2013

Deep Water Horizon Spill Appendix 3

Appendix Table 3-1. Benchmark exceedances for organic contaminants in water, by sample, from the Deepwater Horizon oil spill, Gulf of Mexico, 2010

[Sample dates and times are in yyyy-MM-dd hh:mm ZZZ format, where ZZZ is time zone. Paired sample: 1 indicates that sample is in the paired sample dataset, 0 indicates it is not. Primary sample: 1 indicates that sample is in the primary sample dataset, 0 indicates it is not. Benchmark values are listed in*Tables 5A* , *5B* , and *5C* . **Abbreviations:** Ala., Alabama; AQL, aquatic life; BLM, Bureau of Land Management; BTEX, benzene, toluene, ethylbenzene, xylene; CDT, Central Daylight Time; dd, decimal degrees; E, estimated; EDT, Eastern Daylight Time; Fla., Florida; HH, human health; La., Louisiana; Map no., site number in*figure 1* ; Miss., Mississippi; mg/L, milligram per liter; no., number; NWR, National Wildlife Refuge; PAH, polycyclic aromatic hydrocarbon; post, post-landfall; pre, pre-landfall; sample no., sample number unique to this study; Tex., Texas; TOC, total organic carbon; $\sum TU_i$, sum of toxic units for i compounds; USEPA, U.S. Environmental Protection Agency; µg/L, microgram per liter; <, less than; –, not determined]

Map no.	Station identifier	Site name	Site latitude (dd)	Site longitude (dd)	USGS WSC
AL-1	301338088193500	West Dauphin Island, Ala.	30.227425	-88.326394	Ala.
AL-1	301338088193500	West Dauphin Island, Ala.	30.227425	-88.326394	Ala.
AL-1	301338088193500	West Dauphin Island, Ala.	30.227425	-88.326394	Ala.
AL-10	301341087495200	Fort Morgan BLM-3, Aa.	30.22825903	-87.8311016	Ala.
AL-10	301341087495200	Fort Morgan BLM-3, Aa.	30.22825903	-87.8311016	Ala.
AL-10	301341087495200	Fort Morgan BLM-3, Aa.	30.22825903	-87.8311016	Ala.
AL-10	301341087495200	Fort Morgan BLM-3, Aa.	30.22825903	-87.8311016	Ala.
AL-2	301455088110300	Dauphin Island, AL-2, Ala.	30.24881454	-88.1841677	Ala.
AL-2	301455088110300	Dauphin Island, AL-2, Ala.	30.24881454	-88.1841677	Ala.
AL-2	301455088110300	Dauphin Island, AL-2, Ala.	30.24881454	-88.1841677	Ala.
AL-2	301455088110300	Dauphin Island, AL-2, Ala.	30.24881454	-88.1841677	Ala.
AL-2	301455088110300	Dauphin Island, AL-2, Ala.	30.24881454	-88.1841677	Ala.
AL-2	301455088110300	Dauphin Island, AL-2, Ala.	30.24881454	-88.1841677	Ala.
AL-2	301455088110300	Dauphin Island, AL-2, Ala.	30.24881454	-88.1841677	Ala.
AL-3	301448088044000	Dauphin Island, AL-3, Ala.	30.24687027	-88.0777765	Ala.
AL-3	301448088044000	Dauphin Island, AL-3, Ala.	30.24687027	-88.0777765	Ala.
AL-3	301448088044000	Dauphin Island, AL-3, Ala.	30.24687027	-88.0777765	Ala.
AL-4	301329088003000	Fort Morgan, AL-4, Ala.	30.22492629	-88.0083304	Ala.
AL-4	301329088003000	Fort Morgan, AL-4, Ala.	30.22492629	-88.0083304	Ala.
AL-4	301329088003000	Fort Morgan, AL-4, Ala.	30.22492629	-88.0083304	Ala.
AL-5	301349087541600	Fort Morgan, AL-5, Ala.	30.23048145	-87.9044377	Ala.

Map no.	Station identifier	Site name	Site latitude (dd)	Site longitude (dd)	USGS WSC
AL-5	301349087541600	Fort Morgan, AL-5, Ala.	30.23048145	-87.9044377	Ala.
AL-5	301349087541600	Fort Morgan, AL-5, Ala.	30.23048145	-87.9044377	Ala.
AL-6	301428087434900	Gulf Shores, Ala.	30.24131404	-87.7302646	Ala.
AL-6	301428087434900	Gulf Shores, Ala.	30.24131404	-87.7302646	Ala.
AL-6	301428087434900	Gulf Shores, Ala.	30.24131404	-87.7302646	Ala.
AL-7	301608087345400	Orange Beach, Ala.	30.26909103	-87.5816491	Ala.
AL-7	301608087345400	Orange Beach, Ala.	30.26909103	-87.5816491	Ala.
AL-7	301608087345400	Orange Beach, Ala.	30.26909103	-87.5816491	Ala.
AL-8	301353087561600	BLM-1, Ala.	30.23159265	-87.9377724	Ala.
AL-8	301353087561600	BLM-1, Ala.	30.23159265	-87.9377724	Ala.
AL-8	301353087561600	BLM-1, Ala.	30.23159265	-87.9377724	Ala.
AL-8	301353087561600	BLM-1, Ala.	30.23159265	-87.9377724	Ala.
AL-9	301343087520200	BLM-2, Ala.	30.2288147	-87.867214	Ala.
AL-9	301343087520200	BLM-2, Ala.	30.2288147	-87.867214	Ala.
AL-9	301343087520200	BLM-2, Ala.	30.2288147	-87.867214	Ala.
AL-9	301343087520200	BLM-2, Ala.	30.2288147	-87.867214	Ala.
FL-1	302144086581200	Gulf Island National Seashore near Navarre, Fla.	30.362389	-86.970167	Fla.
FL-1	302144086581200	Gulf Island National Seashore near Navarre, Fla.	30.362389	-86.970167	Fla.
FL-1	302144086581200	Gulf Island National Seashore near Navarre, Fla.	30.362389	-86.970167	Fla.
FL-10	273728082441800	Fort DeSoto Pk near St Pete, Fla.	27.624444	-82.738333	Fla.
FL-10	273728082441800	Fort DeSoto Pk near St Pete, Fla.	27.624444	-82.738333	Fla.
FL-10	273728082441800	Fort DeSoto Pk near St Pete, Fla.	27.624444	-82.738333	Fla.
FL-11	263132082114000	Captiva Island Beach near Captiva, Fla.	26.525639	-82.194222	Fla.
FL-11	263132082114000	Captiva Island Beach near Captiva, Fla.	26.525639	-82.194222	Fla.
FL-11	263132082114000	Captiva Island Beach near Captiva, Fla.	26.525639	-82.194222	Fla.
FL-11	263132082114000	Captiva Island Beach near Captiva, Fla.	26.525639	-82.194222	Fla.
FL-11	263132082114000	Captiva Island Beach near Captiva, Fla.	26.525639	-82.194222	Fla.
FL-11	263132082114000	Captiva Island Beach near Captiva, Fla.	26.525639	-82.194222	Fla.
FL-11	263132082114000	Captiva Island Beach near Captiva, Fla.	26.525639	-82.194222	Fla.

Map no.	Station identifier	Site name	Site latitude (dd)	Site longitude (dd)	USGS WSC
FL-12	255609081440700	Tiger Tail Beach at Marco IS, Fla.	25.936139	-81.734583	Fla.
FL-12	255609081440700	Tiger Tail Beach at Marco IS, Fla.	25.936139	-81.734583	Fla.
FL-12	255609081440700	Tiger Tail Beach at Marco IS, Fla.	25.936139	-81.734583	Fla.
FL-13	251329081101100	NW Cape Sable Beach near Flamingo, Fla.	25.224806	-81.169972	Fla.
FL-13	251329081101100	NW Cape Sable Beach near Flamingo, Fla.	25.224806	-81.169972	Fla.
FL-13	251329081101100	NW Cape Sable Beach near Flamingo, Fla.	25.224806	-81.169972	Fla.
FL-14	243737082522500	Dry Tortugas National Park, Fla.	24.627139	-82.873639	Fla.
FL-14	243737082522500	Dry Tortugas National Park, Fla.	24.627139	-82.873639	Fla.
FL-14	243737082522500	Dry Tortugas National Park, Fla.	24.627139	-82.873639	Fla.
FL-15	254002080092000	B Baggs Cape near Key Biscayne, Fla.	25.667417	-80.155528	Fla.
FL-15	254002080092000	B Baggs Cape near Key Biscayne, Fla.	25.667417	-80.155528	Fla.
FL-15	254002080092000	B Baggs Cape near Key Biscayne, Fla.	25.667417	-80.155528	Fla.
FL-16	260454080063400	Lloyd Beach at Ft Lauderdale, Fla.	26.081694	-80.109444	Fla.
FL-16	260454080063400	Lloyd Beach at Ft Lauderdale, Fla.	26.081694	-80.109444	Fla.
FL-16	260454080063400	Lloyd Beach at Ft Lauderdale, Fla.	26.081694	-80.109444	Fla.
FL-16	260454080063400	Lloyd Beach at Ft Lauderdale, Fla.	26.081694	-80.109444	Fla.
FL-16	260454080063400	Lloyd Beach at Ft Lauderdale, Fla.	26.081694	-80.109444	Fla.
FL-16	260454080063400	Lloyd Beach at Ft Lauderdale, Fla.	26.081694	-80.109444	Fla.
FL-16	260454080063400	Lloyd Beach at Ft Lauderdale, Fla.	26.081694	-80.109444	Fla.
FL-17	264921080021700	MacArthur Beach at W Palm Beach, Fla.	26.822583	-80.038056	Fla.
FL-17	264921080021700	MacArthur Beach at W Palm Beach, Fla.	26.822583	-80.038056	Fla.
FL-17	264921080021700	MacArthur Beach at W Palm Beach, Fla.	26.822583	-80.038056	Fla.
FL-18	244345081000600	Coco Plum Beach near Marathon, Fla.	24.72925	-81.169972	Fla.
FL-18	244345081000600	Coco Plum Beach near Marathon, Fla.	24.72925	-81.169972	Fla.
FL-18	244345081000600	Coco Plum Beach near Marathon, Fla.	24.72925	-81.169972	Fla.
FL-19	265722080045400	BLM Tract1 near Jupiter Inlet, Fla.	26.956111	-80.081667	Fla.
FL-19	265722080045400	BLM Tract1 near Jupiter Inlet, Fla.	26.956111	-80.081667	Fla.
FL-19	265722080045400	BLM Tract1 near Jupiter Inlet, Fla.	26.956111	-80.081667	Fla.
FL-2	302258086263400	Henderson Beach State Park near Destin, Fla.	30.382944	-86.442778	Fla.

Map no.	Station identifier	Site name	Site latitude (dd)	Site longitude (dd)	USGS WSC
FL-2	302258086263400	Henderson Beach State Park near Destin, Fla.	30.382944	-86.442778	Fla.
FL-2	302258086263400	Henderson Beach State Park near Destin, Fla.	30.382944	-86.442778	Fla.
FL-20	265722080045500	BLM Tract2 near Jupiter Inlet, Fla.	26.956111	-80.081944	Fla.
FL-20	265722080045500	BLM Tract2 near Jupiter Inlet, Fla.	26.956111	-80.081944	Fla.
FL-20	265722080045500	BLM Tract2 near Jupiter Inlet, Fla.	26.956111	-80.081944	Fla.
FL-21	243902081332700	BLM Tract1 near Park Key, Fla.	24.650556	-81.5575	Fla.
FL-21	243902081332700	BLM Tract1 near Park Key, Fla.	24.650556	-81.5575	Fla.
FL-21	243902081332700	BLM Tract1 near Park Key, Fla.	24.650556	-81.5575	Fla.
FL-21	243902081332700	BLM Tract1 near Park Key, Fla.	24.650556	-81.5575	Fla.
FL-21	243902081332700	BLM Tract1 near Park Key, Fla.	24.650556	-81.5575	Fla.
FL-21	243902081332700	BLM Tract1 near Park Key, Fla.	24.650556	-81.5575	Fla.
FL-21	243902081332700	BLM Tract1 near Park Key, Fla.	24.650556	-81.5575	Fla.
FL-22	243703081323700	BLM Tract2 near Sugarloaf Key, Fla.	24.6175	-81.543611	Fla.
FL-22	243703081323700	BLM Tract2 near Sugarloaf Key, Fla.	24.6175	-81.543611	Fla.
FL-22	243703081323700	BLM Tract2 near Sugarloaf Key, Fla.	24.6175	-81.543611	Fla.
FL-23	243700081322300	BLM Tract3 near Sugarloaf Key, Fla.	24.616667	-81.539722	Fla.
FL-23	243700081322300	BLM Tract3 near Sugarloaf Key, Fla.	24.616667	-81.539722	Fla.
FL-23	243700081322300	BLM Tract3 near Sugarloaf Key, Fla.	24.616667	-81.539722	Fla.
FL-24	273605082454900	BLM Tract at Egmont Key, Fla.	27.601389	-82.763611	Fla.
FL-24	273605082454900	BLM Tract at Egmont Key, Fla.	27.601389	-82.763611	Fla.
FL-24	273605082454900	BLM Tract at Egmont Key, Fla.	27.601389	-82.763611	Fla.
FL-25	300223085260800	BLM Lathrop Bayou near Panama City, Fla.	30.038944	-85.435472	Fla.
FL-25	300223085260800	BLM Lathrop Bayou near Panama City, Fla.	30.038944	-85.435472	Fla.
FL-25	300223085260800	BLM Lathrop Bayou near Panama City, Fla.	30.038944	-85.435472	Fla.
FL-26	244325081351500	Marvin Key at Great White Heron NWR, Fla.	24.709806	-81.644639	Fla.
FL-26	244325081351500	Marvin Key at Great White Heron NWR, Fla.	24.709806	-81.644639	Fla.
FL-26	244325081351500	Marvin Key at Great White Heron NWR, Fla.	24.709806	-81.644639	Fla.
FL-3	301926086091800	Grayton Beach State Park near Seaside, Fla.	30.324056	-86.155056	Fla.
FL-3	301926086091800	Grayton Beach State Park near Seaside, Fla.	30.324056	-86.155056	Fla.

Map no.	Station identifier	Site name	Site latitude (dd)	Site longitude (dd)	USGS WSC
FL-3	301926086091800	Grayton Beach State Park near Seaside, Fla.	30.324056	-86.155056	Fla.
FL-4	300729085440900	St. Andrews State Park near Panama City, Fla.	30.124722	-85.736028	Fla.
FL-4	300729085440900	St. Andrews State Park near Panama City, Fla.	30.124722	-85.736028	Fla.
FL-4	300729085440900	St. Andrews State Park near Panama City, Fla.	30.124722	-85.736028	Fla.
FL-5	294645085243000	St. Joe Peninsula State Park near Port St. Joe, Fla.	29.779167	-85.408528	Fla.
FL-5	294645085243000	St. Joe Peninsula State Park near Port St. Joe, Fla.	29.779167	-85.408528	Fla.
FL-5	294645085243000	St. Joe Peninsula State Park near Port St. Joe, Fla.	29.779167	-85.408528	Fla.
FL-5	294645085243000	St. Joe Peninsula State Park near Port St. Joe, Fla.	29.779167	-85.408528	Fla.
FL-6	294152084460300	St George Island State Park near E Point, Fla.	29.697861	-84.76775	Fla.
FL-6	294152084460300	St George Island State Park near E Point, Fla.	29.697861	-84.76775	Fla.
FL-6	294152084460300	St George Island State Park near E Point, Fla.	29.697861	-84.76775	Fla.
FL-6	294152084460300	St George Island State Park near E Point, Fla.	29.697861	-84.76775	Fla.
FL-6	294152084460300	St George Island State Park near E Point, Fla.	29.697861	-84.76775	Fla.
FL-6	294152084460300	St George Island State Park near E Point, Fla.	29.697861	-84.76775	Fla.
FL-7	300427084105000	St. Marks NWR near St. Marks, Fla.	30.074194	-84.180444	Fla.
FL-7	300427084105000	St. Marks NWR near St. Marks, Fla.	30.074194	-84.180444	Fla.
FL-7	300427084105000	St. Marks NWR near St. Marks, Fla.	30.074194	-84.180444	Fla.
FL-7	300427084105000	St. Marks NWR near St. Marks, Fla.	30.074194	-84.180444	Fla.
FL-8	290740083031200	Piney Pt Beach at Cedar Key, Fla.	29.12775	-83.053361	Fla.
FL-8	290740083031200	Piney Pt Beach at Cedar Key, Fla.	29.12775	-83.053361	Fla.
FL-8	290740083031200	Piney Pt Beach at Cedar Key, Fla.	29.12775	-83.053361	Fla.
FL-9	285425082412600	Fort Island Gulf Beach near Chassah., Fla.	28.907194	-82.690778	Fla.
FL-9	285425082412600	Fort Island Gulf Beach near Chassah., Fla.	28.907194	-82.690778	Fla.
FL-9	285425082412600	Fort Island Gulf Beach near Chassah., Fla.	28.907194	-82.690778	Fla.
LA-22	294432090083100	Jean Lafitte National Park, La.	29.7422222	-90.1419444	La.
LA-22	294432090083100	Jean Lafitte National Park, La.	29.7422222	-90.1419444	La.
LA-22	294432090083100	Jean Lafitte National Park, La.	29.7422222	-90.1419444	La.
LA-22	294432090083100	Jean Lafitte National Park, La.	29.7422222	-90.1419444	La.
LA-23	294406091511300	Cypremort Point, La.	29.735	-91.8536111	La.

Map no.	Station identifier	Site name	Site latitude (dd)	Site longitude (dd)	USGS WSC
LA-23	294406091511300	Cypremort Point, La.	29.735	-91.8536111	La.
LA-23	294406091511300	Cypremort Point, La.	29.735	-91.8536111	La.
LA-23	294406091511300	Cypremort Point, La.	29.735	-91.8536111	La.
LA-23	294406091511300	Cypremort Point, La.	29.735	-91.8536111	La.
LA-23	294406091511300	Cypremort Point, La.	29.735	-91.8536111	La.
LA-23	294406091511300	Cypremort Point, La.	29.735	-91.8536111	La.
LA-24	292046090254500	Lake Felicity, La.	29.3461111	-90.4291667	La.
LA-24	292046090254500	Lake Felicity, La.	29.3461111	-90.4291667	La.
LA-24	292046090254500	Lake Felicity, La.	29.3461111	-90.4291667	La.
LA-25	293808092460200	Rockefeller Refuge Beach, La.	29.63555556	-92.7672222	La.
LA-25	293808092460200	Rockefeller Refuge Beach, La.	29.63555556	-92.7672222	La.
LA-25	293808092460200	Rockefeller Refuge Beach, La.	29.63555556	-92.7672222	La.
LA-26	291507090551800	Sister Lake, La.	29.25194444	-90.9216667	La.
LA-26	291507090551800	Sister Lake, La.	29.25194444	-90.9216667	La.
LA-26	291507090551800	Sister Lake, La.	29.25194444	-90.9216667	La.
LA-28	293424091321600	Point Chevreuil, La.	29.57333333	-91.5377778	La.
LA-28	293424091321600	Point Chevreuil, La.	29.57333333	-91.5377778	La.
LA-28	293424091321600	Point Chevreuil, La.	29.57333333	-91.5377778	La.
LA-29	294324089432500	Crooked Bayou, La.	29.72333333	-89.7236111	La.
LA-29	294324089432500	Crooked Bayou, La.	29.72333333	-89.7236111	La.
LA-29	294324089432500	Crooked Bayou, La.	29.72333333	-89.7236111	La.
LA-30	294108089234500	Mississippi R. Gulf Outlet, La.	29.68555556	-89.3958333	La.
LA-30	294108089234500	Mississippi R. Gulf Outlet, La.	29.68555556	-89.3958333	La.
LA-31	291537089570100	Grand Isle Beach at State Park, La.	29.26027778	-89.9502778	La.
LA-31	291537089570100	Grand Isle Beach at State Park, La.	29.26027778	-89.9502778	La.
LA-31	291537089570100	Grand Isle Beach at State Park, La.	29.26027778	-89.9502778	La.
LA-31	291537089570100	Grand Isle Beach at State Park, La.	29.26027778	-89.9502778	La.
LA-31	291537089570100	Grand Isle Beach at State Park, La.	29.26027778	-89.9502778	La.
LA-32	291914089105500	Mississippi R. at Main Pass, La.	29.32055556	-89.1819444	La.

Map no.	Station identifier	Site name	Site latitude (dd)	Site longitude (dd)	USGS WSC
LA-32	291914089105500	Mississippi R. at Main Pass, La.	29.32055556	-89.1819444	La.
LA-32	291914089105500	Mississippi R. at Main Pass, La.	29.32055556	-89.1819444	La.
LA-32	291914089105500	Mississippi R. at Main Pass, La.	29.32055556	-89.1819444	La.
LA-33	293518089364300	Breton Sound, La.	29.58833333	-89.6119444	La.
LA-33	293518089364300	Breton Sound, La.	29.58833333	-89.6119444	La.
LA-33	293518089364300	Breton Sound, La.	29.58833333	-89.6119444	La.
LA-34	300907089144500	Miss. Sound at Grand Pass, La.	30.15194444	-89.2458333	La.
LA-34	300907089144500	Miss. Sound at Grand Pass, La.	30.15194444	-89.2458333	La.
LA-34	300907089144500	Miss. Sound at Grand Pass, La.	30.15194444	-89.2458333	La.
LA-35	285951089085600	Mississippi R. at South Pass, La.	28.9975	-89.1488889	La.
LA-35	285951089085600	Mississippi R. at South Pass, La.	28.9975	-89.1488889	La.
LA-35	285951089085600	Mississippi R. at South Pass, La.	28.9975	-89.1488889	La.
LA-36	285615089235600	Mississippi R. at SW Pass, La.	28.9375	-89.3988889	La.
LA-36	285615089235600	Mississippi R. at SW Pass, La.	28.9375	-89.3988889	La.
LA-36	285615089235600	Mississippi R. at SW Pass, La.	28.9375	-89.3988889	La.
LA-46	294456093394801	East Sabine, La.	29.74888889	-93.6633333	La.
LA-46	294456093394801	East Sabine, La.	29.74888889	-93.6633333	La.
LA-46	294456093394801	East Sabine, La.	29.74888889	-93.6633333	La.
LA-6	292708089521400	Bay Jimmy at NE Barataria Bay, La.	29.4522222	-89.8705556	La.
MS-37	301309089044700	South Cat Island Beach, Miss.	30.21916667	-89.0797222	Miss.
MS-37	301309089044700	South Cat Island Beach, Miss.	30.21916667	-89.0797222	Miss.
MS-37	301309089044700	South Cat Island Beach, Miss.	30.21916667	-89.0797222	Miss.
MS-38	301227088582000	West Ship Island Beach, Miss.	30.2075	-88.9722222	Miss.
MS-38	301227088582000	West Ship Island Beach, Miss.	30.2075	-88.9722222	Miss.
MS-38	301227088582000	West Ship Island Beach, Miss.	30.2075	-88.9722222	Miss.
MS-39	301358088533300	East Ship Island Beach, Miss.	30.23277778	-88.8925	Miss.
MS-39	301358088533300	East Ship Island Beach, Miss.	30.23277778	-88.8925	Miss.
MS-39	301358088533300	East Ship Island Beach, Miss.	30.23277778	-88.8925	Miss.
MS-40	301425088440600	West Horn Island Beach, Miss.	30.24027778	-88.735	Miss.

Map no.	Station identifier	Site name	Site latitude (dd)	Site longitude (dd)	USGS WSC
MS-40	301425088440600	West Horn Island Beach, Miss.	30.24027778	-88.735	Miss.
MS-40	301425088440600	West Horn Island Beach, Miss.	30.24027778	-88.735	Miss.
MS-41	301321088353300	East Horn Island Beach, Miss.	30.2225	-88.5925	Miss.
MS-41	301321088353300	East Horn Island Beach, Miss.	30.2225	-88.5925	Miss.
MS-41	301321088353300	East Horn Island Beach, Miss.	30.2225	-88.5925	Miss.
MS-42	301208088253600	Petit Bois Island Beach, Miss.	30.2022222	-88.4266667	Miss.
MS-42	301208088253600	Petit Bois Island Beach, Miss.	30.2022222	-88.4266667	Miss.
MS-42	301208088253600	Petit Bois Island Beach, Miss.	30.2022222	-88.4266667	Miss.
MS-43	301858089141000	Pass Christian Beach, Miss.	30.3161111	-89.2361111	Miss.
MS-43	301858089141000	Pass Christian Beach, Miss.	30.3161111	-89.2361111	Miss.
MS-43	301858089141000	Pass Christian Beach, Miss.	30.3161111	-89.2361111	Miss.
MS-43	301858089141000	Pass Christian Beach, Miss.	30.3161111	-89.2361111	Miss.
MS-44	302336088535800	BIloxi Beach, Miss.	30.39333333	-88.8994444	Miss.
MS-44	302336088535800	BIloxi Beach, Miss.	30.39333333	-88.8994444	Miss.
MS-44	302336088535800	BIloxi Beach, Miss.	30.39333333	-88.8994444	Miss.
MS-44	302336088535800	BIloxi Beach, Miss.	30.39333333	-88.8994444	Miss.
MS-45	302034088325200	Pascagoula Beach, Miss.	30.34277778	-88.5477778	Miss.
MS-45	302034088325200	Pascagoula Beach, Miss.	30.34277778	-88.5477778	Miss.
MS-45	302034088325200	Pascagoula Beach, Miss.	30.34277778	-88.5477778	Miss.
MS-45	302034088325200	Pascagoula Beach, Miss.	30.34277778	-88.5477778	Miss.
MS-45	302034088325200	Pascagoula Beach, Miss.	30.34277778	-88.5477778	Miss.
MS-45	302034088325200	Pascagoula Beach, Miss.	30.34277778	-88.5477778	Miss.
MS-45	302034088325200	Pascagoula Beach, Miss.	30.34277778	-88.5477778	Miss.
MS-45	302034088325200	Pascagoula Beach, Miss.	30.34277778	-88.5477778	Miss.
MS-45	302034088325200	Pascagoula Beach, Miss.	30.34277778	-88.5477778	Miss.
TX-47	294057093572301	Texas Point, Tex.	29.6825	-93.9563889	Tex.
TX-47	294057093572301	Texas Point, Tex.	29.6825	-93.9563889	Tex.
TX-47	294057093572301	Texas Point, Tex.	29.6825	-93.9563889	Tex.
TX-48	295542093521701	Sabine Lake, Tex.	29.92833333	-93.8713889	Tex.

Map no.	Station identifier	Site name	Site latitude (dd)	Site longitude (dd)	USGS WSC
TX-48	295542093521701	Sabine Lake, Tex.	29.92833333	-93.8713889	Tex.
TX-49	293324094220601	High Island, Tex.	29.55666667	-94.3683333	Tex.
TX-49	293324094220601	High Island, Tex.	29.55666667	-94.3683333	Tex.
TX-49	293324094220601	High Island, Tex.	29.55666667	-94.3683333	Tex.
TX-50	293429094332101	East Bay near Anahuac, Tex.	29.5747222	-94.5558333	Tex.
TX-50	293429094332101	East Bay near Anahuac, Tex.	29.5747222	-94.5558333	Tex.
TX-51	291815094461001	Galveston Island, Tex.	29.30416667	-94.7694444	Tex.
TX-51	291815094461001	Galveston Island, Tex.	29.30416667	-94.7694444	Tex.
TX-51	291815094461001	Galveston Island, Tex.	29.30416667	-94.7694444	Tex.
TX-51	291815094461001	Galveston Island, Tex.	29.30416667	-94.7694444	Tex.
TX-51	291815094461001	Galveston Island, Tex.	29.30416667	-94.7694444	Tex.
TX-51	291815094461001	Galveston Island, Tex.	29.30416667	-94.7694444	Tex.
TX-51	291815094461001	Galveston Island, Tex.	29.30416667	-94.7694444	Tex.
TX-51	291815094461001	Galveston Island, Tex.	29.30416667	-94.7694444	Tex.
TX-51	291815094461001	Galveston Island, Tex.	29.30416667	-94.7694444	Tex.
TX-52	294408094501101	Trinity Bay near Beach City, Tex.	29.73555556	-94.8363889	Tex.
TX-52	294408094501101	Trinity Bay near Beach City, Tex.	29.73555556	-94.8363889	Tex.
TX-53	292318094430901	Bolivar Peninsula, Tex.	29.38833333	-94.7191667	Tex.
TX-53	292318094430901	Bolivar Peninsula, Tex.	29.38833333	-94.7191667	Tex.
TX-53	292318094430901	Bolivar Peninsula, Tex.	29.38833333	-94.7191667	Tex.
TX-54	292937094544001	Galveston Bay near Eagle Pt, Tex.	29.4936111	-94.9111111	Tex.
TX-54	292937094544001	Galveston Bay near Eagle Pt, Tex.	29.4936111	-94.9111111	Tex.
TX-55	291251094571401	West Bay, Galveston Is State Park, Tex.	29.21416667	-94.9538889	Tex.
TX-55	291251094571401	West Bay, Galveston Is State Park, Tex.	29.21416667	-94.9538889	Tex.
TX-55	291251094571401	West Bay, Galveston Is State Park, Tex.	29.21416667	-94.9538889	Tex.
TX-55	291251094571401	West Bay, Galveston Is State Park, Tex.	29.21416667	-94.9538889	Tex.
TX-56	290512095063101	San Luis Pass, Tex.	29.08666667	-95.1086111	Tex.
TX-56	290512095063101	San Luis Pass, Tex.	29.08666667	-95.1086111	Tex.
TX-56	290512095063101	San Luis Pass, Tex.	29.08666667	-95.1086111	Tex.

Map no.	Station identifier	Site name	Site latitude (dd)	Site longitude (dd)	USGS WSC

[1] Sum of acute or chronic benchmark toxic units for PAHs and BTEX mixtures in water; a $\sum TU_i$ value >1 indicates potential toxicity to aquatic life. BTEX compounds summed are benzene, toluene, ethylbenzene, xylene, cyclohexane, and methylcyclohexane. PAHs summed are acenaphthene, acenaphthylene, anthracene, benzo[a]anthracene, benzo[a]pyrene, benzo[b]fluoranthene, benzo[g,h,i]perylene, benzo[k]fluoranthene, chrysene, dibenzo[a,h]anthracene, fluoranthene, fluorene, indeno[1,2,3-cd]pyrene, naphthalene, phenanthrene, pyrene. Perylene and benzo(e)pyrene were excluded because data were not available. Any individual PAH or BTEX compounds that were not detected or had missing data were assumed equal to 0. For each PAH and BTEX compound, divide the concentration in µg/L by the acute or chronic potency divisor from USEPA (Table 5A), then sum the quotients for all PAH and BTEX compounds in the sample. Alkylated PAHs (which were not measured) were incorporated using USEPA multipliers (Table 5A).

[2] Four compounds with benchmarks had <50 percent recovery, so their concentrations and their contributions to benchmark exceedance could be biased low. Two of these four compounds, acenaphthylene and naphthalene, are included in the $\sum TU_i$ and other summed PAH benchmarks. For,2,4-trichlorobenzene, no benchmarks were exceeded. Benchmark exceedance could not be evaluated for N-nitrosodiphenylamine, which was never detected but whose benchmark value was below its reporting level.

[3] Summed concentration (µg/L) of the following PAH compounds, which are those included in the aquatic-life benchmark for total PAHs from Buchman (2008): Acenaphthene, Acenaphthylene, Anthracene, Fluorene, Naphthalene, Phenanthrene, 2-Methylnaphthalene, Benzo(a)anthracene, Benzo(a)pyrene, Chrysene, Dibenzo(a,h)anthracene, Fluoranthene, Pyrene

Sample no.	Sample date and time	Sampling period	Primary sample	Paired sample	TOC (mg/L)
sun1dalmtg_01000807_01	2010-05-08 11:15 CDT	Pre	1	1	<3
sun1dalmtg_01000832_01	2010-05-08 11:15 CDT	Pre	0	0	–
sun1dalmtg_01100036_01	2010-10-13 13:00 CDT	Post	1	1	2.1
sun1dalmtg_01000088_01	2010-05-24 16:30 CDT	Pre	1	1	<2.4
sun1dalmtg_01000853_01	2010-05-24 16:30 CDT	Pre	0	0	–
sun1dalmtg_01100021_01	2010-10-14 10:30 CDT	Post	1	1	1.5
sun1dalmtg_01100024_01	2010-10-14 10:50 CDT	Post	0	0	–
sun1dalmtg_01000095_01	2010-05-09 13:15 CDT	Pre	1	1	<1.7
sun1dalmtg_01000840_01	2010-05-09 13:15 CDT	Pre	0	0	–
sun1dalmtg_01000096_01	2010-05-09 13:16 CDT	Pre	0	0	<1.7
sun1dalmtg_01000838_01	2010-05-09 13:16 CDT	Pre	0	0	–
sun1dalmtg_01000097_01	2010-05-09 13:17 CDT	Pre	0	0	<1.7
sun1dalmtg_01000836_01	2010-05-09 13:17 CDT	Pre	0	0	–
sun1dalmtg_01100002_01	2010-10-07 11:15 CDT	Post	1	1	1.8
sun1dalmtg_01000094_01	2010-05-09 10:15 CDT	Pre	1	1	–
sun1dalmtg_01000842_01	2010-05-09 10:15 CDT	Pre	0	0	–
sun1dalmtg_01100005_01	2010-10-06 11:40 CDT	Post	1	1	3
sun1dalmtg_01000087_01	2010-05-08 16:45 CDT	Pre	1	1	<2.1
sun1dalmtg_01000837_01	2010-05-08 16:45 CDT	Pre	0	0	–
sun1dalmtg_01100008_01	2010-10-12 10:20 CDT	Post	1	1	2.1
sun1dalmtg_01000090_01	2010-05-08 15:00 CDT	Pre	1	1	<1.7

Sample no.	Sample date and time	Sampling period	Primary sample	Paired sample	TOC (mg/L)
sun1dalmtg_01000835_01	2010-05-08 15:00 CDT	Pre	0	0	–
sun1dalmtg_01100012_01	2010-10-13 13:35 CDT	Post	1	1	1.5
sun1dalmtg_01000092_01	2010-05-08 12:45 CDT	Pre	1	1	<1.9
sun1dalmtg_01000834_01	2010-05-08 12:45 CDT	Pre	0	0	–
sun1dalmtg_01100028_01	2010-10-14 13:30 CDT	Post	1	1	1.6
sun1dalmtg_01000098_01	2010-05-08 09:45 CDT	Pre	1	1	<1.8
sun1dalmtg_01000841_01	2010-05-08 09:45 CDT	Pre	0	0	–
sun1dalmtg_01100031_01	2010-10-14 10:00 CDT	Post	1	1	1.4
sun1dalmtg_01000091_01	2010-05-24 13:00 CDT	Pre	0	0	<1.7
sun1dalmtg_01000851_01	2010-05-24 13:00 CDT	Pre	0	0	–
sun1dalmtg_01000824_01	2010-05-24 13:01 CDT	Pre	1	1	–
sun1dalmtg_01100015_01	2010-10-13 10:15 CDT	Post	1	1	1.6
sun1dalmtg_01000089_01	2010-05-24 15:00 CDT	Pre	0	0	<1.9
sun1dalmtg_01000852_01	2010-05-24 15:00 CDT	Pre	0	0	–
sun1dalmtg_01000825_01	2010-05-24 15:01 CDT	Pre	1	1	–
sun1dalmtg_01100018_01	2010-10-14 13:25 CDT	Post	1	1	1.4
flnwis1_01004889_01	2010-05-11 13:30 CDT	Pre	0	0	–
flnwis1_01002982_01	2010-05-11 13:30 EDT	Pre	1	1	<1.5
flnwis1_01100062_01	2010-10-04 14:30 CDT	Post	1	1	1.7
flnwis1_01004881_01	2010-05-17 16:00 EDT	Pre	0	0	–
flnwis1_01003369_01	2010-05-17 16:00 EDT	Pre	1	0	<2.7
flnwis1_01000812_02	2010-05-17 16:01 EDT	Pre	0	0	–
flnwis1_01004870_01	2010-05-20 16:30 EDT	Pre	0	0	–
flnwis1_01003390_01	2010-05-20 16:30 EDT	Pre	1	0	<2.2
flnwis1_01000815_02	2010-05-20 16:31 EDT	Pre	0	0	<2.2
flnwis1_01000846_02	2010-05-20 16:31 EDT	Pre	0	0	–
flnwis1_01000816_02	2010-05-20 16:32 EDT	Pre	0	0	–
flnwis1_01000847_02	2010-05-20 16:32 EDT	Pre	0	0	–
flnwis1_01000817_02	2010-05-20 16:33 EDT	Pre	0	0	–

Sample no.	Sample date and time	Sampling period	Primary sample	Paired sample	TOC (mg/L)
flnwis1_01004883_01	2010-05-21 15:00 EDT	Pre	0	0	–
flnwis1_01003667_01	2010-05-21 15:00 EDT	Pre	1	0	<2.2
flnwis1_01000823_02	2010-05-21 15:01 EDT	Pre	0	0	–
flnwis1_01004871_01	2010-05-22 13:05 EDT	Pre	0	0	–
flnwis1_01003386_01	2010-05-22 13:05 EDT	Pre	1	0	<3.4
flnwis1_01000825_02	2010-05-22 13:06 EDT	Pre	0	0	–
flnwis1_01003365_01	2010-05-20 08:45 EDT	Pre	1	0	<1.1
flnwis1_01000827_02	2010-05-20 08:46 EDT	Pre	0	0	–
flnwis1_01004869_01	2010-05-20 08:54 EDT	Pre	0	0	–
flnwis1_01004142_01	2010-06-01 13:00 EDT	Pre	1	0	<2.1
flnwis1_01004848_01	2010-06-01 13:00 EDT	Pre	0	0	–
flnwis1_01000769_02	2010-06-01 13:01 EDT	Pre	0	0	–
flnwis1_01004878_01	2010-05-26 15:00 EDT	Pre	0	0	–
flnwis1_01003611_01	2010-05-26 15:00 EDT	Pre	1	0	<1.3
flnwis1_01000777_02	2010-05-26 15:01 EDT	Pre	0	0	<1.3
flnwis1_01000850_02	2010-05-26 15:01 EDT	Pre	0	0	–
flnwis1_01000779_02	2010-05-26 15:02 EDT	Pre	0	0	<1.4
flnwis1_01000852_02	2010-05-26 15:02 EDT	Pre	0	0	–
flnwis1_01000781_02	2010-05-26 15:03 EDT	Pre	0	0	–
flnwis1_01004892_01	2010-05-27 15:30 EDT	Pre	0	0	–
flnwis1_01003609_01	2010-05-27 15:30 EST	Pre	1	0	<1.3
flnwis1_01000785_02	2010-05-27 15:31 EDT	Pre	0	0	–
flnwis1_01004876_01	2010-05-24 15:45 EDT	Pre	0	0	–
flnwis1_01003316_01	2010-05-24 15:45 EDT	Pre	1	0	<2.5
flnwis1_01000829_02	2010-05-24 15:46 EDT	Pre	0	0	–
flnwis1_01004842_01	2010-06-16 13:00 EDT	Pre	0	0	–
flnwis1_01003603_01	2010-06-16 13:00 EST	Pre	1	0	<1.2
flnwis1_01000788_02	2010-06-16 13:01 EDT	Pre	0	0	–
flnwis1_01004890_01	2010-05-11 17:30 CDT	Pre	0	0	–

Sample no.	Sample date and time	Sampling period	Primary sample	Paired sample	TOC (mg/L)
flnwis1_01002985_01	2010-05-11 17:30 EDT	Pre	1	1	<1.6
flnwis1_01100065_01	2010-10-05 09:30 CDT	Post	1	1	1.4
flnwis1_01004844_01	2010-06-16 15:00 EDT	Pre	0	0	–
flnwis1_01003606_01	2010-06-16 15:00 EST	Pre	1	0	<1.2
flnwis1_01000790_02	2010-06-16 15:01 EDT	Pre	0	0	–
flnwis1_01004107_01	2010-06-09 16:00 EDT	Pre	1	0	<2.7
flnwis1_01004854_01	2010-06-09 16:00 EDT	Pre	0	0	–
flnwis1_01000758_02	2010-06-09 16:01 EDT	Pre	0	0	<2.8
flnwis1_01000842_02	2010-06-09 16:01 EDT	Pre	0	0	–
flnwis1_01000760_02	2010-06-09 16:02 EDT	Pre	0	0	<2.8
flnwis1_01000844_02	2010-06-09 16:02 EDT	Pre	0	0	–
flnwis1_01000762_02	2010-06-09 16:03 EDT	Pre	0	0	–
flnwis1_01004106_01	2010-06-09 13:00 EDT	Pre	1	0	9.9
flnwis1_01004852_01	2010-06-09 13:00 EDT	Pre	0	0	–
flnwis1_01000757_02	2010-06-09 13:01 EDT	Pre	0	0	–
flnwis1_01004850_01	2010-06-09 10:00 EDT	Pre	0	0	–
flnwis1_01003516_01	2010-06-09 10:00 EDT	Pre	1	0	5.6
flnwis1_01000755_02	2010-06-09 10:01 EDT	Pre	0	0	–
flnwis1_01004868_01	2010-06-14 14:00 EDT	Pre	0	0	–
flnwis1_01003382_01	2010-06-14 14:00 EDT	Pre	1	0	<2.2
flnwis1_01000831_02	2010-06-14 14:01 EDT	Pre	0	0	–
flnwis1_01004901_01	2010-06-10 11:00 CDT	Pre	0	0	–
flnwis1_01003524_01	2010-06-10 11:00 EDT	Pre	1	1	4.4
flnwis1_01100079_01	2010-10-12 10:00 CDT	Post	1	1	5.9
flnwis1_01004846_01	2010-07-07 11:00 EDT	Pre	0	0	–
flnwis1_01004066_01	2010-07-07 11:00 EDT	Pre	1	0	<1.9
flnwis1_01000764_02	2010-07-07 11:01 EDT	Pre	0	0	–
flnwis1_01004888_01	2010-05-12 11:30 CDT	Pre	0	0	–
flnwis1_01002992_01	2010-05-12 11:30 EDT	Pre	1	1	<2

Sample no.	Sample date and time	Sampling period	Primary sample	Paired sample	TOC (mg/L)
flnwis1_01100067_01	2010-10-05 14:00 CDT	Post	1	1	1.4
flnwis1_01004891_01	2010-05-12 15:30 CDT	Pre	0	0	–
flnwis1_01002995_01	2010-05-12 15:30 EDT	Pre	1	1	<2.1
flnwis1_01100077_01	2010-10-11 13:00 CDT	Post	1	1	1.8
flnwis1_01003186_01	2010-05-13 09:00 EDT	Pre	1	1	<1.8
flnwis1_01004886_01	2010-05-13 09:00 EDT	Pre	0	0	–
flnwis1_01000533_02	2010-05-13 09:05 EDT	Pre	0	0	–
flnwis1_01100081_01	2010-10-13 10:30 EDT	Post	1	1	1.6
flnwis1_01004887_01	2010-05-13 12:00 EDT	Pre	0	0	–
flnwis1_01003194_01	2010-05-13 12:00 EDT	Pre	1	1	<2
flnwis1_01000535_02	2010-05-13 12:05 EDT	Pre	0	0	<1.9
flnwis1_01000538_02	2010-05-13 12:10 EDT	Pre	0	0	<2
flnwis1_01100072_01	2010-10-06 14:00 EDT	Post	1	1	2.1
flnwis1_01100065_02	2010-10-06 14:05 EDT	Post	0	0	–
flnwis1_01002938_01	2010-05-18 11:30 EDT	Pre	1	0	4.4
flnwis1_01004900_01	2010-05-18 11:30 EDT	Pre	0	0	–
flnwis1_01000534_02	2010-05-18 11:31 EDT	Pre	0	0	–
flnwis1_01100074_01	2010-10-07 11:30 EDT	Post	0	0	3.1
flnwis1_01004863_01	2010-05-18 17:00 EDT	Pre	0	0	–
flnwis1_01003378_01	2010-05-18 17:00 EDT	Pre	1	0	5.7
flnwis1_01000811_02	2010-05-18 17:01 EDT	Pre	0	0	–
flnwis1_01004865_01	2010-05-19 12:00 EDT	Pre	0	0	–
flnwis1_01003374_01	2010-05-19 12:00 EDT	Pre	1	0	3.9
flnwis1_01000809_02	2010-05-19 12:01 EDT	Pre	0	0	–
fs5dlabrg_01000227_01	2010-05-14 10:30 CDT	Pre	1	1	4.8
fs5dlabrg_01000359_01	2010-05-14 10:30 CDT	Pre	0	0	–
fs5dlabrg_01100027_01	2010-10-13 12:30 CDT	Post	1	1	7.9
fs5dlabrg_01100002_02	2010-10-13 12:31 CDT	Post	0	0	7.9
fs5dlabrg_01000103_02	2010-05-13 12:30 CDT	Pre	0	0	–

Sample no.	Sample date and time	Sampling period	Primary sample	Paired sample	TOC (mg/L)
fs5dlabrg_01000385_01	2010-05-13 12:30 CDT	Pre	1	1	–
fs5dlabrg_01000074_02	2010-05-13 12:31 CDT	Pre	0	0	5.7
fs5dlabrg_01000105_02	2010-05-13 12:31 CDT	Pre	0	0	–
fs5dlabrg_01000073_02	2010-05-13 12:32 CDT	Pre	0	0	5.8
fs5dlabrg_01000101_02	2010-05-13 12:32 CDT	Pre	0	0	–
fs5dlabrg_01100005_01	2010-10-05 15:30 CDT	Post	1	1	9.4
fs5dlabrg_01000224_01	2010-05-18 16:20 CDT	Pre	1	1	5.9
fs5dlabrg_01000362_01	2010-05-18 16:20 CDT	Pre	0	0	–
fs5dlabrg_01100018_01	2010-10-12 10:30 CDT	Post	1	1	–
fs5dlabrg_01000225_01	2010-05-13 10:35 CDT	Pre	1	1	3.8
fs5dlabrg_01000360_01	2010-05-13 10:35 CDT	Pre	0	0	–
fs5dlabrg_01100007_01	2010-10-07 14:00 CDT	Post	1	1	6.8
fs5dlabrg_01000226_01	2010-05-17 10:15 CDT	Pre	1	1	5.2
fs5dlabrg_01000369_01	2010-05-17 10:15 CDT	Pre	0	0	–
fs5dlabrg_01100024_01	2010-10-08 10:00 CDT	Post	1	1	8.1
fs5dlabrg_01000223_01	2010-05-13 09:30 CDT	Pre	1	1	4.2
fs5dlabrg_01000367_01	2010-05-13 09:30 CDT	Pre	0	0	–
fs5dlabrg_01100009_01	2010-10-05 11:00 CDT	Post	1	1	6.6
fs5dlabrg_01000228_01	2010-05-18 14:00 CDT	Pre	1	1	6.7
fs5dlabrg_01000364_01	2010-05-18 14:00 CDT	Pre	0	0	–
fs5dlabrg_01100013_01	2010-10-13 12:00 CDT	Post	1	1	12.2
fs5dlabrg_01000229_01	2010-05-07 12:00 CDT	Pre	1	1	3.8
fs5dlabrg_01100011_01	2010-10-12 12:00 CDT	Post	1	1	6.7
fs5dlabrg_01000387_01	2010-05-10 11:45 CDT	Pre	1	1	–
fs5dlabrg_01000071_02	2010-05-10 11:46 CDT	Pre	0	0	3.7
fs5dlabrg_01000070_02	2010-05-10 11:47 CDT	Pre	0	0	3.7
fs5dlabrg_01100017_01	2010-10-14 11:00 CDT	Post	1	1	3.7
fs5dlabrg_01100001_02	2010-10-14 11:02 CDT	Post	0	0	2.6
fs5dlabrg_01000230_01	2010-05-07 10:30 CDT	Pre	0	0	3.5

Sample no.	Sample date and time	Sampling period	Primary sample	Paired sample	TOC (mg/L)
fs5dlabrg_01000372_01	2010-05-07 10:30 CDT	Pre	0	0	–
fs5dlabrg_01000260_01	2010-05-11 10:30 CDT	Pre	1	1	–
fs5dlabrg_01100025_01	2010-10-07 11:15 CDT	Post	1	1	4.1
fs5dlabrg_01000234_01	2010-05-07 14:30 CDT	Pre	1	1	E5.8
fs5dlabrg_01000378_01	2010-05-07 14:30 CDT	Pre	0	0	–
fs5dlabrg_01100015_01	2010-10-13 15:00 CDT	Post	1	1	8.8
fs5dlabrg_01000233_01	2010-05-07 10:00 CDT	Pre	1	1	3.9
fs5dlabrg_01000371_01	2010-05-07 10:00 CDT	Pre	0	0	–
fs5dlabrg_01100029_01	2010-10-11 10:30 CDT	Post	1	1	5
fs5dlabrg_01000231_01	2010-05-07 13:10 CDT	Pre	1	1	<3.3
fs5dlabrg_01000376_01	2010-05-07 13:10 CDT	Pre	0	0	–
fs5dlabrg_01100022_01	2010-10-07 12:00 CDT	Post	1	1	3.1
fs5dlabrg_01000232_01	2010-05-07 09:45 CDT	Pre	1	1	<3.1
fs5dlabrg_01000381_01	2010-05-07 09:45 CDT	Pre	0	0	–
fs5dlabrg_01100020_01	2010-10-14 13:30 CDT	Post	1	1	4.5
sun1ast_01001275_01	2010-05-10 12:48 CDT	Pre	1	1	<2.6
sun1ast_01001514_01	2010-05-10 12:48 CDT	Pre	0	0	–
sun1ast_01100013_01	2010-10-06 13:03 CDT	Post	1	1	3
fs5dlabrg_01000314_01	2010-08-23 14:30 CDT	Post	1	0	10.3
nwisdmsjkn_01001593_01	2010-05-07 15:30 CDT	Pre	1	1	<3.1
nwisdmsjkn_01004130_01	2010-05-07 15:30 CDT	Pre	0	0	–
nwisdmsjkn_01100015_01	2010-10-14 11:30 CDT	Post	1	1	2.4
nwisdmsjkn_01001588_01	2010-05-07 17:00 CDT	Pre	1	1	<3.2
nwisdmsjkn_01004135_01	2010-05-07 17:00 CDT	Pre	0	0	–
nwisdmsjkn_01100013_01	2010-10-14 14:30 CDT	Post	1	1	1.8
nwisdmsjkn_01001595_01	2010-05-07 18:45 CDT	Pre	1	1	<2.8
nwisdmsjkn_01004133_01	2010-05-07 18:45 CDT	Pre	0	0	–
nwisdmsjkn_01100009_01	2010-10-11 14:30 CDT	Post	1	1	2.5
nwisdmsjkn_01001527_01	2010-05-08 14:00 CDT	Pre	1	1	<1.9

Sample no.	Sample date and time	Sampling period	Primary sample	Paired sample	TOC (mg/L)
nwisdmsjkn_01004128_01	2010-05-08 14:00 CDT	Pre	0	0	–
nwisdmsjkn_01100007_01	2010-10-12 16:30 CDT	Post	1	1	1.8
nwisdmsjkn_01001591_01	2010-05-08 13:10 CDT	Pre	1	1	<1.8
nwisdmsjkn_01004126_01	2010-05-08 13:10 CDT	Pre	0	0	–
nwisdmsjkn_01100011_01	2010-10-12 12:30 CDT	Post	1	1	2.2
nwisdmsjkn_01001599_01	2010-05-08 12:15 CDT	Pre	1	1	<1.9
nwisdmsjkn_01004124_01	2010-05-08 12:15 CDT	Pre	0	0	–
nwisdmsjkn_01100017_01	2010-10-13 09:45 CDT	Post	1	1	1.8
nwisdmsjkn_01001597_01	2010-05-08 20:15 CDT	Pre	1	1	4.8
nwisdmsjkn_01004139_01	2010-05-08 20:15 CDT	Pre	0	0	–
nwisdmsjkn_01004140_01	2010-05-18 12:30 CDT	Pre	0	0	–
nwisdmsjkn_01100005_01	2010-10-08 10:00 CDT	Post	1	1	4.3
nwisdmsjkn_01001601_01	2010-05-08 13:00 CDT	Pre	1	1	4.3
nwisdmsjkn_01004141_01	2010-05-18 13:30 CDT	Pre	0	0	–
nwisdmsjkn_01100003_01	2010-10-07 10:30 CDT	Post	1	1	4
nwisdmsjkn_01100003_02	2010-10-07 10:31 CDT	Post	0	0	–
nwisdmsjkn_01001605_01	2010-05-08 16:30 CDT	Pre	1	1	3.8
nwisdmsjkn_01004123_01	2010-05-08 16:30 CDT	Pre	0	0	–
nwisdmsjkn_01000047_02	2010-05-08 16:31 CDT	Pre	0	0	3.5
nwisdmsjkn_01000131_02	2010-05-08 16:31 CDT	Pre	0	0	–
nwisdmsjkn_01000050_02	2010-05-08 16:32 CDT	Pre	0	0	4
nwisdmsjkn_01000133_02	2010-05-08 16:32 CDT	Pre	0	0	–
nwisdmsjkn_01004142_01	2010-05-18 15:00 CDT	Pre	0	0	–
nwisdmsjkn_01004307_01	2010-05-18 15:00 CDT	Pre	1	0	–
nwisdmsjkn_01100019_01	2010-10-14 14:30 CDT	Post	1	1	2.8
sun1ast_01001266_01	2010-05-10 15:13 CDT	Pre	1	1	<2.3
sun1ast_01001521_01	2010-05-10 15:13 CDT	Pre	0	0	–
sun1ast_01100018_01	2010-10-06 12:58 CDT	Post	1	1	3.4
sun1ast_01001273_01	2010-05-10 17:36 CDT	Pre	1	0	6.1

Sample no.	Sample date and time	Sampling period	Primary sample	Paired sample	TOC (mg/L)
sun1ast_01001522_01	2010-05-10 17:36 CDT	Pre	0	0	–
sun1ast_01001265_01	2010-05-10 13:15 CDT	Pre	1	1	<2.3
sun1ast_01001523_01	2010-05-10 13:15 CDT	Pre	0	0	–
sun1ast_01100025_01	2010-10-07 11:01 CDT	Post	1	1	3
sun1ast_01001271_01	2010-05-10 16:25 CDT	Pre	1	0	5.7
sun1ast_01001524_01	2010-05-10 16:25 CDT	Pre	0	0	–
sun1ast_01001268_01	2010-05-10 13:11 CDT	Pre	1	1	<2.1
sun1ast_01001518_01	2010-05-10 13:11 CDT	Pre	0	0	–
sun1ast_01000337_02	2010-05-10 13:12 CDT	Pre	0	0	<2.2
sun1ast_01000381_02	2010-05-10 13:12 CDT	Pre	0	0	–
sun1ast_01000338_02	2010-05-10 13:13 CDT	Pre	0	0	<2.1
sun1ast_01000383_02	2010-05-10 13:13 CDT	Pre	0	0	–
sun1ast_01100017_01	2010-10-13 10:00 CDT	Post	1	1	2.2
sun1ast_01100006_02	2010-10-13 10:02 CDT	Post	0	0	2.1
sun1ast_01100021_01	2010-10-14 13:05 CDT	Post	0	0	–
sun1ast_01001272_01	2010-05-11 12:06 CDT	Pre	1	0	5.1
sun1ast_01001519_01	2010-05-11 12:06 CDT	Pre	0	0	–
sun1ast_01001269_01	2010-05-11 12:05 CDT	Pre	1	1	<2.2
sun1ast_01001520_01	2010-05-11 12:05 CDT	Pre	0	0	–
sun1ast_01100024_01	2010-10-07 12:15 CDT	Post	1	1	2.7
sun1ast_01001270_01	2010-05-11 10:23 CDT	Pre	1	0	4.4
sun1ast_01001515_01	2010-05-11 10:23 CDT	Pre	0	0	–
sun1ast_01001264_01	2010-05-11 10:35 CDT	Pre	1	1	3.9
sun1ast_01001516_01	2010-05-11 10:35 CDT	Pre	0	0	–
sun1ast_01100010_01	2010-10-14 10:20 CDT	Post	1	1	4.6
sun1ast_01100004_02	2010-10-14 10:22 CDT	Post	0	0	4.7
sun1ast_01001263_01	2010-05-11 12:03 CDT	Pre	1	1	<2.3
sun1ast_01001517_01	2010-05-11 12:03 CDT	Pre	0	0	–
sun1ast_01100014_01	2010-10-05 12:30 CDT	Post	1	1	2.7

Sample no.	Sample date and time	Sampling period	Primary sample	Paired sample	TOC (mg/L)

	USEPA toxic unit benchmark for PAH and BTEX compounds				
Organics included in benchmark $\sum TU_i$	Acute Benchmark $\sum TU_i$ for PAH-BTEX mixtures[1,2]	Chronic Benchmark $\sum TU_i$ for PAH-BTEX mixtures[1,2]	Any PAH-BTEX Benchmark TU exceedance [2]	Total concentration of 13 PAHs (µg/L) [3]	No. of HH Benchmarks exceeded
BTEX, PAH	0	0	no	0	0
BTEX	0	0	no	–	0
BTEX, PAH	0	0	no	0	0
BTEX, PAH	0	0	no	0	0
BTEX	0	0	no	–	0
BTEX, PAH	0	0	no	0	0
BTEX, PAH	0	0	no	0	0
PAH	0	0	no	0	0
BTEX	0	0	no	–	0
PAH	0	0	no	0	0
BTEX	0	0	no	–	0
PAH	0	0	no	0	0
BTEX	0	0	no	–	0
BTEX, PAH	0	0	no	0	0
PAH	0	0	no	0	0
BTEX	0	0	no	–	0
BTEX, PAH	0	0	no	0	0
PAH	0	0	no	0	0
BTEX	0	0	no	–	0
BTEX, PAH	0	0	no	0	0
PAH	0	0	no	0	0

	USEPA toxic unit benchmark for PAH and BTEX compounds				
Organics included in benchmark $\sum TU_i$	Acute Benchmark $\sum TU_i$ for PAH-BTEX mixtures[1,2]	Chronic Benchmark $\sum TU_i$ for PAH-BTEX mixtures[1,2]	Any PAH-BTEX Benchmark TU exceedance [2]	Total concentration of 13 PAHs (µg/L) [3]	No. of HH Benchmarks exceeded
BTEX	0	0	no	–	0
BTEX, PAH	0	0	no	0	0
PAH	0	0	no	0	0
BTEX	0	0	no	–	0
BTEX, PAH	0	0	no	0	0
PAH	0	0	no	0	0
BTEX	0	0	no	–	0
BTEX, PAH	0.000589681	0.003	no	0	0
BTEX, PAH	0	0	no	0	0
BTEX	0	0	no	–	0
BTEX, PAH	0	0	no	0	0
BTEX, PAH	0	0	no	0	0
BTEX, PAH	0	0	no	0	0
BTEX	0	0	no	–	0
BTEX, PAH	0	0	no	0	0
BTEX, PAH	0	0	no	0	0
BTEX	0	0	no	–	0
BTEX, PAH	0	0	no	0	0
BTEX, PAH	0	0	no	0	0
BTEX	0	0	no	–	0
BTEX, PAH	0	0	no	0	0
PAH	0	0	no	0	0
BTEX	0	0	no	–	0
BTEX, PAH	0	0	no	0	0
BTEX, PAH	0	0	no	0	0
BTEX	0	0	no	–	0
BTEX, PAH	0	0	no	0	0
BTEX	0	0	no	–	0
PAH	0	0	no	0	0

Organics included in benchmark $\sum TU_i$	USEPA toxic unit benchmark for PAH and BTEX compounds			Total concentration of 13 PAHs (µg/L) [3]	No. of HH Benchmarks exceeded
	Acute Benchmark $\sum TU_i$ for PAH-BTEX mixtures[1,2]	Chronic Benchmark $\sum TU_i$ for PAH-BTEX mixtures[1,2]	Any PAH-BTEX Benchmark TU exceedance [2]		
BTEX	0	0	no	–	0
BTEX, PAH	0	0	no	0	0
PAH	0	0	no	0	0
BTEX	0	0	no	–	0
BTEX, PAH	0	0	no	0	0
PAH	0	0	no	0	0
BTEX, PAH	0	0	no	0	0
PAH	0	0	no	0	0
BTEX	0	0	no	–	0
BTEX, PAH	0	0	no	0	0
BTEX	0	0	no	–	0
PAH	0	0	no	0	0
BTEX	0	0	no	–	0
BTEX, PAH	0	0	no	0	0
BTEX, PAH	0	0	no	0	0
BTEX	0	0	no	–	0
BTEX, PAH	0	0	no	0	0
BTEX	0	0	no	–	0
PAH	0	0	no	0	0
BTEX	0	0	no	–	0
BTEX, PAH	0	0	no	0	0
PAH	0	0	no	0	0
BTEX	0	0	no	–	0
BTEX, PAH	0	0	no	0	0
PAH	0	0	no	0	0
BTEX	0	0	no	–	0
BTEX, PAH	0.001893723	0.007895509	no	0.0376	0
PAH	0.001963468	0.008184059	no	0.0398	0
BTEX	0	0	no	–	0

	USEPA toxic unit benchmark for PAH and BTEX compounds				
Organics included in benchmark $\sum TU_i$	Acute Benchmark $\sum TU_i$ for PAH-BTEX mixtures[1,2]	Chronic Benchmark $\sum TU_i$ for PAH-BTEX mixtures[1,2]	Any PAH-BTEX Benchmark TU exceedance [2]	Total concentration of 13 PAHs (µg/L) [3]	No. of HH Benchmarks exceeded
BTEX, PAH	0	0	no	0	0
BTEX, PAH	0	0	no	0	0
BTEX	0	0	no	–	0
BTEX, PAH	1.88E-06	9.55E-06	no	0	0
PAH	0	0	no	0	0
BTEX, PAH	0	0	no	0	0
BTEX	0	0	no	–	0
BTEX, PAH	0	0	no	0	0
BTEX	0	0	no	–	0
BTEX, PAH	0	0	no	0	0
BTEX	0	0	no	–	0
PAH	0	0	no	0	0
BTEX, PAH	0	0	no	0	0
BTEX	0	0	no	–	0
PAH	0	0	no	0	0
BTEX	0	0	no	–	0
BTEX, PAH	0	0	no	0	0
PAH	0	0	no	0	0
BTEX	0	0	no	–	0
BTEX, PAH	1.56E-06	7.96E-06	no	0	0
PAH	0	0	no	0	0
BTEX	0	0	no	–	0
BTEX, PAH	0	0	no	0	0
BTEX, PAH	0.00046683	0.002375	no	0	0
BTEX	0	0	no	–	0
BTEX, PAH	0	0	no	0	0
PAH	0	0	no	0	0
BTEX	0	0	no	–	0
BTEX, PAH	0	0	no	0	0

	USEPA toxic unit benchmark for PAH and BTEX compounds				
Organics included in benchmark $\sum TU_i$	Acute Benchmark $\sum TU_i$ for PAH-BTEX mixtures[1,2]	Chronic Benchmark $\sum TU_i$ for PAH-BTEX mixtures[1,2]	Any PAH-BTEX Benchmark TU exceedance [2]	Total concentration of 13 PAHs (µg/L) [3]	No. of HH Benchmarks exceeded
BTEX, PAH	0.000282555	0.0014375	no	0	0
BTEX	0	0	no	–	0
BTEX, PAH	5.88E-07	3.00E-06	no	0	0
BTEX, PAH	0.00022113	0.001125	no	0	0
BTEX, PAH	0	0	no	0	0
BTEX	0	0	no	–	0
PAH	0	0	no	0	0
BTEX, PAH	0.00041769	0.002125	no	0	0
BTEX	0	0	no	–	0
BTEX, PAH	0	0	no	0	0
PAH	0	0	no	0	0
BTEX, PAH	0.000452848	0.002304957	no	0	0
BTEX, PAH	0	0	no	0	0
BTEX, PAH	0.00041769	0.002125	no	0	0
BTEX, PAH	1.52E-06	7.75E-06	no	0	0
BTEX	0	0	no	–	0
BTEX, PAH	1.38E-06	7.05E-06	no	0	0
BTEX, PAH	0	0	no	0	0
BTEX	0	0	no	–	0
BTEX, PAH	0	0	no	0	0
PAH	0	0	no	0	0
BTEX	0	0	no	–	0
BTEX, PAH	0	0	no	0	0
PAH	0	0	no	0	0
BTEX, PAH	0	0	no	0	0
BTEX	0	0	no	–	0
BTEX, PAH	0	0	no	0	0
BTEX, PAH	0	0	no	0	0
BTEX	0	0	no	–	0

	USEPA toxic unit benchmark for PAH and BTEX compounds				
Organics included in benchmark $\sum TU_i$	Acute Benchmark $\sum TU_i$ for PAH-BTEX mixtures[1,2]	Chronic Benchmark $\sum TU_i$ for PAH-BTEX mixtures[1,2]	Any PAH-BTEX Benchmark TU exceedance [2]	Total concentration of 13 PAHs (µg/L) [3]	No. of HH Benchmarks exceeded
BTEX, PAH	0	0	no	0	0
BTEX, PAH	0	0	no	0	0
BTEX	0	0	no	–	0
BTEX, PAH	0	0	no	0	0
BTEX	0	0	no	–	0
BTEX, PAH	0	0	no	0	0
BTEX, PAH	0	0	no	0	0
BTEX	0	0	no	–	0
BTEX, PAH	0	0	no	0	0
BTEX, PAH	0	0	no	0	0
BTEX	0	0	no	–	0
BTEX, PAH	0	0	no	0	0
BTEX, PAH	0.004509093	0.018772777	no	0.0205	0
BTEX	0	0	no	–	0
BTEX, PAH	0	0	no	0	0
BTEX, PAH	0.003900709	0.016248154	no	0	0
BTEX	0	0	no	–	0
BTEX, PAH	0	0	no	0	0
BTEX, PAH	1.83E-06	9.32E-06	no	0	0
BTEX	0	0	no	–	0
BTEX, PAH	0	0	no	0	0
BTEX, PAH	0	0	no	0	0
BTEX, PAH	0	0	no	0	0
BTEX, PAH	0	0	no	0	0
BTEX, PAH	0	0	no	0	0
BTEX, PAH	0	0	no	0	0
BTEX, PAH	0	0	no	0	0
BTEX, PAH	0	0	no	0	0
BTEX, PAH	0	0	no	0	0
BTEX	0	0	no	–	0

	USEPA toxic unit benchmark for PAH and BTEX compounds				
Organics included in benchmark $\sum TU_i$	Acute Benchmark $\sum TU_i$ for PAH-BTEX mixtures[1,2]	Chronic Benchmark $\sum TU_i$ for PAH-BTEX mixtures[1,2]	Any PAH-BTEX Benchmark TU exceedance [2]	Total concentration of 13 PAHs (µg/L) [3]	No. of HH Benchmarks exceeded
BTEX	0	0	no	–	0
BTEX, PAH	0	0	no	0	0
BTEX, PAH	0	0	no	0	0
BTEX, PAH	0	0	no	0	0
BTEX	0	0	no	–	0
BTEX, PAH	0	0	no	0	0
BTEX, PAH	0	0	no	0	0
BTEX	0	0	no	–	0
BTEX, PAH	0	0	no	0	0
BTEX, PAH	0	0	no	0	0
BTEX	0	0	no	–	0
BTEX, PAH	0.587530786	2.445600453	chronic TU (PAH+BTEX)	1.48	0
BTEX, PAH	0	0	no	0	0
BTEX	0	0	no	–	0
BTEX, PAH	0	0	no	0	0
BTEX, PAH	0	0	no	0	0
BTEX	0	0	no	–	0
BTEX, PAH	0	0	no	0	0
BTEX, PAH	0	0	no	0	0
BTEX, PAH	0	0	no	0	0
BTEX	0	0	no	–	0
BTEX, PAH	0.000968929	0.004928571	no	0	0
BTEX, PAH	0	0	no	0	0
BTEX	0	0	no	–	0
BTEX, PAH	0	0	no	0	0
BTEX, PAH	0	0	no	0	0
BTEX	0	0	no	–	0
BTEX, PAH	0	0	no	0	0
BTEX, PAH	0	0	no	0	0

	USEPA toxic unit benchmark for PAH and BTEX compounds				
Organics included in benchmark $\sum TU_i$	Acute Benchmark $\sum TU_i$ for PAH-BTEX mixtures[1,2]	Chronic Benchmark $\sum TU_i$ for PAH-BTEX mixtures[1,2]	Any PAH-BTEX Benchmark TU exceedance [2]	Total concentration of 13 PAHs (µg/L) [3]	No. of HH Benchmarks exceeded
BTEX	0	0	no	–	0
BTEX, PAH	0	0	no	0	0
BTEX, PAH	0	0	no	0	0
BTEX	7.87E-05	0.0004	no	–	0
BTEX, PAH	0	0	no	0	0
BTEX, PAH	0	0	no	0	0
BTEX	0.001237963	0.006296793	no	–	0
BTEX, PAH	0	0	no	0	0
BTEX, PAH	0	0	no	0	0
BTEX	0	0	no	–	0
BTEX	0	0	no	–	0
BTEX, PAH	0	0	no	0	0
BTEX, PAH	0.000986614	0.00411399	no	0.017	0
BTEX	0	0	no	–	0
BTEX, PAH	0	0	no	0	0
BTEX, PAH	0	0	no	0	0
BTEX, PAH	0.000898649	0.003738842	no	0.0218	0
BTEX	0	0	no	–	0
BTEX, PAH	0.013679864	0.056838606	no	0.0635	0
BTEX	0	0	no	–	0
BTEX, PAH	0.007618532	0.031706187	no	0.0571	0
BTEX	0	0	no	–	0
BTEX	0	0	no	–	0
BTEX	0	0	no	–	0
BTEX, PAH	0	0	no	0	0
BTEX, PAH	0	0	no	0	0
BTEX	0	0	no	–	0
BTEX, PAH	0	0	no	0	0
BTEX, PAH	0.117407536	0.488411523	no	0.4307	0

	USEPA toxic unit benchmark for PAH and BTEX compounds				
Organics included in benchmark $\sum TU_i$	Acute Benchmark $\sum TU_i$ for PAH-BTEX mixtures[1,2]	Chronic Benchmark $\sum TU_i$ for PAH-BTEX mixtures[1,2]	Any PAH-BTEX Benchmark TU exceedance [2]	Total concentration of 13 PAHs (µg/L) [3]	No. of HH Benchmarks exceeded
BTEX	0	0	no	–	0
BTEX, PAH	0	0	no	0	0
BTEX	0	0	no	–	0
BTEX, PAH	0	0	no	0	0
BTEX, PAH	0	0	no	0	0
BTEX	0	0	no	–	0
BTEX, PAH	0	0	no	0	0
BTEX	0	0	no	–	0
BTEX, PAH	0	0	no	0	0
BTEX	0	0	no	–	0
BTEX, PAH	0	0	no	0	0
BTEX	0	0	no	–	0
BTEX, PAH	0	0	no	0	0
BTEX, PAH	0	0	no	0	0
PAH	0	0	no	0	0
BTEX, PAH	0.004355272	0.018148771	no	0.0848	0
BTEX	0	0	no	–	0
BTEX, PAH	0.021818882	0.090800527	no	0.124	0
BTEX	0	0	no	–	0
BTEX, PAH	0	0	no	0	0
BTEX, PAH	0.058893534	0.244947585	no	0.3293	0
BTEX	0	0	no	–	0
BTEX, PAH	0.000101045	0.00042029	no	0.0087	0
BTEX	0	0	no	–	0
BTEX, PAH	0	0	no	0	0
BTEX, PAH	0	0	no	0	0
BTEX, PAH	0	0	no	0	0
BTEX	0	0	no	–	0
BTEX, PAH	0	0	no	0	0

	USEPA toxic unit benchmark for PAH and BTEX compounds				
Organics included in benchmark $\sum TU_i$	Acute Benchmark $\sum TU_i$ for PAH-BTEX mixtures[1,2]	Chronic Benchmark $\sum TU_i$ for PAH-BTEX mixtures[1,2]	Any PAH-BTEX Benchmark TU exceedance [2]	Total concentration of 13 PAHs (µg/L) [3]	No. of HH Benchmarks exceeded

Supplemental aquatic-life benchmarks[1,2]

No. of acute AQL Benchmarks exceeded	No. of chronic AQL Benchmarks exceeded
0	0
0	0
0	0
0	0
0	0
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Supplemental aquatic-life benchmarks[1,2]	
No. of acute AQL Benchmarks exceeded	No. of chronic AQL Benchmarks exceeded
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Supplemental aquatic-life benchmarks[1,2]	
No. of acute AQL Benchmarks exceeded	No. of chronic AQL Benchmarks exceeded
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Supplemental aquatic-life benchmarks[1,2]	
No. of acute AQL Benchmarks exceeded	No. of chronic AQL Benchmarks exceeded
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Supplemental aquatic-life benchmarks[1,2]	
No. of acute AQL Benchmarks exceeded	No. of chronic AQL Benchmarks exceeded
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Supplemental aquatic-life benchmarks[1,2]	
No. of acute AQL Benchmarks exceeded	No. of chronic AQL Benchmarks exceeded
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Supplemental aquatic-life benchmarks[1,2]	
No. of acute AQL Benchmarks exceeded	No. of chronic AQL Benchmarks exceeded
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Supplemental aquatic-life benchmarks[1,2]	
No. of acute AQL Benchmarks exceeded	No. of chronic AQL Benchmarks exceeded
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Supplemental aquatic-life benchmarks[1,2]	
No. of acute AQL Benchmarks exceeded	No. of chronic AQL Benchmarks exceeded
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Supplemental aquatic-life benchmarks[1,2]

No. of acute AQL Benchmarks exceeded	No. of chronic AQL Benchmarks exceeded

Appendix Table 3-2. Benchmark exceedances for organic contaminants in sediment, by sample, from the Deepwater Horizon oil spill, Gulf of Mexico, 2010

[Sample dates and times are in yyyy-MM-dd hh:mm ZZZ format, where ZZZ is time zone. Primary sample: 1 indicates that sample is in the primary sample dataset, 0 indicates it is not. Flag: 0 indicates that ∑ESBTU values could not be determined because TOC was not measured by the designated laboratory, shown as subscript; 1 indicates that ∑ESBTU values were calculated using TOC measured by the designated laboratory; and 2 indicates that TOC measured by the designated laboratory was below the reporting level, so one-half the reporting level was used to calculated ∑ESBTU values. Yellow shading indicates columns that contain data determined by the USGS for TOC in sediment, or that use the sediment-TOC data from USGS to compute toxic unit benchmarks; blue shading indicates columns that contain data determined by TALVT for TOC in sediment, or that use the sediment-TOC data from TALVT to compute toxic unit benchmarks. Lower and upper SVs exceeded are formatted as XXXXX.bbb, where bbb is the type of benchmark exceeded and XXXXX is the contaminant responsible for the exceedance.**Abbreviations:** AET, apparent effect threshold; Ala., Alabama; BLM, Bureau of Land Management; CDT, Central Daylight Time; dd, decimal degrees; E, estimated; EDT, Eastern Daylight Time; EqP, equilibrium-partitioning; ERL, Effects range-low; ERM, Effects range-median; $\sum ESBTU_i$, sum of equilibrium-partitioning sediment benchmark toxic units for i compounds; Fla., Florida; La., Louisiana; map no., site number in *figure 1* ; Miss., Mississippi; MW, molecular weight; no., number; NWR, National Wildlife Refuge; PAH, polycyclic aromatic hydrocarbon; PEC , probable effect concentration; PEL , probable effect level; Post, post-landfall; Pre, pre-landfall; SV, screening value; T20, concentration associated with 20 percent probability of toxicity; T50, concentration associated with 50 percent probability of toxicity; TALVT, TestAmerica Laboratory of Burlington, Vermont; TEC , threshold effect concentration; TEL , threshold effect level; Tex., Texas; TOC, total organic carbon; TOC_{talvt}, total organic carbon measured by TALVT; TOC_{usgs}, total organic carbon measured by the USGS National Water Quality Laboratory; USGS, U.S. Geological Survey; WSC, Water Science Center; %, percent;–, not determined]

Map no.	Station identifier	Site name	Site latitude (dd)	Site longitude (dd)	USGS WSC
AL-1	301338088193500	West Dauphin Island, Ala.	30.227425	-88.326394	Ala.
AL-1	301338088193500	West Dauphin Island, Ala.	30.227425	-88.326394	Ala.
AL-10	301341087495200	Fort Morgan BLM-3, Ala.	30.22825903	-87.8311016	Ala.
AL-10	301341087495200	Fort Morgan BLM-3, Ala.	30.22825903	-87.8311016	Ala.
AL-10	301341087495200	Fort Morgan BLM-3, Ala.	30.22825903	-87.8311016	Ala.
AL-2	301455088110300	Dauphin Island, AL-2, Ala.	30.24881454	-88.1841677	Ala.
AL-2	301455088110300	Dauphin Island, AL-2, Ala.	30.24881454	-88.1841677	Ala.
AL-2	301455088110300	Dauphin Island, AL-2, Ala.	30.24881454	-88.1841677	Ala.
AL-2	301455088110300	Dauphin Island, AL-2, Ala.	30.24881454	-88.1841677	Ala.
AL-3	301448088044000	Dauphin Island, AL-3, Ala.	30.24687027	-88.0777765	Ala.
AL-3	301448088044000	Dauphin Island, AL-3, Ala.	30.24687027	-88.0777765	Ala.

Map no.	Station identifier	Site name	Site latitude (dd)	Site longitude (dd)	USGS WSC
AL-4	301329088003000	Fort Morgan, AL-4	30.22492629	-88.0083304	Ala.
AL-4	301329088003000	Fort Morgan, AL-4	30.22492629	-88.0083304	Ala.
AL-5	301349087541600	Fort Morgan, AL-5	30.23048145	-87.9044377	Ala.
AL-5	301349087541600	Fort Morgan, AL-5	30.23048145	-87.9044377	Ala.
AL-6	301428087434900	Gulf Shores, Ala.	30.24131404	-87.7302646	Ala.
AL-6	301428087434900	Gulf Shores, Ala.	30.24131404	-87.7302646	Ala.
AL-7	301608087345400	Orange Beach, Ala.	30.26909103	-87.5816491	Ala.
AL-7	301608087345400	Orange Beach, Ala.	30.26909103	-87.5816491	Ala.
AL-8	301353087561600	BLM-1, Ala.	30.23159265	-87.9377724	Ala.
AL-8	301353087561600	BLM-1, Ala.	30.23159265	-87.9377724	Ala.
AL-8	301353087561600	BLM-1, Ala.	30.23159265	-87.9377724	Ala.
AL-9	301343087520200	BLM-2, Ala.	30.2288147	-87.867214	Ala.
AL-9	301343087520200	BLM-2, Ala.	30.2288147	-87.867214	Ala.
AL-9	301343087520200	BLM-2, Ala.	30.2288147	-87.867214	Ala.
FL-1	302144086581200	Gulf Island National Seashore near Navarre, Fla.	30.362389	-86.970167	Fla.
FL-1	302144086581200	Gulf Island National Seashore near Navarre, Fla.	30.362389	-86.970167	Fla.
FL-10	273728082441800	Fort DeSoto Pk near St Pete, Fla.	27.624444	-82.738333	Fla.
FL-10	273728082441800	Fort DeSoto Pk near St Pete, Fla.	27.624444	-82.738333	Fla.
FL-11	263132082114000	Captiva Island Beach near Captiva, Fla.	26.525639	-82.194222	Fla.
FL-11	263132082114000	Captiva Island Beach near Captiva, Fla.	26.525639	-82.194222	Fla.
FL-11	263132082114000	Captiva Island Beach near Captiva, Fla.	26.525639	-82.194222	Fla.
FL-11	263132082114000	Captiva Island Beach near Captiva, Fla.	26.525639	-82.194222	Fla.
FL-12	255609081440700	Tiger Tail Beach at Marco IS, Fla.	25.936139	-81.734583	Fla.
FL-12	255609081440700	Tiger Tail Beach at Marco IS, Fla.	25.936139	-81.734583	Fla.
FL-13	251329081101100	NW Cape Sable Beach near Flamingo, Fla.	25.224806	-81.169972	Fla.
FL-13	251329081101100	NW Cape Sable Beach near Flamingo, Fla.	25.224806	-81.169972	Fla.
FL-14	243737082522500	Dry Tortugas National Park, Fla.	24.627139	-82.873639	Fla.

Map no.	Station identifier	Site name	Site latitude (dd)	Site longitude (dd)	USGS WSC
FL-14	243737082522500	Dry Tortugas National Park, Fla.	24.627139	-82.873639	Fla.
FL-15	254002080092000	B Baggs Cape near Key Biscayne, Fla.	25.667417	-80.155528	Fla.
FL-15	254002080092000	B Baggs Cape near Key Biscayne, Fla.	25.667417	-80.155528	Fla.
FL-16	260454080063400	Lloyd Beach at Ft Lauderdale, Fla.	26.081694	-80.109444	Fla.
FL-16	260454080063400	Lloyd Beach at Ft Lauderdale, Fla.	26.081694	-80.109444	Fla.
FL-16	260454080063400	Lloyd Beach at Ft Lauderdale, Fla.	26.081694	-80.109444	Fla.
FL-16	260454080063400	Lloyd Beach at Ft Lauderdale, Fla.	26.081694	-80.109444	Fla.
FL-17	264921080021700	MacArthur Beach at W Palm Beach, Fla.	26.822583	-80.038056	Fla.
FL-17	264921080021700	MacArthur Beach at W Palm Beach, Fla.	26.822583	-80.038056	Fla.
FL-18	244345081000600	Coco Plum Beach near Marathon, Fla.	24.72925	-81.169972	Fla.
FL-18	244345081000600	Coco Plum Beach near Marathon, Fla.	24.72925	-81.169972	Fla.
FL-19	265722080045400	BLM Tract1 near Jupiter Inlet, Fla.	26.956111	-80.081667	Fla.
FL-19	265722080045400	BLM Tract1 near Jupiter Inlet, Fla.	26.956111	-80.081667	Fla.
FL-2	302258086263400	Henderson Beach State Park near Destin, Fla.	30.382944	-86.442778	Fla.
FL-2	302258086263400	Henderson Beach State Park near Destin, Fla.	30.382944	-86.442778	Fla.
FL-20	265722080045500	BLM Tract2 near Jupiter Inlet, Fla.	26.956111	-80.081944	Fla.
FL-20	265722080045500	BLM Tract2 near Jupiter Inlet, Fla.	26.956111	-80.081944	Fla.
FL-21	243902081332700	BLM Tract1 near Park Key, Fla.	24.650556	-81.5575	Fla.
FL-21	243902081332700	BLM Tract1 near Park Key, Fla.	24.650556	-81.5575	Fla.
FL-21	243902081332700	BLM Tract1 near Park Key, Fla.	24.650556	-81.5575	Fla.
FL-22	243703081323700	BLM Tract2 near Sugarloaf Key, Fla.	24.6175	-81.543611	Fla.
FL-22	243703081323700	BLM Tract2 near Sugarloaf Key, Fla.	24.6175	-81.543611	Fla.

Map no.	Station identifier	Site name	Site latitude (dd)	Site longitude (dd)	USGS WSC
FL-23	243700081322300	BLM Tract3 near Sugarloaf Key, Fla.	24.616667	-81.539722	Fla.
FL-23	243700081322300	BLM Tract3 near Sugarloaf Key, Fla.	24.616667	-81.539722	Fla.
FL-24	273605082454900	BLM Tract at Egmont Key, Fla.	27.601389	-82.763611	Fla.
FL-24	273605082454900	BLM Tract at Egmont Key, Fla.	27.601389	-82.763611	Fla.
FL-25	300223085260800	BLM Lathrop Bayou near Panama City, Fla.	30.038944	-85.435472	Fla.
FL-25	300223085260800	BLM Lathrop Bayou near Panama City, Fla.	30.038944	-85.435472	Fla.
FL-25	300223085260800	BLM Lathrop Bayou near Panama City, Fla.	30.038944	-85.435472	Fla.
FL-26	244325081351500	Marvin Key at Great White Heron NWR, Fla.	24.709806	-81.644639	Fla.
FL-26	244325081351500	Marvin Key at Great White Heron NWR, Fla.	24.709806	-81.644639	Fla.
FL-3	301926086091800	Grayton Beach State Park near Seaside, Fla.	30.324056	-86.155056	Fla.
FL-3	301926086091800	Grayton Beach State Park near Seaside, Fla.	30.324056	-86.155056	Fla.
FL-4	300729085440900	St. Andrews State Park near Panama City, Fla.	30.124722	-85.736028	Fla.
FL-4	300729085440900	St. Andrews State Park near Panama City, Fla.	30.124722	-85.736028	Fla.
FL-5	294645085243000	St. Joe Peninsula State Park near Port St. Joe, Fla.	29.779167	-85.408528	Fla.
FL-5	294645085243000	St. Joe Peninsula State Park near Port St. Joe, Fla.	29.779167	-85.408528	Fla.
FL-6	294152084460300	St George Island State Park near E Point, Fla.	29.697861	-84.76775	Fla.
FL-6	294152084460300	St George Island State Park near E Point, Fla.	29.697861	-84.76775	Fla.
FL-6	294152084460300	St George Island State Park near E Point, Fla.	29.697861	-84.76775	Fla.
FL-6	294152084460300	St George Island State Park near E Point, Fla.	29.697861	-84.76775	Fla.
FL-6	294152084460300	St George Island State Park near E Point, Fla.	29.697861	-84.76775	Fla.
FL-7	300427084105000	St. Marks NWR near St. Marks, Fla.	30.074194	-84.180444	Fla.

Map no.	Station identifier	Site name	Site latitude (dd)	Site longitude (dd)	USGS WSC
FL-7	300427084105000	St. Marks NWR near St. Marks, Fla.	30.074194	-84.180444	Fla.
FL-8	290740083031200	Piney Pt Beach at Cedar Key, Fla.	29.12775	-83.053361	Fla.
FL-8	290740083031200	Piney Pt Beach at Cedar Key, Fla.	29.12775	-83.053361	Fla.
FL-9	285425082412600	Fort Island Gulf Beach near Chassah., Fla.	28.907194	-82.690778	Fla.
FL-9	285425082412600	Fort Island Gulf Beach near Chassah., Fla.	28.907194	-82.690778	Fla.
LA-22	294432090083100	Jean Lafitte National Park, La.	29.7422222	-90.1419444	La.
LA-22	294432090083100	Jean Lafitte National Park, La.	29.7422222	-90.1419444	La.
LA-22	294432090083100	Jean Lafitte National Park, La.	29.7422222	-90.1419444	La.
LA-23	294406091511300	Cypremort Point, La.	29.735	-91.8536111	La.
LA-23	294406091511300	Cypremort Point, La.	29.735	-91.8536111	La.
LA-23	294406091511300	Cypremort Point, La.	29.735	-91.8536111	La.
LA-23	294406091511300	Cypremort Point, La.	29.735	-91.8536111	La.
LA-24	292046090254500	Lake Felicity, La.	29.3461111	-90.4291667	La.
LA-24	292046090254500	Lake Felicity, La.	29.3461111	-90.4291667	La.
LA-25	293808092460200	Rockefeller Refuge Beach, La.	29.63555556	-92.7672222	La.
LA-26	291507090551800	Sister Lake, La.	29.25194444	-90.9216667	La.
LA-26	291507090551800	Sister Lake, La.	29.25194444	-90.9216667	La.
LA-28	293424091321600	Point Chevreuil, La.	29.57333333	-91.5377778	La.

Map no.	Station identifier	Site name	Site latitude (dd)	Site longitude (dd)	USGS WSC
LA-28	293424091321600	Point Chevreuil, La.	29.57333333	-91.5377778	La.
LA-29	294324089432500	Crooked Bayou, La.	29.72333333	-89.7236111	La.
LA-29	294324089432500	Crooked Bayou, La.	29.72333333	-89.7236111	La.
LA-30	294108089234500	Mississippi R. Gulf Outlet, La.	29.68555556	-89.3958333	La.
LA-30	294108089234500	Mississippi R. Gulf Outlet, La.	29.68555556	-89.3958333	La.
LA-31	291537089570100	Grand Isle Beach at State Park, La.	29.26027778	-89.9502778	La.
LA-31	291537089570100	Grand Isle Beach at State Park, La.	29.26027778	-89.9502778	La.
LA-31	291537089570100	Grand Isle Beach at State Park, La.	29.26027778	-89.9502778	La.
LA-31	291537089570100	Grand Isle Beach at State Park, La.	29.26027778	-89.9502778	La.
LA-31	291537089570100	Grand Isle Beach at State Park, La.	29.26027778	-89.9502778	La.
LA-32	291914089105500	Mississippi R. at Main Pass, La.	29.32055556	-89.1819444	La.
LA-32	291914089105500	Mississippi R. at Main Pass, La.	29.32055556	-89.1819444	La.
LA-33	293518089364300	Breton Sound, La.	29.58833333	-89.6119444	La.
LA-33	293518089364300	Breton Sound, La.	29.58833333	-89.6119444	La.

Map no.	Station identifier	Site name	Site latitude (dd)	Site longitude (dd)	USGS WSC
LA-34	300907089144500	Miss. Sound at Grand Pass, La.	30.15194444	-89.2458333	La.
LA-34	300907089144500	Miss. Sound at Grand Pass, La.	30.15194444	-89.2458333	La.
LA-35	285951089085600	Mississippi R. at South Pass, La.	28.9975	-89.1488889	La.
LA-35	285951089085600	Mississippi R. at South Pass, La.	28.9975	-89.1488889	La.
LA-36	285615089235600	Mississippi R. at SW Pass, La.	28.9375	-89.3988889	La.
LA-36	285615089235600	Mississippi R. at SW Pass, La.	28.9375	-89.3988889	La.
LA-46	294456093394801	East Sabine, La.	29.74888889	-93.6633333	La.
LA-46	294456093394801	East Sabine, La.	29.74888889	-93.6633333	La.
LA-6 (Bat0(	292708089521400	Bay Jimmy at NE Barataria Bay, La.	29.4522222	-89.8705556	La.
MS-37	301309089044700	South Cat Island Beach, Miss.	30.21916667	-89.0797222	Miss.
MS-37	301309089044700	South Cat Island Beach, Miss.	30.21916667	-89.0797222	Miss.
MS-38	301227088582000	West Ship Island Beach, Miss.	30.2075	-88.9722222	Miss.
MS-38	301227088582000	West Ship Island Beach, Miss.	30.2075	-88.9722222	Miss.
MS-39	301358088533300	East Ship Island Beach, Miss.	30.23277778	-88.8925	Miss.
MS-39	301358088533300	East Ship Island Beach, Miss.	30.23277778	-88.8925	Miss.
MS-40	301425088440600	West Horn Island Beach, Miss.	30.24027778	-88.735	Miss.
MS-40	301425088440600	West Horn Island Beach, Miss.	30.24027778	-88.735	Miss.
MS-41	301321088353300	East Horn Island Beach, Miss.	30.2225	-88.5925	Miss.
MS-41	301321088353300	East Horn Island Beach, Miss.	30.2225	-88.5925	Miss.
MS-42	301208088253600	Petit Bois Island Beach, Miss.	30.2022222	-88.4266667	Miss.
MS-42	301208088253600	Petit Bois Island Beach, Miss.	30.2022222	-88.4266667	Miss.
MS-43	301858089141000	Pass Christian Beach, Miss.	30.3161111	-89.2361111	Miss.
MS-43	301858089141000	Pass Christian Beach, Miss.	30.3161111	-89.2361111	Miss.

Map no.	Station identifier	Site name	Site latitude (dd)	Site longitude (dd)	USGS WSC
MS-44	302336088535800	BIloxi Beach, Miss.	30.39333333	-88.8994444	Miss.
MS-44	302336088535800	BIloxi Beach, Miss.	30.39333333	-88.8994444	Miss.
MS-44	302336088535800	BIloxi Beach, Miss.	30.39333333	-88.8994444	Miss.
MS-45	302034088325200	Pascagoula Beach, Miss.	30.34277778	-88.5477778	Miss.
MS-45	302034088325200	Pascagoula Beach, Miss.	30.34277778	-88.5477778	Miss.
MS-45	302034088325200	Pascagoula Beach, Miss.	30.34277778	-88.5477778	Miss.
MS-45	302034088325200	Pascagoula Beach, Miss.	30.34277778	-88.5477778	Miss.
TX-47	294057093572301	Texas Point, Tex.	29.6825	-93.9563889	Tex.
TX-47	294057093572301	Texas Point, Tex.	29.6825	-93.9563889	Tex.
TX-47	294057093572301	Texas Point, Tex.	29.6825	-93.9563889	Tex.
TX-48	295542093521701	Sabine Lake, Tex.	29.92833333	-93.8713889	Tex.
TX-49	293324094220601	High Island, Tex.	29.55666667	-94.3683333	Tex.
TX-49	293324094220601	High Island, Tex.	29.55666667	-94.3683333	Tex.
TX-50	293429094332101	East Bay near Anahuac, Tex.	29.5747222	-94.5558333	Tex.
TX-51	291815094461001	Galveston Island, Tex.	29.30416667	-94.7694444	Tex.
TX-51	291815094461001	Galveston Island, Tex.	29.30416667	-94.7694444	Tex.
TX-51	291815094461001	Galveston Island, Tex.	29.30416667	-94.7694444	Tex.
TX-51	291815094461001	Galveston Island, Tex.	29.30416667	-94.7694444	Tex.
TX-51	291815094461001	Galveston Island, Tex.	29.30416667	-94.7694444	Tex.
TX-51	291815094461001	Galveston Island, Tex.	29.30416667	-94.7694444	Tex.

Map no.	Station identifier	Site name	Site latitude (dd)	Site longitude (dd)	USGS WSC
TX-52	294408094501101	Trinity Bay near Beach City, Tex.	29.73555556	-94.8363889	Tex.
TX-53	292318094430901	Bolivar Peninsula, Tex.	29.38833333	-94.7191667	Tex.
TX-53	292318094430901	Bolivar Peninsula, Tex.	29.38833333	-94.7191667	Tex.
TX-54	292937094544001	Galveston Bay near Eagle Pt, Tex.	29.4936111	-94.9111111	Tex.
TX-55	291251094571401	West Bay, Galveston Is State Park, Tex.	29.21416667	-94.9538889	Tex.
TX-55	291251094571401	West Bay, Galveston Is State Park, Tex.	29.21416667	-94.9538889	Tex.
TX-55	291251094571401	West Bay, Galveston Is State Park, Tex.	29.21416667	-94.9538889	Tex.
TX-56	290512095063101	San Luis Pass, Tex.	29.08666667	-95.1086111	Tex.
TX-56	290512095063101	San Luis Pass, Tex.	29.08666667	-95.1086111	Tex.

[1] For each PAH compound, divide the concentration in µg/kg by the sediment-TOC content (kg-oc/kg sediment), then divide by the acute or chronic potency divisor from USEPA (*Table 5D*), and sum the quotients for all PAH compounds. Any individual PAH compounds that were not detected or had missing data were assumed equal to 0. BTEX compounds were excluded from the sum because data were not available. For some samples, akylated PAHs were not measured, so they were incorporated using USEPA multipliers (*Table 5D*). Sediment-TOC values came from the designated laboratory, either USGS or TALVT.

[2] Quality control analysis of field replicates indicates high variability (percent relative standard deviation of 22 to 47 percent) for 12 PAH compounds: benzo[a]anthracene, benzo[a]pyrene, benzo[b]fluoranthene, benzo[e]pyrene, benzo[g,h,i]perylene, benzo[k]fluoranthene, chrysene, fluoranthene, indeno[1,2,3-cd]pyrene, perylene, phenanthrene, and pyrene. Thus, the benchmark results for these PAH compounds or summed PAHs are qualified to indicate that analytical variability for PAHs in sediment is high.

Map no.	Station identifier	Site name	Site latitude (dd)	Site longitude (dd)	USGS WSC

Three PAHs showed contamination in laboratory blanks associated with two samples (is5dlabrg_01100035_01 and is5dlabrg_01100020_01), so these 3 PAHs were treated as missing data for purposes of ∑ESBTU calculation and individual benchmark exceedance. The 3 PAHs are perylene, indeno[1,2,3-cd]pyrene, and benzo[g,h,i]perylene.

[4] Sediment-TOC concentration (%) used to compute exceedance ofEqP benchmarks for individual contaminants, which are not included in ∑ESBTU for PAH mixtures. The sediment-TOC value was selected from the following prioritized list: (1) TOC value measured by USGS, if detected at ≥0.1%; (2)TOC value measured by TALVT, if detected at ≥0.1%; otherwise, (3) 0.05%, if reported as less than the detection level (<0.1%) by either (or both) USGS or TALVT.

[5] EqP benchmarks represent concentrations that are predictive of biological effects; lower SVs define concentrations below which adverse effects are not expected; and upper SVs define concentrations above which adverse effects are likely or frequent. Benchmark values are listed in *Table 5E* .

[6] Low-MW PAHs summed are: acenaphthene, acenaphthylene, anthracene, fluorene, naphthalene, phenanthrene, and 2-methylnaphthalene. High-MW PAHs summed are: pyrene, benzo(a)anthracene, benzo(a)pyrene, chrysene, dibenzo(a,h)anthracene, and fluoranthene. Summed PAHs are the sum of these low-MW and high-MW PAHs.

Sample no.	Sample date and time	Sampling period	Sample type	Primary sample
sun1dalmtg_01000808_01	2010-05-08 11:15 CDT	Pre	Sample routine	1
sun1dalmtg_01100034_01	2010-10-13 13:00 CDT	Post	Sample routine	1
sun1dalmtg_01000811_01	2010-05-24 16:30 CDT	Pre	Sample routine	1
sun1dalmtg_01100022_01	2010-10-14 10:25 CDT	Post	Quality control sample-field replicate	1
sun1dalmtg_01100027_01	2010-10-14 10:26 CDT	Post	Quality control sample-field replicate	0
sun1dalmtg_01000812_01	2010-05-09 13:15 CDT	Pre	Quality control sample-field replicate	1
sun1dalmtg_01000083_01	2010-05-09 13:16 CDT	Pre	Quality control sample-field replicate	0
sun1dalmtg_01000084_01	2010-05-09 13:17 CDT	Pre	Quality control sample-field replicate	0
sun1dalmtg_01100003_01	2010-10-07 12:20 CDT	Post	Sample routine	1
sun1dalmtg_01000082_01	2010-05-09 10:15 CDT	Pre	Sample routine	1
sun1dalmtg_01100006_01	2010-10-06 12:30 CDT	Post	Sample routine	1

Sample no.	Sample date and time	Sampling period	Sample type	Primary sample
sun1dalmtg_01000079_01	2010-05-08 16:45 CDT	Pre	Sample routine	1
sun1dalmtg_01100010_01	2010-10-12 11:00 CDT	Post	Sample routine	1
sun1dalmtg_01000080_01	2010-05-08 15:00 CDT	Pre	Sample routine	1
sun1dalmtg_01100013_01	2010-10-13 13:40 CDT	Post	Sample routine	1
sun1dalmtg_01000081_01	2010-05-08 12:45 CDT	Pre	Sample routine	1
sun1dalmtg_01100029_01	2010-10-14 13:30 CDT	Post	Sample routine	1
sun1dalmtg_01000086_01	2010-05-08 09:45 CDT	Pre	Sample routine	1
sun1dalmtg_01100032_01	2010-10-14 10:00 CDT	Post	Sample routine	1
sun1dalmtg_01000809_01	2010-05-24 13:00 CDT	Pre	Sample routine	1
sun1dalmtg_01000822_01	2010-05-24 13:01 CDT	Pre	Sample routine	0
sun1dalmtg_01100016_01	2010-10-13 10:45 CDT	Post	Sample routine	1
sun1dalmtg_01000810_01	2010-05-24 15:00 CDT	Pre	Sample routine	1
sun1dalmtg_01000823_01	2010-05-24 15:01 CDT	Pre	Sample routine	0
sun1dalmtg_01100019_01	2010-10-14 13:35 CDT	Post	Sample routine	1
flnwis1_01002983_01	2010-05-11 13:30 EDT	Pre	Sample routine	1
flnwis1_01100063_01	2010-10-04 14:30 CDT	Post	Sample routine	1
flnwis1_01003372_01	2010-05-17 16:00 EDT	Pre	Sample routine	1
flnwis1_01000813_02	2010-05-17 16:01 EDT	Pre	Quality control sample-field replicate	0
flnwis1_01003510_01	2010-05-20 16:30 EDT	Pre	Sample routine	1
flnwis1_01000818_02	2010-05-20 16:31 EDT	Pre	Quality control sample-field replicate	0
flnwis1_01000819_02	2010-05-20 16:32 EDT	Pre	Quality control sample-field replicate	0
flnwis1_01000820_02	2010-05-20 16:33 EDT	Pre	Quality control sample-field replicate	0
flnwis1_01003669_01	2010-05-21 15:00 EDT	Pre	Sample routine	1
flnwis1_01000824_02	2010-05-21 15:01 EDT	Pre	Quality control sample-field replicate	0
flnwis1_01003530_01	2010-05-22 13:05 EDT	Pre	Sample routine	1
flnwis1_01000826_02	2010-05-22 13:06 EDT	Pre	Quality control sample-field replicate	0
flnwis1_01003367_01	2010-05-20 08:45 EDT	Pre	Sample routine	1

Sample no.	Sample date and time	Sampling period	Sample type	Primary sample
flnwis1_01000828_02	2010-05-20 08:46 EDT	Pre	Quality control sample-field replicate	0
flnwis1_01004140_01	2010-06-01 13:00 EDT	Pre	Quality control sample-field replicate	1
flnwis1_01000768_02	2010-06-01 13:01 EDT	Pre	Quality control sample-field replicate	0
flnwis1_01004151_01	2010-05-26 15:00 EDT	Pre	Quality control sample-field replicate	1
flnwis1_01000776_02	2010-05-26 15:01 EDT	Pre	Quality control sample-field replicate	0
flnwis1_01000778_02	2010-05-26 15:02 EDT	Pre	Quality control sample-field replicate	0
flnwis1_01000780_02	2010-05-26 15:03 EDT	Pre	Quality control sample-field replicate	0
flnwis1_01004152_01	2010-05-27 15:30 EDT	Pre	Quality control sample-field replicate	1
flnwis1_01000784_02	2010-05-27 15:31 EDT	Pre	Quality control sample-field replicate	0
flnwis1_01003363_01	2010-05-24 15:45 EDT	Pre	Sample routine	1
flnwis1_01000830_02	2010-05-24 15:46 EDT	Pre	Quality control sample-field replicate	0
flnwis1_01004153_01	2010-06-16 13:00 EDT	Pre	Quality control sample-field replicate	1
flnwis1_01000787_02	2010-06-16 13:01 EDT	Pre	Quality control sample-field replicate	0
flnwis1_01002986_01	2010-05-11 17:30 EDT	Pre	Sample routine	1
flnwis1_01100066_01	2010-10-05 09:30 CDT	Post	Sample routine	1
flnwis1_01004154_01	2010-06-16 15:00 EDT	Pre	Quality control sample-field replicate	1
flnwis1_01000789_02	2010-06-16 15:01 EDT	Pre	Quality control sample-field replicate	0
flnwis1_01003612_01	2010-06-09 16:00 EDT	Pre	Sample routine	1
flnwis1_01000834_02	2010-06-09 16:01 EDT	Pre	Quality control sample-field replicate	0
flnwis1_01000759_02	2010-06-09 16:02 EDT	Pre	Quality control sample-field replicate	0
flnwis1_01004105_01	2010-06-09 13:00 EDT	Pre	Quality control sample-field replicate	1
flnwis1_01000756_02	2010-06-09 13:01 EDT	Pre	Quality control sample-field replicate	0

Sample no.	Sample date and time	Sampling period	Sample type	Primary sample
flnwis1_01004104_01	2010-06-09 10:00 EDT	Pre	Quality control sample-field replicate	1
flnwis1_01000754_02	2010-06-09 10:01 EDT	Pre	Quality control sample-field replicate	0
flnwis1_01003384_01	2010-06-14 14:00 EDT	Pre	Sample routine	1
flnwis1_01000832_02	2010-06-14 14:01 EDT	Pre	Quality control sample-field replicate	0
flnwis1_01004615_01	2010-06-10 11:00 CDT	Pre	Sample routine	1
flnwis1_01000583_02	2010-06-10 11:05 EDT	Pre	Quality control sample-field replicate	0
flnwis1_01100080_01	2010-10-12 10:00 CDT	Post	Sample routine	1
flnwis1_01004108_01	2010-07-07 11:00 EDT	Pre	Quality control sample-field replicate	1
flnwis1_01004109_01	2010-07-07 11:01 EDT	Pre	Quality control sample-field replicate	0
flnwis1_01002993_01	2010-05-12 11:30 EDT	Pre	Sample routine	1
flnwis1_01100071_01	2010-10-05 14:00 CDT	Post	Sample routine	1
flnwis1_01002996_01	2010-05-12 15:30 EDT	Pre	Sample routine	1
flnwis1_01100078_01	2010-10-11 13:00 CDT	Post	Sample routine	1
flnwis1_01003187_01	2010-05-13 09:00 EDT	Pre	Sample routine	1
flnwis1_01100082_01	2010-10-13 10:30 EDT	Post	Sample routine	1
flnwis1_01003195_01	2010-05-13 12:00 EDT	Pre	Quality control sample-field replicate	1
flnwis1_01000536_02	2010-05-13 12:05 EDT	Pre	Quality control sample-field replicate	0
flnwis1_01000537_02	2010-05-13 12:10 EDT	Pre	Quality control sample-field replicate	0
flnwis1_01100073_01	2010-10-06 14:00 EDT	Post	Sample routine	1
flnwis1_01100070_02	2010-10-06 14:05 EDT	Post	Quality control sample-field replicate	0
flnwis1_01003192_01	2010-05-18 11:30 EDT	Pre	Sample routine	1

Sample no.	Sample date and time	Sampling period	Sample type	Primary sample
flnwis1_01100075_01	2010-10-07 11:30 EDT	Post	Sample routine	1
flnwis1_01003380_01	2010-05-18 17:00 EDT	Pre	Quality control sample-field replicate	1
flnwis1_01000810_02	2010-05-18 17:01 EDT	Pre	Quality control sample-field replicate	0
flnwis1_01003376_01	2010-05-19 12:00 EDT	Pre	Sample routine	1
flnwis1_01000808_02	2010-05-19 12:01 EDT	Pre	Quality control sample-field replicate	0
fs5dlabrg_01000213_01	2010-05-14 10:30 CDT	Pre	Sample routine	1
fs5dlabrg_01100028_01	2010-10-13 12:30 CDT	Post	Sample routine	1
fs5dlabrg_01100003_02	2010-10-13 12:31 CDT	Post	Quality control sample-field replicate	0
fs5dlabrg_01000383_01	2010-05-13 12:30 CDT	Pre	Sample routine	1
fs5dlabrg_01000064_02	2010-05-13 12:31 CDT	Pre	Quality control sample-field replicate	1
fs5dlabrg_01000065_02	2010-05-13 12:32 CDT	Pre	Quality control sample-field replicate	0
fs5dlabrg_01100006_01	2010-10-05 15:30 CDT	Post	Sample routine	1
fs5dlabrg_01000216_01	2010-05-18 16:20 CDT	Pre	Sample routine	1
fs5dlabrg_01100019_01	2010-10-12 10:30 CDT	Post	Sample routine	1
fs5dlabrg_01000212_01	2010-05-13 10:35 CDT	Pre	Sample routine	1
fs5dlabrg_01000214_01	2010-05-17 10:15 CDT	Pre	Sample routine	1
fs5dlabrg_01100033_01	2010-10-08 10:00 CDT	Post	Sample routine	1
fs5dlabrg_01000211_01	2010-05-13 09:30 CDT	Pre	Sample routine	1

Sample no.	Sample date and time	Sampling period	Sample type	Primary sample
fs5dlabrg_01100010_01	2010-10-05 11:00 CDT	Post	Sample routine	1
fs5dlabrg_01000215_01	2010-05-18 14:00 CDT	Pre	Sample routine	1
fs5dlabrg_01100014_01	2010-10-13 12:00 CDT	Post	Sample routine	1
fs5dlabrg_01000220_01	2010-05-07 12:00 CDT	Pre	Sample routine	1
fs5dlabrg_01100012_01	2010-10-12 12:00 CDT	Post	Sample routine	1
fs5dlabrg_01000388_01	2010-05-10 11:45 CDT	Pre	Sample routine	1
fs5dlabrg_01000068_02	2010-05-10 11:46 CDT	Pre	Quality control sample-field replicate	0
fs5dlabrg_01000067_02	2010-05-10 11:47 CDT	Pre	Quality control sample-field replicate	0
fs5dlabrg_01100032_01	2010-10-14 11:00 CDT	Post	Sample routine	1
fs5dlabrg_01100006_02	2010-10-14 11:02 CDT	Post	Quality control sample-field replicate	0
fs5dlabrg_01000246_01	2010-05-07 10:30 CDT	Pre	Sample routine	1
fs5dlabrg_01100026_01	2010-10-07 11:15 CDT	Post	Sample routine	1
fs5dlabrg_01000219_01	2010-05-07 14:30 CDT	Pre	Sample routine	1
fs5dlabrg_01100016_01	2010-10-13 15:00 CDT	Post	Sample routine	1

Sample no.	Sample date and time	Sampling period	Sample type	Primary sample
fs5dlabrg_01000221_01	2010-05-07 10:00 CDT	Pre	Sample routine	1
fs5dlabrg_01100030_01	2010-10-11 10:30 CDT	Post	Sample routine	1
fs5dlabrg_01000217_01	2010-05-07 13:10 CDT	Pre	Sample routine	1
fs5dlabrg_01100023_01	2010-10-07 12:00 CDT	Post	Sample routine	1
fs5dlabrg_01000218_01	2010-05-07 09:45 CDT	Pre	Sample routine	1
fs5dlabrg_01100021_01	2010-10-14 13:30 CDT	Post	Sample routine	1
sun1ast_01001284_01	2010-05-10 13:17 CDT	Pre	Sample routine	1
sun1ast_01100012_01	2010-10-06 12:40 CDT	Post	Sample routine	1
fs5dlabrg_01000315_01	2010-08-23 13:30 CDT	Post	Sample routine	1
nwisdmsjkn_01001594_01	2010-05-07 15:30 CDT	Pre	Sample routine	1
nwisdmsjkn_01100016_01	2010-10-14 11:30 CDT	Post	Sample routine	1
nwisdmsjkn_01001589_01	2010-05-07 17:00 CDT	Pre	Sample routine	1
nwisdmsjkn_01100014_01	2010-10-14 14:30 CDT	Post	Sample routine	1
nwisdmsjkn_01001596_01	2010-05-07 18:45 CDT	Pre	Sample routine	1
nwisdmsjkn_01100010_01	2010-10-11 14:30 CDT	Post	Sample routine	1
nwisdmsjkn_01001528_01	2010-05-08 14:00 CDT	Pre	Sample routine	1
nwisdmsjkn_01100008_01	2010-10-12 16:30 CDT	Post	Sample routine	1
nwisdmsjkn_01001592_01	2010-05-08 13:10 CDT	Pre	Sample routine	1
nwisdmsjkn_01100012_01	2010-10-12 12:30 CDT	Post	Sample routine	1
nwisdmsjkn_01001600_01	2010-05-08 12:15 CDT	Pre	Sample routine	1
nwisdmsjkn_01100018_01	2010-10-13 09:45 CDT	Post	Sample routine	1
nwisdmsjkn_01001598_01	2010-05-08 20:15 CDT	Pre	Sample routine	1
nwisdmsjkn_01100006_01	2010-10-08 10:00 CDT	Post	Sample routine	1

Sample no.	Sample date and time	Sampling period	Sample type	Primary sample
nwisdmsjkn_01001602_01	2010-05-08 13:00 CDT	Pre	Sample routine	1
nwisdmsjkn_01100004_01	2010-10-07 10:30 CDT	Post	Sample routine	1
nwisdmsjkn_01100004_02	2010-10-07 10:31 CDT	Post	Quality control sample-field replicate	0
nwisdmsjkn_01001606_01	2010-05-08 16:30 CDT	Pre	Sample routine	1
nwisdmsjkn_01000048_02	2010-05-08 16:31 CDT	Pre	Quality control sample-field replicate	0
nwisdmsjkn_01000049_02	2010-05-08 16:32 CDT	Pre	Quality control sample-field replicate	0
nwisdmsjkn_01100020_01	2010-10-14 14:30 CDT	Post	Sample routine	1
sun1ast_01001282_01	2010-05-10 15:25 CDT	Pre	Sample routine	1
sun1ast_01100019_01	2010-10-06 13:40 CDT	Post	Sample routine	1
sun1ast_01100020_01	2010-10-12 11:20 CDT	Post	Sample routine	0
sun1ast_01001285_01	2010-05-10 17:46 CDT	Pre	Sample routine	1
sun1ast_01001280_01	2010-05-10 13:15 CDT	Pre	Sample routine	1
sun1ast_01100026_01	2010-10-07 11:20 CDT	Post	Sample routine	1
sun1ast_01001281_01	2010-05-10 16:25 CDT	Pre	Sample routine	1
sun1ast_01001274_01	2010-05-10 13:11 CDT	Pre	Sample routine	1
sun1ast_01000339_02	2010-05-10 13:12 CDT	Pre	Quality control sample-field replicate	0
sun1ast_01000342_02	2010-05-10 13:13 CDT	Pre	Quality control sample-field replicate	0
sun1ast_01100016_01	2010-10-13 11:00 CDT	Post	Sample routine	1
sun1ast_01100007_02	2010-10-13 11:02 CDT	Post	Quality control sample-field replicate	0
sun1ast_01100022_01	2010-10-14 13:15 CDT	Post	Sample routine	0

Sample no.	Sample date and time	Sampling period	Sample type	Primary sample
sun1ast_01001283_01	2010-05-11 12:15 CDT	Pre	Sample routine	1
sun1ast_01001278_01	2010-05-11 12:05 CDT	Pre	Sample routine	1
sun1ast_01100023_01	2010-10-07 12:43 CDT	Post	Sample routine	1
sun1ast_01001279_01	2010-05-11 10:36 CDT	Pre	Sample routine	1
sun1ast_01001277_01	2010-05-11 10:35 CDT	Pre	Sample routine	1
sun1ast_01100011_01	2010-10-14 11:10 CDT	Post	Sample routine	1
sun1ast_01100008_02	2010-10-14 11:12 CDT	Post	Quality control sample-field replicate	0
sun1ast_01001276_01	2010-05-11 12:03 CDT	Pre	Sample routine	1
sun1ast_01100015_01	2010-10-05 12:50 CDT	Post	Sample routine	1

Sample no.	Sample date and time	Sampling period	Sample type	Primary sample

∑ESBTU based on TOC data from USGS laboratory[1]				∑ESBTU based on TOC data from TALVT laboratory[1]			
Chronic $\sum ESBTU_i$ (using TOC_{usgs})[2,3]	Acute $\sum ESBTU_i$ (using TOC_{usgs})[2,3]	TOC_{usgs} (%)	TOC_{usgs} Flag	Chronic $\sum ESBTU_i$ (using TOC_{talvt})[2,3]	Acute $\sum ESBTU_i$ (using TOC_{talvt})[2,3]	TOC_{talvt} (%)	TOC_{talvt} Flag
0	0	0.1	1	0	0	<0.1	2
0	0	<0.1	2	–	–	–	0
0.003168831	0.0007625	<0.1	2	0.003168831	0.0007625	<0.1	2
0.291372345	0.070055545	<0.1	2	–	–	–	0
–	–	–	0	–	–	–	0
0	0	<0.1	2	0	0	<0.1	2
–	–	–	0	0	0	<0.1	2
–	–	–	0	0.001454545	0.00035	<0.1	2
0	0	<0.1	2	–	–	–	0
0	0	0.1	1	0	0	<0.1	2
0	0	<0.1	2	–	–	–	0

∑ESBTU based on TOC data from USGS laboratory[1]				∑ESBTU based on TOC data from TALVT laboratory[1]			
Chronic $\sum ESBTU_i$ (using TOC_{usgs})[2,3]	Acute $\sum ESBTU_i$ (using TOC_{usgs})[2,3]	TOC_{usgs} (%)	TOC_{usgs} Flag	Chronic $\sum ESBTU_i$ (using TOC_{talvt})[2,3]	Acute $\sum ESBTU_i$ (using TOC_{talvt})[2,3]	TOC_{talvt} (%)	TOC_{talvt} Flag
0	0	0.1	1	0	0	<0.1	2
0.032290289	0.007762914	<0.1	2	–	–	–	0
0.000753247	0.00018125	0.1	1	0.001506494	0.0003625	<0.1	2
0.004315381	0.001038212	<0.1	2	–	–	–	0
0.000623377	0.00015	0.1	1	0.001246753	0.0003	<0.1	2
0.021248176	0.005108184	<0.1	2	–	–	–	0
0.000727273	0.000175	0.1	1	0.001454545	0.00035	<0.1	2
0.005632715	0.001353852	<0.1	2	–	–	–	0
0.002608385	0.000627419	<0.1	2	0.002608385	0.000627419	<0.1	2
–	–	–	0	–	–	–	0
0.213671917	0.051368659	<0.1	2	–	–	–	0
0.00161039	0.0003875	<0.1	2	0.00161039	0.0003875	<0.1	2
–	–	–	0	–	–	–	0
0.227207539	0.054627218	<0.1	2	–	–	–	0
0.002088904	0.000502419	<0.1	2	0.002088904	0.000502419	<0.1	2
0	0	<0.1	2	–	–	–	0
0.001454545	0.00035	<0.1	2	0.001454545	0.00035	<0.1	2
–	–	–	0	0	0	<0.1	2
0.000805195	0.00019375	0.1	1	0.00161039	0.0003875	<0.1	2
–	–	–	0	–	–	–	0
0.00187013	0.00045	<0.1	2	0.00187013	0.00045	<0.1	2
–	–	–	0	0.001974026	0.000475	<0.1	2
0.000402597	0.000096875	0.2	1	0.00161039	0.0003875	<0.1	2
–	–	–	0	0.001714286	0.0004125	<0.1	2
0.000311688	0.000075	0.2	1	0.000366692	8.82353E-05	0.17	1
–	–	–	0	0.000519481	0.000125	0.17	1
0.001566338	0.000376706	0.2	1	0.001118813	0.000269076	0.28	1

∑ESBTU based on TOC data from USGS laboratory[1]				∑ESBTU based on TOC data from TALVT laboratory[1]			
Chronic $\sum ESBTU_i$ (using TOC_{usgs})[2,3]	Acute $\sum ESBTU_i$ (using TOC_{usgs})[2,3]	TOC_{usgs} (%)	TOC_{usgs} Flag	Chronic $\sum ESBTU_i$ (using TOC_{talvt})[2,3]	Acute $\sum ESBTU_i$ (using TOC_{talvt})[2,3]	TOC_{talvt} (%)	TOC_{talvt} Flag
–	–	–	0	0.000718232	0.000172756	0.29	1
0	0	<0.1	2	0	0	0.14	1
–	–	–	0	0	0	0.15	1
0	0	<0.1	2	0	0	0.12	1
0.001064935	0.00025625	0.1	1	0.000760668	0.000183036	0.14	1
0.001454545	0.00035	<0.1	2	0.000484848	0.000116667	0.15	1
–	–	–	0	0.000488923	0.000117647	0.17	1
0.000753247	0.00018125	0.1	1	0.000443086	0.000106618	0.17	1
–	–	–	0	0	0	0.1	1
0.000573801	0.000138012	0.3	1	0.000537938	0.000129386	0.32	1
–	–	–	0	0.004942077	0.001188143	0.32	1
0.006838052	0.001644006	0.1	1	0.013676103	0.003288013	<0.1	2
–	–	–	0	0.010573299	0.00254207	<0.1	2
0	0	0.1	1	0	0	<0.1	2
0	0	<0.1	2	–	–	–	0
0.015994954	0.003845241	0.2	1	0.063979817	0.015380965	<0.1	2
–	–	–	0	0.111947435	0.026910262	<0.1	2
0.000666693	0.000160263	0.4	1	0.000476209	0.000114473	0.56	1
–	–	–	0	0.00050837	0.000122205	0.59	1
0.001055676	0.00025374	0.4	1	0.00067027	0.000161105	0.63	1
0.000119571	2.8744E-05	3.9	1	0.000166546	4.00363E-05	2.8	1
–	–	–	0	0.000119957	2.88399E-05	3.5	1

∑ESBTU based on TOC data from USGS laboratory[1]				∑ESBTU based on TOC data from TALVT laboratory[1]			
Chronic $\sum ESBTU_i$ (using TOC_{usgs})[2,3]	Acute $\sum ESBTU_i$ (using TOC_{usgs})[2,3]	TOC_{usgs} (%)	TOC_{usgs} Flag	Chronic $\sum ESBTU_i$ (using TOC_{talvt})[2,3]	Acute $\sum ESBTU_i$ (using TOC_{talvt})[2,3]	TOC_{talvt} (%)	TOC_{talvt} Flag
0.003078601	0.000740135	8.8	1	0.002462881	0.000592108	11	1
–	–	–	0	0.002075579	0.000498997	11	1
0.001558442	0.000375	<0.1	2	0.001558442	0.000375	<0.1	2
–	–	–	0	0.001662338	0.0004	<0.1	2
0.001922078	0.0004625	<0.1	2	0.001922078	0.0004625	<0.1	2
–	–	–	0	0.001402597	0.0003375	<0.1	2
0	0	<0.1	2	–	–	–	0
0.000253247	6.09375E-05	0.4	1	0.00038961	0.00009375	0.26	1
–	–	–	0	0.000443723	0.000106771	0.24	1
0.001402597	0.0003375	<0.1	2	0.001402597	0.0003375	<0.1	2
0	0	<0.1	2	–	–	–	0
0	0	0.1	1	0	0	<0.1	2
0	0	0.1	1	–	–	–	0
0	0	<0.1	2	0	0	<0.1	2
0	0	<0.1	2	–	–	–	0
0.001272727	0.00030625	0.1	1	0.002545455	0.0006125	<0.1	2
0.002493506	0.0006	<0.1	2	0.002493506	0.0006	<0.1	2
0.001116883	0.00026875	0.1	1	0.002233766	0.0005375	<0.1	2
0	0	<0.1	2	–	–	–	0
–	–	–	0	–	–	–	0
0.051440947	0.012365413	0.3	1	0.067096888	0.016128799	0.23	1

∑ESBTU based on TOC data from USGS laboratory[1]				∑ESBTU based on TOC data from TALVT laboratory[1]			
Chronic $\sum ESBTU_i$ (using TOC_{usgs})[2,3]	Acute $\sum ESBTU_i$ (using TOC_{usgs})[2,3]	TOC_{usgs} (%)	TOC_{usgs} Flag	Chronic $\sum ESBTU_i$ (using TOC_{talvt})[2,3]	Acute $\sum ESBTU_i$ (using TOC_{talvt})[2,3]	TOC_{talvt} (%)	TOC_{talvt} Flag
0.004471128	0.001074663	0.2	1	–	–	–	0
0.002763437	0.000664675	<0.1	2	0.002763437	0.000664675	<0.1	2
–	–	–	0	0.001506494	0.0003625	<0.1	2
0.001209492	0.000290927	0.1	1	0.002418984	0.000581855	<0.1	2
–	–	–	0	0.00273872	0.000658557	0.1	1
0.009537508	0.002292761	6.6	1	0.014306262	0.003439141	4.4	1
0.032839832	0.007895186	0.5	1	–	–	–	0
0.005405186	0.001299619	1	1	–	–	–	0
–	–	–	0	0.002241448	0.000539303	<0.1	2
0.002340235	0.000562894	0.1	1	0.00468047	0.001125788	<0.1	2
0.001402597	0.0003375	<0.1	2	0.001402597	0.0003375	<0.1	2
0.001026746	0.000246883	0.5	1	–	–	–	0
–	–	–	0	0.001486227	0.000357346	2.9	1
0.004980049	0.001197818	1.2	1	–	–	–	0
0.003364506	0.00080885	0.4	1	0.005176162	0.001244385	0.26	1
–	–	–	0	0.021869827	0.005257479	0.23	1
0.075198373	0.018078876	1.1	1	–	–	–	0
–	–	–	0	0.009068215	0.002179958	1.1	1

∑ESBTU based on TOC data from USGS laboratory[1]				∑ESBTU based on TOC data from TALVT laboratory[1]			
Chronic $\sum ESBTU_i$ (using TOC_{usgs})[2,3]	Acute $\sum ESBTU_i$ (using TOC_{usgs})[2,3]	TOC_{usgs} (%)	TOC_{usgs} Flag	Chronic $\sum ESBTU_i$ (using TOC_{talvt})[2,3]	Acute $\sum ESBTU_i$ (using TOC_{talvt})[2,3]	TOC_{talvt} (%)	TOC_{talvt} Flag
0.022054789	0.005302187	0.7	1	–	–	–	0
0.000755648	0.000181665	7.9	1	0.000710669	0.000170852	8.4	1
0.000247136	5.94149E-05	10	1	–	–	–	0
0.029152297	0.007011455	<0.1	2	0.029152297	0.007011455	<0.1	2
0	0	0.1	1	–	–	–	0
–	–	–	0	0.001199586	0.000288557	<0.1	2
0.002252971	0.000542009	0.1	1	0.004505943	0.001084017	<0.1	2
0.00179938	0.000432836	<0.1	2	0.00179938	0.000432836	<0.1	2
0.244775932	0.058850486	<0.1	2	–	–	–	0
–	–	–	0	–	–	–	0
0.666607869	0.160378094	1.1	1	–	–	–	0
0.028485779	0.00684802	1.7	1	–	–	–	0
0.001402144	0.000337076	3.8	1	0.001718758	0.00041319	3.1	1
0.001849083	0.000444597	1.5	1	–	–	–	0

∑ESBTU based on TOC data from USGS laboratory[1]				∑ESBTU based on TOC data from TALVT laboratory[1]			
Chronic $\sum ESBTU_i$ (using TOC_{usgs})[2,3]	Acute $\sum ESBTU_i$ (using TOC_{usgs})[2,3]	TOC_{usgs} (%)	TOC_{usgs} Flag	Chronic $\sum ESBTU_i$ (using TOC_{talvt})[2,3]	Acute $\sum ESBTU_i$ (using TOC_{talvt})[2,3]	TOC_{talvt} (%)	TOC_{talvt} Flag
0.000440176	0.000105829	3.5	1	0.000570599	0.000137186	2.7	1
0.001909515	0.000459103	1.6	1	–	–	–	0
–	–	–	0	0.008370021	0.002013072	<0.1	2
0.086732484	0.020854113	<0.1	2	–	–	–	0
0.013654995	0.003284216	<0.1	2	0.013654995	0.003284216	<0.1	2
0.042925172	0.010320754	<0.1	2	–	–	–	0
0.001298701	0.0003125	<0.1	2	0.001298701	0.0003125	<0.1	2
0.002240326	0.000539216	<0.1	2	–	–	–	0
0.002645232	0.000635972	12	1	–	–	–	0
0.000779221	0.0001875	0.1	1	0.001558442	0.000375	<0.1	2
0	0	<0.1	2	–	–	–	0
0.001441646	0.000346774	0.1	1	0.002883291	0.000693548	<0.1	2
0	0	<0.1	2	–	–	–	0
0.000857143	0.00020625	0.1	1	0.001714286	0.0004125	<0.1	2
0	0	<0.1	2	–	–	–	0
0	0	<0.1	2	0	0	<0.1	2
0	0	<0.1	2	–	–	–	0
0.001142857	0.000275	0.1	1	0.002285714	0.00055	<0.1	2
0	0	<0.1	2	–	–	–	0
0	0	<0.1	2	0	0	<0.1	2
0.166463159	0.040020786	<0.1	2	–	–	–	0
0.002441558	0.0005875	<0.1	2	0.002441558	0.0005875	<0.1	2
0	0	0.1	1	–	–	–	0

∑ESBTU based on TOC data from USGS laboratory[1]				∑ESBTU based on TOC data from TALVT laboratory[1]			
Chronic $\sum ESBTU_i$ (using TOC_{usgs})[2,3]	Acute $\sum ESBTU_i$ (using TOC_{usgs})[2,3]	TOC_{usgs} (%)	TOC_{usgs} Flag	Chronic $\sum ESBTU_i$ (using TOC_{talvt})[2,3]	Acute $\sum ESBTU_i$ (using TOC_{talvt})[2,3]	TOC_{talvt} (%)	TOC_{talvt} Flag
0.001616057	0.000388692	0.1	1	0.003232115	0.000777385	<0.1	2
0.005031622	0.001209762	<0.1	2	–	–	–	0
–	–	–	0	–	–	–	0
0.000779221	0.0001875	0.1	1	0.001558442	0.000375	<0.1	2
0.000883117	0.0002125	0.1	1	0.001766234	0.000425	<0.1	2
0.002025974	0.0004875	<0.1	2	0.002025974	0.0004875	<0.1	2
0	0	<0.1	2	–	–	–	0
0.003852636	0.000926882	<0.1	2	0.003852636	0.000926882	<0.1	2
0.006528634	0.001569253	0.1	1	–	–	–	0
–	–	–	0	–	–	–	0
0.025089539	0.006031274	0.1	1	0.050179078	0.012062547	<0.1	2
0.006705099	0.001611987	0.1	1	0.002095343	0.000503746	0.32	1
0	0	0.1	1	–	–	–	0
0.091455224	0.021985314	0.1	1	0.057159515	0.013740821	0.16	1
0.001623405	0.000390289	<0.1	2	0.001623405	0.000390289	<0.1	2
0	0	<0.1	2	0	0	<0.1	2
0	0	<0.1	2	0	0	<0.1	2
0.047259236	0.011360256	<0.1	2	–	–	–	0
0	0	<0.1	2	–	–	–	0
0	0	<0.1	2	–	–	–	0

∑ESBTU based on TOC data from USGS laboratory[1]				∑ESBTU based on TOC data from TALVT laboratory[1]			
Chronic $\sum ESBTU_i$ (using TOC_{usgs})[2,3]	Acute $\sum ESBTU_i$ (using TOC_{usgs})[2,3]	TOC_{usgs} (%)	TOC_{usgs} Flag	Chronic $\sum ESBTU_i$ (using TOC_{talvt})[2,3]	Acute $\sum ESBTU_i$ (using TOC_{talvt})[2,3]	TOC_{talvt} (%)	TOC_{talvt} Flag
2.622691097	0.63039823	0.1	1	0.819590968	0.196999447	0.32	1
0.001558442	0.000375	<0.1	2	0.001558442	0.000375	<0.1	2
0	0	<0.1	2	–	–	–	0
0.046192205	0.011104363	0.1	1	0.09238441	0.022208727	<0.1	2
0.010492451	0.002522401	<0.1	2	0.010492451	0.002522401	<0.1	2
0.014158462	0.003403228	0.5	1	–	–	–	0
0.016118854	0.003874621	0.4	1	–	–	–	0
0.002571603	0.000618548	<0.1	2	0.002571603	0.000618548	<0.1	2
0	0	<0.1	2	–	–	–	0

∑ESBTU based on TOC data from USGS laboratory[1]				∑ESBTU based on TOC data from TALVT laboratory[1]			
Chronic $\sum ESBTU_i$ (using TOC_{usgs})[2,3]	Acute $\sum ESBTU_i$ (using TOC_{usgs})[2,3]	TOC_{usgs} (%)	TOC_{usgs} Flag	Chronic $\sum ESBTU_i$ (using TOC_{talvt})[2,3]	Acute $\sum ESBTU_i$ (using TOC_{talvt})[2,3]	TOC_{talvt} (%)	TOC_{talvt} Flag

			Supplemental aquatic-life benchmarks[2,3,5]		
Any $\sum ESBTU_i$ exceedance [2,3]	No. of individual EqP benchmarks exceeded	TOC_{used} for EqP (%) [4]	No. of lower SVs exceeded	No. of upper SVs exceeded	Lower SVs exceeded[6]
no	0	0.1	0	0	none
no	0	0.05	0	0	none
no	0	0.05	0	0	none
no	0	0.05	0	0	none
no	–	–	4	5	High-MW PAH.ERL, Total-PAH.TEC, Low-MW PAH.TEL, Total-PAH.TEL
no	0	0.05	0	0	none
no	0	0.05	1	0	Bis(2-ethylhexyl) phthalate.TEL
no	0	0.05	1	0	Bis(2-ethylhexyl) phthalate.TEL
no	0	0.05	0	0	none
no	0	0.1	0	0	none
no	0	0.05	0	0	none

			Supplemental aquatic-life benchmarks[2,3,5]		
Any $\sum ESBTU_i$ exceedance [2,3]	No. of individual EqP benchmarks exceeded	TOC_{used} for EqP (%) [4]	No. of lower SVs exceeded	No. of upper SVs exceeded	Lower SVs exceeded[6]
no	0	0.1	0	0	none
no	0	0.05	0	0	none
no	0	0.1	0	0	none
no	0	0.05	0	0	none
no	0	0.1	0	0	none
no	0	0.05	0	0	none
no	0	0.1	0	0	none
no	0	0.05	0	0	none
no	0	0.05	0	0	none
no	–	–	0	0	none
no	0	0.05	4	3	High-MW PAH.ERL, Total-PAH.ERL, Total-PAH.TEC, Total-PAH.TEL
no	0	0.05	0	0	none
no	–	–	0	0	none
no	0	0.05	5	4	High-MW PAH.ERL, Total-PAH.ERL, Total-PAH.TEC, High-MW PAH.TEL, Total-PAH.TEL
no	0	0.05	0	0	none
no	0	0.05	0	0	none
no	0	0.05	0	0	none
no	0	0.05	0	0	none
no	0	0.1	0	0	none
no	–	–	0	0	none
no	0	0.05	0	0	none
no	0	0.05	0	0	none
no	0	0.2	0	0	none
no	0	0.05	0	0	none
no	0	0.2	0	0	none
no	0	0.17	0	0	none
no	0	0.2	0	0	none

			Supplemental aquatic-life benchmarks[2,3,5]		
Any $\sum ESBTU_i$ exceedance [2,3]	No. of individual EqP benchmarks exceeded	TOC_{used} for EqP (%) [4]	No. of lower SVs exceeded	No. of upper SVs exceeded	Lower SVs exceeded[6]
no	0	0.29	0	0	none
no	0	0.14	0	0	none
no	0	0.15	0	0	none
no	0	0.12	0	0	none
no	0	0.1	0	0	none
no	0	0.15	0	0	none
no	0	0.17	0	0	none
no	0	0.1	0	0	none
no	0	0.1	0	0	none
no	0	0.3	0	0	none
no	0	0.32	5	4	High-MW PAH.ERL, Total-PAH.ERL, Total-PAH.TEC, High-MW PAH.TEL, Total-PAH.TEL
no	0	0.1	3	1	High-MW PAH.ERL, Total-PAH.TEC, Total-PAH.TEL
no	0	0.05	2	1	Total-PAH.TEC, Total-PAH.TEL
no	0	0.1	0	0	none
no	0	0.05	0	0	none
no	0	0.2	0	0	none
no	0	0.05	3	4	High-MW PAH.ERL, Total-PAH.TEC, Total-PAH.TEL
no	0	0.4	0	0	none
no	0	0.59	0	0	none
no	0	0.4	3	1	High-MW PAH.ERL, Total-PAH.TEC, Total-PAH.TEL
no	0	3.9	3	2	High-MW PAH.ERL, Total-PAH.TEC, Total-PAH.TEL
no	0	3.5	3	1	High-MW PAH.ERL, Total-PAH.TEC, Total-PAH.TEL

			Supplemental aquatic-life benchmarks[2,3,5]		
Any $\sum ESBTU_i$ exceedance [2,3]	No. of individual EqP benchmarks exceeded	TOC_{used} for EqP (%) [4]	No. of lower SVs exceeded	No. of upper SVs exceeded	Lower SVs exceeded[6]
no	0	8.8	6	6	Low-MW PAH.ERL, High-MW PAH.ERL, Total-PAH.ERL, Total-PAH.TEC, Low-MW PAH.TEL, Total-PAH.TEL
no	0	11	4	5	High-MW PAH.ERL, Total-PAH.ERL, Total-PAH.TEC, Total-PAH.TEL
no	0	0.05	0	0	none
no	0	0.05	0	0	none
no	0	0.05	0	0	none
no	0	0.05	0	0	none
no	0	0.05	0	0	none
no	0	0.4	0	0	none
no	0	0.24	0	0	none
no	0	0.05	0	0	none
no	0	0.05	0	0	none
no	0	0.1	0	0	none
no	0	0.1	0	0	none
no	0	0.05	0	0	none
no	0	0.05	0	0	none
no	0	0.1	0	0	none
no	0	0.05	0	0	none
no	0	0.1	0	0	none
no	0	0.05	0	0	none
no	–	–	0	0	none
no	0	0.3	6	6	Low-MW PAH.ERL, High-MW PAH.ERL, Total-PAH.ERL, Total-PAH.TEC, Low-MW PAH.TEL, Total-PAH.TEL

			Supplemental aquatic-life benchmarks[2,3,5]		
Any ∑ESBTU$_i$ exceedance [2,3]	No. of individual EqP benchmarks exceeded	TOC$_{used}$ for EqP (%) [4]	No. of lower SVs exceeded	No. of upper SVs exceeded	Lower SVs exceeded[6]
no	0	0.2	4	3	High-MW PAH.ERL, Total-PAH.ERL, Total-PAH.TEC, Total-PAH.TEL
no	0	0.05	0	0	none
no	0	0.05	0	0	none
no	0	0.1	0	0	none
no	0	0.1	0	0	none
no	0	6.6	4	4	High-MW PAH.ERL, Total-PAH.TEC, Dibenzo.ah.anthracene.TEL, Total-PAH.TEL
no	0	0.5	6	6	Low-MW PAH.ERL, High-MW PAH.ERL, Total-PAH.ERL, Total-PAH.TEC, Low-MW PAH.TEL, Total-PAH.TEL
no	0	1	0	0	none
no	0	0.05	0	0	none
no	0	0.1	0	0	none
no	0	0.05	0	0	none
no	0	0.5	2	1	Total-PAH.TEC, Total-PAH.TEL
no	0	2.9	0	2	none
no	0	1.2	3	2	High-MW PAH.ERL, Total-PAH.TEC, Total-PAH.TEL
no	0	0.4	2	1	Total-PAH.TEC, Total-PAH.TEL
no	0	0.23	4	3	High-MW PAH.ERL, Total-PAH.ERL, Total-PAH.TEC, Total-PAH.TEL
no	0	1.1	3	3	High-MW PAH.ERL, Total-PAH.TEC, Total-PAH.TEL
no	0	1.1	3	4	High-MW PAH.ERL, Total-PAH.TEC, Total-PAH.TEL

Any $\sum ESBTU_i$ exceedance [2,3]	No. of individual EqP benchmarks exceeded	TOC_{used} for EqP (%) [4]	Supplemental aquatic-life benchmarks[2,3,5] No. of lower SVs exceeded	No. of upper SVs exceeded	Lower SVs exceeded[6]
no	0	0.7	4	6	Total-PAH.ERL, Total-PAH.TEC, Low-MW PAH.TEL, Total-PAH.TEL
no	0	7.9	3	4	Total-PAH.TEC, Low-MW PAH.TEL, Total-PAH.TEL
no	0	10	2	4	High-MW PAH.ERL, High-MW PAH.TEL
no	0	0.05	2	1	Total-PAH.TEC, Total-PAH.TEL
no	0	0.1	0	0	none
no	0	0.05	0	0	none
no	0	0.1	0	0	none
no	0	0.05	0	0	none
no	0	0.05	4	3	High-MW PAH.ERL, Total-PAH.ERL, Total-PAH.TEC, Total-PAH.TEL
no	–	–	5	4	High-MW PAH.ERL, Total-PAH.ERL, Total-PAH.TEC, High-MW PAH.TEL, Total-PAH.TEL
no	0	1.1	5	5	Low-MW PAH.ERL, Perylene.T20, Total-PAH.TEC, Low-MW PAH.TEL, Total-PAH.TEL
no	0	1.7	1	2	Perylene.T20
no	0	3.8	2	3	Total-PAH.TEC, Total-PAH.TEL
no	0	1.5	4	3	High-MW PAH.ERL, Total-PAH.ERL, Total-PAH.TEC, Total-PAH.TEL

			Supplemental aquatic-life benchmarks[2,3,5]		
Any $\sum ESBTU_i$ exceedance [2,3]	No. of individual EqP benchmarks exceeded	TOC_{used} for EqP (%) [4]	No. of lower SVs exceeded	No. of upper SVs exceeded	Lower SVs exceeded[6]
no	0	3.5	4	3	High-MW PAH.ERL, Total-PAH.ERL, Total-PAH.TEC, Total-PAH.TEL
no	0	1.6	0	0	none
no	0	0.05	1	0	Bis(2-ethylhexyl) phthalate.TEL
no	0	0.05	0	0	none
no	0	0.05	0	0	none
no	0	0.05	3	1	High-MW PAH.ERL, Total-PAH.TEC, Total-PAH.TEL
no	0	0.05	0	0	none
no	0	0.05	0	0	none
no	0	12	5	6	High-MW PAH.ERL, Total-PAH.ERL, Total-PAH.TEC, Low-MW PAH.TEL, Total-PAH.TEL
no	0	0.1	0	0	none
no	0	0.05	0	0	none
no	0	0.1	0	0	none
no	0	0.05	0	0	none
no	0	0.1	0	0	none
no	0	0.05	0	0	none
no	0	0.05	0	0	none
no	0	0.05	0	0	none
no	0	0.1	0	0	none
no	0	0.05	0	0	none
no	0	0.05	0	0	none
no	0	0.05	3	2	High-MW PAH.ERL, Total-PAH.TEC, Total-PAH.TEL
no	0	0.05	0	0	none
no	0	0.1	0	0	none

			Supplemental aquatic-life benchmarks[2,3,5]		
Any $\sum ESBTU_i$ exceedance [2,3]	No. of individual EqP benchmarks exceeded	TOC_{used} for EqP (%) [4]	No. of lower SVs exceeded	No. of upper SVs exceeded	Lower SVs exceeded[6]
no	0	0.1	0	0	none
no	0	0.05	0	0	none
no	–	–	0	0	none
no	0	0.1	0	0	none
no	0	0.1	0	0	none
no	0	0.05	0	0	none
no	0	0.05	0	0	none
no	0	0.05	0	0	none
no	0	0.1	3	1	High-MW PAH.ERL, Total-PAH.TEC, Total-PAH.TEL
no	–	–	3	2	High-MW PAH.ERL, Total-PAH.TEC, Total-PAH.TEL
no	0	0.1	0	0	none
no	0	0.1	3	2	High-MW PAH.ERL, Total-PAH.TEC, Total-PAH.TEL
no	0	0.1	0	0	none
no	0	0.1	5	5	High-MW PAH.ERL, Total-PAH.ERL, Total-PAH.TEC, Low-MW PAH.TEL, Total-PAH.TEL
no	0	0.05	0	0	none
no	0	0.05	0	0	none
no	0	0.05	0	0	none
no	0	0.05	0	0	none
no	0	0.05	0	0	none
no	0	0.05	1	0	Bis(2-ethylhexyl) phthalate.TEL

			Supplemental aquatic-life benchmarks[2,3,5]		
Any $\sum ESBTU_i$ exceedance [2,3]	No. of individual EqP benchmarks exceeded	TOC_{used} for EqP (%) [4]	No. of lower SVs exceeded	No. of upper SVs exceeded	Lower SVs exceeded[6]
yes	0	0.1	12	2	High-MW PAH.ERL, Total-PAH.ERL, Benzo.a.anthracene.T20, Benzo.a.pyrene.T20, Benzo.ghi.perylene.T20, Chrysene.T20, Dibenzo.ah.anthracene.T20, Dibenzo.ah.anthracene.TEC, Total-PAH.TEC, Benzo.a.pyrene.TEL, Dibenzo.ah.anthracene.TEL, Total-PAH.TEL
no	0	0.05	0	0	none
no	0	0.05	0	0	none
no	0	0.1	0	0	none
no	0	0.05	3	2	High-MW PAH.ERL, Total-PAH.TEC, Total-PAH.TEL
no	0	0.5	4	5	High-MW PAH.ERL, Total-PAH.TEC, Low-MW PAH.TEL, Total-PAH.TEL
no	0	0.4	3	4	High-MW PAH.ERL, Total-PAH.TEC, Total-PAH.TEL
no	0	0.05	0	0	none
no	0	0.05	0	0	none

			Supplemental aquatic-life benchmarks[2,3,5]		
Any $\sum ESBTU_i$ exceedance [2,3]	No. of individual EqP benchmarks exceeded	TOC_{used} for EqP (%) [4]	No. of lower SVs exceeded	No. of upper SVs exceeded	Lower SVs exceeded[6]

Upper SVs exceeded[6]	Summed concentration of 7 low-MW PAHs [6]	Summed concentration of 6 high-MW PAHs [6]	Summed concentration of 13 PAHs [6]
none	0	0	0
none	0	0	0
none	0.61	0	0.61
none	0	10.1	10.1
Low-MW PAH.AET, Low-MW PAH.ERM, Total-PAH.PEC, Low-MW PAH.PEL, Total-PAH.PEL	4	20	24
none	0	0	0
none	0	0	0
none	0.28	0	0.28
none	0	0	0
none	0	0	0
none	0	0	0

Upper SVs exceeded[6]	Summed concentration of 7 low-MW PAHs [6]	Summed concentration of 6 high-MW PAHs [6]	Summed concentration of 13 PAHs [6]
none	0	0	0
none	0	1.7	1.7
none	0.29	0	0.29
none	0.63	0.44	1.07
none	0.24	0	0.24
none	0	1.1	1.1
none	0.28	0	0.28
none	0	0.53	0.53
none	0.58	0	0.58
none	0	0	0
Total-PAH.ERM, Total-PAH.PEC, Total-PAH.PEL	0.57	6.9	7.47
none	0.31	0	0.31
none	0	0	0
Total-PAH.ERM, Total-PAH.PEC, High-MW PAH.PEL, Total-PAH.PEL	0	7.1	7.1
none	0.48	0	0.48
none	0	0	0
none	0.28	0	0.28
none	0	0	0
none	0.31	0	0.31
none	0	0	0
none	0.36	0	0.36
none	0.38	0	0.38
none	0.31	0	0.31
none	0.33	0	0.33
none	0.24	0	0.24
none	0.34	0	0.34
none	0.42	1.26	1.68

Upper SVs exceeded[6]	Summed concentration of 7 low-MW PAHs [6]	Summed concentration of 6 high-MW PAHs [6]	Summed concentration of 13 PAHs [6]
none	0.44	0.66	1.1
none	0	0	0
none	0	0	0
none	0	0	0
none	0.41	0	0.41
none	0.28	0	0.28
none	0.32	0	0.32
none	0.29	0	0.29
none	0	0	0
none	0.35	0.57	0.92
Total-PAH.ERM, Total-PAH.PEC, High-MW PAH.PEL, Total-PAH.PEL	0.33	7.04	7.37
Total-PAH.PEL	0.4	2.55	2.95
Total-PAH.PEL	0.36	1.78	2.14
none	0	0	0
none	0	0	0
none	1.45	13.42	14.87
Low-MW PAH.AET, Total-PAH.PEC, Low-MW PAH.PEL, Total-PAH.PEL	2.17	22.45	24.62
none	0	1.3	1.3
none	0.29	1.37	1.66
Total-PAH.PEL	0.3	2.03	2.33
Total-PAH.PEC, Total-PAH.PEL	0.44	2.57	3.01
Total-PAH.PEL	0.47	2.19	2.66

Upper SVs exceeded[6]	Summed concentration of 7 low-MW PAHs [6]	Summed concentration of 6 high-MW PAHs [6]	Summed concentration of 13 PAHs [6]
Low-MW PAH.AET, Low-MW PAH.ERM, Total-PAH.ERM, Total-PAH.PEC, Low-MW PAH.PEL, Total-PAH.PEL	9.5	65	74.5
Low-MW PAH.AET, Total-PAH.ERM, Total-PAH.PEC, Low-MW PAH.PEL, Total-PAH.PEL	2.4	54.2	56.6
none	0.3	0	0.3
none	0.32	0	0.32
none	0.37	0	0.37
none	0.27	0	0.27
none	0	0	0
none	0.39	0	0.39
none	0.41	0	0.41
none	0.27	0	0.27
none	0	0	0
none	0	0	0
none	0	0	0
none	0	0	0
none	0	0	0
none	0.49	0	0.49
none	0.48	0	0.48
none	0.43	0	0.43
none	0	0	0
none	0	0	0
Low-MW PAH.AET, Low-MW PAH.ERM, Total-PAH.ERM, Total-PAH.PEC, Low-MW PAH.PEL, Total-PAH.PEL	9.01	65.2	74.21

Upper SVs exceeded[6]	Summed concentration of 7 low-MW PAHs [6]	Summed concentration of 6 high-MW PAHs [6]	Summed concentration of 13 PAHs [6]
Total-PAH.ERM, Total-PAH.PEC, Total-PAH.PEL	0.99	4.79	5.78
none	0.3	0.46	0.76
none	0.29	0	0.29
none	0.54	0	0.54
none	0.27	0.81	1.08
Low-MW PAH.AET, Total-PAH.PEC, Low-MW PAH.PEL, Total-PAH.PEL	23.71	215.2	238.91
Low-MW PAH.AET, Low-MW PAH.ERM, Total-PAH.ERM, Total-PAH.PEC, Low-MW PAH.PEL, Total-PAH.PEL	7.24	64.46	71.7
none	1.75	11.58	13.33
none	0.32	0	0.32
none	0.39	0.59	0.98
none	0.27	0	0.27
Total-PAH.PEL	0.46	1.61	2.07
Low-MW PAH.AET, Low-MW PAH.PEL	2.57	10.12	12.69
Total-PAH.PEC, Total-PAH.PEL	0	4.3	4.3
Total-PAH.PEL	1.5	1.38	2.88
Total-PAH.ERM, Total-PAH.PEC, Total-PAH.PEL	1.69	6.62	8.31
Low-MW PAH.AET, Total-PAH.PEC, Total-PAH.PEL	14.81	298.2	313.01
Low-MW PAH.AET, Total-PAH.PEC, Low-MW PAH.PEL, Total-PAH.PEL	2.39	30.3	32.69

Upper SVs exceeded[6]	Summed concentration of 7 low-MW PAHs [6]	Summed concentration of 6 high-MW PAHs [6]	Summed concentration of 13 PAHs [6]
Low-MW PAH.AET, Low-MW PAH.ERM, Total-PAH.ERM, Total-PAH.PEC, Low-MW PAH.PEL, Total-PAH.PEL	48.48	13.7	62.18
Low-MW PAH.AET, Low-MW PAH.ERM, Low-MW PAH.PEL, Total-PAH.PEL	5.9	13.5	19.4
Low-MW PAH.AET, High-MW PAH.AET, Low-MW PAH.PEL, High-MW PAH.PEL	2.1	9.1	11.2
Total-PAH.PEL	1.06	1.72	2.78
none	0	0	0
none	0	0	0
none	0.31	0	0.31
none	0	0	0
Total-PAH.ERM, Total-PAH.PEC, Total-PAH.PEL	0.73	5.48	6.21
Total-PAH.ERM, Total-PAH.PEC, High-MW PAH.PEL, Total-PAH.PEL	1.5	7.7	9.2
Low-MW PAH.AET, Low-MW PAH.ERM, Total-PAH.PEC, Low-MW PAH.PEL, Total-PAH.PEL	71.661	169.5	241.161
Low-MW PAH.AET, Low-MW PAH.PEL	23.63	102.8	126.43
Low-MW PAH.AET, Low-MW PAH.PEL, Total-PAH.PEL	3.34	14.21	17.55
Total-PAH.ERM, Total-PAH.PEC, Total-PAH.PEL	0.61	5.4	6.01

Upper SVs exceeded[6]	Summed concentration of 7 low-MW PAHs [6]	Summed concentration of 6 high-MW PAHs [6]	Summed concentration of 13 PAHs [6]
Total-PAH.ERM, Total-PAH.PEC, Total-PAH.PEL	0.9	5.91	6.81
none	0	11.73	11.73
none	0.3	1.01	1.31
none	1.6	10.45	12.05
none	0.62	1.11	1.73
Total-PAH.PEL	0	2.99	2.99
none	0.25	0	0.25
none	0.55	0	0.55
Low-MW PAH.AET, Low-MW PAH.ERM, Total-PAH.ERM, Total-PAH.PEC, Low-MW PAH.PEL, Total-PAH.PEL	4.7	46.7	51.4
none	0.3	0	0.3
none	0	0	0
none	0.64	0	0.64
none	0	0	0
none	0.33	0	0.33
none	0	0	0
none	0	0	0
none	0	0	0
none	0.44	0	0.44
none	0	0	0
none	0	0	0
Total-PAH.PEC, Total-PAH.PEL	0	4.68	4.68
none	0.47	0	0.47
none	0	0	0

Upper SVs exceeded[6]	Summed concentration of 7 low-MW PAHs [6]	Summed concentration of 6 high-MW PAHs [6]	Summed concentration of 13 PAHs [6]
none	0.26	0.51	0.77
none	0	1.89	1.89
none	0.5	11.9	12.4
none	0.3	0	0.3
none	0.34	0	0.34
none	0.39	0	0.39
none	0	0	0
none	0.9	0	0.9
Total-PAH.PEL	0	2.75	2.75
Total-PAH.PEC, Total-PAH.PEL	0	4.19	4.19
none	1.5	10.11	11.61
Total-PAH.PEC, Total-PAH.PEL	0.67	3.58	4.25
none	0	0	0
Low-MW PAH.AET, Low-MW PAH.ERM, Total-PAH.PEC, Low-MW PAH.PEL, Total-PAH.PEL	5.13	38.57	43.7
none	0	0.57	0.57
none	0	0	0
none	0	0	0
none	0.69	11.5	12.19
none	0	0	0
none	0	0	0

Upper SVs exceeded[6]	Summed concentration of 7 low-MW PAHs [6]	Summed concentration of 6 high-MW PAHs [6]	Summed concentration of 13 PAHs [6]
Total-PAH.PEC, Total-PAH.PEL	11.3	425	436.3
none	0.3	0	0.3
none	0	0	0
none	0.94	14.07	15.01
Total-PAH.PEC, Total-PAH.PEL	0.78	2.3	3.08
Low-MW PAH.AET, Low-MW PAH.ERM, Total-PAH.PEC, Low-MW PAH.PEL, Total-PAH.PEL	4.56	28	32.56
Low-MW PAH.AET, Total-PAH.PEC, Low-MW PAH.PEL, Total-PAH.PEL	3.6	28.66	32.26
none	0.58	0	0.58
none	0	0	0

Upper SVs exceeded[6]	Summed concentration of 7 low-MW PAHs [6]	Summed concentration of 6 high-MW PAHs [6]	Summed concentration of 13 PAHs [6]

Appendix Table 3-3. Benchmark exceedances for trace elements in water, by sample, from the Deepwater Horizon oil spill, Gulf of Mexico, 2010

[Sample dates and times are in yyyy-MM-dd hh:mm ZZZ format, where ZZZ is time zone. Paired sample: 1 indicates that sample is in the paired sample dataset, 0 indicates it is not. Primary sample: 1 indicates that sample is in the primary sample dataset, 0 indicates it is not. Benchmark values are listed in *Table 6A.* **Abbreviations:** Ala., Alabama; AALB, acute aquatic-life benchmark; BLM, Bureau of Land Management; CALB, chronic aquatic-life benchmark; CDT, Central Daylight Time; dd, decimal degrees; EDT, Eastern Daylight Time; Fla., Florida; HHB, human health benchmark; La., Louisiana; map no., site number in *figure 1* ; mg/L, milligram per liter; Miss., Mississippi; no., number; NWR, National Wilidlife Refuge; post-postlandfall; pre, pre-landfall; sample no., sample number unique to this study; Tex., Texas; USGS, U.S. Geological Survey; WSC, Water Science Center; –, none]

Map no.	Station identifier	Site name	Site latitude (dd)	Site longitude (dd)	USGS WSC
AL-1	301338088193500	West Dauphin Island, Ala.	30.227425	-88.326394	Ala.
AL-10	301341087495200	Fort Morgan BLM-3, Ala.	30.228259	-87.8311016	Ala.
AL-10	301341087495200	Fort Morgan BLM-3, Ala.	30.228259	-87.8311016	Ala.
AL-10	301341087495200	Fort Morgan BLM-3, Ala.	30.228259	-87.8311016	Ala.
AL-2	301455088110300	Dauphin Island, AL-2, Ala.	30.2488145	-88.1841677	Ala.
AL-2	301455088110300	Dauphin Island, AL-2, Ala.	30.2488145	-88.1841677	Ala.
AL-2	301455088110300	Dauphin Island, AL-2, Ala.	30.2488145	-88.1841677	Ala.
AL-2	301455088110300	Dauphin Island, AL-2, Ala.	30.2488145	-88.1841677	Ala.
AL-3	301448088044000	Dauphin Island, AL-3, Ala.	30.2468703	-88.0777765	Ala.
AL-3	301448088044000	Dauphin Island, AL-3, Ala.	30.2468703	-88.0777765	Ala.
AL-4	301329088003000	Fort Morgan, AL-4, Ala.	30.2249263	-88.0083304	Ala.
AL-4	301329088003000	Fort Morgan, AL-4, Ala.	30.2249263	-88.0083304	Ala.
AL-5	301349087541600	Fort Morgan, AL-5, Ala.	30.2304815	-87.9044377	Ala.
AL-5	301349087541600	Fort Morgan, AL-5, Ala.	30.2304815	-87.9044377	Ala.
AL-6	301428087434900	Gulf Shores, Ala.	30.241314	-87.7302646	Ala.
AL-6	301428087434900	Gulf Shores, Ala.	30.241314	-87.7302646	Ala.
AL-7	301608087345400	Orange Beach, Ala.	30.269091	-87.5816491	Ala.
AL-7	301608087345400	Orange Beach, Ala.	30.269091	-87.5816491	Ala.
AL-8	301353087561600	BLM-1, Ala.	30.2315927	-87.9377724	Ala.
AL-8	301353087561600	BLM-1, Ala.	30.2315927	-87.9377724	Ala.
AL-8	301353087561600	BLM-1, Ala.	30.2315927	-87.9377724	Ala.
AL-9	301343087520200	BLM-2, Ala.	30.2288147	-87.867214	Ala.
AL-9	301343087520200	BLM-2, Ala.	30.2288147	-87.867214	Ala.

Map no.	Station identifier	Site name	Site latitude (dd)	Site longitude (dd)	USGS WSC
AL-9	301343087520200	BLM-2, Ala.	30.2288147	-87.867214	Ala.
FL-1	302144086581200	Gulf Island National Seashore near Navarre, Fla.	30.362389	-86.970167	Fla.
FL-1	302144086581200	Gulf Island National Seashore near Navarre, Fla.	30.362389	-86.970167	Fla.
FL-10	273728082441800	Fort DeSoto Pk near St Pete, Fla.	27.624444	-82.738333	Fla.
FL-10	273728082441800	Fort DeSoto Pk near St Pete, Fla.	27.624444	-82.738333	Fla.
FL-11	263132082114000	Captiva Island Beach near Captiva, Fla.	26.525639	-82.194222	Fla.
FL-11	263132082114000	Captiva Island Beach near Captiva, Fla.	26.525639	-82.194222	Fla.
FL-11	263132082114000	Captiva Island Beach near Captiva, Fla.	26.525639	-82.194222	Fla.
FL-11	263132082114000	Captiva Island Beach near Captiva, Fla.	26.525639	-82.194222	Fla.
FL-12	255609081440700	Tiger Tail Beach at Marco IS, Fla.	25.936139	-81.734583	Fla.
FL-12	255609081440700	Tiger Tail Beach at Marco IS, Fla.	25.936139	-81.734583	Fla.
FL-13	251329081101100	NW Cape Sable Beach near Flamingo, Fla.	25.224806	-81.169972	Fla.
FL-13	251329081101100	NW Cape Sable Beach near Flamingo, Fla.	25.224806	-81.169972	Fla.
FL-14	243737082522500	Dry Tortugas National Park, Fla.	24.627139	-82.873639	Fla.
FL-14	243737082522500	Dry Tortugas National Park, Fla.	24.627139	-82.873639	Fla.
FL-15	254002080092000	B Baggs Cape near Key Biscayne, Fla.	25.667417	-80.155528	Fla.
FL-15	254002080092000	B Baggs Cape near Key Biscayne, Fla.	25.667417	-80.155528	Fla.
FL-16	260454080063400	Lloyd Beach at Ft Lauderdale, Fla.	26.081694	-80.109444	Fla.
FL-16	260454080063400	Lloyd Beach at Ft Lauderdale, Fla.	26.081694	-80.109444	Fla.
FL-16	260454080063400	Lloyd Beach at Ft Lauderdale, Fla.	26.081694	-80.109444	Fla.
FL-16	260454080063400	Lloyd Beach at Ft Lauderdale, Fla.	26.081694	-80.109444	Fla.
FL-17	264921080021700	MacArthur Beach at W Palm Beach, Fla.	26.822583	-80.038056	Fla.
FL-17	264921080021700	MacArthur Beach at W Palm Beach, Fla.	26.822583	-80.038056	Fla.
FL-18	244345081000600	Coco Plum Beach near Marathon, Fla.	24.72925	-81.169972	Fla.
FL-18	244345081000600	Coco Plum Beach near Marathon, Fla.	24.72925	-81.169972	Fla.
FL-19	265722080045400	BLM Tract1 near Jupiter Inlet, Fla.	26.956111	-80.081667	Fla.
FL-19	265722080045400	BLM Tract1 near Jupiter Inlet, Fla.	26.956111	-80.081667	Fla.
FL-2	302258086263400	Henderson Beach State Park near Destin, Fla.	30.382944	-86.442778	Fla.
FL-2	302258086263400	Henderson Beach State Park near Destin, Fla.	30.382944	-86.442778	Fla.
FL-20	265722080045500	BLM Tract2 near Jupiter Inlet, Fla.	26.956111	-80.081944	Fla.
FL-20	265722080045500	BLM Tract2 near Jupiter Inlet, Fla.	26.956111	-80.081944	Fla.

Map no.	Station identifier	Site name	Site latitude (dd)	Site longitude (dd)	USGS WSC
FL-21	243902081332700	BLM Tract1 near Park Key, Fla.	24.650556	-81.5575	Fla.
FL-21	243902081332700	BLM Tract1 near Park Key, Fla.	24.650556	-81.5575	Fla.
FL-21	243902081332700	BLM Tract1 near Park Key, Fla.	24.650556	-81.5575	Fla.
FL-21	243902081332700	BLM Tract1 near Park Key, Fla.	24.650556	-81.5575	Fla.
FL-22	243703081323700	BLM Tract2 near Sugarloaf Key, Fla.	24.6175	-81.543611	Fla.
FL-22	243703081323700	BLM Tract2 near Sugarloaf Key, Fla.	24.6175	-81.543611	Fla.
FL-23	243700081322300	BLM Tract3 near Sugarloaf Key, Fla.	24.616667	-81.539722	Fla.
FL-23	243700081322300	BLM Tract3 near Sugarloaf Key, Fla.	24.616667	-81.539722	Fla.
FL-24	273605082454900	BLM Tract at Egmont Key, Fla.	27.601389	-82.763611	Fla.
FL-24	273605082454900	BLM Tract at Egmont Key, Fla.	27.601389	-82.763611	Fla.
FL-25	300223085260800	BLM Lathrop Bayou near Panama City, Fla.	30.038944	-85.435472	Fla.
FL-25	300223085260800	BLM Lathrop Bayou near Panama City, Fla.	30.038944	-85.435472	Fla.
FL-25	300223085260800	BLM Lathrop Bayou near Panama City, Fla.	30.038944	-85.435472	Fla.
FL-26	244325081351500	Marvin Key at Great White Heron NWR, Fla.	24.709806	-81.644639	Fla.
FL-26	244325081351500	Marvin Key at Great White Heron NWR, Fla.	24.709806	-81.644639	Fla.
FL-3	301926086091800	Grayton Beach State Park near Seaside, Fla.	30.324056	-86.155056	Fla.
FL-3	301926086091800	Grayton Beach State Park near Seaside, Fla.	30.324056	-86.155056	Fla.
FL-4	300729085440900	St. Andrews State Park near Panama City, Fla.	30.124722	-85.736028	Fla.
FL-4	300729085440900	St. Andrews State Park near Panama City, Fla.	30.124722	-85.736028	Fla.
FL-5	294645085243000	St. Joe Peninsula State Park near Port St. Joe, Fla.	29.779167	-85.408528	Fla.
FL-5	294645085243000	St. Joe Peninsula State Park near Port St. Joe, Fla.	29.779167	-85.408528	Fla.
FL-5	294645085243000	St. Joe Peninsula State Park near Port St. Joe, Fla.	29.779167	-85.408528	Fla.
FL-6	294152084460300	St George Island State Park near E Point, Fla.	29.697861	-84.76775	Fla.
FL-6	294152084460300	St George Island State Park near E Point, Fla.	29.697861	-84.76775	Fla.
FL-6	294152084460300	St George Island State Park near E Point, Fla.	29.697861	-84.76775	Fla.
FL-6	294152084460300	St George Island State Park near E Point, Fla.	29.697861	-84.76775	Fla.
FL-6	294152084460300	St George Island State Park near E Point, Fla.	29.697861	-84.76775	Fla.
FL-7	300427084105000	St. Marks NWR near St. Marks, Fla.	30.074194	-84.180444	Fla.
FL-7	300427084105000	St. Marks NWR near St. Marks, Fla.	30.074194	-84.180444	Fla.
FL-7	300427084105000	St. Marks NWR near St. Marks, Fla.	30.074194	-84.180444	Fla.
FL-8	290740083031200	Piney Pt Beach at Cedar Key, Fla.	29.12775	-83.053361	Fla.

Map no.	Station identifier	Site name	Site latitude (dd)	Site longitude (dd)	USGS WSC
FL-8	290740083031200	Piney Pt Beach at Cedar Key, Fla.	29.12775	-83.053361	Fla.
FL-9	285425082412600	Fort Island Gulf Beach near Chassah., Fla.	28.907194	-82.690778	Fla.
FL-9	285425082412600	Fort Island Gulf Beach near Chassah., Fla.	28.907194	-82.690778	Fla.
LA-22	294432090083100	Jean Lafitte National Park, La.	29.7422222	-90.1419444	La.
LA-22	294432090083100	Jean Lafitte National Park, La.	29.7422222	-90.1419444	La.
LA-22	294432090083100	Jean Lafitte National Park, La.	29.7422222	-90.1419444	La.
LA-23	294406091511300	Cypremort Point, La.	29.735	-91.8536111	La.
LA-23	294406091511300	Cypremort Point, La.	29.735	-91.8536111	La.
LA-23	294406091511300	Cypremort Point, La.	29.735	-91.8536111	La.
LA-23	294406091511300	Cypremort Point, La.	29.735	-91.8536111	La.
LA-24	292046090254500	Lake Felicity, La.	29.3461111	-90.4291667	La.
LA-24	292046090254500	Lake Felicity, La.	29.3461111	-90.4291667	La.
LA-25	293808092460200	Rockefeller Refuge Beach, La.	29.6355556	-92.7672222	La.
LA-25	293808092460200	Rockefeller Refuge Beach, La.	29.6355556	-92.7672222	La.
LA-26	291507090551800	Sister Lake, La.	29.2519444	-90.9216667	La.
LA-26	291507090551800	Sister Lake, La.	29.2519444	-90.9216667	La.
LA-28	293424091321600	Point Chevreuil, La.	29.5733333	-91.5377778	La.
LA-28	293424091321600	Point Chevreuil, La.	29.5733333	-91.5377778	La.
LA-29	294324089432500	Crooked Bayou, La.	29.7233333	-89.7236111	La.
LA-29	294324089432500	Crooked Bayou, La.	29.7233333	-89.7236111	La.
LA-30	294108089234500	Miss. R. Gulf Outlet, La.	29.6855556	-89.3958333	La.
LA-30	294108089234500	Miss. R. Gulf Outlet, La.	29.6855556	-89.3958333	La.
LA-31	291537089570100	Grand Isle Beach at State Park, La.	29.2602778	-89.9502778	La.
LA-31	291537089570100	Grand Isle Beach at State Park, La.	29.2602778	-89.9502778	La.
LA-31	291537089570100	Grand Isle Beach at State Park, La.	29.2602778	-89.9502778	La.
LA-31	291537089570100	Grand Isle Beach at State Park, La.	29.2602778	-89.9502778	La.
LA-31	291537089570100	Grand Isle Beach at State Park, La.	29.2602778	-89.9502778	La.
LA-32	291914089105500	Miss. R. at Main Pass, La.	29.3205556	-89.1819444	La.
LA-32	291914089105500	Miss. R. at Main Pass, La.	29.3205556	-89.1819444	La.

Map no.	Station identifier	Site name	Site latitude (dd)	Site longitude (dd)	USGS WSC
LA-33	293518089364300	Breton Sound, La.	29.5883333	-89.6119444	La.
LA-33	293518089364300	Breton Sound, La.	29.5883333	-89.6119444	La.
LA-34	300907089144500	Miss. Sound at Grand Pass, La.	30.1519444	-89.2458333	La.
LA-34	300907089144500	Miss. Sound at Grand Pass, La.	30.1519444	-89.2458333	La.
LA-35	285951089085600	Miss. R. at South Pass, La.	28.9975	-89.1488889	La.
LA-35	285951089085600	Miss. R. at South Pass, La.	28.9975	-89.1488889	La.
LA-36	285615089235600	Miss. R. at SW Pass, La.	28.9375	-89.3988889	La.
LA-36	285615089235600	Miss. R. at SW Pass, La.	28.9375	-89.3988889	La.
LA-46	294456093394801	East Sabine, La.	29.7488889	-93.6633333	La.
LA-46	294456093394801	East Sabine, La.	29.7488889	-93.6633333	La.
LA-6(Bat06	292708089521400	Bay Jimmy at NE Barataria Bay, La.	29.4522222	-89.8705556	La.
MS-37	301309089044700	South Cat Island Beach, Miss.	30.2191667	-89.0797222	Miss.
MS-38	301227088582000	West Ship Island Beach, Miss.	30.2075	-88.9722222	Miss.
MS-39	301358088533300	East Ship Island Beach, Miss.	30.2327778	-88.8925	Miss.
MS-40	301425088440600	West Horn Island Beach, Miss.	30.2402778	-88.735	Miss.
MS-41	301321088353300	East Horn Island Beach, Miss.	30.2225	-88.5925	Miss.
MS-42	301208088253600	Petit Bois Island Beach, Miss.	30.2022222	-88.4266667	Miss.
MS-43	301858089141000	Pass Christian Beach, Miss.	30.3161111	-89.2361111	Miss.
MS-43	301858089141000	Pass Christian Beach, Miss.	30.3161111	-89.2361111	Miss.
MS-44	302336088535800	BIloxi Beach, Miss.	30.3933333	-88.8994444	Miss.
MS-44	302336088535800	BIloxi Beach, Miss.	30.3933333	-88.8994444	Miss.
MS-44	302336088535800	BIloxi Beach, Miss.	30.3933333	-88.8994444	Miss.
MS-45	302034088325200	Pascagoula Beach, Miss.	30.3427778	-88.5477778	Miss.
MS-45	302034088325200	Pascagoula Beach, Miss.	30.3427778	-88.5477778	Miss.
TX-47	294057093572301	Texas Point, Tex.	29.6825	-93.9563889	Tex.
TX-47	294057093572301	Texas Point, Tex.	29.6825	-93.9563889	Tex.
TX-48	295542093521701	Sabine Lake, Tex.	29.9283333	-93.8713889	Tex.
TX-49	293324094220601	High Island, Tex.	29.5566667	-94.3683333	Tex.
TX-49	293324094220601	High Island, Tex.	29.5566667	-94.3683333	Tex.
TX-50	293429094332101	East Bay near Anahuac, Tex.	29.5747222	-94.5558333	Tex.
TX-51	291815094461001	Galveston Island, Tex.	29.3041667	-94.7694444	Tex.

Map no.	Station identifier	Site name	Site latitude (dd)	Site longitude (dd)	USGS WSC
TX-51	291815094461001	Galveston Island, Tex.	29.3041667	-94.7694444	Tex.
TX-51	291815094461001	Galveston Island, Tex.	29.3041667	-94.7694444	Tex.
TX-51	291815094461001	Galveston Island, Tex.	29.3041667	-94.7694444	Tex.
TX-51	291815094461001	Galveston Island, Tex.	29.3041667	-94.7694444	Tex.
TX-52	294408094501101	Trinity Bay near Beach City, Tex.	29.7355556	-94.8363889	Tex.
TX-53	292318094430901	Bolivar Peninsula, Tex.	29.3883333	-94.7191667	Tex.
TX-53	292318094430901	Bolivar Peninsula, Tex.	29.3883333	-94.7191667	Tex.
TX-54	292937094544001	Galveston Bay near Eagle Pt, Tex.	29.4936111	-94.9111111	Tex.
TX-55	291251094571401	West Bay, Galveston Is State Park, Tex.	29.2141667	-94.9538889	Tex.
TX-55	291251094571401	West Bay, Galveston Is State Park, Tex.	29.2141667	-94.9538889	Tex.
TX-55	291251094571401	West Bay, Galveston Is State Park, Tex.	29.2141667	-94.9538889	Tex.
TX-56	290512095063101	San Luis Pass, Tex.	29.0866667	-95.1086111	Tex.
TX-56	290512095063101	San Luis Pass, Tex.	29.0866667	-95.1086111	Tex.

Sample no.	Sample date and time	Sampling period	Primary sample	Paired sample	Sample type	No. of HHB exceeded
sun1dalmtg_01100036_01	2010-10-13 13:00 CDT	Post	1	0	Sample Routine	0
sun1dalmtg_01000088_01	2010-05-24 16:30 CDT	Pre	1	1	Sample Routine	0
sun1dalmtg_01100021_01	2010-10-14 10:30 CDT	Post	1	1	Quality Control Sample-Field Replicate	0
sun1dalmtg_01100024_01	2010-10-14 10:50 CDT	Post	0	0	Quality Control Sample-Field Replicate	0
sun1dalmtg_01000095_01	2010-05-09 13:15 CDT	Pre	1	1	Quality Control Sample-Field Replicate	0
sun1dalmtg_01000096_01	2010-05-09 13:16 CDT	Pre	0	0	Quality Control Sample-Field Replicate	0
sun1dalmtg_01000097_01	2010-05-09 13:17 CDT	Pre	0	0	Quality Control Sample-Field Replicate	0
sun1dalmtg_01100002_01	2010-10-07 11:15 CDT	Post	1	1	Sample Routine	0
sun1dalmtg_01000094_01	2010-05-09 10:15 CDT	Pre	1	1	Sample Routine	0
sun1dalmtg_01100005_01	2010-10-06 11:40 CDT	Post	1	1	Sample Routine	0
sun1dalmtg_01000087_01	2010-05-08 16:45 CDT	Pre	1	1	Sample Routine	0
sun1dalmtg_01100008_01	2010-10-12 10:20 CDT	Post	1	1	Sample Routine	0
sun1dalmtg_01000090_01	2010-05-08 15:00 CDT	Pre	1	1	Sample Routine	0
sun1dalmtg_01100012_01	2010-10-13 13:35 CDT	Post	1	1	Sample Routine	0
sun1dalmtg_01000092_01	2010-05-08 12:45 CDT	Pre	1	1	Sample Routine	0
sun1dalmtg_01100028_01	2010-10-14 13:30 CDT	Post	1	1	Sample Routine	0
sun1dalmtg_01000098_01	2010-05-08 09:45 CDT	Pre	1	1	Sample Routine	0
sun1dalmtg_01100031_01	2010-10-14 10:00 CDT	Post	1	1	Sample Routine	0
sun1dalmtg_01000091_01	2010-05-24 13:00 CDT	Pre	0	0	Sample Routine	0
sun1dalmtg_01000824_01	2010-05-24 13:01 CDT	Pre	1	1	Sample Routine	0
sun1dalmtg_01100015_01	2010-10-13 10:15 CDT	Post	1	1	Sample Routine	0
sun1dalmtg_01000089_01	2010-05-24 15:00 CDT	Pre	0	0	Sample Routine	0
sun1dalmtg_01000825_01	2010-05-24 15:01 CDT	Pre	1	1	Sample Routine	0

Sample no.	Sample date and time	Sampling period	Primary sample	Paired sample	Sample type	No. of HHB exceeded
sun1dalmtg_01100018_01	2010-10-14 13:25 CDT	Post	1	1	Sample Routine	0
flnwis1_01002982_01	2010-05-11 13:30 EDT	Pre	1	1	Sample Routine	0
flnwis1_01100062_01	2010-10-04 14:30 CDT	Post	1	1	Sample Routine	0
flnwis1_01003369_01	2010-05-17 16:00 EDT	Pre	1	0	Sample Routine	0
flnwis1_01000812_02	2010-05-17 16:01 EDT	Pre	0	0	Quality Control Sample-Field Replicate	0
flnwis1_01003390_01	2010-05-20 16:30 EDT	Pre	1	0	Sample Routine	0
flnwis1_01000815_02	2010-05-20 16:31 EDT	Pre	0	0	Quality Control Sample-Field Replicate	0
flnwis1_01000816_02	2010-05-20 16:32 EDT	Pre	0	0	Quality Control Sample-Field Replicate	0
flnwis1_01000817_02	2010-05-20 16:33 EDT	Pre	0	0	Quality Control Sample-Field Replicate	0
flnwis1_01003667_01	2010-05-21 15:00 EDT	Pre	1	0	Sample Routine	0
flnwis1_01000823_02	2010-05-21 15:01 EDT	Pre	0	0	Quality Control Sample-Field Replicate	0
flnwis1_01003386_01	2010-05-22 13:05 EDT	Pre	1	0	Sample Routine	0
flnwis1_01000825_02	2010-05-22 13:06 EDT	Pre	0	0	Quality Control Sample-Field Replicate	0
flnwis1_01003365_01	2010-05-20 08:45 EDT	Pre	1	0	Sample Routine	0
flnwis1_01000827_02	2010-05-20 08:46 EDT	Pre	0	0	Quality Control Sample-Field Replicate	0
flnwis1_01004142_01	2010-06-01 13:00 EDT	Pre	1	0	Quality Control Sample-Field Replicate	0
flnwis1_01000769_02	2010-06-01 13:01 EDT	Pre	0	0	Quality Control Sample-Field Replicate	0
flnwis1_01003611_01	2010-05-26 15:00 EDT	Pre	1	0	Sample Routine	0
flnwis1_01000777_02	2010-05-26 15:01 EDT	Pre	0	0	Quality Control Sample-Field Replicate	0
flnwis1_01000779_02	2010-05-26 15:02 EDT	Pre	0	0	Quality Control Sample-Field Replicate	0
flnwis1_01000781_02	2010-05-26 15:03 EDT	Pre	0	0	Quality Control Sample-Field Replicate	0
flnwis1_01003609_01	2010-05-27 15:30 EST	Pre	1	0	Sample Routine	0
flnwis1_01000785_02	2010-05-27 15:31 EDT	Pre	0	0	Quality Control Sample-Field Replicate	0
flnwis1_01003316_01	2010-05-24 15:45 EDT	Pre	1	0	Sample Routine	0
flnwis1_01000829_02	2010-05-24 15:46 EDT	Pre	0	0	Quality Control Sample-Field Replicate	0
flnwis1_01003603_01	2010-06-16 13:00 EST	Pre	1	0	Sample Routine	0
flnwis1_01000788_02	2010-06-16 13:01 EDT	Pre	0	0	Quality Control Sample-Field Replicate	0
flnwis1_01002985_01	2010-05-11 17:30 EDT	Pre	1	1	Sample Routine	0
flnwis1_01100065_01	2010-10-05 09:30 CDT	Post	1	1	Sample Routine	0
flnwis1_01003606_01	2010-06-16 15:00 EST	Pre	1	0	Sample Routine	0
flnwis1_01000790_02	2010-06-16 15:01 EDT	Pre	0	0	Quality Control Sample-Field Replicate	0

Sample no.	Sample date and time	Sampling period	Primary sample	Paired sample	Sample type	No. of HHB exceeded
flnwis1_01004107_01	2010-06-09 16:00 EDT	Pre	1	0	Quality Control Sample-Field Replicate	0
flnwis1_01000758_02	2010-06-09 16:01 EDT	Pre	0	0	Quality Control Sample-Field Replicate	0
flnwis1_01000760_02	2010-06-09 16:02 EDT	Pre	0	0	Quality Control Sample-Field Replicate	0
flnwis1_01000762_02	2010-06-09 16:03 EDT	Pre	0	0	Quality Control Sample-Field Replicate	0
flnwis1_01004106_01	2010-06-09 13:00 EDT	Pre	1	0	Quality Control Sample-Field Replicate	0
flnwis1_01000757_02	2010-06-09 13:01 EDT	Pre	0	0	Quality Control Sample-Field Replicate	0
flnwis1_01003516_01	2010-06-09 10:00 EDT	Pre	1	0	Sample Routine	0
flnwis1_01000755_02	2010-06-09 10:01 EDT	Pre	0	0	Quality Control Sample-Field Replicate	0
flnwis1_01003382_01	2010-06-14 14:00 EDT	Pre	1	0	Sample Routine	0
flnwis1_01000831_02	2010-06-14 14:01 EDT	Pre	0	0	Quality Control Sample-Field Replicate	0
flnwis1_01003524_01	2010-06-10 11:00 EDT	Pre	1	1	Sample Routine	0
flnwis1_01000582_02	2010-06-10 11:05 EDT	Pre	0	0	Quality Control Sample-Field Replicate	0
flnwis1_01100079_01	2010-10-12 10:00 CDT	Post	1	1	Sample Routine	0
flnwis1_01004066_01	2010-07-07 11:00 EDT	Pre	1	0	Sample Routine	0
flnwis1_01000764_02	2010-07-07 11:01 EDT	Pre	0	0	Quality Control Sample-Field Replicate	0
flnwis1_01002992_01	2010-05-12 11:30 EDT	Pre	1	1	Sample Routine	0
flnwis1_01100067_01	2010-10-05 14:00 CDT	Post	1	1	Sample Routine	0
flnwis1_01002995_01	2010-05-12 15:30 EDT	Pre	1	1	Sample Routine	0
flnwis1_01100077_01	2010-10-11 13:00 CDT	Post	1	1	Sample Routine	0
flnwis1_01003186_01	2010-05-13 09:00 EDT	Pre	1	1	Sample Routine	0
flnwis1_01000533_02	2010-05-13 09:05 EDT	Pre	0	0	Quality Control Sample-Field Replicate	0
flnwis1_01100081_01	2010-10-13 10:30 EDT	Post	1	1	Sample Routine	0
flnwis1_01003194_01	2010-05-13 12:00 EDT	Pre	1	1	Sample Routine	0
flnwis1_01000535_02	2010-05-13 12:05 EDT	Pre	0	0	Quality Control Sample-Field Replicate	0
flnwis1_01000538_02	2010-05-13 12:10 EDT	Pre	0	0	Quality Control Sample-Field Replicate	0
flnwis1_01100072_01	2010-10-06 14:00 EDT	Post	1	1	Sample Routine	0
flnwis1_01100065_02	2010-10-06 14:05 EDT	Post	0	0	Quality Control Sample-Field Replicate	0
flnwis1_01002938_01	2010-05-18 11:30 EDT	Pre	1	0	Sample Routine	0
flnwis1_01000534_02	2010-05-18 11:31 EDT	Pre	0	0	Quality Control Sample-Field Replicate	0
flnwis1_01100074_01	2010-10-07 11:30 EDT	Post	0	0	Sample Routine	0
flnwis1_01003378_01	2010-05-18 17:00 EDT	Pre	1	0	Sample Routine	0

Sample no.	Sample date and time	Sampling period	Primary sample	Paired sample	Sample type	No. of HHB exceeded
flnwis1_01000811_02	2010-05-18 17:01 EDT	Pre	0	0	Quality Control Sample-Field Replicate	0
flnwis1_01003374_01	2010-05-19 12:00 EDT	Pre	1	0	Sample Routine	0
flnwis1_01000809_02	2010-05-19 12:01 EDT	Pre	0	0	Quality Control Sample-Field Replicate	0
fs5dlabrg_01000227_01	2010-05-14 10:30 CDT	Pre	1	1	Sample Routine	0
fs5dlabrg_01100027_01	2010-10-13 12:30 CDT	Post	1	1	Sample Routine	0
fs5dlabrg_01100002_02	2010-10-13 12:31 CDT	Post	0	0	Quality Control Sample-Field Replicate	0
fs5dlabrg_01000385_01	2010-05-13 12:30 CDT	Pre	1	1	Sample Routine	0
fs5dlabrg_01000074_02	2010-05-13 12:31 CDT	Pre	0	0	Quality Control Sample-Field Replicate	0
fs5dlabrg_01000073_02	2010-05-13 12:32 CDT	Pre	0	0	Quality Control Sample-Field Replicate	0
fs5dlabrg_01100005_01	2010-10-05 15:30 CDT	Post	1	1	Sample Routine	0
fs5dlabrg_01000224_01	2010-05-18 16:20 CDT	Pre	1	1	Sample Routine	0
fs5dlabrg_01100018_01	2010-10-12 10:30 CDT	Post	1	1	Sample Routine	0
fs5dlabrg_01000225_01	2010-05-13 10:35 CDT	Pre	1	1	Sample Routine	0
fs5dlabrg_01100007_01	2010-10-07 14:00 CDT	Post	1	1	Sample Routine	0
fs5dlabrg_01000226_01	2010-05-17 10:15 CDT	Pre	1	1	Sample Routine	0
fs5dlabrg_01100024_01	2010-10-08 10:00 CDT	Post	1	1	Sample Routine	0
fs5dlabrg_01000223_01	2010-05-13 09:30 CDT	Pre	1	1	Sample Routine	0
fs5dlabrg_01100009_01	2010-10-05 11:00 CDT	Post	1	1	Sample Routine	0
fs5dlabrg_01000228_01	2010-05-18 14:00 CDT	Pre	1	1	Sample Routine	0
fs5dlabrg_01100013_01	2010-10-13 12:00 CDT	Post	1	1	Sample Routine	0
fs5dlabrg_01000229_01	2010-05-07 12:00 CDT	Pre	1	1	Sample Routine	0
fs5dlabrg_01100011_01	2010-10-12 12:00 CDT	Post	1	1	Sample Routine	0
fs5dlabrg_01000387_01	2010-05-10 11:45 CDT	Pre	1	1	Sample Routine	0
fs5dlabrg_01000071_02	2010-05-10 11:46 CDT	Pre	0	0	Quality Control Sample-Field Replicate	0
fs5dlabrg_01000070_02	2010-05-10 11:47 CDT	Pre	0	0	Quality Control Sample-Field Replicate	0
fs5dlabrg_01100017_01	2010-10-14 11:00 CDT	Post	1	1	Sample Routine	0
fs5dlabrg_01100001_02	2010-10-14 11:02 CDT	Post	0	0	Quality Control Sample-Field Replicate	0
fs5dlabrg_01000260_01	2010-05-11 10:30 CDT	Pre	1	1	Sample Routine	0
fs5dlabrg_01100025_01	2010-10-07 11:15 CDT	Post	1	1	Sample Routine	0

Sample no.	Sample date and time	Sampling period	Primary sample	Paired sample	Sample type	No. of HHB exceeded
fs5dlabrg_01000234_01	2010-05-07 14:30 CDT	Pre	1	1	Sample Routine	0
fs5dlabrg_01100015_01	2010-10-13 15:00 CDT	Post	1	1	Sample Routine	0
fs5dlabrg_01000233_01	2010-05-07 10:00 CDT	Pre	1	1	Sample Routine	0
fs5dlabrg_01100029_01	2010-10-11 10:30 CDT	Post	1	1	Sample Routine	0
fs5dlabrg_01000231_01	2010-05-07 13:10 CDT	Pre	1	1	Sample Routine	0
fs5dlabrg_01100022_01	2010-10-07 12:00 CDT	Post	1	1	Sample Routine	0
fs5dlabrg_01000232_01	2010-05-07 09:45 CDT	Pre	1	1	Sample Routine	0
fs5dlabrg_01100020_01	2010-10-14 13:30 CDT	Post	1	1	Sample Routine	0
sun1ast_01001275_01	2010-05-10 12:48 CDT	Pre	1	1	Sample Routine	0
sun1ast_01100013_01	2010-10-06 13:03 CDT	Post	1	1	Sample Routine	0
fs5dlabrg_01000314_01	2010-08-23 14:30 CDT	Post	1	0	Sample Routine	0
nwisdmsjkn_01100015_01	2010-10-14 11:30 CDT	Post	1	0	Sample Routine	0
nwisdmsjkn_01100013_01	2010-10-14 14:30 CDT	Post	1	0	Sample Routine	0
nwisdmsjkn_01100009_01	2010-10-11 14:30 CDT	Post	1	0	Sample Routine	0
nwisdmsjkn_01100007_01	2010-10-12 16:30 CDT	Post	1	0	Sample Routine	0
nwisdmsjkn_01100011_01	2010-10-12 12:30 CDT	Post	1	0	Sample Routine	0
nwisdmsjkn_01100017_01	2010-10-13 09:45 CDT	Post	1	0	Sample Routine	0
nwisdmsjkn_01001872_01	2010-05-18 12:30 CDT	Pre	1	1	Sample Routine	0
nwisdmsjkn_01100005_01	2010-10-08 10:00 CDT	Post	1	1	Sample Routine	0
nwisdmsjkn_01001604_01	2010-05-18 13:30 CDT	Pre	1	1	Sample Routine	0
nwisdmsjkn_01100003_01	2010-10-07 10:30 CDT	Post	1	1	Sample Routine	0
nwisdmsjkn_01100003_02	2010-10-07 10:31 CDT	Post	0	0	Quality Control Sample-Field Replicate	0
nwisdmsjkn_01001608_01	2010-05-18 15:00 CDT	Pre	1	1	Sample Routine	0
nwisdmsjkn_01100019_01	2010-10-14 14:30 CDT	Post	1	1	Sample Routine	0
sun1ast_01001266_01	2010-05-10 15:13 CDT	Pre	1	1	Sample Routine	0
sun1ast_01100018_01	2010-10-06 12:58 CDT	Post	1	1	Sample Routine	0
sun1ast_01001273_01	2010-05-10 17:36 CDT	Pre	1	0	Sample Routine	0
sun1ast_01001265_01	2010-05-10 13:15 CDT	Pre	1	1	Sample Routine	0
sun1ast_01100025_01	2010-10-07 11:01 CDT	Post	1	1	Sample Routine	0
sun1ast_01001271_01	2010-05-10 16:25 CDT	Pre	1	0	Sample Routine	0
sun1ast_01001268_01	2010-05-10 13:11 CDT	Pre	1	1	Sample Routine	0

Sample no.	Sample date and time	Sampling period	Primary sample	Paired sample	Sample type	No. of HHB exceeded
sun1ast_01000337_02	2010-05-10 13:12 CDT	Pre	0	0	Quality Control Sample-Field Replicate	0
sun1ast_01000338_02	2010-05-10 13:13 CDT	Pre	0	0	Quality Control Sample-Field Replicate	0
sun1ast_01100017_01	2010-10-13 10:00 CDT	Post	1	1	Sample Routine	0
sun1ast_01100006_02	2010-10-13 10:02 CDT	Post	0	0	Quality Control Sample-Field Replicate	0
sun1ast_01001272_01	2010-05-11 12:06 CDT	Pre	1	0	Sample Routine	0
sun1ast_01001269_01	2010-05-11 12:05 CDT	Pre	1	1	Sample Routine	0
sun1ast_01100024_01	2010-10-07 12:15 CDT	Post	1	1	Sample Routine	0
sun1ast_01001270_01	2010-05-11 10:23 CDT	Pre	1	0	Sample Routine	0
sun1ast_01001264_01	2010-05-11 10:35 CDT	Pre	1	1	Sample Routine	0
sun1ast_01100010_01	2010-10-14 10:20 CDT	Post	1	1	Sample Routine	0
sun1ast_01100004_02	2010-10-14 10:22 CDT	Post	0	0	Quality Control Sample-Field Replicate	0
sun1ast_01001263_01	2010-05-11 12:03 CDT	Pre	1	1	Sample Routine	0
sun1ast_01100014_01	2010-10-05 12:30 CDT	Post	1	1	Sample Routine	0

Acute benchmarks		Chronic benchmarks		Nickel or Vanadium benchmarks exceeded
No. of AALB exceeded	AALB exceeded	No. of CALB exceeded	CALB exceeded	
1	Copper	2	Boron, Copper	–
0	–	0	–	–
0	–	1	Boron	–
0	–	1	Boron	–
0	–	0	–	–
0	–	0	–	–
0	–	0	–	–
0	–	1	Boron	–
0	–	1	Manganese	–
0	–	2	Boron, Manganese	–
0	–	0	–	–
0	–	1	Boron	–
0	–	0	–	–
1	Copper	2	Boron, Copper	–
0	–	0	–	–
0	–	1	Boron	–
0	–	0	–	–
0	–	1	Boron	–
0	–	0	–	–
0	–	1	Boron	–
1	Copper	2	Boron, Copper	–
0	–	0	–	–
0	–	1	Boron	–

Acute benchmarks		Chronic benchmarks		Nickel or Vanadium benchmarks exceeded
No. of AALB exceeded	AALB exceeded	No. of CALB exceeded	CALB exceeded	
0	–	1	Boron	–
0	–	0	–	–
0	–	1	Boron	–
0	–	0	–	–
0	–	0	–	–
0	–	0	–	–
0	–	0	–	–
0	–	0	–	–
0	–	0	–	–
0	–	0	–	–
0	–	0	–	–
0	–	0	–	–
0	–	0	–	–
0	–	0	–	–
0	–	0	–	–
0	–	0	–	–
0	–	0	–	–
0	–	0	–	–
0	–	0	–	–
0	–	0	–	–
0	–	0	–	–
0	–	0	–	–
0	–	0	–	–
0	–	0	–	–
0	–	0	–	–
0	–	0	–	–
0	–	0	–	–
0	–	0	–	–
0	–	1	Boron	–
0	–	0	–	–
0	–	0	–	–

Acute benchmarks		Chronic benchmarks		Nickel or Vanadium benchmarks exceeded
No. of AALB exceeded	AALB exceeded	No. of CALB exceeded	CALB exceeded	
0	–	0	–	–
0	–	0	–	–
0	–	0	–	–
0	–	0	–	–
0	–	0	–	–
0	–	0	–	–
0	–	0	–	–
0	–	0	–	–
0	–	0	–	–
0	–	0	–	–
0	–	0	–	–
0	–	0	–	–
0	–	0	–	–
1	Copper	2	Boron, Copper	–
0	–	0	–	–
0	–	0	–	–
0	–	0	–	–
0	–	1	Boron	–
0	–	0	–	–
0	–	1	Boron	–
0	–	0	–	–
0	–	0	–	–
0	–	1	Boron	–
0	–	0	–	–
0	–	0	–	–
0	–	0	–	–
0	–	1	Boron	–
0	–	1	Boron	–
0	–	0	–	–
0	–	0	–	–
1	Copper	2	Boron, Copper	–
0	–	0	–	–

Acute benchmarks		Chronic benchmarks		Nickel or Vanadium benchmarks exceeded
No. of AALB exceeded	AALB exceeded	No. of CALB exceeded	CALB exceeded	
0	–	0	–	–
0	–	0	–	–
0	–	0	–	–
0	–	0	–	–
0	–	0	–	–
0	–	0	–	–
0	–	0	–	–
0	–	0	–	–
0	–	0	–	–
0	–	1	Barium	–
0	–	2	Cobalt, Manganese	–
1	Copper	2	Boron, Copper	–
0	–	4	Cobalt, Lead, Manganese, Nickel	CALB, Nickel
2	Copper, Zinc	8	Barium, Boron, Copper, Lead, Manganese, Nickel, Vanadium, Zinc	CALB, Nickel; CALB.Vanadium
0	–	0	–	–
1	Copper	3	Boron, Copper, Manganese	–
0	–	3	Cobalt, Copper, Manganese	–
0	–	1	Manganese	–
0	–	0	–	–
0	–	1	Manganese	–
0	–	0	–	–
1	Copper	2	Boron, Copper	–
0	–	1	Cobalt	–
0	–	0	–	–
0	–	1	Cobalt	–
0	–	1	Boron	–
0	–	1	Boron	–
2	Copper, Zinc	7	Barium, Cobalt, Copper, Lead, Manganese, Nickel, Zinc	CALB, Nickel
0	–	0	–	–

Acute benchmarks		Chronic benchmarks		Nickel or Vanadium benchmarks exceeded
No. of AALB exceeded	AALB exceeded	No. of CALB exceeded	CALB exceeded	
0	–	0	–	–
0	–	1	Manganese	–
0	–	2	Cobalt, Manganese	–
1	Copper	2	Boron, Copper	–
0	–	4	Cobalt, Lead, Manganese, Nickel	CALB, Nickel
1	Copper	3	Boron, Copper, Manganese	–
0	–	0	–	–
0	–	2	Boron, Manganese	–
0	–	3	Cobalt, Manganese, Nickel	CALB, Nickel
1	Copper	2	Boron, Copper	–
0	–	0	–	–
0	–	1	Boron	–
0	–	1	Boron	–
0	–	1	Boron	–
1	Copper	2	Boron, Copper	–
1	Copper	2	Boron, Copper	–
1	Copper	2	Boron, Copper	–
0	–	0	–	–
1	Copper	2	Boron, Copper	–
0	–	2	Cobalt, Manganese	–
1	Copper	3	Boron, Copper, Manganese	–
1	Copper	3	Boron, Copper, Manganese	–
0	–	0	–	–
0	–	1	Boron	–
0	–	4	Cobalt, Lead, Manganese, Nickel	CALB, Nickel
1	Copper	3	Boron, Copper, Manganese	–
0	–	4	Cobalt, Lead, Manganese, Nickel	CALB, Nickel
0	–	2	Cobalt, Manganese	–
1	Copper	2	Boron, Copper	–
0	–	2	Cobalt, Manganese	–
0	–	2	Cobalt, Manganese	–

Acute benchmarks		Chronic benchmarks		Nickel or Vanadium benchmarks exceeded
No. of AALB exceeded	AALB exceeded	No. of CALB exceeded	CALB exceeded	
0	–	2	Cobalt, Manganese	–
0	–	2	Cobalt, Manganese	–
0	–	1	Boron	–
1	Copper	2	Boron, Copper	–
0	–	2	Cobalt, Manganese	–
0	–	2	Cobalt, Manganese	–
1	Copper	2	Boron, Copper	–
0	–	0	–	–
0	–	0	–	–
0	–	2	Boron, Manganese	–
0	–	1	Boron	–
0	–	0	–	–
0	–	1	Boron	–

Appendix Table 3-4. Benchmark exceedances for trace elements in whole sediment and national baseline comparisons for trace and major elements and nutrients in the less than the 63-micrometer sediment fraction, by sample, from the Deepwater Horizon oil spill, Gulf of Mexico, 2010

[Sample dates and times are in yyyy-MM-dd hh:mm ZZZ format, where ZZZ is time zone. Primary sample: 1 indicates that sample is in the primary sample dataset, 0 indicates it is not. Lower and upper SVs exceeded are formatted as XX.bbb, where bbb is the type of benchmark exceeded and XX is the element responsible for the exceedance. Total no. of elements determined in LT63 sediment fraction: 0 indicates that trace elements were not determined in LT63 sediment fraction, usually because there was too little LT63 sample mass to analyze. **Abbreviations:** AET, apparent effect threshold; Ala., Alabama; BLM, Bureau of Land Management; CDT, Central Daylight Time; dd, decimal degrees; EDT, Eastern Daylight Time; ERL, Effects range-low; ERM, Effects range-median; Fla., Florida; La., Louisiana; LT63, less than 63 µm; map no., site number in *Figure 1* ; Max-baseline, maximum of baseline concentration range; Miss., Mississippi; nr, not reported; NWR, National Wildlife Refuge; PEC , probable effect concentration; PEL , probable effect level; Post, post-landfall; Pre, pre-landfall; Sediment %LT63, percent of whole sediment that passes through a 63-µm sieve; SV, screening value; T20, concentration associated with 20 percent probability of toxicity; T50, concentration associated with 50 percent probability of toxicity; TC, total carbon; TEC , threshold effect concentration; TEL , threshold effect level; Tex., Texas; TOC, total organic carbon; USEPA, U.S. Environmental Protection Agency; USGS, U.S. Geological Survey; WSC, Water Science Center; µm, micrometer; <, less than; %, percent; –, not determined, often because there was too little mass of sediment LT63 to determine trace and major elements in LT63 sediment fraction.]

Map no.	Station identifier	Site name	Site latitude (dd)	Site longitude (dd)	USGS WSC
AL-1	301338088193500	West Dauphin Island, Ala.	30.227425	-88.326394	Ala.
AL-1	301338088193500	West Dauphin Island, Ala.	30.227425	-88.326394	Ala.
AL-10	301341087495200	Fort Morgan BLM-3, Ala.	30.22825903	-87.8311016	Ala.
AL-10	301341087495200	Fort Morgan BLM-3, Ala.	30.22825903	-87.8311016	Ala.
AL-2	301455088110300	Dauphin Island, AL-2, Ala.	30.24881454	-88.1841677	Ala.
AL-2	301455088110300	Dauphin Island, AL-2, Ala.	30.24881454	-88.1841677	Ala.
AL-3	301448088044000	Dauphin Island, AL-3, Ala.	30.24687027	-88.0777765	Ala.
AL-3	301448088044000	Dauphin Island, AL-3, Ala.	30.24687027	-88.0777765	Ala.
AL-4	301329088003000	Fort Morgan, AL-4, Ala.	30.22492629	-88.0083304	Ala.
AL-4	301329088003000	Fort Morgan, AL-4, Ala.	30.22492629	-88.0083304	Ala.
AL-5	301349087541600	Fort Morgan, AL-5, Ala.	30.23048145	-87.9044377	Ala.
AL-5	301349087541600	Fort Morgan, AL-5, Ala.	30.23048145	-87.9044377	Ala.
AL-6	301428087434900	Gulf Shores, Ala.	30.24131404	-87.7302646	Ala.
AL-6	301428087434900	Gulf Shores, Ala.	30.24131404	-87.7302646	Ala.

Map no.	Station identifier	Site name	Site latitude (dd)	Site longitude (dd)	USGS WSC
AL-7	301608087345400	Orange Beach, Ala.	30.26909103	-87.5816491	Ala.
AL-7	301608087345400	Orange Beach, Ala.	30.26909103	-87.5816491	Ala.
AL-8	301353087561600	BLM-1, Ala.	30.23159265	-87.9377724	Ala.
AL-8	301353087561600	BLM-1, Ala.	30.23159265	-87.9377724	Ala.
AL-9	301343087520200	BLM-2, Ala.	30.2288147	-87.867214	Ala.
AL-9	301343087520200	BLM-2, Ala.	30.2288147	-87.867214	Ala.
FL-1	302144086581200	Gulf Island National Seashore near Navarre, Fla.	30.362389	-86.970167	Fla.
FL-1	302144086581200	Gulf Island National Seashore near Navarre, Fla.	30.362389	-86.970167	Fla.
FL-10	273728082441800	Fort DeSoto Pk near St Pete, Fla.	27.624444	-82.738333	Fla.
FL-11	263132082114000	Captiva Island Beach near Captiva, Fla.	26.525639	-82.194222	Fla.
FL-11	263132082114000	Captiva Island Beach near Captiva, Fla.	26.525639	-82.194222	Fla.
FL-12	255609081440700	Tiger Tail Beach at Marco IS, Fla.	25.936139	-81.734583	Fla.
FL-13	251329081101100	NW Cape Sable Beach near Flamingo, Fla.	25.224806	-81.169972	Fla.
FL-14	243737082522500	Dry Tortugas National Park, Fla.	24.627139	-82.873639	Fla.
FL-15	254002080092000	B Baggs Cape near Key Biscayne, Fla.	25.667417	-80.155528	Fla.
FL-16	260454080063400	Lloyd Beach at Ft Lauderdale, Fla.	26.081694	-80.109444	Fla.
FL-16	260454080063400	Lloyd Beach at Ft Lauderdale, Fla.	26.081694	-80.109444	Fla.
FL-16	260454080063400	Lloyd Beach at Ft Lauderdale, Fla.	26.081694	-80.109444	Fla.
FL-17	264921080021700	MacArthur Beach at W Palm Beach, Fla.	26.822583	-80.038056	Fla.
FL-18	244345081000600	Coco Plum Beach near Marathon, Fla.	24.72925	-81.169972	Fla.
FL-19	265722080045400	BLM Tract1 near Jupiter Inlet, Fla.	26.956111	-80.081667	Fla.
FL-2	302258086263400	Henderson Beach State Park near Destin, Fla.	30.382944	-86.442778	Fla.
FL-2	302258086263400	Henderson Beach State Park near Destin, Fla.	30.382944	-86.442778	Fla.
FL-20	265722080045500	BLM Tract2 near Jupiter Inlet, Fla.	26.956111	-80.081944	Fla.
FL-21	243902081332700	BLM Tract1 near Park Key, Fla.	24.650556	-81.5575	Fla.
FL-21	243902081332700	BLM Tract1 near Park Key, Fla.	24.650556	-81.5575	Fla.
FL-22	243703081323700	BLM Tract2 near Sugarloaf Key, Fla.	24.6175	-81.543611	Fla.
FL-23	243700081322300	BLM Tract3 near Sugarloaf Key, Fla.	24.616667	-81.539722	Fla.

Map no.	Station identifier	Site name	Site latitude (dd)	Site longitude (dd)	USGS WSC
FL-24	273605082454900	BLM Tract at Egmont Key, Fla.	27.601389	-82.763611	Fla.
FL-25	300223085260800	BLM Lathrop Bayou near Panama City, Fla.	30.038944	-85.435472	Fla.
FL-25	300223085260800	BLM Lathrop Bayou near Panama City, Fla.	30.038944	-85.435472	Fla.
FL-26	244325081351500	Marvin Key at Great White Heron NWR, Fla.	24.709806	-81.644639	Fla.
FL-3	301926086091800	Grayton Beach State Park near Seaside, Fla.	30.324056	-86.155056	Fla.
FL-3	301926086091800	Grayton Beach State Park near Seaside, Fla.	30.324056	-86.155056	Fla.
FL-4	300729085440900	St. Andrews State Park near Panama City, Fla.	30.124722	-85.736028	Fla.
FL-4	300729085440900	St. Andrews State Park near Panama City, Fla.	30.124722	-85.736028	Fla.
FL-5	294645085243000	St. Joe Peninsula State Park near Port St. Joe, Fla	29.779167	-85.408528	Fla.
FL-5	294645085243000	St. Joe Peninsula State Park near Port St. Joe, Fla	29.779167	-85.408528	Fla.
FL-6	294152084460300	St George Island State Park near E Point, Fla.	29.697861	-84.76775	Fla.
FL-6	294152084460300	St George Island State Park near E Point, Fla.	29.697861	-84.76775	Fla.
FL-6	294152084460300	St George Island State Park near E Point, Fla.	29.697861	-84.76775	Fla.
FL-6	294152084460300	St George Island State Park near E Point, Fla.	29.697861	-84.76775	Fla.
FL-7	300427084105000	St. Marks NWR near St. Marks, Fla.	30.074194	-84.180444	Fla.
FL-7	300427084105000	St. Marks NWR near St. Marks, Fla.	30.074194	-84.180444	Fla.
FL-8	290740083031200	Piney Pt Beach at Cedar Key, Fla.	29.12775	-83.053361	Fla.
FL-9	285425082412600	Fort Island Gulf Beach near Chassah., Fla.	28.907194	-82.690778	Fla.
LA-22	294432090083100	Jean Lafitte National Park, La.	29.7422222	-90.1419444	La.
LA-22	294432090083100	Jean Lafitte National Park, La.	29.7422222	-90.1419444	La.
LA-22	294432090083100	Jean Lafitte National Park, La.	29.7422222	-90.1419444	La.
LA-23	294406091511300	Cypremort Point, La.	29.735	-91.8536111	La.
LA-23	294406091511300	Cypremort Point, La.	29.735	-91.8536111	La.
LA-23	294406091511300	Cypremort Point, La.	29.735	-91.8536111	La.
LA-24	292046090254500	Lake Felicity, La.	29.3461111	-90.4291667	La.
LA-24	292046090254500	Lake Felicity, La.	29.3461111	-90.4291667	La.
LA-24	292046090254500	Lake Felicity, La.	29.3461111	-90.4291667	La.
LA-25	293808092460200	Rockefeller Refuge Beach, La.	29.63555556	-92.7672222	La.

Map no.	Station identifier	Site name	Site latitude (dd)	Site longitude (dd)	USGS WSC
LA-25	293808092460200	Rockefeller Refuge Beach, La.	29.63555556	-92.7672222	La.
LA-25	293808092460200	Rockefeller Refuge Beach, La.	29.63555556	-92.7672222	La.
LA-26	291507090551800	Sister Lake, La.	29.25194444	-90.9216667	La.
LA-26	291507090551800	Sister Lake, La.	29.25194444	-90.9216667	La.
LA-26	291507090551800	Sister Lake, La.	29.25194444	-90.9216667	La.
LA-28	293424091321600	Point Chevreuil, La.	29.57333333	-91.5377778	La.
LA-28	293424091321600	Point Chevreuil, La.	29.57333333	-91.5377778	La.
LA-28	293424091321600	Point Chevreuil, La.	29.57333333	-91.5377778	La.
LA-29	294324089432500	Crooked Bayou, La.	29.72333333	-89.7236111	La.
LA-29	294324089432500	Crooked Bayou, La.	29.72333333	-89.7236111	La.
LA-29	294324089432500	Crooked Bayou, La.	29.72333333	-89.7236111	La.
LA-30	294108089234500	Mississippi R. Gulf Outlet, La.	29.68555556	-89.3958333	La.
LA-30	294108089234500	Mississippi R. Gulf Outlet, La.	29.68555556	-89.3958333	La.
LA-30	294108089234500	Mississippi R. Gulf Outlet, La.	29.68555556	-89.3958333	La.
LA-31	291537089570100	Grand Isle Beach at State Park, La.	29.26027778	-89.9502778	La.
LA-31	291537089570100	Grand Isle Beach at State Park, La.	29.26027778	-89.9502778	La.
LA-31	291537089570100	Grand Isle Beach at State Park, La.	29.26027778	-89.9502778	La.
LA-31	291537089570100	Grand Isle Beach at State Park, La.	29.26027778	-89.9502778	La.
LA-31	291537089570100	Grand Isle Beach at State Park, La.	29.26027778	-89.9502778	La.
LA-31	291537089570100	Grand Isle Beach at State Park, La.	29.26027778	-89.9502778	La.
LA-32	291914089105500	Mississippi R. at Main Pass, La.	29.32055556	-89.1819444	La.
LA-32	291914089105500	Mississippi R. at Main Pass, La.	29.32055556	-89.1819444	La.
LA-33	293518089364300	Breton Sound, La.	29.58833333	-89.6119444	La.
LA-33	293518089364300	Breton Sound, La.	29.58833333	-89.6119444	La.
LA-33	293518089364300	Breton Sound, La.	29.58833333	-89.6119444	La.
LA-34	300907089144500	Miss. Sound at Grand Pass, La.	30.15194444	-89.2458333	La.
LA-34	300907089144500	Miss. Sound at Grand Pass, La.	30.15194444	-89.2458333	La.
LA-35	285951089085600	Mississippi R. at South Pass, La.	28.9975	-89.1488889	La.

Map no.	Station identifier	Site name	Site latitude (dd)	Site longitude (dd)	USGS WSC
LA-35	285951089085600	Mississippi R. at South Pass, La.	28.9975	-89.1488889	La.
LA-36	285615089235600	Mississippi R. at SW Pass, La.	28.9375	-89.3988889	La.
LA-36	285615089235600	Mississippi R. at SW Pass, La.	28.9375	-89.3988889	La.
LA-46	294456093394801	East Sabine, La.	29.74888889	-93.6633333	La.
LA-46	294456093394801	East Sabine, La.	29.74888889	-93.6633333	La.
LA-6 (Bat0(	292708089521400	Bay Jimmy at NE Barataria Bay, La.	29.4522222	-89.8705556	La.
MS-37	301309089044700	South Cat Island Beach, Miss.	30.21916667	-89.0797222	Miss.
MS-37	301309089044700	South Cat Island Beach, Miss.	30.21916667	-89.0797222	Miss.
MS-38	301227088582000	West Ship Island Beach, Miss.	30.2075	-88.9722222	Miss.
MS-38	301227088582000	West Ship Island Beach, Miss.	30.2075	-88.9722222	Miss.
MS-39	301358088533300	East Ship Island Beach, Miss.	30.23277778	-88.8925	Miss.
MS-39	301358088533300	East Ship Island Beach, Miss.	30.23277778	-88.8925	Miss.
MS-40	301425088440600	West Horn Island Beach, Miss.	30.24027778	-88.735	Miss.
MS-40	301425088440600	West Horn Island Beach, Miss.	30.24027778	-88.735	Miss.
MS-41	301321088353300	East Horn Island Beach, Miss.	30.2225	-88.5925	Miss.
MS-41	301321088353300	East Horn Island Beach, Miss.	30.2225	-88.5925	Miss.
MS-42	301208088253600	Petit Bois Island Beach, Miss.	30.2022222	-88.4266667	Miss.
MS-42	301208088253600	Petit Bois Island Beach, Miss.	30.2022222	-88.4266667	Miss.
MS-43	301858089141000	Pass Christian Beach, Miss.	30.3161111	-89.2361111	Miss.
MS-43	301858089141000	Pass Christian Beach, Miss.	30.3161111	-89.2361111	Miss.
MS-44	302336088535800	BIloxi Beach, Miss.	30.39333333	-88.8994444	Miss.
MS-44	302336088535800	BIloxi Beach, Miss.	30.39333333	-88.8994444	Miss.
MS-45	302034088325200	Pascagoula Beach, Miss.	30.34277778	-88.5477778	Miss.
MS-45	302034088325200	Pascagoula Beach, Miss.	30.34277778	-88.5477778	Miss.
MS-45	302034088325200	Pascagoula Beach, Miss.	30.34277778	-88.5477778	Miss.
MS-45	302034088325200	Pascagoula Beach, Miss.	30.34277778	-88.5477778	Miss.
TX-47	294057093572301	Texas Point, Tex.	29.6825	-93.9563889	Tex.
TX-47	294057093572301	Texas Point, Tex.	29.6825	-93.9563889	Tex.

Map no.	Station identifier	Site name	Site latitude (dd)	Site longitude (dd)	USGS WSC
TX-48	295542093521701	Sabine Lake, Tex.	29.92833333	-93.8713889	Tex.
TX-49	293324094220601	High Island, Tex.	29.55666667	-94.3683333	Tex.
TX-49	293324094220601	High Island, Tex.	29.55666667	-94.3683333	Tex.
TX-50	293429094332101	East Bay near Anahuac, Tex.	29.5747222	-94.5558333	Tex.
TX-51	291815094461001	Galveston Island, Tex.	29.30416667	-94.7694444	Tex.
TX-51	291815094461001	Galveston Island, Tex.	29.30416667	-94.7694444	Tex.
TX-51	291815094461001	Galveston Island, Tex.	29.30416667	-94.7694444	Tex.
TX-51	291815094461001	Galveston Island, Tex.	29.30416667	-94.7694444	Tex.
TX-51	291815094461001	Galveston Island, Tex.	29.30416667	-94.7694444	Tex.
TX-51	291815094461001	Galveston Island, Tex.	29.30416667	-94.7694444	Tex.
TX-52	294408094501101	Trinity Bay near Beach City, Tex.	29.73555556	-94.8363889	Tex.
TX-53	292318094430901	Bolivar Peninsula, Tex.	29.38833333	-94.7191667	Tex.
TX-53	292318094430901	Bolivar Peninsula, Tex.	29.38833333	-94.7191667	Tex.
TX-54	292937094544001	Galveston Bay near Eagle Pt, Tex.	29.4936111	-94.9111111	Tex.
TX-55	291251094571401	West Bay, Galveston Is State Park, Tex.	29.21416667	-94.9538889	Tex.
TX-55	291251094571401	West Bay, Galveston Is State Park, Tex.	29.21416667	-94.9538889	Tex.
TX-55	291251094571401	West Bay, Galveston Is State Park, Tex.	29.21416667	-94.9538889	Tex.
TX-56	290512095063101	San Luis Pass, Tex.	29.08666667	-95.1086111	Tex.
TX-56	290512095063101	San Luis Pass, Tex.	29.08666667	-95.1086111	Tex.

[1] Lower SVs define concentrations below which adverse effects are not expected, and upper SVs define concentrations above which adverse effects are likely or frequent. Chemical symbols and benchmark values are listed in *Table 6C* .

[2] Elemental symbols and national baseline values are listed in *Table 6D* . Exceedance of maximum baseline concentrations indicates enrichment above levels associated with undeveloped or agricultural areas. Quality control analysis of field replicates indicates fairly high variability (percent relative standard deviation of 20 to 30%) for Mn, Hg, Na, and Sn in the LT63 sediment fraction. All of these exceeded baseline concentrations in one or more LT63 sediment samples.

Sample no.	Sample date and time	Sampling period	Sample type	Primary sample
sun1dalmtg_01000808_01	2010-05-08 11:15 CDT	Pre	Sample routine	1
sun1dalmtg_01100034_01	2010-10-13 13:00 CDT	Post	Sample routine	1
sun1dalmtg_01000811_01	2010-05-24 16:30 CDT	Pre	Sample routine	1
sun1dalmtg_01100022_01	2010-10-14 10:25 CDT	Post	Quality control sample-field replicate	1
sun1dalmtg_01000812_01	2010-05-09 13:15 CDT	Pre	Quality control sample-field replicate	1
sun1dalmtg_01100003_01	2010-10-07 12:20 CDT	Post	Sample routine	1
sun1dalmtg_01000082_01	2010-05-09 10:15 CDT	Pre	Sample routine	1
sun1dalmtg_01100006_01	2010-10-06 12:30 CDT	Post	Sample routine	1
sun1dalmtg_01000079_01	2010-05-08 16:45 CDT	Pre	Sample routine	1
sun1dalmtg_01100010_01	2010-10-12 11:00 CDT	Post	Sample routine	1
sun1dalmtg_01000080_01	2010-05-08 15:00 CDT	Pre	Sample routine	1
sun1dalmtg_01100013_01	2010-10-13 13:40 CDT	Post	Sample routine	1
sun1dalmtg_01000081_01	2010-05-08 12:45 CDT	Pre	Sample routine	1
sun1dalmtg_01100029_01	2010-10-14 13:30 CDT	Post	Sample routine	1

Sample no.	Sample date and time	Sampling period	Sample type	Primary sample
sun1dalmtg_01000086_01	2010-05-08 09:45 CDT	Pre	Sample routine	1
sun1dalmtg_01100032_01	2010-10-14 10:00 CDT	Post	Sample routine	1
sun1dalmtg_01000809_01	2010-05-24 13:00 CDT	Pre	Sample routine	1
sun1dalmtg_01100016_01	2010-10-13 10:45 CDT	Post	Sample routine	1
sun1dalmtg_01000810_01	2010-05-24 15:00 CDT	Pre	Sample routine	1
sun1dalmtg_01100019_01	2010-10-14 13:35 CDT	Post	Sample routine	1
flnwis1_01002983_01	2010-05-11 13:30 EDT	Pre	Sample routine	1
flnwis1_01100063_01	2010-10-04 14:30 CDT	Post	Sample routine	1
flnwis1_01003372_01	2010-05-17 16:00 EDT	Pre	Sample routine	1
flnwis1_01003510_01	2010-05-20 16:30 EDT	Pre	Sample routine	1
flnwis1_01000819_02	2010-05-20 16:32 EDT	Pre	Quality control sample-field replicate	0
flnwis1_01003669_01	2010-05-21 15:00 EDT	Pre	Sample routine	1
flnwis1_01003530_01	2010-05-22 13:05 EDT	Pre	Sample routine	1
flnwis1_01003367_01	2010-05-20 08:45 EDT	Pre	Sample routine	1
flnwis1_01004140_01	2010-06-01 13:00 EDT	Pre	Quality control sample-field replicate	1
flnwis1_01004151_01	2010-05-26 15:00 EDT	Pre	Quality control sample-field replicate	1
flnwis1_01000776_02	2010-05-26 15:01 EDT	Pre	Quality control sample-field replicate	0
flnwis1_01000778_02	2010-05-26 15:02 EDT	Pre	Quality control sample-field replicate	0
flnwis1_01004152_01	2010-05-27 15:30 EDT	Pre	Quality control sample-field replicate	1
flnwis1_01003363_01	2010-05-24 15:45 EDT	Pre	Sample routine	1
flnwis1_01004153_01	2010-06-16 13:00 EDT	Pre	Quality control sample-field replicate	1
flnwis1_01002986_01	2010-05-11 17:30 EDT	Pre	Sample routine	1
flnwis1_01100066_01	2010-10-05 09:30 CDT	Post	Sample routine	1
flnwis1_01004154_01	2010-06-16 15:00 EDT	Pre	Quality control sample-field replicate	1
flnwis1_01003612_01	2010-06-09 16:00 EDT	Pre	Sample routine	1
flnwis1_01000759_02	2010-06-09 16:02 EDT	Pre	Quality control sample-field replicate	0
flnwis1_01004105_01	2010-06-09 13:00 EDT	Pre	Quality control sample-field replicate	1
flnwis1_01004104_01	2010-06-09 10:00 EDT	Pre	Quality control sample-field replicate	1

Sample no.	Sample date and time	Sampling period	Sample type	Primary sample
flnwis1_01003384_01	2010-06-14 14:00 EDT	Pre	Sample routine	1
flnwis1_01004615_01	2010-06-10 11:00 CDT	Pre	Sample routine	1
flnwis1_01100080_01	2010-10-12 10:00 CDT	Post	Sample routine	1
flnwis1_01004108_01	2010-07-07 11:00 EDT	Pre	Quality control sample-field replicate	1
flnwis1_01002993_01	2010-05-12 11:30 EDT	Pre	Sample routine	1
flnwis1_01100071_01	2010-10-05 14:00 CDT	Post	Sample routine	1
flnwis1_01002996_01	2010-05-12 15:30 EDT	Pre	Sample routine	1
flnwis1_01100078_01	2010-10-11 13:00 CDT	Post	Sample routine	1
flnwis1_01003187_01	2010-05-13 09:00 EDT	Pre	Sample routine	1
flnwis1_01100082_01	2010-10-13 10:30 EDT	Post	Sample routine	1
flnwis1_01003195_01	2010-05-13 12:00 EDT	Pre	Quality control sample-field replicate	1
flnwis1_01000536_02	2010-05-13 12:05 EDT	Pre	Quality control sample-field replicate	0
flnwis1_01000537_02	2010-05-13 12:10 EDT	Pre	Quality control sample-field replicate	0
flnwis1_01100073_01	2010-10-06 14:00 EDT	Post	Sample routine	1
flnwis1_01003192_01	2010-05-18 11:30 EDT	Pre	Sample routine	1
flnwis1_01100075_01	2010-10-07 11:30 EDT	Post	Sample routine	1
flnwis1_01003380_01	2010-05-18 17:00 EDT	Pre	Quality control sample-field replicate	1
flnwis1_01003376_01	2010-05-19 12:00 EDT	Pre	Sample routine	1
fs5dlabrg_01000213_01	2010-05-14 10:30 CDT	Pre	Sample routine	1
fs5dlabrg_01100028_01	2010-10-13 12:30 CDT	Post	Sample routine	1
fs5dlabrg_01100003_02	2010-10-13 12:31 CDT	Post	Quality control sample-field replicate	0
fs5dlabrg_01000064_02	2010-05-13 12:31 CDT	Pre	Quality control sample-field replicate	1
fs5dlabrg_01000065_02	2010-05-13 12:32 CDT	Pre	Quality control sample-field replicate	0
fs5dlabrg_01100006_01	2010-10-05 15:30 CDT	Post	Sample routine	1
fs5dlabrg_01000098_02	2010-05-18 16:19 CDT	Pre	Quality control sample-field replicate	1
fs5dlabrg_01000216_01	2010-05-18 16:20 CDT	Pre	Sample routine	1
fs5dlabrg_01100019_01	2010-10-12 10:30 CDT	Post	Sample routine	1
fs5dlabrg_01000212_01	2010-05-13 10:35 CDT	Pre	Sample routine	1

Sample no.	Sample date and time	Sampling period	Sample type	Primary sample
fs5dlabrg_01100008_01	2010-10-07 14:00 CDT	Post	Sample routine	1
fs5dlabrg_01100024_02	2010-10-07 14:01 CDT	Post	Quality control sample-field replicate	0
fs5dlabrg_01000099_02	2010-05-17 10:14 CDT	Pre	Quality control sample-field replicate	1
fs5dlabrg_01000214_01	2010-05-17 10:15 CDT	Pre	Sample routine	1
fs5dlabrg_01100033_01	2010-10-08 10:00 CDT	Post	Sample routine	1
fs5dlabrg_01000097_02	2010-05-13 09:29 CDT	Pre	Quality control sample-field replicate	1
fs5dlabrg_01100010_01	2010-10-05 11:00 CDT	Post	Sample routine	1
fs5dlabrg_01100023_02	2010-10-05 11:01 CDT	Post	Quality control sample-field replicate	0
fs5dlabrg_01000215_01	2010-05-18 14:00 CDT	Pre	Sample routine	1
fs5dlabrg_01100014_01	2010-10-13 12:00 CDT	Post	Sample routine	1
fs5dlabrg_01100017_02	2010-10-13 12:01 CDT	Post	Quality control sample-field replicate	0
fs5dlabrg_01000220_01	2010-05-07 12:00 CDT	Pre	Sample routine	1
fs5dlabrg_01100012_01	2010-10-12 12:00 CDT	Post	Sample routine	1
fs5dlabrg_01100018_02	2010-10-12 12:01 CDT	Post	Quality control sample-field replicate	0
fs5dlabrg_01000095_02	2010-05-10 11:44 CDT	Pre	Quality control sample-field replicate	1
fs5dlabrg_01000068_02	2010-05-10 11:46 CDT	Pre	Quality control sample-field replicate	0
fs5dlabrg_01000067_02	2010-05-10 11:47 CDT	Pre	Quality control sample-field replicate	0
fs5dlabrg_01000316_01	2010-09-01 11:30 CDT	Post	Sample routine	0
fs5dlabrg_01100032_01	2010-10-14 11:00 CDT	Post	Sample routine	1
fs5dlabrg_01100019_02	2010-10-14 11:01 CDT	Post	Quality control sample-field replicate	0
fs5dlabrg_01000246_01	2010-05-07 10:30 CDT	Pre	Sample routine	1
fs5dlabrg_01100026_01	2010-10-07 11:15 CDT	Post	Sample routine	1
fs5dlabrg_01000219_01	2010-05-07 14:30 CDT	Pre	Sample routine	1
fs5dlabrg_01100016_01	2010-10-13 15:00 CDT	Post	Sample routine	1
fs5dlabrg_01100020_02	2010-10-13 15:01 CDT	Post	Quality control sample-field replicate	0
fs5dlabrg_01000221_01	2010-05-07 10:00 CDT	Pre	Sample routine	1
fs5dlabrg_01100030_01	2010-10-11 10:30 CDT	Post	Sample routine	1
fs5dlabrg_01000096_02	2010-05-07 13:09 CDT	Pre	Quality control sample-field replicate	1

Sample no.	Sample date and time	Sampling period	Sample type	Primary sample
fs5dlabrg_01100023_01	2010-10-07 12:00 CDT	Post	Sample routine	1
fs5dlabrg_01000218_01	2010-05-07 09:45 CDT	Pre	Sample routine	1
fs5dlabrg_01100021_01	2010-10-14 13:30 CDT	Post	Sample routine	1
sun1ast_01001284_01	2010-05-10 13:17 CDT	Pre	Sample routine	1
sun1ast_01100012_01	2010-10-06 12:40 CDT	Post	Sample routine	1
fs5dlabrg_01000315_01	2010-08-23 13:30 CDT	Post	Sample routine	1
nwisdmsjkn_01001594_01	2010-05-07 15:30 CDT	Pre	Sample routine	1
nwisdmsjkn_01100016_01	2010-10-14 11:30 CDT	Post	Sample routine	1
nwisdmsjkn_01001589_01	2010-05-07 17:00 CDT	Pre	Sample routine	1
nwisdmsjkn_01100014_01	2010-10-14 14:30 CDT	Post	Sample routine	1
nwisdmsjkn_01001596_01	2010-05-07 18:45 CDT	Pre	Sample routine	1
nwisdmsjkn_01100010_01	2010-10-11 14:30 CDT	Post	Sample routine	1
nwisdmsjkn_01001528_01	2010-05-08 14:00 CDT	Pre	Sample routine	1
nwisdmsjkn_01100008_01	2010-10-12 16:30 CDT	Post	Sample routine	1
nwisdmsjkn_01001592_01	2010-05-08 13:10 CDT	Pre	Sample routine	1
nwisdmsjkn_01100012_01	2010-10-12 12:30 CDT	Post	Sample routine	1
nwisdmsjkn_01001600_01	2010-05-08 12:15 CDT	Pre	Sample routine	1
nwisdmsjkn_01100018_01	2010-10-13 09:45 CDT	Post	Sample routine	1
nwisdmsjkn_01001598_01	2010-05-08 20:15 CDT	Pre	Sample routine	1
nwisdmsjkn_01100006_01	2010-10-08 10:00 CDT	Post	Sample routine	1
nwisdmsjkn_01001602_01	2010-05-08 13:00 CDT	Pre	Sample routine	1
nwisdmsjkn_01100004_01	2010-10-07 10:30 CDT	Post	Sample routine	1
nwisdmsjkn_01001606_01	2010-05-08 16:30 CDT	Pre	Sample routine	1
nwisdmsjkn_01000048_02	2010-05-08 16:31 CDT	Pre	Quality control sample-field replicate	0
nwisdmsjkn_01000049_02	2010-05-08 16:32 CDT	Pre	Quality control sample-field replicate	0
nwisdmsjkn_01100020_01	2010-10-14 14:30 CDT	Post	Sample routine	1
sun1ast_01001282_01	2010-05-10 15:25 CDT	Pre	Sample routine	1
sun1ast_01100019_01	2010-10-06 13:40 CDT	Post	Sample routine	1

Sample no.	Sample date and time	Sampling period	Sample type	Primary sample
sun1ast_01001285_01	2010-05-10 17:46 CDT	Pre	Sample routine	1
sun1ast_01001280_01	2010-05-10 13:15 CDT	Pre	Sample routine	1
sun1ast_01100026_01	2010-10-07 11:20 CDT	Post	Sample routine	1
sun1ast_01001281_01	2010-05-10 16:25 CDT	Pre	Sample routine	1
sun1ast_01001274_01	2010-05-10 13:11 CDT	Pre	Sample routine	1
sun1ast_01000339_02	2010-05-10 13:12 CDT	Pre	Quality control sample-field replicate	0
sun1ast_01000342_02	2010-05-10 13:13 CDT	Pre	Quality control sample-field replicate	0
sun1ast_01100016_01	2010-10-13 11:00 CDT	Post	Sample routine	1
sun1ast_01100007_02	2010-10-13 11:02 CDT	Post	Quality control sample-field replicate	0
sun1ast_01100022_01	2010-10-14 13:15 CDT	Post	Sample routine	0
sun1ast_01001283_01	2010-05-11 12:15 CDT	Pre	Sample routine	1
sun1ast_01001278_01	2010-05-11 12:05 CDT	Pre	Sample routine	1
sun1ast_01100023_01	2010-10-07 12:43 CDT	Post	Sample routine	1
sun1ast_01001279_01	2010-05-11 10:36 CDT	Pre	Sample routine	1
sun1ast_01001277_01	2010-05-11 10:35 CDT	Pre	Sample routine	1
sun1ast_01100011_01	2010-10-14 11:10 CDT	Post	Sample routine	1
sun1ast_01100008_02	2010-10-14 11:12 CDT	Post	Quality control sample-field replicate	0
sun1ast_01001276_01	2010-05-11 12:03 CDT	Pre	Sample routine	1
sun1ast_01100015_01	2010-10-05 12:50 CDT	Post	Sample routine	1

Whole sediment benchmarks [1]

No. of lower SVs exceeded in whole sediment	No. of upper SVs exceeded in whole sediment	Lower SVs exceeded in whole sediment	Upper SVs exceeded in whole sediment	USEPA benchmarks for Nickel and Vanadium exceeded in whole sediment
0	0	none	none	none
0	0	none	none	none
0	0	none	none	none
0	0	none	none	none
0	0	none	none	none
0	0	none	none	none
0	0	none	none	none
0	0	none	none	none
0	0	none	none	none
0	0	none	none	none
1	0	Cd.T20	none	none
0	0	none	none	none
0	0	none	none	none
0	0	none	none	none

Whole sediment benchmarks [1]

No. of lower SVs exceeded in whole sediment	No. of upper SVs exceeded in whole sediment	Lower SVs exceeded in whole sediment	Upper SVs exceeded in whole sediment	USEPA benchmarks for Nickel and Vanadium exceeded in whole sediment
0	0	none	none	none
0	0	none	none	none
0	0	none	none	none
0	0	none	none	none
0	0	none	none	none
0	0	none	none	none
0	0	none	none	none
0	0	none	none	none
0	1	none	Ba.AET	none
0	0	none	none	none
0	0	none	none	none
0	0	none	none	none
0	0	none	none	none
0	0	none	none	none
0	0	none	none	none
0	0	none	none	none
1	0	Sn.TEL	none	none
0	0	none	none	none
0	0	none	none	none
4	0	Pb.ERL, Pb.T20, Pb.TEC	none	none
0	0	none	none	none
0	0	none	none	none
0	0	none	none	none
5	0	As.ERL, As.T20, As.TEC,	none	none
4	0	As.ERL, As.T20, As.TEC,	none	none
0	0	none	none	none
5	0	As.ERL, As.T20, As.TEC,	none	none

Whole sediment benchmarks [1]

No. of lower SVs exceeded in whole sediment	No. of upper SVs exceeded in whole sediment	Lower SVs exceeded in whole sediment	Upper SVs exceeded in whole sediment	USEPA benchmarks for Nickel and Vanadium exceeded in whole sediment
0	0	none	none	none
0	0	none	none	none
0	0	none	none	none
0	0	none	none	none
2	0	Cd.T20, Ag.T20	none	none
0	0	none	none	none
0	0	none	none	none
0	0	none	none	none
0	0	none	none	none
0	0	none	none	none
0	0	none	none	none
0	0	none	none	none
0	0	none	none	none
0	0	none	none	none
0	0	none	none	none
0	0	none	none	none
0	0	none	none	none
0	0	none	none	none
0	0	none	none	none
6	4	Cd.T20, Ni.T20, Ba.TEL,	Al.AET, Ba.AET, Mn.AE	V.AET
1	2	Ba.TEL	Al.AET, Ba.AET	none
1	3	Ba.TEL	Al.AET, Ba.AET, Mn.AE	none
2	1	Ba.TEL, Sn.TEL	Ba.AET	none
1	1	Ba.TEL	Ba.AET	none
1	1	Ba.TEL	Ba.AET	none
4	4	Ni.T20, Ba.TEL, Ni.TEL,	Al.AET, Ba.AET, Mn.AE	V.AET
0	0	none	none	none
12	4	As.ERL, Ni.ERL, Sb.T20,	Al.AET, Ba.AET, Mn.AE	Ni.ERL, V.AET
5	2	As.ERL, As.T20, As.TEC,	Ba.AET, Mn.AET	none

Whole sediment benchmarks [1]

No. of lower SVs exceeded in whole sediment	No. of upper SVs exceeded in whole sediment	Lower SVs exceeded in whole sediment	Upper SVs exceeded in whole sediment	USEPA benchmarks for Nickel and Vanadium exceeded in whole sediment
15	6	As.ERL, Ni.ERL, As.T20,	Al.AET, Ba.AET, Cr.AET,	Ni.ERL, V.AET
15	6	As.ERL, Ni.ERL, As.T20,	Al.AET, Ba.AET, Cr.AET,	Ni.ERL, V.AET
0	2	none	Ba.AET, Mn.AET	none
0	0	none	none	none
13	5	As.ERL, Ni.ERL, Sb.T20,	Al.AET, Ba.AET, Co.AET	Ni.ERL, V.AET
13	6	As.ERL, Ni.ERL, Sb.T20,	Al.AET, Ba.AET, Co.AET	Ni.ERL, V.AET
6	2	As.ERL, As.T20, Cd.T20,	Ba.AET, Mn.AET	none
1	2	Ba.TEL	Ba.AET, Mn.AET	none
4	3	Ni.T20, Ba.TEL, Ni.TEL,	Al.AET, Ba.AET, V.AET	V.AET
1	3	Ba.TEL	Al.AET, Ba.AET, V.AET	V.AET
1	3	Ba.TEL	Al.AET, Ba.AET, V.AET	V.AET
1	2	Ba.TEL	Al.AET, Ba.AET	none
0	1	none	Mn.AET	none
0	2	none	Ba.AET, Mn.AET	none
2	2	Ba.TEL, Sn.TEL	Al.AET, Ba.AET	none
2	2	Ba.TEL, Sn.TEL	Al.AET, Ba.AET	none
2	2	Ba.TEL, Sn.TEL	Al.AET, Ba.AET	none
1	2	Ba.TEL	Al.AET, Ba.AET	none
1	2	Ba.TEL	Al.AET, Ba.AET	none
1	2	Ba.TEL	Al.AET, Ba.AET	none
12	5	Ni.ERL, As.T20, Cd.T20,	Al.AET, Ba.AET, Co.AET	Ni.ERL, V.AET
6	4	Ni.ERL, Cd.T20, Ni.T20,	Al.AET, Ba.AET, Mn.AE	Ni.ERL, V.AET
16	4	As.ERL, Ni.ERL, As.T20,	Al.AET, Ba.AET, Mn.AE	Ni.ERL, V.AET
1	2	Ba.TEL	Al.AET, Ba.AET	none
1	2	Ba.TEL	Al.AET, Ba.AET	none
5	3	Ni.T20, As.TEL, Ba.TEL,	Al.AET, Ba.AET, V.AET	V.AET
2	3	As.TEL, Ba.TEL	Al.AET, Ba.AET, V.AET	V.AET
1	2	Ba.TEL	Al.AET, Ba.AET	none

Whole sediment benchmarks [1]

No. of lower SVs exceeded in whole sediment	No. of upper SVs exceeded in whole sediment	Lower SVs exceeded in whole sediment	Upper SVs exceeded in whole sediment	USEPA benchmarks for Nickel and Vanadium exceeded in whole sediment
1	2	Ba.TEL	Al.AET, Ba.AET	none
2	3	Ba.TEL, Sn.TEL	Al.AET, Ba.AET, Mn.AE	none
1	2	Ba.TEL	Al.AET, Ba.AET	none
2	2	Ba.TEL, Sn.TEL	Al.AET, Ba.AET	none
1	2	Ba.TEL	Ba.AET, Mn.AET	none
4	4	Ni.T20, Ba.TEL, Cu.TEL,	Al.AET, Ba.AET, Mn.AE	V.AET
0	0	none	none	none
0	0	none	none	none
0	0	none	none	none
0	0	none	none	none
0	0	none	none	none
0	0	none	none	none
0	0	none	none	none
0	0	none	none	none
0	0	none	none	none
0	0	none	none	none
0	0	none	none	none
0	0	none	none	none
0	0	none	none	none
0	0	none	none	none
3	0	Pb.T20, Pb.TEC, Pb.TEL	none	none
0	0	none	none	none
0	1	none	Ba.AET	none
0	1	none	Ba.AET	none
0	0	none	none	none
0	1	none	Ba.AET	none
1	1	Ba.TEL	Ba.AET	none
1	1	Ba.TEL	Ba.AET	none

Whole sediment benchmarks [1]

No. of lower SVs exceeded in whole sediment	No. of upper SVs exceeded in whole sediment	Lower SVs exceeded in whole sediment	Upper SVs exceeded in whole sediment	USEPA benchmarks for Nickel and Vanadium exceeded in whole sediment
6	2	Pb.ERL, Pb.T20, Pb.TEC	Ba.AET, Mn.AET	none
5	3	As.ERL, As.T20, As.TEC,	Ba.AET, Co.AET, Mn.AE	none
1	1	Ba.TEL	Ba.AET	none
4	3	Ag.T20, Ba.TEL, Ag.TEL,	Al.AET, Ba.AET, Mn.AE	none
2	1	Ba.TEL, Sn.TEL	Ba.AET	none
1	1	Ba.TEL	Ba.AET	none
1	1	Ba.TEL	Ba.AET	none
1	1	Ba.TEL	Ba.AET	none
2	1	Ag.T20, Ba.TEL	Ba.AET	none
1	1	Ba.TEL	Ba.AET	none
7	5	As.ERL, Sb.T20, As.T20,	Ba.AET, Co.AET, Mn.AE	V.AET
1	2	Ba.TEL	Al.AET, Ba.AET	none
1	1	Ba.TEL	Ba.AET	none
1	1	Ba.TEL	Ba.AET	none
1	1	Ba.TEL	Ba.AET	none
1	1	Ba.TEL	Ba.AET	none
1	1	Ba.TEL	Ba.AET	none
1	1	Ba.TEL	Ba.AET	none
1	1	Ba.TEL	Ba.AET	none

Less than 63-µm sediment fraction

No. of elements exceeding their Max-baseline in LT63 sediment fraction[2]	Elements exceeding their Max-baselines (enriched) in the LT63 sediment fraction[2]	Sediment %LT63	TOC in LT63 sediment fraction (%)	Total no. of elements determined in LT63 sediment fraction	Elements exceeding both Upper SV and Max-baseline[1,2]
3	Se, Na, S	<1	nr	22	–
–	–	<1	–	0	–
6	As, Mg, P, Se, Na, S	<1	nr	24	–
–	–	<1	–	0	–
3	Cu, Li, S	<1	nr	26	–
4	Mg, Na, Sr, S	<1	nr	24	–
2	Na, S	<1	nr	23	–
7	As, Cu, Pb, Mg, Hg, Na, S	<1	nr	27	–
3	Mo, Na, S	<1	nr	27	–
5	Cd, Mg, Ni, Na, S	nr	nr	25	–
3	Cd, Pb, S	<1	nr	12	–
–	–	<1	–	0	–
5	Ca, Cu, Mg, Na, S	<1	nr	17	–
3	Mg, Na, S	<1	nr	26	–

Less than 63-µm sediment fraction

No. of elements exceeding their Max-baseline in LT63 sediment fraction[2]	Elements exceeding their Max-baselines (enriched) in the LT63 sediment fraction[2]	Sediment %LT63	TOC in LT63 sediment fraction (%)	Total no. of elements determined in LT63 sediment fraction	Elements exceeding both Upper SV and Max-baseline[1,2]
–	–	<1	–	0	–
–	–	<1	–	0	–
4	As, Mg, Na, S	<1	nr	26	–
3	Mg, Na, S	<1	nr	25	–
9	As, Ca, Mg, Mn, P, Se, Na, Sr, S	<1	nr	25	–
–	–	<1	–	0	–
–	–	<1	–	0	–
7	As, Mg, P, Se, Na, S, Zn	<1	nr	21	–
8	As, Ca, Mg, P, Se, Na, Sr, S	<1	nr	26	–
7	Ca, Mg, P, Se, Na, Sr, S	<1	nr	26	–
7	Ca, Cu, P, Se, Na, Sr, S	<1	nr	26	–
7	As, Ca, Mg, P, Na, Sr, S	<1	nr	26	–
6	Ca, Mg, Na, Sr, S, TC	1	1.6	30	–
7	Ca, Mg, Se, Na, Sr, S, TC	<1	2.2	30	–
–	–	<1	–	0	–
4	Ca, Na, Sr, S	<1	nr	25	–
3	Ca, Sr, S	<1	nr	25	–
5	Ca, Mg, Se, Sr, S	<1	nr	24	–
–	–	<1	–	0	–
5	Ca, Na, Sr, S, TC	<1	1.5	30	–
12	Sb, Ca, Cu, Pb, Hg, P, Sr, S, Sn, Zn,	<1	10.1	29	–
–	–	<1	–	0	–
–	–	<1	–	0	–
12	Sb, Ca, Cu, Pb, Hg, P, Ag, Sr, S, Sn,	<1	12.7	30	–
6	Ca, Mg, Na, Sr, S, TC	18	1	30	–
6	Ca, Mg, Na, Sr, S, TC	20	1.1	30	–
7	Ca, Mg, Na, Sr, S, TOC, TC	80	4	30	–
9	As, Ca, Mg, Mo, Na, Sr, S, TOC, TC	39	9.8	30	–

Less than 63-µm sediment fraction

No. of elements exceeding their Max-baseline in LT63 sediment fraction[2]	Elements exceeding their Max-baselines (enriched) in the LT63 sediment fraction[2]	Sediment %LT63	TOC in LT63 sediment fraction (%)	Total no. of elements determined in LT63 sediment fraction	Elements exceeding both Upper SV and Max-baseline[1,2]
5	Ca, Mg, Na, Sr, S	<1	nr	26	–
4	As, Mo, Na, S	<1	nr	27	–
13	Al, As, Cr, Fe, Pb, Li, Hg, Mo, Ni, S	1	2.7	30	–
5	Ca, Na, Sr, S, TC	<1	2.6	30	–
–	–	<1	–	0	–
–	–	<1	–	0	–
–	–	<1	–	0	–
–	–	<1	–	0	–
4	As, Mg, Na, S	<1	nr	24	–
4	Mg, Na, Sr, S	<1	nr	26	–
4	As, Mg, Na, S	<1	nr	26	–
5	As, Mg, Se, Na, S	<1	nr	27	–
5	As, Mg, Se, Na, S	<1	nr	26	–
5	Ca, Mg, Na, Sr, S	<1	nr	26	–
9	Cd, Pb, Mg, Mo, Se, Na, S, TOC, T	1	7.8	30	–
13	Cd, Cr, Pb, Li, Mg, Hg, Mo, P, Se, N	1	11	30	–
6	As, Mg, P, Se, Na, S	<1	nr	24	–
15	As, Cd, Ca, Cr, Pb, Li, Mg, Mo, P, S	2	5	30	–
3	Ba, Na, S	62	3	30	Ba
3	Ba, K, Ti	12	0.8	30	Ba
2	Ba, K	16	0.9	30	Ba
2	Na, S	<1	2.9	30	–
2	Na, S	<1	1.4	30	–
2	Na, S	<1	5.3	30	–
3	Ba, Na, S	54	3.2	30	Ba
3	Ba, Na, S	54	3.2	30	–
4	Ba, K, Na, S	79	2.4	30	Ba
11	As, Fe, Pb, Mg, Mn, P, K, Na, Sr, S,	4	1.3	30	Mn

Less than 63-µm sediment fraction

No. of elements exceeding their Max-baseline in LT63 sediment fraction[2]	Elements exceeding their Max-baselines (enriched) in the LT63 sediment fraction[2]	Sediment %LT63	TOC in LT63 sediment fraction (%)	Total no. of elements determined in LT63 sediment fraction	Elements exceeding both Upper SV and Max-baseline[1,2]
15	Al, As, Ba, Cr, Fe, Pb, Li, Mg, Hg, N	82	1.7	30	Al, Ba, Cr, V
13	Al, As, Ba, Cr, Fe, Li, Mg, Ni, K, Na,	78	1.7	30	Al, Ba, Cr, V
–	–	–	–	0	–
7	Ca, Cu, Pb, Na, Sr, S, TC	6	1.3	30	–
4	Al, K, S, V	64	0.9	30	Al, V
3	As, Ba, Pb	64	0.9	30	As, Ba
9	As, Ba, Cd, Ca, Pb, Mn, Hg, Sr, TC	5	1.7	29	Ba, Mn
–	–	<1	–	0	–
6	Mo, Se, S, V, TOC, TC	55	8.8	30	V
6	Mo, K, Na, S, TOC, TC	39	8.2	30	–
5	K, Na, S, TOC, TC	44	8.6	29	–
3	Ca, Sr, S	<1	nr	28	–
2	Ca, S	<1	nr	27	–
2	Ca, S	<1	nr	26	–
3	Mg, Na, S	<1	nr	23	–
4	Mg, Ni, Na, S	<1	nr	24	–
3	Mg, Na, S	<1	nr	24	–
3	Mg, Na, S	<1	nr	26	–
3	Mg, Na, S	<1	nr	27	–
3	Mg, Na, S	<1	2.2	28	–
0	none	95	1.1	30	–
3	Ba, K, Ti	50	1.3	30	Ba
4	K, Na, S, V	82	2.6	30	V
6	As, Ba, Mo, K, Na, S	17	2.9	30	Ba
5	As, Ba, Mo, Na, S	17	2.9	30	Ba
3	As, Na, S	74	2.8	30	–
4	As, K, Na, S	74	1.5	30	–
4	Ca, Mg, Na, S	<1	nr	26	–

Less than 63-µm sediment fraction

No. of elements exceeding their Max-baseline in LT63 sediment fraction[2]	Elements exceeding their Max-baselines (enriched) in the LT63 sediment fraction[2]	Sediment %LT63	TOC in LT63 sediment fraction (%)	Total no. of elements determined in LT63 sediment fraction	Elements exceeding both Upper SV and Max-baseline[1,2]
4	Mg, Ni, Na, S	<1	nr	27	–
2	Na, S	<1	0.6	29	–
5	Ca, Mg, Na, Sr, S	<1	nr	27	–
2	Mg, S	<1	nr	26	–
5	Ca, Mg, Na, Sr, S	<1	nr	27	–
6	Mo, K, Na, S, TOC, TC	38	9.1	30	–
1	S	<1	nr	26	–
3	Mo, Na, S	<1	3.2	30	–
2	Se, S	<1	nr	26	–
–	–	<1	–	0	–
3	Se, Na, S	<1	nr	25	–
–	–	<1	–	0	–
1	S	<1	nr	26	–
–	–	<1	–	0	–
4	Mg, Ni, Na, S	<1	nr	22	–
4	Mg, Se, Na, S	<1	nr	25	–
2	Na, S	<1	nr	21	–
–	–	<1	–	0	–
1	S	<1	nr	28	–
1	S	<1	4.1	30	–
2	As, S	<1	nr	27	–
5	As, Cu, Mo, S, Zn	<1	2.3	30	–
1	S	<1	nr	28	–
1	S	<1	nr	28	–
2	S, Ti	<1	nr	26	–
4	Hg, Mo, Na, S	<1	2.5	30	–
3	Ca, Sr, S	<1	nr	27	–
3	As, Mg, S	<1	1.2	29	–

Less than 63-µm sediment fraction

No. of elements exceeding their Max-baseline in LT63 sediment fraction[2]	Elements exceeding their Max-baselines (enriched) in the LT63 sediment fraction[2]	Sediment %LT63	TOC in LT63 sediment fraction (%)	Total no. of elements determined in LT63 sediment fraction	Elements exceeding both Upper SV and Max-baseline[1,2]
4	Pb, Na, S, Ti	2	0.4	30	–
11	As, Ba, Ca, Co, Fe, Pb, Mn, Mo, Ni	1	0.5	30	Ba, Co, Mn
2	Na, Ti	12	0.1	30	–
2	Na, S	11	0.8	30	–
1	Mg	<1	nr	21	–
2	Mg, S	<1	nr	25	–
5	Ca, Mg, Na, Sr, S	<1	nr	26	–
2	Mg, S	<1	1.8	29	–
2	Mg, S	<1	2.1	29	–
2	Mg, S	<1	1.6	29	–
4	As, Ca, Cr, Cu	3	0.8	30	As
2	Na, S	<1	1	30	–
4	As, Mg, Na, S	<1	1	30	–
16	Al, Ba, Cr, Cu, Fe, Pb, Li, Mg, Mn,	1	3.6	29	Ba
4	Cu, Mg, Na, S	1	2.8	30	–
4	Mo, K, Na, S	9	2.3	30	–
5	Pb, Mo, K, Na, S	7	2	30	–
2	Mg, Sr	<1	nr	22	–
4	Pb, Mg, S, Zn	<1	nr	23	–