Early Thurs. Morning, February 7th, 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	02/7/2013
Start Time	0024
Stop Time	0332
Distance from observer (ft)	200'
Direction from observer	SE
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 chart lengths
target?	sky
describe background to plume	sky
unique features of plume or stack	—
	@ 0024
Weather:	
ambient temperature (F)	28°
relative humidity	26 %
wind direction	S
wind speed	5 mph
barometric pressure	30.36 inHg
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: ACB 1 Runs 1-8

sec	0	15	30	45
min	Run 1 Time: 0024			
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			
Source Conditions:				
Sun Angle (degrees):				
	Run 2 Time: 0050			
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			
Source Conditions:				
Sun Angle (degrees):				
	Run 3 Time: 0116			
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			
Source Conditions:				
Sun Angle (degrees):				
	Run 4 Time: 0142			
1	10	10	10	10
2	10	10	10	10
3	10	10	10	10
4	15	15	15	15
5	15	15	15	15
6	15	15	15	15
6-minute Average:	12.5			
Source Conditions:				
Sun Angle (degrees):				

sec	0	15	30	45
min	Run 5 Time: 0208			
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			
Source Conditions:	back up to temp.			
Sun Angle (degrees):				
	Run 6 Time: 234			
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 7 Time: 300			
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			
Source Conditions:				
Sun Angle (degrees):				
	Run 8 Time: 326			
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			
Source Conditions:				
Sun Angle (degrees):				

Range of opacity readings: low 0 high 15

Number of readings above 10 % were 12

note: inversion scale-back to 50% commenced @ 0000, 2/7/13. (capacity incineration)

note: boxes let cool too much causing emission spike @ ~130.

Observer's Signature

Early Thurs. Morning, February 7th, 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	02/7/2013
Start Time	352
Stop Time	542
Distance from observer (ft)	200'
Direction from observer	SE
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	—
	@350
Weather:	
ambient temperature (F)	27°
relative humidity	39 %
wind direction	calm
wind speed	calm
barometric pressure	30.40 inHg
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

ACB 1 Runs 9-13

sec	0	15	30	45
min	Run 9 Time: 352			
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			
Source Conditions:				
Sun Angle (degrees):				

sec	0	15	30	45
min	Run 13 Time: 536			
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: 418			
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			
Source Conditions:				
Sun Angle (degrees):				

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

	Run 11 Time: 444			
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			
Source Conditions:				
Sun Angle (degrees):				

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

	Run 12 Time: 510			
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):				

Range of opacity readings: low 0 high 5

Number of readings above 10 % were 0

Observer's Signature

Visible Emissions Evaluation

UNIT 1

Run Number(s) and Description

 2-7-13

Facility Name	ECC FBF
AVOGADRO Project No.	12-9191
Location (city, state)	Brooklyn MI
Type of Facility	
Control Equipment / Emission Source	ACB
Date of Observation	2-7-13
Start Time	0700
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)	28°F
relative humidity	
wind direction	W
wind speed	0-5
barometric pressure	
rain? fog? snow? haze?	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	KOOMTZ
Observer affiliation	AVOGADRO/DA

sec	0	15	30	45
min	Run 1 Time: 0700			
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 2 Time: 720			
1	10	10	10	10
2	5	5	5	10
3	5	10	5	10
4	10	5	5	10
5	10	10	10	5
6	5	10	5	5

6-minute Average: 7.7
Source Conditions:
Sun Angle (degrees): 5

	Run 3 Time: 736			
1	10	5	10	10
2	15	15	10	10
3	10	10	15	10
4	10	15	15	10
5	5	5	5	10
6	5	10	5	5

6-minute Average: 9.6
Source Conditions:
Sun Angle (degrees): 0

	Run 4 Time: 800			
1	5	5	5	5
2	5	5	5	5
3	5	5	5	5
4	5	5	0	5
5	0	0	5	5
6	5	5	5	5

6-minute Average: 4.4
Source Conditions:
Sun Angle (degrees): 5

sec	0	15	30	45
min	Run 5 Time: 820			
1	15	20	15	15
2	15	15	20	15
3	20	15	15	15
4	15	10	15	10
5	10	20	10	10
6	10	10	10	10

6-minute Average: 13.9
Source Conditions:
Sun Angle (degrees): 5

	Run 6 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): 10

	Run 7 Time: 900			
1	10	5	10	5
2	5	5	5	5
3	5	10	5	10
4	5	10	10	5
5	5	10	5	5
6	10	10	5	5

6-minute Average: 6.9
Source Conditions:
Sun Angle (degrees): 15

	Run 8 Time:			
1	5	5	5	5
2	0	5	5	5
3	0	0	5	5
4	0	5	5	0
5	0	5	5	5
6	5	5	5	5

6-minute Average:
Source Conditions:
Sun Angle (degrees): 15

Range of opacity readings:
low 0 high 20

Number of readings above 10 % were 20

Observer's Signature

UNIT 1

Visible Emissions Evaluation

Run Number(s) and Description — Pg. 2 — 2-7-13

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	2-7-13
Start Time	940
Stop Time	
Distance from observer (ft)	100'
Direction from observer	NW
Stack height (fr. observer's elev.) (ft)	10'
Stack Diameter (in)	27x8
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)	32°F
relative humidity	
wind direction	TO: W
wind speed	0-5
barometric pressure	
rain? fog? snow? haze?	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	KOONTZ
Observer affiliation	AVOGADRO/DA

sec	0	15	30	45
min	Run 9 Time: 940			
1	15	15	10	10
2	15	10	10	10
3	10	5	5	10
4	5	5	5	5
5	5	5	5	5
6	5	5	5	5
6-minute Average: 7.1				
Source Conditions:				
Sun Angle (degrees): 15				
	Run 10 Time: 1000			
1	10	5	5	5
2	5	5	5	10
3	10	5	5	5
4	5	5	5	5
5	5	5	5	5
6	5	5	5	5
6-minute Average: 5.6				
Source Conditions:				
Sun Angle (degrees): 20				
	Run 11 Time: 1020			
1	0	0	0	0
2	0	0	0	10
3	0	0	5	0
4	0	5	5	0
5	0	10	5	0
6	0	5	0	0
6-minute Average: 1.9				
Source Conditions:				
Sun Angle (degrees): 20				
	Run 12 Time: 1040			
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				

sec	0	15	30	45
min	Run 13 Time: 1100			
1	5	5	5	0
2	0	0	5	0
3	0	0	0	5
4	0	0	0	0
5	5	0	0	0
6	5	0	0	0
6-minute Average: 1.5				
Source Conditions:				
Sun Angle (degrees): 20				
	Run 14 Time: 1120			
1	5	0	0	0
2	0	0	0	5
3	0	5	0	0
4	0	5	5	5
5	5	5	5	10
6	5	5	5	5
6-minute Average: 3.3				
Source Conditions:				
Sun Angle (degrees): 20				
	Run 15 Time: 1140			
1	0	0	0	0
2	0	0	0	5
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): 30				
	Run 16 Time: 1200			
1	5	0	0	10
2	10	5	5	0
3	0	0	10	0
4	10	0	5	5
5	0	0	0	0
6	10	10	5	5
6-minute Average: 4.0				
Source Conditions:				
Sun Angle (degrees): 30				

Range of opacity readings:
low 0 high 15

Number of readings above 10 % were 3

Observer's Signature

AVOGADRO ENVIRONMENTAL CORPORATION, Easton Pa

Visible Emissions Evaluation

UNIT 1

Run Number(s) and Description

 2-7-13

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	2-7-13
Start Time	1220
Stop Time	
Distance from observer (ft)	150'
Direction from observer	NE
Stack height (fr. observer's elev.) (ft)	10'
Stack Diameter (in)	27x88

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)	32°F
relative humidity	
wind direction	To: SW
wind speed	0-5
barometric pressure	
rain? fog? snow? haze?	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	KOONTZ
Observer affiliation	AVOGADRO/DA

sec	0	15	30	45
min	Run 17 Time:		1220	
1	5	5	5	10
2	5	5	5	5
3	5	5	5	5
4	5	5	10	5
5	5	5	5	5
6	5	5	5	10
6-minute Average:		5.6		
Source Conditions:				
Sun Angle (degrees):		50		
	Run 18 Time:		1240	
1	10	10	10	10
2	10	10	10	10
3	10	10	10	10
4	10	5	5	10
5	10	10	10	5
6	5	5	5	5
6-minute Average:		8.5		
Source Conditions:				
Sun Angle (degrees):		50		
	Run 19 Time:		1300	
1	5	5	5	5
2	5	5	5	5
3	5	5	5	5
4	5	5	5	5
5	10	10	5	5
6	5	5	5	5
6-minute Average:		5.4		
Source Conditions:				
Sun Angle (degrees):		45		
	Run 20 Time:		1320	
1	10	10	10	5
2	5	5	5	5
3	5	5	5	5
4	10	10	10	5
5	5	5	5	10
6	10	10	10	10
6-minute Average:		7.3		
Source Conditions:				
Sun Angle (degrees):		45		

sec	0	15	30	45
min	Run 21 Time:		1340	
1	10	5	10	10
2	10	10	10	10
3	5	5	5	5
4	5	5	5	5
5	10	10	10	10
6	15	10	5	5
6-minute Average:		7.9		
Source Conditions:				
Sun Angle (degrees):		40		
	Run 22 Time:		1400	
1	10	10	10	5
2	5	5	5	5
3	5	5	5	5
4	5	5	5	5
5	10	5	5	5
6	5	5	5	5
6-minute Average:		5.8		
Source Conditions:				
Sun Angle (degrees):		40		
	Run 23 Time:		1420	
1	5	5	5	5
2	5	5	5	5
3	10	10	5	10
4	5	5	10	5
5	10	10	5	5
6	5	5	10	10
6-minute Average:		6.7		
Source Conditions:				
Sun Angle (degrees):		40		
	Run 24 Time:		1440	
1	10	5	10	10
2	10	5	5	5
3	10	10	5	5
4	5	5	10	5
5	5	5	5	5
6	10	10	5	5
6-minute Average:		6.9		
Source Conditions:				
Sun Angle (degrees):		40		

Range of opacity readings:

low 5 high 10

Number of readings above 10 % were 0

Observer's Signature

UNIT 1

Run Number(s) and Description

 2-7-13

Visible Emissions Evaluation

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	2-7-13
Start Time	1500
Stop Time	
Distance from observer (ft)	150'
Direction from observer	NE
Stack height (fr. observer's elev.) (ft)	10'
Stack Diameter (in)	27x8

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	
wind direction	To NW
wind speed	0-5
barometric pressure	
rain? fog? snow? haze?	OVERCAST

Glasses worn:

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

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

sec	0	15	30	45
min	Run 22 Time:	1500		
1	5	10	5	10
2	10	10	10	5
3	10	10	10	10
4	10	5	10	10
5	10	10	10	10
6	10	10	10	10
6-minute Average:	9.2			
Source Conditions:				
Sun Angle (degrees):	30			
	Run 26 Time:	1520		
1	15	10	10	10
2	15	15	10	10
3	10	10	10	10
4	15	15	10	10
5	10	10	10	15
6	15	10	10	10
6-minute Average:	11.5			
Source Conditions:				
Sun Angle (degrees):	30			
	Run 27 Time:	1540		
1	15	15	15	15
2	15	15	15	15
3	15	15	15	15
4	15	15	15	15
5	15	15	15	15
6	15	15	15	15
6-minute Average:	15.0			
Source Conditions:				
Sun Angle (degrees):	30			
	Run 28 Time:	1600		
1	15	15	15	15
2	15	15	15	15
3	15	15	15	15
4	15	15	15	15
5	15	15	15	15
6	15	15	15	15
6-minute Average:	15.0			
Source Conditions:				
Sun Angle (degrees):	25			

sec	0	15	30	45
min	Run 29 Time:	1620		
1	15	15	15	15
2	15	15	15	15
3	15	15	15	15
4	15	15	15	15
5	15	15	15	15
6	15	15	15	15
6-minute Average:	15.0			
Source Conditions:				
Sun Angle (degrees):	20			
	Run 30 Time:	1640		
1	15	15	15	15
2	15	15	15	15
3	15	15	15	15
4	15	15	15	15
5	15	15	15	15
6	15	15	15	15
6-minute Average:	15.0			
Source Conditions:				
Sun Angle (degrees):	10			
	Run 31 Time:	1700		
1	15	15	15	15
2	15	15	15	15
3	15	15	15	15
4	15	15	15	15
5	15	15	15	15
6	15	15	15	15
6-minute Average:	15.0			
Source Conditions:				
Sun Angle (degrees):	10			
	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 126

Observer's Signature

Visible Emissions Evaluation

Thurs. Night, February 7th, 2013

Run Number(s) and Description: ACB 1 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 1
Date of Observation	02/7/2013
Start Time	1914
Stop Time	2202
Distance from observer (ft)	250'
Direction from observer	NNE
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 corex lengths
target?	sky
describe background to plume	sky
unique features of plume or stack	—
	@1914
Weather:	
ambient temperature (F)	31°
relative humidity	56 %
wind direction	W
wind speed	5-8mph
barometric pressure	30.44inHg
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: 1914			
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			
Source Conditions:	running @			
Sun Angle (degrees):	fine			
	Run 2 Time: 1940			
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			
Source Conditions:				
Sun Angle (degrees):				
	Run 3 Time: 2006			
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: 2032			
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: 2038			
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: 2104			
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 7 Time: 2130			
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: 2156			
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	5	5
6-minute Average:	0.4			
Source Conditions:				
Sun Angle (degrees):				

Range of opacity readings: low 0 high 5

Number of readings above 10 % were 0

Observer's Signature

Visible Emissions Evaluation

Thurs. Night, February 7th, 2013

Run Number(s) and Description: ACB1 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 1
Date of Observation	02/7/2013
Start Time	2222
Stop Time	2346
Distance from observer (ft)	250'
Direction from observer	NNE
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 over lengths
target?	sky
describe background to plume	sky
unique features of plume or stack	—
	@ 2220
Weather:	
ambient temperature (F)	32°
relative humidity	60 %
wind direction	W
wind speed	5-9 mph
barometric pressure	30.40 inHg
rain? fog? snow? haze?	clear
Glasses worn:	
corrective? (Y/N)	yes
sunglasses? (Y/N)	—

sec	0	15	30	45
min	Run 9	Time: 2227		
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	6
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):				

sec	0	15	30	45
min	Run 10	Time: 2248		
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):				

sec	0	15	30	45
min	Run 11	Time: 2314		
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):				

sec	0	15	30	45
min	Run 12	Time: 2340		
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):				

Range of opacity readings: low 0 high 0

Number of readings above 10 % were 0

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

Observer's Signature

Early Thurs. Morning, February 7th, 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	02/7/2013
Start Time	0024
Stop Time	0332
Distance from observer (ft)	200'
Direction from observer	SE
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	—
	@ 0024
Weather:	
ambient temperature (F)	28°
relative humidity	26 %
wind direction	S
wind speed	5mph
barometric pressure	30.36 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 1-8

sec	0	15	30	45
min	Run 1 Time: 0024			
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: 0050			
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: 0116			
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				
Source Conditions:				
Sun Angle (degrees):				
	Run 4 Time: 0142			
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 5 Time: 208			
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: basin				
Sun Angle (degrees):				
	Run 6 Time: 234			
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: back up to temp.				
Sun Angle (degrees):				
	Run 7 Time: 300			
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				
Source Conditions:				
Sun Angle (degrees):				
	Run 8 Time: 326			
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				
Source Conditions:				
Sun Angle (degrees):				

Range of opacity readings: low 0 high 10

Number of readings above 10 % were 0

note: inversion scale-back to 50% (incineration capacity) commenced @ 0000, 2/7/13. jpw

note: box let cool too much, causing emission spike @ ~ 130. jpw

Observer's Signature

Early Thurs. Morning, February 7th, 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	02/7/2013
Start Time	352
Stop Time	542
Distance from observer (ft)	200'
Direction from observer	SE
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	—
	@ 350
Weather:	
ambient temperature (F)	27°
relative humidity	39 %
wind direction	calm
wind speed	calm
barometric pressure	30.40 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	Wk:How
Observer affiliation	Avogadro Env.

Run Number(s) and Description: ACB 2 Runs 9-13

sec	0	15	30	45
min	Run 9 Time: 352			
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				
Source Conditions:				
Sun Angle (degrees):				
	Run 10 Time: 418			
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				
Source Conditions:				
Sun Angle (degrees):				
	Run 11 Time: 444			
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				
Source Conditions:				
Sun Angle (degrees):				
	Run 12 Time: 510			
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 13 Time: 530			
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):				

Range of opacity readings: low 0 high 5

Number of readings above 10 % were 0

Observer's Signature

Visible Emissions Evaluation

UNIT 2

Run Number(s) and Description

 2-7-13

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	2-7-13
Start Time	0700
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)	28°F
relative humidity	
wind direction TO:	W
wind speed	0-5
barometric pressure	
rain? fog? snow? haze?	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	KOONTZ
Observer affiliation	AVOGADRO / DA

sec	0	15	30	45
min	Run 1 Time: 0700			
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 2 Time: 720			
1	5	5	5	5
2	5	5	5	5
3	5	5	10	5
4	5	5	5	10
5	5	0	5	5
6	5	5	5	5
6-minute Average:	5.2			
Source Conditions:				
Sun Angle (degrees):	5			
	Run 3 Time: 740			
1	0	0	0	0
2	5	5	5	0
3	5	0	0	0
4	5	5	5	5
5	5	0	0	0
6	0	0	0	0
6-minute Average:	1.9			
Source Conditions:				
Sun Angle (degrees):	0			
	Run 4 Time: 800			
1	0	0	0	0
2	0	5	0	0
3	0	0	0	5
4	0	5	0	0
5	5	0	5	5
6	0	0	5	0
6-minute Average:	1.5			
Source Conditions:				
Sun Angle (degrees):	5			

sec	0	15	30	45
min	Run 5 Time: 820			
1	10	10	5	5
2	10	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:	5.8			
Source Conditions:				
Sun Angle (degrees):	5			
	Run 6 Time: 840			
1	5	5	5	5
2	5	5	5	5
3	5	5	5	5
4	0	0	5	5
5	5	0	0	5
6	5	5	5	5
6-minute Average:	4.2			
Source Conditions:				
Sun Angle (degrees):	10			
	Run 7 Time: 900			
1	0	0	0	0
2	0	5	0	0
3	0	0	0	5
4	0	5	5	5
5	0	0	0	0
6	5	5	0	0
6-minute Average:	1.5			
Source Conditions:				
Sun Angle (degrees):	15			
	Run 8 Time:			
1	5	5	5	5
2	0	0	0	5
3	0	0	5	0
4	0	0	5	0
5	0	0	0	0
6	5	0	0	5
6-minute Average:				
Source Conditions:				
Sun Angle (degrees):	15			

Range of opacity readings:

low 0 high 10

Number of readings above 10 % were 0

Observer's Signature

UNIT 2

Run Number(s) and Description

 2-7-13

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	2-7-13
Start Time	940
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)	32°F
relative humidity	
wind direction TO:	W
wind speed	0-5
barometric pressure	
rain? fog? snow? haze?	OVERCAST
Glasses worn:	
corrective? (Y/N)	Y
sunglasses? (Y/N)	N

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

sec	0	15	30	45
min	Run 9 Time:	940		
1	0	5	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:	0.4			
Source Conditions:				
Sun Angle (degrees):	15			
	Run 10 Time:	1000		
1	10	5	5	5
2	5	5	5	5
3	5	5	10	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):	20			
	Run 11 Time:	1020		
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	5	5	0	0
5	0	5	5	0
6	0	0	0	0
6-minute Average:	0.8			
Source Conditions:				
Sun Angle (degrees):	20			
	Run 12 Time:	1040		
1	20	20	20	20
2	25	20	15	15
3	10	10	5	5
4	5	5	5	5
5	5	5	5	5
6	5	5	5	5
6-minute Average:	9.4			
Source Conditions:				
Sun Angle (degrees):	20			

sec	0	15	30	45
min	Run 13 Time:	1100		
1	0	0	5	0
2	0	5	0	0
3	5	5	0	0
4	0	0	0	0
5	0	0	0	0
6	5	5	0	0
6-minute Average:	1.3			
Source Conditions:				
Sun Angle (degrees):	20			
	Run 14 Time:	1120		
1	5	5	5	5
2	0	0	5	0
3	5	0	5	0
4	5	0	5	5
5	5	5	5	5
6	5	5	5	5
6-minute Average:	3.8			
Source Conditions:				
Sun Angle (degrees):	30			
	Run 15 Time:	1140		
1	0	5	0	0
2	0	0	0	0
3	0	0	0	0
4	5	0	0	0
5	0	0	0	0
6	0	0	0	0
6-minute Average:	0.4			
Source Conditions:				
Sun Angle (degrees):	30			
	Run 16 Time:	1200		
1	0	5	0	0
2	5	5	5	0
3	0	5	5	5
4	0	0	5	5
5	0	0	0	5
6	5	0	0	0
6-minute Average:	2.3			
Source Conditions:				
Sun Angle (degrees):	30			

Range of opacity readings:

low 0 high 20

Number of readings above 10 % were 6

Observer's Signature

Visible Emissions Evaluation

UNIT 2

Run Number(s) and Description

 2-7-13

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	2-7-13
Start Time	1220
Stop Time	
Distance from observer (ft)	150'
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)	32°F
relative humidity	
wind direction	TO ~~SSE~~ W
wind speed	05
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

sec	0	15	30	45
min	Run 17 Time: 1220			
1	5	5	5	5
2	0	5	5	5
3	0	0	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):	50			
	Run 18 Time: 1240			
1	5	5	5	5
2	5	10	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):	50			
	Run 19 Time: 1300			
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):	45			
	Run 20 Time: 1320			
1	10	15	15	15
2	15	15	10	10
3	10	15	10	10
4	10	10	5	5
5	10	5	5	5
6	5	5	5	5
6-minute Average:	9.4			
Source Conditions:				
Sun Angle (degrees):	45			

sec	0	15	30	45
min	Run 21 Time: 1340			
1	5	10	5	5
2	5	5	5	5
3	5	5	5	5
4	5	5	5	5
5	5	5	5	5
6	5	0	5	0
6-minute Average:	4.8			
Source Conditions:				
Sun Angle (degrees):	40			
	Run 22 Time: 1400			
1	5	5	5	10
2	5	5	5	5
3	5	5	5	5
4	5	5	5	5
5	0	0	5	5
6	5	5	5	5
6-minute Average:	4.8			
Source Conditions:				
Sun Angle (degrees):	40			
	Run 23 Time: 1420			
1	10	10	10	10
2	10	10	10	10
3	10	10	5	10
4	10	5	5	10
5	5	5	10	10
6	10	5	10	10
6-minute Average:	8.8			
Source Conditions:				
Sun Angle (degrees):	40			
	Run 24 Time: 1440			
1	0	5	5	5
2	0	0	5	5
3	5	5	5	0
4	5	5	5	5
5	0	5	5	5
6	5	5	5	5
6-minute Average:	4.0			
Source Conditions:				
Sun Angle (degrees):	40			

Range of opacity readings:

low ~~0~~ high 15

Number of readings above 10 % were 6

Observer's Signature

Visible Emissions Evaluation

UNIT 2

Run Number(s) and Description

 2-7-13

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	2-7-13
Start Time	1500
Stop Time	
Distance from observer (ft)	150'
Direction from observer	10 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/25°
relative humidity	
wind direction	To: NW
wind speed	05
barometric pressure	
rain? fog? snow? haze?	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	MONTZ
Observer affiliation	AVOGADRO/DA

sec	0	15	30	45
min	Run 25 Time: 1500			
1	5	5	10	5
2	10	10	5	10
3	5	5	10	10
4	10	10	10	10
5	10	10	10	5
6	10	10	10	10
6-minute Average:			8.5	
Source Conditions:				
Sun Angle (degrees):			30	
	Run 26 Time: 1530			
1	10	5	5	5
2	10	10	10	10
3	10	10	10	10
4	10	5	5	10
5	10	10	10	10
6	10	10	10	10
6-minute Average:			9.0	
Source Conditions:				
Sun Angle (degrees):			30	
	Run 27 Time: 1540			
1	15	15	15	15
2	15	15	15	15
3	15	15	15	15
4	15	15	15	15
5	15	15	15	15
6	15	15	15	15
6-minute Average:			15.0	
Source Conditions:				
Sun Angle (degrees):			30	
	Run 28 Time: 1600			
1	15	15	15	15
2	15	15	15	15
3	15	15	15	15
4	15	15	15	15
5	15	15	15	15
6	15	15	15	15
6-minute Average:			15.0	
Source Conditions:				
Sun Angle (degrees):			30 25	

sec	0	15	30	45
min	Run 29 Time: 1620			
1	15	15	15	15
2	15	15	15	15
3	15	15	15	15
4	15	15	15	15
5	15	15	15	15
6	15	15	15	15
6-minute Average:			15.0	
Source Conditions:				
Sun Angle (degrees):			20	
	Run 30 Time: 1640			
1	15	15	15	15
2	15	15	15	15
3	15	15	15	15
4	15	15	15	15
5	15	15	15	15
6	15	15	15	15
6-minute Average:			15.0	
Source Conditions:				
Sun Angle (degrees):			10	
	Run 31 Time: 1700			
1	15	15	15	15
2	15	15	15	15
3	15	15	15	15
4	15	15	15	15
5	15	15	15	15
6	15	15	15	15
6-minute Average:			15.0	
Source Conditions:				
Sun Angle (degrees):			10	
	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 120

Observer's Signature

Thurs. Night, Febmuny 7th, 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	02/7/2013
Start Time	1914
Stop Time	2202
Distance from observer (ft)	250'
Direction from observer	NNE
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	—
	@ 1914

Weather:

ambient temperature (F)	31°
relative humidity	56 %
wind direction	W
wind speed	5-8 mph
barometric pressure	30.44 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	Whittow
Observer affiliation	Avogadro Env.

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

sec	0	15	30	45
min	Run 1 Time: 1914			
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				
Source Conditions: arriving @				
Sun Angle (degrees): temp				
	Run 2 Time: 1940			
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				
Source Conditions:				
Sun Angle (degrees):				
	Run 3 Time: 2006			
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: 2032			
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: 2058			
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: 2104			
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 7 Time: 2130			
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: 2156			
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

Visible Emissions Evaluation

Thurs. Night February 7th, 2013

Run Number(s) and Description: ACB 2 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 2
Date of Observation	02/7/2013
Start Time	2222
Stop Time	2346
Distance from observer (ft)	250'
Direction from observer	NNE
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 conux lengths
target?	sky
describe background to plume	sky
unique features of plume or stack	—
	@ 2220
Weather:	
ambient temperature (F)	32°
relative humidity	60%
wind direction	W
wind speed	5-7 mph
barometric pressure	30.40 in Hg
rain? fog? snow? haze?	clear
Glasses worn:	
corrective? (Y/N)	yes
sunglasses? (Y/N)	—

sec	0	15	30	45
min	Run 9 Time: 2222			
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):				

sec	0	15	30	45
min	Run 10 Time: 2248			
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):				

sec	0	15	30	45
min	Run 11 Time: 2314			
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):				

sec	0	15	30	45
min	Run 12 Time: 2340			
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):				

Range of opacity readings: low 0 high 0

Number of readings above 10 % were 0

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

Observer's Signature