

## North Carolina Division of Air Quality Monthly Hazardous Air Pollutant Report

Report Date	September 21, 2015		
Data period	8/1/2015	to	8/31/2015
Prepared by	Ambient Monitoring Section		



**Limits and restrictions: Every effort has been made to ensure these data are accurate. This report is for informational purposes.**

2015	24-Hour Average Sample Concentration (ppbv)								Year to Date		
	Samples are collected 1 every 6 days								High	90th Percentile	
	Hazardous Air Pollutant	Site Name	County	AQS ID	4-Aug	10-Aug	16-Aug	22-Aug			28-Aug
				Tuesday	Monday	Sunday	Saturday	Friday			
<b>Acetaldehyde*</b>	AB Tech.	Buncombe	37-021-0035	NO	NO	NO	NO	NO	NO	NO	NO
	Garinger	Mecklenburg	37-119-0041	NO	NO	NO	NO	NO	NO	NO	NO
	Hattie Ave.	Forsyth	37-067-0022	NO	NO	NO	NO	NO	NO	NO	NO
	Candor	Montgomery	37-123-0001	0.57	0.56	0.74	0.66	0.58	0.91	0.75	
	Blackstone	Lee	37-105-0002	0.61	0.60	0.48	0.72	0.61	1.14	0.75	
	Millbrook	Wake	37-183-0014	0.58	0.65	0.88	0.72	0.67	1.34	0.98	
	Battleship	New Hanover	37-129-0010	NO	NO	NO	NO	NO	NO	NO	NO
<b>Benzene</b>	AB Tech.	Buncombe	37-021-0035	0.12	0.09	0.10	0.12	0.10	0.26	0.17	
	Garinger	Mecklenburg	37-119-0041	0.12	0.07	0.19	0.12	0.15	0.34	0.26	
	Hattie Ave.	Forsyth	37-067-0022	0.08	0.08	0.11	0.10	0.16	0.58	0.25	
	Candor	Montgomery	37-123-0001	ND	ND	ND	0.06	0.06	0.20	0.16	
	Blackstone	Lee	37-105-0002	0.13	ND	0.06	0.10	0.11	0.21	0.19	
	Millbrook	Wake	37-183-0014	0.19	0.28	0.26	0.25	0.27	0.38	0.29	
	Battleship	New Hanover	37-129-0010	ND	ND	0.07	ND	ND	0.19	0.14	
<b>Ethylbenzene</b>	AB Tech.	Buncombe	37-021-0035	ND	ND	ND	ND	ND	0.08	0.06	
	Garinger	Mecklenburg	37-119-0041	ND	ND	0.09	ND	0.06	0.11	0.10	
	Hattie Ave.	Forsyth	37-067-0022	ND	ND	ND	ND	ND	0.12	0.07	
	Candor	Montgomery	37-123-0001	ND	ND	ND	ND	ND	0.04	0.03	
	Blackstone	Lee	37-105-0002	ND	ND	ND	ND	ND	0.06	0.04	
	Millbrook	Wake	37-183-0014	ND	ND	ND	ND	ND	0.32	0.07	
	Battleship	New Hanover	37-129-0010	ND	ND	ND	ND	ND	0.06	0.05	
<b>Formaldehyde*</b>	AB Tech.	Buncombe	37-021-0035	NO	NO	NO	NO	NO	NO	NO	
	Garinger	Mecklenburg	37-119-0041	NO	NO	NO	NO	NO	NO	NO	
	Hattie Ave.	Forsyth	37-067-0022	NO	NO	NO	NO	NO	NO	NO	
	Candor	Montgomery	37-123-0001	3.04	3.03	3.74	3.33	3.02	5.42	3.60	
	Blackstone	Lee	37-105-0002	3.46	3.25	2.47	3.60	2.89	7.84	3.70	
	Millbrook	Wake	37-183-0014	3.00	2.79	4.21	4.40	3.56	8.03	4.22	
	Battleship	New Hanover	37-129-0010	NO	NO	NO	NO	NO	NO	NO	
<b>n-Hexane</b>	AB Tech.	Buncombe	37-021-0035	ND	ND	ND	ND	ND	0.27	0.13	
	Garinger	Mecklenburg	37-119-0041	0.07	ND	ND	0.04	0.06	0.26	0.20	
	Hattie Ave.	Forsyth	37-067-0022	ND	ND	ND	ND	ND	0.38	0.16	
	Candor	Montgomery	37-123-0001	ND	ND	ND	ND	ND	0.08	0.06	
	Blackstone	Lee	37-105-0002	ND	ND	ND	ND	ND	0.13	0.08	
	Millbrook	Wake	37-183-0014	ND	ND	ND	ND	ND	0.72	0.30	
	Battleship	New Hanover	37-129-0010	ND	ND	ND	ND	ND	0.31	0.11	
<b>Styrene</b>	AB Tech.	Buncombe	37-021-0035	ND	ND	ND	ND	ND	0.13	0.09	
	Garinger	Mecklenburg	37-119-0041	ND	ND	ND	ND	ND	0.14	0.10	
	Hattie Ave.	Forsyth	37-067-0022	ND	ND	ND	ND	ND	0.11	0.08	
	Candor	Montgomery	37-123-0001	ND	ND	ND	ND	ND	0.10	0.08	
	Blackstone	Lee	37-105-0002	ND	ND	ND	ND	ND	0.18	0.10	
	Millbrook	Wake	37-183-0014	ND	ND	ND	ND	ND	0.13	0.07	
	Battleship	New Hanover	37-129-0010	ND	ND	ND	ND	ND	0.13	0.10	

**ND = not detected in sample**  
**NS = no valid sample / data**  
**NO = site not operating**  
**\* Acetaldehyde and Formaldehyde are not monitored at all sites**  
**Blackstone site began operating in November 2013**

## North Carolina Division of Air Quality Monthly Hazardous Air Pollutant Report

Report Date	September 21, 2015		
Data period	8/1/2015	to	8/31/2015
Prepared by	Ambient Monitoring Section		



Limits and restrictions: Every effort has been made to ensure these data are accurate. This report is for informational purposes.

2015	24-Hour Average Sample Concentration (ppbv)								Year to Date	
	Samples are collected 1 every 6 days									
Hazardous Air Pollutant	Site Name	County	AQS ID	4-Aug	10-Aug	16-Aug	22-Aug	28-Aug	High	90th Percentile
				Tuesday	Monday	Sunday	Saturday	Friday		
<b>Toluene</b>	AB Tech.	Buncombe	37-021-0035	0.41	1.08	0.26	0.30	1.16	1.57	1.06
	Garinger	Mecklenburg	37-119-0041	0.37	0.15	0.57	0.25	0.74	0.80	0.60
	Hattie Ave.	Forsyth	37-067-0022	0.15	0.26	0.32	0.16	0.42	0.89	0.43
	Candor	Montgomery	37-123-0001	0.06	0.03	ND	0.07	0.06	0.25	0.18
	Blackstone	Lee	37-105-0002	0.13	0.09	0.13	0.22	0.13	0.31	0.23
	Millbrook	Wake	37-183-0014	0.13	0.24	0.20	0.08	0.18	1.28	0.53
	Battleship	New Hanover	37-129-0010	0.30	0.09	0.16	0.15	0.16	1.06	0.22
<b>1,2,4-Trimethylbenzene</b>	AB Tech.	Buncombe	37-021-0035	ND	ND	ND	ND	0.04	0.11	0.09
	Garinger	Mecklenburg	37-119-0041	0.25	0.21	0.29	0.21	0.22	0.29	0.23
	Hattie Ave.	Forsyth	37-067-0022	ND	ND	ND	ND	ND	0.15	0.10
	Candor	Montgomery	37-123-0001	ND	ND	ND	ND	0.06	0.10	0.06
	Blackstone	Lee	37-105-0002	ND	ND	ND	ND	ND	0.11	0.08
	Millbrook	Wake	37-183-0014	ND	ND	0.09	0.10	ND	0.18	0.09
	Battleship	New Hanover	37-129-0010	ND	0.10	0.12	0.09	ND	0.22	0.13
<b>m/p-Xylene</b>	AB Tech.	Buncombe	37-021-0035	0.21	0.12	0.11	0.16	0.12	0.23	0.16
	Garinger	Mecklenburg	37-119-0041	0.18	0.09	0.29	0.13	0.23	0.43	0.28
	Hattie Ave.	Forsyth	37-067-0022	0.10	0.11	0.14	0.08	0.19	0.49	0.23
	Candor	Montgomery	37-123-0001	0.04	ND	ND	ND	ND	0.10	0.05
	Blackstone	Lee	37-105-0002	ND	0.05	0.05	0.10	0.07	0.15	0.09
	Millbrook	Wake	37-183-0014	0.09	0.11	0.12	ND	0.10	1.10	0.28
	Battleship	New Hanover	37-129-0010	0.04	0.08	0.09	0.07	0.04	0.22	0.11
<b>o-Xylene</b>	AB Tech.	Buncombe	37-021-0035	0.09	ND	ND	0.08	0.06	0.10	0.08
	Garinger	Mecklenburg	37-119-0041	0.07	ND	0.12	0.06	0.09	0.15	0.12
	Hattie Ave.	Forsyth	37-067-0022	ND	ND	0.06	0.04	0.08	0.15	0.09
	Candor	Montgomery	37-123-0001	ND	ND	ND	ND	ND	0.05	0.03
	Blackstone	Lee	37-105-0002	ND	ND	ND	ND	ND	0.07	0.04
	Millbrook	Wake	37-183-0014	ND	ND	0.05	ND	0.04	0.46	0.08
	Battleship	New Hanover	37-129-0010	ND	ND	ND	ND	ND	0.09	0.06

**ND = not detected in sample**  
**NS = no valid sample / data**  
**NO = site not operating**  
 \* Acetaldehyde and Formaldehyde are not monitored at all sites  
 Blackstone site began operating in November 2013

## 24-hour Average Values (Most Recent 3 Years), ppbv

Hazardous Air Pollutant	Site Name	County	RYTD Valid Sample Days***	24-hr Average Concentrations 90 <sup>th</sup> Percentile				Normalized 3 yr. Mean 90 <sup>th</sup> Percentiles**
				RYTD 2015	2014	2013	2012	
Acetaldehyde *	AB Tech.	Buncombe	NO	NO	NO	NO	NO	AB Tech.
	Garinger	Mecklenburg	NO	NO	NO	NO	NO	Garinger
	Hattie Ave.	Forsyth	NO	NO	NO	NO	NO	Hattie Ave.
	Candor	Montgomery	55	0.72	0.68	0.54	NO	Candor
	Blackstone	Lee	55	0.74	0.74	0.64	NO	Blackstone
	Millbrook	Wake	55	0.99	1.01	0.80	NO	Millbrook
	Battleship	New Hanover	NO	NO	NO	NO	NO	Battleship
Benzene	AB Tech.	Buncombe	58	0.17	0.26	0.25	0.29	AB Tech.
	Garinger	Mecklenburg	55	0.26	0.31	0.35	0.43	Garinger
	Hattie Ave.	Forsyth	56	0.25	0.31	0.33	0.34	Hattie Ave.
	Candor	Montgomery	58	0.16	0.21	0.19	0.16	Candor
	Blackstone	Lee	59	0.18	0.22	0.14	NO	Blackstone
	Millbrook	Wake	57	0.29	0.27	0.36	0.43	Millbrook
	Battleship	New Hanover	56	0.14	0.23	0.19	0.22	Battleship
Ethylbenzene	AB Tech.	Buncombe	58	0.05	0.02	0.11	0.12	AB Tech.
	Garinger	Mecklenburg	55	0.09	0.08	0.16	0.12	Garinger
	Hattie Ave.	Forsyth	56	0.07	0.05	0.20	0.13	Hattie Ave.
	Candor	Montgomery	58	0.01	0.00	0.06	0.04	Candor
	Blackstone	Lee	59	0.03	0.00	0.00	NO	Blackstone
	Millbrook	Wake	57	0.07	0.05	0.15	0.19	Millbrook
	Battleship	New Hanover	56	0.04	0.01	0.09	0.08	Battleship
Formaldehyde*	AB Tech.	Buncombe	NO	NO	NO	NO	NO	AB Tech.
	Garinger	Mecklenburg	NO	NO	NO	NO	NO	Garinger
	Hattie Ave.	Forsyth	NO	NO	NO	NO	NO	Hattie Ave.
	Candor	Montgomery	60	3.45	2.85	2.36	NO	Candor
	Blackstone	Lee	61	3.60	2.99	1.40	NO	Blackstone
	Millbrook	Wake	61	4.13	3.59	2.99	NO	Millbrook
	Battleship	New Hanover	NO	NO	NO	NO	NO	Battleship
n-Hexane	AB Tech.	Buncombe	57	0.14	0.13	0.15	0.14	AB Tech.
	Garinger	Mecklenburg	55	0.21	0.23	0.26	0.28	Garinger
	Hattie Ave.	Forsyth	55	0.17	0.20	0.30	0.25	Hattie Ave.
	Candor	Montgomery	57	0.06	0.07	0.06	0.06	Candor
	Blackstone	Lee	59	0.08	0.08	0.06	NO	Blackstone
	Millbrook	Wake	56	0.36	0.23	0.36	0.42	Millbrook
	Battleship	New Hanover	56	0.12	0.10	0.15	0.26	Battleship
Styrene	AB Tech.	Buncombe	58	0.08	0.00	0.13	0.12	AB Tech.
	Garinger	Mecklenburg	55	0.08	0.00	0.14	0.11	Garinger
	Hattie Ave.	Forsyth	56	0.06	0.00	0.12	0.10	Hattie Ave.
	Candor	Montgomery	58	0.06	0.00	0.11	0.09	Candor
	Blackstone	Lee	59	0.09	0.00	0.00	NO	Blackstone
	Millbrook	Wake	57	0.03	0.00	0.13	0.11	Millbrook
	Battleship	New Hanover	56	0.08	0.00	0.12	0.09	Battleship

**Notes:**

ND = not detected in sample

NS = no valid sample / data

NO = site not operating

RYTD = rolling-year-to-date

\* Acetaldehyde and Formaldehyde are not monitored at all sites

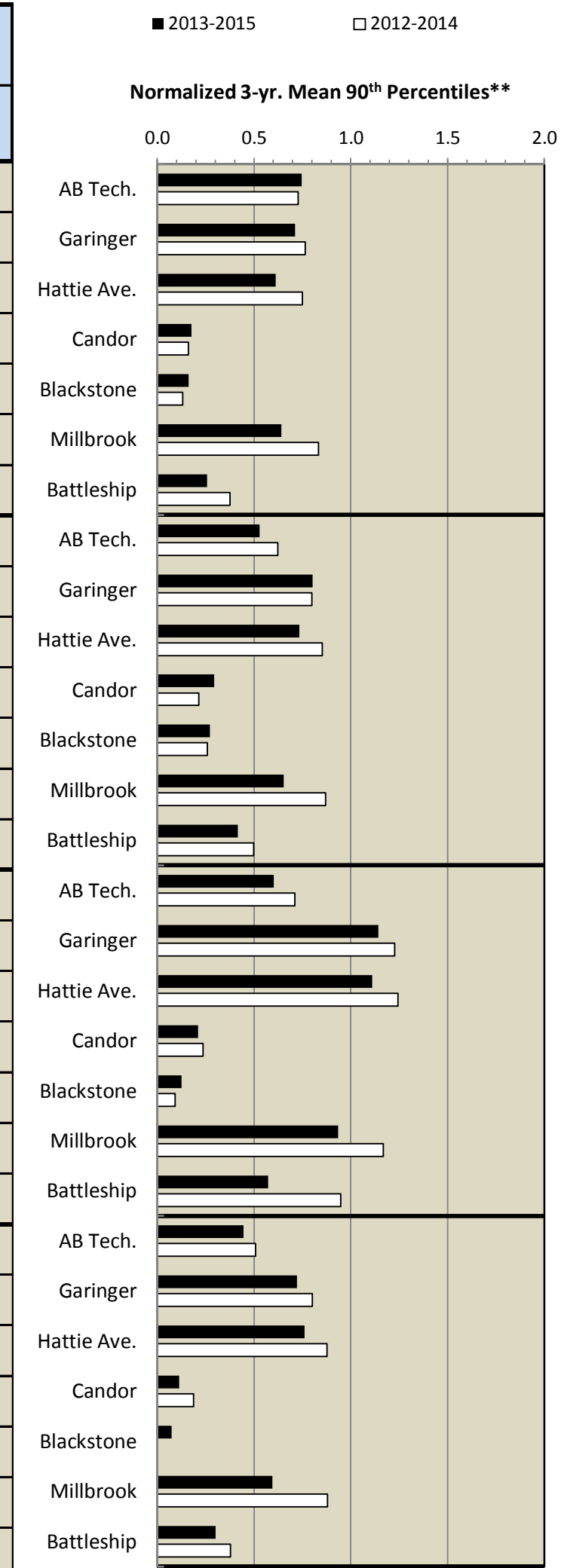
\*\*\*The maximum possible number of valid sample days = 61.

Blackstone site began operating in November 2013

\*\*The white bar shows the 90<sup>th</sup> percentile value for each pollutant at each site as averaged from the previous 3 years of data and normalized to show how it compares to a 90<sup>th</sup> percentile statewide historical value (1.0 on the graph). Similarly, the black bar shows the normalized 90<sup>th</sup> percentile for the latest 3 years, including a rolling 1 year value (RYTD) for the current year's value.

## 24-hour Average Values (Most Recent 3 Years), ppbv

Hazardous Air Pollutant	Site Name	County	RYTD Valid Sample Days***	24-hr Average Concentrations 90th Percentile				2013-2015	2012-2014
				RYTD 2015	2014	2013	2012		
Toluene	AB Tech.	Buncombe	57	0.79	0.52	0.71	0.74		
	Garinger	Mecklenburg	54	0.62	0.57	0.75	0.76		
	Hattie Ave.	Forsyth	54	0.42	0.37	0.87	0.79		
	Candor	Montgomery	55	0.17	0.13	0.19	0.13		
	Blackstone	Lee	56	0.20	0.13	0.11	NO		
	Millbrook	Wake	54	0.57	0.42	0.75	1.09		
	Battleship	New Hanover	53	0.21	0.19	0.29	0.54		
1,2,4-Trimethylbenzene	AB Tech.	Buncombe	58	0.08	0.05	0.26	0.15		
	Garinger	Mecklenburg	55	0.21	0.08	0.31	0.21		
	Hattie Ave.	Forsyth	56	0.09	0.05	0.40	0.18		
	Candor	Montgomery	58	0.07	0.15	0.00	0.01		
	Blackstone	Lee	59	0.07	0.06	ND	NO		
	Millbrook	Wake	56	0.09	0.09	0.31	0.25		
	Battleship	New Hanover	56	0.09	0.05	0.16	0.16		
m/p-Xylene	AB Tech.	Buncombe	58	0.16	0.15	0.47	0.30		
	Garinger	Mecklenburg	55	0.28	0.31	0.88	0.39		
	Hattie Ave.	Forsyth	56	0.22	0.20	1.01	0.39		
	Candor	Montgomery	58	0.05	0.04	0.18	0.08		
	Blackstone	Lee	59	0.08	0.05	0.03	NO		
	Millbrook	Wake	57	0.26	0.19	0.76	0.57		
	Battleship	New Hanover	56	0.11	0.13	0.50	0.60		
o-Xylene	AB Tech.	Buncombe	58	0.08	0.03	0.13	0.11		
	Garinger	Mecklenburg	55	0.11	0.08	0.19	0.15		
	Hattie Ave.	Forsyth	56	0.09	0.05	0.27	0.15		
	Candor	Montgomery	58	0.00	0.00	0.06	0.04		
	Blackstone	Lee	59	0.04	0.00	0.00	NO		
	Millbrook	Wake	57	0.08	0.05	0.19	0.24		
	Battleship	New Hanover	56	0.05	0.02	0.10	0.09		



**Notes:**

ND = not detected in sample

NS = no valid sample / data

NO = site not operating

RYTD = rolling-year-to-date

\* Acetaldehyde and Formaldehyde are not monitored at all sites

\*\*\*The maximum possible number of valid sample days = 61.

Blackstone site began operating in November 2013

\*\*The white bar shows the 90th percentile value for each pollutant at each site as averaged from the previous 3 years of data and normalized to show how it compares to a 90th percentile statewide historical value (1.0 on the graph). Similarly, the black bar shows the normalized 90th percentile for the latest 3 years, including a rolling 1 year value (RYTD) for the current year's value.