	0	0	0		
			89	0	0	0	0		
			90	0	0	0	0		
			91	0	0	0	0		
			92	0	0	0	0		
			93	0	0	0	0		
			94	0	0	0	0		
			95	0	0	0	0		
			96	0	0	0	0		
			97	0	0	0	0		
			98	0	0	0	0		
			99	0	0	0	0		
			100	0	0	0	0		
			101	0	0	0	0		
			102	0	0	0	0		
			103	0	0	0	0		
			104	0	0	0	0		
			105	0	0	0	0		
			106	0	0	0	0		
			107	0	0	0	0		
			108	0	0	0	0		
			109	0	0	0	0		
			110	0	0	0	0		
			111	0	0	0	0		
			112	0	0	0	0		
			113	0	0	0	0		
			114	0	0	0	0		
			115	0	0	0	0		
			116	0	0	0	0		
			117	0	0	0	0		
			118	0	0	0	0		
			119	0	0	0	0		
			120	0	0	0	0		
			121	0	0	0	0		
			122	0	0	0	0		
			123	0	0	0	0		
			124	0	0	0	0		
			125	0	0	0	0		
			126	0	0	0	0		
			127	0	0	0	0		
			128	0	0	0	0		
			129	0	0	0	0		
			130	0	0	0	0		
			131	0	0	0	0		
			132	0	0	0	0		
			133	0	0	0	0		
			134	0	0	0	0		
			135	0	0	0	0		
			136	0	0	0	0		
			137	0	0	0	0		
			138	0	0	0	0		
			139	0	0	0	0		
			140	0	0	0	0		
			141	0	0	0	0		
			142	0	0	0	0		
			143	0	0	0	0		
			144	0	0	0	0		
			145	0	0	0	0		
			146	0	0	0	0		
			147	0	0	0	0		
			148	0	0	0	0		
			149	0	0	0	0		
			150	0	0	0	0		
			151	0	0	0	0		
			152	0	0	0	0		
			153	0	0	0	0		
			154	0	0	0	0		
			155	0	0	0	0		
			156	0	0	0	0		
			157	0	0	0	0		

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME				OBSERVATION DATE				START TIME		STOP TIME	
Gerdau AmeriSteel				9-22-16				9:25 Am		9:43 Am	
ADDRESS				SEC		MIN		COMMENTS			
801 Gerdau AmeriSteel Rd											
CITY		STATE		ZIP							
Jackson		TN		38305							
PHONE		SOURCE ID NUMBER									
(731) 424-5600		57-0189-01									
PROCESS EQUIPMENT		OPERATING MODE									
Electric Arc Furnace		melt									
CONTROL EQUIPMENT		OPERATING MODE									
Baghouse 1 & 2		Continuous									
DESCRIBE EMISSION POINT											
START Outlet on top of Baghouse											
HEIGHT ABOVE GROUND LEVEL		HEIGHT RELATIVE TO OBSERVER									
START 76 ft STOP 76 ft		START 76 ft STOP 76 ft									
DISTANCE FROM OBSERVER		DIRECTION FROM OBSERVER									
START 380 ft STOP 380 ft		START North STOP North									
DESCRIBE VISIBLE EMISSIONS											
START		STOP									
EMISSION COLOR		IF WATER DROPLET PLUME:									
START		STOP		ATTACHED ☐ DETACHED ☐							
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED											
START Outlet (exit)		STOP Outlet (exit)									
DESCRIBE PLUME BACKGROUND											
START Sky		STOP Sky									
BACKGROUND COLOR		SKY CONDITIONS									
START gray STOP gray		START cloudy STOP cloudy									
WIND SPEED		WIND DIRECTION									
START 0-10 mph STOP 0-10 mph		START W STOP W									
AMBIENT TEMP.		WET BULB TEMP.		RH, percent							
START 30° STOP 30°											
SOURCE LAYOUT SKETCH				DRAW NORTH ARROW							
COMMENTS											
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS											
SIGNATURE		DATE		OBSERVER'S NAME (PRINT)		DATE					
				Royale H Herron		1-22-16					
TITLE		DATE		OBSERVER'S SIGNATURE		DATE					
				Gerdau AmeriSteel		5-16-16					
				State Of Tennessee		11-16-15					
				VERIFIED BY		DATE					
				Carl Koonitz							

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau AmeriSteel			OBSERVATION DATE 1-23-16		START TIME 8:40a-	STOP TIME 8:58a-
ADDRESS 801 Gerdau AmeriSteel Rd			SEC MIN		COMMENTS	
CITY Jackson			STATE TN		ZIP 38305	
PHONE (731) 424-5600			SOURCE ID NUMBER 57-0189-01			
PROCESS EQUIPMENT Electric Arc Furnace			OPERATING MODE Melting			
CONTROL EQUIPMENT Baghouse 1 & 2			OPERATING MODE Continuous			
DESCRIBE EMISSION POINT Outlet on top of Baghouse						
HEIGHT ABOVE GROUND LEVEL START 76 ft STOP 76 ft			HEIGHT RELATIVE TO OBSERVER START 76 ft STOP 76 ft			
DISTANCE FROM OBSERVER START 380 ft STOP 380 ft			DIRECTION FROM OBSERVER START North STOP North			
DESCRIBE VISIBLE EMISSIONS						
START ☒ STOP ☐						
EMISSION COLOR START ☒ STOP ☐						
IF WATER DROPLET PLUME: START ☐ STOP ☐ ATTACHED ☐ DETACHED ☐						
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED START Outlet (exit) STOP Outlet (exit)						
DESCRIBE PLUME BACKGROUND START Sky STOP Sky						
BACKGROUND COLOR START Blue STOP Blue			SKY CONDITIONS START Clear STOP Clear			
WIND SPEED START 10-15 STOP 10-15			WIND DIRECTION START N STOP N			
AMBIENT TEMP. START 28° STOP 28°			WET BULB TEMP. START 28° STOP 28°		RH, percent	
SOURCE LAYOUT SKETCH DRAW NORTH ARROW						
SUN LOCATION LINE						
COMMENTS						
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS						
SIGNATURE TITLE			OBSERVER'S NAME (PRINT) Mike Thompson		DATE 1-23-16	
DATE			OBSERVER'S SIGNATURE <i>[Signature]</i>		DATE 1-23-16	
			ORGANIZATION Gerdau AmeriSteel		CERTIFICATION EXPIRATION DATE 5-13-16	
			VERIFIED BY State Of Tennessee/Carl Koontz		DATE 11-13-15	

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME			OBSERVATION DATE			START TIME		STOP TIME	
Gerdau AmeriSteel			1-24-14			11:00 AM		11:16 AM	
ADDRESS			SEC	0	15	30	45	COMMENTS	
801 Gerdau AmeriSteel Rd			MIN						
CITY			1	0	0	0	0		
STATE			2	0	0	0	0		
ZIP			3	0	0	0	0		
PHONE			4	0	0	0	0		
(731) 424-5600			5	0	0	0	0		
SOURCE ID NUMBER			6	0	0	0	0		
57-0189-01			7	0	0	0	0		
PROCESS EQUIPMENT			8	0	0	0	0		
Electric Arc Furnace			9	0	0	0	0		
OPERATING MODE			10	0	0	0	0		
Melt			11	0	0	0	0		
CONTROL EQUIPMENT			12	0	0	0	0		
Baghouse 1 & 2			13	0	0	0	0		
OPERATING MODE			14	0	0	0	0		
Continuous			15	0	0	0	0		
DESCRIBE EMISSION POINT			16	0	0	0	0		
START Outlet on top of Baghouse			17	0	0	0	0		
HEIGHT ABOVE GROUND LEVEL			18	0	0	0	0		
START 76 ft STOP 76 ft			19	0	0	0	0		
HEIGHT RELATIVE TO OBSERVER			20	0	0	0	0		
START 76 ft STOP 76 ft			21	0	0	0	0		
DISTANCE FROM OBSERVER			22	0	0	0	0		
START 380 ft STOP 380 ft			23	0	0	0	0		
DIRECTION FROM OBSERVER			24	0	0	0	0		
START North STOP North			25	0	0	0	0		
DESCRIBE VISIBLE EMISSIONS			26	0	0	0	0		
START			27	0	0	0	0		
STOP			28	0	0	0	0		
EMISSION COLOR			29	0	0	0	0		
IF WATER DROPLET PLUME:			30	0	0	0	0		
START			31	0	0	0	0		
STOP			32	0	0	0	0		
ATTACHED ☐ DETACHED ☐			33	0	0	0	0		
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			34	0	0	0	0		
START Outlet (exit)			35	0	0	0	0		
STOP Outlet (exit)			36	0	0	0	0		
DESCRIBE PLUME BACKGROUND			37	0	0	0	0		
START Sky			38	0	0	0	0		
STOP Sky			39	0	0	0	0		
BACKGROUND COLOR			40	0	0	0	0		
START Green			41	0	0	0	0		
STOP Green			42	0	0	0	0		
SKY CONDITIONS			43	0	0	0	0		
START Clouds			44	0	0	0	0		
STOP Clouds			45	0	0	0	0		
WIND SPEED			46	0	0	0	0		
START 5-10 mph			47	0	0	0	0		
STOP 5-10 mph			48	0	0	0	0		
WIND DIRECTION			49	0	0	0	0		
START N			50	0	0	0	0		
STOP N			51	0	0	0	0		
AMBIENT TEMP.			52	0	0	0	0		
START 39°			53	0	0	0	0		
STOP 39°			54	0	0	0	0		
WET BULB TEMP.			55	0	0	0	0		
RH, percent			56	0	0	0	0		
SOURCE LAYOUT SKETCH			57	0	0	0	0		
DRAW NORTH ARROW			58	0	0	0	0		
			59	0	0	0	0		
SUN WIND PLUME AND STACK			60	0	0	0	0		
COMMENTS			61	0	0	0	0		
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			62	0	0	0	0		
SIGNATURE			63	0	0	0	0		
TITLE			64	0	0	0	0		
DATE			65	0	0	0	0		
OBSERVER'S NAME (PRINT)			66	0	0	0	0		
Mike Johnson			67	0	0	0	0		
OBSERVER'S SIGNATURE			68	0	0	0	0		
Mike Joh			69	0	0	0	0		
ORGANIZATION			70	0	0	0	0		
Gerdau AmeriSteel			71	0	0	0	0		
VERIFIED BY			72	0	0	0	0		
State Of Tennessee/Carl Koontz			73	0	0	0	0		
DATE			74	0	0	0	0		
11-13-18			75	0	0	0	0		

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

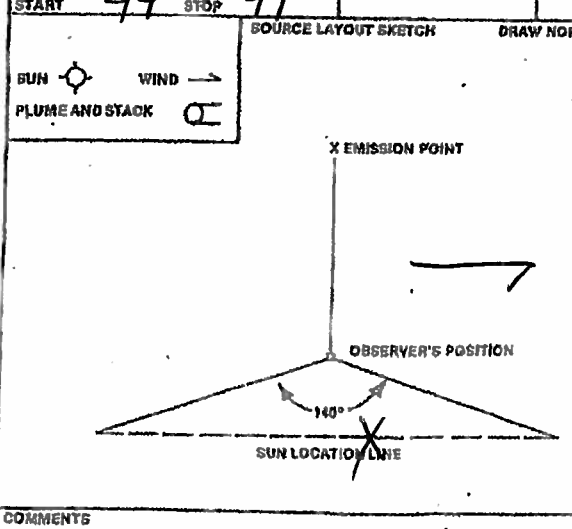
VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau AmeriSteel			OBSERVATION DATE 1-27-16		START TIME 10:30 AM	STOP TIME 10:48 AM
ADDRESS 801 Gerdau AmeriSteel Rd			SEC MIN	0	15	30
				45	COMMENTS	
CITY Jackson			1	0	0	0
STATE TN			2	0	0	0
ZIP 38305			3	0	0	0
PHONE (731) 424-5600			4	0	0	0
SOURCE ID NUMBER 57-0189-01			5	0	0	0
PROCESS EQUIPMENT Electric Arc Furnace			6	0	0	0
OPERATING MODE Meet			7	0	0	0
CONTROL EQUIPMENT Baghouse 1 & 2			8	0	0	0
OPERATING MODE Continuous			9	0	0	0
DESCRIBE EMISSION POINT Outlet on top of Baghouse			10	0	0	0
HEIGHT ABOVE GROUND LEVEL START 76 ft STOP 76 ft			11	0	0	0
HEIGHT RELATIVE TO OBSERVER START 76 ft STOP 76 ft			12	0	0	0
DISTANCE FROM OBSERVER START 380 ft STOP 380 ft			13	0	0	0
DIRECTION FROM OBSERVER START North STOP North			14	0	0	0
DESCRIBE VISIBLE EMISSIONS			15	0	0	0
START			16	0	0	0
STOP			17	0	0	0
EMISSION COLOR			18	0	0	0
IF WATER DROPLET PLUME:			19	0	0	0
START			20	0	0	0
STOP			21	0	0	0
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			22	0	0	0
START Outlet (exit)			23	0	0	0
STOP Outlet (exit)			24	0	0	0
DESCRIBE PLUME BACKGROUND			25	0	0	0
START Sky			26	0	0	0
STOP Sky			27	0	0	0
BACKGROUND COLOR			28	0	0	0
START Blue			29	0	0	0
STOP Blue			30	0	0	0
WIND SPEED			31	0	0	0
START 5-10 mph			32	0	0	0
STOP 5-10 mph			33	0	0	0
WIND DIRECTION			34	0	0	0
START N			35	0	0	0
STOP N			36	0	0	0
AMBIENT TEMP.			37	0	0	0
START 40°			38	0	0	0
STOP 40°			39	0	0	0
WET BULB TEMP.			40	0	0	0
RH, percent			41	0	0	0
SOURCE LAYOUT SKETCH			42	0	0	0
DRAW NORTH ARROW			43	0	0	0
			44	0	0	0
			45	0	0	0
COMMENTS			46	0	0	0
APPLICABLE OPACITY STANDARD			47	0	0	0
3 % OPACITY			48	0	0	0
AVERAGE OPACITY FOR HIGHEST PERIOD			49	0	0	0
NUMBER OF READING ABOVE % WERE			50	0	0	0
OBSERVER'S NAME (PRINT)			51	0	0	0
Mike Johnson			52	0	0	0
OBSERVER'S SIGNATURE			53	0	0	0
Mike Johnson			54	0	0	0
DATE			55	0	0	0
1-27-16			56	0	0	0
ORGANIZATION			57	0	0	0
Gerdau AmeriSteel			58	0	0	0
VERIFIED BY			59	0	0	0
State Of Tennessee/Cand. Kootz			60	0	0	0
CERTIFICATION EXPIRATION DATE			61	0	0	0
5-13-16			62	0	0	0
DATE			63	0	0	0
11-13-15			64	0	0	0

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau AmeriSteel			OBSERVATION DATE 1-28-16		START TIME 11:10 AM	STOP TIME 11:28 AM
ADDRESS 801 Gerdau AmeriSteel Rd			SEC MIN	0	15	30
CITY Jackson			STATE TN		ZIP 38305	
PHONE (731) 424-5600			SOURCE ID NUMBER 57-0189-01			
PROCESS EQUIPMENT Electric Arc Furnace			OPERATING MODE Melt			
CONTROL EQUIPMENT Baghouse 1 & 2			OPERATING MODE Continuous			
DESCRIBE EMISSION POINT Outlet on top of Baghouse						
HEIGHT ABOVE GROUND LEVEL START 76 ft STOP 76 ft			HEIGHT RELATIVE TO OBSERVER START 76 ft STOP 76 ft			
DISTANCE FROM OBSERVER START 380 ft STOP 380 ft			DIRECTION FROM OBSERVER START North STOP North			
DESCRIBE VISIBLE EMISSIONS						
START <u> </u> STOP <u> </u>						
EMISSION COLOR <u> </u>			IF WATER DROPLET PLUME: <u> </u>			
START <u> </u> STOP <u> </u>			ATTACHED ☐ DETACHED ☐			
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED START Outlet (exit) STOP Outlet (exit)						
DESCRIBE PLUME BACKGROUND START Sky STOP Sky						
BACKGROUND COLOR START Blue STOP Blue			SKY CONDITIONS START Clear STOP Clear			
WIND SPEED START 0.5 mph STOP 0.5 mph			WIND DIRECTION START W STOP W			
AMBIENT TEMP. START 44° STOP 44°			WET BULB TEMP. <u> </u>		RH, percent <u> </u>	
SOURCE LAYOUT SKETCH 			DRAW NORTH ARROW 			
COMMENTS						
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS						
SIGNATURE <u> </u>			OBSERVER'S NAME (PRINT) Mike Johnson		DATE 1-28-16	
TITLE <u> </u>			OBSERVER'S SIGNATURE <u> </u>		CERTIFICATION EXPIRATION DATE 5-13-16	
DATE <u> </u>			ORGANIZATION Gerdau AmeriSteel		DATE 11-13-15	
			VERIFIED BY State Of Tennessee, Carl Koontz			

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME			OBSERVATION DATE				START TIME	STOP TIME
Gerdau AmeriSteel			1-29-14				9:30am	4:48pm
ADDRESS			SEC	0	15	30	45	COMMENTS
801 Gerdau AmeriSteel Rd			MIN					
CITY	STATE	ZIP	1	0	0	0	0	
Jackson	TN	38305	2	0	0	0	0	
PHONE	SOURCE ID NUMBER		3	0	0	0	0	
(731) 424-5600	57-0189-01		4	0	0	0	0	
PROCESS EQUIPMENT		OPERATING MODE	5	0	0	0	0	
Electric Arc Furnace		Met	6	0	0	0	0	
CONTROL EQUIPMENT		OPERATING MODE	7	0	0	0	0	
Baghouse 1 & 2		Continuous	8	0	0	0	0	
DESCRIBE EMISSION POINT			9	0	0	0	0	
START Outlet on top of Baghouse			10	0	0	0	0	
HEIGHT ABOVE GROUND LEVEL		HEIGHT RELATIVE TO OBSERVER	11	0	0	0	0	
START 76 ft STOP 76 ft		START 76 ft STOP 76 ft	12	0	0	0	0	
DISTANCE FROM OBSERVER		DIRECTION FROM OBSERVER	13	0	0	0	0	
START 380 ft STOP 380 ft		START North STOP North	14	0	0	0	0	
DESCRIBE VISIBLE EMISSIONS			15	0	0	0	0	
START		STOP	16	0	0	0	0	
EMISSION COLOR		IF WATER DROPLET PLUME:	17	0	0	0	0	
START		ATTACHED ☐ DETACHED ☐	18	0	0	0	0	
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			19	0	0	0	0	
START Outlet (exit)		STOP Outlet (exit)	20	0	0	0	0	
DESCRIBE PLUME BACKGROUND			21	0	0	0	0	
START Sky		STOP Sky	22	0	0	0	0	
BACKGROUND COLOR		SKY CONDITIONS	23	0	0	0	0	
START Blue STOP Blue		START Clear STOP Clear	24	0	0	0	0	
WIND SPEED		WIND DIRECTION	25	0	0	0	0	
START 0.5 mph STOP 0.5 mph		START S STOP S	26	0	0	0	0	
AMBIENT TEMP.		WET BULB TEMP.	27	0	0	0	0	
START 47 STOP 47		RH, percent	28	0	0	0	0	
SOURCE LAYOUT SKETCH			29	0	0	0	0	
DRAW NORTH ARROW			30	0	0	0	0	
			APPLICABLE OPACITY STANDARD 3 % OPACITY					EPA METHOD 9 ☒ TVEE METHOD 2 ☐ TVEE METHOD 1 ☐ TVEE METHOD 3 ☐
COMMENTS			OBSERVER'S NAME (PRINT) Mike Johnson					
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			OBSERVER'S SIGNATURE Mike Johnson					
SIGNATURE			ORGANIZATION Gerdau AmeriSteel					
TITLE			VERIFIED BY State Of Tennessee/Carl Roontz					
DATE			DATE 1-29-14					
DATE			CERTIFICATION EXPIRATION DATE 5-13-16					
DATE			DATE 11-13-15					

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau AmeriSteel			OBSERVATION DATE 1-30-16				START TIME 2:00 PM		STOP TIME 2:18 PM	
ADDRESS 801 Gerdau AmeriSteel Rd			SEC	0	15	30	45	COMMENTS		
			MIN							
CITY Jackson			1	0	0	0	0			
STATE TN			2	0	0	0	0			
ZIP 38305			3	0	0	0	0			
PHONE (731) 424-5600			4	0	0	0	0			
SOURCE ID NUMBER 57-0189-01			5	0	0	0	0			
PROCESS EQUIPMENT Electric Arc Furnace			6	0	0	0	0			
OPERATING MODE melting			7	0	0	0	0			
CONTROL EQUIPMENT Baghouse 1 & 2			8	0	0	0	0			
OPERATING MODE Continuous			9	0	0	0	0			
DESCRIBE EMISSION POINT Outlet on top of Baghouse			10	0	0	0	0			
START			11	0	0	0	0			
HEIGHT ABOVE GROUND LEVEL START 76 ft STOP 76 ft			12	0	0	0	0			
HEIGHT RELATIVE TO OBSERVER START 76 ft STOP 76 ft			13	0	0	0	0			
DISTANCE FROM OBSERVER START 380 ft STOP 380 ft			14	0	0	0	0			
DIRECTION FROM OBSERVER START North STOP North			15	0	0	0	0			
DESCRIBE VISIBLE EMISSIONS			16	0	0	0	0			
START			17	0	0	0	0			
STOP			18	0	0	0	0			
EMISSION COLOR			19	0	0	0	0			
IF WATER DROPLET PLUME:			20	0	0	0	0			
START			21	0	0	0	0			
STOP			22	0	0	0	0			
ATTACHED ☐ DETACHED ☐			23	0	0	0	0			
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			24	0	0	0	0			
START Outlet (exit)			25	0	0	0	0			
STOP Outlet (exit)			26	0	0	0	0			
DESCRIBE PLUME BACKGROUND			27	0	0	0	0			
START Sky			28	0	0	0	0			
STOP Sky			29	0	0	0	0			
BACKGROUND COLOR			30	0	0	0	0			
START Blue STOP Blue										
SKY CONDITIONS										
START clear STOP clear										
WIND SPEED										
START 15 to 20 STOP 15 to 20										
WIND DIRECTION										
START SW STOP SW										
AMBIENT TEMP.										
START 69° STOP 69°										
WET BULB TEMP.										
RH, percent										
SOURCE LAYOUT SKETCH										
DRAW NORTH ARROW										
APPLICABLE OPACITY STANDARD										
3 % OPACITY										
AVERAGE OPACITY FOR HIGHEST PERIOD										
NUMBER OF READING ABOVE % WERE										
OBSERVER'S NAME (PRINT)										
TONY PERRY										
OBSERVER'S SIGNATURE										
DATE										
1-30-16										
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS										
ORGANIZATION										
Gerdau AmeriSteel										
VERIFIED BY										
State Of Tennessee/Carl Koontz										
SIGNATURE										
DATE										
11-16-15										

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau AmeriSteel		OBSERVATION DATE 2-2-14		START TIME 10:00 AM		STOP TIME 10:18 AM	
ADDRESS 801 Gerdau AmeriSteel Rd							
CITY Jackson		STATE TN		ZIP 38305			
PHONE (731) 424-5600		SOURCE ID NUMBER 57-0189-01					
PROCESS EQUIPMENT Electric Arc Furnace		OPERATING MODE melt					
CONTROL EQUIPMENT Baghouse 1 & 2		OPERATING MODE Continuous					
DESCRIBE EMISSION POINT Outlet on top of Baghouse							
HEIGHT ABOVE GROUND LEVEL START 76 ft STOP 76 ft		HEIGHT RELATIVE TO OBSERVER START 76 ft STOP 76 ft					
DISTANCE FROM OBSERVER START 380 ft STOP 380 ft		DIRECTION FROM OBSERVER START North STOP North					
DESCRIBE VISIBLE EMISSIONS							
START STOP 							
EMISSION COLOR 		IF WATER DROPLET PLUME 					
START STOP 		ATTACHED ☐ DETACHED ☐					
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED							
START Outlet (exit) STOP Outlet (exit)							
DESCRIBE PLUME BACKGROUND							
START Sky STOP Sky							
BACKGROUND COLOR START gray STOP gray		SKY CONDITIONS START cloudy STOP cloudy					
WIND SPEED START 0-10 mph STOP 0-10 mph		WIND DIRECTION START W STOP W					
AMBIENT TEMP. START 70° STOP 70°		WET BULB TEMP.		RH, percent			
SOURCE LAYOUT SKETCH		DRAW NORTH ARROW					
SUN WIND PLUME AND STACK X EMISSION POINT OBSERVER'S POSITION SUN LOCATION LINE 140° No Sun							
COMMENTS							
APPLICABLE OPACITY STANDARD 3 % OPACITY EPA METHOD 9 ☐ TVEE METHOD 2 ☐ TVEE METHOD 1 ☐ TVEE METHOD 3 ☐							
AVERAGE OPACITY FOR HIGHEST PERIOD				NUMBER OF READING ABOVE % WERE			
				0 0			
OBSERVER'S NAME (PRINT) Russell Herron							
OBSERVER'S SIGNATURE <i>Russell Herron</i>						DATE 2-2-14	
ORGANIZATION Gerdau AmeriSteel						CERTIFICATION EXPIRATION DATE 5-16-15	
VERIFIED BY State Of Tennessee Carl Kuntz						DATE 11-16-15	
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SIGNATURE		DATE					

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME				OBSERVATION DATE				START TIME		STOP TIME	
Gerdau AmeriSteel				2-3-14				10:00 AM		10:18 AM	
ADDRESS				SEC	0	15	30	45	COMMENTS		
801 Gerdau AmeriSteel Rd				MIN							
CITY				1	0	0	0	0			
STATE				2	0	0	0	0			
ZIP				3	0	0	0	0			
PHONE				4	0	0	0	0			
(731) 424-5600				5	0	0	0	0			
SOURCE ID NUMBER				6	0	0	0	0			
57-0189-01				7	0	0	0	0			
PROCESS EQUIPMENT				8	0	0	0	0			
Electric Arc Furnace				9	0	0	0	0			
OPERATING MODE				10	0	0	0	0			
melt				11	0	0	0	0			
CONTROL EQUIPMENT				12	0	0	0	0			
Baghouse 1 & 2				13	0	0	0	0			
OPERATING MODE				14	0	0	0	0			
Continuous				15	0	0	0	0			
DESCRIBE EMISSION POINT				16	0	0	0	0			
START Outlet on top of Baghouse				17	0	0	0	0			
HEIGHT ABOVE GROUND LEVEL				18	0	0	0	0			
START 76 ft STOP 76 ft				19	0	0	0	0			
HEIGHT RELATIVE TO OBSERVER				20	0	0	0	0			
START 76 ft STOP 76 ft				21	0	0	0	0			
DISTANCE FROM OBSERVER				22	0	0	0	0			
START 380 ft STOP 380 ft				23	0	0	0	0			
DIRECTION FROM OBSERVER				24	0	0	0	0			
START North STOP North				25	0	0	0	0			
DESCRIBE VISIBLE EMISSIONS				26	0	0	0	0			
START				27	0	0	0	0			
STOP				28	0	0	0	0			
EMISSION COLOR				29	0	0	0	0			
IF WATER DROPLET PLUME:				30	0	0	0	0			
START				31	0	0	0	0			
STOP				32	0	0	0	0			
ATTACHED ☐ DETACHED ☐				33	0	0	0	0			
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED				34	0	0	0	0			
START Outlet (exit)				35	0	0	0	0			
STOP Outlet (exit)				36	0	0	0	0			
DESCRIBE PLUME BACKGROUND				37	0	0	0	0			
START Sky				38	0	0	0	0			
STOP Sky				39	0	0	0	0			
BACKGROUND COLOR				40	0	0	0	0			
START blue				41	0	0	0	0			
STOP white				42	0	0	0	0			
WIND SPEED				43	0	0	0	0			
START 0-10 mph				44	0	0	0	0			
STOP 10 mph				45	0	0	0	0			
WIND DIRECTION				46	0	0	0	0			
START W				47	0	0	0	0			
STOP W				48	0	0	0	0			
AMBIENT TEMP.				49	0	0	0	0			
START 50°				50	0	0	0	0			
STOP 50°				51	0	0	0	0			
WET BULB TEMP.				52	0	0	0	0			
RH, percent				53	0	0	0	0			
SOURCE LAYOUT SKETCH				54	0	0	0	0			
DRAW NORTH ARROW				55	0	0	0	0			
				56	0	0	0	0			
SUN LOCATION LINE 140°				57	0	0	0	0			
COMMENTS				58	0	0	0	0			
OBSERVER'S NAME (PRINT)				59	0	0	0	0			
Roydell Herron				60	0	0	0	0			
OBSERVER'S SIGNATURE				61	0	0	0	0			
Roydell Herron				62	0	0	0	0			
DATE				63	0	0	0	0			
2-3-14				64	0	0	0	0			
ORGANIZATION				65	0	0	0	0			
Gerdau AmeriSteel				66	0	0	0	0			
VERIFIED BY				67	0	0	0	0			
State Of Tennessee				68	0	0	0	0			
Carl Koontz				69	0	0	0	0			
DATE				70	0	0	0	0			
11-16-15				71	0	0	0	0			
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS				72	0	0	0	0			
SIGNATURE				73	0	0	0	0			
TITLE				74	0	0	0	0			
DATE				75	0	0	0	0			

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME			OBSERVATION DATE			START TIME	STOP TIME
Gerdau AmeriSteel			2-4-16			10:10 Am	10:28 Am
ADDRESS			SEC	0	15	30	45
801 Gerdau AmeriSteel Rd			MIN				COMMENTS
CITY			1	0	0	0	
JACKSON			2	0	0	0	
STATE			3	0	0	0	
TN			4	0	0	0	
ZIP			5	0	0	0	
38305			6	0	0	0	
PHONE			7	0	0	0	
(731) 424-5600			8	0	0	0	
SOURCE ID NUMBER			9	0	0	0	
57-0189-01			10	0	0	0	
PROCESS EQUIPMENT			11	0	0	0	
Electric Arc Furnace			12	0	0	0	
OPERATING MODE			13	0	0	0	
melting			14	0	0	0	
CONTROL EQUIPMENT			15	0	0	0	
Baghouse 1 & 2			16	0	0	0	
OPERATING MODE			17	0	0	0	
Continuous			18	0	0	0	
DESCRIBE EMISSION POINT			19	0	0	0	
START Outlet on top of Baghouse			20	0	0	0	
HEIGHT ABOVE GROUND LEVEL			21	0	0	0	
START 76 ft STOP 76 ft			22	0	0	0	
HEIGHT RELATIVE TO OBSERVER			23	0	0	0	
START 76 ft STOP 76 ft			24	0	0	0	
DISTANCE FROM OBSERVER			25	0	0	0	
START 380 ft STOP 380 ft			26	0	0	0	
DIRECTION FROM OBSERVER			27	0	0	0	
START North STOP North			28	0	0	0	
DESCRIBE VISIBLE EMISSIONS			29	0	0	0	
START			30	0	0	0	
STOP			31	0	0	0	
EMISSION COLOR			32	0	0	0	
START			33	0	0	0	
STOP			34	0	0	0	
IF WATER DROPLET PLUME:			35	0	0	0	
ATTACHED ☐ DETACHED ☐			36	0	0	0	
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			37	0	0	0	
START Outlet (exit)			38	0	0	0	
STOP Outlet (exit)			39	0	0	0	
DESCRIBE PLUME BACKGROUND			40	0	0	0	
START Sky			41	0	0	0	
STOP Sky			42	0	0	0	
BACKGROUND COLOR			43	0	0	0	
START blue			44	0	0	0	
STOP blue			45	0	0	0	
SKY CONDITIONS			46	0	0	0	
START clear			47	0	0	0	
STOP clear			48	0	0	0	
WIND SPEED			49	0	0	0	
START 0-10 mph			50	0	0	0	
STOP 0-10 mph			51	0	0	0	
WIND DIRECTION			52	0	0	0	
START W			53	0	0	0	
STOP W			54	0	0	0	
AMBIENT TEMP.			55	0	0	0	
START 46.0			56	0	0	0	
STOP 46.0			57	0	0	0	
WET BULB TEMP.			58	0	0	0	
RH, percent			59	0	0	0	
SOURCE LAYOUT SKETCH			60	0	0	0	
DRAW NORTH ARROW			61	0	0	0	
			62	0	0	0	
			63	0	0	0	
			64	0	0	0	
			65	0	0	0	
			66	0	0	0	
			67	0	0	0	
			68	0	0	0	
			69	0	0	0	
			70	0	0	0	
			71	0	0	0	
			72	0	0	0	
			73	0	0	0	
			74	0	0	0	
			75	0	0	0	
			76	0	0	0	
			77	0	0	0	
			78	0	0	0	
			79	0	0	0	
			80	0	0	0	
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			129	0	0	0	
			130	0	0	0	
			131	0	0	0	
			132	0	0	0	
			133	0	0	0	
			134	0	0	0	
			135	0	0	0	
			136	0	0	0	
			137	0	0	0	
			138	0	0	0	
			139	0	0	0	
			140	0	0	0	
			141	0	0	0	

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

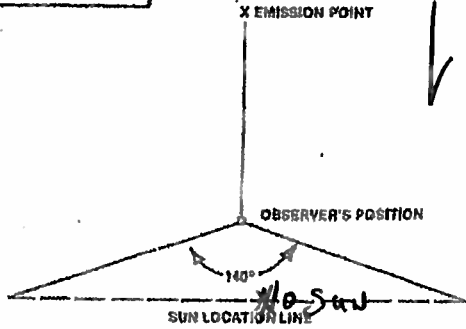
VISIBLE EMISSION OBSERVATION

SOURCE NAME			OBSERVATION DATE				START TIME		STOP TIME	
Gerdau AmeriSteel			2-5-16				11:00 AM		11:18 AM	
ADDRESS			SEC	0	15	30	45	COMMENTS		
801 Gerdau AmeriSteel Rd			MIN							
CITY	STATE	ZIP	1	0	0	0	0			
Jackson	TN	38305	2	0	0	0	0			
PHONE	SOURCE ID NUMBER		3	0	0	0	0			
(731) 424-5600	57-0189-01		4	0	0	0	0			
PROCESS EQUIPMENT		OPERATING MODE	5	0	0	0	0			
Electric Arc Furnace		melt	6	0	0	0	0			
CONTROL EQUIPMENT		OPERATING MODE	7	0	0	0	0			
Baghouse 1 & 2		Continuous	8	0	0	0	0			
DESCRIBE EMISSION POINT			9	0	0	0	0			
START Outlet on top of Baghouse			10	0	0	0	0			
HEIGHT ABOVE GROUND LEVEL		HEIGHT RELATIVE TO OBSERVER	11	0	0	0	0			
START 76 ft STOP 76 ft		START 76 ft STOP 76 ft	12	0	0	0	0			
DISTANCE FROM OBSERVER		DIRECTION FROM OBSERVER	13	0	0	0	0			
START 380 ft STOP 380 ft		START North STOP North	14	0	0	0	0			
DESCRIBE VISIBLE EMISSIONS			15	0	0	0	0			
START — STOP —			16	0	0	0	0			
EMISSION COLOR		IF WATER DROPLET PLUME:	17	0	0	0	0			
START — STOP —		ATTACHED ☐ DETACHED ☐	18	0	0	0	0			
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			19	0	0	0	0			
START Outlet (exit) STOP Outlet (exit)			20	0	0	0	0			
DESCRIBE PLUME BACKGROUND			21	0	0	0	0			
START Sky STOP Sky			22	0	0	0	0			
BACKGROUND COLOR		SKY CONDITIONS	23	0	0	0	0			
START light blue STOP white		START clear STOP clear	24	0	0	0	0			
WIND SPEED		WIND DIRECTION	25	0	0	0	0			
START 0-10 mph STOP 0-10 mph		START W STOP W	26	0	0	0	0			
AMBIENT TEMP.		WET BULB TEMP.	27	0	0	0	0			
START 50° STOP 50°		RH, percent	28	0	0	0	0			
SOURCE LAYOUT SKETCH DRAW NORTH ARROW			29	0	0	0	0			
			30	0	0	0	0			
COMMENTS			APPLICABLE OPACITY STANDARD		EPA METHOD 3		TVEE METHOD 2			
			3 % OPACITY		TVEE METHOD 1		TVEE METHOD 3			
			AVERAGE OPACITY FOR HIGHEST PERIOD		NUMBER OF READING ABOVE % WERE		0 0			
			OBSERVER'S NAME (PRINT)		OBSERVER'S SIGNATURE		DATE			
			Roydell Herron		Roydell Herron		2-5-16			
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			ORGANIZATION		CERTIFICATION EXPIRATION DATE		DATE			
SIGNATURE			Gerdau AmeriSteel		5-16-16		11-16-15			
TITLE			VERIFIED BY		DATE					
			State Of Tennessee/Carl Koontz							

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME			OBSERVATION DATE				START TIME		STOP TIME	
Gerdau AmeriSteel			2-9-16				11:35 AM		11:53 AM	
ADDRESS			SEC	0	15	30	45	COMMENTS		
801 Gerdau AmeriSteel Rd			MIN							
CITY			1	0	0	0	0			
STATE			2	0	0	0	0			
ZIP			3	0	0	0	0			
PHONE			4	0	0	0	0			
(731) 424-5600			5	0	0	0	0			
SOURCE ID NUMBER			6	0	0	0	0			
57-0189-01			7	0	0	0	0			
PROCESS EQUIPMENT			8	0	0	0	0			
Electric Arc Furnace			9	0	0	0	0			
CONTROL EQUIPMENT			10	0	0	0	0			
Baghouse 1 & 2			11	0	0	0	0			
OPERATING MODE			12	0	0	0	0			
Must			13	0	0	0	0			
OPERATING MODE			14	0	0	0	0			
Continuous			15	0	0	0	0			
DESCRIBE EMISSION POINT			16	0	0	0	0			
START Outlet on top of Baghouse			17	0	0	0	0			
HEIGHT ABOVE GROUND LEVEL			18	0	0	0	0			
START 76 ft STOP 76 ft			19	0	0	0	0			
HEIGHT RELATIVE TO OBSERVER			20	0	0	0	0			
START 76 ft STOP 76 ft			21	0	0	0	0			
DISTANCE FROM OBSERVER			22	0	0	0	0			
START 380 ft STOP 380 ft			23	0	0	0	0			
DIRECTION FROM OBSERVER			24	0	0	0	0			
START North STOP North			25	0	0	0	0			
DESCRIBE VISIBLE EMISSIONS			26	0	0	0	0			
START			27	0	0	0	0			
STOP			28	0	0	0	0			
EMISSION COLOR			29	0	0	0	0			
IF WATER DROPLET PLUME:			30	0	0	0	0			
START			31	0	0	0	0			
STOP			32	0	0	0	0			
ATTACHED ☐ DETACHED ☐			33	0	0	0	0			
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			34	0	0	0	0			
START Outlet (exit)			35	0	0	0	0			
STOP Outlet (exit)			36	0	0	0	0			
DESCRIBE PLUME BACKGROUND			37	0	0	0	0			
START Sky			38	0	0	0	0			
STOP Sky			39	0	0	0	0			
BACKGROUND COLOR			40	0	0	0	0			
START Gray STOP Gray			41	0	0	0	0			
SKY CONDITIONS			42	0	0	0	0			
START Cloudy STOP Cloudy			43	0	0	0	0			
WIND SPEED			44	0	0	0	0			
START 5-10 mph STOP 5-10 mph			45	0	0	0	0			
WIND DIRECTION			46	0	0	0	0			
START N STOP N			47	0	0	0	0			
AMBIENT TEMP.			48	0	0	0	0			
START 28° STOP 28°			49	0	0	0	0			
WET BULB TEMP.			50	0	0	0	0			
RH, percent			51	0	0	0	0			
SUN  WIND 			52	0	0	0	0			
PLUME AND STACK 			53	0	0	0	0			
SOURCE LAYOUT SKETCH			54	0	0	0	0			
DRAW NORTH ARROW			55	0	0	0	0			
			56	0	0	0	0			
APPLICABLE OPACITY STANDARD			57	0	0	0	0			
3 % OPACITY			58	0	0	0	0			
EPA METHOD 9 ☒ TVEE METHOD 2 ☐			59	0	0	0	0			
TVEE METHOD 1 ☐ TVEE METHOD 3 ☐			60	0	0	0	0			
AVERAGE OPACITY FOR HIGHEST PERIOD			61	0	0	0	0			
0 0			62	0	0	0	0			
NUMBER OF READING ABOVE % WERE			63	0	0	0	0			
COMMENTS			64	0	0	0	0			
OBSERVER'S NAME (PRINT)			65	0	0	0	0			
Mike Johnson			66	0	0	0	0			
OBSERVER'S SIGNATURE			67	0	0	0	0			
Mike Johnson			68	0	0	0	0			
DATE			69	0	0	0	0			
2-9-16			70	0	0	0	0			
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			71	0	0	0	0			
SIGNATURE			72	0	0	0	0			
Gerdau AmeriSteel			73	0	0	0	0			
VERIFIED BY			74	0	0	0	0			
State Of Tennessee/Carl Kountz			75	0	0	0	0			
DATE			76	0	0	0	0			
11-13-15			77	0	0	0	0			

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau AmeriSteel			OBSERVATION DATE 2-10-16			START TIME 11:00AM		STOP TIME 11:18AM	
ADDRESS 801 Gerdau AmeriSteel Rd			SEC MIN	0	15	30	45	COMMENTS	
CITY Jackson			STATE TN		ZIP 38305				
PHONE (731) 424-5600			SOURCE ID NUMBER 57-0189-01						
PROCESS EQUIPMENT Electric Arc Furnace			OPERATING MODE Melt						
CONTROL EQUIPMENT Baghouse 1 & 2			OPERATING MODE Continuous						
DESCRIBE EMISSION POINT Outlet on top of Baghouse									
HEIGHT ABOVE GROUND LEVEL START 76 ft STOP 76 ft			HEIGHT RELATIVE TO OBSERVER START 76 ft STOP 76 ft						
DISTANCE FROM OBSERVER START 380 ft STOP 380 ft			DIRECTION FROM OBSERVER START North STOP North						
DESCRIBE VISIBLE EMISSIONS									
START			STOP						
EMISSION COLOR			IF WATER DROPLET PLUME:						
START			STOP						
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			ATTACHED ☐ DETACHED ☐						
START Outlet (exit)			STOP Outlet (exit)						
DESCRIBE PLUME BACKGROUND									
START Sky			STOP Sky						
BACKGROUND COLOR			SKY CONDITIONS						
START Blue STOP Blue			START Clear STOP Clear						
WIND SPEED			WIND DIRECTION						
START 5-10 mph STOP 5-10 mph			START N STOP N						
AMBIENT TEMP.			WET BULB TEMP.			RH, percent			
START 28° STOP 28°									
SOURCE LAYOUT SKETCH			DRAW NORTH ARROW						
COMMENTS									
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS									
SIGNATURE			OBSERVER'S NAME (PRINT) Mike Johnson						
TITLE			OBSERVER'S SIGNATURE <i>Mike Johnson</i>						
DATE			DATE 2-10-16						
			ORGANIZATION Gerdau AmeriSteel						
			CERTIFICATION EXPIRATION DATE 5-13-16						
			VERIFIED BY State Of Tennessee/Carl Kountz						
			DATE 11-13-16						

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME			OBSERVATION DATE			START TIME		STOP TIME	
Gerdau AmeriSteel			2-11-16			9:40am		9:58am	
ADDRESS			SEC	0	15	30	45	COMMENTS	
801 Gerdau AmeriSteel Rd			MIN						
CITY			1	0	0	0	0		
STATE			2	0	0	0	0		
ZIP			3	0	0	0	0		
PHONE			4	0	0	0	0		
SOURCE ID NUMBER			5	0	0	0	0		
PROCESS EQUIPMENT			6	0	0	0	0		
Electric Arc Furnace			7	0	0	0	0		
OPERATING MODE			8	0	0	0	0		
CONTROL EQUIPMENT			9	0	0	0	0		
Baghouse 1 & 2			10	0	0	0	0		
OPERATING MODE			11	0	0	0	0		
Continuous			12	0	0	0	0		
DESCRIBE EMISSION POINT			13	0	0	0	0		
START Outlet on top of Baghouse			14	0	0	0	0		
HEIGHT ABOVE GROUND LEVEL			15	0	0	0	0		
START 76 ft STOP 76 ft			16	0	0	0	0		
DISTANCE FROM OBSERVER			17	0	0	0	0		
START 380 ft STOP 380 ft			18	0	0	0	0		
DIRECTION FROM OBSERVER			19	0	0	0	0		
START North STOP North			20	0	0	0	0		
DESCRIBE VISIBLE EMISSIONS			21	0	0	0	0		
START			22	0	0	0	0		
EMISSION COLOR			23	0	0	0	0		
IF WATER DROPLET PLUME:			24	0	0	0	0		
START STOP ATTACHED ☐ DETACHED ☐			25	0	0	0	0		
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			26	0	0	0	0		
START Outlet (exit) STOP Outlet (exit)			27	0	0	0	0		
DESCRIBE PLUME BACKGROUND			28	0	0	0	0		
START Sky STOP Sky			29	0	0	0	0		
BACKGROUND COLOR			30	0	0	0	0		
START Blue STOP Blue			31	0	0	0	0		
WIND SPEED			32	0	0	0	0		
START 0-5mph STOP 0-5mph			33	0	0	0	0		
WIND DIRECTION			34	0	0	0	0		
START N STOP N			35	0	0	0	0		
AMBIENT TEMP.			36	0	0	0	0		
START 36° STOP 36°			37	0	0	0	0		
WET BULB TEMP.			38	0	0	0	0		
RH, percent			39	0	0	0	0		
SOURCE LAYOUT SKETCH			40	0	0	0	0		
DRAW NORTH ARROW			41	0	0	0	0		
			42	0	0	0	0		
			43	0	0	0	0		
			44	0	0	0	0		
			45	0	0	0	0		
			46	0	0	0	0		
			47	0	0	0	0		
			48	0	0	0	0		
			49	0	0	0	0		
			50	0	0	0	0		
COMMENTS			APPLICABLE OPACITY STANDARD 3 % OPACITY						
OBSERVER'S NAME (PRINT) Mike Johnson			EPA METHOD 9 ☐ TVEE METHOD 2 ☐						
OBSERVER'S SIGNATURE Mike Johnson			TVEE METHOD 1 ☐ TVEE METHOD 3 ☐						
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			AVERAGE OPACITY FOR HIGHEST PERIOD 0						
SIGNATURE TITLE			NUMBER OF READING ABOVE % WERE 0						
DATE			OBSERVER'S NAME (PRINT) Mike Johnson						
DATE			OBSERVER'S SIGNATURE Mike Johnson						
DATE			DATE 2-11-16						
DATE			CERTIFICATION EXPIRATION DATE 5-13-16						
DATE			DATE 11-13-15						

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau AmeriSteel			OBSERVATION DATE 2-12-16			START TIME 10:15 AM		STOP TIME 10:33 AM	
ADDRESS 801 Gerdau AmeriSteel Rd			SEC MIN	0	15	30	45	COMMENTS	
CITY Jackson			STATE TN		ZIP 38305				
PHONE (731) 424-5600			SOURCE ID NUMBER 57-0189-01						
PROCESS EQUIPMENT Electric Arc Furnace			OPERATING MODE Melt						
CONTROL EQUIPMENT Baghouse 1 & 2			OPERATING MODE Continuous						
DESCRIBE EMISSION POINT Outlet on top of Baghouse									
HEIGHT ABOVE GROUND LEVEL START 76 ft STOP 76 ft			HEIGHT RELATIVE TO OBSERVER START 76 ft STOP 76 ft						
DISTANCE FROM OBSERVER START 380 ft STOP 380 ft			DIRECTION FROM OBSERVER START North STOP North						
DESCRIBE VISIBLE EMISSIONS									
START			STOP						
EMISSION COLOR			IF WATER DROPLET PLUME:						
START			STOP						
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED									
START Outlet (exit)			STOP Outlet (exit)						
DESCRIBE PLUME BACKGROUND									
START Sky			STOP Sky						
BACKGROUND COLOR			SKY CONDITIONS						
START Blue/white			STOP Blue/white						
WIND SPEED			WIND DIRECTION						
START 0-5 mph			STOP 0-5 mph						
AMBIENT TEMP.			WET BULB TEMP.						
START 43°			STOP 43°						
SOURCE LAYOUT SKETCH			DRAW NORTH ARROW						
APPLICABLE OPACITY STANDARD			EPA METHOD 4						
3 % OPACITY			TVEE METHOD 2						
AVERAGE OPACITY FOR HIGHEST PERIOD			TVEE METHOD 1						
0			TVEE METHOD 3						
NUMBER OF READING ABOVE % WERE			0						
COMMENTS			OBSERVER'S NAME (PRINT)						
			Mike Johnson						
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			OBSERVER'S SIGNATURE						
SIGNATURE			DATE						
			2-12-16						
TITLE			ORGANIZATION						
			Gerdau AmeriSteel						
DATE			VERIFIED BY						
			State Of Tennessee/Carl Roontz						
			DATE						
			11-13-15						

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau AmeriSteel			OBSERVATION DATE 2-13-16		START TIME 12:40	STOP TIME 12:58
ADDRESS 801 Gerdau AmeriSteel Rd			SEC MIN	0	15	30
				45	COMMENTS	
CITY Jackson			1	0	0	0
STATE TN			2	0	0	0
ZIP 38305			3	0	0	0
PHONE (731) 424-5600			4	0	0	0
SOURCE ID NUMBER 57-0189-01			5	0	0	0
PROCESS EQUIPMENT Electric Arc Furnace			6	0	0	0
OPERATING MODE melting			7	0	0	0
CONTROL EQUIPMENT Baghouse 1 & 2			8	0	0	0
OPERATING MODE Continuous			9	0	0	0
DESCRIBE EMISSION POINT Outlet on top of Baghouse			10	0	0	0
START			11	0	0	0
HEIGHT ABOVE GROUND LEVEL START 76 ft STOP 76 ft			12	0	0	0
HEIGHT RELATIVE TO OBSERVER START 76 ft STOP 76 ft			13	0	0	0
DISTANCE FROM OBSERVER START 380 ft STOP 380 ft			14	0	0	0
DIRECTION FROM OBSERVER START North STOP North			15	0	0	0
DESCRIBE VISIBLE EMISSIONS			16	0	0	0
START			17	0	0	0
EMISSION COLOR			18	0	0	0
IF WATER DROPLET PLUME:			19	0	0	0
START			20	0	0	0
STOP			21	0	0	0
ATTACHED ☐ DETACHED ☒			22	0	0	0
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			23	0	0	0
START Outlet (exit) STOP Outlet (exit)			24	0	0	0
DESCRIBE PLUME BACKGROUND			25	0	0	0
START Sky STOP Sky			26	0	0	0
BACKGROUND COLOR			27	0	0	0
START Blue STOP Blue			28	0	0	0
SKY CONDITIONS			29	0	0	0
START Clear STOP Clear			30	0	0	0
WIND SPEED						
START 5 to 10 STOP 5 to 10						
WIND DIRECTION						
START NE STOP NE						
AMBIENT TEMP.						
START 33° STOP 33°						
WET BULB TEMP.						
RH, percent						
SOURCE LAYOUT SKETCH						
DRAW NORTH ARROW						
COMMENTS			APPLICABLE OPACITY STANDARD 3 % OPACITY			
			EPA METHOD 9 ☒ TVEE METHOD 2 ☐			
			TVEE METHOD 1 ☐ TVEE METHOD 3 ☐			
			AVERAGE OPACITY FOR HIGHEST PERIOD 0			
			NUMBER OF READING ABOVE % WERE 0			
			OBSERVER'S NAME (PRINT) Tony Penny			
			OBSERVER'S SIGNATURE <i>Tony Penny</i>			
			DATE 2-13-16			
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			ORGANIZATION Gerdau AmeriSteel			
SIGNATURE			CERTIFICATION EXPIRATION DATE 5-16-16			
TITLE			VERIFIED BY State Of Tennessee/Carl Koontz			
			DATE 11-16-15			

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

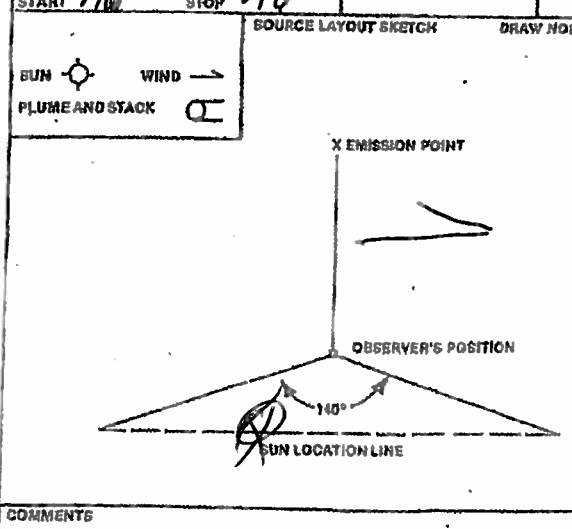
VISIBLE EMISSION OBSERVATION

SOURCE NAME				OBSERVATION DATE				START TIME		STOP TIME	
Gerdau AmeriSteel				2-16-14				10:15 Am		10:33 Am	
ADDRESS				SEC	0	15	30	45	COMMENTS		
801 Gerdau AmeriSteel Rd				MIN							
CITY				1	0	0	0	0			
STATE				2	0	0	0	0			
ZIP				3	0	0	0	0			
PHONE				4	0	0	0	0			
(731) 424-5600				5	0	0	0	0			
SOURCE ID NUMBER				6	0	0	0	0			
57-0189-01				7	0	0	0	0			
PROCESS EQUIPMENT				8	0	0	0	0			
Electric Arc Furnace				9	0	0	0	0			
OPERATING MODE				10	0	0	0	0			
melt				11	0	0	0	0			
CONTROL EQUIPMENT				12	0	0	0	0			
Baghouse 1 & 2				13	0	0	0	0			
OPERATING MODE				14	0	0	0	0			
Continuous				15	0	0	0	0			
DESCRIBE EMISSION POINT				16	0	0	0	0			
Outlet on top of Baghouse				17	0	0	0	0			
HEIGHT ABOVE GROUND LEVEL				18	0	0	0	0			
START 76 ft STOP 76 ft				19	0	0	0	0			
HEIGHT RELATIVE TO OBSERVER				20	0	0	0	0			
START 76 ft STOP 76 ft				21	0	0	0	0			
DISTANCE FROM OBSERVER				22	0	0	0	0			
START 380 ft STOP 380 ft				23	0	0	0	0			
DIRECTION FROM OBSERVER				24	0	0	0	0			
START North STOP North				25	0	0	0	0			
DESCRIBE VISIBLE EMISSIONS				26	0	0	0	0			
START				27	0	0	0	0			
STOP				28	0	0	0	0			
EMISSION COLOR				29	0	0	0	0			
IF WATER DROPLET PLUME:				30	0	0	0	0			
START				31	0	0	0	0			
STOP				32	0	0	0	0			
ATTACHED ☐ DETACHED ☐				33	0	0	0	0			
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED				34	0	0	0	0			
START Outlet (exit)				35	0	0	0	0			
STOP Outlet (exit)				36	0	0	0	0			
DESCRIBE PLUME BACKGROUND				37	0	0	0	0			
START Sky				38	0	0	0	0			
STOP Sky				39	0	0	0	0			
BACKGROUND COLOR				40	0	0	0	0			
SKY CONDITIONS				41	0	0	0	0			
START gray STOP gray				42	0	0	0	0			
START cloudy STOP cloudy				43	0	0	0	0			
WIND SPEED				44	0	0	0	0			
WIND DIRECTION				45	0	0	0	0			
START 0-10 mph STOP 0-10 mph				46	0	0	0	0			
START W STOP W				47	0	0	0	0			
AMBIENT TEMP.				48	0	0	0	0			
WET BULB TEMP.				49	0	0	0	0			
RH, percent				50	0	0	0	0			
START 45° STOP 45°				51	0	0	0	0			
SOURCE LAYOUT SKETCH				52	0	0	0	0			
DRAW NORTH ARROW				53	0	0	0	0			
				54	0	0	0	0			
APPLICABLE OPACITY STANDARD				55	0	0	0	0			
3 % OPACITY				56	0	0	0	0			
EPA METHOD 3 ☒ TVEE METHOD 2 ☐				57	0	0	0	0			
TVEE METHOD 1 ☐ TVEE METHOD 3 ☐				58	0	0	0	0			
AVERAGE OPACITY FOR HIGHEST PERIOD				59	0	0	0	0			
NUMBER OF READING ABOVE % WERE				60	0	0	0	0			
COMMENTS				61	0	0	0	0			
OBSERVER'S NAME (PRINT)				62	0	0	0	0			
Roy del H. Herron				63	0	0	0	0			
OBSERVER'S SIGNATURE				64	0	0	0	0			
Rydel H. Herron				65	0	0	0	0			
DATE				66	0	0	0	0			
2-16-14				67	0	0	0	0			
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS				68	0	0	0	0			
ORGANIZATION				69	0	0	0	0			
Gerdau AmeriSteel				70	0	0	0	0			
CERTIFICATION EXPIRATION DATE				71	0	0	0	0			
5-16-14				72	0	0	0	0			
SIGNATURE				73	0	0	0	0			
TITLE				74	0	0	0	0			
DATE				75	0	0	0	0			
11-16-15				76	0	0	0	0			
VERIFIED BY				77	0	0	0	0			
State Of Tennessee (Carl Koontz)				78	0	0	0	0			

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau AmeriSteel		OBSERVATION DATE 2-17-14		START TIME 1:30 PM		STOP TIME 1:48 PM	
ADDRESS 801 Gerdau AmeriSteel Rd		SEC MIN		0	15	30	45
CITY Jackson		STATE TN		ZIP 38305		COMMENTS	
PHONE (731) 424-5600		SOURCE ID NUMBER 57-0189-01		1		0 0 0 0	
PROCESS EQUIPMENT Electric Arc Furnace		OPERATING MODE mult		2		0 0 0 0	
CONTROL EQUIPMENT Baghouse 1 & 2		OPERATING MODE Continuous		3		0 0 0 0	
DESCRIBE EMISSION POINT Outlet on top of Baghouse		4		0 0 0 0			
HEIGHT ABOVE GROUND LEVEL START 76 ft STOP 76 ft		5		0 0 0 0			
DISTANCE FROM OBSERVER START 380 ft STOP 380 ft		6		0 0 0 0			
DIRECTION FROM OBSERVER START North STOP North		7		0 0 0 0			
DESCRIBE VISIBLE EMISSIONS START STOP		8		0 0 0 0			
EMISSION COLOR START STOP		9		0 0 0 0			
IF WATER DROPLET PLUME: START STOP		10		0 0 0 0			
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED START Outlet (exit) STOP Outlet (exit)		11		0 0 0 0			
DESCRIBE PLUME BACKGROUND START Sky STOP Sky		12		0 0 0 0			
BACKGROUND COLOR START clear STOP white		13		0 0 0 0			
SKY CONDITIONS START clear STOP clear		14		0 0 0 0			
WIND SPEED START 0-10 mph STOP 0-10 mph		15		0 0 0 0			
WIND DIRECTION START W STOP W		16		0 0 0 0			
AMBIENT TEMP. START 46° STOP 46°		17		0 0 0 0			
WET BULB TEMP. START STOP		18		0 0 0 0			
RH, PERCENT START STOP		19		0 0 0 0			
SOURCE LAYOUT SKETCH 		DRAW NORTH ARROW 		20			
COMMENTS		21					
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS		22					
SIGNATURE Roydell Herron		23					
TITLE State Of Tennessee		24					
DATE 2-17-14		25					
ORGANIZATION Gerdau AmeriSteel		26					
VERIFIED BY Carl Koontz		27					
DATE 5-16-14		28					
DATE 11-16-15		29					
		30					

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME				OBSERVATION DATE				START TIME		STOP TIME	
Gerdau AmeriSteel				2-18-16				9:42 Am		10:00 Am	
ADDRESS				SEC				COMMENTS			
801 Gerdau AmeriSteel Rd				MIN							
				0 15 30 45							
CITY				1							
Jackson				2							
STATE				3							
TN				4							
ZIP				5							
38305				6							
PHONE				7							
(731) 424-5600				8							
SOURCE ID NUMBER				9							
57-0189-01				10							
PROCESS EQUIPMENT				11							
Electric Arc Furnace				12							
OPERATING MODE				13							
melt				14							
CONTROL EQUIPMENT				15							
Baghouse 1 (2)				16							
OPERATING MODE				17							
Continuous				18							
DESCRIBE EMISSION POINT				19							
START Outlet on top of Baghouse				20							
HEIGHT ABOVE GROUND LEVEL				21							
START 76 ft STOP 76 ft				22							
HEIGHT RELATIVE TO OBSERVER				23							
START 76 ft STOP 76 ft				24							
DISTANCE FROM OBSERVER				25							
START 380 ft STOP 380 ft				26							
DIRECTION FROM OBSERVER				27							
START North STOP North				28							
DESCRIBE VISIBLE EMISSIONS				29							
START				30							
STOP											
EMISSION COLOR											
IF WATER DROPLET PLUME:											
START											
STOP											
ATTACHED ☐ DETACHED ☐											
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED											
START Outlet (exit)											
STOP Outlet (exit)											
DESCRIBE PLUME BACKGROUND											
START Sky											
STOP Sky											
BACKGROUND COLOR											
START blue											
STOP white											
SKY CONDITIONS											
START clear											
STOP clear											
WIND SPEED											
START 10-15 mph											
STOP 10-15 mph											
WIND DIRECTION											
START W											
STOP W											
AMBIENT TEMP.											
START 60°											
STOP 60°											
WET BULB TEMP.											
RH, percent											
SOURCE LAYOUT SKETCH				DRAW NORTH ARROW							
COMMENTS				APPLICABLE OPACITY STANDARD				EPA METHOD 3 ☒ TVEE METHOD 2 ☐			
				3 % OPACITY				TVEE METHOD 1 ☐ TVEE METHOD 3 ☐			
				AVERAGE OPACITY FOR HIGHEST PERIOD				NUMBER OF READING ABOVE % WERE			
								0 0			
				OBSERVER'S NAME (PRINT)							
				Roydell Herron							
				OBSERVER'S SIGNATURE				DATE			
				Roydell Herron				2-18-16			
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS				ORGANIZATION				CERTIFICATION EXPIRATION DATE			
				Gerdau AmeriSteel				5-16-16			
SIGNATURE				VERIFIED BY				DATE			
TITLE				State Of Tennessee				11-16-17			
				Carl Koontz							

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau AmeriSteel			OBSERVATION DATE 2-19-16			START TIME 1:40 pm		STOP TIME 1:58 pm	
ADDRESS 801 Gerdau AmeriSteel Rd			SEC MIN		0	15	30	45	COMMENTS
CITY Jackson	STATE TN	ZIP 38305	1		0	0	0	0	
PHONE (731) 424-5600	SOURCE ID NUMBER 57-0189-01		2		0	0	0	0	
PROCESS EQUIPMENT Electric Arc Furnace		OPERATING MODE Melt	3		0	0	0	0	
CONTROL EQUIPMENT Baghouse 1 & 2		OPERATING MODE Continuous	4		0	0	0	0	
DESCRIBE EMISSION POINT Outlet on top of Baghouse			5		0	0	0	0	
HEIGHT ABOVE GROUND LEVEL START 76 ft STOP 76 ft			6		0	0	0	0	
HEIGHT RELATIVE TO OBSERVER START 76 ft STOP 76 ft			7		0	0	0	0	
DISTANCE FROM OBSERVER START 380 ft STOP 380 ft			8		0	0	0	0	
DIRECTION FROM OBSERVER START North STOP North			9		0	0	0	0	
DESCRIBE VISIBLE EMISSIONS			10		0	0	0	0	
START Outlet (exit) STOP Outlet (exit)			11		0	0	0	0	
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			12		0	0	0	0	
DESCRIBE PLUME BACKGROUND			13		0	0	0	0	
START Sky STOP Sky			14		0	0	0	0	
BACKGROUND COLOR			15		0	0	0	0	
START Blue STOP Blue			16		0	0	0	0	
SKY CONDITIONS			17		0	0	0	0	
START Clear STOP Clear			18		0	0	0	0	
WIND SPEED			19		0	0	0	0	
START 10-15 STOP 10-15			20		0	0	0	0	
WIND DIRECTION			21		0	0	0	0	
START S STOP S			22		0	0	0	0	
AMBIENT TEMP.			23		0	0	0	0	
START 70° STOP 70°			24		0	0	0	0	
WET BULB TEMP.			25		0	0	0	0	
RH, percent			26		0	0	0	0	
SOURCE LAYOUT SKETCH			27		0	0	0	0	
DRAW NORTH ARROW			28		0	0	0	0	
			29		0	0	0	0	
			30		0	0	0	0	
			APPLICABLE OPACITY STANDARD		EPA METHOD 9 ☒		TVEE METHOD 2 ☐		
			3		% OPACITY		TVEE METHOD 1 ☐		
					TVEE METHOD 3 ☐				
			AVERAGE OPACITY FOR HIGHEST PERIOD		NUMBER OF READING ABOVE %WERE		00		
COMMENTS			OBSERVER'S NAME (PRINT)		DATE				
			Mike Johnson		2-19-16				
			OBSERVER'S SIGNATURE		CERTIFICATION EXPIRATION DATE				
			Mike Johnson		5-13-16				
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			ORGANIZATION		DATE				
			Gerdau AmeriSteel		11-13-15				
SIGNATURE			VERIFIED BY		DATE				
TITLE			State Of Tennessee		Carl Koontz				

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME			OBSERVATION DATE		START TIME		STOP TIME	
Gerdau AmeriSteel			2-23-16		9:30am		9:48am	
ADDRESS			SEC		MIN		COMMENTS	
801 Gerdau AmeriSteel Rd			0		15		30	
CITY			0		0		0	
JACKSON			0		0		0	
STATE			0		0		0	
TN			0		0		0	
ZIP			0		0		0	
38305			0		0		0	
PHONE			0		0		0	
(731) 424-5600			0		0		0	
SOURCE ID NUMBER			0		0		0	
57-0189-01			0		0		0	
PROCESS EQUIPMENT			0		0		0	
Electric Arc Furnace			0		0		0	
OPERATING MODE			0		0		0	
Melt			0		0		0	
CONTROL EQUIPMENT			0		0		0	
Baghouse 1 & 2			0		0		0	
OPERATING MODE			0		0		0	
Continuous			0		0		0	
DESCRIBE EMISSION POINT			0		0		0	
START			0		0		0	
Outlet on top of Baghouse			0		0		0	
HEIGHT ABOVE GROUND LEVEL			0		0		0	
START 76 ft STOP 76 ft			0		0		0	
HEIGHT RELATIVE TO OBSERVER			0		0		0	
START 76 ft STOP 76 ft			0		0		0	
DISTANCE FROM OBSERVER			0		0		0	
START 380 ft STOP 380 ft			0		0		0	
DIRECTION FROM OBSERVER			0		0		0	
START North STOP North			0		0		0	
DESCRIBE VISIBLE EMISSIONS			0		0		0	
START			0		0		0	
Emission color			0		0		0	
IF WATER DROPLET PLUME:			0		0		0	
START			0		0		0	
ATTACHED ☐ DETACHED ☐			0		0		0	
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			0		0		0	
START Outlet (exit) STOP Outlet (exit)			0		0		0	
DESCRIBE PLUME BACKGROUND			0		0		0	
START Sky STOP Sky			0		0		0	
BACKGROUND COLOR			0		0		0	
START Gray STOP Gray			0		0		0	
SKY CONDITIONS			0		0		0	
START Cloudy STOP Cloudy			0		0		0	
WIND SPEED			0		0		0	
START 5-10 mph STOP 5-10 mph			0		0		0	
WIND DIRECTION			0		0		0	
START N STOP N			0		0		0	
AMBIENT TEMP.			0		0		0	
START 52 STOP 52			0		0		0	
WET BULB TEMP.			0		0		0	
RH, percent			0		0		0	
SOURCE LAYOUT SKETCH			0		0		0	
DRAW NORTH ARROW			0		0		0	
			0		0		0	
APPLICABLE OPACITY STANDARD			0		0		0	
3 % OPACITY			0		0		0	
EPA METHOD 9 ☐			0		0		0	
TVEE METHOD 2 ☐			0		0		0	
TVEE METHOD 1 ☐			0		0		0	
TVEE METHOD 3 ☐			0		0		0	
AVERAGE OPACITY FOR HIGHEST PERIOD			0		0		0	
NUMBER OF READING ABOVE % WERE			0		0		0	
OBSERVER'S NAME (PRINT)			0		0		0	
Mike Johnson			0		0		0	
OBSERVER'S SIGNATURE			0		0		0	
Mike Johnson			0		0		0	
DATE			0		0		0	
2-23-16			0		0		0	
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			0		0		0	
SIGNATURE			0		0		0	
Gerdau AmeriSteel			0		0		0	
VERIFIED BY			0		0		0	
State Of Tennessee / Carl Root			0		0		0	
DATE			0		0		0	
11-13-15			0		0		0	

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau AmeriSteel			OBSERVATION DATE 2-24-16		START TIME 12:50 pm	STOP TIME 1:08 pm
ADDRESS 801 Gerdau AmeriSteel Rd			SEC MIN	0	15	30
				45	COMMENTS	
CITY Jackson			1	0	0	0
STATE TN			2	0	0	0
ZIP 38305			3	0	0	0
PHONE (731) 424-5600			4	0	0	0
SOURCE ID NUMBER 57-0189-01			5	0	0	0
PROCESS EQUIPMENT Electric Arc Furnace			6	0	0	0
OPERATING MODE Melt			7	0	0	0
CONTROL EQUIPMENT Baghouse 1 & 2			8	0	0	0
OPERATING MODE Continuous			9	0	0	0
DESCRIBE EMISSION POINT Outlet on top of Baghouse			10	0	0	0
HEIGHT ABOVE GROUND LEVEL START 76 ft STOP 76 ft			11	0	0	0
HEIGHT RELATIVE TO OBSERVER START 76 ft STOP 76 ft			12	0	0	0
DISTANCE FROM OBSERVER START 380 ft STOP 380 ft			13	0	0	0
DIRECTION FROM OBSERVER START North STOP North			14	0	0	0
DESCRIBE VISIBLE EMISSIONS			15	0	0	0
START Outlet (exit) STOP Outlet (exit)			16	0	0	0
EMISION COLOR			17	0	0	0
IF WATER DROPLET PLUME:			18	0	0	0
START Gray STOP Gray			19	0	0	0
ATTACHED ☐ DETACHED ☐			20	0	0	0
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			21	0	0	0
START Outlet (exit) STOP Outlet (exit)			22	0	0	0
DESCRIBE PLUME BACKGROUND			23	0	0	0
START Sky STOP Sky			24	0	0	0
BACKGROUND COLOR			25	0	0	0
START Gray STOP Gray			26	0	0	0
SKY CONDITIONS			27	0	0	0
START Cloudy STOP Cloudy			28	0	0	0
WIND SPEED			29	0	0	0
START 5-10 STOP 5-10			30	0	0	0
WIND DIRECTION						
START N STOP N						
AMBIENT TEMP.						
START 37° STOP 37°						
WET BULB TEMP.						
RH, percent						
SOURCE LAYOUT SKETCH						
DRAW NORTH ARROW						
COMMENTS						
OBSERVER'S NAME (PRINT) Mike Johnson						
OBSERVER'S SIGNATURE Mike Johnson						
DATE 2-24-16						
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS						
ORGANIZATION Gerdau AmeriSteel						
VERIFIED BY State Of Tennessee/Carl Koontz						
SIGNATURE						
TITLE						
DATE						
CERTIFICATION EXPIRATION DATE 5-13-16						
DATE 11-13-15						

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME			OBSERVATION DATE				START TIME	STOP TIME
Gerdau AmeriSteel			2-25-16				10:10am	10:28am
ADDRESS			SEC	0	15	30	45	COMMENTS
801 Gerdau AmeriSteel Rd			MIN					
CITY	STATE	ZIP	1	0	0	0	0	
Jackson	TN	38305	2	0	0	0	0	
PHONE	SOURCE ID NUMBER		3	0	0	0	0	
(731) 424-5600	57-0189-01		4	0	0	0	0	
PROCESS EQUIPMENT		OPERATING MODE	5	0	0	0	0	
Electric Arc Furnace		Melt	6	0	0	0	0	
CONTROL EQUIPMENT		OPERATING MODE	7	0	0	0	0	
Baghouse 1 & 2		Continuous	8	0	0	0	0	
DESCRIBE EMISSION POINT			9	0	0	0	0	
START Outlet on top of Baghouse			10	0	0	0	0	
HEIGHT ABOVE GROUND LEVEL		HEIGHT RELATIVE TO OBSERVER	11	0	0	0	0	
START 76 ft STOP 76 ft		START 76 ft STOP 76 ft	12	0	0	0	0	
DISTANCE FROM OBSERVER		DIRECTION FROM OBSERVER	13	0	0	0	0	
START 380 ft STOP 380 ft		START North STOP North	14	0	0	0	0	
DESCRIBE VISIBLE EMISSIONS			15	0	0	0	0	
START _____ STOP _____			16	0	0	0	0	
EMISSION COLOR		IF WATER DROPLET PLUME:	17	0	0	0	0	
START _____ STOP _____		ATTACHED ☐ DETACHED ☐	18	0	0	0	0	
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			19	0	0	0	0	
START Outlet (exit) STOP Outlet (exit)			20	0	0	0	0	
DESCRIBE PLUME BACKGROUND			21	0	0	0	0	
START Sky STOP Sky			22	0	0	0	0	
BACKGROUND COLOR		SKY CONDITIONS	23	0	0	0	0	
START Blue/white STOP Blue/white		START Cloudy STOP Cloudy	24	0	0	0	0	
WIND SPEED		WIND DIRECTION	25	0	0	0	0	
START 5-10 mph STOP 5-10 mph		START W STOP W	26	0	0	0	0	
AMBIENT TEMP.		WET BULB TEMP.	27	0	0	0	0	
START 43° STOP 43°		RH, percent	28	0	0	0	0	
SOURCE LAYOUT SKETCH DRAW NORTH ARROW			29	0	0	0	0	
			30	0	0	0	0	
COMMENTS			APPLICABLE OPACITY STANDARD					EPA METHOD 9 ☐ TVEE METHOD 2 ☐
			3 % OPACITY					TVEE METHOD 1 ☐ TVEE METHOD 3 ☐
			AVERAGE OPACITY FOR HIGHEST PERIOD					NUMBER OF READING ABOVE % WERE
			0 0					
			OBSERVER'S NAME (PRINT)					DATE
			Mike Johnson					2-25-16
			OBSERVER'S SIGNATURE					CERTIFICATION EXPIRATION DATE
			Mike Johnson					5-13-16
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			ORGANIZATION					DATE
			Gerdau AmeriSteel					11-13-15
SIGNATURE			VERIFIED BY					
TITLE			State Of Tennessee/Carl Koonce					

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau AmeriSteel			OBSERVATION DATE 2-26-16		START TIME 10:20 am	STOP TIME 10:38 am
ADDRESS 801 Gerdau AmeriSteel Rd			SEC MIN	0	15	30
CITY Jackson			STATE TN		ZIP 38305	
PHONE (731) 424-5600			SOURCE ID NUMBER 57-0189-01			
PROCESS EQUIPMENT Electric Arc Furnace			OPERATING MODE Hot			
CONTROL EQUIPMENT Baghouse 1 & 2			OPERATING MODE Continuous			
DESCRIBE EMISSION POINT Outlet on top of Baghouse			START		STOP	
HEIGHT ABOVE GROUND LEVEL 76 ft			START		STOP	
DISTANCE FROM OBSERVER 380 ft			START		STOP	
DIRECTION FROM OBSERVER North			START		STOP	
DESCRIBE VISIBLE EMISSIONS			START		STOP	
EMISSION COLOR			IF WATER DROPLET PLUME:			
START			STOP			
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			ATTACHED ☐ DETACHED ☐			
START			STOP			
DESCRIBE PLUME BACKGROUND			START		STOP	
Sky			Sky			
BACKGROUND COLOR			SKY CONDITIONS			
START			STOP			
WIND SPEED			WIND DIRECTION			
START			STOP			
AMBIENT TEMP.			WET BULB TEMP.		RH, percent	
START			STOP			
SOURCE LAYOUT SKETCH			DRAW NORTH ARROW			
COMMENTS			OBSERVER'S NAME (PRINT)			
			OBSERVER'S SIGNATURE			
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			ORGANIZATION		DATE	
SIGNATURE			Gerdau AmeriSteel		2-26-16	
TITLE			VERIFIED BY		CERTIFICATION EXPIRATION DATE	
			State Of Tennessee/Carl Kowitz		5-13-16	
					DATE	
					11-13-15	

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau AmeriSteel			OBSERVATION DATE 2-27-16		START TIME 12:40 pm	STOP TIME 12:58 pm
ADDRESS 801 Gerdau AmeriSteel Rd			MIN	SEC	COMMENTS	
				0 15 30 45		
CITY Jackson			1	0 0 0 0		
STATE TN			2	0 0 0 0		
ZIP 38305			3	0 0 0 0		
PHONE (731) 424-5600			4	0 0 0 0		
SOURCE ID NUMBER 57-0189-01			5	0 0 0 0		
PROCESS EQUIPMENT Electric Arc Furnace			6	0 0 0 0		
OPERATING MODE melting			7	0 0 0 0		
CONTROL EQUIPMENT Baghouse 1 & 2			8	0 0 0 0		
OPERATING MODE Continuous			9	0 0 0 0		
DESCRIBE EMISSION POINT Outlet on top of Baghouse			10	0 0 0 0		
START			11	0 0 0 0		
HEIGHT ABOVE GROUND LEVEL 76 ft			12	0 0 0 0		
STOP			13	0 0 0 0		
HEIGHT RELATIVE TO OBSERVER 76 ft			14	0 0 0 0		
START			15	0 0 0 0		
DISTANCE FROM OBSERVER 380 ft			16	0 0 0 0		
STOP			17	0 0 0 0		
DIRECTION FROM OBSERVER North			18	0 0 0 0		
START			19	0 0 0 0		
DESCRIBE VISIBLE EMISSIONS			20	0 0 0 0		
START			21	0 0 0 0		
EMISSION COLOR			22	0 0 0 0		
STOP			23	0 0 0 0		
IF WATER DROPLET PLUME:			24	0 0 0 0		
START			25	0 0 0 0		
STOP			26	0 0 0 0		
ATTACHED ☐ DETACHED ☐			27	0 0 0 0		
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED Outlet (exit)			28	0 0 0 0		
STOP			29	0 0 0 0		
DESCRIBE PLUME BACKGROUND Sky			30	0 0 0 0		
START						
STOP						
BACKGROUND COLOR Blue						
STOP						
SKY CONDITIONS Clear						
START						
STOP						
WIND SPEED 15 to 20						
STOP						
WIND DIRECTION SW						
START						
STOP						
AMBIENT TEMP. 64°						
STOP						
WET BULB TEMP.						
RH, percent						
START						
STOP						
SOURCE LAYOUT SKETCH						
DRAW NORTH ARROW						
SUN WIND PLUME AND STACK						
COMMENTS						
OBSERVER'S NAME (PRINT) Tony Perry						
OBSERVER'S SIGNATURE 						
DATE 2-27-16						
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS						
ORGANIZATION Gerdau AmeriSteel						
CERTIFICATION EXPIRATION DATE 5-16-16						
SIGNATURE State Of Tennessee						
DATE 11-16-15						

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau AmeriSteel			OBSERVATION DATE 3-1-14			START TIME 10:05 Am		STOP TIME 10:23 Am	
ADDRESS 801 Gerdau AmeriSteel Rd			SEC MIN		0	15	30	45	COMMENTS
					0	0	0	0	
CITY Jackson			STATE TN		ZIP 38305				
PHONE (731) 424-5600			SOURCE ID NUMBER 57-0189-01						
PROCESS EQUIPMENT Electric Arc Furnace			OPERATING MODE melt						
CONTROL EQUIPMENT Baghouse 1 & 2			OPERATING MODE Continuous						
DESCRIBE EMISSION POINT Outlet on top of Baghouse									
HEIGHT ABOVE GROUND LEVEL START 76 ft STOP 76 ft			HEIGHT RELATIVE TO OBSERVER START 76 ft STOP 76 ft						
DISTANCE FROM OBSERVER START 380 ft STOP 380 ft			DIRECTION FROM OBSERVER START North STOP North						
DESCRIBE VISIBLE EMISSIONS									
START — STOP —									
EMISSION COLOR									
START — STOP —									
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED									
START Outlet (exit) STOP Outlet (exit)									
DESCRIBE PLUME BACKGROUND									
START Sky STOP Sky									
BACKGROUND COLOR									
START gray STOP gray									
WIND SPEED									
START 0-10 mph STOP 0-10 mph									
AMBIENT TEMP.									
START 67° STOP 67°									
WET BULB TEMP.									
RH, percent									
SOURCE LAYOUT SKETCH			DRAW NORTH ARROW						
COMMENTS									
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS									
SIGNATURE			OBSERVER'S NAME (PRINT) Royale Herron						
TITLE			OBSERVER'S SIGNATURE Royale Herron						
DATE			DATE 3-1-14						
			ORGANIZATION Gerdau AmeriSteel						
			CERTIFICATION EXPIRATION DATE 5-16-14						
			VERIFIED BY State Of Tennessee/Carl Koontz						
			DATE 11-16-15						

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME			OBSERVATION DATE		START TIME	STOP TIME
Gerdau AmeriSteel			3-2-16		10:00 Am	10:18 Am
ADDRESS			SEC	0	15	30
801 Gerdau AmeriSteel Rd			MIN	45	COMMENTS	
CITY			1	0	0	0
JACKSON			2	0	0	0
STATE			3	0	0	0
TN			4	0	0	0
ZIP			5	0	0	0
38305			6	0	0	0
PHONE			7	0	0	0
(731) 424-5600			8	0	0	0
SOURCE ID NUMBER			9	0	0	0
57-0189-01			10	0	0	0
PROCESS EQUIPMENT			11	0	0	0
Electric Arc Furnace			12	0	0	0
OPERATING MODE			13	0	0	0
melt			14	0	0	0
CONTROL EQUIPMENT			15	0	0	0
Baghouse 1 & 2			16	0	0	0
OPERATING MODE			17	0	0	0
Continuous			18	0	0	0
DESCRIBE EMISSION POINT			19	0	0	0
START Outlet on top of Baghouse			20	0	0	0
HEIGHT ABOVE GROUND LEVEL			21	0	0	0
START 76 ft STOP 76 ft			22	0	0	0
HEIGHT RELATIVE TO OBSERVER			23	0	0	0
START 76 ft STOP 76 ft			24	0	0	0
DISTANCE FROM OBSERVER			25	0	0	0
START 380 ft STOP 380 ft			26	0	0	0
DIRECTION FROM OBSERVER			27	0	0	0
START North STOP North			28	0	0	0
DESCRIBE VISIBLE EMISSIONS			29	0	0	0
START			30	0	0	0
STOP			31	0	0	0
EMISSION COLOR			32	0	0	0
IF WATER DROPLET PLUME:			33	0	0	0
START			34	0	0	0
STOP			35	0	0	0
ATTACHED ☐ DETACHED ☐			36	0	0	0
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			37	0	0	0
START Outlet (exit)			38	0	0	0
STOP Outlet (exit)			39	0	0	0
DESCRIBE PLUME BACKGROUND			40	0	0	0
START Sky			41	0	0	0
STOP Sky			42	0	0	0
BACKGROUND COLOR			43	0	0	0
START blue			44	0	0	0
STOP white			45	0	0	0
SKY CONDITIONS			46	0	0	0
START clear			47	0	0	0
STOP clear			48	0	0	0
WIND SPEED			49	0	0	0
START 0-10 mph			50	0	0	0
STOP 0-10 mph			51	0	0	0
WIND DIRECTION			52	0	0	0
START W			53	0	0	0
STOP W			54	0	0	0
AMBIENT TEMP.			55	0	0	0
START 50			56	0	0	0
STOP 50			57	0	0	0
WET BULB TEMP.			58	0	0	0
RH, percent			59	0	0	0
SOURCE LAYOUT SKETCH			60	0	0	0
DRAW NORTH ARROW			61	0	0	0
			62	0	0	0
SUN WIND PLUME AND STACK			63	0	0	0
COMMENTS			64	0	0	0
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			65	0	0	0
SIGNATURE			66	0	0	0
TITLE			67	0	0	0
DATE			68	0	0	0
OBSERVER'S NAME (PRINT)			69	0	0	0
Royall Herron			70	0	0	0
OBSERVER'S SIGNATURE			71	0	0	0
Royall Herron			72	0	0	0
ORGANIZATION			73	0	0	0
Gerdau AmeriSteel			74	0	0	0
VERIFIED BY			75	0	0	0
State Of Tennessee			76	0	0	0
DATE			77	0	0	0
11-16-15			78	0	0	0

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau AmeriSteel			OBSERVATION DATE 3-3-14			START TIME 9:35 Am		STOP TIME 9:53 Am	
ADDRESS 801 Gerdau AmeriSteel Rd			SEC MIN		0	15	30	45	COMMENTS
CITY Jackson			STATE TN		ZIP 38305				
PHONE (731) 424-5600			SOURCE ID NUMBER 57-0189-01						
PROCESS EQUIPMENT Electric Arc Furnace			OPERATING MODE melt						
CONTROL EQUIPMENT Baghouse 1 & 2			OPERATING MODE Continuous						
DESCRIBE EMISSION POINT Outlet on top of Baghouse									
START			STOP						
HEIGHT ABOVE GROUND LEVEL START 76 ft STOP 76 ft			HEIGHT RELATIVE TO OBSERVER START 76 ft STOP 76 ft						
DISTANCE FROM OBSERVER START 380 ft STOP 380 ft			DIRECTION FROM OBSERVER START North STOP North						
DESCRIBE VISIBLE EMISSIONS									
START			STOP						
EMISSION COLOR			IF WATER DROPLET PLUME:						
START			STOP						
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED									
START Outlet (exit)			STOP Outlet (exit)						
DESCRIBE PLUME BACKGROUND									
START Sky			STOP Sky						
BACKGROUND COLOR			SKY CONDITIONS						
START gray STOP gray			START cloudy STOP cloudy						
WIND SPEED			WIND DIRECTION						
START 0-10 mph STOP 0-10 mph			START W STOP W						
AMBIENT TEMP.			WET BULB TEMP.			RH, percent			
START 40° STOP 40°									
SOURCE LAYOUT SKETCH			DRAW NORTH ARROW						
COMMENTS									
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS									
SIGNATURE			OBSERVER'S NAME (PRINT)						
TITLE			OBSERVER'S SIGNATURE						
DATE			ORGANIZATION						
			State Of Tennessee Carl Koontz						
			VERIFIED BY						
			DATE						
			EPA METHOD 9 ☒			TVEE METHOD 2 ☒			
			TVEE METHOD 1 ☐			TVEE METHOD 3 ☐			
			AVERAGE OPACITY FOR HIGHEST PERIOD			NUMBER OF READING ABOVE % WERE			
			3 % OPACITY			0 0			
			DATE			3-3-14			
			CERTIFICATION EXPIRATION DATE			5-16-14			
			DATE			11-16-15			

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME				OBSERVATION DATE				START TIME		STOP TIME	
Gerdau AmeriSteel				3-4-14				10:00 Am		10:18 Am	
ADDRESS				MIN				SEC			
801 Gerdau AmeriSteel Rd				0				15			
CITY				30				45			
JACKSON				0				0			
STATE				0				0			
TN				0				0			
ZIP				0				0			
38305				0				0			
PHONE				0				0			
(731) 424-5600				0				0			
SOURCE ID NUMBER				0				0			
57-0189-01				0				0			
PROCESS EQUIPMENT				0				0			
Electric Arc Furnace				0				0			
OPERATING MODE				0				0			
melt				0				0			
CONTROL EQUIPMENT				0				0			
Baghouse 1 (2)				0				0			
OPERATING MODE				0				0			
Continuous				0				0			
DESCRIBE EMISSION POINT				0				0			
START				0				0			
Outlet on top of Baghouse				0				0			
HEIGHT ABOVE GROUND LEVEL				0				0			
START				0				0			
76 ft				0				0			
STOP				0				0			
76 ft				0				0			
DISTANCE FROM OBSERVER				0				0			
START				0				0			
380 ft				0				0			
STOP				0				0			
380 ft				0				0			
DIRECTION FROM OBSERVER				0				0			
START				0				0			
North				0				0			
STOP				0				0			
North				0				0			
DESCRIBE VISIBLE EMISSIONS				0				0			
START				0				0			
EMMISSION COLOR				0				0			
IF WATER DROPLET PLUME:				0				0			
START				0				0			
STOP				0				0			
ATTACHED ☐ DETACHED ☐				0				0			
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED				0				0			
START				0				0			
Outlet (exit)				0				0			
STOP				0				0			
Outlet (exit)				0				0			
DESCRIBE PLUME BACKGROUND				0				0			
START				0				0			
Sky				0				0			
STOP				0				0			
Sky				0				0			
BACKGROUND COLOR				0				0			
START				0				0			
gray				0				0			
STOP				0				0			
gray				0				0			
WIND SPEED				0				0			
START				0				0			
0-10 mph				0				0			
STOP				0				0			
0-10 mph				0				0			
WIND DIRECTION				0				0			
START				0				0			
W				0				0			
STOP				0				0			
W				0				0			
AMBIENT TEMP.				0				0			
START				0				0			
60°				0				0			
STOP				0				0			
60°				0				0			
WET BULB TEMP.				0				0			
RH, percent				0				0			
SOURCE LAYOUT SKETCH				0				0			
DRAW NORTH ARROW				0				0			
				0				0			
SUN LOCATION LINE 140° NO SUN				0				0			
COMMENTS				0				0			
APPLICABLE OPACITY STANDARD				0				0			
3 % OPACITY				0				0			
EPA METHOD 9 ☒				0				0			
TVEE METHOD 2 ☐				0				0			
TVEE METHOD 1 ☐				0				0			
TVEE METHOD 3 ☐				0				0			
AVERAGE OPACITY FOR HIGHEST PERIOD				0				0			
NUMBER OF READING ABOVE % WERE				0				0			
OBSERVER'S NAME (PRINT)				0				0			
Roydell Herron				0				0			
OBSERVER'S SIGNATURE				0				0			
Roydell Herron				0				0			
DATE				0				0			
3-4-14				0				0			
ORGANIZATION				0				0			
Gerdau AmeriSteel				0				0			
CERTIFICATION EXPIRATION DATE				0				0			
5-16-14				0				0			
DATE				0				0			
11-14-15				0				0			
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS				0				0			
SIGNATURE				0				0			
TITLE				0				0			
DATE				0				0			
VERIFIED BY				0				0			
State Of Tennessee/Carl Koontz				0				0			

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME			OBSERVATION DATE				START TIME	STOP TIME
Gerdau AmeriSteel			3-8-16				11:05 Am	11:23 Am
ADDRESS			SEC	0	15	30	45	COMMENTS
801 Gerdau AmeriSteel Rd			MIN					
city	STATE	ZIP	1	0	0	0	0	
Jackson	TN	38305	2	0	0	0	0	
PHONE	SOURCE ID NUMBER		3	0	0	0	0	
(731) 424-5600	57-0189-01		4	0	0	0	0	
PROCESS EQUIPMENT		OPERATING MODE	5	0	0	0	0	
Electric Arc Furnace		melt	6	0	0	0	0	
CONTROL EQUIPMENT		OPERATING MODE	7	0	0	0	0	
Baghouse 1 & 2		Continuous	8	0	0	0	0	
DESCRIBE EMISSION POINT			9	0	0	0	0	
START Outlet on top of Baghouse			10	0	0	0	0	
HEIGHT ABOVE GROUND LEVEL		HEIGHT RELATIVE TO OBSERVER	11	0	0	0	0	
START 76 ft STOP 76 ft	START 76 ft STOP 76 ft		12	0	0	0	0	
DISTANCE FROM OBSERVER		DIRECTION FROM OBSERVER	13	0	0	0	0	
START 380 ft STOP 380 ft	START North STOP North		14	0	0	0	0	
DESCRIBE VISIBLE EMISSIONS			15	0	0	0	0	
START	STOP		16	0	0	0	0	
EMISSION COLOR	IF WATER DROPLET PLUME:		17	0	0	0	0	
START	STOP	ATTACHED ☐ DETACHED ☐	18	0	0	0	0	
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			19					
START Outlet (exit)	STOP Outlet (exit)		20					
DESCRIBE PLUME BACKGROUND			21					
START Sky	STOP Sky		22					
BACKGROUND COLOR	SKY CONDITIONS		23					
START white STOP white	START clear STOP clear		24					
WIND SPEED	WIND DIRECTION		25					
START 0-10 mph STOP 0-10 mph	START W STOP W		26					
AMBIENT TEMP.	WET BULB TEMP.	RH, percent	27					
START 65° STOP 65°			28					
SOURCE LAYOUT SKETCH			29					
DRAW NORTH ARROW			30					
			APPLICABLE OPACITY STANDARD 3 % OPACITY					EPA METHOD 9 ☒ TVEE METHOD 2 ☐ TVEE METHOD 1 ☐ TVEE METHOD 3 ☐
SUN WIND PLUME AND STACK			AVERAGE OPACITY FOR HIGHEST PERIOD 0 0					NUMBER OF READING ABOVE % WERE 0 0
COMMENTS			OBSERVER'S NAME (PRINT)					
			Royale H. Herron					
			OBSERVER'S SIGNATURE					
			Royale H. Herron					
			DATE					
			3-8-16					
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			ORGANIZATION					
			Gerdau AmeriSteel					
SIGNATURE			CERTIFICATION EXPIRATION DATE					
TITLE			DATE					
			5-16-14					
			DATE					
			11-16-15					
			State Of Tennessee/Carl Koontz					

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau AmeriSteel			OBSERVATION DATE 3-9-14		START TIME 12:15 pm	STOP TIME 12:33 pm
ADDRESS 801 Gerdau AmeriSteel Rd			SEC MIN	0	15	30
				45	COMMENTS	
CITY Jackson			STATE TN		ZIP 38305	
PHONE (731) 424-5600			SOURCE ID NUMBER 57-0189-01			
PROCESS EQUIPMENT Electric Arc Furnace			OPERATING MODE Mut			
CONTROL EQUIPMENT Baghouse 1 & 2			OPERATING MODE Continuous			
DESCRIBE EMISSION POINT Outlet on top of Baghouse						
HEIGHT ABOVE GROUND LEVEL START 76 ft STOP 76 ft			HEIGHT RELATIVE TO OBSERVER START 76 ft STOP 76 ft			
DISTANCE FROM OBSERVER START 380 ft STOP 380 ft			DIRECTION FROM OBSERVER START North STOP North			
DESCRIBE VISIBLE EMISSIONS						
START _____ STOP _____						
EMISSION COLOR			IF WATER DROPLET PLUME:			
START _____ STOP _____			ATTACHED ☐ DETACHED ☐			
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED						
START Outlet (exit) STOP Outlet (exit)						
DESCRIBE PLUME BACKGROUND						
START Sky STOP Sky						
BACKGROUND COLOR			SKY CONDITIONS			
START Gray STOP Gray			START Cloudy STOP Cloudy			
WIND SPEED			WIND DIRECTION			
START 5-10 STOP 5-10			START W STOP W			
AMBIENT TEMP.			WET BULB TEMP.		RH, percent	
START 70° STOP 70°						
SOURCE LAYOUT SKETCH			DRAW NORTH ARROW			
COMMENTS						
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS						
SIGNATURE			OBSERVER'S NAME (PRINT)		DATE	
TITLE			OBSERVER'S SIGNATURE		DATE	
			Mike Johnson		3-9-14	
			Mike Johnson		5-13-14	
			ORGANIZATION		CERTIFICATION EXPIRATION DATE	
			Gerdau AmeriSteel		5-13-14	
			VERIFIED BY		DATE	
			State Of Tennessee		11-13-15	

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau AmeriSteel			OBSERVATION DATE 3-10-16		START TIME 10:00am	STOP TIME 10:18am
ADDRESS 801 Gerdau AmeriSteel Rd			SEC MIN	0	15	30
CITY Jackson			STATE TN		ZIP 38305	
PHONE (731) 424-5600			SOURCE ID NUMBER 57-0189-01			
PROCESS EQUIPMENT Electric Arc Furnace			OPERATING MODE Melt			
CONTROL EQUIPMENT Baghouse 1 & 2			OPERATING MODE Continuous			
DESCRIBE EMISSION POINT Outlet on top of Baghouse			HEIGHT ABOVE GROUND LEVEL START 76 ft STOP 76 ft		HEIGHT RELATIVE TO OBSERVER START 76 ft STOP 76 ft	
DISTANCE FROM OBSERVER START 380 ft STOP 380 ft			DIRECTION FROM OBSERVER START North STOP North			
DESCRIBE VISIBLE EMISSIONS			START		STOP	
EMISSION COLOR			IF WATER DROPLET PLUME:			
START			STOP		ATTACHED ☐ DETACHED ☐	
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			START		STOP	
DESCRIBE PLUME BACKGROUND			START		STOP	
BACKGROUND COLOR			SKY CONDITIONS			
WIND SPEED			WIND DIRECTION			
AMBIENT TEMP.			WET BULB TEMP.		RH, percent	
SOURCE LAYOUT SKETCH			DRAW NORTH ARROW			
COMMENTS			APPLICABLE OPACITY STANDARD		EPA METHOD 9 ☒ TVEE METHOD 2 ☐	
			3 % OPACITY		TVEE METHOD 1 ☐ TVEE METHOD 3 ☐	
			AVERAGE OPACITY FOR HIGHEST PERIOD		NUMBER OF READING ABOVE % WERE	
			0		0	
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			OBSERVER'S NAME (PRINT)		DATE	
SIGNATURE			OBSERVER'S SIGNATURE		DATE	
TITLE			ORGANIZATION		CERTIFICATION EXPIRATION DATE	
			Gerdau AmeriSteel		5-13-16	
			VERIFIED BY		DATE	
			State Of Tennessee/Carl Kootz		11-13-15	

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau AmeriSteel			OBSERVATION DATE 3-11-16			START TIME 8:00am		STOP TIME 8:18am	
ADDRESS 801 Gerdau AmeriSteel Rd			SEC MIN	0	15	30	45	COMMENTS	
CITY Jackson			STATE TN		ZIP 38305				
PHONE (731) 424-5600			SOURCE ID NUMBER 57-0189-01						
PROCESS EQUIPMENT Electric Arc Furnace			OPERATING MODE Hot						
CONTROL EQUIPMENT Baghouse 1 & 2			OPERATING MODE Continuous						
DESCRIBE EMISSION POINT Outlet on top of Baghouse									
HEIGHT ABOVE GROUND LEVEL START 76 ft STOP 76 ft			HEIGHT RELATIVE TO OBSERVER START 76 ft STOP 76 ft						
DISTANCE FROM OBSERVER START 380 ft STOP 380 ft			DIRECTION FROM OBSERVER START North STOP North						
DESCRIBE VISIBLE EMISSIONS									
START _____ STOP _____									
EMISSION COLOR			IF WATER DROPLET PLUME:						
START _____ STOP _____			ATTACHED ☐ DETACHED ☐						
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED									
START Outlet (exit) STOP Outlet (exit)									
DESCRIBE PLUME BACKGROUND									
START Sky STOP Sky									
BACKGROUND COLOR			SKY CONDITIONS						
START Gray STOP Gray			START Cloudy STOP Cloudy						
WIND SPEED			WIND DIRECTION						
START 5-10 mph STOP 5-10 mph			START N STOP N						
AMBIENT TEMP.			WET BULB TEMP.			RH, percent			
START 54° STOP 54°									
SOURCE LAYOUT SKETCH			DRAW NORTH ARROW						
COMMENTS									
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			OBSERVER'S NAME (PRINT) Mike Johnson			DATE 3-11-16			
SIGNATURE			OBSERVER'S SIGNATURE Mike Johnson			CERTIFICATION EXPIRATION DATE 5-13-16			
TITLE			ORGANIZATION Gerdau AmeriSteel			DATE 11-13-15			
DATE			VERIFIED BY State Of Tennessee/Carl Bourne						

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau AmeriSteel			OBSERVATION DATE 3-15-14			START TIME 9:40 Am		STOP TIME 9:58 Am					
ADDRESS 801 Gerdau AmeriSteel Rd			SEC MIN		0	15	30	45	COMMENTS				
			1		0	0	0	0					
CITY Jackson			STATE TN		ZIP 38305		2		0	0	0	0	
PHONE (731) 424-5600			SOURCE ID NUMBER 57-0189-01		3		0		0	0	0		
PROCESS EQUIPMENT Electric Arc Furnace			OPERATING MODE melt		4		0		0	0	0		
CONTROL EQUIPMENT Baghouse 1 & 2			OPERATING MODE Continuous		5		0		0	0	0		
DESCRIBE EMISSION POINT Outlet on top of Baghouse			6		0		0		0	0			
HEIGHT ABOVE GROUND LEVEL START 76 ft STOP 76 ft			HEIGHT RELATIVE TO OBSERVER START 76 ft STOP 76 ft		7		0		0	0			
DISTANCE FROM OBSERVER START 380 ft STOP 380 ft			DIRECTION FROM OBSERVER START North STOP North		8		0		0	0			
DESCRIBE VISIBLE EMISSIONS			9		0		0		0	0			
START			STOP		10		0		0	0			
EMISSION COLOR			IF WATER DROPLET PLUME:		11		0		0	0			
START			STOP		12		0		0	0			
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			ATTACHED ☐ DETACHED ☐		13		0		0	0			
START Outlet (exit)			STOP Outlet (exit)		14		0		0	0			
DESCRIBE PLUME BACKGROUND			15		0		0		0	0			
START Sky			STOP Sky		16		0		0	0			
BACKGROUND COLOR			SKY CONDITIONS		17		0		0	0			
START clear			STOP clear		18		0		0	0			
WIND SPEED			WIND DIRECTION		19								
START 0-10 mph			STOP 0-10 mph		20								
AMBIENT TEMP.			WET BULB TEMP.		21								
START 70°			STOP 70°		22								
SOURCE LAYOUT SKETCH			DRAW NORTH ARROW		23								
SUN  WIND 			PLUME AND STACK 		24								
X EMISSION POINT			OBSERVER'S POSITION		25								
SUN LOCATION LINE			140°		26								
COMMENTS			APPLICABLE OPACITY STANDARD		27								
			3 % OPACITY		28								
			EPA METHOD 8 ☒ TVEE METHOD 2 ☐		29								
			TVEE METHOD 1 ☐ TVEE METHOD 3 ☐		30								
			AVERAGE OPACITY FOR HIGHEST PERIOD		0 0		NUMBER OF READING ABOVE % WERE						
			OBSERVER'S NAME (PRINT)		Roydell Herron		DATE		3-15-14				
			OBSERVER'S SIGNATURE		Roydell Herron		CERTIFICATION EXPIRATION DATE		5-16-14				
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			ORGANIZATION		Gerdau AmeriSteel		DATE		11-16-15				
SIGNATURE			VERIFIED BY		State Of Tennessee / Carl Koontz								
TITLE			DATE										

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau AmeriSteel			OBSERVATION DATE 3-16-14		START TIME 11:06 Am	STOP TIME 11:18 Am
ADDRESS 801 Gerdau AmeriSteel Rd			SEC MIN	0	15	30
CITY Jackson			STATE TN		ZIP 38305	
PHONE (731) 424-5600			SOURCE ID NUMBER 57-0189-01		COMMENTS	
PROCESS EQUIPMENT Electric Arc Furnace			OPERATING MODE melt			
CONTROL EQUIPMENT Baghouse 1 & 2			OPERATING MODE Continuous			
DESCRIBE EMISSION POINT Outlet on top of Baghouse						
HEIGHT ABOVE GROUND LEVEL START 76 ft STOP 76 ft			HEIGHT RELATIVE TO OBSERVER START 76 ft STOP 76 ft			
DISTANCE FROM OBSERVER START 380 ft STOP 380 ft			DIRECTION FROM OBSERVER START North STOP North			
DESCRIBE VISIBLE EMISSIONS						
START			STOP			
EMISSION COLOR			IF WATER DROPLET PLUME:			
START			STOP			
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			ATTACHED ☐ DETACHED ☐			
START Outlet (exit)			STOP Outlet (exit)			
DESCRIBE PLUME BACKGROUND						
START Sky			STOP Sky			
BACKGROUND COLOR			SKY CONDITIONS			
START blue			STOP white			
WIND SPEED			WIND DIRECTION			
START 0-10 mph			STOP 0-10 mph			
AMBIENT TEMP.			WET BULB TEMP.		RH, percent	
START 64°			STOP 64°			
SOURCE LAYOUT SKETCH			DRAW NORTH ARROW			
COMMENTS						
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS						
SIGNATURE			OBSERVER'S NAME (PRINT)		DATE	
TITLE			OBSERVER'S SIGNATURE		DATE	
			ORGANIZATION		CERTIFICATION EXPIRATION DATE	
			VERIFIED BY		DATE	
			State Of Tennessee		11-16-15	

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME			OBSERVATION DATE		START TIME	STOP TIME
Gerdau AmeriSteel			3-17-14		10:15 Am	10:33 Am
ADDRESS			SEC	0	15	30
801 Gerdau AmeriSteel Rd			MIN	0	15	30
				45	COMMENTS	
CITY			1	0	0	0
Jackson			2	0	0	0
STATE			3	0	0	0
TN			4	0	0	0
ZIP			5	0	0	0
38305			6	0	0	0
PHONE			7	0	0	0
(731) 424-5600			8	0	0	0
SOURCE ID NUMBER			9	0	0	0
57-0189-01			10	0	0	0
PROCESS EQUIPMENT			11	0	0	0
Electric Arc Furnace			12	0	0	0
OPERATING MODE			13	0	0	0
melt			14	0	0	0
CONTROL EQUIPMENT			15	0	0	0
Baghouse 1 & 2			16	0	0	0
OPERATING MODE			17	0	0	0
Continuous			18	0	0	0
DESCRIBE EMISSION POINT			19	0	0	0
START Outlet on top of Baghouse			20	0	0	0
HEIGHT ABOVE GROUND LEVEL			21	0	0	0
START 76 ft STOP 76 ft			22	0	0	0
HEIGHT RELATIVE TO OBSERVER			23	0	0	0
START 76 ft STOP 76 ft			24	0	0	0
DISTANCE FROM OBSERVER			25	0	0	0
START 380 ft STOP 380 ft			26	0	0	0
DIRECTION FROM OBSERVER			27	0	0	0
START North STOP North			28	0	0	0
DESCRIBE VISIBLE EMISSIONS			29	0	0	0
START			30	0	0	0
EMISSION COLOR						
START						
STOP						
IF WATER DROPLET PLUME:						
ATTACHED ☐ DETACHED ☐						
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED						
START Outlet (exit)						
STOP Outlet (exit)						
DESCRIBE PLUME BACKGROUND						
START Sky						
STOP Sky						
BACKGROUND COLOR						
START blue						
STOP white						
SKY CONDITIONS						
START clear						
STOP clear						
WIND SPEED						
START 6-10 mph						
STOP 0-10 mph						
WIND DIRECTION						
START W						
STOP W						
AMBIENT TEMP.						
START 68°						
STOP 68°						
WET BULB TEMP.						
RH, percent						
SOURCE LAYOUT SKETCH						
DRAW NORTH ARROW						
SUN LOCATION LINE 140°						
COMMENTS						
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS						
SIGNATURE						
TITLE						
DATE						
OBSERVER'S NAME (PRINT)						
Roydell Herron						
OBSERVER'S SIGNATURE						
Roydell Herron						
DATE						
3-17-14						
ORGANIZATION						
Gerdau AmeriSteel						
VERIFIED BY						
State Of Tennessee Carl Kuntz						
DATE						
11-14-15						

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau AmeriSteel			OBSERVATION DATE 3-18-16			START TIME 10:20AM		STOP TIME 10:38AM	
ADDRESS 801 Gerdau AmeriSteel Rd			SEC MIN		0	15	30	45	COMMENTS
			1		0	0	0	0	
CITY Jackson			STATE TN		ZIP 38305		2		0
PHONE (731) 424-5600			SOURCE ID NUMBER 57-0189-01		3		0		0
PROCESS EQUIPMENT Electric Arc Furnace			OPERATING MODE Melt		4		0		0
CONTROL EQUIPMENT Baghouse 1 & 2			OPERATING MODE Continuous		5		0		0
DESCRIBE EMISSION POINT Outlet on top of Baghouse			6		0		0		0
START 76 ft			STOP 76 ft		7		0		0
HEIGHT ABOVE GROUND LEVEL 76 ft			HEIGHT RELATIVE TO OBSERVER 76 ft		8		0		0
DISTANCE FROM OBSERVER 380 ft			DIRECTION FROM OBSERVER North		9		0		0
DESCRIBE VISIBLE EMISSIONS			10		0		0		0
START			STOP		11		0		0
EMISSION COLOR			IF WATER DROPLET PLUME:		12		0		0
START			STOP		13		0		0
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			ATTACHED ☐ DETACHED ☐		14		0		0
START Outlet (exit)			STOP Outlet (exit)		15		0		0
DESCRIBE PLUME BACKGROUND			16		0		0		0
START Sky			STOP Sky		17		0		0
BACKGROUND COLOR			SKY CONDITIONS		18		0		0
START Blue			STOP Blue		19		0		0
WIND SPEED			WIND DIRECTION		20		0		0
START 5-10 mph			STOP 5-10 mph		21		0		0
AMBIENT TEMP.			WET BULB TEMP.		22		0		0
START 63°			STOP 63°		23		0		0
SOURCE LAYOUT SKETCH			DRAW NORTH ARROW		24		0		0
					25		0		0
COMMENTS			APPLICABLE OPACITY STANDARD		26		0		0
			3 % OPACITY		27		0		0
			AVERAGE OPACITY FOR HIGHEST PERIOD		28		0		0
			NUMBER OF READING ABOVE % WERE		29		0		0
			OBSERVER'S NAME (PRINT)		30		0		0
			Mike Johnson						
			OBSERVER'S SIGNATURE		DATE				
			Mike Johnson		3-18-16				
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			ORGANIZATION		CERTIFICATION EXPIRATION DATE				
SIGNATURE			Gerdau AmeriSteel		5-13-16				
TITLE			State Of Tennessee		DATE				
			Carl Kooniz		11-13-15				

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau AmeriSteel			OBSERVATION DATE 3-22-16			START TIME 10:30 AM		STOP TIME 10:48 AM	
ADDRESS 801 Gerdau AmeriSteel Rd			SEC MIN		0	15	30	45	COMMENTS
CITY Jackson			STATE TN		ZIP 38305				
PHONE (731) 424-5600			SOURCE ID NUMBER 57-0189-01						
PROCESS EQUIPMENT Electric Arc Furnace			OPERATING MODE Melt						
CONTROL EQUIPMENT Baghouse 1 & 2			OPERATING MODE Continuous						
DESCRIBE EMISSION POINT Outlet on top of Baghouse									
HEIGHT ABOVE GROUND LEVEL START 76 ft STOP 76 ft			HEIGHT RELATIVE TO OBSERVER START 76 ft STOP 76 ft						
DISTANCE FROM OBSERVER START 380 ft STOP 380 ft			DIRECTION FROM OBSERVER START North STOP North						
DESCRIBE VISIBLE EMISSIONS									
START _____ STOP _____									
EMISSION COLOR START _____ STOP _____			IF WATER DROPLET PLUME: ATTACHED ☐ DETACHED ☐						
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED START Outlet (exit) STOP Outlet (exit)									
DESCRIBE PLUME BACKGROUND START Sky STOP Sky									
BACKGROUND COLOR START Blue STOP Blue			SKY CONDITIONS START Clear STOP Clear						
WIND SPEED START 5-10 mph STOP 5-10 mph			WIND DIRECTION START S STOP S						
AMBIENT TEMP. START 58 STOP 58			WET BULB TEMP.			RH, percent			
SOURCE LAYOUT SKETCH DRAW NORTH ARROW									
SUN LOCATION LINE									
COMMENTS									
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS									
SIGNATURE TITLE			OBSERVER'S NAME (PRINT) Mike Johnson						
			OBSERVER'S SIGNATURE Mike Johnson						
			DATE 3-22-16						
			ORGANIZATION Gerdau AmeriSteel						
			CERTIFICATION EXPIRATION DATE 5-13-16						
			VERIFIED BY State Of Tennessee/Carl Koontz						
			DATE 11-13-15						

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau AmeriSteel			OBSERVATION DATE 3-23-16		START TIME 8:35 AM	STOP TIME 8:53 AM
ADDRESS 801 Gerdau AmeriSteel Rd			SEC MIN	0	15	30
CITY Jackson			STATE TN		ZIP 38305	
PHONE (731) 424-5600			SOURCE ID NUMBER 57-0189-01			
PROCESS EQUIPMENT Electric Arc Furnace			OPERATING MODE Melt			
CONTROL EQUIPMENT Baghouse 1 & 2			OPERATING MODE Continuous			
DESCRIBE EMISSION POINT Outlet on top of Baghouse						
HEIGHT ABOVE GROUND LEVEL START 76 ft STOP 76 ft			HEIGHT RELATIVE TO OBSERVER START 76 ft STOP 76 ft			
DISTANCE FROM OBSERVER START 380 ft STOP 380 ft			DIRECTION FROM OBSERVER START North STOP North			
DESCRIBE VISIBLE EMISSIONS						
START _____ STOP _____						
EMISSION COLOR			IF WATER DROPLET PLUME:			
START _____ STOP _____			ATTACHED ☐ DETACHED ☐			
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED						
START Outlet (exit) STOP Outlet (exit)						
DESCRIBE PLUME BACKGROUND						
START Sky STOP Sky						
BACKGROUND COLOR			SKY CONDITIONS			
START Gray STOP Gray			START Cloudy STOP Cloudy			
WIND SPEED			WIND DIRECTION			
START 5-10 mph STOP 5-10 mph			START S STOP S			
AMBIENT TEMP			WET BULB TEMP.		RH, percent	
START 58° STOP 58°						
SOURCE LAYOUT SKETCH			DRAW NORTH ARROW			
COMMENTS						
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS						
SIGNATURE			OBSERVER'S NAME (PRINT)		DATE	
TITLE			OBSERVER'S SIGNATURE		DATE	
DATE			ORGANIZATION		CERTIFICATION EXPIRATION DATE	
			Gerdau AmeriSteel		3-23-16	
			State Of Tennessee / Gary Roontz		11-13-15	

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau AmeriSteel		OBSERVATION DATE 3-24-14		START TIME 8:20 AM		STOP TIME 8:38 AM	
ADDRESS 801 Gerdau AmeriSteel Rd		SEC MIN		0	15	30	45
CITY Jackson		STATE TN		ZIP 38305		COMMENTS	
PHONE (731) 424-5600		SOURCE ID NUMBER 57-0189-01					
PROCESS EQUIPMENT Electric Arc Furnace		OPERATING MODE Heat					
CONTROL EQUIPMENT Baghouse 1 (2)		OPERATING MODE Continuous					
DESCRIBE EMISSION POINT Outlet on top of Baghouse							
HEIGHT ABOVE GROUND LEVEL START 76 ft STOP 76 ft		HEIGHT RELATIVE TO OBSERVER START 76 ft STOP 76 ft					
DISTANCE FROM OBSERVER START 380 ft STOP 380 ft		DIRECTION FROM OBSERVER START North STOP North					
DESCRIBE VISIBLE EMISSIONS							
START _____ STOP _____							
EMISSION COLOR		IF WATER DROPLET PLUME:					
START _____ STOP _____		ATTACHED ☐ DETACHED ☐					
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED							
START Outlet (exit) STOP Outlet (exit)							
DESCRIBE PLUME BACKGROUND							
START Sky STOP Sky							
BACKGROUND COLOR		SKY CONDITIONS					
START Gray STOP Gray		START Cloudy STOP Cloudy					
WIND SPEED		WIND DIRECTION					
START 10-15 mph STOP 10-15 mph		START N STOP N					
AMBIENT TEMP.		WET BULB TEMP.		RH, percent			
START 63 STOP 63							
SOURCE LAYOUT SKETCH		DRAW NORTH ARROW					
COMMENTS							
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS		OBSERVER'S NAME (PRINT) Mike Johnson		DATE 3-24-14			
SIGNATURE		OBSERVER'S SIGNATURE 		CERTIFICATION EXPIRATION DATE 5-13-16			
TITLE		ORGANIZATION Gerdau AmeriSteel		DATE 11-13-15			
		VERIFIED BY State Of Tennessee/Carl Koontz					

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau AmeriSteel			OBSERVATION DATE 3-25-14		START TIME 8:10am	STOP TIME 8:28am
ADDRESS 801 Gerdau AmeriSteel Rd			SEC MIN	0	15	30
CITY Jackson			STATE TN		ZIP 38305	
PHONE (731) 424-5600			SOURCE ID NUMBER 57-0189-01			
PROCESS EQUIPMENT Electric Arc Furnace			OPERATING MODE Melt			
CONTROL EQUIPMENT Baghouse 1 & 2			OPERATING MODE Continuous			
DESCRIBE EMISSION POINT Outlet on top of Baghouse			HEIGHT ABOVE GROUND LEVEL START 76 ft STOP 76 ft		HEIGHT RELATIVE TO OBSERVER START 76 ft STOP 76 ft	
DISTANCE FROM OBSERVER START 380 ft STOP 380 ft			DIRECTION FROM OBSERVER START North STOP North			
DESCRIBE VISIBLE EMISSIONS			START		STOP	
EMISSION COLOR			IF WATER DROPLET PLUME:			
START			STOP		ATTACHED ☐ DETACHED ☐	
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			START		STOP	
DESCRIBE PLUME BACKGROUND			START		STOP	
BACKGROUND COLOR			SKY CONDITIONS			
WIND SPEED			WIND DIRECTION			
AMBIENT TEMP.			WET BULB TEMP.		RH, percent	
SOURCE LAYOUT SKETCH			DRAW NORTH ARROW			
COMMENTS			OBSERVER'S NAME (PRINT)		DATE	
			Mike Johnson		3-25-14	
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			OBSERVER'S SIGNATURE		CERTIFICATION EXPIRATION DATE	
SIGNATURE			Mike Johnson		5-13-16	
TITLE			ORGANIZATION		DATE	
			Gerdau AmeriSteel		11-13-15	
			VERIFIED BY			
			State Of Tennessee/Carl Kowitz			

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME				OBSERVATION DATE				START TIME		STOP TIME	
Gerdau AmeriSteel				3-29-14				9:25 Am		9:43 Am	
ADDRESS				MIN				SEC			
801 Gerdau AmeriSteel Rd				0				18			
CITY				30				45			
Jackson				0				0			
STATE				0				0			
TN				0				0			
ZIP				0				0			
38305				0				0			
PHONE				0				0			
(731) 424-5600				0				0			
SOURCE ID NUMBER				0				0			
57-0189-01				0				0			
PROCESS EQUIPMENT				0				0			
Electric Arc Furnace				0				0			
OPERATING MODE				0				0			
melt				0				0			
CONTROL EQUIPMENT				0				0			
Baghouse 1 (2)				0				0			
OPERATING MODE				0				0			
Continuous				0				0			
DESCRIBE EMISSION POINT				0				0			
START Outlet on top of Baghouse				0				0			
HEIGHT ABOVE GROUND LEVEL				0				0			
START 76 ft STOP 76 ft				0				0			
HEIGHT RELATIVE TO OBSERVER				0				0			
START 76 ft STOP 76 ft				0				0			
DISTANCE FROM OBSERVER				0				0			
START 380 ft STOP 380 ft				0				0			
DIRECTION FROM OBSERVER				0				0			
START North STOP North				0				0			
DESCRIBE VISIBLE EMISSIONS				0				0			
START				0				0			
STOP				0				0			
EMISSION COLOR				0				0			
IF WATER DROPLET PLUME:				0				0			
START				0				0			
STOP				0				0			
ATTACHED ☐ DETACHED ☐				0				0			
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED				0				0			
START Outlet (exit)				0				0			
STOP Outlet (exit)				0				0			
DESCRIBE PLUME BACKGROUND				0				0			
Sky				0				0			
START				0				0			
STOP				0				0			
BACKGROUND COLOR				0				0			
blue				0				0			
SKY CONDITIONS				0				0			
START clear STOP clear				0				0			
WIND SPEED				0				0			
START 0-10 mph STOP 0-10 mph				0				0			
WIND DIRECTION				0				0			
START W STOP W				0				0			
AMBIENT TEMP.				0				0			
START 60° STOP 60°				0				0			
WET BULB TEMP.				0				0			
RH, percent				0				0			
SOURCE LAYOUT SKETCH				0				0			
DRAW NORTH ARROW				0				0			
SUN  WIND 				0				0			
PLUME AND STACK 				0				0			
X EMISSION POINT				0				0			
OBSERVER'S POSITION				0				0			
SUN LOCATION LINE				0				0			
140°				0				0			
COMMENTS				0				0			
APPLICABLE OPACITY STANDARD				0				0			
3 % OPACITY				0				0			
EPA METHOD 9 ☒ TVEE METHOD 2 ☐				0				0			
TVEE METHOD 1 ☐ TVEE METHOD 8 ☐				0				0			
AVERAGE OPACITY FOR HIGHEST PERIOD				0				0			
NUMBER OF READING ABOVE % WERE				0				0			
OBSERVER'S NAME (PRINT)				0				0			
Raydell Herron				0				0			
OBSERVER'S SIGNATURE				0				0			
Raydell Herron				0				0			
DATE				0				0			
3-29-14				0				0			
ORGANIZATION				0				0			
Gerdau AmeriSteel				0				0			
VERIFIED BY				0				0			
State Of Tennessee (Carl Koontz)				0				0			
DATE				0				0			
11-16-15				0				0			

DEPT. OF ENVIRONMENT & CONSERVATION

AIR POLLUTION CONTROL

VISIBLE EMISSION OBSERVATION

SOURCE NAME				OBSERVATION DATE				START TIME		STOP TIME	
Gerdau AmeriSteel				3-30-14				11:00 Am		11:18 Am	
ADDRESS				SEC				COMMENTS			
801 Gerdau AmeriSteel Rd				MIN							
				0 15 30 45							
CITY				2							
Jackson				0 0 0 0							
STATE				3							
TN				0 0 0 0							
ZIP				4							
38305				0 0 0 0							
PHONE				5							
(731) 424-5600				0 0 0 0							
SOURCE ID NUMBER				6							
57-0189-01				0 0 0 0							
PROCESS EQUIPMENT				7							
Electric Arc Furnace				0 0 0 0							
OPERATING MODE				8							
melt				0 0 0 0							
CONTROL EQUIPMENT				9							
Baghouse 1 & 2				0 0 0 0							
OPERATING MODE				10							
Continuous				0 0 0 0							
DESCRIBE EMISSION POINT				11							
START Outlet on top of Baghouse				0 0 0 0							
HEIGHT ABOVE GROUND LEVEL				12							
START 76 ft STOP 76 ft				0 0 0 0							
DISTANCE FROM OBSERVER				13							
START 76 ft STOP 76 ft				0 0 0 0							
DIRECTION FROM OBSERVER				14							
START 380 ft STOP 380 ft				0 0 0 0							
DIRECTION FROM OBSERVER				15							
START North STOP North				0 0 0 0							
DESCRIBE VISIBLE EMISSIONS				16							
START				0 0 0 0							
EMISSION COLOR				17							
STOP				0 0 0 0							
IF WATER DROPLET PLUME:				18							
START				0 0 0 0							
STOP				0 0 0 0							
ATTACHED ☐ DETACHED ☐				19							
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED				20							
START Outlet (exit)				0 0 0 0							
STOP Outlet (exit)				0 0 0 0							
DESCRIBE PLUME BACKGROUND				21							
START Sky				0 0 0 0							
STOP Sky				0 0 0 0							
BACKGROUND COLOR				22							
START gray				0 0 0 0							
STOP gray				0 0 0 0							
SKY CONDITIONS				23							
START cloudy				0 0 0 0							
STOP cloudy				0 0 0 0							
WIND SPEED				24							
START 10 mph				0 0 0 0							
STOP 10 mph				0 0 0 0							
WIND DIRECTION				25							
START SW				0 0 0 0							
STOP W				0 0 0 0							
AMBIENT TEMP.				26							
START 70°				0 0 0 0							
STOP 70°				0 0 0 0							
WET BULB TEMP.				27							
RH, percent				28							
SOURCE LAYOUT SKETCH				29							
DRAW NORTH ARROW				30							
SUN LOCATION LINE 140° NO SUN				APPLICABLE OPACITY STANDARD 3 % OPACITY AVERAGE OPACITY FOR HIGHEST PERIOD 0 0				EPA METHOD 9 ☒ TVEE METHOD 2 ☐ TVEE METHOD 1 ☐ TVEE METHOD 8 ☐ NUMBER OF READING ABOVE % WERE 0 0			
COMMENTS				OBSERVER'S NAME (PRINT)				ROYAL HERRON			
				OBSERVER'S SIGNATURE				ROYAL HERRON			
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS				DATE				3-30-14			
SIGNATURE				ORGANIZATION				CERTIFICATION EXPIRATION DATE			
				Gerdau AmeriSteel				5-16-14			
TITLE				VERIFIED BY				DATE			
				State Of Tennessee				11-16-15			
				Carl Koontz							

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau Ameristeel			OBSERVATION DATE 1-5-16		START TIME 10:15 AM	STOP TIME 10:21 AM
ADDRESS 801 Gerdau Ameristeel Rd			MIN	SEC	COMMENTS	
			0	15	30	45
CITY Jackson			1	0	0	0
STATE TN			2	0	0	0
ZIP 38305			3	0	0	0
PHONE (731) 424-5600			4	0	0	0
SOURCE ID NUMBER 57-0189-01			5	0	0	0
PROCESS EQUIPMENT Electric Arc Furnace			6	0	0	0
OPERATING MODE melt			7			
CONTROL EQUIPMENT None			8			
OPERATING MODE Continuous			9			
DESCRIBE EMISSION POINT Penthouse Canopy Top of Meltshop			10			
HEIGHT ABOVE GROUND LEVEL START 120 ft STOP 120 ft			11			
HEIGHT RELATIVE TO OBSERVER START 120 ft STOP 120 ft			12			
DISTANCE FROM OBSERVER START 600 ft STOP 600 ft			13			
DIRECTION FROM OBSERVER START NE STOP NE			14			
DESCRIBE VISIBLE EMISSIONS			15			
START			16			
STOP			17			
EMISSION COLOR			18			
IF WATER DROPLET PLUME:			19			
START			20			
STOP			21			
ATTACHED ☐ DETACHED ☐			22			
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			23			
START Outlet (exit)			24			
STOP Outlet (exit)			25			
DESCRIBE PLUME BACKGROUND			26			
START Sky			27			
STOP Sky			28			
BACKGROUND COLOR			29			
START blue			30			
STOP white			31			
SKY CONDITIONS			32			
START clear			33			
STOP clear			34			
WIND SPEED			35			
START 0-10 mph			36			
STOP 0-10 mph			37			
WIND DIRECTION			38			
START W			39			
STOP W			40			
AMBIENT TEMP.			41			
START 40°			42			
STOP 40°			43			
WET BULB TEMP.			44			
RH, percent			45			
SOURCE LAYOUT SKETCH			46			
DRAW NORTH ARROW			47			
SUN  WIND 			48			
PLUME AND STACK 			49			
X EMISSION POINT			50			
OBSERVER'S POSITION			51			
SUN LOCATION LINE			52			
COMMENTS			53			
OBSERVER'S NAME (PRINT) Roydell Herron			54			
OBSERVER'S SIGNATURE Roydell Herron			55			
DATE 1-15-16			56			
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			57			
SIGNATURE Gerdau Ameristeel			58			
TITLE			59			
DATE			60			
VERIFIED BY State of Tennessee (Carl Koontz)			61			
DATE 11-16-15			62			

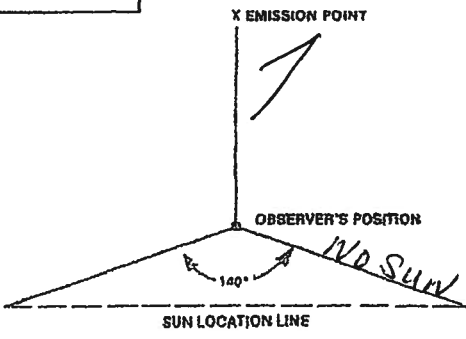
VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau Ameristeel			OBSERVATION DATE 1-6-16		START TIME 10:25 AM	STOP TIME 10:31 AM
ADDRESS 801 Gerdau Ameristeel Rd			SEC MIN	0	15	30
CITY Jackson			STATE TN		ZIP 38305	
PHONE (731) 424-5600			SOURCE ID NUMBER 57-0189-01			
PROCESS EQUIPMENT Electric Arc Furnace			OPERATING MODE melt			
CONTROL EQUIPMENT None			OPERATING MODE Continuous			
DESCRIBE EMISSION POINT Penthouse Canopy Top of Maltshop						
HEIGHT ABOVE GROUND LEVEL START 120 ft STOP 120 ft			HEIGHT RELATIVE TO OBSERVER START 120 ft STOP 120 ft			
DISTANCE FROM OBSERVER START 600 ft STOP 600 ft			DIRECTION FROM OBSERVER START NE STOP NE			
DESCRIBE VISIBLE EMISSIONS						
EMISSION COLOR START STOP			IF WATER DROPLET PLUME ATTACHED DETACHED			
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED START Outlet (exit) STOP Outlet (exit)						
DESCRIBE PLUME BACKGROUND START Sky STOP Sky						
BACKGROUND COLOR START blue STOP white			SKY CONDITIONS START clear STOP clear			
WIND SPEED START 0-10 mph STOP 0-10 mph			WIND DIRECTION START N STOP N			
AMBIENT TEMP. START 36 STOP 36			WET BULB TEMP. RH, percent			
SOURCE LAYOUT SKETCH DRAW NORTH ARROW						
COMMENTS						
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS						
SIGNATURE TITLE			OBSERVER'S NAME (PRINT) Roy dell Herron		DATE 1-6-16	
DATE			OBSERVER'S SIGNATURE Roy dell Herron		DATE 5-16-16	
			ORGANIZATION Gerdau Ameristeel		CERTIFICATION EXPIRATION DATE 5-16-16	
			VERIFIED BY State of Tennessee/Carl Koontz		DATE 1-16-15	

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau Ameristeel			OBSERVATION DATE 1-7-16		START TIME 9:45 Am	STOP TIME 9:51 Am
ADDRESS 801 Gerdau Ameristeel Rd			SEC MIN	0	15	30
			45	COMMENTS		
CITY Jackson	STATE TN	ZIP 38305	1	0	0	0
PHONE (731) 424-5600	SOURCE ID NUMBER 57-0189-01		2	0	0	0
PROCESS EQUIPMENT Electric Arc Furnace	OPERATING MODE melt		3	0	0	0
CONTROL EQUIPMENT None	OPERATING MODE Continuous		4	0	0	0
DESCRIBE EMISSION POINT Penthouse Canopy Top of Meltshop			5	0	0	0
HEIGHT ABOVE GROUND LEVEL START 120 ft STOP 120 ft			6	0	0	0
HEIGHT RELATIVE TO OBSERVER START 120 ft STOP 120 ft			7			
DISTANCE FROM OBSERVER START 600 ft STOP 600 ft			8			
DIRECTION FROM OBSERVER START NE STOP NE			9			
DESCRIBE VISIBLE EMISSIONS			10			
START STOP			11			
EMISSION COLOR			12			
IF WATER DROPLET PLUME:			13			
START STOP ATTACHED DETACHED			14			
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			15			
START Outlet (exit) STOP Outlet (exit)			16			
DESCRIBE PLUME BACKGROUND			17			
START Sky STOP Sky			18			
BACKGROUND COLOR			19			
START gray STOP gray			20			
WIND SPEED			21			
START 0-10 mph STOP 0-10 mph			22			
WIND DIRECTION			23			
START W STOP W			24			
AMBIENT TEMP.			25			
START 45° STOP 45°			26			
WET BULB TEMP.			27			
RH, percent			28			
SUN LOCATION SKETCH			29			
DRAW NORTH ARROW			30			
			APPLICABLE OPACITY STANDARD 20 % OPACITY			EPA METHOD 9 ☒ TVEE METHOD 2 ☐ TVEE METHOD 1 ☐ TVEE METHOD 3 ☐
COMMENTS			AVERAGE OPACITY FOR HIGHEST PERIOD 0 0			
OBSERVER'S NAME (PRINT) Roy dell Herron			OBSERVER'S SIGNATURE Roy dell Herron			
DATE 1-7-14			DATE 5-10-14			
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			ORGANIZATION Gerdau Ameristeel			
SIGNATURE			VERIFIED BY State of Tennessee/Carl Koontz			
TITLE			DATE 11-14-15			

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau Ameristeel			OBSERVATION DATE 1-8-14		START TIME 10:15 AM	STOP TIME 10:21 AM
ADDRESS 801 Gerdau Ameristeel Rd			SEC MIN	0	15	30
CITY Jackson			STATE TN		ZIP 38305	
PHONE (731) 424-5600			SOURCE ID NUMBER 57-0189-01			
PROCESS EQUIPMENT Electric Arc Furnace			OPERATING MODE melt			
CONTROL EQUIPMENT None			OPERATING MODE Continuous			
DESCRIBE EMISSION POINT Penthouse Canopy Top of Meltshop			START		STOP	
HEIGHT ABOVE GROUND LEVEL START 120 ft STOP 120 ft			HEIGHT RELATIVE TO OBSERVER START 120 ft STOP 120 ft			
DISTANCE FROM OBSERVER START 600 ft STOP 600 ft			DIRECTION FROM OBSERVER START NE STOP NE			
DESCRIBE VISIBLE EMISSIONS			START		STOP	
EMISSION COLOR			IF WATER DROPLET PLUME			
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED START Outlet (exit) STOP Outlet (exit)			DESCRIBE PLUME BACKGROUND			
BACKGROUND COLOR START Sky STOP Sky			SKY CONDITIONS START cloudy STOP cloudy			
WIND SPEED START 8-10 mph STOP 0-10 mph			WIND DIRECTION START W STOP W			
AMBIENT TEMP. START 50° STOP 50°			WET BULB TEMP.		RH, percent	
SOURCE LAYOUT SKETCH DRAW NORTH ARROW						
SUN  WIND  PLUME AND STACK 						
						
COMMENTS			OBSERVER'S NAME (PRINT) Roydell Herrow			
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			OBSERVER'S SIGNATURE Roydell Herrow		DATE 1-8-14	
SIGNATURE Gerdau Ameristeel			ORGANIZATION State of Tennessee		CERTIFICATION EXPIRATION DATE 5-16-14	
TITLE			VERIFIED BY Carl Koontz		DATE 11-16-15	

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau Ameristeel			OBSERVATION DATE 1-9-16		START TIME 9:20am	STOP TIME 9:24am
ADDRESS 801 Gerdau Ameristeel Rd			MIN	SEC	0	15
CITY Jackson			STATE TN		ZIP 38305	
PHONE (731) 424-5600			SOURCE ID NUMBER 57-0189-01			
PROCESS EQUIPMENT Electric Arc Furnace			OPERATING MODE Melting			
CONTROL EQUIPMENT None			OPERATING MODE Continuous			
DESCRIBE EMISSION POINT Penthouse Canopy Top of Meltshop			COMMENTS			
HEIGHT ABOVE GROUND LEVEL START 120 ft STOP 120 ft			HEIGHT RELATIVE TO OBSERVER START 120 ft STOP 120 ft			
DISTANCE FROM OBSERVER START 600 ft STOP 600 ft			DIRECTION FROM OBSERVER START NE STOP NE			
DESCRIBE VISIBLE EMISSIONS						
EMISSION COLOR			IF WATER DROPLET PLUME:			
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED						
DESCRIBE PLUME BACKGROUND						
BACKGROUND COLOR			SKY CONDITIONS			
WIND SPEED			WIND DIRECTION			
AMBIENT TEMP.			WET BULB TEMP.			
RH, percent						
SUN			WIND			
PLUME AND STACK						
SOURCE LAYOUT SKETCH			DRAW NORTH ARROW			
X EMISSION POINT						
OBSERVER'S POSITION						
SUN LOCATION LINE						
APPLICABLE OPACITY STANDARD			EPA METHOD 9 ☒ TVEE METHOD 2 ☐			
20 % OPACITY			TVEE METHOD 1 ☐ TVEE METHOD 8 ☐			
AVERAGE OPACITY FOR HIGHEST PERIOD			NUMBER OF READINGS ABOVE % WERE			
OBSERVER'S NAME (PRINT)			DATE			
OBSERVER'S SIGNATURE			DATE			
ORGANIZATION			CERTIFICATION EXPIRATION DATE			
Gerdau Ameristeel			5-13-16			
VERIFIED BY			DATE			
State of Tennessee/Carl Koontz			11-13-15			

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau Ameristeel			OBSERVATION DATE 1-12-16			START TIME 10:00 AM		STOP TIME 10:26 AM	
ADDRESS 801 Gerdau Ameristeel Rd			SEC MIN		0	15	30	45	COMMENTS
			1	0	0	0	0		
CITY Jackson	STATE TN	ZIP 38305	2	0	0	0	0		
PHONE (731) 424-5600	SOURCE ID NUMBER 57-0189-01		3	0	0	0	0		
PROCESS EQUIPMENT Electric Arc Furnace	OPERATING MODE Melt		4	0	0	0	0		
CONTROL EQUIPMENT None	OPERATING MODE Continuous		5	0	0	0	0		
DESCRIBE EMISSION POINT Penthouse Canopy Top of Meltshop			6	0	0	0	0		
HEIGHT ABOVE GROUND LEVEL START 120 ft STOP 120 ft			7						
HEIGHT RELATIVE TO OBSERVER START 120 ft STOP 120 ft			8						
DISTANCE FROM OBSERVER START 600 ft STOP 600 ft			9						
DIRECTION FROM OBSERVER START NE STOP NE			10						
DESCRIBE VISIBLE EMISSIONS			11						
START STOP			12						
EMISSION COLOR			13						
IF WATER DROPLET PLUME			14						
START STOP ATTACHED DETACHED			15						
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			16						
START Outlet (exit) STOP Outlet (exit)			17						
DESCRIBE PLUME BACKGROUND			18						
START Sky STOP Sky			19						
BACKGROUND COLOR			20						
START Blue STOP Blue			21						
WIND SPEED			22						
START 0 mph STOP 0 mph			23						
WIND DIRECTION			24						
START N STOP N			25						
AMBIENT TEMP.			26						
START 44° STOP 44°			27						
WET BULB TEMP.			28						
RH, percent			29						
SUN LOCATION SKETCH			30						
DRAW NORTH ARROW									
			APPLICABLE OPACITY STANDARD 20 % OPACITY AVERAGE OPACITY FOR HIGHEST PERIOD						
SUN LOCATION LINE 140°			EPA METHOD 5 ☒ TVEE METHOD 2 ☐ TVEE METHOD 1 ☐ TVEE METHOD 3 ☐ NUMBER OF READING ABOVE % WERE 0 0						
COMMENTS			OBSERVER'S NAME (PRINT) Mike Johnson						
SIGNATURE Gerdau Ameristeel			OBSERVER'S SIGNATURE Mike Johnson						
TITLE			DATE 1-12-16						
DATE			CERTIFICATION EXPIRATION DATE 5-13-16						
VERIFIED BY State of Tennessee / Carl Koontz			DATE 11-13-15						

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau Ameristeel			OBSERVATION DATE 1-13-16		START TIME 11:15 AM	STOP TIME 11:21 AM
ADDRESS 801 Gerdau Ameristeel Rd			SEC MIN	0	15	30
CITY Jackson			STATE TN		ZIP 38305	
PHONE (731) 424-5600			SOURCE ID NUMBER 57-0189-01			
PROCESS EQUIPMENT Electric Arc Furnace			OPERATING MODE Melt			
CONTROL EQUIPMENT None			OPERATING MODE Continuous			
DESCRIBE EMISSION POINT Penthouse Canopy Top of Meltshop			HEIGHT ABOVE GROUND LEVEL START 120 ft STOP 120 ft		HEIGHT RELATIVE TO OBSERVER START 120 ft STOP 120 ft	
DISTANCE FROM OBSERVER START 600 ft STOP 600 ft			DIRECTION FROM OBSERVER START NE STOP NE			
DESCRIBE VISIBLE EMISSIONS						
EMISSION COLOR START STOP			IF WATER DROPLET PLUME ATTACHED ☐ DETACHED ☐			
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED START Outlet (exit) STOP Outlet (exit)			DESCRIBE PLUME BACKGROUND START Sky STOP Sky			
BACKGROUND COLOR START Blue STOP Blue			SKY CONDITIONS START Clear STOP Clear			
WIND SPEED START 5-10 mph STOP 5-10 mph			WIND DIRECTION START N STOP N			
AMBIENT TEMP. START 44° STOP 44°			WET BULB TEMP.		RH, percent	
SOURCE LAYOUT SKETCH DRAW NORTH ARROW						
COMMENTS			APPLICABLE OPACITY STANDARD 20 % OPACITY		EPA METHOD 3 ☒ TVEE METHOD 2 ☐	
			AVERAGE OPACITY FOR HIGHEST PERIOD		TVEE METHOD 1 ☐ TVEE METHOD 3 ☐	
			OBSERVER'S NAME (PRINT) Mike Johnson		DATE 1-13-16	
			OBSERVER'S SIGNATURE Mike Johnson		DATE 5-13-16	
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			ORGANIZATION Gerdau Ameristeel		CERTIFICATION EXPIRATION DATE	
SIGNATURE			VERIFIED BY State of Tennessee/Carl Koontz		DATE 11-13-15	
TITLE						

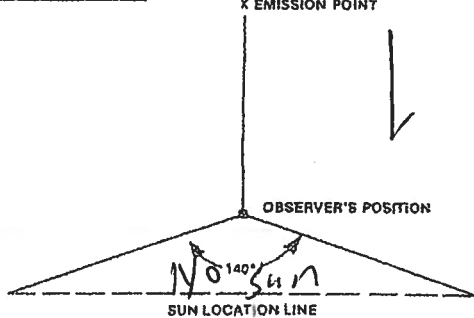
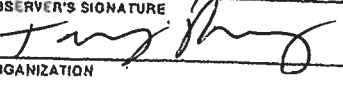
VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau Ameristeel			OBSERVATION DATE 1-14-16		START TIME 10:00 AM	STOP TIME 10:06 AM
ADDRESS 801 Gerdau Ameristeel Rd			SEC MIN	0	15	30
CITY Jackson			STATE TN		ZIP 38305	
PHONE (731) 424-5600			SOURCE ID NUMBER 57-0189-01			
PROCESS EQUIPMENT Electric Arc Furnace			OPERATING MODE Melt			
CONTROL EQUIPMENT None			OPERATING MODE Continuous			
DESCRIBE EMISSION POINT Penthouse Canopy Top of Maltshop			HEIGHT ABOVE GROUND LEVEL START 120 ft STOP 120 ft		HEIGHT RELATIVE TO OBSERVER START 120 ft STOP 120 ft	
DISTANCE FROM OBSERVER START 600 ft STOP 600 ft			DIRECTION FROM OBSERVER START NE STOP NE			
DESCRIBE VISIBLE EMISSIONS						
START STOP						
EMISSION COLOR			IF WATER DROPLET PLUME:			
START STOP			ATTACHED ☐ DETACHED ☐			
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED						
START Outlet (exit) STOP Outlet (exit)						
DESCRIBE PLUME BACKGROUND						
START Sky STOP Sky						
BACKGROUND COLOR			SKY CONDITIONS			
START Blue STOP Blue			START Clear STOP Clear			
WIND SPEED			WIND DIRECTION			
START 10-15 mph STOP 10-15 mph			START N STOP N			
AMBIENT TEMP.			WET BULB TEMP.		RH, percent	
START 55° STOP 55°						
SOURCE LAYOUT SKETCH			DRAW NORTH ARROW			
COMMENTS			APPLICABLE OPACITY STANDARD		EPA METHOD 9 ☒ TVEE METHOD 2 ☐	
			20 % OPACITY		TVEE METHOD 1 ☐ TVEE METHOD 3 ☐	
			AVERAGE OPACITY FOR HIGHEST PERIOD		NUMBER OF READING ABOVE % WERE	
					0 0	
			OBSERVER'S NAME (PRINT)		DATE	
			Mike Johnson		1-14-16	
			OBSERVER'S SIGNATURE		CERTIFICATION EXPIRATION DATE	
			[Signature]		5-13-16	
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			ORGANIZATION		VERIFIED BY	
SIGNATURE			Gerdau Ameristeel		State of Tennessee/Carl Koontz	
TITLE			DATE		DATE	
					11-13-15	

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau Ameristeel			OBSERVATION DATE 1-15-16		START TIME 10:05 AM	STOP TIME 10:11 AM
ADDRESS 801 Gerdau Ameristeel Rd			SEC MIN	0	15	30
CITY Jackson			STATE TN		ZIP 38305	
PHONE (731) 424-5600			SOURCE ID NUMBER 57-0189-01			
PROCESS EQUIPMENT Electric Arc Furnace			OPERATING MODE Melt			
CONTROL EQUIPMENT None			OPERATING MODE Continuous			
DESCRIBE EMISSION POINT Penthouse Canopy Top of Maltshop						
HEIGHT ABOVE GROUND LEVEL START 120 ft STOP 120 ft			HEIGHT RELATIVE TO OBSERVER START 120 ft STOP 120 ft			
DISTANCE FROM OBSERVER START 600 ft STOP 600 ft			DIRECTION FROM OBSERVER START NE STOP NE			
DESCRIBE VISIBLE EMISSIONS						
START _____ STOP _____						
EMISSION COLOR START _____ STOP _____			IF WATER DROPLET PLUME: ATTACHED ☐ DETACHED ☐			
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED START Outlet (exit) STOP Outlet (exit)						
DESCRIBE PLUME BACKGROUND						
START Sky STOP Sky						
BACKGROUND COLOR START Blue STOP Blue			SKY CONDITIONS START Cloudy STOP Cloudy			
WIND SPEED START 5-10 mph STOP 5-10 mph			WIND DIRECTION START S STOP S			
AMBIENT TEMP. START 53° STOP 53°			WET BULB TEMP. RH, per cent			
SOURCE LAYOUT SKETCH DRAW NORTH ARROW						
APPLICABLE OPACITY STANDARD 20 % OPACITY			EPA METHOD 9 ☒ TVEE METHOD 2 ☐			
AVERAGE OPACITY FOR HIGHEST PERIOD			TVEE METHOD 1 ☐ TVEE METHOD 3 ☐			
NUMBER OF READING ABOVE % WERE			0 0			
OBSERVER'S NAME (PRINT) Mike Johnson			DATE 1-15-16			
OBSERVER'S SIGNATURE Mike Johnson			CERTIFICATION-EXPIRATION DATE 5-13-16			
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			VERIFIED BY State of Tennessee/Carl Koontz			
SIGNATURE			DATE			
TITLE			DATE			

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau Ameristeel			OBSERVATION DATE 1-16-16				START TIME 12:30 PM		STOP TIME 12:36 PM	
ADDRESS 801 Gerdau Ameristeel Rd			SEC MIN		0	15	30	45	COMMENTS	
					0	0	0	0		
CITY Jackson	STATE TN	ZIP 38305			0	0	0	0		
PHONE (731) 424-5600	SOURCE ID NUMBER 57-0189-01				0	0	0	0		
PROCESS EQUIPMENT Electric Arc Furnace		OPERATING MODE Melting			0	0	0	0		
CONTROL EQUIPMENT None		OPERATING MODE Continuous			0	0	0	0		
DESCRIBE EMISSION POINT Penthouse Canopy Top of Meltshop										
HEIGHT ABOVE GROUND LEVEL START 120 ft STOP 120 ft			HEIGHT RELATIVE TO OBSERVER START 120 ft STOP 120 ft							
DISTANCE FROM OBSERVER START 600 ft STOP 600 ft			DIRECTION FROM OBSERVER START NE STOP NE							
DESCRIBE VISIBLE EMISSIONS										
START			STOP							
EMISSION COLOR			IF WATER DROPLET PLUME:							
START			STOP							
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED										
START Outlet (exit)			STOP Outlet (exit)							
DESCRIBE PLUME BACKGROUND										
START Sky			STOP Sky							
BACKGROUND COLOR			SKY CONDITIONS							
START Gray STOP GRAY			START cloudy STOP cloudy							
WIND SPEED			WIND DIRECTION							
START 5 to 10 STOP 5 to 10			START N STOP N							
AMBIENT TEMP. 39° STOP 39°			WET BULB TEMP. RH, percent							
START			STOP							
SOURCE LAYOUT SKETCH			DRAW NORTH ARROW							
SUN  WIND 										
PLUME AND STACK 										
										
COMMENTS			APPLICABLE OPACITY STANDARD		EPA METHOD 3 ☒ TVEE METHOD 2 ☐					
			20 % OPACITY		TVEE METHOD 1 ☐ TVEE METHOD 3 ☐					
			AVERAGE OPACITY FOR HIGHEST PERIOD		NUMBER OF READING ABOVE % WERE					
			0		0					
OBSERVER'S NAME (PRINT)			Tony Perry							
OBSERVER'S SIGNATURE										
DATE			1-16-16							
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			ORGANIZATION							
SIGNATURE			Gerdau Ameristeel							
TITLE			State of Tennessee/Carl Koontz							
DATE			11-16-15							

VISIBLE EMISSION OBSERVATION

SOURCE NAME			OBSERVATION DATE			START TIME		STOP TIME
Gerdau Ameristeel			1-19-14			8:40 Am		8:46 Am
ADDRESS			SEC			COMMENTS		
801 Gerdau Ameristeel Rd			MIN	0	15	30	45	
CITY			1	0	0	0	0	
STATE			2	0	0	0	0	
ZIP			3	0	0	0	0	
PHONE			4	0	0	0	0	
(731) 424-5600			5	0	0	0	0	
SOURCE ID NUMBER			6	0	0	0	0	
57-0189-01			7					
PROCESS EQUIPMENT			8					
Electric Arc Furnace			9					
OPERATING MODE			10					
melt			11					
CONTROL EQUIPMENT			12					
None			13					
OPERATING MODE			14					
Continuous			15					
DESCRIBE EMISSION POINT			16					
Penthouse Canopy Top of Maltshop			17					
HEIGHT ABOVE GROUND LEVEL			18					
START 120 ft STOP 120 ft			19					
HEIGHT RELATIVE TO OBSERVER			20					
START 120 ft STOP 120 ft			21					
DISTANCE FROM OBSERVER			22					
START 600 ft STOP 600 ft			23					
DIRECTION FROM OBSERVER			24					
START NE STOP NE			25					
DESCRIBE VISIBLE EMISSIONS			26					
START			27					
STOP			28					
EMISSION COLOR			29					
START			30					
STOP								
IF WATER DROPLET PLUME								
ATTACHED ☐ DETACHED ☐								
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED								
START Outlet (exit) STOP Outlet (exit)								
DESCRIBE PLUME BACKGROUND								
START Sky STOP Sky								
BACKGROUND COLOR								
START gray STOP gray								
WIND SPEED								
START 0-1 mph STOP 0-1 mph								
WIND DIRECTION								
START W STOP W								
AMBIENT TEMP.								
START 15° STOP 15°								
WET BULB TEMP.								
RH, percent								
SOURCE LAYOUT SKETCH								
DRAW NORTH ARROW								
APPLICABLE OPACITY STANDARD								
20 % OPACITY								
AVERAGE OPACITY FOR HIGHEST PERIOD								
NUMBER OF READING ABOVE % WERE								
COMMENTS								
OBSERVER'S NAME (PRINT)								
Roydell Herron								
OBSERVER'S SIGNATURE								
Roydell Herron								
DATE								
1-19-14								
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS								
ORGANIZATION								
Gerdau Ameristeel								
DATE								
5-16-14								
SIGNATURE								
TITLE								
DATE								
11-16-15								
VERIFIED BY								
State of Tennessee/Carl Koonz								

VISIBLE EMISSION OBSERVATION

SOURCE NAME			OBSERVATION DATE			START TIME		STOP TIME
Gerdau Ameristeel			1-20-14			10:10 Am		10:28 Am
ADDRESS			SEC	0	15	30	45	COMMENTS
801 Gerdau Ameristeel Rd			MIN					
CITY			1	0	0	0	0	
JACKSON			2	0	0	0	0	
STATE			3	0	0	0	0	
TN			4	0	0	0	0	
ZIP			5	0	0	0	0	
38305			6	0	0	0	0	
PHONE			7					
(731) 424-5600			8					
SOURCE ID NUMBER			9					
57-0189-01			10					
PROCESS EQUIPMENT			11					
Electric Arc Furnace			12					
OPERATING MODE			13					
melt			14					
CONTROL EQUIPMENT			15					
None			16					
OPERATING MODE			17					
Continuous			18					
DESCRIBE EMISSION POINT			19					
Penthouse Canopy Top of Meltshop			20					
HEIGHT ABOVE GROUND LEVEL			21					
START 120 ft STOP 120 ft			22					
HEIGHT RELATIVE TO OBSERVER			23					
START 120 ft STOP 120 ft			24					
DISTANCE FROM OBSERVER			25					
START 600 ft STOP 600 ft			26					
DIRECTION FROM OBSERVER			27					
START NE STOP NE			28					
DESCRIBE VISIBLE EMISSIONS			29					
START			30					
STOP			31					
EMISSION COLOR			32					
IF WATER DROPLET PLUME:			33					
START			34					
STOP			35					
ATTACHED ☐ DETACHED ☐			36					
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			37					
START Outlet (exit) STOP Outlet (exit)			38					
DESCRIBE PLUME BACKGROUND			39					
START Sky STOP Sky			40					
BACKGROUND COLOR			41					
START gray STOP gray			42					
WIND SPEED			43					
START 0-10 mph STOP 0-10 mph			44					
WIND DIRECTION			45					
START W STOP W			46					
AMBIENT TEMP.			47					
START 32° STOP 32°			48					
WET BULB TEMP.			49					
RH, percent			50					
SOURCE LAYOUT SKETCH			51					
DRAW NORTH ARROW			52					
			53					
			54					
			55					
			56					
			57					
			58					
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			97					
			98					
			99					
			100					

VISIBLE EMISSION OBSERVATION

SOURCE NAME			OBSERVATION DATE		START TIME		STOP TIME	
Gerdau Ameristeel			1-21-16		12:45pm		12:51pm	
ADDRESS			SEC		MIN		COMMENTS	
801 Gerdau Ameristeel Rd			0		15		30	
CITY			0		0		0	
JACKSON			0		0		0	
STATE			0		0		0	
TN			0		0		0	
ZIP			0		0		0	
38305			0		0		0	
PHONE			0		0		0	
(731) 424-5600			0		0		0	
SOURCE ID NUMBER			0		0		0	
57-0189-01			0		0		0	
PROCESS EQUIPMENT			0		0		0	
Electric Arc Furnace			0		0		0	
OPERATING MODE			0		0		0	
None			0		0		0	
CONTROL EQUIPMENT			0		0		0	
Continuous			0		0		0	
DESCRIBE EMISSION POINT			0		0		0	
Penthouse Canopy Top of Meltshop			0		0		0	
START			0		0		0	
STOP			0		0		0	
HEIGHT ABOVE GROUND LEVEL			0		0		0	
120 ft			0		0		0	
HEIGHT RELATIVE TO OBSERVER			0		0		0	
120 ft			0		0		0	
DISTANCE FROM OBSERVER			0		0		0	
600 ft			0		0		0	
DIRECTION FROM OBSERVER			0		0		0	
NE			0		0		0	
DESCRIBE VISIBLE EMISSIONS			0		0		0	
START			0		0		0	
STOP			0		0		0	
EMISSION COLOR			0		0		0	
IF WATER DROPLET PLUME:			0		0		0	
START			0		0		0	
STOP			0		0		0	
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			0		0		0	
START			0		0		0	
STOP			0		0		0	
DESCRIBE PLUME BACKGROUND			0		0		0	
START			0		0		0	
STOP			0		0		0	
BACKGROUND COLOR			0		0		0	
SKY CONDITIONS			0		0		0	
START			0		0		0	
STOP			0		0		0	
WIND SPEED			0		0		0	
WIND DIRECTION			0		0		0	
START			0		0		0	
STOP			0		0		0	
AMBIENT TEMP.			0		0		0	
WET BULB TEMP.			0		0		0	
RH, percent			0		0		0	
START			0		0		0	
STOP			0		0		0	
SOURCE LAYOUT SKETCH			0		0		0	
DRAW NORTH ARROW			0		0		0	
SUN			0		0		0	
WIND			0		0		0	
PLUME AND STACK			0		0		0	
X EMISSION POINT			0		0		0	
OBSERVER'S POSITION			0		0		0	
SUN LOCATION LINE			0		0		0	
APPLICABLE OPACITY STANDARD			0		0		0	
EPA METHOD 9			0		0		0	
TVEE METHOD 2			0		0		0	
AVERAGE OPACITY FOR HIGHEST PERIOD			0		0		0	
NUMBER OF READING ABOVE % WERE			0		0		0	
OBSERVER'S NAME (PRINT)			0		0		0	
OBSERVER'S SIGNATURE			0		0		0	
DATE			0		0		0	
ORGANIZATION			0		0		0	
Gerdau Ameristeel			0		0		0	
VERIFIED BY			0		0		0	
State of Tennessee			0		0		0	
DATE			0		0		0	
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			0		0		0	
SIGNATURE			0		0		0	
TITLE			0		0		0	
DATE			0		0		0	

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau Ameristeel			OBSERVATION DATE 1-22-14		START TIME 9:25 Am	STOP TIME 9:31 Am
ADDRESS 801 Gerdau Ameristeel Rd			SEC MIN	0	15	30
				45	COMMENTS	
CITY Jackson	STATE TN	ZIP 38305	1	0	0	0
PHONE (731) 424-5600	SOURCE ID NUMBER 57-0189-01		2	0	0	0
PROCESS EQUIPMENT Electric Arc Furnace	OPERATING MODE <i>melt</i>		3	0	0	0
CONTROL EQUIPMENT None	OPERATING MODE Continuous		4	0	0	0
DESCRIBE EMISSION POINT Penthouse Canopy Top of Meltshop			5	0	0	0
HEIGHT ABOVE GROUND LEVEL START 120 ft STOP 120 ft			6	0	0	0
HEIGHT RELATIVE TO OBSERVER START 120 ft STOP 120 ft			7			
DISTANCE FROM OBSERVER START 600 ft STOP 600 ft			8			
DIRECTION FROM OBSERVER START NE STOP NE			9			
DESCRIBE VISIBLE EMISSIONS			10			
START STOP			11			
EMISSION COLOR			12			
IF WATER DROPLET PLUME			13			
START STOP			14			
ATTACHED DETACHED			15			
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			16			
START Outlet (exit) STOP Outlet (exit)			17			
DESCRIBE PLUME BACKGROUND			18			
START Sky STOP Sky			19			
BACKGROUND COLOR			20			
START gray STOP gray			21			
WIND SPEED			22			
START 0-10 mph STOP 0-10 mph			23			
WIND DIRECTION			24			
START W STOP W			25			
AMBIENT TEMP.			26			
START 30° STOP 30°			27			
WET BULB TEMP.			28			
RH, percent			29			
SOURCE LAYOUT SKETCH			30			
DRAW NORTH ARROW						
COMMENTS			APPLICABLE OPACITY STANDARD 20 % OPACITY			
			EPA METHOD 9 ☒ TVEE METHOD 2 ☐			
			TVEE METHOD 1 ☐ TVEE METHOD 3 ☐			
			AVERAGE OPACITY FOR HIGHEST PERIOD			
			NUMBER OF READING ABOVE % WERE			
			0 0			
OBSERVER'S NAME (PRINT) Roydell Herrow			OBSERVER'S SIGNATURE Roydell Herrow			
DATE 1-22-14			DATE 1-22-14			
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			ORGANIZATION Gerdau Ameristeel			
SIGNATURE			DATE 5-16-14			
TITLE			VERIFIED BY State of Tennessee (Carl Koontz)			
DATE			DATE 11-16-15			

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau Ameristeel			OBSERVATION DATE 1-23-16			START TIME 8:40am		STOP TIME 8:46am	
ADDRESS 801 Gerdau Ameristeel Rd			SEC 0 15 30 45		MIN				
CITY Jackson			STATE TN		ZIP 38305		COMMENTS		
PHONE (731) 424-5600			SOURCE ID NUMBER 57-0189-01						
PROCESS EQUIPMENT Electric Arc Furnace			OPERATING MODE Melting						
CONTROL EQUIPMENT None			OPERATING MODE Continuous						
DESCRIBE EMISSION POINT Penthouse Canopy Top of Meltshop									
HEIGHT ABOVE GROUND LEVEL START 120 ft STOP 120 ft			HEIGHT RELATIVE TO OBSERVER START 120 ft STOP 120 ft						
DISTANCE FROM OBSERVER START 600 ft STOP 600 ft			DIRECTION FROM OBSERVER START NE STOP NE						
DESCRIBE VISIBLE EMISSIONS									
START			STOP						
EMISSION COLOR			IF WATER DROPLET PLUME:						
START			STOP						
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED									
START Outlet (exit)			STOP Outlet (exit)						
DESCRIBE PLUME BACKGROUND									
START Sky			STOP Sky						
BACKGROUND COLOR			SKY CONDITIONS						
START Blue			STOP Blue						
WIND SPEED			WIND DIRECTION						
START 10-15			STOP 10-15						
AMBIENT TEMP.			WET BULB TEMP.		RH, percent				
START 28°			STOP 28°						
SOURCE LAYOUT SKETCH			DRAW NORTH ARROW						
COMMENTS			APPLICABLE OPACITY STANDARD 20 % OPACITY AVERAGE OPACITY FOR HIGHEST PERIOD 0						
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS SIGNATURE TITLE			OBSERVER'S NAME (PRINT) Mark Thompson OBSERVER'S SIGNATURE DATE 1-23-16						
ORGANIZATION Gerdau Ameristeel VERIFIED BY State of Tennessee/Carl Koontz			CERTIFICATION EXPIRATION DATE 5-13-16 DATE 11-13-15						

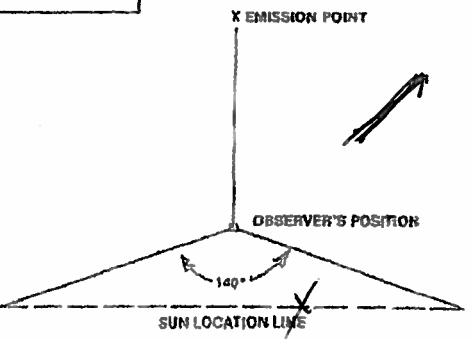
VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau Ameristeel			OBSERVATION DATE 1-26-16		START TIME 11:00 AM	STOP TIME 11:06 AM
ADDRESS 801 Gerdau Ameristeel Rd			SEC MIN	0	15	30
CITY Jackson			STATE TN		ZIP 38305	
PHONE (731) 424-5600			SOURCE ID NUMBER 57-0189-01			
PROCESS EQUIPMENT Electric Arc Furnace			OPERATING MODE Intermittent			
CONTROL EQUIPMENT None			OPERATING MODE Continuous			
DESCRIBE EMISSION POINT Penthouse Canopy Top of Millshop			COMMENTS			
HEIGHT ABOVE GROUND LEVEL START 120 ft STOP 120 ft			HEIGHT RELATIVE TO OBSERVER START 120 ft STOP 120 ft			
DISTANCE FROM OBSERVER START 600 ft STOP 600 ft			DIRECTION FROM OBSERVER START NE STOP NE			
DESCRIBE VISIBLE EMISSIONS						
START _____ STOP _____						
EMISSION COLOR			IF WATER DROPLET PLUME			
START _____ STOP _____			ATTACHED ☒ DETACHED ☐			
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED						
START Outlet (exit) STOP Outlet (exit)						
DESCRIBE PLUME BACKGROUND						
START Sky STOP Sky						
BACKGROUND COLOR			SKY CONDITIONS			
START Gray STOP Gray			START Cloudy STOP Cloudy			
WIND SPEED			WIND DIRECTION			
START 5-10 mph STOP 5-10 mph			START N STOP N			
AMBIENT TEMP.			WET BULB TEMP.			
START 37° STOP 39°			RH, percent			
SOURCE LAYOUT SKETCH			DRAW NORTH ARROW			
COMMENTS			APPLICABLE OPACITY STANDARD 20 % OPACITY			
			EPA METHOD 9 ☒ TVEE METHOD 2 ☐			
			TVEE METHOD 1 ☐ TVEE METHOD 3 ☐			
			AVERAGE OPACITY FOR HIGHEST PERIOD			
			NUMBER OF READING ABOVE % WERE			
			OBSERVER'S NAME (PRINT) Mike Johnson			
			OBSERVER'S SIGNATURE Mike Johnson			
			DATE 1-26-16			
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			ORGANIZATION Gerdau Ameristeel			
SIGNATURE			DATE 5-13-16			
TITLE			VERIFIED BY State of Tennessee/Carl Koonz			
DATE			DATE 11-13-15			

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau Ameristeel			OBSERVATION DATE 1-27-14		START TIME 10:30 AM	STOP TIME 10:36 AM
ADDRESS 801 Gerdau Ameristeel Rd			SEC MIN	0	15	30
CITY Jackson			STATE TN		ZIP 38305	
PHONE (731) 424-5600			SOURCE ID NUMBER 57-0189-01			
PROCESS EQUIPMENT Electric Arc Furnace			OPERATING MODE Meet			
CONTROL EQUIPMENT None			OPERATING MODE Continuous			
DESCRIBE EMISSION POINT Penthouse Canopy Top of Maltshop						
HEIGHT ABOVE GROUND LEVEL START 120 ft STOP 120 ft			HEIGHT RELATIVE TO OBSERVER START 120 ft STOP 120 ft			
DISTANCE FROM OBSERVER START 600 ft STOP 600 ft			DIRECTION FROM OBSERVER START NE STOP NE			
DESCRIBE VISIBLE EMISSIONS						
START STOP						
EMISSION COLOR			IF WATER DROPLET PLUME:			
START STOP			ATTACHED DETACHED			
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED						
START Outlet (exit) STOP Outlet (exit)						
DESCRIBE PLUME BACKGROUND						
START Sky STOP Sky						
BACKGROUND COLOR			SKY CONDITIONS			
START Blue STOP Blue			START Clear STOP Clear			
WIND SPEED			WIND DIRECTION			
START 5-10 mph STOP 5-10 mph			START N STOP N			
AMBIENT TEMP.			WET BULB TEMP.		RH, percent	
START 40° STOP 40°						
SOURCE LAYOUT SKETCH			DRAW NORTH ARROW			
COMMENTS						
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			OBSERVER'S NAME (PRINT) Mike Johnson		DATE 1-27-14	
SIGNATURE			OBSERVER'S SIGNATURE Mike Johnson		CERTIFICATION EXPIRATION DATE 5-13-16	
TITLE			ORGANIZATION Gerdau Ameristeel		DATE 11-13-15	
			VERIFIED BY State of Tennessee (Carl Koontz)		DATE	

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau Ameristeel			OBSERVATION DATE 1-28-16		START TIME 11:10 AM	STOP TIME 11:16 AM
ADDRESS 801 Gerdau Ameristeel Rd			SEC MIN	0	15	30
				45	COMMENTS	
CITY Jackson	STATE TN	ZIP 38305	1	0	0	0
PHONE (731) 424-5600	SOURCE ID NUMBER 57-0189-01		2	0	0	0
PROCESS EQUIPMENT Electric Arc Furnace	OPERATING MODE Hot		3	0	0	0
CONTROL EQUIPMENT None	OPERATING MODE Continuous		4	0	0	0
DESCRIBE EMISSION POINT Penthouse Canopy Top of Millshop			5	0	0	0
HEIGHT ABOVE GROUND LEVEL START 120 ft STOP 120 ft			6	0	0	0
HEIGHT RELATIVE TO OBSERVER START 120 ft STOP 120 ft			7			
DISTANCE FROM OBSERVER START 600 ft STOP 600 ft			8			
DIRECTION FROM OBSERVER START NE STOP NE			9			
DESCRIBE VISIBLE EMISSIONS			10			
START _____ STOP _____			11			
EMISSION COLOR START _____ STOP _____			12			
IF WATER DROPLET PLUME: ATTACHED ☐ DETACHED ☐			13			
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED START Outlet (exit) STOP Outlet (exit)			14			
DESCRIBE PLUME BACKGROUND			15			
START Sky STOP Sky			16			
BACKGROUND COLOR START Blue STOP Blue			17			
SKY CONDITIONS START Clear STOP Clear			18			
WIND SPEED START 0-5 mph STOP 0-5 mph			19			
WIND DIRECTION START W STOP W			20			
AMBIENT TEMP. START 44° STOP 44°			21			
WET BULB TEMP. _____ RH, percent _____			22			
SOURCE LAYOUT SKETCH DRAW NORTH ARROW			23			
SUN  WIND  PLUME AND STACK 			24			
			25			
			26			
			27			
			28			
			29			
			30			
COMMENTS			APPLICABLE OPACITY STANDARD 20 % OPACITY			
			EPA METHOD 9 ☒ TVEE METHOD 2 ☐			
			TVEE METHOD 1 ☐ TVEE METHOD 3 ☐			
			AVERAGE OPACITY FOR HIGHEST PERIOD 0			
			NUMBER OF READING ABOVE % WERE 0			
			OBSERVER'S NAME (PRINT) Mike Johnson			
			OBSERVER'S SIGNATURE Mike Johnson			
			DATE 1-28-16			
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			ORGANIZATION Gerdau Ameristeel			
SIGNATURE TITLE _____ DATE _____			CERTIFICATION EXPIRATION DATE 5-13-16			
			VERIFIED BY State of Tennessee/Carl Koontz			
			DATE 11-13-15			

VISIBLE EMISSION OBSERVATION

SOURCE NAME			OBSERVATION DATE		START TIME		STOP TIME
Gerdau Ameristeel			1-29-16		9:30am		9:36am
ADDRESS			SEC	0	15	30	45
801 Gerdau Ameristeel Rd			MIN				
			1	0	0	0	0
CITY			2	0	0	0	0
Jackson	STATE	IN	3	0	0	0	0
ZIP	38305		4	0	0	0	0
PHONE	SOURCE ID NUMBER		5	0	0	0	0
(731) 424-5600	57-0189-01		6	0	0	0	0
PROCESS EQUIPMENT		OPERATING MODE					
Electric Arc Furnace		Melt					
CONTROL EQUIPMENT		OPERATING MODE					
None		Continuous					
DESCRIBE EMISSION POINT							
Penthouse Canopy Top of Meltshop							
HEIGHT ABOVE GROUND LEVEL							
START	STOP	START	STOP				
120 ft	120 ft	120 ft	120 ft				
DISTANCE FROM OBSERVER							
START	STOP	START	STOP				
600 ft	600 ft	NE	NE				
DESCRIBE VISIBLE EMISSIONS							
START							
STOP							
EMISSION COLOR							
IF WATER DROPLET PLUME:							
START							
STOP							
ATTACHED ☐ DETACHED ☐							
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED							
START							
STOP							
Outlet (exit)							
DESCRIBE PLUME BACKGROUND							
START							
STOP							
Sky							
BACKGROUND COLOR							
START							
STOP							
Blue							
WIND SPEED							
START							
STOP							
0.5 mph							
WIND DIRECTION							
START							
STOP							
S							
AMBIENT TEMP.							
START							
STOP							
47°							
WET BULB TEMP.							
RH, percent							
SOURCE LAYOUT SKETCH							
DRAW NORTH ARROW							
SUN WIND PLUME AND STACK							
COMMENTS							
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS							
SIGNATURE							
TITLE							
DATE							
OBSERVER'S NAME (PRINT)							
Mike Johnson							
OBSERVER'S SIGNATURE							
Gerdau Ameristeel							
ORGANIZATION							
State of Tennessee/Carl Koontz							
DATE							
1-29-16							
CERTIFICATION-EXPIRATION DATE							
5-13-16							
DATE							
11-13-15							

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau Ameristeel			OBSERVATION DATE 1-30-16			START TIME 2:00 PM		STOP TIME 2:06 PM	
ADDRESS 801 Gerdau Ameristeel Rd			SEC MIN		0	15	30	45	COMMENTS
CITY Jackson			STATE TN		ZIP 38305				
PHONE (731) 424-5600			SOURCE ID NUMBER 57-0189-01						
PROCESS EQUIPMENT Electric Arc Furnace			OPERATING MODE melting						
CONTROL EQUIPMENT None			OPERATING MODE Continuous						
DESCRIBE EMISSION POINT Penthouse Canopy Top of Meltshop									
HEIGHT ABOVE GROUND LEVEL START 120 ft STOP 120 ft			HEIGHT RELATIVE TO OBSERVER START 120 ft STOP 120 ft						
DISTANCE FROM OBSERVER START 600 ft STOP 600 ft			DIRECTION FROM OBSERVER START NE STOP NE						
DESCRIBE VISIBLE EMISSIONS									
START			STOP						
EMISSION COLOR			IF WATER DROPLET PLUME:						
START			STOP						
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED									
START Outlet (exit)			STOP Outlet (exit)						
DESCRIBE PLUME BACKGROUND									
START Sky			STOP Sky						
BACKGROUND COLOR			SKY CONDITIONS						
START Blue STOP Blue			START clear STOP clear						
WIND SPEED			WIND DIRECTION						
START 15 to 20 STOP 15 to 20			START		STOP				
AMBIENT TEMP.			WET BULB TEMP.		RH, percent				
START 96° STOP 69									
SOURCE LAYOUT SKETCH			DRAW NORTH ARROW						
APPLICABLE OPACITY STANDARD			EPA METHOD 9 ☒		TVEE METHOD 2 ☐				
20 % OPACITY			TVEE METHOD 1 ☐		TVEE METHOD 8 ☐				
AVERAGE OPACITY FOR HIGHEST PERIOD			NUMBER OF READING ABOVE % WERE						
COMMENTS			OBSERVER'S NAME (PRINT)		DATE				
			Tony Perry		1-30-16				
			OBSERVER'S SIGNATURE		CERTIFICATION EXPIRATION DATE				
			[Signature]		5-16-16				
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			ORGANIZATION		DATE				
SIGNATURE			Gerdau Ameristeel		11-16-16				
TITLE			VERIFIED BY		DATE				
			State of Tennessee/Carl Koontz		11-16-16				

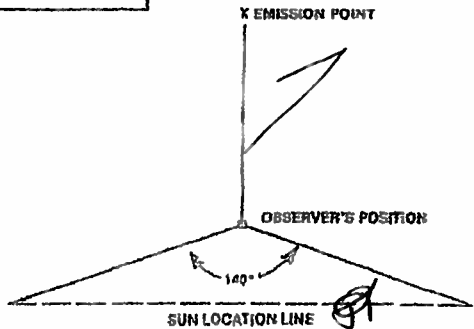
VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau Ameristeel			OBSERVATION DATE 2-2-16		START TIME 10:00 AM	STOP TIME 10:04 AM
ADDRESS 801 Gerdau Ameristeel Rd			SEC MIN	0	15	30
CITY Jackson			STATE TN		ZIP 38305	
PHONE (731) 424-5600			SOURCE ID NUMBER 57-0189-01			
PROCESS EQUIPMENT Electric Arc Furnace			OPERATING MODE melt			
CONTROL EQUIPMENT None			OPERATING MODE Continuous			
DESCRIBE EMISSION POINT Penthouse Canopy Top of Maltshop			HEIGHT ABOVE GROUND LEVEL START 120 ft STOP 120 ft		HEIGHT RELATIVE TO OBSERVER START 120 ft STOP 120 ft	
DISTANCE FROM OBSERVER START 600 ft STOP 600 ft			DIRECTION FROM OBSERVER START NE STOP NE			
DESCRIBE VISIBLE EMISSIONS						
EMISSION COLOR			IF WATER DROPLET PLUME:			
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			ATTACHED ☐ DETACHED ☐			
DESCRIBE PLUME BACKGROUND						
BACKGROUND COLOR			SKY CONDITIONS			
WIND SPEED			WIND DIRECTION			
AMBIENT TEMP.			WET BULB TEMP.		RH, percent	
SOURCE LAYOUT SKETCH			DRAW NORTH ARROW			
COMMENTS						
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			OBSERVER'S NAME (PRINT) Roydell Herron			
SIGNATURE			OBSERVER'S SIGNATURE Roydell Herron		DATE 2-2-16	
TITLE			ORGANIZATION Gerdau Ameristeel		CERTIFICATION EXPIRATION DATE 5-16-14	
DATE			VERIFIED BY State of Tennessee Carl Koontz		DATE 11-16-15	

VISIBLE EMISSION OBSERVATION

SOURCE NAME			OBSERVATION DATE				START TIME		STOP TIME
Gerdau Ameristeel			2-3-16				10:00 Am		10:06 Am
ADDRESS			SEC	0	15	30	45	COMMENTS	
801 Gerdau Ameristeel Rd			MIN						
CITY			1	0	0	0	0		
STATE			2	0	0	0	0		
ZIP			3	0	0	0	0		
PHONE			4	0	0	0	0		
(731) 424-5600			5	0	0	0	0		
SOURCE ID NUMBER			6	0	0	0	0		
57-0189-01			7						
PROCESS EQUIPMENT			8						
Electric Arc Furnace			9						
OPERATING MODE			10						
CONTROL EQUIPMENT			11						
None			12						
OPERATING MODE			13						
Continuous			14						
DESCRIBE EMISSION POINT			15						
Penthouse Canopy Top of Maltshop			16						
HEIGHT ABOVE GROUND LEVEL			17						
START 120 ft STOP 120 ft			18						
HEIGHT RELATIVE TO OBSERVER			19						
START 120 ft STOP 120 ft			20						
DISTANCE FROM OBSERVER			21						
START 600 ft STOP 600 ft			22						
DIRECTION FROM OBSERVER			23						
START NE STOP NE			24						
DESCRIBE VISIBLE EMISSIONS			25						
START			26						
STOP			27						
EMISSION COLOR			28						
IF WATER DROPLET PLUME:			29						
START			30						
STOP			31						
ATTACHED ☐ DETACHED ☐			32						
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			33						
START Outlet (exit) STOP Outlet (exit)			34						
DESCRIBE PLUME BACKGROUND			35						
START Sky STOP Sky			36						
BACKGROUND COLOR			37						
START blue STOP blue			38						
SKY CONDITIONS			39						
START white STOP white			40						
WIND SPEED			41						
START 0-10 mph STOP 0-10 mph			42						
WIND DIRECTION			43						
START W STOP W			44						
AMBIENT TEMP.			45						
START 50° STOP 50°			46						
WET BULB TEMP.			47						
RH, percent			48						
SUN ☐ WIND ☐			49						
PLUME AND STACK ☐			50						
SOURCE LAYOUT SKETCH			51						
DRAW NORTH ARROW			52						
			53						
COMMENTS			54						
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			55						
SIGNATURE			56						
TITLE			57						
DATE			58						
OBSERVER'S NAME (PRINT)			59						
Roydell Herron			60						
OBSERVER'S SIGNATURE			61						
Roydell Herron			62						
DATE			63						
2-3-16			64						
ORGANIZATION			65						
Gerdau Ameristeel			66						
CERTIFICATION-EXPIRATION DATE			67						
5-16-14			68						
VERIFIED BY			69						
State of Tennessee			70						
DATE			71						
11-16-15			72						

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau Ameristeel			OBSERVATION DATE 2-4-16		START TIME 10:10 Am	STOP TIME 10:16 Am
ADDRESS 801 Gerdau Ameristeel Rd			SEC MIN	0	15	30
				45	COMMENTS	
CITY Jackson	STATE TN	ZIP 38305	1	0	0	0
PHONE (731) 424-5600	SOURCE ID NUMBER 57-0189-01		2	0	0	0
PROCESS EQUIPMENT Electric Arc Furnace	OPERATING MODE melt		3	0	0	0
CONTROL EQUIPMENT None	OPERATING MODE Continuous		4	0	0	0
DESCRIBE EMISSION POINT Penthouse Canopy Top of Meltshop			5	0	0	0
START STOP			6	0	0	0
HEIGHT ABOVE GROUND LEVEL START 120 ft STOP 120 ft			7			
HEIGHT RELATIVE TO OBSERVER START 120 ft STOP 120 ft			8			
DISTANCE FROM OBSERVER START 600 ft STOP 600 ft			9			
DIRECTION FROM OBSERVER START NE STOP NE			10			
DESCRIBE VISIBLE EMISSIONS			11			
START STOP			12			
EMISSION COLOR IF WATER DROPLET PLUME:			13			
START STOP			14			
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			15			
START Outlet (exit) STOP Outlet (exit)			16			
DESCRIBE PLUME BACKGROUND			17			
START Sky STOP Sky			18			
BACKGROUND COLOR START blue STOP white			19			
SKY CONDITIONS START clear STOP clear			20			
WIND SPEED START 0-10 mph STOP 0-10 mph			21			
WIND DIRECTION START W STOP W			22			
AMBIENT TEMP. START 46° STOP 46°			23			
WET BULB TEMP. RH, percent			24			
SOURCE LAYOUT SKETCH DRAW NORTH ARROW			25			
SUN  WIND  PLUME AND STACK 			26			
			27			
COMMENTS			28			
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			29			
SIGNATURE			30			
TITLE			APPLICABLE OPACITY STANDARD 20 % OPACITY			
DATE			EPA METHOD 9 ☒ TVEE METHOD 2 ☐			
VERIFIED BY State of Tennessee/Carl Koontz			TVEE METHOD 1 ☐ TVEE METHOD 3 ☐			
			AVERAGE OPACITY FOR HIGHEST PERIOD 0 0			
			NUMBER OF READING ABOVE % WERE			
			OBSERVER'S NAME (PRINT) Roydell Herrow			
			OBSERVER'S SIGNATURE Roydell Herrow			
			DATE 2-4-16			
			CERTIFICATION EXPIRATION DATE 5-16-16			
			DATE 11-16-15			

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau Ameristeel			OBSERVATION DATE 2-5-16		START TIME 11:00 Am	STOP TIME 11:06 Am
ADDRESS 801 Gerdau Ameristeel Rd			SEC MIN	0	15	30
				45	COMMENTS	
CITY Jackson	STATE TN	ZIP 38305	1	0	0	0
PHONE (731) 424-5600	SOURCE ID NUMBER 57-0189-01		2	0	0	0
PROCESS EQUIPMENT Electric Arc Furnace	OPERATING MODE melt		3	0	0	0
CONTROL EQUIPMENT None	OPERATING MODE Continuous		4	0	0	0
DESCRIBE EMISSION POINT Penthouse Canopy Top of Meltshop			5	0	0	0
HEIGHT ABOVE GROUND LEVEL START 120 ft STOP 120 ft			6	0	0	0
HEIGHT RELATIVE TO OBSERVER START 120 ft STOP 120 ft			7			
DISTANCE FROM OBSERVER START 600 ft STOP 600 ft			8			
DIRECTION FROM OBSERVER START NE STOP NE			9			
DESCRIBE VISIBLE EMISSIONS			10			
START STOP			11			
EMISSION COLOR			12			
IF WATER DROPLET PLUME:			13			
START STOP ATTACHED DETACHED			14			
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			15			
START Outlet (exit) STOP Outlet (exit)			16			
DESCRIBE PLUME BACKGROUND			17			
START Sky STOP Sky			18			
BACKGROUND COLOR blue blue			19			
START white STOP white			20			
WIND SPEED START 0-10 mph STOP 0-10 mph			21			
WIND DIRECTION START W STOP W			22			
AMBIENT TEMP. START 50° STOP 50°			23			
WET BULB TEMP. RH, percent			24			
SUN PLUME AND STACK			25			
SOURCE LAYOUT SKETCH			26			
DRAW NORTH ARROW			27			
X EMISSION POINT			28			
OBSERVER'S POSITION			29			
SUN LOCATION LINE			30			
APPLICABLE OPACITY STANDARD			EPA METHOD 9 ☒ TVEE METHOD 2 ☐			
20 % OPACITY			TVEE METHOD 1 ☐ TVEE METHOD 3 ☐			
AVERAGE OPACITY FOR HIGHEST PERIOD			NUMBER OF READING ABOVE % WERE			
COMMENTS			00			
OBSERVER'S NAME (PRINT)			Roydell Herron			
OBSERVER'S SIGNATURE			Roydell Herron			
DATE			2-5-16			
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			ORGANIZATION			
SIGNATURE			Gerdau Ameristeel			
TITLE			VERIFIED BY			
DATE			State of Tennessee (Carl Koontz)			
			DATE			
			11-16-15			



VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau Ameristeel			OBSERVATION DATE 2-9-16		START TIME 11:35am	STOP TIME 11:41am
ADDRESS 801 Gerdau Ameristeel Rd			SEC MIN	0	15	30
				45	COMMENTS	
CITY Jackson	STATE IN	ZIP 38305	1	0	0	0
PHONE (731) 424-5600	SOURCE ID NUMBER 57-0189-01		2	0	0	0
PROCESS EQUIPMENT Electric Arc Furnace	OPERATING MODE Melt		3	0	0	0
CONTROL EQUIPMENT None	OPERATING MODE Continuous		4	0	0	0
DESCRIBE EMISSION POINT Penthouse Canopy Top of Meltshop			5	0	0	0
START			6	0	0	0
HEIGHT ABOVE GROUND LEVEL START 120 ft STOP 120 ft			7			
HEIGHT RELATIVE TO OBSERVER START 120 ft STOP 120 ft			8			
DISTANCE FROM OBSERVER START 600 ft STOP 600 ft			9			
DIRECTION FROM OBSERVER START NE STOP NE			10			
DESCRIBE VISIBLE EMISSIONS			11			
START			12			
EMISSION COLOR			13			
IF WATER DROPLET PLUME:			14			
START			15			
ATTACHED L. DETACHED ..			16			
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			17			
START Outlet (exit) STOP Outlet (exit)			18			
DESCRIBE PLUME BACKGROUND			19			
START Sky STOP Sky			20			
BACKGROUND COLOR			21			
START Gray STOP Gray			22			
SKY CONDITIONS			23			
START Cloudy STOP Cloudy			24			
WIND SPEED			25			
START 5-10 mph STOP 5-10 mph			26			
WIND DIRECTION			27			
START N STOP N			28			
AMBIENT TEMP.			29			
START 28' STOP 28'			30			
WET BULB TEMP.						
RH, percent						
SOURCE LAYOUT SKETCH						
DRAW NORTH ARROW						
COMMENTS						
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS						
SIGNATURE						
TITLE						
DATE						
OBSERVER'S NAME (PRINT)						
Miki Johnson						
OBSERVER'S SIGNATURE						
Mike John						
ORGANIZATION						
Gerdau Ameristeel						
VERIFIED BY						
State of Tennessee (Carl Koontz)						
DATE						
2-9-16						
CERTIFICATION-EXPIRATION DATE						
8-13-16						
DATE						
11-13-15						

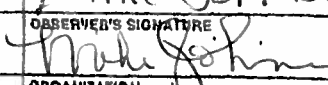
VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau Ameristeel			OBSERVATION DATE 2-10-14		START TIME 11:00 AM	STOP TIME 11:06 AM
ADDRESS 801 Gerdau Ameristeel Rd			SEC MIN	0	15	30
CITY Jackson			STATE TN		ZIP 38305	
PHONE (731) 424-5600			SOURCE ID NUMBER 57-0189-01			
PROCESS EQUIPMENT Electric Arc Furnace			OPERATING MODE Meef			
CONTROL EQUIPMENT None			OPERATING MODE Continuous			
DESCRIBE EMISSION POINT Penthouse Canopy Top of Maltshop			HEIGHT ABOVE GROUND LEVEL START 120 ft STOP 120 ft		HEIGHT RELATIVE TO OBSERVER START 120 ft STOP 120 ft	
DISTANCE FROM OBSERVER START 600 ft STOP 600 ft			DIRECTION FROM OBSERVER START NE STOP NE			
DESCRIBE VISIBLE EMISSIONS			START		STOP	
EMISSION COLOR			IF WATER DROPLET PLUME:			
START			STOP		ATTACHED ☐ DETACHED ☐	
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			START Outlet (exit)		STOP Outlet (exit)	
DESCRIBE PLUME BACKGROUND			START Sky		STOP Sky	
BACKGROUND COLOR			START Blue		STOP Blue	
WIND SPEED			START 5-10 mph		STOP 5-10 mph	
WIND DIRECTION			START N		STOP N	
AMBIENT TEMP.			START 28°		STOP 28°	
WET BULB TEMP.			RH, percent			
SOURCE LAYOUT SKETCH			DRAW NORTH ARROW			
COMMENTS			APPLICABLE OPACITY STANDARD 20 % OPACITY		EPA METHOD 9 ☒ TVEE METHOD 2 ☐	
			AVERAGE OPACITY FOR HIGHEST PERIOD		TVEE METHOD 1 ☐ TVEE METHOD 3 ☐	
			NUMBER OF READING ABOVE % WERE		0 0	
OBSERVER'S NAME (PRINT) Mike Johnson			OBSERVER'S SIGNATURE Mike Johnson		DATE 2-10-14	
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			ORGANIZATION Gerdau Ameristeel		CERTIFICATION-EXPIRATION DATE 5-13-16	
SIGNATURE TITLE			VERIFIED BY State of Tennessee/Carl Koontz		DATE 11-13-15	

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau Ameristeel			OBSERVATION DATE 2-11-16		START TIME 9:40 AM	STOP TIME 9:46 AM
ADDRESS 801 Gerdau Ameristeel Rd			MIN	SEC	COMMENTS	
				0 15 30 45		
CITY Jackson			1	0 0 0 0		
STATE TN			2	0 0 0 0		
ZIP 38305			3	0 0 0 0		
PHONE (731) 424-5600			4	0 0 0 0		
SOURCE ID NUMBER 57-0189-01			5	0 0 0 0		
PROCESS EQUIPMENT Electric Arc Furnace			6	0 0 0 0		
OPERATING MODE Intermittent			7			
CONTROL EQUIPMENT None			8			
OPERATING MODE Continuous			9			
DESCRIBE EMISSION POINT Penthouse Canopy Top of Meltshop			10			
START STOP			11			
HEIGHT ABOVE GROUND LEVEL START 120 ft STOP 120 ft			12			
HEIGHT RELATIVE TO OBSERVER START 120 ft STOP 120 ft			13			
DISTANCE FROM OBSERVER START 600 ft STOP 600 ft			14			
DIRECTION FROM OBSERVER START NE STOP NE			15			
DESCRIBE VISIBLE EMISSIONS			16			
START STOP			17			
EMISSION COLOR			18			
IF WATER DROPLET PLUME			19			
START STOP			20			
ATTACHED ☐ DETACHED ☐			21			
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			22			
START Outlet (exit) STOP Outlet (exit)			23			
DESCRIBE PLUME BACKGROUND			24			
START Sky STOP Sky			25			
BACKGROUND COLOR			26			
START Blue STOP Blue			27			
SKY CONDITIONS			28			
START Clear STOP Clear			29			
WIND SPEED			30			
START 0-5 STOP 0-5			31			
WIND DIRECTION			32			
START N STOP N			33			
AMBIENT TEMP.			34			
START 36' STOP 36'			35			
WET BULB TEMP.			36			
RH, percent			37			
SOURCE LAYOUT SKETCH			38			
DRAW NORTH ARROW			39			
			40			
SUN ☐ WIND ☐ PLUME AND STACK ☐			41			
COMMENTS			42			
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			43			
SIGNATURE			44			
TITLE			45			
DATE			46			
OBSERVER'S NAME (PRINT) Mike Johnson			47			
OBSERVER'S SIGNATURE Mike Johnson			48			
DATE 2-11-16			49			
ORGANIZATION Gerdau Ameristeel			50			
VERIFIED BY State of Tennessee/Carl Koontz			51			
DATE 11-13-15			52			

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau Ameristeel			OBSERVATION DATE 2-12-16		START TIME 10:15 AM		STOP TIME 10:21 AM	
ADDRESS 801 Gerdau Ameristeel Rd			SEC MIN		0		15	
CITY Jackson			STATE TN		ZIP 38305		COMMENTS	
PHONE (731) 424-5600			SOURCE ID NUMBER 57-0189-01		1		0	
PROCESS EQUIPMENT Electric Arc Furnace			OPERATING MODE Melt		2		0	
CONTROL EQUIPMENT None			OPERATING MODE Continuous		3		0	
DESCRIBE EMISSION POINT Penthouse Canopy Top of Meltshop			4		0		0	
START HEIGHT ABOVE GROUND LEVEL 120 ft			STOP HEIGHT ABOVE GROUND LEVEL 120 ft		5		0	
START DISTANCE FROM OBSERVER 600 ft			STOP DISTANCE FROM OBSERVER 600 ft		6		0	
START DIRECTION FROM OBSERVER NE			STOP DIRECTION FROM OBSERVER NE		7			
DESCRIBE VISIBLE EMISSIONS			8					
START EMISSION COLOR			STOP EMISSION COLOR		9			
START POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED Outlet (exit)			STOP POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED Outlet (exit)		10			
DESCRIBE PLUME BACKGROUND			11					
START BACKGROUND COLOR Blue/White			STOP BACKGROUND COLOR Blue/White		12			
START WIND SPEED 5 mph			STOP WIND SPEED 5 mph		13			
START AMBIENT TEMP. 43°			STOP AMBIENT TEMP. 43°		14			
START WET BULB TEMP.			STOP WET BULB TEMP.		15			
START RH, percent			STOP RH, percent		16			
SOURCE LAYOUT SKETCH			DRAW NORTH ARROW		17			
SUN  WIND 			PLUME AND STACK 		18			
X EMISSION POINT			OBSERVER'S POSITION		19			
SUN LOCATION LINE			100°		20			
COMMENTS			APPLICABLE OPACITY STANDARD 20 % OPACITY		EPA METHOD 9 ☒ TVEE METHOD 2 ☐			
			AVERAGE OPACITY FOR HIGHEST PERIOD		TVEE METHOD 1 ☐ TVEE METHOD 3 ☐			
			OBSERVER'S NAME (PRINT) Mike Johnson		NUMBER OF READING ABOVE % WERE 0 0			
			OBSERVER'S SIGNATURE 		DATE 2-12-16			
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			ORGANIZATION Gerdau Ameristeel		CERTIFICATION EXPIRATION DATE 5-13-14			
SIGNATURE			VERIFIED BY State of Tennessee (Carl Koontz)		DATE 11-13-15			
TITLE			DATE					

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau Ameristeel			OBSERVATION DATE 2-13-16			START TIME 12:40 PM		STOP TIME 12:46 PM	
ADDRESS 801 Gerdau Ameristeel Rd			SEC MIN		0	15	30	45	COMMENTS
CITY Jackson			STATE TN		ZIP 38305				
PHONE (731) 424-5600			SOURCE ID NUMBER 57-0189-01						
PROCESS EQUIPMENT Electric Arc Furnace			OPERATING MODE melting						
CONTROL EQUIPMENT None			OPERATING MODE Continuous						
DESCRIBE EMISSION POINT Penthouse Canopy Top of Meltshop									
START			STOP						
HEIGHT ABOVE GROUND LEVEL START 120 ft STOP 120 ft			HEIGHT RELATIVE TO OBSERVER START 120 ft STOP 120 ft						
DISTANCE FROM OBSERVER START 600 ft STOP 600 ft			DIRECTION FROM OBSERVER START NE STOP NE						
DESCRIBE VISIBLE EMISSIONS									
START			STOP						
EMISSION COLOR			IF WATER DROPLET PLUME:						
START			STOP						
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			ATTACHED ☐ DETACHED ☐						
START Outlet (exit)			STOP Outlet (exit)						
DESCRIBE PLUME BACKGROUND									
START Sky			STOP Sky						
BACKGROUND COLOR			SKY CONDITIONS						
START Blue STOP Blue			START Clear STOP Clear						
WIND SPEED			WIND DIRECTION						
START 5 to 10 STOP 5 to 10			START NE STOP NE						
AMBIENT TEMP.			WET BULB TEMP. RH, percent						
START 33° STOP 33°									
SOURCE LAYOUT SKETCH			DRAW NORTH ARROW						
COMMENTS			APPLICABLE OPACITY STANDARD 20 % OPACITY AVERAGE OPACITY FOR HIGHEST PERIOD 0 NUMBER OF READING ABOVE % WERE 0						
OBSERVER'S NAME (PRINT)			Toni Penny						
OBSERVER'S SIGNATURE									
DATE			2-13-16						
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			ORGANIZATION						
SIGNATURE			Gerdau Ameristeel						
TITLE			VERIFIED BY						
			State of Tennessee Carl Koontz						
DATE			11-16-16						

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau Ameristeel			OBSERVATION DATE 2-16-16		START TIME 10:15 Am	STOP TIME 10:21 Am
ADDRESS 801 Gerdau Ameristeel Rd			MIN	SEC	0	15
CITY Jackson			STATE TN		ZIP 38305	
PHONE (731) 424-5600			SOURCE ID NUMBER 57-0189-01			COMMENTS
PROCESS EQUIPMENT Electric Arc Furnace			OPERATING MODE melt			
CONTROL EQUIPMENT None			OPERATING MODE Continuous			COMMENTS
DESCRIBE EMISSION POINT Penthouse Canopy Top of Meltshop			HEIGHT ABOVE GROUND LEVEL START 120 ft STOP 120 ft			
HEIGHT ABOVE GROUND LEVEL START 120 ft STOP 120 ft			HEIGHT RELATIVE TO OBSERVER START 120 ft STOP 120 ft			COMMENTS
DISTANCE FROM OBSERVER START 600 ft STOP 600 ft			DIRECTION FROM OBSERVER START NE STOP NE			
DESCRIBE VISIBLE EMISSIONS			START			COMMENTS
EMISSION COLOR			IF WATER DROPLET PLUME:			
START			STOP			COMMENTS
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			ATTACHED ☐ DETACHED ☐			
START Outlet (exit)			STOP Outlet (exit)			COMMENTS
DESCRIBE PLUME BACKGROUND			START Sky			
BACKGROUND COLOR			STOP Sky			COMMENTS
START gray			STOP gray			
WIND SPEED			WIND DIRECTION			COMMENTS
START 0-10 mph			STOP 0-10 mph			
AMBIENT TEMP.			WET BULB TEMP.			COMMENTS
START 45°			STOP 45°			
SUN ☐ WIND ☐			DRAW NORTH ARROW			COMMENTS
PLUME AND STACK ☐			☐			
SOURCE LAYOUT SKETCH			DRAW NORTH ARROW			COMMENTS
X EMISSION POINT			OBSERVER'S POSITION			
SUN LOCATION LINE			140°			COMMENTS
SUN LOCATION LINE			140°			
COMMENTS			APPLICABLE OPACITY STANDARD			COMMENTS
			20 % OPACITY			
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			EPA METHOD 9 ☒ TVEE METHOD 2 ☐			
SIGNATURE			TVEE METHOD 1 ☐ TVEE METHOD 3 ☐			
TITLE			AVERAGE OPACITY FOR HIGHEST PERIOD			
			NUMBER OF READING ABOVE % WERE			
			O O			
			OBSERVER'S NAME (PRINT)			
			Royall Herrow			
			OBSERVER'S SIGNATURE			
			Royall Herrow			
			DATE			
			2-16-16			
			ORGANIZATION			
			Gerdau Ameristeel			
			CERTIFICATION EXPIRATION DATE			
			5-16-16			
			VERIFIED BY			
			State of Tennessee/Carl Koontz			
			DATE			
			11-16-15			

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau Ameristeel			OBSERVATION DATE 2-17-14		START TIME 1:30pm	STOP TIME 1:36pm
ADDRESS 801 Gerdau Ameristeel Rd			SEC MIN	0	15	30
				45	COMMENTS	
CITY Jackson	STATE TN	ZIP 38305	1	0	0	0
PHONE (731) 424-5600	SOURCE ID NUMBER 57-0189-01		2	0	0	0
PROCESS EQUIPMENT Electric Arc Furnace	OPERATING MODE melt		3	0	0	0
CONTROL EQUIPMENT None	OPERATING MODE Continuous		4	0	0	0
DESCRIBE EMISSION POINT Penthouse Canopy Top of Maltshop			5	0	0	0
START STOP			6	0	0	0
HEIGHT ABOVE GROUND LEVEL START 120 ft STOP 120 ft			7			
HEIGHT RELATIVE TO OBSERVER START 120 ft STOP 120 ft			8			
DISTANCE FROM OBSERVER START 600 ft STOP 600 ft			9			
DIRECTION FROM OBSERVER START NE STOP NE			10			
DESCRIBE VISIBLE EMISSIONS			11			
START STOP			12			
EMISSION COLOR IF WATER DROPLET PLUME:			13			
START STOP			14			
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			15			
START Outlet (exit) STOP Outlet (exit)			16			
DESCRIBE PLUME BACKGROUND			17			
START Sky STOP Sky			18			
BACKGROUND COLOR START white STOP white			19			
WIND SPEED START 0-10 mph STOP 0-10 mph			20			
WIND DIRECTION START W STOP W			21			
AMBIENT TEMP. START 46° STOP 46°			22			
WET BULB TEMP. RH, percent			23			
SOURCE LAYOUT SKETCH DRAW NORTH ARROW			24			
SUN  WIND  PLUME AND STACK 			25			
X EMISSION POINT OBSERVER'S POSITION SUN LOCATION LINE 140°			26			
COMMENTS			27			
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			28			
SIGNATURE TITLE			29			
DATE			30			
OBSERVER'S NAME (PRINT) Koyde Herson			APPLICABLE OPACITY STANDARD 20 % OPACITY			
OBSERVER'S SIGNATURE Koyde Herson			EPA METHOD 9 ☒ TVEE METHOD 2 ☐			
ORGANIZATION Gerdau Ameristeel			TVEE METHOD 1 ☐ TVEE METHOD 3 ☐			
VERIFIED BY State of Tennessee/Carl Koontz			AVERAGE OPACITY FOR HIGHEST PERIOD 0.0			
DATE 2-17-14			NUMBER OF READING ABOVE % WERE			
DATE 5-16-14						
DATE 11-16-15						

VISIBLE EMISSION OBSERVATION

SOURCE NAME			OBSERVATION DATE				START TIME		STOP TIME	
Gerdau Ameristeel			2-18-16				9:42 Am		9:48 Am	
ADDRESS			SEC				MIN		COMMENTS	
801 Gerdau Ameristeel Rd			0 15 30 45							
CITY			1				2		3	
Jackson			0 0 0 0				0 0 0 0		0 0 0 0	
STATE			2				3		4	
IN			0 0 0 0				0 0 0 0		0 0 0 0	
ZIP			3				4		5	
38305			0 0 0 0				0 0 0 0		0 0 0 0	
PHONE			4				5		6	
(731) 424-5600			0 0 0 0				0 0 0 0		0 0 0 0	
SOURCE ID NUMBER			5				6		7	
57-0189-01			0 0 0 0				0 0 0 0		0 0 0 0	
PROCESS EQUIPMENT			6				7		8	
Electric Arc Furnace			0 0 0 0				0 0 0 0		0 0 0 0	
OPERATING MODE			7				8		9	
melt			0 0 0 0				0 0 0 0		0 0 0 0	
CONTROL EQUIPMENT			8				9		10	
None			0 0 0 0				0 0 0 0		0 0 0 0	
OPERATING MODE			9				10		11	
Continuous			0 0 0 0				0 0 0 0		0 0 0 0	
DESCRIBE EMISSION POINT			10				11		12	
Penthouse Canopy Top of Meltshop			0 0 0 0				0 0 0 0		0 0 0 0	
START			11				12		13	
HEIGHT ABOVE GROUND LEVEL			0 0 0 0				0 0 0 0		0 0 0 0	
120 ft			0 0 0 0				0 0 0 0		0 0 0 0	
STOP			12				13		14	
120 ft			0 0 0 0				0 0 0 0		0 0 0 0	
HEIGHT RELATIVE TO OBSERVER			13				14		15	
START			0 0 0 0				0 0 0 0		0 0 0 0	
120 ft			0 0 0 0				0 0 0 0		0 0 0 0	
STOP			14				15		16	
120 ft			0 0 0 0				0 0 0 0		0 0 0 0	
DISTANCE FROM OBSERVER			15				16		17	
START			0 0 0 0				0 0 0 0		0 0 0 0	
600 ft			0 0 0 0				0 0 0 0		0 0 0 0	
STOP			16				17		18	
600 ft			0 0 0 0				0 0 0 0		0 0 0 0	
DIRECTION FROM OBSERVER			17				18		19	
START			0 0 0 0				0 0 0 0		0 0 0 0	
NE			0 0 0 0				0 0 0 0		0 0 0 0	
STOP			18				19		20	
NE			0 0 0 0				0 0 0 0		0 0 0 0	
DESCRIBE VISIBLE EMISSIONS			19				20		21	
START			0 0 0 0				0 0 0 0		0 0 0 0	
STOP			20				21		22	
EMISSION COLOR			0 0 0 0				0 0 0 0		0 0 0 0	
IF WATER DROPLET PLUME:			21				22		23	
START			0 0 0 0				0 0 0 0		0 0 0 0	
STOP			22				23		24	
ATTACHED ☒ DETACHED ☐			0 0 0 0				0 0 0 0		0 0 0 0	
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			23				24		25	
START			0 0 0 0				0 0 0 0		0 0 0 0	
Outlet (exit)			0 0 0 0				0 0 0 0		0 0 0 0	
STOP			24				25		26	
Outlet (exit)			0 0 0 0				0 0 0 0		0 0 0 0	
DESCRIBE PLUME BACKGROUND			25				26		27	
START			0 0 0 0				0 0 0 0		0 0 0 0	
Sky			0 0 0 0				0 0 0 0		0 0 0 0	
STOP			26				27		28	
Sky			0 0 0 0				0 0 0 0		0 0 0 0	
BACKGROUND COLOR			27				28		29	
START			0 0 0 0				0 0 0 0		0 0 0 0	
Blue			0 0 0 0				0 0 0 0		0 0 0 0	
STOP			28				29		30	
White			0 0 0 0				0 0 0 0		0 0 0 0	
WIND SPEED			29				30		31	
START			0 0 0 0				0 0 0 0		0 0 0 0	
0-10 mph			0 0 0 0				0 0 0 0		0 0 0 0	
STOP			30				31		32	
0-10 mph			0 0 0 0				0 0 0 0		0 0 0 0	
WIND DIRECTION			31				32		33	
START			0 0 0 0				0 0 0 0		0 0 0 0	
W			0 0 0 0				0 0 0 0		0 0 0 0	
STOP			32				33		34	
W			0 0 0 0				0 0 0 0		0 0 0 0	
AMBIENT TEMP.			33				34		35	
START			0 0 0 0				0 0 0 0		0 0 0 0	
60°			0 0 0 0				0 0 0 0		0 0 0 0	
STOP			34				35		36	
60°			0 0 0 0				0 0 0 0		0 0 0 0	
WET BULB TEMP.			35				36		37	
RH, percent			36				37		38	
START			0 0 0 0				0 0 0 0		0 0 0 0	
60°			0 0 0 0				0 0 0 0		0 0 0 0	
STOP			37				38		39	
60°			0 0 0 0				0 0 0 0		0 0 0 0	
SOURCE LAYOUT SKETCH			38				39		40	
DRAW NORTH ARROW			39				40		41	
SUN  WIND 			40				41		42	
PLUME AND STACK 			41				42		43	
EMISSION POINT			42				43		44	
OBSERVER'S POSITION			43				44		45	
SUN LOCATION LINE			44				45		46	
140°			45				46		47	
APPLICABLE OPACITY STANDARD			46				47		48	
20 % OPACITY			47				48		49	
EPA METHOD 9 ☒ TVEE METHOD 2 ☐			48				49		50	
TVEE METHOD 1 ☐ TVEE METHOD 3 ☐			49				50		51	
AVERAGE OPACITY FOR HIGHEST PERIOD			50				51		52	
NUMBER OF READING ABOVE % WERE			51				52		53	
0 0			52				53		54	
OBSERVER'S NAME (PRINT)			53				54		55	
Roydell Herron			54				55		56	
OBSERVER'S SIGNATURE			55				56		57	
Roydell Herron			56				57		58	
DATE			57				58		59	
2-18-16			58				59		60	
ORGANIZATION			59				60		61	
Gerdau Ameristeel			60				61		62	
CERTIFICATION EXPIRATION DATE			61				62		63	
5-16-16			62				63		64	
VERIFIED BY			63				64		65	
State of Tennessee (Carl Koontz)			64				65		66	
DATE			65				66		67	
11-16-15			66				67		68	

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau Ameristeel			OBSERVATION DATE 2-19-14				START TIME 8:40pm		STOP TIME 1:46pm	
ADDRESS 801 Gerdau Ameristeel Rd			SEC MIN		0	15	30	45	COMMENTS	
CITY Jackson	STATE TN	ZIP 38305	1		0	0	0	0		
PHONE (731) 424-5600	SOURCE ID NUMBER 57-0189-01		2		0	0	0	0		
PROCESS EQUIPMENT Electric Arc Furnace	OPERATING MODE Melt		3		0	0	0	0		
CONTROL EQUIPMENT None	OPERATING MODE Continuous		4		0	0	0	0		
DESCRIBE EMISSION POINT Penthouse Canopy Top of Maltshop			5		0	0	0	0		
HEIGHT ABOVE GROUND LEVEL START 120 ft STOP 120 ft			6		0	0	0	0		
HEIGHT RELATIVE TO OBSERVER START 120 ft STOP 120 ft			7							
DISTANCE FROM OBSERVER START 600 ft STOP 600 ft			8							
DIRECTION FROM OBSERVER START NE STOP NE			9							
DESCRIBE VISIBLE EMISSIONS			10							
START			11							
STOP			12							
EMISSION COLOR			13							
IF WATER DROPLET PLUME:			14							
START			15							
STOP			16							
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			17							
START Outlet (exit)			18							
STOP Outlet (exit)			19							
DESCRIBE PLUME BACKGROUND			20							
START Sky			21							
STOP Sky			22							
BACKGROUND COLOR			23							
START Blue			24							
STOP Blue			25							
WIND SPEED			26							
START 10-15 mph			27							
STOP 70-15 mph			28							
WIND DIRECTION			29							
START S			30							
STOP S										
AMBIENT TEMP.										
START 70°										
STOP 70°										
WET BULB TEMP.										
RH, percent										
SOURCE LAYOUT SKETCH										
DRAW NORTH ARROW										
COMMENTS										
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS										
SIGNATURE										
TITLE										
DATE										
OBSERVER'S NAME (PRINT)										
OBSERVER'S SIGNATURE										
ORGANIZATION										
Gerdau Ameristeel										
VERIFIED BY										
State of Tennessee/Carl Koontz										
DATE										
2-19-14										
CERTIFICATION EXPIRATION DATE										
5-13-16										
DATE										
11-13-15										

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau Ameristeel			OBSERVATION DATE 2-23-16		START TIME 9:30 AM	STOP TIME 9:36 AM
ADDRESS 801 Gerdau Ameristeel Rd			SEC MIN	0	15	30
CITY Jackson			STATE TN		ZIP 38305	
PHONE (731) 424-5600			SOURCE ID NUMBER 57-0189-01			
PROCESS EQUIPMENT Electric Arc Furnace			OPERATING MODE Melt			
CONTROL EQUIPMENT None			OPERATING MODE Continuous			
DESCRIBE EMISSION POINT Penthouse Canopy Top of Meltshop			START			
HEIGHT ABOVE GROUND LEVEL START 120 ft STOP 120 ft			HEIGHT RELATIVE TO OBSERVER START 120 ft STOP 120 ft			
DISTANCE FROM OBSERVER START 600 ft STOP 600 ft			DIRECTION FROM OBSERVER START NE STOP NE			
DESCRIBE VISIBLE EMISSIONS			START			
EMISSION COLOR			IF WATER DROPLET PLUME			
START			STOP			
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			ATTACHED ☒ DETACHED ☐			
START Outlet (exit)			STOP Outlet (exit)			
DESCRIBE PLUME BACKGROUND			START Sky STOP Sky			
BACKGROUND COLOR			SKY CONDITIONS			
START Gray STOP Gray			START Cloudy STOP Cloudy			
WIND SPEED			WIND DIRECTION			
START 5-10 STOP 5-10			START N STOP N			
AMBIENT TEMP.			WET BULB TEMP.			
START 52° STOP 52°			RH. percent			
SOURCE LAYOUT SKETCH			DRAW NORTH ARROW			
COMMENTS			APPLICABLE OPACITY STANDARD 20 % OPACITY			
			EPA METHOD 9 ☒ TVEE METHOD 2 ☐			
			TVEE METHOD 1 ☐ TVEE METHOD 3 ☐			
			AVERAGE OPACITY FOR HIGHEST PERIOD			
			NUMBER OF READING ABOVE % WERE			
			OBSERVER'S NAME (PRINT) Mike Johnson			
			OBSERVER'S SIGNATURE Mike Johnson			
			DATE 2-23-16			
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			ORGANIZATION Gerdau Ameristeel			
SIGNATURE			CERTIFICATION EXPIRATION DATE 5-13-16			
TITLE			DATE 11-13-15			
			VERIFIED BY State of Tennessee/Carl Koon			

VISIBLE EMISSION OBSERVATION

SOURCE NAME			OBSERVATION DATE				START TIME		STOP TIME	
Gerdau Ameristeel			2-24-16				12:50pm		12:56pm	
ADDRESS			SEC	0	15	30	45	COMMENTS		
801 Gerdau Ameristeel Rd			MIN							
CITY			1	0	0	0	0			
STATE			2	0	0	0	0			
ZIP			3	0	0	0	0			
PHONE			4	0	0	0	0			
(731) 424-5600			5	0	0	0	0			
SOURCE ID NUMBER			6	0	0	0	0			
57-0189-01			7							
PROCESS EQUIPMENT			8							
Electric Arc Furnace			9							
OPERATING MODE			10							
Melt			11							
CONTROL EQUIPMENT			12							
None			13							
OPERATING MODE			14							
Continuous			15							
DESCRIBE EMISSION POINT			16							
Penthouse Canopy Top of Meltshop			17							
HEIGHT ABOVE GROUND LEVEL			18							
START 120 ft STOP 120 ft			19							
HEIGHT RELATIVE TO OBSERVER			20							
START 120 ft STOP 120 ft			21							
DISTANCE FROM OBSERVER			22							
START 600 ft STOP 600 ft			23							
DIRECTION FROM OBSERVER			24							
START NE STOP NE			25							
DESCRIBE VISIBLE EMISSIONS			26							
START			27							
STOP			28							
EMISSION COLOR			29							
START			30							
STOP			31							
IF WATER DROPLET PLUME:			32							
ATTACHED ☐ DETACHED ☐			33							
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			34							
START Outlet (exit) STOP Outlet (exit)			35							
DESCRIBE PLUME BACKGROUND			36							
START Sky STOP Sky			37							
BACKGROUND COLOR			38							
START Green STOP Green			39							
SKY CONDITIONS			40							
START Cloudy STOP Cloudy			41							
WIND SPEED			42							
START 5-10mph STOP 5-10mph			43							
WIND DIRECTION			44							
START N STOP N			45							
AMBIENT TEMP.			46							
START 37° STOP 37°			47							
WET BULB TEMP.			48							
RH. percent			49							
SOURCE LAYOUT SKETCH			50							
DRAW NORTH ARROW			51							
			52							
SUN WIND PLUME AND STACK			53							
COMMENTS			54							
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			55							
SIGNATURE			56							
TITLE			57							
DATE			58							
OBSERVER'S NAME (PRINT)			59							
Mike Johnson			60							
OBSERVER'S SIGNATURE			61							
Mike Johnson			62							
ORGANIZATION			63							
Gerdau Ameristeel			64							
VERIFIED BY			65							
State of Tennessee/Carl Kooner			66							
DATE			67							
11-13-15			68							

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau Ameristeel			OBSERVATION DATE 2-25-16		START TIME 10:10 AM		STOP TIME 10:10 AM	
ADDRESS 801 Gerdau Ameristeel Rd			SEC MIN	0	15	30	45	COMMENTS
			1	0	0	0	0	
CITY Jackson	STATE TN	ZIP 38305	2	0	0	0	0	
PHONE (731) 424-5600	SOURCE ID NUMBER 57-0189-01		3	0	0	0	0	
PROCESS EQUIPMENT Electric Arc Furnace	OPERATING MODE Melt		4	0	0	0	0	
CONTROL EQUIPMENT None	OPERATING MODE Continuous		5	0	0	0	0	
DESCRIBE EMISSION POINT Penthouse Canopy Top of Meltshop			6	0	0	0	0	
HEIGHT ABOVE GROUND LEVEL START 120 ft STOP 120 ft			7					
HEIGHT RELATIVE TO OBSERVER START 120 ft STOP 120 ft			8					
DISTANCE FROM OBSERVER START 600 ft STOP 600 ft			9					
DIRECTION FROM OBSERVER START NE STOP NE			10					
DESCRIBE VISIBLE EMISSIONS			11					
START STOP			12					
EMISSION COLOR			13					
IF WATER DROPLET PLUME:			14					
START STOP ATTACHED DETACHED			15					
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			16					
START Outlet (exit) STOP Outlet (exit)			17					
DESCRIBE PLUME BACKGROUND			18					
START Sky STOP Sky			19					
BACKGROUND COLOR			20					
START Blue/White STOP Blue/White			21					
WIND SPEED			22					
START 5-10 mph STOP 5-10 mph			23					
WIND DIRECTION			24					
START W STOP W			25					
AMBIENT TEMP.			26					
START 43° STOP 43°			27					
WET BULB TEMP.			28					
RH, percent			29					
SOURCE LAYOUT SKETCH			30					
DRAW NORTH ARROW								
COMMENTS			APPLICABLE OPACITY STANDARD 20 % OPACITY AVERAGE OPACITY FOR HIGHEST PERIOD 0 0 NUMBER OF READING ABOVE % WERE 0 0					
OBSERVER'S NAME (PRINT) Mike Johnson			OBSERVER'S SIGNATURE Mike Johnson					
DATE 2-25-16			DATE 2-25-16					
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			CERTIFICATION-EXPIRATION DATE 5-13-16					
SIGNATURE			ORGANIZATION Gerdau Ameristeel					
TITLE			VERIFIED BY State of Tennessee Carl Koonz					
DATE			DATE 11-13-15					

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau Ameristeel			OBSERVATION DATE 2-26-16		START TIME 10:20 am	STOP TIME 10:26 am
ADDRESS 801 Gerdau Ameristeel Rd			SEC	0	15	30
			MIN	45	COMMENTS	
CITY Jackson			1	0	0	0
STATE TN			2	0	0	0
ZIP 38305			3	0	0	0
PHONE (731) 424-5600			4	0	0	0
SOURCE ID NUMBER 57-0189-01			5	0	0	0
PROCESS EQUIPMENT Electric Arc Furnace			6	0	0	0
OPERATING MODE Melt			7			
CONTROL EQUIPMENT None			8			
OPERATING MODE Continuous			9			
DESCRIBE EMISSION POINT Penthouse Canopy Top of Meltshop			10			
START			11			
HEIGHT ABOVE GROUND LEVEL START 120 ft STOP 120 ft			12			
HEIGHT RELATIVE TO OBSERVER START 120 ft STOP 120 ft			13			
DISTANCE FROM OBSERVER START 600 ft STOP 600 ft			14			
DIRECTION FROM OBSERVER START NE STOP NE			15			
DESCRIBE VISIBLE EMISSIONS			16			
START			17			
EMISSION COLOR			18			
IF WATER DROPLET PLUME:			19			
START			20			
STOP			21			
ATTACHED ☐ DETACHED ☐			22			
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			23			
START Outlet (exit)			24			
STOP Outlet (exit)			25			
DESCRIBE PLUME BACKGROUND			26			
START Sky			27			
STOP Sky			28			
BACKGROUND COLOR			29			
START Blue			30			
STOP Blue			31			
SKY CONDITIONS			32			
START Clear			33			
STOP Clear			34			
WIND SPEED			35			
START 5-10			36			
STOP 5-10			37			
WIND DIRECTION			38			
START W			39			
STOP W			40			
AMBIENT TEMP.			41			
START 50°			42			
STOP 50°			43			
WET BULB TEMP.			44			
RH, percent			45			
SOURCE LAYOUT SKETCH			46			
DRAW NORTH ARROW			47			
SUN  WIND 			48			
PLUME AND STACK 			49			
X EMISSION POINT			50			
OBSERVER'S POSITION			51			
140°			52			
SUN LOCATION LINE			53			
COMMENTS			54			
OBSERVER'S NAME (PRINT) Mike Johnson			55			
OBSERVER'S SIGNATURE Mike Johnson			56			
DATE 2-26-16			57			
ORGANIZATION Gerdau Ameristeel			58			
CERTIFICATION EXPIRATION DATE 5-13-16			59			
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			60			
SIGNATURE			61			
TITLE			62			
DATE			63			
VERIFIED BY State of Tennessee (Carl Koontz)			64			
DATE 11-13-15			65			



VISIBLE EMISSION OBSERVATION

SOURCE NAME			OBSERVATION DATE			START TIME		STOP TIME	
Gerdau Ameristeel			2-27-16			12:40 PM		12:46 PM	
ADDRESS			MIN	SEC	0	15	30	45	COMMENTS
801 Gerdau Ameristeel Rd									
CITY	STATE	ZIP	1						
Jackson	TN	38305	2						
PHONE	SOURCE ID NUMBER		3						
(731) 424-5600	57-0189-01		4						
PROCESS EQUIPMENT		OPERATING MODE	5						
Electric Arc Furnace			6						
CONTROL EQUIPMENT		OPERATING MODE	7						
None		Continuous	8						
DESCRIBE EMISSION POINT			9						
START Penthouse Canopy Top of Meltshop			10						
HEIGHT ABOVE GROUND LEVEL			11						
START 120 ft STOP 120 ft			12						
HEIGHT RELATIVE TO OBSERVER			13						
START 120 ft STOP 120 ft			14						
DISTANCE FROM OBSERVER			15						
START 600 ft STOP 600 ft			16						
DIRECTION FROM OBSERVER			17						
START NE STOP NE			18						
DESCRIBE VISIBLE EMISSIONS			19						
START			20						
STOP			21						
EMISSION COLOR			22						
START			23						
STOP			24						
IF WATER DROPLET PLUME:			25						
ATTACHED DETACHED			26						
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			27						
START Outlet (exit) STOP Outlet (exit)			28						
DESCRIBE PLUME BACKGROUND			29						
START Sky STOP Sky			30						
BACKGROUND COLOR			31						
START Blue STOP Blue			32						
SKY CONDITIONS			33						
START Clear STOP Clear			34						
WIND SPEED			35						
START 15/20 STOP 15/20			36						
WIND DIRECTION			37						
START SW STOP SW			38						
AMBIENT TEMP.			39						
START 64° STOP 64°			40						
WET BULB TEMP.			41						
RH, percent			42						
SOURCE LAYOUT SKETCH			43						
DRAW NORTH ARROW			44						
			45						
APPLICABLE OPACITY STANDARD			46						
20 % OPACITY			47						
AVERAGE OPACITY FOR HIGHEST PERIOD			48						
NUMBER OF READING ABOVE % WERE			49						
COMMENTS			50						
OBSERVER'S NAME (PRINT)			51						
Tony Penny			52						
OBSERVER'S SIGNATURE			53						
DATE			54						
2-27-16			55						
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			56						
ORGANIZATION			57						
Gerdau Ameristeel			58						
CERTIFICATION EXPIRATION DATE			59						
5-16-16			60						
VERIFIED BY			61						
State of Tennessee/Carl Koontz			62						
DATE			63						
11-16-15			64						

VISIBLE EMISSION OBSERVATION

SOURCE NAME			OBSERVATION DATE		START TIME	STOP TIME
Gerdau Ameristeel			3-1-16		10:05 Am	10:11 Am
ADDRESS			SEC	0	15	30
801 Gerdau Ameristeel Rd			MIN			
						COMMENTS
CITY	STATE	ZIP	1	0	0	0
Jackson	TN	38305	2	0	0	0
PHONE	SOURCE ID NUMBER		3	0	0	0
(731) 424-5600	57-0189-01		4	0	0	0
PROCESS EQUIPMENT	OPERATING MODE		5	0	0	0
Electric Arc Furnace	melt		6	0	0	0
CONTROL EQUIPMENT	OPERATING MODE		7			
None	Continuous		8			
DESCRIBE EMISSION POINT			9			
Penthouse Canopy Top of Maltshop			10			
START	STOP	START	11			
HEIGHT ABOVE GROUND LEVEL	HEIGHT RELATIVE TO OBSERVER		12			
START 120 ft STOP 120 ft	START 120 ft STOP 120 ft		13			
DISTANCE FROM OBSERVER	DIRECTION FROM OBSERVER		14			
START 600 ft STOP 600 ft	START NE STOP NE		15			
DESCRIBE VISIBLE EMISSIONS			16			
START	STOP	START	17			
EMISSION COLOR	IF WATER DROPLET PLUME:		18			
START	STOP	ATTACHED DETACHED	19			
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			20			
START Outlet (exit) STOP Outlet (exit)			21			
DESCRIBE PLUME BACKGROUND			22			
START Sky STOP Sky	SKY CONDITIONS		23			
BACKGROUND COLOR	START cloudy STOP cloudy		24			
START gray STOP gray	WIND DIRECTION		25			
WIND SPEED	START W STOP W		26			
START 0-10 mph STOP 0-10 mph	WET BULB TEMP.		27			
AMBIENT TEMP.	RH, percent		28			
START 67° STOP 67°			29			
SOURCE LAYOUT SKETCH			30			
DRAW NORTH ARROW						
SUN LOCATION LINE 140° NO SUN						
COMMENTS			APPLICABLE OPACITY STANDARD			
			EPA METHOD 9 ☒ TVEE METHOD 2 ☐			
			20 % OPACITY			
			TVEE METHOD 1 ☐ TVEE METHOD 3 ☐			
			AVERAGE OPACITY FOR HIGHEST PERIOD			
			NUMBER OF READING ABOVE % WERE			
			0 0			
			OBSERVER'S NAME (PRINT)			
			Raydell Herron			
			OBSERVER'S SIGNATURE			
			Raydell Herron			
			DATE			
			3-1-16			
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			ORGANIZATION			
			Gerdau Ameristeel			
SIGNATURE			VERIFIED BY			
TITLE			State of Tennessee			
DATE			Carl Koontz			
			DATE			
			5-16-16			
			DATE			
			11-16-15			

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau Ameristeel			OBSERVATION DATE 3-2-16				START TIME 10:00 AM		STOP TIME 10:06 AM	
ADDRESS 801 Gerdau Ameristeel Rd			SEC MIN		0	15	30	45	COMMENTS	
CITY Jackson			STATE TN		ZIP 38305					
PHONE (731) 424-5600			SOURCE ID NUMBER 57-0189-01							
PROCESS EQUIPMENT Electric Arc Furnace			OPERATING MODE <i>smelt</i>							
CONTROL EQUIPMENT None			OPERATING MODE Continuous							
DESCRIBE EMISSION POINT Penthouse Canopy Top of Meltshop										
START HEIGHT ABOVE GROUND LEVEL 120 ft			STOP 120 ft							
START DISTANCE FROM OBSERVER 600 ft			STOP 600 ft							
START DIRECTION FROM OBSERVER NE			STOP NE							
DESCRIBE VISIBLE EMISSIONS										
START EMISSION COLOR			STOP							
START IF WATER DROPLET PLUME			STOP							
START ATTACHED			STOP DETACHED							
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED										
START Outlet (exit)			STOP Outlet (exit)							
DESCRIBE PLUME BACKGROUND										
START Sky			STOP Sky							
START BACKGROUND COLOR			STOP							
START WIND SPEED			STOP							
START WIND DIRECTION			STOP							
START AMBIENT TEMP.			STOP							
START WET BULB TEMP.			STOP							
START RH, percent			STOP							
SOURCE LAYOUT SKETCH			DRAW NORTH ARROW							
SUN  WIND 			PLUME AND STACK 							
X EMISSION POINT			OBSERVER'S POSITION							
SUN LOCATION LINE										
COMMENTS										
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS										
SIGNATURE			DATE							
TITLE			DATE							
OBSERVER'S NAME (PRINT) Royalell Herrow			OBSERVER'S SIGNATURE Royalell Herrow		DATE 3-2-16					
ORGANIZATION Gerdau Ameristeel			VERIFIED BY State of Tennessee, Carl Koontz		CERTIFICATION EXPIRATION DATE 5-16-16					
					DATE 11-16-15					

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau Ameristeel			OBSERVATION DATE 3-3-14				START TIME 9:35 Am		STOP TIME 9:41 Am			
ADDRESS 801 Gerdau Ameristeel Rd			SEC MIN		0	15	30	45	COMMENTS			
			1		0	0	0	0				
CITY Jackson			STATE TN		ZIP 38305		2		0	0	0	0
PHONE (731) 424-5600			SOURCE ID NUMBER 57-0189-01		3		0		0	0	0	
PROCESS EQUIPMENT Electric Arc Furnace			OPERATING MODE melt		4		0		0	0	0	
CONTROL EQUIPMENT None			OPERATING MODE Continuous		5		0		0	0	0	
DESCRIBE EMISSION POINT Penthouse Canopy Top of Maltshop			6		0		0		0	0	0	
START			7									
HEIGHT ABOVE GROUND LEVEL START 120 ft STOP 120 ft			8									
HEIGHT RELATIVE TO OBSERVER START 120 ft STOP 120 ft			9									
DISTANCE FROM OBSERVER START 600 ft STOP 600 ft			10									
DIRECTION FROM OBSERVER START NE STOP NE			11									
DESCRIBE VISIBLE EMISSIONS			12									
START			13									
EMISSION COLOR			14									
IF WATER DROPLET PLUME:			15									
START			16									
STOP			17									
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			18									
START Outlet (exit)			19									
STOP Outlet (exit)			20									
DESCRIBE PLUME BACKGROUND			21									
START Sky			22									
STOP Sky			23									
BACKGROUND COLOR			24									
START gray STOP gray			25									
WIND SPEED			26									
START 0-10 mph STOP 0-10 mph			27									
WIND DIRECTION			28									
START W STOP W			29									
AMBIENT TEMP.			30									
START 40° STOP 40°												
WET BULB TEMP.												
RH, percent												
SUN  WIND 			SOURCE LAYOUT SKETCH		DRAW NORTH ARROW							
PLUME AND STACK 												
X EMISSION POINT												
OBSERVER'S POSITION												
SUN LOCATION LINE												
140°												
NWSUN												
COMMENTS			APPLICABLE OPACITY STANDARD		EPA METHOD 9 ☒ TVEE METHOD 2 ☐							
			20 % OPACITY		TVEE METHOD 1 ☐ TVEE METHOD 3 ☐							
			AVERAGE OPACITY FOR HIGHEST PERIOD		NUMBER OF READING ABOVE % WERE		0 0					
			OBSERVER'S NAME (PRINT)		ROYDELL HERRON							
			OBSERVER'S SIGNATURE		ROYDELL HERRON		DATE					
			ORGANIZATION		Gerdau Ameristeel		3-3-14					
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			VERIFIED BY		State of Tennessee (Carl Koontz)		CERTIFICATION EXPIRATION DATE					
SIGNATURE			DATE		15-16-14		DATE					
TITLE			DATE		11-16-15							

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau Ameristeel			OBSERVATION DATE 3-4-14			START TIME 10:00 Am		STOP TIME 10:06 Am	
ADDRESS 801 Gerdau Ameristeel Rd			SEC MIN		0	15	30	45	COMMENTS
CITY Jackson	STATE TN	ZIP 38305	1		0	0	0	0	
PHONE (731) 424-5600	SOURCE ID NUMBER 57-0189-01		2		0	0	0	0	
PROCESS EQUIPMENT Electric Arc Furnace	OPERATING MODE melt		3		0	0	0	0	
CONTROL EQUIPMENT None	OPERATING MODE Continuous		4		0	0	0	0	
DESCRIBE EMISSION POINT Penthouse Canopy Top of Maltshop			5		0	0	0	0	
HEIGHT ABOVE GROUND LEVEL START 120 ft STOP 120 ft			6		0	0	0	0	
HEIGHT RELATIVE TO OBSERVER START 120 ft STOP 120 ft			7						
DISTANCE FROM OBSERVER START 600 ft STOP 600 ft			8						
DIRECTION FROM OBSERVER START NE STOP NE			9						
DESCRIBE VISIBLE EMISSIONS			10						
START STOP			11						
EMISSION COLOR			12						
IF WATER DROPLET PLUME			13						
START STOP			14						
ATTACHED DETACHED			15						
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			16						
START Outlet (exit) STOP Outlet (exit)			17						
DESCRIBE PLUME BACKGROUND			18						
START Sky STOP Sky			19						
BACKGROUND COLOR			20						
START gray STOP gray			21						
WIND SPEED			22						
START 8-10 mph STOP 0-10 mph			23						
WIND DIRECTION			24						
START W STOP W			25						
AMBIENT TEMP.			26						
START 60° STOP 60°			27						
WET BULB TEMP.			28						
RH, percent			29						
SOURCE LAYOUT SKETCH			30						
DRAW NORTH ARROW			31						
SUN  WIND 			32						
PLUME AND STACK 			33						
X EMISSION POINT			34						
OBSERVER'S POSITION			35						
SUN LOCATION LINE			36						
COMMENTS			37						
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			38						
SIGNATURE			39						
TITLE			40						
DATE			41						
OBSERVER'S NAME (PRINT) Roydell Herron			42						
OBSERVER'S SIGNATURE Roydell Herron			43						
ORGANIZATION Gerdau Ameristeel			44						
VERIFIED BY State of Tennessee, Carl Koontz			45						
APPLICABLE OPACITY STANDARD 20 % OPACITY			46						
EPA METHOD 9 ☒ TVEE METHOD 2 ☐			47						
TVEE METHOD 1 ☐ TVEE METHOD 3 ☐			48						
AVERAGE OPACITY FOR HIGHEST PERIOD			49						
NUMBER OF READING ABOVE % WERE			50						
DATE 3-4-14			51						
CERTIFICATION EXPIRATION DATE 5-16-14			52						
DATE 11-16-15			53						

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau Ameristeel			OBSERVATION DATE 3-8-14					START TIME 11:05 Am		STOP TIME 11:11 Am	
ADDRESS 801 Gerdau Ameristeel Rd			SEC MIN		0	15	30	45	COMMENTS		
CITY Jackson			STATE TN		ZIP 38305						
PHONE (731) 424-5600			SOURCE ID NUMBER 57-0189-01								
PROCESS EQUIPMENT Electric Arc Furnace			OPERATING MODE melt								
CONTROL EQUIPMENT None			OPERATING MODE Continuous								
DESCRIBE EMISSION POINT Penthouse Canopy Top of Meltshop											
HEIGHT ABOVE GROUND LEVEL START 120 ft STOP 120 ft			HEIGHT RELATIVE TO OBSERVER START 120 ft STOP 120 ft								
DISTANCE FROM OBSERVER START 600 ft STOP 600 ft			DIRECTION FROM OBSERVER START NE STOP NE								
DESCRIBE VISIBLE EMISSIONS											
EMISSION COLOR			IF WATER DROPLET PLUME:								
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED START Outlet (exit) STOP Outlet (exit)											
DESCRIBE PLUME BACKGROUND											
BACKGROUND COLOR START Sky STOP Sky			SKY CONDITIONS								
WIND SPEED START 0-10 mph STOP 0-10 mph			WIND DIRECTION START W STOP W								
AMBIENT TEMP. START 65.0 STOP 65.0			WET BULB TEMP. RH, percent								
SOURCE LAYOUT SKETCH DRAW NORTH ARROW											
SUN LOCATION LINE 140°											
OBSERVER'S POSITION											
COMMENTS											
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			OBSERVER'S NAME (PRINT) Roy dell Herron								
SIGNATURE			OBSERVER'S SIGNATURE Roy dell Herron						DATE 3-8-14		
TITLE			ORGANIZATION Gerdau Ameristeel						CERTIFICATION-EXPIRATION DATE 5-14-14		
			VERIFIED BY State of Tennessee/Carl Koontz						DATE 11-14-15		

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau Ameristeel			OBSERVATION DATE 3-9-14		START TIME 12:15 pm	STOP TIME 12:21 pm
ADDRESS 801 Gerdau Ameristeel Rd			SEC	0	15	30
			MIN	45	COMMENTS	
CITY Jackson			1	0	0	0
STATE TN			2	0	0	0
ZIP 38305			3	0	0	0
PHONE (731) 424-5600			4	0	0	0
SOURCE ID NUMBER 57-0189-01			5	0	0	0
PROCESS EQUIPMENT Electric Arc Furnace			6	0	0	0
OPERATING MODE Melt			7			
CONTROL EQUIPMENT None			8			
OPERATING MODE Continuous			9			
DESCRIBE EMISSION POINT Penthouse Canopy Top of Meltshop			10			
START			11			
HEIGHT ABOVE GROUND LEVEL START 120 ft STOP 120 ft			12			
HEIGHT RELATIVE TO OBSERVER START 120 ft STOP 120 ft			13			
DISTANCE FROM OBSERVER START 600 ft STOP 600 ft			14			
DIRECTION FROM OBSERVER START NE STOP NE			15			
DESCRIBE VISIBLE EMISSIONS			16			
START			17			
STOP			18			
EMISSION COLOR			19			
IF WATER DROPLET PLUME:			20			
START			21			
STOP			22			
ATTACHED L. DETACHED .			23			
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			24			
START Outlet (exit)			25			
STOP Outlet (exit)			26			
DESCRIBE PLUME BACKGROUND			27			
START Sky			28			
STOP Sky			29			
BACKGROUND COLOR			30			
START Gray			31			
STOP Gray			32			
WIND SPEED			33			
START 5-10			34			
STOP 5-10			35			
WIND DIRECTION			36			
START W			37			
STOP W			38			
AMBIENT TEMP.			39			
START 70			40			
STOP 70°			41			
WET BULB TEMP.			42			
RH, percent			43			
SOURCE LAYOUT SKETCH			44			
DRAW NORTH ARROW			45			
			46			
			47			
COMMENTS			48			
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			49			
SIGNATURE			50			
TITLE			51			
DATE			52			
OBSERVER'S NAME (PRINT) Mike Johnson			53			
OBSERVER'S SIGNATURE Mike Johnson			54			
DATE 3-9-14			55			
ORGANIZATION Gerdau Ameristeel			56			
CERTIFICATION-EXPIRATION DATE 5-13-16			57			
VERIFIED BY State of Tennessee/Carl Koontz			58			
DATE 11-13-15			59			

VISIBLE EMISSION OBSERVATION

SOURCE NAME			OBSERVATION DATE		START TIME		STOP TIME
Gerdau Ameristeel			3-10-16		10:00 AM		10:06 AM
ADDRESS			SEC	0	15	30	45
801 Gerdau Ameristeel Rd			MIN				COMMENTS
CITY	STATE	ZIP	1	0	0	0	
Jackson	TN	38305	2	0	0	0	
PHONE	SOURCE ID NUMBER		3	0	0	0	
(731) 424-5600	57-0189-01		4	0	0	0	
PROCESS EQUIPMENT	OPERATING MODE		5	0	0	0	
Electric Arc Furnace	Melt		6	0	0	0	
CONTROL EQUIPMENT	OPERATING MODE		7				
None	Continuous		8				
DESCRIBE EMISSION POINT			9				
Penthouse Canopy Top of Meltshop			10				
START	STOP	START	11				
HEIGHT ABOVE GROUND LEVEL	HEIGHT RELATIVE TO OBSERVER		12				
START 120 ft STOP 120 ft	START 120 ft STOP 120 ft		13				
DISTANCE FROM OBSERVER	DIRECTION FROM OBSERVER		14				
START 600 ft STOP 600 ft	START NE STOP NE		15				
DESCRIBE VISIBLE EMISSIONS			16				
START	STOP	START	17				
EMISSION COLOR	IF WATER DROPLET PLUME:		18				
START	STOP	ATTACHED ☐ DETACHED ☐	19				
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			20				
START Outlet (exit)	STOP Outlet (exit)		21				
DESCRIBE PLUME BACKGROUND			22				
START Sky	STOP Sky	START	23				
BACKGROUND COLOR	SKY CONDITIONS		24				
START Gray STOP Gray	START Cloudy STOP Cloudy		25				
WIND SPEED	WIND DIRECTION		26				
START 5-10 STOP 5-10	START S STOP S		27				
AMBIENT TEMP.	WET BULB TEMP.		28				
START 62° STOP 62°	RH, percent		29				
SOURCE LAYOUT SKETCH			30				
DRAW NORTH ARROW							
SUN WIND PLUME AND STACK							
COMMENTS			APPLICABLE OPACITY STANDARD 20 % OPACITY				
			EPA METHOD 9 ☒ TVEE METHOD 2 ☐ TVEE METHOD 1 ☐ TVEE METHOD 3 ☐				
			AVERAGE OPACITY FOR HIGHEST PERIOD 0 0				
			NUMBER OF READING ABOVE %WERE 0 0				
OBSERVER'S NAME (PRINT)			Mike Johnson				
OBSERVER'S SIGNATURE							
DATE			3-10-16				
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			ORGANIZATION Gerdau Ameristeel				
SIGNATURE			CERTIFICATION-EXPIRATION DATE 5-13-16				
TITLE			VERIFIED BY State of Tennessee/Carl Koontz				
DATE			DATE 11-13-15				

VISIBLE EMISSION OBSERVATION

SOURCE NAME			OBSERVATION DATE			START TIME		STOP TIME	
Gerdau Ameristeel			3-11-14			8:00 AM		8:06 AM	
ADDRESS			SEC	0	15	30	45	COMMENTS	
801 Gerdau Ameristeel Rd			MIN						
CITY			1	0	0	0	0		
JACKSON			2	0	0	0	0		
STATE			3	0	0	0	0		
IN			4	0	0	0	0		
ZIP			5	0	0	0	0		
38305			6	0	0	0	0		
PHONE			7						
(731) 424-5600			8						
SOURCE ID NUMBER			9						
57-0189-01			10						
PROCESS EQUIPMENT			11						
Electric Arc Furnace			12						
OPERATING MODE			13						
None			14						
CONTROL EQUIPMENT			15						
None			16						
OPERATING MODE			17						
Continuous			18						
DESCRIBE EMISSION POINT			19						
Penthouse Canopy Top of Maltshop			20						
START			21						
STOP			22						
HEIGHT ABOVE GROUND LEVEL			23						
START 120 ft STOP 120 ft			24						
HEIGHT RELATIVE TO OBSERVER			25						
START 120 ft STOP 120 ft			26						
DISTANCE FROM OBSERVER			27						
START 600 ft STOP 600 ft			28						
DIRECTION FROM OBSERVER			29						
START NE STOP NE			30						
DESCRIBE VISIBLE EMISSIONS									
START									
STOP									
EMISSION COLOR									
IF WATER DROPLET PLUME:									
START									
STOP									
ATTACHED ☐ DETACHED ☐									
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED									
START Outlet (exit) STOP Outlet (exit)									
DESCRIBE PLUME BACKGROUND									
START Sky STOP Sky									
BACKGROUND COLOR									
START Gray STOP Gray									
SKY CONDITIONS									
START Cloudy STOP Cloudy									
WIND SPEED									
START 5-10 mph STOP 5-10 mph									
WIND DIRECTION									
START N STOP N									
AMBIENT TEMP.									
START 54° STOP 54°									
WET BULB TEMP.									
RH, percent									
SOURCE LAYOUT SKETCH									
DRAW NORTH ARROW									
SUN WIND PLUME AND STACK									
COMMENTS									
APPLICABLE OPACITY STANDARD									
20 % OPACITY									
EPA METHOD 9 ☒ TVEE METHOD 2 ☐									
TVEE METHOD 1 ☐ TVEE METHOD 3 ☐									
AVERAGE OPACITY FOR HIGHEST PERIOD									
NUMBER OF READING ABOVE % WERE									
0 0									
OBSERVER'S NAME (PRINT)									
Mike Johnson									
OBSERVER'S SIGNATURE									
mil Johnson									
DATE									
3-11-14									
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS									
ORGANIZATION									
Gerdau Ameristeel									
VERIFIED BY									
State of Tennessee/Carl Koontz									
SIGNATURE									
TITLE									
DATE									
11-13-15									

VISIBLE EMISSION OBSERVATION

SOURCE NAME			OBSERVATION DATE				START TIME	STOP TIME
Gerdau Ameristeel			3-15-16				9:40 AM	9:46 AM
ADDRESS			MIN	SEC	0	15	30	45
801 Gerdau Ameristeel Rd			COMMENTS					
CITY	STATE	ZIP	1	0	0	0	0	
Jackson	TN	38305	2	0	0	0	0	
PHONE	SOURCE ID NUMBER		3	0	0	0	0	
(731) 424-5600	57-0189-01		4	0	0	0	0	
PROCESS EQUIPMENT	OPERATING MODE		5	0	0	0	0	
Electric Arc Furnace	melt		6	0	0	0	0	
CONTROL EQUIPMENT	OPERATING MODE		7					
None	Continuous		8					
DESCRIBE EMISSION POINT			9					
Penthouse Canopy Top of Meltshop			10					
HEIGHT ABOVE GROUND LEVEL	HEIGHT RELATIVE TO OBSERVER		11					
START 120 ft STOP 120 ft	START 120 ft STOP 120 ft		12					
DISTANCE FROM OBSERVER	DIRECTION FROM OBSERVER		13					
START 600 ft STOP 600 ft	START NE STOP NE		14					
DESCRIBE VISIBLE EMISSIONS			15					
START	STOP		16					
EMISSION COLOR	IF WATER DROPLET PLUME:		17					
START	STOP		18					
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED	ATTACHED DETACHED		19					
START Outlet (exit)	STOP Outlet (exit)		20					
DESCRIBE PLUME BACKGROUND			21					
START Sky	STOP Sky		22					
BACKGROUND COLOR	SKY CONDITIONS		23					
START blue	STOP blue		24					
WIND SPEED	WIND DIRECTION		25					
START 0-10 mph	STOP 0-10 mph		26					
AMBIENT TEMP.	WET BULB TEMP.		27					
START 70°	STOP 70°		28					
SOURCE LAYOUT SKETCH			29					
DRAW NORTH ARROW			30					
			APPLICABLE OPACITY STANDARD 20 % OPACITY					
SUN WIND PLUME AND STACK			EPA METHOD 9 ☒ TVEE METHOD 2 ☐ TVEE METHOD 1 ☐ TVEE METHOD 3 ☐					
COMMENTS			AVERAGE OPACITY FOR HIGHEST PERIOD 00					
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			OBSERVER'S NAME (PRINT) Roydell Herron					
SIGNATURE			OBSERVER'S SIGNATURE Roydell Herron					
TITLE			DATE 3-15-16					
DATE			CERTIFICATION EXPIRATION DATE 5-16-16					
VERIFIED BY			DATE 11-16-15					
State of Tennessee			Carl Koontz					

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau Ameristeel			OBSERVATION DATE 3-16-14			START TIME 11:00 Am		STOP TIME 11:06 Am	
ADDRESS 801 Gerdau Ameristeel Rd			SEC MIN		0	15	30	45	COMMENTS
CITY Jackson	STATE TN	ZIP 38305	1		0	0	0	0	
PHONE (731) 424-5600	SOURCE ID NUMBER 57-0189-01		2		0	0	0	0	
PROCESS EQUIPMENT Electric Arc Furnace	OPERATING MODE melt		3		0	0	0	0	
CONTROL EQUIPMENT None	OPERATING MODE Continuous		4		0	0	0	0	
DESCRIBE EMISSION POINT Penthouse Canopy Top of Maltshop			5		0	0	0	0	
START STOP			6		0	0	0	0	
HEIGHT ABOVE GROUND LEVEL START 120 ft STOP 120 ft			7						
HEIGHT RELATIVE TO OBSERVER START 120 ft STOP 120 ft			8						
DISTANCE FROM OBSERVER START 600 ft STOP 600 ft			9						
DIRECTION FROM OBSERVER START NE STOP NE			10						
DESCRIBE VISIBLE EMISSIONS			11						
START STOP			12						
EMISSION COLOR IF WATER DROPLET PLUME:			13						
START STOP			14						
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			15						
START Outlet (exit) STOP Outlet (exit)			16						
DESCRIBE PLUME BACKGROUND			17						
START Sky STOP Sky			18						
BACKGROUND COLOR blue SKY CONDITIONS			19						
START white STOP white			20						
WIND SPEED START 0-10 mph STOP 0-10 mph			21						
WIND DIRECTION START W STOP W			22						
AMBIENT TEMP. START 64° STOP 64°			23						
WET BULB TEMP. RH, percent			24						
SOURCE LAYOUT SKETCH			25						
DRAW NORTH ARROW			26						
SUN  WIND 			27						
PLUME AND STACK 			28						
EMISSION POINT			29						
OBSERVER'S POSITION			30						
SUN LOCATION LINE			APPLICABLE OPACITY STANDARD		EPA METHOD 9 ☒		TVEE METHOD 2 ☐		
			20 % OPACITY		TVEE METHOD 1 ☐		TVEE METHOD 3 ☐		
			AVERAGE OPACITY FOR HIGHEST PERIOD		NUMBER OF READING ABOVE % WERE		0 0		
COMMENTS			OBSERVER'S NAME (PRINT)		Roy dell Herron				
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			OBSERVER'S SIGNATURE		Roy dell Herron				
SIGNATURE			ORGANIZATION		Gerdau Ameristeel				
TITLE			VERIFIED BY		State of Tennessee (Carl Koontz)				
DATE			DATE		3-16-14				
			DATE		5-16-14				
			DATE		11-16-15				

VISIBLE EMISSION OBSERVATION

SOURCE NAME			OBSERVATION DATE				START TIME		STOP TIME		
Gerdau Ameristeel			3-17-14				10:15 Am		10:21 Am		
ADDRESS			MIN		SEC		0		15		
801 Gerdau Ameristeel Rd											
CITY			STATE		ZIP						
Jackson			TN		38305						
PHONE			SOURCE ID NUMBER								
(731) 424-5600			57-0189-01								
PROCESS EQUIPMENT			OPERATING MODE								
Electric Arc Furnace			melt								
CONTROL EQUIPMENT			OPERATING MODE								
None			Continuous								
DESCRIBE EMISSION POINT											
Penthouse Canopy Top of Meltshop											
HEIGHT ABOVE GROUND LEVEL			HEIGHT RELATIVE TO OBSERVER								
START 120 ft STOP 120 ft			START 120 ft STOP 120 ft								
DISTANCE FROM OBSERVER			DIRECTION FROM OBSERVER								
START 600 ft STOP 600 ft			START NE STOP NE								
DESCRIBE VISIBLE EMISSIONS											
START			STOP								
EMISSION COLOR			IF WATER DROPLET PLUME:								
START			STOP								
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			ATTACHED ☐ DETACHED ☐								
START Outlet (exit)			STOP Outlet (exit)								
DESCRIBE PLUME BACKGROUND											
START Sky			STOP Sky								
BACKGROUND COLOR			SKY CONDITIONS								
START blue			STOP clear								
WIND SPEED			WIND DIRECTION								
START 0-10 mph STOP 0-10 mph			START W STOP W								
AMBIENT TEMP.			WET BULB TEMP.			RH, percent					
START 68° STOP 68°											
SOURCE LAYOUT SKETCH			DRAW NORTH ARROW								
COMMENTS											
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS											
SIGNATURE											
TITLE			DATE								
OBSERVER'S NAME (PRINT)											
Royell Herrow											
OBSERVER'S SIGNATURE											
Royell Herrow											
ORGANIZATION											
Gerdau Ameristeel											
VERIFIED BY											
State of Tennessee											
DATE											
11-16-15											

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau Ameristeel			OBSERVATION DATE 3-18-16		START TIME 10:20am	STOP TIME 10:26am
ADDRESS 801 Gerdau Ameristeel Rd			SEC MIN	0	15	30
CITY Jackson			STATE TN		ZIP 38305	
PHONE (731) 424-5600			SOURCE ID NUMBER 57-0189-01			
PROCESS EQUIPMENT Electric Arc Furnace			OPERATING MODE Melt			
CONTROL EQUIPMENT None			OPERATING MODE Continuous			
DESCRIBE EMISSION POINT Penthouse Canopy Top of Meltshop						
HEIGHT ABOVE GROUND LEVEL START 120 ft STOP 120 ft			HEIGHT RELATIVE TO OBSERVER START 120 ft STOP 120 ft			
DISTANCE FROM OBSERVER START 600 ft STOP 600 ft			DIRECTION FROM OBSERVER START NE STOP NE			
DESCRIBE VISIBLE EMISSIONS						
START _____ STOP _____						
EMISSION COLOR			IF WATER DROPLET PLUME			
START _____ STOP _____			ATTACHED L. DETACHED ..			
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED						
START Outlet (exit) STOP Outlet (exit)						
DESCRIBE PLUME BACKGROUND						
START Sky STOP Sky						
BACKGROUND COLOR			SKY CONDITIONS			
START Blue STOP Blue			START Clear STOP Clear			
WIND SPEED			WIND DIRECTION			
START 5-10 mph STOP 5-10 mph			START W STOP W			
AMBIENT TEMP.			WET BULB TEMP.		RH. percent	
START 63° STOP 63°						
SOURCE LAYOUT SKETCH			DRAW NORTH ARROW			
COMMENTS						
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			OBSERVER'S NAME (PRINT) Mike Johnson		DATE 3-18-16	
SIGNATURE			OBSERVER'S SIGNATURE Mike Johnson		CERTIFICATION-EXPIRATION DATE 6-13-16	
TITLE			ORGANIZATION Gerdau Ameristeel		DATE 11-13-15	
DATE			VERIFIED BY State of Tennessee (Carl Koontz)		DATE	

VISIBLE EMISSION OBSERVATION

SOURCE NAME			OBSERVATION DATE		START TIME	STOP TIME
Gerdau Ameristeel			3-22-14		10:30AM	10:36AM
ADDRESS			SEC	0	15	30
801 Gerdau Ameristeel Rd			MIN			
						COMMENTS
CITY			1	0	0	0
JACKSON			2	0	0	0
STATE			3	0	0	0
TN			4	0	0	0
ZIP			5	0	0	0
38305			6	0	0	0
PHONE			7			
(731) 424-5600			8			
SOURCE ID NUMBER			9			
57-0189-01			10			
PROCESS EQUIPMENT			11			
Electric Arc Furnace			12			
OPERATING MODE			13			
Continuous			14			
CONTROL EQUIPMENT			15			
None			16			
DESCRIBE EMISSION POINT			17			
Penthouse Canopy Top of Meltshop			18			
START			19			
HEIGHT ABOVE GROUND LEVEL			20			
START 120 ft STOP 120 ft			21			
HEIGHT RELATIVE TO OBSERVER			22			
START 120 ft STOP 120 ft			23			
DISTANCE FROM OBSERVER			24			
START 600 ft STOP 600 ft			25			
DIRECTION FROM OBSERVER			26			
START NE STOP NE			27			
DESCRIBE VISIBLE EMISSIONS			28			
START			29			
STOP			30			
EMISSION COLOR			31			
START			32			
STOP			33			
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			34			
START Outlet (exit) STOP Outlet (exit)			35			
DESCRIBE PLUME BACKGROUND			36			
START Sky STOP Sky			37			
BACKGROUND COLOR			38			
START Blue STOP Blue			39			
SKY CONDITIONS			40			
START Clear STOP Clear			41			
WIND SPEED			42			
START 5-10 mph STOP 5-10 mph			43			
WIND DIRECTION			44			
START S STOP S			45			
AMBIENT TEMP.			46			
START 58° STOP 58°			47			
WET BULB TEMP.			48			
RH. percent			49			
SOURCE LAYOUT SKETCH			50			
DRAW NORTH ARROW			51			
			52			
			53			
			54			
			55			
COMMENTS			56			
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			57			
SIGNATURE			58			
TITLE			59			
DATE			60			
OBSERVER'S NAME (PRINT)			61			
Mike Johnson			62			
OBSERVER'S SIGNATURE			63			
Mike Johnson			64			
DATE			65			
3-22-14			66			
ORGANIZATION			67			
Gerdau Ameristeel			68			
DATE			69			
5-13-16			70			
VERIFIED BY			71			
State of Tennessee/Carl Koontz			72			
DATE			73			
11-13-15			74			

VISIBLE EMISSION OBSERVATION

SOURCE NAME			OBSERVATION DATE		START TIME		STOP TIME	
Gerdau Ameristeel			3-23-16		8:35 AM		8:41 AM	
ADDRESS			SEC		MIN		COMMENTS	
801 Gerdau Ameristeel Rd			0		15		30	
CITY			1		0		0	
JACKSON			2		0		0	
STATE			3		0		0	
TN			4		0		0	
ZIP			5		0		0	
38305			6		0		0	
PHONE			7					
(731) 424-5600			8					
SOURCE ID NUMBER			9					
57-0189-01			10					
PROCESS EQUIPMENT			11					
Electric Arc Furnace			12					
OPERATING MODE			13					
None			14					
CONTROL EQUIPMENT			15					
None			16					
OPERATING MODE			17					
Continuous			18					
DESCRIBE EMISSION POINT			19					
Penthouse Canopy Top of Meltshop			20					
START			21					
STOP			22					
HEIGHT ABOVE GROUND LEVEL			23					
START 120 ft STOP 120 ft			24					
HEIGHT RELATIVE TO OBSERVER			25					
START 120 ft STOP 120 ft			26					
DISTANCE FROM OBSERVER			27					
START 600 ft STOP 600 ft			28					
DIRECTION FROM OBSERVER			29					
START NE STOP NE			30					
DESCRIBE VISIBLE EMISSIONS			31					
START			32					
STOP			33					
EMISSION COLOR			34					
START			35					
STOP			36					
IF WATER DROPLET PLUME:			37					
ATTACHED ☐ DETACHED ☐			38					
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			39					
START Outlet (exit) STOP Outlet (exit)			40					
DESCRIBE PLUME BACKGROUND			41					
START Sky STOP Sky			42					
BACKGROUND COLOR			43					
START Gray STOP Gray			44					
SKY CONDITIONS			45					
START Cloudy STOP Cloudy			46					
WIND SPEED			47					
START 5 mph STOP 5 mph			48					
WIND DIRECTION			49					
START S STOP S			50					
AMBIENT TEMP.			51					
START 58° STOP 58°			52					
WET BULB TEMP.			53					
RH, percent			54					
SOURCE LAYOUT SKETCH			55					
DRAW NORTH ARROW			56					
SUN  WIND 			57					
PLUME AND STACK 			58					
X EMISSION POINT			59					
OBSERVER'S POSITION			60					
SUN LOCATION LINE			61					
APPLICABLE OPACITY STANDARD			62					
20 % OPACITY			63					
EPA METHOD 9 ☒ TVEE METHOD 2 ☐			64					
TVEE METHOD 1 ☐ TVEE METHOD 3 ☐			65					
AVERAGE OPACITY FOR HIGHEST PERIOD			66					
NUMBER OF READING ABOVE % WERE			67					
00			68					
OBSERVER'S NAME (PRINT)			69					
Mike Johnson			70					
OBSERVER'S SIGNATURE			71					
Mike Johnson			72					
DATE			73					
3-23-16			74					
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			75					
SIGNATURE			76					
DATE			77					
5-13-16			78					
ORGANIZATION			79					
Gerdau Ameristeel			80					
VERIFIED BY			81					
State of Tennessee Carl Koontz			82					
DATE			83					
11-13-15			84					

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau Ameristeel			OBSERVATION DATE 3-24-16		START TIME 8:20 AM	STOP TIME 8:26 AM
ADDRESS 801 Gerdau Ameristeel Rd			SEC MIN	0	15	30
CITY Jackson			STATE TN		ZIP 38305	
PHONE (731) 424-5600			SOURCE ID NUMBER 57-0189-01			
PROCESS EQUIPMENT Electric Arc Furnace			OPERATING MODE Heat			
CONTROL EQUIPMENT None			OPERATING MODE Continuous			
DESCRIBE EMISSION POINT Penthouse Canopy Top of Maltshop			HEIGHT ABOVE GROUND LEVEL START 120 ft STOP 120 ft		HEIGHT RELATIVE TO OBSERVER START 120 ft STOP 120 ft	
DISTANCE FROM OBSERVER START 600 ft STOP 600 ft			DIRECTION FROM OBSERVER START NE STOP NE			
DESCRIBE VISIBLE EMISSIONS						
START STOP						
EMISSION COLOR			IF WATER DROPLET PLUME:			
START STOP			ATTACHED DETACHED			
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED						
START Outlet (exit) STOP Outlet (exit)						
DESCRIBE PLUME BACKGROUND						
START Sky STOP Sky						
BACKGROUND COLOR			SKY CONDITIONS			
START Cloudy STOP Cloudy			WIND DIRECTION			
WIND SPEED			WIND DIRECTION			
START 10-15 mph STOP 10-15 mph			START N STOP N			
AMBIENT TEMP.			WET BULB TEMP.		RH, percent	
START 63° STOP 63°						
SOURCE LAYOUT SKETCH			DRAW NORTH ARROW			
COMMENTS						
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			OBSERVER'S NAME (PRINT) Mike Johnson		DATE 3-24-16	
SIGNATURE			OBSERVER'S SIGNATURE Mike Johnson		DATE 5-13-16	
TITLE			ORGANIZATION Gerdau Ameristeel		CERTIFICATION-EXPIRATION DATE 5-13-16	
DATE			VERIFIED BY State of Tennessee/Carl Koontz		DATE 11-13-15	

VISIBLE EMISSION OBSERVATION

SOURCE NAME			OBSERVATION DATE		START TIME		STOP TIME
Gerdau Ameristeel			3-25-14		8:10 AM		8:16 AM
ADDRESS			SEC	0	15	30	45
801 Gerdau Ameristeel Rd			MIN				
			1	0	0	0	0
CITY			2	0	0	0	0
Jackson	STATE	IN	3	0	0	0	0
ZIP	38305		4	0	0	0	0
PHONE	SOURCE ID NUMBER		5	0	0	0	0
(731) 424-5600	57-0189-01		6	0	0	0	0
PROCESS EQUIPMENT		OPERATING MODE	7				
Electric Arc Furnace		Melt	8				
CONTROL EQUIPMENT		OPERATING MODE	9				
None		Continuous	10				
DESCRIBE EMISSION POINT			11				
Penthouse Canopy Top of Maltshop			12				
START			13				
HEIGHT ABOVE GROUND LEVEL			14				
START	STOP	HEIGHT RELATIVE TO OBSERVER	15				
120 ft	120 ft	START	16				
STOP	120 ft	STOP	17				
DISTANCE FROM OBSERVER	DIRECTION FROM OBSERVER		18				
START	STOP	START	19				
600 ft	600 ft	STOP	20				
DESCRIBE VISIBLE EMISSIONS			21				
START			22				
EMISSION COLOR			23				
START			24				
IF WATER DROPLET PLUME:			25				
START			26				
ATTACHED ☐ DETACHED ☐			27				
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			28				
START			29				
OUTLET (exit)			30				
DESCRIBE PLUME BACKGROUND			31				
START			32				
SKY			33				
START			34				
GRAY			35				
WIND SPEED			36				
START			37				
5-10 mph			38				
WIND DIRECTION			39				
START			40				
N			41				
AMBIENT TEMP.			42				
START			43				
42°			44				
WET BULB TEMP.			45				
RH, percent			46				
SUN ☐ WIND ☐			47				
PLUME AND STACK ☐			48				
SOURCE LAYOUT SKETCH			49				
DRAW NORTH ARROW			50				
X EMISSION POINT			51				
OBSERVER'S POSITION			52				
SUN LOCATION LINE			53				
No sun			54				
COMMENTS			55				
APPLICABLE OPACITY STANDARD			56				
20 % OPACITY			57				
AVERAGE OPACITY FOR HIGHEST PERIOD			58				
0 0			59				
OBSERVER'S NAME (PRINT)			60				
Mike Johnson			61				
OBSERVER'S SIGNATURE			62				
Mike Johnson			63				
DATE			64				
3-25-14			65				
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			66				
ORGANIZATION			67				
Gerdau Ameristeel			68				
CERTIFICATION-EXPIRATION DATE			69				
5-13-14			70				
SIGNATURE			71				
TITLE			72				
DATE			73				
State of Tennessee			74				
VERIFIED BY			75				
State of Tennessee			76				
DATE			77				
11-13-15			78				

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau Ameristeel			OBSERVATION DATE 3-29-16		START TIME 9:25 Am	STOP TIME 9:31 Am
ADDRESS 801 Gerdau Ameristeel Rd			SEC MIN	0	15	30
CITY Jackson			STATE IN		ZIP 38305	
PHONE (731) 424-5600			SOURCE ID NUMBER 57-0189-01			
PROCESS EQUIPMENT Electric Arc Furnace			OPERATING MODE melt			
CONTROL EQUIPMENT None			OPERATING MODE Continuous			
DESCRIBE EMISSION POINT Penthouse Canopy Top of Maltshop			HEIGHT ABOVE GROUND LEVEL START 120 ft STOP 120 ft		HEIGHT RELATIVE TO OBSERVER START 120 ft STOP 120 ft	
DISTANCE FROM OBSERVER START 600 ft STOP 600 ft			DIRECTION FROM OBSERVER START NE STOP NE			
DESCRIBE VISIBLE EMISSIONS						
EMISSION COLOR			IF WATER DROPLET PLUME:			
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED						
DESCRIBE PLUME BACKGROUND						
WIND SPEED			WIND DIRECTION			
AMBIENT TEMP.			WET BULB TEMP.		RH. percent	
SOURCE LAYOUT SKETCH			DRAW NORTH ARROW			
COMMENTS						
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS						
SIGNATURE			OBSERVER'S NAME (PRINT)		DATE	
TITLE			OBSERVER'S SIGNATURE		DATE	
DATE			ORGANIZATION		CERTIFICATION EXPIRATION DATE	
			VERIFIED BY		DATE	

VISIBLE EMISSION OBSERVATION

SOURCE NAME Gerdau Ameristeel			OBSERVATION DATE 3-30-14		START TIME 11:00 AM	STOP TIME 11:06 AM			
ADDRESS 801 Gerdau Ameristeel Rd			MIN	SEC	0	15	30	45	COMMENTS
CITY Jackson			1	0	0	0	0		
STATE TN			2	0	0	0	0		
ZIP 38305			3	0	0	0	0		
PHONE (731) 424-5600			4	0	0	0	0		
SOURCE ID NUMBER 57-0189-01			5	0	0	0	0		
PROCESS EQUIPMENT Electric Arc Furnace			6	0	0	0	0		
OPERATING MODE melt			7						
CONTROL EQUIPMENT None			8						
OPERATING MODE Continuous			9						
DESCRIBE EMISSION POINT Penthouse Canopy Top of Meltshop			10						
HEIGHT ABOVE GROUND LEVEL START 120 ft STOP 120 ft			11						
HEIGHT RELATIVE TO OBSERVER START 120 ft STOP 120 ft			12						
DISTANCE FROM OBSERVER START 600 ft STOP 600 ft			13						
DIRECTION FROM OBSERVER START NE STOP NE			14						
DESCRIBE VISIBLE EMISSIONS			15						
START STOP			16						
EMISSION COLOR			17						
IF WATER DROPLET PLUME:			18						
START STOP ATTACHED DETACHED			19						
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED			20						
START Outlet (exit) STOP Outlet (exit)			21						
DESCRIBE PLUME BACKGROUND			22						
START Sky STOP Sky			23						
BACKGROUND COLOR			24						
START gray STOP gray			25						
WIND SPEED			26						
START 0-10 mph STOP 0-10 mph			27						
WIND DIRECTION			28						
START W STOP W			29						
AMBIENT TEMP.			30						
START 70° STOP 70°									
WET BULB TEMP.									
RH, percent									
SOURCE LAYOUT SKETCH									
DRAW NORTH ARROW									
COMMENTS			APPLICABLE OPACITY STANDARD 20 % OPACITY						
			EPA METHOD 9 ☒ TVEE METHOD 2 ☐ TVEE METHOD 1 ☐ TVEE METHOD 3 ☐						
			AVERAGE OPACITY FOR HIGHEST PERIOD 0 0						
			NUMBER OF READING ABOVE % WERE						
OBSERVER'S NAME (PRINT)			Royall Herron						
OBSERVER'S SIGNATURE			Royall Herron						
DATE			3-30-14						
I HAVE RECEIVED A COPY OF THESE OPACITY OBSERVATIONS			ORGANIZATION Gerdau Ameristeel						
SIGNATURE			VERIFIED BY State of Tennessee (Carl Koontz)						
TITLE			DATE 5-16-14						
DATE			DATE 11-16-15						

KOONTZ & ASSOCIATES

of Nashville, Tennessee

This is to acknowledge that

TONY PERRY

successfully participated in Visible Emissions
training on NOV 16 2015

and is qualified to evaluate Visible Emissions
for a period of six (6) months from the date of
certification.

Carl Koontz
Instructor

KOONTZ & ASSOCIATES

of Nashville, Tennessee

This is to acknowledge that

MELANIE RAGAN

successfully participated in Visible Emissions
training on NOV 16 2015

and is qualified to evaluate Visible Emissions
for a period of six (6) months from the date of
certification.

Carl Koontz
Instructor

KOONTZ & ASSOCIATES

of Nashville, Tennessee

This is to acknowledge that

ROYDELL HERRON

successfully participated in Visible Emissions
training on NOV 16 2015

and is qualified to evaluate Visible Emissions
for a period of six (6) months from the date of
certification.

Carl Koontz
Instructor

KOONTZ & ASSOCIATES

of Nashville, Tennessee

This is to acknowledge that

MARK THOMPSON

successfully participated in Visible Emissions
training on NOV 13 2015

and is qualified to evaluate Visible Emissions
for a period of six (6) months from the date of
certification.

Carl Koontz
Instructor

KOONTZ & ASSOCIATES

of Nashville, Tennessee

This is to acknowledge that

MIKE JOHNSON

successfully participated in Visible Emissions
training on NOV 13 2015

and is qualified to evaluate Visible Emissions
for a period of six (6) months from the date of
certification.

Carl Koontz
Instructor