Visible Emissions Evaluation

Friday, Jan 4th, 2013

Run Number(s) and Description: Morning Runs 1-8

Facility Name	ECC Floyd Bennett Field
AVOGADRO Project No.	12-9191
Location (city, state)	Brooklyn, NY
Type of Facility	Debris Removal
Control Equipment / Emission Source	ACB
Date of Observation	01/04/2013
Start Time	0020
Stop Time	0328
Distance from observer (ft)	300'
Direction from observer	NNW
Stack height (fr. observer's elev.) (ft)	9'
Stack Diameter (in)	27' x 9'
Description of plume:	
continuous? fugitive? intermittent?	Cont.
color	White
water drops present? (Y/N)	N
attached steam plume? (Y/N)	N
detached steam plume? (Y/N)	N
secondary plume? (Y/N)	N
point where opacity read	1-2 conex box lengths
target?	Sky
describe background to plume	"
unique features of plume or stack	— @ 0000
Weather:	
ambient temperature (F)	32°
relative humidity	53%
wind direction	E
wind speed	3-6mph
barometric pressure	30.10 in Hg
rain? fog? snow? haze?	clear
Glasses worn:	
corrective? (Y/N)	Y
sunglasses? (Y/N)	—

Observer's name	Joshua Wagner
Observer certification date	Night 12/20/2012
Certifying agency	Whitlow
Observer affiliation	Avogadro Env.

sec	0	15	30	45
min	Run 1 Time: 0020			
1	10	10	10	10
2	10	10	10	10
3	10	10	10	10
4	5	10	10	10
5	5	10	10	10
6	5	5	10	10
6-minute Average: 9.4				
Source Conditions:				
Sun Angle (degrees): —				

sec	0	15	30	45
min	Run 5 Time: 0204			
1	10	10	10	10
2	10	10	10	10
3	10	10	10	10
4	5	10	10	10
5	10	10	15	10
6	10	10	10	10
6-minute Average: 10				
Source Conditions:				
Sun Angle (degrees): —				

	Run 2 Time: 0046			
1	10	5	10	10
2	5	10	5	10
3	5	5	5	10
4	10	5	10	5
5	10	5	10	10
6	10	5	10	5
6-minute Average: 7.7				
Source Conditions:				
Sun Angle (degrees): —				

	Run 6 Time: 0230			
1	10	10	10	10
2	10	10	10	10
3	10	10	10	10
4	10	10	10	10
5	10	10	10	10
6	10	10	10	10
6-minute Average: 10				
Source Conditions:				
Sun Angle (degrees): —				

	Run 3 Time: 0112			
1	10	10	10	10
2	10	10	10	10
3	10	10	10	10
4	15	10	10	10
5	5	10	10	10
6	15	10	10	10
6-minute Average: 10.2				
Source Conditions:				
Sun Angle (degrees): —				

	Run 7 Time: 0256			
1	10	10	10	10
2	15	10	10	10
3	5	10	10	10
4	10	10	10	5
5	10	10	10	10
6	5	10	10	10
6-minute Average: 9.6				
Source Conditions:				
Sun Angle (degrees): —				

	Run 4 Time: 0138			
1	10	10	5	10
2	5	10	5	10
3	10	10	5	10
4	5	10	10	10
5	5	10	10	10
6	10	10	5	10
6-minute Average: 8.5				
Source Conditions:				
Sun Angle (degrees): —				

	Run 8 Time: 0322			
1	10	10	10	10
2	10	10	10	10
3	10	10	10	10
4	5	10	5	10
5	5	10	10	10
6	5	10	10	5
6-minute Average: 9.0				
Source Conditions:				
Sun Angle (degrees): —				

Range of opacity readings: low 5 high 15

Number of readings above 15 % were 0

Observer's Signature

Visible Emissions Evaluation

Friday, Jan 4th, 2013

Run Number(s) and Description: Morning Runs 9-13

Facility Name	ECC Floyd Bennett Field Op.
AVOGADRO Project No.	12-9191
Location (city, state)	Brooklyn, NY
Type of Facility	Debris Removal
Control Equipment / Emission Source	ACB
Date of Observation	01/04/2013
Start Time	0348
Stop Time	0538
Distance from observer (ft)	300'
Direction from observer	NNW
Stack height (fr. observer's elev.) (ft)	9'
Stack Diameter (in)	27' x 9'
Description of plume:	
continuous? fugitive? intermittent?	cont
color	white
water drops present? (Y/N)	N
attached steam plume? (Y/N)	N
detached steam plume? (Y/N)	N
secondary plume? (Y/N)	N
point where opacity read	1-2 conex box lengths
target?	sky
describe background to plume	"
unique features of plume or stack	—
Weather:	@348 / 30°
ambient temperature (F)	
relative humidity	65%
wind direction	E
wind speed	4-8 mph
barometric pressure	30.07 inHg
rain? fog? snow? haze?	clear.
Glasses worn:	
corrective? (Y/N)	Y
sunglasses? (Y/N)	—

Observer's name	Joshua Wagner
Observer certification date	Night 12/20/2012
Certifying agency	Whitlow
Observer affiliation	Avogadro Env.

sec	0	15	30	45
min	Run 9 Time: 0348			
1	10	10	10	10
2	10	10	10	10
3	10	10	10	5
4	10	5	5	10
5	10	5	10	5
6	10	10	5	10
6-minute Average: 8.8				
Source Conditions:				
Sun Angle (degrees): —				

sec	0	15	30	45
min	Run 13 Time: 0532			
1	5	5	5	0
2	5	0	5	0
3	0	5	0	5
4	5	5	5	5
5	0	5	5	0
6	5	5	0	5
6-minute Average: 3.3				
Source Conditions:				
Sun Angle (degrees): —				

	Run 10 Time: 0414			
1	10	10	10	10
2	10	10	5	10
3	10	5	10	10
4	5	10	5	10
5	5	5	10	5
6	10	10	5	10
6-minute Average: 8.3				
Source Conditions:				
Sun Angle (degrees): —				

	Run Time:
1	
2	
3	
4	
5	
6	
6-minute Average:	
Source Conditions:	
Sun Angle (degrees):	

	Run 11 Time: 0440			
1	10	10	10	10
2	10	5	10	10
3	5	10	10	5
4	10	10	10	10
5	10	5	10	5
6	5	10	5	5
6-minute Average: 8.3				
Source Conditions:				
Sun Angle (degrees): —				

	Run Time:
1	
2	
3	
4	
5	
6	
6-minute Average:	
Source Conditions:	
Sun Angle (degrees):	

	Run 12 Time: 0506			
1	5	5	5	5
2	5	5	5	10
3	5	5	10	5
4	10	10	5	10
5	10	5	10	5
6	10	5	10	5
6-minute Average: 6.9				
Source Conditions:				
Sun Angle (degrees): —				

	Run Time:
1	
2	
3	
4	
5	
6	
6-minute Average:	
Source Conditions:	
Sun Angle (degrees):	

Range of opacity readings: low 0 high 10

Number of readings above 10 % were 0

Observer's Signature

Visible Emissions Evaluation

Facility Name	ECC FBF
AVOGADRO Project No.	12-9191
Location (city, state)	Brooklyn, NY
Type of Facility	
Control Equipment / Emission Source	ACB
Date of Observation	1-4-13
Start Time	0720
Stop Time	0945
Distance from observer (ft)	100'
Direction from observer	N
Stack height (fr. observer's elev.) (ft)	10'
Stack Diameter (in)	27.17 x 8.42
Description of plume:	
continuous? fugitive? intermittent?	CONT.
color	WHITE
water drops present? (Y/N)	N
attached steam plume? (Y/N)	N
detached steam plume? (Y/N)	N
secondary plume? (Y/N)	N
point where opacity read	10' Downwind
target?	
describe background to plume	Containers
unique features of plume or stack	
Weather:	
ambient temperature (F)	35°F
relative humidity	44 %
wind direction	E
wind speed	10-15
barometric pressure	29.95
rain? fog? snow? haze?	OVERCAST - PTLY CLDY
Glasses worn:	
corrective? (Y/N)	Y
sunglasses? (Y/N)	N

Observer's name	MARK T. READY
Observer certification date	10-22-12
Certifying agency	KOONTZ
Observer affiliation	AVOGADRO / DA

SUNRISE 7:25

Run Number(s) and Description PAGE 1 1-4-13

sec	0	15	30	45
min	Run 1 Time: 720			
1	15	20	20	15
2	15	10	10	10
3	15	10	10	10
4	15	10	10	10
5	10	15	10	10
6	10	10	10	10
6-minute Average:	12.1			
Source Conditions:				
Sun Angle (degrees):	45			
	Run 2 Time: 740			
1	15	15	15	20
2	15	15	10	10
3	10	10	10	10
4	10	10	10	10
5	10	15	10	10
6	10	15	10	15
6-minute Average:	12.1			
Source Conditions:				
Sun Angle (degrees):	45			
	Run 3 Time: 800			
1	10	10	5	5
2	10	10	10	10
3	10	10	10	10
4	10	10	15	10
5	10	10	10	10
6	10	10	10	10
6-minute Average:	9.8			
Source Conditions:				
Sun Angle (degrees):	40			
	Run 4 Time: 820			
1	5	5	10	5
2	5	10	10	5
3	10	10	10	10
4	10	10	10	10
5	10	10	15	5
6	5	5	5	10
6-minute Average:	8.3			
Source Conditions:				
Sun Angle (degrees):	40			

sec	0	15	30	45
min	Run 5 Time: 840			
1	5	5	5	5
2	5	10	5	5
3	10	10	5	5
4	10	10	5	5
5	5	5	5	5
6	5	5	5	5
6-minute Average:	6.0			
Source Conditions:				
Sun Angle (degrees):	40			
	Run 6 Time: 900			
1	5	5	5	10
2	5	5	10	5
3	5	5	5	5
4	5	5	5	5
5	5	5	5	5
6	5	10	5	5
6-minute Average:	5.2			
Source Conditions:				
Sun Angle (degrees):	35			
	Run 7 Time: 920			
1	10	5	10	10
2	5	5	10	10
3	5	5	10	10
4	5	5	5	5
5	5	5	5	10
6	5	10	5	10
6-minute Average:	7.1			
Source Conditions:				
Sun Angle (degrees):	25			
	Run 8 Time: 940			
1	10	5	5	5
2	10	10	5	10
3	5	5	5	5
4	5	5	5	10
5	5	5	5	5
6	5	5	5	5
6-minute Average:	6.0			
Source Conditions:				
Sun Angle (degrees):	25			

Range of opacity readings: low 5 % high 20 %

Number of readings above 10 % were 18

Observer's Signature

AVOGADRO ENVIRONMENTAL CORPORATION, Easton Pa

Visible Emissions Evaluation

Facility Name	ECC FRF
AVOGADRO Project No.	12-9191
Location (city, state)	BROOKLYN, NY
Type of Facility	
Control Equipment / Emission Source	ACB
Date of Observation	1-4-13
Start Time	~~1000~~ 1005
Stop Time	1225
Distance from observer (ft)	100'
Direction from observer	N
Stack height (fr. observer's elev.) (ft)	10'
Stack Diameter (in)	27.17 x 8.42

Description of plume:

continuous? fugitive? intermittent?	CONT -
color	WHITE
water drops present? (Y/N)	N
attached steam plume? (Y/N)	N
detached steam plume? (Y/N)	N
secondary plume? (Y/N)	N
point where opacity read	10' Downwind
target?	
describe background to plume	CONTAINERS
unique features of plume or stack	

Weather:

ambient temperature (F)	40°F
relative humidity	45%
wind direction	E
wind speed	11 10-15
barometric pressure	29.95
rain? fog? snow? haze?	PTly Cldy

Glasses worn:

corrective? (Y/N)	Y
sunglasses? (Y/N)	N

Observer's name	MARK J. READY
Observer certification date	10-22-12
Certifying agency	KOONTZ
Observer affiliation	AVOGADRO / DA

Run Number(s) and Description PAGE 2 1-4-13

sec	0	15	30	45
min	Run 9 Time: 1005			
1	5	5	5	10
2	5	10	5	5
3	5	5	5	5
4	5	10	10	5
5	10	10	10	10
6	5	5	5	5
6-minute Average:	6.7			
Source Conditions:				
Sun Angle (degrees):	5			
	Run 10 Time: 1020			
1	10	5	5	5
2	5	5	5	10
3	10	5	5	10
4	5	5	5	5
5	0	5	10	5
6	5	5	5	10
6-minute Average:	6.0			
Source Conditions:				
Sun Angle (degrees):	~~0~~			
	Run 11 Time: 1040			
1	~~0~~	5	5	~~0~~
2	5	5	5	10
3	~~0~~	5	5	5
4	5	~~0~~	5	5
5	5	5	5	5
6	10	5	~~0~~	5
6-minute Average:	4.4			
Source Conditions:				
Sun Angle (degrees):	5			
	Run 12 Time: 1100			
1	5	5	5	5
2	10	10	5	5
3	10	5	5	5
4	5	5	5	5
5	15	10	10	10
6	10	5	10	15
6-minute Average:	7.5			
Source Conditions:				
Sun Angle (degrees):	10			

sec	0	15	30	45
min	Run 13 Time: 1120			
1	~~0~~	~~0~~	~~0~~	~~0~~
2	~~0~~	~~0~~	0	0
3	5	5	5	5
4	5	0	0	0
5	5	5	0	0
6	0	5	5	0
6-minute Average:	1.9			
Source Conditions:				
Sun Angle (degrees):	20			
	Run 14 Time: 1140			
1	5	5	0	0
2	5	5	5	10
3	5	5	5	5
4	5	~~0~~	5	5
5	5	5	5	5
6	5	10	5	5
6-minute Average:	4.8			
Source Conditions:				
Sun Angle (degrees):	25			
	Run 15 Time: 1200			
1	10	10	5	5
2	5	5	5	5
3	5	5	5	5
4	5	5	5	5
5	5	5	5	10
6	10	5	5	5
6-minute Average:	5.8			
Source Conditions:				
Sun Angle (degrees):	30			
	Run 16 Time: 1220			
1	10	5	5	5
2	10	5	10	5
3	~~0~~	5	10	10
4	10	5	5	10
5	5	5	5	10
6	10	5	5	10
6-minute Average:	6.9			
Source Conditions:				
Sun Angle (degrees):	30			

Range of opacity readings:
low ~~0~~ high 15

Number of readings above 10 % were 2

Observer's Signature

AVOGADRO ENVIRONMENTAL CORPORATION, Easton Pa

Visible Emissions Evaluation

Facility Name	ECC FBF
AVOGADRO Project No.	12-9191
Location (city, state)	BROOKLYN, NY
Type of Facility	
Control Equipment / Emission Source	ACB
Date of Observation	1-4-13
Start Time	1240
Stop Time	1505
Distance from observer (ft)	100'
Direction from observer	N
Stack height (fr. observer's elev.) (ft)	10'
Stack Diameter (in)	27.17 x 8.42

Description of plume:

continuous? fugitive? intermittent?	CONT
color	WHITE
water drops present? (Y/N)	N
attached steam plume? (Y/N)	N
detached steam plume? (Y/N)	N
secondary plume? (Y/N)	N
point where opacity read	10' Downwind
target?	
describe background to plume	Containers
unique features of plume or stack	

Weather:

ambient temperature (F)	44°F
relative humidity	45%
wind direction	E
wind speed	10-15
barometric pressure	29.95
rain? fog? snow? haze?	DRY CLDY

Glasses worn:

corrective? (Y/N)	Y
sunglasses? (Y/N)	N

Observer's name	MARK T. READY
Observer certification date	10-22-12
Certifying agency	KOONTZ
Observer affiliation	AVOGADRO/DA

Run Number(s) and Description 1-4-13

sec	0	15	30	45
min	Run 17 Time: 1240			
1	10	10	10	10
2	10	10	10	10
3	10	10	10	10
4	10	10	5	10
5	10	10	10	5
6	5	5	10	10
6-minute Average:			9.2	
Source Conditions:				
Sun Angle (degrees):			15	
	Run 18 Time: 1300			
1	5	5	5	10
2	10	5	10	5
3	10	5	5	10
4	5	5	5	10
5	10	5	5	5
6	10	5	5	5
6-minute Average:			6.7	
Source Conditions:				
Sun Angle (degrees):			20	
	Run 19 Time: 1320			
1	0	0	0	5
2	0	0	0	5
3	5	0	5	5
4	5	5	5	0
5	0	0	0	0
6	0	0	0	0
6-minute Average:			1.7	
Source Conditions:				
Sun Angle (degrees):			25	
	Run 20 Time: 1340			
1	5	5	5	5
2	5	5	5	5
3	5	0	0	0
4	0	0	0	0
5	0	0	0	0
6	5	0	5	5
6-minute Average:			2.5	
Source Conditions:				
Sun Angle (degrees):			30	

sec	0	15	30	45
min	Run 21 Time: 1400			
1	10	10	10	10
2	10	5	5	5
3	5	5	5	5
4	5	5	5	5
5	5	0	0	5
6	5	5	5	5
6-minute Average:			5.6	
Source Conditions:				
Sun Angle (degrees):			10	
	Run 22 Time: 1420			
1	0	5	0	5
2	10	10	5	5
3	5	10	5	5
4	5	10	0	0
5	0	5	0	5
6	0	0	5	5
6-minute Average:			4.2	
Source Conditions:				
Sun Angle (degrees):			15	
	Run 23 Time: 1440			
1	10	5	5	10
2	10	5	10	5
3	5	5	5	10
4	5	10	10	5
5	5	5	5	5
6	5	5	5	5
6-minute Average:			6.5	
Source Conditions:				
Sun Angle (degrees):			0	
	Run 24 Time: 1500			
1	0	5	0	5
2	5	5	5	5
3	0	5	5	5
4	0	0	5	5
5	5	5	0	5
6	5	0	5	5
6-minute Average:			3.5	
Source Conditions:				
Sun Angle (degrees):			0	

Range of opacity readings:
low 0 high 10

Number of readings above 10 % were 0

Observer's Signature

Visible Emissions Evaluation

Facility Name	ECC FBF
AVOGADRO Project No.	12-9191
Location (city, state)	BROOKLYN, NY
Type of Facility	
Control Equipment / Emission Source	ACB
Date of Observation	1-4-13
Start Time	1520
Stop Time	
Distance from observer (ft)	125'
Direction from observer	NNE
Stack height (fr. observer's elev.) (ft)	10'
Stack Diameter (in)	27.17 x 8.42

Description of plume:

continuous? fugitive? intermittent?	CONT.
color	White
water drops present? (Y/N)	N
attached steam plume? (Y/N)	N
detached steam plume? (Y/N)	N
secondary plume? (Y/N)	N
point where opacity read	10' Downwind
target?	
describe background to plume	Containers
unique features of plume or stack	

Weather:

ambient temperature (F)	45°F
relative humidity	45 %
wind direction	E
wind speed	10-15
barometric pressure	29.95
rain? fog? snow? haze?	CLEAR

Glasses worn:

corrective? (Y/N)	Y
sunglasses? (Y/N)	N

Observer's name	MARK T. READY
Observer certification date	10-22-12
Certifying agency	KOONTZ
Observer affiliation	AVOGADRO/DA

Run Number(s) and Description PAGE 4 1-4-13

sec	0	15	30	45	sec	0	15	30	45
min	Run 25 Time: 1520				min	Run Time:			
1	10	10	10	10	1				
2	10	10	5	10	2				
3	15	10	10	10	3				
4	10	10	10	15	4				
5	10	5	5	5	5				
6	5	5	15	15	6				
6-minute Average:	9.6				6-minute Average:				
Source Conditions:					Source Conditions:				
Sun Angle (degrees):	-0				Sun Angle (degrees):				
	Run 26 Time: 1540					Run Time:			
1	0	0	0	5	1				
2	0	0	0	5	2				
3	5	5	5	0	3				
4	0	0	0	0	4				
5	0	5	5	5	5				
6	0	0	0	0	6				
6-minute Average:	1.7				6-minute Average:				
Source Conditions:					Source Conditions:				
Sun Angle (degrees):	-0				Sun Angle (degrees):				
	Run 27 Time: 1600					Run Time:			
1	5	5	5	5	1				
2	0	0	0	0	2				
3	5	0	0	0	3				
4	0	0	0	0	4				
5	0	0	0	0	5				
6	0	0	0	0	6				
6-minute Average:	1.0				6-minute Average:				
Source Conditions:					Source Conditions:				
Sun Angle (degrees):	5				Sun Angle (degrees):				
	Run 28 Time: 1620					Run Time:			
1	0	0	0	0	1				
2	0	0	0	0	2				
3	0	0	0	0	3				
4	0	0	0	0	4				
5	0	0	0	5	5				
6	0	0	5	0	6				
6-minute Average:	0.42				6-minute Average:				
Source Conditions:					Source Conditions:				
Sun Angle (degrees):	5				Sun Angle (degrees):				

Range of opacity readings:
low -0 high 10

Number of readings above 10 % were -0

Observer's Signature

AVOGADRO ENVIRONMENTAL CORPORATION, Easton Pa

Visible Emissions Evaluation

Friday, Jan. 4th, 2013

Run Number(s) and Description: Night Runs 1-8

Facility Name	ECC Floyd Bennett Field
AVOGADRO Project No.	12-9191
Location (city, state)	Brooklyn, NY
Type of Facility	Debris Removal
Control Equipment / Emission Source	ACB
Date of Observation	01/04/2013
Start Time	1900
Stop Time	2208
Distance from observer (ft)	300'
Direction from observer	NNW
Stack height (fr. observer's elev.) (ft)	9'
Stack Diameter (in)	27' x 9'
Description of plume:	
continuous? fugitive? intermittent?	Cont
color	white
water drops present? (Y/N)	N
attached steam plume? (Y/N)	N
detached steam plume? (Y/N)	N
secondary plume? (Y/N)	N
point where opacity read	1-3 conex lengths
target?	Sky
describe background to plume	Sky, backlit
unique features of plume or stack	—
Weather:	@ 1900
ambient temperature (F)	36°
relative humidity	54%
wind direction	E
wind speed	4-8 mph
barometric pressure	29.99 in Hg
rain? fog? snow? haze?	clear
Glasses worn:	
corrective? (Y/N)	Y
sunglasses? (Y/N)	—

Observer's name	Joshua Wagner
Observer certification date	Night 12/20/2012
Certifying agency	Whitlow
Observer affiliation	Avogadro Env.

sec	0	15	30	45
min	**Run 1 Time: 1900**			
1	5	5	10	5
2	5	5	10	10
3	10	5	10	10
4	10	10	10	5
5	10	10	5	10
6	10	10	10	5
6-minute Average: 8.1				
Source Conditions:				
Sun Angle (degrees): —				
Run 2 Time: 1926				
1	10	10	10	10
2	10	10	10	10
3	10	10	10	10
4	10	10	10	10
5	10	10	10	10
6	10	10	10	10
6-minute Average: 10				
Source Conditions:				
Sun Angle (degrees): —				
Run 3 Time: 1952				
1	10	10	10	10
2	10	10	10	10
3	10	10	10	10
4	5	10	10	10
5	10	10	10	10
6	10	10	10	10
6-minute Average: 9.8				
Source Conditions:				
Sun Angle (degrees): —				
Run 4 Time: 2018				
1	10	10	10	10
2	5	10	5	10
3	10	10	10	5
4	10	10	10	5
5	10	5	10	10
6	10	10	10	10
6-minute Average: 9.0				
Source Conditions:				
Sun Angle (degrees):				

sec	0	15	30	45
min	**Run 5 Time: 2044**			
1	5	10	5	10
2	5	10	5	10
3	10	5	10	10
4	10	10	5	10
5	5	10	10	10
6	5	10	5	10
6-minute Average: 8.1				
Source Conditions:				
Sun Angle (degrees):				
Run 6 Time: 2110				
1	10	10	10	10
2	5	10	5	10
3	5	10	5	10
4	5	10	10	5
5	10	10	10	5
6	10	10	10	5
6-minute Average: 8.3				
Source Conditions:				
Sun Angle (degrees):				
Run 7 Time: 2136				
1	10	5	5	5
2	10	10	10	5
3	10	5	10	5
4	10	5	10	10
5	10	5	10	10
6	5	10	10	5
6-minute Average: 7.9				
Source Conditions:				
Sun Angle (degrees):				
Run 8 Time: 2202				
1	10	10	5	10
2	10	10	10	5
3	10	5	10	10
4	5	10	10	5
5	10	10	10	10
6	5	5	10	10
6-minute Average: 8.5				
Source Conditions:				
Sun Angle (degrees):				

Range of opacity readings: low 5 high 10

Number of readings above 10 % were 0

Observer's Signature

Visible Emissions Evaluation

Friday, January 4th 2013

Run Number(s) and Description: Night Runs 9-12

Facility Name	ECC Floyd Bennett Field
AVOGADRO Project No.	12-9191
Location (city, state)	Brooklyn, NY
Type of Facility	Debris Removal
Control Equipment / Emission Source	ACB
Date of Observation	01/04/2013
Start Time	2230
Stop Time	2354
Distance from observer (ft)	300'
Direction from observer	NNW
Stack height (fr. observer's elev.) (ft)	9'
Stack Diameter (in)	27' x 9'

Description of plume:

continuous? fugitive? intermittent?	Cont.
color	white
water drops present? (Y/N)	N
attached steam plume? (Y/N)	N
detached steam plume? (Y/N)	N
secondary plume? (Y/N)	N
point where opacity read	1-2 conex lengths
target?	sky
describe background to plume	sky, backlit
unique features of plume or stack	—

Weather: @2230

ambient temperature (F)	34°
relative humidity	56%
wind direction	E
wind speed	3-7 mph
barometric pressure	30.02 inHg
rain? fog? snow? haze?	Clear

Glasses worn:

corrective? (Y/N)	Y
sunglasses? (Y/N)	—

Observer's name	Joshua Wagner
Observer certification date	Night 12/20/2012
Certifying agency	Whitlow
Observer affiliation	Avogadro Env.

sec	0	15	30	45
min	Run 9	Time: 2230		
1	10	10	10	10
2	10	10	10	10
3	10	10	10	10
4	10	10	10	10
5	10	10	10	10
6	10	10	10	10
6-minute Average:	10			
Source Conditions:				
Sun Angle (degrees):	—			

sec	0	15	30	45
min	Run	Time:		
1				
2				
3				
4				
5				
6				
6-minute Average:				
Source Conditions:				
Sun Angle (degrees):				

Run 10	Time: 2256			
1	10	10	10	10
2	10	10	10	10
3	10	10	10	10
4	10	10	10	10
5	10	10	10	10
6	10	10	10	10
6-minute Average:	10			
Source Conditions:				
Sun Angle (degrees):	—			

Run	Time:			
1				
2				
3				
4				
5				
6				
6-minute Average:				
Source Conditions:				
Sun Angle (degrees):				

Run 11	Time: 2322			
1	10	10	10	5
2	5	10	10	10
3	5	5	10	10
4	10	10	5	5
5	10	10	10	10
6	10	10	5	10
6-minute Average:	8.5			
Source Conditions:				
Sun Angle (degrees):	—			

Run	Time:			
1				
2				
3				
4				
5				
6				
6-minute Average:				
Source Conditions:				
Sun Angle (degrees):				

Run 12	Time: 2348			
1	10	10	10	10
2	10	10	10	10
3	10	10	10	10
4	10	10	10	10
5	10	10	10	10
6	10	10	10	10
6-minute Average:	10			
Source Conditions:				
Sun Angle (degrees):	—			

Run	Time:			
1				
2				
3				
4				
5				
6				
6-minute Average:				
Source Conditions:				
Sun Angle (degrees):				

Range of opacity readings: low 5 high 10

Number of readings above 10 % were 0

Observer's Signature