

Serial number of River/Lake/channel/well	sample types	collection sites	coordinate	T/(°C)
M1 Mudan R	river	Yilan City	46° 17' 45.5" N 127°32' 45.6" E	13
M2 Songhua R	river	Yilan City	46° 18' 58.8" N 129°31' 23.1" E	18
M3 Woken R	river	Yilan City	46° 19' 37.3" N 129°34' 55.5" E	20
M4 Songhua R	river	Jiamusi City	46° 50' 26.0" N 130°16' 35.6" E	15
M5 well (10m)	groundwater	291 Farm	46° 52' 10.8" N131°25' 41.6" E	5
M6 Agricultural drainage	Agricultural drainage	Fujin City	46° 55' 09.6" N131°33' 17.5" E	20
M7 well (30m)	groundwater	Fujin City	46° 55' 09.0" N131°33' 17.5" E	4
M8 Agricultural drainage	Agricultural drainage	Fujin City	47° 13' 54.4" N132°01' 06.1" E	16
M9 well (40m)	groundwater	Qixing Farm	47° 20' 57.6" N132°52' 53.2" E	5
M10 Agricultural drainage	Agricultural drainage	Chuangye Fram	47° 24' 02.2" N133°03' 48.6" E	18
M11 swamp	swamp	Sanjiang Station	47° 35' 11.4" N133°30' 04.3" E	8
M12 well	groundwater	Sanjiang Station	47° 35' 18.4" N133°29' 48.8" E	4
M13 well	groundwater	Qianfeng Farm	47° 32' 32.3" N133°29' 48.8" E	4
M14 Agricultural drainage	Agricultural drainage	Qianfeng Farm	47° 31' 33.4" N133°52' 54.5" E	19
M15 Naoli R	river	Raohe County	47° 15' 01.3" N133°45' 29.0" E	17
M16 Bielahong R	river	Fuyuan City	47° 55' 00.4" N134°27' 55.3" E	18
M17 Ussuri R	river	Fuyuan City	47° 52' 10.8" N134°39' 19.7" E	13
M18 Nongjiang R	river	Fuyuan City	48° 11' 39.7" N134°16' 14.5" E	18
M19 Amur R	river	Fuyuan City	48° 22' 37.0" N134°17' 37.3" E	12
M20 Yalu R	river	Tongjiang City	48° 11' 46.8" N134°06' 00.2" E	14
M21 well (12m)	groundwater	Tongjiang City	48° 03' 05.9" N133°29' 02.1" E	5
M22 Agricultural drainage	Agricultural drainage	Qingdeli Farm	47° 58' 05.1" N133°15' 10.1" E	13
M23 well (40m)	groundwater	Qingdeli Farm	47° 54' 49.4" N133°07' 22.6" E	3
M24 Qinglong R	river	Tongjiang City	47° 47' 11.2" N132°50' 58.0" E	14
M25 Songhua R	river	Tongjiang City	47° 42' 08.1" N132°31' 13.5" E	16
M26 Amur R	river	Tongjiang City	47° 42' 23.1" N132°30' 30.2" E	10
M27 well (10m)	groundwater	Fujin City	47° 23' 36.8" N132° 28' 35.4" E	8
M28 Agricultural drainage	Agricultural drainage	Fujin City	47° 21' 47.4" N132° 28' 52.3" E	10

COND (ms/cm)	TOC (mg/L)	TC (mg/L)	IC (mg/L)	Fe ²⁺ (mg/L)	Fe ³⁺ (mg/L)	Acid solub	Total dissolved	Total Mn	K (mg/L)	Na (mg/L)	Ca (mg/L)	Mg (mg/L)
0.13	2.35	4.98	2.63	0.04	0.04	1.15	1.11	0.04	2.25	11.16	15.98	4.12
0.27	3.50	7.91	4.40	0.09	0.24	1.65	0.87	0.12	3.21	16.63	21.70	5.26
3.01	3.11	16.49	13.38	0.05	0.13	1.27	0.77	0.07	3.00	23.99	29.20	10.17
0.17	5.58	10.97	5.39	0.13	0.24	2.77	1.20	0.18	2.46	10.80	15.30	3.93
0.48	0.70	38.02	37.32	1.13	0.31	2.49	1.89	0.88	1.17	27.88	36.94	17.27
0.27	5.09	21.19	16.10	0.04	0.01	0.86	0.79	0.03	9.18	23.66	22.91	10.71
0.33	0.75	15.05	14.31	4.00	0.25	6.54	5.22	0.49	2.75	22.03	29.86	13.06
0.18	2.52	7.03	4.51	0.10	0.18	0.93	0.92	0.04	2.62	13.02	17.13	4.71
0.30	5.10	15.95	10.85	3.60	0.20	5.17	5.12	0.31	1.97	17.96	29.89	9.07
0.08	7.83	12.85	5.02	0.13	0.38	4.44	4.02	0.32	8.16	17.96	14.75	4.56
0.04	9.25	10.58	1.34	0.08	0.14	1.11	0.98	0.41	2.44	2.74	3.53	1.11
0.26	1.11	27.76	26.64	6.60	0.80	8.49	7.98	0.03	1.96	14.18	23.63	9.11
0.30	1.64	25.93	24.29	7.40	0.20	9.77	9.74	0.41	1.76	12.57	26.78	11.85
0.18	5.31	7.78	2.47	0.10	0.20	2.14	2.07	0.03	6.68	17.41	10.40	3.68
0.08	3.84	5.02	1.18	0.13	0.13	1.18	1.04	0.03	2.18	4.16	6.62	2.55
0.09	5.69	9.76	4.07	0.10	0.21	2.95	1.50	0.04	5.10	7.10	7.02	3.58
0.50	5.48	8.50	2.02	0.05	0.08	1.04	0.98	0.037	1.56	2.88	4.69	1.56
0.09	5.34	8.75	3.41	0.11	0.98	1.73	1.66	0.07	4.16	5.73	6.69	3.45
0.08	10.79	14.11	3.32	0.09	0.16	1.29	1.08	0.02	1.72	4.71	8.93	2.85
0.20	6.51	12.68	6.17	0.20	0.80	2.80	2.02	0.24	6.00	7.09	8.62	4.03
0.24	0.77	3.77	3.01	12.00	0.00	17.18	17.12	1.12	1.33	8.54	11.96	4.58
0.14	5.83	7.23	1.40	0.14	0.81	2.54	2.49	0.12	6.50	19.23	10.81	5.04
0.05	0.42	19.20	18.78	2.20	0.00	2.92	2.90	0.85	1.52	13.62	20.25	10.55
0.26	7.39	13.06	5.68	0.06	0.13	1.98	1.59	0.10	4.71	12.79	8.63	4.48
0.17	7.77	12.63	4.86	0.09	0.16	1.03	1.01	0.02	2.00	8.00	12.70	3.62
0.26	13.60	16.00	2.40	0.05	0.06	1.05	0.88	0.02	1.34	2.57	6.78	2.28
0.05	0.46	12.67	12.21	0.20	0.20	0.99	0.90	0.09	1.56	19.77	36.26	19.90
0.61	8.11	22.80	14.68	0.08	0.04	0.95	0.91	0.05	19.29	39.05	36.92	17.44

Cl ⁻ (mg/L)	SO ₄ ²⁻ (mg/L)	HCO ₃ ⁻ (mg/L)	SiO ₂ (mg/L)	NO ₃ -N (mg/L)	NH ₄ -N (mg/L)	NO ₃ ⁻ (mg/L)	NO ₂ -N (μg/L)	PO ₄ ³⁻ -P (mg/L)	PO ₄ ³⁻ (mg/L)
17.75	2.90	131.76	8.57	1.65	0.23	7.31	36.86	0.03	0.09
21.30	3.35	124.44	2.36	1.28	1.88	5.67	122.85	0.00	0.00
21.30	0.00	197.64	8.64	1.50	0.03	6.65	73.18	0.00	0.00
17.75	0.50	95.16	1.94	1.16	0.00	5.15	45.81	0.01	0.02
14.20	0.00	329.40	17.07	0.16	0.42	0.71	3.84	0.01	0.02
19.52	0.07	183.00	0.94	0.08	0.00	0.36	4.77	0.01	0.04
12.42	0.00	212.28	11.64	0.10	0.19	0.45	1.73	0.00	0.01
18.46	1.46	80.52	1.22	1.03	0.05	4.56	35.04	0.00	0.00
10.65	0.00	212.28	17.64	0.07	1.31	0.32	0.98	0.28	0.87
28.40	0.72	73.20	16.64	0.74	0.83	3.26	142.70	0.11	0.32
10.60	0.76	43.92	5.08	0.05	0.00	0.22	5.06	0.00	0.00
11.36	0.00	190.32	24.92	0.18	1.12	0.81	1.92	0.01	0.02
56.80	0.00	212.28	23.77	1.03	0.98	4.56	7.53	0.40	1.24
26.62	1.31	73.20	15.07	0.59	0.59	2.63	124.88	0.19	0.57
14.20	5.50	36.60	9.79	0.43	0.01	1.91	18.01	0.02	0.07
21.30	4.37	51.24	4.50	0.07	0.02	0.31	7.94	0.04	0.11
12.42	0.37	43.92	6.36	0.15	0.00	0.65	7.39	0.00	0.01
16.00	0.27	73.20	5.08	0.02	0.01	0.08	4.24	0.02	0.07
12.42	2.83	36.60	2.36	0.29	0.00	1.27	15.19	0.00	0.00
21.30	2.34	80.52	3.93	0.08	0.10	0.34	5.93	0.05	0.14
24.85	0.41	109.80	17.07	0.75	0.79	3.33	13.46	0.04	0.11
33.72	1.43	58.56	7.70	0.63	1.90	2.77	131.81	0.08	0.24
12.42	0.08	168.36	21.06	0.08	0.19	0.35	2.15	0.03	0.09
16.00	3.37	87.84	1.79	0.17	0.05	0.74	1.12	0.02	0.05
16.00	1.42	65.88	3.36	1.14	0.00	5.05	19.69	0.00	0.00
12.42	1.16	43.92	6.93	0.11	0.02	0.47	5.51	0.00	0.00
56.80	2.89	65.88	8.79	8.54	0.05	37.83	22.60	0.00	0.00
53.25	5.85	87.84	1.51	0.62	0.14	2.75	4.08	0.08	0.25