Early Morn. Tues., February 12th, 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	02/12/2013
Start Time	0054
Stop Time	402 [illegible]
Distance from observer (ft)	200'
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	—
	@ 0054
Weather:	
ambient temperature (F)	39°
relative humidity	88 %
wind direction	S
wind speed	5-8 mph
barometric pressure	29.75 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	sec	0	15	30	45
min	Run 1 Time: 0054				min	Run 5 Time: 238			
1	5	5	5	5	1	0	0	0	0
2	5	5	5	5	2	0	0	0	0
3	5	5	5	5	3	0	0	0	0
4	5	5	5	5	4	0	0	0	0
5	5	5	5	5	5	0	0	0	0
6	5	5	5	5	6	0	0	0	0
6-minute Average:	5				6-minute Average:	0			
Source Conditions:					Source Conditions:				
Sun Angle (degrees):					Sun Angle (degrees):				
	Run 2 Time: 120					Run 6 Time: 304			
1	0	0	0	0	1	0	0	0	0
2	0	0	0	0	2	0	0	0	0
3	0	0	0	0	3	0	0	0	0
4	0	0	0	0	4	0	0	0	0
5	0	0	0	0	5	0	0	0	0
6	0	0	0	0	6	0	0	0	0
6-minute Average:	0				6-minute Average:	0			
Source Conditions:					Source Conditions:				
Sun Angle (degrees):					Sun Angle (degrees):				
	Run 3 Time: 0146					Run 7 Time: 330			
1	0	0	0	0	1	0	0	0	0
2	0	0	0	0	2	0	0	0	0
3	0	0	0	0	3	0	0	0	0
4	0	0	0	0	4	0	0	0	0
5	0	0	0	0	5	0	0	0	0
6	0	0	0	0	6	0	0	0	0
6-minute Average:	0				6-minute Average:	0			
Source Conditions:					Source Conditions:				
Sun Angle (degrees):					Sun Angle (degrees):				
	Run 4 Time: 212					Run 8 Time: 356			
1	0	0	0	0	1	0	0	0	0
3 2	0	0	0	0	2	0	0	0	0
3	0	0	0	0	3	0	0	0	0
4	0	0	0	0	4	0	0	0	0
5	0	0	0	0	5	0	0	0	0
6	0	0	0	0	6	0	0	0	0
6-minute Average:	0				6-minute Average:	0			
Source Conditions:					Source Conditions:				
Sun Angle (degrees):					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

Early Morn. Tues., February 12th, 2013

Visible Emissions Evaluation

Facility Name	ECC Floyd Bennett Field
AVOGADRO Project No.	12-9191
Location (city, state)	Brooklyn, NY
Type of Facility	Debris Remediat
Control Equipment / Emission Source	ACB 1
Date of Observation	02/12/2013
Start Time	422
Stop Time	546
Distance from observer (ft)	200'
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 exit lengths
target?	sky
describe background to plume	sky
unique features of plume or stack	—
	@ 420

Weather:

ambient temperature (F)	41°
relative humidity	62%
wind direction	South
wind speed	12-18 mph
barometric pressure	29.76 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 9-12

sec	0	15	30	45	sec	0	15	30	45
min	Run 9 Time: 422				min	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	0	5				
6	0	0	0	0	6				
6-minute Average:	0				6-minute Average:				
Source Conditions:					Source Conditions:				
Sun Angle (degrees):					Sun Angle (degrees):				
	Run 10 Time: 443					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	0	5				
6	0	0	0	0	6				
6-minute Average:	0				6-minute Average:				
Source Conditions:					Source Conditions:				
Sun Angle (degrees):					Sun Angle (degrees):				
	Run 11 Time: 514					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	0	5				
6	0	0	0	0	6				
6-minute Average:	0				6-minute Average:				
Source Conditions:					Source Conditions:				
Sun Angle (degrees):					Sun Angle (degrees):				
	Run 12 Time: 540					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	0	5				
6	0	0	0	0	6				
6-minute Average:	0				6-minute Average:				
Source Conditions:					Source Conditions:				
Sun Angle (degrees):					Sun Angle (degrees):				

Range of opacity readings: low 0 high 0

Number of readings above 10 % were 0

Observer's Signature

Visible Emissions Evaluation

UNIT 1

Run Number(s) and Description

Pg. 1 2-12-13

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	2-12-13
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)	40°F
relative humidity	
wind direction	ENE
wind speed	10-15
barometric pressure	
rain? fog? snow? haze?	PTly Cldy
Glasses worn:	
corrective? (Y/N)	Y
sunglasses? (Y/N)	N

sec	0	15	30	45
min	Run 1 Time: 0700			
1	10	5	5	5
2	5	5	5	5
3	5	5	5	5
4	5	10	10	10
5	10	10	5	5
6	0	5	5	5
6-minute Average:	6.0			
Source Conditions:				
Sun Angle (degrees):	10			
	Run 2 Time: 720			
1	10	10	10	10
2	10	10	15	10
3	10	10	10	10
4	10	10	10	10
5	5	5	5	10
6	10	10	10	10
6-minute Average:	9.6			
Source Conditions:				
Sun Angle (degrees):	10			
	Run 3 Time: 740			
1	15	15	10	10
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:	14.6			
Source Conditions:				
Sun Angle (degrees):	5			
	Run 4 Time: 800			
1	10	10	5	10
2	10	10	10	5
3	10	5	10	5
4	10	10	10	5
5	10	10	10	10
6	10	10	10	10
6-minute Average:	9.0			
Source Conditions:				
Sun Angle (degrees):	5			

sec	0	15	30	45
min	Run 5 Time: 820			
1	5	5	5	5
2	5	5	5	10
3	10	10	10	5
4	5	5	5	5
5	5	10	10	5
6	5	10	5	10
6-minute Average:	6.7			
Source Conditions:				
Sun Angle (degrees):	5			
	Run 6 Time: 840			
1	5	10	10	10
2	5	5	5	5
3	10	5	5	10
4	10	10	10	10
5	5	5	5	10
6	10	5	10	5
6-minute Average:	7.1			
Source Conditions:				
Sun Angle (degrees):	0			
	Run 7 Time: 900			
1	5	5	5	10
2	10	5	5	5
3	5	5	5	5
4	10	10	5	5
5	10	10	5	10
6	10	10	5	5
6-minute Average:	6.9			
Source Conditions:				
Sun Angle (degrees):	0			
	Run 8 Time: 920			
1	10	10	10	10
2	10	10	5	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):	0			

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

Range of opacity readings:

low 5 high 15

Number of readings above 10 % were 23

Observer's Signature

Visible Emissions Evaluation

UNIT 1

Run Number(s) and Description

 2-12-13

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	2-12-13
Start Time	940
Stop Time	
Distance from observer (ft)	100'
Direction from observer	NW
Stack height (fr. observer's elev.) (ft)	101'
Stack Diameter (in)	27 x 8
Description of plume:	
continuous? fugitive? intermittent?	White
color	CONT.
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)	40°F
relative humidity	
wind direction	ENE
wind speed	10-20
barometric pressure	
rain? fog? snow? haze?	PTly CHY
Glasses worn:	
corrective? (Y/N)	Y
sunglasses? (Y/N)	N

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

sec	0	15	30	45
min	Run 9 Time:		940	
1	5	5	5	5
2	5	10	10	10
3	5	5	10	5
4	10	5	5	5
5	5	5	10	10
6	10	10	5	5
6-minute Average:			6.9	
Source Conditions:				
Sun Angle (degrees):			5	

sec	0	15	30	45
min	Run 10 Time:		1000	
1	5	5	5	5
2	5	5	5	5
3	5	5	5	5
4	5	5	5	10
5	5	5	5	5
6	5	5	5	5
6-minute Average:			5.2	
Source Conditions:				
Sun Angle (degrees):			5	

sec	0	15	30	45
min	Run 11 Time:		1020	
1	15	10	15	10
2	15	10	10	15
3	10	10	10	5
4	10	5	10	10
5	5	5	10	5
6	5	5	5	5
6-minute Average:			8.5	
Source Conditions:				
Sun Angle (degrees):			5	

sec	0	15	30	45
min	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):			10	

sec	0	15	30	45
min	Run 13 Time:		1100	
1	10	10	10	10
2	10	10	5	5
3	10	5	10	10
4	5	5	0	5
5	5	5	5	5
6	5	5	5	5
6-minute Average:			6.7	
Source Conditions:				
Sun Angle (degrees):			15	

sec	0	15	30	45
min	Run 14 Time:		1120	
1	5	5	5	5
2	5	5	5	5
3	5	5	5	5
4	5	10	5	5
5	5	5	10	5
6	5	5	5	5
6-minute Average:			5.4	
Source Conditions:				
Sun Angle (degrees):			20	

sec	0	15	30	45
min	Run 15 Time:		1140	
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 16 Time:		1200	
1	5	5	0	5
2	5	0	0	0
3	0	0	0	5
4	0	0	0	0
5	5	0	0	0
6	0	0	5	0
6-minute Average:			1.5	
Source Conditions:				
Sun Angle (degrees):			35	

Range of opacity readings:

low 5 high 15

Number of readings above 10 % were 4

Mark T. Ready

Observer's Signature

UNIT 1

Run Number(s) and Description Pg. 3 2-12-13

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	2-12-13
Start Time	~~12:40~~ 1220
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)	45°F
relative humidity	
wind direction	ENE
wind speed	15-20
barometric pressure	
rain? fog? snow? haze?	Mostly Cldy.
Glasses worn:	
corrective? (Y/N)	Y
sunglasses? (Y/N)	N

Observer's name	MARCT. READY
Observer certification date	10-22-12
Certifying agency	KOONTZ
Observer affiliation	AVOGADRO/EA

sec	0	15	30	45
min	Run 17 Time: 1220			
1	10	10	10	10
2	10	10	10	10
3	5	10	10	10
4	10	10	10	15
5	10	10	10	10
6	5	5	10	5
6-minute Average:	9.4			
Source Conditions:				
Sun Angle (degrees):	60			
	Run 18 Time: 1240			
1	10	5	10	10
2	5	5	5	5
3	10	10	5	5
4	5	5	5	5
5	5	0	0	0
6	5	5	5	5
6-minute Average:	5.4			
Source Conditions:				
Sun Angle (degrees):	60			
	Run 19 Time: 1300			
1	0	0	0	0
2	0	5	0	0
3	5	5	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
6-minute Average:	0.6			
Source Conditions:				
Sun Angle (degrees):	55			
	Run 20 Time: 1320			
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):	55			

sec	0	15	30	45
min	Run 21 Time: 1340			
1	5	5	5	5
2	5	5	5	5
3	10	5	10	5
4	5	5	5	5
5	5	10	5	5
6	5	5	5	5
6-minute Average:	5.6			
Source Conditions:				
Sun Angle (degrees):	50			
	Run 22 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):	30			
	Run 23 Time: 1420			
1	0	0	5	5
2	5	5	5	5
3	5	5	5	5
4	0	0	5	5
5	5	5	5	5
6	5	5	5	5
6-minute Average:	4.2			
Source Conditions:				
Sun Angle (degrees):	25			
	Run 24 Time: 1440			
1	0	0	0	0
2	0	0	0	0
3	5	5	5	5
4	5	5	5	5
5	5	5	5	5
6	5	5	5	5
6-minute Average:	3.3			
Source Conditions:				
Sun Angle (degrees):	15			

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

 2-12-13

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	2-12-13
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)	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)	47°F
relative humidity	
wind direction	TO: ENE
wind speed	15-20
barometric pressure	
rain? fog? snow? haze?	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

sec	0	15	30	45
min 25 Run 1 Time: 1500				
1	0	0	0	0
2	0	0	0	0
3	5	5	0	5
4	0	5	5	5
5	5	5	5	5
6	5	5	5	5
6-minute Average: 2.9				
Source Conditions:				
Sun Angle (degrees): 10				
Run 26 Time: 1520				
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	5	5	0	0
5	0	0	0	0
6	0	0	0	0
6-minute Average: 0.4				
Source Conditions:				
Sun Angle (degrees): 0				
Run 27 Time: 1540				
1	15	15	10	15
2	15	15	10	10
3	10	10	10	5
4	5	5	5	5
5	10	10	10	10
6	10	5	5	5
6-minute Average: 9.4				
Source Conditions:				
Sun Angle (degrees): 0				
Run 28 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	0
6	0	0	0	0
6-minute Average: 0.0				
Source Conditions:				
Sun Angle (degrees): 20				

sec	0	15	30	45
min Run 29 Time: 1620				
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): 20				
Run 30 Time: 1640				
1	10	5	5	5
2	5	5	10	5
3	5	5	5	5
4	5	5	5	5
5	5	5	10	5
6	5	5	5	5
6-minute Average: 5.6				
Source Conditions:				
Sun Angle (degrees): 25				
Run 31 Time: 1700				
1	0	0	0	0
2	0	0	0	0
3	5	5	0	0
4	0	0	5	0
5	5	0	0	5
6	0	5	5	5
6-minute Average: 4.7				
Source Conditions:				
Sun Angle (degrees): 30				
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 5

Observer's Signature

Visible Emissions Evaluation

Tuesday Night, February 12th, 2013

Run Number(s) and Description: ACB1 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	02/12/2013
Start Time	1854
Stop Time	2202
Distance from observer (ft)	2001
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 CMLY heights
target?	sky
describe background to plume	sky
unique features of plume or stack	—
	@ 1654
Weather:	
ambient temperature (F)	39°
relative humidity	50 %
wind direction	S
wind speed	6-10 mph
barometric pressure	29.95 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.

sec	0	15	30	45
min	Run 1 Time: 1854			
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: 1920			
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: 1946			
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: 2012			
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 5 Time: 2038			
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 6 Time: 2104			
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 7 Time: 2130			
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: 2156			
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 5 high 5

Number of readings above 10 % were 0

Observer's Signature

Visible Emissions Evaluation

Tuesday Night, February 12th, 2013

Run Number(s) and Description: ACB 1 Runs 9-12

Facility Name	ECC Floyd Bennett Field
AVOGADRO Project No.	12-9191
Location (city, state)	Brooklyn, NY
Type of Facility	Debris Remediation
Control Equipment / Emission Source	ACB 1
Date of Observation	02/12/2013
Start Time	2222
Stop Time	2346
Distance from observer (ft)	200'
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 cable lengths
target?	sky
describe background to plume	sky
unique features of plume or stack	@2220
Weather:	
ambient temperature (F)	38°
relative humidity	52%
wind direction	S
wind speed	5-9mph
barometric pressure	29.92 inHg
rain? fog? snow? haze?	clear
Glasses worn:	
corrective? (Y/N)	yes
sunglasses? (Y/N)	

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

sec	0	15	30	45
min	Run 9 Time: 2220			
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: 2248			
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: 2314			
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: 2340			
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 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 5 high 5

Number of readings above 10 % were 0

Observer's Signature

AVOGADRO ENVIRONMENTAL CORPORATION, Easton Pa

Early Morn. Tues., February 12th, 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	02/12/2013
Start Time	0054
Stop Time	402
Distance from observer (ft)	200'
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	—

@0054

Weather:

ambient temperature (F)	39°
relative humidity	88%
wind direction	S
wind speed	5-8 mph
barometric pressure	29.75 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 2 Runs 1-8

sec	0	15	30	45
min 1 Run 1 Time: 0054				
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: 0120				
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: 0146				
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: 0212				
1	0	0	0	0
2	0	5	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):				

sec	0	15	30	45
min 5 Run 5 Time: 238				
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: 304				
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: 330				
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: 356				
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

Early Morn., Tues., February 12th, 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	02/12/2013
Start Time	422
Stop Time	546
Distance from observer (ft)	200'
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	—
	@420

Weather:

ambient temperature (F)	41°
relative humidity	62%
wind direction	South
wind speed	12-18mph
barometric pressure	29.76 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	Whittow
Observer affiliation	Avogadro Env.

Run Number(s) and Description: ACB 2 Runs 9-12

sec	0	15	30	45	sec	0	15	30	45
min	Run 9 Time: 422				min	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	0	5				
6	0	0	0	0	6				
6-minute Average:	0				6-minute Average:				
Source Conditions:					Source Conditions:				
Sun Angle (degrees):					Sun Angle (degrees):				
	Run 10 Time: 448					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	0	5				
6	0	0	0	0	6				
6-minute Average:	0				6-minute Average:				
Source Conditions:					Source Conditions:				
Sun Angle (degrees):					Sun Angle (degrees):				
	Run 11 Time: 514					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	0	5				
6	0	0	0	0	6				
6-minute Average:	0				6-minute Average:				
Source Conditions:					Source Conditions:				
Sun Angle (degrees):					Sun Angle (degrees):				
	Run 12 Time: 540					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	0	5				
6	0	0	0	0	6				
6-minute Average:	0				6-minute Average:				
Source Conditions:					Source Conditions:				
Sun Angle (degrees):					Sun Angle (degrees):				

Range of opacity readings: low 0 high 0

Number of readings above 10 % were 0

Observer's Signature

Visible Emissions Evaluation

UNIT 2

Run Number(s) and Description

 2-12-13

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	2-12-13
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)	40°F
relative humidity	
wind direction	ENE
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: 0700			
1	5	5	5	5
2	0	0	0	0
3	0	0	0	0
4	0	5	5	5
5	5	5	5	5
6	5	0	0	0
6-minute Average:	2.5			
Source Conditions:				
Sun Angle (degrees):	10			
	Run 2 Time: 720			
1	10	10	10	10
2	10	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:	6.3			
Source Conditions:				
Sun Angle (degrees):	10			
	Run 3 Time: 740			
1	0	0	0	5
2	5	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	5	5	0	0
6-minute Average:	0.8			
Source Conditions:				
Sun Angle (degrees):	5			
	Run 4 Time: 800			
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):	5			

sec	0	15	30	45
min	Run 5 Time: 820			
1	5	10	5	5
2	5	5	5	5
3	10	5	5	5
4	5	5	5	5
5	5	10	5	5
6	10	10	10	5
6-minute Average:	6.3			
Source Conditions:				
Sun Angle (degrees):	5			
	Run 6 Time: 840			
1	5	5	5	5
2	5	10	10	5
3	5	5	5	5
4	5	10	5	5
5	10	10	10	5
6	5	5	5	5
6-minute Average:	6.3			
Source Conditions:				
Sun Angle (degrees):	0			
	Run 7 Time: 900			
1	5	5	5	5
2	5	5	5	5
3	5	5	10	10
4	5	5	5	5
5	5	5	0	0
6	5	5	5	5
6-minute Average:	5.0			
Source Conditions:				
Sun Angle (degrees):	0			
	Run 8 Time: 920			
1	5	5	5	5
2	5	5	5	5
3	10	10	5	5
4	5	5	5	5
5	10	5	5	5
6	5	5	5	5
6-minute Average:	5.6			
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

UNIT 2

Run Number(s) and Description

 2-12-13

Facility Name	ECC FBF
AVOGADRO Project No.	12-9191
Location (city, state)	Brooklyn NY
Type of Facility	
Control Equipment / Emission Source	ACR
Date of Observation	2-12-13
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)	20x8

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)	40°F
relative humidity	
wind direction	ENE
wind speed	10-20
barometric pressure	
rain? fog? snow? haze?	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

sec	0	15	30	45
min	Run 9 Time: 940			
1	5	5	5	5
2	5	5	5	5
3	0	0	5	5
4	0	0	0	5
5	0	0	5	5
6	5	0	0	5
6-minute Average:	3.1			
Source Conditions:				
Sun Angle (degrees):	5			
	Run 10 Time: 1000			
1	15	15	10	10
2	10	10	10	10
3	10	15	10	10
4	10	10	15	15
5	10	10	10	10
6	10	10	5	10
6-minute Average:	10.8			
Source Conditions:				
Sun Angle (degrees):	5			
	Run 11 Time: 1020			
1	10	5	10	5
2	5	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:	5.8			
Source Conditions:				
Sun Angle (degrees):	5			
	Run 12 Time: 1040			
1	15	10	10	10
2	15	10	10	10
3	15	15	15	15
4	15	15	15	15
5	15	15	10	15
6	15	10	10	15
6-minute Average:	13.1			
Source Conditions:				
Sun Angle (degrees):	10			

sec	0	15	30	45
min	Run 13 Time: 1100			
1	5	5	5	5
2	5	5	5	5
3	5	10	5	5
4	5	5	5	0
5	5	5	5	5
6	0	0	0	5
6-minute Average:	4.9			
Source Conditions:				
Sun Angle (degrees):	15			
	Run 14 Time: 1120			
1	0	0	0	0
2	0	10	5	5
3	5	0	0	0
4	0	0	5	0
5	0	10	10	5
6	0	0	5	0
6-minute Average:	2.5			
Source Conditions:				
Sun Angle (degrees):	30			
	Run 15 Time: 1140			
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			
	Run 16 Time: 1200			
1	0	0	5	0
2	0	5	0	0
3	0	0	0	0
4	0	0	0	0
5	0	5	5	0
6	0	0	0	0
6-minute Average:	0.8			
Source Conditions:				
Sun Angle (degrees):	35			

Range of opacity readings:

low 0 high 15

Number of readings above 10 % were 22

Mark T. Ready

Observer's Signature

Visible Emissions Evaluation

UNIT 2

Run Number(s) and Description Pg. 3 2-12-13

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	2-12-13
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)	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)	45°F
relative humidity	
wind direction To:	ENE
wind speed	15-20
barometric pressure	
rain? fog? snow? haze?	Mostly 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 / DM

sec	0	15	30	45
min	Run 17 Time: 1220			
1	5	5	5	5
2	5	5	5	5
3	5	5	5	5
4	5	5	5	5
5	0	0	0	0
6	0	0	0	0
6-minute Average: 5.3				
Source Conditions:				
Sun Angle (degrees): 60				
	Run 18 Time: 1240			
1	5	5	5	5
2	5	5	5	5
3	5	5	0	0
4	5	5	0	0
5	0	0	0	0
6	0	0	0	0
6-minute Average: 2.5				
Source Conditions:				
Sun Angle (degrees): 60				
	Run 19 Time: 1300			
1	5	5	5	5
2	10	10	5	5
3	5	5	5	10
4	10	5	5	5
5	5	5	5	5
6	5	5	5	5
6-minute Average: 5.8				
Source Conditions:				
Sun Angle (degrees): 55				
	Run 20 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): 55				

sec	0	15	30	45
min	Run 21 Time: 1340			
1	5	5	5	5
2	5	5	10	10
3	5	5	10	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): 50				
	Run 22 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): 40				
	Run 23 Time: 1420			
1	10	5	5	10
2	10	10	5	5
3	10	10	10	5
4	5	5	5	5
5	10	5	10	5
6	5	5	10	5
6-minute Average: 7.1				
Source Conditions:				
Sun Angle (degrees): 25				
	Run 24 Time: 1440			
1	0	0	0	0
2	0	0	0	0
3	0	0	0	5
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): 15				

Range of opacity readings:

low 0 high 10

Number of readings above 10 % were 0

Observer's Signature

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	2-12-13
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)	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)	47°F
relative humidity	
wind direction	TO: ENE
wind speed	15-20
barometric pressure	
rain? fog? snow? haze?	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	ECONTZ
Observer affiliation	AVOGADRO / DA

Run Number(s) and Description: Pg. 4 2-12-13

sec	0	15	30	45
min	Run 25 Time: 1500			
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:	10.0			
Source Conditions:				
Sun Angle (degrees):	10			
	Run 26 Time: 1520			
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 27 Time: 1540			
1	10	10	5	5
2	5	5	5	5
3	5	5	5	5
4	10	5	5	10
5	5	5	5	5
6	5	5	5	5
6-minute Average:	5.8			
Source Conditions:				
Sun Angle (degrees):	0			
	Run 28 Time: 1600			
1	0	0	5	5
2	5	0	0	0
3	0	0	0	0
4	5	5	0	0
5	0	0	0	5
6	0	0	0	0
6-minute Average:	1.0			
Source Conditions:				
Sun Angle (degrees):	20			

sec	0	15	30	45
min	Run 29 Time: 1620			
1	5	5	5	5
2	10	10	10	10
3	10	10	10	10
4	5	5	5	10
5	5	10	10	5
6	5	5	5	5
6-minute Average:	7.3			
Source Conditions:				
Sun Angle (degrees):	20			
	Run 30 Time: 1640			
1	10	10	5	5
2	5	5	10	5
3	5	5	5	5
4	5	10	10	5
5	5	5	5	5
6	5	5	5	5
6-minute Average:	6.0			
Source Conditions:				
Sun Angle (degrees):	25			
	Run 31 Time: 1700			
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):	30			
	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

AVOGADRO ENVIRONMENTAL CORPORATION, Easton Pa

Tuesday Night, February 12th, 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	02/12/2013
Start Time	1854
Stop Time	2202
Distance from observer (ft)	200'
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	—
	@ 1654
Weather:	
ambient temperature (F)	39°
relative humidity	50%
wind direction	S
wind speed	6-10 mph
barometric pressure	29.95 in Hg
rain? fog? snow? haze?	clear
Glasses worn:	
corrective? (Y/N)	yes
sunglasses? (Y/N)	—

Observer's name	Joshua Hagen
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: 1854			
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: 1920			
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: 1946			
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: 2012			
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: 2150			
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

Tuesday Night, February 12th, 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	02/12/2013
Start Time	2222
Stop Time	2346
Distance from observer (ft)	200'
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	—
	@2220
Weather:	
ambient temperature (F)	38°
relative humidity	52%
wind direction	S
wind speed	5-9mph
barometric pressure	29.92 inHg
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: 2304			
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	Whittow
Observer affiliation	Avogadro Env.

Observer's Signature