

**SPOKANE VALLEY - RATHDRUM PRAIRIE AQUIFER  
WATER QUALITY REPORT  
FOR THE PERIOD  
JANUARY 1, 2002 – DECEMBER 31, 2002**

**PREPARED BY  
WATER QUALITY MANAGEMENT PROGRAM**

MARCH 15, 2003

**SPOKANE COUNTY PUBLIC WORKS DEPARTMENT  
DIVISION OF UTILITIES**

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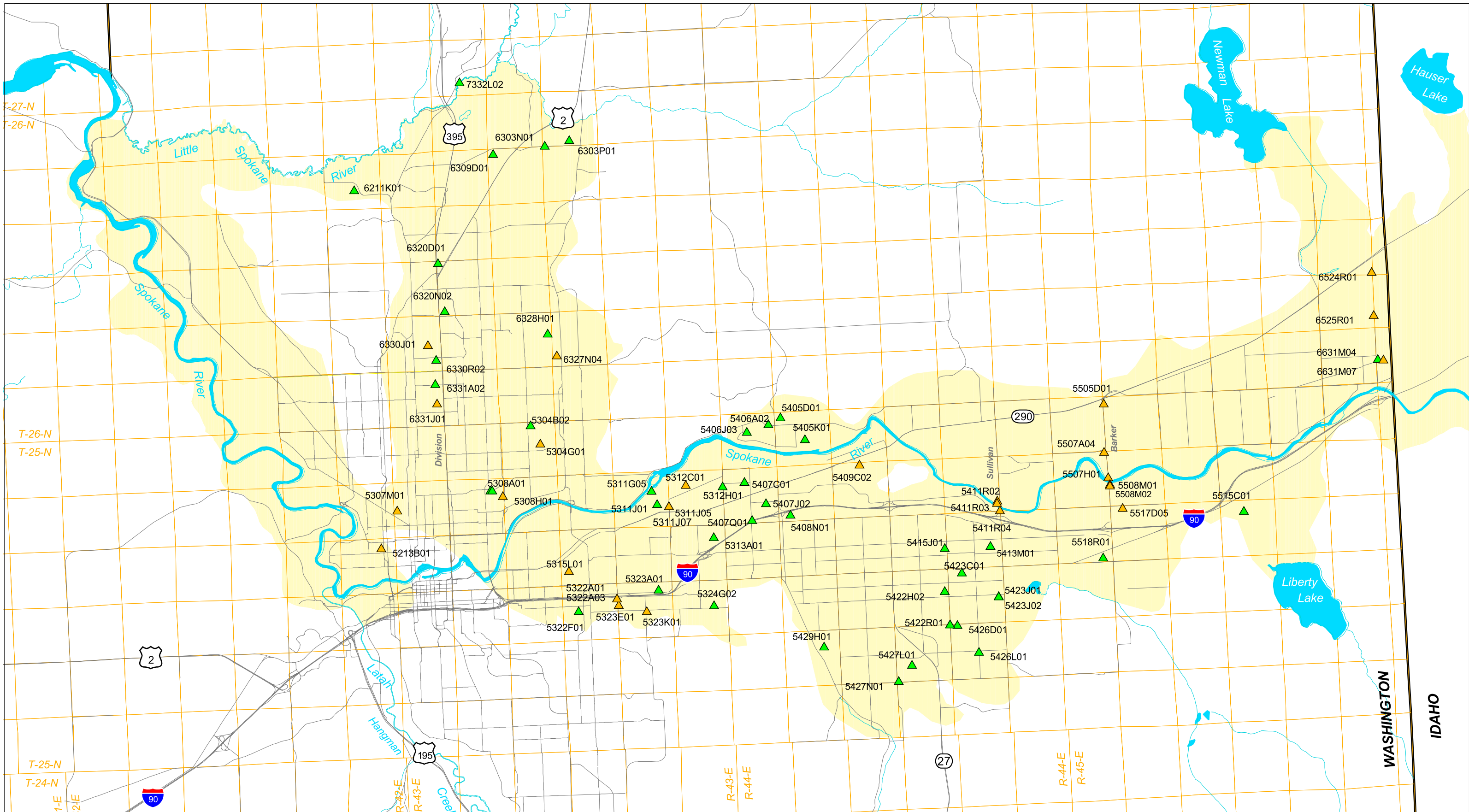
**SPOKANE COUNTY WATER QUALITY MONITORING PROGRAM**

Spokane County, in cooperation with the Spokane Regional Health District (SRHD), the Panhandle Health District (PHD) and other agencies, has conducted an aquifer quality monitoring program since 1977. An intensive one-year sampling effort during the 1977 water year (1976 in Idaho) provides a baseline of water quality for the region's ground water quality (Esvelt, 1978). This baseline sampling effort led to the development of an aquifer protection strategy, the Water Quality Management Plan (Spokane County Engineers, 1979). Ongoing aquifer monitoring was one of the key recommendations of the plan. Therefore, in 1980 Spokane County began an ongoing aquifer monitoring program, in cooperation with SRHD. Monitoring provides information on the overall quality of the resource. In addition, the collection of long-term data allows water quality trends to be analyzed and used as an indicator of the effectiveness of aquifer protection measures. Between 1980 and 1997 the monitoring program relied heavily on samples collected from water supply wells operated by the regions purveyors. Most historic data (pre –1980) is from water supply wells; these sampling locations provide the best trend information. As these wells also supply water to the public, these data also reflect the water quality of what we drink.

Over the last several years Spokane County's aquifer monitoring program changed significantly. Prior to 1997, the assessment of general water quality and trends in aquifer quality were based on data from a network of public water supply wells. As part of the region's Wellhead Protection Program (WHP), several "sentinel" wells were installed between 1995 and 1998. These wells are completed near the water table with some screens extending forty feet, in contrast to the deeper installations of most public water supply wells. The sentinel wells created the opportunity to include testing of water quality near the surface of the water table where contaminants from the land surface first appear. Since most of these wells are upgradient of public water supply wells, the sentinel wells also provide some "early warning" capability to predict future water quality in purveyor wells. Therefore, in 1997 a transition from sampling purveyor wells exclusively to sampling monitoring wells and purveyor wells for general water quality evaluation began. By 1999 the transition was complete. The sampling network now includes monitoring wells and some purveyor wells used historically for trend analyses. In 1999 the Coordinated Monitoring Program was initiated. Through the Coordinated Monitoring Program, individual purveyors support the regional monitoring effort by "contracting " with the County to collect and have analyzed the water quality samples required for drinking water compliance. In 2002, Spokane County quit sampling the monitoring well at the Carnahan Pit and began sampling the old steel cased monitoring well at Frederick and Bowdish.

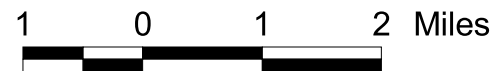
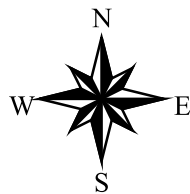
**2002 WATER QUALITY MONITORING**

Samples were collected quarterly during 2002 for general water quality observation and trend analysis from 27 monitoring wells, 14 purveyor wells, and 2 transient community wells. The locations of the wells included in the monitoring program are shown on **Figure 1**. In addition to the usual quarterly sampling, special compliance monitoring samples were collected from wells operated by purveyors participating in the Coordinated Monitoring Program.



**Legend**

- ▲ Monitoring Well
- ▲ Purveyor Well
- SVRP Aquifer Boundary (approximate)



**Figure 1. 2002 Groundwater Sampling Locations**



Spokane County  
Water Quality Management Program

A private, state certified lab performed the water quality analyses reported in this document. Five different combinations of chemical parameters were used in the program. These include a list of inorganic analytes to replace the “short” and “long” lists used previously - internally referred to as the “2001 list”, the complete list of drinking water inorganic analytes, arsenic at a new lower reporting limit required for all drinking water sources in 2002, the nitrate as nitrogen analysis required for drinking water, and the volatile organic chemical package required for drinking water. The most frequently performed set of analyses is the “2001 list”. Analytes on this list include the most commonly detected inorganic parameters, including the indicator chemicals sodium, nitrate – nitrogen, and chloride. A complete description of the parameters tested is included in Appendix A.

## **GENERAL WATER QUALITY OF THE SPOKANE VALLEY AQUIFER**

The overall quality of the aquifer is very good. No exceedances of Primary Maximum Contaminant Levels (MCL) defined by USEPA and the State of Washington were measured in any public water supply well during the reporting period. Concentrations of nitrate-nitrogen, lead and arsenic exceeded state reporting limits or trigger levels in a few samples from public water supply wells. One sample from a monitoring well contained concentrations of nitrate-nitrogen exceeding the MCL.

In general, ground water quality near the margins of the aquifer is lower than that in more central areas of the flow regime. This variation is due, in part, to proximity to hillside recharge zones. Recharge entering the aquifer at the margins from hillside drainages includes contaminants from stormwater runoff and septic system effluent. In addition, groundwater flow near the margins of the aquifer is generally slower, so contaminants are not flushed out or mixed as rapidly.

Historically, nitrate – nitrogen introduced to ground water as a result of human activity, has caused more concern for water purveyors than any other contaminant. Nitrate - nitrogen concentrations continue to be elevated, in wells near the north and south margins of the aquifer. No drinking water compliance samples in 2002 exceeded the nitrate trigger concentration of 5 mg/L as nitrogen, though three quarterly monitoring samples from two wells exceeded the trigger concentration.

- The nitrate + nitrite concentration of the 4/30/2002 quarterly monitoring water sample from Spokane County Water District #3 20<sup>th</sup> & Balfour Well (5429H01) was 6.11 mg/L as N. The nitrate + nitrite concentration of the 10/30/2002 water sample from the same well was 7.47 mg/L as N. This well field is no longer in regular use and was run for only a short time before the samples were collected.
- The only quarterly sample collected from the Carnahan Pit monitoring well (5322K01) exceeded the trigger concentration. The 2/5/2002 water sample nitrate + nitrite concentration was 11.0 mg/L as N which exceeds the nitrate + nitrite as nitrogen MCL of 10 mg/L as N.

In 2002, the level of iron in several groundwater samples from the Spokane Valley - Rathdrum Prairie Aquifer exceeded secondary drinking water standards. Secondary MCLs are based on aesthetic factors rather than health hazards. Numerous samples from both monitoring wells and purveyor wells contained iron concentrations in excess of the 0.3 mg/L secondary MCL. None of the Aquifer samples collected in 2002 exceeded the manganese secondary MCL.

Two quarterly monitoring samples had concentrations of lead in exceedance of the state-reporting limit (SRL) of 0.002 mg/L though there is no MCL for the source water. The locations of samples from purveyor wells with lead concentrations exceeding 0.002 mg/L were:

- Liberty Lake Sewer and Water District's Mission well sample had a lead concentration of 0.0064 mg/L on October 30, 2002. The water from this well usually has no lead detectable above a concentration of 0.001 mg/L.
- East Spokane Water District's Site 2 well (5324G02) sample contained a lead concentration of 0.0030 mg/L on October 29, 2002. . The elevated lead level may be associated with insufficient purging because lead has not been detected above 0.002 mg/L in samples from this well when sufficiently purged.
- No lead concentrations in excess of 0.002 mg/L were found in any samples from monitoring wells in 2002.

Several samples from monitoring wells and purveyor wells contained concentrations of lead between the 0.001 mg/L and the SRL 0.002 mg/L. Spokane County requested the lower reporting limit for lead so that trends approaching the reporting limits can be tracked.

EPA lowered the MCL for arsenic from 50 µg/L to 10 µg/L effective January 22, 2006. Because of the new arsenic rule, the Washington State Department of Health required all water companies to analyze water from all sources for arsenic with a detection level of 2µg/L. Consumer confidence reports (CCR) for 2002 through 2005 are required to report any arsenic detection above 5 µg/L and to report potential health effects associated with elevated arsenic levels for any detections between 10 µg/L and 50 µg/L.

## WATER QUALITY TRENDS FOR SELECTED CONTAMINANTS

Spokane County initiated a ground water monitoring program in 1980 designed to track the water quality changes that occurred as result of the various aquifer protection measures implemented in the region. Of particular interest is an ongoing evaluation of the benefit of the construction of a regional sewer system to reduce the impact of septic system leachate on groundwater quality.

Nitrate—nitrogen is used as an indicator for septic system waste impact because it is found in high concentrations in drainfield leachate, is found in low concentration street runoff and is not a significant component of agricultural recharge water. Water quality studies conducted in 1977 – 1979 showed that the impact from fertilizer nitrogen in agricultural areas over the aquifer was negligible. Nitrate is also of interest because of its public health significance at concentrations above 10 mg/L, the drinking water MCL for nitrate - nitrogen.

### Trend Analysis Graphs

Graphs of water quality at five wellfields illustrate the change in nitrate – nitrogen in the Spokane Valley - Rathdrum Prairie Aquifer over time. The results plotted are annual average nitrate + nitrite – nitrogen or nitrate - nitrogen concentrations based on quarterly monitoring results through December of 2001. Though most of the concentrations reported are for nitrate + nitrite – nitrogen, all values are labeled as “nitrate – nitrogen” or “nitrate” since nitrate is usually the major compound. Overall, the data show the impact residential development using leach fields (septic system drainfields) for sanitary waste disposal has on nitrate—nitrogen concentrations in the aquifer and the impact of the County’s ongoing expansion of the sewer service area on nitrate - nitrogen levels.

Under Spokane County’s monitoring program quarterly samples are collected near the end of January, April, July and October. The seasonal sampling regime is based on the results of several studies that show considerable seasonal variation in water quality at any given sampling site. The sampling dates were selected to provide data that, for a typical year, produce an average close to what would be obtained from continuous sampling and analysis. The values depicted on the graphs are annual averages of the samples collected during the water year beginning in October. The error bars above and below each plotted point represent the 90% confidence interval for the actual average value based on the variability of the annual data.

Much of the variability in annual averages is a result of variations in precipitation. The nitrate - nitrogen data vary seasonally due to the high precipitation in the fall and high spring and accompanying runoff which carries contaminants accumulated in the soil during the dry summers and cold winters. Accordingly, the combination of precipitation and freezing patterns in the Spokane area typically results in two sample events with higher concentrations and two sample events with lower concentrations each year. However, the timing and magnitude of the annual variations is dependent on climatic conditions. For example, if the winter is warm enough to allow precipitation to infiltrate through the season rather than accumulate as snow and ice, there may be a less pronounced or absent spring “peak” in contaminant levels. The timing of the spring thaw directly impacts the concentrations measured in the April sampling round. If the thaw occurs unusually early or late, the spring sample collection period could miss the spring peak. This would cause the annual average to be lower than actual conditions. Conversely, a large summer storm shortly before the July sampling or a rain event in early January could flush contaminants to the aquifer during these typically lower concentration periods. This would produce an annual average higher than actual conditions. In summary, there will always be variations in annual averages that reflect the aquifer’s naturally variable conditions. However, using several years of data for trend analysis dampens these variations and allows reliable analysis of long-term trends.

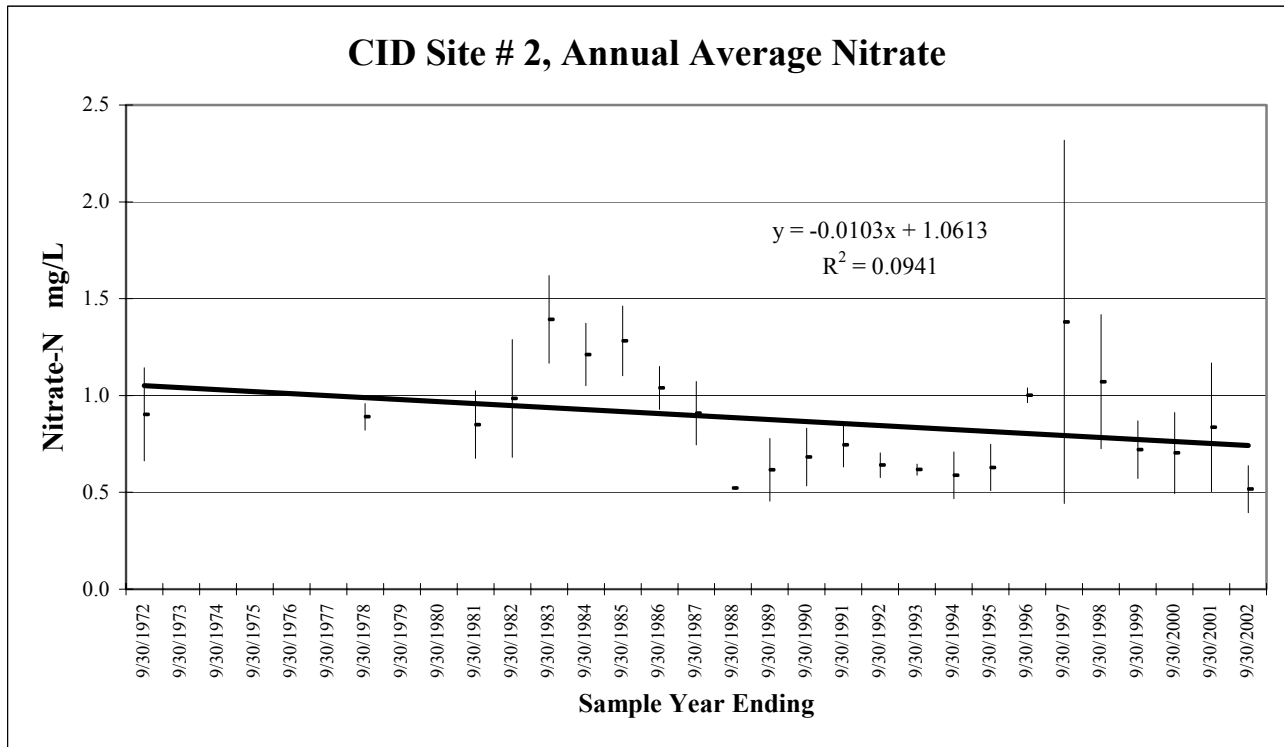


Figure 2. CID Site 2, annual average nitrate concentrations and trends.

The Figure 2 shows the changes in nitrate concentrations in groundwater in the Eastern portion of the Spokane Valley at the Consolidated Irrigation District’s (CID) Wellfield #2 (5518R01). This graph illustrates the generally low nitrate concentrations found in relatively undeveloped areas of the aquifer. Sewer service is not scheduled for extension into the vicinity of the wellfield until 2014 – 2015. Nitrate levels have varied significantly over the 29-year record but there is little change in average water quality. This is consistent with the low level of development found east of the well site and the relatively slow growth occurring in the area.

The following four graphs illustrate the impact of sewer collection system installation on several public water supply wells. Lines are drawn on the graphs to show the trend in nitrate—nitrogen before and after the replacement septic systems with sewers of upgradient of the wells. Though improvement in ground water quality is not expected immediately following sewerage, separate trend lines are shown for the periods before and after sewer connections were made in the area immediately around the well. The examples below clearly illustrate the water quality improvement associated with sewer installation.

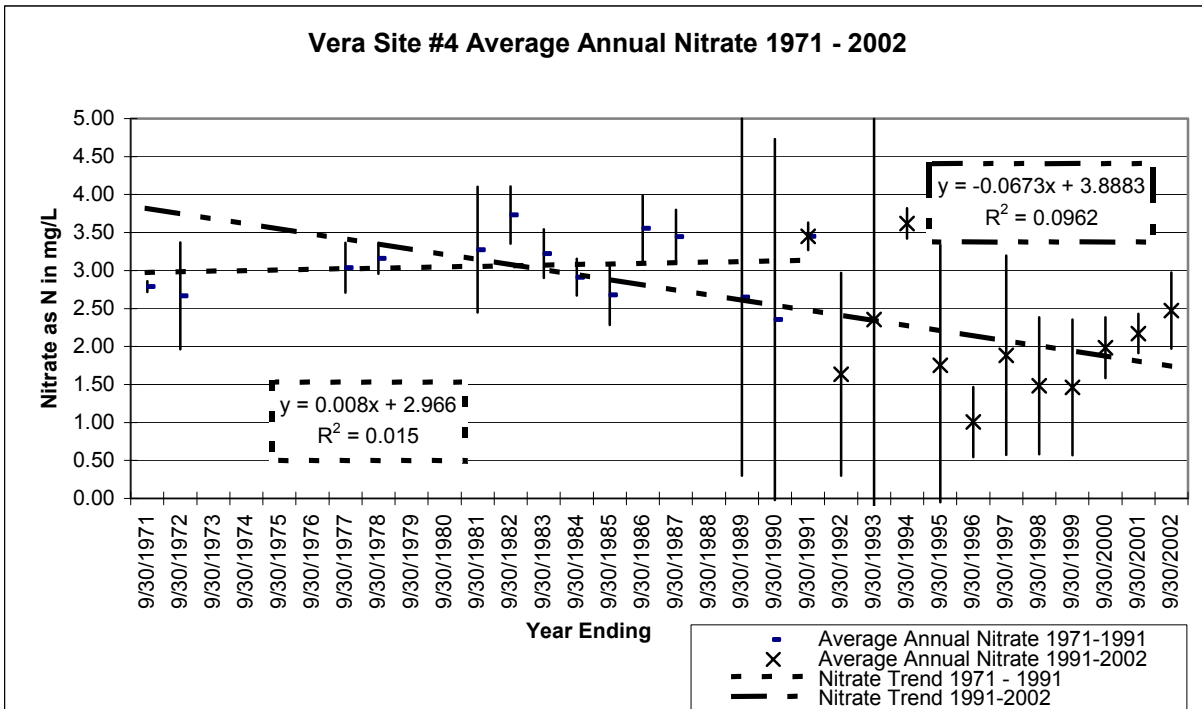


Figure 3. Vera Well #4, annual average nitrate concentrations and trends.

Vera Water and Power’s Well #4 (5426L01) is located at Adams and 24<sup>th</sup> within the Vera Crest Utility Local Improvement District (ULID) which connected to sewers in 1991. The community drainfields for the Bella Vista and Timberline subdivisions connected to the sewer system at the same time. Elimination of these drainfields diverted a large volume of wastewater away from the aquifer near this well. Nitrate – nitrogen concentrations in the samples from the Vera #4 well appear to be declining since the elimination nearby subsurface waste discharge (Figure 3). The level of water quality improvement is partly a function of the number of equivalent residential units (ERUs) eliminated via sewerage and partly a result of the proximity of the previous wastewater discharge to the well. The elimination of the large drainfield serving Bella Vista, located less than ¼ mile from the Vera #4 well, eliminated the subsurface wastewater discharge from several dozen homes.

A graph of nitrate data from Orchard Avenue Irrigation District #1 well (5312H01) (Figure 4) shows a reduction in the rate of increase over time in nitrate - nitrogen concentrations. This well is on North Park Road in an area not scheduled for sewer installation until the 2006 – 2009. The slowing of the rate of increase illustrates the cumulative benefit of the overall sewer program. Nevertheless, the continued, gradual increase in nitrate - nitrogen in ground water illustrates the impact of onsite domestic waste disposal on the aquifer.



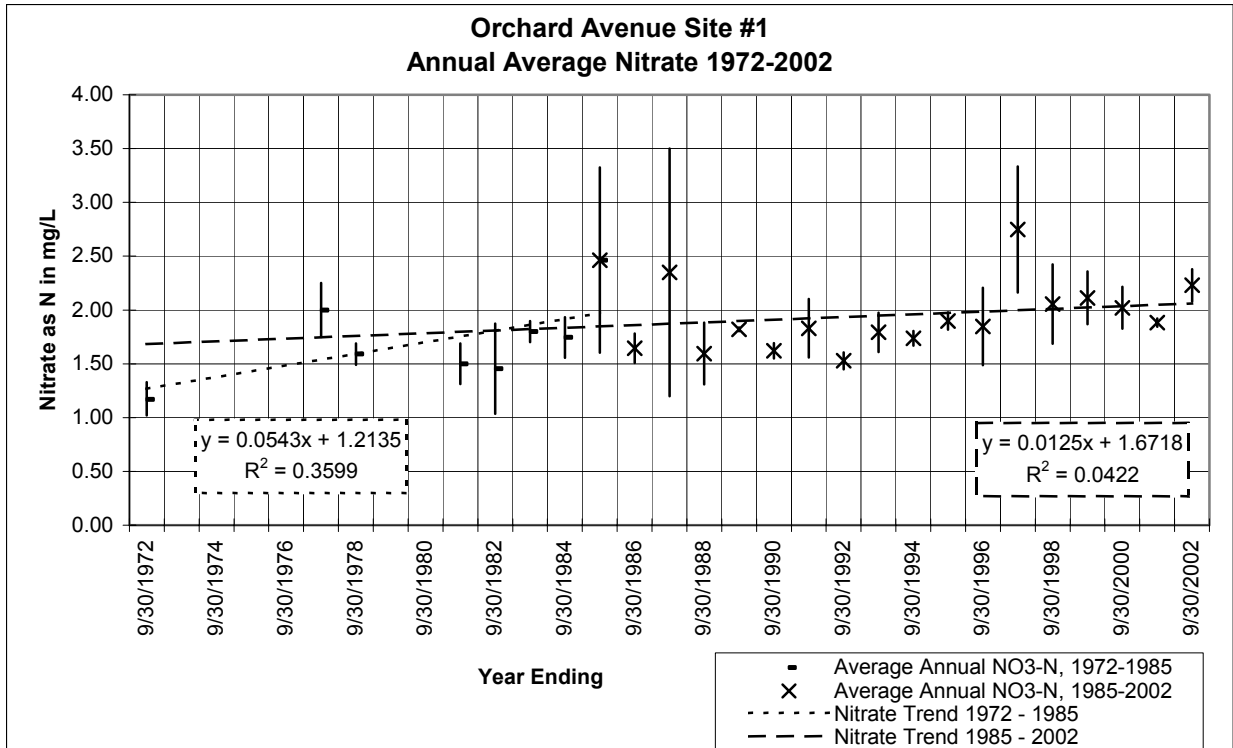


Figure 4. Orchard Avenue Site #1 annual average nitrate concentrations and trends.

The Spokane County Water District 20<sup>th</sup> and Balfour wellfield (5429H01) is located in the Chester Hills sewer project area, completed in 1995, and adjacent to the Chester Terrace sewer area, completed in 1996, and the North and South Kokomo sewer projects, completed in 1990. The annual average nitrate - nitrogen concentrations tended to increase until a peak in 1996 (Figure 5). The trend since 1996 shows a sharp decrease in nitrate - nitrogen concentrations. However, the high rate of decrease may not continue because a large area of high growth to the south of the well is not scheduled for sewer installation until 2009. A major portion of spring recharge to this part of the aquifer is from the Chester Creek drainage to the south, this recharge will mobilize the septic system discharge and carry it to the vicinity of the wellfield.

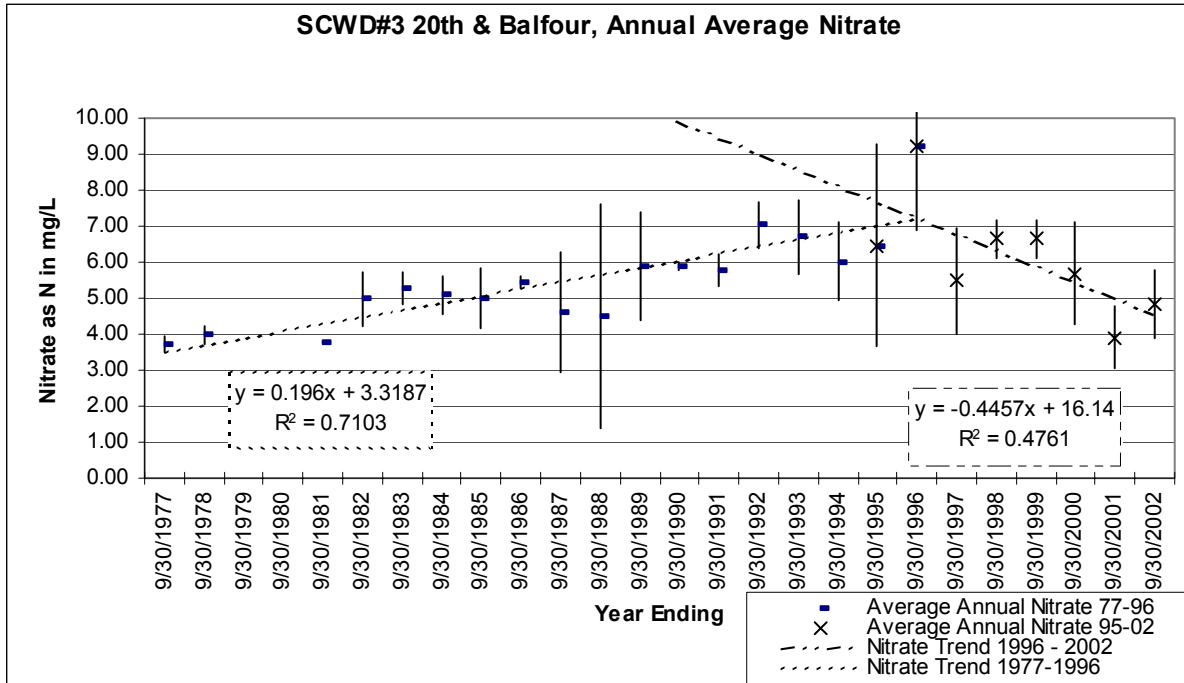


Figure 5. SCWD#3 20<sup>th</sup> and Balfour well, annual average nitrate concentrations and trends.

North Spokane Irrigation District Site 4 (6328H01) is located in an area that is still on septic systems but does not have much new development. The area is downstream from the sewer construction and connection in the Spokane Valley. The average annual nitrate – nitrogen concentrations (Figure 6) vary between 1 and 3 mg/L during the period of record with a decreasing trend. The slope of the trend line shows a larger decrease than the trend line for the CID #2 well (5518R01).

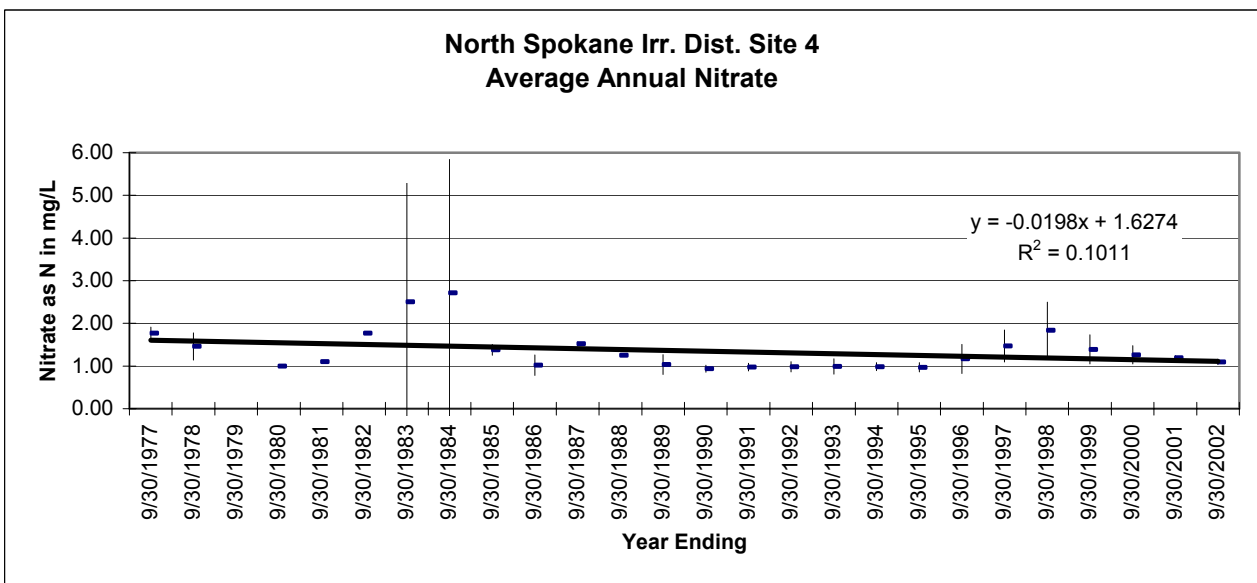


Figure 6. North Spokane Irrigation District Site #4, annual average nitrate concentrations and trends.

## COORDINATED MONITORING PROGRAM: COMPLIANCE MONITORING RESULTS

During 2002, five of the regions water purveyors participated in the Coordinated Monitoring Program. Special sampling and water quality analysis consistent with state Department of Health requirements for drinking water sources was conducted for the City of Spokane, Spokane County Water District #3, Pasadena Park Irrigation District, Orchard Avenue Irrigation District # 6, and Vera Water and Power. The scope and results of this work are summarized below.

### Water Quality in City of Spokane Wells

Drinking water compliance tests were run for inorganic chemicals on two wells, for volatile organic chemicals on one well, and for nitrate as nitrogen on eight wells, with quarterly sampling at the Ray Street well. The detection level for arsenic in the two inorganic drinking water samples was lowered to 1 µg/L and samples from two additional wells were analyzed for arsenic at the same detection level. Table 1 is a list of sampling dates for City of Spokane wells and the type of analysis performed. The data for both compliance monitoring and general aquifer quality monitoring are included in Appendix C and D. Official copies of the analytical results were distributed to both the purveyor and the Department of Health at the time of analysis.

The water quality in the City of Spokane wells in the Spokane Valley - Rathdrum Prairie Aquifer is very good. None of the compliance samples exceeded maximum contaminant levels (MCLs) defined by USEPA and the State of Washington. The concentration of nitrate in the water from the Ray Street well did not exceed the trigger level of 5 mg/L in samples collected in 2002, with a maximum concentration of 4.03 mg/L in April 2002. This well field lies near the margin of the aquifer flow regime. Wells along the edge of the aquifer recharge zone frequently show elevated nitrate – nitrogen concentrations, particularly during recharge periods. None of the quarterly monitoring samples from the Nevada well had lead concentrations over the 0.001 mg/L detection limit. In previous years, water drawn from the sample pump at the Nevada well had lead concentrations over the detection limit. None of the 2002 samples were taken from the sample pump, which supports the hypothesis that the lead came from the sample pump not the source water.

**Table 1. Sampling dates and types of analyses for City of Spokane wells January 2002 to December 2002.**

| Well Name                     | WQMP ID | DOH Source # | Sample Date | Inorganic | Volatile Organic Drinking Water | Nitrate as nitrogen | Arsenic Drinking Water | Inorganic Drinking Water Compliance |
|-------------------------------|---------|--------------|-------------|-----------|---------------------------------|---------------------|------------------------|-------------------------------------|
| CITY of SPOKANE-Nevada        | 5308A02 | 1            | 1/29/2002   | X         |                                 |                     |                        |                                     |
| CITY of SPOKANE-Nevada        | 5308A02 | 1            | 4/30/2002   | X         |                                 |                     |                        |                                     |
| CITY of SPOKANE-Nevada        | 5308A02 | 1            | 8/13/2002   | X         |                                 | X                   |                        |                                     |
| CITY of SPOKANE-Well Electric | 5311G05 | 2            | 8/13/2002   |           |                                 | X                   |                        |                                     |
| CITY of SPOKANE-Parkwater     | 5311J01 | 3            | 8/13/2002   |           |                                 | X                   |                        |                                     |
| CITY of SPOKANE-Ray           | 5322F01 | 4            | 1/29/2002   | X         |                                 | X                   |                        |                                     |
| CITY of SPOKANE-Ray           | 5322F01 | 4            | 4/30/2002   | X         |                                 | X                   |                        |                                     |
| CITY of SPOKANE-Ray           | 5322F01 | 4            | 8/13/2002   | X         |                                 | X                   | X                      |                                     |
| CITY of SPOKANE-Ray           | 5322F01 | 4            | 10/29/2002  | X         |                                 | X                   |                        |                                     |
| CITY of SPOKANE-Hoffman       | 5304B02 | 5            | 8/13/2002   |           |                                 |                     |                        | X                                   |
| CITY of SPOKANE-Grace         | 5308A01 | 6            | 8/13/2002   |           |                                 |                     |                        | X                                   |
| CITY of SPOKANE-Central       | 6331A02 | 8            | 1/29/2002   |           | X                               |                     |                        |                                     |
| CITY of SPOKANE-Central       | 6331A02 | 8            | 8/13/2002   |           |                                 | X                   | X                      |                                     |

## Water Quality in Spokane County Water District #3 Wells

During the 2002 calendar year 16 wells were sampled for drinking water compliance for inorganic compounds and 4 wells were tested for drinking water compliance of volatile organic compounds. The detection limit for all arsenic analyses was 1 µg/L to satisfy a Department of Health request for 2002. Table 2 is a list of sampling dates for Spokane County Water District #3 wells and the type of analysis performed. The complete data for both compliance monitoring and general aquifer quality monitoring are included in Appendices C and D. Official copies of the drinking water compliance analytical results were distributed to both the purveyor and the Department of Health at the time of analysis.

Table 2. Sampling activity matrix: Spokane County Water District #3 wells January 2002 to December 2002.

| Well Name                                            | WQMP ID | DOH Source # | Sample Date | Quarterly Inorganic | Volatile Organic Drinking Water | Inorganic Drinking Water Compliance |
|------------------------------------------------------|---------|--------------|-------------|---------------------|---------------------------------|-------------------------------------|
| Spokane Co Water Dist #3, Knox & Sargent,            | 5407J02 | S05          | 8/8/2002    |                     |                                 | X                                   |
| Spokane Co Water Dist #3, Boone & Lily               | 5313A01 | S06          | 8/8/2002    |                     |                                 | X                                   |
| Spokane Co Water Dist #3, Freeway & Vista            | 5407Q01 | S10          | 12/30/2002  |                     | X                               | X                                   |
| Spokane Co Water Dist #3, 2 <sup>nd</sup> & Koran    | 5323A03 | S11          | 8/8/2002    |                     |                                 | X                                   |
| Spokane Co Water Dist #3, 26 <sup>th</sup> & Vercler | 5427L01 | S15          | 8/8/2002    |                     |                                 | X                                   |
| Spokane Co Water Dist #3, 26 <sup>th</sup> & Vercler | 5427L01 | S15          | 12/30/2002  |                     | X                               |                                     |
| Spokane Co Water Dist #3, Browns Park                | 5427N01 | S16          | 8/8/2002    |                     |                                 | X                                   |
| Spokane Co Water Dist #3, 20 <sup>th</sup> & Balfour | 5429H01 | S18          | 1/29/2002   | X                   |                                 |                                     |
| Spokane Co Water Dist #3, 20 <sup>th</sup> & Balfour | 5429H01 | S18          | 4/30/2002   | X                   |                                 |                                     |
| Spokane Co Water Dist #3, 20 <sup>th</sup> & Balfour | 5429H01 | S18          | 8/8/2002    | X                   |                                 | X                                   |
| Spokane Co Water Dist #3, 20 <sup>th</sup> & Balfour | 5429H01 | S18          | 10/29/2002  | X                   |                                 |                                     |
| Spokane Co Water Dist #3, Lyons & Normandie          | 6330R02 | S20          | 8/7/2002    |                     |                                 | X                                   |
| Spokane Co Water Dist #3, Lyons & Normandie          | 6330R02 | S20          | 12/30/2002  |                     | X                               |                                     |
| Spokane Co Water Dist #3, Steer Inn                  | 6320N02 | S21          | 8/7/2002    |                     |                                 | X                                   |
| Spokane Co Water Dist #3, Freya & Farwell            | 6303P01 | S25          | 8/7/2002    |                     |                                 | X                                   |
| Spokane Co Water Dist #3, Cherry & Farwell           | 6303N01 | S26          | 8/8/2002    |                     |                                 | X                                   |
| Spokane Co Water Dist #3, Cherry & Farwell           | 6303N01 | S26          | 12/30/2002  |                     | X                               |                                     |
| Spokane Co Water Dist #3, Helena & Mead              | 6309D01 | S30          | 8/7/2002    |                     |                                 | X                                   |
| Spokane Co Water Dist #3, Pineriver Park             | 7332L01 | S33          | 8/7/2002    |                     |                                 | X                                   |
| Spokane Co Water Dist #3, Colbert, Riverview         | 7322M01 | S34          | 8/7/2002    |                     |                                 | X                                   |
| Spokane Co Water Dist #3, Chattaroy Hills            | 8323C01 | S36          | 8/7/2002    |                     |                                 | X                                   |
| Spokane Co Water Dist #3, Waterview Terrace          | 7105D01 | S38          | 8/7/2002    |                     |                                 | X                                   |

Water quality in the Spokane County Water District #3 wells is generally good to excellent. No violations of primary drinking water inorganic or volatile organic compound MCLs were observed in 2001. The chloroform concentration in the sample from the 26<sup>th</sup> & Vercler well exceeded the trigger level of 0.5 µg/L at 0.762 µg/L. Chloroform is a byproduct of water chlorination and has no MCL. The trigger concentration for nitrate – nitrogen, 5 mg/L, was not exceeded in compliance samples at the 20<sup>th</sup> and Balfour site in 2002. However, the nitrate + nitrite as nitrogen concentration of the 4/30/2002 and 10/30/2002 quarterly monitoring water samples from this site was over the trigger at 6.11 mg/L and 7.47 mg/L respectively. In each case, the pump was turned on only briefly for sampling purposes.

The 10/30/2002 sample from the 20<sup>th</sup> and Balfour well had an iron concentration in excess of the 0.3 mg/L secondary MCL. Secondary MCLs are based on aesthetic factors rather than health hazards.

The arsenic concentrations in the Spokane County Water District #3 20<sup>th</sup> and Balfour well quarterly monitoring water samples ranged from 4.98 to 6.29 µg/L. The arsenic concentration in the Freya & Farwell water sample of 8/8/2002 was 5.34 µg/L. This is of concern because beginning with the 2002 Consumer Confidence Report; arsenic concentrations over 5 µg/L must be reported. The potential sources for the arsenic have not been investigated.

### Water Quality in Pasadena Park Irrigation District #17 Wells

During the 2002 calendar year four Pasadena Park Irrigation District #17 wells were sampled for volatile organic drinking water compliance and arsenic. Table 3 is a list of sampling dates and the type of analysis performed. The complete data for both compliance monitoring and general aquifer quality monitoring are included in Appendices C and D. Official copies of the drinking water compliance analytical results were distributed to both the purveyor and the Department of Health after reception of the analytical reports.

Pasadena Park sites 2 and 4 (5405K01 & 5406A02) were sampled as part of the quarterly monitoring program. Water quality for the inorganic compounds in this well was very good. No violations of either MCLs or trigger levels were observed. Water drawn from the well at Site 3 on August 8, 2002 had an arsenic concentration of 5.4 µg/L. This concentration seemed anomalously high because arsenic concentrations from previous samples from this well and from other Pasadena Park wells ranged between 1.30 and 2.83 µg/L. The arsenic concentration in a sample taken September 12 was 2.59 µg/L, more in line with previous values. Drinking water compliance testing for volatile organic chemicals at 4 sites also showed no violations.

| Well Name                                    | WQMP ID | DOH Source # | Sample Date | Quarterly Inorganic | VOC Drinking Water | Arsenic Drinking Water | Inorganic Drinking Water Compliance |
|----------------------------------------------|---------|--------------|-------------|---------------------|--------------------|------------------------|-------------------------------------|
| Pasadena Park Irrigation District #17 Site 2 | 5405K01 | S02          | 1/29/2002   | X                   |                    |                        |                                     |
| Pasadena Park Irrigation District #17 Site 2 | 5405K01 | S02          | 4/30/2002   | X                   |                    |                        |                                     |
| Pasadena Park Irrigation District #17 Site 2 | 5405K01 | S02          | 8/8/2002    |                     |                    | X                      |                                     |
| Pasadena Park Irrigation District #17 Site 2 | 5405K01 | S02          | 8/27/2002   |                     | X                  |                        |                                     |
| Pasadena Park Irrigation District #17 Site 2 | 5405K01 | S02          | 10/29/2002  | X                   |                    |                        |                                     |
| Pasadena Park Irrigation District #17 Site 3 | 5405D01 | S03          | 8/8/2002    |                     |                    | X                      |                                     |
| Pasadena Park Irrigation District #17 Site 3 | 5405D01 | S03          | 8/27/2002   |                     | X                  |                        |                                     |
| Pasadena Park Irrigation District #17 Site 3 | 5405D01 | S03          | 9/12/2002   |                     |                    | X                      |                                     |
| Pasadena Park Irrigation District #17 Site 4 | 5406A02 | S04          | 8/8/2002    | X                   |                    | X                      |                                     |
| Pasadena Park Irrigation District #17 Site 4 | 5406A02 | S04          | 8/27/2002   |                     | X                  |                        |                                     |
| Pasadena Park Irrigation District #17 Site 5 | 5406J03 | S05          | 8/8/2002    |                     |                    | X                      |                                     |
| Pasadena Park Irrigation District #17 Site 5 | 5406J03 | S05          | 8/27/2002   |                     | X                  |                        |                                     |

### Water Quality in Vera Water and Power Wells

Vera Water and Power joined the Coordinated Monitoring Program in 2001. During the 2002 calendar year ten wells were sampled for arsenic with analyses with the lower detection level of 1 µg/L. Table 4 is

a list of sampling dates for Vera Water and Power wells and the type of analysis performed. The complete data for both compliance monitoring and general aquifer quality monitoring are included in Appendices C and D. Official copies of the drinking water compliance analytical results were distributed to both the purveyor and the Department of Health after reception of the analytical reports.

Table 4. Sampling activity matrix: Spokane County Water District #3 wells January 2002 to December 2002.

| Well Name                                                 | WQMP ID | DOH Source # | Sample Date | Inorganic | Arsenic |
|-----------------------------------------------------------|---------|--------------|-------------|-----------|---------|
| Vera Water & Power, 601 N. Evergreen                      | 5415J01 | S01          | 8/6/2002    |           | X       |
| Vera Water & Power, 16 <sup>th</sup> & Evergreen NW       | 5422R01 | S03          | 8/6/2002    |           | X       |
| Vera Water & Power, 24 <sup>th</sup> & Adams              | 5426L01 | S04          | 1/29/2002   | X         |         |
| Vera Water & Power, 24 <sup>th</sup> & Adams              | 5426L01 | S04          | 4/30/2002   | X         |         |
| Vera Water & Power, 24 <sup>th</sup> & Adams              | 5426L01 | S04          | 8/6/2002    | X         | X       |
| Vera Water & Power, 24 <sup>th</sup> & Adams              | 5426L01 | S04          | 10/29/2002  | X         |         |
| Vera Water & Power, 16 <sup>th</sup> , east of Bolivar    | 5426D01 | S05          | 8/6/2002    |           | X       |
| Vera Water & Power, 604 S. Evergreen                      | 5422H02 | S06          | 8/8/2002    |           | X       |
| Vera Water & Power, 2 <sup>nd</sup> & Best                | 5423C01 | S07          | 8/6/2002    |           | X       |
| Vera Water & Power, 15306 E. 8 <sup>th</sup>              | 5423J01 | S08          | 8/6/2002    |           | X       |
| Vera Water & Power, 15306 E. 8 <sup>th</sup>              | 5423J02 | S09          | 8/6/2002    |           | X       |
| Vera Water & Power, 15300 E. Springfield, # 2             | 5414J01 | S12          | 8/6/2002    |           | X       |
| Vera Water & Power, 16 <sup>th</sup> & Evergreen, well 33 | 5422R02 | S13          | 8/6/2002    |           | X       |

Water quality in the Vera Water and Power wells is generally good to excellent. In addition to the compliance sampling, Vera's well #4 at 24<sup>th</sup> and Adams (5426L01) is sampled by Spokane County as part of the quarterly monitoring program. No violations of primary drinking water inorganic MCLs were observed in 2002.

#### Water Quality in Orchard Avenue Irrigation District # 6 Wells

Orchard Avenue Irrigation District #6 joined the Coordinated Monitoring Program in 2001. During the 2002 calendar year both wells were sampled for arsenic. Table 5 is a list of sampling dates for Orchard Avenue wells and the type of analysis performed. The complete data for both compliance monitoring and general aquifer quality monitoring are included in Appendices C and D. Official copies of the drinking water compliance analytical results were distributed to both the purveyor and the Department of Health after reception of the analytical reports.

Water quality in the two Orchard Avenue wells is generally good to excellent. In addition to the compliance sampling, one of Orchard Avenue's wells is sampled by Spokane County as part of the quarterly monitoring program. No violations of primary drinking water inorganic or volatile organic compound MCLs were observed in 2002. The arsenic concentration in the quarterly monitoring sample from Site 1 collected on 4/30/2002 was slightly over the 5.0 µg/L level. This is of concern because beginning with the 2002 Consumer Confidence Report; arsenic concentrations over 5 µg/L must be reported. The potential sources for the arsenic have not been investigated.

Table 5. Sampling activity matrix: Orchard Avenue Irrigation District # 6 wells 2002.

| Well Name                                    | WQMP ID | DOH Source # | Sample Date | Inorganic | Arsenic |
|----------------------------------------------|---------|--------------|-------------|-----------|---------|
| Orchard Avenue Irrig. Dist., Marietta & Park | 5312H01 | S01          | 4/30/2002   | X         |         |
| Orchard Avenue Irrig. Dist., Marietta & Park | 5312H01 | S01          | 8/8/2002    | X         | X       |
| Orchard Avenue Irrig. Dist., Buckeye & Dick  | 5407C01 | S02          | 1/29/2002   | X         |         |
| Orchard Avenue Irrig. Dist., Buckeye & Dick  | 5407C01 | S02          | 8/8/2002    |           | X       |
| Orchard Avenue Irrig. Dist., Buckeye & Dick  | 5407C01 | S02          | 10/29/2002  | X         |         |

## EARLY WARNING MONITORING

Early warning of contamination upgradient of a supply well is a goal of the Coordinated Monitoring Program. Table 6 includes a list of sentinel wells in the defined capture zone of the well of concern sampled as part of the monitoring program. Some of the sentinel wells are public supply wells that are sampled as part of the regional monitoring program or for drinking water compliance. However, most sentinel wells are monitoring wells installed for this purpose. The City of Spokane and the Spokane Aquifer Joint Board installed these wells for a variety of uses as part of the development of a Wellhead Protection Plan. The wells were located in capture zones of purveyor wells at distances upgradient equivalent to a few days to a several months travel time. The intent is to detect potential water quality problems in a supply well by examining the data from an upgradient well. This approach assumes that the water in delineated capture zones reflects the quality of the water that will reach a supply well in the near future. The early warning monitoring approach was initiated in 1999. Since that time, indicator water quality parameters of sentinel wells has been compared to downgradient wells. The following sentinel well – supply well pairings have been evaluated:

Denver & Marietta (5308H01) – City of Spokane, Nevada (5308A02)  
 Hale’s Ale (5311J05 & 5311J07) – City of Spokane, Parkwater (5308A02)  
 Felts Field (5312C01) – City of Spokane, Well Electric (5311G05)  
 3<sup>rd</sup> & Havana (5322A01 & 5322A03) - City of Spokane Ray (5322F01)  
 Fire Station (6327N04) – North Spokane Irrigation District #8 Sites 1 & 4 (6328H01)  
 Holy Cross (6330J01) – Spokane County Water District #3 Lyons & Normandie (6330R02)  
 Franklin Park (6331J01) – City of Spokane Central (6331A01)  
 Monitoring well at CID #11 (6631M07) – CID well #11 at Idaho Road (6631M04)

Nitrate– nitrogen was used as an indicator of urban impacts on groundwater in the Spokane Valley - Rathdrum Prairie Aquifer because of its low natural background level in the aquifer and its prevalence in wastewater and potential for being in lawn irrigation leachate. Nitrate is not common in commercial or industrial spills or stormwater injected to groundwater via drywells. Thus, it is expected that even water impacted by a spill would show similar nitrate concentrations in both a supply well and its corresponding sentinel well.

For the limited data available from the supply wells, the Denver & Marietta (5308H01) – Nevada (5308A02) and Hale’s Ale site (5311J05 & 5311J07) – Parkwater (5308A02) pairs showed a good relationship between the water quality of sentinel well and the supply well. The water quality relationships for the other two pairs in the Spokane Valley were not as positive. The downgradient supply well – Well Electric (5311G05) – has water with elevated nitrate concentrations relative to the Felts Field well (5312C01). This pair is near the Spokane River and may be subject to influences from the River. Similarly, the Ray Street supply well (5322F01) water shows consistently higher nitrate concentrations than the water from the 3<sup>rd</sup> & Havana Street sentinel wells (5322A01 & 5322A03). The Ray Street well is near the southern margin of the aquifer. Historically wells along the periphery of the

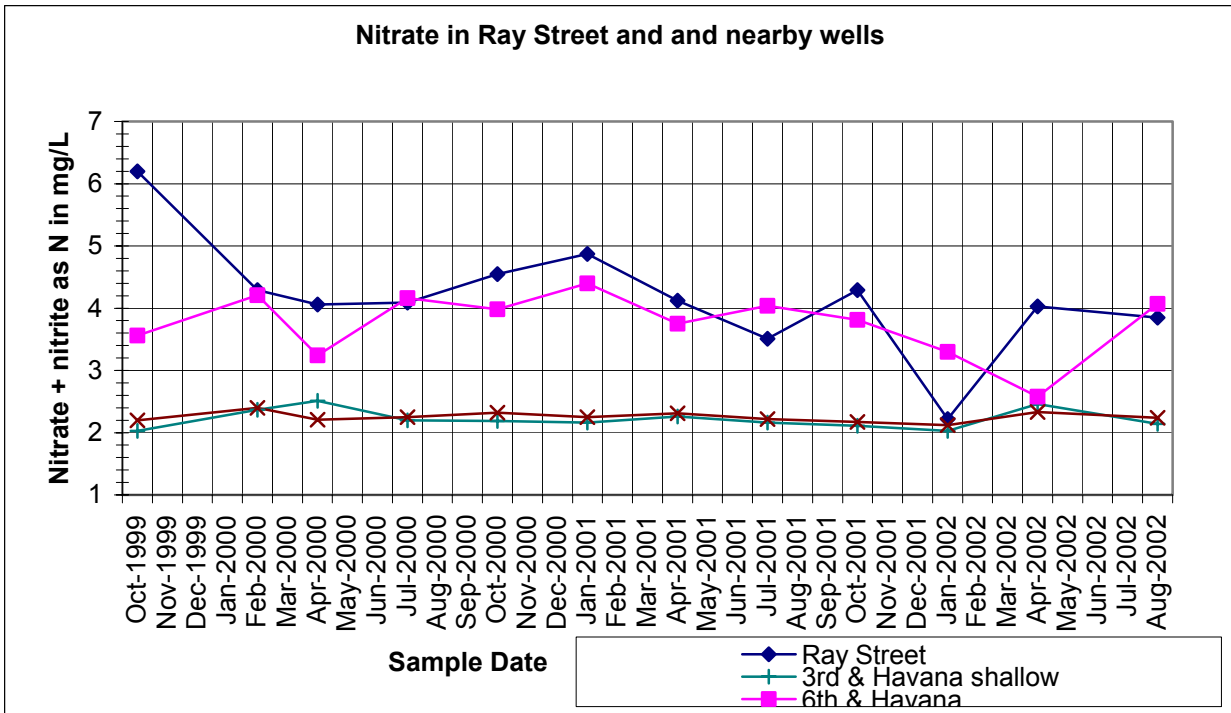


Figure 7. Nitrate + nitrite as nitrogen concentrations in water samples from the City of Spokane’s Ray Street well and nearby monitoring wells.

aquifer have displayed elevated contaminant levels compared to the central flow path. This has been interpreted to illustrate the contribution of poor quality water from “hillside recharge.” The proximity of the Havana wells to the aquifer’s margin was originally thought to be such that similar recharge effects would be observed as at the Ray Street well. However, the 2000 Water Quality Report compared water quality from the 6<sup>th</sup> & Havana well (5323E01) with the Ray Street well and found a better correlation, though the source of elevated contaminant levels may be from different hillside basins.

Spokane County collected quarterly samples in 2002 from two City of Spokane supply wells and their sentinel wells. Figure 7 shows nitrate concentrations for the Ray Street well and the nearby monitoring wells. The water from the 6<sup>th</sup> & Havana well continues to be similar to the Ray Street well water while the samples from wells at 3<sup>rd</sup> & Havana have lower concentrations of nitrate. Though the 3<sup>rd</sup> & Havana wells may not be the best indicators of future water quality problems at Ray Street resulting from the impact of hillside recharge, any plume of contaminants moving through the aquifer would probably flow through the vicinity of the 3<sup>rd</sup> & Havana wells before reaching the Ray Street well.



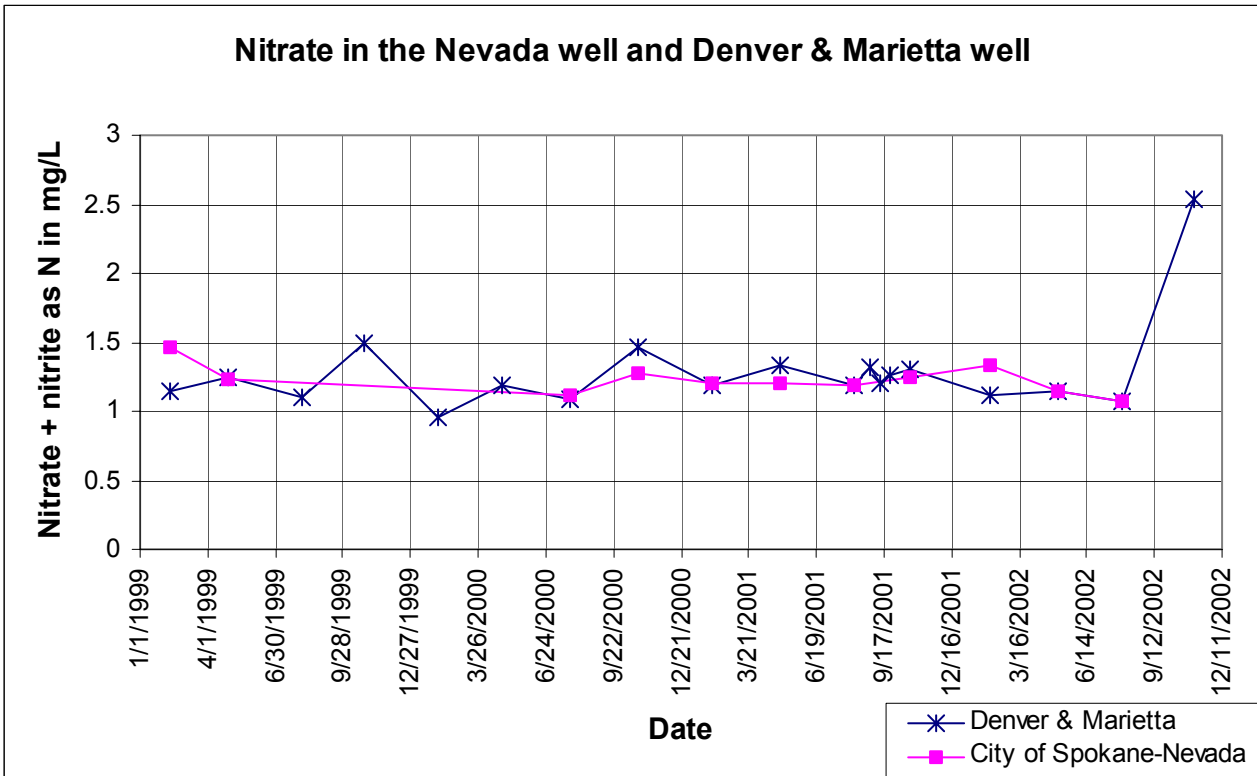


Figure 8. Nitrate + nitrite as nitrogen concentrations in water samples from the City of Spokane’s Nevada well and the monitoring well at Denver & Marietta.

Figure 8 shows nitrate concentrations from all samples collected from the Nevada (5308A02) and Denver & Marietta (5308H01) wells since October 1999. Several additional samples were collected from the Denver & Marietta well during the summer of 2001. The total difference in concentration of nitrate shown in these samples is around 0.1 mg/L and could be due to the variability of actual water quality or to the expected variability of analytical results. In general, the water samples from the Denver & Marietta well continue to have nitrate concentrations greater than or similar to samples from the Nevada well. The higher concentrations of nitrate + nitrate - nitrogen in the monitoring well are probably attributable to sample collection near the water table.

In addition to the City wells described above, a similar analysis was completed in 2000 for the additional well pairs listed below.

- Fire Station (6327N04) – North Spokane Irrigation District #8 Well 4 (6328H01)
- Holy Cross Cemetery (6330J01) – Spokane Co Water District #3, Lyons & Normandie (6330R02)
- Franklin Park (6331J01) – City of Spokane Central (6331A01)

Of these, only the North Spokane Irrigation District Well 4 (6328H01) – Fire Station (6327N04) pair shows no correlation between the water quality in the two wells. Data from the other two pairs are consistent with positive supply well – sentinel well water quality relationships. Very few samples were collected from these additional sentinel wells during 2001, but samples were collected from both wells in all four quarters of 2002. Figure 9 shows the concentrations of nitrate + nitrite as nitrogen in the North Spokane Irrigation wells and the monitoring well at the Fire Station at Regal and Houston.

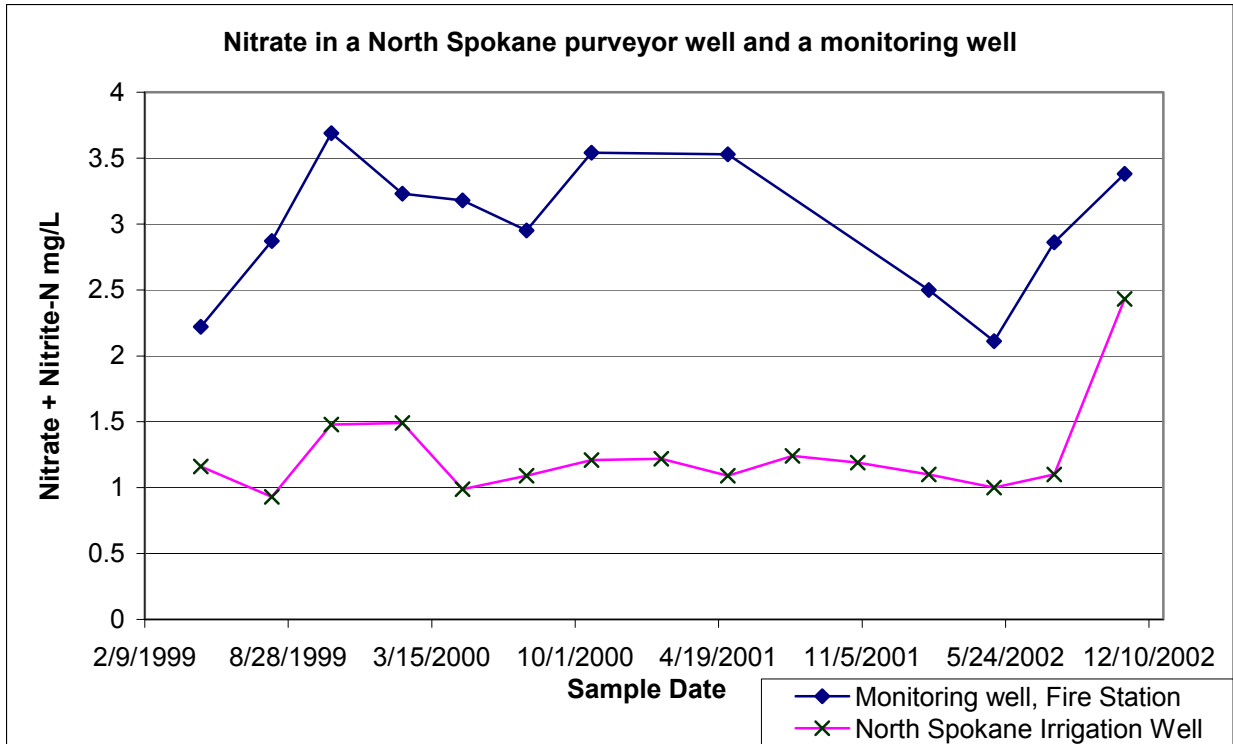


Figure 9. Nitrate + nitrite as nitrogen concentrations in water samples from a North Spokane Irrigation District well and the monitoring well at the Fire Station on north Regal.

A comparison of the monitoring well at CID #11 (6631M07) – CID well #11 at Idaho Road (6631M04) pair is included near the end of this report as part of a discussion on water quality in the aquifer along Idaho Road.

Table 6 contains a list of all wells included in the Coordinated Monitoring Program for 2002 and the wells that could potentially serve as “early warning” sentinel wells for supply wells. Using this table the data in the appendices can be referenced to find actual upgradient water quality. The capture zone well list was ascertained by manually overlaying water supply well locations with capture zone delineations. All upgradient sentinel wells within about a one-mile distance are included in the table. The distance upgradient given in the table is the approximate linear distance between the two wells; with the actual ground water flow path not taken into account. A few of the 15 purveyor’s wells sampled quarterly are also potential sentinel wells.

| Table 6: Water supply wells and associated upgradient sentinel wells |     |                                                    |                   |                                                  |                 |
|----------------------------------------------------------------------|-----|----------------------------------------------------|-------------------|--------------------------------------------------|-----------------|
| Purveyor Wells                                                       |     |                                                    | Capture Zone Well |                                                  |                 |
| WQMP ID                                                              | DOH | Purveyor Well Name                                 | WQMP ID           | Capture Zone Well Name                           | Feet Upgradient |
| 5308A02                                                              | 1   | CITY of SPOKANE-Nevada                             | 5308H01           | Denver & Marietta, City monitoring well          | 1329            |
| 5311G05                                                              | 2   | CITY of SPOKANE-Well Electric                      | 5312C01           | Felts Field City monitoring well                 | 3340            |
| 5311J01                                                              | 3   | CITY of SPOKANE-Parkwater                          | 5311J05           | Hale's Ale Nested Site, east                     | 1150            |
| 5311J01                                                              | 3   | CITY of SPOKANE-Parkwater                          | 5311J07           | Hale's Ale Nested Site, mid                      | 1150            |
| 5322F01                                                              | 4   | CITY of SPOKANE-Ray                                | 5322A01           | Third & Havana Nested Site, east                 | 3850            |
| 5322F01                                                              | 4   | CITY of SPOKANE-Ray                                | 5322A03           | Third & Havana Nested Site, mid                  | 3850            |
| 5322F01                                                              | 4   | CITY of SPOKANE-Ray                                | 5323E01           | 6 <sup>th</sup> & Havana monitoring well         | 3880            |
| 5304B02                                                              | 5   | CITY of POKANE-Hoffman                             | 5304G01           | NE Community Center, City monitoring well        | 2000            |
| 5308A01                                                              | 6   | CITY of SPOKANE-Grace                              | 5308H01           | Denver & Marietta, City monitoring well          | 1166            |
| 6331A02                                                              | 8   | CITY of SPOKANE-Central                            | 6331J01           | Franklin Park, City monitoring well              | 1805            |
| 5407J02                                                              | S05 | Spokane Co Water Dist #3, Knox & Sargent, 1-2      | 5408N01           | Modern Electric Water, Site 6                    | 2600            |
| 5323A03                                                              | S11 | Spokane Co Water Dist #3, 2 <sup>nd</sup> & Koran  | 5324G02           | East Spokane Water District Well 2               | 5190            |
| 5427L01                                                              | S15 | Spokane Co Water Dist #3, Site 2-5, 26th & Vercler | 5426L01           | Vera Water & Power, Site 4                       | 6555            |
| 5429H01                                                              | S18 | Spokane Co Water Dist #3, Site 2-4,20th & Balfour  | 5427L01           | Spokane Co Water Dist #3, 26th & Vercler         | 8645            |
| 6330R02                                                              | S20 | Spokane Co Water Dist #3, 3-1, Lyons & Normandie   | 6331A02           | CITY of SPOKANE-Central                          | 2300            |
| 6330R02                                                              | S20 | Spokane Co Water Dist #3, 3-1, Lyons & Normandie   | 6331J01           | Franklin Park, City monitoring well              | 4170            |
| 6320N02                                                              | S21 | Spokane Co Water Dist #3, Site 3-2, Steer Inn      | 6330R02           | Spokane Co Water Dist #3, Lyons & Normandie      | 4735            |
| 5405K01                                                              | S02 | Pasadena Park Irrigation District #17 Site 2       | 5507A04           | Euclid and Barker monitoring well at CID site 5  | 14560           |
| 5405K01                                                              | S02 | Pasadena Park Irrigation District #17 Site 2       | 5409C02           | Monitoring well at Frederick and Bowdish         | 5775            |
| 5405D01                                                              | S03 | Pasadena Park Irrigation District #17 Site 3       | 5505D01           | Trent and Barker monitoring well                 | 15730           |
| 5312H01                                                              | S01 | Orchard Avenue Irrig. Dist., Marietta & Park       | 5407C01           | Orchard Avenue Irrig. Dist., Buckeye & Dick      | 2140            |
| 5407C01                                                              | S02 | Orchard Avenue Irrig. Dist., Buckeye & Dick        | 5411R04           | Sullivan Road & Centennial Trail monitoring well | 24700           |

| Table 6 cont: Water supply wells and associated upgradient sentinel wells |     |                                                           |                   |                                                             |                 |
|---------------------------------------------------------------------------|-----|-----------------------------------------------------------|-------------------|-------------------------------------------------------------|-----------------|
| Purveyor Wells                                                            |     |                                                           | Capture Zone Well |                                                             |                 |
| WQMP ID                                                                   | DOH | Purveyor Well Name                                        | WQMP ID           | Capture Zone Well Name                                      | Feet Upgradient |
| 5415J01                                                                   | S01 | Vera Water & Power, 601 N. Evergreen                      | 5411R04           | Sullivan Road & Centennial Trail monitoring well            | 6415            |
| 5422R01                                                                   | S03 | Vera Water & Power, 16 <sup>th</sup> & Evergreen NW       | 5423J01           | Vera Water & Power, 15306 E. 8 <sup>th</sup> , S08          | 5400            |
| 5422R01                                                                   | S03 | Vera Water & Power, 16 <sup>th</sup> & Evergreen NW       | 5423J02           | Vera Water & Power, 15306 E. 8 <sup>th</sup> , S09          | 5415            |
| 5422R01                                                                   | S03 | Vera Water & Power, 16 <sup>th</sup> & Evergreen NW       | 5426D01           | Vera Water & Power, 16 <sup>th</sup> , east of Bolivar, S05 | 705             |
| 5426D01                                                                   | S05 | Vera Water & Power, 16 <sup>th</sup> , east of Bolivar    | 5423J01           | Vera Water & Power, 15306 E. 8 <sup>th</sup> , S08          | 4820            |
| 5426D01                                                                   | S05 | Vera Water & Power, 16 <sup>th</sup> , east of Bolivar    | 5423J02           | Vera Water & Power, 15306 E. 8 <sup>th</sup> , S09          | 4850            |
| 5422H02                                                                   | S06 | Vera Water & Power, 604 S. Evergreen                      | 5517D05           | Mission & Potomac, monitoring well at CID site 5            | 18810           |
| 5423J01                                                                   | S08 | Vera Water & Power, 15306 E. 8 <sup>th</sup>              | 5518R01           | Consolidated Irrigation District # 19, Site 2               | 10670           |
| 5423J02                                                                   | S09 | Vera Water & Power, 15306 E. 8 <sup>th</sup>              | 5518R01           | Consolidated Irrigation District # 19, Site 2               | 10700           |
| 5414J01                                                                   | S12 | Vera Water & Power, 15300 E. Springfield, well 2          | 5508M01           | Barker Road & Centennial Trail, north monitoring            | 12890           |
| 5414J01                                                                   | S12 | Vera Water & Power, 15300 E. Springfield, well 2          | 5508M02           | Barker Road & Centennial Trail, south monitoring            | 12845           |
| 5422R02                                                                   | S13 | Vera Water & Power, 16 <sup>th</sup> & Evergreen, well 33 | 5423J01           | Vera Water & Power, 15306 E. 8 <sup>th</sup> , S08          | 5400            |
| 5422R02                                                                   | S13 | Vera Water & Power, 16 <sup>th</sup> & Evergreen, well 33 | 5423J02           | Vera Water & Power, 15306 E. 8 <sup>th</sup> , S09          | 5415            |
| 5422R02                                                                   | S13 | Vera Water & Power, 16 <sup>th</sup> & Evergreen, well 33 | 5426D01           | Vera Water & Power, 16 <sup>th</sup> , east of Bolivar, S05 | 705             |



## **SPECIAL AQUIFER QUALITY INVESTIGATIONS 2002**

This section contains reports on four special investigations. First, the USEPA lowered the maximum contaminant level (MCL) for arsenic in drinking water, effective in 2006. This new standard led to additional investigation of arsenic in the SVRP.

### Arsenic in the Spokane Valley Rathdrum Prairie Aquifer

Spokane County added arsenic to its quarterly analysis list in 2001 in anticipation of the MCL of 10 µg/L of that goes into effect January 22, 2006. Consumer confidence reports (CCR) for 2002 through 2005 are required to report any arsenic detection above 5 µg/L and report health effects associated with elevated arsenic concentrations for any detection between 10 µg/L and 50 µg/L. None of the samples collected for compliance monitoring had concentrations above the current Washington State Department of Health reporting limit of 10.0 µg/L (0.0100 mg/L). The reporting limit for arsenic of the samples collected by Spokane County was 1.00 µg/L (0.00100 mg/L). The average arsenic concentrations from each well are listed in Table 7. All four of the samples from the three monitoring wells next to the river on Barker (5507H01, 5508M01, & 5508M02) had no detectable quantities of arsenic. None of these nondetects are calculated into the averages listed on the table. Two monitoring wells and one public water supply wells exceeded 5 µg/L of arsenic in 2002, though not the 10 µg/L MCL, on a regular basis during the four sampling rounds of 2001. All four Felts Field (5312C01) monitoring well samples analyzed for arsenic had concentrations over 5 µg/L, which ranged from 7.11 µg/L to 8.19 µg/L. The four Spokane County Water District #3 20<sup>th</sup> and Balfour (5429H01) well water samples analyzed for arsenic had concentrations which ranged from 5.45 to 6.14 µg/L. Three of the samples from the Trent & Barker (5505D01) monitoring well had arsenic concentrations over 5 µg/L, ranging from 5.38 to 7.28 µg/L. Two of the three samples from the Consolidated Irrigation District's well field #11 exceeded 5 µg/L. All of the arsenic concentrations are listed in Appendices B and C.

Table 7. Average arsenic concentrations in water collected in 2002 from the wells sampled quarterly.

| WQMP Well ID | Well Name                                              | Arsenic Average (µg/L) | Number of samples |
|--------------|--------------------------------------------------------|------------------------|-------------------|
| 5213B01      | I.E. COLD STORAGE                                      | 2.46                   | 4                 |
| 5304B02      | CITY of SPOKANE-Hoffman                                | 2.82                   | 1                 |
| 5304G01      | NE Community Center, City monitoring well              | 2.52                   | 4                 |
| 5307M01      | Trinity School, Adams & Carlisle, City monitoring well | 2.19                   | 4                 |
| 5308A01      | CITY of SPOKANE-Grace                                  | 2.25                   | 1                 |
| 5308A02      | CITY of SPOKANE-Nevada                                 | 2.17                   | 3                 |
| 5308H01      | Denver & Marietta, City monitoring well                | 2.22                   | 4                 |
| 5311J05      | Hale's Ale Nested Site, east                           | 2.81                   | 4                 |
| 5311J07      | Hale's Ale Nested Site, mid                            | 2.89                   | 4                 |
| 5312C01      | Felts Field City monitoring well                       | 6.85                   | 4                 |
| 5312H01      | ORCHARD AVE IRRIG DIST, Site 1                         | 4.28                   | 3                 |
| 5313A01      | Spokane Co Water Dist #3, Boone & Lily, 1-3            | 2.93                   | 1                 |
| 5315L01      | Olive & Fiske monitoring well                          | 2.03                   | 4                 |
| 5322A01      | Third & Havana Nested Site, east                       | 2.73                   | 4                 |
| 5322A03      | Third & Havana Nested Site, mid                        | 2.61                   | 4                 |
| 5322F01      | CITY of SPOKANE-Ray                                    | 4.23                   | 5                 |
| 5323A03      | Spokane Co Water Dist #3, 2nd & Koren                  | 4.24                   | 1                 |
| 5323E01      | 6th & Havana monitoring well (MW-2)                    | 3.75                   | 4                 |
| 5323K01      | Carnahan Pit monitoring well (MW-1)                    | 2.78                   | 1                 |
| 5324G02      | E. SPOKANE WTR DIST, Site 2                            | 3.58                   | 4                 |
| 5405D01      | PASADENA PARK #3                                       | 3.98                   | 2                 |
| 5405K01      | PASADENA PARK #2                                       | 1.49                   | 4                 |
| 5406A02      | PASADENA PARK IRRIG DIST, Site 4                       | 1.90                   | 2                 |
| 5406J03      | Pasadena Park #5, Maringo & Upriver                    | 1.62                   | 1                 |
| 5407C01      | Orchard Ave Irrig Dist, Site 2 Buckeye & Dick          | 3.70                   | 3                 |
| 5407J02      | Spokane Co Water Dist #3, Knox & Sargent, 1-2          | 3.45                   | 1                 |
| 5407Q01      | Spokane Co Water Dist #3, Freeway & Vista, 1-6         | 2.82                   | 1                 |
| 5408N01      | MODERN ELECT WATER, Site 6                             | 2.44                   | 4                 |
| 5409C02      | monitoring well Frederick & Bowdish                    | 4.71                   | 3                 |
| 5411R02      | Sullivan Park North, monitoring well                   | 2.54                   | 4                 |
| 5411R03      | Sullivan Park South, monitoring well                   | 2.77                   | 4                 |
| 5411R04      | Sullivan Road and Centennial Trail, monitoring well    | 1.77                   | 4                 |
| 5413M01      | VERA WATER & POWER, Well 2                             | 2.79                   | 1                 |
| 5415J01      | VERA WATER & POWER, Well 1                             | 1.88                   | 1                 |
| 5422H02      | VERA WATER & POWER, Well 6                             | 1.44                   | 1                 |
| 5422R01      | VERA WATER & POWER, Well 3                             | 1.19                   | 1                 |
| 5422R02      | VERA WATER & POWER, Well 33                            | 1.04                   | 1                 |
| 5423C01      | VERA WATER & POWER, Well 7                             | <1.00                  | 1                 |
| 5423J01      | VERA WATER & POWER, Well 8                             | <1.00                  | 1                 |
| 5423J02      | VERA WATER & POWER, Well 9                             | <1.00                  | 1                 |
| 5426D01      | VERA WATER & POWER, Well 5                             | <1.00                  | 1                 |

Table 7. cont.

| WQMP Well ID | Well Name                                            | Arsenic Average ( $\mu\text{g/L}$ ) | Number of samples |
|--------------|------------------------------------------------------|-------------------------------------|-------------------|
| 5426L01      | VERA WATER & POWER, Well 4                           | 3.86                                | 5                 |
| 5427L01      | Spokane Co Water Dist #3, Site 2-5, 26th & Vercler   | 4.31                                | 1                 |
| 5427N01      | Spokane Co Water Dist #3, Browns Park, 2-13          | 4.40                                | 1                 |
| 5429H01      | Spokane Co Water Dist #3, Site 2-4,20th & Balfour    | 5.53                                | 4                 |
| 5505D01      | Trent & Barker Road, monitoring well                 | 5.41                                | 4                 |
| 5507A04      | Euclid & Barker monitoring well at CID5              | 1.72                                | 4                 |
| 5507H01      | Barker Road north of river, monitoring well          | <1.00                               | 4                 |
| 5508M01      | Barker Road Centennial Trail North, monitoring well  | <1.00                               | 4                 |
| 5508M02      | Barker Road Centennial Trail South, monitoring well  | <1.00                               | 4                 |
| 5515C01      | Mission Well, LIBERTY LAKE SEWER DIST                | 3.68                                | 4                 |
| 5517D05      | Mission & Barker monitoring well at CID 4            | 1.08                                | 4                 |
| 5518R01      | CONSOLIDATED IRRIG DIST 19, Site 2A                  | 1.07                                | 4                 |
| 6211K01      | Spokane Fish Hatchery well                           | 3.51                                | 4                 |
| 6303N01      | Spokane Co Water Dist #3, Site 3-7, Cherry & Farwell | 2.83                                | 1                 |
| 6303P01      | Spokane Co Water Dist #3, Site 3-6, Freya & Farwell  | 5.34                                | 1                 |
| 6309D01      | Spokane Co Water Dist #3, Helena & Mead, 3-14        | 2.81                                | 1                 |
| 6320D01      | WHITWORTH WATER DIST. #2, Well 2A                    | 3.40                                | 4                 |
| 6320N02      | Spokane Co Water Dist #3, Site 3-2, Steer Inn        | 3.16                                | 1                 |
| 6327N04      | Fire Station Houston & Regal, No. Spokane WD         | 1.68                                | 4                 |
| 6328H01      | NORTH SPOKANE IRRIG. DIST. # 4, Site 4               | 2.47                                | 4                 |
| 6330J01      | Holy Cross, Rhoades & Washington monitoring well     | 3.20                                | 4                 |
| 6330R02      | Spokane Co Water Dist #3, 3-1, Lyons & Normandie     | 3.26                                | 1                 |
| 6331A02      | CITY of SPOKANE-Central                              | 3.33                                | 1                 |
| 6331J01      | Franklin Park, City monitoring well                  | 3.38                                | 4                 |
| 6524R01      | Idaho Road 1000 ft south of Trent, monitoring well   | 3.59                                | 4                 |
| 6525R01      | Idaho Road 300 ft south of pipeline, monitoring well | 2.51                                | 4                 |
| 6631M04      | CONSOLIDATED IRRIG DIST 19, Site 11                  | 5.32                                | 3                 |
| 6631M07      | Idaho Road - East Farms monitoring well at CID11     | 4.27                                | 4                 |
| 7332L02      | Spokane Co Water Dist #3, Pineriver Park, 3-8A       | 4.18                                | 1                 |
|              | <b>AVERAGE</b>                                       | 3.07                                |                   |
|              | <b>MAXIMUM</b>                                       | 6.85                                |                   |
|              | <b>MINIMUM</b>                                       | <1.00                               |                   |

### Groundwater quality along Idaho Road

Water quality in three monitoring wells along Idaho Road, north of the Spokane River has been monitored several times per year since 1999. The Consolidated Irrigation District 19 (CID) site 11 well field has been sampled infrequently since 1999 until 2002. Examining 2002 arsenic concentration data showed that three of the four CID site 11 samples had concentrations over 5  $\mu\text{g/L}$ . Most of the samples from this well in previous years also had arsenic concentrations over 5  $\mu\text{g/L}$ . Samples from other wells in the area might show where the higher than expected arsenic originates.



The samples from the monitoring well a few feet from the CID site 11 wellfield were collected near the surface of the aquifer. They have higher concentrations of nitrates and calcium but lower concentrations of arsenic. The higher concentrations of nitrates are probably caused by the septic systems of the housing area that surrounds the wells. The septic systems do not seem to be the source of the arsenic.

The monitoring well in the undeveloped area less than a mile north of the CID site 11 (6525R01) has lower arsenic and nitrate concentrations than either of the two wells at CID site 11. The calcium concentration is similar to the monitoring well (6631M07) calcium concentrations. This is expected in an area with low human impact.

The 8/8/2001 samples from the USGS monitoring wells near the river (5501B03 and 5501M03), just south of the CID site 11 wells, show the usual river influence on the aquifer with low calcium and low nitrate concentrations. These samples also have low concentrations of arsenic. The river does not appear to be the source of the arsenic in 6631M04.

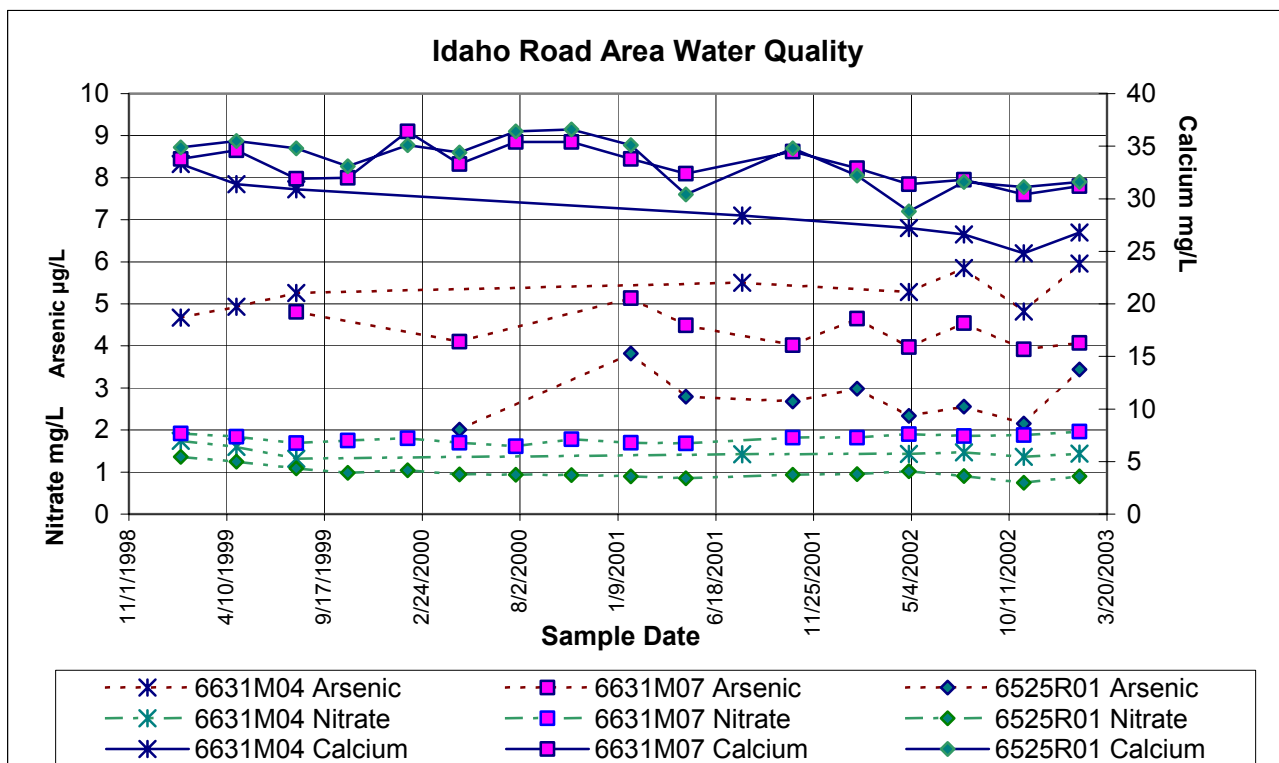


Figure 10. Selected water quality parameters from 3 wells along Idaho Road.

Table 8. A comparison of water quality from a purveyor well (6631M04) and a sample from near the water table in nearby monitoring wells (6631M07, 6524R01, and 6525R01).

| WQMP Well ID | Well Name                                    | Sample Date | Calcium (mg/L) | Arsenic (µg/L) | Nitrate+ nitrite as N (mg/L) |
|--------------|----------------------------------------------|-------------|----------------|----------------|------------------------------|
| 6524R01      | Monitoring well south of Trent on Idaho Road | 1/27/1999   | 34.5           |                | 2.60                         |
| 6525R01      | Middle monitoring well on Idaho Road         | 1/27/1999   | 34.9           |                | 1.20                         |
| 6525R01      | Middle monitoring well on Idaho Road         | 1/27/1999   | 34.1           |                | 1.36                         |
| 6631M04      | CID19, Site 11                               | 1/25/1999   | 33.3           | 4.67           | 1.74                         |
| 6631M07      | Monitoring well on Idaho Road at CID 11      | 1/27/1999   | 33.8           |                | 1.92                         |
| 6631M07      | Monitoring well on Idaho Road at CID 11      | 1/27/1999   | 32.0           |                | 1.88                         |
| 6524R01      | Monitoring well south of Trent on Idaho Road | 4/26/1999   | 36.0           |                | 2.91                         |
| 6525R01      | Middle monitoring well on Idaho Road         | 4/26/1999   | 35.5           |                | 1.25                         |
| 6631M04      | CID19, Site 11                               | 4/26/1999   | 31.4           | 4.93           | 1.60                         |
| 6631M07      | Monitoring well on Idaho Road at CID 11      | 4/26/1999   | 34.6           |                | 1.84                         |
| 6525R01      | Middle monitoring well on Idaho Road         | 5/21/1999   | 34.2           |                | 1.09                         |
| 6631M07      | Monitoring well on Idaho Road at CID 11      | 5/21/1999   | 34.2           |                | 1.63                         |
| 6525R01      | Middle monitoring well on Idaho Road         | 6/17/1999   | 32.9           | 2.28           | 1.03                         |
| 6631M07      | Monitoring well on Idaho Road at CID 11      | 6/17/1999   | 33.3           | 4.21           | 1.85                         |
| 6525R01      | Middle monitoring well on Idaho Road         | 7/14/1999   | 36.7           |                | 1.17                         |
| 6525R01      | Middle monitoring well on Idaho Road         | 7/14/1999   | 3.64           |                | 1.18                         |
| 6631M07      | Monitoring well on Idaho Road at CID 11      | 7/14/1999   | 35.9           |                | 1.94                         |
| 6524R01      | Monitoring well south of Trent on Idaho Road | 8/2/1999    | 34.2           | 3.55           | 2.27                         |
| 6525R01      | Middle monitoring well on Idaho Road         | 8/2/1999    | 34.8           | 2.32           | 1.09                         |
| 6631M04      | CID19, Site 11                               | 8/2/1999    | 30.9           | 5.26           | 1.32                         |
| 6631M07      | Monitoring well on Idaho Road at CID 11      | 8/2/1999    | 31.9           | 4.81           | 1.69                         |
| 6525R01      | Middle monitoring well on Idaho Road         | 8/17/1999   | 33.6           |                | 1.14                         |
| 6631M07      | Monitoring well on Idaho Road at CID 11      | 8/17/1999   | 31.9           |                | 1.84                         |
| 6525R01      | Middle monitoring well on Idaho Road         | 9/14/1999   | 34.0           |                | 0.976                        |
| 6631M07      | Monitoring well on Idaho Road at CID 11      | 9/14/1999   | 32.5           |                | 1.71                         |
| 6525R01      | Middle monitoring well on Idaho Road         | 10/13/1999  | 33.3           |                | 0.959                        |
| 6631M07      | Monitoring well on Idaho Road at CID 11      | 10/13/1999  | 32.4           |                | 1.69                         |
| 6524R01      | Monitoring well south of Trent on Idaho Road | 10/25/1999  | 31.7           |                | 1.83                         |
| 6525R01      | Middle monitoring well on Idaho Road         | 10/25/1999  | 33.1           |                | 0.984                        |
| 6631M07      | Monitoring well on Idaho Road at CID 11      | 10/25/1999  | 32.0           |                | 1.75                         |
| 6525R01      | Middle monitoring well on Idaho Road         | 11/17/1999  | 32.5           |                | 0.951                        |
| 6631M07      | Monitoring well on Idaho Road at CID 11      | 11/17/1999  | 30.8           |                | 1.70                         |
| 6524R01      | Monitoring well south of Trent on Idaho Road | 1/31/2000   | 35.5           |                | 2.48                         |
| 6525R01      | Middle monitoring well on Idaho Road         | 1/31/2000   | 35.1           |                | 1.04                         |
| 6631M07      | Monitoring well on Idaho Road at CID 11      | 1/31/2000   | 36.4           |                | 1.80                         |
| 6524R01      | Monitoring well south of Trent on Idaho Road | 4/25/2000   | 37.3           | 5.15           | 1.98                         |
| 6525R01      | Middle monitoring well on Idaho Road         | 4/25/2000   | 34.4           | 2.01           | 0.945                        |
| 6631M07      | Monitoring well on Idaho Road at CID 11      | 4/25/2000   | 33.3           | 4.10           | 1.70                         |
| 6524R01      | Monitoring well south of Trent on Idaho Road | 7/26/2000   | 37.8           |                | 2.04                         |
| 6525R01      | Middle monitoring well on Idaho Road         | 7/26/2000   | 36.4           |                | 0.934                        |
| 6631M07      | Monitoring well on Idaho Road at CID 11      | 7/26/2000   | 35.4           |                | 1.61                         |
| 6524R01      | Monitoring well south of Trent on Idaho Road | 10/25/2000  | 34.0           |                | 1.71                         |
| 6525R01      | Middle monitoring well on Idaho Road         | 10/25/2000  | 36.6           |                | 0.925                        |
| 6631M07      | Monitoring well on Idaho Road at CID 11      | 10/25/2000  | 35.4           |                | 1.78                         |

Table 8. cont.

| WQMP<br>Well ID | Well Name                                    | Sample Date | Calcium<br>(mg/L) | Arsenic<br>(µg/L) | Nitrate+ nitrite<br>as N (mg/L) |
|-----------------|----------------------------------------------|-------------|-------------------|-------------------|---------------------------------|
| 6524R01         | Monitoring well south of Trent on Idaho Road | 1/30/2001   | 32.2              | 4.70              | 1.92                            |
| 6525R01         | Middle monitoring well on Idaho Road         | 1/30/2001   | 35.1              | 3.82              | 0.897                           |
| 6631M07         | Monitoring well on Idaho Road at CID 11      | 1/30/2001   | 33.8              | 5.14              | 1.70                            |
| 6524R01         | Monitoring well south of Trent on Idaho Road | 4/30/2001   | 66.2              | 3.94              | 2.09                            |
| 6525R01         | Middle monitoring well on Idaho Road         | 4/30/2001   | 30.4              | 2.79              | 0.854                           |
| 6631M07         | Monitoring well on Idaho Road at CID 11      | 4/30/2001   | 32.4              | 4.49              | 1.68                            |
| 5501B03         | Monitoring well, USGS Well 3                 | 8/8/2001    | 6.81              | <1.00             | 0.28                            |
| 5501M03         | Monitoring well, USGS Well 10                | 8/8/2001    | 6.64              | 1.03              | 0.25                            |
| 6631M04         | CID19, Site 11                               | 7/31/2001   | 28.4              | 5.50              | 1.42                            |
| 6524R01         | Monitoring well south of Trent on Idaho Road | 10/22/2001  | 34.6              | 3.54              | 2.28                            |
| 6525R01         | Middle monitoring well on Idaho Road         | 10/22/2001  | 34.8              | 2.68              | 0.936                           |
| 6631M07         | Monitoring well on Idaho Road at CID 11      | 10/22/2001  | 34.5              | 4.02              | 1.82                            |
| 6524R01         | Monitoring well south of Trent on Idaho Road | 2/4/2002    | 33.9              | 3.76              | 2.42                            |
| 6525R01         | Middle monitoring well on Idaho Road         | 2/4/2002    | 32.2              | 2.98              | 0.952                           |
| 6631M07         | Monitoring well on Idaho Road at CID 11      | 2/4/2002    | 32.9              | 4.65              | 1.82                            |
| 6524R01         | Monitoring well south of Trent on Idaho Road | 5/6/2002    | 31.1              | 3.74              | 1.91                            |
| 6525R01         | Middle monitoring well on Idaho Road         | 5/6/2002    | 28.8              | 2.34              | 1.02                            |
| 6631M04         | CID19, Site 11                               | 4/30/2002   | 27.2              | 5.28              | 1.43                            |
| 6631M07         | Monitoring well on Idaho Road at CID 11      | 5/6/2002    | 31.4              | 3.97              | 1.90                            |
| 6524R01         | Monitoring well south of Trent on Idaho Road | 7/29/2002   | 34.6              | 3.75              | 2.54                            |
| 6525R01         | Middle monitoring well on Idaho Road         | 7/29/2002   | 31.6              | 2.56              | 0.903                           |
| 6631M04         | CID19, Site 11                               | 7/29/2002   | 26.6              | 5.85              | 1.47                            |
| 6631M07         | Monitoring well on Idaho Road at CID 11      | 7/29/2002   | 31.8              | 4.54              | 1.86                            |
| 6524R01         | Monitoring well south of Trent on Idaho Road | 11/4/2002   | 30.7              | 3.11              | 1.76                            |
| 6525R01         | Middle monitoring well on Idaho Road         | 11/4/2002   | 31.1              | 2.15              | 0.743                           |
| 6631M04         | CID19, Site 11                               | 11/4/2002   | 24.8              | 4.82              | 1.36                            |
| 6631M07         | Monitoring well on Idaho Road at CID 11      | 11/4/2002   | 30.4              | 3.92              | 1.88                            |

## REFERENCES

Esvelt, L. A. 1978, *Spokane Aquifer Cause and Effect Report*, prepared for Spokane County Office of County Engineer

Spokane County WQMP, 2001, *Spokane Valley - Rathdrum Prairie Aquifer Water Quality Report for the Period October 1, 1999 – December 31, 2000*, prepared for the Spokane Aquifer Joint Board.

**APPENDIX A:**  
**Water Quality Test Parameters**

## 2001 LIST OF ANALYTES

| <u>Analyte</u>              | <u>EPA Method</u> | <u>Reporting limit</u> |
|-----------------------------|-------------------|------------------------|
| Arsenic                     | 200.8             | 0.00100 mg/L           |
| Cadmium                     | 200.8             | 0.00100 mg/L           |
| Calcium                     | 200.7             | 0.250 mg/L             |
| Chloride                    | 300.0             | 0.400 mg/L             |
| Chromium                    | 200.8             | 0.00100 mg/L           |
| Copper                      | 200.8             | 0.00100 mg/L           |
| Fluoride                    | 340.2             | 0.100 mg/L             |
| Iron                        | 200.7             | 0.150 mg/L             |
| Lead                        | 200.8             | 0.00100 mg/L           |
| Magnesium                   | 200.7             | 0.500 mg/L             |
| Manganese                   | 200.8             | 0.0100 mg/L            |
| Mercury                     | 245.1             | 0.00100 mg/L           |
| Ortho-phosphate-phosphorous | 365.2             | 0.00200 mg/L           |
| Potassium                   | 200.7             | 2.00 mg/L              |
| Sodium                      | 200.7             | 0.250 mg/L             |
| Sulfate                     | 300.0             | 0.800 mg/L             |
| Total Dissolved Solids      | 160.1             | 10 mg/L                |
| Total Nitrate + Nitrite     | 353.2             | 0.010 mg/L as N        |
| Total phosphorus            | 365.2             | 0.00500 mg/L           |
| Zinc                        | 200.8             | 0.0100 mg/L            |

**VOLATILE ORGANIC COMPOUND DRINKING WATER COMPLIANCE (EPA METHOD 524.2)**

| Analyte                   | Trigger | State Reporting Limit | MCL | units |
|---------------------------|---------|-----------------------|-----|-------|
| 1,1,1,2-Tetrachloroethane | 0.5     | 0.5                   |     | µg/L  |
| 1,1,1-Trichloroethane     | 0.5     | 0.5                   | 200 | µg/L  |
| 1,1,2,2-Tetrachloroethane | 0.5     | 0.5                   |     | µg/L  |
| 1,1,2-Trichloroethane     | 0.5     | 0.5                   | 5   | µg/L  |
| 1,1-Dichloroethane        | 0.5     | 0.5                   |     | µg/L  |
| 1,1-Dichloroethylene      | 0.5     | 0.5                   | 7   | µg/L  |
| 1,1-Dichloropropene       | 0.5     | 0.5                   |     | µg/L  |
| 1,2,3-Trichlorobenzene    | 0.5     | 0.5                   |     | µg/L  |
| 1,2,3-Trichloropropane    | 0.5     | 0.5                   |     | µg/L  |
| 1,2,4-Trichlorobenzene    | 0.5     | 0.5                   | 70  | µg/L  |
| 1,2,4-Trimethylbenzene    | 0.5     | 0.5                   |     | µg/L  |
| 1,2-Dichlorobenzene       | 0.5     | 0.5                   | 600 | µg/L  |
| 1,2-Dichloroethane        | 0.5     | 0.5                   | 5   | µg/L  |
| 1,2-Dichloropropane       | 0.5     | 0.5                   | 5   | µg/L  |
| 1,3,5-Trimethylbenzene    | 0.5     | 0.5                   |     | µg/L  |
| 1,3-Dichloropropane       | 0.5     | 0.5                   |     | µg/L  |
| 1,3-Dichloropropene       | 0.5     | 0.5                   |     | µg/L  |
| 2,2-Dichloropropane       | 0.5     | 0.5                   |     | µg/L  |
| Benzene                   | 0.5     | 0.5                   | 5   | µg/L  |
| Bromobenzene              | 0.5     | 0.5                   |     | µg/L  |
| Bromochloromethane        | 0.5     | 0.5                   |     | µg/L  |
| Bromodichloromethane      | 0.5     | 0.5                   |     | µg/L  |
| Bromoform                 | 0.5     | 0.5                   |     | µg/L  |
| Bromomethane              | 0.5     | 0.5                   |     | µg/L  |
| Carbon Tetrachloride      | 0.5     | 0.5                   | 5   | µg/L  |
| Chlorobenzene             | 0.5     | 0.5                   | 100 | µg/L  |
| Chlorodibromomethane      | 0.5     | 0.5                   |     | µg/L  |
| Chloroethane              | 0.5     | 0.5                   |     | µg/L  |
| Chloroform                | 0.5     | 0.5                   |     | µg/L  |
| Chloromethane             | 0.5     | 0.5                   |     | µg/L  |
| Cis-1,2-Dichloroethylene  | 0.5     | 0.5                   | 70  | µg/L  |
| cis-1,3-Dichloropropene   | 0.5     | 0.5                   |     | µg/L  |
| DBCP                      | 0.5     | 0.5                   |     | µg/L  |
| Dibromomethane            | 0.5     | 0.5                   |     | µg/L  |
| Dichlorodifluoromethane   | 0.5     | 0.5                   |     | µg/L  |
| Dichloromethane           | 0.5     | 0.5                   | 5   | µg/L  |
| EDB                       | 0.5     | 0.5                   |     | µg/L  |
| Ethylbenzene              | 0.5     | 0.5                   | 700 | µg/L  |
| Fluorotrichloromethane    | 0.5     | 0.5                   |     | µg/L  |
| Hexachlorobutadiene       | 0.5     | 0.5                   |     | µg/L  |
| Isopropylbenzene          | 0.5     | 0.5                   |     | µg/L  |

**VOLATILE ORGANIC COMPOUND DRINKING WATER COMPLIANCE (EPA METHOD 524.2)**  
(cont.)

| Analyte                    | Trigger | State Reporting Limit | MCL   | units |
|----------------------------|---------|-----------------------|-------|-------|
| m/p-Xylene                 | 0.5     | 0.5                   |       | µg/L  |
| m-Dichlorobenzene          | 0.5     | 0.5                   |       | µg/L  |
| Naphthalene                | 0.5     | 0.5                   |       | µg/L  |
| n-Butylbenzene             | 0.5     | 0.5                   |       | µg/L  |
| n-Propylbenzene            | 0.5     | 0.5                   |       | µg/L  |
| o-Chlorotoluene            | 0.5     | 0.5                   |       | µg/L  |
| o-Xylene                   | 0.5     | 0.5                   |       | µg/L  |
| para-Dichlorobenzene       | 0.5     | 0.5                   | 75    | µg/L  |
| p-Chlorotoluene            | 0.5     | 0.5                   |       | µg/L  |
| p-Isopropyltoluene         | 0.5     | 0.5                   |       | µg/L  |
| sec-Butylbenzene           | 0.5     | 0.5                   |       | µg/L  |
| Styrene                    | 0.5     | 0.5                   | 100   | µg/L  |
| tert-Butylbenzene          | 0.5     | 0.5                   |       | µg/L  |
| Tetrachloroethylene        | 0.5     | 0.5                   | 5     | µg/L  |
| Toluene                    | 0.5     | 0.5                   | 1000  | µg/L  |
| Total Xylenes              | 0.5     | 0.5                   | 10000 | µg/L  |
| trans 1,2-Dichloroethylene | 0.5     | 0.5                   | 100   | µg/L  |
| trans-1,3-Dichloropropene  | 0.5     | 0.5                   |       | µg/L  |
| Trichloroethylene          | 0.5     | 0.5                   | 5     | µg/L  |
| Vinyl Chloride             | 0.5     | 0.5                   | 2     | µg/L  |



## INORGANIC DRINKING WATER COMPLIANCE TESTS

| Analyte                       | Method    | State Reporting limit        |
|-------------------------------|-----------|------------------------------|
| Alkalinity                    | EPA 310.1 | 10 mg/L as CaCO <sub>3</sub> |
| Aluminum                      | EPA 200.7 | 0.05 mg/L                    |
| Ammonia                       | EPA 350.3 | 1 mg/L                       |
| Antimony                      | EPA 200.8 | 0.005 mg/L                   |
| Arsenic                       | EPA 200.8 | 0.001 mg/L                   |
| Barium                        | EPA 200.8 | 0.1 mg/L                     |
| Beryllium                     | EPA 200.8 | 0.003 mg/L                   |
| Cadmium                       | EPA 200.8 | 0.002                        |
| Calcium                       | EPA 200.7 | 0.5 mg/L                     |
| Chloride                      | EPA 300   | 20 mg/L                      |
| Chromium                      | EPA 200.8 | 0.01 mg/L                    |
| Color                         | EPA 110.2 | 5 color units                |
| Conductivity                  | EPA 120.1 | 10 µmhos/cm                  |
| Copper                        | EPA 200.8 | 0.2 mg/L                     |
| Cyanide                       | EPA 335.2 | 0.05 mg/L                    |
| Fluoride                      | EPA 340.2 | 0.2 mg/L                     |
| Hardness as CaCO <sub>3</sub> | SM 2340B  | 145 mg/L                     |
| Iron                          | EPA 200.7 | 0.1 mg/L                     |
| Lead                          | EPA 200.8 | 0.002 mg/L                   |
| Magnesium                     | EPA 200.7 | 0.1 mg/L                     |
| Manganese                     | EPA 200.8 | 0.01 mg/L                    |
| Mercury                       | EPA 245.1 | 0.0005 mg/L                  |
| Nickel                        | EPA 200.8 | 0.04 mg/L                    |
| Nitrate + nitrite as nitrogen | EPA 353.2 | 0.5 mg/L                     |
| Nitrate as N                  | EPA 300.0 | 0.5 mg/L                     |
| Nitrite as N                  | EPA 300.0 | 0.5 mg/L                     |
| Orthophosphate                | EPA 365.2 | 0.1 mg/L                     |
| Selenium                      | EPA 200.8 | 0.005 mg/L                   |
| Silica                        | EPA 200.7 | 1.0 mg/L                     |
| Silver                        | EPA 200.8 | 0.01 mg/L                    |
| Sodium                        | EPA 200.7 | 5 mg/L                       |
| Sulfate                       | EPA 300   | 10 mg/L                      |
| Thallium                      | EPA 200.8 | 0.002 mg/L                   |
| Total Dissolved Solids        | EPA 160.1 | 150 mg/L                     |
| Turbidity                     | EPA 180.1 | 0.1 NTU                      |
| Zinc                          | EPA 200.8 | 0.2 mg/L                     |

**APPENDIX B:**  
**Quarterly Water Quality Monitoring Data from all wells**  
**January 2002 through December 2002**

# Ground Water Monitoring Data Report

## Inorganics Water Quality Data by Well

### Spokane County Public Works, Water Quality Management Program

| WQMP<br>Well ID | WELL NAME                          | Sample Date | Conductivity<br>(µmhos/cm) | pH   | Unreviewed Data: Subject to Verification |                                     |                                |                   |               |                      |
|-----------------|------------------------------------|-------------|----------------------------|------|------------------------------------------|-------------------------------------|--------------------------------|-------------------|---------------|----------------------|
|                 |                                    |             |                            |      | Chloride<br>(mg/L)                       | Nitrate +<br>Nitrite<br>(mg/L as N) | Ortho-Phos-<br>phate<br>(mg/L) | Sulfate<br>(mg/L) | TDS<br>(mg/L) | Phosphorus<br>(mg/L) |
| 5213B01         | I.E. COLD STORAGE                  | 1/29/2002   | 360                        | 7.10 | 15.70                                    | 2.17                                | 0.01                           | 17.70             | 200.00        | 0.00826              |
| 5213B01         | I.E. COLD STORAGE                  | 4/30/2002   | 320                        | 7.32 | 18.40                                    | 2.17                                | 0.01                           | 16.40             | 220.00        | 0.0098               |
| 5213B01         | I.E. COLD STORAGE                  | 7/31/2002   | 283                        | 7.51 | 14.30                                    | 1.66                                | 0.01                           | 14.30             | 160.00        | 0.00769              |
| 5213B01         | I.E. COLD STORAGE                  | 10/29/2002  | 331                        | 7.80 | 16.80                                    | 2.16                                | 0.00                           | 14.90             | 180.00        | 0.005                |
| 5304G01         | NE Community Center, City          | 2/6/2002    | 305                        | 7.55 | 3.35                                     | 1.28                                | 0.00                           | 14.20             | 140.00        | 0.005                |
| 5304G01         | NE Community Center, City          | 5/8/2002    | 240                        | 7.52 | 3.83                                     | 1.28                                | 0.00                           | 15.50             | 160.00        | 0.005                |
| 5304G01         | NE Community Center, City          | 7/31/2002   | 273                        | 7.58 | 2.65                                     | 1.30                                | 0.00                           | 14.50             | 170.00        | 0.005                |
| 5304G01         | NE Community Center, City          | 11/6/2002   | 317                        | 7.62 | 6.63                                     | 3.31                                | 0.00                           | 18.40             | 180.00        | 0.0071               |
| 5307M01         | Trinity School, Adams & Carlisle,  | 2/6/2002    | 295                        | 7.40 | 4.09                                     | 1.57                                | 0.00                           | 12.00             | 140.00        | 0.00606              |
| 5307M01         | Trinity School, Adams & Carlisle,  | 5/8/2002    | 260                        | 7.45 | 4.17                                     | 1.57                                | 0.00                           | 12.40             | 160.00        | 0.005                |
| 5307M01         | Trinity School, Adams & Carlisle,  | 7/31/2002   | 250                        | 7.48 | 4.18                                     | 1.50                                | 0.00                           | 12.00             | 140.00        | 0.005                |
| 5307M01         | Trinity School, Adams & Carlisle,  | 11/6/2002   | 270                        | 7.96 | 4.60                                     | 1.98                                | 0.00                           | 11.60             | 130.00        | 0.00549              |
| 5308A02         | CITY of SPOKANE-Nevada             | 1/29/2002   | 270                        | 6.95 | 3.54                                     | 1.34                                | 0.00                           | 10.60             | 140.00        | 0.00524              |
| 5308A02         | CITY of SPOKANE-Nevada             | 4/30/2002   | 210                        | 7.36 | 3.53                                     | 1.15                                | 0.00                           | 9.93              | 140.00        | 0.00636              |
| 5308A02         | CITY of SPOKANE-Nevada             | 8/13/2002   | 205                        | 7.72 | 2.85                                     | 1.07                                | 0.00                           | 9.44              | 130.00        | 0.005                |
| 5308H01         | Denver & Marietta, City monitoring | 2/5/2002    | 235                        | 7.24 | 3.26                                     | 1.11                                | 0.00                           | 10.00             | 120.00        | 0.0056               |
| 5308H01         | Denver & Marietta, City monitoring | 5/7/2002    | 190                        | 7.33 | 3.81                                     | 1.15                                | 0.00                           | 9.71              | 140.00        | 0.005                |
| 5308H01         | Denver & Marietta, City monitoring | 7/30/2002   | 166                        | 7.53 | 2.69                                     | 1.07                                | 0.00                           | 8.49              | 130.00        | 0.00686              |
| 5308H01         | Denver & Marietta, City monitoring | 11/5/2002   | 245                        | 7.83 | 4.80                                     | 2.53                                | 0.00                           | 11.60             | 140.00        | 0.005                |

# Ground Water Monitoring Data Report

## Inorganics Water Quality Data by Well

### Spokane County Public Works, Water Quality Management Program

| WQMP<br>Well ID | WELL NAME                        | Sample Date | Conductivity<br>(µmhos/cm) | pH   | Unreviewed Data: Subject to Verification |                                     |                                |                   |               |                      |
|-----------------|----------------------------------|-------------|----------------------------|------|------------------------------------------|-------------------------------------|--------------------------------|-------------------|---------------|----------------------|
|                 |                                  |             |                            |      | Chloride<br>(mg/L)                       | Nitrate +<br>Nitrite<br>(mg/L as N) | Ortho-Phos-<br>phate<br>(mg/L) | Sulfate<br>(mg/L) | TDS<br>(mg/L) | Phosphorus<br>(mg/L) |
| 5311J05         | Hale's Ale Nested Site, east     | 2/5/2002    | 325                        | 7.39 | 3.04                                     | 1.62                                | 0.00                           | 15.30             | 180.00        | 0.005                |
| 5311J05         | Hale's Ale Nested Site, east     | 5/7/2002    | 250                        | 7.52 | 3.42                                     | 1.90                                | 0.00                           | 15.30             | 200.00        | 0.005                |
| 5311J05         | Hale's Ale Nested Site, east     | 7/30/2002   |                            | 7.49 | 3.62                                     | 1.94                                | 0.00                           | 16.10             | 220.00        | 0.0063               |
| 5311J05         | Hale's Ale Nested Site, east     | 11/5/2002   | 317                        | 7.35 | 3.84                                     | 2.76                                | 0.00                           | 15.40             | 180.00        | 0.005                |
| 5311J07         | Hale's Ale Nested Site, mid      | 2/5/2002    | 320                        | 7.42 | 2.88                                     | 1.54                                | 0.00                           | 15.50             | 180.00        | 0.00579              |
| 5311J07         | Hale's Ale Nested Site, mid      | 5/7/2002    | 260                        | 7.52 | 3.18                                     | 1.68                                | 0.00                           | 15.90             | 190.00        | 0.005                |
| 5311J07         | Hale's Ale Nested Site, mid      | 7/30/2002   | 316                        | 7.44 | 3.49                                     | 1.86                                | 0.00                           | 16.10             | 210.00        | 0.005                |
| 5311J07         | Hale's Ale Nested Site, mid      | 11/5/2002   | 308                        | 7.30 | 3.61                                     | 2.61                                | 0.00                           | 15.40             | 170.00        | 0.005                |
| 5312C01         | Felts Field City monitoring well | 2/5/2002    | 245                        | 7.56 | 2.38                                     | 1.21                                | 0.02                           | 12.00             | 130.00        | 0.0181               |
| 5312C01         | Felts Field City monitoring well | 5/7/2002    | 200                        | 7.68 | 2.32                                     | 1.22                                | 0.02                           | 10.10             | 150.00        | 0.0179               |
| 5312C01         | Felts Field City monitoring well | 7/30/2002   | 184                        | 7.55 | 2.44                                     | 1.12                                | 0.02                           | 9.46              | 140.00        | 0.0193               |
| 5312C01         | Felts Field City monitoring well | 11/5/2002   | 201                        | 7.52 | 2.66                                     | 2.25                                | 0.02                           | 10.60             | 110.00        | 0.0239               |
| 5312H01         | Orchard Ave Irrig Dist, Site 1   | 4/30/2002   | 300                        |      | 3.69                                     | 2.32                                | 0.02                           | 13.70             | 200.00        | 0.0284               |
| 5312H01         | Orchard Ave Irrig Dist, Site 1   | 8/8/2002    | 272                        | 7.69 | 3.00                                     | 2.14                                | 0.02                           | 12.40             | 240.00        | 0.0166               |
| 5315L01         | Olive & Fiske monitoring well    | 2/5/2002    | 270                        | 7.35 | 7.35                                     | 1.49                                | 0.00                           | 10.20             | 140.00        | 0.205                |
| 5315L01         | Olive & Fiske monitoring well    | 5/7/2002    | 240                        | 7.40 | 7.85                                     | 1.80                                | 0.00                           | 10.80             | 160.00        | 0.005                |
| 5315L01         | Olive & Fiske monitoring well    | 7/30/2002   | 241                        | 7.49 | 4.59                                     | 1.48                                | 0.01                           | 10.40             | 160.00        | 0.0063               |
| 5315L01         | Olive & Fiske monitoring well    | 11/5/2002   | 256                        | 7.67 | 12.40                                    | 2.46                                | 0.00                           | 11.00             | 140.00        | 0.0063               |

# Ground Water Monitoring Data Report

## Inorganics Water Quality Data by Well

### Spokane County Public Works, Water Quality Management Program

| WQMP<br>Well ID | WELL NAME                           | Sample Date | Conductivity<br>(µmhos/cm) | pH   | Unreviewed Data: Subject to Verification |                                     |                                |                   |               |                      |
|-----------------|-------------------------------------|-------------|----------------------------|------|------------------------------------------|-------------------------------------|--------------------------------|-------------------|---------------|----------------------|
|                 |                                     |             |                            |      | Chloride<br>(mg/L)                       | Nitrate +<br>Nitrite<br>(mg/L as N) | Ortho-Phos-<br>phate<br>(mg/L) | Sulfate<br>(mg/L) | TDS<br>(mg/L) | Phosphorus<br>(mg/L) |
| 5322A01         | Third & Havana Nested Site, east    | 2/5/2002    | 305                        | 7.22 | 7.16                                     | 2.03                                | 0.01                           | 11.40             | 170.00        | 0.0111               |
| 5322A01         | Third & Havana Nested Site, east    | 5/7/2002    | 250                        | 7.35 | 7.30                                     | 2.46                                | 0.02                           | 11.80             | 170.00        | 0.0176               |
| 5322A01         | Third & Havana Nested Site, east    | 7/30/2002   | 285                        | 7.40 | 5.59                                     | 2.14                                | 0.01                           | 11.10             | 180.00        | 0.0122               |
| 5322A01         | Third & Havana Nested Site, east    | 11/5/2002   | 285                        | 7.50 | 5.42                                     | 2.99                                | 0.01                           | 11.00             | 160.00        | 0.00604              |
| 5322A03         | Third & Havana Nested Site, mid     | 2/5/2002    | 310                        | 7.28 | 6.81                                     | 2.12                                | 0.01                           | 11.70             | 170.00        | 0.0086               |
| 5322A03         | Third & Havana Nested Site, mid     | 5/7/2002    | 240                        | 7.46 | 6.93                                     | 2.33                                | 0.01                           | 11.80             | 180.00        | 0.00851              |
| 5322A03         | Third & Havana Nested Site, mid     | 7/30/2002   | 283                        | 7.42 | 6.06                                     | 2.24                                | 0.01                           | 11.30             | 160.00        | 0.00969              |
| 5322A03         | Third & Havana Nested Site, mid     | 11/5/2002   | 295                        | 7.45 | 6.15                                     | 3.22                                | 0.01                           | 11.30             | 160.00        | 0.122                |
| 5322F01         | CITY of SPOKANE-Ray                 | 1/29/2002   | 400                        | 6.84 | 10.40                                    | 2.22                                | 0.02                           | 14.80             | 210.00        | 0.0184               |
| 5322F01         | CITY of SPOKANE-Ray                 | 4/30/2002   | 410                        |      | 14.40                                    | 4.03                                | 0.02                           | 18.70             | 260.00        | 0.0249               |
| 5322F01         | CITY of SPOKANE-Ray                 | 8/13/2002   | 385                        | 7.67 | 11.80                                    | 3.76                                | 0.02                           | 15.50             | 240.00        | 0.0195               |
| 5322F01         | CITY of SPOKANE-Ray                 | 10/29/2002  | 438                        | 7.64 | 12.20                                    | 4.00                                | 0.02                           | 15.40             | 210.00        | 0.0186               |
| 5323E01         | 6th & Havana monitoring well (MW-2) | 2/5/2002    | 385                        | 7.54 | 9.68                                     | 3.30                                | 0.01                           | 14.70             | 200.00        | 0.0162               |
| 5323E01         | 6th & Havana monitoring well (MW-2) | 5/7/2002    | 310                        | 7.39 | 9.35                                     | 2.58                                | 0.02                           | 14.20             | 220.00        | 0.0207               |
| 5323E01         | 6th & Havana monitoring well (MW-2) | 7/30/2002   | 419                        | 7.36 | 12.30                                    | 4.07                                | 0.01                           | 15.80             | 260.00        | 0.0196               |
| 5323E01         | 6th & Havana monitoring well (MW-2) | 11/5/2002   | 412                        | 7.22 | 12.30                                    | 5.00                                | 0.00                           | 16.00             | 250.00        | 0.0151               |
| 5323K01         | Carnahan Pit monitoring well (MW-1) | 2/5/2002    | 675                        | 7.06 | 17.80                                    | 11.00                               | 0.05                           | 32.10             | 410.00        | 0.0522               |

# Ground Water Monitoring Data Report

## Inorganics Water Quality Data by Well

### Spokane County Public Works, Water Quality Management Program

| WQMP<br>Well ID | WELL NAME                               | Sample Date | Conductivity<br>(µmhos/cm) | pH   | Unreviewed Data: Subject to Verification |                                     |                                |                   |               |                      |
|-----------------|-----------------------------------------|-------------|----------------------------|------|------------------------------------------|-------------------------------------|--------------------------------|-------------------|---------------|----------------------|
|                 |                                         |             |                            |      | Chloride<br>(mg/L)                       | Nitrate +<br>Nitrite<br>(mg/L as N) | Ortho-Phos-<br>phate<br>(mg/L) | Sulfate<br>(mg/L) | TDS<br>(mg/L) | Phosphorus<br>(mg/L) |
| 5324G02         | East Spokane Water District, Site 2     | 1/29/2002   | 470                        | 7.00 | 18.90                                    | 3.69                                | 0.04                           | 17.50             | 270.00        | 0.0502               |
| 5324G02         | East Spokane Water District, Site 2     | 4/30/2002   | 370                        | 7.13 | 15.60                                    | 4.14                                | 0.04                           | 15.90             | 260.00        | 0.0469               |
| 5324G02         | East Spokane Water District, Site 2     | 8/8/2002    | 443                        | 7.52 | 12.50                                    | 3.86                                | 0.02                           | 15.60             | 240.00        | 0.0226               |
| 5324G02         | East Spokane Water District, Site 2     | 10/29/2002  | 415                        | 7.42 | 17.60                                    | 4.41                                | 0.07                           | 14.50             | 260.00        | 0.0742               |
| 5405K01         | Pasadena Park Irrig. Dist., Site 2      | 1/29/2002   | 240                        | 6.96 | 3.47                                     | 1.88                                | 0.01                           | 10.50             | 130.00        | 0.00935              |
| 5405K01         | Pasadena Park Irrig. Dist., Site 2      | 4/30/2002   | 160                        |      | 2.29                                     | 1.11                                | 0.01                           | 8.91              | 120.00        | 0.0101               |
| 5405K01         | Pasadena Park Irrig. Dist., Site 2      | 10/29/2002  | 182                        | 7.44 | 1.89                                     | 0.97                                | 0.00                           | 8.72              | 110.00        | 0.00534              |
| 5406A02         | Pasadena Park Irrig. Dist., Site 4      | 8/8/2002    | 194                        | 7.74 | 2.54                                     | 1.43                                | 0.01                           | 9.86              | 100.00        | 0.0057               |
| 5407C01         | Orchard Ave Irrig. Dist, Site 2 Buckeye | 1/29/2002   | 325                        | 7.00 | 2.81                                     | 1.74                                | 0.01                           | 13.50             | 170.00        | 0.0143               |
| 5407C01         | Orchard Ave Irrig Dist, Site 2 Buckeye  | 10/29/2002  | 308                        | 7.49 | 2.71                                     | 1.69                                | 0.07                           | 11.80             | 160.00        | 0.0127               |
| 5408N01         | Modern Electric Water Co., Site 6       | 1/29/2002   | 285                        | 7.21 | 2.51                                     | 1.67                                | 0.00                           | 13.60             | 150.00        | 0.005                |
| 5408N01         | Modern Electric Water Co., Site 6       | 4/30/2002   | 260                        | 7.42 | 3.26                                     | 1.82                                | 0.01                           | 13.60             | 180.00        | 0.00583              |
| 5408N01         | Modern Electric Water Co., Site 6       | 8/6/2002    | 284                        | 7.74 | 2.72                                     | 1.97                                | 0.00                           | 13.90             | 180.00        | 0.005                |
| 5408N01         | Modern Electric Water Co., Site 6       | 10/30/2002  | 313                        | 8.02 | 2.41                                     | 1.71                                | 0.00                           | 14.30             | 190.00        | 0.00625              |
| 5409C02         | monitoring well Frederick & Bowdish     | 5/7/2002    | 230                        | 7.53 | 2.56                                     | 1.66                                | 0.01                           | 10.30             | 180.00        | 0.00652              |
| 5409C02         | monitoring well Frederick & Bowdish     | 7/30/2002   | 247                        | 7.43 | 2.48                                     | 1.54                                | 0.00                           | 10.00             | 180.00        | 0.00516              |
| 5409C02         | monitoring well Frederick & Bowdish     | 11/5/2002   | 269                        | 7.41 | 2.63                                     | 3.12                                | 0.00                           | 10.40             | 160.00        | 0.00585              |

# Ground Water Monitoring Data Report

## Inorganics Water Quality Data by Well

### Spokane County Public Works, Water Quality Management Program

| WQMP<br>Well ID | WELL NAME                            | Sample Date | Conductivity<br>(µmhos/cm) | pH   | Unreviewed Data: Subject to Verification |                                     |                                |                   |               |                      |
|-----------------|--------------------------------------|-------------|----------------------------|------|------------------------------------------|-------------------------------------|--------------------------------|-------------------|---------------|----------------------|
|                 |                                      |             |                            |      | Chloride<br>(mg/L)                       | Nitrate +<br>Nitrite<br>(mg/L as N) | Ortho-Phos-<br>phate<br>(mg/L) | Sulfate<br>(mg/L) | TDS<br>(mg/L) | Phosphorus<br>(mg/L) |
| 5411R02         | Sullivan Park North, monitoring well | 2/4/2002    | 240                        | 7.21 | 2.08                                     | 0.89                                | 0.01                           | 12.20             | 130.00        | 0.01                 |
| 5411R02         | Sullivan Park North, monitoring well | 5/6/2002    | 190                        | 7.38 | 2.24                                     | 0.87                                | 0.01                           | 11.30             | 130.00        | 0.00836              |
| 5411R02         | Sullivan Park North, monitoring well | 7/29/2002   | 222                        | 7.39 | 1.51                                     | 0.81                                | 0.00                           | 10.80             | 140.00        | 0.00997              |
| 5411R02         | Sullivan Park North, monitoring well | 11/4/2002   | 234                        | 7.36 | 1.26                                     | 0.88                                | 0.00                           | 12.20             | 130.00        | 0.005                |
| 5411R03         | Sullivan Park South, monitoring well | 2/4/2002    | 220                        | 7.35 | 1.96                                     | 0.88                                | 0.00                           | 12.30             | 140.00        | 0.00618              |
| 5411R03         | Sullivan Park South, monitoring well | 5/6/2002    | 190                        | 7.37 | 2.06                                     | 0.84                                | 0.01                           | 10.90             | 130.00        | 0.00527              |
| 5411R03         | Sullivan Park South, monitoring well | 7/29/2002   | 224                        | 7.35 | 1.48                                     | 0.84                                | 0.01                           | 11.00             | 140.00        | 0.00686              |
| 5411R03         | Sullivan Park South, monitoring well | 11/4/2002   | 234                        | 7.43 | 1.21                                     | 0.91                                | 0.00                           | 11.40             | 120.00        | 0.005                |
| 5411R04         | Sullivan Road and Centennial Trail,  | 2/4/2002    | 225                        | 7.41 | 1.74                                     | 0.89                                | 0.01                           | 11.80             | 130.00        | 0.0118               |
| 5411R04         | Sullivan Road and Centennial Trail,  | 5/6/2002    | 100                        | 7.44 | 1.38                                     | 0.52                                | 0.01                           | 7.67              | 88.00         | 0.00566              |
| 5411R04         | Sullivan Road and Centennial Trail,  | 7/29/2002   | 177                        | 7.32 | 1.58                                     | 0.73                                | 0.01                           | 9.54              | 120.00        | 0.0114               |
| 5411R04         | Sullivan Road and Centennial Trail,  | 11/4/2002   | 274                        | 7.61 | 1.20                                     | 0.93                                | 0.00                           | 13.30             | 150.00        | 0.005                |
| 5426L01         | Vera Water & Power, Well 4           | 1/29/2002   | 275                        | 7.06 | 2.79                                     | 1.39                                | 0.01                           | 9.46              | 160.00        | 0.0105               |
| 5426L01         | Vera Water & Power, Well 4           | 4/30/2002   | 310                        | 7.47 | 4.77                                     | 2.49                                | 0.01                           | 13.80             | 230.00        | 0.00954              |
| 5426L01         | Vera Water & Power, Well 4           | 8/6/2002    | 388                        | 7.56 | 5.36                                     | 3.27                                | 0.01                           | 17.20             | 91.00         | 0.00656              |
| 5426L01         | Vera Water & Power, Well 4           | 10/29/2002  | 370                        | 7.48 | 5.09                                     | 2.88                                | 0.00                           | 14.90             | 230.00        | 0.00562              |
| 5429H01         | Spokane Co WD#3, 20th&Balfour        | 1/29/2002   | 460                        | 7.23 | 21.90                                    | 4.00                                | 0.02                           | 15.30             | 280.00        | 0.022                |
| 5429H01         | Spokane Co WD#3, 20th&Balfour        | 4/30/2002   | 450                        | 7.33 | 22.40                                    | 6.11                                | 0.01                           | 16.20             | 300.00        | 0.0156               |
| 5429H01         | Spokane Co WD#3, 20th&Balfour        | 8/8/2002    | 466                        | 7.47 | 19.70                                    | 3.73                                | 0.03                           | 13.90             | 280.00        |                      |
| 5429H01         | Spokane Co WD#3, 20th&Balfour        | 10/30/2002  | 567                        | 7.65 | 26.50                                    | 7.47                                | 0.03                           | 18.90             | 390.00        | 0.812                |

# Ground Water Monitoring Data Report

## Inorganics Water Quality Data by Well

### Spokane County Public Works, Water Quality Management Program

| WQMP<br>Well ID | WELL NAME                              | Sample Date | Conductivity<br>(µmhos/cm) | pH   | Unreviewed Data: Subject to Verification |                                     |                                |                   |               |                      |
|-----------------|----------------------------------------|-------------|----------------------------|------|------------------------------------------|-------------------------------------|--------------------------------|-------------------|---------------|----------------------|
|                 |                                        |             |                            |      | Chloride<br>(mg/L)                       | Nitrate +<br>Nitrite<br>(mg/L as N) | Ortho-Phos-<br>phate<br>(mg/L) | Sulfate<br>(mg/L) | TDS<br>(mg/L) | Phosphorus<br>(mg/L) |
| 5505D01         | Trent & Barker Road, monitoring well   | 2/4/2002    | 380                        | 7.26 | 3.89                                     | 2.83                                | 0.01                           | 11.40             | 210.00        | 0.0167               |
| 5505D01         | Trent & Barker Road, monitoring well   | 5/6/2002    | 330                        | 7.47 | 4.06                                     | 2.82                                | 0.01                           | 12.50             | 260.00        | 0.0154               |
| 5505D01         | Trent & Barker Road, monitoring well   | 7/29/2002   | 356                        | 7.44 | 4.18                                     | 2.95                                | 0.01                           | 11.60             | 220.00        | 0.0148               |
| 5505D01         | Trent & Barker Road, monitoring well   | 11/4/2002   | 356                        | 7.61 | 3.58                                     | 2.74                                | 0.01                           | 10.80             | 190.00        | 0.013                |
| 5507A04         | Euclid & Barker monitoring well at     | 2/4/2002    | 355                        | 7.24 | 1.35                                     | 1.27                                | 0.00                           | 16.40             | 190.00        | 0.005                |
| 5507A04         | Euclid & Barker monitoring well at     | 5/6/2002    | 310                        | 7.42 | 1.41                                     | 1.33                                | 0.00                           | 16.30             | 210.00        | 0.005                |
| 5507A04         | Euclid & Barker monitoring well at     | 7/29/2002   | 326                        | 7.33 | 1.35                                     | 1.39                                | 0.01                           | 16.30             | 200.00        | 0.005                |
| 5507A04         | Euclid & Barker monitoring well at     | 11/4/2002   | 350                        | 7.74 | 1.20                                     | 1.28                                | 0.00                           | 16.70             | 200.00        | 0.005                |
| 5507H01         | Barker Road north of river, monitoring | 2/4/2002    | 65                         | 7.52 | 1.18                                     | 0.15                                | 0.01                           | 5.85              | 49.00         | 0.0136               |
| 5507H01         | Barker Road north of river, monitoring | 5/6/2002    | 50                         | 7.62 | 2.08                                     | 0.26                                | 0.01                           | 5.38              | 67.00         | 0.0165               |
| 5507H01         | Barker Road north of river, monitoring | 7/29/2002   | 47                         | 7.37 | 0.67                                     | 0.19                                | 0.02                           | 3.01              | 39.00         | 0.0136               |
| 5507H01         | Barker Road north of river, monitoring | 11/4/2002   | 46                         | 7.40 | 0.90                                     | 0.13                                | 0.01                           | 3.35              | 24.00         | 0.0076               |
| 5508M01         | Barker Road Centennial Trail North,    | 2/4/2002    | 70                         | 7.30 | 1.03                                     | 0.17                                | 0.01                           | 5.56              | 41.00         | 0.0113               |
| 5508M01         | Barker Road Centennial Trail North,    | 5/6/2002    | 40                         | 7.62 | 1.03                                     | 0.18                                | 0.01                           | 5.06              | 48.00         | 0.0103               |
| 5508M01         | Barker Road Centennial Trail North,    | 7/29/2002   | 45                         | 7.24 | 0.65                                     | 0.21                                | 0.01                           | 3.48              | 35.00         | 0.00828              |
| 5508M01         | Barker Road Centennial Trail North,    | 11/4/2002   | 51                         | 7.48 | 0.74                                     | 0.17                                | 0.01                           | 3.51              | 32.00         | 0.00811              |
| 5508M02         | Barker Road Centennial Trail South,    | 2/4/2002    | 65                         | 7.20 | 1.00                                     | 0.13                                | 0.01                           | 5.52              | 39.00         | 0.0113               |
| 5508M02         | Barker Road Centennial Trail South,    | 5/6/2002    | 40                         | 7.45 | 1.05                                     | 0.19                                | 0.00                           | 5.20              | 53.00         | 0.0516               |
| 5508M02         | Barker Road Centennial Trail South,    | 7/29/2002   | 46                         | 7.25 | 0.62                                     | 0.20                                | 0.01                           | 3.27              | 40.00         | 0.00884              |
| 5508M02         | Barker Road Centennial Trail South,    | 11/4/2002   | 51                         | 7.38 | 0.76                                     | 0.15                                | 0.01                           | 3.41              | 17.00         | 0.00578              |



# Ground Water Monitoring Data Report

## Spokane County Public Works, Water Quality Management Program

### Inorganics Water Quality Data by Well

Unreviewed Data: Subject to Verification

| WQMP Well ID | WELL NAME                            | Sample Date | Conductivity (µmhos/cm) | pH   | Chloride (mg/L) | Nitrate + Nitrite (mg/L as N) | Ortho-Phosphate (mg/L) | Sulfate (mg/L) | TDS (mg/L) | Phosphorus (mg/L) |
|--------------|--------------------------------------|-------------|-------------------------|------|-----------------|-------------------------------|------------------------|----------------|------------|-------------------|
| 5515C01      | Mission Well, LIBERTY LAKE           | 1/29/2002   | 275                     | 7.43 | 2.21            | 1.07                          | 0.01                   | 8.69           | 140.00     | 0.0146            |
| 5515C01      | Mission Well, LIBERTY LAKE           | 4/30/2002   | 180                     | 7.59 | 2.08            | 1.23                          | 0.01                   | 7.59           | 130.00     | 0.013             |
| 5515C01      | Mission Well, LIBERTY LAKE           | 8/6/2002    | 230                     | 7.56 | 2.40            | 1.50                          | 0.01                   | 9.97           | 150.00     | 0.00914           |
| 5515C01      | Mission Well, LIBERTY LAKE           | 10/30/2002  | 256                     | 7.92 | 2.46            | 1.28                          | 0.01                   | 8.51           | 160.00     | 0.0209            |
| 5517D05      | Mission & Barker monitoring well at  | 2/4/2002    | 125                     | 7.02 | 1.34            | 0.56                          | 0.00                   | 6.24           | 73.00      | 0.0072            |
| 5517D05      | Mission & Barker monitoring well at  | 5/6/2002    | 120                     | 7.21 | 1.51            | 1.04                          | 0.00                   | 7.04           | 82.00      | 0.00724           |
| 5517D05      | Mission & Barker monitoring well at  | 7/29/2002   | 102                     | 7.07 | 1.18            | 0.51                          | 0.01                   | 5.96           | 65.00      | 0.00517           |
| 5517D05      | Mission & Barker monitoring well at  | 11/4/2002   | 104                     | 7.23 | 1.08            | 0.47                          | 0.00                   | 4.78           | 51.00      | 0.005             |
| 5518R01      | Consolidated Irrigation Dist, Site 2 | 1/29/2002   | 145                     | 7.72 | 1.19            | 0.45                          | 0.00                   | 5.56           | 86.00      | 0.005             |
| 5518R01      | Consolidated Irrigation Dist, Site 2 | 4/30/2002   | 110                     | 7.92 | 1.16            | 0.40                          | 0.00                   | 5.62           | 99.00      | 0.005             |
| 5518R01      | Consolidated Irrigation Dist, Site 2 | 8/6/2002    | 143                     | 7.65 | 1.41            | 0.73                          | 0.00                   | 6.39           | 93.00      | 0.005             |
| 5518R01      | Consolidated Irrigation Dist, Site 2 | 10/30/2002  | 151                     | 8.18 | 26.80           | 0.63                          | 0.00                   | 6.02           | 110.00     | 0.43              |
| 6211K01      | Spokane Fish Hatchery well           | 1/29/2002   | 320                     | 7.55 | 4.69            | 1.70                          | 0.01                   | 16.20          | 170.00     | 0.00606           |
| 6211K01      | Spokane Fish Hatchery well           | 4/30/2002   | 250                     | 7.51 | 4.84            | 1.72                          | 0.00                   | 15.80          | 180.00     | 0.00927           |
| 6211K01      | Spokane Fish Hatchery well           | 7/31/2002   | 283                     | 7.64 | 4.47            | 1.72                          | 0.01                   | 15.70          | 180.00     | 0.00544           |
| 6211K01      | Spokane Fish Hatchery well           | 11/6/2002   | 284                     | 7.62 | 4.72            | 2.73                          | 0.00                   | 15.60          | 150.00     | 0.00979           |
| 6320D01      | Whitworth Water Dist. #2, 2A         | 1/29/2002   | 275                     | 7.54 | 2.72            | 1.17                          | 0.00                   | 15.00          | 130.00     | 0.00524           |
| 6320D01      | Whitworth Water Dist. #2, 2A         | 4/30/2002   | 220                     | 7.61 | 2.81            | 1.15                          | 0.00                   | 14.60          | 160.00     | 0.00874           |
| 6320D01      | Whitworth Water Dist. #2, 2A         | 7/31/2002   |                         | 7.64 | 2.32            | 1.17                          | 0.01                   | 14.50          | 140.00     | 0.005             |
| 6320D01      | Whitworth Water Dist. #2, 2A         | 11/6/2002   | 238                     | 7.57 | 2.40            | 2.17                          | 0.00                   | 13.80          | 170.00     | 0.00764           |

# Ground Water Monitoring Data Report

## Inorganics Water Quality Data by Well

### Spokane County Public Works, Water Quality Management Program

| WQMP<br>Well ID | WELL NAME                           | Sample Date | Conductivity<br>(µmhos/cm) | pH   | Unreviewed Data: Subject to Verification |                                     |                                |                   |               |                      |
|-----------------|-------------------------------------|-------------|----------------------------|------|------------------------------------------|-------------------------------------|--------------------------------|-------------------|---------------|----------------------|
|                 |                                     |             |                            |      | Chloride<br>(mg/L)                       | Nitrate +<br>Nitrite<br>(mg/L as N) | Ortho-Phos-<br>phate<br>(mg/L) | Sulfate<br>(mg/L) | TDS<br>(mg/L) | Phosphorus<br>(mg/L) |
| 6327N04         | Fire Station Houston & Regal, No.   | 2/6/2002    | 400                        | 7.43 | 8.41                                     | 2.50                                | 0.00                           | 19.40             | 210.00        | 0.0136               |
| 6327N04         | Fire Station Houston & Regal, No.   | 5/8/2002    | 310                        | 7.55 | 6.92                                     | 2.11                                | 0.00                           | 17.50             | 140.00        | 0.005                |
| 6327N04         | Fire Station Houston & Regal, No.   | 7/31/2002   | 445                        | 7.50 | 7.89                                     | 2.86                                | 0.01                           | 21.90             | 250.00        | 0.005                |
| 6327N04         | Fire Station Houston & Regal, No.   | 11/6/2002   | 401                        | 7.45 | 7.14                                     | 3.38                                | 0.00                           | 19.60             | 220.00        | 0.0063               |
| 6328H01         | North Spokane Irrig. Dist. #4       | 1/29/2002   | 245                        | 7.36 | 5.54                                     | 1.10                                | 0.00                           | 11.50             | 120.00        | 0.00606              |
| 6328H01         | North Spokane Irrig. Dist. #4       | 4/30/2002   | 210                        | 7.61 | 5.45                                     | 1.00                                | 0.00                           | 11.20             | 150.00        | 0.00715              |
| 6328H01         | North Spokane Irrig. Dist. #4       | 7/31/2002   | 228                        | 7.86 | 5.12                                     | 1.10                                | 0.01                           | 11.70             | 140.00        | 0.00516              |
| 6328H01         | North Spokane Irrig. Dist. #4       | 11/6/2002   | 225                        | 7.73 | 5.04                                     | 2.43                                | 0.00                           | 12.00             | 140.00        | 0.00683              |
| 6330J01         | Holy Cross, Rhoades & Washington    | 2/6/2002    | 305                        | 7.63 | 3.36                                     | 1.53                                | 0.00                           | 15.00             | 140.00        | 0.00606              |
| 6330J01         | Holy Cross, Rhoades & Washington    | 5/8/2002    | 250                        | 7.52 | 3.43                                     | 1.56                                | 0.01                           | 15.00             | 200.00        | 0.005                |
| 6330J01         | Holy Cross, Rhoades & Washington    | 7/31/2002   | 259                        | 7.57 | 2.91                                     | 1.35                                | 0.00                           | 14.30             | 140.00        | 0.005                |
| 6330J01         | Holy Cross, Rhoades & Washington    | 11/6/2002   | 268                        | 7.69 | 3.84                                     | 2.62                                | 0.00                           | 13.50             | 150.00        | 0.00683              |
| 6331J01         | Franklin Park, City monitoring well | 2/6/2002    | 260                        | 7.72 | 2.19                                     | 1.25                                | 0.00                           | 12.50             | 130.00        | 0.005                |
| 6331J01         | Franklin Park, City monitoring well | 5/8/2002    | 230                        | 7.59 | 2.35                                     | 1.22                                | 0.00                           | 12.60             | 160.00        | 0.005                |
| 6331J01         | Franklin Park, City monitoring well | 7/31/2002   | 241                        | 7.68 | 4.47                                     | 1.36                                | 0.01                           | 12.80             | 140.00        | 0.00854              |
| 6331J01         | Franklin Park, City monitoring well | 11/6/2002   | 243                        | 7.86 | 3.00                                     | 2.53                                | 0.00                           | 12.00             | 150.00        | 0.00871              |

# Ground Water Monitoring Data Report

## Inorganics Water Quality Data by Well

### Spokane County Public Works, Water Quality Management Program

| WQMP<br>Well ID | WELL NAME                             | Sample Date | Conductivity<br>(µmhos/cm) | pH   | Unreviewed Data: Subject to Verification |                                     |                                |                   |               |                      |
|-----------------|---------------------------------------|-------------|----------------------------|------|------------------------------------------|-------------------------------------|--------------------------------|-------------------|---------------|----------------------|
|                 |                                       |             |                            |      | Chloride<br>(mg/L)                       | Nitrate +<br>Nitrite<br>(mg/L as N) | Ortho-Phos-<br>phate<br>(mg/L) | Sulfate<br>(mg/L) | TDS<br>(mg/L) | Phosphorus<br>(mg/L) |
| 6524R01         | Idaho Road 1000 ft south of Trent,    | 2/4/2002    | 300                        | 7.38 | 1.83                                     | 2.42                                | 0.01                           | 10.50             | 170.00        | 0.00695              |
| 6524R01         | Idaho Road 1000 ft south of Trent,    | 5/6/2002    | 250                        | 7.53 | 2.05                                     | 1.91                                | 0.00                           | 10.60             | 220.00        | 0.0064               |
| 6524R01         | Idaho Road 1000 ft south of Trent,    | 7/29/2002   | 287                        | 7.28 | 1.97                                     | 2.54                                | 0.01                           | 10.40             | 160.00        | 0.00546              |
| 6524R01         | Idaho Road 1000 ft south of Trent,    | 11/4/2002   | 278                        | 7.84 | 1.60                                     | 1.76                                | 0.00                           | 8.44              | 140.00        | 0.005                |
| 6525R01         | Idaho Road 300 ft south of pipeline,  | 2/4/2002    | 295                        | 7.36 | 1.20                                     | 0.95                                | 0.00                           | 15.60             | 160.00        | 0.00618              |
| 6525R01         | Idaho Road 300 ft south of pipeline,  | 5/6/2002    | 270                        | 7.62 | 1.23                                     | 1.02                                | 0.00                           | 15.00             | 190.00        | 0.005                |
| 6525R01         | Idaho Road 300 ft south of pipeline,  | 7/29/2002   | 288                        | 7.35 | 1.02                                     | 0.90                                | 0.01                           | 15.20             | 160.00        | 0.00574              |
| 6525R01         | Idaho Road 300 ft south of pipeline,  | 11/4/2002   | 298                        | 8.01 | 0.86                                     | 0.74                                | 0.00                           | 14.40             | 180.00        | 0.005                |
| 6631M04         | Consolidated Irrigation Dist, Site 11 | 4/30/2002   | 210                        | 7.69 | 2.65                                     | 1.43                                | 0.00                           | 11.00             | 150.00        | 0.00715              |
| 6631M04         | Consolidated Irrigation Dist, Site 11 | 7/29/2002   | 234                        | 7.42 | 2.44                                     | 1.47                                | 0.01                           | 11.00             | 140.00        | 0.005                |
| 6631M04         | Consolidated Irrigation Dist, Site 11 | 11/4/2002   | 246                        | 8.20 | 2.22                                     | 1.36                                | 0.00                           | 10.20             | 160.00        | 0.00527              |
| 6631M07         | Idaho Road - East Farms monitoring    | 2/4/2002    | 310                        | 7.50 | 2.49                                     | 1.82                                | 0.00                           | 12.80             | 160.00        | 0.00592              |
| 6631M07         | Idaho Road - East Farms monitoring    | 5/6/2002    | 280                        | 7.54 | 2.93                                     | 1.90                                | 0.00                           | 12.90             | 180.00        | 0.00612              |
| 6631M07         | Idaho Road - East Farms monitoring    | 7/29/2002   | 283                        | 7.39 | 2.66                                     | 1.86                                | 0.01                           | 11.80             | 170.00        | 0.005                |
| 6631M07         | Idaho Road - East Farms monitoring    | 11/4/2002   | 299                        | 8.05 | 2.26                                     | 1.88                                | 0.00                           | 11.60             | 170.00        | 0.005                |

# Ground Water Monitoring Data Report

## Inorganics Water Quality Data by Well

### Spokane County Public Works, Water Quality Management Program

Unreviewed Data: Subject to Verification

| WQMP Well ID | WELL NAME                         | Sample Date | Calcium (mg/L) | Fluoride (mg/L) | Iron (mg/L) | Magnesium (mg/L) | Manganese (mg/L) | Potassium (mg/L) | Sodium (mg/L) |
|--------------|-----------------------------------|-------------|----------------|-----------------|-------------|------------------|------------------|------------------|---------------|
| 5213B01      | I.E. COLD STORAGE                 | 1/29/2002   | 40.00          | < 0.10          | < 0.150     | 13.00            | < 0.010          | 2.33             | 8.54          |
| 5213B01      | I.E. COLD STORAGE                 | 4/30/2002   | 35.20          | < 0.10          | < 0.150     | 12.60            | < 0.010          | 2.65             | 11.90         |
| 5213B01      | I.E. COLD STORAGE                 | 7/31/2002   | 30.30          | 0.12            | < 0.150     | 10.90            | < 0.010          | 2.35             | 7.92          |
| 5213B01      | I.E. COLD STORAGE                 | 10/29/2002  | 37.40          | 0.11            | < 0.150     | 12.60            | < 0.010          | 2.66             | 8.25          |
| 5304G01      | NE Community Center, City         | 2/6/2002    | 27.20          | < 0.10          | < 0.150     | 11.40            | < 0.010          |                  | 3.41          |
| 5304G01      | NE Community Center, City         | 5/8/2002    | 29.60          | < 0.10          | < 0.150     | 12.70            | < 0.010          | 2.08             | 3.49          |
| 5304G01      | NE Community Center, City         | 7/31/2002   | 30.60          | 0.10            | < 0.150     | 13.50            | < 0.010          | 2.00             | 3.94          |
| 5304G01      | NE Community Center, City         | 11/6/2002   | 37.20          | < 0.10          | < 0.150     | 14.90            | < 0.010          | 2.17             | 4.51          |
| 5307M01      | Trinity School, Adams & Carlisle, | 2/6/2002    | 30.80          | < 0.10          | < 0.150     | 10.20            | < 0.010          |                  | 3.50          |
| 5307M01      | Trinity School, Adams & Carlisle, | 5/8/2002    | 30.10          | < 0.10          | < 0.150     | 10.70            | < 0.010          | 2.01             | 3.70          |
| 5307M01      | Trinity School, Adams & Carlisle, | 7/31/2002   | 28.40          | < 0.10          | < 0.150     | 10.80            | < 0.010          | 2.02             | 3.89          |
| 5307M01      | Trinity School, Adams & Carlisle, | 11/6/2002   | 32.90          | < 0.10          | < 0.150     | 11.00            | < 0.010          | 2.30             | 3.83          |
| 5308A02      | CITY of SPOKANE-Nevada            | 1/29/2002   | 32.80          | < 0.10          | < 0.150     | 11.00            | < 0.010          | 1.80             | 3.28          |
| 5308A02      | CITY of SPOKANE-Nevada            | 4/30/2002   | 27.90          | < 0.10          | < 0.150     | 10.00            | < 0.010          | 2.00             | 2.98          |
| 5308A02      | CITY of SPOKANE-Nevada            | 8/13/2002   | 25.60          | < 0.10          | < 0.150     | 9.56             | < 0.010          | 2.00             | 3.03          |

# Ground Water Monitoring Data Report

## Inorganics Water Quality Data by Well

### Spokane County Public Works, Water Quality Management Program

Unreviewed Data: Subject to Verification

| WQMP Well ID | WELL NAME                           | Sample Date | Calcium (mg/L) | Fluoride (mg/L) | Iron (mg/L) | Magnesium (mg/L) | Manganese (mg/L) | Potassium (mg/L) | Sodium (mg/L) |
|--------------|-------------------------------------|-------------|----------------|-----------------|-------------|------------------|------------------|------------------|---------------|
| 5308H01      | Denver & Marietta, City monitoring  | 2/5/2002    | 24.80          | < 0.10          | < 0.150     | 8.46             | < 0.010          |                  | 2.98          |
| 5308H01      | Denver & Marietta, City monitoring  | 5/7/2002    | 22.30          | < 0.10          | < 0.150     | 8.21             | < 0.010          | 2.00             | 2.81          |
| 5308H01      | Denver & Marietta, City monitoring  | 7/30/2002   | 20.10          | < 0.10          | < 0.150     | 7.79             | < 0.010          | 2.00             | 3.10          |
| 5308H01      | Denver & Marietta, City monitoring  | 11/5/2002   | 30.80          | < 0.10          | < 0.150     | 10.50            | < 0.010          | 2.00             | 3.37          |
| 5311J05      | Hale's Ale Nested Site, east        | 2/5/2002    | 32.90          | < 0.10          | < 0.150     | 14.50            | < 0.010          |                  | 3.54          |
| 5311J05      | Hale's Ale Nested Site, east        | 5/7/2002    | 32.60          | < 0.10          | < 0.150     | 16.10            | < 0.010          | 2.11             | 3.82          |
| 5311J05      | Hale's Ale Nested Site, east        | 7/30/2002   | 35.60          | < 0.10          | < 0.150     | 17.40            | < 0.010          | 2.25             | 4.55          |
| 5311J05      | Hale's Ale Nested Site, east        | 11/5/2002   | 38.80          | < 0.10          | < 0.150     | 17.20            | < 0.010          | 2.26             | 4.22          |
| 5311J07      | Hale's Ale Nested Site, mid         | 2/5/2002    | 32.80          | < 0.10          | < 0.150     | 14.60            | < 0.010          |                  | 3.43          |
| 5311J07      | Hale's Ale Nested Site, mid         | 5/7/2002    | 33.10          | < 0.10          | < 0.150     | 16.10            | < 0.010          | 2.04             | 3.79          |
| 5311J07      | Hale's Ale Nested Site, mid         | 7/30/2002   | 34.80          | < 0.10          | < 0.150     | 17.40            | < 0.010          | 2.51             | 4.33          |
| 5311J07      | Hale's Ale Nested Site, mid         | 11/5/2002   | 37.10          | < 0.10          | < 0.150     | 16.90            | < 0.010          | 2.18             | 3.99          |
| 5312C01      | Felts Field City monitoring well    | 2/5/2002    | 28.60          | < 0.10          | < 0.150     | 7.37             | < 0.010          |                  | 3.76          |
| 5312C01      | Felts Field City monitoring well    | 5/7/2002    | 27.10          | < 0.10          | < 0.150     | 7.73             | < 0.010          | 2.00             | 3.61          |
| 5312C01      | Felts Field City monitoring well    | 7/30/2002   | 23.80          | < 0.10          | < 0.150     | 6.88             | < 0.010          | 2.00             | 3.92          |
| 5312C01      | Felts Field City monitoring well    | 11/5/2002   | 28.30          | < 0.10          | 0.248       | 7.59             | < 0.010          | 2.00             | 3.82          |
| 5312H01      | Orchard Avenue Irrig. Dist., Site 1 | 4/30/2002   | 38.00          | < 0.10          | < 0.150     | 14.80            | < 0.010          | 2.20             | 4.82          |
| 5312H01      | Orchard Avenue Irrig. Dist., Site 1 | 8/8/2002    | 37.30          | < 0.10          | < 0.150     | 15.20            | < 0.010          | 2.30             | 4.91          |

# Ground Water Monitoring Data Report

## Inorganics Water Quality Data by Well

### Spokane County Public Works, Water Quality Management Program

Unreviewed Data: Subject to Verification

| WQMP Well ID | WELL NAME                        | Sample Date | Calcium (mg/L) | Fluoride (mg/L) | Iron (mg/L) | Magnesium (mg/L) | Manganese (mg/L) | Potassium (mg/L) | Sodium (mg/L) |
|--------------|----------------------------------|-------------|----------------|-----------------|-------------|------------------|------------------|------------------|---------------|
| 5315L01      | Olive & Fiske monitoring well    | 2/5/2002    | 28.10          | < 0.10          | < 0.150     | 9.06             | < 0.010          |                  | 3.44          |
| 5315L01      | Olive & Fiske monitoring well    | 5/7/2002    | 28.80          | < 0.10          | < 0.150     | 9.78             | < 0.010          | 2.04             | 3.43          |
| 5315L01      | Olive & Fiske monitoring well    | 7/30/2002   | 29.00          | < 0.10          | < 0.150     | 10.20            | < 0.010          | 2.09             | 3.79          |
| 5315L01      | Olive & Fiske monitoring well    | 11/5/2002   | 34.00          | < 0.10          | < 0.150     | 11.00            | < 0.010          | 2.13             | 3.76          |
| 5322A01      | Third & Havana Nested Site, east | 2/5/2002    | 32.00          | < 0.10          | < 0.150     | 10.30            | < 0.010          |                  | 5.08          |
| 5322A01      | Third & Havana Nested Site, east | 5/7/2002    | 32.70          | < 0.10          | < 0.150     | 11.20            | < 0.010          | 2.11             | 5.58          |
| 5322A01      | Third & Havana Nested Site, east | 7/30/2002   | 33.60          | < 0.10          | < 0.150     | 11.90            | < 0.010          | 2.10             | 5.40          |
| 5322A01      | Third & Havana Nested Site, east | 11/5/2002   | 36.30          | < 0.10          | < 0.150     | 11.80            | < 0.010          | 2.04             | 5.02          |
| 5322A03      | Third & Havana Nested Site, mid  | 2/5/2002    | 32.40          | < 0.10          | < 0.150     | 10.70            | < 0.010          |                  | 5.51          |
| 5322A03      | Third & Havana Nested Site, mid  | 5/7/2002    | 30.00          | < 0.10          | < 0.150     | 10.70            | < 0.010          | 2.37             | 4.99          |
| 5322A03      | Third & Havana Nested Site, mid  | 7/30/2002   | 34.00          | < 0.10          | < 0.150     | 12.20            | < 0.010          | 2.29             | 5.73          |
| 5322A03      | Third & Havana Nested Site, mid  | 11/5/2002   | 37.20          | < 0.10          | < 0.150     | 12.40            | < 0.010          | 2.10             | 5.61          |
| 5322F01      | CITY of SPOKANE-Ray              | 1/29/2002   | 46.70          | < 0.10          | < 0.150     | 15.90            | < 0.010          | 2.60             | 8.42          |
| 5322F01      | CITY of SPOKANE-Ray              | 4/30/2002   | 51.90          | < 0.10          | < 0.150     | 17.70            | < 0.010          | 2.86             | 10.20         |
| 5322F01      | CITY of SPOKANE-Ray              | 8/13/2002   | 48.20          | < 0.10          | < 0.150     | 16.40            | < 0.010          | 2.75             | 9.31          |
| 5322F01      | CITY of SPOKANE-Ray              | 10/29/2002  | 51.00          | < 0.10          | < 0.150     | 17.10            | < 0.010          | 3.10             | 9.23          |

# Ground Water Monitoring Data Report

## Inorganics Water Quality Data by Well

### Spokane County Public Works, Water Quality Management Program

Unreviewed Data: Subject to Verification

| WQMP Well ID | WELL NAME                          | Sample Date | Calcium (mg/L) | Fluoride (mg/L) | Iron (mg/L) | Magnesium (mg/L) | Manganese (mg/L) | Potassium (mg/L) | Sodium (mg/L) |
|--------------|------------------------------------|-------------|----------------|-----------------|-------------|------------------|------------------|------------------|---------------|
| 5323E01      | 6th & Havana monitoring well       | 2/5/2002    | 40.70          | < 0.10          | < 0.150     | 13.80            | < 0.010          | 2.12             | 7.66          |
| 5323E01      | 6th & Havana monitoring well       | 5/7/2002    | 38.40          | < 0.10          | < 0.150     | 14.10            | < 0.010          | 2.80             | 7.36          |
| 5323E01      | 6th & Havana monitoring well       | 7/30/2002   | 47.30          | < 0.10          | < 0.150     | 17.50            | < 0.010          | 2.99             | 9.57          |
| 5323E01      | 6th & Havana monitoring well       | 11/5/2002   | 50.40          | < 0.10          | < 0.150     | 17.20            | < 0.010          | 3.07             | 9.72          |
| 5323K01      | Carnahan Pit monitoring well       | 2/5/2002    | 84.50          | 0.12            | < 0.150     | 21.60            | < 0.010          | 4.24             | 15.70         |
| 5324G02      | East Spokane Water Dist, Site 2    | 1/29/2002   | 57.30          | < 0.10          | < 0.150     | 18.10            | < 0.010          | 3.23             | 13.80         |
| 5324G02      | East Spokane Water Dist, Site 2    | 4/30/2002   | 48.00          | < 0.10          | < 0.150     | 15.60            | < 0.010          | 2.69             | 11.10         |
| 5324G02      | East Spokane Water Dist, Site 2    | 8/8/2002    | 55.00          | < 0.10          | < 0.150     | 18.80            | < 0.010          | 2.92             | 10.90         |
| 5324G02      | East Spokane Water Dist, Site 2    | 10/29/2002  | 48.50          | 0.12            | 0.365       | 14.80            | < 0.010          | 2.93             | 12.70         |
| 5405K01      | Pasadena Park Irrig. Dist., Site 2 | 1/29/2002   | 28.50          | < 0.10          | < 0.150     | 8.91             | < 0.010          | 1.87             | 4.26          |
| 5405K01      | Pasadena Park Irrig. Dist., Site 2 | 4/30/2002   | 20.10          | < 0.10          | < 0.150     | 6.57             | < 0.010          | 2.06             | 3.45          |
| 5405K01      | Pasadena Park Irrig. Dist., Site 2 | 10/29/2002  | 21.50          | < 0.10          | < 0.150     | 7.02             | < 0.010          | 2.00             | 3.75          |
| 5406A02      | Pasadena Park Irrig. Dist., Site 4 | 8/8/2002    | 23.20          | < 0.10          | < 0.150     | 8.17             | < 0.010          | 2.00             | 3.48          |
| 5407C01      | Orchard Ave Irrig Dist, Site 2     | 1/29/2002   | 38.10          | < 0.10          | < 0.150     | 16.20            | < 0.010          | 2.15             | 4.46          |
| 5407C01      | Orchard Ave Irrig Dist, Site 2     | 10/29/2002  | 34.60          | < 0.10          | < 0.150     | 15.00            | < 0.010          | 2.18             | 4.52          |
| 5408N01      | Modern Electric Water Co., Site 6  | 1/29/2002   | 33.90          | < 0.10          | < 0.150     | 14.40            | < 0.010          | 2.20             | 3.38          |
| 5408N01      | Modern Electric Water Co., Site 6  | 4/30/2002   | 34.90          | < 0.10          | < 0.150     | 14.60            | < 0.010          | 2.31             | 3.71          |
| 5408N01      | Modern Electric Water Co., Site 6  | 8/6/2002    | 33.20          | < 0.10          | < 0.150     | 14.80            | < 0.010          | 2.00             | 3.75          |
| 5408N01      | Modern Electric Water Co., Site 6  | 10/30/2002  | 33.30          | < 0.10          | < 0.150     | 15.20            | < 0.010          | 2.00             | 4.01          |

# Ground Water Monitoring Data Report

## Inorganics Water Quality Data by Well

### Spokane County Public Works, Water Quality Management Program

Unreviewed Data: Subject to Verification

| WQMP Well ID | WELL NAME                            | Sample Date | Calcium (mg/L) | Fluoride (mg/L) | Iron (mg/L) | Magnesium (mg/L) | Manganese (mg/L) | Potassium (mg/L) | Sodium (mg/L) |
|--------------|--------------------------------------|-------------|----------------|-----------------|-------------|------------------|------------------|------------------|---------------|
| 5409C02      | monitoring well Frederick & Bowdish  | 5/7/2002    | 31.20          | < 0.10          | 0.181       | 12.40            | 0.016            | 2.31             | 3.45          |
| 5409C02      | monitoring well Frederick & Bowdish  | 7/30/2002   | 31.90          | < 0.10          | < 0.150     | 12.80            | < 0.010          | 2.13             | 3.81          |
| 5409C02      | monitoring well Frederick & Bowdish  | 11/5/2002   | 37.00          | < 0.10          | < 0.150     | 13.20            | < 0.010          | 2.12             | 3.65          |
| 5411R02      | Sullivan Park North, monitoring well | 2/4/2002    | 26.90          | < 0.10          | < 0.150     | 12.00            | < 0.010          | 1.06             | 2.71          |
| 5411R02      | Sullivan Park North, monitoring well | 5/6/2002    | 22.30          | < 0.10          | < 0.150     | 10.00            | < 0.010          | 2.00             | 2.70          |
| 5411R02      | Sullivan Park North, monitoring well | 7/29/2002   | 26.00          | < 0.10          | < 0.150     | 11.70            | < 0.010          | 2.00             | 3.00          |
| 5411R02      | Sullivan Park North, monitoring well | 11/4/2002   | 25.10          | < 0.10          | < 0.150     | 11.50            | < 0.010          | 2.00             | 2.75          |
| 5411R03      | Sullivan Park South, monitoring well | 2/4/2002    | 26.40          | < 0.10          | < 0.150     | 11.80            | < 0.010          | 0.99             | 2.64          |
| 5411R03      | Sullivan Park South, monitoring well | 5/6/2002    | 21.80          | < 0.10          | < 0.150     | 9.78             | < 0.010          | 2.00             | 2.54          |
| 5411R03      | Sullivan Park South, monitoring well | 7/29/2002   | 27.00          | < 0.10          | 0.155       | 12.20            | < 0.010          | 2.00             | 3.06          |
| 5411R03      | Sullivan Park South, monitoring well | 11/4/2002   | 25.10          | < 0.10          | < 0.150     | 11.50            | < 0.010          | 2.00             | 2.77          |
| 5411R04      | Sullivan Road and Centennial Trail,  | 2/4/2002    | 26.00          | < 0.10          | < 0.150     | 11.70            | < 0.010          | 1.21             | 2.62          |
| 5411R04      | Sullivan Road and Centennial Trail,  | 5/6/2002    | 11.80          | < 0.10          | < 0.150     | 5.42             | < 0.010          | 2.00             | 2.41          |
| 5411R04      | Sullivan Road and Centennial Trail,  | 7/29/2002   | 21.50          | < 0.10          | 0.869       | 9.85             | < 0.010          | 2.00             | 2.60          |
| 5411R04      | Sullivan Road and Centennial Trail,  | 11/4/2002   | 29.00          | < 0.10          | < 0.150     | 13.60            | < 0.010          | 2.00             | 3.01          |
| 5426L01      | Vera Water & Power, Well 4           | 1/29/2002   | 38.40          | < 0.10          | 0.172       | 9.52             | < 0.010          | 1.71             | 3.72          |
| 5426L01      | Vera Water & Power, Well 4           | 4/30/2002   | 49.00          | 0.13            | 0.169       | 13.70            | < 0.010          | 2.68             | 7.08          |
| 5426L01      | Vera Water & Power, Well 4           | 8/6/2002    | 54.60          | 0.12            | < 0.150     | 15.50            | < 0.010          | 3.00             | 7.54          |
| 5426L01      | Vera Water & Power, Well 4           | 10/29/2002  | 50.30          | 0.12            | < 0.150     | 14.50            | < 0.010          | 2.96             | 7.37          |



# Ground Water Monitoring Data Report

## Inorganics Water Quality Data by Well

### Spokane County Public Works, Water Quality Management Program

Unreviewed Data: Subject to Verification

| WQMP Well ID | WELL NAME                              | Sample Date | Calcium (mg/L) | Fluoride (mg/L) | Iron (mg/L) | Magnesium (mg/L) | Manganese (mg/L) | Potassium (mg/L) | Sodium (mg/L) |
|--------------|----------------------------------------|-------------|----------------|-----------------|-------------|------------------|------------------|------------------|---------------|
| 5429H01      | Spokane Co WD#3, 20th&Balfour          | 1/29/2002   | 60.90          | 0.11            | < 0.150     | 17.30            | < 0.010          | 2.20             | 9.98          |
| 5429H01      | Spokane Co WD#3, 20th&Balfour          | 4/30/2002   | 62.00          | 0.11            | < 0.150     | 18.10            | < 0.010          | 2.90             | 9.67          |
| 5429H01      | Spokane Co WD#3, 20th&Balfour          | 8/8/2002    | 64.70          | 0.11            | < 0.150     | 18.70            | < 0.010          |                  | 11.20         |
| 5429H01      | Spokane Co WD#3, 20th&Balfour          | 10/30/2002  | 71.10          | 0.12            | 0.358       | 18.90            | < 0.010          | 3.06             | 12.70         |
| 5505D01      | Trent & Barker Road, monitoring well   | 2/4/2002    | 44.30          | < 0.10          | < 0.150     | 13.10            | < 0.010          | 1.95             | 5.72          |
| 5505D01      | Trent & Barker Road, monitoring well   | 5/6/2002    | 43.40          | 0.12            | < 0.150     | 14.30            | < 0.010          | 2.47             | 6.11          |
| 5505D01      | Trent & Barker Road, monitoring well   | 7/29/2002   | 46.00          | < 0.10          | < 0.150     | 14.30            | < 0.010          | 2.34             | 6.28          |
| 5505D01      | Trent & Barker Road, monitoring well   | 11/4/2002   | 44.80          | < 0.10          | < 0.150     | 14.60            | < 0.010          | 2.87             | 6.64          |
| 5507A04      | Euclid & Barker monitoring well at     | 2/4/2002    | 41.40          | < 0.10          | < 0.150     | 17.40            | < 0.010          | 1.15             | 3.03          |
| 5507A04      | Euclid & Barker monitoring well at     | 5/6/2002    | 37.50          | < 0.10          | < 0.150     | 16.70            | 0.016            | 2.14             | 3.04          |
| 5507A04      | Euclid & Barker monitoring well at     | 7/29/2002   | 40.20          | < 0.10          | 0.343       | 17.70            | < 0.010          | 2.00             | 3.29          |
| 5507A04      | Euclid & Barker monitoring well at     | 11/4/2002   | 41.90          | < 0.10          | < 0.150     | 18.60            | < 0.010          | 2.44             | 3.50          |
| 5507H01      | Barker Road north of river, monitoring | 2/4/2002    | 5.82           | < 0.10          | < 0.150     | 1.79             | < 0.010          |                  | 1.84          |
| 5507H01      | Barker Road north of river, monitoring | 5/6/2002    | 5.62           | < 0.10          | < 0.150     | 1.70             | < 0.010          | 2.00             | 2.17          |
| 5507H01      | Barker Road north of river, monitoring | 7/29/2002   | 5.09           | < 0.10          | 0.218       | 1.53             | < 0.010          | 2.00             | 1.82          |
| 5507H01      | Barker Road north of river, monitoring | 11/4/2002   | 4.56           | < 0.10          | < 0.150     | 1.48             | < 0.010          | 2.00             | 1.71          |
| 5508M01      | Barker Road Centennial Trail North,    | 2/4/2002    | 5.96           | < 0.10          | < 0.150     | 1.73             | < 0.010          |                  | 1.74          |
| 5508M01      | Barker Road Centennial Trail North,    | 5/6/2002    | 5.14           | < 0.10          | < 0.150     | 1.55             | < 0.010          | 2.00             | 1.73          |
| 5508M01      | Barker Road Centennial Trail North,    | 7/29/2002   | 5.34           | < 0.10          | < 0.150     | 1.58             | < 0.010          | 2.00             | 1.91          |
| 5508M01      | Barker Road Centennial Trail North,    | 11/4/2002   | 4.92           | < 0.10          | < 0.150     | 1.52             | < 0.010          | 2.00             | 2.06          |

# Ground Water Monitoring Data Report

## Inorganics Water Quality Data by Well

### Spokane County Public Works, Water Quality Management Program

Unreviewed Data: Subject to Verification

| WQMP Well ID | WELL NAME                            | Sample Date | Calcium (mg/L) | Fluoride (mg/L) | Iron (mg/L) | Magnesium (mg/L) | Manganese (mg/L) | Potassium (mg/L) | Sodium (mg/L) |
|--------------|--------------------------------------|-------------|----------------|-----------------|-------------|------------------|------------------|------------------|---------------|
| 5508M02      | Barker Road Centennial Trail South,  | 2/4/2002    | 5.72           | < 0.10          | < 0.150     | 1.63             | < 0.010          |                  | 1.69          |
| 5508M02      | Barker Road Centennial Trail South,  | 5/6/2002    | 5.63           | < 0.10          | 0.892       | 1.98             | 0.032            | 2.00             | 1.72          |
| 5508M02      | Barker Road Centennial Trail South,  | 7/29/2002   | 5.19           | < 0.10          | < 0.150     | 1.54             | < 0.010          | 2.00             | 2.00          |
| 5508M02      | Barker Road Centennial Trail South,  | 11/4/2002   | 5.03           | < 0.10          | < 0.150     | 1.56             | < 0.010          | 2.00             | 1.94          |
| 5515C01      | Mission Well, LIBERTY LAKE           | 1/29/2002   | 34.50          | 0.10            | < 0.150     | 10.40            | < 0.010          | 1.62             | 5.13          |
| 5515C01      | Mission Well, LIBERTY LAKE           | 4/30/2002   | 25.30          | 0.12            | < 0.150     | 7.42             | < 0.010          | 2.00             | 4.64          |
| 5515C01      | Mission Well, LIBERTY LAKE           | 8/6/2002    | 31.60          | < 0.10          | < 0.150     | 9.67             | < 0.010          | 2.00             | 4.67          |
| 5515C01      | Mission Well, LIBERTY LAKE           | 10/30/2002  | 30.00          | < 0.10          | 1.110       | 10.80            | 0.015            | 2.00             | 3.52          |
| 5517D05      | Mission & Barker monitoring well at  | 2/4/2002    | 13.30          | < 0.10          | < 0.150     | 4.59             | < 0.010          | 1.08             | 2.08          |
| 5517D05      | Mission & Barker monitoring well at  | 5/6/2002    | 13.20          | < 0.10          | < 0.150     | 4.86             | < 0.010          | 2.00             | 2.16          |
| 5517D05      | Mission & Barker monitoring well at  | 7/29/2002   | 12.20          | < 0.10          | < 0.150     | 4.50             | < 0.010          | 2.00             | 2.06          |
| 5517D05      | Mission & Barker monitoring well at  | 11/4/2002   | 11.50          | < 0.10          | 1.080       | 4.25             | < 0.010          | 2.00             | 2.04          |
| 5518R01      | Consolidated Irrigation Dist, Site 2 | 1/29/2002   | 18.70          | < 0.10          | < 0.150     | 4.38             | < 0.010          | 1.11             | 2.00          |
| 5518R01      | Consolidated Irrigation Dist, Site 2 | 4/30/2002   | 16.30          | < 0.10          | < 0.150     | 3.86             | < 0.010          | 2.00             | 1.99          |
| 5518R01      | Consolidated Irrigation Dist, Site 2 | 8/6/2002    | 20.30          | < 0.10          | < 0.150     | 4.99             | < 0.010          | 2.00             | 2.29          |
| 5518R01      | Consolidated Irrigation Dist, Site 2 | 10/30/2002  | 19.50          | < 0.10          | < 0.150     | 4.88             | < 0.010          | 2.00             | 2.31          |

# Ground Water Monitoring Data Report

## Inorganics Water Quality Data by Well

### Spokane County Public Works, Water Quality Management Program

Unreviewed Data: Subject to Verification

| WQMP Well ID | WELL NAME                         | Sample Date | Calcium (mg/L) | Fluoride (mg/L) | Iron (mg/L) | Magnesium (mg/L) | Manganese (mg/L) | Potassium (mg/L) | Sodium (mg/L) |
|--------------|-----------------------------------|-------------|----------------|-----------------|-------------|------------------|------------------|------------------|---------------|
| 6211K01      | Spokane Fish Hatchery well        | 1/29/2002   | 32.70          | < 0.10          | < 0.150     | 17.20            | < 0.010          | 1.84             | 4.37          |
| 6211K01      | Spokane Fish Hatchery well        | 4/30/2002   | 28.80          | < 0.10          | < 0.150     | 15.70            | < 0.010          | 2.27             | 4.33          |
| 6211K01      | Spokane Fish Hatchery well        | 7/31/2002   | 29.30          | < 0.10          | < 0.150     | 16.80            | < 0.010          | 2.05             | 4.59          |
| 6211K01      | Spokane Fish Hatchery well        | 11/6/2002   | 32.80          | < 0.10          | < 0.150     | 17.00            | < 0.010          | 2.34             | 4.35          |
| 6320D01      | Whitworth Water Dist. #2, 2A      | 1/29/2002   | 27.30          | < 0.10          | < 0.150     | 15.00            | < 0.010          | 1.26             | 3.07          |
| 6320D01      | Whitworth Water Dist. #2, 2A      | 4/30/2002   | 26.30          | < 0.10          | < 0.150     | 15.40            | < 0.010          | 2.00             | 3.24          |
| 6320D01      | Whitworth Water Dist. #2, 2A      | 7/31/2002   | 24.20          | < 0.10          | < 0.150     | 14.60            | < 0.010          | 2.06             | 3.19          |
| 6320D01      | Whitworth Water Dist. #2, 2A      | 11/6/2002   | 27.20          | < 0.10          | < 0.150     | 14.60            | < 0.010          | 2.00             | 3.09          |
| 6327N04      | Fire Station Houston & Regal, No. | 2/6/2002    | 31.70          | < 0.10          | < 0.150     | 18.80            | < 0.010          | 2.99             | 11.00         |
| 6327N04      | Fire Station Houston & Regal, No. | 5/8/2002    | 27.30          | < 0.10          | < 0.150     | 19.60            | < 0.010          | 3.22             | 9.61          |
| 6327N04      | Fire Station Houston & Regal, No. | 7/31/2002   | 34.20          | < 0.10          | < 0.150     | 30.70            | < 0.010          | 4.25             | 11.50         |
| 6327N04      | Fire Station Houston & Regal, No. | 11/6/2002   | 33.00          | < 0.10          | < 0.150     | 24.60            | < 0.010          | 4.34             | 15.30         |
| 6328H01      | North Spokane Irrig. Dist. #4     | 1/29/2002   | 25.40          | < 0.10          | < 0.150     | 10.90            | < 0.010          | 2.31             | 4.42          |
| 6328H01      | North Spokane Irrig. Dist. #4     | 4/30/2002   | 24.30          | < 0.10          | < 0.150     | 10.80            | < 0.010          | 2.09             | 4.90          |
| 6328H01      | North Spokane Irrig. Dist. #4     | 7/31/2002   | 22.50          | < 0.10          | < 0.150     | 11.20            | < 0.010          | 2.06             | 5.19          |
| 6328H01      | North Spokane Irrig. Dist. #4     | 11/6/2002   | 25.90          | < 0.10          | < 0.150     | 11.50            | < 0.010          | 2.48             | 4.96          |
| 6330J01      | Holy Cross, Rhoades & Washington  | 2/6/2002    | 26.70          | < 0.10          | < 0.150     | 13.70            | < 0.010          |                  | 3.38          |
| 6330J01      | Holy Cross, Rhoades & Washington  | 5/8/2002    | 26.20          | < 0.10          | < 0.150     | 14.50            | < 0.010          | 2.26             | 3.55          |
| 6330J01      | Holy Cross, Rhoades & Washington  | 7/31/2002   | 25.30          | < 0.10          | < 0.150     | 14.90            | < 0.010          | 2.00             | 3.84          |
| 6330J01      | Holy Cross, Rhoades & Washington  | 11/6/2002   | 28.70          | < 0.10          | < 0.150     | 15.20            | < 0.010          | 2.17             | 3.44          |

# Ground Water Monitoring Data Report

## Inorganics Water Quality Data by Well

### Spokane County Public Works, Water Quality Management Program

Unreviewed Data: Subject to Verification

| WQMP Well ID | WELL NAME                             | Sample Date | Calcium (mg/L) | Fluoride (mg/L) | Iron (mg/L) | Magnesium (mg/L) | Manganese (mg/L) | Potassium (mg/L) | Sodium (mg/L) |
|--------------|---------------------------------------|-------------|----------------|-----------------|-------------|------------------|------------------|------------------|---------------|
| 6331J01      | Franklin Park, City monitoring well   | 2/6/2002    | 24.20          | < 0.10          | < 0.150     | 11.10            | < 0.010          |                  | 2.62          |
| 6331J01      | Franklin Park, City monitoring well   | 5/8/2002    | 23.60          | < 0.10          | < 0.150     | 11.90            | < 0.010          | 2.00             | 2.83          |
| 6331J01      | Franklin Park, City monitoring well   | 7/31/2002   | 25.90          | < 0.10          | < 0.150     | 13.70            | < 0.010          | 2.00             | 3.41          |
| 6331J01      | Franklin Park, City monitoring well   | 11/6/2002   | 27.70          | < 0.10          | < 0.150     | 13.40            | < 0.010          | 2.10             | 3.16          |
| 6524R01      | Idaho Road 1000 ft south of Trent,    | 2/4/2002    | 33.90          | < 0.10          | < 0.150     | 14.00            | < 0.010          | 2.03             | 3.25          |
| 6524R01      | Idaho Road 1000 ft south of Trent,    | 5/6/2002    | 31.10          | < 0.10          | < 0.150     | 13.70            | < 0.010          | 2.07             | 3.27          |
| 6524R01      | Idaho Road 1000 ft south of Trent,    | 7/29/2002   | 34.60          | < 0.10          | < 0.150     | 14.60            | < 0.010          | 2.11             | 3.38          |
| 6524R01      | Idaho Road 1000 ft south of Trent,    | 11/4/2002   | 30.70          | < 0.10          | < 0.150     | 13.30            | < 0.010          | 2.23             | 3.34          |
| 6525R01      | Idaho Road 300 ft south of pipeline,  | 2/4/2002    | 32.20          | < 0.10          | < 0.150     | 15.80            | < 0.010          | 1.60             | 2.96          |
| 6525R01      | Idaho Road 300 ft south of pipeline,  | 5/6/2002    | 28.80          | 0.11            | < 0.150     | 15.20            | < 0.010          | 2.06             | 2.88          |
| 6525R01      | Idaho Road 300 ft south of pipeline,  | 7/29/2002   | 31.60          | < 0.10          | < 0.150     | 16.30            | < 0.010          | 2.03             | 3.19          |
| 6525R01      | Idaho Road 300 ft south of pipeline,  | 11/4/2002   | 31.10          | < 0.10          | < 0.150     | 16.30            | < 0.010          | 2.34             | 3.20          |
| 6631M04      | Consolidated Irrigation Dist, Site 11 | 4/30/2002   | 27.20          | < 0.10          | < 0.150     | 12.30            | < 0.010          | 2.19             | 2.79          |
| 6631M04      | Consolidated Irrigation Dist, Site 11 | 7/29/2002   | 26.60          | < 0.10          | < 0.150     | 12.30            | < 0.010          | 2.02             | 2.81          |
| 6631M04      | Consolidated Irrigation Dist, Site 11 | 11/4/2002   | 24.80          | < 0.10          | < 0.150     | 11.80            | < 0.010          | 2.12             | 2.86          |
| 6631M07      | Idaho Road - East Farms monitoring    | 2/4/2002    | 32.90          | < 0.10          | < 0.150     | 14.80            | < 0.010          | 1.88             | 2.94          |
| 6631M07      | Idaho Road - East Farms monitoring    | 5/6/2002    | 31.40          | < 0.10          | < 0.150     | 14.60            | < 0.010          | 2.48             | 2.94          |
| 6631M07      | Idaho Road - East Farms monitoring    | 7/29/2002   | 31.80          | < 0.10          | < 0.150     | 14.40            | < 0.010          | 2.06             | 2.93          |
| 6631M07      | Idaho Road - East Farms monitoring    | 11/4/2002   | 30.40          | < 0.10          | < 0.150     | 14.10            | < 0.010          | 2.54             | 2.97          |

# Ground Water Monitoring Data Report

## Inorganics Water Quality Data by Well

### Spokane County Public Works, Water Quality Management Program

Unreviewed Data: Subject to Verification

| WQMP Well ID | WELL NAME                          | Sample Date | Arsenic (mg/L) | Cadmium (mg/L) | Chromium (mg/L) | Copper (mg/L) | Lead (mg/L) | Mercury (mg/L) | Zinc (mg/L) |
|--------------|------------------------------------|-------------|----------------|----------------|-----------------|---------------|-------------|----------------|-------------|
| 5213B01      | I.E. COLD STORAGE                  | 1/29/2002   | 0.0026         | <0.00100       | 0.00103         | 0.0013        | < 0.00100   | < 0.001        | 0.02150     |
| 5213B01      | I.E. COLD STORAGE                  | 4/30/2002   | 0.0028         | <0.00100       | < 0.0010        | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 5213B01      | I.E. COLD STORAGE                  | 7/31/2002   | 0.0023         | <0.00100       | < 0.0010        | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 5213B01      | I.E. COLD STORAGE                  | 10/29/2002  | 0.0022         | <0.00100       | < 0.0010        | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 5304G01      | NE Community Center, City          | 2/6/2002    | 0.0024         | <0.00100       | 0.00658         | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 5304G01      | NE Community Center, City          | 5/8/2002    | 0.0028         | <0.00100       | 0.00511         | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 5304G01      | NE Community Center, City          | 7/31/2002   | 0.0029         | <0.00100       | < 0.0010        | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 5304G01      | NE Community Center, City          | 11/6/2002   | 0.0021         | <0.00100       | 0.00122         | 0.0011        | < 0.00100   | < 0.001        | < 0.01000   |
| 5307M01      | Trinity School, Adams & Carlisle,  | 2/6/2002    | 0.0023         | <0.00100       | 0.00105         | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 5307M01      | Trinity School, Adams & Carlisle,  | 5/8/2002    | 0.0024         | <0.00100       | < 0.0010        | 0.0012        | < 0.00100   | < 0.001        | < 0.01000   |
| 5307M01      | Trinity School, Adams & Carlisle,  | 7/31/2002   | 0.0023         | <0.00100       | < 0.0010        | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 5307M01      | Trinity School, Adams & Carlisle,  | 11/6/2002   | 0.0019         | <0.00100       | 0.00101         | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 5308A02      | CITY of SPOKANE-Nevada             | 1/29/2002   | 0.0023         | <0.00100       | < 0.0010        | 0.0014        | < 0.00100   | < 0.001        | < 0.01000   |
| 5308A02      | CITY of SPOKANE-Nevada             | 4/30/2002   | 0.0023         | <0.00100       | < 0.0010        | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 5308A02      | CITY of SPOKANE-Nevada             | 8/13/2002   | 0.0020         | <0.00100       | < 0.0010        | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 5308H01      | Denver & Marietta, City monitoring | 2/5/2002    | 0.0024         | <0.00100       | < 0.0010        | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 5308H01      | Denver & Marietta, City monitoring | 5/7/2002    | 0.0022         | <0.00100       | < 0.0010        | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 5308H01      | Denver & Marietta, City monitoring | 7/30/2002   | 0.0021         | <0.00100       | < 0.0010        | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 5308H01      | Denver & Marietta, City monitoring | 11/5/2002   | 0.0022         | <0.00100       | 0.00178         | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |

# Ground Water Monitoring Data Report

## Inorganics Water Quality Data by Well

### Spokane County Public Works, Water Quality Management Program

Unreviewed Data: Subject to Verification

| WQMP Well ID | WELL NAME                           | Sample Date | Arsenic (mg/L) | Cadmium (mg/L) | Chromium (mg/L) | Copper (mg/L) | Lead (mg/L) | Mercury (mg/L) | Zinc (mg/L) |
|--------------|-------------------------------------|-------------|----------------|----------------|-----------------|---------------|-------------|----------------|-------------|
| 5311J05      | Hale's Ale Nested Site, east        | 2/5/2002    | 0.0032         | <0.00100       | 0.00131         | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 5311J05      | Hale's Ale Nested Site, east        | 5/7/2002    | 0.0028         | <0.00100       | < 0.0010        | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 5311J05      | Hale's Ale Nested Site, east        | 7/30/2002   | 0.0029         | <0.00100       | < 0.0010        | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 5311J05      | Hale's Ale Nested Site, east        | 11/5/2002   | 0.0024         | <0.00100       | < 0.0010        | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 5311J07      | Hale's Ale Nested Site, mid         | 2/5/2002    | 0.0032         | <0.00100       | 0.00151         | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 5311J07      | Hale's Ale Nested Site, mid         | 5/7/2002    | 0.0028         | <0.00100       | < 0.0010        | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 5311J07      | Hale's Ale Nested Site, mid         | 7/30/2002   | 0.0030         | <0.00100       | < 0.0010        | < 0.0010      | < 0.00100   | < 0.001        | 0.01300     |
| 5311J07      | Hale's Ale Nested Site, mid         | 11/5/2002   | 0.0026         | <0.00100       | < 0.0010        | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 5312C01      | Felts Field City monitoring well    | 2/5/2002    | 0.0067         | <0.00100       | 0.00131         | 0.0014        | < 0.00100   | < 0.001        | < 0.01000   |
| 5312C01      | Felts Field City monitoring well    | 5/7/2002    | 0.0061         | <0.00100       | < 0.0010        | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 5312C01      | Felts Field City monitoring well    | 7/30/2002   | 0.0077         | <0.00100       | < 0.0010        | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 5312C01      | Felts Field City monitoring well    | 11/5/2002   | 0.0069         | <0.00100       | < 0.0010        | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 5312H01      | Orchard Avenue Irrig. Dist., Site 1 | 4/30/2002   | 0.0056         | <0.00100       | < 0.0010        | 0.0013        | < 0.00100   | < 0.001        | 0.02140     |
| 5312H01      | Orchard Avenue Irrig. Dist., Site 1 | 8/8/2002    | 0.0048         | <0.00100       | < 0.0010        | < 0.0010      | < 0.00100   | < 0.001        | 0.01190     |
| 5315L01      | Olive & Fiske monitoring well       | 2/5/2002    | 0.0023         | <0.00100       | 0.00169         | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 5315L01      | Olive & Fiske monitoring well       | 5/7/2002    | 0.0020         | <0.00100       | 0.00105         | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 5315L01      | Olive & Fiske monitoring well       | 7/30/2002   | 0.0020         | <0.00100       | < 0.0010        | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 5315L01      | Olive & Fiske monitoring well       | 11/5/2002   | 0.0019         | <0.00100       | 0.00144         | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |

# Ground Water Monitoring Data Report

## Inorganics Water Quality Data by Well

### Spokane County Public Works, Water Quality Management Program

Unreviewed Data: Subject to Verification

| WQMP Well ID | WELL NAME                        | Sample Date | Arsenic (mg/L) | Cadmium (mg/L) | Chromium (mg/L) | Copper (mg/L) | Lead (mg/L) | Mercury (mg/L) | Zinc (mg/L) |
|--------------|----------------------------------|-------------|----------------|----------------|-----------------|---------------|-------------|----------------|-------------|
| 5322A01      | Third & Havana Nested Site, east | 2/5/2002    | 0.0028         | <0.00100       | 0.00155         | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 5322A01      | Third & Havana Nested Site, east | 5/7/2002    | 0.0033         | <0.00100       | < 0.0010        | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 5322A01      | Third & Havana Nested Site, east | 7/30/2002   | 0.0027         | <0.00100       | < 0.0010        | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 5322A01      | Third & Havana Nested Site, east | 11/5/2002   | 0.0022         | <0.00100       | < 0.0010        | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 5322A03      | Third & Havana Nested Site, mid  | 2/5/2002    | 0.0031         | <0.00100       | 0.00125         | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 5322A03      | Third & Havana Nested Site, mid  | 5/7/2002    | 0.0025         | <0.00100       | < 0.0010        | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 5322A03      | Third & Havana Nested Site, mid  | 7/30/2002   | 0.0025         | <0.00100       | < 0.0010        | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 5322A03      | Third & Havana Nested Site, mid  | 11/5/2002   | 0.0024         | <0.00100       | < 0.0010        | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 5322F01      | CITY of SPOKANE-Ray              | 1/29/2002   | 0.0045         | <0.00100       | 0.00103         | 0.0018        | < 0.00100   | < 0.001        | < 0.01000   |
| 5322F01      | CITY of SPOKANE-Ray              | 4/30/2002   | 0.0042         | <0.00100       | < 0.0010        | 0.0022        | < 0.00100   | < 0.001        | 0.02170     |
| 5322F01      | CITY of SPOKANE-Ray              | 8/13/2002   | 0.0040         | <0.00100       | < 0.0010        | < 0.0010      | < 0.00100   | < 0.001        | 0.01070     |
| 5322F01      | CITY of SPOKANE-Ray              | 10/29/2002  | 0.0041         | <0.00100       | < 0.0010        | < 0.0010      | < 0.00100   | < 0.001        | 0.02010     |
| 5323E01      | 6th & Havana monitoring well     | 2/5/2002    | 0.0038         | <0.00100       | 0.00149         | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 5323E01      | 6th & Havana monitoring well     | 5/7/2002    | 0.0037         | <0.00100       | < 0.0010        | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 5323E01      | 6th & Havana monitoring well     | 7/30/2002   | 0.0040         | <0.00100       | < 0.0010        | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 5323E01      | 6th & Havana monitoring well     | 11/5/2002   | 0.0034         | <0.00100       | < 0.0010        | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 5323K01      | Carnahan Pit monitoring well     | 2/5/2002    | 0.0028         | <0.00100       | 0.00143         | 0.0012        | < 0.00100   | < 0.001        | < 0.01000   |

# Ground Water Monitoring Data Report

## Inorganics Water Quality Data by Well

### Spokane County Public Works, Water Quality Management Program

Unreviewed Data: Subject to Verification

| WQMP Well ID | WELL NAME                              | Sample Date | Arsenic (mg/L) | Cadmium (mg/L) | Chromium (mg/L) | Copper (mg/L) | Lead (mg/L) | Mercury (mg/L) | Zinc (mg/L) |
|--------------|----------------------------------------|-------------|----------------|----------------|-----------------|---------------|-------------|----------------|-------------|
| 5324G02      | E. SPOKANE WTR DIST, Site 2            | 1/29/2002   | 0.0045         | <0.00100       | 0.00113         | 0.0057        | 0.00106     | < 0.001        | 0.01670     |
| 5324G02      | E. SPOKANE WTR DIST, Site 2            | 4/30/2002   | 0.0029         | <0.00100       | < 0.0010        | 0.0035        | < 0.00100   | < 0.001        | < 0.01000   |
| 5324G02      | E. SPOKANE WTR DIST, Site 2            | 8/8/2002    | 0.0040         | <0.00100       | < 0.0010        | 0.0025        | < 0.00100   | < 0.001        | < 0.01000   |
| 5324G02      | E. SPOKANE WTR DIST, Site 2            | 10/29/2002  | 0.0029         | <0.00100       | < 0.0010        | 0.0052        | 0.00298     | < 0.001        | < 0.01000   |
| 5405K01      | Pasadena Park Irrig. Dist., Site 2     | 1/29/2002   | 0.0016         | <0.00100       | 0.00116         | 0.0013        | < 0.00100   | < 0.001        | 0.01280     |
| 5405K01      | Pasadena Park Irrig. Dist., Site 2     | 4/30/2002   | 0.0013         | <0.00100       | < 0.0010        | 0.0050        | < 0.00100   | < 0.001        | 0.01880     |
| 5405K01      | Pasadena Park Irrig. Dist., Site 2     | 10/29/2002  | 0.0015         | <0.00100       | < 0.0010        | < 0.0010      | < 0.00100   | < 0.001        | 0.01300     |
| 5406A02      | Pasadena Park Irrig. Dist., Site 4     | 8/8/2002    | 0.0018         | <0.00100       | < 0.0010        | 0.0019        | < 0.00100   | < 0.001        | < 0.01000   |
| 5407C01      | Orchard Ave Irrig Dist, Site 2 Buckeye | 1/29/2002   | 0.0042         | <0.00100       | 0.00153         | 0.0030        | < 0.00100   | < 0.001        | 0.01060     |
| 5407C01      | Orchard Ave Irrig Dist, Site 2 Buckeye | 10/29/2002  | 0.0042         | <0.00100       | < 0.0010        | 0.0035        | < 0.00100   | < 0.001        | < 0.01000   |
| 5408N01      | Modern Electric Water Co., Site 6      | 1/29/2002   | 0.0023         | <0.00100       | < 0.0010        | 0.0018        | < 0.00100   | < 0.001        | < 0.01000   |
| 5408N01      | Modern Electric Water Co., Site 6      | 4/30/2002   | 0.0025         | <0.00100       | < 0.0010        | 0.0020        | < 0.00100   | < 0.001        | < 0.01000   |
| 5408N01      | Modern Electric Water Co., Site 6      | 8/6/2002    | 0.0025         | <0.00100       | < 0.0010        | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 5408N01      | Modern Electric Water Co., Site 6      | 10/30/2002  | 0.0025         | <0.00100       | < 0.0010        | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 5409C02      | monitoring well Frederick & Bowdish    | 5/7/2002    | 0.0048         | <0.00100       | < 0.0010        | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 5409C02      | monitoring well Frederick & Bowdish    | 7/30/2002   | 0.0049         | <0.00100       | < 0.0010        | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 5409C02      | monitoring well Frederick & Bowdish    | 11/5/2002   | 0.0044         | <0.00100       | < 0.0010        | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |



# Ground Water Monitoring Data Report

## Inorganics Water Quality Data by Well

### Spokane County Public Works, Water Quality Management Program

Unreviewed Data: Subject to Verification

| WQMP Well ID | WELL NAME                            | Sample Date | Arsenic (mg/L) | Cadmium (mg/L) | Chromium (mg/L) | Copper (mg/L) | Lead (mg/L) | Mercury (mg/L) | Zinc (mg/L) |
|--------------|--------------------------------------|-------------|----------------|----------------|-----------------|---------------|-------------|----------------|-------------|
| 5411R02      | Sullivan Park North, monitoring well | 2/4/2002    | 0.0029         | <0.00100       | 0.00117         | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 5411R02      | Sullivan Park North, monitoring well | 5/6/2002    | 0.0023         | <0.00100       | < 0.0010        | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 5411R02      | Sullivan Park North, monitoring well | 7/29/2002   | 0.0029         | <0.00100       | < 0.0010        | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 5411R02      | Sullivan Park North, monitoring well | 11/4/2002   | 0.0020         | <0.00100       | < 0.0010        | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 5411R03      | Sullivan Park South, monitoring well | 2/4/2002    | 0.0029         | <0.00100       | 0.0013          | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 5411R03      | Sullivan Park South, monitoring well | 5/6/2002    | 0.0026         | <0.00100       | < 0.0010        | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 5411R03      | Sullivan Park South, monitoring well | 7/29/2002   | 0.0032         | <0.00100       | < 0.0010        | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 5411R03      | Sullivan Park South, monitoring well | 11/4/2002   | 0.0024         | <0.00100       | < 0.0010        | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 5411R04      | Sullivan Road and Centennial Trail,  | 2/4/2002    | 0.0018         | <0.00100       | 0.0012          | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 5411R04      | Sullivan Road and Centennial Trail,  | 5/6/2002    | 0.0018         | <0.00100       | < 0.0010        | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 5411R04      | Sullivan Road and Centennial Trail,  | 7/29/2002   | 0.0021         | <0.00100       | < 0.0010        | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 5411R04      | Sullivan Road and Centennial Trail,  | 11/4/2002   | 0.0014         | <0.00100       | < 0.0010        | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 5426L01      | Vera Water & Power, Well 4           | 1/29/2002   | 0.0019         | <0.00100       | 0.00101         | 0.0051        | < 0.00100   | < 0.001        | 0.02610     |
| 5426L01      | Vera Water & Power, Well 4           | 4/30/2002   | 0.0045         | <0.00100       | < 0.0010        | 0.0011        | < 0.00100   | < 0.001        | < 0.01000   |
| 5426L01      | Vera Water & Power, Well 4           | 8/6/2002    | 0.0045         | <0.00100       | < 0.0010        | < 0.0010      | < 0.00100   | < 0.001        | 0.02030     |
| 5426L01      | Vera Water & Power, Well 4           | 10/29/2002  | 0.0041         | <0.00100       | < 0.0010        | 0.0012        | < 0.00100   | < 0.001        | < 0.01000   |
| 5429H01      | Spokane Co WD#3, 20th&Balfour        | 1/29/2002   | 0.0057         | <0.00100       | < 0.0010        | 0.0028        | < 0.00100   | < 0.001        | < 0.01000   |
| 5429H01      | Spokane Co WD#3, 20th&Balfour        | 4/30/2002   | 0.0050         | <0.00100       | < 0.0010        | 0.0033        | < 0.00100   | < 0.001        | < 0.01000   |
| 5429H01      | Spokane Co WD#3, 20th&Balfour        | 8/8/2002    | 0.0063         | <0.00100       | < 0.0100        | < 0.0010      | < 0.00100   | < 0.001        | < 0.20000   |
| 5429H01      | Spokane Co WD#3, 20th&Balfour        | 10/30/2002  | 0.0051         | <0.00100       | < 0.0010        | 0.0055        | 0.00162     | < 0.001        | < 0.01000   |

# Ground Water Monitoring Data Report

## Inorganics Water Quality Data by Well

### Spokane County Public Works, Water Quality Management Program

Unreviewed Data: Subject to Verification

| WQMP Well ID | WELL NAME                              | Sample Date | Arsenic (mg/L) | Cadmium (mg/L) | Chromium (mg/L) | Copper (mg/L) | Lead (mg/L) | Mercury (mg/L) | Zinc (mg/L) |
|--------------|----------------------------------------|-------------|----------------|----------------|-----------------|---------------|-------------|----------------|-------------|
| 5505D01      | Trent & Barker Road, monitoring well   | 2/4/2002    | 0.0061         | <0.00100       | 0.00103         | < 0.0010      | <0.00100    | < 0.001        | < 0.01000   |
| 5505D01      | Trent & Barker Road, monitoring well   | 5/6/2002    | 0.0050         | <0.00100       | < 0.0010        | < 0.0010      | <0.00100    | < 0.001        | < 0.01000   |
| 5505D01      | Trent & Barker Road, monitoring well   | 7/29/2002   | 0.0057         | <0.00100       | 0.00118         | < 0.0010      | <0.00100    | < 0.001        | < 0.01000   |
| 5505D01      | Trent & Barker Road, monitoring well   | 11/4/2002   | 0.0049         | <0.00100       | < 0.0010        | 0.0018        | <0.00100    | < 0.001        | < 0.01000   |
| 5507A04      | Euclid & Barker monitoring well at     | 2/4/2002    | 0.0022         | <0.00100       | < 0.0010        | < 0.0010      | <0.00100    | < 0.001        | < 0.01000   |
| 5507A04      | Euclid & Barker monitoring well at     | 5/6/2002    | 0.0016         | <0.00100       | < 0.0010        | < 0.0010      | <0.00100    | < 0.001        | < 0.01000   |
| 5507A04      | Euclid & Barker monitoring well at     | 7/29/2002   | 0.0017         | <0.00100       | 0.00299         | < 0.0010      | <0.00100    | < 0.001        | < 0.01000   |
| 5507A04      | Euclid & Barker monitoring well at     | 11/4/2002   | 0.0013         | <0.00100       | < 0.0010        | < 0.0010      | <0.00100    | < 0.001        | < 0.01000   |
| 5507H01      | Barker Road north of river, monitoring | 2/4/2002    | < 0.0010       | <0.00100       | < 0.0010        | 0.0010        | <0.00100    | < 0.001        | 0.04780     |
| 5507H01      | Barker Road north of river, monitoring | 5/6/2002    | < 0.0010       | <0.00100       | < 0.0010        | < 0.0010      | <0.00100    | < 0.001        | 0.03260     |
| 5507H01      | Barker Road north of river, monitoring | 7/29/2002   | < 0.0010       | <0.00100       | < 0.0010        | < 0.0010      | <0.00100    | < 0.001        | 0.03000     |
| 5507H01      | Barker Road north of river, monitoring | 11/4/2002   | < 0.0010       | <0.00100       | < 0.0010        | < 0.0010      | <0.00100    | < 0.001        | 0.03660     |
| 5508M01      | Barker Road Centennial Trail North,    | 2/4/2002    | < 0.0010       | <0.00100       | < 0.0010        | < 0.0010      | <0.00100    | < 0.001        | 0.04360     |
| 5508M01      | Barker Road Centennial Trail North,    | 5/6/2002    | < 0.0010       | <0.00100       | < 0.0010        | < 0.0010      | <0.00100    | < 0.001        | 0.04110     |
| 5508M01      | Barker Road Centennial Trail North,    | 7/29/2002   | < 0.0010       | <0.00100       | < 0.0010        | < 0.0010      | <0.00100    | < 0.001        | 0.03330     |
| 5508M01      | Barker Road Centennial Trail North,    | 11/4/2002   | < 0.0010       | <0.00100       | < 0.0010        | < 0.0010      | <0.00100    | < 0.001        | 0.02350     |
| 5508M02      | Barker Road Centennial Trail South,    | 2/4/2002    | < 0.0010       | <0.00100       | < 0.0010        | < 0.0010      | <0.00100    | < 0.001        | 0.01140     |
| 5508M02      | Barker Road Centennial Trail South,    | 5/6/2002    | < 0.0010       | <0.00100       | 0.00202         | 0.0021        | <0.00100    | < 0.001        | 0.01530     |
| 5508M02      | Barker Road Centennial Trail South,    | 7/29/2002   | < 0.0010       | <0.00100       | < 0.0010        | < 0.0010      | <0.00100    | < 0.001        | < 0.01000   |
| 5508M02      | Barker Road Centennial Trail South,    | 11/4/2002   | < 0.0010       | <0.00100       | < 0.0010        | < 0.0010      | <0.00100    | < 0.001        | < 0.01000   |

# Ground Water Monitoring Data Report

## Inorganics Water Quality Data by Well

### Spokane County Public Works, Water Quality Management Program

Unreviewed Data: Subject to Verification

| WQMP Well ID | WELL NAME                            | Sample Date | Arsenic (mg/L) | Cadmium (mg/L) | Chromium (mg/L) | Copper (mg/L) | Lead (mg/L) | Mercury (mg/L) | Zinc (mg/L) |
|--------------|--------------------------------------|-------------|----------------|----------------|-----------------|---------------|-------------|----------------|-------------|
| 5515C01      | Mission Well, LIBERTY LAKE           | 1/29/2002   | 0.0037         | <0.00100       | < 0.0010        | 0.0029        | < 0.00100   | < 0.001        | < 0.01000   |
| 5515C01      | Mission Well, LIBERTY LAKE           | 4/30/2002   | 0.0039         | <0.00100       | < 0.0010        | 0.0012        | < 0.00100   | < 0.001        | < 0.01000   |
| 5515C01      | Mission Well, LIBERTY LAKE           | 8/6/2002    | 0.0034         | <0.00100       | < 0.0010        | 0.0011        | < 0.00100   | < 0.001        | < 0.01000   |
| 5515C01      | Mission Well, LIBERTY LAKE           | 10/30/2002  | 0.0037         | <0.00100       | < 0.0010        | 0.0414        | 0.00637     | < 0.001        | 0.01520     |
| 5517D05      | Mission & Barker monitoring well at  | 2/4/2002    | 0.0013         | <0.00100       | < 0.0010        | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 5517D05      | Mission & Barker monitoring well at  | 5/6/2002    | 0.0010         | <0.00100       | 0.00115         | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 5517D05      | Mission & Barker monitoring well at  | 7/29/2002   | < 0.0010       | <0.00100       | < 0.0010        | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 5517D05      | Mission & Barker monitoring well at  | 11/4/2002   | < 0.0010       | <0.00100       | < 0.0010        | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 5518R01      | Consolidated Irrig. Dist, 19, Site 2 | 1/29/2002   | 0.0012         | <0.00100       | < 0.0010        | 0.0013        | < 0.00100   | < 0.001        | < 0.01000   |
| 5518R01      | Consolidated Irrig. Dist, 19, Site 2 | 4/30/2002   | 0.0011         | <0.00100       | < 0.0010        | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 5518R01      | Consolidated Irrig. Dist, 19, Site 2 | 8/6/2002    | < 0.0010       | <0.00100       | < 0.0010        | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 5518R01      | Consolidated Irrig. Dist, 19, Site 2 | 10/30/2002  | 0.0011         | <0.00100       | < 0.0010        | < 0.0010      | < 0.00100   | < 0.001        | 0.01220     |

# Ground Water Monitoring Data Report

## Inorganics Water Quality Data by Well

### Spokane County Public Works, Water Quality Management Program

Unreviewed Data: Subject to Verification

| WQMP Well ID | WELL NAME                         | Sample Date | Arsenic (mg/L) | Cadmium (mg/L) | Chromium (mg/L) | Copper (mg/L) | Lead (mg/L) | Mercury (mg/L) | Zinc (mg/L) |
|--------------|-----------------------------------|-------------|----------------|----------------|-----------------|---------------|-------------|----------------|-------------|
| 6211K01      | Spokane Fish Hatchery well        | 1/29/2002   | 0.0038         | <0.00100       | 0.00114         | 0.0014        | < 0.00100   | < 0.001        | 0.01780     |
| 6211K01      | Spokane Fish Hatchery well        | 4/30/2002   | 0.0036         | <0.00100       | < 0.0010        | < 0.0010      | < 0.00100   | < 0.001        | 0.01360     |
| 6211K01      | Spokane Fish Hatchery well        | 7/31/2002   | 0.0033         | <0.00100       | < 0.0010        | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 6211K01      | Spokane Fish Hatchery well        | 11/6/2002   | 0.0033         | <0.00100       | < 0.0010        | 0.0020        | < 0.00100   | < 0.001        | 0.01420     |
| 6320D01      | Whitworth Water Dist. #2, 2A      | 1/29/2002   | 0.0037         | <0.00100       | 0.00106         | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 6320D01      | Whitworth Water Dist. #2, 2A      | 4/30/2002   | 0.0034         | <0.00100       | < 0.0010        | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 6320D01      | Whitworth Water Dist. #2, 2A      | 7/31/2002   | 0.0034         | <0.00100       | < 0.0010        | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 6320D01      | Whitworth Water Dist. #2, 2A      | 11/6/2002   | 0.0031         | <0.00100       | < 0.0010        | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 6327N04      | Fire Station Houston & Regal, No. | 2/6/2002    | 0.0018         | <0.00100       | 0.00136         | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 6327N04      | Fire Station Houston & Regal, No. | 5/8/2002    | 0.0017         | <0.00100       | 0.00124         | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 6327N04      | Fire Station Houston & Regal, No. | 7/31/2002   | 0.0017         | <0.00100       | < 0.0010        | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 6327N04      | Fire Station Houston & Regal, No. | 11/6/2002   | 0.0015         | <0.00100       | < 0.0010        | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 6328H01      | North Spokane Irrig. Dist. #4     | 1/29/2002   | 0.0027         | <0.00100       | 0.00102         | 0.0013        | < 0.00100   | < 0.001        | 0.01260     |
| 6328H01      | North Spokane Irrig. Dist. #4     | 4/30/2002   | 0.0024         | <0.00100       | < 0.0010        | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 6328H01      | North Spokane Irrig. Dist. #4     | 7/31/2002   | 0.0025         | <0.00100       | < 0.0010        | 0.0013        | < 0.00100   | < 0.001        | < 0.01000   |
| 6328H01      | North Spokane Irrig. Dist. #4     | 11/6/2002   | 0.0022         | <0.00100       | < 0.0010        | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 6330J01      | Holy Cross, Rhoades & Washington  | 2/6/2002    | 0.0033         | <0.00100       | 0.00127         | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 6330J01      | Holy Cross, Rhoades & Washington  | 5/8/2002    | 0.0033         | <0.00100       | 0.00134         | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 6330J01      | Holy Cross, Rhoades & Washington  | 7/31/2002   | 0.0032         | <0.00100       | < 0.0010        | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 6330J01      | Holy Cross, Rhoades & Washington  | 11/6/2002   | 0.0030         | <0.00100       | < 0.0010        | 0.0023        | < 0.00100   | < 0.001        | < 0.01000   |

# Ground Water Monitoring Data Report

## Inorganics Water Quality Data by Well

### Spokane County Public Works, Water Quality Management Program

Unreviewed Data: Subject to Verification

| WQMP Well ID | WELL NAME                             | Sample Date | Arsenic (mg/L) | Cadmium (mg/L) | Chromium (mg/L) | Copper (mg/L) | Lead (mg/L) | Mercury (mg/L) | Zinc (mg/L) |
|--------------|---------------------------------------|-------------|----------------|----------------|-----------------|---------------|-------------|----------------|-------------|
| 6331J01      | Franklin Park, City monitoring well   | 2/6/2002    | 0.0031         | <0.00100       | 0.00111         | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 6331J01      | Franklin Park, City monitoring well   | 5/8/2002    | 0.0035         | <0.00100       | 0.00146         | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 6331J01      | Franklin Park, City monitoring well   | 7/31/2002   | 0.0035         | <0.00100       | 0.00121         | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 6331J01      | Franklin Park, City monitoring well   | 11/6/2002   | 0.0034         | <0.00100       | < 0.0010        | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 6524R01      | Idaho Road 1000 ft south of Trent,    | 2/4/2002    | 0.0038         | <0.00100       | 0.00126         | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 6524R01      | Idaho Road 1000 ft south of Trent,    | 5/6/2002    | 0.0037         | <0.00100       | 0.00116         | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 6524R01      | Idaho Road 1000 ft south of Trent,    | 7/29/2002   | 0.0038         | <0.00100       | 0.00117         | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 6524R01      | Idaho Road 1000 ft south of Trent,    | 11/4/2002   | 0.0031         | <0.00100       | < 0.0010        | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 6525R01      | Idaho Road 300 ft south of pipeline,  | 2/4/2002    | 0.0030         | <0.00100       | 0.0011          | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 6525R01      | Idaho Road 300 ft south of pipeline,  | 5/6/2002    | 0.0023         | <0.00100       | < 0.0010        | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 6525R01      | Idaho Road 300 ft south of pipeline,  | 7/29/2002   | 0.0026         | <0.00100       | 0.00135         | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 6525R01      | Idaho Road 300 ft south of pipeline,  | 11/4/2002   | 0.0022         | <0.00100       | < 0.0010        | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 6631M04      | Consolidated Irrig. Dist, 19, Site 11 | 4/30/2002   | 0.0053         | <0.00100       | < 0.0010        | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 6631M04      | Consolidated Irrig. Dist, 19, Site 11 | 7/29/2002   | 0.0059         | <0.00100       | < 0.0010        | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 6631M04      | Consolidated Irrig. Dist, 19, Site 11 | 11/4/2002   | 0.0048         | <0.00100       | < 0.0010        | < 0.0010      | < 0.00100   | < 0.001        | 0.03090     |
| 6631M07      | Idaho Road - East Farms monitoring    | 2/4/2002    | 0.0047         | <0.00100       | 0.00103         | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 6631M07      | Idaho Road - East Farms monitoring    | 5/6/2002    | 0.0040         | <0.00100       | < 0.0010        | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |
| 6631M07      | Idaho Road - East Farms monitoring    | 7/29/2002   | 0.0045         | <0.00100       | 0.00129         | < 0.0010      | < 0.00100   | < 0.001        | 0.01060     |
| 6631M07      | Idaho Road - East Farms monitoring    | 11/4/2002   | 0.0039         | <0.00100       | < 0.0010        | < 0.0010      | < 0.00100   | < 0.001        | < 0.01000   |

**Appendix C:  
Inorganic Water Quality Data from Purveyor Wells  
for Department of Health compliance  
January 2002 through December 2002**

# Ground Water Monitoring Data Report

## Inorganics DOH Compliance Data

### Spokane County Public Works, Water Quality Management Program

| WQMP<br>Well ID | WELL NAME                                           | Sample Date | Conductivity<br>(µmhos/cm) | pH   | Unreviewed Data: Subject to Verification      |                          |                    |                        |                           |
|-----------------|-----------------------------------------------------|-------------|----------------------------|------|-----------------------------------------------|--------------------------|--------------------|------------------------|---------------------------|
|                 |                                                     |             |                            |      | Alkalinity<br>(mg/L as<br>CaCO <sub>3</sub> ) | Ammonia-N<br>(mg/L as N) | Chloride<br>(mg/L) | Color<br>(Color units) | Cyanide (total)<br>(mg/L) |
| 5308A01         | CITY of SPOKANE-Grace                               | 8/13/2002   | 200                        |      | 92                                            | <0.1                     | 2.81               | <5                     | <0.01                     |
| 5304B02         | CITY of SPOKANE-Hoffman                             | 8/13/2002   | 278                        |      | 122                                           | <0.1                     | 3.08               | <5                     | <0.01                     |
| 5313A01         | Spokane Co Water Dist #3, Boone & Lily              | 8/8/2002    | 241                        |      | 111                                           | <0.1                     | 2.34               | <5                     | <0.01                     |
| 5323A03         | Spokane Co Water Dist #3, 2nd & Koren               | 8/8/2002    | 363                        | 7.44 | 160                                           | <0.1                     | 8.84               | <5                     | <0.01                     |
| 5407J02         | Spokane Co Water Dist #3, Knox&Sarg                 | 8/8/2002    | 301                        | 7.57 | 145                                           | <0.1                     | 2.29               | <5                     | <0.01                     |
| 5407Q01         | Spokane Co Water Dist #3, Freeway&Vis               | 8/8/2002    | 275                        | 7.65 | 126                                           | <0.1                     | 2.16               | <5                     | <0.01                     |
| 5427L01         | Spokane Co Water Dist #3, 26 <sup>th</sup> &Vercler | 8/8/2002    | 377                        | 7.52 | 172                                           | <0.1                     | 5.31               | <5                     | <0.01                     |
| 5427N01         | Spokane Co Water Dist #3, Browns Park               | 8/8/2002    | 397                        | 7.63 | 194                                           | <0.1                     | 5.65               | <5                     | <0.01                     |
| 5429H01         | Spokane Co Water Dist #3, 20 <sup>th</sup> &Balfour | 8/8/2002    | 466                        | 7.47 | 208                                           | <0.1                     | 19.7               | <5                     | <0.01                     |
| 6303N01         | Spokane Co Water Dist #3, Cherry&Farw               | 8/7/2002    | 369                        | 7.54 | 159                                           | <0.1                     | 11.0               | <5                     | <0.01                     |
| 6303P01         | Spokane Co Water Dist #3, Freya&Farwe               | 8/7/2002    | 298                        | 7.53 | 140                                           | <0.1                     | 4.29               | <5                     | <0.01                     |
| 6309D01         | Spokane Co Water Dist #3, Helena&Mead               | 8/7/2002    | 272                        | 7.75 | 130                                           | <0.1                     | 4.74               | <5                     | <0.01                     |
| 6320N02         | Spokane Co Water Dist #3, Steer Inn                 | 8/7/2002    | 248                        | 7.71 | 119                                           | <0.1                     | 2.93               | <5                     | <0.01                     |
| 6330R02         | Spokane Co Water Dist #3, Lyons & Nor               | 8/7/2002    | 252                        | 7.85 | 114                                           | <0.1                     | 2.67               | <5                     | <0.01                     |
| 7105D01         | Spokane Co Water Dist #3, Waterview                 | 8/7/2002    | 420                        |      | 217                                           | <0.1                     | 3.51               | <5                     | <0.01                     |
| 7322M01         | Spokane Co Water Dist #3, Riverview,                | 8/7/2002    | 511                        | 7.41 | 207                                           | <0.1                     | 24.9               | <5                     | <0.01                     |
| 7332L02         | Spokane Co Water Dist #3, Pineriver                 | 8/7/2002    | 388                        | 7.50 | 187                                           | <0.1                     | 8.04               | <5                     | <0.01                     |
| 8323C01         | Spokane Co Water Dist #3, Chattaroy                 | 8/7/2002    | 311                        | 7.44 | 153                                           | <0.1                     | 5.00               | <5                     | <0.01                     |

# Ground Water Monitoring Data Report

## Inorganics DOH Compliance Data

Spokane County Public Works, Water Quality Management Program

| WQMP<br>Well ID | WELL NAME                                           | Sample Date | Hardness<br>(mg/L as CaCO3) | Unreviewed Data: Subject to Verification |                             |                               |                   |               |                    |
|-----------------|-----------------------------------------------------|-------------|-----------------------------|------------------------------------------|-----------------------------|-------------------------------|-------------------|---------------|--------------------|
|                 |                                                     |             |                             | Nitrate +<br>Nitrite<br>(mg/L as N)      | Nitrate-N<br>(mg/L as<br>N) | Ortho-Phos<br>phate<br>(mg/L) | Sulfate<br>(mg/L) | TDS<br>(mg/L) | Turbidity<br>(NTU) |
| 5308A01         | CITY of SPOKANE-Grace                               | 8/13/2002   | 102                         | 1.03                                     | 0.96                        | 0.0027                        | 8.67              | 120           | < 1                |
| 5304B02         | CITY of SPOKANE-Hoffman                             | 8/13/2002   | 145                         | 1.36                                     | 1.29                        | 0.0030                        | 14.2              | 160           | < 1                |
| 5313A01         | Spokane Co Water Dist #3, Boone & Lily              | 8/8/2002    | 129                         | 1.30                                     | 1.34                        | 0.0074                        | 11.4              | 150           | < 1                |
| 5323A03         | Spokane Co Water Dist #3, 2nd & Koren               | 8/8/2002    | 186                         | 2.91                                     | 3.23                        | 0.01                          | 14.2              | 210           | < 1                |
| 5407J02         | Spokane Co Water Dist #3, Knox &                    | 8/8/2002    | 166                         | 1.28                                     | 1.31                        | 0.01                          | 15.4              | 190           | < 1                |
| 5407Q01         | Spokane Co Water Dist #3, Freeway &                 | 8/8/2002    | 146                         | 1.35                                     | 1.38                        | 0.00                          | 13.1              | 160           | < 1                |
| 5427L01         | Spokane Co Water Dist #3, 26 <sup>th</sup> &Vercler | 8/8/2002    | 201                         | 2.46                                     | 2.60                        | 0.01                          | 15.0              | 230           | < 1                |
| 5427N01         | Spokane Co Water Dist #3, Browns Park               | 8/8/2002    | 208                         | 2.72                                     | 3.10                        | 0.01                          | 15.4              | 240           | < 1                |
| 5429H01         | Spokane Co Water Dist #3, 20 <sup>th</sup> &Balfour | 8/8/2002    | 238                         | 3.73                                     | 4.32                        | 0.03                          | 13.9              | 280           | < 1                |
| 6303N01         | Spokane Co Water Dist #3, Cherry&Farw               | 8/7/2002    | 198                         | 3.55                                     | 3.60                        | 0.01                          | 21.8              | 230           | < 1                |
| 6303P01         | Spokane Co Water Dist #3, Freya&Farw                | 8/7/2002    | 162                         | 1.43                                     | 1.29                        | 0.01                          | 15.5              | 190           | < 1                |
| 6309D01         | Spokane Co Water Dist #3, Helena&Mead               | 8/7/2002    | 150                         | 1.11                                     | 1.05                        | 0.00                          | 15.4              | 190           | < 1                |
| 6320N02         | Spokane Co Water Dist #3, Steer Inn                 | 8/7/2002    | 138                         | 1.55                                     | 1.29                        | 0.00                          | 13.6              | 180           | < 1                |
| 6330R02         | Spokane Co Water Dist #3, Lyons & Nor               | 8/7/2002    | 134                         | 1.31                                     | 1.19                        | 0.00                          | 12.7              | 160           | < 1                |
| 7105D01         | Spokane Co Water Dist #3, Waterview                 | 8/7/2002    | 228                         | 0.10                                     | 0                           | 0.00                          | 20.9              | 240           | < 1                |
| 7322M01         | Spokane Co Water Dist #3, Riverview,                | 8/7/2002    | 271                         | 4.02                                     | 4.08                        | 0.02                          | 16.4              | 260           | < 1                |
| 7332L02         | Spokane Co Water Dist #3, Pineriver                 | 8/7/2002    | 207                         | 1.24                                     | 1.14                        | 0.02                          | 15.3              | 79            | < 1                |
| 8323C01         | Spokane Co Water Dist #3, Chattaroy                 | 8/7/2002    | 167                         | 0.21                                     | 0.26                        | 0.35                          | 11.0              | 230           | < 1                |



# Ground Water Monitoring Data Report

## Inorganics DOH Compliance Data

### Spokane County Public Works, Water Quality Management Program

Unreviewed Data: Subject to Verification

| WQMP Well ID | WELL NAME                                           | Sample Date | Aluminum (mg/L) | Antimony (mg/L) | Arsenic (mg/L) | Barium (mg/L) | Beryllium (mg/L) | Cadmium (mg/L) | Calcium (mg/L) | Chromium (mg/L) |
|--------------|-----------------------------------------------------|-------------|-----------------|-----------------|----------------|---------------|------------------|----------------|----------------|-----------------|
| 5308A01      | CITY of SPOKANE-Grace                               | 8/13/2002   | <0.2            | <0.001          | 0.0023         | <0.10         | <0.0008          | <0.00100       | 26.50          | < 0.01          |
| 5304B02      | CITY of SPOKANE-Hoffman                             | 8/13/2002   | <0.2            | <0.001          | 0.00282        | <0.10         | <0.0008          | <0.00100       | 32.90          | < 0.01          |
| 5313A01      | Spokane Co Water Dist #3, Boone& Lily               | 8/8/2002    | <0.2            | <0.001          | 0.0029         | <0.10         | <0.0008          | <0.00100       | 30.70          | < 0.01          |
| 5323A03      | Spokane Co Water Dist #3, 2nd & Koren               | 8/8/2002    | <0.2            | <0.001          | 0.0042         | <0.10         | <0.0008          | <0.00100       | 48.00          | < 0.01          |
| 5407J02      | Spokane Co Water Dist #3, Knox &                    | 8/8/2002    | <0.2            | <0.001          | 0.0035         | <0.10         | <0.0008          | <0.00100       | 37.90          | < 0.01          |
| 5407Q01      | Spokane Co Water Dist #3, Freeway &                 | 8/8/2002    | <0.2            | <0.001          | 0.0028         | <0.10         | <0.0008          | <0.00100       | 33.80          | < 0.01          |
| 5427L01      | Spokane Co Water Dist #3, 26 <sup>th</sup> &Vercler | 8/8/2002    | <0.2            | <0.001          | 0.0043         | <0.10         | <0.0008          | <0.00100       | 52.50          | < 0.01          |
| 5427N01      | Spokane Co Water Dist #3, Browns Park               | 8/8/2002    | <0.2            | <0.001          | 0.0044         | <0.10         | <0.0008          | <0.00100       | 53.70          | < 0.01          |
| 5429H01      | Spokane Co Water Dist #3, 20 <sup>th</sup> &Balfour | 8/8/2002    | <0.2            | <0.001          | 0.0063         | 0.174         | <0.0008          | <0.00100       | 64.70          | < 0.01          |
| 6303N01      | Spokane Co Water Dist #3, Cherry&Farw               | 8/7/2002    | <0.2            | <0.001          | 0.0028         | <0.10         | <0.0008          | <0.00100       | 42.60          | < 0.01          |
| 6303P01      | Spokane Co Water Dist #3, Freya&Farw                | 8/7/2002    | <0.2            | <0.001          | 0.0053         | <0.10         | <0.0008          | <0.00100       | 39.20          | < 0.01          |
| 6309D01      | Spokane Co Water Dist #3, Helena&Mead               | 8/7/2002    | <0.2            | <0.001          | 0.0028         | <0.10         | <0.0008          | <0.00100       | 34.10          | < 0.01          |
| 6320N02      | Spokane Co Water Dist #3, Steer Inn                 | 8/7/2002    | <0.2            | <0.001          | 0.0032         | <0.10         | <0.0008          | <0.00100       | 29.40          | < 0.01          |
| 6330R02      | Spokane Co Water Dist #3, Lyons&Norm                | 8/7/2002    | <0.2            | <0.001          | 0.0033         | <0.10         | <0.0008          | <0.00100       | 29.60          | < 0.01          |
| 7105D01      | Spokane Co Water Dist #3, Waterview                 | 8/7/2002    | <0.2            | <0.001          | < 0.0010       | <0.10         | <0.0008          | <0.00100       | 60.70          | < 0.01          |
| 7322M01      | Spokane Co Water Dist #3, Riverview,                | 8/7/2002    | <0.2            | <0.001          | 0.0025         | <0.10         | <0.0008          | <0.00100       | 79.80          | < 0.01          |
| 7332L02      | Spokane Co Water Dist #3, Pineriver                 | 8/7/2002    | <0.2            | <0.001          | 0.0042         | <0.10         | <0.0008          | <0.00100       | 57.80          | < 0.01          |
| 8323C01      | Spokane Co Water Dist #3, Chattaroy                 | 8/7/2002    | <0.2            | <0.001          | 0.0035         | <0.10         | <0.0008          | <0.00100       | 49.20          | < 0.01          |

# Ground Water Monitoring Data Report

## Inorganics DOH Compliance Data

### Spokane County Public Works, Water Quality Management Program

Unreviewed Data: Subject to Verification

| WQMP Well ID | WELL NAME                                           | Sample Date | Copper (mg/L) | Fluoride (mg/L) | Iron (mg/L) | Lead (mg/L) | Magnesium (mg/L) | Manganese (mg/L) | Mercury (mg/L) | Nickel (mg/L) |
|--------------|-----------------------------------------------------|-------------|---------------|-----------------|-------------|-------------|------------------|------------------|----------------|---------------|
| 5308A01      | CITY of SPOKANE-Grace                               | 8/13/2002   | <0.0010       | <0.10           | <0.150      | <0.00100    | 8.74             | <0.010           | <0.001         | < 0.04        |
| 5304B02      | CITY of SPOKANE-Hoffman                             | 8/13/2002   | <0.0010       | <0.10           | <0.150      | <0.00100    | 15.2             | <0.010           | <0.001         | < 0.04        |
| 5313A01      | Spokane Co Water Dist #3, Boone & Lily              | 8/8/2002    | 0.0041        | <0.10           | <0.150      | <0.00100    | 12.6             | <0.010           | <0.001         | < 0.04        |
| 5323A03      | Spokane Co Water Dist #3, 2nd & Koren               | 8/8/2002    | 0.0033        | <0.10           | <0.150      | <0.00100    | 16.2             | <0.010           | <0.001         | < 0.04        |
| 5407J02      | Spokane Co Water Dist #3, Knox &                    | 8/8/2002    | <0.0010       | <0.10           | <0.150      | <0.00100    | 17.3             | <0.010           | <0.001         | < 0.04        |
| 5407Q01      | Spokane Co Water Dist #3, Freeway &                 | 8/8/2002    | <0.0010       | <0.10           | <0.150      | <0.00100    | 14.              | <0.010           | <0.001         | < 0.04        |
| 5427L01      | Spokane Co Water Dist #3, 26 <sup>th</sup> &Vercler | 8/8/2002    | 0.0012        | <0.10           | <0.150      | <0.00100    | 16.9             | <0.010           | <0.001         | < 0.04        |
| 5427N01      | Spokane Co Water Dist #3, Browns Park               | 8/8/2002    | 0.0026        | <0.10           | 0.216       | <0.00100    | 17.8             | <0.010           | <0.001         | < 0.04        |
| 5429H01      | Spokane Co Water Dist #3, 20 <sup>th</sup> &Balfour | 8/8/2002    | <0.0010       | 0.11            | <0.150      | <0.00100    | 18.7             | <0.010           | <0.001         | < 0.04        |
| 6303N01      | Spokane Co Water Dist #3, Cherry&Far                | 8/7/2002    | 0.0032        | <0.10           | <0.150      | <0.00100    | 22.2             | <0.010           | <0.001         | < 0.04        |
| 6303P01      | Spokane Co Water Dist #3, Freya&Farw                | 8/7/2002    | <0.0010       | <0.10           | <0.150      | <0.00100    | 15.6             | <0.010           | <0.001         | < 0.04        |
| 6309D01      | Spokane Co Water Dist #3, Helena&Me                 | 8/7/2002    | <0.0010       | <0.10           | <0.150      | <0.00100    | 15.8             | <0.010           | <0.001         | < 0.04        |
| 6320N02      | Spokane Co Water Dist #3, Steer Inn                 | 8/7/2002    | <0.0010       | <0.10           | <0.150      | <0.00100    | 15.7             | <0.010           | <0.001         | < 0.04        |
| 6330R02      | Spokane Co Water Dist #3, Lyons&Norm                | 8/7/2002    | <0.0010       | <0.10           | <0.150      | <0.00100    | 14.6             | <0.010           | <0.001         | < 0.04        |
| 7105D01      | Spokane Co Water Dist #3, Waterview                 | 8/7/2002    | 0.0013        | <0.10           | <0.150      | <0.00100    | 18.6             | <0.010           | <0.001         | < 0.04        |
| 7322M01      | Spokane Co Water Dist #3, Riverview,                | 8/7/2002    | <0.0010       | <0.10           | <0.150      | <0.00100    | 17.4             | <0.010           | <0.001         | < 0.04        |
| 7332L02      | Spokane Co Water Dist #3, Pineriver                 | 8/7/2002    | <0.0010       | 0.18            | <0.150      | <0.00100    | 15.3             | <0.010           | <0.001         | < 0.04        |
| 8323C01      | Spokane Co Water Dist #3, Chattaroy                 | 8/7/2002    | <0.0010       | 0.23            | <0.150      | <0.00100    | 10.8             | 0.167            | <0.001         | < 0.04        |

# Ground Water Monitoring Data Report

## Inorganics DOH Compliance Data

### Spokane County Public Works, Water Quality Management Program

Unreviewed Data: Subject to Verification

| WQMP Well ID | WELL NAME                                           | Sample Date | Selenium (mg/L) | Silicon (mg/L) | Silver (mg/L) | Sodium (mg/L) | Thallium (mg/L) | Zinc (mg/L) |
|--------------|-----------------------------------------------------|-------------|-----------------|----------------|---------------|---------------|-----------------|-------------|
| 5308A01      | CITY of SPOKANE-Grace                               | 8/13/2002   | <0.005          | 10.4           | <0.00100      | 2.98          | <0.0004         | < 0.2000    |
| 5304B02      | CITY of SPOKANE-Hoffman                             | 8/13/2002   | <0.005          | 11.4           | <0.00100      | 4.20          | <0.0004         | < 0.2000    |
| 5313A01      | Spokane Co Water Dist #3, Boone & Lily              | 8/8/2002    | <0.005          | 11.6           | <0.00100      | 3.22          | <0.0004         | < 0.2000    |
| 5323A03      | Spokane Co Water Dist #3, 2nd & Koren               | 8/8/2002    | <0.005          | 15.9           | <0.00100      | 7.91          | <0.0004         | < 0.2000    |
| 5407J02      | Spokane Co Water Dist #3, Knox &                    | 8/8/2002    | <0.005          | 11.2           | <0.00100      | 3.43          | <0.0004         | < 0.2000    |
| 5407Q01      | Spokane Co Water Dist #3, Freeway &                 | 8/8/2002    | <0.005          | 11.5           | <0.00100      | 3.37          | <0.0004         | < 0.2000    |
| 5427L01      | Spokane Co Water Dist #3, 26 <sup>th</sup> &Vercler | 8/8/2002    | <0.005          | 15.2           | <0.00100      | 7.66          | <0.0004         | < 0.2000    |
| 5427N01      | Spokane Co Water Dist #3, Browns Park               | 8/8/2002    | <0.005          | 16.0           | <0.00100      | 7.82          | <0.0004         | < 0.2000    |
| 5429H01      | Spokane Co Water Dist #3, 20 <sup>th</sup> &Balfour | 8/8/2002    | <0.005          | 22.6           | <0.00100      | 11.20         | <0.0004         | < 0.2000    |
| 6303N01      | Spokane Co Water Dist #3, Cherry&Farw               | 8/7/2002    | <0.005          | 13.3           | <0.00100      | 6.68          | <0.0004         | < 0.2000    |
| 6303P01      | Spokane Co Water Dist #3, Freya&Farw                | 8/7/2002    | <0.005          | 14.4           | <0.00100      | 4.23          | <0.0004         | < 0.2000    |
| 6309D01      | Spokane Co Water Dist #3, Helena &                  | 8/7/2002    | <0.005          | 12.6           | <0.00100      | 4.36          | <0.0004         | < 0.2000    |
| 6320N02      | Spokane Co Water Dist #3, Steer Inn                 | 8/7/2002    | <0.005          | 12.3           | <0.00100      | 3.83          | <0.0004         | < 0.2000    |
| 6330R02      | Spokane Co Water Dist #3,Lyons&Norm                 | 8/7/2002    | <0.005          | 12.9           | <0.00100      | 3.34          | <0.0004         | < 0.2000    |
| 7105D01      | Spokane Co Water Dist #3, Waterview                 | 8/7/2002    | <0.005          | 16.0           | <0.00100      | 8.61          | <0.0004         | < 0.2000    |
| 7322M01      | Spokane Co Water Dist #3, Riverview,                | 8/7/2002    | <0.005          | 28.6           | <0.00100      | 6.32          | <0.0004         | < 0.2000    |
| 7332L02      | Spokane Co Water Dist #3, Pineriver                 | 8/7/2002    | <0.005          | 22.5           | <0.00100      | 9.04          | <0.0004         | < 0.2000    |
| 8323C01      | Spokane Co Water Dist #3, Chattaroy                 | 8/7/2002    | <0.005          | 20.2           | <0.00100      | 7.33          | <0.0004         | < 0.2000    |

# Ground Water Monitoring Data Report

## Inorganics DOH Compliance Data

### Spokane County Public Works, Water Quality Management Program

Unreviewed Data: Subject to Verification

| WQMP<br>Well ID | WELL NAME                         | Sample Date | Nitrate-N<br>(mg/L as N) | Arsenic<br>(mg/L) |
|-----------------|-----------------------------------|-------------|--------------------------|-------------------|
| 5322F01         | CITY of SPOKANE-Ray               | 1/29/2002   | 3.53                     |                   |
| 5322F01         | CITY of SPOKANE-Ray               | 4/30/2002   | 3.96                     |                   |
| 5322F01         | CITY of SPOKANE-Ray               | 8/13/2002   | 3.85                     | 0.00443           |
| 5322F01         | CITY of SPOKANE-Ray               | 10/29/2002  | 3.91                     |                   |
| 6331A02         | CITY of SPOKANE-Central           | 8/13/2002   | 1.21                     | 0.00333           |
| 5308A02         | CITY of SPOKANE-Nevada            | 8/13/2002   | 1.01                     |                   |
| 5311G05         | CITY of SPOKANE-Well Electric     | 8/13/2002   | 1.59                     |                   |
| 5311J01         | CITY of SPOKANE-Parkwater         | 8/13/2002   | 1.44                     |                   |
| 5312H01         | Orchard Ave Irrig Dist, Site 1    | 8/8/2002    |                          | 0.0024            |
| 5407C01         | Orchard Ave Irrig Dist, Site 2    | 8/8/2002    |                          | 0.0027            |
| 5405K01         | Pasadena Park Irrig. Dist. Site 2 | 8/8/2002    |                          | 0.0016            |
| 5405D01         | Pasadena Park Irrig. Dist. Site 3 | 8/8/2002    |                          | 0.0054            |
| 5405D01         | Pasadena Park Irrig. Dist. Site 3 | 9/12/2002   |                          | 0.0026            |
| 5406A02         | Pasadena Park Irrig. Dist. Site 4 | 8/8/2002    |                          | 0.0020            |
| 5406J03         | Pasadena Park Irrig. Dist. Site 5 | 8/8/2002    |                          | 0.0016            |

# Ground Water Monitoring Data Report

## Inorganics DOH Compliance Data

### Spokane County Public Works, Water Quality Management Program

Unreviewed Data: Subject to Verification

| WQMP<br>Well ID | WELL NAME                   | Sample Date | Nitrate-N<br>(mg/L as N) | Arsenic<br>(mg/L) |
|-----------------|-----------------------------|-------------|--------------------------|-------------------|
| 5415J01         | VERA WATER & POWER, Well 1  | 8/6/2002    |                          | 0.0019            |
| 5413M01         | VERA WATER & POWER, Well 2  | 8/6/2002    |                          | 0.0028            |
| 5422R01         | VERA WATER & POWER, Well 3  | 8/6/2002    |                          | 0.0012            |
| 5426L01         | VERA WATER & POWER, Well 4  | 8/6/2002    |                          | 0.0043            |
| 5426D01         | VERA WATER & POWER, Well 5  | 8/6/2002    |                          | <0.0010           |
| 5422H02         | VERA WATER & POWER, Well 6  | 8/8/2002    |                          | 0.0014            |
| 5423C01         | VERA WATER & POWER, Well 7  | 8/6/2002    |                          | <0.0010           |
| 5423J01         | VERA WATER & POWER, Well 8  | 8/6/2002    |                          | <0.0010           |
| 5423J02         | VERA WATER & POWER, Well 9  | 8/6/2002    |                          | <0.0010           |
| 5422R02         | VERA WATER & POWER, Well 33 | 8/6/2002    |                          | 0.0010            |

**Appendix D:**  
**Volatile Organic Compound Water Quality Data from Purveyor Wells**  
**for Department of Health compliance**  
**January 2002 through December 2002**

# Ground Water Monitoring Data Report

## DOH Compliance Organics Water Quality

Spokane County Public Works, Water Quality Management Program

Unreviewed Data: Subject to Verification

| WQMP Well ID | WELL NAME                                           | Sample Date | Dichlorodifluoro methane (µg/L) | Chloromethane (µg/L) | Vinyl Chloride (µg/L) | Bromomethane (µg/L) | Chloroethane (µg/L) | Trichlorofluoro methane (µg/L) |
|--------------|-----------------------------------------------------|-------------|---------------------------------|----------------------|-----------------------|---------------------|---------------------|--------------------------------|
| 5405D01      | Pasadena Park Irrig. Dist. Well 3                   | 8/27/2002   | < 0.5                           | < 0.5                | < 0.5                 | < 0.5               | < 0.5               | < 0.5                          |
| 5405K01      | Pasadena Park Irrig. Dist. Well 2                   | 8/27/2002   | < 0.5                           | < 0.5                | < 0.5                 | < 0.5               | < 0.5               | < 0.5                          |
| 5406A02      | Pasadena Park Irrig. Dist. Well 4                   | 8/27/2002   | < 0.5                           | < 0.5                | < 0.5                 | < 0.5               | < 0.5               | < 0.5                          |
| 5406J03      | Pasadena Park Irrig. Dist. Well 5                   | 8/27/2002   | < 0.5                           | < 0.5                | < 0.5                 | < 0.5               | < 0.5               | < 0.5                          |
| 5407Q01      | Spokane Co Water Dist #3, Freeway & Vista           | 12/30/2002  | < 0.5                           | < 0.5                | < 0.5                 | < 0.5               | < 0.5               | < 0.5                          |
| 5427L01      | Spokane Co Water Dist #3, 26 <sup>th</sup> &Vercler | 12/30/2002  | < 0.5                           | < 0.5                | < 0.5                 | < 0.5               | < 0.5               | < 0.5                          |
| 6303N01      | Spokane Co Water Dist #3, Cherry&Farwell            | 12/30/2002  | < 0.5                           | < 0.5                | < 0.5                 | < 0.5               | < 0.5               | < 0.5                          |
| 6330R02      | Spokane Co Water Dist #3, Lyons & Norm              | 12/30/2002  | < 0.5                           | < 0.5                | < 0.5                 | < 0.5               | < 0.5               | < 0.5                          |
| 6331A02      | CITY of SPOKANE-Central                             | 1/29/2002   | < 0.5                           | < 0.5                | < 0.5                 | < 0.5               | < 0.5               | < 0.5                          |

< -Analyte was not detected above the listed detection limit.

B - Analyte was detected in the associated method blank.

J - Estimated value, reported below the routine reporting limit.

P - Values from two tests differed by more than 25%.

X - Coeluted analyte detected above the sample detection limit.

# Ground Water Monitoring Data Report

## DOH Compliance Organics Water Quality

Spokane County Public Works, Water Quality Management Program

Unreviewed Data: Subject to Verification

| WQMP Well ID | WELL NAME                                            | Sample Date | 1,1-Dichloro-ethylene (µg/L) | Methylene Chloride (µg/L) | trans-1,2-Dichloro-ethylene (µg/L) | 1,1-Dichloro-ethane (µg/L) | Chloroform (µg/L) | 1,1,1-Trichloro-ethane (µg/L) |
|--------------|------------------------------------------------------|-------------|------------------------------|---------------------------|------------------------------------|----------------------------|-------------------|-------------------------------|
| 5405D01      | Pasadena Park Irrig. Dist. Well 3                    | 8/27/2002   | < 0.5                        | < 0.5                     | < 0.5                              | < 0.5                      | < 0.5             | < 0.5                         |
| 5405K01      | Pasadena Park Irrig. Dist. Well 2                    | 8/27/2002   | < 0.5                        | < 0.5                     | < 0.5                              | < 0.5                      | < 0.5             | < 0.5                         |
| 5406A02      | Pasadena Park Irrig. Dist. Well 4                    | 8/27/2002   | < 0.5                        | < 0.5                     | < 0.5                              | < 0.5                      | < 0.5             | < 0.5                         |
| 5406J03      | Pasadena Park Irrig. Dist. Well 5                    | 8/27/2002   | < 0.5                        | < 0.5                     | < 0.5                              | < 0.5                      | < 0.5             | < 0.5                         |
| 5407Q01      | Spokane Co Water Dist #3, Freeway & Vista            | 12/30/2002  | < 0.5                        | < 0.5                     | < 0.5                              | < 0.5                      | < 0.5             | < 0.5                         |
| 5427L01      | Spokane Co Water Dist #3, 26 <sup>th</sup> & Vercler | 12/30/2002  | < 0.5                        | < 0.5                     | < 0.5                              | < 0.5                      | 0.762             | < 0.5                         |
| 6303N01      | Spokane Co Water Dist #3, Cherry & Farwell           | 12/30/2002  | < 0.5                        | < 0.5                     | < 0.5                              | < 0.5                      | < 0.5             | < 0.5                         |
| 6330R02      | Spokane Co Water Dist #3, Lyons & Norm               | 12/30/2002  | < 0.5                        | < 0.5                     | < 0.5                              | < 0.5                      | < 0.5             | < 0.5                         |
| 6331A02      | CITY of SPOKANE-Central                              | 1/29/2002   | < 0.5                        | B 0.518                   | < 0.5                              | < 0.5                      | < 0.5             | < 0.5                         |

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J - Estimated value, reported below the routine reporting limit.

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X - Coeluted analyte detected above the sample detection limit.



# Ground Water Monitoring Data Report

## DOH Compliance Organics Water Quality

Spokane County Public Works, Water Quality Management Program

Unreviewed Data: Subject to Verification

| WQMP Well ID | WELL NAME                                            | Sample Date | Carbon Tetrachloride (µg/L) | 1,2-Dichloroethane (µg/L) | Trichloro-ethylene (µg/L) | 1,2-Dichloropropane (µg/L) | Bromodichloro-methane (µg/L) | trans-1, 3 Dichloro-propylene (µg/L) |
|--------------|------------------------------------------------------|-------------|-----------------------------|---------------------------|---------------------------|----------------------------|------------------------------|--------------------------------------|
| 5405D01      | Pasadena Park Irrig. Dist. Well 3                    | 8/27/2002   | < 0.5                       | < 0.5                     | < 0.5                     | < 0.5                      | < 0.5                        | < 0.5                                |
| 5405K01      | Pasadena Park Irrig. Dist. Well 2                    | 8/27/2002   | < 0.5                       | < 0.5                     | < 0.5                     | < 0.5                      | < 0.5                        | < 0.5                                |
| 5406A02      | Pasadena Park Irrig. Dist. Well 4                    | 8/27/2002   | < 0.5                       | < 0.5                     | < 0.5                     | < 0.5                      | < 0.5                        | < 0.5                                |
| 5406J03      | Pasadena Park Irrig. Dist. Well 5                    | 8/27/2002   | < 0.5                       | < 0.5                     | < 0.5                     | < 0.5                      | < 0.5                        | < 0.5                                |
| 5407Q01      | Spokane Co Water Dist #3, Freeway & V                | 12/30/2002  | < 0.5                       | < 0.5                     | < 0.5                     | < 0.5                      | < 0.5                        | < 0.5                                |
| 5427L01      | Spokane Co Water Dist #3, 26 <sup>th</sup> & Vercler | 12/30/2002  | < 0.5                       | < 0.5                     | < 0.5                     | < 0.5                      | < 0.5                        | < 0.5                                |
| 6303N01      | Spokane Co Water Dist #3, Cherry&Far                 | 12/30/2002  | < 0.5                       | < 0.5                     | < 0.5                     | < 0.5                      | < 0.5                        | < 0.5                                |
| 6330R02      | Spokane Co Water Dist #3, Lyons & Nor                | 12/30/2002  | < 0.5                       | < 0.5                     | < 0.5                     | < 0.5                      | < 0.5                        | < 0.5                                |
| 6331A02      | CITY of SPOKANE-Central                              | 1/29/2002   | < 0.5                       | < 0.5                     | < 0.5                     | < 0.5                      | < 0.5                        | < 0.5                                |

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B - Analyte was detected in the associated method blank.

J - Estimated value, reported below the routine reporting limit.

P - Values from two tests differed by more than 25%.

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# Ground Water Monitoring Data Report

## DOH Compliance Organics Water Quality

Spokane County Public Works, Water Quality Management Program

Unreviewed Data: Subject to Verification

| WQMP Well ID | WELL NAME                                          | Sample Date | cis-1, 3-Dichloro-propylene (µg/L) | 1,1,2-Trichloro ethane (µg/L) | 1,1,2,2-Tetrachloro -ethane (µg/L) | Dibromochloro methane (µg/L) | Chlorobenzene (µg/L) | Bromoform (µg/L) |
|--------------|----------------------------------------------------|-------------|------------------------------------|-------------------------------|------------------------------------|------------------------------|----------------------|------------------|
| 5405D01      | Pasadena Park Irrig. Dist. Well 3                  | 8/27/2002   | < 0.5                              | < 0.5                         | < 0.5                              | < 0.5                        | < 0.5                | < 0.5            |
| 5405K01      | Pasadena Park Irrig. Dist. Well 2                  | 8/27/2002   | < 0.5                              | < 0.5                         | < 0.5                              | < 0.5                        | < 0.5                | < 0.5            |
| 5406A02      | Pasadena Park Irrig. Dist. Well 4                  | 8/27/2002   | < 0.5                              | < 0.5                         | < 0.5                              | < 0.5                        | < 0.5                | < 0.5            |
| 5406J03      | Pasadena Park Irrig. Dist. Well 5                  | 8/27/2002   | < 0.5                              | < 0.5                         | < 0.5                              | < 0.5                        | < 0.5                | < 0.5            |
| 5407Q01      | Spokane Co Water Dist #3, Freeway &                | 12/30/2002  | < 0.5                              | < 0.5                         | < 0.5                              | < 0.5                        | < 0.5                | < 0.5            |
| 5427L01      | Spokane Co Water Dist #3, 26 <sup>th</sup> & Vercl | 12/30/2002  | < 0.5                              | < 0.5                         | < 0.5                              | < 0.5                        | < 0.5                | < 0.5            |
| 6303N01      | Spokane Co Water Dist #3, Cherry&Far               | 12/30/2002  | < 0.5                              | < 0.5                         | < 0.5                              | < 0.5                        | < 0.5                | < 0.5            |
| 6330R02      | Spokane Co Water Dist #3, Lyons&Nor                | 12/30/2002  | < 0.5                              | < 0.5                         | < 0.5                              | < 0.5                        | < 0.5                | < 0.5            |
| 6331A02      | CITY of SPOKANE-Central                            | 1/29/2002   | < 0.5                              | < 0.5                         | < 0.5                              | < 0.5                        | < 0.5                | < 0.5            |

< -Analyte was not detected above the listed detection limit.

B - Analyte was detected in the associated method blank.

J - Estimated value, reported below the routine reporting limit.

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# Ground Water Monitoring Data Report

## DOH Compliance Organics Water Quality

### Spokane County Public Works, Water Quality Management Program

Unreviewed Data: Subject to Verification

| WQMP<br>Well ID | WELL NAME                                           | Sample Date | Tetrachloro-<br>ethylene (µg/L) | 1,3-Dichloro<br>benzene (µg/L) | 1,4-Dichloro<br>benzene (µg/L) | 1,2-Dichloro<br>benzene (µg/L) |
|-----------------|-----------------------------------------------------|-------------|---------------------------------|--------------------------------|--------------------------------|--------------------------------|
| 5405D01         | Pasadena Park Irrig. Dist. Well 3                   | 8/27/2002   | < 0.5                           | < 0.5                          | < 0.5                          | < 0.5                          |
| 5405K01         | Pasadena Park Irrig. Dist. Well 2                   | 8/27/2002   | < 0.5                           | < 0.5                          | < 0.5                          | < 0.5                          |
| 5406A02         | Pasadena Park Irrig. Dist. Well 4                   | 8/27/2002   | < 0.5                           | < 0.5                          | < 0.5                          | < 0.5                          |
| 5406J03         | Pasadena Park Irrig. Dist. Well 5                   | 8/27/2002   | < 0.5                           | < 0.5                          | < 0.5                          | < 0.5                          |
| 5407Q01         | Spokane Co Water Dist #3, Freeway &                 | 12/30/2002  | < 0.5                           | < 0.5                          | < 0.5                          | < 0.5                          |
| 5427L01         | Spokane Co Water Dist #3, 26 <sup>th</sup> &Vercler | 12/30/2002  | < 0.5                           | < 0.5                          | < 0.5                          | < 0.5                          |
| 6303N01         | Spokane Co Water Dist #3, Cherry & Farwell          | 12/30/2002  | < 0.5                           | < 0.5                          | < 0.5                          | < 0.5                          |
| 6330R02         | Spokane Co Water Dist #3, Lyons & Norm              | 12/30/2002  | < 0.5                           | < 0.5                          | < 0.5                          | < 0.5                          |
| 6331A02         | CITY of SPOKANE-Central                             | 1/29/2002   | < 0.5                           | < 0.5                          | < 0.5                          | < 0.5                          |

< -Analyte was not detected above the listed detection limit.

B - Analyte was detected in the associated method blank.

J - Estimated value, reported below the routine reporting limit.

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