

**NEW GOLD RAINY RIVER MINE
APPENDIX U
ZONE OF INFLUENCE WATER
RESULTS**



2018 Offsite Groundwater Monitoring Report

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December 2018

Introduction

New Gold Inc. (New Gold) is currently operating and will eventually reclaim an open pit and underground gold mine, the Rainy River Mine (RRM). Through the Environmental Assessment process for construction and operation of the RRM, New Gold committed to an offsite well water quality program. The condition states:

A groundwater level (flow) and quality monitoring program of regular sampling and dipping of dedicated monitoring wells will be implemented to confirm that no area wells are affected by the mine. Furthermore, local well owners will be asked to participate in a well water quality program to monitor water quality in their wells.

Water Chemistry Summary

One offsite groundwater sampling program was completed in September-October 2018 with nine local wells participating. The 2018 sample results will be compared against 2017 sample results and the same groundwater quality standards that the wells on the mine site are compared against.

All groundwater results were within the Provincial Water Quality Guidelines of Ontario (PWQO) standards except for phosphorus, copper, iron, uranium, and zinc. Results highlighted in red exceeded the PWQO. Please note, all samples were collected at a location representative of the water quality directly in the well. No samples were collected from a location that could be affected by a water treatment system in the residence.

In Summary;

- OF01 had elevated levels of cadmium, copper, lead and zinc.
- OF02 had elevated levels of iron.
- OF03 had elevated levels of copper, iron and zinc.
- OF04 had elevated levels of copper, lead and zinc.
- OF05 had elevated levels of copper, iron, lead and zinc.
- OF06 was not sampled as owner was not available.
- OF07 had elevated levels of cobalt, iron and zinc.
- OF08 had elevated levels of cobalt, iron and zinc.
- OF09 had elevated levels of iron.
- OF10 was not sampled at instruction of owner.
- OF11 had elevated levels of copper and zinc.

Table 1 displays all water chemistry results for 2018. Figures 1 through 6 show each parameter that measured higher than the Provincial Water Quality Guidelines of Ontario. Individual well result summaries are available in Table 2. Results highlighted in red exceeded the PWQO.

Figures 1-6: Provincial Water Quality Objectives Exceeded in 2018 Offsite Well Samples

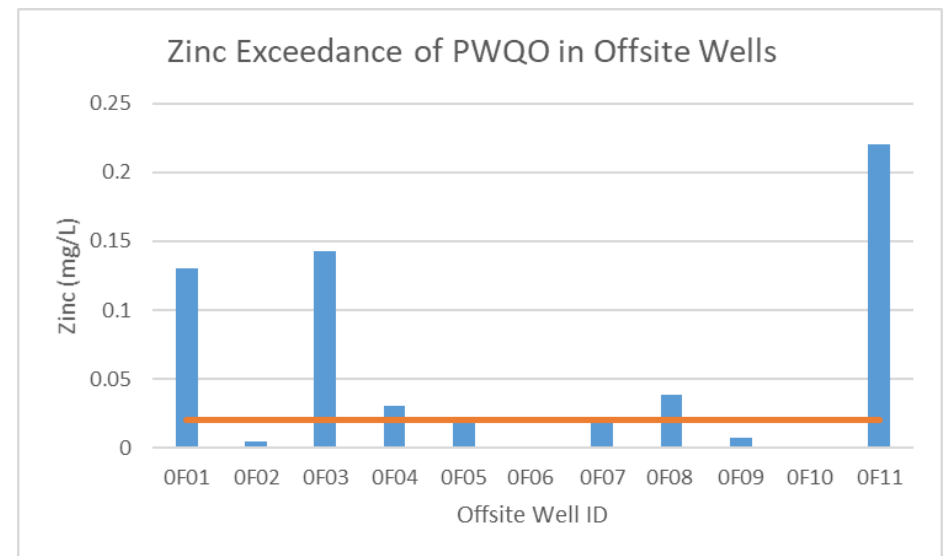
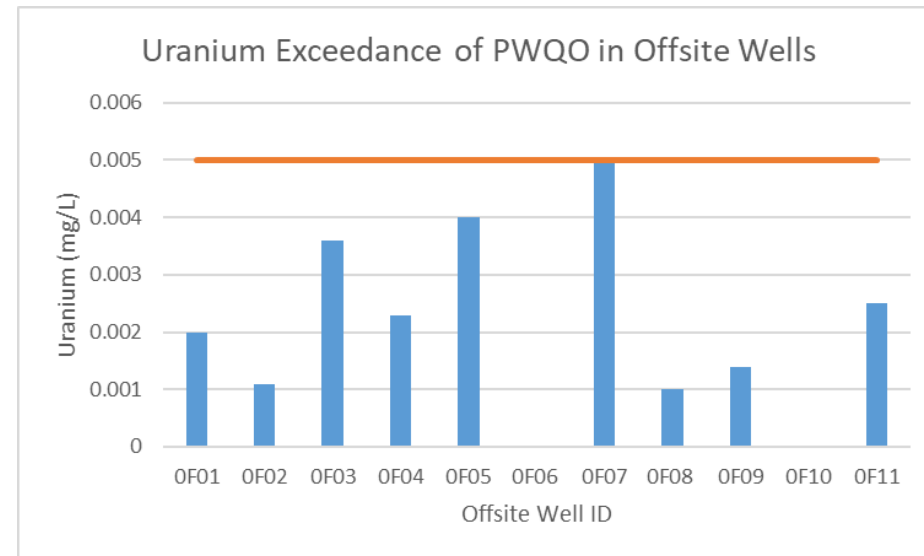
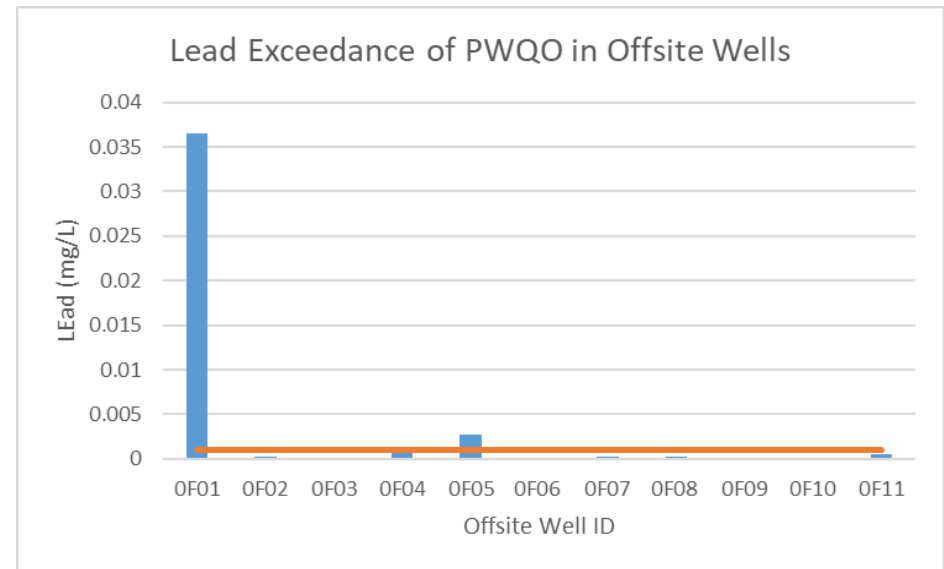
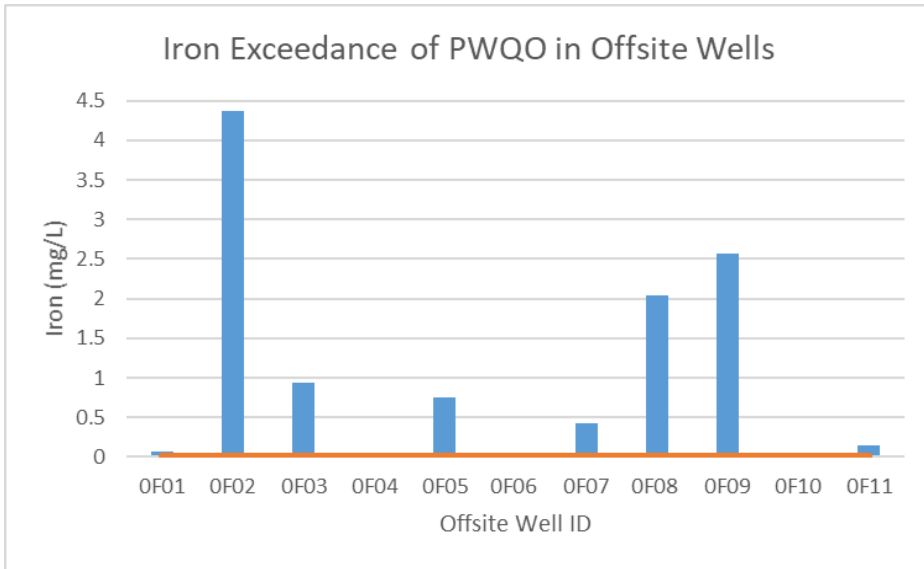
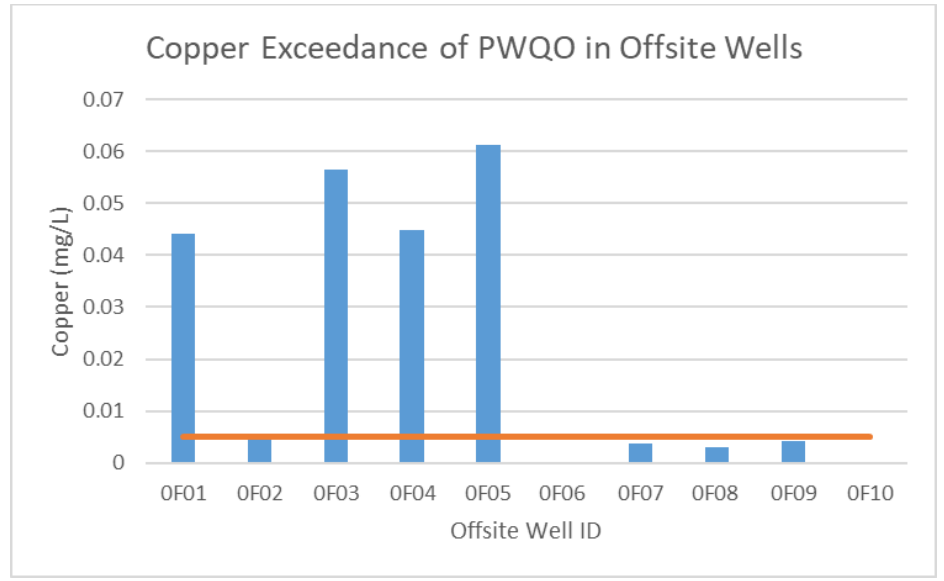
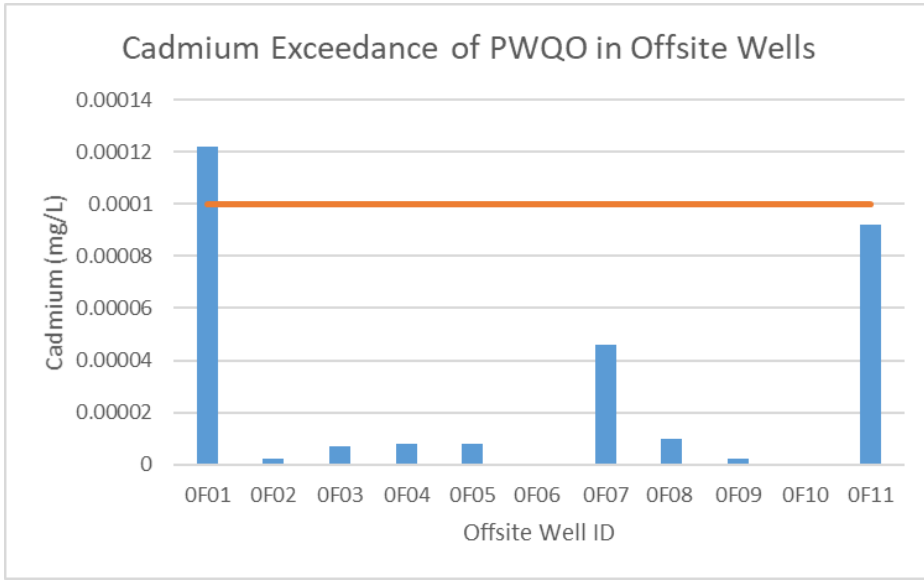


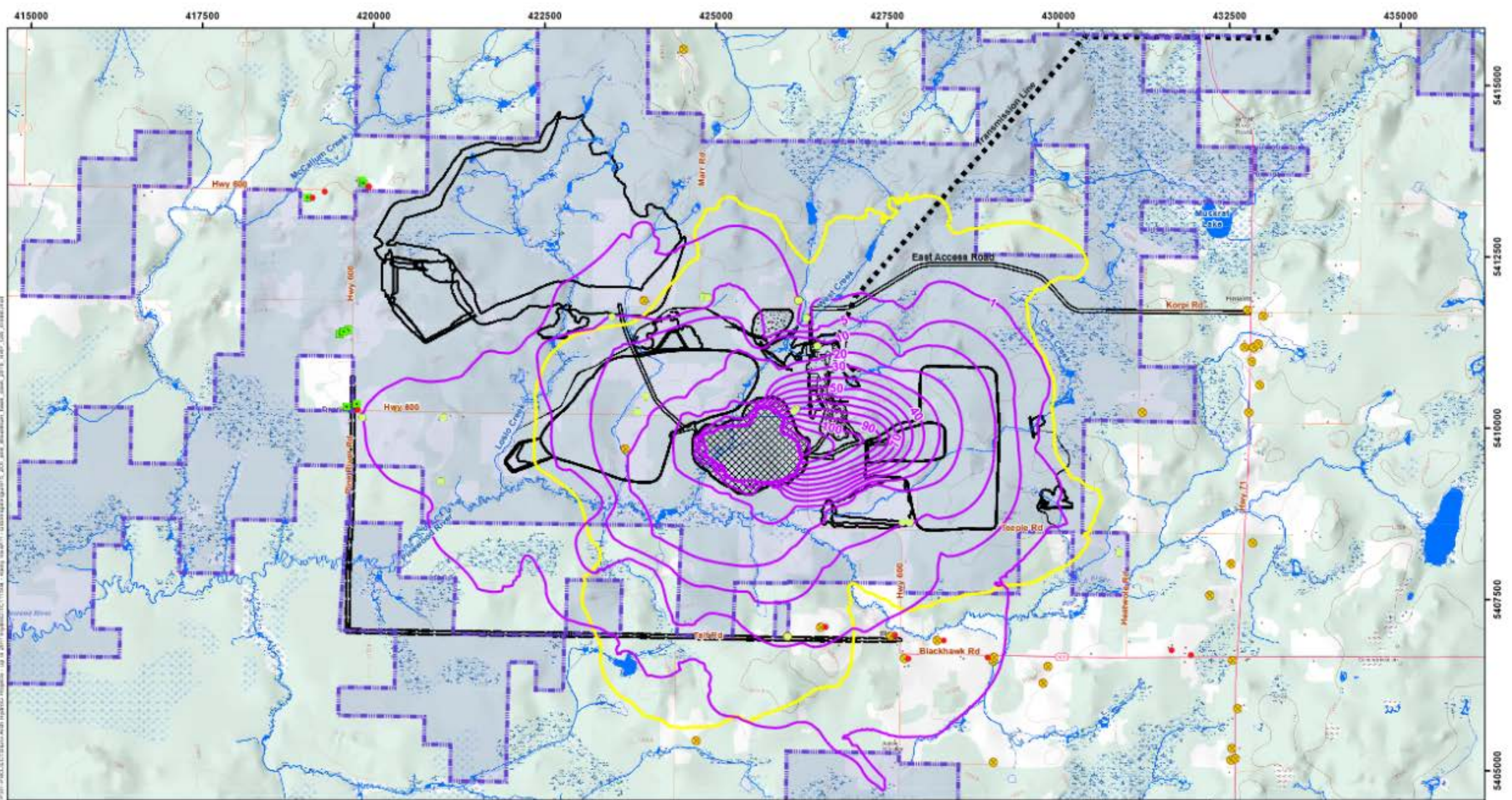
Table 2: Off Site Groundwater Water Chemistry Sample Results Summary by Well

Client Sample ID	Date Sampled	Alkalinity, Total (as CaCO3)	Ammonia, Total (as N)	Chloride (Cl)	Conductivity (EC)	Cyanide, Free	Cyanide, Total	Cyanide, Weak Acid Dissolved	Hardness (as CaCO3)	Nitrate (as N)	Nitrite (as N)	pH	Phosphorus (P)-Total	Sulfate (SO4)	Total Dissolved Solids	Aluminum (Al)-Dissolved	Aluminum (Al)-Total	Antimony (Sb)-Dissolved	Antimony (Sb)-Total
Unit		mg/L	mg/L	mg/L	uS/cm	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	pH	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
	PWQO						0.0050					6.5-8.5					0.0750		0.020
OF01	11-Oct-2017	506	0.658	9.37	958	0.0001	0.0002	0.0001	476	0.005		7.87	0.0083	70.4	555	0.001	0.0010	0.00001	0.00001
OF01	26-Sep-2018	476	0.022	9.43	1060	0.0002	0.0002	0.0001	11.6	0.015	0.002	7.94	0.139	72.1	666	0.0018	0.0012	0.00064	0.00078
OF01	Average	491	0.340	9.40	1009	0.0002	0.0002	0.0001	243.8	0.010	0.002	7.91	0.0737	71.3	610.5	0.0014	0.0011	0.00033	0.00040
OF02	11-Oct-2017	526	0.674	3.77	905	0.0001	0.0002	0.0001	474	0.005		8.10	0.0300	35.7	525	0.001	0.0015	0.00001	0.00002
OF02	25-Sep-2018	481	0.762	4.27	909	0.0002	0.0002	0.0001	450	0.020	0.004	7.62	0.0645	39.3	524	0.0006	0.0008	0.000005	0.00006
OF02	Average	504	0.718	4.02	907	0.0002	0.0002	0.0001	462.0	0.013	0.004	7.86	0.0473	37.5	524.5	0.0008	0.0012	0.00001	0.00004
OF03	11-Oct-2017	460	0.256	7.67	796	0.0002	0.0002	0.0001	424	0.005		7.85	0.0081	17.3	455	0.001	0.0020	0.00005	0.00006
OF03	27-Sep-2018	318	0.086	18.9	615	0.0003	0.0002	0.0001	320	0.045	0.003	7.78	0.009	6.12	346	0.0014	0.0362	0.0002	0.00026
OF03	Average	389	0.171	13.29	706	0.0003	0.0002	0.0001	372.0	0.025	0.003	7.82	0.0086	11.7	400.5	0.0012	0.0191	0.00013	0.00016
OF04	11-Oct-2017	541	0.054	103	1270	0.0001	0.0002	0.0001	612	0.760		7.42	0.0018	36.6	825	0.001	0.0015	0.00043	0.00049
OF04	26-Sep-2018	521	0.234	107	1310	0.0001	0.0002	0.0001	617	0.65	0.004	7.80	0.0030	37.7	754	0.0014	0.0002	0.00038	0.00042
OF04	Average	531	0.144	105.00	1290	0.0001	0.0002	0.0001	614.5	0.705	0.004	7.61	0.0024	37.2	789.5	0.0012	0.0009	0.00041	0.00046
OF05	12-Oct-2017	498	0.086	5.74	865	0.0002	0.0002	0.0001	484	0.005		7.65	0.0085	23.4	490	0.0030	0.0010	0.00001	0.00003
OF05	27-Sep-2018	466	0.098	3.62	883	0.0003	0.0002	0.0001	479	0.015	0.003	7.70	0.0035	22.9	492	0.0008	0.0012	0.00002	0.00006
OF05	Average	482	0.092	4.68	874	0.0003	0.0002	0.0001	481.5	0.010	0.003	7.68	0.0060	23.2	491.0	0.0019	0.0011	0.00002	0.00005
OF06	12-Oct-2017	598	0.116	3.47	977	0.0001	0.0002	0.0001	549	0.155		7.33	0.0458	19.0	565	0.0020	0.0020	0.00007	0.00010
OF06	2018	No sample																	
OF06	Average	598	0.116	3.47	977	0.0001	0.0002	0.0001	549.0	0.155		7.33	0.0458	19.0	565.0	0.0020	0.0020	0.00007	0.00010
OF07	12-Oct-2017	552	0.332	8.74	1040	0.0001	0.0002	0.0001	549	0.005		7.32	0.0001	77.0	630	0.001	0.0010	0.00001	0.00002
OF07	19-Oct-2018	523	0.282	8.36	1060	0.0001	0.0002	0.0002	594	0.01	0.008	7.36	0.0005	76.7	600	0.0006	0.0016	0.000005	0.00002
OF07	Average	538	0.307	8.55	1050	0.0001	0.0002	0.0002	571.5	0.008	0.008	7.34	0.0003	76.9	615.0	0.0008	0.0013	0.00001	0.00002
OF08	13-Oct-2017	429	0.076	19.9	790	0.0001	0.0002	0.0001	405	0.005		7.28	0.0029	9.44	475	0.0020	0.0035	0.00004	0.00001
OF08	19-Oct-2018	425	0.12	25.5	836	0.0001	0.0002	0.0003	445	0.015	0.004	7.29	0.0005	9.68	440	0.0024	0.0002	0.000005	0.00002
OF08	Average	427	0.098	22.70	813	0.0001	0.0002	0.0002	425.0	0.010	0.004	7.29	0.0017	9.6	457.5	0.0022	0.0019	0.00002	0.00002
OF09	13-Oct-2017	546	0.256	1.02	948	0.0001	0.0002	0.0001	508	0.005		7.42	0.0168	33.7	555	0.0010	0.0100	0.00003	0.00003
OF09	26-Sep-2018	524	0.356	1.08	997	0.0005	0.0002	0.0001	536	0.015	0.003	7.80	0.014	36.7	554	0.0006	0.0028	0.000005	0.00002
OF09	Average	535	0.306	1.05	973	0.0003	0.0002	0.0001	522.0	0.010	0.003	7.61	0.0154	35.2	554.5	0.0008	0.0064	0.00002	0.00003
OF10	14-Oct-2017	489	0.118	38.5	947	0.0001	0.0002	0.0001	406	0.790		7.11	0.0076	18.0	545	0.0010	0.0090	0.00015	0.00015
OF10	2018	No sample																	
OF10	Average	489	0.118	38.50	947	0.0001	0.0002	0.0001	406.0	0.790		7.11	0.0076	18.0	545.0	0.0010	0.0090	0.00015	0.00015
OF11	2017	No sample																	
OF11	4-Oct-2018	470	0.118	6.21	837	0.0004	0.0002	0.0001	459	0.050	0.001	7.69	0.0065	6.3	458	0.0026	0.0072	0.00036	0.0004
OF11	Average	470	0.118	6.21	837	0.0004	0.0002	0.0001	459.0	0.050	0.001	7.69	0.0065	6.3	458.0	0.0026	0.0072	0.00036	0.00040
Overall Average		496	0.230	19.72	944	0.0002	0.0002	0.0001	464.2	0.162	0.004	7.57	0.0196	31.4	546.5	0.0026	0.0046	0.00014	0.00016

Client Sample ID	Date Sampled	Arsenic (As)- Dissolved	Arsenic (As)- Total	Barium (Ba)- Dissolved	Barium (Ba)- Total	Beryllium (Be)- Dissolved	Beryllium (Be)- Total	Bismuth (Bi)- Dissolved	Bismuth (Bi)- Total	Boron (B)- Dissolved	Boron (B)- Total	Cadmium (Cd)- Dissolved	Cadmium (Cd)- Total	Calcium (Ca)- Dissolved	Calcium (Ca)- Total	Cesium (Cs)- Dissolved	Cesium (Cs)- Total	Chromium (Cr)- Dissolved	Chromium (Cr)- Total
Unit		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
	PWQO		0.10				0.0011				0.20		0.0001						0.0010
OF01	11-Oct-2017	0.0188	0.0192	0.050	0.052	0.00001	0.00001	0.00002	0.00002	0.171	0.202	0.000005	0.000005	113	111			0.0001	0.0001
OF01	26-Sep-2018	0.0107	0.0099	0.004	0.004	0.000002	0.000001	0.000002	0.000004	0.213	0.187	0.000103	0.000122	3.88	3.92	0.000002	0.000002	0.0001	0.00008
OF01	Average	0.01475	0.0146	0.027	0.028	0.000006	0.000006	0.000011	0.000012	0.192	0.195	0.000054	0.000064	58.4	57.46	0.000002	0.000002	0.00010	0.00009
OF02	11-Oct-2017	0.00490	0.0052	0.071	0.070	0.00001	0.00001	0.00002	0.00002	0.192	0.21	0.000005	0.000005	98.9	97.3			0.0003	0.0006
OF02	25-Sep-2018	0.0076	0.0072	0.067	0.068	0.000002	0.000002	0.000002	0.000003	0.174	0.159	0.0000005	0.000002	101	101	0.000004	0.000007	0.00002	0.00006
OF02	Average	0.00625	0.0062	0.069	0.069	0.000006	0.000006	0.000011	0.000025	0.183	0.185	0.000003	0.000004	100.0	99.15	0.000004	0.000007	0.00016	0.00033
OF03	11-Oct-2017	0.00190	0.0024	0.077	0.081	0.00001	0.00001	0.00002	0.00002	0.049	0.047	0.000005	0.000005	102	102			0.0001	0.0001
OF03	27-Sep-2018	0.0007	0.0014	0.054	0.053	0.000002	0.000001	0.000002	0.000002	0.033	0.030	0.000002	0.000007	75.2	74.7	0.000002	0.000005	0.0001	0.0002
OF03	Average	0.00130	0.0019	0.066	0.067	0.000006	0.000006	0.000011	0.000011	0.041	0.039	0.000004	0.000006	88.6	88.35	0.000002	0.000005	0.00010	0.00015
OF04	11-Oct-2017	0.00070	0.0009	0.116	0.120	0.00001	0.00001	0.00002	0.00002	0.167	0.197	0.000005	0.000010	131	136			0.0001	0.0002
OF04	26-Sep-2018	0.0007	0.0007	0.12	0.118	0.000002	0.000001	0.000006	0.000002	0.162	0.151	0.000006	0.000008	129	133	0.000156	0.000166	0.0001	0.0002
OF04	Average	0.00070	0.0008	0.118	0.119	0.000006	0.000006	0.000013	0.000011	0.165	0.174	0.000006	0.000009	130.0	134.50	0.000156	0.000166	0.00010	0.00020
OF05	12-Oct-2017	0.00190	0.0019	0.096	0.098	0.00001	0.00001	0.00002	0.00002	0.046	0.056	0.000005	0.000005	111	108			0.0001	0.0002
OF05	27-Sep-2018	0.0027	0.0023	0.092	0.095	0.000002	0.000001	0.000002	0.000002	0.049	0.043	0.000005	0.000008	107	109	0.000019	0.000002	0.0001	0.0003
OF05	Average	0.00230	0.0021	0.094	0.097	0.000006	0.000006	0.000011	0.000020	0.048	0.050	0.000005	0.000007	109.0	108.50	0.000019	0.000020	0.00010	0.00025
OF06	12-Oct-2017	0.00098	0.0009	0.085	0.087	0.00001	0.00001	0.00002	0.00002	0.055	0.069	0.000010	0.000010	114	117			0.0001	0.0001
OF06	2018																		
OF06	Average	0.00098	0.0009	0.085	0.087	0.000010	0.000010	0.000020	0.000020	0.055	0.069	0.000010	0.000010	114.0	117.00			0.00010	0.00010
OF07	12-Oct-2017	0.00060	0.0005	0.022	0.022	0.00001	0.00001	0.00002	0.00002	0.072	0.080	0.000035	0.000035	124	128			0.0001	0.0001
OF07	19-Oct-2018	0.0005	0.0005	0.024	0.023	0.000002	0.000001	0.000002	0.000002	0.085	0.079	0.000045	0.000046	131	133	0.000056	0.000057	0.00002	0.0001
OF07	Average	0.00055	0.0005	0.023	0.023	0.000006	0.000006	0.000011	0.000011	0.079	0.080	0.000040	0.000041	127.5	130.50	0.000056	0.000057	0.00006	0.00010
OF08	13-Oct-2017	0.00040	0.0005	0.092	0.091	0.00001	0.00001	0.00002	0.00002	0.027	0.026	0.000005	0.000005	108	110			0.0001	0.0001
OF08	19-Oct-2018	0.0004	0.0005	0.092	0.089	0.000002	0.000001	0.000002	0.000002	0.034	0.031	0.000004	0.000001	118	122	0.000046	0.000047	0.00006	0.00006
OF08	Average	0.00040	0.0005	0.092	0.090	0.000006	0.000006	0.000011	0.000011	0.031	0.029	0.000005	0.000008	113.0	116.00	0.000046	0.000047	0.00008	0.00008
OF09	13-Oct-2017	0.00620	0.0087	0.106	0.108	0.00001	0.00001	0.00002	0.00002	0.059	0.070	0.000005	0.000005	99.4	108.0			0.0001	0.0001
OF09	26-Sep-2018	0.0069	0.0071	0.114	0.114	0.000002	0.000001	0.000002	0.000002	0.07	0.063	0.000001	0.000002	102	103	0.0000095	0.0000095	0.0001	0.00004
OF09	Average	0.00655	0.0079	0.110	0.111	0.000006	0.000006	0.000011	0.000011	0.065	0.067	0.000003	0.000004	100.7	105.50	0.000010	0.000010	0.00010	0.00007
OF10	14-Oct-2017	0.00050	0.0005	0.097	0.098	0.00001	0.00001	0.00002	0.00002	0.059	0.066	0.000030	0.000030	91.7	95.5			0.0003	0.0004
OF10	2018																		
OF10	Average	0.00050	0.0005	0.097	0.098	0.000010	0.00001	0.000020	0.000020	0.059	0.066	0.000030	0.000030	91.7	95.50			0.00030	0.00040
OF11	2017																		
OF11	4-Oct-2018	0.0006	0.0006	0.068	0.060	0.000002	0.000002	0.000008	0.000014	0.08	0.099	0.00011	0.000092	99	101	0.000002	0.000002	0.0001	0.0001
OF11	Average	0.00060	0.0006	0.068	0.060	0.000002	0.000002	0.000008	0.000014	0.080	0.099	0.000110	0.000092	99.0	101.00	0.000002	0.000002	0.00010	0.00010
Overall Average		0.00317	0.0033	0.077	0.077	0.000006	0.000006	0.000013	0.000015	0.091	0.095	0.000024	0.000025	102.90	104.86	0.000033	0.000035	0.00012	0.00017

Client Sample ID	Date Sampled	Cobalt (Co)-Dissolved	Cobalt (Co)-Total	Copper (Cu)-Dissolved	Copper (Cu)-Total	Iron (Fe)-Dissolved	Iron (Fe)-Total	Lead (Pb)-Dissolved	Lead (Pb)-Total	Lithium (Li)-Dissolved	Lithium (Li)-Total	Magnesium (Mg)-Dissolved	Magnesium (Mg)-Total	Manganese (Mn)-Dissolved	Manganese (Mn)-Total	Mercury (Hg)-Dissolved	Mercury (Hg)-Total	Molybdenum (Mo)-Dissolved	Molybdenum (Mo)-Total
Unit		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
	PWQO		0.0009		0.0050		0.30		0.0010								0.00020		0.040
OF01	11-Oct-2017	0.00007	0.00007	0.0001	0.0001	1.54	1.79	0.00001	0.00001	0.051	0.059	47.2	46.9	0.337	0.357	0.000002	0.000002	0.0029	0.0032
OF01	26-Sep-2018	0.00002	0.00002	0.0289	0.0441	0.047	0.065	0.0314	0.0365	0.015	0.015	0.45	0.434	0.0116	0.0115	0.000001	0.000001	0.0031	0.0028
OF01	Average	0.00005	0.00005	0.0145	0.0221	0.794	0.928	0.01571	0.01826	0.033	0.037	23.83	23.67	0.174	0.184	0.000002	0.000002	0.0030	0.0030
OF02	11-Oct-2017	0.00004	0.00004	0.0001	0.0035	2.81	3.35	0.00001	0.00001	0.051	0.053	55.1	51.4	0.193	0.192	0.000002	0.000002	0.0023	0.0023
OF02	25-Sep-2018	0.00003	0.00003	0.00002	0.0047	4.27	4.37	0.000005	0.00020	0.036	0.041	48.2	47.2	0.231	0.224	0.000001	0.000001	0.0018	0.0017
OF02	Average	0.00004	0.00004	0.0001	0.0041	3.540	3.860	0.00001	0.00011	0.044	0.047	51.65	49.30	0.212	0.208	0.000002	0.000002	0.0021	0.0020
OF03	11-Oct-2017	0.00024	0.00024	0.0063	0.0212	2.04	2.72	0.00001	0.00006	0.025	0.024	40.9	39.2	0.349	0.350	0.000002	0.000002	0.0022	0.0024
OF03	27-Sep-2018	0.00009	0.00014	0.0191	0.0565	0.363	0.93	0.00001	0.00010	0.017	0.016	32	31.4	0.0583	0.0639	0.000001	0.000002	0.0038	0.0035
OF03	Average	0.00017	0.00019	0.0127	0.03885	1.202	1.825	0.00001	0.00008	0.021	0.020	36.45	35.30	0.204	0.207	0.000002	0.000002	0.0030	0.0030
OF04	11-Oct-2017	0.00036	0.00044	0.0257	0.0297	0.020	0.080	0.0002	0.0004	0.013	0.016	69.3	69.4	0.0451	0.0619	0.000002	0.000002	0.0034	0.0039
OF04	26-Sep-2018	0.00033	0.00037	0.0446	0.0448	0.024	0.037	0.00096	0.0011	0.013	0.015	71.7	71.1	0.046	0.0477	0.000001	0.000001	0.0035	0.0035
OF04	Average	0.00035	0.00041	0.0352	0.03725	0.022	0.059	0.00058	0.00075	0.013	0.016	70.50	70.25	0.046	0.055	0.000002	0.000002	0.0035	0.0037
OF05	12-Oct-2017	0.00047	0.00049	0.0003	0.0024	0.680	0.72	0.00001	0.00003	0.030	0.032	50.0	49.3	0.226	0.235	0.000002	0.000002	0.0029	0.0033
OF05	27-Sep-2018	0.00049	0.00052	0.0117	0.0613	0.785	0.743	0.0002	0.0027	0.029	0.031	51.3	48.7	0.22	0.217	0.000001	0.000001	0.0034	0.0032
OF05	Average	0.00048	0.00051	0.0060	0.03185	0.733	0.732	0.00011	0.00137	0.030	0.032	50.65	49.00	0.223	0.226	0.000002	0.000002	0.0032	0.0033
OF06	12-Oct-2017	0.00003	0.00003	0.350	0.364	0.010	0.010	0.0017	0.00180	0.043	0.045	64.6	64.7	0.0084	0.0087	0.000004	0.000006	0.0047	0.0052
OF06	2018																		
OF06	Average	0.00003	0.00003	0.3500	0.364	0.010	0.010	0.00170	0.00180	0.043	0.045	64.60	64.70	0.008	0.009	0.000004	0.000006	0.0047	0.0052
OF07	12-Oct-2017	0.00199	0.00206	0.0010	0.0039	0.350	0.41	0.00001	0.00004	0.057	0.058	58.4	59.0	0.898	0.914	0.000002	0.000002	0.0011	0.0013
OF07	19-Oct-2018	0.00219	0.00232	0.0035	0.0037	0.393	0.43	0.0002	0.0002	0.06	0.059	64.9	70.1	1	1.02	0.000001	0.000001	0.0012	0.0014
OF07	Average	0.00209	0.00219	0.0023	0.0038	0.372	0.420	0.00011	0.00012	0.059	0.059	61.65	64.55	0.949	0.967	0.000002	0.000002	0.001150	0.0014
OF08	13-Oct-2017	0.00285	0.00289	0.0001	0.0005	2.03	2.09	0.00009	0.0002	0.009	0.009	32.9	32.2	0.465	0.454	0.000002	0.000002	0.0009	0.00098000
OF08	19-Oct-2018	0.00281	0.003	0.0008	0.0029	1.82	2.04	0.0001	0.0003	0.01	0.009	36.3	38.3	0.501	0.519	0.000001	0.000001	0.001	0.0011
OF08	Average	0.00283	0.00295	0.0005	0.0017	1.925	2.065	0.00010	0.00025	0.010	0.009	34.60	35.25	0.483	0.487	0.000002	0.000002	0.0010	0.0010
OF09	13-Oct-2017	0.00006	0.00007	0.0002	0.0013	2.09	2.75	0.00001	0.00003	0.053	0.052	63.0	66.0	0.381	0.393	0.000002	0.000002	0.0050	0.0057
OF09	26-Sep-2018	0.00005	0.00006	0.0022	0.0042	2.4	2.57	0.00002	0.00001	0.047	0.053	68.4	68.9	0.449	0.417	0.000001	0.000001	0.0055	0.0052
OF09	Average	0.00006	0.00007	0.0012	0.0028	2.245	2.660	0.00002	0.00002	0.050	0.053	65.70	67.45	0.415	0.405	0.000002	0.000002	0.0053	0.0055
OF10	14-Oct-2017	0.00037	0.00042	0.0755	0.0805	0.01	0.070	0.0004	0.0008	0.018	0.018	42.9	44.7	0.0027	0.0051	0.000006	0.000008	0.0027	0.0030
OF10	2018																		
OF10	Average	0.00037	0.00042	0.0755	0.0805	0.010	0.070	0.00040	0.00080	0.018	0.018	42.90	44.70	0.003	0.005	0.000006	0.000008	0.0027	0.0030
OF11	2017																		
OF11	4-Oct-2018	0.00086	0.00062	0.0554	0.0588	0.157	0.152	0.0008	0.0006	0.016	0.014	51.3	49.9	0.054	0.0374	0.000005	0.000001	0.0031	0.003
OF11	Average	0.00086	0.00062	0.0554	0.0588	0.157	0.152	0.00080	0.00060	0.016	0.014	51.30	49.90	0.054	0.037	0.000005	0.000001	0.0031	0.0030
Overall Average		0.00066	0.00068	0.0503	0.0587	1.001	1.1618	0.00177	0.0022	0.030	0.032	51.30	50.37	0.252	0.254	0.000002	0.000003	0.0030	0.0031

Client Sample ID	Date Sampled	Nickel (Ni)- Dissolved	Nickel (Ni)- Total	Potassium (K)- Dissolved	Potassium (K)- Total	Rubidium (Rb)- Dissolved	Rubidium (Rb)- Total	Selenium (Se)- Dissolved	Selenium (Se)- Total	Silicon (Si)- Dissolved	Silicon (Si)- Total	Silver (Ag)- Dissolved	Silver (Ag)- Total	Sodium (Na)- Dissolved	Sodium (Na)- Total	Strontium (Sr)- Dissolved	Strontium (Sr)- Total	Sulfur (S)- Dissolved	Sulfur (S)- Total
Unit		mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
	PWQO		0.025						0.100				0.00010						
OF01	11-Oct-2017	0.0002	0.0003	5.26	5.25			0.0002	0.0002			0.00001	0.00001	29.5	28.6	0.972	1.05		
OF01	26-Sep-2018	0.0005	0.0005	1.73	1.67	0.00051	0.00048	0.000025	0.00004	10.3	10.3	0.0000005	0.000007	252	260	0.0162	0.0144	23.3	25.3
OF01	Average	0.0004	0.0004	3.50	3.46	0.00051	0.00048	0.00011	0.00012	10.30	10.30	0.000005	0.000009	140.8	144.3	0.494	0.532	23.3	25.3
OF02	11-Oct-2017	0.0004	0.0004	5.52	5.28			0.0002	0.0002			0.00001	0.00001	30.9	26.6	0.713	0.701		
OF02	25-Sep-2018	0.0002	0.0002	6.05	5.7	0.00113	0.00111	0.00003	0.00006	10.7	10.6	0.0000005	0.000003	30.5	31.9	0.821	0.752	12.4	13.7
OF02	Average	0.0003	0.0003	5.79	5.49	0.00113	0.00111	0.00012	0.00013	10.70	10.60	0.000005	0.000007	30.7	29.3	0.767	0.727	12.4	13.7
OF03	11-Oct-2017	0.0008	0.0008	3.15	3.18			0.0002	0.0002			0.00001	0.00001	13.7	12.3	0.276	0.306		
OF03	27-Sep-2018	0.0016	0.0019	1.57	1.54	0.00057	0.0006	0.0003	0.0003	8.92	8.85	0.0000005	0.000001	7.74	8.25	0.233	0.22	2.1	2.1
OF03	Average	0.0012	0.0014	2.36	2.36	0.00057	0.00060	0.00025	0.00025	8.92	8.85	0.000005	0.000006	10.7	10.3	0.255	0.263	2.1	2.1
OF04	11-Oct-2017	0.0052	0.0058	3.33	3.40			0.0018	0.0016			0.00001	0.00001	48.3	45.9	0.934	1.05		
OF04	26-Sep-2018	0.0055	0.0059	3.53	3.44	0.00121	0.00115	0.0018	0.0017	8.45	8.81	0.0000015	0.000003	46.6	48.3	0.983	0.959	12.3	13.7
OF04	Average	0.0054	0.0059	3.43	3.42	0.00121	0.00115	0.00180	0.00165	8.45	8.81	0.000006	0.000007	47.5	47.1	0.959	1.005	12.3	13.7
OF05	12-Oct-2017	0.0010	0.0011	4.52	4.66			0.0002	0.0002			0.00001	0.00001	13.6	12.7	0.345	0.368		
OF05	27-Sep-2018	0.0012	0.0015	4.48	4.28	0.00631	0.00612	0.00005	0.000045	9.71	9.82	0.0000005	0.00002	11.4	11.5	0.364	0.341	7.5	8.5
OF05	Average	0.0011	0.0013	4.50	4.47	0.00631	0.00612	0.00013	0.00012	9.71	9.82	0.000005	0.000015	12.5	12.1	0.355	0.355	7.5	8.5
OF06	12-Oct-2017	0.0032	0.0033	4.70	4.88			0.0002	0.0002			0.00008	0.00027	12.0	12.1	0.384	0.393		
OF06	2018																		
OF06	Average	0.0032	0.0033	4.70	4.88			0.00020	0.00020			0.000080	0.000270	12.0	12.1	0.384	0.393		
OF07	12-Oct-2017	0.0004	0.0004	4.33	4.34			0.0002	0.0002			0.00001	0.00001	16.5	16.7	0.687	0.719		
OF07	19-Oct-2018	0.0004	0.0004	4.38	4.53	0.00154	0.00156	0.00003	0.000035	10.4	10.5	0.0000005	0.000001	17.5	18.4	0.667	0.705	28.6	29.7
OF07	Average	0.0004	0.0004	4.36	4.44	0.00154	0.00156	0.00012	0.00012	10.40	10.50	0.000005	0.000006	17.0	17.6	0.677	0.712	28.6	29.7
OF08	13-Oct-2017	0.0022	0.0022	2.74	2.74			0.0002	0.0002			0.00001	0.00001	10.7	10.4	0.207	0.219		
OF08	19-Oct-2018	0.0022	0.0022	2.81	2.89	0.00295	0.00323	0.000035	0.00007	9.98	10	0.0000005	0.000001	11	11.8	0.213	0.223	3.5	3.8
OF08	Average	0.0022	0.0022	2.78	2.82	0.00295	0.00323	0.00012	0.00014	9.98	10.00	0.000005	0.000006	10.9	11.1	0.210	0.221	3.5	3.8
OF09	13-Oct-2017	0.0003	0.0004	5.39	5.50			0.0002	0.0002			0.00001	0.00001	15.1	15.6	0.512	0.574		
OF09	26-Sep-2018	0.0002	0.0003	5.49	5.63	0.00135	0.00153	0.000025	0.000035	12.3	12.8	0.0000005	0.000001	15.1	16.2	0.558	0.529	11.6	13
OF09	Average	0.0003	0.0004	5.44	5.57	0.00135	0.00153	0.00011	0.00012	12.30	12.80	0.000005	0.000006	15.1	15.9	0.535	0.552	11.6	13.0
OF10	14-Oct-2017	0.0067	0.0070	3.39	3.49			0.0016	0.0016			0.00001	0.00001	49.1	50.6	0.145	0.162		
OF10	2018																		
OF10	Average	0.0067	0.0070	3.39	3.49			0.00160	0.00160			0.000010	0.000010	49.1	50.6	0.145	0.162		
OF11	2017																		
OF11	4-Oct-2018	0.0061	0.0057	0.79	0.67	0.0008	0.00066	0.0004	0.0005	9.01	8.98	0.0000005	0.000002	4.85	4.5	0.178	0.173	2.2	2.1
OF11	Average	0.0061	0.0057	0.79	0.67	0.00080	0.00066	0.00040	0.00050	9.01	8.98	0.000001	0.000002	4.9	4.5	0.178	0.173	2.2	2.1
Overall Average		0.0025	0.0026	3.73	3.73	0.00182	0.00183	0.00045	0.00045	9.97	10.07	0.000012	0.000031	31.9	32.3	0.451	0.463	11.5	12.4



LEGEND

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| Proposed Site Features | <ul style="list-style-type: none"> Mine Feature Open Pit Highway Re-alignment East Access Road Transmission Line | <ul style="list-style-type: none"> RRP-NG Property Boundary EA RRP Groundwater Model ZOI Drawdown Base Case, 2018 RRP Groundwater Model ● Private Water Wells (2012 Survey) ● Private Water Wells (2013 Survey) ● Private Water Wells (MOE) | <ul style="list-style-type: none"> ● Offsite Groundwater Monitoring Participants |
|-------------------------------|---|---|--|

Source / Notes:
 - Only major facilities are shown. Connecting infrastructure and supporting facilities are generally not shown.
 - Surface geology based on air photo analysis and review of published geology maps. Surface materials may vary from those indicated.

newgold Rainy River Project

RAINY RIVER PROJECT

ZOI and Drawdown Base Case, 2018 RRP Groundwater Model