

## Mayflower Pipeline Rupture

Volatile Organics												
Chemical	Units	WS-003	WS-002	WS-BKG-001	WS-005	WS-001	WS-007	WS-006	WS-008	WS-004	Eco SLs <sup>(1)</sup>	Drinking Water SLs <sup>(2)</sup>
Chloroform	ug/l	<0.27	<0.27	<0.27	<0.27	<0.27	<0.27	<0.27	1.11	<0.27	1.8	80
Benzene	ug/l	<0.66	<0.66	<0.66	<0.66	<0.66	<0.66	<0.66	1.8	<0.66	46	5
Bromodichloromethane	ug/l	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	0.659	<0.65	NA	80
Toluene	ug/l	<0.57	0.559	<0.57	<0.57	<0.57	0.578	<0.57	1.84	<0.57	2.0	1000
Ethylbenzene	ug/l	<0.51	0.523	<0.51	<0.51	<0.51	<0.51	<0.51	0.879	<0.51	7.3	700
m,p-Xylene	ug/l	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	<1.2	2.6	<1.2	NA	NA
o-Xylene	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	2.12	0.501	NA	NA
Total Zylenes	ug/l	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	4.72	0.501	13	1000
Oil and Grease	mg/l	<2.5	3.3	3.5	3.5	3.1	2.5	2.7	10	2.7	NA	NA
Semi-volatiles												
Benzyl alcohol	ug/l	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	0.775	8.6	1500
Acetophenone	ug/l	<0.1	<0.1	<0.1	<0.1	<0.1	0.113	<0.1	<1	0.12	NA	1500
Di-n-butyl phthalate	ug/l	<0.2	<0.2	<0.2	<0.2	<0.2	1.224	<0.2	<2	0.519	9.4	670

Dissolved Metals												
Chemical	Units	WS-003	WS-002	WS-BKG-001	WS-005	WS-001	WS-007	WS-006	WS-008	WS-004	Eco SLs <sup>(1)</sup>	Drinking Water SLs <sup>(2)</sup>
Aluminum	ug/l	41.1	42.4	<20	71	108	162	41.7	91.4	160	5.0	16000
Antimony	ug/l	<5	<5	<5	<5	<5	<5	<5	<5	<5	30	6
Arsenic	ug/l	<0.5	<0.5	<0.5	0.57	0.66	0.98	0.98	0.63	0.95	5.0	10
Barium	ug/l	14.1	12.6	34.3	10.5	12.7	14.6	12	17.5	14	3.9	2000
Beryllium	ug/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.53	NA
Boron	ug/l	12.3	10.3	8.35	11.6	11.3	9.56	12.8	9.58	8.44	1.6	3100
Cadmium	ug/l	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.017	5
Calcium	mg/l	2.86	11.1	6.17	3.25	3.5	11.2	4.63	11.4	10.4	116	NA
Chromium	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	2.0	100
Cobalt	ug/l	<0.5	<0.5	1.01	<0.5	<0.5	<0.5	<0.5	1.25	<0.5	3.0	4.7
Copper	ug/l	0.62	0.55	0.68	0.73	0.96	1.4	0.69	0.69	1.44	0.23	1300
Iron	ug/l	152	155	76.4	258	340	520	307	272	516	158	11000
Lead	ug/l	<0.3	<0.3	<0.3	<0.3	<0.3	0.36	<0.3	<0.3	0.37	1.0	15
Magnesium	mg/l	1.38	1.3	1.84	1.42	1.43	1.38	1.5	1.96	1.36	82	NA
Manganese	ug/l	82.8	54.3	222	10.4	113	75.2	138	313	81.5	80	320
Nickel	ug/l	0.67	0.64	2.15	0.68	1.16	1.48	0.71	2.25	1.46	25	300
Potassium	mg/l	1.65	1.5	0.73	1.64	1.56	1.38	1.53	1.08	1.43	53	NA
Selenium	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.0	50
Silicon Dioxide	mg/l	2.06	2.57	7.49	1.39	2.85	4.17	1.92	8.46	4.22	NA	NA
Silver	ug/l	<0.5	<0.5	<0.5	<5	<0.5	<0.5	<0.5	<0.5	<0.5	0.12	71
Sodium	mg/l	5.11	4.39	5.51	5.04	4.72	3.62	5.93	4.14	3.63	680	NA
Thallium	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.8	2
Vanadium	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	0.65	<0.5	<0.5	0.57	19	78
Zinc	ug/l	1.77	2.1	57.8	4.01	5.73	22.8	4.92	10.7	8.1	30	4700

Total Metals												
Chemical	Units	WS-003	WS-002	WS-BKG-001	WS-005	WS-001	WS-007	WS-006	WS-008	WS-004	Eco SLs <sup>(1)</sup>	Drinking Water SLs <sup>(2)</sup>
Aluminum	ug/l	304	209	361	211	854	1400	293	1950	691	5.0	16000
Antimony	ug/l	<10	<10	<10	<10	<10	<10	<10	<10	<10	30	6
Arsenic	ug/l	<1	<1	<1	<1	1.2	1.4	1.52	1.12	1.83	5.0	10
Barium	ug/l	18	16.2	43.5	17.1	19.3	23.4	16.2	37.1	33	3.9	2000
Beryllium	ug/l	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.53	NA
Boron	ug/l	<25	<25	<25	<25	<25	<25	<25	<25	<25	1.6	3100
Cadmium	ug/l	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.017	5
Calcium	mg/l	10.4	9.16	8.4	4.84	4.85	5.72	5.89	6.06	4.28	116	NA
Chromium	ug/l	<1	<1	<1	<1	1.62	1.4	<1	2.94	1.02	2.0	100
Cobalt	ug/l	<1	<1	1.2	<1	<1	<1	<1	1.96	1.22	3.0	4.7
Copper	ug/l	<1	<1	1.79	1.25	1.72	2.07	1.05	1.98	3.69	0.23	1300
Iron	ug/l	628	539	380	897	1250	1820	1170	1850	2040	158	11000
Lead	ug/l	<1	<1	<1	<1	1.42	1.82	<1	2.62	6.94	1.0	15
Magnesium	mg/l	1.45	1.37	1.96	1.48	1.55	1.54	1.58	2.2	1.71	82	NA
Manganese	ug/l	144	118	239	163	156	95.6	242	316	284	80	320
Nickel	ug/l	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	3.5	2.79	25	300
Potassium	mg/l	1.76	1.6	<1	1.78	1.96	1.6	1.72	1.59	2.11	53	NA
Selenium	ug/l	<2	<2	<2	<2	<2	<2	<2	<2	<2	1.0	50
Silver	ug/l	<5	<5	<5	<5	<5	<5	<5	<5	<5	0.12	71
Sodium	mg/l	5.19	4.48	5.74	5.13	4.89	3.68	5.94	4.13	3.82	680	NA
Thallium	ug/l	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	0.8	2
Vanadium	ug/l	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	2.95	<2.5	19	78
Zinc	ug/l	<3	<3	58.6	<3	9.04	8.58	3.04	14	43	30	4700

(1) Savannah River National Laboratory - Ecological Screening Values for Surface Water (2005)

(2) Regional Screening Level Summary Table November 2012

Above Ecological Screening Level