Mond. Early Morning, January 21st, 2013

Run Number(s) and Description

ACB 1 Runs 1-8

Visible Emissions Evaluation

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 1
Date of Observation	01/21/2013
Start Time	0104
Stop Time	0420
Distance from observer (ft)	150'
Direction from observer	E
Stack height (fr. observer's elev.) (ft)	9'
Stack Diameter (in)	27'x9'
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 cones lengths
target?	sky
describe background to plume	sky
unique features of plume or stack	—
Weather:	@0100
ambient temperature (F)	30°
relative humidity	37%
wind direction	SE
wind speed	0-3mph
barometric pressure	30.06 in
rain? fog? snow? haze?	clear
Glasses worn:	
corrective? (Y/N)	yes
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: 0104			
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
6-minute Average: 0				
Source Conditions:				
Sun Angle (degrees):				
	Run 2 Time: 0130			
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	5	0	0
6	0	0	5	0
6-minute Average: 0.4				
Source Conditions:				
Sun Angle (degrees):				
	Run 3 Time: 0156			
1	5	5	5	5
2	5	5	5	5
6 3	5	5	5	5
9 4	0	0	0	0
0 5	0	0	0	0
6	0	0	0	0
6-minute Average: 2.5				
Source Conditions:				
Sun Angle (degrees):				
	Run 4 Time: 222			
1	5	5	5	5
2	5	5	5	5
4 3	5	5	5	5
4	5	5	5	5
6 5	5	5	5	5
6	5	5	5	5
6-minute Average: 5				
Source Conditions:				
Sun Angle (degrees):				

sec	0	15	30	45
min	Run 5 Time: 0248			
1	5	5	5	5
2	0	0	0	0
3	5	5	5	5
1 4	5	5	5	5
2 5	5	5	5	5
6	0	0	0	0
6-minute Average: 3.3				
Source Conditions:				
Sun Angle (degrees):				
	Run 6 Time: 0314			
1	5	5	5	5
2	5	5	5	5
3	5	5	5	5
7 4	5	5	5	5
5	5	5	5	5
6	5	5	5	5
6-minute Average: 5				
Source Conditions:				
Sun Angle (degrees):				
	Run 7 Time: 0348			
1	10	10	10	10
2	10	10	10	10
0 3	10	10	10	10
1 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 8 Time: 0414			
1	5	5	5	5
2	5	5	5	0
3	5	5	5	5
4	5	5	5	5
5	5	5	0	5
6	5	5	5	5
6-minute Average: 4.6				
Source Conditions:				
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

Mond. Early Morning, January 21st, 2013

Visible Emissions Evaluation

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 1
Date of Observation	01/21/2013
Start Time	0440
Stop Time	0544
Distance from observer (ft)	150'
Direction from observer	E
Stack height (fr. observer's elev.) (ft)	9'
Stack Diameter (in)	27'x9'
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
unique features of plume or stack	—
Weather:	@440
ambient temperature (F)	28°
relative humidity	35%
wind direction	SE
wind speed	calm
barometric pressure	30.09 in Hg
rain? fog? snow? haze?	clear
Glasses worn:	
corrective? (Y/N)	yes
sunglasses? (Y/N)	—

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

Run Number(s) and Description: ACB 1 Runs 9-11

sec	0	15	30	45
min	Run 9	Time: 0440		
0 1	0	0	0	0
1 2	0	0	0	0
2 3	0	0	0	0
3 4	5	5	5	5
4 5	5	5	5	5
5 6	10	10	5	5
6-minute Average: 2.9				
Source Conditions:				
Sun Angle (degrees):				

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

	Run	Time:			
1	10	10	10	10	
2	15	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: 10.8					
Source Conditions:					
Sun Angle (degrees):					

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

	Run	Time:		
1				
2				
3				
4				
5				
6				
6-minute Average:				
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 15

Number of readings above 10 % were 1

Observer's Signature

Visible Emissions Evaluation

UNIT 1

Run Number(s) and Description

Pg. 1 1-21-13

Facility Name	ECC FBF
AVOGADRO Project No.	Brooklyn NY
Location (city, state)	12-9191
Type of Facility	
Control Equipment / Emission Source	ACB
Date of Observation	1-21-13
Start Time	0720
Stop Time	
Distance from observer (ft)	100'
Direction from observer	NW
Stack height (fr. observer's elev.) (ft)	10'
Stack Diameter (in)	27 x 8
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	Top Edge
target?	
describe background to plume	Containers
unique features of plume or stack	
Weather:	
ambient temperature (F)	30°F
relative humidity	40%
wind direction	TO: E
wind speed	10-15
barometric pressure	
rain? fog? snow? haze?	PTly cldy overcast
Glasses worn:	
corrective? (Y/N)	Y
sunglasses? (Y/N)	N

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

sec	0	15	30	45
min	Run 1 Time: 0720			
1	15	10	10	10
2	10	10	10	15
3	10	10	10	10
4	15	10	10	10
5	10	10	10	10
6	10	5	5	5
6-minute Average:	10.0			
Source Conditions:				
Sun Angle (degrees):	20			
	Run 2 Time: 740			
1	5	10	10	10
2	10	10	10	10
3	5	10	10	10
4	10	10	10	10
5	10	10	10	10
6	10	10	10	10
6-minute Average:	9.6			
Source Conditions:				
Sun Angle (degrees):	20			
	Run 3 Time: 800			
1	10	10	10	15
2	15	10	10	10
3	10	10	10	10
4	10	10	10	10
5	10	5	10	10
6	10	10	5	5
6-minute Average:	9.8			
Source Conditions:				
Sun Angle (degrees):	15			
	Run 4 Time: 8020			
1	10	10	10	10
2	10	10	15	10
3	10	10	10	10
4	10	5	5	10
5	10	10	10	10
6	10	10	10	10
6-minute Average:	9.8			
Source Conditions:				
Sun Angle (degrees):	10			

sec	0	15	30	45
min	Run 5 Time: 840			
1	5	5	5	5
2	5	5	5	5
3	5	5	5	5
4	5	5	5	5
5	5	5	5	5
6	5	5	5	5
6-minute Average:	5.0			
Source Conditions:				
Sun Angle (degrees):	5			
	Run 6 Time: 900			
1	15	15	10	15
2	10	10	15	15
3	15	15	15	15
4	15	15	15	15
5	25	15	15	15
6	15	10	10	15
6-minute Average:	14.4			
Source Conditions:				
Sun Angle (degrees):	5			
	Run 7 Time: 920			
1	15	10	10	10
2	10	5	5	5
3	5	5	5	5
4	5	5	5	5
5	5	5	5	5
6	5	5	5	5
6-minute Average:	6.3			
Source Conditions:				
Sun Angle (degrees):	5			
	Run 8 Time: 940			
1	5	5	5	5
2	5	5	5	5
3	5	5	5	5
4	5	5	5	5
5	5	5	5	5
6	5	5	5	5
6-minute Average:	5.0			
Source Conditions:				
Sun Angle (degrees):	5			

Range of opacity readings:

low 5 high 20

Number of readings above 10 % were 26

Observer's Signature

UNIT 1

Visible Emissions Evaluation

Run Number(s) and Description

 1-21-13

Facility Name	ECC FBF
AVOGADRO Project No.	12-9191
Location (city, state)	Brooklyn MY
Type of Facility	
Control Equipment / Emission Source	ACB
Date of Observation	1-21-13
Start Time	1000
Stop Time	
Distance from observer (ft)	100'
Direction from observer	NW
Stack height (fr. observer's elev.) (ft)	10'
Stack Diameter (in)	21 x 5
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	Top Edge
target?	
describe background to plume	Containers
unique features of plume or stack	
Weather:	
ambient temperature (F)	~~35~~ 30°F
relative humidity	30%
wind direction	TO: E
wind speed	10-15
barometric pressure	
rain? fog? snow? haze?	OVERCAST
Glasses worn:	
corrective? (Y/N)	Y
sunglasses? (Y/N)	N

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

sec	0	15	30	45
min	Run 9 Time: 1000			
1	5	5	5	5
2	5	5	5	5
3	5	5	5	5
4	5	5	5	5
5	5	5	5	5
6	5	5	5	5
6-minute Average:	5.0			
Source Conditions:				
Sun Angle (degrees):	0			
	Run 10 Time: 1020			
1	5	5	5	5
2	5	5	5	0
3	5	5	5	5
4	0	0	0	0
5	0	0	0	5
6	5	0	0	5
6-minute Average:	2.9			
Source Conditions:				
Sun Angle (degrees):	0			
	Run 11 Time: 1040			
1	0	0	5	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
6-minute Average:	0.2			
Source Conditions:				
Sun Angle (degrees):	10			
	Run 12 Time: 1100			
1	5	5	5	5
2	5	5	5	5
3	5	5	5	5
4	5	5	5	5
5	5	5	5	5
6	5	5	5	5
6-minute Average:	5.0			
Source Conditions:				
Sun Angle (degrees):	15			

sec	0	15	30	45
min	Run 13 Time: 1120			
1	15	15	10	10
2	10	10	15	10
3	10	5	5	10
4	10	10	10	5
5	10	10	10	10
6	10	10	10	5
6-minute Average:	9.8			
Source Conditions:				
Sun Angle (degrees):	20			
	Run 14 Time: 1140			
1	15	15	10	10
2	10	10	10	10
3	10	10	5	5
4	10	10	10	10
5	10	10	10	5
6	10	10	10	5
6-minute Average:	9.6			
Source Conditions:				
Sun Angle (degrees):	30			
	Run 15 Time: 1200			
1	10	5	10	10
2	5	5	10	10
3	10	10	10	10
4	10	10	10	10
5	10	5	10	5
6	10	10	10	10
6-minute Average:	9.0			
Source Conditions:				
Sun Angle (degrees):	50			
	Run 16 Time: 1220			
1	10	15	10	10
2	5	5	10	5
3	10	5	5	5
4	5	5	5	5
5	5	5	5	5
6	5	5	5	5
6-minute Average:	6.5			
Source Conditions:				
Sun Angle (degrees):	45			

Range of opacity readings: low 0 high 15

Number of readings above 10 % were 6

Observer's Signature

* NEW LOCATION @ 1140

DIRECTION - NE 5-10

DISTANCE - 150'

UNIT 1

Pg. 3 1-21-13

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	1-21-13
Start Time	1240
Stop Time	
Distance from observer (ft)	150'
Direction from observer	Mod NE
Stack height (fr. observer's elev.) (ft)	10'
Stack Diameter (in)	27 x 8
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	Top Edge
target?	
describe background to plume	Containers
unique features of plume or stack	
Weather:	
ambient temperature (F)	30°F
relative humidity	30°F
wind direction	N
wind speed	5-10
barometric pressure	
rain? fog? snow? haze?	OVERCAST
Glasses worn:	
corrective? (Y/N)	Y
sunglasses? (Y/N)	N

Observer's name	MARK J. READY
Observer certification date	10-21-12
Certifying agency	KOONTZ
Observer affiliation	AVOGADRO / DA

Run Number(s) and Description

sec	0	15	30	45
min	Run 1 Time: 1240			
1	5	5	5	5
2	5	10	5	5
3	5	10	5	5
4	5	5	5	5
5	5	5	5	5
6	5	5	5	5
6-minute Average:	5.4			
Source Conditions:				
Sun Angle (degrees):	40			
	Run 1R Time: 1300			
1	5	5	5	5
2	10	5	5	5
3	5	5	5	5
4	5	5	5	5
5	5	5	5	5
6	5	5	5	5
6-minute Average:	5.2			
Source Conditions:				
Sun Angle (degrees):	35			
	Run 1? Time: 1320			
1	5	5	5	5
2	5	5	5	5
3	5	5	5	10
4	5	5	5	5
5	5	5	5	5
6	5	5	5	5
6-minute Average:	5.2 5.0			
Source Conditions:				
Sun Angle (degrees):	35			
	Run 2? Time: 1340			
1	5	5	5	5
2	5	5	5	5
3	5	5	5	5
4	5	5	5	5
5	5	5	5	5
6	5	5	5	5
6-minute Average:	5.0			
Source Conditions:				
Sun Angle (degrees):	30			

sec	0	15	30	45
min	Run 2 Time: 1400			
1	5	5	10	5
2	5	10	5	10
3	5	5	5	10
4	10	10	5	5
5	10	10	10	5
6	5	5	5	5
6-minute Average:	6.9			
Source Conditions:				
Sun Angle (degrees):	25			
	Run 2R Time: 1420			
1	10	10	10	5
2	5	5	10	5
3	5	5	5	5
4	5	5	5	5
5	10	5	5	5
6	10	5	5	5
6-minute Average:	6.3			
Source Conditions:				
Sun Angle (degrees):	20			
	Run 2? Time: 1440			
1	10	10	5	5
2	5	5	5	5
3	10	5	5	5
4	5	5	5	10
5	5	5	5	5
6	10	5	5	5
6-minute Average:	6.0			
Source Conditions:				
Sun Angle (degrees):	20			
	Run 2? Time: 1500			
1	10	10	10	5
2	10	10	10	10
3	5	5	10	10
4	5	5	10	5
5	5	10	10	5
6	10	10	10	10
6-minute Average:	8.3			
Source Conditions:				
Sun Angle (degrees):	15			

Range of opacity readings:
low 5 high 10

Number of readings above 10 % were 0

Observer's Signature

AVOGADRO ENVIRONMENTAL CORPORATION, Easton Pa

UNIT 1

Run Number(s) and Description

Pg. 4 1-21-13

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	1-21-13
Start Time	1520
Stop Time	
Distance from observer (ft)	150'
Direction from observer	NE
Stack height (fr. observer's elev.) (ft)	10'
Stack Diameter (in)	27 x 8
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	Top Edge
target?	
describe background to plume	Containers
unique features of plume or stack	
Weather:	
ambient temperature (F)	35°F
relative humidity	30%
wind direction	TO: NE
wind speed	5-10
barometric pressure	
rain? fog? snow? haze?	OVERCAST
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

WIND CALM @ 1540

sec	0	15	30	45
min	Run 25 Time: 1520			
1	5	5	5	5
2	15	10	10	5
3	5	15	15	5
4	5	5	5	5
5	5	5	5	5
6	5	5	5	5
6-minute Average:	6.7			
Source Conditions:				
Sun Angle (degrees):	15			
	Run 26 Time: 1540			
1	5	5	5	5
2	5	5	5	5
3	5	5	5	5
4	5	5	5	5
5	5	5	5	5
6	5	5	5	5
6-minute Average:	5.0			
Source Conditions:				
Sun Angle (degrees):	5			
	Run 27 Time: 1600			
1	10	10	10	10
2	10	10	10	10
3	10	10	10	10
4	5	5	5	5
5	5	5	5	10
6	5	5	5	10
6-minute Average:	7.9			
Source Conditions:				
Sun Angle (degrees):	0			
	Run 28 Time: 1620			
1	5	5	5	5
2	5	5	5	5
3	5	5	5	5
4	5	5	5	5
5	5	5	5	5
6	5	5	5	5
6-minute Average:	5.0			
Source Conditions:				
Sun Angle (degrees):	0			

sec	0	15	30	45
min	Run 29 Time: 1640			
1	10	5	5	5
2	5	5	5	5
3	5	5	5	5
4	5	5	5	5
5	5	5	5	5
6	5	5	5	5
6-minute Average:	5.2			
Source Conditions:				
Sun Angle (degrees):	10			
	Run Time:			
1				
2				
3				
4				
5				
6				
6-minute Average:				
Source Conditions:				
Sun Angle (degrees):				
	Run Time:			
1				
2				
3				
4				
5				
6				
6-minute Average:				
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 15

Number of readings above 10 % were 3

Observer's Signature

Mon. Night, January 21st, 2013

Visible Emissions Evaluation

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 1
Date of Observation	01/21/2013
Start Time	1956
Stop Time	2304
Distance from observer (ft)	150'
Direction from observer	E
Stack height (fr. observer's elev.) (ft)	9'
Stack Diameter (in)	27'x9'
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
unique features of plume or stack	—
	@1956
Weather:	
ambient temperature (F)	30°
relative humidity	64%
wind direction	SE
wind speed	4-5mph
barometric pressure	29.89 inHg
rain? fog? snow? haze?	snow, ~2030 - snow ceases to flurries
Glasses worn:	
corrective? (Y/N)	yes
sunglasses? (Y/N)	—

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

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

sec	0	15	30	45
min	Run 1 Time: 1956			
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
6-minute Average: 0				
Source Conditions:				
Sun Angle (degrees):				
	Run 2 Time: 2022			
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
6-minute Average: 0				
Source Conditions:				
Sun Angle (degrees):				
	Run 3 Time: 2048			
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
6-minute Average: 0				
Source Conditions:				
Sun Angle (degrees):				
	Run 4 Time: 2114			
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
6-minute Average: 0				
Source Conditions:				
Sun Angle (degrees):				

sec	0	15	30	45
min	Run 5 Time: 2140			
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
6-minute Average: 0				
Source Conditions:				
Sun Angle (degrees):				
	Run 6 Time: 2206			
1	0	0	0	0
2	0	0	0	0
3	5	0	0	0
4	0	0	0	0
5	5	0	0	0
6	0	0	0	0
6-minute Average: 0.4				
Source Conditions:				
Sun Angle (degrees):				
	Run 7 Time: 2232			
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
6-minute Average: 0				
Source Conditions:				
Sun Angle (degrees):				
	Run 8 Time: 2258			
1	0	0	0	0
2	0	0	0	0
3	5	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
6-minute Average: 0.2				
Source Conditions:				
Sun Angle (degrees):				

Range of opacity readings: low 0 high 5

Number of readings above 10 % were 0

Observer's Signature

Mon. Night, January 21st, 2013

Visible Emissions Evaluation

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 1
Date of Observation	01/21/2013
Start Time	2324
Stop Time	2348
Distance from observer (ft)	150'
Direction from observer	E
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
unique features of plume or stack	—
Weather:	@2324
ambient temperature (F)	28°
relative humidity	55%
wind direction	SE
wind speed	6-9 mph
barometric pressure	29.85 in Hg
rain? fog? snow? haze?	clear
Glasses worn:	
corrective? (Y/N)	yes
sunglasses? (Y/N)	—

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

Run Number(s) and Description: ACB1 Runs 9-10

sec	0	15	30	45
min	Run 9	Time: 2324		
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	5	0	0
6-minute Average:	0.2			
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):				

sec	0	15	30	45
min	Run 10	Time: 2342		
1	0	0	0	0
2	0	0	0	0
3	5	0	0	5
4	0	0	0	0
5	0	5	0	0
6	0	0	0	5
6-minute Average:	0.8			
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):				

sec	0	15	30	45
min	Run	Time:		
1				
2				
3				
4				
5				
6				
6-minute Average:				
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):				

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

Range of opacity readings: low 0 high 5

Number of readings above 10 % were 0

Observer's Signature

AVOGADRO ENVIRONMENTAL CORPORATION, Easton Pa

Visible Emissions Evaluation

Monday Early Morning, January 21st, 2013

Run Number(s) and Description: ACB 2 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 2
Date of Observation	01/21/2013
Start Time	0104
Stop Time	0420
Distance from observer (ft)	150'
Direction from observer	E
Stack height (fr. observer's elev.) (ft)	8'
Stack Diameter (in)	20' x 8'
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
unique features of plume or stack	—
Weather:	@0100
ambient temperature (F)	30°
relative humidity	37%
wind direction	SE
wind speed	0-7 mph
barometric pressure	30.06 in
rain? fog? snow? haze?	clear
Glasses worn:	
corrective? (Y/N)	yes
sunglasses? (Y/N)	—

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

sec	0	15	30	45
min	Run 1 Time: 0104			
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
6-minute Average: 0				
Source Conditions:				
Sun Angle (degrees):				
	Run 2 Time: 0130			
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	5	0	0
6	0	0	0	5
6-minute Average: 0.4				
Source Conditions:				
Sun Angle (degrees):				
	Run 3 Time: 0156			
6 1	5	5	5	5
7 2	5	5	5	5
8 3	5	5	5	5
9 4	[illegible]	[illegible]	[illegible]	[illegible]
5	[illegible]	[illegible]	[illegible]	[illegible]
6	[illegible]	[illegible]	[illegible]	[illegible]
6-minute Average: [illegible] 2.5				
Source Conditions:				
Sun Angle (degrees):				
	Run 4 Time: 0222			
1	0	0	0	0
2	0	0	0	0
4 3	[illegible]	[illegible]	[illegible]	[illegible]
5 4	0	0	0	0
6 5	0	0	0	0
7 6	0	0	0	0
6-minute Average: 0				
Source Conditions:				
Sun Angle (degrees):				

sec	0	15	30	45
min	Run 5 Time: 248			
1	5	5	5	5
2	0	0	0	0
3	0	0	0	0
1 4	0	0	0	0
2 5	0	0	0	0
6	0	0	0	0
6-minute Average: 0.8				
Source Conditions:				
Sun Angle (degrees):				
	Run 6 Time: 0314			
4 1	5	5	5	5
5 2	5	5	5	5
6 3	5	5	5	5
7 4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
6-minute Average: 2.5				
Source Conditions:				
Sun Angle (degrees):				
	Run 7 Time: 0348			
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
6-minute Average: 0				
Source Conditions:				
Sun Angle (degrees):				
	Run 8 Time: 0414			
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
6-minute Average: 0				
Source Conditions:				
Sun Angle (degrees):				

Range of opacity readings: low 0 high 5

Number of readings above 10 % were 0

Observer's Signature

AVOGADRO ENVIRONMENTAL CORPORATION, Easton Pa

Mond. Early Morning, January 21st, 2013

Visible Emissions Evaluation

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 2
Date of Observation	01/21/2013
Start Time	0440
Stop Time	0544
Distance from observer (ft)	150'
Direction from observer	E
Stack height (fr. observer's elev.) (ft)	8'
Stack Diameter (in)	20' x 8'
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
unique features of plume or stack	—
Weather:	@ 440
ambient temperature (F)	28°
relative humidity	35%
wind direction	SE
wind speed	calm
barometric pressure	30.09 in Hg
rain? fog? snow? haze?	clear
Glasses worn:	
corrective? (Y/N)	yes
sunglasses? (Y/N)	—

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

Run Number(s) and Description: ACB 2 Runs 9-11

sec	0	15	30	45
min	Run 9 Time: 0440			
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
6-minute Average:	0			
Source Conditions:				
Sun Angle (degrees):				
	Run 10 Time: 0502			
1	0	0	0	0
2	0	0	0	0
3	0	0	5	0
4	5	0	0	0
5	5	0	0	0
6	0	0	0	0
6-minute Average:	0.6			
Source Conditions:				
Sun Angle (degrees):				
	Run 11 Time: 0523			
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
6-minute Average:	0			
Source Conditions:				
Sun Angle (degrees):				
	Run Time:			
1				
2				
3				
4				
5				
6				
6-minute Average:				
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 Time:			
1				
2				
3				
4				
5				
6				
6-minute Average:				
Source Conditions:				
Sun Angle (degrees):				
	Run Time:			
1				
2				
3				
4				
5				
6				
6-minute Average:				
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 5

Number of readings above 10 % were 0

Observer's Signature

AVOGADRO ENVIRONMENTAL CORPORATION, Easton Pa

Visible Emissions Evaluation

UNIT 2

Run Number(s) and Description — Pg. 1 — 1-21-13

Facility Name	ECC EBF
AVOGADRO Project No.	12-9191
Location (city, state)	Brooklyn NY
Type of Facility	
Control Equipment / Emission Source	ACB
Date of Observation	1-21-13
Start Time	0720
Stop Time	
Distance from observer (ft)	100'
Direction from observer	NW
Stack height (fr. observer's elev.) (ft)	10'
Stack Diameter (in)	20 x 8
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	Top edge
target?	
describe background to plume	Containers
unique features of plume or stack	
Weather:	
ambient temperature (F)	30°F
relative humidity	40%
wind direction	E
wind speed	10-15
barometric pressure	
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

sec	0	15	30	45
min	Run 1 Time: 0720			
1	5	5	5	5
2	5	5	5	5
3	5	5	5	5
4	5	5	5	5
5	5	5	5	5
6	5	5	5	5
6-minute Average:	5.0			
Source Conditions:				
Sun Angle (degrees):	20			
	Run 2 Time: 740			
1	5	5	5	0
2	5	5	5	0
3	0	5	5	5
4	0	0	0	5
5	5	5	5	5
6	5	5	0	5
6-minute Average:	3.5			
Source Conditions:				
Sun Angle (degrees):	20			
	Run 3 Time: 800			
1	5	5	0	0
2	0	5	5	0
3	0	5	5	5
4	5	5	5	5
5	5	5	5	5
6	5	5	5	5
6-minute Average:	4.0			
Source Conditions:				
Sun Angle (degrees):	15			
	Run 4 Time: 820			
1	5	5	5	5
2	5	5	5	5
3	5	5	5	5
4	5	5	5	5
5	5	5	0	5
6	0	5	5	5
6-minute Average:	4.6			
Source Conditions:				
Sun Angle (degrees):	10			

sec	0	15	30	45
min	Run 5 Time: 840			
1	10	10	10	10
2	10	10	10	10
3	10	5	10	10
4	10	10	10	10
5	10	10	10	10
6	10	5	10	10
6-minute Average:	9.6			
Source Conditions:				
Sun Angle (degrees):	5			
	Run 6 Time: 900			
1	15	5	5	5
2	5	5	5	5
3	5	5	5	5
4	5	5	5	5
5	5	5	5	5
6	5	5	5	5
6-minute Average:	5.0			
Source Conditions:				
Sun Angle (degrees):	5			
	Run 7 Time: 920			
1	15	15	15	10
2	10	10	10	10
3	10	10	10	10
4	10	10	10	5
5	5	10	10	5
6	5	5	5	5
6-minute Average:	9.2			
Source Conditions:				
Sun Angle (degrees):	5			
	Run 8 Time: 940			
1	5	5	5	5
2	5	5	5	5
3	5	5	5	5
4	5	5	5	5
5	0	5	5	5
6	5	5	0	5
6-minute Average:	4.6			
Source Conditions:				
Sun Angle (degrees):	5			

Range of opacity readings:

low 0 high 15

Number of readings above 10 % were 4

Observer's Signature

UNIT 2

Run Number(s) and Description

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	1-21-13
Start Time	1000
Stop Time	
Distance from observer (ft)	100'
Direction from observer	NW
Stack height (fr. observer's elev.) (ft)	10'
Stack Diameter (in)	20 x 8
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	Top edge
target?	
describe background to plume	Containers
unique features of plume or stack	
Weather:	
ambient temperature (F)	30 ~~35~~ F
relative humidity	30%
wind direction	10-15
wind speed	70: E
barometric pressure	
rain? fog? snow? haze?	OVERCAST
Glasses worn:	
corrective? (Y/N)	Y
sunglasses? (Y/N)	N

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

sec	0	15	30	45
min	Run 9 Time: 1000			
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
6-minute Average:	0.0			
Source Conditions:				
Sun Angle (degrees):	0			
	Run 10 Time: 1020			
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
6-minute Average:	0.0			
Source Conditions:				
Sun Angle (degrees):	0			
	Run 11 Time: 1040			
1	0	5	0	0
2	5	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
6-minute Average:	0.4			
Source Conditions:				
Sun Angle (degrees):	10			
	Run 12 Time: 1100			
1	5	0	5	5
2	5	5	5	5
3	5	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
6-minute Average:	1.7			
Source Conditions:				
Sun Angle (degrees):	15			

sec	0	15	30	45
min	Run 13 Time: 1120			
1	0	0	0	0
2	5	5	5	5
3	5	5	5	10
4	5	5	5	5
5	5	5	5	5
6	5	5	5	5
6-minute Average:	4.4			
Source Conditions:				
Sun Angle (degrees):	20			
	Run 14 Time: 1140 *			
1	0	0	0	5
2	5	5	5	5
3	5	0	0	10
4	5	5	0	0
5	0	0	0	0
6	0	0	0	0
6-minute Average:	1.7			
Source Conditions:				
Sun Angle (degrees):	50			
	Run 15 Time: 1200			
1	5	5	0	0
2	0	0	5	5
3	0	0	0	5
4	5	5	5	5
5	5	5	5	5
6	0	5	5	5
6-minute Average:	3.3			
Source Conditions:				
Sun Angle (degrees):	50			
	Run 16 Time: 1220			
1	10	10	10	10
2	10	10	10	5
3	5	5	5	5
4	5	5	5	5
5	5	5	5	5
6	5	5	5	5
6-minute Average:	6.5			
Source Conditions:				
Sun Angle (degrees):	50 45			

Range of opacity readings:

low 0 high 10

Number of readings above 10 % were 0

Observer's Signature

* NEW LOCATION @ 1140

DIRECTION - NE

DISTANCE - 150'

WIND 5-10 TO NE.

UNIT 2

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	1-21-13
Start Time	1240
Stop Time	
Distance from observer (ft)	150'
Direction from observer	NE
Stack height (fr. observer's elev.) (ft)	10'
Stack Diameter (in)	20 x 8
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	Top Edge
target?	
describe background to plume	Containers
unique features of plume or stack	
Weather:	
ambient temperature (F)	30°F
relative humidity	30%
wind direction	TO: N
wind speed	5-10
barometric pressure	
rain? fog? snow? haze?	OVERCAST
Glasses worn:	
corrective? (Y/N)	Y
sunglasses? (Y/N)	N

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

Run Number(s) and Description: Pg. 3 1-21-13

sec	0	15	30	45
min	Run 17 Time: 1240			
1	5	5	5	5
2	5	5	5	5
3	5	5	5	5
4	5	5	5	5
5	5	5	5	5
6	5	5	5	5
6-minute Average:			5.0	
Source Conditions:				
Sun Angle (degrees):			40	
	Run 18 Time: 1300			
1	5	5	5	5
2	5	5	5	5
3	5	5	5	5
4	10	5	10	10
5	5	5	5	10
6	10	5	5	5
6-minute Average:			6.0	
Source Conditions:				
Sun Angle (degrees):			35	
	Run 19 Time: 1320			
1	5	5	5	5
2	5	5	5	5
3	5	5	5	5
4	5	5	5	5
5	5	5	5	5
6	5	5	5	5
6-minute Average:			5.0	
Source Conditions:				
Sun Angle (degrees):			35	
	Run 20 Time: 1340			
1	5	5	5	5
2	5	5	5	5
3	5	5	5	5
4	5	5	5	5
5	5	5	5	5
6	5	5	5	5
6-minute Average:			5.0	
Source Conditions:				
Sun Angle (degrees):			30	

sec	0	15	30	45
min	Run 21 Time: 1400			
1	5	5	5	5
2	5	5	5	5
3	5	5	5	5
4	5	5	5	5
5	5	5	5	5
6	5	5	5	5
6-minute Average:			5.0	
Source Conditions:				
Sun Angle (degrees):			25	
	Run 22 Time: 1420			
1	0	0	0	5
2	5	5	5	5
3	5	5	5	5
4	5	5	5	5
5	5	5	5	5
6	5	5	5	5
6-minute Average:			4.4	
Source Conditions:				
Sun Angle (degrees):			20	
	Run 23 Time: 1440			
1	5	5	5	5
2	5	5	5	5
3	5	5	5	5
4	5	5	5	5
5	5	5	5	5
6	10	5	5	5
6-minute Average:			5.2	
Source Conditions:				
Sun Angle (degrees):			20	
	Run 24 Time: 1500			
1	5	5	5	5
2	5	5	5	0
3	5	5	5	5
4	5	0	0	0
5	0	0	0	0
6	0	0	0	0
6-minute Average:			2.5	
Source Conditions:				
Sun Angle (degrees):			15	

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

UNIT 2

Run Number(s) and Description

 1-21-13

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	1-21-13
Start Time	1520
Stop Time	
Distance from observer (ft)	150'
Direction from observer	NE
Stack height (fr. observer's elev.) (ft)	10'
Stack Diameter (in)	20 x 8
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	Top Edge
target?	
describe background to plume	Containers
unique features of plume or stack	
Weather:	
ambient temperature (F)	35°F
relative humidity	30%
wind direction	NE
wind speed	5-10
barometric pressure	
rain? fog? snow? haze?	OVERCAST
Glasses worn:	
corrective? (Y/N)	Y
sunglasses? (Y/N)	N

Observer's name	MAIZE TI READY
Observer certification date	10-22-12
Certifying agency	KOONTZ
Observer affiliation	AVOGADRO/DA

WIND CALM @ 1540

sec	0	15	30	45
min	Run 25 Time: 1520			
1	5	5	5	5
2	5	5	5	5
3	5	5	5	5
4	5	5	5	5
5	10	5	5	5
6	5	10	5	5
6-minute Average:	5.4			
Source Conditions:				
Sun Angle (degrees):	15			
	Run 26 Time: 1540			
1	10	10	10	10
2	10	10	10	10
3	5	10	5	10
4	10	5	10	5
5	10	5	5	10
6	5	5	5	5
6-minute Average:	7.9			
Source Conditions:				
Sun Angle (degrees):	5			
	Run 27 Time: 1600			
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	5
6	0	5	0	0
6-minute Average:	0.4			
Source Conditions:				
Sun Angle (degrees):	0			
	Run 28 Time: 1620			
1	5	5	5	5
2	5	5	5	5
3	5	5	5	5
4	5	5	5	10
5	10	5	5	5
6	5	5	5	5
6-minute Average:	5.4			
Source Conditions:				
Sun Angle (degrees):	6			

sec	0	15	30	45
min	Run 29 Time: 1640			
1	5	5	5	5
2	5	5	5	5
3	5	5	5	5
4	5	5	5	5
5	5	5	5	5
6	5	5	5	5
6-minute Average:	5.0			
Source Conditions:				
Sun Angle (degrees):	10			
	Run Time:			
1				
2				
3				
4				
5				
6				
6-minute Average:				
Source Conditions:				
Sun Angle (degrees):				
	Run Time:			
1				
2				
3				
4				
5				
6				
6-minute Average:				
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

Mon. Night, January 21st, 2013

Visible Emissions Evaluation

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 2
Date of Observation	01/21/2013
Start Time	1956
Stop Time	2304
Distance from observer (ft)	150'
Direction from observer	E
Stack height (fr. observer's elev.) (ft)	8'
Stack Diameter (in)	20' x 8'
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
unique features of plume or stack	—
Weather:	@1956
ambient temperature (F)	30°
relative humidity	64%
wind direction	SE
wind speed	4-5mph
barometric pressure	29.89 inHg
rain? fog? snow? haze?	SNOW
	~2030 - Snow ceases to flurries
Glasses worn:	
corrective? (Y/N)	yes
sunglasses? (Y/N)	—

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

Run Number(s) and Description: ACB 2 Runs 1-8

sec	0	15	30	45
min	Run 1 Time: 1956			
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
6-minute Average: 0				
Source Conditions:				
Sun Angle (degrees):				
	Run 2 Time: 2022			
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
6-minute Average: 0				
Source Conditions:				
Sun Angle (degrees):				
	Run 3 Time: 2048			
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
6-minute Average: 0				
Source Conditions:				
Sun Angle (degrees):				
	Run 4 Time: 2114			
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
6-minute Average: 0				
Source Conditions:				
Sun Angle (degrees):				

sec	0	15	30	45
min	Run 5 Time: 2140			
1	0	0	0	0
2	0	0	0	0
3	0	0	5	0
4	0	0	0	0
5	0	0	0	0
6	0	5	0	0
6-minute Average: 0.4				
Source Conditions:				
Sun Angle (degrees):				
	Run 6 Time: 2206			
1	0	0	0	0
2	0	5	0	0
3	0	0	0	0
4	0	0	0	0
5	5	0	0	0
6	0	0	0	0
6-minute Average: 0.4				
Source Conditions:				
Sun Angle (degrees):				
	Run 7 Time: 2232			
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	5	0	0
5	0	0	0	0
6	0	5	0	0
6-minute Average: 0.4				
Source Conditions:				
Sun Angle (degrees):				
	Run 8 Time: 2258			
1	0	0	0	5
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
6-minute Average: 0.2				
Source Conditions:				
Sun Angle (degrees):				

Range of opacity readings: low 0 high 5

Number of readings above 10 % were 0

Observer's Signature

Mon Night, January 21st, 2013

Visible Emissions Evaluation

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 2
Date of Observation	01/21/2013
Start Time	2324
Stop Time	2348
Distance from observer (ft)	150'
Direction from observer	E
Stack height (fr. observer's elev.) (ft)	8'
Stack Diameter (in)	20' x 8'
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
unique features of plume or stack	—
Weather:	@2324
ambient temperature (F)	28°
relative humidity	55%
wind direction	SE
wind speed	6-9 mph
barometric pressure	29.85 in Hg
rain? fog? snow? haze?	clear
Glasses worn:	
corrective? (Y/N)	yes
sunglasses? (Y/N)	—

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

Run Number(s) and Description

ACB 2 Runs 9-10

sec	0	15	30	45
min	Run 9 Time: 2324			
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
6-minute Average:	0			
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: 2342			
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
6-minute Average:	0			
Source Conditions:				
Sun Angle (degrees):				

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

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

	Run Time:			
1				
2				
3				
4				
5				
6				
6-minute Average:				
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 0

Number of readings above 10 % were 0

Observer's Signature

AVOGADRO ENVIRONMENTAL CORPORATION, Easton Pa