

Site: Exxon Oil Pipeline Release
Location: Mayflower, AR
Collection Date: 4/22/2013
Report Date: 5/2/2013
Media: Surface Water Samples

Dissolved Metals													
Contaminant	Units	WS-BKG-001	WS-001	WS-002	WS-003	WS-004	WS-006	WS-007	WS-008	WS-019	WS-005	Eco SLs ⁽¹⁾	Drinking Water SLs ⁽²⁾
Aluminum	ug/L	<20	206	57.2	64.5	460	196	638	58.7	315	62	5.0	16,000 *
Antimony	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	30	6.0
Arsenic	ug/L	<0.5	0.85	0.54	0.55	1.98	1.61	1.89	0.84	2.96	0.57	5.0	10
Barium	ug/L	31	11.8	11.4	11.6	21.8	5.44	21.5	14.2	59.4	7.75	3.9	2,000
Beryllium	ug/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.53	4.0
Boron	ug/L	8.96	11.2	10.5	10.9	9.35	11.6	10.3	8.31	10.4	11	1.6	3,100
Cadmium	ug/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.017	5.0
Calcium	mg/L	6.58	3.09	2.84	2.84	3.51	3.02	3.11	5.08	10.5	2.94	116	NA
Chromium	ug/L	<0.5	<0.5	<0.5	<0.5	0.57	<0.5	0.71	<0.5	0.52	<0.5	2.0	100
Cobalt	ug/L	<0.5	<0.5	<0.5	<0.5	3.32	<0.5	2.92	1.41	1.72	<0.5	3.0	4.7 *
Copper	ug/L	<0.5	0.94	0.76	0.77	2.06	1.14	2.18	4.63	1.56	0.78	0.23	1300
Iron	ug/L	33.7	367	181	173	387	347	457	185	355	214	158	11,000 *
Lead	ug/L	<0.3	0.32	<0.3	<0.3	0.4	<0.3	0.46	<0.3	0.63	<0.3	1.0	15
Magnesium	mg/L	1.79	1.37	1.33	1.33	974	1.33	1.29	1.91	2.81	1.35	82	NA
Manganese	ug/L	104	248	64.6	52.3	1.39	133	702	400	2780	33.6	80	320 *
Nickel	ug/L	2.05	1.12	0.87	0.87	2.74	0.91	2.68	1.95	3.01	0.94	25	300 *
Potassium	mg/L	0.786	1.75	1.71	1.74	2.13	1.76	2.19	1.22	3.72	1.84	53	NA
Selenium	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.0	50
Silicon Dioxide	mg/L	8.82	2.09	1	1.01	6.1	1.86	6.39	6.89	6.94	0.952	NA	NA
Silver	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.12	71 *
Sodium	mg/L	5.15	4.36	4.1	4.26	3.02	4.44	2.97	4.09	2.6	4.3	680	NA
Thallium	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.8	2.0
Vanadium	ug/L	<0.5	0.51	<0.5	<0.5	1.09	<0.5	1.34	<0.5	1.95	<0.5	19	78 *
Zinc	ug/L	55.1	4.26	1.29	1.38	5.02	1.3	9.63	8.77	7.52	2.73	30	4,700 *

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Total Metals													
Contaminant	Units	WS-BKG-001	WS-001	WS-002	WS-003	WS-004	WS-006	WS-007	WS-008	WS-019	WS-005	Eco SLs ⁽¹⁾	Drinking Water SLs ⁽²⁾
Aluminum	ug/L	1270	1640	258	326	12400	1080	13700	2910	9300	385	5.0	16,000 *
Antimony	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	30	6.0
Arsenic	ug/L	1.41	1.54	<1	<1	3.7	2.12	3.77	2.14	4.38	<1	5.0	10
Barium	ug/L	130	25.8	18.4	16.8	138	25.7	140	37.4	293	13.9	3.9	2,000
Beryllium	ug/L	<0.5	<0.5	<0.5	<0.5	1.06	<0.5	1.11	<0.5	0.87	<0.5	0.53	4.0
Boron	ug/L	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	1.6	3,100
Cadmium	ug/L	1.05	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.017	5.0
Calcium	mg/L	8.16	3.33	3.2	2.95	5.13	3.07	4.77	5.12	17.4	3.12	116	NA
Chromium	ug/L	1.24	1.22	<1	<1	7.11	<1	7.9	4.45	5.86	<1	2.0	100
Cobalt	ug/L	15.3	1.1	<1	<1	8.84	<1	8.76	3.11	8.14	<1	3.0	4.7 *
Copper	ug/L	5.97	2.59	1.58	1.2	6.59	1.53	6.95	29.7	9.97	1.32	0.23	1,300
Iron	ug/L	1890	2280	659	603	12000	1540	13200	4820	8350	1020	158	11,000 *
Lead	ug/L	4.42	2.8	<1	<1	18.6	1.5	19.4	2.34	17.1	<1	1.0	15
Magnesium	mg/L	2.19	1.52	1.44	1.38	2.71	1.49	2.72	2.36	4.2	1.51	82	NA
Manganese	ug/L	4610	383	207	159	1710	289	1560	519	9690	164	80	320 *
Nickel	ug/L	8.85	<2.5	<2.5	<2.5	9.62	<2.5	10.4	7.48	11.7	<2.5	25	300 *
Potassium	mg/L	1.51	2.05	2.02	1.98	2.65	1.77	2.63	1.87	4.29	1.88	53	NA
Selenium	ug/L	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	1.0	50
Silver	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	0.12	71 *
Sodium	mg/L	5.06	3.88	3.76	3.76	2.53	3.76	2.51	3.58	2.3	3.86	680	NA
Thallium	ug/L	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	0.8	2.0
Vanadium	ug/L	<2.5	<2.5	<2.5	<2.5	11.6	<2.5	12.6	3.48	9.31	<2.5	19	78 *
Zinc	ug/L	362	10.1	6.04	<3	36.3	5.52	35.2	12.7	56.3	4.14	30	4,700 *

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Oil & Grease													
Contaminant	Units	WS-BKG-001	WS-001	WS-002	WS-003	WS-004	WS-006	WS-007	WS-008	WS-019	WS-005	Eco SLs ⁽¹⁾	Drinking Water SLs ⁽²⁾
Oil & Grease	mg/L	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	0.00001	NA

Semi-Volatile Organic Compounds (SVOCs)													
Contaminant	Units	WS-BKG-001	WS-001	WS-002	WS-003	WS-004	WS-006	WS-007	WS-008	WS-019	WS-005	Eco SLs ⁽¹⁾	Drinking Water SLs ⁽²⁾
Benzyl alcohol	ug/L	1.74	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	<0.16	8.6	1500 *
Acetophenone	ug/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.11	0.11	<0.1	<0.1	NA	1500 *
4-Methylphenol (p-Cresol)	ug/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	NA	1400 *
Butyl benzyl phthalate	ug/L	0.414	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	0.426	<0.3	NA	14 *

Volatile Organic Compounds (VOCs)													
Contaminant	Units	WS-BKG-001	WS-001	WS-002	WS-003	WS-004	WS-006	WS-007	WS-008	WS-019	WS-005	Eco SLs ⁽¹⁾	Drinking Water SLs ⁽²⁾
Chloroform	ug/L	<0.27	<0.27	<0.27	<0.27	<0.27	<0.27	<0.27	1.38	<0.27	<0.27	1.8	80
Bromodichloromethane	ug/L	<0.66	<0.65	<0.65	<0.65	<0.65	<0.65	<0.65	0.73	<0.65	<0.66	NA	80
Benzene	ug/L	<0.66	<0.66	<0.66	<0.66	<0.66	<0.66	<0.66	<0.66	<0.66	<0.66	46	5.0
Toluene	ug/L	<0.57	<0.57	<0.57	<0.57	<0.57	<0.57	<0.57	0.751	<0.57	<0.57	2.0	1,000
Ethylbenzene	ug/L	<0.51	<0.51	0.52	0.51	<0.51	<0.51	<0.51	0.557	<0.51	<0.51	7.3	700
Styrene	ug/L	1.07	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53	<0.53	72	100

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

(2) Regional Screening Level Summary Table November 2012

*MCL unavailable, tapwater screening level used

Exceeds Ecological Screening Level
Exceeds Regional Screening Level
Exceeds Ecological & Regional Screening Level