

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

Report Date **December 9, 2014**

Data period **10/1/2014** to **10/31/2014**

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.

2014	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	2-Oct	8-Oct	14-Oct	20-Oct	26-Oct	High		
				Thursday	Wednesday	Tuesday	Monday	Sunday			
Acetaldehyde*	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	0.35	0.63	0.26	0.31	0.68	1.21	0.68	
	Blackstone	Lee	37-105-0002	0.33	0.32	0.05	0.36	0.85	0.96	0.77	
	Millbrook	Wake	37-183-0014	0.62	0.96	0.31	0.63	1.25	1.25	0.97	
	Battleship	New Hanover	37-129-0010	NO	NO	NO	NO	NO	NO	NO	
Benzene	AB Tech.	Buncombe	37-021-0035	0.16	0.14	0.03	0.13	0.17	0.80	0.26	
	Garinger	Mecklenburg	37-119-0041	NS	0.17	0.05	NS	0.25	0.39	0.30	
	Hattie Ave.	Forsyth	37-067-0022	0.05	NS	0.07	NS	0.09	0.39	0.30	
	Candor	Montgomery	37-123-0001	0.03	0.10	0.04	NS	0.09	0.28	0.21	
	Blackstone	Lee	37-105-0002	0.03	0.06	0.02	0.08	0.10	0.33	0.24	
	Millbrook	Wake	37-183-0014	0.23	0.13	0.09	0.48	0.08	0.48	0.27	
	Battleship	New Hanover	37-129-0010	0.13	0.02	0.03	0.10	0.09	0.37	0.25	
Ethylbenzene	AB Tech.	Buncombe	37-021-0035	ND	ND	ND	ND	ND	0.08	0.02	
	Garinger	Mecklenburg	37-119-0041	NS	ND	ND	NS	0.01	0.11	0.09	
	Hattie Ave.	Forsyth	37-067-0022	0.02	NS	ND	NS	ND	0.11	0.05	
	Candor	Montgomery	37-123-0001	ND	ND	ND	NS	ND	0.00	ND	
	Blackstone	Lee	37-105-0002	ND	ND	ND	ND	ND	0.01	ND	
	Millbrook	Wake	37-183-0014	0.02	ND	ND	0.09	ND	0.09	0.05	
	Battleship	New Hanover	37-129-0010	ND	ND	ND	ND	ND	0.05	0.01	
Formaldehyde*	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	1.25	1.77	0.73	0.78	2.04	3.79	3.09	
	Blackstone	Lee	37-105-0002	1.03	0.81	0.23	1.14	1.92	3.85	3.01	
	Millbrook	Wake	37-183-0014	1.89	2.53	0.82	1.42	2.59	5.12	3.64	
	Battleship	New Hanover	37-129-0010	NO	NO	NO	NO	NO	NO	NO	
n-Hexane	AB Tech.	Buncombe	37-021-0035	0.29	0.17	0.00	0.13	0.11	0.29	0.13	
	Garinger	Mecklenburg	37-119-0041	NS	0.11	ND	NS	0.21	0.28	0.20	
	Hattie Ave.	Forsyth	37-067-0022	NS	NS	ND	NS	0.05	0.31	0.18	
	Candor	Montgomery	37-123-0001	0.03	NS	ND	NS	0.02	0.09	0.06	
	Blackstone	Lee	37-105-0002	0.08	ND	0.00	0.01	0.01	0.11	0.07	
	Millbrook	Wake	37-183-0014	NS	0.17	ND	0.63	0.07	0.63	0.21	
	Battleship	New Hanover	37-129-0010	0.17	ND	ND	0.04	0.02	0.21	0.09	
Styrene	AB Tech.	Buncombe	37-021-0035	ND	ND	ND	ND	ND	0.03	ND	
	Garinger	Mecklenburg	37-119-0041	NS	ND	ND	NS	ND	0.03	ND	
	Hattie Ave.	Forsyth	37-067-0022	ND	NS	ND	NS	ND	0.04	ND	
	Candor	Montgomery	37-123-0001	ND	ND	ND	NS	ND	0.10	ND	
	Blackstone	Lee	37-105-0002	ND	ND	ND	ND	ND	0.07	ND	
	Millbrook	Wake	37-183-0014	0.01	ND	ND	ND	ND	0.03	ND	
	Battleship	New Hanover	37-129-0010	ND	ND	ND	ND	ND	0.03	ND	

**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

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2014	24-Hour Average Sample Concentration (ppbv) Samples are collected 1 every 6 days								Year to Date	
Hazardous Air Pollutant	Site Name	County	AQS ID	2-Oct	8-Oct	14-Oct	20-Oct	26-Oct	High	90th Percentile
				Thursday	Wednesday	Tuesday	Monday	Sunday	High	90th Percentile
<b>Toluene</b>	AB Tech.	Buncombe	37-021-0035	0.75	NS	0.15	0.26	0.29	0.75	0.52
	Garinger	Mecklenburg	37-119-0041	NS	NS	0.20	NS	0.44	0.68	0.56
	Hattie Ave.	Forsyth	37-067-0022	NS	NS	NS	NS	0.06	0.62	0.37
	Candor	Montgomery	37-123-0001	NS	NS	NS	NS	0.09	0.56	0.13
	Blackstone	Lee	37-105-0002	NS	NS	NS	0.02	0.08	0.21	0.13
	Millbrook	Wake	37-183-0014	NS	NS	NS	0.89	0.22	0.89	0.37
	Battleship	New Hanover	37-129-0010	NS	NS	NS	0.08	0.02	0.39	0.19
<b>1,2,4-Trimethylbenzene</b>	AB Tech.	Buncombe	37-021-0035	ND	ND	ND	ND	ND	0.13	0.05
	Garinger	Mecklenburg	37-119-0041	NS	ND	ND	NS	ND	0.14	0.08
	Hattie Ave.	Forsyth	37-067-0022	ND	NS	ND	NS	ND	0.09	0.06
	Candor	Montgomery	37-123-0001	ND	ND	ND	NS	ND	0.19	0.15
	Blackstone	Lee	37-105-0002	ND	ND	ND	ND	ND	0.17	0.07
	Millbrook	Wake	37-183-0014	ND	ND	ND	0.04	ND	0.15	0.09
	Battleship	New Hanover	37-129-0010	ND	ND	ND	ND	ND	0.08	0.05
<b>m/p-Xylene</b>	AB Tech.	Buncombe	37-021-0035	0.15	0.09	ND	0.02	0.06	0.27	0.15
	Garinger	Mecklenburg	37-119-0041	NS	0.06	ND	NS	0.20	0.70	0.29
	Hattie Ave.	Forsyth	37-067-0022	0.21	NS	ND	NS	ND	0.45	0.21
	Candor	Montgomery	37-123-0001	ND	ND	ND	NS	ND	0.05	0.04
	Blackstone	Lee	37-105-0002	ND	ND	ND	ND	ND	0.06	0.05
	Millbrook	Wake	37-183-0014	0.26	0.09	ND	0.49	ND	0.59	0.19
	Battleship	New Hanover	37-129-0010	ND	ND	ND	ND	ND	1.04	0.13
<b>o-Xylene</b>	AB Tech.	Buncombe	37-021-0035	ND	ND	ND	ND	ND	0.11	0.04
	Garinger	Mecklenburg	37-119-0041	NS	ND	ND	NS	0.01	0.12	0.09
	Hattie Ave.	Forsyth	37-067-0022	0.02	NS	ND	NS	ND	0.15	0.06
	Candor	Montgomery	37-123-0001	ND	ND	ND	NS	ND	0.01	ND
	Blackstone	Lee	37-105-0002	ND	ND	ND	ND	ND	0.01	ND
	Millbrook	Wake	37-183-0014	0.03	ND	ND	0.12	ND	0.12	0.05
	Battleship	New Hanover	37-129-0010	ND	ND	ND	ND	ND	0.07	0.02

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**Blackstone site began operating in October 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 2014	2013	2012	2011	
Acetaldehyde *	AB Tech.	Buncombe	NO	NO	NO	NO	NO	
	Garinger	Mecklenburg	NO	NO	NO	NO	NO	
	Hattie Ave.	Forsyth	NO	NO	NO	NO	NO	
	Candor	Montgomery	59	0.68	0.54	NO	NO	
	Blackstone	Lee	59	0.74	0.64	NO	NO	
	Millbrook	Wake	59	0.96	0.80	NO	NO	
	Battleship	New Hanover	NO	NO	NO	NO	NO	
Benzene	AB Tech.	Buncombe	59	0.25	0.25	0.29	0.32	
	Garinger	Mecklenburg	55	0.33	0.35	0.43	0.56	
	Hattie Ave.	Forsyth	55	0.31	0.33	0.34	1.33	
	Candor	Montgomery	55	0.21	0.19	0.16	0.75	
	Blackstone	Lee	60	0.22	0.14	NO	NO	
	Millbrook	Wake	56	0.27	0.36	0.43	0.42	
	Battleship	New Hanover	56	0.23	0.19	0.22	0.24	
Ethylbenzene	AB Tech.	Buncombe	59	0.03	0.11	0.12	0.17	
	Garinger	Mecklenburg	55	0.09	0.16	0.12	0.22	
	Hattie Ave.	Forsyth	55	0.06	0.20	0.13	0.17	
	Candor	Montgomery	55	0.00	0.06	0.04	0.09	
	Blackstone	Lee	60	0.00	0.00	NO	NO	
	Millbrook	Wake	56	0.06	0.15	0.19	0.18	
	Battleship	New Hanover	56	0.02	0.09	0.08	0.19	
Formaldehyde*	AB Tech.	Buncombe	NO	NO	NO	NO	NO	
	Garinger	Mecklenburg	NO	NO	NO	NO	NO	
	Hattie Ave.	Forsyth	NO	NO	NO	NO	NO	
	Candor	Montgomery	59	2.85	2.36	NO	NO	
	Blackstone	Lee	59	2.99	1.40	NO	NO	
	Millbrook	Wake	59	3.59	2.99	NO	NO	
	Battleship	New Hanover	NO	NO	NO	NO	NO	
n-Hexane	AB Tech.	Buncombe	59	0.13	0.15	0.14	0.19	
	Garinger	Mecklenburg	55	0.23	0.26	0.28	0.40	
	Hattie Ave.	Forsyth	54	0.19	0.30	0.25	0.33	
	Candor	Montgomery	54	0.06	0.06	0.06	0.11	
	Blackstone	Lee	60	0.07	0.06	NO	NO	
	Millbrook	Wake	55	0.22	0.36	0.42	0.34	
	Battleship	New Hanover	56	0.11	0.15	0.26	0.20	
Styrene	AB Tech.	Buncombe	59	0.00	0.13	0.12	0.14	
	Garinger	Mecklenburg	55	0.01	0.14	0.11	0.15	
	Hattie Ave.	Forsyth	55	0.00	0.12	0.10	0.11	
	Candor	Montgomery	55	0.00	0.11	0.09	0.10	
	Blackstone	Lee	60	0.00	0.00	NO	NO	
	Millbrook	Wake	56	0.00	0.13	0.11	0.13	
	Battleship	New Hanover	56	0.02	0.12	0.09	0.14	

**Notes:**

ND = not detected in sample

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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				Normalized 3-yr. Mean 90th Percentiles**
				RYTD 2014	2013	2012	2011	
Toluene	AB Tech.	Buncombe	58	0.52	0.71	0.74	0.80	
	Garinger	Mecklenburg	54	0.57	0.75	0.76	1.00	
	Hattie Ave.	Forsyth	53	0.43	0.87	0.79	0.84	
	Candor	Montgomery	52	0.14	0.19	0.13	0.28	
	Blackstone	Lee	57	0.13	0.11	NO	NO	
	Millbrook	Wake	53	0.41	0.75	1.09	0.79	
	Battleship	New Hanover	53	0.19	0.29	0.54	0.45	
1,2,4-Trimethylbenzene	AB Tech.	Buncombe	59	0.06	0.26	0.15	0.12	
	Garinger	Mecklenburg	55	0.11	0.31	0.21	0.18	
	Hattie Ave.	Forsyth	55	0.07	0.40	0.18	0.18	
	Candor	Montgomery	55	0.15	0.00	0.01	0.07	
	Blackstone	Lee	60	0.06	ND	NO	NO	
	Millbrook	Wake	56	0.09	0.31	0.25	0.14	
	Battleship	New Hanover	56	0.05	0.16	0.16	0.10	
m/p-Xylene	AB Tech.	Buncombe	59	0.15	0.47	0.30	0.25	
	Garinger	Mecklenburg	54	0.33	0.88	0.39	0.37	
	Hattie Ave.	Forsyth	55	0.22	1.01	0.39	0.27	
	Candor	Montgomery	55	0.04	0.18	0.08	0.10	
	Blackstone	Lee	59	0.05	0.03	NO	NO	
	Millbrook	Wake	56	0.23	0.76	0.57	0.31	
	Battleship	New Hanover	56	0.17	0.50	0.60	0.56	
o-Xylene	AB Tech.	Buncombe	59	0.04	0.13	0.11	0.18	
	Garinger	Mecklenburg	55	0.11	0.19	0.15	0.26	
	Hattie Ave.	Forsyth	55	0.07	0.27	0.15	0.21	
	Candor	Montgomery	55	0.00	0.06	0.04	0.09	
	Blackstone	Lee	60	0.00	0.00	NO	NO	
	Millbrook	Wake	56	0.06	0.19	0.24	0.20	
	Battleship	New Hanover	56	0.02	0.10	0.09	0.23	

**Notes:**

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\*\*\*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.