

**JER-WQ8**

[illegible]

JER-WQ8

| Sample ID               | Units      | PKCA<br>Discharge<br>Criteria | Date Sampled |           |           |           |           |          |          |           |           |           |           |           |           |  |
|-------------------------|------------|-------------------------------|--------------|-----------|-----------|-----------|-----------|----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|--|
|                         |            |                               | JER-WQ8      | JER-WQ8   | JER-WQ8   | JER-WQ8   | JER-WQ8   | JER-WQ8  | JER-WQ8  | JER-WQ8   | JER-WQ8   | JER-WQ8   | JER-WQ8   | JER-WQ8   | JER-WQ8   |  |
|                         |            |                               | 30-Jul-05    | 29-Aug-05 | 10-Apr-06 | 18-Jun-06 | 11-Jul-06 | 5-Aug-06 | 5-Sep-06 | 17-Dec-06 | 27-Apr-07 | 16-Jul-07 | 25-Aug-07 | 23-Sep-07 | 18-Dec-07 |  |
| Focal Coliform          | CFU/100 mL | 20                            |              |           |           |           |           |          |          |           |           |           |           |           |           |  |
| Field Water Temperature | deg C      |                               |              |           | 3.13      | 10.74     | 14.2      | 15.3     | 9.11     | 1.27      | 2.77      | 17.02     | 8.54      | 1.87      | 2.99      |  |
| Field Conductivity      | uS/cm      |                               |              |           | 18        | 12        | 12        | 5        | 9        | 20        | 21        | 14        | 11        | 13        | 19        |  |
| Field DO                | %          |                               |              |           |           |           |           |          |          |           | 138       | 114.5     | -         | 111.2     | 106.9     |  |
| Field DO                | mg/L       |                               |              |           | 10.19     | 8.64      | 10.04     |          | 10.91    | 9.79      | 18.72     | 11.04     | -         | 15.41     | 14.28     |  |
| Field pH                |            |                               |              |           | 6.25      | 6.85      | 6.31      | 7.9      | 5.92     | 6.53      | 5.29      | 8.38      | 6.87      | 8.04      | 5.44      |  |
| Field ORP               | mV         |                               |              |           | 410.90    | 237.20    | 375.20    |          | 299.40   | 319       | 81.3      | 184.9     | 276.0     | 175.3     | 39        |  |

JER-WQ9

| Sample ID                          | Units  | PKCA Discharge Criteria | Date Sampled |         |         |         |         |         |         |         |         |         |         |         |
|------------------------------------|--------|-------------------------|--------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
|                                    |        |                         | JER-WQ9      | JER-WQ9 | JER-WQ9 | JER-WQ9 | JER-WQ9 | JER-WQ9 | JER-WQ9 | JER-WQ9 | JER-WQ9 | JER-WQ9 | JER-WQ9 | JER-WQ9 |
| Lab Sample ID                      |        |                         |              |         |         |         |         |         |         |         |         |         |         |         |
| Hardness (as CaCO3)                | mg/L   |                         |              |         |         |         |         |         |         |         |         |         |         |         |
| Conductivity                       | uS/cm  |                         |              |         |         |         |         |         |         |         |         |         |         |         |
| pH                                 |        | 6.0 - 8.8               |              |         |         |         |         |         |         |         |         |         |         |         |
| Total Dissolved Solids             | mg/L   | 4000                    |              |         |         |         |         |         |         |         |         |         |         |         |
| Total Suspended Solids             | mg/L   | 25                      |              |         |         |         |         |         |         |         |         |         |         |         |
| Turbidity                          | NTU    |                         |              |         |         |         |         |         |         |         |         |         |         |         |
| Ammonia as N                       | mg/L   | 12                      |              |         |         |         |         |         |         |         |         |         |         |         |
| Acidity (as CaCO3)                 | mg/L   |                         |              |         |         |         |         |         |         |         |         |         |         |         |
| Alkalinity, Bicarbonate (as CaCO3) | mg/L   |                         |              |         |         |         |         |         |         |         |         |         |         |         |
| Alkalinity, Carbonate (as CaCO3)   | mg/L   |                         |              |         |         |         |         |         |         |         |         |         |         |         |
| Alkalinity, Hydroxide (as CaCO3)   | mg/L   |                         |              |         |         |         |         |         |         |         |         |         |         |         |
| Alkalinity, Total (as CaCO3)       | mg/L   |                         |              |         |         |         |         |         |         |         |         |         |         |         |
| Chloride (Cl)                      | mg/L   | 1000                    |              |         |         |         |         |         |         |         |         |         |         |         |
| Fluoride (F)                       | mg/L   |                         |              |         |         |         |         |         |         |         |         |         |         |         |
| Sulfate (SO4)                      | mg/L   |                         |              |         |         |         |         |         |         |         |         |         |         |         |
| Nitrate (as N)                     | mg/L   | 56                      |              |         |         |         |         |         |         |         |         |         |         |         |
| Nitrite (as N)                     | mg/L   | 5.0                     |              |         |         |         |         |         |         |         |         |         |         |         |
| Total Kjeldahl Nitrogen            | mg N/L |                         |              |         |         |         |         |         |         |         |         |         |         |         |
| Ortho Phosphate as P               | mg/L   |                         |              |         |         |         |         |         |         |         |         |         |         |         |
| Total Dissolved Phosphate As P     | mg/L   |                         |              |         |         |         |         |         |         |         |         |         |         |         |
| Total Phosphate as P               | mg/L   | 0.4                     |              |         |         |         |         |         |         |         |         |         |         |         |
| Aluminum (Al)-Total                | mg/L   | 3.0                     |              |         |         |         |         |         |         |         |         |         |         |         |
| Antimony (Sb)-Total                | mg/L   |                         |              |         |         |         |         |         |         |         |         |         |         |         |
| Arsenic (As)-Total                 | mg/L   | 0.10                    |              |         |         |         |         |         |         |         |         |         |         |         |
| Barium (Ba)-Total                  | mg/L   |                         |              |         |         |         |         |         |         |         |         |         |         |         |
| Beryllium (Be)-Total               | mg/L   |                         |              |         |         |         |         |         |         |         |         |         |         |         |
| Bismuth (Bi)-Total                 | mg/L   |                         |              |         |         |         |         |         |         |         |         |         |         |         |
| Boron (B)-Total                    | mg/L   |                         |              |         |         |         |         |         |         |         |         |         |         |         |
| Cadmium (Cd)-Total                 | mg/L   | 0.0024                  |              |         |         |         |         |         |         |         |         |         |         |         |
| Calcium (Ca)-Total                 | mg/L   |                         |              |         |         |         |         |         |         |         |         |         |         |         |
| Chromium (Cr)-Total                | mg/L   | 0.170                   |              |         |         |         |         |         |         |         |         |         |         |         |
| Cobalt (Co)-Total                  | mg/L   |                         |              |         |         |         |         |         |         |         |         |         |         |         |
| Copper (Cu)-Total                  | mg/L   | 0.04                    |              |         |         |         |         |         |         |         |         |         |         |         |
| Iron (Fe)-Total                    | mg/L   |                         |              |         |         |         |         |         |         |         |         |         |         |         |
| Lead (Pb)-Total                    | mg/L   | 0.02                    |              |         |         |         |         |         |         |         |         |         |         |         |
| Lithium (Li)-Total                 | mg/L   |                         |              |         |         |         |         |         |         |         |         |         |         |         |
| Magnesium (Mg)-Total               | mg/L   |                         |              |         |         |         |         |         |         |         |         |         |         |         |
| Manganese (Mn)-Total               | mg/L   |                         |              |         |         |         |         |         |         |         |         |         |         |         |
| Mercury (Hg)-Total                 | mg/L   | 1.50                    |              |         |         |         |         |         |         |         |         |         |         |         |
| Molybdenum (Mo)-Total              | mg/L   |                         |              |         |         |         |         |         |         |         |         |         |         |         |
| Nickel (Ni)-Total                  | mg/L   | 0.10                    |              |         |         |         |         |         |         |         |         |         |         |         |
| Potassium (K)-Total                | mg/L   |                         |              |         |         |         |         |         |         |         |         |         |         |         |

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## JER-WQ9

[illegible]

## JER-WQ10

[illegible]

**JER-WQ10**

| Sample ID                 | Units      | PKCA Discharge Criteria | JER-WQ10  | JER-WQ10  | JER-WQ10  | JER-WQ10 | JER-WQ10  | JER-WQ10  | JER-WQ10 | JER-WQ10  | JER-WQ10  | JER-WQ10  | JER-WQ10  | JER-WQ10  | JER-WQ10  | JER-WQ10  |
|---------------------------|------------|-------------------------|-----------|-----------|-----------|----------|-----------|-----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
|                           |            |                         | 18-May-95 | 30-Jul-95 | 29-Aug-95 | 8-Apr-96 | 27-Jun-96 | 11-Jul-96 | 3-Aug-96 | 5-Sep-96  | 17-Dec-96 | 26-Apr-97 | 15-Jul-97 | 25-Aug-97 | 23-Sep-97 | 06-Dec-97 |
| Date Sampled              |            |                         |           |           |           |          |           |           |          |           |           |           |           |           |           |           |
| Silicon (Si)-Total        | mg/L       |                         | <0.0001   | <0.0002   | <0.0002   | 0.021    | 0.33      | <0.0002   | <0.0001  | 0.000238  | <0.00010  | <0.00010  | 0.224     | 0.206     | 0.175     | <0.00010  |
| Silver (Ag)-Total         | mg/L       |                         | <0.0001   | <0.0002   | <0.0002   | <0.0001  | <0.0001   | <0.0001   | <0.0001  | 0.000238  | <0.00010  | <0.00010  | <0.00010  | <0.00010  | <0.00010  | <0.00010  |
| Sodium (Na)-Total         | mg/L       |                         | 0.586     | <0.5      | 0.9       | <0.5     | <0.5      | <0.5      | <0.5     | 0.434     | 0.68      | <0.50     | <0.50     | <0.50     | <0.50     | <0.50     |
| Selenium (Se)-Total       | mg/L       |                         | 0.0058    | 0.0061    | 0.0063    | 0.0041   | 0.0044    | 0.0041    | 0.0044   | 0.00441   | 0.00659   | 0.00450   | 0.00450   | 0.00464   | 0.00477   | 0.005     |
| Thallium (Tl)-Total       | mg/L       |                         | <0.00005  | <0.00005  | <0.00005  | <0.00005 | <0.00005  | <0.00005  | <0.00005 | 0.0000044 | <0.00010  | <0.00010  | <0.00010  | <0.00010  | <0.00010  | <0.00010  |
| Tin (Sn)-Total            | mg/L       |                         | <0.0001   | <0.0001   | <0.0001   | <0.0001  | <0.0001   | <0.0001   | <0.0001  | 0.0000433 | <0.00010  | 0.00080   | 0.00193   | <0.00010  | 0.0018    | <0.00010  |
| Titanium (Ti)-Total       | mg/L       |                         | <0.0001   | <0.0001   | <0.0001   | <0.0001  | <0.0001   | <0.0001   | <0.0001  | 0.000177  | <0.010    | <0.010    | <0.010    | <0.010    | <0.010    | <0.010    |
| Uranium (U)-Total         | mg/L       | 1.0                     | 0.00016   | 0.00012   | 0.00018   | 0.00014  | 0.00008   | 0.00008   | 0.00008  | 0.000142  | 0.000236  | 0.000144  | 0.000146  | 0.000135  | 0.000130  | 0.000133  |
| Vanadium (V)-Total        | mg/L       |                         | <0.00005  | 0.0002    | 0.0004    | <0.0005  | <0.0005   | <0.0005   | <0.0005  | 0.0000894 | <0.0010   | <0.0010   | <0.0010   | <0.0010   | <0.0010   | <0.0010   |
| Zinc (Zn)-Total           | mg/L       |                         | 0.001     | 0.003     | 0.002     | <0.003   | 0.002     | 0.002     | 0.003    | 0.0077    | <0.001    | <0.001    | <0.001    | 0.0011    | <0.001    | <0.001    |
| Aluminum (Al)-Dissolved   | mg/L       | 0.50                    | 0.02      | 0.014     | 0.013     | 0.016    | 0.018     | 0.020     | 0.028    | 0.0232    | 0.0114    | 0.0128    | <0.01     | 0.0091    | 0.0093    | <0.00010  |
| Antimony (Sb)-Dissolved   | mg/L       | 2.0                     | <0.0004   | <0.0001   | <0.0001   | <0.0005  | <0.00005  | <0.00005  | <0.00005 | 0.000008  | <0.00005  | <0.00010  | <0.00010  | <0.00010  | <0.00010  | <0.00010  |
| Arsenic (As)-Dissolved    | mg/L       |                         | <0.0004   | <0.0001   | 0.0002    | 0.0002   | 0.0002    | <0.0001   | 0.0002   | 0.000192  | 0.00021   | 0.00016   | 0.00020   | 0.00017   | 0.00017   | 0.00016   |
| Barium (Ba)-Dissolved     | mg/L       |                         | 0.0018    | <0.003    | <0.003    | <0.003   | 0.00187   | <0.000005 | 0.00175  | 0.000237  | 0.000237  | 0.00187   | 0.00159   | 0.00156   | 0.00144   | 0.00157   |
| Beryllium (Be)-Dissolved  | mg/L       |                         | <0.0005   | <0.0001   | <0.0001   | <0.0001  | <0.0001   | <0.0001   | <0.0001  | 0.0000037 | <0.00050  | <0.00050  | <0.00050  | <0.00050  | <0.00050  | <0.00050  |
| Bismuth (Bi)-Dissolved    | mg/L       |                         | <0.00005  |           |           |          |           |           |          |           |           |           |           |           |           |           |
| Boron (B)-Dissolved       | mg/L       |                         | <0.002    | <0.004    | <0.004    | <0.001   | <0.001    | <0.001    | <0.001   | 0.0384    | <0.010    | <0.010    | <0.010    | <0.010    | <0.010    | <0.010    |
| Cadmium (Cd)-Dissolved    | mg/L       |                         | <0.0001   | <0.00005  | 0.00008   | <0.00005 | <0.00005  | <0.00005  | <0.00005 | 0.0000196 | <0.000050 | <0.000050 | <0.000050 | <0.000050 | <0.000050 | <0.000050 |
| Calcium (Ca)-Dissolved    | mg/L       |                         | 1.2       | 1         | 0.94      | 0.6      | 0.9       | 1.0       | 0.9      | 0.879     | 1.47      | 1.08      | 0.965     | 0.947     | 0.947     | 1.01      |
| Chromium (Cr)-Dissolved   | mg/L       |                         | <0.0004   | <0.0004   | <0.0004   | <0.0004  | <0.0003   | <0.0003   | <0.0003  | 0.000192  | <0.00050  | <0.00050  | <0.00050  | <0.00050  | <0.00050  | <0.00050  |
| Cobalt (Co)-Dissolved     | mg/L       |                         | <0.0001   | <0.00005  | <0.00005  | <0.00005 | <0.00002  | <0.00002  | <0.00002 | 0.0000245 | <0.00010  | <0.00010  | <0.00010  | <0.00010  | <0.00010  | <0.00010  |
| Copper (Cu)-Dissolved     | mg/L       |                         | 0.0008    | 0.0003    | <0.0010   | <0.0010  | 0.0023    | 0.0003    | 0.0023   | 0.00198   | 0.0012    | 0.00086   | 0.00068   | 0.00070   | 0.00067   | <0.00080  |
| Iron (Fe)-Dissolved       | mg/L       |                         | 0.006     | <0.01     | <0.01     | <0.01    | <0.01     | <0.01     | <0.01    | 0.0172    | <0.030    | <0.030    | <0.030    | <0.030    | <0.030    | <0.030    |
| Lead (Pb)-Dissolved       | mg/L       |                         | <0.0001   | <0.00005  | 0.00008   | <0.0005  | <0.0005   | <0.0005   | <0.0005  | 0.000231  | <0.000050 | <0.000050 | <0.000050 | <0.000050 | <0.000050 | <0.000050 |
| Lithium (Li)-Dissolved    | mg/L       |                         | 0.0004    |           |           |          |           |           |          |           |           |           |           |           |           |           |
| Magnesium (Mg)-Dissolved  | mg/L       |                         | 0.69      | 0.51      | <0.50     | <0.5     | <0.5      | <0.5      | 0.4      | 0.418     | 0.742     | 0.575     | 0.491     | 0.529     | 0.490     | 0.546     |
| Manganese (Mn)-Dissolved  | mg/L       |                         | 0.001     | <0.001    | <0.001    | <0.010   | <0.010    | <0.010    | <0.010   | 0.00207   | <0.000050 | 0.000234  | 0.00146   | 0.000078  | 0.000072  | 0.000119  |
| Mercury (Hg)-Dissolved    | mg/L       |                         | <0.0002   | <0.0002   | <0.0005   | <0.00005 | <0.00005  | <0.00005  | <0.00005 | <0.00001  | <0.000050 | <0.000050 | <0.000050 | <0.000050 | <0.000050 | <0.000050 |
| Molybdenum (Mo)-Dissolved | mg/L       |                         | <0.0003   | <0.0003   | <0.0003   | <0.0003  | <0.0003   | <0.0005   | <0.00005 | 0.0000261 | <0.000050 | <0.000050 | <0.000050 | <0.000050 | <0.000050 | <0.000050 |
| Nickel (Ni)-Dissolved     | mg/L       |                         | 0.0003    | 0.0002    | 0.0003    | <0.0001  | 0.00103   | 0.00016   | 0.00103  | 0.00028   | 0.00124   | <0.00050  | <0.00050  | <0.00050  | <0.00050  | <0.00050  |
| Potassium (K)-Dissolved   | mg/L       |                         | 0.3       | <0.5      | <0.5      | <0.5     | <0.5      | <0.5      | <0.5     | 0.295     | <0.50     | <0.50     | <0.50     | <0.50     | <0.50     | <0.50     |
| Selenium (Se)-Dissolved   | mg/L       |                         | <0.0004   | <0.0004   | <0.0004   | <0.0006  | <0.0006   | <0.0006   | <0.0006  | <0.0001   | <0.00010  | <0.00010  | <0.00010  | <0.00010  | <0.00010  | <0.00010  |
| Silicon (Si)-Dissolved    | mg/L       |                         | <0.0002   | <0.0005   | <0.0005   | <0.0005  | <0.0005   | <0.0005   | <0.0005  | 0.22      | 0.337     | 0.225     | 0.222     | 0.175     | 0.194     | 0.179     |
| Silver (Ag)-Dissolved     | mg/L       |                         | 0.0067    | 0.0067    | 0.0047    | <0.0002  | <0.0002   | <0.0005   | <0.0005  | 0.000334  | <0.000010 | <0.000010 | <0.000010 | <0.000010 | <0.000010 | <0.000010 |
| Sodium (Na)-Dissolved     | mg/L       |                         | 0.8       | 0.6       | 0.7       | <0.5     | <0.5      | <0.5      | <0.5     | 0.42      | 0.71      | <0.50     | <0.50     | <0.50     | <0.50     | <0.50     |
| Strontium (Sr)-Dissolved  | mg/L       |                         | <0.00005  | <0.00002  | 0.00002   | <0.00002 | <0.00002  | <0.00005  | <0.00005 | 0.00048   | 0.000701  | 0.00492   | 0.00448   | 0.00476   | 0.00457   | 0.00503   |
| Thallium (Tl)-Dissolved   | mg/L       |                         | <0.00005  | <0.00002  | <0.00002  | <0.00002 | <0.00002  | <0.00005  | <0.00005 | 0.000004  | <0.00010  | <0.00010  | <0.00010  | <0.00010  | <0.00010  | <0.00010  |
| Tin (Sn)-Dissolved        | mg/L       |                         | <0.0002   | <0.0002   | <0.0002   | <0.0002  | <0.0001   | <0.0001   | <0.0001  | <0.0003   | <0.00010  | 0.00084   | 0.00190   | 0.00130   | <0.00010  | 0.00055   |
| Titanium (Ti)-Dissolved   | mg/L       |                         | <0.0003   | 0.00002   | 0.00013   | 0.00011  | <0.0005   | <0.0005   | <0.0005  | 0.000101  | <0.010    | <0.010    | <0.010    | <0.010    | <0.010    | <0.010    |
| Uranium (U)-Dissolved     | mg/L       |                         | 0.0002    | 0.00013   | 0.00012   | 0.00012  | 0.00012   | 0.00011   | 0.00011  | 0.000141  | 0.000163  | 0.000178  | 0.000126  | 0.000118  | 0.000112  | 0.000114  |
| Vanadium (V)-Dissolved    | mg/L       |                         | <0.0001   | <0.0005   | <0.0005   | <0.0001  | 0.0002    | 0.00005   | 0.0002   | 0.0000558 | <0.0010   | <0.0010   | <0.0010   | <0.0010   | <0.0010   | <0.0010   |
| Zinc (Zn)-Dissolved       | mg/L       |                         | 0.005     | <0.002    | <0.002    | <0.001   | 0.002     | <0.001    | 0.002    | 0.00614   | 0.0012    | <0.0010   | <0.0020   | <0.0010   | <0.0010   | <0.0010   |
| Oil and Grease            | mg/L       | 5.0                     |           |           |           |          |           |           |          |           |           |           | 0.53      | -         | -         | -         |
| Total Inorganic Carbon    | mg/L       |                         | 1.1       | 1         | <1        | 2.9      | <0.1      | <0.1      | <0.1     | 0.96      | 0.96      | 0.64      | 3.35      | 0.55      | 0.53      | 0.58      |
| Total Organic Carbon      | mg/L       |                         | 3         | 2         | 3         | 2.9      | 2.6       | 2.6       | 2.6      | 3.95      | 3.95      | 2.82      | -         | 3.36      | 2.96      | 2.84      |
| BOD                       | mg/L       | 25                      |           |           |           |          |           |           |          |           |           |           |           |           |           |           |
| Fecal Coliform            | CFU/100 mL | 20                      |           |           |           |          |           |           |          |           |           |           |           |           |           |           |



## JER-WQ11

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| Sample ID               | Units      | PKCA Discharge Criteria |
|-------------------------|------------|-------------------------|
| Date Sampled            |            |                         |
| Fecal Coliform          | CFU/100 mL | 20                      |
| Field Water Temperature | deg C      |                         |
| Field Conductivity      | uS/cm      |                         |
| Field DO                | %          |                         |
| Field DO                | mg/L       |                         |
| Field pH                |            |                         |
| Field ORP               | mV         |                         |
| Balance (+ions/-ions)   | Ratio      |                         |





## JER-WQ11

[illegible]

JER-WQ12

| Sample ID                          | Units  | PKCA Discharge Criteria | Date Sampled |           |           |           |            |           |           |           |           |           |  |  |
|------------------------------------|--------|-------------------------|--------------|-----------|-----------|-----------|------------|-----------|-----------|-----------|-----------|-----------|--|--|
|                                    |        |                         | 28-Jun-05    | 26-Aug-05 | 27-Jun-06 | 11-Jul-06 | 6-Aug-06   | 12-Sep-06 | 26-Jun-07 | 22-Jul-07 | 11-Aug-07 | 25-Aug-07 |  |  |
| Time Sampled                       |        |                         |              |           |           |           |            |           |           |           |           |           |  |  |
| Lab Sample ID                      |        |                         |              |           |           |           |            |           |           |           |           |           |  |  |
| Hardness (as CaCO3)                | mg/L   |                         | 11.4         | 14.1      | <5        | 20.2      | L420594-24 | 06-11362  | L523057-4 | L534134-2 | L543213-6 | L546749-7 |  |  |
| Conductivity                       | uS/cm  |                         | 31           | 34        | 15        | 57        |            | 29.8      | 25.4      | 48.4      | 43.9      | 40.2      |  |  |
| pH                                 |        | 6.0 - 8.8               | 6.05         | 7.15      | 6.75      | 7.35      |            | 80        | 65.1      | 132       | 115       | 105       |  |  |
| Total Dissolved Solids             | mg/L   | 4000                    | 44           | 16        | 13        | 48        |            | 7.40      | 7.26      | 7.56      | 7.50      | 7.50      |  |  |
| Total Suspended Solids             | mg/L   | 25                      | <2           | <2        | <2        | <2        |            | 23        | 39.0      | 101       | 74.0      | 74.0      |  |  |
| Turbidity                          | NTU    |                         | 1            | <1        | 2         | 3         |            | 1         | 1.90      | <3        | <3        | <3        |  |  |
| Ammonia as N                       | mg/L   | 12                      | <0.1         | <0.1      | 0.02      | 0.01      | 0.007      | 0.02      | 0.0102    | 0.0078    | <0.005    | <0.005    |  |  |
| Acidity (as CaCO3)                 | mg/L   |                         | 2            | 2         | 2         | 2         |            | 2         | 5.4       | 1.9       | 1.1       | 3.2       |  |  |
| Alkalinity, Bicarbonate (as CaCO3) | mg/L   |                         | 12           | 14        | 10        | 22        |            | 25        | 15.8      | 31.6      | 28.1      | 26.3      |  |  |
| Alkalinity, Carbonate (as CaCO3)   | mg/L   |                         | <1           | <1        | <1        | <1        |            | <1        | <1.0      | <1.0      | <1.0      | <1.0      |  |  |
| Alkalinity, Hydroxide (as CaCO3)   | mg/L   |                         | <1           | <1        | <1        | <1        |            | <1        | <1.0      | <1.0      | <1.0      | <1.0      |  |  |
| Alkalinity, Total (as CaCO3)       | mg/L   | 1000                    | 10           | 11        | 8         | 18        |            | 20        | 15.8      | 31.6      | 28.1      | 26.3      |  |  |
| Chloride (Cl)                      | mg/L   |                         | 1.4          | 2.2       | 0.2       | 3         |            | 4.0       | 3.71      | 6.18      | 5.97      | 5.58      |  |  |
| Fluoride (F)                       | mg/L   |                         | 0.03         | 0.03      | 0.04      | 0.04      |            | 0.04      |           |           |           |           |  |  |
| Sulfate (SO4)                      | mg/L   |                         | <0.5         | 0.6       | 1.1       | 1.2       |            | 3.6       | 3.65      | 7.85      | 7.83      | 6.77      |  |  |
| Nitrate (as N)                     | mg/L   | 56                      | 0.59         | 0.3       | <0.05     | 0.91      |            | 1.22      | 1.35      | 3.97      | 2.71      | 2.32      |  |  |
| Nitrite (as N)                     | mg/L   | 5.0                     | <0.05        | <0.05     | <0.05     | <0.05     |            | <0.05     | 0.0033    | 0.0012    | <0.001    | <0.001    |  |  |
| Total Kjeldahl Nitrogen            | mg N/L |                         |              |           |           | 0.2       |            |           |           |           |           |           |  |  |
| Ortho Phosphate as P               | mg/L   |                         | <0.2         | <0.2      | <0.20     | <0.20     |            | <0.20     | <0.0010   | 0.0015    | <0.0010   | <0.0010   |  |  |
| Total Dissolved Phosphate as P     | mg/L   |                         | <0.005       | <0.005    |           |           |            |           | 0.0027    | 0.0021    | <0.0020   | <0.0020   |  |  |
| Total Phosphate as P               | mg/L   | 0.4                     | 0.05         | <0.02     | 0.0372    | 0.0770    |            | 0.0428    | 0.0047    | 0.0051    | 0.0032    | 0.0023    |  |  |
| Aluminum (Al)-Total                | mg/L   | 3.0                     | 0.064        | 0.034     | <0.00005  | <0.00005  |            | 0.0000806 | 0.0615    | 0.0193    | 0.0154    | 0.0199    |  |  |
| Antimony (Sb)-Total                | mg/L   |                         | <0.0001      | <0.0001   | <0.00005  | <0.00005  |            | <0.00005  | <0.00010  | <0.00010  | <0.00010  | <0.00010  |  |  |
| Arsenic (As)-Total                 | mg/L   | 0.10                    | <0.0004      | <0.0004   | <0.0002   | 0.0003    |            | 0.000301  | 0.00019   | 0.00020   | 0.00014   | 0.00019   |  |  |
| Barium (Ba)-Total                  | mg/L   |                         | <0.005       | 0.006     | 0.00210   | 0.00890   |            | 0.0126    | 0.00962   | 0.0180    | 0.0149    | 0.0135    |  |  |
| Beryllium (Be)-Total               | mg/L   |                         | <0.0005      | <0.0005   | <0.0001   | <0.0001   |            | 0.0000076 | <0.00050  | <0.00050  | <0.00050  | <0.00050  |  |  |
| Bismuth (Bi)-Total                 | mg/L   |                         |              |           |           |           |            |           | <0.00050  | <0.00050  | <0.00050  | <0.00050  |  |  |
| Boron (B)-Total                    | mg/L   |                         | <0.010       | <0.010    | <0.001    | 0.003     |            | 0.0673    | <0.00050  | <0.010    | <0.010    | <0.010    |  |  |
| Cadmium (Cd)-Total                 | mg/L   | 0.0024                  | <0.0002      | <0.0001   | <0.00005  | <0.00005  |            | <0.00005  | <0.00005  | <0.00005  | <0.00005  | <0.00005  |  |  |
| Calcium (Ca)-Total                 | mg/L   |                         | 2.58         | 3.51      | 1.12      | 4.64      |            | 7.63      | 5.60      | 11.4      | 10.3      | 9.83      |  |  |
| Chromium (Cr)-Total                | mg/L   | 0.170                   | <0.0009      | <0.0009   | <0.0005   | 0.0014    |            | 0.000462  | <0.0005   | <0.0005   | <0.0005   | <0.0005   |  |  |
| Cobalt (Co)-Total                  | mg/L   |                         | <0.0001      | <0.0001   | <0.00005  | <0.00005  |            | 0.0000829 | <0.00010  | <0.00010  | <0.00010  | <0.00010  |  |  |
| Copper (Cu)-Total                  | mg/L   | 0.04                    | 0.0014       | 0.002     | 0.0012    | 0.0016    |            | 0.00265   | 0.00331   | 0.00233   | 0.00197   | 0.00188   |  |  |
| Iron (Fe)-Total                    | mg/L   |                         | 0.03         | <0.10     | <0.10     | <0.10     |            | 0.0249    | 0.12      | 0.057     | <0.030    | <0.030    |  |  |
| Lead (Pb)-Total                    | mg/L   | 0.02                    | <0.0001      | <0.0001   | 0.00008   | 0.00003   |            | 0.000101  | 0.000097  | <0.00005  | <0.00005  | <0.00005  |  |  |
| Lithium (Li)-Total                 | mg/L   |                         |              |           |           | <0.005    |            | 0.00097   | <0.0050   | <0.0050   | <0.0050   | <0.0050   |  |  |
| Magnesium (Mg)-Total               | mg/L   |                         | 1.02         | 1.36      | <0.50     | 1.45      |            | 2.22      | 2.82      | 4.80      | 4.39      | 3.87      |  |  |
| Manganese (Mn)-Total               | mg/L   |                         | 0.002        | <0.01     | <0.01     | <0.01     |            | 0.00721   | 0.00405   | 0.00393   | 0.00558   | 0.00220   |  |  |
| Mercury (Hg)-Total                 | mg/L   |                         | <0.0002      | <0.0001   | <0.00005  | <0.00005  |            | <0.00005  | <0.000050 | <0.000050 | <0.000050 | <0.000050 |  |  |
| Molybdenum (Mo)-Total              | mg/L   | 1.50                    | <0.0005      | <0.0005   | <0.00005  | 0.00011   |            | 0.000413  | 0.00017   | 0.000163  | 0.000358  | 0.000365  |  |  |
| Nickel (Ni)-Total                  | mg/L   | 0.10                    | <0.0006      | <0.0006   | <0.0004   | 0.0012    |            | 0.000938  | 0.0014    | 0.00163   | 0.00085   | 0.00089   |  |  |
| Potassium (K)-Total                | mg/L   |                         | <0.5         | <0.5      | <0.5      | <0.5      |            | 1.04      | 0.83      | 1.26      | 1.01      | 1.06      |  |  |
| Selenium (Se)-Total                | mg/L   |                         | <0.0008      | <0.0008   | <0.0010   | <0.0010   |            | 0.000175  | <0.0010   | <0.0010   | <0.0010   | <0.0010   |  |  |

| Sample ID                | Units | PKCA<br>Discharge<br>Criteria | JER-WQ12  | JER-WQ12  | JER-WQ12  | JER-WQ12  | JER-WQ12  | JER-WQ12   | JER-WQ12  | JER-WQ12  | JER-WQ12  | JER-WQ12  | JER-WQ12 |
|--------------------------|-------|-------------------------------|-----------|-----------|-----------|-----------|-----------|------------|-----------|-----------|-----------|-----------|----------|
| Date Sampled             |       |                               | 28-Jun-05 | 28-Aug-05 | 27-Jun-06 | 11-Jul-06 | 6-Aug-06  | 12-Sep-06  | 26-Jun-07 | 22-Jul-07 | 11-Aug-07 | 25-Aug-07 |          |
| Silicon (Si)-Total       | mg/L  |                               | 0.62      | 0.66      | 0.13      | <0.0001   | 0.61      | 1.43       | 1.04      | 1.66      | 1.36      | 1.39      |          |
| Silver (Ag)-Total        | mg/L  |                               | <0.0002   | <0.0002   | <0.0001   | <0.0001   | <0.0001   | 0.0000652  | <0.0001   | <0.00010  | <0.00010  | <0.00010  |          |
| Sodium (Na)-Total        | mg/L  |                               | 0.8       | <0.5      | <0.7      | 0.16      | 2.2       | 1.8        | 2.26      | 3.84      | 3.39      | 3.27      |          |
| Srionium (Sr)-Total      | mg/L  |                               |           | 0.0174    | 0.0047    | 0.0216    | 0.0302    | 0.0239     | 0.0215    | 0.0474    | 0.0425    | 0.0363    |          |
| Thallium (Tl)-Total      | mg/L  |                               | <0.00005  | <0.00005  | <0.00005  | <0.00005  | <0.00005  | 0.000015   | <0.00010  | <0.00010  | <0.00010  | <0.00010  |          |
| Tin (Sn)-Total           | mg/L  |                               |           |           |           | <0.0001   | <0.0001   | <0.0000300 | 0.0002    | <0.00010  | <0.00010  | <0.00010  |          |
| Titanium (Ti)-Total      | mg/L  |                               |           |           |           | 0.0011    | 0.000765  | 0.0013     | <0.0010   | <0.010    | <0.010    | <0.010    |          |
| Uranium (U)-Total        | mg/L  | 1.0                           | 0.00037   | 0.00016   | 0.00016   | 0.00139   | 0.00144   | 0.00165    | 0.00122   | 0.000913  | 0.000547  | 0.000792  |          |
| Vanadium (V)-Total       | mg/L  |                               | <0.0001   | 0.0002    | <0.0005   | <0.0005   | 0.000309  | <0.0005    | <0.0010   | <0.0010   | <0.0010   | <0.0010   |          |
| Zinc (Zn)-Total          | mg/L  | 0.50                          | <0.002    | 0.0005    | 0.0003    | 0.005     | 0.00512   | 0.007      | 0.0041    | 0.0030    | 0.0026    | 0.0029    |          |
| Aluminum (Al)-Dissolved  | mg/L  | 2.0                           | 0.049     | 0.023     | 0.024     | 0.021     | 0.0372    | 0.008      | 0.0126    | 0.0148    | -         | <0.01     |          |
| Antimony (Sb)-Dissolved  | mg/L  |                               | <0.0001   | <0.0001   | <0.0005   | <0.0005   | 0.000773  | <0.0005    | <0.0010   | <0.0010   | -         | <0.0010   |          |
| Arsenic (As)-Dissolved   | mg/L  |                               | 0.0002    | 0.0002    | 0.0001    | 0.0004    | 0.000236  | 0.0003     | 0.00018   | 0.00019   | -         | 0.00019   |          |
| Barium (Ba)-Dissolved    | mg/L  |                               | 0.008     | 0.006     | 0.00175   | 0.00682   | 0.0125    | 0.00941    | 0.00929   | 0.0178    | -         | 0.0133    |          |
| Beryllium (Be)-Dissolved | mg/L  |                               | <0.0001   | <0.0001   | <0.0001   | <0.0001   | 0.0000963 | <0.0001    | <0.00050  | <0.00050  | -         | <0.00050  |          |
| Bismuth (Bi)-Dissolved   | mg/L  |                               |           |           |           |           |           |            | <0.00050  | <0.00050  | -         | <0.00050  |          |
| Boron (B)-Dissolved      | mg/L  |                               | <0.004    | <0.004    | <0.001    | 0.003     | 0.0514    | 0.002      | <0.010    | <0.010    | -         | <0.010    |          |
| Cadmium (Cd)-Dissolved   | mg/L  |                               | <0.00005  | <0.00005  | <0.00005  | <0.00005  | 0.0000028 | <0.00002   | <0.00050  | <0.00050  | -         | <0.000050 |          |
| Calcium (Ca)-Dissolved   | mg/L  |                               | 2.76      | 3.4       | 1.1       | 5.1       | 7.58      | 7.2        | 5.84      | 11.4      | -         | 9.83      |          |
| Chromium (Cr)-Dissolved  | mg/L  |                               | 0.0004    | <0.0004   | 0.0005    | <0.0003   | 0.000452  | 0.0005     | <0.00050  | <0.00050  | -         | <0.00050  |          |
| Cobalt (Co)-Dissolved    | mg/L  |                               | 0.00007   | <0.00005  | <0.00002  | 0.0000909 | 0.00005   | 0.00005    | <0.00010  | <0.00010  | -         | <0.00010  |          |
| Copper (Cu)-Dissolved    | mg/L  |                               | 0.0049    | 0.0011    | 0.0002    | 6.0043    | 0.00253   | 6.0031     | 0.00247   | 0.00186   | -         | 0.00167   |          |
| Iron (Fe)-Dissolved      | mg/L  |                               | 0.02      | <0.01     | <0.10     | <0.10     | 0.0246    | <0.10      | <0.30     | <0.30     | -         | <0.30     |          |
| Lead (Pb)-Dissolved      | mg/L  |                               | 0.00005   | <0.00005  | 0.00010   | 0.00006   | 0.000715  | <0.00005   | <0.000050 | <0.000050 | -         | <0.000050 |          |
| Lithium (Li)-Dissolved   | mg/L  |                               | 1.09      | 1.4       | 0.5       | <0.010    | 0.00397   | <0.0010    | <0.0050   | <0.0050   | -         | <0.0050   |          |
| Magnesium (Mg)-Dissolved | mg/L  |                               | 0.008     | <0.001    | <0.010    | <0.010    | 0.00709   | 0.016      | 0.00579   | 0.00619   | -         | 0.000435  |          |
| Manganese (Mn)-Dissolved | mg/L  |                               | <0.0002   | <0.0001   | <0.0005   | <0.0005   | <0.0001   | <0.00005   | <0.000050 | <0.000050 | -         | <0.000050 |          |
| Mercury (Hg)-Dissolved   | mg/L  |                               | <0.0003   | <0.0003   | <0.00005  | 0.0       |           |            |           |           |           |           |          |

CFU/100 mL

JER-WQ12

| Sample ID               | Units | PKCA<br>Discharge<br>Criteria | JER-WQ12<br>28-Jun-05 | JER-WQ12<br>26-Aug-05 | JER-WQ12<br>27-Jun-06 | JER-WQ12<br>11-Jul-06 | JER-WQ12<br>6-Aug-06 | JER-WQ12<br>12-Sep-06 | JER-WQ12<br>26-Jun-07 | JER-WQ12<br>22-Jul-07 | JER-WQ12<br>11-Aug-07 | JER-WQ12<br>25-Aug-07 |
|-------------------------|-------|-------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Date Sampled            |       |                               |                       |                       |                       |                       |                      |                       |                       |                       |                       |                       |
| Field Water Temperature | deg C |                               |                       |                       | 8.57                  | 13.74                 | 10.1                 | 6.1                   | 14.98                 | 12.85                 | 10.51                 | 8.92                  |
| Field Conductivity      | uS/cm |                               |                       |                       | 12                    | 53                    | 107                  | 58                    | 83                    | 137                   | 107                   | 83                    |
| Field DO                | %     |                               |                       |                       |                       |                       |                      |                       | 114.1                 | 105.1                 | 92.8                  | -                     |
| Field DO                | mg/L  |                               |                       |                       | 12.66                 | 9.35                  |                      | 12.02                 | 11.28                 | 11.35                 | 10.36                 | -                     |
| Field pH                |       |                               |                       |                       | 6.43                  | 6.77                  | 8.0                  | 6.31                  | 6.74                  | 7.21                  | 6.76                  | 7.54                  |
| Field ORP               | mV    |                               |                       |                       | 250.00                | 334.00                |                      | 209.60                | 148.4                 | 190.9                 | 122.3                 | 246.3                 |
| Balance (ions/ions)     | Ratio |                               | 0.99                  | 0.98                  | 0.65                  | 0.90                  |                      | 0.99                  |                       |                       |                       |                       |

[illegible]

| Sample ID    | Units | Discharge Criteria | CL-12     | CL-12     | CL-12     | JER-WQ13  | JER-WQ13  | JER-WQ13  | JER-WQ13  | JER-WQ13  | JER-WQ13  | JER-WQ13  |
|--------------|-------|--------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Date Sampled |       |                    | 18-Apr-05 | 10-Sep-05 | 22-Nov-05 | 17-Jan-06 | 26-Mar-06 | 26-Jun-06 | 26-Jun-06 | 10-Aug-06 | 24-Jul-06 | 27-Dec-06 |

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|                                  | Jun-79 | Jun-12 | Jun-13 | L420594-25 | 06-10652 | L464346-8 | L307255-9 |
|----------------------------------|--------|--------|--------|------------|----------|-----------|-----------|
| Hardness (as CaCO <sub>3</sub> ) | 8.9    | 8.8    | 11.8   | 29.7       | 16.8     | 33.3      |           |
| Conductivity                     | 0.03   | 0.07   | 0.02   | 0.05       | 0.05     | 0.05      |           |

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| Alkalinity, Total (as CaCO <sub>3</sub> ) | 8.3  | 8.9  | 11.1 | 22.8 | 10 | 6    | 10   | 8    | 14   | 11   | 10   | 11   | 13   | 23.2 | 22.8 |
|-------------------------------------------|------|------|------|------|----|------|------|------|------|------|------|------|------|------|------|
| Chloride (Cl)                             | 1000 | <0.5 | 1    | 1    | 1  | 0.6  | 0.6  | 1.2  | 1.6  | 1.6  | 2.6  | 3.3  | 5.7  | 6.35 | 6.35 |
| Fluoride (F)                              |      | 0.03 | 0.04 | 0.05 |    | 0.05 | 0.05 | 0.05 | 0.04 | 0.03 | 0.03 | 0.03 | 0.03 |      |      |

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|                                | mg/L | <0.001 | <0.001 | <0.001 | <0.2  | <0.2   | <0.2   | <0.2   | <0.0010 |
|--------------------------------|------|--------|--------|--------|-------|--------|--------|--------|---------|
| Crnig Phosphate as P           | mg/L | <0.001 | <0.001 | <0.001 | 0.004 | <0.001 | <0.2   | <0.2   | <0.0010 |
| Total Dissolved Phosphate As P | mg/L | <0.001 | 0.003  | <0.001 | 0.004 | 0.002  | <0.005 | <0.005 | 0.0023  |

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|                      | Mean   | SD     | SE     | P-value | 95% CI | OR      | 95% CI  | P-value | 95% CI  | OR      | 95% CI  | P-value  | 95% CI   |
|----------------------|--------|--------|--------|---------|--------|---------|---------|---------|---------|---------|---------|----------|----------|
| Beryllium (Bq)-Total | <0.005 | <0.005 | <0.005 | <0.005  | <0.005 | <0.0005 | <0.0005 | <0.0001 | <0.0001 | <0.0001 | <0.0001 | <0.00050 | <0.00050 |
| Bismuth (Bq)-Total   | <0.1   | <0.1   | <0.1   | <0.1    | <0.1   | <0.0005 | <0.0005 | <0.0001 | <0.0001 | <0.0007 | <0.0001 | <0.00050 | <0.00050 |

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JER-WQ13

| Sample ID               | Units      | P&CA<br>Discharge<br>Criteria | CL-12<br>18-Aug-95 | CL-12<br>10-Sep-95 | CL-12<br>22-Nov-95 | CL-12<br>17-Apr-98 | JER-WQ13<br>28-May-05 | JER-WQ13<br>29-Jun-05 | JER-WQ13<br>30-Jun-05 | JER-WQ13<br>26-Aug-05 | JER-WQ13<br>10-Apr-06 | JER-WQ13<br>21-Jun-06 | JER-WQ13<br>11-Jul-06 | JER-WQ13<br>12-Jul-06 | JER-WQ13<br>6-Aug-06 | JER-WQ13<br>5-Sep-06 | JER-WQ13<br>17-Dec-06 | JER-WQ13<br>27-Apr-07 |
|-------------------------|------------|-------------------------------|--------------------|--------------------|--------------------|--------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------------------|----------------------|-----------------------|-----------------------|
| Fecal Coliform          | CFU/100 mL | 20                            |                    |                    |                    |                    |                       |                       |                       |                       | 1.57                  | 15.15                 | 15.84                 | 16.3                  | 8.73                 | 8.73                 | 0.21                  | 3.26                  |
| Field Water Temperature | deg C      |                               |                    |                    |                    |                    |                       |                       |                       |                       | 32                    | 24                    | 33                    | 34                    | 36                   | 36                   | 77                    | 87                    |
| Field Conductivity      | uS/cm      |                               |                    |                    |                    |                    |                       |                       |                       |                       |                       |                       |                       |                       |                      |                      |                       |                       |
| Field DO                | %          |                               |                    |                    |                    |                    |                       |                       |                       |                       | 11.55                 | 10.41                 | 9.07                  |                       | 11.10                | 11.10                | 9.01                  | 122.6                 |
| Field pH                | mg/L       |                               |                    |                    |                    |                    |                       |                       |                       |                       | 6.3                   | 6.26                  | 7.05                  | 7.8                   | 6.54                 | 6.54                 | 6.76                  | 16.33                 |
| Field ORP               | mV         |                               |                    |                    |                    |                    |                       |                       |                       |                       | 427.40                | 193.10                | 334.20                |                       | 208.40               | 208.40               | 341                   | 5.91                  |
| Balance (Hons-Ions)     | Ratio      |                               |                    |                    |                    |                    | Low EC                | 0.93                  |                       | 0.94                  | 0.61                  | 0.45                  | 0.85                  | 0.83                  |                      | 0.88                 |                       | 85.5                  |

JER-WQ13

| Sample ID                          | Units  | PKCA Discharge Criteria | JER-WQ13 1-Jul-07 10:15 | JER-WQ13 17-Jul-07 00:00 | JER-WQ13 25-Aug-07 14:00 | JER-WQ13 23-Sep-07 12:00 | JER-WQ13 08-Dec-07 13:30 |
|------------------------------------|--------|-------------------------|-------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Lab Sample ID                      |        |                         | L525299-2               | L531523-10               | L546749-6                | L557895-12               | L56854-10                |
| Hardness (as CaCO3)                | mg/L   |                         | 21.8                    | 22.8                     | 28.2                     | 30.3                     | 36                       |
| Conductivity                       | uS/cm  |                         | 55.0                    | 67.7                     | 78.3                     | 85.4                     | 93.8                     |
| pH                                 |        | 6.0 - 8.8               | 7.35                    | 7.06                     | 7.45                     | 7.70                     | 7.37                     |
| Total Dissolved Solids             | mg/L   | 4000                    | 39.0                    | 42.0                     | 59.0                     | 37.0                     | 66                       |
| Total Suspended Solids             | mg/L   | 25                      | <3                      | <3                       | <3                       | <3                       | <3                       |
| Turbidity                          | NTU    |                         | 1.39                    | 0.65                     | 0.60                     | 0.69                     | 0.39                     |
| Ammonia as N                       | mg/L   | 12                      | 0.0144                  | 0.0183                   | 0.0112                   | 0.0167                   | 0.0388                   |
| Acidity (as CaCO3)                 | mg/L   |                         | 8.0                     | 2.4                      | 2.7                      | 2.2                      | 2.3                      |
| Alkalinity, Bicarbonate (as CaCO3) | mg/L   |                         | 13.6                    | 15.8                     | 15.7                     | 16.9                     | 21.5                     |
| Alkalinity, Carbonate (as CaCO3)   | mg/L   |                         | <1.0                    | <1.0                     | <1.0                     | <1.0                     | <1.0                     |
| Alkalinity, Hydroxide (as CaCO3)   | mg/L   |                         | <1.0                    | <1.0                     | <1.0                     | <1.0                     | <1.0                     |
| Alkalinity, Total (as CaCO3)       | mg/L   |                         | 13.6                    | 15.8                     | 15.7                     | 16.9                     | 21.5                     |
| Chloride (Cl)                      | mg/L   | 1000                    | 3.68                    | 4.06                     | 5.07                     | 5.54                     | 6.26                     |
| Fluoride (F)                       | mg/L   |                         |                         |                          |                          |                          |                          |
| Sulfate (SO4)                      | mg/L   |                         | 3.19                    | 3.47                     | 4.73                     | 5.46                     | 5.99                     |
| Nitrate (as N)                     | mg/L   | 58                      | 1.01                    | 1.19                     | 1.99                     | 2.33                     | 2.59                     |
| Nitrite (as N)                     | mg/L   | 5.0                     | <0.001                  | 0.0062                   | 0.0051                   | 0.0064                   | 0.0045                   |
| Total Kjeldahl Nitrogen            | mg N/L |                         | -                       | -                        | -                        | -                        | 0.297                    |
| Ortho Phosphate as P               | mg/L   |                         | <0.0010                 | <0.0010                  | <0.0010                  | <0.0010                  | <0.0010                  |
| Total Dissolved Phosphate As P     | mg/L   |                         | 0.0025                  | <0.0020                  | <0.0020                  | <0.0020                  | <0.0020                  |
| Total Phosphate as P               | mg/L   | 0.4                     | 0.0069                  | 0.0028                   | 0.0043                   | 0.0027                   | 0.0033                   |
| Aluminum (Al)-Total                | mg/L   | 3.0                     | 0.0375                  | 0.0265                   | 0.0135                   | 0.0367                   | 0.007                    |
| Antimony (Sb)-Total                | mg/L   |                         | <0.00010                | <0.00010                 | <0.00010                 | <0.00010                 | <0.00010                 |
| Arsenic (As)-Total                 | mg/L   | 0.10                    | 0.00017                 | 0.00019                  | 0.00019                  | 0.00018                  | 0.0002                   |
| Barium (Ba)-Total                  | mg/L   |                         | 0.00554                 | 0.00511                  | 0.00487                  | 0.00469                  | 0.00583                  |
| Beryllium (Be)-Total               | mg/L   |                         | <0.00050                | <0.00050                 | <0.00050                 | <0.00050                 | <0.00050                 |
| Bismuth (Bi)-Total                 | mg/L   |                         | <0.00050                | <0.00050                 | <0.00050                 | <0.00050                 | <0.00050                 |
| Boron (B)-Total                    | mg/L   |                         | <0.010                  | <0.010                   | <0.010                   | <0.010                   | <0.010                   |
| Cadmium (Cd)-Total                 | mg/L   | 0.0024                  | <0.00005                | <0.00005                 | <0.00005                 | <0.00005                 | <0.00005                 |
| Calcium (Ca)-Total                 | mg/L   |                         | 4.68                    | 4.89                     | 5.98                     | 6.51                     | 7.48                     |
| Chromium (Cr)-Total                | mg/L   | 0.170                   | <0.00035                | <0.00035                 | <0.00035                 | <0.00035                 | <0.00035                 |
| Cobalt (Co)-Total                  | mg/L   |                         | <0.00010                | <0.00010                 | <0.00010                 | <0.00010                 | <0.00010                 |
| Copper (Cu)-Total                  | mg/L   | 0.04                    | 0.00187                 | 0.00169                  | 0.00156                  | 0.00175                  | 0.00178                  |
| Iron (Fe)-Total                    | mg/L   |                         | 0.048                   | 0.068                    | 0.051                    | 0.039                    | <0.030                   |
| Lead (Pb)-Total                    | mg/L   | 0.02                    | 0.000450                | <0.00005                 | <0.00005                 | 0.000200                 | 0.000455                 |
| Lithium (Li)-Total                 | mg/L   |                         | <0.0050                 | <0.0050                  | <0.0050                  | <0.0050                  | <0.0050                  |
| Magnesium (Mg)-Total               | mg/L   |                         | 2.36                    | 2.54                     | 3.22                     | 3.50                     | 4.08                     |
| Manganese (Mn)-Total               | mg/L   |                         | 0.0319                  | 0.00827                  | 0.00350                  | 0.00293                  | 0.00132                  |
| Mercury (Hg)-Total                 | mg/L   |                         | <0.000050               | <0.000050                | <0.000050                | <0.000050                | <0.000050                |
| Molybdenum (Mo)-Total              | mg/L   | 1.50                    | 0.000089                | 0.000091                 | 0.000125                 | 0.000142                 | 0.000124                 |
| Nickel (Ni)-Total                  | mg/L   | 0.10                    | 0.00109                 | 0.00105                  | 0.00066                  | 0.00097                  | 0.00091                  |
| Potassium (K)-Total                | mg/L   |                         | 0.60                    | 0.60                     | 0.74                     | 0.80                     | 0.91                     |

## JER-WQ13

| Sample ID                 | Units | PKCA<br>Discharge<br>Criteria | JER-WQ13<br>1-Jul-07 | JER-WQ13<br>17-Jul-07 | JER-WQ13<br>25-Aug-07 | JER-WQ13<br>23-Sep-07 | JER-WQ13<br>08-Dec-07 |
|---------------------------|-------|-------------------------------|----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Date Sampled              |       |                               |                      |                       |                       |                       |                       |
| Selenium (Se)-Total       | mg/L  |                               | <0.0010              | <0.0010               | <0.0010               | <0.0010               | <0.0010               |
| Silicon (Si)-Total        | mg/L  |                               | 0.770                | 0.698                 | 0.648                 | 0.704                 | 0.714                 |
| Silver (Ag)-Total         | mg/L  |                               | <0.000010            | <0.000010             | <0.000010             | <0.000010             | <0.000010             |
| Sodium (Na)-Total         | mg/L  |                               | 2.07                 | 2.28                  | 3.00                  | 3.48                  | 3.9                   |
| Strontium (Sr)-Total      | mg/L  |                               | <0.000010            | <0.000010             | <0.000010             | <0.000010             | <0.000010             |
| Thallium (Tl)-Total       | mg/L  |                               | <0.000010            | <0.000010             | <0.000010             | <0.000010             | <0.000010             |
| Tin (Sn)-Total            | mg/L  |                               | <0.000010            | 0.00251               | 0.00156               | <0.000010             | 0.000151              |
| Titanium (Ti)-Total       | mg/L  |                               | <0.010               | <0.010                | <0.010                | <0.010                | <0.010                |
| Uranium (U)-Total         | mg/L  | 1.0                           | 0.000928             | 0.00103               | 0.000951              | 0.00108               | 0.00104               |
| Vanadium (V)-Total        | mg/L  |                               | <0.0010              | <0.0010               | <0.0010               | <0.0010               | <0.0010               |
| Zinc (Zn)-Total           | mg/L  | 0.50                          | 0.0013               | 0.0012                | <0.001                | 0.0017                | <0.001                |
| Aluminum (Al)-Dissolved   | mg/L  | 2.0                           | 0.0106               | 0.0136                | <0.008                | 0.0062                | 0.0068                |
| Antimony (Sb)-Dissolved   | mg/L  |                               | <0.0010              | <0.0010               | <0.0010               | <0.0010               | <0.0010               |
| Arsenic (As)-Dissolved    | mg/L  |                               | 0.00016              | 0.00019               | 0.00039               | 0.00016               | 0.0002                |
| Barium (Ba)-Dissolved     | mg/L  |                               | 0.00509              | 0.00505               | 0.00495               | 0.00471               | 0.00571               |
| Beryllium (Be)-Dissolved  | mg/L  |                               | <0.00050             | <0.00050              | <0.00050              | <0.00050              | <0.00050              |
| Bismuth (Bi)-Dissolved    | mg/L  |                               | <0.00050             | <0.00050              | <0.00050              | <0.00050              | <0.00050              |
| Boron (B)-Dissolved       | mg/L  |                               | <0.010               | <0.010                | <0.010                | <0.010                | <0.010                |
| Cadmium (Cd)-Dissolved    | mg/L  |                               | <0.000050            | <0.000050             | <0.000050             | <0.000050             | <0.000050             |
| Calcium (Ca)-Dissolved    | mg/L  |                               | 4.69                 | 4.95                  | 6.00                  | 6.43                  | 7.68                  |
| Chromium (Cr)-Dissolved   | mg/L  |                               | <0.00050             | <0.00050              | <0.00050              | <0.00050              | <0.00050              |
| Chromium (Cr)-Dissolved   | mg/L  |                               | <0.0010              | <0.0010               | <0.0010               | <0.0010               | <0.0010               |
| Cobalt (Co)-Dissolved     | mg/L  |                               | 0.00192              | 0.00156               | 0.00168               | 0.00147               | 0.00178               |
| Copper (Cu)-Dissolved     | mg/L  |                               | <0.030               | <0.030                | <0.030                | <0.030                | <0.030                |
| Iron (Fe)-Dissolved       | mg/L  |                               | 0.00064              | <0.000050             | <0.000050             | <0.000050             | 0.000051              |
| Lead (Pb)-Dissolved       | mg/L  |                               | <0.0050              | <0.0050               | <0.0050               | <0.0050               | <0.0050               |
| Lithium (Li)-Dissolved    | mg/L  |                               | 2.44                 | 2.54                  | 3.21                  | 3.42                  | 4.08                  |
| Magnesium (Mg)-Dissolved  | mg/L  |                               | <0.000050            | 0.0000435             | 0.000627              | 0.000847              | 0.00089               |
| Manganese (Mn)-Dissolved  | mg/L  |                               | <0.000050            | <0.000050             | <0.000050             | <0.000050             | <0.00050              |
| Mercury (Hg)-Dissolved    | mg/L  |                               | <0.000099            | 0.000104              | 0.000106              | 0.000131              | 0.000129              |
| Molybdenum (Mo)-Dissolved | mg/L  |                               | 0.000089             | 0.000095              | 0.000099              | 0.000078              | 0.000069              |
| Nickel (Ni)-Dissolved     | mg/L  |                               | 0.63                 | 0.61                  | 0.75                  | 0.78                  | 0.9                   |
| Potassium (K)-Dissolved   | mg/L  |                               | <0.0010              | <0.0010               | <0.0010               | <0.0010               | <0.0010               |
| Selenium (Se)-Dissolved   | mg/L  |                               | 0.669                | 0.690                 | 0.646                 | 0.678                 | 0.697                 |
| Silicon (Si)-Dissolved    | mg/L  |                               | <0.000010            | <0.000010             | <0.000010             | <0.000010             | <0.000010             |
| Silver (Ag)-Dissolved     | mg/L  |                               | 2.19                 | 2.31                  | 3.00                  | 3.39                  | 3.98                  |
| Sodium (Na)-Dissolved     | mg/L  |                               | 0.0162               | 0.0167                | 0.0182                | 0.0207                | 0.0245                |
| Strontium (Sr)-Dissolved  | mg/L  |                               | <0.000010            | <0.000010             | 0.000020              | <0.000010             | <0.000010             |
| Thallium (Tl)-Dissolved   | mg/L  |                               | <0.000010            | 0.00184               | 0.00184               | <0.000010             | 0.00119               |
| Tin (Sn)-Dissolved        | mg/L  |                               | <0.010               | <0.010                | <0.010                | <0.010                | <0.010                |
| Titanium (Ti)-Dissolved   | mg/L  |                               | 0.000763             | 0.000697              | 0.00100               | 0.000920              | 0.000987              |
| Uranium (U)-Dissolved     | mg/L  |                               | <0.0010              | <0.0010               | <0.0010               | <0.0010               | <0.0010               |
| Vanadium (V)-Dissolved    | mg/L  |                               | <0.0010              | <0.0010               | <0.0010               | <0.0010               | 0.00012               |
| Zinc (Zn)-Dissolved       | mg/L  | 5.0                           | <0.0010              | <0.0010               | <0.0010               | <0.0010               | 0.0012                |
| Oil and Grease            | mg/L  |                               | *                    | 3.16                  | *                     | *                     | *                     |
| Total Inorganic Carbon    | mg/L  |                               | 2.67                 | 5.08                  | 3.14                  | 3.50                  | 3.8                   |
| Total Organic Carbon      | mg/L  |                               | 4.72                 | *                     | 5.25                  | 5.12                  | 5.24                  |
| BOD                       | mg/L  | 25                            |                      | *                     | *                     | *                     | *                     |

JER-WQ13

| Sample ID               | Units      | PKCA<br>Discharge<br>Criteria | JER-WQ13 | JER-WQ13  | JER-WQ13  | JER-WQ13  | JER-WQ13  | JER-WQ13 |
|-------------------------|------------|-------------------------------|----------|-----------|-----------|-----------|-----------|----------|
| Date Sampled            |            |                               | 1-Jul-07 | 17-Jul-07 | 25-Aug-07 | 23-Sep-07 | 08-Dec-07 |          |
| Fecal Coliform          | CFU/100 mL | 20                            | 11.71    | 17.17     | 8.28      | -         | -         | -        |
| Field Water Temperature | deg C      |                               | 86       | 86        | 62        | 3.57      | 2.44      |          |
| Field Conductivity      | uS/cm      |                               | 130.9    | 103.6     | -         | 337       | 100       |          |
| Field DO                | %          |                               | 14.38    | 10.02     | -         | 80.4      | 97.1      |          |
| Field DO                | mg/L       |                               | 7.97     | 7.06      | 7.25      | 10.02     | 13.23     |          |
| Field pH                | mV         |                               | 194.4    | 151.6     | 288.5     | 6.76      | 7.81      |          |
| Field ORP               |            |                               |          |           |           | 156.3     | 39.4      |          |
| Balance (+ions/-ions)   | Ratio      |                               |          |           |           |           |           |          |

JER-WQ14

| Sample ID                          | Units  | PKCA Discharge Criteria | Date Sampled |           |           |           |           |            |          |           |           |           |           |          |
|------------------------------------|--------|-------------------------|--------------|-----------|-----------|-----------|-----------|------------|----------|-----------|-----------|-----------|-----------|----------|
|                                    |        |                         | 28-Jun-05    | 28-Jul-05 | 26-Aug-05 | 21-Jun-05 | 11-Jul-05 | 6-Aug-06   | 5-Sep-06 | 1-Jul-07  | JER-WQ14  | JER-WQ14  | JER-WQ14  | JER-WQ14 |
| Time Sampled                       |        |                         |              |           |           |           |           |            |          |           |           |           |           |          |
| Lab Sample ID                      |        |                         |              |           |           |           |           |            |          |           |           |           |           |          |
| Hardness (as CaCO3)                | mg/L   |                         | 6.4          | 7.2       | 7.4       | <6        | 6.7       | L420594-26 | 06-10851 | L525299-3 | L531523-9 | L546749-9 | L557895-9 |          |
| Conductivity                       | uS/cm  |                         | 18           | 16        | 17        | 16        | 20        |            | 9.5      | 7.58      | 9.43      | 11.7      | 11.6      |          |
| pH                                 |        | 6.0 - 8.8               | 5.73         | 5.87      | 7.09      | 6.85      | 7.18      |            | 21       | 16.5      | 25.5      | 26.8      | 27.4      |          |
| Total Dissolved Solids             | mg/L   | 4000                    | 36           | <15       | 20        | 13        | 12        |            | 22       | 18.0      | 15.0      | 31.0      | 27.0      |          |
| Total Suspended Solids             | mg/L   | 25                      | <2           | <2        | <2        | 1         | <2        |            | <2       | <3        | 5.9       | <3        | <3        |          |
| Turbidity                          | NTU    |                         | 1            | 1         | <1        | 1         | 1         |            | 1        | 1.48      | 1.58      | 0.43      | 0.41      |          |
| Ammonia as N                       | mg/L   | 12                      | <0.1         | <0.1      | <0.1      | 0.01      | 0.01      | 0.009      | 0.01     | 0.0118    | 0.0398    | 0.0126    | 0.0117    |          |
| Acidity (as CaCO3)                 | mg/L   |                         | 2            | 4         | 2         | 6         | 2         |            | 2        | 2.6       | 2.2       | 2.2       | 1.9       |          |
| Alkalinity, Bicarbonate (as CaCO3) | mg/L   |                         | 12           | 13        | 10        | 11        | 13        |            | 14       | 6.4       | 10        | 10.2      | 10.9      |          |
| Alkalinity, Carbonate (as CaCO3)   | mg/L   |                         | <1           | <1        | <1        | <1        | <1        |            | <1       | <1.0      | <1.0      | <1.0      | <1.0      |          |
| Alkalinity, Hydroxide (as CaCO3)   | mg/L   |                         | <1           | <1        | <1        | <1        | <1        |            | <1       | <1.0      | <1.0      | <1.0      | <1.0      |          |
| Alkalinity, Total (as CaCO3)       | mg/L   |                         | 10           | 11        | 8         | 9         | 10        |            | 12       | 6.4       | 10        | 10.2      | 10.9      |          |
| Chloride (Cl)                      | mg/L   | 1000                    | 0.1          | 0.3       | 0.4       | 0.5       | 0.3       |            | 0.4      | <0.5      | 0.52      | 0.73      | 0.81      |          |
| Fluoride (F)                       | mg/L   |                         | 0.03         | 0.05      | 0.02      | 0.02      | 0.03      |            | 0.03     | <0.5      | 0.52      | 0.73      | 0.81      |          |
| Sulfate (SO4)                      | mg/L   |                         | <0.5         | <0.5      | <0.5      | 1.1       | <0.5      |            | 1.0      | <0.50     | <0.50     | 0.52      | 0.68      |          |
| Nitrate (as N)                     | mg/L   | 56                      | <0.05        | <0.05     | <0.05     | <0.05     | <0.05     |            | <0.05    | <0.05     | <0.05     | 0.0051    | 0.0198    |          |
| Nitrite (as N)                     | mg/L   | 5.0                     | <0.05        | <0.05     | <0.05     | <0.05     | <0.05     |            | 0.4      | <0.05     | <0.001    | <0.001    | <0.001    |          |
| Total Kjeldahl Nitrogen            | mg N/L |                         | <0.2         | <0.2      | <0.2      | <0.20     | <0.20     |            | <0.20    | <0.0010   | <0.0010   | <0.0010   | <0.0010   |          |
| Ortho Phosphate as P               | mg/L   |                         | <0.005       | <0.005    | <0.005    |           |           |            |          | 0.0027    | 0.0035    | 0.0021    | <0.0020   |          |
| Total Dissolved Phosphate As P     | mg/L   |                         | <0.005       | <0.005    | <0.005    |           |           |            |          | 0.0047    | 0.0128    | 0.0047    | 0.0031    |          |
| Total Phosphate as P               | mg/L   | 0.4                     | <0.02        | <0.02     | <0.02     |           |           |            |          | 0.0370    | 0.0331    | 0.0219    | 0.0170    |          |
| Aluminum (Al)-Total                | mg/L   | 3.0                     | 0.05         | 0.029     | 0.027     | 0.0417    | 0.0472    | 0.0324     | 0.0252   | <0.0005   | <0.0005   | <0.0010   | <0.0010   |          |
| Antimony (Sb)-Total                | mg/L   |                         | 0.0001       | <0.0001   | <0.0001   | <0.0005   | <0.0005   | 0.0000131  | <0.0005  | <0.00010  | <0.00010  | <0.00010  | <0.00010  |          |
| Arsenic (As)-Total                 | mg/L   | 0.10                    | <0.0004      | <0.0004   | <0.0004   | <0.0002   | <0.0002   | 0.000213   | 0.0004   | 0.00018   | 0.00023   | 0.00023   | 0.00022   |          |
| Barium (Ba)-Total                  | mg/L   |                         | <0.005       | <0.005    | <0.005    | 0.00176   | 0.00206   | 0.00203    | 0.00212  | 0.00253   | 0.00258   | 0.00196   | 0.00186   |          |
| Beryllium (Be)-Total               | mg/L   |                         | <0.005       | <0.005    | <0.005    | <0.0001   | <0.0001   | 0.0000031  | <0.0001  | <0.00050  | <0.00050  | <0.00050  | <0.00050  |          |
| Bismuth (Bi)-Total                 | mg/L   |                         | <0.010       | <0.010    | <0.010    | <0.001    | <0.001    | 0.112      | 0.001    | <0.00050  | <0.00050  | <0.00050  | <0.00050  |          |
| Boron (B)-Total                    | mg/L   |                         | <0.002       | <0.002    | <0.001    | <0.0005   | <0.0005   | 0.000012   | <0.0002  | <0.0005   | <0.0005   | <0.0005   | <0.0005   |          |
| Cadmium (Cd)-Total                 | mg/L   | 0.0024                  | 1.34         | 1.56      | 1.84      | 1.22      | 1.49      | 1.84       | 2.48     | 1.87      | 2.30      | 2.76      | 2.77      |          |
| Calcium (Ca)-Total                 | mg/L   |                         | <0.009       | <0.009    | <0.009    | <0.0005   | 0.0012    | 0.000213   | 0.0024   | <0.0005   | <0.0005   | <0.0005   | <0.0005   |          |
| Chromium (Cr)-Total                | mg/L   | 0.170                   | <0.0001      | <0.0001   | <0.0001   | <0.0005   | <0.0005   | 0.0000407  | <0.0005  | <0.00010  | <0.00010  | <0.00010  | <0.00010  |          |
| Cobalt (Co)-Total                  | mg/L   |                         | <0.001       | <0.001    | <0.001    | <0.001    | 0.0053    | 0.00202    | 0.0015   | 0.00130   | 0.00158   | 0.00138   | 0.00134   |          |
| Copper (Cu)-Total                  | mg/L   | 0.04                    | 0.07         | 0.14      | <0.10     | 0.11      | 0.12      | 0.155      | 0.17     | 0.106     | 0.251     | 0.230     | 0.174     |          |
| Iron (Fe)-Total                    | mg/L   |                         | <0.001       | <0.001    | <0.001    | <0.0005   | <0.0005   | 0.0000762  | <0.0005  | <0.0005   | <0.0005   | <0.0005   | 0.000090  |          |
| Lead (Pb)-Total                    | mg/L   | 0.02                    | <0.001       | <0.001    | <0.001    | <0.0005   | <0.0005   | <0.0002    | <0.005   | <0.0050   | <0.0050   | <0.0050   | <0.0050   |          |
| Lithium (Li)-Total                 | mg/L   |                         | 0.52         | 0.63      | 0.70      | <0.50     | <0.05     | 0.657      | 1.01     | 0.708     | 0.920     | 1.13      | 1.14      |          |
| Magnesium (Mg)-Total               | mg/L   |                         | 0.003        | <0.01     | <0.01     | 0.01      | <0.01     | 0.0054     | <0.01    | 0.00812   | 0.0114    | 0.00304   | 0.00163   |          |
| Manganese (Mn)-Total               | mg/L   |                         | <0.002       | <0.002    | <0.001    | <0.0005   | <0.0005   | <0.0001    | <0.0005  | <0.00050  | <0.00050  | <0.00050  | <0.00050  |          |
| Mercury (Hg)-Total                 | mg/L   |                         | <0.0005      | <0.0005   | <0.0005   | <0.0005   | <0.0005   | 0.0000445  | <0.0005  | <0.0005   | <0.0005   | <0.0005   | <0.0005   |          |
| Molybdenum (Mo)-Total              | mg/L   | 1.50                    | <0.0006      | <0.0006   | <0.0006   | 0.0008    | 0.0005    | 0.000386   | 0.0008   | <0.0005   | <0.0005   | <0.0005   | <0.0005   |          |
| Nickel (Ni)-Total                  | mg/L   | 0.10                    | <0.5         | <0.5      | <0.5      | <0.5      | <0.5      | 0.285      | <0.5     | <0.50     | <0.50     | <0.50     | <0.50     |          |
| Potassium (K)-Total                | mg/L   |                         | <0.0008      | <0.0008   | <0.0008   | <0.0010   | <0.0010   | <0.0001    | <0.0010  | <0.0010   | <0.0010   | <0.0010   | <0.0010   |          |
| Selenium (Se)-Total                | mg/L   |                         | <0.0008      | <0.0008   | <0.0008   | <0.0010   | <0.0010   | <0.0001    | <0.0010  | <0.0010   | <0.0010   | <0.0010   | <0.0010   |          |

| Sample ID                | Units | PKCA Discharge Criteria | JER-WQ14     |           |           |           |           |           |          |            |            |           |           |          | 23-Sep-07 |          |          |          |
|--------------------------|-------|-------------------------|--------------|-----------|-----------|-----------|-----------|-----------|----------|------------|------------|-----------|-----------|----------|-----------|----------|----------|----------|
|                          |       |                         | Date Sampled | 28-Jun-05 | 29-Jul-05 | 26-Aug-05 | 21-Jun-06 | 11-Jul-06 | 6-Aug-06 | 5-Sep-06   | 1-Jul-07   | 17-Jul-07 | 25-Aug-07 |          |           |          |          |          |
| Silicon (Si)-Total       | mg/L  |                         | <0.0022      | 0.2       | 0.09      | <0.0002   | 0.29      | 0.18      | <0.0001  | 0.25       | 0.467      | <0.0001   | 0.272     | <0.00010 | 0.280     | <0.00010 | 0.235    | 0.216    |
| Silver (Ag)-Total        | mg/L  |                         |              |           |           |           |           |           |          |            |            |           |           |          |           |          |          |          |
| Sodium (Na)-Total        | mg/L  |                         | 0.7          |           | 0.5       | <0.5      | <0.5      | <0.5      | <0.0001  | <0.5       | 0.518      | <0.5      | <0.50     | 0.53     | 0.00820   | 0.00648  | 0.00667  | 0.76     |
| Strontium (Sr)-Total     | mg/L  |                         |              |           |           | 0.0047    | 0.0033    | 0.0048    | <0.0005  | 0.0048     | 0.000482   | 0.0058    | 0.00504   | <0.0010  | <0.0010   | <0.0010  | <0.0010  | 0.0667   |
| Thallium (Tl)-Total      | mg/L  |                         | <0.0005      | <0.0005   | <0.0005   | <0.0005   | <0.0005   | <0.0005   | <0.0005  | <0.0005    | 0.0000016  | <0.0005   | <0.0010   | <0.0010  | 0.00336   | 0.00476  | <0.0010  | <0.0010  |
| Tin (Sn)-Total           | mg/L  |                         |              |           |           |           |           |           | <0.0001  | <0.0001    | <0.0000000 | <0.0001   | <0.0010   | <0.010   | <0.010    | <0.010   | <0.010   | <0.010   |
| Titanium (Ti)-Total      | mg/L  |                         |              |           |           |           |           |           | <0.0005  | <0.0005    | 0.000263   | <0.0005   | <0.010    | <0.010   | <0.010    | <0.010   | <0.010   | <0.010   |
| Vanadium (V)-Total       | mg/L  | 1.0                     |              | 0.0002    | 0.00022   | 0.00024   | 0.00014   | 0.00019   | <0.0005  | <0.0005    | 0.000202   | 0.0017    | 0.00223   | 0.000261 | 0.000273  | 0.000219 | 0.000194 | 0.000194 |
| Zinc (Zn)-Total          | mg/L  | 0.50                    |              | 0.0002    | 0.0002    | 0.0002    | 0.0002    | 0.0002    | <0.0001  | 0.0008     | 0.000366   | 0.0002    | <0.001    | <0.001   | <0.001    | <0.001   | <0.001   | 0.00023  |
| Aluminum (Al)-Dissolved  | mg/L  | 2.0                     |              | 0.041     | 0.02      | <0.002    | 0.026     | 0.032     | 0.032    | 0.032      | 0.0273     | 0.022     | 0.0184    | 0.0100   | 0.0100    | 0.0100   | 0.0090   | 0.0090   |
| Antimony (Sb)-Dissolved  | mg/L  |                         | <0.0001      | <0.0001   | <0.0001   | <0.0001   | <0.0001   | <0.0001   | <0.0005  | <0.0005    | 0.0000116  | <0.0005   | <0.0010   | <0.0010  | <0.0010   | <0.0010  | <0.0010  | <0.0010  |
| Arsenic (As)-Dissolved   | mg/L  |                         | 0.0002       | <0.0001   | 0.0002    | 0.0002    | 0.0001    | 0.0002    | 0.0002   | 0.000195   | 0.000195   | 0.0002    | 0.00017   | 0.00021  | 0.00021   | 0.00021  | 0.00021  | 0.00021  |
| Barium (Ba)-Dissolved    | mg/L  |                         | 0.003        | <0.003    | <0.003    | <0.003    | 0.00192   | 0.00274   | 0.00274  | 0.00182    | 0.00182    | 0.00146   | 0.00034   | 0.00251  | 0.00189   | 0.00180  | 0.00180  | 0.00180  |
| Beryllium (Be)-Dissolved | mg/L  |                         | <0.0001      | <0.0001   | <0.0001   | <0.0001   | <0.0001   | <0.0001   | <0.0001  | <0.0000003 | <0.0000003 | <0.0001   | <0.0001   | <0.0001  | <0.0001   | <0.0001  | <0.0001  | <0.0001  |
| Bismuth (Bi)-Dissolved   | mg/L  |                         |              |           |           |           |           |           |          |            |            |           |           |          |           |          |          |          |
| Boron (B)-Dissolved      | mg/L  |                         | <0.004       | <0.004    | <0.004    | <0.004    | <0.004    | <0.001    | <0.001   | <0.001     | 0.000116   | <0.001    | <0.010    | <0.010   | <0.010    | <0.010   | <0.010   | <0.010   |
| Cadmium (Cd)-Dissolved   | mg/L  |                         | <0.0005      | <0.0005   | <0.0005   | <0.0005   | <0.0005   | <0.0005   | <0.0005  | <0.0005    | 0.0000116  | <0.0002   | <0.00050  | <0.00050 | <0.00050  | <0.00050 | <0.00050 | <0.00050 |
| Calcium (Ca)-Dissolved   | mg/L  |                         | 1.6          | 1.8       | 1.8       | 1.8       | 0.7       | 1.7       | 0.0003   | 0.0003     | 1.79       | 2.3       | 1.84      | 2.28     | 2.78      | 2.78     | 2.78     | 2.76     |
| Chromium (Cr)-Dissolved  | mg/L  |                         | 0.0007       | <0.0004   | <0.0004   | <0.0004   | <0.0003   | <0.0003   | <0.0003  | <0.0003    | 0.000209   | 0.0008    | <0.0050   | <0.0050  | <0.0050   | <0.0050  | <0.0050  | <0.0050  |
| Cobalt (Co)-Dissolved    | mg/L  |                         | <0.0005      | <0.0005   | <0.0005   | <0.0005   | <0.0002   | 0.0002    | 0.0002   | 0.000379   | 0.000379   | 0.0002    | <0.0010   |          |           |          |          |          |

CFU/100 mL

JER-WQ14

| Sample ID               | Units | PKCA<br>Discharge<br>Criteria | JER-WQ14  | JER-WQ14  | JER-WQ14  | JER-WQ14  | JER-WQ14  | JER-WQ14 | JER-WQ14 | JER-WQ14 | JER-WQ14  | JER-WQ14  | JER-WQ14  |
|-------------------------|-------|-------------------------------|-----------|-----------|-----------|-----------|-----------|----------|----------|----------|-----------|-----------|-----------|
| Date Sampled            |       |                               | 28-Jun-05 | 29-Jul-05 | 28-Aug-05 | 21-Jun-06 | 11-Jul-06 | 6-Aug-06 | 5-Sep-06 | 1-Jul-07 | 17-Jul-07 | 25-Aug-07 | 23-Sep-07 |
| Field Water Temperature | deg C |                               |           |           |           | 16.45     | 16.37     | 17       | 8.3      | 14.41    | 16.69     | 7.64      | 2.44      |
| Field Conductivity      | uS/cm |                               |           |           | 14        | 15        | 11        | 16       | 18       | 24       | 24        | 21        | 24        |
| Field DO                | %     |                               |           |           | 7.79      | 8.54      |           | 11.47    | 127.6    | 102.1    | 102.1     | -         | 107.8     |
| Field DO                | mg/L  |                               |           |           | 7.33      | 6.85      | 8.0       | 8.29     | 13.00    | 9.94     | 9.94      | -         | 14.7      |
| Field pH                |       |                               |           |           |           |           |           |          | 7.64     | 7.64     | 6.74      | 6.75      | 7.87      |
| Field ORP               | mV    |                               |           |           | 154.30    | 358.20    |           | 284.30   | 139.4    | 191.5    | 191.5     | 287.9     | 187.5     |
| Balance (+ions/-ions)   | Ratio |                               | 0.83      | 0.77      | 0.95      | 0.38      | 0.73      | 0.80     |          |          |           |           |           |

| Sample ID                           | Units         | PYCA Discharge Criteria | Date Sampled Time Sampled |                       |                       |                       |                       |                       |                       |                       |                       |  |
|-------------------------------------|---------------|-------------------------|---------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|--|
|                                     |               |                         | JER-WQ15<br>28-Jun-05     | JER-WQ15<br>30-Jul-05 | JER-WQ16<br>28-Aug-05 | JER-WQ15<br>21-Jun-06 | JER-WQ15<br>11-Jul-06 | JER-WQ15<br>24-Sep-06 | JER-WQ15<br>24-Jun-07 | JER-WQ15<br>22-Jul-07 | JER-WQ15<br>26-Aug-07 |  |
| Lab Sample ID                       |               |                         |                           |                       |                       |                       |                       |                       |                       |                       |                       |  |
| Hardness (as CaCO3)<br>Conductivity | mg/L<br>µS/cm |                         | <6                        | 8.1<br>17             | 7.9<br>18             | Jun-32<br><6          | Jun-15<br>7.2         | 06-11731<br>11.1      | L534134-3<br>5.82     | 1534134-3<br>11.1     |                       |  |
| pH                                  |               | 6.0 - 8.8               |                           |                       |                       |                       |                       |                       |                       |                       |                       |  |
| Total Dissolved Solids              | mg/L          | 4000                    | 48                        | <15                   | 6.97                  | 6.85                  | 7.05                  | 6.87                  | 6.59                  | 7.18                  |                       |  |
| Total Suspended Solids              | mg/L          | 25                      | <2                        | <2                    | <2                    | <2                    | 16                    | 19                    | 16.0                  | 21.0                  |                       |  |
| Turbidity                           | NTU           |                         |                           |                       |                       |                       |                       |                       |                       |                       |                       |  |
| Ammonia as N                        | mg/L          | 12                      | 1                         | 1                     | 1                     | 1                     | 2                     | <1                    | 0.79                  | 0.48                  |                       |  |
| Acidity (as CaCO3)                  | mg/L          |                         | <0.1                      | <0.1                  | <0.1                  | 0.03                  | 0.01                  | 0.02                  | 0.0157                | 0.0215                |                       |  |
| Alkalinity, Bicarbonate (as CaCO3)  | mg/L          |                         | 2                         | 4                     | 2                     | 5                     | 3                     | 3                     | 2.6                   | 1.6                   |                       |  |
| Alkalinity, Carbonate (as CaCO3)    | mg/L          |                         | 12                        | 13                    | 10                    | 12                    | 14                    | 20                    | 4.5                   | 9.8                   |                       |  |
| Alkalinity, Hydroxide (as CaCO3)    | mg/L          |                         | <1                        | <1                    | <1                    | <1                    | <1                    | <1                    | <1.0                  | <1.0                  |                       |  |
| Alkalinity, Total (as CaCO3)        | mg/L          |                         | <1                        | <1                    | <1                    | <1                    | <1                    | <1                    | <1.0                  | <1.0                  |                       |  |
| Chloride (Cl)                       | mg/L          | 1000                    | 10                        | 10                    | 8                     | 10                    | 12                    | 17                    | 4.5                   | 9.8                   |                       |  |
| Fluoride (F)                        | mg/L          |                         | 0.1                       | 0.3                   | 0.4                   | 0.5                   | 0.3                   | 0.6                   | <0.5                  | 0.60                  |                       |  |
| Sulfate (SO4)                       | mg/L          |                         | 0.03                      | 0.05                  | 0.02                  | 0.02                  | 0.03                  | 0.03                  |                       |                       |                       |  |
| Nitrate (as N)                      | mg/L          | 56                      | <0.5                      | <0.5                  | <0.5                  | 0.9                   | <0.5                  | 1.3                   | <0.50                 | 0.61                  |                       |  |
| Nitrite (as N)                      | mg/L          |                         | <0.05                     | 0.08                  | 0.08                  | <0.05                 | <0.05                 | 0.06                  | 0.0109                | 0.0653                |                       |  |
| Total Kjeldahl Nitrogen             | mg N/L        | 5.0                     | <0.05                     | <0.05                 | <0.05                 | <0.05                 | <0.05                 | <0.05                 | <0.01                 | <0.01                 |                       |  |
| Ortho Phosphate as P                | mg/L          |                         | <0.2                      | <0.2                  | <0.2                  | <0.20                 | <0.20                 | <0.20                 | <0.010                | <0.010                |                       |  |
| Total Dissolved Phosphate As P      | mg/L          |                         | <0.005                    | <0.005                | <0.005                |                       |                       |                       | 0.0024                | 0.0023                |                       |  |
| Total Phosphate as P                | mg/L          | 0.4                     | <0.02                     | <0.02                 | <0.02                 |                       |                       |                       | 0.0070                | 0.0050                |                       |  |
| Aluminum (Al)-Total                 | mg/L          | 3.0                     | 0.059                     | 0.034                 | 0.03                  | 0.0491                | 0.0363                | 0.0176                | 0.0389                | 0.0232                |                       |  |
| Antimony (Sb)-Total                 | mg/L          |                         | <0.001                    | <0.001                | <0.001                | <0.0005               | <0.0005               | <0.0005               | <0.0010               | <0.0010               |                       |  |
| Arsenic (As)-Total                  | mg/L          | 0.10                    | <0.004                    | <0.004                | <0.004                | <0.002                | <0.002                | <0.0012               | 0.0018                | 0.00016               |                       |  |
| Barium (Ba)-Total                   | mg/L          |                         | <0.05                     | <0.05                 | <0.05                 | 0.00209               | 0.00286               | 0.00218               | 0.00197               | 0.00317               |                       |  |
| Beryllium (Be)-Total                | mg/L          |                         | <0.005                    | <0.005                | <0.005                | <0.001                | <0.001                | <0.001                | <0.0050               | <0.0050               |                       |  |
| Bismuth (Bi)-Total                  | mg/L          |                         | <0.010                    | <0.010                | <0.010                |                       |                       |                       | <0.0050               | <0.0050               |                       |  |
| Boron (B)-Total                     | mg/L          |                         | <0.002                    | <0.002                | <0.001                | 0.002                 | <0.001                | <0.001                | <0.010                | <0.010                |                       |  |
| Cadmium (Cd)-Total                  | mg/L          | 0.0024                  | <0.002                    | <0.002                | <0.001                | <0.0005               | <0.0005               | <0.0002               | <0.0005               | <0.0005               |                       |  |
| Calcium (Ca)-Total                  | mg/L          |                         | 1.36                      | 1.9                   | 1.99                  | 1.28                  | 1.87                  | 2.71                  | 1.38                  | 2.85                  |                       |  |
| Chromium (Cr)-Total                 | mg/L          | 0.170                   | <0.009                    | <0.009                | <0.009                | <0.0005               | 0.008                 | <0.005                | <0.005                | <0.005                |                       |  |
| Cobalt (Co)-Total                   | mg/L          |                         | <0.001                    | <0.001                | <0.001                | <0.0005               | <0.0005               | <0.0005               | <0.0010               | 0.00020               |                       |  |
| Copper (Cu)-Total                   | mg/L          | 0.04                    | <0.01                     | <0.01                 | <0.01                 | 0.0013                | <0.001                | 0.0017                | 0.00107               | 0.00156               |                       |  |
| Iron (Fe)-Total                     | mg/L          |                         | 0.09                      | 0.11                  | <0.10                 | <0.10                 | <0.10                 | 0.12                  | 0.066                 | 0.179                 |                       |  |
| Lead (Pb)-Total                     | mg/L          |                         | <0.001                    | <0.001                | <0.001                | <0.0005               | <0.0005               | <0.0005               | <0.0005               | <0.0005               |                       |  |
| Lithium (Li)-Total                  | mg/L          | 0.02                    | <0.001                    | <0.001                | <0.001                | <0.0005               | <0.0035               | <0.005                | <0.0050               | <0.0050               |                       |  |
| Magnesium (Mg)-Total                | mg/L          |                         | 0.52                      | 0.72                  | 0.73                  | <0.50                 | 0.37                  | 1.14                  | 0.582                 | 1.02                  |                       |  |
|                                     |               |                         |                           |                       |                       |                       |                       |                       |                       |                       |                       |  |

| Sample ID                | Units | PKCA<br>Discharge<br>Criteria | JER-WQ15  | JER-WQ15  | JER-WQ15  | JER-WQ15  | JER-WQ15  | JER-WQ15  | JER-WQ15  | JER-WQ15  | JER-WQ15  | JER-WQ15  |
|--------------------------|-------|-------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Date Sampled             |       |                               | 28-Jun-05 | 30-Jul-05 | 28-Aug-08 | 21-Jun-06 | 11-Jul-06 | 24-Sep-06 | 24-Jun-07 | 22-Jul-07 | JER-WQ15  | JER-WQ15  |
| Selenium (Se)-Total      | mg/L  |                               | <0.0038   | <0.0008   | <0.0008   | <0.0010   | <0.0010   | <0.0010   | <0.0010   | <0.0010   | <0.0010   | <0.0010   |
| Silicon (Si)-Total       | mg/L  |                               | 0.23      | 0.14      | 0.36      | 0.20      | 0.27      | 0.72      | 0.294     | 0.330     | 0.330     | 1.85      |
| Silver (Ag)-Total        | mg/L  |                               | <0.0002   | <0.0002   | <0.0002   | <0.0001   | <0.0001   | <0.0001   | <0.000010 | <0.000010 | <0.000010 | <0.000010 |
| Sodium (Na)-Total        | mg/L  |                               | 0.7       | 0.7       | <0.5      | <0.5      | <0.5      | <0.5      | <0.50     | 0.60      | 0.60      | 0.81      |
| Strontium (Sr)-Total     | mg/L  |                               | <0.0005   | <0.0005   | 0.0051    | 0.0037    | 0.0052    | 0.0066    | 0.00373   | 0.00722   | 0.00722   | 0.00924   |
| Thallium (Tl)-Total      | mg/L  |                               | <0.0005   | <0.0005   | <0.0005   | <0.0005   | <0.0005   | <0.0005   | <0.0010   | <0.0010   | <0.0010   | <0.0010   |
| Tin (Sn)-Total           | mg/L  |                               | <0.0005   | <0.0005   | <0.0005   | <0.0005   | <0.0005   | <0.0005   | <0.0010   | <0.0010   | <0.0010   | <0.0010   |
| Titanium (Ti)-Total      | mg/L  | 1.0                           | 0.00023   | 0.00023   | 0.00026   | 0.00019   | 0.00016   | 0.00019   | 0.000208  | 0.000228  | 0.000228  | 0.000149  |
| Uranium (U)-Total        | mg/L  |                               | 0.0001    | 0.0002    | 0.0003    | <0.0005   | <0.0005   | <0.0005   | <0.0010   | <0.0010   | <0.0010   | <0.0010   |
| Vanadium (V)-Total       | mg/L  | 0.50                          | <0.002    | <0.002    | 0.005     | 0.002     | 0.005     | 0.005     | <0.001    | <0.001    | <0.001    | <0.001    |
| Zinc (Zn)-Total          | mg/L  | 2.0                           | 0.043     | 0.019     | 0.025     | 0.032     | 0.031     | 0.010     | 0.0275    | 0.0152    | 0.0152    | 0.0234    |
| Aluminum (Al)-Dissolved  | mg/L  |                               | <0.0001   | <0.0001   | <0.0001   | <0.0001   | <0.0005   | <0.0005   | <0.0010   | <0.0010   | <0.0010   | <0.0010   |
| Antimony (Sb)-Dissolved  | mg/L  |                               | <0.0001   | <0.0001   | <0.0001   | <0.0001   | <0.0005   | <0.0005   | <0.0010   | <0.0010   | <0.0010   | <0.0010   |
| Arsenic (As)-Dissolved   | mg/L  |                               | 0.0001    | <0.0001   | 0.0002    | <0.0001   | 0.0002    | 0.0002    | 0.00012   | 0.00017   | 0.00017   | 0.00015   |
| Barium (Ba)-Dissolved    | mg/L  |                               | 0.004     | 0.004     | <0.003    | 0.00401   | 0.00351   | 0.00174   | 0.00187   | 0.00310   | 0.00310   | 0.00500   |
| Beryllium (Be)-Dissolved | mg/L  |                               | <0.0001   | <0.0001   | <0.0001   | <0.0001   | <0.0001   | <0.0001   | <0.0050   | <0.0050   | <0.0050   | <0.0050   |
| Bismuth (Bi)-Dissolved   | mg/L  |                               | <0.0001   | <0.0001   | <0.0001   | <0.0001   | <0.0001   | <0.0001   | <0.0050   | <0.0050   | <0.0050   | <0.0050   |
| Boron (B)-Dissolved      | mg/L  |                               | <0.004    | <0.004    | <0.004    | <0.001    | <0.001    | <0.001    | <0.010    | <0.010    | <0.010    | <0.010    |
| Cadmium (Cd)-Dissolved   | mg/L  |                               | <0.0005   | <0.0005   | <0.0005   | <0.0005   | <0.0005   | <0.0002   | <0.00050  | <0.00050  | <0.00050  | <0.00050  |
| Calcium (Ca)-Dissolved   | mg/L  |                               | 1.48      | 2.1       | 2         | 0.8       | 1.9       | 2.7       | 1.38      | 2.70      | 3.99      | 3.99      |
| Chromium (Cr)-Dissolved  | mg/L  |                               | <0.0004   | <0.0004   | <0.0004   | <0.0003   | <0.0003   | <0.0003   | <0.0050   | <0.0050   | <0.0050   | <0.0050   |
| Cobalt (Co)-Dissolved    | mg/L  |                               | 0.00008   | <0.00005  | <0.00005  | <0.0002   | <0.0002   | <0.0002   | <0.0010   | <0.0010   | <0.0010   | 0.00013   |
| Copper (Cu)-Dissolved    | mg/L  |                               | 0.0041    | 0.0056    | <0.0010   | 0.0001    | 0.0048    | 0.0014    | 0.00094   | 0.00155   | <0.00090  | <0.00090  |
| Iron (Fe)-Dissolved      | mg/L  |                               | 0.03      | 0.06      | 0.03      | <0.10     | <0.10     | <0.10     | <0.030    | 0.080     | 0.061     | 0.061     |
| Lead (Pb)-Dissolved      | mg/L  |                               | <0.0005   | <0.0005   | <0.0005   | <0.0005   | <0.0005   | <0.0005   | <0.00050  | <0.00050  | <0.00050  | <0.00050  |
| Lithium (Li)-Dissolved   | mg/L  |                               | 0.53      | 0.7       | 0.7       | <0.5      | 0.6       | 1.1       | 0.579     | 1.48      | 1.48      | 1.48      |
| Magnesium (Mg)-Dissolved | mg/L  |                               |           |           |           |           |           |           |           |           |           |           |

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[illegible]

| Sample ID                 | Units | PKCA Discharge Criteria | CL-17     | CL-17     | CL-17 | CL-17    | CL-17 | CL-17 | 3-Dec-98 | 31-Jul-05 | 17-Jul-07 | JER-WQ16  | JER-WQ16 | JER-WQ16 | JER-WQ16 | 17-Dec-07 |
|---------------------------|-------|-------------------------|-----------|-----------|-------|----------|-------|-------|----------|-----------|-----------|-----------|----------|----------|----------|-----------|
| Date Sampled              |       |                         | 18-Jul-98 | 12-Aug-96 | CL-17 | 8-Sep-98 | CL-17 | CL-17 |          |           |           |           |          |          |          |           |
| Silicon (Si)-Total        | mg/L  |                         | 0.32      | 0.32      |       | 0.84     |       |       | 0.87     | 0.27      | 0.276     | 11-Aug-97 |          |          |          |           |
| Silver (Ag)-Total         | mg/L  |                         | <0.00001  | <0.00001  |       | <0.00001 |       |       | <0.00001 | <0.00002  | <0.000010 |           |          |          |          |           |
| Sodium (Na)-Total         | mg/L  |                         | <2        | <2        |       | <2       |       |       | <2       | <0.5      | <0.50     |           |          |          |          |           |
| Strontium (Sr)-Total      | mg/L  |                         | 0.0035    | 0.0035    |       | 0.004    |       |       | 0.0048   | 0.00479   | 0.00505   |           |          |          |          |           |
| Thallium (Tl)-Total       | mg/L  |                         | <0.0005   | <0.0005   |       | <0.0005  |       |       | <0.0005  | <0.0005   | <0.00010  |           |          |          |          |           |
| Tin (Sn)-Total            | mg/L  |                         | 0.0003    | 0.0002    |       | 0.0003   |       |       | <0.001   | 0.00377   | <0.0010   |           |          |          |          |           |
| Titanium (Ti)-Total       | mg/L  |                         | <0.01     | <0.01     |       | <0.01    |       |       | <0.01    | <0.010    | <0.010    |           |          |          |          |           |
| Uranium (U)-Total         | mg/L  | 1.0                     |           |           |       |          |       |       | 0.00003  | 0.00006   | 0.000080  |           |          |          |          |           |
| Vanadium (V)-Total        | mg/L  |                         | 0.0001    | 0.0001    |       | 0.0001   |       |       | <0.001   | 0.0001    | <0.0010   |           |          |          |          |           |
| Zinc (Zn)-Total           | mg/L  | 0.50                    | <0.001    | <0.001    |       | <0.001   |       |       | 0.001    | <0.002    | <0.0010   |           |          |          |          |           |
| Aluminum (Al)-Dissolved   | mg/L  | 2.0                     | 0.022     | 0.018     |       | 0.059    |       |       | 0.03     | 0.022     | 0.0124    |           |          |          |          |           |
| Antimony (Sb)-Dissolved   | mg/L  |                         | <0.0005   | <0.0005   |       | <0.0005  |       |       | <0.0005  | <0.001    | <0.00010  |           |          |          |          |           |
| Arsenic (As)-Dissolved    | mg/L  |                         | 0.0002    | 0.00017   |       | 0.00018  |       |       | <0.001   | <0.001    | 0.00016   |           |          |          |          |           |
| Barium (Ba)-Dissolved     | mg/L  |                         | 0.00122   | 0.00114   |       | 0.00134  |       |       | 0.00163  | <0.003    | 0.00177   |           |          |          |          |           |
| Beryllium (Be)-Dissolved  | mg/L  |                         | <0.0005   | <0.0005   |       | <0.0005  |       |       | <0.005   | <0.001    | <0.00050  |           |          |          |          |           |
| Bismuth (Bi)-Dissolved    | mg/L  |                         | <0.0005   | <0.0005   |       | <0.0005  |       |       | <0.005   | <0.004    | <0.00050  |           |          |          |          |           |
| Boron (B)-Dissolved       | mg/L  |                         | <0.001    | 0.001     |       | 0.003    |       |       | 0.002    | <0.0005   | <0.010    |           |          |          |          |           |
| Cadmium (Cd)-Dissolved    | mg/L  |                         | <0.00005  | <0.00005  |       | <0.00005 |       |       | <0.00005 | 1.5       | <0.000050 |           |          |          |          |           |
| Calcium (Ca)-Dissolved    | mg/L  |                         | 1.48      | 1.54      |       | 1.59     |       |       | 1.89     | 1.63      | 2.44      |           |          |          |          |           |
| Chromium (Cr)-Dissolved   | mg/L  |                         | 0.0001    | 0.0002    |       | 0.0002   |       |       | <0.005   | <0.0004   | <0.00050  |           |          |          |          |           |
| Cobalt (Co)-Dissolved     | mg/L  |                         | <0.001    | <0.001    |       | <0.0001  |       |       | <0.001   | <0.00005  | <0.00010  |           |          |          |          |           |
| Copper (Cu)-Dissolved     | mg/L  |                         | 0.0012    | 0.0011    |       | 0.0015   |       |       | 0.0021   | 0.0034    | 0.00099   |           |          |          |          |           |
| Iron (Fe)-Dissolved       | mg/L  |                         | 0.04      | 0.03      |       | 0.02     |       |       | 0.02     | <0.01     | <0.030    |           |          |          |          |           |
| Lead (Pb)-Dissolved       | mg/L  |                         | <0.00005  | 0.0001    |       | 0.00024  |       |       | 0.00007  | <0.00005  | <0.00050  |           |          |          |          |           |
| Lithium (Li)-Dissolved    | mg/L  |                         | <0.001    | <0.001    |       | 0.001    |       |       | <0.001   | <0.001    | <0.030    |           |          |          |          |           |
| Magnesium (Mg)-Dissolved  | mg/L  |                         | 0.611     | 0.731     |       | 0.766    |       |       | 0.89     | 0.6       | 0.743     |           |          |          |          |           |
| Manganese (Mn)-Dissolved  | mg/L  |                         | 0.00205   | 0.00175   |       | 0.00141  |       |       | 0.00194  | <0.001    | 0.00232   |           |          |          |          |           |
| Mercury (Hg)-Dissolved    | mg/L  |                         | <0.00005  | <0.00005  |       | <0.00005 |       |       | <0.00005 | <0.0002   | <0.000050 |           |          |          |          |           |
| Molybdenum (Mo)-Dissolved | mg/L  |                         | 0.0002    | 0.0002    |       | 0.0003   |       |       | 0.0005   | 0.0003    | <0.00050  |           |          |          |          |           |

JER-WQ16

| Sample ID               | Units | PKCA<br>Discharge<br>Criteria | CL-17 | 18-Jul-96 | CL-17 | 12-Aug-96 | CL-17 | 6-Sep-96 | CL-17 | 3-Dec-96 | JER-WQ16 | 17-Jul-07 | JER-WQ16 | 11-Aug-07 | JER-WQ16 | 17-Dec-07 |
|-------------------------|-------|-------------------------------|-------|-----------|-------|-----------|-------|----------|-------|----------|----------|-----------|----------|-----------|----------|-----------|
| Date Sampled            |       |                               |       |           |       |           |       |          |       |          |          |           |          |           |          |           |
| Field Water Temperature | deg C |                               |       |           |       |           |       |          |       |          |          |           |          |           |          |           |
| Field Conductivity      | uS/cm |                               |       |           |       |           |       |          |       |          |          |           |          |           |          |           |
| Field DO                | %     |                               |       |           |       |           |       |          |       |          |          |           |          |           |          |           |
| Field DO                | mg/L  |                               |       |           |       |           |       |          |       |          |          |           |          |           |          |           |
| Field pH                |       |                               |       |           |       |           |       |          |       |          |          |           |          |           |          |           |
| Field ORP               | mV    |                               |       |           |       |           |       |          |       |          |          |           |          |           |          |           |
| Ion Balance             | Ratio |                               |       |           |       |           |       |          |       |          |          |           |          |           |          |           |

0.98

JER-WQ17

| Sample ID                          | Units     | PKCA Discharge Criteria | Date Sampled |           |          |           |         |          |          |          |           |           |           |
|------------------------------------|-----------|-------------------------|--------------|-----------|----------|-----------|---------|----------|----------|----------|-----------|-----------|-----------|
|                                    |           |                         | CL-14        | CL-14     | CL-14    | CL-14     | CL-14   | CL-14    | CL-14    | CL-14    | CL-14     | CL-14     |           |
| Time Sampled                       |           |                         | 14:52        | 17-Jul-96 | 16:12    | 11-Aug-98 | 13:52   | 6-Sep-96 | 11:22    | 5-Dec-96 | 31-Jul-05 | 11-Jul-06 | 17-Jul-07 |
| Lab Sample ID                      |           |                         |              |           |          |           |         |          |          |          |           |           |           |
| Hardness (as CaCO3) Conductivity   | mg/L      |                         | 6.14         | 7         | 6.56     | 6.82      | 6.7     | 6.82     | 6.7      | 6.82     | 6.7       | 6.5       | 7.64      |
|                                    | uS/cm     |                         |              |           |          |           |         | 10.9     | 16       | 17       | 20.8      | 17        | 20.8      |
| pH                                 | 6.0 - 8.8 |                         | 6.73         | 7.02      | 6.74     |           |         |          | 7.2      | 7.03     | 6.81      |           |           |
|                                    | mg/L      | 4000                    | 10           | 11        | 10       | 16        | <15     | 15       | 13.0     | 13.0     | 13.0      |           |           |
| Total Dissolved Solids             | mg/L      | 25                      | 4            | 2         | 1        | 2         | <2      | <2       | <3       | <2       | <2        |           |           |
|                                    | NTU       |                         |              |           |          |           |         |          |          |          |           |           |           |
| Turbidity                          | mg/L      | 12                      | 0.021        | <0.005    | 0.007    | 0.035     | <0.1    | 0.02     | 0.0183   | 0.0183   | 0.0183    | 0.0183    | 0.0183    |
|                                    | mg/L      |                         | 2            | 1.9       | 2        | 4         | 3       | 1        | 2.1      | 2.1      | 2.1       | 2.1       | 2.1       |
| Ammonia as N                       | mg/L      |                         | 5.1          | 5.9       | 5.1      | 10        | 9       | 12       | 8.0      | 8.0      | 8.0       | 8.0       | 8.0       |
| Acidity (as CaCO3)                 | mg/L      |                         | <1           | <1        | <1       | <1        | <1      | <1       | <1       | <1       | <1        | <1        | <1        |
| Alkalinity, Bicarbonate (as CaCO3) | mg/L      |                         |              |           |          |           |         |          |          |          |           |           |           |
| Alkalinity, Carbonate (as CaCO3)   | mg/L      |                         |              |           |          |           |         |          |          |          |           |           |           |
| Alkalinity, Hydroxide (as CaCO3)   | mg/L      |                         |              |           |          |           |         |          |          |          |           |           |           |
| Alkalinity, Total (as CaCO3)       | mg/L      |                         | 5.1          | 5.9       | 5.1      | 10        | 7       | 9        | 8.0      | 8.0      | 8.0       | 8.0       | 8.0       |
| Chloride (Cl)                      | mg/L      | 1000                    | 0.6          | 0.6       | <0.5     | 0.03      | 0.03    | 0.05     | 0.02     | 0.05     | 0.02      | 0.05      | <0.5      |
| Fluoride (F)                       | mg/L      |                         | <1           | <1        | <1       | <1        | <1      | <1       | <0.5     | <0.5     | <0.5      | <0.5      | <0.5      |
| Sulfate (SO4)                      | mg/L      |                         | <0.005       | <0.005    | 0.007    | 0.007     | 0.06    | 0.08     | 0.0088   | 0.0088   | 0.0088    | 0.0088    | 0.0088    |
| Nitrate (as N)                     | mg/L      | 56                      | 0.001        | <0.001    | 0.001    | 0.002     | <0.05   | <0.05    | <0.001   | <0.001   | <0.001    | <0.001    | <0.001    |
| Nitrite (as N)                     | mg/L      | 5.0                     | 0.001        | <0.001    | 0.001    | 0.002     | <0.05   | <0.05    | <0.001   | <0.001   | <0.001    | <0.001    | <0.001    |
| Total Kjeldahl Nitrogen            | mg N/L    |                         |              |           |          |           |         |          |          |          |           |           |           |
| Ortho Phosphate as P               | mg/L      |                         | 0.005        | 0.003     | 0.003    | 0.001     | <0.2    | <0.20    | <0.0010  | <0.0010  | <0.0010   | <0.0010   | <0.0010   |
| Total Dissolved Phosphate As P     | mg/L      |                         | 0.005        | 0.003     | 0.003    | 0.002     | <0.005  | <0.0020  | <0.0020  | <0.0020  | <0.0020   | <0.0020   | <0.0020   |
| Total Phosphate as P               | mg/L      | 0.4                     | 0.007        | 0.005     | 0.008    | 0.007     | <0.02   | 0.0433   | 0.0092   | 0.0092   | 0.0092    | 0.0092    | 0.0092    |
| Aluminum (Al)-Total                | mg/L      | 3.0                     | 0.038        | 0.041     | 0.124    | 0.042     | 0.029   | 0.0433   | 0.0278   | 0.0278   | 0.0278    | 0.0278    | 0.0278    |
| Antimony (Sb)-Total                | mg/L      |                         | <0.00005     | <0.00005  | <0.00005 | <0.00005  | <0.0001 | <0.00005 | <0.00010 | <0.00010 | <0.00010  | <0.00010  | <0.00010  |
| Arsenic (As)-Total                 | mg/L      | 0.10                    | 0.00019      | 0.00024   | 0.00021  | 0.00018   | <0.0004 | <0.0002  | 0.00019  | 0.00019  | 0.00019   | 0.00019   | 0.00019   |
| Barium (Ba)-Total                  | mg/L      |                         | 0.00192      | 0.00156   | 0.0018   | 0.00191   | <0.005  | 0.00149  | 0.00189  | 0.00189  | 0.00189   | 0.00189   | 0.00189   |
| Beryllium (Be)-Total               | mg/L      |                         | <0.0005      | <0.0005   | <0.0005  | <0.0005   | <0.0005 | <0.0005  | <0.00050 | <0.00050 | <0.00050  | <0.00050  | <0.00050  |
| Bismuth (Bi)-Total                 | mg/L      |                         | <0.0005      | <0.0005   | <0.0005  | <0.0005   | <0.0005 | <0.0005  | <0.00050 | <0.00050 | <0.00050  | <0.00050  | <0.00050  |
| Boron (B)-Total                    | mg/L      |                         | <0.001       | 0.003     | 0.004    | <0.001    | <0.010  | 0.001    | <0.010   | <0.010   | <0.010    | <0.010    | <0.010    |
| Cadmium (Cd)-Total                 | mg/L      | 0.0024                  | <0.00005     | 0.00006   | <0.00005 | <0.00005  | 0.0012  | <0.00005 | <0.00005 | <0.00005 | <0.00005  | <0.00005  | <0.00005  |
| Calcium (Ca)-Total                 | mg/L      |                         | 1.46         | 1.6       | 1.47     | 2.47      | 1.59    | 1.42     | 1.73     | 1.73     | 1.73      | 1.73      | 1.73      |
| Chromium (Cr)-Total                | mg/L      | 0.170                   | 0.0001       | 0.0002    | 0.0002   | <0.0005   | <0.0009 | 0.0010   | <0.0005  | <0.0005  | <0.0005   | <0.0005   | <0.0005   |
| Cobalt (Co)-Total                  | mg/L      |                         | <0.0001      | <0.0001   | <0.0001  | <0.0001   | <0.0001 | <0.00010 | <0.00010 | <0.00010 | <0.00010  | <0.00010  | <0.00010  |
| Copper (Cu)-Total                  | mg/L      | 0.04                    | 0.0014       | 0.0014    | 0.0021   | 0.0027    | 0.0015  | 0.0016   | 0.00138  | 0.00138  | 0.00138   | 0.00138   | 0.00138   |
| Iron (Fe)-Total                    | mg/L      |                         | 0.04         | 0.05      | 0.07     | 0.01      | <0.10   | <0.10    | 0.079    | <0.10    | <0.10     | <0.10     | <0.10     |
| Lead (Pb)-Total                    | mg/L      | 0.02                    | <0.00005     | <0.00005  | 0.00006  | 0.00012   | 0.0002  | <0.00005 | <0.00005 | <0.00005 | <0.00005  | <0.00005  | <0.00005  |
| Lithium (Li)-Total                 | mg/L      |                         | <0.001       | 0.002     | 0.002    | <0.001    | 0.75    | <0.005   | <0.005   | <0.005   | <0.005    | <0.005    | <0.005    |
| Magnesium (Mg)-Total               | mg/L      |                         | 0.592        | 0.743     | 0.739    | 1.1       | 0.75    | 0.39     | 0.793    | 0.793    | 0.793     | 0.793     | 0.793     |
| Manganese (Mn)-Total               | mg/L      |                         | 0.00325      | 0.00305   | 0.00264  | 0.00168   | <0.01   | <0.0005  | <0.0005  | <0.0005  | <0.0005   | <0.0005   | <0.0005   |
| Mercury (Hg)-Total                 | mg/L      |                         | <0.00005     | <0.00005  | <0.00005 | <0.00005  | <0.0005 | <0.00005 | <0.00005 | <0.00005 | <0.00005  | <0.00005  | <0.00005  |
| Molybdenum (Mo)-Total              | mg/L      | 1.50                    | <0.00005     | <0.00005  | <0.00005 | <0.00005  | <0.0005 | <0.00005 | <0.00005 | <0.00005 | <0.00005  | <0.00005  | <0.00005  |
| Nickel (Ni)-Total                  | mg/L      | 0.10                    | 0.0004       | 0.0003    | 0.0005   | 0.0004    | <0.0006 | 0.0004   | <0.0005  | <0.0005  | <0.0005   | <0.0005   | <0.0005   |
| Potassium (K)-Total                | mg/L      |                         | <2           | <2        | <2       | <2        | <2      | <2       | <2       | <2       | <2        | <2        | <2        |
| Selenium (Se)-Total                | mg/L      |                         | <0.001       | <0.001    | <0.001   | <0.001    | <0.001  | <0.001   | <0.0010  | <0.0010  | <0.0010   | <0.0010   | <0.0010   |

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### Fecal Coleform

| Sample ID               | Units | PKCA<br>Discharge<br>Criteria | CL-14     | CL-14     | CL-14    | CL-14    | CL-14     | JER-WQ17  | JER-WQ17  | JER-WQ17 |
|-------------------------|-------|-------------------------------|-----------|-----------|----------|----------|-----------|-----------|-----------|----------|
| Date Sampled            |       |                               | 17-Jul-96 | 11-Aug-98 | 6-Sep-98 | 5-Dec-96 | 31-Jul-95 | 11-Jul-06 | 17-Jul-07 |          |
| Field Water Temperature | deg C |                               |           |           |          |          |           | 15.14     | 16.89     |          |
| Field Conductivity      | uS/cm |                               |           |           |          |          |           | 15        | 19        |          |
| Field DO                | %     |                               |           |           |          |          |           | 107.2     | 107.2     |          |
| Field DO                | mg/L  |                               |           |           |          |          |           | 8.88      | 10.35     |          |
| Field pH                |       |                               |           |           |          |          |           | 6.84      | 6.81      |          |
| Field ORP               | mV    |                               |           |           |          |          |           | 340.00    | 197.2     |          |
| Ion Balance             | Ratio |                               |           |           |          |          | 1.01      | 0.75      |           |          |

JER-WQ18

| Sample ID                           | Units         | PKCA<br>Discharge<br>Criteria | CL-16<br>17-Jul-96<br>17:11 | CL-16<br>14:33 | CL-16<br>11-Aug-98 | CL-16<br>12:00 | CL-16<br>6-Sep-98<br>11:50 | CL-16<br>3-Dec-98 | JER-WQ18<br>31-Jul-05 | JER-WQ18<br>11-Jul-06 | JER-WQ18<br>17-Jul-07 | JER-WQ18<br>11-Aug-07 |
|-------------------------------------|---------------|-------------------------------|-----------------------------|----------------|--------------------|----------------|----------------------------|-------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Date Sampled                        |               |                               |                             |                |                    |                |                            |                   |                       |                       |                       |                       |
| Time Sampled                        |               |                               |                             |                |                    |                |                            |                   |                       |                       |                       |                       |
| Lab Sample ID                       |               |                               |                             |                |                    |                |                            |                   |                       |                       |                       |                       |
| Hardness (as CaCO3)<br>Conductivity | mg/L<br>uS/cm |                               | 5.77                        | 6.51           | 5.94               | 5.94           | 5.94                       | 5.94              | 7.2                   | 5.6                   | 8.84                  | 5.43213-4<br>9.49     |
| pH                                  | 6.0 - 8.8     |                               |                             |                |                    |                |                            |                   | 17                    | 18                    | 24.0                  | 23.3                  |
| Total Dissolved Solids              | mg/L          |                               | 6.83                        | 6.94           | 6.81               | 6.81           | 6.81                       | 6.81              | 6.92                  | 7.03                  | 6.87                  | 7.30                  |
| Total Suspended Solids              | mg/L          |                               | 9                           | 9              | 10                 | 10             | 10                         | 12                | 24                    | 8                     | 15.0                  | 11.0                  |
| Turbidity                           | NTU           |                               | 3                           | 8              | 4                  | 4              | 4                          | 3                 | <2                    | <2                    | <3                    | <2                    |
| Ammonia as N                        | mg/L          |                               |                             |                |                    |                |                            |                   | 3                     | 2                     | 0.91                  | 1.22                  |
| Acidity (as CaCO3)                  | mg/L          |                               | 0.018                       | 0.01           | 0.014              | 0.014          | 0.014                      | 0.016             | <0.1                  | 0.02                  | 0.0067                | 0.0090                |
| Alkalinity, Bicarbonate (as CaCO3)  | mg/L          |                               | 2                           | 1.9            | 2                  | 2              | 2                          | 3                 | 2                     | 3                     | 2.0                   | <1.0                  |
| Alkalinity, Carbonate (as CaCO3)    | mg/L          |                               | 4.8                         | 5.1            | 5.6                | 5.6            | 5.6                        | 6                 | 9                     | 14                    | 9.3                   | 8.9                   |
| Alkalinity, Hydroxide (as CaCO3)    | mg/L          |                               | <1                          | <1             | <1                 | <1             | <1                         | <1                | <1                    | <1                    | <1.0                  | <1.0                  |
| Alkalinity, Total (as CaCO3)        | mg/L          |                               | 4.8                         | 5.1            | 5.6                | 5.6            | 5.6                        | 6                 | 8                     | 11                    | 9.3                   | 8.9                   |
| Chloride (Cl)                       | mg/L          | 1000                          | 0.5                         | <0.5           | <0.5               | <0.5           | <0.5                       | 0.9               | 0.5                   | 0.4                   | 0.60                  | 0.76                  |
| Fluoride (F)                        | mg/L          |                               | <0.02                       | 0.03           | 0.04               | 0.04           | 0.04                       | 0.03              | 0.05                  | 0.02                  |                       |                       |
| Sulfate (SO4)                       | mg/L          |                               | <1                          | <1             | <1                 | <1             | <1                         | <1                | <0.5                  | <0.5                  | 0.51                  | 0.67                  |
| Nitrate (as N)                      | mg/L          | 55                            | 0.01                        | <0.005         | <0.005             | <0.005         | <0.005                     | 0.011             | <0.05                 | <0.05                 | <0.005                | <0.005                |
| Nitrite (as N)                      | mg/L          | 5.0                           | 0.001                       | 0.001          | 0.001              | 0.001          | 0.001                      | 0.001             | <0.05                 | <0.05                 | <0.001                | 0.0015                |
| Total Kjeldahl Nitrogen             | mg N/L        |                               |                             |                |                    |                |                            |                   |                       |                       |                       |                       |
| Ortho Phosphate as P                | mg/L          |                               | 0.002                       | 0.001          | 0.003              | 0.003          | 0.003                      | <0.001            | <0.2                  | <0.20                 | <0.0010               | <0.0010               |
| Total Dissolved Phosphate as P      | mg/L          |                               | 0.003                       | 0.003          | 0.003              | 0.003          | 0.003                      | 0.002             | <0.005                | <0.0020               | 0.0026                | 0.0026                |
| Total Phosphate as P                | mg/L          | 0.4                           | 0.005                       | 0.027          | 0.007              | 0.007          | 0.007                      | 0.004             | <0.02                 | 0.0060                | 0.0066                | 0.0066                |
| Aluminum (Al)-Total                 | mg/L          | 3.0                           | 0.033                       | 0.029          | 0.076              | 0.076          | 0.076                      | 0.048             | <0.02                 | 0.0373                | 0.0262                | 0.0336                |
| Antimony (Sb)-Total                 | mg/L          |                               | <0.00005                    | <0.00005       | <0.00005           | <0.00005       | <0.00005                   | <0.00005          | <0.0001               | <0.00010              | <0.00010              | <0.00010              |
| Arsenic (As)-Total                  | mg/L          | 0.10                          | 0.00017                     | 0.00021        | 0.00018            | 0.00018        | 0.00018                    | 0.0002            | <0.0004               | <0.0002               | 0.00020               | 0.00020               |
| Barium (Ba)-Total                   | mg/L          |                               | 0.00168                     | 0.00166        | 0.00184            | 0.00184        | 0.00184                    | 0.0021            | <0.005                | 0.00199               | 0.00167               | 0.00150               |
| Beryllium (Be)-Total                | mg/L          |                               | <0.0005                     | <0.0005        | <0.0005            | <0.0005        | <0.0005                    | <0.0005           | <0.0005               | <0.0001               | <0.00050              | <0.00050              |
| Bismuth (Bi)-Total                  | mg/L          |                               | <0.0005                     | <0.0005        | <0.0005            | <0.0005        | <0.0005                    | <0.0005           | <0.0005               | <0.00050              | <0.00050              | <0.00050              |
| Boron (B)-Total                     | mg/L          |                               | <0.001                      | 0.002          | 0.004              | 0.004          | 0.004                      | <0.001            | <0.010                | <0.001                | <0.010                | <0.010                |
| Cadmium (Cd)-Total                  | mg/L          | 0.0024                        | <0.00005                    | <0.00005       | <0.00005           | <0.00005       | <0.00005                   | <0.00005          | <0.0002               | <0.00005              | <0.00005              | <0.00005              |
| Calcium (Ca)-Total                  | mg/L          |                               | 1.37                        | 1.46           | 1.41               | 1.41           | 1.41                       | 1.79              | 1.68                  | 1.41                  | 2.05                  | 2.20                  |
| Chromium (Cr)-Total                 | mg/L          | 0.170                         | 0.0001                      | 0.0002         | 0.0001             | 0.0001         | 0.0001                     | <0.0005           | <0.0009               | 0.0011                | <0.0005               | <0.0005               |
| Cobalt (Co)-Total                   | mg/L          |                               | <0.0001                     | <0.0001        | <0.0001            | <0.0001        | <0.0001                    | <0.0001           | <0.0001               | <0.0005               | <0.00010              | <0.00010              |
| Copper (Cu)-Total                   | mg/L          | 0.04                          | 0.0013                      | 0.0013         | 0.0015             | 0.0015         | 0.0015                     | 0.0022            | <0.001                | <0.001                | 0.00103               | 0.00101               |
| Iron (Fe)-Total                     | mg/L          |                               | 0.03                        | 0.04           | 0.04               | 0.04           | 0.04                       | 0.02              | <0.10                 | <0.10                 | 0.117                 | 0.158                 |
| Lead (Pb)-Total                     | mg/L          | 0.02                          | <0.00005                    | 0.00006        | <0.00005           | <0.00005       | <0.00005                   | 0.00011           | <0.0001               | <0.00005              | <0.00005              | <0.00005              |
| Lithium (Li)-Total                  | mg/L          |                               | <0.001                      | <0.001         | 0.002              | 0.002          | 0.002                      | <0.001            | <0.001                | <0.005                | <0.0050               | <0.0050               |
| Magnesium (Mg)-Total                | mg/L          |                               | 0.56                        | 0.67           | 0.668              | 0.668          | 0.668                      | 0.79              | 0.73                  | 0.34                  | 0.858                 | 0.971                 |
| Manganese (Mn)-Total                | mg/L          |                               | 0.00301                     | 0.00368        | 0.00336            | 0.00336        | 0.00336                    | 0.00179           | <0.01                 | <0.01                 | 0.00464               | 0.00494               |
| Mercury (Hg)-Total                  | mg/L          |                               | <0.00005                    | <0.00005       | <0.00005           | <0.00005       | <0.00005                   | <0.00005          | <0.0002               | <0.00005              | <0.000050             | <0.000050             |
| Molybdenum (Mo)-Total               | mg/L          | 1.50                          | <0.00005                    | <0.00005       | <0.00005           | <0.00005       | <0.00005                   | <0.00005          | <0.0005               | <0.00005              | <0.00005              | <0.00005              |
| Nickel (Ni)-Total                   | mg/L          | 0.10                          | 0.0003                      | 0.0003         | 0.0004             | 0.0004         | 0.0004                     | 0.0005            | <0.0006               | 0.0003                | <0.0005               | 0.00062               |
| Potassium (K)-Total                 | mg/L          |                               | <2                          | <2             | <2                 | <2             | <2                         | <2                | <0.5                  | <0.5                  | <0.50                 | <0.50                 |
| Selenium (Se)-Total                 | mg/L          |                               | <0.001                      | <0.001         | <0.001             | <0.001         | <0.001                     | <0.001            | <0.0008               | <0.0010               | <0.0010               | <0.0010               |



[illegible]

## JER-WQ21

| Sample ID                          | Units  | PKCA<br>Discharge<br>Criteria | JER-WQ21  | JER-WQ21  | JER-WQ21   |
|------------------------------------|--------|-------------------------------|-----------|-----------|------------|
| Date Sampled                       |        |                               | 01-JUL-07 | 29-JUL-07 | 25-AUG-07  |
| Time Sampled                       |        |                               | 17:55     | 08:30     | 16:15      |
| Lab Sample ID                      |        |                               | L525299-4 | L535988-1 | L546749-13 |
| Hardness (as CaCO3)                | mg/L   |                               | 4.06      | 6.4       | 6.12       |
| Conductivity                       | uS/cm  |                               | 9.9       | 16.2      | 15.5       |
| pH                                 | pH     | 6.0 - 8.8                     | 6.67      | 7.05      | 6.92       |
| Total Dissolved Solids             | mg/L   | 4000                          | 11.0      | 17.0      | 15.0       |
| Total Suspended Solids             | mg/L   | 25                            | <3        | <3        | <3         |
| Turbidity                          | NTU    |                               | 1.02      | 0.98      | 0.61       |
| Ammonia as N                       | mg/L   | 12                            | 0.0105    | 0.0124    | 0.0211     |
| Acidity (as CaCO3)                 | mg/L   |                               | 2.5       | 1.2       | 1.9        |
| Alkalinity, Bicarbonate (as CaCO3) | mg/L   |                               | 3.6       | 6.0       | 5.4        |
| Alkalinity, Carbonate (as CaCO3)   | mg/L   |                               | <1.0      | <1.0      | <1.0       |
| Alkalinity, Hydroxide (as CaCO3)   | mg/L   |                               | <1.0      | <1.0      | <1.0       |
| Alkalinity, Total (as CaCO3)       | mg/L   |                               | 3.6       | 6.0       | 5.4        |
| Chloride (Cl)                      | mg/L   | 1000                          | <0.5      | <0.5      | <0.5       |
| Fluoride (F)                       | mg/L   |                               |           |           |            |
| Sulfate (SO4)                      | mg/L   |                               | <0.50     | 0.65      | 0.57       |
| Nitrate (as N)                     | mg/L   | 56                            | 0.0082    | 0.0902    | 0.0119     |
| Nitrite (as N)                     | mg/L   | 5.0                           | <0.001    | <0.001    | <0.001     |
| Total Kjeldahl Nitrogen            | mg N/L |                               | -         | -         | -          |
| Ortho Phosphate as P               | mg/L   |                               | <0.0010   | <0.0010   | <0.0010    |
| Total Dissolved Phosphate As P     | mg/L   |                               | 0.0025    | <0.0020   | 0.0062     |
| Total Phosphate as P               | mg/L   | 0.4                           | 0.0062    | 0.0071    | 0.0158     |
| Aluminum (Al)-Total                | mg/L   | 3.0                           | 0.0369    | 0.0360    | 0.0141     |
| Antimony (Sb)-Total                | mg/L   |                               | <0.00010  | <0.00010  | <0.00010   |
| Arsenic (As)-Total                 | mg/L   | 0.10                          | 0.00012   | 0.00012   | 0.00015    |
| Barium (Ba)-Total                  | mg/L   |                               | 0.00193   | 0.00303   | 0.00127    |
| Beryllium (Be)-Total               | mg/L   |                               | <0.00050  | <0.00050  | <0.00050   |
| Bismuth (Bi)-Total                 | mg/L   |                               | <0.00050  | <0.00050  | <0.00050   |
| Boron (B)-Total                    | mg/L   |                               | <0.010    | <0.010    | <0.010     |
| Cadmium (Cd)-Total                 | mg/L   | 0.0024                        | <0.00005  | <0.00005  | <0.00005   |
| Calcium (Ca)-Total                 | mg/L   |                               | 0.907     | 1.45      | 1.33       |
| Chromium (Cr)-Total                | mg/L   | 0.170                         | <0.0005   | <0.0005   | <0.0005    |
| Cobalt (Co)-Total                  | mg/L   |                               | <0.00010  | <0.00010  | <0.00010   |
| Copper (Cu)-Total                  | mg/L   | 0.04                          | 0.00114   | 0.00161   | 0.00138    |
| Iron (Fe)-Total                    | mg/L   |                               | 0.090     | 0.219     | 0.123      |
| Lead (Pb)-Total                    | mg/L   | 0.02                          | <0.00005  | <0.00005  | <0.00005   |
| Lithium (Li)-Total                 | mg/L   |                               | <0.0050   | <0.0050   | <0.0050    |
| Magnesium (Mg)-Total               | mg/L   |                               | 0.424     | 0.634     | 0.674      |
| Manganese (Mn)-Total               | mg/L   |                               | 0.00508   | 0.00727   | 0.00359    |
| Mercury (Hg)-Total                 | mg/L   |                               | <0.000050 | <0.000050 | <0.000050  |
| Molybdenum (Mo)-Total              | mg/L   | 1.50                          | <0.00005  | <0.00005  | <0.00005   |
| Nickel (Ni)-Total                  | mg/L   | 0.10                          | <0.0005   | <0.0005   | <0.0005    |
| Potassium (K)-Total                | mg/L   |                               | <0.50     | <0.50     | <0.50      |
| Selenium (Se)-Total                | mg/L   |                               | <0.0010   | <0.0010   | <0.0010    |
| Silicon (Si)-Total                 | mg/L   |                               | 0.186     | 0.180     | 0.119      |

## JER-WQ21

| Sample ID                 | Units      | PKCA<br>Discharge<br>Criteria | JER-WQ21  | JER-WQ21  | JER-WQ21  |
|---------------------------|------------|-------------------------------|-----------|-----------|-----------|
| Date Sampled              |            |                               | 01-JUL-07 | 29-JUL-07 | 25-AUG-07 |
| Silver (Ag)-Total         | mg/L       |                               | <0.000010 | <0.000010 | <0.000010 |
| Sodium (Na)-Total         | mg/L       |                               | <0.50     | 0.55      | <0.50     |
| Strontium (Sr)-Total      | mg/L       |                               | 0.00327   | 0.00592   | 0.00413   |
| Thallium (Tl)-Total       | mg/L       |                               | <0.00010  | <0.00010  | <0.00010  |
| Tin (Sn)-Total            | mg/L       |                               | <0.00010  | <0.00010  | <0.00010  |
| Titanium (Ti)-Total       | mg/L       |                               | <0.010    | <0.010    | <0.010    |
| Uranium (U)-Total         | mg/L       | 1.0                           | 0.000124  | 0.000125  | 0.000085  |
| Vanadium (V)-Total        | mg/L       |                               | <0.0010   | <0.0010   | <0.0010   |
| Zinc (Zn)-Total           | mg/L       | 0.50                          | <0.001    | 0.0058    | <0.001    |
| Aluminum (Al)-Dissolved   | mg/L       | 2.0                           | 0.0130    | <0.008    | <0.004    |
| Antimony (Sb)-Dissolved   | mg/L       |                               | <0.00010  | <0.00010  | <0.00010  |
| Arsenic (As)-Dissolved    | mg/L       |                               | 0.00010   | 0.00013   | 0.00015   |
| Barium (Ba)-Dissolved     | mg/L       |                               | 0.00179   | 0.00229   | 0.00120   |
| Beryllium (Be)-Dissolved  | mg/L       |                               | <0.00050  | <0.00050  | <0.00050  |
| Bismuth (Bi)-Dissolved    | mg/L       |                               | <0.00050  | <0.00050  | <0.00050  |
| Boron (B)-Dissolved       | mg/L       |                               | <0.010    | <0.010    | <0.010    |
| Cadmium (Cd)-Dissolved    | mg/L       |                               | <0.000050 | <0.000050 | <0.000050 |
| Calcium (Ca)-Dissolved    | mg/L       |                               | 0.900     | 1.45      | 1.34      |
| Chromium (Cr)-Dissolved   | mg/L       |                               | <0.00050  | <0.00050  | <0.00050  |
| Cobalt (Co)-Dissolved     | mg/L       |                               | <0.00010  | <0.00010  | <0.00010  |
| Copper (Cu)-Dissolved     | mg/L       |                               | 0.00101   | <0.0010   | 0.00111   |
| Iron (Fe)-Dissolved       | mg/L       |                               | <0.030    | 0.121     | <0.030    |
| Lead (Pb)-Dissolved       | mg/L       |                               | <0.000050 | <0.000050 | <0.000050 |
| Lithium (Li)-Dissolved    | mg/L       |                               | <0.0050   | <0.0050   | <0.0050   |
| Magnesium (Mg)-Dissolved  | mg/L       |                               | 0.440     | 0.674     | 0.675     |
| Manganese (Mn)-Dissolved  | mg/L       |                               | <0.000050 | <0.00010  | 0.000114  |
| Mercury (Hg)-Dissolved    | mg/L       |                               | <0.000050 | <0.000050 | <0.000050 |
| Molybdenum (Mo)-Dissolved | mg/L       |                               | <0.000050 | 0.000072  | <0.000050 |
| Nickel (Ni)-Dissolved     | mg/L       |                               | <0.00050  | <0.00050  | <0.00050  |
| Potassium (K)-Dissolved   | mg/L       |                               | <0.50     | <0.50     | <0.50     |
| Selenium (Se)-Dissolved   | mg/L       |                               | <0.0010   | <0.0010   | <0.0010   |
| Silicon (Si)-Dissolved    | mg/L       |                               | 0.149     | 0.178     | 0.104     |
| Silver (Ag)-Dissolved     | mg/L       |                               | <0.000010 | <0.000010 | <0.000010 |
| Sodium (Na)-Dissolved     | mg/L       |                               | <0.50     | 0.56      | <0.50     |
| Strontium (Sr)-Dissolved  | mg/L       |                               | 0.00328   | 0.00525   | 0.00411   |
| Thallium (Tl)-Dissolved   | mg/L       |                               | <0.00010  | <0.00010  | <0.00010  |
| Tin (Sn)-Dissolved        | mg/L       |                               | <0.00010  | <0.00010  | <0.00010  |
| Titanium (Ti)-Dissolved   | mg/L       |                               | <0.010    | <0.010    | <0.010    |
| Uranium (U)-Dissolved     | mg/L       |                               | 0.000091  | 0.000061  | 0.000058  |
| Vanadium (V)-Dissolved    | mg/L       |                               | <0.0010   | <0.0010   | <0.0010   |
| Zinc (Zn)-Dissolved       | mg/L       |                               | <0.0010   | 0.0051    | <0.0010   |
| Oil and Grease            | mg/L       | 5.0                           | -         | -         | -         |
| Total Inorganic Carbon    | mg/L       |                               | <0.50     | 0.94      | 0.95      |
| Total Organic Carbon      | mg/L       |                               | 3.87      | 4.32      | 4.32      |
| BOD                       | mg/L       | 25                            |           | -         | -         |
| Fecal Coliform            | CFU/100 mL | 20                            |           | -         | -         |
| Field Water Temperature   | deg C      |                               | 17.34     | 10.48     | 7.31      |

# JER-WQ21

| Sample ID          | Units | PKCA<br>Discharge<br>Criteria | JER-WQ21  | JER-WQ21  | JER-WQ21  |
|--------------------|-------|-------------------------------|-----------|-----------|-----------|
| Date Sampled       |       |                               | 01-JUL-07 | 29-JUL-07 | 25-AUG-07 |
| Field Conductivity | uS/cm |                               | 11        | 18        | 12        |
| Field DO           | %     |                               | 141.1     | 100.2     | -         |
| Field DO           | mg/L  |                               | 13.49     | 10.37     | -         |
| Field pH           |       |                               | 7.10      | 7.01      | 7.02      |
| Field ORP          | mV    |                               | 97.7      | 282.7     | 154.9     |

## JER-SW2

| Sample ID                          | Units | PKCA<br>Discharge<br>Criteria | Date Sampled |          |          |           |          |          |           |          |          |         |           |         |           |         |           |         |           |
|------------------------------------|-------|-------------------------------|--------------|----------|----------|-----------|----------|----------|-----------|----------|----------|---------|-----------|---------|-----------|---------|-----------|---------|-----------|
|                                    |       |                               | 28-Aug-05    | JER-SW2  | JER-SW2  | 21-Jun-06 | JER-SW2  | JER-SW2  | 11-Jul-06 | JER-SW2  | 9-Aug-06 | JER-SW2 | 14-Sep-06 | JER-SW2 | 27-Jun-07 | JER-SW2 | 25-Jul-07 | JER-SW2 | 25-Aug-07 |
| Time Sampled                       |       |                               |              |          |          |           |          |          |           |          |          |         |           |         |           |         |           |         |           |
| Lab Sample ID                      |       |                               | L523057-2    |          |          |           |          |          |           |          |          |         |           |         |           |         |           |         |           |
| Hardness (as CaCO3)                |       |                               | 158          | 157      | 255      | 173       | 06-11364 | 272      | 257       | 381      | 466      |         |           |         |           |         |           |         |           |
| Conductivity                       |       |                               | 419          | 609      | 760      | 642       | 852      | 715      | 1250      | 1570     |          |         |           |         |           |         |           |         |           |
| pH                                 |       |                               | 7.91         | 7.71     | 7.82     | 7.60      | 8.10     | 7.87     | 7.78      | 7.82     |          |         |           |         |           |         |           |         |           |
| Total Dissolved Solids             |       |                               | 352          | 340      | 552      | 400       | 550      | 452      | 1010      | 1200     |          |         |           |         |           |         |           |         |           |
| Total Suspended Solids             |       |                               | 23           | 15       | 14       | 127       | 3        | 3.5      | 26.2      | 16.7     |          |         |           |         |           |         |           |         |           |
| Turbidity                          |       |                               | 140          | 24       | 8        | 170       | 10       | 4.13     | 15.3      | 10.8     |          |         |           |         |           |         |           |         |           |
| Ammonia as N                       |       |                               | 4.2          | 20.3     | 8.10     | 11.5      | 14.5     | 8.61     | 14.0      | 20.8     |          |         |           |         |           |         |           |         |           |
| Acidity (as CaCO3)                 |       |                               | 50           | 16       | 12       | 9         | 6        | 9.4      | 4.9       | 8.2      |          |         |           |         |           |         |           |         |           |
| Alkalinity, Bicarbonate (as CaCO3) |       |                               | 79           | 82       | 107      | 45        | 74       | 75.6     | 35.9      | 63.8     |          |         |           |         |           |         |           |         |           |
| Alkalinity, Carbonate (as CaCO3)   |       |                               | <1           | <1       | <1       | <1        | <1       | <1.0     | <1.0      | <1.0     |          |         |           |         |           |         |           |         |           |
| Alkalinity, Hydroxide (as CaCO3)   |       |                               | <1           | <1       | <1       | <1        | <1       | <1.0     | <1.0      | <1.0     |          |         |           |         |           |         |           |         |           |
| Alkalinity, Total (as CaCO3)       |       |                               | 65           | 68       | 88       | 37        | 61       | 75.6     | 35.9      | 63.8     |          |         |           |         |           |         |           |         |           |
| Chloride (Cl)                      |       |                               | 24.2         | 25.3     | 30.1     | 11.8      | 21.3     | 25.8     | 88.0      | 97.4     |          |         |           |         |           |         |           |         |           |
| Fluoride (F)                       |       |                               | 0.14         | 0.16     | 0.12     | 0.13      | 0.11     | 32.3     | 53.1      | 52.3     |          |         |           |         |           |         |           |         |           |
| Sulfate (SO4)                      |       |                               | 21.5         | 13.1     | 19.6     | 21.1      | 41.7     | 56.4     | 92.8      | 121      |          |         |           |         |           |         |           |         |           |
| Nitrate (as N)                     |       |                               | 17.9         | 45.9     | 57.6     | 55.2      | 65.9     | 1.58     | 2.98      | 4.56     |          |         |           |         |           |         |           |         |           |
| Nitrite (as N)                     |       |                               | 0.82         | 0.77     | 1.80     | 1.62      | 2.11     | -        | -         | -        |          |         |           |         |           |         |           |         |           |
| Total Kjeldahl Nitrogen            |       |                               | <0.2         | <0.20    | <0.20    | <0.20     | <0.20    | 0.0045   | <0.0010   | <0.0010  |          |         |           |         |           |         |           |         |           |
| Ortho Phosphate as P               |       |                               | <0.005       | <0.0050  | <0.0050  | <0.0050   | <0.0050  | 0.0127   | 0.0059    | <0.0020  |          |         |           |         |           |         |           |         |           |
| Total Dissolved Phosphate As P     |       |                               | <0.050       | <0.050   | <0.050   | <0.050    | <0.050   | 0.0204   | 0.0184    | 0.0026   |          |         |           |         |           |         |           |         |           |
| Total Phosphate as P               |       |                               | 3.01         | 0.162    | 0.0523   | 3.02      | 0.0764   | 0.0580   | 0.372     | 0.216    |          |         |           |         |           |         |           |         |           |
| Aluminum (Al)-Total                |       |                               | 0.3005       | 0.00022  | 0.00050  | 0.00063   | 0.00039  | 0.00094  | 0.00038   | 0.00114  |          |         |           |         |           |         |           |         |           |
| Antimony (Sb)-Total                |       |                               | 0.0038       | 0.0013   | 0.00919  | 0.0011    | 0.0012   | 0.00042  | 0.00038   | 0.00085  |          |         |           |         |           |         |           |         |           |
| Arsenic (As)-Total                 |       |                               | 0.044        | 0.304    | 0.344    | 0.139     | 0.442    | 0.168    | 0.325     | 0.283    |          |         |           |         |           |         |           |         |           |
| Barium (Ba)-Total                  |       |                               | <0.0005      | <0.0001  | <0.0001  | 0.0001    | <0.0001  | <0.00050 | <0.0010   | <0.00050 |          |         |           |         |           |         |           |         |           |
| Beryllium (Be)-Total               |       |                               | 0.087        | 0.060    | 0.079    | 0.036     | 0.065    | 0.096    | 0.092     | 0.190    |          |         |           |         |           |         |           |         |           |
| Bismuth (Bi)-Total                 |       |                               | <0.0001      | <0.00005 | <0.00005 | 0.00018   | <0.00002 | <0.00050 | <0.0010   | 0.00073  |          |         |           |         |           |         |           |         |           |
| Boron (B)-Total                    |       |                               | 41.6         | 33.4     | 51.3     | 41.6      | 54.2     | 40.1     | 110       | 117      |          |         |           |         |           |         |           |         |           |
| Cadmium (Cd)-Total                 |       |                               | 0.005        | 0.0016   | 0.0021   | 0.0124    | 0.0014   | 0.00072  | 0.0043    | 0.00270  |          |         |           |         |           |         |           |         |           |
| Calcium (Ca)-Total                 |       |                               | 0.0028       | 0.00168  | 0.00154  | 0.00276   | 0.00182  | 0.00235  | 0.00293   | 0.00327  |          |         |           |         |           |         |           |         |           |
| Cobalt (Co)-Total                  |       |                               | 0.0307       | 0.0158   | 0.0138   | 0.0250    | 0.0087   | 0.00596  | 0.00655   | 0.0216   |          |         |           |         |           |         |           |         |           |
| Copper (Cu)-Total                  |       |                               | 5.07         | 0.16     | 0.13     | 3.24      | 0.23     | 0.123    | 0.692     | 0.577    |          |         |           |         |           |         |           |         |           |
| Iron (Fe)-Total                    |       |                               | 0.0042       | 0.00240  | 0.00047  | 0.00192   | 0.00023  | 0.000397 | 0.00110   | 0.00058  |          |         |           |         |           |         |           |         |           |
| Lead (Pb)-Total                    |       |                               | 16.9         | 15.4     | 26.3     | 21.5      | 38.1     | 37.5     | 33.4      | 47.7     |          |         |           |         |           |         |           |         |           |
| Lithium (Li)-Total                 |       |                               | 0.19         | 0.13     | 0.12     | 0.34      | 0.03     | 0.0256   | 0.0486    | 0.255    |          |         |           |         |           |         |           |         |           |
| Magnesium (Mg)-Total               |       |                               | <0.0001      | <0.00005 | <0.00005 | <0.00005  | <0.00005 | <0.00050 | <0.00050  | <0.00050 |          |         |           |         |           |         |           |         |           |
| Manganese (Mn)-Total               |       |                               | 0.003        | 0.00850  | 0.00974  | 0.0133    | 0.0254   | 0.0189   | 0.0333    | 0.0672   |          |         |           |         |           |         |           |         |           |
| Mercury (Hg)-Total                 |       |                               | 0.0006       | 0.0158   | 0.0357   | 0.0157    | 0.0358   | 0.0309   | 0.0487    | 0.0788   |          |         |           |         |           |         |           |         |           |
| Molybdenum (Mo)-Total              |       |                               | 5            | 4.4      | 6.5      | 16.4      | 14.8     | 7.87     | 24.4      | 22.5     |          |         |           |         |           |         |           |         |           |
| Nickel (Ni)-Total                  |       |                               |              |          |          |           |          |          |           |          |          |         |           |         |           |         |           |         |           |
| Potassium (K)-Total                |       |                               |              |          |          |           |          |          |           |          |          |         |           |         |           |         |           |         |           |

| Sample ID                 | Units | PKCA Discharge Criteria | JER-SW2   | JER-SW2   | JER-SW2   | JER-SW2  | JER-SW2   | JER-SW2   | JER-SW2   | JER-SW2   | JER-SW2 |
|---------------------------|-------|-------------------------|-----------|-----------|-----------|----------|-----------|-----------|-----------|-----------|---------|
|                           |       |                         | 28-Aug-05 | 21-Jun-06 | 11-Jul-06 | 9-Aug-06 | 14-Sep-06 | 27-Jun-07 | 22-Jul-07 | 25-Aug-07 |         |
| Date Sampled              |       |                         |           |           |           |          |           |           |           |           |         |
| Selenium (Se)-Total       | mg/L  | Chloria                 | <0.0003   | <0.0010   | 0.0017    | 0.0016   | <0.0010   | <0.0010   | <0.0010   | <0.0020   | <0.0050 |
| Silicon (Si)-Total        | mg/L  |                         | 11        | 3.04      | 3.62      | 7.32     | 3.35      | 4.52      | 4.34      | 5.60      |         |
| Silver (Ag)-Total         | mg/L  |                         | <0.0002   | <0.0001   | <0.0001   | <0.0001  | <0.0001   | 0.000040  | 0.000030  | 0.000082  |         |
| Sodium (Na)-Total         | mg/L  |                         | 11.2      | 11.7      | 15.5      | 11.9     | 20.7      | 17.0      | 49.1      | 57.1      |         |
| Strontium (Sr)-Total      | mg/L  |                         | 0.122     | 0.157     | 0.360     | 0.680    | 2.17      | 0.499     | 3.67      | 2.61      |         |
| Thallium (Tl)-Total       | mg/L  |                         | <0.00005  | <0.00005  | <0.00005  | 0.00009  | <0.00005  | 0.00012   | <0.00020  | <0.00010  |         |
| Tin (Sn)-Total            | mg/L  |                         |           |           | 0.0038    | 0.0007   | 0.0008    | 0.0008    | <0.00020  | <0.00010  |         |
| Titanium (Ti)-Total       | mg/L  |                         |           |           | 0.0022    | 0.180    | 0.0046    | 0.180     | <0.010    | 0.017     |         |
| Uranium (U)-Total         | mg/L  |                         |           |           | 0.131     | 0.0595   | 0.0174    | 0.0508    | 0.0184    | 0.120     |         |
| Vanadium (V)-Total        | mg/L  |                         |           |           | 0.0008    | 0.0072   | 0.0007    | <0.0010   | <0.0020   | <0.0010   |         |
| Zinc (Zn)-Total           | mg/L  |                         |           | 0.0105    | 0.0010    | 0.012    | 0.015     | 0.002     | <0.0050   |           |         |
| Aluminum (Al)-Dissolved   | mg/L  |                         |           | 0.012     | 0.005     | 0.013    | 0.568     | <0.002    | <0.0030   |           |         |
| Calcium (Ca)-Dissolved    | mg/L  | 2.0                     |           | 0.063     | 0.123     | 0.0057   | 0.0074    | 0.00338   | 0.00113   |           |         |
| Antimony (Sb)-Dissolved   | mg/L  |                         |           | 0.0006    | 0.0005    | 0.0007   | 0.0015    | 0.0010    | 0.00036   |           |         |
| Arsenic (As)-Dissolved    | mg/L  |                         |           | 0.0016    | 0.0007    | 0.0010   | 0.0015    | 0.0040    | 0.00032   |           |         |
| Barium (Ba)-Dissolved     | mg/L  |                         |           | 0.026     | 0.277     | 0.341    | 0.130     | 0.412     | 0.300     |           |         |
| Beryllium (Be)-Dissolved  | mg/L  |                         |           | <0.0001   | <0.0001   | <0.0001  | <0.0001   | <0.00050  | <0.00050  |           |         |
| Blomuth (Bt)-Dissolved    | mg/L  |                         |           |           |           |          |           | <0.0050   | <0.0010   |           |         |
| Boron (B)-Dissolved       | mg/L  |                         |           | 0.086     | 0.030     | 0.073    | 0.037     | 0.054     | 0.085     |           |         |
| Cadmium (Cd)-Dissolved    | mg/L  |                         |           | <0.00005  | <0.00005  | <0.00005 | 0.00004   | <0.00002  | <0.000050 |           |         |
| Calcium (Ca)-Dissolved    | mg/L  |                         |           | 38.8      | 33.3      | 38.2     | 52.1      | 40.7      | 103       |           |         |
| Chromium (Cr)-Dissolved   | mg/L  |                         |           | 0.0013    | 0.0003    | 0.0011   | 0.0024    | 0.0016    | <0.0050   |           |         |
| Cobalt (Co)-Dissolved     | mg/L  |                         |           | 0.00063   | 0.00154   | 0.00156  | 0.00196   | 0.00146   | 0.00219   |           |         |
| Copper (Cu)-Dissolved     | mg/L  |                         |           | 0.0221    | 0.0142    | 0.0160   | 0.0167    | 0.0067    | 0.00557   |           |         |
| Iron (Fe)-Dissolved       | mg/L  |                         |           | 0.04      | <0.10     | <0.10    | 0.53      | 0.17      | <0.30     |           |         |
| Lead (Pb)-Dissolved       | mg/L  |                         |           | <0.00005  | 0.00196   | 0.00029  | 0.00038   | <0.00005  | 0.000391  |           |         |
| Lithium (Li)-Dissolved    | mg/L  |                         |           |           |           | 0.0098   | 0.0072    | 0.0048    | 0.0120    |           |         |
| Magnesium (Mg)-Dissolved  | mg/L  |                         |           | 14.9      | 18        | 28.3     | 18.9      | 34.5      | 37.7      |           |         |
| Manganese (Mn)-Dissolved  | mg/L  |                         |           | 0.11      | 0.100     | 0.134    | 0.248     | 0.031     | 0.0161    |           |         |
| Mercury (Hg)-Dissolved    | mg/L  |                         |           | <0.0001   | <0.00005  | <0.00005 | <0.00005  | <0.00005  | <0.000050 |           |         |
| Molybdenum (Mo)-Dissolved | mg/L  |                         |           | 0.0032    | 0.00948   | 0.0103   | 0.0143    | 0.0233    | 0.0195    |           |         |
| Nickel (Ni)-Dissolved     | mg/L  |                         |           | 0.0003    | 0.00144   | 0.0342   | 0.0129    | 0.0289    | 0.0334    |           |         |
| Potassium (K)-Dissolved   | mg/L  |                         |           | 3.7       | 4.3       | 7.1      | 14.2      | 13.2      | 8.01      |           |         |
| Selenium (Se)-Dissolved   | mg/L  |                         |           | <0.0004   | 0.0011    | 0.0023   | 0.0011    | 0.0013    | <0.0010   |           |         |
| Silicon (Si)-Dissolved    | mg/L  |                         |           | 3.78      | 3.017     | 4.07     | 4.03      | 3.18      | 4.23      |           |         |
| Silver (Ag)-Dissolved     | mg/L  |                         |           | <0.00005  | <0.00005  | <0.00005 | <0.00005  | <0.000050 | 0.000027  |           |         |
| Sodium (Na)-Dissolved     | mg/L  |                         |           | 10.6      | 13.2      | 16.4     | 11.2      | 17.4      | 45.4      |           |         |
| Strontium (Sr)-Dissolved  | mg/L  |                         |           | 0.117     | 0.134     | 0.405    | 0.659     | 2.09      | 0.495     |           |         |
| Thallium (Tl)-Dissolved   | mg/L  |                         |           | 0.00002   |           |          |           |           |           |           |         |

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JER-SW2

| Sample ID               | Units      | PKCA Discharge Criteria | JER-SW2 26-Aug-05 | JER-SW2 21-Jun-06 | JER-SW2 11-Jul-06 | JER-SW2 9-Aug-06 | JER-SW2 14-Sep-06 | JER-SW2 27-Jun-07 | JER-SW2 22-Jul-07 | JER-SW2 25-Aug-07 |
|-------------------------|------------|-------------------------|-------------------|-------------------|-------------------|------------------|-------------------|-------------------|-------------------|-------------------|
| Date Sampled            |            |                         |                   |                   |                   |                  |                   |                   |                   |                   |
| Fecal Coliform          | CFU/100 mL | 20                      |                   |                   |                   |                  |                   |                   |                   |                   |
| Field Water Temperature | deg C      |                         |                   | 5.71              | 4.78              | 9.9              | 3.02              | 18.15             | 13.32             | 11.7              |
| Field Conductivity      | uS/cm      |                         |                   | 794               | 800               | 582              | 654               | 782               | 1290              | 1239              |
| Field DO                | %          |                         |                   |                   |                   |                  |                   | 101.4             | 108.8             | N/A               |
| Field DO                | mg/L       |                         |                   | 12.23             | 10.90             | 9.82             | 13.04             | 9.6               | 11.2              | N/A               |
| Field pH                |            |                         |                   | 7.73              | 7.15              | 7.53             | 8.16              | 7.69              | 7.82              | 8.12              |
| Field ORP               | mV         |                         |                   | 182.60            | 312.10            | 432.70           | 254.80            | 208.9             | 145.5             | 118.3             |
| Ion Balance             | Ratio      |                         | 0.98              | 0.67              | 0.83              | 0.77             | 0.87              |                   |                   |                   |