Table 2.

Summary of Detections and Comparisons to Criteria and Screening Values from the Dry-Period Sampling Event SJRWMD Alternative Water Supply Program Central Florida Artificial Recharge Project

| | | Central Florida Artificial Necharge Floject | | | | | | | | | | |
|--|---------------|---|----------------------|-------------------|-------------------------------|--|----------------|-------------------------------|-----------------------|---------------------------------|---------------------------|--|
| | Location | Lake Orienta East | Lake Orienta West | Lake Sherwood | Criteria and Screening Values | | | | | | | |
| | SampleID ==> | | | | Maximum Contaminant Levels Br | | | | Brownfields | Risk-based C | Risk-based Concentrations | |
| Date Collected ==> | | | 8/23/2001 | LS-R 8/13/2001 | Florida MCL / SMCL | Florida MCL / SMCL Federal MCL/SMCL ² | | Federal MCL/SMCL ² | Florida Brownfield | Regional USEPA RBC ⁴ | Regional USEPA RBC 4, 5 | |
| Time Collected ==> | | 12:45 | 11:20 | 15:00 | (Chapter 62-550, FAC) 1 | (Chapter 62-550, FAC) 1 | | | (62-785) ³ | EPA Region III | EPA Region IV | |
| Matrix ==> | | WA | WA | WA | MCL | SMCL | MCL | SMCL | GCTL | Tap Water | ŭ | |
| Sar | mple Type ==> | N | N | N | | | | | | (HQ=1.0) | (HQ=0.1) | |
| Parameter Group and Name | Units | | | | Criteria Units | Criteria Units | Criteria Units | Criteria Units | Criteria Units | Criteria Units | Criteria Units | |
| <u>Radionuclides</u> | | | | | | | | | | | | |
| Alpha, gross | pCi/L | 5.5 = | 9.8 = | 3.3 = | 15 pCi/L | | 15 pCi/L | | | | | |
| Beta, gross | pCi/L | 4.7 = | 6.8 = | 10.4 = | none | | | | | | | |
| General Chemistry | | | | | | | | | | | | |
| Total Dissolved Solids (residue, filterable) | mg/L | 240 = | 270 = | 150 = | | 500 mg/L | | 500 mg/L | 500 mg/L | | | |
| Turbidity | NTU | 0.75 = | 12 = | 36 J | 1 NTU | | 1 NTU | | | | | |
| Color | Color Units | 10 = | 50 = | 20 J | | 15 Color Units | | | | | | |
| Total Organic Carbon | mg/L | 1.2 = | 2.1 = | 22 = | | | | | | | | |
| Dissolved Organic Carbon | mg/L | 1.2 = | 1.4 = | 2.5 = | none | | | | | | | |
| Methylene Blue Active Substances | mg/L | | 0.095 J | | | | | 0.5 mg/L | | | | |
| <u>Nutrients</u> | | | | | | | | | | | | |
| Nitrogen, ammonia (as N) | mg/L | 0.13 = | 0.46 = | 1.2 = | 10 mg/L | | 10 mg/L | | 10 mg/L | 580 mg/L | 58 mg/L | |
| Nitrogen, Kjeldahl, Total | mg/L | 0.36 J | 2 = | 1.4 = | | | | | | | | |
| Phosphorus, Total (as p) | mg/L | 0.036 = | 0.42 = | | | | | | | | | |
| Phosphorus, Total Orthophosphate (as P) | mg/L | 0.09 = | 0.045 = | 0.009 J | none | | | | | | | |
| <u>Anions</u> | | | | | | | | | | | | |
| Chloride (as CI) | mg/L | 17 = | 19 = | 9.7 = | | 250 mg/L | | 250 mg/L | | | | |
| Fluoride | mg/L | | | 0.36 = | 4 mg/L | 2 mg/L | | 2 mg/L | 2 mg/L | 2.2 mg/L | 0.22 mg/L | |
| Sulfate (as SO4) | mg/L | 14 = | 55 = | 16 = | | 250 mg/L | | 250 mg/L | 250 mg/L | | | |
| Alkalinity, bicarbonate (as CaCO3) | mg/L | 140 = | 130 = | 110 = | none | | | | | | | |
| <u>Metals</u> | | | | | | | | | | | | |
| Aluminum | μg/L | | 1610 = | | | 200 μg/L | | 50 μg/L | | 37000 µg/L | 3700 μg/L | |
| Arsenic | μg/L | | 6.36 = | 1.09 = | 50 μg/L | | 50 μg/L | | 50 μg/L | 0.045 µg/L | 0.045 µg/L | |
| Barium | μg/L | 8.79 J | 21 J | 14.1 = | 2000 µg/L | | 2000 μg/L | | 2000 µg/L | 2600 µg/L | 260 μg/L | |
| Beryllium | μg/L | 0.041 J | | | 4 µg/L | | 4 μg/L | | 4 μg/L | 0.016 µg/L | 0.016 µg/L | |
| Cadmium | μg/L | 0.233 J | 1.46 = | | 5 μg/L | | 5 μg/L | | 5 μg/L | 18 μg/L | 1.8 µg/L | |
| Calcium | μg/L | 60000 = | 65900 = | 36600 = | none | | | | | | | |
| Chromium, total | μg/L | | 3.17 J | | 100 μg/L | | 100 μg/L | | 100 μg/L | | | |
| Cobalt | μg/L | 0.142 J | 0.37 J | 0.434 J | | 4000 // | | 1000 " | 4000 " | 2200 µg/L | 220 µg/L | |
| Copper | μg/L | 200 | 16.6 J | 2012 | | 1000 μg/L | | 1000 μg/L | 1000 μg/L | 130000 µg/L | 13000 µg/L | |
| Iron | μg/L | 292 = | 4680 = | 6310 = | 45 (1 | 300 μg/L | 4.5 (1 | 300 μg/L | 300 μg/L | 11000 µg/L | 1100 μg/L | |
| Lead | μg/L | 0.110 | 9.24 = | 0.972 J | 15 μg/L | | 15 μg/L | | 15 μg/L | | | |
| Magnesium | μg/L | 2410 = | 9260 = | 10600 = | none | F0 // | | | 50 " | 0.40 | 0.4 | |
| Manganese | μg/L | 10.8 = | 61.4 = | 76.5 = | 100 (1 | 50 μg/L | 400 (| 50 μg/L | 50 μg/L | 840 µg/L | 84 μg/L | |
| Nickel | μg/L | 5.08 = | 6.77 = | 23 = | 100 μg/L | | 100 μg/L | | 100 μg/L | 730 µg/L | 73 μg/L | |
| Potassium | μg/L | 1380 J | 1780 J | 2760 J | none | 400 // | | 100 " | 400 " | 100 // | 40 # | |
| Silver | μg/L | 0.047 J | 10000 | 4.4000 | 400000 // | 100 μg/L | | 100 μg/L | 100 μg/L | 180 μg/L | 18 μg/L | |
| Sodium | μg/L | 6630 = | 10900 = | 14900 J | 160000 µg/L | | | | 40 | 200// | 26/1 | |
| Vanadium | μg/L | 0.351 J | 6.95 J | 1.00 | | F000 · · // | | F000/I | 49 µg/L | 260 µg/L | 26 µg/L | |
| Zinc | μg/L | | 26.8 = | 1.66 J | | 5000 μg/L | | 5000 μg/L | 5000 μg/L | 11000 μg/L | 1100 µg/L | |
| Volatile Organic Compounds | /1 | 27 | 2.0 | 100 | | | | | 4200// | 4000/ | 100// | |
| Methyl ethyl ketone (2-butanone) | μg/L | 27 J | 3.9 J | 160 = | E/I | | E/I | | 4200 μg/L | 1900 µg/L | 190 µg/L | |
| Methylene chloride | μg/L | 0.43 J | 0.55 J | | 5 µg/L | | 5 μg/L | | 5 μg/L | 4.1 µg/L | 4.1 μg/L | |

Notes

Bolded values represent positive detections above promulgated regulatory criteria.

Boxed values represent positive detections above Risk-Based Criteria.

Bolded and boxed values represent positive detections above promulgated regulatory criteria and Risk-Based Criteria.

Sources:

¹ Florida Ground Water Guidance Concentrations, 17-520.400 FAC, June 2, 1994: Primary Drinking Water Standards (17-550.310 FAC), Secondary Drinking Water Standards (17-550.320 FAC).

² Brownfield's Cleanup Criteria Rule, Groundwater Cleanup Target Levels, Draft Chapter 62-785 F.A.C., 1997.

- ³ Drinking Water Regulations and Health Advisories, Office of Water, USEPA, October 1996.
- ⁴ EPA Region III Risk-Based Concentration Table, Tap Water Values, R.L. Smith, October 1997.
- ⁵ EPA Region IV Supplemental Guidance to RAGS: Region 4 Bulletins, Human Health Risk Assessment, November 1995; HQ=0.1 applied to noncarcinogens.

Explanation of Qualifers

"=" Represents a detection at the value shown

"J" Represents an estimated value that is above the method detection limit and below the practical quantitation limit.

Blanks for the chemical data represent nondetection

Blanks for the criteria and screening values represent no established value.