

APPENDIX C: ANALYTICAL RESULTS - SEDIMENT POREWATER

Porewater				Location Unit	CR_R	CR_A	CR_A	CR_A	CR_A	CR_B	CR_B	CR_B	CR_B	ER_R
Notes: - Field duplicates processed - Validation qualifiers not shown, only "U" for NDs - Ready for ProUCL pre-processor				Year	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011
				Location	CRM_REF	CRM0.0	CRM1.5	CRM2.0	CRM2.5	CRM3.0	CRM3.5	CRM4.0	CRM4.5	ERM_REF
				Sample Date	02/25/2011	02/22/2011	02/24/2011	02/23/2011	02/23/2011	02/24/2011	02/25/2011	02/25/2011	02/25/2011	06/09/2011
				Unique Sample ID	KIF-CRM_REF- PORE-022511	KIF-CRM0.0-PORE- 022211	KIF-CRM1.5-PORE- 022411	KIF-CRM2.0-PORE- 022311	KIF-CRM2.5-PORE- 022311	KIF-CRM3.0-PORE- 022411	KIF-CRM3.5-PORE- 022511	KIF-CRM4.0-PORE- 022511	KIF-CRM4.5-PORE- 022511	KIF-ERM_REF- PORE-060911
Parameter Order	Parameter Group	Analyte Name	Units											
8	Inorganic	Aluminum	mg/L	--	11.3	--	--	--	--	--	--	--	--	--
8	Inorganic	Antimony	mg/L	--	0.00077	--	--	--	--	--	--	--	--	--
8	Inorganic	Arsenic	mg/L	--	0.0627	--	--	--	--	--	--	--	--	--
8	Inorganic	Barium	mg/L	--	0.4	--	--	--	--	--	--	--	--	--
8	Inorganic	Beryllium	mg/L	--	0.00178	--	--	--	--	--	--	--	--	--
8	Inorganic	Boron	mg/L	--	0.0865	--	--	--	--	--	--	--	--	--
8	Inorganic	Cadmium	mg/L	--	0.00038	--	--	--	--	--	--	--	--	--
8	Inorganic	Chromium	mg/L	--	0.012	--	--	--	--	--	--	--	--	--
8	Inorganic	Cobalt	mg/L	--	0.014	--	--	--	--	--	--	--	--	--
8	Inorganic	Copper	mg/L	--	0.0294	--	--	--	--	--	--	--	--	--
8	Inorganic	Lead	mg/L	--	0.0213	--	--	--	--	--	--	--	--	--
8	Inorganic	Manganese	mg/L	--	9.24	--	--	--	--	--	--	--	--	--
8	Inorganic	Mercury	mg/L	--	<0.00015	--	--	--	--	--	--	--	--	--
8	Inorganic	Molybdenum	mg/L	--	0.00575	--	--	--	--	--	--	--	--	--
8	Inorganic	Nickel	mg/L	--	0.0211	--	--	--	--	--	--	--	--	--
8	Inorganic	Selenium	mg/L	--	0.00088	--	--	--	--	--	--	--	--	--
8	Inorganic	Silver	mg/L	--	<0.00033	--	--	--	--	--	--	--	--	--
8	Inorganic	Strontium	mg/L	--	0.346	--	--	--	--	--	--	--	--	--
8	Inorganic	Thallium	mg/L	--	0.00081	--	--	--	--	--	--	--	--	--
8	Inorganic	Vanadium	mg/L	--	0.0348	--	--	--	--	--	--	--	--	--
8	Inorganic	Zinc	mg/L	--	0.0576	--	--	--	--	--	--	--	--	--
8	Inorganic-cation/anion	Calcium	mg/L	--	60.8	--	--	--	--	--	--	--	--	--
8	Inorganic-cation/anion	Chloride	mg/L	7.11	11.9	20.6	9.3	10.1	489	37.4	20.6	19.2	5.55	
8	Inorganic-cation/anion	Iron	mg/L	--	11.1	--	--	--	--	--	--	--	--	--
8	Inorganic-cation/anion	Magnesium	mg/L	--	16.4	--	--	--	--	--	--	--	--	--
8	Inorganic-cation/anion	Potassium	mg/L	--	4.48	--	--	--	--	--	--	--	--	--
8	Inorganic-cation/anion	Sodium	mg/L	--	8.22	--	--	--	--	--	--	--	--	--
8	Inorganic-cation/anion	Sulfate	mg/L	5.05	10.2	35.9	8.07	20	92.1	30.5	35.5	36.3	1.82	
9	Inorganic-cation/anion, Dissolved	Calcium, Dissolved	mg/L	50.4	63.8	38.3	47.2	46.2	77	48.9	50.5	49.7	52.4	
9	Inorganic-cation/anion, Dissolved	Iron, Dissolved	mg/L	2.6	0.153	0.0877	<0.025	<0.025	1.46	0.103	0.149	0.286	14	
9	Inorganic-cation/anion, Dissolved	Magnesium, Dissolved	mg/L	16.8	16.7	11.1	13.2	12.8	20.7	13.6	14	13.3	8.79	
9	Inorganic-cation/anion, Dissolved	Potassium, Dissolved	mg/L	2.72	3.71	1.98	2.7	2.78	3.87	2.44	2.56	2.72	2.78	
9	Inorganic-cation/anion, Dissolved	Sodium, Dissolved	mg/L	6.12	9	7.89	7.86	8.6	9.12	8.51	8.38	9.58	4.32	
9	Inorganics, Dissolved	Aluminum, Dissolved	mg/L	<0.05	<0.05	<0.05	0.0539	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
9	Inorganics, Dissolved	Antimony, Dissolved	mg/L	<0.00033	0.00057	0.00034	0.0004	0.00047	0.00075	0.00042	0.00055	0.00065	<0.00033	
9	Inorganics, Dissolved	Arsenic, Dissolved	mg/L	0.00687	0.0573	0.00843	0.0158	0.0164	0.0589	0.021	0.0122	0.0151	0.00368	
9	Inorganics, Dissolved	Barium, Dissolved	mg/L	0.0925	0.152	0.0836	0.108	0.117	0.234	0.12	0.101	0.121	0.198	
9	Inorganics, Dissolved	Beryllium, Dissolved	mg/L	<0.00033	<0.00033	<0.00033	<0.00033	<0.00033	<0.00033	<0.00033	<0.00033	<0.00033	<0.00033	<0.00033
9	Inorganics, Dissolved	Boron, Dissolved	mg/L	0.0208	0.0964	0.0367	0.055	0.0649	0.0769	0.0434	0.0459	0.0549	0.0154	
9	Inorganics, Dissolved	Cadmium, Dissolved	mg/L	<0.00033	<0.00033	<0.00033	<0.00033	<0.00033	<0.00033	<0.00033	<0.00033	<0.00033	<0.00033	<0.00033
9	Inorganics, Dissolved	Chromium, Dissolved	mg/L	0.00081	<0.00033	0.00151	<0.00033	<0.00033	0.00319	0.00044	0.00216	0.00107	0.00244	
9	Inorganics, Dissolved	Cobalt, Dissolved	mg/L	0.00214	0.00093	0.00071	0.00065	0.00044	0.0028	0.00093	0.00072	0.00087	0.0116	
9	Inorganics, Dissolved	Copper, Dissolved	mg/L	0.00077	0.00195	0.00405	0.00452	0.00597	0.0079	0.00284	0.00278	0.00307	0.00086	
9	Inorganics, Dissolved	Lead, Dissolved	mg/L	0.00056	<0.00033	0.00185	0.00505	<0.00033	0.0105	0.00462	0.0006	0.00597	<0.00033	
9	Inorganics, Dissolved	Manganese, Dissolved	mg/L	5.29	2.62	3.8	3.08	1.44	9.92	4.84	2.26	3.93	5.53	
9	Inorganics, Dissolved	Mercury, Dissolved	mg/L	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015

APPENDIX C: ANALYTICAL RESULTS - SEDIMENT POREWATER

Porewater				Location Unit	CR_R	CR_A	CR_A	CR_A	CR_A	CR_B	CR_B	CR_B	CR_B	ER_R
Notes: - Field duplicates processed - Validation qualifiers not shown, only "U" for NDs - Ready for ProUCL pre-processor				Year	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011
				Location	CRM_REF	CRM0.0	CRM1.5	CRM2.0	CRM2.5	CRM3.0	CRM3.5	CRM4.0	CRM4.5	ERM_REF
				Sample Date	02/25/2011	02/22/2011	02/24/2011	02/23/2011	02/23/2011	02/24/2011	02/25/2011	02/25/2011	02/25/2011	06/09/2011
				Unique Sample ID	KIF-CRM_REF- PORE-022511	KIF-CRM0.0-PORE- 022211	KIF-CRM1.5-PORE- 022411	KIF-CRM2.0-PORE- 022311	KIF-CRM2.5-PORE- 022311	KIF-CRM3.0-PORE- 022411	KIF-CRM3.5-PORE- 022511	KIF-CRM4.0-PORE- 022511	KIF-CRM4.5-PORE- 022511	KIF-ERM_REF- PORE-060911
Parameter Order	Parameter Group	Analyte Name	Units											
9	Inorganics, Dissolved	Molybdenum, Dissolved	mg/L	0.00084	0.00984	0.00095	0.0082	0.00365	0.0152	0.00331	0.00227	0.00188	0.00044	
9	Inorganics, Dissolved	Nickel, Dissolved	mg/L	0.00172	0.00181	0.00123	0.00147	0.00101	0.0029	0.00137	0.00148	0.00145	0.00565	
9	Inorganics, Dissolved	Selenium, Dissolved	mg/L	<0.00033	0.00075	<0.00033	0.00049	0.00051	0.00045	<0.00033	<0.00033	0.00049	<0.00033	
9	Inorganics, Dissolved	Silver, Dissolved	mg/L	<0.00033	<0.00033	<0.00033	<0.00033	<0.00033	<0.00033	<0.00033	<0.00033	<0.00033	<0.00033	
9	Inorganics, Dissolved	Strontium, Dissolved	mg/L	0.127	0.29	0.148	0.209	0.218	0.346	0.2	0.198	0.194	0.161	
9	Inorganics, Dissolved	Thallium, Dissolved	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
9	Inorganics, Dissolved	Vanadium, Dissolved	mg/L	<0.001	0.00164	0.00133	0.00175	0.00141	0.00177	0.0015	<0.001	0.00233	<0.001	
9	Inorganics, Dissolved	Zinc, Dissolved	mg/L	0.0453	<0.0083	0.0103	0.0264	0.00986	0.0157	0.0109	0.0136	0.0127	0.0135	
10	Speciation	Arsenate	mg/L	--	0.0299	--	--	--	--	--	--	--	--	
10	Speciation	Arsenic	mg/L	--	0.071	--	--	--	--	--	--	--	--	
10	Speciation	Arsenite	mg/L	--	0.0139	--	--	--	--	--	--	--	--	
10	Speciation	Inorganic Arsenic	mg/L	--	0.0438	--	--	--	--	--	--	--	--	
10	Speciation	Organic Arsenic	mg/L	--	0.0272	--	--	--	--	--	--	--	--	
10	Speciation	Selenate	mg/L	<0.000157	--	<0.000157	<0.000157	<0.000157	<0.000157	<0.000157	<0.000157	<0.000157	<0.000157	
10	Speciation	Selenite	mg/L	<0.000285	<0.000285	<0.000285	--	0.000356	<0.000285	<0.000285	<0.000285	<0.000285	<0.000285	
10	Speciation	Selenium	mg/L	--	<0.00388	--	--	--	--	--	--	--	--	
10	Speciation, Dissolved	Arsenate, Dissolved	mg/L	0.00119	0.0306	0.00354	0.0102	0.00552	0.0119	0.00162	0.00163	0.00593	0.00104	
10	Speciation, Dissolved	Arsenic, Dissolved	mg/L	0.00862	0.0585	0.011	0.0197	0.0204	0.0751	0.0259	0.0158	0.0193	0.00395	
10	Speciation, Dissolved	Arsenite, Dissolved	mg/L	0.00584	0.0106	0.00747	0.00806	0.0129	0.0579	0.0188	0.0118	0.0118	<0.00244	
10	Speciation, Dissolved	Inorganic Arsenic, Dissolved	mg/L	0.00703	0.0412	0.011	0.0183	0.0184	0.0693	0.0204	<0.0134	0.0177	0.00349	
10	Speciation, Dissolved	Inorganic Selenium, Dissolved	mg/L	<0.000285	<0.000285	<0.000285	0.000388	0.000356	<0.000285	<0.000285	<0.000285	<0.000285	<0.000285	
10	Speciation, Dissolved	Organic Arsenic, Dissolved	mg/L	0.00159	0.0173	<0.0009	0.0014	0.00196	0.00581	0.00549	0.00238	0.00155	0.000461	
10	Speciation, Dissolved	Organic Selenium, Dissolved	mg/L	0.000429	<0.00194	<0.000388	<0.000388	<0.000388	<0.000388	<0.000388	0.000571	0.000572	0.000679	
10	Speciation, Dissolved	Selenium, Dissolved	mg/L	0.000429	<0.00194	<0.000388	0.000553	0.000574	<0.000388	<0.000388	0.000571	0.000572	0.000679	
15	Physical Property	Alkalinity	mg/L	186	247	119	176	146	289	161	132	120	163	
15	Physical Property	Dissolved Organic Carbon	mg/L	10800	16200	7980	11400	11300	17100	8400	11700	17500	8300	
15	Physical Property	Hardness (As CaCO3)	mg/L	195	219	141	172	168	278	178	184	179	167	

APPENDIX C: ANALYTICAL RESULTS - SEDIMENT POREWATER

Porewater				Location	ER_A	ER_A	ER_A	ER_B	ER_B	ER_C	ER_C
Notes: - Field duplicates processed - Validation qualifiers not shown, only "U" for NDs - Ready for ProUCL pre-processor				Year	2011	2011	2011	2011	2011	2011	2011
				Location	ERM0.5	ERM0.8	ERM1.0	ERM2.5	ERM3.0	ERM4.0	ERM5.5
				Sample Date	06/06/2011	06/06/2011	06/07/2011	06/06/2011	06/08/2011	06/08/2011	06/08/2011
				Unique Sample ID	KIF-ERM0.5-PORE-060611	KIF-ERM0.8-PORE-060611	KIF-ERM1.0-PORE-060711	KIF-ERM2.5-PORE-060611	KIF-ERM3.0-PORE-060811	KIF-ERM4.0-PORE-060811	ERM5.5_OFFSET-PORE-060811
Parameter Order	Parameter Group	Analyte Name	Units								
8	Inorganic	Aluminum	mg/L	--	--	--	--	--	--	--	--
8	Inorganic	Antimony	mg/L	--	--	--	--	--	--	--	--
8	Inorganic	Arsenic	mg/L	--	--	--	--	--	--	--	--
8	Inorganic	Barium	mg/L	--	--	--	--	--	--	--	--
8	Inorganic	Beryllium	mg/L	--	--	--	--	--	--	--	--
8	Inorganic	Boron	mg/L	--	--	--	--	--	--	--	--
8	Inorganic	Cadmium	mg/L	--	--	--	--	--	--	--	--
8	Inorganic	Chromium	mg/L	--	--	--	--	--	--	--	--
8	Inorganic	Cobalt	mg/L	--	--	--	--	--	--	--	--
8	Inorganic	Copper	mg/L	--	--	--	--	--	--	--	--
8	Inorganic	Lead	mg/L	--	--	--	--	--	--	--	--
8	Inorganic	Manganese	mg/L	--	--	--	--	--	--	--	--
8	Inorganic	Mercury	mg/L	--	--	--	--	--	--	--	--
8	Inorganic	Molybdenum	mg/L	--	--	--	--	--	--	--	--
8	Inorganic	Nickel	mg/L	--	--	--	--	--	--	--	--
8	Inorganic	Selenium	mg/L	--	--	--	--	--	--	--	--
8	Inorganic	Silver	mg/L	--	--	--	--	--	--	--	--
8	Inorganic	Strontium	mg/L	--	--	--	--	--	--	--	--
8	Inorganic	Thallium	mg/L	--	--	--	--	--	--	--	--
8	Inorganic	Vanadium	mg/L	--	--	--	--	--	--	--	--
8	Inorganic	Zinc	mg/L	--	--	--	--	--	--	--	--
8	Inorganic-cation/anion	Calcium	mg/L	--	--	--	--	--	--	--	--
8	Inorganic-cation/anion	Chloride	mg/L	7.69	10.4	8.81	5.4	5.71	4.91	4.85	
8	Inorganic-cation/anion	Iron	mg/L	--	--	--	--	--	--	--	--
8	Inorganic-cation/anion	Magnesium	mg/L	--	--	--	--	--	--	--	--
8	Inorganic-cation/anion	Potassium	mg/L	--	--	--	--	--	--	--	--
8	Inorganic-cation/anion	Sodium	mg/L	--	--	--	--	--	--	--	--
8	Inorganic-cation/anion	Sulfate	mg/L	2.64	3.2	2.26	3.07	2.37	1.67	15.9	
9	Inorganic-cation/anion, Dissolved	Calcium, Dissolved	mg/L	47.8	37.1	42.3	55.9	33.3	18.3	6.44	
9	Inorganic-cation/anion, Dissolved	Iron, Dissolved	mg/L	2.88	2.11	2.55	1.63	9.18	3.94	2.58	
9	Inorganic-cation/anion, Dissolved	Magnesium, Dissolved	mg/L	12.6	9.92	12.2	13	8.21	4.36	1.39	
9	Inorganic-cation/anion, Dissolved	Potassium, Dissolved	mg/L	2.89	2.34	2.34	3.43	2.38	1.92	1.36	
9	Inorganic-cation/anion, Dissolved	Sodium, Dissolved	mg/L	6.05	6.8	6.51	3.02	4.26	3.06	1.67	
9	Inorganics, Dissolved	Aluminum, Dissolved	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	0.118	0.467	
9	Inorganics, Dissolved	Antimony, Dissolved	mg/L	<0.00033	<0.00033	0.00034	0.00065	<0.00033	<0.00033	<0.00033	
9	Inorganics, Dissolved	Arsenic, Dissolved	mg/L	0.104	0.0633	0.0703	0.564	0.013	0.0115	0.00208	
9	Inorganics, Dissolved	Barium, Dissolved	mg/L	0.194	0.163	0.171	0.265	0.169	0.0774	0.0421	
9	Inorganics, Dissolved	Beryllium, Dissolved	mg/L	<0.00033	<0.00033	<0.00033	<0.00033	<0.00033	<0.00033	<0.00033	
9	Inorganics, Dissolved	Boron, Dissolved	mg/L	0.0476	0.0349	0.0386	1.06	0.0158	0.0209	0.0305	
9	Inorganics, Dissolved	Cadmium, Dissolved	mg/L	<0.00033	<0.00033	<0.00033	<0.00033	<0.00033	<0.00033	<0.00033	
9	Inorganics, Dissolved	Chromium, Dissolved	mg/L	<0.00033	0.00235	0.00103	0.00333	0.00055	0.00328	0.00082	
9	Inorganics, Dissolved	Cobalt, Dissolved	mg/L	0.0029	0.00333	0.00322	0.00232	0.00777	0.00287	0.00459	
9	Inorganics, Dissolved	Copper, Dissolved	mg/L	0.00104	0.00268	0.00069	0.00133	0.00284	0.00089	0.00193	
9	Inorganics, Dissolved	Lead, Dissolved	mg/L	<0.00033	0.00034	<0.00033	<0.00033	<0.00033	<0.00033	0.00202	
9	Inorganics, Dissolved	Manganese, Dissolved	mg/L	4.85	5.34	4.14	4.88	6.67	3.98	0.699	
9	Inorganics, Dissolved	Mercury, Dissolved	mg/L	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	

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Porewater				Location	ER_A	ER_A	ER_A	ER_B	ER_B	ER_C	ER_C
Notes: - Field duplicates processed - Validation qualifiers not shown, only "U" for NDs - Ready for ProUCL pre-processor				Year	2011	2011	2011	2011	2011	2011	2011
				Location	ERM0.5	ERM0.8	ERM1.0	ERM2.5	ERM3.0	ERM4.0	ERM5.5
				Sample Date	06/06/2011	06/06/2011	06/07/2011	06/06/2011	06/08/2011	06/08/2011	06/08/2011
				Unique Sample ID	KIF-ERM0.5-PORE-060611	KIF-ERM0.8-PORE-060611	KIF-ERM1.0-PORE-060711	KIF-ERM2.5-PORE-060611	KIF-ERM3.0-PORE-060811	KIF-ERM4.0-PORE-060811	ERM5.5_OFFSET-PORE-060811
Parameter Order	Parameter Group	Analyte Name	Units								
9	Inorganics, Dissolved	Molybdenum, Dissolved	mg/L	0.00215	0.00198	0.00186	0.234	0.00073	0.00101	<0.00033	
9	Inorganics, Dissolved	Nickel, Dissolved	mg/L	0.00186	0.00271	0.00235	0.00216	0.00351	0.00177	0.00277	
9	Inorganics, Dissolved	Selenium, Dissolved	mg/L	<0.00033	0.00033	0.00045	0.00097	<0.00033	<0.00033	<0.00033	
9	Inorganics, Dissolved	Silver, Dissolved	mg/L	<0.00033	<0.00033	<0.00033	<0.00033	<0.00033	<0.00033	<0.00033	
9	Inorganics, Dissolved	Strontium, Dissolved	mg/L	0.218	0.174	0.173	0.606	0.133	0.0721	0.0236	
9	Inorganics, Dissolved	Thallium, Dissolved	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	
9	Inorganics, Dissolved	Vanadium, Dissolved	mg/L	<0.001	0.00117	<0.001	0.0016	<0.001	<0.001	0.00105	
9	Inorganics, Dissolved	Zinc, Dissolved	mg/L	0.00905	0.0239	0.05	0.0322	0.0346	0.00858	0.0245	
10	Speciation	Arsenate	mg/L	--	--	--	--	--	--	--	
10	Speciation	Arsenic	mg/L	--	--	--	--	--	--	--	
10	Speciation	Arsenite	mg/L	--	--	--	--	--	--	--	
10	Speciation	Inorganic Arsenic	mg/L	--	--	--	--	--	--	--	
10	Speciation	Organic Arsenic	mg/L	--	--	--	--	--	--	--	
10	Speciation	Selenate	mg/L	<0.000157	--	<0.000157	<0.000157	<0.000157	<0.000157	--	
10	Speciation	Selenite	mg/L	<0.000285	--	<0.000285	<0.000285	<0.000285	<0.000285	--	
10	Speciation	Selenium	mg/L	--	--	--	--	--	--	--	
10	Speciation, Dissolved	Arsenate, Dissolved	mg/L	0.048	--	0.013	0.135	0.00407	0.00541	--	
10	Speciation, Dissolved	Arsenic, Dissolved	mg/L	0.112	--	0.0606	0.543	0.0146	0.0128	--	
10	Speciation, Dissolved	Arsenite, Dissolved	mg/L	0.0992	--	0.0861	0.654	0.00912	0.00781	--	
10	Speciation, Dissolved	Inorganic Arsenic, Dissolved	mg/L	0.147	--	0.0746	0.788	0.0132	0.0132	--	
10	Speciation, Dissolved	Inorganic Selenium, Dissolved	mg/L	<0.000285	--	<0.000285	<0.000285	<0.000285	<0.000285	--	
10	Speciation, Dissolved	Organic Arsenic, Dissolved	mg/L	<0.003	--	<0.0009	<0.045	<0.0015	<0.0015	--	
10	Speciation, Dissolved	Organic Selenium, Dissolved	mg/L	0.000546	--	0.000817	0.000861	<0.000388	<0.000388	--	
10	Speciation, Dissolved	Selenium, Dissolved	mg/L	0.000546	--	0.000817	0.000861	<0.000388	<0.000388	--	
15	Physical Property	Alkalinity	mg/L	188	139	160	186	132	65.8	<10	
15	Physical Property	Dissolved Organic Carbon	mg/L	11000	14300	11900	13700	18400	12000	9520	
15	Physical Property	Hardness (As CaCO3)	mg/L	171	133	156	193	117	63.8	21.8	

APPENDIX C: ANALYTICAL RESULTS - RESIDUAL SEDIMENT

Residual Sediment <div style="border: 1px solid black; padding: 2px; font-size: 0.8em;"> Notes: - Field duplicates processed - Validation qualifiers not shown, only "U" for NDs - Ready for ProUCL pre-processor </div>		Location Unit Year Location Sample Date Unique Sample ID		CR_R	CR_A	CR_A	CR_A	CR_A	CR_B	CR_B	CR_B	CR_B	ER_R	ER_A	ER_A		
				2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011	2011
				CRM_REF	CRM0.0	CRM1.5	CRM2.0	CRM2.5	CRM3.0	CRM3.5	CRM4.0	CRM4.5	ERM_REF	ERM0.5	ERM0.8		
				02/25/2011	02/22/2011	02/24/2011	02/23/2011	02/23/2011	02/24/2011	02/25/2011	02/25/2011	02/25/2011	06/09/2011	06/06/2011	06/06/2011		
				KIF-CRM_REF-SED-022511	KIF-CRM0.0-SED-022211	KIF-CRM1.5-SED-022411	KIF-CRM2.0-SED-022311	KIF-CRM2.5-SED-022311	KIF-CRM3.0-SED-022411	KIF-CRM3.5-SED-022511	KIF-CRM4.0-SED-022511	KIF-CRM4.5-SED-022511	KIF-ERM_REF-SED-060911	KIF-ERM0.5-SED-060611	KIF-ERM0.8-SED-060611		
Parameter Order	Parameter Group	Analyte Name	Units														
8	Inorganic	Aluminum	mg/kg	6910	27200	29000	28600	23300	32500	26700	24700	29900	12100	12100	13100		
8	Inorganic	Antimony	mg/kg	<1.13	<1.93	<1.73	1.71	1.93	2.04	<1.73	2.05	1.69	<1.62	<1.47	<1.74		
8	Inorganic	Arsenic	mg/kg	47.4	33.1	15.3	26.4	27.8	31	26.2	26.9	30.3	4.05	24	30.6		
8	Inorganic	Barium	mg/kg	33.1	291	208	278	276	306	276	275	277	95	233	209		
8	Inorganic	Beryllium	mg/kg	<0.45	2.43	1.76	2.35	2.51	2.48	2.53	2.49	2.44	0.973	1.83	1.81		
8	Inorganic	Boron	mg/kg	6.37	27.5	18.4	26.5	24.7	30.9	24.8	23.5	31.5	<6.49	12.1	10.1		
8	Inorganic	Cadmium	mg/kg	<0.113	<0.193	<0.173	<0.168	<0.146	<0.17	<0.173	<0.17	<0.162	<0.162	<0.147	<0.174		
8	Inorganic	Chromium	mg/kg	31.9	36.6	32.7	37.7	32.8	41.2	33.4	32.8	37.4	12.4	18.6	19		
8	Inorganic	Cobalt	mg/kg	8.04	21.1	21.2	20.5	18.6	21.8	19	19.6	18.3	13.2	15.1	16.7		
8	Inorganic	Copper	mg/kg	4.53	35.2	55.5	36.8	40	31.9	41.6	39.1	36.8	10.4	26.9	25.2		
8	Inorganic	Lead	mg/kg	20.6	23.9	30.8	23.6	21.5	23.3	24.9	22.3	25	15.1	15.3	18.7		
8	Inorganic	Manganese	mg/kg	691	1280	2010	1130	871	1580	1170	932	1080	400	392	791		
8	Inorganic	Mercury	mg/kg	0.59	0.57	1.3	0.58	0.37	0.25	0.61	0.42	0.76	0.057	0.11	0.11		
8	Inorganic	Molybdenum	mg/kg	<4.5	<7.71	<6.91	<6.72	<5.84	<6.8	<6.94	<6.82	<6.5	<6.49	<5.9	<6.97		
8	Inorganic	Nickel	mg/kg	4.57	35.1	31.7	35.1	32.2	38.1	32	33	31.9	18.7	23.2	23.8		
8	Inorganic	Selenium	mg/kg	<1.13	2.97	2.56	3.09	3.5	3.23	2.81	3.17	3.41	<1.62	2.71	2.34		
8	Inorganic	Silver	mg/kg	<0.563	<0.964	<0.863	<0.84	<0.73	<0.849	<0.867	<0.852	<0.812	<0.811	<0.737	<0.871		
8	Inorganic	Strontium	mg/kg	<4.5	--	54.3	142	166	159	140	162	136	12.1	131	100		
8	Inorganic	Thallium	mg/kg	<1.13	<1.93	<1.73	<1.68	<1.46	<1.7	<1.73	<1.7	<1.62	<1.62	<1.47	<1.74		
8	Inorganic	Vanadium	mg/kg	40.9	62.9	52.8	63.8	62.4	67.1	60.9	62	65.8	16.5	39.8	36.3		
8	Inorganic	Zinc	mg/kg	47.7	89.7	128	85.4	73.6	88.5	89.5	78.6	81.4	67.4	51.2	64.3		
8	Inorganic-cation/anion	Calcium	mg/kg	848	4130	3640	4150	4040	4420	4090	4400	4170	1940	3660	3240		
8	Inorganic-cation/anion	Iron	mg/kg	35300	30800	31200	31700	26700	35300	26600	30100	26400	15800	24100	23300		
8	Inorganic-cation/anion	Magnesium	mg/kg	675	2450	3240	2730	2190	2910	2590	2340	2880	1110	1220	1310		
8	Inorganic-cation/anion	Potassium	mg/kg	710	3550	3630	4020	2960	4900	3670	3090	4730	1030	977	1030		
8	Inorganic-cation/anion	Sodium	mg/kg	<113	246	<173	267	262	310	255	247	340	<162	<259	<251		
10	Speciation	Arsenate	mg/kg	17.4	10.4	7.82	21.3	8.69	16.1	10.3	12.9	8.86	2.26	20.9	15.9		
10	Speciation	Arsenic	mg/kg	18.9	28.2	12.4	21.4	20.2	25.8	22.5	17.6	14	2.97	20.9	28.9		
10	Speciation	Arsenite	mg/kg	7.19	14	3.78	2.74	10.1	14.6	11.4	9.06	5.59	0.512	5.53	16.1		
10	Speciation	Inorganic Arsenic	mg/kg	24.6	24.4	11.6	24	18.8	26.6	21.8	22	14.4	2.77	26.4	32		
10	Speciation	Inorganic Selenium	mg/kg	<0.392	<1.1	<0.808	<0.616	<1.17	<0.716	<0.901	<1.03	<0.495	<0.453	1.09	0.824		
10	Speciation	Organic Arsenic	mg/kg	<2.59	3.77	<1.71	<2.55	<3.33	<3.69	<3.03	<3.16	<2.93	<0.315	<11	<13.8		
10	Speciation	Organic Selenium	mg/kg	<0.474	2.03	<0.783	1.38	1.37	2.07	2	1.34	1.34	1.31	2.24	2.25		
10	Speciation	Selenate	mg/kg	<0.31	<0.513	<0.364	<0.275	<0.363	<0.37	<0.375	<0.41	<0.294	<0.358	<0.274	<0.498		
10	Speciation	Selenite	mg/kg	<0.392	<1.1	<0.808	<0.616	<1.17	<0.716	<0.901	<1.03	<0.495	<0.453	1.09	0.824		
10	Speciation	Selenium	mg/kg	<0.474	3.13	1.33	1.99	2.54	3.01	2.9	2.37	1.83	1.31	3.34	3.07		
15	Physical Property	% Ash	%	1	38	33	50	50	43	41	29	40	<1	58	51		

APPENDIX C: ANALYTICAL RESULTS - RESIDUAL SEDIMENT

Residual Sediment				Location	ER_A	ER_B	ER_B	ER_C	ER_C
Notes: - Field duplicates processed - Validation qualifiers not shown, only "U" for NDs - Ready for ProUCL pre-processor				Year	2011	2011	2011	2011	2011
				Location	ERM1.0	ERM2.5	ERM3.0	ERM4.0	ERM5.5
				Sample Date	06/07/2011	06/06/2011	06/08/2011	06/08/2011	06/08/2011
				Unique Sample ID	KIF-ERM1.0-SED-060711	KIF-ERM2.5-SED-060611	KIF-ERM3.0-SED-060811	KIF-ERM4.0-SED-060811	KIF-ERM5.5-OFFSET-SED-060811
Parameter Order	Parameter Group	Analyte Name	Units						
8	Inorganic	Aluminum	mg/kg	17500	16400	8930	20900	5260	
8	Inorganic	Antimony	mg/kg	<1.72	2.43	<1.53	<2	<1.16	
8	Inorganic	Arsenic	mg/kg	38.9	82.7	6.65	17.8	2	
8	Inorganic	Barium	mg/kg	249	365	91.4	178	41.8	
8	Inorganic	Beryllium	mg/kg	2.06	2.93	0.859	1.72	<0.465	
8	Inorganic	Boron	mg/kg	13	41.4	<6.13	<7.99	<4.65	
8	Inorganic	Cadmium	mg/kg	<0.172	<0.132	<0.153	<0.2	<0.116	
8	Inorganic	Chromium	mg/kg	23.8	32.5	9.72	22.4	6.09	
8	Inorganic	Cobalt	mg/kg	19.1	14.5	11.2	21.4	3.63	
8	Inorganic	Copper	mg/kg	29.1	45.9	9.66	22.5	4.35	
8	Inorganic	Lead	mg/kg	20.7	22.5	11.7	25.3	8.26	
8	Inorganic	Manganese	mg/kg	876	184	508	1220	76.9	
8	Inorganic	Mercury	mg/kg	0.1	0.12	<0.05	0.08	<0.039	
8	Inorganic	Molybdenum	mg/kg	<6.88	<5.27	<6.13	<7.99	<4.65	
8	Inorganic	Nickel	mg/kg	29.2	28.2	14.6	30.2	6.93	
8	Inorganic	Selenium	mg/kg	3.28	5.11	<1.53	2.28	<1.16	
8	Inorganic	Silver	mg/kg	<0.86	<0.659	<0.767	<0.999	<0.581	
8	Inorganic	Strontium	mg/kg	121	255	17.5	38.5	<4.65	
8	Inorganic	Thallium	mg/kg	<1.72	<1.32	<1.53	<2	<1.16	
8	Inorganic	Vanadium	mg/kg	45.4	77	14.3	37.8	7.81	
8	Inorganic	Zinc	mg/kg	73.3	41.5	50.4	105	22.3	
8	Inorganic-cation/anion	Calcium	mg/kg	3630	4830	1360	2440	350	
8	Inorganic-cation/anion	Iron	mg/kg	27900	22100	14100	31100	5460	
8	Inorganic-cation/anion	Magnesium	mg/kg	1640	1350	844	1930	379	
8	Inorganic-cation/anion	Potassium	mg/kg	1530	2040	681	1740	458	
8	Inorganic-cation/anion	Sodium	mg/kg	<218	<277	<153	<200	<116	
10	Speciation	Arsenate	mg/kg	12.6	68.3	2.71	<2.74	1.58	
10	Speciation	Arsenic	mg/kg	24.9	75.6	5.82	9.76	1.65	
10	Speciation	Arsenite	mg/kg	12.7	8.11	1.59	4.48	0.195	
10	Speciation	Inorganic Arsenic	mg/kg	27.6	76.4	4.3	5.48	1.78	
10	Speciation	Inorganic Selenium	mg/kg	1.1	4.31	<0.387	<0.541	<0.38	
10	Speciation	Organic Arsenic	mg/kg	<11.8	<8.51	<2.11	4.29	<0.442	
10	Speciation	Organic Selenium	mg/kg	3.04	<0.683	1.12	1.83	0.651	
10	Speciation	Selenate	mg/kg	<0.418	<0.229	<0.306	<0.428	<0.301	
10	Speciation	Selenite	mg/kg	1.1	4.31	<0.387	<0.541	<0.38	
10	Speciation	Selenium	mg/kg	3.06	4.62	1.12	1.83	0.651	
15	Physical Property	% Ash	%	53	76	7	5	<1	