

Site:	Exxon Oil Pipeline Release
Location:	Mayflower, AR
Collection Date:	4/24/2013
Report Date:	5/6/2013
Media:	Surface Water Samples

		Dissolved Metals																	Eco SLs <sup>(1)</sup>	Drinking Water SLs <sup>(2)</sup>
Contaminant	Units	WS-017S	WS-017D	WS-016S	WS-016D	WS-015S	WS-015D	WS-014S	WS-014D	WS-013S	WS-013D	WS-011S	WS-011D	WS-012S	WS-012D	WS-010D	WS-018S	WS-018D		
Aluminum	ug/L	47.1	48.7	47.9	46.3	97.8	47.6	44.4	44.8	39.1	43.5	60.7	64.2	82	79	136	76.9	74.7	5.0	16,000 *
Antimony	ug/L	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	30	6.0
Arsenic	ug/L	0.68	0.68	0.57	0.57	0.56	0.59	0.59	0.6	0.55	0.56	0.58	0.58	0.65	0.66	0.79	0.6	0.6	5.0	10
Barium	ug/L	8.07	8.05	8.3	8.34	8.41	8.44	8.68	8.69	9.45	9.61	9.66	9.96	9.68	9.61	11.1	9.95	9.8	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	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.53	4.0
Boron	ug/L	15	14.9	12.6	12.8	12.8	13.4	12.5	12.8	10.2	10.2	12.1	12.4	12	11.9	12.3	12.4	12.2	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	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.017	5.0
Calcium	mg/L	3.75	3.77	3.21	3.24	3.25	3.22	3.34	3.36	2.48	2.49	3.03	3.02	3.03	2.98	3.13	3.1	3.08	116	NA
Chromium	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<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	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	3.0	4.7 *
Copper	ug/L	1.14	1.13	0.9	0.91	0.91	0.89	0.89	0.85	0.72	0.66	0.8	0.82	0.88	0.9	0.95	0.77	0.8	0.23	1300
Iron	ug/L	301	280	219	212	224	214	221	228	234	250	197	205	255	250	347	206	212	158	11,000 *
Lead	ug/L	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	<0.3	1.0	15
Magnesium	mg/L	1.61	1.46	1.17	1.18	1.19	1.19	1.22	1.23	1.05	1.05	1.14	1.14	1.13	1.13	1.13	1.14	1.15	82	NA
Manganese	ug/L	16.2	16.5	25.7	25.3	19.2	19.4	49	51.4	50	52.6	76.4	94.6	155	154	393	75.7	78.4	80	320 *
Nickel	ug/L	1.38	1.37	1.01	0.98	1.01	1.08	1.1	1.08	0.88	0.89	0.93	0.94	1.02	1.01	1.1	0.96	0.95	25	300 *
Potassium	mg/L	2.23	2.26	2.02	2.06	2.04	2.04	2.08	2.1	1.6	1.6	1.92	1.92	1.92	1.92	1.94	1.96	1.94	53	NA
Selenium	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.0	50
Silicon Dioxide	mg/L	1.24	1.04	0.667	0.852	0.965	0.733	0.827	1.07	1.26	1.55	0.888	1.11	1.35	1.33	1.83	0.961	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	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.12	71 *
Sodium	mg/L	6.39	6.38	5.34	5.4	5.31	5.37	5.37	5.44	3.81	3.83	4.9	4.98	4.79	4.79	4.95	5.01	4.98	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	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.8	2.0
Vanadium	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	19	78 *
Zinc	ug/L	1.86	2.72	2.14	2.01	1.79	1.97	1.9	2	1.7	3.71	3.29	2.53	2.19	2.32	3.24	3.62	2.64	30	4,700 *

(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

Site:	Exxon Oil Pipeline Release
Location:	Mayflower, AR
Collection Date:	4/24/2013
Report Date:	5/6/2013
Media:	Surface Water Samples

		Total Metals																	Eco SLs <sup>(1)</sup>	Drinking Water SLs <sup>(2)</sup>
Contaminant	Units	WS-017S	WS-017D	WS-016S	WS-016D	WS-015S	WS-015D	WS-014S	WS-014D	WS-013S	WS-013D	WS-011S	WS-011D	WS-012S	WS-012D	WS-010D	WS-018S	WS-018D		
Aluminum	ug/L	282	275	245	249	218	236	190	208	185	193	292	311	473	463	945	1260	338	5.0	16,000 *
Antimony	ug/L	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	30	6.0
Arsenic	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.23	1.72	<1	5.0	10
Barium	ug/L	10.1	10.1	10.4	10.6	10.3	10.4	10.4	10.4	10.8	10.8	12.3	15.2	12.6	12.6	17	27	13	3.9	2,000
Beryllium	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.53	4.0
Boron	ug/L	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	1.6	3,100
Cadmium	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	0.017	5.0
Calcium	mg/L	3.84	3.83	3.24	3.31	3.3	3.24	3.3	3.3	2.47	2.46	3.02	3.06	3.04	3.03	3.12	3.34	3.08	116	NA
Chromium	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.37	<1	2.0	100
Cobalt	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.29	<1	3.0	4.7 *
Copper	ug/L	1.33	1.38	1.1	1.1	1.05	1.09	1.04	1.02	<1	<1	1.01	1.04	1.12	1.08	1.43	2.32	1	0.23	1,300
Iron	ug/L	1420	1470	994	1010	1040	1180	1140	1040	746	936	700	1000	1360	1370	1550	3310	896	158	11,000 *
Lead	ug/L	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.38	4.51	<1	1.0	15
Magnesium	mg/L	1.71	1.71	1.55	1.57	1.26	1.55	1.41	1.58	1.11	1.1	1.22	1.35	1.36	1.36	1.56	1.8	1.53	82	NA
Manganese	ug/L	161	169	198	203	187	187	239	245	204	198	314	340	347	348	584	999	323	80	320 *
Nickel	ug/L	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	2.7	<2.5	25	300 *
Potassium	mg/L	2.22	2.23	2	2.01	1.98	1.97	1.98	1.98	1.54	1.52	1.83	1.85	1.88	1.87	1.91	1.99	1.86	53	NA
Selenium	ug/L	<2	<2	<2	<2	<2	<2	<2	<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	<5	<5	<5	<5	<5	<5	<5	0.12	71 *
Sodium	mg/L	6.05	6	5.13	5.19	5.02	5.01	4.99	5.06	3.63	3.56	4.64	4.6	4.52	4.52	4.66	4.68	4.7	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	<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	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	2.62	<2.5	19	78 *
Zinc	ug/L	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	4.28	9.44	<3	30	4,700 *

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(2) Regional Screening Level Summary Table November 2012

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Exceeds Ecological Screening Level

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Site:	Exxon Oil Pipeline Release
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Media:	Surface Water Samples

Oil & Grease																				
Contaminant	Units	WS-017S	WS-017D	WS-016S	WS-016D	WS-015S	WS-015D	WS-014S	WS-014D	WS-013S	WS-013D	WS-011S	WS-011D	WS-012S	WS-012D	WS-010D	WS-018S	WS-018D	Eco SLs <sup>(1)</sup>	Drinking Water SLs <sup>(2)</sup>
Oil & Grease	mg/L	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	0.00001	NA

Volatile Organic Compounds (VOCs)																				
Contaminant	Units	WS-017S	WS-017D	WS-016S	WS-016D	WS-015S	WS-015D	WS-014S	WS-014D	WS-013S	WS-013D	WS-011S	WS-011D	WS-012S	WS-012D	WS-010D	WS-018S	WS-018D	Eco SLs <sup>(1)</sup>	Drinking Water SLs <sup>(2)</sup>
Benzene	ug/L	<0.66	<0.66	<0.66	<0.66	<0.66	<0.66	<0.66	<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	<0.57	<0.57	<0.57	<0.57	<0.57	<0.57	<0.57	<0.57	<0.57	<0.57	2.0	1,000

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

(2) Regional Screening Level Summary Table November 2012

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