

Table of Contents

Tables	Page
Table 5-1 Community Air Monitoring Action Levels for Particulates	1
Table 7-1 Particulate Air Monitoring Results Summary by Day	2
Table 7-2 VOC Air Monitoring Results	2
Table 7-3 Stationary Air Monitoring 1 Hour Time Weighted PM Results	2
Table 8-1 Surface Water, Fresh (mg/L) Action Level Exceedances	3
Table 8-2 Lab Analytes without a U Qualifier or a Corresponding ODEQ Action Level	3
Attachment B: Surface Water Analytical Results Compared with Action Levels.....	4
Attachment C: Surface Water Laboratory Data	9
Figures	Page
Figure 1 Site Vicinity Map	16
Figure 2 Site Layout Map	17
Figure 3 Roving Air Monitoring, Time Period: March 12, 2018, 2:13 PM – 7:13 PM.....	18
Figure 4 Roving Air Monitoring, Time Period: March 12, 2018, 7:13 PM to MARCH 13, 2018, 12:13 AM	19
Figure 5 Roving Air Monitoring, Time Period: March 13, 2018, 12:13 AM - 05:13 AM	20
Figure 6 Roving Air Monitoring, Time Period: March 13, 2018, 5:13 AM - 10:13 AM	21
Figure 7 Roving Air Monitoring, Time Period: March 13, 2018, 10:13 AM - 3:13 PM	22
Figure 8 Roving Air Monitoring, Time Period: March 13, 2018, 3:13 PM - 8:13 PM	23
Figure 9 Particulate Time Weighted Average & VOC Air Monitoring, March 13, 2018.....	24
Attachment F: Plume Models	25
Photos	28

**Table 5-1
Community Air Monitoring Action Levels for Particulates**

PM2.5 and PM10 Threshold Levels ($\mu\text{g}/\text{m}^3$) 24-Hour average	Level of Health Concern and AQI Range	Meaning
0.0 – 12.0	Good (0-50)	Air quality is considered satisfactory, and air pollution poses little or no risk.
12.1 - 35.4	Moderate (51-100)	Air quality is acceptable; however, for some pollutants there may be a moderate health concern for a very small number of people. For example, people who are unusually sensitive ⁵ to ozone may experience respiratory symptoms.
35.5 - 55.4	Unhealthy for Sensitive Groups (101 – 150)	Although the public is not likely to be affected at this level, people with lung disease, and older adults and children are at a greater risk from exposure to ozone, whereas persons with heart and lung disease, and older adults and children are at greater risk from the presence of particles in the air.
55.5 - 150.4	Unhealthy (151 – 200)	Everyone may begin to experience some adverse health effects, and members of the sensitive groups may experience effects that are more serious.
150.5 - 250.4	Very Unhealthy (201-301)	This would trigger a health alert signifying that everyone may experience more serious health effects.
> 250.5	Hazardous (> 300)	This would trigger a health warning of emergency conditions. The entire population is more likely to be affected.

Source: Northwest Area Contingency Plan, Section 9418-28*

* Threshold values taken from EPA AQI online calculator found at: http://airnow.gov/index.cfm?action=resources.aqi_conc_calc

* 24 Hour PM 2.5 "breakpoints" verified via Federal Register for National Ambient Air Quality Standards (NAAQS) rulemaking.

Table 7-1 Particulate Air Monitoring Results Summary by Day						
Parameter	Date	Minimum	Maximum	Average	Sample Size	Units
PM10	3/12/2018	0	5,485	321	105	µg/m ³
PM10	3/13/2018	0	6,880	140	190	µg/m ³
PM10 (1 hour Time Weighted Average)	3/13/2018	0	1,230	182	10	µg/m ³
VOC	3/13/2018	0.0	2.2	0.5	23	ppm

Table 7-2 VOC Air Monitoring Results						
Location	Date	Minimum	Maximum	Average	Sample Size	Units
AR01	3/13/2018	1.7	2.2	2	4	ppm
AR02	3/13/2018	0	1.2	0.3	5	ppm
AR03	3/13/2018	0.7	1.1	0.9	3	ppm
Site Wide Spot Checks	3/13/2018	0	0.1	0	11	ppm

Table 7-3 Stationary Air Monitoring 1 Hour Time Weighted PM Results					
Location	Date	Time	Measurement	Units	
NE 74th Ave/NE Roselawn St (closest to the site)	3/13/2018	12:48 AM	356	µg/m ³	
NE 74th Ave/NE Roselawn St	3/13/2018	3:14 AM	33	µg/m ³	
NE 74th Ave/NE Roselawn St	3/13/2018	4:36 AM	1230	µg/m ³	
NE 74th Ave/NE Roselawn St	3/13/2018	7:10 AM	59	µg/m ³	
NE 74th Ave/NE Roselawn St	3/13/2018	8:21 AM	12	µg/m ³	
NE 74th Ave/NE Roselawn St	3/13/2018	9:34 AM	4	µg/m ³	
NE 73rd Ave/NE Killingsworth St	3/13/2018	8:59 AM	0	µg/m ³	
NE 72nd Ave/NE Emerson St	3/13/2018	7:26 AM	10	µg/m ³	
NE 70th Ave/NE Killingsworth St	3/13/2018	4:15 AM	53	µg/m ³	
NE 70th Ave/NE Emerson St (farthest from the site)	3/13/2018	1:08 AM	62	µg/m ³	

Chemical	CAS No.	Aquatic	Birds	Mammals	Sample Result	Qualifier
Barium and compounds	7440-39-3	0.004	150	39	3.0	
Lead	7439-92-1	0.0025	28	323	0.042	
Benzo[a]anthracene	56-55-3	0.000027			0.0017	JQ
Fluorene	86-73-7	0.0039			0.0064	JQ
2-Methylphenol (o-Cresol)	95-48-7	0.013		2200	0.044	JH
Phenol	108-95-2	0.110			0.98	
Toluene	108-88-3	0.0098		104	0.11	

Analyte	CAS Number	Result	Units	Qualifier
1,2,4-Trimethylbenzene	95-63-6	31	µg/L	
1,3,5-Trimethylbenzene	108-67-8	11	µg/L	
4-Isopropyltoluene	99-87-6	3.8	µg/L	
Chloroethane	75-00-3	0.11	µg/L	JQ
Dichlorobromomethane	75-27-4	0.078	µg/L	JQ
Isopropylbenzene	98-82-8	6.0	µg/L	
n-Butylbenzene	104-51-8	8.6	µg/L	
N-Propylbenzene	103-65-1	4.7	µg/L	
Styrene	100-42-5	170	µg/L	
Chloromethane	74-87-3	0.88	µg/L	
Dichlorodifluoromethane	75-71-8	0.47	µg/L	
1-Methylnaphthalene	90-12-0	20	µg/L	JQ
2-Methylnaphthalene	91-57-6	24	µg/L	JH
Acenaphthylene	208-96-8	33	µg/L	JQ
Phenanthrene	85-01-8	19	µg/L	JQ
#2 Diesel (C10-C24)	STL00163	25	mg/L	
Motor Oil (>C24-C36)	STL00299	7.2	mg/L	
Gasoline	STL00228	2.3	mg/L	
1,2,4-Trimethylbenzene	95-63-6	0.088	µg/L	JQ
Gasoline	STL00228	0.068	mg/L	JQ

Surface Water, Fresh (mg/L)							
Chemical	CAS No.	Aquatic	Birds	Mammals	Sampled Result	Qualifier	Exceedance
Inorganics							
Aluminum	7429-90-5	0.087 n,t	797 h	8 f	-	-	-
Antimony and compounds	7440-36-0	1.6 q		1 f	-	-	-
Arsenic III	7440-38-2	0.150 t	18 h	6 f,i	0.0050	U	No
Barium and compounds	7440-39-3	0.004 o	150 h	39 f	3.0		Yes (Aquatic)
Beryllium and compounds	7440-41-7	0.0053 q		5 f	-	-	-
Cadmium and compounds	7440-43-9	0.0022 t	10 h	8 f,i	0.0015	JQ	No
Calcium		116 p			-	-	-
Chromium III		0.074 t	7.2 h	2.1×104 f	-	-	-
Cobalt	7440-48-4	0.023 o		9 f,i	-	-	-
Copper and compounds	7440-50-8	0.009 t	341 h	53 f,i	-	-	-
Iron		1.000 n,q,t			-	-	-
Lead	7439-92-1	0.0025 t	28 h	323 f,i	0.042		Yes (Aquatic)
Magnesium		82 p			-	-	-
Manganese and compounds	7439-96-5	0.120 o	7242 h	676 f,i	-	-	-
Mercury (elemental, total)	7439-97-6	0.00077 t	3.3 h	10 f	0.00030	U	No
Nickel	7440-02-0	0.052 t	562 h	38 f,i	-	-	-
Potassium		53 p			-	-	-
Selenium	7782-49-2	0.005 t	3.6 h	1.5 f,i	0.040	U	No
Silver and compounds	7440-22-4	0.00012 q			0.0020	U	No
Sodium		680 p			-	-	-
Thallium		0.040 q		0.06 f,i	-	-	-
Vanadium	7440-62-2	0.020 o	82 h	1.6 f	-	-	-
Zinc	7440-66-6	0.120 t	105 h	1230 f,i	-	-	-
Organics							
SVOCs							
Acenaphthene	83-32-9	0.520 q			0.02	U	No
Acrolein	107-02-8	0.021 q			-	-	-
Acrylonitrile	107-13-1	2.6 q			-	-	-
Aniline	62-53-3				-	-	-
Anthracene	120-12-7	0.013 o			0.004	JQ	No
Benzidine	92-87-5	0.0039 o			-	-	-
Benzo[a]anthracene	56-55-3	0.000027 o			0.0017	JQ	Yes (Aquatic)
Benzo[a]pyrene	50-32-8	0.000014 o		8 f,i	0.05	U	No
Benzoic acid	65-85-0	0.042 o			0.2	U	No
Benzyl alcohol	100-51-6	0.0086 o			0.15	UJL	No
1,1-Biphenyl	92-52-4	0.014 o			-	-	-

Chemical	CAS No.	Aquatic	Birds	Mammals	Sampled Result	Qualifier	Exceedance
Bis(2-ethylhexyl)phthalate (DEHP)	117-81-7	0.003 o	8 h	73 f	0.75	U	No
4-Bromoaniline					-	-	-
4-Bromophenyl phenyl ether	101-55-3	0.0015 o			0.03	U	No
Butyl benzyl phthalate	85-68-7	0.019 o			0.5	U	No
3-Chloraniline					-	-	-
4-Chloroaniline	106-47-8				0.5	UJL	No
beta-Chloronaphthalene	91-58-7	0.032 r			0.05	U	No
2-Chlorophenol	95-57-8	2.0 q			0.03	U	No
3-Chlorophenol					-	-	-
4-Chlorophenol					-	-	-
Dibenzofuran	132-64-9	0.0037 o			0.02	U	No
Di-n-butyl phthalate	84-74-2	0.035 o	0.8 h	2200 f	0.15	U	No
2,4-Dichlorophenol	120-83-2	3.65 q			0.2	U	No
3,4-Dichlorophenol					-	-	-
Diethyl phthalate	84-66-2	0.210 o		1.8×104 f	0.6	U	No
Di-n-hexylphthalate				220 f	-	-	-
2,4-Dimethylphenol	105-67-9	0.042 r			0.2	U	No
Dimethyl phthalate	131-11-3	0.003 q			0.03	U	No
2,4-Dinitrophenol	51-28-5				0.25	U	No
Dinitrotoluene mixture	25321-14-6	0.230 q			-	-	-
2,4-Dinitrotoluene	121-14-2	0.230 q			0.05	U	No
2,6-Dinitrotoluene	606-20-2	0.230 q			0.03	U	No
Di-n-octyl phthalate	117-84-0	0.708 p			0.0094	JQ	No
1,4-Dioxane	123-91-1			4 f	-	-	-
1,2-Diphenylhydrazine	122-66-7	0.0054 r			-	-	-
Ethyl acetate	141-78-6			690 f	-	-	-
Fluoranthene	206-44-0	0.00616 n			0.15	U	No
Fluorene	86-73-7	0.0039 p			0.0064	JQ	Yes (Aquatic)
Heptane					-	-	-
Hexachlorobenzene	118-74-1				0.03	U	No
Hexachlorobutadiene	87-68-3	0.0093 q			0.0005	U	No
Hexachlorocyclopentadiene	77-47-4	0.0052 q			0.15	U	No
Hexachloroethane	67-72-1	0.540 q			0.05	U	No
n-Hexane	110-54-3	0.00058 o			-	-	-
Isophorone	78-59-1	2.34 r			0.02	U	No
1-Methylnaphthalene		0.0021 o			-	-	-
2-Methylphenol (o-Cresol)	95-48-7	0.013 o		2200 f	0.044	JH	Yes (Aquatic)
Naphthalene	91-20-3	0.620 q		284 f,i	0.11		No
3-Nitroaniline	99-09-2				0.15	U	No

Chemical	CAS No.	Aquatic	Birds	Mammals	Sampled Result	Qualifier	Exceedance
4-Nitroaniline	100-01-6				0.1	U	No
Nitrobenzene	98-95-3	0.54 r			0.03	U	No
4-Nitrophenol	100-02-7	0.150 q			0.75	U	No
N-Nitrosodi-n-butylamine	924-16-3	0.117 r			-	-	-
N-Nitrosodiethanolamine	1116-54-7	0.117 r			-	-	-
N-Nitrosodiethylamine	55-18-5	0.117 r			-	-	-
N-Nitrosodimethylamine	62-75-9	0.117 r			-	-	-
N-Nitrosodiphenylamine	86-30-6	0.210 o			0.15	U	No
N-Nitroso di-n-propylamine	621-64-7	0.117 r			0.03	U	No
N-Nitroso-N-methylethylamine	10595-95-6	0.117 r			-	-	-
Parathion	56-38-2	0.000013 q,t			-	-	-
Pentachlorobenzene	608-93-5	0.00047 o			-	-	-
Pentachloronitrobenzene	82-68-8		51 h		-	-	-
Pentachlorophenol	87-86-5	0.015 t		1.8 f	0.5	U	No
1-Pentanol		0.110 o			-	-	-
Phenanthrene		0.0063 n			-	-	-
Phenol	108-95-2	0.110 n			0.98		Yes (Aquatic)
2,3,4,6-Tetrachlorophenol					-	-	-
2,4,5-Trichlorophenol	95-95-4				0.02	U	No
2,4,6-Trichlorophenol	88-06-2	0.970 q			0.03	U	No
Pesticides							
Aldrin	309-00-2	0.00006 r		1.5 f,i	-	-	-
BHC (alpha)	319-84-6	0.0022 o			-	-	-
BHC (beta)	319-85-7	0.0022 o			-	-	-
BHC (gamma) Lindane	58-89-9	0.00008 n,q	14.5 h	62 f,i	-	-	-
BHC-technical	58-89-9		4 h	12 f	-	-	-
Chlordane	57-74-9	4.3×10 ⁻⁶ q,t	15.5 h	18 f	-	-	-
Chlorpyrifos	2921-88-2	0.000041 t			-	-	-
DDD	72-54-8	0.000001 t	0.02 h	6 f	-	-	-
DDE	72-55-9		0.02 h	6 f	-	-	-
DDT	50-29-3	0.000001 q	0.02 h	6 f,i	-	-	-
Dieldrin	60-57-1	0.000056 t	0.6 h	0.15 f	-	-	-
Endosulfan	115-29-7	0.000056 q,t	72 h	1 f	-	-	-
Endrin	72-20-8	0.000036 t	0.07 h	0.3 f	-	-	-
Heptachlor	76-44-8	3.8×10 ⁻⁶ q,t		2 f,i	-	-	-
Heptachlor epoxide	102-45-73	3.8×10 ⁻⁶ t			-	-	-
Methoxychlor	72-43-5	0.00003 q,t		30 f,i	-	-	-
Toxaphene	8001-35-2	2.0×10 ⁻⁷ q,t		60 f	-	-	-
PCBs							

Chemical	CAS No.	Aquatic	Birds	Mammals	Sampled Result	Qualifier	Exceedance
Polychlorinated biphenyls (Total)	1336-36-3	0.000014 q,t		0.27 e,i	-	-	-
Aroclor 1016	12674-11-2			13 f	0.00046	UJL	No
Aroclor 1221	11104-28-2	0.00028 o			0.00046	UJL	No
Aroclor 1232	11141-16-5	0.00058 o			0.00046	UJL	No
Aroclor 1242	53469-21-9	0.000053 o	3.0 h	0.7 f	0.00046	UJL	No
Aroclor 1248	12672-29-6	0.000081 o			0.00046	UJL	No
Aroclor 1254	11097-69-1	0.000033 o	1.3 h	0.3 f	0.00046	UJL	No
Aroclor 1260	11096-82-5	0.094 o			0.00046	UJL	No
Dioxins/Furans							
2,3,7,8-TCDD (dioxin)	1746-01-6		1.0×10 ⁻⁴ h	7.6×10 ⁻⁶ f	5.5×10 ⁻⁹	JQ	No
VOCs							
Acetone	67-64-1	1.500 o		76 f	-	-	-
Benzene	71-43-2	0.13 o		200 f	0.089		No
Carbon disulfide	75-15-0	0.00092 o			-	-	-
Carbon tetrachloride	56-23-5	0.074 r		123 f	0.0002	U	No
1,1-Dichloroethane	75-34-3	0.047 o			0.0002	U	No
1,1-Dichloroethylene	75-35-4	0.025 o		230 f	0.0002	U	No
cis-1,4-Dichloro-2-butene	764-41-0				-	-	-
trans-1,4-Dichloro-2-butene					-	-	-
2-Butanone		14 o			-	-	-
Chloroform	67-66-3	1.24 q		115 f	0.0036		No
1,2-Dichloropropane	78-87-5	5.7 q			0.0002	U	No
1,3-Dichloropropene	542-75-6	0.244 q			-	-	-
Methylene chloride	75-09-2	2.200 o		45 f	0.005	U	No
4-Methyl-2-pentanone		0.170 o			-	-	-
Toluene	108-88-3	0.0098 o		104 f	0.11		Yes (Aquatic)
2-Hexanone		0.099 o			-	-	-
Chlorobenzene	108-90-7	0.05 q			0.0002	U	No
Vinyl acetate	108-05-405-4	0.016 o			-	-	-
Vinyl chloride	75-01-4			1.3 f	0.000015	JQ	No
m-Xylene	108-38-3	0.0018 o			-	-	-
o-Xylene	95-47-6				0.03	0	No
Xylene (mixed)	1330-20-7	0.013 o		8 f	-	-	-
1,2,4-Trichlorobenzene	120-82-1	0.110 o			0.0003	U	No
1,1,1-Trichloroethane	71-55-6	0.011 o		4000 f	0.0002	U	No
1,1,2-Trichloroethane	79-00-5	9.4 q			0.0002	U	No
Trichloroethylene (TCE)	79-01-6	21.9 q		3 f	0.0002	U	No

Chemical	CAS No.	Aquatic	Birds	Mammals	Sampled Result	Qualifier	Exceedance
1,1,1,2-Tetrachloroethane	630-20-6	0.186 r			0.0003	U	No
1,1,2,2-Tetrachloroethane	79-34-5	2.4 q			0.0002	U	No
Tetrachloroethylene (PCE)	127-18-4	0.840 q		6 f	0.0005	U	No
Ethylbenzene	100-41-4	0.0073 o			0.044	0	No
1,2-Dichlorobenzene	95-50-1	0.014 o			0.0003	U	No
1,3-Dichlorobenzene	541-73-1	0.071 o			0.0003	U	No
1,4-Dichlorobenzene	106-46-7	0.015 o			0.0003	U	No
1,2,3-Trichlorobenzene					-	-	-
2-Chloroethyl vinyl ether	110-75-8	4.76 r			-	-	-
1,2-Dichloroethane (EDC)	107-06-2	20.0 q	125 h	200 f	0.00043		No
1,2-Dichloroethylene (cis)	156-59-2	0.590 o		180 f	0.0002	U	No
1,2-Dichloroethylene (trans)	156-60-5	0.590 o		180 f	0.0002	U	No
1,2-Dichloroethylene (mixture)	540-59-0	0.590 o		180 f	-	-	-
Methyl ethyl ketone	78-93-3			14000 f	-	-	-
Tribromomethane		0.320 o			-	-	-

Source: Oregon Department of Environmental Quality, Waste management and Cleanup Division, Cleanup Policy and Program Develop Section. April 1998. Guidance for Ecological Risk Assessment: Levels I, II, III, IV. Portland Oregon.

Qualifier information:

H – The sample result is biased high.

J – The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.

L – The sample result is biased low.

Q – Detected concentration is below the method reporting limit/Contract Required Quantitation Limit, but is above the method quantitation limit.

R – The data is rejected and unusable. The analyte may or may not be present in the sample.

U – The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.

UJ – The material was analyzed for but was not detected. The reported detection limit is estimated because QC criteria were not met.

Analyte	CAS Number	Result	Units	Qualifier	Found in ODEQ Action Level Table
Arsenic	7440-38-2	0.0050	mg/L	U	Yes
Barium	7440-39-3	3.0	mg/L		Yes
Cadmium	7440-43-9	0.0015	mg/L	JQ	Yes
Chromium	7440-47-3	0.0034	mg/L		Yes
Lead	7439-92-1	0.042	mg/L		Yes
Selenium	7782-49-2	0.040	mg/L	U	Yes
Silver	7440-22-4	0.0020	mg/L	U	Yes
Mercury	7439-97-6	0.00030	mg/L	U	Yes
PCB-1016	12674-11-2	0.46	ug/L	UJL	Yes
PCB-1221	11104-28-2	0.46	ug/L	UJL	Yes
PCB-1232	11141-16-5	0.46	ug/L	UJL	Yes
PCB-1242	53469-21-9	0.46	ug/L	UJL	Yes
PCB-1248	12672-29-6	0.46	ug/L	UJL	Yes
PCB-1254	11097-69-1	0.46	ug/L	UJL	Yes
PCB-1260	11096-82-5	0.46	ug/L	UJL	Yes
1,1,1,2-Tetrachloroethane	630-20-6	0.30	ug/L	U	Yes
1,1,1-Trichloroethane	71-55-6	0.20	ug/L	U	Yes
1,1,2,2-Tetrachloroethane	79-34-5	0.20	ug/L	U	Yes
1,1,2-Trichloroethane	79-00-5	0.20	ug/L	U	Yes
1,1-Dichloroethane	75-34-3	0.20	ug/L	U	Yes
1,1-Dichloroethene	75-35-4	0.20	ug/L	U	Yes
1,1-Dichloropropene	563-58-6	0.20	ug/L	U	No
1,2,3-Trichlorobenzene	87-61-6	0.50	ug/L	U	No
1,2,3-Trichloropropane	96-18-4	0.20	ug/L	U	No
1,2,4-Trichlorobenzene	120-82-1	0.30	ug/L	U	Yes
1,2,4-Trimethylbenzene	95-63-6	31	ug/L		No
1,2-Dibromo-3-Chloropropane	96-12-8	2.0	ug/L	U	No
1,2-Dichlorobenzene	95-50-1	0.30	ug/L	U	Yes
1,2-Dichloroethane	107-06-2	0.43	ug/L		Yes
1,2-Dichloropropane	78-87-5	0.20	ug/L	U	Yes
1,3,5-Trimethylbenzene	108-67-8	11	ug/L		No
1,3-Dichlorobenzene	541-73-1	0.30	ug/L	U	Yes
1,3-Dichloropropane	142-28-9	0.20	ug/L	U	No
1,4-Dichlorobenzene	106-46-7	0.30	ug/L	U	Yes
2,2-Dichloropropane	594-20-7	0.50	ug/L	U	No
2-Chlorotoluene	95-49-8	0.50	ug/L	U	No
4-Chlorotoluene	106-43-4	0.30	ug/L	U	No
4-Isopropyltoluene	99-87-6	3.8	ug/L		No
Bromobenzene	108-86-1	0.20	ug/L	U	No

Analyte	CAS Number	Result	Units	Qualifier	Found in ODEQ Action Level Table
Bromoform	75-25-2	0.50	ug/L	U	No
Bromomethane	74-83-9	0.50	ug/L	U	No
Carbon tetrachloride	56-23-5	0.20	ug/L	U	Yes
Chlorobenzene	108-90-7	0.20	ug/L	U	Yes
Chlorobromomethane	74-97-5	0.20	ug/L	U	No
Chlorodibromomethane	124-48-1	0.20	ug/L	U	No
Chloroethane	75-00-3	0.11	ug/L	JQ	No
Chloroform	67-66-3	3.6	ug/L		Yes
cis-1,2-Dichloroethene	156-59-2	0.20	ug/L	U	Yes
cis-1,3-Dichloropropene	10061-01-5	0.20	ug/L	U	No
Dibromomethane	74-95-3	0.20	ug/L	U	No
Dichlorobromomethane	75-27-4	0.078	ug/L	JQ	No
Ethylbenzene	100-41-4	44	ug/L		Yes
Ethylene Dibromide	106-93-4	0.10	ug/L	U	No
Hexachlorobutadiene	87-68-3	0.50	ug/L	U	Yes
Isopropylbenzene	98-82-8	6.0	ug/L		No
Methyl tert-butyl ether	1634-04-4	0.30	ug/L	U	No
Methylene Chloride	75-09-2	5.0	ug/L	U	Yes
m-Xylene & p-Xylene	179601-23-1	0.50	ug/L	U	No
n-Butylbenzene	104-51-8	8.6	ug/L		No
N-Propylbenzene	103-65-1	4.7	ug/L		No
o-Xylene	95-47-6	30	ug/L		Yes
sec-Butylbenzene	135-98-8	1.0	ug/L	U	No
tert-Butylbenzene	98-06-6	0.50	ug/L	U	No
Tetrachloroethene	127-18-4	0.50	ug/L	U	Yes
trans-1,2-Dichloroethene	156-60-5	0.20	ug/L	U	Yes
trans-1,3-Dichloropropene	10061-02-6	0.20	ug/L	U	No
Trichloroethene	79-01-6	0.20	ug/L	U	Yes
Trichlorofluoromethane	75-69-4	0.50	ug/L	U	No
Benzene	71-43-2	89	ug/L		Yes
Naphthalene	91-20-3	110	ug/L		Yes
Styrene	100-42-5	170	ug/L		No
Toluene	108-88-3	110	ug/L		Yes
Chloromethane	74-87-3	0.88	ug/L		No
Dichlorodifluoromethane	75-71-8	0.47	ug/L		No
Vinyl chloride	75-01-4	0.015	ug/L	JQ	Yes
1,2,4-Trichlorobenzene	120-82-1	20	ug/L	U	Yes
1,2-Dichlorobenzene	95-50-1	30	ug/L	U	Yes
1,3-Dichlorobenzene	541-73-1	20	ug/L	U	Yes
1,4-Dichlorobenzene	106-46-7	20	ug/L	U	Yes

Analyte	CAS Number	Result	Units	Qualifier	Found in ODEQ Action Level Table
1-Methylnaphthalene	90-12-0	20	ug/L	JQ	No
2,4,5-Trichlorophenol	95-95-4	20	ug/L	U	Yes
2,4,6-Trichlorophenol	88-06-2	30	ug/L	U	Yes
2,4-Dichlorophenol	120-83-2	200	ug/L	U	Yes
2,4-Dimethylphenol	105-67-9	200	ug/L	U	Yes
2,4-Dinitrophenol	51-28-5	250	ug/L	U	Yes
2,4-Dinitrotoluene	121-14-2	50	ug/L	U	Yes
2,6-Dinitrotoluene	606-20-2	30	ug/L	U	Yes
2-Chloronaphthalene	91-58-7	50	ug/L	U	Yes
2-Chlorophenol	95-57-8	30	ug/L	U	Yes
2-Methylnaphthalene	91-57-6	24	ug/L	JH	No
2-Methylphenol	95-48-7	44	ug/L	JH	Yes
2-Nitroaniline	88-74-4	30	ug/L	U	No
2-Nitrophenol	88-75-5	50	ug/L	U	No
3 & 4 Methylphenol	15831-10-4	40	ug/L	U	No
3,3'-Dichlorobenzidine	91-94-1	750	ug/L	U	No
3-Nitroaniline	99-09-2	150	ug/L	U	Yes
4,6-Dinitro-2-methylphenol	534-52-1	250	ug/L	U	No
4-Bromophenyl phenyl ether	101-55-3	30	ug/L	U	Yes
4-Chloro-3-methylphenol	59-50-7	30	ug/L	U	No
4-Chloroaniline	106-47-8	500	ug/L	UJL	Yes
4-Chlorophenyl phenyl ether	7005-72-3	30	ug/L	U	No
4-Nitroaniline	100-01-6	100	ug/L	U	Yes
4-Nitrophenol	100-02-7	750	ug/L	U	Yes
Acenaphthene	83-32-9	20	ug/L	U	Yes
Acenaphthylene	208-96-8	33	ug/L	JQ	No
Anthracene	120-12-7	4.0	ug/L	JQ	Yes
Benzo[a]anthracene	56-55-3	1.7	ug/L	JQ	Yes
Benzo[a]pyrene	50-32-8	50	ug/L	U	Yes
Benzo[b]fluoranthene	205-99-2	50	ug/L	U	No
Benzo[g,h,i]perylene	191-24-2	50	ug/L	U	No
Benzo[k]fluoranthene	207-08-9	50	ug/L	U	No
Benzoic acid	65-85-0	200	ug/L	U	Yes
Benzyl alcohol	100-51-6	150	ug/L	UJL	Yes
Bis(2-chloroethoxy)methane	111-91-1	30	ug/L	U	No
Bis(2-chloroethyl)ether	111-44-4	30	ug/L	U	No
Bis(2-ethylhexyl) phthalate	117-81-7	750	ug/L	U	Yes
bis(chloroisopropyl) ether	108-60-1	30	ug/L	U	No

Analyte	CAS Number	Result	Units	Qualifier	Found in ODEQ Action Level Table
Butyl benzyl phthalate	85-68-7	500	ug/L	U	Yes
Carbazole	86-74-8	30	ug/L	U	No
Chrysene	218-01-9	30	ug/L	U	No
Dibenz(a,h)anthracene	53-70-3	30	ug/L	U	No
Dibenzofuran	132-64-9	20	ug/L	U	Yes
Diethyl phthalate	84-66-2	600	ug/L	U	Yes
Dimethyl phthalate	131-11-3	30	ug/L	U	Yes
Di-n-butyl phthalate	84-74-2	150	ug/L	U	Yes
Di-n-octyl phthalate	117-84-0	9.4	ug/L	JQ	Yes
Fluoranthene	206-44-0	150	ug/L	U	Yes
Fluorene	86-73-7	6.4	ug/L	JQ	Yes
Hexachlorobenzene	118-74-1	30	ug/L	U	Yes
Hexachlorobutadiene	87-68-3	50	ug/L	U	Yes
Hexachlorocyclopentadiene	77-47-4	150	ug/L	U	Yes
Hexachloroethane	67-72-1	50	ug/L	U	Yes
Indeno[1,2,3-cd]pyrene	193-39-5	50	ug/L	U	No
Isophorone	78-59-1	20	ug/L	U	Yes
Naphthalene	91-20-3	85	ug/L	JH	Yes
Nitrobenzene	98-95-3	30	ug/L	U	Yes
N-Nitrosodi-n-propylamine	621-64-7	30	ug/L	U	Yes
N-Nitrosodiphenylamine	86-30-6	150	ug/L	U	Yes
Pentachlorophenol	87-86-5	500	ug/L	U	Yes
Phenanthrene	85-01-8	19	ug/L	JQ	No
Phenol	108-95-2	980	ug/L		Yes
Pyrene	129-00-0	100	ug/L	U	No
#2 Diesel (C10-C24)	STL00163	25	mg/L		No
Motor Oil (>C24-C36)	STL00299	7.2	mg/L		No
Gasoline	STL00228	2.3	mg/L		No
1,1,1,2-Tetrachloroethane	630-20-6	0.30	ug/L	U	Yes
1,1,1-Trichloroethane	71-55-6	0.20	ug/L	U	Yes
1,1,2,2-Tetrachloroethane	79-34-5	0.20	ug/L	U	Yes
1,1,2-Trichloroethane	79-00-5	0.20	ug/L	U	Yes
1,1-Dichloroethane	75-34-3	0.20	ug/L	U	Yes
1,1-Dichloroethene	75-35-4	0.20	ug/L	U	Yes
1,1-Dichloropropene	563-58-6	0.20	ug/L	U	No
1,2,3-Trichlorobenzene	87-61-6	0.50	ug/L	U	No
1,2,3-Trichloropropane	96-18-4	0.20	ug/L	U	No
1,2,4-Trichlorobenzene	120-82-1	0.30	ug/L	U	Yes
1,2,4-Trimethylbenzene	95-63-6	0.088	ug/L	JQ	No

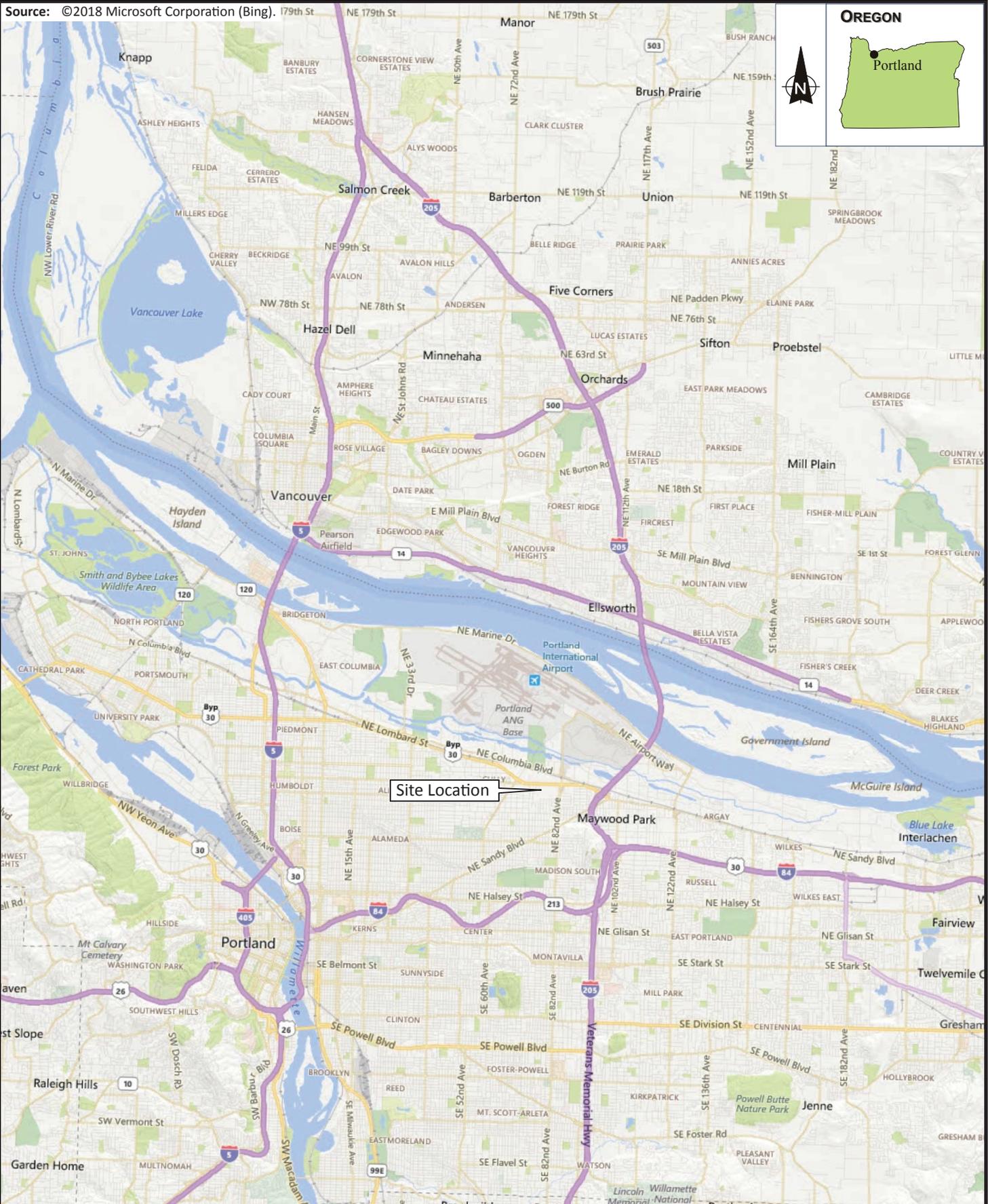
Analyte	CAS Number	Result	Units	Qualifier	Found in ODEQ Action Level Table
1,2-Dibromo-3-Chloropropane	96-12-8	2.0	ug/L	U	No
1,2-Dichlorobenzene	95-50-1	0.30	ug/L	U	Yes
1,2-Dichloroethane	107-06-2	0.20	ug/L	U	Yes
1,2-Dichloropropane	78-87-5	0.20	ug/L	U	Yes
1,3,5-Trimethylbenzene	108-67-8	0.50	ug/L	U	No
1,3-Dichlorobenzene	541-73-1	0.30	ug/L	U	Yes
1,3-Dichloropropane	142-28-9	0.20	ug/L	U	No
1,4-Dichlorobenzene	106-46-7	0.30	ug/L	U	Yes
2,2-Dichloropropane	594-20-7	0.50	ug/L	U	No
2-Chlorotoluene	95-49-8	0.50	ug/L	U	No
4-Chlorotoluene	106-43-4	0.30	ug/L	U	No
4-Isopropyltoluene	99-87-6	0.30	ug/L	U	No
Benzene	71-43-2	0.035	ug/L	JQ	Yes
Bromobenzene	108-86-1	0.20	ug/L	U	No
Bromoform	75-25-2	0.50	ug/L	U	No
Bromomethane	74-83-9	0.50	ug/L	U	No
Carbon tetrachloride	56-23-5	0.20	ug/L	U	Yes
Chlorobenzene	108-90-7	0.20	ug/L	U	Yes
Chlorobromomethane	74-97-5	0.20	ug/L	U	No
Chlorodibromomethane	124-48-1	0.20	ug/L	U	No
Chloroethane	75-00-3		ug/L	R	No
Chloroform	67-66-3	0.33	ug/L		Yes
Chloromethane	74-87-3	0.50	ug/L	UJL	No
cis-1,2-Dichloroethene	156-59-2	0.20	ug/L	U	Yes
cis-1,3-Dichloropropene	10061-01-5	0.20	ug/L	U	No
Dibromomethane	74-95-3	0.20	ug/L	U	No
Dichlorobromomethane	75-27-4	0.20	ug/L	U	No
Dichlorodifluoromethane	75-71-8	0.40	ug/L	UJL	No
Ethylbenzene	100-41-4	0.2	ug/L	U	Yes
Ethylene Dibromide	106-93-4	0.10	ug/L	U	No
Hexachlorobutadiene	87-68-3	0.50	ug/L	U	Yes
Isopropylbenzene	98-82-8	1.0	ug/L	U	No
Methyl tert-butyl ether	1634-04-4	0.30	ug/L	U	No
Methylene Chloride	75-09-2	5.0	ug/L	U	Yes
m-Xylene & p-Xylene	179601-23-1	0.50	ug/L	U	No
Naphthalene	91-20-3	0.31	ug/L	JQ	Yes
n-Butylbenzene	104-51-8	0.50	ug/L	U	No
N-Propylbenzene	103-65-1	0.30	ug/L	U	No
o-Xylene	95-47-6	0.5	ug/L	U	Yes

Analyte	CAS Number	Result	Units	Qualifier	Found in ODEQ Action Level Table
sec-Butylbenzene	135-98-8	1.0	ug/L	U	No
Styrene	100-42-5	0.5	ug/L	U	No
tert-Butylbenzene	98-06-6	0.50	ug/L	U	No
Tetrachloroethene	127-18-4	0.50	ug/L	U	Yes
Toluene	108-88-3	0.050	ug/L	JQ	Yes
trans-1,2-Dichloroethene	156-60-5	0.20	ug/L	U	Yes
trans-1,3-Dichloropropene	10061-02-6	0.20	ug/L	U	No
Trichloroethene	79-01-6	0.20	ug/L	U	Yes
Trichlorofluoromethane	75-69-4	0.50	ug/L	U	No
Vinyl chloride	75-01-4	0.020	ug/L	UJL	Yes
Gasoline	STL00228	0.068	mg/L	JQ	No
1,2,3,4,6,7,8-HpCDD	35822-46-9	110	pg/L	B	No
1,2,3,4,6,7,8-HpCDF	67562-39-4	340	pg/L	U	No
1,2,3,4,7,8,9-HpCDF	55673-89-7	400	pg/L	U	No
1,2,3,4,7,8-HxCDD	39227-28-6	8.0	pg/L	JQ	No
1,2,3,4,7,8-HxCDF	70648-26-9	54	pg/L	JL	No
1,2,3,6,7,8-HxCDD	57653-85-7	10	pg/L	JQ	No
1,2,3,6,7,8-HxCDF	57117-44-9	88	pg/L	JL	No
1,2,3,7,8,9-HxCDD	19408-74-3	11	pg/L	JQ	No
1,2,3,7,8,9-HxCDF	72918-21-9	52	pg/L	UJL	No
1,2,3,7,8-PeCDD	40321-76-4	52	pg/L	U	No
1,2,3,7,8-PeCDF	57117-41-6	57	pg/L		No
13C-1,2,3,4,6,7,8-HpCDD	109719-83-7	26	%	*	No
13C-1,2,3,4,6,7,8-HpCDF	109719-84-8	27	%	*	No
13C-1,2,3,4,7,8-HxCDF	114423-98-2	28	%	*	No
13C-1,2,3,6,7,8-HxCDD	109719-81-5	35	%	*	No
13C-1,2,3,7,8-PeCDD	109719-79-1	42	%		No
13C-1,2,3,7,8-PeCDF	109719-77-9	46	%		No
13C-2,3,7,8-TCDD	76523-40-5	57	%		No
13C-2,3,7,8-TCDF	89059-46-1	61	%		No
13C-OCDD	114423-97-1	24	%	*	No
2,3,4,6,7,8-HxCDF	60851-34-5	53	pg/L	JL	No
2,3,4,7,8-PeCDF	57117-31-4	100	pg/L		No
2,3,7,8-TCDD	1746-01-6	5.5	pg/L	JQ	Yes
OCDD	3268-87-9	620	pg/L	JL	No
OCDF	39001-02-0	130	pg/L	JL	No
13C-2,3,7,8-TCDF	89059-46-1	56	%		No
2,3,7,8-TCDF	51207-31-9	61	pg/L		No

*Qualifier Information:
H – The sample result is biased high.*

Analyte	CAS Number	Result	Units	Qualifier	Found in ODEQ Action Level Table
<p><i>J – The result is an estimated quantity. The associated numerical value is the approximate concentration of the analyte in the sample.</i></p> <p><i>L – The sample result is biased low.</i></p> <p><i>Q – Detected concentration is below the method reporting limit/Contract Required Quantitation Limit, but is above the method quantitation limit.</i></p> <p><i>R – The data is rejected and unusable. The analyte may or may not be present in the sample.</i></p> <p><i>U – The analyte was analyzed for, but was not detected above the level of the reported sample quantitation limit.</i></p> <p><i>UJ – The material was analyzed for but was not detected. The reported detection limit is estimated because QC criteria were not met.</i></p>					

Source: ©2018 Microsoft Corporation (Bing).



Site Location

ecology and environment, inc.
 Global Environmental Specialists
 Seattle, Washington

JUNKYARD FIRE RESPONSE
 Portland, Oregon

0 2 4
 Approximate Scale in Miles

Figure 1
 SITE VICINITY MAP

Date:	Drawn by:	
4/17/18	AES	10:START IV\TO21T2SS11\fig 1



ecology and environment, inc.
Global Environmental Specialists
Portland, Oregon

JUNKYARD FIRE RESPONSE
Portland, Oregon

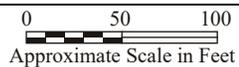


Figure 2
SITE LAYOUT MAP

Date:
5/11/18

Drawn by:
AES

10:START IV\TO21T2SS11\fig 2

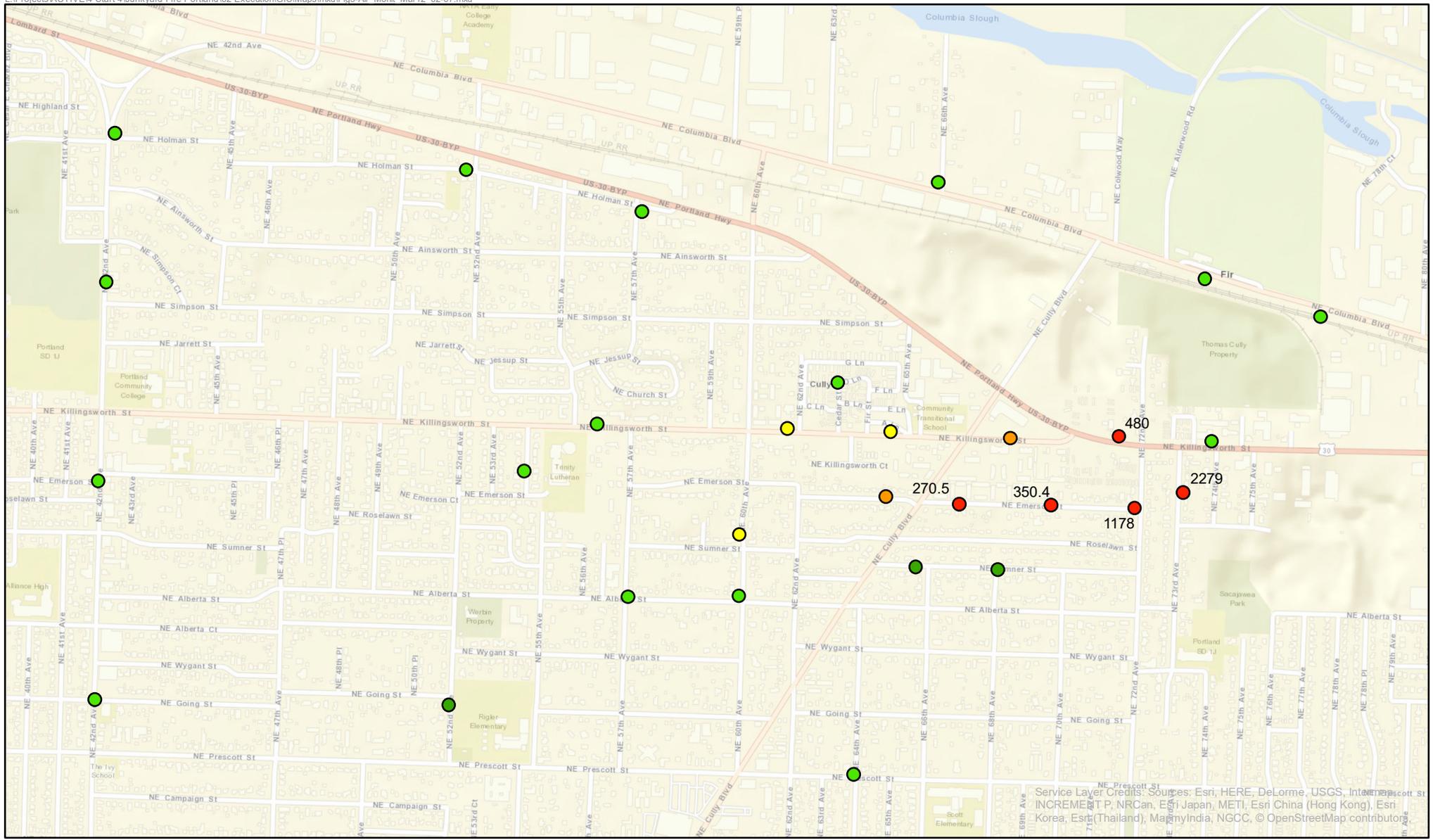


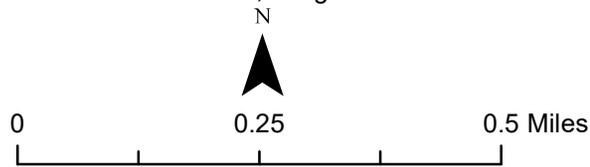
FIGURE 3
ROVING AIR MONITORING
TIME PERIOD: MARCH 12, 2018
2:13 PM - 7:13 PM
 Portland, Oregon

Legend

- March 12: 2:13-7:13
- 0 ug/m3
 - 0-35 ug/m3
 - 35-150 ug/m3
 - 150-250 ug/m3
 - 250-10,000 ug/m3



Date: 6/5/2018



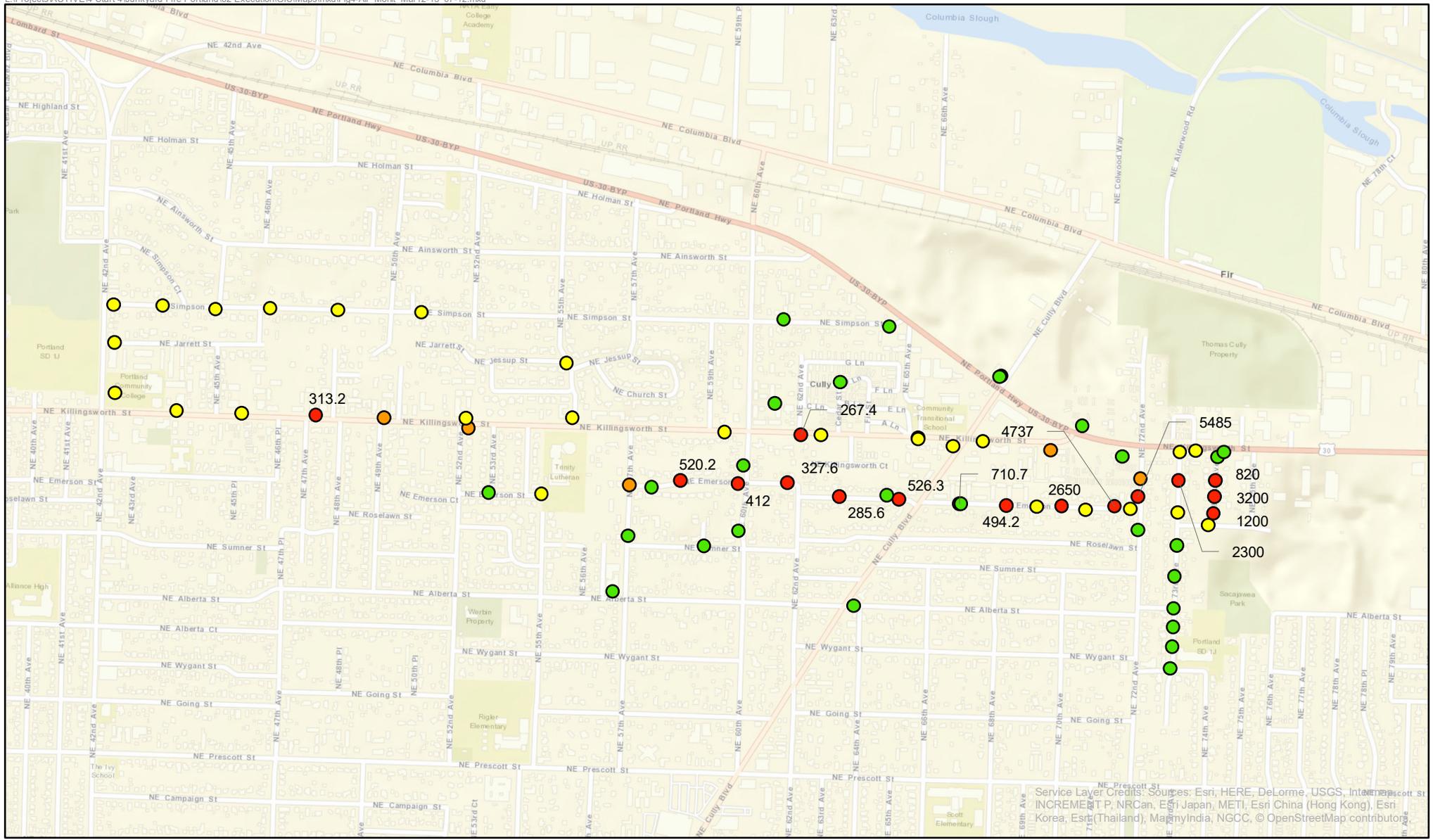
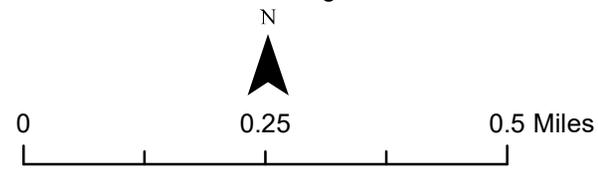


FIGURE 4
ROVING AIR MONITORING
TIME PERIOD: MARCH 12, 2018, 7:13 PM
TO MARCH 13, 2018, 12:13 AM
Portland, Oregon



Date: 6/5/2018



- Legend**
- March 12-13: 07:13-12:13**
- 0 ug/m3
 - 0-35 ug/m3
 - 35-150 ug/m3
 - 150-250 ug/m3
 - 250-10,000 ug/m3

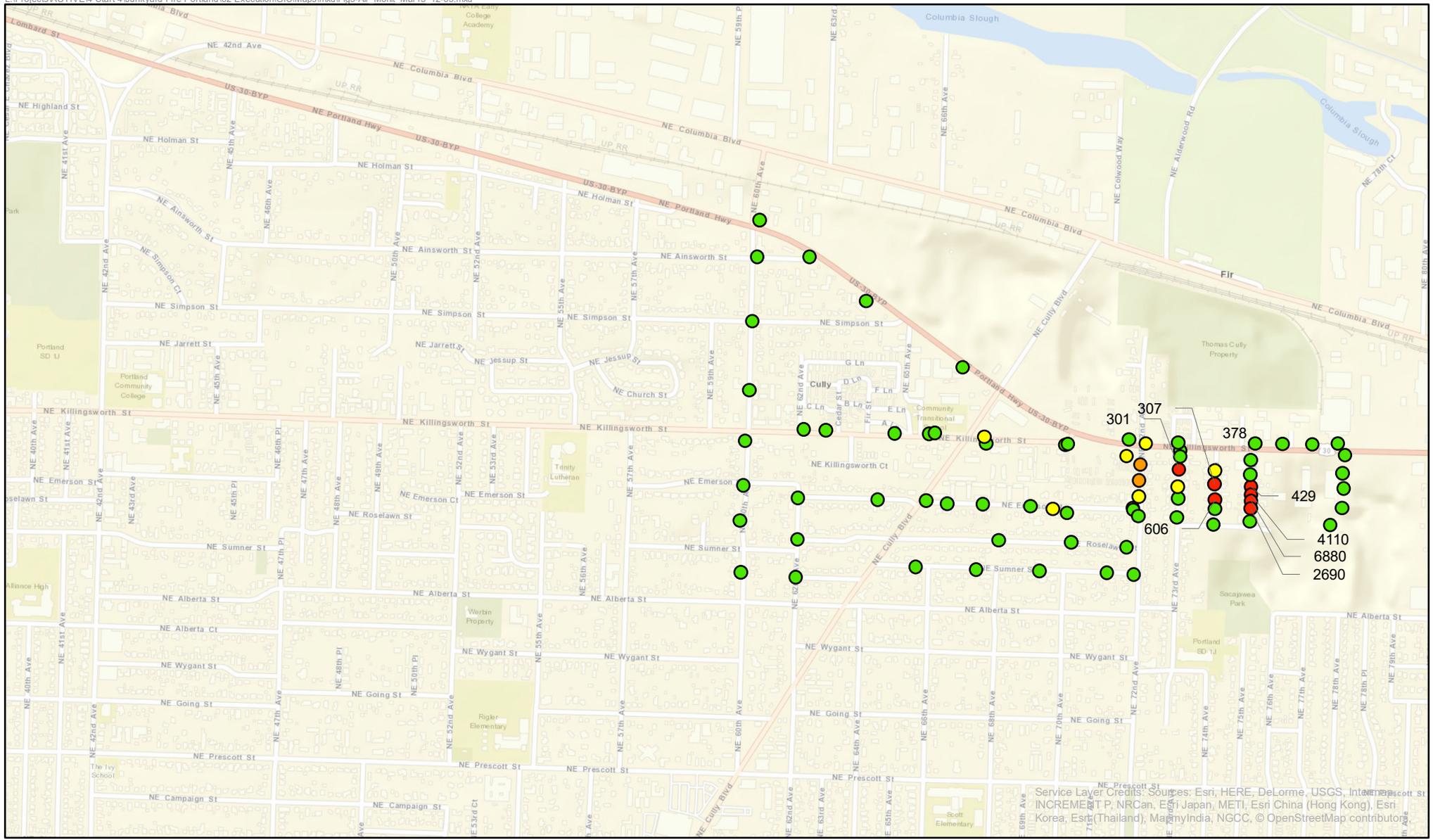
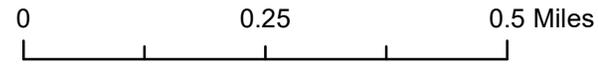


FIGURE 5
ROVING AIR MONITORING
TIME PERIOD: MARCH 13, 2018
12:13 AM - 05:13 AM
Portland, Oregon

- Legend**
- March 13: 12:13-05:13**
- 0 ug/m3
 - 0-35 ug/m3
 - 35-150 ug/m3
 - 150-250 ug/m3
 - 250-10,000 ug/m3



Date: 6/5/2018



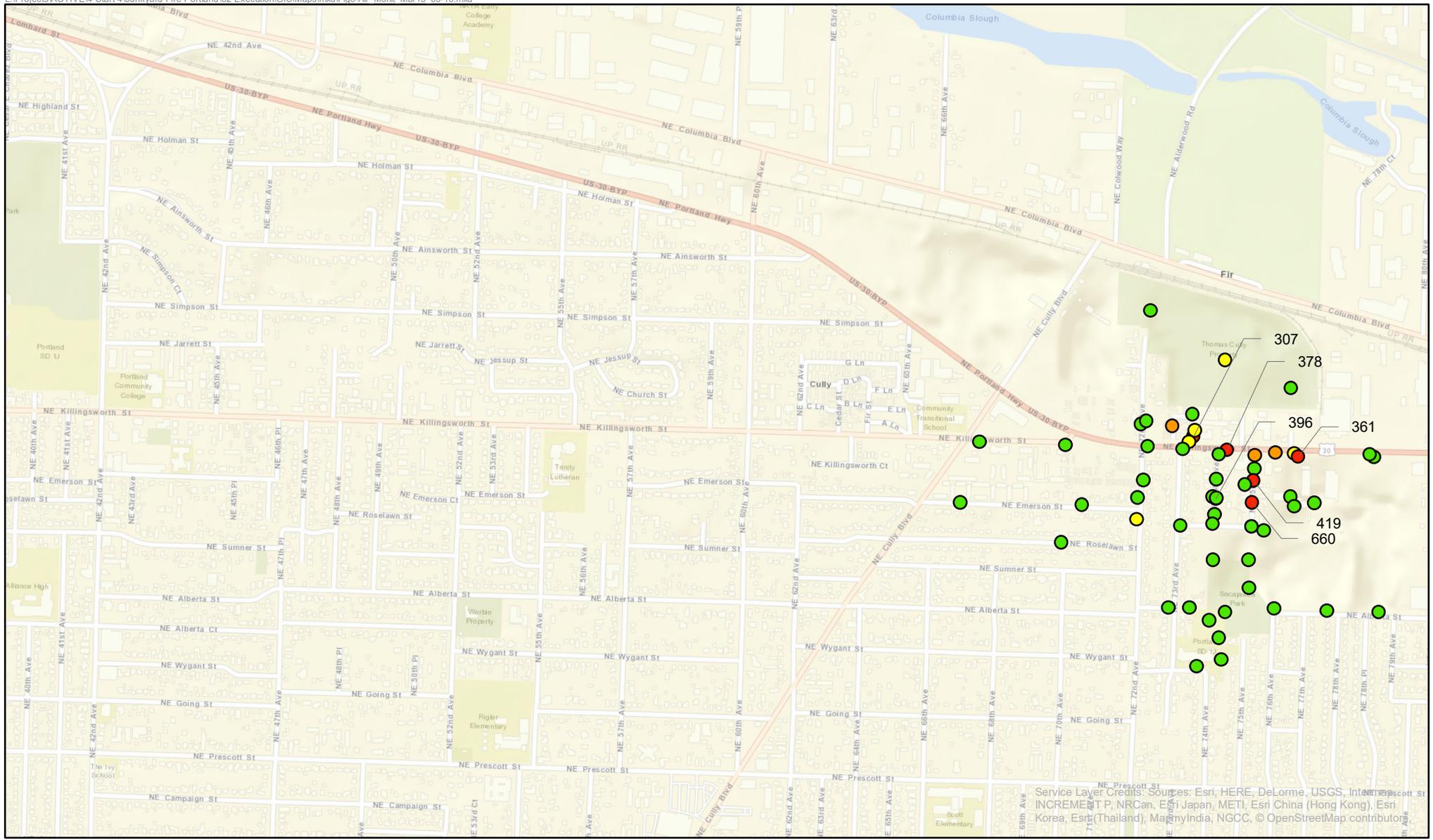
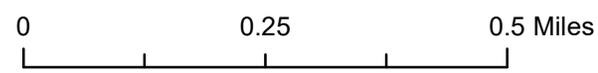


FIGURE 6
ROVING AIR MONITORING
TIME PERIOD: MARCH 13, 2018
5:13 AM - 10:13 AM
 Portland, Oregon

- Legend**
- March 13: 05:13-10:13**
- 0 ug/m3
 - 0-35 ug/m3
 - 35-150 ug/m3
 - 150-250 ug/m3
 - 250-10,000 ug/m3



Date: 6/5/2018



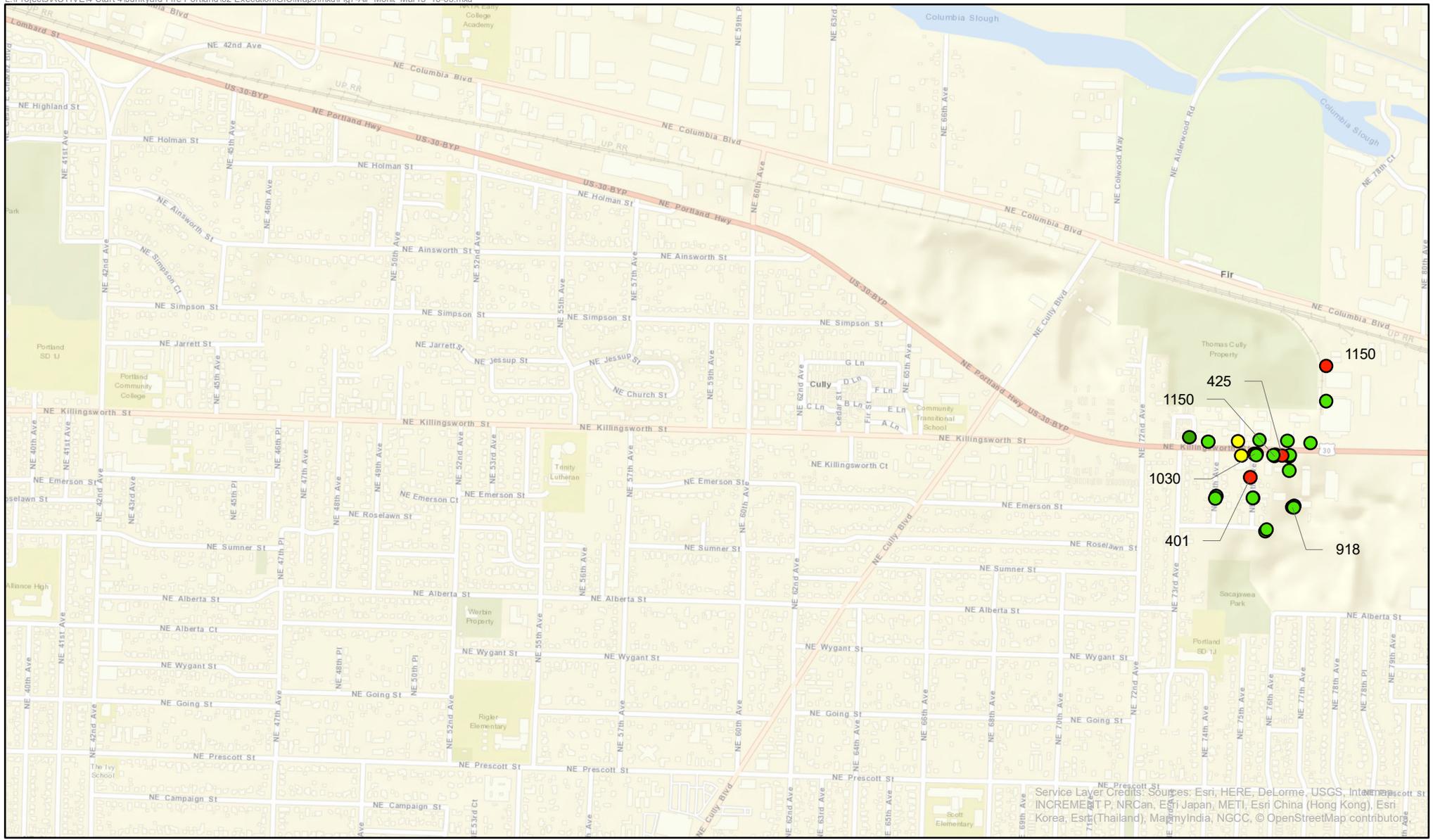
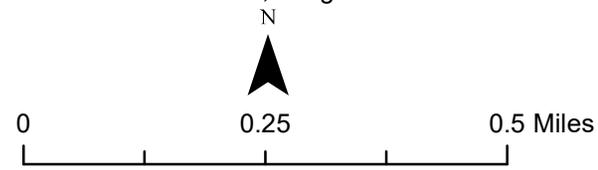


FIGURE 7
ROVING AIR MONITORING
TIME PERIOD: MARCH 13, 2018
10:13 AM - 3:13 PM
Portland, Oregon



Date: 6/5/2018



- Legend**
- March 13: 10:13-3:13**
- 0 ug/m3
 - 0-35 ug/m3
 - 35-150 ug/m3
 - 150-250 ug/m3
 - 250-10,000 ug/m3

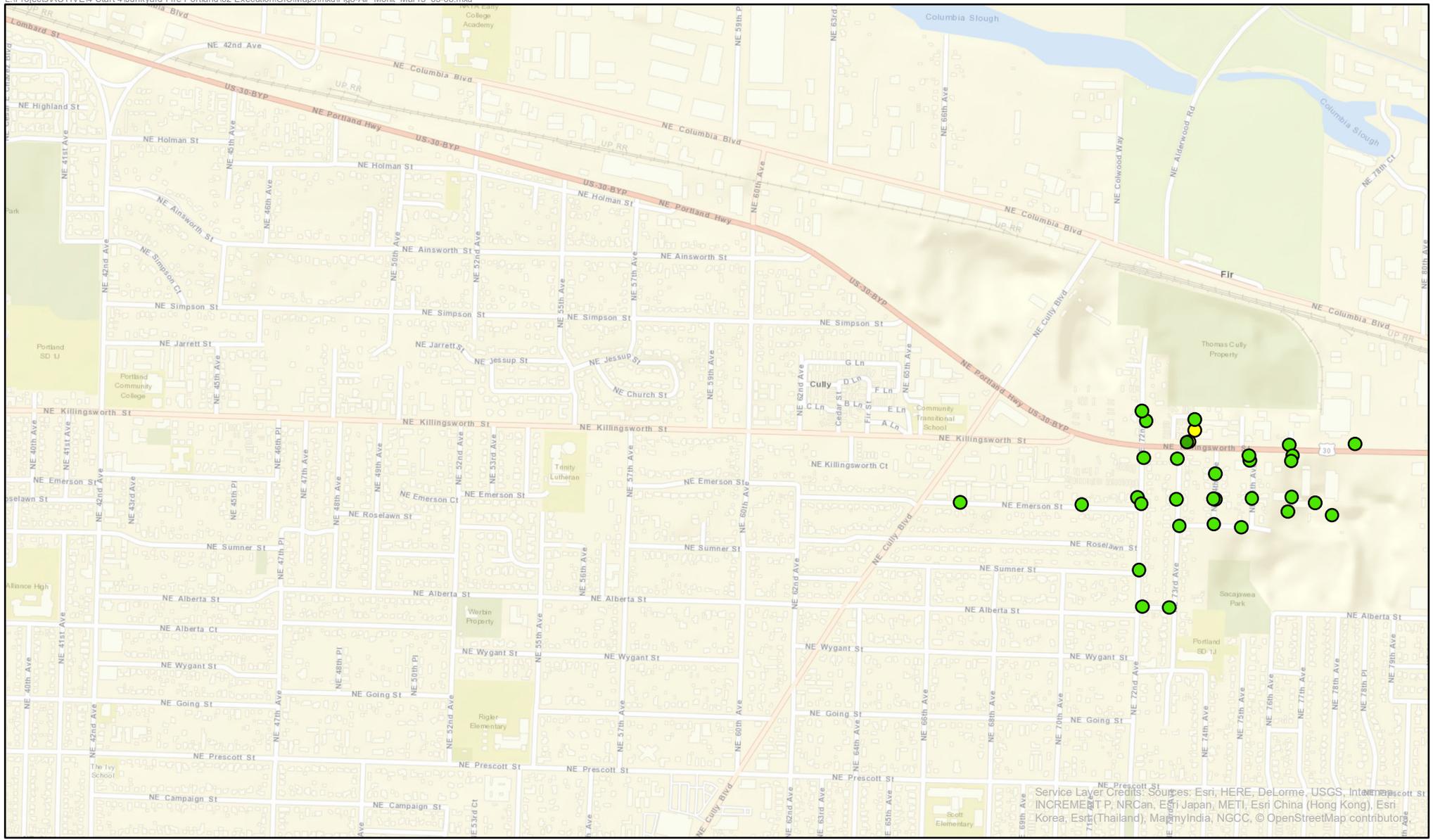
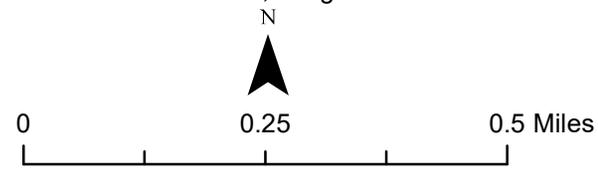


FIGURE 8
ROVING AIR MONITORING
TIME PERIOD: MARCH 13, 2018
3:13 PM - 8:13 PM
Portland, Oregon

- Legend**
- March 13: 3:13-8:13**
- 0 ug/m3
 - 0-35 ug/m3
 - 35-150 ug/m3
 - 150-250 ug/m3
 - 250-10,000 ug/m3



Date: 6/5/2018



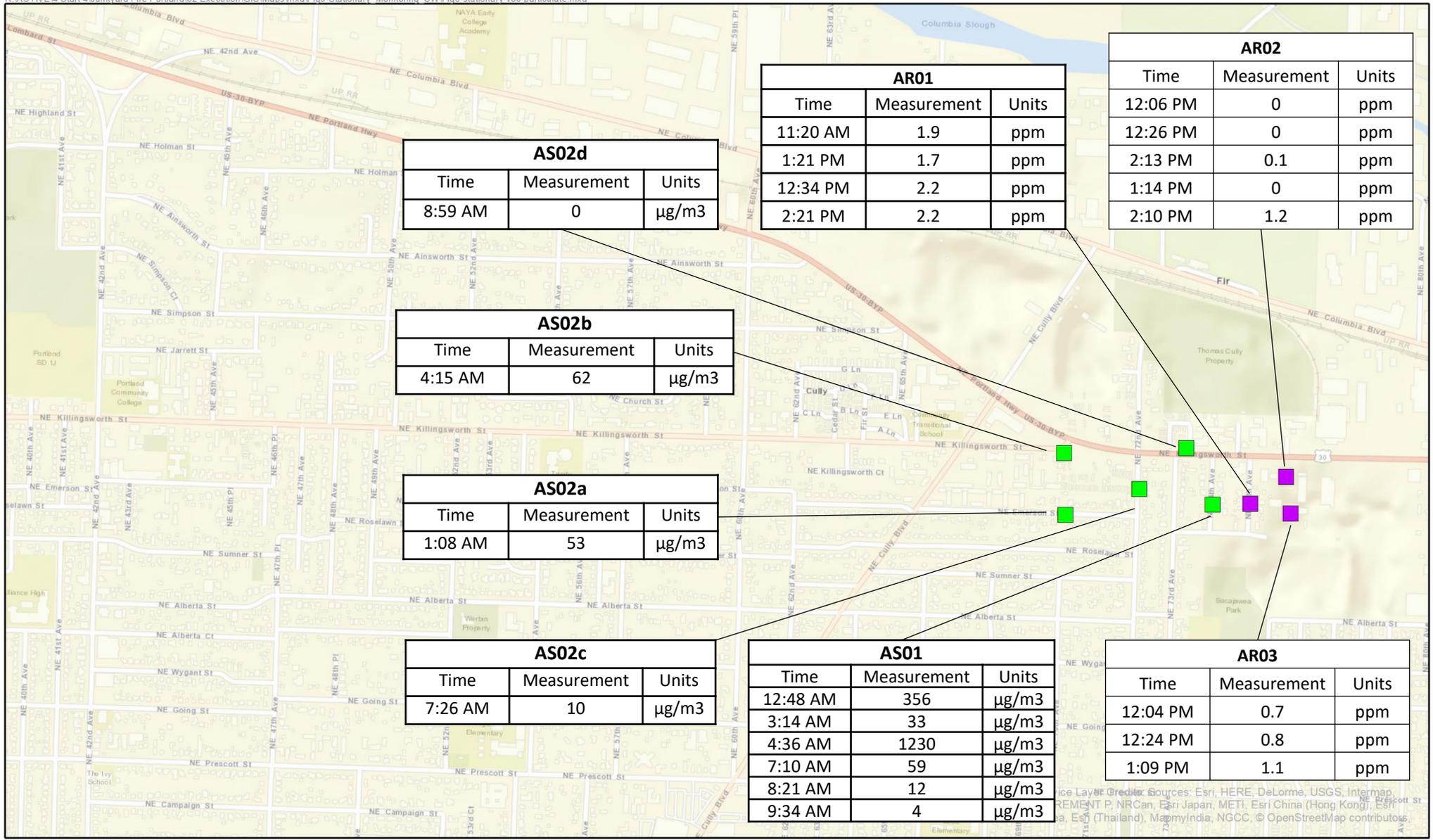
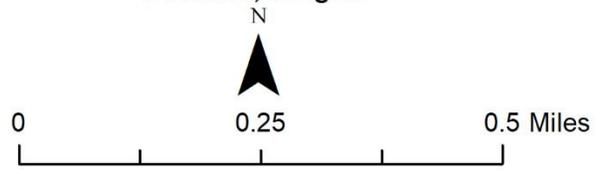


FIGURE 9
PARTICULATE TIME WEIGHTED AVERAGE
& VOC AIR MONITORING
MARCH 13, 2018
Portland, Oregon



Date: 6/4/2018

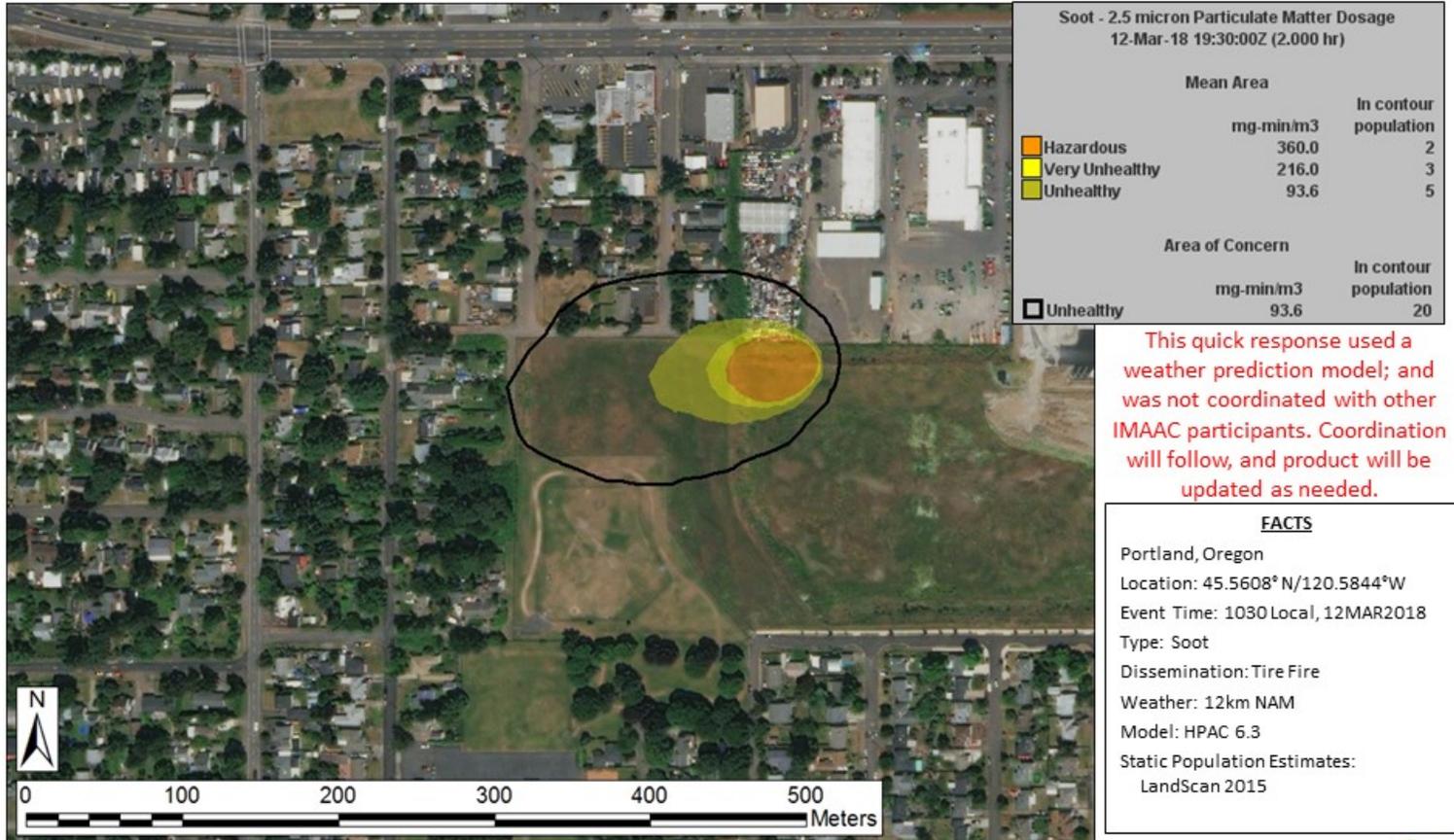


- Legend**
- VOC Monitoring
 - 1 Hour TWA Particulate Monitoring



UNCLASSIFIED//FOR OFFICIAL USE ONLY (FOUO)

Soot Surface Dosage – 1930 Z – Initial Response



12MAR2018 2000Z

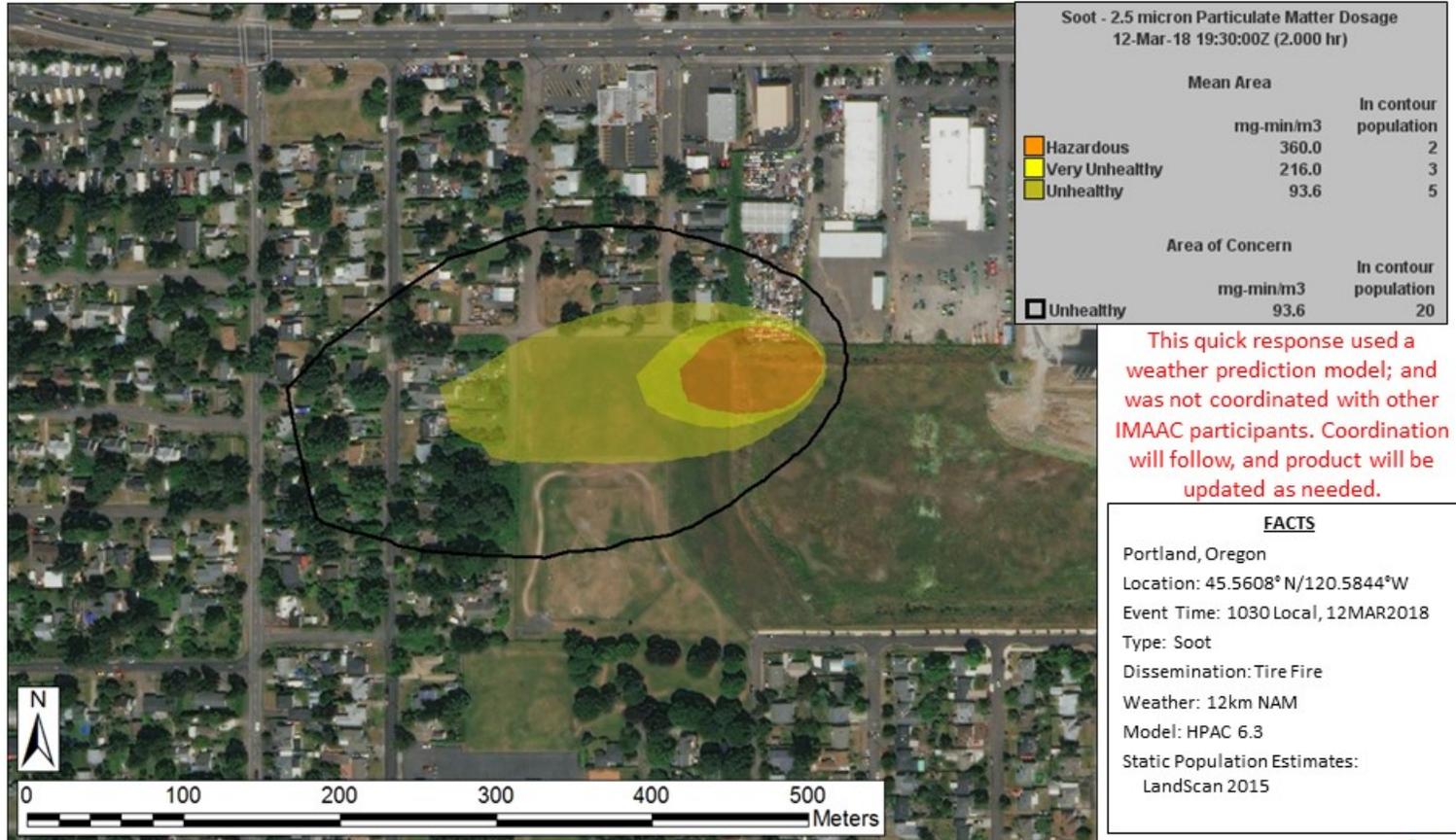
UNCLASSIFIED//FOR OFFICIAL USE ONLY (FOUO)

4



UNCLASSIFIED//FOR OFFICIAL USE ONLY (FOUO)

Soot Surface Dosage – 2130 Z – Initial Response



12MAR2018 2000Z

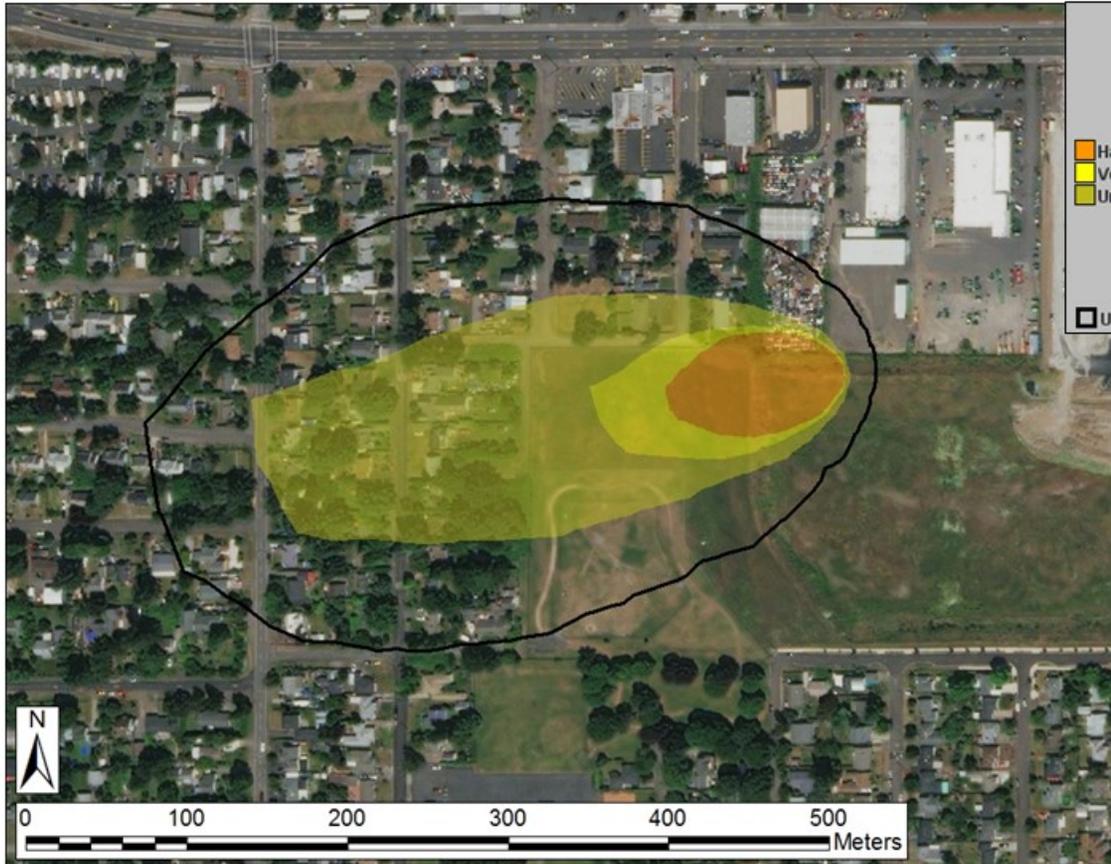
UNCLASSIFIED//FOR OFFICIAL USE ONLY (FOUO)

7



UNCLASSIFIED//FOR OFFICIAL USE ONLY (FOUO)

Soot Surface Dosage – 2330 Z – Initial Response



Soot - 2.5 micron Particulate Matter Dosage
12-Mar-18 23:30:00Z (6.000 hr)

Mean Area		In contour population
	mg-min/m ³	
■ Hazardous	360.0	5
■ Very Unhealthy	216.0	9
■ Unhealthy	93.6	38

Area of Concern		In contour population
	mg-min/m ³	
 Unhealthy	93.6	86

This quick response used a weather prediction model; and was not coordinated with other IMAAC participants. Coordination will follow, and product will be updated as needed.

FACTS
 Portland, Oregon
 Location: 45.5608° N/120.5844° W
 Event Time: 1030 Local, 12MAR2018
 Type: Soot
 Dissemination: Tire Fire
 Weather: 12km NAM
 Model: HPAC 6.3
 Static Population Estimates:
 LandScan 2015

12MAR2018 2000Z

UNCLASSIFIED//FOR OFFICIAL USE ONLY (FOUO)

10

JUNKYARD FIRE RESPONSE
Portland, Oregon

TO Number: TO-21-T2-SS11
Photographed by: Maren Fulton (MF), Seth Wing (SW)



Photo 1 EPA and Portland Fire and Rescue observing firefighting activities at site.

Direction: South Date: 3/12/18 Time: 13:25 Taken by: MF



Photo 2 Firefighting hoses, and foam from firefighting activity runoff.

Direction: Southwest Date: 3/12/18 Time: 13:26 Taken by: MF



Photo 3 Portland Fire and Rescue observing firefighting activities at site.

Direction: South Date: 3/12/18 Time: 13:26 Taken by: MF



Photo 4 Staged totes with unknown liquid contents, located at NW Metals site, near fire.

Direction: Southwest Date: 3/12/18 Time: 13:26 Taken by: MF

JUNKYARD FIRE RESPONSE
Portland, Oregon

TO Number: TO-21-T2-SS11
Photographed by: Maren Fulton (MF), Seth Wing (SW)



Photo 5 Firefighting activities at site.

Direction: West Date: 3/12/18 Time: 13:27 Taken by: MF



Photo 6 Smoldering junkyard contents, firefighting water stream, and firefighting foam runoff.

Direction: Southwest Date: 3/12/18 Time: 13:27 Taken by: MF



Photo 7 Fire suppression activities, and tire stockpile located against NW Metals shop building.

Direction: West Date: 3/12/18 Time: 13:28 Taken by: MF



Photo 8 Smoldering junkyard contents, firefighting water stream, and firefighting foam runoff.

Direction: Southwest Date: 3/12/18 Time: 13:28 Taken by: MF

JUNKYARD FIRE RESPONSE
Portland, Oregon

TO Number: TO-21-T2-SS11
Photographed by: Maren Fulton (MF), Seth Wing (SW)



Photo 9 Firefighting activities at site, and foam runoff.

Direction: West Date: 3/12/18 Time: 13:31 Taken by: MF



Photo 10 Firefighting activities at site, and pooled runoff on Sunbelt Rentals property, with accumulated foam.

Direction: Northwest Date: 3/12/18 Time: 13:34 Taken by: MF



Photo 11 Firefighting activities at site, and pooled runoff on Sunbelt Rentals property, with accumulated foam.

Direction: West Date: 3/12/18 Time: 13:34 Taken by: MF



Photo 12 Ditch/waterway located on south side of Sunbelt Rentals property, with pooled firefighting runoff.

Direction: West Date: 3/12/18 Time: 13:35 Taken by: MF

JUNKYARD FIRE RESPONSE
Portland, Oregon



Photo 13 Ansilite® aqueous film-forming foam concentrate (AFFF) for 3% proportioning, used by Portland Fire.

Direction: Down Date: 3/12/18 Time: 13:40 Taken by: MF

TO Number: TO-21-T2-SS11
Photographed by: Maren Fulton (MF), Seth Wing (SW)



Photo 14 Firefighting activities, and firefighting foam runoff.

Direction: West Date: 3/12/18 Time: 13:53 Taken by: MF



Photo 15 EPA conducting media interview.

Direction: East Date: 3/12/18 Time: 15:05 Taken by: MF



Photo 16 Smoke plume across NE 75th Ave.

Direction: South Date: 3/12/18 Time: 15:08 Taken by: MF

JUNKYARD FIRE RESPONSE
 Portland, Oregon

TO Number: TO-21-T2-SS11
 Photographed by: Maren Fulton (MF), Seth Wing (SW)



Photo 17 Light Water™ ATC Plus™, the second brand of firefighting AFFF, used by Portland Fire.

Direction: Down Date: 3/12/18 Time: 16:03 Taken by: MF



Photo 18 Portland Fire crew prepping Light Water™ ATC Plus™ for inline injection with firefighting stream.

Direction: Northwest Date: 3/12/18 Time: 16:03 Taken by: MF



Photo 19 EPA collecting firefighting effluent from midstream of runoff.

Direction: South Date: 3/12/18 Time: 16:11 Taken by: MF



Photo 20 EPA collecting firefighting effluent from midstream of runoff.

Direction: West Date: 3/12/18 Time: 16:11 Taken by: MF

JUNKYARD FIRE RESPONSE
Portland, Oregon



Photo 21 Smoldering junkyard contents, and firefighting water stream.

Direction: West Date: 3/12/18 Time: 16:18 Taken by: MF

TO Number: TO-21-T2-SS11
Photographed by: Maren Fulton (MF), Seth Wing (SW)



Photo 22 Secured DustTrak air monitoring station, located at NE Emerson and NE 70th Ave.

Direction: West Date: 3/13/18 Time: 03:38 Taken by: MF



Photo 23 Looking south towards site from Thomas Cully Park.

Direction: South Date: 3/13/18 Time: 07:40 Taken by: MF

JUNKYARD FIRE RESPONSE
Portland, Oregon

TO Number: TO-21-T2-SS11
Photographed by: Maren Fulton (MF), Seth Wing (SW)



Photo 24 NW Metals sign off Killingsworth Blvd.

Direction: Southeast Date: 3/13/18 Time: 08:49 Taken by: MF



Photo 25 Conducting air quality monitoring along NE Emerson St.

Direction: East Date: 3/13/18 Time: 09:45 Taken by: MF



Photo 26 Looking northeast towards site.

Direction: Northeast Date: 3/13/18 Time: 09:48 Taken by: MF

JUNKYARD FIRE RESPONSE
Portland, Oregon

TO Number: TO-21-T2-SS11
Photographed by: Maren Fulton (MF), Seth Wing (SW)



Photo 27 Burned residences located west of junkyard.

Direction: North Date: 3/13/18 Time: 09:48 Taken by: MF



Photo 28 Looking east along line of sight of ditch/waterway along south boundary of junkyard and Sunbelt Rentals.

Direction: East Date: 3/13/18 Time: 09:48 Taken by: MF

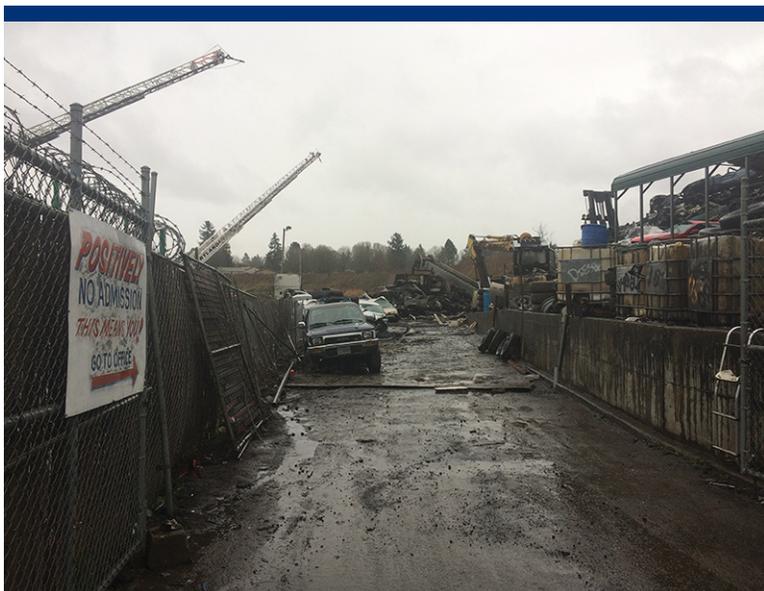


Photo 29 Looking along unburned, staged totes, with unknown liquid contents, located at NW Metals site.

Direction: South Date: 3/13/18 Time: 10:05 Taken by: MF



Photo 30 Unburned, staged totes, with unknown liquid contents, located at NW Metals site.

Direction: Southwest Date: 3/13/18 Time: 10:05 Taken by: MF

JUNKYARD FIRE RESPONSE
Portland, Oregon



Photo 31 NW Metals owner/operator working excavator to stage cars to access hot spots for fire crew.

Direction: West Date: 3/13/18 Time: 10:10 Taken by: MF



Photo 33 Fire crew spraying hot spots uncovered by NW Metals equipment operator.

Direction: West Date: 3/13/18 Time: 12:04 Taken by: MF

TO Number: TO-21-T2-SS11
Photographed by: Maren Fulton (MF), Seth Wing (SW)



Photo 32 Portland Fire truck and boom.

Direction: NA Date: 3/13/18 Time: 10:11 Taken by: SW



Photo 34 Fire crew spraying hot spots uncovered by NW Metals equipment operator.

Direction: West Date: 3/13/18 Time: 13:23 Taken by: MF

JUNKYARD FIRE RESPONSE
Portland, Oregon

TO Number: TO-21-T2-SS11
Photographed by: Maren Fulton (MF), Seth Wing (SW)



Photo 35 Sorbent boom placed in firefighting runoff, and pooled water in southwest corner of Sunbelt Rentals property.

Direction: Southwest Date: 3/13/18 Time: 13:47 Taken by: MF



Photo 36 Firefighting activities suppressing hot spots.

Direction: West Date: 3/13/18 Time: 13:49 Taken by: MF



Photo 37 Media crews staging for 2pm media interview.

Direction: Northwest Date: 3/13/18 Time: 15:02 Taken by: MF



Photo 38 EPA discussing air monitoring activities during media appearance.

Direction: Northwest Date: 3/13/18 Time: 15:07 Taken by: MF