ADM Grand Ledge, MI

Emissions Test Report

15k Dust Collector, 50k bph Leg, Rail Loading Pit,
30k bph High Roller, 40k bph Screener
80k bph Bulkweigher Rail Loading Spout
50k bph High Roller feeding 50k Leg,
15k bph Drag running from 50k Leg to House

Plant ID No. M3912

Particulate Matter and Visible Emissions

Test Dates: March 18 thru March 21, 2019
Report Date: March 30, 2019

Prepared For:

Karena Musgrave
Archer Daniels Midland Co.
Decatur, IL
Tel: 217.424.5817

Prepared By:

Sam T. Turner,
Decatur, IL
Tel: 217.433.6618

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EXECUTIVE SUMMARY

From March 18 to March 21, 2019, Sam Turner and Rick Dancey performed compliance testing to verify the performance of visible emissions and particulate matter (PM), at the ADM Grain facility in Grand Ledge MI. Measurements of O_2/CO_2, were done by a Fyrite analyzer. Three (3) PM or visible emissions test runs were performed in accordance with 40 CFR Subpart DD. Mr. Leo Muhlenkamp of ADM Grand Ledge MI facility, provided process information and operational data. Julie Brunner and David Patterson of the Michigan Department of Environmental Quality observed testing on March 18th. Julie Brunner also observed testing on the 21st.

A summary of the test results is given on the following pages in Tables 1 thru 4.

TABLE 1

Particulate Matter Emissions Summary
Grain 15,000 cfm Dust Collector
Grand Ledge, MI

Parameter	Run 1	Run 2	Run 3	Averages
Test Date	**3/18/2019**	**3/18/2019**	**3/18/2019**	
Run Time (min.)	72	72	72	
Stack Information				
% O_2	20.90	20.90	20.90	**20.90**
% CO_2	0.03	0.03	0.03	**0.03**
Stack Temperature, Deg F	42	48	47	**45**
Stack Moisture Content	0.84%	0.29%	0.11%	**0.41%**
Stack Gas Velocity				
FPS	67.43	66.52	68.72	**67.56**
ACFM	17,276	17,043	17,605	**17,308**
DSCFM	18,137	17,772	18,402	**18,104**
PM Emissions (Front Half)				
PM, gr/dscf	0.0006	0.0003	0.0006	**0.0005**
PM, lbs/dscf	8.73E-08	3.78E-08	8.89E-08	**7.13E-08**
PM, lbs/hr	0.0950	0.0403	0.0981	**0.0778**
PM Emissions (Total)				
PM, gr/dscf	0.0006	0.0003	0.0006	**0.0005**
PM, lbs/dscf	8.73E-08	3.78E-08	8.89E-08	**7.13E-08**
PM, lbs/hr	0.0950	0.0403	0.0981	**0.0778**

Visible Emissions

Parameter	Run 1	Run 2	Run 3	Averages
Test Date	**03/18/2019**	**03/18/2019**	**03/18/2019**	
Run Time (min.)	60	60	60	
VE Determination Locations				
15,000 cfm Dust Collector Stack	0%	0%	0%	**0%**

TABLE 2

Visible Emissions

Parameter	Run 1	Run 2	Run 3	Averages
Test Date	**03/18/2019**	**03/19/2019**	**03/21/2019**	
Run Time (min.)	60	60	60	
VE Determination Locations				
50 K bph Leg	0%	0%	0%	**0%**

Visible Emissions

Parameter	Run 1	Run 2	Run 3	Averages
Test Date	**03/18/2019**	**03/19/2019**	**03/21/2019**	
Run Time (min.)	60	60	60	
VE Determination Locations				
50K High Roller feeding 50K Leg	0%	0%	0%	**0%**

Visible Emissions

Parameter	Run 1	Run 2	Run 3	Averages
Test Date	**03/18/2019**	**03/19/2019**	**03/21/20**	
Run Time (min.)	60	60	60	
VE Determination Locations				
30 K High Roller up top	0%	0%	0%	**0%**

TABLE 3

Visible Emissions

Parameter	Run 1	Run 2	Run 3	Averages
Test Date	**03/19/2019**	**03/19/2019**	**03/21/201**	
Run Time (min.)	60	60	60	
VE Determination Locations				
15 K bph Drag from 50 K	0%	0%	0%	**0%**

Parameter	Run 1	Run 2	Run 3	Averages
Test Date	**03/19/2019**	**03/19/2019**	**03/21/201**	
Run Time (min.)	60	60	60	
VE Determination Locations				
Railcar pit unloading	0%	0%	0%	**0%**

Parameter	Run 1	Run 2	Run 3	Averages
Test Date	**03/21/2019**	**03/21/2019**	**03/21/201**	
Run Time (min.)	60	60	60	
VE Determination Locations				
40 K bph Screener	0%	0%	0%	**0%**

Parameter	Run 1	Run 2	Run 3	Averages
Test Date	**03/21/2019**	**03/21/2019**	**03/21/201**	
Run Time (min.)	60	60	60	
VE Determination Locations				
80K bph Bulkweigher Loadout Spout	0%	0%	0%	**0%**

CERTIFICATION

Having written this report and having supervised the test program described herein, I certify that I am personally familiar with the emissions tests described in this report, and with the methods, measurements, data and calculations employed in the performance of those tests. To the best of my knowledge, the results reported herein are true and accurate within the limitations of the methods employed.

Sam Turner
Environmental Services

INTRODUCTION

The Michigan Department of Environmental Quality requires particulate and Visible Emission testing for the Railcar loading Baghouse and Conveyor's at ADM's Grain Handling System in Grand Ledge, MI.

Plant ID No. M3912

Test Summary is described on page 10. The tests performed and methodologies employed are described in pages 11 through 19 of this report. Quality assurance measures are described on pages 20 through 22. Appendices A thru F contain field data sheets, calculated values, sample calculations, and other reference data from which test results were developed.

TEST SUMMARY

Particulate Matter Emission Rates

From March 18 thru March 21, 2019, Visible Emissions and PM Emissions were measured on the Railcar baghouse and conveyor's system for three (3) 60-minute runs.

PM emissions results for the 15k CFM Dust Collector Stack ranged from 0.0003 to 0.0006 gr/dscf, averaging 0.0005 gr/dscf. PM emissions results ranged from 0.0403 to 0.0981 lbs/hr, averaging 0.0778 lbs/hr. Isokinetic ranged from 95.9% to 97.5 %, averaging 96.5 %. Sample volume ranged from 65.21 scf to 66.61 scf, averaging 65.11 scf.

Visible emissions for the 15,000 cfm Dust Collector Stack pass with no readings above 0 percent,

Visible emissions for all sources pass the allowable visible emission standard.

Emission rates for PM sampling runs were calculated using the flow and moisture determinations from each USEPA Method 5 sampling run, individual gas or particulate concentrations. PM Field data sheets are included in Appendix A, along with emission rate calculations, can be found in Appendix B. Example emission rate calculations are included in Appendix C.

TEST SERIES

In accordance with the testing requirements of the facility Test Plan per Subpart DD, PM and VE's, were measured. The following test methods were employed:

- USEPA Method 1 - Sample and Velocity Traverses for Stationary Sources
- USEPA Method 2 - Determination of Stack Gas Velocity and Flow Rate
- USEPA Method 3 - Determination of Dry Molecular Weight
- USEPA Method 4 - Determination of Moisture Content in Stack Gases
- USEPA Method 5 - Determination of Particulate Matter Emissions Subpart DD
- USEPA Method 9 - Determination of Opacity Emissions

USEPA Method 1: Sample & Velocity Traverses for Stationary Sources

The Grand Ledge dust collector baghouse exhausts through a 27.75" round Stack with 2 sample ports without nipples. Sampling ports, along with upstream and downstream measurements, are illustrated in Figure 1: Sample Ports are;

- 71" (2.54 diameters) downstream of nearest disturbance, and
- 17" (0.61 diameters) upstream of nearest disturbance.
- Diameter – 27.75 inches

USEPA Method 2: Determination of Stack Gas Velocity and Volumetric Flow Rate

Stack gas velocity measurements for the 15,000 cfm Dust Collector stack were made with a type "S" Pitot tube constructed in accordance with Method 2 specifications. Sample/velocity traverse points are shown in Table 4. Stack gas temperature was measured concurrently with VP at each traverse point using a type "K" thermocouple and readout.

FIGURE 1

Source Schematic – 15K CFM Baghouse

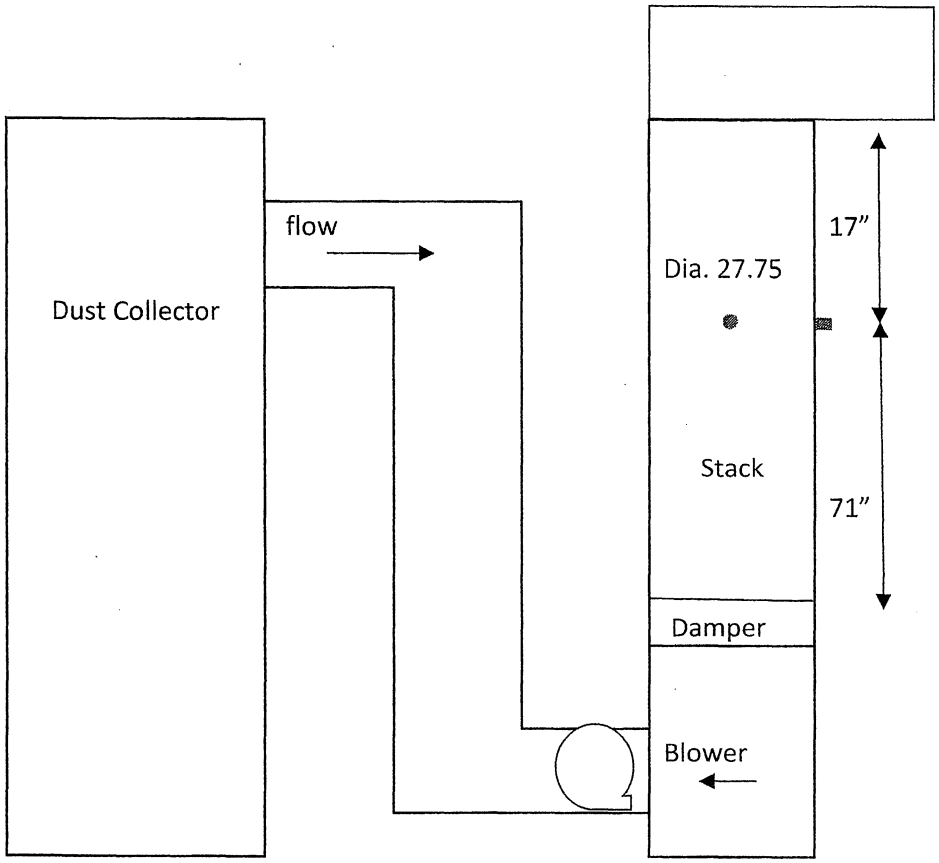


TABLE 4

Location of Traverse Points

Source Name	Stack Diameter (in.)	Location of Traverse Point (inches)											
		1	2	3	4	5	6	7	8	9	10	11	12
15,000 cfm Dust collector	27.75	**1.0**	**1.9**	**3.3**	**4.9**	**6.9**	**9.9**	**17.9**	**20.8**	**22.8**	**24.5**	**25.9**	**26.75**

USEPA Method 4: Determination of Moisture Content of Stack Gas

Moisture content of stack gas is measured to allow calculation of stack gas volumetric flow rate on a dry basis. As part of the Method 5 particulate measurement test, a measured volume of stack gas is drawn through an impinger train consisting of four (4) ice-cooled impingers. Impingers 1, 3 and 4 are of the modified Greenburg-Smith design, while impinger 2 is of standard G-S design; impingers 1 and 2 are charged with 100 ml of deionized water each, impinger 4 is charged with approximately 300 grams of indicator-type silica gel, and impinger 3 is left empty. Sample gas is drawn through the ice-cooled impinger train at a rate yielding an isokinetic particulate sample. The volume of water collected in the first three impingers is quantified by weighing the final volume of water in each impinger and subtracting the initial weight of DI water placed in impingers 1 and 2. Impinger 4 is weighed prior to and following sample collection to quantify the volume of water vapor collected in the silica gel. The total volume of water vapor collected and the sample volume are used to calculate stack gas moisture content as specified in Method 4.

USEPA Method 5: Determination of Particulate Matter Emissions

Three (3) USEPA Method 5 test runs are performed, and the test results averaged, to quantify particulate emissions from the source tested. Unless otherwise specified below, all equipment preparation, sampling, sample recovery, analytical and calculation activities are conducted in accordance with CFR 40 Part 60.

Preliminary: Method 5 employs an 85mm circular glass-fiber filter meeting the specifications of Method 5 Section 3.1.1. In preparation for sampling, uniquely numbered Gelman Type A/E binder-free glass fiber filters were oven-dried at 110°C for 4 hours, and then desiccated over silica gel for six hours. Filters were then weighed at least 2 times at 6-hour (min.) intervals until constant weight (+/- 0.5 mg) was obtained; results of all weighing were recorded in a permanent log book. Filters were stored in individual sealed glass Petri dishes prior to sampling.

A series of four glass impingers was employed to condense water vapor from the filtered sample stream. The impinger train was constructed and prepared as described in USEPA Method 4. Total moisture collected in the sample train is quantified by weighing the volume of water collected in Impingers 1 through 4 to the nearest 0.1g.

USEPA Method 5: Determination of Particulate Matter Emissions (cont.)

Sampling: Preliminary velocity and temperature measurements and a low-temperature psychrometric chart are used to select a sampling nozzle as set forth in Method 5. Sampling was performed at the traverse points shown in Table 5. Each traverse point for the Dust Collector stacks were sampled for 3 minutes for a total sampling time of 72 minutes. The entire sample train was tested for leaks prior to and following each of the three sampling runs.

During run 1 impinger three froze up. The test was stopped and a leak check was done at highest vacuum before the removable of impinger. A measured amount of antifreeze [62.0 g) was added to the impinger and recorded in the tare weight for a total tare weight of 643.90 g. The impinger was replaced back in sample train. The entire sample train was leak checked once more and testing was continued. David Patterson of the Michigan Department of Environmental Quality approved the correction.

USEPA Method 5: Determination of Particulate Matter Emissions (Cont.)

Recovery: Following the post-test leak check, each sample train is removed to a clean location for disassembly and recovery. The filter holder was disassembled, and the filter (with any loose particulate) removed and replaced in its sealed Petri dish (container 3). The "front half" of the filter holder is rinsed with acetone and the wash solvent retained in a clean glass jar with a Teflon-lined cap. The sampling nozzle is cleaned with acetone and an appropriate brush, with the process repeated at least six times; the nozzle is then rinsed until no visible particulate remained. Nozzle and probe wash liquid were collected and retained in the same container used for the filter holder wash. The resulting "front half" wash container (container 1) is labeled with the unit tested, test date and run number, and contents; liquid level is marked on the outside of the jar for laboratory reference. A single 100 ml acetone blank was retained for laboratory use.

PM emissions measured by USEPA Method 5, not including back half condensable particulate are used to measure PM and PM 10 emissions. The resulting sample containers (filters, probe wash "front half", and a single acetone blank) are retained in the Key laboratory for analysis as described in the following paragraph.

Analytical: Key laboratory staff in Decatur IL, performed all analytical procedures at their internal laboratory. Each filter container will be opened and the contents desiccated over silica gel at room temperature for at least 24 hours; constant weight is obtained as described earlier for filter tare weights. The volume of each liquid sample is recorded, and the "front half" wash liquid from each test run is evaporated at room temperature in tarred, uniquely numbered 250 ml Pyrex® beakers. After evaporation of all free liquid, each beaker is desiccated and a constant weight obtained as described above for filters.

USEPA Method 9: Visible Determination of Opacity of Emissions

Opacity emissions are observed at 15-second intervals during each test run. VEE observations are made from ground level at a location chosen to ensure an unobstructed view of the stack exit/emission point and that the sun is within the 140° arc behind the observer. The 15-second opacity measurements were reduced to a maximum 60-minute average for reporting. The field sheets for opacity observations are included in Appendix A. A copy of the VE Certification card for the observer is included in Appendix D.

QA/QC PROCEDURES

Environmental Services follows the Quality Assurance/Quality Control protocols found in "Air Monitoring Quality Assurance Vol. VI: Standard Operating Procedures for Stationary Source Emission Monitoring and Testing" (CARB, 1979) and "Maintenance, Calibration and Operation of Isokinetic Source Sampling Equipment" (Jerome J. Rom, EPA, 1972) and the quality assurance guidelines as published in "Quality Assurance Handbook for Air Pollution Measurement Systems" Vol. III (EPA-600/4-77-0276).

General QA/QC measures include pre- and post-test leak checks of all sampling trains; blank laboratory and field solutions such as acetone, distilled water or other reagents used for sampling, recovery or cleaning; nitrogen gas blanks; and documentation of all project parameters. QA/QC measures for specific test methods are described in individual method discussions.

Equipment Calibrations

All equipment is calibrated prior to use in field-testing. Specific calibration checks performed for each equipment item are specified below. Equipment calibrations for this test are found in Appendix D; example calculations are found in Appendix C.

Type "S" Pitot Tubes

An S-type pitot tube was used for preliminary and post velocity traverses. Each Pitot tube is constructed as specified in USEPA Method 2. A standard Pitot tube was used for F5 stack per Method 1A. A Pitot tube calibration can be found in Appendix D.

Thermocouples

Type "K" thermocouples were used for all temperature measurements. Thermocouples were calibrated in the past six months against an ASTM mercury/glass reference thermometer at different temperatures encountered during sampling conditions. An oven was used to calibrate at levels within 10% of the temperatures of the stack. An ice bath was used to calibrate the impinger thermocouple. All thermocouples used measure within 2% (absolute) of the reference thermometer. Thermocouple calibrations are found in Appendix D.

Equipment Calibrations (Cont.)

Dry Gas Meters/Metering Orifices

Dry gas meters (DGMs) used to measure sample volume for moisture checks were calibrated with Critical Orifice set S/N 1722, which was calibrated against a reference dry test meter, serial number (16300942) as specified in USEPA Method 5, Section 16.2.1. The Critical Orifice calibration equipment setup is pictured in Figure 3.

Prior to field use, the DGM and its metering orifice were calibrated at three DH values; Y and DH@ values are calculated as specified in paragraphs 9.2.1.1 of Method 5. Upon return to the laboratory after the field test, the meter and orifice were recalibrated in the same manner as the initial calibration. DGM calibrations are included in Appendix D.

Sampling Nozzles

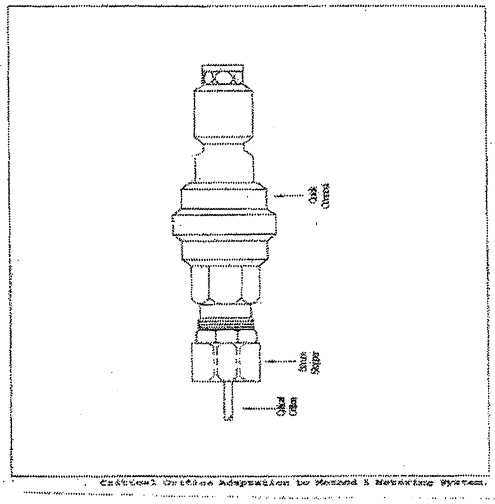
Nozzles used in particulate sampling are constructed in accordance with Section 10.1. of USEPA Method 5. Each nozzle used for sampling was calibrated prior to and immediately following each sample run. Nozzle diameter was measured at three axes; the average of the three measurements was used in all Method 5 calculations. Nozzle diameters, which vary less than 0.004" among the three measurements, are considered acceptable. Nozzle diameter calibrations are found in Appendix D.

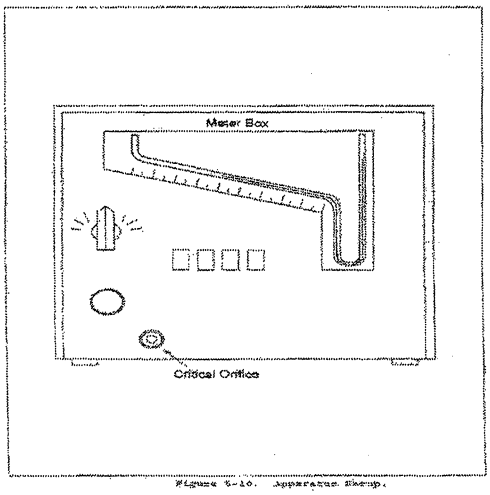
Process Unit Operational Data

The process unit operational rates for each run are included in Appendix F.

FIGURE 2

Dry Gas Meter Calibration Schematic





Appendix A

Field Data Sheets

USEPA METHOD _____ FIELD DATA 0.001 13"

leak ck 0.003 at 9"

Location: 140 N Grandhelst
Process: Dust collector
Unit:

Test Date: 3-15-19
Test #: 1
Operator: S Tower

Pitot Line	
Pre-test:	✓
Post-test:	PASS

Leak Check	(Pre)	(Post)
cfm:	0.016	0.004
vac:	19	13.5

Pbar (in H_g):	30.28	Pitot Coeff.:	.84	Filter #:	37
Pstat. (in H_2O):	.06	Meter Yi:	1.014	Meter Box #:	20967S
As (sq. ft.):	4.27	H@.75cfm:	1.73	Probe #:	D-2
Nozzle (in.)	0.201	Ref. Temp (F)		Time (min):	72

O_2 %	20.9				
CO_2 %	0.0				
Bws:					
H_2O, ml					

Impinger Wt./Vol.	Final	Init.	Diff.
1	620.0	619.4	.6
2	645.7	644.6	1.1
3	411.3	410.5	0.8
4	631.5	623.0	8.5

5T Init 643.40

Traverse Pt. #	Time	Δp Inches H_2O	Meter Conditions ΔH	Meter (cf)	Temperature (F) Stack	Probe	Oven	Meter (F) In	Out	Imp Out (F)	Vac (in. Hg)	√Δ p
1	9:39/9:41	2.55	4.3	665.607/669.3	35	30	29	43	42	29	9	
2	9:44	2.4	4.0	672	36	31	29	43	44	33	8.5	
3	9:47	2.2	3.4	675.2	36	32	29	46	43	36	8.0	
4	9:50	2.0	3.4	677.515	36	32	29	47	43	38	11.0	
5	10:11/10:14	1.9	3.2	675.595/680.0	38	33	31	48	46	34	7	
6	10:17	1.6	2.7	683.10	39	34	31	49	46	38	6	
7	10:20	.90	1.5	685.30	39	35	31	51	47	41	3	
8	10:23	.95	1.6	687.36	39	35	32	52	47	41	3	
9	10:26	1.1	1.8	689.40	41	36	32	55	48	45	4	
10	10:29	1.2	2.0	691.60	42	37	32	56	48	42	4	
11	10:32	1.2	2.0	694.20	41	38	32	58	49	43	6	
12	10:35	1.2	2.0	695.395	43	39	32	61	50	44	6	
10 1	10:53/10:56	2.3	3.6	699.60	43	38	35	57	53	37	7	
2	10:59	2.4	4.0	702.80	44	38	34	58	54	38	8	
3	11:02	2.4	4.0	704.90	43	39	35	59	54	45	8	
4	11:05	2.1	3.5	709.00	44	39	35	61	55	46	8	
5	11:08	1.7	2.8	712.00	45	39	35	63	55	46	7	
6	11:11	1.2	2.0	714.50	45	39	35	65	56	46	5	
7	11:14	.85	1.4	716.30	45	39	35	65	56	46	4	
8	11:17	.96	1.6	718.35	45	39	35	66	57	46	4	
9	11:20	1.2	2.0	720.60	45	39	35	68	55	44	4	
10	11:23	1.2	2.0	722.95	44	39	36	69	58	44	4	
11	11:26	1.2	2.0	725.30	45	39	36	70	59	45	4	
12	11:29	1.8	1.8	727.562	44	40	36	71	60	45	4	

665.607

677.595 meter 677.595

5T 1.1

USEPA METHOD _____ FIELD DATA

Location: AOM Gheaster Test Date: 3-15-19
Process: Dust Collector Test #: 2
Unit: _____ Operator: S Heine

Pitot Line	
Pre-test:	PASS
Post-test:	PASS

Leak Check	(Pre)	(Post)
cfm:	0.002	0.00
vac:	12"	9"

Pbar (in H_g): 30.33 Pitot Coeff.: .84 Filter #: 38 O_2 %: 20.9
Pstat. (in H_2O): .06 Meter Yi: 1.014 Meter Box #: 209678 CO_2 %: 0.03
As (sq. ft.): 4.27 H@.75cfm: 1.73 Probe #: P-2 Bws: _____
Nozzle (in.): 0.201 Ref. Temp (F): _____ Time (min): 72 H_2O, ml: _____

Impinger Wt./Vol.	Final	Init.	Diff.
1	584.7	590.8	-4.1
2	553.0	561.4	-3.4
3	410.9	411.0	-.1
4	637.9	623.4	14.5

Traverse Pt. #	Time	Δp Inches H_2O	Meter Conditions ΔH	Meter Conditions Meter (cf)	Temperature (F) Stack	Probe	Oven	Meter (F) In	Meter (F) Out	Imp Out (F)	Vac (in. Hg)	√Δ p
A 1	12:46/12:49	2.55	4.4	727.69	47	41	39	60	60	39	8.5	
2	12:52	2.1	3.45	734.15	47	42	40	60	61	46	7.0	
3	12:55	2.3	3.65	737.20	47	42	40	62	61	50	7.5	
4	12:58	2.5	3.6	740.40	47	42	41	64	61	50	7.5	
5	13:01	1.8	3.0	743.10	47	42	42	67	61	53	6.5	
6	13:04	1.1	1.8	745.5	48	43	43	68	62	53	4	
7	13:07	.87	1.4	747.5	48	43	43	69	62	52	3	
8	13:10	.95	1.6	749.6	49	44	43	70	63	51	3	
9	13:13	1.0	1.7	751.65	48	44	43	72	63	50	3	
10	13:16	1.2	2.0	753.95	48	43	44	73	63	51	4	
11	13:19	1.2	2.0	756.25	48	45	43	74	64	50	4	
12	13:22	1.2	2.0	758.4	47	44	43	75	64	50	4	
B 1	13:30/13:33	2.4	3.5	761.8	47	43	42	70	65	45	8	
2	13:36	2.2	3.3	764.85	47	43	42	70	65	50	8	
3	13:39	2.1	3.3	767.90	47	43	42	70	66	51	7	
4	13:42	2.2	3.4	771.10	47	43	42	71	66	51	7	
5	13:45	1.7	3.0	773.50	48	43	42	72	66	51	6	
6	13:48	1.5	2.6	776.50	47	43	43	73	66	51	5.5	
7	13:51	.85	1.5	778.55	48	43	43	73	66	51	3	
8	13:54	.85	1.6	780.6	47	43	43	73	66	50	3	
9	13:57	.97	1.7	782.85	48	43	43	74	66	49	4	
10	14:00	1.1	1.9	785.10	48	44	43	75	66	50	4	
11	14:03	1.1	1.9	787.30	48	44	43	75	66	50	4	
12	14:06	.97	1.7	789.53	48	45	44	75	67	50	4	

USEPA METHOD _____ FIELD DATA

Location: ADM Granville Test Date: 3-18-19
Process: Grain Test #: 3
Unit: Dust Collector Operator: S Turner

Pitot Line	
Pre-test:	PASS
Post-test:	PASS

Leak Check	(Pre)	(Post)
cfm:	0.00	0.00
vac:	12.5	11"

Pbar (in H_g): 30.30 Pitot Coeff.: .83 Filter #: 39 O_2 %: 20.9
Pstat. (in H_2O): .06 Meter Yi: 1.014 Meter Box #: 2096-78 CO_2 %: 0.03
As (sq. ft.): 4.27 H@.75cfm: 1.73 Probe #: P-2 Bws:
Nozzle (in.): 0.201 Ref. Temp (F): Time (min): 72 H_2O, ml:

Impinger Wt./Vol.	Final	Init.	Diff.
1	590.8	586.7	-5.2
2	561.4	558.0	-3.2
3	411.3	410.9	0.4
4	644.4	634.9	9.5

Traverse Pt. #	Time	Δp Inches H_2O	Meter Conditions ΔH	Meter Conditions Meter (cf)	Temperature (F) Stack	Probe	Oven	Meter (F) In	Meter (F) Out	Imp Out (F)	Vac (in. Hg)	√Δ p
1	15:24/1529	2.6	4.6	789.643	47	45	47	60	62	44	9	
2	15:27	2.0	3.6	792.31	47	44	47	60	62	50	9	
3	15:30	2.1	3.7	796.30	47	44	46	62	61	50	8	
4	15:33	2.2	3.9	802.40	46	44	46	63	61	52	8	
5	15:36	1.9	3.4	805.80	47	44	46	65	61	52	7	
6	15:39	1.5	2.65	809.5	47	44	46	66	61	51	6	
7	15:42	.90	1.6	810.70	47	44	46	67	61	50	3	
8	15:45	.94	1.7	812.80	47	44	46	69	61	49	4	
9	15:48	1.1	1.9	815.10	48	45	46	69	62	49	4	
10	15:51	1.1	1.9	817.35	47	45	46	70	62	49	4	
11	15:54	1.3	2.6	820.10	47	45	46	71	62	50	5	
12	15:57	1.1	1.9	822.405	48	46	47	72	63	49	4	
1	16:03/1606	2.2	3.5	825.0	47	45	46	69	63	47	8	
2	16:09	2.2	3.8	828.9	47	45	46	70	64	50	8	
3	16:12	2.2	3.8	832.10	46	45	46	70	64	50	8	
4	16:15	2.1	3.7	836.3	47	45	46	71	64	50	8	
5	16:18	1.6	2.8	839.3	47	45	46	71	64	49	8	
6	16:21	1.1	1.65	840.50	47	45	46	71	64	49	4	
7	16:24	.90	1.6	842.60	47	45	46	72	65	48	4	
8	16:27	1.1	1.9	844.70	47	45	46	72	65	48	4	
9	16:30	1.3	2.3	847.20	48	47	47	73	65	48	5	
10	16:33	1.6	2.8	850.0	48	47	47	74	65	48	6	
11	16:36	1.8	3.2	852.90	48	47	48	75	65	49	7	
12	16:39	1.7	3.0	555.816	48	48	49	75	66	49	7	

Fyrite Field Sheet

Facility: ADM GRAIN GRAND Ledge Unit: 15K dust collector Fuel: None

Date: 3-18-19 Site: GRAND Ledge

Rick Dancey

Test #: 1 Leak Ck: ✓ Operator: S. Turner

Sample Time	Analysis Time	Raw Readings CO2 A	Raw Readings O2 B	Raw Readings CO C	Calculated Conc. %O2 (B-A)	Calculated Conc. %CO (C-B)
10:00	10:00	0.03	20.9			
10:40	10:40	0.03	20.9			
Averages:						

Test #: 2 Leak Ck: ✓ Operator: Rick Dancey

Sample Time	Analysis Time	Raw Readings CO2 A	Raw Readings O2 B	Raw Readings CO C	Calculated Conc. %O2 (B-A)	Calculated Conc. %CO (C-B)
12:40	12:40	0.03	20.9			
13:30	13:30	0.03	20.9			
Averages:						

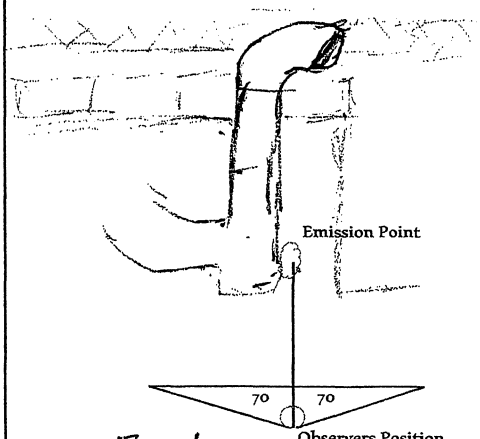
Test #: 3 Leak Ck: ✓ Operator: Rick Dancey

Sample Time	Analysis Time	Raw Readings CO2 A	Raw Readings O2 B	Raw Readings CO C	Calculated Conc. %O2 (B-A)	Calculated Conc. %CO (C-B)
16:10	16:10	0.03	20.9			
16:40	16:40	0.03	20.9			
Averages:						

USEPA Method 9 Visible Emissions Field Data Sheets

Plant name: ADM			Observation Date 3/18/19				Start Time 0945			End Time 1125					
Address: 16994 Wright Rd			SEC.	0	15	30	45	SEC.	0	15	30	45			
City: Grand Ledge	**State: MI**	**Zip: 48837**	MIN					MIN							
Phone: 517-627-4017			1	0	0	0	0	31	0	0	0	0			
Source: **15 K cfm dust collector**			2	0	0	0	0	32	0	0	0	0			
Source Number			3	0	0	0	0	33	0	0	0	0			
Process Equipment: Grain		Operating Mode YES	4	0	0	0	0	34	0	0	0	0			
Control Equipment: Baghouse		Operating Mode YES	5	0	0	0	0	35	0	0	0	0			
Describe Emission Point: Stack Outlet			6	0	0	0	0	36	0	0	0	0			
			7	0	0	0	0	37	0	0	0	0			
Height Above Ground Level 20 ft.	Height Relative to Observer 15 ft		8	0	0	0	0	38	0	0	0	0			
Distance from Observer 30 ft.	Direction from Observer SSW		9	0	0	0	0	39	0	0	0	0			
Describe Emissions C-RAIN DUST	Emission Color LIGHT BROWN		10	0	0	0	0	40	0	0	0	0			
Plume Type: Continuous X Fugitive: O Intermittent O			11	0	0	0	0	41	0	0	0	0			
Water Droplets Present NO	Plume: Attached O Detached O N/A		12	0	0	0	0	42	0	0	0	0			
At What Point Was Opacity Determined 1ST FROM SOURCE/STACK			13	0	0	0	0	43	0	0	0	0			
Background BLUE SKY ~~[illegible]~~ & RAILING			14	0	0	0	0	44	0	0	0	0			
Background Color BLUE ~~GRAY~~ & YELLOW	Percent Cloud Cover Start/End 0 / 0		15	0	0	0	0	45	0	0	0	0			
Wind Speed 2 MPH Start / End 4	Wind Direction From Start/ End SSW / WSW		16	0	0	0	0	46	0	0	0	0			
Temperature 25°C Start / End 33°	Humidity 87% / 57%		17	0	0	0	0	47	0	0	0	0			
Source Layout Sketch		Draw North Arrow	18	0	0	0	0	48	0	0	0	0			
			19	0	0	0	0	49	0	0	0	0			
			20	0	0	0	0	50	0	0	0	0			
			21	0	0	0	0	51	0	0	0	0			
			22	0	0	0	0	52	0	0	0	0			
			23	0	0	0	0	53	0	0	0	0			
			24	0	0	0	0	54	0	0	0	0			
			25	0	0	0	0	55	0	0	0	0			
			26	0	0	0	0	56	0	0	0	0			
			27	0	0	0	0	57	0	0	0	0			
			28	0	0	0	0	58	0	0	0	0			
			29	0	0	0	0	59	0	0	0	0			
			30	0	0	0	0	60	0	0	0	0			

West



South

N

N

North

EAST

Highest 6 Minute Average 0 | # Readings Above 0 % Were 0

Opacity Readings Minimum 0 Maximum 0

Comments: STOP 0954 HRS

START 1009 HRS

STOP 1030 HRS

START 1055 HRS

Observers Name: RICK RANCEY

Observers Signature [signature] Date: 3/18/19

Organization: Environmental Services, Decatur IL. 217-413-6618

Certified by: Carl Koontz Associate Date: 9/26/18

Verified By: Date:

USEPA Method 9 Visible Emissions Field Data Sheets

Plant name: ADM

Address: 16994 Wright Rd

City: Grand Ledge **State:** MI **Zip:** 48837

Phone: 517-627-4017

Source: 15 K cfm dust collector

Source Number

Process Equipment: Grain **Operating Mode** 100

Control Equipment: Baghouse **Operating Mode** 100

Describe Emission Point: Stack Outlet

Height Above Ground Level 20 ft **Height Relative to Observer** 15 ft

Distance from Observer 30 ft **Direction from Observer** SSW

Describe Emissions GRAIN DUST **Emission Color** LIGHT BROWN

Plume Type: Continuous X Fugitive: O Intermittent O

Water Droplets Present NO **Plume:** Attached O Detached O N/A

At What Point Was Opacity Determined 15 ft FROM STACK

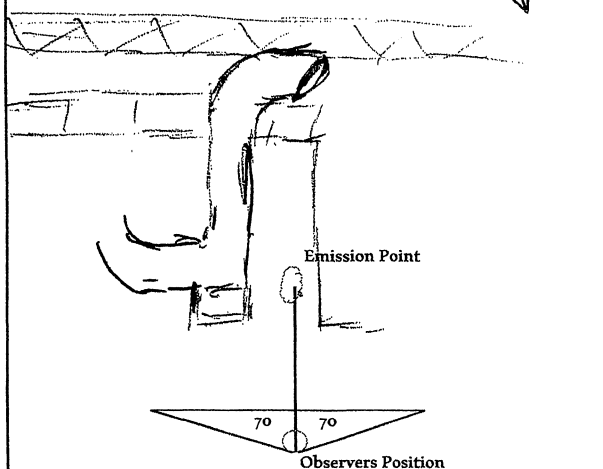
Background BLUE SKY & RAILING

Background Color BLUE / YELLOW **Percent Cloud Cover Start/End** 0/50%

Wind Speed Start/End 5MPH / 8MPH **Wind Direction From Start/End** WSW / W

Temperature Start/End 39 / 41 **Humidity** 48% / 38%

Source Layout Sketch — Draw North Arrow



Observation Date 3/18/19	Start Time 1244	End Time 1401							
SEC	0	15	30	45	SEC	0	15	30	45
MIN					MIN				
1	0	0	0	0	31	0	0	0	0
2	0	0	0	0	32	0	0	0	0
3	0	0	0	0	33	0	0	0	0
4	0	0	0	0	34	0	0	0	0
5	0	0	0	0	35	0	0	0	0
6	0	0	0	0	36	0	0	0	0
7	0	0	0	0	37	0	0	0	0
8	0	0	0	0	38	0	0	0	0
9	0	0	0	0	39	0	0	0	0
10	0	0	0	0	40	0	0	0	0
11	0	0	0	0	41	0	0	0	0
12	0	0	0	0	42	0	0	0	0
13	0	0	0	0	43	0	0	0	0
14	0	0	0	0	44	0	0	0	0
15	0	0	0	0	45	0	0	0	0
16	0	0	0	0	46	0	0	0	0
17	0	0	0	0	47	0	0	0	0
18	0	0	0	0	48	0	0	0	0
19	0	0	0	0	49	0	0	0	0
20	0	0	0	0	50	0	0	0	0
21	0	0	0	0	51	0	0	0	0
22	0	0	0	0	52	0	0	0	0
23	0	0	0	0	53	0	0	0	0
24	0	0	0	0	54	0	0	0	0
25	0	0	0	0	55	0	0	0	0
26	0	0	0	0	56	0	0	0	0
27	0	0	0	0	57	0	0	0	0
28	0	0	0	0	58	0	0	0	0
29	0	0	0	0	59	0	0	0	0
30	0	0	0	0	60	0	0	0	0

Highest 6 Minute Average 0 # Readings Above 0 % Were 0

Opacity Readings Minimum 0 Maximum 0

Comments: STOP 1314

START 1331

Observers Name: RICK DANCEY

Observers Signature [signature] Date: 3/18/19

Organization: Environmental Services, Decatur IL. 217-413-6618

Certified by: Carl Koontz Associate Date: 9/26/18

Verified By: Date:

USEPA Method 9 Visible Emissions Field Data Sheets

Plant name: ADM

Address: 16994 Wright Rd

City: Grand Ledge **State:** MI **Zip:** 48837

Phone: 517-627-4017

Source: 15 K cfm dust collector

Source Number

Process Equipment: Grain **Operating Mode** YES

Control Equipment: Baghouse **Operating Mode** YES

Describe Emission Point: Stack Outlet

Height Above Ground Level 20 FT **Height Relative to Observer** 15 FT

Distance from Observer 30 FT **Direction from Observer** ~~SSW~~ SW

Describe Emissions GRAIN DUST **Emission Color** LIGHT BROWN

Plume Type: Continuous X Fugitive: O Intermittent O

Water Droplets Present NO **Plume:** Attached O Detached O N/A

At What Point Was Opacity Determined 1 FT. FROM STACK.

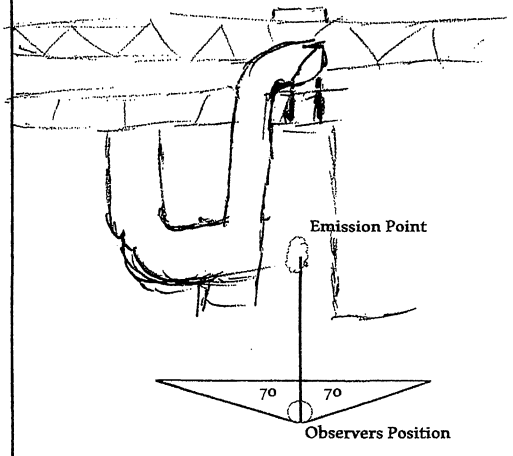
Background CLOUDY SKY / RAILING

Background Color GRAY/SH WHITE / YELLOW **Percent Cloud Cover Start/End** 90% / 60%

Wind Speed Start End 9 MPH / 8 MPH **Wind Direction From Start/ End** W / W

Temperature Start End 41 / 40 **Humidity** 39% / 38%

Source Layout Sketch Draw North Arrow



Observation Date 3/18/19 **Start Time** 1521 **End Time** 1634

SEC	0	15	30	45	SEC	0	15	30	45
MIN					MIN				
1	0	0	0	0	31	0	0	0	0
2	0	0	0	0	32	0	0	0	0
3	0	0	0	0	33	0	0	0	0
4	0	0	0	0	34	0	0	0	0
5	0	0	0	0	35	0	0	0	0
6	0	0	0	0	36	0	0	0	0
7	0	0	0	0	37	0	0	0	0
8	0	0	0	0	38	0	0	0	0
9	0	0	0	0	39	0	0	0	0
10	0	0	0	0	40	0	0	0	0
11	0	0	0	0	41	0	0	0	0
12	0	0	0	0	42	0	0	0	0
13	0	0	0	0	43	0	0	0	0
14	0	0	0	0	44	0	0	0	0
15	0	0	0	0	45	0	0	0	0
16	0	0	0	0	46	0	0	0	0
17	0	0	0	0	47	0	0	0	0
18	0	0	0	0	48	0	0	0	0
19	0	0	0	0	49	0	0	0	0
20	0	0	0	0	50	0	0	0	0
21	0	0	0	0	51	0	0	0	0
22	0	0	0	0	52	0	0	0	0
23	0	0	0	0	53	0	0	0	0
24	0	0	0	0	54	0	0	0	0
25	0	0	0	0	55	0	0	0	0
26	0	0	0	0	56	0	0	0	0
27	0	0	0	0	57	0	0	0	0
28	0	0	0	0	58	0	0	0	0
29	0	0	0	0	59	0	0	0	0
30	0	0	0	0	60	0	0	0	0

Highest 6 Minute Average 0 # Readings Above 0 % Were 0

Opacity Readings Minimum 0 Maximum 0

Comments: STOP 1551 HRS
START 1604

Observers Name: RICK DANCEY

Observers Signature: [signature] Date: 3/18/19

Organization: Environmental Services, Decatur IL. 217-413-6618

Certified by: Carl Koontz Associate Date: 9/26/18

Verified By: Date:

USEPA Method 9 Visible Emissions Field Data Sheets

Plant name: ADM

Address: 16994 Wright Rd

City: Grand Ledge **State:** MI **Zip:** 48837

Phone: 517-627-4017

Source: 50 K bph leg

Source Number

Process Equipment: Grain — Operating Mode YOT

Control Equipment: ~~Baghouse~~ ENCLOSED — Operating Mode YOT

Describe Emission Point: ~~Stack Outlet~~ AROUND CONVEYOR LOC.

Height Above Ground Level: 0-130 — Height Relative to Observer: 0-130

Distance from Observer: 30-150 — Direction from Observer: NNW

Describe Emissions: CORN DUST — Emission Color: LT. BROWN

Plume Type: Continuous O Fugitive: X Intermittent O

Water Droplets Present: NO — Plume: Attached O Detached O: N/A

At What Point Was Opacity Determined: 1-25E AROUND LOC.

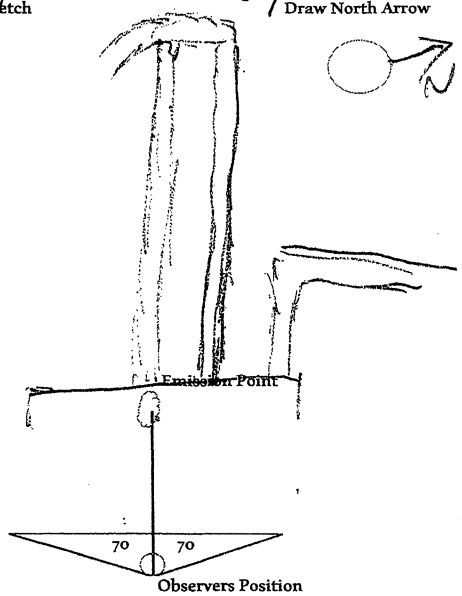
Background: PARTLY CLOUDY SKY

Background Color: WHITE/BLUE — Percent Cloud Cover Start/End: 50/100

Wind Speed Start/End: 10/10 — Wind Direction From Start/End: W/W

Temperature Start/End: 41/41 — Humidity: 38/38

Source Layout Sketch — Draw North Arrow



Observation Date 3/18/19	Start Time 1828	End Time 1928

SEC	0	15	30	45	SEC	0	15	30	45
MIN					MIN				
1	0	0	0	0	31	0	0	0	0
2	0	0	0	0	32	0	0	0	0
3	0	0	0	0	33	0	0	0	0
4	0	0	0	0	34	0	0	0	0
5	0	0	0	0	35	0	0	0	0
6	0	0	0	0	36	0	0	0	0
7	0	0	0	0	37	0	0	0	0
8	0	0	0	0	38	0	0	0	0
9	0	0	0	0	39	0	0	0	0
10	0	0	0	0	40	0	0	0	0
11	0	0	0	0	41	0	0	0	0
12	0	0	0	0	42	0	0	0	0
13	0	0	0	0	43	0	0	0	0
14	0	0	0	0	44	0	0	0	0
15	0	0	0	0	45	0	0	0	0
16	0	0	0	0	46	0	0	0	0
17	0	0	0	0	47	0	0	0	0
18	0	0	0	0	48	0	0	0	0
19	0	0	0	0	49	0	0	0	0
20	0	0	0	0	50	0	0	0	0
21	0	0	0	0	51	0	0	0	0
22	0	0	0	0	52	0	0	0	0
23	0	0	0	0	53	0	0	0	0
24	0	0	0	0	54	0	0	0	0
25	0	0	0	0	55	0	0	0	0
26	0	0	0	0	56	0	0	0	0
27	0	0	0	0	57	0	0	0	0
28	0	0	0	0	58	0	0	0	0
29	0	0	0	0	59	0	0	0	0
30	0	0	0	0	60	0	0	0	0

Highest 6 Minute Average 0 — # Readings Above 0 % Were 0

Opacity Readings Minimum 0 — Maximum 0

Comments:

Observers Name: RICK DANCEY

Observers Signature: [signature] — Date: 3/18/19

Organization: Environmental Services, Decatur IL. 217-413-6618

Certified by: Carl Koontz Associate — Date: 9/26/18

Verified By: — Date:

USEPA Method 9 Visible Emissions Field Data Sheets

Plant name: ADM

Address: 16994 Wright Rd

City: Grand Ledge | **State: MI** | **Zip: 48837**

Phone: 517-627-4017

Source: ~~50 K bph leg~~ 50K BPH LEG ~~AT ROLLER MILLING COMPLEX~~

Source Number

Process Equipment: Grain | Operating Mode NOS

Control Equipment: ~~Baghouse~~ ENCLOSED | Operating Mode NOS

Describe Emission Point: ~~Stack Outlet~~ AROUND CONVEYOR LEG

Height Above Ground Level 0-130 FT | Height Relative to Observer 0-130 FT

Distance from Observer 30-150 FT | Direction from Observer NNW

Describe Emissions CORN DUST | Emission Color LT. BROWN

Plume Type: Continuous O Fugitive: X Intermittent O

Water Droplets Present NO | Plume: Attached O Detached O N/A

At What Point Was Opacity Determined 1-2 FT AROUND LEG

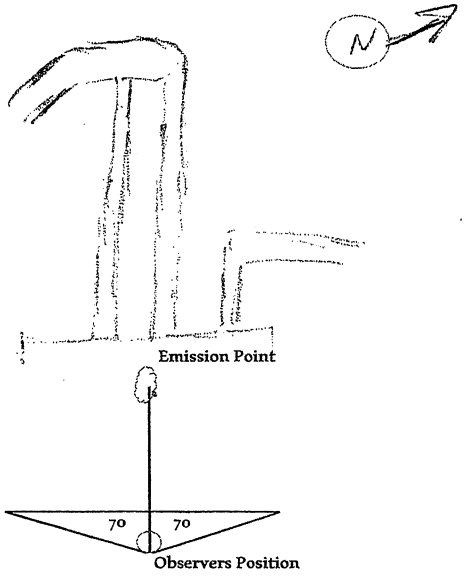
Background ~~SILO~~ BLUE SKY

Background Color ~~BLUE GRAY~~ | Percent Cloud Cover Start/End 0/0

Wind Speed Start 1 MPH End 14 MPH | Wind Direction From Start/ End NE/S

Temperature Start 24 End 31 | Humidity 39/83

Source Layout Sketch — Draw North Arrow



Observation Date 3/19/15 | Start Time 0823 | End Time 0923

SEC	0	15	30	45	SEC	0	15	30	45
MIN					MIN				
1	0	0	0	0	31	0	0	0	0
2	0	0	0	0	32	0	0	0	0
3	0	0	0	0	33	0	0	0	0
4	0	0	0	0	34	0	0	0	0
5	0	0	0	0	35	0	0	0	0
6	0	0	0	0	36	0	0	0	0
7	0	0	0	0	37	0	0	0	0
8	0	0	0	0	38	0	0	0	0
9	0	0	0	0	39	0	0	0	0
10	0	0	0	0	40	0	0	0	0
11	0	0	0	0	41	0	0	0	0
12	0	0	0	0	42	0	0	0	0
13	0	0	0	0	43	0	0	0	0
14	0	0	0	0	44	0	0	0	0
15	0	0	0	0	45	0	0	0	0
16	0	0	0	0	46	0	0	0	0
17	0	0	0	0	47	0	0	0	0
18	0	0	0	0	48	0	0	0	0
19	0	0	0	0	49	0	0	0	0
20	0	0	0	0	50	0	0	0	0
21	0	0	0	0	51	0	0	0	0
22	0	0	0	0	52	0	0	0	0
23	0	0	0	0	53	0	0	0	0
24	0	0	0	0	54	0	0	0	0
25	0	0	0	0	55	0	0	0	0
26	0	0	0	0	56	0	0	0	0
27	0	0	0	0	57	0	0	0	0
28	0	0	0	0	58	0	0	0	0
29	0	0	0	0	59	0	0	0	0
30	0	0	0	0	60	0	0	0	0

Highest 6 Minute Average 0 | # Readings Above 0 % Were 0

Opacity Readings Minimum 0 Maximum 0

Comments:

Observers Name: RICK DANCY

Observers Signature [signature] Date: 3/19/15

Organization: Environmental Services, Decatur IL. 217-413-6618

Certified by: Carl Koontz Associate Date: 9/26/18

Verified By: Date:

RECEIVED

APR 11 2019

AIR QUALITY DIVISION

USEPA Method 9 Visible Emissions Field Data Sheets

Plant name: ADM

Address: 16994 Wright Rd

City: Grand Ledge **State:** MI **Zip:** 48837

Phone: 517-627-4017

Source: 50 K bph leg

Source Number

Process Equipment: Grain — Operating Mode VOS

Control Equipment: ~~Baghouse~~ ENCLOSED — Operating Mode VOS

Describe Emission Point: Stack Outlet AROUND CONVEYOR LOC

Height Above Ground Level: 0-130 ft — Height Relative to Observer: 0-130 ft

Distance from Observer: 30-150 ft. — Direction from Observer: NNW

Describe Emissions: GRAIN DUST — Emission Color: LT BROWN

Plume Type: Continuous O Fugitive: X Intermittent O

Water Droplets Present: NO — Plume: Attached O Detached O N/A

At What Point Was Opacity Determined: 1-25 ft. AROUND LOC

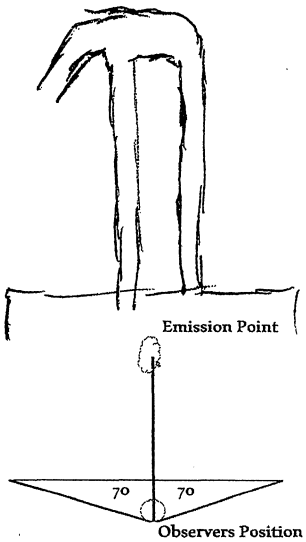
Background: ~~SILO~~ SKY

Background Color: WHITE/GRAY ~~Lt. GRAY~~ — Percent Cloud Cover Start/End: 100 % / 100

Wind Speed: 4 / 3 Start End — Wind Direction From Start/ End: N / NW

Temperature: 35 / 35 Start End — Humidity: 95 / 97

Source Layout Sketch — Draw North Arrow



Observation Date	3/21/19	Start Time	0835	End Time	0943

SEC	0	15	30	45	SEC	0	15	30	45
MIN					MIN				
1	0	0	0	0	31	0	0	0	0
2	0	0	0	0	32	0	0	0	0
3	0	0	0	0	33	0	0	0	0
4	0	0	0	0	34	0	0	0	0
5	0	0	0	0	35	0	0	0	0
6	0	0	0	0	36	0	0	0	0
7	0	0	0	0	37	0	0	0	0
8	0	0	0	0	38	0	0	0	0
9	0	0	0	0	39	0	0	0	0
10	0	0	0	0	40	0	0	0	0
11	0	0	0	0	41	0	0	0	0
12	0	0	0	0	42	0	0	0	0
13	0	0	0	0	43	0	0	0	0
14	0	0	0	0	44	0	0	0	0
15	0	0	0	0	45	0	0	0	0
16	0	0	0	0	46	0	0	0	0
17	0	0	0	0	47	0	0	0	0
18	0	0	0	0	48	0	0	0	0
19	0	0	0	0	49	0	0	0	0
20	0	0	0	0	50	0	0	0	0
21	0	0	0	0	51	0	0	0	0
22	0	0	0	0	52	0	0	0	0
23	0	0	0	0	53	0	0	0	0
24	0	0	0	0	54	0	0	0	0
25	0	0	0	0	55	0	0	0	0
26	0	0	0	0	56	0	0	0	0
27	0	0	0	0	57	0	0	0	0
28	0	0	0	0	58	0	0	0	0
29	0	0	0	0	59	0	0	0	0
30	0	0	0	0	60	0	0	0	0

Highest 6 Minute Average 0 — # Readings Above 0 % Were 0

Opacity Readings Minimum 0 — Maximum 0

Comments: STOP 0909
START 0917

Observers Name: RICK DANCOY

Observers Signature: [signature] — Date: 3/21/19

Organization: Environmental Services, Decatur IL. 217-413-6618

Certified by: Carl Koontz Associate — Date: 9/26/18

Verified By: — Date:

USEPA Method 9 Visible Emissions Field Data Sheets

Plant name: ADM

Address: 16994 Wright Rd

City: Grand Ledge **State:** MI **Zip:** 48837

Phone: 517-627-4017

Source: 50 K bph hi roller that feeds the 50 K leg

Source Number

Process Equipment: Grain **Operating Mode** YOS

Control Equipment: ~~Baghouse~~ ENCLOSED **Operating Mode** YOS

Describe Emission Point: ~~Stack Outlet~~ AROUND CONVEYOR

Height Above Ground Level 10-20 ft. **Height Relative to Observer** 10-20 ft.

Distance from Observer 30-60 ft **Direction from Observer** N

Describe Emissions CORN DUST **Emission Color** LIGHT BROWN

Plume Type: Continuous O Fugitive: X Intermittent O

Water Droplets Present **Plume:** Attached O Detached O N/A

At What Point Was Opacity Determined 1-2 ft AROUND CONVEYOR

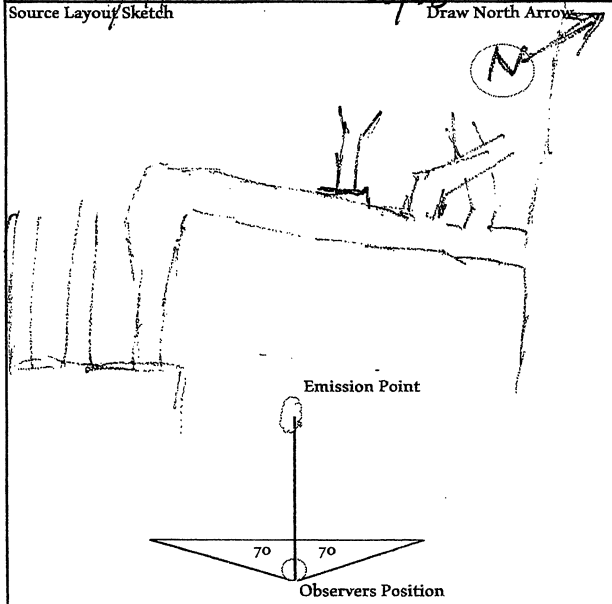
Background SILO

Background Color LT. GRAY **Percent Cloud Cover Start/End** 50/50

Wind Speed Start 10 End 10 **Wind Direction From Start/ End** NW/W

Temperature Start 41 End 41 **Humidity** 38/38

Source Layout Sketch — Draw North Arrow



Observation Date 3/18/19	Start Time 1828	End Time 1928

SEC	0	15	30	45	SEC	0	15	30	45
MIN					MIN				
1	0	0	0	0	31	0	0	0	0
2	0	0	0	0	32	0	0	0	0
3	0	0	0	0	33	0	0	0	0
4	0	0	0	0	34	0	0	0	0
5	0	0	0	0	35	0	0	0	0
6	0	0	0	0	36	0	0	0	0
7	0	0	0	0	37	0	0	0	0
8	0	0	0	0	38	0	0	0	0
9	0	0	0	0	39	0	0	0	0
10	0	0	0	0	40	0	0	0	0
11	0	0	0	0	41	0	0	0	0
12	0	0	0	0	42	0	0	0	0
13	0	0	0	0	43	0	0	0	0
14	0	0	0	0	44	0	0	0	0
15	0	0	0	0	45	0	0	0	0
16	0	0	0	0	46	0	0	0	0
17	0	0	0	0	47	0	0	0	0
18	0	0	0	0	48	0	0	0	0
19	0	0	0	0	49	0	0	0	0
20	0	0	0	0	50	0	0	0	0
21	0	0	0	0	51	0	0	0	0
22	0	0	0	0	52	0	0	0	0
23	0	0	0	0	53	0	0	0	0
24	0	0	0	0	54	0	0	0	0
25	0	0	0	0	55	0	0	0	0
26	0	0	0	0	56	0	0	0	0
27	0	0	0	0	57	0	0	0	0
28	0	0	0	0	58	0	0	0	0
29	0	0	0	0	59	0	0	0	0
30	0	0	0	0	60	0	0	0	0

Highest 6 Minute Average 0 # Readings Above 0 % Were 0

Opacity Readings Minimum 0 Maximum 0

Comments:

Observers Name: RICK DANCEY

Observers Signature [signature] Date: 3/18/19

Organization: Environmental Services, Decatur IL. 217-413-6618

Certified by: Carl Koontz Associate Date: 9/26/18

Verified By: Date:

USEPA Method 9 Visible Emissions Field Data Sheets

Plant name: ADM

Address: 16994 Wright Rd

City: Grand Ledge | **State:** MI | **Zip:** 48837

Phone: 517-627-4017

Source: 50 K bph hi roller that feeds the 50 K leg

Source Number

Process Equipment: Grain | **Operating Mode** YES

Control Equipment: ~~Baghouse~~ ENCLOSED | **Operating Mode** YES

Describe Emission Point: ~~Stack Outlet~~ AROUND CONVEYOR

Height Above Ground Level 10-20 ft | **Height Relative to Observer** 10-20 ft

Distance from Observer 30-60 ft | **Direction from Observer** N

Describe Emissions CORN DUST | **Emission Color** LT. BROWN

Plume Type: Continuous O Fugitive: X Intermittent O

Water Droplets Present NO | **Plume:** Attached O Detached O N/A

At What Point Was Opacity Determined 1-2 ft AROUND CONVEYOR

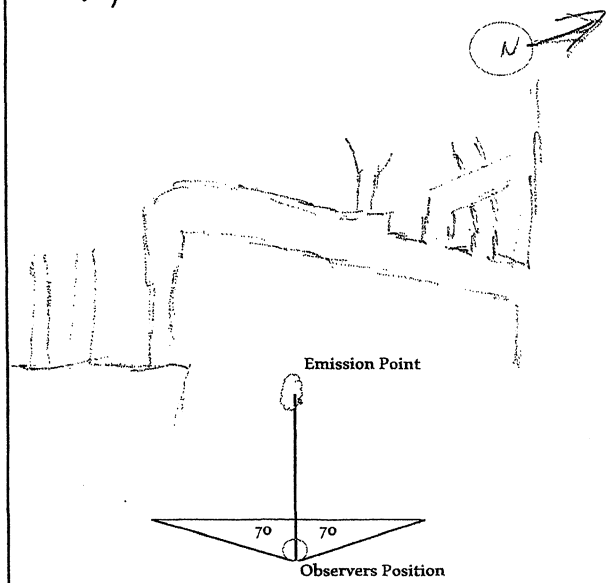
Background ~~BLUE SKY~~ SILO

Background Color LT. GRAY/~~BLUE~~ | **Percent Cloud Cover Start/End** 0/0

Wind Speed Start 1 MPH End 4 MPH | **Wind Direction From Start/ End** NE/S

Temperature Start 24 End 31 | **Humidity** 27/83

Source Layout/Sketch — Draw North Arrow



Observation Date	3/19/19	Start Time	0823	End Time	0928

SEC	0	15	30	45	SEC	0	15	30	45
MIN					MIN				
1	0	0	0	0	31	0	0	0	0
2	0	0	0	0	32	0	0	0	0
3	0	0	0	0	33	0	0	0	0
4	0	0	0	0	34	0	0	0	0
5	0	0	0	0	35	0	0	0	0
6	0	0	0	0	36	0	0	0	0
7	0	0	0	0	37	0	0	0	0
8	0	0	0	0	38	0	0	0	0
9	0	0	0	0	39	0	0	0	0
10	0	0	0	0	40	0	0	0	0
11	0	0	0	0	41	0	0	0	0
12	0	0	0	0	42	0	0	0	0
13	0	0	0	0	43	0	0	0	0
14	0	0	0	0	44	0	0	0	0
15	0	0	0	0	45	0	0	0	0
16	0	0	0	0	46	0	0	0	0
17	0	0	0	0	47	0	0	0	0
18	0	0	0	0	48	0	0	0	0
19	0	0	0	0	49	0	0	0	0
20	0	0	0	0	50	0	0	0	0
21	0	0	0	0	51	0	0	0	0
22	0	0	0	0	52	0	0	0	0
23	0	0	0	0	53	0	0	0	0
24	0	0	0	0	54	0	0	0	0
25	0	0	0	0	55	0	0	0	0
26	0	0	0	0	56	0	0	0	0
27	0	0	0	0	57	0	0	0	0
28	0	0	0	0	58	0	0	0	0
29	0	0	0	0	59	0	0	0	0
30	0	0	0	0	60	0	0	0	0

Highest 6 Minute Average 0 | # Readings Above 0 % Were 0

Opacity Readings Minimum 0 | Maximum 0

Comments:

Observers Name: RICK DANCEY

Observers Signature [signature] | Date: 3/19/19

Organization: Environmental Services, Decatur IL. 217-413-6618

Certified by: Carl Koontz Associate | Date: 9/26/18

Verified By: | Date:

USEPA Method 9 Visible Emissions Field Data Sheets

Plant name: ADM

Address: 16994 Wright Rd

City: Grand Ledge **State:** MI **Zip:** 48837

Phone: 517-627-4017

Source: 50 K bph hi roller that feeds the 50 K leg

Source Number

Process Equipment: Grain **Operating Mode** YES

Control Equipment: ~~Baghouse~~ ENCLOSED **Operating Mode** YES

Describe Emission Point: ~~Stack Outlet~~ AROUND CONVEYOR

Height Above Ground Level 10-20 ft **Height Relative to Observer** 10-20 ft.

Distance from Observer 30-60 ft **Direction from Observer** N

Describe Emissions GRAIN DUST **Emission Color** LT BROWN

Plume Type: Continuous O Fugitive: X Intermittent O

Water Droplets Present NO **Plume:** Attached O Detached O N/A

At What Point Was Opacity Determined 1-2 ft AROUND CONVEYOR

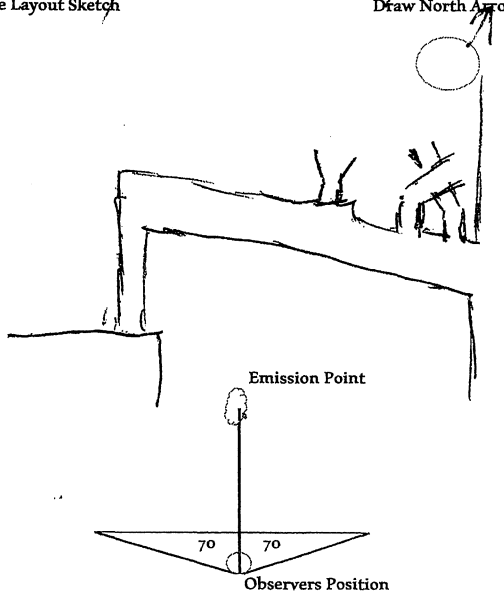
Background SILO

Background Color LT GRAY **Percent Cloud Cover Start/End** 100/100

Wind Speed Start 4 End 3 **Wind Direction From Start/ End** N/N

Temperature Start 35 End 35 **Humidity** 95/97

Source Layout Sketch Draw North Arrow



Observation Date	3/21/19	Start Time	0835	End Time	0943

SEC	0	15	30	45	SEC	0	15	30	45
MIN					MIN				
1	0	0	0	0	31	0	0	0	0
2	0	0	0	0	32	0	0	0	0
3	0	0	0	0	33	0	0	0	0
4	0	0	0	0	34	0	0	0	0
5	0	0	0	0	35	0	0	0	0
6	0	0	0	0	36	0	0	0	0
7	0	0	0	0	37	0	0	0	0
8	0	0	0	0	38	0	0	0	0
9	0	0	0	0	39	0	0	0	0
10	0	0	0	0	40	0	0	0	0
11	0	0	0	0	41	0	0	0	0
12	0	0	0	0	42	0	0	0	0
13	0	0	0	0	43	0	0	0	0
14	0	0	0	0	44	0	0	0	0
15	0	0	0	0	45	0	0	0	0
16	0	0	0	0	46	0	0	0	0
17	0	0	0	0	47	0	0	0	0
18	0	0	0	0	48	0	0	0	0
19	0	0	0	0	49	0	0	0	0
20	0	0	0	0	50	0	0	0	0
21	0	0	0	0	51	0	0	0	0
22	0	0	0	0	52	0	0	0	0
23	0	0	0	0	53	0	0	0	0
24	0	0	0	0	54	0	0	0	0
25	0	0	0	0	55	0	0	0	0
26	0	0	0	0	56	0	0	0	0
27	0	0	0	0	57	0	0	0	0
28	0	0	0	0	58	0	0	0	0
29	0	0	0	0	59	0	0	0	0
30	0	0	0	0	60	0	0	0	0

Highest 6 Minute Average 0 # Readings Above 0 % Were 0

Opacity Readings Minimum 0 Maximum 0

Comments: STOP 0909
START 0917

Observers Name: RICK DANCEY

Observers Signature [signature] Date: 3/21/19

Organization: Environmental Services, Decatur IL. 217-413-6618

Certified by: Carl Koontz Associate Date: 9/26/18

Verified By: Date:

USEPA Method 9 Visible Emissions Field Data Sheets

Plant name: ADM

Address:

State: Zip:

Phone:

Source: 30 K bph high Roller upfor

Source Number

Process Equipment: GRAIN — Operating Mode: yes

Control Equipment: Enclosed — Operating Mode: yes

Describe Emission Point: Conveyor

Height Above Ground Level: 115'

Height Relative to Observer: 0 Ft

Distance from Observer: 150'

Direction from Observer: NE

Describe Emissions: GRAIN

Emission Color: light GRAY

Plume Type: Continuous O Fugitive: X Intermittent O

Water Droplets Present: NO

Plume: Attached O Detached O: N/A

At What Point Was Opacity Determined: 1-3 Ft ABOUND conveyor

Background: SKY And conveyor/silo

Background Color: GRAY - yellow

Percent Cloud Cover Start/End: 50 / 50

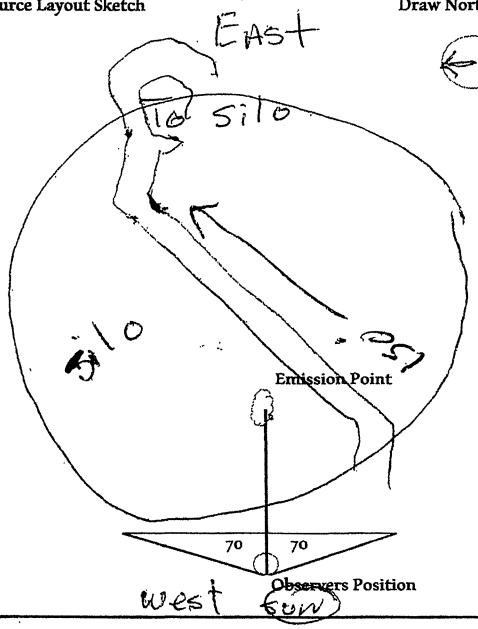
Wind Speed Start/End: 0-10 / 0-10

Wind Direction From Start/End: W / W

Temperature Start/End: 41 / 41

Humidity: 38

Source Layout Sketch — Draw North Arrow



Observation Date: 3-18-19 — Start Time: 1832 — End Time: 1932

SEC	0	15	30	45	SEC	0	15	30	45
MIN					MIN				
1	0	0	0	0	31	0	0	0	0
2	0	0	0	0	32	0	0	0	0
3	0	0	0	0	33	0	0	0	0
4	0	0	0	0	34	0	0	0	0
5	0	0	0	0	35	0	0	0	0
6	0	0	0	0	36	0	0	0	0
7	0	0	0	0	37	0	0	0	0
8	0	0	0	0	38	0	0	0	0
9	0	0	0	0	39	0	0	0	0
10	0	0	0	0	40	0	0	0	0
11	0	0	0	0	41	0	0	0	0
12	0	0	0	0	42	0	0	0	0
13	0	0	0	0	43	0	0	0	0
14	0	0	0	0	44	0	0	0	0
15	0	0	0	0	45	0	0	0	0
16	0	0	0	0	46	0	0	0	0
17	0	0	0	0	47	0	0	0	0
18	0	0	0	0	48	0	0	0	0
19	0	0	0	0	49	0	0	0	0
20	0	0	0	0	50	0	0	0	0
21	0	0	0	0	51	0	0	0	0
22	0	0	0	0	52	0	0	0	0
23	0	0	0	0	53	0	0	0	0
24	0	0	0	0	54	0	0	0	0
25	0	0	0	0	55	0	0	0	0
26	0	0	0	0	56	0	0	0	0
27	0	0	0	0	57	0	0	0	0
28	0	0	0	0	58	0	0	0	0
29	0	0	0	0	59	0	0	0	0
30	0	0	0	0	60	0	0	0	0

Highest 6 Minute Average: 0 — # Readings Above: 0 — % Were: 0

Opacity Readings Minimum: 0 — Maximum: 0

Comments:

Observers Name: Sam Turner

Observers Signature: Sam Turner — Date: 3-18-19

Organization: Environmental Services, Decatur IL. 217-413-6618

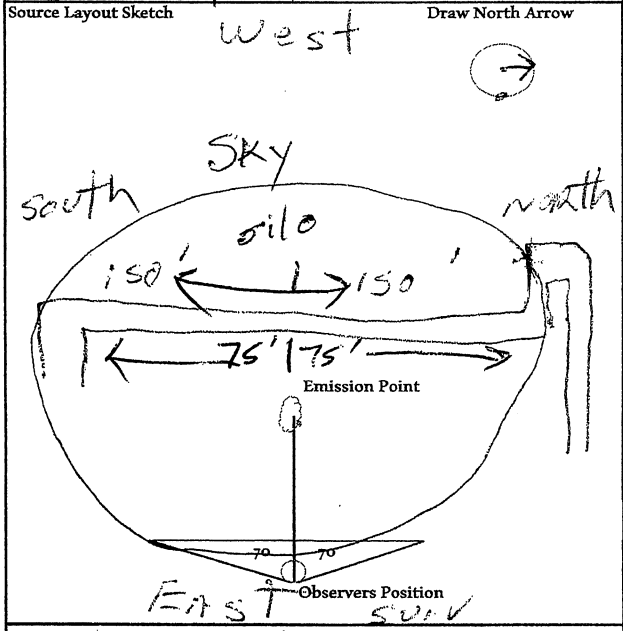
Certified by: Carl Koontz Associate — Date: ~~3-18-2017~~ 3-15-19

Verified By: — Date:

USEPA Method 9 Visible Emissions Field Data Sheets

Plant name: ADM		
Address: 16994 Wright Rd		
City: Grand Ledge	**State: MI**	**Zip: 48837**
Phone: 517-627-4017		
Source: 30 K bph high roller up top		
Source Number		
Process Equipment: Grain	Operating Mode yes	
Control Equipment: ~~Baghouse~~ Enclosed	Operating Mode yes	
Describe Emission Point: ~~Stack Outlet~~ mound conveyor		
Height Above Ground Level ~~200'~~ 115'	Height Relative to Observer 0	
Distance from Observer 150	Direction from Observer south & North	
Describe Emissions Grain	Emission Color none	
Plume Type: Continuous O Fugitive: X Intermittent O		
Water Droplets Present no	Plume: Attached O Detached O N/A	
At What Point Was Opacity Determined 1-2 Ft mound conveyor		
Background sky & silo / conveyor		
Background Color Gray Blue	Percent Cloud Cover Start/End 10 / 10	
Wind Speed Start End 0-5 0-5 mph	Wind Direction From Start/ End NE / S	
Temperature Start End 32 / 31	Humidity	

Source Layout Sketch — Draw North Arrow



SEC MIN	0	15	30	45	SEC MIN	0	15	30	45
1	0	0	0	0	31	0	0	0	0
2	0	0	0	0	32	0	0	0	0
3	0	0	0	0	33	0	0	0	0
4	0	0	0	0	34	0	0	0	0
5	0	0	0	0	35	0	0	0	0
6	0	0	0	0	36	0	0	0	0
7	0	0	0	0	37	0	0	0	0
8	0	0	0	0	38	0	0	0	0
9	0	0	0	0	39	0	0	0	0
10	0	0	0	0	40	0	0	0	0
11	0	0	0	0	41	0	0	0	0
12	0	0	0	0	42	0	0	0	0
13	0	0	0	0	43	0	0	0	0
14	0	0	0	0	44	0	0	0	0
15	0	0	0	0	45	0	0	0	0
16	0	0	0	0	46	0	0	0	0
17	0	0	0	0	47	0	0	0	0
18	0	0	0	0	48	0	0	0	0
19	0	0	0	0	49	0	0	0	0
20	0	0	0	0	50	0	0	0	0
21	0	0	0	0	51	0	0	0	0
22	0	0	0	0	52	0	0	0	0
23	0	0	0	0	53	0	0	0	0
24	0	0	0	0	54	0	0	0	0
25	0	0	0	0	55	0	0	0	0
26	0	0	0	0	56	0	0	0	0
27	0	0	0	0	57	0	0	0	0
28	0	0	0	0	58	0	0	0	0
29	0	0	0	0	59	0	0	0	0
30	0	0	0	0	60	0	0	0	0

Observation Date 3-19-19 | Start Time 8:29 | End Time 9:29

Highest 6 Minute Average 0 | # Readings Above 0 % Were 0

Opacity Readings Minimum 0 Maximum 0

Comments:

Observers Name: Sam Turner

Observers Signature Sam Turner Date: 3-19-19

Organization: Environmental Services, Decatur IL. 217-413-6618

Certified by: Carl Koontz Associate Date: 3-15-19

Verified By: Date:

USEPA Method 9 Visible Emissions Field Data Sheets

Plant name: ADM

Address: 16994 Wright Rd

City: Grand Ledge **State:** MI **Zip:** 48837

Phone: 517-627-4017

Source: 30 K bph high roller up top

Source Number

Process Equipment: Grain — Operating Mode

Control Equipment: ~~Baghouse~~ Enclosed — Operating Mode

Describe Emission Point: ~~Stack Outlet~~ Around conveyor A

Height Above Ground Level: 115'

Height Relative to Observer:

Distance from Observer: 0-75'

Direction from Observer: NE - South west

Describe Emissions: Gray in

Emission Color: light GRAY

Plume Type: Continuous O Fugitive: X Intermittent O

Water Droplets Present: No

Plume: Attached O Detached O: N/A

At What Point Was Opacity Determined: 1-3 FT around conveyor

Background: Silo / conveyor 5 / Ground

Background Color: DARK GRAY/BLUE

Percent Cloud Cover Start/End: 100 / 100

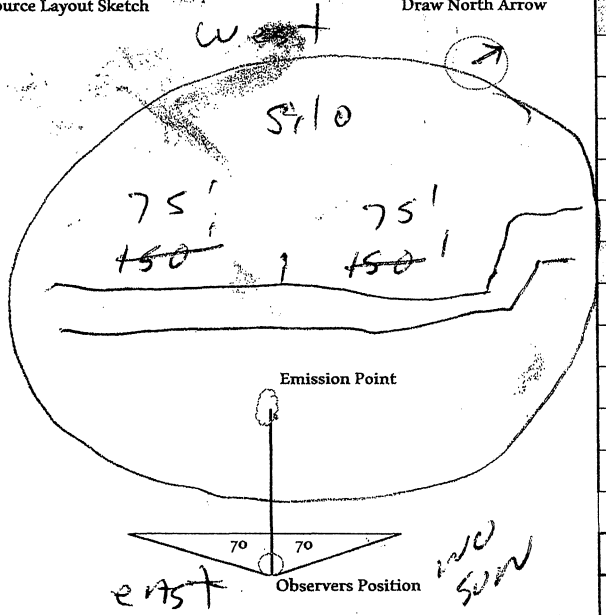
Wind Speed: Start 3 mph End 3 mph

Wind Direction From Start/ End: NW / N

Temperature: Start 36 End 37

Humidity: 97%

Source Layout Sketch — Draw North Arrow



SEC	0	15	30	45	SEC	0	15	30	45
MIN					MIN				
1	0	0	0	0	31	0	0	0	0
2	0	0	0	0	32	0	0	0	0
3	0	0	0	0	33	0	0	0	0
4	0	0	0	0	34	0	0	0	0
5	0	0	0	0	35	0	0	0	0
6	0	0	0	0	36	0	0	0	0
7	0	0	0	0	37	0	0	0	0
8	0	0	0	0	38	0	0	0	0
9	0	0	0	0	39	0	0	0	0
10	0	0	0	0	40	0	0	0	0
11	0	0	0	0	41	0	0	0	0
12	0	0	0	0	42	0	0	0	0
13	0	0	0	0	43	0	0	0	0
14	0	0	0	0	44	0	0	0	0
15	0	0	0	0	45	0	0	0	0
16	0	0	0	0	46	0	0	0	0
17	0	0	0	0	47	0	0	0	0
18	0	0	0	0	48	0	0	0	0
19	0	0	0	0	49	0	0	0	0
20	0	0	0	0	50	0	0	0	0
21	0	0	0	0	51	0	0	0	0
22	0	0	0	0	52	0	0	0	0
23	0	0	0	0	53	0	0	0	0
24	0	0	0	0	54	0	0	0	0
25	0	0	0	0	55	0	0	0	0
26	0	0	0	0	56	0	0	0	0
27	0	0	0	0	57	0	0	0	0
28	0	0	0	0	58	0	0	0	0
29	0	0	0	0	59	0	0	0	0
30	0	0	0	0	60	0	0	0	0

Observation Date: 3-21-19 Start Time: 839 End Time: 9:46

Highest 6 Minute Average: 0 # Readings Above: 0 % Were: 0

Opacity Readings Minimum: 0 Maximum: 0

Comments: Stop 9:11
Start 9:18

Observers Name: Sam Turner

Observers Signature: Sam Turner Date: 3-21-19

Organization: Environmental Services, Decatur IL. 217-413-6618

Certified by: Carl Koontz Associate Date: 3-15-19

Verified By: Date:

USEPA Method 9 Visible Emissions Field Data Sheets

Plant name: ADM

Address: 16994 Wright Rd

City: Grand Ledge **State:** MI **Zip:** 48837

Phone: 517-627-4017

Source: 15K bph drag from 50K leg back to house

Source Number

Process Equipment: Grain **Operating Mode** YES

Control Equipment: ~~Baghouse~~ ENCLOSED **Operating Mode** YES

Describe Emission Point: Stack Outlet AROUND CONVEYOR

Height Above Ground Level 130 FT **Height Relative to Observer** 5-15 FT

Distance from Observer 5-70 FT **Direction from Observer** NE

Describe Emissions GRAIN DUST **Emission Color** LT. BROWN

Plume Type: Continuous O Fugitive: X Intermittent O

Water Droplets Present NO **Plume:** Attached O Detached O N/A

At What Point Was Opacity Determined 1-2 FT AROUND CONVEYOR

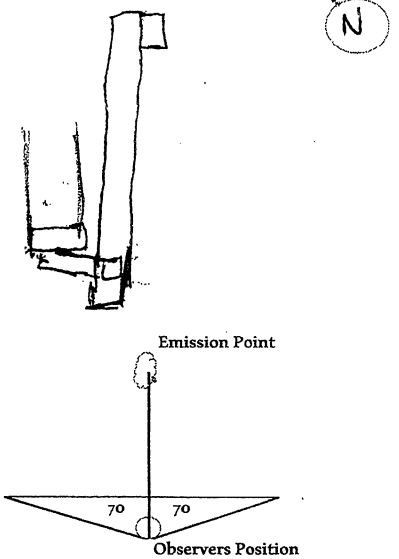
Background SKY & CONVEYOR LEG

Background Color WHITE / BLUE / GRAY **Percent Cloud Cover Start/End** 50/50

Wind Speed Start 5-12 End 5-15 **Wind Direction From Start/ End** SW/SW

Temperature Start 47 End 47 **Humidity** 42/42

Source Layout Sketch — Draw North Arrow



Observation Date 3/19/19 **Start Time** 1635 **End Time** 1735

SEC	0	15	30	45	SEC	0	15	30	45
MIN					MIN				
1	0	0	0	0	31	0	0	0	0
2	0	0	0	0	32	0	0	0	0
3	0	0	0	0	33	0	0	0	0
4	0	0	0	0	34	0	0	0	0
5	0	0	0	0	35	0	0	0	0
6	0	0	0	0	36	0	0	0	0
7	0	0	0	0	37	0	0	0	0
8	0	0	0	0	38	0	0	0	0
9	0	0	0	0	39	0	0	0	0
10	0	0	0	0	40	0	0	0	0
11	0	0	0	0	41	0	0	0	0
12	0	0	0	0	42	0	0	0	0
13	0	0	0	0	43	0	0	0	0
14	0	0	0	0	44	0	0	0	0
15	0	0	0	0	45	0	0	0	0
16	0	0	0	0	46	0	0	0	0
17	0	0	0	0	47	0	0	0	0
18	0	0	0	0	48	0	0	0	0
19	0	0	0	0	49	0	0	0	0
20	0	0	0	0	50	0	0	0	0
21	0	0	0	0	51	0	0	0	0
22	0	0	0	0	52	0	0	0	0
23	0	0	0	0	53	0	0	0	0
24	0	0	0	0	54	0	0	0	0
25	0	0	0	0	55	0	0	0	0
26	0	0	0	0	56	0	0	0	0
27	0	0	0	0	57	0	0	0	0
28	0	0	0	0	58	0	0	0	0
29	0	0	0	0	59	0	0	0	0
30	0	0	0	0	60	0	0	0	0

Highest 6 Minute Average 0 # Readings Above 0 % Were 0

Opacity Readings Minimum 0 Maximum 0

Comments:

Observers Name: RICK DANCEY

Observers Signature [signature] Date: 3/19/19

Organization: Environmental Services, Decatur IL. 217-413-6618

Certified by: Carl Koontz Associate Date: 9/26/18

Verified By: Date:

USEPA Method 9 Visible Emissions Field Data Sheets

1436

Plant name: ADM

Address: 16994 WRIGHT RD.

GRAND LEDGE | **State:** MI | **Zip:** 48837

Phone: 517-627-4017

Source: 15K BPH DRAG FROM 50K

Source Number

Process Equipment: | Operating Mode YES

Control Equipment: ENCLOSED | Operating Mode YES

Describe Emission Point: AROUND CONVEYOR

Height Above Ground Level: 130 ft | Height Relative to Observer: 5-15 ft.

Distance from Observer: 20-40 ft. | Direction from Observer: NNW

Describe Emissions: GRAIN DUST | Emission Color: LT. BROWN

Plume Type: Continuous O Fugitive: X Intermittent O

Water Droplets Present: NO | Plume: Attached O Detached O, N/A.

At What Point Was Opacity Determined: 1-2 ft AROUND CONVEYOR

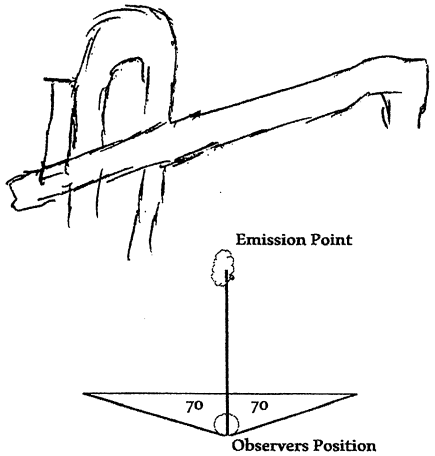
Background: SKY / CONVEYOR LEG

Background Color: white / blue / GRAY | Percent Cloud Cover Start/End: 5% / 70%

Wind Speed Start End: 8MPH / 10-15MPH | Wind Direction From Start/ End: SSW / SW

Temperature Start End: 42 / 45 | Humidity: 57 / 57

Source Layout Sketch — Draw North Arrow (N)



Observation Date: 3/19/19 | Start Time: 1310 | End Time: 1437 (ET)

SEC	0	15	30	45	SEC	0	15	30	45
MIN					MIN				
1	0	0	0	0	31	0	0	0	0
2	0	0	0	0	32	0	0	0	0
3	0	0	0	0	33	0	0	0	0
4	0	0	0	0	34	0	0	0	0
5	0	0	0	0	35	0	0	0	0
6	0	0	0	0	36	0	0	0	0
7	0	0	0	0	37	0	0	0	0
8	0	0	0	0	38	0	0	0	0
9	0	0	0	0	39	0	0	0	0
10	0	0	0	0	40	0	0	0	0
11	0	0	0	0	41	0	0	0	0
12	0	0	0	0	42	0	0	0	0
13	0	0	0	0	43	0	0	0	0
14	0	0	0	0	44	0	0	0	0
15	0	0	0	0	45	0	0	0	0
16	0	0	0	0	46	0	0	0	0
17	0	0	0	0	47	0	0	0	0
18	0	0	0	0	48	0	0	0	0
19	0	0	0	0	49	0	0	0	0
20	0	0	0	0	50	0	0	0	0
21	0	0	0	0	51	0	0	0	0
22	0	0	0	0	52	0	0	0	0
23	0	0	0	0	53	0	0	0	0
24	0	0	0	0	54	0	0	0	0
25	0	0	0	0	55	0	0	0	0
26	0	0	0	0	56	0	0	0	0
27	0	0	0	0	57	0	0	0	0
28	0	0	0	0	58	0	0	0	0
29	0	0	0	0	59	0	0	0	0
30	0	0	0	0	60	0	0	0	0

Highest 6 Minute Average: 0 | # Readings Above 0 % Were 0

Opacity Readings Minimum: 0 | Maximum: 0

Comments: STOP 1313

START 1318, STOP 1341

START 1352, STOP 1354 DRAG PROBLEM

START 1359, STOP 1401, START 1408

Observers Name: ~~Sam Parker~~ RICK DANCEY

Observers Signature: [signature] | Date: 3/19/19

Organization: Environmental Services, Decatur IL. 217-413-6618

Certified by: Carl Koontz Associate | Date: ~~3-23-2017~~ 9/26/18

Verified By: | Date:

USEPA Method 9 Visible Emissions Field Data Sheets

Plant name: ADM

Address: 16994 Wright Rd

City: Grand Ledge **State:** MI **Zip:** 48837

Phone: 517-627-4017

Source: 15K bph drag from 50K leg back to house

Source Number

Process Equipment: Grain **Operating Mode** YES

Control Equipment: ~~Baghouse~~ ENCLOSED **Operating Mode** YES

Describe Emission Point: ~~Stack Outlet~~ AROUND CONVEYOR

Height Above Ground Level 130 ft **Height Relative to Observer** 5-15 ft.

Distance from Observer 20-40 ft. **Direction from Observer** NNW

Describe Emissions GRAIN DUST **Emission Color** LT BROWN

Plume Type: Continuous O Fugitive: X Intermittent O

Water Droplets Present NO **Plume:** Attached O Detached O N/A

At What Point Was Opacity Determined 1-2 ft AROUND CONVEYOR

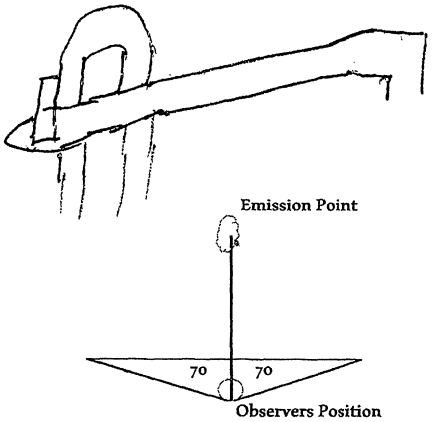
Background SKY / CONVEYOR LEG.

Background Color WHITE / BLUE GRAY **Percent Cloud Cover Start/End** 50% / 50%

Wind Speed Start 11 End 5-12 **Wind Direction From** Start WSW End SW

Temperature Start 47 End 47 **Humidity** 42/42

Source Layout Sketch — Draw North Arrow



Observation Date	3/19/19	Start Time	1532	End Time	1632

SEC	0	15	30	45	SEC	0	15	30	45
MIN					MIN				
1	0	0	0	0	31	0	0	0	0
2	0	0	0	0	32	0	0	0	0
3	0	0	0	0	33	0	0	0	0
4	0	0	0	0	34	0	0	0	0
5	0	0	0	0	35	0	0	0	0
6	0	0	0	0	36	0	0	0	0
7	0	0	0	0	37	0	0	0	0
8	0	0	0	0	38	0	0	0	0
9	0	0	0	0	39	0	0	0	0
10	0	0	0	0	40	0	0	0	0
11	0	0	0	0	41	0	0	0	0
12	0	0	0	0	42	0	0	0	0
13	0	0	0	0	43	0	0	0	0
14	0	0	0	0	44	0	0	0	0
15	0	0	0	0	45	0	0	0	0
16	0	0	0	0	46	0	0	0	0
17	0	0	0	0	47	0	0	0	0
18	0	0	0	0	48	0	0	0	0
19	0	0	0	0	49	0	0	0	0
20	0	0	0	0	50	0	0	0	0
21	0	0	0	0	51	0	0	0	0
22	0	0	0	0	52	0	0	0	0
23	0	0	0	0	53	0	0	0	0
24	0	0	0	0	54	0	0	0	0
25	0	0	0	0	55	0	0	0	0
26	0	0	0	0	56	0	0	0	0
27	0	0	0	0	57	0	0	0	0
28	0	0	0	0	58	0	0	0	0
29	0	0	0	0	59	0	0	0	0
30	0	0	0	0	60	0	0	0	0

Highest 6 Minute Average 0 # Readings Above 0 % Were 0

Opacity Readings Minimum 0 Maximum 0

Comments:

Observers Name: RICK DANCOY

Observers Signature [signature] Date: 3/19/19

Organization: Environmental Services/Decatur IL. 217-413-6618

Certified by: Carl Koontz Associate Date: 9/26/18

Verified By: Date:

USEPA Method 9 Visible Emissions Field Data Sheets

Plant name: ADM

Address: 16994 Wright Rd

City: Grand Ledge **State:** MI **Zip:** 48837

Phone: 517-627-4017

Source: ~~15 K bph pit reclaim~~ Pit (Rail)

Source Number

Process Equipment: Grain **Operating Mode** Yes

Control Equipment: ~~Baghouse~~ Suction FAN **Operating Mode** Yes

Describe Emission Point: ~~Stack Outlet~~ Pit outlet

Height Above Ground Level ~~15~~ **Height Relative to Observer** -3 FT

Distance from Observer 30 FT **Direction from Observer** NW

Describe Emissions GRAIN **Emission Color** Light GRAY

Plume Type: Continuous O Fugitive: X Intermittent O

Water Droplets Present NO **Plume:** Attached O Detached O N/A

At What Point Was Opacity Determined Above Pit 1-3 FT

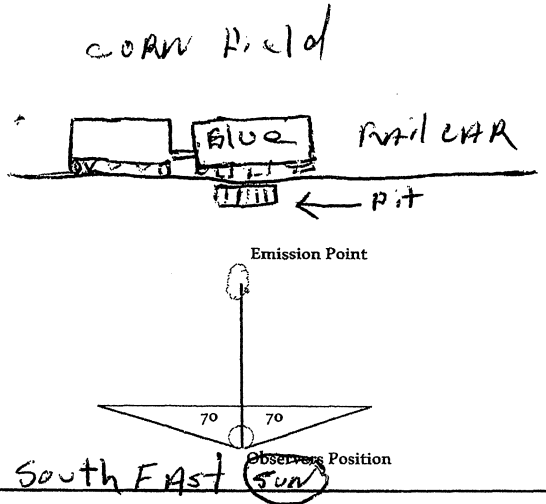
Background CORN Field / Ground - Railcar

Background Color Blue/BROWN **Percent Cloud Cover Start/End** 5% 70%

Wind Speed Start 5 mph End 10-15 mph **Wind Direction From** Start SSW End SW

Temperature Start ~~42~~ End 45 **Humidity** 57 %

Source Layout Sketch (9) NW — Draw North Arrow



Observation Date	3-19-19	Start Time	13:10	End Time	14:38

SEC	0	15	30	45	SEC	0	15	30	45
MIN					MIN				
1	0	0	0	0	31	0	0	0	0
2	0	5	0	5	32	0	0	0	0
3	0	0	0	0	33	0	0	0	0
4	0	0	0	0	34	0	0	0	0
5	0	0	0	0	35	0	0	0	0
6	0	0	0	0	36	0	0	0	0
7	0	0	0	0	37	0	0	0	0
8	0	0	0	0	38	0	0	0	5
9	0	0	0	0	39	0	0	0	0
10	0	0	0	0	40	0	0	0	0
11	0	0	0	0	41	0	0	0	0
12	0	0	0	0	42	0	0	0	0
13	0	0	0	0	43	0	0	0	0
14	0	0	0	0	44	0	0	0	0
15	0	0	0	0	45	0	0	0	0
16	0	0	0	0	46	0	0	0	0
17	0	0	0	0	47	0	0	0	0
18	0	0	0	0	48	0	0	0	0
19	0	0	0	0	49	0	0	0	0
20	0	0	0	0	50	0	0	0	0
21	0	0	0	0	51	0	0	0	0
22	0	0	0	0	52	0	0	0	0
23	0	0	0	0	53	0	0	0	0
24	0	0	0	0	54	0	0	0	0
25	0	0	0	0	55	0	0	0	0
26	0	0	0	0	56	0	0	0	0
27	0	0	0	0	57	0	0	0	0
28	0	0	0	0	58	0	0	0	0
29	0	0	0	0	59	0	0	0	0
30	0	0	0	0	60	0	0	0	0

stop at 1:13

Highest 6 Minute Average 10 # Readings Above 5 % Were 0

Opacity Readings Minimum 0 Maximum 5

Comments: Stop 13:13

Start 13:18 Stop 13:41

Start 13:52 Stop 13:54 DAMP problem

Start 13:59 Stop 14:01 Start 14:08

Observers Name:

Observers Signature Sam Kunes **Date:**

Organization: Environmental Services, Decatur IL. 217-413-6618

Certified by: Carl Koontz Associate **Date:**

Verified By: **Date:**

USEPA Method 9 Visible Emissions Field Data Sheets

Plant name: ADM

Address: 16994 Wright Rd

City: Grand Ledge | **State: MI** | **Zip: 48837**

Phone: 517-627-4017

Source: ~~15 K bph pit reclaim~~ Rail Pit

Source Number

Process Equipment: Grain | Operating Mode 725

Control Equipment: ~~Baghouse~~ | Operating Mode yes

Describe Emission Point: ~~Stack Outlet~~ Top of pit

Height Above Ground Level: 0 | Height Relative to Observer: -317

Distance from Observer: 20 | Direction from Observer: SE

Describe Emissions: Grain | Emission Color: BR / light GRAY

Plume Type: Continuous O Fugitive X Intermittent O

Water Droplets Present: NO | Plume: Attached O Detached O: n/a

At What Point Was Opacity Determined: 1-3 Ft above pit

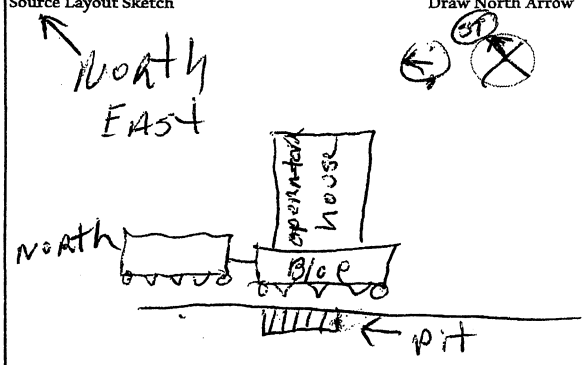
Background: Rail car - Ground

Background Color: Blue - white | Percent Cloud Cover Start/End: 50% 50

Wind Speed: 7-11 | Start End: 5-12 | Wind Direction From Start/ End: WSW SW

Temperature: 47 | Start End: 47 | Humidity: 42

Source Layout Sketch



Draw North Arrow

Observation Date 3-19-19 | Start Time 15:31 | End Time 16:31

SEC	0	15	30	45	SEC	0	15	30	45
MIN					MIN				
1	0	0	0	0	31	0	0	0	0
2	0	0	0	0	32	0	0	0	0
3	0	0	0	0	33	0	0	0	0
4	0	0	0	0	34	0	0	0	0
5	0	0	0	0	35	0	0	0	0
6	0	0	0	0	36	0	0	0	0
7	0	0	0	0	37	0	0	0	0
8	0	0	0	0	38	0	0	0	0
9	0	0	0	0	39	0	0	0	0
10	0	0	0	0	40	0	0	0	0
11	0	0	0	0	41	0	0	0	0
12	0	0	0	0	42	0	0	0	0
13	0	0	0	0	43	0	0	0	0
14	0	0	0	0	44	0	0	0	0
15	0	0	0	0	45	0	0	0	0
16	0	0	0	0	46	0	0	0	0
17	0	0	0	0	47	0	0	0	0
18	0	0	0	0	48	0	0	0	0
19	0	0	0	0	49	0	0	0	0
20	0	0	0	0	50	0	0	0	0
21	0	0	0	0	51	0	0	0	0
22	0	0	0	0	52	0	0	0	0
23	0	0	0	0	53	0	0	0	0
24	0	0	0	0	54	0	0	0	0
25	0	0	0	0	55	0	0	0	0
26	0	0	0	0	56	0	0	0	0
27	0	0	0	0	57	0	0	0	0
28	0	0	0	0	58	0	0	0	0
29	0	0	0	0	59	0	0	0	0
30	0	0	0	0	60	0	0	0	0

Highest 6 Minute Average 0 | # Readings Above 5 % Were 0

Opacity Readings Minimum 0 Maximum 0

Comments:

Observers Name: Sam Turner

Observers Signature: Sam Turner | Date: 3-19-19

Organization: Environmental Services, Decatur IL. 217-413-6618

Certified by: Carl Koontz Associate | Date: 3-15-19

Verified By: | Date:

USEPA Method 9 Visible Emissions Field Data Sheets

Plant name: ADM

Address: 16994 Wright Rd

City: Grand Ledge | **State:** MI | **Zip:** 48837

Phone: 517-627-4017

Source: ~~15 K bph pit reclaim~~ Rail | Pit

Source Number

Process Equipment: Grain | Operating Mode: Yes

Control Equipment: ~~Baghouse~~ none | Operating Mode: Yes

Describe Emission Point: ~~Stack Outlet~~ Pit outlet

Height Above Ground Level: 0 | Height Relative to Observer: -3 Ft

Distance from Observer: 20 Ft | Direction from Observer: SE

Describe Emissions: Grain | Emission Color: light Gray

Plume Type: Continuous O Fugitive: X Intermittent O

Water Droplets Present: NO | Plume: Attached O Detached O: N/A

At What Point Was Opacity Determined: 1-3 Ft above Pit

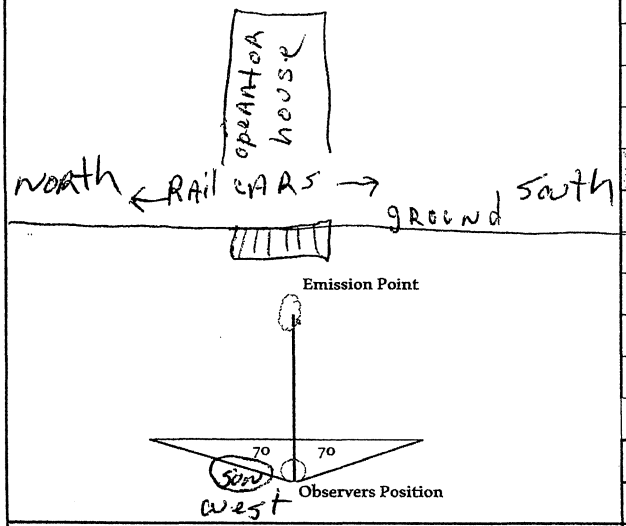
Background: Rail car - ground

Background Color: Blue-white | Percent Cloud Cover Start/End: 50% / 50

Wind Speed: Start 5-12 End 5-15 | Wind Direction From Start/End: SW / SW

Temperature: Start 47 End 47 | Humidity: 42

Source Layout Sketch — Draw North Arrow



SEC	0	15	30	45	SEC	0	15	30	45
MIN					MIN				
1	0	0	0	0	31	0	0	0	0
2	0	0	0	0	32	0	0	0	0
3	0	0	0	0	33	0	0	0	0
4	0	0	0	0	34	0	0	0	0
5	0	0	0	0	35	0	0	0	0
6	0	0	0	0	36	0	0	0	0
7	0	0	0	0	37	0	0	0	0
8	0	0	0	0	38	0	0	0	0
9	0	0	0	0	39	0	0	0	0
10	0	0	0	0	40	0	0	0	0
11	0	0	0	0	41	0	0	0	0
12	0	0	0	0	42	0	0	0	0
13	0	0	0	0	43	0	0	0	0
14	0	0	0	0	44	0	0	0	0
15	0	0	0	0	45	0	0	0	0
16	0	0	0	0	46	0	0	0	0
17	0	0	0	0	47	0	0	0	0
18	0	0	0	0	48	0	0	0	0
19	0	0	0	0	49	0	0	0	0
20	0	0	0	0	50	0	0	0	0
21	0	0	0	0	51	0	0	0	0
22	0	0	0	0	52	0	0	0	0
23	0	0	0	0	53	0	0	0	0
24	0	0	0	0	54	0	0	0	0
25	0	0	0	0	55	0	0	0	0
26	0	0	0	0	56	0	0	0	0
27	0	0	0	0	57	0	0	0	0
28	0	0	0	0	58	0	0	0	0
29	0	0	0	0	59	0	0	0	0
30	0	0	0	0	60	0	0	0	0

Observation Date: 3-19-19 | Start Time: 1633 | End Time: 1733

Highest 6 Minute Average: 0 | # Readings Above: 5 | % Were: 0

Opacity Readings Minimum: 0 | Maximum: 0

Comments:

Observers Name: Sam Turner

Observers Signature: Sam Turner | Date: 3-19-19

Organization: Environmental Services, Decatur IL. 217-413-6618

Certified by: Carl Koontz Associate | Date: 3-15-19

Verified By: | Date:

USEPA Method 9 Visible Emissions Field Data Sheets

Plant name: ADM

Address: 16994 Wright Rd

City: Grand Ledge **State:** MI **Zip:** 48837

Phone: 517-627-4017

Source: 40 K bph screener

Source Number

Process Equipment: Grain **Operating Mode** YES

Control Equipment: ~~Baghouse~~ ENCLOSED **Operating Mode** YES

Describe Emission Point: ~~Stack Outlet~~ AROUND SCREEN HOUSING

Height Above Ground Level 100 ft **Height Relative to Observer** 3 - 8 ft

Distance from Observer 3 - 12 ft **Direction from Observer** ~~All~~ NNW

Describe Emissions GRAIN DUST **Emission Color** LT BROWN

Plume Type: Continuous O Fugitive: X Intermittent O

Water Droplets Present NO **Plume:** Attached O Detached O N/A

At What Point Was Opacity Determined 1ST AROUND SCREEN HOUSING

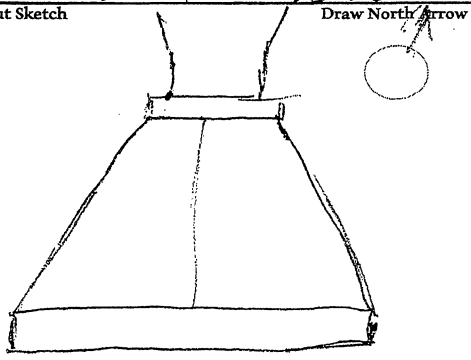
Background SKY / CONVEYORS

Background Color GRAY / LT GRAY **Percent Cloud Cover Start/End** 100 100

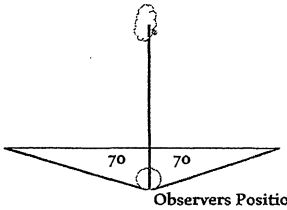
Wind Speed Start 12 mph End 12 mph **Wind Direction From Start/ End** NW WNW

Temperature Start 39 End 40 **Humidity** 75 %

Source Layout Sketch Draw North Arrow



Emission Point



Observers Position

SEC	0	15	30	45	SEC	0	15	30	45
MIN					MIN				
1	0	0	0	0	31	0	0	0	0
2	0	0	0	0	32	0	0	0	0
3	0	0	0	0	33	10	5	0	0
4	0	0	0	5	34	0	0	0	0
5	0	0	0	0	35	5	0	0	0
6	0	0	0	0	36	0	0	0	0
7	5	0	0	0	37	0	0	0	0
8	0	0	0	5	38	0	0	0	5
9	0	0	0	0	39	0	0	0	0
10	0	0	0	0	40	0	0	0	0
11	0	0	0	0	41	0	0	0	0
12	0	0	0	0	42	0	0	5	0
13	0	0	0	0	43	0	0	0	0
14	0	0	0	0	44	0	0	0	0
15	0	0	0	0	45	0	0	0	0
16	0	0	0	0	46	0	0	0	0
17	0	0	0	0	47	0	0	0	0
18	0	0	0	0	48	0	0	0	0
19	0	0	0	0	49	0	0	0	0
20	0	0	0	0	50	0	0	0	0
21	0	0	0	0	51	0	0	0	0
22	0	0	0	0	52	0	0	0	0
23	0	0	0	0	53	0	0	0	0
24	0	0	0	0	54	0	0	0	0
25	0	0	0	0	55	0	0	0	0
26	0	0	0	0	56	0	0	0	0
27	0	0	0	0	57	0	0	0	0
28	0	0	0	0	58	0	0	0	0
29	0	0	0	0	59	0	0	0	0
30	0	0	0	0	60	0	0	0	0

Observation Date 3/21/19 **Start Time** 0859 **End Time** 1209

Highest 6 Minute Average 20 **# Readings Above** 0 **% Were** 7

Opacity Readings Minimum 0 **Maximum** 10

Comments:

Observers Name: Rick DANCOY

Observers Signature Rick Dancoy **Date:** 3/21/19

Organization: Environmental Services, Decatur IL. 217-413-6618

Certified by: Carl Koontz Associate **Date:** 9/26/18

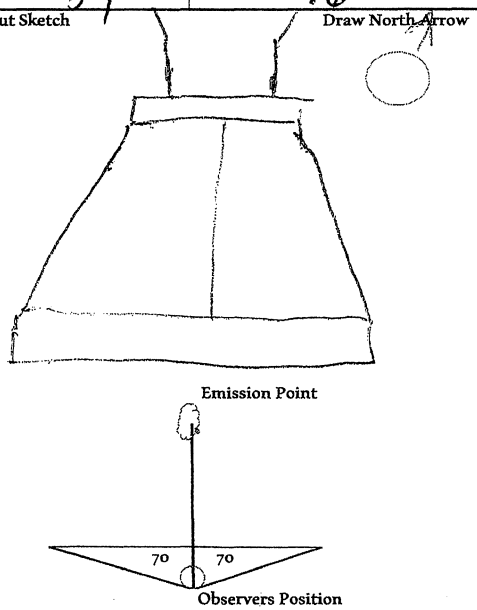
Verified By: **Date:**

0.17

USEPA Method 9 Visible Emissions Field Data Sheets

Plant name: ADM	Observation Date 3/21/19	Start Time 1252
Address: 16994 Wright Rd		End Time ~~1420~~ 1421
City: Grand Ledge **State:** MI **Zip:** 48837		
Phone: 517-627-4017		
Source: 40 K bph screener		
Source Number		
Process Equipment: Grain — Operating Mode: Yes		
Control Equipment: ~~Baghouse~~ ENCLOSED — Operating Mode: Yes		
Describe Emission Point: Stack Outlet AROUND SCREEN HOUSING		
Height Above Ground Level: 100 ft — Height Relative to Observer: ~ 8 FT		
Distance from Observer: 3-1/2 FT — Direction from Observer: NW		
Describe Emissions: GRAIN DUST — Emission Color: LT. BROWN		
Plume Type: Continuous O Fugitive: X Intermittent O		
Water Droplets Present: NO — Plume: Attached O Detached O N/A		
At What Point Was Opacity Determined: 1ST AROUND SCREEN HOUSING		
Background: SKY / CONVEYOR		
Background Color: LT GRAY / GRAY — Percent Cloud Cover Start/End: 100 / 100		
Wind Speed: 12 / 7 Start End — Wind Direction From Start/ End: WNW WNW		
Temperature: 40 / 39 Start End — Humidity: 76		

Source Layout Sketch — Draw North Arrow



SEC	0	15	30	45	SEC	0	15	30	45
MIN					MIN				
1	0	0	0	0	31	0	0	0	0
2	0	0	0	0	32	0	0	0	0
3	0	0	0	0	33	0	0	0	0
4	0	0	0	0	34	0	0	0	0
5	0	0	0	0	35	0	0	0	0
6	0	0	0	0	36	0	0	0	0
7	0	0	0	0	37	0	0	0	0
8	0	0	0	0	38	0	0	0	5
9	0	0	0	0	39	0	0	0	0
10	0	0	0	0	40	0	5	0	0
11	0	0	0	0	41	0	0	0	0
12	0	0	0	0	42	0	0	0	0
13	5	5	0	0	43	0	0	0	0
14	0	0	0	0	44	0	0	0	0
15	0	0	0	0	45	0	0	0	0
16	0	0	0	0	46	0	5	0	0
17	0	0	0	0	47	0	0	5	0
18	0	0	0	0	48	0	5	0	0
19	0	0	5	5	49	0	0	0	0
20	0	0	0	0	50	0	0	0	0
21	0	0	0	0	51	0	0	0	0
22	0	0	0	0	52	0	0	0	0
23	0	0	0	0	53	5	0	0	5
24	0	0	0	0	54	0	0	0	0
25	0	0	0	0	55	0	0	0	0
26	0	0	0	5	56	0	0	0	0
27	0	5	0	0	57	0	0	0	0
28	0	0	0	0	58	0	0	0	0
29	5	0	0	0	59	0	0	0	0
30	0	0	0	0	60	0	0	0	0

Highest 6 Minute Average 15 — # Readings Above 0 % Were 14

Opacity Readings Minimum 0 — Maximum 5

Comments: STOP 1321
START 1350

Observers Name: ~~Rick DANCOY~~

Observers Signature — Date: 3/21/19

Organization: Environmental Services, Decatur IL. 217-413-6618

Certified by: Carl Koontz Associate — Date: 9/26/18

Verified By: — Date:

0.29

USEPA Method 9 Visible Emissions Field Data Sheets

Plant name: ADM

Address: 16994 WRIGHT RD.

GRAND LEDGE **State:** MI **Zip:** 48837

Phone: 517-627-4017

Source: 40K BPH SCREENER

Source Number

Process Equipment: GRAIN **Operating Mode** YES

Control Equipment: ENCLOSED **Operating Mode** YES

Describe Emission Point AROUND SCREEN HOUSING

Height Above Ground Level 100 FT **Height Relative to Observer** — 8 FT

Distance from Observer 3-1/2 FT **Direction from Observer** WNW

Describe Emissions GRAIN DUST **Emission Color** LT - BROWN

Plume Type: Continuous O Fugitive: X Intermittent O

Water Droplets Present NO **Plume:** Attached O Detached O N/A

At What Point Was Opacity Determined 15 FT. AROUND SCREEN HOUSING

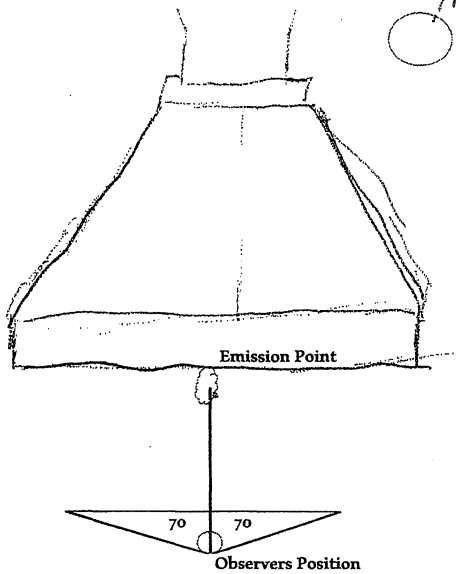
Background SILO / CONVEYORS

Background Color GRAY / LT GRAY **Percent Cloud Cover Start/End** 100 / 100 %

Wind Speed 7 **Start** 7 **End** **Wind Direction From Start/ End** WNW WNW

Temperature 39 **Start** 41 **End** **Humidity** 80 %

Source Layout Sketch Draw North Arrow



Comments:

Observation Date 3/21/19 **Start Time** 1423 **End Time** 1523

SEC	0	15	30	45	SEC	0	15	30	45
MIN					MIN				
1	0	0	0	0	31	0	0	0	0
2	0	0	0	0	32	0	0	0	0
3	0	0	0	0	33	0	0	0	0
4	0	0	0	0	34	0	0	0	0
5	0	0	0	0	35	0	0	0	0
6	0	0	0	0	36	0	0	0	0
7	0	0	0	0	37	0	5	0	0
8	0	0	0	0	38	0	0	5	0
9	0	0	0	5	39	0	0	5	0
10	0	0	0	0	40	0	0	0	0
11	0	0	0	0	41	0	0	0	0
12	0	0	0	0	42	0	0	0	0
13	0	0	0	0	43	0	0	0	0
14	0	0	0	0	44	0	0	0	0
15	0	0	0	0	45	0	0	0	0
16	0	0	5	0	46	0	0	0	0
17	0	0	5	0	47	0	0	0	0
18	0	0	0	0	48	0	0	0	0
19	0	0	0	0	49	0	0	0	0
20	0	0	0	0	50	0	0	5	0
21	0	0	0	0	51	0	0	0	0
22	0	0	0	0	52	0	0	0	0
23	0	0	0	0	53	0	0	0	0
24	0	0	0	10	54	0	0	0	0
25	0	0	0	0	55	0	0	0	0
26	0	0	0	0	56	0	0	0	0
27	5	5	0	0	57	0	0	5	0
28	0	0	0	0	58	0	0	0	0
29	5	0	0	0	59	0	0	0	0
30	0	5	0	0	60	0	0	0	0

Highest 6 Minute Average 15 # Readings Above 0 % Were 13

Opacity Readings Minimum 0 Maximum 10

Observers Name: ~~Sam Turner~~ RICK DANCEY

Observers Signature [signature] Date: 3/21/19

Organization: Environmental Services, Decatur IL. 217-413-6618

Certified by: Carl Koontz Associate Date: 3-23-2017

Verified By: Date: 9/26/18

70 0,29

USEPA Method 9 Visible Emissions Field Data Sheets

Plant name: ADM

Address: 16994 Wright Rd

City: Grand Ledge **State:** MI **Zip:** 48837

Phone: 517-627-4017

Source: 80 K bph bulkweigher (loadout spout)

Source Number

Process Equipment: Grain **Operating Mode** Yes

Control Equipment: ~~Baghouse~~ MDS. Fan to Bashaw **Operating Mode** Yes

Describe Emission Point: ~~Stack Outlet~~ outlet of Spout

1-3 Ft

Height Above Ground Level 15' **Height Relative to Observer** 15'

Distance from Observer 25' **Direction from Observer** SW

Describe Emissions Grain **Emission Color** light Gray/BR

Plume Type: Continuous O Fugitive ~~X~~ Intermittent O

Water Droplets Present No **Plume:** Attached O Detached O N/A

At What Point Was Opacity Determined 1-3 Ft Around Spout

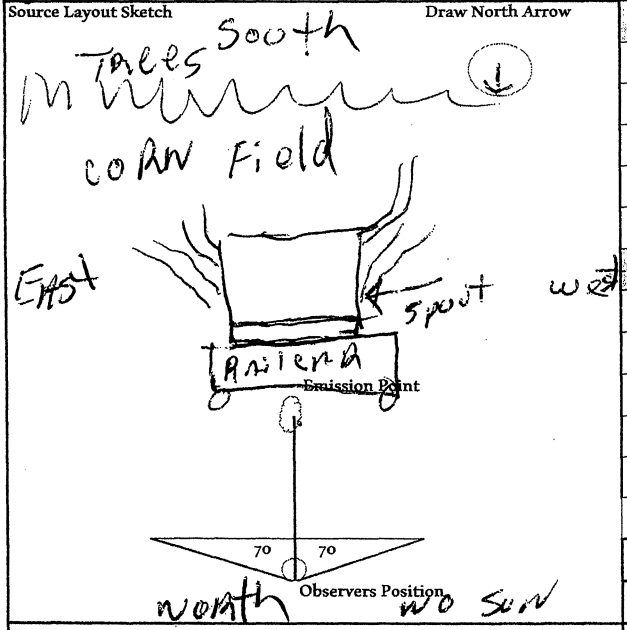
Background Corn Field - Trees - Sky - spout

Background Color Brown-Black-Gray **Percent Cloud Cover Start/End** 100 100

Wind Speed Start 12 mph End 12 mph **Wind Direction From Start/ End** NW WNW

Temperature Start 39 End 46 **Humidity** 75%

Source Layout Sketch Draw North Arrow



Observation Date	3-21-19	Start Time	11:09	End Time	12:09

SEC	0	15	30	45	SEC	0	15	30	45
MIN					MIN				
1	0	0	0	0	31	0	0	0	0
2	0	0	0	0	32	0	0	0	0
3	0	0	0	0	33	0	0	0	0
4	0	0	0	5	34	0	0	0	0
5	0	0	0	0	35	0	0	0	0
6	0	0	0	5	36	0	0	0	0
7	0	0	0	0	37	0	0	0	0
8	0	0	0	0	38	0	0	0	0
9	0	0	0	0	39	0	0	0	0
10	0	15	5	0	40	0	0	0	0
11	0	0	10	0	41	0	0	0	0
12	0	0	0	0	42	0	0	0	0
13	0	0	0	5	43	0	0	0	0
14	0	0	0	0	44	0	0	0	0
15	0	0	0	0	45	0	0	0	0
16	0	0	0	0	46	0	0	0	0
17	0	0	0	0	47	0	0	0	0
18	0	0	0	0	48	0	0	0	0
19	0	0	0	0	49	0	0	0	0
20	0	0	0	0	50	0	0	0	0
21	0	0	0	0	51	0	5	0	0
22	0	0	0	0	52	0	0	0	0
23	0	0	0	0	53	0	0	0	0
24	0	0	0	0	54	0	0	0	0
25	0	0	0	0	55	0	0	0	0
26	0	0	0	0	56	0	0	0	0
27	0	0	35	0	57	0	0	5	0
28	0	0	0	0	58	0	0	0	0
29	0	0	0	0	59	0	0	0	0
30	0	0	0	10	60	0	0	0	0

Highest 6 Minute Average 45 # Readings Above 5 % Were 4

Opacity Readings Minimum 0 Maximum 35

Comments:

Observers Name: Sam Turner

Observers Signature Date: 3-21-19

Organization: Environmental Services, Decatur IL. 217-413-6618

Certified by: Carl Koontz Associate Date: 3-15-19

Verified By: Date:

USEPA Method 9 Visible Emissions Field Data Sheets

Plant name: ADM

Address: 16994 Wright Rd

City: Grand Ledge | **State:** MI | **Zip:** 48837

Phone: 517-627-4017

Source: 80 K bph buliweigher (loadout spout)

Source Number

Process Equipment: Grain | **Operating Mode** yes

Control Equipment: ~~Baghouse~~ neg. fan to Baghouse | **Operating Mode** yes

Describe Emission Point: ~~Stack Outlet~~ Spout outlet

Height Above Ground Level 15 | **Height Relative to Observer** 20

Distance from Observer 75' | **Direction from Observer** NW

Describe Emissions Grain | **Emission Color** BR / light Gray

Plume Type: Continuous O Fugitive: X Intermittent O

Water Droplets Present no | **Plume: Attached** O **Detached** O n/a

At What Point Was Opacity Determined 1-3' around spout

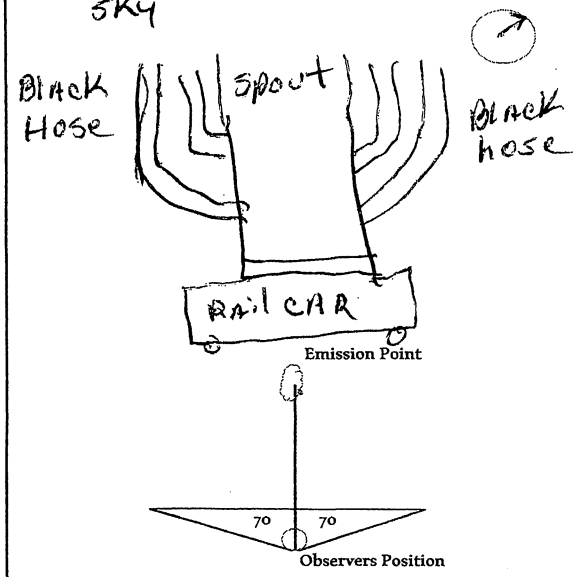
Background sky -- spout

Background Color Blue-Black-~~Brown~~ Gray | **Percent Cloud Cover Start/End** 100 100

Wind Speed Start 12 End 7 Mph | **Wind Direction From Start/ End** WNW WNW

Temperature Start 48 End 39 | **Humidity** 76

Source Layout Sketch (Draw North Arrow)



Observation Date	3-21-19	Start Time	12:47	End Time	14:17

SEC	0	15	30	45	SEC	0	15	30	45
MIN					MIN				
1	0	0	0	20	31	0	0	0	0
2	0	0	0	0	32	0	0	0	0
3	0	0	0	0	33	0	0	0	0
4	0	0	0	0	34	0	0	0	0
5	0	0	0	25	35	0	0	0	0
6	0	0	0	0	36	0	0	0	0
7	0	0	0	0	37	0	0	0	0
8	0	0	0	0	38	0	0	0	0
9	0	0	0	0	39	0	0	0	0
10	0	0	0	0	40	0	0	0	0
11	0	0	0	0	41	0	0	0	0
12	0	0	10	0	42	0	0	0	0
13	0	0	0	0	43	0	0	0	0
14	0	0	0	0	44	0	0	0	0
15	0	10	0	0	45	0	0	0	0
16	0	0	0	0	46	0	0	0	0
17	0	0	0	0	47	0	0	0	0
18	0	0	0	0	48	0	0	0	0
19	0	0	0	0	49	0	0	0	0
20	0	0	0	0	50	0	0	0	0
21	0	15	0	0	51	0	0	0	0
22	0	0	0	0	52	0	0	0	0
23	0	0	0	0	53	0	0	0	0
24	0	0	0	0	54	0	0	0	0
25	0	0	0	0	55	0	0	0	0
26	0	0	0	0	56	0	0	0	0
27	0	0	0	0	57	0	0	0	0
28	0	0	0	0	58	0	0	0	0
29	0	30	0	0	59	0	0	0	0
30	0	0	0	0	60	0	0	0	0

Highest 6 Minute Average 45 | # Readings Above 5 % Were 6

Opacity Readings Minimum 0 Maximum 30

Comments: Stop: 13:19
Start: 1349

Observers Name: Sam Turner

Observers Signature Sam Turner | **Date:** 3-21-19

Organization: Environmental Services, Decatur IL. 217-413-6618

Certified by: Carl Koontz Associate | **Date:** 3-15-19

Verified By: | **Date:**

USEPA Method 9 Visible Emissions Field Data Sheets

Plant name: ADM

Address: 16994 Wright Rd

City: Grand Ledge **State:** MI **Zip:** 48837

Phone: 517-627-4017

Source: 80 K bph buliweigher (loadout spout)

Source Number

Process Equipment: Grain **Operating Mode** yes

Control Equipment: ~~Baghouse~~ Neg. Pan Bghouse **Operating Mode** yes

Describe Emission Point: ~~Stack Outlet~~ Spout outlet

Height Above Ground Level 15' **Height Relative to Observer** 20'

Distance from Observer 75' **Direction from Observer** NW

Describe Emissions Gating **Emission Color** light Gray

Plume Type: Continuous O Fugitive ~~O~~ X Intermittent O

Water Droplets Present No **Plume:** Attached O Detached O N/A

At What Point Was Opacity Determined 1-3 Ft Inbound conveyor

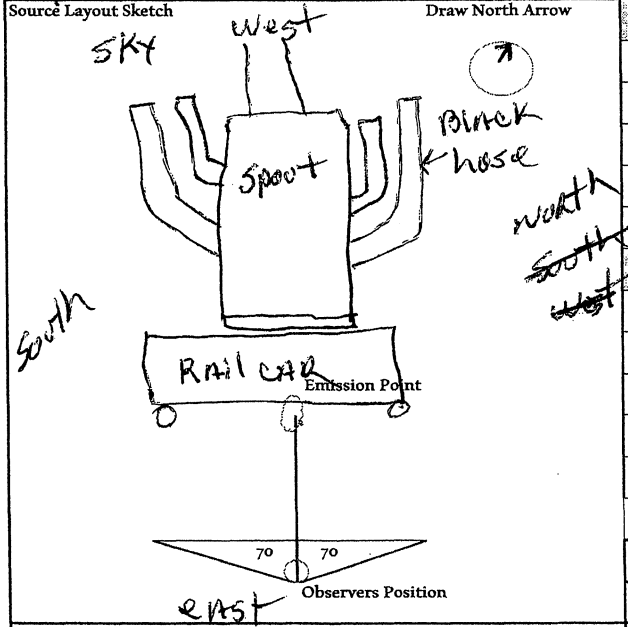
Background Sky - Spout

Background Color Blue-Black-Brown Gray **Percent Cloud Cover Start/End** 100 / 100

Wind Speed Start 7 mph End 7 mph **Wind Direction From Start/ End** WNW / WNW

Temperature Start 39 End 41 **Humidity** 80 %

Source Layout Sketch — Draw North Arrow



Observation Date 3-21-19	Start Time 14:19	End Time 15:19

SEC	0	15	30	45	SEC	0	15	30	45
MIN					MIN				
1	0	0	0	0	31	0	0	0	0
2	0	0	0	0	32	0	0	0	0
3	0	0	0	0	33	0	0	0	0
4	0	0	0	0	34	0	0	0	0
5	0	0	0	0	35	0	0	0	0
6	0	0	0	0	36	0	0	0	0
7	0	0	0	0	37	0	0	0	0
8	0	0	0	0	38	0	0	0	0
9	0	0	0	0	39	0	0	0	0
10	0	0	0	0	40	0	0	0	0
11	0	0	0	0	41	0	0	0	0
12	0	0	0	0	42	0	0	0	0
13	0	0	0	0	43	0	0	0	0
14	0	0	0	0	44	0	0	0	0
15	0	0	0	0	45	40	0	0	0
16	0	0	0	0	46	0	0	0	0
17	0	0	0	0	47	0	0	0	0
18	0	0	0	0	48	0	0	0	0
19	0	0	25	0	49	0	0	0	0
20	0	0	0	0	50	0	0	0	0
21	0	0	0	0	51	0	0	0	0
22	0	0	0	0	52	0	0	0	0
23	0	0	0	0	53	0	0	0	0
24	0	0	0	0	54	0	5	0	0
25	0	0	0	0	55	0	0	0	0
26	0	0	0	0	56	0	0	0	0
27	0	0	0	0	57	0	0	0	0
28	0	0	0	0	58	0	0	0	0
29	0	0	0	0	59	0	0	0	0
30	0	0	0	0	60	0	0	0	0

Highest 6 Minute Average 40 # Readings Above 5 % Were 2

Opacity Readings Minimum 0 Maximum 40

Comments:

Observers Name: Sam Turner

Observers Signature Sam Turner Date: 3-21-19

Organization: Environmental Services, Decatur IL. 217-413-6618

Certified by: Carl Koontz Associate Date: 3-15-19

Verified By: Date: