State of Oregon Department of Environmental Quality

Air Quality Monitoring Results
Portland North Coast Electric

Data Quality Key
Met all QC and Method criteria.
Results Estimated. Either below the quantitation limit, or because of issues during sampling or analysis.
Sampler not set up or no sample collected due to instrument problems.
Data of unacceptable quality.

Comparison Values For Metals in Air

	Arsenic, Total (ng/m³ LTP)	Beryllium, Total (ng/m³ LTP)	Cadmium, Total (ng/m³ LTP)	Chromium, Total (ng/m³ LTP)	Cobalt, Total (ng/m³ LTP)	Hexavalent Chromium Cr(VI) (ng/m³ LTP)	Lead, Total (ng/m³ LTP)	Manganese, Total (ng/m³ LTP)	Nickel, Total (ng/m³ LTP)	Selenium, Total (ng/m³ LTP)
Urban Background from NATTS sites	0.2 - 1.4	< MDL	0.04 - 0.5	1.6 - 4	0.05 - 0.3	0.01 - 0.08	2 - 10	3.2 - 19.5	0.8 - 2.8	0.1 - 1
DEQ Ambient Bench Mark	0.2	0.4	0.6	N/A	100	0.08	150	90	4	N/A
Oregon 24-Hour Screening Levels	36	10	30	N/A	100	36	150	400	200	710

Statistics of Daily Values

	Arsenic, Total (ng/m³ LTP)	Beryllium, Total (ng/m³ LTP)	Cadmium, Total (ng/m³ LTP)	Chromium, Total (ng/m³ LTP)	Cobalt, Total (ng/m³ LTP)	Hexavalent Chromium Cr(VI) (ng/m³ LTP)	Lead, Total (ng/m³ LTP)	Manganese, Total (ng/m³ LTP)	Nickel, Total (ng/m³ LTP)	Selenium, Total (ng/m³ LTP)
Minimum Detected Amount	0.185	0	0.092	0	0.092	0.036	0.379	1.16	0.46	0.348
Maximum Detected Amount	1.94	0	5.93	0	0.78	0.655	10.1	109	21.9	8.15
Average[1]	**0.435**	N/A	0.476	N/A	0.214	**0.0993**	2.557	22.34	1.808	0.894
Standard Deviation[1]	0.318	N/A	0.886	N/A	0.143	0.112	2.112	22.02	2.621	1.429
Times above DEQ Ambient Benchmark	**2.2**	N/A	0.8	N/A	0.0	**1.2**	0.0	0.2	0.5	N/A

[1] Calculated by using ProUCL 5, Kaplan Meier method with non-detects

Daily Data

Sampled	Sample Type	Arsenic, Total (ng/m³ LTP)	Beryllium, Total (ng/m³ LTP)	Cadmium, Total (ng/m³ LTP)	Chromium, Total (ng/m³ LTP)	Cobalt, Total (ng/m³ LTP)	Hexavalent Chromium Cr(VI) (ng/m³ LTP)	Lead, Total (ng/m³ LTP)	Manganese, Total (ng/m³ LTP)	Nickel, Total (ng/m³ LTP)	Selenium, Total (ng/m³ LTP)
3/30/2016 11:00	24 Hr	1.94	<0.087	0.26	<27.0	0.78	0.096	9.66	109	5.33	0.602
3/31/2016 11:00	24 Hr	1.14	<0.087	<0.087	<27.0	0.503	0.054	4	85.9	4.31	0.386
4/1/2016 11:00	24 Hr	0.86	<0.087	0.092	<27.0	0.265	<0.036	3.13	37	1.95	<0.346
4/4/2016 11:00	24 Hr	<0.173	<0.087	<0.087	<27.0	0.104	0.078	0.379	1.16	<0.346	<0.346
4/5/2016 11:00	24 Hr	0.9	<0.087	<0.087	<27.0	0.356	0.036	3.32	23	2.18	<0.346
4/6/2016 11:00	24 Hr	1.14	<0.087	<0.087	<27.0	0.367	0.05	7.12	34.7	1.85	<0.346
4/7/2016 11:00	24 Hr	0.888	<0.087	0.173	<27.0	0.396	0.037	8.75	31	1.72	<0.346
4/8/2016 11:00	24 Hr	0.661	<0.087	<0.087	<27.0	0.163	<0.036	2.55	10.1	0.687	<0.346
4/11/2016 11:00	24 Hr	0.633	<0.087	0.791	<27.0	0.237	0.231	3.04	12.4	1.08	0.372
4/12/2016 11:00	24 Hr	0.415	<0.087	5.93	<27.0	0.325	0.337	7.4	7.44	1.4	1.99
4/13/2016 11:00	24 Hr	0.429	<0.087	3.98	<27.0	0.272	0.347	5.09	4.46	1.37	2.74
4/14/2016 11:00	24 Hr	0.528	<0.087	1.49	<27.0	0.187	0.124	3.13	6.81	1.84	8.15
4/15/2016 11:00	24 Hr	0.942	<0.087	0.507	<27.0	0.163	<0.036	3.44	15.3	1.97	<0.346
4/18/2016 11:00	24 Hr	0.879	<0.087	0.1	<27.0	0.485	0.068	6.6	102	4.33	0.803
4/19/2016 11:00	24 Hr	1.41	<0.087	0.145	<27.0	0.549	0.057	5.91	74.4	4.48	0.402
4/20/2016 11:00	24 Hr	0.786	<0.087	1.27	<27.0	0.457	0.051	5.39	49.7	2.47	6.38
4/21/2016 11:00	24 Hr	0.398	<0.087	0.91	<27.0	0.372	0.394	4.21	22.3	21.9	0.897
4/22/2016 11:00	24 Hr	0.543	<0.087	<0.087	<27.0	<0.087	0.056	2.43	4.37	1.73	<0.346
4/25/2016 11:00	24 Hr	0.464	<0.087	0.118	<27.0	0.611	0.111	4.74	23.1	5.91	0.653
4/26/2016 11:00	24 Hr	0.5	<0.087	<0.087	<27.0	0.182	0.07	1.83	23.5	1.2	0.701
4/27/2016 11:00	24 Hr	0.692	<0.087	1.15	<27.0	0.678	0.103	5.17	31.8	8.47	0.834
4/28/2016 11:00	24 Hr	0.287	<0.087	0.369	<27.0	0.142	0.059	1.53	18.9	1.4	<0.346
4/29/2016 11:00	24 Hr	0.234	<0.087	0.249	<27.0	0.092	<0.036	1.1	9.53	1.94	<0.346
5/2/2016 11:00	24 Hr	0.561	<0.087	0.346	<27.0	0.358	0.049	3.25	31.8	2.39	0.424
5/3/2016 11:00	24 Hr	0.421	<0.087	<0.087	<27.0	0.152	0.038	2.14	21.2	1.14	<0.346
5/4/2016 11:00	24 Hr	0.381	<0.087	<0.087	<27.0	0.125	<0.036	1.21	29.3	1.13	<0.346
5/5/2016 11:00	24 Hr	0.41	<0.087	<0.087	<27.0	0.164	<0.036	1.43	27.3	2.06	<0.346

Comparison Values For Metals in Air

	Arsenic, Total (ng/m³ LTP)	Beryllium, Total (ng/m³ LTP)	Cadmium, Total (ng/m³ LTP)	Chromium, Total (ng/m³ LTP)	Cobalt, Total (ng/m³ LTP)	Hexavalent Chromium Cr(VI) (ng/m³ LTP)	Lead, Total (ng/m³ LTP)	Manganese, Total (ng/m³ LTP)	Nickel, Total (ng/m³ LTP)	Selenium, Total (ng/m³ LTP)
Urban Background from NATTS sites	0.2 - 1.4	< MDL	0.04 - 0.5	1.6 - 4	0.05 - 0.3	0.01 - 0.08	2 - 10	3.2 - 19.5	0.8 - 2.8	0.1 - 1
DEQ Ambient Bench Mark	0.2	0.4	0.6	N/A	100	0.08	150	90	4	N/A
Oregon 24-Hour Screening Levels	36	10	30	N/A	100	36	150	400	200	710

Statistics of Daily Values

	Arsenic, Total (ng/m³ LTP)	Beryllium, Total (ng/m³ LTP)	Cadmium, Total (ng/m³ LTP)	Chromium, Total (ng/m³ LTP)	Cobalt, Total (ng/m³ LTP)	Hexavalent Chromium Cr(VI) (ng/m³ LTP)	Lead, Total (ng/m³ LTP)	Manganese, Total (ng/m³ LTP)	Nickel, Total (ng/m³ LTP)	Selenium, Total (ng/m³ LTP)
Minimum Detected Amount	0.185	0	0.092	0	0.092	0.036	0.379	1.16	0.46	0.348
Maximum Detected Amount	1.94	0	5.93	0	0.78	0.655	10.1	109	21.9	8.15
Average[1]	**0.435**	N/A	0.476	N/A	0.214	**0.0993**	2.557	22.34	1.808	0.894
Standard Deviation[1]	0.318	N/A	0.886	N/A	0.143	0.112	2.112	22.02	2.621	1.429
Times above DEQ Ambient Benchmark	**2.2**	N/A	0.8	N/A	0.0	**1.2**	0.0	0.2	0.5	N/A

[1] Calculated by using ProUCL 5, Kaplan Meier method with non-detects

Daily Data

Sampled	Sample Type	Arsenic, Total (ng/m³ LTP)	Beryllium, Total (ng/m³ LTP)	Cadmium, Total (ng/m³ LTP)	Chromium, Total (ng/m³ LTP)	Cobalt, Total (ng/m³ LTP)	Hexavalent Chromium Cr(VI) (ng/m³ LTP)	Lead, Total (ng/m³ LTP)	Manganese, Total (ng/m³ LTP)	Nickel, Total (ng/m³ LTP)	Selenium, Total (ng/m³ LTP)
5/6/2016 11:00	24 Hr	0.641	<0.087	<0.087	<27.0	0.14	<0.036	10.1	12	0.637	<0.346
5/9/2016 11:00	24 Hr	0.608	<0.087	0.107	<27.0	0.156	<0.036	2.41	19.8	1.06	<0.346
5/10/2016 11:00	24 Hr	Void	Void	Void	Void	Void	<0.036	Void	Void	Void	Void
5/11/2016 11:00	24 Hr	0.556	<0.087	0.625	<27.0	0.324	0.055	3.06	108	2.21	0.49
5/12/2016 10:05	24 Hr	0.653	<0.087	0.464	<27.0	0.324	0.049	3.03	40.7	1.7	<0.346
5/13/2016 11:00	24 Hr	0.391	<0.087	0.41	<27.0	0.237	<0.036	2.31	16.5	1	<0.346
5/16/2016 11:00	24 Hr	0.235	<0.087	<0.087	<27.0	0.093	0.082	1.52	26.1	0.954	<0.346
5/17/2016 11:00	24 Hr	0.339	<0.087	0.171	<27.0	0.135	0.051	1.84	11.3	1.12	<0.346
5/18/2016 11:00	24 Hr	<0.173	<0.087	0.405	<27.0	0.173	0.103	1.19	15.5	1.22	<0.346
5/19/2016 11:00	24 Hr	0.464	<0.087	1.28	<27.0	0.182	0.14	2.74	12.3	1.2	1.06
5/20/2016 11:00	24 Hr	0.246	<0.087	0.436	<27.0	<0.087	<0.036	1.04	12.8	0.961	<0.346
5/23/2016 11:00	24 Hr	0.314	<0.087	0.771	<27.0	0.126	0.059	2.48	20.2	1.2	0.416
5/24/2016 11:00	24 Hr	0.291	<0.087	<0.087	<27.0	0.107	0.16	1.25	22.4	0.8	<0.346
5/25/2016 11:00	24 Hr	0.248	<0.087	0.298	<27.0	0.192	0.169	1.72	24.6	1.91	0.409
5/26/2016 11:00	24 Hr	0.514	<0.087	0.272	<27.0	0.106	0.129	1.01	15.2	1.04	2.19
5/27/2016 11:00	24 Hr	0.543	<0.087	<0.087	<27.0	0.1	<0.036	1.14	10.8	1.02	<0.346
5/31/2016 11:00	24 Hr	Void	Void	Void	Void	Void	0.056	Void	Void	Void	Void
6/1/2016 11:00	24 Hr	0.281	<0.087	0.308	<27.0	0.217	Void	2.15	11.5	1.08	<0.346
6/2/2016 11:00	24 Hr	0.826	<0.087	0.281	<27.0	0.225	Void	3.02	26.3	1.8	1.59
6/9/2016 11:00	24 Hr	0.453	<0.087	0.954	<27.0	0.282	0.655	3.08	11.8	1.45	5.44
6/10/2016 11:00	24 Hr	<0.173	<0.087	<0.087	<27.0	<0.087	<0.036	0.512	2.36	0.653	<0.346
6/13/2016 11:00	24 Hr	0.235	<0.087	0.505	<27.0	0.142	0.36	0.99	5.15	0.46	4.23
6/14/2016 11:00	24 Hr	0.379	<0.087	0.524	<27.0	0.244	0.32	1.06	4.88	1.66	0.836
6/15/2016 11:00	24 Hr	0.395	<0.087	1.6	<27.0	0.166	0.199	1.1	6.74	1.16	1.62
6/16/2016 11:00	24 Hr	0.525	<0.087	<0.087	<27.0	0.125	0.043	1.84	23.1	1.16	0.622
6/17/2016 11:00	24 Hr	0.705	<0.087	<0.087	<27.0	0.097	<0.036	2.25	13.4	0.939	<0.346
6/20/2016 11:00	24 Hr	0.402	<0.087	<0.087	<27.0	0.177	0.109	1.4	10.7	1.39	<0.346
6/21/2016 11:00	24 Hr	<0.173	<0.087	<0.087	<27.0	0.13	0.038	1.07	27.8	0.848	<0.346
6/22/2016 11:00	24 Hr	0.222	<0.087	0.296	<27.0	0.253	0.474	2.2	10.2	0.632	<0.346
6/23/2016 11:00	24 Hr	0.241	<0.087	2.68	<27.0	0.305	0.213	1.51	6.7	0.779	2.25
6/24/2016 11:00	24 Hr	0.239	<0.087	<0.087	<27.0	0.111	<0.036	0.97	19.3	0.784	<0.346
6/27/2016 11:00	24 Hr	0.196	<0.087	<0.087	<27.0	0.116	0.038	1.18	11.6	0.481	<0.346
6/28/2016 11:00	24 Hr	<0.173	<0.087	<0.087	<27.0	0.128	0.094	1.13	20.6	2.03	<0.346
6/29/2016 11:00	24 Hr	<0.173	<0.087	<0.087	<27.0	0.113	0.073	1.01	17	1.28	<0.346

Comparison Values For Metals in Air

	Arsenic, Total (ng/m³ LTP)	Beryllium, Total (ng/m³ LTP)	Cadmium, Total (ng/m³ LTP)	Chromium, Total (ng/m³ LTP)	Cobalt, Total (ng/m³ LTP)	Hexavalent Chromium Cr(VI) (ng/m³ LTP)	Lead, Total (ng/m³ LTP)	Manganese, Total (ng/m³ LTP)	Nickel, Total (ng/m³ LTP)	Selenium, Total (ng/m³ LTP)
Urban Background from NATTS sites	0.2 - 1.4	< MDL	0.04 - 0.5	1.6 - 4	0.05 - 0.3	0.01 - 0.08	2 - 10	3.2 - 19.5	0.8 - 2.8	0.1 - 1
DEQ Ambient Bench Mark	0.2	0.4	0.6	N/A	100	0.08	150	90	4	N/A
Oregon 24-Hour Screening Levels	36	10	30	N/A	100	36	150	400	200	710

Statistics of Daily Values

	Arsenic, Total (ng/m³ LTP)	Beryllium, Total (ng/m³ LTP)	Cadmium, Total (ng/m³ LTP)	Chromium, Total (ng/m³ LTP)	Cobalt, Total (ng/m³ LTP)	Hexavalent Chromium Cr(VI) (ng/m³ LTP)	Lead, Total (ng/m³ LTP)	Manganese, Total (ng/m³ LTP)	Nickel, Total (ng/m³ LTP)	Selenium, Total (ng/m³ LTP)
Minimum Detected Amount	0.185	0	0.092	0	0.092	0.036	0.379	1.16	0.46	0.348
Maximum Detected Amount	1.94	0	5.93	0	0.78	0.655	10.1	109	21.9	8.15
Average[1]	**0.435**	N/A	0.476	N/A	0.214	**0.0993**	2.557	22.34	1.808	0.894
Standard Deviation[1]	0.318	N/A	0.886	N/A	0.143	0.112	2.112	22.02	2.621	1.429
Times above DEQ Ambient Benchmark	**2.2**	N/A	0.8	N/A	0.0	**1.2**	0.0	0.2	0.5	N/A

[1] Calculated by using ProUCL 5, Kaplan Meier method with non-detects

Daily Data

Sampled	Sample Type	Arsenic, Total (ng/m³ LTP)	Beryllium, Total (ng/m³ LTP)	Cadmium, Total (ng/m³ LTP)	Chromium, Total (ng/m³ LTP)	Cobalt, Total (ng/m³ LTP)	Hexavalent Chromium Cr(VI) (ng/m³ LTP)	Lead, Total (ng/m³ LTP)	Manganese, Total (ng/m³ LTP)	Nickel, Total (ng/m³ LTP)	Selenium, Total (ng/m³ LTP)
6/30/2016 11:00	24 Hr	<0.173	<0.087	<0.087	<27.0	0.109	<0.036	0.994	7.73	0.499	<0.346
7/1/2016 11:00	24 Hr	<0.173	<0.087	<0.087	<27.0	<0.087	Void	0.762	5.07	<0.346	<0.346
7/5/2016 11:00	24 Hr	<0.173	<0.087	<0.087	<27.0	0.104	0.067	1.1	36.4	0.732	<0.346
7/6/2016 11:00	24 Hr	<0.173	<0.087	<0.087	<27.0	0.137	<0.036	1.35	13.2	1.01	<0.346
7/7/2016 11:00	24 Hr	0.28	<0.087	1.97	<27.0	0.178	0.078	1.48	5.37	0.485	5.62
7/8/2016 11:00	24 Hr	0.187	<0.087	0.095	<27.0	<0.087	<0.036	0.426	1.96	<0.346	<0.346
7/11/2016 11:00	24 Hr	<0.173	<0.087	1.79	<27.0	0.175	0.064	1.81	26.6	1.9	1.09
7/12/2016 11:00	24 Hr	0.244	<0.087	0.215	<27.0	0.128	0.047	1.06	39.6	1.35	0.469
7/13/2016 11:00	24 Hr	<0.173	<0.087	<0.087	<27.0	0.095	<0.036	1.22	35.4	0.838	0.348
7/14/2016 11:00	24 Hr	0.197	<0.087	<0.087	<27.0	0.374	0.141	1.42	11.9	3.96	0.587
7/15/2016 11:00	24 Hr	0.204	<0.087	<0.087	<27.0	<0.087	<0.036	0.814	8.36	0.651	<0.346
7/18/2016 11:00	24 Hr	0.256	<0.087	0.175	<27.0	0.215	0.127	1.5	31.4	1.01	<0.346
7/19/2016 11:00	24 Hr	0.265	<0.087	<0.087	<27.0	0.279	0.064	1.33	16.4	1.45	<0.346
7/20/2016 11:00	24 Hr	0.185	<0.087	0.267	<27.0	0.154	0.069	5.57	12.4	0.964	<0.346
7/21/2016 11:00	24 Hr	0.197	<0.087	0.1	<27.0	0.177	0.117	1.22	13.6	1.5	<0.346
7/22/2016 11:00	24 Hr	<0.173	<0.087	<0.087	<27.0	<0.087	<0.036	1.1	3.28	0.656	<0.346
7/25/2016 11:00	24 Hr	<0.173	<0.087	<0.087	<27.0	0.138	0.058	1.11	19.5	1.02	<0.346
7/26/2016 11:00	24 Hr	<0.173	<0.087	<0.087	<27.0	0.107	<0.036	0.784	8.89	0.461	<0.346
7/27/2016 11:00	24 Hr	<0.173	<0.087	<0.087	<27.0	0.156	<0.036	1.87	28.4	0.798	<0.346
7/28/2016 11:00	24 Hr	0.227	<0.087	<0.087	<27.0	0.168	<0.036	4.7	10.7	0.898	<0.346
7/29/2016 11:00	24 Hr	<0.173	<0.087	<0.087	<27.0	0.113	<0.036	1.67	6.62	0.537	<0.346