

APPENDIX 4.1-A

Surface Water Quality Summary Tables

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Data Qualifiers

d - RL increased due
to sample
matrix interference

j - not detected above
minimum detectable
concentration



Dewey-Burdock Surface Water Sampling Location		Sub01		Summary Statistics for Sub01					
Description		Stock Pond							
Date and Time Collected		3/24/2008 12:45:00 PM	6/18/2008 12:00:00 PM						
Lab ID		R08030252 -003	R08060347 -001						
Analyte	Units	Result	Result	n	n (non-detect)	Minimum	Maximum	Mean*	StDev*
Field Parameters									
Field Conductivity	umhos/cm	240	291	2	0	240	291	265.5	36.062446
Field Dissolved Oxygen	mg/L	11.58	6.75	2	0	6.75	11.58	9.165	3.4153258
Field pH	s.u.	6.47	8.25	2	0	6.47	8.25	7.36	1.2586501
Field Temperature	Deg C	8.98	19.18	2	0	8.98	19.18	14.08	7.2124892
Field Turbidity	NTUs	356	1294	2	0	356	1294	825	663.26610
Microbiological									
Bacteria, Fecal Coliform	CFU/100ml	44 d	20 d	2	0	20	44	32	16.970563
Physical Properties									
Conductivity @ 25 C	umhos/cm	230	250	2	0	230	250	240	14.142136
pH, Laboratory	s.u.	7.73	7.07	2	0	7.07	7.73	7.4	0.4666905
Sodium Adsorption Ratio (SAR)	unitless	0.98	1	2	0	0.98	1	0.99	0.0141421
Solids, Suspended Sediment SSC @ 105 C	mg/L	198	393	2	0	198	393	295.5	137.88582
Solids, Total Dissolved TDS @ 180 C	mg/L	300	990	2	0	300	990	645	487.90368
Solids, Total Suspended TSS @ 105 C	mg/L	100	280	2	0	100	280	190	127.27922
Major Ions									
Alkalinity, Total as CaCO3	mg/L	38	84	2	0	38	84	61	32.526912
Bicarbonate as HCO3	mg/L	46	102	2	0	46	102	74	39.59798
Calcium, Dissolved	mg/L	21	21.1	2	0	21	21.1	21.05	0.0707107
Carbonate as CO3	mg/L	<5	<5	2	2	<5	<5	<5	<5
Chloride	mg/L	3	5	2	0	3	5	4	1.4142136
Fluoride	mg/L	0.3	0.6	2	0	0.3	0.6	0.45	0.212132
Magnesium, Dissolved	mg/L	4.4	4.4	2	0	4.4	4.4	4.4	0
Nitrogen, Ammonia as N	mg/L	<0.1	1.2	2	1	<0.1	1.2	0.625	0.8131728
Nitrogen, Nitrate as N	mg/L	1.2	<0.1	2	1	<0.1	1.2	0.625	0.8131728
Potassium, Dissolved	mg/L	4	8	2	0	4	8	6	2.8284271
Silica	mg/L	8.6	7.9	2	0	7.9	8.6	8.25	0.4949747
Sodium, Dissolved	mg/L	18.9	20 d	2	0	18.9	20	19.45	0.7778175
Sulfate, Total	mg/L	59	33	2	0	33	59	46	18.384776
Metals, Dissolved									
Aluminum, Dissolved	mg/L	0.2	0.3	2	0	0.2	0.3	0.25	0.0707107
Arsenic, Dissolved	mg/L	0.001	0.003	2	0	0.001	0.003	0.002	0.0014142
Barium, Dissolved	mg/L	<0.1	<0.1	2	2	<0.1	<0.1	<0.1	<0.1
Boron, Dissolved	mg/L	<0.1	0.1	2	1	<0.1	0.1	0.075	0.0353553
Cadmium, Dissolved	mg/L	<0.005	<0.005	2	2	<0.005	<0.005	<0.005	<0.005
Chromium, Dissolved	mg/L	<0.01	<0.01	2	2	<0.01	<0.01	<0.01	<0.01
Copper, Dissolved	mg/L	<0.01	<0.01	2	2	<0.01	<0.01	<0.01	<0.01
Iron, Dissolved	mg/L	0.15	0.31	2	0	0.15	0.31	0.23	0.1131371
Lead, Dissolved	mg/L	<0.001	<0.001	2	2	<0.001	<0.001	<0.001	<0.001
Manganese, Dissolved	mg/L	0.02	0.24	2	0	0.02	0.24	0.13	0.1555635
Mercury, Dissolved	mg/L	<0.001	<0.001	2	2	<0.001	<0.001	<0.001	<0.001
Molybdenum, Dissolved	mg/L	<0.1	<0.1	2	2	<0.1	<0.1	<0.1	<0.1
Nickel, Dissolved	mg/L	<0.01	<0.01	2	2	<0.01	<0.01	<0.01	<0.01
Selenium, Dissolved	mg/L	<0.001	<0.005	2	2	<0.001	<0.005	<0.005	<0.005
Silver, Dissolved	mg/L	<0.005	<0.005	2	2	<0.005	<0.005	<0.005	<0.005
Thorium 232, Dissolved	mg/L	<0.005	<0.005	2	2	<0.005	<0.005	<0.005	<0.005
Uranium, Dissolved	mg/L	<0.0003	0.0003	2	1	<0.0003	0.0003	0.00023	0.0001061
Vanadium, Dissolved	mg/L	<0.1	<0.1	2	2	<0.1	<0.1	<0.1	<0.1
Zinc, Dissolved	mg/L	<0.01	0.01	2	1	<0.01	0.01	0.0075	0.0035355
Metals, Dissolved, Speciated									
Selenium-IV, Dissolved	mg/L	<0.001	<0.001	2	2	<0.001	<0.001	<0.001	<0.001
Selenium-VI, Dissolved	mg/L	<0.001	<0.001	2	2	<0.001	<0.001	<0.001	<0.001
Metals, Suspended									
Thorium 232, Suspended	mg/L	0.002	0.004	2	0	0.002	0.004	0.003	0.0014142
Uranium, Suspended	mg/L	0.0006	0.0007	2	0	0.0006	0.0007	0.00065	7.071E-05
Metals, Total									
Aluminum, Total	mg/L	22.4	52.8	2	0	22.4	52.8	37.6	21.496046
Arsenic, Total	mg/L	0.005	0.014	2	0	0.005	0.014	0.0095	0.006364
Barium, Total	mg/L	0.1	0.2	2	0	0.1	0.2	0.15	0.0707107
Boron, Total	mg/L	<0.1	0.2	2	1	<0.1	0.2	0.125	0.106066
Cadmium, Total	mg/L	<0.005	<0.005	2	2	<0.005	<0.005	<0.005	<0.005
Calcium, Total	mg/L	25.1	30.2	2	0	25.1	30.2	27.65	3.6062446
Chromium, Hexavalent	mg/L	<0.01	<0.05	2	2	<0.01	<0.05	<0.05	<0.05
Chromium, Total	mg/L	<0.05	0.06	2	1	<0.05	0.06	0.0425	0.0247487
Chromium, Trivalent	mg/L	<0.01	0.06	2	1	<0.01	0.06	0.0325	0.0388909
Copper, Total	mg/L	0.02	0.03	2	0	0.02	0.03	0.025	0.0070711
Iron, Total	mg/L	15.1	44.1	2	0	15.1	44.1	29.6	20.506097
Lead, Total	mg/L	0.009	0.026	2	0	0.009	0.026	0.0175	0.0120208
Magnesium, Total	mg/L	8.4	15.1	2	0	8.4	15.1	11.75	4.7376154
Manganese, Total	mg/L	0.18	0.77	2	0	0.18	0.77	0.475	0.417193
Mercury, Total	mg/L	<0.0001	<0.001	2	2	<0.0001	<0.001	<0.001	<0.001
Molybdenum, Total	mg/L	<0.1	<0.1	2	2	<0.1	<0.1	<0.1	<0.1
Nickel, Total	mg/L	<0.05	<0.05	2	2	<0.05	<0.05	<0.05	<0.05



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Dewey-Burdock Surface Water Sampling Location		Sub01		Summary Statistics for Sub01					
Description		Stock Pond							
Date and Time Collected		3/24/2008 12:45:00 PM	6/18/2008 12:00:00 PM						
Lab ID		R08030252 -003	R08060347 -001						
Analyte	Units	Result	Result	n	n (non- detect)	Minimum	Maximum	Mean*	StDev*
Potassium, Total	mg/L	8.3	20.9	2	0	8.3	20.9	14.6	8.9095454
Selenium, Total	mg/L	0.001	<0.001	2	1	<0.001	0.001	0.00075	0.0003536
Silica, Total	mg/L	104	88.1	2	0	88.1	104	96.05	11.242998
Silver, Total	mg/L	<0.005	<0.005	2	2	<0.005	<0.005	<0.005	<0.005
Sodium, Total	mg/L	17.8	21 d	2	0	17.8	21	19.4	2.2627417
Thorium 232, Total	mg/L	<0.005	0.012	2	1	<0.005	0.012	0.00725	0.0067175
Uranium, Total	mg/L	0.0011	0.002	2	0	0.0011	0.002	0.00155	0.0006364
Vanadium, Total	mg/L	<0.1	<0.1	2	2	<0.1	<0.1	<0.1	<0.1
Zinc, Total	mg/L	0.06	0.13	2	0	0.06	0.13	0.095	0.0494975
Metals, Total, Speciated									
Selenium-IV, Total	mg/L	<0.001	<0.001	2	2	<0.001	<0.001	<0.001	<0.001
Selenium-VI, Total	mg/L	0.001	<0.001	2	1	<0.001	0.001	0.00075	0.0003536
Radionuclides, Dissolved									
Lead 210, Dissolved	pCi/L	NM	0.7 j	1	0	0.7	0.7	0.7	---
Polonium 210, Dissolved	pCi/L	NM	0.1 j	1	0	0.1	0.1	0.1	---
Radium 226, Dissolved	pCi/L	0.2	0.5	2	0	0.2	0.5	0.35	0.212132
Thorium 230, Dissolved	pCi/L	0.2	0 j	2	0	0	0.2	0.1	0.1414214
Radionuclides, Suspended									
Lead 210, Suspended	pCi/L	NM	-2.1 j	1	0	-2.1	0	-2.1	---
Polonium 210, Suspended	pCi/L	NM	1.3	1	0	1.3	1.3	1.3	---
Radium 226, Suspended	pCi/L	1	-0.2 j	2	0	-0.2	1	0.4	0.8485281
Thorium 230, Suspended	pCi/L	0.2 j	0.4	2	0	0.2	0.4	0.3	0.1414214
Radionuclides, Total									
Gross Alpha, Total	pCi/L	2.4	16.2	2	0	2.4	16.2	9.3	9.7580736
Gross Beta, Total	pCi/L	5.1	20.2	2	0	5.1	20.2	12.65	10.677312
Gross Gamma, Total	pCi/L	<20	0 j	2	1	<20	0	5	7.0710678
Lead 210, Total	pCi/L	NM	-1.4 j	1	0	-1.4	0	-1.4	---
Polonium 210, Total	pCi/L	NM	1.4	1	0	1.4	1.4	1.4	---
Radium 226, Total	pCi/L	1.2	0.3 j	2	0	0.3	1.2	0.75	0.6363961
Thorium 230, Total	pCi/L	0.4	0.4	2	0	0.4	0.4	0.4	0
Data Quality Parameters									
A/C Balance (± 5)	%	4.36	1.86	2	0	1.86	4.36	3.11	1.767767
Anions	meq/l	2.17	2.54	2	0	2.17	2.54	2.355	0.2616295
Cations	meq/l	2.37	2.63	2	0	2.37	2.63	2.5	0.1838478
Solids, Total Dissolved Calculated	mg/L	162	164	2	0	162	164	163	1.4142136
TDS Balance (0.80 - 1.20)	dec. %	1.86	6.05	2	0	1.86	6.05	3.955	2.9627774

Sampling Interval: Quarterly

Missing Samples and Reasons: September and November 2007 - Dry

* 1/2 RL used to calculate the mean and st dev where non-detect data occurred.

NM - not measured in field/not requested for analysis from lab



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Dewey-Burdock Surface Water Sampling Location		Sub02				Summary Statistics for Sub02					
Description		Triangle Mine Pit									
Date and Time Collected		9/27/2007 6:45:00 PM	11/12/2007 12:50:00 PM	2/10/2008 5:00:00 PM	6/18/2008 1:05:00 PM						
Lab ID		R07090389 -002	R07110147 -001	R08020083 -003	R08060347 -002						
Analyte	Units	Result	Result	Result	Result	n (non- detect)	Minimum	Maximum	Mean*	StDev*	
Field Parameters											
Field Conductivity	umhos/cm	2171	3743	3523	3676	4	0	2171	3743	3278.25	743.88681
Field Dissolved Oxygen	mg/L	7.1	8.82	11.15	10.03	4	0	7.1	11.15	9.275	1.7342914
Field pH	s.u.	8.04	7.83	5.55	7.95	4	0	5.55	8.04	7.3425	1.1980922
Field Temperature	Deg C	17.94	8.35	1.05	19.56	4	0	1.05	19.56	11.725	8.6671737
Field Turbidity	NTUs	2.1	1.2	1.4	0.5	4	0	0.5	2.1	1.3	0.6582806
Microbiological											
Bacteria, Fecal Coliform	CFU/100ml	2 d	<2	<2	<2	4	3	<2	2	1.25	0.5
Physical Properties											
Conductivity @ 25 C	umhos/cm	3700	3340	3800	3540	4	0	3340	3800	3595	200.91458
pH, Laboratory	s.u.	7.99	7.78	7.81	8.08	4	0	7.78	8.08	7.915	0.1438749
Sodium Adsorption Ratio (SAR)	unitless	NM	1.6	1.6	1.5	3	0	1.5	1.6	1.56667	0.057735
Solids, Suspended Sediment SSC @ 105 C	mg/L	<5	<5	<5	<5	4	4	<5	<5	<5	<5
Solids, Total Dissolved TDS @ 180 C	mg/L	3900	3900	2900	3800	4	0	2900	3900	3625	485.62674
Solids, Total Suspended TSS @ 105 C	mg/L	<5	<5	10	7	4	2	<5	10	5.5	3.6742346
Major Ions											
Alkalinity, Total as CaCO3	mg/L	92	102	90	96	4	0	90	102	95	5.2915026
Bicarbonate as HCO3	mg/L	112	124	110	117	4	0	110	124	115.75	6.2383224
Calcium, Dissolved	mg/L	622	561 d	538 d	609	4	0	538	622	582.5	39.602188
Carbonate as CO3	mg/L	<5	<5	<5	<5	4	4	<5	<5	<5	<5
Chloride	mg/L	23	22	24	19	4	0	19	24	22	2.1602469
Fluoride	mg/L	0.4	0.5	0.5	0.9	4	0	0.4	0.9	0.575	0.2217356
Magnesium, Dissolved	mg/L	212	180	198	204	4	0	180	212	198.5	13.601471
Nitrogen, Ammonia as N	mg/L	NM	<0.1	<0.1	<0.1	3	3	<0.1	<0.1	<0.1	<0.1
Nitrogen, Nitrate as N	mg/L	<0.1	0.1	0.2	<0.1	4	2	<0.1	0.2	0.1	0.0707107
Potassium, Dissolved	mg/L	21	21	23	20	4	0	20	23	21.25	1.2583057
Silica	mg/L	2	2.4	2.8	<0.5	4	1	<0.5	2.8	1.8625	1.1235175
Sodium, Dissolved	mg/L	163	165 d	169 d	172 d	4	0	163	172	167.25	4.0311289
Sulfate, Total	mg/L	2840 d	2390 d	2500 d	2310 d	4	0	2310	2840	2510	233.38095
Metals, Dissolved											
Aluminum, Dissolved	mg/L	<0.1	<0.1	<0.1	<0.1	4	4	<0.1	<0.1	<0.1	<0.1
Arsenic, Dissolved	mg/L	0.001	<0.001	0.001	<0.001	4	2	<0.001	0.001	0.00075	0.0002887
Barium, Dissolved	mg/L	<0.1	<0.1	<0.1	<0.1	4	4	<0.1	<0.1	<0.1	<0.1
Boron, Dissolved	mg/L	0.4	0.5	0.5	0.5	4	0	0.4	0.5	0.475	0.05
Cadmium, Dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	4	4	<0.005	<0.005	<0.005	<0.005
Chromium, Dissolved	mg/L	<0.01	<0.01	<0.05	<0.01	4	4	<0.01	<0.05	<0.05	<0.05
Copper, Dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	4	4	<0.01	<0.01	<0.01	<0.01
Iron, Dissolved	mg/L	<0.03	0.08	0.07	0.05	4	1	<0.03	0.08	0.05375	0.0286865
Lead, Dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	4	4	<0.001	<0.001	<0.001	<0.001
Manganese, Dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	4	4	<0.01	<0.01	<0.01	<0.01
Mercury, Dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	4	4	<0.001	<0.001	<0.001	<0.001
Molybdenum, Dissolved	mg/L	<0.1	<0.1	<0.1	<0.1	4	4	<0.1	<0.1	<0.1	<0.1
Nickel, Dissolved	mg/L	<0.01	<0.01	<0.05	<0.01	4	4	<0.01	<0.05	<0.05	<0.05
Selenium, Dissolved	mg/L	0.006	0.002	0.002	<0.005	4	1	<0.005	0.006	0.00313	0.0019311
Silver, Dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	4	4	<0.005	<0.005	<0.005	<0.005
Thorium 232, Dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	4	4	<0.005	<0.005	<0.005	<0.005
Uranium, Dissolved	mg/L	0.164	0.171	0.177	0.175	4	0	0.164	0.177	0.17175	0.0057373
Vanadium, Dissolved	mg/L	<0.1	<0.1	<0.1	<0.1	4	4	<0.1	<0.1	<0.1	<0.1
Zinc, Dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	4	4	<0.01	<0.01	<0.01	<0.01
Metals, Dissolved, Speciated											
Selenium-IV, Dissolved	mg/L	NM	<0.001	<0.001	<0.001	3	3	<0.001	<0.001	<0.001	<0.001
Selenium-VI, Dissolved	mg/L	NM	0.002	<0.001	0.002	3	1	<0.001	0.002	0.0015	0.000866
Metals, Suspended											
Thorium 232, Suspended	mg/L	<0.001	<0.001	<0.001	<0.001	4	4	<0.001	<0.001	<0.001	<0.001
Uranium, Suspended	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	4	4	<0.0003	<0.0003	<0.0003	<0.0003
Metals, Total											
Aluminum, Total	mg/L	<0.1	<0.1	<0.1	<0.1	4	4	<0.1	<0.1	<0.1	<0.1
Arsenic, Total	mg/L	<0.001	<0.001	<0.001	0.002	4	3	<0.001	0.002	0.00088	0.00075
Barium, Total	mg/L	<0.1	<0.1	<0.1	<0.1	4	4	<0.1	<0.1	<0.1	<0.1
Boron, Total	mg/L	0.5	0.4	0.5	0.5	4	0	0.4	0.5	0.475	0.05
Cadmium, Total	mg/L	<0.005	<0.005	<0.005	<0.005	4	4	<0.005	<0.005	<0.005	<0.005
Calcium, Total	mg/L	NM	NM	579 d	602	2	0	579	602	590.5	16.263456
Chromium, Hexavalent	mg/L	<0.05	<0.005	<0.005	0.005	4	3	<0.005	0.005	0.00875	0.0108972
Chromium, Total	mg/L	<0.05	<0.05	<0.05	<0.05	4	4	<0.05	<0.05	<0.05	<0.05
Chromium, Trivalent	mg/L	<0.01	<0.01	<0.01	<0.01	4	4	<0.01	<0.01	<0.01	<0.01
Copper, Total	mg/L	<0.01	<0.01	<0.01	<0.01	4	4	<0.01	<0.01	<0.01	<0.01
Iron, Total	mg/L	0.14	0.23	0.22	0.18	4	0	0.14	0.23	0.1925	0.0411299
Lead, Total	mg/L	<0.001	<0.001	<0.001	<0.001	4	4	<0.001	<0.001	<0.001	<0.001
Magnesium, Total	mg/L	NM	NM	201	204	2	0	201	204	202.5	2.1213203
Manganese, Total	mg/L	0.02	0.02	0.04	<0.01	4	1	<0.01	0.04	0.02125	0.0143614
Mercury, Total	mg/L	<0.001	<0.001	<0.001	<0.001	4	4	<0.001	<0.001	<0.001	<0.001
Molybdenum, Total	mg/L	<0.1	<0.1	<0.1	<0.1	4	4	<0.1	<0.1	<0.1	<0.1
Nickel, Total	mg/L	<0.05	<0.05	<0.05	<0.05	4	4	<0.05	<0.05	<0.05	<0.05



POWERTECH (USA) INC.

Dewey-Burdock Surface Water Sampling Location		Sub02				Summary Statistics for Sub02					
Description		Triangle Mine Pit									
Date and Time Collected		9/27/2007 6:45:00 PM	11/12/2007 12:50:00 PM	2/10/2008 5:00:00 PM	6/18/2008 1:05:00 PM						
Lab ID		R07090389 -002	R07110147 -001	R08020083 -003	R08060347 -002						
Analyte	Units	Result	Result	Result	Result	n	n (non- detect)	Minimum	Maximum	Mean*	StDev*
Potassium, Total	mg/L	NM	NM	23.6	21.1	2	0	21.1	23.6	22.35	1.767767
Selenium, Total	mg/L	0.001	0.002	0.002	0.003	4	0	0.001	0.003	0.002	0.0008165
Silica, Total	mg/L	NM	NM	2.9	<0.5	2	1	<0.5	2.9	1.575	1.873833
Silver, Total	mg/L	<0.005	<0.005	<0.005	<0.005	4	4	<0.005	<0.005	<0.005	<0.005
Sodium, Total	mg/L	NM	NM	175	180 d	2	0	175	180	177.5	3.5355339
Thorium 232, Total	mg/L	<0.005	<0.005	<0.005	<0.005	4	4	<0.005	<0.005	<0.005	<0.005
Uranium, Total	mg/L	0.168	0.162	0.168 d	0.19	4	0	0.162	0.19	0.172	0.0123288
Vanadium, Total	mg/L	<0.1	<0.1	<0.1	<0.1	4	4	<0.1	<0.1	<0.1	<0.1
Zinc, Total	mg/L	<0.01	<0.01	<0.02	<0.01	4	4	<0.01	<0.02	<0.02	<0.02
Metals, Total, Speciated											
Selenium-IV, Total	mg/L	<0.001	<0.001	<0.001	<0.001	4	4	<0.001	<0.001	<0.001	<0.001
Selenium-VI, Total	mg/L	0.001	0.002	0.002	0.003	4	0	0.001	0.003	0.002	0.0008165
Radionuclides, Dissolved											
Lead 210, Dissolved	pCi/L	<1	<1	NM	-1 j	3	2	<1	0	0	0.8660254
Polonium 210, Dissolved	pCi/L	<1	1.8	NM	0 j	3	1	<1	1.8	0.76667	0.9291573
Radium 226, Dissolved	pCi/L	0.6	0.6	0.4	0.7	4	0	0.4	0.7	0.575	0.1258306
Thorium 230, Dissolved	pCi/L	<0.2	<0.2	0.4	0.1 j	4	2	<0.2	0.4	0.175	0.15
Radionuclides, Suspended											
Lead 210, Suspended	pCi/L	<1	<1	NM	1.5 j	3	2	<1	1.5	0.83333	0.5773503
Polonium 210, Suspended	pCi/L	<1	<1	NM	0.3 j	3	2	<1	0.3	0.43333	0.1154701
Radium 226, Suspended	pCi/L	<0.2	<0.2	<0.2	-0.4 j	4	3	<0.2	-0.4	-0.025	0.25
Thorium 230, Suspended	pCi/L	<0.2	0.7	0.4	0.1 j	4	1	<0.2	0.7	0.325	0.2872281
Radionuclides, Total											
Gross Alpha, Total	pCi/L	82.8	132	131	199	4	0	82.8	199	136.2	47.749625
Gross Beta, Total	pCi/L	55.9	83.3	81.5	80.1	4	0	55.9	83.3	75.2	12.933162
Gross Gamma, Total	pCi/L	<20	1060	<20	0 j	4	2	<20	1060	270	526.68776
Lead 210, Total	pCi/L	NM	<1	NM	0.5 j	2	1	<1	0.5	0.5	0
Polonium 210, Total	pCi/L	NM	1.5	NM	0.3 j	2	0	0.3	1.5	0.9	0.8485281
Radium 226, Total	pCi/L	NM	0.6	0.6	0.2 j	3	0	0.2	0.6	0.46667	0.2309401
Thorium 230, Total	pCi/L	NM	<0.2	0.5	0.2 j	3	1	<0.2	0.5	0.26667	0.2081666
Data Quality Parameters											
A/C Balance (± 5)	%	-4.01	-1.86	-3.33	4.36	4	0	-4.01	4.36	-1.21	3.8202007
Anions	meq/l	61.6	52.4	54.6	50.6	4	0	50.6	61.6	54.8	4.8194052
Cations	meq/l	56.8	50.5	51.1	55.2	4	0	50.5	56.8	53.4	3.082207
Solids, Total Dissolved Calculated	mg/L	3950	3400	3510	3390	4	0	3390	3950	3562.5	263.99179
TDS Balance (0.80 - 1.20)	dec. %	0.99	1.15	0.83	1.12	4	0	0.83	1.15	1.0225	0.1459166

Sampling Interval: Quarterly

Missing Samples and Reasons: None

* 1/2 RL used to calculate the mean and st dev where non-detect data occurred.

NM - not measured in field/not requested for analysis from lab

Dewey-Burdock Surface Water Sampling Location		Sub03		Summary Statistics for Sub03					
Description		Mine Dam							
Date and Time Collected		11/12/2007 2:50:00 PM R07110147-003	6/18/2008 2:15:00 PM R08060347-004						
Lab ID									
Analyte	Units	Result	Result	n	n (non-detect)	Minimum	Maximum	Mean*	StDev*
Field Parameters									
Field Conductivity	umhos/cm	1225	1023	2	0	1023	1225	1124	142.83557
Field Dissolved Oxygen	mg/L	10.21	8.94	2	0	8.94	10.21	9.575	0.8980256
Field pH	s.u.	6.49	6.11	2	0	6.11	6.49	6.3	0.2687006
Field Temperature	Deg C	10.89	31.9	2	0	10.89	31.9	21.395	14.856313
Field Turbidity	NTUs	6.6	12.7	2	0	6.6	12.7	9.65	4.3133514
Microbiological									
Bacteria, Fecal Coliform	CFU/100ml	<2	<2	2	2	<2	<2	<2	<2
Physical Properties									
Conductivity @ 25 C	umhos/cm	1080	975	2	0	975	1080	1027.5	74.246212
pH, Laboratory	s.u.	4.58	4.4	2	0	4.4	4.58	4.49	0.1272792
Sodium Adsorption Ratio (SAR)	unitless	0.15	<0.1	2	1	<0.1	0.15	0.1	0.0707107
Solids, Suspended Sediment SSC @ 105 C	mg/L	<5	37	2	1	<5	37	19.75	24.395184
Solids, Total Dissolved TDS @ 180 C	mg/L	970	820	2	0	820	970	895	106.06602
Solids, Total Suspended TSS @ 105 C	mg/L	6	26	2	0	6	26	16	14.142136
Major Ions									
Alkalinity, Total as CaCO3	mg/L	<5	<5	2	2	<5	<5	<5	<5
Bicarbonate as HCO3	mg/L	<5	<5	2	2	<5	<5	<5	<5
Calcium, Dissolved	mg/L	128	130	2	0	128	130	129	1.4142136
Carbonate as CO3	mg/L	<5	<5	2	2	<5	<5	<5	<5
Chloride	mg/L	9	2	2	0	2	9	5.5	4.9497475
Fluoride	mg/L	0.2	0.4	2	0	0.2	0.4	0.3	0.1414214
Magnesium, Dissolved	mg/L	53.4	47.4	2	0	47.4	53.4	50.4	4.2426407
Nitrogen, Ammonia as N	mg/L	0.1	0.1	2	0	0.1	0.1	0.1	0
Nitrogen, Nitrate as N	mg/L	<0.1	<0.1	2	2	<0.1	<0.1	<0.1	<0.1
Potassium, Dissolved	mg/L	35	16	2	0	16	35	25.5	13.435029
Silica	mg/L	7.5	2.1	2	0	2.1	7.5	4.8	3.8183766
Sodium, Dissolved	mg/L	8.2 d	4 d	2	0	4	8.2	6.1	2.9698485
Sulfate, Total	mg/L	699 d	510 d	2	0	510	699	604.5	133.64318
Metals, Dissolved									
Aluminum, Dissolved	mg/L	0.6	0.6	2	0	0.6	0.6	0.6	0
Arsenic, Dissolved	mg/L	<0.001	<0.001	2	2	<0.001	<0.001	<0.001	<0.001
Barium, Dissolved	mg/L	<0.1	<0.1	2	2	<0.1	<0.1	<0.1	<0.1
Boron, Dissolved	mg/L	<0.1	0.2	2	1	<0.1	0.2	0.125	0.106066
Cadmium, Dissolved	mg/L	<0.005	<0.005	2	2	<0.005	<0.005	<0.005	<0.005
Chromium, Dissolved	mg/L	<0.01	<0.01	2	2	<0.01	<0.01	<0.01	<0.01
Copper, Dissolved	mg/L	<0.01	<0.01	2	2	<0.01	<0.01	<0.01	<0.01
Iron, Dissolved	mg/L	0.12	0.24	2	0	0.12	0.24	0.18	0.0848528
Lead, Dissolved	mg/L	<0.001	<0.001	2	2	<0.001	<0.001	<0.001	<0.001
Manganese, Dissolved	mg/L	11.6	8.44	2	0	8.44	11.6	10.02	2.2344574
Mercury, Dissolved	mg/L	<0.001	<0.001	2	2	<0.001	<0.001	<0.001	<0.001
Molybdenum, Dissolved	mg/L	<0.1	<0.1	2	2	<0.1	<0.1	<0.1	<0.1
Nickel, Dissolved	mg/L	0.23	0.17	2	0	0.17	0.23	0.2	0.0424264
Selenium, Dissolved	mg/L	<0.001	<0.005	2	2	<0.001	<0.005	<0.005	<0.005
Silver, Dissolved	mg/L	<0.005	<0.005	2	2	<0.005	<0.005	<0.005	<0.005
Thorium 232, Dissolved	mg/L	<0.005	<0.005	2	2	<0.005	<0.005	<0.005	<0.005
Uranium, Dissolved	mg/L	0.0014	0.0023	2	0	0.0014	0.0023	0.00185	0.0006364
Vanadium, Dissolved	mg/L	<0.1	<0.1	2	2	<0.1	<0.1	<0.1	<0.1
Zinc, Dissolved	mg/L	0.16	0.1	2	0	0.1	0.16	0.13	0.0424264
Metals, Dissolved, Speciated									
Selenium-IV, Dissolved	mg/L	<0.001	<0.001	2	2	<0.001	<0.001	<0.001	<0.001
Selenium-VI, Dissolved	mg/L	<0.001	<0.001	2	2	<0.001	<0.001	<0.001	<0.001
Metals, Suspended									
Thorium 232, Suspended	mg/L	<0.001	<0.001	2	2	<0.001	<0.001	<0.001	<0.001
Uranium, Suspended	mg/L	0.0008	0.0004	2	0	0.0004	0.0008	0.0006	0.0002828
Metals, Total									
Aluminum, Total	mg/L	0.7	1.2	2	0	0.7	1.2	0.95	0.3535534
Arsenic, Total	mg/L	<0.001	0.002	2	1	<0.001	0.002	0.00125	0.0010607
Barium, Total	mg/L	<0.1	<0.1	2	2	<0.1	<0.1	<0.1	<0.1
Boron, Total	mg/L	<0.1	0.1	2	1	<0.1	0.1	0.075	0.0353553
Cadmium, Total	mg/L	<0.005	<0.005	2	2	<0.005	<0.005	<0.005	<0.005
Calcium, Total	mg/L	NM	132	1	0	132	132	132	---
Chromium, Hexavalent	mg/L	<0.005	0.006 b	2	1	<0.005	0.006	0.00425	0.0024749
Chromium, Total	mg/L	<0.05	<0.05	2	2	<0.05	<0.05	<0.05	<0.05
Chromium, Trivalent	mg/L	<0.01	<0.01	2	2	<0.01	<0.01	<0.01	<0.01
Copper, Total	mg/L	<0.01	<0.01	2	2	<0.01	<0.01	<0.01	<0.01
Iron, Total	mg/L	0.16	1.1	2	0	0.16	1.1	0.63	0.6646804
Lead, Total	mg/L	<0.001	<0.001	2	2	<0.001	<0.001	<0.001	<0.001
Magnesium, Total	mg/L	NM	48.6	1	0	48.6	48.6	48.6	---
Manganese, Total	mg/L	12.2	8.43	2	0	8.43	12.2	10.315	2.6657926
Mercury, Total	mg/L	<0.001	<0.001	2	2	<0.001	<0.001	<0.001	<0.001
Molybdenum, Total	mg/L	<0.1	<0.1	2	2	<0.1	<0.1	<0.1	<0.1
Nickel, Total	mg/L	0.23	0.17	2	0	0.17	0.23	0.2	0.0424264

Dewey-Burdock Surface Water Sampling Location		Sub03		Summary Statistics for Sub03					
Description		Mine Dam							
Date and Time Collected		11/12/2007 2:50:00 PM	6/18/2008 2:15:00 PM						
Lab ID		R07110147 -003	R08060347 -004						
Analyte	Units	Result	Result	n	n (non- detect)	Minimum	Maximum	Mean*	StDev*
Potassium, Total	mg/L	NM	17.9	1	0	17.9	17.9	17.9	---
Selenium, Total	mg/L	<0.001	<0.001	2	2	<0.001	<0.001	<0.001	<0.001
Silica, Total	mg/L	NM	3.8	1	0	3.8	3.8	3.8	---
Silver, Total	mg/L	<0.005	<0.005	2	2	<0.005	<0.005	<0.005	<0.005
Sodium, Total	mg/L	NM	5 d	1	0	5	5	5	---
Thorium 232, Total	mg/L	<0.005	<0.005	2	2	<0.005	<0.005	<0.005	<0.005
Uranium, Total	mg/L	0.0014	0.0031	2	0	0.0014	0.0031	0.00225	0.0012021
Vanadium, Total	mg/L	<0.1	0.2	2	1	<0.1	0.2	0.125	0.106066
Zinc, Total	mg/L	0.17	0.08	2	0	0.08	0.17	0.125	0.0636396
Metals, Total, Speciated									
Selenium-IV, Total	mg/L	<0.001	<0.001	2	2	<0.001	<0.001	<0.001	<0.001
Selenium-VI, Total	mg/L	<0.001	<0.001	2	2	<0.001	<0.001	<0.001	<0.001
Radionuclides, Dissolved									
Lead 210, Dissolved	pCi/L	<1	-3 j	2	1	<1	-3	-1.25	2.4748737
Polonium 210, Dissolved	pCi/L	<1	0 j	2	1	<1	0	0.25	0.3535534
Radium 226, Dissolved	pCi/L	4.5	2.6	2	0	2.6	4.5	3.55	1.3435029
Thorium 230, Dissolved	pCi/L	<0.2	0 j	2	1	<0.2	0	0.05	0.0707107
Radionuclides, Suspended									
Lead 210, Suspended	pCi/L	<1	-0.8 j	2	1	<1	-0.8	-0.15	0.9192388
Polonium 210, Suspended	pCi/L	<1	0.5 j	2	1	<1	0.5	0.5	0
Radium 226, Suspended	pCi/L	<0.2	-0.09 j	2	1	<0.2	-0.09	0.005	0.1343503
Thorium 230, Suspended	pCi/L	1.3	0.4	2	0	0.4	1.3	0.85	0.6363961
Radionuclides, Total									
Gross Alpha, Total	pCi/L	16.6	19.9	2	0	16.6	19.9	18.25	2.3334524
Gross Beta, Total	pCi/L	38.8	21.8	2	0	21.8	38.8	30.3	12.020815
Gross Gamma, Total	pCi/L	1270	1080	2	0	1080	1270	1175	134.35029
Lead 210, Total	pCi/L	<1	-3.8 j	2	1	<1	-3.8	-1.65	3.0405592
Polonium 210, Total	pCi/L	2.5	0.5 j	2	0	0.5	2.5	1.5	1.4142136
Radium 226, Total	pCi/L	4	2.5	2	0	2.5	4	3.25	1.0606602
Thorium 230, Total	pCi/L	<0.2	0.3	2	1	<0.2	0.3	0.2	0.1414214
Data Quality Parameters									
A/C Balance (± 5)	%	0.0673	4.34	2	0	0.0673	4.34	2.20365	3.0212551
Anions	meq/l	12.9	10.7	2	0	10.7	12.9	11.8	1.5556349
Cations	meq/l	12.9	11.7	2	0	11.7	12.9	12.3	0.8485281
Solids, Total Dissolved Calculated	mg/L	851	716	2	0	716	851	783.5	95.459415
TDS Balance (0.80 - 1.20)	dec. %	1.14	1.15	2	0	1.14	1.15	1.145	0.0070711

Sampling Interval: Quarterly

Missing Samples and Reasons: September 2007 and February/March 2008 - Dry

* 1/2 RL used to calculate the mean and st dev where non-detect data occurred.

NM - not measured in field/not requested for analysis from lab



Dewey-Burdock Surface Water Sampling Location		Sub04		Summary Statistics for Sub04					
Description		Stock Pond							
Date and Time Collected		11/12/2007 1:50:00 PM R07110147 -002	6/17/2008 2:00:00 PM R08060316 -001						
Lab ID									
Analyte	Units	Result	Result	n	n (non-detect)	Minimum	Maximum	Mean*	StDev*
Field Parameters									
Field Conductivity	umhos/cm	1868	562	2	0	562	1868	1215	923.48146
Field Dissolved Oxygen	mg/L	9.77	9.52	2	0	9.52	9.77	9.645	0.1767767
Field pH	s.u.	7.2	4.68	2	0	4.68	7.2	5.94	1.7819091
Field Temperature	Deg C	9.53	27.07	2	0	9.53	27.07	18.3	12.402653
Field Turbidity	NTUs	37.3	1.4	2	0	1.4	37.3	19.35	25.385133
Microbiological									
Bacteria, Fecal Coliform	CFU/100ml	<2	<2	2	2	<2	<2	<2	<2
Physical Properties									
Conductivity @ 25 C	umhos/cm	1650	692	2	0	692	1650	1171	677.4083
pH, Laboratory	s.u.	4.65	4.89	2	0	4.65	4.89	4.77	0.1697056
Sodium Adsorption Ratio (SAR)	unitless	0.25	<0.1	2	1	<0.1	0.25	0.15	0.1414214
Solids, Suspended Sediment SSC @ 105 C	mg/L	12	<5	2	1	<5	12	7.25	6.7175144
Solids, Total Dissolved TDS @ 180 C	mg/L	1700	450	2	0	450	1700	1075	883.88348
Solids, Total Suspended TSS @ 105 C	mg/L	23	<5	2	1	<5	23	12.75	14.495689
Major Ions									
Alkalinity, Total as CaCO3	mg/L	<5	<5	2	2	<5	<5	<5	<5
Bicarbonate as HCO3	mg/L	<5	<5	2	2	<5	<5	<5	<5
Calcium, Dissolved	mg/L	201	64.8	2	0	64.8	201	132.9	96.307944
Carbonate as CO3	mg/L	<5	<5	2	2	<5	<5	<5	<5
Chloride	mg/L	18	2	2	0	2	18	10	11.313708
Fluoride	mg/L	0.6	0.4	2	0	0.4	0.6	0.5	0.1414214
Magnesium, Dissolved	mg/L	99.5	27.3	2	0	27.3	99.5	63.4	51.05311
Nitrogen, Ammonia as N	mg/L	0.3	<0.1	2	1	<0.1	0.3	0.175	0.1767767
Nitrogen, Nitrate as N	mg/L	<0.1	<0.1	2	2	<0.1	<0.1	<0.1	<0.1
Potassium, Dissolved	mg/L	46	14	2	0	14	46	30	22.627417
Silica	mg/L	16.2	3.7	2	0	3.7	16.2	9.95	8.8388348
Sodium, Dissolved	mg/L	17.1 d	2.9 d	2	0	2.9	17.1	10	10.040916
Sulfate, Total	mg/L	1200 d	291 d	2	0	291	1200	745.5	642.76006
Metals, Dissolved									
Aluminum, Dissolved	mg/L	1.2	0.4	2	0	0.4	1.2	0.8	0.5656854
Arsenic, Dissolved	mg/L	<0.001	<0.001	2	2	<0.001	<0.001	<0.001	<0.001
Barium, Dissolved	mg/L	<0.1	<0.1	2	2	<0.1	<0.1	<0.1	<0.1
Boron, Dissolved	mg/L	0.1	<0.1	2	1	<0.1	0.1	0.075	0.0353553
Cadmium, Dissolved	mg/L	0.008	<0.005	2	1	<0.005	0.008	0.00525	0.0038891
Chromium, Dissolved	mg/L	<0.01	<0.01	2	2	<0.01	<0.01	<0.01	<0.01
Copper, Dissolved	mg/L	<0.01	<0.01	2	2	<0.01	<0.01	<0.01	<0.01
Iron, Dissolved	mg/L	1.48	<0.03	2	1	<0.03	1.48	0.7475	1.0359114
Lead, Dissolved	mg/L	0.001	<0.001	2	1	<0.001	0.001	0.00075	0.0003536
Manganese, Dissolved	mg/L	20.4	5.2	2	0	5.2	20.4	12.8	10.748023
Mercury, Dissolved	mg/L	<0.001	<0.001	2	2	<0.001	<0.001	<0.001	<0.001
Molybdenum, Dissolved	mg/L	<0.1	<0.1	2	2	<0.1	<0.1	<0.1	<0.1
Nickel, Dissolved	mg/L	0.43	0.09	2	0	0.09	0.43	0.26	0.2404163
Selenium, Dissolved	mg/L	<0.001	<0.005	2	2	<0.001	<0.005	<0.005	<0.005
Silver, Dissolved	mg/L	<0.005	<0.005	2	2	<0.005	<0.005	<0.005	<0.005
Thorium 232, Dissolved	mg/L	<0.005	<0.005	2	2	<0.005	<0.005	<0.005	<0.005
Uranium, Dissolved	mg/L	0.0021	0.0006	2	0	0.0006	0.0021	0.00135	0.0010607
Vanadium, Dissolved	mg/L	<0.1	<0.1	2	2	<0.1	<0.1	<0.1	<0.1
Zinc, Dissolved	mg/L	0.37	0.07	2	0	0.07	0.37	0.22	0.212132
Metals, Dissolved, Speciated									
Selenium-IV, Dissolved	mg/L	<0.001	<0.001	2	2	<0.001	<0.001	<0.001	<0.001
Selenium-VI, Dissolved	mg/L	<0.001	<0.001	2	2	<0.001	<0.001	<0.001	<0.001
Metals, Suspended									
Thorium 232, Suspended	mg/L	<0.001	<0.001	2	2	<0.001	<0.001	<0.001	<0.001
Uranium, Suspended	mg/L	0.0014	<0.0003	2	1	<0.0003	0.0014	0.00078	0.0008839
Metals, Total									
Aluminum, Total	mg/L	1.5	0.5	2	0	0.5	1.5	1	0.7071068
Arsenic, Total	mg/L	<0.001	<0.002	2	2	<0.001	<0.002	<0.002	<0.002
Barium, Total	mg/L	<0.1	<0.1	2	2	<0.1	<0.1	<0.1	<0.1
Boron, Total	mg/L	<0.1	<0.1	2	2	<0.1	<0.1	<0.1	<0.1
Cadmium, Total	mg/L	0.008	<0.005	2	1	<0.005	0.008	0.00525	0.0038891
Calcium, Total	mg/L	NM	61.7	1	0	61.7	61.7	61.7	---
Chromium, Hexavalent	mg/L	<0.05	<0.005	2	2	<0.005	<0.05	<0.05	<0.05
Chromium, Total	mg/L	<0.05	<0.05	2	2	<0.05	<0.05	<0.05	<0.05
Chromium, Trivalent	mg/L	<0.01	<0.01	2	2	<0.01	<0.01	<0.01	<0.01
Copper, Total	mg/L	<0.01	<0.01	2	2	<0.01	<0.01	<0.01	<0.01
Iron, Total	mg/L	3.73	0.18	2	0	0.18	3.73	1.955	2.5102291
Lead, Total	mg/L	<0.001	<0.001	2	2	<0.001	<0.001	<0.001	<0.001
Magnesium, Total	mg/L	NM	26.8	1	0	26.8	26.8	26.8	---
Manganese, Total	mg/L	21.3	5.18	2	0	5.18	21.3	13.24	11.398561
Mercury, Total	mg/L	<0.001	<0.0001	2	2	<0.0001	<0.001	<0.001	<0.001
Molybdenum, Total	mg/L	<0.1	<0.1	2	2	<0.1	<0.1	<0.1	<0.1
Nickel, Total	mg/L	0.44	0.1	2	0	0.1	0.44	0.27	0.2404163



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Dewey-Burdock Surface Water Sampling Location		Sub04		Summary Statistics for Sub04					
Description		Stock Pond							
Date and Time Collected		11/12/2007 1:50:00 PM	6/17/2008 2:00:00 PM						
Lab ID		R07110147 -002	R08060316 -001						
Analyte	Units	Result	Result	n	n (non- detect)	Minimum	Maximum	Mean*	StDev*
Potassium, Total	mg/L	NM	14.7	1	0	14.7	14.7	14.7	---
Selenium, Total	mg/L	<0.001	0.001	2	1	<0.001	0.001	0.00075	0.0003536
Silica, Total	mg/L	NM	3.9	1	0	3.9	3.9	3.9	---
Silver, Total	mg/L	<0.005	<0.005	2	2	<0.005	<0.005	<0.005	<0.005
Sodium, Total	mg/L	NM	3 d	1	0	3	3	3	---
Thorium 232, Total	mg/L	<0.005	<0.005	2	2	<0.005	<0.005	<0.005	<0.005
Uranium, Total	mg/L	0.0024	0.0007	2	0	0.0007	0.0024	0.00155	0.0012021
Vanadium, Total	mg/L	<0.1	<0.1	2	2	<0.1	<0.1	<0.1	<0.1
Zinc, Total	mg/L	0.41	0.06	2	0	0.06	0.41	0.235	0.2474874
Metals, Total, Speciated									
Selenium-IV, Total	mg/L	<0.001	<0.001	2	2	<0.001	<0.001	<0.001	<0.001
Selenium-VI, Total	mg/L	<0.001	0.001	2	1	<0.001	0.001	0.00075	0.0003536
Radionuclides, Dissolved									
Lead 210, Dissolved	pCi/L	<1	-2.1 j	2	1	<1	-2.1	-0.8	1.8384776
Polonium 210, Dissolved	pCi/L	2.2	0.2 j	2	0	0.2	2.2	1.2	1.4142136
Radium 226, Dissolved	pCi/L	3.4	3.1	2	0	3.1	3.4	3.25	0.212132
Thorium 230, Dissolved	pCi/L	0.9	0 j	2	0	0	0.9	0.45	0.6363961
Radionuclides, Suspended									
Lead 210, Suspended	pCi/L	<1	6.7 j	2	1	<1	6.7	3.6	4.384062
Polonium 210, Suspended	pCi/L	<1	0.2 j	2	1	<1	0.2	0.35	0.212132
Radium 226, Suspended	pCi/L	<0.2	-0.4 j	2	1	<0.2	-0.4	-0.15	0.3535534
Thorium 230, Suspended	pCi/L	0.5	0.2 j	2	0	0.2	0.5	0.35	0.212132
Radionuclides, Total									
Gross Alpha, Total	pCi/L	13.6	3	2	0	3	13.6	8.3	7.4953319
Gross Beta, Total	pCi/L	51.3	13	2	0	13	51.3	32.15	27.08219
Gross Gamma, Total	pCi/L	<20	0 j	2	1	<20	0	5	7.0710678
Lead 210, Total	pCi/L	<1	-3 j	2	1	<1	-3	-1.25	2.4748737
Polonium 210, Total	pCi/L	3.4	0.4 j	2	0	0.4	3.4	1.9	2.1213203
Radium 226, Total	pCi/L	3.5	2.7	2	0	2.7	3.5	3.1	0.5656854
Thorium 230, Total	pCi/L	<0.2	0.2 j	2	1	<0.2	0.2	0.15	0.0707107
Data Quality Parameters									
A/C Balance (± 5)	%	-0.902	2.01	2	0	-0.902	2.01	0.554	2.0590949
Anions	meq/l	22.3	6.13	2	0	6.13	22.3	14.215	11.433917
Cations	meq/l	21.9	6.39	2	0	6.39	21.9	14.145	10.967226
Solids, Total Dissolved Calculated	mg/L	1450	412	2	0	412	1450	931	733.97684
TDS Balance (0.80 - 1.20)	dec. %	1.18	1.08	2	0	1.08	1.18	1.13	0.0707107

Sampling Interval: Quarterly

Missing Samples and Reasons: September 2007 and February/March 2008 - Dry

* 1/2 RL used to calculate the mean and st dev where non-detect data occurred.

NM - not measured in field/not requested for analysis from lab



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Sub05

Sampling interval: Quarterly

Missing Samples and Reasons: September and November 2007 and February/March and June 2008 - Dry



Dewey-Burdock Surface Water Sampling Location		Sub06				Summary Statistics for Sub06					
Description		Darrow Mine Pit Northwest									
Date and Time Collected		9/27/2007 6:10:00 PM	11/27/2007 9:36:00 AM	2/10/2008 4:10:00 PM	6/23/2008 1:45:00 PM						
Lab ID		R07090389 -003	R07110302 -002	R08020083 -002	R08060403 -003						
Analyte	Units	Result	Result	Result	Result	n	n (non- detect)	Minimum	Maximum	Mean*	StDev*
Field Parameters											
Field Conductivity	umhos/cm	4125	6255	7140	4126	4	0	4125	7140	5411.5	1528.2667
Field Dissolved Oxygen	mg/L	6.96	13.32	13.41	9.56	4	0	6.96	13.41	10.8125	3.132894
Field pH	s.u.	3.21	2.82	4.42	3.49	4	0	2.82	4.42	3.485	0.6811999
Field Temperature	Deg C	16.2	2.84	0.03	25.12	4	0	0.03	25.12	11.0475	11.737857
Field Turbidity	NTUs	NM	0.2	22	10.3	3	0	0.2	22	10.8333	10.909782
Microbiological											
Bacteria, Fecal Collform	CFU/100ml	<2	<2	<2	<2	4	4	<2	<2	<2	<2
Physical Properties											
Conductivity @ 25 C	umhos/cm	6210	6390	7640	4110	4	0	4110	7640	6087.5	1463.7025
pH, Laboratory	s.u.	3.22	3.2	3.19	3.52	4	0	3.19	3.52	3.2825	0.1588238
Sodium Adsorption Ratio (SAR)	unitless	NM	0.59	0.7	0.44	3	0	0.44	0.7	0.57667	0.1305118
Solids, Suspended Sediment SSC @ 105 C	mg/L	10	<5	14	8	4	1	<5	14	8.625	4.7849591
Solids, Total Dissolved TDS @ 180 C	mg/L	8100	8600	6800	4500	4	0	4500	8600	7000	1831.2109
Solids, Total Suspended TSS @ 105 C	mg/L	5	5	10	14	4	0	5	14	8.5	4.3588989
Major Ions											
Alkalinity, Total as CaCO3	mg/L	82	<5	<5	<5	4	3	<5	82	22.375	39.75
Bicarbonate as HCO3	mg/L	100	<5	<5	<5	4	3	<5	100	26.875	48.75
Calcium, Dissolved	mg/L	512	471 d	534 d	328	4	0	328	534	461.25	92.590046
Carbonate as CO3	mg/L	<5	<5	<5	<5	4	4	<5	<5	<5	<5
Chloride	mg/L	10	7	10	5	4	0	5	10	8	2.4494897
Fluoride	mg/L	3.7	5.5	7.4	3.9	4	0	3.7	7.4	5.125	1.7173138
Magnesium, Dissolved	mg/L	771	707	878	436	4	0	436	878	698	188.37374
Nitrogen, Ammonia as N	mg/L	NM	3.4 d	4.5 d	2	3	0	2	4.5	3.3	1.2529964
Nitrogen, Nitrate as N	mg/L	0.4	0.4	0.4	0.6	4	0	0.4	0.6	0.45	0.1
Potassium, Dissolved	mg/L	27	29	35	17	4	0	17	35	27	7.4833148
Silica	mg/L	30	34.1	37.2	10.2	4	0	10.2	37.2	27.875	12.146707
Sodium, Dissolved	mg/L	88	86.1 d	113 d	52 d	4	0	52	113	84.775	25.053326
Sulfate, Total	mg/L	5030 d	5700 d	7330 d	3180 d	4	0	3180	7330	5310	1717.3429
Metals, Dissolved											
Aluminum, Dissolved	mg/L	134	131	162	64.4	4	0	64.4	162	122.85	41.391907
Arsenic, Dissolved	mg/L	0.003	0.004	0.004	0.002	4	0	0.002	0.004	0.00325	0.0009574
Barium, Dissolved	mg/L	<0.1	<0.1	<0.1	<0.1	4	4	<0.1	<0.1	<0.1	<0.1
Boron, Dissolved	mg/L	0.6	<0.1	<0.1	0.2	4	2	<0.1	0.6	0.225	0.2598076
Cadmium, Dissolved	mg/L	0.026	0.026	0.036	0.015	4	0	0.015	0.036	0.02575	0.0085781
Chromium, Dissolved	mg/L	<0.01	<0.01	<0.05	0.01	4	3	<0.01	0.01	0.01125	0.0094648
Copper, Dissolved	mg/L	0.11	0.1	0.13	0.07	4	0	0.07	0.13	0.1025	0.025
Iron, Dissolved	mg/L	4.28	5.74	7.35	1.88	4	0	1.88	7.35	4.8125	2.3225184
Lead, Dissolved	mg/L	0.001	0.001	0.001	<0.001	4	1	<0.001	0.001	0.00088	0.00025
Manganese, Dissolved	mg/L	223	249	299	133	4	0	133	299	226	69.560525
Mercury, Dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	4	4	<0.001	<0.001	<0.001	<0.001
Molybdenum, Dissolved	mg/L	<0.1	<0.1	<0.1	<0.1	4	4	<0.1	<0.1	<0.1	<0.1
Nickel, Dissolved	mg/L	5.07	5.58	6.45	3.01	4	0	3.01	6.45	5.0275	1.4606933
Selenium, Dissolved	mg/L	0.035	0.014	0.017	0.009	4	0	0.009	0.035	0.01875	0.0113248
Silver, Dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	4	4	<0.005	<0.005	<0.005	<0.005
Thorium 232, Dissolved	mg/L	0.011	0.01	0.013	<0.005	4	1	<0.005	0.013	0.00913	0.0045894
Uranium, Dissolved	mg/L	5.29	5.84	7.84	3.22	4	0	3.22	7.84	5.5475	1.8995328
Vanadium, Dissolved	mg/L	<0.1	<0.1	<0.1	<0.1	4	4	<0.1	<0.1	<0.1	<0.1
Zinc, Dissolved	mg/L	4.31	4.45	6.58	2.99	4	0	2.99	6.58	4.5825	1.4852469
Metals, Dissolved, Speciated											
Selenium-IV, Dissolved	mg/L	NM	<0.001	<0.001	<0.001	3	3	<0.001	<0.001	<0.001	<0.001
Selenium-VI, Dissolved	mg/L	NM	0.014	0.002	0.009	3	0	0.002	0.014	0.00833	0.0060277
Metals, Suspended											
Thorium 232, Suspended	mg/L	<0.001	<0.001	<0.001	<0.001	4	4	<0.001	<0.001	<0.001	<0.001
Uranium, Suspended	mg/L	0.0013	0.0013	0.0019	0.0015	4	0	0.0013	0.0019	0.0015	0.0002828
Metals, Total											
Aluminum, Total	mg/L	160	<0.1	166	62.8	4	1	<0.1	166	97.2125	80.20549
Arsenic, Total	mg/L	<0.003	0.003	0.004	0.002	4	1	<0.003	0.004	0.00263	0.0011087
Barium, Total	mg/L	<0.1	<0.1	<0.1	<0.1	4	4	<0.1	<0.1	<0.1	<0.1
Boron, Total	mg/L	0.7	<0.1	<0.1	0.2	4	2	<0.1	0.7	0.25	0.3082207
Cadmium, Total	mg/L	0.03 d	0.027	0.031	0.019	4	0	0.019	0.031	0.02675	0.0054391
Calcium, Total	mg/L	NM	NM	571 d	330	2	0	330	571	450.5	170.41273
Chromium, Hexavalent	mg/L	<0.05	<0.02	<0.01	<0.005	4	4	<0.005	<0.05	<0.05	<0.05
Chromium, Total	mg/L	<0.05	<0.05	<0.05	<0.05	4	4	<0.05	<0.05	<0.05	<0.05
Chromium, Trivalent	mg/L	<0.01	<0.01	<0.01	<0.01	4	4	<0.01	<0.01	<0.01	<0.01
Copper, Total	mg/L	0.14	0.1	0.13	0.06	4	0	0.06	0.14	0.1075	0.0359398
Iron, Total	mg/L	4.66	5.93	8.22	2.19	4	0	2.19	8.22	5.25	2.5162803
Lead, Total	mg/L	<0.003	0.001	0.001	0.011 d	4	1	<0.003	0.011	0.00363	0.0049223
Magnesium, Total	mg/L	NM	NM	930 d	439	2	0	439	930	684.5	347.18943
Manganese, Total	mg/L	215	246	317	0.06	4	0	0.06	317	194.515	136.48646
Mercury, Total	mg/L	<0.001	<0.001	<0.001	<0.0001	4	4	<0.0001	<0.001	<0.001	<0.001
Molybdenum, Total	mg/L	<0.1	<0.1	<0.1	<0.1	4	4	<0.1	<0.1	<0.1	<0.1
Nickel, Total	mg/L	6.53	<0.05	6.14	3.03	4	1	<0.05	6.53	3.93125	3.0388111



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Dewey-Burdock Surface Water Sampling Location		Sub06				Summary Statistics for Sub06					
Description		Darrow Mine Pit Northwest									
Date and Time Collected		9/27/2007 6:10:00 PM	11/27/2007 9:36:00 AM	2/10/2008 4:10:00 PM	6/23/2008 1:45:00 PM						
Lab ID		R07090389 -003	R07110302 -002	R08020083 -002	R08060403 -003						
Analyte	Units	Result	Result	Result	Result	n	n (non- detect)	Minimum	Maximum	Mean*	StDev
Potassium, Total	mg/L	NM	NM	37.1	17.7	2	0	17.7	37.1	27.4	13.717872
Selenium, Total	mg/L	0.013	0.013	0.016	0.008	4	0	0.008	0.016	0.0125	0.0033166
Silica, Total	mg/L	NM	NM	41.5	11.4	2	0	11.4	41.5	26.45	21.283914
Silver, Total	mg/L	<0.005	<0.005	<0.005	<0.005	4	4	<0.005	<0.005	<0.005	<0.005
Sodium, Total	mg/L	NM	NM	115	54 d	2	0	54	115	84.5	43.133514
Thorium 232, Total	mg/L	0.01	0.01	0.013	0.005	4	0	0.005	0.013	0.0095	0.0033166
Uranium, Total	mg/L	7.38 d	5.83	6.73 d	3.61	4	0	3.61	7.38	5.8875	1.6459724
Vanadium, Total	mg/L	<0.1	<0.1	<0.1	<0.1	4	4	<0.1	<0.1	<0.1	<0.1
Zinc, Total	mg/L	5.55	4.46	7.22 d	2.92	4	0	2.92	7.22	5.0375	1.8113784
Metals, Total, Speciated											
Selenium-IV, Total	mg/L	<0.001	<0.001	<0.001	<0.001	4	4	<0.001	<0.001	<0.001	<0.001
Selenium-VI, Total	mg/L	0.013	0.013	0.016	0.008	4	0	0.008	0.016	0.0125	0.0033166
Radionuclides, Dissolved											
Lead 210, Dissolved	pCi/L	<1	<1	NM	-0.6 j	3	2	<1	0	0.13333	0.6350853
Polonium 210, Dissolved	pCi/L	<1	1.7	NM	0.3 j	3	1	<1	1.7	0.83333	0.7571878
Radium 226, Dissolved	pCi/L	4.3	2	2.2	2.2	4	0	2	4.3	2.675	1.0874282
Thorium 230, Dissolved	pCi/L	23.8	27.8	25.2	6.3	4	0	6.3	27.8	20.775	9.7912801
Radionuclides, Suspended											
Lead 210, Suspended	pCi/L	<1	<1	NM	3.7 j	3	2	<1	3.7	1.56667	1.8475209
Polonium 210, Suspended	pCi/L	4.5	1.4	NM	0.4 j	3	0	0.4	4.5	2.1	2.1377558
Radium 226, Suspended	pCi/L	<0.2	<0.2	1	-0.2 j	4	2	<0.2	1	0.25	0.5196152
Thorium 230, Suspended	pCi/L	<0.2	1	<0.2	0.2 j	4	2	<0.2	1	0.35	0.4358899
Radionuclides, Total											
Gross Alpha, Total	pCi/L	3070	6780	8750	3570	4	0	3070	8750	5542.5	2697.1266
Gross Beta, Total	pCi/L	2500	3200	3600	1200	4	0	1200	3600	2625	1053.1698
Gross Gamma, Total	pCi/L	<20	264	675	0 j	4	1	<20	675	237.25	316.37043
Lead 210, Total	pCi/L	NM	<1	NM	3.1 j	2	1	<1	3.1	1.8	1.8384776
Polonium 210, Total	pCi/L	NM	3.1	NM	0.7 j	2	0	0.7	3.1	1.9	1.6970563
Radium 226, Total	pCi/L	NM	2	1.8	2	3	0	1.8	2	1.93333	0.1154701
Thorium 230, Total	pCi/L	NM	28.8	31.1	6.5	3	0	6.5	31.1	22.1333	13.587617
Data Quality Parameters											
A/C Balance (± 5)	%	2.82	-0.00889	-2.74	3.85	4	0	-2.74	3.85	0.98028	2.9686587
Anions	meq/l	119	119	154	66.6	4	0	66.6	154	114.65	36.032717
Cations	meq/l	126	119	145	72	4	0	72	145	115.5	31.010751
Solids, Total Dissolved Calculated	mg/L	7090	7020	8910	4050	4	0	4050	8910	6767.5	2011.871
TDS Balance (0.80 - 1.20)	dec. %	1.14	1.23	0.77	1.12	4	0	0.77	1.23	1.065	0.2024022

Sampling Interval: Quarterly

Missing Samples and Reasons: None

* 1/2 RL used to calculate the mean and st dev where non-detect data occurred.

NM - not measured in field/not requested for analysis from lab

Dewey-Burdock Surface Water Sampling Location		BVC01						
Description		Beaver Creek Downstream						
Date and Time Collected		7/24/2007 2:20:00 PM	8/20/2007 5:07:00 PM	9/26/2007 12:16:00 PM	10/17/2007 2:45:00 PM	11/19/2007 11:30:00 AM	12/11/2007 12:20:00 PM	1/11/2008 11:15:00 AM
Lab ID		R07070382	R07080273	R07090368	R07100295	R07110229	R07120148	R08010124
Analyte		Units	Result	Result	Result	Result	Result	Result
Field Parameters								
Field Conductivity	umhos/cm	NM	1777	1339	5726	7678	4134	2812
Field Dissolved Oxygen	mg/L	NM	12.29	10.95	11.13	12.2	11.21	10.07
Field pH	s.u.	NM	8.91	8.87	8.58	8.2	7.94	7.67
Field Temperature	Deg C	NM	27.57	16.74	12.14	3.54	-0.08	-0.07
Field Turbidity	NTUs	NM	21	1.7	2.5	6.4	6.4	8.6
Microbiological								
Bacteria, Fecal Coliform	CFU/100ml	68 d	2500 d	<2	76 d	30 d	6 d	16 d
Physical Properties								
Conductivity @ 25 C	umhos/cm	1480	1660	1740	5750	7290	4370	3140
pH, Laboratory	s.u.	8.31	8.8	8.79	7.84	7.77	7.88	7.68
Sodium Adsorption Ratio (SAR)	unitless	NM	NM	NM	11	13	4.7	1.9
Solids, Suspended Sediment SSC @ 105 C	mg/L	19	47	40	4510	20	13	12
Solids, Total Dissolved TDS @ 180 C	mg/L	950	1100	1200	4600	6100	3500	2900
Solids, Total Suspended TSS @ 105 C	mg/L	27	51	31	<5	20	10	12
Major Ions								
Alkalinity, Total as CaCO3	mg/L	134	112	78	112	196	188	214
Bicarbonate as HCO3	mg/L	163	137	85	137	239	229	261
Calcium, Dissolved	mg/L	68.4	73	53	314	379 d	452 d	499 d
Carbonate as CO3	mg/L	<5	<5	<5	<5	<5	<5	<5
Chloride	mg/L	101	158	141 d	852 d	1370 d	581 d	208 d
Chloride2	mg/L	NM	NM	NM	NM	NM	NM	NM
Fluoride	mg/L	0.7	0.6	0.9	0.5	0.2	0.3	0.4
Magnesium, Dissolved	mg/L	29.5	27.8	28	141	209	110	114
Nitrogen, Ammonia as N	mg/L	NM	NM	NM	<0.1	<0.1	<0.1	<0.1
Nitrogen, Nitrate as N	mg/L	<0.1	0.1	<0.1	<0.1	<0.1	0.3	0.4
Potassium, Dissolved	mg/L	9.5	11.4	11	15	11	5	5
Silica	mg/L	2.7	6.2	3.8	<1	1.6	11	13
Sodium, Dissolved	mg/L	213	263	242 d	950 d	1240 d	426 d	182 d
Sulfate, Total	mg/L	463 d	511 d	568 d	2180 d	2540 d	1430 d	1470 d
Metals, Dissolved								
Aluminum, Dissolved	mg/L	NM	NM	NM	<0.1	<0.1	<0.1	<0.1
Arsenic, Dissolved	mg/L	NM	NM	NM	0.001	<0.001	0.002	<0.001
Barium, Dissolved	mg/L	NM	NM	NM	<0.1	<0.1	<0.1	<0.1
Boron, Dissolved	mg/L	NM	NM	NM	0.3	0.6	0.2	0.2
Cadmium, Dissolved	mg/L	NM	NM	NM	<0.005	<0.005	<0.005	<0.005
Chromium, Dissolved	mg/L	NM	NM	NM	<0.01	<0.01	<0.01	<0.01
Copper, Dissolved	mg/L	NM	NM	NM	<0.01	<0.01	<0.01	<0.01
Iron, Dissolved	mg/L	NM	NM	NM	<0.03	0.18	<0.03	<0.03
Lead, Dissolved	mg/L	NM	NM	NM	<0.001	<0.001	<0.001	<0.001
Manganese, Dissolved	mg/L	NM	NM	NM	0.08	0.23	0.06	0.05
Mercury, Dissolved	mg/L	NM	NM	NM	<0.001	<0.001	<0.001	<0.001
Molybdenum, Dissolved	mg/L	NM	NM	NM	<0.1	<0.1	<0.1	<0.1
Nickel, Dissolved	mg/L	NM	NM	NM	<0.01	<0.01	<0.01	<0.01
Selenium, Dissolved	mg/L	NM	NM	NM	<0.001	<0.001	0.002	0.003
Silver, Dissolved	mg/L	NM	NM	NM	<0.005	<0.005	<0.005	<0.005
Thorium 232, Dissolved	mg/L	NM	NM	NM	<0.005	<0.005	<0.005	<0.005
Uranium, Dissolved	mg/L	NM	NM	0.0075	0.0097	0.0182	0.0124	0.0134
Vanadium, Dissolved	mg/L	NM	NM	NM	<0.1	<0.1	<0.1	<0.1
Zinc, Dissolved	mg/L	NM	NM	NM	<0.01	<0.01	<0.01	<0.01
Metals, Dissolved, Speciated								
Selenium-IV, Dissolved	mg/L	NM	NM	NM	<0.001	<0.001	<0.001	<0.001
Selenium-VI, Dissolved	mg/L	NM	NM	NM	<0.001	<0.001	0.002	0.003
Metals, Suspended								
Thorium 232, Suspended	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Uranium, Suspended	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Metals, Total								
Aluminum, Total	mg/L	NM	NM	NM	0.1	<0.1	0.2	0.3
Arsenic, Total	mg/L	0.002	0.002	0.002	0.001	<0.001	0.001	<0.001
Barium, Total	mg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Boron, Total	mg/L	0.2	0.2	0.21	0.3	0.5	0.2	0.2
Cadmium, Total	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium, Total	mg/L	NM	NM	NM	NM	NM	NM	506 d
Chromium, Hexavalent	mg/L	NM	NM	NM	<0.005	<0.005	<0.005	<0.005
Chromium, Total	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Chromium, Trivalent	mg/L	NM	NM	NM	<0.01	<0.01	<0.01	<0.01
Copper, Total	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Iron, Total	mg/L	0.48	0.66	0.61	0.13	0.05	0.25	0.29
Lead, Total	mg/L	<0.001	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Magnesium, Total	mg/L	NM	NM	NM	NM	NM	NM	121
Manganese, Total	mg/L	0.15	0.11	0.2	0.16	0.18	0.08	0.09
Mercury, Total	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Mercury, Total2	mg/L	NM	NM	NM	NM	NM	NM	NM



Dewey-Burdock Surface Water Sampling Location		BVC01						
Description		Beaver Creek Downstream						
Date and Time Collected		7/24/2007 2:20:00 PM	8/20/2007 5:07:00 PM	9/26/2007 12:16:00 PM	10/17/2007 2:45:00 PM	11/19/2007 11:30:00 AM	12/11/2007 12:20:00 PM	1/11/2008 11:15:00 AM
Lab ID		R07070382	R07080273	R07090368	R07100295	R07110229	R07120148	R08010124
Analyte		Units	Result	Result	Result	Result	Result	Result
Molybdenum, Total	mg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel, Total	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Potassium, Total	mg/L	NM	NM	NM	NM	NM	NM	5.3
Selenium, Total	mg/L	0.002	0.003	0.001	<0.001	<0.001	0.001	0.003
Silica, Total	mg/L	NM	NM	NM	NM	NM	NM	14.6
Silver, Total	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Sodium, Total	mg/L	NM	NM	NM	NM	NM	NM	191
Thorium 232, Total	mg/L	NM	NM	<0.005	<0.005	<0.005	<0.005	<0.005
Uranium, Total	mg/L	0.004	0.0046	0.0076	0.0097	0.018	0.0142	0.0139
Vanadium, Total	mg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc, Total	mg/L	<0.01	<0.01	<0.01	<0.01	0.03	<0.01	<0.01
Metals, Total, Speciated								
Selenium-IV, Total	mg/L	NM	NM	NM	<0.001	<0.001	<0.001	<0.001
Selenium-VI, Total	mg/L	NM	NM	NM	<0.001	<0.001	0.001	0.003
Radionuclides, Dissolved								
Lead 210, Dissolved	pCi/L	NM	NM	<1	<1	4.6	11	<1
Polonium 210, Dissolved	pCi/L	NM	NM	<1	2.6	1.9	1	<1
Radium 226, Dissolved	pCi/L	NM	NM	<0.2	0.3	<0.2	<0.2	<0.2
Thorium 230, Dissolved	pCi/L	NM	NM	<0.2	<0.2	<0.2	<0.2	<0.2
Radionuclides, Suspended								
Lead 210, Suspended	pCi/L	NM	NM	<1	<1	<1	3	<1
Polonium 210, Suspended	pCi/L	NM	NM	<1	<1	2.5	1.6	1.4
Radium 226, Suspended	pCi/L	NM	NM	<0.2	<0.2	<0.2	0.4	<0.2
Thorium 230, Suspended	pCi/L	NM	NM	<0.2	0.7	<0.2	<0.2	<0.2
Radionuclides, Total								
Gross Alpha, Total	pCi/L	5.9	7.1	6.6	12	65.8	27.9	12.6
Gross Beta, Total	pCi/L	10.3	14.7	9.4	2.7	44.4	14.9	4.1
Gross Gamma, Total	pCi/L	NM	NM	NM	<20	<20	1310	<20
Lead 210, Total	pCi/L	NM	NM	<1	NM	4.6	14	<1
Polonium 210, Total	pCi/L	NM	NM	<1	NM	4.4	2.6	1.4
Radium 226, Total	pCi/L	<0.2	<0.2	<0.2	NM	<0.2	0.4	<0.2
Thorium 230, Total	pCi/L	NM	NM	<0.2	NM	<0.2	<0.2	<0.2
Data Quality Parameters								
A/C Balance (± 5)	%	0.715	1.06	-4.61	-1.92	-2.71	0.412	1.85
Anions	meq/l	15.2	17.4	17.4	71.6	95.3	49.8	40.8
Cations	meq/l	15.4	17.8	15.9	68.9	90.3	50.3	42.3
Solids, Total Dissolved Calculated	mg/L	967	1120	1090	4520	5860	3110	2610
TDS Balance (0.80 - 1.20)	dec. %	0.98	0.96	1.08	1.02	1.04	1.14	1.09



Dewey-Burdock Surface Water Sampling Location		BVC01				Summary Statistics for BVC01					
Description		Beaver Creek Downstream									
Date and Time Collected		3/9/2008 3:15:00 PM	4/14/2008 6:43:00 PM	5/26/2008 2:00:00 PM	6/17/2008 11:05:00 AM						
Lab ID		R08030091 -005	R08040178 -004	R08050356 -002	R08060315 -002						
Analyte	Units	Result	Result	Result	Result	n	n (non- detect)	Minimum	Maximum	Mean*	StDev*
Field Parameters											
Field Conductivity	umhos/cm	1718	5109	860	5650	10	0	860	7678	3680.3	2308.3456
Field Dissolved Oxygen	mg/L	13.57	9.2	6.86	10.39	10	0	6.86	13.57	10.787	1.853987
Field pH	s.u.	8.24	8.15	7.95	8.13	10	0	7.67	8.91	8.264	0.4050295
Field Temperature	Deg C	0.18	16.03	12.85	23.83	10	0	-0.08	27.57	11.273	10.107392
Field Turbidity	NTUs	308	11.8	1790	53	10	0	1.7	1790	220.94	559.20315
Microbiological											
Bacteria, Fecal Coliform	CFU/100ml	<2	<2	5700 d	44 d	11	3	<2	5700	767.545	1796.4728
Physical Properties											
Conductivity @ 25 C	umhos/cm	5000	5340	908	5140	11	0	908	7290	3801.64	2119.4229
pH, Laboratory	s.u.	8.1	8.09	7.69	8.13	11	0	7.68	8.8	8.09818	0.397563
Sodium Adsorption Ratio (SAR)	unitless	10	6.8	2.5	9.9	8	0	1.9	13	7.475	4.1264824
Solids, Suspended Sediment SSC @ 105 C	mg/L	11	19	4840	59	11	0	11	4840	871.818	1881.8557
Solids, Total Dissolved TDS @ 180 C	mg/L	4300	3800	620	4000	11	0	620	6100	3006.36	1802.1225
Solids, Total Suspended TSS @ 105 C	mg/L	12	17	4600	100	11	1	<5	4600	443.864	1378.7027
Major Ions											
Alkalinity, Total as CaCO3	mg/L	214	160	84	156	11	0	78	214	149.818	49.569786
Bicarbonate as HCO3	mg/L	261	195	102	190	11	0	85	261	181.727	61.961425
Calcium, Dissolved	mg/L	308	425	75.5	358	11	0	53	499	273.173	172.29483
Carbonate as CO3	mg/L	<5	<5	<5	<5	11	11	<5	<5	<5	<5
Chloride	mg/L	113 d	973 d	38 d	970 d	11	0	38	1370	500.455	467.49489
Chloride2	mg/L	NM	NM	24	NM	1	0	24	24	24	---
Fluoride	mg/L	0.2	<0.1	0.5	0.6	11	1	<0.1	0.9	0.45	0.25
Magnesium, Dissolved	mg/L	129	127	17.2	124	11	0	17.2	209	96.0455	61.68866
Nitrogen, Ammonia as N	mg/L	<0.1	<0.1	<0.1	<0.1	8	8	<0.1	<0.1	<0.1	<0.1
Nitrogen, Nitrate as N	mg/L	<0.1	<0.1	0.6	<0.1	11	7	<0.1	0.6	0.15909	0.1894969
Potassium, Dissolved	mg/L	12	10	7	8	11	0	5	15	9.53636	3.0634205
Silica	mg/L	6.9	2.1	2.9	2.2	11	1	<1	13	4.80909	4.0478277
Sodium, Dissolved	mg/L	864	625	93 d	856 d	11	0	93	1240	541.273	385.17141
Sulfate, Total	mg/L	2490 d	1570 d	317 d	1410 d	11	0	317	2540	1359	815.2185
Metals, Dissolved											
Aluminum, Dissolved	mg/L	<0.1	<0.1	<0.1	<0.1	8	8	<0.1	<0.1	<0.1	<0.1
Arsenic, Dissolved	mg/L	<0.001	<0.001	<0.001	0.001	8	5	<0.001	0.002	0.00081	0.0005303
Barium, Dissolved	mg/L	<0.1	<0.1	<0.1	0.1	8	7	<0.1	0.1	0.05625	0.0176777
Boron, Dissolved	mg/L	0.2	0.3	0.2	0.4	8	0	0.2	0.6	0.3	0.1414214
Cadmium, Dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	8	8	<0.005	<0.005	<0.005	<0.005
Chromium, Dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	8	8	<0.01	<0.01	<0.01	<0.01
Copper, Dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	8	8	<0.01	<0.01	<0.01	<0.01
Iron, Dissolved	mg/L	<0.03	<0.03	<0.03	0.03	8	6	<0.03	0.18	0.0375	0.0578174
Lead, Dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	8	8	<0.001	<0.001	<0.001	<0.001
Manganese, Dissolved	mg/L	0.32	0.83	<0.01	0.73	8	1	<0.01	0.83	0.28813	0.3219354
Mercury, Dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	8	8	<0.001	<0.001	<0.001	<0.001
Molybdenum, Dissolved	mg/L	<0.1	<0.1	<0.1	<0.1	8	8	<0.1	<0.1	<0.1	<0.1
Nickel, Dissolved	mg/L	0.01	<0.01	<0.01	<0.01	8	7	<0.01	0.01	0.00563	0.0017678
Selenium, Dissolved	mg/L	<0.001	<0.001	<0.005	<0.001	8	6	<0.001	0.003	0.00125	0.001069
Silver, Dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	8	8	<0.005	<0.005	<0.005	<0.005
Thorium 232, Dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	8	8	<0.005	<0.005	<0.005	<0.005
Uranium, Dissolved	mg/L	0.0269	0.0125	0.002	0.0092	9	0	0.002	0.0269	0.01242	0.0070231
Vanadium, Dissolved	mg/L	<0.1	<0.1	<0.1	<0.1	8	8	<0.1	<0.1	<0.1	<0.1
Zinc, Dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	8	8	<0.01	<0.01	<0.01	<0.01
Metals, Dissolved, Speciated											
Selenium-IV, Dissolved	mg/L	<0.001	<0.001	0.002	<0.001	8	7	<0.001	0.002	0.00069	0.0005303
Selenium-VI, Dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	8	6	<0.001	0.003	0.001	0.0009636
Metals, Suspended											
Thorium 232, Suspended	mg/L	<0.001	<0.001	0.013	<0.001	11	10	<0.001	0.013	0.00164	0.0037689
Uranium, Suspended	mg/L	0.0009	<0.0003	0.0031	<0.0003	11	9	<0.0003	0.0031	0.00049	0.0008956
Metals, Total											
Aluminum, Total	mg/L	0.3	0.5	99.3	4.3	8	1	<0.1	99.3	13.1313	34.846653
Arsenic, Total	mg/L	<0.001	0.002	0.048	0.004 d	11	3	<0.001	0.048	0.00577	0.0140434
Barium, Total	mg/L	<0.1	<0.1	1.1	0.1	11	9	<0.1	1.1	0.15	0.3154362
Boron, Total	mg/L	0.2	0.3	0.3	0.4	11	0	0.2	0.5	0.27364	0.100227
Cadmium, Total	mg/L	<0.005	<0.005	<0.005	<0.005	11	11	<0.005	<0.005	<0.005	<0.005
Calcium, Total	mg/L	295	381	132	362	5	0	132	506	335.2	136.83457
Chromium, Hexavalent	mg/L	<0.005	<0.005	<0.005	<0.005	8	8	<0.005	<0.005	<0.005	<0.005
Chromium, Total	mg/L	<0.05	<0.05	0.19	<0.05	11	10	<0.05	0.19	0.04	0.0497494
Chromium, Trivalent	mg/L	<0.01	<0.01	<0.01	<0.01	8	8	<0.01	<0.01	<0.01	<0.01
Copper, Total	mg/L	<0.01	<0.01	0.11	<0.01	11	10	<0.01	0.11	0.01455	0.0316587
Iron, Total	mg/L	0.44	0.52	137 d	3.02	11	0	0.05	137	13.0409	41.12064
Lead, Total	mg/L	<0.001	<0.001	0.088	0.002	11	8	<0.001	0.088	0.00864	0.0263259
Magnesium, Total	mg/L	127	128	59.8	130	5	0	59.8	130	113.16	30.017128
Manganese, Total	mg/L	0.36	0.98	1.82	0.97	11	0	0.08	1.82	0.46364	0.5590934
Mercury, Total	mg/L	<0.001	<0.001	<0.0001	<0.0001	11	11	<0.0001	<0.001	<0.001	<0.001
Mercury, Total2	mg/L	<0.0001	NM	NM	NM	1	1	<0.0001	<0.0001	<0.0001	---



Dewey-Burdock Surface Water Sampling Location		BVC01				Summary Statistics for BVC01					
Description		Beaver Creek Downstream									
Date and Time Collected		3/9/2008 3:15:00 PM	4/14/2008 6:43:00 PM	5/26/2008 2:00:00 PM	6/17/2008 11:05:00 AM						
Lab ID		R08030091 -005	R08040178 -004	R08050356 -002	R08060315 -002						
Analyte	Units	Result	Result	Result	Result	n	n (non- detect)	Minimum	Maximum	Mean*	StDev*
Molybdenum, Total	mg/L	<0.1	<0.1	<0.1	<0.1	11	11	<0.1	<0.1	<0.1	<0.1
Nickel, Total	mg/L	<0.05	<0.05	0.15	<0.05	11	10	<0.05	0.15	0.03636	0.0376889
Potassium, Total	mg/L	11.3	13	37.4	8.8	5	0	5.3	37.4	15.16	12.765696
Selenium, Total	mg/L	<0.001	<0.001	<0.001	<0.001	11	6	<0.001	0.003	0.00118	0.0010068
Silica, Total	mg/L	8.2	4.8	51.9	12.9	5	0	4.8	51.9	18.48	19.078181
Silver, Total	mg/L	<0.005	<0.005	<0.005	<0.005	11	11	<0.005	<0.005	<0.005	<0.005
Sodium, Total	mg/L	876 d	659	99 d	902 d	5	0	99	902	545.4	378.8922
Thorium 232, Total	mg/L	<0.005	<0.005	0.04	<0.005	9	8	<0.005	0.04	0.00667	0.0125
Uranium, Total	mg/L	0.0262	0.0127	0.0109	0.0113	11	0	0.004	0.0262	0.0121	0.0062576
Vanadium, Total	mg/L	<0.1	<0.1	0.4	<0.1	11	10	<0.1	0.4	0.08182	0.105529
Zinc, Total	mg/L	<0.01	<0.01	0.54	0.02	11	8	<0.01	0.54	0.05727	0.1603179
Metals, Total, Speciated											
Selenium-IV, Total	mg/L	<0.001	<0.001	<0.001	<0.001	8	8	<0.001	<0.001	<0.001	<0.001
Selenium-VI, Total	mg/L	<0.001	<0.001	<0.001	<0.001	8	6	<0.001	0.003	0.00088	0.0008763
Radionuclides, Dissolved											
Lead 210, Dissolved	pCi/L	NM	NM	-1 j	NM	6	3	<1	11	2.68333	4.4879468
Polonium 210, Dissolved	pCi/L	NM	NM	0.3 j	NM	6	2	<1	2.6	1.13333	0.9223159
Radium 226, Dissolved	pCi/L	-0.02 j	0.1 j	2	-0.02 j	9	4	<0.2	2	0.30667	0.6417164
Thorium 230, Dissolved	pCi/L	0	0.3	0 j	0.1 j	9	5	<0.2	0.3	0.1	0.0866025
Radionuclides, Suspended											
Lead 210, Suspended	pCi/L	NM	NM	15.3 j	NM	6	4	<1	15.3	3.38333	5.9229779
Polonium 210, Suspended	pCi/L	NM	NM	3	NM	6	2	<1	3	1.58333	1.0225784
Radium 226, Suspended	pCi/L	-0.7 j	0 j	3.1	-0.9 j	9	4	<0.2	3.1	0.25556	1.1468556
Thorium 230, Suspended	pCi/L	0.4	0.8	3.4	0.2 j	9	4	<0.2	3.4	0.65556	1.0643203
Radionuclides, Total											
Gross Alpha, Total	pCi/L	17.4	15.1	18.2	8.9 j	11	0	5.9	65.8	17.9545	17.131221
Gross Beta, Total	pCi/L	12.5 j	-27.1 j	12.7	-11.1 j	11	0	-27.1	44.4	7.95455	17.627102
Gross Gamma, Total	pCi/L	<20	0 j	0 j	0 j	8	4	<20	1310	168.75	461.16119
Lead 210, Total	pCi/L	NM	NM	14 j	NM	5	2	<1	14	6.72	6.8532474
Polonium 210, Total	pCi/L	NM	NM	3.3	NM	5	1	<1	4.4	2.44	1.5372053
Radium 226, Total	pCi/L	-0.7 j	0.1 j	5.1	-0.95 j	10	5	<0.2	5.1	0.445	1.6879392
Thorium 230, Total	pCi/L	0.4	1.1	3.4	0.3	8	4	<0.2	3.4	0.7	1.1426786
Data Quality Parameters											
A/C Balance (± 5)	%	3.65	-3.44	0.05	4.51	11	0	-4.61	4.51	-0.0394	2.8808215
Anions	meq/l	59.4	63.4	9.42	59.9	11	0	9.42	95.3	45.42	27.788156
Cations	meq/l	63.9	59.2	9.43	65.6	11	0	9.43	90.3	45.3664	27.144886
Solids, Total Dissolved Calculated	mg/L	4070	3840	609	3830	11	0	609	5860	2875.09	1733.6218
TDS Balance (0.80 - 1.20)	dec. %	1.04	0.99	1.01	1.04	11	0	0.96	1.14	1.03545	0.0526049

Sampling Interval: Monthly

Missing Samples and Reasons: February 2008 - Frozen

* 1/2 RL used to calculate the mean and st dev where non-detect data occurred.

NM - not measured in field/not requested for analysis from lab



Dewey-Burdock Surface Water Sampling Location		BVCO4						
Description		Beaver Creek Upstream						
Date and Time Collected		7/24/2007 3:30:00 PM	8/20/2007 4:08:00 PM	9/28/2007 8:16:00 AM	10/17/2007 12:15:00 PM	11/19/2007 12:30:00 PM	12/11/2007 10:00:00 AM	1/11/2008 1:00:00 PM
Lab ID		R07070382 -002	R07080273 -002	R07100001 -001	R07100295 -001	R07110229 -003	R07110148 -001	R08010124 -003
Analyte	Units	Result	Result	Result	Result	Result	Result	Result
Field Parameters								
Field Conductivity	umhos/cm	NM	1450	4712	7157	5416	4055	3022
Field Dissolved Oxygen	mg/L	NM	12.31	6.85	10.45	12.39	11.01	11.37
Field pH	s.u.	NM	8.82	7.6	8.46	8.18	7.86	7.74
Field Temperature	Deg C	NM	27.22	10.78	10.05	5.12	-0.04	-0.1
Field Turbidity	NTUs	NM	79.5	NM	12.6	9.3	2.9	16.8
Microbiological								
Bacteria, Fecal Coliform	CFU/100ml	110 d	350 d	12 d	62 d	<2	10 d	4 d
Physical Properties								
Conductivity @ 25 C	umhos/cm	2660	1400	7030	7130	5460	4370	3310
pH, Laboratory	s.u.	7.72	8.48	8.23	7.94	7.97	7.88	7.8
Sodium Adsorption Ratio (SAR)	unitless	NM	NM	NM	12	7.9	4.6	2.4
Solids, Suspended Sediment SSC @ 105 C	mg/L	111	156	86	5820	14	11	24
Solids, Total Dissolved TDS @ 180 C	mg/L	1800	910	5600	5800	4500	3500	3000
Solids, Total Suspended TSS @ 105 C	mg/L	100	160	47	16	16	10	25
Major Ions								
Alkalinity, Total as CaCO3	mg/L	80	106	110	166	176	190	220
Bicarbonate as HCO3	mg/L	98	129	134	202	215	232	268
Calcium, Dissolved	mg/L	146	77.8	288	382	426 d	449 d	463 d
Carbonate as CO3	mg/L	<5	<5	<5	<5	<5	<5	<5
Chloride	mg/L	251	118	1310 d	1540 d	1040 d	601 d	255 d
Fluoride	mg/L	0.45	0.4	<0.1	<0.1	0.5	0.3	0.3
Magnesium, Dissolved	mg/L	47.7	24.8	171	210	140	101	124
Nitrogen, Ammonia as N	mg/L	NM	NM	NM	<0.1	<0.1	<0.1	<0.1
Nitrogen, Nitrate as N	mg/L	<0.1	0.4	<0.1	<0.1	0.1	0.3	0.4
Potassium, Dissolved	mg/L	10	10.1	10	9	7	5	5
Silica	mg/L	7.9	15.5	1	2	9.1	11.9	14.1
Sodium, Dissolved	mg/L	404	194	1100 d	1160 d	736 d	415 d	224 d
Sulfate, Total	mg/L	859 d	436 d	2520 d	2670 d	1920 d	1450 d	1450 d
Metals, Dissolved								
Aluminum, Dissolved	mg/L	NM	NM	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic, Dissolved	mg/L	NM	NM	0.001	<0.001	0.001	<0.001	<0.001
Barium, Dissolved	mg/L	NM	NM	<0.1	<0.1	<0.1	<0.1	<0.1
Boron, Dissolved	mg/L	NM	NM	0.5	0.6	0.4	0.2	0.2
Cadmium, Dissolved	mg/L	NM	NM	<0.005	<0.005	<0.005	<0.005	<0.005
Chromium, Dissolved	mg/L	NM	NM	<0.01	<0.01	<0.01	<0.01	<0.01
Copper, Dissolved	mg/L	NM	NM	<0.01	<0.01	<0.01	<0.01	<0.01
Iron, Dissolved	mg/L	NM	NM	<0.03	<0.03	<0.03	<0.03	<0.03
Lead, Dissolved	mg/L	NM	NM	<0.001	<0.001	<0.001	<0.001	<0.001
Manganese, Dissolved	mg/L	NM	NM	0.02	0.16	0.1	0.04	0.05
Mercury, Dissolved	mg/L	NM	NM	<0.001	<0.001	<0.001	<0.001	<0.001
Molybdenum, Dissolved	mg/L	NM	NM	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel, Dissolved	mg/L	NM	NM	<0.01	<0.01	<0.01	<0.01	<0.01
Selenium, Dissolved	mg/L	NM	NM	0.003	<0.001	0.004	0.002	0.003
Silver, Dissolved	mg/L	NM	NM	<0.005	<0.005	<0.005	<0.005	<0.005
Thorium 232, Dissolved	mg/L	NM	NM	<0.005	<0.005	<0.005	<0.005	<0.005
Uranium, Dissolved	mg/L	NM	NM	0.014	0.023	0.0189	0.0114	0.0141
Vanadium, Dissolved	mg/L	NM	NM	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc, Dissolved	mg/L	NM	NM	<0.01	<0.01	<0.01	<0.01	<0.01
Metals, Dissolved, Speciated								
Selenium-IV, Dissolved	mg/L	NM	NM	NM	<0.001	<0.001	<0.001	<0.001
Selenium-VI, Dissolved	mg/L	NM	NM	NM	<0.001	0.004	0.002	0.003
Metals, Suspended								
Thorium 232, Suspended	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Uranium, Suspended	mg/L	0.0006	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Metals, Total								
Aluminum, Total	mg/L	NM	NM	2	0.6	0.2	0.1	0.6
Arsenic, Total	mg/L	0.003	0.003	0.002	<0.001	0.001	<0.001	0.001
Barium, Total	mg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Boron, Total	mg/L	0.2	<0.1	0.4	0.6	0.4	0.2	0.2
Cadmium, Total	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Calcium, Total	mg/L	NM	NM	NM	NM	NM	NM	508 d
Chromium, Hexavalent	mg/L	NM	NM	<0.005	<0.005	<0.005	<0.005	<0.005
Chromium, Total	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Chromium, Trivalent	mg/L	NM	NM	<0.01	<0.01	<0.01	<0.01	<0.01
Copper, Total	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Iron, Total	mg/L	1.34	2.48	1.34	0.39	0.31	0.19	0.68
Lead, Total	mg/L	0.002	0.003	0.001	<0.001	<0.001	<0.001	<0.001
Magnesium, Total	mg/L	NM	NM	NM	NM	NM	NM	125
Manganese, Total	mg/L	0.51	0.41	0.1	0.18	0.1	0.05	0.12
Mercury, Total	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Mercury, Total2	mg/L	NM	NM	NM	NM	NM	NM	NM
Molybdenum, Total	mg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1



POWERTECH (USA) INC.

Dewey-Burdock Surface Water Sampling Location		BVC04						
Description		Beaver Creek Upstream						
Date and Time Collected		7/24/2007 3:30:00 PM	8/20/2007 4:08:00 PM	9/28/2007 8:16:00 AM	10/17/2007 12:15:00 PM	11/19/2007 12:30:00 PM	12/11/2007 10:00:00 AM	1/11/2008 1:00:00 PM
Lab ID		R07070382	R07080273	R07100001	R07100295	R07110229	R07120148	R08010124
Analyte	Units	Result	Result	Result	Result	Result	Result	Result
Nickel, Total	mg/L	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Potassium, Total	mg/L	NM	NM	NM	NM	NM	NM	5.4
Selenium, Total	mg/L	0.002	0.002	<0.001	<0.001	0.004	0.002	0.003
Silica, Total	mg/L	NM	NM	NM	NM	NM	NM	16.6
Silver, Total	mg/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Sodium, Total	mg/L	NM	NM	NM	NM	NM	NM	259
Thorium 232, Total	mg/L	NM	NM	<0.005	<0.005	<0.005	<0.005	<0.005
Uranium, Total	mg/L	0.0073	0.003	0.0137	0.0239	0.0177	0.0135	0.0144
Vanadium, Total	mg/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Zinc, Total	mg/L	0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Metals, Total, Speciated								
Selenium-IV, Total	mg/L	NM	NM	<0.001	<0.001	<0.001	<0.001	<0.001
Selenium-VI, Total	mg/L	NM	NM	<0.001	<0.001	0.004	0.002	0.003
Radionuclides, Dissolved								
Lead 210, Dissolved	pCi/L	NM	NM	<1	<1	<1	26	2.2
Polonium 210, Dissolved	pCi/L	NM	NM	<1	3	1.3	<1	1.8
Radium 226, Dissolved	pCi/L	NM	NM	<0.2	0.5	<0.2	<0.2	<0.2
Thorium 230, Dissolved	pCi/L	NM	NM	1.7	<0.2	<0.2	<0.2	<0.2
Radionuclides, Suspended								
Lead 210, Suspended	pCi/L	NM	NM	<2	<1	<1	8.6	<1
Polonium 210, Suspended	pCi/L	NM	NM	<2	<1	1.7	2.9	<1
Radium 226, Suspended	pCi/L	NM	NM	<0.9	<0.2	0.8	0.3	<0.2
Thorium 230, Suspended	pCi/L	NM	NM	<2	<0.2	<0.2	<0.2	<0.2
Radionuclides, Total								
Gross Alpha, Total	pCi/L	11.4	7	2.3	26.6	34.7	17.1	13.9
Gross Beta, Total	pCi/L	13.9	15.4	<2	14	48.1	11.7	7.2
Gross Gamma, Total	pCi/L	NM	NM	<20	<20	1080	1100	<20
Lead 210, Total	pCi/L	NM	NM	NM	NM	<1	35	2.2
Polonium 210, Total	pCi/L	NM	NM	NM	NM	3	2.9	1.8
Radium 226, Total	pCi/L	<0.2	0.7	0.7	NM	0.8	0.3	<0.2
Thorium 230, Total	pCi/L	NM	NM	NM	NM	<0.2	<0.2	<0.2
Data Quality Parameters								
A/C Balance (± 5)	%	4.79	0.739	-3.55	-4.07	-1.84	-2.15	1.72
Anions	meq/l	26.6	14.6	91.7	94.5	67.4	51	41.7
Cations	meq/l	29.3	14.8	85.4	87.1	65	48.8	43.2
Solids, Total Dissolved Calculated	mg/L	1770	945	5640	5700	4110	3140	2650
TDS Balance (0.80 - 1.20)	dec. %	1.03	0.97	0.99	1.01	1.09	1.11	1.12



POWERTECH (USA) INC.

Dewey-Burdock Surface Water Sampling Location		BVC04				Summary Statistics for BVC04					
Description		Beaver Creek Upstream									
Date and Time Collected		3/9/2008 11:05:00 AM	4/14/2008 2:55:00 PM	5/26/2008 4:30:00 PM	6/17/2008 12:20:00 PM						
Lab ID		R08030091 -002	R08040178 -003	R08050356 -004	R08060315 -004						
Analyte	Units	Result	Result	Result	Result	n	n (non-detect)	Minimum	Maximum	Mean*	StDev*
Field Parameters											
Field Conductivity	umhos/cm	2015	7186	733	4915	10	0	733	7186	4066.1	2248.4143
Field Dissolved Oxygen	mg/L	13.74	12.21	6.54	9.55	10	0	6.54	13.74	10.642	2.3803445
Field pH	s.u.	8.12	8.27	8.09	7.52	10	0	7.52	8.82	8.066	0.4008103
Field Temperature	Deg C	-0.08	16.94	13.06	25.14	10	0	-0.1	27.22	10.809	10.030917
Field Turbidity	NTUs	226	14.3	1730	33.8	9	0	2.9	1730	236.133	564.61807
Microbiological											
Bacteria, Fecal Coliform	CFU/100ml	32 d	<2	1200 d	44 d	11	2	<2	1200	166	357.56818
Physical Properties											
Conductivity @ 25 C	umhos/cm	2640	7540	784	514	11	0	514	7540	3894.36	2589.0404
pH, Laboratory	s.u.	8.09	7.97	7.71	8.14	11	0	7.71	8.48	7.99364	0.2308364
Sodium Adsorption Ratio (SAR)	unitless	4.3	10	2.8	9.4	8	0	2.4	12	6.675	3.6169245
Solids, Suspended Sediment SSC @ 105 C	mg/L	323	40	2700	51	11	0	11	5820	848.727	1827.3521
Solids, Total Dissolved TDS @ 180 C	mg/L	1800	5100	520	3500	11	0	520	5800	3275.45	1852.6703
Solids, Total Suspended TSS @ 105 C	mg/L	270	32	2200	55	11	0	10	2200	266.455	646.14369
Major Ions											
Alkalinity, Total as CaCO3	mg/L	118	186	84	148	11	0	80	220	144	47.065911
Bicarbonate as HCO3	mg/L	144	227	102	180	11	0	98	268	175.545	57.418401
Calcium, Dissolved	mg/L	225	455	51.5	300	11	0	51.5	463	296.664	153.58471
Carbonate as CO3	mg/L	<5	<5	<5	<5	11	11	<5	<5	<5	<5
Chloride	mg/L	339 d	1730 d	9	739 d	11	0	9	1730	721.091	600.56481
Fluoride	mg/L	0.4	<0.1	0.6	0.7	11	3	<0.1	0.7	0.34545	0.2229961
Magnesium, Dissolved	mg/L	53.3	177	13.2	105	11	0	13.2	210	106.091	65.551025
Nitrogen, Ammonia as N	mg/L	<0.1	<0.1	<0.1	<0.1	8	8	<0.1	<0.1	<0.1	<0.1
Nitrogen, Nitrate as N	mg/L	0.5	<0.1	0.3	<0.1	11	5	<0.1	0.5	0.20455	0.1767124
Potassium, Dissolved	mg/L	5	6	6	9	11	0	5	10.1	7.46364	2.173602
Silica	mg/L	7.4	2.6	2.8	4.1	11	0	1	15.5	7.12727	5.0821434
Sodium, Dissolved	mg/L	280	995	89 d	743 d	11	0	89	1160	576.364	386.62625
Sulfate, Total	mg/L	681 d	1860 d	286 d	1090 d	11	0	286	2670	1383.82	801.71402
Metals, Dissolved											
Aluminum, Dissolved	mg/L	<0.1	<0.1	<0.1	<0.1	9	9	<0.1	<0.1	<0.1	<0.1
Arsenic, Dissolved	mg/L	<0.001	0.001	<0.001	<0.001	9	6	<0.001	0.001	0.00067	0.00025
Barium, Dissolved	mg/L	<0.1	<0.1	<0.1	<0.1	9	9	<0.1	<0.1	<0.1	<0.1
Boron, Dissolved	mg/L	0.2	0.3	0.2	0.4	9	0	0.2	0.6	0.33333	0.15
Cadmium, Dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	9	9	<0.005	<0.005	<0.005	<0.005
Chromium, Dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	9	9	<0.01	<0.01	<0.01	<0.01
Copper, Dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	9	9	<0.01	<0.01	<0.01	<0.01
Iron, Dissolved	mg/L	<0.03	0.04	0.04	<0.03	9	7	<0.03	0.04	0.02056	0.011024
Lead, Dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	9	9	<0.001	<0.001	<0.001	<0.001
Manganese, Dissolved	mg/L	0.08	0.55	<0.01	0.28	9	1	<0.01	0.55	0.14278	0.1746266
Mercury, Dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	9	9	<0.001	<0.001	<0.001	<0.001
Molybdenum, Dissolved	mg/L	<0.1	<0.1	<0.1	<0.1	9	9	<0.1	<0.1	<0.1	<0.1
Nickel, Dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	9	9	<0.01	<0.01	<0.01	<0.01
Selenium, Dissolved	mg/L	0.002	<0.001	<0.005	<0.001	9	4	<0.001	0.004	0.002	0.0012748
Silver, Dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	9	9	<0.005	<0.005	<0.005	<0.005
Thorium 232, Dissolved	mg/L	<0.005	<0.005	<0.005	<0.005	9	9	<0.005	<0.005	<0.005	<0.005
Uranium, Dissolved	mg/L	0.0056	0.0165	0.0017	0.0078	9	0	0.0017	0.023	0.01256	0.0067039
Vanadium, Dissolved	mg/L	<0.1	<0.1	<0.1	<0.1	9	9	<0.1	<0.1	<0.1	<0.1
Zinc, Dissolved	mg/L	<0.01	<0.01	<0.01	<0.01	9	9	<0.01	<0.01	<0.01	<0.01
Metals, Dissolved, Speciated											
Selenium-IV, Dissolved	mg/L	0.001	<0.001	<0.001	<0.001	8	7	<0.001	0.001	0.00056	0.0001768
Selenium-VI, Dissolved	mg/L	<0.001	<0.001	<0.001	<0.001	8	5	<0.001	0.004	0.00144	0.0013999
Metals, Suspended											
Thorium 232, Suspended	mg/L	0.004	<0.001	0.009	<0.001	11	9	<0.001	0.009	0.00159	0.0026722
Uranium, Suspended	mg/L	0.0014	<0.0003	0.0021	<0.0003	11	8	<0.0003	0.0021	0.00048	0.00066
Metals, Total											
Aluminum, Total	mg/L	9.9	0.7	61.3	3.2	9	0	0.1	61.3	8.73333	19.952318
Arsenic, Total	mg/L	0.004	0.003	0.023 d	0.004 d	11	2	<0.001	0.023	0.00409	0.0064063
Barium, Total	mg/L	<0.1	<0.1	0.5	0.1	11	9	<0.1	0.5	0.09545	0.1350084
Boron, Total	mg/L	0.1	0.4	0.2	0.4	11	1	<0.1	0.6	0.28636	0.164455
Cadmium, Total	mg/L	<0.005	<0.005	<0.005	<0.005	11	11	<0.005	<0.005	<0.005	<0.005
Calcium, Total	mg/L	217	401	81.3	309	5	0	81.3	508	303.26	164.47762
Chromium, Hexavalent	mg/L	<0.005	<0.005	<0.005	<0.005	9	9	<0.005	<0.005	<0.005	<0.005
Chromium, Total	mg/L	<0.05	<0.05	0.08	<0.05	11	10	<0.05	0.08	0.03	0.0165831
Chromium, Trivalent	mg/L	<0.01	<0.01	<0.01	<0.01	9	9	<0.01	<0.01	<0.01	<0.01
Copper, Total	mg/L	<0.01	<0.01	0.07	<0.01	11	10	<0.01	0.07	0.01091	0.0195982
Iron, Total	mg/L	8.65	0.74	63.1	2.69	11	0	0.19	63.1	7.44636	18.6139
Lead, Total	mg/L	0.007	<0.001	0.047	0.002	11	5	<0.001	0.047	0.00586	0.0137806
Magnesium, Total	mg/L	53.5	161	32.8	111	5	0	32.8	161	96.66	52.652901
Manganese, Total	mg/L	0.28	0.72	1.34	0.44	11	0	0.05	1.34	0.38636	0.3796649
Mercury, Total	mg/L	<0.001	<0.001	<0.0001	<0.0001	11	11	<0.0001	<0.001	<0.001	<0.001
Mercury, Total2	mg/L	<0.0001	NM	NM	NM	1	1	<0.0001	<0.0001	<0.0001	---
Molybdenum, Total	mg/L	<0.1	<0.1	<0.1	<0.1	11	11	<0.1	<0.1	<0.1	<0.1



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Dewey-Burdock Surface Water Sampling Location		BVC04				Summary Statistics for BVC04					
Description		Beaver Creek Upstream									
Date and Time Collected		3/9/2008 11:05:00 AM	4/14/2008 2:55:00 PM	5/26/2008 4:30:00 PM	6/17/2008 12:20:00 PM						
Lab ID		R08030091 -002	R08040178 -003	R08050356 -004	R08060315 -004						
Analyte	Units	Result	Result	Result	Result	n	n (non- detect)	Minimum	Maximum	Mean*	StDev*
Nickel, Total	mg/L	<0.05	<0.05	0.08	<0.05	11	10	<0.05	0.08	0.03	0.0165831
Potassium, Total	mg/L	6.6	14.4	20.4	9.7	5	0	5.4	20.4	11.3	6.1619802
Selenium, Total	mg/L	0.002	<0.001	<0.001	<0.001	11	5	<0.001	0.004	0.00159	0.0012004
Silica, Total	mg/L	54.5	6	77.6	12.9	5	0	6	77.6	33.52	31.032354
Silver, Total	mg/L	<0.005	<0.005	<0.005	<0.005	11	11	<0.005	<0.005	<0.005	<0.005
Sodium, Total	mg/L	273 d	1070	96 d	770 d	5	0	96	1070	493.6	409.39626
Thorium 232, Total	mg/L	0.005	<0.005	0.021	<0.005	9	7	<0.005	0.021	0.00483	0.0061186
Uranium, Total	mg/L	0.0061	0.0169	0.0069	0.0097	11	0	0.003	0.0239	0.0121	0.006149
Vanadium, Total	mg/L	<0.1	<0.1	0.2	<0.1	11	10	<0.1	0.2	0.06364	0.0452267
Zinc, Total	mg/L	0.06	<0.01	0.27	0.02	11	6	<0.01	0.27	0.03636	0.0791862
Metals, Total, Speciated											
Selenium-IV, Total	mg/L	0.001	<0.001	<0.001	<0.001	9	8	<0.001	0.001	0.00056	0.0001667
Selenium-VI, Total	mg/L	<0.001	<0.001	<0.001	<0.001	9	6	<0.001	0.004	0.00133	0.0013463
Radionuclides, Dissolved											
Lead 210, Dissolved	pCi/L	NM	NM	0.9 j	NM	6	3	<1	26	5.1	10.260019
Polonium 210, Dissolved	pCi/L	NM	NM	0.1 j	NM	6	2	<1	3	1.2	1.077033
Radium 226, Dissolved	pCi/L	0.08 j	0.1 j	-0.06 j	0.1 j	9	4	<0.2	0.5	0.12444	0.150259
Thorium 230, Dissolved	pCi/L	0.2	0.1 j	0 j	0 j	9	4	<0.2	1.7	0.26667	0.5408327
Radionuclides, Suspended											
Lead 210, Suspended	pCi/L	NM	NM	-30 j	NM	6	4	<1	8.6	-3.15	13.536432
Polonium 210, Suspended	pCi/L	NM	NM	3.7	NM	6	3	<1	3.7	1.71667	1.3272779
Radium 226, Suspended	pCi/L	2.5 j	0.2 j	2.2	-0.7 j	9	3	<0.2	2.5	0.66111	1.0391637
Thorium 230, Suspended	pCi/L	0.3 j	0.1 j	2.1	0.3	9	5	<0.2	2.1	0.46667	0.678233
Radionuclides, Total											
Gross Alpha, Total	pCi/L	6.7 j	23.4	12.5	3.9 j	11	0	2.3	34.7	14.5	10.162086
Gross Beta, Total	pCi/L	-2 j	2.8 j	12.9	-12.4 j	11	1	<2	48.1	10.2364	15.195741
Gross Gamma, Total	pCi/L	<20	0 j	0 j	0 j	9	4	<20	1100	246.667	478.17361
Lead 210, Total	pCi/L	NM	NM	33 j	NM	4	1	<1	35	17.675	18.880921
Polonium 210, Total	pCi/L	NM	NM	3.8	NM	4	0	1.8	3.8	2.875	0.8220908
Radium 226, Total	pCi/L	0.1 j	0.3 j	2.2 j	-0.53 j	10	2	<0.2	2.2	0.477	0.720772
Thorium 230, Total	pCi/L	0.5	0.2 j	2.1	0.3	7	3	<0.2	2.1	0.48571	0.7267016
Data Quality Parameters											
A/C Balance (± 5)	%	3.3	-6.02	-1.82	9.39	11	0	-6.02	9.39	0.04445	4.4968576
Anions	meq/l	26.1	91.1	7.96	46.6	11	0	7.96	94.5	50.8418	31.50247
Cations	meq/l	27.9	80.8	7.68	56.2	11	0	7.68	87.1	49.6527	27.990937
Solids, Total Dissolved Calculated	mg/L	1680	5340	516	3090	11	0	516	5700	3143.73	1858.463
TDS Balance (0.80 - 1.20)	dec. %	1.06	0.96	1.02	1.12	11	0	0.96	1.12	1.04364	0.0597114

Sampling Interval: Monthly

Missing Samples and Reasons: February 2008 - Frozen

* 1/2 RL used to calculate the mean and st dev where non-detect data occurred.

NM - not measured in field/not requested for analysis from lab



POWERTECH (USA) INC.

Dewey-Burdock Surface Water Sampling Location		PSC01		Summary Statistics for PSC01					
Description		Pass Creek Downstream							
Date and Time Collected		7/19/2007 10:45:00 AM	7/18/2008 12:40:00 PM						
Lab ID		R07070315 -001	R08070340 -001						
Analyte	Units	Result	Result	n	n (non- detect)	Minimum	Maximum	Mean*	StDev*
Field Parameters									
Field Conductivity	umhos/cm	NM	1844	1	0	1844	1844	1844	---
Field Dissolved Oxygen	mg/L	NM	10.26	1	0	10.26	10.26	10.26	---
Field pH	s.u.	NM	8.12	1	0	8.12	8.12	8.12	---
Field Temperature	Deg C	NM	13.56	1	0	13.56	13.56	13.56	---
Field Turbidity	NTUs	NM	1780	1	0	1780	1780	1780	---
Microbiological									
Bacteria, Fecal Coliform	CFU/100ml	4000 d	3700 d	2	0	3700	4000	3850	212.13203
Physical Properties									
Conductivity @ 25 C	umhos/cm	1840	1750	2	0	1750	1840	1795	63.63961
pH, Laboratory	s.u.	7.16	7.24	2	0	7.16	7.24	7.2	0.0565685
Sodium Adsorption Ratio (SAR)	unitless	NM	<0.1	1	1	<0.1	<0.1	<0.1	---
Solids, Suspended Sediment SSC @ 105 C	mg/L	134	4490	2	0	134	4490	2312	3080.1571
Solids, Total Dissolved TDS @ 180 C	mg/L	1700	1600	2	0	1600	1700	1650	70.710678
Solids, Total Suspended TSS @ 105 C	mg/L	150	3700	2	0	150	3700	1925	2510.2291
Major Ions									
Alkalinity, Total as CaCO3	mg/L	56	62	2	0	56	62	59	4.2426407
Bicarbonate as HCO3	mg/L	68	76	2	0	68	76	72	5.6568542
Calcium, Dissolved	mg/L	510 d	459	2	0	459	510	484.5	36.062446
Carbonate as CO3	mg/L	<5	<5	2	2	<5	<5	<5	<5
Chloride	mg/L	2.8	2	2	0	2	2.8	2.4	0.5656854
Fluoride	mg/L	0.14	0.2	2	0	0.14	0.2	0.17	0.0424264
Magnesium, Dissolved	mg/L	30.5	12.5	2	0	12.5	30.5	21.5	12.727922
Nitrogen, Ammonia as N	mg/L	NM	0.1	1	0	0.1	0.1	0.1	---
Nitrogen, Nitrate as N	mg/L	0.77	0.6 h	2	0	0.6	0.77	0.685	0.1202082
Potassium, Dissolved	mg/L	12.4	7	2	0	7	12.4	9.7	3.8183766
Silica	mg/L	16.5	1.7	2	0	1.7	16.5	9.1	10.46518
Sodium, Dissolved	mg/L	6.3	2.6	2	0	2.6	6.3	4.45	2.6162951
Sulfate, Total	mg/L	1400	977 d	2	0	977	1400	1188.5	299.10617
Metals, Dissolved									
Aluminum, Dissolved	mg/L	NM	<0.1	1	1	<0.1	<0.1	<0.1	---
Arsenic, Dissolved	mg/L	NM	0.002	1	0	0.002	0.002	0.002	---
Barium, Dissolved	mg/L	NM	0.1	1	0	0.1	0.1	0.1	---
Boron, Dissolved	mg/L	NM	<0.1	1	1	<0.1	<0.1	<0.1	---
Cadmium, Dissolved	mg/L	NM	<0.005	1	1	<0.005	<0.005	<0.005	---
Chromium, Dissolved	mg/L	NM	0.02	1	0	0.02	0.02	0.02	---
Copper, Dissolved	mg/L	NM	<0.01	1	1	<0.01	<0.01	<0.01	---
Iron, Dissolved	mg/L	NM	0.1	1	0	0.1	0.1	0.1	---
Lead, Dissolved	mg/L	NM	<0.001	1	1	<0.001	<0.001	<0.001	---
Manganese, Dissolved	mg/L	NM	0.04	1	0	0.04	0.04	0.04	---
Mercury, Dissolved	mg/L	NM	<0.001	1	1	<0.001	<0.001	<0.001	---
Molybdenum, Dissolved	mg/L	NM	<0.1	1	1	<0.1	<0.1	<0.1	---
Nickel, Dissolved	mg/L	NM	0.03	1	0	0.03	0.03	0.03	---
Selenium, Dissolved	mg/L	NM	<0.005	1	1	<0.005	<0.005	<0.005	---
Silver, Dissolved	mg/L	NM	<0.005	1	1	<0.005	<0.005	<0.005	---
Thorium 232, Dissolved	mg/L	NM	<0.005	1	1	<0.005	<0.005	<0.005	---
Uranium, Dissolved	mg/L	NM	0.005	1	0	0.005	0.005	0.005	---
Vanadium, Dissolved	mg/L	NM	<0.1	1	1	<0.1	<0.1	<0.1	---
Zinc, Dissolved	mg/L	NM	<0.01	1	1	<0.01	<0.01	<0.01	---
Metals, Dissolved, Speciated									
Selenium-IV, Dissolved	mg/L	NM	<0.001	1	1	<0.001	<0.001	<0.001	---
Selenium-VI, Dissolved	mg/L	NM	<0.001	1	1	<0.001	<0.001	<0.001	---
Metals, Suspended									
Thorium 232, Suspended	mg/L	<0.001	0.001	2	1	<0.001	0.001	0.00075	0.0003536
Uranium, Suspended	mg/L	0.0004	0.0005	2	0	0.0004	0.0005	0.00045	7.071E-05
Metals, Total									
Aluminum, Total	mg/L	NM	85.9	1	0	85.9	85.9	85.9	---
Arsenic, Total	mg/L	0.003	0.031	2	0	0.003	0.031	0.017	0.019799
Barium, Total	mg/L	0.2	0.8	2	0	0.2	0.8	0.5	0.4242641
Boron, Total	mg/L	<0.1	0.3	2	1	<0.1	0.3	0.175	0.1767767
Cadmium, Total	mg/L	<0.005	<0.005	2	2	<0.005	<0.005	<0.005	<0.005
Calcium, Total	mg/L	NM	664	1	0	664	664	664	---
Chromium, Hexavalent	mg/L	NM	<0.005	1	1	<0.005	<0.005	<0.005	---
Chromium, Total	mg/L	<0.05	0.17	2	1	<0.05	0.17	0.0975	0.1025305
Chromium, Trivalent	mg/L	NM	0.17	1	0	0.17	0.17	0.17	---
Copper, Total	mg/L	<0.01	0.1	2	1	<0.01	0.1	0.0525	0.0671751
Iron, Total	mg/L	2	128 d	2	0	2	128	65	89.095454
Lead, Total	mg/L	0.002	0.074	2	0	0.002	0.074	0.038	0.0509117
Magnesium, Total	mg/L	NM	164	1	0	164	164	164	---
Manganese, Total	mg/L	0.16	2.55	2	0	0.16	2.55	1.355	1.6899852
Mercury, Total	mg/L	<0.001	<0.0002	2	2	<0.0002	<0.001	<0.001	<0.001
Molybdenum, Total	mg/L	<0.1	<0.1	2	2	<0.1	<0.1	<0.1	<0.1
Nickel, Total	mg/L	<0.05	0.15	2	1	<0.05	0.15	0.0875	0.0883883



Dewey-Burdock Surface Water Sampling Location		PSC01		Summary Statistics for PSC01					
Description		Pass Creek Downstream							
Date and Time Collected		7/19/2007 10:45:00 AM	7/18/2008 12:40:00 PM						
Lab ID		R07070315 -001	R08070340 -001						
Analyte	Units	Result	Result	n	n (non- detect)	Minimum	Maximum	Mean*	StDev*
Potassium, Total	mg/L	NM	46.1	1	0	46.1	46.1	46.1	---
Selenium, Total	mg/L	0.002 d	<0.001	2	1	<0.001	0.002	0.00125	0.0010607
Silica, Total	mg/L	NM	49.2	1	0	49.2	49.2	49.2	---
Silver, Total	mg/L	<0.005	<0.005	2	2	<0.005	<0.005	<0.005	<0.005
Sodium, Total	mg/L	NM	3 d	1	0	3	3	3	---
Thorium 232, Total	mg/L	NM	0.02	1	0	0.02	0.02	0.02	---
Uranium, Total	mg/L	0.01	0.0252	2	0	0.01	0.0252	0.0176	0.010748
Vanadium, Total	mg/L	<0.1	0.1	2	1	<0.1	0.1	0.075	0.0353553
Zinc, Total	mg/L	0.03	0.34	2	0	0.03	0.34	0.185	0.2192031
Metals, Total, Speciated									
Selenium-IV, Total	mg/L	NM	<0.001	1	1	<0.001	<0.001	<0.001	---
Selenium-VI, Total	mg/L	NM	<0.001	1	1	<0.001	<0.001	<0.001	---
Radionuclides, Dissolved									
Lead 210, Dissolved	pCi/L	NM	2.2 j	1	0	2.2	2.2	2.2	---
Polonium 210, Dissolved	pCi/L	NM	0.7 j	1	0	0.7	0.7	0.7	---
Radium 226, Dissolved	pCi/L	NM	0.1 j	1	0	0.1	0.1	0.1	---
Thorium 230, Dissolved	pCi/L	NM	0 j	1	0	0	0	0	---
Radionuclides, Suspended									
Lead 210, Suspended	pCi/L	NM	0.9 j	1	0	0.9	0.9	0.9	---
Polonium 210, Suspended	pCi/L	NM	0.3 j	1	0	0.3	0.3	0.3	---
Radium 226, Suspended	pCi/L	NM	0.1 j	1	0	0.1	0.1	0.1	---
Thorium 230, Suspended	pCi/L	NM	0.5	1	0	0.5	0.5	0.5	---
Radionuclides, Total									
Gross Alpha, Total	pCi/L	8.8	6.5 j	2	0	6.5	8.8	7.65	1.6263456
Gross Beta, Total	pCi/L	15.1	1.4 j	2	0	1.4	15.1	8.25	9.6873629
Gross Gamma, Total	pCi/L	NM	0 j	1	0	0	0	0	---
Lead 210, Total	pCi/L	NM	3 j	1	0	3	3	3	---
Polonium 210, Total	pCi/L	NM	1 j	1	0	1	1	1	---
Radium 226, Total	pCi/L	0.7	0.2 j	2	0	0.2	0.7	0.45	0.3535534
Thorium 230, Total	pCi/L	NM	0.5	1	0	0.5	0.5	0.5	---
Data Quality Parameters									
A/C Balance (± 5)	%	-2.54	5.55	2	0	-2.54	5.55	1.505	5.7204939
Anions	meq/l	30.5	21.7	2	0	21.7	30.5	26.1	6.2225397
Cations	meq/l	29	24.2	2	0	24.2	29	26.6	3.3941125
Solids, Total Dissolved Calculated	mg/L	2020	1510	2	0	1510	2020	1765	360.62446
TDS Balance (0.80 - 1.20)	dec. %	0.86	1.07	2	0	0.86	1.07	0.965	0.1484924

Sampling Interval: Monthly

Missing Samples and Reasons: August 2007 through June 2008 - Dry

* 1/2 RL used to calculate the mean and st dev where non-detect data occurred.

NM - not measured in field/not requested for analysis from lab



Dewey-Burdock Surface Water Sampling Location		PSC02		Summary Statistics for PSC02					
Description		Pass Creek Upstream							
Date and Time Collected		7/19/2007 11:30:00 AM R07070315 -002	7/18/2008 2:25:00 PM R08070340 -002						
Lab ID									
Analyte	Units	Result	Result	n	n (non- detect)	Minimum	Maximum	Mean*	StDev*
Field Parameters									
Field Conductivity	umhos/cm	NM	1696	1	0	1696	1696	1696	---
Field Dissolved Oxygen	mg/L	NM	9.51	1	0	9.51	9.51	9.51	---
Field pH	s.u.	NM	8.1	1	0	8.1	8.1	8.1	---
Field Temperature	Deg C	NM	17.13	1	0	17.13	17.13	17.13	---
Field Turbidity	NTUs	NM	1672	1	0	1672	1672	1672	---
Microbiological									
Bacteria, Fecal Coliform	CFU/100ml	4400 d	7500 d	2	0	4400	7500	5950	2192.031
Physical Properties									
Conductivity @ 25 C	umhos/cm	1240	1520	2	0	1240	1520	1380	197.9899
pH, Laboratory	s.u.	7.26	7.34	2	0	7.26	7.34	7.3	0.0565685
Sodium Adsorption Ratio (SAR)	unitless	NM	<0.1	1	1	<0.1	<0.1	<0.1	---
Solids, Suspended Sediment SSC @ 105 C	mg/L	108	2370	2	0	108	2370	1239	1599.4755
Solids, Total Dissolved TDS @ 180 C	mg/L	1100	1500	2	0	1100	1500	1300	282.84271
Solids, Total Suspended TSS @ 105 C	mg/L	140	2000	2	0	140	2000	1070	1315.2186
Major Ions									
Alkalinity, Total as CaCO3	mg/L	50	60	2	0	50	60	55	7.0710678
Bicarbonate as HCO3	mg/L	61	73	2	0	61	73	67	8.4852814
Calcium, Dissolved	mg/L	270	439	2	0	270	439	354.5	119.50105
Carbonate as CO3	mg/L	<5	<5	2	2	<5	<5	<5	<5
Chloride	mg/L	1.6	2	2	0	1.6	2	1.8	0.2828427
Fluoride	mg/L	0.14	0.2	2	0	0.14	0.2	0.17	0.0424264
Magnesium, Dissolved	mg/L	18	10.1	2	0	10.1	18	14.05	5.5861436
Nitrogen, Ammonia as N	mg/L	NM	0.2	1	0	0.2	0.2	0.2	---
Nitrogen, Nitrate as N	mg/L	0.56	0.6 h	2	0	0.56	0.6	0.58	0.0282843
Potassium, Dissolved	mg/L	8	6	2	0	6	8	7	1.4142136
Silica	mg/L	7	1.8	2	0	1.8	7	4.4	3.6769553
Sodium, Dissolved	mg/L	2	1.7	2	0	1.7	2	1.85	0.212132
Sulfate, Total	mg/L	645 d	909 d	2	0	645	909	777	186.67619
Metals, Dissolved									
Aluminum, Dissolved	mg/L	NM	<0.1	1	1	<0.1	<0.1	<0.1	---
Arsenic, Dissolved	mg/L	NM	0.002	1	0	0.002	0.002	0.002	---
Barium, Dissolved	mg/L	NM	<0.1	1	1	<0.1	<0.1	<0.1	---
Boron, Dissolved	mg/L	NM	<0.1	1	1	<0.1	<0.1	<0.1	---
Cadmium, Dissolved	mg/L	NM	<0.005	1	1	<0.005	<0.005	<0.005	---
Chromium, Dissolved	mg/L	NM	<0.01	1	1	<0.01	<0.01	<0.01	---
Copper, Dissolved	mg/L	NM	<0.01	1	1	<0.01	<0.01	<0.01	---
Iron, Dissolved	mg/L	NM	<0.03	1	1	<0.03	<0.03	<0.03	---
Lead, Dissolved	mg/L	NM	<0.001	1	1	<0.001	<0.001	<0.001	---
Manganese, Dissolved	mg/L	NM	0.03	1	0	0.03	0.03	0.03	---
Mercury, Dissolved	mg/L	NM	<0.001	1	1	<0.001	<0.001	<0.001	---
Molybdenum, Dissolved	mg/L	NM	<0.1	1	1	<0.1	<0.1	<0.1	---
Nickel, Dissolved	mg/L	NM	<0.01	1	1	<0.01	<0.01	<0.01	---
Selenium, Dissolved	mg/L	NM	<0.005	1	1	<0.005	<0.005	<0.005	---
Silver, Dissolved	mg/L	NM	<0.005	1	1	<0.005	<0.005	<0.005	---
Thorium 232, Dissolved	mg/L	NM	<0.005	1	1	<0.005	<0.005	<0.005	---
Uranium, Dissolved	mg/L	NM	0.0007	1	0	0.0007	0.0007	0.0007	---
Vanadium, Dissolved	mg/L	NM	<0.1	1	1	<0.1	<0.1	<0.1	---
Zinc, Dissolved	mg/L	NM	<0.01	1	1	<0.01	<0.01	<0.01	---
Metals, Dissolved, Speciated									
Selenium-IV, Dissolved	mg/L	NM	<0.001	1	1	<0.001	<0.001	<0.001	---
Selenium-VI, Dissolved	mg/L	NM	<0.001	1	1	<0.001	<0.001	<0.001	---
Metals, Suspended									
Thorium 232, Suspended	mg/L	<0.001	0.002	2	1	<0.001	0.002	0.00125	0.0010607
Uranium, Suspended	mg/L	0.0005	0.0009	2	0	0.0005	0.0009	0.0007	0.0002828
Metals, Total									
Aluminum, Total	mg/L	NM	58.7	1	0	58.7	58.7	58.7	---
Arsenic, Total	mg/L	0.003	0.018	2	0	0.003	0.018	0.0105	0.0106066
Barium, Total	mg/L	0.3	0.5	2	0	0.3	0.5	0.4	0.1414214
Boron, Total	mg/L	<0.1	0.2	2	1	<0.1	0.2	0.125	0.106066
Cadmium, Total	mg/L	<0.005	<0.005	2	2	<0.005	<0.005	<0.005	<0.005
Calcium, Total	mg/L	NM	516	1	0	516	516	516	---
Chromium, Hexavalent	mg/L	NM	<0.005	1	1	<0.005	<0.005	<0.005	---
Chromium, Total	mg/L	<0.05	0.1	2	1	<0.05	0.1	0.0625	0.053033
Chromium, Trivalent	mg/L	NM	0.1	1	0	0.1	0.1	0.1	---
Copper, Total	mg/L	<0.01	0.06	2	1	<0.01	0.06	0.0325	0.0388909
Iron, Total	mg/L	0.28	75.7	2	0	0.28	75.7	37.99	53.329993
Lead, Total	mg/L	0.002	0.04	2	0	0.002	0.04	0.021	0.0268701
Magnesium, Total	mg/L	NM	97.7	1	0	97.7	97.7	97.7	---
Manganese, Total	mg/L	0.12	1.48	2	0	0.12	1.48	0.8	0.9616652
Mercury, Total	mg/L	<0.001	<0.0002	2	2	<0.0002	<0.001	<0.001	<0.001
Molybdenum, Total	mg/L	<0.1	<0.1	2	2	<0.1	<0.1	<0.1	<0.1
Nickel, Total	mg/L	<0.05	0.09	2	1	<0.05	0.09	0.0575	0.0459619



Dewey-Burdock Surface Water Sampling Location		PSC02		Summary Statistics for PSC02						
Description		Pass Creek Upstream								
Date and Time Collected		7/19/2007 11:30:00 AM	7/18/2008 2:25:00 PM							
Lab ID		R07070315 -002	R08070340 -002							
Analyte	Units	Result	Result	n	n (non- detect)	Minimum	Maximum	Mean*	StDev*	
Potassium, Total	mg/L	NM	30.1	1	0	30.1	30.1	30.1	---	
Selenium, Total	mg/L	0.003 d	<0.001	2	1	<0.001	0.003	0.00175	0.0017678	
Silica, Total	mg/L	NM	51.9	1	0	51.9	51.9	51.9	---	
Silver, Total	mg/L	<0.005*	<0.005	2	2	<0.005	<0.005	<0.005	<0.005	
Sodium, Total	mg/L	NM	2 d	1	0	2	2	2	---	
Thorium 232, Total	mg/L	NM	0.012	1	0	0.012	0.012	0.012	---	
Uranium, Total	mg/L	0.0012	0.0057	2	0	0.0012	0.0057	0.00345	0.003182	
Vanadium, Total	mg/L	<0.1	<0.1	2	2	<0.1	<0.1	<0.1	<0.1	
Zinc, Total	mg/L	0.02	0.19	2	0	0.02	0.19	0.105	0.1202082	
Metals, Total, Speciated										
Selenium-IV, Total	mg/L	NM	<0.001	1	1	<0.001	<0.001	<0.001	---	
Selenium-VI, Total	mg/L	NM	<0.001	1	1	<0.001	<0.001	<0.001	---	
Radionuclides, Dissolved										
Lead 210, Dissolved	pCi/L	NM	1.7 j	1	0	1.7	1.7	1.7	---	
Polonium 210, Dissolved	pCi/L	NM	0.2 j	1	0	0.2	0.2	0.2	---	
Radium 226, Dissolved	pCi/L	NM	-0.04 j	1	0	-0.04	0	-0.04	---	
Thorium 230, Dissolved	pCi/L	NM	0 j	1	0	0	0	0	---	
Radionuclides, Suspended										
Lead 210, Suspended	pCi/L	NM	-0.8 j	1	0	-0.8	0	-0.8	---	
Polonium 210, Suspended	pCi/L	NM	0.3 j	1	0	0.3	0.3	0.3	---	
Radium 226, Suspended	pCi/L	NM	-0.2 j	1	0	-0.2	0	-0.2	---	
Thorium 230, Suspended	pCi/L	NM	0.2 j	1	0	0.2	0.2	0.2	---	
Radionuclides, Total										
Gross Alpha, Total	pCi/L	1.9	4.2 j	2	0	1.9	4.2	3.05	1.6263456	
Gross Beta, Total	pCi/L	11.9	-7 j	2	0	-7	11.9	2.45	13.364318	
Gross Gamma, Total	pCi/L	NM	0 j	1	0	0	0	0	---	
Lead 210, Total	pCi/L	NM	0 j	1	0	0	0	0	---	
Polonium 210, Total	pCi/L	NM	0.5 j	1	0	0.5	0.5	0.5	---	
Radium 226, Total	pCi/L	<0.2	-0.2 j	2	1	<0.2	-0.2	-0.05	0.212132	
Thorium 230, Total	pCi/L	NM	0.2 j	1	0	0.2	0.2	0.2	---	
Data Quality Parameters										
A/C Balance (± 5)	%	3.42	6.31	2	0	3.42	6.31	4.865	2.0435386	
Anions	meq/l	14.5	20.2	2	0	14.5	20.2	17.35	4.0305087	
Cations	meq/l	15.6	23	2	0	15.6	23	19.3	5.2325902	
Solids, Total Dissolved Calculated	mg/L	998	1410	2	0	998	1410	1204	291.32799	
TDS Balance (0.80 - 1.20)	dec. %	1.07	1.07	2	0	1.07	1.07	1.07	0	

Sampling Interval: Monthly

Missing Samples and Reasons: August 2007 through June 2008 - Dry

* 1/2 RL used to calculate the mean and st dev where non-detect data occurred.

NM - not measured in field/not requested for analysis from lab