Hydrologic and Biologic Data for the Water-Quality Assessment in Relation to Rio Grande Silvery Minnow Habitats, Middle Rio Grande, New Mexico, 2002-2003

U.S. DEPARTMENT OF THE INTERIOR
U.S. FISH AND WILDLIFE SERVICE
New Mexico Ecological Services Field Office

Prepared in cooperation with the
MIDDLE RIO GRANDE ENDANGERED SPECIES ACT COLLABORATIVE PROGRAM
and the NEW MEXICO INTERSTATE STREAM COMMISSION

July 2004 (DRAFT)

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By Cynthia G. Abeyta and Joel D. Lusk

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For additional information contact to:

Cynthia G. Abeyta or Joel D. Lusk
U.S. Fish and Wildlife Service
New Mexico Ecological Services Field Office
2105 Osuna Rd. NE
Albuquerque, NM 87113

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CONVERSION FACTORS AND VERTICAL DATUM

Multiply	By	To obtain
inch (in)	25.40	millimeter
foot (ft)	0.3048	meter
mile (mi)	1.609	kilometer
acre	4,047	square meter
quart	0.9464	liter
gallon	3.785	liter
foot per mile	0.1894	meter per kilometer
ounce	28.35	gram

Temperature in degrees Celsius (^{o}C) may be converted to degrees Fahrenheit (^{o}F) as follows:

$$^{o}F=(1.8 \times {}^{o}C) + 32$$

Sea level: In this report, “sea level” refers to the National Geodetic Vertical Datum of 1929—a geodetic datum derived from a general adjustment of the first-order level nets of the United States and Canada, formerly called Sea Level Datum of 1929.

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ABSTRACT

Hydrologic and biologic data for the assessment of water-quality in relation to Rio Grande silvery minnow habitats within the Middle Rio Grande, New Mexico, were collected by the U.S. Fish and Wildlife Service in cooperation with the Middle Rio Grande Endangered Species Act Collaborative Program and the New Mexico Interstate Stream Commission. The Rio Grande silvery minnow, federally listed as endangered in 1994, currently occupies about 5 percent of its known historic range. Water-quality degradation has been identified as one of the factors that has contributed to the decline of this fish.

Prior to the collection of new data, a comprehensive literature search of historical water-quality investigations relevant to this assessment was conducted. Information obtained through the review of more than 80 documents retrieved through the historical search was utilized in the planning of this water-quality assessment.

During 2002 through 2003, new hydrologic and biologic data were collected at (1) eleven sites in the Rio Grande, (2) two waste-water treatment plant out falls, and (3) one irrigation return drain/riverside drain. Surface-water, sediment, and fish samples were collected at each of these sites for chemical analysis; live fish were also collected and assessed for health.

Data collection activities are divided into two elements associated with habitats of the Rio Grande silvery minnow: macro-habitat and meso-habitat. Hydrologic data and biologic data were collected within both elements. Hydrologic data include physical and chemical properties of surface water and sediment. Biologic data include population, chemical accumulation, and health properties of fish.

Data collection activities were proposed for 3 years, however, funding was provided for 1 year of data collection. Data herein represent the year of the data collection effort. Interpretation of data collected is not included in this report; the first year product requirement is a data report. Three years of data collection is recommended in order to conduct representative statistical analyses for interpretation of results.

INTRODUCTION

In 1994, the Rio Grande silvery minnow (*Hybognathus aramus*) was listed as endangered by the U.S. Fish and Wildlife Service (Service) (U.S. Fish and Wildlife Service, 1994). In the past, the Rio Grande silvery minnow (silvery minnow) was found in over 3,000 miles of river channel including the Rio Grande from Española, New Mexico to the Gulf of

Mexico and the Pecos River from Santa Rosa, New Mexico downstream to its confluence with the Rio Grande in Texas (fig. 1). The silvery minnow was the most abundant and widespread fish in the Rio Grande and Pecos River. Currently, the silvery minnow occupies about 5 percent (170 miles) of its known historic range and is found only in the Rio Grande downstream of Cochiti Dam to the headwaters of Elephant Butte Reservoir. This region, referred to as the Middle Rio Grande, is located within the Middle Rio Grande Basin, New Mexico (fig. 2). The silvery minnow is now one of the rarest fishes in the Rio Grande.

In July 1999, the Service released the "*Rio Grande Silvery Minnow Recovery Plan*" (U.S. Fish and Wildlife Service, 1999). This planning document (Recovery Plan) delineates reasonable actions believed to be required to recover and/or protect the silvery minnow. The Recovery Plan was prepared with the assistance of a recovery team, contractors, State agencies, and other affected and interested parties. Goals of the Recovery Plan are to: 1) stabilize and enhance silvery minnow populations and its habitat within the middle Rio Grande valley; and 2) reestablish the silvery minnow in at least three other areas of its historic habitat. The Recovery Plan lists several factors that may contribute to the decline of the silvery minnow. These factors include one or more of the following:

1. Modification of stream discharge patterns and channel desiccation (drying) by impoundments;
2. Water diversion;
3. Stream channelization;
4. Competition and predation by introduced non-native species; and
5. Water-quality degradation

With the exception of water-quality degradation, each of the factors listed in the Recovery Plan have been or are being studied as they relate to the silvery minnow. In 2002, the Service, in cooperation with the Middle Rio Grande Endangered Species Act Collaborative Program and the New Mexico Interstate Stream Commission, implemented a water-quality assessment to provide information on the nature, extent and possible role of water-quality degradation in the decline of the silvery minnow and to increase the knowledge of the ecological needs of the silvery minnow. The Service also worked cooperatively with the Pueblo of Isleta in assessing water quality at a site on Isleta Reservation. The assessment was designed as a 4-year study, including 3 years of data collection and the 4th year for data analysis and interpretation.

Purpose and Scope

This report presents historical information and new data collected by the Service within the Middle Rio Grande during 2002 and 2003. This compilation of information and data will result in a better understanding of the hydrology, biology, and water-quality within the Middle Rio Grande.

A comprehensive literature search of historical water-quality reports relevant to this assessment produced over 80 documented studies. These documents were reviewed and pertinent information was used in designing the assessment. In this report, information compiled through the literature review process are considered secondary to the collection of first-order water-quality data to define the current baseline water-quality characteristics of the minnow habitats and the Middle Rio Grande.

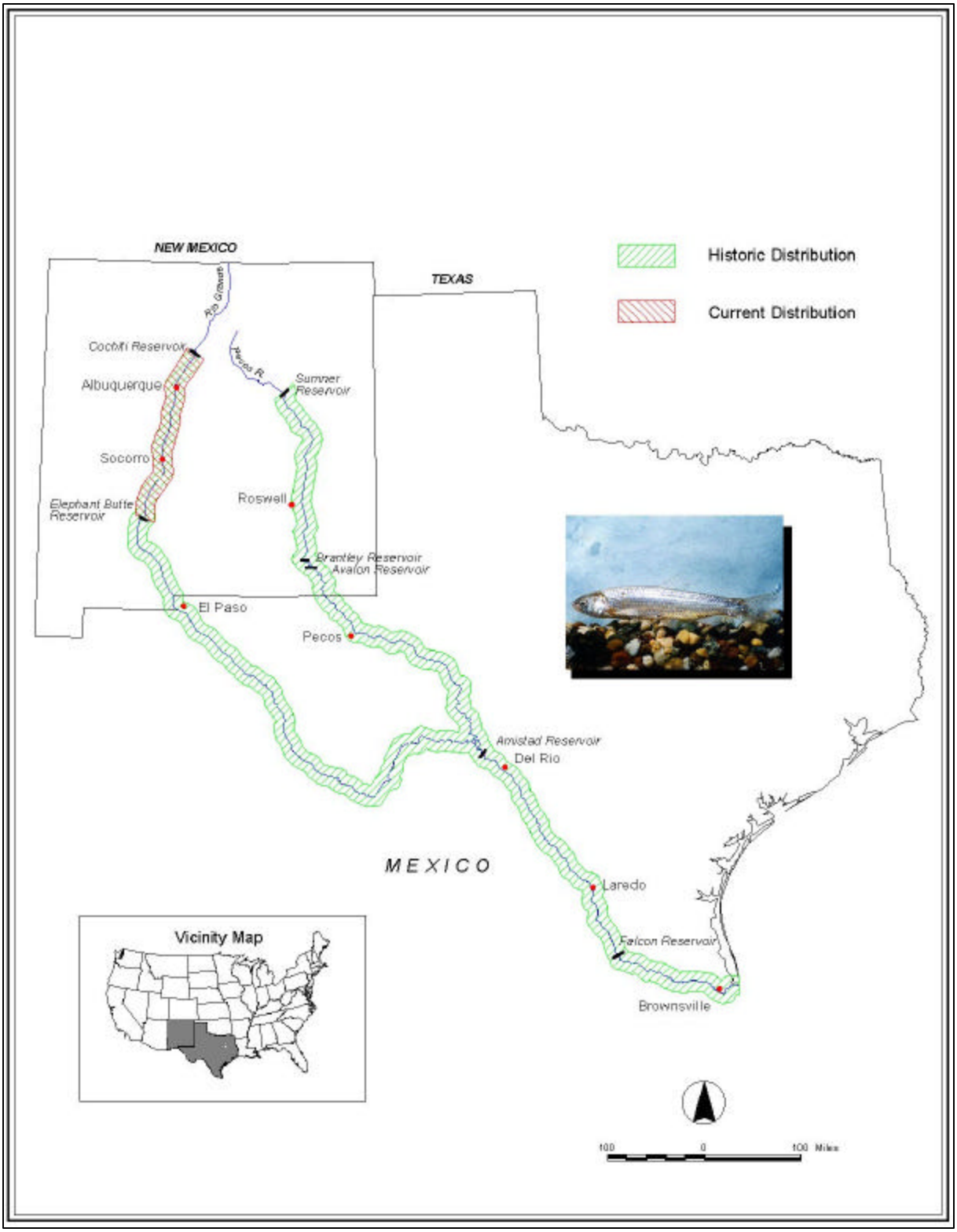

Figure 1.—Historic and current distribution of the Rio Grande silvery minnow.

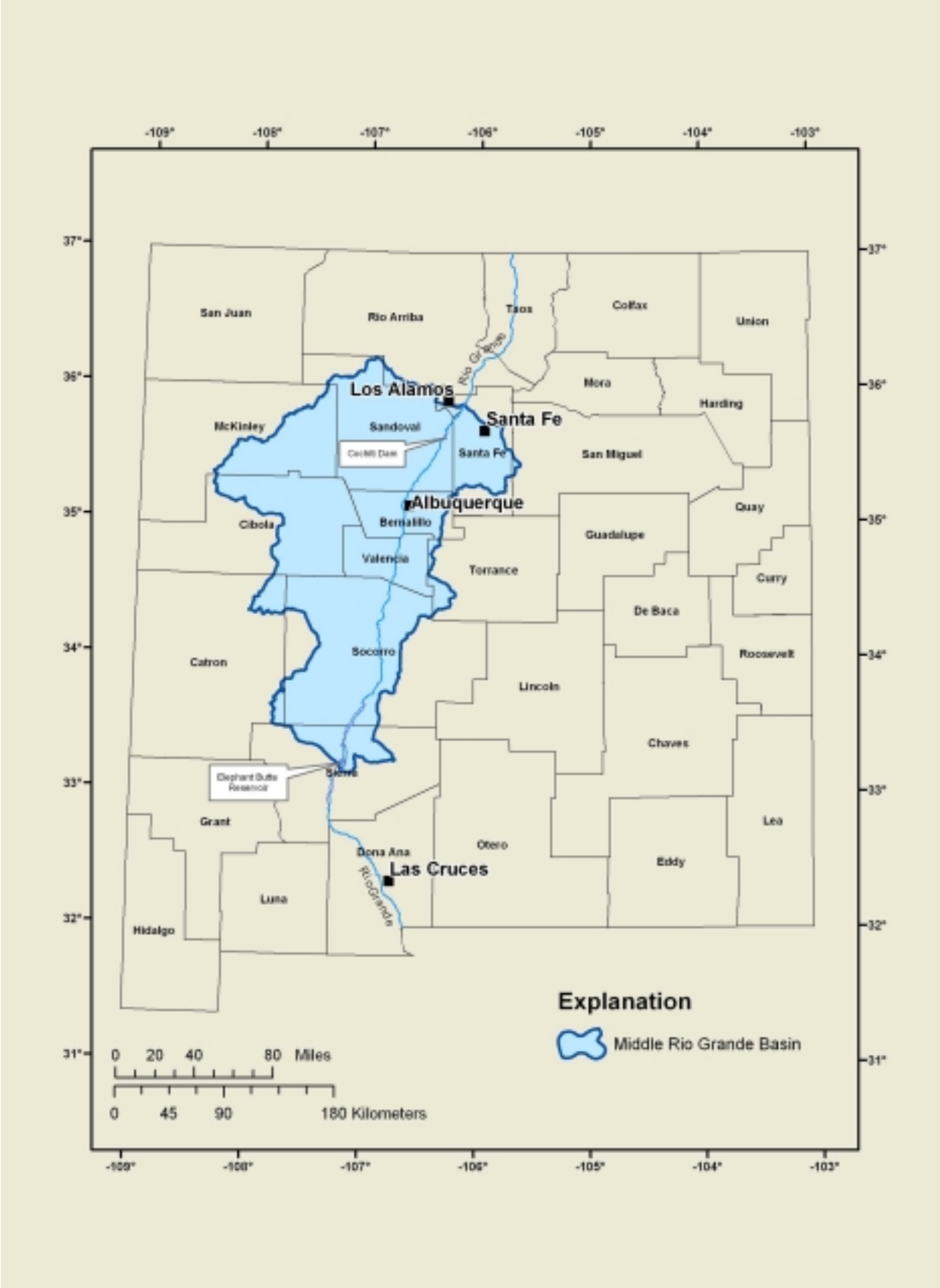

Figure 2.—Location of the Middle Rio Grande Basin.

New data presented in this report were collected at 11 sites within the Rio Grande main stem and at 3 sites within adjacent outfalls to the Rio Grande (fig. 3, table 1). Data were collected in periods of low flow in the Rio Grande, during the irrigation season July through September, and the non-irrigation season October through February; Pueblo irrigation continues through November. Data were collected in accordance with U.S. Environmental Protection Agency, U.S. Geological Survey, and Service guidelines and specifications to maintain a consistent data collection program.

Table 1.--Water-quality monitoring sites (see fig. 3 for locations).

Map number	Site name	Latitude/Longitude	Times sampled
1	Rio Rancho Waste Water Treatment Plant Outfall #2	351535N 1064040W	2
2	Rio Grande at La Orilla	350921N 1064014W	4
3	Rio Grande at Barelas	350446N 10646231W	2
4	Albuquerque Waste Water Treatment Plant Outfall	350103N 1064016W	2
5	Rio Grande at Los Padillas	345747N 1064113W	4
6	Rio Grande at Isleta below Railroad Bridge	350103N 1064040W	2
7	Rio Grande at Los Lunas	344907N 1064243W	4
8	Rio Grande at Abeytas	342701N 1064809W	2
9	Lower San Juan Irrigation Drain	342214N 1065026W	2
10	Rio Grande at La Joya	341846N 10651141W	4
11	Rio Grande at Lemitar	341051N 1065302W	2
12	Rio Grande below Arroyo del Tajo	340227N 1065154W	4
13	Rio Grande at San Pedro	335427N 1065109W	2
14	Rio Grande at North Boundary Bosque del Apache	335234N 1065058W	2

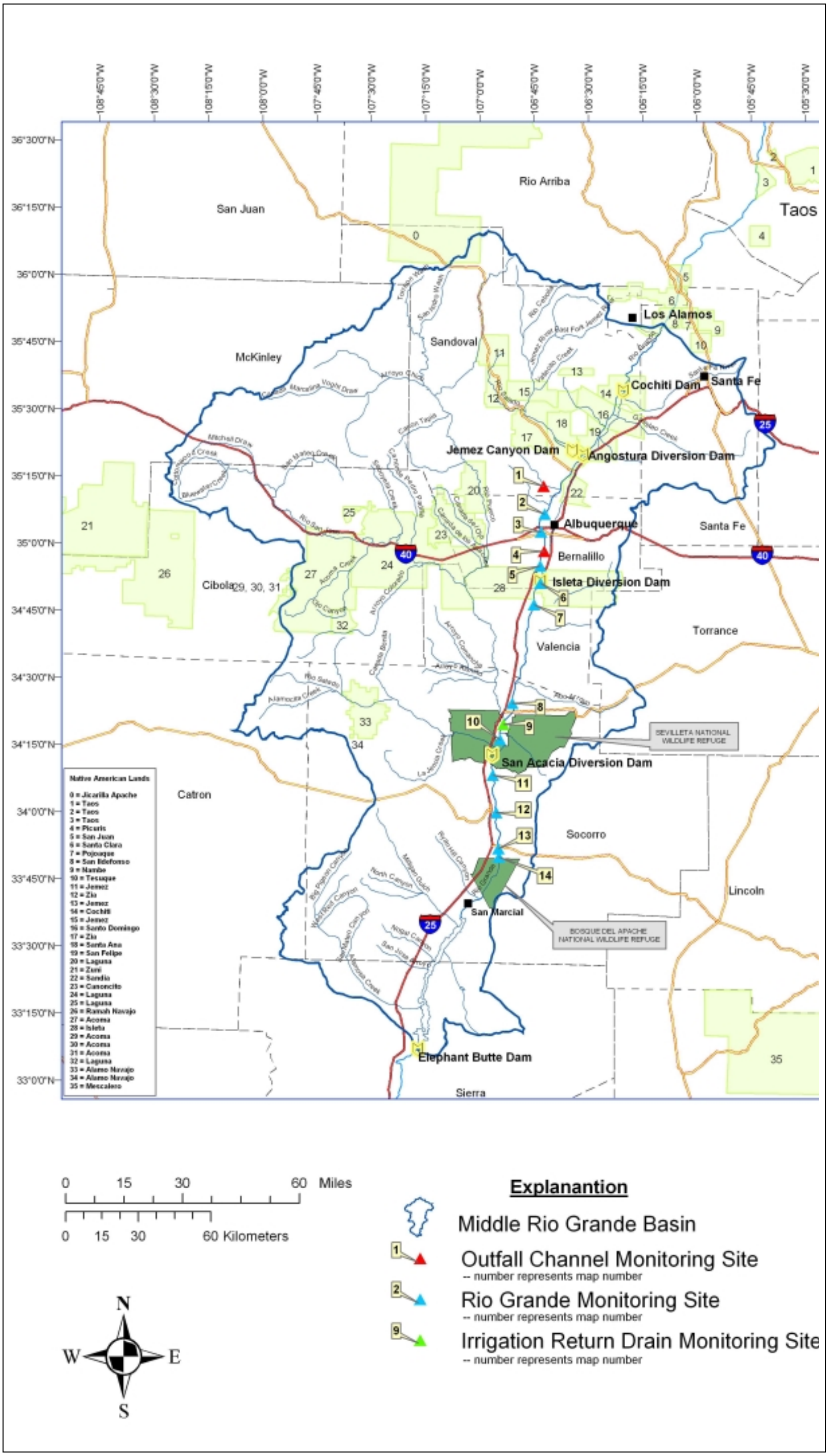

Figure 3.—Location of sampling sites within the Middle Rio Grande, New Mexico (see table 1for map number).

Data collection during 2002 and 2003, was conducted concurrently with another Service and Middle Rio Grande Endangered Species Act Collaborative Program cooperative study entitled "*Habitat Preference of Rio Grande Silvery Minnow in Relation to Fluvial Geomorphology, Flow Regime, and Pollution, Middle Rio Grande Valley, New Mexico*" (Hoagstrom, C.W., and Tashjian, P.L., 2001). The two studies worked together to select sampling locations, schedule sampling events, and collect hydrologic and biologic data. Staff from the habitat study provided fish collection, identification and silvery minnow habitat characterization. They also collected fish samples, and provided seine haul and stream discharge data for the water-quality study.

Description of the Middle Rio Grande

The Middle Rio Grande, New Mexico (Middle Rio Grande), defined as the Rio Grande from Cochiti Dam to the headwaters of Elephant Butte Reservoir, is located within the Middle Rio Grande Basin (Basin) in central New Mexico (fig. 2). The Basin is located within the north-trending Rio Grande Rift that extends from Chihuahua, Mexico, through New Mexico to southern Colorado (fig 1). Within the Basin, the Rio Grande Rift consists of a series of sediment filled half grabens, or closed basins. The Rio Grande follows the course of the rift system through New Mexico where it flows slightly west of south (fig. 2) and bisects a vast riparian forest area commonly referred to as bosque. The Middle Rio Grande has a drainage area of approximately 14,500 square miles (Byrd, et. al., 2003).

Population growth in the Basin increased from approximately 315,000 in 1970 to about 690,000 in 2000 (Bartolino and Cole, 2002, table 2.2; U.S. Bureau of Census, 2001). The human population in the Middle Rio Grande in 2000 represents approximately 40 percent of the population of New Mexico (U.S. Bureau of Census, 2001). The primary source of drinking-water for the population in the Middle Rio Grande is provided from ground-water.

Major Indian reservations, towns and cities adjacent to the Rio Grande include: Cochiti, Santo Domingo, San Felipe, Santa Ana, Sandia and Isleta Indian Reservations; towns of Bernalillo, Los Lunas, Belen, and Socorro; cities of Albuquerque and Rio Rancho (fig. 3); and numerous smaller towns and villages.

The economy of the communities of the Middle Rio Grande primarily consists of business, industry, livestock grazing and subsistence farming. The primary source of water to support business and industry is ground water and for grazing and agriculture, the Rio Grande. Water for irrigation and stock watering is diverted from the Rio Grande; the success of these activities is dependent on adequate quantity and acceptable quality of water from this source.

This study focuses on the main stem of the Rio Grande because of its designation as habitat for the silvery minnow. Due to the potential impact on surface-water quality, the study also focuses on treated effluent from waste-water treatment plant outfalls and irrigation return drain/riverside drains that release to the Rio Grande.

Sample Site Selection

During 2002-2003, 14 sampling sites within the Middle Rio Grande were identified for collection of hydrologic and biologic data for the assessment of water

quality (table 1, fig. 3). Sites selected represent (1) macro- and meso-habitats throughout the silvery minnow occupied range, (2) physio-chemical divisions, and (3) geographical features.

Macro-habitat includes the large-scale physical channel characteristics; meso-habitat includes distinct aquatic habitat types such as side channels, backwaters, embayments, etc. within a macro-habitat (Hoagstrom, C.W., and Tashjian, P.L., 2001). The macro-habitats were randomly selected from over 1,500 existing U.S. Bureau of Reclamation (BOR) surveyed observation sites within each of two geomorphic reaches between the southern border of Sandia Pueblo and the Elephant Butte delta at San Marcial (fig. 3). The BOR sites were used in order to compare preexisting data with new data collected in each macro-habitat.

Physiochemical divisions include areas that may affect water-quality through human activities adjacent to the Rio Grande. These activities include waste water treatment plants and irrigation return drains/riverside drains that discharge to the Rio Grande.

Geographical features include areas of arroyo confluence with the Rio Grande and areas within the same geomorphic reach but different channel widths (wide vs. narrow).

Eleven of the sites are located within the main stem of the Rio Grande; two sites are located within waste water treatment plant outfalls; and one site is located within an irrigation drain return.

Data Collection Activities

Data collection activities were conducted during low flow irrigation and non-irrigation seasons, July through October, and November through February, respectively, where flows were less than 750-cubic feet per second (cfs). The emphasis on low flow is due to (1) data collection techniques and methods for the water-quality and habitat preference studies are most effective in relatively low depths (less than 3.0 feet) and velocities (less than 3.0 feet per second) and (2) the availability of habitat for silvery minnow under low-flow conditions is a primary concern (U.S. Fish and Wildlife Service, 1999).

Data collection activities were preferably conducted under stable flow conditions. Stable conditions are defined as those having flows with limited fluctuations, since stable flows are more likely to represent a condition effective of the flow being studied. However, logistical constrains, such as weather, reduced the flexibility of the sampling schedule and at times collection of data under fluctuating flows was unavoidable.

Data collection activities included: characterization of water-quality conditions in an embayment habitat; characterization of water-quality conditions in meso-habitats during randomized seine hauls; and, characterization of water-quality conditions in macro-habitats along transects (fig. 4). Data collection tasks are discussed in the following sections of this report.

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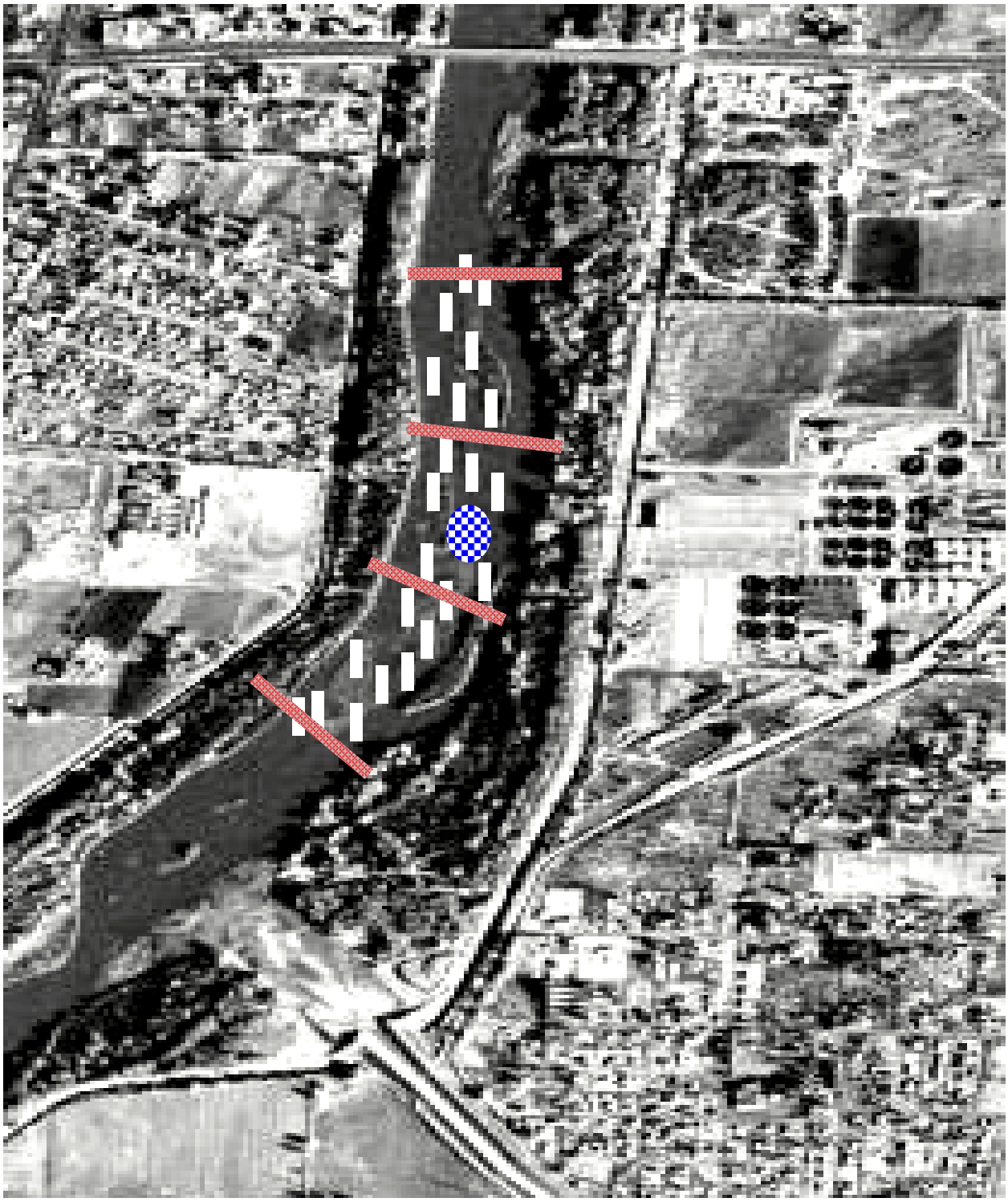

Figure 4.—Example layout of embayment, seine hauls, and transects. (white boxes represent seine hauls in meso-habitats; red, cross-hatched lines represent transects across macro-habitats; and, checkered-blue oval represents the embayment habitat sampled primarily for water and sediment).

Antonia Nevarez, Erin Gleeson, and staff from the New Mexico Ecological Services Field Office. Additionally, special acknowledgement goes to the Pueblo of Isleta for their cooperation on this project and for assistance received from John Sorrell, Cody Walker, and Dave Pierce.

REVIEW OF MIDDLE RIO GRANDE WATER-QUALITY REPORTS

A comprehensive information search and review of existing water-quality investigations relevant to this water-quality assessment was conducted upon the initiation, and through the duration, of the study. Searches were made through the world wide web and of published literature for data that involved water quality and the Rio Grande. From this search, 86 reports were identified that focused on the Middle Rio Grande (table 2). Most reports, 62 out of 86, involved investigation of the chemistry of the water column. Most notable of these documents are: Moore and Anderholm (2002); U.S. Geological Survey annual New Mexico Water Resources Data reports (Ortiz et al., 2000; 2001; et seq.); New Mexico Environment Department annual reports (Pierce 1988, 1992, 1996, etc.); spatial and temporal trends reported by Passell et al. (2004); and quantification of salinization in the Rio Grande Valley reported by Mills (2003).

Forty-two documents reported on climate, weather, or environmental setting, and 40 presented hydrologic or geomorphic data. All U.S. Geological Survey reports contained hydrologic data; geomorphic data was found in only 6 reports. The most comprehensive geomorphic studies were reported by Mussetter Engineering, Inc. (2002) and Graf (1994).

Few of the reviewed reports presented information that quantified the biological response to water quality conditions in the Middle Rio Grande. The majority of the biologic studies reported bioaccumulation in fish and invertebrate tissue, with only the report by Roy et al. (1992) containing tissue data on Rio Grande silvery minnow. Fifteen studies included both fish surveys along with measures of water quality. Only one study by the U.S. Geological Survey (Carter 1997; Levings et al. 1998), quantified the health of the fish community in relation to measured water-quality conditions. Schmitt et al. (1999) characterized the health of the fish community throughout the Rio Grande basin, but did not include any sampling locations in the middle Rio Grande. Buhl (2000a, 2000b) presented the only data involving the direct effects of water-quality conditions on Rio Grande silvery minnow.

No published studies have been conducted on algae or aquatic productivity of the Rio Grande that likely play a role in food availability and food quality important for the Rio Grande silvery minnow, although recently, surveys have been initiated.

In summary, of the 86 reports reviewed, few have measured water-quality conditions and integrated these measures with observations of the health of the fish community, the health of the Rio Grande silvery minnow, or the health and integrity of the aquatic resources. Integrated studies that provide sensitive tracking of biologic conditions that respond to physical, chemical, and biological stressors will be necessary in order to link water-quality impairment with changes in the Middle Rio Grande and with the health of Rio Grande silvery minnow.

QUALITY ASSURANCE/QUALITY CONTROL AND REVIEW OF ANALYTICAL DATA

The objective of QA/QC is to monitor the overall sampling program and all environmentally related data collection and analysis to ensure that all data produced are suitable for evaluation and interpretation of surface-water quality within the Middle Rio Grande. A field and laboratory QA/QC program was developed to ensure and validate that inconsistencies in protocols did not introduce errors into the data-collection process.

Field QC checks were used to (1) identify inconsistencies and (2) minimize the potential for interference or introduction of non-environmental contaminants during sample collection, storage, transport, and/or equipment decontamination. Applicable QA/QC samples were collected and analyzed during all field sampling activities. The following protocols were followed for collection of QA/QC field samples that were submitted to the analytical laboratory:

Equipment blanks—One was collected per every 10 sampling events and analyzed for the same parameters as the surface-water and soil environmental samples. These samples were collected by pouring ASTM Type II reagent water through the sampling equipment that would come in contact with the sample. The reagent water is then poured into the appropriate sample bottles. Equipment blanks for soluble metals were run through a filtering apparatus in the field.

Field duplicates—One was collected per every 10 sampling events and analyzed for the same parameters as the surface-water and soil environmental samples. Each field-duplicate bottle was filled immediately after its respective environmental sample bottle was filled. Collection procedures for field duplicates were identical to those for the environmental samples.

Matrix spikes and matrix-spike duplicates (MS/MSD)—One pair was collected per every 10 sampling events and analyzed for the same parameters as the surface-water and soil environmental samples. The MS/MSD sample bottles were filled immediately after their respective field-duplicate sample bottles were filled. Collection procedures for MS/MSD sample bottles were identical to those for the environmental samples. The filled and preserved MS/MSD sample bottles were sent to the laboratory where they were spiked with known concentrations of analytes. Each MS/MSD pair was analyzed for the same parameters as its respective environmental sample.

The accuracy of laboratory QA/QC program analytical data was evaluated by the following:

Standard methods that, whenever possible, are recognized and considered as standard by the scientific community. EPA methods generally were used.

Calibration standards obtained from the National Institute of Standards and Technology EPA repository or other reliable commercial sources.

Audit samples evaluating laboratory performance on EPA Water Supply and Water Pollution samples to maintain EPOA certification.

Surrogate spikes for volatile and semivolatile organic compounds where recovery of organic surrogate analytes

should be within three standard deviations of the laboratory-established average recovery of the surrogate analyte.

Known laboratory control samples where recovery of analytes should be within three standard deviations of the laboratory-established average recovery of the analyte. For multiple-analyte samples, 80 percent of the analytes should be within control limits. In-house control limits were used.

Recovery of analytes where recovery should be within three standard deviations of the laboratory-established average recovery of the analyte. For multiple-analyte methods, 95 percent of the analytes should be within control limits.

Method blanks, also known as reagent, analytical, or preparation blanks, are analyzed to assess the level of background interference or contamination which exists in the analytical system and which might lead to the reporting of elevated concentration levels or false positive data. The concentration of the target analyte in the method blank should be below the reporting limit for that analyte, however, some common laboratory solvents (methylene chloride, acetone, 2-butanone, toluene, and bis (2-ethylhexyl)phthalate) and metals are difficult to eliminate to the parts-per-billion level. Therefore, criteria for determining blank acceptability must be based on consideration of the analytical techniques used, analytes reported, and reporting limits required.

The precision of analytical data was evaluated by submitting environmental duplicate, MS, and MSD samples. Analytical results for these samples should be within established control limits as defined in the laboratory analytical report.

Completeness was evaluated by dividing the number of valid data obtained by the total number of samples analyzed and multiplying by 100 to obtain the percentage of analytical data associated with acceptable QC criteria. If 95 percent or greater of the analytical data were in control, then the sample batch was determined to be in control.

Representativeness of field data was evaluated by (1) use of standard methods of measurement and sample collection: (2) collection of sufficient size or amount of sample; (3) documentation of reasons for use of nonstandard techniques; and (4) adherence to chain-of-custody procedures. Representativeness of laboratory analytical data was evaluated by (1) use of preservation techniques to minimize sample degradation that may occur between sample collection and sample analysis; (2) prescribed holding times; (3) field and laboratory blank analyses to determine whether samples have be contaminated; and (4) use of matrix spikes to determine the presence of matrix effects.

Comparability of field and laboratory measurements was evaluated by using standard methods of measurement and analysis of consistent reporting units. Comparability in the laboratory also was evaluated by traceable materials for calibration and QC.

Upon completion of analyses and review of analytical and QA/QC results, the laboratory submitted laboratory analytical results reports to the Service. The data were reviewed, validated, and qualified in QA/QC Data Validation Reports. Data Validation Reports are available to the public at the U.S. Fish and Wildlife Service, New Mexico Ecological Services Field Office, Albuquerque, New Mexico.

The QA/QC analytical data collected during sampling within the Middle Rio Grande are not presented in this report; they may be reviewed at the location mentioned above. Environmental-sample data collected during 2002 and 2003, from the Middle Rio Grande are presented in the following sections of this report. Environmental-sample data that did not meet QA/QC criteria are valid data and are still reported in the data table but are qualified. Qualified data are flagged data that may have been noncompliant but are usable.

All field data measurements that were recorded on field sheets, including field measurements, transect measurements, and seine haul measurements, were entered into electronic spreadsheets. The QA/QC procedure for these data included 100 percent review and verification. Original field sheets may be reviewed at the location mentioned above. These data and associated graphs are presented in the following sections of this report.

HYDROLOGIC DATA

Hydrologic data were compiled from (1) water and sediment samples collected within, and physical properties measurements made in, surface-water embayments and outfall channels, (2) physical properties measurements made along cross-sectional surface-water channel transects, and (3) physical properties measurements made in surface water at random and discretionary seine haul locations. A total of 38 sampling events occurred at 14 sites within the Middle Rio Grande; 5 sites were sampled 4 times; 9 sites were sampled twice (table 1, fig. 3). These data are presented in the following sections.

Surface-water and Sediment Chemical Data

Thirty-eight water and sediment samples representative of water and sediment in Rio Grande and irrigation drain embayments and outfall channels were collected from 11 Rio Grande sites, one City of Albuquerque Waste Water Plant Outfall (Albuquerque WWTP Outfall) site, one Rio Rancho Waste Water Treatment Plant Outfall (Rio Rancho WWTP Outfall), and one irrigation return drain/riverside drain. Water samples were analyzed for physical properties (water temperature, pH, specific conductance, dissolved oxygen, and turbidity), alkalinity, total dissolved solids, total suspended solids, hardness, common anions, total cyanide, perchlorate, nutrients, trace elements, total mercury, biological oxygen demand, chemical oxygen demand, volatile organic compounds, pesticides, herbicides, explosives, and pharmaceuticals. Sediment samples were analyzed for common anions, total cyanide, nutrients, trace elements, total mercury, total organic carbon, volatile organic compounds, polyaromatic hydrocarbons, total petroleum hydrocarbons, moisture, and grain size. Analytical methods used to analyze the surface-water and sediment samples are presented in table 3.

Upon arrival at each sampling site, the embayment location was identified by the lead field fishery biologist. Physical properties measurements (water temperature, pH, specific conductance, dissolved oxygen, and occasionally turbidity) were made in the embayment prior to collecting water and sediment samples; all field meters used to measure physical properties were calibrated in the field prior to making the measurements. Then, width- and depth-integrated surface-water samples were collected from the

embayment using Teflon sampling equipment; the water samples were composited into a five-gallon sample container (fig. 5). Next, width-integrated sediment samples were collected in the embayment by horizontally dragging a 1-3/4 inch diameter sampling tube through the upper 1 inch of the embayment bottom sediment. Samples were collected in undisturbed areas within the embayment. The sediment samples were composited in a 1-gallon container.

Figure 5.—Collection of a surface-water sample in a Rio Grande embayment.

Water samples collected in the Albuquerque and Rio Rancho WWTP Outfall channels were composites of the well mixed effluent. Sediment samples from the Albuquerque WWTP Outfall channel were collected where sediment was available and then composited. Sediment samples collected from Rio Rancho WWTP Outfall channel were width integrated composites.

Water and sediment composite samples were processed in the field immediately after collection. The composite water sample was emptied into a churn splitter. Sample bottles for particular water analytes were filled and preserved immediately. Sample jars for particular sediment analytes were filled and put on ice. Duplicate-, MS, and MSD sample bottles and jars were filled immediately after their respective environmental samples. All sampling equipment used to collect and process water and sediment samples was decontaminated in the laboratory prior to use.

Chain-of-custody procedures were followed to ensure that samples were collected, protected, stored, handled, analyzed, and disposed of properly by authorized personnel. The Service team leader who collected the sample in the field had initial custody of the samples. The analytical laboratories, Severn Trent Laboratory, Arvada, Colorado, and New Mexico Scientific Laboratory Division, Albuquerque, New Mexico, were the ultimate recipients of the samples. Results of the analyses are presented in tables 4.1-4.14; photographs of sample sites are shown in figures 6.1-6.14. Qualifier codes used in validating the chemical analytical data are listed in table 5.

Transect Data

Physical properties measurements along cross-sectional channel transects, representative of the cross-sectional surface-water water column, were made at 1 or 2 locations within each sampling site and event (exception of Rio Grande at Los Padillas on July 25, 2002 where no measurements were made). At each transect site, a tag line was set out along the cross section of the channel (fig. 8). Physical properties measurements were made in the water column every 8 feet along the tag line. Physical properties measurements included water temperature, pH, specific conductance, dissolved oxygen, and occasionally turbidity. Transect data results and graphs are presented in tables 6.1-6.14 and figures 7.1-7.14.

Figure 8.—Measurement of physical properties along a transect line across the Rio Grande.

Stream and outfall discharges were measured along each transect. If discharge measurements were made at more than one transect per sample event, the measurements were averaged and are presented with the surface-water and sediment chemical data in tables 4.1-4.14. Raw discharge data are available in a report by P.L. Tashjian (2003).

Seine-haul Data

Physical properties measurements were made within seine hauls. Seine hauls were made by crew from the Habitat study; physical property measurements were made by the Water-Quality study crew. Seine haul effort included: (1) collection of fish for identification and enumeration; (2) collection of fish for chemical and health analysis; (3) identification of physical habitat characteristics; and (4) identification of chemical habitat (physical properties) characteristics.

Seine hauls were made using 10-feet wide by 6-feet long, 0.125 mesh flat seine with a double lead-weighted drag line (fig. 9). Seine hauls were made in the direction of flow where the seine and its dragline had the greatest possible degree of contact with the substrate. Seine haul locations were selected using a systematic random walk strategy (Remshardt, 2001, Bovee, 1986). To a lesser degree, seine hauls were also made at discretionary locations. The seine crew lead used discretion to select up to five additional seine haul locations based on (1) the need to evaluate a specific habitat that may have been overlooked by the random selection process, or (2) if the random seine haul efforts were not successful in colleting silvery minnow. Additionally, a seine haul made in the predetermined embayment was considered discretionary. Seine haul locations were 100 feet apart; they began upstream and worked on downstream. Direction of travel between seine hauls was randomly determined using a random number table that indicated an angle of travel between 0 and 180 degrees. Five to more than 50 seine hauls were made during each sampling event.

Figure 9.—Seine haul in the Rio Grande.

Physical properties measurements within each seine haul included water temperature, pH, specific conductance, dissolved oxygen, and occasionally turbidity. Seine haul location, in latitude and longitude, and elevation were also

reported. Seine haul data results and graphs are presented in tables 7.1-7.14 and figures 10.1-10.14.

Habitat data collected during seine-haul activities are available in a report by W.J. Remshardt (2003). Fish monitoring and catch per unit effort data are presented in the Biologic Data section of this report.

Continuous-monitoring Data

Continuous-monitoring of physical properties data were made at a designated transect location at each sample site. Water temperature, pH, dissolved oxygen, specific conductance, and occasionally turbidity were measured at 15-minute intervals for at least 24 hours using a continuous-monitoring multi-parameter measuring device (Datasonde (with turbidity probe) or Minisonde (without turbidity probe), both by Hydrolab, Inc.). The continuous-monitoring device was installed in a perforated pipe suspended between iron posts driven into the streambed (fig. 11) along a transect at its deepest wadeable location (thalweg).

During each day of sampling, routine calibration and maintenance were conducted on each probe used. Probe assembly included a stirrer which was activated during programmed measurements. Data were stored on internal memory of the continuous-monitoring device for later downloading.

Data were then imported into Microsoft® Excel spreadsheets. Data were amended with date column, reviewed for deployment date and time, removal date and time, notations were removed, and data were plotted. Anomalous data, such as negative values, or values measured when probe was not in water, or when probe had been placed into a saline solution were discarded. Continuous-monitoring raw data results, descriptive statistics, and graphs are presented in tables 8.1-8.14 and figures 12.1-12.14.

Figure 11.—Continuous monitoring recorder installation in the Rio Grande.

Gross Primary Productivity

Changes in measured dissolved oxygen concentrations over time were used to determine gross primary productivity and community respiration. Primary productivity is defined as the rate of formation of organic matter from inorganic carbon by photosynthesizing organisms which represents the conversion of solar energy to reduced chemical energy (Bott, 1996). Some of this fixed energy is lost through plant respiration; the portion stored as biomass is termed net primary productivity; and, the total (plant respiration + net primary productivity) is gross primary productivity.

Continuous monitoring of temperature and dissolved oxygen changes

over a 24-hour time period were used to relate to photosynthesis, respiration, and gas exchange with the atmosphere, and assuming that groundwater and hyporheic inputs were negligible. Whole stream metabolism was estimated from the difference between gross primary productivity and community respiration.

To determine gross primary productivity, oxygen saturation status was determined by comparing dissolved oxygen concentration at a site's water temperature and barometric pressure to a table of saturation values generated with a web-based program at the uniform resource locator page at http://water.usgs.gov/cgi-bin/dotables. Geomorphic and hydrologic reach characteristics of each site were used to determine the gas exchange coefficient according to Owens et al. (1964; cited in Bott 1996, p. 544). Figures 13.1-13.14 illustrate the corrected rate of oxygen change versus time since probe deployment. Community respiration was determined by multiplying the average hourly night-time respiration rate by 24. Gross primary productivity was calculated by the area under the curve greater than 0. Whole stream metabolism was calculated as the difference between gross primary productivity and community respiration.

BIOLOGIC DATA

Biologic data were compiled from (1) collection of fish for identification and enumeration; (2) collection of fish for chemical analysis; and (3) collection of fish for health analysis. Fish collections were accomplished by the Habitat study crew through seine-haul efforts described in the Seine-Haul Data section above. A total of 38 fish sampling events occurred at 14 sites within the Middle Rio Grande; five sites were sampled 4 times; 9 sites were sampled twice (table 1, fig. 3). These data are presented in the following sections.

It was determined early in the study that there would probably not be enough silvery minnow captured on which to conduct chemical and health analyses, therefore, fathead minnow (*Pimephales promelas*) and red shiner (*Cyprinella lutrensis*) were collected as samples on which to conduct the analyses.

Fish Identification and Numeration data

Collection, identification, and enumeration of fish were conducted by the Habitat study crew as described by Remshardt (2003). As fish were collected through seine haul efforts, they were immediately identified by fishery biologists to species (Mayden, et al., 1992) and enumerated. During enumeration, fishes were held in the river in a flow-through screened bucket (fig. 14). Generally, fathead minnow, red shiner, or both, of a length greater than 30 mm, were held for chemical and health; all other fishes were released away from locations of continued collection activities.

Figure 14.—Fish collected through seine haul efforts for identification and enumeration.

Fish held for analysis were kept live in the river in a flow-through bucket for further identification and later processing. Any silvery minnow captured during the seine haul were inspected for a Visible Implant Elastomer tag, measured to the nearest millimeter total length, and released. Fish identification and enumeration data are presented in the report by Remshardt (2003). A summary of the data presenting the fish monitoring inventory and catch per unit effort are presented in table 9.

Fish Chemical Data

Twenty-nine fish samples representative of fish (generally, species fathead minnow (*Pimephales promelas*) and red shiner (*Cyprinella lutrensis*)) in the Rio Grande and irrigation drain embayments and outfall channels were collected from 11 Rio Grande sites, the Albuquerque WWTP Outfall site, the Rio Rancho WWTP Outfall, and one irrigation return drain/riverside drain. For 8 sampling events, there were insufficient numbers of fish to submit for chemical analysis; approximately 20 grams of sample are needed.

Fish samples were generally analyzed for trace elements, total mercury, pesticides, lipids, and moisture. Some sampling events resulted in insufficient sample to conduct all requested parameters. Analytical methods used to analyze fish samples are presented in table 3; results of the analyses are presented in tables 4.1-4.14.

Fish collected for chemical analysis were processed in the field at or near completion of the seine haul activities. The fish were euthanized, measured to the nearest millimeter total length, weighed to the nearest gram, put into a clean sample jar, and preserved on ice. Duplicate-, MS, and MSD samples were not collected due to insufficient sample volume.

Chain-of-custody procedures were followed to ensure that samples were collected, protected, stored, handled, analyzed, and disposed of properly by authorized personnel. The Service team leader who collected the sample in the field had initial custody of the samples. The analytical laboratory, Severn Trent Laboratory, Arvada, Colorado, was the ultimate recipient of the samples.

Fish Health Data

Twenty-four fish samples representative of fish (generally, species fathead minnow (*Pimephales promelas*) and red shiner (*Cyprinella lutrensis*)) in the Rio Grande and irrigation drain embayments were collected from 11 Rio Grande sites and one irrigation return drain/riverside drain; there were insufficient numbers of fish collected during sampling events at Albuquerque WWTP Outfall and Rio Rancho WWTP Outfall channels to submit for health analysis (fig. 15); approximately 25 fish per sample set are needed.

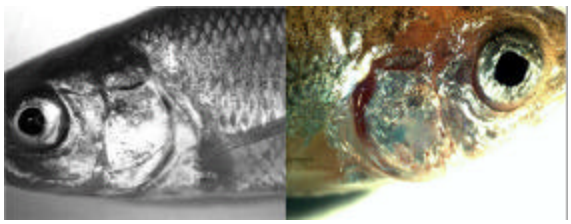

Figure 15.—Depiction of fish health observations of normal opercula (left) and shortened opercula (right).

Fish collected for health analysis were placed live into a plastic bag containing approximately 4 liters of water, 20 grams of salt, and a few drops of Stress

Coat ® (a solution containing plant extract and anhydrous sodium thiosulfate) to reduce transport stress. The bag was compressed and then filled with 2/3rd pure oxygen. It was then double-bagged, sealed with rubber bands, and placed into an insulated container for shipping (fig. 16).

Figure 16.—Processing of live fish samples for fish health assessment.

Containers were priority shipped via overnight courier to the analytical laboratory. Chain-of-custody procedures were followed to ensure that fish samples were collected, protected, stored, handled, and analyzed properly by authorized personnel. The Service team leader who collected the sample in the field had initial custody of the samples. The analytical laboratory, New Mexico State University Department of Fishery and Wildlife Sciences, was the ultimate recipient of the samples.

Upon arrival at the analytical laboratory, fish were inspected for mortality and immediately placed on aeration. Health assessments began within one hour. Lengths and weights were recorded and the necropsy-based fish health condition profile was conducted. Necropsies were performed by C. Sykes using a stereomicroscope with an attached digital camera to document abnormalities (Sykes, 2003). The variables measured in the health condition profile include Fulton's condition factor, normality index, severity index, and feeding index (Goede 1993). The health condition profile was modified to obtain a health assessment index for each fish per Adams et al. (1993). Results of fish health analyses are presented in tables 10.1-10.14 and 11.1-11.14. Codes used in the fish health analyses are listed in table 12.

SUMMARY OF RESULTS

During 2002 and 2003, water quality in the Middle Rio Grande, New Mexico, was assessed in the relation to Rio Grande silvery minnow habitats. A historic search of existing water-quality information within the Middle Rio Grande resulted in review of 86 reports. New hydrologic and biologic data were collected at 11 sites within the Rio Grande main stem, 2 sites located in waste-water treatment plant outfalls, and 1 site located in an irrigation return drain/riverside drain.

Hydrologic data collection included (1) chemical analyses of water and sediment samples, (2) physical properties measurement (water temperature, pH, specific conductance, dissolved oxygen, and occasionally turbidity) of Rio Grande embayments, (3) physical properties measurements along cross-sectional surface-water channel transects, (4) physical properties measurements made in surface water at random and discretionary seine haul locations, and (5) continuous measurement (24-hour minimum) of physical properties made along a transect.

During 2002-2003, 38 water samples were collected from 14 sites within the Middle Rio Grande and analyzed for temperature, pH, specific conductance, dissolved oxygen, turbidity, alkalinity,

hardness, total dissolved solids, total suspended solids, common anions, perchlorate, total cyanide, nutrients, trace elements, total mercury, biochemical oxygen demand, chemical oxygen demand, volatile organic compounds, herbicide, pesticides, explosives, and pharmaceuticals. Analytical results for temperature, pH, specific conductance, dissolved oxygen, turbidity, alkalinity, hardness, total dissolved solids, total suspended solids, common anions, perchlorate, total cyanide, nutrients, trace elements, total mercury, biochemical oxygen demand, chemical oxygen demand varied with season and flows. Concentrations of volatile organic compounds detected above the laboratory established reporting limit and/or the method detection limit include acetic acid, acetone, bromodichloro-methane, bromoform, 2-butanone (MEK), chloroform, cyclotetrasiloxane/ octamethyl, dibromochloromethane, 1,2-dichloropropane, diphenylmethane, methylene chloride, silanol, trimethyl, toluene, and various unknowns (acetone and methylene chloride are known common laboratory contaminants). Concentrations of pesticides detected above the laboratory established reporting limit and/or the method detection limit include ethoprop, mevinphos, and atrazine. The herbicide dalapon was detected at concentrations above the laboratory established reporting limit and/or the method detection limit include. Concentrations of explosive compounds in water detected above the laboratory established reporting limit and/or the method detection limit include 2-nitrotoluene and 1,2,5-trinitrobenzene. The pharmaceutical cholesterol was detected at concentrations above the laboratory reporting limit of 10 nanograms per liter.

During 2002-2003, 38 sediment samples were collected and analyzed for common anions, total cyanide nutrients, total organic carbon, trace elements, total mercury, volatile organic compounds, pesticides, polyaromatic hydrocarbons, moisture, total petroleum hydrocarbons, and grain size. Analytical results for common anions, total cyanide nutrients, total organic carbon, trace elements, total mercury, moisture, and grain size were variable. Concentrations of volatile organic compounds detected above the laboratory established reporting limit and/or the method detection limit include acetic acid, acetone, chloroform, benzene, 2-butanone (MEK), carbon disulfide, alpha-pinene, alpha-BHC, beta-pinene, bicyclo[3,1,1]hept-2-ene,3,6, cyclohexene,/4-methyl-1-(1-met, dimethyl sulfide, disulfide/dimethyl, dodecane/1-iodo, eicosane, ethylbenzene, heneicosane, 1-hexanol/2-ethyl-, methanethiol, 3-methylheptyl acetate, methylene chloride*, 1,1,2,2-tetrachloroethane, toluene, tridecane, and various unknowns (acetone and methylene chloride are know common laboratory contaminants). Pesticides methoxychlor, alpha-BHC, delta-BHC, dieldrin, and endosulfan I were detected above the laboratory established reporting limit and/or the method detection limit. Concentrations of polyaromatic hydrocarbons detected above the laboratory established reporting limit and/or the method detection limit include acenaphthene, anthracene, benzo(a)anthracene, benzo(b)fluoranthene, benzo(a)pyrene, chrysene, dibenzo(a,h)anthracene, fluoranthene, indeno(1,2,3cd)pyrene, phenanthrene, pyrene, 1-methylnaphthalene, and 2-methylnaphthalene. The petroleum hydrocarbon n-hexane extractable material was detected at concentrations above the laboratory established reporting limit and/or the method detection limit.

Physical properties measurements made along transects showed variation along a cross section of the channel. Water-quality conditions generally varied near river banks, islands, mudflats, and sandbars. Most often dissolved oxygen and specific conductivity either increased or decreased closer to shore. In some cases, shallow side-channel habitats contained much less oxygen and were warmer than main-stem habitats. Sites with more shorelines tended to have more variable water-quality conditions. Sites that were narrow or engineered, such as the waste water treatment plant outfalls and irrigation return drains, were nearly uniform in their longitudinal water-quality conditions. However, narrow river sites such as San Pedro were also consistent in water-quality conditions from bank to bank. Even in variable habitats, the thalweg main-stem flow tended to be similar in water-quality conditions, and tended to be cooler, less turbid, and contain more variable water-quality conditions at the rivers shorelines.

Physical properties measurements made in seine haul locations showed longitudinal (upstream to downstream) variation. These measurements were made throughout the course of the day. As a result, at most sites, water temperature often rose as seine haul activity was conducted. Water quality varied significantly due to storm water activity as was evidenced by decreasing water temperature and specific conductivity during seine haul activity at La Joya on September 10, 2002. The most variable water-quality conditions encountered were at the Rio Grande below Arroyo del Tajo and Rio Grande at Los Lunas sites in February 2003. Occasionally, various habitat types had low dissolved oxygen (less than 2 milligrams per liter (mg/L)) and concordant changes in pH and specific conductivity. The most consistent water-quality conditions were encountered at the Rio Grande at La Orilla and Rio Grande at Barelas sites. To more fully characterize different water-quality conditions in distinct fish habitats, data will need to be normalized in order to compare conditions that varied with time versus habitat type. Data will also be paired with its fish diversity and abundance to determine if there are different water-quality conditions found to support native minnow diversity.

Physical properties measurements made at continuous-monitoring sites varied over time. However, at many sites specific conductance, dissolved oxygen, and turbidity fell drastically over time, and did not return to their diurnal pattern. This effect was attributed to the burial of the continuous-monitoring probes with river sediment. Often, over a period o1 or 2 days, sand and silt would accumulate as much as several feet on top of the suspended probe. At times, the probe was washed free of sediment, and measurement of data resumed; often the probe remained completely buried until retrieval, as illustrated by the "flat line" measurements (e.g., at Rio Grande at La Orilla, Rio Grande at La Joya, and Rio Grande at San Pedro July 2002; and Rio Grande at Isleta and Rio Grande at Los Lunas, December 2002). Naturally variable water-quality conditions were evident at other sites. Specific conductance changes were likely associated with storm-water events, particularly at the southernmost sites. The Rio Grande below Arroyo del Tajo during July is an example of the mixing of waters (perhaps from the Rio Salado, Rio Puerco, and Rio Grande) with differing water chemistries. Diurnal water-temperature fluctuations were moderate and specific conductance, dissolved oxygen, and turbidity varied widely, most likely due to different sources of water. At waste water treatment plant outfalls, water quality was

often uniform, but occasionally drastic changes were evident. Concordant change of water temperature and specific conductance occurred at the Rio Rancho WWTP outfall on August 13, 2002. It is likely that the water treatment activities were altered at this time as evidenced by the change in water temperature and specific conductance. Likewise, at the Albuquerque WWTP outfall during August 7, 2002, turbidity increased concordant with a decrease of dissolved oxygen (below protective water-quality criteria for aquatic life), suggesting that a change in treatment may have occurred. Waste water treatment plant effluents more commonly had higher specific conductance (dissolved solids) than other sites measured. This in large part is due to the water source being ground water.

Changes in dissolved oxygen over time, as measured by the continuous-monitoring probes, were used to determine the relative productivity of aquatic flora for each site. Dissolved oxygen concentration in water tends to fluctuate on a 24-hour basis. Dissolved oxygen often increased during daylight hours when photosynthesis occurred and decreased at night when respiration continued. Aquatic flora (primary oxygen producers) in stream ecosystems are significant producers of energy and food even though other forms of energy include other reduced forms (e.g., detritus, leaf litter). Primary productivity measurements have their basis in oxygen evolution, and can be measured by changes in dissolved oxygen. Dissolved oxygen concentrations measured in the Middle Rio Grande generally decreased at most sites, indicating the ecosystem was respiring (consuming oxygen) to a greater extent than was released into the water column by algae and plants. Sites with the highest rates of respiration include Rio Rancho WWTP outfall in August, Rio Grande at Los Padillas in February, Rio Grande at Los Lunas in July, and Arroyo del Tajo in July, September, and December. The highest rates of oxygen production occurred at Rio Rancho WWTP outfall in August, Rio Grande at Los Lunas in July, Rio Grande at Abeytas in January, and Rio Grande at La Joya in December. Data show an overall net uptake of oxygen at over 80 percent of sites where oxygen was measured continuously, as net primary productivity was generally negative in value, suggesting that there is little oxygen generated by primary producers. Nine percent of sites where oxygen was measured continuously showed overall positive primary production as shown by changes in oxygen. As primary production and herbivory are intricately related, the silvery minnow population may find little to eat in the Middle Rio Grande, particularly in the summer months. Determination of limitations of primary productivity may be assessed by correlation of nutrient concentrations in surface water with primary productivity. The limiting factor for primary productivity was not investigated and more research would be warranted.

During 2002-2003, Biologic data collection included (1) collection of fish for identification and enumeration, (2) chemical analyses of fish samples, and (3) collection of fish for health analysis.

Fish collection for identification and enumeration resulted in a total catch of 7,286 fish from a total of 1,464 seine haul efforts. Twenty-two silvery minnow were identified; 16 were collected through random seine haul efforts and 6 from discretionary efforts. Silvery minnow were found at: (1) Rio Grande at La Orilla in July 2002 (1 fish/discretionary), December 2002 (2 fish/random, 3 fish/discretionary), and February 2003 (1 fish/discretionary); (2) Rio Grande at Barelas in January 2003 (1 fish/random); (3) Rio Grande at Los

Padillas in February 2003 (1 fish/random); (4) Rio Grande at Los Lunas in July 2002 (1 fish/random) October 2002 (2 fish/random), and February 2003 (1 fish/random); (5) Rio Grande at Lemitar in August 2002 (4 fish/random) and January 2003 (1 fish/discretionary); (6) Rio Grande below Arroyo del Tajo in July 2002 (1 fish/random); (7) Rio Grande at San Pedro in August 2002 (1 fish/random); and (8) Rio Grande at North Boundary Bosque del Apache in August 2002 (2 fish/random). A total of 817 fathead minnows (*Pimephales promelas*) and 3,322 red shiners (*Cyprinella lutreusis*) were collected and identified. Of the total fish catch, 4,420 native and 2,866 non-native fish were counted. The highest random catch per unit effort was at Rio Grande below Arroyo del Tajo in July 2002 (20.2) followed by Rio Grande at Los Lunas in July and October 2002 (13.0 and 13.0, respectively). Catch per unit effort fell significantly for all sites in 2003 with the exception of Rio Rancho WWTP outfall where the non-native discretionary fish catch per unit effort was 136.4; fish collected and identified included 1,330 non-native fish and 34 native fish.

Twenty-nine fish samples were collected from 14 sites within the Middle Rio Grande were collected and analyzed for trace elements, total mercury, pesticides, moisture, and lipids. Analytical results for trace elements, total mercury, moisture, and lipids were variable. Concentrations of pesticides detected above the laboratory established reporting limit and/or the method detection limit include 4,4'-DDD, 4,4'-DDE, alpha-chlordane, beta-BHC, dieldrin, endrin, endrin aldehyde, and gamma-BHC (lindane).

Many of the fish collected had shortened opercula (Fig. 15). Whether this was indicative of a nutritional deficiency or the result of exposure to elevated suspended sediment and turbidity will need to be evaluated. Fish collected in the winter appeared to be in better condition and feeding more actively than fish collected in summer or fall. Mean condition factors, percentage of fish with fat reserves, feeding indices, and normality indices were higher in the winter. Gross primary productivity was low at all sites and slightly higher in the summer than in the winter, however, mean community respiration and whole stream metabolism were significantly higher in summer than in winter. In some cases, the rapid decline of oxygen content from the Rio Grande could be attributed to runoff events. Additional inputs of water, bacterial activity, faunal activity and growth, or other biochemical demands that consume oxygen or reduce its solubility are also having an effect. There was a correlation, albeit weak, between whole stream metabolism and several fish condition indices, therefore, the amount of respiration and gross primary productivity may play a role in the health of the minnow community. However, sample collection was too sparse to attribute significance to these trends.

The Service has collected additional data at these same sampling locations to further evaluate trends. In addition, water-quality criteria for the protection of silvery minnow and its habitat are being developed in order to identify the potential effects of some of the chemicals that were detected in water and sediment and other water-quality conditions identified in this study.

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Figure 6.1.1.—Rio Rancho Waste Water Treatment Plant Outfall #2 on August 8, 2002.

Figure 6.1.2.—Rio Rancho Waste Water Treatment Plant Outfall #2 on January 30, 2003

Figure 6.2.1.—Rio Grande at La Orilla on July 26, 2002.

Figure 6.2.1.—Rio Grande at La Orilla on December 19, 2002.

Figure 6.3.1.—Rio Grande at Barelas on August 22, 2002.

Figure 6.3.2.—Sediment Processing at Rio Grande at Barelas on August 22, 2002.

Figure 6.4.1.—Albuquerque Waste Water Treatment Plant Outfall on August 6, 2002.

Figure 6.4.2.—Albuquerque Waste Water Treatment Plant Outfall on January 29, 2003

Figure 6.5—No photos available for Rio Grande at Los Padillas.

Figure 6.6.1.—No photos for Rio Grande at Isleta below Railroad Bridge.

Figure 6.7.1.—Rio Grande at Los Lunas on July 24, 2002.

Figure 6.7.2.—Rio Grande at Los Lunas on September 11, 2002.

Figure 6.8.1.—Rio Grande at Abeytas on September 12, 2002.

Figure 6.8.2.—Foam Close-up Rio Grande at Abeytas on September 12, 2002.

Figure 6.9.1.—Lower San Juan Drain on August 5, 2002.

Figure 6.9.2.—Collecting Seine Haul Data at Lower San Juan Drain on August 5, 2002.

Figure 6.10.1.—Rio Grande at La Joya on July 23, 2002.

Figure 6.10.2.—Rio Grande at La Joya on July 23, 2002.

Figure 6.11.1.—Rio Grande at Lemitar on August 21, 2002.

Figure 6.12.1.—Rio Grande below Arroyo del Tajo on September 9, 2002.

Figure 6.12.2.— Rio Grande below Arroyo del Tajo on September 9, 2002.

Figure 6.13.1.—Rio Grande at San Pedro on August 20, 2002.

Figure 6.14.1.—Rio Grande at North Boundary of Bosque del Apache National Wildlife Refuge on August 19, 2002.

The following figures are not available at this time:

Figure 7.1 Transect data for Rio Rancho Waste Water Treatment Plant Outfall #2
Figure 7.2 Transect data for Rio Grande at La Orilla
Figure 7.3 Transect data for Rio Grande at Barelas
Figure 7.4 Transect data for Rio Grande at Albuquerque Waste Water Treatment Plant Outfall
Figure 7.5 Transect data for Rio Grande at Los Padillas
Figure 7.7 Transect data for Rio Grande at Los Lunas
Figure 7.8 Transect data for Rio Grande at Abeytas
Figure 7.9 Transect data for Lower San Juan Drain
Figure 7.10 Transect data for Rio Grande at La Joya
Figure 7.11 Transect data for Rio Grande at Lemitar
Figure 7.12 Transect data for Rio Grande below Arroyo del Tajo
Figure 7.13 Transect data for Rio Grande at San Pedro
Figure 7.14 Transect data for Rio Grande at North Boundary Bosque del Apache

Awaiting permission from the Pueblo of Isleta to release this graph:

Figure 7.6 Transect data for Rio Grande at Isleta below Railroad Bridge

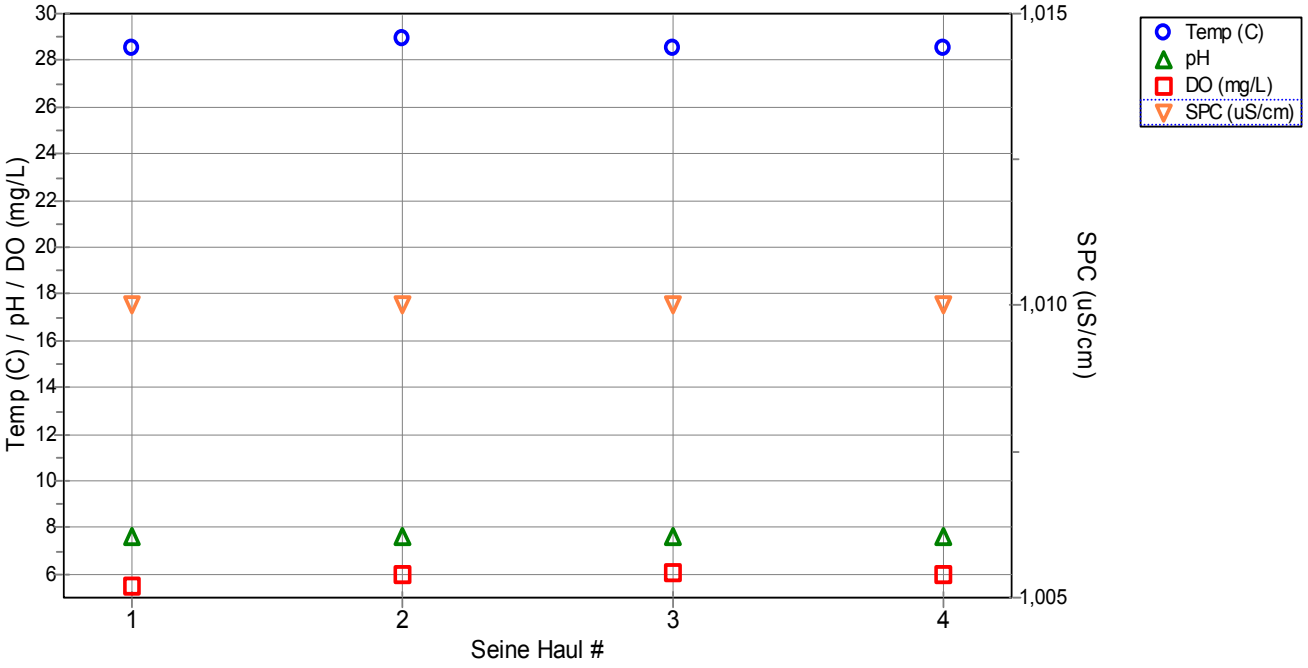

Figure 10.1.1.—Seine Haul Data for Rio Rancho Waste Water Treatment Plant Outfall #2 on August 8, 2002.

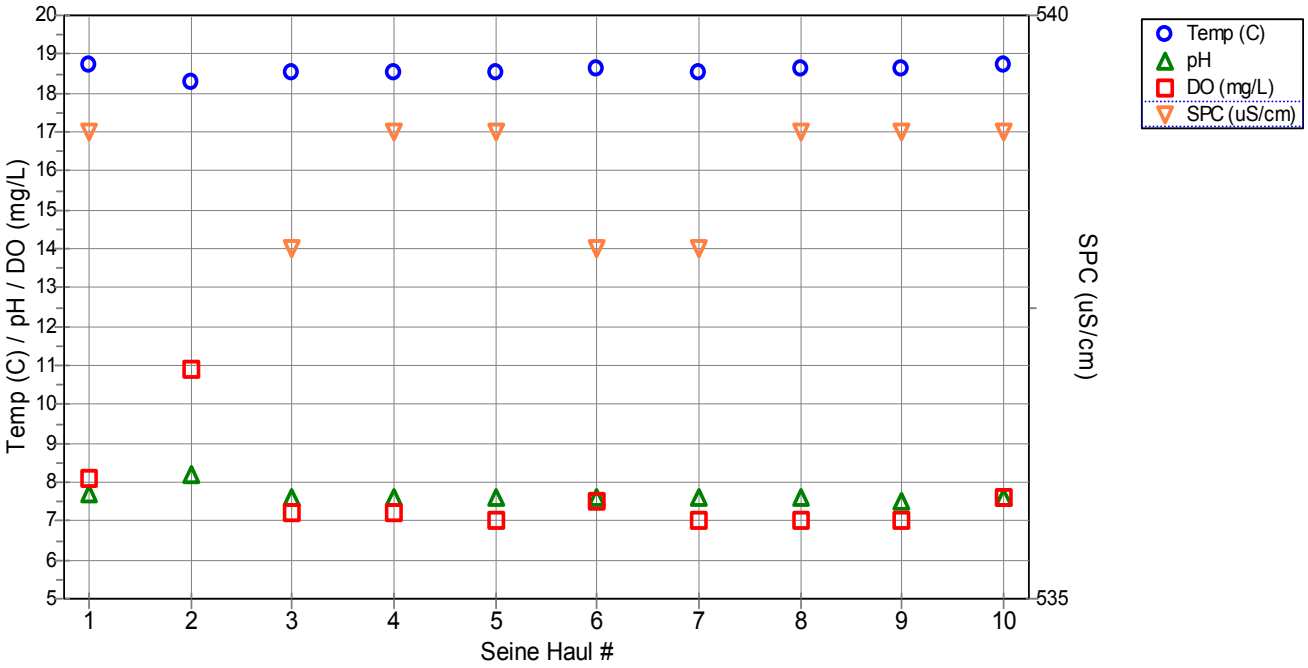

Figure 10.1.2.—Seine Haul Data for Rio Rancho Waste Water Treatment Plant Outfall #2 on January 30, 2003.

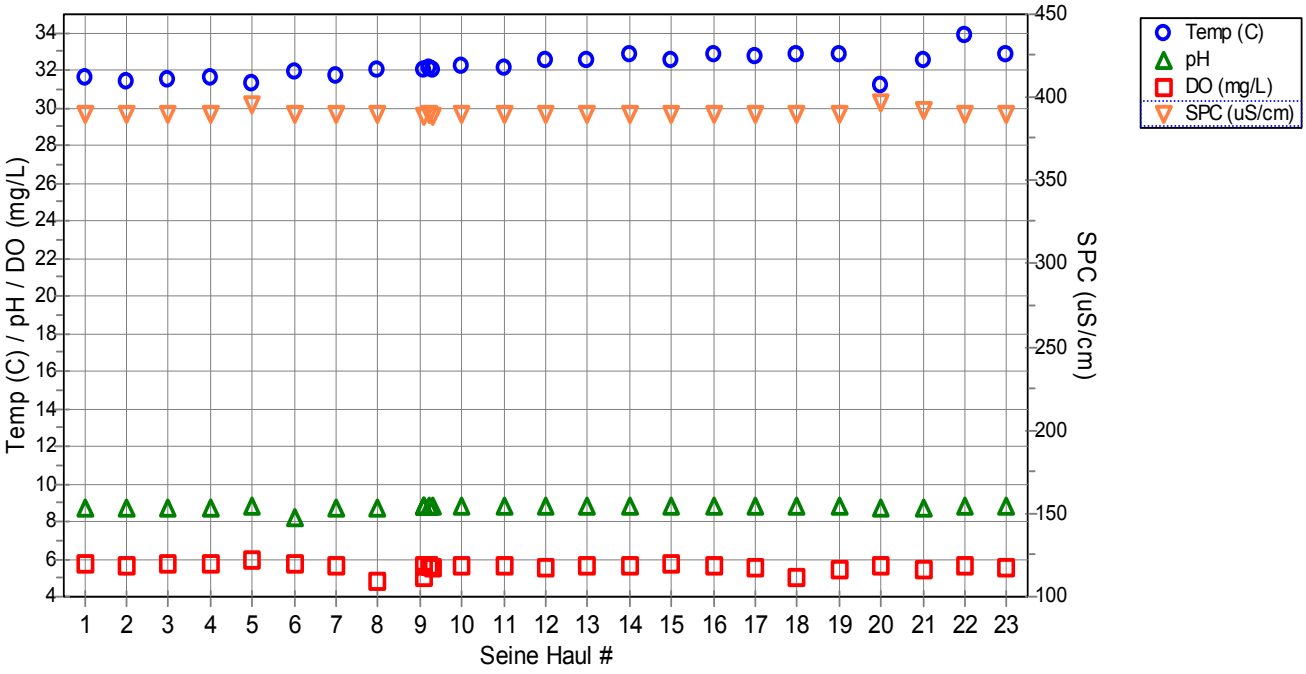

Figure 10.2.1.—Seine Haul Data for Rio Grande at La Orilla on July 26, 2002.

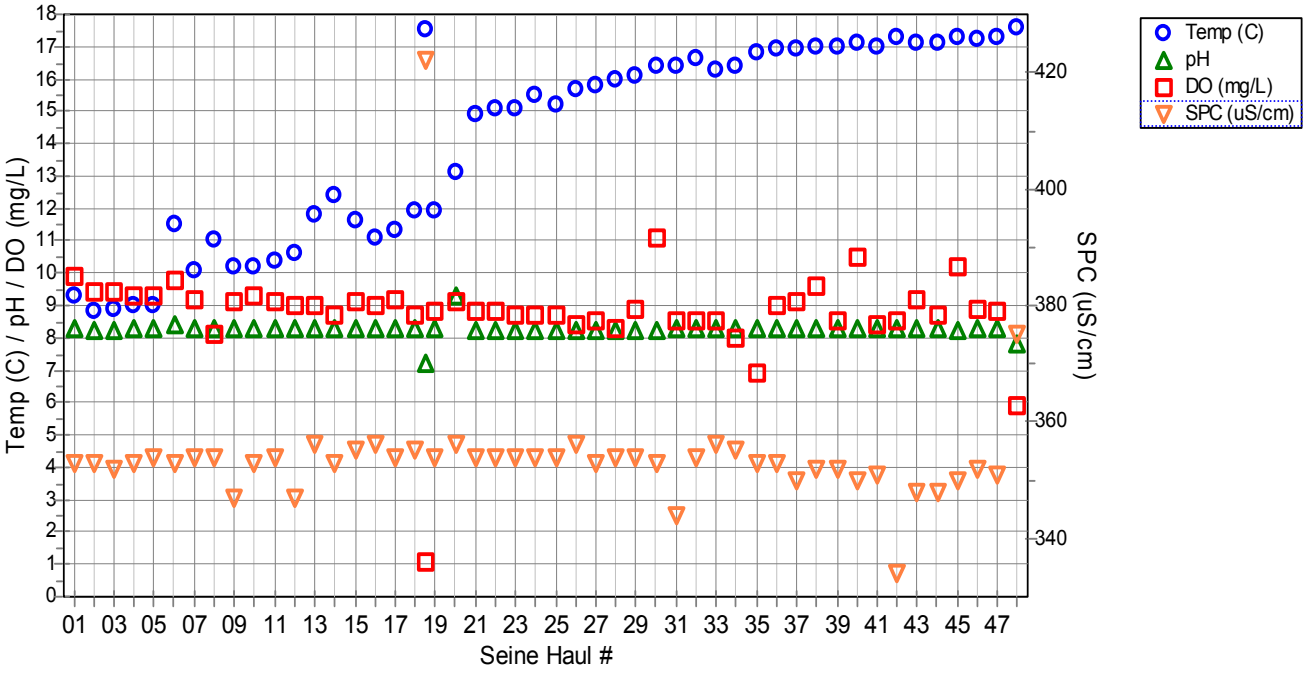

Figure 10.2.2.—Seine Haul Data for Rio Grande at La Orilla on November 1, 2002.

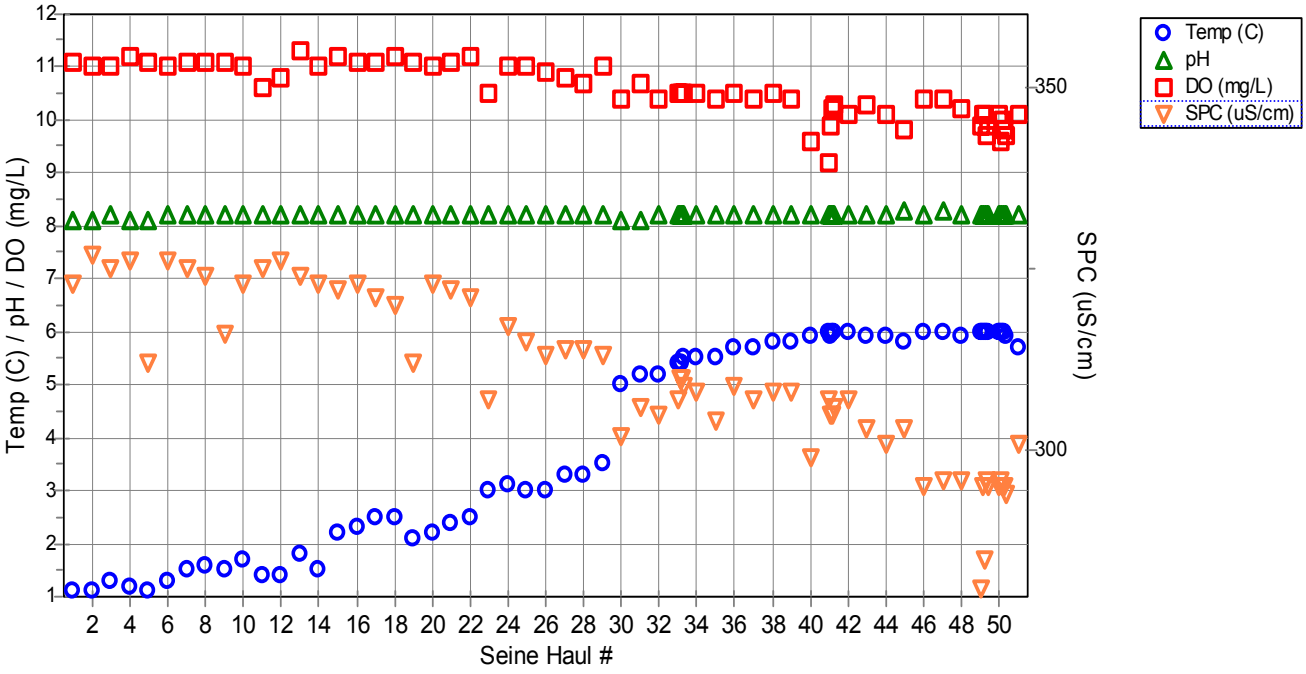

Figure 10.2.3.—Seine Haul Data Rio Grande at La Orilla on December 19, 2002.

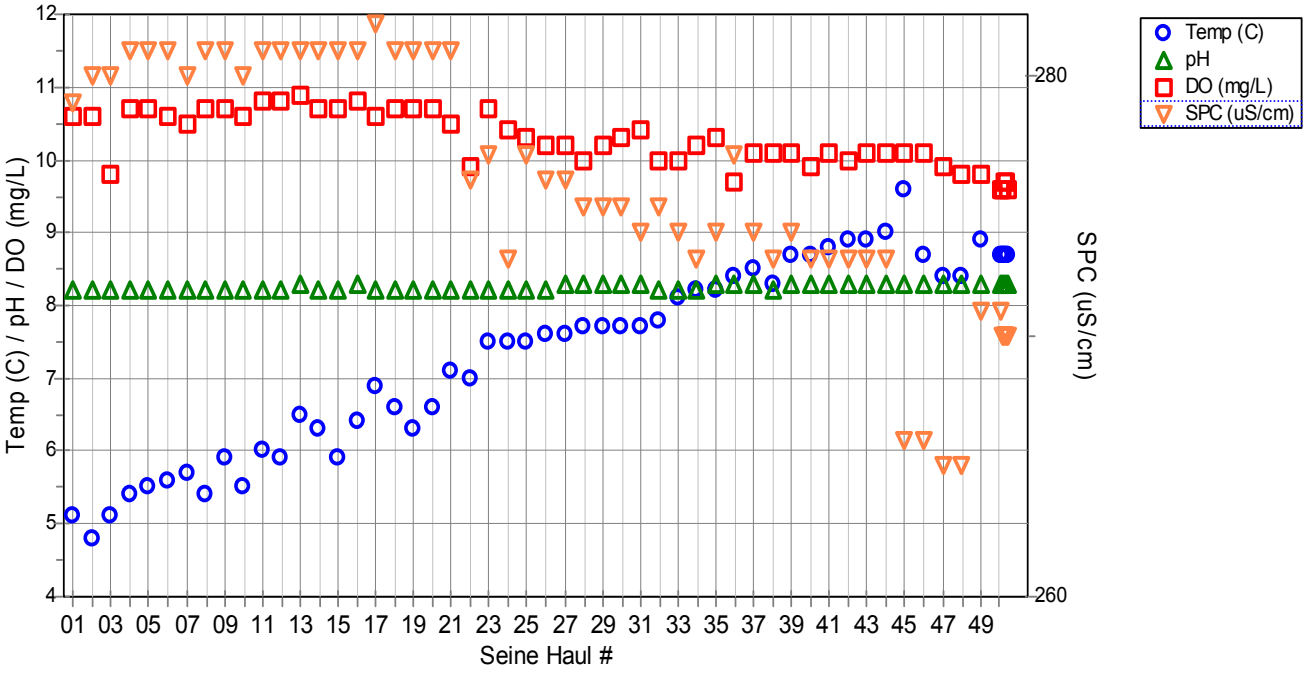

Figure 10.2.4.—Seine Haul Data Rio Grande at La Orilla on February 28, 2003.

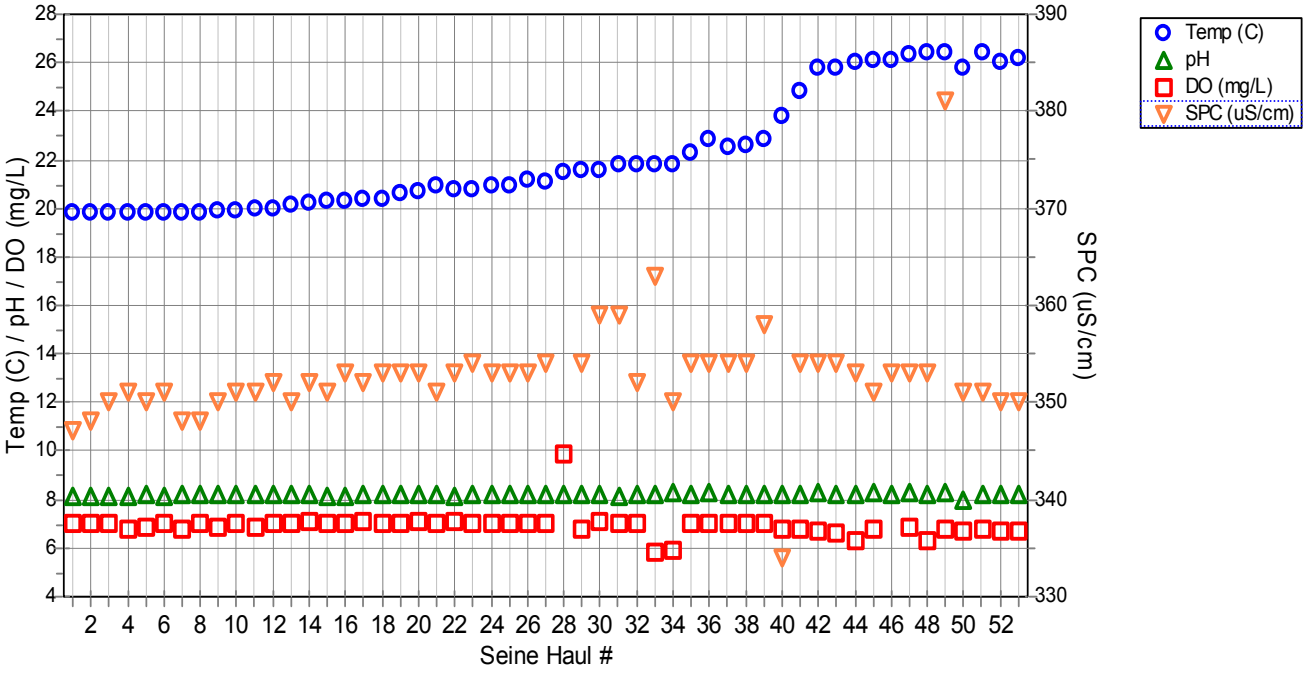

Figure 10.3.1.—Seine Haul Data for Rio Grande at Barelas on August 22, 2002.

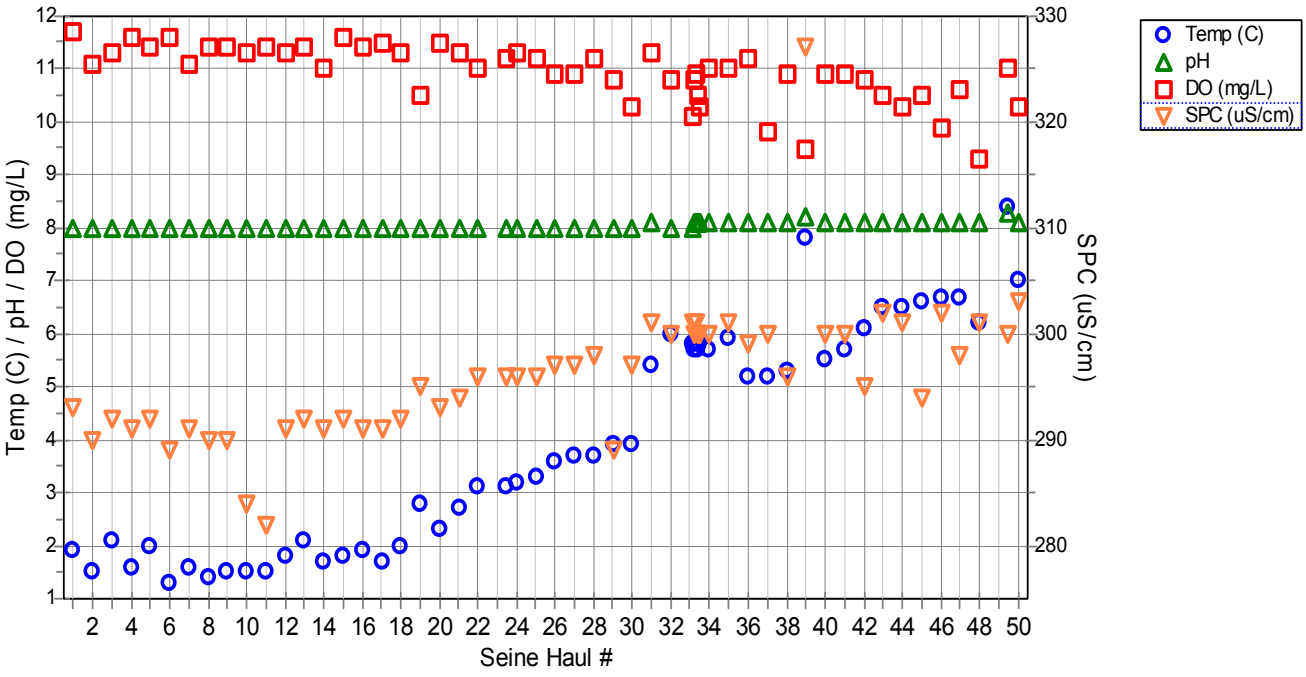

Figure 10.3.2.—Seine Haul Data Rio Grande at Barelas on January 17, 2003.

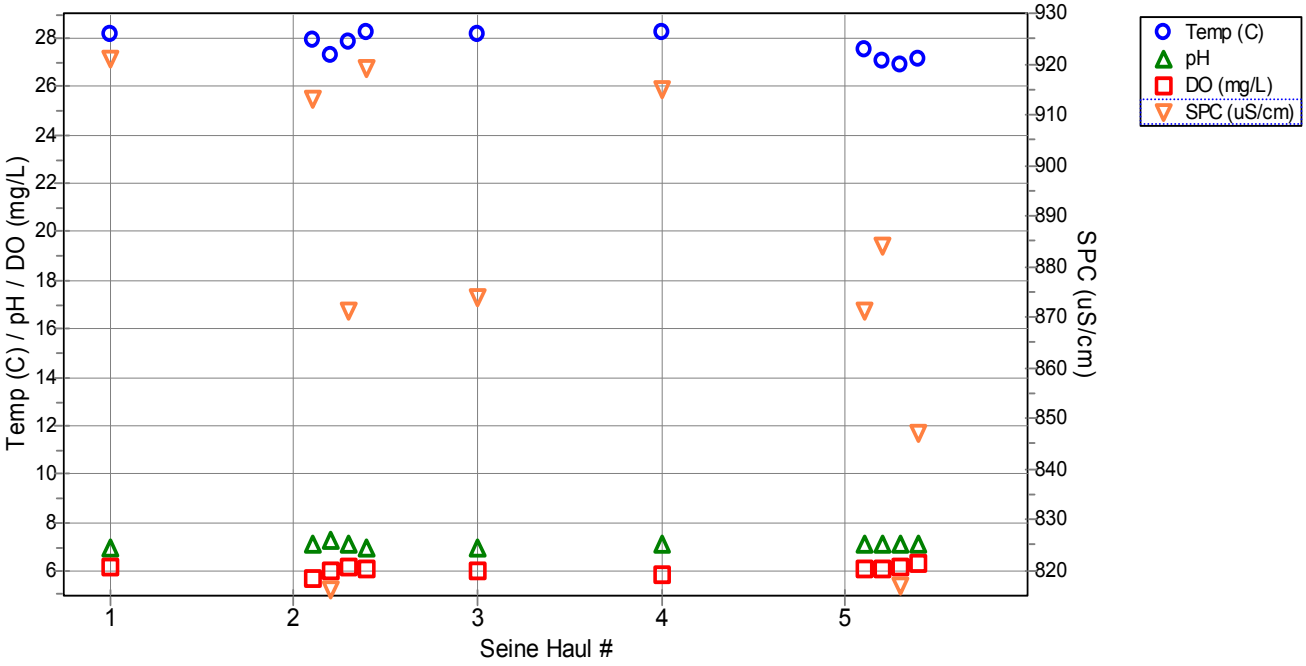

Figure 10.4.1.—Seine Haul Data for Albuquerque Waste Water Treatment Plant Outfall on August 6, 2002.

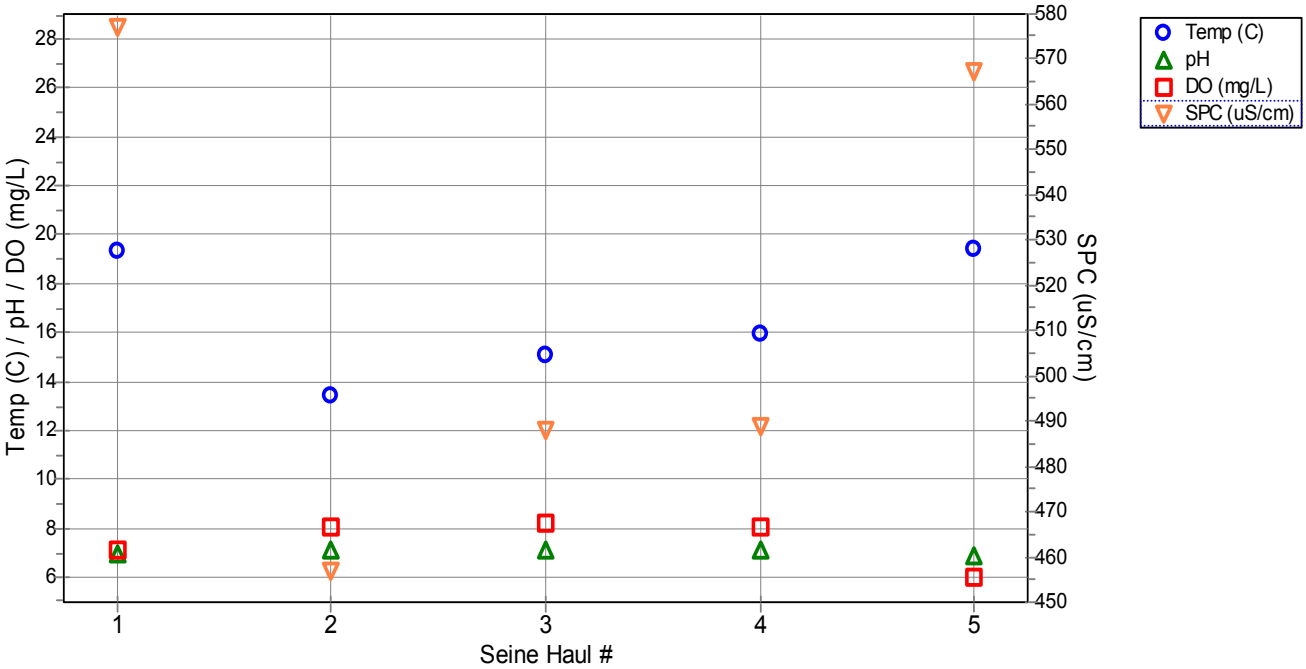

Figure 10.4.2.—Seine Haul Data for Albuquerque Waste Water Treatment Plant Outfall on January 29, 2003.

—No Seine Haul Data for Rio Grande at Los Padillas was collected on July 25, 2002—

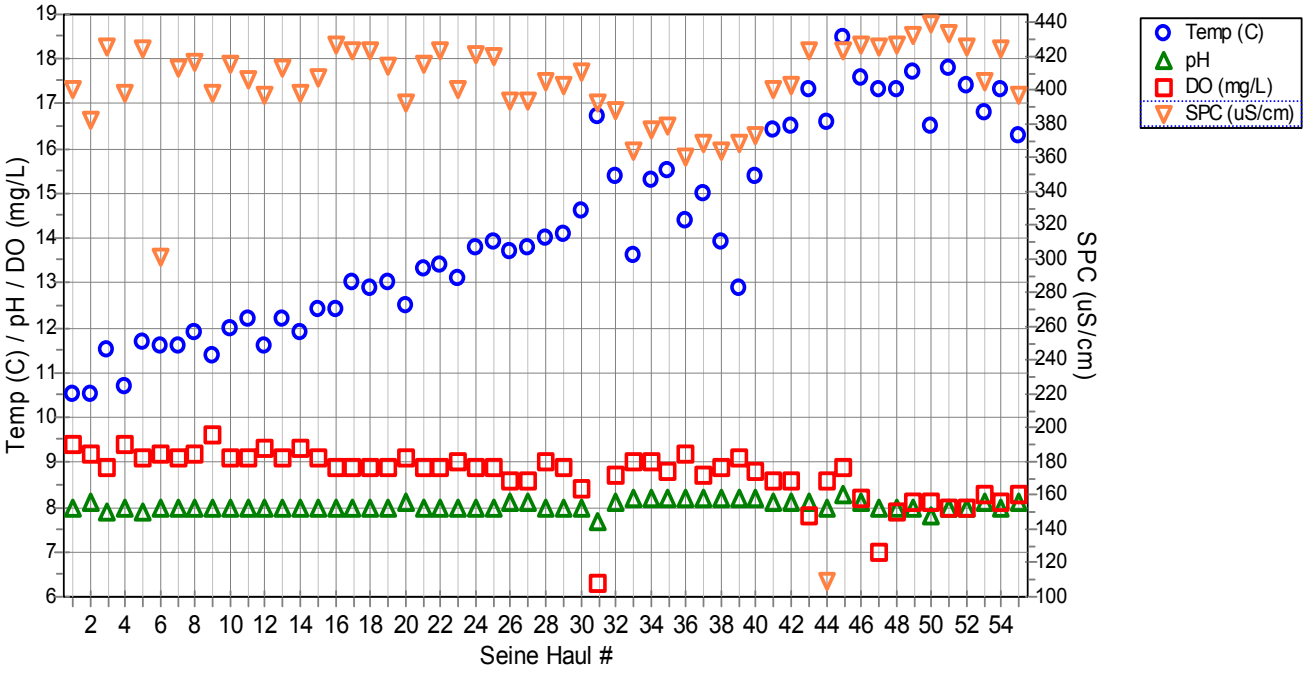

Figure 10.5.1.—Seine Haul Data for Rio Grande at Los Padillas, October 31, 2002.

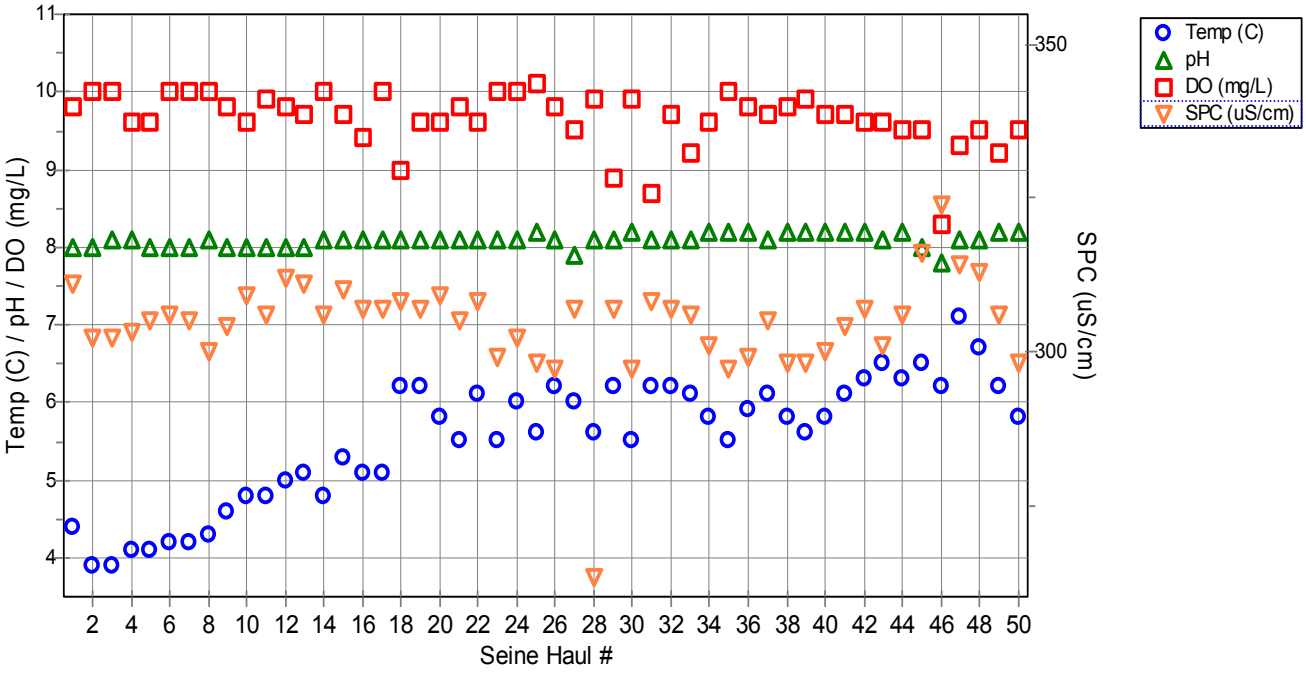

Figure 10.5.2.—Seine Haul Data Rio Grande at Los Padillas, December 18, 2002.

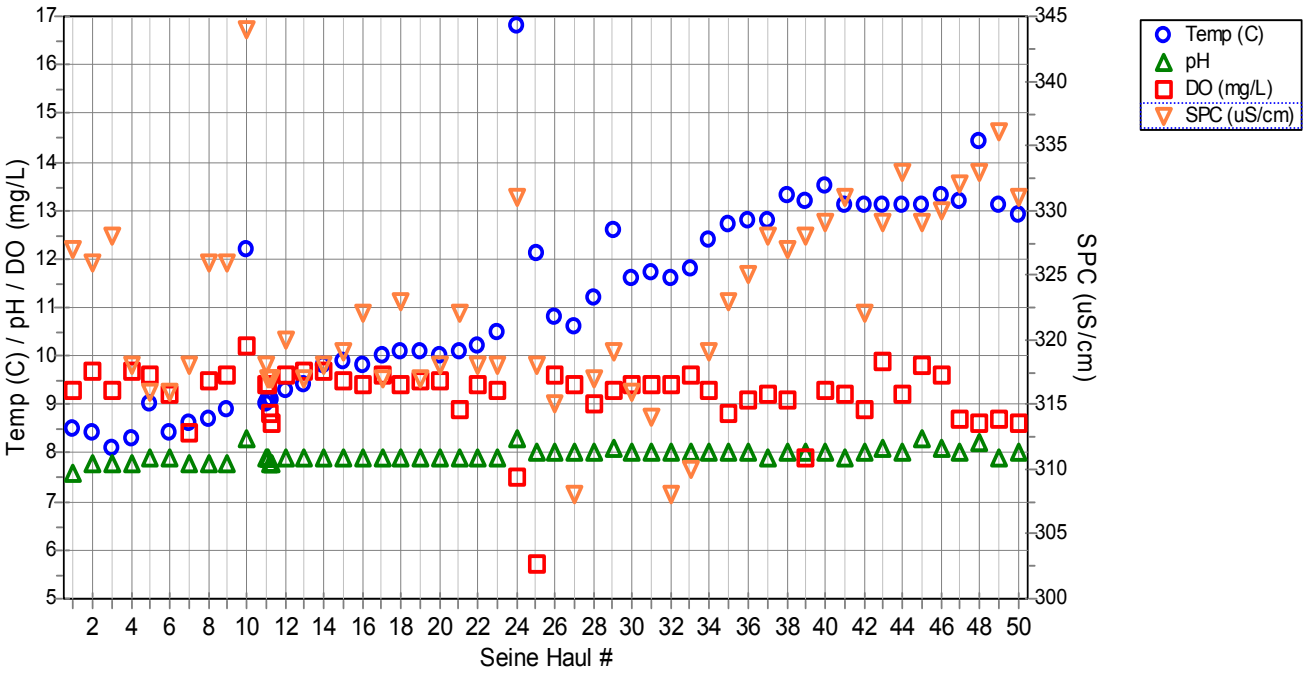

Figure 10.5.3.—Seine Haul Data Rio Grande at Los Padillas, February 27, 2003.

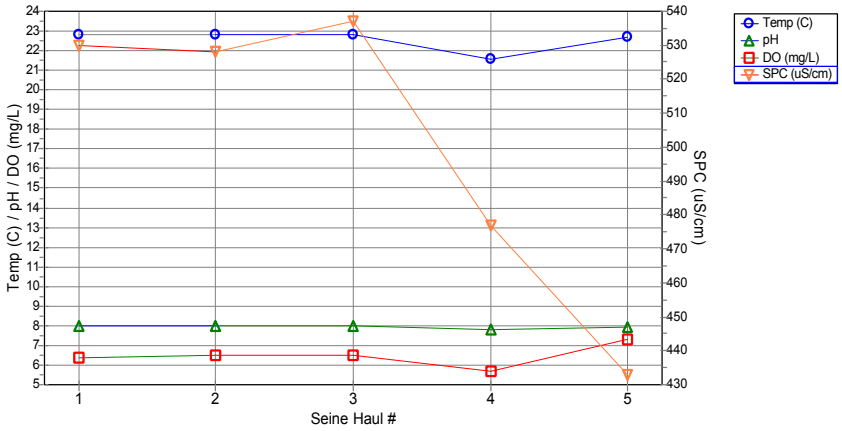

Figure 10.6.1—Seine Haul Data for Rio Grande at Isleta below Railroad Bridge on August 7, 2002.

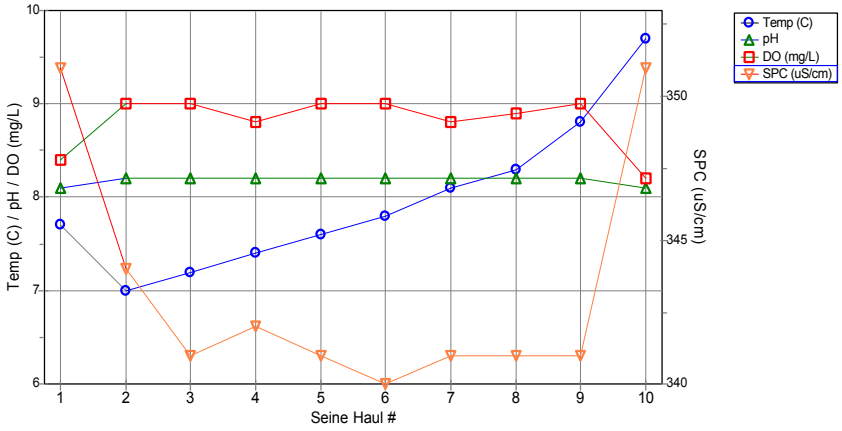

Figure 10.6.2—Seine Haul Data for Rio Grande at Isleta below Railroad Bridge on January 28, 2003.

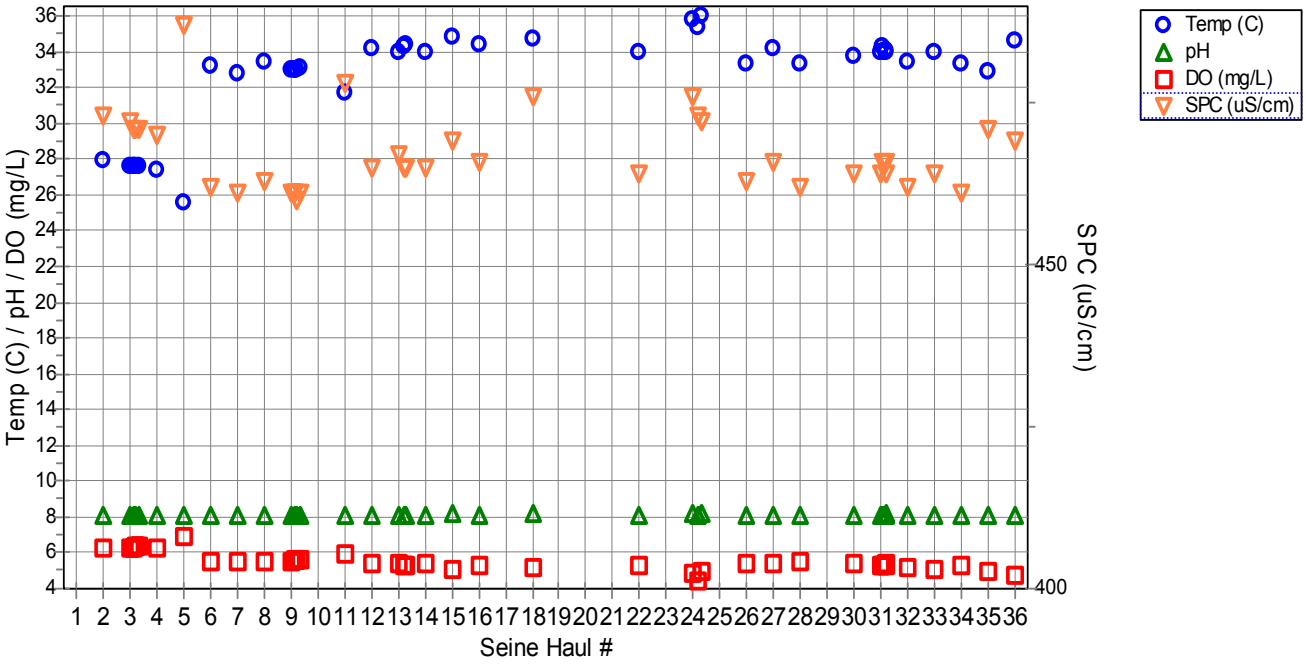

Figure 10.7.1.—Seine Haul Data for Rio Grande at Los Lunas, July 24, 2002.

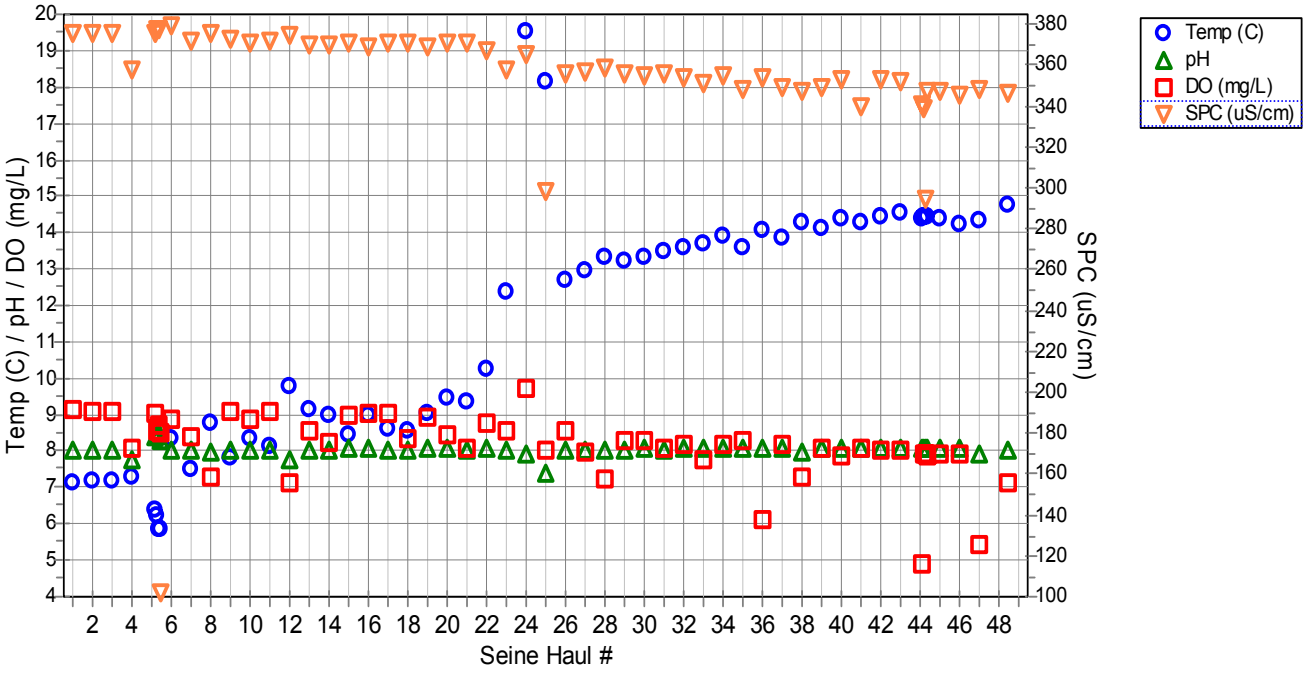

Figure 10.7.2.—Seine Haul Data for Rio Grande at Los Lunas, October 30, 2002.

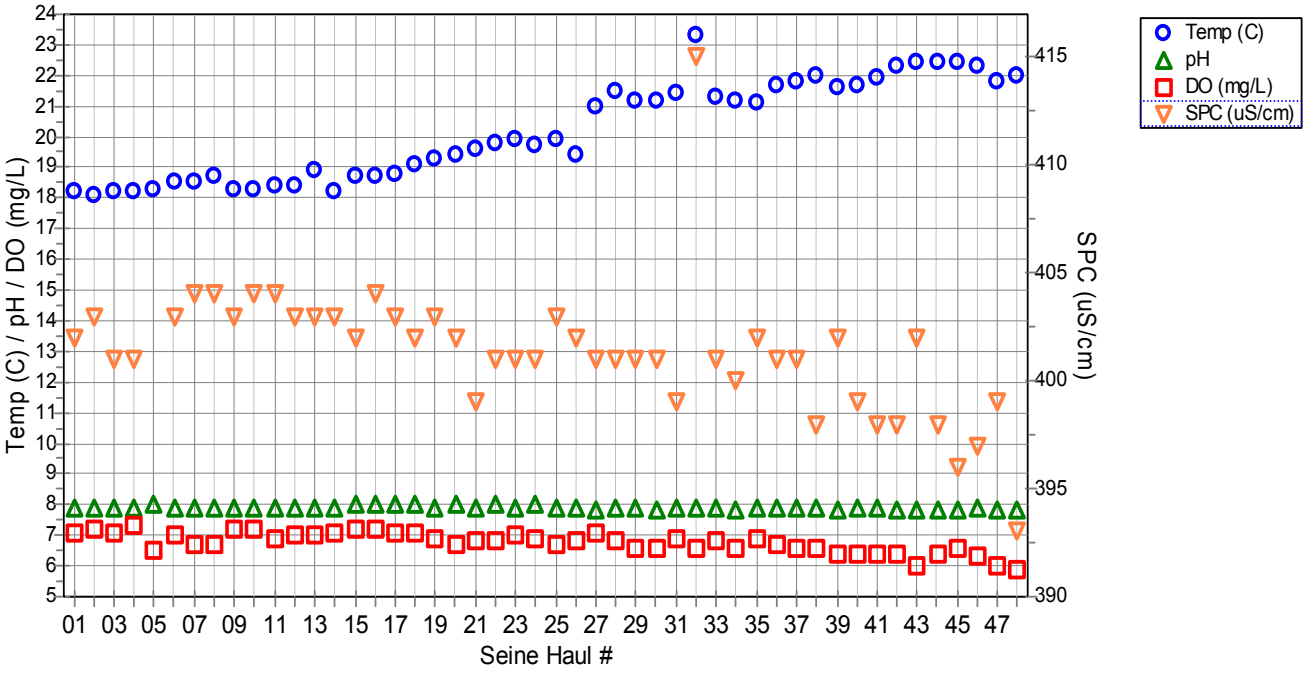

Figure 10.8.1.—Seine Haul Data for Rio Grande at Abeytas on September 12, 2002.

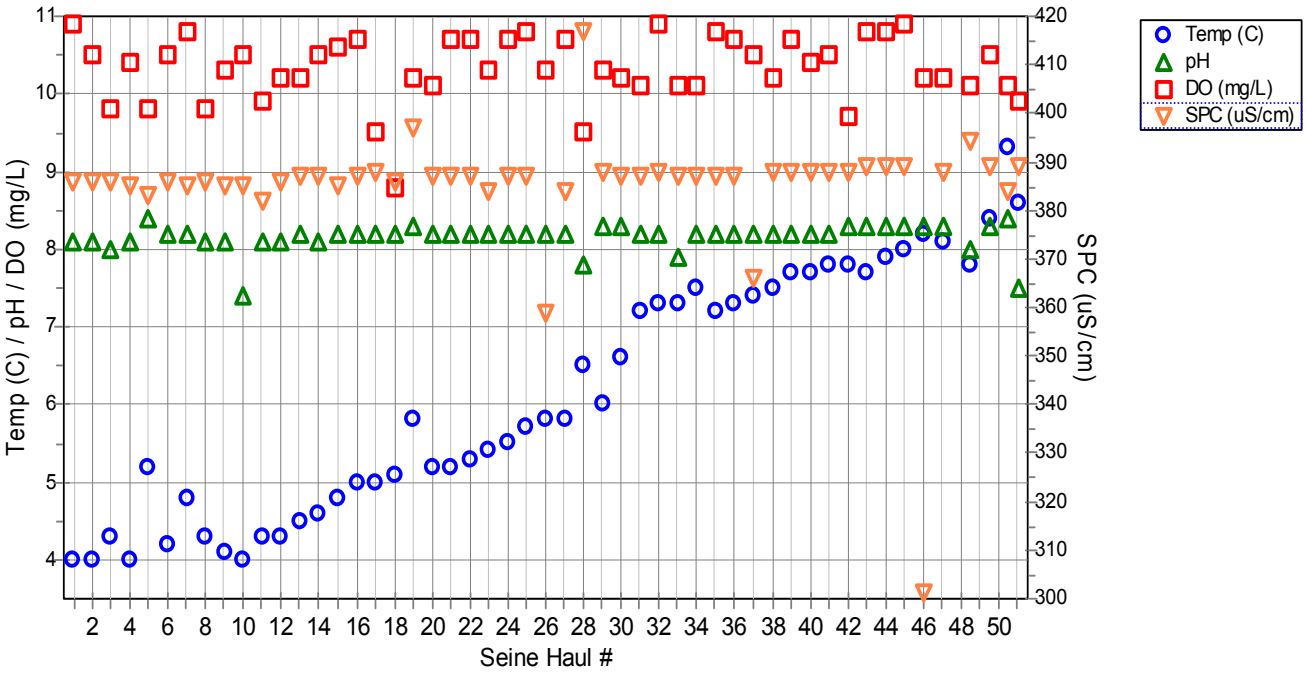

Figure 10.8.2.—Seine Haul Data Rio Grande at Abeytas on January 16, 2003.

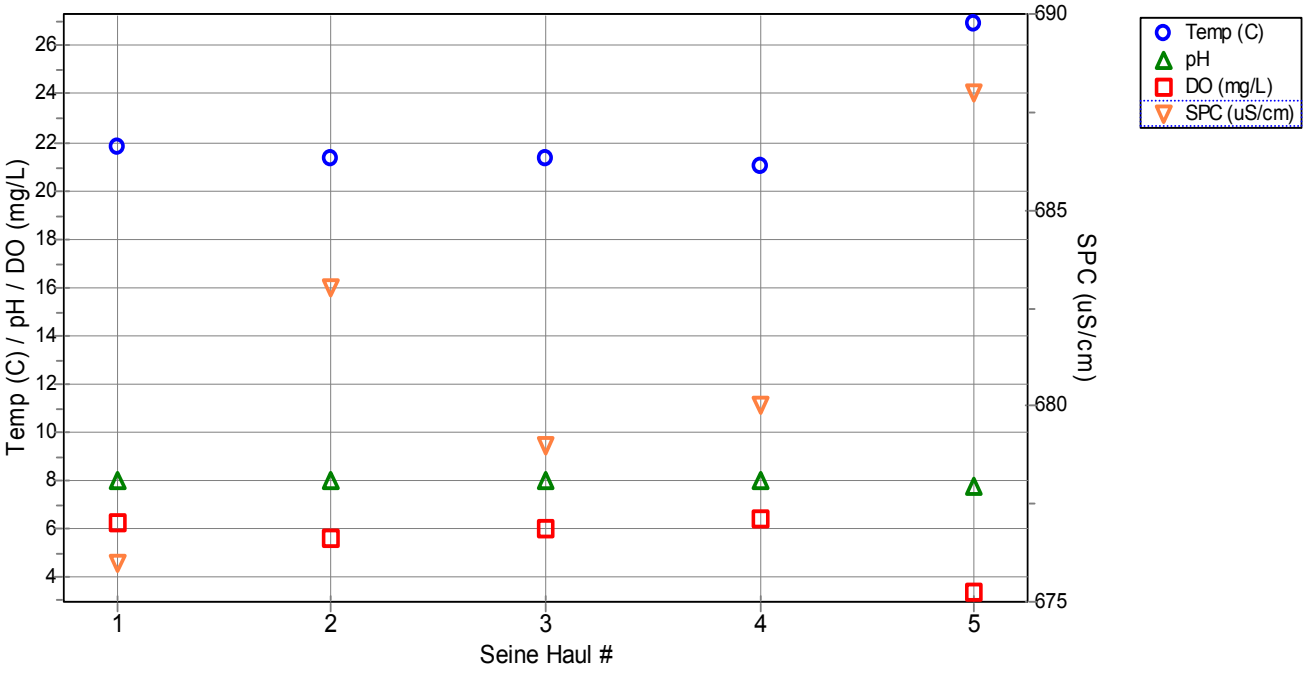

Figure 10.9.1.—Seine Haul Data for Lower San Juan Drain on August 5, 2002.

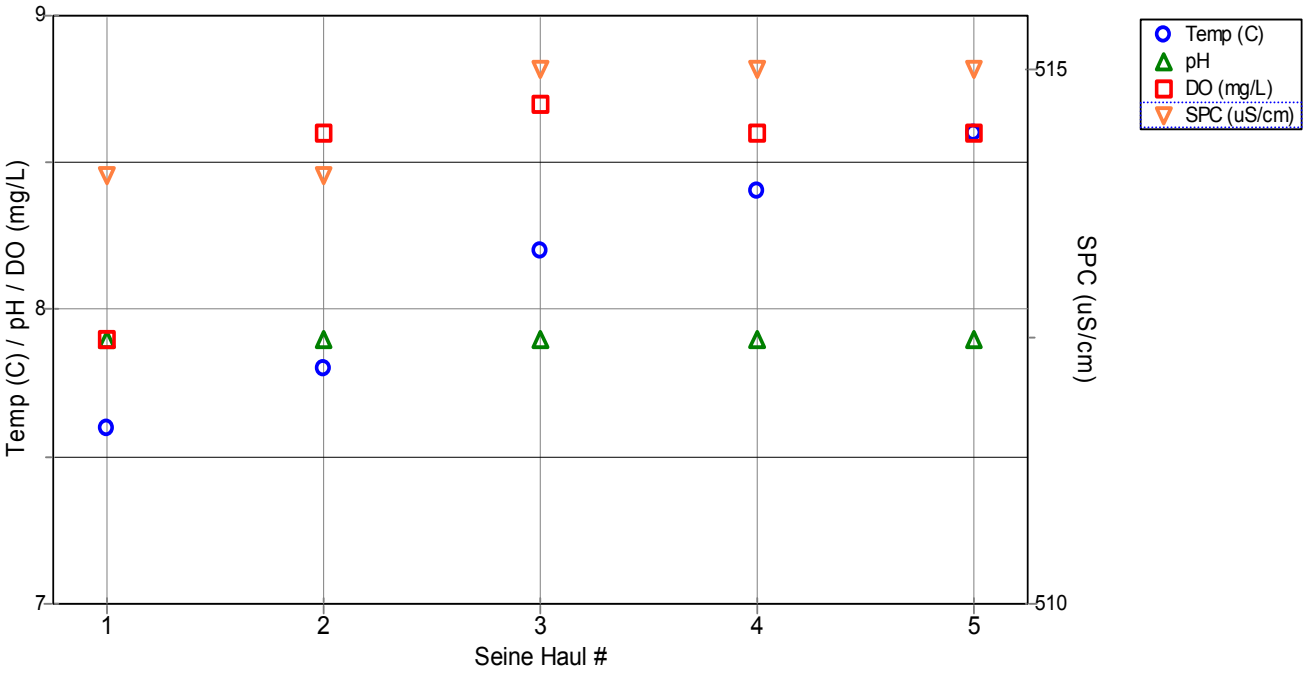

Figure 10.9.2.—Seine Haul Data for Lower San Juan Drain January 27, 2003.

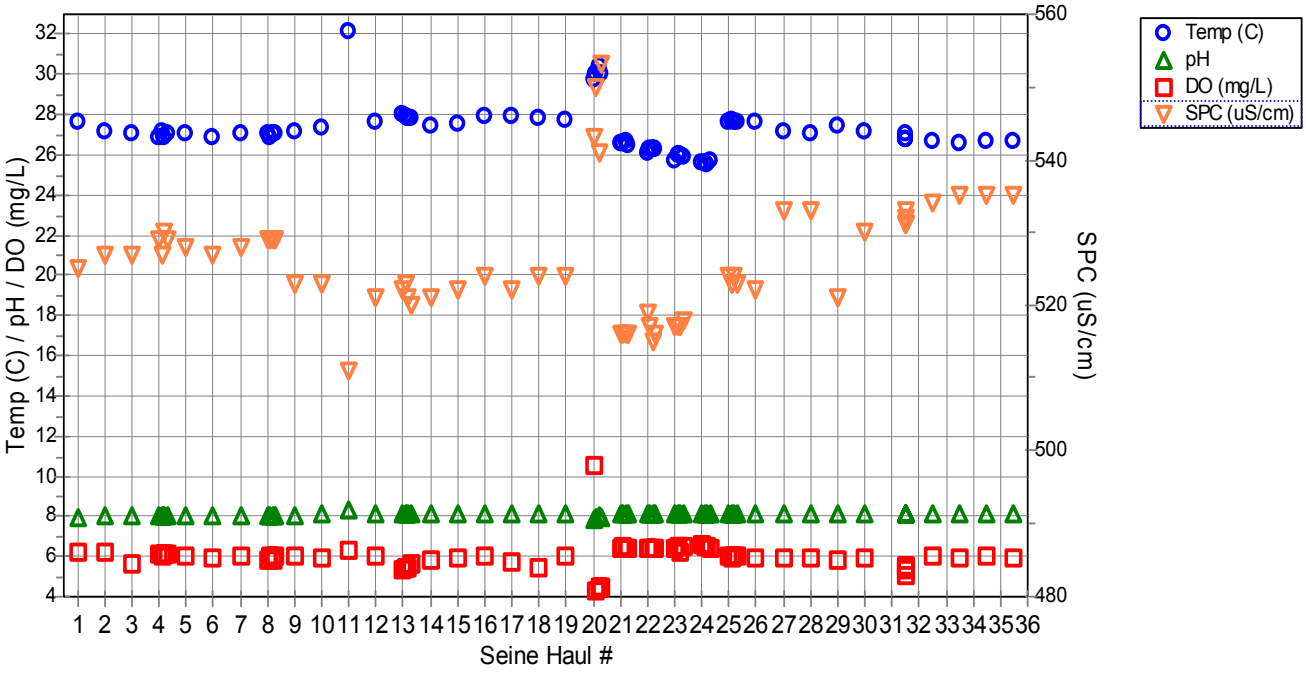

Figure 10.10.1.—Seine Haul Data for Rio Grande at La Joya on July 23, 2002.

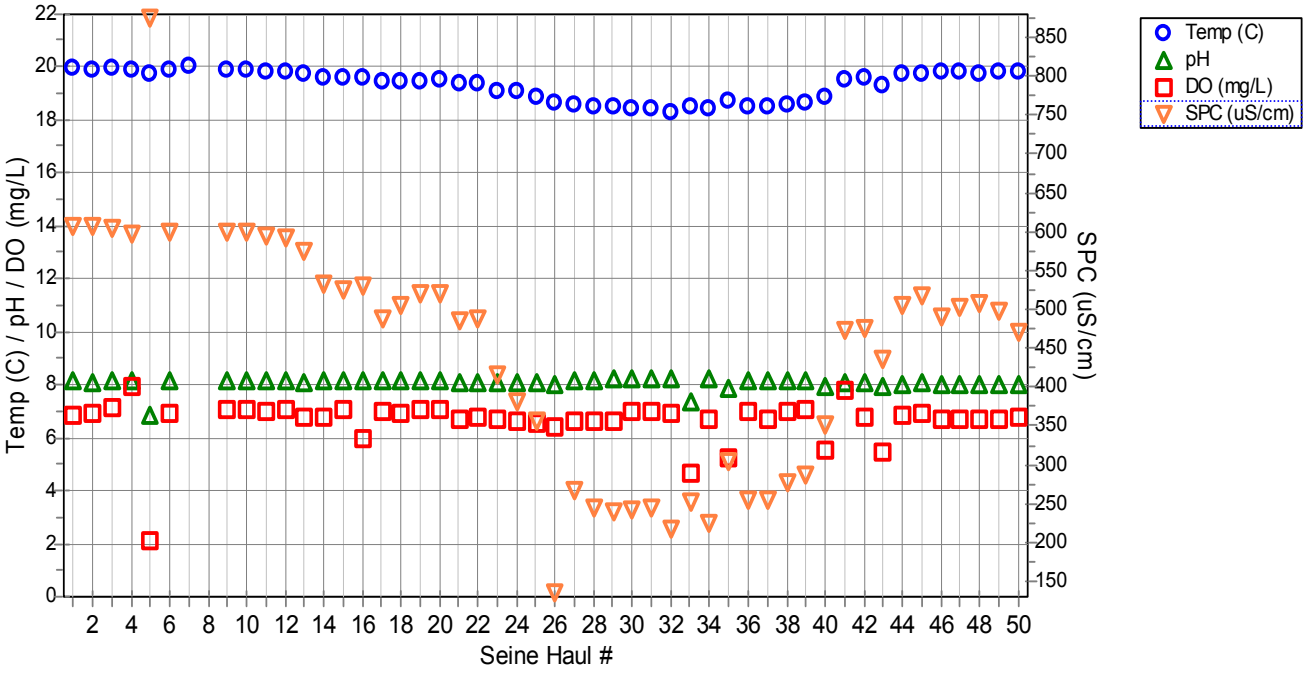

Figure 10.10.2.—Seine Haul Data for Rio Grande at La Joya on September 10, 2002.

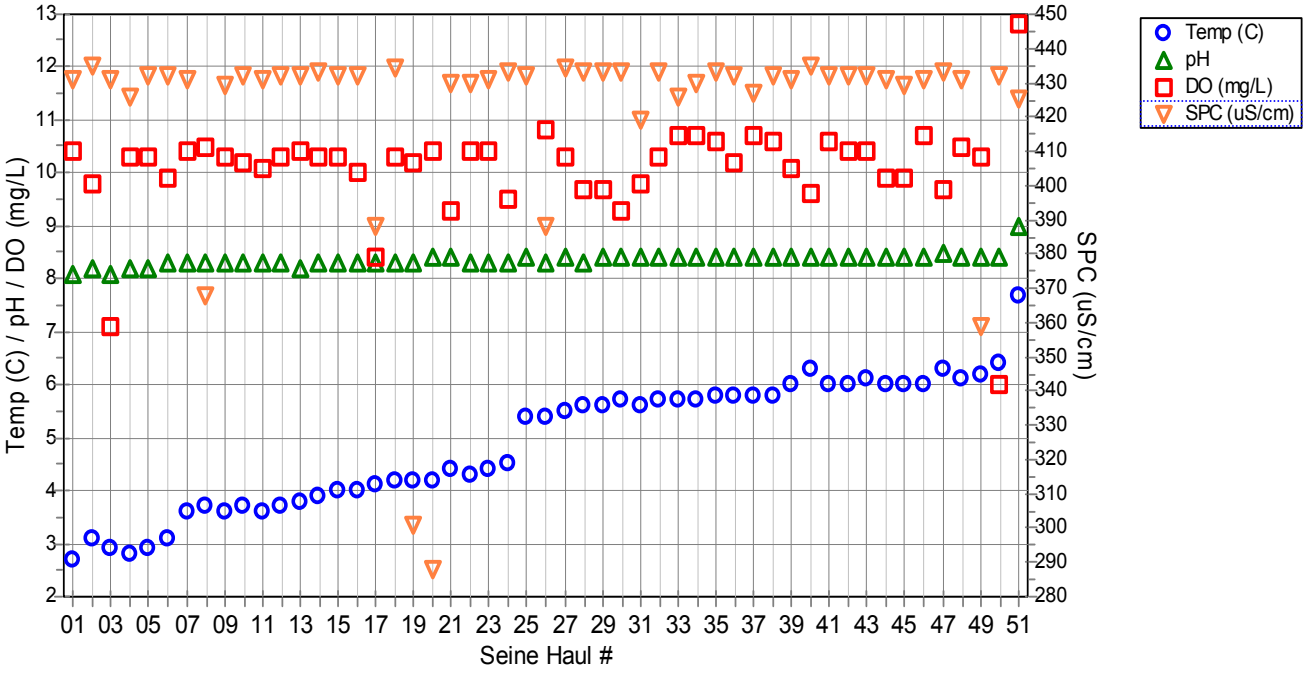

Figure 10.10.3.—Seine Haul Data Rio Grande at La Joya on December 13, 2002.

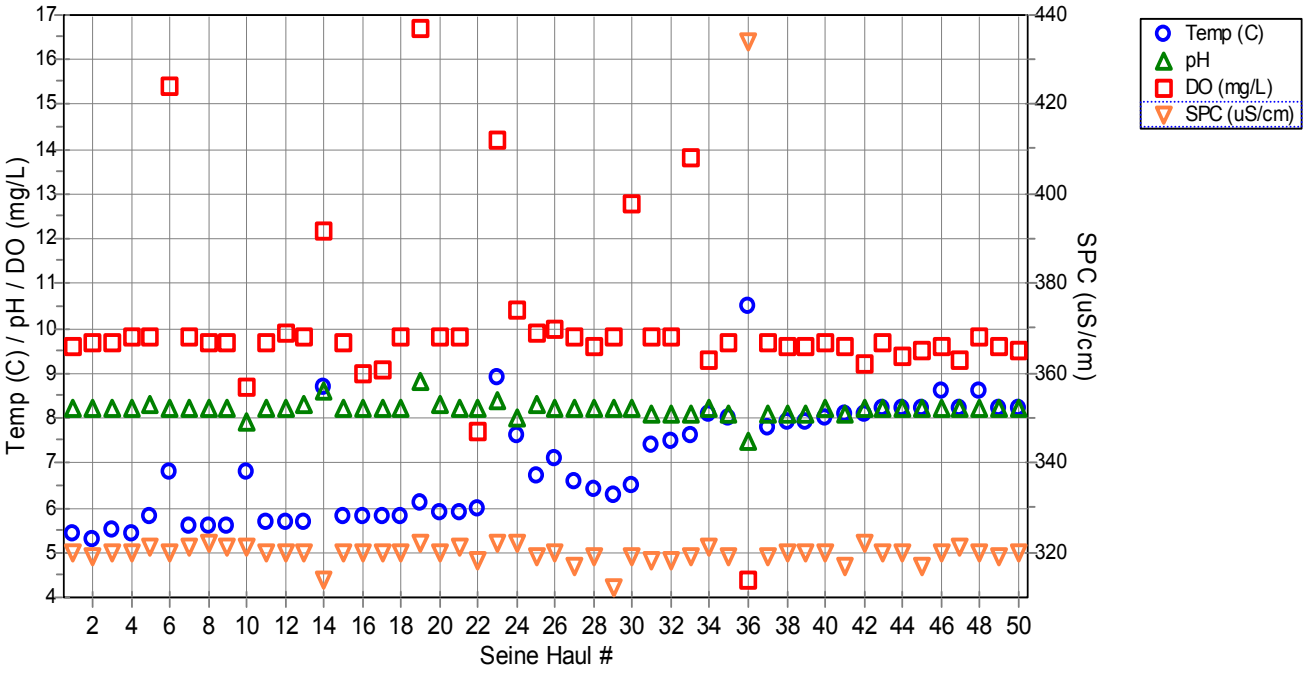

Figure 10.10.4.—Seine Haul Data Rio Grande at La Joya on February 25, 2003.

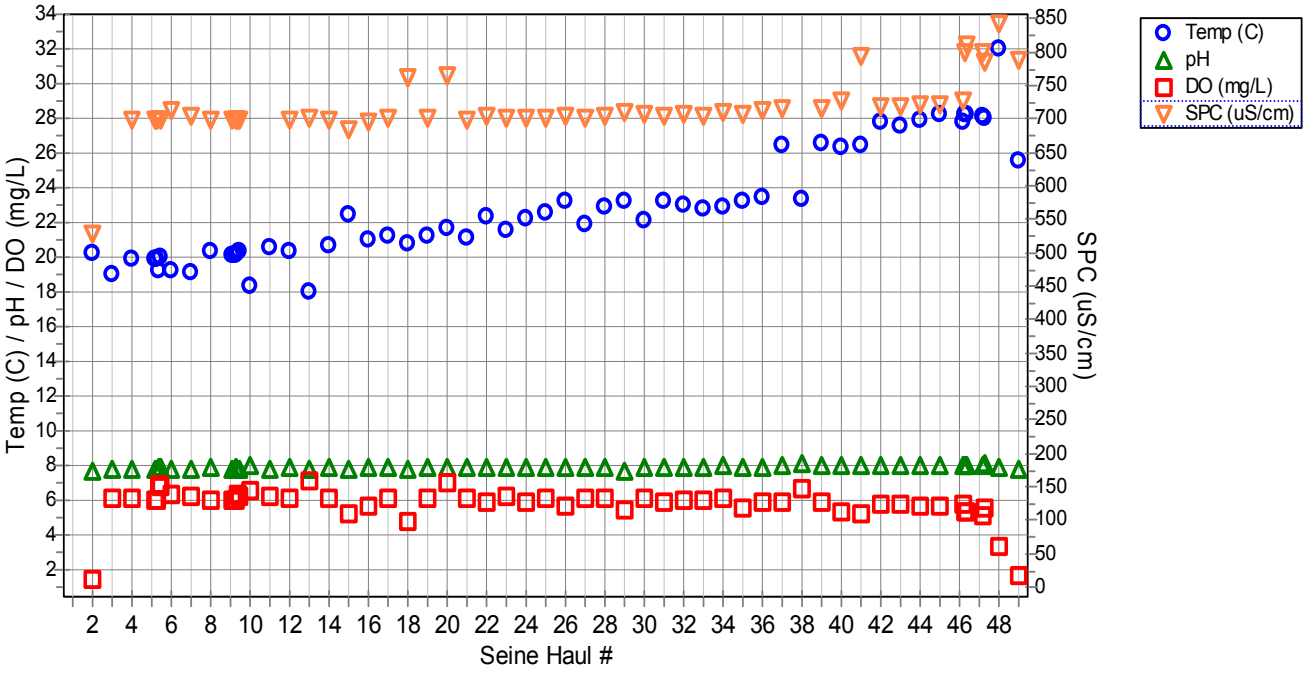

Figure 10.11.1.—Seine Haul Data for Rio Grande at Lemitar on August 21, 2002.

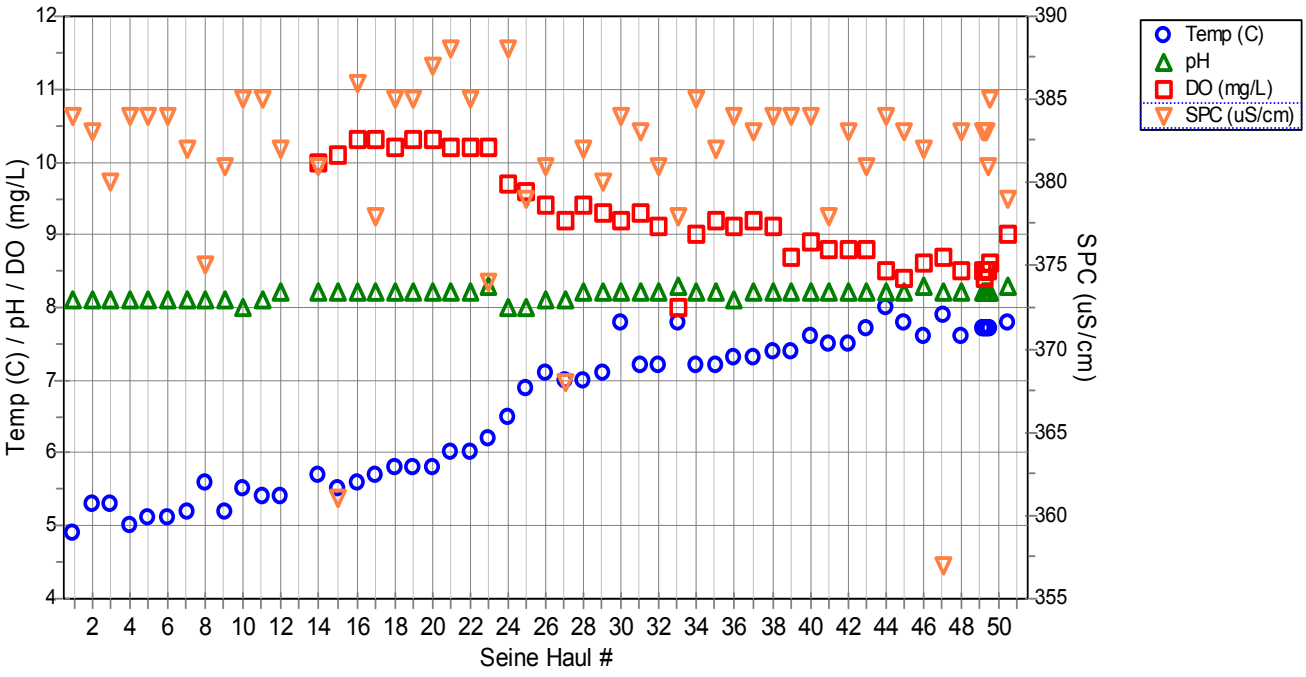

Figure 10.11.2.—Seine Haul Data Rio Grande at Lemitar on January 15, 2003.

—Seine Haul Data for Rio Grande below Arroyo del Tajo, July 22, 2002 is unavailable—

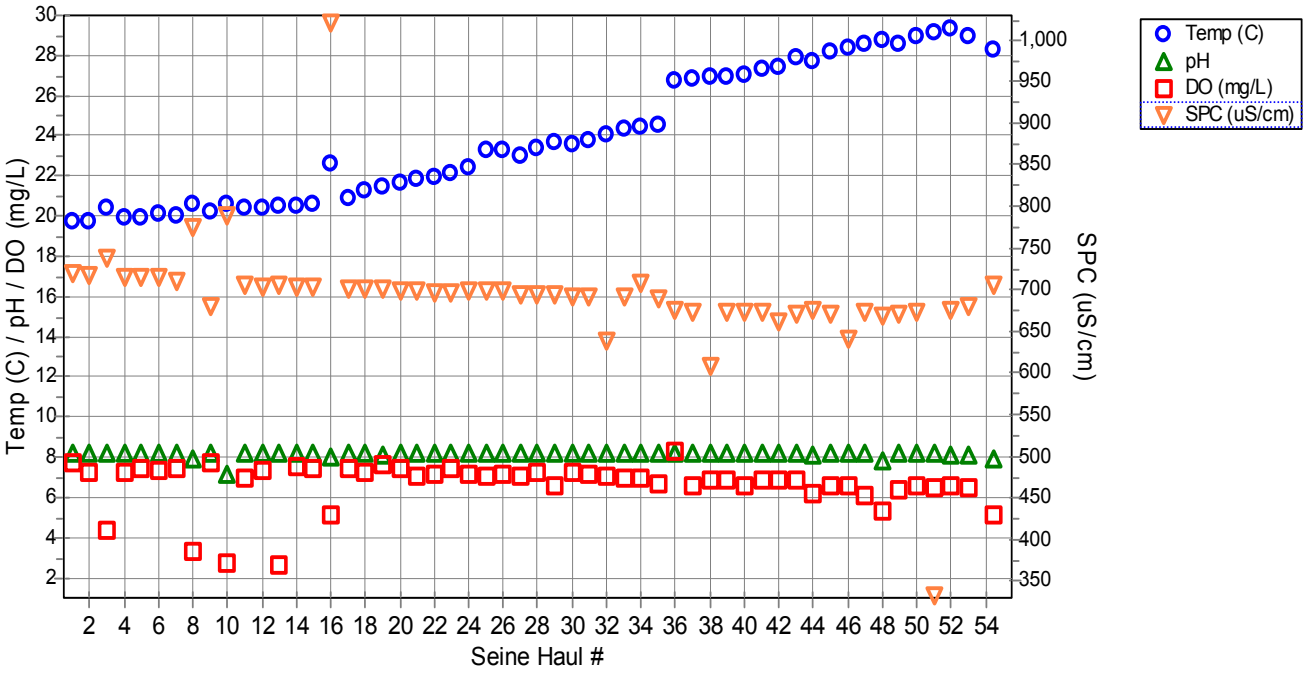

Figure10.12.1.—Seine Haul Data for Rio Grande below Arroyo del Tajo, September 9, 2002.

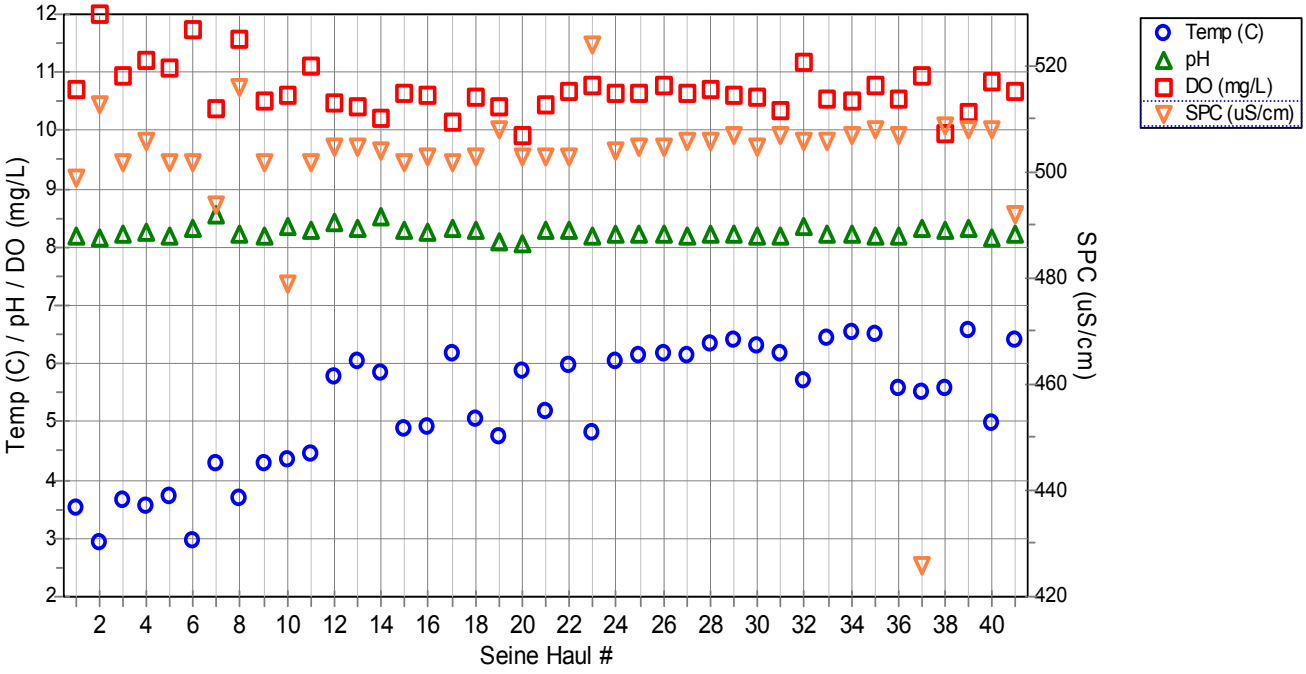

Figure 10.12.2.—Seine Haul Data for Rio Grande below Arroyo del Tajo, December 12, 2002.

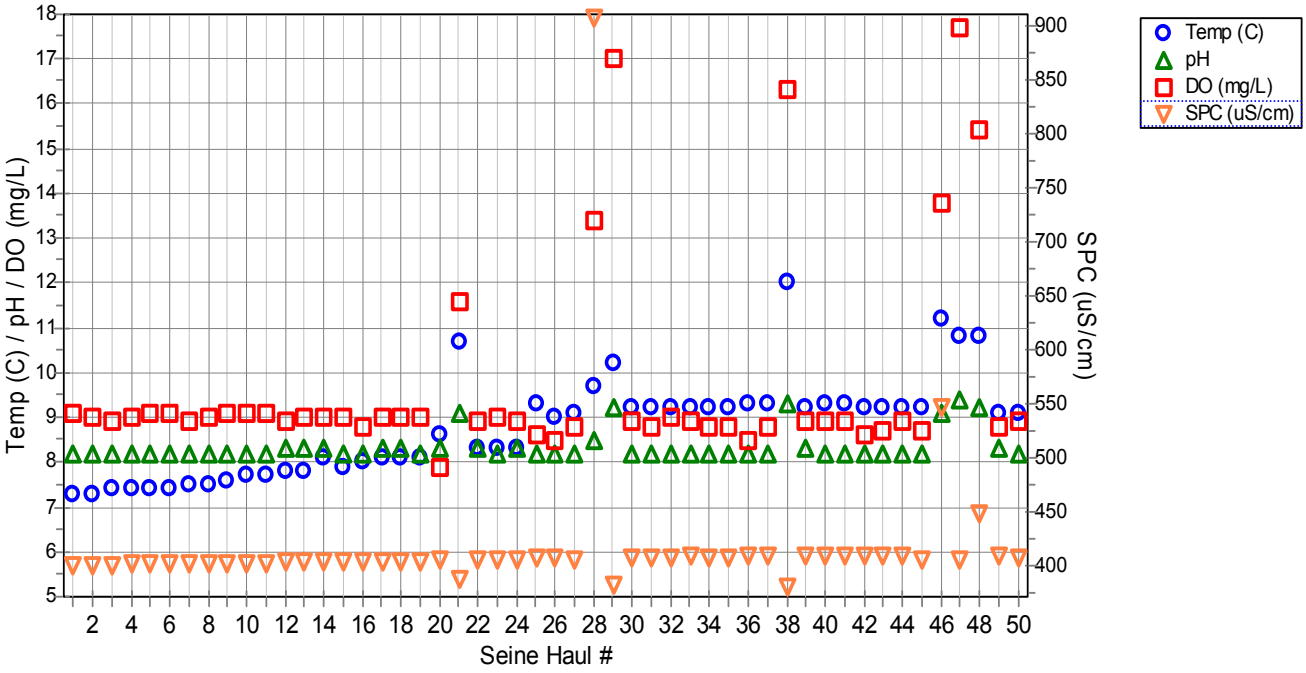

Figure 10.12.3.—Seine Haul Data Rio Grande below Arroyo del Tajo, February 24, 2003.

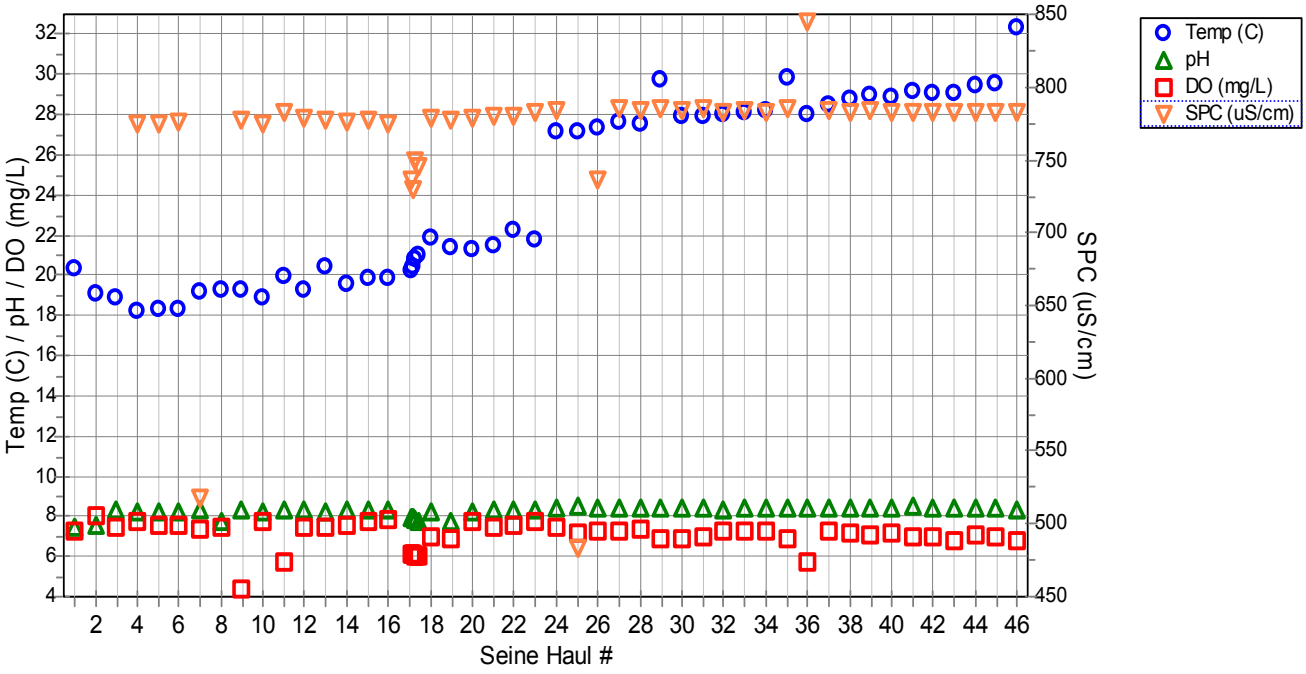

Figure 10.13.1.—Seine Haul Data for Rio Grande at San Pedro, August 20, 2002.

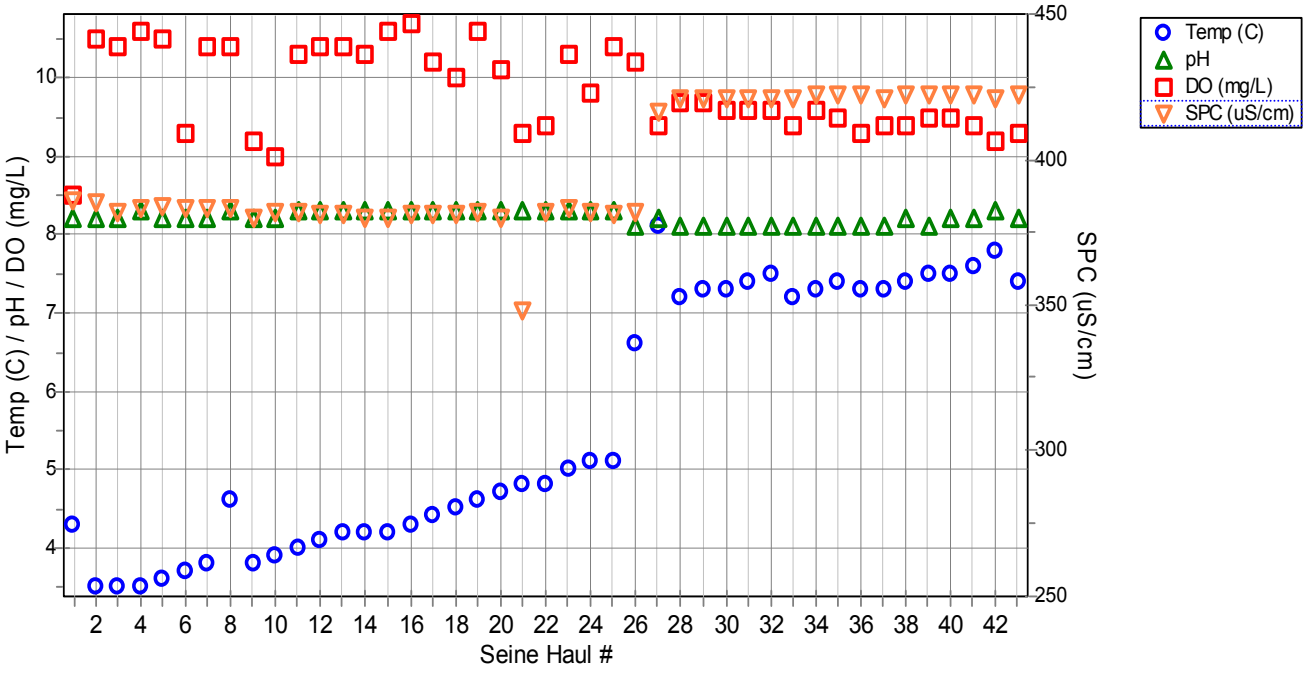

Figure 10.13.2.—Seine Haul Data Rio Grande at San Pedro, January 14, 2003.

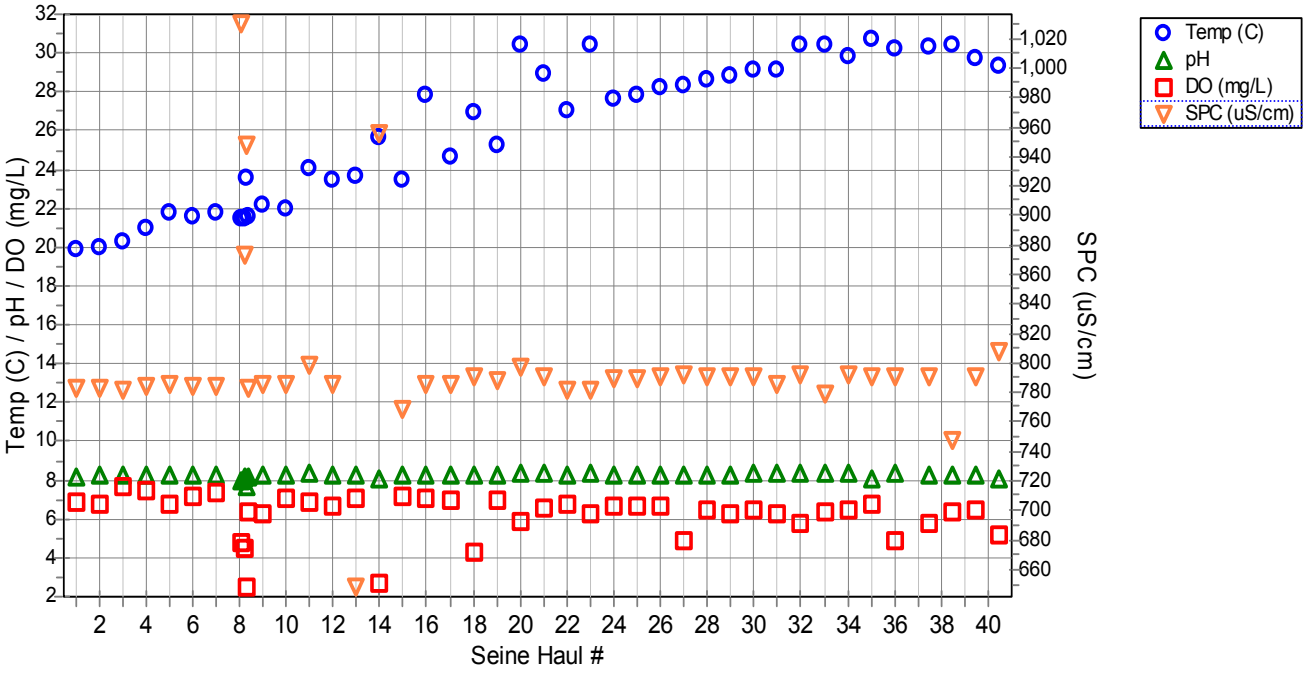

Figure 10.14.1.—Seine Haul Data for Rio Grande at North Boundary Bosque del Apache NWR August 19, 2002.

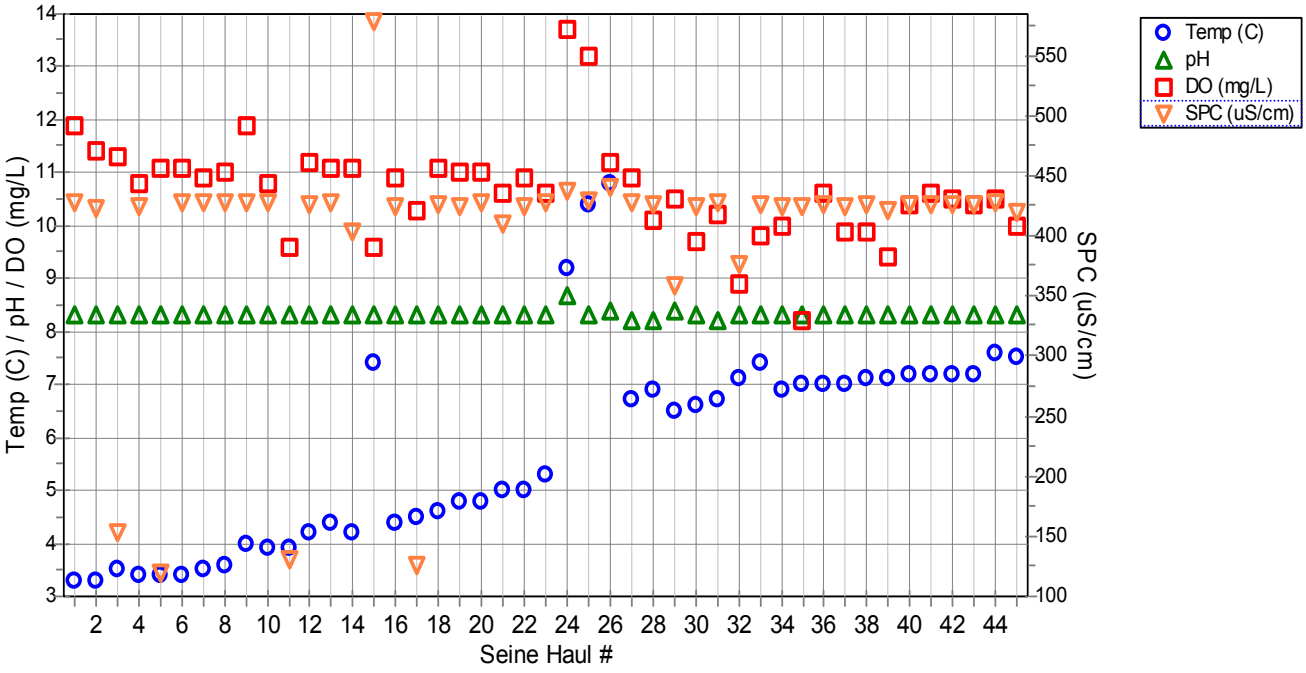

Figure 10.14.2.—Seine Haul Data Rio Grande at North Boundary Bosque del Apache NWR January 13, 2003.

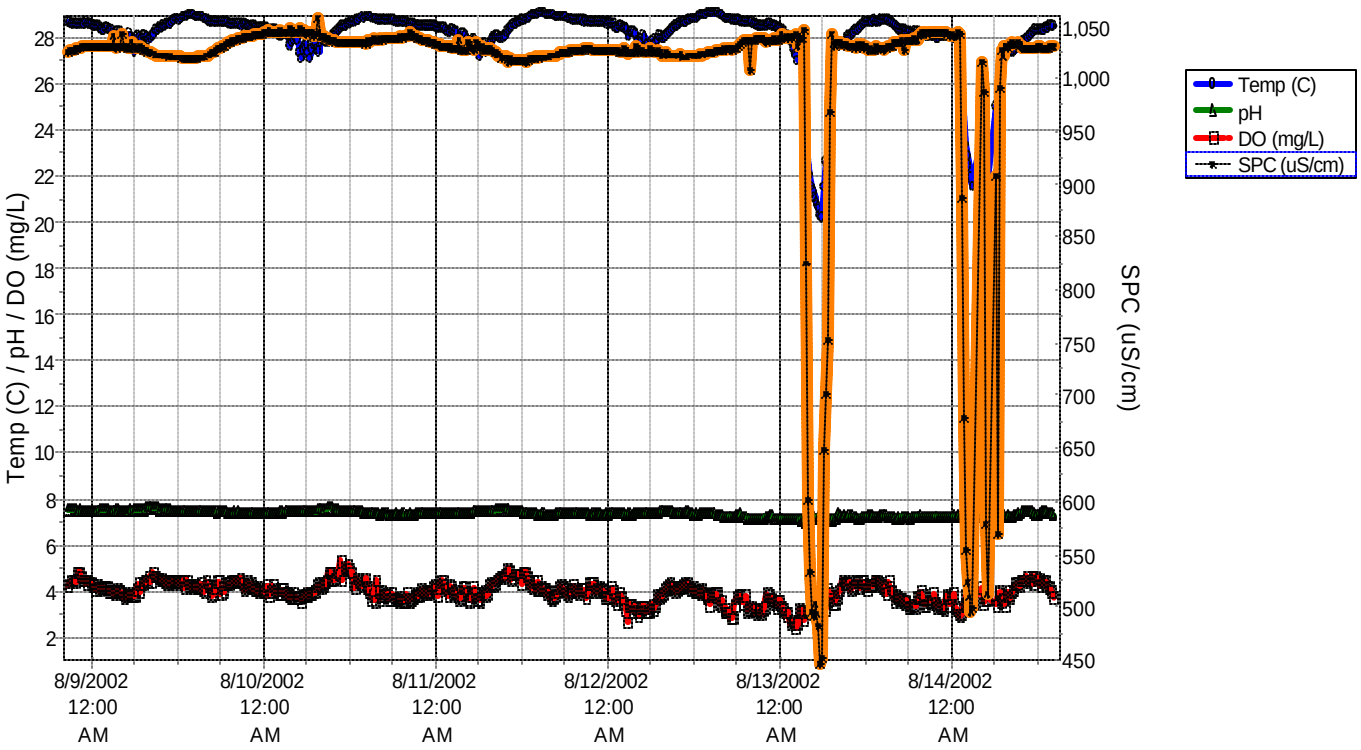

Figure 12.1.1.—Continuous Monitoring Data for Rio Rancho Waste Water Treatment Plant Outfall #2, August 8 through August 14, 2002.

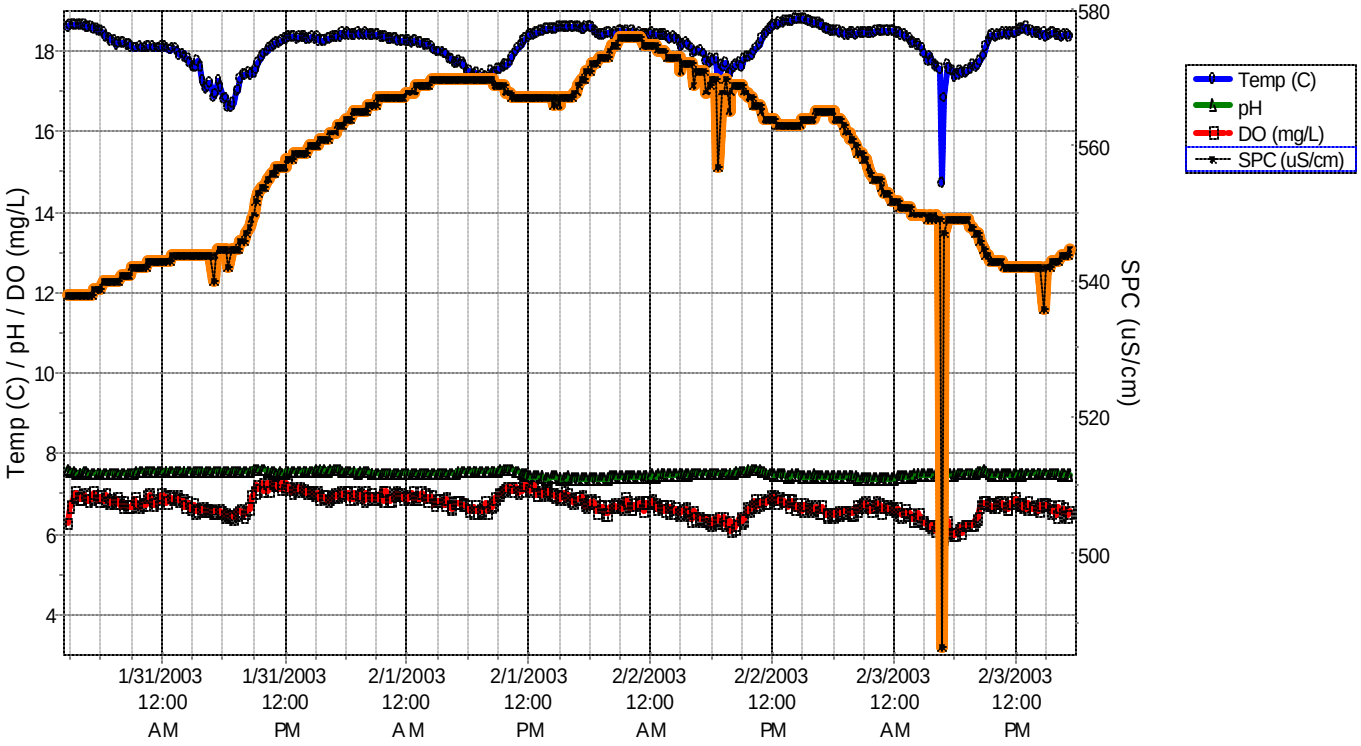

Figure 12.1.2.—Continuous Monitoring Data for Rio Rancho Waste Water Treatment Plant Outfall #2, January 30 through February 3, 2003.

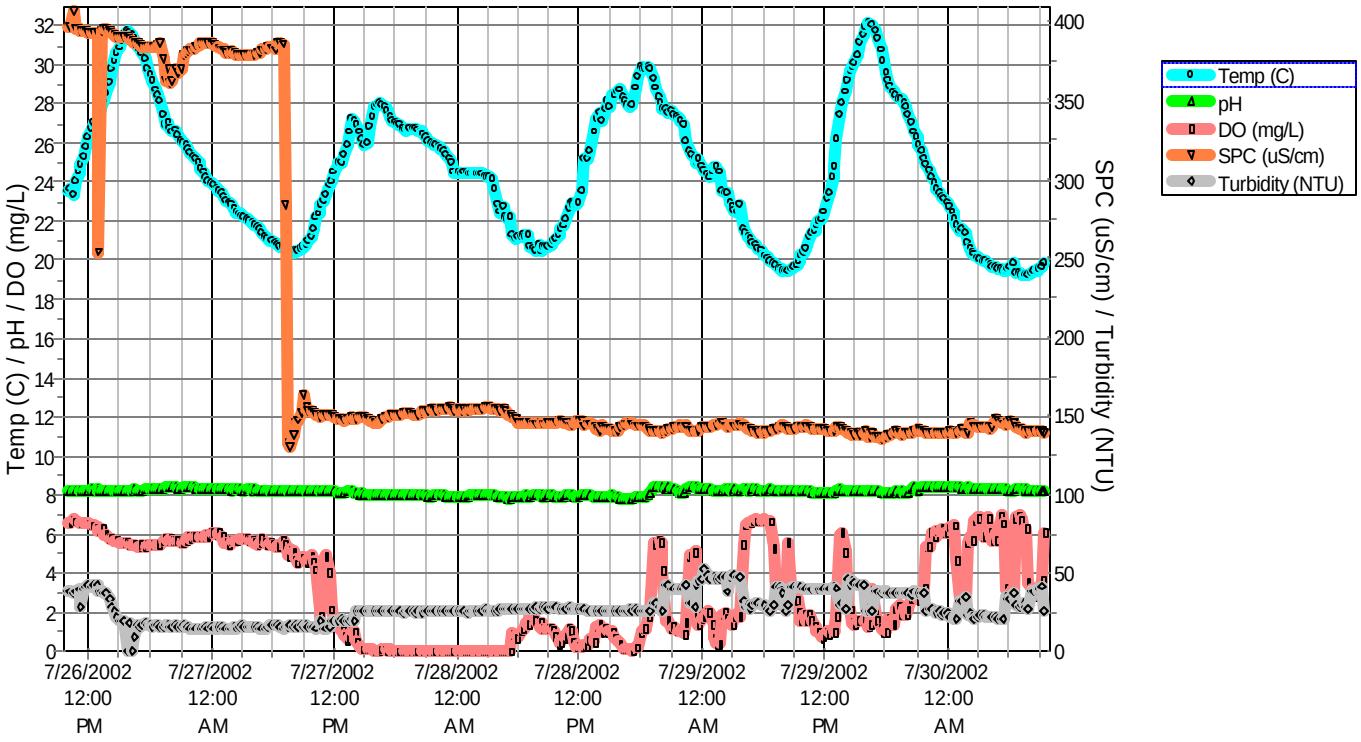

Figure 12.2.1.—Continuous Monitoring Data for Rio Grande at La Orilla, July 26 through July 30, 2002.

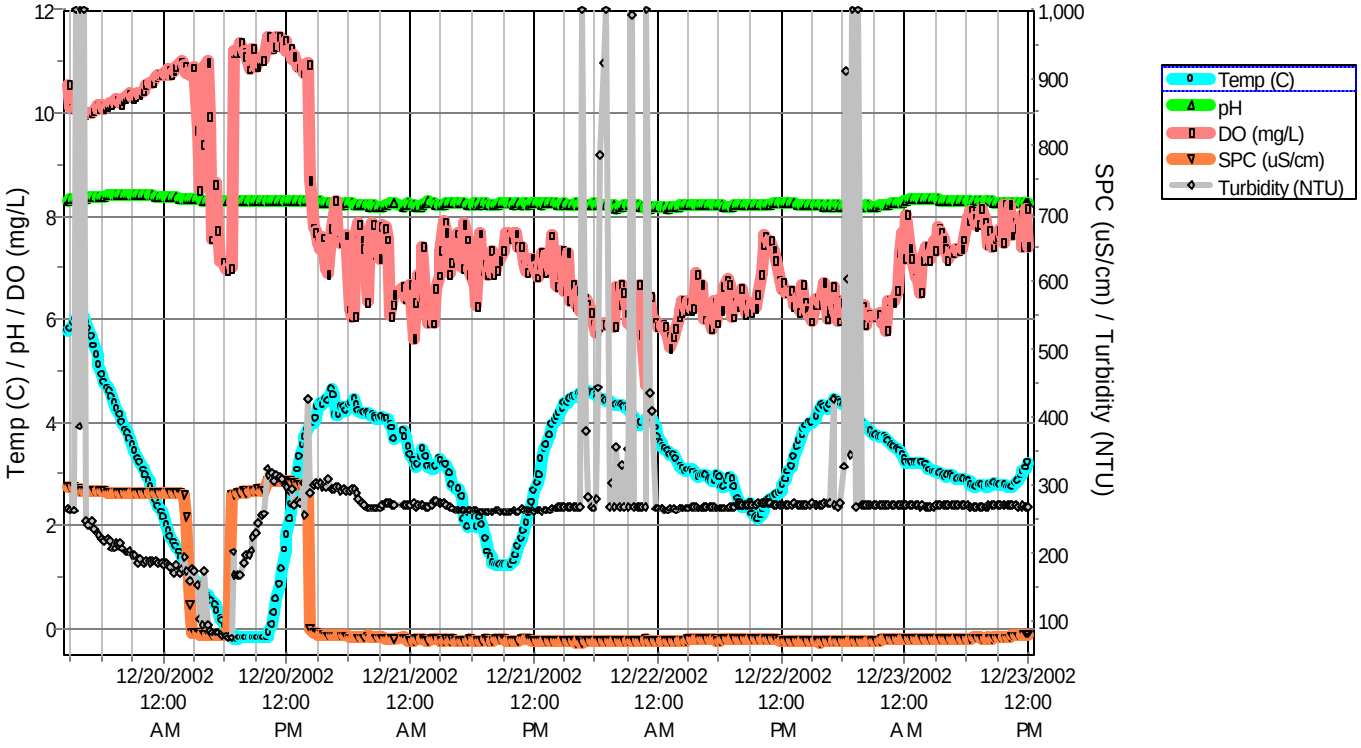

Figure 12.2.2.—Continuous Monitoring Data for Rio Grande at La Orilla, December 20 through December 23, 2002.

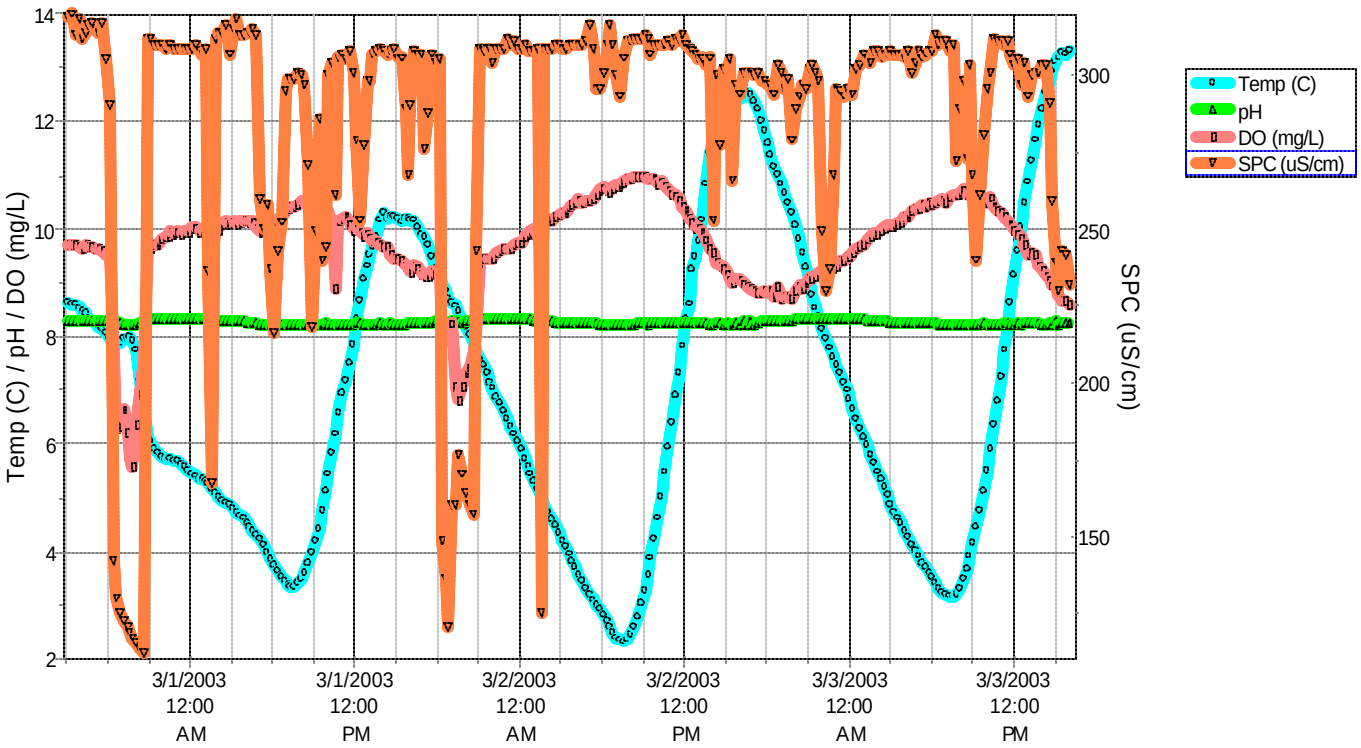

Figure 12.2.3.—Continuous Monitoring Data for Rio Grande at La Orilla, February 28 though March 3, 2003.

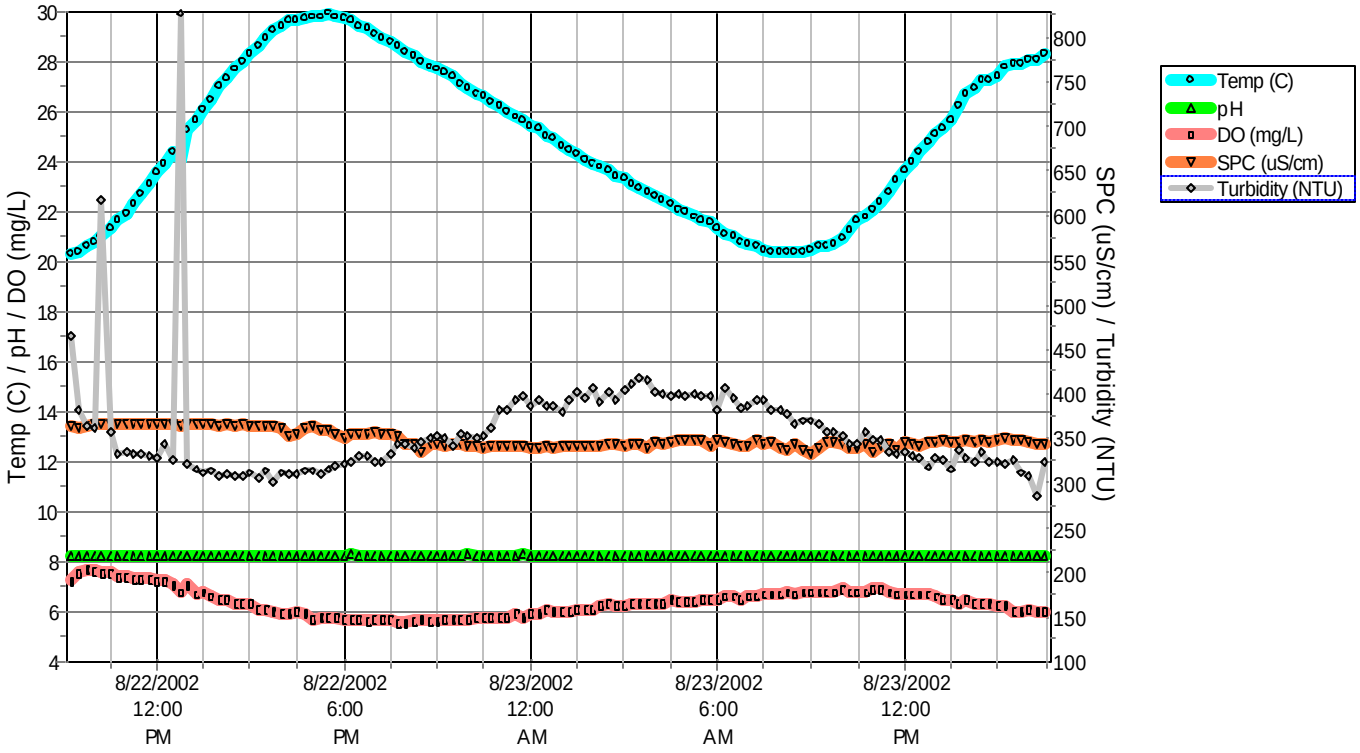

Figure 12.3.1.—Continuous Monitoring Data for Rio Grande at Barelas August 22 through August 23, 2002.

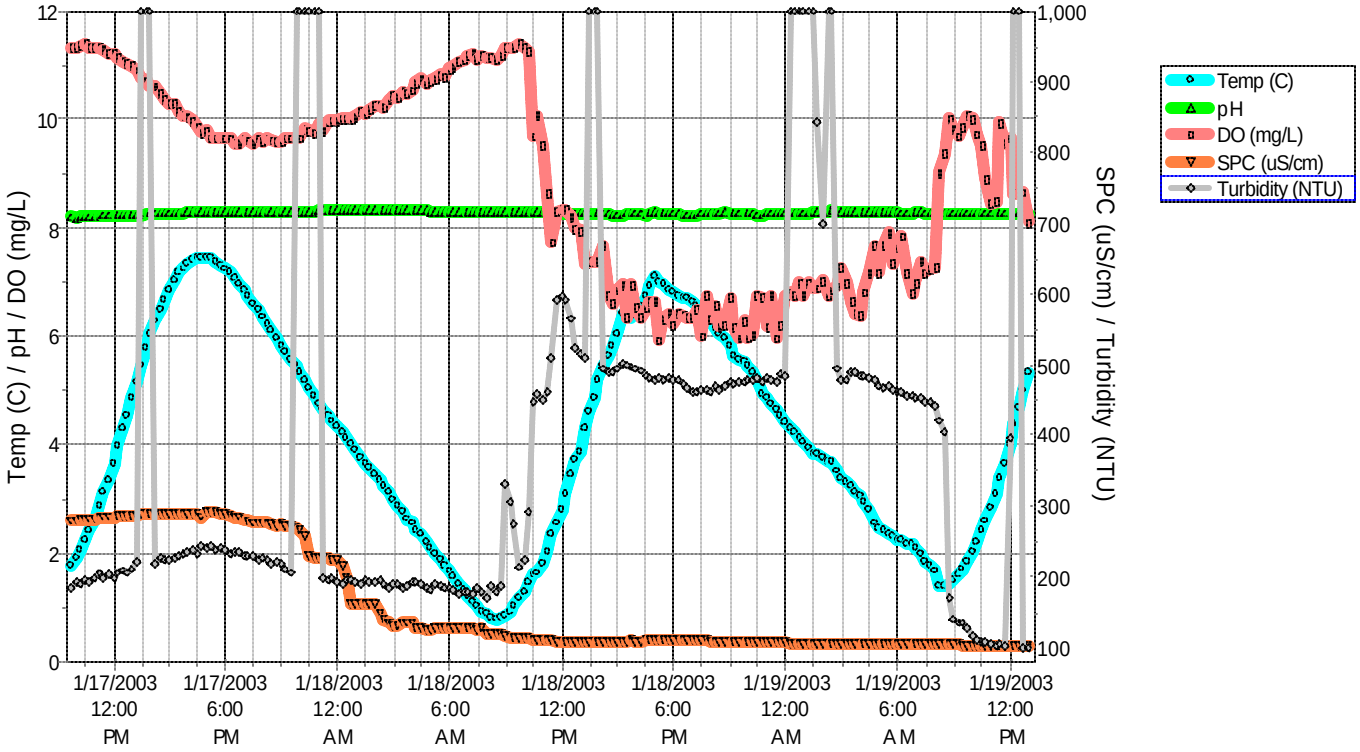

Figure 12.3.2.—Continuous Monitoring Data for Rio Grande at Barelas January 17 through January 19, 2003.

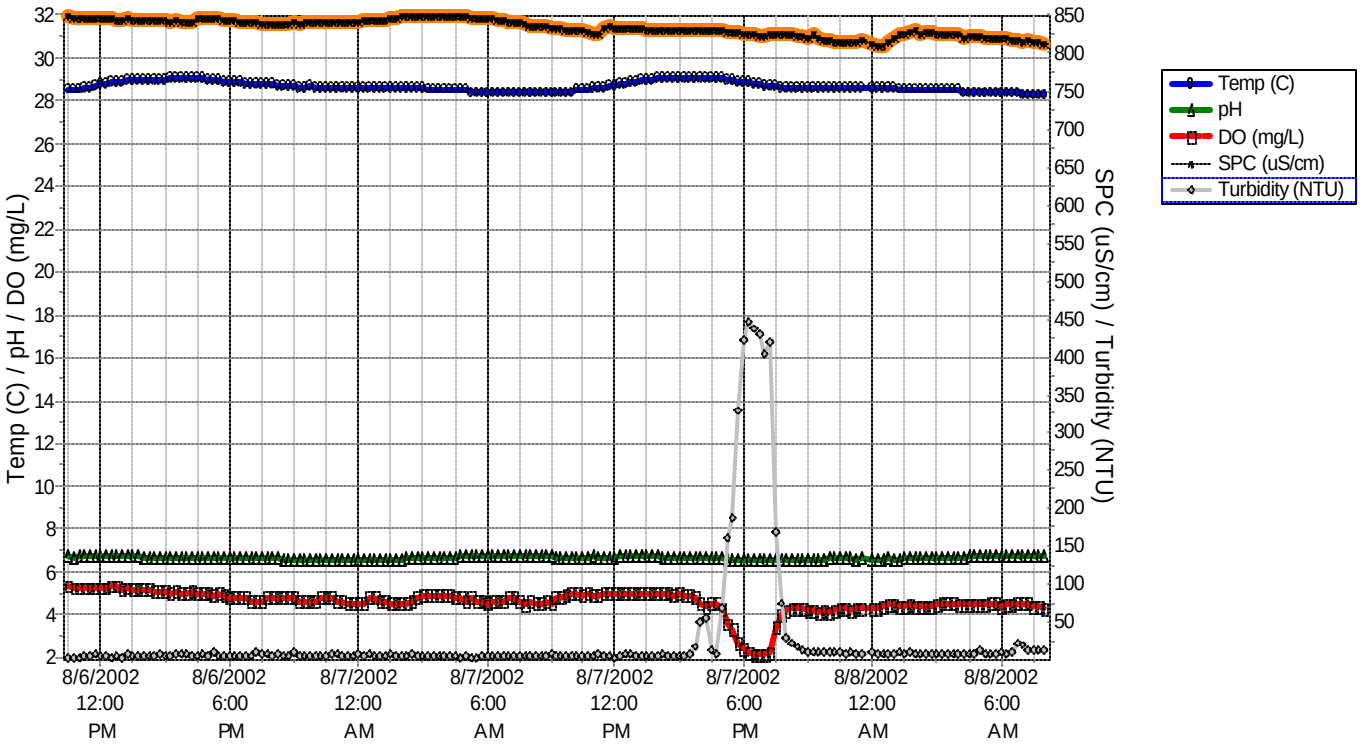

Figure 12.4.1.—Continuous Monitoring Data for Albuquerque Waste Water Treatment Plant Outfall, August 6 through August 8, 2002.

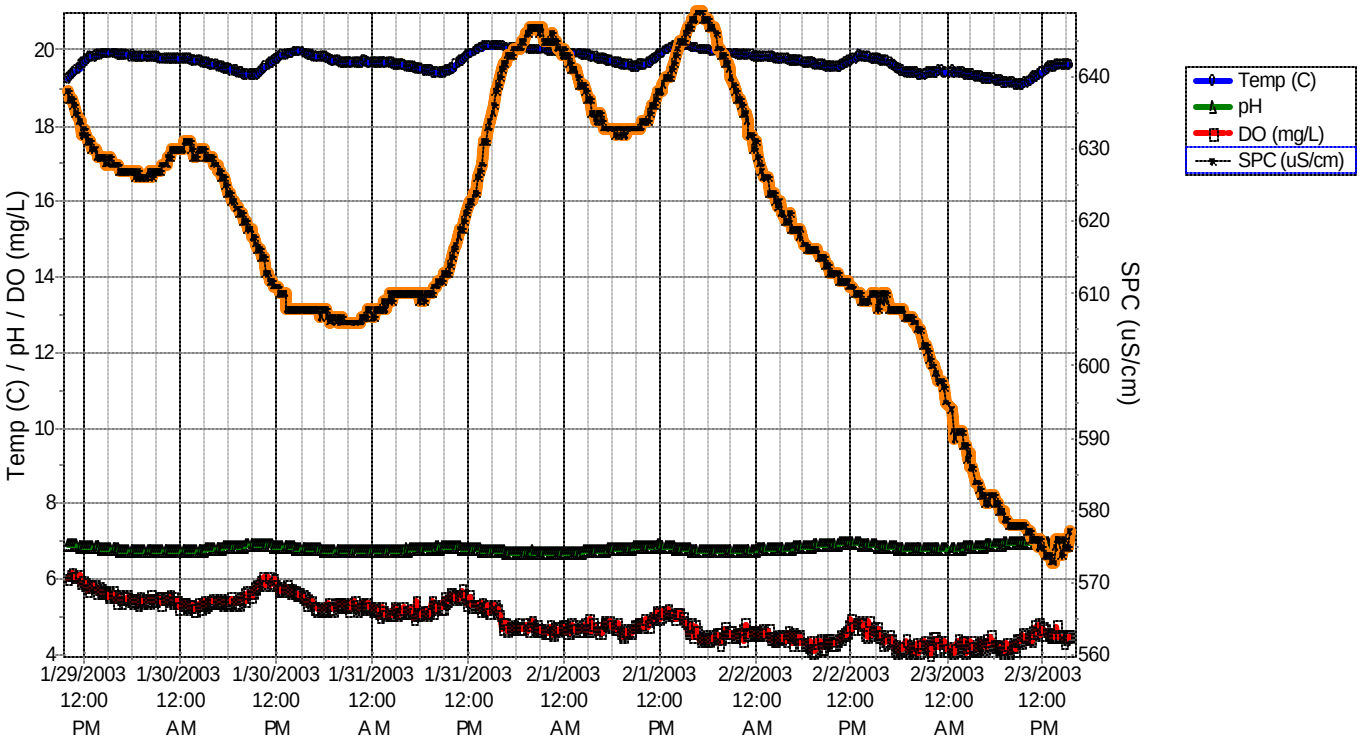

Figure 12.4.2.—Continuous Monitoring Data for Albuquerque Waste Water Treatment Plant Outfall, January 29 through February 3, 2003.

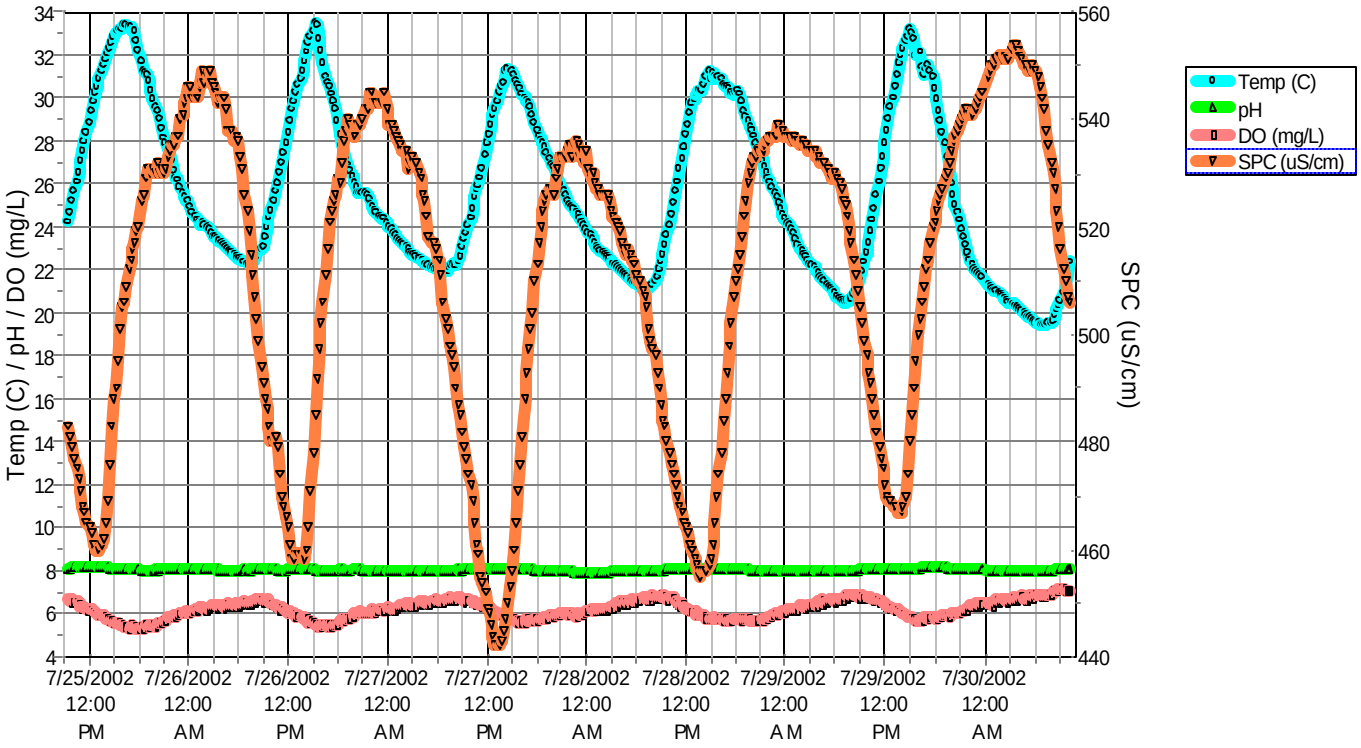

Figure 12.5.1.—Continuous Monitoring Data for Rio Grande at Los Padillas, July 25 through July 30, 2002.

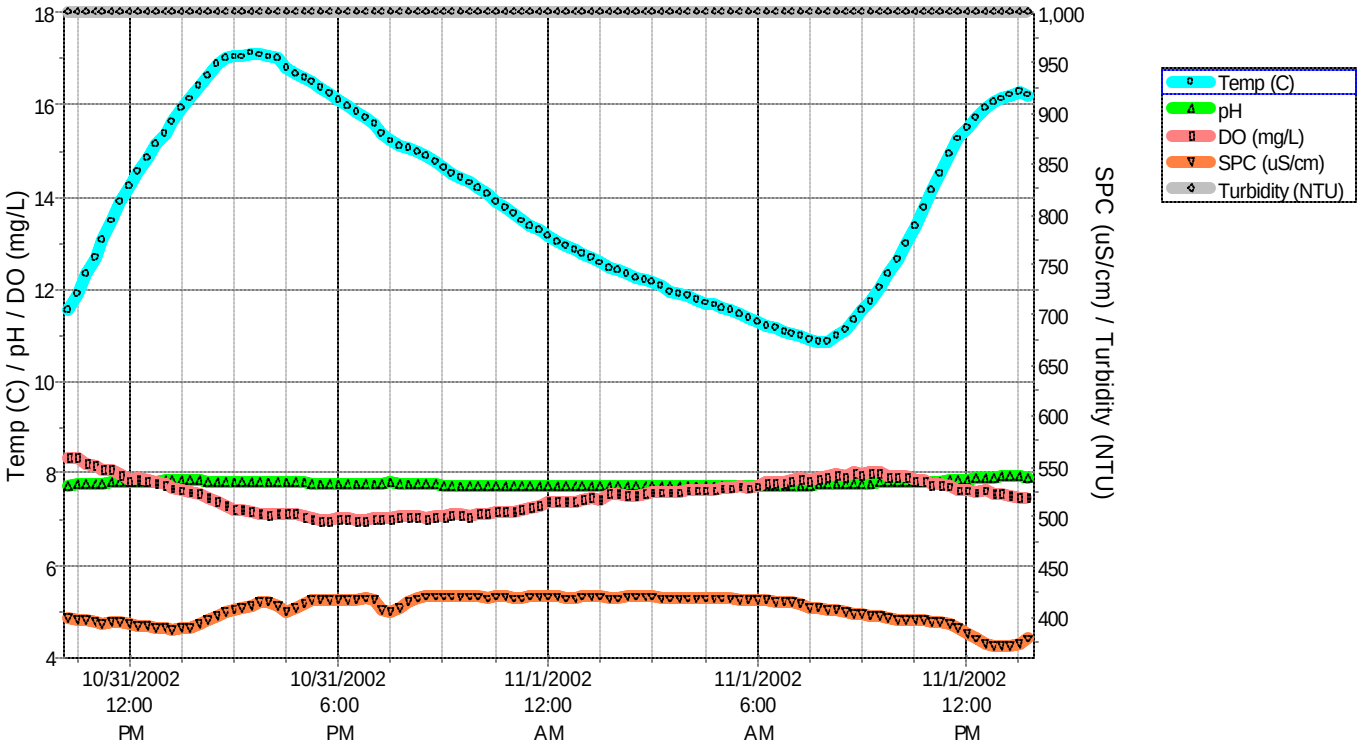

Figure 12.5.2.—Continuous Monitoring Data for Rio Grande at Los Padillas, October 31 through November 1, 2002.

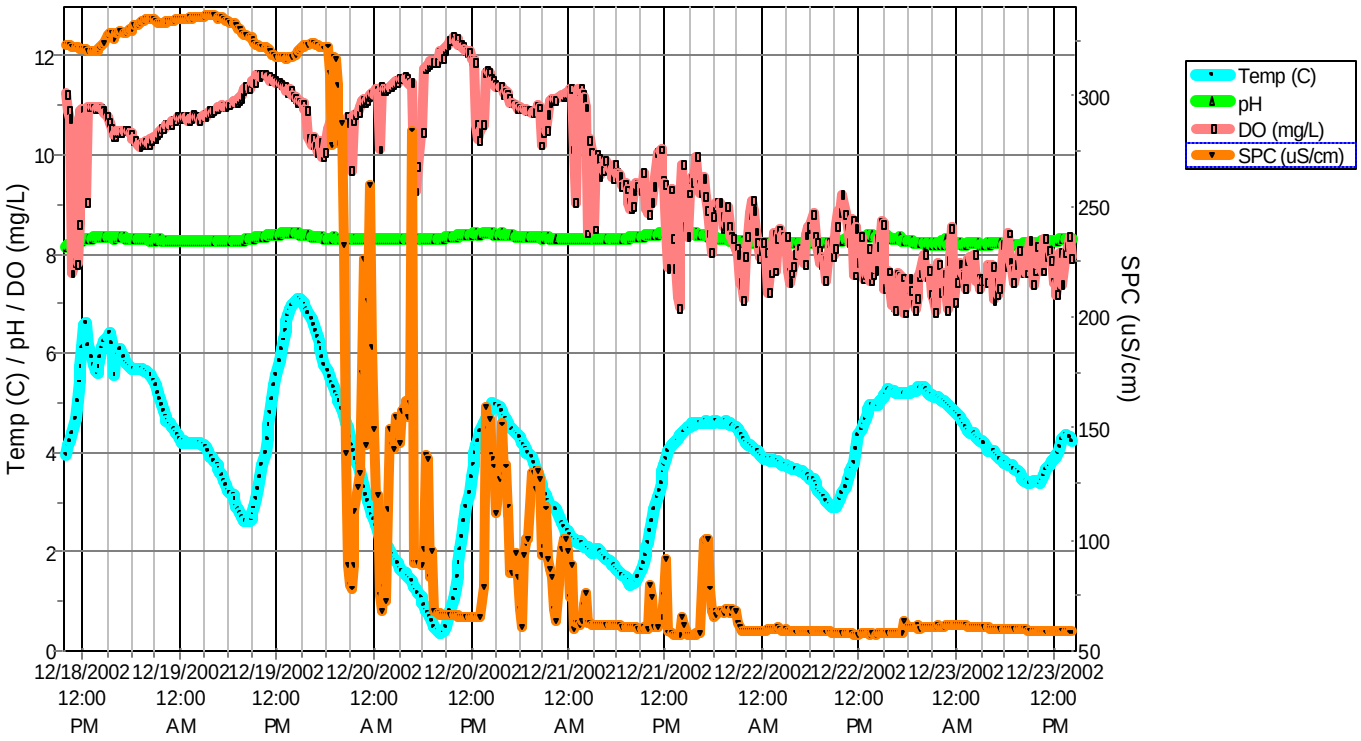

Figure 12.5.3.—Continuous Monitoring Data for Rio Grande at Los Padillas, December 18 through December 23, 2002.

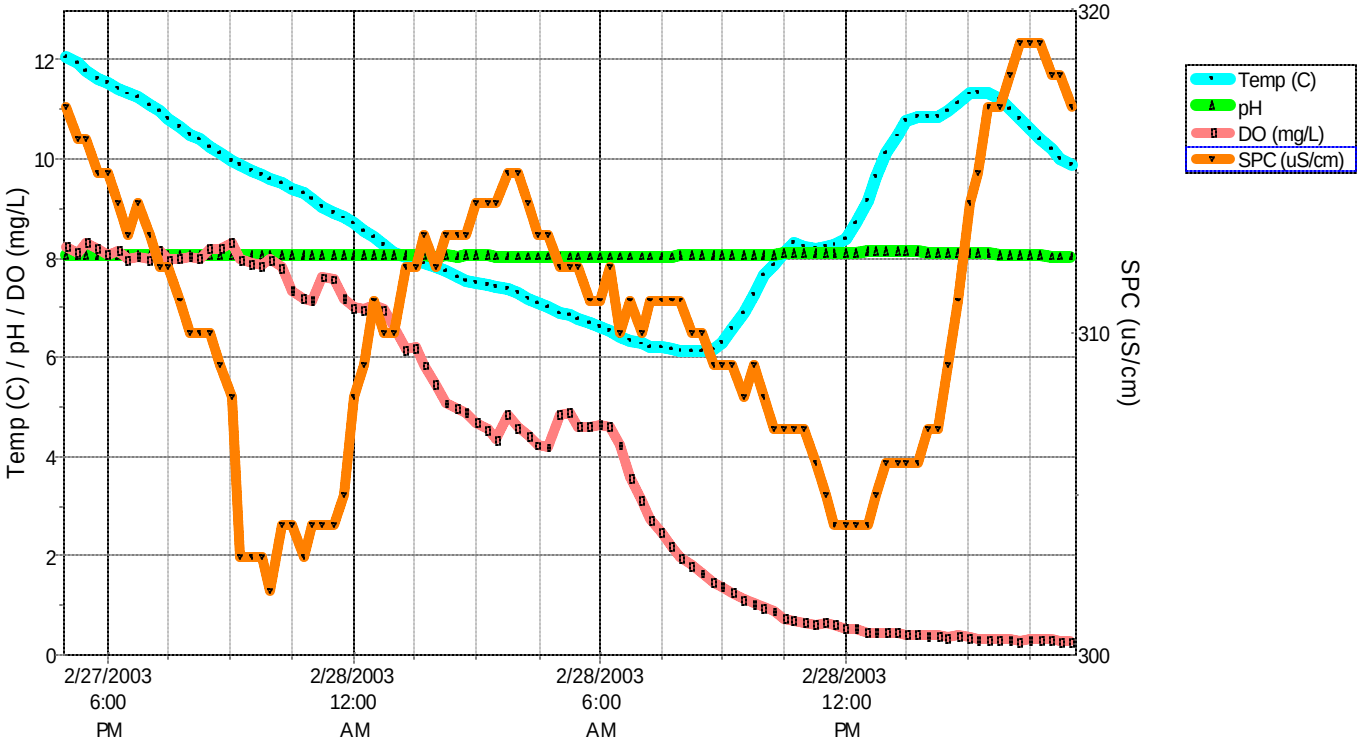

Figure 12.5.4.—Continuous Monitoring Data for Rio Grande at Los Padillas, February 27 though February 28, 2003.

Figure 12.6.1—Continuous Monitoring Data for Rio Grande at Isleta below Railroad Bridge on August 7, 2002 through August 11, 2002.

Figure 12.6.2—Continuous Monitoring Data for Rio Grande at Isleta below Railroad Bridge on January 28 through February 3, 2003.

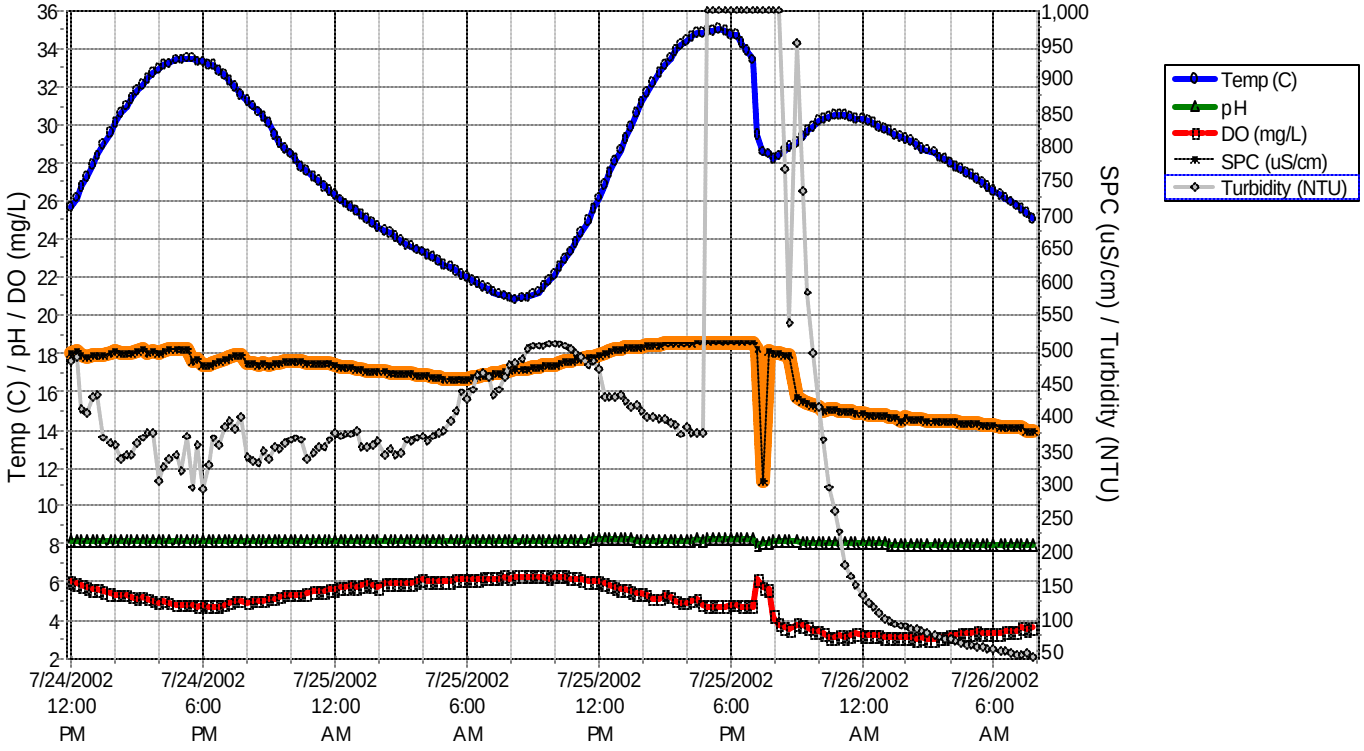

Figure 12.7.1.—Continuous Monitoring Data for Rio Grande at Los Lunas, July 24 through July 26, 2002.

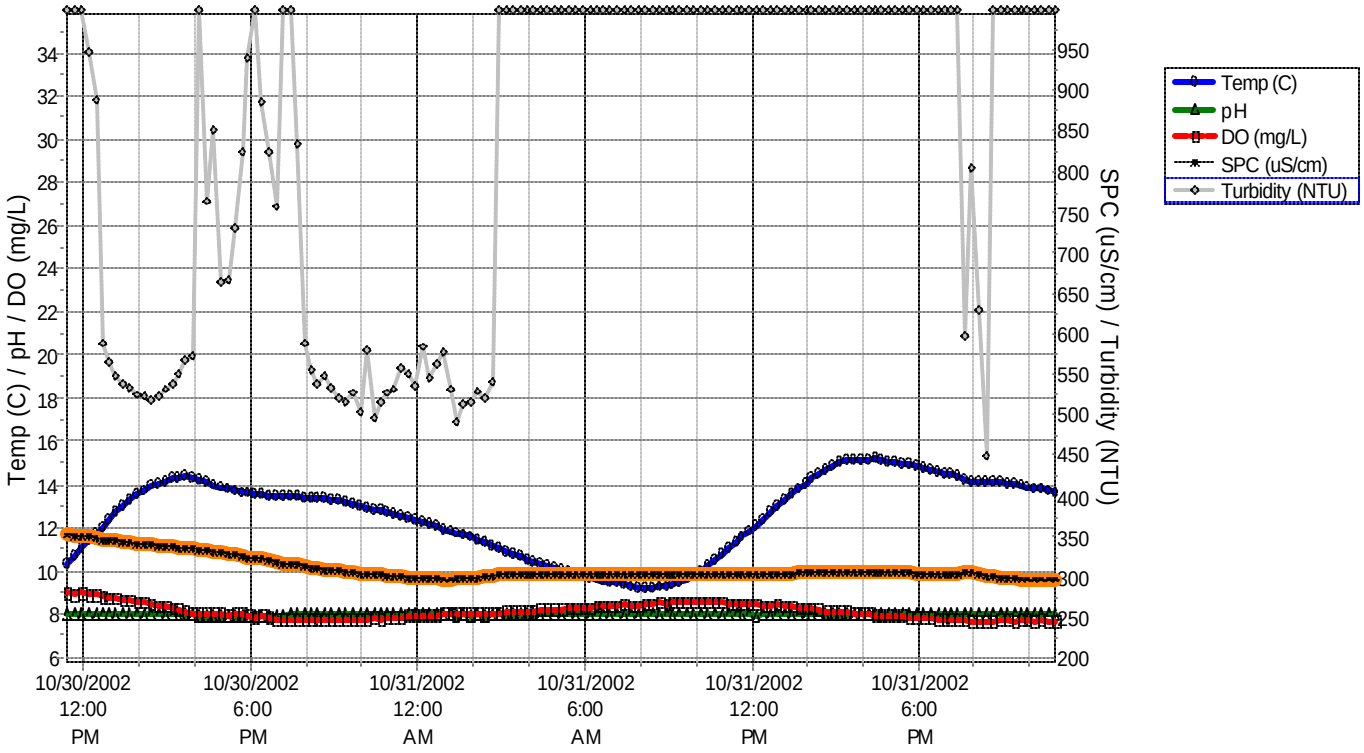

Figure 12.7.2.—Continuous Monitoring Data for Rio Grande at Los Lunas, October 30 through October 31, 2002.

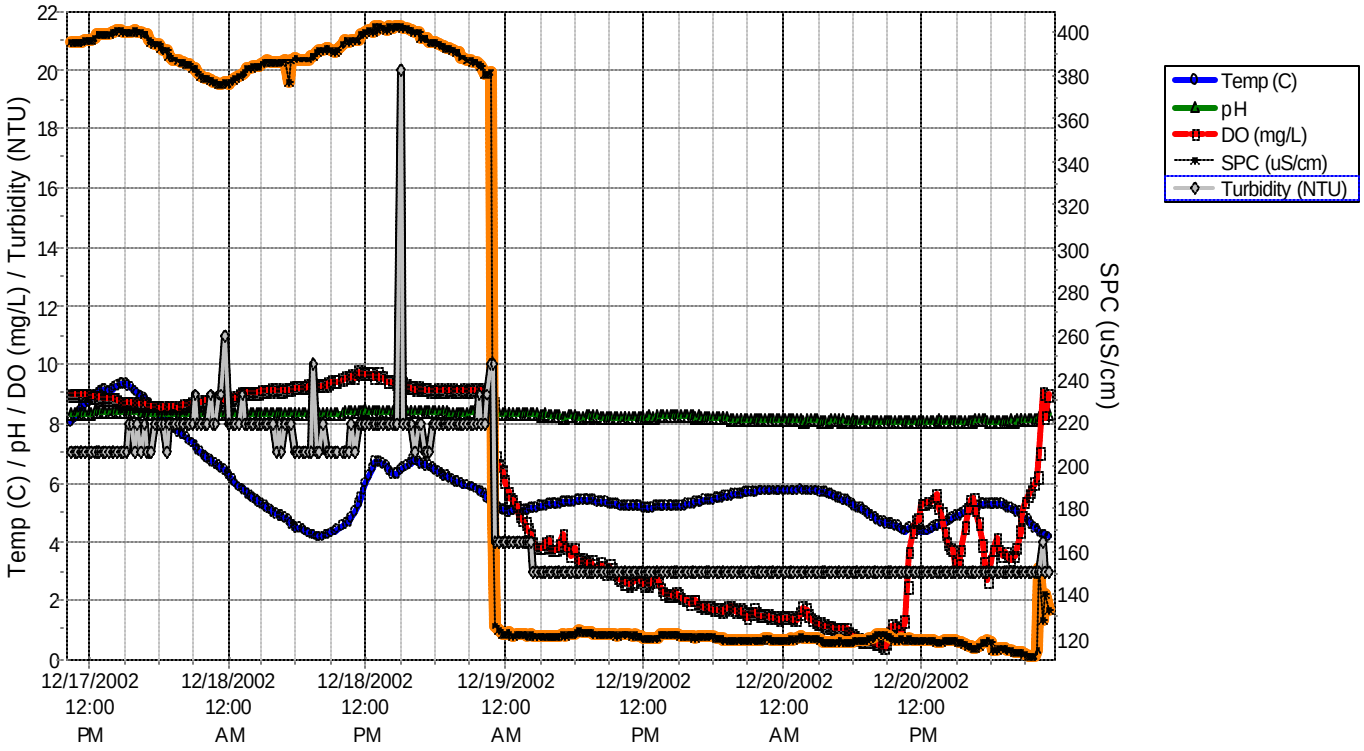

Figure 12.7.3.—Continuous Monitoring Data for Rio Grande at Los Lunas, December 17 through December 20, 2002.

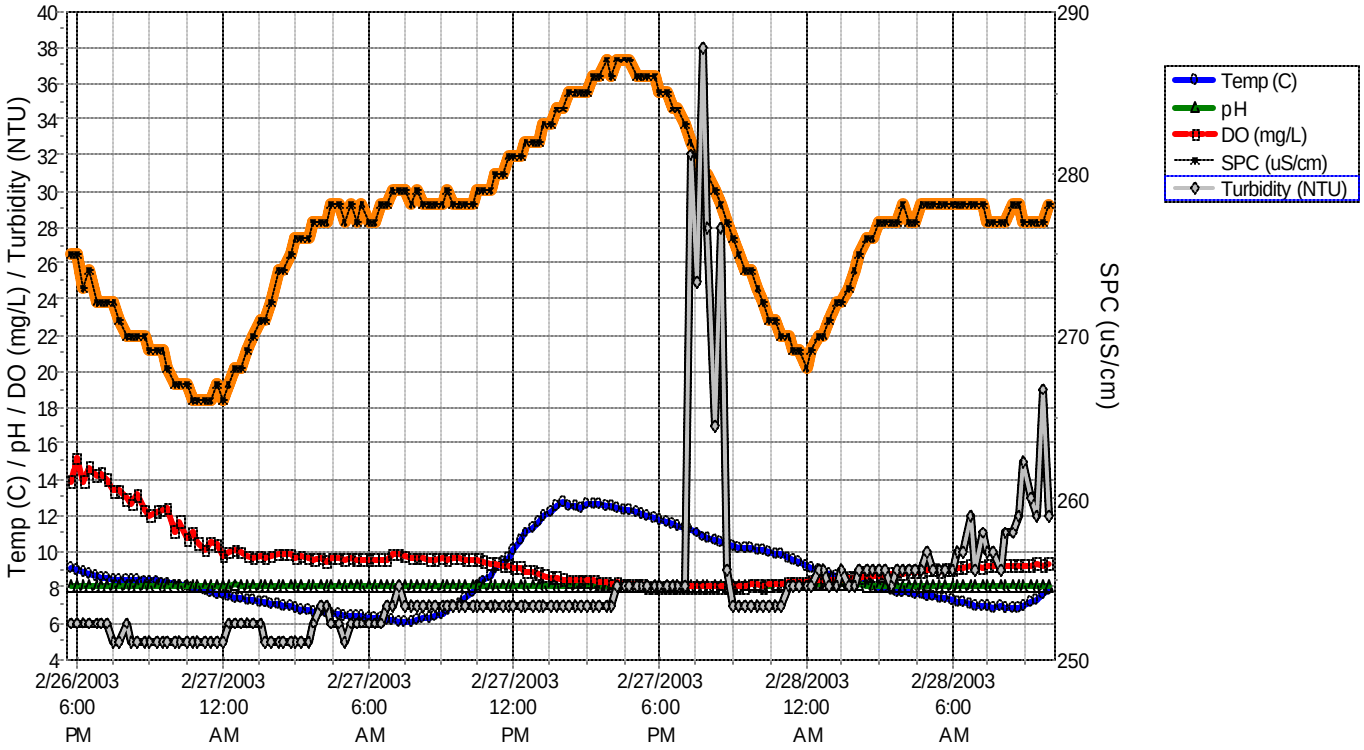

Figure 12.7.4.—Continuous Monitoring Data for Rio Grande at Los Lunas, February 26 though February 28, 2003.

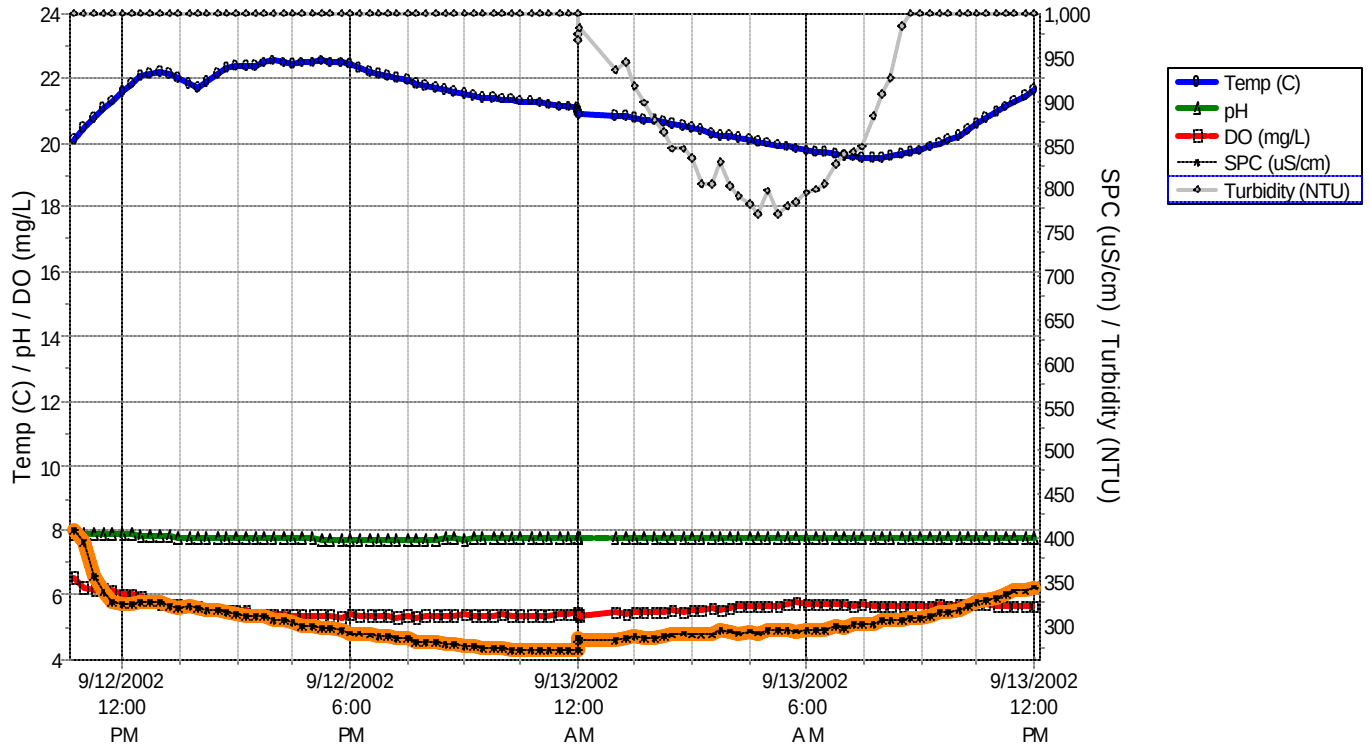

Figure 12.8.1.—Continuous Monitoring Data for Rio Grande at Abeytas September 12 through September 13, 2002.

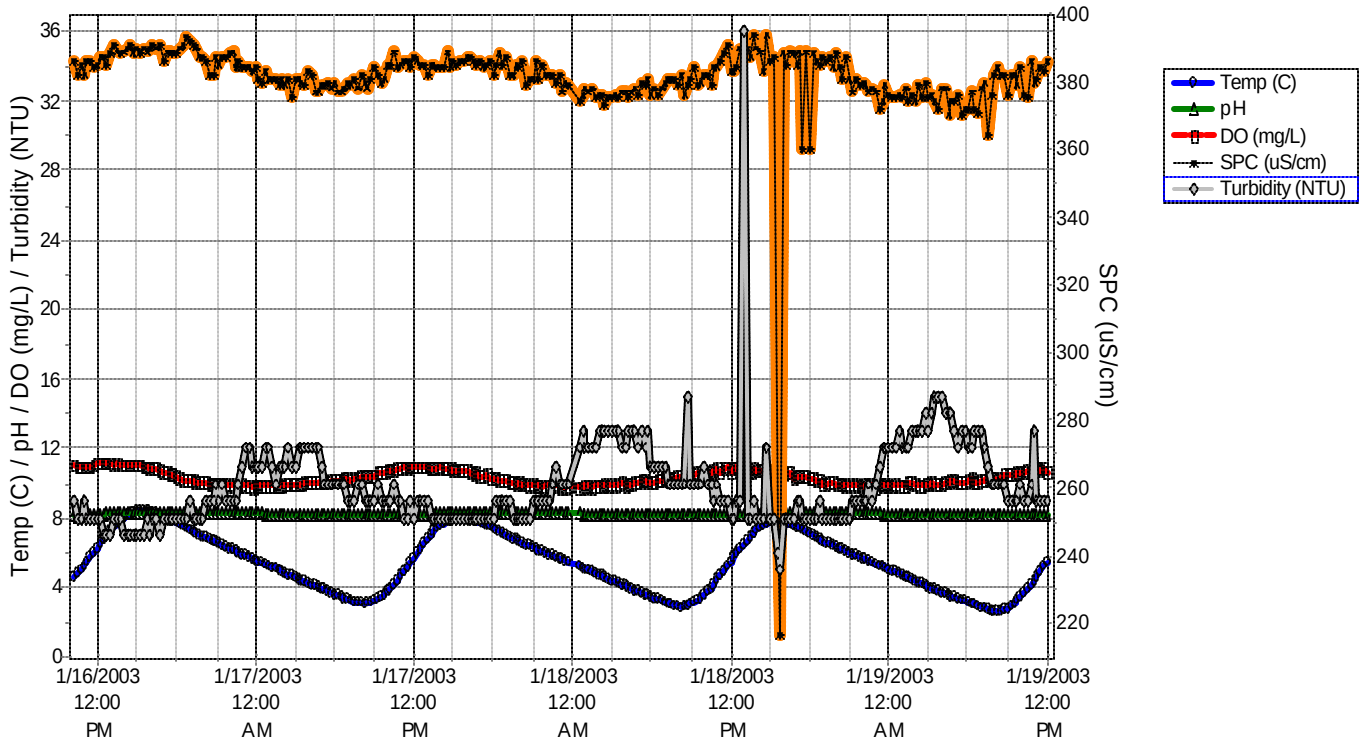

Figure 12.8.2.— Continuous Monitoring Data for Rio Grande at Abeytas January 16 through January 19, 2003.

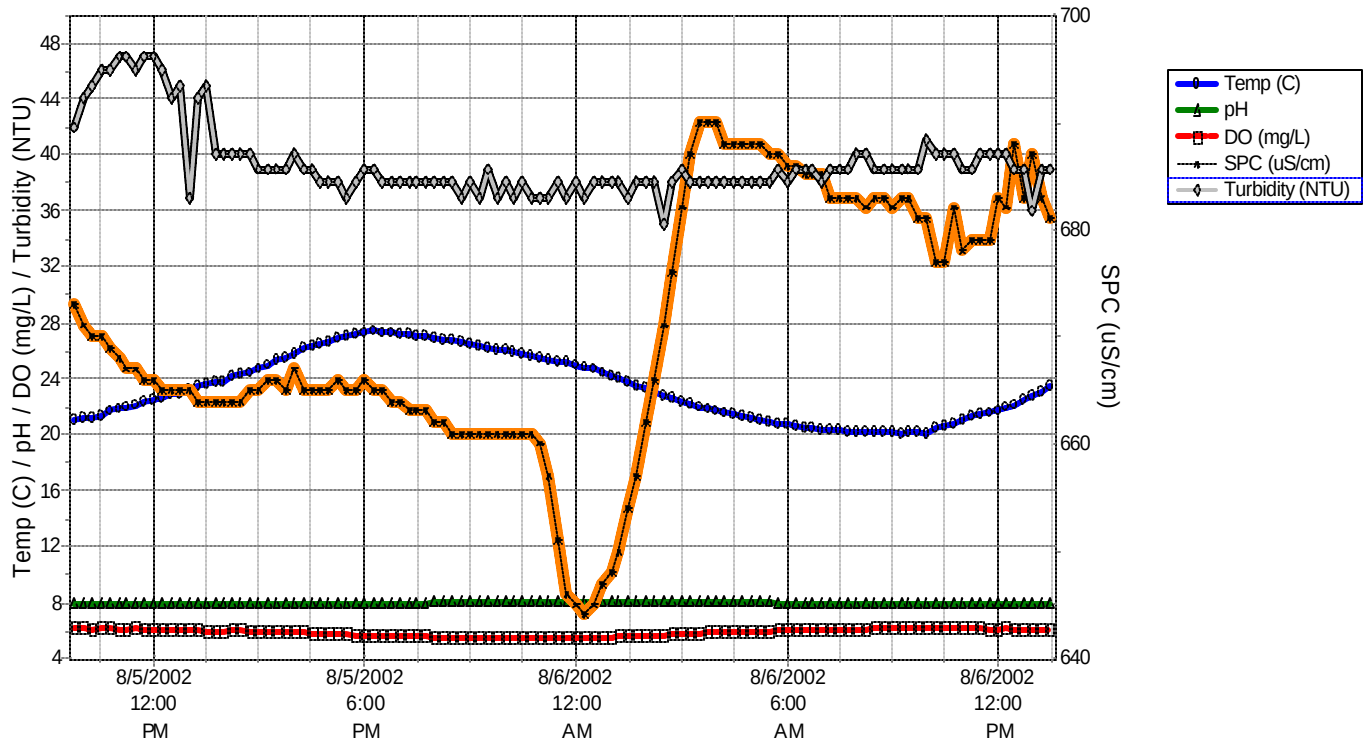

Figure 12.9.1.—Continuous Monitoring Data for Lower San Juan Drain, August 5 through August 6, 2002.

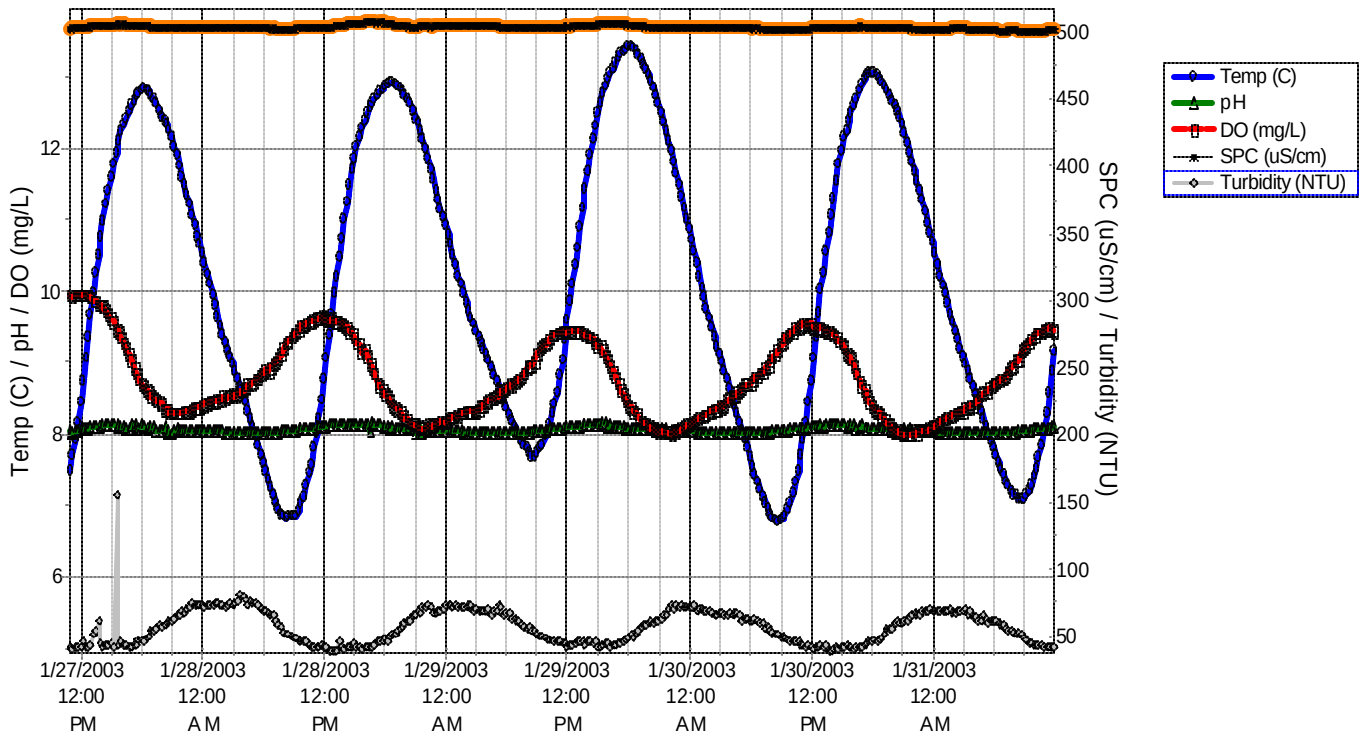

Figure 12.9.2.—Continuous Monitoring Data for Lower San Juan Drain, January 27 through January 31, 2003.

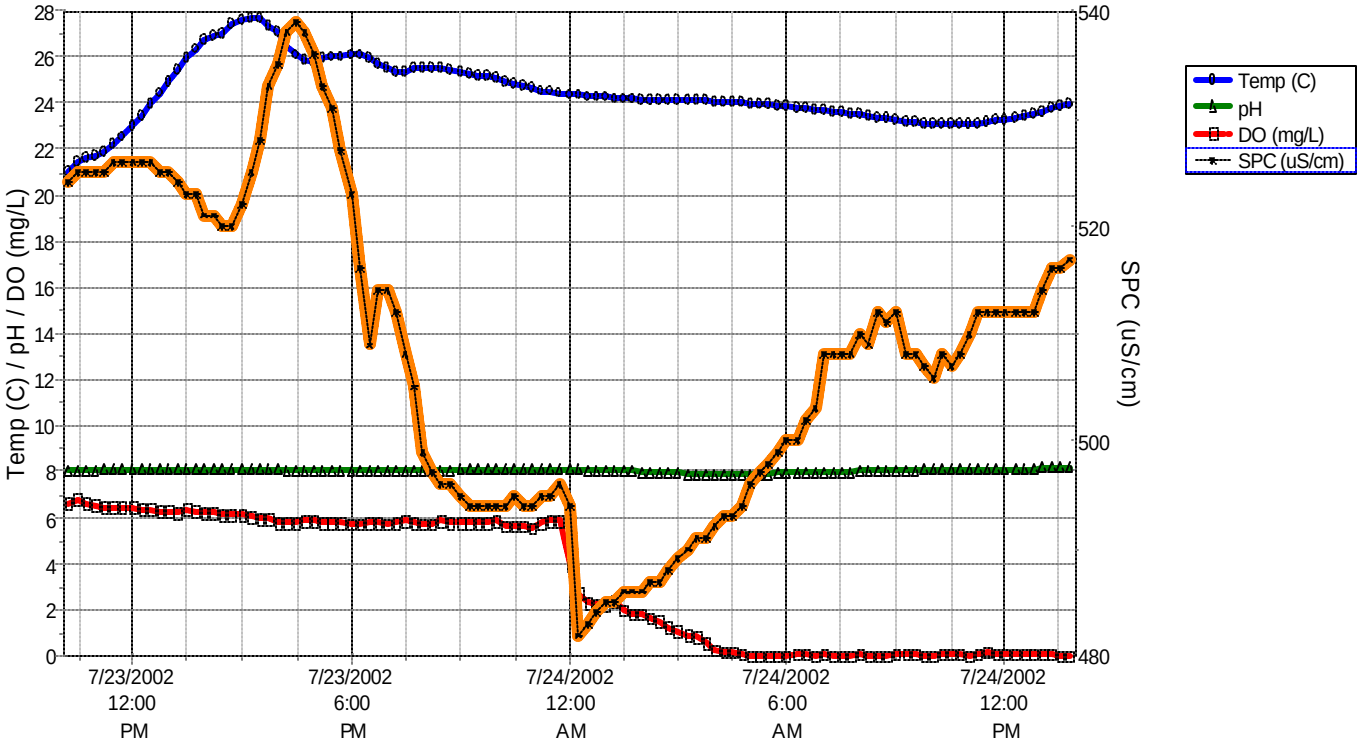

Figure 12.10.1.— Continuous Monitoring Data for Rio Grande at La Joya, July 23 through July 24, 2002.

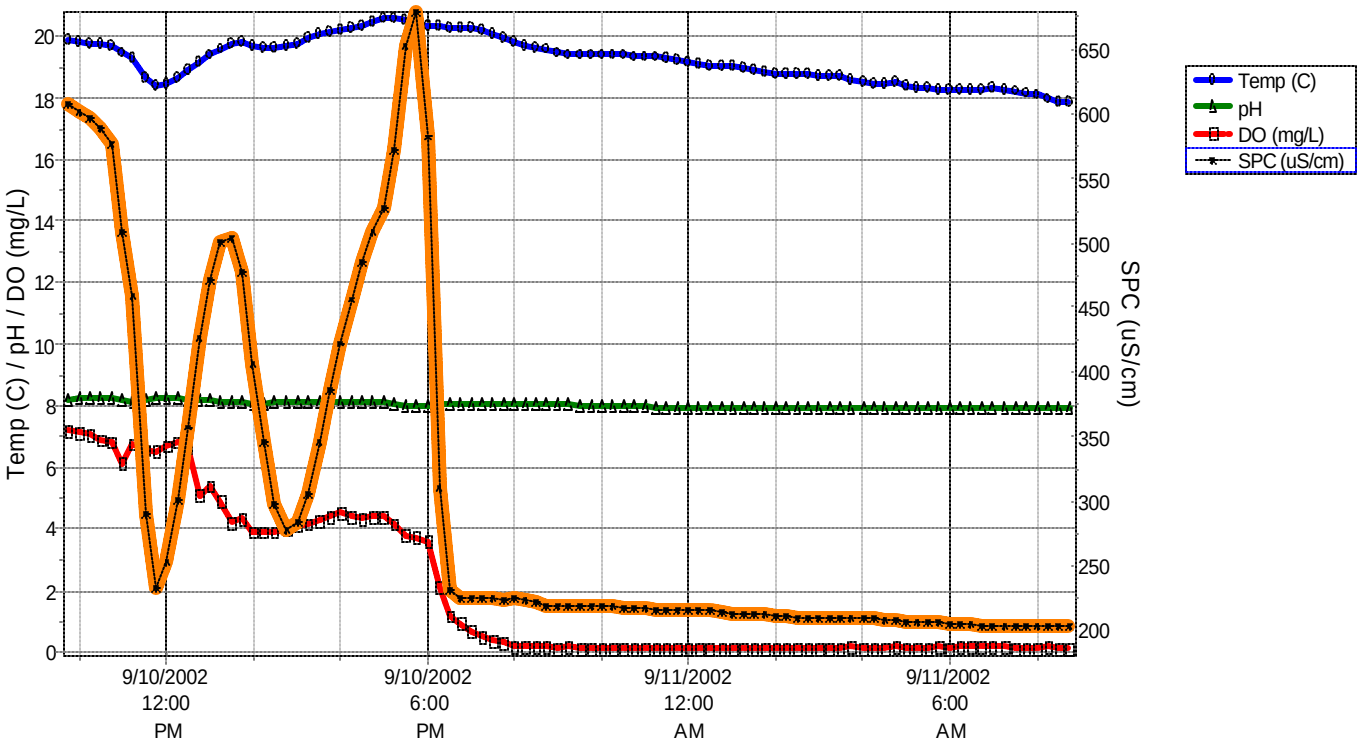

Figure 12.10.2.—Continuous Monitoring Data for Rio Grande at La Joya, September 10 through September 11, 2002.

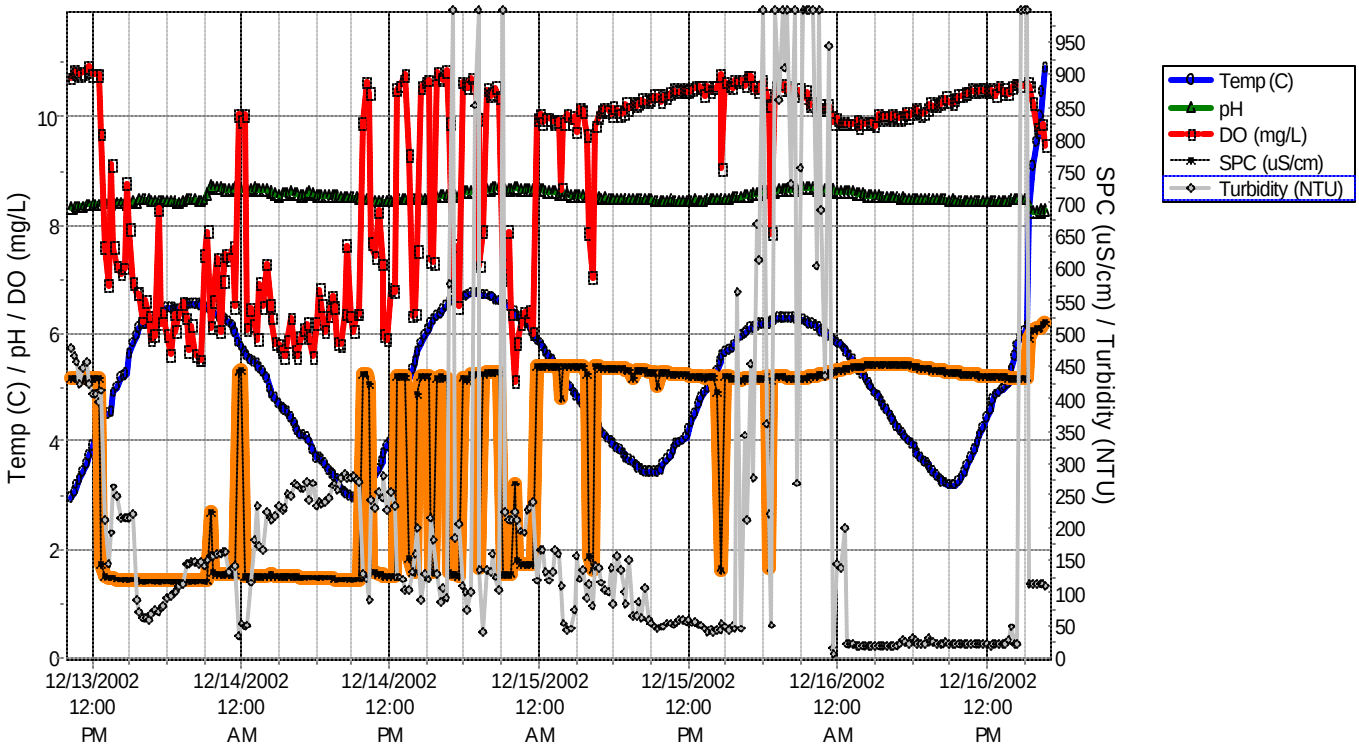

Figure 12.10.3.—Continuous Monitoring Data for Rio Grande at La Joya, December 13 through December 16, 2002.

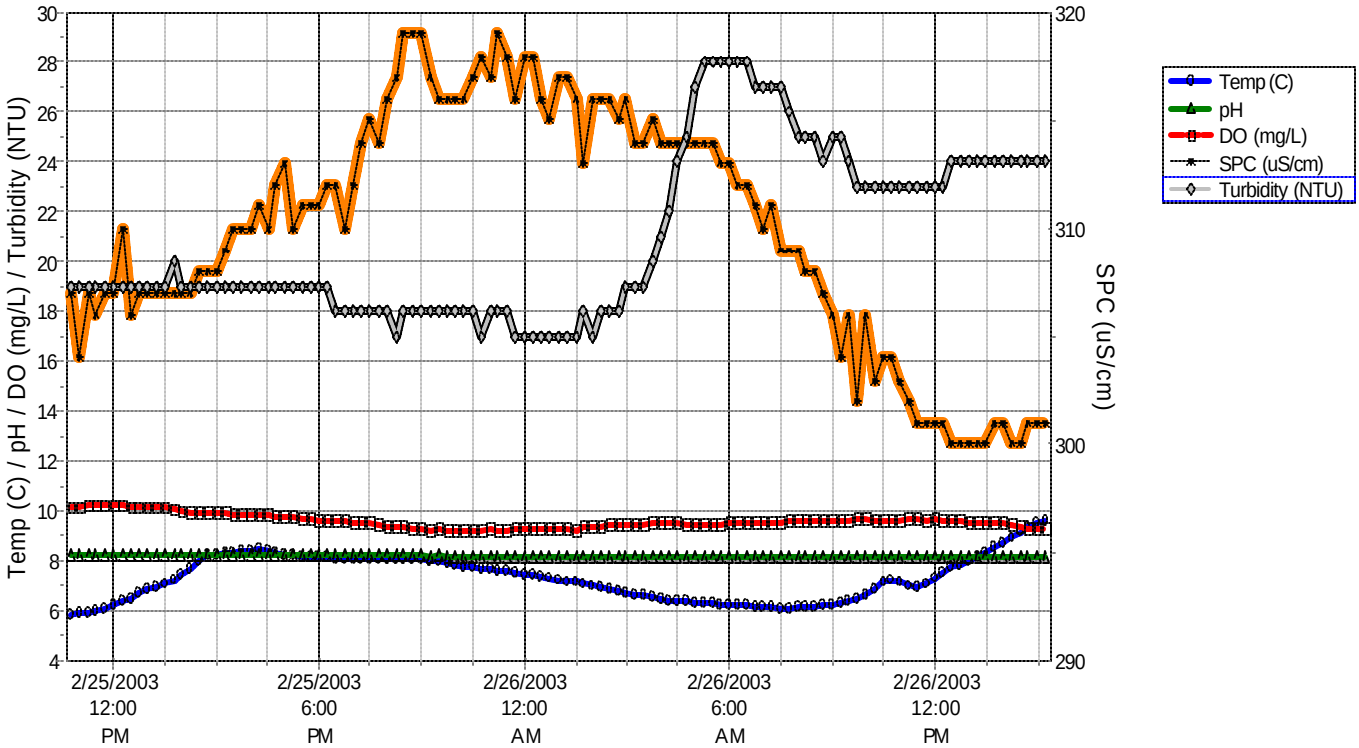

Figure 12.10.4.— Continuous Monitoring Data for Rio Grande at La Joya, February 25 though February 26, 2003.

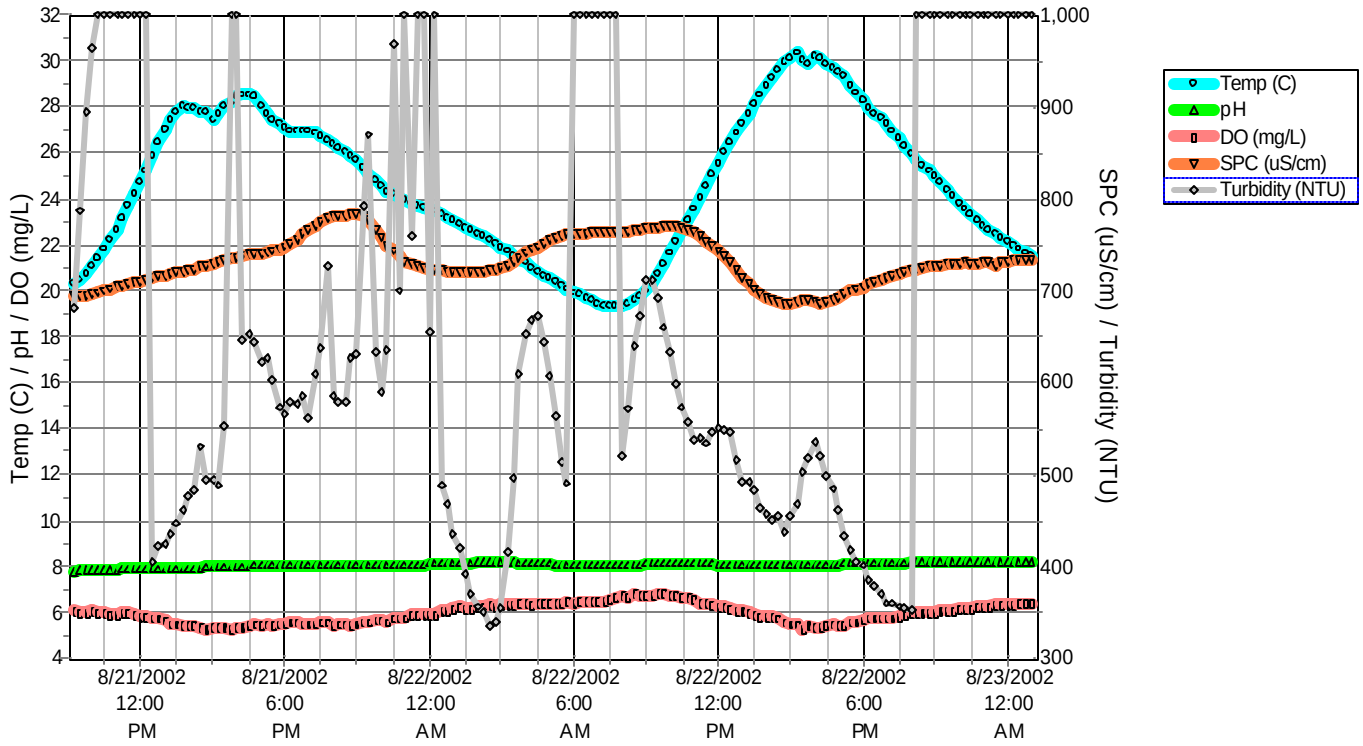

Figure 12.11.1.—Continuous Monitoring Data for Rio Grande at Lemitar August 21 through August 23, 2002.

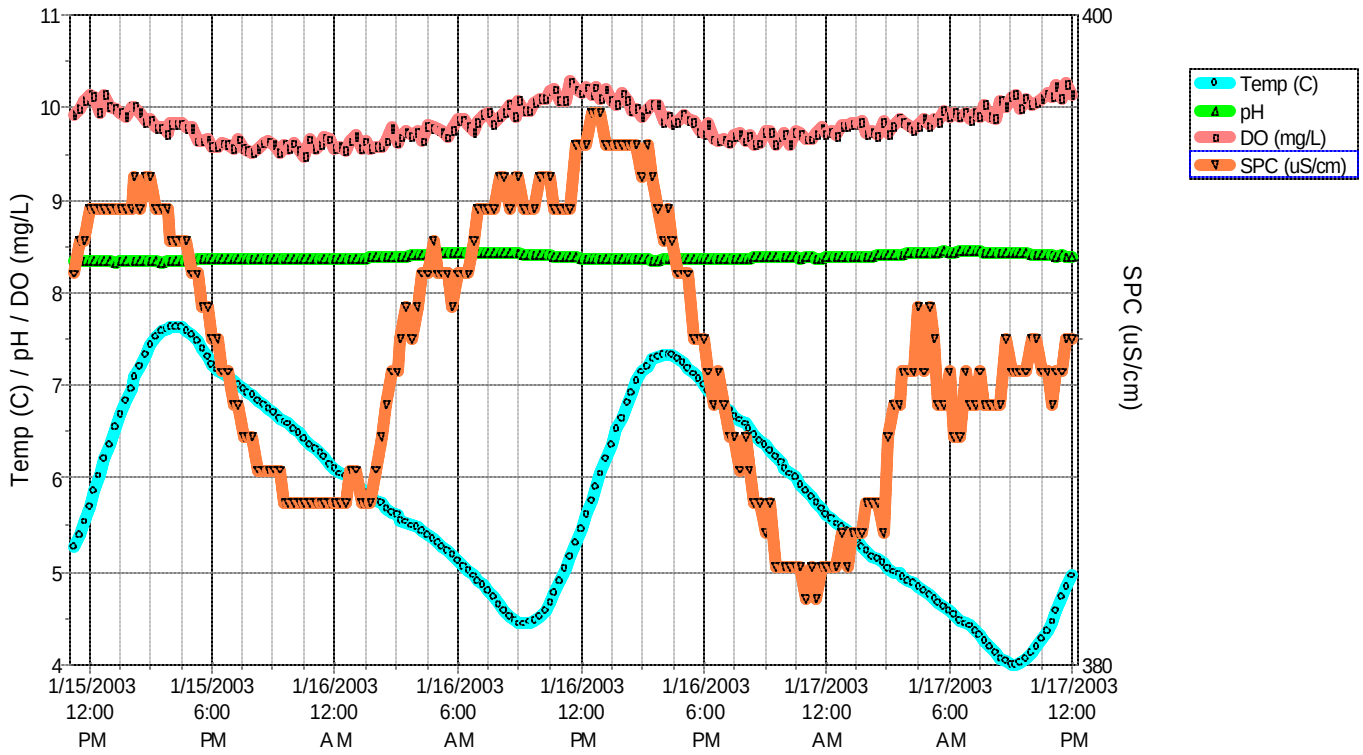

Figure 12.11.2.—Continuous Monitoring Data for Rio Grande at Lemitar January 15 through January 17, 2003.

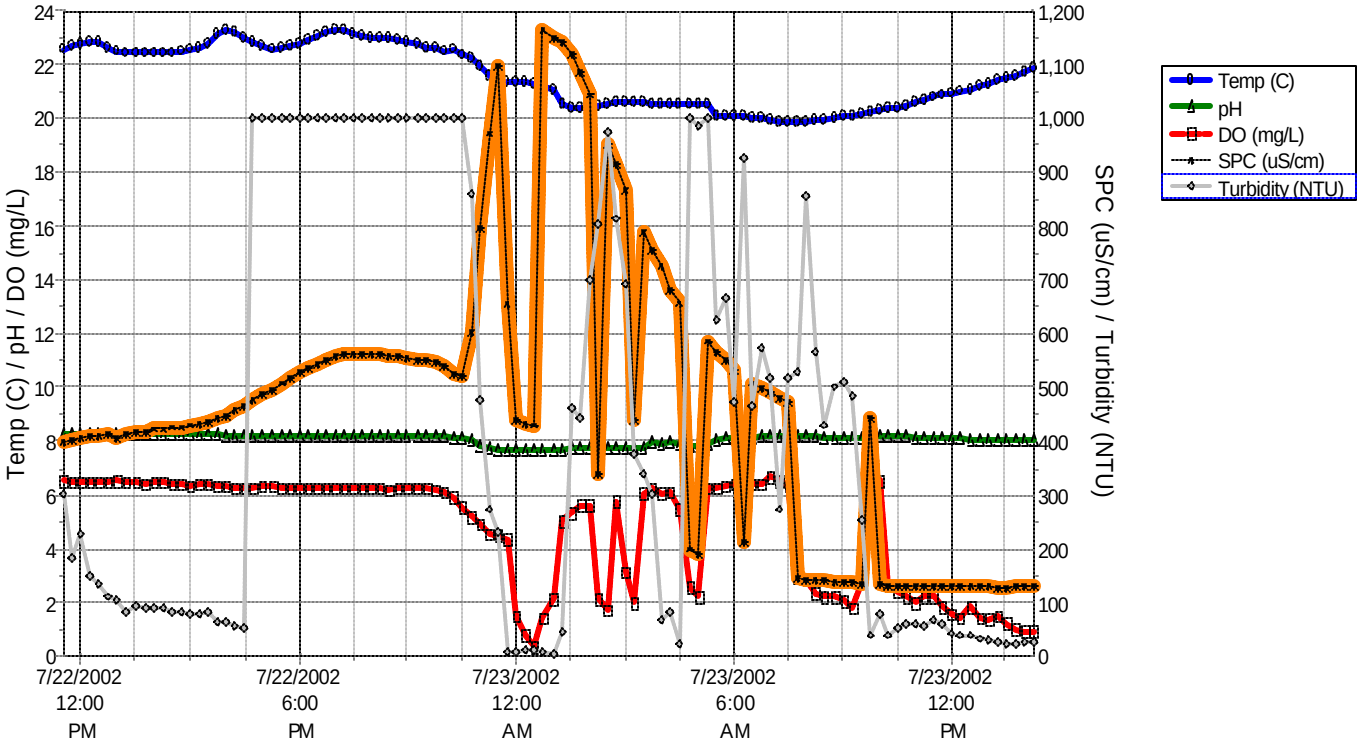

Figure 12.12.1.—Continuous Monitoring Data for Rio Grande below Arroyo del Tajo, July 22 through July 23, 2002.

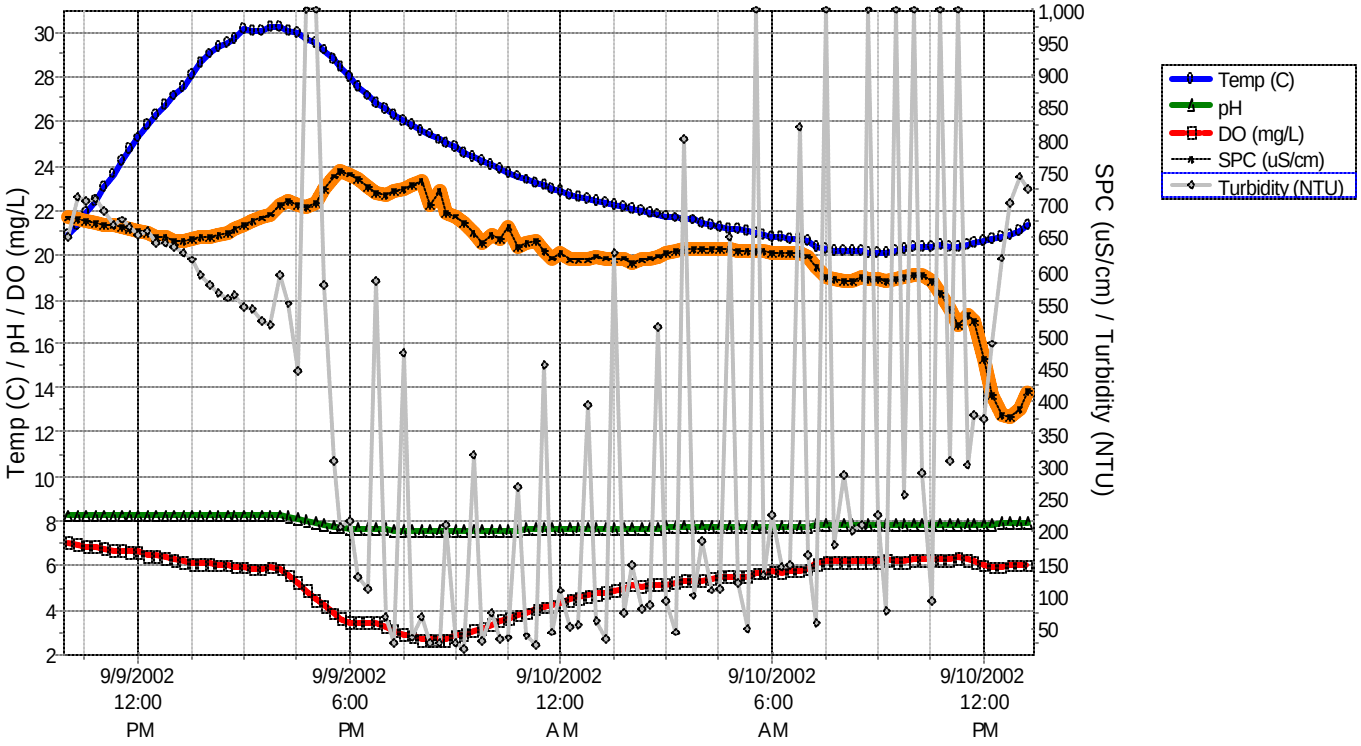

Figure 12.12.2.— Continuous Monitoring Data for Rio Grande below Arroyo del Tajo, September 9 through September 10, 2002.

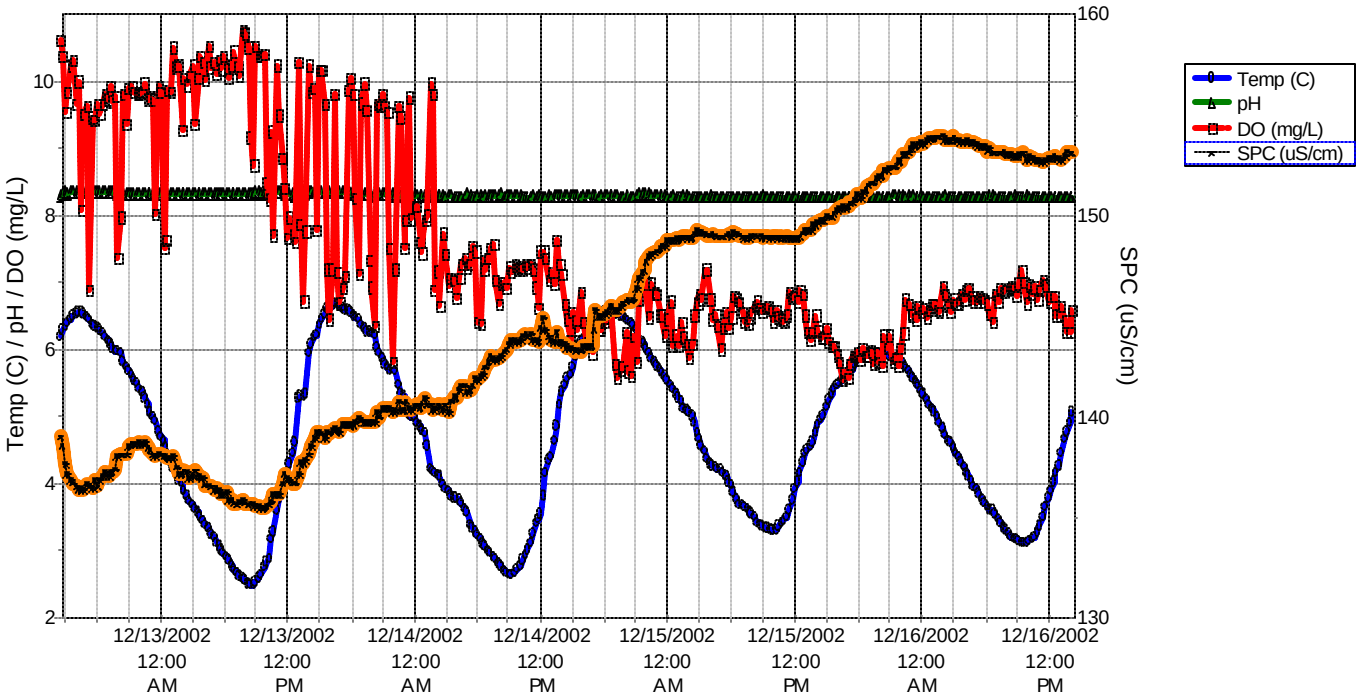

Figure 12.12.3.—Continuous Monitoring Data for Rio Grande below Arroyo del Tajo, December 13 through December 16, 2002.

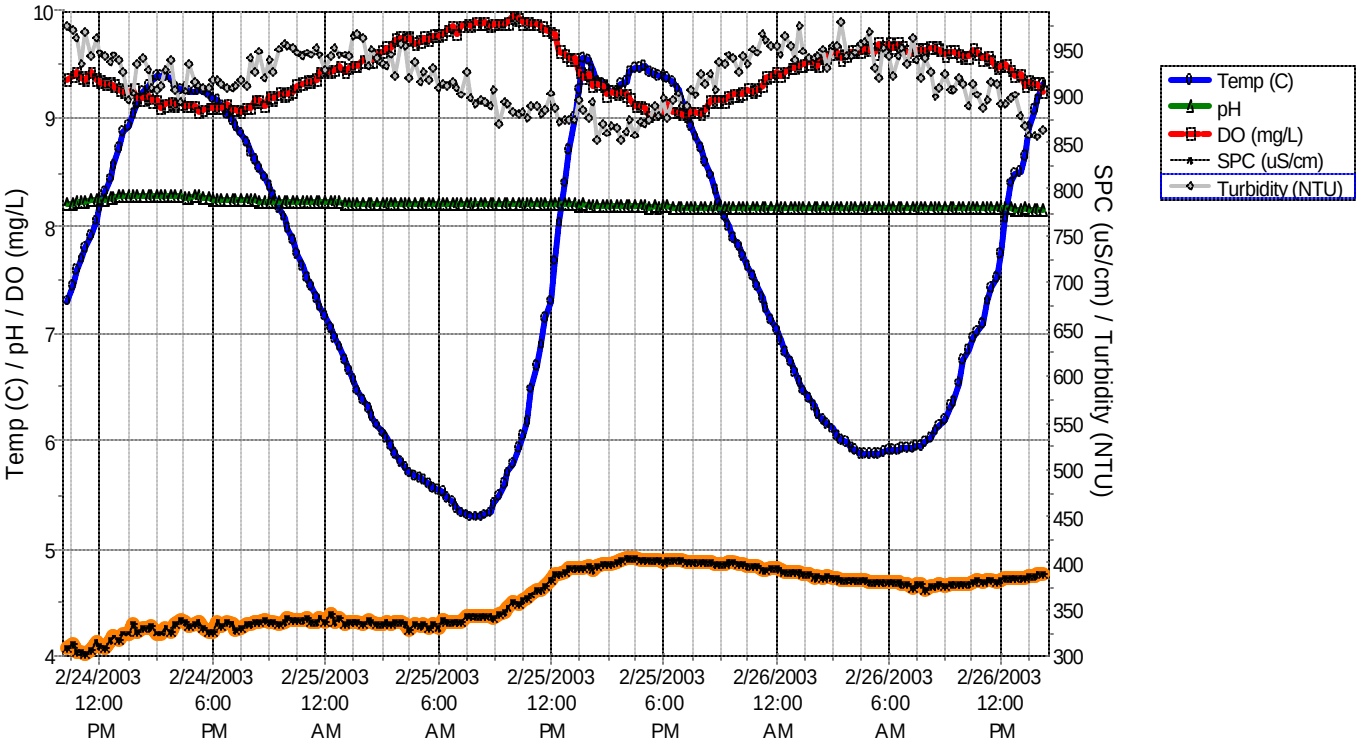

Figure 12.12.4.— Continuous Monitoring Data for Rio Grande below Arroyo del Tajo, February 23 though February 26, 2003.

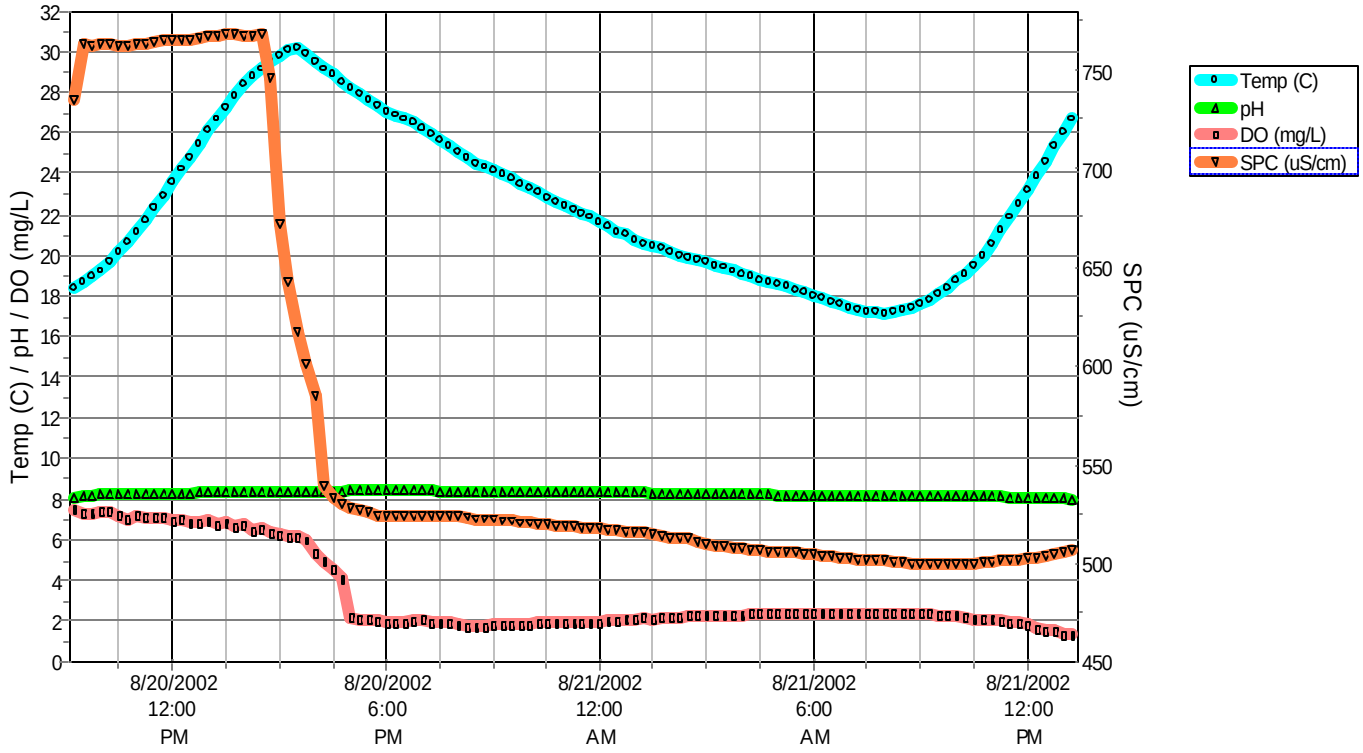

Figure 12.13.1.—Continuous Monitoring Data for Rio Grande at San Pedro August 20 through August 21, 2002.

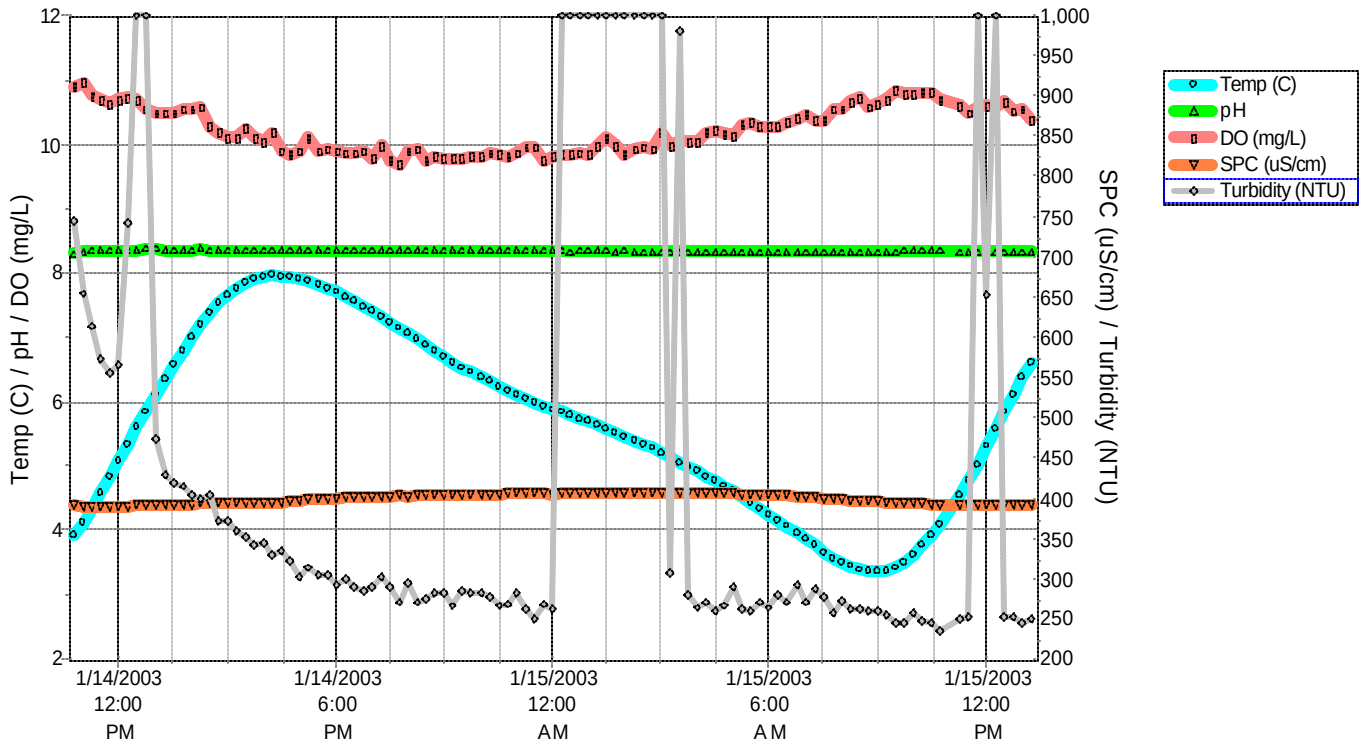

Figure 12.13.2.—Continuous Monitoring Data for Rio Grande at San Pedro January 14 through January 15, 2003.

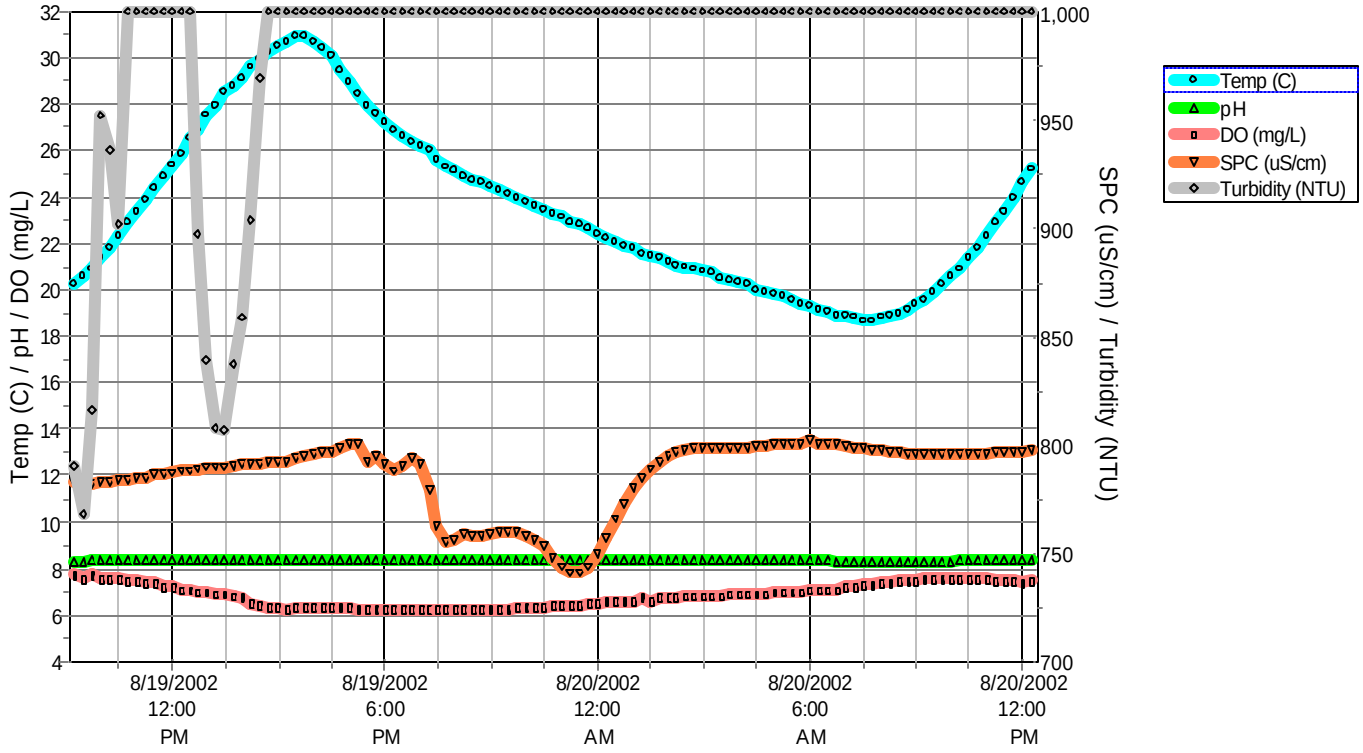

Figure 12.14.1.—Continuous Monitoring Data for Rio Grande at North Boundary Bosque del Apache NWR, August 19 through 20, 2002.

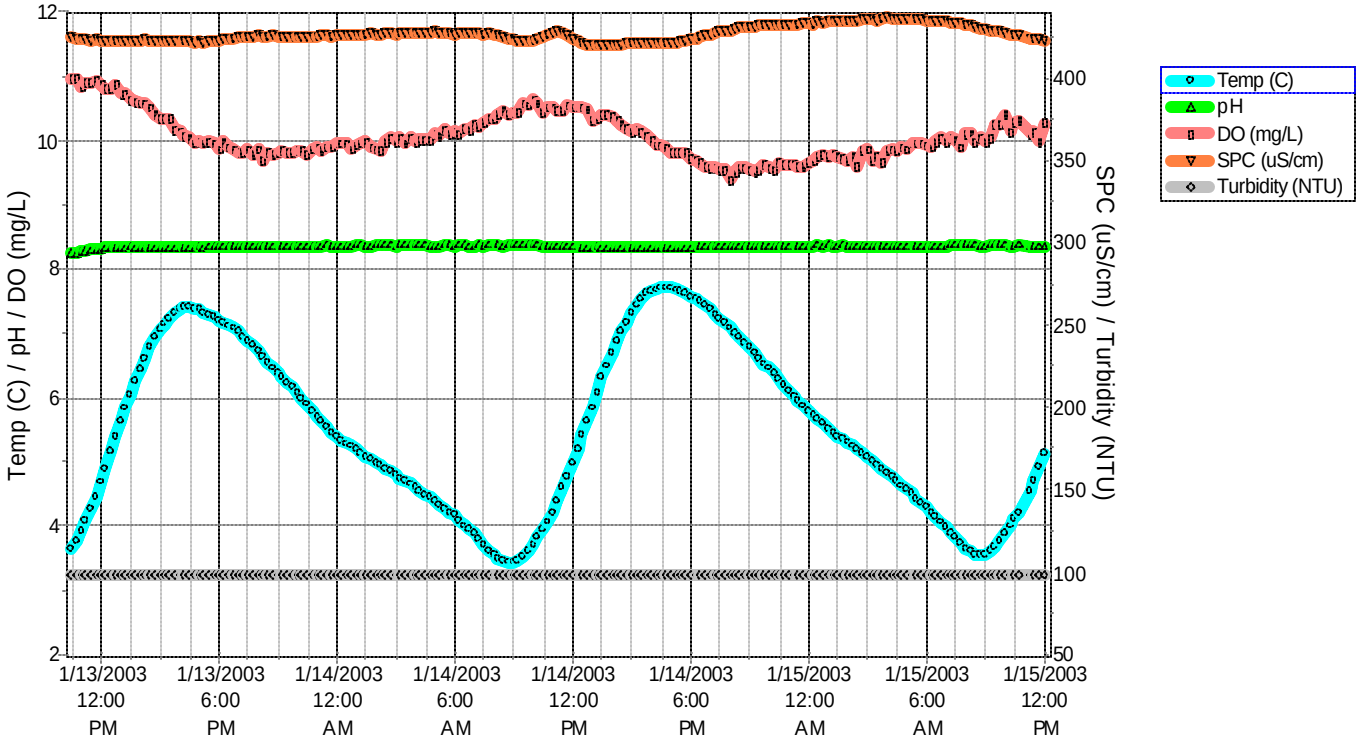

Figure 12.14.2.—Continuous Monitoring Data for Rio Grande at North Boundary Bosque del Apache NWR, January 13 through 15, 2003.

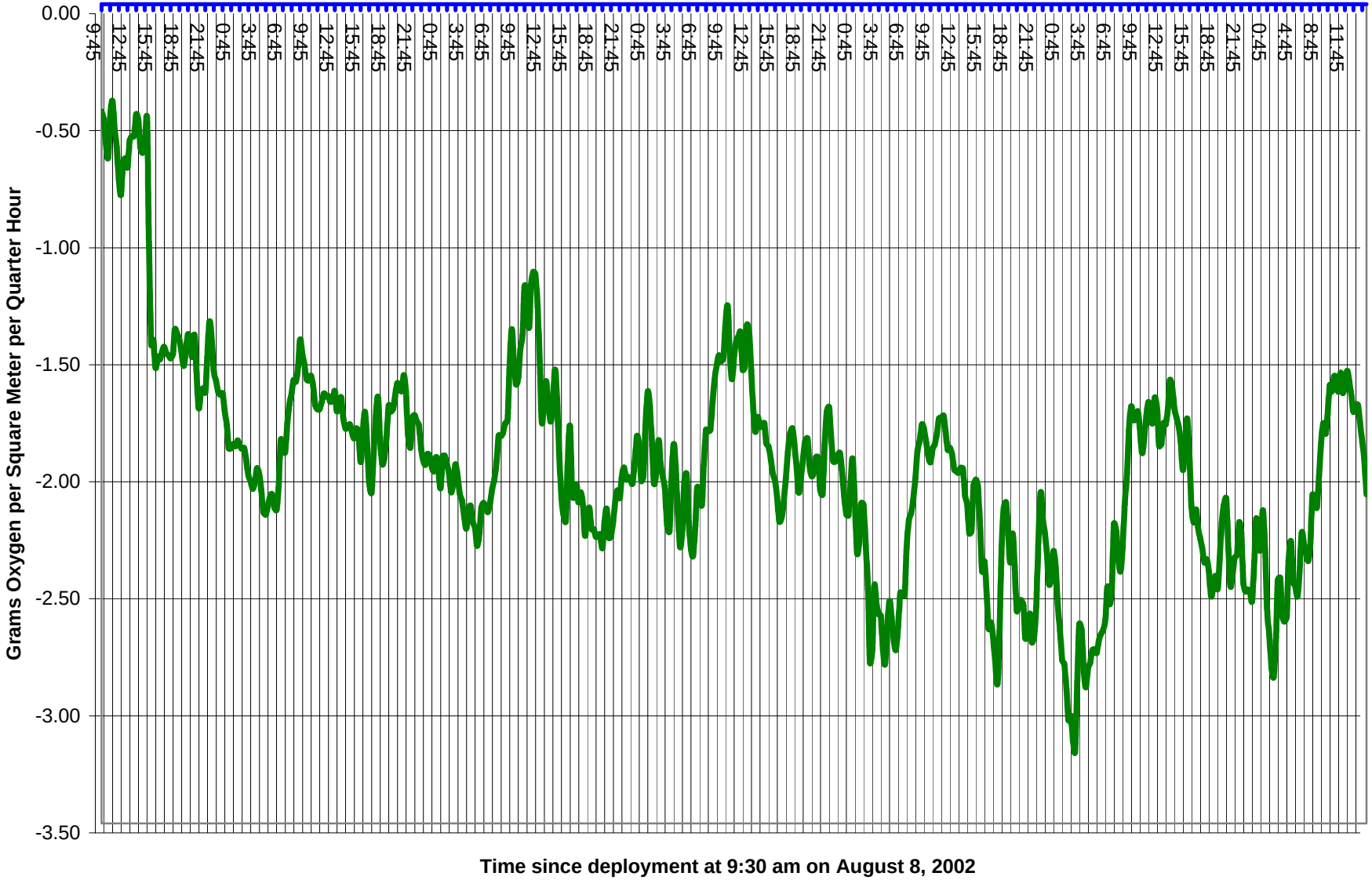

Figure 13.1.1.--Rate of oxygen change for Rio Rancho Waste Water Treatment Plant Outfall #2
August 8 through 14, 2002

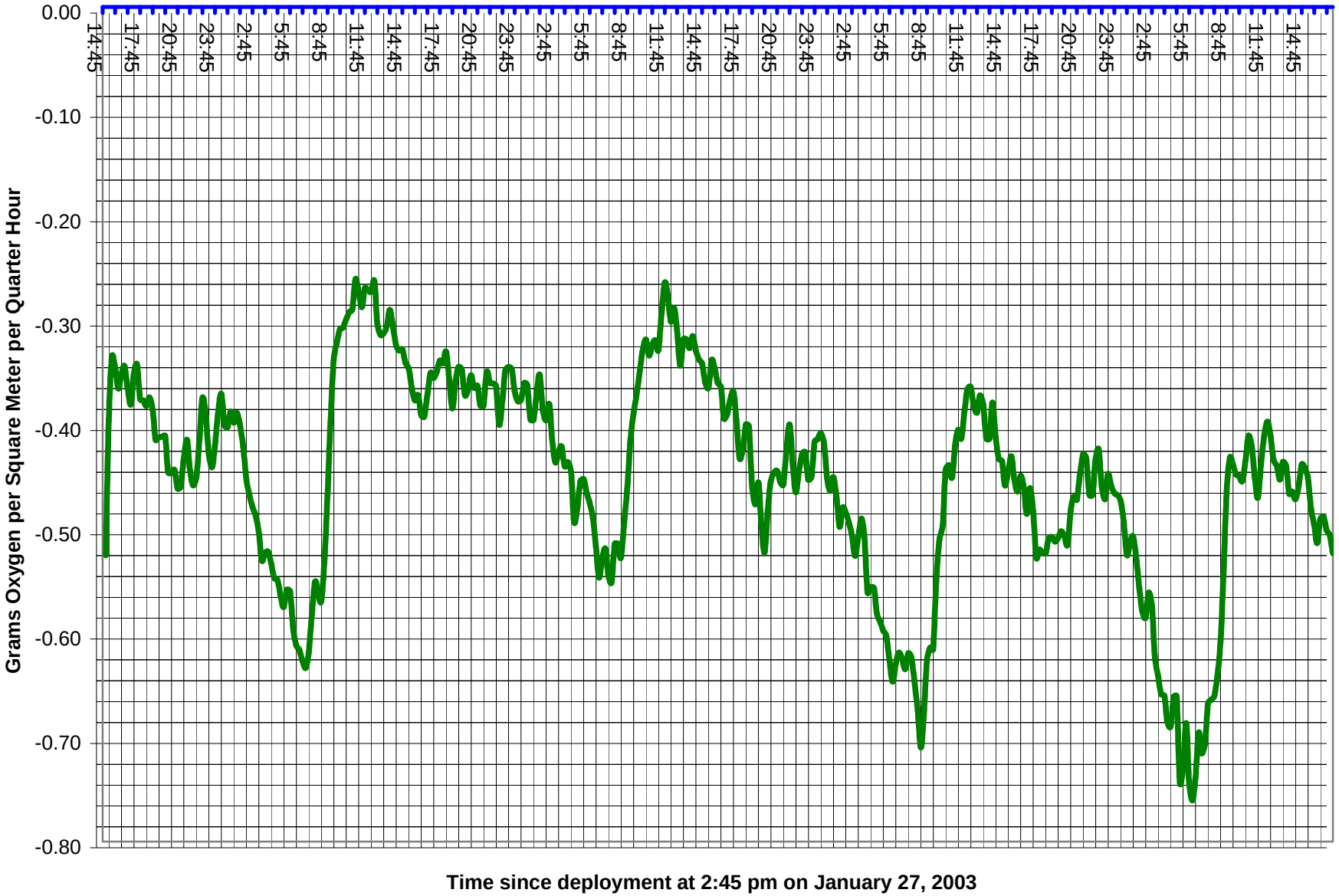

Figure 13.1.2.--Rate of oxygen change for Rio Rancho Waste Water Treatment Plant Outfall #2
January 27 through February 3, 2003

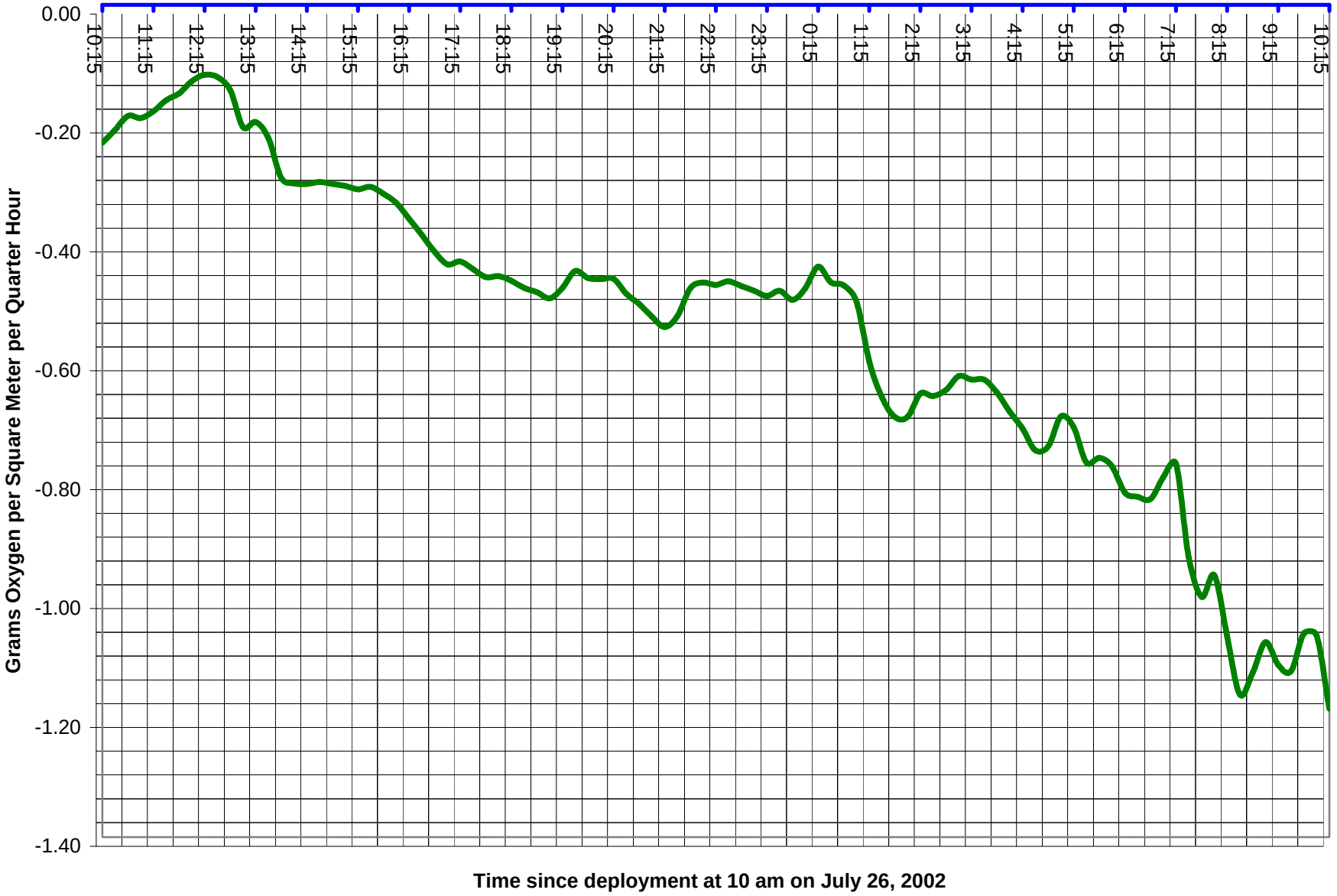

Figure 13.2.1.--Rate of oxygen change for Rio Grande at La Orilla July 26 through July 27, 2002

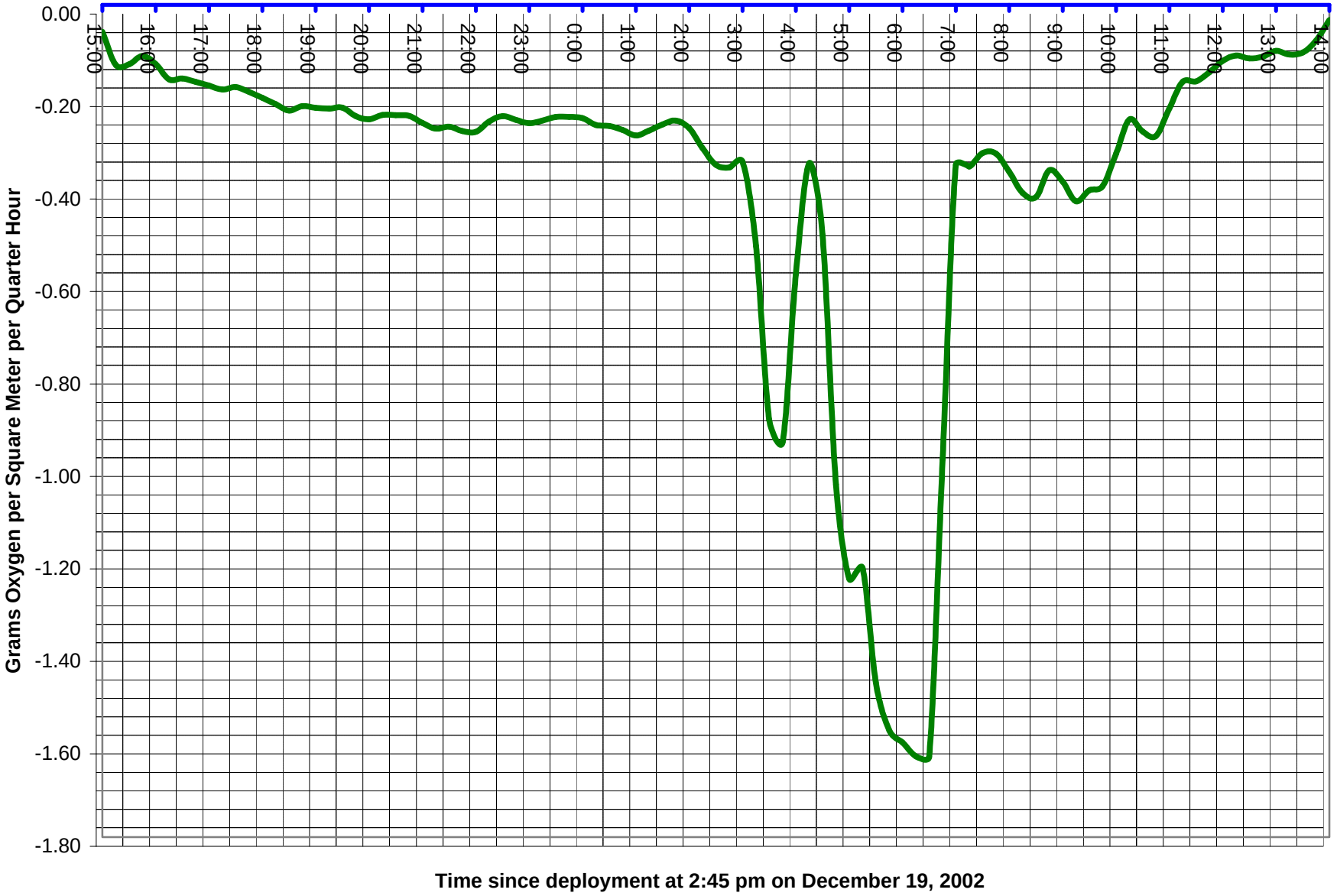

Figure 13.2.2.--Rate of oxygen change for Rio Grande at La Orilla December 19 through 20, 2002

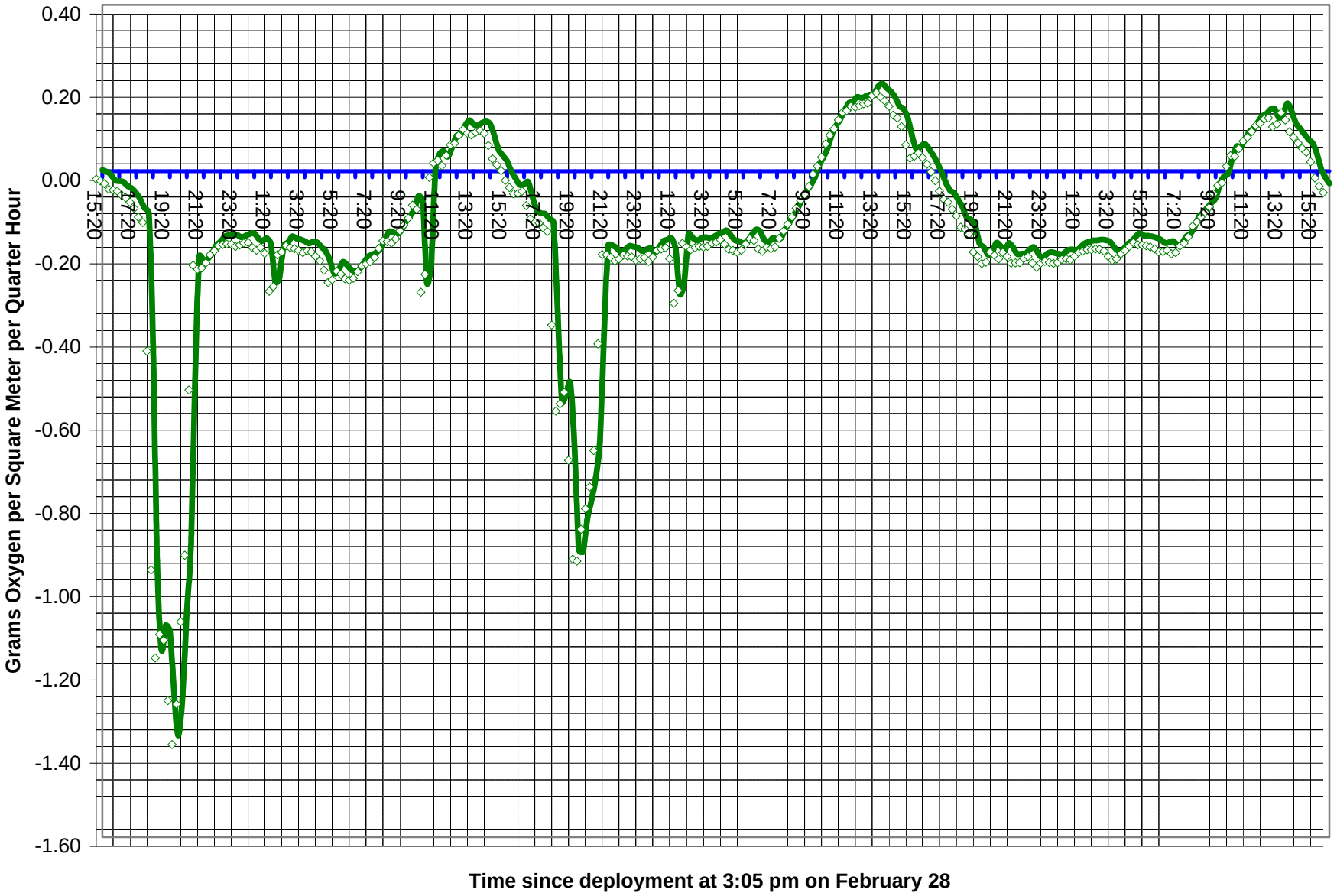

Figure 13.2.3.--Rate of oxygen change for Rio Grande at La Orilla February 28 through March 3, 2003

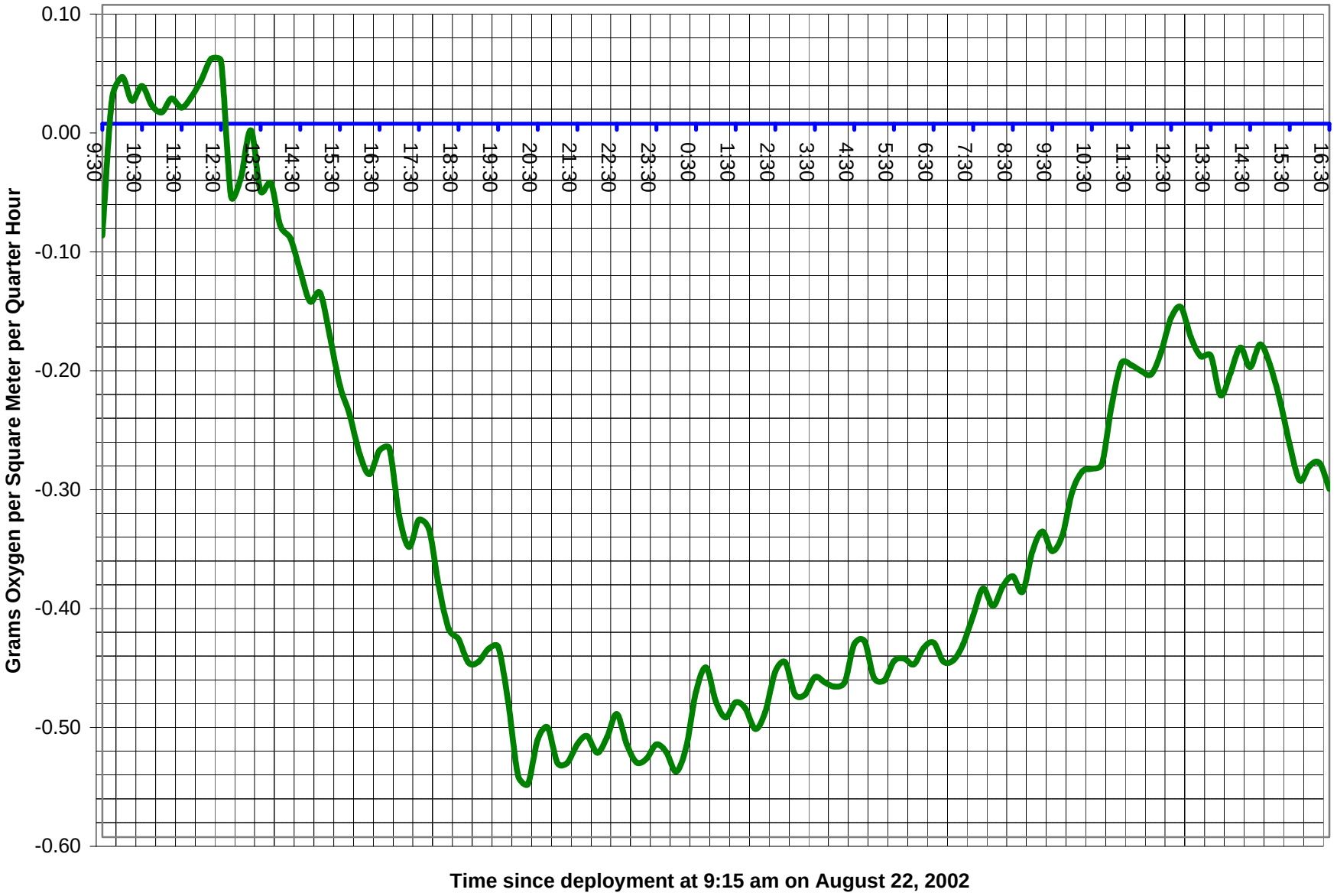

Figure 13.3.1.--Rate of oxygen change for Rio Grande at Barelas August 22 through 23, 2002

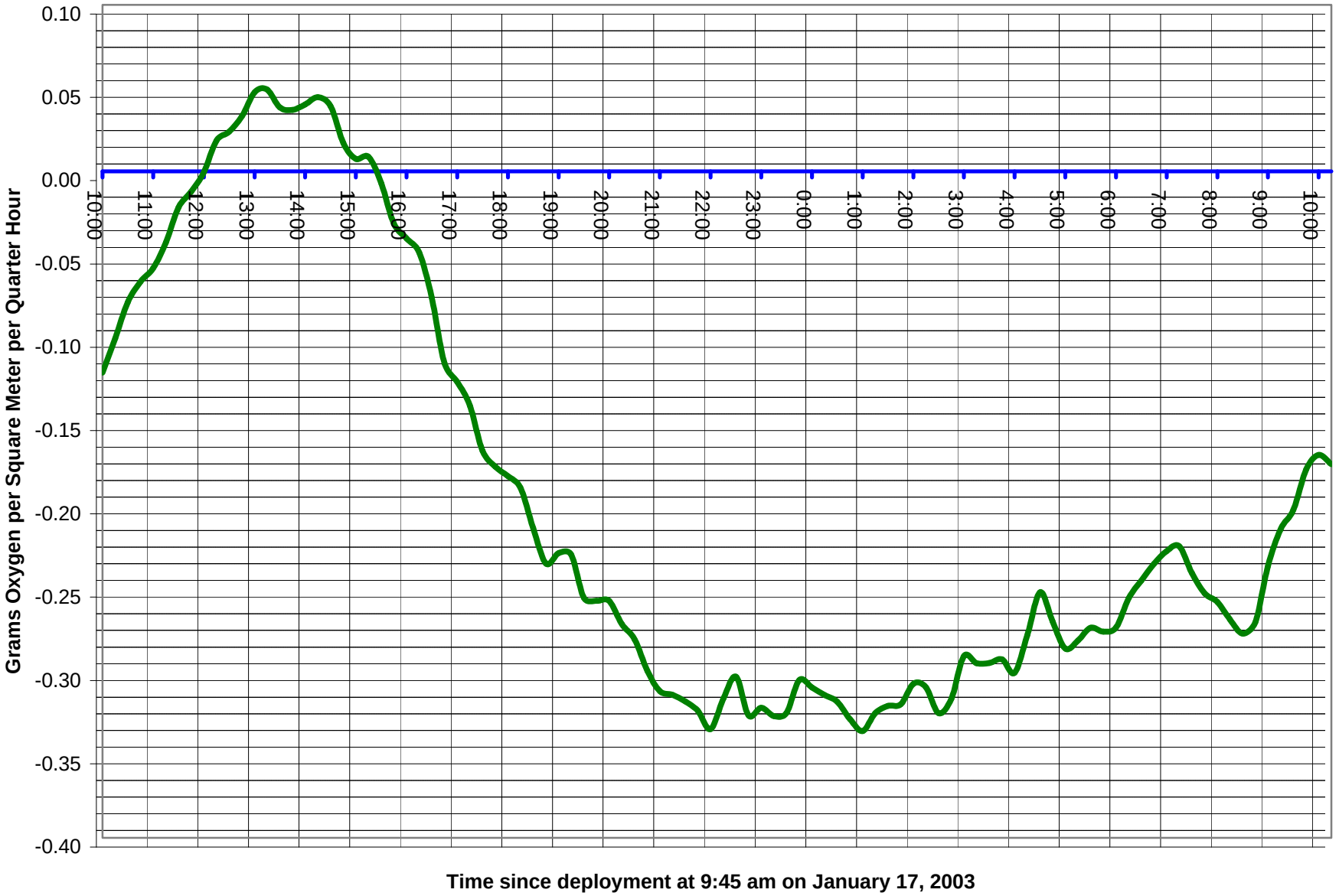

Figure 13.3.2.--Rate of oxygen change for Rio Grande at Barelas January 17 through 19, 2003

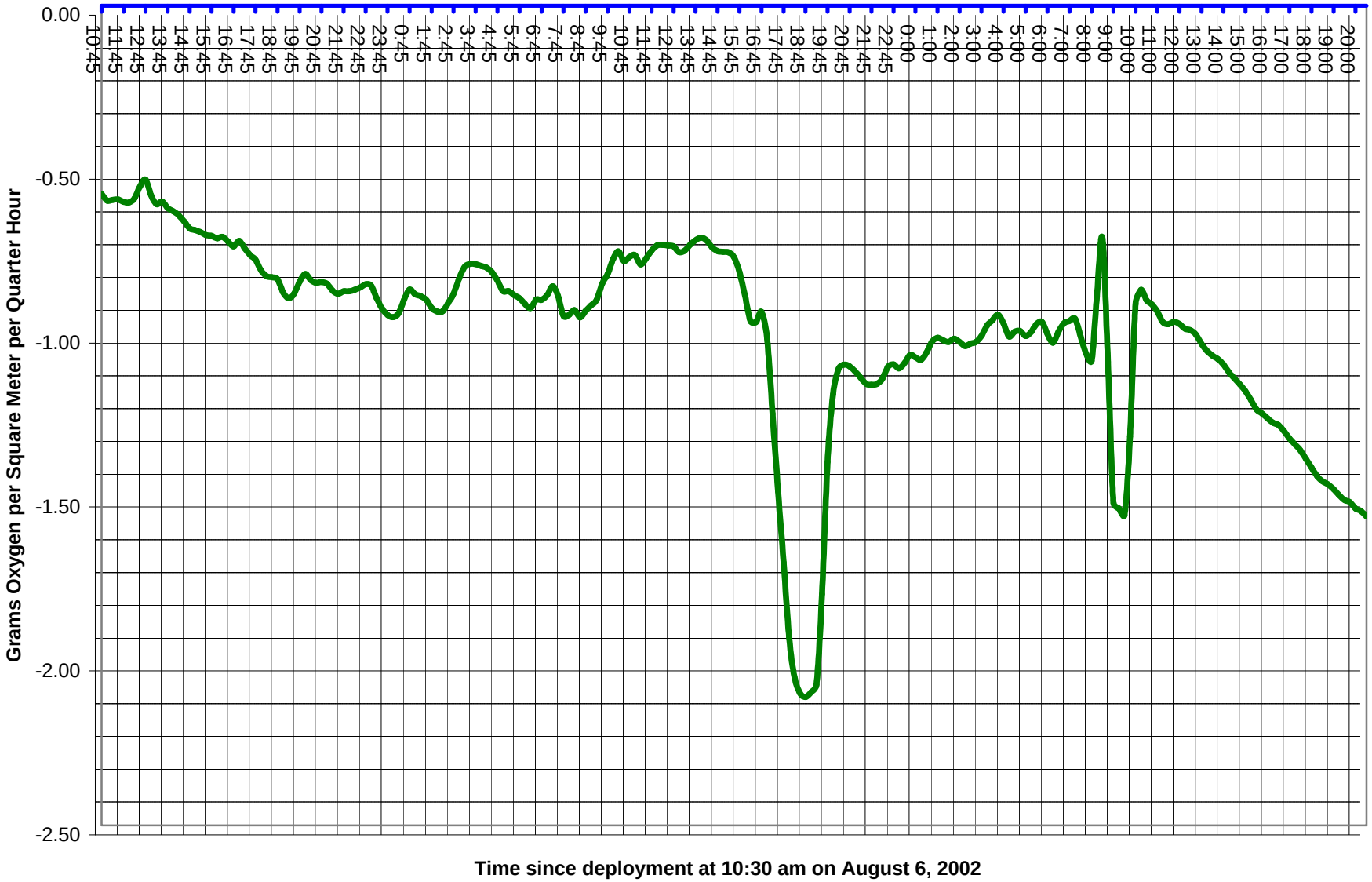

Figure 13.4.1.--Rate of oxygen change for Albuquerque Waste Water Treatment Plant Oufall
August 6 through 8, 2002

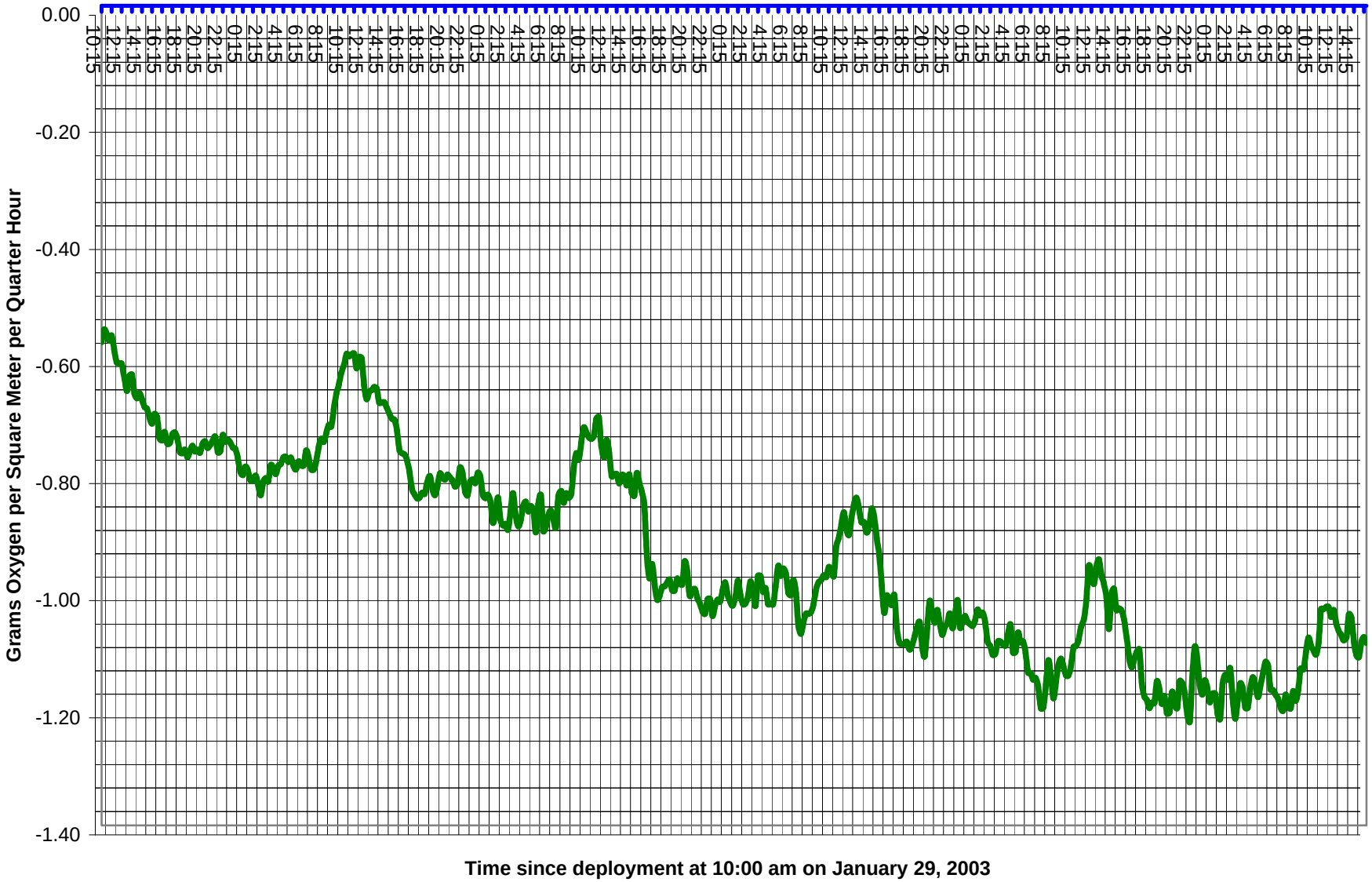

Figure 13.4.2.--Rate of oxygen change for Albuquerque Waste Water Treatment Plant
January 29 through February 3, 2003

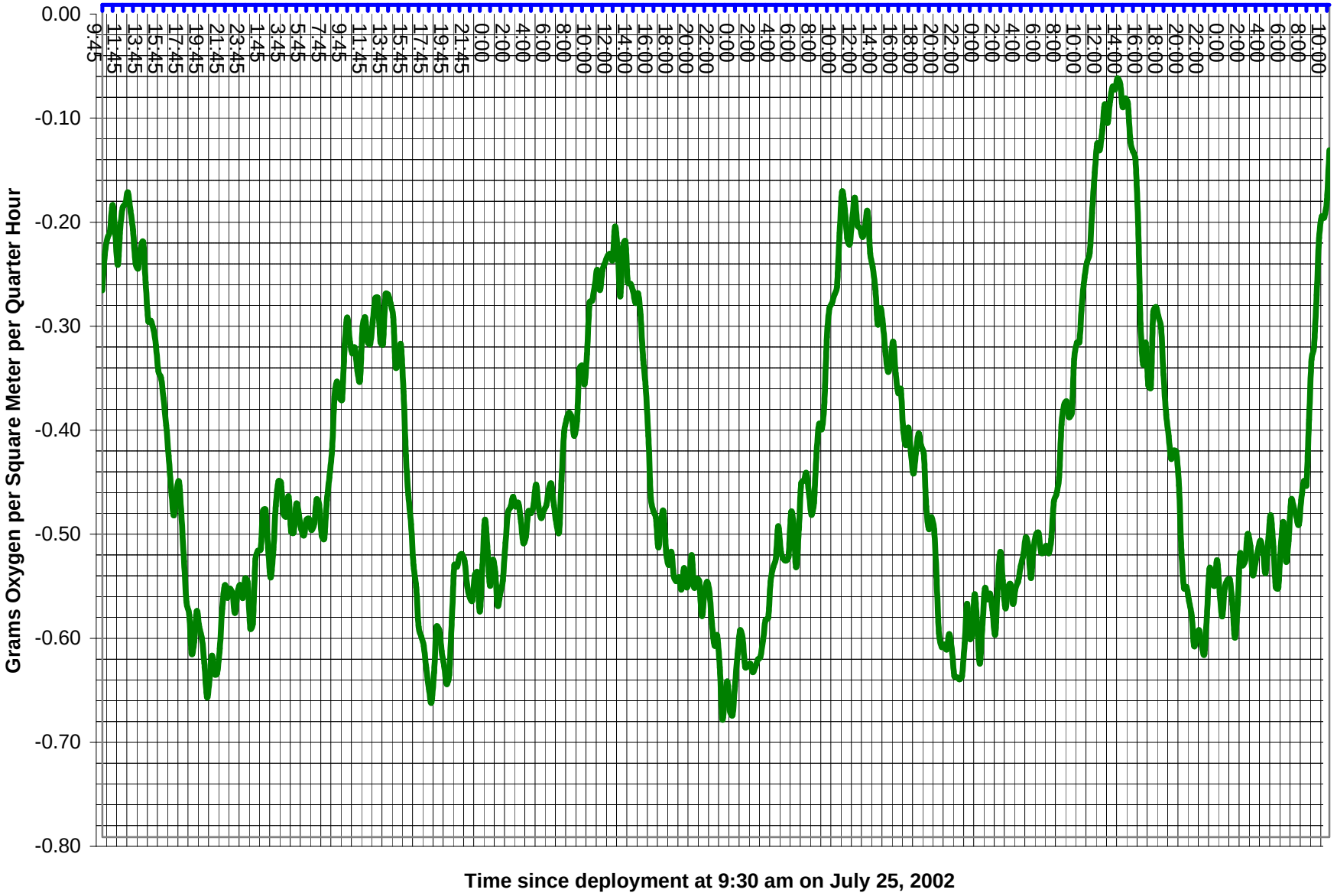

Figure 13.5.1.--Rate of oxygen change for Rio Grande at Los Padillas July 25 through July 30, 2002

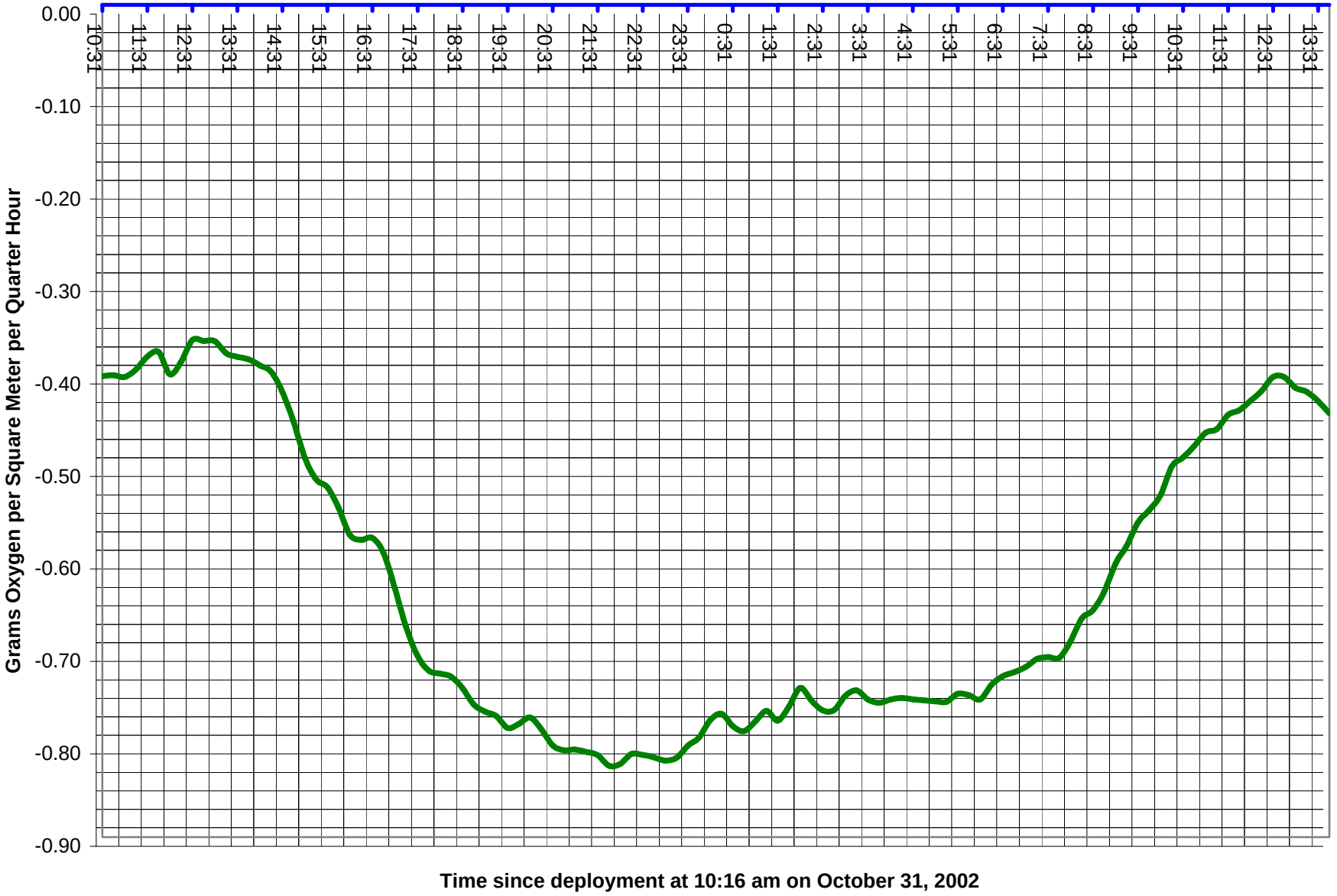

Figure 13.5.2.--Rate of oxygen change for Rio Grande at Los Padillas October 31 through November 1, 2002

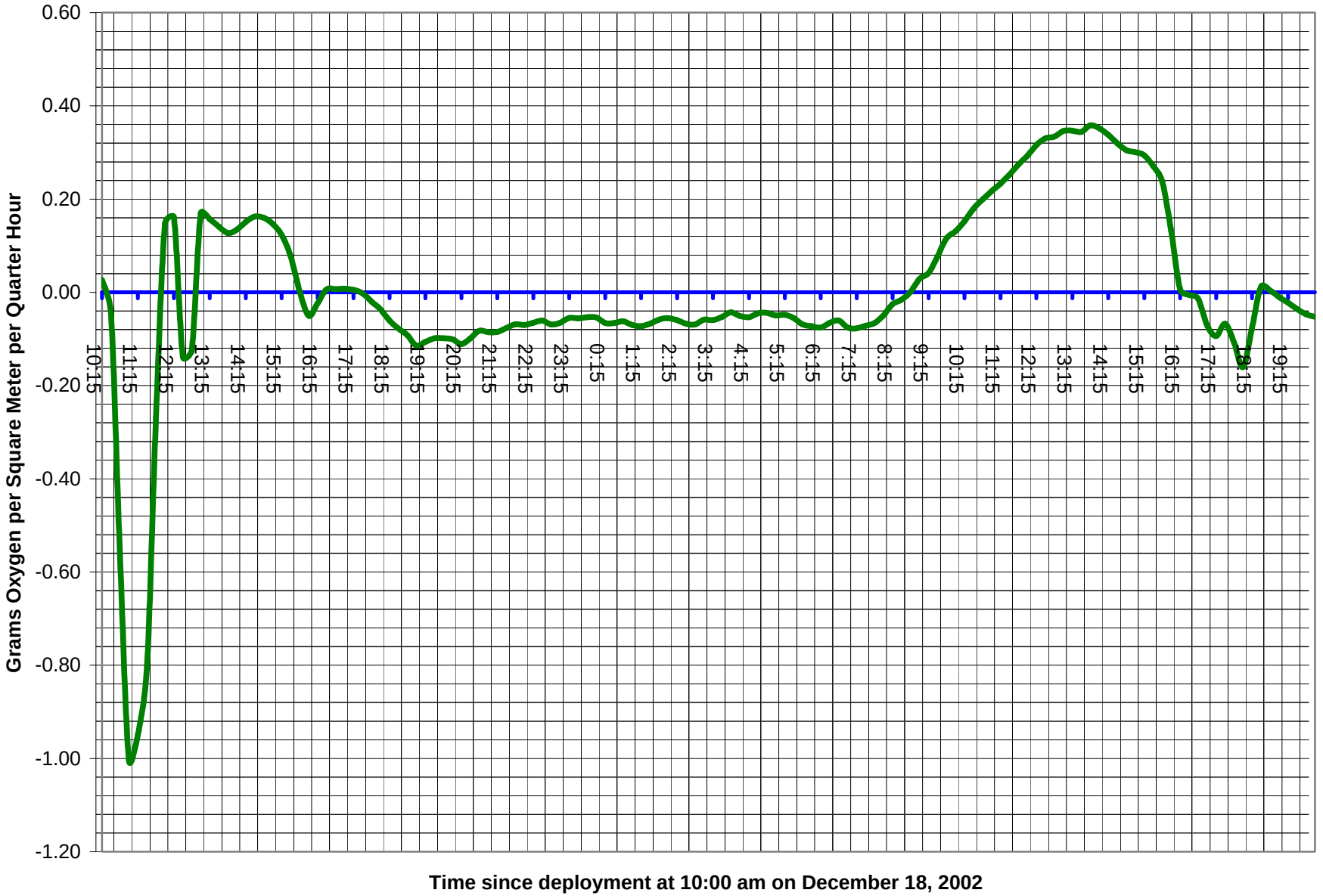

Figure 13.5.3.--Rate of oxygen change for Rio Grande at Los Padillas December 18 through 19, 2002

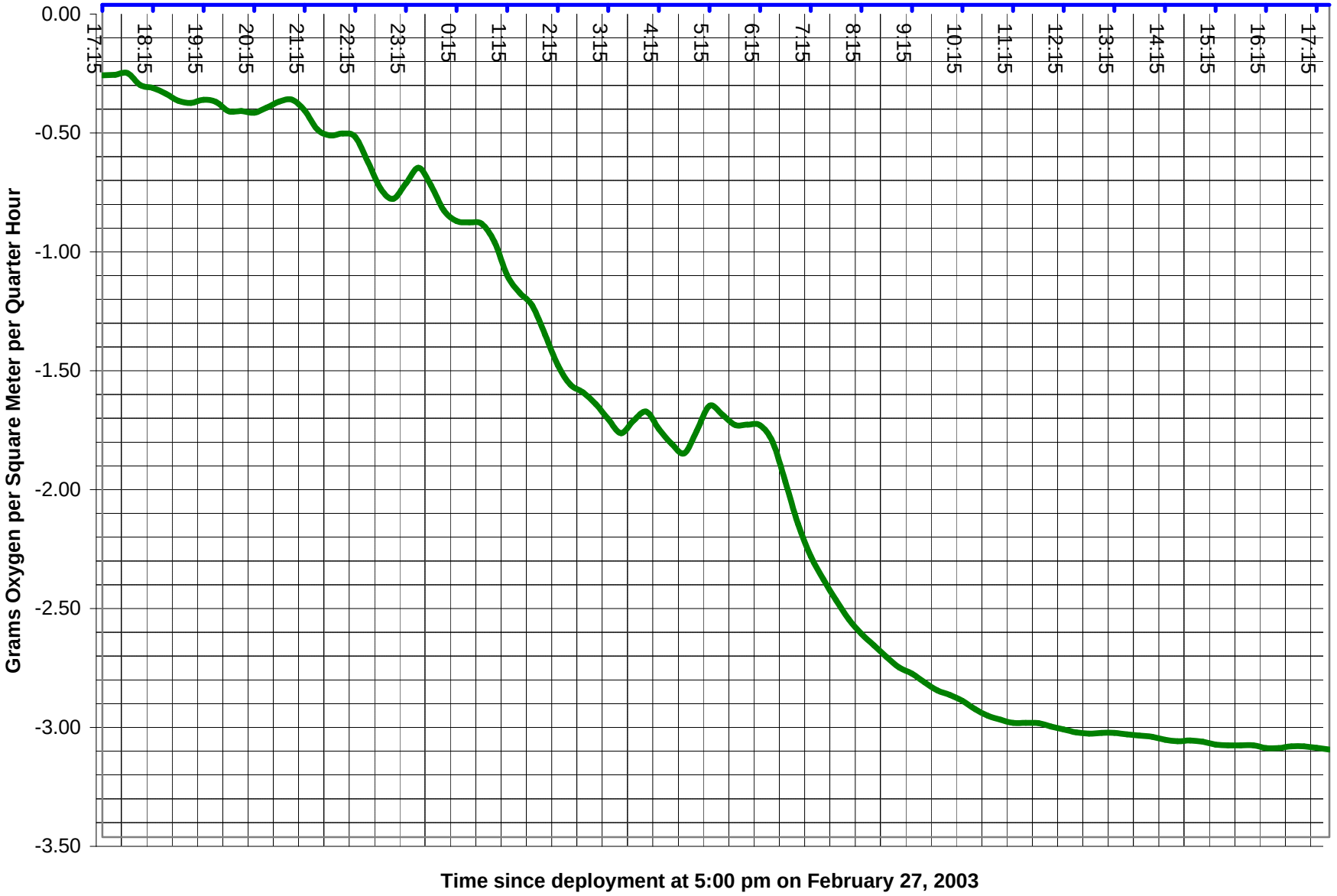

Figure 13.5.4.--Rate of oxygen change for Rio Grande at Los Padillas February 27 through 28, 2003

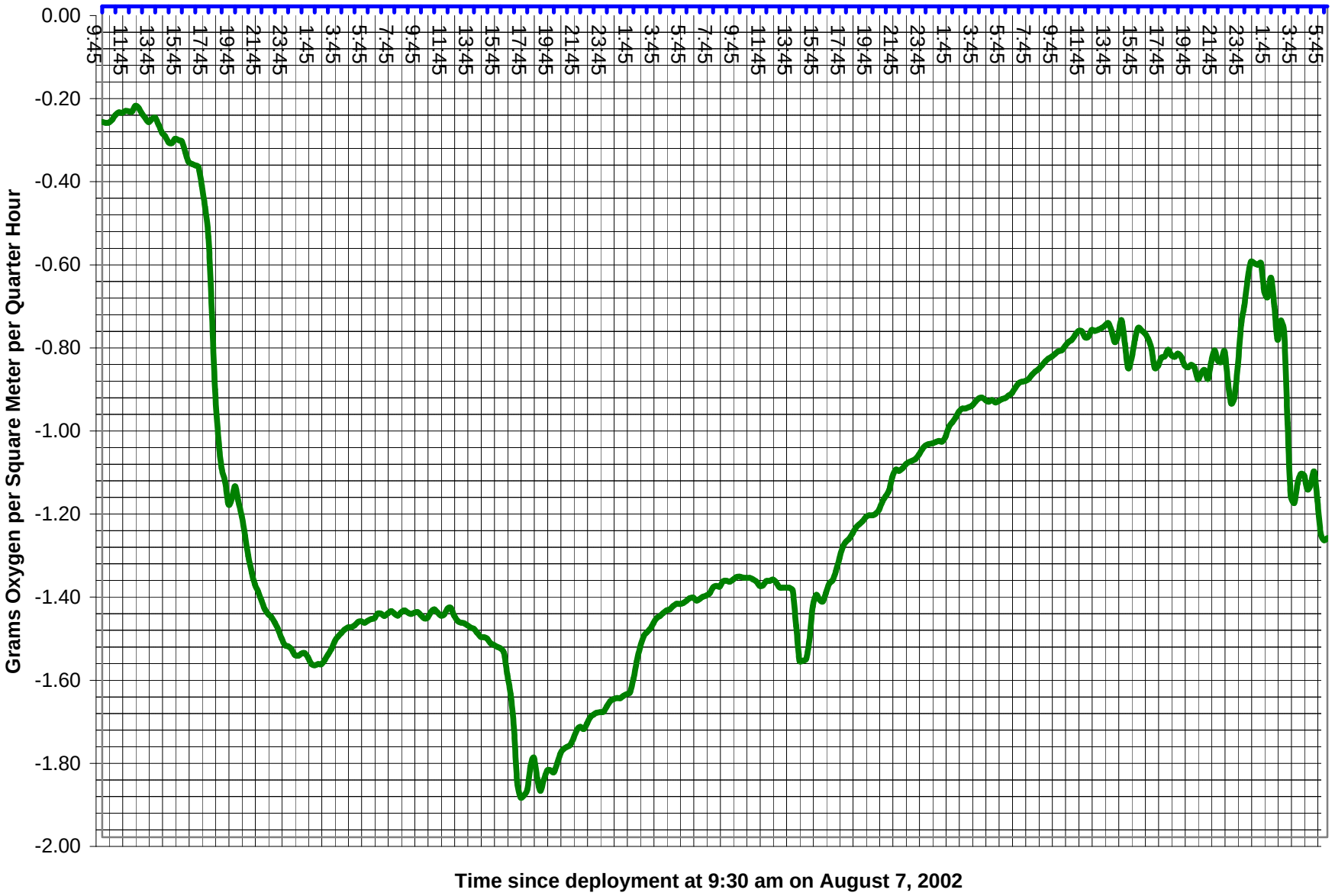

Figure 13.6.1.--Rate of oxygen change for Rio Grande at Isleta August 7 through 11, 2002

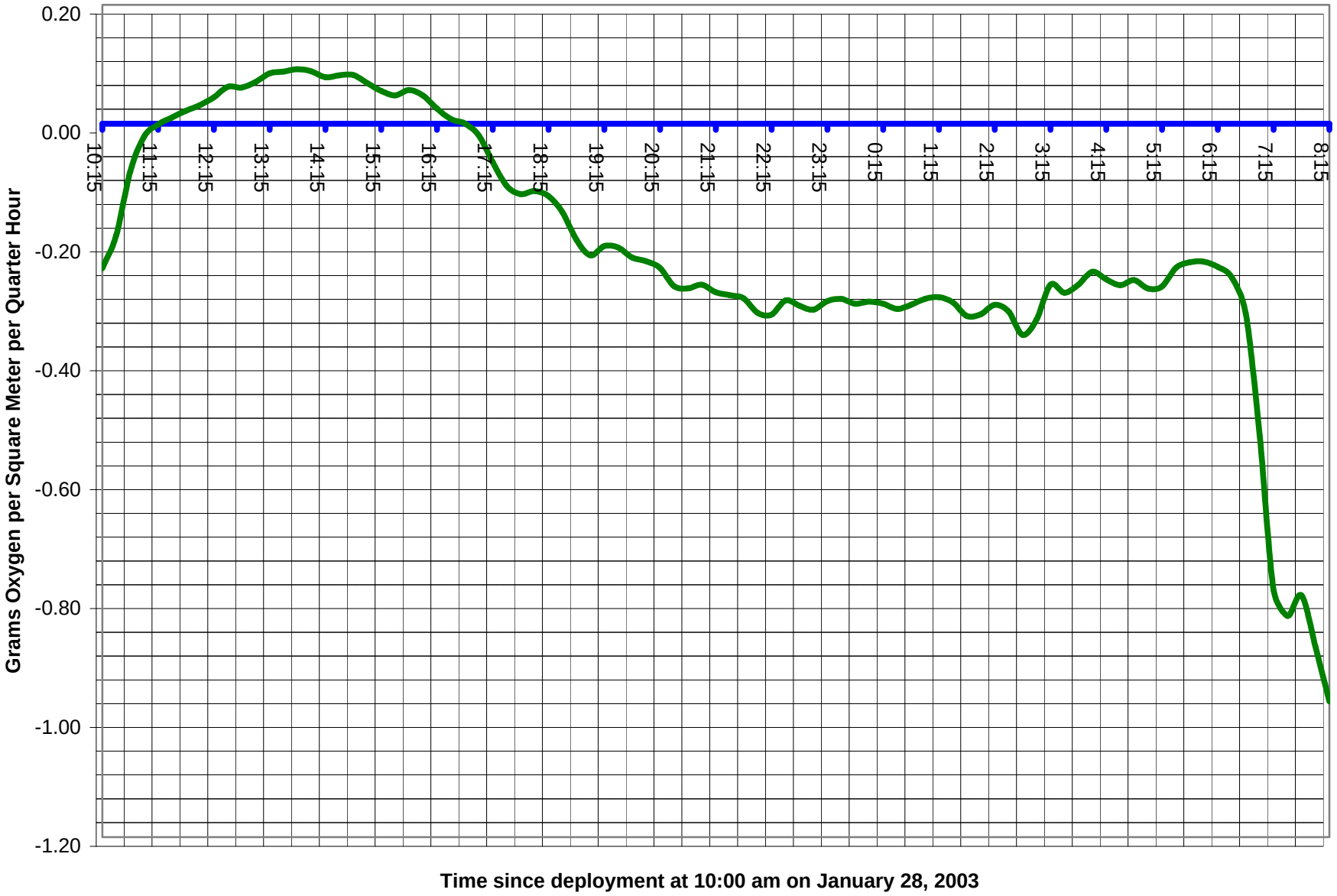

Figure 16.6.2.--Rate of oxygen change for Rio Grande at Isleta January 28 through 29, 2003

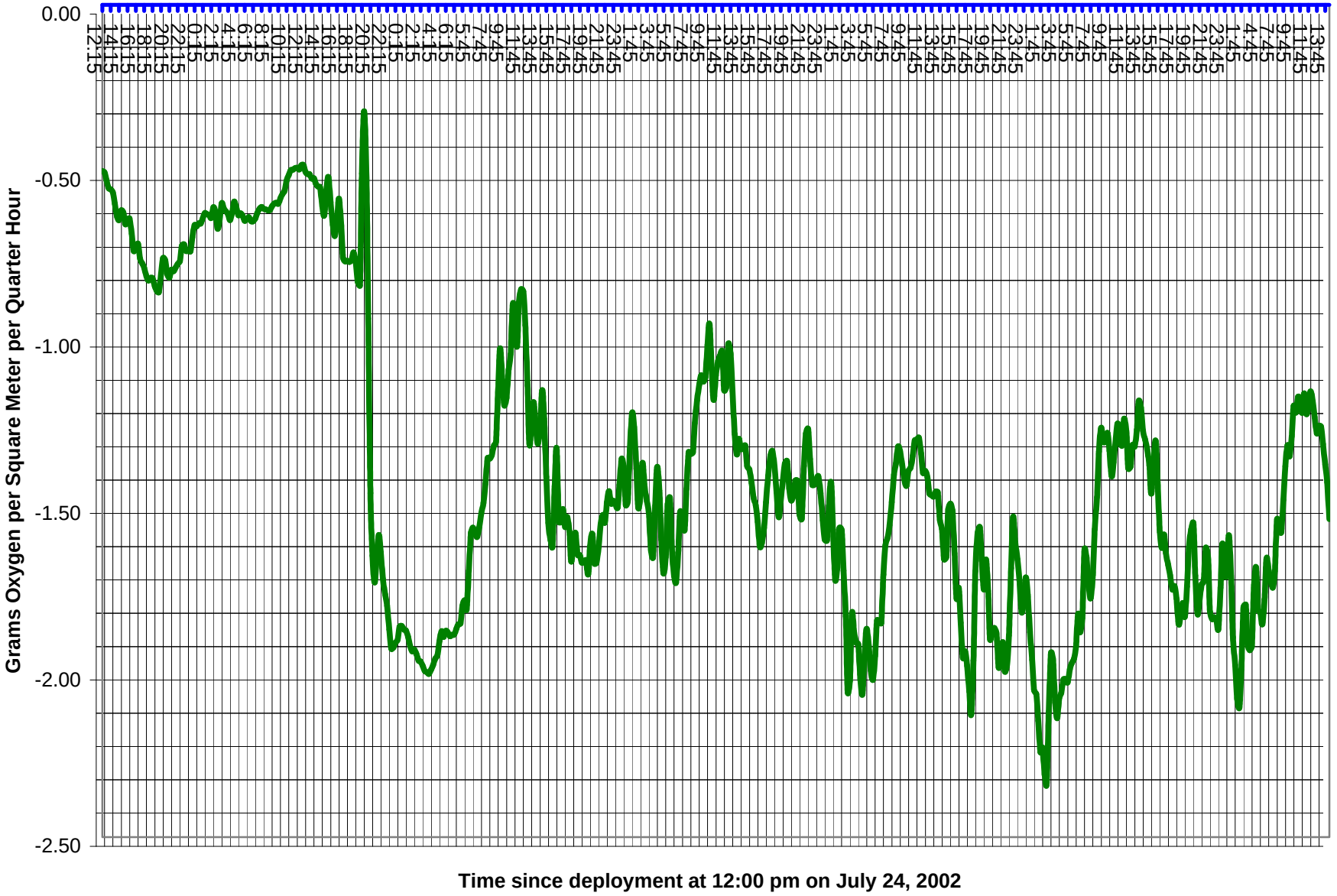

Figure 13.7.1.--Rate of oxygen change for Rio Grande at Los Lunas July 24 through 26, 2002

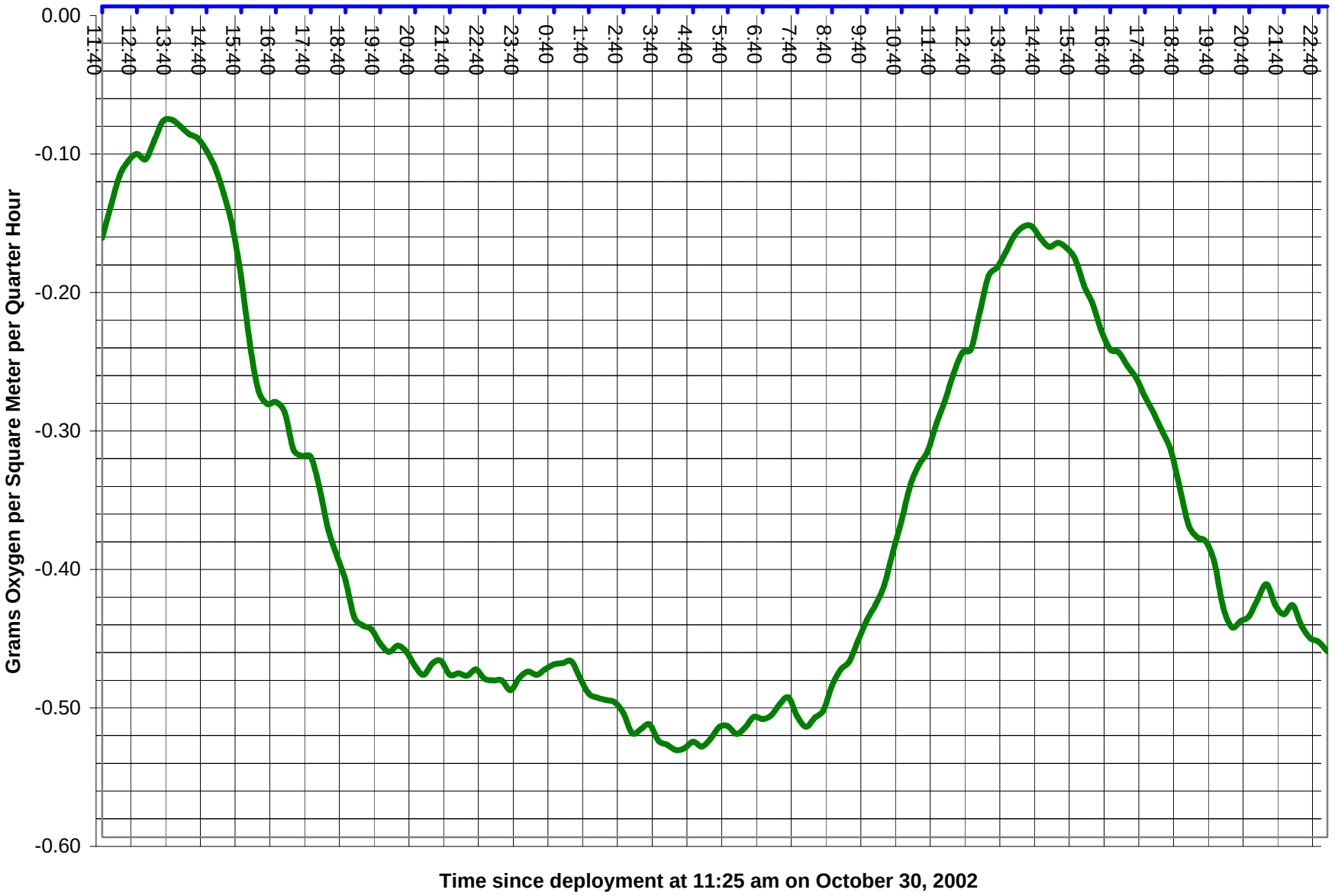

Figure 13.7.2--Rate of oxygen change for Rio Grande at Los Lunas October 30 through October 31, 2002

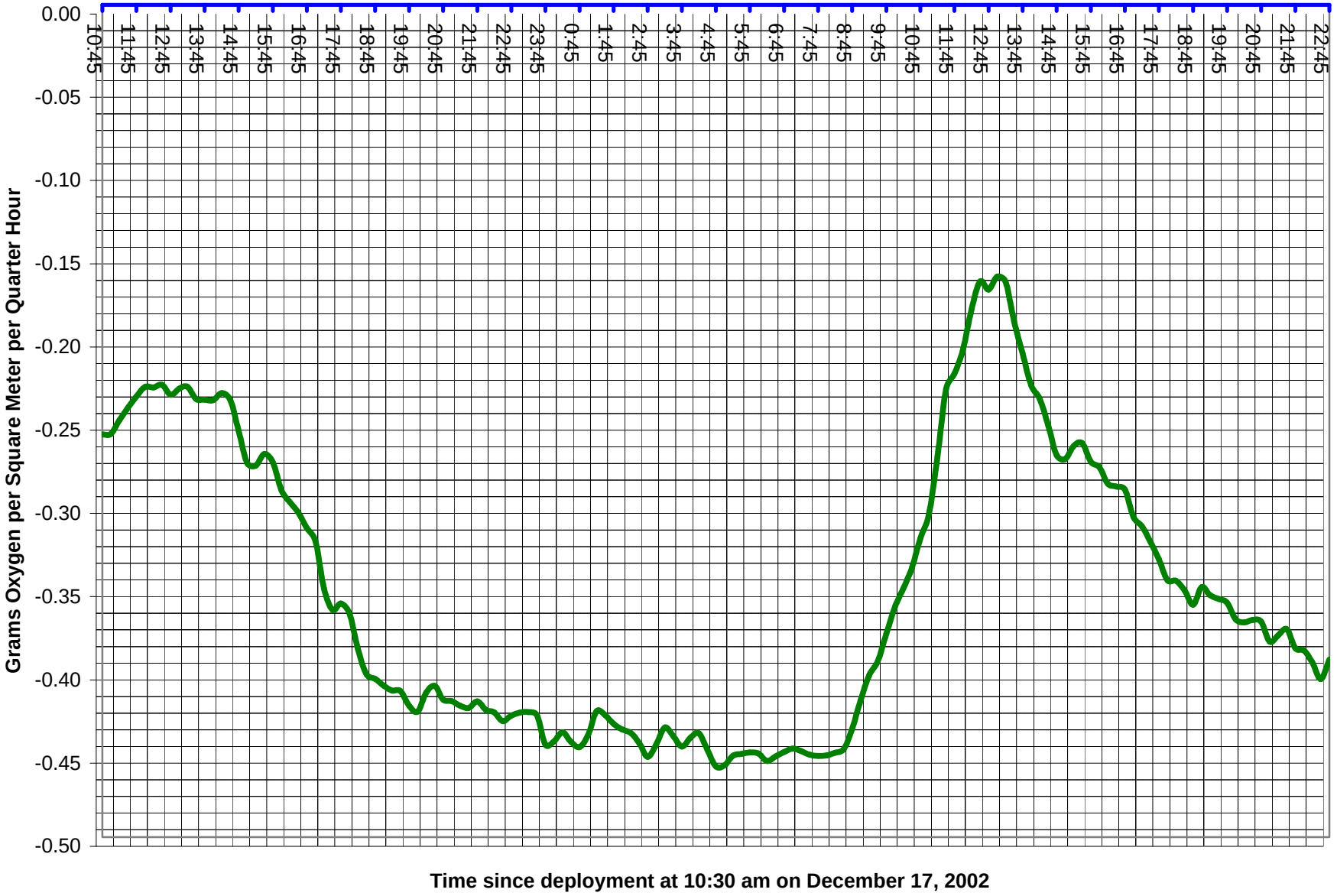

Figure 13.7.3.--Rate of oxygen change for Rio Grande at Los Lunas December 17 through 18, 2002

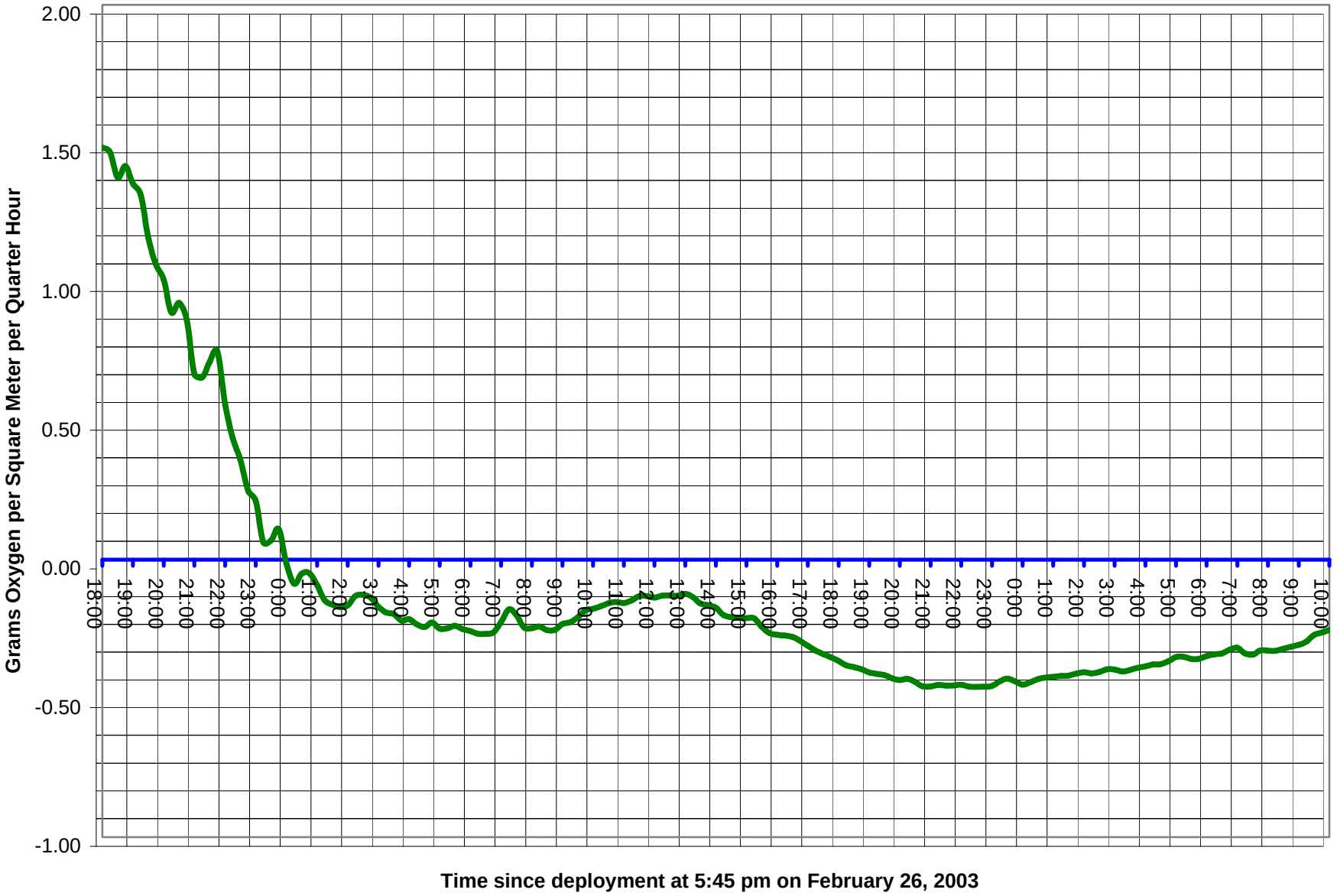

Figure 13.7.4.--Rate of oxygen change for Rio Grande at Los Lunas February 26 through 28, 2003

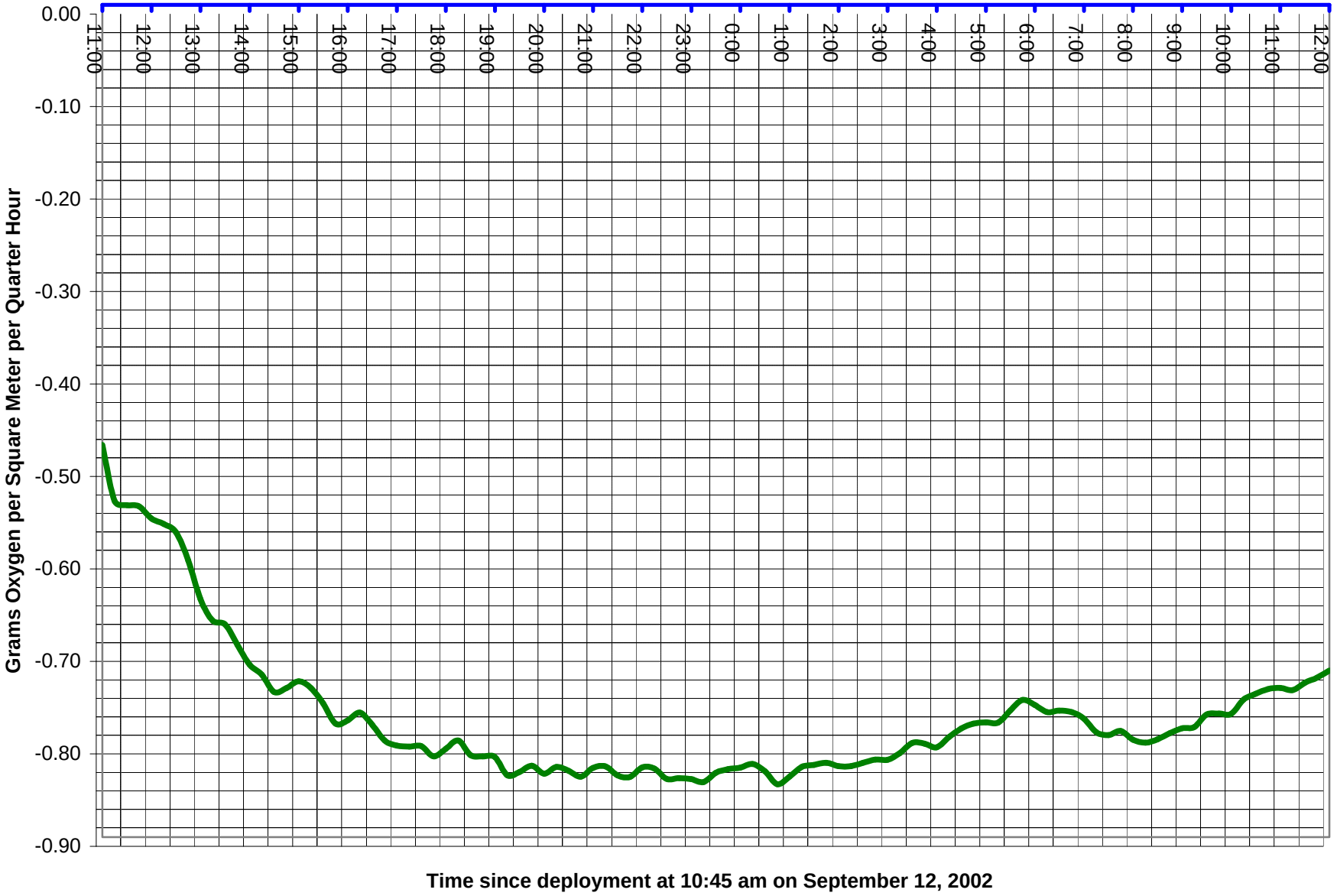

Figure 13.8.1.--Rate of oxygen change for Rio Grande at Abeytas September 12 through 13, 2002

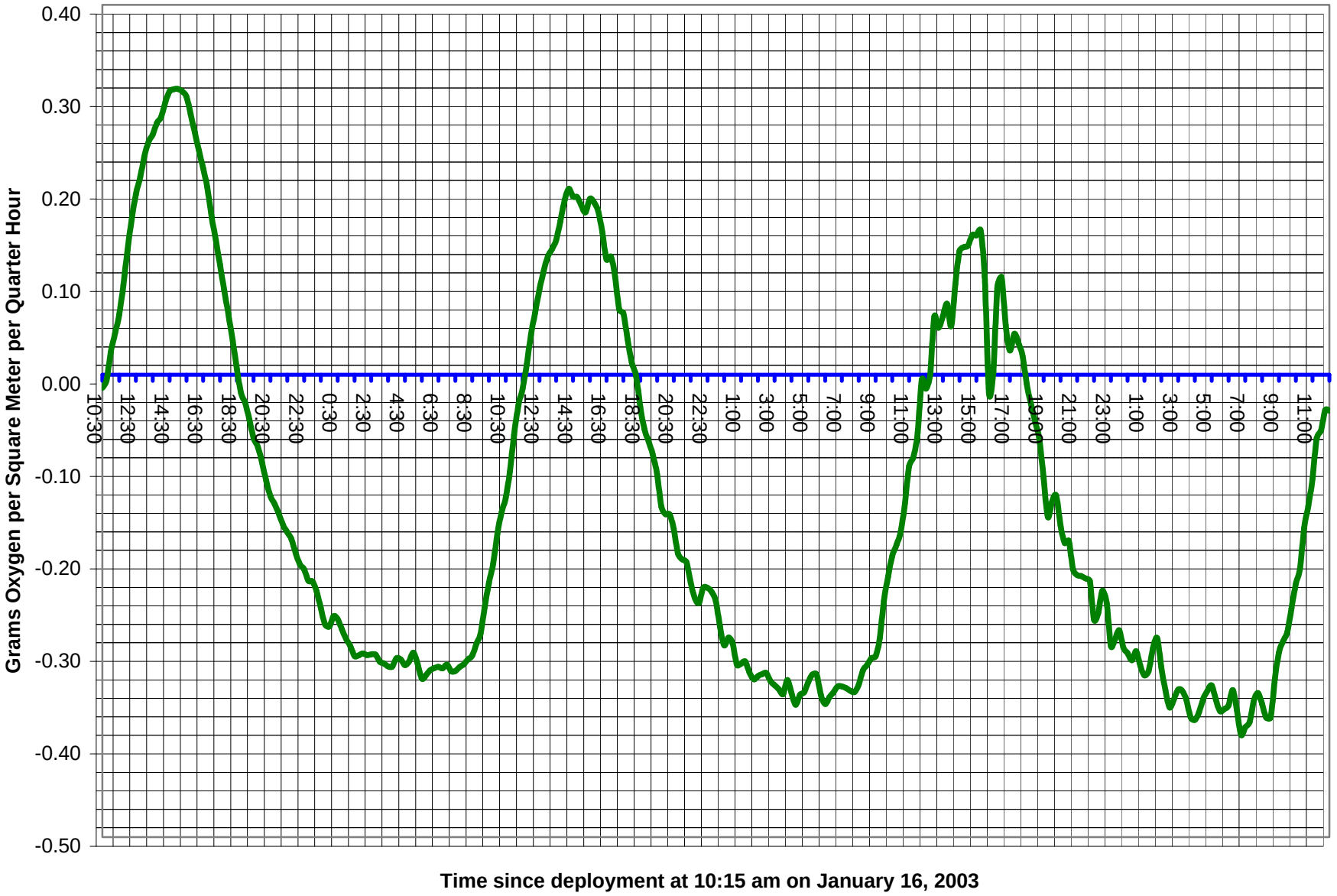

Figure 13.8.2--Rate of oxygen change for Rio Grande at Abeytas January 16 through 19, 2003

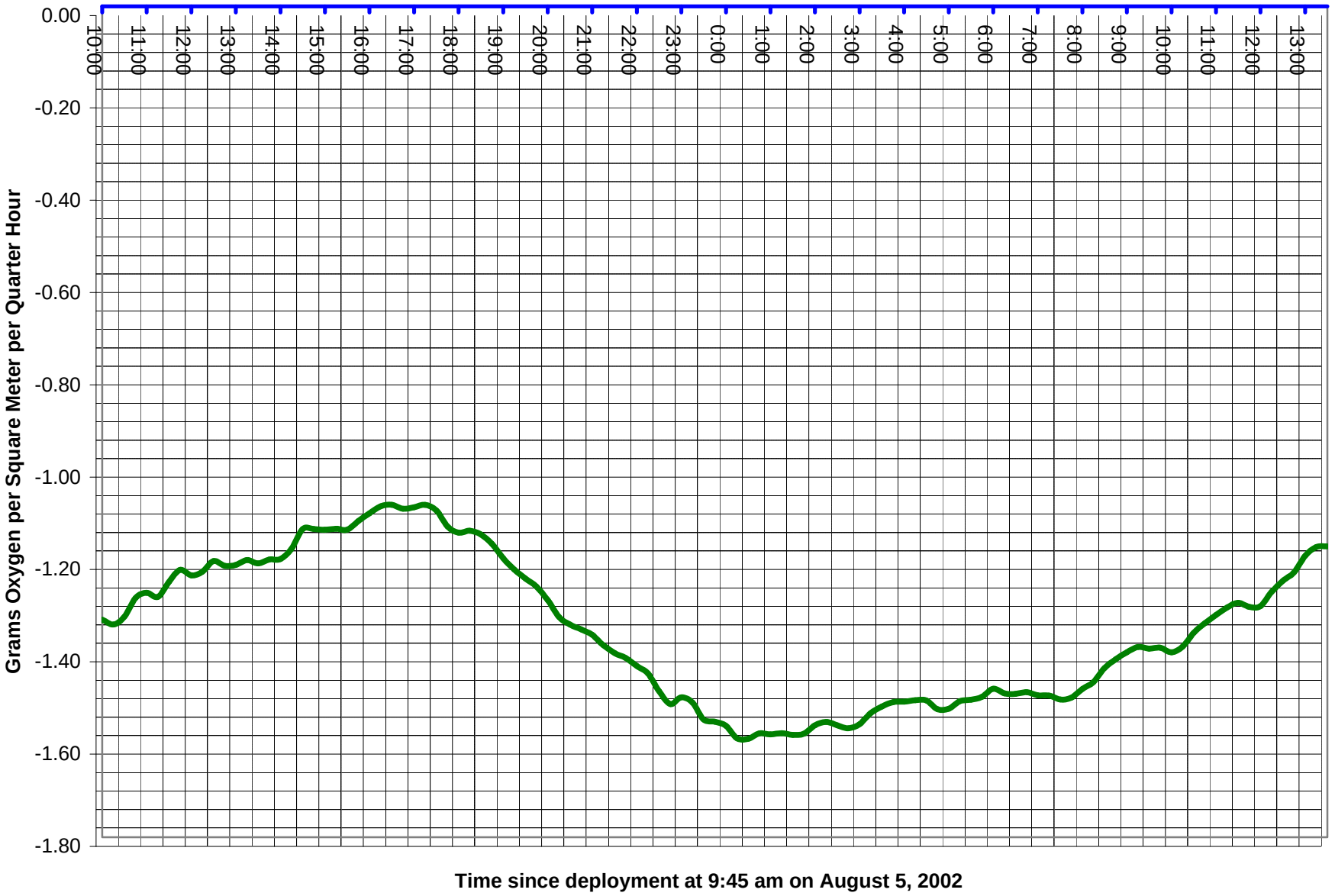

Figure 13.9.1.--Rate of oxygen change for Lower San Juan Drain August 5 through 6, 2002

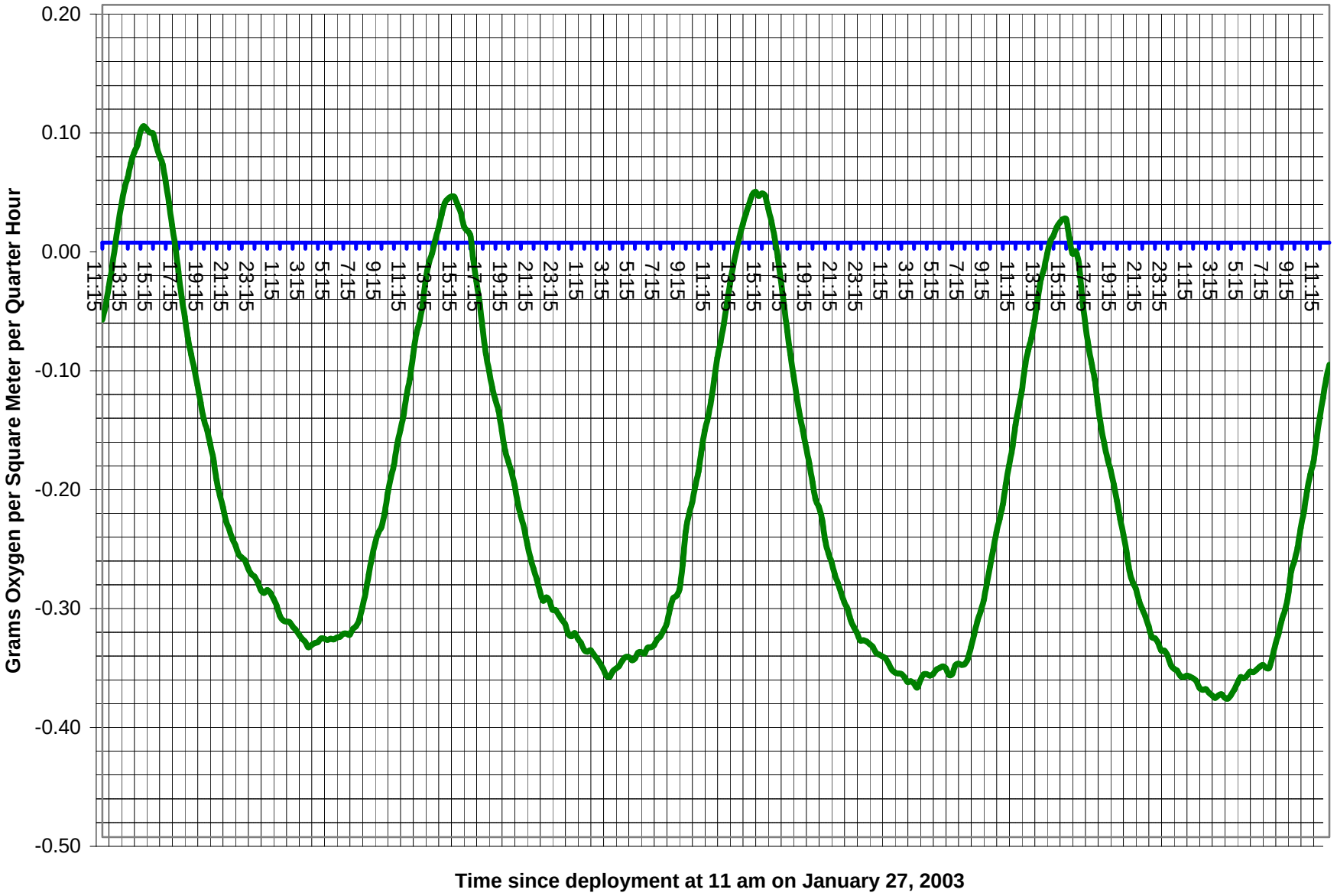

Figure 13.9.2.--Rate of oxygen change in the Lower San Juan Drain January 27 through 31, 2003

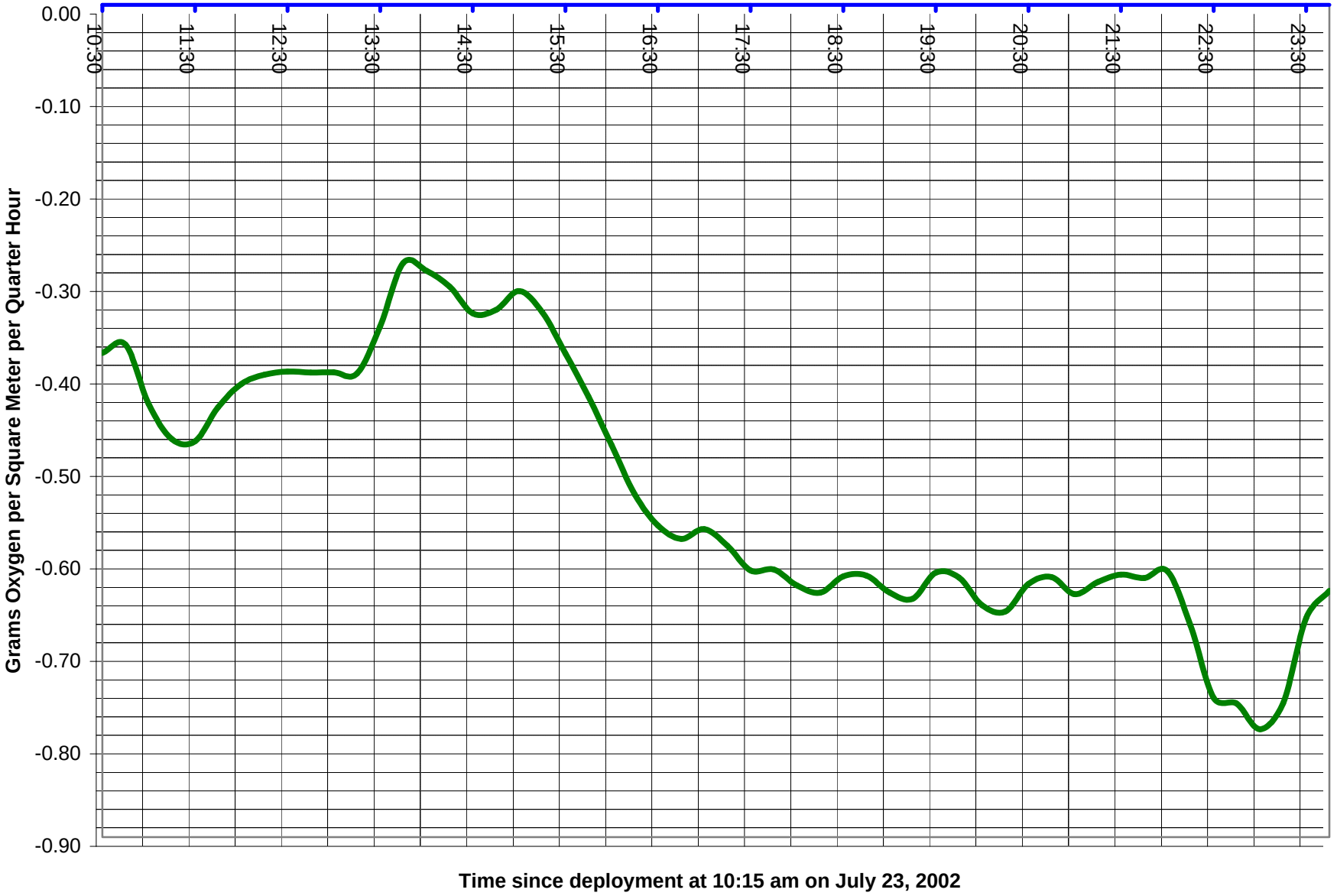

Figure 13.10.1.--Rate of oxygen change for Rio Grande at La Joya July 23, 2002

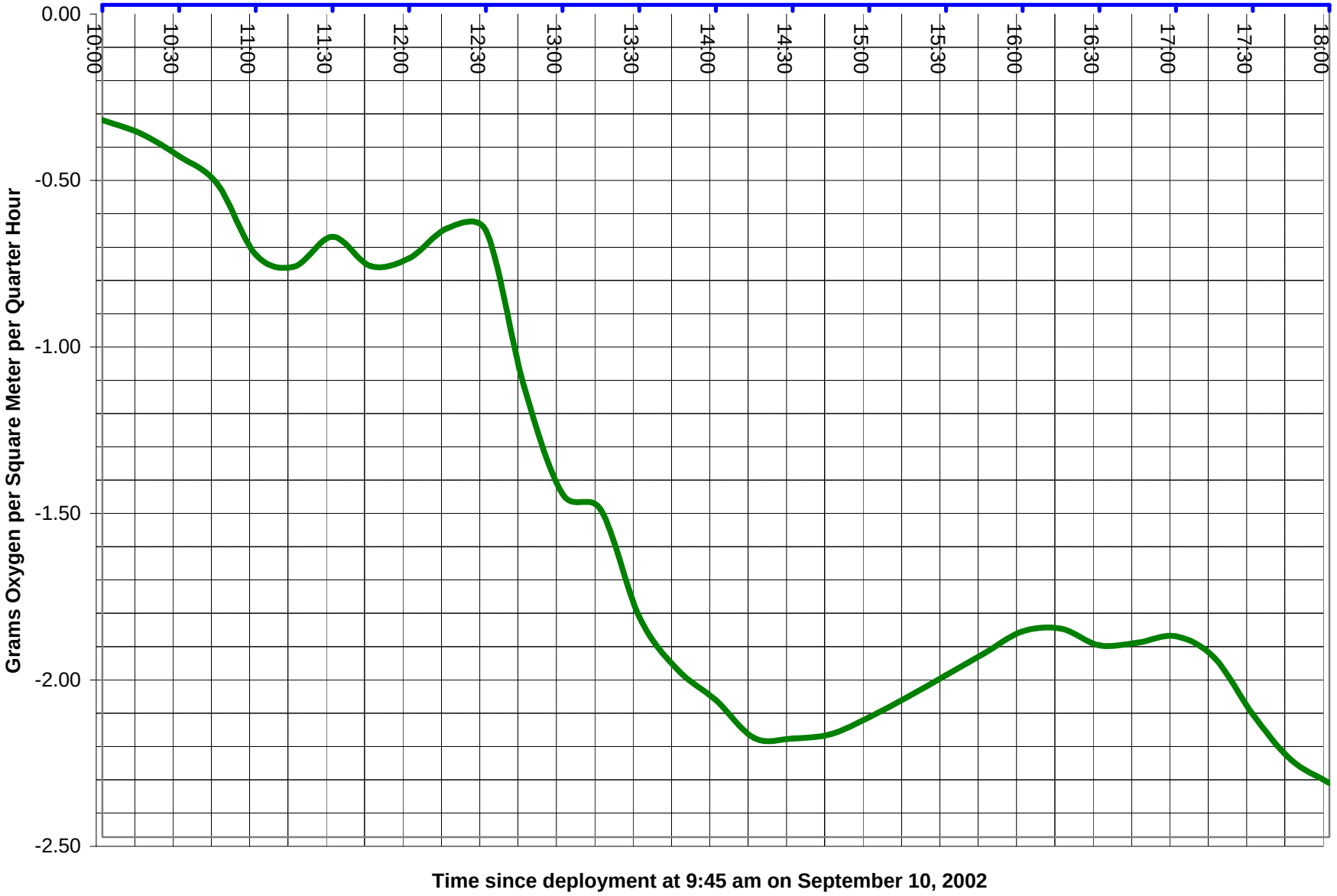

Figure 13.10.2.--Rate of oxygen change for Rio Grande at La Joya September 9 through 10, 2002

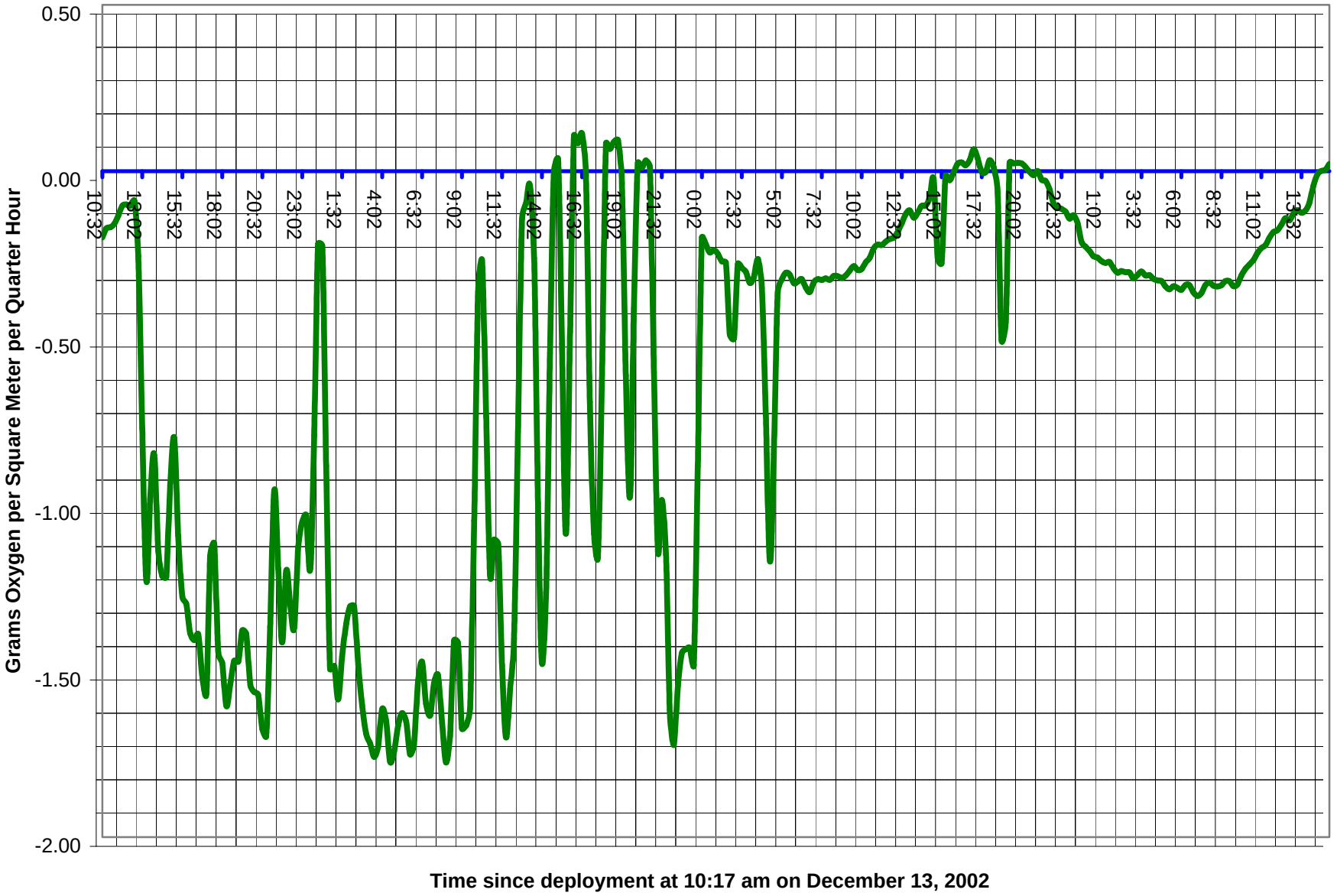

Figure 13.10.3.--Rate of oxygen change for Rio Grande at La Joya December 13 through 16, 2002

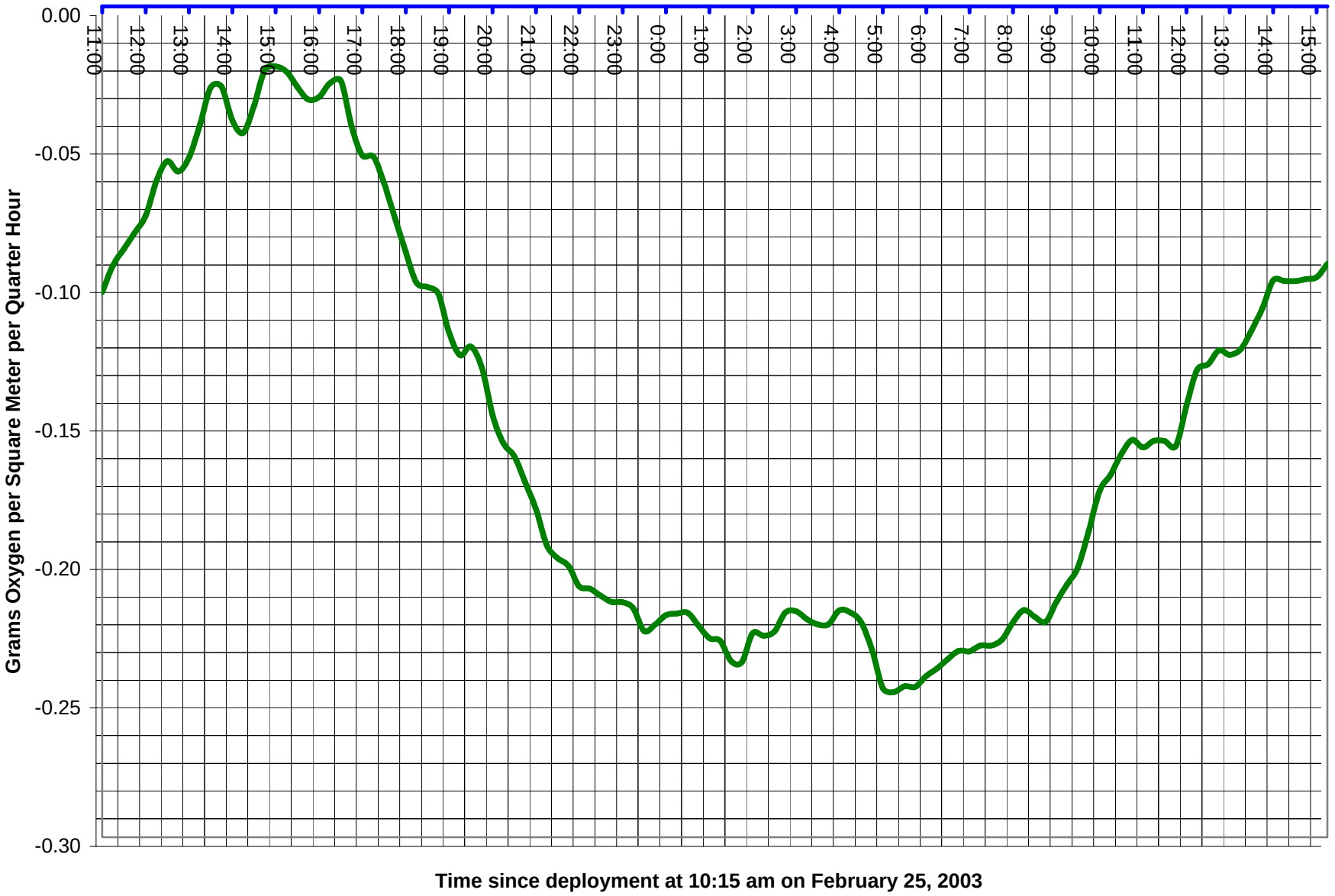

Figure 13.10.4.--Rate of oxygen change for Rio Grande at La Joya February 25 through 26, 2003

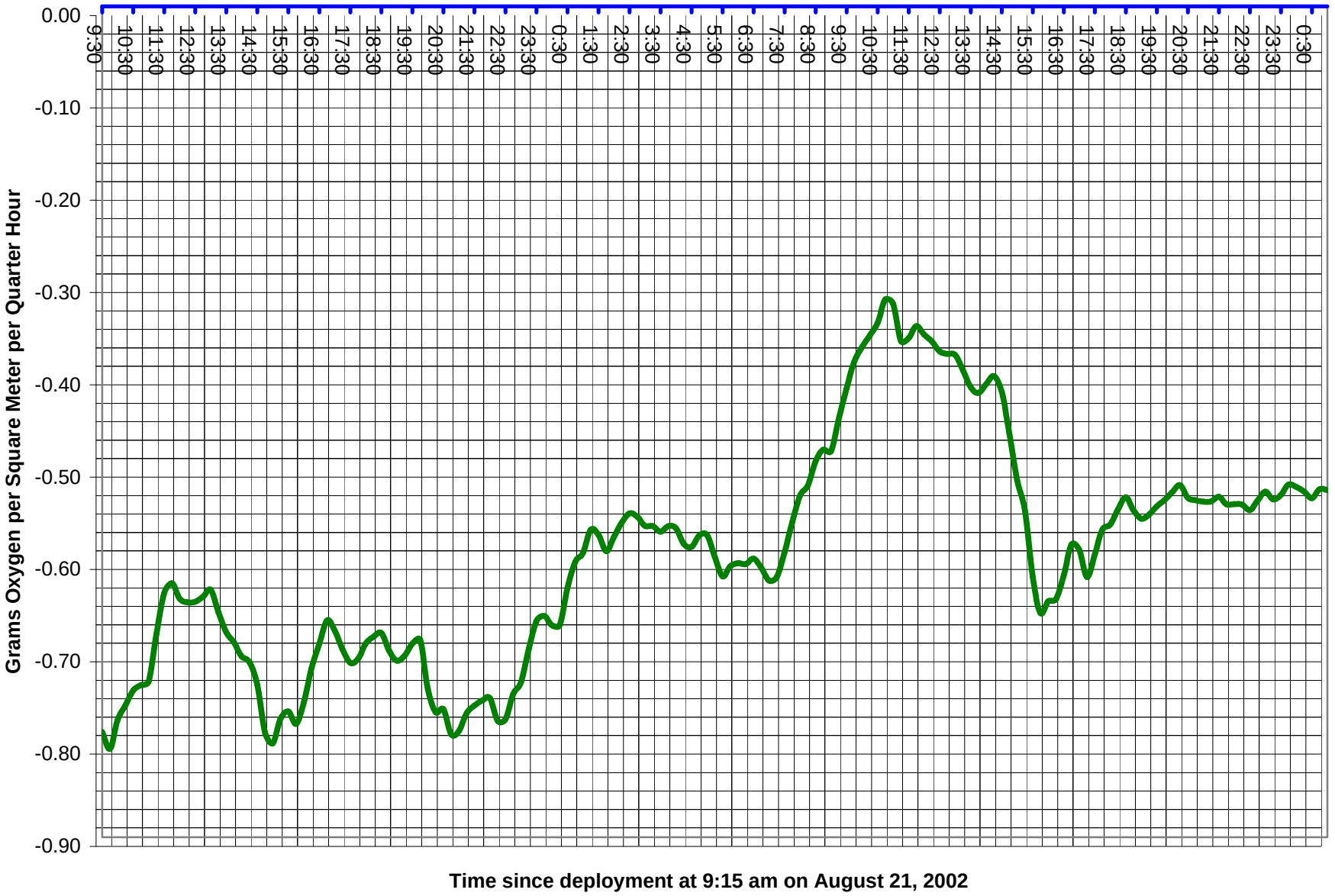

Figure 13.11.1.--Rate of oxygen change for Rio Grande at Lemitar August 21 through 23, 2002

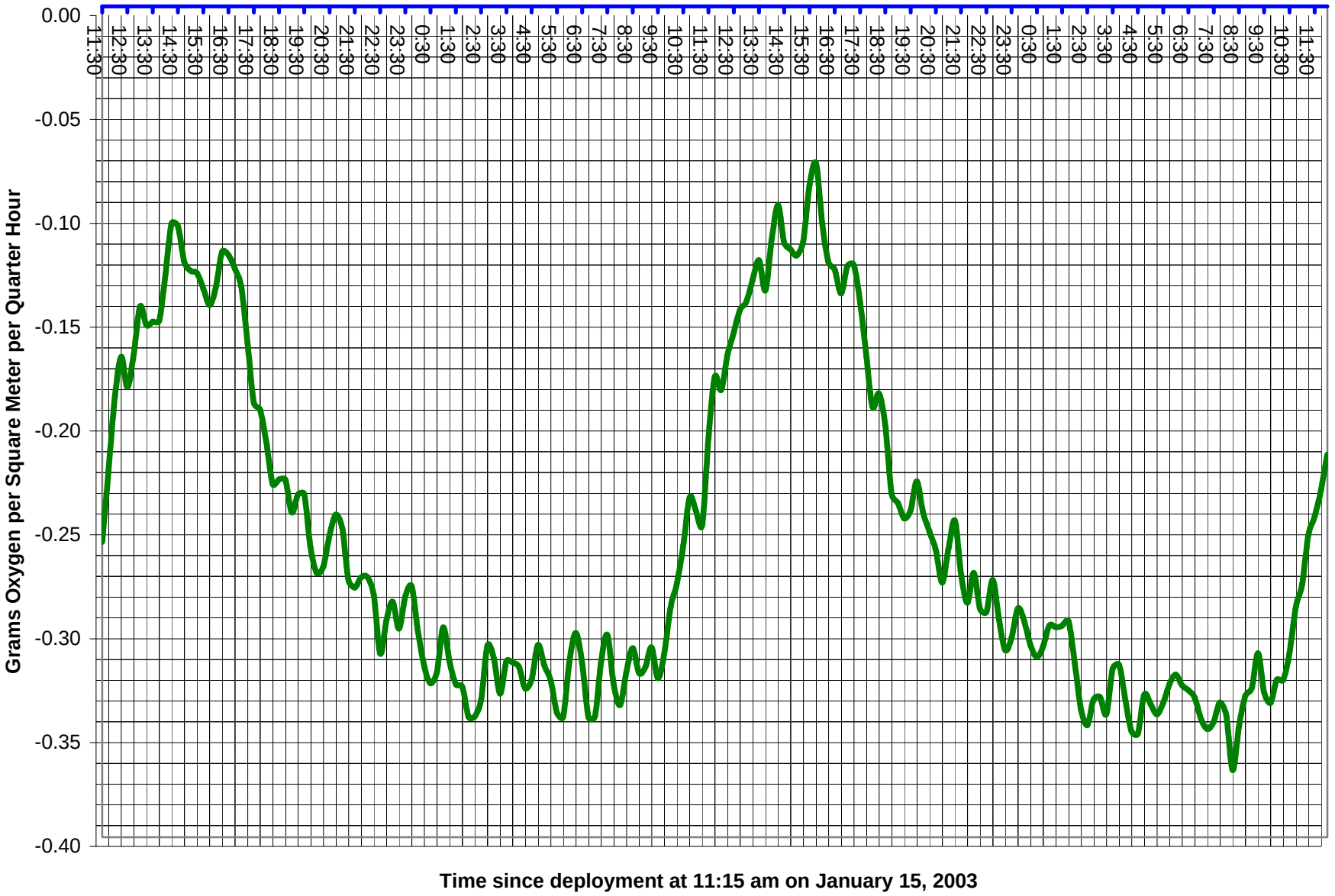

Figure 13.11.2.--Rate of oxygen change for Rio Grande at Lemitar January 15 through 17, 2003

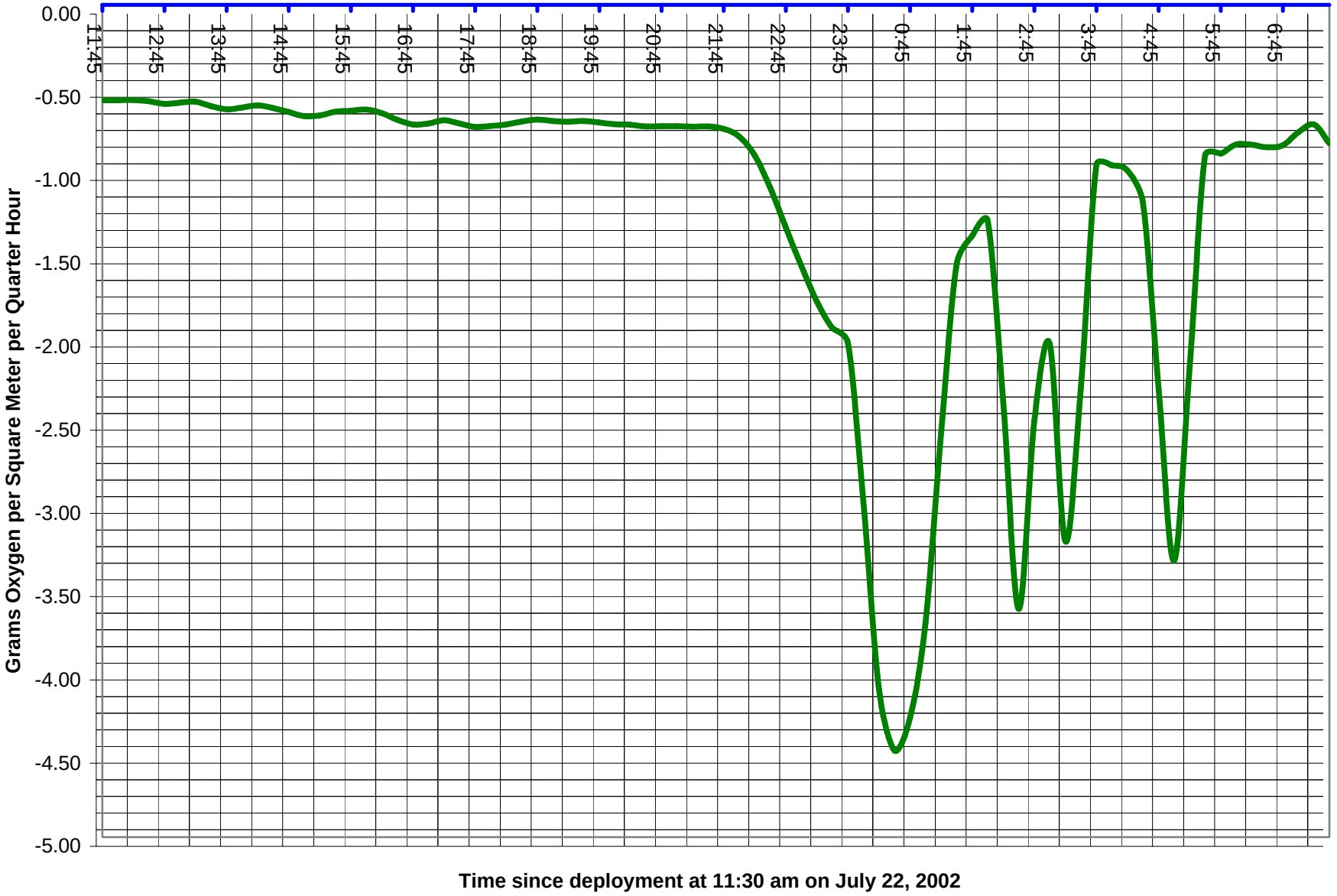

Figure 13.12.1.--Rate of oxygen change for Rio Grande below Arroyo del Tajo July 22 through 23, 2002

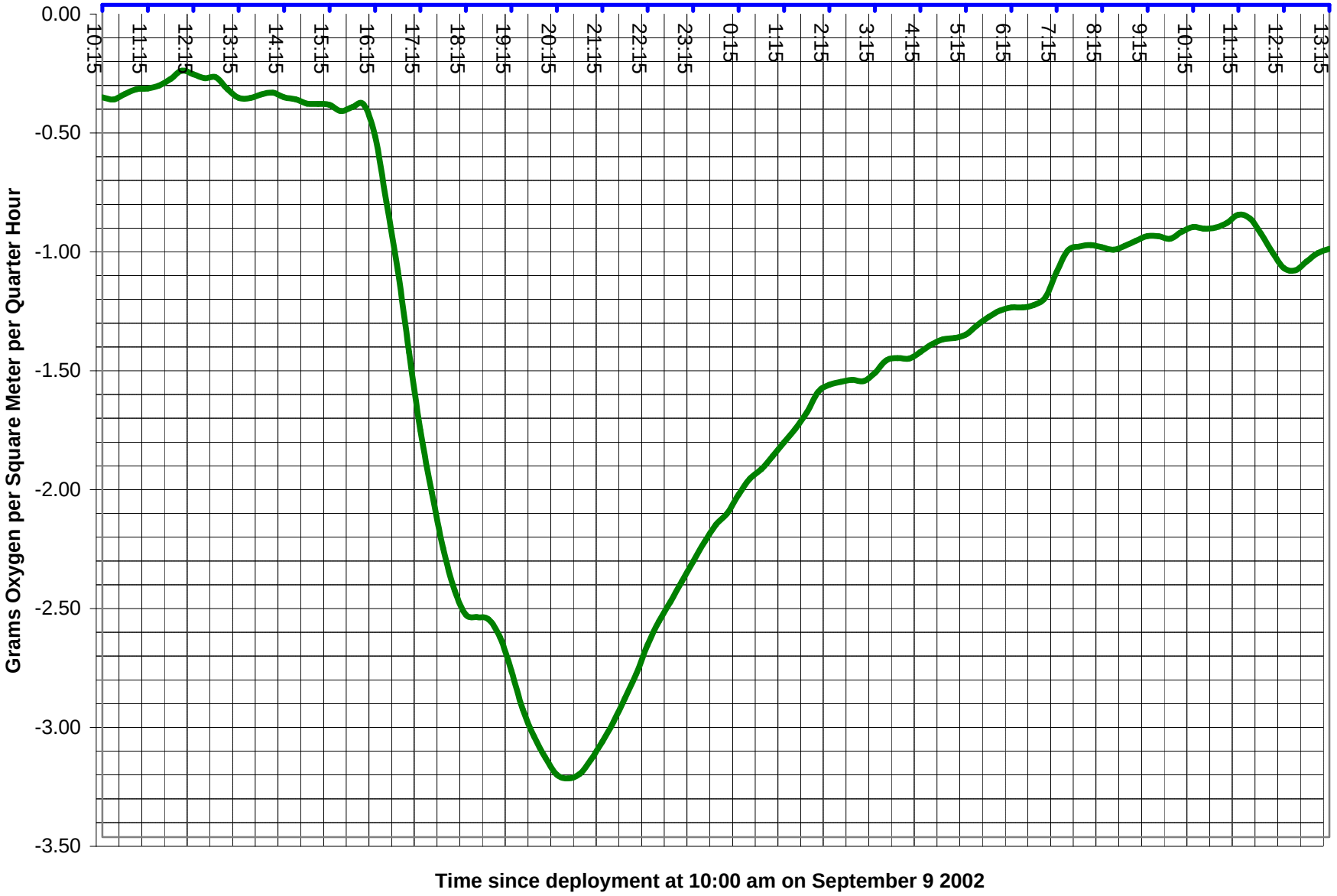

Figure 13.12.2.--Rate of oxygen change for Rio Grande below Arroyo del Tajo September 9 through 10, 2002

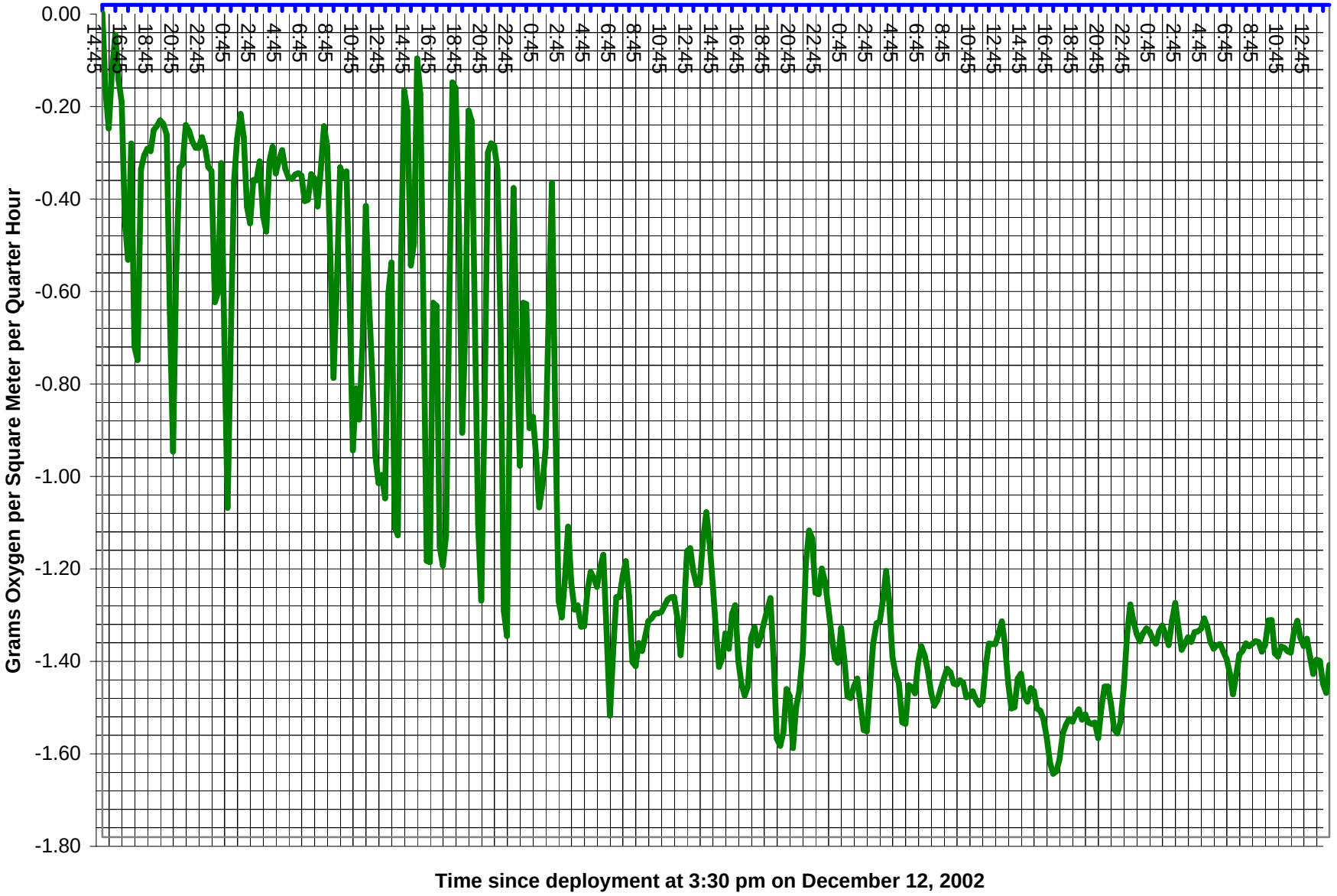

Figure 13.12.3.--Rate of oxygen change for Rio Grande below Arroyo Tajo December 12 through 16, 2002

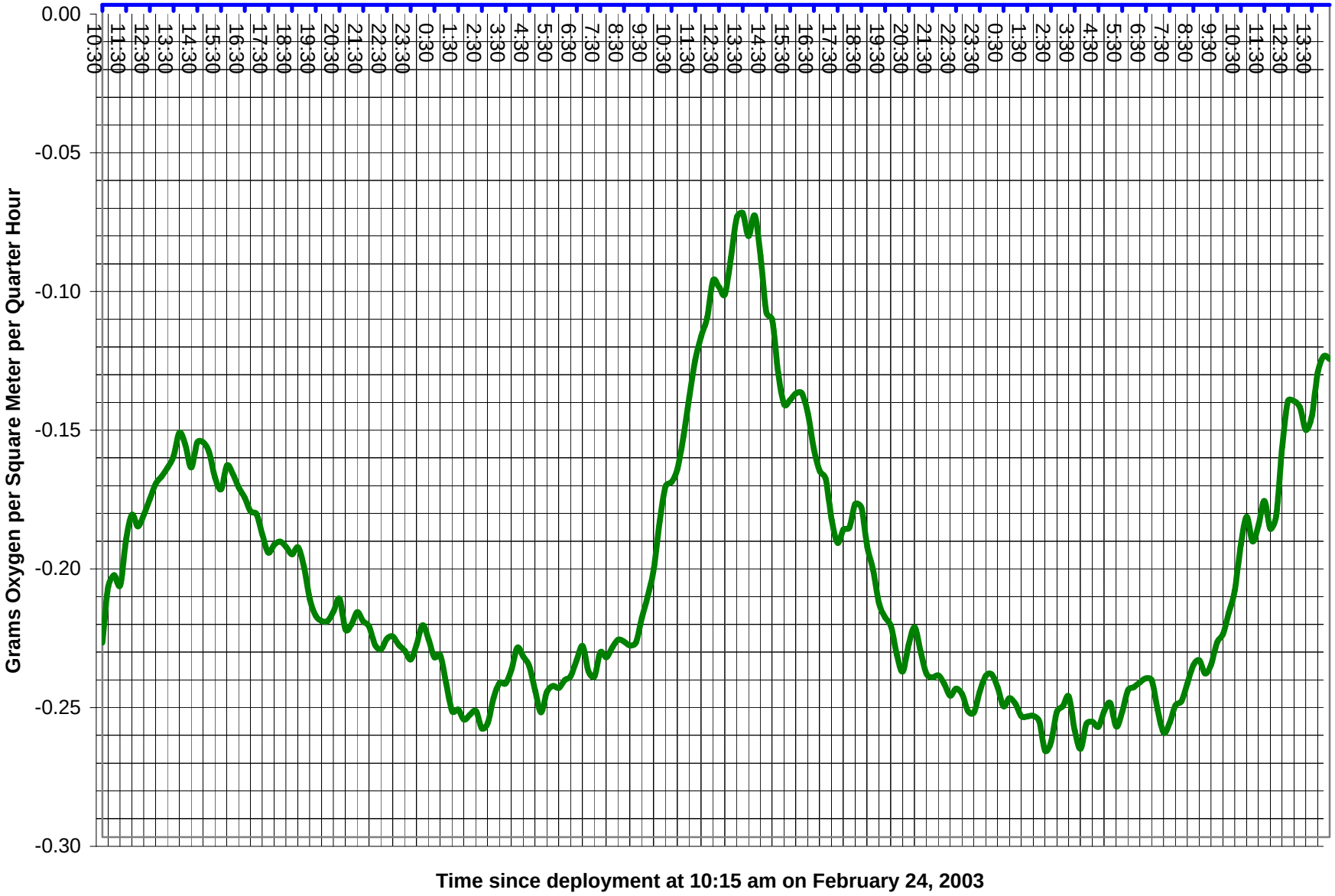

Figure 13.12.4.--Rate of oxygen change for Rio Grande below Arroyo del Tajo, February 24 though 26, 2003

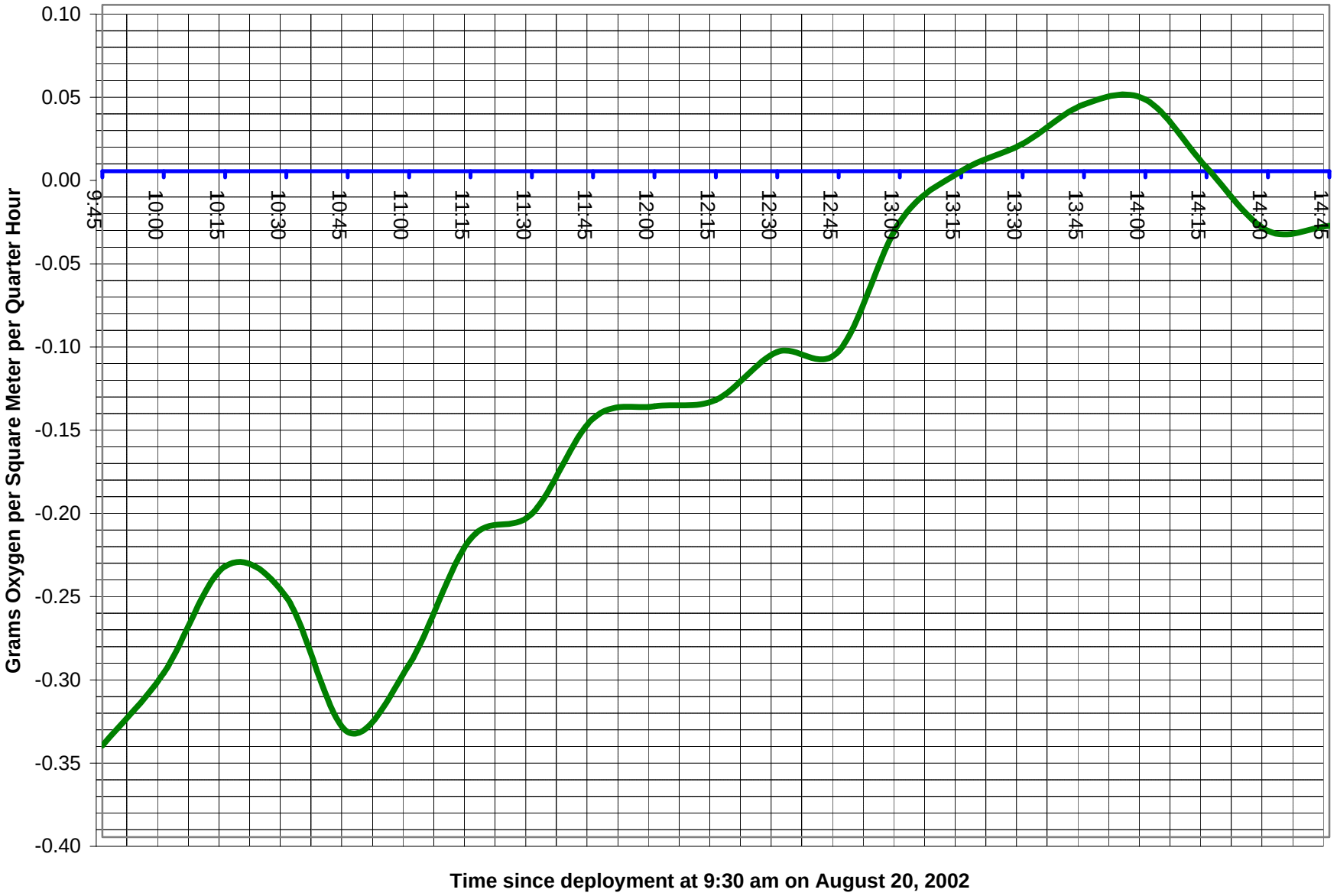

Figure 13.13.1.--Rate of Oxygen Change for Rio Grande at San Pedro August 20, 2002

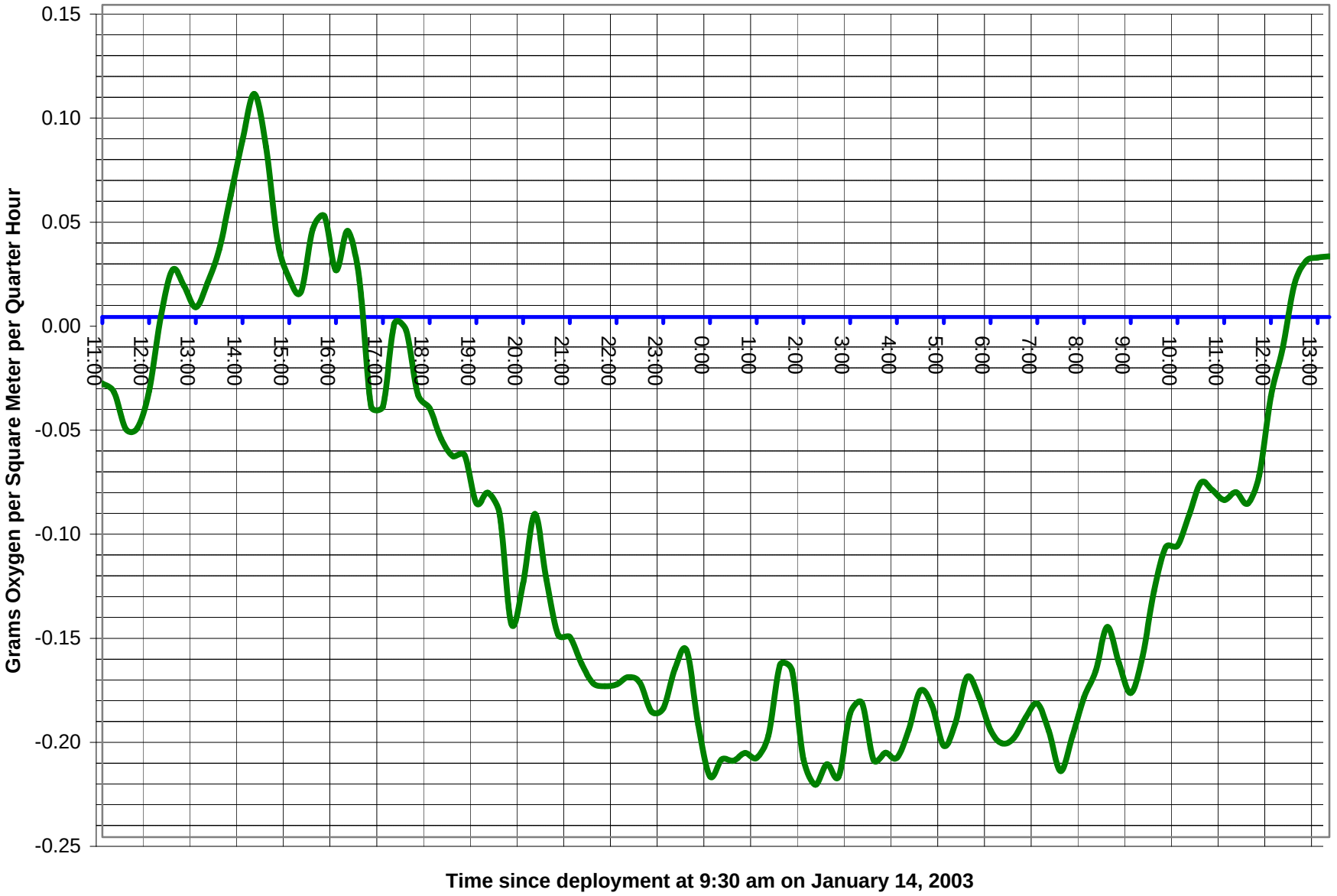

Figure 13.13.2.--Rate of oxygen change for Rio Grande at San Pedro January 14 through 15, 2003

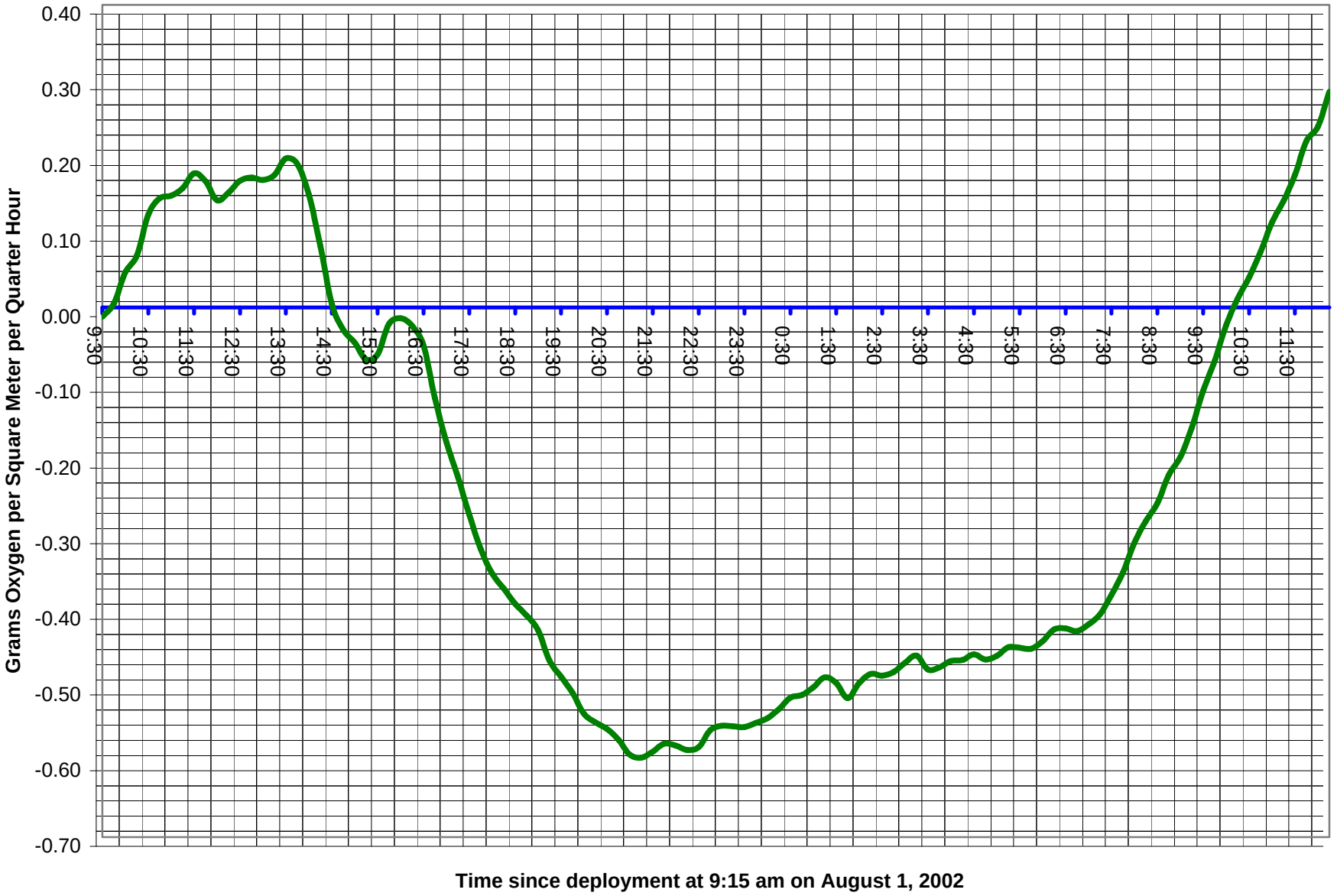

Figure 13.14.1.--Rate of oxygen change for Rio Grande at North Boundary Bosque del Apache NWR
August 19 though 20, 2002

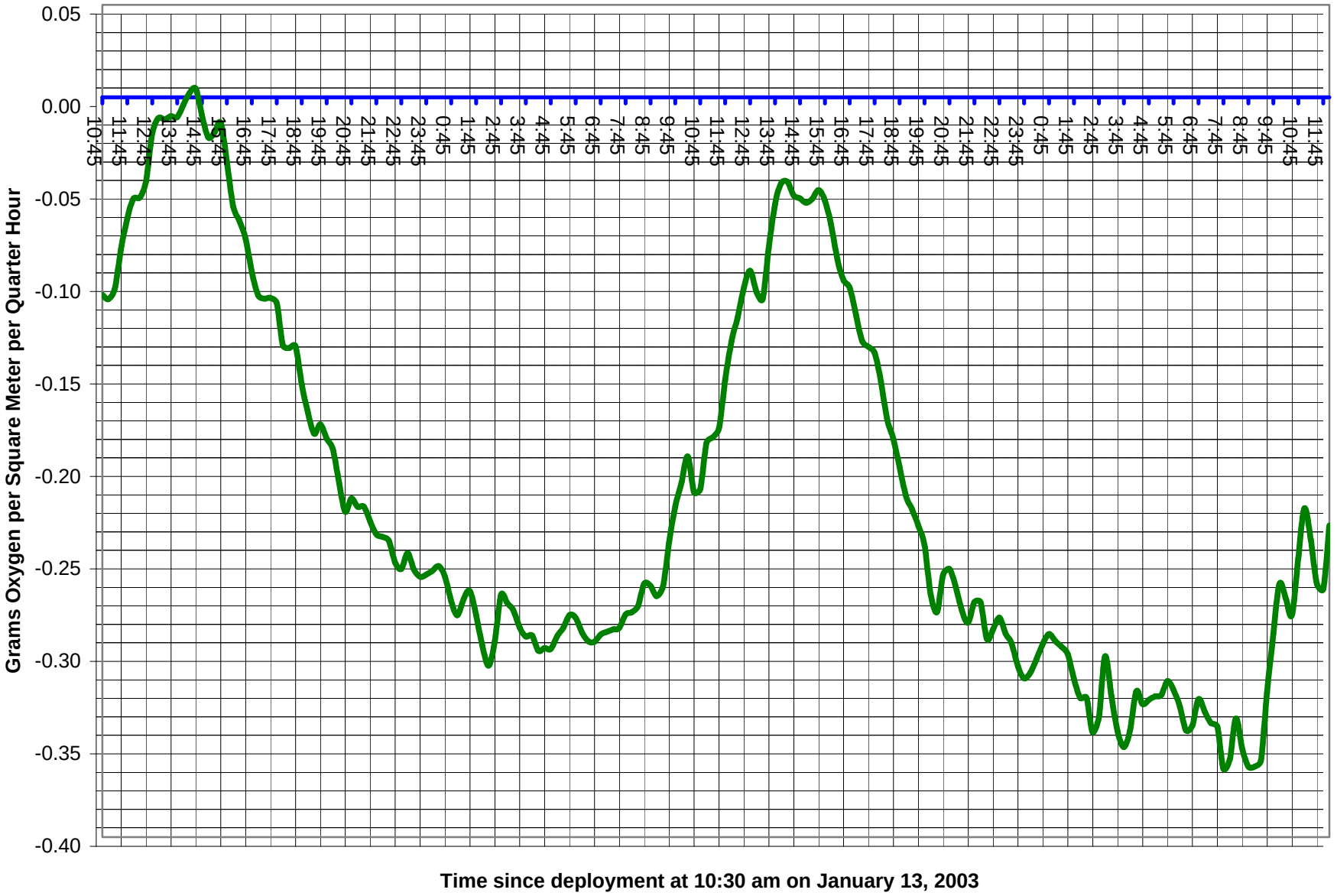

Figure 13.14.2.--Rate of oxygen change for Rio Grande at North Boundary Bosque del Apache NWR
January 13 through 15, 2003

Table 2.--Summary of water-quality investigations of the Middle Rio Grande identified by location, year work conducted, and type of information provided

Reference number	Reference citation	Location	Year(s) work conducted	Type of Water-quality investigation													General description of the Investigation
				Algae / productivity	Invertebrate survey	Fish survey	Fish health	Toxicity tests	Aquatic habitat	Hydrology / geomorphology	Climate / Setting	Riparian / wetlands	Bioaccumulation	Sediment chemistry	Water chemistry	Radio-activity	
1	Anderholm, S.K., M.J. Radell, and S.F. Richey. 1995. Water-Quality Assessment of the Rio Grande Valley Study Unit, Colorado, New Mexico, and Texas--Analysis of Selected Nutrient, Suspended-Sediment, and Pesticide Data. U.S. Geological Survey Water-Resources Investigations Report 94-4061, Abuquerque, NM.	Rio Grande Basin from headwaters in CO to El Paso, TX	1980-1990							X	X			X	X	X	Retrospective analysis of historic water quality emphasizing nutrients, suspended sediments, and pesticides.
2	Anderholm, S.K. 1997. Water-Quality Assessment of the Rio Grande Valley, Colorado, New Mexico, and Texas - - Shallow Ground-Water Quality and Land Use in the Albuquerque Area, Central New Mexico, 1993. U.S. Geological Survey Water-Resources Investigations Report 97-4067, Albuquerque, NM.	Shallow ground-water in vicinity of Albuquerque, NM	1993								X				X	X	Characterization of shallow ground-water quality with reference to pollution and surface water recharge.
3	Bexfield, L.M. and S.K. Anderholm 2002. Spatial Patterns and Temporal Variability in Water Quality from City of Albuquerque Drinking-Water Supply Wells and Piezometer Nests, with Implications for the Ground-Water Flow System. U.S. Geological Survey Water-Resources Investigations Report 01-4244, Albuquerque, NM.	Ground-water in vicinity of Albuquerque, NM	1988-97								X				X		Drinking water quality. Drinking water is discharged through the WWTP outfall. Report identifies recharge areas and differences in ground water quality areas.
4	Beyer, D.W. 1995. Acute Toxicity of Rodeo Herbicide to Rio Grande Silvery Minnow as Estimated by Surrogate Species: Plains Minnow and Fathead Minnow. Archives of Environmental Contamination and Toxicology 29:24-26.	Laboratory study	1992					X							X		Acute toxicity tests using fathead minnow and plains minnow as surrogates for Rio Grande silvery minnow with a glyphosphate herbicide in water quality conditions simulating those in the East and West Riverside drains.
5	Booher, J.L., P.R. Fresquez, L.F. Carter, B.M. Gallaher, and M.A. Mullen. 1998. Radionuclide Concentrations in Bed Sediment and Fish Tissue Within the Rio Grande Drainage Basin. Los Alamos National Laboratory Report LA-13366, Los Alamos, NM.	Rio Grande Basin from headwaters in CO to El Paso, TX	1992-93										X			X	Radionuclides in whole fish, fish tissues, and bed-sediment analyzed in conjuntion with the USGS NAWQA study
6	Brandvold, D.K., C.J. Popp, T.R. Lynch, and L.A. Brandvold. 1984. Heavy Metals and Pesticides in Water, Sediments, and Biota in the Middle Rio Grande Valley. Selected Papers on Water Quality and Pollution in New Mexico. New Mexico Bureau of Mines and Mineral Resources, Hydrologic Report 7:14-23.	Bernalillo to Caballo Reservoir	1978 & 1983										X	X	X	X	Concentrations, sources, and transport of toxic chemicals
7	Brandvold, D.K., J.A. Brierley, and C.J. Popp. 1973. Chemical and Biological Character of Rio Grande Water in the Bosque del Apache Wildlife Refuge. New Mexico Water Resources Research Institute Technical Completion Report Project No. A-038-NMEX, Las Cruces, NM.	Bosque del Apache NWR	1970-73										X		X		Nutrients, salts, other water chemistry and microbiology evaluated on duck ponds; mercury in fish tissues
8	Broderick, S. C. 2000. Fish and Herptile Communities in Wetlands in the Fort Craig Reach of the Rio Grande and Elephant Butte Delta, Socorro County, New Mexico, 1997 and 1998. U.S. Bureau of Reclamation, Denver, CO.	Rio Grande near Fort Craig, NM	1997-1998			X			X						X		Fish community sampling in a variety of aquatic habitats near Elephant Butte; basic water quality measured
9	Brown, K.D. 2004. Pharmaceutically Active Compounds in Residential and Hospital Effluent, Municipal Wastewater, and the Rio Grande in Albuquerque, New Mexico. University of New Mexico, Water Resources Program Publication No. WRP-9, Albuquerque, NM.	Drinking and waste water of the City of Albuquerque, and Rio Grande in the vicinity	2003												X		Survey of the fate and transport of pharmaceuticals and antibiotics in source waters to the Rio Grande near Albuquerque, NM
10	Buhl, K.J. 2002a. The Relative toxicity of inorganic contaminants to the Rio Grande silvery minnow (Hybognathus amarus) and fathead minnow (Pimephales promelas) in a water quality simulating that in the Rio Grande, New Mexico. Final Report to the U.S. Fish and Wildlife Service, Study No. 2F33-9620003. U.S. Geological Survey, Columbia Environmental Research Center, Yankton Field Research Station, Yankton, SD.	Laboratory study with reconstituted water quality as MRG at Isleta, NM	1998					X							X		Acute toxicity tests using fathead minnow and Rio Grande silvery minnow in side by side tests with aluminum, ammonia, arsenic, chlorine, copper, nitrate and a site-specific mixture simulating the MRG at Isleta, NM
11	Buhl, K.J. 2002b. Preliminary results of on-site toxicity tests with Rio Grande silvery minnow. Memorandum dated December 31, 2002, to J. Lusk, U.S. Fish and Wildlife Service, from K. Buhl, U.S. Geological Survey, Columbia Environmental Research Center, Yankton Field Research Station, Yankton, SD.	Laboratory study using Waste Water Treatment Plant effluent with simulation of ammonia pulse	2002					X							X		Progress report on chronic and acute toxicity tests conducted with Rio Grande silvery minnow in effluent from the Albuquerque Water Reclamation Plant, the Rio Rancho Waste Water Treatment Plant #2, and ammonia spike
12	Bullard, T.F. and S.G. Wells. 1992. Hydrology of the Middle Rio Grande from Velarde to Elephant Butte Reservoir, New Mexico. U.S. Fish and Wildlife Service Resource Publication 179, Washington, D.C.	middle Rio Grande	1987							X	X						Environmental setting, historic hydrology and geomorphology of MRG and relation to dams
13	Campbell, K.R., B.J. Parkhurst, J.M. Kennedy, and S.M. Bartell. 2001. NPDES Site Surveys, Water Quality Trends, and Potential Effects of NPDES Pollutants on Federally-Listed Species for the Middle Rio Grande River, New Mexico. The Cadmus Group, Inc., Techical Report to the U.S. Environmental Protection Agency under Contract No. 68-C-990250, Laramie, WY.	NPDES Discharge areas between Rio Grande between Cochiti and Elephant Butte Reservoirs	2000								X		X		X		Review of existing water quality studies, comparison to toxicological studies, spatial summaries and trends.
14	Carter, L.F. 1997a. Water-quality assessment of the Rio Grande Valley, Colorado, New Mexico, and Texas--Organic compounds and trace elements in bed sediment and fish tissue, 1992-93. U.S. Geological Survey Water-Resources Investigations Report 97-4002, Albuquerque, NM.	Rio Grande Basin from headwaters in CO to El Paso, TX	1992-93			X							X	X			Organochlorines and trace elements in whole fish and bed-sediment collected for the NAWQA study
15	Carter, L.F. 1997b. Water-quality assessment of the Rio Grande Valley, Colorado, New Mexico, and Texas--Fish communities at selected sites, 1993-95. U.S. Geological Survey Water-Resources Investigations Report 97-4017, Albuquerque, NM.	Rio Grande Basin from headwaters in CO to El Paso, TX	1993-95			X	X			X	X						Describes fish community structure related to chemical and physical characteristics at selected sites in the RGB
16	City of Albuquerque and U.S. Geological Survey. 1997. Menual Drainage/Detention Basin Water Quality Analysis and Design Study Recommendations. City of Albuquerque Public Works Department Final Project Report; Volume 1 of 2, Albuquerque, NM.	Menaul Drainage Basin in Albuquerque, NM	1996-97							X	X				X		Water chemistry and flow for stormwater runoff events in the Menaul Drainage Basin in Albuquerque, NM
17	Crawford, C.S., A.C. Cully, R. Leutheuser, M.S. Sifuentes, Larry H. White, J.P. Wilber. 1993. Middle Rio Grande Ecosystem: Bosque Biological Management Plan. Middle Rio Grande Biological Interagency Team, U.S. Fish and Wildlife Service, Albuquerque, NM.	Cochiti Dam to San Marcial, NM	1992-93		X	X			X	X	X	X		X	X		Ecological synthesis and management document
18	Diniz. E.V. Quality of Urban Runoff in Albuquerque, New Mexico. Selected Papers on Water Quality and Pollution in New Mexico. New Mexico Bureau of Mines and Mineral Resources, Hydrologic Report 7:93-102.	Alameda Floodway	1979							X	X				X		Correlations between pollutant load and flood flow
19	Dudley, R.K. and S.P. Platania. 1997. Habitat Use of Rio Grande Silvery Minnow. University of New Mexico Museum of Southwestern Biology, Albuquerque, NM.	middle Rio Grande	1994-1996			X			X	X	X						Fish community surveys with emphasis on silvery minnow at habitats near Rio Rancho and Socorro, NM
20	Ellis, S.R., G.W. Levings, L.F. Carter, S.F. Richey, and M.J. Radell. 1993. Rio Grande Valley, Colorado, New Mexico, and Texas. Water Resource Bulletin 29:617-646.	Rio Grande Basin from headwaters in CO to El Paso, TX	1991-1993							X	X		X		X		Retrospective analysis of hydrology, climate, water chemistry, sources, and ground water
21	Fox, D.G., R. Jemison, D.U. Potter, H.M. Valett, and R. Watts. 1995. Geology, Climate, Land, and Water Quality. Chapter 4, pages52-79 in D.M. Finch and J.A. Tainter, editors, Ecology, Diversity, and Sustainability of the Middle Rio Grande Basin. U.S. Forest Service, General Technical Report RM-GTR-268, Fort Collins, CO.	middle Rio Grande	1979-1994							X	X				X	X	Review of existing water quality studies, with emphasis on nutrients and sediment transport in the Rio Puerco Basin
22	Fresquez, P. R., J.D. Huchton, and M. A. Mullen. 1999. Trace Elements, With Special Reference to Mercury, in Fish Collected Upstream and Downstream of Los Alamos National Laboratory. Los Alamos National Laboratory Report LA-13658-MS, Los Alamos, NM.	In and upstream of Cochiti Reservoir	1991-99										X				Summary of trace element in fish tissues upstream of Cochiti Reservoir

Table 2.--Summary of water-quality investigations of the Middle Rio Grande identified by location, year work conducted, and type of information provided

Reference number	Reference citation	Location	Year(s) work conducted	Type of Water-quality investigation													General description of the Investigation
				Algae / productivity	Invertebrate survey	Fish survey	Fish health	Toxicity tests	Aquatic habitat	Hydrology / geomorphology	Climate / Setting	Riparian / wetlands	Bioaccumulation	Sediment chemistry	Water chemistry	Radio-activity	
23	Fresquez, P.R., D.R. Armstrong, and J.G. Salazar. 1994. Radionuclide Concentrations in Game and Nongame Fish Upstream and Downstream of Los Alamos National Laboratory: 1981-1993. Los Alamos National Laboratory Report LA-12818-MS, Los Alamos, NM.	In and upstream of Cochiti Reservoir	1981-83										X			X	Summary of radionuclides in fish and risk assessment to the public from consumption
24	Fullerton, W., and D. Batts. 2003. A Framework for a Restoration Vision for the Rio Grande: Hope for a Living River. World Wildlife Fund, The Alliance for Rio Grande Heritage, Albuquerque, NM.	Rio Grande Basin from headwaters in CO to Candelaria, TX	2002						X	X	X	X					Restoration projects, general summary of impacts by river reach, river ecology, geomorphology, and constraints
25	Gold, R. L., and R. McBreen. 1997. Low-flow Water Quality and Discharge Data for Lined Channels in Northeast Albuquerque, New Mexico, 1990-1994. U.S. Geological Survey Open-File Report 97-811, Albuquerque, NM.	Campus Wash, Embudo Arroyo, and North Diversion Channel in Albuquerque, NM	1990-1994							X					X		Water quality and discharge data for three, lined stormwater floodway channels in Albuquerque, NM
26	Gonzales, G. J., P. R. Fresquez, and J. W. Beveridge. 1999. Organic contaminant levels in three fish species downchannel from the Los Alamos National Laboratory. Los Alamos National Laboratory Report LA-13612-MS, Los Alamos, NM.	In and upstream of Cochiti Reservoir	1997										X				Organochlorine compounds in fish tissues collected upstream of Cochiti Reservoirand risk assessment to the public from fish consumption
27	Gonzales, G. J., and P. R. Fresquez. 2003. Polychlorinated Biphenyls (PCBs) in Catfish and Carp Collected from the Rio Grande Upstream and Downstream of Los Alamos National Laboratory. Los Alamos National Laboratory Report LA-14001, Los Alamos, NM.	In and upstream of Cochiti Reservoir	1997										X				PCBs in fish tissues collected upstream of Cochiti Reservoir and risk assessment to the public from fish consumption
28	Graf, W.L. 1994. Plutonium and the Rio Grande: Environmental Change and Contamination in the Nuclear Age. Oxford University Press, New York, NY.	Rio Grande Basin from CO to San Marcial, NM	1993						X	X	X	X		X	X	X	Environmental setting, historic hydrology and geomorphology of MRG in context of plutonium cycling
29	Harwood, K.A. 1995. The Urban Stormwater Contribution of Dissolved Trace Metals from the North Floodway Channel, Albuquerque, NM, to the Rio Grande. University of New Mexico, Water Resources Program Professional Paper, Albuquerque, NM.	North Floodway Channel and Albuquerque Urban Area	1993-94							X	X				X		Water chemistry of storm runoff, dischrage, loads, as well as comparison to WWTP loads and data
30	Healy, D.F. 1997. Water-Quality Assessment of the Rio Grande Valley, Colorado, New Mexico, and Texas--Summary and analysis of water-quality data for the basic-fixed-site network, 1993-95. U.S. Geological Survey Water-Resources Investigations Report 97-4212, Albuquerque, NM.	Rio Grande Basin from headwaters in CO to El Paso, TX	1993-95												X		Spation variations of dissolved solids, major constituents, and nutrient data were analyzed for the NAWQA study
31	Hem, J. D. 1985. Study and interpretation of the chemical characteristics of natural water. U.S. Geological Survey Water-Supply Paper 2254, Government Printing Office, Washington, DC.	Rio Grande at San Acacia, NM and the Rio Puerco	1945-46												X		Describes effects of Rio Puerco on variability of water quality in Rio Grande at San Acacia, NM
32	Kelly T. and O. Romero. 2003. Rainfall, Runoff, and Water-Quality Data for the Urban Storm-Water Program in the Albuquerque, New Mexico, Metropolitan Area, Water Year, 2001. U.S. Geological Survey Open-File Report 03-16, Albuquerque, NM.	North Floodway Channel and Albuquerque Urban Area	2000-2001							X	X				X		Water chemistry of storm runoff, rainfall, and flow data
33	Kelly T. and H.E. Taylor. 1996. Concentrations and Loads of Selected Trace Elements and Other Constituents in the Rio Grande in the Vicinity of Albuquerque, New Mexico, 1994. U.S. Geological Survey Open-File Report 96-126. Albuquerque, NM.	Rio Grande at Bernalillo, NM to Isleta Irrigation Diversion Dam	1994							X				X	X		Water and suspended sediment chemistry data collected with instantaneous flow for calculation of load
34	Kehmeier, J., P. Castiglia, S. Wagner, and J. Fluder III. 2002. Modelling Reservoir Operation Effects on Surface Water Quality: The Upper Rio Grande Basin 1975-2001. SWCA Environmental Consultants Poster Presentation, Albuquerque, NM	Rio Grande Basin from headwaters in CO to Fort Quitman, TX	1975-2001								X				X		Model of USGS water quality data identifying correlations of temperature, dissolved oxygen, conductivity, and discharge
35	Kitchell, J.F., D.E. Schindler, B.R. Herwig, D.M. Post, M.H. Olson, and M. Oldham. 1999. Nutrient Cycling at the Landscape Scale: The Role of Diel Foraging Migrations by Geese at the Bosque del Apache National Wildlife Refuge, New Mexico. Limnology and Oceanography 44:828-836.	Bosque del Apache NWR	1995-1996	X						X			X		X		Effects of migratory birds on water quality and nitrogen isotope analysis of guano, plants, fish and invertebrates
36	Lang, B.K. and C.S. Altenbach. 1994. Ichthyofauna of the Middle Rio Grande Conservancy District Irrigation System: Cochiti Dam to Elephant Butte State Park, July-August 1993. University Ichthyofaunal Studies Program, Museum of Southwestern Biology, Albuquerque, NM.	middle Rio Grande	1993			X									X		Survey of fish communities in irrigation canals with some water quality measurements
37	Levings, G.W., Healy, D.F., Richey, S.F., and Carter, L.F. 1998. Water quality in the Rio Grande Valley, Colorado, New Mexico, and Texas, 1992-95. U.S. Geological Survey Circular 1162, Albuquerque, NM.	Rio Grande Basin from headwaters in CO to El Paso, TX	1992-95			X	X		X		X		X	X	X	X	Comprehensive study of land use and water quality in the upper and middle Rio Grande as part of NAWQA
38	McQuillan, D., S. Hopkins, T.H. Chapman, K. Sherell, and D. Mills. 2002. Drug Residues in Ambient Water: Initial Surveillance in New Mexico, USA. Presented at the 7th Annual New Mexico Environmental Health Conference, October 28-30, 2002, Albuquerque, New Mexico. New Mexico Department of Health, Scientific Laboratory Division, New Mexico Environment Department, Ground Water Quality Bureau, Santa Fe, NM.	Rio Grande in NM	2000												X		Initial analysis of water for pharmaceutical chemicals
39	Mills, S.K. 2003. Quantifying Salinization of the Rio Grande using Environmental Tracers. New Mexico Institute of Mining and Technology Master's Thesis, Socorro, NM.	Rio Grande Basin from headwaters in CO to Fort Quitman, TX	2001-2002							X					X	X	Summary of historic salinization using stable isotopes identifying relative source contributions into the Rio Grande
40	Miller, L.K., R. L. Moquino, and B.A. Hill. 1997. Water-quality Assessment of the Rio Grande Valley, Colorado, New Mexico, and Texas -- Water quality data for water-column, suspended sediment, and bed-material samples collected at selected surface-water sites in the upper Rio Grande Basin, June and September 1994. U.S. Geological Survey Open-File Report 97-644, Albuquerque, NM.	Upper Rio Grande	1994							X				X	X		Water column, suspended-sediment and bed sediment chemistry from headwaters of the upper Rio Grande to San Felipe, NM
41	Moore, S. J., and Anderholm, S.K. 2002. Spatial and Temporal Variations in Streamflow, Dissolved Solids, Nutrients, and Suspended Sediment in the Rio Grande Valley Study Unit, Colorado, New Mexico, and Texas, 1993-95. U.S. Geological Survey Water-Resources Investigations Report 02-4224, Albuquerque, NM.	Rio Grande Basin from headwaters in CO to El Paso, TX	1993-95							X	X				X		Spatial variations in streamflow, dissolved solids, nutrients, suspended sediment and load calculations
42	McCulley, Frick & Gilman, Inc. 1998. The City of Albuquerque Public Works Department Wastewater Utility Division Constructed Wetland Pilot Project Final Report -- Volume 1, MFG Project No. 5352, Albuquerque, NM.	Constructed wetlands at the City of Albuquerque WWTP	1996-1998	X	X				X	X	X	X	X	X	X		Results of the Constructed Wetland Pilot Project utilizing constructed wetlands to treat wastewater.
43	Mullen, K. and R. Koch. 2004. PCB Congener Preliminary Results: 2000-2003 Surface Water and Sediment Sampling. Presentation to the Middle Rio Grande Water Quality Standards Workgroup on March 25, 2004, LA-UR-04-0758, Los Alamos National Laboratory, Los Alamos, NM.	Rio Grande from Chamita to below Albuquerque, NM	2000-2003										X	X	X		Data summary on polychlorinated biphenyl compounds, and their congeners, in water and sediment
44	Mussetter Engineering, Inc. 2002. Geomorphic and Sedimentologic Investigations of the Middle Rio Grande Between Cochiti Dam and Elephant Butte Reservoir. New Mexico Interstate Stream Commission Report, Albuquerque, NM.	middle Rio Grande	2001-2002							X	X			X	X		Geomorphology, geology, sediment loading, and hydrology of middle Rio Grande with historic emphasis
45	Nelson, S.M. R.A. Roline, J.S. Thullen, J.J. Sartoris, and J.E. Boutwell. 2000. Invertebrate Assemblages and Trace Element Bioaccumulation Associated with Constructed Wetlands. Wetlands 20(2):406-415.	Constructed Wetlands at the City of Albuquerque WWTP	1997-1998	X	X				X			X	X		X		Evaluation of constructed wetlands for wastewater treatment on invertebrate assemblages, bioaccumulation, and water quality

Table 2.--Summary of water-quality investigations of the Middle Rio Grande identified by location, year work conducted, and type of information provided

Reference number	Reference citation	Location	Year(s) work conducted	Type of Water-quality investigation													General description of the Investigation
				Algae / productivity	Invertebrate survey	Fish survey	Fish health	Toxicity tests	Aquatic habitat	Hydrology / geomorphology	Climate / Setting	Riparian / wetlands	Bioaccumulation	Sediment chemistry	Water chemistry	Radio-activity	
46	New Mexico Environment Department. 2001a. Cochiti Reservoir fish tissue sampling results PCBs and pesticides – 1999 and 2000. DOE Oversight Bureau Correspondence from T. Michael to R. Vorhees, Health Department, dated February 6, 2001, Santa Fe, NM.	Cochiti Reservoir	1999-2000										X				Evaluation of health risks posed by polychlorinated biphenl compounds in fish tissue from Cochiti Reservoir
47	New Mexico Environment Department. 2001b. State of the Environment. New Mexico Environment Department, Santa Fe, NM.	State of New Mexico	1990-2000								X				X	X	Report on air, water, and land use monitoring identifying regulations, pollution prevention, and clean up activities
48	New Mexico Environment Department. 2002. Middle Rio Grande Total Maximum Daily Load (TMDL) for Fecal Coliform. NMED Surface Water Quality Bureau Management Plan, Santa Fe, NM.	From the Northern boundary of Isleta Pueblo to the Southern Boundary of Santa Ana Pueblo	1998-2000							X	X				X		Calculation of fecal coliform loads from various sources and management plan to reduce loads
49	New Mexico Environment Department and New Mexico Department of Health. 2003. Antibiotics in New Mexico Wastewater and Groundwater. New Mexico Environment Department and New Mexico Department of Health, Santa Fe, NM.	middle Rio Grande and other locales in NM	2000-02												X		Results of antibiotic residues in wastewater and ground water near various NM dairies and municipalities
50	New Mexico Environment Department. 2001. 1999 Special Water Quality Study of the Rio Grande from the Angostura Diversion near Algodones, New Mexico to the Isleta Diversion near Isleta Pueblo, New Mexico. NMED Surface Water Quality Bureau Draft Report, Santa Fe, NM.	middle Rio Grande	1999												X		Draft report on chemical analyses of water from WWTPs near Albuquerque and the middle Rio Grande
51	New Mexico Water Quality Control Commission. 1998. Water Quality and Water Pollution Control in New Mexico. NMWQCC Report NMED/SWQ-98/4, Santa Fe, NM.	middle Rio Grande (stream segments 2105 and 2105.1)	1996-1998								X				X		Water quality impaired by metals, total ammonia, chlorine, fecal coliform, and chlordane
52	New Mexico Water Quality Control Commission. 2000. Water Quality and Water Pollution Control in New Mexico. NMWQCC Report NMED/SWQ-00/1, Santa Fe, NM.	middle Rio Grande (stream segments 2105 and 2105.1)	1999								X				X		Stream segment water quality impaired by fecal bacteria
53	New Mexico Water Quality Control Commission. 2002. Water Quality and Water Pollution Control in New Mexico. NMWQCC Report NMED/SWQ-02/1, Santa Fe, NM.	middle Rio Grande (stream segments NM-2105_10, NM-2105_40, NM-2105_50, and NM-2105.1_00)	2000-2001								X				X		Stream segment water quality impaired by fecal bacteria
54	New Mexico Water Quality Control Commission. 2004. Water Quality and Water Pollution Control in New Mexico. NMWQCC Report NMED/SWQ-Final Draft, Santa Fe, NM.	middle Rio Grande (stream segments NM-2105_10, NM-2105_40, NM-2105_50, and NM-2105.1_00)	2002-2003								X				X		Stream segment water quality impaired by fecal bacteria
55	Ong, K., T.F. O'Brien, and M.D. Rucker. 1991. Reconnaissance investigation of water quality, bottom sediment, and biota associated with irrigation drainage in the Middle Rio Grande and Bosque del Apache National Wildlife Refuge in New Mexico 1988–89. U.S. Geological Survey, Water-Resources Investigations Report 91-4036, Albuquerque, NM.	Bosque del Apache NWR and references to middle Rio Grande	1986-1988							X	X	X	X	X	X	X	Reconnaissance investigation of water quality, bottom sediment, and biota associated with irrigation and the Bosque del Apache National Wildlife Refuge
56	Ortiz, D., K. Lange, and L. Beal. 2000. Water resources data, New Mexico, water year 1999. U.S. Geological Survey Water-Data Report NM-99-1,Albuquerque, NM.	Rio Grande in NM	1998-1999							X				X	X	X	Water and sediment chemistry and flow at fixed monitoring stations of the Rio Grande in NM
57	Ortiz, D., K. Lange, and L. Beal. 2001. Water resources data, New Mexico, water year 2000. U.S. Geological Survey Water-Data Report NM-00-1,Albuquerque, NM.	Rio Grande in NM	1999-2000							X				X	X	X	Water and sediment chemistry and flow at fixed monitoring stations of the Rio Grande in NM
58	Parsons Engineering Science, Inc. 2000a. Draft Biological Assessment of the City of Albuquerque's Drinking Water Project for Implementation of the City's Water Resources Management Strategy. Parsons Engineering Science, Inc., Albuquerque, NM	North Floodway Channel and Rio Grande in Albuquerque Urban Area	1999-2000					X			X				X		Water chemistry of Albuquerque WWTP, and whole effluent toxicity tests demonstrating no acute, but chronic toxicity
59	Parsons Engineering Science, Inc. 2000b. Final Biological Evaluation for the approval of a National Pollutant Discharge Elimination System (NPDES) Permit for the Albuquerque Municipal Separate Storm Sewer System (MS4). Parsons Engineering Science, Inc., Albuquerque, NM	North and South Diversion Channels, San Jose Drain in Albuquerque Urban Area	1999-2000					X		X	X	X			X		Data summary and evaluation of effects of local storm water on federally-listed endangered species
60	Passell, H.D., C.N. Dahm, and E.J. Bedrick. 2001. Water-Quality Trends and Patterns in the Upper and Middle Rio Grande, 1975-1999. Proceedings of the 2001 Aquatic Science Meeting. The American Society of Limnology and Oceanography, 12-16 February 2001, Albuquerque, NM.	Upper Rio Grande, from the headwaters to Bernardo, NM	1975-1999							X	X				X		Hydrological and geochemical spatial patterns and temporal trends using USGS water quality data from 1975-1999
61	Passell, H.D., C.N. Dahm, and E.J. Bedrick. 2004. Hydrological and Geochemical Patterns and Trends in the Middle Rio Grande, 1975-1999. Journal of the American Water Resources Association 40(1):111-127.	Upper Rio Grande, from the headwaters to Bernardo, NM	1975-1999														Hydrological and geochemical spatial patterns and temporal trends using USGS water quality data from 1975-1999
62	Passell, H.D. 2004. Nutrient Trends and Patterns in the Upper Rio Grande, 1975-1999. University of New Mexico Ph.D. Dissertation, Chapter 2, Albuquerque, New Mexico.	Upper Rio Grande, from the headwaters to Bernardo, NM	1975-1999								X				X		Nutrient spatial patterns and temporal trends identified using USGS water quality data from 1975-1999
63	Passell, H.D. 2004. Long-term Ammonia Dynamics and Potential Toxicity to Fish Species in the Rio Grande, 1989-2002. University of New Mexico Ph.D. Dissertation, Chapter 3, Albuquerque, New Mexico.	middle Rio Grande in vicinity of City of Albuquerque wastewater	1989-2002							X	X				X		Model of the toxicity and temporal trends of ammonia from the City of Albuquerque WWTP to RG fishes
64	Phillips, F.M., J. Hogan, S. Mills, And J.M.H. Hendrickx. 2003. Environmental Traces applied to Quantifying Causes of Salinity in Arid-Region Rivers: Preliminary Results from the Rio Grande, Southwestern USA. Pages in A.S. Alsharahan, and W.W. Wood, editors, Water Resources Perspectives: Evaluation, Management and Policy, Elsevier, Amsterdam.	Rio Grande Basin from headwaters in CO to El Paso, TX	1999-2001								X				X	X	Water chemistry indicating influx of subsurface saline waters affects surface water quality in 6 basins of RG
65	Pierce, S.T. 1988. Intesive Water Quality Survey of the Rio Grande from Angostura to U.S. 85 Bridge, Sandoval and Bernalillo Counties, New Mexico. New Mexico Environmental Improvement Division, Surface Water Quality Bureau, Santa Fe, NM.	Rio Grande from Angostura to Interstate 25	1987							X					X		Water chemistry on Rio Grande above and below potential sources
66	Pierce, S.T. 1992. Special Water Quality Survey of the Rio Grande from Angostura Diversion Works to I-25 in Sandoval and Bernalillo Counties, June 18-September 18, 1991. Pages 118-149 in Intensive Water Quality Stream Surveys and Lake Quality Assessment Surveys, 1991. New Mexico Environment Department NMED/SWQ-92/2, Santa Fe, NM.	Rio Grande from Angostura to Interstate 25, including Jemez River, and WWTP discharges	1991							X					X		Water chemistry on Rio Grande above and below sources, includes Jemez River, and Bernalillo, Rio Rancho, and Albquerque WWTP effluent discharges
67	Pierce, S.T. 1996. Special Water Quality Survey of the Rio Grande from the Rio Bravo Bridge in Albuquerque to Bernardo, Bernalillo, Valencia and Socorro Couinties, New Mexico, May 9 - October 6, 1994. Pages 149-182 in Intensive Water Quality Stream Surveys and Lake Quality Assessment Surveys, 1994. New Mexico Environment Department NMED/SWQ-96/2, Santa Fe, NM.	Rio Grande from Rio Bravo Bridge in Albuquerque, NM to Bernardo, NM	1994							X					X	X	Water chemistry on Rio Grande above and below sources, includes Los Lunas and Albquerque WWTP effluent discharges
68	Platania, S. P. 1993. The fishes of the Rio Grande between Velarde and Elephant Butte Reservoir and their habitat associations. Report submitted to the New Mexico Department of Game and Fish, U.S. Bureau of Reclamation, Cooperative Agreement 0-FC-40-08870, Albuquerque, NM.	Rio Grande from Velarde to Elephant Butte Reservoir	1987-1992			X			X	X							Density and diversity of fish community and habitat associations in the Middle Rio Grande

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69	Platania, S. P. and R. K. Dudley. 2003. Summary of the Biology of Rio Grande Silvery Minnow, an Endangered Species in the Middle Rio Grande, New Mexico. Prepared for the October 3, 2003 Symposium: The Rio Grande Silvery Minnow: Science and Policy in the Bosque, Santa Fe, NM.	middle Rio Grande	1994-2002			X			X	X							Summary report on Rio Grande silvery minnow biology, population temporal and spatial trends, and habitat use
70	Plateau Ecosystems Consulting, Inc. 2001. Fish Studies on the Middle Rio Grande, New Mexico, 1995-1999. Plateau Ecosystems Consulting, Inc., Final Report, Arvada, CO.	middle Rio Grande	1995-1999			X											Fish community surveys conducted by electroshocking
71	Remshardt, W.J. 2003. Habitat Preference of Rio Grande silvery minnow in Relation to Fluvial Geomorphology, Flow Regime, and Pollution, Middle Rio Grande Valley, New Mexico. Chapter 1: Meso-habitat and Fish Data Summary. U.S. Fish and Wildlife Service, New Mexico Fishery Resources Office, Annual Report for Field Year 2002, Albuquerque, NM.	middle Rio Grande	2002-03			X			X	X							Visual and physical characterization of water and substrate as fish habitat in conjuntion with collections of fishes
72	Remshardt, W.J., J.R. Smith, and C.W. Hoagstrom. 2003. Fishes of the Mainstem Rio Grande; Bernalillo to Fort Craig, New Mexico, June 1999 through June 2001, with Emphasis on Rio Grande silvery minnow, Hybognatus amarus (Girard). 2003. U.S. Fish and Wildlife Service, Albuquerque, NM.	middle Rio Grande	1999-2001			X			X								Fish community surveys by river reach and occurrence of habitat variables during survey
73	Roy R., T.F. O'Brien, and M. Rusk-Maghini. 1992. Organochlorine and Trace Element Contaminant Investigation of the Rio Grande, New Mexico. U.S. Fish and Wildlife Service Contaminants Report, Albuquerque, NM.	Rio Grande from CO/NM border to El Paso, TX	1985-87										X	X			Chemical analyses of sediment, plants, invertebrates, fish, reptiles, mammals, and birds with emphasis on spatial trends in fish and sediment along three Rio Grande reaches
74	Schmitt, C. J., T.M. Bartish, V.S. Blazer, T.S. Gross, D.E. Tillit, W.L. Bryant, and L.R. DeWeese. 1999. Biomonitoring of Environmental Status and Trends (BEST) Program: Contaminants and Related Effects in Fish from the Mississippi, Columbia, and Rio Grande Basins. Pages 437-446 in Proceedings of the Technical Meeting Charleston South Carolina March 8-12, 1999--Volume 2 of 3--Contamination of Hydrologic Systems and Related Ecosystems, Water-Resources Investigations Report 99-4018B. U.S. Geological Survey Toxic Substances Hydrology Program, Washington, DC.	Rio Grande (entire)	1997				X							X				Evaluated contaminants in whole body fish tissue in relation to various biomarkers and health metrics (only NM site was Elephant Butte Reservoir)
75	Scurlock, D. 1998. From the Rio to the Sierra: An Environmental History of the Middle Rio Grande Basin. U.S. Forest Service, Rocky Mountain Research Station, General Technical Report RMRS-GTR-5, Fort Collins, CO.	middle Rio Grande	chronicle			X				X	X	X					Review of historic climate, settlement patterns, resource use, and natural resource impacts and changes
76	Sublette, J.E., M.D. Hatch, and M. Sublette. 1990. The Fishes of New Mexico. University of New Mexico Press, Albuquerque, NM.	Rio Grande in NM				X					X						Taxonomy, biology, distribution, ecology and current status of the fishes of New Mexico
77	Tashjian, P.L. 2003. Habitat Preference of Rio Grande silvery minnow in Relation to Fluvial Geomorphology, Flow Regime, and Pollution, Middle Rio Grande Valley, New Mexico. Chapter 2: Macro-habitat and Hydrology Summary. U.S. Fish and Wildlife Service, Water Resources Division, Annual Report for Funding Year 2002, Albuquerque, NM.	middle Rio Grande	2002-03						X	X							Spatial characterization of river cross-sections, fluvial geomorphology, and flow regime
78	Thomas, C.T. 1995. Infiltration and Quality of Water for Two Arroyo Channels, Albuquerque, NM, 1988-92. U.S. Geological Survey, Water-Resources Investigations Report 95-4070, Albuquerque, NM.	Tijeras and Grant Line Arroyos	1988-92							X	X				X		Characterization of Streamflow and water chemistry of 2 arroyos in Albuquerque, NM
79	U.S. Bureau of Reclamation. 2000. Client Report by Assaigai Analytical Laboratories, Inc., Certificate of Analysis, Albuquerque, NM.	Rio Grande near San Marcial, NM	2000					X							X		Acute and chronic toxicity tests results with water collected from the Tiffany Plug region with water chemistry data
80	U.S. Bureau of Reclamation and U.S. Army Corps of Engineers. 2003a. Programmatic Biological Assessment of Reclamation's Water and River Maintenance Operations, Army Corps of Engineers' Flood Control Operation, and Non-Federal Actions on the Middle Rio Grande, New Mexico, March 1, 2003 – February 28, 2013. U.S. Bureau of Reclamation Albuquerque Area Office, and U.S. Army Corps of Engineers, Albuquerque District, Albuquerque, NM.	Rio Grande Basin from headwaters to Elephant Butte Reservior	1994-2002			X				X	X	X					Characterization of federal agency water operations and effects on federally-listed endangered species, with summary of silvery minnow status and trends
81	U.S. Bureau of Reclamation. 2003b. Geomorphic Assessment of the Rio Grande San Acacia Reach. U.S. Bureau of Reclamation Albuquerque Area Office, Final Report, Albuquerque, NM.	San Acacia Reach	1997-2000							X	X	X					Characterization of physical channel features, discharge, and sediment size changes over historic time in a 10.5 mile long river reach below San Acacia Dam
82	U.S. Environmental Protection Agency. 2003. EPA Region 6 - State/EPA Ambient Toxicity Monitoring Program - Results for New Mexico. Toxicity Testing Results from September 24, 1990 to July 14, 2003 available from the internetand accessed on February 2, 2004 at the URL: <http://www.epa.gov/Region06/6wq/ecopro/watershd/monitrng/toxnet/>.	Cochiti Reservoir and Middle Rio Grande on Sandia Pueblo	2000-2002					X							X		EPA toxicity testing results of water and sediment from selected sites on Sandia Pueblo lands, Cochiti Reservoir, and numerous other sites from across New Mexico.
83	U.S. Environmental Protection Agency. 2004. EPA Region 6 - Public Notice of Draft NPDES Permits(s). NPDES Permit No. NM0022250 Fact Sheet for the Draft National Pollutant Discharge Elimination System (NPDES) Permit to Discharge to Waters of the United States. Prepared by the NPDES Permits Branch on April 30, 2004. Water Quality Protection Division, Region 6 EPA, Dallas, TX.	City of Albuquerque WWTP and middle Rio Grande in vicinity	2003-2004												X		Water quality characteristics of City of Albuquerque WWTP effluent and middle Rio Grande just upstream
84	Van Metre, P.C., B.J. Mahler, and E. Callender. 1997. Water-Quality Trends in the Rio Grande/Rio Bravo Basin using Sediment Cores from Reservoirs. U.S. Geological Survey Fact Sheet FS-221-96, Austin, TX.	Elephant Butte, Amistad International, and Falcon International Reservoirs	1991								X			X	X	X	water quality trends were reconstructed using sediment cores chemistry and radionuclides
85	Wilson, J.T. and P.C. Van Metre. 1999. Deposition and Chemistry of Bottom Sediments in Cochiti Lake, North-Central New Mexico. U.S. Geological Survey Water-Resources Investigations Report 99-4258, Albuquerque, NM.	Cochiti Reservoir and other reservoirs in NM	1996								X			X	X	X	Radiological and chemical analyses of bottom sediments in Cochiti Reservoir spatially, by depth, and temporally
86	Wilcox, R. 1997. Concentrations of Selected Trace Elements and Other Constituents in the Rio Grande and in Fish Tissue in the Vicinity of Albuquerque, New Mexico, 1994 to 1996. U.S. Geological Survey Open-File Report 97-667, Albuquerque, NM.	middle Rio Grande	1994-1996							X	X		X		X		Chemical analysis of water and fish from riverside drains, WWTPs, and Rio Grande with emphasis on arsenic

Table 3.--Method used and parameters analyzed for water, sediment, and fish tissue samples collected in 2002-2003

[Laboratory analyses to be performed by STL Environmental Laboratory and New Mexico State Laboratory (pharmaceuticals). mm of Hg, millimeters of mercury; ft^3/sec, cubic feet per second; µS/cm, microsiemens per centimeter; mg/L milligrams per liter; µg/L, micrograms per liter; pCi/L, picocuries per liter; µg/g, microgram per gram; µg/kg, microgram per kilogram; pCi/g, picocuries per gram; g/kg, gram per kilogram; ng/L, nanograms per liter; *, to be analyzed; --, will not be analyzed; **, optional for analysis.]

Method[(1)]	Parameter, units	Sample matrix		
		water	sediment	tissue
	Field parameters			
E170.1	Temperature, water, field, degrees Celsius	*	--	--
E170.1	Temperature, air, field, degrees Celsius	*	--	--
--	Barometric pressure, field, mm of Hg	--	--	--
--	Discharge, instantaneous, field, ft^3/sec	*	--	--
E120.1	Specific conductance, field, µS	*	--	--
E150.1	pH, water, whole, field, standard units	*	--	--
--	Oxygen, dissolved, field, mg/L	*	--	--
E180.1	Turbidity, field, NTU			
A403	Alkalinity, (field):			
	Alkalinity, bicarbonate, as $CaCO_3$, mg/L	*	--	--
	Alkalinity, carbonate, as $CaCO_3$,mg/L	*	--	--
	Alkalinity, total, as $CaCO_3$, mg/L	*	--	--
	Analytical parameters			
E130.2	Hardness, as CaCO3, water--mg/L	*	--	--
E160.1	Total dissolved solids, water--mg/L	*	--	--
E160.2	Total suspended solids, water--mg/L	*	--	--
E300.0A, water	Common anions, water--mg/L, sediment--mg/kg:			
SW9056, sediment	Fluoride	*	*	--
	Chloride	*	*	--
	Nitrate	*	*	--
	Nitrite	*	*	--
	Phosphate as P, Ortho	*	*	--
	Sulfate	*	*	--
	Bromide	*	*	--
E314.0	Perchlorate, water--µg/L	*	--	--
SW9012A	Cyanide, total, water--mg/L, sediment--mg/kg	*	*	--
	Nutrients, water--mg/L, sediment--mg/kg:			
E350.1	Nitrogen, ammonia	*	*	--
E354.1	Nitrogen, nitrite	*	*	--
E353.2	Nitrogen, nitrite+nitrate	*	*	--
E351.2	Nitrogen, kjeldahl	*	*	--
E365.3	Phosphorus, total orthophosphate	*	*	--
SW9060	Total organic carbon, sediment--g/kg	--	*	--

Table 3.--Method used and parameters analyzed for water, sediment, and fish tissue samples collected in 2002-2003

Method[1]	Parameter, units	Sample matrix		
		water	sediment	tissue
SW6010B	Inductively Coupled Plasma (ICP) trace elements,water--µg/L, sediment--µg/kg, tissue--mg/kg:			
	Aluminum	*	*	*
	Barium	*	--	*
	Boron	*	*	*
	Calcium	*	*	*
	Cobalt	*	--	*
	Iron	*	*	*
	Potassium	*	*	*
	Lithium	*	*	*
	Magnesium	*	*	*
	Manganese	*	--	*
	Molybdenum	*	--	*
	Sodium	*	*	*
	Tin	*	--	*
	Strontium	*	*	*
	Titanium	*	*	*
	Vanadium	*	--	*
	Silica	*	--	--
SW6020	Trace ICP metals, water, dissolved--µg/L, sediment and fish tissue, total--µg/kg:			
	Silver	*	*	*
	Arsenic	*	*	*
	Barium	--	*	--
	Beryllium	*	*	*
	Cadmium	*	*	*
	Cobalt	--	*	--
	Chromium	*	*	*
	Copper	*	*	*
	Manganese	--	*	--
	Molybdenum	--	*	--
	Nickel	*	*	*
	Lead	*	*	*
	Antimony	*	*	*
	Selenium	*	*	*
	Tin	--	*	--
	Thallium	*	*	*
	Uranium	*	*	*
	Vanadium	--	*	--
	Zinc	*	*	*
SW7470	Mercury, total, water--µg/L	*	--	--
SW7471	Mercury, total, sediment---mg/kg	--	*	--
A245.6	Mercury, total, tissue--ug/kg	--	--	*
A405.1	Biochemical oxygen demand, mg/L	*	--	--
A410.4	Chemical oxygen demand, mg/L	*	--	--

Table 3.--Method used and parameters analyzed for water, sediment, and fish tissue samples collected in 2002-2003

Method[1]	Parameter, units	Sample matrix		
		water	sediment	tissue
SW8260	Volatile organic compounds, water--µg/L, sediment--µg/kg			
	Acetone	*	*	--
	Benzene	*	*	--
	Bromodichloromethane	*	*	--
	Bromoform	*	*	--
	Bromomethane	*	*	--
	2-Butanone (MEK)	*	*	--
	Carbon disulfide	*	*	--
	Carbon tetrachloride	*	*	--
	Chlorobenzene	*	*	--
	Chloroethane	*	*	--
	Chloroform	*	*	--
	Chloromethane	*	*	--
	Dibromochloromethane	*	*	--
	1,1-Dichloroethane	*	*	--
	1,2-Dichloroethane	*	*	--
	1,1-Dichloroethene	*	*	--
	cis-1,2-Dichloroethene	*	*	--
	trans-1,2-Dichloroethene	*	*	--
	1,2-Dichloroethene (total)	*	*	--
	1,2-Dichloropropane	*	*	--
	cis-1,3Dichloropropene	*	*	--
	trans-1,3-Dichloropropene	*	*	--
	Ethylbenzene	*	*	--
	2-Hexanone	*	*	--
	Methylene chloride	*	*	--
	4-Methyl-2-pentanone (MIBK)	*	*	--
	Styrene	*	*	--
	1,1,2,2-Tetrachlorethane	*	*	--
	Tetrachloroethene	*	*	--
	Toluene	*	*	--
	1,1,1-Trichloroethane	*	*	--
	1,1,2-Trichloroethane	*	*	--
	Trichloroethene	*	*	--
	Vinyl chloride	*	*	--
	m-Xylene & p-Xylene	*	*	--
	o-Xylene	*	*	--
	Xylenes (total)	*	*	--
SW8151B	Herbicides, water--µg/L	*	--	--
	2,4-D	*	--	--
	2,4-DB	*	--	--
	2,4,5-T	*	--	--
	2,4,5-TP (Silvex)	*	--	--
	Dalapon	*	--	--
	Dicamba	*	--	--
	Dichlorprop	*	--	--
	Dinoseb	*	--	--
	MCPA	*	--	--
	MCPP	*	--	--

Table 3.--Method used and parameters analyzed for water, sediment, and fish tissue samples collected in 2002-2003

Method[1]	Parameter, units	Sample matrix		
		water	sediment	tissue
SW8141A	Organophosphorous pesticides/semivolatiles, water--µg/L			
	Anilazine	*	--	--
	Fensulfothion	*	--	--
	Malathion	*	--	--
	Simazine	*	--	--
	O,O,O-Triethyl phosphorothioate	*	--	--
	Ethoprop	*	--	--
	Propazine	*	--	--
	Merphos	*	--	--
	Atrazine	*	--	--
	EPN	*	--	--
	Chlorpyrifos	*	--	--
	Thionazin	*	--	--
	Methyl parathion	*	--	--
	Phorate	*	--	--
	Disulfoton	*	--	--
	Ronnel	*	--	--
	Naled	*	--	--
	Trichloronate	*	--	--
	Diazinon	*	--	--
	Tokuthion	*	--	--
	Bolstar	*	--	--
	Sulfotepp	*	--	--
	Famphur	*	--	--
	Fenthion	*	--	--
	Ethyl parathion	*	--	--
	Coumaphos	*	--	--
	Dimethoate	*	--	--
	Dichlorvos	*	--	--
	Mevinphos	*	--	--
	Demeton (total)	*	--	--
	Azinphos-methyl	*	--	--
	Tetrachlorvinphos (Stirophos)	*	--	--
SW8081A	Organophosphorous pesticides/semivolatiles, sediment--µg/kg, tissue--µg/L			
	Aldrin	--	*	*
	alpha-BHC	--	*	*
	beta-BHC	--	*	*
	delta-BHC	--	*	*
	gamma-BHC (Lindane)	--	*	*
	Chlordane (technical)	--	*	*
	4,4'-DDD	--	*	*
	4,4'-DDE	--	*	*
	4,4'-DDT	--	*	*
	Dieldrin	--	*	*
	Endosulfan I	--	*	*
	Endosulfan II	--	*	*
	Endosulfan sulfate	--	*	*
	Endrin	--	*	*
	Endrin aldehyde	--	*	*
	Heptachlor	--	*	*

Table 3.--Method used and parameters analyzed for water, sediment, and fish tissue samples collected in 2002-2003

Method[(1)]	Parameter, units	Sample matrix		
		water	sediment	tissue
	Heptachlor epoxide	--	*	*
	Methoxychlor	--	*	*
	Toxaphene	--	*	*
SW8330	Explosives, water--µg/L, sediment--µg/kg			
	2-Amino-4,6-dinitrotoluene	*	**	--
	4-Amino-2,6-dinitrotoluene	*	**	--
	1,3-Dinitrobenzene	*	**	--
	2,4-Dinitrotoluene	*	**	--
	2,6-Dinitrotoluene	*	**	--
	HMX	*	**	--
	Nitrobenzene	*	**	--
	Nitroglycerin	*	**	--
	2-Nitrotoluene	*	**	--
	3-Nitrotoluene	*	**	--
	4-Nitrotoluene	*	**	--
	PETN	*	**	--
	RDX	*	**	--
	Tetryl	*	**	--
	1,3,5-Trinitrobenzene	*	**	--
	2,4,6-Trinitrotoluene	*	**	
ITMS	Pharmasuticals, ng/L	*	--	--
	6α-Methyprednisolone	*	--	--
	Amitriptyline	*	--	--
	β-Estradiol	*	--	--
	Caffeine	*	--	--
	Cholesterol	*	--	--
	Desipramine	*	--	--
	Dextro-Norgestrel	*	--	--
	Doxepin	*	--	--
	Equilin	*	--	--
	Estrone	*	--	--
	Ethynyl Estradiol	*	--	--
	Imipramine	*	--	--
	Medroxyprogesterone	*	--	--
	Megestrol Acetate	*	--	--
	Mestranol	*	--	--
	Norethindrone	*	--	--
	Norethynodrel	*	--	--
	Nortriptyline	*	--	--
	Paroxetine	*	--	--
	Prednisone	*	--	--
	Progestrorone	*	--	--
	Propoxyphene	*	--	--
	Protroptyline	*	--	--
	Prozac	*	--	--
	Sertraline	*	--	--
	Tamoxifen	*	--	--
	Trimipramine maleate	*	--	--

Table 3.--Method used and parameters analyzed for water, sediment, and fish tissue samples collected in 2002-2003

Method[1]	Parameter, units	Sample matrix		
		water	sediment	tissue
SW8310	Polyaromatic Hydrocarbons, sediment--µg/L	--	*	--
	Acenaphthene	--	*	--
	Acenaphthylene	--	*	--
	Anthracene	--	*	--
	Benzo(a)anthracene	--	*	--
	Benzo(a)pyrene	--	*	--
	Benzo(b)fluoranthene	--	*	--
	Benzo(ghi)perylene	--	*	--
	Benzo(k)fluoranthene	--	*	--
	Chrysene	--	*	--
	Dibenzo(a,h)anthracene	--	*	--
	Fluoranthene	--	*	--
	Fluorene	--	*	--
	Indeno(1,2,3-cd)pyrene	--	*	--
	1-Methylnaphthalene	--	*	--
	2-Methylnaphthalene	--	*	--
	Naphthalene	--	*	--
	Phenanthrene	--	*	--
	Pyrene	--	*	--
D2216 or E160.3	Moisture, sediment, fish--percent	--	*	*
SW9071B	n-Hexane Exttractable Material, sediment--mg/kg	--	*	--
SW9071B	SGT-HEM (Petroleum Hydrocarbons), sediment--mg/kg	--	*	--
D422	Grain size	--	*	--
SW846 Total residue	Lipids, percent	--	--	*

[1] Method numbers preceeded by A are from:
Standard Methods for the Examination of Water and Wastewater , 19th Edition (1995).
Method numbers preceeded by E are from:
Methods for Chemical Analysis of Water and Wastes , EPA Manual, 600/4-79-020 (USEPA, 1983 and subsequent revisions).
Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater , 40 CFR 136, Appendix A (USEPA, 1986c).
Methods for the Determination of Organic and Inorganic Compounds in Drinking Water , Volume 1, EPA 815/R-00-014 (USEPA, 2000).
Inductively Coupled Plasma - Atomic Emission Spectrometer Method for Trace Element Analysis of Water and Wastes , 40 CFR 136, Appendix C (USEPA, 1986a and subsequent revisions).
Method numbers preceeded by SW are from:
Test Methods for Evaluating Solid Waste, Physical/Chemical Methods , SW-846, 3rd Edition (USEPA, 1986a and its updates).
Method numbers preceeded by SW are from:
Annual Book of ASTM Standards , American Society for Testing and Materials, 1919 Race Street, Philadelphia, PA 19103. (USEPA, 1986a and its updates).

Table 4.1--Analytical results of surface-water monitoring at Rio Rancho Waste Water Treatment Plant Outfall #2

[Field parameters measured by field staff. Laboratory analyses performed by Severn Trent Laboratory and the New Mexico Scientific Laboratory (pharmaceuticals). --, no data; ^{o}C, degrees Celsius; mm of Hg, millimeters of mercury; ft^3/sec, cubic feet per second; mg/L, milligram per liter; %, percent; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units; ug/L, micrograms per liter; g/kg, grams per kilogram; mg/kg, milligram per kilogram; ug/kg, micrograms per kilogram; ITMS, Ion trap mass spectrometer; ng/L, nanograms per liter; n/a, not applicable.]

Method	Parameter	Matrix	Unit (Standard)	8-Aug-02				30-Jan-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
--	Station identification number	--	--	351535106354610		--	--	351535106354610		--	--
--	Latitude/Longitude	--	--	351535/1063546		--	--	351535/1063546		--	--
--	Time	--	--	1000		--	--	1030		--	--
	Field parameters										
170.1	Air temperature	air	^{o}C	29.5		0.1	0.01	11.3		0.1	0.01
170.1	Water temperature	water	^{o}C	28.8		0.1	0.01	18.4		0.1	0.01
--	Barometric pressure	air	mm of Hg	641		--	--	640		--	--
--	Discharge, instantaneous	water	ft^3/s	5.7		--	--	5.3		--	--
150.1	pH - unfiltered	water	--	7.8		0.1	0.01	7.2		0.1	0.01
--	Dissolved oxygen	water	mg/L	7.5		0.1	0.01	7.8		0.1	0.01
--	Dissolved oxygen, saturation	water	%	96		1	0.01	85		1	0.01
120.1	Specific conductance - unfiltered	water	uS/cm	1026		1	1	688		1	1
180.1	Turbidity	water	NTU	2.5		1	0.1	3.1		1	0.1
310.1	Alkalinity, as $CaCO_3$	water	mg/L	150		1	0.1	178		1	0.1
310.1	Bicarbonate, as HCO_3	water	mg/L	180		1	0.1	215		1	0.1
310.1	Carbonate, as CO_3	water	mg/L	1.0		0.1	0.1	0.9		0.1	0.1
	General chemistry										
130.2	Hardness, as $CaCO_3$	water	mg/L	110	J	5	2	58	J	5.0	2
160.1	Total dissolved solids	water	mg/L	630		10	5	550		10	5
160.2	Total suspended solids	water	mg/L	3.0	B	4.8	2.2	4.0		4.0	1.8
314	Perchlorate	water	ug/L	ND		20	1.5	0.68	B	20	0.2
405.1	Biochemical oxygen demand (BOD)	water	mg/L	ND		2	0.23	3.9		2.0	0.23
410.4	Chemical oxygen demand (COD)	water	mg/L	18	B	20	3.5	25		20	3.5
9060	Total organic carbon	sediment	g/kg	1.2	B	2	0.59	1.1	B	2.0	0.59
	Moisture	sediment	%	23		0.1	--	20		0.1	--
	Moisture	fish	%	--		--	--	76		0.1	--
Ttoal res.	Lipids	fish	%	0.84	B	0.1	--	0.54		0.1	--
	Common anions										
300.0A	Bromide	water	mg/L	0.34		0.2	0.03	0.18	B	0.2	0.03
300.0A	Chloride	water	mg/L	140	Q	15	0.5	75	Q	15	0.5
300.0A	Fluoride	water	mg/L	0.66	B	1.0	0.03	0.81	B	1.0	0.03
300.0A	Nitrate	water	mg/L	4.4		0.5	0.03	7.5		0.5	0.03
300.0A	Nitrite	water	mg/L	ND		0.5	0.04	ND		0.5	0.04
300.0A	Phosphate as P, Ortho	water	mg/L	3.9		0.5	0.04	3.7		0.5	0.04
300.0A	Sulfate	water	mg/L	110	Q	25	1	100	Q	25	1
9012A	Cyanide, Total	water	mg/L	0.0044	B	0.01	0.002	0.004	B	0.01	0.0039
9012A	Cyanide, Total	sediment	mg/kg	0.16	B	0.65	0.11	0.26	B J	0.63	0.12
9056	Bromide	sediment	mg/kg	ND		2.6	0.39	ND		2.5	0.38
9056	Chloride	sediment	mg/kg	41		39	1.3	38	J	38	1.3

Table 4.1--Analytical results of surface-water monitoring at Rio Rancho Waste Water Treatment Plant Outfall #2

Method	Parameter	Matrix	Unit (Standard)	8-Aug-02				30-Jan-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
9056	Fluoride	sediment	mg/kg	2.4	B	13	0.39	2.0	B J	13	0.38
9056	Nitrate	sediment	mg/kg	2.3	B	6.5	0.39	2.8	B J	6.3	0.38
9056	Nitrite	sediment	mg/kg	2.1	B	6.5	0.52	ND		6.3	0.5
9056	Phosphate as P, Ortho	sediment	mg/kg	7.2		6.5	0.52	9.1		6.3	0.5
9056	Sulfate	sediment	mg/kg	30	B	65	2.6	40	B J	63	2.5
	Nutrients										
350.1	Ammonia as N	water	mg/L	0.032	B	0.1	0.015	ND		0.1	0.038
351.2	Total Kjeldahl Nitrogen	water	mg/L	0.67		0.5	0.14	1.4		0.5	0.083
353.2	Nitrate-Nitrite	water	mg/L	4.5		0.1	0.012	7.0		0.1	0.012
354.1	Nitrite	water	mg/L	0.01		0.01	0.002	0.015		0.01	0.0018
365.3	Total phosphorus	water	mg/L	3.0		0.05	0.013	3.6	J Q	0.5	0.13
350.1	Ammonia as N	sediment	mg/kg	5.2		1.3	0.2	5.7		1.3	0.48
351.2	Total Kjeldahl Nitrogen	sediment	mg/kg	140		65	26	120		63	7.2
353.2	Nitrate-Nitrite	sediment	mg/kg	ND		1.3	0.16	0.49	B J	1.3	0.15
354.1	Nitrite	sediment	mg/kg	0.068	B	0.13	0.052	0.06	B	0.13	0.023
365.3	Total phosphorus	sediment	mg/kg	4.8	B J	6.5	1.6	220	Q	63	15
	Trace elements										
6020	Antimony	water	ug/L	1.3	B	2	0.04	0.36	B J	2	0.04
6020	Arsenic	water	ug/L	14		5	0.061	15	J	5	0.061
6020	Barium	water	ug/L	15		1	0.057	6.1		1	0.057
6020	Beryllium	water	ug/L	ND		1	0.028	--		--	--
6020	Cadmium	water	ug/L	0.068	B	1	0.022	0.1	B	1	0.022
6020	Chromium	water	ug/L	1.4	B	2	0.24	1.8	B J	2	0.24
6020	Cobalt	water	ug/L	0.32	B	1	0.015	0.27	B J	1	0.015
6020	Copper	water	ug/L	1.9	B	2	0.63	4.1		2	0.63
6020	Lead	water	ug/L	0.24	B	1	0.15	0.22	B	1	0.15
6020	Manganese	water	ug/L	3.7		1	0.061	3.1	J	1	0.061
6020	Molybdenum	water	ug/L	5.8		2	0.023	8.8	J	2	0.023
6020	Nickel	water	ug/L	1.9	B	2	0.25	0.89	B	2	0.25
6020	Selenium	water	ug/L	0.69	B	5	0.19	1.2	B	5	0.19
6020	Silver	water	ug/L	0.049	B	5	0.012	0.015	B	5	0.012
6020	Thallium	water	ug/L	ND		1	0.015	ND		1	0.015
6020	Tin	water	ug/L	2.5	B J	10	0.054	0.29	B J	10	0.054
6020	Uranium	water	ug/L	0.97	B J	1	0.0015	1.1	J	1	0.0015
6020	Vanadium	water	ug/L	19		5	0.07	16	J	5	0.07
6020	Zinc	water	ug/L	46		10	2.3	63		10	2.3
7470A	Mercury	water	ug/L	ND		0.2	0.028	ND		0.2	0.015
6010B	Aluminum	water	ug/L	28	B	100	20	30	B	100	20
6010B	Beryllium	water	ug/L	--		--	--	0.49	B J	5	0.22
6010B	Boron	water	ug/L	540		100	5.2	630		100	5.2
6010B	Calcium	water	ug/L	35000		200	31	19000		200	31
6010B	Iron	water	ug/L	29	B	100	13	49	B	100	13
6010B	Lithium	water	ug/L	180		10	2.1	170		10	2.1
6010B	Magnesium	water	ug/L	5400		200	24	2700		200	24
6010B	Potassium	water	ug/L	19000		3000	490	22000		3000	490
6010B	Silica	water	ug/L	34000		1100	23	31000		1100	23

Table 4.1--Analytical results of surface-water monitoring at Rio Rancho Waste Water Treatment Plant Outfall #2

Method	Parameter	Matrix	Unit (Standard)	8-Aug-02				30-Jan-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
6010B	Sodium	water	ug/L	150000		5000	1500	160000		5000	1500
6010B	Strontium	water	ug/L	450		10	0.35	360		10	0.35
6010B	Titanium	water	ug/L	ND		10	0.97	ND		10	0.97
6020	Antimony	sediment	mg/kg	0.098	B	0.26	0.0038	0.0062	B J	0.25	0.0036
6020	Arsenic	sediment	mg/kg	1.1		0.65	0.022	1.4		0.63	0.021
6020	Barium	sediment	mg/kg	75	J	0.13	0.031	34	J	0.13	0.03
6020	Beryllium	sediment	ug/kg	0.16		0.13	0.0057	--		--	--
6020	Cadmium	sediment	mg/kg	0.033	B	0.13	0.0018	0.026	B	0.13	0.0018
6020	Chromium	sediment	mg/kg	4.3	J	0.26	0.024	4.4	J	0.25	0.023
6020	Cobalt	sediment	mg/kg	1.5		0.13	0.0016	1.6	J	0.13	0.0015
6020	Copper	sediment	mg/kg	2.8	J	0.26	0.02	3.4	J	0.25	0.019
6020	Lead	sediment	mg/kg	2.5	J	0.13	0.0055	2.3		0.13	0.0053
6020	Manganese	sediment	mg/kg	79	J	0.13	0.03	82		0.13	0.029
6020	Molybdenum	sediment	mg/kg	0.23	B J	0.26	0.0029	0.12	B	0.25	0.0028
6020	Nickel	sediment	mg/kg	2.6		0.13	0.017	2.4	J	0.13	0.016
6020	Selenium	sediment	mg/kg	0.14	B	0.65	0.064	0.15	B	0.63	0.062
6020	Silver	sediment	mg/kg	0.04	B J	0.13	0.003	0.046	B	0.13	0.0029
6020	Thallium	sediment	mg/kg	0.039	B	0.13	0.0013	0.027	B	0.13	0.0012
6020	Tin	sediment	mg/kg	0.38	B	1.3	0.1	0.14	B	1.3	0.099
6020	Uranium	sediment	mg/kg	0.38		0.13	0.0024	0.33		0.13	0.0023
6020	Vanadium	sediment	mg/kg	12	J	0.65	0.0073	11	J	0.63	0.007
6020	Zinc	sediment	mg/kg	17		1.3	0.46	20		1.3	0.44
7471A	Mercury	sediment	mg/kg	ND		0.043	0.0033	ND		0.041	0.0031
6010B	Aluminum	sediment	mg/kg	3000		13	2.7	2100		13	2.6
6010B	Beryllium	sediment	mg/kg	--		--	--	0.15	B	0.63	0.043
6010B	Boron	sediment	mg/kg	1.4	B	13	0.48	0.49	B	13	0.46
6010B	Calcium	sediment	mg/kg	4800		26	10	3000		25	9.8
6010B	Iron	sediment	mg/kg	5200		13	2.1	5800	J	13	2
6010B	Lithium	sediment	mg/kg	4.1	B	6.5	0.14	4.3	B	6.3	0.14
6010B	Magnesium	sediment	mg/kg	1100		26	2	910		25	1.9
6010B	Potassium	sediment	mg/kg	680		390	46	590		380	44
6010B	Sodium	sediment	mg/kg	170	B	650	78	150	B	630	75
6010B	Strontium	sediment	mg/kg	25		1.3	0.02	18		1.3	0.063
6010B	Titanium	sediment	mg/kg	180		1.3	0.16	220		1.3	0.15
6020	Antimony	fish	mg/kg	ND		0.2	0.02	ND		0.83	0.083
6020	Arsenic	fish	mg/kg	0.11	B	0.5	0.0076	0.58	B	2.1	0.031
6020	Beryllium	fish	mg/kg	ND		0.1	0.0023	--		--	--
6020	Cadmium	fish	mg/kg	0.01	B	0.1	0.0027	0.016	B	0.41	0.011
6020	Chromium	fish	mg/kg	0.31	J	0.2	0.034	1.3	J	0.83	0.14
6020	Copper	fish	mg/kg	0.89		0.2	0.061	8.9		0.83	0.25
6020	Lead	fish	mg/kg	0.03	B	0.1	0.02	0.21	B	0.41	0.083
6020	Nickel	fish	mg/kg	0.11	J	0.1	0.011	0.6	J	0.41	0.046
6020	Selenium	fish	mg/kg	0.55		0.5	0.018	1.9	B	2.1	0.075
6020	Silver	fish	mg/kg	0.0076	B J	0.1	0.002	0.063	B	0.41	0.0083
6020	Thallium	fish	mg/kg	ND		0.1	0.002	0.011	B	0.41	0.0083
6020	Uranium	fish	mg/kg	0.01	B	0.1	0.002	0.057	B	0.41	0.0083

Table 4.1--Analytical results of surface-water monitoring at Rio Rancho Waste Water Treatment Plant Outfall #2

Method	Parameter	Matrix	Unit (Standard)	8-Aug-02				30-Jan-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
6020	Zinc	fish	mg/kg	46	J	1.0	0.13	230	J	4.1	0.52
245.6	Mercury	fish	ug/kg	26	B	100	5.9	160	B	410	24
6010B	Aluminum	fish	mg/kg	15		10	3.1	190		41	13
6010B	Barium	fish	mg/kg	1.5		1.0	0.12	28	J	4.1	0.5
6010B	Beryllium	fish	mg/kg	--		--	--	ND		2.1	0.58
6010B	Boron	fish	mg/kg	ND		10	0.51	ND		41	2.1
6010B	Calcium	fish	mg/kg	5100	J	20	3.2	41000	J	83	13
6010B	Cobalt	fish	mg/kg	ND		1	0.15	1.0	B	4.1	0.62
6010B	Iron	fish	mg/kg	35		10	2	210		41	8.3
6010B	Lithium	fish	mg/kg	ND		5	0.22	ND		21	0.91
6010B	Magnesium	fish	mg/kg	270	J	20	1.5	1400		83	6.3
6010B	Manganese	fish	mg/kg	2.6		1.0	0.14	16		4.1	0.58
6010B	Molybdenum	fish	mg/kg	ND		2	0.24	ND		8.3	0.99
6010B	Potassium	fish	mg/kg	2200		300	31	8700		1200	130
6010B	Sodium	fish	mg/kg	560		500	120	2400		2100	500
6010B	Strontium	fish	mg/kg	21		1	0.15	150		4.1	0.62
6010B	Tin	fish	mg/kg	1.7	B J	10	0.42	2.7	B J	41	1.7
6010B	Titanium	fish	mg/kg	0.87	B	1	0.2	4.6		4.1	0.83
6010B	Vanadium	fish	mg/kg	ND		1	0.35	1.5	B	4.1	1.4
	Volatile organic compounds										
8260B	Acetone	water	ug/L	ND		10	2.9	ND		10	2.5
8260B	Benzene	water	ug/L	ND		1	0.27	ND		1	0.17
8260B	Bromodichloromethane	water	ug/L	ND		1	0.35	ND		1	0.2
8260B	Bromoform	water	ug/L	ND		1	0.46	ND		1	0.23
8260B	Bromomethane	water	ug/L	ND		2	0.28	ND		2	0.22
8260B	Carbon disulfide	water	ug/L	ND		1	0.67	ND		1	0.24
8260B	Carbon tetrachloride	water	ug/L	ND		1	0.35	ND		1	0.2
8260B	Chlorobenzene	water	ug/L	ND		1	0.24	ND		1	0.13
8260B	Chloroethane	water	ug/L	ND		2	0.26	ND		2	0.18
8260B	Chloroform	water	ug/L	ND		1	0.29	ND		1	0.17
8260B	Chloromethane	water	ug/L	ND		2	0.26	ND		2	0.26
8260B	cis-1,2-Dichloroethene	water	ug/L	ND		1	0.33	ND		1	0.14
8260B	cis-1,3-Dichloropropene	water	ug/L	ND		1	0.31	ND		1	0.19
8260B	Dibromochloromethane	water	ug/L	ND		1	0.37	ND		1	0.19
8260B	Ethylbenzene	water	ug/L	ND		1	0.51	ND		1	0.12
8260B	Methylene chloride	water	ug/L	ND		5	0.86	ND		5	0.21
8260B	m-Xylene & p-Xylene	water	ug/L	ND		2	0.52	ND		2	0.27
8260B	o-Xylene	water	ug/L	ND		1	0.24	ND		1	0.15
8260B	Styrene	water	ug/L	ND		1	0.28	ND		1	0.14
8260B	Tetrachloroethene	water	ug/L	ND		1	0.27	ND		1	0.26
8260B	Toluene	water	ug/L	ND		1	0.26	ND		1	0.15
8260B	trans-1,2-Dichloroethene	water	ug/L	ND		0.5	0.25	ND		0.5	0.15
8260B	trans-1,3-Dichloropropene	water	ug/L	ND		1	0.36	ND		1	0.2
8260B	Trichloroethene	water	ug/L	ND		1	0.24	ND		1	0.16
8260B	Vinyl chloride	water	ug/L	ND		1	0.26	ND		1	0.19
8260B	Xylenes (total)	water	ug/L	ND		2	0.73	ND		2	0.41

Table 4.1--Analytical results of surface-water monitoring at Rio Rancho Waste Water Treatment Plant Outfall #2

Method	Parameter	Matrix	Unit (Standard)	8-Aug-02				30-Jan-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
8260B	1,1,1-Trichloroethane	water	ug/L	ND		1	0.32	ND		1	0.16
8260B	1,1,2,2-Tetrachloroethane	water	ug/L	ND		1	0.5	ND		1	0.21
8260B	1,1,2-Trichloroethane	water	ug/L	ND		1	0.41	ND		1	0.27
8260B	1,1-Dichloroethane	water	ug/L	ND		1	0.29	ND		1	0.22
8260B	1,1-Dichloroethene	water	ug/L	ND		1	0.31	ND		1	0.23
8260B	1,2-Dichloroethane	water	ug/L	ND		1	0.43	ND		1	0.26
8260B	1,2-Dichloroethene (total)	water	ug/L	ND		1	0.54	ND		1	0.24
8260B	1,2-Dichloropropane	water	ug/L	ND		1	0.38	ND		1	0.18
8260B	2-Butanone (MEK)	water	ug/L	ND		5	2.4	ND		5	2
8260B	2-Hexanone	water	ug/L	ND		5	1.8	ND		5	1.7
8260B	4-Methyl-2-pentanone	water	ug/L	ND		5	1.8	ND		5	0.98
8260B	Acetone	sediment	ug/kg	ND		26	6	ND		25	4.3
8260B	Benzene	sediment	ug/kg	ND		6.5	1.2	ND		6.3	0.15
8260B	Bromodichloromethane	sediment	ug/kg	ND		6.5	1.2	ND		6.3	0.25
8260B	Bromoform	sediment	ug/kg	ND		6.5	1.2	ND		6.3	0.33
8260B	Bromomethane	sediment	ug/kg	ND		13	1.6	ND		13	0.75
8260B	Carbon disulfide	sediment	ug/kg	ND		6.5	1.2	ND		6.3	0.3
8260B	Carbon tetrachloride	sediment	ug/kg	ND		6.5	1.6	ND		6.3	0.31
8260B	Chlorobenzene	sediment	ug/kg	ND		6.5	0.98	ND		6.3	0.23
8260B	Chloroethane	sediment	ug/kg	ND		13	1.7	ND		13	0.29
8260B	Chloroform	sediment	ug/kg	ND		13	1.2	ND		13	0.31
8260B	Chloromethane	sediment	ug/kg	ND		13	2	ND		13	0.45
8260B	cis-1,2-Dichloroethene	sediment	ug/kg	ND		3.3	1.1	ND		3.1	0.26
8260B	cis-1,3-Dichloropropene	sediment	ug/kg	ND		6.5	1.3	ND		6.3	0.45
8260B	Dibromochloromethane	sediment	ug/kg	ND		6.5	1.2	ND		6.3	0.25
8260B	Dimethyl sulfide	sediment	ug/kg	--		--	--	14	T2	--	--
8260B	Disulfide, dimethyl	sediment	ug/kg	--		--	--	20	T2	--	--
8260B	Ethylbenzene	sediment	ug/kg	ND		6.5	1.6	ND		6.3	0.34
8260B	Methanethiol	sediment	ug/kg	--		--	--	100	T2	--	--
8260B	Methylene chloride	sediment	ug/kg	3	J B	6.5	1	ND		6.3	0.52
8260B	m-Xylene & p-Xylene	sediment	ug/kg	ND		3.3	2.4	ND		3.1	0.53
8260B	o-Xylene	sediment	ug/kg	ND		3.3	1.3	ND		3.1	0.29
8260B	Styrene	sediment	ug/kg	ND		6.5	0.86	ND		6.3	0.26
8260B	Tetrachloroethene	sediment	ug/kg	ND		6.5	1.3	ND		6.3	0.31
8260B	Toluene	sediment	ug/kg	ND		6.5	1	ND		6.3	0.28
8260B	trans-1,2-Dichloroethene	sediment	ug/kg	ND		3.3	1	ND		3.1	0.44
8260B	trans-1,3-Dichloropropene	sediment	ug/kg	ND		6.5	1.3	ND		6.3	0.53
8260B	Trichloroethene	sediment	ug/kg	ND		6.5	1.1	ND		6.3	0.36
8260B	Vinyl chloride	sediment	ug/kg	ND		6.5	1.4	ND		6.3	0.29
8260B	Xylenes (total)	sediment	ug/kg	ND		6.5	3.7	ND		6.3	0.7
8260B	1,1,1-Trichloroethane	sediment	ug/kg	ND		6.5	1.3	ND		6.3	0.33
8260B	1,1,2,2-Tetrachloroethane	sediment	ug/kg	ND		6.5	1.4	ND		6.3	0.7
8260B	1,1,2-Trichloroethane	sediment	ug/kg	ND		6.5	2	ND		6.3	0.4
8260B	1,1-Dichloroethane	sediment	ug/kg	ND		6.5	1.3	ND		6.3	0.26
8260B	1,1-Dichloroethene	sediment	ug/kg	ND		6.5	1.4	ND		6.3	0.39
8260B	1,2-Dichloroethane	sediment	ug/kg	ND		6.5	1.3	ND		6.3	0.28

Table 4.1--Analytical results of surface-water monitoring at Rio Rancho Waste Water Treatment Plant Outfall #2

Method	Parameter	Matrix	Unit (Standard)	8-Aug-02				30-Jan-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
8260B	1,2-Dichloroethene (total)	sediment	ug/kg	ND		6.5	2	ND		6.3	0.38
8260B	1,2-Dichloropropane	sediment	ug/kg	ND		6.5	1.6	ND		6.3	0.28
8260B	2-Butanone (MEK)	sediment	ug/kg	ND		26	6.1	ND		25	3.4
8260B	2-Hexanone	sediment	ug/kg	ND		26	6	ND		25	2.9
8260B	4-Methyl-2-pentanone	sediment	ug/kg	ND		26	5.1	ND		25	2.5
	Herbicides										
8151A	Dalapon	water	ug/L	ND		2	0.42	ND		2	0.33
8151A	Dicamba	water	ug/L	ND		2	0.081	ND		2	0.086
8151A	Dichlorprop	water	ug/L	ND		4	0.13	ND		4	0.11
8151A	Dinoseb	water	ug/L	ND		0.6	0.09	ND		0.6	0.065
8151A	MCPA	water	ug/L	ND		400	13	ND		400	12
8151A	MCPP	water	ug/L	ND		400	42	ND		400	15
8151A	2,4,5-T	water	ug/L	ND		1	0.043	ND		1	0.043
8151A	2,4,5-TP (Silvex)	water	ug/L	ND		1	0.034	ND		1	0.036
8151A	2,4-D	water	ug/L	ND		4	0.16	ND		4	0.24
8151A	2,4-DB	water	ug/L	ND		4	0.21	ND		4	0.098
	Pesticides										
8141A	Anilazine	water	ug/L	ND		10	1.3	C		10	1.3
8141A	Atrazine	water	ug/L	1.9	J	10	0.52	ND		10	0.52
8141A	Azinphos-methyl	water	ug/L	ND		2.5	0.14	ND		2.5	0.14
8141A	Bolstar	water	ug/L	ND		0.5	0.14	ND		0.5	0.14
8141A	Chlorpyrifos	water	ug/L	ND		0.5	0.054	ND		0.5	0.054
8141A	Coumaphos	water	ug/L	ND		0.5	0.079	ND		0.5	0.079
8141A	Demeton (total)	water	ug/L	ND		1	0.19	ND		1	0.19
8141A	Diazinon	water	ug/L	ND		0.5	0.039	ND		0.5	0.039
8141A	Dichlorvos	water	ug/L	ND		0.5	0.13	ND		0.5	0.13
8141A	Dimethoate	water	ug/L	ND		0.5	0.18	ND		0.5	0.18
8141A	Disulfoton	water	ug/L	ND		0.5	0.057	ND		0.5	0.057
8141A	EPN	water	ug/L	ND		0.5	0.05	ND		0.5	0.05
8141A	Ethoprop	water	ug/L	0.17	J COL	0.5	0.056	ND		0.5	0.056
8141A	Ethyl parathion	water	ug/L	ND		0.5	0.04	ND		0.5	0.04
8141A	Famphur	water	ug/L	ND		1	0.054	ND		1	0.054
8141A	Fensulfothion	water	ug/L	ND		2.5	0.22	ND		2.5	0.22
8141A	Fenthion	water	ug/L	ND		0.5	0.061	ND		0.5	0.061
8141A	Malathion	water	ug/L	ND		1.2	0.05	ND		1.2	0.05
8141A	Merphos	water	ug/L	ND		5	0.063	ND		5	0.063
8141A	Methyl parathion	water	ug/L	ND		0.5	0.061	ND		0.5	0.061
8141A	Mevinphos	water	ug/L	ND		6.2	0.16	ND		6.2	0.16
8141A	Naled	water	ug/L	ND		10	0.22	ND		10	0.22
8141A	Phorate	water	ug/L	ND		0.5	0.075	ND		0.5	0.075
8141A	Propazine	water	ug/L	ND		10	2.5	ND		10	2.5
8141A	Ronnel	water	ug/L	ND		10	0.11	ND		10	0.11
8141A	Simazine	water	ug/L	ND		10	0.46	ND		10	0.46
8141A	Sulfotepp	water	ug/L	ND		0.5	0.03	ND		0.5	0.03
8141A	Tetrachlorvinphos (Stirophos)	water	ug/L	ND		2.5	0.056	ND		2.5	0.056
8141A	Thionazin	water	ug/L	ND		0.5	0.059	ND		0.5	0.059

Table 4.1--Analytical results of surface-water monitoring at Rio Rancho Waste Water Treatment Plant Outfall #2

Method	Parameter	Matrix	Unit (Standard)	8-Aug-02				30-Jan-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
8141A	Tokuthion	water	ug/L	ND		0.5	0.071	ND		0.5	0.071
8141A	Trichloronate	water	ug/L	ND		0.5	0.057	ND		0.5	0.057
8141A	O,O,O-Triethyl phosphorothioate	water	ug/L	ND		0.5	0.15	ND		0.5	0.15
8081A	Aldrin	sediment	ug/kg	ND		2.2	0.51	ND		11	1.7
8081A	alpha-BHC	sediment	ug/kg	ND		2.2	0.48	ND		11	1.6
8081A	beta-BHC	sediment	ug/kg	ND		2.2	0.44	ND		11	1.7
8081A	Chlordane (technical)	sediment	ug/kg	ND		22	3.3	ND		110	16
8081A	delta-BHC	sediment	ug/kg	ND		2.2	0.14	ND		11	3.9
8081A	Dieldrin	sediment	ug/kg	ND		2.2	0.71	ND		11	1.5
8081A	Endosulfan I	sediment	ug/kg	ND		2.2	0.5	ND		11	2.3
8081A	Endosulfan II	sediment	ug/kg	ND		2.2	0.86	ND		11	2.6
8081A	Endosulfan sulfate	sediment	ug/kg	ND		2.2	0.38	ND		11	2.5
8081A	Endrin	sediment	ug/kg	ND		2.2	0.5	ND		11	2.6
8081A	Endrin aldehyde	sediment	ug/kg	ND		2.2	2	ND		11	5.3
8081A	gamma-BHC (Lindane)	sediment	ug/kg	ND		2.2	0.91	ND		11	1.5
8081A	Heptachlor	sediment	ug/kg	ND		2.2	0.61	ND		11	1.9
8081A	Heptachlor epoxide	sediment	ug/kg	ND		8.8	0.47	ND		42	1.4
8081A	Methoxychlor	sediment	ug/kg	ND		4.3	0.22	ND		21	5
8081A	Toxaphene	sediment	ug/kg	ND		220	13	ND		1100	63
8081A	4,4'-DDD	sediment	ug/kg	ND		2.2	0.38	ND		11	2.2
8081A	4,4'-DDE	sediment	ug/kg	ND		2.2	0.42	ND		11	2.8
8081A	4,4'-DDT	sediment	ug/kg	ND		2.2	0.43	ND		11	3
8081A	Aldrin	fish	ug/kg	ND		6	2.2	ND		25	9.1
8081A	alpha-BHC	fish	ug/kg	ND		6	0.6	ND		25	2.5
8081A	alpha-Chlordane	fish	ug/kg	ND		6	0.6	ND		25	2.5
8081A	beta-BHC	fish	ug/kg	ND		6	0.6	ND		25	2.5
8081A	delta-BHC	fish	ug/kg	ND		6	0.6	ND		25	2.5
8081A	Dieldrin	fish	ug/kg	ND		6	0.6	ND		25	2.5
8081A	Endosulfan I	fish	ug/kg	ND		6	0.6	ND		25	2.5
8081A	Endosulfan II	fish	ug/kg	ND		6	0.6	ND		25	2.5
8081A	Endosulfan sulfate	fish	ug/kg	ND		6	2.9	ND		25	12
8081A	Endrin	fish	ug/kg	ND		6	0.6	ND		25	2.5
8081A	Endrin aldehyde	fish	ug/kg	ND		6	0.6	ND		25	2.5
8081A	Endrin ketone	fish	ug/kg	ND		6	0.6	ND		25	2.5
8081A	gamma-BHC (Lindane)	fish	ug/kg	ND		6	0.6	ND		25	2.5
8081A	gamma-Chlordane	fish	ug/kg	ND		6	1.8	ND		25	7.5
8081A	Heptachlor	fish	ug/kg	ND		6	0.6	ND		25	2.5
8081A	Heptachlor epoxide	fish	ug/kg	ND		22	0.56	ND		91	2.3
8081A	Methoxychlor	fish	ug/kg	ND		11	0.56	ND		46	2.3
8081A	Toxaphene	fish	ug/kg	ND		60	33	ND		250	140
8081A	4,4'-DDD	fish	ug/kg	ND		6	0.6	ND		25	2.5
8081A	4,4'-DDE	fish	ug/kg	0.87	J COL	6	0.6	ND		25	2.5
8081A	4,4'-DDT	fish	ug/kg	ND		6	1.4	32		25	5.8
	Explosives										
8330	HMX	water	ug/L	ND		0.25	0.19	ND		0.25	0.03
8330	Nitrobenzene	water	ug/L	ND		0.25	0.08	ND		0.25	0.04

Table 4.1--Analytical results of surface-water monitoring at Rio Rancho Waste Water Treatment Plant Outfall #2

Method	Parameter	Matrix	Unit (Standard)	8-Aug-02				30-Jan-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
8330	Nitroglycerin	water	ug/L	ND		2.5	0.9	ND		2.5	0.3
8330	PETN	water	ug/L	ND		2.5	1.3	ND		2.5	0.5
8330	RDX	water	ug/L	ND		0.25	0.17	ND		0.25	0.03
8330	Tetryl	water	ug/L	ND		0.5	0.15	ND		0.5	0.03
8330	1,3,5-Trinitrobenzene	water	ug/L	ND		0.25	0.092	ND		0.25	0.03
8330	1,3-Dinitrobenzene	water	ug/L	ND		0.25	0.11	ND		0.25	0.03
8330	2,4,6-Trinitrotoluene	water	ug/L	ND		0.25	0.089	ND		0.25	0.05
8330	2,4-Dinitrotoluene	water	ug/L	ND		0.25	0.1	ND		0.25	0.04
8330	2,6-Dinitrotoluene	water	ug/L	ND		0.25	0.15	ND		0.25	0.03
8330	2-Amino-4,6-dinitrotoluene	water	ug/L	ND		0.25	0.12	ND		0.25	0.04
8330	2-Nitrotoluene	water	ug/L	ND		0.25	0.16	ND		0.25	0.04
8330	3-Nitrotoluene	water	ug/L	ND		0.25	0.18	ND		0.25	0.09
8330	4-Amino-2,6-dinitrotoluene	water	ug/L	ND		0.25	0.1	ND		3.2	0.05
8330	4-Nitrotoluene	water	ug/L	ND		0.25	0.23	ND		0.4	0.05
	Polyaromatic hydrocarbons										
8310	Acenaphthene	sediment	ug/kg	ND		1300	25	46	J COL	250	4.9
8310	Acenaphthylene	sediment	ug/kg	ND		1300	78	ND		250	15
8310	Anthracene	sediment	ug/kg	29	J	130	17	ND		25	3.3
8310	Benzo(a)anthracene	sediment	ug/kg	ND		130	33	ND		25	6.3
8310	Benzo(a)pyrene	sediment	ug/kg	33	J	130	12	ND		25	2.3
8310	Benzo(b)fluoranthene	sediment	ug/kg	79	J	130	25	ND		25	4.9
8310	Benzo(ghi)perylene	sediment	ug/kg	75	J	260	17	11	J COL	50	3.3
8310	Benzo(k)fluoranthene	sediment	ug/kg	62	J	130	15	ND		25	2.9
8310	Chrysene	sediment	ug/kg	76	J	260	16	ND		50	3
8310	Dibenzo(a,h)anthracene	sediment	ug/kg	ND		260	30	ND		50	5.8
8310	Fluoranthene	sediment	ug/kg	56	J	260	56	ND		50	11
8310	Fluorene	sediment	ug/kg	ND		260	57	ND		50	11
8310	Indeno(1,2,3-cd)pyrene	sediment	ug/kg	48	J	260	15	ND		50	2.9
8310	Naphthalene	sediment	ug/kg	ND		1300	78	ND		250	15
8310	Phenanthrene	sediment	ug/kg	29	J	260	22	ND		50	4.1
8310	Pyrene	sediment	ug/kg	ND		260	45	ND		50	8.7
8310	1-Methylnaphthalene	sediment	ug/kg	ND		1300	46	ND		250	8.8
8310	2-Methylnaphthalene	sediment	ug/kg	ND		1300	22	46	J COL	250	4.1
	Total Petroleum Hydrocarbons										
9071B	n-Hexane Ext. Material	sediment	mg/kg	ND		650	210	ND		630	200
9071B	SGT-HEM (Petroleum Hydrocarbons)	sediment	mg/kg	ND		650	160	ND		630	150
	Pharmaceuticals										
ITMS	Amitriptyline	water	ng/L	ND		10.0	--	ND		10.0	++
ITMS	Beta-Estradiol	water	ng/L	ND		10.0	--	ND		10.0	++
ITMS	Caffeine	water	ng/L	ND		10.0	--	ND		10.0	++
ITMS	Cholesterol	water	ng/L	ND		10.0	--	ND		10.0	++
ITMS	Desipramine	water	ng/L	ND		10.0	--	ND		10.0	++
ITMS	Dextro-Norgestrel	water	ng/L	ND		10.0	--	ND		10.0	++
ITMS	Doxepin	water	ng/L	ND		10.0	--	ND		10.0	++
ITMS	Equilin	water	ng/L	ND		10.0	--	ND		10.0	++
ITMS	Estrone	water	ng/L	ND		10.0	--	ND		10.0	++

Table 4.1--Analytical results of surface-water monitoring at Rio Rancho Waste Water Treatment Plant Outfall #2

Method	Parameter	Matrix	Unit (Standard)	8-Aug-02				30-Jan-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
ITMS	Enthynl Estradiol	water	ng/L	ND		10.0	--	ND		10.0	++
ITMS	Imipramine	water	ng/L	ND		10.0	--	ND		10.0	++
ITMS	Medroxyprogesterone	water	ng/L	ND		10.0	--	ND		10.0	++
ITMS	Megestrol Acetate	water	ng/L	ND		10.0	--	ND		10.0	++
ITMS	Menstranol	water	ng/L	ND		10.0	--	ND		10.0	++
ITMS	Nordoxepin	water	ng/L	ND		10.0	--	ND		10.0	++
ITMS	Norethindrone	water	ng/L	ND		10.0	--	ND		10.0	++
ITMS	Norethynodrel	water	ng/L	ND		10.0	--	ND		10.0	++
ITMS	Nortriptyline	water	ng/L	ND		10.0	--	ND		10.0	++
ITMS	Paroxetine	water	ng/L	ND		10.0	--	ND		10.0	++
ITMS	Phenytoin	water	ng/L	ND		10.0	--	ND		10.0	++
ITMS	Prednisone	water	ng/L	ND		10.0	--	ND		10.0	++
ITMS	Progesterone	water	ng/L	ND		10.0	--	ND		10.0	++
ITMS	Propoxyphene	water	ng/L	ND		10.0	--	ND		10.0	++
ITMS	Protroptyline	water	ng/L	ND		10.0	--	ND		10.0	++
ITMS	Prozac	water	ng/L	ND		10.0	--	ND		10.0	++
ITMS	Setraline	water	ng/L	ND		10.0	--	ND		10.0	++
ITMS	Tamoxifen	water	ng/L	ND		10.0	--	ND		10.0	++
ITMS	Trimipramine maleate	water	ng/L	ND		10.0	--	ND		10.0	++
ITMS	6 alpha-Methyprednisolone	water	ng/L	ND		10.0	--	ND		10.0	++

Table 4.1--Analytical results of surface-water monitoring at Rio Rancho Waste Water Treatment Plant Outfall #2

Method	Parameter	Matrix	Unit (Standard)	8-Aug-02				30-Jan-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
	Grain size analysis										
D422	Maximum particle size	sediment	--	fine gravel		--	--	fine gravel		--	--
D422	Particle size, 9500 microns, gravel	sediment	%	0.4		0.1	--	0.6		0.1	--
D422	Particle size, 4750 microns, gravel	sediment	%	1.9		0.1	--	2.0		0.1	--
D422	Particle size, 2000 microns, sand	sediment	%	3.6		0.1	--	5.1		0.1	--
D422	Particle size, 850 microns, sand	sediment	%	8.4		0.1	--	8.5		0.1	--
D422	Particle size, 425 microns, sand	sediment	%	27.1		0.1	--	25.8		0.1	--
D422	Particle size, 250 microns, sand	sediment	%	26.7		0.1	--	29.3		0.1	--
D422	Particle size, 180 microns, sand	sediment	%	11.9		0.1	--	12.6		0.1	--
D422	Particle size, 150 microns, sand	sediment	%	5.9		0.1	--	4.9		0.1	--
D422	Particle size, 75 microns, sand	sediment	%	10.4		0.1	--	5.5		0.1	--
D422	Particle size, 37.7 microns, silt	sediment	%	--		--	--	3.9		0.1	--
D422	Particle size, 36.1 microns, silt	sediment	%	1.2		0.1	--	--		--	--
D422	Particle size, 23.8 microns, silt	sediment	%	--		--	--	0.0		0.1	--
D422	Particle size, 22.8 microns, silt	sediment	%	0.0		0.1	--	--		--	--
D422	Particle size, 13.7 microns, silt	sediment	%	--		--	--	0.0		0.1	--
D422	Particle size, 13.2 microns, silt	sediment	%	0.4		0.1	--	--		--	--
D422	Particle size, 9.8 microns, silt	sediment	%	--		--	--	0.3		0.1	--
D422	Particle size, 9.1 microns, silt	sediment	%	0.4		0.1	--	--		--	--
D422	Particle size, 7.0 microns, silt	sediment	%	--		--	--	0.0		0.1	--
D422	Particle size, 6.6 microns, silt	sediment	%	0.0		0.1	--	--		--	--
D422	Particle size, 3.4 microns, clay	sediment	%	--		--	--	0.4		0.1	--
D422	Particle size, 3.2 microns, clay	sediment	%	0.4		0.1	--	--		--	--
D422	Particle size, 1.4 microns, clay	sediment	%	0.0		0.1	--	0.3		0.1	--
D422	Particle size, less than 1.4 microns, clay	sediment	%	1.4		0.1	--	0.9		0.1	--

[1] See table 5 for description of qualifier codes.

[2] Reporting limit -- the lowest level at which measurements become quantitatively meaningful, ie., the quantitation limit, which is approximately three times the method detection limit. Reporting limits cannot be less than the statistically determined method detection limit.

[3] Method detection limit -- the minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero and is determined from replicate analyses of low level standards in a typical representative matrix.

Table.4.2--Analytical results of surface-water monitoring at Rio Grande at La Orilla, 2002-2003

[Field parameters measured by field staff. Laboratory analyses performed by Severn Trent Laboratory and the New Mexico Scientific Laboratory (pharmaceuticals). --, no data; °C, degrees Celsius; mm of Hg, millimeters of mercury; ft^3/sec, cubic feet per second; mg/L, milligram per liter; %, percent; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units; >, greater than; ug/L, micrograms per liter; g/kg, grams per kilogram; mg/kg, milligram per kilogram; ug/kg, micrograms per kilogram; ITMS, Ion trap mass spectrometer; ng/L, nanograms per liter; n/a, not applicable.]

Method	Parameter	Matrix	Unit	26-Jul-02				1-Nov-02				19-Dec-02				28-Feb-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
--	Station identification number	--	--	350921106401410		--	--	350921106401410		--	--	350921106401310		--	--	350920106401310		--	--
--	Latitude/Longitude	--	--	350921/1064014		--	--	350921/1064014		--	--	350921/1064013		--	--	350920/1064013		--	--
--	Time	--	--	1030		--	--	1100		--	--	1015		--	--	1015		--	--
	Field parameters																		
170.1	Air temperature	air	°C	26.8		0.1	0.01	15.7		0.1	0.01	3.2		0.1	0.01	6.3		0.1	0.01
170.1	Water temperature	water	°C	26.1		0.1	0.01	17.3		0.1	0.01	2.1		0.1	0.01	6.3		0.1	0.01
--	Barometric pressure	air	mm of Hg	638		--	--	637		--	--	638		--	--	632		--	--
--	Discharge, instantaneous	water	ft^3/s	344		--	--	261		--	--	469		--	--	334		--	--
150.1	pH - unfiltered	water	--	7.6		0.1	0.01	7.8		0.1	0.01	8.3		0.1	0.01	8.4		0.1	0.01
--	Dissolved oxygen	water	mg/L	6.6		0.1	0.01	7.3		0.1	0.01	11.3		0.1	0.01	9.8		0.1	0.01
--	Dissolved oxygen, saturation	water	%	82		1	0.01	71		1	0.01	83		1	0.01	79		1	0.01
120.1	Specific conductance - unfiltered	water	uS/cm	359		1	1	395		1	1	236		1	1	283		1	1
180.1	Turbidity	water	NTU	397		1	0.1	289		1	0.1	302		1	0.1	121		1	0.1
310.1	Alkalinity, as $CaCO_3$	water	mg/L	109		1	0.1	127		1	0.1	138		1	0.1	136		1	0.1
310.1	Bicarbonate, as HCO_3	water	mg/L	129		1	0.1	154		1	0.1	166		1	0.1	163		1	0.1
310.1	Carbonate, as CO_3	water	mg/L	1.6		0.1	0.1	0.7		0.1	0.1	1.0		0.1	0.1	1.4		0.1	0.1
	General chemistry																		
130.2	Hardness, as $CaCO_3$	water	mg/L	130		5	2	470	J	5	2	170	J	5	2	120	J	5	2
160.1	Total dissolved solids	water	mg/L	230		10	5	300	J G	40	20	320		10	5	310		10	5
160.2	Total suspended solids	water	mg/L	ND		4	1.8	2200	Q	40	18	260	Q	10	4.5	110	Q	5	2.2
314	Perchlorate	water	ug/L	--		--	--	ND		20	2.5	ND		20	2.5	ND		2	0.41
405.1	Biochemical oxygen demand (BOD)	water	mg/L	ND		2	0.23	5.4		2	0.23	ND		2	0.23	ND		2	0.31
410.4	Chemical oxygen demand (COD)	water	mg/L	13	B J	20	3.5	11	B	20	3.5	ND		20	3.5	5.9	B	20	3.5
9060	Total organic carbon	sediment	g/kg	2.5		2	0.59	6.1		2	0.59	6.7		2	0.59	4.6		2	0.59
D2216	Moisture	sediment	%	13		0.1	--	35		0.1	--	51		0.01	--	37		0.1	--
D2216	Moisture	fish	%	--	f	--	--	--		--	--	--		--	--	--	f	--	--
Total Residue	Lipids (Fathead Minnow)	fish	%	--	f	--	--	--		--	--	--		--	--	--	f	--	--
	Common anions																		
300.0A	Bromide	water	mg/L	ND		0.2	0.03	ND		0.2	0.03	ND		0.2	0.03	0.18	B	0.2	0.03
300.0A	Chloride	water	mg/L	5.7		3	0.1	14		3	0.1	22		3	0.1	25		3	0.1
300.0A	Fluoride	water	mg/L	0.43	B	1	0.03	0.53	B	1	0.03	0.54	B	1	0.03	0.55	B	1	0.03
300.0A	Nitrate	water	mg/L	0.19	B	0.5	0.03	0.26	B	0.5	0.03	0.25	B	0.5	0.03	0.37	B	0.5	0.03
300.0A	Nitrite	water	mg/L	ND		0.5	0.04	ND		0.5	0.04	ND		0.5	0.04	ND		0.5	0.04
300.0A	Phosphate as P, Ortho	water	mg/L	ND		0.5	0.04	ND		0.5	0.04	ND		0.5	0.04	0.15	B J	0.5	0.04
300.0A	Sulfate	water	mg/L	61	Q	25	1	78	Q	25	1	71	Q	25	1	66	Q	25	1
9012A	Cyanide, Total	water	mg/L	0.0047	B	0.01	0.002	0.0035	B	0.01	0.002	ND		0.01	0.002	ND		0.01	0.0039
9012A	Cyanide, Total	sediment	mg/kg	0.17	B J	0.57	0.1	0.34	B	0.76	0.13	0.21	B	1	0.18	0.28	B	0.8	0.16
9056	Bromide	sediment	mg/kg	ND		2.3	0.34	ND		3.1	0.46	ND		4.1	0.61	ND		3.2	0.48
9056	Chloride	sediment	mg/kg	12	B J	34	1.1	22	B J	46	1.5	38	B J	61	2	15	B J	48	1.6
9056	Fluoride	sediment	mg/kg	2.4	B	11	0.34	3.7	B	15	0.46	5.5	B J	20	0.61	2.5	B	16	0.48
9056	Nitrate	sediment	mg/kg	ND		5.7	0.34	3.4	B	7.6	0.46	17	J	10	0.61	ND		8	0.48
9056	Nitrite	sediment	mg/kg	1.7	B J	5.7	0.46	ND		7.6	0.61	ND		10	0.81	ND		8	0.64
9056	Phosphate as P, Ortho	sediment	mg/kg	ND		5.7	0.46	ND		7.6	0.61	ND		10	0.81	ND		8	0.64
9056	Sulfate	sediment	mg/kg	27	B	57	2.3	36	B	76	3.1	110	J	100	4.1	30	B J	80	3.2
	Nutrients																		
350.1	Ammonia as N	water	mg/L	0.017	B	0.1	0.015	0.034	B	0.1	0.015	0.044	B	0.1	0.015	ND		0.1	0.038
351.2	Total Kjeldahl Nitrogen	water	mg/L	ND		0.5	0.14	ND		0.5	0.14	0.18	B	0.5	0.14	ND		0.5	0.083
353.2	Nitrate-Nitrite	water	mg/L	0.062	B	0.1	0.01	0.065	B	0.1	0.012	0.091	B	0.1	0.012	0.26		0.1	0.012
354.1	Nitrite	water	mg/L	0.0026	B J	0.01	0.002	0.0053	B J	0.01	0.002	0.0031	B	0.01	0.002	0.0024	B	0.01	0.0018
365.3	Total phosphorus	water	mg/L	0.11		0.05	0.013	1.2	J Q	0.1	0.026	0.17	J	0.05	0.013	0.4	G	0.25	0.095
350.1	Ammonia as N	sediment	mg/kg	ND		1.1	0.17	6.7	J	1.5	0.23	12	J	2	0.3	ND		1.6	0.61
351.2	Total Kjeldahl Nitrogen	sediment	mg/kg	150		57	23	440	Q	76	31	450		100	41	260		80	9.1
353.2	Nitrate-Nitrite	sediment	mg/kg	ND		1.1	0.24	2.9		1.5	0.18	12	J	2	0.24	0.22	B J	1.6	0.19
354.1	Nitrite	sediment	mg/kg	ND		0.11	0.046	0.14	B	0.15	0.061	0.16	B	0.2	0.081	0.085	B	0.16	0.029
365.3	Total phosphorus	sediment	mg/kg	32	Q	29	6.9	270	Q	76	18	2800	Q	510	120	630	Q	160	38
	Trace elements																		
6020	Antimony	water	ug/L	0.76	B	2	0.04	0.11	B J	2	0.04	0.16	B	2	0.04	0.11	B	2	0.04
6020	Arsenic	water	ug/L	2.6	B	5	0.061	5.6		5	0.061	4.4	B	5	0.061	5.8		5	0.061
6020	Barium	water	ug/L	71		1	0.057	91		1	0.057	89		1	0.057	80		1	0.057
6020	Beryllium	water	ug/L	ND		1	0.028	--		--	--	--		--	--	--		--	--
6020	Cadmium	water	ug/L	ND		1	0.022	ND		1	0.022	ND		1	0.022	ND		1	0.022
6020	Chromium	water	ug/L	0.72	B	2	0.24	0.6	B	2	0.24	0.71	B	2	0.24	0.38	B	2	0.24
6020	Cobalt	water	ug/L	0.2	B	1	0.015	0.62	B	1	0.015	0.24	B	1	0.015	0.35	B	1	0.015
6020	Copper	water	ug/L	0.95	B	2	0.63	0.79	B	2	0.63	0.87	B	2	0.63	1.3	B	2	0.63
6020	Lead	water	ug/L	2		1	0.15	ND		1	0.15	ND		1	0.15	ND		1	0.15
6020	Manganese	water	ug/L	0.68	B	1	0.061	340		1	0.061	7.5		1	0.061	7.9	J	1	0.061
6020	Molybdenum	water	ug/L	4.2		2	0.023	5.1	J	2	0.023	5.8		2	0.023	5.5		2	0.023
6020	Nickel	water	ug/L	1.1	B	2	0.25	ND		2	0.25	1.3	B	2	0.25	ND		2	0.25

Table.4.2--Analytical results of surface-water monitoring at Rio Grande at La Orilla, 2002-2003

Method	Parameter	Matrix	Unit	26-Jul-02				1-Nov-02				19-Dec-02				28-Feb-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
6020	Selenium	water	ug/L	0.4	B	5	0.19	0.63	B	5	0.19	ND		5	0.19	0.69	B J	5	0.19
6020	Silver	water	ug/L	0.048	B	5	0.012	0.088	B J	5	0.012	ND		5	0.012	ND		5	0.012
6020	Thallium	water	ug/L	ND		1	0.015	ND		1	0.015	ND		1	0.015	ND		1	0.015
6020	Tin	water	ug/L	1.5	B	10	0.054	ND		10	0.054	0.1	B J	10	0.054	ND		10	0.054
6020	Uranium	water	ug/L	2		1	0.0015	3.1	J	1	0.0015	4		1	0.0015	3.8		1	0.0015
6020	Vanadium	water	ug/L	5.3		5	0.07	5.3		5	0.07	4.3	B J	5	0.07	4	B	5	0.07
6020	Zinc	water	ug/L	4.3	B	10	2.3	4.2	B	10	2.3	5	B	10	2.3	9.1	B	10	2.3
7470A	Mercury	water	ug/L	ND		0.2	0.028	ND		0.2	0.028	ND		0.2	0.015	0.029	B J	0.2	0.015
6010B	Aluminum	water	ug/L	24	B	100	20	77	B	100	20	27	B	100	20	ND		100	20
6010B	Beryllium	water	ug/L	--		--	--	ND		5	0.22	0.25	B	5	0.22	ND		5	0.22
6010B	Boron	water	ug/L	34	B	100	5.2	75	B	100	5.2	120		100	5.2	140		100	5.2
6010B	Calcium	water	ug/L	42000		200	31	47000	J	200	31	48000	J	200	31	46000		200	31
6010B	Iron	water	ug/L	ND		100	13	64	B	100	13	14	B	100	13	13	B	100	13
6010B	Lithium	water	ug/L	20		10	2.1	48		10	2.1	98		10	2.1	110		10	2.1
6010B	Magnesium	water	ug/L	7400		200	24	8400		200	24	9500		200	24	8700		200	24
6010B	Potassium	water	ug/L	3200		3000	490	3500		3000	490	3900		3000	490	4200		3000	490
6010B	Silica	water	ug/L	17000		1100	23	19000	J	1100	23	22000		1100	23	24000		1100	23
6010B	Sodium	water	ug/L	21000		5000	1500	32000		5000	1500	42000		5000	1500	49000		5000	1500
6010B	Strontium	water	ug/L	360		10	0.35	490		10	0.35	430		10	0.35	400		10	0.35
6010B	Titanium	water	ug/L	ND		10	0.97	2.8	B	10	0.97	1.2	B	10	0.97	ND		10	0.97
6020	Antimony	sediment	mg/kg	0.0038	B J	0.23	0.0033	ND		0.31	0.0044	ND		0.41	0.0059	ND		0.32	0.0046
6020	Arsenic	sediment	mg/kg	2.7		0.57	0.019	4		0.76	0.026	5.8	J	1	0.034	4.6		0.8	0.027
6020	Barium	sediment	mg/kg	160		0.11	0.028	130	J	0.15	0.037	210		0.2	0.049	170		0.16	0.038
6020	Beryllium	sediment	mg/kg	0.57		0.11	0.005	--		--	--	--		--	--	--		--	--
6020	Cadmium	sediment	mg/kg	0.12		0.11	0.0016	0.091	B	0.15	0.0021	0.17	B	0.2	0.0028	0.12	B	0.16	0.0022
6020	Chromium	sediment	mg/kg	9.5	J	0.23	0.021	7.4	J	0.31	0.028	13	J	0.41	0.036	10	J	0.32	0.029
6020	Cobalt	sediment	mg/kg	4.6		0.11	0.0014	3.5		0.15	0.0018	5.6		0.2	0.0024	4.8		0.16	0.0019
6020	Copper	sediment	mg/kg	8	J	0.23	0.017	6.1	J	0.31	0.023	11		0.41	0.03	8.3	J	0.32	0.024
6020	Lead	sediment	mg/kg	8.4		0.11	0.0048	6.2		0.15	0.0064	9.5	J	0.2	0.0085	7.8	J	0.16	0.0067
6020	Manganese	sediment	mg/kg	280	J	0.11	0.026	340	J	0.15	0.035	350	J	0.2	0.047	300		0.16	0.037
6020	Molybdenum	sediment	mg/kg	0.25	J	0.23	0.0025	0.32		0.31	0.0034	0.34	B J	0.41	0.0045	0.22	B J	0.32	0.0035
6020	Nickel	sediment	mg/kg	8.6		0.11	0.015	5.7	J	0.15	0.02	11	J	0.2	0.026	8.2	J	0.16	0.021
6020	Selenium	sediment	mg/kg	0.38	B	0.57	0.056	0.29	B	0.76	0.075	0.65	B	1	0.099	0.33	B	0.8	0.078
6020	Silver	sediment	mg/kg	0.058	B J	0.11	0.0026	0.077	B J	0.15	0.0035	0.24	J	0.2	0.0047	0.1	B	0.16	0.0037
6020	Thallium	sediment	mg/kg	0.15		0.11	0.0011	0.11	B J	0.15	0.0015	0.2	J	0.2	0.002	0.15	B	0.16	0.0016
6020	Tin	sediment	mg/kg	ND		1.1	0.091	ND		1.5	0.12	ND		2	0.16	ND		1.6	0.13
6020	Uranium	sediment	mg/kg	0.89		0.11	0.0021	0.62		0.15	0.0028	0.87	J	0.2	0.0036	0.76		0.16	0.0029
6020	Vanadium	sediment	mg/kg	21	J	0.57	0.0064	18	J	0.76	0.0086	28		1	0.011	23	J	0.8	0.0089
6020	Zinc	sediment	mg/kg	31		1.1	0.4	30		1.5	0.54	45		2	0.71	37	J	1.6	0.56
7471A	Mercury	sediment	mg/kg	ND		0.038	0.0029	0.0055	B	0.05	0.0038	0.0078	B	0.067	0.0051	ND		0.053	0.004
6010B	Aluminum	sediment	mg/kg	5500		11	2.4	13000		15	3.2	16000	J	20	4.3	8200	J	16	3.4
6010B	Beryllium	sediment	mg/kg	--		--	--	0.62	B	0.76	0.052	0.53	B	1	0.069	0.41	B	0.8	0.054
6010B	Boron	sediment	mg/kg	2.8	B	11	0.42	7.4	B	15	0.57	9.5	B	20	0.75	3.4	B	16	0.59
6010B	Calcium	sediment	mg/kg	11000		23	8.9	24000	J	31	12	23000	J	41	16	19000	J	32	12
6010B	Iron	sediment	mg/kg	6700		11	1.8	12000		15	2.4	13000		20	3.2	9100	J	16	2.6
6010B	Lithium	sediment	mg/kg	6.5		5.7	0.13	14		7.6	0.17	17		10	0.22	11		8	0.18
6010B	Magnesium	sediment	mg/kg	2200	J	23	1.7	4500	J	31	2.3	5200		41	3	3700		32	2.4
6010B	Potassium	sediment	mg/kg	1200		340	40	2600		460	54	3400		610	71	1900		480	56
6010B	Sodium	sediment	mg/kg	ND		570	69	320	B	760	92	210	B	1000	120	ND		800	96
6010B	Strontium	sediment	mg/kg	40	J	1.1	0.017	65		1.5	0.076	99		2	0.1	69		1.6	0.08
6010B	Titanium	sediment	mg/kg	170		1.1	0.14	200		1.5	0.18	220		2	0.24	210	J	1.6	0.19
6020	Antimony	fish	mg/kg	ND		200	20	--		--	--	--		--	--	ND		0.2	0.02
6020	Arsenic	fish	mg/kg	0.23	B	0.5	0.0076	--		--	--	--		--	--	0.53	J	0.5	0.0076
6020	Beryllium	fish	mg/kg	0.012	B	0.1	0.0023	--		--	--	--		--	--	--		--	--
6020	Cadmium	fish	mg/kg	0.011	B	0.1	0.0027	--		--	--	--		--	--	0.0067	B	0.1	0.0027
6020	Chromium	fish	mg/kg	0.52	J	0.2	0.034	--		--	--	--		--	--	0.41	J	0.2	0.034
6020	Copper	fish	mg/kg	1.1		0.2	0.061	--		--	--	--		--	--	0.92		0.2	0.061
6020	Lead	fish	mg/kg	0.19		0.1	0.02	--		--	--	--		--	--	0.19		0.1	0.02
6020	Nickel	fish	mg/kg	0.26	J	0.1	0.011	--		--	--	--		--	--	0.17	J	0.1	0.011
6020	Selenium	fish	mg/kg	0.53		0.5	0.018	--		--	--	--		--	--	0.64		0.5	0.018
6020	Silver	fish	mg/kg	0.0054	B J	0.1	0.002	--		--	--	--		--	--	0.0062	B	0.1	0.002
6020	Thallium	fish	mg/kg	ND		0.1	0.002	--		--	--	--		--	--	0.01	B	0.1	0.002
6020	Uranium	fish	mg/kg	0.019	B	0.1	0.002	--		--	--	--		--	--	0.022	B	0.1	0.002
6020	Zinc	fish	mg/kg	24		1	0.13	--		--	--	--		--	--	23	J	1	0.13
245.6	Mercury	fish	ug/kg	26	B	100	5.9	--		--	--	--		--	--	12	B	100	5.9
6010B	Aluminum	fish	mg/kg	170		10	3.1	--		--	--	--		--	--	180		10	3.1
6010B	Barium	fish	mg/kg	7.8		1	0.12	--		--	--	--		--	--	15	J	1	0.12
6010B	Beryllium	fish	mg/kg	--		--	--	--		--	--	--		--	--	ND		0.5	0.14
6010B	Boron	fish	mg/kg	ND		10	0.51	--		--	--	--		--	--	1.7	B	10	0.51
6010B	Calcium	fish	mg/kg	6300		20	3.2	--		--	--	--		--	--	8900	J	20	3.2
6010B	Cobalt	fish	mg/kg	0.18	B	1	0.15	--		--	--	--		--	--	0.25	B J	1	0.15
6010B	Iron	fish	mg/kg	150		10	2	--		--	--	--		--	--	150	J	10	2

Table.4.2--Analytical results of surface-water monitoring at Rio Grande at La Orilla, 2002-2003

Method	Parameter	Matrix	Unit	26-Jul-02				1-Nov-02				19-Dec-02				28-Feb-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
6010B	Lithium	fish	mg/kg	ND		5	0.22	--		--	--	--		--	--	0.26	B	5	0.22
6010B	Magnesium	fish	mg/kg	370		20	1.5	--		--	--	--		--	--	370	J	20	1.5
6010B	Manganese	fish	mg/kg	5.1		1	0.14	--		--	--	--		--	--	13	J	1	0.14
6010B	Molybdenum	fish	mg/kg	ND		2	0.24	--		--	--	--		--	--	ND		2	0.24
6010B	Potassium	fish	mg/kg	2700		300	31	--		--	--	--		--	--	2700		300	31
6010B	Sodium	fish	mg/kg	710		500	120	--		--	--	--		--	--	1100		500	120
6010B	Strontium	fish	mg/kg	19		1	0.15	--		--	--	--		--	--	27		1	0.15
6010B	Tin	fish	mg/kg	1.3	B J	10	0.42	--		--	--	--		--	--	0.64	B	10	0.42
6010B	Titanium	fish	mg/kg	3.2		1	0.2	--		--	--	--		--	--	3.2		1	0.2
6010B	Vanadium	fish	mg/kg	ND		1	0.35	--		--	--	--		--	--	0.48	B	1	0.35
	Volatile organic compounds																		
8260B	Acetone	water	ug/L	ND		10	2.9	2.9	J	10	2.9	3.2	J	10	2.9	ND		10	2.5
8260B	Benzene	water	ug/L	ND		1	0.27	ND		1	0.27	ND		1	0.27	ND		1	0.17
8260B	Bromodichloromethane	water	ug/L	ND		1	0.35	ND		1	0.35	ND		1	0.35	ND		1	0.2
8260B	Bromoform	water	ug/L	ND		1	0.46	ND		1	0.46	ND		1	0.46	ND		1	0.23
8260B	Bromomethane	water	ug/L	ND		2	0.28	ND		2	0.28	ND		2	0.28	ND		2	0.22
8260B	Carbon disulfide	water	ug/L	ND		1	0.67	ND		1	0.67	ND		1	0.67	ND		1	0.24
8260B	Carbon tetrachloride	water	ug/L	ND		1	0.35	ND		1	0.35	ND		1	0.35	ND		1	0.2
8260B	Chlorobenzene	water	ug/L	ND		1	0.24	ND		1	0.24	ND		1	0.24	ND		1	0.13
8260B	Chloroethane	water	ug/L	ND		2	0.26	ND		2	0.26	ND		2	0.26	ND		2	0.18
8260B	Chloroform	water	ug/L	ND		1	0.29	ND		1	0.29	ND		1	0.29	ND		1	0.17
8260B	Chloromethane	water	ug/L	ND		2	0.26	ND		2	0.26	ND		2	0.26	ND		2	0.91
8260B	cis-1,2-Dichloroethene	water	ug/L	ND		1	0.33	ND		1	0.33	ND		1	0.33	ND		1	0.14
8260B	cis-1,3-Dichloropropene	water	ug/L	ND		1	0.31	ND		1	0.31	ND		1	0.31	ND		1	0.19
8260B	Dibromochloromethane	water	ug/L	ND		1	0.37	ND		1	0.37	ND		1	0.37	ND		1	0.19
8260B	Ethylbenzene	water	ug/L	ND		1	0.51	ND		1	0.51	ND		1	0.51	ND		1	0.12
8260B	Methylene chloride	water	ug/L	ND		5	0.86	ND		5	0.86	ND		5	0.86	ND		5	0.21
8260B	m-Xylene & p-Xylene	water	ug/L	ND		2	0.52	ND		2	0.52	ND		2	0.52	ND		2	0.27
8260B	o-Xylene	water	ug/L	ND		1	0.24	ND		1	0.24	ND		1	0.24	ND		1	0.15
8260B	Styrene	water	ug/L	ND		1	0.28	ND		1	0.28	ND		1	0.28	ND		1	0.14
8260B	Tetrachloroethene	water	ug/L	ND		1	0.27	ND		1	0.27	ND		1	0.27	ND		1	0.26
8260B	Toluene	water	ug/L	ND		1	0.26	ND		1	0.26	ND		1	0.26	ND		1	0.15
8260B	trans-1,2-Dichloroethene	water	ug/L	ND		0.5	0.25	ND		0.5	0.25	ND		0.5	0.25	ND		0.5	0.15
8260B	trans-1,3-Dichloropropene	water	ug/L	ND		1	0.36	ND		1	0.36	ND		1	0.36	ND		1	0.2
8260B	Trichloroethene	water	ug/L	ND		1	0.24	ND		1	0.24	ND		1	0.24	ND		1	0.16
8260B	Unknown	water	ug/L	--		--	--	--		--	--	2.1	J	--	--	--		--	--
8260B	Vinyl chloride	water	ug/L	ND		1	0.26	ND		1	0.26	ND		1	0.26	ND		1	0.19
8260B	Xylenes (total)	water	ug/L	ND		2	0.73	ND		2	0.73	ND		2	0.73	ND		2	0.41
8260B	1,1,1-Trichloroethane	water	ug/L	ND		1	0.32	ND		1	0.32	ND		1	0.32	ND		1	0.16
8260B	1,1,2,2-Tetrachloroethane	water	ug/L	ND		1	0.5	ND		1	0.5	ND		1	0.5	ND		1	0.21
8260B	1,1,2-Trichloroethane	water	ug/L	ND		1	0.41	ND		1	0.41	ND		1	0.41	ND		1	0.27
8260B	1,1-Dichloroethane	water	ug/L	ND		1	0.29	ND		1	0.29	ND		1	0.29	ND		1	0.22
8260B	1,1-Dichloroethene	water	ug/L	ND		1	0.31	ND		1	0.31	ND		1	0.31	ND		1	0.23
8260B	1,2-Dichloroethane	water	ug/L	ND		1	0.43	ND		1	0.43	ND		1	0.43	ND		1	0.26
8260B	1,2-Dichloroethene (total)	water	ug/L	ND		1	0.54	ND		1	0.54	ND		1	0.54	ND		1	0.24
8260B	1,2-Dichloropropane	water	ug/L	ND		1	0.38	ND		1	0.38	ND		1	0.38	ND		1	0.18
8260B	2-Butanone (MEK)	water	ug/L	ND		5	2.4	ND		5	2.4	ND		5	2.4	ND		5	2
8260B	2-Hexanone	water	ug/L	ND		5	1.8	ND		5	1.8	ND		5	1.8	ND		5	1.7
8260B	4-Methyl-2-pentanone	water	ug/L	ND		5	1.8	ND		5	1.8	ND		5	1.8	ND		5	0.98
8260B	Acetic acid, 2-ethylhexyl este	sediment	ug/kg	--		--	--	16	T2	--	--	--		--	--	--		--	--
8260B	Acetone	sediment	ug/kg	ND		23	5.3	31		31	7	24	J	41	9.3	22	J	32	5.4
8260B	Alpha pinene	sediment	ug/kg	--		--	--	26	T2	--	--	--		--	--	36	T2	--	--
8260B	Benzene	sediment	ug/kg	ND		5.7	1	ND		7.6	1.4	ND		10	1.8	ND		8	0.19
8260B	Bromodichloromethane	sediment	ug/kg	ND		5.7	1.1	ND		7.6	1.4	ND		10	1.9	ND		8	0.32
8260B	Bromoform	sediment	ug/kg	ND		5.7	1	ND		7.6	1.4	ND		10	1.8	ND		8	0.42
8260B	Bromomethane	sediment	ug/kg	ND		11	1.4	ND		15	1.8	ND		20	2.4	ND		16	0.96
8260B	Carbon disulfide	sediment	ug/kg	ND		5.7	1.1	ND		7.6	1.4	ND		10	1.9	ND		8	0.38
8260B	Carbon tetrachloride	sediment	ug/kg	ND		5.7	1.4	ND		7.6	1.8	ND		10	2.4	ND		8	0.4
8260B	Chlorobenzene	sediment	ug/kg	ND		5.7	0.86	ND		7.6	1.1	ND		10	1.5	ND		8	0.29
8260B	Chloroethane	sediment	ug/kg	ND		11	1.5	ND		15	2	ND		20	2.6	ND		16	0.37
8260B	Chloroform	sediment	ug/kg	ND		11	1	ND		15	1.4	ND		20	1.8	ND		16	0.4
8260B	Chloromethane	sediment	ug/kg	ND		11	1.7	ND		15	2.3	ND		20	3	ND		16	0.57
8260B	cis-1,2-Dichloroethene	sediment	ug/kg	ND		2.9	0.96	ND		3.8	1.3	ND		5.1	1.7	ND		4	0.34
8260B	cis-1,3-Dichloropropene	sediment	ug/kg	ND		5.7	1.1	ND		7.6	1.5	ND		10	1.9	ND		8	0.57
8260B	Cyclohexane, 1-methyl-4-(1-met	sediment	ug/kg	--		--	--	8.6	T2	--	--	--		--	--	--		--	--
8260B	Dibromochloromethane	sediment	ug/kg	ND		5.7	1	ND		7.6	1.4	ND		10	1.8	ND		8	0.32
8260B	**Eicosane**	sediment	ug/kg	**--**		**--**	**--**	**--**		**--**	**--**	12	T2	--	--	**--**		**--**	**--**
8260B	Ethylbenzene	sediment	ug/kg	ND		5.7	1.4	ND		7.6	1.8	ND		10	2.4	ND		8	0.32
8260B	Methanethiol	sediment		--		--	--	--		--	--	--		--	--	ND		8	0.43
8260B	Methylene chloride	sediment	ug/kg	ND		5.7	0.92	ND		7.6	1.2	ND		10	1.6	12	T2	--	--
8260B	m-Xylene & p-Xylene	sediment	ug/kg	ND		2.9	2.1	ND		3.8	2.8	ND		5.1	3.6	ND		8	0.65
8260B	o-Xylene	sediment	ug/kg	ND		2.9	1.1	ND		3.8	1.5	ND		5.1	2	ND		4	0.67

Table.4.2--Analytical results of surface-water monitoring at Rio Grande at La Orilla, 2002-2003

Method	Parameter	Matrix	Unit	26-Jul-02				1-Nov-02				19-Dec-02				28-Feb-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
8260B	Styrene	sediment	ug/kg	ND		5.7	0.76	ND		7.6	1	ND		10	1.3	ND		4	0.37
8260B	Tetrachloroethene	sediment	ug/kg	ND		5.7	1.1	ND		7.6	1.5	ND		10	2	ND		8	0.34
8260B	Tetradecane	sediment	ug/kg	--		--	--			--	--	15	T2			ND		8	0.4
8260B	Toluene	sediment	ug/kg	ND		5.7	0.89	1.6	J	7.6	1.2	ND		10	1.6	ND		8	0.35
8260B	trans-1,2-Dichloroethene	sediment	ug/kg	ND		2.9	0.91	ND		3.8	1.2	ND		5.1	1.6	ND		4	0.56
8260B	trans-1,3-Dichloropropene	sediment	ug/kg	ND		5.7	1.1	ND		7.6	1.5	ND		10	2	ND		8	0.67
8260B	Trichloroethene	sediment	ug/kg	ND		5.7	1	ND		7.6	1.3	ND		10	1.8	ND		8	0.46
8260B	Tridecane	sediment	ug/kg	--		--	--	--		--	--	--		--	--	16	T2	--	--
8260B	Unknown	sediment	ug/kg	--		--	--	--		--	--	10		--	--	30	J	--	--
8260B	Unknown	sediment	ug/kg	--		--	--	96	J	--	--	48		--	--	--		--	--
8260B	Unknown	sediment	ug/kg	--		--	--	11	J	--	--	110		--	--	--		--	--
8260B	Unknown	sediment	ug/kg	--		--	--	120	J	--	--	16		--	--	--		--	--
8260B	Vinyl chloride	sediment	ug/kg	ND		5.7	1.3	ND		7.6	1.7	ND		10	2.2	ND		8	0.37
8260B	Xylenes (total)	sediment	ug/kg	ND		5.7	3.2	ND		7.6	4.3	ND		10	5.7	ND		8	0.89
8260B	1,1,1-Trichloroethane	sediment	ug/kg	ND		5.7	1.1	ND		7.6	1.5	ND		10	2	ND		8	0.42
8260B	1,1,2,2-Tetrachloroethane	sediment	ug/kg	ND		5.7	1.3	ND		7.6	1.7	ND		10	2.2	ND		8	0.89
8260B	1,1,2-Trichloroethane	sediment	ug/kg	ND		5.7	1.7	ND		7.6	2.3	ND		10	3	ND		8	0.51
8260B	1,1-Dichloroethane	sediment	ug/kg	ND		5.7	1.1	ND		7.6	1.5	ND		10	2	ND		8	0.34
8260B	1,1-Dichloroethene	sediment	ug/kg	ND		5.7	1.3	ND		7.6	1.7	ND		10	2.2	ND		8	0.49
8260B	1,2-Dichloroethane	sediment	ug/kg	ND		5.7	1.1	ND		7.6	1.5	ND		10	2	ND		8	0.35
8260B	1,2-Dichloroethene (total)	sediment	ug/kg	ND		5.7	1.7	ND		7.6	2.3	ND		10	3	ND		8	0.48
8260B	1,2-Dichloropropane	sediment	ug/kg	ND		5.7	1.4	ND		7.6	1.8	ND		10	2.4	ND		8	0.35
8260B	1-Hexanol, 2-ethyl-	sediment	ug/kg	--		--	--	9.7	T2	--	--	--		--	--	--		--	--
8260B	2-Butanone (MEK)	sediment	ug/kg	ND		23	5.4	8.9	J	31	7.2	ND		41	9.5	6.5	J	32	4.3
8260B	2-Hexanone	sediment	ug/kg	ND		23	5.3	ND		31	7	ND		41	9.3	ND		32	3.7
8260B	4-Methyl-2-pentanone	sediment	ug/kg	ND		23	4.5	ND		31	6	ND		41	7.9	ND		32	3.2
	Herbicides																		
8151A	Dalapon	water	ug/L	ND		2	0.42	ND		2	0.33	ND		2	0.33	ND		2	0.33
8151A	Dicamba	water	ug/L	ND		2	0.081	ND		2	0.086	ND		2	0.086	ND		2	0.086
8151A	Dichlorprop	water	ug/L	ND		4	0.13	ND		4	0.11	ND		4	0.11	ND		4	0.11
8151A	Dinoseb	water	ug/L	ND		0.6	0.09	ND		0.6	0.065	ND		0.6	0.065	ND		0.6	0.065
8151A	MCPA	water	ug/L	ND		400	13	ND		400	12	ND		400	12	ND		400	12
8151A	MCPP	water	ug/L	ND		400	42	ND		400	15	ND		400	15	ND		400	15
8151A	2,4,5-T	water	ug/L	ND		1	0.043	ND		1	0.043	ND		1	0.043	ND		1	0.043
8151A	2,4,5-TP (Silvex)	water	ug/L	ND		1	0.034	ND		1	0.036	ND		1	0.036	ND		1	0.036
8151A	2,4-D	water	ug/L	ND		4	0.16	ND		4	0.24	ND		4	0.24	ND		4	0.24
8151A	2,4-DB	water	ug/L	ND		4	0.21	ND		4	0.098	ND		4	0.098	ND		4	0.098
	Pesticides																		
8141A	Anilazine	water	ug/L	ND		10	1.3	ND		10	1.3	ND		10	1.3	ND		10	1.3
8141A	Atrazine	water	ug/L	ND		10	0.52	ND		10	0.52	ND		10	0.52	ND		10	0.52
8141A	Azinphos-methyl	water	ug/L	ND		2.5	0.14	ND		2.5	0.14	ND		2.5	0.14	ND		2.5	0.14
8141A	Bolstar	water	ug/L	ND		0.5	0.14	ND		0.5	0.14	ND		0.5	0.14	ND		0.5	0.14
8141A	Chlorpyrifos	water	ug/L	ND		0.5	0.054	ND		0.5	0.054	ND		0.5	0.054	ND		0.5	0.054
8141A	Coumaphos	water	ug/L	ND		0.5	0.079	ND		0.5	0.079	ND		0.5	0.079	ND		0.5	0.079
8141A	Demeton (total)	water	ug/L	ND		1	0.19	ND		1	0.19	ND		1	0.19	ND		1	0.19
8141A	Diazinon	water	ug/L	ND		0.5	0.039	ND		0.5	0.039	ND		0.5	0.039	ND		0.5	0.039
8141A	Dichlorvos	water	ug/L	ND		0.5	0.13	ND		0.5	0.13	ND		0.5	0.13	ND		0.5	0.13
8141A	Dimethoate	water	ug/L	ND		0.5	0.18	ND		0.5	0.18	ND		0.5	0.18	ND		0.5	0.18
8141A	Disulfoton	water	ug/L	ND		0.5	0.057	ND		0.5	0.057	ND		0.5	0.057	ND		0.5	0.057
8141A	EPN	water	ug/L	ND		0.5	0.05	ND		0.5	0.05	ND		0.5	0.05	ND		0.5	0.05
8141A	Ethoprop	water	ug/L	ND		0.5	0.056	ND		0.5	0.056	ND		0.5	0.056	ND		0.5	0.056
8141A	Ethyl parathion	water	ug/L	ND		0.5	0.04	ND		0.5	0.04	ND		0.5	0.04	ND		0.5	0.04
8141A	Famphur	water	ug/L	ND		1	0.054	ND		1	0.054	ND		1	0.054	ND		1	0.054
8141A	Fensulfothion	water	ug/L	ND		2.5	0.22	ND		2.5	0.22	ND		2.5	0.22	ND		2.5	0.22
8141A	Fenthion	water	ug/L	ND		0.5	0.061	ND		0.5	0.061	ND		0.5	0.061	ND		0.5	0.061
8141A	Malathion	water	ug/L	ND		1.2	0.05	ND		1.2	0.05	ND		1.2	0.05	ND		1.2	0.05
8141A	Merphos	water	ug/L	ND		5	0.063	ND		5	0.063	ND		5	0.063	ND		5	0.063
8141A	Methyl parathion	water	ug/L	ND		0.5	0.061	ND		0.5	0.061	ND		0.5	0.061	ND		0.5	0.061
8141A	Mevinphos	water	ug/L	ND		6.2	0.16	ND		6.2	0.16	ND		6.2	0.16	ND		6.2	0.16
8141A	Naled	water	ug/L	ND		10	0.22	ND		10	0.22	ND		10	0.22	ND		10	0.22
8141A	Phorate	water	ug/L	ND		0.5	0.075	ND		0.5	0.075	ND		0.5	0.075	ND		0.5	0.075
8141A	Propazine	water	ug/L	ND		10	2.5	ND		10	2.5	ND		10	2.5	ND		10	2.5
8141A	Ronnel	water	ug/L	ND		10	0.11	ND		10	0.11	ND		10	0.11	ND		10	0.11
8141A	Simazine	water	ug/L	ND		10	0.46	ND		10	0.46	ND		10	0.46	ND		10	0.46
8141A	Sulfotepp	water	ug/L	ND		0.5	0.03	ND		0.5	0.03	ND		0.5	0.03	ND		0.5	0.03
8141A	Tetrachlorvinphos (Stirophos)	water	ug/L	ND		2.5	0.056	ND		2.5	0.056	ND		2.5	0.056	ND		2.5	0.056
8141A	Thionazin	water	ug/L	ND		0.5	0.059	ND		0.5	0.059	ND		0.5	0.059	ND		0.5	0.059
8141A	Tokuthion	water	ug/L	ND		0.5	0.071	ND		0.5	0.071	ND		0.5	0.071	ND		0.5	0.071
8141A	Trichloronate	water	ug/L	ND		0.5	0.057	ND		0.5	0.057	ND		0.5	0.057	ND		0.5	0.057
8141A	O,O,O-Triethyl phosphorothioate	water	ug/L	ND		0.5	0.15	ND		0.5	0.15	ND		0.5	0.15	ND		0.5	0.15
8081A	Aldrin	sediment	ug/kg	ND		1.9	0.45	ND		52	8.3	ND		17	2.7	ND		14	2.2
8081A	alpha-BHC	sediment	ug/kg	ND		1.9	0.42	ND		52	7.6	ND		17	2.5	ND		14	2

Table.4.2--Analytical results of surface-water monitoring at Rio Grande at La Orilla, 2002-2003

Method	Parameter	Matrix	Unit	26-Jul-02				1-Nov-02				19-Dec-02				28-Feb-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
8081A	beta-BHC	sediment	ug/kg	ND		1.9	0.39	ND		52	8.3	ND		17	2.7	ND		14	2.2
8081A	Chlordane (technical)	sediment	ug/kg	ND		19	2.9	ND		520	76	ND		170	25	ND		140	20
8081A	delta-BHC	sediment	ug/kg	ND		1.9	0.13	ND		52	19	ND		17	6.3	ND		14	4.9
8081A	Dieldrin	sediment	ug/kg	ND		1.9	0.62	ND		52	7.3	ND		17	2.4	ND		14	1.9
8081A	Endosulfan I	sediment	ug/kg	ND		1.9	0.44	ND		52	11	ND		17	3.7	ND		14	3
8081A	Endosulfan II	sediment	ug/kg	ND		1.9	0.76	ND		52	13	ND		17	4.3	ND		14	3.4
8081A	Endosulfan sulfate	sediment	ug/kg	ND		1.9	0.33	ND		52	12	ND		17	4.1	ND		14	3.2
8081A	Endrin	sediment	ug/kg	ND		1.9	0.44	ND		52	13	ND		17	4.2	ND		14	3.3
8081A	Endrin aldehyde	sediment	ug/kg	ND		1.9	1.8	ND		52	26	ND		17	8.6	ND		14	6.8
8081A	gamma-BHC (Lindane)	sediment	ug/kg	ND		1.9	0.8	ND		52	7.3	ND		17	2.4	ND		14	1.9
8081A	Heptachlor	sediment	ug/kg	ND		1.9	0.54	ND		52	9.5	ND		17	3.1	ND		14	2.5
8081A	Heptachlor epoxide	sediment	ug/kg	ND		7.7	0.41	ND		200	6.7	6.8	J COL	68	2.2	ND		53	1.8
8081A	Methoxychlor	sediment	ug/kg	ND		3.8	0.19	ND		100	24	ND		33	8	ND		26	6.3
8081A	Toxaphene	sediment	ug/kg	ND		190	11	ND		5200	310	ND		1700	100	ND		1400	80
8081A	4,4'-DDD	sediment	ug/kg	ND		1.9	0.33	ND		52	11	ND		17	3.5	ND		14	2.8
8081A	4,4'-DDE	sediment	ug/kg	ND		1.9	0.37	ND		52	13	ND		17	4.5	ND		14	3.5
8081A	4,4'-DDT	sediment	ug/kg	ND		1.9	0.38	ND		52	15	ND		17	4.9	ND		14	3.8
8081A	Aldrin	fish	ug/kg	--	f	--	--	--		--	--	--		--	--	ND		6	2.2
8081A	alpha-BHC	fish	ug/kg	--	f	--	--	--		--	--	--		--	--	ND		6	0.6
8081A	alpha-Chlordane	fish	ug/kg	--	f	--	--	--		--	--	--		--	--	5	J	6	0.6
8081A	beta-BHC	fish	ug/kg	--	f	--	--	--		--	--	--		--	--	ND		6	0.6
8081A	delta-BHC	fish	ug/kg	--	f	--	--	--		--	--	--		--	--	ND		6	0.6
8081A	Dieldrin	fish	ug/kg	--	f	--	--	--		--	--	--		--	--	ND		6	0.6
8081A	Endosulfan I	fish	ug/kg	--	f	--	--	--		--	--	--		--	--	ND		6	0.6
8081A	Endosulfan II	fish	ug/kg	--	f	--	--	--		--	--	--		--	--	ND		6	0.6
8081A	Endosulfan sulfate	fish	ug/kg	--	f	--	--	--		--	--	--		--	--	ND		6	2.9
8081A	Endrin	fish	ug/kg	--	f	--	--	--		--	--	--		--	--	ND		6	0.6
8081A	Endrin aldehyde	fish	ug/kg	--	f	--	--	--		--	--	--		--	--	ND		6	0.6
8081A	Endrin ketone	fish	ug/kg	--	f	--	--	--		--	--	--		--	--	ND		6	0.6
8081A	gamma-BHC (Lindane)	fish	ug/kg	--	f	--	--	--		--	--	--		--	--	ND		6	0.6
8081A	gamma-Chlordane	fish	ug/kg	--	f	--	--	--		--	--	--		--	--	ND		6	1.8
8081A	Heptachlor	fish	ug/kg	--	f	--	--	--		--	--	--		--	--	ND		6	0.6
8081A	Heptachlor epoxide	fish	ug/kg	--	f	--	--	--		--	--	--		--	--	ND		22	0.56
8081A	Methoxychlor	fish	ug/kg	--	f	--	--	--		--	--	--		--	--	37		11	0.56
8081A	Toxaphene	fish	ug/kg	--	f	--	--	--		--	--	--		--	--	ND		60	33
8081A	4,4'-DDD	fish	ug/kg	--	f	--	--	--		--	--	--		--	--	ND		6	0.6
8081A	4,4'-DDE	fish	ug/kg	--	f	--	--	--		--	--	--		--	--	6.2		6	0.6
8081A	4,4'-DDT	fish	ug/kg	--	f	--	--	--		--	--	--		--	--	ND		6	1.4
	Explosives																		
8330	HMX	water	ug/L	ND		0.25	0.19	ND		0.25	0.03	ND		0.25	0.03	ND		0.25	0.03
8330	Nitrobenzene	water	ug/L	ND		0.25	0.08	ND		0.25	0.04	ND		0.25	0.04	ND		0.25	0.04
8330	Nitroglycerin	water	ug/L	ND		2.5	0.9	ND		2.5	0.3	ND		2.5	0.3	ND		2.5	0.3
8330	PETN	water	ug/L	ND		2.5	1.3	ND		2.5	0.5	ND		2.5	0.5	ND		2.5	0.5
8330	RDX	water	ug/L	ND		0.25	0.17	ND		0.25	0.03	ND		0.25	0.03	ND		0.25	0.03
8330	Tetryl	water	ug/L	ND		0.5	0.15	ND		0.5	0.03	ND		0.5	0.03	ND		0.5	0.03
8330	1,3,5-Trinitrobenzene	water	ug/L	ND		0.25	0.092	ND		0.25	0.03	ND		0.25	0.03	ND		0.25	0.03
8330	1,3-Dinitrobenzene	water	ug/L	ND		0.25	0.11	ND		0.25	0.03	ND		0.25	0.03	ND		0.25	0.03
8330	2,4,6-Trinitrotoluene	water	ug/L	ND		0.25	0.089	ND		0.25	0.05	ND		0.25	0.05	ND		0.25	0.05
8330	2,4-Dinitrotoluene	water	ug/L	ND		0.25	0.1	ND		0.25	0.04	ND		0.25	0.04	ND		0.25	0.04
8330	2,6-Dinitrotoluene	water	ug/L	ND		0.25	0.15	ND		0.25	0.03	ND		0.25	0.03	ND		0.25	0.03
8330	2-Amino-4,6-dinitrotoluene	water	ug/L	ND		0.25	0.12	ND		0.25	0.04	ND		0.25	0.04	ND		0.25	0.04
8330	2-Nitrotoluene	water	ug/L	ND		0.25	0.16	ND		0.25	0.04	ND		0.25	0.04	ND		0.25	0.04
8330	3-Nitrotoluene	water	ug/L	ND		0.25	0.18	ND		0.25	0.09	ND		0.25	0.09	ND		0.25	0.09
8330	4-Amino-2,6-dinitrotoluene	water	ug/L	ND		0.25	0.1	ND		0.25	0.05	ND		3.2	0.05	ND		3.2	0.05
8330	4-Nitrotoluene	water	ug/L	ND		0.25	0.23	ND		0.25	0.05	ND		0.4	0.05	ND		0.4	0.05
	Polyaromatic hydrocarbons																		
8310	Acenaphthene	sediment	ug/kg	ND		230	4.5	ND		3100	60	17	J COL	410	7.9	ND		320	6.2
8310	Acenaphthylene	sediment	ug/kg	ND		230	14	ND		3100	180	ND		410	24	ND		320	19
8310	Anthracene	sediment	ug/kg	ND		23	3	ND		310	40	ND		41	5.3	ND		32	4.2
8310	Benzo(a)anthracene	sediment	ug/kg	ND		23	5.7	ND		310	76	ND		41	10	ND		32	8
8310	Benzo(a)pyrene	sediment	ug/kg	5.5	J COL	23	2.1	34	J COL	310	28	16	J COL	41	3.6	13	J	32	2.9
8310	Benzo(b)fluoranthene	sediment	ug/kg	17	J	23	4.5	ND		310	60	36	J	41	7.9	17	J	32	6.2
8310	Benzo(ghi)perylene	sediment	ug/kg	ND		46	3	ND		610	40	13	J	81	5.3	ND		64	4.2
8310	Benzo(k)fluoranthene	sediment	ug/kg	5.8	J	23	2.6	ND		310	35	11	J COL	41	4.7	ND		32	3.7
8310	Chrysene	sediment	ug/kg	12	J	46	2.8	ND		610	37	18	J COL	81	4.9	19	J	64	3.8
8310	Dibenzo(a,h)anthracene	sediment	ug/kg	ND		46	5.3	ND		610	70	16	J COL	81	9.3	ND		64	7.3
8310	Fluoranthene	sediment	ug/kg	12	J COL	46	9.7	ND		610	130	44	J COL	81	17	ND		64	14
8310	Fluorene	sediment	ug/kg	ND		46	10	ND		610	130	ND		81	18	ND		64	14
8310	Indeno(1,2,3-cd)pyrene	sediment	ug/kg	ND		46	2.6	ND		610	35	12	J COL	81	4.7	ND		64	3.7
8310	Naphthalene	sediment	ug/kg	ND		230	14	ND		3100	180	ND		410	24	ND		320	19
8310	Phenanthrene	sediment	ug/kg	ND		46	3.8	ND		610	50	10	J	81	6.7	ND		64	5.3
8310	Pyrene	sediment	ug/kg	9.2	J COL	46	7.9	ND		610	110	17	J COL	81	14	ND		64	11

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Method	Parameter	Matrix	Unit	26-Jul-02				1-Nov-02				19-Dec-02				28-Feb-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
8310	1-Methylnaphthalene	sediment	ug/kg	8	J COL	230	8	ND		3100	110	19	J COL	410	14	ND		320	11
8310	2-Methylnaphthalene	sediment	ug/kg	ND		230	3.8	ND		3100	50	ND		410	6.7	ND		320	5.3
	Total Petroleum Hydrocarbons																		
9071B	n-Hexane Ext. Material	sediment	mg/kg	2200		570	180	420	B	760	240	ND		1000	320	ND		800	260
9071B	SGT-HEM (Petroleum Hydrocarbons)	sediment	mg/kg	250	B	570	140	ND		760	180	ND		1000	240	ND		800	190
	Pharmaceuticals																		
ITMS	Amitriptyline	water	ng/L	ND		10		ND		10	--	--		--	--	ND		10	--
ITMS	Beta-Estradiol	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Caffeine	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Cholesterol	water	ng/L	3000		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Desipramine	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Dextro-Norgestrel	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Doxepin	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Equilin	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Estrone	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Enthynl Estradiol	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Imipramine	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Medroxyprogesterone	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Megestrol Acetate	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Menstranol	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Nordoxepin	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Norethindrone	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Norethynodrel	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Nortriptyline	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Paroxetine	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Phenytoin	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Prednisone	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Progesterone	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Propoxyphene	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Protroptyline	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Prozac	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Setraline	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Tamoxifen	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Trimipramine maleate	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	6 alpha-Methyprednisolone	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
	Grain size analysis																		
D422	Maximum particle size	sediment	--	coarse sand		--	--	coarse sand		--	--	fine gravel		--	--	fine gravel		--	--
D422	Particle size, 4750 microns, gravel	sediment	%	--		--	--	--		--	--	0.2		0.1	--	0.1		0.1	--
D422	Particle size, 2000 microns, sand	sediment	%	0.9		0.1	--	0.1		0.1	--	0.3		0.1	--	0.4		0.1	--
D422	Particle size, 850 microns, sand	sediment	%	5.7		0.1	--	1.7		0.1	--	2.2		0.1	--	3.4		0.1	--
D422	Particle size, 425 microns, sand	sediment	%	23.4		0.1	--	10.9		0.1	--	13.5		0.1	--	17.0		0.1	--
D422	Particle size, 250 microns, sand	sediment	%	26.6		0.1	--	18.8		0.1	--	25.4		0.1	--	21.7		0.1	--
D422	Particle size, 180 microns, sand	sediment	%	9.2		0.1	--	12.0		0.1	--	11.0		0.1	--	7.6		0.1	--
D422	Particle size, 150 microns, sand	sediment	%	2.8		0.1	--	4.1		0.1	--	1.6		0.1	--	2.6		0.1	--
D422	Particle size, 75 microns, sand	sediment	%	10.9		0.1	--	5.1		0.1	--	2.8		0.1	--	9.8		0.1	--
D422	Particle size, 35.0 microns, silt	sediment	%	9.8		--	--	--		0.1	--	--		--	--	--		0.1	--
D422	Particle size, 33.7 microns, silt	sediment	%	--		--	--	--		--	--	2.8		0.1	--	--		--	--
D422	Particle size, 31.4 microns, silt	sediment	%	--		--	--	--		--	--	--		--	--	19.4		0.1	--
D422	Particle size, 27.9 microns, silt	sediment	%	--		--	--	25.8		0.1	--	--		--	--	--		--	--
D422	Particle size, 22.6 microns, silt	sediment	%	2.6		0.1	--	--		--	--	--		--	--	--		--	--
D422	Particle size, 21.6 microns, silt	sediment	%	--		--	--	--		--	--	3.0		0.1	--	--		--	--
D422	Particle size, 20.7 microns, silt	sediment	%	--		--	--	--		--	--	--		--	--	3.2		0.1	--
D422	Particle size, 18.5 microns, silt	sediment	%	--		--	--	2.4		0.1	--	--		--	--	--		--	--
D422	Particle size, 13.3 microns, silt	sediment	%	2.6		0.1	--	--		--	--	--		--	--	--		--	--
D422	Particle size, 12.8 microns, silt	sediment	%	--		--	--	--		--	--	7.4		0.1	--	--		--	--
D422	Particle size, 12.5 microns, silt	sediment	%	--		--	--	--		--	--	--		--	--	3.7		0.1	--
D422	Particle size, 11.2 microns, silt	sediment	%	--		--	--	2.7		0.1	--	--		--	--	--		--	--
D422	Particle size, 9.4 microns, silt	sediment	%	1.2		0.1	--	--		--	--	--		--	--	--		--	--
D422	Particle size, 9.3 microns, silt	sediment	%	--		--	--	--		--	--	3.0		0.1	--	--		--	--
D422	Particle size, 9.0 microns, silt	sediment	%	--		--	--	--		--	--	--		--	--	1.8		0.1	--
D422	Particle size, 8.2 microns, silt	sediment	%	--		--	--	2.0		0.1	--	--		--	--	--		--	--
D422	Particle size, 6.8 microns, silt	sediment	%	1.3		0.1	--	--		--	--	--		--	--	--		--	--
D422	Particle size, 6.4 microns, silt	sediment	%	--		--	--	--		--	--	--		--	--	1.8		0.1	--
D422	Particle size, 6.3 microns, silt	sediment	%	--		--	--	--		--	--	1.5		0.1	--	--		--	--
D422	Particle size, 6.0 microns, silt	sediment	%	--		--	--	1.2		0.1	--	--		--	--	--		--	--
D422	Particle size, 3.3 microns, clay	sediment	%	1.4		0.1	--	--		--	--	--		--	--	0.9		0.1	--
D422	Particle size, 3.2 microns, clay	sediment	%	--		--	--	--		--	--	5.9		0.1	--	--		--	--
D422	Particle size, 3.0 microns, clay	sediment	%	--		--	--	2.7		0.1	--	--		--	--	--		--	--
D422	Particle size, 1.4 microns, clay	sediment	%	0.6		0.1	--	--		--	--	4.4		0.1	--	1.0		0.1	--
D422	Particle size, less than 1.4 microns, clay	sediment	%	1.3		0.1	--	--		--	--	15.2		0.1	--	5.4		0.1	--
D422	Particle size, 1.3 microns, clay	sediment	%	--		--	--	2.7		0.1	--	--		--	--	--		--	--
D422	Particle size, less than 1.3 microns, clay	sediment	%	--		--	--	7.8		0.1	--	--		--	--	--		--	--

Table.4.2--Analytical results of surface-water monitoring at Rio Grande at La Orilla, 2002-2003

Method	Parameter	Matrix	Unit	26-Jul-02				1-Nov-02				19-Dec-02				28-Feb-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]

[1] See table 5 for description of qualifier codes.

[2] Reporting limit -- the lowest level at which measurements become quantitatively meaningful, ie., the quantitation limit, which is approximately three times the method detection limit. Reporting limits cannot be less than the statistically detrmined method detection limit.

[3] Method detection limit -- the minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero and is determined from replicate analyses of low level standards in a typical representative matrix.

PROVISIONAL DATA--SUBJECT TO REVISION

Table 4.3--Analytical results of surface-water monitoring at Rio Grande at Barelas

[Field parameters measured by field staff. Laboratory analyses performed by Severn Trent Laboratory and the New Mexico Scientific Laboratory (pharmaceuticals). --, no data; °C, degrees Celsius; mm of Hg, millimeters of mercury; ft^3/sec, cubic feet per second; mg/L, milligram per liter; %, percent; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units; ug/L, micrograms per liter; g/kg, grams per kilogram; mg/kg, milligram per kilogram; ug/kg, micrograms per kilogram; ITMS, Ion trap mass spectrometer; ng/L, nanograms per liter; n/a, not applicable.]

Method	Parameter	Matrix	Unit	22-Aug-02				17-Jan-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
--	Station identification number	--	--	350446106462310		--	--	350445106402110		--	--
--	Latitude/Longitude	--	--	350446/1064623		--	--	350445/1064021		--	--
--	Time	--	--	1000		--	--	1130		--	--
	Field parameters										
170.1	Air temperature	air	°C	23.1		0.1	0.01	2.9		0.1	0.01
170.1	Water temperature	water	°C	20.9		0.1	0.01	3.3		0.1	0.01
--	Barometric pressure	air	mm of Hg	639		--	--	643		--	--
--	Discharge, instantaneous	water	ft^3/s	416		--	--	475		--	--
150.1	pH - unfiltered	water	--	8.0		0.1	0.01	8.1		0.1	0.01
--	Dissolved oxygen	water	mg/L	8.3		0.1	0.01	11.2		0.1	0.01
--	Dissolved oxygen, saturation	water	%	92.9		1	0.01	84		1	0.01
120.1	Specific conductance - unfiltered	water	uS/cm	332		1	1	239		1	1
180.1	Turbidity	water	NTU	237		1	0.1	85		1	0.1
310.1	Alkalinity, as $CaCO_3$	water	mg/L	101		1	0.1	141		1	0.1
310.1	Bicarbonate, as HCO_3	water	mg/L	121		1	0.1	169		1	0.1
310.1	Carbonate, as CO_3	water	mg/L	0.7		0.1	0.1	1.0		0.1	0.1
	General chemistry										
130.2	Hardness, as $CaCO_3$	water	mg/L	180	J	5	2	150	J	5	2
160.1	Total dissolved solids	water	mg/L	280	J	10	5	300		10	5
160.2	Total suspended solids	water	mg/L	240	Q	10	4.5	79		4	1.8
314	Perchlorate	water	ug/L	ND		20	1.5	ND		20	0.2
405.1	Biochemical oxygen demand (BOD)	water	mg/L	ND		2	0.23	ND		2	0.23
410.4	Chemical oxygen demand (COD)	water	mg/L	14	B	20	3.5	ND		20	3.5
9060	Total organic carbon	sediment	g/kg	2.3	J	2	0.59	3.5		2	0.59
D2216	Moisture	sediment	%	24		0.1	--	28		0.1	--
D2216	Moisture	fish	%	--		--	--	--	f	--	--
Total Residue	Lipids (Red Shiner)	fish	%	--		--	--	0.48		0.1	--
	Common anions										
300.0A	Bromide	water	mg/L	ND		0.2	0.03	ND		0.2	0.03
300.0A	Chloride	water	mg/L	5.2		3	0.1	16		3	0.1
300.0A	Fluoride	water	mg/L	0.41	B	1	0.03	0.53	B	1	0.03
300.0A	Nitrate	water	mg/L	0.22	B	0.5	0.03	0.29	B	0.5	0.03
300.0A	Nitrite	water	mg/L	ND		0.5	0.04	ND		0.5	0.04
300.0A	Phosphate as P, Ortho	water	mg/L	ND		0.5	0.04	ND		0.5	0.04
300.0A	Sulfate	water	mg/L	72	Q	25	1	61	Q	25	1
9012A	Cyanide, Total	water	mg/L	0.018		0.01	0.002	ND		0.01	0.0039
9012A	Cyanide, Total	sediment	mg/kg	0.2	B J	0.66	0.11	0.29	B J	0.69	0.14
9056	Bromide	sediment	mg/kg	ND		2.6	0.39	ND		2.8	0.41
9056	Chloride	sediment	mg/kg	17	B J	39	1.3	26	B J	41	1.4
9056	Fluoride	sediment	mg/kg	2.8	B	13	0.39	2.4	B	14	0.41
9056	Nitrate	sediment	mg/kg	2.7	B	6.6	0.39	2.9	B J	6.9	0.41
9056	Nitrite	sediment	mg/kg	ND		6.6	0.52	2	B J	6.9	0.55
9056	Phosphate as P, Ortho	sediment	mg/kg	2.7	B	6.6	0.52	ND		6.9	0.55
9056	Sulfate	sediment	mg/kg	42	B	66	2.6	23	B J	69	2.8

Table 4.3--Analytical results of surface-water monitoring at Rio Grande at Barelas

Method	Parameter	Matrix	Unit	22-Aug-02				17-Jan-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
	Nutrients										
350.1	Ammonia as N	water	mg/L	0.016	B	0.1	0.015	0.12		0.1	0.015
351.2	Total Kjeldahl Nitrogen	water	mg/L	ND		0.5	0.14	ND		0.5	0.083
353.2	Nitrate-Nitrite	water	mg/L	ND		0.1	0.012	0.094	B	0.1	0.012
354.1	Nitrite	water	mg/L	ND		0.01	0.002	ND		0.01	0.002
365.3	Total phosphorus	water	mg/L	0.12	J	0.05	0.013	0.58	G	0.1	0.026
350.1	Ammonia as N	sediment	mg/kg	0.59	B J	1.3	0.2	0.69	B	1.4	0.21
351.2	Total Kjeldahl Nitrogen	sediment	mg/kg	69		66	26	270		69	7.9
353.2	Nitrate-Nitrite	sediment	mg/kg	0.28	B J	1.3	0.16	ND		1.4	0.17
354.1	Nitrite	sediment	mg/kg	0.057	B	0.13	0.052	0.09	B J	0.14	0.055
365.3	Total phosphorus	sediment	mg/kg	160	J Q	33	7.9	430	Q	140	33
	Trace elements										
6020	Antimony	water	ug/L	0.18	B	2	0.04	0.16	B	2	0.04
6020	Arsenic	water	ug/L	2.4	B	5	0.061	3.7	B	5	0.061
6020	Barium	water	ug/L	81		1	0.057	90	J	1	0.057
6020	Beryllium	water	ug/L	ND		1	0.028	--		--	--
6020	Cadmium	water	ug/L	ND		1	0.022	0.025	B	1	0.022
6020	Chromium	water	ug/L	0.41	B	2	0.24	1.1	B J	2	0.24
6020	Cobalt	water	ug/L	0.15	B	1	0.015	0.25	B	1	0.015
6020	Copper	water	ug/L	0.91	B	2	0.63	0.95	B	2	0.63
6020	Lead	water	ug/L	ND		1	0.15	ND		1	0.15
6020	Manganese	water	ug/L	0.64	B J	1	0.061	2.2		1	0.061
6020	Molybdenum	water	ug/L	3.7	J	2	0.023	5.4		2	0.023
6020	Nickel	water	ug/L	1.1	B	2	0.25	0.29	B J	2	0.25
6020	Selenium	water	ug/L	0.33	B	5	0.19	0.34	B	5	0.19
6020	Silver	water	ug/L	ND		5	0.012	ND		5	0.012
6020	Thallium	water	ug/L	0.016	B J	1	0.015	ND		1	0.015
6020	Tin	water	ug/L	ND		10	0.054	ND		10	0.054
6020	Uranium	water	ug/L	1.9	J	1	0.0015	4.1		1	0.0015
6020	Vanadium	water	ug/L	5.2		5	0.07	3.9	B	5	0.07
6020	Zinc	water	ug/L	5.8	B	10	2.3	3.4	B J	10	2.3
7470A	Mercury	water	ug/L	ND		0.2	0.028	ND		0.2	0.015
6010B	Aluminum	water	ug/L	--		--	--	ND		100	20
6010B	Beryllium	water	ug/L	--		--	--	0.46	B J	5	0.22
6010B	Boron	water	ug/L	32	B	100	5.2	87	B	100	5.2
6010B	Calcium	water	ug/L	47000		200	31	44000		200	31
6010B	Iron	water	ug/L	ND		100	13	16	B	100	13
6010B	Lithium	water	ug/L	18		10	2.1	60		10	2.1
6010B	Magnesium	water	ug/L	8400		200	24	8500		200	24
6010B	Potassium	water	ug/L	2500	B	3000	490	3100		3000	490
6010B	Silica	water	ug/L	16000		1100	23	20000		1100	23
6010B	Sodium	water	ug/L	21000		5000	1500	31000		5000	1500
6010B	Strontium	water	ug/L	400		10	0.35	390		10	0.35
6010B	Titanium	water	ug/L	ND		10	3.3	ND		10	0.97
6020	Antimony	sediment	mg/kg	ND		0.26	0.0038	ND		0.28	0.004
6020	Arsenic	sediment	mg/kg	1.6		0.66	0.022	2.8		0.69	0.023
6020	Barium	sediment	mg/kg	79	J	0.13	0.031	100	J	0.14	0.033
6020	Beryllium	sediment	mg/kg	0.22		0.13	0.0058	--		--	--
6020	Cadmium	sediment	mg/kg	0.036	B	0.13	0.0018	0.067	B J	0.14	0.0019
6020	Chromium	sediment	mg/kg	4.8	J	0.26	0.024	5.7	J	0.28	0.025
6020	Cobalt	sediment	mg/kg	2.3		0.13	0.0016	2.8	J	0.14	0.0017
6020	Copper	sediment	mg/kg	3.2	J	0.26	0.02	4.6	J	0.28	0.021
6020	Lead	sediment	mg/kg	3.5	J	0.13	0.0055	4.3	J	0.14	0.0058
6020	Manganese	sediment	mg/kg	130	J	0.13	0.03	170	J	0.14	0.032
6020	Molybdenum	sediment	mg/kg	0.15	B	0.26	0.0029	0.15	B J	0.28	0.003

Table 4.3--Analytical results of surface-water monitoring at Rio Grande at Barelas

Method	Parameter	Matrix	Unit	22-Aug-02				17-Jan-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
6020	Nickel	sediment	mg/kg	3.9		0.13	0.017	4.9	J	0.14	0.018
6020	Selenium	sediment	mg/kg	0.16	B	0.66	0.064	0.23	B	0.69	0.068
6020	Silver	sediment	mg/kg	0.035	B	0.13	0.003	0.044	B	0.14	0.0032
6020	Thallium	sediment	mg/kg	0.059	B	0.13	0.0013	0.078	B J	0.14	0.0014
6020	Tin	sediment	mg/kg	ND		1.3	0.1	0.13	B J	1.4	0.11
6020	Uranium	sediment	mg/kg	0.44		0.13	0.0024	0.46	J	0.14	0.0025
6020	Vanadium	sediment	mg/kg	12	J	0.66	0.0073	13	J	0.69	0.0077
6020	Zinc	sediment	mg/kg	16		1.3	0.46	22	J	1.4	0.48
7471A	Mercury	sediment	mg/kg	ND		0.043	0.0033	ND		0.046	0.0035
6010B	Aluminum	sediment	mg/kg	4600		13	2.8	9300	J	14	2.9
6010B	Beryllium	sediment	mg/kg	--		--	--	0.53	B	0.69	0.047
6010B	Boron	sediment	mg/kg	2.3	B	13	0.49	4.7	B	14	0.51
6010B	Calcium	sediment	mg/kg	8200		26	10	18000	J	28	11
6010B	Iron	sediment	mg/kg	5700		13	2.1	9300	J	14	2.2
6010B	Lithium	sediment	mg/kg	5.3	B	6.6	0.14	11		6.9	0.15
6010B	Magnesium	sediment	mg/kg	1700		26	2	3600	J	28	2.1
6010B	Potassium	sediment	mg/kg	980		390	46	1900		410	48
6010B	Sodium	sediment	mg/kg	ND		660	79	ND		690	83
6010B	Strontium	sediment	mg/kg	32		1.3	0.02	80		1.4	0.069
6010B	Titanium	sediment	mg/kg	160		1.3	0.16	180	J	1.4	0.17
6020	Antimony	fish	mg/kg	--		--	--	0.03	B	0.2	0.02
6020	Arsenic	fish	mg/kg	--		--	--	0.18	B	0.5	0.0076
6020	Beryllium	fish	mg/kg	--		--	--	--		--	--
6020	Cadmium	fish	mg/kg	--		--	--	0.012	B	0.1	0.0027
6020	Chromium	fish	mg/kg	--		--	--	0.22	J	0.2	0.034
6020	Copper	fish	mg/kg	--		--	--	0.71	J	0.2	0.061
6020	Lead	fish	mg/kg	--		--	--	0.033	B	0.1	0.02
6020	Nickel	fish	mg/kg	--		--	--	0.036	B J	0.1	0.011
6020	Selenium	fish	mg/kg	--		--	--	1.1		0.5	0.018
6020	Silver	fish	mg/kg	--		--	--	0.0038	B	0.1	0.002
6020	Thallium	fish	mg/kg	--		--	--	0.0047	B	0.1	0.002
6020	Uranium	fish	mg/kg	--		--	--	0.0087	B	0.1	0.002
6020	Zinc	fish	mg/kg	--		--	--	50	J	1	0.13
245.6	Mercury	fish	ug/kg	--		--	--	30	B	100	5.9
6010B	Aluminum	fish	mg/kg	--		--	--	32		10	3.1
6010B	Barium	fish	mg/kg	--		--	--	3.7		1	0.12
6010B	Beryllium	fish	mg/kg	--		--	--	ND		0.5	0.14
6010B	Boron	fish	mg/kg	--		--	--	ND		10	0.51
6010B	Calcium	fish	mg/kg	--		--	--	8300	J	20	3.2
6010B	Cobalt	fish	mg/kg	--		--	--	0.22	B	1	0.15
6010B	Iron	fish	mg/kg	--		--	--	26		10	2
6010B	Lithium	fish	mg/kg	--		--	--	ND		5	0.22
6010B	Magnesium	fish	mg/kg	--		--	--	320		20	1.5
6010B	Manganese	fish	mg/kg	--		--	--	3		1	0.14
6010B	Molybdenum	fish	mg/kg	--		--	--	ND		2	0.24
6010B	Potassium	fish	mg/kg	--		--	--	2000		300	31
6010B	Sodium	fish	mg/kg	--		--	--	550		500	120
6010B	Strontium	fish	mg/kg	--		--	--	21		1	0.15
6010B	Tin	fish	mg/kg	--		--	--	2.1	B J	10	0.42
6010B	Titanium	fish	mg/kg	--		--	--	1.3		1	0.2
6010B	Vanadium	fish	mg/kg	--		--	--	ND		1	0.35
	Volatile organic compounds										
8260B	Acetone	water	ug/L	ND		10	2.9	ND		10	2.9
8260B	Benzene	water	ug/L	ND		1	0.27	ND		1	0.27
8260B	Bromodichloromethane	water	ug/L	ND		1	0.35	ND		1	0.35

Table 4.3--Analytical results of surface-water monitoring at Rio Grande at Barelas

Method	Parameter	Matrix	Unit	22-Aug-02				17-Jan-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
8260B	Bromoform	water	ug/L	ND		1	0.46	ND		1	0.46
8260B	Bromomethane	water	ug/L	ND		2	0.28	ND		2	0.28
8260B	Carbon disulfide	water	ug/L	ND		1	0.67	ND		1	0.67
8260B	Carbon tetrachloride	water	ug/L	ND		1	0.35	ND		1	0.35
8260B	Chlorobenzene	water	ug/L	ND		1	0.24	ND		1	0.24
8260B	Chloroethane	water	ug/L	ND		2	0.26	ND		2	0.26
8260B	Chloroform	water	ug/L	ND		1	0.29	ND		1	0.29
8260B	Chloromethane	water	ug/L	ND		2	0.26	ND		2	0.26
8260B	cis-1,2-Dichloroethene	water	ug/L	ND		1	0.33	ND		1	0.33
8260B	cis-1,3-Dichloropropene	water	ug/L	ND		1	0.31	ND		1	0.31
8260B	Dibromochloromethane	water	ug/L	ND		1	0.37	ND		1	0.37
8260B	Ethylbenzene	water	ug/L	ND		1	0.51	ND		1	0.51
8260B	Methylene chloride	water	ug/L	ND		5	0.86	ND		5	0.86
8260B	m-Xylene & p-Xylene	water	ug/L	ND		2	0.52	ND		2	0.52
8260B	o-Xylene	water	ug/L	ND		1	0.24	ND		1	0.24
8260B	Styrene	water	ug/L	ND		1	0.28	ND		1	0.28
8260B	Tetrachloroethene	water	ug/L	ND		1	0.27	ND		1	0.27
8260B	Toluene	water	ug/L	ND		1	0.26	ND		1	0.26
8260B	trans-1,2-Dichloroethene	water	ug/L	ND		0.5	0.25	ND		0.5	0.25
8260B	trans-1,3-Dichloropropene	water	ug/L	ND		1	0.36	ND		1	0.36
8260B	Trichloroethene	water	ug/L	ND		1	0.24	ND		1	0.24
8260B	Vinyl chloride	water	ug/L	ND		1	0.26	ND		1	0.26
8260B	Xylenes (total)	water	ug/L	ND		2	0.73	ND		2	0.73
8260B	1,1,1-Trichloroethane	water	ug/L	ND		1	0.32	ND		1	0.32
8260B	1,1,2,2-Tetrachloroethane	water	ug/L	ND		1	0.5	ND		1	0.5
8260B	1,1,2-Trichloroethane	water	ug/L	ND		1	0.41	ND		1	0.41
8260B	1,1-Dichloroethane	water	ug/L	ND		1	0.29	ND		1	0.29
8260B	1,1-Dichloroethene	water	ug/L	ND		1	0.31	ND		1	0.31
8260B	1,2-Dichloroethane	water	ug/L	ND		1	0.43	ND		1	0.43
8260B	1,2-Dichloroethene (total)	water	ug/L	ND		1	0.54	ND		1	0.54
8260B	1,2-Dichloropropane	water	ug/L	ND		1	0.38	ND		1	0.38
8260B	2-Butanone (MEK)	water	ug/L	ND		5	2.4	ND		5	2.4
8260B	2-Hexanone	water	ug/L	ND		5	1.8	ND		5	1.8
8260B	4-Methyl-2-pentanone	water	ug/L	ND		5	1.8	ND		5	1.8
8260B	Acetone	sediment	ug/kg	14	J	26	6	22	J	28	4.7
8260B	Benzene	sediment	ug/kg	ND		6.6	1.2	ND		6.9	0.17
8260B	Bicyclo[3.1.1]hept-2-ene, 3,6,	sediment	ug/kg	--		--	--	7.4	T2	--	--
8260B	Bromodichloromethane	sediment	ug/kg	ND		6.6	1.2	ND		6.9	0.28
8260B	Bromoform	sediment	ug/kg	ND		6.6	1.2	ND		6.9	0.36
8260B	Bromomethane	sediment	ug/kg	ND		13	1.6	ND		14	0.83
8260B	Carbon disulfide	sediment	ug/kg	ND		6.6	1.2	ND		6.9	0.33
8260B	Carbon tetrachloride	sediment	ug/kg	ND		6.6	1.6	ND		6.9	0.35
8260B	Chlorobenzene	sediment	ug/kg	ND		6.6	0.98	ND		6.9	0.25
8260B	Chloroethane	sediment	ug/kg	ND		13	1.7	ND		14	0.32
8260B	Chloroform	sediment	ug/kg	ND		13	1.2	ND		14	0.35
8260B	Chloromethane	sediment	ug/kg	ND		13	2	ND		14	0.5
8260B	cis-1,2-Dichloroethene	sediment	ug/kg	ND		3.3	1.1	ND		3.5	0.29
8260B	cis-1,3-Dichloropropene	sediment	ug/kg	ND		6.6	1.3	ND		6.9	0.5
8260B	Cyclohexene, 4-methyl-1-(1-met	sediment	ug/kg	--		--	--	9.1	T2	--	--
8260B	Dibromochloromethane	sediment	ug/kg	ND		6.6	1.2	ND		6.9	0.28
8260B	Dimethyl sulfide	sediment	ug/kg	--		--	--	11	T2	--	--
8260B	Ethylbenzene	sediment	ug/kg	ND		6.6	1.6	ND		6.9	0.37
8260B	Methanethiol	sediment	ug/kg	--		--	--	27	T2	--	--
8260B	Methylene chloride	sediment	ug/kg	ND		6.6	1	2.7	J B	6.9	0.57
8260B	m-Xylene & p-Xylene	sediment	ug/kg	ND		3.3	2.4	ND		3.5	0.58

Table 4.3--Analytical results of surface-water monitoring at Rio Grande at Barelas

Method	Parameter	Matrix	Unit	22-Aug-02				17-Jan-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
8260B	o-Xylene	sediment	ug/kg	ND		3.3	1.3	ND		3.5	0.32
8260B	Styrene	sediment	ug/kg	ND		6.6	0.87	ND		6.9	0.29
8260B	Tetrachloroethene	sediment	ug/kg	ND		6.6	1.3	ND		6.9	0.35
8260B	Toluene	sediment	ug/kg	ND		6.6	1	ND		6.9	0.3
8260B	trans-1,2-Dichloroethene	sediment	ug/kg	ND		3.3	1	ND		3.5	0.48
8260B	trans-1,3-Dichloropropene	sediment	ug/kg	ND		6.6	1.3	ND		6.9	0.58
8260B	Trichloroethene	sediment	ug/kg	ND		6.6	1.1	ND		6.9	0.4
8260B	Unknown	sediment	ug/kg	9.3		--	--	--		--	--
8260B	Unknown	sediment	ug/kg	11		--	--	--		--	--
8260B	Vinyl chloride	sediment	ug/kg	ND		6.6	1.4	ND		6.9	0.32
8260B	Xylenes (total)	sediment	ug/kg	ND		6.6	3.7	ND		6.9	0.77
8260B	1,1,1-Trichloroethane	sediment	ug/kg	ND		6.6	1.3	ND		6.9	0.36
8260B	1,1,2,2-Tetrachloroethane	sediment	ug/kg	ND		6.6	1.4	ND		6.9	0.77
8260B	1,1,2-Trichloroethane	sediment	ug/kg	ND		6.6	2	ND		6.9	0.44
8260B	1,1-Dichloroethane	sediment	ug/kg	ND		6.6	1.3	ND		6.9	0.29
8260B	1,1-Dichloroethene	sediment	ug/kg	ND		6.6	1.4	ND		6.9	0.43
8260B	1,2-Dichloroethane	sediment	ug/kg	ND		6.6	1.3	ND		6.9	0.3
8260B	1,2-Dichloroethene (total)	sediment	ug/kg	ND		6.6	2	ND		6.9	0.41
8260B	1,2-Dichloropropane	sediment	ug/kg	ND		6.6	1.6	ND		6.9	0.3
8260B	2-Butanone (MEK)	sediment	ug/kg	ND		26	6.2	8.3	J	28	3.7
8260B	2-Hexanone	sediment	ug/kg	ND		26	6	ND		28	3.2
8260B	4-Methyl-2-pentanone	sediment	ug/kg	ND		26	5.1	ND		28	2.8
	Herbicides										
8151A	Dalapon	water	ug/L	ND		2	0.42	ND		2	0.33
8151A	Dicamba	water	ug/L	ND		2	0.081	ND		2	0.086
8151A	Dichlorprop	water	ug/L	ND		4	0.13	ND		4	0.11
8151A	Dinoseb	water	ug/L	ND		0.6	0.09	ND		0.6	0.065
8151A	MCPA	water	ug/L	ND		400	13	ND		400	12
8151A	MCPP	water	ug/L	ND		400	42	ND		400	15
8151A	2,4,5-T	water	ug/L	ND		1	0.043	ND		1	0.043
8151A	2,4,5-TP (Silvex)	water	ug/L	ND		1	0.034	ND		1	0.036
8151A	2,4-D	water	ug/L	ND		4	0.16	ND		4	0.24
8151A	2,4-DB	water	ug/L	ND		4	0.21	ND		4	0.098
	Pesticides										
8141A	Anilazine	water	ug/L	ND		10	1.3	ND		10	1.3
8141A	Atrazine	water	ug/L	ND		10	0.52	ND		10	0.52
8141A	Azinphos-methyl	water	ug/L	ND		2.5	0.14	ND		2.5	0.14
8141A	Bolstar	water	ug/L	ND		0.5	0.14	ND		0.5	0.14
8141A	Chlorpyrifos	water	ug/L	ND		0.5	0.054	ND		0.5	0.054
8141A	Coumaphos	water	ug/L	ND		0.5	0.079	ND		0.5	0.079
8141A	Demeton (total)	water	ug/L	ND		1	0.19	ND		1	0.19
8141A	Diazinon	water	ug/L	ND		0.5	0.039	ND		0.5	0.039
8141A	Dichlorvos	water	ug/L	ND		0.5	0.13	ND		0.5	0.13
8141A	Dimethoate	water	ug/L	ND		0.5	0.18	ND		0.5	0.18
8141A	Disulfoton	water	ug/L	ND		0.5	0.057	ND		0.5	0.057
8141A	EPN	water	ug/L	ND		0.5	0.05	ND		0.5	0.05
8141A	Ethoprop	water	ug/L	ND		0.5	0.056	ND		0.5	0.056
8141A	Ethyl parathion	water	ug/L	ND		0.5	0.04	ND		0.5	0.04
8141A	Famphur	water	ug/L	ND		1	0.054	ND		1	0.054
8141A	Fensulfothion	water	ug/L	ND		2.5	0.22	ND		2.5	0.22
8141A	Fenthion	water	ug/L	ND		0.5	0.061	ND		0.5	0.061
8141A	Malathion	water	ug/L	ND		1.2	0.05	ND		1.2	0.05
8141A	Merphos	water	ug/L	ND		5	0.063	ND		5	0.063
8141A	Methyl parathion	water	ug/L	ND		0.5	0.061	ND		0.5	0.061
8141A	Mevinphos	water	ug/L	ND		6.2	0.16	ND		6.2	0.16

Table 4.3--Analytical results of surface-water monitoring at Rio Grande at Barelas

Method	Parameter	Matrix	Unit	22-Aug-02				17-Jan-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
8141A	Naled	water	ug/L	ND		10	0.22	ND		10	0.22
8141A	Phorate	water	ug/L	ND		0.5	0.075	ND		0.5	0.075
8141A	Propazine	water	ug/L	ND		10	2.5	ND		10	2.5
8141A	Ronnel	water	ug/L	ND		10	0.11	ND		10	0.11
8141A	Simazine	water	ug/L	ND		10	0.46	ND		10	0.46
8141A	Sulfotepp	water	ug/L	ND		0.5	0.03	ND		0.5	0.03
8141A	Tetrachlorvinphos (Stirophos)	water	ug/L	ND		2.5	0.056	ND		2.5	0.056
8141A	Thionazin	water	ug/L	ND		0.5	0.059	ND		0.5	0.059
8141A	Tokuthion	water	ug/L	ND		0.5	0.071	ND		0.5	0.071
8141A	Trichloronate	water	ug/L	ND		0.5	0.057	ND		0.5	0.057
8141A	O,O,O-Triethyl phosphorothioate	water	ug/L	ND		0.5	0.15	ND		0.5	0.15
8081A	Aldrin	sediment	ug/kg	ND		2.2	0.51	ND		23	3.7
8081A	alpha-BHC	sediment	ug/kg	0.6	J COL	2.2	0.49	ND		23	3.5
8081A	beta-BHC	sediment	ug/kg	ND		2.2	0.45	ND		23	3.7
8081A	Chlordane (technical)	sediment	ug/kg	ND		22	3.3	ND		230	35
8081A	delta-BHC	sediment	ug/kg	0.75	J COL	2.2	0.14	ND		23	8.6
8081A	Dieldrin	sediment	ug/kg	0.74	J COL	2.2	0.71	ND		23	3.3
8081A	Endosulfan I	sediment	ug/kg	ND		2.2	0.5	ND		23	5.1
8081A	Endosulfan II	sediment	ug/kg	ND		2.2	0.87	ND		23	5.8
8081A	Endosulfan sulfate	sediment	ug/kg	ND		2.2	0.38	ND		23	5.5
8081A	Endrin	sediment	ug/kg	ND		2.2	0.5	ND		23	5.7
8081A	Endrin aldehyde	sediment	ug/kg	ND		2.2	2	ND		23	12
8081A	gamma-BHC (Lindane)	sediment	ug/kg	ND		2.2	0.92	ND		23	3.3
8081A	Heptachlor	sediment	ug/kg	ND		2.2	0.62	ND		23	4.3
8081A	Heptachlor epoxide	sediment	ug/kg	ND		8.8	0.47	ND		93	3
8081A	Methoxychlor	sediment	ug/kg	ND		4.3	0.22	ND		46	11
8081A	Toxaphene	sediment	ug/kg	ND		220	13	ND		2300	140
8081A	4,4'-DDD	sediment	ug/kg	0.73	J COL	2.2	0.38	ND		23	4.8
8081A	4,4'-DDE	sediment	ug/kg	0.66	J COL	2.2	0.42	ND		23	6.1
8081A	4,4'-DDT	sediment	ug/kg	ND		2.2	0.43	ND		23	6.6
8081A	Aldrin	fish	ug/kg	--		--	--	ND		12	4.3
8081A	alpha-BHC	fish	ug/kg	--		--	--	ND		12	1.2
8081A	alpha-Chlordane	fish	ug/kg	--		--	--	ND		12	1.2
8081A	beta-BHC	fish	ug/kg	--		--	--	ND		12	1.2
8081A	delta-BHC	fish	ug/kg	--		--	--	ND		12	1.2
8081A	Dieldrin	fish	ug/kg	--		--	--	ND		12	1.2
8081A	Endosulfan I	fish	ug/kg	--		--	--	ND		12	1.2
8081A	Endosulfan II	fish	ug/kg	--		--	--	ND		12	1.2
8081A	Endosulfan sulfate	fish	ug/kg	--		--	--	ND		12	5.6
8081A	Endrin	fish	ug/kg	--		--	--	ND		12	1.2
8081A	Endrin aldehyde	fish	ug/kg	--		--	--	ND		12	1.2
8081A	Endrin ketone	fish	ug/kg	--		--	--	ND		12	1.2
8081A	gamma-BHC (Lindane)	fish	ug/kg	--		--	--	ND		12	1.2
8081A	gamma-Chlordane	fish	ug/kg	--		--	--	ND		12	3.5
8081A	Heptachlor	fish	ug/kg	--		--	--	ND		12	1.2
8081A	Heptachlor epoxide	fish	ug/kg	--		--	--	ND		43	1.1
8081A	Methoxychlor	fish	ug/kg	--		--	--	ND		21	1.1
8081A	Toxaphene	fish	ug/kg	--		--	--	ND		120	64
8081A	4,4'-DDD	fish	ug/kg	--		--	--	ND		12	1.2
8081A	4,4'-DDE	fish	ug/kg	--		--	--	ND		12	1.2
8081A	4,4'-DDT	fish	ug/kg	--		--	--	ND		12	2.7
	Explosives										
8330	HMX	water	ug/L	ND		0.25	0.19	ND		0.25	0.03
8330	Nitrobenzene	water	ug/L	ND		0.25	0.08	ND		0.25	0.04
8330	Nitroglycerin	water	ug/L	ND		2.5	0.9	ND		2.5	0.3

Table 4.3--Analytical results of surface-water monitoring at Rio Grande at Barelas

Method	Parameter	Matrix	Unit	22-Aug-02				17-Jan-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
8330	PETN	water	ug/L	ND		2.5	1.3	ND		2.5	0.5
8330	RDX	water	ug/L	ND		0.25	0.17	ND		0.25	0.03
8330	Tetryl	water	ug/L	ND		0.5	0.15	ND		0.5	0.03
8330	1,3,5-Trinitrobenzene	water	ug/L	ND		0.25	0.092	ND		0.25	0.03
8330	1,3-Dinitrobenzene	water	ug/L	ND		0.25	0.11	ND		0.25	0.03
8330	2,4,6-Trinitrotoluene	water	ug/L	ND		0.25	0.089	ND		0.25	0.05
8330	2,4-Dinitrotoluene	water	ug/L	ND		0.25	0.1	ND		0.25	0.04
8330	2,6-Dinitrotoluene	water	ug/L	ND		0.25	0.15	ND		0.25	0.03
8330	2-Amino-4,6-dinitrotoluene	water	ug/L	ND		0.25	0.12	ND		0.25	0.04
8330	2-Nitrotoluene	water	ug/L	ND		0.25	0.16	ND		0.25	0.04
8330	3-Nitrotoluene	water	ug/L	ND		0.25	0.18	ND		0.25	0.09
8330	4-Amino-2,6-dinitrotoluene	water	ug/L	ND		0.25	0.1	ND		3.2	0.05
8330	4-Nitrotoluene	water	ug/L	ND		0.25	0.23	ND		0.4	0.05
	Polyaromatic hydrocarbons										
8310	Acenaphthene	sediment	ug/kg	ND		260	5.1	ND		280	5.4
8310	Acenaphthylene	sediment	ug/kg	ND		260	16	19	J	280	17
8310	Anthracene	sediment	ug/kg	ND		26	3.4	ND		28	3.6
8310	Benzo(a)anthracene	sediment	ug/kg	ND		26	6.6	ND		28	6.9
8310	Benzo(a)pyrene	sediment	ug/kg	ND		26	2.4	17	J	28	2.5
8310	Benzo(b)fluoranthene	sediment	ug/kg	ND		26	5.1	ND		28	5.4
8310	Benzo(ghi)perylene	sediment	ug/kg	ND		52	3.4	10	J B C	55	3.6
8310	Benzo(k)fluoranthene	sediment	ug/kg	ND		26	3.0	ND		28	3.2
8310	Chrysene	sediment	ug/kg	ND		52	3.1	ND		55	3.3
8310	Dibenzo(a,h)anthracene	sediment	ug/kg	ND		52	6.0	20	J COL	55	6.4
8310	Fluoranthene	sediment	ug/kg	22	J COL	52	11	58	COL	55	12
8310	Fluorene	sediment	ug/kg	ND		52	11	ND		55	12
8310	Indeno(1,2,3-cd)pyrene	sediment	ug/kg	ND		52	3.0	ND		55	3.2
8310	Naphthalene	sediment	ug/kg	ND		260	16	ND		280	17
8310	Phenanthrene	sediment	ug/kg	ND		52	4.3	10	J COL	55	4.6
8310	Pyrene	sediment	ug/kg	ND		52	9.0	24	J COL	55	9.5
8310	1-Methylnaphthalene	sediment	ug/kg	9.2	J	260	9.2	33	J COL	280	9.7
8310	2-Methylnaphthalene	sediment	ug/kg	ND		260	4.3	ND		280	4.6
	Total Petroleum Hydrocarbons										
9071B	n-Hexane Ext. Material	sediment	mg/kg	ND		660	210	380	B	690	220
9071B	SGT-HEM (Petroleum Hydrocarbons)	sediment	mg/kg	ND		660	160	ND		690	170

Table 4.3--Analytical results of surface-water monitoring at Rio Grande at Barelas

Method	Parameter	Matrix	Unit	22-Aug-02				17-Jan-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
	Pharmaceuticals										
ITMS	Amitriptyline	water	ng/L	ND		10	--	ND		10	--
ITMS	Beta-Estradiol	water	ng/L	ND		10	--	ND		10	--
ITMS	Caffeine	water	ng/L	ND		10	--	ND		10	--
ITMS	Cholesterol	water	ng/L	ND		10	--	ND		10	--
ITMS	Desipramine	water	ng/L	ND		10	--	ND		10	--
ITMS	Dextro-Norgestrel	water	ng/L	ND		10	--	ND		10	--
ITMS	Doxepin	water	ng/L	ND		10	--	ND		10	--
ITMS	Equilin	water	ng/L	ND		10	--	ND		10	--
ITMS	Estrone	water	ng/L	ND		10	--	ND		10	--
ITMS	Enthynl Estradiol	water	ng/L	ND		10	--	ND		10	--
ITMS	Imipramine	water	ng/L	ND		10	--	ND		10	--
ITMS	Medroxyprogesterone	water	ng/L	ND		10	--	ND		10	--
ITMS	Megestrol Acetate	water	ng/L	ND		10	--	ND		10	--
ITMS	Menstranol	water	ng/L	ND		10	--	ND		10	--
ITMS	Nordoxepin	water	ng/L	ND		10	--	ND		10	--
ITMS	Norethindrone	water	ng/L	ND		10	--	ND		10	--
ITMS	Norethynodrel	water	ng/L	ND		10	--	ND		10	--
ITMS	Nortriptyline	water	ng/L	ND		10	--	ND		10	--
ITMS	Paroxetine	water	ng/L	ND		10	--	ND		10	--
ITMS	Phenytoin	water	ng/L	ND		10	--	ND		10	--
ITMS	Prednisone	water	ng/L	ND		10	--	ND		10	--
ITMS	Progesterone	water	ng/L	ND		10	--	ND		10	--
ITMS	Propoxyphene	water	ng/L	ND		10	--	ND		10	--
ITMS	Protroptyline	water	ng/L	ND		10	--	ND		10	--
ITMS	Prozac	water	ng/L	ND		10	--	ND		10	--
ITMS	Setraline	water	ng/L	ND		10	--	ND		10	--
ITMS	Tamoxifen	water	ng/L	ND		10	--	ND		10	--
ITMS	Trimipramine maleate	water	ng/L	ND		10	--	ND		10	--
ITMS	6 alpha-Methyprednisolone	water	ng/L	ND		10	--	ND		10	--
	Grain size analysis										
D422	Maximum particle size	sediment	--	coarse sand		--	--	coarse sand		--	--
D422	Particle size, 9500 microns, gravel	sediment	%	--		--	--	1.4		0.1	--
D422	Particle size, 4750 microns, gravel	sediment	%	--		--	--	0.1		0.1	--
D422	Particle size, 2000 microns, sand	sediment	%	1.3		0.1	--	2.4		0.1	--
D422	Particle size, 850 microns, sand	sediment	%	5.5		0.1	--	7.0		0.1	--
D422	Particle size, 425 microns, sand	sediment	%	25.5		0.1	--	16.6		0.1	--
D422	Particle size, 250 microns, sand	sediment	%	41.4		0.1	--	14.6		0.1	--
D422	Particle size, 180 microns, sand	sediment	%	13.0		0.1	--	4.8		0.1	--
D422	Particle size, 150 microns, sand	sediment	%	1.8		0.1	--	2.4		0.1	--
D422	Particle size, 75 microns, sand	sediment	%	2.4		0.1	--	13.9		0.1	--
D422	Particle size, 34.4 microns, silt	sediment	%	3.1		--	--	--		--	--
D422	Particle size, 33.9 microns, silt	sediment	%	--		0.1	--	13.6		0.1	--
D422	Particle size, 21.9 microns, silt	sediment	%	0.4		0.1	--	3.6		0.1	--
D422	Particle size, 13.1 microns, silt	sediment	%	--		--	--	5.7		0.1	--
D422	Particle size, 12.7 microns, silt	sediment	%	0.4		0.1	--	--		--	--
D422	Particle size, 9.2 microns, silt	sediment	%	--		--	--	1.8		0.1	--
D422	Particle size, 9.1 microns, silt	sediment	%	0.9		0.1	--	--		--	--
D422	Particle size, 6.7 microns, silt	sediment	%	--		--	--	1.8		0.1	--
D422	Particle size, 6.5 microns, silt	sediment	%	0.0		0.1	--	--		--	--
D422	Particle size, 3.4 microns, clay	sediment	%	--		--	--	1.8		0.1	--
D422	Particle size, 3.2 microns, clay	sediment	%	2.7		0.1	--	--		--	--
D422	Particle size, 1.4 microns, clay	sediment	%	--		--	--	1.8		0.1	--
D422	Particle size, less than 1.4 microns, clay	sediment	%	--		--	--	6.6		0.1	--
D422	Particle size, 1.3 microns, clay	sediment	%	0.0		0.1	--	--		--	--

Table 4.3--Analytical results of surface-water monitoring at Rio Grande at Barelas

Method	Parameter	Matrix	Unit	22-Aug-02				17-Jan-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
D422	Particle size, less than 1.3 microns, clay	sediment	%	1.7		0.1	--	--		--	--

[1] See table 5 for description of qualifier codes.

[2] Reporting limit -- the lowest level at which measurements become quantitatively meaningful, ie., the quantitation limit, which is approximately three times the method detection limit. Reporting limits cannot be less than the statistically determined method detection limit.

[3] Method detection limit -- the minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero and is determined from replicate analyses of low level standards in a typical representative matrix.

Table 4.4.--Analytical results of surface-water monitoring at Albuquerque Waste Water Treatment Plant Outfall

[Field parameters measured by field staff. Laboratory analyses performed by Severn Trent Laboratory and the New Mexico Scientific Laboratory (pharmaceuticals). --, no data; °C, degrees Celsius; mm of Hg, millimeters of mercury; ft^3/sec, cubic feet per second; mg/L, milligram per liter; %, percent; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units; ug/L, micrograms per liter; g/kg, grams per kilogram; mg/kg, milligram per kilogram; ug/kg, micrograms per kilogram; ITMS, Ion trap mass spectrometer; ng/L, nanograms per liter; n/a, not applicable.]

Method	Parameter	Matrix	Unit (standard)	6-Aug-02				29-Jan-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
--	Station identification number	--	--	350103106401610		--	--	350102106401710		--	--
--	Latitude/Longitude	--	--	350103/1064016		--	--	350102/1064017		--	--
--	Time	--	--	0945		--	--	0930		--	--
	Field parameters										
170.1	Air temperature	air	°C	24.3		0.1	0.01	8.3		0.1	0.01
170.1	Water temperature	water	°C	28.3		0.1	0.01	20.3		0.1	0.01
--	Barometric pressure	air	mm of Hg	641		1	--	643		1	--
--	Discharge, instantaneous	water	ft^3/s	57		1	--	44		1	--
150.1	pH - unfiltered	water	--	7.1		0.1	0.01	6.7		0.1	0.01
--	Dissolved oxygen	water	mg/L	6.1		0.1	0.01	7.1		0.1	0.01
--	Dissolved oxygen, saturation	water	%	78		1	0.01	78		1	0.01
120.1	Specific conductance - unfiltered	water	uS/cm	816		1	1	671		1	1
180.1	Turbidity	water	NTU	1.9	B	1	0.1	1.9	B	1	0.1
310.1	Alkalinity, as $CaCO_3$	water	mg/L	146		1	0.1	132		1	0.1
310.1	Bicarbonate, as HCO_3	water	mg/L	176		1	0.1	160		1	0.1
310.1	Carbonate, as CO_3	water	mg/L	0.5		0.1	0.1	0.4		0.1	0.1
	General chemistry										
130.2	Hardness, as $CaCO_3$	water	mg/L	130	J	5	2	120	J	5	2
160.1	Total dissolved solids	water	mg/L	500	J	10	5	510		10	5
160.2	Total suspended solids	water	mg/L	2.4	B	4	1.8	ND		4	1.8
314	Perchlorate	water	ug/L	ND		20	1.5	3.3	B	20	0.2
405.1	Biochemical oxygen demand (BOD)	water	mg/L	ND		2	0.23	2.0		2.0	0.23
410.4	Chemical oxygen demand (COD)	water	mg/L	18	B	20	3.5	23		20	3.5
9060	Total organic carbon	sediment	g/kg	1	B	2	0.59	0.62	B	2	0.59
D2216	Moisture	sediment	%	21		0.1	2.2	19		0.1	--
D2216	Moisture	fish	%	77		0.1	--	72		0.1	--
Total res.	Lipids (Red shiner)	fish	%	--	f	--	--	--		--	--
Total res.	Lipids (White bass)	fish	%	--		--	--	2.9		0.1	--
	Common anions										
300.0A	Bromide	water	mg/L	0.82	J	0.2	0.03	0.49		0.2	0.03
300.0A	Chloride	water	mg/L	93	Q	15	0.5	95	J Q	15	0.5
300.0A	Fluoride	water	mg/L	1.3		1	0.03	1.5		1	0.03
300.0A	Nitrate	water	mg/L	2.8		0.5	0.03	4.6		0.5	0.03
300.0A	Nitrite	water	mg/L	ND		0.5	0.04	ND		0.5	0.04
300.0A	Phosphate as P, Ortho	water	mg/L	0.69		0.5	0.04	2.1		0.5	0.04
300.0A	Sulfate	water	mg/L	84	Q	25	1	100	Q	25	1
9012A	Cyanide, Total	water	mg/L	0.0071	B J	0.01	0.002	0.0075	B	0.01	0.0039
9012A	Cyanide, Total	sediment	mg/kg	0.29	B	0.63	0.11	0.42	B J	0.62	0.12
9056	Bromide	sediment	mg/kg	ND		2.5	0.38	ND		2.5	0.37
9056	Chloride	sediment	mg/kg	34	B	38	1.3	36	B J	37	1.2

Table 4.4.--Analytical results of surface-water monitoring at Albuquerque Waste Water Treatment Plant Outfall

Method	Parameter	Matrix	Unit (standard)	6-Aug-02				29-Jan-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
9056	Fluoride	sediment	mg/kg	2.7	B	13	0.38	2.2	B J	12	0.37
9056	Nitrate	sediment	mg/kg	2.8	B	6.3	0.38	2.6	B J	6.2	0.37
9056	Nitrite	sediment	mg/kg	2.0	B	6.3	0.51	ND		6.2	0.5
9056	Phosphate as P, Ortho	sediment	mg/kg	3.5	B	6.3	0.51	3.5	B	6.2	0.5
9056	Sulfate	sediment	mg/kg	32	B	63	2.5	37	B J	62	2.5
	Nutrients										
350.1	Ammonia as N	water	mg/L	0.2		0.1	0.015	0.1		0.1	0.038
351.2	Total Kjeldahl Nitrogen	water	mg/L	0.86		0.5	0.14	0.97		0.5	0.083
353.2	Nitrate-Nitrite	water	mg/L	3.0		0.1	0.012	4.6		0.1	0.012
354.1	Nitrite	water	mg/L	0.027	J	0.01	0.002	0.012		0.01	0.0018
365.3	Total phosphorus	water	mg/L	3.1	Q	0.5	0.13	1.9	J Q	0.5	0.13
350.1	Ammonia as N	sediment	mg/kg	0.7	B	1.3	0.19	1.2		1.2	0.47
351.2	Total Kjeldahl Nitrogen	sediment	mg/kg	120		63	25	28	B	62	7.1
353.2	Nitrate-Nitrite	sediment	mg/kg	0.65	B J	1.3	0.15	0.55	B J	1.2	0.15
354.1	Nitrite	sediment	mg/kg	0.073	B	0.13	0.051	0.05	B	0.12	0.022
365.3	Total phosphorus	sediment	mg/kg	74	Q	32	7.6	210	Q	62	15
	Trace elements										
6020	Antimony	water	ug/L	0.37	B	2	0.04	0.53	B J	2	0.04
6020	Arsenic	water	ug/L	3.8	B	5	0.061	7.3	J	5	0.061
6020	Barium	water	ug/L	12		1	0.057	8.8		1	0.057
6020	Beryllium	water	ug/L	ND		1	0.028	--	--	--	--
6020	Cadmium	water	ug/L	0.03	B	1	0.022	0.027	B	1	0.022
6020	Chromium	water	ug/L	0.57	B	2	0.24	1	B J	2	0.24
6020	Cobalt	water	ug/L	0.43	B	1	0.015	0.54	B J	1	0.015
6020	Copper	water	ug/L	0.82	B	2	0.63	1.7	B	2	0.63
6020	Lead	water	ug/L	ND		1	0.15	0.23	B	1	0.15
6020	Manganese	water	ug/L	44		1	0.061	32	J	1	0.061
6020	Molybdenum	water	ug/L	8.8		2	0.023	7.8	J	2	0.023
6020	Nickel	water	ug/L	2.7		2	0.25	2		2	0.25
6020	Selenium	water	ug/L	0.42	B	5	0.19	0.62	B	5	0.19
6020	Silver	water	ug/L	0.076	B	5	0.012	0.019	B	5	0.012
6020	Thallium	water	ug/L	ND		1	0.015	ND		1	0.015
6020	Tin	water	ug/L	ND		10	0.054	0.31	B J	10	0.054
6020	Uranium	water	ug/L	1	J	1	0.0015	0.83	B J	1	0.0015
6020	Vanadium	water	ug/L	5.7		5	0.07	8.6	J	5	0.07
6020	Zinc	water	ug/L	18		10	2.3	23		10	2.3
7470A	Mercury	water	ug/L	ND		0.2	0.028	ND		0.2	0.015
6010B	Aluminum	water	ug/L	ND		100	20	ND		100	20
6010B	Beryllium	water	ug/L	--		--	--	0.38	B J	5	0.22
6010B	Boron	water	ug/L	380		100	5.2	340		100	5.2
6010B	Calcium	water	ug/L	40000		200	31	39000		200	31
6010B	Iron	water	ug/L	19	B	100	13	73	B	100	13
6010B	Lithium	water	ug/L	59		10	2.1	58		10	2.1
6010B	Magnesium	water	ug/L	6300		200	24	6500		200	24
6010B	Potassium	water	ug/L	17000		3000	490	18000		3000	490
6010B	Silica	water	ug/L	56000	J	1100	23	55000		1100	23
6010B	Sodium	water	ug/L	120000		5000	1500	120000		5000	1500
6010B	Strontium	water	ug/L	350		10	0.35	330		10	0.35

Table 4.4.--Analytical results of surface-water monitoring at Albuquerque Waste Water Treatment Plant Outfall

Method	Parameter	Matrix	Unit (standard)	6-Aug-02				29-Jan-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
6010B	Titanium	water	ug/L	ND		10	0.97	ND		10	0.97
6020	Antimony	sediment	mg/kg	0.083	B	0.25	0.0037	0.012	B J	0.25	0.0036
6020	Arsenic	sediment	mg/kg	0.8		0.63	0.022	1.5		0.62	0.021
6020	Barium	sediment	mg/kg	15	J	0.13	0.03	19	J	0.12	0.03
6020	Beryllium	sediment	mg/kg	0.094	B	0.13	0.0056	--		--	--
6020	Cadmium	sediment	mg/kg	0.02	B	0.13	0.0018	0.023	B	0.12	0.0017
6020	Chromium	sediment	mg/kg	4.3	J	0.25	0.023	3.3	J	0.25	0.022
6020	Cobalt	sediment	mg/kg	3.9		0.13	0.0015	3.2	J	0.12	0.0015
6020	Copper	sediment	mg/kg	7.9	J	0.25	0.019	8.4	J	0.25	0.019
6020	Lead	sediment	mg/kg	3.0	J	0.13	0.0053	1.9		0.12	0.0052
6020	Manganese	sediment	mg/kg	100	J	0.13	0.029	93		0.12	0.029
6020	Molybdenum	sediment	mg/kg	0.76	J	0.25	0.0028	0.21	B	0.25	0.0027
6020	Nickel	sediment	mg/kg	17		0.13	0.016	11	J	0.12	0.016
6020	Selenium	sediment	mg/kg	0.13	B	0.63	0.062	0.13	B	0.62	0.061
6020	Silver	sediment	mg/kg	0.1	B J	0.13	0.0029	0.1	B	0.12	0.0029
6020	Thallium	sediment	mg/kg	0.029	B	0.13	0.0013	0.019	B	0.12	0.0012
6020	Tin	sediment	mg/kg	0.41	B	1.3	0.1	0.19	B	1.2	0.098
6020	Uranium	sediment	mg/kg	0.29		0.13	0.0023	0.27		0.12	0.0022
6020	Vanadium	sediment	mg/kg	9.5	J	0.63	0.0071	8.1	J	0.62	0.007
6020	Zinc	sediment	mg/kg	15		1.3	0.44	13		1.2	0.43
7471A	Mercury	sediment	mg/kg	ND		0.042	0.0032	ND		0.041	0.0031
6010B	Aluminum	sediment	mg/kg	2600		13	2.7	2000		12	2.6
6010B	Beryllium	sediment	mg/kg	--		--	--	0.13	B	0.62	0.042
6010B	Boron	sediment	mg/kg	ND		13	0.47	ND		12	0.46
6010B	Calcium	sediment	mg/kg	2100		25	9.9	2500		25	9.7
6010B	Iron	sediment	mg/kg	8000		13	2	6100	J	12	2
6010B	Lithium	sediment	mg/kg	3.1	B	6.3	0.14	2.7	B	6.2	0.14
6010B	Magnesium	sediment	mg/kg	3100	J	25	1.9	2300		25	1.9
6010B	Potassium	sediment	mg/kg	390		380	44	340	B	370	43
6010B	Sodium	sediment	mg/kg	320	B	630	76	110	B	620	75
6010B	Strontium	sediment	mg/kg	170		1.3	0.019	13		1.2	0.062
6010B	Titanium	sediment	mg/kg	240		1.3	0.15	200		1.2	0.15
6020	Antimony	fish	mg/kg	ND		860	86	ND		0.72	0.072
6020	Arsenic	fish	mg/kg	0.27	B	2.1	0.033	0.92	B	1.8	0.027
6020	Beryllium	fish	mg/kg	ND		0.43	0.0099	--		--	--
6020	Cadmium	fish	mg/kg	0.067	B	0.43	0.012	ND		0.36	0.0098
6020	Chromium	fish	mg/kg	1.3	J	0.86	0.14	2	J	0.72	0.12
6020	Copper	fish	mg/kg	5.8		0.86	0.26	5.3		0.72	0.22
6020	Lead	fish	mg/kg	0.12	B	0.43	0.086	0.11	B	0.36	0.072
6020	Nickel	fish	mg/kg	0.71	J	0.43	0.048	1.2	J	0.36	0.04
6020	Selenium	fish	mg/kg	2.9		2.1	0.077	10		1.8	0.065
6020	Silver	fish	mg/kg	0.27	B J	0.43	0.0086	ND		0.36	0.0072
6020	Thallium	fish	mg/kg	0.042	B	0.43	0.0086	0.011	B	0.36	0.0072
6020	Uranium	fish	mg/kg	0.023	B	0.43	0.0086	0.019	B	0.36	0.0072
6020	Zinc	fish	mg/kg	220	J	4.3	0.54	85	J	3.6	0.45
245.6	Mercury	fish	ug/kg	0.09	B	430	25	1300		360	21
6010B	Aluminum	fish	mg/kg	ND		43	13	34	B	36	11
6010B	Barium	fish	mg/kg	4.6		4.3	0.51	4.5	J	3.6	0.43

Table 4.4.--Analytical results of surface-water monitoring at Albuquerque Waste Water Treatment Plant Outfall

Method	Parameter	Matrix	Unit (standard)	6-Aug-02				29-Jan-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
6010B	Beryllium	fish	mg/kg	--		--	--	ND		1.8	0.51
6010B	Boron	fish	mg/kg	ND		43	2.2	ND		36	1.8
6010B	Calcium	fish	mg/kg	20000	J	86	14	33000	J	72	12
6010B	Cobalt	fish	mg/kg	ND		4.3	0.64	ND		3.6	0.54
6010B	Iron	fish	mg/kg	79		43	8.6	94		36	7.2
6010B	Lithium	fish	mg/kg	ND		21	0.94	ND		18	0.8
6010B	Magnesium	fish	mg/kg	1100		86	6.6	1300		72	5.5
6010B	Manganese	fish	mg/kg	5.7		4.3	0.6	3.3	B	3.6	0.51
6010B	Molybdenum	fish	mg/kg	ND		8.6	1	ND		7.2	0.87
6010B	Potassium	fish	mg/kg	10000		1300	130	9900		1100	110
6010B	Sodium	fish	mg/kg	2600		2100	510	4200		1800	430
6010B	Strontium	fish	mg/kg	51		4.3	0.64	76		3.6	0.54
6010B	Tin	fish	mg/kg	6.8	B J	43	1.8	3.7	B J	36	1.5
6010B	Titanium	fish	mg/kg	1	B	4.3	0.86	ND		3.6	0.72
6010B	Vanadium	fish	mg/kg	ND		4.3	1.5	ND		3.6	1.3
	Volatile organic compounds										
8260B	Acetone	water	ug/L	6.1	J	10	2.9	2.6	J	10	2.5
8260B	Benzene	water	ug/L	ND		1	0.27	ND		1	0.17
8260B	Bromodichloromethane	water	ug/L	2.6		1	0.35	3.2		1	0.2
8260B	Bromoform	water	ug/L	0.97	J	1	0.46	0.43	J	1	0.23
8260B	Bromomethane	water	ug/L	ND		2	0.28	ND		2	0.22
8260B	Carbon disulfide	water	ug/L	ND		1	0.67	ND		1	0.24
8260B	Carbon tetrachloride	water	ug/L	ND		1	0.35	ND		1	0.2
8260B	Chlorobenzene	water	ug/L	ND		1	0.24	ND		1	0.13
8260B	Chloroethane	water	ug/L	ND		2	0.26	ND		2	0.18
8260B	Chloroform	water	ug/L	1.6		1	0.29	3		1	0.17
8260B	Chloromethane	water	ug/L	ND		2	0.26	ND		2	0.26
8260B	cis-1,2-Dichloroethene	water	ug/L	ND		1	0.33	ND		1	0.14
8260B	cis-1,3-Dichloropropene	water	ug/L	ND		1	0.31	ND		1	0.19
8260B	Dibromochloromethane	water	ug/L	3.1		1	0.37	2.3		1	0.19
8260B	Ethylbenzene	water	ug/L	ND		1	0.51	ND		1	0.12
8260B	Methylene chloride	water	ug/L	ND		5	0.86	ND		5	0.21
8260B	m-Xylene & p-Xylene	water	ug/L	ND		2	0.52	ND		2	0.27
8260B	o-Xylene	water	ug/L	ND		1	0.24	ND		1	0.15
8260B	Styrene	water	ug/L	ND		1	0.28	ND		1	0.14
8260B	Tetrachloroethene	water	ug/L	ND		1	0.27	ND		1	0.26
8260B	Toluene	water	ug/L	ND		1	0.26	ND		1	0.15
8260B	trans-1,2-Dichloroethene	water	ug/L	ND		0.5	0.25	ND		0.5	0.15
8260B	trans-1,3-Dichloropropene	water	ug/L	ND		1	0.36	ND		1	0.2
8260B	Trichloroethene	water	ug/L	ND		1	0.24	ND		1	0.16
8260B	Vinyl chloride	water	ug/L	ND		1	0.26	ND		1	0.19
8260B	Xylenes (total)	water	ug/L	ND		2	0.73	ND		2	0.41
8260B	1,1,1-Trichloroethane	water	ug/L	ND		1	0.32	ND		1	0.16
8260B	1,1,2,2-Tetrachloroethane	water	ug/L	ND		1	0.5	ND		1	0.21
8260B	1,1,2-Trichloroethane	water	ug/L	ND		1	0.41	ND		1	0.27
8260B	1,1-Dichloroethane	water	ug/L	ND		1	0.29	ND		1	0.22
8260B	1,1-Dichloroethene	water	ug/L	ND		1	0.31	ND		1	0.23
8260B	1,2-Dichloroethane	water	ug/L	ND		1	0.43	ND		1	0.26

Table 4.4.--Analytical results of surface-water monitoring at Albuquerque Waste Water Treatment Plant Outfall

Method	Parameter	Matrix	Unit (standard)	6-Aug-02				29-Jan-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
8260B	1,2-Dichloroethene (total)	water	ug/L	ND		1	0.54	ND		1	0.24
8260B	1,2-Dichloropropane	water	ug/L	ND		1	0.38	ND		1	0.18
8260B	2-Butanone (MEK)	water	ug/L	ND		5	2.4	ND		5	2
8260B	2-Hexanone	water	ug/L	ND		5	1.8	ND		5	1.7
8260B	4-Methyl-2-pentanone	water	ug/L	ND		5	1.8	ND		5	0.98
8260B	Acetone	sediment	ug/kg	ND		25	5.8	ND		25	4.2
8260B	Benzene	sediment	ug/kg	ND		6.3	1.1	ND		6.2	0.15
8260B	Bromodichloromethane	sediment	ug/kg	ND		6.3	1.2	ND		6.2	0.25
8260B	Bromoform	sediment	ug/kg	ND		6.3	1.2	ND		6.2	0.32
8260B	Bromomethane	sediment	ug/kg	ND		13	1.5	ND		12	0.75
8260B	Carbon disulfide	sediment	ug/kg	ND		6.3	1.2	ND		6.2	0.3
8260B	Carbon tetrachloride	sediment	ug/kg	ND		6.3	1.5	ND		6.2	0.31
8260B	Chlorobenzene	sediment	ug/kg	ND		6.3	0.95	ND		6.2	0.22
8260B	Chloroethane	sediment	ug/kg	ND		13	1.6	ND		12	0.29
8260B	Chloroform	sediment	ug/kg	ND		13	1.1	0.73	J	12	0.31
8260B	Chloromethane	sediment	ug/kg	ND		13	1.9	ND		12	0.45
8260B	cis-1,2-Dichloroethene	sediment	ug/kg	ND		3.2	1.1	ND		3.1	0.26
8260B	cis-1,3-Dichloropropene	sediment	ug/kg	ND		6.3	1.2	ND		6.2	0.45
8260B	Dibromochloromethane	sediment	ug/kg	ND		6.3	1.1	ND		6.2	0.25
8260B	Ethylbenzene	sediment	ug/kg	ND		6.3	1.5	ND		6.2	0.34
8260B	Methylene chloride	sediment	ug/kg	ND		6.3	1	1.1	J	6.2	0.51
8260B	m-Xylene & p-Xylene	sediment	ug/kg	ND		3.2	2.3	ND		3.1	0.52
8260B	o-Xylene	sediment	ug/kg	ND		3.2	1.3	ND		3.1	0.29
8260B	Styrene	sediment	ug/kg	ND		6.3	0.84	ND		6.2	0.26
8260B	Tetrachloroethene	sediment	ug/kg	ND		6.3	1.3	ND		6.2	0.31
8260B	Toluene	sediment	ug/kg	ND		6.3	0.99	ND		6.2	0.27
8260B	trans-1,2-Dichloroethene	sediment	ug/kg	ND		3.2	1	ND		3.1	0.43
8260B	trans-1,3-Dichloropropene	sediment	ug/kg	ND		6.3	1.3	ND		6.2	0.52
8260B	Trichloroethene	sediment	ug/kg	ND		6.3	1.1	ND		6.2	0.36
8260B	Unknown	sediment	ug/kg	27		--	--	--		--	--
8260B	Unknown	sediment	ug/kg	35		--	--	--		--	--
8260B	Vinyl chloride	sediment	ug/kg	ND		6.3	1.4	ND		6.2	0.29
8260B	Xylenes (total)	sediment	ug/kg	ND		6.3	3.5	ND		6.2	0.7
8260B	1,1,1-Trichloroethane	sediment	ug/kg	ND		6.3	1.2	ND		6.2	0.32
8260B	1,1,2,2-Tetrachloroethane	sediment	ug/kg	ND		6.3	1.4	ND		6.2	0.7
8260B	1,1,2-Trichloroethane	sediment	ug/kg	ND		6.3	1.9	ND		6.2	0.4
8260B	1,1-Dichloroethane	sediment	ug/kg	ND		6.3	1.2	ND		6.2	0.26
8260B	1,1-Dichloroethene	sediment	ug/kg	ND		6.3	1.4	ND		6.2	0.39
8260B	1,2-Dichloroethane	sediment	ug/kg	ND		6.3	1.3	ND		6.2	0.27
8260B	1,2-Dichloroethene (total)	sediment	ug/kg	ND		6.3	1.9	ND		6.2	0.37
8260B	1,2-Dichloropropane	sediment	ug/kg	ND		6.3	1.5	ND		6.2	0.27
8260B	2-Butanone (MEK)	sediment	ug/kg	ND		25	6	ND		25	3.4
8260B	2-Hexanone	sediment	ug/kg	ND		25	5.8	ND		25	2.9
8260B	4-Methyl-2-pentanone	sediment	ug/kg	ND		25	4.9	ND		25	2.5

Table 4.4.--Analytical results of surface-water monitoring at Albuquerque Waste Water Treatment Plant Outfall

Method	Parameter	Matrix	Unit (standard)	6-Aug-02				29-Jan-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
	Herbicides										
8151A	Dalapon	water	ug/L	0.96	J B COL	2	0.42	ND		2	0.33
8151A	Dicamba	water	ug/L	ND		2	0.081	ND		2	0.086
8151A	Dichlorprop	water	ug/L	ND		4	0.13	ND		4	0.11
8151A	Dinoseb	water	ug/L	ND		0.6	0.09	ND		0.6	0.065
8151A	MCPA	water	ug/L	ND		400	13	ND		400	12
8151A	MCPP	water	ug/L	ND		400	42	ND		400	15
8151A	2,4,5-T	water	ug/L	ND		1	0.043	ND		1	0.043
8151A	2,4,5-TP (Silvex)	water	ug/L	ND		1	0.034	ND		1	0.036
8151A	2,4-D	water	ug/L	ND		4	0.16	ND		4	0.24
8151A	2,4-DB	water	ug/L	ND		4	0.21	ND		4	0.098
	Pesticides										
8141A	Anilazine	water	ug/L	ND		10	1.3	ND		10	1.3
8141A	Atrazine	water	ug/L	ND		10	0.52	ND		10	0.52
8141A	Azinphos-methyl	water	ug/L	ND		2.5	0.14	ND		2.5	0.14
8141A	Bolstar	water	ug/L	ND		0.5	0.14	ND		0.5	0.14
8141A	Chlorpyrifos	water	ug/L	ND		0.5	0.054	ND		0.5	0.054
8141A	Coumaphos	water	ug/L	ND		0.5	0.079	ND		0.5	0.079
8141A	Demeton (total)	water	ug/L	ND		1	0.19	ND		1	0.19
8141A	Diazinon	water	ug/L	ND		0.5	0.039	ND		0.5	0.039
8141A	Dichlorvos	water	ug/L	ND		0.5	0.13	ND		0.5	0.13
8141A	Dimethoate	water	ug/L	ND		0.5	0.18	ND		0.5	0.18
8141A	Disulfoton	water	ug/L	ND		0.5	0.057	ND		0.5	0.057
8141A	EPN	water	ug/L	ND		0.5	0.05	ND		0.5	0.05
8141A	Ethoprop	water	ug/L	0.18	J COL	0.5	0.056	ND		0.5	0.056
8141A	Ethyl parathion	water	ug/L	ND		0.5	0.04	ND		0.5	0.04
8141A	Famphur	water	ug/L	ND		1	0.054	ND		1	0.054
8141A	Fensulfothion	water	ug/L	ND		2.5	0.22	ND		2.5	0.22
8141A	Fenthion	water	ug/L	ND		0.5	0.061	ND		0.5	0.061
8141A	Malathion	water	ug/L	ND		1.2	0.05	ND		1.2	0.05
8141A	Merphos	water	ug/L	ND		5	0.063	ND		5	0.063
8141A	Methyl parathion	water	ug/L	ND		0.5	0.061	ND		0.5	0.061
8141A	Mevinphos	water	ug/L	ND		6.2	0.16	ND		6.2	0.16
8141A	Naled	water	ug/L	ND		10	0.22	ND		10	0.22
8141A	Phorate	water	ug/L	ND		0.5	0.075	ND		0.5	0.075
8141A	Propazine	water	ug/L	ND		10	2.5	ND		10	2.5
8141A	Ronnel	water	ug/L	ND		10	0.11	ND		10	0.11
8141A	Simazine	water	ug/L	ND		10	0.46	ND		10	0.46
8141A	Sulfotepp	water	ug/L	ND		0.5	0.03	ND		0.5	0.03
8141A	Tetrachlorvinphos (Stirophos)	water	ug/L	ND		2.5	0.056	ND		2.5	0.056
8141A	Thionazin	water	ug/L	ND		0.5	0.059	ND		0.5	0.059
8141A	Tokuthion	water	ug/L	ND		0.5	0.071	ND		0.5	0.071
8141A	Trichloronate	water	ug/L	ND		0.5	0.057	ND		0.5	0.057
8141A	O,O,O-Triethyl phosphorothioate	water	ug/L	ND		0.5	0.15	ND		0.5	0.15
8081A	Aldrin	sediment	ug/kg	ND		2.2	0.49	ND		11	1.7
8081A	alpha-BHC	sediment	ug/kg	ND		2.2	0.47	ND		11	1.6
8081A	beta-BHC	sediment	ug/kg	ND		2.2	0.43	ND		11	1.7
8081A	Chlordane (technical)	sediment	ug/kg	ND		22	3.2	ND		110	16

Table 4.4.--Analytical results of surface-water monitoring at Albuquerque Waste Water Treatment Plant Outfall

Method	Parameter	Matrix	Unit (standard)	6-Aug-02				29-Jan-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
8081A	delta-BHC	sediment	ug/kg	ND		2.2	0.14	ND		11	3.9
8081A	Dieldrin	sediment	ug/kg	ND		2.2	0.68	ND		11	1.5
8081A	Endosulfan I	sediment	ug/kg	ND		2.2	0.48	ND		11	2.3
8081A	Endosulfan II	sediment	ug/kg	ND		2.2	0.84	ND		11	2.6
8081A	Endosulfan sulfate	sediment	ug/kg	ND		2.2	0.37	ND		11	2.5
8081A	Endrin	sediment	ug/kg	ND		2.2	0.48	ND		11	2.5
8081A	Endrin aldehyde	sediment	ug/kg	ND		2.2	1.9	ND		11	5.3
8081A	gamma-BHC (Lindane)	sediment	ug/kg	ND		2.2	0.89	ND		11	1.5
8081A	Heptachlor	sediment	ug/kg	ND		2.2	0.6	ND		11	1.9
8081A	Heptachlor epoxide	sediment	ug/kg	ND		8.5	0.46	ND		42	1.4
8081A	Methoxychlor	sediment	ug/kg	ND		4.2	0.22	ND		20	4.9
8081A	Toxaphene	sediment	ug/kg	ND		220	13	ND		1100	62
8081A	4,4'-DDD	sediment	ug/kg	ND		2.2	0.37	ND		11	2.2
8081A	4,4'-DDE	sediment	ug/kg	ND		2.2	0.41	ND		11	2.7
8081A	4,4'-DDT	sediment	ug/kg	ND		2.2	0.42	ND		11	3
8081A	Aldrin	fish	ug/kg	--	f	--	--	ND		22	8
8081A	alpha-BHC	fish	ug/kg	--	f	--	--	ND		22	2.2
8081A	alpha-Chlordane	fish	ug/kg	--	f	--	--	ND		22	2.2
8081A	beta-BHC	fish	ug/kg	--	f	--	--	ND		22	2.2
8081A	delta-BHC	fish	ug/kg	--	f	--	--	ND		22	2.2
8081A	Dieldrin	fish	ug/kg	--	f	--	--	ND		22	2.2
8081A	Endosulfan I	fish	ug/kg	--	f	--	--	ND		22	2.2
8081A	Endosulfan II	fish	ug/kg	--	f	--	--	ND		22	2.2
8081A	Endosulfan sulfate	fish	ug/kg	--	f	--	--	ND		22	10
8081A	Endrin	fish	ug/kg	--	f	--	--	ND		22	2.2
8081A	Endrin aldehyde	fish	ug/kg	--	f	--	--	ND		22	2.2
8081A	Endrin ketone	fish	ug/kg	--	f	--	--	ND		22	2.2
8081A	gamma-BHC (Lindane)	fish	ug/kg	--	f	--	--	ND		22	2.2
8081A	gamma-Chlordane	fish	ug/kg	--	f	--	--	ND		22	6.5
8081A	Heptachlor	fish	ug/kg	--	f	--	--	ND		22	2.2
8081A	Heptachlor epoxide	fish	ug/kg	--	f	--	--	ND		80	2
8081A	Methoxychlor	fish	ug/kg	--	f	--	--	ND		40	2
8081A	Toxaphene	fish	ug/kg	--	f	--	--	ND		220	120
8081A	4,4'-DDD	fish	ug/kg	--	f	--	--	ND		22	2.2
8081A	4,4'-DDE	fish	ug/kg	--	f	--	--	270		22	2.2
8081A	4,4'-DDT	fish	ug/kg	--	f	--	--	ND		22	5.1
	Explosives										
8330	HMX	water	ug/L	ND		0.25	0.19	ND		0.25	0.03
8330	Nitrobenzene	water	ug/L	ND		0.25	0.08	ND		0.25	0.04
8330	Nitroglycerin	water	ug/L	ND		2.5	0.9	ND		2.5	0.3
8330	PETN	water	ug/L	ND		2.5	1.3	ND		2.5	0.5
8330	RDX	water	ug/L	ND		0.25	0.17	ND		0.25	0.03
8330	Tetryl	water	ug/L	ND		0.5	0.15	ND		0.5	0.03
8330	1,3,5-Trinitrobenzene	water	ug/L	ND		0.25	0.092	ND		0.25	0.03
8330	1,3-Dinitrobenzene	water	ug/L	ND		0.25	0.11	ND		0.25	0.03
8330	2,4,6-Trinitrotoluene	water	ug/L	ND		0.25	0.089	ND		0.25	0.05
8330	2,4-Dinitrotoluene	water	ug/L	ND		0.25	0.1	ND		0.25	0.04
8330	2,6-Dinitrotoluene	water	ug/L	ND		0.25	0.15	ND		0.25	0.03

Table 4.4.--Analytical results of surface-water monitoring at Albuquerque Waste Water Treatment Plant Outfall

Method	Parameter	Matrix	Unit (standard)	6-Aug-02				29-Jan-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
8330	2-Amino-4,6-dinitrotoluene	water	ug/L	ND		0.25	0.12	ND		0.25	0.04
8330	2-Nitrotoluene	water	ug/L	0.22	J	0.25	0.16	0.097	J	0.25	0.04
8330	3-Nitrotoluene	water	ug/L	ND		0.25	0.18	ND		0.25	0.09
8330	4-Amino-2,6-dinitrotoluene	water	ug/L	ND		0.25	0.1	ND		3.2	0.05
8330	4-Nitrotoluene	water	ug/L	ND		0.25	0.23	ND		0.4	0.05
	Polyaromatic hydrocarbons										
8310	Acenaphthene	sediment	ug/kg	ND		2500	49	ND		250	4.8
8310	Acenaphthylene	sediment	ug/kg	ND		2500	150	ND		250	15
8310	Anthracene	sediment	ug/kg	77	J	250	33	ND		25	3.2
8310	Benzo(a)anthracene	sediment	ug/kg	170	J	250	63	ND		25	6.2
8310	Benzo(a)pyrene	sediment	ug/kg	130	J	250	23	ND		25	2.2
8310	Benzo(b)fluoranthene	sediment	ug/kg	270		250	49	ND		25	4.8
8310	Benzo(ghi)perylene	sediment	ug/kg	160	J	510	33	ND		50	3.2
8310	Benzo(k)fluoranthene	sediment	ug/kg	210	J	250	29	ND		25	2.9
8310	Chrysene	sediment	ug/kg	300	J	510	30	ND		50	3
8310	Dibenzo(a,h)anthracene	sediment	ug/kg	ND		510	58	8.1	J COL	50	5.7
8310	Fluoranthene	sediment	ug/kg	ND	COL	510	110	ND		50	11
8310	Fluorene	sediment	ug/kg	ND		510	110	ND		50	11
8310	Indeno(1,2,3-cd)pyrene	sediment	ug/kg	210	J	510	29	ND		50	2.9
8310	Naphthalene	sediment	ug/kg	ND		2500	150	ND		250	15
8310	Phenanthrene	sediment	ug/kg	79	J	510	42	ND		50	4.1
8310	Pyrene	sediment	ug/kg	100	J	510	87	ND		50	8.6
8310	1-Methylnaphthalene	sediment	ug/kg	ND		2500	89	ND		250	8.7
8310	2-Methylnaphthalene	sediment	ug/kg	ND		2500	42	7.7	J COL	250	4.1
	Total Petroleum Hydrocarbons										
9071B	n-Hexane Ext. Material	sediment	mg/kg	ND		630	200	ND		620	200
9071B	SGT-HEM (Petroleum Hydrocarbons)	sediment	mg/kg	ND		630	150	ND		620	150
	Pharmaceuticals										
ITMS	Amitriptyline	water	ng/L	ND		10.0	--	ND		10.0	--
ITMS	Beta-Estradiol	water	ng/L	ND		10.0	--	ND		10.0	--
ITMS	Caffeine	water	ng/L	ND		10.0	--	ND		10.0	--
ITMS	Cholesterol	water	ng/L	ND		11.0	--	ND		10.0	--
ITMS	Desipramine	water	ng/L	ND		10.0	--	ND		10.0	--
ITMS	Dextro-Norgestrel	water	ng/L	ND		10.0	--	ND		10.0	--
ITMS	Doxepin	water	ng/L	ND		10.0	--	ND		10.0	--
ITMS	Equilin	water	ng/L	ND		10.0	--	ND		10.0	--
ITMS	Estrone	water	ng/L	ND		10.0	--	ND		10.0	--
ITMS	Enthynl Estradiol	water	ng/L	ND		10.0	--	ND		10.0	--
ITMS	Imipramine	water	ng/L	ND		10.0	--	ND		10.0	--
ITMS	Medroxyprogesterone	water	ng/L	ND		10.0	--	ND		10.0	--
ITMS	Megestrol Acetate	water	ng/L	ND		10.0	--	ND		10.0	--
ITMS	Menstranol	water	ng/L	ND		10.0	--	ND		10.0	--
ITMS	Nordoxepin	water	ng/L	ND		10.0	--	ND		10.0	--
ITMS	Norethindrone	water	ng/L	ND		10.0	--	ND		10.0	--
ITMS	Norethynodrel	water	ng/L	ND		10.0	--	ND		10.0	--
ITMS	Nortriptyline	water	ng/L	ND		10.0	--	ND		10.0	--
ITMS	Paroxetine	water	ng/L	ND		10.0	--	ND		10.0	--
ITMS	Phenytoin	water	ng/L	ND		10.0	--	ND		10.0	--

Table 4.4.--Analytical results of surface-water monitoring at Albuquerque Waste Water Treatment Plant Outfall

Method	Parameter	Matrix	Unit (standard)	6-Aug-02				29-Jan-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
ITMS	Prednisone	water	ng/L	ND		10.0	--	ND		10.0	--
ITMS	Progesterone	water	ng/L	ND		10.0	--	ND		10.0	--
ITMS	Propoxyphene	water	ng/L	ND		10.0	--	ND		10.0	--
ITMS	Protroptyline	water	ng/L	ND		10.0	--	ND		10.0	--
ITMS	Prozac	water	ng/L	ND		10.0	--	ND		10.0	--
ITMS	Setraline	water	ng/L	ND		10.0	--	ND		10.0	--
ITMS	Tamoxifen	water	ng/L	ND		10.0	--	ND		10.0	--
ITMS	Trimipramine maleate	water	ng/L	ND		10.0	--	ND		10.0	--
ITMS	6 alpha-Methyprednisolone	water	ng/L	ND		10.0	--	ND		10.0	--
	Grain size analysis										
D422	Maximum particle size	sediment	--	fine gravel		--	--	fine gravel		--	--
D422	Particle size, 9500 microns, gravel	sediment	%	4.9		0.1	--	10.1		0.1	--
D422	Particle size, 4750 microns, gravel	sediment	%	4.1		0.1	--	4.9		0.1	--
D422	Particle size, 2000 microns, sand	sediment	%	6.6		0.1	--	9.0		0.1	--
D422	Particle size, 850 microns, sand	sediment	%	11.4		0.1	--	17.1		0.1	--
D422	Particle size, 425 microns, sand	sediment	%	33.6		0.1	--	30.9		0.1	--
D422	Particle size, 250 microns, sand	sediment	%	27.4		0.1	--	20.4		0.1	--
D422	Particle size, 180 microns, sand	sediment	%	7.1		0.1	--	4.2		0.1	--
D422	Particle size, 150 microns, sand	sediment	%	1.5		0.1	--	0.9		0.1	--
D422	Particle size, 75 microns, sand	sediment	%	0.9		0.1	--	1.0		0.1	--
D422	Particle size, 38.2 microns, silt	sediment	%	--		--	--	0.0		0.1	--
D422	Particle size, 37.5 microns, silt	sediment	%	2.2		0.1	--	--		--	--
D422	Particle size, 24.2 microns, silt	sediment	%	--		--	--	0.0		0.1	--
D422	Particle size, 14.0 microns, silt	sediment	%	--		--	--	0.4		0.1	--
D422	Particle size, 9.9 microns, silt	sediment	%	--		--	--	0.0		0.1	--
D422	Particle size, 7.2 microns, silt	sediment	%	--		--	--	0.4		0.1	--
D422	Particle size, 3.4 microns, clay	sediment	%	--		--	--	0.0		0.1	--
D422	Particle size, 1.4 microns, clay	sediment	%	--		--	--	0.0		0.1	--
D422	Particle size, less than 1.4 microns, clay	sediment	%	--		--	--	0.7		0.1	--

[1] See table 5 for description of qualifier codes.

[2] Reporting limit -- the lowest level at which measurements become quantitatively meaningful, ie., the quantitation limit, which is approximately three times the method detection limit. Reporting limits cannot be less than the statistically determined method detection limit.

[3] Method detection limit -- the minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero and is determined from replicate analyses of low level standards in a typical representative matrix.

Table 4.5--Analytical results of surface-water monitoring at Rio Grande at Los Padillas, 2002-2003

[Field parameters measured by field staff. Laboratory analyses performed by Severn Trent Laboratory and the New Mexico Scientific Laboratory (pharmaceuticals). --, no data; °C, degrees Celsius; mm of Hg, millimeters of mercury; ft^3/sec, cubic feet per second; mg/L, milligram per liter; %, percent; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units; ug/L, >, greater than; micrograms per liter; g/kg, grams per kilogram; mg/kg, milligram per kilogram; ug/kg, micrograms per kilogram; ITMS, Ion trap mass spectrometer; ng/L, nanograms per liter; n/a, not applicable.]

Method	Parameter	Matrix	Unit	25-Jul-02				31-Oct-02				18-Dec-02				27-Feb-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
--	Station identification number	--	--	345747106411310		--	--	345741106411310		--	--	345748106411310		--	--	345749106411310		--	--
--	Latitude/Longitude	--	--	345747/1064113		--	--	345741/1064113		--	--	345748/1064113		--	--	345749/1064113		--	--
--	Time	--	--	1130		--	--	1200		--	--	1100		--	--	1045		--	--
	Field parameters																		
170.1	Air temperature	air	°C	29.6		0.1	0.01	14.7		0.1	0.01	3.9		0.1	0.01	--		0.1	0.01
170.1	Water temperature	water	°C	29.8		0.1	0.01	16.7		0.1	0.01	4.9		0.1	0.01	10.3		0.1	0.01
--	Barometric pressure	air	mm of Hg	642		--	--	639		--	--	631		--	--	634		--	--
--	Discharge, instantaneous	water	ft^3/s	276		--	--	268		--	--	426		--	--	314		--	--
150.1	pH - unfiltered	water	--	7.9		0.1	0.01	8.1		0.1	0.01	8.1		0.1	0.01	8.0		0.1	0.01
--	Dissolved oxygen	water	mg/L	6.5		0.1	0.01	9.0		0.1	0.01	10.9		0.1	0.01	9.3		0.1	0.01
--	Dissolved oxygen, saturation	water	%	86		1	0.01	97		1	0.01	86		1	0.01	81		1	0.01
120.1	Specific conductance - unfiltered	water	uS/cm	445		1	1	431		1	1	283		1	1	322		1	1
180.1	Turbidity	water	NTU	>1000		1	0.1	980		1	0.1	135		1	0.1	148		1	0.1
310.1	Alkalinity, as $CaCO_3$	water	mg/L	116		1	0.1	126		1	0.1	137		1	0.1	133		1	0.1
310.1	Bicarbonate, as HCO_3	water	mg/L	140		1	0.1	152		1	0.1	165		1	0.1	160		1	0.1
310.1	Carbonate, as CO_3	water	mg/L	0.8		0.1	0.1	0.6		0.1	0.1	1.1		0.1	0.1	1.0		0.1	0.1
	General chemistry																		
130.2	Hardness, as $CaCO_3$	water	mg/L	130		5	2	720	J Q	25	10	150	J	5	2	170	J G	12	5
160.1	Total dissolved solids	water	mg/L	290		10	5	290	J G	40	20	340		10	5	260		10	5
160.2	Total suspended solids	water	mg/L	910	Q	20	9	3000	Q	40	18	120	Q	5	2.2	190	Q	6.7	3
314	Perchlorate	water	ug/L	ND		20	1.5	ND		20	2.5	ND		20	2.5	ND		1	0.41
405.1	Biochemical oxygen demand (BOD)	water	mg/L	1.8	B	2	0.23	ND		2	0.23	ND		2	0.23	2.6		2	0.31
410.4	Chemical oxygen demand (COD)	water	mg/L	17	B J	20	3.5	30		20	3.5	ND		20	3.5	4.1	B	20	3.5
9060	Total organic carbon	sediment	g/kg	4.9		2	0.59	11		2	0.59	1.8	B	2	0.59	0.74	B	2	0.59
D2216	Moisture	sediment	%	25		0.1	10	62		0.1	--	27		0.1	--	23		0.1	--
D2216	Moisture	fish	%	--	f	--	--	--		--	--	--		--	--	--		--	--
Total Residue	Lipids (Fathead Minnow)	fish	%	2.1	B	0.1		--		--	--	--		--	--	--		--	--
Total Residue	Lipids (Red Shiner)	fish	%	--		--	--	--		--	--	--		--	--	--	f	--	--
	Common anions																		
300.0A	Bromide	water	mg/L	0.37		0.2	0.03	0.18	B	0.2	0.03	ND		0.2	0.03	0.24		0.2	0.03
300.0A	Chloride	water	mg/L	22		3	0.1	24		3	0.1	31		3	0.1	28		3	0.1
300.0A	Fluoride	water	mg/L	0.64	B	1	0.03	0.63	B	1	0.03	0.61	B	1	0.03	0.75	B	1	0.03
300.0A	Nitrate	water	mg/L	0.79		0.5	0.03	1.1		0.5	0.03	0.66		0.5	0.03	1.1		0.5	0.03
300.0A	Nitrite	water	mg/L	0.21	B	0.5	0.04	ND		0.5	0.04	ND		0.5	0.04	0.23	B	0.5	0.04
300.0A	Phosphate as P, Ortho	water	mg/L	0.56		0.5	0.04	0.21	B	0.5	0.04	0.29	B	0.5	0.04	0.27	B	0.5	0.04
300.0A	Sulfate	water	mg/L	70	Q	25	1	79	Q	25	1	75	Q	25	1	52	Q	25	1
9012A	Cyanide, Total	water	mg/L	0.0058	B	0.01	0.002	0.0063	B	0.01	0.002	ND		0.01	0.002	0.0051	B	0.01	0.0039
9012A	Cyanide, Total	sediment	mg/kg	0.44	B J	0.66	0.12	ND		1.3	0.23	0.23	B	0.68	0.12	ND		0.65	0.13
9056	Bromide	sediment	mg/kg	ND		2.7	0.4	ND		5.3	0.79	ND		2.7	0.41	ND		2.6	0.39
9056	Chloride	sediment	mg/kg	18	B J	40	1.3	66	B J	79	2.6	23	B J	41	1.4	13	B J	39	1.3
9056	Fluoride	sediment	mg/kg	3.3	B	13	0.4	8	B	26	0.79	2.3	B J	14	0.41	1.3	B	13	0.39
9056	Nitrate	sediment	mg/kg	2.1	B J	6.6	0.4	6	B	13	0.79	2.9	B J	6.8	0.41	1.9	B J	6.5	0.39
9056	Nitrite	sediment	mg/kg	2.1	B J	6.6	0.53	ND		13	1.1	ND		6.8	0.55	ND		6.5	0.52
9056	Phosphate as P, Ortho	sediment	mg/kg	ND		6.6	0.53	ND		13	1.1	2.4	B	6.8	0.55	2.3	B	6.5	0.52
9056	Sulfate	sediment	mg/kg	34	B	66	2.7	61	B	130	5.3	37	B J	68	2.7	24	B J	65	2.6
	Nutrients																		
350.1	Ammonia as N	water	mg/L	0.042	B	0.1	0.015	0.081	B	0.1	0.015	0.047	B	0.1	0.015	0.11		0.1	0.038
351.2	Total Kjeldahl Nitrogen	water	mg/L	0.17	B	0.5	0.14	0.22	B	0.5	0.14	ND		0.5	0.14	0.31	B	0.5	0.083
353.2	Nitrate-Nitrite	water	mg/L	0.65		0.1	0.01	1.1		0.1	0.012	0.54		0.1	0.012	1.2		0.1	0.012
354.1	Nitrite	water	mg/L	0.0061	B J	0.01	0.002	0.0072	B J	0.01	0.002	0.0023	B	0.01	0.002	0.084		0.01	0.0018
365.3	Total phosphorus	water	mg/L	0.34		0.05	0.013	1.1	J Q	0.25	0.065	0.31	J	0.05	0.013	0.42	G	0.25	0.095
350.1	Ammonia as N	sediment	mg/kg	1.8		1.3	0.2	23	J	2.6	0.4	2.1	J	1.4	0.2	ND		1.3	0.49
351.2	Total Kjeldahl Nitrogen	sediment	mg/kg	160		66	27	1300	Q	260	110	100		68	27	1000	Q	320	37
353.2	Nitrate-Nitrite	sediment	mg/kg	ND		1.3	0.28	0.55	B J	2.6	0.32	0.86	B J	1.4	0.16	0.36	B J	1.3	0.16
354.1	Nitrite	sediment	mg/kg	ND		0.13	0.053	0.46		0.26	0.11	0.12	B	0.14	0.055	0.041	B	0.13	0.023
365.3	Total phosphorus	sediment	mg/kg	230	Q	66	16	170	Q	130	32	230	Q	34	8.2	85	Q	32	7.8
	Trace elements																		
6020	Antimony	water	ug/L	0.23	B	2	0.04	1.2	B J	2	0.04	0.19	B	2	0.04	0.14	B	2	0.04
6020	Arsenic	water	ug/L	4.6	B	5	0.061	6.1		5	0.061	4.3	B	5	0.061	5.1		5	0.061
6020	Barium	water	ug/L	80		1	0.057	92		1	0.057	73		1	0.057	69		1	0.057
6020	Beryllium	water	ug/L	ND		1	0.028	--		--	--	--		--	--	--		--	--
6020	Cadmium	water	ug/L	0.027	B	1	0.022	0.033	B	1	0.022	ND		1	0.022	0.025	B	1	0.022
6020	Chromium	water	ug/L	0.72	B	2	0.24	1.2	B	2	0.24	0.69	B	2	0.24	0.32	B	2	0.24
6020	Cobalt	water	ug/L	0.89	B	1	0.015	1.1		1	0.015	0.26	B	1	0.015	0.34	B	1	0.015
6020	Copper	water	ug/L	1.1	B	2	0.63	1.4	B	2	0.63	0.69	B	2	0.63	1.7	B	2	0.63
6020	Lead	water	ug/L	0.27	B	1	0.15	0.65	B	1	0.15	ND		1	0.15	ND		1	0.15
6020	Manganese	water	ug/L	9.3		1	0.061	14		1	0.061	3.6		1	0.061	4.2	J	1	0.061
6020	Molybdenum	water	ug/L	5.5		2	0.023	6.1	J	2	0.023	5.8		2	0.023	5.3		2	0.023
6020	Nickel	water	ug/L	1.9	B	2	0.25	1.1	B J	2	0.25	1.3	B	2	0.25	0.71	B	2	0.25
6020	Selenium	water	ug/L	0.52	B	5	0.19	0.74	B	5	0.19	ND		5	0.19	0.45	B J	5	0.19
6020	Silver	water	ug/L	0.02	B	5	0.012	0.11	B J	5	0.012	ND		5	0.012	ND		5	0.012
6020	Thallium	water	ug/L	ND		1	0.015	0.053	B J	1	0.015	ND		1	0.015	ND		1	0.015
6020	Tin	water	ug/L	0.3	B	10	0.054	2.7	B J	10	0.054	0.097	B J	10	0.054	ND		10	0.054
6020	Uranium	water	ug/L	2.1		1	0.0015	3.2	J	1	0.0015	3.5		1	0.0015	3.3		1	0.0015
6020	Vanadium	water	ug/L	9.1		5	0.07	8.1		5	0.07	5	J	5	0.07	4.2	B	5	0.07
6020	Zinc	water	ug/L	6.8	B	10	2.3	8	B	10	2.3	6.9	B	10	2.3	6.8	B	10	2.3
7470A	Mercury	water	ug/L	ND		0.2	0.028	ND		0.2	0.028	ND		0.2	0.015	ND		0.2	0.015
6010B	Aluminum	water	ug/L	ND		100	20	1500		100	20	25	B	100	20	30	B J	100	20
6010B	Beryllium	water	ug/L	--		--	--	ND		5	0.22	0.49	B	5	0.22	0.23	B	5	0.22
6010B	Boron	water	ug/L	89	B	100	5.2	100		100	5.2	130		100	5.2	140		100	5.2

Method	Parameter	Matrix	Unit	25-Jul-02				31-Oct-02				18-Dec-02				27-Feb-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
6010B	Calcium	water	ug/L	41000		200	31	48000	J	200	31	48000	J	200	31	48000		200	31
6010B	Iron	water	ug/L	ND		100	13	880		100	13	16	B	100	13	13	B	100	13
6010B	Lithium	water	ug/L	28		10	2.1	41		10	2.1	77		10	2.1	76		10	2.1
6010B	Magnesium	water	ug/L	6900		200	24	8100		200	24	9200		200	24	8500		200	24
6010B	Potassium	water	ug/L	5500		3000	490	6000		3000	490	5700		3000	490	6700	J	3000	490
6010B	Silica	water	ug/L	24000		1100	23	32000	J	1100	23	26000		1100	23	29000		1100	23
6010B	Sodium	water	ug/L	37000		5000	1500	43000		5000	1500	51000		5000	1500	53000	J	5000	1500
6010B	Strontium	water	ug/L	400		10	0.35	490		10	0.35	420		10	0.35	390		10	0.35
6010B	Titanium	water	ug/L	ND		10	0.97	28		10	0.97	1	B	10	0.97	1.4	B	10	0.97
6020	Antimony	sediment	mg/kg	ND		0.27	0.0038	0.18	B J	0.53	0.0076	ND		0.27	0.004	ND		0.26	0.0038
6020	Arsenic	sediment	mg/kg	1.7		0.66	0.023	8.1		1.3	0.045	1.2	J	0.68	0.023	1.1		0.65	0.022
6020	Barium	sediment	mg/kg	78		0.13	0.032	220	J	0.26	0.063	68		0.14	0.033	31		0.13	0.031
6020	Beryllium	sediment	mg/kg	0.32		0.13	0.0058	--		--	--	--		--	--	--		--	--
6020	Cadmium	sediment	mg/kg	0.056	B	0.13	0.0019	0.21	B	0.26	0.0037	0.037	B	0.14	0.0019	0.021	B	0.13	0.0018
6020	Chromium	sediment	mg/kg	5.5	J	0.27	0.024	23	J	0.53	0.047	3.2	J	0.27	0.025	2.1	J	0.26	0.023
6020	Cobalt	sediment	mg/kg	2.7		0.13	0.0016	8.3		0.26	0.0032	1.8		0.14	0.0016	1.3		0.13	0.0016
6020	Copper	sediment	mg/kg	4.2	J	0.27	0.02	16	J	0.53	0.04	2.3		0.27	0.02	1.7	J	0.26	0.019
6020	Lead	sediment	mg/kg	4.7		0.13	0.0056	16		0.26	0.011	2.8	J	0.14	0.0057	2.1	J	0.13	0.0054
6020	Manganese	sediment	mg/kg	170	J	0.13	0.031	420	J	0.26	0.061	100	J	0.14	0.031	74		0.13	0.03
6020	Molybdenum	sediment	mg/kg	0.16	B J	0.27	0.0029	0.63		0.53	0.0058	0.12	B J	0.27	0.003	0.084	B J	0.26	0.0028
6020	Nickel	sediment	mg/kg	4.9		0.13	0.017	17	J	0.26	0.034	2.9	J	0.14	0.018	1.9	J	0.13	0.017
6020	Selenium	sediment	mg/kg	0.24	B	0.66	0.065	0.74	B	1.3	0.13	0.2	B	0.68	0.067	ND		0.65	0.063
6020	Silver	sediment	mg/kg	0.042	B J	0.13	0.0031	0.22	B J	0.26	0.0061	0.041	B J	0.14	0.0031	0.021	B	0.13	0.003
6020	Thallium	sediment	mg/kg	0.073	B	0.13	0.0013	0.36	J	0.26	0.0026	0.039	B J	0.14	0.0014	0.023	B	0.13	0.0013
6020	Tin	sediment	mg/kg	ND		1.3	0.1	1.2	B	2.6	0.21	ND		1.4	0.11	ND		1.3	0.1
6020	Uranium	sediment	mg/kg	0.48		0.13	0.0024	1.4		0.26	0.0047	0.3	J	0.14	0.0025	0.22		0.13	0.0023
6020	Vanadium	sediment	mg/kg	13	J	0.66	0.0074	44	J	1.3	0.015	9.4		0.68	0.0077	6.6	J	0.65	0.0072
6020	Zinc	sediment	mg/kg	19		1.3	0.46	72		2.6	0.92	15		1.4	0.48	9.6	J	1.3	0.45
7471A	Mercury	sediment	mg/kg	ND		0.044	0.0033	0.017	B	0.087	0.0066	ND		0.045	0.0034	ND		0.043	0.0032
6010B	Aluminum	sediment	mg/kg	14000		13	2.8	38000		26	5.5	3000	J	14	2.9	1800		13	2.7
6010B	Beryllium	sediment	mg/kg	--		--	--	1.6		1.3	0.09	0.13	B	0.68	0.046	0.077	B	0.65	0.044
6010B	Boron	sediment	mg/kg	7	B	13	0.49	25	B	26	0.97	0.72	B	14	0.51	ND		13	0.48
6010B	Calcium	sediment	mg/kg	23000		27	10	39000	J	53	21	8000	J	27	11	4000		26	10
6010B	Iron	sediment	mg/kg	11000		13	2.1	26000		26	4.2	5000		14	2.2	3800	J	13	2.1
6010B	Lithium	sediment	mg/kg	14		6.6	0.15	37		13	0.29	4.1	B	6.8	0.15	3.5	B J	6.5	0.14
6010B	Magnesium	sediment	mg/kg	4900		27	2	11000	J	53	4	1200		27	2	780		26	1.9
6010B	Potassium	sediment	mg/kg	2900		400	46	7500		790	92	760		410	48	470		390	45
6010B	Sodium	sediment	mg/kg	150	B	660	80	ND		1300	160	170	B	680	82	ND		650	78
6010B	Strontium	sediment	mg/kg	93	J	1.3	0.02	170		2.6	0.13	24		1.4	0.068	17		1.3	0.065
6010B	Titanium	sediment	mg/kg	220		1.3	0.16	230		2.6	0.32	170		1.4	0.16	140	J	1.3	0.16
6020	Antimony	fish	mg/kg	ND		0.2	0.02	--		--	--	--		--	--	ND		0.2	0.02
6020	Arsenic	fish	mg/kg	0.3	B	0.5	0.0076	--		--	--	--		--	--	0.15	B J	0.5	0.0076
6020	Beryllium	fish	mg/kg	0.011	B	0.1	0.0023	--		--	--	--		--	--	--		--	--
6020	Cadmium	fish	mg/kg	0.011	B	0.1	0.0027	--		--	--	--		--	--	0.0075	B	0.1	0.0027
6020	Chromium	fish	mg/kg	0.52	J	0.2	0.034	--		--	--	--		--	--	0.28	J	0.2	0.034
6020	Copper	fish	mg/kg	1.4		0.2	0.061	--		--	--	--		--	--	0.91		0.2	0.061
6020	Lead	fish	mg/kg	0.26		0.1	0.02	--		--	--	--		--	--	0.054	B	0.1	0.02
6020	Nickel	fish	mg/kg	0.23	J	0.1	0.011	--		--	--	--		--	--	ND		0.1	0.011
6020	Selenium	fish	mg/kg	0.58		0.5	0.018	--		--	--	--		--	--	0.75		0.5	0.018
6020	Silver	fish	mg/kg	0.023	B J	0.1	0.002	--		--	--	--		--	--	0.0035	B	0.1	0.002
6020	Thallium	fish	mg/kg	ND		0.1	0.002	--		--	--	--		--	--	0.0027	B	0.1	0.002
6020	Uranium	fish	mg/kg	0.037	B	0.1	0.002	--		--	--	--		--	--	0.014	B	0.1	0.002
6020	Zinc	fish	mg/kg	37		1	0.13	--		--	--	--		--	--	62	J	1	0.13
245.6	Mercury	fish	ug/kg	38	B	100	5.9	--		--	--	--		--	--	110		100	5.9
6010B	Aluminum	fish	mg/kg	400		10	3.1	--		--	--	--		--	--	10		10	3.1
6010B	Barium	fish	mg/kg	9.6		1	0.12	--		--	--	--		--	--	5.7	J	1	0.12
6010B	Beryllium	fish	mg/kg	--		--	--	--		--	--	--		--	--	ND		0.5	0.14
6010B	Boron	fish	mg/kg	0.65	B	10	0.51	--		--	--	--		--	--	0.82	B	10	0.51
6010B	Calcium	fish	mg/kg	7400		20	3.2	--		--	--	--		--	--	8400	J	20	3.2
6010B	Cobalt	fish	mg/kg	0.29	B	1	0.15	--		--	--	--		--	--	0.22	B J	1	0.15
6010B	Iron	fish	mg/kg	340		10	2	--		--	--	--		--	--	24	J	10	2
6010B	Lithium	fish	mg/kg	0.32	B	5	0.22	--		--	--	--		--	--	ND		5	0.22
6010B	Magnesium	fish	mg/kg	410		20	1.5	--		--	--	--		--	--	370	J	20	1.5
6010B	Manganese	fish	mg/kg	9.9		1	0.14	--		--	--	--		--	--	6.7	J	1	0.14
6010B	Molybdenum	fish	mg/kg	ND		2	0.24	--		--	--	--		--	--	ND		2	0.24
6010B	Potassium	fish	mg/kg	2200		300	31	--		--	--	--		--	--	3700		300	31
6010B	Sodium	fish	mg/kg	600		500	120	--		--	--	--		--	--	810		500	120
6010B	Strontium	fish	mg/kg	22		1	0.15	--		--	--	--		--	--	25		1	0.15
6010B	Tin	fish	mg/kg	1.3	B J	10	0.42	--		--	--	--		--	--	0.64	B	10	0.42
6010B	Titanium	fish	mg/kg	5.9		1	0.2	--		--	--	--		--	--	0.31	B	1	0.2
6010B	Vanadium	fish	mg/kg	0.72	B	1	0.35	--		--	--	--		--	--	ND		1	0.35
	Volatile organic compounds																		
8260B	Acetic acid, 2-ethylhexyl este	water	ug/L	2.92	T2			--		--	--	--		--	--	--		--	--
8260B	Acetone	water	ug/L	ND		10	2.9	6.5	J	10	2.9	ND		10	2.9	ND		10	2.5
8260B	Benzene	water	ug/L	ND		1	0.27	ND		1	0.27	ND		1	0.27	ND		1	0.17
8260B	Bromodichloromethane	water	ug/L	ND		1	0.35	ND		1	0.35	ND		1	0.35	ND		1	0.2
8260B	Bromoform	water	ug/L	ND		1	0.46	ND		1	0.46	ND		1	0.46	ND		1	0.23
8260B	Bromomethane	water	ug/L	ND		2	0.28	ND		2	0.28	ND		2	0.28	ND		2	0.22
8260B	Carbon disulfide	water	ug/L	ND		1	0.67	ND		1	0.67	ND		1	0.67	ND		1	0.24
8260B	Carbon tetrachloride	water	ug/L	ND		1	0.35	ND		1	0.35	ND		1	0.35	ND		1	0.2
8260B	Chlorobenzene	water	ug/L	ND		1	0.24	ND		1	0.24	ND		1	0.24	ND		1	0.13
8260B	Chloroethane	water	ug/L	ND		2	0.26	ND		2	0.26	ND		2	0.26	ND		2	0.18
8260B	Chloroform	water	ug/L	ND		1	0.29	ND		1	0.29	0.31	J	1	0.29	ND		1	0.17
8260B	Chloromethane	water	ug/L	ND		2	0.26	ND		2	0.26	ND		2	0.26	ND		2	0.91
8260B	cis-1,2-Dichloroethene	water	ug/L	ND		1	0.33	ND		1	0.33	ND		1	0.33	ND		1	0.14
8260B	cis-1,3-Dichloropropene	water	ug/L	ND		1	0.31	ND		1	0.31	ND		1	0.31	ND		1	0.19
8260B	Dibromochloromethane	water	ug/L	ND		1	0.37	ND		1	0.37	ND		1	0.37	ND		1	0.19

Table 4.5--Analytical results of surface-water monitoring at Rio Grande at Los Padillas, 2002-2003

Method	Parameter	Matrix	Unit	25-Jul-02				31-Oct-02				18-Dec-02				27-Feb-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
8260B	Diphenylmethane	water	ug/L	192	T2			--		--	--	--		--	--	--		--	--
8260B	Ethylbenzene	water	ug/L	ND		1	0.51	ND		1	0.51	ND		1	0.51	ND		1	0.12
8260B	Methylene chloride	water	ug/L	ND		5	0.86	ND		5	0.86	ND		5	0.86	ND		5	0.21
8260B	m-Xylene & p-Xylene	water	ug/L	ND		2	0.52	ND		2	0.52	ND		2	0.52	ND		2	0.27
8260B	o-Xylene	water	ug/L	ND		1	0.24	ND		1	0.24	ND		1	0.24	ND		1	0.15
8260B	Styrene	water	ug/L	ND		1	0.28	ND		1	0.28	ND		1	0.28	ND		1	0.14
8260B	Tetrachloroethene	water	ug/L	ND		1	0.27	ND		1	0.27	ND		1	0.27	ND		1	0.26
8260B	Toluene	water	ug/L	0.81	J	1	0.26	ND		1	0.26	ND		1	0.26	ND		1	0.15
8260B	trans-1,2-Dichloroethene	water	ug/L	ND		0.5	0.25	ND		0.5	0.25	ND		0.5	0.25	ND		0.5	0.15
8260B	trans-1,3-Dichloropropene	water	ug/L	ND		1	0.36	ND		1	0.36	ND		1	0.36	ND		1	0.2
8260B	Trichloroethene	water	ug/L	ND		1	0.24	ND		1	0.24	ND		1	0.24	ND		1	0.16
8260B	Unknown	water	ug/L	1.9				--		--	--	2.4	J			--		--	--
8260B	Unknown	water	ug/L	1.4				--		--	--	--		--	--	--		--	--
8260B	Vinyl chloride	water	ug/L	ND		1	0.26	ND		1	0.26	ND		1	0.26	ND		1	0.19
8260B	Xylenes (total)	water	ug/L	ND		2	0.73	ND		2	0.73	ND		2	0.73	ND		2	0.41
8260B	1,1,1-Trichloroethane	water	ug/L	ND		1	0.32	ND		1	0.32	ND		1	0.32	ND		1	0.16
8260B	1,1,2,2-Tetrachloroethane	water	ug/L	ND		1	0.5	ND		1	0.5	ND		1	0.5	ND		1	0.21
8260B	1,1,2-Trichloroethane	water	ug/L	ND		1	0.41	ND		1	0.41	ND		1	0.41	ND		1	0.27
8260B	1,1-Dichloroethane	water	ug/L	ND		1	0.29	ND		1	0.29	ND		1	0.29	ND		1	0.22
8260B	1,1-Dichloroethene	water	ug/L	ND		1	0.31	ND		1	0.31	ND		1	0.31	ND		1	0.23
8260B	1,2-Dichloroethane	water	ug/L	ND		1	0.43	ND		1	0.43	ND		1	0.43	ND		1	0.26
8260B	1,2-Dichloroethene (total)	water	ug/L	ND		1	0.54	ND		1	0.54	ND		1	0.54	ND		1	0.24
8260B	1,2-Dichloropropane	water	ug/L	ND		1	0.38	ND		1	0.38	ND		1	0.38	ND		1	0.18
8260B	1,4 dichlorobenzene	water	ug/L	--		--	--	--		--	--	--		--	--	0.13		--	--
8260B	2-Butanone (MEK)	water	ug/L	ND		5	2.4	ND		5	2.4	ND		5	2.4	ND		5	2
8260B	2-Hexanone	water	ug/L	ND		5	1.8	ND		5	1.8	ND		5	1.8	ND		5	1.7
8260B	4-Methyl-2-pentanone	water	ug/L	ND		5	1.8	ND		5	1.8	ND		5	1.8	ND		5	0.98
8260B	Acetone	sediment	ug/kg	12	J	27	6.1	45	J	53	12	ND		27	6.3	ND		26	4.4
8260B	Alpha pinene	sediment	ug/kg	7	T2			22	T2			--		--	--	--		--	--
8260B	Benzene	sediment	ug/kg	ND		6.6	1.2	ND		13	2.3	ND		6.8	1.2	ND		6.5	0.16
8260B	Bromodichloromethane	sediment	ug/kg	ND		6.6	1.2	ND		13	2.4	ND		6.8	1.3	ND		6.5	0.26
8260B	Bromoform	sediment	ug/kg	ND		6.6	1.2	ND		13	2.4	ND		6.8	1.2	ND		6.5	0.34
8260B	Bromomethane	sediment	ug/kg	ND		13	1.6	ND		26	3.2	ND		14	1.6	ND		13	0.78
8260B	Carbon disulfide	sediment	ug/kg	ND		6.6	1.2	ND		13	2.4	ND		6.8	1.3	ND		6.5	0.31
8260B	Carbon tetrachloride	sediment	ug/kg	ND		6.6	1.6	ND		13	3.2	ND		6.8	1.6	ND		6.5	0.32
8260B	Chlorobenzene	sediment	ug/kg	ND		6.6	0.99	ND		13	2	ND		6.8	1	ND		6.5	0.23
8260B	Chloroethane	sediment	ug/kg	ND		13	1.7	ND		26	3.4	ND		14	1.8	ND		13	0.3
8260B	Chloroform	sediment	ug/kg	ND		13	1.2	ND		26	2.4	ND		14	1.2	ND		13	0.32
8260B	Chloromethane	sediment	ug/kg	ND		13	2	ND		26	4	ND		14	2	ND		13	0.47
8260B	cis-1,2-Dichloroethene	sediment	ug/kg	ND		3.3	1.1	ND		6.6	2.2	ND		3.4	1.1	ND		3.2	0.27
8260B	cis-1,3-Dichloropropene	sediment	ug/kg	ND		6.6	1.3	ND		13	2.5	ND		6.8	1.3	ND		6.5	0.47
8260B	Dibromochloromethane	sediment	ug/kg	ND		6.6	1.2	ND		13	2.4	ND		6.8	1.2	ND		6.5	0.26
8260B	Ethylbenzene	sediment	ug/kg	ND		6.6	1.6	ND		13	3.2	ND		6.8	1.6	ND		6.5	0.35
8260B	Methylene chloride	sediment	ug/kg	ND		6.6	1.1	2.8	J B	13	2.1	1.2	J B	6.8	1.1	2.2	J B	6.5	0.53
8260B	m-Xylene & p-Xylene	sediment	ug/kg	ND		3.3	2.4	ND		6.6	4.7	ND		3.4	2.5	ND		3.2	0.54
8260B	Octadecane	sediment	ug/kg	--		--	--	--		--	--	14	T2			--		--	--
8260B	o-Xylene	sediment	ug/kg	ND		3.3	1.3	ND		6.6	2.6	ND		3.4	1.4	ND		3.2	0.3
8260B	Styrene	sediment	ug/kg	ND		6.6	0.88	ND		13	1.7	ND		6.8	0.9	ND		6.5	0.27
8260B	Tetrachloroethene	sediment	ug/kg	ND		6.6	1.3	ND		13	2.6	ND		6.8	1.4	ND		6.5	0.32
8260B	Toluene	sediment	ug/kg	ND		6.6	1	4.7	J	13	2.1	ND		6.8	1.1	ND		6.5	0.28
8260B	trans-1,2-Dichloroethene	sediment	ug/kg	ND		3.3	1	ND		6.6	2.1	ND		3.4	1.1	ND		3.2	0.45
8260B	trans-1,3-Dichloropropene	sediment	ug/kg	ND		6.6	1.3	ND		13	2.6	ND		6.8	1.4	ND		6.5	0.54
8260B	Trichloroethene	sediment	ug/kg	ND		6.6	1.2	ND		13	2.3	ND		6.8	1.2	ND		6.5	0.38
8260B	Unknown	sediment	ug/kg	--		--	--	16	J	--	--	12		--	--	--		--	--
8260B	Unknown	sediment	ug/kg	--		--	--	21	J	--	--	21		--	--	--		--	--
8260B	Unknown	sediment	ug/kg	--		--	--	290	J	--	--	59		--	--	--		--	--
8260B	Unknown	sediment	ug/kg	--		--	--	20	J	--	--	7.2		--	--	--		--	--
8260B	Unknown	sediment	ug/kg	--		--	--	560	J	--	--	--		--	--	--		--	--
8260B	Unknown	sediment	ug/kg	--		--	--	14	J	--	--	--		--	--	--		--	--
8260B	Vinyl chloride	sediment	ug/kg	ND		6.6	1.5	ND		13	2.9	ND		6.8	1.5	ND		6.5	0.3
8260B	Xylenes (total)	sediment	ug/kg	ND		6.6	3.7	ND		13	7.4	ND		6.8	3.8	ND		6.5	0.72
8260B	1,1,1-Trichloroethane	sediment	ug/kg	ND		6.6	1.3	ND		13	2.6	ND		6.8	1.3	ND		6.5	0.34
8260B	1,1,2,2-Tetrachloroethane	sediment	ug/kg	ND		6.6	1.5	ND		13	2.9	ND		6.8	1.5	ND		6.5	0.72
8260B	1,1,2-Trichloroethane	sediment	ug/kg	ND		6.6	2	ND		13	4	ND		6.8	2	ND		6.5	0.41
8260B	1,1-Dichloroethane	sediment	ug/kg	ND		6.6	1.3	ND		13	2.6	ND		6.8	1.3	ND		6.5	0.27
8260B	1,1-Dichloroethene	sediment	ug/kg	ND		6.6	1.5	ND		13	2.9	ND		6.8	1.5	ND		6.5	0.4
8260B	1,2-Dichloroethane	sediment	ug/kg	ND		6.6	1.3	ND		13	2.6	ND		6.8	1.4	ND		6.5	0.28
8260B	1,2-Dichloroethene (total)	sediment	ug/kg	ND		6.6	2	ND		13	4	ND		6.8	2	ND		6.5	0.39
8260B	1,2-Dichloropropane	sediment	ug/kg	ND		6.6	1.6	ND		13	3.2	ND		6.8	1.6	ND		6.5	0.28
8260B	2-Butanone (MEK)	sediment	ug/kg	ND		27	6.2	13	J	53	12	ND		27	6.4	ND		26	3.5
8260B	2-Hexanone	sediment	ug/kg	ND		27	6.1	ND		53	12	ND		27	6.3	ND		26	3
8260B	4-Methyl-2-pentanone	sediment	ug/kg	ND		27	5.2	ND		53	10	ND		27	5.3	ND		26	2.6
	Herbicides																		
8151A	Dalapon	water	ug/L	ND		2	0.42	ND		1	0.043	ND		2	0.33	ND		2	0.33
8151A	Dicamba	water	ug/L	ND		2	0.081	ND		1	0.036	ND		2	0.086	ND		2	0.086
8151A	Dichlorprop	water	ug/L	ND		4	0.13	ND		4	0.24	ND		4	0.11	ND		4	0.11
8151A	Dinoseb	water	ug/L	ND		0.6	0.09	ND		4	0.098	ND		0.6	0.065	ND		0.6	0.065
8151A	MCPA	water	ug/L	ND		400	13	ND		2	0.33	ND		400	12	ND		400	12
8151A	MCPP	water	ug/L	ND		400	42	ND		2	0.086	ND		400	15	ND		400	15
8151A	2,4,5-T	water	ug/L	ND		1	0.043	ND		4	0.11	ND		1	0.043	ND		1	0.043
8151A	2,4,5-TP (Silvex)	water	ug/L	ND		1	0.034	ND		0.6	0.065	ND		1	0.036	ND		1	0.036
8151A	2,4-D	water	ug/L	ND		4	0.16	ND		400	12	ND		4	0.24	ND		4	0.24
8151A	2,4-DB	water	ug/L	ND		4	0.21	ND		400	15	ND		4	0.098	ND		4	0.098
	Pesticides																		
8141A	Anilazine	water	ug/L	ND		10	1.3	ND		10	1.3	ND		10	1.3	ND		10	1.3
8141A	Atrazine	water	ug/L	ND		10	0.52	ND		10	0.52	ND		10	0.52	ND		10	0.52
8141A	Azinphos-methyl	water	ug/L	ND		2.5	0.14	ND		2.5	0.14	ND		2.5	0.14	ND		2.5	0.14

Table 4.5--Analytical results of surface-water monitoring at Rio Grande at Los Padillas, 2002-2003

Method	Parameter	Matrix	Unit	25-Jul-02				31-Oct-02				18-Dec-02				27-Feb-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
8141A	Bolstar	water	ug/L	ND		0.5	0.14	ND		0.5	0.14	ND		0.5	0.14	ND		0.5	0.14
8141A	Chlorpyrifos	water	ug/L	ND		0.5	0.054	ND		0.5	0.054	ND		0.5	0.054	ND		0.5	0.054
8141A	Coumaphos	water	ug/L	ND		0.5	0.079	ND		0.5	0.079	ND		0.5	0.079	ND		0.5	0.079
8141A	Demeton (total)	water	ug/L	ND		1	0.19	ND		1	0.19	ND		1	0.19	ND		1	0.19
8141A	Diazinon	water	ug/L	ND		0.5	0.039	ND		0.5	0.039	ND		0.5	0.039	ND		0.5	0.039
8141A	Dichlorvos	water	ug/L	ND		0.5	0.13	ND		0.5	0.13	ND		0.5	0.13	ND		0.5	0.13
8141A	Dimethoate	water	ug/L	ND		0.5	0.18	ND		0.5	0.18	ND		0.5	0.18	ND		0.5	0.18
8141A	Disulfoton	water	ug/L	ND		0.5	0.057	ND		0.5	0.057	ND		0.5	0.057	ND		0.5	0.057
8141A	EPN	water	ug/L	ND		0.5	0.05	ND		0.5	0.05	ND		0.5	0.05	ND		0.5	0.05
8141A	Ethoprop	water	ug/L	ND		0.5	0.056	ND		0.5	0.056	ND		0.5	0.056	ND		0.5	0.056
8141A	Ethyl parathion	water	ug/L	ND		0.5	0.04	ND		0.5	0.04	ND		0.5	0.04	ND		0.5	0.04
8141A	Famphur	water	ug/L	ND		1	0.054	ND		1	0.054	ND		1	0.054	ND		1	0.054
8141A	Fensulfothion	water	ug/L	ND		2.5	0.22	ND		2.5	0.22	ND		2.5	0.22	ND		2.5	0.22
8141A	Fenthion	water	ug/L	ND		0.5	0.061	ND		0.5	0.061	ND		0.5	0.061	ND		0.5	0.061
8141A	Malathion	water	ug/L	ND		1.2	0.05	ND		1.2	0.05	ND		1.2	0.05	ND		1.2	0.05
8141A	Merphos	water	ug/L	ND		5	0.063	ND		5	0.063	ND		5	0.063	ND		5	0.063
8141A	Methyl parathion	water	ug/L	ND		0.5	0.061	ND		0.5	0.061	ND		0.5	0.061	ND		0.5	0.061
8141A	Mevinphos	water	ug/L	ND		6.2	0.16	ND		6.2	0.16	ND		6.2	0.16	ND		6.2	0.16
8141A	Naled	water	ug/L	ND		10	0.22	ND		10	0.22	ND		10	0.22	ND		10	0.22
8141A	Phorate	water	ug/L	ND		0.5	0.075	ND		0.5	0.075	ND		0.5	0.075	ND		0.5	0.075
8141A	Propazine	water	ug/L	ND		10	2.5	ND		10	2.5	ND		10	2.5	ND		10	2.5
8141A	Ronnel	water	ug/L	ND		10	0.11	ND		10	0.11	ND		10	0.11	ND		10	0.11
8141A	Simazine	water	ug/L	ND		10	0.46	ND		10	0.46	ND		10	0.46	ND		10	0.46
8141A	Sulfotepp	water	ug/L	ND		0.5	0.03	ND		0.5	0.03	ND		0.5	0.03	ND		0.5	0.03
8141A	Tetrachlorvinphos (Stirophos)	water	ug/L	ND		2.5	0.056	ND		2.5	0.056	ND		2.5	0.056	ND		2.5	0.056
8141A	Thionazin	water	ug/L	ND		0.5	0.059	ND		0.5	0.059	ND		0.5	0.059	ND		0.5	0.059
8141A	Tokuthion	water	ug/L	ND		0.5	0.071	ND		0.5	0.071	ND		0.5	0.071	ND		0.5	0.071
8141A	Trichloronate	water	ug/L	ND		0.5	0.057	ND		0.5	0.057	ND		0.5	0.057	ND		0.5	0.057
8141A	O,O,O-Triethyl phosphorothioate	water	ug/L	ND		0.5	0.15	ND		0.5	0.15	ND		0.5	0.15	ND		0.5	0.15
8081A	Aldrin	sediment	ug/kg	ND		2.3	0.52	ND		220	36	ND		12	1.8	ND		2.2	0.35
8081A	alpha-BHC	sediment	ug/kg	ND		2.3	0.49	ND		220	33	ND		12	1.7	ND		2.2	0.32
8081A	beta-BHC	sediment	ug/kg	ND		2.3	0.45	ND		220	36	ND		12	1.8	ND		2.2	0.35
8081A	Chlordane (technical)	sediment	ug/kg	ND		23	3.3	ND		2200	330	ND		120	17	ND		22	3.2
8081A	delta-BHC	sediment	ug/kg	ND		2.3	0.15	ND		220	82	ND		12	4.2	ND		2.2	0.8
8081A	Dieldrin	sediment	ug/kg	ND		2.3	0.72	ND		220	32	ND		12	1.6	ND		2.2	0.31
8081A	Endosulfan I	sediment	ug/kg	ND		2.3	0.5	ND		220	49	ND		12	2.5	ND		2.2	0.48
8081A	Endosulfan II	sediment	ug/kg	ND		2.3	0.88	ND		220	55	ND		12	2.9	ND		2.2	0.54
8081A	Endosulfan sulfate	sediment	ug/kg	ND		2.3	0.38	ND		220	53	ND		12	2.7	ND		2.2	0.52
8081A	Endrin	sediment	ug/kg	ND		2.3	0.5	ND		220	54	ND		12	2.8	ND		2.2	0.53
8081A	Endrin aldehyde	sediment	ug/kg	ND		2.3	2	ND		220	110	ND		12	5.8	ND		2.2	1.1
8081A	gamma-BHC (Lindane)	sediment	ug/kg	ND		2.3	0.93	ND		220	32	ND		12	1.6	ND		2.2	0.31
8081A	Heptachlor	sediment	ug/kg	ND		2.3	0.62	ND		220	41	ND		12	2.1	ND		2.2	0.4
8081A	Heptachlor epoxide	sediment	ug/kg	ND		8.9	0.48	ND		880	29	2.7	J COL	46	1.5	ND		8.7	0.28
8081A	Methoxychlor	sediment	ug/kg	0.46	J COL	4.4	0.23	ND		430	100	ND		23	5.4	ND		4.3	1
8081A	Toxaphene	sediment	ug/kg	ND		230	13	ND		22000	1300	ND		1200	68	ND		220	13
8081A	4,4'-DDD	sediment	ug/kg	ND		2.3	0.38	ND		220	46	ND		12	2.4	ND		2.2	0.45
8081A	4,4'-DDE	sediment	ug/kg	ND		2.3	0.42	ND		220	58	ND		12	3	ND		2.2	0.57
8081A	4,4'-DDT	sediment	ug/kg	ND		2.3	0.44	ND		220	63	ND		12	3.3	ND		2.2	0.62
8081A	Aldrin	fish	ug/kg	ND		6	2.2	--		--	--	--		--	--	--	f	--	--
8081A	alpha-BHC	fish	ug/kg	ND		6	0.6	--		--	--	--		--	--	--	f	--	--
8081A	alpha-Chlordane	fish	ug/kg	ND		6	0.6	--		--	--	--		--	--	--	f	--	--
8081A	beta-BHC	fish	ug/kg	ND		6	0.6	--		--	--	--		--	--	--	f	--	--
8081A	delta-BHC	fish	ug/kg	ND		6	0.6	--		--	--	--		--	--	--	f	--	--
8081A	Dieldrin	fish	ug/kg	ND		6	0.6	--		--	--	--		--	--	--	f	--	--
8081A	Endosulfan I	fish	ug/kg	ND		6	0.6	--		--	--	--		--	--	--	f	--	--
8081A	Endosulfan II	fish	ug/kg	ND		6	0.6	--		--	--	--		--	--	--	f	--	--
8081A	Endosulfan sulfate	fish	ug/kg	ND		6	2.9	--		--	--	--		--	--	--	f	--	--
8081A	Endrin	fish	ug/kg	ND		6	0.6	--		--	--	--		--	--	--	f	--	--
8081A	Endrin aldehyde	fish	ug/kg	ND		6	0.6	--		--	--	--		--	--	--	f	--	--
8081A	Endrin ketone	fish	ug/kg	ND		6	0.6	--		--	--	--		--	--	--	f	--	--
8081A	gamma-BHC (Lindane)	fish	ug/kg	ND		6	0.6	--		--	--	--		--	--	--	f	--	--
8081A	gamma-Chlordane	fish	ug/kg	ND		6	1.8	--		--	--	--		--	--	--	f	--	--
8081A	Heptachlor	fish	ug/kg	ND		6	0.6	--		--	--	--		--	--	--	f	--	--
8081A	Heptachlor epoxide	fish	ug/kg	ND		22	0.56	--		--	--	--		--	--	--	f	--	--
8081A	Methoxychlor	fish	ug/kg	ND		11	0.56	--		--	--	--		--	--	--	f	--	--
8081A	Toxaphene	fish	ug/kg	ND		60	33	--		--	--	--		--	--	--	f	--	--
8081A	4,4'-DDD	fish	ug/kg	ND		6	0.6	--		--	--	--		--	--	--	f	--	--
8081A	4,4'-DDE	fish	ug/kg	1.9	J	6	0.6	--		--	--	--		--	--	--	f	--	--
8081A	4,4'-DDT	fish	ug/kg	ND		6	1.4	--		--	--	--		--	--	--	f	--	--
	Explosives																		
8330	HMX	water	ug/L	ND		0.25	0.19	ND		0.25	0.03	ND		0.25	0.03	ND		0.25	0.03
8330	Nitrobenzene	water	ug/L	ND		0.25	0.08	ND		0.25	0.04	ND		0.25	0.04	ND		0.25	0.04
8330	Nitroglycerin	water	ug/L	ND		2.5	0.9	ND		2.5	0.3	ND		2.5	0.3	ND		2.5	0.3
8330	PETN	water	ug/L	ND		2.5	1.3	ND		2.5	0.5	ND		2.5	0.5	ND		2.5	0.5
8330	RDX	water	ug/L	ND		0.25	0.17	ND		0.25	0.03	ND		0.25	0.03	ND		0.25	0.03
8330	Tetryl	water	ug/L	ND		0.5	0.15	ND		0.5	0.03	ND		0.5	0.03	ND		0.5	0.03
8330	1,3,5-Trinitrobenzene	water	ug/L	ND		0.25	0.092	ND		0.25	0.03	ND		0.25	0.03	ND		0.25	0.03
8330	1,3-Dinitrobenzene	water	ug/L	ND		0.25	0.11	ND		0.25	0.03	ND		0.25	0.03	ND		0.25	0.03
8330	2,4,6-Trinitrotoluene	water	ug/L	ND		0.25	0.089	ND		0.25	0.05	ND		0.25	0.05	ND		0.25	0.05
8330	2,4-Dinitrotoluene	water	ug/L	ND		0.25	0.1	ND		0.25	0.04	ND		0.25	0.04	ND		0.25	0.04
8330	2,6-Dinitrotoluene	water	ug/L	ND		0.25	0.15	ND		0.25	0.03	ND		0.25	0.03	ND		0.25	0.03
8330	2-Amino-4,6-dinitrotoluene	water	ug/L	ND		0.25	0.12	ND		0.25	0.04	ND		0.25	0.04	ND		0.25	0.04
8330	2-Nitrotoluene	water	ug/L	ND		0.25	0.16	ND		0.25	0.04	ND		0.25	0.04	ND		0.25	0.04
8330	3-Nitrotoluene	water	ug/L	ND		0.25	0.18	ND		0.25	0.09	ND		0.25	0.09	ND		0.25	0.09
8330	4-Amino-2,6-dinitrotoluene	water	ug/L	ND		0.25	0.1	ND		0.25	0.05	ND		3.2	0.05	ND		3.2	0.05
8330	4-Nitrotoluene	water	ug/L	ND		0.25	0.23	ND		0.25	0.05	ND		0.4	0.05	ND		0.4	0.05

Table 4.5--Analytical results of surface-water monitoring at Rio Grande at Los Padillas, 2002-2003

Method	Parameter	Matrix	Unit	25-Jul-02				31-Oct-02				18-Dec-02				27-Feb-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
	Polyaromatic hydrocarbons																		
8310	Acenaphthene	sediment	ug/kg	ND		270	5.2	ND		5300	100	ND		270	5.3	ND		260	5
8310	Acenaphthylene	sediment	ug/kg	ND		270	16	ND		5300	320	ND		270	16	ND		260	16
8310	Anthracene	sediment	ug/kg	ND		27	3.4	ND		530	68	ND		27	3.6	ND		26	3.4
8310	Benzo(a)anthracene	sediment	ug/kg	10	J COL	27	6.6	ND		530	130	ND		27	6.8	ND		26	6.5
8310	Benzo(a)pyrene	sediment	ug/kg	13	J COL	27	2.4	60	J COL	530	47	7.4	J COL	27	2.5	ND		26	2.3
8310	Benzo(b)fluoranthene	sediment	ug/kg	40		27	5.2	ND		530	100	14	J	27	5.3	ND		26	5
8310	Benzo(ghi)perylene	sediment	ug/kg	19	J COL	53	3.4	ND		1100	68	7.8	J	55	3.6	ND		52	3.4
8310	Benzo(k)fluoranthene	sediment	ug/kg	13	J	27	3.1	ND		530	61	ND		27	3.1	ND		26	3
8310	Chrysene	sediment	ug/kg	18	J COL	53	3.2	63	J COL	1100	63	10	J COL	55	3.3	ND		52	3.1
8310	Dibenzo(a,h)anthracene	sediment	ug/kg	ND		53	6.1	ND		1100	120	14	J COL	55	6.3	ND		52	6
8310	Fluoranthene	sediment	ug/kg	55		53	11	290	J COL	1100	220	ND		55	12	ND		52	11
8310	Fluorene	sediment	ug/kg	ND		53	12	ND		1100	230	ND		55	12	ND		52	11
8310	Indeno(1,2,3-cd)pyrene	sediment	ug/kg	7.2	J COL	53	3.1	ND		1100	61	5.8	J COL	55	3.1	ND		52	3
8310	Naphthalene	sediment	ug/kg	ND		270	16	ND		5300	320	ND		270	16	ND		260	16
8310	Phenanthrene	sediment	ug/kg	22	J	53	4.4	ND		1100	87	ND		55	4.5	ND		52	4.3
8310	Pyrene	sediment	ug/kg	ND		53	9.2	ND		1100	180	ND		55	9.4	ND		52	8.9
8310	1-Methylnaphthalene	sediment	ug/kg	28	J COL	270	9.3	ND		5300	180	ND		270	9.6	ND		260	9.1
8310	2-Methylnaphthalene	sediment	ug/kg	ND		270	4.4	ND		5300	87	5.8	J	270	4.5	ND		260	4.3
	Total Petroleum Hydrocarbons																		
9071B	n-Hexane Ext. Material	sediment	mg/kg	3000		660	210	ND		1300	420	ND		680	220	ND		650	210
9071B	SGT-HEM (Petroleum Hydrocarbons)	sediment	mg/kg	ND		660	160	ND		1300	320	ND		680	160	ND		650	160
	Pharmaceuticals																		
ITMS	Amitriptyline	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Beta-Estradiol	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Caffeine	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Cholesterol	water	ng/L	3000		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Desipramine	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Dextro-Norgestrel	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Doxepin	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Equilin	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Estrone	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Enthynl Estradiol	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Imipramine	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Medroxyprogesterone	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Megestrol Acetate	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Menstranol	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Nordoxepin	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Norethindrone	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Norethynodrel	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Nortriptyline	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Paroxetine	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Phenytoin	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Prednisone	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Progesterone	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Propoxyphene	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Protroptyline	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Prozac	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Setraline	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Tamoxifen	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Trimipramine maleate	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	6 alpha-Methyprednisolone	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
	Grain size analysis																		
D422	Maximum particle size	sediment	--	coarse sand		--	--	coarse sand		--	--	coarse sand		--	--	coarse sand		--	--
D422	Particle size, 2000 microns, sand	sediment	%	0.8		0.1	--	0.2		0.1	--	1.6		0.1	--	0.9		0.1	--
D422	Particle size, 850 microns, sand	sediment	%	0.0		0.1	--	0.6		0.1	--	4.8		0.1	--	7.0		0.1	--
D422	Particle size, 425 microns, sand	sediment	%	18.7		0.1	--	1.4		0.1	--	10.3		0.1	--	27.1		0.1	--
D422	Particle size, 250 microns, sand	sediment	%	33.6		0.1	--	1.6		0.1	--	12.0		0.1	--	35.0		0.1	--
D422	Particle size, 180 microns, sand	sediment	%	15.9		0.1	--	0.8		0.1	--	15.9		0.1	--	16.0		0.1	--
D422	Particle size, 150 microns, sand	sediment	%	3.8		0.1	--	0.4		0.1	--	12.7		0.1	--	5.7		0.1	--
D422	Particle size, 75 microns, sand	sediment	%	3.1		0.1	--	4.2		0.1	--	31.3		0.1	--	5.0		0.1	--
D422	Particle size, 37.6 microns, silt	sediment	%	--		--	--	--		0.1	--	7.4		0.1	--	--		--	--
D422	Particle size, 37.1 microns, silt	sediment	%	--		--	--	--		--	--	--		--	--	0.0		0.1	--
D422	Particle size, 34.3 microns, silt	sediment	%	9.3		0.1	--	--		--	--	--		--	--	--		--	--
D422	Particle size, 27.0 microns, silt	sediment	%	--		--	--	5.4		0.1	--	--		--	--	--		--	--
D422	Particle size, 23.8 microns, silt	sediment	%	--		--	--	--		--	--	0.0		0.1	--	--		--	--
D422	Particle size, 23.6 microns, silt	sediment	%	--		--	--	--		--	--	--		--	--	0.4		0.1	--
D422	Particle size, 22.2 microns, silt	sediment	%	3.5		0.1	--	--		--	--	--		--	--	--		--	--
D422	Particle size, 17.7 microns, silt	sediment	%	--		--	--	5.8		0.1	--	--		--	--	--		--	--
D422	Particle size, 13.7 microns, silt	sediment	%	--		--	--	--		--	--	0.0		0.1	--	0.4		0.1	--
D422	Particle size, 13.0 microns, silt	sediment	%	2.1		0.1	--	--		--	--	--		--	--	--		--	--
D422	Particle size, 10.6 microns, silt	sediment	%	--		--	--	7.2		0.1	--	--		--	--	--		--	--
D422	Particle size, 9.7 microns, silt	sediment	%	--		--	--	--		--	--	--		--	--	0.4		0.1	--
D422	Particle size, 9.5 microns, silt	sediment	%	--		--	--	--		--	--	0.0		0.1	--	--		--	--
D422	Particle size, 9.2 microns, silt	sediment	%	0.6		0.1	--	--		--	--	--		--	--	--		--	--
D422	Particle size, 7.5 microns, silt	sediment	%	--		--	--	4.3		0.1	--	--		--	--	--		--	--
D422	Particle size, 7.0 microns, silt	sediment	%	--		--	--	--		--	--	--		--	--	0.0		0.1	--
D422	Particle size, 6.9 microns, silt	sediment	%	--		--	--	--		--	--	0.8		0.1	--	--		--	--
D422	Particle size, 6.6 microns, silt	sediment	%	1.4		0.1	--	--		--	--	--		--	--	--		--	--
D422	Particle size, 5.6 microns, silt	sediment	%	--		--	--	7.2		0.1	--	--		--	--	--		--	--
D422	Particle size, 3.5 microns, clay	sediment	%	--		--	--	--		--	--	0.8		0.1	--	--		--	--
D422	Particle size, 3.4 microns, clay	sediment	%	--		--	--	--		--	--	--		--	--	0.0		0.1	--
D422	Particle size, 3.2 microns, clay	sediment	%	2.1		0.1	--	--		--	--	--		--	--	--		--	--
D422	Particle size, 2.8 microns, clay	sediment	%	--		--	--	11.6		0.1	--	--		--	--	--		--	--
D422	Particle size, 1.4 microns, clay	sediment	%	1.5		0.1	--	--		--	--	0.0		0.1	--	0.1		0.1	--
D422	Particle size, less than 1.4 microns, clay	sediment	%	3.5		0.1	--	--		--	--	2.5		0.1	--	2.0		0.1	--
D422	Particle size, 1.3 microns, clay	sediment	%	--		--	--	13.0		0.1	--	--		--	--	--		--	--

Table 4.5--Analytical results of surface-water monitoring at Rio Grande at Los Padillas, 2002-2003

Method	Parameter	Matrix	Unit	25-Jul-02				31-Oct-02				18-Dec-02				27-Feb-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
D422	Particle size, less than 1.3 microns, clay	sediment	%	--		--	--	36.2		0.1	--	--		--	--	--		--	--

[1] See table 5 for description of qualifier codes.

[2] Reporting limit -- the lowest level at which measurements become quantitatively meaningful, ie., the quantitation limit, which is approximately three times the method detection limit. Reporting limits cannot be less than the statistically determined method detection limit.

[3] Method detection limit -- the minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero and is determined from replicate analyses of low level standards in a typical representative matrix.

Table 4.6.--Analytical results of surface-water monitoring at Rio Grande at Isleta below Railroad Bridge

[Field parameters measured by field staff. Laboratory analyses performed by Severn Trent Laboratory and the New Mexico Scientific Laboratory (pharmaceuticals). --, no data; °C, degrees Celsius; mm of Hg, millimeters of mercury; ft^3/sec, cubic feet per second; mg/L, milligram per liter; %, percent; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units; ug/L, micrograms per liter; g/kg, grams per kilogram; mg/kg, milligram per kilogram; ug/kg, micrograms per kilogram; ITMS, Ion trap mass spectrometer; ng/L, nanograms per liter; n/a, not applicable.]

Method	Parameter	Matrix	Unit (Standard)	7-Aug-02				28-Jan-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
--	Station identification number	--	--	345519106404010		--	--	345519106404010		--	--
--	Latitude/Longitude	--	--	345519/1064040		--	--	345519/1064040		--	--
--	Time	--	--	1000		--	--	1030		--	--
	Field parameters										
170.1	Air temperature	air	°C	26.7		0.1	0.01	8.4		0.1	0.01
170.1	Water temperature	water	°C	22.7		0.1	0.01	9.1		0.1	0.01
--	Barometric pressure	air	mm of Hg	641		--	--	639		--	--
--	Discharge, instantaneous	water	ft^3/s	514		--	--	466		--	--
150.1	pH - unfiltered	water	--	7.9		0.1	0.01	7.9		0.1	0.01
--	Dissolved oxygen	water	mg/L	7.3		0.1	0.01	9.1		0.1	0.01
--	Dissolved oxygen, saturation	water	%	83.8		1	0.01	78.6		1	0.01
120.1	Specific conductance - unfiltered	water	uS/cm	433		1	1	310		1	1
180.1	Turbidity	water	NTU	--		1	0.1	68		1	0.1
310.1	Alkalinity, as $CaCO_3$	water	mg/L	128		1	0.1	138		1	0.1
310.1	Bicarbonate, as HCO_3	water	mg/L	154		1	0.1	167		1	0.1
310.1	Carbonate, as CO_3	water	mg/L	1.2		0.1	0.1	0.6		0.1	0.1
	General chemistry										
130.2	Hardness, as $CaCO_3$	water	mg/L	140	J	5	2	180	J	5	2
160.1	Total dissolved solids	water	mg/L	280		10	5	330		10	5
160.2	Total suspended solids	water	mg/L	340	Q	20	9	200		4	1.8
314	Perchlorate	water	ug/L	ND		20	1.5	ND		20	0.2
405.1	Biochemical oxygen demand (BOD)	water	mg/L	ND		2	0.23	1.4	B	2	0.23
410.4	Chemical oxygen demand (COD)	water	mg/L	7.6	B J	20	3.5	ND		20	3.5
9060	Total organic carbon	sediment	g/kg	8		2	0.59	ND		2	0.59
D2216	Moisture (for volatical organic compound analyses)	sediment	%	40		0.1	--	--		--	--
D2216	Moisture (for all other analyses)	sediment	%	32		0.1	--	22		0.1	--
D2216	Moisture (Red shiner)	fish	%	--	f	0.1	--	--	f	0.1	--
Total res.	Lipids (Red shiner)	fish	%	--	f	0.1	--	0.42		0.1	--
	Common anions										
300.0A	Bromide	water	mg/L	ND		0.2	0.03	0.3		0.2	0.03
300.0A	Chloride	water	mg/L	12		3	0.1	28		3	0.1
300.0A	Fluoride	water	mg/L	0.52	B	1	0.03	0.61	B	1	0.03
300.0A	Nitrate	water	mg/L	0.29	B	0.5	0.03	0.84		0.5	0.03
300.0A	Nitrite	water	mg/L	ND		0.5	0.04	ND		0.5	0.04
300.0A	Phosphate as P, Ortho	water	mg/L	ND		0.5	0.04	0.17	B	0.5	0.04
300.0A	Sulfate	water	mg/L	70	Q	25	1	74	Q	25	1

Table 4.6.--Analytical results of surface-water monitoring at Rio Grande at Isleta below Railroad Bridge

Method	Parameter	Matrix	Unit (Standard)	7-Aug-02				28-Jan-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
9012A	Cyanide, Total	water	mg/L	0.0036	B J	0.01	0.002	0.0073	B	0.01	0.0039
9012A	Cyanide, Total	sediment	mg/kg	0.16	B	0.73	0.13	0.21	B J	0.64	0.13
9056	Bromide	sediment	mg/kg	ND		2.9	0.44	ND		2.6	0.38
9056	Chloride	sediment	mg/kg	18	B	44	1.5	24	B J	38	1.3
9056	Fluoride	sediment	mg/kg	4.1	B	15	0.44	2	B J	13	0.38
9056	Nitrate	sediment	mg/kg	ND		7.3	0.44	2.6	B J	6.4	0.38
9056	Nitrite	sediment	mg/kg	2.3	B	7.3	0.59	ND		6.4	0.51
9056	Orthophosphate	sediment	mg/kg	ND		7.3	0.59	2.4	B	6.4	0.51
9056	Sulfate	sediment	mg/kg	73		73	2.9	37	B J	64	2.6
	Nutrients										
350.1	Ammonia as N	water	mg/L	0.039	B	0.1	0.015	0.12		0.1	0.038
351.2	Total Kjeldahl Nitrogen	water	mg/L	0.22	B	0.5	0.14	0.33	B	0.5	0.083
353.2	Nitrate-Nitrite	water	mg/L	0.15		0.1	0.012	0.72		0.1	0.012
354.1	Nitrite	water	mg/L	0.01		0.01	0.002	0.011		0.01	0.0018
365.3	Total phosphorus	water	mg/L	0.8	Q	0.5	0.13	0.75		0.05	0.013
350.1	Ammonia as N	sediment	mg/kg	3.2		1.5	0.22	1.1	B	1.3	0.49
351.2	Total Kjeldahl Nitrogen	sediment	mg/kg	470	Q	150	59	26	B	64	7.3
353.2	Nitrate-Nitrite	sediment	mg/kg	0.49	B J	1.5	0.18	0.26	B J	1.3	0.15
354.1	Nitrite	sediment	mg/kg	0.13	B	0.15	0.059	0.027	B	0.13	0.023
365.3	Total phosphorus	sediment	mg/kg	400	Q	150	35	110	Q	64	15
	Trace elements										
6020	Antimony	water	ug/L	0.2	B	2	0.04	0.34	B J	2	0.04
6020	Arsenic	water	ug/L	3.7	B	5	0.061	4.8	B J	5	0.061
6020	Barium	water	ug/L	90		1	0.057	94		1	0.057
6020	Beryllium	water	ug/L	ND		1	0.028	--		--	--
6020	Cadmium	water	ug/L	ND		1	0.022	ND		1	0.022
6020	Chromium	water	ug/L	0.3	B	2	0.24	0.54	B J	2	0.24
6020	Cobalt	water	ug/L	0.28	B	1	0.015	0.39	B J	1	0.015
6020	Copper	water	ug/L	0.75	B	2	0.63	1.1	B	2	0.63
6020	Lead	water	ug/L	ND		1	0.15	ND		1	0.15
6020	Manganese	water	ug/L	2.5		1	0.061	60	J	1	0.061
6020	Molybdenum	water	ug/L	4.2		2	0.023	6.5	J	2	0.023
6020	Nickel	water	ug/L	1.2	B	2	0.25	0.51	B	2	0.25
6020	Selenium	water	ug/L	0.48	B	5	0.19	0.57	B	5	0.19
6020	Silver	water	ug/L	0.042	B	5	0.012	0.014	B	5	0.012
6020	Thallium	water	ug/L	ND		1	0.015	ND		1	0.015
6020	Tin	water	ug/L	ND		10	0.054	0.23	B J	10	0.054
6020	Uranium	water	ug/L	2.8	J	1	0.0015	3.6	J	1	0.0015
6020	Vanadium	water	ug/L	5.3		5	0.07	4.8	B J	5	0.07
6020	Zinc	water	ug/L	5.4	B	10	2.3	5.2	B	10	2.3
7470A	Mercury	water	ug/L	ND		0.2	0.028	ND		0.2	0.015
6010B	Aluminum	water	ug/L	ND		100	20	ND		100	20
6010B	Beryllium	water	ug/L	--		--	--	0.22	B J	5	0.22
6010B	Boron	water	ug/L	61	B	100	5.2	120		100	5.2

Table 4.6.--Analytical results of surface-water monitoring at Rio Grande at Isleta below Railroad Bridge

Method	Parameter	Matrix	Unit (Standard)	7-Aug-02				28-Jan-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
6010B	Calcium	water	ug/L	46000		200	31	45000		200	31
6010B	Iron	water	ug/L	17	B	100	13	15	B	100	13
6010B	Lithium	water	ug/L	35		10	2.1	57		10	2.1
6010B	Magnesium	water	ug/L	7800		200	24	8100		200	24
6010B	Potassium	water	ug/L	4000		3000	490	5500		3000	490
6010B	Silica	water	ug/L	22000	J	1100	23	25000		1100	23
6010B	Sodium	water	ug/L	29000		5000	1500	42000		5000	1500
6010B	Strontium	water	ug/L	360		10	0.35	380		10	0.35
6010B	Titanium	water	ug/L	ND		10	0.97	1.2	B	10	0.97
6020	Antimony	sediment	mg/kg	0.013	B	0.29	0.0042	0.013	B J	0.26	0.0037
6020	Arsenic	sediment	mg/kg	2.20		0.73	0.025	1.8		0.64	0.022
6020	Barium	sediment	mg/kg	0.16	J	0.15	0.035	82	J	0.13	0.031
6020	Beryllium	sediment	mg/kg	0.61		0.15	0.0064	--		--	--
6020	Cadmium	sediment	mg/kg	0.18		0.15	0.0021	0.044	B	0.13	0.0018
6020	Chromium	sediment	mg/kg	11.0	J	0.29	0.026	4.1	J	0.26	0.023
6020	Cobalt	sediment	mg/kg	5.40		0.15	0.0018	2.4	J	0.13	0.0015
6020	Copper	sediment	mg/kg	9.00	J	0.29	0.022	3.5	J	0.26	0.019
6020	Lead	sediment	mg/kg	10.0	J	0.15	0.0062	3.6		0.13	0.0054
6020	Manganese	sediment	mg/kg	260	J	0.15	0.034	280		0.13	0.029
6020	Molybdenum	sediment	mg/kg	0.40	J	0.29	0.0032	0.17	B	0.26	0.0028
6020	Nickel	sediment	mg/kg	9.50		0.15	0.019	3.5	J	0.13	0.017
6020	Selenium	sediment	mg/kg	0.36	B	0.73	0.072	0.15	B	0.64	0.063
6020	Silver	sediment	mg/kg	0.15	J	0.15	0.0034	0.044	B	0.13	0.0029
6020	Thallium	sediment	mg/kg	0.21		0.15	0.0015	0.054	B	0.13	0.0013
6020	Tin	sediment	mg/kg	ND		1.50	0.12	0.12	B	1.3	0.1
6020	Uranium	sediment	mg/kg	1.20		0.15	0.0026	0.39		0.13	0.0023
6020	Vanadium	sediment	mg/kg	26.0	J	0.73	0.0082	12	J	0.64	0.0072
6020	Zinc	sediment	mg/kg	36.0		1.50	0.51	18		1.3	0.45
7471A	Mercury	sediment	mg/kg	0.0083	B	0.048	0.0037	ND		0.042	0.0032
6010B	Aluminum	sediment	mg/kg	12000	J	15	3.1	3200		13	2.7
6010B	Beryllium	sediment	mg/kg	--		--	--	0.2	B	0.64	0.044
6010B	Boron	sediment	mg/kg	5.6	B	15	0.54	1.4	B	13	0.47
6010B	Calcium	sediment	mg/kg	20000	J	29	11	6800		26	10
6010B	Iron	sediment	mg/kg	12000		15	2.3	4900	J	13	2.1
6010B	Lithium	sediment	mg/kg	14		7.3	0.16	4.6	B	6.4	0.14
6010B	Magnesium	sediment	mg/kg	4400	J	29	2.2	1300		26	1.9
6010B	Potassium	sediment	mg/kg	2700		440	51	810		380	45
6010B	Sodium	sediment	mg/kg	ND		730	88	85	B	640	77
6010B	Strontium	sediment	mg/kg	76		1.5	0.022	25		1.3	0.064
6010B	Titanium	sediment	mg/kg	310	J	1.5	0.18	140		1.3	0.15
6020	Antimony	fish	mg/kg	ND		0.2	20	0.029	B	0.2	0.02
6020	Arsenic	fish	mg/kg	0.22	B	0.5	7.6	0.39	B	0.5	0.0076
6020	Beryllium	fish	mg/kg	0.022	B	0.1	2.3	--		--	--
6020	Cadmium	fish	mg/kg	0.0099	B	0.1	2.7	0.0093	B	0.1	0.0027

Table 4.6.--Analytical results of surface-water monitoring at Rio Grande at Isleta below Railroad Bridge

Method	Parameter	Matrix	Unit (Standard)	7-Aug-02				28-Jan-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
6020	Chromium	fish	mg/kg	0.65	J	0.2	34	0.51	J	0.2	0.034
6020	Copper	fish	mg/kg	0.93		0.2	61	1.4		0.2	0.061
6020	Lead	fish	mg/kg	0.31		0.1	20	0.26		0.1	0.02
6020	Nickel	fish	mg/kg	0.45	J	0.1	11	0.25	J	0.1	0.011
6020	Selenium	fish	mg/kg	0.4	B	0.5	18	0.8		0.5	0.018
6020	Silver	fish	mg/kg	0.009	B J	0.1	2	0.0084	B	0.1	0.002
6020	Thallium	fish	mg/kg	0.01	B	0.1	2	0.014	B	0.1	0.002
6020	Uranium	fish	mg/kg	0.036	B	0.1	2	0.035	B	0.1	0.002
6020	Zinc	fish	mg/kg	27	J	1	130	39	J	1	0.13
245.6	Mercury	fish	ug/kg	13.0	B	100	5.9	50	B	100	5.9
6010B	Aluminum	fish	mg/kg	610		10	3.1	270		10	3.1
6010B	Barium	fish	mg/kg	11		1	0.12	13	J	1	0.12
6010B	Beryllium	fish	mg/kg	--		--	--	ND		0.5	0.14
6010B	Boron	fish	mg/kg	ND		10	0.51	0.62	B	10	0.51
6010B	Calcium	fish	mg/kg	8100	J	20	3.2	6900	J	20	3.2
6010B	Cobalt	fish	mg/kg	0.28	B	1	0.15	0.23	B	1	0.15
6010B	Iron	fish	mg/kg	460		10	2	240		10	2
6010B	Lithium	fish	mg/kg	0.63	B	5	0.22	0.32	B	5	0.22
6010B	Magnesium	fish	mg/kg	440	J	20	1.5	450		20	1.5
6010B	Manganese	fish	mg/kg	13		1	0.14	8.2		1	0.14
6010B	Molybdenum	fish	mg/kg	ND		2	0.24	ND		2	0.24
6010B	Potassium	fish	mg/kg	1700		300	31	3500		300	31
6010B	Sodium	fish	mg/kg	220	B	500	120	1200	J	500	120
6010B	Strontium	fish	mg/kg	23		1	0.15	20		1	0.15
6010B	Tin	fish	mg/kg	1.9	B J	10	0.42	1.5	B J	10	0.42
6010B	Titanium	fish	mg/kg	12		1	0.2	5.2		1	0.2
6010B	Vanadium	fish	mg/kg	1.1		1	0.35	0.58	B	1	0.35
	Volatile organic compounds										
8260B	Acetone	water	ug/L	3.8	J	10	2.9	ND		10	2.5
8260B	Benzene	water	ug/L	ND		1	0.27	ND		1	0.17
8260B	Bromodichloromethane	water	ug/L	ND		1	0.35	ND		1	0.2
8260B	Bromoform	water	ug/L	ND		1	0.46	ND		1	0.23
8260B	Bromomethane	water	ug/L	ND		2	0.28	ND		2	0.22
8260B	Carbon disulfide	water	ug/L	ND		1	0.67	ND		1	0.24
8260B	Carbon tetrachloride	water	ug/L	ND		1	0.35	ND		1	0.2
8260B	Chlorobenzene	water	ug/L	ND		1	0.24	ND		1	0.13
8260B	Chloroethane	water	ug/L	ND		2	0.26	ND		2	0.18
8260B	Chloroform	water	ug/L	ND		1	0.29	ND		1	0.17
8260B	Chloromethane	water	ug/L	ND		2	0.26	ND		2	0.26
8260B	cis-1,2-Dichloroethene	water	ug/L	ND		1	0.33	ND		1	0.14
8260B	cis-1,3-Dichloropropene	water	ug/L	ND		1	0.31	ND		1	0.19
8260B	Dibromochloromethane	water	ug/L	ND		1	0.37	ND		1	0.19
8260B	Ethylbenzene	water	ug/L	ND		1	0.51	ND		1	0.12
8260B	Methylene chloride	water	ug/L	ND		5	0.86	ND		5	0.21

Table 4.6.--Analytical results of surface-water monitoring at Rio Grande at Isleta below Railroad Bridge

Method	Parameter	Matrix	Unit (Standard)	7-Aug-02				28-Jan-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
8260B	m-Xylene & p-Xylene	water	ug/L	ND		2	0.52	ND		2	0.27
8260B	o-Xylene	water	ug/L	ND		1	0.24	ND		1	0.15
8260B	Styrene	water	ug/L	ND		1	0.28	ND		1	0.14
8260B	Tetrachloroethene	water	ug/L	ND		1	0.27	ND		1	0.26
8260B	Toluene	water	ug/L	ND		1	0.26	ND		1	0.15
8260B	trans-1,2-Dichloroethene	water	ug/L	ND		0.5	0.25	ND		0.5	0.15
8260B	trans-1,3-Dichloropropene	water	ug/L	ND		1	0.36	ND		1	0.2
8260B	Trichloroethene	water	ug/L	ND		1	0.24	ND		1	0.16
8260B	Unknown	water	ug/L	2.6	J	--	--	--		--	--
8260B	Vinyl chloride	water	ug/L	ND		1	0.26	ND		1	0.19
8260B	Xylenes (total)	water	ug/L	ND		2	0.73	ND		2	0.41
8260B	1,1,1-Trichloroethane	water	ug/L	ND		1	0.32	ND		1	0.16
8260B	1,1,2,2-Tetrachloroethane	water	ug/L	ND		1	0.5	ND		1	0.21
8260B	1,1,2-Trichloroethane	water	ug/L	ND		1	0.41	ND		1	0.27
8260B	1,1-Dichloroethane	water	ug/L	ND		1	0.29	ND		1	0.22
8260B	1,1-Dichloroethene	water	ug/L	ND		1	0.31	ND		1	0.23
8260B	1,2-Dichloroethane	water	ug/L	ND		1	0.43	ND		1	0.26
8260B	1,2-Dichloroethene (total)	water	ug/L	ND		1	0.54	ND		1	0.24
8260B	1,2-Dichloropropane	water	ug/L	ND		1	0.38	ND		1	0.18
8260B	2-Butanone (MEK)	water	ug/L	ND		5	2.4	ND		5	2
8260B	2-Hexanone	water	ug/L	ND		5	1.8	ND		5	1.7
8260B	4-Methyl-2-pentanone	water	ug/L	ND		5	1.8	ND		5	0.98
8260B	Acetone	sediment	ug/kg	15	J	33	7.6	ND		26	4.4
8260B	Benzene	sediment	ug/kg	ND		8.3	1.5	ND		6.4	0.15
8260B	Bromodichloromethane	sediment	ug/kg	ND		8.3	1.5	ND		6.4	0.26
8260B	Bromoform	sediment	ug/kg	ND		8.3	1.5	ND		6.4	0.33
8260B	Bromomethane	sediment	ug/kg	ND		17	2	ND		13	0.77
8260B	Carbon disulfide	sediment	ug/kg	ND		8.3	1.5	ND		6.4	0.31
8260B	Carbon tetrachloride	sediment	ug/kg	ND		8.3	2	ND		6.4	0.32
8260B	Chlorobenzene	sediment	ug/kg	ND		8.3	1.2	ND		6.4	0.23
8260B	Chloroethane	sediment	ug/kg	ND		17	2.2	ND		13	0.29
8260B	Chloroform	sediment	ug/kg	ND		17	1.5	ND		13	0.32
8260B	Chloromethane	sediment	ug/kg	ND		17	2.5	ND		13	0.46
8260B	cis-1,2-Dichloroethene	sediment	ug/kg	ND		4.1	1.4	ND		3.2	0.27
8260B	cis-1,3-Dichloropropene	sediment	ug/kg	ND		8.3	1.6	ND		6.4	0.46
8260B	Dibromochloromethane	sediment	ug/kg	ND		8.3	1.5	ND		6.4	0.26
8260B	Ethylbenzene	sediment	ug/kg	ND		8.3	2	ND		6.4	0.35
8260B	Methylene chloride	sediment	ug/kg	ND		8.3	1.3	ND		6.4	0.53
8260B	m-Xylene & p-Xylene	sediment	ug/kg	ND		4.1	3	ND		3.2	0.54
8260B	o-Xylene	sediment	ug/kg	ND		4.1	1.6	ND		3.2	0.29
8260B	Styrene	sediment	ug/kg	ND		8.3	1.1	ND		6.4	0.27
8260B	Tetrachloroethene	sediment	ug/kg	ND		8.3	1.6	ND		6.4	0.32
8260B	Toluene	sediment	ug/kg	ND		8.3	1.3	ND		6.4	0.28
8260B	trans-1,2-Dichloroethene	sediment	ug/kg	ND		4.1	1.3	ND		3.2	0.45

Table 4.6.--Analytical results of surface-water monitoring at Rio Grande at Isleta below Railroad Bridge

Method	Parameter	Matrix	Unit (Standard)	7-Aug-02				28-Jan-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
8260B	trans-1,3-Dichloropropene	sediment	ug/kg	ND		8.3	1.7	ND		6.4	0.54
8260B	Trichloroethene	sediment	ug/kg	ND		8.3	1.4	ND		6.4	0.37
8260B	Unknown	sediment	ug/kg	14		--	--	--		--	--
8260B	Unknown	sediment	ug/kg	39		--	--	--		--	--
8260B	Vinyl chloride	sediment	ug/kg	ND		8.3	1.8	ND		6.4	0.29
8260B	Xylenes (total)	sediment	ug/kg	ND		8.3	4.6	ND		6.4	0.72
8260B	1,1,1-Trichloroethane	sediment	ug/kg	ND		8.3	1.6	ND		6.4	0.33
8260B	1,1,2,2-Tetrachloroethane	sediment	ug/kg	ND		8.3	1.8	ND		6.4	0.72
8260B	1,1,2-Trichloroethane	sediment	ug/kg	ND		8.3	2.5	ND		6.4	0.41
8260B	1,1-Dichloroethane	sediment	ug/kg	ND		8.3	1.6	ND		6.4	0.27
8260B	1,1-Dichloroethene	sediment	ug/kg	ND		8.3	1.8	ND		6.4	0.4
8260B	1,2-Dichloroethane	sediment	ug/kg	ND		8.3	1.6	ND		6.4	0.28
8260B	1,2-Dichloroethene (total)	sediment	ug/kg	ND		8.3	2.5	ND		6.4	0.38
8260B	1,2-Dichloropropane	sediment	ug/kg	ND		8.3	2	ND		6.4	0.28
8260B	2-Butanone (MEK)	sediment	ug/kg	ND		33	7.8	ND		26	3.5
8260B	2-Hexanone	sediment	ug/kg	ND		33	7.6	ND		26	2.9
8260B	4-Methyl-2-pentanone	sediment	ug/kg	ND		33	6.5	ND		26	2.6
	Herbicides										
8151A	Dalapon	water	ug/L	ND		2	0.42	ND		2	0.33
8151A	Dicamba	water	ug/L	ND		2	0.081	ND		2	0.086
8151A	Dichlorprop	water	ug/L	ND		4	0.13	ND		4	0.11
8151A	Dinoseb	water	ug/L	ND		0.6	0.09	ND		0.6	0.065
8151A	MCPA	water	ug/L	ND		400	13	ND		400	12
8151A	MCPP	water	ug/L	ND		400	42	ND		400	15
8151A	2,4,5-T	water	ug/L	ND		1	0.043	ND		1	0.043
8151A	2,4,5-TP (Silvex)	water	ug/L	ND		1	0.034	ND		1	0.036
8151A	2,4-D	water	ug/L	ND		4	0.16	ND		4	0.24
8151A	2,4-DB	water	ug/L	ND		4	0.21	ND		4	0.098
	Pesticides										
8141A	Anilazine	water	ug/L	ND		10	1.3	ND		10	1.3
8141A	Atrazine	water	ug/L	ND		10	0.52	ND		10	0.52
8141A	Azinphos-methyl	water	ug/L	ND		2.5	0.14	ND		2.5	0.14
8141A	Bolstar	water	ug/L	ND		0.5	0.14	ND		0.5	0.14
8141A	Chlorpyrifos	water	ug/L	ND		0.5	0.054	ND		0.5	0.054
8141A	Coumaphos	water	ug/L	ND		0.5	0.079	ND		0.5	0.079
8141A	Demeton (total)	water	ug/L	ND		1	0.19	ND		1	0.19
8141A	Diazinon	water	ug/L	ND		0.5	0.039	ND		0.5	0.039
8141A	Dichlorvos	water	ug/L	ND		0.5	0.13	ND		0.5	0.13
8141A	Dimethoate	water	ug/L	ND		0.5	0.18	ND		0.5	0.18
8141A	Disulfoton	water	ug/L	ND		0.5	0.057	ND		0.5	0.057
8141A	EPN	water	ug/L	ND		0.5	0.05	ND		0.5	0.05
8141A	Ethoprop	water	ug/L	ND		0.5	0.056	ND		0.5	0.056
8141A	Ethyl parathion	water	ug/L	ND		0.5	0.04	ND		0.5	0.04
8141A	Famphur	water	ug/L	ND		1	0.054	ND		1	0.054

Table 4.6.--Analytical results of surface-water monitoring at Rio Grande at Isleta below Railroad Bridge

Method	Parameter	Matrix	Unit (Standard)	7-Aug-02				28-Jan-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
8141A	Fensulfothion	water	ug/L	ND		2.5	0.22	ND		2.5	0.22
8141A	Fenthion	water	ug/L	ND		0.5	0.061	ND		0.5	0.061
8141A	Malathion	water	ug/L	ND		1.2	0.05	ND		1.2	0.05
8141A	Merphos	water	ug/L	ND		5	0.063	ND		5	0.063
8141A	Methyl parathion	water	ug/L	ND		0.5	0.061	ND		0.5	0.061
8141A	Mevinphos	water	ug/L	ND		6.2	0.16	ND		6.2	0.16
8141A	Naled	water	ug/L	ND		10	0.22	ND		10	0.22
8141A	Phorate	water	ug/L	ND		0.5	0.075	ND		0.5	0.075
8141A	Propazine	water	ug/L	ND		10	2.5	ND		10	2.5
8141A	Ronnel	water	ug/L	ND		10	0.11	ND		10	0.11
8141A	Simazine	water	ug/L	ND		10	0.46	ND		10	0.46
8141A	Sulfotepp	water	ug/L	ND		0.5	0.03	ND		0.5	0.03
8141A	Tetrachlorvinphos (Stirophos)	water	ug/L	ND		2.5	0.056	ND		2.5	0.056
8141A	Thionazin	water	ug/L	ND		0.5	0.059	ND		0.5	0.059
8141A	Tokuthion	water	ug/L	ND		0.5	0.071	ND		0.5	0.071
8141A	Trichloronate	water	ug/L	ND		0.5	0.057	ND		0.5	0.057
8141A	O,O,O-Triethyl phosphorothioate	water	ug/L	ND		0.5	0.15	ND		0.5	0.15
8081A	Aldrin	sediment	ug/kg	ND		2.5	0.57	ND	u	11	1.7
8081A	alpha-BHC	sediment	ug/kg	ND		2.5	0.54	ND	u	11	1.6
8081A	beta-BHC	sediment	ug/kg	ND		2.5	0.5	ND	u	11	1.7
8081A	Chlordane (technical)	sediment	ug/kg	ND		25	3.7	ND	u	110	16
8081A	delta-BHC	sediment	ug/kg	ND		2.5	0.16	ND	u	11	4
8081A	Dieldrin	sediment	ug/kg	ND		2.5	0.79	ND	u	11	1.5
8081A	Endosulfan I	sediment	ug/kg	ND		2.5	0.56	ND	u	11	2.4
8081A	Endosulfan II	sediment	ug/kg	ND		2.5	0.97	ND	u	11	2.7
8081A	Endosulfan sulfate	sediment	ug/kg	ND		2.5	0.42	ND	u	11	2.6
8081A	Endrin	sediment	ug/kg	ND		2.5	0.56	ND	u	11	2.6
8081A	Endrin aldehyde	sediment	ug/kg	ND		2.5	2.2	ND	u	11	5.5
8081A	gamma-BHC (Lindane)	sediment	ug/kg	ND		2.5	1	ND	u	11	1.5
8081A	Heptachlor	sediment	ug/kg	ND		2.5	0.69	ND	u	11	2
8081A	Heptachlor epoxide	sediment	ug/kg	ND		9.8	0.53	ND	u	43	1.4
8081A	Methoxychlor	sediment	ug/kg	ND		4.8	0.25	ND	u	21	5.1
8081A	Toxaphene	sediment	ug/kg	ND		250	15	ND	u	1100	64
8081A	4,4'-DDD	sediment	ug/kg	ND		2.5	0.42	ND	u	11	2.2
8081A	4,4'-DDE	sediment	ug/kg	4.5		2.5	0.47	ND	u	11	2.8
8081A	4,4'-DDT	sediment	ug/kg	ND		2.5	0.48	ND	u	11	3.1
8081A	Aldrin	fish	ug/kg	--	f	--	--	ND	V	14	5.1
8081A	alpha-BHC	fish	ug/kg	--	f	--	--	ND	V	14	1.4
8081A	alpha-Chlordane	fish	ug/kg	--	f	--	--	ND	V	14	1.4
8081A	beta-BHC	fish	ug/kg	--	f	--	--	ND	V	14	1.4
8081A	delta-BHC	fish	ug/kg	--	f	--	--	ND	V	14	1.4
8081A	Dieldrin	fish	ug/kg	--	f	--	--	ND	V	14	1.4
8081A	Endosulfan I	fish	ug/kg	--	f	--	--	ND	V	14	1.4
8081A	Endosulfan II	fish	ug/kg	--	f	--	--	ND	V	14	1.4

Table 4.6.--Analytical results of surface-water monitoring at Rio Grande at Isleta below Railroad Bridge

Method	Parameter	Matrix	Unit (Standard)	7-Aug-02				28-Jan-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
8081A	Endosulfan sulfate	fish	ug/kg	--	f	--	--	ND	V	14	6.7
8081A	Endrin	fish	ug/kg	--	f	--	--	ND	V	14	1.4
8081A	Endrin aldehyde	fish	ug/kg	--	f	--	--	ND	V	14	1.4
8081A	Endrin ketone	fish	ug/kg	--	f	--	--	ND	V	14	1.4
8081A	gamma-BHC (Lindane)	fish	ug/kg	--	f	--	--	ND	V	14	1.4
8081A	gamma-Chlordane	fish	ug/kg	--	f	--	--	ND	V	14	4.1
8081A	Heptachlor	fish	ug/kg	--	f	--	--	ND	V	14	1.4
8081A	Heptachlor epoxide	fish	ug/kg	--	f	--	--	ND	V	51	1.3
8081A	Methoxychlor	fish	ug/kg	--	f	--	--	ND	V	25	1.3
8081A	Toxaphene	fish	ug/kg	--	f	--	--	ND	V	140	76
8081A	4,4'-DDD	fish	ug/kg	--	f	--	--	ND	V	14	1.4
8081A	4,4'-DDE	fish	ug/kg	--	f	--	--	ND	V	14	1.4
8081A	4,4'-DDT	fish	ug/kg	--	f	--	--	ND	V	14	3.2
	Explosives										
8330	HMX	water	ug/L	ND		0.25	0.19	ND		0.25	0.03
8330	Nitrobenzene	water	ug/L	ND		0.25	0.08	ND		0.25	0.04
8330	Nitroglycerin	water	ug/L	ND		2.5	0.9	ND		2.5	0.3
8330	PETN	water	ug/L	ND		2.5	1.3	ND		2.5	0.5
8330	RDX	water	ug/L	ND		0.25	0.17	ND		0.25	0.03
8330	Tetryl	water	ug/L	ND		0.5	0.15	ND		0.5	0.03
8330	1,3,5-Trinitrobenzene	water	ug/L	ND		0.25	0.092	ND		0.25	0.03
8330	1,3-Dinitrobenzene	water	ug/L	ND		0.25	0.11	ND		0.25	0.03
8330	2,4,6-Trinitrotoluene	water	ug/L	ND		0.25	0.089	ND		0.25	0.05
8330	2,4-Dinitrotoluene	water	ug/L	ND		0.25	0.1	ND		0.25	0.04
8330	2,6-Dinitrotoluene	water	ug/L	ND		0.25	0.15	ND		0.25	0.03
8330	2-Amino-4,6-dinitrotoluene	water	ug/L	ND		0.25	0.12	ND		0.25	0.04
8330	2-Nitrotoluene	water	ug/L	ND		0.25	0.16	ND		0.25	0.04
8330	3-Nitrotoluene	water	ug/L	ND		0.25	0.18	ND		0.25	0.09
8330	4-Amino-2,6-dinitrotoluene	water	ug/L	ND		0.25	0.1	ND		3.2	0.05
8330	4-Nitrotoluene	water	ug/L	ND		0.25	0.23	ND		0.4	0.05
	Polyaromatic hydrocarbons										
8310	Acenaphthene	sediment	ug/kg	ND	u	1500	29	ND		260	5
8310	Acenaphthylene	sediment	ug/kg	ND	u	1500	88	ND		260	15
8310	Anthracene	sediment	ug/kg	29	J,u	150	19	ND		26	3.3
8310	Benzo(a)anthracene	sediment	ug/kg	ND	u	150	37	ND		26	6.4
8310	Benzo(a)pyrene	sediment	ug/kg	92	J,COL,u	150	13	2.9	J COL	26	2.3
8310	Benzo(b)fluoranthene	sediment	ug/kg	170	COL,u	150	29	5.2	J	26	5
8310	Benzo(ghi)perylene	sediment	ug/kg	100	J,u	290	19	6.1	J COL	51	3.3
8310	Benzo(k)fluoranthene	sediment	ug/kg	120	J,COL,u	150	17	ND		26	2.9
8310	Chrysene	sediment	ug/kg	130	J,COL,u	290	18	ND		51	3.1
8310	Dibenzo(a,h)anthracene	sediment	ug/kg	ND	u	290	34	ND		51	5.9
8310	Fluoranthene	sediment	ug/kg	93	J,COL,u	290	62	ND		51	11
8310	Fluorene	sediment	ug/kg	ND	u	290	64	ND		51	11
8310	Indeno(1,2,3-cd)pyrene	sediment	ug/kg	100	J,u	290	17	ND		51	2.9

Table 4.6.--Analytical results of surface-water monitoring at Rio Grande at Isleta below Railroad Bridge

Method	Parameter	Matrix	Unit (Standard)	7-Aug-02				28-Jan-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
8310	Naphthalene	sediment	ug/kg	ND	u	1500	88	ND		260	15
8310	Phenanthrene	sediment	ug/kg	65	J,u	290	24	ND		51	4.2
8310	Pyrene	sediment	ug/kg	86	J,COL,u	290	51	ND		51	8.8
8310	1-Methylnaphthalene	sediment	ug/kg	ND	u	1500	51	ND		260	9
8310	2-Methylnaphthalene	sediment	ug/kg	ND	u	1500	24	ND		260	4.2
	Total Petroleum Hydrocarbons										
9071B	n-Hexane Ext. Material	sediment	mg/kg	280	B	730	230	ND		640	210
9071B	SGT-HEM (Petroleum Hydrocarbons)	sediment	mg/kg	ND		730	180	ND		640	150
	Pharmaceuticals										
ITMS	Amitriptyline	water	ng/L	ND		10.0	--	ND		10.0	--
ITMS	Beta-Estradiol	water	ng/L	ND		10.0	--	ND		10.0	--
ITMS	Caffeine	water	ng/L	ND		10.0	--	ND		10.0	--
ITMS	Cholesterol	water	ng/L	ND		10.0	--	ND		10.0	--
ITMS	Desipramine	water	ng/L	ND		10.0	--	ND		10.0	--
ITMS	Dextro-Norgestrel	water	ng/L	ND		10.0	--	ND		10.0	--
ITMS	Doxepin	water	ng/L	ND		10.0	--	ND		10.0	--
ITMS	Equilin	water	ng/L	ND		10.0	--	ND		10.0	--
ITMS	Estrone	water	ng/L	ND		10.0	--	ND		10.0	--
ITMS	Enthynl Estradiol	water	ng/L	ND		10.0	--	ND		10.0	--
ITMS	Imipramine	water	ng/L	ND		10.0	--	ND		10.0	--
ITMS	Medroxyprogesterone	water	ng/L	ND		10.0	--	ND		10.0	--
ITMS	Megestrol Acetate	water	ng/L	ND		10.0	--	ND		10.0	--
ITMS	Menstranol	water	ng/L	ND		10.0	--	ND		10.0	--
ITMS	Nordoxepin	water	ng/L	ND		10.0	--	ND		10.0	--
ITMS	Norethindrone	water	ng/L	ND		10.0	--	ND		10.0	--
ITMS	Norethynodrel	water	ng/L	ND		10.0	--	ND		10.0	--
ITMS	Nortriptyline	water	ng/L	ND		10.0	--	ND		10.0	--
ITMS	Paroxetine	water	ng/L	ND		10.0	--	ND		10.0	--
ITMS	Phenytoin	water	ng/L	ND		10.0	--	ND		10.0	--
ITMS	Prednisone	water	ng/L	ND		10.0	--	ND		10.0	--
ITMS	Progesterone	water	ng/L	ND		10.0	--	ND		10.0	--
ITMS	Propoxyphene	water	ng/L	ND		10.0	--	ND		10.0	--
ITMS	Protroptyline	water	ng/L	ND		10.0	--	ND		10.0	--
ITMS	Prozac	water	ng/L	ND		10.0	--	ND		10.0	--
ITMS	Setraline	water	ng/L	ND		10.0	--	ND		10.0	--
ITMS	Tamoxifen	water	ng/L	ND		10.0	--	ND		10.0	--
ITMS	Trimipramine maleate	water	ng/L	ND		10.0	--	ND		10.0	--
ITMS	6 alpha-Methyprednisolone	water	ng/L	ND		10.0	--	ND		10.0	--

Table 4.6.--Analytical results of surface-water monitoring at Rio Grande at Isleta below Railroad Bridge

Method	Parameter	Matrix	Unit (Standard)	7-Aug-02				28-Jan-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
	Grain size analysis										
D422	Maximum particle size	sediment	--	medium sand		--	--	coarse sand		--	--
D422	Particle size, 2000 microns, sand	sediment		--		0.1	0.1	0.3		0.1	0.1
D422	Particle size, 850 microns, sand	sediment	%	0.6		0.1	0.1	2.7		0.1	0.1
D422	Particle size, 425 microns, sand	sediment	%	1.1		0.1	0.1	14.8		0.1	0.1
D422	Particle size, 250 microns, sand	sediment	%	4		0.1	0.1	31.0		0.1	0.1
D422	Particle size, 180 microns, sand	sediment	%	6.9		0.1	0.1	20.7		0.1	0.1
D422	Particle size, 150 microns, sand	sediment	%	5.4		0.1	0.1	7.1		0.1	0.1
D422	Particle size, 75 microns, sand	sediment	%	23.7		0.1	0.1	11.6		0.1	0.1
D422	Particle size, 37.0 microns, silt	sediment	%	--		0.1	0.1	6.5		0.1	0.1
D422	Particle size, 31.8 microns, silt	sediment	%	25.1		0.1	0.1	--		0.1	0.1
D422	Particle size, 23.5 microns, silt	sediment	%	--		0.1	0.1	0.5		0.1	0.1
D422	Particle size, 20.8 microns, silt	sediment	%	6.7		0.1	0.1	--		0.1	0.1
D422	Particle size, 13.7 microns, silt	sediment	%	--		0.1	0.1	1.0		0.1	0.1
D422	Particle size, 12.4 microns, silt	sediment	%	6.7		0.1	0.1	--		0.1	0.1
D422	Particle size, 9.8 microns, silt	sediment	%	--		0.1	0.1	1.0		0.1	0.1
D422	Particle size, 8.8 microns, silt	sediment	%	3.4		0.1	0.1	--		0.1	0.1
D422	Particle size, 7.0 microns, silt	sediment	%	--		0.1	0.1	0.0		0.1	0.1
D422	Particle size, 6.4 microns, silt	sediment	%	2.2		0.1	0.1	--		0.1	0.1
D422	Particle size, 3.4 microns, clay	sediment	%	--		0.1	0.1	0.5		0.1	0.1
D422	Particle size, 3.3 microns, clay	sediment	%	3.4		0.1	0.1	--		0.1	0.1
D422	Particle size, 1.4 microns, clay	sediment	%	--		0.1	0.1	0.5		0.1	0.1
D422	Particle size, less than 1.4 microns, clay	sediment	%	--		0.1	0.1	1.8		0.1	0.1
D422	Particle size, 1.3 microns, clay	sediment	%	3.4		0.1	0.1	--		0.1	0.1
D422	Particle size, less than 1.3 microns, clay	sediment	%	7.5		0.1	0.1	--		0.1	0.1

Table 4.7--Analytical results of surface-water monitoring at Rio Grande at Los Lunas, 2002-2003

[Field parameters measured by field staff. Laboratory analyses performed by Severn Trent Laboratory and the New Mexico Scientific Laboratory (pharmaceuticals). --, no data; °C, degrees Celsius; mm of Hg, millimeters of mercury; ft^3/sec, cubic feet per second; mg/L, milligram per liter; %, percent; uS/cm, micorsiemens per centimeter; >, greater than; NTU, Nephelometric turbidity units; ug/L, >, greater than; micrograms per liter; g/kg, grams per kilogram; mg/kg, milligram per kilogram; ug/kg, micrograms per kilogram; ITMS, Ion trap mass spectrometer; ng/L, nanograms per liter; n/a, not applicable.]

Method	Parameter	Matrix	Unit	24-Jul-02				30-Oct-02				17-Dec-02				26-Feb-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
--	Station identification number	--	--	344907106424310		--	--	344708106424310		--	--	344907106424410		--	--	344906106424410		--	--
--	Latitude/Longitude	--	--	344907/1064243		--	--	344708/1064243		--	--	344907/1064244		--	--	344906/1064244		--	--
--	Time	--	--	1145		--	--	1000		--	--	1015		--	--	1200		--	--
	Field parameters																		
170.1	Air temperature	air	°C	27.0		0.1	0.01	10.5		0.1	0.01	6.3		0.1	0.01	17.2		0.1	0.01
170.1	Water temperature	water	°C	30.5		0.1	0.01	10.8		0.1	0.01	7.9		0.1	0.01	10.4		0.1	0.01
--	Barometric pressure	air	mm of Hg	645		--	--	640		--	--	630		--	--	643		--	--
--	Discharge, instantaneous	water	ft^3/s	89		--	--	266		--	--	428		--	--	344		--	--
150.1	pH - unfiltered	water	--	8.0		0.1	0.01	8.0		0.1	0.01	8.2		0.1	0.01	8.2		0.1	0.01
--	Dissolved oxygen	water	mg/L	5.1		0.1	0.01	9.4		0.1	0.01	10.1		0.1	0.01	8.6		0.1	0.01
--	Dissolved oxygen, saturation	water	%	68		1	0.01	85		1	0.01	86		1	0.01	77		1	0.01
120.1	Specific conductance - unfiltered	water	uS/cm	508		1	1	490		1	1	315		1	1	318		1	1
180.1	Turbidity	water	NTU	>1000		1	0.1	>1000		1	0.1	118		1	0.1	140		1	0.1
310.1	Alkalinity, as $CaCO_3$	water	mg/L	133		1	0.1	133		1	0.1	137		1	0.1	134		1	0.1
310.1	Bicarbonate, as HCO_3	water	mg/L	160		1	0.1	161		1	0.1	164		1	0.1	161		1	0.1
310.1	Carbonate, as CO_3	water	mg/L	1.2		0.1	0.1	0.5		0.1	0.1	1.3		0.1	0.1	0.8		0.1	0.1
	General chemistry																		
130.2	Hardness, as $CaCO_3$	water	mg/L	160		5	2	1500	J Q	12	5	170	J	5	2	210	J G	12	5
160.1	Total dissolved solids	water	mg/L	350	G	20	10	380	G	100	50	350		10	5	240	G	20	10
160.2	Total suspended solids	water	mg/L	2000	Q	20	9	10000	Q	100	45	100	Q	5	2.2	590	Q	20	9
314	Perchlorate	water	ug/L	ND		20	1.5	ND		20	2.5	ND		20	2.5	ND		1	0.41
405.1	Biochemical oxygen demand (BOD)	water	mg/L	2.1		2	0.23	7.5		2	0.23	ND		2	0.23	5.7		2	0.31
410.4	Chemical oxygen demand (COD)	water	mg/L	20	J	20	3.5	25		20	3.5	ND		20	3.5	5.9	B	20	3.5
9060	Total organic carbon	sediment	g/kg	0.74	B	2	0.59	21		2	0.59	2.7		2	0.59	0.87	B	2	0.59
D2216	Moisture	sediment	%	17		0.1	--	58		0.1	--	23		0.1	--	29		0.1	--
D2216	Moisture (Red Shiner)	fish	%	--		--	--	83		0.1	--	--		--	--	79		0.1	--
D2216	Moisture (Fathead Minnow)	fish	%	--	f	--	--	75		0.1	--	75		0.1	--	--		--	--
Total Residue	Lipids (Red Shiner)	fish	%	--		--	--	0.6		0.1	--	--		--	--	1.4		0.1	--
Total Residue	Lipids (Fathead Minnow)	fish	%	0.91	B	0.1	--	0.64		0.1	--	0.36	B	0.1	--	--		--	--
	Common anions																		
300.0A	Bromide	water	mg/L	0.24		0.2	0.03	0.23		0.2	0.03	ND		0.2	0.03	0.2		0.2	0.03
300.0A	Chloride	water	mg/L	19		3	0.1	39		3	0.1	27		3	0.1	28		3	0.1
300.0A	Fluoride	water	mg/L	0.58	B	1	0.03	0.64	B	1	0.03	0.64	B	1	0.03	0.61	B	1	0.03
300.0A	Nitrate	water	mg/L	0.65		0.5	0.03	1.2		0.5	0.03	0.79		0.5	0.03	1		0.5	0.03
300.0A	Nitrite	water	mg/L	ND		0.5	0.04	ND		0.5	0.04	ND		0.5	0.04	0.24	B	0.5	0.04
300.0A	Phosphate as P, Ortho	water	mg/L	ND		0.5	0.04	0.19	B	0.5	0.04	0.27	B	0.5	0.04	0.25	B	0.5	0.04
300.0A	Sulfate	water	mg/L	91	Q	25	1	120	Q	25	1	63	Q	25	1	57	Q	25	1
9012A	Cyanide, Total	water	mg/L	0.0036	B J	0.01	0.002	0.0069	B J	0.01	0.002	ND		0.01	0.002	ND		0.01	0.0039
9012A	Cyanide, Total	sediment	mg/kg	0.15	B J	0.6	0.1	0.33	B	1.2	0.21	0.11	B	0.65	0.11	ND		0.7	0.14
9056	Bromide	sediment	mg/kg	ND		2.4	0.36	ND		4.8	0.71	ND		2.6	0.39	ND		2.8	0.42
9056	Chloride	sediment	mg/kg	15	B J	36	1.2	55	B J	71	2.4	22	B J	39	1.3	13	B J	42	1.4
9056	Fluoride	sediment	mg/kg	2.1	B	12	0.36	6.5	B	24	0.71	2.2	B J	13	0.39	1.8	B	14	0.42
9056	Nitrate	sediment	mg/kg	1.8	B J	6	0.36	5.4	B	12	0.71	2.8	B J	6.5	0.39	2.2	B J	7	0.42
9056	Nitrite	sediment	mg/kg	1.8	B J	6	0.48	ND		12	0.95	ND		6.5	0.52	ND		7	0.56
9056	Phosphate as P, Ortho	sediment	mg/kg	ND		6	0.48	ND		12	0.95	3.1	B	6.5	0.52	2.7	B	7	0.56
9056	Sulfate	sediment	mg/kg	27	B	60	2.4	62	B	120	4.8	27	B J	65	2.6	30	B J	70	2.8
	Nutrients																		
350.1	Ammonia as N	water	mg/L	0.089	B	0.1	0.015	0.17		0.1	0.015	0.048	B	0.1	0.015	0.085	B	0.1	0.038
351.2	Total Kjeldahl Nitrogen	water	mg/L	0.15	B	0.5	0.14	1.2		0.5	0.14	0.15	B	0.5	0.14	0.28	B	0.5	0.083
353.2	Nitrate-Nitrite	water	mg/L	0.51		0.1	0.01	1.2		0.1	0.012	0.8		0.1	0.012	1.1		0.1	0.012
354.1	Nitrite	water	mg/L	0.0061	B J	0.01	0.002	0.012	J	0.01	0.002	0.0039	B	0.01	0.002	0.095		0.01	0.0018
365.3	Total phosphorus	water	mg/L	0.69		0.05	0.013	6.6	Q	0.5	0.13	0.37	J	0.05	0.013	0.3	G	0.1	0.038
350.1	Ammonia as N	sediment	mg/kg	ND		1.2	0.18	9.7		2.4	0.36	1.9	J	1.3	0.2	0.89	B J	1.4	0.53
351.2	Total Kjeldahl Nitrogen	sediment	mg/kg	42	B	60	24	1100	Q	240	95	190		65	26	65	B	70	8
353.2	Nitrate-Nitrite	sediment	mg/kg	0.57	B J	1.2	0.25	2.2	B	2.4	0.29	0.38	B J	1.3	0.16	0.55	B J	1.4	0.17
354.1	Nitrite	sediment	mg/kg	ND		0.12	0.048	0.31		0.24	0.095	0.087	B	0.13	0.052	0.061	B	0.14	0.025
365.3	Total phosphorus	sediment	mg/kg	180	Q	60	14	670	Q	120	29	210	Q	33	7.8	460	Q	70	17
	Trace elements																		
6020	Antimony	water	ug/L	0.19	B	2	0.04	0.18	B J	2	0.04	0.2	B	2	0.04	0.45	B	2	0.04
6020	Arsenic	water	ug/L	4.3	B	5	0.061	6		5	0.061	4.5	B	5	0.061	4.9	B	5	0.061
6020	Barium	water	ug/L	100		1	0.057	100		1	0.057	87		1	0.057	82		1	0.057
6020	Beryllium	water	ug/L	ND		1	0.028	--		--	--	--		--	--	--		--	--
6020	Cadmium	water	ug/L	0.046	B	1	0.022	0.035	B	1	0.022	0.027	B	1	0.022	0.026	B	1	0.022
6020	Chromium	water	ug/L	0.55	B	2	0.24	0.64	B	2	0.24	0.62	B	2	0.24	0.34	B	2	0.24
6020	Cobalt	water	ug/L	0.5	B	1	0.015	0.73	B	1	0.015	0.36	B	1	0.015	0.49	B	1	0.015
6020	Copper	water	ug/L	1.7	B	2	0.63	1.2	B	2	0.63	0.76	B	2	0.63	1.2	B	2	0.63
6020	Lead	water	ug/L	ND		1	0.15	ND		1	0.15	ND		1	0.15	ND		1	0.15

Table 4.7--Analytical results of surface-water monitoring at Rio Grande at Los Lunas, 2002-2003

Method	Parameter	Matrix	Unit	24-Jul-02				30-Oct-02				17-Dec-02				26-Feb-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
6020	Manganese	water	ug/L	2.6		1	0.061	13		1	0.061	3.2		1	0.061	11	J	1	0.061
6020	Molybdenum	water	ug/L	5.1		2	0.023	5.7	J	2	0.023	5.8		2	0.023	5.7		2	0.023
6020	Nickel	water	ug/L	1.3	B J	2	0.25	0.65	B J	2	0.25	1.5	B	2	0.25	1.3	B	2	0.25
6020	Selenium	water	ug/L	0.3	B	5	0.19	0.82	B	5	0.19	0.78	B	5	0.19	0.8	B J	5	0.19
6020	Silver	water	ug/L	0.03	B J	5	0.012	0.058	B J	5	0.012	ND		5	0.012	ND		5	0.012
6020	Thallium	water	ug/L	ND		1	0.015	ND		1	0.015	ND		1	0.015	0.017	B	1	0.015
6020	Tin	water	ug/L	ND		10	0.054	ND		10	0.054	0.12	B J	10	0.054	0.18	B	10	0.054
6020	Uranium	water	ug/L	2.4	J	1	0.0015	3.1	J	1	0.0015	3.3		1	0.0015	3.1		1	0.0015
6020	Vanadium	water	ug/L	7.9		5	0.07	5		5	0.07	5.3	J	5	0.07	4.5	B	5	0.07
6020	Zinc	water	ug/L	7	B	10	2.3	7.2	B	10	2.3	7.6	B	10	2.3	9.8	B	10	2.3
7470A	Mercury	water	ug/L	0.033	B	0.2	0.028	0.055	B	0.2	0.028	ND		0.2	0.015	0.022	B	0.2	0.015
6010B	Aluminum	water	ug/L	47	B	100	20	46	B	100	20	23	B	100	20	36	B J	100	20
6010B	Beryllium	water	ug/L	--		--	--	ND		5	0.22	0.24	B	5	0.22	0.32	B	5	0.22
6010B	Boron	water	ug/L	87	B	100	5.2	170		100	5.2	140		100	5.2	120		100	5.2
6010B	Calcium	water	ug/L	46000		200	31	56000		200	31	50000	J	200	31	48000		200	31
6010B	Iron	water	ug/L	33	B	100	13	48	B	100	13	18	B	100	13	13	B	100	13
6010B	Lithium	water	ug/L	31		10	2.1	83		10	2.1	63		10	2.1	55		10	2.1
6010B	Magnesium	water	ug/L	7400		200	24	8600		200	24	9700		200	24	8400		200	24
6010B	Potassium	water	ug/L	4500		3000	490	6500		3000	490	5500		3000	490	6100	J	3000	490
6010B	Silica	water	ug/L	21000		1100	23	26000		1100	23	26000		1100	23	28000		1100	23
6010B	Sodium	water	ug/L	36000		5000	1500	62000		5000	1500	57000		5000	1500	51000	J	5000	1500
6010B	Strontium	water	ug/L	420		10	0.35	550		10	0.35	430		10	0.35	400		10	0.35
6010B	Titanium	water	ug/L	1.1	B	10	0.97	1.9	B	10	0.97	1.4	B	10	0.97	1.6	B	10	0.97
6020	Antimony	sediment	mg/kg	ND		0.24	0.0035	ND		480	6.9	ND		0.26	0.0038	0.0081	B	0.28	0.0041
6020	Arsenic	sediment	mg/kg	1.4		0.6	0.02	7.3		1.2	0.04	1.8	J	0.65	0.022	1.3		0.7	0.024
6020	Barium	sediment	mg/kg	58		0.12	0.029	240	J	0.24	0.057	92		0.13	0.031	70		0.14	0.034
6020	Beryllium	sediment	mg/kg	0.31		0.12	0.0053	--		--	--	--		--	--	--		--	--
6020	Cadmium	sediment	mg/kg	0.041	B	0.12	0.0017	0.21	B	0.24	0.0033	0.057	B	0.13	0.0018	0.044	B	0.14	0.002
6020	Chromium	sediment	mg/kg	5.3	J	0.24	0.022	23	J	0.48	0.043	5	J	0.26	0.023	3.7	J	0.28	0.025
6020	Cobalt	sediment	mg/kg	2.4		0.12	0.0014	8.3		0.24	0.0029	2.4		0.13	0.0016	1.8		0.14	0.0017
6020	Copper	sediment	mg/kg	3.7	J	0.24	0.018	17	J	0.48	0.036	4.1		0.26	0.02	2.8	J	0.28	0.021
6020	Lead	sediment	mg/kg	4.3		0.12	0.0051	15		0.24	0.01	4.8	J	0.13	0.0055	3	J	0.14	0.0059
6020	Manganese	sediment	mg/kg	170	J	0.12	0.028	500	J	0.24	0.055	170	J	0.13	0.03	110		0.14	0.032
6020	Molybdenum	sediment	mg/kg	0.14	B J	0.24	0.0026	0.48		0.48	0.0052	0.12	B J	0.26	0.0029	0.092	B J	0.28	0.0031
6020	Nickel	sediment	mg/kg	4.3		0.12	0.016	16	J	0.24	0.031	3.9	J	0.13	0.017	3	J	0.14	0.018
6020	Selenium	sediment	mg/kg	0.19	B	0.6	0.059	0.73	B	1.2	0.12	0.26	B	0.65	0.064	0.13	B	0.7	0.069
6020	Silver	sediment	mg/kg	0.041	B J	0.12	0.0028	0.22	B J	0.24	0.0055	0.07	B J	0.13	0.003	0.058	B	0.14	0.0032
6020	Thallium	sediment	mg/kg	0.067	B	0.12	0.0012	0.32	J	0.24	0.0024	0.067	B J	0.13	0.0013	0.047	B	0.14	0.0014
6020	Tin	sediment	mg/kg	ND		1.2	0.095	0.22	B	2.4	0.19	ND		1.3	0.1	ND		1.4	0.11
6020	Uranium	sediment	mg/kg	0.35		0.12	0.0022	1.3		0.24	0.0043	0.4	J	0.13	0.0023	0.31		0.14	0.0025
6020	Vanadium	sediment	mg/kg	12	J	0.6	0.0067	43	J	1.2	0.013	11		0.65	0.0073	9.5	J	0.7	0.0079
6020	Zinc	sediment	mg/kg	17		1.2	0.42	73		2.4	0.83	20		1.3	0.46	16	J	1.4	0.49
7471A	Mercury	sediment	mg/kg	ND		0.04	0.003	0.017	B	0.078	0.0059	ND		0.043	0.0033	ND		0.046	0.0035
6010B	Aluminum	sediment	mg/kg	2700		12	2.5	31000		24	5	4300	J	13	2.7	2400		14	2.9
6010B	Beryllium	sediment	mg/kg	--		--	--	1.3		1.2	0.081	0.1	B	0.65	0.044	0.087	B	0.7	0.048
6010B	Boron	sediment	mg/kg	0.66	B	12	0.45	20	B J	24	0.88	2.2	B	13	0.48	1.1	B	14	0.52
6010B	Calcium	sediment	mg/kg	4700		24	9.4	33000		48	19	8500	J	26	10	5900		28	11
6010B	Iron	sediment	mg/kg	4600		12	1.9	22000		24	3.8	5000		13	2.1	3700	J	14	2.2
6010B	Lithium	sediment	mg/kg	3.7	B	6	0.13	31		12	0.26	5.5	B	6.5	0.14	3.7	B J	7	0.15
6010B	Magnesium	sediment	mg/kg	1000		24	1.8	9200		48	3.6	1600		26	2	980		28	2.1
6010B	Potassium	sediment	mg/kg	660		360	42	6400		710	83	1000		390	46	560		420	49
6010B	Sodium	sediment	mg/kg	ND		600	72	220	B	1200	140	160	B	650	78	ND		700	84
6010B	Strontium	sediment	mg/kg	18	J	1.2	0.018	150		2.4	0.12	29		1.3	0.065	22		1.4	0.07
6010B	Titanium	sediment	mg/kg	160		1.2	0.14	260		2.4	0.29	140		1.3	0.16	150	J	1.4	0.17
6020	Antimony (Red Shiner)	fish	mg/kg	--		--	--	ND		1.2	0.12	--		---	--	ND		0.94	0.094
6020	Arsenic (Red Shiner)	fish	mg/kg	--		--	--	0.75	B	2.9	0.045	--		---	--	0.64	B J	2.4	0.036
6020	Beryllium (Red Shiner)	fish	mg/kg	--		--	--	--		--	--	--		---	--	--		--	--
6020	Cadmium (Red Shiner)	fish	mg/kg	--		--	--	0.054	B	0.59	0.016	--		---	--	0.031	B	0.47	0.013
6020	Chromium (Red Shiner)	fish	mg/kg	--		--	--	1.5	J	1.2	0.2	--		---	--	1	J	0.94	0.16
6020	Copper (Red Shiner)	fish	mg/kg	--		--	--	4.3		1.2	0.36	--		---	--	3.5		0.94	0.29
6020	Lead (Red Shiner)	fish	mg/kg	--		--	--	0.41	B	0.59	0.12	--		---	--	0.45	B	0.47	0.094
6020	Nickel (Red Shiner)	fish	mg/kg	--		--	--	0.16	B J	0.59	0.065	--		---	--	ND		0.47	0.052
6020	Selenium (Red Shiner)	fish	mg/kg	--		--	--	2.9		2.9	0.11	--		---	--	2.9		2.4	0.085
6020	Silver (Red Shiner)	fish	mg/kg	--		--	--	0.025	B J	0.59	0.012	--		---	--	0.02	B	0.47	0.0094
6020	Thallium (Red Shiner)	fish	mg/kg	--		--	--	0.016	B	0.59	0.012	--		---	--	0.014	B	0.47	0.0094
6020	Uranium (Red Shiner)	fish	mg/kg	--		--	--	0.047	B	0.59	0.012	--		---	--	0.047	B	0.47	0.0094
6020	Zinc (Red Shiner)	fish	mg/kg	--		--	--	230	J	5.9	0.74	--		---	--	300	J	4.7	0.59
245.6	Mercury (Red Shiner)	fish	ug/kg	--		--	--	220	B	590	35	--		---	--	190	B	470	28
6010B	Aluminum (Red Shiner)	fish	mg/kg	--		--	--	350		59	18	--		---	--	42	B	47	15
6010B	Barium (Red Shiner)	fish	mg/kg	--		--	--	24		5.9	0.7	--		---	--	18	J	4.7	0.57
6010B	Beryllium (Red Shiner)	fish	mg/kg	--		--	--	ND		2.9	0.82	--		---	--	ND		2.4	0.66
6010B	Boron (Red Shiner	fish	mg/kg	--		--	--	ND		59	3	--		---	--	5.7	B	47	2.4
6010B	Calcium (Red Shiner)	fish	mg/kg	--		--	--	45000	J	120	19	--		---	--	38000	J	94	15
6010B	Cobalt (Red Shiner)	fish	mg/kg	--		--	--	ND		5.9	0.88	--		---	--	1	B J	4.7	0.71

Table 4.7--Analytical results of surface-water monitoring at Rio Grande at Los Lunas, 2002-2003

Method	Parameter	Matrix	Unit	24-Jul-02				30-Oct-02				17-Dec-02				26-Feb-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
6010B	Iron (Red Shiner)	fish	mg/kg	--		--	--	300		59	12	--		---	--	98	J	47	9.4
6010B	Lithium (Red Shiner)	fish	mg/kg	--		--	--	ND		29	1.3	--		---	--	ND		24	1
6010B	Magnesium (Red Shiner)	fish	mg/kg	--		--	--	1800		120	9	--		---	--	1600	J	94	7.2
6010B	Manganese (Red Shiner)	fish	mg/kg	--		--	--	25		5.9	0.82	--		---	--	17	J	4.7	0.66
6010B	Molybdenum (Red Shiner)	fish	mg/kg	--		--	--	ND		12	1.4	--		---	--	ND		9.4	1.1
6010B	Potassium (Red Shiner)	fish	mg/kg	--		--	--	12000		1800	180	--		---	--	13000		1400	140
6010B	Sodium (Red Shiner)	fish	mg/kg	--		--	--	2300	B	2900	700	--		---	--	3000		2400	570
6010B	Strontium (Red Shiner)	fish	mg/kg	--		--	--	120		5.9	0.88	--		---	--	110		4.7	0.71
6010B	Tin (Red Shiner)	fish	mg/kg	--		--	--	8.9	B J	59	2.5	--		---	--	ND		47	2
6010B	Titanium (Red Shiner)	fish	mg/kg	--		--	--	6		5.9	1.2	--		---	--	1.9	B	4.7	0.94
6010B	Vanadium (Red Shiner)	fish	mg/kg	--		--	--	ND		5.9	2.1	--		---	--	ND		4.7	1.7
6020	Antimony (Fathead Minnow)	fish	mg/kg	ND		0.2	0.02	0.25	B	0.8	0.08	0.081	B	0.8	0.08	--		--	--
6020	Arsenic (Fathead Minnow)	fish	mg/kg	0.18	B	0.5	0.0076	1.6	B	2	0.03	1.4	B J	2	0.03	--		--	--
6020	Beryllium (Fathead Minnow)	fish	mg/kg	0.0026	B	0.1	0.0023	--		--	--	--		--	--	--		--	--
6020	Cadmium (Fathead Minnow)	fish	mg/kg	0.009	B	0.1	0.0027	0.038	B	0.4	0.011	0.02	B	0.4	0.011	--		--	--
6020	Chromium (Fathead Minnow)	fish	mg/kg	0.36	J	0.2	0.034	1.5	J	0.8	0.13	1.9	J	0.8	0.13	--		--	--
6020	Copper (fathead Minnow)	fish	mg/kg	0.96		0.2	0.061	3.8		0.8	0.24	3.6		0.8	0.25	--		--	--
6020	Lead (Fathead Minnow)	fish	mg/kg	0.086	B	0.1	0.02	0.58		0.4	0.08	0.52		0.4	0.08	--		--	--
6020	Nickel (Fathead Minnow)	fish	mg/kg	0.065	B J	0.1	0.011	0.11	B J	0.4	0.044	0.45	J	0.4	0.045	--		--	--
6020	Selenium (Fathead Minnow)	fish	mg/kg	0.41	B	0.5	0.018	2.7		2	0.072	2.3		2	0.072	--		--	--
6020	Silver (Fathead Minnow)	fish	mg/kg	0.021	B J	0.1	0.002	0.099	B J	0.4	0.008	--		--	--	--		--	--
6020	Thallium (Fathead Minnow)	fish	mg/kg	ND		0.1	0.002	0.062	B	0.4	0.008	0.044	B	0.4	0.008	--		--	--
6020	Uranium (Fathead Minnow)	fish	mg/kg	0.0092	B	0.1	0.002	0.086	B	0.4	0.008	0.071	B	0.4	0.008	--		--	--
6020	Zinc (Fathead Minnow)	fish	mg/kg	26		1	0.13	130	J	4	0.5	85	J	4	0.5	--		--	--
245.6	Mercury (Fathead Minnow)	fish	ug/kg	15	B	100	5.9	74	B	400	23	120	B	400	24	--		--	--
6010B	Aluminum (Fathead Minnow)	fish	mg/kg	41		10	3.1	540		40	12	790		40	12	--		--	--
6010B	Barium (Fathead Minnow)	fish	mg/kg	7.4		1	0.12	43		4	0.48	48		4	0.48	--		--	--
6010B	Beryllium (Fathead Minnow)	fish	mg/kg	--		--	--	ND		2	0.56	ND		2	0.56	--		--	--
6010B	Boron (Fathead Minnow)	fish	mg/kg	ND		10	0.51	2.5	B	40	2	ND		40	2	--		--	--
6010B	Calcium (Fathead Minnow)	fish	mg/kg	6000		20	3.2	29000	J	80	13	27000	J	80	13	--		--	--
6010B	Cobalt (Fathead Minnow)	fish	mg/kg	ND		1	0.15	0.7	B	4	0.6	1.1	B	4	0.6	--		--	--
6010B	Iron (Fathead Minnow)	fish	mg/kg	36		10	2	410		40	8	640		40	8	--		--	--
6010B	Lithium (Fathead Minnow)	fish	mg/kg	ND		5	0.22	ND		20	0.88	ND		20	0.88	--		--	--
6010B	Magnesium (Fathead Minnow)	fish	mg/kg	290		20	1.5	1500		80	6.1	1500		80	6.1	--		--	--
6010B	Manganese (Fathead Minnow)	fish	mg/kg	2.3		1	0.14	16		4	0.56	20		4	0.56	--		--	--
6010B	Molybdenum (Fathead Minnow)	fish	mg/kg	ND		2	0.24	ND		8	0.95	ND		8	0.96	--		--	--
6010B	Potassium (Fathead Minnow)	fish	mg/kg	2300		300	31	12000		1200	120	10000		1200	120	--		--	--
6010B	Sodium (Fathead Minnow)	fish	mg/kg	460	B	500	120	3000		2000	480	2700		2000	480	--		--	--
6010B	Strontium (Fathead Minnow)	fish	mg/kg	19		1	0.15	86		4	0.6	84		4	0.6	--		--	--
6010B	Tin (Fathead Minnow)	fish	mg/kg	1.3	B J	10	0.42	5.1	B J	40	1.7	5.2	B J	40	1.7	--		--	--
6010B	Titanium (Fathead Minnow)	fish	mg/kg	0.68	B	1	0.2	7.2		4	0.8	14		4	0.8	--		--	--
6010B	Vanadium (Fathead Minnow)	fish	mg/kg	ND		1	0.35	ND		4	1.4	1.6	B	4	1.4	--		--	--
	Volatile organic compounds																		
8260B	Acetone	water	ug/L	6.1	J	10	2.9	ND		10	2.9	ND		10	2.9	3.3	J	10	2.5
8260B	Benzene	water	ug/L	ND		1	0.27	ND		1	0.27	ND		1	0.27	ND		1	0.17
8260B	Bromodichloromethane	water	ug/L	ND		1	0.35	ND		1	0.35	ND		1	0.35	ND		1	0.2
8260B	Bromoform	water	ug/L	ND		1	0.46	ND		1	0.46	ND		1	0.46	ND		1	0.23
8260B	Bromomethane	water	ug/L	ND		2	0.28	ND		2	0.28	ND		2	0.28	ND		2	0.22
8260B	Carbon disulfide	water	ug/L	ND		1	0.67	ND		1	0.67	ND		1	0.67	ND		1	0.24
8260B	Carbon tetrachloride	water	ug/L	ND		1	0.35	ND		1	0.35	ND		1	0.35	ND		1	0.2
8260B	Chlorobenzene	water	ug/L	ND		1	0.24	ND		1	0.24	ND		1	0.24	ND		1	0.13
8260B	Chloroethane	water	ug/L	ND		2	0.26	ND		2	0.26	ND		2	0.26	ND		2	0.18
8260B	Chloroform	water	ug/L	ND		1	0.29	ND		1	0.29	ND		1	0.29	ND		1	0.17
8260B	Chloromethane	water	ug/L	ND		2	0.26	ND		2	0.26	ND		2	0.26	ND		2	0.91
8260B	cis-1,2-Dichloroethene	water	ug/L	ND		1	0.33	ND		1	0.33	ND		1	0.33	ND		1	0.14
8260B	cis-1,3-Dichloropropene	water	ug/L	ND		1	0.31	ND		1	0.31	ND		1	0.31	ND		1	0.19
8260B	Dibromochloromethane	water	ug/L	ND		1	0.37	ND		1	0.37	ND		1	0.37	ND		1	0.19
8260B	Ethylbenzene	water	ug/L	ND		1	0.51	ND		1	0.51	ND		1	0.51	ND		1	0.12
8260B	Methylene chloride	water	ug/L	ND		5	0.86	ND		5	0.86	ND		5	0.86	ND		5	0.21
8260B	m-Xylene & p-Xylene	water	ug/L	ND		2	0.52	ND		2	0.52	ND		2	0.52	ND		2	0.27
8260B	o-Xylene	water	ug/L	ND		1	0.24	ND		1	0.24	ND		1	0.24	ND		1	0.15
8260B	Styrene	water	ug/L	ND		1	0.28	ND		1	0.28	ND		1	0.28	ND		1	0.14
8260B	Tetrachloroethene	water	ug/L	ND		1	0.27	ND		1	0.27	ND		1	0.27	ND		1	0.26
8260B	Toluene	water	ug/L	ND		1	0.26	ND		1	0.26	ND		1	0.26	0.28	J	1	0.15
8260B	trans-1,2-Dichloroethene	water	ug/L	ND		0.5	0.25	ND		0.5	0.25	ND		0.5	0.25	ND		0.5	0.15
8260B	trans-1,3-Dichloropropene	water	ug/L	ND		1	0.36	ND		1	0.36	ND		1	0.36	ND		1	0.2
8260B	Trichloroethene	water	ug/L	ND		1	0.24	ND		1	0.24	ND		1	0.24	ND		1	0.16
8260B	Unknown	water	ug/L	7.4	J	--	--	--		--	--	--		--	--	ND		1	0.19
8260B	Vinyl chloride	water	ug/L	ND		1	0.26	ND		1	0.26	ND		1	0.26	ND		2	0.41
8260B	Xylenes (total)	water	ug/L	ND		2	0.73	ND		2	0.73	ND		2	0.73	ND		1	0.16
8260B	1,1,1-Trichloroethane	water	ug/L	ND		1	0.32	ND		1	0.32	ND		1	0.32	ND		1	0.21
8260B	1,1,2,2-Tetrachloroethane	water	ug/L	ND		1	0.5	ND		1	0.5	ND		1	0.5	ND		1	0.27
8260B	1,1,2-Trichloroethane	water	ug/L	ND		1	0.41	ND		1	0.41	ND		1	0.41	ND		1	0.22
8260B	1,1-Dichloroethane	water	ug/L	ND		1	0.29	ND		1	0.29	ND		1	0.29	ND		1	0.23

Table 4.7--Analytical results of surface-water monitoring at Rio Grande at Los Lunas, 2002-2003

Method	Parameter	Matrix	Unit	24-Jul-02				30-Oct-02				17-Dec-02				26-Feb-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
8260B	1,1-Dichloroethene	water	ug/L	ND		1	0.31	ND		1	0.31	ND		1	0.31	ND		1	0.26
8260B	1,2-Dichloroethane	water	ug/L	ND		1	0.43	ND		1	0.43	ND		1	0.43	ND		1	0.24
8260B	1,2-Dichloroethene (total)	water	ug/L	ND		1	0.54	ND		1	0.54	ND		1	0.54	ND		1	0.18
8260B	1,2-Dichloropropane	water	ug/L	ND		1	0.38	ND		1	0.38	ND		1	0.38	0.18		--	--
8260B	2-Butanone (MEK)	water	ug/L	ND		5	2.4	ND		5	2.4	ND		5	2.4	ND		5	2
8260B	2-Hexanone	water	ug/L	ND		5	1.8	ND		5	1.8	ND		5	1.8	ND		5	1.7
8260B	4-Methyl-2-pentanone	water	ug/L	ND		5	1.8	ND		5	1.8	ND		5	1.8	ND		5	0.98
8260B	Acetic acid, 2-ethylhexyl este	sediment	ug/kg	--		--	--	--		--	--	--		--	--	10	T2	--	--
8260B	Acetone	sediment	ug/kg	ND		24	5.5	51		48	11	ND		26	6	ND		28	4.8
8260B	Benzene	sediment	ug/kg	ND		6	1.1	ND		12	2.1	ND		6.5	1.2	ND		7	0.17
8260B	Beta pinene	sediment	ug/kg	--		--	--	--		--	--	27	T2			--		--	--
8260B	Bromodichloromethane	sediment	ug/kg	ND		6	1.1	ND		12	2.2	ND		6.5	1.2	ND		7	0.28
8260B	Bromoform	sediment	ug/kg	ND		6	1.1	ND		12	2.2	ND		6.5	1.2	ND		7	0.36
8260B	Bromomethane	sediment	ug/kg	ND		12	1.4	ND		24	2.9	ND		13	1.6	ND		14	0.84
8260B	Carbon disulfide	sediment	ug/kg	ND		6	1.1	ND		12	2.2	ND		6.5	1.2	ND		7	0.34
8260B	Carbon tetrachloride	sediment	ug/kg	ND		6	1.4	ND		12	2.9	ND		6.5	1.6	ND		7	0.35
8260B	Chlorobenzene	sediment	ug/kg	ND		6	0.9	ND		12	1.8	ND		6.5	0.98	ND		7	0.25
8260B	Chloroethane	sediment	ug/kg	ND		12	1.6	ND		24	3.1	ND		13	1.7	ND		14	0.32
8260B	Chloroform	sediment	ug/kg	ND		12	1.1	ND		24	2.1	ND		13	1.2	ND		14	0.35
8260B	Chloromethane	sediment	ug/kg	ND		12	1.8	ND		24	3.6	ND		13	2	ND		14	0.5
8260B	cis-1,2-Dichloroethene	sediment	ug/kg	ND		3	1	ND		5.9	2	ND		3.3	1.1	ND		3.5	0.29
8260B	cis-1,3-Dichloropropene	sediment	ug/kg	ND		6	1.2	ND		12	2.3	ND		6.5	1.3	ND		7	0.5
8260B	Dibromochloromethane	sediment	ug/kg	ND		6	1.1	ND		12	2.1	ND		6.5	1.2	ND		7	0.28
8260B	Dodecane, 1-iodo	sediment	ug/kg	--		--	--	14	T2			--		--	--	--		--	--
8260B	Eicosane	sediment	ug/kg	--		--	--	16	T2			--		--	--	--		--	--
8260B	Ethylbenzene	sediment	ug/kg	ND		6	1.4	ND		12	2.9	ND		6.5	1.6	ND		7	0.38
8260B	Heneicosane	sediment	ug/kg	--		--	--	16	T2			--		--	--	--		--	--
8260B	Methylene chloride	sediment	ug/kg	ND		6	0.96	ND		12	1.9	1.2	J B	6.5	1	2.3	J B	7	0.58
8260B	m-Xylene & p-Xylene	sediment	ug/kg	ND		3	2.2	ND		5.9	4.3	ND		3.3	2.3	ND		3.5	0.59
8260B	Naphthalene, 1,6,-dimethyl	sediment	ug/kg	--		--	--					7.9	T2			--		--	--
8260B	o-Xylene	sediment	ug/kg	ND		3	1.2	ND		5.9	2.4	ND		3.3	1.3	ND		3.5	0.32
8260B	Styrene	sediment	ug/kg	ND		6	0.79	ND		12	1.6	ND		6.5	0.86	ND		7	0.29
8260B	Tetrachloroethene	sediment	ug/kg	ND		6	1.2	ND		12	2.4	ND		6.5	1.3	ND		7	0.35
8260B	Toluene	sediment	ug/kg	ND		6	0.94	50		12	1.9	ND		6.5	1	ND		7	0.31
8260B	trans-1,2-Dichloroethene	sediment	ug/kg	ND		3	0.95	ND		5.9	1.9	ND		3.3	1	ND		3.5	0.49
8260B	trans-1,3-Dichloropropene	sediment	ug/kg	ND		6	1.2	ND		12	2.4	ND		6.5	1.3	ND		7	0.59
8260B	Trichloroethene	sediment	ug/kg	ND		6	1	ND		12	2.1	ND		6.5	1.1	ND		7	0.41
8260B	Unknown	sediment	ug/kg	--		--	--	210	J			16				58	J	--	--
8260B	Unknown	sediment	ug/kg	--		--	--	15	J			23				8.6	J	--	--
8260B	Unknown	sediment	ug/kg	--		--	--	290	J			--		--	--	--		--	--
8260B	Unknown	sediment	ug/kg	12				48	J			--		--	--	--		--	--
8260B	Vinyl chloride	sediment	ug/kg	ND		6	1.3	ND		12	2.6					ND		7	0.32
8260B	Xylenes (total)	sediment	ug/kg	ND		6	3.4	ND		12	6.7	ND		6.5	1.4	ND		7	0.79
8260B	1,1,1-Trichloroethane	sediment	ug/kg	ND		6	1.2	ND		12	2.3	ND		6.5	3.7	ND		7	0.36
8260B	1,1,2,2-Tetrachloroethane	sediment	ug/kg	ND		6	1.3	ND		12	2.6	ND		6.5	1.3	ND		7	0.79
8260B	1,1,2-Trichloroethane	sediment	ug/kg	ND		6	1.8	ND		12	3.6	ND		6.5	1.4	ND		7	0.45
8260B	1,1-Dichloroethane	sediment	ug/kg	ND		6	1.2	ND		12	2.3	ND		6.5	2	ND		7	0.29
8260B	1,1-Dichloroethene	sediment	ug/kg	ND		6	1.3	ND		12	2.6	ND		6.5	1.3	ND		7	0.43
8260B	1,2-Dichloroethane	sediment	ug/kg	ND		6	1.2	ND		12	2.4	ND		6.5	1.4	ND		7	0.31
8260B	1,2-Dichloroethene (total)	sediment	ug/kg	ND		6	1.8	ND		12	3.6	ND		6.5	1.3	81		--	--
8260B	1,2-Dichloropropane	sediment	ug/kg	ND		6	1.4	ND		12	2.9	ND		6.5	2	ND		7	0.42
8260B	1-Hexanol, 2-ethyl-	sediment	ug/kg	--		--	--	14	T2			ND		6.5	1.6	ND		7	0.31
8260B	2-Butanone (MEK)	sediment	ug/kg	ND		24	5.7	20	J	48	11	ND		26	6.1	ND		28	3.8
8260B	2-Hexanone	sediment	ug/kg	ND		24	5.5	ND		48	11	ND		26	6	ND		28	3.2
8260B	4-Methyl-2-pentanone	sediment	ug/kg	ND		24	4.7	ND		48	9.3	ND		26	5.1	ND		28	2.8
	Herbicides																		
8151A	Dalapon	water	ug/L	ND		2	0.42	ND		2	0.33	ND		2	0.33	ND		2	0.33
8151A	Dicamba	water	ug/L	ND		2	0.081	ND		2	0.086	ND		2	0.086	ND		2	0.086
8151A	Dichlorprop	water	ug/L	ND		4	0.13	ND		4	0.11	ND		4	0.11	ND		4	0.11
8151A	Dinoseb	water	ug/L	ND		0.6	0.09	ND		0.6	0.065	ND		0.6	0.065	ND		0.6	0.065
8151A	MCPA	water	ug/L	ND		400	13	ND		400	12	ND		400	12	ND		400	12
8151A	MCPP	water	ug/L	ND		400	42	ND		400	15	ND		400	15	ND		400	15
8151A	2,4,5-T	water	ug/L	ND		1	0.043	ND		1	0.043	ND		1	0.043	ND		1	0.043
8151A	2,4,5-TP (Silvex)	water	ug/L	ND		1	0.034	ND		1	0.036	ND		1	0.036	ND		1	0.036
8151A	2,4-D	water	ug/L	ND		4	0.16	ND		4	0.24	ND		4	0.24	ND		4	0.24
8151A	2,4-DB	water	ug/L	ND		4	0.21	ND		4	0.098	ND		4	0.098	ND		4	0.098
	Pesticides																		
8141A	Anilazine	water	ug/L	ND		10	1.3	ND		20	2.5	ND		10	1.3	ND		10	1.3
8141A	Atrazine	water	ug/L	ND		10	0.52	ND		20	1	ND		10	0.52	ND		10	0.52
8141A	Azinphos-methyl	water	ug/L	ND		2.5	0.14	ND		4.9	0.27	ND		2.5	0.14	ND		2.5	0.14
8141A	Bolstar	water	ug/L	ND		0.5	0.14	ND		0.98	0.27	ND		0.5	0.14	ND		0.5	0.14
8141A	Chlorpyrifos	water	ug/L	ND		0.5	0.054	ND		0.98	0.11	ND		0.5	0.054	ND		0.5	0.054
8141A	Coumaphos	water	ug/L	ND		0.5	0.079	ND		0.98	0.15	ND		0.5	0.079	ND		0.5	0.079
8141A	Demeton (total)	water	ug/L	ND		1	0.19	ND		2	0.37	ND		1	0.19	ND		1	0.19

Table 4.7--Analytical results of surface-water monitoring at Rio Grande at Los Lunas, 2002-2003

Method	Parameter	Matrix	Unit	24-Jul-02				30-Oct-02				17-Dec-02				26-Feb-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
8141A	Diazinon	water	ug/L	ND		0.5	0.039	ND		0.98	0.076	ND		0.5	0.039	ND		0.5	0.039
8141A	Dichlorvos	water	ug/L	ND		0.5	0.13	ND		0.98	0.25	ND		0.5	0.13	ND		0.5	0.13
8141A	Dimethoate	water	ug/L	ND		0.5	0.18	ND		0.98	0.35	ND		0.5	0.18	ND		0.5	0.18
8141A	Disulfoton	water	ug/L	ND		0.5	0.057	ND		0.98	0.11	ND		0.5	0.057	ND		0.5	0.057
8141A	EPN	water	ug/L	ND		0.5	0.05	ND		0.98	0.098	ND		0.5	0.05	ND		0.5	0.05
8141A	Ethoprop	water	ug/L	ND		0.5	0.056	ND		0.98	0.11	ND		0.5	0.056	ND		0.5	0.056
8141A	Ethyl parathion	water	ug/L	ND		0.5	0.04	ND		0.98	0.078	ND		0.5	0.04	ND		0.5	0.04
8141A	Famphur	water	ug/L	ND		1	0.054	ND		2	0.11	ND		1	0.054	ND		1	0.054
8141A	Fensulfothion	water	ug/L	ND		2.5	0.22	ND		4.9	0.43	ND		2.5	0.22	ND		2.5	0.22
8141A	Fenthion	water	ug/L	ND		0.5	0.061	ND		0.98	0.12	ND		0.5	0.061	ND		0.5	0.061
8141A	Malathion	water	ug/L	ND		1.2	0.05	ND		2.4	0.098	ND		1.2	0.05	ND		1.2	0.05
8141A	Merphos	water	ug/L	ND		5	0.063	ND		9.8	0.12	ND		5	0.063	ND		5	0.063
8141A	Methyl parathion	water	ug/L	ND		0.5	0.061	ND		0.98	0.12	ND		0.5	0.061	ND		0.5	0.061
8141A	Mevinphos	water	ug/L	ND		6.2	0.16	ND		12	0.31	ND		6.2	0.16	ND		6.2	0.16
8141A	Naled	water	ug/L	ND		10	0.22	ND		20	0.43	ND		10	0.22	ND		10	0.22
8141A	Phorate	water	ug/L	ND		0.5	0.075	ND		0.98	0.15	ND		0.5	0.075	ND		0.5	0.075
8141A	Propazine	water	ug/L	ND		10	2.5	ND		20	4.9	ND		10	2.5	ND		10	2.5
8141A	Ronnel	water	ug/L	ND		10	0.11	ND		20	0.22	ND		10	0.11	ND		10	0.11
8141A	Simazine	water	ug/L	ND		10	0.46	ND		20	0.9	ND		10	0.46	ND		10	0.46
8141A	Sulfotepp	water	ug/L	ND		0.5	0.03	ND		0.98	0.059	ND		0.5	0.03	ND		0.5	0.03
8141A	Tetrachlorvinphos (Stirophos)	water	ug/L	ND		2.5	0.056	ND		4.9	0.11	ND		2.5	0.056	ND		2.5	0.056
8141A	Thionazin	water	ug/L	ND		0.5	0.059	ND		0.98	0.12	ND		0.5	0.059	ND		0.5	0.059
8141A	Tokuthion	water	ug/L	ND		0.5	0.071	ND		0.98	0.14	ND		0.5	0.071	ND		0.5	0.071
8141A	Trichloronate	water	ug/L	ND		0.5	0.057	ND		0.98	0.11	ND		0.5	0.057	ND		0.5	0.057
8141A	O,O,O-Triethyl phosphorothioate	water	ug/L	ND		0.5	0.15	ND		0.98	0.29	ND		0.5	0.15	ND		0.5	0.15
8081A	Aldrin	sediment	ug/kg	ND		2	0.47	ND		200	32	ND		11	1.8	ND		2.4	0.38
8081A	alpha-BHC	sediment	ug/kg	ND		2	0.45	ND		200	30	ND		11	1.6	ND		2.4	0.35
8081A	beta-BHC	sediment	ug/kg	ND		2	0.41	ND		200	32	ND		11	1.8	ND		2.4	0.38
8081A	Chlordane (technical)	sediment	ug/kg	ND		20	3	ND		2000	300	ND		110	16	ND		24	3.5
8081A	delta-BHC	sediment	ug/kg	ND		2	0.13	ND		200	74	ND		11	4	ND		2.4	0.87
8081A	Dieldrin	sediment	ug/kg	ND		2	0.65	ND		200	29	ND		11	1.6	ND		2.4	0.34
8081A	Endosulfan I	sediment	ug/kg	ND		2	0.46	ND		200	44	ND		11	2.4	ND		2.4	0.52
8081A	Endosulfan II	sediment	ug/kg	ND		2	0.79	ND		200	50	ND		11	2.7	ND		2.4	0.59
8081A	Endosulfan sulfate	sediment	ug/kg	ND		2	0.35	ND		200	48	ND		11	2.6	ND		2.4	0.56
8081A	Endrin	sediment	ug/kg	ND		2	0.46	ND		200	49	ND		11	2.7	ND		2.4	0.58
8081A	Endrin aldehyde	sediment	ug/kg	ND		2	1.8	ND		200	100	ND		11	5.5	ND		2.4	1.2
8081A	gamma-BHC (Lindane)	sediment	ug/kg	ND		2	0.84	ND		200	29	ND		11	1.6	ND		2.4	0.34
8081A	Heptachlor	sediment	ug/kg	ND		2	0.57	ND		200	37	ND		11	2	ND		2.4	0.43
8081A	Heptachlor epoxide	sediment	ug/kg	ND		8.1	0.43	ND		800	26	3.6	J COL	44	1.4	ND		9.4	0.31
8081A	Methoxychlor	sediment	ug/kg	ND		4	0.2	ND		390	94	ND		22	5.2	ND		4.6	1.1
8081A	Toxaphene	sediment	ug/kg	ND		200	12	ND		20000	1200	ND		1100	65	ND		240	14
8081A	4,4'-DDD	sediment	ug/kg	ND		2	0.35	ND		200	42	ND		11	2.3	ND		2.4	0.49
8081A	4,4'-DDE	sediment	ug/kg	ND		2	0.39	ND		200	52	ND		11	2.9	ND		2.4	0.62
8081A	4,4'-DDT	sediment	ug/kg	ND		2	0.4	ND		200	57	ND		11	3.1	ND		2.4	0.67
8081A	Aldrin (Red Shiner)	fish	ug/kg	--		--	--	ND		180	65	--		--	--	ND		28	10
8081A	alpha-BHC (Red Shiner)	fish	ug/kg	--		--	--	ND		180	18	--		--	--	ND		28	2.8
8081A	alpha-Chlordane (Red Shiner)	fish	ug/kg	--		--	--	ND		180	18	--		--	--	ND		28	2.8
8081A	beta-BHC (Red Shiner)	fish	ug/kg	--		--	--	ND		180	18	--		--	--	ND		28	2.8
8081A	delta-BHC (Red Shiner)	fish	ug/kg	--		--	--	ND		180	18	--		--	--	ND		28	2.8
8081A	Dieldrin (Red Shiner)	fish	ug/kg	--		--	--	ND		180	18	--		--	--	ND		28	2.8
8081A	Endosulfan I (Red Shiner)	fish	ug/kg	--		--	--	ND		180	18	--		--	--	ND		28	2.8
8081A	Endosulfan II (Red Shiner)	fish	ug/kg	--		--	--	ND		180	18	--		--	--	ND		28	2.8
8081A	Endosulfan sulfate (Red Shiner)	fish	ug/kg	--		--	--	ND		180	85	--		--	--	ND		28	14
8081A	Endrin (Red Shiner)	fish	ug/kg	--		--	--	ND		180	18	--		--	--	ND		28	2.8
8081A	Endrin aldehyde (Red Shiner)	fish	ug/kg	--		--	--	ND		180	18	--		--	--	ND		28	2.8
8081A	Endrin ketone (Red Shiner)	fish	ug/kg	--		--	--	ND		180	18	--		--	--	ND		28	2.8
8081A	gamma-BHC (Lindane) (Red Shiner)	fish	ug/kg	--		--	--	ND		180	18	--		--	--	ND		28	2.8
8081A	gamma-Chlordane (Red Shiner)	fish	ug/kg	--		--	--	ND		180	53	--		--	--	ND		28	8.5
8081A	Heptachlor (Red Shiner)	fish	ug/kg	--		--	--	ND		180	18	--		--	--	ND		28	2.8
8081A	Heptachlor epoxide (Red Shiner)	fish	ug/kg	--		--	--	ND		650	16	--		--	--	ND		100	2.6
8081A	Methoxychlor (Red Shiner)	fish	ug/kg	--		--	--	ND		320	16	--		--	--	ND		52	2.6
8081A	Toxaphene (Red Shiner)	fish	ug/kg	--		--	--	ND		1800	970	--		--	--	ND		280	160
8081A	4,4'-DDD (Red Shiner)	fish	ug/kg	--		--	--	ND		180	18	--		--	--	ND		28	2.8
8081A	4,4'-DDE (Red Shiner)	fish	ug/kg	--		--	--	29	J	180	18	--		--	--	30		28	2.8
8081A	4,4'-DDT (Red Shiner)	fish	ug/kg	--		--	--	ND		180	41	--		--	--	ND		28	6.6
8081A	Aldrin (Fathead Minnow)	fish	ug/kg	ND		6	2.2	ND		120	44	--	f	--	--	--		--	--
8081A	alpha-BHC (Fathead Minnow)	fish	ug/kg	ND		6	0.6	ND		120	12	--	f	--	--	--		--	--
8081A	alpha-Chlordane (Fathead Minnow)	fish	ug/kg	1.6	J COL	6	0.6	ND		120	12	--	f	--	--	--		--	--
8081A	beta-BHC (Fathead Minnow)	fish	ug/kg	ND		6	0.6	14	J COL	120	12	--	f	--	--	--		--	--
8081A	delta-BHC (Fathead Minnow)	fish	ug/kg	ND		6	0.6	ND		120	12	--	f	--	--	--		--	--
8081A	Dieldrin (Fathead Minnow)	fish	ug/kg	0.92	J COL	6	0.6	ND		120	12	--	f	--	--	--		--	--
8081A	Endosulfan I (Fathead Minnow)	fish	ug/kg	ND		6	0.6	ND		120	12	--	f	--	--	--		--	--
8081A	Endosulfan II (Fathead Minnow)	fish	ug/kg	ND		6	0.6	ND		120	12	--	f	--	--	--		--	--
8081A	Endosulfan sulfate (Fathead Minnow)	fish	ug/kg	ND		6	2.9	ND		120	58	--	f	--	--	--		--	--

Table 4.7--Analytical results of surface-water monitoring at Rio Grande at Los Lunas, 2002-2003

Method	Parameter	Matrix	Unit	24-Jul-02				30-Oct-02				17-Dec-02				26-Feb-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
8081A	Endrin (Fathead Minnow)	fish	ug/kg	0.71	J	6	0.6	ND		120	12	--	f	--	--	--		--	--
8081A	Endrin aldehyde (Fathead Minnow)	fish	ug/kg	ND		6	0.6	15	J COL	120	12	--	f	--	--	--		--	--
8081A	Endrin ketone (Fathead Minnow)	fish	ug/kg	ND		6	0.6	ND		120	12	--	f	--	--	--		--	--
8081A	gamma-BHC (Lindane) (Fathead Minnow)	fish	ug/kg	ND		6	0.6	12	J	120	12	--	f	--	--	--		--	--
8081A	gamma-Chlordane (Fathead Minnow)	fish	ug/kg	ND		6	1.8	ND		120	36	--	f	--	--	--		--	--
8081A	Heptachlor (Fathead Minnow)	fish	ug/kg	ND		6	0.6	ND		120	12	--	f	--	--	--		--	--
8081A	Heptachlor epoxide (Fathead Minnow)	fish	ug/kg	ND		22	0.56	ND		440	11	--	f	--	--	--		--	--
8081A	Methoxychlor (Fathead Minnow)	fish	ug/kg	ND		11	0.56	ND		220	11	--	f	--	--	--		--	--
8081A	Toxaphene (Fathead Minnow)	fish	ug/kg	ND		60	33	ND		1200	660	--	f	--	--	--		--	--
8081A	4,4'-DDD (Fathead Minnow)	fish	ug/kg	3.3	J CHI	6	0.6	ND		120	12	--	f	--	--	--		--	--
8081A	4,4'-DDE (Fathead Minnow)	fish	ug/kg	5.9	J	6	0.6	26	J COL	120	12	--	f	--	--	--		--	--
8081A	4,4'-DDT (Fathead Minnow)	fish	ug/kg	ND		6	1.4	ND		120	28	--	f	--	--	--		--	--
	Explosives																		
8330	HMX	water	ug/L	ND		0.25	0.19	ND		0.25	0.04	ND		0.25	0.03	ND		0.25	0.03
8330	Nitrobenzene	water	ug/L	ND		0.25	0.08	ND		0.25	0.04	ND		0.25	0.04	ND		0.25	0.04
8330	Nitroglycerin	water	ug/L	ND		2.5	0.9	ND		2.5	0.09	ND		2.5	0.3	ND		2.5	0.3
8330	PETN	water	ug/L	ND		2.5	1.3	ND		2.5	0.03	ND		2.5	0.5	ND		2.5	0.5
8330	RDX	water	ug/L	ND		0.25	0.17	ND		0.25	0.03	ND		0.25	0.03	ND		0.25	0.03
8330	Tetryl	water	ug/L	ND		0.5	0.15	ND		0.5	0.05	ND		0.5	0.03	ND		0.5	0.03
8330	1,3,5-Trinitrobenzene	water	ug/L	ND		0.25	0.092	ND		0.25	0.05	ND		0.25	0.03	ND		0.25	0.03
8330	1,3-Dinitrobenzene	water	ug/L	ND		0.25	0.11	ND		0.25	0.04	ND		0.25	0.03	ND		0.25	0.03
8330	2,4,6-Trinitrotoluene	water	ug/L	ND		0.25	0.089	0.08	J	0.25	0.03	ND		0.25	0.05	ND		0.25	0.05
8330	2,4-Dinitrotoluene	water	ug/L	ND		0.25	0.1	ND		0.25	0.05	ND		0.25	0.04	ND		0.25	0.04
8330	2,6-Dinitrotoluene	water	ug/L	ND		0.25	0.15	ND		0.25	0.03	ND		0.25	0.03	ND		0.25	0.03
8330	2-Amino-4,6-dinitrotoluene	water	ug/L	ND		0.25	0.12	ND		0.25	0.04	ND		0.25	0.04	ND		0.25	0.04
8330	2-Nitrotoluene	water	ug/L	ND		0.25	0.16	ND		0.25	0.03	ND		0.25	0.04	ND		0.25	0.04
8330	3-Nitrotoluene	water	ug/L	ND		0.25	0.18	ND		0.25	0.3	ND		0.25	0.09	ND		0.25	0.09
8330	4-Amino-2,6-dinitrotoluene	water	ug/L	ND		0.25	0.1	ND		0.25	0.5	ND		3.2	0.05	ND		3.2	0.05
8330	4-Nitrotoluene	water	ug/L	ND		0.25	0.23	ND		0.25	0.03	ND		0.4	0.05	ND		0.4	0.05
8330	HMX	sediment	mg/kg	--		--	--	ND		0.59	0.095	--		--	--	--		--	--
8330	Nitrobenzene	sediment	mg/kg	--		--	--	ND		0.59	0.14	--		--	--	--		--	--
8330	Nitroglycerin	sediment	mg/kg	--		--	--	ND		12	0.24	--		--	--	--		--	--
8330	PETN	sediment	mg/kg	--		--	--	ND		9.5	0.071	--		--	--	--		--	--
8330	RDX	sediment	mg/kg	--		--	--	ND		0.59	0.12	--		--	--	--		--	--
8330	Tetryl	sediment	mg/kg	--		--	--	ND		1.2	0.17	--		--	--	--		--	--
8330	1,3,5-Trinitrobenzene	sediment	mg/kg	--		--	--	ND		0.59	0.071	--		--	--	--		--	--
8330	1,3-Dinitrobenzene	sediment	mg/kg	--		--	--	ND		0.59	0.095	--		--	--	--		--	--
8330	2,4,6-Trinitrotoluene	sediment	mg/kg	--		--	--	ND		0.59	0.095	--		--	--	--		--	--
8330	2,4-Dinitrotoluene	sediment	mg/kg	--		--	--	ND		0.59	0.095	--		--	--	--		--	--
8330	2,6-Dinitrotoluene	sediment	mg/kg	--		--	--	ND		0.59	0.14	--		--	--	--		--	--
8330	2-Amino-4,6-dinitrotoluene	sediment	mg/kg	--		--	--	ND		0.59	0.12	--		--	--	--		--	--
8330	2-Nitrotoluene	sediment	mg/kg	--		--	--	ND		0.59	0.071	--		--	--	--		--	--
8330	3-Nitrotoluene	sediment	mg/kg	--		--	--	ND		0.59	1.4	--		--	--	--		--	--
8330	4-Amino-2,6-dinitrotoluene	sediment	mg/kg	--		--	--	ND		0.59	1	--		--	--	--		--	--
8330	4-Nitrotoluene	sediment	mg/kg	--		--	--	ND		0.59	0.12	--		--	--	--		--	--
	Polyaromatic hydrocarbons																		
8310	Acenaphthene	sediment	ug/kg	ND		240	4.7	ND		4800	93	ND		260	5.1	ND		280	5.5
8310	Acenaphthylene	sediment	ug/kg	ND		240	14	ND		4800	290	ND		260	16	ND		280	17
8310	Anthracene	sediment	ug/kg	ND		24	3.1	63	J	480	62	ND		26	3.4	ND		28	3.6
8310	Benzo(a)anthracene	sediment	ug/kg	ND		24	6	190	J	480	120	ND		26	6.5	ND		28	7
8310	Benzo(a)pyrene	sediment	ug/kg	ND		24	2.2	350	J	480	43	ND		26	2.3	ND		28	2.5
8310	Benzo(b)fluoranthene	sediment	ug/kg	ND		24	4.7	330	J	480	93	5.7	J COL	26	5.1	ND		28	5.5
8310	Benzo(ghi)perylene	sediment	ug/kg	ND		48	3.1	290	J B	950	62	ND		52	3.4	ND		56	3.6
8310	Benzo(k)fluoranthene	sediment	ug/kg	ND		24	2.8	250	J COL	480	55	ND		26	3	ND		28	3.2
8310	Chrysene	sediment	ug/kg	ND		48	2.9	240	J COL	950	57	ND		52	3.1	ND		56	3.4
8310	Dibenzo(a,h)anthracene	sediment	ug/kg	ND		48	5.5	210	J COL	950	110	ND		52	6	ND		56	6.5
8310	Fluoranthene	sediment	ug/kg	13	J COL	48	10	250	J COL	950	200	ND		52	11	ND		56	12
8310	Fluorene	sediment	ug/kg	ND		48	10	ND		950	210	ND		52	11	ND		56	12
8310	Indeno(1,2,3-cd)pyrene	sediment	ug/kg	ND		48	2.8	270	J	950	55	ND		52	3	ND		56	3.2
8310	Naphthalene	sediment	ug/kg	ND		240	14	ND		4800	290	ND		260	16	ND		280	17
8310	Phenanthrene	sediment	ug/kg	ND		48	4	ND		950	78	ND		52	4.3	ND		56	4.6
8310	Pyrene	sediment	ug/kg	ND		48	8.3	ND		950	160	ND		52	9	ND		56	9.7
8310	1-Methylnaphthalene	sediment	ug/kg	ND		240	8.4	ND		4800	170	26	J COL	260	9.1	ND		280	9.8
8310	2-Methylnaphthalene	sediment	ug/kg	ND		240	4	ND		4800	78	ND		260	4.3	ND		280	4.6
	Total Petroleum Hydrocarbons																		
9071B	n-Hexane Ext. Material	sediment	mg/kg	2600		600	190	ND		1200	380	ND		650	210	ND		700	220
9071B	SGT-HEM (Petroleum Hydrocarbons)	sediment	mg/kg	ND		600	140	ND		1200	290	ND		650	160	ND		700	170

Table 4.7--Analytical results of surface-water monitoring at Rio Grande at Los Lunas, 2002-2003

Method	Parameter	Matrix	Unit	24-Jul-02				30-Oct-02				17-Dec-02				26-Feb-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
	Pharmaceuticals																		
ITMS	Amitriptyline	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Beta-Estradiol	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Caffeine	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Cholesterol	water	ng/L	2700		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Desipramine	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Dextro-Norgestrel	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Doxepin	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Equilin	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Estrone	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Enthynl Estradiol	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Imipramine	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Medroxyprogesterone	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Megestrol Acetate	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Menstranol	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Nordoxepin	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Norethindrone	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Norethynodrel	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Nortriptyline	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Paroxetine	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Phenytoin	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Prednisone	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Progesterone	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Propoxyphene	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Protroptyline	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Prozac	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Setraline	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Tamoxifen	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	Trimipramine maleate	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
ITMS	6 alpha-Methyprednisolone	water	ng/L	ND		10	--	ND		10	--	--		--	--	ND		10	--
	Grain size analysis																		
D422	Maximum particle size	sediment	--	fine gravel		--	--	coarse sand		--	--	coarse sand		--	--	coarse sand		--	--
D422	Particle size, 9500 microns, gravel	sediment	%	0.9		0.1	--	--		--	--	--		--	--	--		0.1	--
D422	Particle size, 4750 microns, gravel	sediment	%	1.2		0.1	--	--		--	--	0.1		0.1	--	--		0.1	--
D422	Particle size, 2000 microns, sand	sediment	%	1.0		0.1	--	0.1		0.1	--	0.1		0.1	--	0.1		0.1	--
D422	Particle size, 850 microns, sand	sediment	%	2.6		0.1	--	0.9		0.1	--	1.9		0.1	--	1.4		0.1	--
D422	Particle size, 425 microns, sand	sediment	%	12.5		0.1	--	3.3		0.1	--	12.8		0.1	--	18.5		0.1	--
D422	Particle size, 250 microns, sand	sediment	%	35.7		0.1	--	7.2		0.1	--	25.0		0.1	--	48.2		0.1	--
D422	Particle size, 180 microns, sand	sediment	%	26.7		0.1	--	6.3		0.1	--	19.0		0.1	--	19.6		0.1	--
D422	Particle size, 150 microns, sand	sediment	%	8.1		0.1	--	1.9		0.1	--	8.3		0.1	--	4.0		0.1	--
D422	Particle size, 75 microns, sand	sediment	%	5.5		0.1	--	4.0		0.1	--	15.8		0.1	--	4.2		0.1	--
D422	Particle size, 36.8 microns, silt	sediment	%	--		--	--	--		--	--	--		--	--	0.0		0.1	--
D422	Particle size, 36.6 microns, silt	sediment	%	4.0		0.1	--	--		--	--	7.5		0.1	--	--		--	--
D422	Particle size, 30.5 microns, silt	sediment	%	--		--	--	0.5		0.1	--	--		--	--	--		--	--
D422	Particle size, 23.4 microns, silt	sediment	%	--		--	--	--		--	--	1.7		0.1	--	0.4		0.1	--
D422	Particle size, 23.1 microns, silt	sediment	%	0.0		0.1	--	--		--	--	--		--	--	--		--	--
D422	Particle size, 19.5 microns, silt	sediment	%	--		--	--	3.5		0.1	--	--		--	--	--		--	--
D422	Particle size, 13.5 microns, silt	sediment	%	--		--	--	--		--	--	0.9		0.1	--	0.4		0.1	--
D422	Particle size, 13.4 microns, silt	sediment	%	0.0		0.1	--	--		--	--	--		--	--	--		--	--
D422	Particle size, 11.6 microns, silt	sediment	%	--		--	--	7.0		0.1	--	--		--	--	--		--	--
D422	Particle size, 9.6 microns, silt	sediment	%	--		--	--	--		--	--	0.9		0.1	--	0.4		--	--
D422	Particle size, 9.5 microns, silt	sediment	%	0.5		0.1	--	--		--	--	--		--	--	--		--	--
D422	Particle size, 8.2 microns, silt	sediment	%	--		--	--	5.3		0.1	--	--		--	--	--		--	--
D422	Particle size, 6.9 microns, silt	sediment	%	--		--	--	--		--	--	0.9		0.1	--	--		--	--
D422	Particle size, 6.7 microns, silt	sediment	%	--		--	--	--		--	--	--		--	--	0.4		--	--
D422	Particle size, 6.5 microns, silt	sediment	%	0.0		0.1	--	--		--	--	--		--	--	--		--	--
D422	Particle size, 6.0 microns, silt	sediment	%	--		--	--	7.0		0.1	--	--		--	--	--		--	--
D422	Particle size, 3.4 microns, clay	sediment	%	0.5		0.1	--	--		--	--	--		--	--	--		--	--
D422	Particle size, 3.3 microns, clay	sediment	%	--		--	--	--		--	--	0.9		0.1	--	0.0		0.1	--
D422	Particle size, 3.1 microns, clay	sediment	%	--		--	--	10.6		0.1	--	--		--	--	--		--	--
D422	Particle size, 1.4 microns, clay	sediment	%	0.6		0.1	--	--		--	--	0.0		0.1	--	0.1		0.1	--
D422	Particle size, less than 1.4 microns, clay	sediment	%	0.3		0.1	--	--		--	--	4.5		0.1	--	2.3		0.1	--
D422	Particle size, 1.3 microns, clay	sediment	%	--		--	--	10.6		0.1	--	--		--	--	--		--	--
D422	Particle size, less than 1.3 microns, clay	sediment	%	--		--	--	31.7		0.1	--	--		--	--	--		--	--

[1] See table 5 for description of qualifier codes.

[2] Reporting limit -- the lowest level at which measurements become quantitatively meaningful, ie., the quantitation limit, which is approximately three times the method detection limit. Reporting limits cannot be less than the statistically determined method detection limit.

[3] Method detection limit -- the minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero and is determined from replicate analyses of low level standards in a typical representative matrix.

Table 4.8--Analytical results of surface-water monitoring at Rio Grande at Abeytas

[Field parameters measured by field staff. Laboratory analyses performed by Severn Trent Laboratory and the New Mexico Scientific Laboratory (pharmaceuticals). --, no data; °C, degrees Celsius; mm of Hg, millimeters of mercury; ft^3/sec, cubic feet per second; mg/L, milligram per liter; %, percent; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units; ug/L, micrograms per liter; g/kg, grams per kilogram; mg/kg, milligram per kilogram; ug/kg, micrograms per kilogram; ITMS, Ion trap mass spectrometer; ng/L, nanograms per liter; n/a, not applicable.]

Method	Parameter	Matrix	Unit	12-Sep-02				16-Jan-03			
				Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]	Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]
--	Station identification number	--	--	342701106480910		--	--	342701106480910	--	--	--
--	Latitude/Longitude	--	--	342701/1064809		--	--	342701/1064809	--	--	--
--	Time	--	--	1100		--	--	1200	--	--	--
	Field parameters										
170.1	Air temperature	air	°C	--		0.1	0.01	12.0		0.1	0.01
170.1	Water temperature	water	°C	22.0		0.1	0.01	6.6		0.1	0.01
--	Barometric pressure	air	mm of Hg	643		--	--	651		--	--
--	Discharge, instantaneous	water	ft^3/s	499		--	--	502		--	--
150.1	pH - unfiltered	water	--	7.8		0.1	0.01	8.4		0.1	0.01
--	Dissolved oxygen	water	mg/L	5.9		0.1	0.01	11.8		0.1	0.01
--	Dissolved oxygen, saturation	water	%	81		1	0.01	96		1	0.01
120.1	Specific conductance - unfiltered	water	uS/cm	393		1	1	312		1	1
180.1	Turbidity	water	NTU	--		1	0.1	172		1	0.1
310.1	Alkalinity, as $CaCO_3$	water	mg/L	128		1	0.1	151		1	0.1
310.1	Bicarbonate, as HCO_3	water	mg/L	154		1	0.1	181		1	0.1
310.1	Carbonate, as CO_3	water	mg/L	1.0		0.1	0.1	1.6		0.1	0.1
	General chemistry										
130.2	Hardness, as $CaCO_3$	water	mg/L	250	J	5	2	160	J	5	2
160.1	Total dissolved solids	water	mg/L	310	G	20	10	350	J	10	5
160.2	Total suspended solids	water	mg/L	670	Q	20	9	240	Q	10	4.5
314	Perchlorate	water	ug/L	ND		20	1.5	ND		20	0.2
405.1	Biochemical oxygen demand (BOD)	water	mg/L	2		2	0.23	3.9		2	0.23
410.4	Chemical oxygen demand (COD)	water	mg/L	22		20	3.5	8.7	B	20	3.5
9060	Total organic carbon	sediment	g/kg	7.8		2	0.59	22		4.6	1.3
D2216	Moisture	sediment	%	37		0.1	--	56		0.1	--
D2216	Moisture	fish	%	--	f	--	--	--	f	--	--
Total Residue	Lipids (Red shiner)	fish	%	2.4	B	0.1		0.6		0.1	
	Common anions										
300.0A	Bromide	water	mg/L	ND		0.2	0.03	0.24		0.2	0.03
300.0A	Chloride	water	mg/L	18		3	0.1	29		3	0.1
300.0A	Fluoride	water	mg/L	0.54	B	1	0.03	0.6	B	1	0.03
300.0A	Nitrate	water	mg/L	0.58		0.5	0.03	0.52		0.5	0.03
300.0A	Nitrite	water	mg/L	ND		0.5	0.04	ND		0.5	0.04
300.0A	Phosphate as P, Ortho	water	mg/L	ND		0.5	0.04	0.14	B	0.5	0.04
300.0A	Sulfate	water	mg/L	84	Q	25	1	80	Q	25	1
9012A	Cyanide, Total	water	mg/L	0.0091	B	0.01	0.002	0.0054	B	0.01	0.0039
9012A	Cyanide, Total	sediment	mg/kg	0.33	B J	0.79	0.14	0.69	B J	1.1	0.23
9056	Bromide	sediment	mg/kg	ND		3.2	0.47	ND		4.6	0.68
9056	Chloride	sediment	mg/kg	22	B J	47	1.6	56	B J	68	2.3
9056	Fluoride	sediment	mg/kg	8.2	B	16	0.47	4.9	B	23	0.68
9056	Nitrate	sediment	mg/kg	ND		7.9	0.47	4.9	B J	11	0.68
9056	Nitrite	sediment	mg/kg	ND		7.9	0.63	3.6	B J	11	0.91
9056	Phosphate as P, Ortho	sediment	mg/kg	ND		7.9	0.63	2.7	B	11	0.91
9056	Sulfate	sediment	mg/kg	190		79	3.2	41	B J	110	4.6

Table 4.8--Analytical results of surface-water monitoring at Rio Grande at Abeytas

Method	Parameter	Matrix	Unit	12-Sep-02				16-Jan-03			
				Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]	Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]
	Nutrients										
350.1	Ammonia as N	water	mg/L	0.033	B	0.1	0.015	0.082	B	0.1	0.015
351.2	Total Kjeldahl Nitrogen	water	mg/L	0.22	B	0.5	0.14	ND		0.5	0.083
353.2	Nitrate-Nitrite	water	mg/L	0.55		0.1	0.012	0.41		0.1	0.012
354.1	Nitrite	water	mg/L	0.011	J	0.01	0.002	0.0023	B	0.01	0.002
365.3	Total phosphorus	water	mg/L	0.49		0.05	0.013	0.39		0.05	0.013
350.1	Ammonia as N	sediment	mg/kg	7.8		1.6	0.24	9.6		2.3	0.34
351.2	Total Kjeldahl Nitrogen	sediment	mg/kg	590		79	63	1000		110	26
353.2	Nitrate-Nitrite	sediment	mg/kg	1.3	B J	1.6	0.19	0.28	B J	2.3	0.27
354.1	Nitrite	sediment	mg/kg	0.33		0.16	0.063	0.15	B J	0.23	0.091
365.3	Total phosphorus	sediment	mg/kg	710	Q	160	38	550	Q	230	55
	Trace elements										
6020	Antimony	water	ug/L	0.26	B	2	0.04	0.73	B	2	0.04
6020	Arsenic	water	ug/L	3.4	B J	5	0.061	4.7	B	5	0.061
6020	Barium	water	ug/L	94		1	0.057	88	J	1	0.057
6020	Beryllium	water	ug/L	ND		1	0.028	--		--	--
6020	Cadmium	water	ug/L	ND		1	0.022	ND		1	0.022
6020	Chromium	water	ug/L	0.53	B	2	0.24	1.1	B J	2	0.24
6020	Cobalt	water	ug/L	0.45	B	1	0.015	0.48	B	1	0.015
6020	Copper	water	ug/L	1.7	B	2	0.63	0.79	B	2	0.63
6020	Lead	water	ug/L	ND		1	0.15	ND		1	0.15
6020	Manganese	water	ug/L	0.6	B J	1	0.061	35		1	0.061
6020	Molybdenum	water	ug/L	5	J	2	0.023	5.8		2	0.023
6020	Nickel	water	ug/L	3.5		2	0.25	0.87	B J	2	0.25
6020	Selenium	water	ug/L	ND		5	0.19	ND		5	0.19
6020	Silver	water	ug/L	0.016	B J	5	0.012	ND		5	0.012
6020	Thallium	water	ug/L	ND		1	0.015	ND		1	0.015
6020	Tin	water	ug/L	ND		10	0.054	0.41	B	10	0.054
6020	Uranium	water	ug/L	2.4	J	1	0.0015	3.2		1	0.0015
6020	Vanadium	water	ug/L	6.1		5	0.07	4.2	B	5	0.07
6020	Zinc	water	ug/L	8.3	B	10	2.3	6.3	B J	10	2.3
7470A	Mercury	water	ug/L	ND		0.2	0.028	0.029	B J	0.2	0.015
6010B	Aluminum	water	ug/L	24	B J	100	20	ND		100	20
6010B	Beryllium	water	ug/L	--		--	--	0.51	B J	5	0.22
6010B	Boron	water	ug/L	95	B	100	5.2	120		100	5.2
6010B	Calcium	water	ug/L	50000	J	200	31	47000		200	31
6010B	Iron	water	ug/L	16	B	100	13	24	B	100	13
6010B	Lithium	water	ug/L	34		10	2.1	58		10	2.1
6010B	Magnesium	water	ug/L	8200		200	24	8500		200	24
6010B	Potassium	water	ug/L	5500		3000	490	4900		3000	490
6010B	Silica	water	ug/L	21000	J	1100	23	22000		1100	23
6010B	Sodium	water	ug/L	36000		5000	1500	45000		5000	1500
6010B	Strontium	water	ug/L	480		10	0.35	420		10	0.35
6010B	Titanium	water	ug/L	1.2	B	10	0.97	ND		10	0.97
6020	Antimony	sediment	mg/kg	0.013	B J	0.32	0.0046	0.068	B	0.46	0.0066
6020	Arsenic	sediment	mg/kg	4.5		0.79	0.027	5.1		1.1	0.039
6020	Barium	sediment	mg/kg	300	J	0.16	0.038	200	J	0.23	0.055
6020	Beryllium	sediment	mg/kg	1.5		0.16	0.0069	--		--	--
6020	Cadmium	sediment	mg/kg	0.27		0.16	0.0022	0.17	B J	0.23	0.0032
6020	Chromium	sediment	mg/kg	32	J	0.32	0.028	22	J	0.46	0.041
6020	Cobalt	sediment	mg/kg	11		0.16	0.0019	7.6	J	0.23	0.0027
6020	Copper	sediment	mg/kg	19	J	0.32	0.024	14	J	0.46	0.034

Table 4.8--Analytical results of surface-water monitoring at Rio Grande at Abeytas

Method	Parameter	Matrix	Unit	12-Sep-02				16-Jan-03			
				Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]	Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]
6020	Lead	sediment	mg/kg	14	J	0.16	0.0066	12	J	0.23	0.0096
6020	Manganese	sediment	mg/kg	660	J	0.79	0.18	640	J	0.23	0.052
6020	Molybdenum	sediment	mg/kg	0.4	J	0.32	0.0035	0.36	B J	0.46	0.005
6020	Nickel	sediment	mg/kg	26	J	0.16	0.021	16	J	0.23	0.03
6020	Selenium	sediment	mg/kg	0.84		0.79	0.077	0.51	B	1.1	0.11
6020	Silver	sediment	mg/kg	0.21	J	0.16	0.0036	0.14	B	0.23	0.0052
6020	Thallium	sediment	mg/kg	0.27	J	0.16	0.0016	0.24	J	0.23	0.0023
6020	Tin	sediment	mg/kg	ND		1.6	0.12	0.29	B J	2.3	0.18
6020	Uranium	sediment	mg/kg	1.3		0.16	0.0028	1	J	0.23	0.0041
6020	Vanadium	sediment	mg/kg	48	J	0.79	0.0088	36	J	1.1	0.013
6020	Zinc	sediment	mg/kg	72		1.6	0.55	56	J	2.3	0.8
7471A	Mercury	sediment	mg/kg	0.016	B	0.052	0.0039	0.011	B	0.075	0.0057
6010B	Aluminum	sediment	mg/kg	32000		32	6.6	31000	J	23	4.8
6010B	Beryllium	sediment	mg/kg	--		--	--	1.5		1.1	0.078
6010B	Boron	sediment	mg/kg	18	B	32	1.2	14	B	23	0.84
6010B	Calcium	sediment	mg/kg	52000	J	63	25	38000	J	46	18
6010B	Iron	sediment	mg/kg	26000		32	5	23000	J	23	3.6
6010B	Lithium	sediment	mg/kg	35		16	0.35	32		11	0.25
6010B	Magnesium	sediment	mg/kg	13000		63	4.7	10000	J	46	3.4
6010B	Potassium	sediment	mg/kg	5700		950	110	6100		680	80
6010B	Sodium	sediment	mg/kg	250	B	1600	190	ND		1100	140
6010B	Strontium	sediment	mg/kg	160		3.2	0.16	160		2.3	0.11
6010B	Titanium	sediment	mg/kg	290		3.2	0.38	230	J	2.3	0.27
6020	Antimony	fish	mg/kg	--	f	--	--	ND		0.2	0.02
6020	Arsenic	fish	mg/kg	--	f	--	--	0.21	B	0.5	0.0076
6020	Beryllium	fish	mg/kg	--	f	--	--	--		--	--
6020	Cadmium	fish	mg/kg	--	f	--	--	0.013	B	0.1	0.0027
6020	Chromium	fish	mg/kg	--	f	--	--	0.25	J	0.2	0.034
6020	Copper	fish	mg/kg	--	f	--	--	0.85	J	0.2	0.061
6020	Lead	fish	mg/kg	--	f	--	--	0.043	B	0.1	0.02
6020	Nickel	fish	mg/kg	--	f	--	--	0.072	B J	0.1	0.011
6020	Selenium	fish	mg/kg	--	f	--	--	0.74		0.5	0.018
6020	Silver	fish	mg/kg	--	f	--	--	0.0072	B	0.1	0.002
6020	Thallium	fish	mg/kg	--	f	--	--	0.004	B	0.1	0.002
6020	Uranium	fish	mg/kg	--	f	--	--	0.0068	B	0.1	0.002
6020	Zinc	fish	mg/kg	--	f	--	--	55	J	1	0.13
245.6	Mercury	fish	ug/kg	82	B	100	5.9	31	B	100	5.9
6010B	Aluminum	fish	mg/kg	36	B	40	12	51		10	3.1
6010B	Barium	fish	mg/kg	7.2		4	0.48	4		1	0.12
6010B	Beryllium	fish	mg/kg	--		--	--	ND		0.5	0.14
6010B	Boron	fish	mg/kg	2.7	B	40	2	ND		10	0.51
6010B	Calcium	fish	mg/kg	9700	J	80	13	6700	J	20	3.2
6010B	Cobalt	fish	mg/kg	ND		4	0.6	0.26	B	1	0.15
6010B	Iron	fish	mg/kg	36	B	40	8	42		10	2
6010B	Lithium	fish	mg/kg	ND		20	0.88	ND		5	0.22
6010B	Magnesium	fish	mg/kg	370		80	6.1	290		20	1.5
6010B	Manganese	fish	mg/kg	5.1		4	0.56	4.1		1	0.14
6010B	Molybdenum	fish	mg/kg	ND		8	0.96	ND		2	0.24
6010B	Potassium	fish	mg/kg	2300		1200	120	2000		300	31
6010B	Sodium	fish	mg/kg	480	B	2000	480	550		500	120
6010B	Strontium	fish	mg/kg	31		4	0.6	24		1	0.15
6010B	Tin	fish	mg/kg	4.3	B J	40	1.7	1.7	B J	10	0.42

Table 4.8--Analytical results of surface-water monitoring at Rio Grande at Abeytas

Method	Parameter	Matrix	Unit	12-Sep-02				16-Jan-03			
				Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]	Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]
6010B	Titanium	fish	mg/kg	1.1	B	4	0.8	1.9		1	0.2
6010B	Vanadium	fish	mg/kg	ND		4	1.4	ND		1	0.35
	Volatile organic compounds										
8260B	Acetone	water	ug/L	ND		10	2.9	ND		10	2.9
8260B	Benzene	water	ug/L	ND		1	0.27	ND		1	0.27
8260B	Bromodichloromethane	water	ug/L	ND		1	0.35	ND		1	0.35
8260B	Bromoform	water	ug/L	ND		1	0.46	ND		1	0.46
8260B	Bromomethane	water	ug/L	ND		2	0.28	ND		2	0.28
8260B	Carbon disulfide	water	ug/L	ND		1	0.67	ND		1	0.67
8260B	Carbon tetrachloride	water	ug/L	ND		1	0.35	ND		1	0.35
8260B	Chlorobenzene	water	ug/L	ND		1	0.24	ND		1	0.24
8260B	Chloroethane	water	ug/L	ND		2	0.26	ND		2	0.26
8260B	Chloroform	water	ug/L	ND		1	0.29	ND		1	0.29
8260B	Chloromethane	water	ug/L	ND		2	0.26	ND		2	0.26
8260B	cis-1,2-Dichloroethene	water	ug/L	ND		1	0.33	ND		1	0.33
8260B	cis-1,3-Dichloropropene	water	ug/L	ND		1	0.31	ND		1	0.31
8260B	Dibromochloromethane	water	ug/L	ND		1	0.37	ND		1	0.37
8260B	Ethylbenzene	water	ug/L	ND		1	0.51	ND		1	0.51
8260B	Methylene chloride	water	ug/L	ND		5	0.86	ND		5	0.86
8260B	m-Xylene & p-Xylene	water	ug/L	ND		2	0.52	ND		2	0.52
8260B	o-Xylene	water	ug/L	ND		1	0.24	ND		1	0.24
8260B	Styrene	water	ug/L	ND		1	0.28	ND		1	0.28
8260B	Tetrachloroethene	water	ug/L	ND		1	0.27	ND		1	0.27
8260B	Toluene	water	ug/L	ND		1	0.26	ND		1	0.26
8260B	trans-1,2-Dichloroethene	water	ug/L	ND		0.5	0.25	ND		0.5	0.25
8260B	trans-1,3-Dichloropropene	water	ug/L	ND		1	0.36	ND		1	0.36
8260B	Trichloroethene	water	ug/L	ND		1	0.24	ND		1	0.24
8260B	Vinyl chloride	water	ug/L	ND		1	0.26	ND		1	0.26
8260B	Xylenes (total)	water	ug/L	ND		2	0.73	ND		2	0.73
8260B	1,1,1-Trichloroethane	water	ug/L	ND		1	0.32	ND		1	0.32
8260B	1,1,2,2-Tetrachloroethane	water	ug/L	ND		1	0.5	ND		1	0.5
8260B	1,1,2-Trichloroethane	water	ug/L	ND		1	0.41	ND		1	0.41
8260B	1,1-Dichloroethane	water	ug/L	ND		1	0.29	ND		1	0.29
8260B	1,1-Dichloroethene	water	ug/L	ND		1	0.31	ND		1	0.31
8260B	1,2-Dichloroethane	water	ug/L	ND		1	0.43	ND		1	0.43
8260B	1,2-Dichloroethene (total)	water	ug/L	ND		1	0.54	ND		1	0.54
8260B	1,2-Dichloropropane	water	ug/L	ND		1	0.38	ND		1	0.38
8260B	2-Butanone (MEK)	water	ug/L	ND		5	2.4	ND		5	2.4
8260B	2-Hexanone	water	ug/L	ND		5	1.8	ND		5	1.8
8260B	4-Methyl-2-pentanone	water	ug/L	ND		5	1.8	ND		5	1.8
8260B	Alpha-pinene	sediment	ug/kg	--		--	--	18	T2	--	--
8260B	Acetone	sediment	ug/kg	12	J	32	7.3	49		46	7.8
8260B	Benzene	sediment	ug/kg	ND		7.9	1.4	ND		11	0.27
8260B	Beta-pinene	sediment	ug/kg	--		--	--	36	T2	--	--
8260B	Bromodichloromethane	sediment	ug/kg	ND		7.9	1.5	ND		11	0.46
8260B	Bromoform	sediment	ug/kg	ND		7.9	1.4	ND		11	0.59
8260B	Bromomethane	sediment	ug/kg	ND		16	1.9	ND		23	1.4
8260B	Carbon disulfide	sediment	ug/kg	ND		7.9	1.5	ND		11	0.55
8260B	Carbon tetrachloride	sediment	ug/kg	ND		7.9	1.9	ND		11	0.57
8260B	Chlorobenzene	sediment	ug/kg	ND		7.9	1.2	ND		11	0.41
8260B	Chloroethane	sediment	ug/kg	ND		16	2.1	ND		23	0.52
8260B	Chloroform	sediment	ug/kg	ND		16	1.4	ND		23	0.57

Table 4.8--Analytical results of surface-water monitoring at Rio Grande at Abeytas

Method	Parameter	Matrix	Unit	12-Sep-02				16-Jan-03			
				Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]	Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]
8260B	Chloromethane	sediment	ug/kg	ND		16	2.4	ND		23	0.82
8260B	cis-1,2-Dichloroethene	sediment	ug/kg	ND		3.9	1.3	ND		5.7	0.48
8260B	cis-1,3-Dichloropropene	sediment	ug/kg	ND		7.9	1.5	ND		11	0.82
8260B	Dibromochloromethane	sediment	ug/kg	ND		7.9	1.4	ND		11	0.46
8260B	Disulfide, dimethyl	sediment	ug/kg	22	J T2	--	--	13	T2	--	--
8260B	Ethylbenzene	sediment	ug/kg	ND		7.9	1.9	ND		11	0.62
8260B	Methanethiol	sediment	ug/kg	--		--	--	64	T2	--	--
8260B	Methylene chloride	sediment	ug/kg	1.7	J B	7.9	1.3	2.6	J B	11	0.93
8260B	m-Xylene & p-Xylene	sediment	ug/kg	ND		3.9	2.8	ND		5.7	0.96
8260B	o-Xylene	sediment	ug/kg	ND		3.9	1.6	ND		5.7	0.52
8260B	Styrene	sediment	ug/kg	ND		7.9	1	ND		11	0.48
8260B	Tetrachloroethene	sediment	ug/kg	ND		7.9	1.6	ND		11	0.57
8260B	Toluene	sediment	ug/kg	ND		7.9	1.2	110		11	0.5
8260B	trans-1,2-Dichloroethene	sediment	ug/kg	ND		3.9	1.2	ND		5.7	0.8
8260B	trans-1,3-Dichloropropene	sediment	ug/kg	ND		7.9	1.6	ND		11	0.96
8260B	Trichloroethene	sediment	ug/kg	ND		7.9	1.4	ND		11	0.66
8260B	Tridecane	sediment	ug/kg	--		--	--	13	T2	--	--
8260B	Unknown	sediment	ug/kg	--		--	--	20	J	--	--
8260B	Unknown	sediment	ug/kg	--		--	--	19	J	--	--
8260B	Unknown	sediment	ug/kg	--		--	--	200	J	--	--
8260B	Unknown	sediment	ug/kg	--		--	--	44	J	--	--
8260B	Unknown	sediment	ug/kg	--		--	--	33	J	--	--
8260B	Unknown	sediment	ug/kg	--		--	--	47	J	--	--
8260B	Unknown	sediment	ug/kg	--		--	--	63	J	--	--
8260B	Vinyl chloride	sediment	ug/kg	ND		7.9	1.7	ND		11	0.52
8260B	Xylenes (total)	sediment	ug/kg	ND		7.9	4.4	ND		11	1.3
8260B	1,1,1-Trichloroethane	sediment	ug/kg	ND		7.9	1.5	ND		11	0.59
8260B	1,1,2,2-Tetrachloroethane	sediment	ug/kg	ND		7.9	1.7	ND		11	1.3
8260B	1,1,2-Trichloroethane	sediment	ug/kg	ND		7.9	2.4	ND		11	0.73
8260B	1,1-Dichloroethane	sediment	ug/kg	ND		7.9	1.5	ND		11	0.48
8260B	1,1-Dichloroethene	sediment	ug/kg	ND		7.9	1.7	ND		11	0.71
8260B	1,2-Dichloroethane	sediment	ug/kg	ND		7.9	1.6	ND		11	0.5
8260B	1,2-Dichloroethene (total)	sediment	ug/kg	ND		7.9	2.4	ND		11	0.68
8260B	1,2-Dichloropropane	sediment	ug/kg	ND		7.9	1.9	ND		11	0.5
8260B	2-Butanone (MEK)	sediment	ug/kg	ND		32	7.4	12	J	46	6.2
8260B	2-Hexanone	sediment	ug/kg	ND		32	7.3	ND		46	5.2
8260B	4-Methyl-2-pentanone	sediment	ug/kg	ND		32	6.2	ND		46	4.6
	Herbicides										
8151A	Dalapon	water	ug/L	ND		2	0.42	ND		1	0.043
8151A	Dicamba	water	ug/L	ND		2	0.081	ND		1	0.036
8151A	Dichlorprop	water	ug/L	ND		4	0.13	ND		4	0.24
8151A	Dinoseb	water	ug/L	ND		0.6	0.09	ND		4	0.098
8151A	MCPA	water	ug/L	ND		400	13	ND		2	0.33
8151A	MCPP	water	ug/L	ND		400	42	ND		2	0.086
8151A	2,4,5-T	water	ug/L	ND		1	0.043	ND		4	0.11
8151A	2,4,5-TP (Silvex)	water	ug/L	ND		1	0.034	ND		0.6	0.065
8151A	2,4-D	water	ug/L	ND		4	0.16	ND		400	12
8151A	2,4-DB	water	ug/L	ND		4	0.21	ND		400	15

Table 4.8--Analytical results of surface-water monitoring at Rio Grande at Abeytas

Method	Parameter	Matrix	Unit	12-Sep-02				16-Jan-03			
				Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]	Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]
	Pesticides										
8141A	Anilazine	water	ug/L	ND		10	1.3	ND		10	1.3
8141A	Atrazine	water	ug/L	ND		10	0.52	ND		10	0.52
8141A	Azinphos-methyl	water	ug/L	ND		2.5	0.14	ND		2.5	0.14
8141A	Bolstar	water	ug/L	ND		0.5	0.14	ND		0.5	0.14
8141A	Chlorpyrifos	water	ug/L	ND		0.5	0.054	ND		0.5	0.054
8141A	Coumaphos	water	ug/L	ND		0.5	0.079	ND		0.5	0.079
8141A	Demeton (total)	water	ug/L	ND		1	0.19	ND		1	0.19
8141A	Diazinon	water	ug/L	ND		0.5	0.039	ND		0.5	0.039
8141A	Dichlorvos	water	ug/L	ND		0.5	0.13	ND		0.5	0.13
8141A	Dimethoate	water	ug/L	ND		0.5	0.18	ND		0.5	0.18
8141A	Disulfoton	water	ug/L	ND		0.5	0.057	ND		0.5	0.057
8141A	EPN	water	ug/L	ND		0.5	0.05	ND		0.5	0.05
8141A	Ethoprop	water	ug/L	ND		0.5	0.056	ND		0.5	0.056
8141A	Ethyl parathion	water	ug/L	ND		0.5	0.04	ND		0.5	0.04
8141A	Famphur	water	ug/L	ND		1	0.054	ND		1	0.054
8141A	Fensulfothion	water	ug/L	ND		2.5	0.22	ND		2.5	0.22
8141A	Fenthion	water	ug/L	ND		0.5	0.061	ND		0.5	0.061
8141A	Malathion	water	ug/L	ND		1.2	0.05	ND		1.2	0.05
8141A	Merphos	water	ug/L	ND		5	0.063	ND		5	0.063
8141A	Methyl parathion	water	ug/L	ND		0.5	0.061	ND		0.5	0.061
8141A	Mevinphos	water	ug/L	ND		6.2	0.16	ND		6.2	0.16
8141A	Naled	water	ug/L	ND		10	0.22	ND		10	0.22
8141A	Phorate	water	ug/L	ND		0.5	0.075	ND		0.5	0.075
8141A	Propazine	water	ug/L	ND		10	2.5	ND		10	2.5
8141A	Ronnel	water	ug/L	ND		10	0.11	ND		10	0.11
8141A	Simazine	water	ug/L	ND		10	0.46	ND		10	0.46
8141A	Sulfotepp	water	ug/L	ND		0.5	0.03	ND		0.5	0.03
8141A	Tetrachlorvinphos (Stirophos)	water	ug/L	ND		2.5	0.056	ND		2.5	0.056
8141A	Thionazin	water	ug/L	ND		0.5	0.059	ND		0.5	0.059
8141A	Tokuthion	water	ug/L	ND		0.5	0.071	ND		0.5	0.071
8141A	Trichloronate	water	ug/L	ND		0.5	0.057	ND		0.5	0.057
8141A	O,O,O-Triethyl phosphorothioate	water	ug/L	ND		0.5	0.15	ND		0.5	0.15
8081A	Aldrin	sediment	ug/kg	ND		27	4.3	ND		39	6.2
8081A	alpha-BHC	sediment	ug/kg	ND		27	3.9	ND		39	5.7
8081A	beta-BHC	sediment	ug/kg	ND		27	4.3	ND		39	6.2
8081A	Chlordane (technical)	sediment	ug/kg	ND		270	39	ND		390	57
8081A	delta-BHC	sediment	ug/kg	ND		27	9.8	ND		39	14
8081A	Dieldrin	sediment	ug/kg	ND		27	3.8	ND		39	5.5
8081A	Endosulfan I	sediment	ug/kg	ND		27	5.8	ND		39	8.4
8081A	Endosulfan II	sediment	ug/kg	ND		27	6.6	ND		39	9.6
8081A	Endosulfan sulfate	sediment	ug/kg	ND		27	6.3	ND		39	9.1
8081A	Endrin	sediment	ug/kg	ND		27	6.5	ND		39	9.3
8081A	Endrin aldehyde	sediment	ug/kg	ND		27	13	ND		39	19
8081A	gamma-BHC (Lindane)	sediment	ug/kg	ND		27	3.8	ND		39	5.5
8081A	Heptachlor	sediment	ug/kg	ND		27	4.9	ND		39	7.1
8081A	Heptachlor epoxide	sediment	ug/kg	ND		110	3.5	ND		150	5
8081A	Methoxychlor	sediment	ug/kg	ND		52	12	ND		75	18
8081A	Toxaphene	sediment	ug/kg	ND		2700	160	ND		3900	230
8081A	4,4'-DDD	sediment	ug/kg	ND		27	5.5	ND		39	8
8081A	4,4'-DDE	sediment	ug/kg	ND		27	6.9	ND		39	10
8081A	4,4'-DDT	sediment	ug/kg	ND		27	7.6	ND		39	11

Table 4.8--Analytical results of surface-water monitoring at Rio Grande at Abeytas

Method	Parameter	Matrix	Unit	12-Sep-02				16-Jan-03			
				Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]	Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]
8081A	Aldrin	fish	ug/kg	--	f	--	--	ND		150	55
8081A	alpha-BHC	fish	ug/kg	--	f	--	--	ND		150	15
8081A	alpha-Chlordane	fish	ug/kg	--	f	--	--	ND		150	15
8081A	beta-BHC	fish	ug/kg	--	f	--	--	ND		150	15
8081A	delta-BHC	fish	ug/kg	--	f	--	--	ND		150	15
8081A	Dieldrin	fish	ug/kg	--	f	--	--	ND		150	15
8081A	Endosulfan I	fish	ug/kg	--	f	--	--	ND		150	15
8081A	Endosulfan II	fish	ug/kg	--	f	--	--	ND		150	15
8081A	Endosulfan sulfate	fish	ug/kg	--	f	--	--	ND		150	72
8081A	Endrin	fish	ug/kg	--	f	--	--	ND		150	15
8081A	Endrin aldehyde	fish	ug/kg	--	f	--	--	ND		150	15
8081A	Endrin ketone	fish	ug/kg	--	f	--	--	ND		150	15
8081A	gamma-BHC (Lindane)	fish	ug/kg	--	f	--	--	ND		150	15
8081A	gamma-Chlordane	fish	ug/kg	--	f	--	--	ND		150	45
8081A	Heptachlor	fish	ug/kg	--	f	--	--	ND		150	15
8081A	Heptachlor epoxide	fish	ug/kg	--	f	--	--	ND		550	14
8081A	Methoxychlor	fish	ug/kg	--	f	--	--	ND		280	14
8081A	Toxaphene	fish	ug/kg	--	f	--	--	ND		1500	820
8081A	4,4'-DDD	fish	ug/kg	--	f	--	--	ND		150	15
8081A	4,4'-DDE	fish	ug/kg	--	f	--	--	ND		150	15
8081A	4,4'-DDT	fish	ug/kg	--	f	--	--	ND		150	35
	Explosives										
8330	HMX	water	ug/L	ND		0.25	0.1	ND		0.25	0.03
8330	Nitrobenzene	water	ug/L	ND		0.25	0.1	ND		0.25	0.04
8330	Nitroglycerin	water	ug/L	ND		2.5	0.6	ND		2.5	0.3
8330	PETN	water	ug/L	ND		2.5	0.7	ND		2.5	0.5
8330	RDX	water	ug/L	ND		0.25	0.08	ND		0.25	0.03
8330	Tetryl	water	ug/L	ND		0.5	0.1	ND		0.5	0.03
8330	1,3,5-Trinitrobenzene	water	ug/L	ND		0.25	0.09	ND		0.25	0.03
8330	1,3-Dinitrobenzene	water	ug/L	ND		0.25	0.1	ND		0.25	0.03
8330	2,4,6-Trinitrotoluene	water	ug/L	ND		0.25	0.1	ND		0.25	0.05
8330	2,4-Dinitrotoluene	water	ug/L	ND		0.25	0.1	ND		0.25	0.04
8330	2,6-Dinitrotoluene	water	ug/L	ND		0.25	0.1	ND		0.25	0.03
8330	2-Amino-4,6-dinitrotoluene	water	ug/L	ND		0.25	0.1	ND		0.25	0.04
8330	2-Nitrotoluene	water	ug/L	ND		0.25	0.09	ND		0.25	0.04
8330	3-Nitrotoluene	water	ug/L	ND		0.25	0.09	ND		0.25	0.09
8330	4-Amino-2,6-dinitrotoluene	water	ug/L	ND		0.25	0.1	ND		3.2	0.05
8330	4-Nitrotoluene	water	ug/L	ND		0.25	0.2	ND		0.4	0.05
	Polyaromatic hydrocarbons										
8310	Acenaphthene	sediment	ug/kg	ND		320	6.2	ND		460	8.9
8310	Acenaphthylene	sediment	ug/kg	ND		320	19	ND		460	27
8310	Anthracene	sediment	ug/kg	ND		32	4.1	ND		46	5.9
8310	Benzo(a)anthracene	sediment	ug/kg	ND		32	7.9	ND		46	11
8310	Benzo(a)pyrene	sediment	ug/kg	ND		32	2.8	6.8	J COL	46	4.1
8310	Benzo(b)fluoranthene	sediment	ug/kg	ND		32	6.2	ND		46	8.9
8310	Benzo(ghi)perylene	sediment	ug/kg	ND		63	4.1	ND		91	5.9
8310	Benzo(k)fluoranthene	sediment	ug/kg	ND		32	3.6	ND		46	5.2
8310	Chrysene	sediment	ug/kg	ND		63	3.8	ND		91	5.5
8310	Dibenzo(a,h)anthracene	sediment	ug/kg	ND		63	7.3	15	J COL	91	10
8310	Fluoranthene	sediment	ug/kg	ND		63	13	ND		91	19
8310	Fluorene	sediment	ug/kg	ND		63	14	ND		91	20
8310	Indeno(1,2,3-cd)pyrene	sediment	ug/kg	ND		63	3.6	ND		91	5.2

Table 4.8--Analytical results of surface-water monitoring at Rio Grande at Abeytas

Method	Parameter	Matrix	Unit	12-Sep-02				16-Jan-03			
				Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]	Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]
8310	Naphthalene	sediment	ug/kg	ND		320	19	ND		460	27
8310	Phenanthrene	sediment	ug/kg	ND		63	5.2	ND		91	7.5
8310	Pyrene	sediment	ug/kg	ND		63	11	ND		91	16
8310	1-Methylnaphthalene	sediment	ug/kg	11	J COL	320	11	38	J COL	460	16
8310	2-Methylnaphthalene	sediment	ug/kg	ND		320	5.2	ND		460	7.5
	Total Petroleum Hydrocarbons										
9071B	n-Hexane Ext. Material	sediment	mg/kg	ND		790	250	ND		1100	360
9071B	SGT-HEM (Petroleum Hydrocarbons)	sediment	mg/kg	ND		790	190	ND		1100	270
	Pharmaceuticals										
ITMS	Amitriptyline	water	ng/L	ND		10	--	ND		10	--
ITMS	Beta-Estradiol	water	ng/L	ND		10	--	ND		10	--
ITMS	Caffeine	water	ng/L	ND		10	--	ND		10	--
ITMS	Cholesterol	water	ng/L	ND		11	--	ND		10	--
ITMS	Desipramine	water	ng/L	ND		10	--	ND		10	--
ITMS	Dextro-Norgestrel	water	ng/L	ND		10	--	ND		10	--
ITMS	Doxepin	water	ng/L	ND		10	--	ND		10	--
ITMS	Equilin	water	ng/L	ND		10	--	ND		10	--
ITMS	Estrone	water	ng/L	ND		10	--	ND		10	--
ITMS	Enthynl Estradiol	water	ng/L	ND		10	--	ND		10	--
ITMS	Imipramine	water	ng/L	ND		10	--	ND		10	--
ITMS	Medroxyprogesterone	water	ng/L	ND		10	--	ND		10	--
ITMS	Megestrol Acetate	water	ng/L	ND		10	--	ND		10	--
ITMS	Menstranol	water	ng/L	ND		10	--	ND		10	--
ITMS	Nordoxepin	water	ng/L	ND		10	--	ND		10	--
ITMS	Norethindrone	water	ng/L	ND		10	--	ND		10	--
ITMS	Norethynodrel	water	ng/L	ND		10	--	ND		10	--
ITMS	Nortriptyline	water	ng/L	ND		10	--	ND		10	--
ITMS	Paroxetine	water	ng/L	ND		10	--	ND		10	--
ITMS	Phenytoin	water	ng/L	ND		10	--	ND		10	--
ITMS	Prednisone	water	ng/L	ND		10	--	ND		10	--
ITMS	Progesterone	water	ng/L	ND		10	--	ND		10	--
ITMS	Propoxyphene	water	ng/L	ND		10	--	ND		10	--
ITMS	Protroptyline	water	ng/L	ND		10	--	ND		10	--
ITMS	Prozac	water	ng/L	ND		10	--	ND		10	--
ITMS	Setraline	water	ng/L	ND		10	--	ND		10	--
ITMS	Tamoxifen	water	ng/L	ND		10	--	ND		10	--
ITMS	Trimipramine maleate	water	ng/L	ND		10	--	ND		10	--
ITMS	6 alpha-Methyprednisolone	water	ng/L	ND		10	--	ND		10	--

Table 4.8--Analytical results of surface-water monitoring at Rio Grande at Abeytas

Method	Parameter	Matrix	Unit	12-Sep-02				16-Jan-03			
				Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]	Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]
	Grain size analysis										
D422	Maximum particle size	sediment	--	medium sand		--	--	medium sand		--	--
D422	Particle size, 425 microns, sand	sediment	%	0.4		0.1	--	0.3		0.1	--
D422	Particle size, 250 microns, sand	sediment	%	0.8		0.1	--	0.7		0.1	--
D422	Particle size, 180 microns, sand	sediment	%	0.5		0.1	--	1.2		0.1	--
D422	Particle size, 150 microns, sand	sediment	%	0.1		0.1	--	0.8		0.1	--
D422	Particle size, 75 microns, sand	sediment	%	0.6		0.1	--	6.1		0.1	--
D422	Particle size, 30.2 microns, silt	sediment	%	--		--	--	20.4		0.1	--
D422	Particle size, 28.1 microns, silt	sediment	%	0.1		0.1	--	--		--	--
D422	Particle size, 19.6 microns, silt	sediment	%	--		--	--	6.2		0.1	--
D422	Particle size, 18.0 microns, silt	sediment	%	3.7		0.1	--	--		--	--
D422	Particle size, 11.8 microns, silt	sediment	%	--		--	--	9.3		0.1	--
D422	Particle size, 10.7 microns, silt	sediment	%	5.5		0.1	--	--		--	--
D422	Particle size, 8.5 microns, silt	sediment	%	--		--	--	6.2		0.1	--
D422	Particle size, 7.7 microns, silt	sediment	%	9.2		0.1	--	--		--	--
D422	Particle size, 6.2 microns, silt	sediment	%	--		--	--	4.7		0.1	--
D422	Particle size, 5.8 microns, clay	sediment	%	7.4		0.1	--	--		--	--
D422	Particle size, 3.1 microns, clay	sediment	%	--		--	--	10.9		0.1	--
D422	Particle size, 3.0 microns, clay	sediment	%	14.5		0.1	--	--		--	--
D422	Particle size, 1.3 microns, clay	sediment	%	15.1		0.1	--	10.9		0.1	--
D422	Particle size, less than 1.3 microns, clay	sediment	%	42.1		0.1	--	22.2		0.1	--

[1] See table 5 for description of qualifier codes.

[2] Reporting limit -- the lowest level at which measurements become quantitatively meaningful, ie., the quantitation limit, which is approximately three times the method detection limit. Reporting limits cannot be less than the statistically determined method detection limit.

[3] Method detection limit -- the minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero and is determined from replicate analyses of low level standards in a typical representative matrix.

Table 4.9--Analytical results of surface-water monitoring at Lower San Juan Drain

[Field parameters measured by field staff. Laboratory analyses performed by Severn Trent Laboratory and the New Mexico Scientific Laboratory (pharmaceuticals). --, no data; °C, degrees Celsius; mm of Hg, millimeters of mercury; ft^3/sec, cubic feet per second; mg/L, milligram per liter; %, percent; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units; ug/L, micrograms per liter; g/kg, grams per kilogram; mg/kg, milligram per kilogram; ug/kg, micrograms per kilogram; ITMS, Ion trap mass spectrometer; ng/L, nanograms per liter; n/a, not applicable.]

Method	Parameter	Matrix	Unit	5-Aug-02				27-Jan-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
--	Station identification number	--	--	342217106502610		--	--	342216106502810		--	--
--	Latitude/Longitude	--	--	342217/1065026		--	--	342216/1065028		--	--
--	Time	--	--	1030		--	--	1130		--	--
	Field parameters										
170.1	Air temperature	air	°C	32.1		0.1	0.01	10.1		0.1	0.01
170.1	Water temperature	water	°C	25.3		0.1	0.01	9.9		0.1	0.01
--	Barometric pressure	air	mm of Hg	644		--	--	649		--	--
--	Discharge, instantaneous	water	ft^3/s	52		--	--	35		--	--
150.1	pH - unfiltered	water	--	7.9		0.1	0.01	7.8		0.1	0.01
--	Dissolved oxygen	water	mg/L	3.3		0.1	0.01	8.8		0.1	0.01
--	Dissolved oxygen, saturation	water	%	39.6		1	0.01	76.3		1	0.01
120.1	Specific conductance - unfiltered	water	uS/cm	690		1	1	424		1	1
180.1	Turbidity	water	NTU	168		1	0.1	12.3		1	0.1
310.1	Alkalinity, as $CaCO_3$	water	mg/L	174		1	0.1	182		1	0.1
310.1	Bicarbonate, as HCO_3	water	mg/L	207		1	0.1	218		1	0.1
310.1	Carbonate, as CO_3	water	mg/L	2.5		0.1	0.1	1.5		0.1	0.1
	General chemistry										
130.2	Hardness, as $CaCO_3$	water	mg/L	300	J	5	2	270	J	5	2
160.1	Total dissolved solids	water	mg/L	460	J	10	5	460		10	5
160.2	Total suspended solids	water	mg/L	200	Q	10	4.5	70		4	1.8
314	Perchlorate	water	ug/L	ND		20	1.5	ND		20	0.2
405.1	Biochemical oxygen demand (BOD)	water	mg/L	ND		2	0.23	ND		2	0.23
410.4	Chemical oxygen demand (COD)	water	mg/L	15	B J	20	3.5	3.5	B	20	3.5
9060	Total organic carbon	sediment	g/kg	0.68	B	2	0.59	15		2	0.59
D2216	Moisture	sediment	%	22		0.1	--	47		0.1	--
D2216	Moisture	fish	%	--	f	--	--	--	f	--	--
Total Residue	Lipids (Red Shiner)	fish	%	1	B	0.1	--	0.78		0.1	--
	Common anions										
300.0A	Bromide	water	mg/L	0.24		0.2	0.03	0.29		0.2	0.03
300.0A	Chloride	water	mg/L	32	J	3	0.1	36		3	0.1
300.0A	Fluoride	water	mg/L	0.57	B	1	0.03	0.62	B	1	0.03
300.0A	Nitrate	water	mg/L	0.37	B	0.5	0.03	0.3	B	0.5	0.03
300.0A	Nitrite	water	mg/L	0.2	B	0.5	0.04	ND		0.5	0.04
300.0A	Phosphate as P, Ortho	water	mg/L	ND		0.5	0.04	ND		0.5	0.04
300.0A	Sulfate	water	mg/L	130	Q	25	1	120	Q	25	1
9012A	Cyanide, Total	water	mg/L	0.0048	B	0.01	0.002	0.0044	B	0.01	0.0039
9012A	Cyanide, Total	sediment	mg/kg	0.24	B	0.64	0.11	0.38	B J	0.94	0.19
9056	Bromide	sediment	mg/kg	ND		2.6	0.39	ND		3.8	0.56
9056	Chloride	sediment	mg/kg	18	B	39	1.3	54	B J	56	1.9
9056	Fluoride	sediment	mg/kg	2.4	B	13	0.39	3.7	B J	19	0.56
9056	Nitrate	sediment	mg/kg	ND		6.4	0.39	3.8	B J	9.4	0.56
9056	Nitrite	sediment	mg/kg	1.9	B	6.4	0.52	ND		9.4	0.75
9056	Phosphate as P, Ortho	sediment	mg/kg	3.8	B	6.4	0.52	3.5	B	9.4	0.75
9056	Sulfate	sediment	mg/kg	44	B	64	2.6	95	J	94	3.8

Table 4.9--Analytical results of surface-water monitoring at Lower San Juan Drain

Method	Parameter	Matrix	Unit	5-Aug-02				27-Jan-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
	Nutrients										
350.1	Ammonia as N	water	mg/L	0.055	B	0.1	0.015	0.043	B	0.1	0.038
351.2	Total Kjeldahl Nitrogen	water	mg/L	0.2	B	0.5	0.14	0.22	B	0.5	0.083
353.2	Nitrate-Nitrite	water	mg/L	0.27		0.1	0.012	0.12		0.1	0.012
354.1	Nitrite	water	mg/L	0.049	J	0.01	0.002	0.0092	B	0.01	0.0018
365.3	Total phosphorus	water	mg/L	0.82	Q	0.25	0.065	0.56		0.05	0.013
350.1	Ammonia as N	sediment	mg/kg	ND		1.3	0.19	4.5		1.9	0.71
351.2	Total Kjeldahl Nitrogen	sediment	mg/kg	79		64	26	940	Q	230	53
353.2	Nitrate-Nitrite	sediment	mg/kg	0.18	B J	1.3	0.15	0.4	B J	1.9	0.23
354.1	Nitrite	sediment	mg/kg	ND		0.13	0.052	0.057	B	0.19	0.034
365.3	Total phosphorus	sediment	mg/kg	210	Q	64	15	950	Q	190	45
	Trace elements										
6020	Antimony	water	ug/L	0.21	B	2	0.04	0.77	B J	2	0.04
6020	Arsenic	water	ug/L	4.9	B	5	0.061	7.1	J	5	0.061
6020	Barium	water	ug/L	130		1	0.057	120		1	0.057
6020	Beryllium	water	ug/L	ND		1	0.028	--		--	--
6020	Cadmium	water	ug/L	0.024	B	1	0.022	0.047	B	1	0.022
6020	Chromium	water	ug/L	0.39	B	2	0.24	1.3	B J	2	0.24
6020	Cobalt	water	ug/L	0.74	B	1	0.015	0.73	B J	1	0.015
6020	Copper	water	ug/L	1.5	B	2	0.63	2.4		2	0.63
6020	Lead	water	ug/L	ND		1	0.15	0.95	B	1	0.15
6020	Manganese	water	ug/L	19		1	0.061	390	J	1	0.061
6020	Molybdenum	water	ug/L	8.2		2	0.023	5.7	J	2	0.023
6020	Nickel	water	ug/L	1.7	B	2	0.25	0.85	B	2	0.25
6020	Selenium	water	ug/L	0.62	B	5	0.19	0.46	B	5	0.19
6020	Silver	water	ug/L	0.015	B	5	0.012	0.025	B	5	0.012
6020	Thallium	water	ug/L	ND		1	0.015	0.025	B	1	0.015
6020	Tin	water	ug/L	ND		10	0.054	0.55	B J	10	0.054
6020	Uranium	water	ug/L	3.2	J	1	0.0015	2.8	J	1	0.0015
6020	Vanadium	water	ug/L	7.2		5	0.07	3.8	B J	5	0.07
6020	Zinc	water	ug/L	5.1	B	10	2.3	6.4	B	10	2.3
7470A	Mercury	water	ug/L	ND		0.2	0.028	ND		0.2	0.015
6010B	Aluminum	water	ug/L	21	B	100	20	ND		100	20
6010B	Beryllium	water	ug/L	--		--	--	0.3	B J	5	0.22
6010B	Boron	water	ug/L	130		100	5.2	130		100	5.2
6010B	Calcium	water	ug/L	77000		200	31	63000		200	31
6010B	Iron	water	ug/L	ND		100	13	15	B	100	13
6010B	Lithium	water	ug/L	54		10	2.1	76		10	2.1
6010B	Magnesium	water	ug/L	12000		200	24	12000		200	24
6010B	Potassium	water	ug/L	7000		3000	490	4900		3000	490
6010B	Silica	water	ug/L	28000	J	1100	23	30000		1100	23
6010B	Sodium	water	ug/L	60000		5000	1500	62000		5000	1500
6010B	Strontium	water	ug/L	690		10	0.35	600		10	0.35
6010B	Titanium	water	ug/L	ND		10	0.97	1.4	B	10	0.97
6020	Antimony	sediment	mg/kg	0.088	B	0.26	0.0037	0.062	B J	0.38	0.0054
6020	Arsenic	sediment	mg/kg	1.6		0.64	0.022	6		0.94	0.032
6020	Barium	sediment	mg/kg	71	J	0.13	0.031	240	J	0.19	0.045
6020	Beryllium	sediment	mg/kg	0.24		0.13	0.0057	--		--	--
6020	Cadmium	sediment	mg/kg	0.12	B	0.13	0.0018	0.17	B	0.19	0.0026
6020	Chromium	sediment	mg/kg	7.5	J	0.26	0.023	14	J	0.38	0.034
6020	Cobalt	sediment	mg/kg	2.5		0.13	0.0015	5.6	J	0.19	0.0023
6020	Copper	sediment	mg/kg	3	J	0.26	0.019	11	J	0.38	0.028

Table 4.9--Analytical results of surface-water monitoring at Lower San Juan Drain

Method	Parameter	Matrix	Unit	5-Aug-02				27-Jan-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
6020	Lead	sediment	mg/kg	3.7	J	0.13	0.0054	8.3		0.19	0.0079
6020	Manganese	sediment	mg/kg	250	J	0.13	0.03	2100		1.9	0.43
6020	Molybdenum	sediment	mg/kg	0.39	J	0.26	0.0028	0.41		0.38	0.0041
6020	Nickel	sediment	mg/kg	5.3		0.13	0.017	11	J	0.19	0.024
6020	Selenium	sediment	mg/kg	0.31	B	0.64	0.063	0.59	B	0.94	0.092
6020	Silver	sediment	mg/kg	0.045	B J	0.13	0.003	0.12	B	0.19	0.0043
6020	Thallium	sediment	mg/kg	0.076	B	0.13	0.0013	0.16	B	0.19	0.0019
6020	Tin	sediment	mg/kg	0.41	B	1.3	0.1	0.2	B	1.9	0.15
6020	Uranium	sediment	mg/kg	0.9		0.13	0.0023	0.94		0.19	0.0034
6020	Vanadium	sediment	mg/kg	18	J	0.64	0.0072	27	J	0.94	0.011
6020	Zinc	sediment	mg/kg	14		1.3	0.45	43		1.9	0.66
7471A	Mercury	sediment	mg/kg	ND		0.043	0.0032	ND		0.062	0.0047
6010B	Aluminum	sediment	mg/kg	3700		13	2.7	14000		19	3.9
6010B	Beryllium	sediment	mg/kg	--		--	--	0.65	B	0.94	0.064
6010B	Boron	sediment	mg/kg	2.2	B J	13	0.48	8.3	B	19	0.69
6010B	Calcium	sediment	mg/kg	52000		26	10	29000		38	15
6010B	Iron	sediment	mg/kg	7600		13	2.1	14000	J	19	3
6010B	Lithium	sediment	mg/kg	4.8	B	6.4	0.14	17		9.4	0.21
6010B	Magnesium	sediment	mg/kg	2200	J	26	1.9	5600		38	2.8
6010B	Potassium	sediment	mg/kg	800		390	45	3200		560	66
6010B	Sodium	sediment	mg/kg	ND		640	77	190	B	940	110
6010B	Strontium	sediment	mg/kg	93		1.3	0.019	130		1.9	0.094
6010B	Titanium	sediment	mg/kg	230		1.3	0.15	310		1.9	0.23
6020	Antimony	fish	mg/kg	0.075	B	0.2	0.02	--	f	--	--
6020	Arsenic	fish	mg/kg	0.13	B	0.5	0.0076	--	f	--	--
6020	Beryllium	fish	mg/kg	0.0039	B	0.1	0.0023	--	f	--	--
6020	Cadmium	fish	mg/kg	0.017	B	0.1	0.0027	--	f	--	--
6020	Chromium	fish	mg/kg	0.31	J	0.2	0.034	--	f	--	--
6020	Copper	fish	mg/kg	0.89		0.2	0.061	--	f	--	--
6020	Lead	fish	mg/kg	0.059	B	0.1	0.02	--	f	--	--
6020	Nickel	fish	mg/kg	0.2	J	0.1	0.011	--	f	--	--
6020	Selenium	fish	mg/kg	0.39	B	0.5	0.018	--	f	--	--
6020	Silver	fish	mg/kg	0.019	B J	0.1	0.002	--	f	--	--
6020	Thallium	fish	mg/kg	0.0094	B	0.1	0.002	--	f	--	--
6020	Uranium	fish	mg/kg	0.018	B	0.1	0.002	--	f	--	--
6020	Zinc	fish	mg/kg	35	J	1	0.13	--	f	--	--
245.6	Mercury	fish	ug/kg	32	B	100	5.9	42	B	100	5.9
6010B	Aluminum	fish	mg/kg	25		10	3.1	12	B	28	8.6
6010B	Barium	fish	mg/kg	4.1		1	0.12	3.6	J	2.8	0.33
6010B	Beryllium	fish	mg/kg	--		--	--	ND		1.4	0.39
6010B	Boron	fish	mg/kg	ND		10	0.51	1.7	B J	28	1.4
6010B	Calcium	fish	mg/kg	7800	J	20	3.2	6800	J	56	9
6010B	Cobalt	fish	mg/kg	ND		1	0.15	ND		2.8	0.42
6010B	Iron	fish	mg/kg	29		10	2	27	B	28	5.6
6010B	Lithium	fish	mg/kg	ND		5	0.22	ND		14	0.61
6010B	Magnesium	fish	mg/kg	280		20	1.5	350		56	4.3
6010B	Manganese	fish	mg/kg	7		1	0.14	5.3		2.8	0.39
6010B	Molybdenum	fish	mg/kg	ND		2	0.24	ND		5.6	0.67
6010B	Potassium	fish	mg/kg	2000		300	31	3400		830	85
6010B	Sodium	fish	mg/kg	480	B	500	120	710	B	1400	330
6010B	Strontium	fish	mg/kg	24		1	0.15	19		2.8	0.42
6010B	Tin	fish	mg/kg	1.4	B J	10	0.42	2.8	B J	28	1.2

Table 4.9--Analytical results of surface-water monitoring at Lower San Juan Drain

Method	Parameter	Matrix	Unit	5-Aug-02				27-Jan-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
6010B	Titanium	fish	mg/kg	0.62	B	1	0.2	0.57	B	2.8	0.56
6010B	Vanadium	fish	mg/kg	ND		1	0.35	ND		2.8	0.97
	Volatile organic compounds										
8260B	Acetone	water	ug/L	7.5	J	10	2.9	ND		10	2.9
8260B	Benzene	water	ug/L	ND		1	0.27	ND		1	0.27
8260B	Bromodichloromethane	water	ug/L	ND		1	0.35	ND		1	0.35
8260B	Bromoform	water	ug/L	ND		1	0.46	ND		1	0.46
8260B	Bromomethane	water	ug/L	ND		2	0.28	ND		2	0.28
8260B	Carbon disulfide	water	ug/L	ND		1	0.67	ND		1	0.67
8260B	Carbon tetrachloride	water	ug/L	ND		1	0.35	ND		1	0.35
8260B	Chlorobenzene	water	ug/L	ND		1	0.24	ND		1	0.24
8260B	Chloroethane	water	ug/L	ND		2	0.26	ND		2	0.26
8260B	Chloroform	water	ug/L	ND		1	0.29	ND		1	0.29
8260B	Chloromethane	water	ug/L	ND		2	0.26	ND		2	0.26
8260B	cis-1,2-Dichloroethene	water	ug/L	ND		1	0.33	ND		1	0.33
8260B	cis-1,3-Dichloropropene	water	ug/L	ND		1	0.31	ND		1	0.31
8260B	Dibromochloromethane	water	ug/L	ND		1	0.37	ND		1	0.37
8260B	Ethylbenzene	water	ug/L	ND		1	0.51	ND		1	0.51
8260B	Methylene chloride	water	ug/L	ND		5	0.86	ND		5	0.86
8260B	m-Xylene & p-Xylene	water	ug/L	ND		2	0.52	ND		2	0.52
8260B	o-Xylene	water	ug/L	ND		1	0.24	ND		1	0.24
8260B	Styrene	water	ug/L	ND		1	0.28	ND		1	0.28
8260B	Tetrachloroethene	water	ug/L	ND		1	0.27	ND		1	0.27
8260B	Toluene	water	ug/L	ND		1	0.26	ND		1	0.26
8260B	trans-1,2-Dichloroethene	water	ug/L	ND		0.5	0.25	ND		0.5	0.25
8260B	trans-1,3-Dichloropropene	water	ug/L	ND		1	0.36	ND		1	0.36
8260B	Trichloroethene	water	ug/L	ND		1	0.24	ND		1	0.24
8260B	Vinyl chloride	water	ug/L	ND		1	0.26	ND		1	0.26
8260B	Xylenes (total)	water	ug/L	ND		2	0.73	ND		2	0.73
8260B	1,1,1-Trichloroethane	water	ug/L	ND		1	0.32	ND		1	0.32
8260B	1,1,2,2-Tetrachloroethane	water	ug/L	ND		1	0.5	ND		1	0.5
8260B	1,1,2-Trichloroethane	water	ug/L	ND		1	0.41	ND		1	0.41
8260B	1,1-Dichloroethane	water	ug/L	ND		1	0.29	ND		1	0.29
8260B	1,1-Dichloroethene	water	ug/L	ND		1	0.31	ND		1	0.31
8260B	1,2-Dichloroethane	water	ug/L	ND		1	0.43	ND		1	0.43
8260B	1,2-Dichloroethene (total)	water	ug/L	ND		1	0.54	ND		1	0.54
8260B	1,2-Dichloropropane	water	ug/L	ND		1	0.38	ND		1	0.38
8260B	2-Butanone (MEK)	water	ug/L	3.5	J	5	2.4	ND		5	2.4
8260B	2-Hexanone	water	ug/L	ND		5	1.8	ND		5	1.8
8260B	4-Methyl-2-pentanone	water	ug/L	ND		5	1.8	ND		5	1.8
8260B	Acetic acid, 2-ethylhexyl este	sediment	ug/kg	8.9	T2	--	1.3	--		--	--
8260B	Acetone	sediment	ug/kg	ND		26	1.4	22	J	38	6.4
8260B	Benzene	sediment	ug/kg	ND		6.4	1.9	ND		9.4	0.23
8260B	Bromodichloromethane	sediment	ug/kg	ND		6.4	1.3	ND		9.4	0.38
8260B	Bromoform	sediment	ug/kg	ND		6.4	1.4	ND		9.4	0.49
8260B	Bromomethane	sediment	ug/kg	ND		13	1.3	ND		19	1.1
8260B	Carbon disulfide	sediment	ug/kg	ND		6.4		1.4	J	9.4	0.45
8260B	Carbon tetrachloride	sediment	ug/kg	ND		6.4	1.9	ND		9.4	0.47
8260B	Chlorobenzene	sediment	ug/kg	ND		6.4	1.5	ND		9.4	0.34
8260B	Chloroethane	sediment	ug/kg	ND		13	6.1	ND		19	0.43
8260B	Chloroform	sediment	ug/kg	ND		13	5.9	ND		19	0.47
8260B	Chloromethane	sediment	ug/kg	ND		13		ND		19	0.68

Table 4.9--Analytical results of surface-water monitoring at Lower San Juan Drain

Method	Parameter	Matrix	Unit	5-Aug-02				27-Jan-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
8260B	cis-1,2-Dichloroethene	sediment	ug/kg	ND		3.2	5	ND		4.7	0.39
8260B	cis-1,3-Dichloropropene	sediment	ug/kg	ND		6.4		ND		9.4	0.68
8260B	Dibromochloromethane	sediment	ug/kg	ND		6.4	5.9	ND		9.4	0.38
8260B	Ethylbenzene	sediment	ug/kg	ND		6.4	1.2	ND		9.4	0.51
8260B	Methanethiol	sediment	ug/kg	--		--	--	17	T2	--	--
8260B	Methylene chloride	sediment	ug/kg	ND		6.4	1.2	2.9	J B	9.4	0.77
8260B	m-Xylene & p-Xylene	sediment	ug/kg	ND		3.2	1.5	ND		4.7	0.79
8260B	o-Xylene	sediment	ug/kg	ND		3.2	1.2	ND		4.7	0.43
8260B	Styrene	sediment	ug/kg	ND		6.4	1.5	ND		9.4	0.39
8260B	Tetrachloroethene	sediment	ug/kg	ND		6.4	0.97	ND		9.4	0.47
8260B	Toluene	sediment	ug/kg	ND		6.4	1.7	ND		9.4	0.41
8260B	trans-1,2-Dichloroethene	sediment	ug/kg	ND		3.2	1.9	ND		4.7	0.66
8260B	trans-1,3-Dichloropropene	sediment	ug/kg	ND		6.4	1.1	ND		9.4	0.79
8260B	Trichloroethene	sediment	ug/kg	ND		6.4	1.2	ND		9.4	0.54
8260B	Unknown	sediment	ug/kg	10		--	1.2	--		--	--
8260B	Unknown	sediment	ug/kg	28		--		--		--	--
8260B	Vinyl chloride	sediment	ug/kg	ND		6.4	1.5	ND		9.4	0.43
8260B	Xylenes (total)	sediment	ug/kg	ND		6.4	1	ND		9.4	1.1
8260B	1,1,1-Trichloroethane	sediment	ug/kg	ND		6.4	2.3	ND		9.4	0.49
8260B	1,1,2,2-Tetrachloroethane	sediment	ug/kg	ND		6.4	1.3	ND		9.4	1.1
8260B	1,1,2-Trichloroethane	sediment	ug/kg	ND		6.4	0.85	ND		9.4	0.6
8260B	1,1-Dichloroethane	sediment	ug/kg	ND		6.4	1.3	ND		9.4	0.39
8260B	1,1-Dichloroethene	sediment	ug/kg	ND		6.4	1	ND		9.4	0.58
8260B	1,2-Dichloroethane	sediment	ug/kg	ND		6.4		ND		9.4	0.41
8260B	1,2-Dichloroethene (total)	sediment	ug/kg	ND		6.4	1.3	ND		9.4	0.56
8260B	1,2-Dichloropropane	sediment	ug/kg	ND		6.4	1.1	ND		9.4	0.41
8260B	2-Butanone (MEK)	sediment	ug/kg	ND		26		ND		38	5.1
8260B	2-Hexanone	sediment	ug/kg	ND		26		ND		38	4.3
8260B	4-Methyl-2-pentanone	sediment	ug/kg	ND		26	3.6	ND		38	3.8
	Herbicides										
8151A	Dalapon	water	ug/L	ND		2	0.42	ND		2	0.33
8151A	Dicamba	water	ug/L	ND		2	0.081	ND		2	0.086
8151A	Dichlorprop	water	ug/L	ND		4	0.13	ND		4	0.11
8151A	Dinoseb	water	ug/L	ND		0.6	0.09	ND		0.6	0.065
8151A	MCPA	water	ug/L	ND		400	13	ND		400	12
8151A	MCPP	water	ug/L	ND		400	42	ND		400	15
8151A	2,4,5-T	water	ug/L	ND		1	0.043	ND		1	0.043
8151A	2,4,5-TP (Silvex)	water	ug/L	ND		1	0.034	ND		1	0.036
8151A	2,4-D	water	ug/L	ND		4	0.16	ND		4	0.24
8151A	2,4-DB	water	ug/L	ND		4	0.21	ND		4	0.098

Table 4.9--Analytical results of surface-water monitoring at Lower San Juan Drain

Method	Parameter	Matrix	Unit	5-Aug-02				27-Jan-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
	Pesticides										
8141A	Anilazine	water	ug/L	ND		10	1.3	ND		10	1.3
8141A	Atrazine	water	ug/L	ND		10	0.52	ND		10	0.52
8141A	Azinphos-methyl	water	ug/L	ND		2.5	0.14	ND		2.5	0.14
8141A	Bolstar	water	ug/L	ND		0.5	0.14	ND		0.5	0.14
8141A	Chlorpyrifos	water	ug/L	ND		0.5	0.054	ND		0.5	0.054
8141A	Coumaphos	water	ug/L	ND		0.5	0.079	ND		0.5	0.079
8141A	Demeton (total)	water	ug/L	ND		1	0.19	ND		1	0.19
8141A	Diazinon	water	ug/L	ND		0.5	0.039	ND		0.5	0.039
8141A	Dichlorvos	water	ug/L	ND		0.5	0.13	ND		0.5	0.13
8141A	Dimethoate	water	ug/L	ND		0.5	0.18	ND		0.5	0.18
8141A	Disulfoton	water	ug/L	ND		0.5	0.057	ND		0.5	0.057
8141A	EPN	water	ug/L	ND		0.5	0.05	ND		0.5	0.05
8141A	Ethoprop	water	ug/L	ND		0.5	0.056	ND		0.5	0.056
8141A	Ethyl parathion	water	ug/L	ND		0.5	0.04	ND		0.5	0.04
8141A	Famphur	water	ug/L	ND		1	0.054	ND		1	0.054
8141A	Fensulfothion	water	ug/L	ND		2.5	0.22	ND		2.5	0.22
8141A	Fenthion	water	ug/L	ND		0.5	0.061	ND		0.5	0.061
8141A	Malathion	water	ug/L	ND		1.2	0.05	ND		1.2	0.05
8141A	Merphos	water	ug/L	ND		5	0.063	ND		5	0.063
8141A	Methyl parathion	water	ug/L	ND		0.5	0.061	ND		0.5	0.061
8141A	Mevinphos	water	ug/L	ND		6.2	0.16	ND		6.2	0.16
8141A	Naled	water	ug/L	ND		10	0.22	ND		10	0.22
8141A	Phorate	water	ug/L	ND		0.5	0.075	ND		0.5	0.075
8141A	Propazine	water	ug/L	ND		10	2.5	ND		10	2.5
8141A	Ronnel	water	ug/L	ND		10	0.11	ND		10	0.11
8141A	Simazine	water	ug/L	ND		10	0.46	ND		10	0.46
8141A	Sulfotepp	water	ug/L	ND		0.5	0.03	ND		0.5	0.03
8141A	Tetrachlorvinphos (Stirophos)	water	ug/L	ND		2.5	0.056	ND		2.5	0.056
8141A	Thionazin	water	ug/L	ND		0.5	0.059	ND		0.5	0.059
8141A	Tokuthion	water	ug/L	ND		0.5	0.071	ND		0.5	0.071
8141A	Trichloronate	water	ug/L	ND		0.5	0.057	ND		0.5	0.057
8141A	O,O,O-Triethyl phosphorothioate	water	ug/L	ND		0.5	0.15	ND		0.5	0.15
8081A	Aldrin	sediment	ug/kg	ND		2.2	0.5	ND		80	13
8081A	alpha-BHC	sediment	ug/kg	ND		2.2	0.48	ND		80	12
8081A	beta-BHC	sediment	ug/kg	ND		2.2	0.44	ND		80	13
8081A	Chlordane (technical)	sediment	ug/kg	ND		22	3.2	ND		800	120
8081A	delta-BHC	sediment	ug/kg	ND		2.2	0.14	ND		80	29
8081A	Dieldrin	sediment	ug/kg	ND		2.2	0.7	ND		80	11
8081A	Endosulfan I	sediment	ug/kg	ND		2.2	0.49	ND		80	17
8081A	Endosulfan II	sediment	ug/kg	ND		2.2	0.85	ND		80	20
8081A	Endosulfan sulfate	sediment	ug/kg	ND		2.2	0.37	ND		80	19
8081A	Endrin	sediment	ug/kg	ND		2.2	0.49	ND		80	19
8081A	Endrin aldehyde	sediment	ug/kg	ND		2.2	2	ND		80	40
8081A	gamma-BHC (Lindane)	sediment	ug/kg	ND		2.2	0.9	ND		80	11
8081A	Heptachlor	sediment	ug/kg	ND		2.2	0.61	ND		80	15
8081A	Heptachlor epoxide	sediment	ug/kg	ND		8.6	0.46	ND		310	10
8081A	Methoxychlor	sediment	ug/kg	ND		4.3	0.22	ND		150	37
8081A	Toxaphene	sediment	ug/kg	ND		220	13	ND		8000	470
8081A	4,4'-DDD	sediment	ug/kg	ND		2.2	0.37	ND		80	16
8081A	4,4'-DDE	sediment	ug/kg	ND		2.2	0.41	ND		80	21
8081A	4,4'-DDT	sediment	ug/kg	ND		2.2	0.43	ND		80	23

Table 4.9--Analytical results of surface-water monitoring at Lower San Juan Drain

Method	Parameter	Matrix	Unit	5-Aug-02				27-Jan-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
8081A	Aldrin	fish	ug/kg	ND		6	2.2	ND		10	3.8
8081A	alpha-BHC	fish	ug/kg	ND		6	0.6	ND		10	1
8081A	alpha-Chlordane	fish	ug/kg	ND		6	0.6	ND		10	1
8081A	beta-BHC	fish	ug/kg	ND		6	0.6	ND		10	1
8081A	delta-BHC	fish	ug/kg	ND		6	0.6	ND		10	1
8081A	Dieldrin	fish	ug/kg	ND		6	0.6	ND		10	1
8081A	Endosulfan I	fish	ug/kg	ND		6	0.6	ND		10	1
8081A	Endosulfan II	fish	ug/kg	ND		6	0.6	ND		10	1
8081A	Endosulfan sulfate	fish	ug/kg	ND		6	2.9	ND		10	5
8081A	Endrin	fish	ug/kg	ND		6	0.6	ND		10	1
8081A	Endrin aldehyde	fish	ug/kg	ND		6	0.6	ND		10	1
8081A	Endrin ketone	fish	ug/kg	ND		6	0.6	ND		10	1
8081A	gamma-BHC (Lindane)	fish	ug/kg	ND		6	0.6	ND		10	1
8081A	gamma-Chlordane	fish	ug/kg	ND		6	1.8	ND		10	3.1
8081A	Heptachlor	fish	ug/kg	ND		6	0.6	ND		10	1
8081A	Heptachlor epoxide	fish	ug/kg	ND		22	0.56	ND		38	0.96
8081A	Methoxychlor	fish	ug/kg	ND		11	0.56	ND		19	0.96
8081A	Toxaphene	fish	ug/kg	ND		60	33	ND		100	57
8081A	4,4'-DDD	fish	ug/kg	ND		6	0.6	ND		10	1
8081A	4,4'-DDE	fish	ug/kg	0.8	J COL	6	0.6	ND		10	1
8081A	4,4'-DDT	fish	ug/kg	ND		6	1.4	ND		10	2.4
	Explosives										
8330	HMX	water	ug/L	ND		0.25	0.19	ND		0.25	0.03
8330	Nitrobenzene	water	ug/L	ND		0.25	0.08	ND		0.25	0.04
8330	Nitroglycerin	water	ug/L	ND		2.5	0.9	ND		2.5	0.3
8330	PETN	water	ug/L	ND		2.5	1.3	ND		2.5	0.5
8330	RDX	water	ug/L	ND		0.25	0.17	ND		0.25	0.03
8330	Tetryl	water	ug/L	ND		0.5	0.15	ND		0.5	0.03
8330	1,3,5-Trinitrobenzene	water	ug/L	ND		0.25	0.092	ND		0.25	0.03
8330	1,3-Dinitrobenzene	water	ug/L	ND		0.25	0.11	ND		0.25	0.03
8330	2,4,6-Trinitrotoluene	water	ug/L	ND		0.25	0.089	ND		0.25	0.05
8330	2,4-Dinitrotoluene	water	ug/L	ND		0.25	0.1	ND		0.25	0.04
8330	2,6-Dinitrotoluene	water	ug/L	ND		0.25	0.15	ND		0.25	0.03
8330	2-Amino-4,6-dinitrotoluene	water	ug/L	ND		0.25	0.12	ND		0.25	0.04
8330	2-Nitrotoluene	water	ug/L	ND		0.25	0.16	ND		0.25	0.04
8330	3-Nitrotoluene	water	ug/L	ND		0.25	0.18	ND		0.25	0.09
8330	4-Amino-2,6-dinitrotoluene	water	ug/L	ND		0.25	0.1	ND		3.2	0.05
8330	4-Nitrotoluene	water	ug/L	ND		0.25	0.23	ND		0.4	0.05
	Polyaromatic hydrocarbons										
8310	Acenaphthene	sediment	ug/kg	ND		260	5	40	J COL	380	7.3
8310	Acenaphthylene	sediment	ug/kg	ND		260	15	ND		380	23
8310	Anthracene	sediment	ug/kg	ND		26	3.4	ND		38	4.9
8310	Benzo(a)anthracene	sediment	ug/kg	ND		26	6.4	ND		38	9.4
8310	Benzo(a)pyrene	sediment	ug/kg	ND		26	2.3	ND		38	3.4
8310	Benzo(b)fluoranthene	sediment	ug/kg	ND		26	5	ND		38	7.3
8310	Benzo(ghi)perylene	sediment	ug/kg	ND		52	3.4	ND		75	4.9
8310	Benzo(k)fluoranthene	sediment	ug/kg	ND		26	3	ND		38	4.3
8310	Chrysene	sediment	ug/kg	ND		52	3.1	11	J COL	75	4.5
8310	Dibenzo(a,h)anthracene	sediment	ug/kg	ND		52	5.9	ND		75	8.6
8310	Fluoranthene	sediment	ug/kg	ND		52	11	ND		75	16

Table 4.9--Analytical results of surface-water monitoring at Lower San Juan Drain

Method	Parameter	Matrix	Unit	5-Aug-02				27-Jan-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
8310	Fluorene	sediment	ug/kg	ND		52	11	ND		75	16
8310	Indeno(1,2,3-cd)pyrene	sediment	ug/kg	ND		52	3	ND		75	4.3
8310	Naphthalene	sediment	ug/kg	ND		260	15	ND		380	23
8310	Phenanthrene	sediment	ug/kg	ND		52	4.3	ND		75	6.2
8310	Pyrene	sediment	ug/kg	ND		52	8.9	ND		75	13
8310	1-Methylnaphthalene	sediment	ug/kg	ND		260	9	ND		380	13
8310	2-Methylnaphthalene	sediment	ug/kg	ND		260	4.3	ND		380	6.2
	Total Petroleum Hydrocarbons										
9071B	n-Hexane Ext. Material	sediment	mg/kg	ND		640	210	710	B	940	300
9071B	SGT-HEM (Petroleum Hydrocarbons)	sediment	mg/kg	ND		640	150	ND		940	230
	Pharmaceuticals										
ITMS	Amitriptyline	water	ng/L	ND		10	--	ND		10	--
ITMS	Beta-Estradiol	water	ng/L	ND		10	--	ND		10	--
ITMS	Caffeine	water	ng/L	ND		10	--	ND		10	--
ITMS	Cholesterol	water	ng/L	ND		10	--	ND		10	--
ITMS	Desipramine	water	ng/L	ND		10	--	ND		10	--
ITMS	Dextro-Norgestrel	water	ng/L	ND		10	--	ND		10	--
ITMS	Doxepin	water	ng/L	ND		10	--	ND		10	--
ITMS	Equilin	water	ng/L	ND		10	--	ND		10	--
ITMS	Estrone	water	ng/L	ND		10	--	ND		10	--
ITMS	Enthynl Estradiol	water	ng/L	ND		10	--	ND		10	--
ITMS	Imipramine	water	ng/L	ND		10	--	ND		10	--
ITMS	Medroxyprogesterone	water	ng/L	ND		10	--	ND		10	--
ITMS	Megestrol Acetate	water	ng/L	ND		10	--	ND		10	--
ITMS	Menstranol	water	ng/L	ND		10	--	ND		10	--
ITMS	Nordoxepin	water	ng/L	ND		10	--	ND		10	--
ITMS	Norethindrone	water	ng/L	ND		10	--	ND		10	--
ITMS	Norethynodrel	water	ng/L	ND		10	--	ND		10	--
ITMS	Nortriptyline	water	ng/L	ND		10	--	ND		10	--
ITMS	Paroxetine	water	ng/L	ND		10	--	ND		10	--
ITMS	Phenytoin	water	ng/L	ND		10	--	ND		10	--
ITMS	Prednisone	water	ng/L	ND		10	--	ND		10	--
ITMS	Progesterone	water	ng/L	ND		10	--	ND		10	--
ITMS	Propoxyphene	water	ng/L	ND		10	--	ND		10	--
ITMS	Protroptyline	water	ng/L	ND		10	--	ND		10	--
ITMS	Prozac	water	ng/L	ND		10	--	ND		10	--
ITMS	Setraline	water	ng/L	ND		10	--	ND		10	--
ITMS	Tamoxifen	water	ng/L	ND		10	--	ND		10	--
ITMS	Trimipramine maleate	water	ng/L	ND		10	--	ND		10	--
ITMS	6 alpha-Methyprednisolone	water	ng/L	ND		10	--	ND		10	--

Table 4.9--Analytical results of surface-water monitoring at Lower San Juan Drain

Method	Parameter	Matrix	Unit	5-Aug-02				27-Jan-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
	Grain size analysis										
D422	Maximum particle size	sediment	--	fine gravel		--	--	coarse sand		--	--
D422	Particle size, 9500 microns, gravel	sediment	%	5.3		0.1	--	--		--	--
D422	Particle size, 4750 microns, gravel	sediment	%	9.3		0.1	--	--		--	--
D422	Particle size, 2000 microns, sand	sediment	%	14.7		0.1	--	0.1		0.1	--
D422	Particle size, 850 microns, sand	sediment	%	10.4		0.1	--	0.4		0.1	--
D422	Particle size, 425 microns, sand	sediment	%	12.7		0.1	--	1.2		0.1	--
D422	Particle size, 250 microns, sand	sediment	%	15.2		0.1	--	2.1		0.1	--
D422	Particle size, 180 microns, sand	sediment	%	9.9		0.1	--	2.5		0.1	--
D422	Particle size, 150 microns, sand	sediment	%	5		0.1	--	1.6		0.1	--
D422	Particle size, 75 microns, sand	sediment	%	9.2		0.1	--	8.1		0.1	--
D422	Particle size, 36.9 microns, silt	sediment	%	6.4		0.1	--	--		--	--
D422	Particle size, 35.2 microns, silt	sediment	%	--		--	--	52.8		0.1	--
D422	Particle size, 23.3 microns, silt	sediment	%	0.0		0.1	--	--		--	--
D422	Particle size, 22.8 microns, silt	sediment	%	--		--	--	8.0		0.1	--
D422	Particle size, 13.5 microns, silt	sediment	%	0.0		0.1	--	--		--	--
D422	Particle size, 13.4 microns, silt	sediment	%	--		--	--	6.4		0.1	--
D422	Particle size, 9.6 microns, silt	sediment	%	--		--	--	3.2		0.1	--
D422	Particle size, 9.4 microns, silt	sediment	%	0.5		0.1	--	--		--	--
D422	Particle size, 6.9 microns, silt	sediment	%	0.5		0.1	--	1.6		0.1	--
D422	Particle size, 3.5 microns, silt	sediment	%	1.0		0.1	--	--		--	--
D422	Particle size, 3.3 microns, clay	sediment	%	--		--	--	3.2		0.1	--
D422	Particle size, 1.4 microns, clay	sediment	%	0.0		0.1	--	2.1		0.1	--
D422	Particle size, less than 1.4 microns, clay	sediment	%	0.0		0.1	--	6.9		0.1	--

[1] See table 5 for description of qualifier codes.

[2] Reporting limit -- the lowest level at which measurements become quantitatively meaningful, ie., the quantitation limit, which is approximately three times the method detection limit. Reporting limits cannot be less than the statistically determined method detection limit.

[3] Method detection limit -- the minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero and is determined from replicate analyses of low level standards in a typical representative matrix.

Table 4.10--Analytical results of surface-water monitoring at Rio Grande at La Joya, 2002-2003

[Field parameters measured by field staff. Laboratory analyses performed by Severn Trent Laboratory and the New Mexico Scientific Laboratory (pharmaceuticals). --, no data; °C, degrees Celsius; mm of Hg, millimeters of mercury; ft^3/sec, cubic feet per second; mg/L, milligram per liter; %, percent; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units; >, greater than; ug/L, micrograms per liter; g/kg, grams per kilogram; mg/kg, milligram per kilogram; ug/kg, micrograms per kilogram; ITMS, Ion trap mass spectrometer; ng/L, nanograms per liter; n/a, not applicable.]

Method	Parameter	Matrix	Unit	23-Jul-02				10-Sep-02				13-Dec-02				25-Feb-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
--	Station identification number	--	--	341846106511410		--	--	341850106511810		--	--	341850106511610		--	--	341845106511210		--	--
--	Latitude/Longitude	--	--	341846/1065114		--	--	341850/1065118		--	--	341850/1065116		--	--	341845/1065112		--	--
--	Time	--	--	1100		--	--	1045		--	--	1015		--	--	1045		--	--
	Field parameters																		
170.1	Air temperature	air	°C	32.9		0.1	0.01	18.0		0.1	0.01	7.4		0.1	0.01	5.8		0.1	0.01
170.1	Water temperature	water	°C	22.5		0.1	0.01	19.1		0.1	0.01	3.2		0.1	0.01	7.5		0.1	0.01
--	Barometric pressure	air	mm of Hg	647		--	--	645		--	--	645		--	--	642		--	--
--	Discharge, instantaneous	water	ft^3/s	342		--	--	160		--	--	548		--	--	549		--	--
150.1	pH - unfiltered	water	--	8.0		0.1	0.01	8.2		0.1	0.01	8.1		0.1	0.01	8.3		0.1	0.01
--	Dissolved oxygen	water	mg/L	6.5		0.1	0.01	7.4		0.1	0.01	10.6		0.1	0.01	11.4		0.1	0.01
--	Dissolved oxygen, saturation	water	%	74		1	0.01	81		1	0.01	79		1	0.01	97		1	0.01
120.1	Specific conductance - unfiltered	water	uS/cm	591		1	1	360		1	1	337		1	1	327		1	1
180.1	Turbidity	water	NTU	>1000		1	0.1	>1000		1	0.1	243		1	0.1	372		1	0.1
310.1	Alkalinity, as $CaCO_3$	water	mg/L	150		1	0.1	171		1	0.1	152		1	0.1	146		1	0.1
310.1	Bicarbonate, as HCO_3	water	mg/L	181		1	0.1	204		1	0.1	182		1	0.1	175		1	0.1
310.1	Carbonate, as CO_3	water	mg/L	1.3		0.1	0.1	2.0		0.1	0.1	1.9		0.1	0.1	1.7		0.1	0.1
	General chemistry																		
130.2	Hardness, as $CaCO_3$	water	mg/L	170		5	2	480	J Q	12	5	170	J	5	2	150	J	5	2
160.1	Total dissolved solids	water	mg/L	380	G	20	10	330	G	20	10	760		10	5	310	G	20	10
160.2	Total suspended solids	water	mg/L	1500	Q	100	45	1500	Q	20	9	200	Q	10	4.5	370	Q	20	9
314	Perchlorate	water	ug/L	ND		20	1.5	ND		20	1.5	ND		20	2.5	ND		1	0.41
405.1	Biochemical oxygen demand (BOD)	water	mg/L	ND		2	0.23	2.3		2	0.23	ND		2	0.23	2.3		2	0.31
410.4	Chemical oxygen demand (COD)	water	mg/L	18	B	20	3.5	15	B	20	3.5	4.9	B	20	3.5	ND		20	3.5
9060	Total organic carbon	sediment	g/kg	4.4		2	0.59	14		2	0.59	6.4		2	0.59	0.91	B	2	0.59
D2216	Moisture	sediment	%	19		0.1	2.5	41		0.1	--	24		0.1	--	22		0.1	--
D2216	Moisture (Red Shiner)	fish	%	--		--	--	--	f	--	--	--		--	--	76		0.1	--
Total Residue	Lipids (Red Shiner)	fish	%	--		--	--	0.34	B	0.1	--	--		--	--	--	f	--	--
	Common anions																		
300.0A	Bromide	water	mg/L	0.2		0.2	0.03	0.23		0.2	0.03	0.17	B	0.2	0.03	0.3		0.2	0.03
300.0A	Chloride	water	mg/L	28		3	0.1	27		3	0.1	28		3	0.1	24		3	0.1
300.0A	Fluoride	water	mg/L	0.64	B	1	0.03	0.58	B	1	0.03	0.56	B	1	0.03	0.6	B	1	0.03
300.0A	Nitrate	water	mg/L	0.74		0.5	0.03	0.43	B	0.5	0.03	0.47	B	0.5	0.03	0.62		0.5	0.03
300.0A	Nitrite	water	mg/L	ND		0.5	0.04	ND		0.5	0.04	ND		0.5	0.04	ND		0.5	0.04
300.0A	Phosphate as P, Ortho	water	mg/L	ND		0.5	0.04	ND		0.5	0.04	ND		0.5	0.04	ND		0.5	0.04
300.0A	Sulfate	water	mg/L	100	Q	25	1	100	Q	25	1	92	Q	25	1	79	Q	25	1
9012A	Cyanide, Total	water	mg/L	0.0033	B J	0.01	0.002	0.063		0.01	0.002	0.0054	B J	0.01	0.002	ND		0.01	0.0039
9012A	Cyanide, Total	sediment	mg/kg	0.65	J	0.62	0.11	1.2	J	0.85	0.15	ND		0.66	0.12	0.31	B	0.64	0.13
9056	Bromide	sediment	mg/kg	ND		2.5	0.37	ND		3.4	0.51	ND		2.6	0.4	ND		2.6	0.39
9056	Chloride	sediment	mg/kg	14	B J	37	1.2	35	B J	51	1.7	26	B J	40	1.3	13	B J	39	1.3
9056	Fluoride	sediment	mg/kg	2.9	B	12	0.37	6.2	B	17	0.51	2.9	B J	13	0.4	1.5	B	13	0.39
9056	Nitrate	sediment	mg/kg	ND		6.2	0.37	3.3	B	8.5	0.51	2.6	B J	6.6	0.4	ND		6.4	0.39
9056	Nitrite	sediment	mg/kg	1.8	B J	6.2	0.49	2.7	B	8.5	0.68	ND		6.6	0.53	ND		6.4	0.51
9056	Phosphate as P, Ortho	sediment	mg/kg	1.7	B	6.2	0.49	ND		8.5	0.68	2.5	B	6.6	0.53	2	B	6.4	0.51
9056	Sulfate	sediment	mg/kg	41	B	62	2.5	72	B	85	3.4	51	B J	66	2.6	32	B J	64	2.6
	Nutrients																		
350.1	Ammonia as N	water	mg/L	0.092	B	0.1	0.015	0.02	B	0.1	0.015	0.052	B	0.1	0.015	0.084	B	0.1	0.038
351.2	Total Kjeldahl Nitrogen	water	mg/L	0.33	B	0.5	0.14	0.23	B	0.5	0.14	0.18	B	0.5	0.14	0.15	B	0.5	0.083
353.2	Nitrate-Nitrite	water	mg/L	0.63		0.1	0.01	0.34		0.1	0.012	0.32		0.1	0.012	0.51		0.1	0.012
354.1	Nitrite	water	mg/L	0.0093	B	0.01	0.002	0.0023	B	0.01	0.002	0.0037	B	0.01	0.002	0.0036	B	0.01	0.0018
365.3	Total phosphorus	water	mg/L	1	Q	1	0.26	0.35		0.05	0.013	0.32		0.05	0.013	0.29	G	0.1	0.038
350.1	Ammonia as N	sediment	mg/kg	1.7		1.2	0.19	3.7	J	1.7	0.25	1.9	J	1.3	0.2	0.51	B J	1.3	0.49
351.2	Total Kjeldahl Nitrogen	sediment	mg/kg	210		62	25	760		85	68	630	Q	130	53	55	B	64	7.3
353.2	Nitrate-Nitrite	sediment	mg/kg	ND		1.2	0.26	0.2	B J	1.7	0.2	0.38	B J	1.3	0.16	0.25	B J	1.3	0.15
354.1	Nitrite	sediment	mg/kg	ND		0.12	0.049	ND		0.17	0.068	0.098	B	0.13	0.053	0.047	B	0.13	0.023
365.3	Total phosphorus	sediment	mg/kg	230	Q	62	15	640	Q	170	41	430	Q	130	32	130	Q	32	7.7
	Trace elements																		
6020	Antimony	water	ug/L	0.19	B	2	0.04	0.17	B	2	0.04	0.22	B	2	0.04	0.18	B	2	0.04
6020	Arsenic	water	ug/L	5.7		5	0.061	5.1	J	5	0.061	4.5	B	5	0.061	5.5		5	0.061
6020	Barium	water	ug/L	100		1	0.057	80		1	0.057	90		1	0.057	82		1	0.057
6020	Beryllium	water	ug/L	ND		1	0.028	0.05	B	1	0.028	--		--	--	--		--	--
6020	Cadmium	water	ug/L	0.027	B	1	0.022	0.022	B	1	0.022	ND		1	0.022	ND		1	0.022
6020	Chromium	water	ug/L	0.49	B	2	0.24	0.45	B	2	0.24	0.57	B	2	0.24	ND		2	0.24
6020	Cobalt	water	ug/L	0.53	B	1	0.015	0.55	B	1	0.015	0.49	B	1	0.015	0.53	B	1	0.015

Table 4.10--Analytical results of surface-water monitoring at Rio Grande at La Joya, 2002-2003

Method	Parameter	Matrix	Unit	23-Jul-02				10-Sep-02				13-Dec-02				25-Feb-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
6020	Copper	water	ug/L	1.2	B	2	0.63	3.1		2	0.63	0.91	B	2	0.63	1.9	B	2	0.63
6020	Lead	water	ug/L	ND		1	0.15	0.24	B	1	0.15	ND		1	0.15	ND		1	0.15
6020	Manganese	water	ug/L	0.93	B	1	0.061	1.3	J	1	0.061	7.4		1	0.061	3	J	1	0.061
6020	Molybdenum	water	ug/L	5.9		2	0.023	5.7	J	2	0.023	6.2		2	0.023	5.8		2	0.023
6020	Nickel	water	ug/L	1.3	B J	2	0.25	4		2	0.25	30		2	0.25	0.62	B	2	0.25
6020	Selenium	water	ug/L	ND		5	0.19	ND		5	0.19	ND		5	0.19	0.82	B J	5	0.19
6020	Silver	water	ug/L	0.041	B J	5	0.012	0.019	B J	5	0.012	ND		5	0.012	ND		5	0.012
6020	Thallium	water	ug/L	ND		1	0.015	ND		1	0.015	ND		1	0.015	ND		1	0.015
6020	Tin	water	ug/L	ND		10	0.054	0.083	B	10	0.054	0.19	B J	10	0.054	ND		10	0.054
6020	Uranium	water	ug/L	2.8	J	1	0.0015	2.8	J	1	0.0015	3.3		1	0.0015	3.3		1	0.0015
6020	Vanadium	water	ug/L	8		5	0.07	4.8	B	5	0.07	4.1	B J	5	0.07	3.8	B	5	0.07
6020	Zinc	water	ug/L	5.1	B	10	2.3	8.2	B	10	2.3	8.7	B	10	2.3	3.5	B	10	2.3
7470A	Mercury	water	ug/L	ND		0.2	0.028	ND		0.2	0.028	ND		0.2	0.015	0.022	B	0.2	0.015
6010B	Aluminum	water	ug/L	34	B	100	20	ND		100	20	ND		100	20	ND		100	20
6010B	Beryllium	water	ug/L	--		--	--	--		--	--	0.22	B	5	0.22	0.26	B J	5	0.22
6010B	Boron	water	ug/L	120		100	5.2	130		100	5.2	130		100	5.2	170		100	5.2
6010B	Calcium	water	ug/L	55000		200	31	64000		200	31	58000	J	200	31	52000		200	31
6010B	Iron	water	ug/L	18	B	100	13	ND		100	13	ND		100	13	ND		100	13
6010B	Lithium	water	ug/L	49		10	2.1	56		10	2.1	63		10	2.1	74		10	2.1
6010B	Magnesium	water	ug/L	8800		200	24	11000		200	24	10000		200	24	10000		200	24
6010B	Potassium	water	ug/L	5500		3000	490	5100		3000	490	5500		3000	490	5100		3000	490
6010B	Silica	water	ug/L	24000		1100	23	23000		1100	23	25000		1100	23	27000		1100	23
6010B	Sodium	water	ug/L	48000		5000	1500	55000		5000	1500	54000		5000	1500	55000		5000	1500
6010B	Strontium	water	ug/L	520		10	0.35	570		10	0.35	500		10	0.35	490	J	10	0.35
6010B	Titanium	water	ug/L	ND		10	0.97	ND		10	0.97	1.7	B	10	0.97	ND		10	0.97
6020	Antimony	sediment	mg/kg	ND		0.25	0.0036	0.013	B J	0.34	0.0049	0.037	B J	0.26	0.0038	ND		0.26	0.0037
6020	Arsenic	sediment	mg/kg	2		0.62	0.021	3.9		0.85	0.029	2.3	J	0.66	0.023	1.2		0.64	0.022
6020	Barium	sediment	mg/kg	100		0.12	0.03	130	J	0.17	0.041	100		0.13	0.032	60		0.13	0.031
6020	Beryllium	sediment	mg/kg	0.43		0.12	0.0054	0.72		0.17	0.0075	--		--	--	--		--	--
6020	Cadmium	sediment	mg/kg	0.066	B	0.12	0.0017	0.17		0.17	0.0024	0.094	B	0.13	0.0019	0.029	B	0.13	0.0018
6020	Chromium	sediment	mg/kg	8.8	J	0.25	0.022	12	J	0.34	0.031	8.8	J	0.26	0.024	3.3	J	0.26	0.023
6020	Cobalt	sediment	mg/kg	3.8		0.12	0.0015	6.3		0.17	0.002	3.6		0.13	0.0016	1.7		0.13	0.0015
6020	Copper	sediment	mg/kg	5.6	J	0.25	0.019	15	J	0.34	0.025	7.9		0.26	0.02	2	J	0.26	0.019
6020	Lead	sediment	mg/kg	5.4		0.12	0.0052	11	J	0.17	0.0071	5.3	J	0.13	0.0056	2.4	J	0.13	0.0054
6020	Manganese	sediment	mg/kg	260	J	0.12	0.028	310	J	0.17	0.039	220	J	0.13	0.03	110		0.13	0.03
6020	Molybdenum	sediment	mg/kg	0.19	B J	0.25	0.0027	0.31	B J	0.34	0.0037	0.21	B J	0.26	0.0029	0.084	B J	0.26	0.0028
6020	Nickel	sediment	mg/kg	7.1		0.12	0.016	11	J	0.17	0.022	6.7	J	0.13	0.017	2.5	J	0.13	0.017
6020	Selenium	sediment	mg/kg	0.27	B	0.62	0.061	0.65	B	0.85	0.083	0.26	B	0.66	0.065	0.097	B	0.64	0.063
6020	Silver	sediment	mg/kg	0.039	B J	0.12	0.0028	0.15	B J	0.17	0.0039	0.091	B J	0.13	0.003	0.026	B	0.13	0.003
6020	Thallium	sediment	mg/kg	0.089	B	0.12	0.0012	0.21	J	0.17	0.0017	0.1	B J	0.13	0.0013	0.035	B	0.13	0.0013
6020	Tin	sediment	mg/kg	ND		1.2	0.098	ND		1.7	0.13	0.18	B	1.3	0.1	ND		1.3	0.1
6020	Uranium	sediment	mg/kg	0.54		0.12	0.0022	1		0.17	0.0031	0.56	J	0.13	0.0024	0.24		0.13	0.0023
6020	Vanadium	sediment	mg/kg	17	J	0.62	0.0069	26	J	0.85	0.0095	17		0.66	0.0074	8	J	0.64	0.0072
6020	Zinc	sediment	mg/kg	22		1.2	0.43	49		1.7	0.59	25		1.3	0.46	11	J	1.3	0.45
7471A	Mercury	sediment	mg/kg	0.0035	B	0.041	0.0031	0.028	B	0.056	0.0042	0.024	B	0.044	0.0033	0.0039	B	0.042	0.0032
6010B	Aluminum	sediment	mg/kg	9300		12	2.6	18000	J	17	3.6	9500	J	13	2.8	2500		13	2.7
6010B	Beryllium	sediment	mg/kg	--		--	--	--		--	--	0.28	B	0.66	0.045	0.13	B	0.64	0.044
6010B	Boron	sediment	mg/kg	4.8	B	12	0.46	6.8	B	17	0.63	4.4	B	13	0.49	1.8	B	13	0.48
6010B	Calcium	sediment	mg/kg	18000		25	9.6	18000	J	34	13	19000	J	26	10	6600		26	10
6010B	Iron	sediment	mg/kg	9100		12	2	18000		17	2.7	10000		13	2.1	4100	J	13	2.1
6010B	Lithium	sediment	mg/kg	11		6.2	0.14	18		8.5	0.19	10		6.6	0.15	3.5	B	6.4	0.14
6010B	Magnesium	sediment	mg/kg	4400		25	1.9	6200	J	34	2.5	4400	J	26	2	1100	J	26	1.9
6010B	Potassium	sediment	mg/kg	1900		370	43	3500		510	59	1800		400	46	630		390	45
6010B	Sodium	sediment	mg/kg	ND		620	74	120	B	850	100	ND		660	79	ND		640	77
6010B	Strontium	sediment	mg/kg	58	J	1.2	0.019	94		1.7	0.085	59		1.3	0.066	20		1.3	0.064
6010B	Titanium	sediment	mg/kg	210		1.2	0.15	170		1.7	0.2	190	J	1.3	0.16	110		1.3	0.15
6020	Antimony	fish	mg/kg	--		--	--	0.028	B	0.2	0.02	--		--	--	ND		0.82	0.082
6020	Arsenic	fish	mg/kg	--		--	--	0.11	B	0.5	0.0076	--		--	--	0.55	B J	2	0.031
6020	Beryllium	fish	mg/kg	--		--	--	0.0055	B	0.1	0.0023	--		--	--	--		--	--
6020	Cadmium	fish	mg/kg	--		--	--	0.019	B	0.1	0.0027	--		--	--	0.017	B	0.41	0.011
6020	Chromium	fish	mg/kg	--		--	--	0.29	J	0.2	0.034	--		--	--	1.2	J	0.82	0.14
6020	Copper	fish	mg/kg	--		--	--	1		0.2	0.061	--		--	--	3		0.82	0.25
6020	Lead	fish	mg/kg	--		--	--	0.046	B	0.1	0.02	--		--	--	0.1	B	0.41	0.082
6020	Nickel	fish	mg/kg	--		--	--	0.13	J	0.1	0.011	--		--	--	0.077	B J	0.41	0.045
6020	Selenium	fish	mg/kg	--		--	--	0.35	B	0.5	0.018	--		--	--	3.3		2	0.073
6020	Silver	fish	mg/kg	--		--	--	0.0083	B J	0.1	0.002	--		--	--	0.012	B	0.41	0.0082
6020	Thallium	fish	mg/kg	--		--	--	0.0047	B	0.1	0.002	--		--	--	ND		0.41	0.0082
6020	Uranium	fish	mg/kg	--		--	--	0.019	B	0.1	0.002	--		--	--	0.029	B	0.41	0.0082
6020	Zinc	fish	mg/kg	--		--	--	19	J	1	0.13	--		--	--	190	J	4.1	0.51
245.6	Mercury	fish	ug/kg	--		--	--	--		--	--	--		--	--	440	B	2900	170

Table 4.10--Analytical results of surface-water monitoring at Rio Grande at La Joya, 2002-2003

Method	Parameter	Matrix	Unit	23-Jul-02				10-Sep-02				13-Dec-02				25-Feb-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
6010B	Aluminum	fish	mg/kg	--		--	--	73		10	3.1	--		--	--	110		41	13
6010B	Barium	fish	mg/kg	--		--	--	3.8		1	0.12	--		--	--	11	J	4.1	0.49
6010B	Beryllium	fish	mg/kg	--		--	--	--		--	--	--		--	--	ND		2	0.57
6010B	Boron	fish	mg/kg	--		--	--	0.85	B	10	0.51	--		--	--	7.6	B	41	2.1
6010B	Calcium	fish	mg/kg	--		--	--	6000	J	20	3.2	--		--	--	26000	J	82	13
6010B	Cobalt	fish	mg/kg	--		--	--	ND		1	0.15	--		--	--	0.99	B J	4.1	0.61
6010B	Iron	fish	mg/kg	--		--	--	69		10	2	--		--	--	140	J	41	8.2
6010B	Lithium	fish	mg/kg	--		--	--	ND		5	0.22	--		--	--	ND		20	0.9
6010B	Magnesium	fish	mg/kg	--		--	--	270		20	1.5	--		--	--	1200	J	82	6.2
6010B	Manganese	fish	mg/kg	--		--	--	4.7	J	1	0.14	--		--	--	13	J	4.1	0.57
6010B	Molybdenum	fish	mg/kg	--		--	--	ND		2	0.24	--		--	--	ND		8.2	0.98
6010B	Potassium	fish	mg/kg	--		--	--	1700		300	31	--		--	--	11000		1200	120
6010B	Sodium	fish	mg/kg	--		--	--	330	B	500	120	--		--	--	1800	B	2000	490
6010B	Strontium	fish	mg/kg	--		--	--	20		1	0.15	--		--	--	80		4.1	0.61
6010B	Tin	fish	mg/kg	--		--	--	1.2	B J	10	0.42	--		--	--	3.4	B	41	1.7
6010B	Titanium	fish	mg/kg	--		--	--	1.6		1	0.2	--		--	--	3.1	B	4.1	0.82
6010B	Vanadium	fish	mg/kg	--		--	--	ND		1	0.35	--		--	--	ND		4.1	1.4
	Volatile organic compounds																		
8260B	Acetone	water	ug/L	3.9	J	10	2.9	ND		10	2.9	ND		10	2.9	3.4	J	10	2.5
8260B	Benzene	water	ug/L	ND		1	0.27	ND		1	0.27	ND		1	0.27	ND		1	0.17
8260B	Bromodichloromethane	water	ug/L	ND		1	0.35	ND		1	0.35	ND		1	0.35	ND		1	0.2
8260B	Bromoform	water	ug/L	ND		1	0.46	ND		1	0.46	ND		1	0.46	ND		1	0.23
8260B	Bromomethane	water	ug/L	ND		2	0.28	ND		2	0.28	ND		2	0.28	ND		2	0.22
8260B	Carbon disulfide	water	ug/L	ND		1	0.67	ND		1	0.67	ND		1	0.67	ND		1	0.24
8260B	Carbon tetrachloride	water	ug/L	ND		1	0.35	ND		1	0.35	ND		1	0.35	ND		1	0.2
8260B	Chlorobenzene	water	ug/L	ND		1	0.24	ND		1	0.24	ND		1	0.24	ND		1	0.13
8260B	Chloroethane	water	ug/L	ND		2	0.26	ND		2	0.26	ND		2	0.26	ND		2	0.18
8260B	Chloroform	water	ug/L	ND		1	0.29	ND		1	0.29	ND		1	0.29	ND		1	0.17
8260B	Chloromethane	water	ug/L	ND		2	0.26	ND		2	0.26	ND		2	0.26	ND		2	0.91
8260B	cis-1,2-Dichloroethene	water	ug/L	ND		1	0.33	ND		1	0.33	ND		1	0.33	ND		1	0.14
8260B	cis-1,3-Dichloropropene	water	ug/L	ND		1	0.31	ND		1	0.31	ND		1	0.31	ND		1	0.19
8260B	Cyclotetrasiloxane, octamethyl	water	ug/L	--		--	--	1.4	J	--	--	--		--	--	--		--	--
8260B	Dibromochloromethane	water	ug/L	ND		1	0.37	ND		1	0.37	ND		1	0.37	ND		1	0.19
8260B	Ethylbenzene	water	ug/L	ND		1	0.51	ND		1	0.51	ND		1	0.51	ND		1	0.12
8260B	Methylene chloride	water	ug/L	ND		5	0.86	ND		5	0.86	ND		5	0.86	ND		5	0.21
8260B	m-Xylene & p-Xylene	water	ug/L	ND		2	0.52	ND		2	0.52	ND		2	0.52	ND		2	0.27
8260B	o-Xylene	water	ug/L	ND		1	0.24	ND		1	0.24	ND		1	0.24	ND		1	0.15
8260B	Styrene	water	ug/L	ND		1	0.28	ND		1	0.28	ND		1	0.28	ND		1	0.14
8260B	Tetrachloroethene	water	ug/L	ND		1	0.27	ND		1	0.27	ND		1	0.27	ND		1	0.26
8260B	Toluene	water	ug/L	ND		1	0.26	ND		1	0.26	ND		1	0.26	ND		1	0.15
8260B	trans-1,2-Dichloroethene	water	ug/L	ND		0.5	0.25	ND		0.5	0.25	ND		0.5	0.25	ND		0.5	0.15
8260B	trans-1,3-Dichloropropene	water	ug/L	ND		1	0.36	ND		1	0.36	ND		1	0.36	ND		1	0.2
8260B	Trichloroethene	water	ug/L	ND		1	0.24	ND		1	0.24	ND		1	0.24	ND		1	0.16
8260B	Vinyl chloride	water	ug/L	ND		1	0.26	ND		1	0.26	ND		1	0.26	ND		1	0.19
8260B	Xylenes (total)	water	ug/L	ND		2	0.73	ND		2	0.73	ND		2	0.73	ND		2	0.41
8260B	1,1,1-Trichloroethane	water	ug/L	ND		1	0.32	ND		1	0.32	ND		1	0.32	ND		1	0.16
8260B	1,1,2,2-Tetrachloroethane	water	ug/L	ND		1	0.5	ND		1	0.5	ND		1	0.5	ND		1	0.21
8260B	1,1,2-Trichloroethane	water	ug/L	ND		1	0.41	ND		1	0.41	ND		1	0.41	ND		1	0.27
8260B	1,1-Dichloroethane	water	ug/L	ND		1	0.29	ND		1	0.29	ND		1	0.29	ND		1	0.22
8260B	1,1-Dichloroethene	water	ug/L	ND		1	0.31	ND		1	0.31	ND		1	0.31	ND		1	0.23
8260B	1,2-Dichloroethane	water	ug/L	ND		1	0.43	ND		1	0.43	ND		1	0.43	ND		1	0.26
8260B	1,2-Dichloroethene (total)	water	ug/L	ND		1	0.54	ND		1	0.54	ND		1	0.54	ND		1	0.24
8260B	1,2-Dichloropropane	water	ug/L	ND		1	0.38	ND		1	0.38	ND		1	0.38	ND		1	0.18
8260B	2-Butanone (MEK)	water	ug/L	ND		5	2.4	ND		5	2.4	ND		5	2.4	ND		5	2
8260B	2-Hexanone	water	ug/L	ND		5	1.8	ND		5	1.8	ND		5	1.8	ND		5	1.7
8260B	4-Methyl-2-pentanone	water	ug/L	ND		5	1.8	ND		5	1.8	ND		5	1.8	ND		5	0.98
8260B	Acetone	sediment	ug/kg	6.9	J	25	5.7	20	J	34	7.8	22	J	26	6.1	ND		26	4.4
8260B	Alpha pinene	sediment	ug/kg	7	T2	--	--	--		--	--	--		--	--	--		--	--
8260B	Benzene	sediment	ug/kg	ND		6.2	1.1	ND		8.5	1.5	ND		6.6	1.2	ND		6.4	0.15
8260B	Beta-pinene	sediment	ug/kg	--		--	--	--		--	--	25	T2	--	--	--		--	--
8260B	Bromodichloromethane	sediment	ug/kg	ND		6.2	1.1	ND		8.5	1.6	ND		6.6	1.2	ND		6.4	0.26
8260B	Bromoform	sediment	ug/kg	ND		6.2	1.1	ND		8.5	1.5	ND		6.6	1.2	ND		6.4	0.33
8260B	Bromomethane	sediment	ug/kg	ND		12	1.5	ND		17	2	ND		13	1.6	ND		13	0.77
8260B	Carbon disulfide	sediment	ug/kg	ND		6.2	1.1	ND		8.5	1.6	ND		6.6	1.2	ND		6.4	0.31
8260B	Carbon tetrachloride	sediment	ug/kg	ND		6.2	1.5	ND		8.5	2	ND		6.6	1.6	ND		6.4	0.32
8260B	Chlorobenzene	sediment	ug/kg	ND		6.2	0.93	ND		8.5	1.3	ND		6.6	0.99	ND		6.4	0.23
8260B	Chloroethane	sediment	ug/kg	ND		12	1.6	ND		17	2.2	ND		13	1.7	ND		13	0.3
8260B	Chloroform	sediment	ug/kg	ND		12	1.1	ND		17	1.5	ND		13	1.2	ND		13	0.32
8260B	Chloromethane	sediment	ug/kg	ND		12	1.9	ND		17	2.5	ND		13	2	ND		13	0.46
8260B	cis-1,2-Dichloroethene	sediment	ug/kg	ND		3.1	1	ND		4.2	1.4	ND		3.3	1.1	ND		3.2	0.27

Table 4.10--Analytical results of surface-water monitoring at Rio Grande at La Joya, 2002-2003

Method	Parameter	Matrix	Unit	23-Jul-02				10-Sep-02				13-Dec-02				25-Feb-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
8260B	cis-1,3-Dichloropropene	sediment	ug/kg	ND		6.2	1.2	ND		8.5	1.6	ND		6.6	1.3	ND		6.4	0.46
8260B	Dibromochloromethane	sediment	ug/kg	ND		6.2	1.1	ND		8.5	1.5	ND		6.6	1.2	ND		6.4	0.26
8260B	Dimethyl sulfide	sediment	ug/kg	--		--	--	ND		8.5	2	--		--	--	--		--	--
8260B	Disulfide, dimethyl	sediment	ug/kg	--		--	--	--		--	--	--		--	--	--		--	--
8260B	Ethylbenzene	sediment	ug/kg	ND		6.2	1.5	ND		8.5	2	ND		6.6	1.6	ND		6.4	0.35
8260B	Methanethiol	sediment	ug/kg	--		--	--	--		--	--	--		--	--	--		--	--
8260B	Methylene chloride	sediment	ug/kg	ND		6.2	0.99	2.3	J B	8.5	1.4	6.8	B	6.6	1.1	ND		6.4	0.53
8260B	m-Xylene & p-Xylene	sediment	ug/kg	ND		3.1	2.2	ND		4.2	3.1	ND		3.3	2.4	ND		3.2	0.54
8260B	o-Xylene	sediment	ug/kg	ND		3.1	1.2	ND		4.2	1.7	ND		3.3	1.3	ND		3.2	0.3
8260B	Styrene	sediment	ug/kg	ND		6.2	0.82	ND		8.5	1.1	ND		6.6	0.87	ND		6.4	0.27
8260B	Tetrachloroethene	sediment	ug/kg	ND		6.2	1.2	ND		8.5	1.7	ND		6.6	1.3	ND		6.4	0.32
8260B	Toluene	sediment	ug/kg	ND		6.2	0.96	ND		8.5	1.3	ND		6.6	1	ND		6.4	0.28
8260B	trans-1,2-Dichloroethene	sediment	ug/kg	ND		3.1	0.98	ND		4.2	1.3	ND		3.3	1	ND		3.2	0.45
8260B	trans-1,3-Dichloropropene	sediment	ug/kg	ND		6.2	1.2	ND		8.5	1.7	ND		6.6	1.3	ND		6.4	0.54
8260B	Trichloroethene	sediment	ug/kg	ND		6.2	1.1	ND		8.5	1.5	ND		6.6	1.2	ND		6.4	0.37
8260B	Tridecane	sediment	ug/kg	7.8	T2	--	--	--		--	--	--		--	--	--		--	--
8260B	Unknown	sediment	ug/kg	8.9		--	--	22	J	--	--	--		--	--	8.6	J	--	--
8260B	Unknown	sediment	ug/kg	13		--	--	19	J	--	--	--		--	--	38	J	--	--
8260B	Unknown	sediment	ug/kg	--		--	--	22	J	--	--	--		--	--	75	J	--	--
8260B	Vinyl chloride	sediment	ug/kg	ND		6.2	1.4	ND		8.5	1.9	ND		6.6	1.5	ND		6.4	0.3
8260B	Xylenes (total)	sediment	ug/kg	ND		6.2	3.5	ND		8.5	4.7	ND		6.6	3.7	ND		6.4	0.72
8260B	1,1,1-Trichloroethane	sediment	ug/kg	ND		6.2	1.2	ND		8.5	1.7	ND		6.6	1.3	ND		6.4	0.33
8260B	1,1,2,2-Tetrachloroethane	sediment	ug/kg	ND		6.2	1.4	ND		8.5	1.9	ND		6.6	1.5	ND		6.4	0.72
8260B	1,1,2-Trichloroethane	sediment	ug/kg	ND		6.2	1.9	ND		8.5	2.5	ND		6.6	2	ND		6.4	0.41
8260B	1,1-Dichloroethane	sediment	ug/kg	ND		6.2	1.2	ND		8.5	1.7	ND		6.6	1.3	ND		6.4	0.27
8260B	1,1-Dichloroethene	sediment	ug/kg	ND		6.2	1.4	ND		8.5	1.9	ND		6.6	1.5	ND		6.4	0.4
8260B	1,2-Dichloroethane	sediment	ug/kg	ND		6.2	1.2	ND		8.5	1.7	ND		6.6	1.3	ND		6.4	0.28
8260B	1,2-Dichloroethene (total)	sediment	ug/kg	ND		6.2	1.9	ND		8.5	2.5	ND		6.6	2	ND		6.4	0.39
8260B	1,2-Dichloropropane	sediment	ug/kg	ND		6.2	1.5	ND		8.5	2	ND		6.6	1.6	ND		6.4	0.28
8260B	2-Butanone (MEK)	sediment	ug/kg	ND		25	5.8	ND		34	8	ND		26	6.2	ND		26	3.5
8260B	2-Hexanone	sediment	ug/kg	ND		25	5.7	ND		34	7.8	ND		26	6.1	ND		26	3
8260B	3-methylheptyl acetate	sediment	ug/kg	--		--	--	--		--	--	--		--	--	10	T2	--	--
8260B	4-Methyl-2-pentanone	sediment	ug/kg	ND		25	4.8	ND		34	6.6	ND		26	5.2	ND		26	2.6
	Herbicides																		
8151A	Dalapon	water	ug/L	ND		2	0.42	ND		2	0.42	ND		2	0.33	ND		2	0.33
8151A	Dicamba	water	ug/L	ND		2	0.081	ND		2	0.081	ND		2	0.086	ND		2	0.086
8151A	Dichlorprop	water	ug/L	ND		4	0.13	ND		4	0.13	ND		4	0.11	ND		4	0.11
8151A	Dinoseb	water	ug/L	ND		0.6	0.09	ND		0.6	0.09	ND		0.6	0.065	ND		0.6	0.065
8151A	MCPA	water	ug/L	ND		400	13	ND		400	13	ND		400	12	ND		400	12
8151A	MCPP	water	ug/L	ND		400	42	ND		400	42	ND		400	15	ND		400	15
8151A	2,4,5-T	water	ug/L	ND		1	0.043	ND		1	0.043	ND		1	0.043	ND		1	0.043
8151A	2,4,5-TP (Silvex)	water	ug/L	ND		1	0.034	ND		1	0.034	ND		1	0.036	ND		1	0.036
8151A	2,4-D	water	ug/L	ND		4	0.16	ND		4	0.16	ND		4	0.24	ND		4	0.24
8151A	2,4-DB	water	ug/L	ND		4	0.21	ND		4	0.21	ND		4	0.098	ND		4	0.098
	Pesticides																		
8141A	Anilazine	water	ug/L	ND		10	1.3	ND		10	1.3	ND		10	1.3	ND		10	1.3
8141A	Atrazine	water	ug/L	ND		10	0.52	ND		10	0.52	ND		10	0.52	ND		10	0.52
8141A	Azinphos-methyl	water	ug/L	ND		2.5	0.14	ND		2.5	0.14	ND		2.5	0.14	ND		2.5	0.14
8141A	Bolstar	water	ug/L	ND		0.5	0.14	ND		0.5	0.14	ND		0.5	0.14	ND		0.5	0.14
8141A	Chlorpyrifos	water	ug/L	ND		0.5	0.054	ND		0.5	0.054	ND		0.5	0.054	ND		0.5	0.054
8141A	Coumaphos	water	ug/L	ND		0.5	0.079	ND		0.5	0.079	ND		0.5	0.079	ND		0.5	0.079
8141A	Demeton (total)	water	ug/L	ND		1	0.19	ND		1	0.19	ND		1	0.19	ND		1	0.19
8141A	Diazinon	water	ug/L	ND		0.5	0.039	ND		0.5	0.039	ND		0.5	0.039	ND		0.5	0.039
8141A	Dichlorvos	water	ug/L	ND		0.5	0.13	ND		0.5	0.13	ND		0.5	0.13	ND		0.5	0.13
8141A	Dimethoate	water	ug/L	ND		0.5	0.18	ND		0.5	0.18	ND		0.5	0.18	ND		0.5	0.18
8141A	Disulfoton	water	ug/L	ND		0.5	0.057	ND		0.5	0.057	ND		0.5	0.057	ND		0.5	0.057
8141A	EPN	water	ug/L	ND		0.5	0.05	ND		0.5	0.05	ND		0.5	0.05	ND		0.5	0.05
8141A	Ethoprop	water	ug/L	ND		0.5	0.056	ND		0.5	0.056	ND		0.5	0.056	ND		0.5	0.056
8141A	Ethyl parathion	water	ug/L	ND		0.5	0.04	ND		0.5	0.04	ND		0.5	0.04	ND		0.5	0.04
8141A	Famphur	water	ug/L	ND		1	0.054	ND		1	0.054	ND		1	0.054	ND		1	0.054
8141A	Fensulfothion	water	ug/L	ND		2.5	0.22	ND		2.5	0.22	ND		2.5	0.22	ND		2.5	0.22
8141A	Fenthion	water	ug/L	ND		0.5	0.061	ND		0.5	0.061	ND		0.5	0.061	ND		0.5	0.061
8141A	Malathion	water	ug/L	ND		1.2	0.05	ND		1.2	0.05	ND		1.2	0.05	ND		1.2	0.05
8141A	Merphos	water	ug/L	ND		5	0.063	ND		5	0.063	ND		5	0.063	ND		5	0.063
8141A	Methyl parathion	water	ug/L	ND		0.5	0.061	ND		0.5	0.061	ND		0.5	0.061	ND		0.5	0.061
8141A	Mevinphos	water	ug/L	ND		6.2	0.16	ND		6.2	0.16	ND		6.2	0.16	ND		6.2	0.16
8141A	Naled	water	ug/L	ND		10	0.22	ND		10	0.22	ND		10	0.22	ND		10	0.22
8141A	Phorate	water	ug/L	ND		0.5	0.075	ND		0.5	0.075	ND		0.5	0.075	ND		0.5	0.075
8141A	Propazine	water	ug/L	ND		10	2.5	ND		10	2.5	ND		10	2.5	ND		10	2.5
8141A	Ronnel	water	ug/L	ND		10	0.11	ND		10	0.11	ND		10	0.11	ND		10	0.11

Table 4.10--Analytical results of surface-water monitoring at Rio Grande at La Joya, 2002-2003

Method	Parameter	Matrix	Unit	23-Jul-02				10-Sep-02				13-Dec-02				25-Feb-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
8141A	Simazine	water	ug/L	ND		10	0.46	ND		10	0.46	ND		10	0.46	ND		10	0.46
8141A	Sulfotepp	water	ug/L	ND		0.5	0.03	ND		0.5	0.03	ND		0.5	0.03	ND		0.5	0.03
8141A	Tetrachlorvinphos (Stirophos)	water	ug/L	ND		2.5	0.056	ND		2.5	0.056	ND		2.5	0.056	ND		2.5	0.056
8141A	Thionazin	water	ug/L	ND		0.5	0.059	ND		0.5	0.059	ND		0.5	0.059	ND		0.5	0.059
8141A	Tokuthion	water	ug/L	ND		0.5	0.071	ND		0.5	0.071	ND		0.5	0.071	ND		0.5	0.071
8141A	Trichloronate	water	ug/L	ND		0.5	0.057	ND		0.5	0.057	ND		0.5	0.057	ND		0.5	0.057
8141A	O,O,O-Triethyl phosphorothioate	water	ug/L	ND		0.5	0.15	ND		0.5	0.15	ND		0.5	0.15	ND		0.5	0.15
8081A	Aldrin	sediment	ug/kg	ND		2.1	0.48	ND		2.9	0.46	ND		45	7.1	ND		2.2	0.35
8081A	alpha-BHC	sediment	ug/kg	ND		2.1	0.46	ND		2.9	0.42	ND		45	6.6	ND		2.2	0.32
8081A	beta-BHC	sediment	ug/kg	ND		2.1	0.42	ND		2.9	0.46	ND		45	7.1	ND		2.2	0.35
8081A	Chlordane (technical)	sediment	ug/kg	ND		21	3.1	ND		29	4.2	ND		450	3.3	ND		22	3.2
8081A	delta-BHC	sediment	ug/kg	0.47	J COL	2.1	0.14	ND		2.9	1.1	ND		45	16	ND		2.2	0.8
8081A	Dieldrin	sediment	ug/kg	ND		2.1	0.67	ND		2.9	0.41	ND		45	6.4	ND		2.2	0.31
8081A	Endosulfan I	sediment	ug/kg	ND		2.1	0.47	ND		2.9	0.63	ND		45	9.8	ND		2.2	0.48
8081A	Endosulfan II	sediment	ug/kg	ND		2.1	0.82	ND		2.9	0.71	ND		45	11	ND		2.2	0.54
8081A	Endosulfan sulfate	sediment	ug/kg	ND		2.1	0.36	ND		2.9	0.68	ND		45	11	ND		2.2	0.51
8081A	Endrin	sediment	ug/kg	ND		2.1	0.47	ND		2.9	0.69	ND		45	11	ND		2.2	0.53
8081A	Endrin aldehyde	sediment	ug/kg	ND		2.1	1.9	ND		2.9	1.4	ND		45	23	ND		2.2	1.1
8081A	gamma-BHC (Lindane)	sediment	ug/kg	ND		2.1	0.87	ND		2.9	0.41	ND		45	6.4	ND		2.2	0.31
8081A	Heptachlor	sediment	ug/kg	ND		2.1	0.58	ND		2.9	0.53	ND		45	8.2	ND		2.2	0.4
8081A	Heptachlor epoxide	sediment	ug/kg	ND		8.3	0.45	ND		11	0.37	ND		180	5.8	ND		8.6	0.28
8081A	Methoxychlor	sediment	ug/kg	ND		4.1	0.21	ND		5.6	1.3	ND		87	21	ND		4.2	1
8081A	Toxaphene	sediment	ug/kg	ND		210	12	ND		290	17	ND		4500	260	ND		220	13
8081A	4,4'-DDD	sediment	ug/kg	ND		2.1	0.36	ND		2.9	0.59	ND		45	9.3	ND		2.2	0.45
8081A	4,4'-DDE	sediment	ug/kg	ND		2.1	0.4	ND		2.9	0.75	ND		45	12	ND		2.2	0.57
8081A	4,4'-DDT	sediment	ug/kg	ND		2.1	0.41	ND		2.9	0.81	ND		45	13	ND		2.2	0.62
8081A	Aldrin	fish	ug/kg	--		--	--	ND		24	8.8	--		--	--	--	f	--	--
8081A	alpha-BHC	fish	ug/kg	--		--	--	ND		24	2.4	--		--	--	--	f	--	--
8081A	alpha-Chlordane	fish	ug/kg	--		--	--	ND		24	2.4	--		--	--	--	f	--	--
8081A	beta-BHC	fish	ug/kg	--		--	--	ND		24	2.4	--		--	--	--	f	--	--
8081A	delta-BHC	fish	ug/kg	--		--	--	ND		24	2.4	--		--	--	--	f	--	--
8081A	Dieldrin	fish	ug/kg	--		--	--	ND		24	2.4	--		--	--	--	f	--	--
8081A	Endosulfan I	fish	ug/kg	--		--	--	ND		24	2.4	--		--	--	--	f	--	--
8081A	Endosulfan II	fish	ug/kg	--		--	--	ND		24	2.4	--		--	--	--	f	--	--
8081A	Endosulfan sulfate	fish	ug/kg	--		--	--	ND		24	12	--		--	--	--	f	--	--
8081A	Endrin	fish	ug/kg	--		--	--	ND		24	2.4	--		--	--	--	f	--	--
8081A	Endrin aldehyde	fish	ug/kg	--		--	--	6.2	J	24	2.4	--		--	--	--	f	--	--
8081A	Endrin ketone	fish	ug/kg	--		--	--	ND		24	2.4	--		--	--	--	f	--	--
8081A	gamma-BHC (Lindane)	fish	ug/kg	--		--	--	ND		24	2.4	--		--	--	--	f	--	--
8081A	gamma-Chlordane	fish	ug/kg	--		--	--	ND		24	7.2	--		--	--	--	f	--	--
8081A	Heptachlor	fish	ug/kg	--		--	--	ND		24	2.4	--		--	--	--	f	--	--
8081A	Heptachlor epoxide	fish	ug/kg	--		--	--	ND		88	2.2	--		--	--	--	f	--	--
8081A	Methoxychlor	fish	ug/kg	--		--	--	ND		44	2.2	--		--	--	--	f	--	--
8081A	Toxaphene	fish	ug/kg	--		--	--	ND		240	130	--		--	--	--	f	--	--
8081A	4,4'-DDD	fish	ug/kg	--		--	--	ND		24	2.4	--		--	--	--	f	--	--
8081A	4,4'-DDE	fish	ug/kg	--		--	--	ND		24	2.4	--		--	--	--	f	--	--
8081A	4,4'-DDT	fish	ug/kg	--		--	--	ND		24	5.6	--		--	--	--	f	--	--
	Explosives																		
8330	HMX	water	ug/L	ND		0.25	0.19	ND		0.25	0.1	ND		0.25	0.03	ND		0.25	0.03
8330	Nitrobenzene	water	ug/L	ND		0.25	0.08	ND		0.25	0.1	ND		0.25	0.04	ND		0.25	0.04
8330	Nitroglycerin	water	ug/L	ND		2.5	0.9	ND		2.5	0.6	ND		2.5	0.3	ND		2.5	0.3
8330	PETN	water	ug/L	ND		2.5	1.3	ND		2.5	0.7	ND		2.5	0.5	ND		2.5	0.5
8330	RDX	water	ug/L	ND		0.25	0.17	ND		0.25	0.08	ND		0.25	0.03	ND		0.25	0.03
8330	Tetryl	water	ug/L	ND		0.5	0.15	ND		0.5	0.1	ND		0.5	0.03	ND		0.5	0.03
8330	1,3,5-Trinitrobenzene	water	ug/L	ND		0.25	0.092	ND		0.25	0.09	ND		0.25	0.03	ND		0.25	0.03
8330	1,3-Dinitrobenzene	water	ug/L	ND		0.25	0.11	ND		0.25	0.1	ND		0.25	0.03	ND		0.25	0.03
8330	2,4,6-Trinitrotoluene	water	ug/L	ND		0.25	0.089	ND		0.25	0.1	ND		0.25	0.05	ND		0.25	0.05
8330	2,4-Dinitrotoluene	water	ug/L	ND		0.25	0.1	ND		0.25	0.1	ND		0.25	0.04	ND		0.25	0.04
8330	2,6-Dinitrotoluene	water	ug/L	ND		0.25	0.15	ND		0.25	0.1	ND		0.25	0.03	ND		0.25	0.03
8330	2-Amino-4,6-dinitrotoluene	water	ug/L	ND		0.25	0.12	ND		0.25	0.1	ND		0.25	0.04	ND		0.25	0.04
8330	2-Nitrotoluene	water	ug/L	ND		0.25	0.16	ND		0.25	0.09	ND		0.25	0.04	ND		0.25	0.04
8330	3-Nitrotoluene	water	ug/L	ND		0.25	0.18	ND		0.25	0.09	ND		0.25	0.09	ND		0.25	0.09
8330	4-Amino-2,6-dinitrotoluene	water	ug/L	ND		0.25	0.1	ND		0.25	0.1	ND		3.2	0.05	ND		3.2	0.05
8330	4-Nitrotoluene	water	ug/L	ND		0.25	0.23	ND		0.25	0.2	ND		0.4	0.05	ND		0.4	0.05
	Polyaromatic hydrocarbons																		
8310	Acenaphthene	sediment	ug/kg	ND		1200	24	ND		340	6.6	ND		260	5.2	ND		260	5
8310	Acenaphthylene	sediment	ug/kg	ND		1200	74	ND		340	20	ND		260	16	ND		260	15
8310	Anthracene	sediment	ug/kg	ND		120	16	ND		34	4.4	ND		26	3.4	ND		26	3.3
8310	Benzo(a)anthracene	sediment	ug/kg	ND		120	31	ND		34	8.5	ND		26	6.6	ND		26	6.4
8310	Benzo(a)pyrene	sediment	ug/kg	ND		120	11	ND		34	3.1	ND		26	2.4	ND		26	2.3

Table 4.10--Analytical results of surface-water monitoring at Rio Grande at La Joya, 2002-2003

Method	Parameter	Matrix	Unit	23-Jul-02				10-Sep-02				13-Dec-02				25-Feb-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
8310	Benzo(b)fluoranthene	sediment	ug/kg	ND		120	24	ND		34	6.6	ND		26	5.2	ND		26	5
8310	Benzo(ghi)perylene	sediment	ug/kg	ND		250	16	ND		68	4.4	3.8	J COL	53	3.4	ND		51	3.3
8310	Benzo(k)fluoranthene	sediment	ug/kg	ND		120	14	ND		34	3.9	ND		26	3	ND		26	3
8310	Chrysene	sediment	ug/kg	ND		250	15	ND		68	4.1	ND		53	3.2	ND		51	3.1
8310	Dibenzo(a,h)anthracene	sediment	ug/kg	ND		250	28	24	J	68	7.8	ND		53	6.1	ND		51	5.9
8310	Fluoranthene	sediment	ug/kg	ND		250	53	ND		68	14	ND		53	11	ND		51	11
8310	Fluorene	sediment	ug/kg	ND		250	54	ND		68	15	ND		53	12	ND		51	11
8310	Indeno(1,2,3-cd)pyrene	sediment	ug/kg	ND		250	14	ND		68	3.9	ND		53	3	ND		51	3
8310	Naphthalene	sediment	ug/kg	ND		1200	74	ND		340	20	ND		260	16	ND		260	15
8310	Phenanthrene	sediment	ug/kg	ND		250	20	ND		68	5.6	ND		53	4.4	ND		51	4.2
8310	Pyrene	sediment	ug/kg	ND		250	43	ND		68	12	ND		53	9.1	ND		51	8.9
8310	1-Methylnaphthalene	sediment	ug/kg	ND		1200	43	26	J COL	340	12	15	J COL	260	9.3	ND		260	9
8310	2-Methylnaphthalene	sediment	ug/kg	ND		1200	20	ND		340	5.6	ND		260	4.4	ND		260	4.2
	Total Petroleum Hydrocarbons																		
9071B	n-Hexane Ext. Material	sediment	mg/kg	2400		620	200	ND		850	270	ND		660	210	ND		640	210
9071B	SGT-HEM (Petroleum Hydrocarbons)	sediment	mg/kg	ND		620	150	ND		850	200	ND		660	160	ND		640	150
	Pharmaceuticals																		
ITMS	Amitriptyline	water	ng/L	ND		10	--	ND		10	--	ND		10	--	ND		10	--
ITMS	Beta-Estradiol	water	ng/L	ND		10	--	ND		10	--	ND		10	--	ND		10	--
ITMS	Caffeine	water	ng/L	ND		10	--	ND		10	--	ND		10	--	ND		10	--
ITMS	Cholesterol	water	ng/L	ND		10	--	ND		10	--	ND		10	--	ND		10	--
ITMS	Desipramine	water	ng/L	ND		10	--	ND		10	--	ND		10	--	ND		10	--
ITMS	Dextro-Norgestrel	water	ng/L	ND		10	--	ND		10	--	ND		10	--	ND		10	--
ITMS	Doxepin	water	ng/L	ND		10	--	ND		10	--	ND		10	--	ND		10	--
ITMS	Equilin	water	ng/L	ND		10	--	ND		10	--	ND		10	--	ND		10	--
ITMS	Estrone	water	ng/L	ND		10	--	ND		10	--	ND		10	--	ND		10	--
ITMS	Enthynl Estradiol	water	ng/L	ND		10	--	ND		10	--	ND		10	--	ND		10	--
ITMS	Imipramine	water	ng/L	ND		10	--	ND		10	--	ND		10	--	ND		10	--
ITMS	Medroxyprogesterone	water	ng/L	ND		10	--	ND		10	--	ND		10	--	ND		10	--
ITMS	Megestrol Acetate	water	ng/L	ND		10	--	ND		10	--	ND		10	--	ND		10	--
ITMS	Menstranol	water	ng/L	ND		10	--	ND		10	--	ND		10	--	ND		10	--
ITMS	Nordoxepin	water	ng/L	ND		10	--	ND		10	--	ND		10	--	ND		10	--
ITMS	Norethindrone	water	ng/L	ND		10	--	ND		10	--	ND		10	--	ND		10	--
ITMS	Norethynodrel	water	ng/L	ND		10	--	ND		10	--	ND		10	--	ND		10	--
ITMS	Nortriptyline	water	ng/L	ND		10	--	ND		10	--	ND		10	--	ND		10	--
ITMS	Paroxetine	water	ng/L	ND		10	--	ND		10	--	ND		10	--	ND		10	--
ITMS	Phenytoin	water	ng/L	ND		10	--	ND		10	--	ND		10	--	ND		10	--
ITMS	Prednisone	water	ng/L	ND		10	--	ND		10	--	ND		10	--	ND		10	--
ITMS	Progesterone	water	ng/L	ND		10	--	ND		10	--	ND		10	--	ND		10	--
ITMS	Propoxyphene	water	ng/L	ND		10	--	ND		10	--	ND		10	--	ND		10	--
ITMS	Protroptyline	water	ng/L	ND		10	--	ND		10	--	ND		10	--	ND		10	--
ITMS	Prozac	water	ng/L	ND		10	--	ND		10	--	ND		10	--	ND		10	--
ITMS	Setraline	water	ng/L	ND		10	--	ND		10	--	ND		10	--	ND		10	--
ITMS	Tamoxifen	water	ng/L	ND		10	--	ND		10	--	ND		10	--	ND		10	--
ITMS	Trimipramine maleate	water	ng/L	ND		10	--	ND		10	--	ND		10	--	ND		10	--
ITMS	6 alpha-Methyprednisolone	water	ng/L	ND		10	--	ND		10	--	ND		10	--	ND		10	--
	Grain size analysis																		
D422	Maximum particle size	sediment	--	medium sand	--	--		medium sand	--	--		medium sand	--	--		medium sand	--	--	
D422	Particle size, 850 microns, sand	sediment	%	0.1	0.1	--		0.3	0.1	--		0.2	0.1	--		0.8	0.1	--	
D422	Particle size, 425 microns, sand	sediment	%	3.4	0.1	--		3.1	0.1	--		0.4	0.1	--		8.6	0.1	--	
D422	Particle size, 250 microns, sand	sediment	%	18.1	0.1	--		6.4	0.1	--		2.1	0.1	--		27.1	0.1	--	
D422	Particle size, 180 microns, sand	sediment	%	20.5	0.1	--		5.1	0.1	--		2.6	0.1	--		25.8	0.1	--	
D422	Particle size, 150 microns, sand	sediment	%	9.5	0.1	--		1.7	0.1	--		2.3	0.1	--		10.8	0.1	--	
D422	Particle size, 75 microns, sand	sediment	%	20.4	0.1	--		4.4	0.1	--		31.4	0.1	--		19.0	0.1	--	
D422	Particle size, 36.2 microns, silt	sediment	%	--	--	--		--	--	--		--	--	--		3.4	0.1	--	
D422	Particle size, 33.5 microns, silt	sediment	%	--	--	--		--	--	--		36.5	0.1	--			--	--	
D422	Particle size, 33.1 microns, silt	sediment	%	7.9	0.1	--		--	--	--		--	--	--			--	--	
D422	Particle size, 29.0 microns, silt	sediment	%	--	--	--		3.8	0.1	--		--	--	--			--	--	
D422	Particle size, 23.1 microns, silt	sediment	%	--	--	--		--	--	--		--	--	--		0.9	0.1	--	
D422	Particle size, 22.0 microns, silt	sediment	%	--	--	--		--	--	--		6.3	0.1	--			--	--	
D422	Particle size, 21.6 microns, silt	sediment	%	5.1	0.1	--		--	--	--		--	--	--			--	--	
D422	Particle size, 19.1 microns, silt	sediment	%	--	--	--		9.2	0.1	--		--	--	--			--	--	
D422	Particle size, 13.4 microns, silt	sediment	%	--	--	--		--	--	--		--	--	--		0.0	0.1	--	
D422	Particle size, 13.0 microns, silt	sediment	%	--	--	--		--	--	--		4.5	0.1	--			--	--	
D422	Particle size, 12.8 microns, silt	sediment	%	4.2	0.1	--		--	--	--		--	--	--			--	--	
D422	Particle size, 11.7 microns, silt	sediment	%	--	--	--		13.9	0.1	--		--	--	--			--	--	
D422	Particle size, 9.3 microns, silt	sediment	%	--	--	--		--	--	--		--	--	--		0.0	0.1	--	
D422	Particle size, 9.1 microns, silt	sediment	%	1.7	0.1	--		--	--	--		1.8	0.1	--			--	--	
D422	Particle size, 8.3 microns, silt	sediment	%	--	--	--		10.8	0.1	--		--	--	--			--	--	
D422	Particle size, 6.8 microns, silt	sediment	%	--	--	--		--	--	--		0.9	0.1	--		0.5	0.1	--	

Table 4.10--Analytical results of surface-water monitoring at Rio Grande at La Joya, 2002-2003

Method	Parameter	Matrix	Unit	23-Jul-02				10-Sep-02				13-Dec-02				25-Feb-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
D422	Particle size, 6.7 microns, silt	sediment	%	2.5		0.1	--	--		--	--	--		--	--			--	--
D422	Particle size, 6.2 microns, silt	sediment	%	--		--	--	6.2		0.1	--	--		--	--			--	--
D422	Particle size, 3.4 microns, clay	sediment	%	--		--	--	--		--	--	0.9		0.1	--			--	--
D422	Particle size, 3.2 microns, clay	sediment	%	1.6		0.1	--	--		--	--	--		--	--	0.0		0.1	--
D422	Particle size, 3.1 microns, clay	sediment	%	--		--	--	12.1		0.1	--	--		--	--			--	--
D422	Particle size, 1.4 microns, clay	sediment	%	1.9		0.1	--	6.4		0.1	--	1.8		0.1	--	0.5		0.1	--
D422	Particle size, less than 1.4 microns, clay	sediment	%	3.0		0.1	--	16.7		0.1	--	8.1		0.1	--	2.3		0.1	--

[1] See table 5 for description of qualifier codes.

[2] Reporting limit -- the lowest level at which measurements become quantitatively meaningful, ie., the quantitation limit, which is approximately three times the method detection limit. Reporting limits cannot be less than the statistically determined method detection limit.

[3] Method detection limit -- the minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero and is determined from replicate analyses of low level standards in a typical representative matrix.

PROVISIONAL DATA--SUBJECT TO REVISION

Table 4.11--Analytical results of surface-water monitoring at Rio Grande at Lemitar

[Field parameters measured by field staff. Laboratory analyses performed by Severn Trent Laboratory and the New Mexico Scientific Laboratory (pharmaceuticals). --, no data; °C, degrees Celsius; mm of Hg, millimeters of mercury; ft^3/sec, cubic feet per second; mg/L, milligram per liter; %, percent; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units; ug/L, micrograms per liter; g/kg, grams per kilogram; mg/kg, milligram per kilogram; ug/kg, micrograms per kilogram; ITMS, Ion trap mass spectrometer; ng/L, nanograms per liter; n/a, not applicable.]

Method	Parameter	Matrix	Unit	21-Aug-02				15-Jan-03			
				Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]	Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]
--	Station identification number	--	--	341105106530210		--	--	341103106530210		--	--
--	Latitude/Longitude	--	--	341105/1065302		--	--	341103/1065302		--	--
--	Time	--	--	1030		--	--	1115		--	--
	Field parameters										
170.1	Air temperature	air	°C	24.6		0.1	0.01	8.4		0.1	0.01
170.1	Water temperature	water	°C	27.3		0.1	0.01	6.3		0.1	0.01
--	Barometric pressure	air	mm of Hg	645		--	--	647		--	--
--	Discharge, instantaneous	water	ft^3/s	45		--	--	530		--	--
150.1	pH - unfiltered	water	--	7.7		0.1	0.01	8.2		0.1	0.01
--	Dissolved oxygen	water	mg/L	5.4		0.1	0.01	10.5		0.1	0.01
--	Dissolved oxygen, saturation	water	%	81		1	0.01	85		1	0.01
120.1	Specific conductance - unfiltered	water	uS/cm	794		1	1	364		1	1
180.1	Turbidity	water	NTU	--		1	0.1	203		1	0.1
310.1	Alkalinity, as $CaCO_3$	water	mg/L	123		1	0.1	159		1	0.1
310.1	Bicarbonate, as HCO_3	water	mg/L	149		1	0.1	191		1	0.1
310.1	Carbonate, as CO_3	water	mg/L	0.4		0.1	0.1	1.3		0.1	0.1
	General chemistry										
130.2	Hardness, as $CaCO_3$	water	mg/L	5500	J Q	120	50	190	J	5	2
160.1	Total dissolved solids	water	mg/L	580	J G	100	50	400		10	5
160.2	Total suspended solids	water	mg/L	8700	Q	100	45	290	Q	10	4.5
314	Perchlorate	water	ug/L	ND		20	1.5	ND		20	0.2
405.1	Biochemical oxygen demand (BOD)	water	mg/L	6.7		2.0	0.23	ND		2	0.23
410.4	Chemical oxygen demand (COD)	water	mg/L	43		20	3.5	ND		20	3.5
9060	Total organic carbon	sediment	g/kg	9.0	J	2.0	0.59	4.6		2.7	0.8
D2216	Moisture	sediment	%	28		0.1	--	26		0.1	--
D2216	Moisture	fish	%	--		--	--	--	f	--	--
Total Residue	Lipids (Red shiner and Fathead minnow))	fish	%	--		--	--	0.5		0.1	
	Common anions										
300.0A	Bromide	water	mg/L	0.25		0.2	0.03	0.3		0.2	0.03
300.0A	Chloride	water	mg/L	56	J Q	15.0	0.5	41		3	0.1
300.0A	Fluoride	water	mg/L	0.68	B	1.0	0.03	0.62	B	1	0.03
300.0A	Nitrate	water	mg/L	1		0.5	0.03	0.66		0.5	0.03
300.0A	Nitrite	water	mg/L	ND		0.5	0.04	ND		0.5	0.04
300.0A	Phosphate as P, Ortho	water	mg/L	0.14	B	0.5	0.04	0.13	B	0.5	0.04
300.0A	Sulfate	water	mg/L	130	Q	25.0	1	100	Q	25	1
9012A	Cyanide, Total	water	mg/L	0.0024	B	0.01	0.002	0.0043	B	0.01	0.0039
9012A	Cyanide, Total	sediment	mg/kg	0.69	B J	0.70	0.12	0.39	B J	0.67	0.13
9056	Bromide	sediment	mg/kg	ND		2.8	0.42	ND		2.7	0.4
9056	Chloride	sediment	mg/kg	41	B J	42	1.4	26	B J	40	1.3
9056	Fluoride	sediment	mg/kg	4.6	B	14	0.42	2.4	B J	13	0.4
9056	Nitrate	sediment	mg/kg	2.8	B	7.0	0.42	2.7	B J	6.7	0.4
9056	Nitrite	sediment	mg/kg	ND		7.0	0.56	ND		6.7	0.54

Table 4.11--Analytical results of surface-water monitoring at Rio Grande at Lemitar

Method	Parameter	Matrix	Unit	21-Aug-02				15-Jan-03			
				Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]	Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]
9056	Phosphate as P, Ortho	sediment	mg/kg	ND		7.0	0.56	2.4	B	6.7	0.54
9056	Sulfate	sediment	mg/kg	100		70	2.8	57	B J	67	2.7
	Nutrients										
350.1	Ammonia as N	water	mg/L	0.06	B	0.1	0.015	0.03	B	0.1	0.015
351.2	Total Kjeldahl Nitrogen	water	mg/L	1		0.5	0.14	1.8	B	0.5	0.083
353.2	Nitrate-Nitrite	water	mg/L	0.95		0.1	0.012	0.53		0.1	0.012
354.1	Nitrite	water	mg/L	0.013		0.01	0.002	0.0031	B	0.01	0.002
365.3	Total phosphorus	water	mg/L	9.1	J Q	0.25	0.065	0.66	J	0.05	0.013
350.1	Ammonia as N	sediment	mg/kg	0.65	B J	1.4	0.21	0.93	B	1.3	0.2
351.2	Total Kjeldahl Nitrogen	sediment	mg/kg	290		70	28	670		67	15
353.2	Nitrate-Nitrite	sediment	mg/kg	0.44	B J	1.4	0.17	0.17	B J	1.3	0.16
354.1	Nitrite	sediment	mg/kg	0.12	B	0.14	0.056	0.072	B J	0.13	0.054
365.3	Total phosphorus	sediment	mg/kg	310	J Q	35	8.4	1800	Q	340	81
	Trace elements										
6020	Antimony	water	ug/L	0.38	B	2.0	0.04	0.25	B	2	0.04
6020	Arsenic	water	ug/L	2.9	B	5.0	0.061	5.5		5	0.061
6020	Barium	water	ug/L	98		1.0	0.057	93	J	1	0.057
6020	Beryllium	water	ug/L	ND		1.0	0.028	--		--	--
6020	Cadmium	water	ug/L	0.024	B	1.0	0.022	0.028	B	1	0.022
6020	Chromium	water	ug/L	0.79	B	2.0	0.24	1.1	B J	2	0.24
6020	Cobalt	water	ug/L	0.54	B	1.0	0.015	0.52	B	1	0.015
6020	Copper	water	ug/L	2.4		2.0	0.63	0.93	B	2	0.63
6020	Lead	water	ug/L	0.2	B	1.0	0.15	ND		1	0.15
6020	Manganese	water	ug/L	4.3	J	1.0	0.061	4.9		1	0.061
6020	Molybdenum	water	ug/L	4.8	J	2.0	0.023	5.9		2	0.023
6020	Nickel	water	ug/L	2		2.0	0.25	0.63	B J	2	0.25
6020	Selenium	water	ug/L	0.59	B	5.0	0.19	0.23	B	5	0.19
6020	Silver	water	ug/L	0.026	B	5.0	0.012	ND		5	0.012
6020	Thallium	water	ug/L	0.024	B J	1.0	0.015	ND		1	0.015
6020	Tin	water	ug/L	0.16	B	10	0.054	0.15	B	10	0.054
6020	Uranium	water	ug/L	2.4	J	1.0	0.0015	3		1	0.0015
6020	Vanadium	water	ug/L	12		5.0	0.07	4.1	B	5	0.07
6020	Zinc	water	ug/L	9.5	B	10	2.3	4.1	B J	10	2.3
7470A	Mercury	water	ug/L	ND		0.2	0.028	ND		0.2	0.015
6010B	Aluminum	water	ug/L	61	B	100	20	ND		100	20
6010B	Beryllium	water	ug/L	--		--	--	0.47	B J	5	0.22
6010B	Boron	water	ug/L	110		100	5.2	150		100	5.2
6010B	Calcium	water	ug/L	55000		200	31	55000		200	31
6010B	Iron	water	ug/L	63	B	100	13	37	B	100	13
6010B	Lithium	water	ug/L	43		10	2.1	71		10	2.1
6010B	Magnesium	water	ug/L	10000		200	24	10000		200	24
6010B	Potassium	water	ug/L	5500		3000	490	5300		3000	490
6010B	Silica	water	ug/L	20000		1100	23	25000		1100	23
6010B	Sodium	water	ug/L	77000		5000	1500	64000		5000	1500
6010B	Strontium	water	ug/L	840		10	0.35	530		10	0.35
6010B	Titanium	water	ug/L	ND		10	3.3	1.8	B	10	0.97
6020	Antimony	sediment	mg/kg	ND		0.28	0.0041	0.0083	B	0.27	0.0039
6020	Arsenic	sediment	mg/kg	2.6		0.70	0.024	2.3		0.67	0.023
6020	Barium	sediment	mg/kg	160	J	0.14	0.034	150	J	0.13	0.032

Table 4.11--Analytical results of surface-water monitoring at Rio Grande at Lemitar

Method	Parameter	Matrix	Unit	21-Aug-02				15-Jan-03			
				Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]	Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]
6020	Beryllium	sediment	mg/kg	0.49		0.14	0.0061	--		--	--
6020	Cadmium	sediment	mg/kg	0.088	B	0.14	0.002	0.094	B J	0.13	0.0019
6020	Chromium	sediment	mg/kg	12	J	0.28	0.025	9.6	J	0.27	0.024
6020	Cobalt	sediment	mg/kg	5.5		0.14	0.0017	4.7	J	0.13	0.0016
6020	Copper	sediment	mg/kg	9.0	J	0.28	0.021	7.3	J	0.27	0.02
6020	Lead	sediment	mg/kg	7.7	J	0.14	0.0059	5.8	J	0.13	0.0057
6020	Manganese	sediment	mg/kg	260	J	0.14	0.032	250	J	0.13	0.031
6020	Molybdenum	sediment	mg/kg	0.17	B	0.28	0.0031	0.14	B J	0.27	0.003
6020	Nickel	sediment	mg/kg	9.9		0.14	0.018	8.8	J	0.13	0.018
6020	Selenium	sediment	mg/kg	0.31	B	0.70	0.068	0.3	B	0.67	0.066
6020	Silver	sediment	mg/kg	0.069	B	0.14	0.0032	0.056	B	0.13	0.0031
6020	Thallium	sediment	mg/kg	0.12	B	0.14	0.0014	0.078	B J	0.13	0.0013
6020	Tin	sediment	mg/kg	ND		1.4	0.11	0.18	B J	1.3	0.11
6020	Uranium	sediment	mg/kg	0.73		0.14	0.0025	0.49	J	0.13	0.0024
6020	Vanadium	sediment	mg/kg	28	J	0.70	0.0078	20	J	0.67	0.0076
6020	Zinc	sediment	mg/kg	35		1.4	0.49	29	J	1.3	0.47
7471A	Mercury	sediment	mg/kg	0.012	B	0.046	0.0035	0.014	B	0.045	0.0034
6010B	Aluminum	sediment	mg/kg	11000		14	2.9	10000	J	13	2.8
6010B	Beryllium	sediment	mg/kg	--		--	--	0.58	B	0.67	0.046
6010B	Boron	sediment	mg/kg	3.2	B	14	0.52	1.5	B	13	0.5
6010B	Calcium	sediment	mg/kg	17000		28	11	21000	J	27	11
6010B	Iron	sediment	mg/kg	12000		14	2.2	12000	J	13	2.2
6010B	Lithium	sediment	mg/kg	10		7.0	0.15	11		6.7	0.15
6010B	Magnesium	sediment	mg/kg	3900		28	2.1	4300	J	27	2
6010B	Potassium	sediment	mg/kg	2000		420	49	1800		400	47
6010B	Sodium	sediment	mg/kg	ND		700	84	ND		670	81
6010B	Strontium	sediment	mg/kg	79		1.4	0.021	100		1.3	0.067
6010B	Titanium	sediment	mg/kg	250		1.4	0.17	280	J	1.3	0.16
6020	Antimony	fish	mg/kg	--		--	--	ND		0.2	0.02
6020	Arsenic	fish	mg/kg	--		--	--	0.14	B	0.5	0.0076
6020	Beryllium	fish	mg/kg	--		--	--	--		--	--
6020	Cadmium	fish	mg/kg	--		--	--	0.011	B	0.1	0.0027
6020	Chromium	fish	mg/kg	--		--	--	0.25	J	0.2	0.034
6020	Copper	fish	mg/kg	--		--	--	0.81	J	0.2	0.061
6020	Lead	fish	mg/kg	--		--	--	0.062	B	0.1	0.02
6020	Nickel	fish	mg/kg	--		--	--	0.068	B J	0.1	0.011
6020	Selenium	fish	mg/kg	--		--	--	0.92		0.5	0.018
6020	Silver	fish	mg/kg	--		--	--	0.005	B	0.1	0.002
6020	Thallium	fish	mg/kg	--		--	--	0.0046	B	0.1	0.002
6020	Uranium	fish	mg/kg	--		--	--	0.009	B	0.1	0.002
6020	Zinc	fish	mg/kg	--		--	--	60	J	1	0.13
245.6	Mercury	fish	ug/kg	--		--	--	9.8	B	100	5.9
6010B	Aluminum	fish	mg/kg	--		--	--	38		10	3.1
6010B	Barium	fish	mg/kg	--		--	--	2.9		1	0.12
6010B	Beryllium	fish	mg/kg	--		--	--	ND		0.5	0.14
6010B	Boron	fish	mg/kg	--		--	--	ND		10	0.51
6010B	Calcium	fish	mg/kg	--		--	--	6400	J	20	3.2
6010B	Cobalt	fish	mg/kg	--		--	--	0.24	B	1	0.15
6010B	Iron	fish	mg/kg	--		--	--	24		10	2

Table 4.11--Analytical results of surface-water monitoring at Rio Grande at Lemitar

Method	Parameter	Matrix	Unit	21-Aug-02				15-Jan-03			
				Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]	Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]
6010B	Lithium	fish	mg/kg	--		--	--	ND		5	0.22
6010B	Magnesium	fish	mg/kg	--		--	--	290		20	1.5
6010B	Manganese	fish	mg/kg	--		--	--	3.1		1	0.14
6010B	Molybdenum	fish	mg/kg	--		--	--	ND		2	0.24
6010B	Potassium	fish	mg/kg	--		--	--	2100		300	31
6010B	Sodium	fish	mg/kg	--		--	--	630		500	120
6010B	Strontium	fish	mg/kg	--		--	--	17		1	0.15
6010B	Tin	fish	mg/kg	--		--	--	1.8	B J	10	0.42
6010B	Titanium	fish	mg/kg	--		--	--	1.4		1	0.2
6010B	Vanadium	fish	mg/kg	--		--	--	ND		1	0.35
	Volatile organic compounds										
8260B	Acetone	water	ug/L	11		10	2.9	ND		10	2.9
8260B	Benzene	water	ug/L	ND		1	0.27	ND		1	0.27
8260B	Bromodichloromethane	water	ug/L	ND		1	0.35	ND		1	0.35
8260B	Bromoform	water	ug/L	ND		1	0.46	ND		1	0.46
8260B	Bromomethane	water	ug/L	ND		2	0.28	ND		2	0.28
8260B	Carbon disulfide	water	ug/L	ND		1	0.67	ND		1	0.67
8260B	Carbon tetrachloride	water	ug/L	ND		1	0.35	ND		1	0.35
8260B	Chlorobenzene	water	ug/L	ND		1	0.24	ND		1	0.24
8260B	Chloroethane	water	ug/L	ND		2	0.26	ND		2	0.26
8260B	Chloroform	water	ug/L	ND		1	0.29	ND		1	0.29
8260B	Chloromethane	water	ug/L	ND		2	0.26	ND		2	0.26
8260B	cis-1,2-Dichloroethene	water	ug/L	ND		1	0.33	ND		1	0.33
8260B	cis-1,3-Dichloropropene	water	ug/L	ND		1	0.31	ND		1	0.31
8260B	Dibromochloromethane	water	ug/L	ND		1	0.37	ND		1	0.37
8260B	Ethylbenzene	water	ug/L	ND		1	0.51	ND		1	0.51
8260B	Methylene chloride	water	ug/L	ND		5	0.86	ND		5	0.86
8260B	m-Xylene & p-Xylene	water	ug/L	ND		2	0.52	ND		2	0.52
8260B	o-Xylene	water	ug/L	ND		1	0.24	ND		1	0.24
8260B	Styrene	water	ug/L	ND		1	0.28	ND		1	0.28
8260B	Tetrachloroethene	water	ug/L	ND		1	0.27	ND		1	0.27
8260B	Toluene	water	ug/L	ND		1	0.26	ND		1	0.26
8260B	trans-1,2-Dichloroethene	water	ug/L	ND		0.5	0.25	ND		0.5	0.25
8260B	trans-1,3-Dichloropropene	water	ug/L	ND		1	0.36	ND		1	0.36
8260B	Trichloroethene	water	ug/L	ND		1	0.24	ND		1	0.24
8260B	Vinyl chloride	water	ug/L	ND		1	0.26	ND		1	0.26
8260B	Xylenes (total)	water	ug/L	ND		2	0.73	ND		2	0.73
8260B	1,1,1-Trichloroethane	water	ug/L	ND		1	0.32	ND		1	0.32
8260B	1,1,2,2-Tetrachloroethane	water	ug/L	ND		1	0.5	ND		1	0.5
8260B	1,1,2-Trichloroethane	water	ug/L	ND		1	0.41	ND		1	0.41
8260B	1,1-Dichloroethane	water	ug/L	ND		1	0.29	ND		1	0.29
8260B	1,1-Dichloroethene	water	ug/L	ND		1	0.31	ND		1	0.31
8260B	1,2-Dichloroethane	water	ug/L	ND		1	0.43	ND		1	0.43
8260B	1,2-Dichloroethene (total)	water	ug/L	ND		1	0.54	ND		1	0.54
8260B	1,2-Dichloropropane	water	ug/L	ND		1	0.38	ND		1	0.38
8260B	2-Butanone (MEK)	water	ug/L	ND		5	2.4	ND		5	2.4
8260B	2-Hexanone	water	ug/L	ND		5	1.8	ND		5	1.8
8260B	4-Methyl-2-pentanone	water	ug/L	ND		5	1.8	ND		5	1.8
8260B	Acetone	sediment	ug/kg	22	J	28	6.4	17	J	27	4.6

Table 4.11--Analytical results of surface-water monitoring at Rio Grande at Lemitar

Method	Parameter	Matrix	Unit	21-Aug-02				15-Jan-03			
				Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]	Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]
8260B	Benzene	sediment	ug/kg	ND		7	1.2	ND		6.7	0.16
8260B	Bromodichloromethane	sediment	ug/kg	ND		7	1.3	ND		6.7	0.27
8260B	Bromoform	sediment	ug/kg	ND		7	1.3	ND		6.7	0.35
8260B	Bromomethane	sediment	ug/kg	ND		14	1.7	ND		13	0.81
8260B	Carbon disulfide	sediment	ug/kg	ND		7	1.3	0.83	J	6.7	0.32
8260B	Carbon tetrachloride	sediment	ug/kg	ND		7	1.7	ND		6.7	0.34
8260B	Chlorobenzene	sediment	ug/kg	ND		7	1	ND		6.7	0.24
8260B	Chloroethane	sediment	ug/kg	ND		14	1.8	ND		13	0.31
8260B	Chloroform	sediment	ug/kg	ND		14	1.3	ND		13	0.34
8260B	Chloromethane	sediment	ug/kg	ND		14	2.1	ND		13	0.49
8260B	cis-1,2-Dichloroethene	sediment	ug/kg	ND		4	1.2	ND		3.4	0.28
8260B	cis-1,3-Dichloropropene	sediment	ug/kg	ND		7	1.3	ND		6.7	0.49
8260B	Cyclohexane, 1-methyl-4-(1-met	sediment	ug/kg	12	T2	--	--	--		--	--
8260B	Dibromochloromethane	sediment	ug/kg	ND		7	1.3	ND		6.7	0.27
8260B	Ethylbenzene	sediment	ug/kg	ND		7	1.7	ND		6.7	0.36
8260B	Methylene chloride	sediment	ug/kg	ND		7	1.1	7.5	B	6.7	0.55
8260B	m-Xylene & p-Xylene	sediment	ug/kg	ND		4	2.5	ND		3.4	0.57
8260B	o-Xylene	sediment	ug/kg	ND		4	1.4	ND		3.4	0.31
8260B	Styrene	sediment	ug/kg	ND		7	0.92	ND		6.7	0.28
8260B	Tetrachloroethene	sediment	ug/kg	ND		7	1.4	ND		6.7	0.34
8260B	Toluene	sediment	ug/kg	ND		7	1.1	1.5	J	6.7	0.3
8260B	trans-1,2-Dichloroethene	sediment	ug/kg	ND		4	1.1	ND		3.4	0.47
8260B	trans-1,3-Dichloropropene	sediment	ug/kg	ND		7	1.4	ND		6.7	0.57
8260B	Trichloroethene	sediment	ug/kg	ND		7	1.2	ND		6.7	0.39
8260B	Unknown	sediment	ug/kg	15	T1	--	--	---		--	--
8260B	Vinyl chloride	sediment	ug/kg	ND		7	1.5	ND		6.7	0.31
8260B	Xylenes (total)	sediment	ug/kg	ND		7	3.9	ND		6.7	0.76
8260B	.Alpha.-pinene	sediment	ug/kg	7.2	T2	--	--	--		--	--
8260B	1,1,1-Trichloroethane	sediment	ug/kg	ND		7	1.4	ND		6.7	0.35
8260B	1,1,2,2-Tetrachloroethane	sediment	ug/kg	1.6	J B	7	1.5	ND		6.7	0.76
8260B	1,1,2-Trichloroethane	sediment	ug/kg	ND		7	2.1	ND		6.7	0.43
8260B	1,1-Dichloroethane	sediment	ug/kg	ND		7	1.4	ND		6.7	0.28
8260B	1,1-Dichloroethene	sediment	ug/kg	ND		7	1.5	ND		6.7	0.42
8260B	1,2-Dichloroethane	sediment	ug/kg	ND		7	1.4	ND		6.7	0.3
8260B	1,2-Dichloroethene (total)	sediment	ug/kg	ND		7	2.1	ND		6.7	0.4
8260B	1,2-Dichloropropane	sediment	ug/kg	ND		7	1.7	ND		6.7	0.3
8260B	2-Butanone (MEK)	sediment	ug/kg	ND		28	6.6	ND		27	3.6
8260B	2-Hexanone	sediment	ug/kg	ND		28	6.4	ND		27	3.1
8260B	4-Methyl-2-pentanone	sediment	ug/kg	ND		28	5.4	ND		27	2.7
	Herbicides										
8151A	Dalapon	water	ug/L	ND		2.4	0.5	ND		2	0.33
8151A	Dicamba	water	ug/L	ND		2.4	0.097	ND		2	0.086
8151A	Dichlorprop	water	ug/L	--		--	--	ND		4	0.11
8151A	Dinoseb	water	ug/L	ND		0.7	0.11	ND		0.6	0.065
8151A	MCPA	water	ug/L	ND		480	16	ND		400	12
8151A	MCPP	water	ug/L	ND		480	50	ND		400	15
8151A	2,4,5-T	water	ug/L	ND		1.2	0.052	ND		1	0.043
8151A	2,4,5-TP (Silvex)	water	ug/L	ND		1.2	0.041	ND		1	0.036
8151A	2,4-D	water	ug/L	ND		4.8	0.19	ND		4	0.24

Table 4.11--Analytical results of surface-water monitoring at Rio Grande at Lemitar

Method	Parameter	Matrix	Unit	21-Aug-02				15-Jan-03			
				Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]	Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]
8151A	2,4-DB	water	ug/L	ND		4.8	0.25	ND		4	0.098
	Pesticides										
8141A	Anilazine	water	ug/L	ND		10	1.3	ND		10	1.3
8141A	Atrazine	water	ug/L	ND		10	0.52	ND		10	0.52
8141A	Azinphos-methyl	water	ug/L	ND		2.5	0.14	ND		2.5	0.14
8141A	Bolstar	water	ug/L	ND		0.5	0.14	ND		0.5	0.14
8141A	Chlorpyrifos	water	ug/L	ND		0.5	0.054	ND		0.5	0.054
8141A	Coumaphos	water	ug/L	ND		0.5	0.079	ND		0.5	0.079
8141A	Demeton (total)	water	ug/L	ND		1.0	0.19	ND		1	0.19
8141A	Diazinon	water	ug/L	ND		0.5	0.039	ND		0.5	0.039
8141A	Dichlorvos	water	ug/L	ND		0.5	0.13	ND		0.5	0.13
8141A	Dimethoate	water	ug/L	ND		0.5	0.18	ND		0.5	0.18
8141A	Disulfoton	water	ug/L	ND		0.5	0.057	ND		0.5	0.057
8141A	EPN	water	ug/L	ND		0.5	0.05	ND		0.5	0.05
8141A	Ethoprop	water	ug/L	ND		0.5	0.056	ND		0.5	0.056
8141A	Ethyl parathion	water	ug/L	ND		0.5	0.04	ND		0.5	0.04
8141A	Famphur	water	ug/L	ND		1.0	0.054	ND		1	0.054
8141A	Fensulfothion	water	ug/L	ND		2.5	0.22	ND		2.5	0.22
8141A	Fenthion	water	ug/L	ND		0.5	0.061	ND		0.5	0.061
8141A	Malathion	water	ug/L	ND		1.2	0.05	ND		1.2	0.05
8141A	Merphos	water	ug/L	ND		5.0	0.063	ND		5	0.063
8141A	Methyl parathion	water	ug/L	ND		0.5	0.061	ND		0.5	0.061
8141A	Mevinphos	water	ug/L	ND		6.2	0.16	ND		6.2	0.16
8141A	Naled	water	ug/L	ND		10.0	0.22	ND		10	0.22
8141A	Phorate	water	ug/L	ND		0.5	0.075	ND		0.5	0.075
8141A	Propazine	water	ug/L	ND		10.0	2.5	ND		10	2.5
8141A	Ronnel	water	ug/L	ND		10.0	0.11	ND		10	0.11
8141A	Simazine	water	ug/L	ND		10.0	0.46	ND		10	0.46
8141A	Sulfotepp	water	ug/L	ND		0.5	0.03	ND		0.5	0.03
8141A	Tetrachlorvinphos (Stirophos)	water	ug/L	ND		2.5	0.056	ND		2.5	0.056
8141A	Thionazin	water	ug/L	ND		0.5	0.059	ND		0.5	0.059
8141A	Tokuthion	water	ug/L	ND		0.5	0.071	ND		0.5	0.071
8141A	Trichloronate	water	ug/L	ND		0.5	0.057	ND		0.5	0.057
8141A	O,O,O-Triethyl phosphorothioate	water	ug/L	ND		0.5	0.15	ND		0.5	0.15
8081A	Aldrin	sediment	ug/kg	ND		2.4	0.54	ND		23	3.6
8081A	alpha-BHC	sediment	ug/kg	ND		2.4	0.52	ND		23	3.4
8081A	beta-BHC	sediment	ug/kg	ND		2.4	0.47	ND		23	3.6
8081A	Chlordane (technical)	sediment	ug/kg	ND		24.0	3.5	ND		230	34
8081A	delta-BHC	sediment	ug/kg	ND		2.4	0.15	ND		23	8.4
8081A	Dieldrin	sediment	ug/kg	ND		2.4	0.75	ND		23	3.2
8081A	Endosulfan I	sediment	ug/kg	ND		2.4	0.53	ND		23	5
8081A	Endosulfan II	sediment	ug/kg	ND		2.4	0.92	ND		23	5.7
8081A	Endosulfan sulfate	sediment	ug/kg	ND		2.4	0.41	ND		23	5.4
8081A	Endrin	sediment	ug/kg	ND		2.4	0.53	ND		23	5.5
8081A	Endrin aldehyde	sediment	ug/kg	ND		2.4	2.1	ND		23	11
8081A	gamma-BHC (Lindane)	sediment	ug/kg	ND		2.4	0.98	ND		23	3.2
8081A	Heptachlor	sediment	ug/kg	ND		2.4	0.66	ND		23	4.2
8081A	Heptachlor epoxide	sediment	ug/kg	ND		9.4	0.5	ND		90	3
8081A	Methoxychlor	sediment	ug/kg	0.5	J COL	4.6	0.24	ND		45	11

Table 4.11--Analytical results of surface-water monitoring at Rio Grande at Lemitar

Method	Parameter	Matrix	Unit	21-Aug-02				15-Jan-03			
				Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]	Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]
8081A	Toxaphene	sediment	ug/kg	ND		240.0	14	ND		2300	130
8081A	4,4'-DDD	sediment	ug/kg	ND		2.4	0.41	ND		23	4.7
8081A	4,4'-DDE	sediment	ug/kg	1.2	J	2.4	0.45	ND		23	5.9
8081A	4,4'-DDT	sediment	ug/kg	ND		2.4	0.46	ND		23	6.5
8081A	Aldrin	fish	ug/kg	--		--	--	--	f	--	--
8081A	alpha-BHC	fish	ug/kg	--		--	--	--	f	--	--
8081A	alpha-Chlordane	fish	ug/kg	--		--	--	--	f	--	--
8081A	beta-BHC	fish	ug/kg	--		--	--	--	f	--	--
8081A	delta-BHC	fish	ug/kg	--		--	--	--	f	--	--
8081A	Dieldrin	fish	ug/kg	--		--	--	--	f	--	--
8081A	Endosulfan I	fish	ug/kg	--		--	--	--	f	--	--
8081A	Endosulfan II	fish	ug/kg	--		--	--	--	f	--	--
8081A	Endosulfan sulfate	fish	ug/kg	--		--	--	--	f	--	--
8081A	Endrin	fish	ug/kg	--		--	--	--	f	--	--
8081A	Endrin aldehyde	fish	ug/kg	--		--	--	--	f	--	--
8081A	Endrin ketone	fish	ug/kg	--		--	--	--	f	--	--
8081A	gamma-BHC (Lindane)	fish	ug/kg	--		--	--	--	f	--	--
8081A	gamma-Chlordane	fish	ug/kg	--		--	--	--	f	--	--
8081A	Heptachlor	fish	ug/kg	--		--	--	--	f	--	--
8081A	Heptachlor epoxide	fish	ug/kg	--		--	--	--	f	--	--
8081A	Methoxychlor	fish	ug/kg	--		--	--	--	f	--	--
8081A	Toxaphene	fish	ug/kg	--		--	--	--	f	--	--
8081A	4,4'-DDD	fish	ug/kg	--		--	--	--	f	--	--
8081A	4,4'-DDE	fish	ug/kg	--		--	--	--	f	--	--
8081A	4,4'-DDT	fish	ug/kg	--		--	--	--	f	--	--
	Explosives										
8330	HMX	water	ug/L	ND		0.25	0.19	ND		0.25	0.03
8330	Nitrobenzene	water	ug/L	ND		0.25	0.08	ND		0.25	0.04
8330	Nitroglycerin	water	ug/L	ND		2.5	0.9	ND		2.5	0.3
8330	PETN	water	ug/L	ND		2.5	1.3	ND		2.5	0.5
8330	RDX	water	ug/L	ND		0.25	0.17	ND		0.25	0.03
8330	Tetryl	water	ug/L	ND		0.50	0.15	ND		0.5	0.03
8330	1,3,5-Trinitrobenzene	water	ug/L	ND		0.25	0.092	ND		0.25	0.03
8330	1,3-Dinitrobenzene	water	ug/L	ND		0.25	0.11	ND		0.25	0.03
8330	2,4,6-Trinitrotoluene	water	ug/L	ND		0.25	0.089	ND		0.25	0.05
8330	2,4-Dinitrotoluene	water	ug/L	ND		0.25	0.1	ND		0.25	0.04
8330	2,6-Dinitrotoluene	water	ug/L	ND		0.25	0.15	ND		0.25	0.03
8330	2-Amino-4,6-dinitrotoluene	water	ug/L	ND		0.25	0.12	ND		0.25	0.04
8330	2-Nitrotoluene	water	ug/L	ND		0.25	0.16	ND		0.25	0.04
8330	3-Nitrotoluene	water	ug/L	ND		0.25	0.18	ND		0.25	0.09
8330	4-Amino-2,6-dinitrotoluene	water	ug/L	ND		0.25	0.1	ND		3.2	0.05
8330	4-Nitrotoluene	water	ug/L	ND		0.25	0.23	ND		0.4	0.05
	Polyaromatic hydrocarbons										
8310	Acenaphthene	sediment	ug/kg	28	J	280	5.4	ND		270	5.3
8310	Acenaphthylene	sediment	ug/kg	ND		280	17	ND		270	16
8310	Anthracene	sediment	ug/kg	ND		28	3.6	ND		27	3.5
8310	Benzo(a)anthracene	sediment	ug/kg	ND		28	7	ND		27	6.7
8310	Benzo(a)pyrene	sediment	ug/kg	2.5	J COL	28	2.5	ND		27	2.4
8310	Benzo(b)fluoranthene	sediment	ug/kg	ND		28	5.4	ND		27	5.3

Table 4.11--Analytical results of surface-water monitoring at Rio Grande at Lemitar

Method	Parameter	Matrix	Unit	21-Aug-02				15-Jan-03			
				Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]	Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]
8310	Benzo(ghi)perylene	sediment	ug/kg	4	J COL	56	3.6	ND		54	3.5
8310	Benzo(k)fluoranthene	sediment	ug/kg	ND		28	3.2	ND		27	3.1
8310	Chrysene	sediment	ug/kg	ND		56	3.4	ND		54	3.2
8310	Dibenzo(a,h)anthracene	sediment	ug/kg	ND		56	6.4	ND		54	6.2
8310	Fluoranthene	sediment	ug/kg	ND		56	12	ND		54	11
8310	Fluorene	sediment	ug/kg	13	J	56	12	ND		54	12
8310	Indeno(1,2,3-cd)pyrene	sediment	ug/kg	ND		56	3.2	ND		54	3.1
8310	Naphthalene	sediment	ug/kg	46	J	280	17	ND		270	16
8310	Phenanthrene	sediment	ug/kg	ND		56	4.6	7.8	J	54	4.5
8310	Pyrene	sediment	ug/kg	ND		56	9.6	ND		54	9.3
8310	1-Methylnaphthalene	sediment	ug/kg	150	J COL	280	9.8	32	J COL	270	9.4
8310	2-Methylnaphthalene	sediment	ug/kg	58	J COL	280	4.6	ND		270	4.5
	Total Petroleum Hydrocarbons										
9071B	n-Hexane Ext. Material	sediment	mg/kg	ND		700	220	ND		670	220
9071B	SGT-HEM (Petroleum Hydrocarbons)	sediment	mg/kg	ND		700	170	ND		670	160
	Pharmaceuticals										
ITMS	Amitriptyline	water	ng/L	ND		10	--	ND		10	--
ITMS	Beta-Estradiol	water	ng/L	ND		10	--	ND		10	--
ITMS	Caffeine	water	ng/L	ND		10	--	ND		10	--
ITMS	Cholesterol	water	ng/L	ND		11	--	ND		10	--
ITMS	Desipramine	water	ng/L	ND		10	--	ND		10	--
ITMS	Dextro-Norgestrel	water	ng/L	ND		10	--	ND		10	--
ITMS	Doxepin	water	ng/L	ND		10	--	ND		10	--
ITMS	Equilin	water	ng/L	ND		10	--	ND		10	--
ITMS	Estrone	water	ng/L	ND		10	--	ND		10	--
ITMS	Enthynl Estradiol	water	ng/L	ND		10	--	ND		10	--
ITMS	Imipramine	water	ng/L	ND		10	--	ND		10	--
ITMS	Medroxyprogesterone	water	ng/L	ND		10	--	ND		10	--
ITMS	Megestrol Acetate	water	ng/L	ND		10	--	ND		10	--
ITMS	Menstranol	water	ng/L	ND		10	--	ND		10	--
ITMS	Nordoxepin	water	ng/L	ND		10	--	ND		10	--
ITMS	Norethindrone	water	ng/L	ND		10	--	ND		10	--
ITMS	Norethynodrel	water	ng/L	ND		10	--	ND		10	--
ITMS	Nortriptyline	water	ng/L	ND		10	--	ND		10	--
ITMS	Paroxetine	water	ng/L	ND		10	--	ND		10	--
ITMS	Phenytoin	water	ng/L	ND		10	--	ND		10	--
ITMS	Prednisone	water	ng/L	ND		10	--	ND		10	--
ITMS	Progesterone	water	ng/L	ND		10	--	ND		10	--
ITMS	Propoxyphene	water	ng/L	ND		10	--	ND		10	--
ITMS	Protroptyline	water	ng/L	ND		10	--	ND		10	--
ITMS	Prozac	water	ng/L	ND		10	--	ND		10	--
ITMS	Setraline	water	ng/L	ND		10	--	ND		10	--
ITMS	Tamoxifen	water	ng/L	ND		10	--	ND		10	--
ITMS	Trimipramine maleate	water	ng/L	ND		10	--	ND		10	--
ITMS	6 alpha-Methyprednisolone	water	ng/L	ND		10	--	ND		10	--

Table 4.11--Analytical results of surface-water monitoring at Rio Grande at Lemitar

Method	Parameter	Matrix	Unit	21-Aug-02				15-Jan-03			
				Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]	Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]
	Grain size analysis										
D422	Maximum particle size	sediment	--	medium sand		--	--	medium sand		--	--
D422	Particle size, 850 microns, sand	sediment	%	0.1		0.1	--	0.3		0.1	--
D422	Particle size, 425 microns, sand	sediment	%	0.7		0.1	--	0.8		0.1	--
D422	Particle size, 250 microns, sand	sediment	%	10.6		0.1	--	2.2		0.1	--
D422	Particle size, 180 microns, sand	sediment	%	29.2		0.1	--	2.9		0.1	--
D422	Particle size, 150 microns, sand	sediment	%	11.0		0.1	--	7.0		0.1	--
D422	Particle size, 75 microns, sand	sediment	%	10.0		0.1	--	50.4		0.1	--
D422	Particle size, 35.9 microns, silt	sediment	%	--		--	--	24.8		0.1	--
D422	Particle size, 30.1 microns, silt	sediment	%	6.1		0.1	--	--		--	--
D422	Particle size, 23.4 microns, silt	sediment	%	--		--	--	4.6		0.1	--
D422	Particle size, 19.9 microns, silt	sediment	%	5.7		0.1	--	--		--	--
D422	Particle size, 13.7 microns, silt	sediment	%	--		--	--	3.0		0.1	--
D422	Particle size, 12.1 microns, silt	sediment	%	7.3		0.1	--	--		--	--
D422	Particle size, 9.8 microns, silt	sediment	%	--		--	--	1.5		0.1	--
D422	Particle size, 8.6 microns, silt	sediment	%	3.3		0.1	--	--		--	--
D422	Particle size, 7.0 microns, silt	sediment	%	--		--	--	0.8		0.1	--
D422	Particle size, 6.4 microns, silt	sediment	%	1.8		0.1	--	--		--	--
D422	Particle size, 3.4 microns, clay	sediment	%	--		--	--	0.8		0.1	--
D422	Particle size, 3.3 microns, clay	sediment	%	3.4		0.1	--	--		--	--
D422	Particle size, 1.4 microns, clay	sediment	%	3.1		0.1	--	0.0		0.1	--
D422	Particle size, less than 1.4 microns, clay	sediment	%	7.7		0.1	--	1.0		0.1	--

[1] See table 5 for description of qualifier codes.

[2] Reporting limit -- the lowest level at which measurements become quantitatively meaningful, ie., the quantitation limit, which is approximately three times the method detection limit. Reporting limits cannot be less than the statistically determined method detection limit.

[3] Method detection limit -- the minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero and is determined from replicate analyses of low level standards in a typical representative matrix.

Table 4.12--Analytical results of surface-water monitoring at Rio Grande below Arroyo del Tajo, 2002-2003

[Field parameters measured by field staff. Laboratory analyses performed by Severn Trent Laboratory and the New Mexico Scientific Laboratory (pharmaceuticals). --, no data; °C, degrees Celsius; mm of Hg, millimeters of mercury; ft^3/sec, cubic feet per second; mg/L, milligram per liter; %, percent; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units; >, greater than; ug/L, micrograms per liter; g/kg, grams per kilogram; mg/kg, milligram per kilogram; ug/kg, micrograms per kilogram; ITMS, Ion trap mass spectrometer; ng/L, nanograms per liter; n/a, not applicable.]

Method	Parameter	Matrix	Unit	22-Jul-02				9-Sep-02				12-Dec-02				24-Feb-02			
				Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]	Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]	Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]	Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]
--	Latitude/Longitude	--	--	340227106515410		--	--	340224106515010		--	--	340228106515310		--	--	340227106515210		--	--
--	Latitude/Longitude	--	--	340227/1065154		--	--	340224/1065150		--	--	340228/1065153		--	--	340227/1065152		--	--
--	Time	--	--	1345		--	--	1030		--	--	1045		--	--	1030		--	--
	Field parameters																		
170.1	Air temperature	air	°C	26.0		0.1	0.01	22.4		0.1	0.01	7.5		0.1	0.01	12.6		0.1	0.01
170.1	Water temperature	water	°C	22.8		0.1	0.01	23.3		0.1	0.01	5.8		0.1	0.01	8.4		0.1	0.01
--	Barometric pressure	air	mm of Hg	647		--	--	648		--	--	647		--	--	642		--	--
--	Discharge, instantaneous	water	ft^3/s	190		--	--	36		--	--	555		--	--	526		--	--
150.1	pH - unfiltered	water	--	8.2		0.1	0.01	8.4		0.1	0.01	8.2		0.1	0.01	8.2		0.1	0.01
--	Dissolved oxygen	water	mg/L	7.1		0.1	0.01	9.4		0.1	0.01	11.4		0.1	0.01	9.8		0.1	0.01
--	Dissolved oxygen, saturation	water	%	83		1	0.01	111		1	0.01	91		1	0.01	84		1	0.01
120.1	Specific conductance - unfiltered	water	uS/cm	696		1	1	740		1	1	387		1	1	341		1	1
180.1	Turbidity	water	NTU	>1000		1	0.1	>1000		1	0.1	489		1	0.1	612		1	0.1
310.1	Alkalinity, as $CaCO_3$	water	mg/L	151		1	0.1	172		1	0.1	156		1	0.1	149		1	0.1
310.1	Bicarbonate, as HCO_3	water	mg/L	181		1	0.1	205		1	0.1	186		1	0.1	179		1	0.1
310.1	Carbonate, as CO_3	water	mg/L	1.3		0.1	0.1	2.1		0.1	0.1	2.2		0.1	0.1	1.5		0.1	0.1
	General chemistry																		
130.2	Hardness, as $CaCO_3$	water	mg/L	200		5	2	560	J Q	12	5	240	J	5	2	160	J	5	2
160.1	Total dissolved solids	water	mg/L	470	J G	100	50	510	G	20	10	400	G	20	10	320	J G	20	10
160.2	Total suspended solids	water	mg/L	6500	Q	100	45	1700	Q	20	9	460	Q	20	9	810	Q	20	9
314	Perchlorate	water	ug/L	ND		20	1.5	ND		20	1.5	ND	U	20	2.5	ND		1	0.2
405.1	Biochemical oxygen demand (BOD)	water	mg/L	ND		2	0.23	ND		2	0.23	ND		2	0.23	2.2		2	0.31
410.4	Chemical oxygen demand (COD)	water	mg/L	23	J	20	3.5	20		20	3.5	6.6	B	20	3.5	9.4	B	20	3.5
9060	Total organic carbon	sediment	g/kg	7.8		2	0.59	7.3		2	0.59	8.8		2	0.59	2		2	0.59
D2216	Moisture	sediment	%	46		0.1	--	43		0.1	--	27		0.1	--	26		0.1	--
D2216	Moisture (Red Shiner)	fish	%	--		--	--	--	f	--	--	--		--	--	--	f	--	--
D2216	Moisture (Fathead Minnow)	fish	%	--	f	--	--	--	f	--	--	--		--	--	--		--	--
Total Residue	Lipids (Red Shiner)	fish	%	--		--	--	0.24	B	0.1	--	--		--	--	--	f	--	--
Total Residue	Lipids (Fathead Minnow)	fish	%	--	f	--	--	0.67	B	0.1	--	--		--	--	--		--	--
	Common anions																		
300.0A	Bromide	water	mg/L	0.18	B	0.2	0.03	0.27		0.2	0.03	0.21		0.2	0.03	0.28		0.2	0.03
300.0A	Chloride	water	mg/L	43	J	3	0.1	49	Q	15	0.5	37		3	0.1	32		3	0.1
300.0A	Fluoride	water	mg/L	0.58	B	1	0.03	0.57	B	1	0.03	0.72	B	1	0.03	0.64	B	1	0.03
300.0A	Nitrate	water	mg/L	0.62		0.5	0.03	0.3	B	0.5	0.03	0.4	B	0.5	0.03	0.65		0.5	0.03
300.0A	Nitrite	water	mg/L	ND		0.5	0.04	ND		0.5	0.04	ND		0.5	0.04	ND		0.5	0.04
300.0A	Phosphate as P, Ortho	water	mg/L	ND		0.5	0.04	ND		0.5	0.04	ND		0.5	0.04	0.11	B	0.5	0.04
300.0A	Sulfate	water	mg/L	140	Q	25	1	140	Q	25	1	98	Q	25	1	86	Q	25	1
9012A	Cyanide, Total	water	mg/L	0.0056	B J	0.01	0.002	0.0051	B J	0.01	0.002	0.0034	B J	0.01	0.002	0.0047	B	0.01	0.0039
9012A	Cyanide, Total	sediment	mg/kg	0.25	B J	0.93	0.16	0.41	B J	0.88	0.15	ND		0.69	0.12	ND		0.67	0.13
9056	Bromide	sediment	mg/kg	ND		3.7	0.56	ND		3.5	0.53	ND		2.8	0.41	ND		2.7	0.4
9056	Chloride	sediment	mg/kg	50	B J	56	1.9	49	B J	53	1.8	27	B J	41	1.4	15	B J	40	1.3
9056	Fluoride	sediment	mg/kg	6.2	B	19	0.56	6.5	B	18	0.53	3.7	B J	14	0.41	1.7	B	13	0.4
9056	Nitrate	sediment	mg/kg	ND		9.3	0.56	3.5	B	8.8	0.53	2.8	B J	6.9	0.41	1.9	B J	6.7	0.4
9056	Nitrite	sediment	mg/kg	3	B J	9.3	0.75	2.8	B	8.8	0.7	ND		6.9	0.55	ND		6.7	0.54
9056	Phosphate as P, Ortho	sediment	mg/kg	ND		9.3	0.75	ND		8.8	0.7	2.7	B	6.9	0.55	2.3	B	6.7	0.54
9056	Sulfate	sediment	mg/kg	190		93	3.7	150		88	3.5	48	B J	69	2.8	39	B J	67	2.7
	Nutrients																		
350.1	Ammonia as N	water	mg/L	0.018	B	0.1	0.015	0.045	B	0.1	0.015	0.054	B	0.1	0.015	ND		0.1	0.038
351.2	Total Kjeldahl Nitrogen	water	mg/L	0.86		0.5	0.14	0.33	B	0.5	0.14	0.22	B	0.5	0.14	0.15	B	0.5	0.083
353.2	Nitrate-Nitrite	water	mg/L	0.58		0.1	0.01	0.15		0.1	0.012	0.2		0.1	0.012	0.49		0.1	0.012
354.1	Nitrite	water	mg/L	0.0095	B J	0.01	0.002	ND		0.01	0.002	0.0029	B J	0.01	0.002	0.0025	B	0.01	0.0018
365.3	Total phosphorus	water	mg/L	0.28	Q	0.25	0.065	1.6	Q	0.25	0.065	0.53		0.05	0.013	0.18	B G	0.25	0.095
350.1	Ammonia as N	sediment	mg/kg	3.7		1.9	0.28	4.5	J	1.8	0.26	1.2	B J	1.4	0.21	ND		1.3	0.51
351.2	Total Kjeldahl Nitrogen	sediment	mg/kg	730	Q	93	75	660		88	70	520	Q	140	55	110		67	7.7
353.2	Nitrate-Nitrite	sediment	mg/kg	0.41	B J	1.9	0.39	0.46	B J	1.8	0.21	0.29	B J	1.4	0.17	0.25	B J	1.3	0.16
354.1	Nitrite	sediment	mg/kg	0.087	B	0.19	0.075	0.082	B	0.18	0.07	0.12	B	0.14	0.055	0.062	B	0.13	0.024
365.3	Total phosphorus	sediment	mg/kg	35	B Q	47	11	1100	Q	180	42	460	Q	140	33	190	Q	34	8.1
	Trace elements																		
6020	Antimony	water	ug/L	1	B	2	0.04	1.3	B	2	0.04	0.42	B	2	0.04	0.28	B	2	0.04
6020	Arsenic	water	ug/L	4.1	B	5	0.061	4.7	B J	5	0.061	5.1		5	0.061	5		5	0.061
6020	Barium	water	ug/L	110		1	0.057	88		1	0.057	88		1	0.057	84		1	0.057
6020	Beryllium	water	ug/L	ND		1	0.028	0.032	B	1	0.028	--		--	--	--		--	--
6020	Cadmium	water	ug/L	0.028	B	1	0.022	0.027	B	1	0.022	0.045	B	1	0.022	ND		1	0.022
6020	Chromium	water	ug/L	0.59	B	2	0.24	0.42	B	2	0.24	0.54	B	2	0.24	ND		2	0.24
6020	Cobalt	water	ug/L	0.56	B	1	0.015	0.52	B	1	0.015	0.55	B	1	0.015	0.58	B	1	0.015
6020	Copper	water	ug/L	1.8	B	2	0.63	1.6	B	2	0.63	0.8	B	2	0.63	1.8	B	2	0.63
6020	Lead	water	ug/L	ND		1	0.15	ND		1	0.15	ND		1	0.15	ND		1	0.15
6020	Manganese	water	ug/L	0.92	B	1	0.061	0.52	B J	1	0.061	2.9		1	0.061	2.6	J	1	0.061
6020	Molybdenum	water	ug/L	7.2		2	0.023	6.7	J	2	0.023	6.3		2	0.023	6		2	0.023
6020	Nickel	water	ug/L	0.78	B J	2	0.25	3.3		2	0.25	2.2		2	0.25	0.63	B	2	0.25
6020	Selenium	water	ug/L	0.35	B	5	0.19	0.99	B J	5	0.19	0.7	B	5	0.19	0.87	B J	5	0.19
6020	Silver	water	ug/L	0.17	B J	5	0.012	0.11	B J	5	0.012	0.033	B J	5	0.012	ND		5	0.012
6020	Thallium	water	ug/L	0.018	B	1	0.015	0.032	B J	1	0.015	0.027	B	1	0.015	ND		1	0.015
6020	Tin	water	ug/L	1.8	B J	10	0.054	2.9	B	10	0.054	0.41	B J	10	0.054	ND		10	0.054
6020	Uranium	water	ug/L	3.3	J	1	0.0015	2.7	J	1	0.0015	3.2		1	0.0015	3.2		1	0.0015
6020	Vanadium	water	ug/L	7.6		5	0.07	6.6		5	0.07	5.2	J	5	0.07	4.4	B	5	0.07
6020	Zinc	water	ug/L	5.3	B	10	2.3	7.3	B	10	2.3	5.7	B	10	2.3	10		10	2.3
7470A	Mercury	water	ug/L	0.04	B	0.2	0.028	ND		0.2	0.028	ND		0.2	0.015	0.033	B	0.2	0.015
6010B	Aluminum	water	ug/L	39	B	100	20	ND		100	20	22	B	100	20	79	B	100	20

Table 4.12--Analytical results of surface-water monitoring at Rio Grande below Arroyo del Tajo, 2002-2003

Method	Parameter	Matrix	Unit	22-Jul-02				9-Sep-02				12-Dec-02				24-Feb-02			
				Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]	Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]	Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]	Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]
6010B	Beryllium	water	ug/L	--		--	--	--		--	--	0.25	B	5	0.22	ND		5	0.22
6010B	Boron	water	ug/L	120		100	5.2	150		100	5.2	140		100	5.2	130		100	5.2
6010B	Calcium	water	ug/L	62000		200	31	70000		200	31	57000	J	200	31	54000		200	31
6010B	Iron	water	ug/L	20	B	100	13	14	B	100	13	14	B	100	13	70	B	100	13
6010B	Lithium	water	ug/L	52		10	2.1	65		10	2.1	65		10	2.1	69		10	2.1
6010B	Magnesium	water	ug/L	10000		200	24	13000		200	24	10000		200	24	11000		200	24
6010B	Potassium	water	ug/L	6900		3000	490	5000		3000	490	5500		3000	490	5400		3000	490
6010B	Silica	water	ug/L	21000	J	1100	23	22000		1100	23	24000		1100	23	27000		1100	23
6010B	Sodium	water	ug/L	67000		5000	1500	77000		5000	1500	61000		5000	1500	56000		5000	1500
6010B	Strontium	water	ug/L	880		10	0.35	800		10	0.35	540		10	0.35	530	J	10	0.35
6010B	Titanium	water	ug/L	1.5	B	10	0.97	ND		10	0.97	1.7	B	10	0.97	2.2	B	10	0.97
6020	Antimony	sediment	mg/kg	0.11	B J	0.37	0.0054	0.14	B J	0.35	0.0051	0.0045	B J	0.28	0.004	ND		0.27	0.0039
6020	Arsenic	sediment	mg/kg	3.7		0.93	0.032	3.4		0.88	0.03	2.7	J	0.69	0.023	2.3		0.67	0.023
6020	Barium	sediment	mg/kg	230		0.19	0.045	230	J	0.18	0.042	200		0.14	0.033	150		0.13	0.032
6020	Beryllium	sediment	mg/kg	1.2		0.19	0.0082	1		0.18	0.0077	--		--	--	--		--	--
6020	Cadmium	sediment	mg/kg	0.18	B	0.19	0.0026	0.17	B	0.18	0.0025	0.11	B	0.14	0.0019	0.081	B	0.13	0.0019
6020	Chromium	sediment	mg/kg	23	J	0.37	0.034	20	J	0.35	0.032	11	J	0.28	0.025	10	J	0.27	0.024
6020	Cobalt	sediment	mg/kg	9.2		0.19	0.0022	8.7		0.18	0.0021	5.4		0.14	0.0017	4.6		0.13	0.0016
6020	Copper	sediment	mg/kg	20	J	0.37	0.028	15	J	0.35	0.026	9.5		0.28	0.021	6.6	J	0.27	0.02
6020	Lead	sediment	mg/kg	16		0.19	0.0078	14	J	0.18	0.0074	7.8	J	0.14	0.0058	6	J	0.13	0.0057
6020	Manganese	sediment	mg/kg	520	J	0.19	0.043	390	J	0.18	0.04	270	J	0.14	0.032	230		0.13	0.031
6020	Molybdenum	sediment	mg/kg	0.38	J	0.37	0.0041	0.3	B J	0.35	0.0039	0.12	B J	0.28	0.003	0.13	B J	0.27	0.003
6020	Nickel	sediment	mg/kg	19		0.19	0.024	16	J	0.18	0.023	10	J	0.14	0.018	8.3	J	0.13	0.018
6020	Selenium	sediment	mg/kg	0.46	B	0.93	0.091	0.66	B	0.88	0.086	0.37	B	0.69	0.067	0.2	B	0.67	0.066
6020	Silver	sediment	mg/kg	0.13	B J	0.19	0.0043	0.13	B J	0.18	0.004	0.07	B J	0.14	0.0032	0.06	B	0.13	0.0031
6020	Thallium	sediment	mg/kg	0.3		0.19	0.0018	0.26	J	0.18	0.0017	0.12	B J	0.14	0.0014	0.083	B	0.13	0.0013
6020	Tin	sediment	mg/kg	0.57	B	1.9	0.15	0.49	B	1.8	0.14	ND		1.4	0.11	ND		1.3	0.11
6020	Uranium	sediment	mg/kg	1.2		0.19	0.0034	1		0.18	0.0032	0.58	J	0.14	0.0025	0.5		0.13	0.0024
6020	Vanadium	sediment	mg/kg	41	J	0.93	0.01	40	J	0.88	0.0099	22		0.69	0.0077	21	J	0.67	0.0076
6020	Zinc	sediment	mg/kg	56		1.9	0.65	63		1.8	0.62	38		1.4	0.48	29	J	1.3	0.47
7471A	Mercury	sediment	mg/kg	0.014	B	0.062	0.0047	0.021	B	0.058	0.0044	0.02	B	0.045	0.0034	0.0067	B	0.045	0.0034
6010B	Aluminum	sediment	mg/kg	350	J	19	3.9	29000	J	18	3.7	15000	J	14	2.9	6200		13	2.8
6010B	Beryllium	sediment	mg/kg	--		--	--	--		--	--	0.12	B	0.14	0.047	0.3	B	0.67	0.046
6010B	Boron	sediment	mg/kg	ND		19	0.69	9.7	B	18	0.65	5.8	B J	14	0.51	1.8	B	13	0.5
6010B	Calcium	sediment	mg/kg	18000	J	37	15	22000	J	35	14	25000	J	28	11	14000		27	11
6010B	Iron	sediment	mg/kg	260		19	3	21000		18	2.8	15000		14	2.2	8700	J	13	2.2
6010B	Lithium	sediment	mg/kg	0.67	B	9.3	0.21	22		8.8	0.19	15	J	6.9	0.15	7.4		6.7	0.15
6010B	Magnesium	sediment	mg/kg	790	J	37	2.8	8200	J	35	2.6	6200	J	28	2.1	2900	J	27	2
6010B	Potassium	sediment	mg/kg	5200		560	65	5100		530	62	2800		410	48	1200		400	47
6010B	Sodium	sediment	mg/kg	1300		930	110	150	B	880	110	180	B J	690	83	170	B	670	81
6010B	Strontium	sediment	mg/kg	60	J	1.9	0.028	140		1.8	0.088	110		1.4	0.069	57		1.3	0.067
6010B	Titanium	sediment	mg/kg	6.1		1.9	0.22	220		1.8	0.21	290	J	1.4	0.17	210		1.3	0.16
6020	Antimony (Fathead Minnow)	fish	mg/kg	--		--	--	--	f	--	--	--		--	--	--		--	--
6020	Arsenic (Fathead Minnow)	fish	mg/kg	0.16	B	0.5	0.0076	--	f	--	--	--		--	--	--		--	--
6020	Beryllium (Fathead Minnow)	fish	mg/kg	0.0096	B	0.1	0.0023	--	f	--	--	--		--	--	--		--	--
6020	Cadmium (Fathead Minnow)	fish	mg/kg	0.017	B	0.1	0.0027	--	f	--	--	--		--	--	--		--	--
6020	Chromium (Fathead Minnow)	fish	mg/kg	0.51	J	0.2	0.034	--	f	--	--	--		--	--	--		--	--
6020	Copper (Fathead Minnow)	fish	mg/kg	1.4		0.2	0.061	--	f	--	--	--		--	--	--		--	--
6020	Lead (Fathead Minnow)	fish	mg/kg	0.19		0.1	0.02	--	f	--	--	--		--	--	--		--	--
6020	Nickel (Fathead Minnow)	fish	mg/kg	0.22	J	0.1	0.011	--	f	--	--	--		--	--	--		--	--
6020	Selenium (Fathead Minnow)	fish	mg/kg	0.29	B	0.5	0.018	--	f	--	--	--		--	--	--		--	--
6020	Silver (Fathead Minnow)	fish	mg/kg	0.015	B J	0.1	0.002	--	f	--	--	--		--	--	--		--	--
6020	Thallium (Fathead Minnow)	fish	mg/kg	ND		0.1	0.002	--	f	--	--	--		--	--	--		--	--
6020	Uranium (Fathead Minnow)	fish	mg/kg	0.014	B	0.1	0.002	--	f	--	--	--		--	--	--		--	--
6020	Zinc (Fathead Minnow)	fish	mg/kg	23		1	0.13	--	f	--	--	--		--	--	--		--	--
245.6	Mercury (Fathead Minnow)	fish	ug/kg	29	B	100	5.9	42	B	100	5.9	--		--	--	--		--	--
6010B	Aluminum (Fathead Minnow)	fish	mg/kg	190		10	3.1	610		10	3.1	--		--	--	--		--	--
6010B	Barium (Fathead Minnow)	fish	mg/kg	5.5		1	0.12	15		1	0.12	--		--	--	--		--	--
6010B	Beryllium (Fathead Minnow)	fish	mg/kg	--		--	--	--		--	--	--		--	--	--		--	--
6010B	Boron (Fathead Minnow)	fish	mg/kg	ND		10	0.51	0.97	B	10	0.51	--		--	--	--		--	--
6010B	Calcium (Fathead Minnow)	fish	mg/kg	6300		20	3.2	13000	J	20	3.2	--		--	--	--		--	--
6010B	Cobalt (Fathead Minnow)	fish	mg/kg	0.16	B	1	0.15	0.24	B	1	0.15	--		--	--	--		--	--
6010B	Iron (Fathead Minnow)	fish	mg/kg	150		10	2	450		10	2	--		--	--	--		--	--

Table 4.12--Analytical results of surface-water monitoring at Rio Grande below Arroyo del Tajo, 2002-2003

Method	Parameter	Matrix	Unit	22-Jul-02				9-Sep-02				12-Dec-02				24-Feb-02			
				Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]	Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]	Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]	Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]
6010B	Lithium (Fathead Minnow)	fish	mg/kg	0.29	B	5	0.22	0.67		5	0.22	--		--	--	--		--	--
6010B	Magnesium (Fathead Minnow)	fish	mg/kg	350		20	1.5	530		20	1.5	--		--	--	--		--	--
6010B	Manganese (Fathead Minnow)	fish	mg/kg	4.6		1	0.14	19	J	1	0.14	--		--	--	--		--	--
6010B	Molybdenum (Fathead Minnow)	fish	mg/kg	ND		2	0.24	ND		2	0.24	--		--	--	--		--	--
6010B	Potassium (Fathead Minnow)	fish	mg/kg	2500		300	31	1400		300	31	--		--	--	--		--	--
6010B	Sodium (Fathead Minnow)	fish	mg/kg	570		500	120	320	B	500	120	--		--	--	--		--	--
6010B	Strontium (Fathead Minnow)	fish	mg/kg	22		1	0.15	50		1	0.15	--		--	--	--		--	--
6010B	Tin (Fathead Minnow)	fish	mg/kg	1.3	B J	10	0.42	0.98	B J	10	0.42	--		--	--	--		--	--
6010B	Titanium (Fathead Minnow)	fish	mg/kg	2.9		1	0.2	8.7		1	0.2	--		--	--	--		--	--
6010B	Vanadium (Fathead Minnow)	fish	mg/kg	0.35	B	1	0.35	1.1		1	0.35	--		--	--	--		--	--
6020	Antimony (Red Shiner)	fish	mg/kg	--		--	--	0.065	B	0.2	0.02	--		--	--	ND		0.2	0.02
6020	Arsenic (Red Shiner)	fish	mg/kg	--		--	--	0.08	B	0.5	0.0076	--		--	--	0.092	B J	0.5	0.0076
6020	Beryllium (Red Shiner)	fish	mg/kg	--		--	--	0.0038	B	0.1	0.0023	--		--	--	--		--	--
6020	Cadmium (Red Shiner)	fish	mg/kg	--		--	--	0.021	B	0.1	0.0027	--		--	--	0.0083	B	0.1	0.0027
6020	Chromium (Red Shiner)	fish	mg/kg	--		--	--	0.32	J	0.2	0.034	--		--	--	0.29	J	0.2	0.034
6020	Copper (Red Shiner)	fish	mg/kg	--		--	--	0.76	1000	0.2	0.061	--		--	--	0.8		0.2	0.061
6020	Lead (Red Shiner)	fish	mg/kg	--		--	--	0.16		0.1	0.02	--		--	--	0.032	B	0.1	0.02
6020	Nickel (Red Shiner)	fish	mg/kg	--		--	--	0.26	J	0.1	0.011	--		--	--	ND		0.1	0.011
6020	Selenium (Red Shiner)	fish	mg/kg	--		--	--	0.2	B	0.5	0.018	--		--	--	0.79		0.5	0.018
6020	Silver (Red Shiner)	fish	mg/kg	--		--	--	0.012	B J	0.1	0.002	--		--	--	0.0022	B	0.1	0.002
6020	Thallium (Red Shiner)	fish	mg/kg	--		--	--	0.0084	B	0.1	0.002	--		--	--	0.004	B	0.1	0.002
6020	Uranium (Red Shiner)	fish	mg/kg	--		--	--	0.019	B	0.1	0.002	--		--	--	0.0068	B	0.1	0.002
6020	Zinc (Red Shiner)	fish	mg/kg	--		--	--	31	J	1	0.13	--		--	--	48	J	1	0.13
245.6	Mercury (Red Shiner)	fish	ug/kg	--		--	--	52	B	100	5.9	--		--	--	97	B	100	5.9
6010B	Aluminum (Red Shiner)	fish	mg/kg	--		--	--	190		10	3.1	--		--	--	28		10	3.1
6010B	Barium (Red Shiner)	fish	mg/kg	--		--	--	10		1	0.12	--		--	--	2.9	J	1	0.12
6010B	Beryllium (Red Shiner)	fish	mg/kg	--		--	--	--		--	--	--		--	--	ND		0.5	0.14
6010B	Boron (Red Shiner)	fish	mg/kg	--		--	--	0.95	B	10	0.51	--		--	--	2.8	B	10	0.51
6010B	Calcium (Red Shiner)	fish	mg/kg	--		--	--	8300	J	20	3.2	--		--	--	8900	J	20	3.2
6010B	Cobalt (Red Shiner)	fish	mg/kg	--		--	--	ND		1	0.15	--		--	--	0.34	B J	1	0.15
6010B	Iron (Red Shiner)	fish	mg/kg	--		--	--	140		10	2	--		--	--	35	J	10	2
6010B	Lithium (Red Shiner)	fish	mg/kg	--		--	--	ND		5	0.22	--		--	--	ND		5	0.22
6010B	Magnesium (Red Shiner)	fish	mg/kg	--		--	--	330		20	1.5	--		--	--	370	J	20	1.5
6010B	Manganese (Red Shiner)	fish	mg/kg	--		--	--	7.5	J	1	0.14	--		--	--	2.9	J	1	0.14
6010B	Molybdenum (Red Shiner)	fish	mg/kg	--		--	--	ND		2	0.24	--		--	--	ND		2	0.24
6010B	Potassium (Red Shiner)	fish	mg/kg	--		--	--	1200		300	31	--		--	--	3000		300	31
6010B	Sodium (Red Shiner)	fish	mg/kg	--		--	--	210	B	500	120	--		--	--	730		500	120
6010B	Strontium (Red Shiner)	fish	mg/kg	--		--	--	33		1	0.15	--		--	--	28		1	0.15
6010B	Tin (Red Shiner)	fish	mg/kg	--		--	--	1.4	B J	10	0.42	--		--	--	0.55	B	10	0.42
6010B	Titanium (Red Shiner)	fish	mg/kg	--		--	--	3		1	0.2	--		--	--	0.81	B	1	0.2
6010B	Vanadium (Red Shiner)	fish	mg/kg	--		--	--	0.41	B	1	0.35	--		--	--	ND		1	0.35
	Volatile organic compounds																		
8260B	Acetic Acid, 2-ethylexyl este	water	ug/L	--		--	--	--		--	--	--		--	--	1.82	T2	--	--
8260B	Acetone	water	ug/L	5	J	10	2.9	ND		10	2.9	3.1	J	10	2.9	4.9	J	10	2.5
8260B	Benzene	water	ug/L	ND		1	0.27	ND		1	0.27	ND		1	0.27	ND		1	0.17
8260B	Bromodichloromethane	water	ug/L	ND		1	0.35	ND		1	0.35	ND		1	0.35	ND		1	0.2
8260B	Bromoform	water	ug/L	ND		1	0.46	ND		1	0.46	ND		1	0.46	ND		1	0.23
8260B	Bromomethane	water	ug/L	ND		2	0.28	ND		2	0.28	ND		2	0.28	ND		2	0.22
8260B	Carbon disulfide	water	ug/L	ND		1	0.67	ND		1	0.67	ND		1	0.67	ND		1	0.24
8260B	Carbon tetrachloride	water	ug/L	ND		1	0.35	ND		1	0.35	ND		1	0.35	ND		1	0.2
8260B	Chlorobenzene	water	ug/L	ND		1	0.24	ND		1	0.24	ND		1	0.24	ND		1	0.13
8260B	Chloroethane	water	ug/L	ND		2	0.26	ND		2	0.26	ND		2	0.26	ND		2	0.18
8260B	Chloroform	water	ug/L	ND		1	0.29	ND		1	0.29	ND		1	0.29	ND		1	0.17
8260B	Chloromethane	water	ug/L	ND		2	0.26	ND		2	0.26	ND		2	0.26	ND		2	0.91
8260B	cis-1,2-Dichloroethene	water	ug/L	ND		1	0.33	ND		1	0.33	ND		1	0.33	ND		1	0.14
8260B	cis-1,3-Dichloropropene	water	ug/L	ND		1	0.31	ND		1	0.31	ND		1	0.31	ND		1	0.19
8260B	Dibromochloromethane	water	ug/L	ND		1	0.37	ND		1	0.37	ND		1	0.37	ND		1	0.19
8260B	Ethylbenzene	water	ug/L	ND		1	0.51	ND		1	0.51	ND		1	0.51	ND		1	0.12
8260B	Methylene chloride	water	ug/L	ND		5	0.86	ND		5	0.86	ND		5	0.86	ND		5	0.21
8260B	m-Xylene & p-Xylene	water	ug/L	ND		2	0.52	ND		2	0.52	ND		2	0.52	ND		2	0.27
8260B	o-Xylene	water	ug/L	ND		1	0.24	ND		1	0.24	ND		1	0.24	ND		1	0.15
8260B	Silanol, tri methyl-	water	ug/L	--		--	--	--		--	--	--		--	--	1.52	T2	--	--
8260B	Styrene	water	ug/L	ND		1	0.28	ND		1	0.28	ND		1	0.28	ND		1	0.14
8260B	Tetrachloroethene	water	ug/L	ND		1	0.27	ND		1	0.27	ND		1	0.27	ND		1	0.26
8260B	Toluene	water	ug/L	ND		1	0.26	ND		1	0.26	ND		1	0.26	ND		1	0.15
8260B	trans-1,2-Dichloroethene	water	ug/L	ND		0.5	0.25	ND		0.5	0.25	ND		0.5	0.25	ND		0.5	0.15
8260B	trans-1,3-Dichloropropene	water	ug/L	ND		1	0.36	ND		1	0.36	ND		1	0.36	ND		1	0.2
8260B	Trichloroethene	water	ug/L	ND		1	0.24	ND		1	0.24	ND		1	0.24	ND		1	0.16
8260B	Vinyl chloride	water	ug/L	ND		1	0.26	ND		1	0.26	ND		1	0.26	ND		1	0.19
8260B	Xylenes (total)	water	ug/L	ND		2	0.73	ND		2	0.73	ND		2	0.73	ND		2	0.41
8260B	1,1,1-Trichloroethane	water	ug/L	ND		1	0.32	ND		1	0.32	ND		1	0.32	ND		1	0.16
8260B	1,1,2,2-Tetrachloroethane	water	ug/L	ND		1	0.5	ND		1	0.5	ND		1	0.5	ND		1	0.21
8260B	1,1,2-Trichloroethane	water	ug/L	ND		1	0.41	ND		1	0.41	ND		1	0.41	ND		1	0.27

Table 4.12--Analytical results of surface-water monitoring at Rio Grande below Arroyo del Tajo, 2002-2003

Method	Parameter	Matrix	Unit	22-Jul-02				9-Sep-02				12-Dec-02				24-Feb-02			
				Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]	Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]	Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]	Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]
8260B	1,1-Dichloroethane	water	ug/L	ND		1	0.29	ND		1	0.29	ND		1	0.29	ND		1	0.22
8260B	1,1-Dichloroethene	water	ug/L	ND		1	0.31	ND		1	0.31	ND		1	0.31	ND		1	0.23
8260B	1,2-Dichloroethane	water	ug/L	ND		1	0.43	ND		1	0.43	ND		1	0.43	ND		1	0.26
8260B	1,2-Dichloroethene (total)	water	ug/L	ND		1	0.54	ND		1	0.54	ND		1	0.54	ND		1	0.24
8260B	1,2-Dichloropropane	water	ug/L	ND		1	0.38	ND		1	0.38	ND		1	0.38	ND		1	0.18
8260B	2-Butanone (MEK)	water	ug/L	ND		5	2.4	ND		5	2.4	ND		5	2.4	ND		5	2
8260B	2-Hexanone	water	ug/L	ND		5	1.8	ND		5	1.8	ND		5	1.8	ND		5	1.7
8260B	4-Methyl-2-pentanone	water	ug/L	ND		5	1.8	ND		5	1.8	ND		5	1.8	ND		5	0.98
8260B	Acetic Acid, 2-ethylexyl este	sediment	ug/kg	--		--	--	--		--	--	--		--	--	12	T2	--	--
8260B	Acetone	sediment	ug/kg	25	J	37	8.6	ND		35	8.1	13	J	28	6.3	ND		27	4.6
8260B	Benzene	sediment	ug/kg	ND		9.3	1.7	ND		8.8	1.6	ND		6.9	1.2	ND		6.7	0.16
8260B	Benzene, 1,4-bis(1-methylethyl)	sediment	ug/kg	--		--	--	--		--	--	9.2	T2			--		--	--
8260B	Bromodichloromethane	sediment	ug/kg	ND		9.3	1.7	ND		8.8	1.6	ND		6.9	1.3	ND		6.7	0.27
8260B	Bromoform	sediment	ug/kg	ND		9.3	1.7	ND		8.8	1.6	ND		6.9	1.3	ND		6.7	0.35
8260B	Bromomethane	sediment	ug/kg	ND		19	2.2	ND		18	2.1	ND		14	1.7	ND		13	0.81
8260B	Carbon disulfide	sediment	ug/kg	ND		9.3	1.7	ND		8.8	1.6	ND		6.9	1.3	ND		6.7	0.32
8260B	Carbon tetrachloride	sediment	ug/kg	ND		9.3	2.2	ND		8.8	2.1	ND		6.9	1.7	ND		6.7	0.34
8260B	Chlorobenzene	sediment	ug/kg	ND		9.3	1.4	ND		8.8	1.3	ND		6.9	1	ND		6.7	0.24
8260B	Chloroethane	sediment	ug/kg	ND		19	2.4	ND		18	2.3	ND		14	1.8	ND		13	0.31
8260B	Chloroform	sediment	ug/kg	ND		19	1.7	ND		18	1.6	ND		14	1.2	ND		13	0.34
8260B	Chloromethane	sediment	ug/kg	ND		19	2.8	ND		18	2.6	ND		14	2.1	ND		13	0.49
8260B	cis-1,2-Dichloroethene	sediment	ug/kg	ND		4.7	1.6	ND		4.4	1.5	ND		3.4	1.2	ND		3.4	0.28
8260B	cis-1,3-Dichloropropene	sediment	ug/kg	ND		9.3	1.8	ND		8.8	1.7	ND		6.9	1.3	ND		6.7	0.49
8260B	Dibromochloromethane	sediment	ug/kg	ND		9.3	1.7	ND		8.8	1.6	ND		6.9	1.2	ND		6.7	0.27
8260B	Dimethyl sulfide	sediment	ug/kg	--		--	--	--		--	--	--		--	--	--		--	--
8260B	Disulfide, dimethyl	sediment	ug/kg	--		--	--	--		--	--	--		--	--	--		--	--
8260B	Ethylbenzene	sediment	ug/kg	ND		9.3	2.2	ND		8.8	2.1	ND		6.9	1.7	ND		6.7	0.36
8260B	Methanethiol	sediment	ug/kg	--		--	--	--		--	--	--		--	--	--		--	--
8260B	Methylene chloride	sediment	ug/kg	ND		9.3	1.5	1.8	J B	8.8	1.4	5.2	J B	6.9	1.1	ND		ug/kg	0.55
8260B	m-Xylene & p-Xylene	sediment	ug/kg	ND		4.7	3.4	ND		4.4	3.2	ND		3.4	2.5	ND		ug/kg	0.57
8260B	Naphthalene, 2,3-dimethyl-	sediment	ug/kg	33	T2			--		--	--			--	--	--		--	--
8260B	o-Xylene	sediment	ug/kg	ND		4.7	1.8	ND		4.4	1.7	ND		3.4	1.4	ND		3.4	0.31
8260B	Styrene	sediment	ug/kg	ND		9.3	1.2	ND		8.8	1.2	ND		6.9	0.91	ND		6.7	0.28
8260B	Tetrachloroethene	sediment	ug/kg	ND		9.3	1.8	ND		8.8	1.7	ND		6.9	1.4	ND		6.7	0.34
8260B	Toluene	sediment	ug/kg	ND		9.3	1.5	ND		8.8	1.4	ND		6.9	1.1	ND		6.7	0.3
8260B	trans-1,2-Dichloroethene	sediment	ug/kg	ND		4.7	1.5	ND		4.4	1.4	ND		3.4	1.1	ND		3.4	0.47
8260B	trans-1,3-Dichloropropene	sediment	ug/kg	ND		9.3	1.9	ND		8.8	1.8	ND		6.9	1.4	ND		6.7	0.57
8260B	Trichloroethene	sediment	ug/kg	ND		9.3	1.6	ND		8.8	1.5	ND		6.9	1.2	ND		6.7	0.39
8260B	Unknown	sediment	ug/kg	24		--	--	--		--	--	--		--	--	20	J	--	--
8260B	Unknown	sediment	ug/kg	55		--	--	--		--	--	--		--	--	42	J	--	--
8260B	Unknown	sediment	ug/kg	33		--	--	--		--	--	--		--	--	--		--	--
8260B	Unknown	sediment	ug/kg	15		--	--	--		--	--	--		--	--	--		--	--
8260B	Unknown	sediment	ug/kg	9.9		--	--	--		--	--	--		--	--	--		--	--
8260B	Unknown	sediment	ug/kg	19		--	--	--		--	--	--		--	--	--		--	--
8260B	Vinyl chloride	sediment	ug/kg	ND		9.3	2.1	ND		8.8	1.9	ND		6.9	1.5	ND		6.7	0.31
8260B	Xylenes (total)	sediment	ug/kg	ND		9.3	5.2	ND		8.8	4.9	ND		6.9	3.9	ND		6.7	0.76
8260B	1,1,1-Trichloroethane	sediment	ug/kg	ND		9.3	1.8	ND		8.8	1.7	ND		6.9	1.3	ND		6.7	0.35
8260B	1,1,2,2-Tetrachloroethane	sediment	ug/kg	ND		9.3	2.1	ND		8.8	1.9	ND		6.9	1.5	ND		6.7	0.76
8260B	1,1,2-Trichloroethane	sediment	ug/kg	ND		9.3	2.8	ND		8.8	2.6	ND		6.9	2.1	ND		6.7	0.43
8260B	1,1-Dichloroethane	sediment	ug/kg	ND		9.3	1.8	ND		8.8	1.7	ND		6.9	1.3	ND		6.7	0.28
8260B	1,1-Dichloroethene	sediment	ug/kg	ND		9.3	2.1	ND		8.8	1.9	ND		6.9	1.5	ND		6.7	0.42
8260B	1,2-Dichloroethane	sediment	ug/kg	ND		9.3	1.8	ND		8.8	1.7	ND		6.9	1.4	ND		6.7	0.3
8260B	1,2-Dichloroethene (total)	sediment	ug/kg	ND		9.3	2.8	ND		8.8	2.6	ND		6.9	2.1	ND		6.7	0.4
8260B	1,2-Dichloropropane	sediment	ug/kg	ND		9.3	2.2	--		--	--	ND		6.9	1.7	ND		6.7	0.3
8260B	1-Octanol	sediment	ug/kg	30	T2			ND		8.8	2.1	--		--	--	--		--	--
8260B	2-Butanone (MEK)	sediment	ug/kg	ND		37	8.8	ND		35	8.3	ND		28	6.5	ND		27	3.6
8260B	2-Hexanone	sediment	ug/kg	ND		37	8.6	ND		35	8.1	ND		28	6.3	ND		27	3.1
8260B	4-Methyl-2-pentanone	sediment	ug/kg	ND		37	7.3	ND		35	6.9	ND		28	5.4	ND		27	2.7
	Herbicides																		
8151A	Dalapon	water	ug/L	ND		2	0.42	ND		2	0.42	ND		ug/L	0.33	ND		2	0.33
8151A	DCAA	water	%	--		--	--	--		--	--	--		--	--	--		--	--
8151A	Dicamba	water	ug/L	ND		2	0.081	ND		2	0.081	ND		2	0.086	ND		2	0.086
8151A	Dichlorprop	water	ug/L	ND		4	0.13	ND		4	0.13	ND		4	0.11	ND		4	0.11
8151A	Dinoseb	water	ug/L	ND		0.6	0.09	ND		0.6	0.09	ND		0.6	0.065	ND		0.6	0.065
8151A	MCPA	water	ug/L	ND		400	13	ND		400	13	ND		400	12	ND		400	12
8151A	MCPP	water	ug/L	ND		400	42	ND		400	42	ND		400	15	ND		400	15
8151A	2,4,5-T	water	ug/L	--		--	--	ND		1	0.043	ND		1	0.043	ND		1	0.043
8151A	2,4,5-TP (Silvex)	water	ug/L	ND		1	0.034	ND		1	0.034	ND		1	0.036	ND		1	0.036
8151A	2,4-D	water	ug/L	ND		4	0.16	ND		4	0.16	ND		4	0.24	ND		4	0.24
8151A	2,4-DB	water	ug/L	ND		4	0.21	ND		4	0.21	ND		4	0.098	ND		4	0.098
	Pesticides																		
8141A	Anilazine	water	ug/L	ND		10	1.3	ND		10	1.3	ND		10		ND		10	1.3
8141A	Atrazine	water	ug/L	ND		10	0.52	ND		10	0.52	ND		10	3.6	ND		10	0.52

Table 4.12--Analytical results of surface-water monitoring at Rio Grande below Arroyo del Tajo, 2002-2003

Method	Parameter	Matrix	Unit	22-Jul-02				9-Sep-02				12-Dec-02				24-Feb-02			
				Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]	Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]	Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]	Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]
8141A	Azinphos-methyl	water	ug/L	ND		2.5	0.14	ND		2.5	0.14	ND		2.5	9.5	ND		2.5	0.14
8141A	Bolstar	water	ug/L	ND		0.5	0.14	ND		0.5	0.14	ND		0.5	3.6	ND		0.5	0.14
8141A	Chlorpyrifos	water	ug/L	ND		0.5	0.054	ND		0.5	0.054	ND		0.5	3.2	ND		0.5	0.054
8141A	Coumaphos	water	ug/L	ND		0.5	0.079	ND		0.5	0.079	ND		0.5	5.4	ND		0.5	0.079
8141A	Demeton (total)	water	ug/L	ND		1	0.19	ND		1	0.19	ND		1	12	ND		1	0.19
8141A	Diazinon	water	ug/L	ND		0.5	0.039	ND		0.5	0.039	ND		0.5	3.2	ND		0.5	0.039
8141A	Dichlorvos	water	ug/L	ND		0.5	0.13	ND		0.5	0.13	ND		0.5	17	ND		0.5	0.13
8141A	Dimethoate	water	ug/L	ND		0.5	0.18	ND		0.5	0.18	ND		0.5	3.3	ND		0.5	0.18
8141A	Disulfoton	water	ug/L	ND		0.5	0.057	ND		0.5	0.057	ND		0.5	2.5	ND		0.5	0.057
8141A	EPN	water	ug/L	ND		0.5	0.05	ND		0.5	0.05	ND		0.5	6.3	ND		0.5	0.05
8141A	Ethoprop	water	ug/L	ND		0.5	0.056	ND		0.5	0.056	ND		0.5	6.9	ND		0.5	0.056
8141A	Ethyl parathion	water	ug/L	ND		0.5	0.04	ND		0.5	0.04	ND		0.5	5.4	ND		0.5	0.04
8141A	Famphur	water	ug/L	ND		1	0.054	ND		1	0.054	ND		1	4.5	ND		1	0.054
8141A	Fensulfothion	water	ug/L	ND		2.5	0.22	ND		2.5	0.22	ND		2.5	12	ND		2.5	0.22
8141A	Fenthion	water	ug/L	ND		0.5	0.061	ND		0.5	0.061	ND		0.5	9.6	ND		0.5	0.061
8141A	Malathion	water	ug/L	ND		1.2	0.05	ND		1.2	0.05	ND		1.2	17	ND		1.2	0.05
8141A	Merphos	water	ug/L	ND		5	0.063	ND		5	0.063	ND		5	4.5	ND		5	0.063
8141A	Methyl parathion	water	ug/L	ND		0.5	0.061	ND		0.5	0.061	ND		0.5	6.1	ND		0.5	0.061
8141A	Mevinphos	water	ug/L	ND		6.2	0.16	ND		6.2	0.16	ND		6.2	11	ND		6.2	0.16
8141A	Naled	water	ug/L	ND		10	0.22	ND		10	0.22	ND		10	7.4	ND		10	0.22
8141A	Phorate	water	ug/L	ND		0.5	0.075	ND		0.5	0.075	ND		0.5	6.9	ND		0.5	0.075
8141A	Propazine	water	ug/L	ND		10	2.5	ND		10	2.5	ND		10	7.4	ND		10	2.5
8141A	Ronnel	water	ug/L	ND		10	0.11	ND		10	0.11	ND		10	17	ND		10	0.11
8141A	Simazine	water	ug/L	ND		10	0.46	ND		10	0.46	ND		10	12	ND		10	0.46
8141A	Sulfotepp	water	ug/L	ND		0.5	0.03	ND		0.5	0.03	ND		0.5	13	ND		0.5	0.03
8141A	Tetrachlorvinphos (Stirophos)	water	ug/L	ND		2.5	0.056	ND		2.5	0.056	ND		0.5	3.4	ND		2.5	0.056
8141A	Thionazin	water	ug/L	ND		0.5	0.059	ND		0.5	0.059	ND		0.5	6.6	ND		0.5	0.059
8141A	Tokuthion	water	ug/L	ND		0.5	0.071	ND		0.5	0.071	ND		0.5	6.6	ND		0.5	0.071
8141A	Trichloronate	water	ug/L	ND		0.5	0.057	ND		0.5	0.057	ND		2.5	11	ND		0.5	0.057
8141A	O,O,O-Triethyl phosphorothioate	water	ug/L	ND		0.5	0.15	ND		0.5	0.15	ND		0.5	22	ND		0.5	0.15
8081A	Aldrin	sediment	ug/kg	ND		32	7.3	ND		3	0.48	ND		47	0.22	ND		2.3	0.36
8081A	alpha-BHC	sediment	ug/kg	ND		32	6.9	ND		3	0.44	ND		47	0.061	ND		2.3	0.34
8081A	beta-BHC	sediment	ug/kg	ND		32	6.3	ND		3	0.48	ND		47	0.05	ND		2.3	0.36
8081A	Chlordane (technical)	sediment	ug/kg	ND		320	47	ND		30	4.4	ND		470	0.22	ND		23	3.4
8081A	delta-BHC	sediment	ug/kg	ND		32	2.1	ND		3	1.1	ND		47	0.063	ND		2.3	0.84
8081A	Dieldrin	sediment	ug/kg	ND		32	10	ND		3	0.42	ND		47	2.5	ND		2.3	0.32
8081A	Endosulfan I	sediment	ug/kg	ND		32	7.1	ND		3	0.65	ND		47	0.15	ND		2.3	0.5
8081A	Endosulfan II	sediment	ug/kg	ND		32	12	ND		3	0.74	ND		47	0.061	ND		2.3	0.57
8081A	Endosulfan sulfate	sediment	ug/kg	ND		32	5.4	ND		3	0.7	ND		47	0.054	ND		2.3	0.54
8081A	Endrin	sediment	ug/kg	ND		32	7.1	ND		3	0.72	ND		47	0.11	ND		2.3	0.55
8081A	Endrin aldehyde	sediment	ug/kg	ND		32	29	ND		3	1.5	ND		47	0.071	ND		2.3	1.1
8081A	gamma-BHC (Lindane)	sediment	ug/kg	ND		32	13	ND		3	0.42	ND		47	0.075	ND		2.3	0.32
8081A	Heptachlor	sediment	ug/kg	ND		32	8.8	ND		3	0.55	ND		47	0.057	ND		2.3	0.42
8081A	Heptachlor epoxide	sediment	ug/kg	ND		130	6.7	ND		12	0.39	ND		180	0.04	ND		9	0.3
8081A	Methoxychlor	sediment	ug/kg	ND		62	3.2	ND		5.8	1.4	ND		91	0.46	ND		4.5	1.1
8081A	Toxaphene	sediment	ug/kg	ND		3200	190	ND		300	18	ND		4700	0.056	ND		230	13
8081A	4,4'-DDD	sediment	ug/kg	ND		32	5.4	ND		3	0.62	ND		47	0.03	ND		2.3	0.47
8081A	4,4'-DDE	sediment	ug/kg	ND		32	6	1.6	J	3	0.77	ND		47	0.059	ND		2.3	0.59
8081A	4,4'-DDT	sediment	ug/kg	ND		32	6.2	ND		3	0.85	ND		47	0.16	ND		2.3	0.65
8081A	Aldrin	fish	ug/kg	--	f	--	--	--	f	--	--	--		--	--	--		--	--
8081A	alpha-BHC	fish	ug/kg	--	f	--	--	--	f	--	--	--		--	--	--		--	--
8081A	alpha-Chlordane	fish	ug/kg	--	f	--	--	--	f	--	--	--		--	--	--		--	--
8081A	beta-BHC	fish	ug/kg	--	f	--	--	--	f	--	--	--		--	--	--		--	--
8081A	delta-BHC	fish	ug/kg	--	f	--	--	--	f	--	--	--		--	--	--		--	--
8081A	Dieldrin	fish	ug/kg	--	f	--	--	--	f	--	--	--		--	--	--		--	--
8081A	Endosulfan I	fish	ug/kg	--	f	--	--	--	f	--	--	--		--	--	--		--	--
8081A	Endosulfan II	fish	ug/kg	--	f	--	--	--	f	--	--	--		--	--	--		--	--
8081A	Endosulfan sulfate	fish	ug/kg	--	f	--	--	--	f	--	--	--		--	--	--		--	--
8081A	Endrin	fish	ug/kg	--	f	--	--	--	f	--	--	--		--	--	--		--	--
8081A	Endrin aldehyde	fish	ug/kg	--	f	--	--	--	f	--	--	--		--	--	--		--	--
8081A	Endrin ketone	fish	ug/kg	--	f	--	--	--	f	--	--	--		--	--	--		--	--
8081A	gamma-BHC (Lindane)	fish	ug/kg	--	f	--	--	--	f	--	--	--		--	--	--		--	--
8081A	gamma-Chlordane	fish	ug/kg	--	f	--	--	--	f	--	--	--		--	--	--		--	--
8081A	Heptachlor	fish	ug/kg	--	f	--	--	--	f	--	--	--		--	--	--		--	--
8081A	Heptachlor epoxide	fish	ug/kg	--	f	--	--	--	f	--	--	--		--	--	--		--	--
8081A	Methoxychlor	fish	ug/kg	--	f	--	--	--	f	--	--	--		--	--	--		--	--
8081A	Toxaphene	fish	ug/kg	--	f	--	--	--	f	--	--	--		--	--	--		--	--
8081A	4,4'-DDD	fish	ug/kg	--	f	--	--	--	f	--	--	--		--	--	--		--	--
8081A	4,4'-DDE	fish	ug/kg	--	f	--	--	--	f	--	--	--		--	--	--		--	--
8081A	4,4'-DDT	fish	ug/kg	--	f	--	--	--	f	--	--	--		--	--	--		--	--

Table 4.12--Analytical results of surface-water monitoring at Rio Grande below Arroyo del Tajo, 2002-2003

Method	Parameter	Matrix	Unit	22-Jul-02				9-Sep-02				12-Dec-02				24-Feb-02			
				Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]	Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]	Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]	Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]
	Explosives																		
8330	HMX	water	ug/L	ND		0.25	0.19	ND		0.25	0.1	--		--	--	ND		0.25	0.03
8330	Nitrobenzene	water	ug/L	ND		0.25	0.08	ND		0.25	0.1	--		--	--	ND		0.25	0.04
8330	Nitroglycerin	water	ug/L	ND		2.5	0.9	ND		2.5	0.6	--		--	--	ND		2.5	0.3
8330	PETN	water	ug/L	ND		2.5	1.3	ND		2.5	0.7	--		--	--	ND		2.5	0.5
8330	RDX	water	ug/L	ND		0.25	0.17	ND		0.25	0.08	--		--	--	ND		0.25	0.03
8330	Tetryl	water	ug/L	ND		0.5	0.15	ND		0.5	0.1	--		--	--	ND		0.5	0.03
8330	1,3,5-Trinitrobenzene	water	ug/L	ND		0.25	0.092	ND		0.25	0.09	--		--	--	ND		0.25	0.03
8330	1,3-Dinitrobenzene	water	ug/L	ND		0.25	0.11	ND		0.25	0.1	--		--	--	ND		0.25	0.03
8330	2,4,6-Trinitrotoluene	water	ug/L	ND		0.25	0.089	ND		0.25	0.1	--		--	--	ND		0.25	0.05
8330	2,4-Dinitrotoluene	water	ug/L	ND		0.25	0.1	ND		0.25	0.1	--		--	--	ND		0.25	0.04
8330	2,6-Dinitrotoluene	water	ug/L	ND		0.25	0.15	ND		0.25	0.1	--		--	--	ND		0.25	0.03
8330	2-Amino-4,6-dinitrotoluene	water	ug/L	ND		0.25	0.12	ND		0.25	0.1	--		--	--	ND		0.25	0.04
8330	2-Nitrotoluene	water	ug/L	ND		0.25	0.16	ND		0.25	0.09	--		--	--	ND		0.25	0.04
8330	3-Nitrotoluene	water	ug/L	ND		0.25	0.18	ND		0.25	0.09	--		--	--	ND		0.25	0.09
8330	4-Amino-2,6-dinitrotoluene	water	ug/L	ND		0.25	0.1	ND		0.25	0.1	--		--	--	ND		3.2	0.05
8330	4-Nitrotoluene	water	ug/L	ND		0.25	0.23	ND		0.25	0.2	--		--	--	ND		0.4	0.05
	Polyaromatic hydrocarbons																		
8310	Acenaphthene	sediment	ug/kg	ND		1900	36	ND		350	6.9	14	J	280	0.039	ND		270	5.3
8310	Acenaphthylene	sediment	ug/kg	ND		1900	110	ND		350	21	ND		280	0.14	ND		270	16
8310	Anthracene	sediment	ug/kg	ND		190	24	ND		35	4.6	ND		28	12	ND		27	3.5
8310	Benzo(a)anthracene	sediment	ug/kg	ND		190	47	ND		35	8.8	ND		28	0.19	ND		27	6.7
8310	Benzo(a)pyrene	sediment	ug/kg	ND		190	17	ND		35	3.2	ND		28	0.054	ND		27	2.4
8310	Benzo(b)fluoranthene	sediment	ug/kg	ND		190	36	ND		35	6.9	7.8	J COL	28	10	ND		27	5.3
8310	Benzo(ghi)perylene	sediment	ug/kg	34	J COL	370	24	ND		70	4.6	ND		55	8.5	ND		54	3.5
8310	Benzo(k)fluoranthene	sediment	ug/kg	ND		190	21	ND		35	4	ND		28	0.52	ND		27	3.1
8310	Chrysene	sediment	ug/kg	31	J COL	370	22	ND		70	4.2	ND		55	0.14	ND		54	3.2
8310	Dibenzo(a,h)anthracene	sediment	ug/kg	ND		370	43	ND		70	8.1	ND		55	0.079	ND		54	6.2
8310	Fluoranthene	sediment	ug/kg	ND		370	79	ND		70	15	ND		55	1.3	ND		54	11
8310	Fluorene	sediment	ug/kg	ND		370	81	ND		70	15	ND		55	0.18	ND		54	12
8310	Indeno(1,2,3-cd)pyrene	sediment	ug/kg	23	J B	370	21	ND		70	4	ND		55	280	ND		54	3.1
8310	Naphthalene	sediment	ug/kg	ND		1900	110	ND		350	21	ND		280	0.05	ND		270	16
8310	Phenanthrene	sediment	ug/kg	ND		370	31	ND		70	5.8	ND		55	0.13	ND		54	4.5
8310	Pyrene	sediment	ug/kg	ND		370	64	ND		70	12	ND		55	23	ND		54	9.3
8310	1-Methylnaphthalene	sediment	ug/kg	ND		1900	65	13	J COL	350	12	59	J COL	280	0.057	ND		270	9.4
8310	2-Methylnaphthalene	sediment	ug/kg	ND		1900	31	ND		350	5.8	ND		280	0.056	ND		270	4.5
	Total petroleum hydrocarbons																		
9071B	n-Hexane Ext. Material	sediment	mg/kg	4700		930	300	ND		880	280	250	B	690	220	ND		670	220
9071B	SGT-HEM (Petroleum Hydrocarbons)	sediment	mg/kg	300	B	930	220	ND		880	210	ND		690	170	ND		670	160
	Pharmaceuticals																		
ITMS	Amitriptyline	water	ng/L	ND		10	--	ND		10	--	ND		10	--	ND		10	--
ITMS	Beta-Estradiol	water	ng/L	ND		10	--	ND		10	--	ND		10	--	ND		10	--
ITMS	Caffeine	water	ng/L	ND		10	--	ND		10	--	ND		10	--	ND		10	--
ITMS	Cholesterol	water	ng/L	ND		10	--	ND		10	--	ND		10	--	ND		10	--
ITMS	Desipramine	water	ng/L	ND		10	--	ND		10	--	ND		10	--	ND		10	--
ITMS	Dextro-Norgestrel	water	ng/L	ND		10	--	ND		10	--	ND		10	--	ND		10	--
ITMS	Doxepin	water	ng/L	ND		10	--	ND		10	--	ND		10	--	ND		10	--
ITMS	Equilin	water	ng/L	ND		10	--	ND		10	--	ND		10	--	ND		10	--
ITMS	Estrone	water	ng/L	ND		10	--	ND		10	--	ND		10	--	ND		10	--
ITMS	Enthynl Estradiol	water	ng/L	ND		10	--	ND		10	--	ND		10	--	ND		10	--
ITMS	Imipramine	water	ng/L	ND		10	--	ND		10	--	ND		10	--	ND		10	--
ITMS	Medroxyprogesterone	water	ng/L	ND		10	--	ND		10	--	ND		10	--	ND		10	--
ITMS	Megestrol Acetate	water	ng/L	ND		10	--	ND		10	--	ND		10	--	ND		10	--
ITMS	Menstranol	water	ng/L	ND		10	--	ND		10	--	ND		10	--	ND		10	--
ITMS	Nordoxepin	water	ng/L	ND		10	--	ND		10	--	ND		10	--	ND		10	--
ITMS	Norethindrone	water	ng/L	ND		10	--	ND		10	--	ND		10	--	ND		10	--
ITMS	Norethynodrel	water	ng/L	ND		10	--	ND		10	--	ND		10	--	ND		10	--
ITMS	Nortriptyline	water	ng/L	ND		10	--	ND		10	--	ND		10	--	ND		10	--
ITMS	Paroxetine	water	ng/L	ND		10	--	ND		10	--	ND		10	--	ND		10	--
ITMS	Phenytoin	water	ng/L	ND		10	--	ND		10	--	ND		10	--	ND		10	--
ITMS	Prednisone	water	ng/L	ND		10	--	ND		10	--	ND		10	--	ND		10	--
ITMS	Progesterone	water	ng/L	ND		10	--	ND		10	--	ND		10	--	ND		10	--
ITMS	Propoxyphene	water	ng/L	ND		10	--	ND		10	--	ND		10	--	ND		10	--
ITMS	Protroptyline	water	ng/L	ND		10	--	ND		10	--	ND		10	--	ND		10	--
ITMS	Prozac	water	ng/L	ND		10	--	ND		10	--	ND		10	--	ND		10	--
ITMS	Setraline	water	ng/L	ND		10	--	ND		10	--	ND		10	--	ND		10	--
ITMS	Tamoxifen	water	ng/L	ND		10	--	ND		10	--	ND		10	--	ND		10	--
ITMS	Trimipramine maleate	water	ng/L	ND		10	--	ND		10	--	ND		10	--	ND		10	--
ITMS	6 alpha-Methyprednisolone	water	ng/L	ND		10	--	ND		10	--	ND		10	--	ND		10	--

Table 4.12--Analytical results of surface-water monitoring at Rio Grande below Arroyo del Tajo, 2002-2003

Method	Parameter	Matrix	Unit	22-Jul-02				9-Sep-02				12-Dec-02				24-Feb-02			
				Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]	Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]	Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]	Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]
	Grain size analysis																		
D422	Maximum particle size	sediment	--	medium sand		--	--	medium sand		--	--	coarse sand		--	--	medium sand		--	--
D422	Particle size, 2000 microns, sand	sediment	%	0.1		0.1	--	--		--	--	0.1		0.1	--	0.1		0.1	--
D422	Particle size, 850 microns, sand	sediment	%	0.1		0.1	--	--		--	--	0.0		0.1	--	0.1		0.1	--
D422	Particle size, 425 microns, sand	sediment	%	1.8		0.1	--	1.6		0.1	--	0.0		0.1	--	1.0		0.1	--
D422	Particle size, 250 microns, sand	sediment	%	7.4		0.1	--	9.7		0.1	--	1.2		0.1	--	8.5		0.1	--
D422	Particle size, 180 microns, sand	sediment	%	7.3		0.1	--	9.7		0.1	--	5.1		0.1	--	10.9		0.1	--
D422	Particle size, 150 microns, sand	sediment	%	4.8		0.1	--	3.3		0.1	--	2.7		0.1	--	8.2		0.1	--
D422	Particle size, 75 microns, sand	sediment	%	14.2		0.1	--	2.9		0.1	--	6.1		0.1	--	24.1		0.1	--
D422	Particle size, 35.0 microns, silt	sediment	%	--		--	--	--		0.1	--	--		--	--	34.5		0.1	--
D422	Particle size, 28.8 microns, silt	sediment	%	--		--	--	0.6		0.1	--	--		--	--	--		--	--
D422	Particle size, 28.2 microns, silt	sediment	%	9.2		0.1	--	--		--	--	--		--	--	--		--	--
D422	Particle size, 27.5 microns, silt	sediment	%	--		--	--	--		--	--	26.8		0.1	--	--		--	--
D422	Particle size, 23.1 microns, silt	sediment	%	--		--	--	--		--	--	--		--	--	6.1		0.1	--
D422	Particle size, 19.9 microns, silt	sediment	%	--		--	--	--		--	--	19.3		0.1	--	--		--	--
D422	Particle size, 18.3 microns, silt	sediment	%	--		--	--	1.5		0.1	--	--		--	--	--		--	--
D422	Particle size, 18.2 microns, silt	sediment	%	3.3		0.1	--	--		--	--	--		--	--	--		--	--
D422	Particle size, 13.5 microns, silt	sediment	%	--		--	--	--		--	--	--		--	--	1.3		0.1	--
D422	Particle size, 12.4 microns, silt	sediment	%	--		--	--	--		--	--	13.2		0.1	--	--		--	--
D422	Particle size, 11.0 microns, silt	sediment	%	--		--	--	7.6		0.1	--	--		--	--	--		--	--
D422	Particle size, 10.8 microns, silt	sediment	%	3.3		0.1	--	--		--	--	--		--	--	--		--	--
D422	Particle size, 9.8 microns, silt	sediment	%	--		--	--	--		--	--	--		--	--	1.3		0.1	--
D422	Particle size, 9.0 microns, silt	sediment	%	--		--	--	--		--	--	6.1		0.1	--	--		--	--
D422	Particle size, 7.7 microns, silt	sediment	%	--		--	--	3.0		0.1	--	--		--	--	--		--	--
D422	Particle size, 7.5 microns, silt	sediment	%	4.4		0.1	--	--		--	--	--		--	--	--		--	--
D422	Particle size, 6.7 microns, silt	sediment	%	--		--	--	--		--	--	--		--	--	0.7		0.1	--
D422	Particle size, 6.4 microns, silt	sediment	%	--		--	--	--		--	--	4.1		0.1	--	--		--	--
D422	Particle size, 5.9 microns, silt	sediment	%	--		--	--	7.6		0.1	--	--		--	--	--		--	--
D422	Particle size, 5.7 microns, silt	sediment	%	5.6		0.1	--	--		--	--	--		--	--	--		--	--
D422	Particle size, 3.3 microns, clay	sediment	%	--		--	--	--		--	--	2.0		0.1	--	0.0		0.1	--
D422	Particle size, 3.0 microns, clay	sediment	%	--		--	--	12.2		0.1	--	--		--	--	--		--	--
D422	Particle size, 2.9 microns, clay	sediment	%	9.9		0.1	--	--		--	--	--		--	--	--		--	--
D422	Particle size, 1.4 microns, clay	sediment	%	--		--	--	--		--	--	2.0		0.1	--	0.7		0.1	--
D422	Particle size, less than 1.4 microns, clay	sediment	%	--		--	--	--		--	--	11.2		0.1	--	2.7		0.1	--
D422	Particle size, 1.3 microns, clay	sediment	%	11.4		0.1	--	9.1		0.1	--	--		--	--	--		--	--
D422	Particle size, less than 1.3 microns, clay	sediment	%	17.3		0.1	--	31.1		0.1	--	--		--	--	--		--	--

[1] See table 5 for description of qualifier codes.

[2] Reporting limit -- the lowest level at which measurements become quantitatively meaningful, ie., the quantitation limit, which is approximately three times the method detection limit. Reporting limits cannot be less than the statistically detrmined method detection limit.

[3] Method detection limit -- the minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero and is determined from replicate analyses of low level standards in a typical representative matrix.

Table 4.13--Analytical results of surface-water monitoring at Rio Grande at San Pedro

[Field parameters measured by field staff. Laboratory analyses performed by Severn Trent Laboratory and the New Mexico Scientific Laboratory (pharmaceuticals). --, no data; °C, degrees Celsius; mm of Hg, millimeters of mercury; ft^3/sec, cubic feet per second; mg/L, milligram per liter; %, percent; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units; >, greater than; ug/L, micrograms per liter; g/kg, grams per kilogram; mg/kg, milligram per kilogram; ug/kg, micrograms per kilogram; ITMS, Ion trap mass spectrometer; ng/L, nanograms per liter; n/a, not applicable.]

Method	Parameter	Matrix	Unit	20-Aug-02				14-Jan-03			
				Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]	Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]
--	Station identification number	--	--	335427106510910		--	--	335427106511010		--	--
--	Latitude/Longitude	--	--	335427/1065109		--	--	335427/1065110		--	--
--	Time	--	--	1015		--	--	1100		--	--
	Field parameters										
170.1	Air temperature	air	°C	27.4		0.1	0.01	9.5		0.1	0.01
170.1	Water temperature	water	°C	22.4		0.1	0.01	4.5		0.1	0.01
--	Barometric pressure	air	mm of Hg	645		--	--	652		--	--
--	Discharge, instantaneous	water	ft^3/s	25		--	--	370		--	--
150.1	pH - unfiltered	water	--	8.2		0.1	0.01	8.1		0.1	0.01
--	Dissolved oxygen	water	mg/L	7.3		0.1	0.01	10.7		0.1	0.01
--	Dissolved oxygen, saturation	water	%	98.5		1	0.01	82.7		1	0.01
120.1	Specific conductance - unfiltered	water	uS/cm	743		1	1	342		1	1
180.1	Turbidity	water	NTU	>1000		1	0.1	>1000		1	0.1
310.1	Alkalinity, as $CaCO_3$	water	mg/L	182		1	0.1	159		1	0.1
310.1	Bicarbonate, as HCO_3	water	mg/L	217		1	0.1	192		1	0.1
310.1	Carbonate, as CO_3	water	mg/L	2.1		0.1	0.1	1.1		0.1	0.1
	General chemistry										
130.2	Hardness, as $CaCO_3$	water	mg/L	300	J Q	12	5	300	J G	12	5
160.1	Total dissolved solids	water	mg/L	480	J G	20	10	430	G	20	10
160.2	Total suspended solids	water	mg/L	940	Q	20	9	970	Q	29	13
314	Perchlorate	water	ug/L	ND		20	1.5	ND		20	0.2
405.1	Biochemical oxygen demand (BOD)	water	mg/L	ND		2	0.23	1.5	B	2	0.23
410.4	Chemical oxygen demand (COD)	water	mg/L	12	B	20	3.5	ND		20	3.5
9060	Total organic carbon	sediment	g/kg	5.1		2	0.59	6.6		2	0.59
D2216	Moisture	sediment	%	38		0.1	--	39		0.1	--
D2216	Moisture	fish	%	--	f	--	--	--	f	--	--
Total Residue	Lipids (Red Shiner)	fish	%	--		--	--	0.33		0.1	--
Total Residue	Lipids (Fathead Minnow)	fish	%	--	f	--	--	--		--	--
	Common anions										
300.0A	Bromide	water	mg/L	0.21		0.2	0.03	0.23		0.2	0.03
300.0A	Chloride	water	mg/L	49		3	0.1	39		3	0.1
300.0A	Fluoride	water	mg/L	0.62	B	1	0.03	0.6	B	1	0.03
300.0A	Nitrate	water	mg/L	ND		0.5	0.03	0.46	B	0.5	0.03
300.0A	Nitrite	water	mg/L	ND		0.5	0.04	ND		0.5	0.04
300.0A	Phosphate as P, Ortho	water	mg/L	ND		0.5	0.04	0.13	B	0.5	0.04
300.0A	Sulfate	water	mg/L	140	Q	25	1	100	Q	25	1
9012A	Cyanide, Total	water	mg/L	ND		0.01	0.002	0.0054	B	0.01	0.002
9012A	Cyanide, Total	sediment	mg/kg	0.32	B J	0.8	0.14	0.41	B J	0.82	0.14
9056	Bromide	sediment	mg/kg	ND		3.2	0.48	ND		3.3	0.49
9056	Chloride	sediment	mg/kg	36	B J	48	1.6	26	B J	49	1.6
9056	Fluoride	sediment	mg/kg	4.4	B	16	0.48	2.4	B J	16	0.49
9056	Nitrate	sediment	mg/kg	3.4	B	8	0.48	3.4	B J	8.2	0.49
9056	Nitrite	sediment	mg/kg	ND		8	0.64	ND		8.2	0.65
9056	Phosphate as P, Ortho	sediment	mg/kg	ND		8	0.64	1.9	B	8.2	0.65
9056	Sulfate	sediment	mg/kg	150		80	3.2	41	B J	82	3.3

Table 4.13--Analytical results of surface-water monitoring at Rio Grande at San Pedro

Method	Parameter	Matrix	Unit	20-Aug-02				14-Jan-03			
				Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]	Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]
	Nutrients										
350.1	Ammonia as N	water	mg/L	0.028	B	0.1	0.015	0.057	B	0.1	0.015
351.2	Total Kjeldahl Nitrogen	water	mg/L	0.14	B	0.5	0.14	0.14	B	0.5	0.083
353.2	Nitrate-Nitrite	water	mg/L	0.025	B	0.1	0.012	0.29		0.1	0.012
354.1	Nitrite	water	mg/L	ND		0.01	0.002	ND		0.01	0.002
365.3	Total phosphorus	water	mg/L	0.15		0.05	0.013	1	J Q	0.25	0.065
350.1	Ammonia as N	sediment	mg/kg	0.36	B	1.6	0.24	0.73	B	1.6	0.25
351.2	Total Kjeldahl Nitrogen	sediment	mg/kg	300		80	32	320		82	9.3
353.2	Nitrate-Nitrite	sediment	mg/kg	ND		1.6	0.19	0.27	B J	1.6	0.2
354.1	Nitrite	sediment	mg/kg	0.087	B	0.16	0.064	0.095	B J	0.16	0.065
365.3	Total phosphorus	sediment	mg/kg	280	J Q	40	9.6	1700	Q	410	98
	Trace elements										
6020	Antimony	water	ug/L	0.22	B	2	0.04	0.34	B	2	0.04
6020	Arsenic	water	ug/L	6.0		5	0.061	4.1	B	5	0.061
6020	Barium	water	ug/L	100		1	0.057	82	J	1	0.057
6020	Beryllium	water	ug/L	0.068	B	1	0.028	--		--	--
6020	Cadmium	water	ug/L	0.03	B	1	0.022	0.026	B	1	0.022
6020	Chromium	water	ug/L	1.4	B	2	0.24	1.1	B J	2	0.24
6020	Cobalt	water	ug/L	0.75	B	1	0.015	0.49	B	1	0.015
6020	Copper	water	ug/L	1.8	B	2	0.63	0.9	B	2	0.63
6020	Lead	water	ug/L	0.66	B	1	0.15	ND		1	0.15
6020	Manganese	water	ug/L	19	J	1	0.061	1.4		1	0.061
6020	Molybdenum	water	ug/L	7.1	J	2	0.023	5.6		2	0.023
6020	Nickel	water	ug/L	2.2		2	0.25	0.69	B J	2	0.25
6020	Selenium	water	ug/L	0.32	B	5	0.19	ND		5	0.19
6020	Silver	water	ug/L	0.038	B	5	0.012	ND		5	0.012
6020	Thallium	water	ug/L	0.04	B J	1	0.015	ND		1	0.015
6020	Tin	water	ug/L	0.46	B	10	0.054	0.2	B	10	0.054
6020	Uranium	water	ug/L	2.7	J	1	0.0015	3.1		1	0.0015
6020	Vanadium	water	ug/L	6.8		5	0.07	4.3	B	5	0.07
6020	Zinc	water	ug/L	13		10	2.3	3	B J	10	2.3
7470A	Mercury	water	ug/L	ND		0.2	0.028	0.023	B	0.2	0.015
6010B	Aluminum	water	ug/L	290		100	20	ND		100	20
6010B	Beryllium	water	ug/L	--		--	--	0.53	B J	5	0.22
6010B	Boron	water	ug/L	160		100	5.2	140		100	5.2
6010B	Calcium	water	ug/L	72000		200	31	53000		200	31
6010B	Iron	water	ug/L	290		100	13	15	B	100	13
6010B	Lithium	water	ug/L	74		10	2.1	68		10	2.1
6010B	Magnesium	water	ug/L	14000		200	24	10000		200	24
6010B	Potassium	water	ug/L	6000		3000	490	5000		3000	490
6010B	Silica	water	ug/L	26000		1100	23	22000		1100	23
6010B	Sodium	water	ug/L	80000		5000	1500	59000		5000	1500
6010B	Strontium	water	ug/L	760		10	0.35	530		10	0.35
6010B	Titanium	water	ug/L	3.7	B	10	0.97	ND		10	0.97
6020	Antimony	sediment	mg/kg	ND		0.32	0.0047	0.013	B	0.33	0.0047
6020	Arsenic	sediment	mg/kg	3.2		0.8	0.027	3.2		0.82	0.028
6020	Barium	sediment	mg/kg	150	J	0.16	0.039	250	J	0.16	0.039
6020	Beryllium	sediment	mg/kg	0.59		0.16	0.0071	--		--	--
6020	Cadmium	sediment	mg/kg	0.1	B	0.16	0.0023	0.12	B J	0.16	0.0023
6020	Chromium	sediment	mg/kg	13	J	0.32	0.029	15	J	0.33	0.029
6020	Cobalt	sediment	mg/kg	5.9		0.16	0.0019	6.5	J	0.16	0.002

Table 4.13--Analytical results of surface-water monitoring at Rio Grande at San Pedro

Method	Parameter	Matrix	Unit	20-Aug-02				14-Jan-03			
				Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]	Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]
6020	Copper	sediment	mg/kg	9.7	J	0.32	0.024	10	J	0.33	0.025
6020	Lead	sediment	mg/kg	9	J	0.16	0.0068	8.4	J	0.16	0.0069
6020	Manganese	sediment	mg/kg	320	J	0.16	0.037	340	J	0.16	0.038
6020	Molybdenum	sediment	mg/kg	0.18	B	0.32	0.0035	0.19	B J	0.33	0.0036
6020	Nickel	sediment	mg/kg	9.8		0.16	0.021	12	J	0.16	0.021
6020	Selenium	sediment	mg/kg	0.34	B	0.8	0.079	0.34	B	0.82	0.08
6020	Silver	sediment	mg/kg	0.1	B	0.16	0.0037	0.074	B	0.16	0.0038
6020	Thallium	sediment	mg/kg	0.16		0.16	0.0016	0.13	B J	0.16	0.0016
6020	Tin	sediment	mg/kg	ND		1.6	0.13	0.2	B J	1.6	0.13
6020	Uranium	sediment	mg/kg	0.77		0.16	0.0029	0.7	J	0.16	0.0029
6020	Vanadium	sediment	mg/kg	31	J	0.8	0.009	29	J	0.82	0.0091
6020	Zinc	sediment	mg/kg	39		1.6	0.56	43	J	1.6	0.57
7471A	Mercury	sediment	mg/kg	0.01	B	0.053	0.004	0.011	B	0.054	0.0041
6010B	Aluminum	sediment	mg/kg	16000		16	3.4	15000	J	16	3.4
6010B	Beryllium	sediment	mg/kg	--		--	--	0.87		0.82	0.056
6010B	Boron	sediment	mg/kg	4.7	B	16	0.59	2.8	B	16	0.6
6010B	Calcium	sediment	mg/kg	15000		32	13	30000	J	33	13
6010B	Iron	sediment	mg/kg	15000		16	2.6	18000	J	16	2.6
6010B	Lithium	sediment	mg/kg	13		8	0.18	16		8.2	0.18
6010B	Magnesium	sediment	mg/kg	4600		32	2.4	6800	J	33	2.5
6010B	Potassium	sediment	mg/kg	2800		480	56	2800		490	57
6010B	Sodium	sediment	mg/kg	180	B	800	96	99	B	820	98
6010B	Strontium	sediment	mg/kg	78		1.6	0.024	130		1.6	0.082
6010B	Titanium	sediment	mg/kg	180		1.6	0.19	380	J	1.6	0.2
6020	Antimony	fish	mg/kg	0.084	B	0.2	0.02	ND		0.2	0.02
6020	Arsenic	fish	mg/kg	0.17	B	0.5	0.0076	0.11	B	0.5	0.0076
6020	Beryllium	fish	mg/kg	0.0084	B	0.1	0.0023	--		--	--
6020	Cadmium	fish	mg/kg	0.019	B	0.1	0.0027	0.015	B	0.1	0.0027
6020	Chromium	fish	mg/kg	0.58	J	0.2	0.034	0.24	J	0.2	0.034
6020	Copper	fish	mg/kg	0.77		0.2	0.061	0.88	J	0.2	0.061
6020	Lead	fish	mg/kg	0.15		0.1	0.02	0.053	B	0.1	0.02
6020	Nickel	fish	mg/kg	0.73	J	0.1	0.011	0.1	J	0.1	0.011
6020	Selenium	fish	mg/kg	0.24	B	0.5	0.018	0.77		0.5	0.018
6020	Silver	fish	mg/kg	0.022	B J	0.1	0.002	0.004	B	0.1	0.002
6020	Thallium	fish	mg/kg	0.015	B	0.1	0.002	0.0068	B	0.1	0.002
6020	Uranium	fish	mg/kg	0.024	B	0.1	0.002	0.0091	B	0.1	0.002
6020	Zinc	fish	mg/kg	28	J	1	0.13	63	J	1	0.13
245.6	Mercury	fish	ug/kg	33	B	100	5.9	19	B	100	5.9
6010B	Aluminum	fish	mg/kg	280		10	3.1	300		10	3.1
6010B	Barium	fish	mg/kg	13		1	0.12	11		1	0.12
6010B	Beryllium	fish	mg/kg	--		--	--	ND		0.5	0.14
6010B	Boron	fish	mg/kg	ND		10	0.51	ND		10	0.51
6010B	Calcium	fish	mg/kg	13000	J	20	3.2	6900	J	20	3.2
6010B	Cobalt	fish	mg/kg	ND		1	0.15	0.32	B	1	0.15
6010B	Iron	fish	mg/kg	200		10	2	260		10	2
6010B	Lithium	fish	mg/kg	0.37	B	5	0.22	ND		5	0.22
6010B	Magnesium	fish	mg/kg	460		20	1.5	390		20	1.5
6010B	Manganese	fish	mg/kg	12		1	0.14	8.5		1	0.14
6010B	Molybdenum	fish	mg/kg	ND		2	0.24	ND		2	0.24
6010B	Potassium	fish	mg/kg	2300		300	31	2200		300	31
6010B	Sodium	fish	mg/kg	720		500	120	640		500	120

Table 4.13--Analytical results of surface-water monitoring at Rio Grande at San Pedro

Method	Parameter	Matrix	Unit	20-Aug-02				14-Jan-03			
				Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]	Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]
6010B	Strontium	fish	mg/kg	57		1	0.15	26		1	0.15
6010B	Tin	fish	mg/kg	1.8	B J	10	0.42	1.8	B J	10	0.42
6010B	Titanium	fish	mg/kg	3.5		1	0.2	7.8		1	0.2
6010B	Vanadium	fish	mg/kg	0.61	B	1	0.35	0.65	B	1	0.35
	Volatile organic compounds										
8260B	Acetone	water	ug/L	ND		10	2.9	ND		10	2.9
8260B	Benzene	water	ug/L	ND		1	0.27	ND		1	0.27
8260B	Bromodichloromethane	water	ug/L	ND		1	0.35	ND		1	0.35
8260B	Bromoform	water	ug/L	ND		1	0.46	ND		1	0.46
8260B	Bromomethane	water	ug/L	ND		2	0.28	ND		2	0.28
8260B	Carbon disulfide	water	ug/L	ND		1	0.67	ND		1	0.67
8260B	Carbon tetrachloride	water	ug/L	ND		1	0.35	ND		1	0.35
8260B	Chlorobenzene	water	ug/L	ND		1	0.24	ND		1	0.24
8260B	Chloroethane	water	ug/L	ND		2	0.26	ND		2	0.26
8260B	Chloroform	water	ug/L	ND		1	0.29	ND		1	0.29
8260B	Chloromethane	water	ug/L	ND		2	0.26	ND		2	0.26
8260B	cis-1,2-Dichloroethene	water	ug/L	ND		1	0.33	ND		1	0.33
8260B	cis-1,3-Dichloropropene	water	ug/L	ND		1	0.31	ND		1	0.31
8260B	Dibromochloromethane	water	ug/L	ND		1	0.37	ND		1	0.37
8260B	Ethylbenzene	water	ug/L	ND		1	0.51	ND		1	0.51
8260B	Methylene chloride	water	ug/L	ND		5	0.86	ND		5	0.86
8260B	m-Xylene & p-Xylene	water	ug/L	ND		2	0.52	ND		2	0.52
8260B	o-Xylene	water	ug/L	ND		1	0.24	ND		1	0.24
8260B	Styrene	water	ug/L	ND		1	0.28	ND		1	0.28
8260B	Tetrachloroethene	water	ug/L	ND		1	0.27	ND		1	0.27
8260B	Toluene	water	ug/L	ND		1	0.26	ND		1	0.26
8260B	trans-1,2-Dichloroethene	water	ug/L	ND		0.5	0.25	ND		0.5	0.25
8260B	trans-1,3-Dichloropropene	water	ug/L	ND		1	0.36	ND		1	0.36
8260B	Trichloroethene	water	ug/L	ND		1	0.24	ND		1	0.24
8260B	**Unknown**	water	ug/L	--		--	--	1.4	J	--	--
8260B	Vinyl chloride	water	ug/L	ND		1	0.26	ND		1	0.26
8260B	Xylenes (total)	water	ug/L	ND		2	0.73	ND		2	0.73
8260B	1,1,1-Trichloroethane	water	ug/L	ND		1	0.32	ND		1	0.32
8260B	1,1,2,2-Tetrachloroethane	water	ug/L	ND		1	0.5	ND		1	0.5
8260B	1,1,2-Trichloroethane	water	ug/L	ND		1	0.41	ND		1	0.41
8260B	1,1-Dichloroethane	water	ug/L	ND		1	0.29	ND		1	0.29
8260B	1,1-Dichloroethene	water	ug/L	ND		1	0.31	ND		1	0.31
8260B	1,2-Dichloroethane	water	ug/L	ND		1	0.43	ND		1	0.43
8260B	1,2-Dichloroethene (total)	water	ug/L	ND		1	0.54	ND		1	0.54
8260B	1,2-Dichloropropane	water	ug/L	ND		1	0.38	ND		1	0.38
8260B	2-Butanone (MEK)	water	ug/L	ND		5	2.4	ND		5	2.4
8260B	2-Hexanone	water	ug/L	ND		5	1.8	ND		5	1.8
8260B	4-Methyl-2-pentanone	water	ug/L	ND		5	1.8	ND		5	1.8
8260B	Acetone	sediment	ug/kg	ND		32	7.4	11	J	33	5.6
8260B	Benzene	sediment	ug/kg	ND		8	1.4	ND		8.2	0.2
8260B	Bromodichloromethane	sediment	ug/kg	ND		8	1.5	ND		8.2	0.33
8260B	Bromoform	sediment	ug/kg	ND		8	1.5	ND		8.2	0.42
8260B	Bromomethane	sediment	ug/kg	ND		16	1.9	ND		16	0.98
8260B	Carbon disulfide	sediment	ug/kg	ND		8	1.5	ND		8.2	0.39
8260B	Carbon tetrachloride	sediment	ug/kg	ND		8	1.9	ND		8.2	0.41
8260B	Chlorobenzene	sediment	ug/kg	ND		8	1.2	ND		8.2	0.29

Table 4.13--Analytical results of surface-water monitoring at Rio Grande at San Pedro

Method	Parameter	Matrix	Unit	20-Aug-02				14-Jan-03			
				Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]	Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]
8260B	Chloroethane	sediment	ug/kg	ND		16	2.1	ND		16	0.38
8260B	Chloroform	sediment	ug/kg	ND		16	1.4	ND		16	0.41
8260B	Chloromethane	sediment	ug/kg	ND		16	2.4	ND		16	0.59
8260B	cis-1,2-Dichloroethene	sediment	ug/kg	ND		4	1.4	ND		4.1	0.34
8260B	cis-1,3-Dichloropropene	sediment	ug/kg	ND		8	1.5	ND		8.2	0.59
8260B	Dibromochloromethane	sediment	ug/kg	ND		8	1.4	ND		8.2	0.33
8260B	Ethylbenzene	sediment	ug/kg	ND		8	1.9	ND		8.2	0.44
8260B	Methylene chloride	sediment	ug/kg	ND		8	1.3	10	B	8.2	0.67
8260B	m-Xylene & p-Xylene	sediment	ug/kg	ND		4	2.9	ND		4.1	0.69
8260B	o-Xylene	sediment	ug/kg	ND		4	1.6	ND		4.1	0.38
8260B	Styrene	sediment	ug/kg	ND		8	1.1	ND		8.2	0.34
8260B	Tetrachloroethene	sediment	ug/kg	ND		8	1.6	ND		8.2	0.41
8260B	Toluene	sediment	ug/kg	ND		8	1.3	ND		8.2	0.36
8260B	trans-1,2-Dichloroethene	sediment	ug/kg	ND		4	1.3	ND		4.1	0.57
8260B	trans-1,3-Dichloropropene	sediment	ug/kg	ND		8	1.6	ND		8.2	0.69
8260B	Trichloroethene	sediment	ug/kg	ND		8	1.4	ND		8.2	0.47
8260B	Unknown	sediment	ug/kg	12		--	--	49	J	--	--
8260B	Unknown	sediment	ug/kg	14		--	--	15	J	--	--
8260B	Unknown	sediment	ug/kg	--		--	--	9.7	J	--	--
8260B	Vinyl chloride	sediment	ug/kg	ND		8	1.8	ND		8.2	0.38
8260B	Xylenes (total)	sediment	ug/kg	ND		8	4.5	ND		8.2	0.91
8260B	1,1,1-Trichloroethane	sediment	ug/kg	--		--	--	ND		8.2	0.42
8260B	1,1,2,2-Tetrachloroethane	sediment	ug/kg	1.8	J B	8	1.8	ND		8.2	0.91
8260B	1,1,2-Trichloroethane	sediment	ug/kg	ND		8	2.4	ND		8.2	0.52
8260B	1,1-Dichloroethane	sediment	ug/kg	ND		8	1.6	ND		8.2	0.34
8260B	1,1-Dichloroethene	sediment	ug/kg	ND		8	1.8	ND		8.2	0.51
8260B	1,2-Dichloroethane	sediment	ug/kg	ND		8	1.6	ND		8.2	0.36
8260B	1,2-Dichloroethene (total)	sediment	ug/kg	ND		8	2.4	ND		8.2	0.49
8260B	1,2-Dichloropropane	sediment	ug/kg	ND		8	1.9	ND		8.2	0.36
8260B	2-Butanone (MEK)	sediment	ug/kg	ND		32	7.6	ND		33	4.4
8260B	2-Hexanone	sediment	ug/kg	ND		32	7.4	ND		33	3.8
8260B	4-Methyl-2-pentanone	sediment	ug/kg	ND		32	6.3	ND		33	3.3
	Herbicides										
8151A	Dalapon	water	ug/L	ND		2	0.42	ND		2	0.33
8151A	Dicamba	water	ug/L	ND		2	0.081	ND		2	0.086
8151A	Dichlorprop	water	ug/L	ND		4	0.13	ND		4	0.11
8151A	Dinoseb	water	ug/L	ND		0.6	0.09	ND		0.6	0.065
8151A	MCPA	water	ug/L	ND		400	13	ND		400	12
8151A	MCPP	water	ug/L	ND		400	42	ND		400	15
8151A	2,4,5-T	water	ug/L	ND		1	0.043	ND		1	0.043
8151A	2,4,5-TP (Silvex)	water	ug/L	ND		1	0.034	ND		1	0.036
8151A	2,4-D	water	ug/L	ND		4	0.16	ND		4	0.24
8151A	2,4-DB	water	ug/L	ND		4	0.21	ND		4	0.098
	Pesticides										
8141A	Anilazine	water	ug/L	ND		10	1.3	ND		10	1.3
8141A	Atrazine	water	ug/L	ND		10	0.52	ND		10	0.52
8141A	Azinphos-methyl	water	ug/L	ND		2.5	0.14	ND		2.5	0.14
8141A	Bolstar	water	ug/L	ND		0.5	0.14	ND		0.5	0.14
8141A	Chlorpyrifos	water	ug/L	ND		0.5	0.054	ND		0.5	0.054
8141A	Coumaphos	water	ug/L	ND		0.5	0.079	ND		0.5	0.079
8141A	Demeton (total)	water	ug/L	ND		1	0.19	ND		1	0.19

Table 4.13--Analytical results of surface-water monitoring at Rio Grande at San Pedro

Method	Parameter	Matrix	Unit	20-Aug-02				14-Jan-03			
				Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]	Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]
8141A	Diazinon	water	ug/L	ND		0.5	0.039	ND		0.5	0.039
8141A	Dichlorvos	water	ug/L	ND		0.5	0.13	ND		0.5	0.13
8141A	Dimethoate	water	ug/L	ND		0.5	0.18	ND		0.5	0.18
8141A	Disulfoton	water	ug/L	ND		0.5	0.057	ND		0.5	0.057
8141A	EPN	water	ug/L	ND		0.5	0.05	ND		0.5	0.05
8141A	Ethoprop	water	ug/L	ND		0.5	0.056	ND		0.5	0.056
8141A	Ethyl parathion	water	ug/L	ND		0.5	0.04	ND		0.5	0.04
8141A	Famphur	water	ug/L	ND		1	0.054	ND		1	0.054
8141A	Fensulfothion	water	ug/L	ND		2.5	0.22	ND		2.5	0.22
8141A	Fenthion	water	ug/L	ND		0.5	0.061	ND		0.5	0.061
8141A	Malathion	water	ug/L	ND		1.2	0.05	ND		1.2	0.05
8141A	Merphos	water	ug/L	ND		5	0.063	ND		5	0.063
8141A	Methyl parathion	water	ug/L	ND		0.5	0.061	ND		0.5	0.061
8141A	Mevinphos	water	ug/L	ND		6.2	0.16	ND		6.2	0.16
8141A	Naled	water	ug/L	ND		10	0.22	ND		10	0.22
8141A	Phorate	water	ug/L	ND		0.5	0.075	ND		0.5	0.075
8141A	Propazine	water	ug/L	ND		10	2.5	ND		10	2.5
8141A	Ronnel	water	ug/L	ND		10	0.11	ND		10	0.11
8141A	Simazine	water	ug/L	ND		10	0.46	ND		10	0.46
8141A	Sulfotepp	water	ug/L	ND		0.5	0.03	ND		0.5	0.03
8141A	Tetrachlorvinphos (Stirophos)	water	ug/L	ND		2.5	0.056	ND		2.5	0.056
8141A	Thionazin	water	ug/L	ND		0.5	0.059	ND		0.5	0.059
8141A	Tokuthion	water	ug/L	ND		0.5	0.071	ND		0.5	0.071
8141A	Trichloronate	water	ug/L	ND		0.5	0.057	ND		0.5	0.057
8141A	O,O,O-Triethyl phosphorothioate	water	ug/L	ND		0.5	0.15	ND		0.5	0.15
8081A	Aldrin	sediment	ug/kg	ND		2.7	0.63	ND		28	4.4
8081A	alpha-BHC	sediment	ug/kg	0.73	J COL	2.7	0.59	ND		28	4.1
8081A	beta-BHC	sediment	ug/kg	ND		2.7	0.55	ND		28	4.4
8081A	Chlordane (technical)	sediment	ug/kg	ND		27	4	ND		280	41
8081A	delta-BHC	sediment	ug/kg	ND		2.7	0.18	ND		28	10
8081A	Dieldrin	sediment	ug/kg	ND		2.7	0.87	ND		28	3.9
8081A	Endosulfan I	sediment	ug/kg	ND		2.7	0.61	ND		28	6
8081A	Endosulfan II	sediment	ug/kg	ND		2.7	1.1	ND		28	6.9
8081A	Endosulfan sulfate	sediment	ug/kg	ND		2.7	0.47	ND		28	6.5
8081A	Endrin	sediment	ug/kg	ND		2.7	0.61	ND		28	6.7
8081A	Endrin aldehyde	sediment	ug/kg	ND		2.7	2.5	ND		28	14
8081A	gamma-BHC (Lindane)	sediment	ug/kg	ND		2.7	1.1	ND		28	3.9
8081A	Heptachlor	sediment	ug/kg	ND		2.7	0.76	ND		28	5.1
8081A	Heptachlor epoxide	sediment	ug/kg	ND		11	0.58	ND		110	3.6
8081A	Methoxychlor	sediment	ug/kg	ND		5.3	0.27	ND		54	13
8081A	Toxaphene	sediment	ug/kg	ND		270	16	ND		2800	160
8081A	4,4'-DDD	sediment	ug/kg	ND		2.7	0.47	ND		28	5.7
8081A	4,4'-DDE	sediment	ug/kg	0.72	J COL	2.7	0.51	ND		28	7.2
8081A	4,4'-DDT	sediment	ug/kg	ND		2.7	0.53	ND		28	7.8
8081A	Aldrin	fish	ug/kg	--	f	--	--	--	f	--	--
8081A	alpha-BHC	fish	ug/kg	--	f	--	--	--	f	--	--
8081A	alpha-Chlordane	fish	ug/kg	--	f	--	--	--	f	--	--
8081A	beta-BHC	fish	ug/kg	--	f	--	--	--	f	--	--
8081A	delta-BHC	fish	ug/kg	--	f	--	--	--	f	--	--
8081A	Dieldrin	fish	ug/kg	--	f	--	--	--	f	--	--
8081A	Endosulfan I	fish	ug/kg	--	f	--	--	--	f	--	--

Table 4.13--Analytical results of surface-water monitoring at Rio Grande at San Pedro

Method	Parameter	Matrix	Unit	20-Aug-02				14-Jan-03			
				Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]	Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]
8081A	Endosulfan II	fish	ug/kg	--	f	--	--	--	f	--	--
8081A	Endosulfan sulfate	fish	ug/kg	--	f	--	--	--	f	--	--
8081A	Endrin	fish	ug/kg	--	f	--	--	--	f	--	--
8081A	Endrin aldehyde	fish	ug/kg	--	f	--	--	--	f	--	--
8081A	Endrin ketone	fish	ug/kg	--	f	--	--	--	f	--	--
8081A	gamma-BHC (Lindane)	fish	ug/kg	--	f	--	--	--	f	--	--
8081A	gamma-Chlordane	fish	ug/kg	--	f	--	--	--	f	--	--
8081A	Heptachlor	fish	ug/kg	--	f	--	--	--	f	--	--
8081A	Heptachlor epoxide	fish	ug/kg	--	f	--	--	--	f	--	--
8081A	Methoxychlor	fish	ug/kg	--	f	--	--	--	f	--	--
8081A	Toxaphene	fish	ug/kg	--	f	--	--	--	f	--	--
8081A	4,4'-DDD	fish	ug/kg	--	f	--	--	--	f	--	--
8081A	4,4'-DDE	fish	ug/kg	--	f	--	--	--	f	--	--
8081A	4,4'-DDT	fish	ug/kg	--	f	--	--	--	f	--	--
	Explosives										
8330	HMX	water	ug/L	ND		0.25	0.19	ND		0.25	0.03
8330	Nitrobenzene	water	ug/L	ND		0.25	0.08	ND		0.25	0.04
8330	Nitroglycerin	water	ug/L	ND		2.5	0.9	ND		2.5	0.3
8330	PETN	water	ug/L	ND		2.5	1.3	ND		2.5	0.5
8330	RDX	water	ug/L	ND		0.25	0.17	ND		0.25	0.03
8330	Tetryl	water	ug/L	ND		0.5	0.15	ND		0.5	0.03
8330	1,3,5-Trinitrobenzene	water	ug/L	ND		0.25	0.092	ND		0.25	0.03
8330	1,3-Dinitrobenzene	water	ug/L	ND		0.25	0.11	ND		0.25	0.03
8330	2,4,6-Trinitrotoluene	water	ug/L	ND		0.25	0.089	ND		0.25	0.05
8330	2,4-Dinitrotoluene	water	ug/L	ND		0.25	0.1	ND		0.25	0.04
8330	2,6-Dinitrotoluene	water	ug/L	ND		0.25	0.15	ND		0.25	0.03
8330	2-Amino-4,6-dinitrotoluene	water	ug/L	ND		0.25	0.12	ND		0.25	0.04
8330	2-Nitrotoluene	water	ug/L	ND		0.25	0.16	ND		0.25	0.04
8330	3-Nitrotoluene	water	ug/L	ND		0.25	0.18	ND		0.25	0.09
8330	4-Amino-2,6-dinitrotoluene	water	ug/L	ND		0.25	0.1	ND		3.2	0.05
8330	4-Nitrotoluene	water	ug/L	ND		0.25	0.23	ND		0.4	0.05
	Polyaromatic hydrocarbons										
8310	Acenaphthene	sediment	ug/kg	ND		320	6.3	16	J	330	6.4
8310	Acenaphthylene	sediment	ug/kg	ND		320	19	ND		330	20
8310	Anthracene	sediment	ug/kg	ND		32	4.2	ND		33	4.2
8310	Benzo(a)anthracene	sediment	ug/kg	ND		32	8	ND		33	8.2
8310	Benzo(a)pyrene	sediment	ug/kg	ND		32	2.9	5.7	J COL	33	2.9
8310	Benzo(b)fluoranthene	sediment	ug/kg	ND		32	6.3	11	J COL	33	6.4
8310	Benzo(ghi)perylene	sediment	ug/kg	ND		64	4.2	23	J CHI	65	4.2
8310	Benzo(k)fluoranthene	sediment	ug/kg	ND		32	3.7	ND		33	3.8
8310	Chrysene	sediment	ug/kg	ND		64	3.9	ND		65	3.9
8310	Dibenzo(a,h)anthracene	sediment	ug/kg	ND		64	7.4	18	J COL	65	7.5
8310	Fluoranthene	sediment	ug/kg	ND		64	14	ND		65	14
8310	Fluorene	sediment	ug/kg	ND		64	14	ND		65	14
8310	Indeno(1,2,3-cd)pyrene	sediment	ug/kg	ND		64	3.7	6.8	J COL	65	3.8
8310	Naphthalene	sediment	ug/kg	ND		320	19	ND		330	20
8310	Phenanthrene	sediment	ug/kg	ND		64	5.3	ND		65	5.4
8310	Pyrene	sediment	ug/kg	ND		64	11	ND		65	11
8310	1-Methylnaphthalene	sediment	ug/kg	23	J COL	320	11	43	J COL	330	11
8310	2-Methylnaphthalene	sediment	ug/kg	ND		320	5.3	17	J COL	330	5.4
	Total Petroleum Hydrocarbons										

Table 4.13--Analytical results of surface-water monitoring at Rio Grande at San Pedro

Method	Parameter	Matrix	Unit	20-Aug-02				14-Jan-03			
				Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]	Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]
9071B	n-Hexane Ext. Material	sediment	mg/kg	ND		800	260	ND		820	260
9071B	SGT-HEM (Petroleum Hydrocarbons)	sediment	mg/kg	ND		800	190	ND		820	200
	Pharmaceuticals										
ITMS	Amitriptyline	water	ng/L	ND		10	--	ND		10	--
ITMS	Beta-Estradiol	water	ng/L	ND		10	--	ND		10	--
ITMS	Caffeine	water	ng/L	ND		10	--	ND		10	--
ITMS	Cholesterol	water	ng/L	ND		10	--	ND		10	--
ITMS	Desipramine	water	ng/L	ND		10	--	ND		10	--
ITMS	Dextro-Norgestrel	water	ng/L	ND		10	--	ND		10	--
ITMS	Doxepin	water	ng/L	ND		10	--	ND		10	--
ITMS	Equilin	water	ng/L	ND		10	--	ND		10	--
ITMS	Estrone	water	ng/L	ND		10	--	ND		10	--
ITMS	Enthynl Estradiol	water	ng/L	ND		10	--	ND		10	--
ITMS	Imipramine	water	ng/L	ND		10	--	ND		10	--
ITMS	Medroxyprogesterone	water	ng/L	ND		10	--	ND		10	--
ITMS	Megestrol Acetate	water	ng/L	ND		10	--	ND		10	--
ITMS	Menstranol	water	ng/L	ND		10	--	ND		10	--
ITMS	Nordoxepin	water	ng/L	ND		10	--	ND		10	--
ITMS	Norethindrone	water	ng/L	ND		10	--	ND		10	--
ITMS	Norethynodrel	water	ng/L	ND		10	--	ND		10	--
ITMS	Nortriptyline	water	ng/L	ND		10	--	ND		10	--
ITMS	Paroxetine	water	ng/L	ND		10	--	ND		10	--
ITMS	Phenytoin	water	ng/L	ND		10	--	ND		10	--
ITMS	Prednisone	water	ng/L	ND		10	--	ND		10	--
ITMS	Progesterone	water	ng/L	ND		10	--	ND		10	--
ITMS	Propoxyphene	water	ng/L	ND		10	--	ND		10	--
ITMS	Protroptyline	water	ng/L	ND		10	--	ND		10	--
ITMS	Prozac	water	ng/L	ND		10	--	ND		10	--
ITMS	Setraline	water	ng/L	ND		10	--	ND		10	--
ITMS	Tamoxifen	water	ng/L	ND		10	--	ND		10	--
ITMS	Trimipramine maleate	water	ng/L	ND		10	--	ND		10	--
ITMS	6 alpha-Methyprednisolone	water	ng/L	ND		10	--	ND		10	--
	Grain size analysis										
D422	Maximum particle size	sediment	--	Medium sand		--	--	Medium sand		--	--
D422	Particle size, 850 microns, sand	sediment	%	--		0.1	--	0.1		0.1	--
D422	Particle size, 425 microns, sand	sediment	%	1.7		0.1	--	0.3		0.1	--
D422	Particle size, 250 microns, sand	sediment	%	16.5		0.1	--	0.3		0.1	--
D422	Particle size, 180 microns, sand	sediment	%	18		0.1	--	1.9		0.1	--
D422	Particle size, 150 microns, sand	sediment	%	9.3		0.1	--	2.8		0.1	--
D422	Particle size, 75 microns, sand	sediment	%	21.5		0.1	--	20.4		0.1	--
D422	Particle size, 33.4 microns, silt	sediment	%	--		0.1	--	44.5		0.1	--
D422	Particle size, 30.3 microns, silt	sediment	%	0.5		0.1	--	--		0.1	--
D422	Particle size, 22.1 microns, silt	sediment	%	--		0.1	--	9.1		0.1	--
D422	Particle size, 19.3 microns, silt	sediment	%	0.8		0.1	--	--		0.1	--
D422	Particle size, 13.3 microns, silt	sediment	%	--		0.1	--	8.1		0.1	--
D422	Particle size, 11.2 microns, silt	sediment	%	0.8		0.1	--	--		0.1	--
D422	Particle size, 9.2 microns, silt	sediment	%	--		0.1	--	3.0		0.1	--
D422	Particle size, 8.0 microns, silt	sediment	%	0.8		0.1	--	--		0.1	--
D422	Particle size, 6.8 microns, silt	sediment	%	--		0.1	--	1.0		0.1	--
D422	Particle size, 5.6 microns, silt	sediment	%	2.5		0.1	--	--		0.1	--
D422	Particle size, 3.3 microns, clay	sediment	%	--		0.1	--	1.0		0.1	--

Table 4.13--Analytical results of surface-water monitoring at Rio Grande at San Pedro

Method	Parameter	Matrix	Unit	20-Aug-02				14-Jan-03			
				Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]	Result	Qualifier[1]	Reporting limit[2]	Method detection limit[3]
D422	Particle size, 3.0 microns, clay	sediment	%	5.3		0.1	--	--		0.1	--
D422	Particle size, 1.4 microns, clay	sediment	%	--		0.1	--	2.0		0.1	--
D422	Particle size, less than 1.4 microns, clay	sediment	%	--		0.1	--	5.3		0.1	--
D422	Particle size, 1.3 microns, clay	sediment	%	5.7		0.1	--	--		0.1	--
D422	Particle size, less than 1.3 microns, clay	sediment	%	16.3		0.1	--	--		0.1	--

[1] See table 5 for description of qualifier codes.

[2] Reporting limit -- the lowest level at which measurements become quantitatively meaningful, ie., the quantitation limit, which is approximately three times the method detection limit. Reporting limits cannot be less than the statistically determined method detection limit.

[3] Method detection limit -- the minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero and is determined from replicate analyses of low level standards in a typical representative matrix.

Table 4.14--Analytical results of surface-water monitoring at Rio Grande at North Boundary Bosque del Apache

[Field parameters measured by field staff. Laboratory analyses performed by Severn Trent Laboratory and the New Mexico Scientific Laboratory (pharmaceuticals). --, no data; °C, degrees Celsius; mm of Hg, millimeters of mercury; ft^3/sec, cubic feet per second; mg/L, milligram per liter; %, percent; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units; ug/L, >, greater than; micrograms per liter; g/kg, grams per kilogram; mg/kg, milligram per kilogram; ug/kg, micrograms per kilogram; ITMS, Ion trap mass spectrometer; ng/L, nanograms per liter; n/a, not applicable.]

Method	Parameter	Matrix	Unit	19-Aug-02				13-Jan-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
--	Station identification number	--	--	335234106505810		--	--	335234106505810		--	--
--	Latitude/Longitude	--	--	335234/1065058		--	--	335234/1065058		--	--
--	Time	--	--	1000		--	--	1100		--	--
	Field parameters										
170.1	Air temperature	air	°C	27.4		0.1	0.01	--		0.1	0.01
170.1	Water temperature	water	°C	22.8		0.1	0.01	4.4		0.1	0.01
--	Barometric pressure	air	mm of Hg	645		--	--	653		--	--
--	Discharge, instantaneous	water	ft^3/s	5		--	--	451		--	--
150.1	pH - unfiltered	water	--	8.4		0.1	0.01	8.1		0.1	0.01
--	Dissolved oxygen	water	mg/L	8.6		0.1	0.01	10.8		0.1	0.01
--	Dissolved oxygen, saturation	water	%	99.9		1	0.01	83.1		1	0.01
120.1	Specific conductance - unfiltered	water	uS/cm	740		1	1	345		1	1
180.1	Turbidity	water	NTU	>1000		1	0.1	544		1	0.1
310.1	Alkalinity, as $CaCO_3$	water	mg/L	178		1	0.1	159		1	0.1
310.1	Bicarbonate, as HCO_3	water	mg/L	211		1	0.1	191		1	0.1
310.1	Carbonate, as CO_3	water	mg/L	2.7		0.1	0.1	1.2		0.1	0.1
	General chemistry										
130.2	Hardness, as $CaCO_3$	water	mg/L	290	J	5	2	270	J	5	2
160.1	Total dissolved solids	water	mg/L	490	J G	20	10	280	G	20	10
160.2	Total suspended solids	water	mg/L	720	Q	20	9	700	Q	20	9
314	Perchlorate	water	ug/L	ND		20	1.5	ND		20	0.2
405.1	Biochemical oxygen demand (BOD)	water	mg/L	ND		2	0.23	ND		2	0.23
410.4	Chemical oxygen demand (COD)	water	mg/L	5.3	B	20	3.5	12	B	20	3.5
9060	Total organic carbon	sediment	g/kg	2.3		2	0.59	8.6		2	0.59
D2216	Moisture	sediment	%	34		0.1	--	30		0.1	--
D2216	Moisture	fish	%	--	f	--	--	--	--	--	--
Total Residue	Lipids (Red shiner)	fish	%	--		--	--	4		0.1	--
Total Residue	Lipids (Fathead minnow)	fish	%	--	f	--	--	--		--	--
	Common anions										
300.0A	Bromide	water	mg/L	0.22		0.2	0.03	0.16	B	0.2	0.03
300.0A	Chloride	water	mg/L	47	J Q	15	0.5	40		3	0.1
300.0A	Fluoride	water	mg/L	0.59	B	1	0.03	0.63	B	1	0.03
300.0A	Nitrate	water	mg/L	ND		0.5	0.03	0.42	B	0.5	0.03
300.0A	Nitrite	water	mg/L	ND		0.5	0.04	ND		0.5	0.04
300.0A	Phosphate as P, Ortho	water	mg/L	ND		0.5	0.04	0.13	B	0.5	0.04
300.0A	Sulfate	water	mg/L	140	Q	25	1	100	Q	25	1
9012A	Cyanide, Total	water	mg/L	ND		0.01		0.0059	B	0.01	0.002
9012A	Cyanide, Total	sediment	mg/kg	ND		0.75	0.13	0.35	B J	0.71	0.12
9056	Bromide	sediment	mg/kg	ND		3	0.45	ND		2.8	0.43
9056	Chloride	sediment	mg/kg	33	B J	45	1.5	16	B J	43	1.4
9056	Fluoride	sediment	mg/kg	4.2	B	15	0.45	2.6	B J	14	0.43
9056	Nitrate	sediment	mg/kg	3.6	B	7.5	0.45	2.9	B J	7.1	0.43
9056	Nitrite	sediment	mg/kg	2.7	B	7.5	0.6	ND		7.1	0.57
9056	Phosphate as P, Ortho	sediment	mg/kg	3.2	B	7.5	0.6	2.1	B	7.1	0.57
9056	Sulfate	sediment	mg/kg	100		75	3	45	B J	71	2.8

Table 4.14--Analytical results of surface-water monitoring at Rio Grande at North Boundary Bosque del Apache

Method	Parameter	Matrix	Unit	19-Aug-02				13-Jan-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
	Nutrients										
350.1	Ammonia as N	water	mg/L	0.089	B	0.1	0.015	0.024	B	0.1	0.015
351.2	Total Kjeldahl Nitrogen	water	mg/L	0.15	B	0.5	0.14	ND		0.5	0.14
353.2	Nitrate-Nitrite	water	mg/L	ND		0.1	0.012	0.32		0.1	0.012
354.1	Nitrite	water	mg/L	ND		0.01	0.002	0.0031	B	0.01	0.002
365.3	Total phosphorus	water	mg/L	0.3		0.05	0.013	0.82	J Q	0.25	0.065
350.1	Ammonia as N	sediment	mg/kg	0.58	B	1.5	0.23	2.5	J	1.4	0.21
351.2	Total Kjeldahl Nitrogen	sediment	mg/kg	200		75	30	560		71	57
353.2	Nitrate-Nitrite	sediment	mg/kg	ND		1.5	0.18	0.28	B J	1.4	0.17
354.1	Nitrite	sediment	mg/kg	0.066	B	0.15	0.06	0.11	B J	0.14	0.057
365.3	Total phosphorus	sediment	mg/kg	2.8	B J	7.5	1.8	1300	Q	710	170
	Trace elements										
6020	Antimony	water	ug/L	0.98	B	2	0.04	0.71	B	2	0.04
6020	Arsenic	water	ug/L	6.3		5	0.061	4.8	B	5	0.061
6020	Barium	water	ug/L	90		1	0.057	84	J	1	0.057
6020	Beryllium	water	ug/L	ND		1	0.028	--		--	--
6020	Cadmium	water	ug/L	ND		1	0.022	ND		1	0.022
6020	Chromium	water	ug/L	0.45	B	2	0.24	0.77	B J	2	0.24
6020	Cobalt	water	ug/L	0.41	B	1	0.015	0.53	B	1	0.015
6020	Copper	water	ug/L	0.8	B	2	0.63	1	B	2	0.63
6020	Lead	water	ug/L	ND		1	0.15	ND		1	0.15
6020	Manganese	water	ug/L	4.4	J	1	0.061	6.2	J	1	0.061
6020	Molybdenum	water	ug/L	7.3	J	2	0.023	6.2		2	0.023
6020	Nickel	water	ug/L	1.6	B	2	0.25	0.98	B	2	0.25
6020	Selenium	water	ug/L	ND		5	0.19	0.31	B	5	0.19
6020	Silver	water	ug/L	0.036	B	5	0.012	ND		5	0.012
6020	Thallium	water	ug/L	0.056	B J	1	0.015	ND		1	0.015
6020	Tin	water	ug/L	2.7	B	10	0.054	ND		10	0.054
6020	Uranium	water	ug/L	2.2	J	1	0.0015	3	J	1	0.0015
6020	Vanadium	water	ug/L	3.3	B	5	0.07	4.5	B	5	0.07
6020	Zinc	water	ug/L	4.8	B	10	2.3	8.6	B	10	2.3
7470A	Mercury	water	ug/L	0.055	B	0.2	0.028	0.026	B	0.2	0.015
6010B	Aluminum	water	ug/L	ND		100	20	73	B	100	20
6010B	Beryllium	water	ug/L	--		--	--	ND		5	0.22
6010B	Boron	water	ug/L	150		100	31	120		100	5.2
6010B	Calcium	water	ug/L	68000		200	0.002	59000		200	31
6010B	Iron	water	ug/L	ND		100	13	51	B	100	13
6010B	Lithium	water	ug/L	75		10	2.1	73		10	2.1
6010B	Magnesium	water	ug/L	12000		200	24	11000		200	24
6010B	Potassium	water	ug/L	5300		3000	490	5300		3000	490
6010B	Silica	water	ug/L	23000		1100	23	25000		1100	23
6010B	Sodium	water	ug/L	79000		5000	1500	66000		5000	1500
6010B	Strontium	water	ug/L	670		10	0.35	580		10	0.35
6010B	Titanium	water	ug/L	ND		10	0.97	2	B	10	0.97
6020	Antimony	sediment	mg/kg	83	B	300	4.4	0.029	B	0.28	0.0041
6020	Arsenic	sediment	mg/kg	2600		750	26	4		0.71	0.024
6020	Barium	sediment	mg/kg	150000	J	150	36	260	J	0.14	0.034
6020	Beryllium	sediment	mg/kg	590		150	6.6	--		--	--
6020	Cadmium	sediment	mg/kg	79	B	150	2.1	0.17	J	0.14	0.002
6020	Chromium	sediment	mg/kg	11000	J	300	27	16	J	0.28	0.026
6020	Cobalt	sediment	mg/kg	5000		150	1.8	7.7	J	0.14	0.0017
6020	Copper	sediment	mg/kg	8500	J	300	23	14	J	0.28	0.021

Table 4.14--Analytical results of surface-water monitoring at Rio Grande at North Boundary Bosque del Apache

Method	Parameter	Matrix	Unit	19-Aug-02				13-Jan-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
6020	Lead	sediment	mg/kg	8100	J	150	6.3	12	J	0.14	0.006
6020	Manganese	sediment	mg/kg	240000	J	150	35	410	J	0.14	0.033
6020	Molybdenum	sediment	mg/kg	240	B	300	3.3	0.2	B J	0.28	0.0031
6020	Nickel	sediment	mg/kg	8000		150	20	15	J	0.14	0.019
6020	Selenium	sediment	mg/kg	310	B	750	74	0.44	B	0.71	0.07
6020	Silver	sediment	mg/kg	66	B	150	3.5	0.12	B	0.14	0.0033
6020	Thallium	sediment	mg/kg	140	B	150	1.5	0.19	J	0.14	0.0014
6020	Tin	sediment	mg/kg	310	B	1500	120	0.13	B J	1.4	0.11
6020	Uranium	sediment	mg/kg	710		150	2.7	0.92	J	0.14	0.0026
6020	Vanadium	sediment	mg/kg	26000	J	750	8.4	31	J	0.71	0.008
6020	Zinc	sediment	mg/kg	35000		1500	530	52	J	1.4	0.5
7471A	Mercury	sediment	mg/kg	0.0084	B	0.05	0.0038	0.018	B	0.047	0.0036
6010B	Aluminum	sediment	mg/kg	11000		15	3.2	9800		14	3
6010B	Beryllium	sediment	mg/kg	--		--	--	0.43	B	0.71	0.048
6010B	Boron	sediment	mg/kg	3.1	B	15	0.56	3	B J	14	0.53
6010B	Calcium	sediment	mg/kg	10000		30	12	17000		28	11
6010B	Iron	sediment	mg/kg	11000		15	2.4	10000		14	2.3
6010B	Lithium	sediment	mg/kg	9.3		7.5	0.17	9.9		7.1	0.16
6010B	Magnesium	sediment	mg/kg	3200		30	2.3	4200		28	2.1
6010B	Potassium	sediment	mg/kg	1900		450	53	1800		430	50
6010B	Sodium	sediment	mg/kg	ND		750	90	ND		710	85
6010B	Strontium	sediment	mg/kg	60		1.5	0.023	68	J	1.4	0.071
6010B	Titanium	sediment	mg/kg	120		1.5	0.18	180		1.4	0.17
6020	Antimony	fish	mg/kg	0.029	B	0.2	0.02	ND		0.2	0.02
6020	Arsenic	fish	mg/kg	0.26	B	0.5	0.0076	0.13	B	0.5	0.0076
6020	Beryllium	fish	mg/kg	0.027	B	0.1	0.0023	--		--	--
6020	Cadmium	fish	mg/kg	0.031	B	0.1	0.0027	0.016	B	0.1	0.0027
6020	Chromium	fish	mg/kg	0.86	J	0.2	0.034	0.3	J	0.2	0.034
6020	Copper	fish	mg/kg	1.9		0.2	0.061	0.91	J	0.2	0.061
6020	Lead	fish	mg/kg	0.35		0.1	0.02	0.079	B	0.1	0.02
6020	Nickel	fish	mg/kg	1.1	J	0.1	0.011	0.095	B J	0.1	0.011
6020	Selenium	fish	mg/kg	0.52		0.5	0.018	0.85		0.5	0.018
6020	Silver	fish	mg/kg	0.013	B J	0.1	0.002	0.0052	B	0.1	0.002
6020	Thallium	fish	mg/kg	0.017	B	0.1	0.002	0.0091	B	0.1	0.002
6020	Uranium	fish	mg/kg	0.035	B	0.1	0.002	0.012	B	0.1	0.002
6020	Zinc	fish	mg/kg	30	J	1	0.13	67	J	1	0.13
245.6	Mercury	fish	ug/kg	33	B	100	5.9	17	B	100	5.9
6010B	Aluminum	fish	mg/kg	180		10	3.1	60		10	3.1
6010B	Barium	fish	mg/kg	9.5		1	0.12	4		1	0.12
6010B	Beryllium	fish	mg/kg	--		--	--	ND		0.5	0.14
6010B	Boron	fish	mg/kg	0.6	B	10	0.51	ND		10	0.51
6010B	Calcium	fish	mg/kg	8200	J	20	3.2	7400	J	20	3.2
6010B	Cobalt	fish	mg/kg	ND		1	0.15	0.23	B	1	0.15
6010B	Iron	fish	mg/kg	140		10	2	49		10	2
6010B	Lithium	fish	mg/kg	ND		5	0.22	ND		5	0.22
6010B	Magnesium	fish	mg/kg	350		20	1.5	320		20	1.5
6010B	Manganese	fish	mg/kg	9.2		1	0.14	4		1	0.14
6010B	Molybdenum	fish	mg/kg	ND		2	0.24	ND		2	0.24
6010B	Potassium	fish	mg/kg	2200		300	31	2100		300	31
6010B	Sodium	fish	mg/kg	570		500	120	430	B	500	120
6010B	Strontium	fish	mg/kg	34		1	0.15	26		1	0.15
6010B	Tin	fish	mg/kg	1.6	B J	10	0.42	1.6	B J	10	0.42

Table 4.14--Analytical results of surface-water monitoring at Rio Grande at North Boundary Bosque del Apache

Method	Parameter	Matrix	Unit	19-Aug-02				13-Jan-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
6010B	Titanium	fish	mg/kg	2.5		1	0.2	2.1		1	0.2
6010B	Vanadium	fish	mg/kg	0.36	B	1	0.35	ND		1	0.35
	Volatile organic compounds										
8260B	Acetone	water	ug/L	ND		10	2.9	ND		10	2.9
8260B	Benzene	water	ug/L	ND		1	0.27	ND		1	0.27
8260B	Bromodichloromethane	water	ug/L	ND		1	0.35	ND		1	0.35
8260B	Bromoform	water	ug/L	ND		1	0.46	ND		1	0.46
8260B	Bromomethane	water	ug/L	ND		2	0.28	ND		2	0.28
8260B	Carbon disulfide	water	ug/L	ND		1	0.67	ND		1	0.67
8260B	Carbon tetrachloride	water	ug/L	ND		1	0.35	ND		1	0.35
8260B	Chlorobenzene	water	ug/L	ND		1	0.24	ND		1	0.24
8260B	Chloroethane	water	ug/L	ND		2	0.26	ND		2	0.26
8260B	Chloroform	water	ug/L	ND		1	0.29	ND		1	0.29
8260B	Chloromethane	water	ug/L	ND		2	0.26	ND		2	0.26
8260B	cis-1,2-Dichloroethene	water	ug/L	ND		1	0.33	ND		1	0.33
8260B	cis-1,3-Dichloropropene	water	ug/L	ND		1	0.31	ND		1	0.31
8260B	Dibromochloromethane	water	ug/L	ND		1	0.37	ND		1	0.37
8260B	Ethylbenzene	water	ug/L	ND		1	0.51	ND		1	0.51
8260B	Methylene chloride	water	ug/L	ND		5	0.86	ND		5	0.86
8260B	m-Xylene & p-Xylene	water	ug/L	ND		2	0.52	ND		2	0.52
8260B	o-Xylene	water	ug/L	ND		1	0.24	ND		1	0.24
8260B	Styrene	water	ug/L	ND		1	0.28	ND		1	0.28
8260B	Tetrachloroethene	water	ug/L	ND		1	0.27	ND		1	0.27
8260B	Toluene	water	ug/L	ND		1	0.26	ND		1	0.26
8260B	trans-1,2-Dichloroethene	water	ug/L	ND		0.5	0.25	ND		0.5	0.25
8260B	trans-1,3-Dichloropropene	water	ug/L	ND		1	0.36	ND		1	0.36
8260B	Trichloroethene	water	ug/L	ND		1	0.24	ND		1	0.24
8260B	Unknown	water	ug/L	--		--	--	1.1	J	--	--
8260B	Vinyl chloride	water	ug/L	ND		1	0.26	ND		1	0.26
8260B	Xylenes (total)	water	ug/L	ND		2	0.73	ND		2	0.73
8260B	1,1,1-Trichloroethane	water	ug/L	ND		1	0.32	ND		1	0.32
8260B	1,1,2,2-Tetrachloroethane	water	ug/L	ND		1	0.5	ND		1	0.5
8260B	1,1,2-Trichloroethane	water	ug/L	ND		1	0.41	ND		1	0.41
8260B	1,1-Dichloroethane	water	ug/L	ND		1	0.29	ND		1	0.29
8260B	1,1-Dichloroethene	water	ug/L	ND		1	0.31	ND		1	0.31
8260B	1,2-Dichloroethane	water	ug/L	ND		1	0.43	ND		1	0.43
8260B	1,2-Dichloroethene (total)	water	ug/L	ND		1	0.54	ND		1	0.54
8260B	1,2-Dichloropropane	water	ug/L	ND		1	0.38	ND		1	0.38
8260B	2-Butanone (MEK)	water	ug/L	ND		5	2.4	ND		5	2.4
8260B	2-Hexanone	water	ug/L	ND		5	1.8	ND		5	1.8
8260B	4-Methyl-2-pentanone	water	ug/L	ND		5	1.8	ND		5	1.8
8260B	Acetone	sediment	ug/kg	ND		30	6.9	11	J	28	6.5
8260B	Benzene	sediment	ug/kg	ND		7.5	1.3	ND		7.1	1.3
8260B	Bromodichloromethane	sediment	ug/kg	ND		7.5	1.4	ND		7.1	1.3
8260B	Bromoform	sediment	ug/kg	ND		7.5	1.4	ND		7.1	1.3
8260B	Bromomethane	sediment	ug/kg	ND		15	1.8	ND		14	1.7
8260B	Carbon disulfide	sediment	ug/kg	ND		7.5	1.4	ND		7.1	1.3
8260B	Carbon tetrachloride	sediment	ug/kg	ND		7.5	1.8	ND		7.1	1.7
8260B	Chlorobenzene	sediment	ug/kg	ND		7.5	1.1	ND		7.1	1.1
8260B	Chloroethane	sediment	ug/kg	ND		15	2	ND		14	1.9
8260B	Chloroform	sediment	ug/kg	ND		15	1.4	ND		14	1.3
8260B	Chloromethane	sediment	ug/kg	ND		15	2.3	ND		14	2.1

Table 4.14--Analytical results of surface-water monitoring at Rio Grande at North Boundary Bosque del Apache

Method	Parameter	Matrix	Unit	19-Aug-02				13-Jan-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
8260B	cis-1,2-Dichloroethene	sediment	ug/kg	ND		3.8	1.3	ND		3.6	1.2
8260B	cis-1,3-Dichloropropene	sediment	ug/kg	ND		7.5	1.4	ND		7.1	1.4
8260B	Dibromochloromethane	sediment	ug/kg	ND		7.5	1.4	ND		7.1	1.3
8260B	Ethylbenzene	sediment	ug/kg	ND		7.5	1.8	ND		7.1	1.7
8260B	Methylene chloride	sediment	ug/kg	1.7	J	7.5	1.2	2.8	J	7.1	1.1
8260B	m-Xylene & p-Xylene	sediment	ug/kg	ND		3.8	2.7	ND		3.6	2.6
8260B	o-Xylene	sediment	ug/kg	ND		3.8	1.5	ND		3.6	1.4
8260B	Styrene	sediment	ug/kg	ND		7.5	0.99	ND		7.1	0.94
8260B	Tetrachloroethene	sediment	ug/kg	ND		7.5	1.5	ND		7.1	1.4
8260B	Toluene	sediment	ug/kg	ND		7.5	1.2	ND		7.1	1.1
8260B	trans-1,2-Dichloroethene	sediment	ug/kg	ND		3.8	1.2	ND		3.6	1.1
8260B	trans-1,3-Dichloropropene	sediment	ug/kg	ND		7.5	1.5	ND		7.1	1.4
8260B	Trichloroethene	sediment	ug/kg	ND		7.5	1.3	ND		7.1	1.2
8260B	Unknown	sediment	ug/kg	12		--	--	--		--	--
8260B	Unknown	sediment	ug/kg	9		--	--	--		--	--
8260B	Unknown	sediment	ug/kg	15		--	--	--		--	--
8260B	Vinyl chloride	sediment	ug/kg	ND		7.5	1.7	ND		7.1	1.6
8260B	Xylenes (total)	sediment	ug/kg	ND		7.5	4.2	ND		7.1	4
8260B	1,1,1-Trichloroethane	sediment	ug/kg	ND		7.5	1.5	ND		7.1	1.4
8260B	1,1,2,2-Tetrachloroethane	sediment	ug/kg	1.7	J B	7.5	1.7	ND		7.1	1.6
8260B	1,1,2-Trichloroethane	sediment	ug/kg	ND		7.5	2.3	ND		7.1	2.1
8260B	1,1-Dichloroethane	sediment	ug/kg	ND		7.5	1.5	ND		7.1	1.4
8260B	1,1-Dichloroethene	sediment	ug/kg	ND		7.5	1.7	ND		7.1	1.6
8260B	1,2-Dichloroethane	sediment	ug/kg	ND		7.5	1.5	ND		7.1	1.4
8260B	1,2-Dichloroethene (total)	sediment	ug/kg	ND		7.5	2.3	ND		7.1	2.1
8260B	1,2-Dichloropropane	sediment	ug/kg	ND		7.5	1.8	ND		7.1	1.7
8260B	2-Butanone (MEK)	sediment	ug/kg	ND		30	7.1	ND		28	6.7
8260B	2-Hexanone	sediment	ug/kg	ND		30	6.9	ND		28	6.5
8260B	4-Methyl-2-pentanone	sediment	ug/kg	ND		30	5.9	ND		28	5.6
	Herbicides										
8151A	Dalapon	water	ug/L	ND		2	0.42	ND		2	0.33
8151A	Dicamba	water	ug/L	ND		2	0.081	ND		2	0.086
8151A	Dichlorprop	water	ug/L	ND		4	0.13	ND		4	0.11
8151A	Dinoseb	water	ug/L	ND		0.6	0.09	ND		0.6	0.065
8151A	MCPA	water	ug/L	ND		400	13	ND		400	12
8151A	MCPP	water	ug/L	ND		400	42	ND		400	15
8151A	2,4,5-T	water	ug/L	ND		1	0.043	ND		1	0.043
8151A	2,4,5-TP (Silvex)	water	ug/L	ND		1	0.034	ND		1	0.036
8151A	2,4-D	water	ug/L	ND		4	0.16	ND		4	0.24
8151A	2,4-DB	water	ug/L	ND		4	0.21	ND		4	0.098
	Pesticides										
8141A	Anilazine	water	ug/L	ND		10	1.3	ND		10	1.3
8141A	Atrazine	water	ug/L	ND		10	0.52	ND		10	0.52
8141A	Azinphos-methyl	water	ug/L	ND		2.5	0.14	ND		2.5	0.14
8141A	Bolstar	water	ug/L	ND		0.5	0.14	ND		0.5	0.14
8141A	Chlorpyrifos	water	ug/L	ND		0.5	0.054	ND		0.5	0.054
8141A	Coumaphos	water	ug/L	ND		0.5	0.079	ND		0.5	0.079
8141A	Demeton (total)	water	ug/L	ND		1	0.19	ND		1	0.19
8141A	Diazinon	water	ug/L	ND		0.5	0.039	ND		0.5	0.039
8141A	Dichlorvos	water	ug/L	ND		0.5	0.13	ND		0.5	0.13
8141A	Dimethoate	water	ug/L	ND		0.5	0.18	ND		0.5	0.18
8141A	Disulfoton	water	ug/L	ND		0.5	0.057	ND		0.5	0.057

Table 4.14--Analytical results of surface-water monitoring at Rio Grande at North Boundary Bosque del Apache

Method	Parameter	Matrix	Unit	19-Aug-02				13-Jan-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
8141A	EPN	water	ug/L	ND		0.5	0.05	ND		0.5	0.05
8141A	Ethoprop	water	ug/L	ND		0.5	0.056	ND		0.5	0.056
8141A	Ethyl parathion	water	ug/L	ND		0.5	0.04	ND		0.5	0.04
8141A	Famphur	water	ug/L	ND		1	0.054	ND		1	0.054
8141A	Fensulfothion	water	ug/L	ND		2.5	0.22	ND		2.5	0.22
8141A	Fenthion	water	ug/L	ND		0.5	0.061	ND		0.5	0.061
8141A	Malathion	water	ug/L	ND		1.2	0.05	ND		1.2	0.05
8141A	Merphos	water	ug/L	ND		5	0.063	ND		5	0.063
8141A	Methyl parathion	water	ug/L	ND		0.5	0.061	ND		0.5	0.061
8141A	Mevinphos	water	ug/L	ND		6.2	0.16	ND		6.2	0.16
8141A	Naled	water	ug/L	ND		10	0.22	ND		10	0.22
8141A	Phorate	water	ug/L	ND		0.5	0.075	ND		0.5	0.075
8141A	Propazine	water	ug/L	ND		10	2.5	ND		10	2.5
8141A	Ronnel	water	ug/L	ND		10	0.11	ND		10	0.11
8141A	Simazine	water	ug/L	ND		10	0.46	ND		10	0.46
8141A	Sulfotepp	water	ug/L	ND		0.5	0.03	ND		0.5	0.03
8141A	Tetrachlorvinphos (Stirophos)	water	ug/L	ND		2.5	0.056	ND		2.5	0.056
8141A	Thionazin	water	ug/L	ND		0.5	0.059	ND		0.5	0.059
8141A	Tokuthion	water	ug/L	ND		0.5	0.071	ND		0.5	0.071
8141A	Trichloronate	water	ug/L	ND		0.5	0.057	ND		0.5	0.057
8141A	O,O,O-Triethyl phosphorothioate	water	ug/L	ND		0.5	0.15	ND		0.5	0.15
8081A	Aldrin	sediment	ug/kg	ND		2.6	0.59	ND		120	19
8081A	alpha-BHC	sediment	ug/kg	ND		2.6	0.56	ND		120	18
8081A	beta-BHC	sediment	ug/kg	ND		2.6	0.51	ND		120	19
8081A	Chlordane (technical)	sediment	ug/kg	ND		26	3.8	ND		1200	3.6
8081A	delta-BHC	sediment	ug/kg	ND		2.6	0.17	ND		120	44
8081A	Dieldrin	sediment	ug/kg	ND		2.6	0.81	ND		120	17
8081A	Endosulfan I	sediment	ug/kg	ND		2.6	0.57	ND		120	26
8081A	Endosulfan II	sediment	ug/kg	ND		2.6	0.99	ND		120	30
8081A	Endosulfan sulfate	sediment	ug/kg	ND		2.6	0.44	ND		120	28
8081A	Endrin	sediment	ug/kg	ND		2.6	0.57	ND		120	29
8081A	Endrin aldehyde	sediment	ug/kg	ND		2.6	2.3	ND		120	60
8081A	gamma-BHC (Lindane)	sediment	ug/kg	ND		2.6	1.1	ND		120	17
8081A	Heptachlor	sediment	ug/kg	ND		2.6	0.71	ND		120	22
8081A	Heptachlor epoxide	sediment	ug/kg	ND		10	0.54	ND		480	16
8081A	Methoxychlor	sediment	ug/kg	ND		5	0.26	ND		230	56
8081A	Toxaphene	sediment	ug/kg	ND		260	15	ND		12000	710
8081A	4,4'-DDD	sediment	ug/kg	ND		2.6	0.44	ND		120	25
8081A	4,4'-DDE	sediment	ug/kg	0.76	J COL	2.6	0.48	ND		120	31
8081A	4,4'-DDT	sediment	ug/kg	ND		2.6	0.5	ND		120	34
8081A	Aldrin	fish	ug/kg	--	f	--	--	--	f	--	--
8081A	alpha-BHC	fish	ug/kg	--	f	--	--	--	f	--	--
8081A	alpha-Chlordane	fish	ug/kg	--	f	--	--	--	f	--	--
8081A	beta-BHC	fish	ug/kg	--	f	--	--	--	f	--	--
8081A	delta-BHC	fish	ug/kg	--	f	--	--	--	f	--	--
8081A	Dieldrin	fish	ug/kg	--	f	--	--	--	f	--	--
8081A	Endosulfan I	fish	ug/kg	--	f	--	--	--	f	--	--
8081A	Endosulfan II	fish	ug/kg	--	f	--	--	--	f	--	--
8081A	Endosulfan sulfate	fish	ug/kg	--	f	--	--	--	f	--	--
8081A	Endrin	fish	ug/kg	--	f	--	--	--	f	--	--
8081A	Endrin aldehyde	fish	ug/kg	--	f	--	--	--	f	--	--
8081A	Endrin ketone	fish	ug/kg	--	f	--	--	--	f	--	--

Table 4.14--Analytical results of surface-water monitoring at Rio Grande at North Boundary Bosque del Apache

Method	Parameter	Matrix	Unit	19-Aug-02				13-Jan-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
8081A	gamma-BHC (Lindane)	fish	ug/kg	--	f	--	--	--	f	--	--
8081A	gamma-Chlordane	fish	ug/kg	--	f	--	--	--	f	--	--
8081A	Heptachlor	fish	ug/kg	--	f	--	--	--	f	--	--
8081A	Heptachlor epoxide	fish	ug/kg	--	f	--	--	--	f	--	--
8081A	Methoxychlor	fish	ug/kg	--	f	--	--	--	f	--	--
8081A	Toxaphene	fish	ug/kg	--	f	--	--	--	f	--	--
8081A	4,4'-DDD	fish	ug/kg	--	f	--	--	--	f	--	--
8081A	4,4'-DDE	fish	ug/kg	--	f	--	--	--	f	--	--
8081A	4,4'-DDT	fish	ug/kg	--	f	--	--	--	f	--	--
	Explosives										
8330	HMX	water	ug/L	ND		0.25	0.19	ND		0.25	0.03
8330	Nitrobenzene	water	ug/L	ND		0.25	0.08	ND		0.25	0.04
8330	Nitroglycerin	water	ug/L	ND		2.5	0.9	ND		2.5	0.3
8330	PETN	water	ug/L	ND		2.5	1.3	ND		2.5	0.5
8330	RDX	water	ug/L	ND		0.25	0.17	ND		0.25	0.03
8330	Tetryl	water	ug/L	ND		0.5	0.15	ND		0.5	0.03
8330	1,3,5-Trinitrobenzene	water	ug/L	ND		0.25	0.092	ND		0.25	0.03
8330	1,3-Dinitrobenzene	water	ug/L	ND		0.25	0.11	ND		0.25	0.03
8330	2,4,6-Trinitrotoluene	water	ug/L	ND		0.25	0.089	ND		0.25	0.05
8330	2,4-Dinitrotoluene	water	ug/L	ND		0.25	0.1	ND		0.25	0.04
8330	2,6-Dinitrotoluene	water	ug/L	ND		0.25	0.15	ND		0.25	0.03
8330	2-Amino-4,6-dinitrotoluene	water	ug/L	ND		0.25	0.12	ND		0.25	0.04
8330	2-Nitrotoluene	water	ug/L	ND		0.25	0.16	ND		0.25	0.04
8330	3-Nitrotoluene	water	ug/L	ND		0.25	0.18	ND		0.25	0.09
8330	4-Amino-2,6-dinitrotoluene	water	ug/L	ND		0.25	0.1	ND		3.2	0.05
8330	4-Nitrotoluene	water	ug/L	ND		0.25	0.23	ND		0.4	0.05
	Polyaromatic hydrocarbons										
8310	Acenaphthene	sediment	ug/kg	ND		300	5.9	ND		280	5.6
8310	Acenaphthylene	sediment	ug/kg	ND		300	18	ND		280	17
8310	Anthracene	sediment	ug/kg	ND		30	3.9	ND		28	3.7
8310	Benzo(a)anthracene	sediment	ug/kg	ND		30	7.5	ND		28	7.1
8310	Benzo(a)pyrene	sediment	ug/kg	ND		30	2.7	5.8	J COL	28	2.6
8310	Benzo(b)fluoranthene	sediment	ug/kg	ND		30	5.9	11	J COL	28	5.6
8310	Benzo(ghi)perylene	sediment	ug/kg	ND		60	3.9	12	J COL	57	3.7
8310	Benzo(k)fluoranthene	sediment	ug/kg	ND		30	3.5	ND		28	3.3
8310	Chrysene	sediment	ug/kg	ND		60	3.6	ND		57	3.4
8310	Dibenzo(a,h)anthracene	sediment	ug/kg	ND		60	6.9	12	J COL	57	6.5
8310	Fluoranthene	sediment	ug/kg	ND		60	13	ND		57	12
8310	Fluorene	sediment	ug/kg	ND		60	13	ND		57	12
8310	Indeno(1,2,3-cd)pyrene	sediment	ug/kg	ND		60	3.5	11	J COL	57	3.3
8310	Naphthalene	sediment	ug/kg	ND		300	18	ND		280	17
8310	Phenanthrene	sediment	ug/kg	ND		60	5	5.3	J	57	4.7
8310	Pyrene	sediment	ug/kg	ND		60	10	ND		57	9.8
8310	1-Methylnaphthalene	sediment	ug/kg	ND		300	11	37	J COL	280	10
8310	2-Methylnaphthalene	sediment	ug/kg	ND		300	5	ND		280	4.7
	Total Petroleum Hydrocarbons										
9071B	n-Hexane Ext. Material	sediment	mg/kg	ND		750	240	270	B	710	230
9071B	SGT-HEM (Petroleum Hydrocarbons)	sediment	mg/kg	ND		750	180	ND		710	170

Table 4.14--Analytical results of surface-water monitoring at Rio Grande at North Boundary Bosque del Apache

Method	Parameter	Matrix	Unit	19-Aug-02				13-Jan-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
	Pharmaceuticals										
ITMS	Amitriptyline	water	ng/L	ND		10	--	ND		10	--
ITMS	Beta-Estradiol	water	ng/L	ND		10	--	ND		10	--
ITMS	Caffeine	water	ng/L	ND		10	--	ND		10	--
ITMS	Cholesterol	water	ng/L	ND		10	--	ND		10	--
ITMS	Desipramine	water	ng/L	ND		10	--	ND		10	--
ITMS	Dextro-Norgestrel	water	ng/L	ND		10	--	ND		10	--
ITMS	Doxepin	water	ng/L	ND		10	--	ND		10	--
ITMS	Equilin	water	ng/L	ND		10	--	ND		10	--
ITMS	Estrone	water	ng/L	ND		10	--	ND		10	--
ITMS	Enthynl Estradiol	water	ng/L	ND		10	--	ND		10	--
ITMS	Imipramine	water	ng/L	ND		10	--	ND		10	--
ITMS	Medroxyprogesterone	water	ng/L	ND		10	--	ND		10	--
ITMS	Megestrol Acetate	water	ng/L	ND		10	--	ND		10	--
ITMS	Menstranol	water	ng/L	ND		10	--	ND		10	--
ITMS	Nordoxepin	water	ng/L	ND		10	--	ND		10	--
ITMS	Norethindrone	water	ng/L	ND		10	--	ND		10	--
ITMS	Norethynodrel	water	ng/L	ND		10	--	ND		10	--
ITMS	Nortriptyline	water	ng/L	ND		10	--	ND		10	--
ITMS	Paroxetine	water	ng/L	ND		10	--	ND		10	--
ITMS	Phenytoin	water	ng/L	ND		10	--	ND		10	--
ITMS	Prednisone	water	ng/L	ND		10	--	ND		10	--
ITMS	Progesterone	water	ng/L	ND		10	--	ND		10	--
ITMS	Propoxyphene	water	ng/L	ND		10	--	ND		10	--
ITMS	Protroptyline	water	ng/L	ND		10	--	ND		10	--
ITMS	Prozac	water	ng/L	ND		10	--	ND		10	--
ITMS	Setraline	water	ng/L	ND		10	--	ND		10	--
ITMS	Tamoxifen	water	ng/L	ND		10	--	ND		10	--
ITMS	Trimipramine maleate	water	ng/L	ND		10	--	ND		10	--
ITMS	6 alpha-Methyprednisolone	water	ng/L	ND		10	--	ND		10	--
	Grain size analysis										
D422	Maximum particle size	sediment	--	medium sand		--	--	medium sand		--	--
D422	Particle size, 425 microns, sand	sediment	%	1.7		0.1	--	--		--	--
D422	Particle size, 250 microns, sand	sediment	%	10.8		0.1	--	0.2		0.1	--
D422	Particle size, 180 microns, sand	sediment	%	26.1		0.1	--	0.6		0.1	--
D422	Particle size, 150 microns, sand	sediment	%	15.5		0.1	--	0.4		0.1	--
D422	Particle size, 75 microns, sand	sediment	%	9.7		0.1	--	3.0		0.1	--
D422	Particle size, 30.7 microns, silt	sediment	%	3.1		0.1	--	--		--	--
D422	Particle size, 25.8 microns, silt	sediment	%	--		--	--	27.4		0.1	--
D422	Particle size, 19.5 microns, silt	sediment	%	0.9		0.1	--	--		--	--
D422	Particle size, 18.6 microns, silt	sediment	%	--		--	--	18.4		0.1	--
D422	Particle size, 12.0 microns, silt	sediment	%	--		--	--	18.4		0.1	--
D422	Particle size, 11.3 microns, silt	sediment	%	0.9		0.1	--	--		--	--
D422	Particle size, 8.7 microns, silt	sediment	%	--		--	--	5.4		0.1	--
D422	Particle size, 8.1 microns, silt	sediment	%	1.8		0.1	--	--		0.1	--
D422	Particle size, 6.2 microns, silt	sediment	%	--		--	--	7.6		0.1	--
D422	Particle size, 5.9 microns, silt	sediment	%	0.9		0.1	--	--		--	--
D422	Particle size, 3.2 microns, clay	sediment	%	--		--	--	4.3		0.1	--
D422	Particle size, 2.9 microns, clay	sediment	%	4.4		0.1	--	--		--	--
D422	Particle size, 1.4 microns, clay	sediment	%	--		--	--	3.6		0.1	--
D422	Particle size, less than 1.4 microns, clay	sediment	%	--		--	--	10.8		0.1	--
D422	Particle size, 1.3 microns, clay	sediment	%	7.3		0.1	--	--		--	--

Table 4.14--Analytical results of surface-water monitoring at Rio Grande at North Boundary Bosque del Apache

Method	Parameter	Matrix	Unit	19-Aug-02				13-Jan-03			
				Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]	Result	Qualifier[1]	Reporting limit[1]	Method detection limit[2]
D422	Particle size, less than 1.3 microns, clay	sediment	%	16.9		0.1	--	--		--	--

[1] See table 5 for description of qualifier codes.

[2] Reporting limit -- the lowest level at which measurements become quantitatively meaningful, ie., the quantitation limit, which is approximately three times the method detection limit. Reporting limits cannot be less than the statistically determined method detection limit.

[3] Method detection limit -- the minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero and is determined from replicate analyses of low level standards in a typical representative matrix.

Table 5.—Data-qualifier codes used to qualify analytical data

[TIC, tentatively identified compound]

Data-qualifier code	Definition
a	Spiked analyte recovery is outside control limits (laboratory qualifier code).
A	Reported results may be less than the actual value or possibility of a false non-detect because the sample was extracted or analyzed after the required analytical holding time limits[1].
b	Compound also is detected in the blank.
B(o)	Organics: Method blank contamination. The associated method blank contains the target analyte at a reportable level (laboratory qualifier code).
B(i)	Inorganics: Estimated result. Result is less than the laboratory reporting limit (laboratory qualifier code).
c	Reporting limit was not reported by the laboratory.
C	Reported results did not meet the project-reporting limits[2].
COL	More than 40% relative percent difference between the primary and confirmation detector results. The lower of the two results is reported (laboratory qualifier code).
CHI	More than 40% relative percent difference between the primary and confirmation column results. The higher of the two results is reported (laboratory qualifier code).
d	Associated surrogate-recovery sample results did not meet the frequency or quality-control acceptance criteria.
D	Associated field-duplicate sample results did not meet the frequency (discussed in the Quality assurance/quality control and review of analytical data section of this report) or quality-control acceptance criteria[3].
DIL	The concentration is estimated or not reported due to dilution (laboratory qualifier code).
e	Associated equipment-conditions blank results did not meet the frequency or quality-control criteria.
f	Analysis not performed due to insufficient sample volume provided.
G	Elevated reporting limit. The reporting limit is elevated due to matrix interference (laboratory qualifier code).
H	Reported value may be biased high because the quality-control results are substantially greater than the quality-control limits[4]
i	Reported value may be biased low because the quality-control results are substantially less than the quality-control limits
I	Percent recovery is estimated since the results exceeded the calibration range (laboratory qualifier code).
IC	Diluted due to high inorganic chloride (laboratory qualifier code).
j	Associated laboratory-control sample results did not meet the frequency or quality-control acceptance criteria.
J(o)	Organics: Result is detected below the laboratory reporting limit or is an estimated concentration (laboratory qualifier code).
J(i)	Inorganics: Method blank contamination. The associated method blank contains the target analyte at a reportable level (laboratory qualifier code).

Table 5.—Data-qualifier codes used to qualify analytical data

Data-qualifier code	Definition
K	Associated laboratory-control sample results did not meet the frequency or quality-control acceptance criteria.
l	Associated method blank results did not meet the frequency or quality-control acceptance criteria.
L	Serial dilution of a digestate in the analytical batch indicates that physical and chemical interferences are present (laboratory qualifier code).
M	Associated matrix spike or matrix-spike duplicate sample results did not meet the frequency or quality-control acceptance criteria.
n	Instrument tuning, calibration, internal standards, or performance results did not meet the frequency or quality-control acceptance criteria.
N	Spiked analyte recovery is outside stated control limits (laboratory qualifier code).
NC	The recovery and/or Relative Percent Difference were not calculated (laboratory qualifier code).
O	Problems with inductively coupled plasma analysis such as interelemental interferences or serial dilution. (This qualifier is to be used only with inorganic data.)
p	Relative Percent Difference (RPD) is outside stated control limits (laboratory qualifier code).
P	Reported result was more than the highest calibration of method limits or exceeded the instrument's linear range.
q	Reported result was less than the lowest calibration, target-detection, reporting, or method limits or was below the instrument's linear range.
Q	Elevated reporting limit. The reporting limit is elevated due to high analyte levels (laboratory qualifier code).
R	Problems in the sampling or analysis process such as field or laboratory contamination of a sample.
s	The sample result (positive or not detected) is considered conditionally rejected because of serious deficiencies in the ability to analyze the sample, or the quality-control acceptance criteria were substantially outside the required limits. Resampling or reanalysis may be necessary to verify the presence or absence of the constituent.
S	The reported positive sample result is considered not reliable because of substantial contamination in the associated blanks on the basis of the following criteria: (1) concentration of analyte that is a common laboratory organic contaminant has a concentration less than 10 times the concentration in the associated blank or (2) other analytes have concentrations less than 5 times the concentration in the associated blank.
t	Sample diluted because of the concentration of target.
T1	A tentatively identified compound that did not generate a spectral match of 80% or greater. Typically called "unknown" (laboratory qualifier code).
T2	A tentatively identified compound with a spectral match of 80% or better (laboratory qualifier code).

Table 5.—Data-qualifier codes used to qualify analytical data

Data-qualifier code	Definition
T3	A tentatively identified compound that was calibrated for by the lab, but not on the client target analyte list (laboratory qualifier code).
u	Sample diluted due to interfering, non-target compounds in the sample.
U	The reported positive sample result is considered an estimated quantity or questionable because: (1) there were analysis problems, (2) the quality-control or confirmation acceptance criteria were not met, or (3) the amount reported is less than or more than the calibration or method-detection limits[5,6]
v	The reported not-detected (ND) sample result is questionable because of analysis problems or unmet quality-control acceptance criteria.
V	Elevated reporting limit due to limited sample volume
w	The identification of a TIC is questionable and the reported positive result for the TIC is strictly an estimated value because normal analysis and quality-control acceptance criteria do not apply directly for the reported TIC result. (This data-qualifier code is to be used only with TIC data.)
Wa	Post digestion spike recovery fell between 40-85% due to matrix interference (laboratory qualifier code).
Wb	Post digestion spike recovery fell between 115-150% due to matrix interference (laboratory qualifier code).
X	The identification of a TIC is questionable and the reported positive result is considered not reliable because this TIC was also detected in an associated quality-control blank. (This data-qualifier code is to be used only with TIC data.)
Y	The identification of a TIC is questionable and the reported positive result is considered as conditionally rejected because this TIC is considered a common laboratory contaminant. (This data-qualifier code is to be used only with TIC data.)
Z	This data qualifier code is used for specific analytical results that have data-quality problems not covered or represented in this list. If this code is used, some explanation is needed to describe the specific data-quality problem.

[1]Holding time – period of time during which a sample can be stored after collection and preservation. Holding-time limits are listed in table 1.5.2.1 of the *Sampling and Analysis Plan for Water-Quality Assessment in Relation to Silvery Minnow Habitats, Middle Rio Grande, New Mexico*, Revision 2 (U.S. Fish and Wildlife Service, Abeyta and Lusk, June 2003).

[2] Project-reporting limit – the minimum signal level required to quantitatively identify a specific analyte by a specific procedure at a confidence level that is greater than 97 percent. Limits are listed in table 1.8.2.1 of the *Sampling and Analysis Plan for Water-Quality Assessment in Relation to Silvery Minnow Habitats, Middle Rio Grande, New Mexico*, Revision 2 (U.S. Fish and Wildlife Service, Abeyta and Lusk, June 2003).

[3] Quality-control acceptance criteria – predefined requirements established to monitor that the data generated are precise and accurate. Criteria are listed in table 1.8.3.1 of the *Sampling and Analysis Plan for Water-Quality Assessment in Relation to Silvery Minnow Habitats, Middle Rio Grande, New Mexico*, Revision 2 (U.S. Fish and Wildlife Service, Abeyta and Lusk, June 2003).

[4] Quality-control limits – limits for assessing accuracy through the use of matrix-spike and matrix-spike duplicate samples. Limits are listed in table 1.13.2.1 of the *Sampling and Analysis Plan for Water-*

Table 5.—Data-qualifier codes used to qualify analytical data

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Quality Assessment in Relation to Silvery Minnow Habitats, Middle Rio Grande, New Mexico, Revision 2 (U.S. Fish and Wildlife Service, Abeyta and Lusk, June 2003).

[5] Calibration limit – frequency of calibration and calibration verification and the concentration of calibration standards are determined by the manufacturer's guidelines, the analytical method, or the requirements of special contracts.

[6] Method-detection limit – minimum concentration of a substance that can be measured and reported using a specific method.

Table 6.1.1.--Transect data for Rio Rancho Waste Water Treatment Plant Outfall #2 on August 8, 2002

[--, no data; ft, feet; in, inch; °C, degrees Celsius; mg/L, milligram per liter; % sat, percent saturation; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units.]

Transect	Dist. from initial point (ft)	Probe depth (in)	Time	Water temp (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
North	2	--	--	--	--	--	--	--	--	Too shallow to measure
North	4	--	--	29.5	8.0	8.4	128	1010	--	Shallow; algal mat.
North	6	--	--	28.6	7.6	6.2	91.2	1010	--	--
North	8	--	--	28.3	7.6	6.4	97.8	1010	--	--
North	10	--	--	28.5	7.5	6.5	98.6	1010	--	--
North	12	--	--	28.5	7.6	6.4	97.1	1010	--	--
North	14	--	--	28.5	7.5	6.3	96.5	1010	--	--
North	16	--	--	28.4	7.5	6.0	90.7	1010	--	--
North	18	--	--	28.5	7.6	5.9	89.5	1000	--	--
North	20	--	--	28.4	7.5	5.4	80.1	1010	--	--
South	2	--	--	28.5	7.6	6.2	95.7	1010	--	--
South	4	--	--	28.6	7.6	6.2	91.6	1010	--	--
South	6	--	--	28.3	7.6	6.2	94.9	1010	--	--
South	8	--	--	28.5	7.5	6.1	93.8	1010	--	--
South	10	--	--	28.3	7.6	6.1	93.4	1010	--	--
South	12	--	--	28.6	7.6	6.1	93.7	1010	--	--
South	14	--	--	28.6	7.6	6.1	94.0	1010	--	--
South	16	--	--	28.6	7.6	5.7	88.0	1010	--	--

Table 6.1.2.--Transect data for Rio Rancho Waste Water Treatment Plant Outfall #2 on January 30, 2003

[--, no data; ft, feet; in, inch; ^{o}C, degrees Celsius; mg/L, milligram per liter; % sat, percent saturation; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units.]

Transect	Dist. from initial point (ft)	Probe depth (in)	Time	Water temp. (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
Upstream	4	--	--	--	--	--	--	--	--	West bank starts at 2 ft; too
Upstream	6	3	1058	18.5	7.6	7.3	92.7	535	--	--
Upstream	10	6	1059	18.5	7.6	7.2	90.6	536	--	--
Upstream	12	6	1100	18.5	7.6	7.0	89.1	536	--	--
Upstream	14	6	1101	18.5	7.6	7.1	90.0	536	--	--
Upstream	16	9	1102	18.5	7.6	7.2	91.2	536	--	--
Upstream	18	9	1103	18.5	7.6	7.1	89.6	536	--	--
Upstream	20	6	1104	18.5	7.6	7.2	91.0	536	--	--
Upstream	22	3	1105	18.5	7.6	7.3	92.6	535	--	--
Upstream	24	3	1105	18.4	7.7	7.9	99.4	529	--	East bank.
Downstream	4	9	1109	18.5	7.6	7.1	89.6	536	--	West bank at 2 ft.
Downstream	6	6	1110	18.5	7.6	7.2	91.8	537	--	--
Downstream	8	6	1111	18.5	7.6	7.0	90.4	537	--	--
Downstream	10	6	1112	18.5	7.6	7.0	89.2	537	--	--
Downstream	12	6	1113	18.5	7.6	7.2	90.9	537	--	--
Downstream	14	6	1114	18.5	7.6	7.1	89.7	537	--	--
Downstream	16	9	1115	18.5	7.6	7.2	91.3	537	--	--
Downstream	18	6	1115	18.5	7.6	7.1	89.6	537	--	--
Downstream	20	3	1116	18.54	7.6	7.2	91.3	537	--	East bank at 21 ft.

Table 6.2.1.--Transect data for Rio Grande at La Orilla on November 1, 2002

[--, no data; ft, feet; in, inch; °C, degrees Celsius; mg/L, milligram per liter; % sat, percent saturation; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units.]

Transect	Dist. from initial point (ft)	Probe depth (in)	Time	Water temp. (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
A	39	--	0920	--	--	--	--	--	--	Shoreline
A	40	--	0922	10.1	8.2	9.1	95.9	364	--	--
A	48	--	0923	10.0	8.2	8.8	93.4	364	--	--
A	56	--	0924	10.1	8.2	8.6	91.5	364	--	--
A	64	--	0924	10.1	8.2	8.6	91.1	364	--	--
A	72	--	0925	10.1	8.2	8.6	91.0	364	--	--
A	80	--	0926	10.1	8.2	8.6	90.2	364	--	--
A	88	--	0926	10.1	8.2	8.5	90.3	365	--	--
A	96	--	0927	10.2	8.2	8.7	92.2	364	--	--
A	104	--	0928	10.2	8.2	8.5	90.8	364	--	--
A	112	--	0929	10.2	8.2	8.6	91.0	364	--	--
A	120	--	0930	10.1	8.2	8.6	91.4	363	--	--
A	128	--	0931	10.1	8.2	8.6	90.9	363	--	--
A	136	--	0931	10.1	8.2	8.7	91.7	363	--	--
A	144	--	0932	10.2	8.2	8.6	91.8	363	--	--
A	152	--	0932	10.2	8.2	8.6	90.7	363	--	--
A	160	--	0933	10.2	8.2	8.6	91.1	363	--	--
A	168	--	0934	10.3	8.2	8.6	91.6	363	--	--
A	176	--	0934	10.3	8.2	8.6	91.6	363	--	--
A	184	--	0935	10.4	8.2	8.6	92.2	362	--	--
A	192	--	0936	10.5	8.2	8.7	92.5	362	--	--
A	200	--	0936	10.5	8.2	8.5	91.1	362	--	--
A	208	--	0937	10.5	8.2	8.5	91.0	362	--	--
A	216-712	--	--	--	--	--	--	--	--	Island.
A	720	--	0948	10.7	8.2	8.5	92.7	362	--	--
A	728	--	0949	10.6	8.2	8.5	91.0	362	--	--
A	736	--	0950	10.8	8.2	8.5	92.2	362	--	--
A	744	--	0951	10.6	8.2	8.7	92.5	361	--	--
A	752	--	0952	10.5	8.2	8.7	92.4	361	--	--
A	760	--	--	--	--	--	--	--	--	Too shallow; less than 0.5 in. of
A	768	--	0952	10.6	8.3	8.4	90.9	362	--	--

Table 6.2.1.--Transect data for Rio Grande at La Orilla on November 1, 2002

Transect	Dist. from initial point (ft)	Probe depth (in)	Time	Water temp. (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
A	766-774	--	--	--	--	--	--	--	--	Too shallow; less than 0.8 in of water.
A	780	--	0954	10.8	8.2	8.1	86.3	361	--	--
A	788-846	--							--	Too shallow; dry mud.
A	872	--	0957	10.4	8.2	8.7	92.8	361	--	--
A	880	--	0958	10.1	8.2	8.7	92.8	361	--	--
B	24	--	1022	11.4	8.2	8.3	91.0	365	--	--
B	32	--	1023	11.5	8.2	8.6	94.1	364	--	--
B	40	--	1024	11.6	8.2	8.5	93.1	364	--	--
B	48	--	1025	11.6	8.2	8.4	92.4	364	--	--
B	56	--	1025	11.6	8.2	8.4	92.7	364	--	--
B	64	--	1025	11.6	8.2	8.4	92.1	364	--	--
B	72	--	1026	11.6	8.2	8.4	92.3	364	--	--
B	80	--	1027	11.6	8.2	8.4	92.4	364	--	--
B	88	--	1028	11.7	8.2	8.4	92.3	364	--	--
B	96	--	1029	11.7	8.2	8.3	91.3	364	--	--
B	104	--	1030	11.7	8.2	8.3	90.8	364	--	--
B	112	--	1031	11.8	8.2	8.3	92.2	364	--	--
B	120	--	1032	11.8	8.2	8.4	92.7	363	--	--
B	128	--	1032	11.9	8.2	8.3	92.1	364	--	--
B	136	--	1032	12.0	8.3	8.4	92.7	363	--	--
B	144	--	1033	11.9	8.3	8.4	93.0	363	--	--
B	152	--	1035	12.1	8.2	8.3	92.1	364	--	--
B	160	--	1036	12.3	8.2	8.3	92.4	363	--	--
B	168	--	1037	12.6	8.3	8.9	91.4	363	--	--
B	176	--	1037	12.7	8.3	8.3	93.6	364	--	--
B	184	--	1038	12.8	8.3	8.4	94.9	363	--	--
B	192	--	1039	12.7	8.3	8.4	94.4	363	--	--
B	200	--	1040	12.5	8.3	9.3	93.3	--	--	--
B	208-272	--	--	--	--	--	--	--	--	Too shallow.
B	280	--	1040	12.7	8.3	8.3	93.3	362	--	--
B	288	--	1043	12.7	8.3	8.4	94.5	362	--	--

Table 6.2.1.--Transect data for Rio Grande at La Orilla on November 1, 2002

Transect	Dist. from initial point (ft)	Probe depth (in)	Time	Water temp. (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
B	296	--	1044	12.5	8.3	8.3	92.6	362	--	--
B	304	--	1046	12.7	8.3	8.2	92.0	362	--	--
B	312	--	1046	13.1	8.3	7.9	89.8	362	--	--
B	320	--	1046	12.7	8.3	8.0	90.4	362	--	--
B	328-352	--	--	--	--	--	--	--	--	Too shallow.
B	360	--	1048	12.5	8.3	8.4	94.0	361	--	--
B	368	--	1050	12.2	8.3	8.5	93.5	361	--	--
B	376	--	1051	12.0	8.3	8.6	94.9	361	--	--
B	384	--	1051	11.9	8.3	8.5	94.4	361	--	--
B	392	--	1052	11.8	8.3	8.4	92.9	361	--	--
B	400	--	1053	11.8	8.3	8.4	92.5	361	--	--
B	408	--	1054	11.8	8.3	8.4	92.4	361	--	--
B	416	--	1054	11.8	8.3	8.5	94.0	360	--	--
B	424	--	1055	11.8	8.3	8.3	92.9	360	--	--
B	432	--	1056	11.8	8.3	8.1	89.4	361	--	--
B	440	--	1057	11.8	8.3	8.2	90.1	361	--	--
B	448	--	1057	11.8	8.3	8.4	92.7	361	--	--

Table 6.2.2.--Transect data for Rio Grande at La Orilla on December 19, 2002

[--, no data; ft, feet; in, inch; °C, degrees Celsius; mg/L, milligram per liter; % sat, percent saturation; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units.]

Transect	Dist. from initial point (ft)	Probe depth (in)	Time	Water temp. (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
A	38	--	--	--	--	--	--	--	--	West bank
A	40	10	1147	3.9	8.3	11.0	99.5	302	316	--
A	48	18	1149	3.9	8.3	11.4	103	302	312	--
A	56	14	1150	3.9	8.3	11.4	103	303	309	--
A	64	12	1152	3.9	8.3	11.3	102	303	308	--
A	72	16	1153	3.9	8.3	11.4	104	303	317	--
A	80	14	1154	4.0	8.3	11.0	100	303	303	--
A	88	20	1155	4.0	8.2	11.5	104	303	304	--
A	96	18	1156	4.0	8.2	11.3	102	303	301	--
A	104	18	1157	4.0	8.3	11.1	101	303	298	--
A	112	20	1158	4.0	8.3	11.9	108	304	307	--
A	120	20	1159	4.0	8.2	11.0	100	304	297	--
A	128	18	1200	4.1	8.2	11.2	102	301	305	--
A	136	14	1201	4.1	8.3	11.4	104	305	303	--
A	144	12	1202	4.1	8.2	11.2	102	306	313	--
A	152	8	1203	4.2	8.3	11.3	103	306	309	--
A	160	10	1204	4.2	8.3	11.4	104	306	308	--
A	168	10	1206	4.3	8.3	11.3	104	307	306	--
A	176	8	1207	4.4	8.3	11.3	103	307	304	--
A	184	8	1208	3.8	8.3	11.5	104	311	315	--
A	192	6	1209	4.4	8.3	11.1	102	308	305	--
A	200	6	1210	4.5	8.3	11.0	102	308	318	--
A	208	12	1211	4.5	8.3	10.9	101	308	319	--
A	216	6	1213	4.5	8.3	10.9	101	308	313	--
A	220-712	--	--	--	--	--	--	--	--	Island 4 feet above water.
A	714	12	1231	4.8	8.3	10.9	101	308	328	--
A	722	12	1232	4.8	8.3	10.9	101	309	302	--
A	730	14	1233	4.8	8.3	10.9	102	309	297	--
A	738	12	1234	4.9	8.3	10.9	101	309	303	--
A	746	14	1235	5.0	8.3	10.8	101	310	320	--
A	754	10	1235	5.1	8.3	10.9	102	311	306	--

Table 6.2.2.--Transect data for Rio Grande at La Orilla on December 19, 2002

Transect	Dist. from initial point (ft)	Probe depth (in)	Time	Water temp. (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
A	762	10	1236	5.0	8.3	10.9	102	311	306	--
A	770	6	1238	4.6	8.3	11.0	102	313	318	--
A	778	10	1239	4.9	8.3	10.8	101	312	304	--
A	786	8	1240	4.9	8.3	10.7	100	312	324	--
A	794	6	1241	5.0	8.3	10.8	101	312	312	--
A	802	6	1242	5.0	8.3	10.8	101	311	302	--
A	810	6	1243	5.0	8.3	10.9	102	311	309	--
A	818	6	1244	5.0	8.3	10.9	102	311	409	--
A	826	3	1245	5.0	8.4	10.8	101	311	719	--
A	834	6	1246	5.0	8.3	10.6	100	311	323	--
A	842	6	1247	5.0	8.3	10.9	101	311	305	--
A	850	10	1248	5.0	8.3	10.9	102	311	306	--
A	858	6	1249	4.9	8.3	10.9	102	311	301	--
A	866	6	1250	4.9	8.3	10.8	101	311	298	--
A	874	4	1251	4.9	8.3	10.8	101	312	311	--
A	882	6	12.52	4.9	8.3	10.6	99.1	311	309	--
A	890	12	1253	4.9	8.3	10.9	101	311	293	--
A	898	4	1254	4.8	8.3	10.5	97.6	311	356	--
A	900	--	--	--	--	--	--	--	--	East bank

Table 6.2.3.--Transect data for Rio Grande at La Orilla on February 28, 2003

[--, no data; ft, feet; in, inch; °C, degrees Celsius; mg/L, milligram per liter; % sat, percent saturation; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units.]

Transect	Dist. from initial point (ft)	Probe depth (in)	Time	Water temp. (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
B	22	--	--	--	--	--	--	--	--	Bank.
B	24	6	1251	7.8	8.2	10.1	102	316	208	--
B	32	9	1252	7.8	8.2	10.1	102	316	192	--
B	40	6	1253	7.8	8.2	10.1	102	317	193	--
B	48	6	1254	7.8	8.2	10.1	102	317	194	--
B	56	12	1255	8.0	8.3	10.0	102	317	198	--
B	64	9	1256	8.1	8.2	9.9	101	318	196	--
B	72	3	1257	8.3	8.3	10.2	105	318	>1000	Shallow.
B	80-88	--	--	--	--	--	--	--	--	Too shallow.
B	88	3	1300	8.5	8.3	9.9	101	318	233	--
B	96	6	1300	8.3	8.3	9.9	101	318	482	--
B	104	6	1301	8.2	8.2	9.9	101	318	228	--
B	112	9	1302	8.1	8.3	9.9	101	318	216	--
B	120	12	1303	8.1	8.3	9.9	101	318	203	--
B	128	12	1304	8.1	8.3	10.0	102	319	206	--
B	136	6	1305	8.1	8.3	9.9	101	319	202	--
B	144	6	1306	8.2	8.3	10.0	102	320	225	--
B	152	6	1306	8.2	8.3	10.0	102	320	213	--
B	160	4	1307	8.2	8.3	10.0	102	321	202	--
B	168	6	1308	8.3	8.3	9.9	102	321	225	--
B	176	6	1308	8.3	8.3	9.9	102	321	208	--
B	184	6	1309	8.3	8.3	9.9	101	322	203	--
B	192	6	1310	8.3	8.3	10.0	102	322	193	--
B	200	6	1311	8.4	8.3	10.0	102	323	199	--
B	208	9	1312	8.3	8.3	10.0	102	323	198	--
B	216	9	1312	8.4	8.3	9.9	102	323	222	--
B	224	12	1314	8.4	8.3	10.0	102	323	218	--
B	232	15	1315	8.4	8.2	10.0	102	323	191	--
B	240	15	1316	8.5	8.2	9.9	102	323	191	--
B	248	12	1317	8.5	8.2	10.0	103	323	188	--
B	258	12	1318	8.5	8.2	10.0	103	323	196	--

Table 6.2.3.--Transect data for Rio Grande at La Orilla on February 28, 2003

Transect	Dist. from initial point (ft)	Probe depth (in)	Time	Water temp. (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
B	266	15	1319	8.5	8.2	9.9	103	323	210	--
B	274	12	1320	8.6	8.2	10.0	102	323	192	--
B	282	15	1321	8.6	8.2	9.9	103	323	209	--
B	290	15	1322	8.6	8.2	9.9	102	323	194	--
B	298	18	1323	8.6	8.2	10.0	103	323	205	--
B	306	21	1324	8.7	8.2	10.0	--	323	195	--
B	314	21	1324	8.8	8.2	10.0	103	319	190	--
B	322	24	1325	8.9	8.2	10.0	104	324	194	--
B	330	24	1326	9.2	8.2	10.0	105	324	193	--
B	338	18	1327	9.3	8.3	10.0	105	324	208	--
B	346-360	--	--	--	--	--	--	--	--	Too shallow; sand bar.
B	362	3	1329	10.0	8.3	9.6	103	325	225	--
B	370	12	1330	9.4	8.3	10.2	107	323	232	--
B	378	21	1332	9.0	8.2	10.0	105	323	215	--
B	386	9	1332	9.0	8.3	10.0	104	323	221	--
B	394	6	1333	9.0	8.3	9.9	104	323	226	--
B	402	6	1335	9.0	8.3	10.0	104	323	220	--
B	410	9	1336	9.0	8.2	10.0	104	323	234	--
B	418	6	1337	9.0	8.2	10.0	104	323	233	--
B	426	6	1337	9.0	8.2	10.0	104	323	229	--
B	434	6	1338	9.0	8.3	10.0	104	323	219	--
B	442	6	1339	9.0	8.3	10.0	104	323	260	--
B	450	18	1340	9.0	8.2	10.0	105	322	235	--
B	458	18	1340	9.0	8.2	10.0	104	322	232	--
B	466	6	1341	9.0	8.3	10.1	105	322	293	--
B	474	--	--	--	--	--	--	--	--	Too shallow.
B	478	--	--	--	--	--	--	--	--	Bank.

Table 6.3.1.--Transect data for Rio Grande at Barelas on August 22, 2002

[--, no data; ft, feet; in, inch; °C, degrees Celsius; mg/L, milligram per liter; % sat, percent saturation; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units.]

Transect	Dist. from initial point (ft)	Probe depth (in)	Time	Water temp. (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
B	17	--	--	--	--	--	--	--	--	River's edge.
B	20	--	1153	22.6	8.0	7.5	103	386	--	--
B	24	--	--	22.7	8.1	7.5	104	386	--	--
B	28	--	--	23.0	8.0	7.6	104	386	--	--
B	32	--	--	23.0	8.1	7.5	104	386	--	--
B	40	--	1155	22.6	8.0	7.5	105	386	--	--
B	48	--	--	22.0	8.1	7.6	105	387	--	--
B	56	--	--	23.3	8.0	7.4	103	386	--	--
B	64	--	--	23.1	8.0	7.4	102	387	--	--
B	72	--	--	22.8	8.0	7.4	102	386	--	--
B	80	--	--	23.4	8.0	7.5	104	386	--	--
B	88	--	--	23.4	8.1	7.6	105	387	--	--
B	96	--	--	23.4	8.1	7.5	104	387	--	--
B	104	--	1200	23.4	8.1	7.4	103	387	--	--
B	112	--	--	23.5	8.1	7.5	104	387	--	--
B	120	--	--	23.5	8.1	7.5	105	386	--	--
B	128	--	--	23.5	8.1	7.5	105	386	--	--
B	136	--	--	23.5	8.1	7.5	106	387	--	--
B	144	--	--	23.6	8.1	7.5	104	386	--	--
B	152	--	--	23.6	8.1	7.5	105	385	--	--
B	160	--	--	23.6	8.1	7.5	105	385	--	--
B	168	--	1206	23.6	8.1	7.5	105	384	--	--
B	176	--	--	23.6	8.1	7.5	105	384	--	--
B	184	--	--	23.6	8.1	7.6	106	384	--	--
B	192	--	1208	23.6	8.1	7.5	106	384	--	--
B	200	--	--	23.6	8.1	7.6	105	383	--	--
B	208	--	--	23.7	8.1	7.5	106	384	--	Edge of embayment at 212 ft.
B	216	--	1210	23.7	8.1	7.5	105	383	--	--
B	220	--	--	23.7	8.1	7.5	105	383	--	--
B	224	--	1214	23.8	8.1	7.5	106	383	--	--
B	228	--	--	23.8	8.1	7.5	105	383	--	--

Table 6.3.1.--Transect data for Rio Grande at Barelas on August 22, 2002

Transect	Dist. from initial point (ft)	Probe depth (in)	Time	Water temp. (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
B	232	--	--	23.8	8.1	7.4	103	383	--	Shallow.
B	236	--	1216	23.8	8.1	7.4	105	385	--	Shallow.
B	240	--	--	24.0	8.1	7.4	104	382	--	Shallow.
B	244	--	--	24.1	8.1	7.4	104	382	--	Very shallow.
B	248	--	1219	24.2	8.1	7.4	105	382	--	Very shallow.
B	252	--	--	24.2	8.1	7.5	106	382	--	Very shallow.
B	256	--	--	24.3	8.1	7.5	106	382	--	Very shallow; end of embayment.
B	260	--	--	24.2	8.1	7.4	104	382	--	--
B	268	--	1223	24.0	8.1	7.4	105	382	--	--
B	276	--	--	24.0	8.1	7.4	104	383	--	--
B	284	--	1226	24.0	8.1	7.5	104	382	--	Deep.
B	292	--	--	23.8	8.1	7.5	105	382	--	--
B	300	--	--	23.6	8.1	7.5	105	381	--	--
B	308	--	1228	23.5	8.1	7.5	105	381	--	--
B	316	--	--	23.4	8.1	7.4	103	381	--	--
B	321	--	1230	23.5	8.1	6.7	95.2	381	--	River's edge.

Table 6.3.2.--Transect data for Rio Grande at Barelas on January 17, 2003

[--, no data; ft, feet; in, inch; °C, degrees Celsius; mg/L, milligram per liter; % sat, percent saturation; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units.]

Transect	Dist. from initial point (ft)	Probe depth (ft)	Time	Water temp. (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
B	17	--	--	--	--	--	--	--	--	Bank.
B	22	--	1257	4.4	7.8	10.2	79.0	247	106	--
B	30	--	1301	4.6	7.8	10.3	79.6	250	--	--
B	38	--	1302	4.6	7.8	10.3	79.6	250	--	--
B	46	--	1303	4.7	7.8	10.3	80.0	251	--	--
B	54	--	1304	4.7	7.8	10.3	80.0	251	--	--
B	62	--	1304	4.8	7.8	10.3	80.2	252	109	--
B	70	--	1307	4.9	7.8	10.3	80.1	253	--	--
B	78	--	1307	4.9	7.8	10.3	80.2	253	--	--
B	86	--	1308	5.0	7.8	10.3	80.4	253	--	--
B	94	--	1308	5.0	7.8	10.3	80.3	253	--	--
B	102	--	1309	5.0	7.8	10.2	80.3	254	112	Near deployed hydrolab.
B	110	--	1312	5.1	7.8	10.3	80.5	255	--	--
B	118	--	1312	5.2	7.8	10.2	80.6	255	--	--
B	126	--	1313	5.2	7.8	10.3	80.6	255	--	--
B	134	--	1314	5.3	7.8	10.2	80.6	257	--	--
B	142	--	1314	5.4	7.8	10.2	80.8	258	106	--
B	150	--	1317	5.6	7.8	10.2	81.0	259	--	--
B	158	--	1318	5.7	7.8	10.2	81.0	260	--	--
B	166	--	1318	5.7	7.8	10.2	80.8	260	--	--
B	174	--	1319	5.8	7.8	10.2	81.0	260	--	--
B	182	--	1320	5.8	7.8	10.2	81.2	261	98.8	--
B	190	--	1323	5.9	7.8	10.1	80.7	262	--	--
B	198	--	1324	6.0	7.9	10.1	81.1	262	--	--
B	206	--	1325	6.1	7.8	10.1	81.2	263	--	--
B	214	--	1326	6.1	7.8	10.1	81.1	263	--	--
B	222	--	1326	6.1	7.8	10.1	81.1	264	--	--
B	230	--	1328	6.2	7.8	10.0	81.1	264	95.2	--
B	238	--	1329	6.3	7.8	10.0	81.2	265	--	--
B	246	--	1329	6.3	7.8	10.1	81.3	265	--	--
B	254	--	1330	6.4	7.8	10.0	81.3	266	--	--
B	262	--	1330	6.4	7.8	10.0	81.3	266	95.6	--
B	270	--	1332	6.4	7.8	10.0	81.4	267	--	--

Table 6.3.2.--Transect data for Rio Grande at Barelas on January 17, 2003

Transect	Dist. from initial point (ft)	Probe depth (ft)	Time	Water temp. (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
B	278	--	1333	6.5	7.8	10.0	81.4	267	--	--
B	286	--	1334	6.5	7.8	10.0	81.4	267	--	--
B	294	--	1335	6.5	7.8	10.0	81.5	267	--	--
B	302	--	1336	6.6	7.8	10.0	81.5	268	88.8	--
B	310	--	1337	6.6	7.8	9.84	80.1	268	--	--
B	318	--	1338	6.6	7.8	9.84	80.3	268	--	--

Table 6.4.1.--Transect data for Albuquerque Waste Water Treatment Plant Outfall on August 6, 2002

[--, no data; ft, feet; in, inch; °C, degrees Celsius; mg/L, milligram per liter; % sat, percent saturation; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units.]

Transect	Dist. from initial point (ft)	Probe depth (in)	Time	Water temp. (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
--	1	--	--	--	--	--	--	--	--	Too shallow.
--	2	--	--	28.2	7.0	5.7	86.3	918	--	--
--	4	--	--	28.2	7.0	5.9	90.1	919	--	--
--	6	--	--	28.2	7.0	6.5	95.1	898	--	--
--	8	--	--	28.2	7.0	6.3	93.6	918	--	--
--	12	--	--	28.2	7.0	6.1	89.6	920	--	--
--	14	--	--	28.2	7.0	5.9	89.9	917	--	--
--	16	--	--	28.2	7.0	6.3	95.3	907	--	--
--	18	--	--	28.2	7.0	6.1	92.6	920	--	--
--	20	--	--	28.2	7.0	6.1	92.8	919	--	--
--	22	--	0927	28.2	7.0	6.0	95.3	921	--	--
--	24	--	--	28.2	7.0	6.1	91.1	918	--	--
--	26	--	--	28.2	7.0	6.0	91.5	919	--	--
--	30	--	--	28.2	7.0	5.9	90.4	919	--	--
--	32	--	--	28.1	7.0	6.1	91.5	919	--	--
--	2	--	1120	28.5	7.0	6.0	91.3	917	--	--
--	4	--	--	28.5	7.0	6.0	92.0	918	--	--
--	6	--	--	28.5	7.0	6.1	93.3	918	--	--
--	8	--	--	28.5	7.0	6.3	94.0	918	--	--
--	10	--	--	28.5	7.0	6.2	95.2	919	--	--
--	12	--	--	28.5	7.0	6.2	95.9	919	--	--
--	14	--	--	28.5	7.0	6.1	93.6	919	--	--
--	16	--	--	28.5	7.0	6.1	93.1	919	--	--
--	18	--	--	28.5	7.0	6.0	93.3	919	--	--
--	20	--	--	28.5	7.0	6.1	93.5	919	--	--
--	22	--	--	28.5	7.0	6.0	91.9	919	--	--
--	24	--	--	28.5	7.0	5.9	90.5	918	--	--

Table 6.4.2.--Transect data for Albuquerque Waste Water Treatment Plant Outfall on January 29, 2003

[--, no data; ft, feet; in, inch; °C, degrees Celsius; mg/L, milligram per liter; % sat, percent saturation; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units.]

Transect	Dist. from initial point (ft)	Probe depth (in)	Time	Water temp (°C)	pH	DO (mg/L)	DO (%)	SPC (uS/cm)	Turbidity (NTU)	Comments
A	6	24	1230	19.8	6.8	6.8	87.8	574	--	East transect.
A	10	24	1234	19.8	6.8	6.8	88.2	574	--	--
A	14	24	1236	19.8	6.8	6.7	87.0	574	--	--
A	18	24	1237	19.8	6.8	6.7	87.6	574	--	--
A	22	24	1238	19.8	6.8	6.9	89.2	574	--	--
A	26	22	1239	19.8	6.8	6.8	88.4	574	--	--
A	30	17	1240	19.8	6.8	6.9	88.9	574	--	--
A	34	15	1240	19.8	6.8	6.5	84.6	574	--	--
B	4	--	1249	19.8	6.8	6.7	87.0	575	--	West transect/north bank.
B	8	19	1248	19.8	6.8	6.6	85.5	575	--	--
B	12	24	1247	19.8	6.8	6.9	89.3	575	--	--
B	16	23	1246	19.8	6.8	6.9	89.6	575	--	--
B	20	24	1244	19.8	6.8	6.9	90.2	574	--	--
B	24	7	1243	19.7	6.8	6.8	87.6	574	--	--

Table 6.5.2.--Transect data for Rio Grande at Los Padillas on October 31, 2002

[--, no data; ft, feet; in, inch; °C, degrees Celsius; mg/L, milligram per liter; % sat, percent saturation; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units.]

Transect	Dist. from initial point (ft)	Probe depth (in)	Time	Water temp. (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
D	16	--	1338	14.0	8.4	8.3	96.0	375	--	--
D	24	--	1340	14.4	8.0	8.4	97.0	377	--	--
D	32	--	1341	14.6	8.0	8.0	97.2	378	--	--
D	40	--	1342	14.8	8.0	8.1	96.1	379	--	--
D	48	--	1343	15.0	8.0	7.9	93.9	314	--	--
D	56	--	1344	15.1	8.0	8.1	97.4	378	--	Ankle deep.
D	64	--	1345	15.2	8.0	8.4	98.7	382	--	--
D	72	--	1347	15.3	8.0	8.2	98.8	383	--	--
D	80	--	1348	15.3	8.0	8.3	99.0	384	--	--
D	88	--	1348	15.4	8.0	8.1	97.0	374	--	--
D	96	--	1349	15.5	8.0	8.1	97.2	387	--	--
D	104	--	1350	15.7	8.0	8.2	96.8	389	--	Mid-shin deep.
D	112	--	1351	15.8	8.0	8.1	97.1	395	--	Mid-shin deep.
D	120	--	1352	16.0	8.0	8.0	96.2	396	--	Ankle deep.
D	128	--	1353	16.0	8.0	7.9	94.7	397	--	About 2 ft. deep.
D	136	--	1354	16.0	8.0	7.6	90.5	397	--	About 2 ft. deep.
D	144	--	1355	16.1	8.0	7.8	94.8	399	--	Ankle deep.
D	152	--	1356	16.1	8.0	7.8	94.4	399	--	About 2 ft. deep.
D	160	--	1357	16.2	8.0	7.9	96.2	401	--	About 2 ft. deep.
D	168	--	1358	16.2	8.0	7.7	94.4	402	--	About 2 ft. deep.
D	176	--	1359	16.3	8.0	7.8	94.3	403	--	About 2 ft. deep.
D	184	--	1400	16.3	7.9	7.6	93.3	439	--	About 2 ft. deep.
D	192	--	1401	16.3	7.9	7.8	93.7	409	--	--
D	200	--	1402	16.3	8.0	7.6	92.0	399	--	Mid-shin deep.
D	208	--	1402	16.3	8.0	7.9	94.9	407	--	--
D	216	--	1403	16.4	8.0	7.9	95.3	409	--	Hydrolab deployed here.
D	224	--	1404	16.4	8.0	7.8	92.9	415	--	--
D	232	--	1406	16.5	8.0	7.8	94.3	417	--	--
D	240	--	1406	16.6	7.9	7.7	94.0	421	--	--
D	248	--	1407	16.7	7.9	7.8	94.2	421	--	--
D	256	--	1408	16.8	7.9	7.7	93.5	426	--	--

Table 6.5.2.--Transect data for Rio Grande at Los Padillas on October 31, 2002

Transect	Dist. from initial point (ft)	Probe depth (in)	Time	Water temp. (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
D	264	--	1409	16.8	7.9	7.7	94.9	427	--	--
D	272	--	1410	16.9	7.9	7.6	94.4	429	--	--
D	280	--	1411	17.0	7.9	7.6	95.2	431	--	--
D	288	--	1412	17.0	7.9	7.6	94.9	434	--	--
D	296-328	--	--	--	--	--	--	--	--	Dry.
D	336	--	1414	17.0	7.9	7.6	93.6	439	--	--
D	344	--	1415	17.2	7.9	7.6	94.1	393	--	--
D	352	--	1415	17.3	7.9	7.6	93.9	443	--	--
D	360	--	1416	17.3	7.9	7.6	93.4	444	--	Ankle deep.
D	368	--	1418	16.8	7.9	7.8	94.9	437	--	--
D	376	--	1419	17.4	7.9	7.1	84.8	414	--	--
D	384	--	1420	17.5	7.9	7.5	93.7	447	--	--
D	392	--	1421	17.6	7.9	7.6	94.4	447	--	--
D	400	--	1422	17.6	7.9	7.3	91.4	404	--	--
D	408	--	1424	17.6	7.9	7.4	91.8	449	--	--
D	416	--	1425	17.7	7.9	7.3	91.2	446	--	--
D	424	--	1426	17.8	7.9	7.4	92.2	437	--	--
D	432	--	1427	17.8	8.0	7.5	94.6	450	--	Two in.. Deep
D	440	--	1428	17.7	7.9	7.5	93.9	452	--	--
D	448	--	1429	17.7	7.9	7.2	89.9	452	--	--
D	456	--	1430	17.7	7.9	7.4	91.3	452	--	--
D	464	--	1431	17.7	7.9	7.4	92.6	452	--	--
D	472	--	1432	17.7	7.9	7.5	93.2	452	--	--
D	480	--	1432	17.7	7.9	6.9	82.7	432	--	--
D	488-562	--	--	--	--	--	--	--	--	Small channels, too small to measure.
D	570		1435	17.6	8.0	7.4	93.9	452	--	--
D	578		1436	17.6	8.0	7.2	89.5	451	--	--
D	586		1437	17.6	7.9	7.2	88.8	452	--	--

Table 6.6.1.--Transect data for Rio Grande at Isleta below Railroad Bridge on August 7, 2002

[--, no data; ft, feet; in, inch; °C, degrees Celsius; mg/L, milligram per liter; % sat, percent saturation; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units.]

Transect	Dist. from initial point (ft)	Probe depth (in)	Time	Water temp. (°C)	pH	DO (mg/L)	DO (%)	SPC (uS/cm)	Turbidity (NTU)	Comments
Upstream	84	--	--	--	--	--	--	--	--	East bank.
Upstream	88	--	--	21.5	7.7	6.2	82.6	480	--	--
Upstream	96	--	--	21.5	7.7	6.2	83.7	481	--	--
Upstream	104	--	--	21.5	7.8	6.2	83.1	486	--	--
Upstream	112	--	--	21.5	7.8	6.2	83.1	489	--	--
Upstream	120	--	--	21.6	7.8	6.3	83.5	493	--	--
Upstream	128	--	--	21.6	7.8	6.1	82.8	494	--	--
Upstream	136	--	--	21.7	7.8	6.4	86.0	503	--	--
Upstream	144	--	--	21.9	7.8	6.4	86.2	516	--	--
Upstream	152	--	--	21.9	7.8	6.5	87.7	520	--	--
Upstream	160	--	--	22.0	7.9	6.6	89.8	528	--	--
Upstream	168	--	--	22.1	7.9	6.6	90.3	533	--	--
Upstream	176	--	--	22.1	7.9	6.6	89.1	537	--	--
Upstream	184	--	--	22.2	7.9	6.5	89.1	539	--	--
Upstream	192	--	--	22.2	7.9	6.6	90.1	540	--	--
Upstream	200	--	--	22.3	7.9	6.6	90.0	541	--	--
Upstream	208	--	--	22.3	7.9	6.8	92.3	540	--	--
Upstream	216	--	--	22.3	7.9	6.8	92.1	540	--	--
Upstream	224	--	--	22.3	7.9	6.6	90.6	540	--	--
Upstream	232	--	--	22.3	7.9	6.7	92.2	538	--	--
Upstream	240	--	--	22.3	7.9	6.6	90.8	538	--	--
Upstream	248	--	--	22.4	7.9	6.6	90.5	537	--	--
Upstream	256	--	--	22.4	8.0	6.7	91.1	534	--	--
Upstream	264	--	--	22.4	8.0	6.7	90.8	530	--	--
Upstream	272	--	--	22.3	8.0	6.7	90.8	526	--	--
Upstream	280	--	--	22.3	8.0	6.8	92.6	518	--	--
Upstream	288	--	--	22.2	8.0	6.7	91.3	511	--	--
Upstream	296	--	--	22.0	8.0	6.7	91.7	505	--	--
Upstream	304	--	--	21.9	8.0	6.8	92.3	501	--	--
Upstream	312	--	--	21.6	7.9	6.7	90.5	496	--	--

Table 6.6.1.--Transect data for Rio Grande at Isleta below Railroad Bridge on August 7, 2002

Transect	Dist. from initial point (ft)	Probe depth (in)	Time	Water temp. (°C)	pH	DO (mg/L)	DO (%)	SPC (uS/cm)	Turbidity (NTU)	Comments
Upstream	320	--	--	21.3	7.9	6.7	89.8	488	--	--
Upstream	328	--	--	21.1	7.9	6.6	88.1	487	--	--
Upstream	336	--	--	21.0	7.9	6.6	87.4	485	--	--
Upstream	344	--	--	21.0	7.9	6.6	87.3	485	--	--
Upstream	352	--	--	21.0	7.9	6.6	87.4	485	--	--
Upstream	360	--	--	21.0	7.9	6.5	85.2	486	--	--
Downstream	0	--	--	23.3	7.8	5.8	80.4	483	--	East bank.
Downstream	8	--	--	23.4	7.8	6.3	88.2	483	--	--
Downstream	16	--	--	23.4	7.9	6.3	87.4	484	--	--
Downstream	24	--	--	23.9	7.9	6.3	88.3	493	--	--
Downstream	32	--	--	24.3	7.9	6.3	89.3	503	--	--
Downstream	40	--	--	24.9	7.9	6.3	90.9	510	--	--
Downstream	48	--	--	25.5	7.9	6.4	93.3	517	--	--
Downstream	56	--	--	25.9	7.9	6.5	94.3	524	--	--
Downstream	64	--	--	26.5	8.0	6.4	94.0	525	--	--
Downstream	72	--	--	27.0	8.0	6.4	94.8	526	--	--
Downstream	80	--	--	27.4	8.0	6.1	91.3	525	--	--
Downstream	88	--	--	27.5	8.0	6.2	92.5	525	--	--
Downstream	96	--	--	27.4	8.0	6.3	95.5	525	--	--
Downstream	104	--	--	27.5	8.0	6.3	94.8	525	--	--
Downstream	112	--	--	27.5	8.0	6.3	95.2	522	--	--
Downstream	120	--	--	27.6	8.0	6.4	96.2	518	--	--
Downstream	128	--	--	27.7	8.0	6.3	95.3	515	--	--
Downstream	136	--	--	27.6	8.0	6.3	95.0	511	--	--
Downstream	144	--	--	27.7	8.0	6.3	95.4	507	--	--
Downstream	152	--	--	27.7	8.0	6.3	95.3	507	--	--
Downstream	160	--	--	27.5	8.0	6.3	95.4	504	--	--
Downstream	168	--	--	27.5	8.0	6.3	93.9	503	--	--
Downstream	176	--	--	27.5	8.0	6.3	93.8	501	--	--
Downstream	184	--	--	27.4	8.0	6.3	95.1	501	--	--
Downstream	192	--	--	27.4	8.0	6.3	94.7	500	--	--

Table 6.6.1.--Transect data for Rio Grande at Isleta below Railroad Bridge on August 7, 2002

Transect	Dist. from initial point (ft)	Probe depth (in)	Time	Water temp. (^{o}C)	pH	DO (mg/L)	DO (%)	SPC (uS/cm)	Turbidity (NTU)	Comments
Downstream	200	--	--	27.2	8.0	6.3	94.7	500	--	--
Downstream	208	--	--	27.3	8.0	6.4	94.5	497	--	--
Downstream	216	--	--	27.2	8.0	6.4	95.1	497	--	--
Downstream	224	--	--	27.1	8.0	6.4	94.6	495	--	--
Downstream	232	--	--	26.9	8.0	6.3	93.8	494	--	--
Downstream	240	--	--	26.9	8.0	6.4	95.1	494	--	--
Downstream	248	--	--	26.7	8.0	6.3	93.1	492	--	--
Downstream	256	--	--	26.7	8.0	6.3	93.8	492	--	--
Downstream	264	--	--	26.5	8.0	6.4	94.1	491	--	--
Downstream	272	--	--	26.4	7.9	6.4	93.9	490	--	--
Downstream	280	--	--	26.2	7.9	6.4	93.8	489	--	--
Downstream	288	--	--	26.1	7.9	6.4	94.0	487	--	--
Downstream	296	--	--	26.0	7.9	6.4	93.2	487	--	--
Downstream	304	--	--	26.0	7.9	6.2	90.5	486	--	--

Table 6.6.2.--Transect data for Rio Grande at Isleta below Railroad Bridge on January 28, 2003

[--, no data; ft, feet; in, inch; °C, degrees Celsius; mg/L, milligram per liter; % sat, percent saturation; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units.]

Transect	Dist. from initial point (ft)	Probe depth (in)	Time	Water temp. (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
A	41	--	--	--	--	--	--	--	--	East bank.
A	44	9	1056	8.5	8.0	8.7	88.5	377	60.4	--
A	52	12	1057	8.6	8.0	8.9	91.3	376	--	--
A	60	12	1058	8.6	8.0	8.9	91.4	376	--	--
A	68	16	1059	8.4	8.0	8.9	90.4	375	68.4	--
A	76	21	1102	8.4	8.0	9.0	91.8	373	--	--
A	84	21	1104	8.1	8.0	9.3	94.1	370	--	--
A	92	21	1106	7.8	8.1	9.3	93.7	360	82.7	--
A	100	15	1107	7.8	8.1	9.5	95.2	366	--	--
A	108	15	1108	7.7	8.1	9.5	95.0	364	108	--
A	116	9	1111	7.8	8.1	9.5	95.4	364	--	--
A	124	9	1112	7.8	8.1	9.7	97.2	363	--	--
A	132	6	1113	7.8	8.1	9.5	95.0	363	114	--
A	140	6	1115	7.9	8.1	9.6	96.8	363	--	--
A	148	9	1116	7.9	8.1	9.7	97.4	363	--	--
A	156	6	1117	7.9	8.1	9.7	98.0	363	112	--
A	164	6	1120	8.0	8.1	9.7	97.9	363	--	--
A	172	6	1121	8.0	8.1	9.7	97.6	362	--	--
A	180	6	1122	8.0	8.1	9.7	97.4	362	--	--
A	188	6	1123	8.0	8.1	9.6	97.1	362	107	--
A	196	9	1124	8.1	8.1	9.6	96.9	362	--	--
A	204	12	1125	8.1	8.1	9.6	96.8	362	--	--
A	212	9	1126	8.1	8.1	9.7	98.0	361	105	--
A	220	6	1127	8.2	8.1	9.7	97.9	361	--	--
A	238	9	1128	8.2	8.1	9.5	96.3	361	--	--
A	246	9	1131	8.3	8.1	9.8	99.1	361	109	--
A	254	9	1133	8.3	8.1	9.7	98.6	361	--	--
A	262	9	1133	8.4	8.1	9.7	98.3	361	--	--
A	270	9	1134	8.4	8.1	9.6	98.2	361	108	--
A	278	9	1136	8.5	8.1	9.7	98.7	360	--	--
A	286	9	1137	8.5	8.1	9.7	98.9	360	--	--

Table 6.6.2.--Transect data for Rio Grande at Isleta below Railroad Bridge on January 28, 2003

Transect	Dist. from initial point (ft)	Probe depth (in)	Time	Water temp. (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
A	294	9	1138	8.5	8.1	9.6	97.6	360	103	--
A	302	12	1140	8.6	8.1	9.7	98.7	360	--	--
A	310	12	1141	8.6	8.1	9.6	98.0	360	--	--
A	318	12	1142	8.6	8.1	9.7	99.0	360	103	--
A	326	9	1143	8.6	8.1	9.6	98.1	360	--	--
A	334	9	1145	8.6	8.1	9.5	97.6	359	--	--
A	336	--	--	--	--	--	--	--	--	West bank.

Table 6.7.1.--Transect data for Rio Grande at Los Lunas on July 24, 2002

[--, no data; ft, feet; in, inch; °C, degrees Celsius; mg/L, milligram per liter; % sat, percent saturation; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units.]

Transect	Dist. from initial point (feet)	Probe depth (in)	Time	Water temp (°C)	pH	DO (mg/L)	DO (%)	SPC (uS/cm)	Turbidity (NTU)	Comments
D	142	--	0900	--	--	--	--	--	--	Too shallow.
D	150	--	--	22.2	8.1	7.0	94.3	468	91	--
D	158-174	--	--	--	--	--	--	--	--	Too shallow.
D	182-254	--	--	--	--	--	--	--	--	Dry.
D	262	--	--	22.2	8.1	6.8	92.3	470	96	--
D	270	--	--	22.3	8.1	6.7	91.6	469	105	--
D	278	--	--	22.3	8.1	6.8	92.0	469	107	--
D	286	--	--	22.2	8.1	6.8	91.8	469	103	--
D	294	--	--	22.9	8.1	7.0	94.1	471	93	--
D	302	--	--	22.2	8.1	7.0	94.4	469	94	--
D	310	--	--	22.2	8.1	7.0	94.4	470	91	--
D	318	--	--	22.3	8.1	7.0	94.1	470	91	--
D	326	--	--	22.3	8.1	7.0	94.8	470	92	--
D	334	--	--	22.3	8.1	7.0	95.0	470	90	--
D	342	--	--	22.3	8.1	7.0	95.0	470	92	--
D	350	--	--	22.2	8.1	7.0	94.6	470	92	--
D	358	--	--	22.4	8.1	7.0	94.6	470	93	--
D	366-504	--	--	--	--	--	--	--	--	Too shallow.
D	512	--	--	22.6	8.1	6.9	93.6	471	95	--
D	520	--	--	22.8	8.1	6.9	93.6	471	94	--
D	528	--	--	22.8	8.1	6.8	93.5	471	91	--
D	536	--	--	22.9	8.1	6.9	95.0	471	91	--
D	544	--	--	23.1	8.1	6.9	95.5	470	95	--
D	552	--	--	23.3	8.1	6.9	94.7	468	92	--
D	560	--	--	23.0	8.1	6.8	93.1	467	97	--
D	568	--	--	23.1	8.1	6.8	93.6	464	94	--
D	576	--	--	22.7	8.1	6.5	88.4	458	87	--

Table 6.7.1.--Transect data for Rio Grande at Los Lunas on July 24, 2002

Transect	Dist. from initial point (feet)	Probe depth (in)	Time	Water temp (^{o}C)	pH	DO (mg/L)	DO (%)	SPC (uS/cm)	Turbidity (NTU)	Comments
A	60	--	--	23.5	8.1	6.8	93.9	475	95	--
A	68	--	--	23.8	8.1	6.8	95.9	475	96	--
A	76	--	--	23.9	8.1	6.8	95.6	475	97	--
A	84	--	--	23.9	8.1	6.8	95.5	475	98	--
A	92	--	--	24.0	8.1	6.8	95.4	475	97	--
A	100	--	--	24.2	8.1	7.5	101.4	492	98	Very shallow.
A	108	--	--	--	--	--	--	--	--	Too shallow.
A	116	--	--	--	--	--	--	--	--	Dry land.
A	124-148	--	--	--	--	--	--	--	--	Dry.
A	156	--	--	--	--	--	--	--	--	Too shallow.
A	164	--	--	24.3	8.1	6.5	91.3	477	99	--
A	172	--	--	24.4	8.1	6.6	93.7	477	98	--
A	180-344	--	--	--	--	--	--	--	--	Land/dry.
A	352-376	--	--	--	--	--	--	--	--	Too shallow.
A	384	--	--	--	--	--	--	--	--	Land/dry.
A	392	--	--	--	--	--	--	--	--	Too shallow.
A	400-480	--	--	--	--	--	--	--	--	Land/dry.
A	488-528	--	--	--	--	--	--	--	--	Dry.

Table 6.7.2.--Transect data for Rio Grande at Los Lunas on October 30, 2002

[--, no data; ft, feet; in, inch; °C, degrees Celsius; mg/L, milligram per liter; % sat, percent saturation; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units.]

Transect	Dist. from initial point (ft)	Probe depth (ft)	Time	Water temp (°C)	pH	DO (mg/L)	DO (%)	SPC (uS/cm)	Turbidity (NTU)	Comments
A	56	--	1049	10.6	8.0	8.5	90.4	364	>1000	West bank, water's edge at 54 ft.
A	64	--	1054	10.8	8.0	8.5	91.1	364	>1000	Probe is knee deep.
A	72	--	1055	10.9	8.0	8.6	92.2	365	>1000	--
A	80	--	1056	10.9	8.0	8.6	92.3	366	>1000	Site of continuous monitor.
A	88	--	1057	10.9	8.0	8.6	92.4	368	>1000	--
A	96	--	1058	10.9	8.0	8.6	92.5	369	>1000	--
A	104	--	1059	10.9	8.0	8.7	93.0	370	>1000	--
A	112	--	1100	10.9	8.0	8.6	92.3	370	>1000	--
A	120	--	1101	10.9	8.0	8.5	91.5	371	>1000	Ankle deep.
A	128	--	1103	10.9	8.0	8.6	92.6	371	>1000	--
A	136	--	1104	10.9	8.0	8.5	92.1	371	>1000	--
A	142	--	1105	11.0	8.0	8.5	92.0	370	>1000	Sunny.
A	150	--	1106	11.0	8.0	8.6	93.3	370	>1000	Shallow .
A	158	--	1108	11.0	8.0	8.4	91.1	371	>1000	Shallow .
A	166	--	1109	11.1	8.0	8.5	91.7	371	>1000	--
A	174	--	1110	11.1	8.0	8.4	90.7	371	>1000	--
A	177-502	--	--	--	--	--	--	--	--	Island. Too shallow to measure from 502- 520.
A	520	--	1120	11.0	8.1	8.6	92.7	372	>1000	--
A	528	--	1122	11.0	8.1	8.4	91.1	372	>1000	--
A	536	--	1123	11.0	8.1	8.6	93.0	372	>1000	--
A	544	--	1124	11.1	8.1	8.5	91.6	372	>1000	--
A	552	--	1125	11.2	8.1	8.3	89.2	372	>1000	--
A	560	--	1127	11.2	8.1	8.5	91.5	373	>1000	--
A	570	--	1129	10.9	8.0	8.2	87.8	373	>1000	Weeds.
A	616	--	1132	11.1	8.1	8.4	90.4	373	>1000	--
C	10	--	1255	12.9	8.0	8.0	90.1	359	>1000	West edge at 10 ft.
C	18	--	1256	13.0	8.0	8.1	91.5	359	>1000	--

Table 6.7.2.--Transect data for Rio Grande at Los Lunas on October 30, 2002

Transect	Dist. from initial point (ft)	Probe depth (ft)	Time	Water temp (°C)	pH	DO (mg/L)	DO (%)	SPC (uS/cm)	Turbidity (NTU)	Comments
C	26	--	1257	13.1	8.1	8.1	91.5	358	>1000	--
C	34	--	1257	13.2	8.0	8.1	92.0	359	>1000	--
C	42	--	1258	13.2	8.0	8.1	92.3	359	>1000	--
C	50	--	1300	13.3	8.0	8.1	91.4	359	>1000	--
C	58	--	1301	13.3	8.0	8.1	92.0	359	>1000	--
C	66	--	1302	13.4	8.0	8.1	91.7	359	>1000	--
C	74	--	--	--	--	--	--	--	--	Too shallow; riffle.
C	82	--	--	--	--	--	--	--	--	Too shallow; riffle.
C	90	--	--	--	--	--	--	--	--	Too shallow; riffle.
C	98	--	--	--	--	--	--	--	--	Too shallow; riffle.
C	106	--	1304	13.5	8.1	7.6	85.9	359	>1000	Shallow.
C	114	--	1305	13.5	8.1	7.9	89.9	359	>1000	Shallow.
C	122	--	1306	13.5	8.1	7.5	85.1	357	>1000	Shallow.
C	130	--	1307	13.5	8.1	7.9	90.4	359	>1000	Shallow.
C	138	--	1308	13.5	8.1	8.0	90.8	354	>1000	Shallow.
C	146	--	1310	14.5	8.1	7.5	87.8	360	>1000	Shallow; backwater.
C	154	--	--	--	--	--	--	--	--	Too shallow.
C	162	--	1312	13.6	8.1	8.0	91.0	359	>1000	--
C	170	--	1313	13.6	8.1	7.8	--	359	>1000	Shallow.
C	178	--	1314	13.8	8.0	7.9	91.1	359	>1000	Shallow.
C	186	--	1315	13.7	8.1	7.9	90.3	359	>1000	Knee deep.
C	194	--	1317	13.7	8.0	7.9	90.9	359	>1000	Knee deep.
C	202	--	1318	13.9	8.0	7.9	91.3	360	>1000	Knee deep.
C	210	--	1319	13.9	8.0	8.0	91.5	360	>1000	Knee deep.
C	218	--	1319	13.9	8.0	7.9	91.0	362	>1000	Knee deep.
C	226	--	1320	14.0	8.0	8.0	91.8	363	>1000	Knee deep.
C	234	--	1321	14.0	8.0	7.9	91.0	364	>1000	Lower thigh deep.
C	242	--	--	14.1	8.1	7.8	90.4	363	>1000	--
C	242.5-302	--	--	--	--	--	--	--	--	Island. Shallow to 308 ft.
C	308	--	1328	14.2	8.1	7.8	90.0	364	>1000	--
C	316	--	1329	14.2	8.1	7.8	90.7	363	>1000	--
C	324	--	1330	14.2	8.1	7.8	90.5	363	>1000	--

Table 6.7.2.--Transect data for Rio Grande at Los Lunas on October 30, 2002

Transect	Dist. from initial point (ft)	Probe depth (ft)	Time	Water temp (^{o}C)	pH	DO (mg/L)	DO (%)	SPC (uS/cm)	Turbidity (NTU)	Comments
C	332	--	1331	14.3	8.1	7.8	90.1	363	>1000	--
C	340-372	--	--	--	--	--	--	--	--	Too shallow then island to 372 ft.
C	374	--	1333	14.3	8.1	7.5	88.2	363	>1000	--
C	382	--	1334	14.3	8.1	7.8	90.5	363	>1000	--
C	390	--	1335	14.4	8.1	7.7	89.9	363	>1000	--
C	398-458	--	--	--	--	--	--	--	--	Too shallow;
C	460	--	1338	14.2	8.1	7.6	88.3	366	>1000	--
	468	--	1339	14.3	8.1	7.7	89.5	366	>1000	--
C	474-530	--	--	--	--	--	--	--	--	Bank at 474 ft. to 530 ft.; wet weeds
C	540	--	1342	14.5	8.1	3.7	40.6	368	>1000	Shallow side channel.
C	548	--	1344	14.8	8.1	6.9	82.4	367	>1000	--
C	562	--	1346	15.8	8.1	7.6	90.5	371	>1000	East bank at 565 ft.

Table 6.7.3.--Transect data for Rio Grande at Los Lunas on December 17, 2002

[--, no data; ft, feet; in, inch; °C, degrees Celsius; mg/L, milligram per liter; % sat, percent saturation; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units.]

Transect	Dist. from initial point (ft)	Probe depth (ft)	Time	Water temp. (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
A	56	--	1029	8.0	8.1	9.0	98.5	388	--	--
A	64	--	1030	8.1	8.1	9.7	99.5	387	--	--
A	72	--	1031	8.1	8.2	9.4	95.9	387	--	--
A	80	--	1032	8.1	8.2	9.7	98.8	387	--	--
A	88	--	1032	8.1	8.2	9.3	94.5	389	--	--
A	96	--	1034	8.1	8.1	9.3	94.5	391	--	--
A	104	--	1042	8.2	8.2	9.2	94.3	388	230	--
A	112	--	1044	8.2	8.2	9.2	93.7	389	253	--
A	120	--	1045	8.2	8.2	9.3	94.7	389	338	--
A	128	--	1046	8.2	8.2	9.2	93.8	389	234	--
A	136	--	1049	8.2	8.2	9.3	95.1	388	229	--
A	144	--	1050	8.2	8.2	9.3	95.5	388	227	--
A	152-174	--	--	--	--	--	--	--	--	Too deep.
A	178	--	1055	8.3	8.3	9.4	96.2	387	249	--
A	180-232	--	--	--	--	--	--	--	--	Island then small channel.
A	234	--	1057	8.3	8.3	9.8	101	387	215	--
A	236-268	--	--	--	--	--	--	--	--	Shallow water.
A	270	--	1100	8.4	8.3	9.9	102	387	204	--
A	272	--	1101	8.5	8.3	9.8	101	386	204	--
A	278-360	--	--	--	--	--	--	--	--	Island; too shallow.
A	364	--	1104	7.1	7.7	7.6	75.4	453	--	--
A	370-508	--	--	--	--	--	--	--	--	Island/bar.
A	510	--	1107	8.4	8.8	15.0	155	375	260	--
A	518	--	1109	8.4	8.5	11.4	117	385	181	--
A	526	--	1110	8.4	8.5	10.9	112	385	193	--
A	534	--	1113	8.4	8.4	10.5	108	386	208	--
A	542	--	1114	8.4	8.4	10.3	106	387	214	--
A	550	--	1115	8.4	8.4	10.2	105	387	221	--
A	558	--	1117	8.5	8.4	10.1	104	366	255	--
A	566	--	1119	8.4	8.4	10.4	107	386	199	--
A	574	--	1120	8.4	8.4	10.2	105	386	223	--

Table 6.7.3.--Transect data for Rio Grande at Los Lunas on December 17, 2002

Transect	Dist. from initial point (ft)	Probe depth (ft)	Time	Water temp. (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
A	582	--	1122	8.5	8.4	0.7	7.10	452	--	Measurement made in area with vegetation.
A	582	--	1126	8.5	8.4	10.3	106	386	215	--
A	590	--	1128	8.7	8.5	9.5	98.3	389	115	--
A	598	--	1130	8.6	8.5	10.8	112	386	220	--
A	606	--	1132	8.6	9.0	10.4	107	386	229	--
A	610	--	1134	8.5	8.5	10.5	109	386	211	--
C	12	--	1334	9.1	8.3	9.3	97.6	394	234	--
C	20	--	1336	9.1	8.3	9.4	98.2	394	245	--
C	28	--	1337	9.1	8.3	9.6	101	394	253	--
C	36	--	1337	9.1	8.3	9.5	99.4	394	256	--
C	44	--	1338	9.1	8.3	9.4	98.6	395	246	--
C	52	--	1339	9.1	8.3	9.7	102	394	249	--
C	60	--	1380	9.1	8.3	9.5	99.1	394	242	--
C	68	--	1340	9.1	8.3	9.4	98.7	394	251	--
C	76	--	1341	9.1	8.3	9.4	98.6	394	253	--
C	77-97	--	--	--	--	--	--	--	--	Sandbar.
C	98	--	1342	9.1	8.3	9.3	97.7	395	242	--
C	106	--	1343	9.2	8.3	9.6	100	394	248	--
C	114	--	1344	9.2	8.3	9.5	99.2	395	248	--
C	122	--	1345	9.2	8.3	9.5	99.2	394	246	--
C	130	--	1346	9.2	8.3	9.4	97.9	394	284	--
C	138	--	1347	9.1	8.3	9.3	97.7	394	256	--
C	146	--	1350	9.2	8.3	7.2	74.7	394	331	--
C	154	--	1351	9.2	8.3	9.2	97.1	394	260	--
C	162	--	1352	9.2	8.3	9.4	98.7	394	247	--
C	170	--	1353	9.2	8.3	9.5	99.4	394	254	--
C	178	--	1354	9.2	8.3	9.5	99.3	394	250	--
C	186	--	1355	9.2	8.3	9.4	97.8	394	245	--
C	194	--	1357	9.1	8.3	9.2	96.2	394	291	--
C	202	--	1357	9.1	8.3	9.3	97.5	394	248	--
C	210	--	1358	9.2	8.3	9.6	100	394	228	--
C	218	--	1359	9.2	8.3	9.5	99.8	394	231	--

Table 6.7.3.--Transect data for Rio Grande at Los Lunas on December 17, 2002

Transect	Dist. from initial point (ft)	Probe depth (ft)	Time	Water temp. (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
C	226	--	1400	9.1	8.4	9.7	101	393	221	--
C	234	--	1401	9.2	8.4	9.7	102	393	250	--
C	242	--	1401	9.2	8.4	9.9	104	393	226	--
C	248-300	--	--	--	--	--	--	--	--	Island; too shallow.
C	302	--	1404	9.4	8.8	8.9	93.1	383	335	--
C	310	--	1406	9.2	8.4	9.7	102	393	232	--
C	318	--	1407	9.2	8.4	9.7	101	393	247	--
C	326	--	1408	9.2	8.4	9.9	105	393	227	--
C	334	--	1408	9.2	8.4	9.9	104	392	233	--
C	342	--	1409	9.2	8.5	10.1	106	392	239	--
C	350-370	--	1411	9.5	8.8	11.0	116	389	1000	Island; too shallow.
C	372	--	1413	9.2	8.5	9.9	104	392	258	--
C	380	--	1414	9.2	8.5	10.2	106	391	298	--
C	388	--	1415	9.2	8.5	10.3	108	391	256	--
C	396	--	1417	9.2	8.5	10.5	110	392	233	--
C	404	--	1418	9.3	8.5	10.3	107	391	1000	--
C	412	--	1414	9.3	8.6	10.5	111	391	226	--
C	420	--	1421	9.4	8.6	11.7	123	389	1000	--
C	428	--	1422	9.6	8.1	11.4	121	385	834	--
C	436-450	--	--	--	--	--	--	--	--	Island; too shallow.
C	460	--	1424	9.2	8.4	9.4	98.4	390	1000	--
C	468	--	--	9.3	8.6	11.0	116	390	213	--
C	476	--	1426	9.3	8.6	10.8	113	391	208	--
C	482	--	1427	9.3	8.7	12.0	125	389	1000	--
C	520	--	1429	9.3	8.7	6.1	63.6	389	311	--
C	528	--	1430	9.3	8.6	6.0	62.3	390	1000	--
C	530	--	1431	9.4	9.1	15.5	164	377	743	--
C	538	--	1452	9.4	9.1	15.5	163	378	1000	--
C	546	--	--	--	--	--	--	--	--	Too shallow.
C	550	--	1435	9.0	9.1	14.8	155	378	235	--
C	554	--	1436	9.0	9.1	14.2	148	379	1000	--
C	555	--	--	--	--	--	--	--	--	Bank.

Table 6.7.4.--Transect data for Rio Grande at Los Lunas on February 26, 2003

[--, no data; ft, feet; in, inch; °C, degrees Celsius; mg/L, milligram per liter; % sat, percent saturation; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units.]

Transect	Dist. from initial point (feet)	Probe depth (in)	Time	Water temp (°C)	pH	DO (mg/L)	DO (%)	SPC (uS/cm)	Turbidity (NTU)	Comments
A	56	12	1112	7.9	8.1	8.9	89.0	268	--	--
A	64	9	1113	7.9	8.1	8.8	87.5	268	--	--
A	72	9	1113	7.9	8.1	8.7	86.2	269	--	--
A	80	6	1114	8.0	8.1	8.8	87.7	268	--	--
A	88	6	1115	8.1	8.1	8.8	88.0	269	--	--
A	96	9	1116	8.1	8.1	8.6	86.6	269	--	--
A	104	6	1117	8.2	8.1	8.6	86.2	269	--	--
A	112	18	1118	8.1	8.1	8.2	76.5	269	--	--
A	120	24	1119	8.3	8.1	8.6	86.4	269	--	--
A	128	24	1120	8.3	8.1	8.8	87.2	269	--	--
A	136	24	1121	8.3	8.1	8.7	87.6	269	--	--
A	144	24	1122	8.3	8.1	8.6	86.5	269	--	--
A	152	24	1123	8.4	8.1	8.6	86.9	268	--	--
A	160	24	1123	8.4	8.1	8.6	86.0	267	--	--
A	168	24	1124	8.4	8.1	8.9	89.6	268	--	--
A	176	24	1125	8.5	8.1	8.3	83.3	268	--	--
A	180-230	--	--	--	--	--	--	--	--	Dry.
A	232	12	1127	8.5	8.1	8.4	84.4	267	--	--
A	236-506	--	--	--	--	--	--	--	--	Dry.
A	508	4	1130	8.7	7.9	8.3	82.2	267	--	--
A	516	4	1131	8.7	8.1	8.1	82.3	266	--	--
A	524	6	1132	8.6	8.1	8.3	84.7	267	--	--
A	532	9	1133	8.5	8.1	8.7	87.7	267	--	--
A	540	9	1133	8.5	8.1	8.4	85.3	266	--	--
A	548	4	1134	8.5	8.1	8.3	83.4	263	--	--
A	556	6	1135	8.6	8.1	8.0	80.2	268	--	--
A	564	9	1136	8.5	8.1	8.1	81.3	267	--	--
A	572	9	1137	8.5	8.0	8.0	78.2	267	--	--
A	580	4	1138	8.5	8.1	7.6	76.1	267	--	--
A	582-596	--	--	--	--	--	--	--	--	Too shallow.
A	598	4	1139	8.5	7.8	7.5	75.0	266	--	--

Table 6.7.4.--Transect data for Rio Grande at Los Lunas on February 26, 2003

Transect	Dist. from initial point (feet)	Probe depth (in)	Time	Water temp (^{o}C)	pH	DO (mg/L)	DO (%)	SPC (uS/cm)	Turbidity (NTU)	Comments
A	606	9	1140	8.5	8.1	8.2	82.5	266	--	--
B	10	12	1211	8.8	8.2	12.9	117.6	271	--	--
B	18	9	1212	8.9	8.1	8.6	87.3	272	--	--
B	26	9	1213	8.9	8.1	8.5	86.9	273	--	--
B	34	6	1213	8.9	8.1	8.6	87.6	272	--	--
B	42	12	1214	8.9	8.1	8.5	86.7	272	--	--
B	50	18	1215	8.9	8.1	8.5	86.3	271	--	--
B	58	24	1216	8.9	8.1	8.5	86.3	246	--	--
B	66	24	1217	8.9	8.1	8.5	86.7	273	--	--
B	74	18	1217	8.9	8.1	8.7	87.7	272	--	--
B	82	18	1218	8.9	8.1	8.6	86.9	242	--	--
B	90	12	1219	8.9	8.2	8.5	87.2	272	--	--
B	98	16	1219	8.9	8.1	8.6	87.5	272	--	--
B	106	12	1220	8.9	8.1	8.4	85.6	272	--	--
B	114	12	1221	8.9	8.1	8.5	87.3	271	--	--
B	122	9	1221	8.9	8.2	8.5	87.4	272	--	--
B	130	12	1222	8.9	8.1	8.5	87.0	272	--	--
B	138	18	1222	8.9	8.1	8.5	87.2	272	--	--
B	146	18	1223	8.9	8.2	8.6	87.6	272	--	--
B	150-398	--	--	--	--	--	--	--	--	Dry/too shallow.
B	400	3	1227	9.1	8.2	8.3	85.0	269	--	--
B	404-522	--	--	--	--	--	--	--	--	Dry/shallow.
B	524	3	1232	8.9	8.2	8.1	82.5	271	--	--
B	532	16	1233	9.0	8.1	8.4	85.7	271	--	--
B	540	24	1234	9.0	8.1	8.6	87.2	226	--	--
B	548	24	1235	9.0	8.1	8.5	87.1	263	--	--
B	556	24	1236	9.0	8.2	8.1	82.3	270	--	--
B	564	9	1237	9.0	8.2	8.3	85.2	270	--	--

Table 6.8.2.--Transect data for Rio Grande at Abeytas on September 12, 2002

[--, no data; ft, feet; in, inch; °C, degrees Celsius; mg/L, milligram per liter; % sat, percent saturation; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units.]

Transect	Dist. From initial point (ft)	Probe depth (in)	Time	Water temp. (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
A	56	--	1010	19.2	7.9	6.8	87.6	396	>1000	Large amount of foam present
A	64	--	1011	19.3	7.9	6.9	88.0	396	>1000	--
A	72	--	1012	19.3	7.9	6.9	88.2	396	>1000	--
A	80	--	1014	19.3	7.9	6.9	88.2	396	>1000	--
A	88	--	1016	19.3	7.9	6.9	88.4	397	>1000	--
A	96	--	1017	19.2	8.0	7.3	92.6	397	>1000	Water covered island.
A	104	--	1019	18.6	7.9	7.1	89.2	396	>1000	--
A	112-190	--	--	--	--	--	--	--	--	Dry.
A	190	--	1022	21.1	8.0	6.6	88.0	419	>1000	--
A	198	--	1024	21.2	8.0	6.2	81.0	411	>1000	--
A	206-270	--	--	--	--	--	--	--	--	Dry.
A	270	--	1026	19.9	7.9	6.5	83.0	397	>1000	--
A	278	--	1027	19.5	7.9	6.8	87.3	396	>1000	--
A	286	--	1028	19.5	7.9	6.8	87.8	397	>1000	--
A	294	--	1029	19.7	7.9	6.8	87.2	400	>1000	--
A	302	--	1030	19.7	7.9	6.6	85.9	401	>1000	--
A	310	--	1031	19.7	7.9	6.6	85.5	400	>1000	--
A	318	--	1032	19.7	7.9	6.6	86.1	400	>1000	--
A	326	--	1033	19.7	7.9	6.6	85.8	400	>1000	--
A	334	--	1034	19.7	7.9	6.6	85.8	400	>1000	--
A	342	--	1035	19.7	7.9	6.6	85.6	400	>1000	--
A	350	--	1037	19.7	7.9	6.6	84.4	399	>1000	--
A	358	--	1040	19.8	7.9	6.5	84.4	400	>1000	--
A	366	--	1041	19.8	7.9	6.6	84.0	400	>1000	--
A	374	--	1042	19.8	7.9	6.5	84.5	399	>1000	--
A	382	--	1043	19.8	7.9	6.6	87.0	399	>1000	Hydrolab deployed here.
A	390	--	1046	19.8	7.9	6.7	86.8	400	>1000	--
A	398	--	1047	19.8	7.9	6.7	87.3	400	>1000	--
A	406	--	1049	19.7	7.9	6.7	86.7	400	>1000	--

Table 6.8.2.--Transect data for Rio Grande at Abeytas on September 12, 2002

Transect	Dist. From initial point (ft)	Probe depth (in)	Time	Water temp. (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
A	414	--	1050	19.7	7.9	7.0	87.6	399	>1000	--
A	422	--	1051	19.6	7.9	6.7	86.9	400	>1000	--
A	430	--	1052	19.6	7.9	6.8	86.9	400	>1000	--
A	438	--	1054	19.5	7.9	6.8	87.5	401	>1000	--
A	446	--	1055	19.4	7.9	6.8	87.1	401	>1000	--
A	454	--	1056	19.3	7.9	6.8	86.9	401	>1000	--

Table 6.8.4.--Transect data for Rio Grande at Abeytas on January 16, 2003

[--, no data; ft, feet; in, inch; °C, degrees Celsius; mg/L, milligram per liter; % sat, percent saturation; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units.]

Transect	Dist. from initial point (ft)	Time	Probe depth (in)	Water temp. (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
C	10	1422	--	9.5	8.8	15.1	155	364	183	--
C	18	--	--	--	--	--	--	--	--	Too shallow.
C	26	1427	--	9.1	8.6	12.7	129	366	204	--
C	34	1428	--	8.9	8.5	12.0	122	367	580	--
C	42	1429	--	9.0	8.6	12.5	127	367	206	--
C	50	1430	--	8.4	8.4	11.5	115	370	224	--
C	58	1431	--	8.3	8.3	11.1	111	371	232	--
C	66	1431	--	8.3	8.3	11.1	111	371	233	--
C	74	1432	--	8.3	8.3	10.9	109	371	242	--
C	82	1433	--	8.4	8.3	11.0	110	372	233	--
C	90	1433	--	8.4	8.4	10.9	109	372	241	--
C	98	1435	--	8.4	8.4	10.8	108	372	241	--
C	106	1436	--	8.4	8.4	10.7	108	372	238	--
C	114	1437	--	8.4	8.4	10.7	108	372	691	--
C	122	--	--	--	--	--	--	--	--	Too shallow.
C	130	1439	--	8.4	8.4	10.7	107	372	276	--
C	138	1440	--	8.4	8.4	10.8	108	372	256	--
C	146	1441	--	8.4	8.4	10.8	109	372	>1000	--
C	154	1442	--	8.4	8.4	10.9	109	372	243	--
C	162	1443	--	8.4	8.4	11.0	110	372	243	--
C	170	1443	--	8.5	8.4	10.9	109	373	245	--
C	178	1444	--	8.5	8.4	11.0	110	372	241	--
C	186	1445	--	8.5	8.4	11.0	110	373	236	--
C	194	1446	--	8.5	8.4	10.8	109	373	247	--
C	202	1447	--	8.5	8.4	10.6	106	372	409	--
C	--	--	--	--	--	--	--	--	--	Water flowing over algae covered island; shallow.
C	210	--	--	--	--	--	--	--	--	Too shallow.
C	218	1450	--	8.6	8.4	10.6	107	372	274	--
C	226	1451	--	8.6	8.4	11.2	112	372	221	--
C	234	1451	--	8.6	8.4	11.3	113	372	238	--

Table 6.8.4.--Transect data for Rio Grande at Abeytas on January 16, 2003

Transect	Dist. from initial point (ft)	Time	Probe depth (in)	Water temp. (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
C	242	1452	--	8.6	8.4	11.6	117	372	245	--
C	250	1453	--	8.5	8.4	12.0	121	371	246	--
C	258	1454	--	8.5	8.3	11.1	112	372	248	--
C	266	1455	--	8.5	8.4	10.8	108	372	257	--
C	274	--	--	--	--	--	--	--	--	Mudflat/island; turbid area.
C	282	1456	--	8.6	8.4	8.4	84.9	372	598	--
C	290	1457	--	8.8	8.4	11.0	110	372	247	--
C	298	1458	--	8.7	8.4	10.9	109	372	242	--
C	306	1459	--	8.6	8.4	10.6	106	372	301	--
C	314 to 322	--	--	--	--	--	--	--	--	Too shallow.
C	330	1500	--	8.6	8.4	10.4	105	372	> 1000	--
C	338 to 360	--	--	--	--	--	--	--	--	Too shallow.
C	364	1502	--	9.0	8.5	3.7	30.7	370	11	
C	368 to 422	--	--	--	--	--	--	--	--	Shallow/island; turbid/algae area in middle.
C	424	1505	--	8.6	8.4	10.7	107	372	265	--
C	432	1506	--	8.6	8.4	11.2	112	372	256	--
C	440	1507	--	8.6	8.4	10.9	109	372	259	--
C	448	1508	--	8.6	8.4	11.1	111	372	254	--
C	456	1509	--	8.6	8.4	11.0	111	372	260	--
C	464	1509	--	8.6	8.4	11.0	110	372	254	--
C	468	--	--	--	--	--	--	--	--	East bank.

Table 6.9.1.--Transect data for Lower San Juan Drain on August 5, 2002

[--, no data; ft, feet; in, inch; °C, degrees Celsius; mg/L, milligram per liter; % sat, percent saturation; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units.]

Transect	Dist. from initial point (ft)	Probe depth (ft)	Time	Water temp (°C)	pH	DO (mg/L)	DO (%)	SPC (uS/cm)	Turbidity (NTU)	Comments
downstream	0	--	--	--	--	--	--	--	--	Water's edge.
downstream	2	--	--	21.92	7.91	6.90	93.3	677.2	--	--
downstream	4	--	--	21.85	7.92	6.87	93.0	677.2	--	--
downstream	6	--	--	21.84	7.88	6.89	92.7	678.1	--	--
downstream	8	--	--	21.84	7.89	6.85	92.4	678.2	--	--
downstream	10	--	--	21.85	7.89	6.75	91.0	678.4	--	--
downstream	12	--	--	21.86	7.89	6.85	92.3	678.4	--	--
downstream	14	--	--	21.87	7.90	6.87	92.7	678.6	--	--
downstream	16	--	--	21.87	7.90	6.93	92.9	678.6	--	--
downstream	18	--	--	21.88	7.90	6.89	92.2	678.2	--	--
downstream	20	--	--	21.69	7.90	6.87	92.0	678.5	--	--
downstream	22	--	--	21.88	7.90	6.79	91.6	678.3	--	--
downstream	24	--	--	21.87	7.91	6.88	91.1	679.0	--	--
downstream	26	--	--	21.92	7.91	6.76	91.3	678.3	--	--
downstream	28	--	--	21.88	7.92	6.83	91.9	679.1	--	--
downstream	30	--	--	21.96	7.92	6.82	92.1	678.4	--	--
downstream	32	--	--	21.98	7.92	6.86	92.7	679.6	--	--
downstream	34	--	--	22.00	7.92	6.83	92.3	678.7	--	--
downstream	36	--	--	22.01	7.93	6.84	92.5	679.2	--	--
downstream	38	--	--	22.09	7.93	6.90	93.3	679.4	--	--
downstream	40	--	--	22.11	7.93	6.89	93.4	679.5	--	--
downstream	42	--	--	22.09	7.93	6.79	91.9	679.4	--	--
downstream	44	--	--	22.09	7.94	6.84	92.7	679.3	--	--
downstream	46	--	--	22.17	7.95	6.79	92.2	680.0	--	--
downstream	48	--	--	23.22	7.98	6.64	92.5	682.8	--	--
downstream	49. 5	--	--	--	--	--	--	--	--	Right edge.

Table 6.9.1.--Transect data for Lower San Juan Drain on August 5, 2002

Transect	Dist. from initial point (ft)	Probe depth (ft)	Time	Water temp (°C)	pH	DO (mg/L)	DO (%)	SPC (uS/cm)	Turbidity (NTU)	Comments
upstream	4	--	1345	--	--	--	--	--	--	Right edge.
upstream	5	--	--	23.37	7.93	6.51	89.8	671.2	--	--
upstream	6	--	--	23.32	7.96	6.48	88.4	672.1	--	--
upstream	7	--	--	23.35	7.96	6.46	89.5	673.5	--	--
upstream	8	--	--	23.34	7.96	6.55	90.2	673.4	--	--
upstream	9	--	--	23.36	7.96	6.41	88.6	673.5	--	--
upstream	10	--	--	23.37	7.98	6.43	89.4	673.2	--	--
upstream	11	--	--	23.38	7.94	6.48	90.0	673.3	--	--
upstream	12	--	--	23.38	7.96	6.52	90.3	673.0	--	--
upstream	13	--	--	23.38	7.97	6.50	90.2	673.7	--	--
upstream	14	--	--	23.39	7.97	6.53	90.7	673.5	--	--
upstream	15	--	--	23.40	7.97	6.46	89.5	674.1	--	--
upstream	16	--	--	23.41	7.97	6.45	89.8	673.9	--	--
upstream	17	--	--	23.41	7.98	6.48	90.4	673.9	--	--
upstream	18	--	--	23.42	7.98	6.45	89.9	675.0	--	--
upstream	19	--	--	23.42	7.98	6.49	89.9	674.1	--	--
upstream	20	--	--	23.43	7.98	6.48	89.9	674.3	--	--
upstream	21	--	--	23.44	7.98	6.51	90.5	674.0	--	--
upstream	22	--	--	23.46	7.98	6.53	90.6	674.3	--	--
upstream	23	--	--	23.46	7.98	6.52	90.5	674.2	--	--
upstream	24	--	--	23.46	7.98	6.50	90.7	675.2	--	--
upstream	25	--	--	23.46	7.99	6.53	90.6	674.0	--	--
upstream	26	--	--	23.46	7.99	6.56	90.8	674.1	--	--
upstream	27	--	--	23.46	7.99	6.52	90.1	673.8	--	--
upstream	28	--	--	23.47	7.99	6.48	90.0	673.1	--	--
upstream	29	--	--	23.47	7.99	6.48	89.7	674.7	--	--
upstream	30	--	--	23.47	7.99	6.45	89.5	674.4	--	--
upstream	30.2	--	--	--	--	--	--	--	--	Left edge.

Table 6.9.2.--Transect data for Lower San Juan Drain on January 27, 2003

[--, no data; ft, feet; in, inch; °C, degrees Celsius; mg/L, milligram per liter; % sat, percent saturation; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units.]

Transect	Dist. from initial point (ft)	Probe depth (ft)	Time	Water temp. (°C)	pH	DO (mg/L)	DO (%)	SPC (uS/cm)	Turbidity (NTU)	Comments
A	--	--	--	--	--	--	--	--	--	West bank.
A	4	--	1027	6.98	7.64	8.36	80.8	512.0	--	--
A	8	--	1028	6.97	7.76	8.34	80.2	513.0	--	--
A	12	--	1029	6.95	7.80	8.32	80.4	513.0	--	--
A	16	--	1030	6.95	7.81	8.31	80.2	513.0	--	--
A	20	--	1031	6.95	7.82	8.28	80.0	513.0	--	--
A	24	--	1032	6.95	7.83	8.30	80.4	513.0	--	--
A	28	--	1033	6.93	7.84	8.08	77.2	514.0	--	--
A	30	--	1035	6.91	7.87	8.27	79.6	513.0	--	--
B	6	--	1101	7.47	7.84	8.52	83.4	513.0	--	--
B	10	--	1103	7.45	7.87	8.67	84.8	513.0	--	--
B	14	--	1104	7.42	7.88	8.63	84.7	514.0	--	--
B	18	--	1105	7.42	7.88	8.69	84.9	514.0	--	--
B	22	--	1106	7.45	7.89	8.62	84.2	513.0	--	--
B	26	--	1107	7.55	7.89	8.53	83.7	514.0	--	--
B	30	--	1108	7.73	7.89	8.22	80.1	513.0	--	--
B	34	--	--	--	--	--	--	--	--	Too shallow but wet.

Table 6.10.1.--Transect data for Rio Grande at La Joya on July 23, 2002

[--, no data; ft, feet; in, inch; °C, degrees Celsius; mg/L, milligram per liter; % sat, percent saturation; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units.]

Transect	Dist. from initial point (ft)	Probe depth (in)	Time	Water temp. (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
D	32	--	--	20.75	8.14	6.40	84.4	574	844	--
D	40	--	--	20.87	8.15	6.46	85.1	575	809	--
D	48	--	--	20.91	8.15	6.53	86.1	575	829	--
D	56	--	--	20.01	8.15	6.56	85.8	575	792	--
D	64	--	--	19.37	8.16	7.17	91.3	577	780	--
D	72	--	--	20.9	8.15	6.51	85.7	575	789	--
D	80	--	--	20.8	8.15	6.53	86.3	575	789	--
D	88	--	--	20.8	8.15	6.59	87.7	576	809	--
D	96	--	--	20.8	8.15	6.53	85.7	575	801	--
D	104	--	--	20.8	8.15	6.45	84.9	573	810	--
D	112	--	--	20.8	8.15	6.50	85.6	574	804	--
D	120	--	10:05	20.9	8.16	6.50	85.5	574	787	--
D	128	--	--	20.9	8.16	6.56	85.8	574	781	Location of deployed probe.
D	136	--	--	20.9	8.15	6.59	87.0	575	761	--
D	144	--	--	21.0	8.14	6.54	86.7	575	761	--
D	152	--	--	20.9	8.14	6.60	87.0	575	763	--
D	160	--	--	20.9	8.14	6.61	87.3	574	767	--
D	168	--	--	21.1	8.14	6.52	86.3	574	814	--
D	176-288	--	--	--	--	--	--	--	--	Dry.
D	296	--	--	21.3	8.17	6.40	85.0	574	784	--
D	304	--	--	20.9	8.16	6.64	88.0	581	771	--
D	312	--	--	21.2	8.14	6.51	85.9	574	763	--
D	320	--	--	21.2	8.16	6.52	86.7	574	757	--
D	328	--	--	21.2	8.13	6.48	85.9	574	771	--
C	12	--	10:53	21.9	8.19	6.30	84.4	577	713	--
C	20	--	--	22.0	8.18	6.42	86.2	577	712	--
C	28	--	--	22.1	8.17	6.47	87.4	577	711	--
C	36	--	--	22.0	8.16	6.45	87.1	578	694	--
C	44	--	--	22.0	8.16	6.42	86.4	578	687	--
C	52	--	--	22.0	8.17	6.42	86.6	579	684	--
C	60	--	--	22.0	8.16	6.38	85.9	578	679	--
C	68	--	--	21.9	8.17	6.35	85.0	578	670	--
C	76	--	--	21.9	8.17	6.42	86.2	578	679	--

Table 6.10.1.--Transect data for Rio Grande at La Joya on July 23, 2002

Transect	Dist. from initial point (ft)	Probe depth (in)	Time	Water temp. (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
C	84	--	--	21.9	8.17	6.44	86.5	578	660	--
C	92	--	--	21.8	8.16	6.35	85.1	578	681	--
C	100	--	--	21.8	8.15	6.31	84.5	578	665	--
C	108	--	--	21.9	8.17	6.43	86.2	578	665	--
C	116	--	--	21.9	8.16	6.39	85.5	578	676	--
C	124	--	--	21.9	8.15	6.43	86.1	578	683	--
C	132	--	--	21.8	8.16	6.43	86.2	579	658	--
C	140	--	--	22.0	8.15	6.47	87.0	579	659	--
C	148	--	--	21.9	8.14	6.51	87.0	580	648	--
C	156	--	--	21.9	8.13	6.47	86.9	580	645	--
C	164	--	--	21.8	8.16	6.42	86.2	579	660	--
C	172	--	--	21.9	8.14	6.40	85.6	580	660	--
C	180	--	--	21.9	8.14	6.33	85.0	580	660	--
C	188	--	--	21.9	8.15	6.41	86.3	580	653	--
C	196	--	--	21.9	8.16	6.60	88.5	581	638	--
C	204	--	--	21.9	8.14	6.47	87.1	581	663	--
C	212	--	--	21.9	8.15	6.41	86.3	581	657	--
C	220-422	--	--	--	--	--	--	--	--	Dry.
C	428	--	--	22.1	8.16	6.36	85.9	580	663	--
C	436	--	--	22.0	8.16	6.49	87.3	580	664	--
C	444	--	--	21.9	8.16	6.51	87.1	581	657	--
C	452	--	--	21.9	8.17	6.31	84.3	581	663	--
C	460	--	--	22.0	8.16	6.39	86.2	580	662	--
C	468-484	--	--	--	--	--	--	--	--	Dry.
C	492	--	--	22.8	8.07	5.34	73.1	577	> 1000	Pool.
C	500	--	11:45	--	--	--	--	--	--	Dry.
B	96	--	--	26.1	8.19	6.11	88.1	570	> 1000	--
B	104	--	--	26.2	8.20	6.08	88.6	570	> 1000	--
B	112	--	--	26.3	8.20	6.20	90.6	570	> 1000	--
B	120	--	--	26.3	8.19	6.17	90.1	570	> 1000	--
B	128	--	--	26.3	8.19	6.16	89.7	571	> 1000	--
B	136	--	--	26.3	8.19	6.23	90.9	571	> 1000	--
B	144	--	--	26.3	8.18	6.23	91.0	571	> 1000	--
B	152	--	--	26.4	8.18	6.16	90.2	572	> 1000	--
B	160	--	--	26.4	8.18	6.21	90.4	571	> 1000	--

Table 6.10.1.--Transect data for Rio Grande at La Joya on July 23, 2002

Transect	Dist. from initial point (ft)	Probe depth (in)	Time	Water temp. (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
B	168-192	--	--	--	--	--	--	--	--	Too shallow.
B	200	--	--	25.6	8.19	6.42	93.1	582	> 1000	--
B	208	--	--	27.0	8.16	6.06	89.2	571	> 1000	--
B	216	--	--	26.8	8.19	6.10	89.9	571	> 1000	--
B	224	--	--	26.9	8.18	5.96	87.6	569	> 1000	--
B	232-256	--	--	--	--	--	--	--	--	Dry.
B	264-304	--	--	--	--	--	--	--	--	Too shallow.
B	312-320	--	--	--	--	--	--	--	--	Dry.
B	328	--	--	27.7	8.19	5.61	82.8	567	> 1000	--
B	336	--	--	27.5	8.22	5.67	85.4	570	> 1000	--
B	344	--	--	24.6	8.19	6.62	88.7	570	> 1000	--
B	352	--	--	27.2	8.20	6.03	88.9	570	> 1000	--
B	360	--	--	27.2	8.18	6.03	89.5	570	> 1000	--
B	368	--	--	27.4	8.18	6.13	91.2	572	> 1000	--
B	376	--	--	26.9	8.17	6.10	89.9	572	> 1000	--
B	384	--	--	26.9	8.16	6.08	89.6	571	> 1000	--
B	392	--	--	26.9	8.17	6.02	88.8	571	> 1000	--
B	400-408	--	--	--	--	--	--	--	--	Too shallow.
B	416-424	--	--	--	--	--	--	--	--	Dry.
B	432	--	--	--	--	--	--	--	--	Too shallow.
B	440	--	--	26.9	8.19	5.98	87.9	571	> 1000	--
B	448	--	--	27.0	8.18	6.05	89.4	571	> 1000	--
B	456	--	--	26.8	8.18	5.66	83.4	572	> 1000	--
B	464	--	--	26.8	8.17	5.94	87.8	571	> 1000	--
B	472	--	--	26.9	8.17	6.06	88.8	571	> 1000	--
B	480	--	--	26.9	8.17	6.00	88.9	572	> 1000	--
B	488	--	--	26.9	8.16	6.01	88.4	572	> 1000	--
B	496	--	--	26.9	8.15	6.10	90.2	573	> 1000	--
B	504	--	14:30	27.0	8.16	6.07	89.8	573	> 1000	--
B	512	--	--	26.9	8.16	6.01	88.7	573	> 1000	--
B	520	--	--	26.9	8.16	6.01	88.6	574	> 1000	--
B	528	--	--	26.8	8.15	6.12	90.3	577	> 1000	--
B	536	--	--	26.9	8.15	6.16	90.8	579	> 1000	--
B	544	--	--	26.8	8.14	6.17	90.7	580	> 1000	--
B	552	--	--	26.8	8.14	6.18	90.8	582	> 1000	--
B	560	--	--	26.9	8.15	6.10	90.1	582	> 1000	--

Table 6.11.1.--Transect data for Rio Grande at Lemitar on August 21, 2002

[--, no data; ft, feet; in, inch; °C, degrees Celsius; mg/L, milligram per liter; % sat, percent saturation; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units.]

Transect	Dist. from initial point (ft)	Probe depth (in)	Time	Water temp. (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
C	525-616	3	--	--	--	--	--	--	--	Far from west side of river; all mud; little to no water.
C	618	3	1149	30.1	7.8	5.3	81.4	702	--	Side channel.
C	624	3	1153	29.6	7.8	--	--	705	--	Side channel.
C	632-660	--	--	--	--	--	--	--	--	Mud.
C	668	3	1156	24.9	7.9	6.1	85.9	704	--	River flow.
C	674	18	1200	25.0	7.9	6.0	85.9	703	--	River flow.
C	678	18	1201	24.8	7.9	6.1	86.1	704	--	River flow.
C	682	18	1203	24.3	7.9	6.2	87.9	705	--	River flow.
C	686	18	1204	24.6	7.9	6.1	86.9	705	--	River flow.
C	690	18	1204	24.6	7.9	6.1	86.9	704	--	River flow.
C	694	18	1205	24.5	7.9	6.1	86.4	705	--	River flow.
C	698	18	1206	24.5	7.9	6.1	86.2	704	--	River flow.
C	702	18	1207	24.6	7.9	6.1	87.0	705	--	River flow.
C	706	18	1208	24.6	7.9	6.1	87.8	705	--	River flow.
C	710	18	1210	24.6	7.9	6.2	87.2	705	--	River flow.
C	714	18	1210	24.6	7.9	6.1	87.6	705	--	Thrashing carp about; river flow.
C	718	18	1211	24.6	7.9	6.1	86.2	705	--	River flow.
C	722	18	1211	24.7	7.9	6.0	89.0	705	--	River flow.
C	726	18	--	24.7	7.9	6.1	85.6	705	--	River flow.
C	730	18	--	24.7	7.9	6.0	86.5	705	--	River flow.
C	732	18	--	24.7	7.9	6.1	85.2	705	--	River flow.
C	736	18	--	24.7	7.9	6.0	85.4	706	--	Above deployed hydrolab, river flow.
C	740	18	--	24.8	7.9	6.0	84.7	705	--	Above deployed hydrolab, river flow.
C	742	5	1217	25.1	8.0	5.9	89.0	705	--	--
C	750-768	--	--	--	--	--	--	--	--	Mud; too shallow to measure.
C	770	--	--	28.0	8.0	6.0	90.0	704	--	Backwater.
C	786	--	--	--	--	--	--	--	--	East edge of river.

Table 6.11.2.--Transect data for Rio Grande at Lemitar on January 15, 2003

[--, no data; ft, feet; in, inch; °C, degrees Celsius; mg/L, milligram per liter; % sat, percent saturation; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units.]

Transect	Dist. from initial point (ft)	Probe depth (in)	Time	Water temp. (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
C	421 to 432		--	--	--	--	--	--	--	Bank; too shallow/muddy.
C	432 to 502		--	--	--	--	--	--	--	Island; dry mud.
C	502 to 508		--	--	--	--	--	--	--	Too shallow/muddy
C	522		1457	7.7	8.2	9.1	89.6	401	12.8	Bank; next to deployed hydrolab at 526 ft.
C	530		1459	7.7	8.2	9.2	90.3	401	12.0	--
C	538		1501	7.7	8.2	9.2	90.0	402	13.0	--
C	546		1501	7.7	8.2	9.1	89.9	402	12.0	--
C	554		1502	7.7	8.2	9.1	89.9	402	13.0	--
C	562		1503	7.7	8.3	9.1	89.7	402	14.0	--
C	570		--	--	--	--	--	--	--	Too shallow to measure.
C	578		1503	7.8	8.3	9.0	88.6	402	24.0	--
C	586		--	--	--	--	--	--	--	Too shallow.
C	596		--	--	--	--	--	--	--	Too shallow.
C	604		--	--	--	--	--	--	--	--
C	612		--	--	--	--	--	--	--	--
C	620		1505	7.8	8.3	9.2	90.7	402	12.6	--
C	628		1506	7.7	8.3	9.3	92.1	402	13.5	--
C	636		1506	7.7	8.3	9.6	94.8	402	14.0	--
C	644		1507	7.7	8.3	9.5	94.0	402	14.0	--
C	652		1507	7.7	8.3	9.3	91.8	402	13.3	--
C	660		1508	7.7	8.3	9.2	90.6	402	12.7	--
C	668		1509	7.7	8.3	9.2	91.2	402	12.4	--
C	670-697		--	--	--	--	--	--	--	Too deep to measure.

Table 6.12.1.--Transect data for Rio Grande below Arroyo del Tajo on July 22, 2002

[--, no data; ft, feet; in, inch; °C, degrees Celsius; mg/L, milligram per liter; % sat, percent saturation; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units.]

Transect	Dist. from initial point (ft)	Probe depth (ft)	Time	Water temp. (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
D	162	--	1119	22.5	8.3	6.4	86.0	559	>1000	Lower transect.
D	170	--	--	--	--	--	--	--	--	Too shallow.
D	178	--	--	22.5	8.3	6.7	91.1	560	>1000	--
D	186	--	--	22.5	8.3	6.7	90.7	562	>1000	--
D	194-226	--	--	--	--	--	--	--	--	Dry.
D	234-250	--	--	--	--	--	--	--	--	Too shallow.
D	258	--	--	22.7	8.3	6.8	92.4	563	365	--
D	266	--	--	--	--	--	--	--	--	Too shallow.
D	274-602	--	--	--	--	--	--	--	--	Dry.
D	610	--	--	22.8	8.3	6.7	92.0	569	409	--
D	618	--	--	22.8	8.3	6.7	91.0	569	442	--
D	626	--	--	22.8	8.3	6.6	90.7	571	424	--
D	634	--	--	22.9	8.3	6.6	90.6	571	422	--
D	642	--	--	21.9	8.3	7.0	93.0	580	413	--
D	650	--	--	21.9	8.3	6.8	91.5	577	435	--
D	658	--	--	21.9	8.3	6.8	91.4	577	423	--
D	666	--	--	22.9	8.3	6.7	91.5	574	428	Shallow.
D	674	--	--	22.9	8.3	6.6	90.3	574	418	--
D	682	--	--	22.9	8.3	6.6	89.8	574	423	Began raining.
D	690	--	--	22.9	8.3	6.6	90.1	574	429	Raining harder.
D	698-722	--	--	--	--	--	--	--	--	Too shallow.
D	730	--	--	23.0	8.3	6.5	89.2	576	429	Shallow.
D	738	--	--	--	--	--	--	--	--	Too shallow.
D	746	--	--	23.0	8.3	6.6	91.2	574	429	--
D	754	--	--	--	--	--	--	--	--	Lightning/thunder; ended transect.

Table 6.13.1.--Transect data for Rio Grande at San Pedro on August 20, 2002

[--, no data; ft, feet; in, inch; °C, degrees Celsius; mg/L, milligram per liter; % sat, percent saturation; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units.]

Transect	Dist. from initial point	Probe depth (in)	Time	Water Temp (oC)	pH	DO (mg/L)	DO (%)	SPC	Turbidity	Comments
A	182	--	1005	23.1	8.3	7.3	99.7	761	--	--
A	184	--	1005	22.5	8.3	7.7	106	763	--	--
A	186	--	1006	22.4	8.3	7.9	109	764	--	--
A	188-200	--	--	--	--	--	--	--	--	Too shallow.
A	202	--	1007	22.2	8.3	8.1	110	708	--	--
A	204-252	--	--	--	--	--	--	--	--	Too shallow; land.
A	254	--	1028	20.2	8.3	7.6	99.1	760	--	--
A	256	--	1029	20.9	8.3	6.5	93.2	735	--	--
A	258	--	1030	21.6	8.2	7.1	95.2	756	--	--
A	260	--	1031	20.2	8.3	7.6	99.1	753	--	--
A	262	--	1032	20.2	8.3	7.6	98.9	760	--	--
A	264	--	1033	20.2	8.3	7.5	97.9	760	--	--
A	266	--	1034	20.3	8.3	7.7	100	761	--	--
A	268	--	1034	20.3	8.3	7.7	101	761	--	--
A	270	--	1035	20.3	8.3	7.7	99.9	759	--	--
A	272	--	1036	20.3	8.2	7.5	98.8	760	--	--
A	274	--	1036	20.3	8.3	7.6	100	759	--	--
A	276	--	1037	20.4	8.3	7.6	100	759	--	--
A	278	--	1038	20.5	8.3	7.6	99.8	761	--	--
A	280	--	--	19.8	8.2	7.6	98.4	761	--	--
A	282	--	--	19.8	8.2	7.6	98.6	761	--	--
A	284	--	--	20.1	8.3	7.1	99.0	760	--	--
A	286	--	--	20.0	8.3	7.7	99.6	761	--	--
A	288	--	--	20.1	8.3	7.6	98.3	762	--	--
A	290	--	--	21.0	8.3	7.2	95.8	761	--	--
A	292	--	--	21.2	8.3	7.2	96.2	765	--	--
B	50	--	0913	18.8	8.1	7.6	96.0	760	--	East bank.
B	52	--	0914	18.7	8.1	7.5	96.2	761	--	--
B	54	--	0915	18.7	8.1	7.6	95.9	761	--	--
B	56	--	0916	--	--	--	--	--	--	Land.
B	58	--	0917	--	--	--	--	--	--	Land.

Table 6.13.1.--Transect data for Rio Grande at San Pedro on August 20, 2002

Transect	Dist. from initial point	Probe depth (in)	Time	Water Temp (oC)	pH	DO (mg/L)	DO (%)	SPC	Turbidity	Comments
B	60	--	0918	18.7	8.2	7.5	95.9	760	--	--
B	62	--	0919	18.6	8.2	7.7	96.7	761	--	--
B	64	--	0920	18.6	8.2	7.7	96.9	761	--	--
B	66	--	0921	18.6	8.2	7.8	98.5	761	--	--
B	68	--	0922	18.6	8.2	7.8	99.2	762	--	--
B	70	--	0923	18.7	8.2	7.7	98.8	761	--	--
B	72	--	--	18.7	8.1	7.9	99.6	761	--	--
B	74	--	--	18.7	8.2	7.8	97.9	762	--	--
B	76	--	--	18.7	8.2	7.8	99.8	761	--	--
B	78	--	--	18.8	8.2	7.8	98.4	762	--	--
B	80	--	--	18.8	8.2	7.7	99.4	761	--	--
B	82	--	--	18.9	8.2	7.7	96.5	761	--	--
B	84	--	--	18.9	8.2	7.7	98.5	664	--	--
B	86	--	--	18.9	8.2	7.8	98.6	--	--	Too shallow.
B	88	--	--	--	--	--	--	--	--	Too shallow.
B	90	--	--	--	--	--	--	--	--	Too shallow.
B	92	--	--	--	--	--	--	--	--	Too shallow.
B	94	--	--	--	--	--	--	--	--	No data collected.
B	96	--	--	--	--	--	--	--	--	No data collected.
B	98	--	--	19.7	8.2	7.1	91.9	--	--	--
B	100	--	--	20.1	8.2	6.9	89.6	764	--	--
B	102	--	--	20.1	8.2	7.3	90.1	763	--	--
B	104	--	--	20.1	8.2	7.1	91.3	--	--	--
B	106	--	0937	19.9	8.2	6.8	90.1	--	--	--
B	108	--	0938	19.8	8.2	7.2	94.7	--	--	--
B	110	--	0939	19.9	8.2	7.1	93.7	--	--	--
B	112	--	0940	19.8	8.2	7.3	93.8	--	--	--
B	114	--	0941	20.2	8.2	7.2	93.9	753	--	--
B	116	--	0942	19.8	8.2	7.4	96.0	761	--	--
B	118	--	0944	19.9	8.3	7.6	97.8	761	--	--
B	120	--	--	--	--	--	--	--	--	Too shallow.
B	122	--	--	--	--	--	--	--	--	Too shallow.
B	124	--	--	--	--	--	--	--	--	Bank

Table 6.13.1.--Transect data for Rio Grande at San Pedro on August 20, 2002

Transect	Dist. from initial point	Probe depth (in)	Time	Water Temp (oC)	pH	DO (mg/L)	DO (%)	SPC	Turbidity	Comments
C	6	--	1112	22.6	8.3	7.6	102	766	--	--
C	8	--	1113	22.7	8.3	7.6	103	766	--	--
C	10	--	1114	22.6	8.3	7.5	103	766	--	--
C	12	--	1115	22.2	8.3	7.7	102	764	--	--
C	14	--	1115	22.1	8.3	7.7	102	765	--	--
C	16	--	1116	22.0	8.3	7.7	103	761	--	--
C	18	--	1116	22.6	8.3	7.7	103	766	--	--
C	20	--	1117	22.0	8.3	7.6	103	765	--	--
C	22	--	1118	22.0	8.3	7.7	103	764	--	--
C	24	--	1118	22.0	8.2	7.6	102	765	--	--
C	26	--	1119	22.1	8.2	7.6	101	765	--	--
C	28	--	1120	22.1	8.3	7.6	101	766	--	--
C	30	--	1121	22.1	8.2	7.5	102	767	--	--
C	32	--	1123	22.1	8.2	7.6	102	766	--	--
C	34	--	1124	22.2	8.2	7.6	101	765	--	--
C	36	--	1125	22.2	8.3	7.5	102	765	--	--
C	38	--	1126	22.2	8.2	7.5	99.8	765	--	--
C	40	--	--	--	--	--	--	--	--	Dirt.

Table 6.13.2.--Transect data for Rio Grande at San Pedro on January 14, 2003

[--, no data; ft, feet; in, inch; °C, degrees Celsius; mg/L, milligram per liter; % sat, percent saturation; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units.]

Transect	Dist. from initial point (ft)	Probe depth (in)	Time	Water temp. (°C)	pH	DO (mg/L)	DO (%)	SPC (uS/cm)	Turbidity (NTU)	Comments
B	0	--	--	--	--	--	--	--	--	Bank.
B	8	--	1351	6.7	8.0	10.3	98.4	421	--	--
B	16	--	1353	6.8	8.0	10.2	97.3	421	--	--
B	24	--	1353	6.8	8.0	10.1	96.9	421	--	--
B	32	--	1354	6.8	8.0	10.1	96.4	422	--	--
B	40	--	1355	6.8	8.0	10.1	96.6	421	--	--
B	48	--	1356	6.8	8.0	10.1	96.8	422	--	--
B	56	--	1357	6.8	8.0	10.1	96.3	422	--	--
B	64	--	1357	6.9	8.0	10.0	96.0	422	--	--
B	72	--	1358	6.9	8.0	10.0	96.2	422	--	--
B	80	--	1359	6.9	8.0	10.0	96.2	422	--	--
B	88	--	1359	6.9	8.0	10.0	96.3	422	--	--
B	96	--	1400	6.9	8.0	10.0	96.2	422	--	--
B	104	--	1401	7.0	8.0	10.0	96.5	422	--	--
B	112	--	1402	7.0	8.1	10.1	96.7	422	--	--
B	120	--	1402	7.0	8.1	10.0	96.5	422	--	--

Table 6.14.1.--Transect data for Rio Grande at North Boundary Bosque del Apache on August 19, 2002

[--, no data; ft, feet; in, inch; °C, degrees Celsius; mg/L, milligram per liter; % sat, percent saturation; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units.]

Transect	Dist. from initial point (ft)	Probe depth (in)	Time	Water temp. (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
C	6	--	0915	19.6	8.3	7.3	93.8	771	>1000	East.
C	8	--	--	19.7	8.3	7.3	93.3	770	804	--
C	10	--	--	19.7	8.3	7.3	95.5	769	756	--
C	12	--	--	19.7	8.3	7.5	97.7	769	764	--
C	14	--	--	19.8	8.3	7.6	95.3	770	705	--
C	16	--	--	19.8	8.2	7.5	97.8	770	690	--
C	18	--	--	19.8	8.3	7.5	96.3	769	749	--
C	20	--	--	19.9	8.3	7.4	94.8	770	848	--
C	22	--	--	19.9	8.3	7.5	95.6	768	>1000	--
C	24	--	--	19.9	8.4	7.4	95.6	771	701	--
C	26	--	--	19.9	8.4	7.4	96.2	764	>1000	--
C	28	--	--	20.0	8.4	7.5	95.4	768	>1000	--
C	30	--	--	20.0	--	7.4	96.5	769	>1000	--
D	8-16	--	--	--	--	--	--	--	--	East bank; too shallow.
D	18	--	--	20.6	8.5	8.3	109	--	813	Shallow.
D	20	--	--	20.4	8.1	8.6	112	--	913	Shallow.
D	22	--	--	22.6	8.4	7.6	105	776	941	--
D	24	--	--	23.0	8.4	7.5	104	776	>1000	--

Table 6.14.2.--Transect data for Rio Grande at North Boundary Bosque del Apache on January 13, 2003

[--, no data; ft, feet; in, inch; °C, degrees Celsius; mg/L, milligram per liter; % sat, percent saturation; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units.]

Transect	Dist. from initial point (ft)	Probe depth (in)	Time	Water temp (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
C	8	--	1348	8.0	8.4	10.9	106	404	984	--
C	16-26	--	--	--	--	--	--	--	--	Too shallow; mud.
C	28	--	1353	6.8	8.3	10.3	98.2	406	>1000	--
C	36	--	1355	6.9	8.3	10.6	101	406	>1000	--
C	44	--	1356	7.1	8.3	10.4	100	406	>1000	--
C	52	--	1358	7.0	8.3	10.5	101	406	>1000	--
C	60	--	1359	7.2	8.3	10.4	101	406	994	--
C	64-112	--	--	--	--	--	--	--	--	Muddy island.
C	114	--	1401	6.9	8.3	10.5	101	406	>1000	--
C	122-156	--	--	--	--	--	--	--	--	Too shallow but flow.
C	158	--	1405	6.6	8.3	10.8	103	406	>1000	--
C	166	--	1406	6.6	8.3	10.8	103	406	990	--
C	174	--	1407	6.6	8.3	10.8	103	406	>1000	--
C	182	--	1408	6.6	8.3	10.8	103	406	991	--
C	190	--	1409	6.7	8.3	10.9	103	406	980	--
C	198	--	1411	6.6	8.3	10.8	103	406	999	--
C	206	--	1412	6.7	8.3	10.8	103	406	967	--
C	214	--	1413	6.7	8.3	10.8	103	406	944	--
C	222	--	1413	6.7	8.3	10.8	103	406	961	--
C	230	--	1414	6.7	8.3	10.8	103	407	933	--
C	238	--	1415	6.7	8.3	10.8	103	406	949	--
C	246	--	1416	6.7	8.3	10.8	103	405	>1000	--
C	254	--	1417	6.7	8.3	10.7	102	406	997	--
C	262	--	1418	6.7	8.3	10.8	103	407	972	--
C	270	--	1419	6.7	8.3	10.8	103	407	960	--
C	278	--	1420	6.7	8.3	10.8	103	407	941	--
C	286	--	1421	6.7	8.3	10.7	102	407	954	--
C	294	--	1422	6.7	8.3	10.8	102	407	991	--
C	302	--	1423	6.7	8.3	10.8	103	407	956	--
C	310	--	1423	6.8	8.3	10.7	102	407	950	--
C	318	--	1424	6.9	8.3	10.7	102	407	900	--
C	326	--	1425	6.9	8.3	10.7	102	407	>1000	--
C	229	--	--	--	--	--	--	--	--	Bank.

Table 6.14.2.--Transect data for Rio Grande at North Boundary Bosque del Apache on January 13, 2003

Transect	Dist. from initial point (ft)	Probe depth (in)	Time	Water temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
D	7	--	--	--	--	--	--	--	--	Bank.
D	8	--	1142	4.5	8.2	11.1	100	406	948	--
D	16	--	1143	4.5	8.2	11.3	102	405	921	--
D	24	--	1146	4.6	8.2	11.3	102	406	945	--
D	32	--	1148	4.6	8.2	11.2	101	405	959	--
D	40	--	--	--	--	--	--	--	--	Too shallow
D	48	--	1151	4.8	8.2	10.2	92.2	392	>1000	--
D	56	--	1153	4.7	8.3	11.0	99.7	405	>1000	--
D	64	--	1154	4.7	8.3	10.8	98.2	405	289	--
D	72	--	1155	4.8	8.3	10.9	98.6	405	945	--
D	80	--	1156	4.8	8.3	10.5	95.2	405	>1000	--
D	88	--	1158	4.7	8.2	11.2	102	405	991	--
D	96	--	1159	4.7	8.2	11.2	101	406	965	--
D	106	--	1200	4.7	8.2	11.2	101	406	955	--
D	114	--	1202	4.8	8.2	11.1	101	406	951	--
D	122	--	1203	4.8	8.2	11.0	100	405	925	--
D	130	--	1204	4.8	8.2	11.2	101	406	924	--
D	138	--	1205	4.8	8.2	11.2	101	406	940	--
D	138-160	--	--	--	--	--	--	--	--	Too deep, too swift to measure.
D	162	--	1210	4.8	8.2	11.2	101	406	>1000	--
D	166-300	--	--	--	--	--	--	--	--	Island.
D	162	--	1214	7.9	8.5	11.5	113	406	935	--
D	170-182	--	--	--	--	--	--	--	--	Too shallow, island/bar.
D	184	--	1216	6.0	8.3	11.1	104	407	>1000	--
D	188	--	1219	5.6	8.3	11.0	102	407	>1000	--
D	192	--	1221	5.7	8.3	11.1	103	407	>1000	--
D	196	--	1222	6.0	8.3	11.0	103	407	882	--
D	200	--	1223	6.2	8.3	11.0	104	407	>1000	--
D	204	--	1224	6.3	8.3	11.0	104	407	983	--
D	208	--	1225	6.3	8.3	11.1	105	407	908	--
D	213	--	--	--	--	--	--	--	--	Bank.

Table 7.1.1--Seine haul data for Rio Rancho Waste Water Treatment Plant Outfall #2 on August 8, 2002

[#, number; --, no data; ft, feet; in, inch; ^{o}C, degrees Celsius; mg/L, milligram per liter; % sat, percent saturation; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units.]

Seine haul #	Latitude	Longitude	Elevation (ft)	Error (+/- ft)	Probe depth (in)	Time	Water temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
1	351534.1	1063546.1	5015	24.5	6	1120	28.5	7.6	5.5	84.8	1010	--	--
2	351534.3	1063546.2	--	--	12	1132	28.9	7.6	6.0	93.0	1010	--	--
3	351534.5	1063546.5	4996	16.0	6	1135	28.5	7.6	6.1	92.8	1010	--	--
4	351534.6	1063546.5	5900	14.1	24	1136	28.5	7.6	6.0	91.9	1010	--	--

Table 7.1.2--Seine haul data for Rio Rancho Waste Water Treatment Plant Outfall #2 on January 30, 2003

[#, number; --, no data; ft, feet; in, inch; °C, degrees Celsius; mg/L, milligram per liter; % sat, percent saturation; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units.]

Seine haul #	Latitude (N)	Longitude (W)	Elevation (ft)	Error (+/- ft)	Probe depth (in)	Time	Water temp. (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
1	351531.1	1063544.4	5064	23.0	12	1133	18.7	7.7	8.1	103	539	--	Bank.
2	351531.8	1063544.2	5030	18.3	6	1149	18.3	8.2	10.9	137	--	--	Backwater.
3	351532.3	1063545.1	5069	34.4	12	1210	18.5	7.6	7.2	91.0	538	--	--
4	351532.4	1063545.0	5072	22.8	15	1219	18.5	7.6	7.2	91.3	539	--	Debris pile.
5	351533.0	1063545.6	5047	18.1	12	1229	18.5	7.6	7.0	88.9	539	--	Bank.
6	351533.6	1063545.7	5081	20.7	12	1237	18.6	7.6	7.5	97.1	538	--	Tumble weed.
7	351534.1	1063545.6	5069	15.5	12	1244	18.5	7.6	7.0	89.2	538	--	Tumble weed.
8	351534.9	1063544.4	5139	26.0	6	1253	18.6	7.6	7.0	88.6	539	--	Bank.
9	351534.8	1063546.3	5058	17.7	12	1258	18.6	7.5	7.0	89.5	539	--	Effluent flow.
10	351535.2	1063546.4	5001	15.8	12	1302	18.7	7.6	7.6	96.5	539	--	Backwater.

Table 7.2.1--Seine haul data for Rio Grande at La Orilla on July 26, 2002

[#, number; --, no data; ft, feet; in, inch; °C, degrees Celsius; mg/L, milligram per liter; % sat, percent saturation; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units.]

Seine haul #	Latitude (North)	Longitude (West)	Elevation (ft)	Error (+/- ft)	Probe depth (ft)	Time	Water temp. (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
1	350927.3	1064004.0	--	--	--	1406	31.66	8.75	5.72	--	389.5	--	--
2	350927.0	1064005.1	--	--	--	--	31.45	8.74	5.65	--	389.9	--	--
3	350926.6	1064005.8	--	--	--	1411	31.55	8.74	5.76	--	390.0	--	--
4	350924.6	1064006.6	--	--	--	1412	31.62	8.75	5.72	--	389.9	--	--
5	350923.5	1064007.2	--	--	--	1418	31.26	8.80	5.94	--	395.0	--	--
6	350922.6	1064006.2	--	--	--	1414	31.95	8.17	5.70	--	389.6	--	--
7	350923.7	1064005.0	--	--	--	1416	31.75	8.77	5.67	--	389.7	--	--
8	350922.3	1064006.0	--	--	--	1420	32.05	8.77	4.87	--	389.8	--	--
9A	350921.2	1064006.8	--	--	--	1421	32.07	8.79	5.06	--	--	--	Upper left.
9B	350921.2	1064006.8	--	--	--	1422	--	8.79	5.69	--	389.0	--	Upper right.
9C	350921.2	1064006.8	--	--	--	1423	32.08	8.79	5.62	--	389.6	--	Lower left.
9D	350921.2	1064006.8	--	--	--	1424	32.03	8.79	5.59	--	389.0	--	Lower right.
10	350920.3	1064007.2	--	--	--	1426	32.23	8.78	5.65	--	389.9	--	--
11	350919.5	1064007.1	--	--	--	1428	32.17	8.78	5.64	--	389.6	--	--
12	350918.4	1064008.2	--	--	--	1429	32.54	8.78	5.57	--	389.7	--	--
13	350917.6	1064009.2	--	--	--	1430	32.52	8.78	5.64	--	389.9	--	--
14	350917.3	1064010.2	--	--	--	1435	32.83	8.79	5.65	--	389.8	--	--
15	350917.0	1064009.7	--	--	--	1434	32.52	8.80	5.71	--	390.0	--	--
16	350916.2	1064010.7	--	--	--	1437	32.80	8.80	5.65	--	389.8	--	--
17	350915.4	1064010.9	--	--	--	1439	32.78	8.80	5.52	--	390.0	--	--
18	350914.9	1064012.5	--	--	--	1443	32.80	8.80	5.06	--	389.6	--	--
19	350913.5	1064012.8	--	--	--	1445	32.83	8.80	5.48	--	389.5	--	--
20	350913.1	1064014.1	--	--	--	1447	31.18	8.75	5.67	--	397.2	--	--
21	350911.9	1064012.9	--	--	--	1449	32.50	8.77	5.45	--	391.8	--	--
22	350911.8	1064012.3	--	--	--	1451	33.84	8.86	5.61	--	390.2	--	--
23	350911.3	1064013.3	--	--	--	1452	32.89	8.80	5.55	--	389.5	--	--

Table 7.2.2.--Seine haul data for Rio Grande at La Orilla on November 1, 2002

[#, number; --, no data; ft, feet; in, inch; °C, degrees Celsius; mg/L, milligram per liter; % sat, percent saturation; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units.]

Seine haul #	Latitude (North)	Longitude (West)	Elevation (ft)	Error (+/- ft)	Probe depth (in)	Time	Water temp. (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
1	350928.0	1064006.0	5066	20.6	3	0904	9.3	8.3	9.9	98.6	353	--	--
2	350927.0	1064005.0	5036	34.8	6	0908	8.8	8.2	9.4	96.6	353	--	--
3	350927.0	1064006.0	5003	34.1	6	0912	8.9	8.2	9.4	97.0	352	--	--
4	350925.0	1064007.0	5053	22.2	8	0915	9.0	8.3	9.3	97.1	353	--	--
5	350924.0	1064006.0	4953	25.4	8	0922	9.0	8.3	9.4	96.4	354	--	--
6	350924.0	1064007.0	--	--	4	0928	11.5	8.4	9.8	108	353	--	--
7	350923.0	1064008.0	5012	19.3	6	0933	10.1	8.3	9.2	98.1	354	--	--
8	350922.0	1064008.0	4976	19.4	2	1001	11.0	8.3	8.1	88.0	354	--	--
9	350922.0	1064008.0	4977	29.1	8	1006	10.2	8.3	9.1	96.1	347	--	--
10	350921.0	1064008.0	4999	34.2	2	--	10.2	8.3	9.3	99.3	353	--	--
11	350919.1	1064009.6	4993	32.8	4	1011	10.4	8.3	9.1	96.5	354	--	--
12	350918.6	1064010.8	4975	36.1	6	1013	10.6	8.3	9.0	97.1	347	--	--
13	350917.7	1064011.7	4954	38.5	2	1017	11.8	8.3	9.0	100	356	--	--
14	350917.2	1064013.0	4961	88.8	1	1022	12.4	8.3	8.7	97.4	353	--	--
15	350916.7	1064012.8	4959	22.7	6	1028	11.6	8.3	9.1	100	355	--	--
16	350915.6	1064013.0	4958	24.9	6	1033	11.1	8.3	9.0	97.5	356	--	--
17	350915.1	1064014.4	4959	35.8	4	1040	11.4	8.3	9.2	100	354	--	--
18	350919.1	1064013.8	4978	24.3	4	1045	11.9	8.3	8.7	95.4	355	--	--
19	350913.2	1064015.1	4961	17.5	12	1053	11.9	8.3	8.8	97.5	354	--	--
20	350912.7	1064015.3	4951	28.4	6	1058	13.1	9.3	9.1	103	356	--	--
21	350911.4	1064016.4	4963	25.4	8	1230	14.9	8.2	8.8	104	354	--	--
22	350910.6	1064017.2	4983	24.9	6	1233	15.1	8.2	8.8	104	354	--	--
23	350910.0	1064016.7	4982	20.2	4	1237	15.1	8.2	8.7	103	354	--	--
24	350909.9	1064017.2	4998	61.6	2	1240	15.5	8.2	8.7	104	354	--	--
25	350908.6	1064017.5	4985	32.9	6	1244	15.2	8.2	8.7	103	354	--	--
26	350907.6	1064018.1	4993	--	2	1249	15.7	8.2	8.4	102	356	--	--
27	350906.8	1064017.6	4965	31.5	1	1255	15.8	8.2	8.5	102	353	--	--
28	350906.2	1064018.3	4992	40.3	1	1300	16.0	8.2	8.3	100	354	--	--
29	350905.3	1064017.0	5003	16.8	6	--	16.1	8.2	8.9	105	354	--	--
30	350904.9	1064016.4	5001	18.6	12	1309	16.4	8.2	11.1	111	353	--	--
31	350904.1	1064017.3	4995	13.0	12	1313	16.5	8.3	8.5	103	344	--	--
32	350903.6	1064018.8	4985	15.1	8	1317	16.6	8.3	8.5	104	354	--	--

Table 7.2.2.--Seine haul data for Rio Grande at La Orilla on November 1, 2002

Seine haul #	Latitude (North)	Longitude (West)	Elevation (ft)	Error (+/- ft)	Probe depth (in)	Time	Water temp. (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
33	350903.4	1064019.8	4962	19.4	4	1321	16.3	8.3	8.5	104	356	--	--
34	350902.6	1064021.4	4973	19.3	1	1324	16.4	8.3	8.0	98.3	355	--	--
35	350901.6	1064021.6	4975	17.2	6	1333	16.8	8.3	6.9	85.5	353	--	--
36	350900.8	1064021.7	4974	--	1	1341	16.9	8.3	9.0	110	353	--	--
37	350859.3	1064022.1	4965	25.2	6	1344	16.9	8.3	9.1	106	350	--	--
38	350858.9	1064023.8	4979	20.1	2	1347	17.0	8.3	9.6	109	352	--	--
39	350858.0	1064023.7	4980	17.3	2	1349	17.0	8.3	8.5	105	352	--	--
40	350856.2	1064024.4	4975	21.9	2	1353	17.1	8.3	10.5	107	350	--	--
41	350855.6	1064025.1	4981	17.1	4	1357	17.0	8.3	8.4	103	351	--	--
42	350855.3	1064026.3	4975	20.7	2	1404	17.3	8.3	8.5	107	334	--	--
43	350853.9	1064026.1	4981	26.3	1	1408	17.1	8.3	9.2	114	348	--	--
44	350853.2	1064026.5	4975	17.6	6	1411	17.1	8.3	8.7	105	348	--	--
45	350852.6	1064027.7	4957	21.5	2	1418	17.3	8.2	10.2	127	350	--	--
46	350851.8	1064026.9	4910	--	2	1424	17.2	8.3	8.9	108	352	--	--
47	350850.5	1064028.9	4954	30.6	4	1428	17.3	8.3	8.8	107	351	--	--
48	350900.7	1064028.6	4962	19.5	2	1437	17.6	7.8	5.9	64	375	--	--
--	350919.9	1064014.3	4953	32.9	3	1503	17.5	7.2	1.1	12.0	422	--	Embayment.

Table 7.2.3--Seine haul data for Rio Grande at La Orilla on December 19, 2002

[#, number; --, no data; ft, feet; in, inch; °C, degrees Celsius; mg/L, milligram per liter; % sat, percent saturation; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units.]

Seine haul #	Latitude (North)	Longitude (West)	Elevation (ft)	Error (+/- ft)	Probe depth (in)	Time	Water temp. (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
1	350927.9	1064006.0	4978	16.3	4	0856	1.1	8.1	11.1	93.4	323	--	--
2	350926.8	1064005.8	4989	26.0	15	0900	1.1	8.1	11.0	92.5	327	--	--
3	350926.6	1064007.1	4988	22.3	5	0906	1.3	8.2	11.0	92.9	325	--	--
4	350925.7	1064007.3	4984	14.9	3	0911	1.2	8.1	11.2	94.4	326	--	--
5	350924.8	1064007.0	4989	14.8	5	0916	1.1	8.1	11.1	93.4	312	--	--
6	350923.9	1064007.3	4990	23.7	3	0920	1.3	8.2	11.0	92.7	326	--	--
7	350923.2	1064008.3	4989	20.6	3	0926	1.5	8.2	11.1	94.3	325	--	--
8	350921.1	1064009.7	5008	13.1	6	0930	1.6	8.2	11.1	94.5	324	--	--
9	350921.7	1064008.5	5007	12.2	4	0935	1.5	8.2	11.1	94.0	316	--	--
10	350921.3	1064009.2	4992	19.7	3	0940	1.7	8.2	11.0	93.8	323	--	--
11	350921.0	1064008.9	4992	17.8	6	0945	1.4	8.2	10.6	89.0	325	--	--
12	350920.9	1064009.1	4962	25.7	3	0949	1.4	8.2	10.8	91.7	326	--	--
13	350920.5	1064009.6	4983	16.9	9	0953	1.8	8.2	11.3	96.9	324	--	--
14	350918.7	1064010.1	4987	17.2	12	1001	1.5	8.2	11.0	93.9	323	--	--
15	350918.4	1064010.9	4980	20.4	6	1007	2.2	8.2	11.2	97.2	322	--	--
16	350917.4	1064011.6	5008	17.9	8	1015	2.3	8.2	11.1	96.5	323	--	--
17	350916.8	1064012.7	4988	19.7	3	1020	2.5	8.2	11.1	96.8	321	--	--
18	350916.1	1064013.9	4973	26.8	9	1025	2.5	8.2	11.2	97.6	320	--	--
19	350915.8	1064013.0	5001	20.5	9	1029	2.1	8.2	11.1	95.6	312	--	--
20	350914.7	1064012.6	5010	17.0	4	1034	2.2	8.2	11.0	95.3	323	--	--
21	350913.8	1064012.7	5001	18.6	3	1039	2.4	8.2	11.1	96.7	322	--	--
22	350913.0	1064014.6	5002	16.1	12	1044	2.5	8.2	11.2	97.7	321	--	--
23	350912.0	1064014.1	5050	65.1	3	1051	3.0	8.2	10.5	--	307	--	--
24	350910.7	1064014.7	4991	11.2	12	1056	3.1	8.2	11.0	98.0	317	--	--
25	350909.7	1064015.0	4988	12.3	4	1100	3.0	8.2	11.0	97.4	315	--	--
26	350909.0	1064016.4	5013	14.8	3	1105	3.0	8.2	10.9	96.5	313	--	--
27	350908.1	1064015.8	5013	23.3	10	1112	3.3	8.2	10.8	96.4	314	--	--
28	350907.6	1064017.1	4990	19.3	16	1118	3.3	8.2	10.7	95.5	314	--	--
29	350906.4	1064016.7	4998	24.4	17	1122	3.5	8.2	11.0	98.7	313	--	--
30	350906.1	1064016.8	5039	38.7	3	1310	5.1	8.1	10.4	97.0	302	--	--
31	350904.4	1064017.8	4998	34.4	24	1314	5.2	8.1	10.7	99.7	306	--	--
32	350902.0	1064019.8	5006	35.6	16	1319	5.2	8.2	10.4	97.2	305	--	--

Table 7.2.3--Seine haul data for Rio Grande at La Orilla on December 19, 2002

Seine haul #	Latitude (North)	Longitude (West)	Elevation (ft)	Error (+/- ft)	Probe depth (in)	Time	Water temp. (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
33A	350903.4	1064018.3	5009	20.5	12	1327	5.4	8.2	10.5	99.2	307	--	Upstream right.
33B	350903.4	1064018.3	5011	15.2	12	1328	5.4	8.2	10.5	98.9	310	--	Upstream left.
33C	350903.3	1064018.4	5008	15.0	24	1329	5.4	8.2	10.5	99.4	310	--	Downstream left.
33D	350903.2	1064018.4	5009	23.9	18	1331	5.5	8.2	10.5	99.3	309	--	Downstream right.
34	350902.8	1064019.2	5004	34.1	12	1336	5.5	8.2	10.5	99.0	308	--	--
35	350902.2	1064020.8	4987	22.4	6	1344	5.5	8.2	10.4	99.0	304	--	--
36	350901.3	1064020.3	4993	13.7	16	1349	5.7	8.2	10.5	99.5	309	--	--
37	350900.4	1064021.6	4978	55.3	15	1356	5.7	8.2	10.4	98.9	307	--	--
38	350859.5	1064021.7	4973	17.4	24	1403	5.8	8.2	10.5	99.8	308	--	--
39	350859.7	1064023.1	4995	28.9	9	1409	5.8	8.2	10.5	99.8	308	--	--
40	350859.4	1064024.4	4997	24.1	9	1415	5.9	8.2	9.6	91.7	299	--	--
41A	350859.0	1064025.7	4991	18.2	3	1419	6.0	8.2	9.2	90.8	307	--	Upstream right.
41B	350858.9	1064025.5	4996	19.7	3	1421	5.9	8.2	9.9	94.9	305	--	Upstream left.
41C	350858.7	1064025.7	4996	28.0	3	1422	6.0	8.2	10.2	97.9	305	--	Downstream left.
41D	350858.6	1064026.1	4979	25.6	4	1424	6.0	8.2	10.3	97.4	306	--	Downstream right.
42	350858.2	1064026.7	4980	25.5	3	1420	6.0	8.2	10.1	96.4	307	--	--
43	350857.6	1064027.1	4965	26.3	18	1431	5.9	8.2	10.3	98.8	303	--	--
44	350857.5	1064028.4	4982	17.4	3	1437	5.9	8.2	10.1	96.1	301	--	--
45	350856.4	1064028.6	4976	13.4	4	1440	5.8	8.3	9.9	93.6	303	--	--
46	350900.2	1064027.9	4995	26.2	24	1447	6.0	8.2	10.4	99.7	295	--	Discretionary.
47	350905.4	1064023.4	5003	32.9	4	1458	6.0	8.3	10.5	99.1	296	--	Discretionary.
48	350910.2	1064222.5	5003	99.9	12	1504	5.9	8.2	10.2	96.4	296	--	Discretionary.
49	350914.3	1064016.9	4988	61.8	6	1515	6.0	8.2	9.9	94.8	281	--	Discretionary; downstream left.
49	350914.3	1064017.0	4993	41.7	6	1517	6.0	8.2	10.1	96.5	295	--	Discretionary; downstream right.
49	350914.6	1064017.0	4978	36.4	3	1519	6.0	8.2	10.1	96.8	285	--	Discretionary; upstream right.
49	350914.5	1064017.1	4979	17.0	3	1521	6.0	8.2	9.7	93.0	296	--	Discretionary; upstream left.
49	350914.5	1064017.1	4979	18.5	6	1522	6.0	8.2	9.9	94.3	295	--	Discretionary; center.
50	350914.7	1064016.8	4984	16.4	6	1523	6.0	8.2	10.1	96.5	295	--	Discretionary; downstream left.
50	350914.8	1064016.9	4986	36.1	6	1525	6.0	8.2	9.6	91.3	296	--	Discretionary; downstream right.

Table 7.2.3--Seine haul data for Rio Grande at La Orilla on December 19, 2002

Seine haul #	Latitude (North)	Longitude (West)	Elevation (ft)	Error (+/- ft)	Probe depth (in)	Time	Water temp. (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
50	350914.8	1064016.7	4987	33.3	6	1526	6.0	8.2	10.0	94.9	295	--	Discretionary; upstream right.
50	350914.8	1064016.6	4993	17.2	6	1527	6.0	8.2	9.8	94.2	295	--	Discretionary; upstream left.
50	350914.7	1064016.6	4989	18.6	4	1528	5.9	8.2	9.7	92.9	294	--	Discretionary; center.
51	350920.5	1064013.6	4981	31.4	3	1535	5.7	8.2	10.1	96.6	301	--	--

Table 7.2.4--Seine haul data for Rio Grande at La Orilla on February 28, 2003

[#, number; --, no data; ft, feet; in, inch; °C, degrees Celsius; mg/L, milligram per liter; % sat, percent saturation; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units.]

Seine haul #	Latitude (North)	Longitude (West)	Elevation (ft)	Error (+/- ft)	Probe depth (in)	Time	Water temp. (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
1	350927.8	1064005.8	4965	16.3	4	0908	5.1	8.2	10.6	100	279	--	--
2	350926.2	1064005.4	4976	17.4	4	0912	4.8	8.2	10.6	99.2	280	--	--
3	350925.7	1064006.7	4987	15.3	3	0917	5.1	8.2	9.8	92.7	280	--	--
4	350925.4	1064007.9	4992	14.0	5	0921	5.4	8.2	10.7	102	281	--	--
5	350924.2	1064008.5	4994	16.4	6	0924	5.5	8.2	10.7	102	281	--	--
6	350923.5	1064008.9	5003	18.6	5	0928	5.6	8.2	10.6	102	281	--	--
7	350923.3	1064008.4	4971	28.1	6	0933	5.7	8.2	10.5	101	280	--	--
8	350922.0	1064007.5	5000	27.9	12	0938	5.4	8.2	10.7	102	281	--	--
9	350922.1	1064009.0	4965	12.9	3	0943	5.9	8.2	10.7	103	281	--	--
10	350921.6	1064008.5	4983	23.8	10	0948	5.5	8.2	10.6	101	280	--	--
11	350920.9	1064009.6	4995	13.1	12	0954	6.0	8.2	10.8	104	281	--	--
12	350919.9	1064009.9	4991	18.9	8	0958	5.9	8.2	10.8	104	281	--	--
13	350919.8	1064012.5	4990	17.9	1	1002	6.5	8.3	10.9	107	281	--	--
14	350918.0	1064011.6	4992	18.0	5	1007	6.3	8.2	10.7	104	281	--	--
15	350917.7	1064011.1	5005	19.4	14	1011	5.9	8.2	10.7	103	281	--	--
16	350917.3	1064012.3	5003	19.7	3	1017	6.4	8.3	10.8	106	281	--	--
17	350917.2	1064013.6	4994	9.4	3	1023	6.9	8.2	10.6	105	282	--	--
18	350916.3	1064013.0	4988	10.7	9	1026	6.6	8.2	10.7	105	281	--	--
19	350915.4	1064013.5	4985	25.0	7	1029	6.3	8.2	10.7	104	281	--	--
20	350914.5	1064014.0	4994	16.0	6	1034	6.6	8.2	10.7	105	281	--	--
21	350914.4	1064015.0	4987	21.1	24	1042	7.1	8.2	10.5	105	281	--	--
22	350914.2	1064015.9	4973	16.0	12	1047	7.0	8.2	9.9	97.9	276	--	--
23	350913.7	1064015.0	5011	18.3	25	1202	7.5	8.2	10.7	107	277	--	--
24	350913.5	1064016.2	4995	16.7	23	1207	7.5	8.2	10.5	105	273	--	--
25	350912.4	1064015.9	5003	16.9	5	1210	7.5	8.2	10.3	104	277	--	--
26	350911.6	1064015.5	5000	18.6	4	1214	7.6	8.2	10.2	103	276	--	--
27	350911.1	1064014.4	5001	27.9	4	1220	7.6	8.3	10.2	103	276	--	--
28	350909.5	1064014.7	5011	20.0	3	1225	7.7	8.3	10.0	101	275	--	--
29	350908.8	1064014.1	4995	22.9	7	1229	7.7	8.3	10.2	102	275	--	--
30	350908.1	1064014.2	4986	39.3	6	1234	7.7	8.3	10.3	104	275	--	--
31	350907.2	1064014.5	5028	24.0	22	1240	7.7	8.3	10.4	105	274	--	--
32	350907.2	1064016.2	5001	26.3	2	1250	7.8	8.2	10.0	102	275	--	--

Table 7.2.4--Seine haul data for Rio Grande at La Orilla on February 28, 2003

Seine haul #	Latitude (North)	Longitude (West)	Elevation (ft)	Error (+/- ft)	Probe depth (in)	Time	Water temp. (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
33	350906.2	1064016.8	4986	16.8	12	1255	8.1	8.2	10.0	102	274	--	--
34	350905.7	1064016.2	4962	19.0	18	1259	8.2	8.2	10.2	104	273	--	--
35	350904.9	1064016.7	4981	17.9	21	1303	8.2	8.3	10.3	105	274	--	--
36	350904.5	1064018.0	4995	21.6	11	1308	8.5	8.3	9.7	99.6	277	--	--
37	350903.9	1064017.6	5005	22.9	30	1313	8.5	8.3	10.1	104	274	--	--
38	350903.6	1064018.8	4992	20.2	8	1319	8.3	8.2	10.1	104	273	--	--
39	350903.4	1064018.2	4988	18.9	32	1325	8.7	8.3	10.1	105	274	--	--
40	350902.8	1064019.2	5007	18.8	32	1329	8.7	8.3	9.9	102	273	--	--
41	350902.1	1064019.9	5002	20.6	11	1333	8.8	8.3	10.1	105	273	--	--
42	350901.9	1064021.2	5007	28.6	9	1337	8.9	8.3	10.0	104	273	--	--
43	350901.6	1064020.1	5012	16.0	15	1341	8.9	8.3	10.1	105	273	--	--
44	350901.1	1064021.4	4990	18.5	9	1347	9.0	8.3	10.1	105	273	--	--
45	350903.7	1064023.1	4988	18.4	5	1351	9.6	8.4	10.1	106	266	--	--
46	350906.5	1064022.7	5005	18.1	9	1358	8.7	8.3	10.1	104	266	--	--
47	350910.5	1064020.0	4989	25.7	8	1407	8.4	8.3	9.9	102	265	--	--
48	350911.6	1064021.7	4992	27.7	5	1411	8.4	8.3	9.8	101	265	--	--
49	350920.9	1064013.9	5043	18.2	4	1424	9.0	8.3	9.8	102	271	--	--
50A	350924.0	1064013.2	5000	16.5	10	1433	8.7	8.3	9.6	99.4	271	--	Upper left; wild Rio Grande silvery minnow.
50B	350924.0	1064013.2	5000	16.5	11	1434	8.7	8.3	9.6	99.4	270	--	Upper right.
50C	350924.0	1064013.2	5000	16.5	9	1435	8.7	8.3	9.7	100	270	--	Lower left.
50D	350924.0	1064013.2	5000	16.5	7	1436	8.7	8.3	9.7	99.7	270	--	Lower right.
50E	350924.0	1064013.2	5000	16.5	10	1437	8.7	8.3	9.6	99.6	270	--	Center.

Table 7.3.1.--Seine haul data for Rio Grande at Barelas on August 22, 2002

[#, number; --, no data; ft, feet; in, inch; °C, degrees Celsius; mg/L, milligram per liter; % sat, percent saturation; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units.]

Seine haul #	Latitude (North)	Longitude (West)	Elev (ft)	Error (+/- ft)	Probe depth (in)	Time	Water temp. (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
1	350454.9	1064029.8	4910	--	--	0757	19.8	8.1	7.0	89.5	347	--	--
2	350453.2	1064028.9	4932	--	--	0803	19.8	8.1	7.0	91.7	348	--	--
3	350453.3	1064030.1	4948	--	--	0808	19.8	8.1	7.0	90.1	350	--	--
4	350452.5	1064029.8	4865	--	--	0812	19.8	8.1	6.8	87.6	351	--	--
5	350451.6	1064028.6	4887	--	--	0818	19.8	8.2	6.9	89.9	350	--	--
6	350452.2	1064028.9	4945	--	--	0825	19.8	8.1	7.0	90.8	351	--	--
7	350451.8	1064029.4	4938	--	--	0829	19.8	8.2	6.8	88.9	348	--	--
8	350451.2	1064027.3	4968	--	--	0837	19.8	8.2	7.0	91.3	348	--	--
9	350450.4	1064028.1	4930	--	--	0841	19.9	8.2	6.9	89.1	350	--	--
10	350449.4	1064027.7	4937	--	--	0847	19.9	8.2	7.0	91.4	351	--	--
11	350449.2	1064025.8	4967	--	--	0854	20.0	8.2	6.9	91.1	351	--	--
12	350449.4	1064026.4	4954	--	--	0900	20.0	8.2	7.0	91.2	352	--	--
13	350448.5	1064026.2	4939	--	--	0906	20.1	8.2	7.0	90.9	350	--	--
14	350447.7	1064025.2	4947	--	--	0922	20.2	8.2	7.1	93.0	352	--	--
15	350447.6	1064023.8	4939	--	--	0926	20.3	8.1	7.0	92.0	351	--	--
16	350446.6	1064024.2	4945	--	--	0930	20.3	8.1	7.0	92.1	353	--	--
17	350445.5	1064023.5	4951	--	--	0945	20.5	8.2	7.1	93.1	352	--	--
18	350444.9	1064023.4	4942	--	--	0948	20.4	8.2	7.0	91.9	353	--	--
19	350444.1	1064022.5	4937	--	--	0952	20.6	8.2	7.0	92.5	353	--	--
20	350442.9	1064022.0	4925	--	--	1000	20.7	8.2	7.1	94.2	353	--	--
21	350442.6	1064020.2	4991	--	--	1003	20.9	8.2	7.0	92.8	351	--	--
22	350442.1	1064020.3	4965	--	--	1008	20.8	8.1	7.1	94.2	353	--	--
23	350441.6	1064020.8	4921	--	--	1011	20.8	8.2	7.0	93.4	354	--	--
24	350440.9	1064019.9	4912	--	--	1017	20.9	8.2	7.0	93.5	353	--	--
25	350439.9	1064020.2	4987	--	--	1025	20.9	8.2	7.0	93.2	353	--	--
26	350439.6	1064019.1	4943	--	--	1030	21.2	8.2	7.0	93.9	353	--	--
27	350438.7	1064018.8	4989	--	--	1035	21.1	8.2	7.0	94.1	354	--	--
28	350438.3	1064016.5	4985	--	--	1046	21.5	8.2	10.0	66.2	--	--	--
29	350437.6	1064016.1	4926	--	--	1050	21.6	8.2	6.8	91.8	354	--	--
30	350436.7	1064015.8	4914	--	--	1054	21.6	8.2	7.1	95.5	359	--	--
31	350435.6	1064014.1	4936	--	--	1100	21.8	8.1	7.0	94.9	359	--	--
32	350435.1	1064012.8	4933	--	--	1102	21.8	8.2	7.1	90.4	352	--	--

Table 7.3.1.--Seine haul data for Rio Grande at Barelas on August 22, 2002

Seine haul #	Latitude (North)	Longitude (West)	Elev (ft)	Error (+/- ft)	Probe depth (in)	Time	Water temp. (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
33	350431.0	1064008.2	--	--	--	1105	21.8	8.2	5.9	79.2	363	--	--
34	350434.5	1064011.1	4942	--	--	1107	21.8	8.3	5.9	81.1	350	--	--
35	350434.3	1064010.6	4927	--	--	1112	22.3	8.2	7.0	96.8	354	--	--
36	350433.8	1064009.1	4924	--	--	1118	22.8	8.3	7.0	97.1	354	--	--
37	350432.8	1064009.4	4938	--	--	1123	22.5	8.2	7.0	96.3	354	--	--
38	350432.2	1064008.0	4925	--	--	1127	22.6	8.2	7.0	97.8	354	--	--
39	350431.4	1064007.0	4901	--	--	1131	22.8	8.2	7.0	96.0	358	--	--
40	350429.5	1064005.6	4941	--	--	1255	23.8	8.2	6.8	96.9	334	--	--
41	350429.2	1064004.5	4939	--	--	1300	24.8	8.2	6.8	96.2	354	--	--
42	350429.3	1064003.4	4933	--	--	1304	25.8	8.3	6.7	97.7	354	--	--
43	350428.4	1064002.5	4909	--	--	1310	25.8	8.2	6.6	96.0	354	--	--
44	350429.6	1064002.0	4926	--	--	1314	26.0	8.2	6.4	93.8	353	--	--
45	350429.5	1064000.5	4933	--	--	1318	26.2	8.3	6.8	98.9	351	--	--
46	350428.4	1063959.8	4950	--	--	1321	26.2	8.2	--	98.6	353	--	--
47	350428.3	1063958.3	4947	--	--	1327	26.3	8.3	6.9	101.6	353	--	--
48	350427.9	1063957.5	4946	--	--	1330	26.4	8.2	6.3	93.6	353	--	--
49	350427.4	1063956.1	4952	--	--	1335	26.4	8.3	6.8	99.9	381	--	--
50	350427.9	1063955.0	4960	--	--	1338	25.8	8.0	6.7	97.2	351	--	--
51	350427.1	1063941.4	4969	--	--	1345	26.4	8.2	6.8	99.8	351	--	--
52	350427.1	1063952.8	4961	--	--	1348	26.0	8.2	6.7	98.1	350	--	--
53	350426.6	1063952.2	4910	--	--	1353	26.2	8.2	6.7	98.5	350	--	--

7.3.2--Seine haul data for Rio Grande at Barelas on January 17, 2003

[#, number; --, no data; ft, feet; in, inch; °C, degrees Celsius; mg/L, milligram per liter; % sat, percent saturation; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units.]

Seine haul #	Latitude (North)	Longitude (West)	Elevation (ft)	Error (+/- ft)	Probe depth (in)	Time	Water temp. (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
1	350454.9	1064030.5	4963	10.5	12	0855	1.9	8.0	11.7	99.8	293	--	--
2	350453.7	1064030.9	4957	25.9	18	0859	1.5	8.0	11.1	93.5	290	--	--
3	350453.6	1064029.8	4954	10.1	2	0902	2.1	8.0	11.4	97.3	292	--	--
4	350452.6	1064030.1	4945	18.1	36	0905	1.6	8.0	11.6	98.5	291	--	--
5	350452.1	1064028.9	4945	21.8	20	0910	2.0	8.0	11.4	97.3	292	--	--
6	350451.2	1064029.0	4961	26.8	20	0915	1.3	8.0	11.6	97.8	289	--	--
7	350451.7	1064028.1	4958	24.8	15	0919	1.6	8.0	11.1	94.3	291	--	--
8	350450.4	1064027.6	4959	11.7	8	0922	1.4	8.0	11.5	95.1	290	--	--
9	350450.1	1064026.4	4966	12.5	3	0925	1.5	8.0	11.4	96.4	290	--	--
10	350449.5	1064025.1	4967	15.9	3	0929	1.5	8.0	11.3	95.8	284	--	--
11	350448.3	1064025.3	4958	13.6	3	0935	1.5	8.0	11.4	96.4	282	--	--
12	350447.9	1064024.2	4964	10.4	14	0939	1.8	8.0	11.3	96.5	291	--	--
13	350446.7	1064023.8	4935	32.1	4	0947	2.1	8.0	11.4	97.1	292	--	--
14	350445.8	1064024.2	4935	15.9	15	0950	1.7	8.0	11.0	92.2	291	--	--
15	350444.9	1064023.3	4942	18.1	8	0954	1.8	8.0	11.6	98.4	292	--	--
16	350444.0	1064022.4	4921	10.0	12	1002	1.9	8.0	11.4	97.2	291	--	--
17	350443.1	1064022.2	4934	10.5	12	1005	1.7	8.0	11.5	97.5	291	--	--
18	350443.4	1064021.0	4966	12.2	3	1012	2.0	8.0	11.3	96.9	292	--	--
19	350443.6	1064019.7	4966	10.3	9	1016	2.8	8.0	10.5	91.6	295	--	--
20	350442.4	1064019.7	4951	20.6	9	1021	2.3	8.0	11.5	98.8	293	--	--
21	350442.9	1064018.8	4932	28.8	3	1024	2.7	8.0	11.3	99.1	294	--	--
22	350443.7	1064017.8	4945	21.5	4	1026	3.1	8.0	11.0	94.0	296	--	--
23D	350444.3	1064017.6	4953	24.1	6	1031	3.1	8.0	11.2	98.6	296	--	Discretionary.
24	350442.1	1064017.5	4956	24.7	4	1038	3.2	8.0	11.4	100	296	--	--
25	350441.2	1064016.9	4950	17.9	3	1052	3.3	8.0	11.2	98.2	296	--	--
26	350442.0	1064014.9	4979	35.8	9	1056	3.6	8.0	11.0	97.8	297	--	--
27	350442.2	1064013.9	4939	19.5	3	1100	3.7	8.0	10.9	98.2	297	--	--
28	350442.6	1064012.9	4957	23.7	9	1104	3.7	8.0	11.2	99.6	298	--	--
29	350441.5	1064012.1	4976	15.5	3	1109	3.9	8.0	10.8	97.2	289	--	--
30	350441.2	1064011.1	4980	15.5	4	1113	3.9	8.0	10.3	92.4	297	--	--
31	350440.2	1064011.3	4995	19.3	9	1237	5.4	8.1	11.4	106	301	--	--
32	350439.0	1064011.0	4994	18.2	4	1241	6.0	8.0	10.8	99.0	300	--	--

7.3.2--Seine haul data for Rio Grande at Barelas on January 17, 2003

Seine haul #	Latitude (North)	Longitude (West)	Elevation (ft)	Error (+/- ft)	Probe depth (in)	Time	Water temp. (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
33A	350439.1	1060410.0	4961	21.4	2	1247	5.8	8.0	10.1	96.1	301	--	Upper right.
33B	350439.2	1060410.0	4963	16.6	3	1248	5.7	8.1	10.8	102	300	--	Upper left.
33C	350438.8	1060410.0	4973	38.7	3	1249	5.8	8.1	10.9	103	301	--	Center.
33D	350438.8	1064009.9	4988	28.4	6	1251	5.7	8.1	10.5	99.5	300	--	Lower left.
33E	350438.8	1064009.8	4983	26.2	4	1252	5.8	8.1	10.3	98.1	300	--	Lower right.
34	350439.5	1064009.9	4988	18.8	4	1255	5.7	8.1	11.0	104	300	--	--
35	350438.3	1064008.7	4979	23.1	12	1258	5.9	8.1	11.0	104	301	--	--
36	350437.1	1064008.4	4989	20.1	15	1301	5.2	8.1	11.2	104	299	--	--
37	350436.3	1064008.2	4962	30.7	3	1306	5.2	8.1	9.8	90.1	300	--	--
38	350436.5	1064007.2	4944	17.7	2	1310	5.3	8.1	10.9	103	296	--	--
39	350435.8	1064006.0	4967	14.0	2	1314	7.8	8.2	9.5	93.9	327	--	--
40	350434.6	1064005.0	5018	17.4	4	1321	5.5	8.1	10.9	102	300	--	--
41	350433.7	1064004.5	4987	18.8	6	1325	5.7	8.1	10.9	103	300	--	--
42	350433.4	1064003.7	4972	7.50	3	1329	6.1	8.1	10.8	103	295	--	--
43	350432.7	1064003.3	4919	24.6	4	1333	6.5	8.1	10.5	109	302	--	--
44	350432.5	1064001.8	4927	33.9	3	1336	6.5	8.1	10.3	99.2	301	--	--
45	350431.5	1064000.8	4958	19.6	4	1341	6.6	8.1	10.5	102	294	--	--
46	350431.0	1064001.3	4933	20.6	2	1345	6.7	8.1	9.9	95.8	302	--	--
47	350429.8	1064000.6	4953	33.9	3	1349	6.7	8.1	10.6	103	298	--	--
48	--	--	--	--	6	1401	6.2	8.1	9.3	88.2	301	--	GPS unit stopped working.
49D	--	--	--	--	6	1413	8.5	8.3	11.0	110	300	--	Discretionary.
50	--	--	--	--	6	1428	7.0	8.1	10.3	100	303	--	Embayment.

Table 7.4.1--Seine haul data for Albuquerque Waste Water Treatment Plant Outfall on August 6, 2002

[#, number; --, no data; ft, feet; in, inch; °C, degrees Celsius; mg/L, milligram per liter; % sat, percent saturation; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units.]

Seine haul #	Latitude (North)	Longitude (West)	Elevation (ft)	Error (+/- ft)	Probe depth (in)	Time	Water temp. (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
1	350102.4	1064017.1	4935	--	24	0948	28.1	7.1	6.2	94.4	921	--	--
2a	350102.4	1064017.0	4932	--	24	0950	27.9	7.1	5.7	89.4	913	--	--
2b	350102.4	1064017.0	4932	--	8	0950	27.3	7.3	6.0	94.8	816	--	--
2c	350102.4	1064017.0	4932	--	24	0950	27.8	7.1	6.2	94.0	871	--	--
2d	350102.4	1064017.0	4932	--	36	0950	28.2	7.1	6.1	91.4	919	--	--
3	350102.0	1064016.9	4934	--	6	1000	28.1	7.1	6.0	92.9	874	--	--
4	350102.0	1064017.0	4936	--	18	1001	28.2	7.1	5.9	89.1	915	--	--
5a	350102.0	1064017.3	4945	--	12	1004	27.5	7.1	6.1	92.0	871	--	--
5b	350102.0	1064017.3	4945	--	24	1004	27.0	7.1	6.1	91.7	884	--	--
5c	350102.0	1064017.3	4945	--	24	1004	26.9	7.1	6.2	91.5	817	--	--
5d	350102.0	1064017.3	4945	--	12	1004	27.1	7.1	6.3	93.9	847	--	--
--[1]	350102.8	1064020.1	4934	--	24	1048	23.8	8.2	6.7	94.2	434	--	Rio Grande site (random).
--[1]	350101.4	1064017.3	4935	--	36	1038	25.3	7.3	6.8	97.3	624	--	Mixing (60 ft. south from mouth).
--[1]	350100.8	1064017.9	4916	--	24	1041	23.8	8.0	6.9	96.5	450	--	120 ft. south of mouth.

[1] Additional water-quality data collected in Rio Grande downstream from mouth of the outfall; these measurements are not associated with seine hauls but are provided as additional information.

Table 7.4.2--Seine haul data for Albuquerque Waste Water Treatment Plant Outfall on January 29, 2003

[#, number; --, no data; ft, feet; in, inch; °C, degrees Celsius; mg/L, milligram per liter; % sat, percent saturation; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units.]

Seine haul #	Latitude (North)	Longitude (West)	Elevation (ft)	Error (+/- ft)	Probe depth (in)	Time	Water temp. (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
1	350102.6	1064016.9	4940	17.5	20	1017	19.3	7.0	7.1	91.0	577	--	--
2	350102.1	1064017.1	4932	22.1	24	1040	13.4	7.1	8.1	97.8	457	--	--
3	350101.6	1064017.2	4926	52.3	26	1055	15.1	7.1	8.2	96.6	488	--	--
4	350101.4	1064017.2	4922	23.0	22	1113	15.9	7.1	8.1	96.4	489	--	--
5	350102.5	1064016.9	4924	24.6	23	1138	19.4	6.9	6.0	77.3	567	--	--

Table 7.5.1--Seine haul data for Rio Grande at Los Padillas on July 25, 2002

[#, number; --, no data; ft, feet; in, inch; ^{o}C, degrees Celsius; mg/L, milligram per liter; % sat, percent saturation; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units.]

Seine haul #	Latitude (North)	Longitude (West)	Elev (ft)	Error (+/- ft)	Probe depth (in)	Time	Water temp. (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments

Data not collected.

Table 7.5.2--Seine haul data for Rio Grande at Los Padillas on October 31, 2002

[#, number; --, no data; ft, feet; in, inch; °C, degrees Celsius; mg/L, milligram per liter; % sat, percent saturation; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units.]

Seine haul #	Latitude (North)	Longitude (West)	Elev (ft)	Error (+/- ft)	Probe depth (in)	Time	Water temp. (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
1	345803.4	1064118.0	4977	19.1	14	0941	10.5	8.0	9.4	101	400	--	--
2	345802.7	1064117.9	4941	24.8	2	0946	10.5	8.1	9.2	98.7	382	--	--
3	345802.0	1064117.0	4949	19.0	14	0949	11.5	7.9	8.9	97.8	426	--	--
4	345800.9	1064116.2	4911	20.5	12	0953	10.7	8.0	9.4	102	398	--	--
5	345759.8	1064115.5	4921	--	20	0959	11.7	7.9	9.1	101	425	--	--
6	345758.8	1064116.2	4922	22.8	6	1003	11.6	8.0	9.2	101	301	--	--
7	345757.6	1064116.0	4924	31.0	10	1006	11.6	8.0	9.1	99.8	413	--	--
8	345757.2	1064115.2	4931	28.2	12	1013	11.9	8.0	9.2	102	417	--	--
9	345756.3	1064116.3	4912	--	5	1018	11.4	8.0	9.6	104	398	--	--
10	345754.8	1064114.6	4909	28.7	5	1022	12.0	8.0	9.1	101	415	--	--
11	345754.2	1064114.6	4917	22.2	8	1025	12.2	8.0	9.1	101	406	--	--
12	345753.3	1064114.9	4891	20.0	4	1029	11.6	8.0	9.3	102	397	--	--
13	345753.5	1064113.9	4896	24.5	12	1032	12.2	8.0	9.1	101	413	--	--
14	345752.5	1064114.4	4923	42.4	12	1036	11.9	8.0	9.3	103	398	--	--
15	345751.2	1064113.9	4903	22.9	6	1041	12.4	8.0	9.1	102	407	--	--
16	345751.0	1064112.5	4935	26.9	12	1048	12.4	8.0	8.9	99.4	427	--	--
17	345750.0	1064112.8	4897	--	3	1054	13.0	8.0	8.9	102	423	--	--
18	345749.2	1064112.3	4865	61.8	8	1056	12.9	8.0	9.0	102	423	--	--
19	345748.0	1064111.8	4871	--	24	1104	13.0	8.0	8.9	102	414	--	--
20	345746.6	1064111.8	4908	61.1	12	1109	12.5	8.1	9.1	102	392	--	--
21	345745.9	1064110.6	4935	29.2	18	1114	13.3	8.0	8.9	102	415	--	--
22	345744.9	1064109.3	4942	20.9	16	1119	13.4	8.0	8.9	101	423	--	--
23	345743.6	1064111.2	4917	30.2	10	1123	13.1	8.0	9.0	102	400	--	--
24	345744.0	1064109.8	4928	29.5	13	1129	13.8	8.0	8.9	103	421	--	--
25	345743.1	1064109.6	4938	27.7	12	1133	13.9	8.0	8.9	103	420	--	--
26	345742.4	1064110.9	4928	38.9	5	1139	13.7	8.1	8.6	99.7	394	--	--
27	345741.3	1064112.1	4937	33.9	10	1144	13.8	8.1	8.6	98.0	394	--	--
28	345740.0	1064111.1	4923	29.2	8	1151	14.0	8.0	9.0	105	405	--	--
29	345739.1	1064111.4	4952	26.5	6	1155	14.1	8.0	8.9	103	403	--	--
30	345737.9	1064111.3	4914	28.6	3	1200	14.6	8.0	8.4	98.2	411	--	--
31	345741.0	1066413.3	4922	23.7	2	1311	16.7	7.7	6.3	74.1	392	--	Embayment.
32	345737.4	1064112.7	4915	--	6	1317	15.4	8.1	8.7	105	388	--	--

Table 7.5.2--Seine haul data for Rio Grande at Los Padillas on October 31, 2002

Seine haul #	Latitude (North)	Longitude (West)	Elev (ft)	Error (+/- ft)	Probe depth (in)	Time	Water temp. (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
33	345736.8	1064114.0	4850	23.0	24	1323	13.6	8.2	9.0	104	364	--	--
34	345736.1	1064112.5	4867	33.7	24	1328	15.3	8.2	9.0	107	377	--	--
35	345734.7	1064111.7	--	--	12	1332	15.5	8.2	8.8	105	379	--	--
36	345733.7	1064112.2	4922	23.7	12	1337	14.4	8.2	9.2	107	360	--	--
37	345733.3	1064111.7	4898	31.6	12	1344	15.0	8.2	8.7	103	369	--	--
38	345732.4	1064111.4	4891	48.2	10	1348	13.9	8.2	8.9	103	364	--	--
39	345731.5	1064110.7	4919	16.9	4	1352	12.9	8.2	9.1	106	368	--	--
40	345731.4	1064109.3	4907	40.7	12	1356	15.5	8.2	8.8	106	373	--	--
41	345731.3	1064108.0	4907	29.2	6	1402	16.4	8.1	8.6	104	401	--	--
42	345730.6	1064107.1	4912	24.8	24	1405	16.5	8.1	8.6	105	403	--	--
43	345730.5	1064105.8	4915	28.7	2	1409	17.3	8.1	7.8	97.0	423	--	--
44	345729.7	1064105.1	4909	35.0	5	1413	16.6	8.0	8.6	106	109	--	--
45	345728.8	1064102.3	4912	--	6	1419	18.5	8.3	8.9	115	423	--	--
46	345728.5	1064101.0	4919	44.3	5	1423	17.6	8.1	8.2	102	427	--	--
47	345728.0	1064102.3	4917	22.1	3	1428	17.3	8.0	7.0	87.5	426	--	--
48	345726.7	1064101.7	4933	32.3	3	1431	17.3	8.0	7.9	99.3	427	--	--
49	345726.7	1064100.5	4931	23.9	10	1436	17.7	8.0	8.1	101	432	--	--
50	345726.2	1064101.2	4927	26.2	2	1440	16.5	7.8	8.1	87.7	439	--	--
51	345726.2	1064100.0	4930	20.4	12	1444	17.8	8.0	8.0	101	434	--	--
52	345725.5	1064100.3	4912	33.6	10	1447	17.4	8.0	8.0	100	426	--	--
53	345724.2	1064100.9	4905	27.3	2	1452	16.8	8.1	8.3	102	405	--	--
54	345723.7	1064159.9	4934	31.1	8	1455	17.3	8.0	8.1	101	425	--	--
55	345734.0	1064110.5	4970	24.1	10	1511	16.3	8.1	8.4	102	397	--	--

Table 7.5.3--Seine haul data for Rio Grande at Los Padillas on December 18, 2002

[#, number; --, no data; ft, feet; in, inch; °C, degrees Celsius; mg/L, milligram per liter; % sat, percent saturation; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units.]

Seine haul #	Latitude (North)	Longitude (West)	Elevation (ft)	Error (+/- ft)	Probe depth (in)	Time	Water temp. (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
1	345803.5	1064117.5	4900	23.4	12	0936	4.4	8.0	9.8	91.0	311	--	--
2	345802.5	1064118.3	4923	23.0	2	0941	3.9	8.0	10.0	91.5	302	--	--
3	345801.1	1064120.1	4909	20.0	16	0949	3.9	8.1	10.0	92.1	302	--	--
4	345800.2	1064118.1	4884	14.3	4	0954	4.1	8.1	9.6	88.4	303	--	--
5	345759.9	1064117.7	4900	21.1	12	0958	4.1	8.0	9.6	88.6	305	--	--
6	345758.9	1064117.0	4913	23.3	24	1003	4.2	8.0	10.0	92.3	306	--	--
7	345756.7	1064118.7	4916	13.7	15	1009	4.2	8.0	10.0	92.3	305	--	--
8	345755.4	1064116.5	4957	12.8	12	1020	4.3	8.1	10.0	92.3	300	--	--
9	345754.8	1064115.7	4918	14.5	4	1027	4.6	8.0	9.8	91.7	304	--	--
10	345753.4	1064114.5	4945	14.7	3	1031	4.8	8.0	9.6	90.3	309	--	--
11	345752.5	1064113.7	4928	14.1	9	1036	4.8	8.0	9.9	92.8	306	--	--
12	345751.9	1064113.4	4912	17.0	9	1044	5.0	8.0	9.9	93.0	312	--	--
13	345750.5	1064113.7	4909	14.7	9	1051	5.1	8.0	9.7	92.0	311	--	--
14	345749.4	1064113.9	4900	18.7	9	1057	4.8	8.1	10.0	93.8	306	--	--
15	345749.2	1064112.7	4903	15.5	10	1102	5.3	8.1	9.7	92.0	310	--	--
16	345748.1	1064113.5	4911	11.7	9	1109	5.1	8.1	9.4	88.8	307	--	--
17	345747.3	1064113.5	4906	29.5	12	1113	5.1	8.1	10.0	94.5	307	--	--
18	345746.0	1064113.4	4878	18.1	3	1121	6.2	8.1	9.0	86.0	308	--	--
19	345745.0	1064114.6	4898	19.4	3	1123	6.2	8.1	9.6	93.0	307	--	--
20	345744.3	1064114.7	4909	18.9	3	1126	5.8	8.1	9.6	92.2	309	--	--
21	345742.7	1064115.2	4908	20.3	9	1129	5.5	8.1	9.8	94.2	305	--	--
22	345743.2	1064115.0	4914	19.6	6	1134	6.1	8.1	9.6	92.3	308	--	Discretionary.
23	345742.4	1064115.6	4917	26.5	6	1138	5.5	8.1	10.0	95.3	299	--	--
24	345742.1	1064114.6	4928	18.6	10	1144	6.0	8.1	10.0	97.3	302	--	--
25	345740.8	1064115.2	4996	25.5	24	1148	5.6	8.2	10.1	96.8	298	--	--
26	345741.2	1064112.3	5110	21.2	9	1156	6.2	8.1	9.8	94.8	297	--	
27	345747.7	1064113.4	4917	19.1	9	1312	6.1	7.9	9.5	92.6	307	--	Discretionary.
28	345738.9	1064114.0	5036	59.1	6	1320	5.6	8.1	9.9	94.5	263	--	--
29	345738.5	1064111.0	4965	63.3	24	1325	6.2	8.1	8.9	86.6	307	--	--
30	345737.8	1064112.3	4950	21.5	6	1330	5.5	8.2	9.9	94.6	297	--	--
31	345737.8	1064111.7	4942	28.2	9	1337	6.2	8.1	8.7	85.2	308	--	--
32	345737.2	1064112.3	4869	21.5	12	1342	6.2	8.1	9.7	95.1	307	--	--

Table 7.5.3--Seine haul data for Rio Grande at Los Padillas on December 18, 2002

Seine haul #	Latitude (North)	Longitude (West)	Elevation (ft)	Error (+/- ft)	Probe depth (in)	Time	Water temp. (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
33	345735.7	1064112.2	4867	37.6	12	1351	6.1	8.1	9.2	89.4	306	--	--
34	345734.4	1064112.0	4878	34.9	24	1355	5.8	8.2	9.6	91.3	301	--	--
35	345733.6	1064112.6	4888	72.3	24	1400	5.5	8.2	10.0	95.5	297	--	--
36	345732.7	1064110.4	4893	18.7	3	1404	5.9	8.2	9.8	93.5	299	--	--
37	345732.2	1064109.3	4908	20.1	7	1407	6.1	8.1	9.7	94.1	305	--	--
38	345731.9	1064110.4	4901	20.5	9	1410	5.8	8.2	9.9	95.0	298	--	--
39	345731.4	1064110.7	4897	36.8	14	1414	5.6	8.2	9.9	96.2	298	--	--
40	345730.6	1064109.6	4906	37.2	3	1416	5.8	8.2	9.7	92.8	300	--	--
41	345729.7	1064107.7	4906	16.2	4	1420	6.1	8.2	9.7	94.8	304	--	--
42	345728.8	1064107.0	4911	11.3	4	1425	6.3	8.2	9.6	94.1	307	--	--
43	345728.8	1064106.0	4914	47.2	6	1429	6.5	8.1	9.6	94.6	301	--	--
44	345727.6	1064106.0	4923	24.4	4	1434	6.3	8.2	9.5	93.0	306	--	--
45	345727.6	1064105.3	4926	25.0	6	1436	6.5	8.0	9.5	93.0	316	--	Discretionary.
46	345726.8	1064104.6	4915	33.9	12	1440	6.2	7.8	8.4	81.9	324	--	--
47	345726.7	1064103.3	4912	28.1	7	1444	7.1	8.1	9.3	92.6	314	--	--
48	345725.4	1064103.5	4902	22.8	18	1447	6.7	8.1	9.5	93.9	313	--	--
49	345725.8	1064106.2	4911	37.1	18	1452	6.2	8.2	9.2	91.1	306	--	Discretionary.
50	345726.5	1064108.5	4912	23.8	24	1456	5.8	8.2	9.5	92.1	298	--	Discretionary.

Table 7.5.4--Seine haul data for Rio Grande at Los Padillas on February 27, 2003

[#, number; --, no data; ft, feet; in, inch; °C, degrees Celsius; mg/L, milligram per liter; % sat, percent saturation; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units.]

Seine haul #	Latitude (North)	Longitude (West)	Elev (ft)	Error (+/-)	Probe depth (in)	Time	Water temp. (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
1	345803.0	1064117.3	4911	21.4	17	0949	8.5	7.6	9.3	96.3	327	--	--
2	345803.1	1064116.5	5090	57.5	23	0952	8.4	7.8	9.7	99.0	326	--	--
3	345810.4	1064116.1	4991	19.7	26	0959	8.1	7.8	9.3	93.9	328	--	--
4	345800.4	1064115.5	4943	33.6	11	1004	8.3	7.8	9.7	99.4	318	--	--
5	345759.9	1064117.1	4942	21.2	5	1008	9.0	7.9	9.6	99.5	316	--	--
6	345759.7	1064115.7	4967	24.1	20	1013	8.5	7.9	9.2	93.5	316	--	--
7	345759.0	1064116.6	4952	25.0	6	1017	8.6	7.9	8.5	85.4	318	--	--
8	345758.1	1064114.7	4960	23.8	19	1022	8.7	7.8	9.5	98.7	326	--	--
9	345757.4	1064115.3	4940	18.9	7	1026	8.9	7.8	9.6	99.7	326	--	--
10	345755.9	1064115.6	4936	13.7	3	1030	12.2	8.3	10.2	114	344	--	--
11	345755.1	1064116.1	4932	19.5	14	1038	9.0	7.9	9.4	96.9	318	--	--
11	345755.0	1064116.0	4922	16.9	15	1040	9.1	7.9	9.4	97.1	317	--	--
11	345755.1	1064116.2	4934	17.5	11	1042	9.1	7.8	8.8	89.5	317	--	--
11	345755.0	1064116.1	4935	11.8	7	1042	9.1	7.9	8.6	87.3	317	--	--
12	345754.2	1064115.3	4920	10.6	9	1045	9.3	7.9	9.6	100	320	--	--
13	345753.2	1064115.5	4907	33.6	9	1050	9.4	7.9	9.7	101	317	--	--
14	345750.9	1064113.8	4917	22.6	8	1058	9.8	7.9	9.7	102	318	--	--
15	345751.0	1064113.0	4925	16.9	10	1104	10.0	7.9	9.5	101	319	--	--
16	345750.5	1064112.4	4922	56.4	18	1111	9.8	7.9	9.5	100	322	--	--
17	345749.9	1064112.9	4916	23.4	5	1116	10.0	7.9	9.6	102	317	--	--
18	345750.2	1064112.2	4913	27.4	15	1122	10.1	7.9	9.4	99.8	323	--	--
19	345749.5	1064113.1	4921	22.4	15	1129	10.1	7.9	9.5	101	317	--	--
20	345748.4	1064112.1	4902	21.8	4	1135	10.0	7.9	9.5	101	318	--	--
21	345748.2	1064111.9	4910	34.3	15	1141	10.1	7.9	8.9	95.1	322	--	--
22	345747.4	1064112.0	4929	29.8	9	1147	10.2	7.9	9.4	101	318	--	--
23	345746.4	1064113.5	4915	20.0	5	1151	10.5	7.9	9.3	101	318	--	--
24	345745.3	1064113.8	4922	14.2	2	1156	16.8	8.3	7.5	93.2	331	--	--
25	345744.4	1064116.0	4973	21.6	7	1201	12.1	8.0	5.7	61.7	318	--	--
26	345743.2	1064116.2	4927	17.4	18	1206	10.8	8.0	9.6	104	315	--	--
27	345742.5	1064116.6	4927	21.1	14	1212	10.6	8.0	9.4	101	308	--	--
28	345741.9	1064115.3	4934	21.3	4	1217	11.2	8.0	9.0	97.7	317	--	--
29	345741.5	1064113.7	4905	21.5	6	1226	12.6	8.1	9.3	106	319	--	--

Table 7.5.4--Seine haul data for Rio Grande at Los Padillas on February 27, 2003

Seine haul #	Latitude (North)	Longitude (West)	Elev (ft)	Error (+/-)	Probe depth (in)	Time	Water temp. (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
30	345749.8	1064113.2	4929	15.7	6	1328	11.6	8.0	9.5	103	316	--	--
31	345740.5	1064115.1	4904	17.7	14	1340	11.7	8.0	9.4	104	314	--	--
32	345739.6	1064114.8	4902	18.1	12	1344	11.6	8.0	9.4	104	308	--	--
33	345738.7	1064113.6	4905	17.0	4	1347	11.8	8.0	9.6	105	310	--	--
34	345738.8	1064112.3	4888	13.2	27	1354	12.4	8.0	9.3	105	319	--	--
35	345738.3	1064111.3	4892	13.5	7	1402	12.7	8.0	8.9	99.7	323	--	--
36	345738.1	1064110.2	4902	22.1	33	1409	12.8	8.0	9.1	102	325	--	--
37	345737.2	1064108.6	4902	20.5	7	1413	12.8	7.9	9.2	103	328	--	--
38	345736.8	1064107.3	4893	17.7	5	1419	13.3	8.0	9.1	104	327	--	--
39	345735.6	1064106.7	4897	17.7	17	1423	13.2	8.0	7.9	90.5	328	--	--
40	345735.8	1064106.1	4912	29.2	6	1429	13.5	8.0	9.3	108	329	--	--
41	345735.0	1064106.0	4896	18.9	7	1436	13.1	7.9	9.2	105	331	--	--
42	345734.0	1064105.1	4876	16.5	4	1440	13.1	8.0	8.9	102	322	--	--
43	345734.0	1064104.3	4954	25.9	5	1446	13.1	8.1	9.9	113	329	--	--
44	345732.7	1064104.6	4928	18.0	4	1449	13.1	8.0	9.2	105	333	--	--
45	345734.2	1064103.5	4958	24.3	4	1454	13.1	8.3	9.8	112	329	--	--
46	345731.8	1064103.5	4901	13.9	4	1457	13.3	8.1	9.6	111	330	--	--
47	345731.9	1064105.7	4970	19.9	12	1503	13.2	8.0	8.7	97.8	332	--	--
48	345733.4	1064107.1	4875	12.4	5	1508	14.4	8.2	8.6	98.4	333	--	--
49	345735.2	1064109.0	4922	26.4	11	1514	13.1	7.9	8.7	98.7	336	--	--
50	345734.3	1064110.4	4932	20.6	9	1524	12.9	8.0	8.6	96.3	331	--	--

Table 7.6.1--Seine haul data for Rio Grande at Isleta below Railroad Bridge on August 7, 2002

[#, number; --, no data; ft, feet; in, inch; °C, degrees Celsius; mg/L, milligram per liter; % sat, percent saturation; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units.]

Seine haul #	Latitude (North)	Longitude (West)	Elevation (ft)	Error (+/-)	Probe depth (in)	Time	Water temp. (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTUs)	Comments
1	345519.1	1064041.9	4893	15.5	30	1003	22.8	8.0	6.4	88.7	530	--	--
2	345519.3	1064041.7	4892	18.0	30	1002	22.8	8.0	6.5	88.5	528	--	--
3	345519.5	1064041.0	4889	15.0	0.4	1001	22.8	8.0	6.5	90.0	537	--	--
4	345520.3	1064039.1	4888	21.0	18	0958	21.6	7.8	5.7	77.1	477	--	--
5	345518.8	1064039.6	4881	18.8	--	1111	22.7	7.9	7.3	83.8	433	--	Embayment.

Table 7.6.2--Seine haul data for Rio Grande at Isleta below Railroad Bridge on January 28, 2003

[#, number; --, no data; ft, feet; in, inch; °C, degrees Celsius; mg/L, milligram per liter; % sat, percent saturation; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units.]

Seine haul #	Latitude (North)	Longitude (West)	Elevation (ft)	Error (+/- ft)	Probe depth (in)	Time	Water temp. (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
1	345519.3	1064040.4	4895	15.2	18	1031	7.7	8.1	8.4	84.0	351	--	--
2	345518.7	1064041.0	4880	18.3	19	1037	7.0	8.2	9.0	88.1	344	--	--
3	345518.5	1064041.5	4894	45.0	7	1045	7.2	8.2	9.0	88.8	341	--	--
4	345517.5	1064041.8	4891	17.4	18	1053	7.4	8.2	8.8	86.9	342	--	--
5	345518.4	1064042.5	4881	50.2	3	1104	7.6	8.2	9.0	89.6	341	--	--
6	345518.3	1064042.6	4894	33.0	7	1112	7.8	8.2	9.0	90.1	340	--	--
7	345518.5	1064043.6	4893	38.7	18	1124	8.1	8.2	8.8	88.2	341	--	--
8	345516.6	1064043.9	4901	33.8	12	1134	8.4	8.2	8.9	90.2	341	--	--
9	345514.9	1064044.5	4908	40.3	6	1142	8.8	8.2	9.0	92.1	341	--	--
10	345519.7	1064040.3	4891	23.4	7	1156	9.7	8.1	8.2	85.6	351	--	--

Table 7.7.1--Seine haul data for Rio Grande at Los Lunas on July 24, 2002

[#, number; --, no data; ft, feet; in, inch; °C, degrees Celsius; mg/L, milligram per liter; % sat, percent saturation; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units.]

Seine haul #	Latitude (North)	Longitude (West)	Elevation (ft)	Error (+/- ft)	Probe depth (in)	Time	Water temp. (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
1	--	--	--	--	--	1130	--	--	--	--	--	--	Too shallow; shoreline.
2	344915.0	1064246.9	--	--	--	--	27.9	8.1	6.3	--	473	102	--
3A	344912.2	1064246.8	--	--	--	--	27.6	8.1	6.3	--	472	97.5	Upper left.
3B	344912.2	1064246.8	--	--	--	--	27.7	8.1	6.3	--	471	96.3	Upper right.
3C	344912.2	1064246.8	--	--	--	--	27.6	8.1	6.4	--	471	94.9	Lower left.
3D	344912.2	1064246.8	--	--	--	--	27.6	8.1	6.4	--	471	94.9	Lower right.
4	344911.0	1064247.6	--	--	--	--	27.4	8.1	6.3	--	470	93.8	--
5	344910.3	1064246.9	--	--	--	--	25.7	8.1	6.9	--	487	102	--
6	344909.3	1064246.6	--	--	--	1500	33.2	8.1	5.5	--	462	92.1	--
7	344908.1	1064246.2	--	--	--	--	32.8	8.1	5.5	--	461	94.2	--
8	344906.9	1064246.0	--	--	--	--	33.4	8.1	5.5	--	463	96.9	--
9A	344905.8	1064245.3	--	--	--	--	33.0	8.1	5.5	--	461	92.2	Upper left.
9B	344905.8	1064245.3	--	--	--	--	33.0	8.1	5.6	--	461	91.2	Upper right.
9C	344905.8	1064245.3	--	--	--	--	33.0	8.1	5.6	--	460	91.5	Lower left.
9D	344905.8	1064245.3	--	--	--	--	33.1	8.1	5.6	--	461	90.2	Lower right.
10	344905.3	1064243.5	--	--	--	--	--	--	--	--	--	--	Too shallow.
11	344904.0	1064242.8	--	--	--	--	31.7	8.1	5.9	--	478	93.7	--
12	344903.7	1064242.6	--	--	--	--	34.2	8.1	5.4	--	465	90.0	--
13A	344902.6	1064241.9	--	--	--	--	34.1	8.1	5.4	--	467	91.5	Upper left.
13B	344902.6	1064241.9	--	--	--	--	--	--	--	--	--	--	Upper right; too shallow.
13C	344902.6	1064241.9	--	--	--	--	34.3	8.1	5.3	--	465	89.8	Lower left.
13D	344902.6	1064241.9	--	--	--	--	34.4	8.1	5.3	--	465	84.1	Lower right.
14	344901.4	1064242.0	--	--	--	--	34.1	8.1	5.4	--	465	90.8	--
15	344901.3	1064240.5	--	--	--	--	34.8	8.2	5.1	--	469	99.0	--
16	344900.4	1064241.8	--	--	--	--	34.4	8.1	5.3	--	466	90.4	--
17	344859.4	1064239.4	--	--	--	--	--	--	--	--	--	--	Too shallow.
18	344857.4	1064238.3	--	--	--	--	34.7	8.2	5.2	--	476	87.9	--
19	344856.4	1064237.7	--	--	--	--	--	--	--	--	--	--	Too shallow.
20	344855.3	1064238.4	--	--	--	--	--	--	--	--	--	--	Too shallow.
21	--	--	--	--	--	--	--	--	--	--	--	--	Too shallow.
22	344853.6	1064239.4	--	--	--	--	33.9	8.1	5.3	--	464	91.0	--
23	344854.0	1064238.2	--	--	--	--	--	--	--	--	--	--	Too shallow.

Table 7.7.1--Seine haul data for Rio Grande at Los Lunas on July 24, 2002

Seine haul #	Latitude (North)	Longitude (West)	Elevation (ft)	Error (+/- ft)	Probe depth (in)	Time	Water temp. (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
24A	344853.2	1064237.2	--	--	--	--	35.8	8.2	4.9	--	476	73.0	Upper left.
24B	344853.2	1064237.2	--	--	--	--	--	--	--	--	--	--	Upper right; too shallow.
24C	344853.2	1064237.2	--	--	--	--	35.3	8.1	4.4	--	473	84.1	Lower left.
24D	344853.2	1064237.2	--	--	--	--	36.0	8.2	5.0	--	472	83.3	Lower right.
25	344852.5	1064238.3	--	--	--	--	--	--	--	--	--	--	Too shallow.
26	344851.3	1064238.4	--	--	--	--	33.3	8.1	5.4	--	463	88.7	--
27	344851.0	1064237.6	--	--	--	--	34.2	8.1	5.4	--	466	87.9	--
28	344850.1	1064238.5	--	--	--	--	33.3	8.1	5.5	--	462	89.2	--
29	344849.2	1064239.2	--	--	--	--	--	--	--	--	--	--	Too shallow.
30	344849.4	1064238.1	--	--	--	--	33.7	8.1	5.4	--	464	89.3	--
31A	344848.1	1064238.2	--	--	--	--	34.0	8.1	5.3	--	464	89.9	Upper left.
31B	344848.1	1064238.2	--	--	--	--	34.3	8.1	5.3	--	466	89.6	upper right.
31C	344848.1	1064238.2	--	--	--	--	34.1	8.2	5.3	--	466	88.9	Lower left.
31D	344848.1	1064238.2	--	--	--	--	33.9	8.1	5.4	--	464	88.6	Lower right.
32	--	--	--	--	--	--	33.4	8.1	5.2	--	462	103	--
33	--	--	--	--	--	--	34.0	8.1	5.1	--	464	101	--
34	--	--	--	--	--	--	33.3	8.1	5.4	--	461	90.1	--
35	--	--	--	--	--	--	32.9	8.1	5.0	--	471	138	--
36	--	--	--	--	--	--	34.6	8.1	4.8	--	469	87.9	--

Table 7.7.2--Seine haul data for Rio Grande at Los Lunas on October 30, 2002

[#, number; --, no data; ft, feet; in, inch; °C, degrees Celsius; mg/L, milligram per liter; % sat, percent saturation; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units.]

Seine haul #	Latitude (North)	Longitude (West)	Elevation (ft)	Error (+/- ft)	Probe depth (in)	Time	Water temp. (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
1	344921	1064247	4875	--	6	815	7.2	8.0	9.1	89.9	376	--	--
2	344920	1034246	4871	--	5	821	7.2	8.0	9.1	89.0	376	--	--
3	344919	1064246	4876	--	8	827	7.2	8.0	9.1	89.7	376	--	--
4	344918	1064248	4901	--	2	832	7.3	7.8	8.1	79.4	358	--	--
5A	344916	1064247	4881	--	10	839	6.4	8.4	9.0	85.6	376	--	Northwest corner.
5B	344916	1064247	4881	--	18	842	6.2	8.5	8.5	81.4	377	--	Northeast corner.
5C	344916	1064247	4862	--	18	848	5.8	8.5	8.7	84.1	377	--	Southeast corner.
5D	344916	1064247	4862	--	12	851	5.9	8.3	8.5	79.9	102	--	Southwest corner.
6	344915	1064246	4890	--	6	856	8.3	8.0	8.9	88.1	379	--	--
7	344914	1064245	4964	--	2	901	7.5	8.1	8.4	83.7	372	--	--
8	344914	1064245	4854	--	3	906	8.8	8.0	7.3	73.6	376	--	--
9	344914	1064244	4852	--	10	914	7.8	8.0	9.1	91.0	373	--	--
10	344913	1064245	4852	--	6	918	8.4	8.1	8.9	90.7	371	--	--
11	344913	1064244	4844	--	18	930	8.1	8.0	9.1	91.4	372	--	--
12	344911	1064244	4817	--	2	935	9.8	7.8	7.1	74.8	375	--	--
13	344910	1064244	4805	--	5	939	9.1	8.1	8.6	88.2	370	--	--
14	344908	1064243	4854	--	10	948	9.0	8.1	8.2	84.6	370	--	--
15	344908	1064242	4870	--	3	951	8.5	8.1	9.0	90.8	371	--	--
16	344908	1064243	4853	--	8	958	9.0	8.1	9.1	93.0	369	--	--
17	344907	1064242	4852	26.4	4	1005	8.6	8.1	9.0	92.0	371	--	--
18	344907.1	1064241.1	4840	62.7	3	1010	8.6	8.0	8.4	85.1	371	--	--
19	344905.8	1064242.9	4864	34.2	24	1020	9.0	8.1	8.9	92.0	369	--	--
20	344904.6	1064240.8	4879	27.6	2	1028	9.5	8.1	8.5	88.1	371	--	--
21	344902.9	1064241.7	4869	24.1	6	1035	9.3	8.1	8.1	82.2	371	--	--
22	344900.8	1064240.4	4854	24.2	5	1042	10.3	8.1	8.8	--	367	--	--
23	344900.5	1064242.3	4842	22.6	12	1209	12.4	8.0	8.5	95.3	358	--	--
24	344859.6	1064242.5	4872	20.6	2	1214	19.5	7.9	9.7	111	365	--	--
25	344858.2	1064243.2	4857	29.1	4	1220	18.2	7.4	8.0	82.1	298	--	--
26	344858.0	1064242.3	4858	53.2	10	1227	12.7	8.0	8.5	95.3	356	--	--
27	344856.3	1064240.9	4835	23.0	12	1235	12.9	8.0	8.0	89.1	357	--	--
28	344856.4	1064239.8	4840	20.9	5	1242	13.3	8.0	7.2	82.3	359	--	--
29	344855.9	1064240.5	4885	35.6	12	1247	13.2	8.1	8.3	93.5	356	--	--

Table 7.7.2--Seine haul data for Rio Grande at Los Lunas on October 30, 2002

Seine haul #	Latitude (North)	Longitude (West)	Elevation (ft)	Error (+/- ft)	Probe depth (in)	Time	Water temp. (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
30	344854.3	1064240.4	4842	33.2	12	1253	13.3	8.1	8.3	94.2	355	--	--
31	344853.6	1064241.0	4844	--	3	1301	13.5	8.1	8.1	92.5	356	--	--
32	344852.5	1064239.8	4876	30.8	10	1307	13.6	8.1	8.2	94.3	354	--	--
33	344851.9	1064240.8	4933	24.7	12	1311	13.7	8.1	7.7	89.0	351	--	--
34	344850.6	1064239.5	4891	27.3	10	1318	13.9	8.1	8.2	94.6	355	--	--
35	344850.1	1064240.6	4876	31.3	10	1323	13.6	8.1	8.3	94.7	348	--	--
36	344850.2	1064240.7	4871	49.2	12	1330	14.1	8.1	6.1	70.1	354	--	--
37	--	--	--	--	11	1336	13.9	8.1	8.2	94.0	349	--	--
38	--	--	--	--	18	1344	14.3	8.0	7.3	88.5	347	--	--
39	--	--	--	--	5	1349	14.1	8.1	8.1	93.2	349	--	--
40	--	--	--	--	18	1354	14.4	8.1	7.9	89.0	353	--	--
41	--	--	--	--	12	1400	14.3	8.1	8.1	93.4	340	--	--
42	--	--	--	--	20	1404	14.5	8.1	8.0	93.4	353	--	--
43	--	--	--	--	12	1407	14.6	8.1	8.0	94.0	352	--	--
44A	344845.2	1064242.5	4858	37.6	5	1415	14.4	8.1	--	92.1	341	--	Northeast corner.
44B	344845.2	1064242.5	4858	37.6	4	1417	14.4	8.1	7.9	92.3	339	--	Northwest corner.
44C	344845.2	1064242.5	4858	37.6	5	1420	14.5	8.1	7.9	92.3	294	--	Southwest corner.
44D	344845.2	1064242.5	4858	37.6	3	1421	14.4	8.1	7.9	92.0	347	--	Southeast corner.
45	344844.2	1064243.8	4868	20.9	10	1424	14.4	8.1	7.9	92.6	347	--	--
46	344843.8	1064245.0	4851	20.5	14	1426	14.2	8.1	7.9	92.1	345	--	--
47	344842.5	1064847.8	4858	22.8	8	1434	14.3	7.9	5.4	61.1	348	--	--
48	344907.3	1064243.8	4861	29.0	12	1509	14.8	8.0	7.1	83.9	346	--	Embayment

Table 7.7.3.--Seine haul data for Rio Grande at Los Lunas on December 17, 2003

[#, number; --, no data; ft, feet; in, inch; °C, degrees Celsius; mg/L, milligram per liter; % sat, percent saturation; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units.]

Seine haul #	Latitude (North)	Longitude (West)	Elevation (ft)	Error (+/- ft)	Probe depth (in)	Time	Water temp. (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
1	344921.3	1064248.3	4870	16.7	4	0922	7.2	8.2	9.4	93.3	413	--	--
2	344920.7	1064249.6	4864	27.0	7	0925	7.4	8.2	10.3	103	414	--	--
3	344920.0	1064249.3	4829	16.1	8	0932	7.6	8.3	10.0	101	411	--	--
4	344920.2	1064247.7	4825	18.3	5	0943	7.6	8.2	10.4	105	413	--	--
5	344918.8	1064247.5	4854	21.3	3	0948	8.0	8.7	15.2	154	422	--	--
6	344918.2	1064248.2	4840	17.6	9	0954	8.0	8.3	10.3	106	413	--	--
7	344918.0	1064247.5	4840	21.6	9	0958	7.7	8.4	12.2	124	410	--	--
8	344916.7	1064245.7	4884	30.4	5	1004	7.9	8.1	10.3	103	414	--	--
9	344915.7	1064245.3	4854	30.2	12	1008	7.6	8.2	10.2	103	416	--	--
10	344915.8	1064246.0	4892	17.9	6	1015	8.2	8.6	14.1	144	412	--	--
11	344915.6	1064246.8	4879	17.1	7	1018	8.1	8.2	10.0	102	416	--	--
12	344914.1	1064247.4	4872	21.2	9	1022	8.0	8.1	13.6	109	419	--	--
13	344913.6	1064246.7	4856	13.4	15	1027	8.0	8.1	9.9	100	419	--	--
14	344912.4	1064245.8	4848	19.4	5	1032	8.0	8.2	9.9	100	325	--	--
15	344911.3	1064244.8	4831	18.4	4	1036	8.0	8.2	9.9	101	419	--	--
16	344910.9	1064244.4	4842	31.2	8	1040	7.8	7.7	9.6	97.3	419	--	--
17	344908.7	1064243.7	4859	13.1	17	1048	8.1	8.2	10.0	102	419	--	--
18	344908.3	1064243.1	4875	12.8	12	1052	8.1	8.3	10.5	108	418	--	--
19	344907.8	1064241.8	4885	17.2	10	1059	8.1	8.3	10.8	110	419	--	--
20	344907.4	1064242.9	4863	25.7	3	1104	8.2	7.8	8.8	88.5	420	--	--
21	344907.5	1064241.8	4858	20.4	10	1108	8.2	8.3	10.7	110	419	--	--
22	344904.2	1064242.9	4872	14.7	6	1119	8.2	7.6	9.6	98.8	557	--	--
23	344907.0	1064244.0	4858	20.0	4	1126	8.6	8.3	9.4	97.9	402	--	Embayment.
24	344904.3	1064241.2	4859	33.5	6	1235	9.9	9.0	15.3	161	459	--	--
25	344903.3	1064242.4	4865	8.5	17	1240	9.1	8.4	11.0	115	420	--	--
26	344902.6	1064241.3	4842	37.2	3	1247	9.0	8.5	10.0	104	421	--	--
27	344902.9	1064240.2	4842	30.1	3	1250	9.6	9.0	15.3	162	407	--	--
28	344902.2	1064241.1	4919	30.7	6	1302	9.1	8.2	10.0	112	416	--	--
29	344901.3	1064241.5	4829	21.7	15	1307	9.1	8.4	10.5	110	421	--	--
30	344859.7	1064241.8	4862	30.8	18	1313	9.1	8.3	10.3	108	422	--	--
31	344859.4	1064240.7	4801	24.1	3	1317	9.0	8.4	10.2	107	423	--	--
32	344858.9	1064240.4	4837	26.0	12	1322	9.1	8.3	10.1	105	420	--	--

Table 7.7.3.--Seine haul data for Rio Grande at Los Lunas on December 17, 2003

Seine haul #	Latitude (North)	Longitude (West)	Elevation (ft)	Error (+/- ft)	Probe depth (in)	Time	Water temp. (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
33	344859.1	1064239.8	4842	27.4	8	1328	9.0	7.6	9.2	94.4	431	--	--
34	344858.0	1064240.6	4839	20.1	6	1333	9.0	8.6	10.2	111	557	--	--
35	344855.6	1064240.8	4884	23.4	17	1341	9.0	8.4	10.5	111	424	--	--
36	344855.8	1064240.6	4832	35.1	24	1346	9.0	8.3	10.3	107	423	--	--
37	344855.0	1064239.9	4854	26.5	24	1352	9.0	8.5	10.5	110	423	--	--
38	344854.8	1064239.6	4879	54.6	12	1401	9.0	8.4	10.6	110	423	--	--
39	344853.4	1064239.0	4828	111.0	12	1405	8.7	8.1	11.6	121	417	--	Discretionary.
40	344852.0	1064239.0	4862	42.2	18	1411	9.0	8.4	9.6	104	424	--	--
41	344851.9	1064241.0	4870	27.8	10	1415	9.1	8.3	9.6	100	423	--	--
42	344850.4	1064240.1	4799	72.5	18	1418	9.1	8.2	9.7	101	425	--	--
43	344850.0	1064241.1	4868	79.9	6	1422	9.3	8.3	9.7	99.1	344	--	--
44	344849.6	1064241.3	4850	19.4	18	1427	9.2	8.2	9.3	99.2	425	--	Discretionary.
45	344849.0	1064242.4	4870	65.5	3	1431	9.6	8.5	9.7	100	388	--	--
46	344849.5	1064241.2	4863	19.7	15	1435	9.2	8.2	8.2	85.8	413	--	--
47	344848.2	1064241.5	4945	26.6	18	1440	9.2	8.3	9.7	102	427	--	--
48	344847.5	1064240.9	4872	39.4	24	1445	9.2	8.4	10.4	109	425	--	--
49	344847.4	1064241.2	4850	31.6	24	1451	9.2	8.3	10.1	106	424	--	--
50	344846.2	1064242.0	4852	34.9	18	1457	9.2	8.3	9.9	105	423	--	--
51	344850.4	1064244.2	4833	62.4	6	1504	9.1	8.2	9.6	100	410	--	--

Table 7.7.4--Seine haul data for Rio Grande at Los Lunas on February 26, 2003

[#, number; --, no data; ft, feet; in, inch; °C, degrees Celsius; mg/L, milligram per liter; % sat, percent saturation; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units.]

Seine haul #	Latitude (North)	Longitude (West)	Elevation (ft)	Error (+/- ft)	Probe depth (in)	Time	Water temp (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
1	344921.1	1064247.4	4842	18.0	13	1040	7.5	8.0	9.7	95.6	326	--	--
2	344920.4	1064246.7	4855	17.6	15	1044	7.5	8.1	9.7	95.7	327	--	--
3	344919.9	1064247.9	4830	16.5	8	1052	8.1	7.5	2.8	25.3	461	--	--
4	344920.0	1064247.1	4852	16.5	6	1055	8.0	8.1	9.1	90.4	320	--	--
5	344919.4	1064246.4	4860	17.3	15	1059	7.9	8.1	9.6	95.8	328	--	--
6	344918.2	1064246.3	4861	16.6	16	1103	8.0	8.1	4.8	97.3	326	--	--
7	344917.3	1064245.9	4882	17.4	6	1108	9.8	8.0	8.8	91.9	340	--	--
8	344917.5	1064246.6	4824	23.6	7	1114	9.5	8.1	9.3	96.6	403	--	--
9	344916.3	1064247.0	4835	18.3	9	1117	6.9	7.4	4.2	40.2	392	--	--
10	344915.3	1064247.1	4852	22.4	5	1122	11.2	7.6	2.1	22.1	391	--	--
11	344914.2	1064245.8	4854	39.0	7	1126	8.4	8.1	9.5	95.5	330	--	--
12	344913.2	1064244.7	4852	16.2	10	1133	8.4	8.1	9.7	97.8	331	--	--
13	344913.0	1064243.8	4848	17.3	16	1140	8.6	8.1	9.7	97.7	331	--	--
14	344912.0	1064244.1	4884	17.4	4	1144	13.9	7.6	1.7	18.3	334	--	--
15	344911.2	1064245.0	4882	22.3	1	1147	9.0	8.1	9.3	95.1	331	--	--
16	344911.0	1064243.4	4876	21.2	20	1152	8.8	8.1	9.5	96.4	331	--	--
17	344911.3	1064243.6	4883	49.2	12	1159	8.8	8.1	9.7	98.3	281	--	--
18	344911.3	1064243.6	4883	49.2	4	1206	8.7	7.4	2.0	19.3	353	--	--
19	344911.3	1064243.6	4883	49.2	4	1214	9.1	8.2	9.2	93.8	332	--	--
20	344911.3	1064243.6	4883	49.2	15	1218	9.0	8.1	9.4	95.1	303	--	--
21	344911.3	1064243.6	4883	49.2	14	1221	8.9	8.1	9.6	97.6	332	--	--
22	344911.3	1064243.6	4883	49.2	5	1226	10.5	7.3	1.4	12.7	407	--	--
23	344911.3	1064243.6	4883	49.2	6	1329	8.7	8.1	8.8	89.0	329	--	--
24	344911.3	1064243.6	4883	49.2	11	1334	8.5	8.1	9.4	94.9	334	--	--
25	344911.3	1064243.6	4883	49.2	10	1338	8.5	8.1	9.1	92.2	334	--	--
26	344911.3	1064243.6	4883	49.2	14	1344	8.5	8.1	9.4	93.8	334	--	--
27	--	--	--	--	13	1348	8.4	8.1	9.5	96.1	337	--	GPS display bad; low battery.
28	--	--	--	--	8	1354	8.4	8.1	9.5	95.8	337	--	--
29	--	--	--	--	5	1358	8.3	8.1	9.5	95.7	180	--	Batteries changed.
30	--	--	--	--	22	1403	8.3	8.1	9.5	95.1	332	--	--
31	344901.7	1064242.9	4861	33.2	14	1409	8.3	8.1	9.6	97.0	339	--	--

Table 7.7.4--Seine haul data for Rio Grande at Los Lunas on February 26, 2003

Seine haul #	Latitude (North)	Longitude (West)	Elevation (ft)	Error (+/- ft)	Probe depth (in)	Time	Water temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
32	344901.1	1064242.6	4865	20.3	22	1422	8.3	8.1	9.6	96.1	338	--	--
33	344859.5	1064240.0	4857	18.8	13	1428	8.8	8.2	9.3	94.3	327	--	--
34	344858.4	1064240.4	4876	26.3	4	1433	8.3	8.1	9.5	95.6	337	--	--
35	344857.6	1064240.1	4838	36.1	5	1441	8.3	8.1	9.5	94.3	337	--	--
36	344856.5	1064239.8	4848	21.3	6	1445	8.1	8.1	9.4	92.8	337	--	--
37	344855.3	1064239.9	4825	41.4	6	1451	8.2	8.1	9.6	95.3	329	--	--
38	344854.8	1064241.2	4823	17.5	8	1457	8.1	8.1	9.0	87.7	336	--	--
39	344854.4	1064239.9	4810	17.0	6	1500	8.2	8.1	9.5	95.5	337	--	--
40	344853.4	1064240.7	4863	18.4	10	1506	8.2	8.1	9.4	94.0	338	--	--
41	344852.2	1064240.3	4840	15.9	8	1510	8.3	8.1	9.6	95.4	319	--	--
42	344851.1	1064240.1	4888	33.7	13	1518	8.4	8.1	9.5	96.2	338	--	--
43	344850.5	1064240.6	4878	20.2	16	1523	8.5	8.1	9.4	95.0	339	--	--
44	344850.9	1064241.0	4825	15.8	13	1526	8.4	8.2	8.9	89.8	336	--	--
45	344850.1	1064239.6	4912	20.8	20	1531	8.5	8.2	9.4	94.5	338	--	--
46	344849.9	1064241.0	4869	11.1	11	1536	8.6	8.2	9.5	96.4	340	--	--
47	344849.6	1064239.6	4864	31.3	20	1543	8.5	8.1	9.2	90.7	334	--	--
47	344849.4	1064239.6	4864	30.9	22	1545	8.5	8.1	8.0	85.7	339	--	--
47	--	--	--	--	17	1547	8.5	8.1	9.0	90.7	338	--	--
47	344851.3	1064240.9	4823	--	20	1550	8.5	7.8	8.6	84.8	338	--	--
48	344853.8	1064241.3	4860	15.3	7	1555	8.4	8.1	6.2	60.3	333	--	--
49	344905.1	1064247.6	4872	20.3	15	1607	8.7	8.2	9.5	96.3	334	--	--
50	344904.6	1064247.2	4839	15.5	13	1612	8.7	8.2	9.2	93.6	344	--	--

Table 7.8.1.--Seine haul data for Rio Grande at Abeytas on September 12, 2002

[#, number; --, no data; ft, feet; in, inch; °C, degrees Celsius; mg/L, milligram per liter; % sat, percent saturation; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units.]

Seine haul #	Latitude (North)	Longitude (West)	Elev (ft)	Error (+/- ft)	Probe depth (in)	Time	Water temp. (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
1	342712.3	1064759.6	4784	14.8	6	0908	18.2	7.9	7.1	89.0	402	--	--
2	342711.2	1064801.5	4786	36.2	6	0913	18.1	7.9	7.2	90.6	403	--	--
3	342710.5	1064802.5	4763	22.3	12	0916	18.2	7.9	7.1	90.3	401	--	--
4	342709.5	1064803.3	4758	30.0	12	0922	18.2	7.9	7.3	90.6	401	--	--
5	342709.1	1064804.5	4750	46.8	3	0928	18.3	8.0	6.5	80.8	--	--	--
6	342708.4	1064805.1	4744	26.8	6	0932	18.5	7.9	7.0	89.5	403	--	--
7	342707.2	1064806.1	4751	33.7	6	0934	18.5	7.9	6.7	84.1	404	--	--
8	342706.9	1064807.0	4743	27.0	12	0939	18.7	7.9	6.7	84.1	404	--	--
9	342705.7	1064807.2	4730	38.3	18	0943	18.3	7.9	7.2	89.9	403	--	--
10	342704.5	1064807.3	4758	17.5	12	0946	18.3	7.9	7.2	89.3	404	--	--
11	342703.4	1064807.2	4787	24.1	12	0950	18.4	7.9	6.9	87.5	404	--	--
12	342702.2	1064807.4	4713	27.9	18	0956	18.4	7.9	7.0	88.4	403	--	--
13	342701.6	1064808.1	4738	49.0	18	1002	18.9	7.9	7.0	90.1	403	--	--
14	342700.4	1064808.6	4742	17.0	12	1005	18.2	7.9	7.1	90.6	403	--	--
15	342659.2	1064808.9	4738	46.4	12	1010	18.7	8.0	7.2	91.0	402	--	--
16	342658.2	1064809.4	4750	40.3	12	1013	18.7	8.0	7.2	91.1	404	--	--
17	342657.1	1064809.7	4717	22.5	12	1018	18.8	8.0	7.1	89.6	403	--	--
18	342656.2	1064810.6	4714	21.7	12	1024	19.1	8.0	7.1	90.3	402	--	--
19	342655.6	1064812.1	4731	41.2	6	1027	19.3	7.9	6.9	88.3	403	--	--
20	342655.1	1064813.5	4718	39.2	6	1033	19.4	8.0	6.7	85.1	402	--	--
21	342655.1	1064814.8	4734	36.0	12	1041	19.6	7.9	6.8	86.3	399	--	--
22	342653.8	1064815.0	4742	53.9	6	1044	19.8	8.0	6.8	87.3	401	--	--
23	342651.8	1064814.9	4743	33.7	12	1050	19.9	7.9	7.0	90.3	401	--	--
24	342650.9	1064814.8	4743	20.6	12	1053	19.7	8.0	6.9	89.0	401	--	--
25	342649.5	1064813.1	4751	28.8	3	1100	19.9	7.9	6.7	86.1	403	--	--
26	342649.9	1064812.5	4734	17.0	12	1104	19.4	7.9	6.8	88.4	402	--	--
27	342649.7	1064813.6	4723	34.5	6	1152	21.0	7.8	7.1	97.1	401	--	--
28	342648.2	1064813.4	4763	62.0	5	1154	21.5	7.9	6.8	91.2	401	--	--
29	342647.3	1064813.2	4768	21.6	6	1159	21.2	7.9	6.6	88.8	401	--	--
30	342647.3	1064814.3	4708	33.0	6	1202	21.2	7.8	6.6	87.2	401	--	--
31	342646.1	1064815.1	4779	27.1	18	1206	21.4	7.9	6.9	92.6	399	--	--
32	342645.7	1064814.2	4740	36.3	2	1212	23.3	7.9	6.6	91.1	415	--	--

Table 7.8.1.--Seine haul data for Rio Grande at Abeytas on September 12, 2002

Seine haul #	Latitude (North)	Longitude (West)	Elev (ft)	Error (+/- ft)	Probe depth (in)	Time	Water temp. (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
33	342645.3	1064813.1	4727	19.2	12	1216	21.3	7.9	6.8	89.9	401	--	--
34	342644.0	1064843.9	4737	16.8	12	1220	21.2	7.8	6.6	90.0	400	--	--
35	342642.9	1064812.8	4733	41.3	12	1223	21.1	7.9	6.9	91.5	402	--	--
36	342641.6	1064812.4	4753	34.2	12	1227	21.7	7.9	6.7	89.5	401	--	--
37	342640.8	1064813.4	4744	17.1	18	1232	21.8	7.9	6.6	90.0	401	--	--
38	342639.9	1064814.2	4726	25.4	18	1238	22.0	7.9	6.6	90.1	398	--	--
39	342639.6	1064812.9	4766	12.3	3	1243	21.6	7.8	6.4	82.3	402	--	--
40	342638.7	1064811.4	4767	34.3	3	1256	21.7	7.9	6.4	86.4	399	--	--
41	342638.2	1064812.5	4705	23.9	12	1301	21.9	7.9	6.4	86.8	398	--	--
42	342637.6	1064813.8	4719	16.0	12	1304	22.3	7.8	6.4	87.4	398	--	--
43	342637.2	1064812.5	4792	28.2	3	1310	22.4	7.8	6.0	81.0	402	--	--
44	342636.1	1064812.5	4708	27.3	--	1314	22.4	7.8	6.4	86.5	398	--	--
45	342635.0	1064812.8	4786	72.3	18	1319	22.4	7.8	6.6	90.2	396	--	--
46	342639.3	1064811.9	--	--	12	1325	22.3	7.9	6.3	86.1	397	--	--
47	342644.0	1064812.0	4786	25.0	12	1336	21.8	7.8	6.0	79.3	399	--	--
48	342701.1	1064809.5	--	--	18	1350	22.0	7.8	5.9	80.5	393	--	--

Table 7.8.2--Seine haul data for Rio Grande at Abeytas on January 16, 2003

[#, number; --, no data; ft, feet; in, inch; °C, degrees Celsius; mg/L, milligram per liter; % sat, percent saturation; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units.]

Seine haul #	Latitude (North)	Longitude (West)	Elevation (ft)	Error (+/- ft)	Probe depth (in)	Time	Water temp (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
1	342712.1	1064800.3	4717	18.6	32	0944	4.0	8.1	10.9	96.8	386	--	--
2	342711.6	1064801.4	4737	17.1	9	0948	4.0	8.1	10.5	93.9	386	--	--
3	342710.8	1064802.4	4733	18.9	3	0951	4.3	8.0	9.8	87.9	386	--	--
4	342709.3	1064803.0	4726	25.4	20	0956	4.0	8.1	10.4	92.7	385	--	--
5	342709.7	1064804.1	4724	25.6	2	0958	5.2	8.4	9.8	85.5	383	--	--
6	342708.8	1064804.2	4722	19.0	18	1001	4.2	8.2	10.5	94.1	386	--	--
7	342708.6	1064806.0	4726	16.1	6	1005	4.8	8.2	10.9	98.8	385	--	--
8	342707.8	1064805.5	4741	16.9	8	1009	4.3	8.1	9.8	87.1	386	--	--
9	342706.8	1064804.7	4747	18.1	15	1013	4.1	8.1	10.3	92.6	385	--	--
10	342705.7	1064804.6	4757	20.6	8	1018	4.0	7.4	10.5	93.6	385	--	--
11	342705.7	1064806.0	4759	19.1	12	1020	4.3	8.1	9.9	87.7	382	--	--
12	342704.9	1064805.8	4753	22.7	6	1024	4.3	8.1	10.2	91.6	386	--	--
13	342705.1	1064806.3	4748	17.1	6	1028	4.5	8.2	10.2	92.5	387	--	--
14	342704.0	1064808.0	4749	33.9	30	1032	4.6	8.1	10.5	95.4	387	--	--
15	342703.1	1064808.7	4755	26.4	10	1035	4.8	8.2	10.6	96.3	385	--	--
16	342702.6	1064810.5	4752	13.6	36	1040	5.0	8.2	10.7	97.5	387	--	--
17	342701.9	1064811.4	4734	16.4	6	1045	5.0	8.2	9.5	86.5	388	--	--
18	342701.0	1064811.1	4719	20.4	6	1051	5.1	8.2	8.8	80.2	386	--	--
19	342700.1	1064811.3	4715	21.2	9	1055	5.8	8.3	10.2	98.8	397	--	--
20	342659.7	1064812.6	4695	21.5	24	1101	5.2	8.2	10.1	93.3	387	--	--
21	342658.4	1064812.9	4687	62.4	24	1105	5.2	8.2	10.7	98.3	387	--	--
22	342657.6	1064812.0	4701	50.1	4	1107	5.3	8.2	10.7	98.5	387	--	--
23	342657.0	1064810.8	4701	42.2	2	1112	5.4	8.2	10.3	95.0	384	--	--
24	342656.7	1064812.2	4705	30.3	30	1117	5.5	8.2	10.7	98.5	387	--	--
25	342655.7	1064812.7	4717	26.7	36	1122	5.7	8.2	10.8	98.8	387	--	--
26	342655.2	1064813.7	4703	25.1	3	1132	5.8	8.2	10.3	96.4	359	--	--
27	342654.3	1064813.6	4710	16.3	4	1136	5.8	8.2	10.7	96.6	384	--	--
28	342653.6	1064814.5	4719	14.5	4	1139	6.5	7.8	9.5	88.8	417	--	--
29	342653.2	1064815.5	4727	36.6	36	1147	6.0	8.3	10.3	95.3	388	--	--
30	342652.7	1064815.1	4718	13.9	12	1149	6.6	8.3	10.2	97.9	387	--	--
31	342651.6	1064815.2	4740	29.2	12	1255	7.2	8.2	10.1	94.5	387	--	--
32	342650.8	1064814.3	4740	31.7	36	1258	7.4	8.2	11.0	107	388	--	--

Table 7.8.2--Seine haul data for Rio Grande at Abeytas on January 16, 2003

Seine haul #	Latitude (North)	Longitude (West)	Elevation (ft)	Error (+/- ft)	Probe depth (in)	Time	Water temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
33	342650.3	1064813.6	4737	16.6	3	1303	7.3	7.9	10.1	97.0	387	--	--
34	342649.3	1064813.2	4736	18.1	3	1306	7.5	8.2	10.1	97.8	387	--	--
35	342648.9	1064812.2	4740	9.6	3	1309	7.2	8.2	10.8	105	387	--	--
36	342647.7	1064811.4	4751	9.7	6	1312	7.3	8.2	10.7	104	387	--	--
37	342647.1	1064811.5	4730	19.4	3	1317	7.4	8.2	10.5	102	366	--	--
38	342646.6	1064812.6	4747	23.4	6	1322	7.5	8.2	10.2	99.3	388	--	--
39	342646.1	1064812.8	4747	16.9	2	1326	7.7	8.2	10.7	104	388	--	--
40	342644.9	1064813.9	4717	43.2	24	1332	7.7	8.2	10.5	102	388	--	--
41	342644.2	1064813.2	4725	31.3	24	1337	7.8	8.2	10.5	103	388	--	--
42	342643.6	1064813.9	4755	11.9	7	1340	7.8	8.3	9.7	94.6	388	--	--
43	342642.8	1064814.9	4733	21.3	15	1347	7.7	8.3	10.8	105	389	--	--
44	342641.9	1064814.3	4737	17.3	43	1351	7.9	8.3	10.8	106	389	--	--
45	342640.9	1064814.0	4739	17.3	26	1403	8.0	8.3	10.9	109	389	--	--
46	342640.4	1064813.0	4724	32.1	9	1409	8.2	8.3	10.2	99.2	301	--	--
47	342639.4	1064813.6	4727	19.5	20	1413	8.1	8.3	10.2	95.3	388	--	--
48D	342644.3	1064811.6	4736	39.6	9	1423	7.8	8.0	10.1	97.9	394	--	Discretionary.
49D	342653.7	1064813.0	4679	22.7	10	1437	8.4	8.3	10.5	105	389	--	Discretionary.
50D	342654.2	1064811.8	4696	18.1	5	1440	9.3	8.4	10.1	104	384	--	Discretionary.
51	342701.5	1064809.1	4686	21.9	9	1452	8.6	7.5	9.9	95.4	389	--	Embayment.

Table 7.9.1.--Seine haul data for Rio Grande at Lower San Juan Drain on August 5, 2002

[#, number; --, no data; ft, feet; in, inch; °C, degrees Celsius; mg/L, milligram per liter; % sat, percent saturation; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units.]

Seine haul #	Latitude (North)	Longitude (West)	Elevation (ft)	Error (+/-)	Probe depth (in)	Time	Water temp. (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
1	342216.2	1065026.5	4714	--	6	0936	21.8	8.0	6.3	83.9	676	--	--
2	342215.4	1065025.1	4713	--	8	0942	21.3	8.0	5.6	73.0	683	--	--
3	342215.6	1065024.7	4710	--	5	0945	21.3	8.0	6.0	79.7	679	--	--
4	342215.6	1065024.3	4712	--	7	0952	21.0	8.0	6.4	84.1	680	--	--
5	342216.5	1065025.7	4726	--	4	1144	26.9	7.8	3.4	49.3	688	--	Embayment.

Table 7.9.2.--Seine haul data for Lower San Juan Drain on January 27, 2003

[#, number; --, no data; ft, feet; in, inch; °C, degrees Celsius; mg/L, milligram per liter; % sat, percent saturation; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units.]

Seine haul #	Latitude (N)	Longitude (W)	Elevation	Error (+/- ft)	Probe depth	Time	Water temp (°C)	pH	DO (mg/L)	DO (%)	SPC	Turbidity	Comments
1	342216.2	1065029.9	4732	70.6	14	1125	7.6	7.9	7.9	77.1	514	--	--
2	342216.5	1065029.6	4697	35.0	14	1133	7.8	7.9	8.6	85.0	514	--	--
3	342216.7	1065027.6	4679	70.9	4	1141	8.2	7.9	8.7	86.0	515	--	--
4	342216.0	1065026.0	4711	35.5	7	1205	8.4	7.9	8.6	86.4	515	--	--
5	342216.5	1065027.6	4692	17.6	10	1216	8.6	7.9	8.6	86.9	515	--	--

Table 7.10.1--Seine haul data for Rio Grande La Joya on July 23, 2002

[#, number; --, no data; ft, feet; in, inch; °C, degrees Celsius; mg/L, milligram per liter; % sat, percent saturation; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units.]

Seine haul #	Latitude (North)	Longitude (West)	Elevation (ft)	Error (+/- ft)	Probe depth (in)	Time	Water temp. (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
1	341914.8	1065110.9	--	--	--	1606	27.6	7.9	6.2	--	525	--	Shoreline.
2	341913.7	1065111.3	--	--	--	1607	27.1	8.0	6.2	--	527	--	--
3	341912.9	1065112.5	--	--	--	1609	27.0	8.0	5.6	--	527	--	--
4	341911.7	1065112.5	--	--	--	1612	26.9	8.0	6.1	--	529	--	Upper left.
4	341911.7	1065112.5	--	--	--	1611	27.1	8.0	6.0	--	527	--	Upper right.
4	341911.7	1065112.5	--	--	--	1613	26.9	8.0	6.1	--	530	--	Lower left.
4	341911.7	1065112.5	--	--	--	1614	27.0	8.0	6.1	--	529	--	Lower right.
5	341911.3	1065113.6	--	--	--	1615	27.0	8.0	6.0	--	528	--	--
6	341910.9	1065114.4	--	--	--	1618	26.9	8.0	5.9	--	527	--	--
7	341910.3	1065113.4	--	--	--	1619	27.0	8.0	6.0	--	528	--	--
8	341909.4	1065112.6	--	--	--	1621	27.0	8.0	5.8	--	529	--	Upper left.
8	341909.4	1065112.6	--	--	--	1622	27.0	8.0	6.0	--	529	--	Upper right.
8	341909.4	1065112.6	--	--	--	1623	27.0	8.0	5.9	--	529	--	Lower left.
8	341909.4	1065112.6	--	--	--	1622	27.0	8.0	6.0	--	529	--	Lower right.
9	341909.2	1065113.5	--	--	--	1624	27.1	8.0	6.0	--	523	--	--
10	341907.2	1065113.8	--	--	--	1626	27.3	8.1	5.9	--	523	--	--
11	341906.1	1065117.2	--	--	--	1629	32.1	8.3	6.4	--	511	--	--
12	341903.9	1065115.5	--	--	--	1632	27.6	8.1	6.0	--	521	--	--
13	341902.9	1065114.9	--	--	--	1634	28.0	8.1	5.3	--	522	--	Upper left.
13	341902.9	1065114.9	--	--	--	1635	27.9	8.1	5.4	--	523	--	Upper right.
13	341902.9	1065114.9	--	--	--	1636	27.8	8.1	5.4	--	521	--	Lower left.
13	341902.9	1065114.9	--	--	--	1637	27.8	8.1	5.6	--	520	--	Lower right.
14	341901.7	1065114.7	--	--	--	1639	27.4	8.1	5.9	--	521	--	--
15	341900.2	1065114.5	--	--	--	1640	27.5	8.1	5.9	--	522	--	--
16	341859.8	1065115.7	--	--	--	1642	27.9	8.1	6.0	--	524	--	--
17	341859.1	1065115.6	--	--	--	1644	28.0	8.1	5.7	--	522	--	--
18	341858.3	1065116.2	--	--	--	1646	27.8	8.1	5.4	--	524	--	--
19	341856.3	1065115.0	--	--	--	1650	27.7	8.1	6.0	--	524	--	--
20	341855.7	1065116.0	--	--	--	1505	29.7	7.8	10.5	--	543	--	In island; upper left.
20	341855.7	1065116.0	--	--	--	1504	30.0	7.9	4.3	--	550	--	Upper right.
20	341855.7	1065116.0	--	--	--	1501	30.4	8.0	4.5	--	541	--	Lower left.
20	341855.7	1065116.0	--	--	--	1502	30.0	7.9	4.5	--	553	--	Lower right.

Table 7.10.1--Seine haul data for Rio Grande La Joya on July 23, 2002

Seine haul #	Latitude (North)	Longitude (West)	Elevation (ft)	Error (+/- ft)	Probe depth (in)	Time	Water temp. (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
21	341854.4	1065115.5	--	--	--	1450	26.6	8.1	6.4	--	516	--	Upper left.
21	341854.4	1065115.5	--	--	--	1454	26.6	8.1	6.5	--	516	--	Upper right.
21	341854.4	1065115.5	--	--	--	1454	26.7	8.1	6.4	--	516	--	Lower left.
21	341854.4	1065115.5	--	--	--	1452	26.5	8.1	6.4	--	516	--	Lower right.
22	341853.4	1065116.3	--	--	--	1441	26.1	8.1	6.4	--	519	--	Upper left.
22	341853.4	1065116.3	--	--	--	1445	26.3	8.1	6.4	--	517	--	Upper right.
22	341853.4	1065116.3	--	--	--	1443	26.3	8.1	6.4	--	515	--	Lower left.
22	341853.4	1065116.3	--	--	--	1444	26.3	8.1	6.4	--	516	--	Lower right.
23	341852.3	1065115.1	--	--	--	1436	25.7	8.1	6.4	--	517	--	Near shallow island; upper left.
23	341852.3	1065115.1	--	--	--	1435	26.0	8.1	6.5	--	517	--	Near shallow island; upper right.
23	341852.3	1065115.1	--	--	--	1431	26.0	8.1	6.2	--	517	--	Near shallow island; lower left.
23	341852.3	1065115.1	--	--	--	1434	25.9	8.1	6.5	--	518	--	Near shallow island; lower right.
24	341851.1	1065114.7	--	--	--	1426	25.6	8.1	6.6	--	--	--	Upper left; relatively deep.
24	341851.1	1065114.7	--	--	--	1428	25.6	8.1	6.5	--	--	--	Upper right; relatively deep.
24	341851.1	1065114.7	--	--	--	1427	25.5	8.1	6.5	--	--	--	Lower left; relatively deep.
24	341851.1	1065114.7	--	--	--	1429	25.7	8.1	6.4	--	--	--	Lower right; relatively deep.
25	341849.7	1065114.5	--	--	--	1657	27.6	8.1	6.0	--	524	--	Upper left.
25	341849.7	1065114.5	--	--	--	1656	27.7	8.1	5.9	--	523	--	Upper right.
25	341849.7	1065114.5	--	--	--	1657	27.6	8.1	6.0	--	524	--	Lower left.
25	341849.7	1065114.5	--	--	--	1658	27.6	8.1	6.0	--	523	--	Lower right.
26	341848.3	1065114.2	--	--	--	1700	27.6	8.1	5.9	--	522	--	--
27	341847.9	1065113.0	--	--	--	1701	27.1	8.1	5.9	--	533	--	--
28	341847.1	1065113.1	--	--	--	1703	27.0	8.1	5.9	--	533	--	--
29	341846.3	1065113.7	--	--	--	1705	27.4	8.1	5.8	--	521	--	--
30	341845.7	1065112.5	--	--	--	1708	27.1	8.1	5.9	--	530	--	--

Table 7.10.1--Seine haul data for Rio Grande La Joya on July 23, 2002

Seine haul #	Latitude (North)	Longitude (West)	Elevation (ft)	Error (+/- ft)	Probe depth (in)	Time	Water temp. (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
31D	341845.5	1065112.1	--	--	--	1710	26.8	8.1	5.5	--	531	--	Discretionary; upper left.
31D	341845.5	1065112.1	--	--	--	1709	27.0	8.1	5.3	--	531	--	Discretionary; upper right.
31D	341845.5	1065112.1	--	--	--	1711	26.8	8.1	5.1	--	532	--	Discretionary; lower left.
31D	341845.5	1065112.1	--	--	--	1712	26.8	8.1	5.4	--	533	--	Discretionary; lower right.
32D	341844.8	1065110.0	--	--	--	1715	26.7	8.1	6.0	--	534	--	Discretionary.
33D	341844.1	1063109.5	--	--	--	1716	26.6	8.1	5.9	--	535	--	Discretionary.
34D	341843.0	1065108.7	--	--	--	1718	26.7	8.1	6.0	--	535	--	Discretionary.
35D	341842.3	1065108.2	--	--	--	1720	26.7	8.1	5.9	--	535	--	Discretionary.

Table 7.10.2--Seine haul data for Rio Grande La Joya on September 10, 2002

[#, number; --, no data; ft, feet; in, inch; °C, degrees Celsius; mg/L, milligram per liter; % sat, percent saturation; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units.]

Seine haul #	Latitude (North)	Longitude (West)	Elevation (ft)	Error (+/- ft)	Probe depth (in)	Time	Water temp. (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
1	341914.6	1065114.0	4686	14.3	--	0921	19.9	8.2	6.9	91.3	608	--	Raining.
2	341914.1	1065113.7	4701	20.4	--	0929	19.9	8.1	6.9	91.0	608	--	--
3	341913.6	1065114.6	4710	22.2	--	0933	19.9	8.2	7.1	92.9	605	--	--
4	341912.2	1065115.8	4695	31.5	--	0941	19.9	8.1	8.0	93.6	596	--	--
5	341911.3	1065115.8	4672	--	--	0946	19.7	6.9	6.7	--	876	--	--
6	341909.9	1065115.9	4668	--	--	0950	19.9	8.2	7.0	89.7	600	--	--
7	341909.1	1065114.7	4689	--	--	0954	20.0	7.0	0.2	2.1	655	--	--
8	--	--	--	--	--	--	--	--	--	--	--	--	--
9	341907.8	1065114.5	4688	--	--	0959	19.9	8.2	7.1	90.9	599	--	--
10	341906.8	1065114.3	4664	--	--	1005	19.9	8.2	7.0	90.9	599	--	--
11	341906.6	1065115.2	4715	--	--	1009	19.8	8.2	7.0	90.2	595	--	--
12	341905.6	1065114.8	4611	--	--	1016	19.8	8.2	7.0	90.0	591	--	--
13	341904.1	1065117.7	4689	--	--	1024	19.8	8.1	6.7	85.5	574	--	--
14	341902.6	1065117.9	4695	--	--	1028	19.6	8.2	6.8	87.5	532	--	Change of color in runoff.
15	341901.9	1065116.1	4693	--	--	1032	19.6	8.2	7.1	92.5	525	--	--
16	341901.5	1065115.8	4692	--	--	1034	19.6	8.2	6.0	72.4	530	--	--
17	341901.3	1065114.7	4701	--	--	1038	19.5	8.2	7.0	90.2	487	--	--
18	341901.0	1065115.1	4697	--	--	1042	19.5	8.1	6.9	90.1	504	--	--
19	341859.7	1065115.6	4678	--	--	1047	19.5	8.2	7.1	90.9	519	--	Dirty brown water.
20	341858.7	1065115.7	4689	--	--	1050	19.5	8.2	7.1	90.9	520	--	--
21	341858.4	1065114.5	4685	--	--	1055	19.4	8.1	6.7	86.9	484	--	--
22	341857.1	1065115.2	4695	--	--	1100	19.4	8.1	6.8	88.5	487	--	--
23	341856.2	1065115.7	4694	--	--	1104	19.1	8.1	6.7	86.8	416	--	--
24	341855.8	1065117.1	4696	--	--	1107	19.1	8.1	6.6	85.4	381	--	--
25	341854.2	1065116.6	4675	--	--	1114	18.9	8.1	6.5	82.9	355	--	--
26	341854.0	1065116.0	4676	--	--	1118	18.7	8.0	6.4	82.2	135	--	--
27	341853.3	1065117.1	4688	--	--	1125	18.6	8.1	6.6	82.0	267	--	--
28	341852.3	1065117.5	4752	--	--	1129	18.5	8.2	6.6	83.9	245	--	--
29	341851.3	1065117.2	4732	--	--	1135	18.5	8.2	6.7	85.2	239	--	--
30	341849.9	1065117.2	4667	--	--	1140	18.4	8.2	7.0	87.1	241	--	--
31	341849.6	1065116.7	4647	--	--	1144	18.4	8.2	7.0	87.9	244	--	--
32	341850.5	1065117.6	4635	--	--	1150	18.3	8.2	6.9	87.3	218	--	Embayment.

Table 7.10.2--Seine haul data for Rio Grande La Joya on September 10, 2002

Seine haul #	Latitude (North)	Longitude (West)	Elevation (ft)	Error (+/- ft)	Probe depth (in)	Time	Water temp. (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
33	341847.9	1065115.6	4680	--	--	1156	18.5	7.3	4.7	55.6	252	--	--
34	341846.9	1065114.3	4677	--	--	1203	18.4	8.2	6.7	85.5	225	--	--
35	341846.1	1065113.2	4675	--	--	1208	18.7	7.9	5.3	61.6	303	--	--
36	341845.7	1065114.4	4692	--	--	1211	18.5	8.2	7.0	87.6	254	--	--
37	341844.8	1065113.5	4712	--	--	1216	18.5	8.2	6.7	85.0	253	--	--
38	341844.0	1065112.9	4720	--	--	1220	18.6	8.2	7.0	87.9	276	--	--
39	341843.2	1065112.3	4701	--	--	1225	18.6	8.1	7.1	88.3	286	--	--
40	341842.7	1065113.0	4687	--	--	1230	18.9	7.9	5.6	68.7	352	--	--
41	341842.1	1065112.2	4684	--	--	1316	19.5	8.1	7.8	98.6	472	--	--
42	341839.4	1065112.3	4685	--	--	1322	19.6	8.1	6.8	85.0	475	--	--
43	341838.6	1065109.0	4695	--	--	1330	19.3	8.0	5.5	70.0	435	--	--
44	341837.2	1065111.6	4713	--	--	1336	19.8	8.0	6.9	87.3	505	--	--
45	341836.0	1065112.3	4712	--	--	1345	19.7	8.1	7.0	88.0	518	--	--
46	341836.0	1065110.2	4685	--	--	1347	19.8	8.0	6.7	85.5	490	--	--
47	341834.9	1065109.9	4698	--	--	1351	19.9	8.0	6.7	88.0	503	--	--
48	341834.5	1065110.4	4706	--	--	1355	19.8	8.0	6.7	88.0	508	--	--
49	341833.6	1065109.5	4695	--	--	1400	19.8	8.0	6.7	85.0	497	--	--
50	341833.1	1065108.4	4708	--	--	1406	19.8	8.0	6.8	88.0	471	--	--

Table 7.10.3.--Seine haul data for Rio Grande at La Joya on December 13, 2002

[#, number; --, no data; ft, feet; in, inch; °C, degrees Celsius; mg/L, milligram per liter; % sat, percent saturation; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units.]

Seine haul #	Latitude (North)	Longitude (West)	Elevation (ft)	Error (+/- ft)	Probe depth (in)	Time	Water temp. (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
1	341913.4	1065113.7	4704	22.3	12	0906	2.7	8.1	10.4	90.3	431	--	--
2	341912.2	1065114.4	4679	21.1	3	0910	3.1	8.2	9.8	86.8	435	--	--
3	341910.8	1065114.1	4725	25.8	18	0920	2.9	8.1	7.1	89.3	431	--	--
4	341909.9	1065115.6	4733	23.2	15	0925	2.8	8.2	10.3	89.1	426	--	--
5	341909.1	1065115.8	4704	16.1	15	0957	2.9	8.2	10.3	90.4	432	--	--
6	341908.5	1065116.5	4707	72.6	18	0959	3.1	8.3	9.9	87.7	432	--	--
7	341907.3	1065115.5	4713	29.1	12	1056	3.6	8.3	10.4	91.8	431	--	--
8	341906.8	1065114.6	4706	16.9	17	1101	3.7	8.3	10.5	93.3	368	--	--
9	341905.9	1065115.1	4707	50.9	15	1105	3.6	8.3	10.3	92.4	429	--	--
10	341904.8	1065115.4	4708	42.3	24	1109	3.7	8.3	10.2	91.3	432	--	--
11	341903.5	1065115.3	4708	26.2	15	1113	3.6	8.3	10.1	89.1	431	--	--
12	341902.6	1065115.9	4700	57.9	15	1115	3.7	8.3	10.3	92.3	432	--	--
13	341902.4	1065114.9	4700	24.1	9	1119	3.8	8.2	10.4	92.4	432	--	--
14	341901.4	1065114.0	4709	34.6	17	1123	3.9	8.3	10.3	92.3	433	--	--
15	341900.7	1065113.4	4714	22.0	20	1132	4.0	8.3	10.3	92.4	432	--	--
16	341900.2	1065114.3	4712	20.7	24	1135	4.0	8.3	10.0	90.7	432	--	--
17	341900.0	1065114.3	4714	16.1	8	1138	4.1	8.3	8.4	70.0	388	--	Discretionary.
18	341858.8	1065114.7	4713	25.6	6	1143	4.2	8.3	10.3	92.4	434	--	--
19	341858.5	1065115.8	4709	32.2	24	1146	4.2	8.3	10.2	91.9	301	--	--
20	341857.2	1065115.9	4713	36.1	9	1150	4.2	8.4	10.4	94.2	288	--	--
21	341856.1	1065115.8	4715	17.5	3	1153	4.4	8.4	9.3	84.5	430	--	--
22	341855.2	1065115.7	4708	17.6	9	1202	4.3	8.3	10.4	94.5	430	--	--
23	341853.9	1065115.8	4709	25.8	14	1210	4.4	8.3	10.4	94.5	431	--	--
24	341853.3	1065115.1	4704	20.1	24	1216	4.5	8.3	9.5	86.8	433	--	--
25	341852.3	1065116.2	4751	24.6	8	1328	5.4	8.4	--	--	432	--	--
26	341851.2	1065116.1	4715	21.1	24	1332	5.4	8.3	10.8	100.2	388	--	--
27	341850.6	1065115.4	4729	23.7	6	1337	5.5	8.4	10.3	96.1	434	--	--
28	341850.3	1065115.4	4719	30.9	4	1340	5.6	8.3	9.7	90.7	433	--	Embayment.
29	341849.5	1065114.6	4700	25.9	3	1345	5.6	8.4	9.7	89.4	433	--	--
30	341848.6	1065114.2	4712	37.2	6	1350	5.7	8.4	9.3	85.8	433	--	--
31	341847.6	1065114.6	4713	26.7	8	1354	5.6	8.4	9.8	82.2	419	--	--
32	341847.2	1065114.1	4724	18.0	9	1400	5.7	8.4	10.3	96.8	433	--	--
33	341845.8	1065113.4	4692	31.8	24	1403	5.7	8.4	10.7	100	426	--	--

Table 7.10.3.--Seine haul data for Rio Grande at La Joya on December 13, 2002

Seine haul #	Latitude (North)	Longitude (West)	Elevation (ft)	Error (+/- ft)	Probe depth (in)	Time	Water temp. (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
34	341845.2	1065113.0	4704	59.1	17	1407	5.7	8.4	10.7	100	430	--	--
35	341843.7	1065113.0	4701	25.8	24	1412	5.8	8.4	10.6	99.6	433	--	--
36	341842.2	1065112.3	4707	34.4	6	1416	5.8	8.4	10.2	96.2	432	--	--
37	341842.3	1065113.3	4706	31.3	15	1421	5.8	8.4	10.7	101	427	--	--
38	341841.0	1065112.9	4682	33.3	12	1426	5.8	8.4	10.6	100	432	--	--
39	341840.6	1065111.2	4714	62.7	3	1429	6.0	8.4	10.1	95.3	431	--	--
40	341840.4	1065110.9	4702	30.5	6	1431	6.3	8.4	9.6	89.0	435	--	Discretionary.
41	341840.3	1065112.2	4703	24.4	8	1438	6.0	8.4	10.6	99.8	432	--	--
42	341840.2	1065109.2	4704	19.2	6	1446	6.0	8.4	10.4	98.3	432	--	--
43	341840.7	1065111.3	4694	18.8	3	1450	6.1	8.4	10.4	99.9	432	--	--
44	341838.8	1065110.8	4688	22.2	3	1456	6.0	8.4	9.9	94.7	431	--	--
45	341837.5	1065111.8	4687	31.1	8	1504	6.0	8.5	9.9	92.5	429	--	--
46	341837.7	1065111.5	4683	27.6	8	1507	6.0	8.5	10.7	101	431	--	--
47	341837.0	1065110.5	4694	17.9	3	1513	6.3	8.5	99.7	101	433	--	--
48	341836.1	1065110.7	4667	51.9	12	1520	6.1	8.5	10.5	99.9	431	--	--
49	341835.6	1065109.7	4691	28.0	14	1525	6.2	8.5	10.3	98.8	359	--	--
50	341834.9	1065108.0	4686	22.9	3	1528	6.4	8.4	6.0	89.1	432	--	--
51	341834.5	1065107.1	4704	29.0	3	1532	7.7	9.0	12.8	128	425	--	--

Table 7.10.4.--Seine haul data for Rio Grande La Joya on February 25, 2003

[#, number; --, no data; ft, feet; in, inch; °C, degrees Celsius; mg/L, milligram per liter; % sat, percent saturation; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units.]

Seine haul #	Latitude (North)	Longitude (West)	Elevation (ft)	Error	Probe depth (in)	Time	Water temp. (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
1	341914.1	1065113.2	4650	27.0	18	0954	5.4	8.2	9.6	90.5	320	--	--
2	341913.5	1065114.9	4641	22.7	14	0957	5.4	8.2	9.7	90.6	319	--	--
3	341912.1	1065116.0	4672	25.9	12	1002	5.5	8.2	9.7	91.6	320	--	--
4	341911.6	1065117.0	4677	18.9	12	1005	5.4	8.2	9.8	91.3	320	--	--
5	341911.1	1065116.1	4676	47.0	16	1010	5.8	8.3	9.8	94.1	321	--	--
6	341910.2	1065114.6	4667	19.1	5	1014	6.8	8.2	15.4	150	320	--	--
7	341909.7	1065113.9	4675	21.1	16	1024	5.6	8.2	9.8	91.8	321	--	--
8	341908.7	1065115.0	4685	18.4	25	1030	5.6	8.2	9.7	91.1	322	--	--
9	341908.3	1065115.7	4660	17.9	8	1037	5.6	8.2	9.7	91.6	321	--	--
10	341906.9	1065115.7	4666	18.1	6	1042	6.8	7.9	8.7	85.2	321	--	--
11	341904.8	1065119.9	4696	15.6	3	1050	5.7	8.2	9.7	92.2	320	--	--
12	341903.7	1065119.2	4702	17.3	11	1055	5.7	8.2	9.9	91.9	320	--	--
13	341903.0	1065118.7	4688	16.1	9	1058	5.7	8.3	9.8	92.7	320	--	--
14	341903.3	1065116.4	4677	16.1	2	1105	8.7	8.6	12.2	123	314	--	--
15	341902.4	1065117.4	4669	17.1	4	1110	5.8	8.2	9.7	92.3	320	--	--
16	341901.5	1065117.0	4685	17.2	22	1116	5.8	8.2	9.0	85.3	320	--	--
17	341901.3	1065116.9	4695	16.0	9	1118	5.8	8.2	9.1	86.0	320	--	--
18	341900.5	1065117.2	4684	17.3	26	1126	5.8	8.2	9.8	92.4	320	--	--
19	341900.4	1065117.9	4685	16.8	4	1130	6.1	8.8	16.7	157	322	--	--
20	341900.0	1065117.3	4687	21.0	13	1136	5.9	8.3	9.8	92.6	320	--	--
21	341859.7	1065115.9	4691	17.8	14	1144	5.9	8.2	9.8	92.8	321	--	--
22	341858.7	1065115.2	4669	17.9	26	1149	6.0	8.2	7.7	71.9	318	--	--
23	341857.8	1065116.1	4682	23.1	5	1202	9.0	8.4	14.2	145	322	--	--
24	341855.9	1065119.3	4702	17.4	3	1209	7.6	8.0	10.4	104	322	--	--
25	341854.8	1065118.3	4713	17.7	6	1214	6.7	8.3	9.9	96.5	319	--	--
26	341854.2	1065118.9	4711	19.8	11	1218	7.1	8.2	10.0	97.5	320	--	--
27	341853.1	1065118.3	4712	25.7	17	1224	6.6	8.2	9.8	95.0	317	--	--
28	341852.2	1065117.5	4711	14.4	14	1229	6.4	8.2	9.6	90.9	319	--	--
29	341852.2	1065116.6	4704	14.5	8	1233	6.3	8.2	9.8	94.5	312	--	--
30	341851.8	1065117.6	4703	19.0	9	1237	6.5	8.2	12.8	107	319	--	--
31	341851.5	1065116.5	4782	15.3	20	1402	7.4	8.1	9.8	97.7	318	--	--
32	341850.3	1065115.8	4763	23.0	14	--	7.5	8.1	9.8	97.7	318	--	--

Table 7.10.4.--Seine haul data for Rio Grande La Joya on February 25, 2003

Seine haul #	Latitude (North)	Longitude (West)	Elevation (ft)	Error	Probe depth (in)	Time	Water temp. (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
33	341849.5	1065114.8	4748	34.6	12	1409	7.6	8.1	13.8	124	319	--	--
34	341848.4	1065114.7	4645	18.8	3	1411	8.1	8.2	9.3	92.1	321	--	--
35	341848.3	1065112.8	4650	17.2	9	1415	8.0	8.1	9.7	97.3	319	--	--
36	341848.8	1065112.6	4657	22.1	5	1421	10.5	7.5	4.4	34.2	434	--	--
37	341847.8	1065113.3	4668	18.9	9	1427	7.8	8.1	9.7	96.2	319	--	--
38	341846.6	1065113.6	4684	19.3	14	1431	7.9	8.1	9.6	96.2	320	--	--
39	341845.7	1065114.4	4688	17.5	12	1435	7.9	8.1	9.6	95.9	320	--	--
40	341844.6	1065113.8	4677	15.2	17	1440	8.0	8.2	9.7	97.1	320	--	--
41	341844.6	1065112.5	4685	18.1	7	1445	8.1	8.1	9.6	96.1	317	--	--
42	341844.5	1065111.9	4705	16.9	5	1450	8.1	8.2	9.2	92.9	322	--	--
43	341844.5	1065111.4	4670	16.8	23	1456	8.2	8.2	9.7	96.7	320	--	--
44	341843.9	1065112.3	4674	14.5	18	1501	8.2	8.2	9.4	94.4	320	--	--
45	341842.9	1065111.4	4668	28.2	3	1506	8.2	8.2	9.5	96.8	317	--	--
46	341842.0	1065110.7	4677	12.0	4	1510	8.6	8.2	9.6	97.4	320	--	--
47	341842.4	1065110.3	4646	12.4	20	1514	8.2	8.2	9.3	91.0	321	--	--
48	341841.1	1065111.7	4673	15.4	8	1518	8.6	8.2	9.8	98.3	320	--	--
49	341840.0	1065112.5	4675	17.2	8	1525	8.2	8.2	9.6	97.5	319	--	--
50	341843.4	1065111.3	4665	20.4	17	1531	8.2	8.2	9.5	95.6	320	--	--

Table 7.11.1--Seine haul data for Rio Grande at Lemitar on August 21, 2002

[#, number; --, no data; ft, feet; in, inch; °C, degrees Celsius; mg/L, milligram per liter; % sat, percent saturation; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units.]

Seine haul #	Latitude (North)	Longitude (West)	Elevation (ft)	Error (+/- ft)	Probe depth (in)	Time	Water temp. (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
2	341114.0	1065303.1	4626	--	--	0843	20.2	7.7	1.5	19.5	729	399	--
3	341113.5	--	4619	--	--	0846	19.0	7.9	6.2	77.6	--	370	--
4	341112.7	1065303.8	4636	--	--	0852	19.9	7.8	6.1	79.0	698	411	--
5	341112.3	1065303.5	4616	--	--	0855	19.9	7.8	6.0	77.6	699	407	A
5	341112.0	1065303.6	4622	--	--	0857	19.9	7.8	6.1	78.4	697	438	B
5	341111.7	1065303.6	4622	--	--	0858	19.2	7.9	7.0	79.5	696	426	C
5	341111.6	1065303.3	4622	--	--	0859	20.0	7.9	6.9	81.2	698	445	D
6	341110.9	1065302.9	4621	--	--	0903	19.3	7.9	6.4	82.1	713	462	--
7	341110.6	1065303.2	4618	--	--	0906	19.2	7.9	6.3	82.6	704	413	--
8	341109.7	1065302.8	4630	--	--	0909	20.3	7.9	6.0	78.8	699	473	--
9	341108.9	1065303.7	4632	--	--	0912	20.2	7.9	6.1	79.2	697	523	A
9	341108.9	1065303.9	--	--	--	0915	20.2	7.9	6.1	80.1	697	512	B
9	341108.7	1065303.8	4636	--	--	0916	20.3	7.9	6.4	83.1	698	531	C
9	341108.5	1065304.1	4636	--	--	0917	20.4	7.9	6.2	81.3	698	555	D
10	341108.9	1065302.8	4661	--	--	0919	18.4	8.0	6.6	83.0	--	611	--
11	341108.3	1065303.5	4657	--	--	0922	20.5	7.9	6.3	81.9	697	542	--
12	341106.7	1065303.1	4639	--	--	0927	20.4	7.9	6.1	80.1	698	561	--
13	341105.8	1065304.0	9640	--	--	0932	18.1	7.9	7.1	88.6	701	577	--
14	341105.1	1065302.6	4634	--	--	0938	20.7	7.9	6.1	80.6	699	619	--
15	341104.0	1065303.8	4633	--	--	0942	22.5	7.8	5.2	70.3	684	582	--
16	341103.8	1065302.5	4637	--	--	0947	21.0	7.9	5.8	76.2	695	657	--
17	341102.6	1065303.5	4638	--	--	0951	21.3	7.9	6.2	82.9	701	672	--
18	341102.1	1065303.8	4631	--	--	0956	20.8	7.9	4.8	63.6	716	519	--
19	341101.4	1065302.4	4615	--	--	1001	21.2	7.9	6.2	82.9	700	708	--
20	341100.8	1065303.5	4624	--	--	1006	21.7	7.9	7.1	95.1	764	561	--
21	341100.4	1065302.5	4633	--	--	1010	21.1	7.9	6.1	81.4	697	731	--
22	341100.0	1065304.3	4621	--	--	1015	22.4	7.9	5.9	80.5	705	785	--
23	341100.1	1065303.6	4620	--	--	1018	21.5	7.9	6.3	83.8	702	761	--
24	341059.3	1065303.8	4601	--	--	1022	22.2	8.0	5.9	80.5	701	622	--
25	341058.9	1065303.8	4604	--	--	1027	22.6	7.9	6.2	84.8	702	829	--
26	341057.8	1065302.5	4614	--	--	1036	23.2	8.0	5.7	79.5	703	>1000	--
27	341057.5	1065303.9	4617	--	--	1040	21.9	7.9	6.2	83.3	702	900	--

Table 7.11.1--Seine haul data for Rio Grande at Lemitar on August 21, 2002

Seine haul #	Latitude (North)	Longitude (West)	Elevation (ft)	Error (+/- ft)	Probe depth (in)	Time	Water temp. (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
28	341056.4	1065303.8	4655	--	--	1045	22.9	7.9	6.1	83.6	705	922	--
29	341056.4	1065304.5	4626	--	--	1050	23.2	7.7	5.5	74.8	708	436	--
30	341055.3	1065304.7	4626	--	--	1056	22.2	8.0	6.2	83.7	707	>1000	--
31	341054.8	1065303.5	4632	--	--	1103	23.2	8.0	5.9	81.6	705	991	--
32	341053.9	1065302.6	4663	--	--	1110	23.0	8.0	6.1	83.2	706	>1000	--
33	341053.3	1065302.9	4626	--	--	1112	22.8	8.0	6.0	82.1	705	>1000	--
34	341052.9	1065302.1	4617	--	--	1120	23.0	8.0	6.2	89.8	708	>1000	--
35	341052.3	1065302.0	4616	--	--	1122	23.2	8.0	5.6	77.6	706	>1000	--
36	341051.6	1065302.0	4605	--	--	1126	23.5	8.0	6.0	83.1	712	>1000	--
37	341047.9	1065302.1	4617	--	--	1245	26.4	8.0	5.9	86.6	715	>1000	--
38	341046.3	1065302.3	4611	--	--	1250	23.3	8.1	6.8	93.2	--	613	--
39	341046.3	1065302.4	4599	--	--	1255	26.5	8.0	5.9	87.1	716	>1000	--
40	341046.1	1065301.3	4611	--	--	--	26.4	8.0	5.3	77.9	728	827	--
41	341045.0	1065301.9	4618	--	--	1303	26.5	8.0	5.3	81.0	792	899	--
42	341043.6	1065300.8	4610	--	--	1307	27.8	8.0	5.9	87.7	718	>1000	--
43	341043.1	1065300.5	4609	--	--	1315	27.5	8.0	5.8	87.1	718	>1000	--
44	341041.4	1065300.8	4610	--	--	1320	28.0	8.0	5.7	86.2	721	>1000	--
45	341041.4	1065259.5	4617	--	--	1327	28.2	8.0	5.8	87.6	720	>1000	--
46	341041.1	1065258.0	4618	--	--	1330	27.8	8.0	5.8	87.0	719	>1000	A
46	341041.0	1065257.5	4618	--	--	1332	27.8	8.0	5.8	88.1	726	991	B
46	341041.0	1065257.7	4651	--	--	1335	28.3	8.0	5.4	81.0	799	>1000	C
46	341041.0	1065257.8	4652	--	--	1338	28.3	8.1	5.4	82.9	810	>1000	D
47	341039.0	1065257.9	4650	--	--	1340	28.3	8.0	5.6	83.1	805	>1000	A
47	341039.8	1065257.8	4647	--	--	1340	28.1	8.0	5.1	89.1	798	>1000	B
47	341039.9	1065257.8	4642	--	--	1342	28.1	8.1	5.6	82.1	785	999	C
47	341039.9	1065257.7	4645	--	--	1345	28.2	8.1	5.2	87.3	777	>1000	D
48	341038.9	1065258.8	4641	--	--	1345	32.0	8.0	3.4	58.9	842	992	--
49	341105.2	1065301.9	--	--	--	1415	35.6	7.8	1.7	77.0	787	>1000	--

Table 7.11.2--Seine haul data for Rio Grande at Lemitar on January 15, 2003

[#, number; --, no data; ft, feet; in, inch; °C, degrees Celsius; mg/L, milligram per liter; % sat, percent saturation; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units.]

Seine haul #	Latitude (North)	Longitude (West)	Elevation (ft)	Error (+/- ft)	Probe depth (in)	Time	Water temp (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
1	341116.6	1065304.6	4654	24.2	4	1000	4.9	8.1	--	--	304	--	--
2	341116.1	1065304.9	4658	28.1	4	1003	5.3	8.1	--	--	383	--	Ruptured DO meter membrane.
3	341115.0	1065304.6	4648	22.0	2	1008	5.3	8.1	--	--	380	--	--
4	341113.5	1065304.6	4637	17.4	9	1012	5.1	8.1	--	--	384	--	--
5	341113.4	1065303.8	4639	18.5	12	1016	5.1	8.1	--	--	384	--	--
6	341113.0	1065302.7	4619	24.0	12	1021	5.1	8.1	--	--	384	--	--
7	341112.6	1065302.9	4622	19.2	2	1024	5.2	8.1	--	--	382	--	--
8	341111.2	1065303.8	4625	16.4	2	1028	5.6	8.1	--	--	375	--	--
9	341111.1	1065303.8	4621	17.4	6	1031	5.2	8.1	--	--	381	--	--
10	341109.5	1065303.5	4627	21.3	2	1039	5.6	8.0	--	--	385	--	--
11	341108.2	1065303.1	4611	16.6	24	1044	5.4	8.1	--	--	385	--	--
12	341106.7	1065303.3	4628	27.3	12	1048	5.4	8.2	--	--	382	--	--
13	--	--	--	--	--	--	--	--	--	--	--	--	Skipped.
14	341104.9	1065304.4	4579	38.7	24	1102	5.7	8.2	10.0	78.7	381	--	Used YSI model 95 DO meter.
15	341104.3	1065303.9	4597	16.1	18	1106	5.5	8.2	10.1	80.8	361	--	30 feet from embayment.
16	341103.6	1065302.8	4600	23.1	8	1110	5.6	8.2	10.3	81.8	386	--	--
17	341102.7	1065303.3	4607	27.8	6	1117	5.7	8.2	10.3	82.2	378	--	--
18	341102.0	1065302.5	4609	17.8	6	1120	5.8	8.2	10.2	82.3	385	--	--
19	341100.5	1065302.7	4629	24.5	18	1127	5.8	8.2	10.3	82.3	385	--	--
20	341059.4	1065302.8	4628	12.5	12	1134	5.9	8.2	10.3	82.2	387	--	--
21	341059.3	1065303.3	4619	14.6	40	1140	6.0	8.2	10.2	82.6	388	--	--
22	341058.0	1065303.0	4617	8.30	6	1146	6.0	8.2	10.2	82.1	385	--	--
23	341058.1	1065304.1	4616	16.3	12	1154	6.2	8.3	10.2	82.5	374	--	--
24	341103.7	1065302.5	4611	16.9	4	1203	6.5	8.0	9.7	80.4	388	--	Embayment.
25	341057.1	1065304.3	4643	28.1	4	1308	6.9	8.0	9.6	80.7	379	--	--
26	341056.5	1065303.7	4651	22.3	3	1312	7.1	8.1	9.5	79.6	381	--	--
27	341055.9	1065303.4	4644	36.4	24	1316	7.0	8.1	9.2	77.6	368	--	--
28	341055.3	1065304.1	4623	29.0	6	1320	7.0	8.2	9.4	79.1	382	--	--
29	341054.5	1065304.3	4673	40.9	2	1324	7.1	8.2	9.3	78.5	380	--	--

Table 7.11.2--Seine haul data for Rio Grande at Lemitar on January 15, 2003

Seine haul #	Latitude (North)	Longitude (West)	Elevation (ft)	Error (+/- ft)	Probe depth (in)	Time	Water temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
30	341053.7	1065304.1	4662	19.6	9	1327	7.8	8.2	9.2	79.0	384	--	--
31	341052.1	1065304.6	4644	41.9	12	1332	7.2	8.2	9.3	78.2	383	--	--
32	341051.3	1065304.0	4633	25.8	15	1336	7.2	8.2	9.1	77.0	381	--	--
33	341050.6	1065303.3	4640	12.7	12	1340	7.8	8.3	8.0	68.4	378	--	--
34	341049.7	1065302.7	4626	17.6	15	1345	7.2	8.2	9.0	76.2	385	--	--
35	341048.8	1065302.7	4634	36.9	9	1347	7.2	8.2	9.2	77.4	382	--	--
36	341047.7	1065302.2	4638	16.7	6	1355	7.3	8.1	9.1	76.8	384	--	--
37	341047.7	1065303.5	4647	24.6	6	1400	7.4	8.2	9.2	77.2	383	--	--
38	341046.9	1065303.6	4691	22.9	15	1406	7.4	8.2	9.1	76.8	384	--	--
39	341046.9	1065302.8	4672	20.3	12	1411	7.4	8.2	8.7	74.3	384	--	--
40	341046.0	1065302.3	4662	28.8	2	1414	7.6	8.2	8.9	75.8	384	--	--
41	341045.0	1065301.3	4648	24.9	6	1418	7.5	8.2	8.8	74.6	378	--	--
42	341043.5	1065301.1	4627	22.6	6	1421	7.5	8.2	8.8	75.8	383	--	--
43	341043.2	1065300.0	4629	28.4	2	1427	7.7	8.2	8.8	75.2	381	--	--
44	341043.0	1065258.9	4638	16.7	2	1433	8.0	8.2	8.5	72.3	384	--	--
45	341042.8	1065300.2	4618	21.8	4	1438	7.8	8.2	8.5	72.5	383	--	--
46	341041.8	1065300.9	4629	25.4	12	1442	7.6	8.3	8.6	73.3	382	--	--
47	341041.0	1065300.5	4623	18.9	2	1445	7.9	8.2	8.7	75.1	357	--	--
48	341040.5	1065301.6	4625	41.0	9	1450	7.6	8.2	8.5	72.5	383	--	--
49D	341044.6	1065303.6	4620	33.3	9	1504	7.7	8.2	8.5	72.5	383	--	Discretionary; Rio Grande silvery minnow present; upper right.
49D	341044.6	1065303.6	4618	16.8	6	1506	7.7	8.2	8.4	73.0	383	--	Discretionary; upper left.
49D	341044.6	1065303.6	4620	27.8	6	1507	7.7	8.2	8.5	73.3	383	--	Discretionary; center.
49D	341044.6	1065303.6	4630	16.0	6	1509	7.7	8.2	8.5	73.1	381	--	Discretionary; lower left.
49D	341044.6	1065303.6	4619	23.4	8	1510	7.7	8.2	8.6	73.2	385	--	Discretionary; lower right.
50D	341048.1	1065306.1	4619	24.0	2	1517	7.8	8.3	9.0	78.0	379	--	Discretionary.

Table 7.12.1--Seine haul data for Rio Grande below Arroyo del Tajo on July 22, 2002

[#, number; --, no data; ft, feet; in, inch; ^{o}C, degrees Celsius; mg/L, milligram per liter; % sat, percent saturation; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units.]

Seine haul #	Latitude (north)	Longitude (west)	Elevation (ft)	Error (+/- ft)	Probe depth (in)	Time	Water temp. (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments

Data not collected.

Table 7.12.2--Seine haul data for Rio Grande below Arroyo del Tajo on September 9, 2002

[#, number; --, no data; ft, feet; in, inch; °C, degrees Celsius; mg/L, milligram per liter; % sat, percent saturation; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units.]

Seine haul #	Latitude (north)	Longitude (west)	Elevation (ft)	Error (+/- ft)	Probe depth (in)	Time	Water temp. (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
1	340247.7	1065150.1	4599	--	2.0	0855	19.7	8.2	7.7	98.8	718	--	Shoreline.
2	340247.0	1065150.0	4597	--	1.0	0859	19.8	8.2	7.3	94.0	716	--	Between bars.
3	340245.9	1065149.9	4598	--	1.0	0903	20.4	8.2	4.3	54.4	737	--	--
4	340244.9	1065148.9	4604	--	1.0	0908	19.9	8.2	7.2	93.7	715	--	--
5	340244.5	1065147.0	4616	--	0.5	0913	19.9	8.2	7.5	96.6	714	--	Small side channel.
6	340243.4	1065147.3	4597	--	0.5	0919	20.1	8.2	7.4	95.6	714	--	Same side channel.
7	340243.0	1065148.3	4599	--	4.0	0925	20.1	8.2	7.4	99.8	709	--	--
8	340242.8	1065147.4	4594	--	18.0	0929	20.6	8.0	3.3	45.0	775	--	--
9	340242.5	1065148.3	4608	--	3.0	0935	20.2	8.2	7.8	102	679	--	--
10	340241.3	1065148.4	4605	--	5.0	0940	20.6	7.2	2.7	30.1	788	--	--
11	340240.1	1065148.0	4606	--	2.0	0950	20.4	8.2	7.0	90.5	704	--	--
12	340238.9	1065148.6	4618	--	6.0	0952	20.4	8.2	7.4	96.3	703	--	--
13	340237.7	1065148.7	4604	--	0.5	0956	20.5	8.2	2.7	34.3	704	--	--
14	340237.0	1065149.6	4601	--	2.0	1000	20.5	8.2	7.5	98.1	702	--	--
15	340235.3	1065149.7	4610	--	1.0	1005	20.6	8.2	7.5	98.1	703	--	--
16	340234.9	1065150.6	4598	--	0.5	1009	22.7	8.0	5.1	69.1	1019	--	--
17	340234.6	1065149.8	4599	--	6.0	1015	20.9	8.2	7.5	97.7	700	--	--
18	340234.1	1065150.5	4590	--	1.0	1021	21.3	8.2	7.2	97.4	701	--	--
19	340233.1	1065149.9	4584	--	0.5	1026	21.5	8.1	7.6	98.6	700	--	--
20	340232.2	1065150.1	4589	--	0.5	1032	21.7	8.2	7.4	99.2	698	--	--
21	340231.2	1065150.1	4590	--	18.0	1037	21.9	8.2	7.0	94.1	698	--	--
22	340230.0	1065149.8	4583	--	4.0	1041	21.9	8.2	7.1	95.5	695	--	--
23	340228.9	1065149.7	4592	--	6.0	1048	22.2	8.2	7.4	101	696	--	--
24	340227.5	1065149.6	4586	--	4.0	1051	22.4	8.2	7.2	97.5	697	--	--
25	340226.3	1065149.6	4591	--	0.5	1056	23.3	8.2	7.0	96.2	699	--	--
26	340225.0	1065149.3	4579	--	4.0	1103	23.3	8.2	7.2	99.6	698	--	--
27	340224.3	1065150.0	4582	--	4.0	1106	23.0	8.2	7.1	96.9	694	--	--
28	340223.3	1065150.3	4572	--	12.0	1113	23.4	8.2	7.2	99.2	693	--	--
29	340222.4	1065151.2	4689	--	22.0	1118	23.7	8.2	6.6	92.9	693	--	--
30	340221.4	1065151.0	4602	--	6.0	1123	23.6	8.2	7.2	99.9	692	--	--
31	340220.7	1065152.1	4575	--	8.0	1130	23.8	8.2	7.2	100	690	--	--
32	340219.8	1065152.7	4581	--	6.0	1134	24.0	8.2	7.1	99.1	638	--	--

Table 7.12.2--Seine haul data for Rio Grande below Arroyo del Tajo on September 9, 2002

Seine haul #	Latitude (north)	Longitude (west)	Elevation (ft)	Error (+/- ft)	Probe depth (in)	Time	Water temp. (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
33	340219.0	1065153.6	4572	--	4.0	1140	24.4	8.2	6.9	98.1	691	--	--
34	340217.5	1065154.0	4569	--	8.0	1146	24.5	8.2	7.0	99.5	707	--	--
35	340216.1	1065153.7	4568	--	3.0	1150	24.6	8.2	6.7	94.4	688	--	--
36	340215.5	1065154.2	4592	--	4.0	1248	26.7	8.2	8.3	116	675	--	--
37	340213.7	1065155.4	4602	--	6.0	1252	26.9	8.2	6.6	96.5	673	--	--
38	340213.6	1065157.2	4595	--	4.0	1256	26.9	8.2	6.8	100	607	--	--
39	340213.1	1065158.7	4596	--	10.0	1300	27.0	8.2	6.8	101	673	--	--
40	340211.8	1065156.8	4589	--	12.0	1305	27.0	8.2	6.5	96.4	672	--	--
41	340211.3	1065200.6	4601	--	4.0	1312	27.3	8.2	6.9	102	672	--	--
42	340210.3	1065157.0	4600	--	6.0	1319	27.4	8.2	6.9	103	660	--	--
43	340209.2	1065157.0	4598	--	6.0	1327	27.9	8.2	6.9	103	670	--	--
44	340207.0	1065203.1	4598	--	12.0	1334	27.7	8.1	6.2	93.7	675	--	--
45	340207.2	1065157.7	4596	--	12.0	1341	28.2	8.2	6.6	99.6	671	--	--
46	340206.7	1065159.2	4594	--	10.0	1345	28.4	8.2	6.6	99.7	641	--	--
47	340205.1	1065200.1	4596	--	18.0	1350	28.6	8.2	6.1	91.9	672	--	--
48	340204.3	1065202.1	4605	--	8.0	1356	28.8	7.9	5.4	82.1	669	--	--
49	340203.2	1065202.3	4600	--	6.0	1400	28.6	8.2	6.4	96.7	670	--	--
50	340202.8	1065200.2	4608	--	8.0	1406	28.9	8.2	6.6	100	672	--	--
51	340201.6	1065159.8	4602	--	12.0	1413	29.1	8.2	6.5	98.2	332	--	--
52	340159.0	1065201.8	4594	--	12.0	1418	29.3	8.2	6.6	101	675	--	--
53	340158.1	1065202.2	4596	--	6.0	1422	28.9	8.2	6.5	98.0	679	--	--
--	340223.4	1065150.2	4582	--	12.0	1445	28.3	7.9	5.1	76.1	705	--	Embayment.

Table 7.12.3--Seine haul data for Rio Grande below Arroyo del Tajo on December 12, 2002

[#, number; --, no data; ft, feet; in, inch; °C, degrees Celsius; mg/L, milligram per liter; % sat, percent saturation; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units.]

Seine haul #	Latitude (North)	Longitude (West)	Elevation (ft)	Error (+/- ft)	Probe depth (in)	Time	Water temp. (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
1	340241.0	1065148.6	4565	26.3	10	0942	3.51	8.19	10.71	94.9	499	--	--
2	340240.0	1065149.8	4579	35.2	6	0956	2.94	8.17	12.00	102.5	513	--	--
3	340239.7	1065148.8	4571	23.7	16	1001	3.64	8.21	10.93	97.6	502	--	--
4	340238.9	1065149.5	4572	15.7	6	1005	3.56	8.26	11.20	98.3	506	--	--
5	340237.5	1065149.6	4589	28.0	16	1011	3.71	8.20	11.08	98.8	502	--	--
6	340236.3	1065149.6	4585	24.7	6	1016	2.97	8.32	11.72	99.9	502	--	--
7	340235.1	1065150.1	4572	25.7	3	1027	4.30	8.54	10.39	94.4	494	--	--
8	340234.5	1065151.4	4596	36.3	3	1042	3.69	8.21	11.58	99.6	516	--	--
9	340230.1	1065150.1	4587	16.4	6	1055	4.30	8.19	10.50	92.6	502	--	--
10	340230.0	1065151.2	4581	27.3	6	1101	4.34	8.35	10.61	97.0	479	--	--
11	340229.2	1065150.6	4594	34.2	8	1107	4.46	8.28	11.12	98.8	502	--	--
12	340228.8	1065151.8	4598	56.5	3	1112	5.77	8.41	10.49	99.0	505	--	--
13	340228.0	1065151.5	4602	25.5	3	1118	6.05	8.31	10.41	100.3	505	--	--
14	340227.4	1065153.3	4614	38.8	3	1125	5.85	8.51	10.22	97.3	504	--	--
15	340226.8	1065151.2	4590	31.2	12	1132	4.89	8.30	10.65	97.9	502	--	--
16	340226.6	1065152.2	4592	31.1	12	1136	4.92	8.25	10.62	97.7	503	--	--
17	340225.8	1065153.1	4615	31.7	6	1141	6.17	8.34	10.15	98.1	502	--	--
18	340225.2	1065153.6	4585	22.0	8	1147	5.04	8.29	10.56	97.6	503	--	--
19	340224.6	1065152.5	4588	29.9	6	1153	4.75	8.09	10.40	95.0	508	--	--
20	340224.0	1065152.9	4605	21.9	3	1155	5.88	8.06	9.90	94.4	503	--	Discretionary.
21	340223.2	1065151.6	4562	31.9	12	1205	5.18	8.30	10.45	96.7	503	--	--
22	340222.0	1065152.4	4578	20.4	12	1325	5.97	8.30	10.66	100.2	503	--	--
23	340221.2	1065151.4	4564	24.2	12	1330	4.82	8.18	10.76	99.0	524	--	--
24	340221.0	1065152.4	4487	30.9	12	1336	6.03	8.24	10.63	100.6	504	--	--
25	340220.6	1065152.2	4521	19.2	16	1340	6.14	8.23	10.63	101.1	505	--	--
26	340219.2	1065152.4	4562	18.4	16	1345	6.17	8.21	10.77	101.6	505	--	--
27	340218.4	1065153.6	4546	22.7	16	1354	6.14	8.20	10.65	101.5	506	--	--
28	340218.0	1065152.6	4550	30.1	16	1401	6.33	8.21	10.70	101.6	506	--	--
29	340218.0	1065151.7	4552	23.6	8	1407	6.41	8.24	10.62	101.4	507	--	--
30	340217.0	1065151.9	4566	18.7	3	1412	6.29	8.18	10.57	101.4	505	--	--
31	340215.9	1065152.6	4578	25.1	6	1419	6.16	8.19	10.35	99.5	507	--	--
32	340215.4	1065154.3	4592	15.0	6	1425	5.72	8.36	11.17	105.1	506	--	--

Table 7.12.3--Seine haul data for Rio Grande below Arroyo del Tajo on December 12, 2002

Seine haul #	Latitude (North)	Longitude (West)	Elevation (ft)	Error (+/- ft)	Probe depth (in)	Time	Water temp. (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
33	340215.0	1065155.0	4573	23.3	16	1436	6.43	8.24	10.55	101.0	506	--	--
34	340214.6	1065155.3	4560	31.9	16	1441	6.54	8.22	10.52	100.9	507	--	--
35	340214.2	1065155.4	4565	17.6	12	1446	6.49	8.20	10.78	103.1	508	--	Discretionary.
36	340213.6	1065156.8	4571	29.3	4	1452	5.59	8.19	10.54	98.4	507	--	--
37	340213.1	1065158.3	4570	29.6	4	1456	5.50	8.34	10.95	102.4	426	--	--
38	340212.8	1065158.3	4556	22.2	4	1503	5.59	8.30	9.96	96.0	509	--	--
39	340212.0	1065159.5	4607	24.3	4	1509	6.58	8.32	10.32	99.2	508	--	--
40	340210.9	1065201.0	4587	25.6	6	1515	4.99	8.17	10.83	96.4	508	--	--
41	340210.1	1065202.5	4580	29.3	8	1520	6.40	8.21	10.66	101.7	492	--	--

Table 7.12.4.--Seine haul data for Rio Grande below Arroyo del Tajo on February 24, 2003

[#, number; --, no data; ft, feet; in, inch; °C, degrees Celsius; mg/L, milligram per liter; % sat, percent saturation; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units.]

Seine haul #	Latitude (North)	Longitude (West)	Elevation (ft)	Error (+/- ft)	Probe depth (in)	Time	Water temp. (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
1	340247.4	1065148.6	4581	10.2	9	1015	7.3	8.2	9.1	89.4	399	--	--
2	340246.5	1065149.4	4590	18.4	12	1022	7.3	8.2	9.0	88.7	400	--	--
3	340246.5	1065148.3	4588	14.3	12	1026	7.4	8.2	8.9	88.1	400	--	--
4	340245.7	1065148.7	4600	17.0	12	1031	7.4	8.2	9.0	89.1	401	--	--
5	340244.7	1065148.1	4594	9.0	9	1036	7.4	8.2	9.1	89.6	401	--	--
6	340243.5	1065148.3	4583	7.5	6	1041	7.4	8.2	9.1	89.6	402	--	--
7	340242.2	1065148.6	4591	12.1	3	1048	7.5	8.2	9.0	88.1	402	--	--
8	340241.2	1065149.0	4594	13.9	15	1054	7.5	8.2	9.0	88.8	402	--	--
9	340240.1	1065149.1	4588	18.0	15	1100	7.6	8.2	9.1	89.7	402	--	--
10	340238.9	1065148.3	4589	17.0	15	1109	7.7	8.2	9.1	90.0	402	--	--
11	340237.7	1065148.6	4589	14.1	15	1114	7.7	8.2	9.1	89.7	402	--	--
12	340236.9	1065148.1	4606	25.3	9	1119	7.8	8.3	8.9	89.0	403	--	--
13	340235.4	1065148.2	4593	8.5	15	1124	7.8	8.3	9.0	90.0	403	--	--
14	340234.6	1065149.8	4593	20.2	6	1129	8.1	8.3	9.0	89.9	403	--	--
15	340233.9	1065150.2	4589	16.1	12	1136	7.9	8.2	9.0	90.1	403	--	--
16	340233.0	1065150.8	4587	15.9	9	1146	8.0	8.2	8.8	88.1	404	--	--
17	340232.4	1065149.8	4584	31.3	9	1154	8.1	8.3	9.0	90.7	404	--	--
18	340231.8	1065149.3	4570	41.0	18	1201	8.1	8.3	9.0	90.4	404	--	--
19	340230.9	1065149.8	4572	19.6	15	1206	8.1	8.2	9.0	90.6	404	--	--
20	340228.9	1065153.2	4578	25.2	3	1211	8.6	8.3	7.9	80.2	405	--	--
21	340228.1	1065152.1	4595	25.1	3	1215	10.7	9.1	11.6	124	387	--	--
22	340228.0	1065150.9	4595	17.8	6	1220	8.3	8.3	8.9	90.1	405	--	--
23	340226.9	1065148.9	4593	18.0	18	1225	8.3	8.2	9.0	90.9	405	--	--
24	340225.9	1065150.7	4602	17.8	6	1230	8.3	8.3	9.0	89.5	405	--	--
25	340227.2	1065151.0	4593	11.8	3	1335	9.3	8.2	8.6	88.5	406	--	--
26	340224.0	1065151.1	4595	25.6	3	1354	9.0	8.2	8.5	87.2	406	--	--
27	340223.3	1065150.4	4598	18.2	6	1405	9.1	8.2	8.8	90.3	405	--	--
28	340225.9	1065147.8	4568	23.1	3	1416	9.7	8.5	13.4	140	906	--	--
29	340222.7	1065148.5	4578	18.1	3	1423	10.2	9.2	17.0	178	381	--	--
30	340222.5	1065151.2	4568	20.8	18	1428	9.2	8.2	8.9	91.9	407	--	--
31	340221.7	1065150.6	4581	25.9	9	1433	9.2	8.2	8.8	90.6	406	--	--
32	340221.1	1065151.6	4571	19.6	18	1438	9.2	8.2	9.0	92.4	407	--	--

Table 7.12.4.--Seine haul data for Rio Grande below Arroyo del Tajo on February 24, 2003

Seine haul #	Latitude (North)	Longitude (West)	Elevation (ft)	Error (+/- ft)	Probe depth (in)	Time	Water temp. (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
33	340219.8	1065151.7	4584	22.0	18	1445	9.2	8.2	8.9	92.3	408	--	--
34	340218.9	1065152.5	4579	23.7	18	1450	9.2	8.2	8.9	91.2	407	--	--
35	340218.0	1065153.4	4578	14.3	15	1453	9.2	8.2	8.8	90.3	407	--	--
36	340217.0	1065152.9	4578	10.1	3	1457	9.4	8.2	8.5	87.3	408	--	--
37	340216.5	1065153.9	4581	18.2	6	1501	9.3	8.2	8.8	91.0	408	--	--
38	340215.3	1065157.8	4574	20.1	3	1515	12.0	9.3	16.3	179	380	--	--
39	340214.8	1065156.9	4581	20.0	3	1520	9.2	8.3	8.9	90.1	409	--	--
40	340214.2	1065155.8	4618	23.7	6	1522	9.3	8.2	8.9	91.4	408	--	--
41	340213.1	1065154.4	4602	17.9	12	1527	9.3	8.2	8.9	92.2	408	--	--
42	340214.5	1065157.4	4553	20.8	3	1535	9.2	8.2	8.6	88.3	409	--	--
43	340213.3	1065159.0	4569	15.7	3	1539	9.2	8.2	8.7	89.9	409	--	--
44	340211.8	1065200.1	4575	17.4	9	1543	9.2	8.2	8.9	91.9	408	--	--
45	340211.1	1065201.0	4571	24.1	3	1547	9.2	8.2	8.7	89.6	405	--	--
46	340206.0	1065201.0	4579	18.5	3	1551	11.2	9.1	13.9	150	546	--	--
47	340204.9	1065201.7	4574	19.2	3	1555	10.8	9.4	17.7	190	405	--	--
48	340204.9	1065201.5	4582	23.2	6	1558	10.8	9.2	15.4	165	447	--	--
49	340208.4	1065203.6	4593	11.7	3	1607	9.1	8.3	8.8	90.0	409	--	--
50	340214.1	1065155.7	4589	10.7	9	1619	9.1	8.2	8.9	91.2	407	--	--

Table 7.13.1--Seine haul data for Rio Grande at San Pedro on August 20, 2002

[#, number; --, no data; ft, feet; in, inch; °C, degrees Celsius; mg/L, milligram per liter; % sat, percent saturation; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units.]

Seine haul #	Latitude (North)	Longitude (West)	Elevation (ft)	Error (+/- ft)	Probe depth (in)	Time	Water temp. (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
1	335432.8	1065111.1	4552	--	3	0840	20.3	7.5	7.3	95.9	--	465.2	--
2	335431.9	1065111.9	4539	--	2	0845	19.1	7.6	8.0	102	--	465.2	Shallow.
3	335431.2	1065112.0	4533	--	5	0849	18.9	8.3	7.5	94.7	--	318.8	--
4	335430.1	1065111.5	4536	--	11	0853	18.2	8.2	7.7	95.9	775	323.6	--
5	335429.6	1065111.3	4528	--	17	0857	18.3	8.2	7.6	95.9	775	328.2	--
6	335428.6	1065110.7	4541	--	11	0900	18.3	8.2	7.6	95.7	776	326.0	--
7	335427.9	1065110.1	4540	--	5	0907	19.2	8.3	7.4	94.4	518	364.9	--
8	333427.4	1065110.6	4564	--	4	0916	19.3	7.7	7.5	95.4	--	399.8	--
9	335427.1	1065109.4	4521	--	5	0924	19.3	8.3	4.4	55.0	777	--	--
10	335426.1	1065109.3	4529	--	8	0930	18.9	8.2	7.7	97.5	775	271.2	--
11	335425.0	1065109.1	4526	--	2	0935	19.9	8.3	5.7	73.2	783	536.9	--
12	335423.7	1065108.8	4504	--	6	0947	19.3	8.3	7.5	96.1	779	353.5	--
13	335422.9	1065109.2	4531	--	2	0953	20.4	8.2	7.5	98.7	777	470.4	--
14	335422.4	1065108.5	4485	--	4	0957	19.6	8.3	7.6	98.0	776	337.5	--
15	335421.1	1065108.3	4536	--	13	1003	19.8	8.3	7.7	99.2	777	336.3	--
16	335470.1	1065107.4	4544	--	10	1008	19.8	8.3	7.8	100	775	333.4	--
17A	335419.2	1065106.0	4544	--	7	1030	20.2	7.9	6.1	79.2	736	725.1	Rio Grande silvery minnow present; backwater; very
17B	335419.2	1065106.0	4544	--	7	1030	20.4	7.9	6.1	78.0	730	735.4	
17C	335419.2	1065106.0	4544	--	7	1030	20.8	7.9	6.0	75.7	750	736.0	
17D	335419.2	1065106.0	4544	--	7	1030	21.0	7.7	6.0	68.1	745	721.2	
18	335419.1	1065106.9	4547	--	13	1058	21.9	8.2	7.1	96.2	779	437.4	--
19	335418.6	1065105.9	4545	--	10	1048	21.4	7.7	6.9	92.9	777	572.5	--
20	335417.2	1065105.5	4541	--	17	1054	21.3	8.2	7.7	102	778	389.9	--
21	335416.4	1065104.8	4537	--	15	1103	21.5	8.3	7.5	101	780	354.8	--
22	335415.2	1065104.8	4551	--	5	1108	22.2	8.3	7.6	103	780	354.7	--
23	335414.3	1065104.2	4538	--	9	1111	21.8	8.3	7.7	103	782	365.2	--
24	335413.3	1065104.0	4589	--	6	1320	27.1	8.4	7.5	111	784	>1000	Changed Hydrolab
25	335412.9	1065103.7	4582	--	13	1322	27.1	8.5	7.2	106	483	>1000	Isolated pool; no flow.
26	335411.3	1065103.1	4541	--	5	1325	27.3	8.4	7.3	108	736	>1000	--
27	335410.1	1065102.8	4528	--	11	1328	27.6	8.4	7.3	108	785	>1000	--

Table 7.13.1--Seine haul data for Rio Grande at San Pedro on August 20, 2002

Seine haul #	Latitude (North)	Longitude (West)	Elevation (ft)	Error (+/- ft)	Probe depth (in)	Time	Water temp. (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
28	335409.3	1065101.6	4526	--	7	1331	27.5	8.4	7.4	110	784	>1000	--
29	335408.8	1065100.0	4531	--	2	1333	29.7	8.4	6.9	109	785	>1000	--
30	335408.2	1065059.7	4533	--	11	1336	28.0	8.4	6.9	105	784	>1000	--
31	335407.1	1065058.8	4532	--	6	1340	27.9	8.4	7.0	104	785	>1000	--
32	335406.0	1065058.1	4539	--	13	1343	28.0	8.4	7.3	110	782	>1000	--
33	335405.1	1065057.6	4550	--	7	1345	28.1	8.4	7.3	110	784	>1000	--
34	335403.7	1065057.1	4559	--	6	1348	28.2	8.4	7.3	111	783	>1000	--
35	335403.3	1065055.8	4551	--	3	1350	29.8	8.4	6.9	107	785	>1000	--
36	335401.9	1065055.4	4553	--	2	1356	28.0	8.4	5.7	96.6	845	>1000	--
37	335400.8	1065054.7	4551	--	7	1358	28.5	8.4	7.3	111	784	>1000	--
38	335359.8	1065053.7	4547	--	7	1401	28.8	8.4	7.2	111	783	>1000	--
39	335358.9	1065053.6	4544	--	7	1402	29.0	8.4	7.1	109	784	>1000	--
40	335358.0	1065052.9	4543	--	7	1408	28.9	8.4	7.2	110	783	>1000	--
41	335357.0	1065052.2	4525	--	11	1414	29.2	8.5	7.0	108	783	>1000	--
42	335355.9	1065051.5	4537	--	18	1422	29.2	8.4	7.0	109	782	>1000	--
43	335354.9	1065050.8	4556	--	11	1425	29.1	8.4	6.8	105	783	>1000	--
44	335354.0	1065050.8	4545	--	7	1431	29.4	8.4	7.1	110	783	>1000	--
45	335353.3	1065049.7	4546	--	4	1433	29.5	8.4	7.0	109	783	>1000	--
46	335427.2	1065109.5	4574	--	7	1506	32.3	8.3	6.8	109	782	372.7	Embayment.

Table 7.13.2.--Seine haul data for Rio Grande at San Pedro on January 14, 2003

[#, number; --, no data; ft, feet; in, inch; °C, degrees Celsius; mg/L, milligram per liter; % sat, percent saturation; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units.]

Seine haul #	Latitude	Longitude	Elevation (ft)	Error (+/- ft)	Probe depth (ft)	Time	Water temp. (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
1	335432.2	1065111.1	4542	23.5	2	1008	4.3	8.2	8.5	77.6	386	--	--
2	335431.4	1065111.8	4538	23.6	24	1012	3.5	8.2	10.5	93.3	385	--	--
3	335430.7	1065110.5	4560	38.2	16	1016	3.5	8.2	10.4	93.3	382	--	--
4	335429.6	1065110.4	4536	17.0	24	1020	3.5	8.3	10.6	94.7	383	--	--
5	335428.4	1065111.0	4556	19.2	12	1025	3.6	8.2	10.5	94.6	384	--	--
6	335427.5	1065110.2	4557	20.1	12	1030	3.7	8.2	9.3	86.1	383	--	--
7	335426.2	1065109.7	4550	27.6	16	1034	3.8	8.2	10.4	93.9	383	--	--
8	335424.9	1065109.6	4566	28.6	4	1039	4.6	8.3	10.4	96.9	383	--	--
9	335424.1	1065108.5	4572	26.4	24	1046	3.8	8.2	9.2	81.0	380	--	--
10	335423.6	1065108.1	4593	40.5	16	1050	3.9	8.2	9.0	81.4	382	--	--
11	335422.8	1065107.7	4551	17.3	8	1056	4.0	8.3	10.3	94.6	382	--	--
12	335421.8	1065107.4	4559	19.2	16	1101	4.1	8.3	10.4	95.3	381	--	--
13	335420.7	1065106.6	4566	19.8	6	1105	4.2	8.3	10.4	94.7	381	--	--
14	335419.9	1065106.5	4586	16.6	8	1111	4.2	8.3	10.3	93.6	380	--	--
15	335418.8	1065106.5	4575	26.5	36	1115	4.2	8.3	10.6	96.6	380	--	--
16	335417.4	1065105.8	4586	38.5	18	1120	4.3	8.3	10.7	97.8	381	--	--
17	335416.5	1065106.3	4592	23.2	12	1125	4.4	8.3	10.2	93.3	381	--	--
18	335415.9	1065105.0	4576	22.3	6	1130	4.5	8.3	10.0	90.8	381	--	--
19	335415.3	1065105.7	4540	20.3	12	1139	4.6	8.3	10.6	97.5	382	--	--
20	335414.5	1065105.1	4591	21.5	24	1146	4.7	8.3	10.1	93.6	380	--	--
21	335414.1	1065103.3	4619	35.6	9	1151	4.8	8.3	9.3	86.2	348	--	--
22	335413.2	1065103.9	4627	35.2	4	1156	4.9	8.3	9.5	87.7	382	--	--
23	335412.1	1065103.8	4610	33.9	9	1201	5.0	8.3	10.3	95.4	383	--	--
24	335411.7	1065102.5	4563	25.4	18	1207	5.1	8.3	9.8	95.4	382	--	--
25	335411.9	1065103.9	4537	28.3	18	1212	5.1	8.3	10.4	97.1	381	--	--
26	335411.1	1065102.7	4533	21.6	18	1401	6.6	8.1	10.2	98.6	381.7	--	--
27	335410.3	1065101.9	4547	59.7	6	1429	8.1	8.2	9.4	92.7	416	--	--
28	335409.1	1065100.3	4567	21.4	15	1433	7.2	8.1	9.7	93.9	421	--	--
29	335408.6	1065100.0	4559	30.5	15	1435	7.3	8.1	9.7	93.6	421	--	--
30	335407.6	1065059.8	4547	15.8	17	1438	7.3	8.1	9.6	92.6	421	--	--
31	335407.1	1065058.9	4552	9.80	26	1442	7.4	8.1	9.6	92.8	421	--	--
32	335406.0	1065059.8	4554	31.4	12	1446	7.5	8.1	9.6	93.3	421	--	--

Table 7.13.2.--Seine haul data for Rio Grande at San Pedro on January 14, 2003

Seine haul #	Latitude	Longitude	Elevation (ft)	Error (+/- ft)	Probe depth (ft)	Time	Water temp. (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
33	335406.0	1065100.2	4549	22.5	6	1449	7.2	8.1	9.4	91.0	421	--	--
34	335405.0	1065059.8	4529	25.8	5	1452	7.3	8.1	9.6	91.9	422	--	--
35	335401.2	1065056.4	4544	25.8	18	1459	7.4	8.1	9.5	92.1	422	--	--
36	335400.2	1065056.8	4571	46.4	26	1503	7.3	8.1	9.3	90.2	422	--	--
37	335359.0	1065056.0	4551	26.6	6	1507	7.3	8.1	9.4	90.9	421	--	--
38	335358.5	1065055.3	4554	24.5	6	1510	7.4	8.2	9.4	91.8	422	--	--
39	335358.3	1065054.0	4545	18.1	12	1515	7.5	8.1	9.5	92.6	422	--	--
40	335357.2	1065053.5	4545	52.2	4	1518	7.5	8.2	9.5	92.2	422	--	--
41	335356.2	1065052.7	4542	23.7	18	1524	7.6	8.2	9.5	92.2	422	--	--
42	335355.2	1065053.8	4551	14.3	3	1528	7.8	8.3	9.2	90.5	421	--	--
43	335354.6	1065053.3	4497	20.8	6	1532	7.4	8.2	9.3	89.9	422	--	--

Table 7.14.1.--Seine haul data for Rio Grande at North Boundary Bosque del Apache on August 19, 2002

[#, number; --, no data; ft, feet; in, inch; °C, degrees Celsius; mg/L, milligram per liter; % sat, percent saturation; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units.]

Seine haul #	Latitude (North)	Longitude (West)	Elev (ft)	Error (+/- ft)	Probe depth (in)	Time	Water temp. (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbid-ity (NTUs)	Comments
1	335256.3	1065046.9	4533	--	2	0930	19.9	8.2	6.9	88.3	783	--	--
2	335254.7	1065048.4	4513	--	4	0940	20.0	8.3	6.8	87.7	783	--	--
3	335253.4	1065048.8	4526	--	6	0950	20.3	8.3	7.7	97.5	782	--	--
4	335252.9	1065050.2	4511	--	8	1000	21.0	8.3	7.5	99.6	784	--	--
5	335247.7	1065053.5	4515	--	2	1010	21.8	8.3	6.8	91.5	786	--	--
6	335246.2	1065053.1	4504	--	9	1015	21.6	8.3	7.2	96.9	784	--	--
7	335245.2	1065053.1	4507	--	3	1020	21.8	8.3	7.4	99.4	784	--	--
8A	335243.3	1065052.4	4514	--	6	1030	21.5	8.0	4.8	56.2	1030	--	--
8B	335243.3	1065052.4	4514	--	6	1030	21.5	8.2	4.6	58.9	873	--	--
8C	335243.3	1065052.4	4514	--	4	1030	23.6	7.7	2.5	33.7	947	--	--
8D	335243.3	1065052.4	4514	--	4	1030	21.6	8.2	6.4	83.0	783	--	--
9	335242.7	1065053.3	4512	--	6	1040	22.2	8.3	6.3	85.2	786	--	--
10	335241.9	1065054.9	4530	--	22	1050	22.0	8.3	7.1	94.7	785	--	--
11	335241.3	1065055.7	4578	--	12	1050	24.1	8.4	6.9	94.8	798	--	--
12	335236.8	1065058.7	4506	51.5	3	1100	23.5	8.3	6.7	95.5	786	--	--
13	335235.8	1065059.2	4499	26	3	1115	23.7	8.3	7.1	99.2	648	--	--
14	335234.5	1065058.5	4565	28	4	1120	25.7	8.1	2.7	35.1	955	--	--
15	335233.7	1065058.4	4541	27	3	1125	23.5	8.3	7.2	99.9	768	--	--
16	335232.3	1065058.3	4546	27.6	6	1132	27.8	8.3	7.1	98.6	786	--	--
17	335231.0	1065058.0	4534	35.9	3	1137	24.6	8.3	7.0	99.2	786	--	--
18	335229.7	1065057.6	4579	39.2	3	1141	26.9	8.3	4.3	--	790	--	--
19	335229.5	1065058.5	4510	30.6	6	1148	25.2	8.3	7.0	101	788	--	--
20	335228.6	1065057.6	4535	24.5	6	1153	30.4	8.5	5.9	91.6	797	--	--
21	335228.0	1065058.9	4538	47.2	3	1245	28.9	8.4	6.6	102	790	--	--
22	335226.4	1065059.3	4534	29	6	1250	27.0	8.3	6.8	101	782	--	--
23	335224.0	1065057.8	4502	27	4	1300	30.4	8.4	6.3	96.6	782	--	--
24	335223.9	1065058.4	4520	20	3	1305	27.6	8.3	6.7	101	789	--	--
25	335222.9	1065057.6	4511	42	5	1305	27.8	8.3	6.7	102	789	--	--
26	335222.1	1065057.3	4509	19	3	1310	28.2	8.4	6.7	102	790	--	--
27	335221.1	1065056.5	4523	35	5	1315	28.3	8.4	4.9	76.3	792	--	--
28	335220.0	1065055.9	4533	39	5	1320	28.6	8.4	6.5	98.1	790	--	--
29	335219.4	1065055.4	4520	33.6	20	1325	28.8	8.4	6.3	94.5	790	--	--

Table 7.14.1.--Seine haul data for Rio Grande at North Boundary Bosque del Apache on August 19, 2002

Seine haul #	Latitude (North)	Longitude (West)	Elev (ft)	Error (+/- ft)	Probe depth (in)	Time	Water temp. (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbid-ity (NTUs)	Comments
30	335218.9	1065055.1	4516	31	4	1330	29.1	8.4	6.5	99.6	790	--	--
31	335217.8	1065054.3	4524	40	8	1335	29.1	8.4	6.3	98.2	785	--	--
32	335216.3	1065054.3	4649	22	10	1340	30.4	8.4	5.8	87.1	792	--	--
33	335215.7	1065053.6	4520	25	3	1340	30.4	8.4	6.4	100	779	--	--
34	335215.2	1065053.5	4518	38	5	1350	29.8	8.4	6.5	101	792	--	--
35	335208.0	1065052.3	4546	22	5	1400	30.7	8.1	6.8	113	791	--	--
36	335208.9	1065051.9	4514	27.4	10	1405	30.2	8.4	4.9	75.8	790	--	--
37D	335210.7	1065051.7	4502	35	22	1410	30.3	8.3	5.8	91.4	791	--	Discretionary seine; 1 large carp deep midstream.
38D	335211.7	1065051.8	4494	32	4	1415	30.5	8.3	6.4	101	748	--	Discretionary seine.
39D	335229.3	1065058.8	4520	27.5	4	1434	29.7	8.4	6.5	101	791	--	Discretionary seine.
40D	335233.5	1065058.5	4483	18	8	1435	29.3	8.1	5.2	78.9	808	--	Embayment; discretionary seine.

Table 7.14.2--Seine haul data for Rio Grande at North Boundary Bosque del Apache on January 13, 2003

[#, number; --, no data; ft, feet; in, inch; °C, degrees Celsius; mg/L, milligram per liter; % sat, percent saturation; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units.]

Seine haul #	Latitude	Longitude	Elevation (ft)	Error (+/- ft)	Probe depth (in)	Time	Water temp (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
1	335256.1	1065047.2	4571	32.8	21	1009	3.3	8.3	11.9	104	428	--	--
2	335255.5	1065047.7	4529	28.6	21	1013	3.3	8.3	11.4	98.2	422	--	--
3	335255.2	1065048.8	4530	28.3	21	1022	3.6	8.3	11.3	99.9	153	--	--
4	335255.0	1065048.0	4558	25.2	26	1030	3.4	8.3	10.8	93.5	424	--	--
5	335253.9	1065048.3	4553	15.0	12	1035	3.4	8.3	11.1	95.6	120	--	--
6	335252.7	1065048.6	4539	23.2	9	1042	3.4	8.3	11.1	97.6	427	--	--
7	335251.9	1065049.4	4509	23.4	8	1048	3.5	8.3	11.0	95.7	427	--	--
8	335251.6	1065048.9	4566	23.8	6	1052	3.6	8.3	11.0	97.8	428	--	--
9	335250.0	1065050.0	4576	125.0	4	1109	4.0	8.3	11.9	104	427	--	--
10	335250.4	1065050.7	4517	35.5	10	1113	3.9	8.3	10.9	96.2	427	--	--
11	335250.6	1065052.1	4489	18.8	15	1116	3.9	8.3	9.6	82.8	130	--	--
12	335249.8	1065053.2	4482	26.4	25	1122	4.2	8.3	11.2	99.6	426	--	--
13	335248.9	1065054.0	4469	38.8	20	1133	4.4	8.3	11.1	99.7	427	--	--
14	335248.4	1065052.7	4498	45.6	21	1142	4.2	8.3	11.1	99.3	404	--	--
15	335248.5	1065051.8	4483	20.1	3	1147	7.4	8.3	9.6	90.0	579	--	--
16	335247.8	1065052.8	4521	49.5	18	1153	4.4	8.3	10.9	96.6	424	--	--
17	335246.8	1065052.9	4501	18.2	12	1159	4.5	8.3	10.3	91.6	126	--	--
18	335245.4	1065052.8	4522	56.9	14	1204	4.6	8.3	11.1	101	426	--	--
19	335243.5	1065053.9	4494	41.8	14	1209	4.8	8.3	11.0	98.3	425	--	--
20	335243.5	1065053.0	4505	43.0	26	1214	4.8	8.3	11.0	99.8	427	--	--
21	335242.9	1065054.2	4496	15.0	12	1219	5.0	8.3	10.6	96.7	410	--	--
22	335241.8	1065054.5	4505	14.9	15	1225	5.0	8.3	10.9	99.9	424	--	--
23	335241.2	1065055.4	4515	24.0	10	1236	5.3	8.3	10.6	96.1	427	--	--
24	335240.5	1065056.5	4525	24.8	6	--	9.2	8.7	13.7	139	437	--	--
25	335240.4	1065058.2	4550	23.0	3	1356	10.4	8.3	13.2	136	430	--	--
26	335239.9	1065057.3	4538	27.8	3	1357	10.8	8.4	11.2	117	441	--	--
27	335238.8	1065057.2	4616	25.2	2	1401	6.7	8.2	10.9	99.9	427	--	--
28	335238.3	1065059.2	4549	23.5	6	1407	6.9	8.2	10.1	99.4	426	--	--
29	335237.6	1065058.1	4532	35.1	6	1411	6.5	8.4	10.5	98.9	358	--	--
30	335237.0	1065058.0	4527	18.5	9	1415	6.6	8.3	9.7	90.5	424	--	--
31	335236.7	1065059.1	4533	18.7	24	1421	6.7	8.2	10.2	96.4	427	--	--
32	335235.2	1065058.1	4531	21.6	2	1437	7.1	8.3	8.9	78.8	376	--	--

Table 7.14.2--Seine haul data for Rio Grande at North Boundary Bosque del Apache on January 13, 2003

Seine haul #	Latitude	Longitude	Elevation (ft)	Error (+/- ft)	Probe depth (in)	Time	Water temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)	Comments
33	335233.9	1065057.6	4577	29.6	2	1443	7.4	8.3	9.8	95.0	426	--	Embayment.
34	335232.9	1065058.0	4543	10.5	20	1452	6.9	8.3	10.0	94.3	425	--	--
35	335232.3	1065058.8	4533	33.0	12	1457	7.0	8.3	8.2	78.8	424	--	--
36	335231.0	1065057.9	4520	35.0	16	1502	7.0	8.3	10.6	101	426	--	--
37	335230.0	1065058.2	4548	32.0	18	1507	7.0	8.3	9.9	94.6	425	--	--
38	335228.7	1065058.0	4545	49.5	36	1516	7.1	8.3	9.9	95.4	426	--	--
39	335227.7	1065058.0	4552	68.6	4	1524	7.1	8.3	9.4	87.8	421	--	--
40	335059.4	1065227.1	4521	11.7	6	1528	7.2	8.3	10.4	101	426	--	--
41	335226.0	1065059.8	4531	22.1	9	1533	7.2	8.3	10.6	102	426	--	--
42	335225.5	1065058.4	4527	24.9	16	1537	7.2	8.3	10.5	101	426	--	--
43	335223.7	1065057.4	4540	19.1	16	1541	7.2	8.3	10.4	100	426	--	--
44	335224.2	1065054.0	4517	31.7	12	1541	7.6	8.3	10.5	102	428	--	Discretionary.
45	335226.5	1065055.5	4527	20.3	6	1554	7.5	8.3	10.0	91.1	420	--	Discretionary.

Table 8.1.1.--Continuous Monitoring Data for Rio Rancho Waste Water Treatment Plant
Outfall #2, August 8 through August 14, 2002

[--, no data; °C, degrees Celsius; mg/L, milligrams per liter; % sat, percent saturation; uS/cm, microsiemens per centimeter; NTU, Nephelometric turbidity units.]

MiniSonde4a 36755
Log File Name : RIO RANCHO 8-8-2
Setup Date (MMDDYY) : 080802
Setup Time (HHMMSS) : 083928
Starting Date (MMDDYY) : 080802
Starting Time (HHMMSS) : 093000
Stopping Date (MMDDYY) : 081502
Stopping Time (HHMMSS) : 120000
Interval (HHMMSS) : 001500
Sensor warmup (HHMMSS) : 000200
Circltr warmup (HHMMSS) : 000100

Date	Time (HHMMSS)	Temp (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
8/8/2002	093000	28.3	7.6	6.0	91.3	1004	--
8/8/2002	094500	28.4	7.6	6.0	91.5	1002	--
8/8/2002	100000	28.4	7.6	5.9	89.8	1004	--
8/8/2002	101500	28.4	7.5	5.7	87.7	1003	--
8/8/2002	103000	28.5	7.6	5.7	87.3	1004	--
8/8/2002	104500	28.5	7.5	6.2	94.2	511	--
8/8/2002	110000	28.5	7.5	5.9	90.1	990	--
8/8/2002	111500	28.7	7.6	5.8	89.6	1003	--
8/8/2002	113000	28.7	7.6	5.7	87.2	1002	--
8/8/2002	114500	28.7	7.6	5.5	84.1	1002	--
8/8/2002	120000	28.8	7.6	5.5	84.8	1002	--
8/8/2002	121500	28.9	7.6	5.8	89.7	1002	--
8/8/2002	123000	29.0	7.6	5.5	85.3	1003	--
8/8/2002	124500	28.9	7.6	5.7	88.2	1002	--
8/8/2002	130000	29.0	7.6	5.8	89.8	1002	--
8/8/2002	131500	29.0	7.6	5.7	88.9	999	--
8/8/2002	133000	29.2	7.6	5.8	89.8	1002	--
8/8/2002	134500	29.5	7.6	5.9	92.6	1003	--
8/8/2002	140000	29.3	7.6	5.7	89.0	1002	--
8/8/2002	141500	29.2	7.5	5.7	87.8	1003	--
8/8/2002	143000	29.3	7.6	5.7	88.1	1002	--
8/8/2002	144500	29.2	7.5	5.8	89.2	1003	--
8/8/2002	150000	29.7	7.6	5.9	92.4	1004	--
8/8/2002	151500	29.0	7.5	4.4	67.9	1003	--
8/8/2002	153000	29.0	7.5	4.9	75.9	1003	--
8/8/2002	154500	28.9	7.5	4.5	68.8	1003	--
8/8/2002	160000	28.9	7.5	4.6	71.3	1003	--
8/8/2002	161500	29.0	7.5	4.6	70.7	1004	--
8/8/2002	163000	28.9	7.5	4.6	70.8	1004	--
8/8/2002	164500	28.9	7.5	4.7	72.0	1005	--
8/8/2002	170000	28.9	7.5	4.6	71.6	1005	--
8/8/2002	171500	28.9	7.5	4.6	70.9	1006	--
8/8/2002	173000	28.9	7.5	4.6	71.2	1007	--
8/8/2002	174500	28.9	7.5	4.6	70.3	1008	--
8/8/2002	180000	28.9	7.5	4.7	71.9	1009	--
8/8/2002	181500	28.9	7.5	4.8	74.6	1010	--

Table 8.1.1.--Continuous Monitoring Data for Rio Rancho Waste Water Treatment Plant
Outfall #2, August 8 through August 14, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
8/8/2002	183000	28.8	7.5	4.6	71.2	1011	--
8/8/2002	184500	28.8	7.5	4.8	73.5	1012	--
8/8/2002	190000	28.8	7.5	4.5	69.1	1015	--
8/8/2002	191500	28.7	7.5	4.6	71.2	1016	--
8/8/2002	193000	28.8	7.5	4.6	71.4	1018	--
8/8/2002	194500	28.7	7.5	4.8	74.2	1020	--
8/8/2002	200000	28.7	7.5	4.6	70.2	1021	--
8/8/2002	201500	28.7	7.5	4.7	71.5	1024	--
8/8/2002	203000	28.6	7.5	4.8	74.0	1024	--
8/8/2002	204500	28.7	7.5	4.3	65.4	1025	--
8/8/2002	210000	28.7	7.5	4.4	67.8	1027	--
8/8/2002	211500	28.6	7.5	4.4	68.2	1027	--
8/8/2002	213000	28.6	7.5	4.4	68.2	1028	--
8/8/2002	214500	28.6	7.5	4.4	67.6	1029	--
8/8/2002	220000	28.6	7.5	4.8	74.2	1030	--
8/8/2002	221500	28.6	7.5	4.8	73.4	1030	--
8/8/2002	223000	28.6	7.5	4.6	71.0	1030	--
8/8/2002	224500	28.6	7.5	4.5	68.3	1031	--
8/8/2002	230000	28.6	7.5	4.5	69.5	1031	--
8/8/2002	231500	28.6	7.5	4.3	66.5	1032	--
8/8/2002	233000	28.6	7.5	4.5	68.8	1031	--
8/8/2002	234500	28.6	7.5	4.4	66.9	1032	--
8/9/2002	000000	28.6	7.5	4.3	66.0	1032	--
8/9/2002	001500	28.5	7.5	4.2	64.3	1032	--
8/9/2002	003000	28.5	7.5	4.1	62.1	1032	--
8/9/2002	004500	28.5	7.5	4.2	64.4	1032	--
8/9/2002	010000	28.5	7.5	4.1	62.9	1032	--
8/9/2002	011500	28.4	7.5	4.2	63.9	1031	--
8/9/2002	013000	28.4	7.5	4.2	63.8	1031	--
8/9/2002	014500	28.4	7.5	4.1	63.1	1031	--
8/9/2002	020000	28.4	7.5	4.1	63.3	1031	--
8/9/2002	021500	28.4	7.5	4.1	63.3	1031	--
8/9/2002	023000	28.4	7.5	4.0	61.3	1031	--
8/9/2002	024500	28.3	7.5	4.0	60.6	1031	--
8/9/2002	030000	28.2	7.5	4.0	60.3	1040	--
8/9/2002	031500	28.1	7.5	3.9	59.1	1032	--
8/9/2002	033000	28.3	7.5	4.0	61.6	1030	--
8/9/2002	034500	28.3	7.5	4.0	61.5	1031	--
8/9/2002	040000	28.2	7.5	4.0	60.6	1031	--
8/9/2002	041500	28.1	7.5	3.9	58.7	1042	--
8/9/2002	043000	27.8	7.5	3.7	56.8	1032	--
8/9/2002	044500	27.9	7.5	3.8	58.3	1032	--
8/9/2002	050000	28.0	7.5	3.8	58.1	1030	--
8/9/2002	051500	28.1	7.5	3.9	60.1	1030	--
8/9/2002	053000	28.0	7.5	3.9	58.5	1035	--
8/9/2002	054500	27.6	7.5	3.8	57.6	1032	--
8/9/2002	060000	27.5	7.5	3.9	58.1	1031	--
8/9/2002	061500	28.0	7.5	4.1	61.5	1030	--
8/9/2002	063000	28.1	7.6	4.3	66.1	1029	--
8/9/2002	064500	28.0	7.5	4.0	60.2	1032	--

Table 8.1.1.--Continuous Monitoring Data for Rio Rancho Waste Water Treatment Plant
Outfall #2, August 8 through August 14, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
8/9/2002	070000	27.9	7.6	4.3	65.3	1029	--
8/9/2002	071500	28.1	7.6	4.3	65.2	1028	--
8/9/2002	073000	28.1	7.6	4.5	68.3	1027	--
8/9/2002	074500	28.0	7.7	4.4	67.3	1025	--
8/9/2002	080000	27.9	7.7	4.6	70.5	1025	--
8/9/2002	081500	28.0	7.7	4.4	66.9	1025	--
8/9/2002	083000	28.1	7.6	4.8	73.0	1024	--
8/9/2002	084500	28.2	7.6	4.7	71.4	1024	--
8/9/2002	090000	28.3	7.6	4.6	70.6	1023	--
8/9/2002	091500	28.4	7.6	4.6	69.8	1022	--
8/9/2002	093000	28.4	7.6	4.5	68.2	1023	--
8/9/2002	094500	28.4	7.6	4.5	69.5	1022	--
8/9/2002	100000	28.5	7.5	4.5	69.0	1023	--
8/9/2002	101500	28.5	7.5	4.4	67.9	1022	--
8/9/2002	103000	28.6	7.5	4.3	65.9	1023	--
8/9/2002	104500	28.6	7.5	4.4	67.0	1021	--
8/9/2002	110000	28.6	7.5	4.3	65.9	1023	--
8/9/2002	111500	28.7	7.5	4.4	68.4	1020	--
8/9/2002	113000	28.8	7.5	4.4	67.3	1020	--
8/9/2002	114500	28.8	7.5	4.4	67.9	1020	--
8/9/2002	120000	28.8	7.5	4.4	67.4	1020	--
8/9/2002	121500	28.8	7.5	4.3	66.9	1020	--
8/9/2002	123000	28.8	7.5	4.4	67.6	1019	--
8/9/2002	124500	28.9	7.5	4.4	68.6	1019	--
8/9/2002	130000	28.9	7.4	4.2	64.3	1019	--
8/9/2002	131500	29.0	7.5	4.5	69.1	1019	--
8/9/2002	133000	29.0	7.4	4.3	66.1	1019	--
8/9/2002	134500	29.0	7.5	4.2	65.6	1019	--
8/9/2002	140000	29.0	7.4	4.2	64.3	1019	--
8/9/2002	141500	29.0	7.4	4.3	65.8	1019	--
8/9/2002	143000	28.9	7.4	4.2	64.7	1019	--
8/9/2002	144500	28.9	7.4	4.2	64.6	1020	--
8/9/2002	150000	28.9	7.4	4.1	63.7	1020	--
8/9/2002	151500	28.9	7.4	4.3	66.2	1020	--
8/9/2002	153000	28.9	7.4	4.1	63.4	1021	--
8/9/2002	154500	28.9	7.5	4.0	61.0	1021	--
8/9/2002	160000	28.9	7.5	4.4	67.8	1022	--
8/9/2002	161500	28.8	7.4	4.2	65.0	1023	--
8/9/2002	163000	28.7	7.5	4.1	62.3	1024	--
8/9/2002	164500	28.7	7.4	3.8	58.6	1026	--
8/9/2002	170000	28.7	7.4	3.9	60.5	1026	--
8/9/2002	171500	28.7	7.4	4.2	64.4	1028	--
8/9/2002	173000	28.7	7.4	4.4	67.3	1030	--
8/9/2002	174500	28.7	7.4	4.4	67.9	1029	--
8/9/2002	180000	28.7	7.4	3.9	60.6	1030	--
8/9/2002	181500	28.7	7.4	4.1	63.2	1031	--
8/9/2002	183000	28.6	7.4	4.0	61.5	1032	--
8/9/2002	184500	28.7	7.4	4.4	66.9	1033	--
8/9/2002	190000	28.6	7.4	4.3	66.8	1034	--
8/9/2002	191500	28.6	7.4	4.3	65.9	1035	--

Table 8.1.1.--Continuous Monitoring Data for Rio Rancho Waste Water Treatment Plant
Outfall #2, August 8 through August 14, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
8/9/2002	193000	28.6	7.4	4.4	67.2	1036	--
8/9/2002	194500	28.6	7.4	4.4	68.1	1036	--
8/9/2002	200000	28.6	7.4	4.5	69.3	1037	--
8/9/2002	201500	28.6	7.4	4.4	67.2	1037	--
8/9/2002	203000	28.6	7.4	4.5	68.8	1038	--
8/9/2002	204500	28.6	7.4	4.6	69.9	1038	--
8/9/2002	210000	28.5	7.4	4.3	66.3	1038	--
8/9/2002	211500	28.6	7.4	4.1	62.3	1040	--
8/9/2002	213000	28.6	7.4	4.2	64.2	1040	--
8/9/2002	214500	28.5	7.4	4.4	67.4	1040	--
8/9/2002	220000	28.5	7.4	4.2	64.7	1041	--
8/9/2002	221500	28.4	7.4	4.3	66.4	1040	--
8/9/2002	223000	28.5	7.4	4.2	63.9	1041	--
8/9/2002	224500	28.5	7.4	4.1	62.4	1042	--
8/9/2002	230000	28.5	7.4	4.1	62.1	1042	--
8/9/2002	231500	28.5	7.4	4.0	61.7	1042	--
8/9/2002	233000	28.4	7.4	4.2	63.8	1042	--
8/9/2002	234500	28.4	7.4	4.0	61.2	1042	--
8/10/2002	000000	28.4	7.4	4.0	62.0	1043	--
8/10/2002	001500	28.4	7.4	4.0	60.7	1043	--
8/10/2002	003000	28.4	7.4	4.2	64.3	1043	--
8/10/2002	004500	28.3	7.4	3.9	59.0	1045	--
8/10/2002	010000	28.3	7.4	4.0	60.7	1044	--
8/10/2002	011500	28.4	7.4	4.2	64.3	1043	--
8/10/2002	013000	28.3	7.4	4.0	60.9	1043	--
8/10/2002	014500	28.3	7.4	4.1	62.7	1043	--
8/10/2002	020000	28.2	7.4	3.9	59.5	1044	--
8/10/2002	021500	28.1	7.4	3.9	59.3	1046	--
8/10/2002	023000	28.1	7.4	4.1	61.7	1043	--
8/10/2002	024500	28.2	7.4	4.1	61.9	1043	--
8/10/2002	030000	28.2	7.4	3.9	59.5	1043	--
8/10/2002	031500	28.2	7.4	3.9	59.2	1043	--
8/10/2002	033000	28.1	7.4	3.8	58.2	1044	--
8/10/2002	034500	27.7	7.4	3.7	56.2	1047	--
8/10/2002	040000	27.8	7.4	3.7	56.4	1045	--
8/10/2002	041500	28.0	7.4	3.9	59.6	1043	--
8/10/2002	043000	28.0	7.4	3.8	57.0	1043	--
8/10/2002	044500	27.9	7.5	3.7	56.8	1044	--
8/10/2002	050000	27.4	7.5	3.7	55.7	1048	--
8/10/2002	051500	27.1	7.5	3.6	53.6	1045	--
8/10/2002	053000	27.5	7.5	3.8	57.9	1045	--
8/10/2002	054500	27.7	7.5	3.9	58.2	1043	--
8/10/2002	060000	27.7	7.5	3.9	58.8	1042	--
8/10/2002	061500	27.3	7.5	3.8	57.3	1044	--
8/10/2002	063000	27.1	7.5	3.9	58.0	1044	--
8/10/2002	064500	27.5	7.5	3.9	59.0	1043	--
8/10/2002	070000	27.8	7.5	4.0	60.2	1041	--
8/10/2002	071500	27.8	7.5	4.0	60.8	1042	--
8/10/2002	073000	27.5	7.5	4.2	63.2	1057	--
8/10/2002	074500	27.5	7.5	4.3	64.9	1044	--

Table 8.1.1.--Continuous Monitoring Data for Rio Rancho Waste Water Treatment Plant
Outfall #2, August 8 through August 14, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
8/10/2002	080000	27.8	7.5	4.2	63.2	1041	--
8/10/2002	081500	27.9	7.5	4.3	65.5	1040	--
8/10/2002	083000	27.9	7.5	4.3	64.9	1040	--
8/10/2002	084500	27.8	7.6	4.4	66.1	1038	--
8/10/2002	090000	27.8	7.6	4.8	73.4	1038	--
8/10/2002	091500	27.8	7.6	4.8	72.8	1036	--
8/10/2002	093000	28.0	7.6	4.5	68.3	1036	--
8/10/2002	094500	28.1	7.6	4.5	68.7	1036	--
8/10/2002	100000	28.2	7.5	4.6	69.4	1035	--
8/10/2002	101500	28.3	7.5	4.8	73.5	1035	--
8/10/2002	103000	28.3	7.5	4.7	71.9	1035	--
8/10/2002	104500	28.4	7.5	5.3	81.6	1035	--
8/10/2002	110000	28.5	7.5	4.5	69.2	1034	--
8/10/2002	111500	28.5	7.5	5.0	77.3	1034	--
8/10/2002	113000	28.5	7.5	5.0	76.6	1034	--
8/10/2002	114500	28.6	7.5	5.2	79.4	1034	--
8/10/2002	120000	28.6	7.5	5.0	76.2	1034	--
8/10/2002	121500	28.6	7.5	4.8	74.0	1034	--
8/10/2002	123000	28.7	7.5	4.3	66.5	1034	--
8/10/2002	124500	28.7	7.5	4.2	64.3	1034	--
8/10/2002	130000	28.7	7.5	4.6	70.3	1035	--
8/10/2002	131500	28.8	7.5	4.4	67.3	1035	--
8/10/2002	133000	28.8	7.4	4.3	66.3	1035	--
8/10/2002	134500	28.9	7.4	4.2	64.7	1035	--
8/10/2002	140000	28.9	7.4	4.5	68.8	1035	--
8/10/2002	141500	28.9	7.4	4.6	71.1	1033	--
8/10/2002	143000	28.9	7.4	4.2	64.1	1036	--
8/10/2002	144500	28.9	7.4	4.0	61.7	1035	--
8/10/2002	150000	28.9	7.4	3.7	56.7	1036	--
8/10/2002	151500	28.9	7.3	3.8	58.9	1036	--
8/10/2002	153000	28.9	7.3	3.6	55.5	1038	--
8/10/2002	154500	28.8	7.4	4.5	68.7	1036	--
8/10/2002	160000	28.8	7.3	4.0	61.6	1037	--
8/10/2002	161500	28.8	7.3	3.7	56.8	1038	--
8/10/2002	163000	28.7	7.3	4.0	61.6	1037	--
8/10/2002	164500	28.8	7.3	3.8	58.8	1038	--
8/10/2002	170000	28.7	7.4	3.8	58.7	1038	--
8/10/2002	171500	28.7	7.4	3.9	60.5	1038	--
8/10/2002	173000	28.7	7.3	3.7	56.4	1038	--
8/10/2002	174500	28.7	7.3	3.6	55.5	1039	--
8/10/2002	180000	28.7	7.3	3.9	59.7	1039	--
8/10/2002	181500	28.7	7.3	3.7	56.9	1038	--
8/10/2002	183000	28.7	7.3	3.7	56.2	1039	--
8/10/2002	184500	28.7	7.3	3.7	56.8	1039	--
8/10/2002	190000	28.7	7.3	3.6	54.9	1040	--
8/10/2002	191500	28.7	7.4	3.7	57.0	1039	--
8/10/2002	193000	28.7	7.4	3.6	55.3	1041	--
8/10/2002	194500	28.7	7.3	3.6	54.6	1041	--
8/10/2002	200000	28.6	7.3	3.9	59.8	1040	--
8/10/2002	201500	28.6	7.3	3.7	56.5	1040	--

Table 8.1.1.--Continuous Monitoring Data for Rio Rancho Waste Water Treatment Plant
Outfall #2, August 8 through August 14, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
8/10/2002	203000	28.6	7.3	3.6	55.0	1044	--
8/10/2002	204500	28.6	7.3	3.7	56.8	1042	--
8/10/2002	210000	28.6	7.3	3.8	57.6	1040	--
8/10/2002	211500	28.5	7.4	3.9	60.4	1041	--
8/10/2002	213000	28.5	7.4	3.9	59.0	1038	--
8/10/2002	214500	28.5	7.4	3.9	59.0	1039	--
8/10/2002	220000	28.5	7.4	4.1	62.4	1037	--
8/10/2002	221500	28.5	7.3	4.0	60.7	1037	--
8/10/2002	223000	28.5	7.4	3.9	60.5	1036	--
8/10/2002	224500	28.5	7.4	4.0	61.2	1036	--
8/10/2002	230000	28.5	7.4	3.9	60.0	1037	--
8/10/2002	231500	28.5	7.4	4.0	60.5	1035	--
8/10/2002	233000	28.5	7.4	4.2	63.7	1034	--
8/10/2002	234500	28.5	7.4	4.2	64.9	1034	--
8/11/2002	000000	28.5	7.4	4.1	62.4	1033	--
8/11/2002	001500	28.4	7.4	3.8	58.5	1033	--
8/11/2002	003000	28.4	7.4	4.1	63.2	1033	--
8/11/2002	004500	28.4	7.4	4.4	67.2	1032	--
8/11/2002	010000	28.4	7.4	4.5	68.6	1032	--
8/11/2002	011500	28.4	7.4	4.2	64.9	1031	--
8/11/2002	013000	28.3	7.4	4.1	61.9	1031	--
8/11/2002	014500	28.3	7.4	3.8	58.5	1031	--
8/11/2002	020000	28.3	7.4	4.2	64.0	1031	--
8/11/2002	021500	28.3	7.4	4.2	63.7	1030	--
8/11/2002	023000	28.3	7.4	3.9	60.1	1029	--
8/11/2002	024500	28.3	7.4	4.0	61.4	1029	--
8/11/2002	030000	28.3	7.4	3.8	58.2	1029	--
8/11/2002	031500	28.0	7.4	3.6	55.1	1037	--
8/11/2002	033000	27.9	7.4	3.8	57.1	1030	--
8/11/2002	034500	28.2	7.4	4.2	63.6	1028	--
8/11/2002	040000	28.2	7.4	4.2	63.5	1028	--
8/11/2002	041500	28.1	7.4	3.9	59.7	1028	--
8/11/2002	043000	27.9	7.4	3.7	55.4	1035	--
8/11/2002	044500	27.5	7.4	3.6	54.1	1031	--
8/11/2002	050000	27.6	7.4	3.8	58.0	1030	--
8/11/2002	051500	27.9	7.4	4.1	62.8	1029	--
8/11/2002	053000	28.0	7.5	3.9	59.1	1027	--
8/11/2002	054500	27.7	7.5	3.6	54.8	1035	--
8/11/2002	060000	27.4	7.5	3.6	54.3	1032	--
8/11/2002	061500	27.2	7.4	3.6	53.4	1030	--
8/11/2002	063000	27.5	7.5	3.9	59.2	1032	--
8/11/2002	064500	27.8	7.5	4.0	60.3	1028	--
8/11/2002	070000	27.7	7.4	3.8	57.3	1028	--
8/11/2002	071500	27.4	7.5	3.9	59.2	1029	--
8/11/2002	073000	27.5	7.5	4.2	64.0	1029	--
8/11/2002	074500	27.8	7.5	4.3	65.3	1028	--
8/11/2002	080000	28.0	7.5	4.2	63.7	1027	--
8/11/2002	081500	28.0	7.5	4.3	65.6	1026	--
8/11/2002	083000	28.1	7.5	4.5	68.5	1025	--
8/11/2002	084500	28.1	7.5	4.6	69.2	1023	--

Table 8.1.1.--Continuous Monitoring Data for Rio Rancho Waste Water Treatment Plant
Outfall #2, August 8 through August 14, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
8/11/2002	090000	28.0	7.6	4.7	71.0	1023	--
8/11/2002	091500	28.0	7.6	4.7	70.8	1019	--
8/11/2002	093000	28.0	7.6	4.6	70.0	1020	--
8/11/2002	094500	28.1	7.6	4.7	71.5	1020	--
8/11/2002	100000	28.2	7.5	4.9	75.3	1017	--
8/11/2002	101500	28.3	7.5	4.9	74.8	1014	--
8/11/2002	103000	28.4	7.5	4.4	68.0	1019	--
8/11/2002	104500	28.5	7.5	4.6	70.0	1017	--
8/11/2002	110000	28.6	7.5	4.7	71.9	1017	--
8/11/2002	111500	28.6	7.4	4.7	72.4	1017	--
8/11/2002	113000	28.6	7.4	4.7	72.8	1016	--
8/11/2002	114500	28.7	7.4	4.8	73.0	1017	--
8/11/2002	120000	28.7	7.4	4.3	66.6	1016	--
8/11/2002	121500	28.7	7.4	4.8	73.6	1017	--
8/11/2002	123000	28.8	7.4	4.8	73.6	1014	--
8/11/2002	124500	28.8	7.4	4.7	72.2	1015	--
8/11/2002	130000	28.8	7.4	4.4	67.4	1017	--
8/11/2002	131500	28.9	7.4	4.2	65.1	1019	--
8/11/2002	133000	29.0	7.4	4.2	64.2	1018	--
8/11/2002	134500	29.0	7.4	4.4	67.7	1019	--
8/11/2002	140000	29.0	7.4	4.0	62.6	1021	--
8/11/2002	141500	29.0	7.3	4.4	67.9	1019	--
8/11/2002	143000	29.1	7.3	4.1	62.9	1020	--
8/11/2002	144500	29.1	7.4	4.2	64.6	1020	--
8/11/2002	150000	29.1	7.4	4.0	62.4	1020	--
8/11/2002	151500	29.1	7.3	4.0	62.4	1020	--
8/11/2002	153000	29.0	7.3	3.9	60.0	1021	--
8/11/2002	154500	29.0	7.3	4.0	61.1	1021	--
8/11/2002	160000	29.0	7.3	3.7	57.4	1022	--
8/11/2002	161500	29.0	7.3	3.7	57.0	1022	--
8/11/2002	163000	29.0	7.3	3.8	58.0	1023	--
8/11/2002	164500	28.9	7.3	3.9	59.5	1022	--
8/11/2002	170000	29.0	7.3	4.0	62.2	1024	--
8/11/2002	171500	28.9	7.4	4.1	63.8	1024	--
8/11/2002	173000	28.9	7.4	4.2	65.4	1025	--
8/11/2002	174500	28.9	7.4	4.2	64.6	1025	--
8/11/2002	180000	28.9	7.4	4.1	62.8	1025	--
8/11/2002	181500	28.9	7.4	3.9	60.6	1026	--
8/11/2002	183000	28.9	7.4	3.8	58.7	1026	--
8/11/2002	184500	28.8	7.4	4.1	63.1	1028	--
8/11/2002	190000	28.8	7.4	4.0	61.9	1027	--
8/11/2002	191500	28.8	7.4	4.3	65.8	1027	--
8/11/2002	193000	28.8	7.4	4.1	62.4	1028	--
8/11/2002	194500	28.8	7.4	4.0	61.3	1028	--
8/11/2002	200000	28.7	7.3	3.9	60.5	1028	--
8/11/2002	201500	28.8	7.3	4.0	62.2	1028	--
8/11/2002	203000	28.7	7.3	4.1	63.0	1028	--
8/11/2002	204500	28.7	7.4	4.0	62.0	1029	--
8/11/2002	210000	28.7	7.4	3.7	57.4	1029	--
8/11/2002	211500	28.6	7.4	4.0	61.3	1029	--

Table 8.1.1.--Continuous Monitoring Data for Rio Rancho Waste Water Treatment Plant
Outfall #2, August 8 through August 14, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
8/11/2002	213000	28.7	7.3	4.3	66.1	1029	--
8/11/2002	214500	28.7	7.4	4.3	66.7	1028	--
8/11/2002	220000	28.7	7.4	4.3	66.8	1028	--
8/11/2002	221500	28.7	7.3	4.0	61.8	1028	--
8/11/2002	223000	28.7	7.3	4.1	62.6	1027	--
8/11/2002	224500	28.7	7.4	4.0	61.7	1028	--
8/11/2002	230000	28.7	7.3	4.1	63.5	1028	--
8/11/2002	231500	28.7	7.3	4.0	62.1	1028	--
8/11/2002	233000	28.7	7.3	4.0	60.8	1027	--
8/11/2002	234500	28.6	7.3	3.8	57.8	1027	--
8/12/2002	000000	28.6	7.3	3.8	57.6	1027	--
8/12/2002	001500	28.6	7.3	3.8	57.6	1027	--
8/12/2002	003000	28.6	7.4	4.1	63.2	1027	--
8/12/2002	004500	28.6	7.4	4.0	61.5	1027	--
8/12/2002	010000	28.6	7.4	3.6	55.5	1027	--
8/12/2002	011500	28.4	7.3	3.5	53.2	1028	--
8/12/2002	013000	28.4	7.4	3.7	57.3	1027	--
8/12/2002	014500	28.5	7.4	3.9	60.0	1026	--
8/12/2002	020000	28.5	7.4	3.7	57.1	1026	--
8/12/2002	021500	28.4	7.4	3.5	53.4	1029	--
8/12/2002	023000	28.4	7.3	3.2	49.6	1027	--
8/12/2002	024500	28.3	7.3	2.7	41.0	1026	--
8/12/2002	030000	28.1	7.4	3.4	51.4	1024	--
8/12/2002	031500	28.2	7.4	3.4	51.9	1025	--
8/12/2002	033000	28.3	7.3	3.2	48.4	1026	--
8/12/2002	034500	28.3	7.4	3.3	50.0	1026	--
8/12/2002	040000	28.2	7.4	3.2	48.1	1032	--
8/12/2002	041500	27.8	7.4	2.9	44.0	1026	--
8/12/2002	043000	27.6	7.4	3.0	45.8	1027	--
8/12/2002	044500	27.9	7.4	3.3	50.6	1028	--
8/12/2002	050000	28.1	7.4	3.3	50.1	1026	--
8/12/2002	051500	28.0	7.4	3.2	47.9	1026	--
8/12/2002	053000	27.6	7.4	3.0	45.9	1025	--
8/12/2002	054500	27.4	7.4	3.1	46.1	1025	--
8/12/2002	060000	27.5	7.4	3.3	49.7	1029	--
8/12/2002	061500	27.8	7.4	3.4	52.1	1027	--
8/12/2002	063000	28.0	7.4	3.3	49.5	1026	--
8/12/2002	064500	27.8	7.4	3.4	51.9	1025	--
8/12/2002	070000	27.9	7.4	3.8	57.5	1028	--
8/12/2002	071500	28.1	7.5	3.7	56.9	1025	--
8/12/2002	073000	28.1	7.4	3.9	58.7	1024	--
8/12/2002	074500	28.0	7.5	3.9	58.9	1023	--
8/12/2002	080000	28.0	7.4	4.1	62.4	1023	--
8/12/2002	081500	28.1	7.4	4.2	63.3	1025	--
8/12/2002	083000	28.2	7.5	4.2	64.2	1022	--
8/12/2002	084500	28.3	7.5	4.3	66.1	1022	--
8/12/2002	090000	28.4	7.5	4.2	63.5	1022	--
8/12/2002	091500	28.4	7.4	4.2	63.9	1022	--
8/12/2002	093000	28.5	7.4	4.0	61.4	1022	--
8/12/2002	094500	28.5	7.4	4.1	62.8	1022	--

Table 8.1.1.--Continuous Monitoring Data for Rio Rancho Waste Water Treatment Plant
Outfall #2, August 8 through August 14, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
8/12/2002	100000	28.6	7.3	4.2	63.8	1022	--
8/12/2002	101500	28.6	7.4	4.1	63.3	1024	--
8/12/2002	103000	28.7	7.4	4.3	65.7	1021	--
8/12/2002	104500	28.7	7.4	4.3	65.9	1020	--
8/12/2002	110000	28.7	7.4	4.3	65.7	1021	--
8/12/2002	111500	28.8	7.4	4.3	66.2	1022	--
8/12/2002	113000	28.8	7.4	4.1	63.2	1023	--
8/12/2002	114500	28.8	7.4	4.1	63.1	1023	--
8/12/2002	120000	28.8	7.3	4.1	63.5	1022	--
8/12/2002	121500	28.8	7.3	4.0	62.0	1022	--
8/12/2002	123000	28.9	7.4	4.0	61.0	1023	--
8/12/2002	124500	28.9	7.3	4.0	61.7	1023	--
8/12/2002	130000	29.0	7.4	3.9	60.8	1024	--
8/12/2002	131500	29.0	7.4	4.1	62.6	1023	--
8/12/2002	133000	29.0	7.4	3.9	60.7	1024	--
8/12/2002	134500	29.0	7.4	3.8	58.1	1024	--
8/12/2002	140000	29.1	7.4	3.8	59.4	1025	--
8/12/2002	141500	29.1	7.3	3.4	53.1	1025	--
8/12/2002	143000	29.1	7.3	3.9	59.7	1026	--
8/12/2002	144500	29.1	7.4	3.9	60.9	1026	--
8/12/2002	150000	29.1	7.4	3.9	60.5	1026	--
8/12/2002	151500	29.1	7.3	3.9	59.9	1027	--
8/12/2002	153000	29.1	7.3	3.5	53.6	1027	--
8/12/2002	154500	29.0	7.3	3.4	52.6	1028	--
8/12/2002	160000	29.0	7.3	3.6	55.2	1028	--
8/12/2002	161500	28.9	7.2	3.0	47.0	1029	--
8/12/2002	163000	28.9	7.2	3.2	49.5	1028	--
8/12/2002	164500	28.9	7.2	3.1	48.1	1029	--
8/12/2002	170000	28.9	7.2	3.1	47.3	1029	--
8/12/2002	171500	28.8	7.2	2.8	43.8	1030	--
8/12/2002	173000	28.8	7.2	2.8	43.5	1028	--
8/12/2002	174500	28.7	7.2	3.4	52.5	1029	--
8/12/2002	180000	28.8	7.3	3.8	58.0	1029	--
8/12/2002	181500	28.7	7.3	3.8	58.7	1031	--
8/12/2002	183000	28.7	7.3	3.8	58.9	1033	--
8/12/2002	184500	28.7	7.2	3.5	53.2	1034	--
8/12/2002	190000	28.7	7.2	3.5	54.2	1036	--
8/12/2002	191500	28.6	7.2	3.8	58.2	1036	--
8/12/2002	193000	28.6	7.2	3.2	49.1	1036	--
8/12/2002	194500	28.7	7.1	3.3	50.3	1037	--
8/12/2002	200000	28.7	7.2	3.3	50.1	1008	--
8/12/2002	201500	28.6	7.2	3.3	51.0	1037	--
8/12/2002	203000	28.6	7.2	3.2	49.2	1037	--
8/12/2002	204500	28.6	7.1	3.0	45.5	1038	--
8/12/2002	210000	28.5	7.2	3.3	50.2	1038	--
8/12/2002	211500	28.5	7.1	3.2	48.7	1038	--
8/12/2002	213000	28.5	7.1	3.0	45.5	1038	--
8/12/2002	214500	28.5	7.1	3.2	49.5	1038	--
8/12/2002	220000	28.5	7.1	3.3	50.3	1036	--
8/12/2002	221500	28.5	7.2	3.9	60.5	1035	--

Table 8.1.1.--Continuous Monitoring Data for Rio Rancho Waste Water Treatment Plant
Outfall #2, August 8 through August 14, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
8/12/2002	223000	28.6	7.3	3.8	58.6	1037	--
8/12/2002	224500	28.6	7.3	3.7	56.3	1037	--
8/12/2002	230000	28.5	7.3	3.6	55.9	1037	--
8/12/2002	231500	28.5	7.2	3.5	52.9	1039	--
8/12/2002	233000	28.5	7.1	3.3	50.7	1037	--
8/12/2002	234500	28.4	7.1	3.5	54.3	1037	--
8/13/2002	000000	28.4	7.2	3.6	55.0	1039	--
8/13/2002	001500	28.4	7.1	3.4	51.4	1042	--
8/13/2002	003000	28.3	7.1	3.2	48.9	1038	--
8/13/2002	004500	28.3	7.1	3.1	46.9	1038	--
8/13/2002	010000	28.1	7.1	2.9	43.8	1040	--
8/13/2002	011500	28.1	7.1	3.0	46.3	1038	--
8/13/2002	013000	27.9	7.1	2.6	39.6	1040	--
8/13/2002	014500	27.8	7.1	2.7	41.1	1039	--
8/13/2002	020000	27.5	7.1	2.7	40.1	1041	--
8/13/2002	021500	27.3	7.1	2.4	36.5	1042	--
8/13/2002	023000	27.0	7.1	2.6	38.3	1031	--
8/13/2002	024500	27.6	7.1	3.2	48.4	1038	--
8/13/2002	030000	27.9	7.1	3.2	48.0	1038	--
8/13/2002	031500	28.0	7.1	3.1	47.7	1039	--
8/13/2002	033000	27.8	7.1	2.7	41.0	1045	--
8/13/2002	034500	24.8	7.0	3.1	44.2	826	--
8/13/2002	040000	22.8	7.1	3.1	42.7	601	--
8/13/2002	041500	22.1	7.2	3.3	44.2	533	--
8/13/2002	043000	21.6	7.2	3.3	44.6	496	--
8/13/2002	044500	21.3	7.2	3.3	44.0	491	--
8/13/2002	050000	21.1	7.1	3.3	43.9	502	--
8/13/2002	051500	20.8	7.1	3.5	46.1	493	--
8/13/2002	053000	20.6	7.2	3.4	44.8	482	--
8/13/2002	054500	20.3	7.1	3.6	46.8	447	--
8/13/2002	060000	20.2	7.1	3.6	46.6	452	--
8/13/2002	061500	21.6	7.1	3.9	52.7	648	--
8/13/2002	063000	22.6	7.0	3.2	44.1	701	--
8/13/2002	064500	22.1	7.1	4.1	55.1	753	--
8/13/2002	070000	25.9	7.1	3.9	56.5	968	--
8/13/2002	071500	27.4	7.1	3.7	55.2	1042	--
8/13/2002	073000	27.8	7.1	3.5	52.4	1033	--
8/13/2002	074500	27.8	7.1	3.5	53.0	1032	--
8/13/2002	080000	27.8	7.2	3.7	56.2	1034	--
8/13/2002	081500	27.7	7.4	4.0	60.6	1035	--
8/13/2002	083000	27.7	7.3	4.1	61.3	1034	--
8/13/2002	084500	27.7	7.2	4.5	67.9	1033	--
8/13/2002	090000	27.8	7.3	4.3	65.2	1033	--
8/13/2002	091500	27.9	7.2	4.3	65.7	1033	--
8/13/2002	093000	28.0	7.3	4.3	65.3	1032	--
8/13/2002	094500	28.1	7.2	4.4	67.1	1032	--
8/13/2002	100000	28.1	7.3	4.1	62.4	1032	--
8/13/2002	101500	28.2	7.3	4.1	63.1	1031	--
8/13/2002	103000	28.3	7.2	4.2	64.8	1031	--
8/13/2002	104500	28.3	7.2	4.4	67.0	1030	--

Table 8.1.1.--Continuous Monitoring Data for Rio Rancho Waste Water Treatment Plant
Outfall #2, August 8 through August 14, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
8/13/2002	110000	28.4	7.2	4.4	67.2	1033	--
8/13/2002	111500	28.4	7.2	4.2	63.7	1032	--
8/13/2002	113000	28.5	7.3	4.4	66.9	1033	--
8/13/2002	114500	28.6	7.3	4.4	68.0	1030	--
8/13/2002	120000	28.7	7.2	4.2	64.9	1031	--
8/13/2002	121500	28.7	7.2	4.0	62.0	1030	--
8/13/2002	123000	28.7	7.3	4.2	65.2	1028	--
8/13/2002	124500	28.7	7.3	4.3	65.6	1029	--
8/13/2002	130000	28.7	7.3	4.2	64.9	1028	--
8/13/2002	131500	28.7	7.2	4.4	68.4	1028	--
8/13/2002	133000	28.7	7.2	4.5	69.5	1032	--
8/13/2002	134500	28.7	7.3	4.4	67.3	1030	--
8/13/2002	140000	28.7	7.3	4.3	65.9	1029	--
8/13/2002	141500	28.7	7.3	4.3	65.8	1029	--
8/13/2002	143000	28.7	7.3	4.2	64.4	1028	--
8/13/2002	144500	28.8	7.3	4.1	63.2	1030	--
8/13/2002	150000	28.7	7.3	3.9	59.7	1030	--
8/13/2002	151500	28.7	7.2	4.4	68.2	1032	--
8/13/2002	153000	28.7	7.2	4.1	63.3	1031	--
8/13/2002	154500	28.7	7.3	4.0	61.6	1032	--
8/13/2002	160000	28.6	7.2	3.6	55.1	1034	--
8/13/2002	161500	28.5	7.2	3.8	58.9	1035	--
8/13/2002	163000	28.4	7.2	3.7	57.3	1035	--
8/13/2002	164500	28.4	7.1	3.7	55.9	1034	--
8/13/2002	170000	28.4	7.2	3.6	55.4	1036	--
8/13/2002	171500	28.4	7.2	3.5	54.2	1035	--
8/13/2002	173000	28.3	7.2	3.5	53.0	1027	--
8/13/2002	174500	28.3	7.2	3.6	54.7	1036	--
8/13/2002	180000	28.3	7.2	3.3	51.1	1036	--
8/13/2002	181500	28.2	7.2	3.3	50.5	1037	--
8/13/2002	183000	28.2	7.2	3.4	52.4	1036	--
8/13/2002	184500	28.2	7.2	3.4	52.4	1038	--
8/13/2002	190000	28.2	7.2	3.3	50.3	1037	--
8/13/2002	191500	28.3	7.3	3.8	57.4	1037	--
8/13/2002	193000	28.2	7.2	3.7	56.6	1041	--
8/13/2002	194500	28.2	7.3	4.0	60.2	1042	--
8/13/2002	200000	28.2	7.2	3.8	57.7	1044	--
8/13/2002	201500	28.2	7.2	3.4	51.7	1044	--
8/13/2002	203000	28.1	7.2	3.4	51.6	1042	--
8/13/2002	204500	28.1	7.2	3.5	53.7	1044	--
8/13/2002	210000	28.1	7.2	3.6	54.2	1044	--
8/13/2002	211500	28.1	7.2	3.6	54.2	1043	--
8/13/2002	213000	28.1	7.2	3.9	59.7	1044	--
8/13/2002	214500	28.1	7.2	3.5	52.7	1044	--
8/13/2002	220000	28.0	7.2	3.3	50.7	1043	--
8/13/2002	221500	28.0	7.2	3.4	51.4	1044	--
8/13/2002	223000	28.1	7.2	3.4	51.2	1043	--
8/13/2002	224500	28.1	7.2	3.4	50.9	1044	--
8/13/2002	230000	28.1	7.2	3.3	49.7	1043	--
8/13/2002	231500	28.1	7.2	3.8	57.7	1043	--

Table 8.1.1.--Continuous Monitoring Data for Rio Rancho Waste Water Treatment Plant
Outfall #2, August 8 through August 14, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
8/13/2002	233000	28.1	7.2	3.7	56.8	1042	--
8/13/2002	234500	28.1	7.3	3.4	52.4	1041	--
8/14/2002	000000	28.1	7.2	3.7	56.8	1042	--
8/14/2002	001500	28.1	7.3	3.9	59.2	1041	--
8/14/2002	003000	28.0	7.2	3.3	50.1	1041	--
8/14/2002	004500	27.9	7.2	3.2	49.1	1041	--
8/14/2002	010000	27.8	7.3	3.0	45.6	1043	--
8/14/2002	011500	27.8	7.2	2.9	43.4	1042	--
8/14/2002	013000	26.8	7.2	3.0	43.9	887	--
8/14/2002	014500	24.8	7.3	3.4	48.8	680	--
8/14/2002	020000	23.4	7.2	3.8	53.2	554	--
8/14/2002	021500	22.8	7.3	3.5	48.5	524	--
8/14/2002	023000	22.5	7.3	3.4	46.3	509	--
8/14/2002	024500	22.0	7.2	3.5	47.6	495	--
8/14/2002	030000	21.6	7.2	3.5	46.9	499	--
8/14/2002	041500	23.9	7.2	4.1	58.2	1014	--
8/14/2002	043000	25.7	7.2	3.5	50.9	987	--
8/14/2002	044500	22.9	7.3	3.7	50.7	578	--
8/14/2002	050000	21.9	7.4	3.7	49.4	513	--
8/14/2002	061500	25.1	7.3	3.4	49.4	908	--
8/14/2002	063000	22.1	7.3	3.9	53.7	569	--
8/14/2002	064500	24.0	7.3	4.0	56.0	991	--
8/14/2002	070000	26.4	7.3	3.6	52.8	1028	--
8/14/2002	071500	27.3	7.3	3.7	55.2	1020	--
8/14/2002	073000	27.4	7.2	3.4	51.7	1032	--
8/14/2002	074500	27.4	7.2	3.9	58.0	1032	--
8/14/2002	080000	27.4	7.3	4.0	60.2	1030	--
8/14/2002	081500	27.4	7.2	3.8	56.4	1033	--
8/14/2002	083000	27.4	7.3	4.0	59.6	1034	--
8/14/2002	084500	27.4	7.3	4.1	61.7	1033	--
8/14/2002	090000	27.5	7.3	4.3	65.1	1033	--
8/14/2002	091500	27.6	7.3	4.3	65.1	1034	--
8/14/2002	093000	27.7	7.3	4.2	63.3	1032	--
8/14/2002	094500	27.7	7.4	4.5	68.4	1031	--
8/14/2002	100000	27.8	7.5	4.5	68.3	1030	--
8/14/2002	101500	27.9	7.5	4.4	67.4	1030	--
8/14/2002	103000	27.9	7.5	4.7	70.9	1030	--
8/14/2002	104500	28.0	7.5	4.4	67.0	1030	--
8/14/2002	110000	28.1	7.5	4.5	68.7	1030	--
8/14/2002	111500	28.2	7.5	4.6	70.2	1030	--
8/14/2002	113000	28.2	7.4	4.3	65.2	1030	--
8/14/2002	114500	28.3	7.3	4.7	71.3	1030	--
8/14/2002	120000	28.4	7.3	4.4	67.9	1031	--
8/14/2002	121500	28.4	7.3	4.6	69.8	1032	--
8/14/2002	123000	28.4	7.4	4.3	65.3	1031	--
8/14/2002	124500	28.4	7.4	4.4	67.2	1029	--

Table 8.1.1.--Continuous Monitoring Data for Rio Rancho Waste Water Treatment Plant
Outfall #2, August 8 through August 14, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
8/14/2002	130000	28.4	7.4	4.4	66.6	1030	--
8/14/2002	131500	28.4	7.4	4.4	67.1	1030	--
8/14/2002	133000	28.4	7.3	4.2	63.7	1030	--
8/14/2002	134500	28.5	7.4	4.2	63.8	1031	--
8/14/2002	140000	28.5	7.4	4.0	60.9	1031	--
8/14/2002	141500	28.5	7.3	3.8	57.8	1031	--

Descriptive Statistics	*Temp (°C)*	*pH*	*DO (mg/L)*	*DO (%)*	*SPC (uS/cm)*	*Turbidity (NTU)*
Mean	28.5	7.5	4.4	67.4	1026	--
Standard Error	0.03	0.00	0.04	0.58	2.39	--
Median	28.6	7.5	4.3	66.1	1031	--
Mode	28.6	7.5	4.4	64.3	1031	--
Standard Deviation	0.42	0.07	0.56	8.85	36.43	--
Sample Variance	0.18	0.01	0.32	78.38	1327.29	--
Kurtosis	0.83	-0.26	1.35	1.31	174.53	--
Skewness	-0.74	-0.01	1.29	1.28	-12.35	--
Range	2.6	0.3	2.6	40.6	546	--
Minimum	27.1	7.3	3.6	53.6	511	--
Maximum	29.7	7.7	6.2	94.2	1057	--
Sum	6611.0	1734.3	1019.3	15640.5	238053	--
Count	232	232	232	232	232	--

Table 8.1.2.--Continuous Monitoring Data for Rio Rancho Waste Water Treatment Plant Outfall #2, January 30 through February 3, 2003

[--, no data; °C, degrees Celsius; mg/L, milligrams per liter; % sat, percent saturation; uS/cm, microsiemens per centimeter; NTU, Nephelometric turbidity units.]

MiniSonde4a 36755
Log File Name : RIO RANCHO WWTP01-30-03
Setup Date (MMDDYY) : 013003
Setup Time (HHMMSS) : 141332
Starting Date (MMDDYY) : 013003
Starting Time (HHMMSS) : 144500
Stopping Date (MMDDYY) : 020703
Stopping Time (HHMMSS) : 120000
Interval (HHMMSS) : 001500
Sensor warmup (HHMMSS) : 000200
Circltr warmup (HHMMSS) : 000100

Date	Time (HHMMSS)	Temp (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
1/30/2003	144500	18.6	7.6	6.3	79.6	538	--
1/30/2003	150000	18.6	7.5	6.7	85.0	538	--
1/30/2003	151500	18.6	7.5	7.0	88.4	538	--
1/30/2003	153000	18.6	7.5	7.0	89.2	538	--
1/30/2003	154500	18.6	7.5	6.9	87.7	538	--
1/30/2003	160000	18.6	7.5	6.9	87.8	538	--
1/30/2003	161500	18.6	7.5	7.0	88.6	538	--
1/30/2003	163000	18.6	7.5	7.0	88.4	538	--
1/30/2003	164500	18.6	7.5	6.9	87.2	538	--
1/30/2003	170000	18.6	7.5	6.9	87.3	538	--
1/30/2003	171500	18.6	7.5	7.0	89.1	539	--
1/30/2003	173000	18.5	7.5	6.9	88.1	539	--
1/30/2003	174500	18.5	7.5	6.8	86.8	539	--
1/30/2003	180000	18.5	7.5	6.9	87.9	539	--
1/30/2003	181500	18.4	7.5	6.8	86.5	540	--
1/30/2003	183000	18.4	7.5	7.0	88.4	540	--
1/30/2003	184500	18.3	7.5	6.8	85.6	540	--
1/30/2003	190000	18.2	7.5	6.9	86.6	540	--
1/30/2003	191500	18.3	7.5	6.8	85.8	540	--
1/30/2003	193000	18.1	7.5	6.9	86.5	540	--
1/30/2003	194500	18.2	7.5	6.8	85.8	540	--
1/30/2003	200000	18.2	7.5	6.7	84.2	541	--
1/30/2003	201500	18.2	7.5	6.8	85.8	541	--
1/30/2003	203000	18.2	7.5	6.7	84.3	541	--
1/30/2003	204500	18.1	7.5	6.7	84.6	541	--
1/30/2003	210000	18.1	7.5	6.7	84.5	542	--
1/30/2003	211500	18.1	7.5	6.9	86.4	542	--
1/30/2003	213000	18.1	7.5	6.8	85.7	542	--
1/30/2003	214500	18.1	7.5	6.7	84.5	542	--
1/30/2003	220000	18.1	7.5	6.7	84.7	542	--
1/30/2003	221500	18.1	7.5	6.8	84.9	542	--
1/30/2003	223000	18.1	7.5	6.9	87.3	543	--
1/30/2003	224500	18.1	7.5	7.0	87.7	543	--
1/30/2003	230000	18.1	7.5	6.9	86.2	543	--
1/30/2003	231500	18.1	7.6	6.8	84.9	543	--
1/30/2003	233000	18.0	7.6	6.8	85.4	543	--

Table 8.1.2.--Continuous Monitoring Data for Rio Rancho Waste Water Treatment Plant Outfall #2, January 30 through February 3, 2003

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
1/30/2003	234500	18.1	7.6	6.9	86.3	543	--
1/31/2003	000000	18.1	7.5	7.0	87.6	543	--
1/31/2003	001500	18.1	7.6	7.0	87.4	543	--
1/31/2003	003000	18.1	7.6	6.8	85.6	543	--
1/31/2003	004500	18.0	7.6	7.0	87.4	543	--
1/31/2003	010000	18.1	7.6	6.9	86.6	544	--
1/31/2003	011500	18.0	7.5	6.9	86.7	544	--
1/31/2003	013000	17.9	7.5	7.0	87.3	544	--
1/31/2003	014500	17.9	7.6	6.9	85.8	544	--
1/31/2003	020000	17.9	7.5	6.8	85.8	544	--
1/31/2003	021500	17.8	7.5	6.7	83.8	544	--
1/31/2003	023000	17.8	7.5	6.8	84.8	544	--
1/31/2003	024500	17.7	7.5	6.6	82.9	544	--
1/31/2003	030000	17.6	7.5	6.8	84.3	544	--
1/31/2003	031500	17.6	7.5	6.6	81.8	544	--
1/31/2003	033000	17.7	7.6	6.6	82.4	544	--
1/31/2003	034500	17.6	7.5	6.6	82.3	544	--
1/31/2003	040000	17.3	7.5	6.7	82.4	544	--
1/31/2003	041500	17.1	7.5	6.6	81.4	544	--
1/31/2003	043000	17.1	7.5	6.6	81.5	544	--
1/31/2003	044500	17.2	7.5	6.6	81.3	544	--
1/31/2003	050000	16.8	7.5	6.6	80.3	540	--
1/31/2003	051500	16.9	7.5	6.6	80.7	544	--
1/31/2003	053000	17.2	7.5	6.6	81.6	545	--
1/31/2003	054500	17.1	7.5	6.5	80.6	545	--
1/31/2003	060000	16.8	7.5	6.5	79.0	545	--
1/31/2003	061500	16.8	7.5	6.5	79.5	545	--
1/31/2003	063000	16.6	7.5	6.5	78.7	542	--
1/31/2003	064500	16.6	7.5	6.5	78.6	545	--
1/31/2003	070000	16.7	7.5	6.4	78.3	545	--
1/31/2003	071500	17.0	7.5	6.5	79.6	545	--
1/31/2003	073000	17.0	7.5	6.6	80.9	545	--
1/31/2003	074500	17.3	7.5	6.6	81.9	546	--
1/31/2003	080000	17.4	7.5	6.5	80.1	546	--
1/31/2003	081500	17.4	7.5	6.6	81.3	547	--
1/31/2003	083000	17.4	7.5	6.7	82.7	548	--
1/31/2003	084500	17.4	7.6	6.9	85.7	549	--
1/31/2003	090000	17.4	7.6	7.0	87.4	550	--
1/31/2003	091500	17.5	7.6	7.2	89.9	552	--
1/31/2003	093000	17.7	7.6	7.1	88.6	553	--
1/31/2003	094500	17.8	7.6	7.3	90.8	554	--
1/31/2003	100000	17.9	7.6	7.1	88.7	554	--
1/31/2003	101500	18.0	7.6	7.3	91.3	555	--
1/31/2003	103000	18.0	7.6	7.1	89.2	555	--
1/31/2003	104500	18.1	7.6	7.3	91.5	556	--
1/31/2003	110000	18.1	7.5	7.2	91.1	556	--
1/31/2003	111500	18.2	7.5	7.2	90.6	557	--
1/31/2003	113000	18.2	7.5	7.1	90.2	557	--
1/31/2003	114500	18.2	7.5	7.3	92.0	557	--
1/31/2003	120000	18.3	7.5	7.1	90.0	557	--

Table 8.1.2.--Continuous Monitoring Data for Rio Rancho Waste Water Treatment Plant Outfall #2, January 30 through February 3, 2003

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
1/31/2003	121500	18.3	7.5	7.3	91.9	558	--
1/31/2003	123000	18.3	7.5	7.2	90.7	558	--
1/31/2003	124500	18.3	7.5	7.0	89.1	558	--
1/31/2003	130000	18.3	7.5	7.1	89.9	559	--
1/31/2003	131500	18.3	7.6	7.1	89.1	559	--
1/31/2003	133000	18.3	7.6	7.2	90.4	559	--
1/31/2003	134500	18.3	7.5	7.1	90.2	559	--
1/31/2003	140000	18.3	7.5	7.1	89.4	559	--
1/31/2003	141500	18.3	7.6	7.0	88.9	559	--
1/31/2003	143000	18.3	7.6	7.0	89.0	560	--
1/31/2003	144500	18.3	7.6	7.0	89.1	560	--
1/31/2003	150000	18.3	7.6	7.0	88.1	560	--
1/31/2003	151500	18.3	7.6	7.0	88.7	560	--
1/31/2003	153000	18.3	7.6	6.9	87.0	561	--
1/31/2003	154500	18.3	7.6	7.0	87.8	561	--
1/31/2003	160000	18.2	7.6	6.9	87.2	561	--
1/31/2003	161500	18.3	7.6	6.8	86.5	561	--
1/31/2003	163000	18.3	7.6	6.9	87.2	562	--
1/31/2003	164500	18.3	7.6	7.0	87.9	562	--
1/31/2003	170000	18.3	7.6	7.0	88.6	562	--
1/31/2003	171500	18.4	7.6	6.9	87.7	563	--
1/31/2003	173000	18.4	7.6	7.0	89.0	563	--
1/31/2003	174500	18.4	7.6	7.0	88.4	563	--
1/31/2003	180000	18.4	7.6	7.0	88.8	564	--
1/31/2003	181500	18.4	7.6	7.0	89.1	564	--
1/31/2003	183000	18.4	7.6	6.9	87.1	564	--
1/31/2003	184500	18.4	7.5	6.9	87.1	565	--
1/31/2003	190000	18.4	7.5	7.0	88.8	565	--
1/31/2003	191500	18.4	7.5	7.0	88.1	565	--
1/31/2003	193000	18.4	7.5	7.0	88.7	565	--
1/31/2003	194500	18.4	7.5	6.8	86.4	565	--
1/31/2003	200000	18.4	7.5	7.0	89.0	565	--
1/31/2003	201500	18.4	7.5	6.9	87.3	566	--
1/31/2003	203000	18.4	7.5	7.0	88.3	566	--
1/31/2003	204500	18.4	7.5	6.9	87.5	566	--
1/31/2003	210000	18.4	7.5	6.9	87.0	566	--
1/31/2003	211500	18.4	7.5	6.9	87.4	567	--
1/31/2003	213000	18.3	7.5	7.1	89.2	567	--
1/31/2003	214500	18.3	7.5	6.9	86.7	567	--
1/31/2003	220000	18.3	7.5	7.1	89.1	567	--
1/31/2003	221500	18.3	7.5	6.8	86.5	567	--
1/31/2003	223000	18.3	7.5	6.9	86.6	567	--
1/31/2003	224500	18.3	7.5	7.0	88.1	567	--
1/31/2003	230000	18.3	7.5	7.0	88.6	567	--
1/31/2003	231500	18.3	7.5	7.0	88.3	567	--
1/31/2003	233000	18.3	7.5	7.0	88.5	567	--
1/31/2003	234500	18.2	7.5	6.9	86.9	567	--
2/1/2003	000000	18.2	7.5	7.0	87.8	568	--
2/1/2003	001500	18.2	7.5	6.9	87.1	568	--
2/1/2003	003000	18.2	7.5	7.0	88.9	568	--

Table 8.1.2.--Continuous Monitoring Data for Rio Rancho Waste Water Treatment Plant Outfall #2, January 30 through February 3, 2003

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
2/1/2003	004500	18.2	7.5	6.9	86.9	568	--
2/1/2003	010000	18.2	7.5	6.9	86.7	569	--
2/1/2003	011500	18.2	7.5	6.9	86.8	569	--
2/1/2003	013000	18.2	7.5	7.0	88.4	569	--
2/1/2003	014500	18.1	7.5	7.0	88.0	569	--
2/1/2003	020000	18.1	7.5	6.8	86.1	569	--
2/1/2003	021500	18.1	7.5	6.9	87.4	569	--
2/1/2003	023000	18.1	7.5	6.9	87.2	570	--
2/1/2003	024500	18.0	7.5	6.8	85.0	570	--
2/1/2003	030000	18.0	7.5	6.8	85.6	570	--
2/1/2003	031500	18.0	7.5	6.8	85.7	570	--
2/1/2003	033000	18.0	7.5	6.9	86.1	570	--
2/1/2003	034500	17.9	7.5	6.7	84.3	570	--
2/1/2003	040000	17.9	7.5	6.9	86.3	570	--
2/1/2003	041500	17.8	7.5	6.7	83.7	570	--
2/1/2003	043000	17.8	7.5	6.6	83.0	570	--
2/1/2003	044500	17.7	7.5	6.8	84.5	570	--
2/1/2003	050000	17.7	7.5	6.8	84.9	570	--
2/1/2003	051500	17.7	7.5	6.8	84.6	570	--
2/1/2003	053000	17.7	7.5	6.7	84.0	570	--
2/1/2003	054500	17.6	7.5	6.7	83.9	570	--
2/1/2003	060000	17.5	7.5	6.7	83.0	570	--
2/1/2003	061500	17.5	7.5	6.6	82.1	570	--
2/1/2003	063000	17.3	7.5	6.5	80.9	570	--
2/1/2003	064500	17.4	7.5	6.7	83.3	570	--
2/1/2003	070000	17.4	7.5	6.6	81.7	570	--
2/1/2003	071500	17.3	7.5	6.6	81.5	570	--
2/1/2003	073000	17.4	7.5	6.5	81.2	570	--
2/1/2003	074500	17.4	7.6	6.8	84.1	570	--
2/1/2003	080000	17.3	7.6	6.6	81.1	570	--
2/1/2003	081500	17.5	7.6	6.7	83.2	570	--
2/1/2003	083000	17.4	7.6	6.7	83.3	570	--
2/1/2003	084500	17.5	7.6	6.9	85.5	569	--
2/1/2003	090000	17.5	7.6	7.0	86.6	569	--
2/1/2003	091500	17.5	7.6	7.0	87.1	569	--
2/1/2003	093000	17.6	7.6	7.1	88.0	569	--
2/1/2003	094500	17.6	7.6	7.1	88.7	568	--
2/1/2003	100000	17.6	7.6	7.2	89.4	568	--
2/1/2003	101500	17.7	7.6	7.2	89.4	568	--
2/1/2003	103000	17.8	7.6	7.1	88.3	567	--
2/1/2003	104500	18.0	7.6	7.2	90.0	567	--
2/1/2003	110000	18.1	7.5	7.0	88.6	567	--
2/1/2003	111500	18.2	7.5	7.1	89.4	567	--
2/1/2003	113000	18.2	7.5	7.2	91.1	567	--
2/1/2003	114500	18.3	7.4	7.2	91.4	567	--
2/1/2003	120000	18.3	7.4	7.1	90.2	567	--
2/1/2003	121500	18.4	7.4	7.1	89.7	567	--
2/1/2003	123000	18.4	7.4	7.2	91.1	567	--
2/1/2003	124500	18.4	7.4	7.0	88.3	567	--
2/1/2003	130000	18.4	7.4	7.0	88.7	567	--

Table 8.1.2.--Continuous Monitoring Data for Rio Rancho Waste Water Treatment Plant Outfall #2, January 30 through February 3, 2003

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
2/1/2003	131500	18.5	7.4	7.1	90.0	567	--
2/1/2003	133000	18.5	7.4	7.0	88.8	567	--
2/1/2003	134500	18.5	7.4	7.0	89.4	567	--
2/1/2003	140000	18.5	7.4	7.1	89.5	567	--
2/1/2003	141500	18.5	7.4	7.0	88.4	567	--
2/1/2003	143000	18.5	7.4	7.0	89.0	566	--
2/1/2003	144500	18.6	7.4	6.9	88.2	567	--
2/1/2003	150000	18.6	7.4	6.9	87.6	566	--
2/1/2003	151500	18.6	7.4	6.9	87.8	567	--
2/1/2003	153000	18.6	7.4	7.0	89.6	567	--
2/1/2003	154500	18.6	7.4	6.9	87.3	567	--
2/1/2003	160000	18.6	7.4	7.0	88.5	567	--
2/1/2003	161500	18.6	7.4	6.9	87.1	567	--
2/1/2003	163000	18.6	7.4	6.8	86.5	568	--
2/1/2003	164500	18.6	7.4	6.9	87.4	568	--
2/1/2003	170000	18.6	7.4	6.9	87.5	569	--
2/1/2003	171500	18.6	7.4	6.9	87.8	570	--
2/1/2003	173000	18.5	7.4	6.7	85.7	570	--
2/1/2003	174500	18.6	7.4	6.7	85.3	571	--
2/1/2003	180000	18.6	7.4	6.8	86.1	571	--
2/1/2003	181500	18.6	7.3	6.8	87.0	572	--
2/1/2003	183000	18.5	7.3	6.8	86.1	572	--
2/1/2003	184500	18.4	7.3	6.6	83.1	572	--
2/1/2003	190000	18.4	7.3	6.7	84.8	573	--
2/1/2003	191500	18.4	7.3	6.7	84.5	573	--
2/1/2003	193000	18.4	7.3	6.5	82.1	573	--
2/1/2003	194500	18.4	7.4	6.5	82.6	573	--
2/1/2003	200000	18.4	7.4	6.7	85.0	574	--
2/1/2003	201500	18.4	7.4	6.7	84.5	575	--
2/1/2003	203000	18.5	7.4	6.7	85.5	575	--
2/1/2003	204500	18.4	7.4	6.7	84.7	575	--
2/1/2003	210000	18.5	7.4	6.7	84.7	576	--
2/1/2003	211500	18.5	7.4	6.7	84.4	576	--
2/1/2003	213000	18.5	7.4	6.9	87.1	576	--
2/1/2003	214500	18.5	7.4	6.8	86.2	576	--
2/1/2003	220000	18.4	7.4	6.7	84.3	576	--
2/1/2003	221500	18.5	7.4	6.7	84.4	576	--
2/1/2003	223000	18.4	7.4	6.8	85.7	576	--
2/1/2003	224500	18.4	7.4	6.8	85.5	576	--
2/1/2003	230000	18.4	7.4	6.8	85.9	576	--
2/1/2003	231500	18.4	7.4	6.6	83.7	575	--
2/1/2003	233000	18.4	7.4	6.8	86.1	575	--
2/1/2003	234500	18.4	7.4	6.8	86.1	575	--
2/2/2003	000000	18.4	7.4	6.8	86.1	575	--
2/2/2003	001500	18.4	7.4	6.8	86.4	575	--
2/2/2003	003000	18.4	7.4	6.8	85.5	575	--
2/2/2003	004500	18.4	7.4	6.6	84.0	574	--
2/2/2003	010000	18.4	7.4	6.7	84.7	574	--
2/2/2003	011500	18.4	7.4	6.7	84.9	574	--
2/2/2003	013000	18.4	7.4	6.6	83.5	574	--

Table 8.1.2.--Continuous Monitoring Data for Rio Rancho Waste Water Treatment Plant Outfall #2, January 30 through February 3, 2003

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
2/2/2003	014500	18.3	7.4	6.6	83.0	573	--
2/2/2003	020000	18.3	7.5	6.7	84.8	573	--
2/2/2003	021500	18.3	7.5	6.5	82.6	573	--
2/2/2003	023000	18.3	7.5	6.7	84.0	573	--
2/2/2003	024500	18.2	7.5	6.5	81.8	573	--
2/2/2003	030000	18.1	7.5	6.6	82.7	571	--
2/2/2003	031500	18.2	7.5	6.6	83.1	572	--
2/2/2003	033000	18.2	7.5	6.7	83.9	572	--
2/2/2003	034500	18.2	7.5	6.5	81.9	572	--
2/2/2003	040000	18.1	7.5	6.4	80.3	572	--
2/2/2003	041500	17.9	7.5	6.6	82.1	569	--
2/2/2003	043000	17.9	7.5	6.4	80.2	571	--
2/2/2003	044500	18.0	7.5	6.4	80.5	571	--
2/2/2003	050000	18.0	7.5	6.3	79.7	571	--
2/2/2003	051500	17.9	7.5	6.4	79.9	571	--
2/2/2003	053000	17.7	7.5	6.4	79.4	568	--
2/2/2003	054500	17.7	7.5	6.3	78.3	569	--
2/2/2003	060000	17.8	7.5	6.2	77.9	570	--
2/2/2003	061500	17.7	7.5	6.4	79.4	570	--
2/2/2003	063000	17.8	7.5	6.3	78.6	570	--
2/2/2003	064500	17.2	7.5	6.4	79.1	557	--
2/2/2003	070000	17.6	7.5	6.3	78.0	568	--
2/2/2003	071500	17.6	7.5	6.4	80.1	568	--
2/2/2003	073000	17.7	7.5	6.2	77.7	570	--
2/2/2003	074500	17.4	7.5	6.3	78.6	565	--
2/2/2003	080000	17.4	7.5	6.1	75.8	568	--
2/2/2003	081500	17.6	7.5	6.1	76.1	569	--
2/2/2003	083000	17.6	7.5	6.2	77.8	569	--
2/2/2003	084500	17.7	7.5	6.4	79.8	569	--
2/2/2003	090000	17.6	7.5	6.3	78.7	569	--
2/2/2003	091500	17.8	7.6	6.4	79.7	568	--
2/2/2003	093000	17.8	7.6	6.6	83.1	568	--
2/2/2003	094500	17.8	7.6	6.6	82.4	567	--
2/2/2003	100000	17.9	7.6	6.7	84.2	567	--
2/2/2003	101500	18.0	7.6	6.9	86.0	566	--
2/2/2003	103000	18.1	7.6	6.7	84.5	566	--
2/2/2003	104500	18.2	7.6	6.8	85.2	566	--
2/2/2003	110000	18.3	7.6	6.9	86.5	565	--
2/2/2003	111500	18.4	7.5	6.8	86.3	564	--
2/2/2003	113000	18.5	7.5	6.8	86.1	564	--
2/2/2003	114500	18.5	7.5	6.9	88.0	564	--
2/2/2003	120000	18.6	7.5	6.9	87.5	564	--
2/2/2003	121500	18.6	7.5	6.9	88.2	564	--
2/2/2003	123000	18.6	7.5	6.8	86.2	563	--
2/2/2003	124500	18.7	7.4	6.9	87.8	563	--
2/2/2003	130000	18.7	7.4	6.9	87.4	563	--
2/2/2003	131500	18.7	7.4	6.8	87.2	563	--
2/2/2003	133000	18.7	7.4	6.7	85.0	563	--
2/2/2003	134500	18.7	7.4	6.8	87.3	563	--
2/2/2003	140000	18.7	7.4	6.9	87.4	563	--

Table 8.1.2.--Continuous Monitoring Data for Rio Rancho Waste Water Treatment Plant Outfall #2, January 30 through February 3, 2003

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
2/2/2003	141500	18.8	7.4	6.7	85.0	563	--
2/2/2003	143000	18.8	7.4	6.7	86.0	563	--
2/2/2003	144500	18.8	7.4	6.7	84.8	563	--
2/2/2003	150000	18.7	7.4	6.6	84.4	564	--
2/2/2003	151500	18.8	7.4	6.7	85.8	564	--
2/2/2003	153000	18.7	7.4	6.7	85.4	564	--
2/2/2003	154500	18.7	7.4	6.6	84.4	564	--
2/2/2003	160000	18.7	7.4	6.6	84.5	564	--
2/2/2003	161500	18.7	7.4	6.7	85.3	565	--
2/2/2003	163000	18.7	7.4	6.6	83.8	565	--
2/2/2003	164500	18.6	7.4	6.6	83.7	565	--
2/2/2003	170000	18.6	7.4	6.7	85.4	565	--
2/2/2003	171500	18.6	7.4	6.5	82.1	565	--
2/2/2003	173000	18.5	7.4	6.5	82.3	565	--
2/2/2003	174500	18.5	7.4	6.5	82.6	565	--
2/2/2003	180000	18.5	7.4	6.5	82.1	565	--
2/2/2003	181500	18.5	7.4	6.5	82.6	564	--
2/2/2003	183000	18.5	7.4	6.6	83.1	564	--
2/2/2003	184500	18.5	7.4	6.5	82.7	564	--
2/2/2003	190000	18.4	7.4	6.5	82.8	563	--
2/2/2003	191500	18.4	7.4	6.6	82.9	562	--
2/2/2003	193000	18.4	7.4	6.6	83.2	562	--
2/2/2003	194500	18.4	7.4	6.5	82.7	561	--
2/2/2003	200000	18.4	7.4	6.5	82.6	561	--
2/2/2003	201500	18.4	7.4	6.7	84.9	560	--
2/2/2003	203000	18.4	7.4	6.6	83.5	559	--
2/2/2003	204500	18.4	7.4	6.7	84.7	559	--
2/2/2003	210000	18.4	7.4	6.7	85.2	558	--
2/2/2003	211500	18.5	7.4	6.8	86.0	558	--
2/2/2003	213000	18.4	7.4	6.7	84.9	557	--
2/2/2003	214500	18.5	7.3	6.6	83.6	556	--
2/2/2003	220000	18.4	7.4	6.7	84.9	555	--
2/2/2003	221500	18.5	7.4	6.8	85.9	555	--
2/2/2003	223000	18.5	7.4	6.8	85.7	555	--
2/2/2003	224500	18.5	7.4	6.6	83.3	554	--
2/2/2003	230000	18.5	7.4	6.7	84.9	553	--
2/2/2003	231500	18.5	7.4	6.7	85.0	553	--
2/2/2003	233000	18.5	7.4	6.6	84.1	553	--
2/2/2003	234500	18.5	7.4	6.7	84.6	552	--
2/3/2003	000000	18.5	7.4	6.6	84.0	552	--
2/3/2003	001500	18.4	7.4	6.6	84.1	552	--
2/3/2003	003000	18.4	7.4	6.5	82.7	551	--
2/3/2003	004500	18.4	7.4	6.5	82.0	551	--
2/3/2003	010000	18.4	7.4	6.6	83.3	551	--
2/3/2003	011500	18.3	7.4	6.5	82.5	551	--
2/3/2003	013000	18.3	7.4	6.5	81.9	551	--
2/3/2003	014500	18.2	7.4	6.4	80.4	550	--
2/3/2003	020000	18.2	7.4	6.4	80.4	550	--
2/3/2003	021500	18.2	7.4	6.4	80.1	550	--
2/3/2003	023000	18.1	7.4	6.5	82.0	550	--

Table 8.1.2.--Continuous Monitoring Data for Rio Rancho Waste Water Treatment Plant Outfall #2, January 30 through February 3, 2003

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
2/3/2003	024500	18.1	7.4	6.3	79.2	550	--
2/3/2003	030000	17.9	7.4	6.3	78.6	550	--
2/3/2003	031500	17.7	7.5	6.2	78.0	549	--
2/3/2003	033000	17.9	7.5	6.2	77.5	550	--
2/3/2003	034500	17.7	7.5	6.2	77.9	549	--
2/3/2003	040000	17.7	7.5	6.1	75.7	550	--
2/3/2003	041500	17.6	7.5	6.2	77.6	549	--
2/3/2003	043000	17.6	7.5	6.2	77.7	549	--
2/3/2003	044500	14.7	7.5	6.6	77.4	486	--
2/3/2003	050000	16.8	7.5	5.9	71.9	547	--
2/3/2003	051500	17.6	7.5	6.3	78.4	549	--
2/3/2003	053000	17.5	7.5	6.0	75.1	549	--
2/3/2003	054500	17.5	7.5	6.0	74.5	549	--
2/3/2003	060000	17.4	7.5	6.0	74.0	549	--
2/3/2003	061500	17.4	7.5	6.1	76.0	549	--
2/3/2003	063000	17.5	7.5	6.2	76.9	549	--
2/3/2003	064500	17.4	7.5	6.0	74.6	549	--
2/3/2003	070000	17.5	7.5	6.2	77.5	549	--
2/3/2003	071500	17.5	7.5	6.2	77.4	549	--
2/3/2003	073000	17.5	7.5	6.2	77.7	548	--
2/3/2003	074500	17.6	7.5	6.2	77.6	548	--
2/3/2003	080000	17.6	7.5	6.3	79.1	547	--
2/3/2003	081500	17.7	7.5	6.4	79.9	547	--
2/3/2003	083000	17.7	7.6	6.7	83.3	546	--
2/3/2003	084500	17.9	7.6	6.8	85.3	545	--
2/3/2003	090000	18.1	7.5	6.8	85.6	544	--
2/3/2003	091500	18.2	7.5	6.7	84.9	544	--
2/3/2003	093000	18.3	7.5	6.7	85.0	543	--
2/3/2003	094500	18.4	7.5	6.7	84.7	543	--
2/3/2003	100000	18.4	7.4	6.7	84.7	543	--
2/3/2003	101500	18.4	7.5	6.8	86.1	543	--
2/3/2003	103000	18.4	7.5	6.8	86.3	543	--
2/3/2003	104500	18.4	7.4	6.7	85.4	542	--
2/3/2003	110000	18.4	7.5	6.6	84.1	542	--
2/3/2003	111500	18.4	7.5	6.7	84.1	542	--
2/3/2003	113000	18.4	7.5	6.8	86.3	542	--
2/3/2003	114500	18.4	7.5	6.8	86.1	542	--
2/3/2003	120000	18.4	7.5	6.9	87.2	542	--
2/3/2003	121500	18.5	7.5	6.7	85.2	542	--
2/3/2003	123000	18.5	7.5	6.7	85.5	542	--
2/3/2003	124500	18.5	7.5	6.7	84.9	542	--
2/3/2003	130000	18.6	7.5	6.7	84.6	542	--
2/3/2003	131500	18.5	7.5	6.8	86.0	542	--
2/3/2003	133000	18.5	7.5	6.7	84.4	542	--
2/3/2003	134500	18.4	7.5	6.6	84.2	542	--
2/3/2003	140000	18.4	7.5	6.7	84.5	542	--
2/3/2003	141500	18.4	7.5	6.6	83.7	542	--
2/3/2003	143000	18.4	7.5	6.7	85.4	542	--
2/3/2003	144500	18.4	7.5	6.7	85.2	536	--
2/3/2003	150000	18.3	7.5	6.7	85.2	542	--

Table 8.1.2.--Continuous Monitoring Data for Rio Rancho Waste Water Treatment Plant Outfall #2, January 30 through February 3, 2003

Date	Time (HHMMSS)	Temp (^oC)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
2/3/2003	151500	18.4	7.5	6.7	84.5	542	--
2/3/2003	153000	18.4	7.5	6.6	83.1	543	--
2/3/2003	154500	18.4	7.5	6.6	83.4	543	--
2/3/2003	160000	18.4	7.5	6.5	82.0	543	--
2/3/2003	161500	18.4	7.5	6.7	84.9	543	--
2/3/2003	163000	18.3	7.5	6.5	82.2	544	--
2/3/2003	164500	18.4	7.5	6.6	84.1	544	--
2/3/2003	170000	18.4	7.5	6.5	81.8	544	--
2/3/2003	171500	18.3	7.5	6.6	82.8	545	--

Descriptive Statistics	*Temp (°C)*	*pH*	*DO (mg/L)*	*DO (%)*	*SPC (uS/cm)*	*Turbidity (NTU)*
Mean	18.1	7.5	6.9	86.4	559	--
Standard Error	0.03	0.00	0.01	0.19	0.82	--
Median	18.2	7.5	6.9	86.8	565	--
Mode	18.6	7.5	7.0	86.1	567	--
Standard Deviation	0.46	0.07	0.19	2.88	12.44	--
Sample Variance	0.21	0.00	0.04	8.29	154.76	--
Kurtosis	0.88	-0.15	-0.23	0.02	-1.36	--
Skewness	-1.23	-1.04	-0.19	-0.63	-0.46	--
Range	2.1	0.3	1.0	13.7	38	--
Minimum	16.6	7.3	6.3	78.3	538	--
Maximum	18.6	7.6	7.3	92.0	576	--
Sum	4195.9	1740.0	1591.0	20033.8	129721	--
Count	232	232	232	232	232	--

Table 8.2.1.--Continuous Monitoring Data for Rio Grande at La Orilla
July 26 through August 4, 2002

[--, no data; °C, degrees Celsius; mg/L, milligrams per liter; % sat, percent saturation; uS/cm, microsiemens per centimeter; NTU, Nephelometric turbidity units.]

DataSonde 4a 40183
Log File Name : LA ORILA7-26-2
Setup Date (MMDDYY) : 072602
Setup Time (HHMMSS) : 093107
Starting Date (MMDDYY) : 072602
Starting Time (HHMMSS) : 094500
Stopping Date (MMDDYY) : 122203
Stopping Time (HHMMSS) : 000000
Interval (HHMMSS) : 001500
Sensor warmup (HHMMSS) : 000200
Circltr warmup (HHMMSS) : 000100

Date	Time (HHMMSS)	Temp (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
7/26/2002	100000	23.6	8.2	6.6	92.4	397	38
7/26/2002	101500	23.6	8.2	6.6	92.4	397	37
7/26/2002	103000	23.4	8.2	6.7	93.8	406	36
7/26/2002	104500	24.0	8.2	6.6	93.9	395	38
7/26/2002	110000	24.5	8.3	6.5	93.6	395	39
7/26/2002	111500	24.9	8.3	6.6	94.7	394	28
7/26/2002	113000	25.3	8.2	6.5	94.9	394	40
7/26/2002	114500	25.8	8.2	6.5	95.5	394	41
7/26/2002	120000	26.3	8.2	6.5	96.3	393	42
7/26/2002	121500	26.7	8.3	6.5	96.3	393	41
7/26/2002	123000	27.0	8.3	6.4	96.0	393	42
7/26/2002	124500	26.9	8.3	6.3	94.8	393	42
7/26/2002	130000	27.2	8.2	6.1	91.9	253	38
7/26/2002	131500	27.9	8.2	6.3	95.3	394	38
7/26/2002	133000	28.1	8.2	5.9	90.2	396	36
7/26/2002	134500	28.6	8.2	5.9	91.0	395	36
7/26/2002	140000	29.1	8.2	5.8	89.7	394	33
7/26/2002	141500	29.7	8.2	5.8	91.0	393	28
7/26/2002	143000	30.1	8.2	5.7	90.0	392	25
7/26/2002	144500	30.5	8.2	5.7	90.8	391	22
7/26/2002	150000	30.9	8.2	5.6	89.9	391	20
7/26/2002	151500	31.2	8.2	5.6	90.4	390	20
7/26/2002	153000	31.5	8.2	5.6	90.3	390	20
7/26/2002	154500	31.7	8.2	5.5	89.7	390	0
7/26/2002	160000	31.6	8.3	5.5	89.3	389	18
7/26/2002	161500	31.5	8.2	5.4	88.0	388	0
7/26/2002	163000	31.3	8.3	5.4	87.5	387	8
7/26/2002	164500	31.0	8.2	5.4	86.0	387	17
7/26/2002	170000	30.7	8.3	5.4	86.1	386	16
7/26/2002	171500	30.5	8.3	5.4	86.2	385	17
7/26/2002	173000	30.2	8.3	5.4	85.3	384	18
7/26/2002	174500	29.8	8.3	5.4	85.3	384	17
7/26/2002	180000	29.5	8.3	5.5	85.4	384	17
7/26/2002	181500	29.2	8.3	5.5	84.8	384	16
7/26/2002	183000	28.8	8.3	5.5	84.5	385	17
7/26/2002	184500	28.4	8.3	5.5	84.2	386	17
7/26/2002	190000	28.2	8.3	5.5	83.8	387	16
7/26/2002	191500	27.5	8.3	5.7	85.3	376	16

Table 8.2.1.--Continuous Monitoring Data for Rio Grande at La Orilla
July 26 through August 4, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
7/26/2002	193000	26.9	8.4	5.7	85.6	363	17
7/26/2002	194500	27.0	8.4	5.6	84.5	370	17
7/26/2002	200000	26.8	8.4	5.7	85.4	362	16
7/26/2002	201500	26.5	8.4	5.7	84.4	363	16
7/26/2002	203000	26.6	8.4	5.6	83.7	370	17
7/26/2002	204500	26.4	8.3	5.6	83.3	367	16
7/26/2002	210000	26.0	8.3	5.6	82.3	370	16
7/26/2002	211500	26.0	8.4	5.6	82.2	378	17
7/26/2002	213000	25.9	8.4	5.7	83.4	380	16
7/26/2002	214500	25.7	8.4	5.8	85.3	381	16
7/26/2002	220000	25.5	8.4	5.8	84.0	382	15
7/26/2002	221500	25.3	8.4	5.9	84.9	382	14
7/26/2002	223000	25.2	8.3	5.8	84.5	384	14
7/26/2002	224500	25.0	8.3	5.9	84.4	386	14
7/26/2002	230000	24.7	8.3	5.8	83.9	387	15
7/26/2002	231500	24.5	8.3	5.9	83.7	387	15
7/26/2002	233000	24.3	8.3	5.9	84.4	387	16
7/26/2002	234500	24.1	8.3	5.8	82.8	387	15
7/27/2002	000000	23.9	8.3	6.1	85.7	387	16
7/27/2002	001500	23.8	8.3	6.0	85.1	386	15
7/27/2002	003000	23.7	8.3	6.0	83.9	384	15
7/27/2002	004500	23.6	8.3	6.0	84.7	383	16
7/27/2002	010000	23.4	8.3	5.9	82.0	382	16
7/27/2002	011500	23.3	8.3	5.6	78.0	382	15
7/27/2002	013000	23.1	8.3	5.6	78.0	380	15
7/27/2002	014500	22.9	8.3	5.5	75.6	380	15
7/27/2002	020000	22.8	8.3	5.6	78.0	381	15
7/27/2002	021500	22.7	8.3	5.7	78.3	380	16
7/27/2002	023000	22.5	8.3	5.6	77.7	379	15
7/27/2002	024500	22.4	8.3	5.8	79.1	379	16
7/27/2002	030000	22.3	8.2	5.8	79.2	378	17
7/27/2002	031500	22.2	8.2	5.7	78.5	378	16
7/27/2002	033000	22.1	8.3	5.8	79.2	378	16
7/27/2002	034500	22.0	8.3	5.7	77.0	379	16
7/27/2002	040000	21.9	8.3	5.7	77.1	379	16
7/27/2002	041500	21.8	8.3	5.5	75.1	379	16
7/27/2002	043000	21.7	8.2	5.5	74.5	380	16
7/27/2002	044500	21.5	8.2	5.6	75.4	380	15
7/27/2002	050000	21.4	8.2	5.8	77.9	382	15
7/27/2002	051500	21.2	8.2	5.5	74.2	382	15
7/27/2002	053000	21.1	8.2	5.5	73.9	384	16
7/27/2002	054500	21.0	8.2	5.6	74.8	383	17
7/27/2002	060000	21.0	8.2	5.5	72.8	383	17
7/27/2002	061500	20.9	8.2	5.4	71.9	382	17
7/27/2002	063000	20.8	8.2	5.4	72.4	387	17
7/27/2002	064500	20.7	8.2	5.4	71.6	387	16
7/27/2002	070000	20.7	8.2	5.6	74.8	386	15
7/27/2002	071500	20.6	8.2	5.5	73.1	284	16
7/27/2002	073000	20.5	8.2	4.8	64.0	132	16
7/27/2002	074500	20.4	8.2	5.2	68.2	130	17
7/27/2002	080000	20.4	8.2	5.0	66.5	137	16
7/27/2002	081500	20.5	8.2	4.7	61.5	145	17

Table 8.2.1.--Continuous Monitoring Data for Rio Grande at La Orilla
July 26 through August 4, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
7/27/2002	083000	20.5	8.2	4.5	60.0	147	16
7/27/2002	084500	20.6	8.2	4.8	64.1	152	17
7/27/2002	090000	20.7	8.2	4.8	63.3	162	16
7/27/2002	091500	20.8	8.2	4.6	61.4	156	17
7/27/2002	093000	21.0	8.2	4.7	62.7	153	16
7/27/2002	094500	21.2	8.2	4.9	65.8	153	16
7/27/2002	100000	21.5	8.2	4.6	62.5	151	16
7/27/2002	101500	22.2	8.2	4.2	57.7	150	15
7/27/2002	103000	22.4	8.2	2.2	29.9	150	18
7/27/2002	104500	22.9	8.2	1.8	24.9	149	19
7/27/2002	110000	23.1	8.2	4.7	65.7	150	15
7/27/2002	111500	23.4	8.2	4.9	68.0	151	15
7/27/2002	113000	23.9	8.2	4.0	56.0	150	16
7/27/2002	114500	24.0	8.2	2.1	29.9	151	20
7/27/2002	120000	24.5	8.2	1.6	22.7	150	19
7/27/2002	121500	24.9	8.1	1.5	22.2	148	20
7/27/2002	123000	25.0	8.1	1.3	18.1	147	20
7/27/2002	124500	25.0	8.1	1.1	15.1	148	21
7/27/2002	130000	25.4	8.1	0.8	11.2	147	20
7/27/2002	131500	25.9	8.2	0.6	9.1	148	20
7/27/2002	133000	26.6	8.2	0.7	10.4	148	20
7/27/2002	134500	27.3	8.2	1.1	15.9	150	21
7/27/2002	140000	27.2	8.1	1.0	14.4	149	20
7/27/2002	141500	26.9	8.1	0.4	6.6	148	25
7/27/2002	143000	26.5	8.0	0.2	3.0	149	25
7/27/2002	144500	26.1	8.1	0.1	1.9	149	26
7/27/2002	150000	25.9	8.0	0.1	1.2	149	26
7/27/2002	151500	26.0	8.0	0.1	1.2	149	26
7/27/2002	153000	26.9	8.0	0.1	1.1	147	26
7/27/2002	154500	27.3	8.0	0.1	0.7	146	26
7/27/2002	160000	27.9	8.0	0.0	0.7	145	25
7/27/2002	161500	28.0	8.0	0.0	0.6	146	25
7/27/2002	163000	28.0	8.0	0.0	0.6	147	25
7/27/2002	164500	28.0	8.0	0.1	0.8	148	25
7/27/2002	170000	27.8	8.0	0.1	0.8	149	25
7/27/2002	171500	27.6	8.0	0.0	0.6	150	25
7/27/2002	173000	27.4	8.0	0.1	0.7	150	25
7/27/2002	174500	27.1	8.0	0.0	0.5	150	25
7/27/2002	180000	27.0	8.0	0.0	0.4	151	26
7/27/2002	181500	27.0	8.0	0.0	0.4	151	25
7/27/2002	183000	26.9	8.0	0.0	0.6	151	25
7/27/2002	184500	26.8	8.0	0.0	0.6	151	24
7/27/2002	190000	26.7	8.0	0.0	0.5	151	25
7/27/2002	191500	26.8	8.0	0.0	0.5	151	25
7/27/2002	193000	26.7	8.0	0.0	0.2	152	25
7/27/2002	194500	26.7	8.0	0.0	0.5	151	25
7/27/2002	200000	26.8	8.0	0.0	0.4	151	24
7/27/2002	201500	26.7	8.0	0.0	0.4	151	25
7/27/2002	203000	26.6	8.0	0.0	0.2	152	25
7/27/2002	204500	26.4	8.0	0.0	0.6	152	24
7/27/2002	210000	26.3	8.0	0.0	0.2	153	25
7/27/2002	211500	26.1	7.9	0.0	0.2	153	25

Table 8.2.1.--Continuous Monitoring Data for Rio Grande at La Orilla
July 26 through August 4, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
7/27/2002	213000	26.0	7.9	0.0	0.4	154	26
7/27/2002	214500	25.9	8.0	0.0	0.4	154	25
7/27/2002	220000	25.8	8.0	0.0	0.4	153	25
7/27/2002	221500	25.8	8.0	0.0	0.2	154	26
7/27/2002	223000	25.7	8.0	0.0	0.4	154	26
7/27/2002	224500	25.6	8.0	0.0	0.5	154	26
7/27/2002	230000	25.3	8.0	0.0	0.4	154	26
7/27/2002	231500	25.2	7.9	0.0	0.4	155	25
7/27/2002	233000	25.0	7.9	0.0	0.2	154	25
7/27/2002	234500	24.5	7.9	0.0	0.2	153	25
7/28/2002	000000	24.5	7.9	0.0	0.2	154	25
7/28/2002	001500	24.5	7.9	0.0	0.4	154	25
7/28/2002	003000	24.4	7.9	0.0	0.4	153	25
7/28/2002	004500	24.5	7.9	0.0	0.1	154	25
7/28/2002	010000	24.5	7.9	0.0	0.4	153	24
7/28/2002	011500	24.4	8.0	0.0	0.4	154	25
7/28/2002	013000	24.4	8.0	0.0	0.2	154	25
7/28/2002	014500	24.4	8.0	0.0	0.4	154	25
7/28/2002	020000	24.4	8.0	0.0	0.4	154	25
7/28/2002	021500	24.4	8.0	0.0	0.4	154	25
7/28/2002	023000	24.4	8.0	0.0	0.4	154	26
7/28/2002	024500	24.3	8.0	0.0	0.1	155	27
7/28/2002	030000	24.3	8.0	0.0	0.1	155	26
7/28/2002	031500	24.2	8.0	0.0	0.2	155	26
7/28/2002	033000	24.1	8.0	0.0	0.1	155	26
7/28/2002	034500	23.6	8.0	0.0	0.5	154	26
7/28/2002	040000	22.8	7.9	0.0	0.1	154	26
7/28/2002	041500	22.4	7.9	0.0	0.2	153	27
7/28/2002	043000	22.7	7.9	0.0	0.2	154	27
7/28/2002	044500	22.2	7.9	0.0	0.1	153	27
7/28/2002	050000	22.1	7.9	0.0	0.2	151	27
7/28/2002	051500	22.2	7.9	0.0	0.5	150	27
7/28/2002	053000	21.3	7.9	0.8	11.3	149	27
7/28/2002	054500	21.1	7.9	0.8	10.1	148	27
7/28/2002	060000	21.2	8.0	0.7	8.7	146	27
7/28/2002	061500	21.2	7.9	1.1	15.0	146	27
7/28/2002	063000	21.3	7.9	1.2	15.9	145	27
7/28/2002	064500	21.2	8.0	1.5	20.2	145	27
7/28/2002	070000	21.3	7.9	1.3	18.2	146	27
7/28/2002	071500	20.7	7.9	2.1	27.6	146	27
7/28/2002	073000	20.6	8.0	1.8	23.8	144	27
7/28/2002	074500	20.5	8.0	1.6	21.1	145	28
7/28/2002	080000	20.8	8.0	1.3	16.7	145	27
7/28/2002	081500	20.5	8.0	1.5	19.6	145	28
7/28/2002	083000	20.7	7.9	1.2	15.7	145	28
7/28/2002	084500	20.7	7.9	1.2	15.4	145	28
7/28/2002	090000	20.7	8.0	1.1	15.1	145	27
7/28/2002	091500	20.8	8.0	1.2	15.4	145	28
7/28/2002	093000	21.0	7.9	1.0	13.8	146	28
7/28/2002	094500	21.1	7.9	0.8	10.7	146	28
7/28/2002	100000	21.3	7.9	0.4	5.0	147	27
7/28/2002	101500	21.5	7.9	0.5	6.8	147	27

Table 8.2.1.--Continuous Monitoring Data for Rio Grande at La Orilla
July 26 through August 4, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
7/28/2002	103000	21.8	8.0	0.7	9.6	146	27
7/28/2002	104500	22.1	8.0	0.8	11.1	145	27
7/28/2002	110000	22.6	8.0	1.1	15.6	143	28
7/28/2002	111500	23.0	8.0	1.0	14.1	143	27
7/28/2002	113000	22.9	7.9	0.5	6.5	145	27
7/28/2002	114500	22.9	7.9	0.2	3.3	146	27
7/28/2002	120000	22.9	7.9	0.3	4.5	147	27
7/28/2002	121500	23.5	8.0	0.2	3.0	146	27
7/28/2002	123000	25.2	8.0	0.3	4.1	143	27
7/28/2002	124500	25.2	8.0	0.3	4.8	145	26
7/28/2002	130000	25.6	8.0	0.6	9.0	145	26
7/28/2002	133000	26.6	7.9	0.5	7.0	143	26
7/28/2002	134500	27.3	7.9	1.3	19.3	141	26
7/28/2002	140000	27.6	7.9	1.4	21.0	140	26
7/28/2002	141500	27.2	7.9	1.0	15.1	143	26
7/28/2002	143000	27.8	7.9	1.1	17.1	140	26
7/28/2002	144500	28.1	7.9	1.0	15.0	140	26
7/28/2002	150000	27.8	7.9	0.9	14.2	140	26
7/28/2002	151500	28.4	8.0	0.9	14.4	139	26
7/28/2002	153000	28.4	7.9	0.6	9.8	140	26
7/28/2002	154500	28.6	7.9	0.5	8.1	140	26
7/28/2002	160000	28.7	7.8	0.4	6.1	142	26
7/28/2002	161500	28.4	7.8	0.1	2.2	143	26
7/28/2002	163000	28.1	7.8	0.1	1.1	144	26
7/28/2002	164500	27.9	7.8	0.1	0.7	145	26
7/28/2002	170000	27.8	7.8	0.1	0.6	145	27
7/28/2002	171500	27.9	7.8	0.0	0.5	145	26
7/28/2002	173000	28.8	7.9	0.2	2.3	143	27
7/28/2002	174500	29.4	7.9	0.2	3.7	143	26
7/28/2002	180000	29.9	7.9	1.0	15.0	143	26
7/28/2002	181500	29.8	7.9	1.1	17.8	144	26
7/28/2002	183000	29.8	8.0	1.2	19.0	142	26
7/28/2002	184500	29.8	8.0	1.8	27.6	141	26
7/28/2002	190000	29.7	8.1	2.1	32.8	140	26
7/28/2002	191500	29.3	8.4	5.6	87.1	140	30
7/28/2002	193000	28.8	8.4	5.5	84.6	140	30
7/28/2002	194500	28.4	8.4	5.7	87.3	140	28
7/28/2002	200000	28.0	8.4	5.5	84.0	138	26
7/28/2002	201500	27.7	8.4	4.1	61.6	140	26
7/28/2002	203000	27.8	8.3	1.6	24.1	139	42
7/28/2002	204500	27.5	8.4	1.6	24.0	140	42
7/28/2002	210000	27.6	8.3	1.1	17.3	141	39
7/28/2002	211500	27.4	8.3	1.3	18.9	142	40
7/28/2002	213000	27.4	8.3	1.0	15.1	143	39
7/28/2002	214500	27.3	8.2	1.1	16.1	143	39
7/28/2002	220000	27.1	8.1	1.0	15.4	142	40
7/28/2002	221500	26.9	8.1	0.9	13.8	142	40
7/28/2002	223000	26.1	8.3	1.4	21.1	143	42
7/28/2002	224500	25.6	8.4	4.9	71.4	140	30
7/28/2002	230000	25.4	8.4	4.9	71.7	139	30
7/28/2002	231500	25.2	8.4	5.0	72.9	139	28
7/28/2002	233000	25.0	8.4	2.0	28.0	140	43

Table 8.2.1.--Continuous Monitoring Data for Rio Grande at La Orilla
July 26 through August 4, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
7/28/2002	234500	25.2	8.3	1.4	19.8	140	45
7/29/2002	000000	24.8	8.3	1.7	24.4	142	46
7/29/2002	001500	24.6	8.3	1.8	25.5	142	52
7/29/2002	003000	24.5	8.3	2.0	28.7	142	48
7/29/2002	004500	24.2	8.3	1.9	27.6	142	46
7/29/2002	010000	24.5	8.2	1.3	19.0	143	47
7/29/2002	011500	24.8	8.2	0.6	9.2	144	47
7/29/2002	013000	24.8	8.2	0.4	6.3	143	46
7/29/2002	014500	24.5	8.2	0.4	6.2	144	46
7/29/2002	020000	23.6	8.3	1.9	26.7	146	47
7/29/2002	021500	23.5	8.3	2.0	27.1	144	47
7/29/2002	023000	23.5	8.2	1.7	23.1	142	38
7/29/2002	024500	22.9	8.3	1.4	19.7	144	47
7/29/2002	030000	22.8	8.2	1.4	18.8	143	48
7/29/2002	031500	22.6	8.3	1.7	23.8	143	48
7/29/2002	033000	22.5	8.3	2.0	26.7	143	47
7/29/2002	034500	22.8	8.2	1.8	24.6	145	47
7/29/2002	040000	21.6	8.3	5.5	73.8	144	32
7/29/2002	041500	21.4	8.3	6.4	86.5	142	28
7/29/2002	043000	21.2	8.3	6.5	87.6	140	29
7/29/2002	044500	21.1	8.3	6.6	87.9	140	27
7/29/2002	050000	20.9	8.3	6.6	88.4	140	29
7/29/2002	051500	20.8	8.3	6.7	89.2	139	30
7/29/2002	053000	20.6	8.3	6.7	88.5	139	30
7/29/2002	054500	20.5	8.3	6.6	87.7	139	29
7/29/2002	060000	20.4	8.2	6.7	88.3	139	29
7/29/2002	061500	20.2	8.2	6.6	87.2	139	29
7/29/2002	063000	20.1	8.3	6.7	87.4	139	27
7/29/2002	064500	19.9	8.3	6.7	87.1	140	26
7/29/2002	070000	19.8	8.2	5.3	69.5	141	29
7/29/2002	071500	19.7	8.2	3.0	39.3	141	41
7/29/2002	073000	19.6	8.2	2.6	34.0	142	41
7/29/2002	074500	19.5	8.2	2.6	33.7	143	39
7/29/2002	080000	19.4	8.2	2.4	30.6	143	36
7/29/2002	081500	19.4	8.2	2.7	34.5	142	26
7/29/2002	083000	19.5	8.2	5.5	71.8	141	29
7/29/2002	084500	19.5	8.2	2.7	34.2	141	41
7/29/2002	090000	19.6	8.2	2.6	33.7	141	41
7/29/2002	091500	19.8	8.2	2.6	33.9	142	41
7/29/2002	093000	19.9	8.2	2.1	26.9	142	41
7/29/2002	094500	20.2	8.2	1.6	21.2	142	41
7/29/2002	100000	20.4	8.2	1.8	23.6	142	40
7/29/2002	101500	20.6	8.2	1.6	20.9	143	40
7/29/2002	103000	21.2	8.2	1.8	24.6	142	40
7/29/2002	104500	21.4	8.2	1.5	20.8	141	39
7/29/2002	110000	21.5	8.1	1.3	17.8	141	40
7/29/2002	111500	21.8	8.1	1.1	14.6	141	39
7/29/2002	113000	22.0	8.1	0.9	12.7	141	39
7/29/2002	114500	22.1	8.1	0.7	8.8	141	40
7/29/2002	120000	22.5	8.1	0.8	10.9	141	40
7/29/2002	121500	23.1	8.1	1.0	13.9	140	40
7/29/2002	123000	23.5	8.1	0.9	12.1	139	40

Table 8.2.1.--Continuous Monitoring Data for Rio Grande at La Orilla
July 26 through August 4, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
7/29/2002	124500	24.2	8.1	1.1	15.4	139	41
7/29/2002	130000	24.8	8.1	1.0	13.9	140	40
7/29/2002	131500	26.2	8.2	1.7	25.6	142	40
7/29/2002	133000	27.5	8.3	6.0	90.0	142	29
7/29/2002	134500	28.0	8.3	6.1	92.6	141	30
7/29/2002	140000	28.6	8.2	5.1	77.8	140	27
7/29/2002	141500	29.2	8.2	2.1	33.2	138	46
7/29/2002	143000	29.6	8.2	2.2	33.5	138	43
7/29/2002	144500	29.8	8.2	1.5	22.6	137	45
7/29/2002	150000	30.0	8.2	1.4	21.8	137	44
7/29/2002	151500	30.5	8.2	1.6	25.6	138	42
7/29/2002	153000	31.1	8.2	1.5	24.4	138	43
7/29/2002	154500	31.5	8.2	1.5	24.4	139	42
7/29/2002	160000	32.0	8.2	1.7	27.5	140	25
7/29/2002	161500	32.1	8.2	1.2	20.0	136	25
7/29/2002	163000	32.1	8.2	1.4	22.8	135	29
7/29/2002	164500	32.0	8.3	3.1	50.7	138	25
7/29/2002	170000	31.8	8.2	1.8	29.9	136	38
7/29/2002	171500	31.3	8.2	1.6	25.2	136	38
7/29/2002	173000	30.8	8.1	1.2	19.2	135	36
7/29/2002	174500	30.2	8.1	1.0	15.2	136	37
7/29/2002	180000	29.6	8.1	1.0	14.8	136	37
7/29/2002	181500	29.2	8.1	1.7	25.9	137	36
7/29/2002	183000	28.9	8.1	1.6	24.0	138	36
7/29/2002	184500	28.6	8.1	1.4	20.8	138	36
7/29/2002	190000	28.4	8.2	2.2	33.4	140	36
7/29/2002	191500	28.2	8.1	2.4	36.4	139	36
7/29/2002	193000	28.2	8.2	1.8	27.6	138	36
7/29/2002	194500	28.0	8.1	2.1	32.3	138	36
7/29/2002	200000	27.9	8.2	1.9	28.7	138	36
7/29/2002	201500	27.5	8.1	2.2	32.5	139	36
7/29/2002	203000	27.1	8.3	2.8	41.3	138	35
7/29/2002	204500	26.5	8.4	2.7	40.6	139	37
7/29/2002	210000	26.3	8.3	2.9	42.0	140	36
7/29/2002	211500	25.9	8.2	2.6	37.9	141	36
7/29/2002	213000	25.6	8.4	2.8	41.2	140	36
7/29/2002	214500	25.2	8.4	3.3	47.0	139	36
7/29/2002	220000	24.9	8.4	5.3	76.9	138	26
7/29/2002	221500	24.6	8.4	5.3	76.3	138	27
7/29/2002	223000	24.2	8.4	6.1	85.9	138	27
7/29/2002	224500	23.9	8.4	5.9	83.1	138	25
7/29/2002	230000	23.6	8.4	6.2	86.4	138	24
7/29/2002	231500	23.4	8.4	6.2	86.1	138	25
7/29/2002	233000	23.3	8.4	6.2	87.0	138	23
7/29/2002	234500	23.2	8.4	6.0	84.1	139	24
7/30/2002	000000	23.0	8.4	6.1	83.9	139	24
7/30/2002	001500	22.7	8.4	6.4	87.7	139	22
7/30/2002	003000	22.4	8.4	6.4	87.8	138	22
7/30/2002	004500	22.1	8.4	6.4	87.9	139	21
7/30/2002	010000	21.8	8.4	4.7	63.3	139	21
7/30/2002	011500	21.5	8.4	2.7	35.6	140	32
7/30/2002	013000	21.6	8.3	2.7	36.2	141	32

Table 8.2.1.--Continuous Monitoring Data for Rio Grande at La Orilla
July 26 through August 4, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
7/30/2002	014500	21.4	8.3	2.6	34.4	138	34
7/30/2002	020000	20.9	8.4	5.6	74.6	138	23
7/30/2002	021500	20.6	8.3	5.8	77.4	146	24
7/30/2002	023000	20.4	8.3	5.7	74.8	143	22
7/30/2002	024500	20.3	8.3	6.7	87.7	143	21
7/30/2002	030000	20.1	8.3	6.8	89.9	142	22
7/30/2002	031500	20.0	8.3	6.8	89.5	142	23
7/30/2002	033000	20.0	8.3	5.9	76.6	142	23
7/30/2002	034500	19.9	8.3	5.8	76.2	142	22
7/30/2002	040000	19.8	8.3	6.9	89.6	142	22
7/30/2002	041500	19.7	8.3	6.1	79.1	141	22
7/30/2002	043000	19.7	8.3	5.7	74.2	142	22
7/30/2002	044500	19.6	8.3	6.1	79.2	148	22
7/30/2002	050000	19.5	8.3	5.6	73.4	147	21
7/30/2002	051500	19.5	8.3	6.9	89.5	146	21
7/30/2002	053000	19.4	8.3	6.5	84.3	145	21
7/30/2002	054500	19.4	8.3	3.2	41.5	143	34
7/30/2002	060000	19.5	8.3	2.9	37.0	145	33
7/30/2002	061500	19.6	8.2	3.0	38.1	147	33
7/30/2002	063000	19.8	8.3	2.9	37.6	146	36
7/30/2002	064500	19.3	8.3	6.8	88.4	142	29
7/30/2002	070000	19.3	8.3	6.9	89.3	141	28
7/30/2002	071500	19.3	8.3	6.8	87.4	140	29
7/30/2002	073000	19.3	8.2	6.2	80.3	139	30
7/30/2002	074500	19.3	8.3	6.3	81.0	139	28
7/30/2002	080000	19.3	8.2	3.6	46.0	139	27
7/30/2002	081500	19.3	8.2	3.1	40.0	139	38
7/30/2002	083000	19.4	8.2	3.1	39.6	139	37
7/30/2002	084500	19.5	8.2	2.9	37.0	140	38
7/30/2002	090000	19.5	8.2	2.9	37.1	140	40
7/30/2002	091500	19.6	8.2	3.6	46.7	139	41
7/30/2002	093000	19.8	8.3	6.0	78.9	139	26

Descriptive Statistics (statistics before probe burial)	*Temp (°C)*	*pH*	*DO (mg/L)*	*DO (%)*	*SPC (uS/cm)*	*Turbidity (NTU)*
Mean	25.0	8.3	5.7	81.8	353	20
Standard Error	0.35	0.01	0.05	0.95	8.03	0.91
Median	24.5	8.3	5.6	84.1	384	16
Mode	26.9	8.2	5.5	85.3	387	16
Standard Deviation	3.50	0.06	0.49	9.45	79.46	9.03
Sample Variance	12.23	0.00	0.24	89.29	6314.55	81.58
Kurtosis	-1.05	-0.96	0.84	-0.13	2.97	1.11
Skewness	0.40	0.51	-0.22	-0.67	-2.17	1.30
Range	11.3	0.2	2.5	38.6	276	42
Minimum	20.4	8.2	4.2	57.7	130	0
Maximum	31.7	8.4	6.7	96.3	406	42
Sum	2451.4	809.8	554.3	8016.4	34613.5	1941
Count	98	98	98	98	98	98

*** * * Equipment failure- no continuous monitoring at the La Orilla site on 11/1/02* * ***

Table 8.2.2.--Continuous Monitoring Data for Rio Grande at La Orilla
December 19 through December 23, 2002

[--, no data; ~, approximately; >, greater than; °C, degrees Celsius; mg/L, milligrams per liter; % sat, percent saturation; uS/cm, microsiemens per centimeter; NTU, Nephelometric turbidity units.]

DataSonde 4a 40184
Log File Name : LA ORILLA 12-19-02
Setup Date (MMDDYY) : 121902
Setup Time (HHMMSS) : 140726
Starting Date (MMDDYY) : 121902
Starting Time (HHMMSS) : 143000
Stopping Date (MMDDYY) : 122302
Stopping Time (HHMMSS) : 120000
Interval (HHMMSS) : 001500
Sensor warmup (HHMMSS) : 000200
Circltr warmup (HHMMSS) : 000100

Date	Time (HHMMSS)	Temp (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
12/19/2002	144500	5.8	8.3	10.5	100.5	297	266
12/19/2002	150000	5.8	8.3	10.1	96.4	298	265
12/19/2002	151500	6.0	8.3	10.1	96.6	296	263
12/19/2002	153000	6.0	8.3	10.1	96.5	295	> 1000
12/19/2002	154500	6.1	8.3	10.2	97.5	294	387
12/19/2002	160000	6.1	8.4	10.0	95.5	293	> 1000
12/19/2002	161500	6.0	8.4	10.0	95.7	293	> 1000
12/19/2002	163000	6.0	8.4	10.0	95.6	293	248
12/19/2002	164500	5.8	8.4	10.0	95.4	292	240
12/19/2002	170000	5.7	8.4	10.0	95.2	292	246
12/19/2002	171500	5.5	8.4	10.0	94.9	292	235
12/19/2002	173000	5.3	8.4	10.1	95.4	292	230
12/19/2002	174500	5.1	8.4	10.1	94.3	292	228
12/19/2002	180000	5.0	8.4	10.2	94.8	291	222
12/19/2002	181500	4.8	8.4	10.1	93.6	291	218
12/19/2002	183000	4.7	8.4	10.2	94.1	290	222
12/19/2002	184500	4.6	8.4	10.2	94.1	290	219
12/19/2002	190000	4.5	8.4	10.2	93.9	290	207
12/19/2002	191500	4.4	8.4	10.2	94.1	290	206
12/19/2002	193000	4.3	8.4	10.3	94.0	290	217
12/19/2002	194500	4.2	8.4	10.2	93.0	290	217
12/19/2002	200000	4.0	8.4	10.3	93.6	290	207
12/19/2002	201500	3.9	8.4	10.3	93.5	290	201
12/19/2002	203000	3.8	8.4	10.3	93.5	289	202
12/19/2002	204500	3.7	8.4	10.4	93.5	289	204
12/19/2002	210000	3.6	8.4	10.3	92.8	289	196
12/19/2002	211500	3.5	8.4	10.4	92.8	289	195
12/19/2002	213000	3.3	8.4	10.4	92.9	289	186
12/19/2002	214500	3.2	8.4	10.4	92.4	289	190
12/19/2002	220000	3.1	8.4	10.5	92.9	289	186
12/19/2002	221500	3.0	8.4	10.6	93.6	289	188
12/19/2002	223000	2.9	8.4	10.6	93.5	289	188
12/19/2002	224500	2.8	8.4	10.6	93.1	289	185
12/19/2002	230000	2.6	8.4	10.6	93.1	289	188
12/19/2002	231500	2.5	8.4	10.7	93.5	289	187
12/19/2002	233000	2.4	8.4	10.7	93.5	289	184
12/19/2002	234500	2.3	8.4	10.8	93.5	289	184

Table 8.2.2.--Continuous Monitoring Data for Rio Grande at La Orilla
December 19 through December 23, 2002

Date	Time (HHMMSS)	Temp (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
12/20/2002	000000	2.2	8.4	10.8	93.4	288	183
12/20/2002	001500	2.0	8.4	10.7	92.7	289	185
12/20/2002	003000	1.9	8.4	10.8	93.3	289	181
12/20/2002	004500	1.8	8.4	10.8	92.2	288	179
12/20/2002	010000	1.7	8.4	10.8	92.6	288	171
12/20/2002	011500	1.6	8.4	10.9	92.8	288	183
12/20/2002	013000	1.5	8.4	11.0	93.3	288	170
12/20/2002	014500	1.4	8.4	11.0	93.2	287	177
12/20/2002	020000	1.3	8.3	10.9	92.5	286	193
12/20/2002	021500	1.2	8.3	10.8	90.9	252	174
12/20/2002	023000	1.1	8.3	10.8	90.5	123	159
12/20/2002	024500	1.0	8.3	10.8	90.6	85	176
12/20/2002	030000	1.0	8.3	10.9	91.1	83	173
12/20/2002	031500	0.9	8.3	9.7	80.9	83	155
12/20/2002	033000	0.9	8.3	8.5	71.1	82	103
12/20/2002	034500	0.8	8.3	9.4	78.3	81	96
12/20/2002	040000	0.7	8.3	10.9	90.4	80	174
12/20/2002	041500	0.6	8.3	11.0	91.2	80	94
12/20/2002	043000	0.6	8.3	9.9	82.2	79	87
12/20/2002	044500	0.5	8.3	7.6	62.5	79	85
12/20/2002	050000	0.5	8.3	8.7	71.4	78	84
12/20/2002	051500	0.4	8.3	7.7	63.7	78	83
12/20/2002	053000	0.2	8.3	7.1	58.3	78	80
12/20/2002	054500	0.2	8.3	7.1	58.2	78	78
12/20/2002	060000	0.1	8.3	7.0	56.9	78	77
12/20/2002	061500	0.0	8.3	7.0	56.7	78	76
12/20/2002	063000	-0.1	8.3	7.0	56.9	285	75
12/20/2002	064500	-0.1	8.3	11.2	90.9	287	203
12/20/2002	070000	-0.2	8.3	11.2	90.7	287	167
12/20/2002	071500	-0.2	8.3	11.2	90.7	288	167
12/20/2002	073000	-0.2	8.3	11.4	92.2	289	168
12/20/2002	074500	-0.2	8.3	11.2	90.6	291	184
12/20/2002	080000	-0.2	8.3	11.1	90.1	290	196
12/20/2002	081500	-0.2	8.3	10.9	88.2	292	196
12/20/2002	083000	-0.2	8.3	11.1	89.6	292	204
12/20/2002	084500	-0.2	8.3	11.3	91.2	293	223
12/20/2002	090000	-0.2	8.3	10.9	88.3	293	231
12/20/2002	091500	-0.2	8.3	11.0	89.0	294	245
12/20/2002	093000	-0.2	8.3	11.1	89.6	291	255
12/20/2002	094500	-0.2	8.3	11.0	89.5	292	258
12/20/2002	100000	-0.2	8.3	11.5	93.3	306	325
12/20/2002	101500	0.0	8.3	11.5	93.4	307	313
12/20/2002	103000	0.1	8.3	11.3	92.0	306	318
12/20/2002	104500	0.3	8.3	11.3	92.9	307	307
12/20/2002	110000	0.6	8.3	11.5	95.1	307	315
12/20/2002	111500	0.9	8.3	11.5	95.9	307	312
12/20/2002	113000	1.2	8.3	11.3	95.2	307	309
12/20/2002	114500	1.5	8.3	11.4	97.0	306	300
12/20/2002	120000	1.8	8.3	11.2	96.5	305	296
12/20/2002	121500	2.1	8.3	11.3	97.6	305	292
12/20/2002	123000	2.4	8.3	11.0	96.2	304	294

Table 8.2.2.--Continuous Monitoring Data for Rio Grande at La Orilla
December 19 through December 23, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
12/20/2002	124500	2.8	8.3	11.1	97.8	302	271
12/20/2002	130000	3.1	8.3	10.9	96.8	301	277
12/20/2002	131500	3.4	8.3	10.9	97.4	300	274
12/20/2002	133000	3.6	8.3	10.8	97.1	299	303
12/20/2002	134500	3.7	8.3	10.9	98.7	299	256
12/20/2002	140000	3.9	8.3	11.0	99.5	298	428
12/20/2002	141500	4.0	8.3	8.7	79.1	89	290
12/20/2002	143000	4.0	8.3	7.8	70.8	85	299
12/20/2002	144500	4.1	8.3	7.7	70.2	84	304
12/20/2002	150000	4.3	8.3	7.5	68.6	82	301
12/20/2002	151500	4.4	8.3	7.4	67.9	82	302
12/20/2002	153000	4.4	8.3	7.6	69.7	81	296
12/20/2002	154500	4.5	8.3	7.0	64.3	79	297
12/20/2002	160000	4.4	8.3	6.9	63.3	78	308
12/20/2002	161500	4.7	8.3	7.8	72.1	78	295
12/20/2002	163000	4.5	8.2	8.0	74.2	78	295
12/20/2002	164500	4.2	8.2	8.3	75.7	78	297
12/20/2002	170000	4.2	8.3	7.6	69.2	77	296
12/20/2002	171500	4.3	8.3	7.5	68.7	77	293
12/20/2002	173000	4.3	8.2	7.6	69.5	77	294
12/20/2002	174500	4.2	8.3	7.6	69.9	77	293
12/20/2002	180000	4.4	8.3	6.2	56.9	76	293
12/20/2002	181500	4.4	8.3	6.1	55.5	75	295
12/20/2002	183000	4.4	8.2	6.1	56.1	75	294
12/20/2002	184500	4.4	8.2	7.7	70.3	76	289
12/20/2002	190000	4.3	8.2	7.8	71.8	76	281
12/20/2002	191500	4.2	8.2	7.6	69.2	76	276
12/20/2002	193000	4.2	8.2	7.4	67.4	77	272
12/20/2002	194500	4.2	8.2	6.4	58.1	77	266
12/20/2002	200000	4.2	8.2	7.7	70.4	76	266
12/20/2002	201500	4.2	8.2	7.8	71.6	75	267
12/20/2002	203000	4.1	8.2	7.3	66.5	75	266
12/20/2002	204500	4.1	8.2	7.5	67.9	75	267
12/20/2002	210000	4.1	8.2	7.2	65.6	76	267
12/20/2002	211500	4.1	8.2	7.8	71.2	75	271
12/20/2002	213000	4.1	8.2	7.8	70.8	73	274
12/20/2002	214500	4.1	8.2	7.6	68.9	72	276
12/20/2002	220000	4.0	8.3	6.1	55.4	72	274
12/20/2002	221500	3.9	8.3	6.3	57.0	72	272
12/20/2002	223000	3.7	8.3	6.5	58.6	71	273
12/20/2002	224500	3.7	8.2	7.2	65.2	74	272
12/20/2002	230000	3.8	8.2	7.1	64.4	75	272
12/20/2002	231500	3.8	8.2	6.7	60.2	75	272
12/20/2002	233000	3.7	8.2	6.4	57.8	71	273
12/20/2002	234500	3.5	8.3	6.5	58.0	71	273
12/21/2002	000000	3.4	8.2	6.7	59.7	71	273
12/21/2002	001500	3.3	8.2	5.7	50.3	71	274
12/21/2002	003000	3.2	8.2	6.4	56.5	72	270
12/21/2002	004500	3.2	8.2	6.9	61.0	73	271
12/21/2002	010000	3.4	8.2	6.5	57.6	74	271
12/21/2002	011500	3.5	8.2	7.4	66.6	71	272

Table 8.2.2.--Continuous Monitoring Data for Rio Grande at La Orilla
December 19 through December 23, 2002

Date	Time (HHMMSS)	Temp (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
12/21/2002	013000	3.3	8.3	6.2	55.7	71	270
12/21/2002	014500	3.2	8.3	5.9	52.9	71	270
12/21/2002	020000	3.1	8.3	6.4	56.7	72	272
12/21/2002	021500	3.1	8.3	5.9	52.6	72	278
12/21/2002	023000	3.2	8.2	6.6	58.7	72	277
12/21/2002	024500	3.3	8.2	6.9	61.1	72	274
12/21/2002	030000	3.3	8.2	7.3	65.4	71	275
12/21/2002	031500	3.2	8.2	7.9	70.2	71	275
12/21/2002	033000	3.2	8.3	7.7	68.7	71	271
12/21/2002	034500	3.0	8.3	6.9	61.2	71	269
12/21/2002	040000	2.8	8.3	7.1	62.8	71	267
12/21/2002	041500	2.7	8.3	7.6	66.4	71	265
12/21/2002	043000	2.7	8.3	7.7	67.3	71	264
12/21/2002	044500	2.7	8.3	7.3	64.2	71	265
12/21/2002	050000	2.6	8.3	7.0	61.4	71	265
12/21/2002	051500	2.1	8.3	7.9	67.9	71	264
12/21/2002	053000	2.0	8.2	7.6	65.2	71	264
12/21/2002	054500	2.2	8.2	6.9	59.8	72	264
12/21/2002	060000	2.2	8.3	6.7	58.1	71	264
12/21/2002	061500	2.2	8.2	7.0	60.4	71	264
12/21/2002	063000	2.0	8.3	6.3	53.8	71	263
12/21/2002	064500	2.2	8.2	7.7	66.6	71	262
12/21/2002	070000	2.0	8.3	7.0	60.0	71	262
12/21/2002	071500	1.8	8.3	7.1	60.5	71	261
12/21/2002	073000	1.5	8.2	6.9	58.2	71	262
12/21/2002	074500	1.4	8.2	7.3	62.1	71	262
12/21/2002	080000	1.3	8.2	6.9	58.2	71	262
12/21/2002	081500	1.2	8.2	7.0	58.7	71	263
12/21/2002	083000	1.2	8.2	7.2	60.6	72	263
12/21/2002	084500	1.3	8.3	7.1	60.3	72	262
12/21/2002	090000	1.3	8.3	7.3	62.0	72	261
12/21/2002	091500	1.3	8.3	7.7	64.6	71	262
12/21/2002	093000	1.2	8.3	7.7	64.7	71	262
12/21/2002	094500	1.3	8.3	7.6	63.9	71	262
12/21/2002	100000	1.3	8.2	7.7	64.8	70	264
12/21/2002	101500	1.4	8.3	7.7	65.0	70	262
12/21/2002	103000	1.6	8.3	7.4	63.1	70	262
12/21/2002	104500	1.8	8.2	7.4	63.3	72	266
12/21/2002	110000	1.9	8.3	7.1	61.0	73	263
12/21/2002	111500	2.0	8.3	7.0	60.0	73	263
12/21/2002	113000	2.2	8.2	7.2	62.2	73	263
12/21/2002	114500	2.5	8.3	7.2	62.8	70	263
12/21/2002	120000	2.7	8.3	7.0	61.6	69	262
12/21/2002	121500	2.8	8.3	6.8	60.1	70	263
12/21/2002	123000	3.0	8.3	7.1	62.7	70	263
12/21/2002	124500	3.3	8.2	7.3	65.2	70	262
12/21/2002	130000	3.5	8.3	6.9	62.1	70	263
12/21/2002	131500	3.6	8.3	7.3	65.4	70	263
12/21/2002	133000	3.8	8.3	7.0	62.9	70	263
12/21/2002	134500	4.0	8.3	7.6	69.2	69	267
12/21/2002	140000	4.1	8.3	6.7	60.9	68	267

Table 8.2.2.--Continuous Monitoring Data for Rio Grande at La Orilla
December 19 through December 23, 2002

Date	Time (HHMMSS)	Temp (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
12/21/2002	141500	4.1	8.2	6.7	60.7	68	269
12/21/2002	143000	4.2	8.2	6.9	63.1	69	269
12/21/2002	144500	4.3	8.2	7.4	67.3	69	269
12/21/2002	150000	4.4	8.3	6.6	60.4	68	270
12/21/2002	151500	4.4	8.2	7.3	67.0	69	270
12/21/2002	153000	4.5	8.2	6.4	58.8	69	269
12/21/2002	154500	4.5	8.2	6.7	61.6	68	269
12/21/2002	160000	4.5	8.3	6.3	57.9	68	268
12/21/2002	161500	4.5	8.2	6.6	60.5	68	269
12/21/2002	163000	4.6	8.2	6.2	56.8	68	269
12/21/2002	164500	4.6	8.2	6.3	58.6	68	> 1000
12/21/2002	170000	4.6	8.2	6.4	59.3	68	379
12/21/2002	171500	4.6	8.2	6.3	58.1	69	282
12/21/2002	173000	4.6	8.2	6.1	56.7	69	268
12/21/2002	174500	4.6	8.3	5.9	54.3	69	267
12/21/2002	180000	4.5	8.2	5.8	53.1	68	281
12/21/2002	181500	4.5	8.2	5.9	54.6	68	443
12/21/2002	183000	4.5	8.2	5.9	54.0	68	787
12/21/2002	184500	4.5	8.2	5.9	54.5	68	921
12/21/2002	190000	4.4	8.2	5.9	54.0	68	> 1000
12/21/2002	191500	4.4	8.2	5.9	54.3	68	268
12/21/2002	193000	4.4	8.2	6.0	55.3	69	304
12/21/2002	194500	4.4	8.2	5.9	53.8	69	268
12/21/2002	200000	4.4	8.2	6.6	60.9	69	356
12/21/2002	201500	4.3	8.2	6.3	57.8	69	268
12/21/2002	203000	4.3	8.2	6.7	61.4	69	332
12/21/2002	204500	4.3	8.2	6.5	59.8	69	268
12/21/2002	210000	4.3	8.2	6.1	56.1	70	354
12/21/2002	211500	4.3	8.2	6.0	54.5	70	269
12/21/2002	213000	4.2	8.2	5.9	53.4	70	992
12/21/2002	214500	4.1	8.2	6.1	56.0	70	269
12/21/2002	220000	4.0	8.2	6.0	54.8	70	270
12/21/2002	221500	4.0	8.2	6.7	60.6	70	269
12/21/2002	223000	4.0	8.2	5.7	52.0	70	269
12/21/2002	224500	4.1	8.2	4.7	42.9	72	268
12/21/2002	230000	4.1	8.2	6.3	57.0	71	> 1000
12/21/2002	231500	4.1	8.2	6.5	58.8	70	436
12/21/2002	233000	4.1	8.2	6.0	54.8	70	411
12/21/2002	234500	3.9	8.2	6.0	54.2	70	267
12/22/2002	000000	3.7	8.2	5.9	52.9	70	266
12/22/2002	001500	3.6	8.2	5.9	52.8	70	266
12/22/2002	003000	3.5	8.2	5.9	52.8	70	266
12/22/2002	004500	3.5	8.2	5.9	52.5	70	265
12/22/2002	010000	3.4	8.2	5.7	50.9	70	264
12/22/2002	011500	3.4	8.2	5.4	48.7	70	266
12/22/2002	013000	3.4	8.2	5.7	50.8	70	266
12/22/2002	014500	3.3	8.2	5.8	52.0	70	265
12/22/2002	020000	3.2	8.2	6.1	54.1	71	266
12/22/2002	021500	3.2	8.2	6.2	54.8	71	266
12/22/2002	023000	3.1	8.2	6.4	56.8	71	267
12/22/2002	024500	3.1	8.2	6.2	55.1	71	266

Table 8.2.2.--Continuous Monitoring Data for Rio Grande at La Orilla
December 19 through December 23, 2002

Date	Time (HHMMSS)	Temp (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
12/22/2002	030000	3.1	8.2	6.3	56.3	71	267
12/22/2002	031500	3.1	8.2	6.2	55.1	72	268
12/22/2002	033000	3.0	8.2	6.2	55.1	72	268
12/22/2002	034500	3.0	8.2	6.9	61.1	72	268
12/22/2002	040000	2.9	8.2	6.4	56.8	71	267
12/22/2002	041500	3.0	8.2	6.7	59.1	73	267
12/22/2002	043000	3.0	8.2	6.0	53.2	72	268
12/22/2002	044500	3.0	8.2	6.0	53.2	72	268
12/22/2002	050000	2.9	8.2	6.0	52.8	72	268
12/22/2002	051500	2.9	8.2	5.8	51.4	72	268
12/22/2002	053000	2.9	8.2	6.3	55.9	72	268
12/22/2002	054500	3.0	8.2	6.0	52.6	71	267
12/22/2002	060000	2.9	8.2	6.4	56.6	71	267
12/22/2002	061500	2.7	8.2	6.2	54.5	72	267
12/22/2002	063000	2.7	8.2	6.6	58.4	72	267
12/22/2002	064500	2.9	8.2	6.8	59.9	72	267
12/22/2002	070000	2.9	8.2	6.7	59.0	72	269
12/22/2002	071500	2.9	8.2	6.1	53.5	71	269
12/22/2002	073000	2.8	8.2	6.3	55.7	72	270
12/22/2002	074500	2.5	8.2	6.3	54.8	72	271
12/22/2002	080000	2.5	8.2	6.4	55.6	71	271
12/22/2002	081500	2.4	8.2	6.6	57.4	72	272
12/22/2002	083000	2.4	8.2	6.1	53.3	71	272
12/22/2002	084500	2.4	8.2	6.3	54.9	71	272
12/22/2002	090000	2.5	8.2	6.2	53.7	71	271
12/22/2002	091500	2.2	8.2	6.3	54.5	72	273
12/22/2002	093000	2.2	8.2	6.2	53.8	72	273
12/22/2002	094500	2.1	8.2	6.5	56.2	72	275
12/22/2002	100000	2.2	8.2	6.9	59.8	72	275
12/22/2002	101500	2.3	8.2	7.5	64.7	71	274
12/22/2002	103000	2.4	8.2	7.6	66.5	72	275
12/22/2002	104500	2.5	8.2	7.5	65.7	71	274
12/22/2002	110000	2.6	8.2	7.5	65.9	71	274
12/22/2002	111500	2.6	8.3	7.4	64.3	71	273
12/22/2002	113000	2.6	8.3	7.1	62.6	71	273
12/22/2002	114500	2.6	8.3	6.8	59.5	71	272
12/22/2002	120000	2.7	8.3	6.6	58.0	71	272
12/22/2002	121500	2.8	8.3	6.7	59.2	70	272
12/22/2002	123000	2.9	8.3	6.5	57.5	70	272
12/22/2002	124500	3.1	8.3	6.6	58.3	70	273
12/22/2002	130000	3.2	8.3	6.6	58.4	69	273
12/22/2002	131500	3.3	8.3	6.3	55.8	70	274
12/22/2002	133000	3.5	8.2	6.4	57.8	70	273
12/22/2002	134500	3.7	8.2	6.1	55.3	70	273
12/22/2002	140000	3.8	8.2	6.7	60.3	70	273
12/22/2002	141500	3.9	8.2	6.4	57.6	69	273
12/22/2002	143000	3.9	8.2	6.2	56.3	70	273
12/22/2002	144500	4.0	8.2	6.0	54.8	70	273
12/22/2002	150000	4.0	8.2	6.0	54.5	70	274
12/22/2002	151500	4.1	8.2	6.3	57.4	70	273
12/22/2002	153000	4.1	8.2	6.4	58.6	69	273

Table 8.2.2.--Continuous Monitoring Data for Rio Grande at La Orilla
December 19 through December 23, 2002

Date	Time (HHMMSS)	Temp (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
12/22/2002	154500	4.3	8.2	6.3	57.7	68	272
12/22/2002	160000	4.3	8.2	6.5	59.6	69	273
12/22/2002	161500	4.3	8.2	6.7	61.4	69	274
12/22/2002	163000	4.3	8.2	6.0	54.9	68	275
12/22/2002	164500	4.3	8.2	6.2	56.8	68	275
12/22/2002	170000	4.4	8.2	6.6	60.8	69	428
12/22/2002	171500	4.4	8.2	6.2	57.4	68	273
12/22/2002	173000	4.4	8.2	6.0	54.9	69	268
12/22/2002	174500	4.4	8.2	6.4	58.6	69	275
12/22/2002	180000	4.4	8.2	6.4	58.4	69	327
12/22/2002	181500	4.3	8.2	6.1	56.2	69	911
12/22/2002	183000	4.3	8.2	6.0	54.5	69	605
12/22/2002	184500	4.2	8.2	6.0	54.8	69	344
12/22/2002	190000	4.2	8.2	6.5	59.4	69	> 1000
12/22/2002	191500	4.1	8.2	6.1	55.4	69	270
12/22/2002	193000	4.1	8.2	6.0	54.7	69	> 1000
12/22/2002	194500	4.0	8.2	6.0	54.9	69	271
12/22/2002	200000	3.9	8.2	6.3	56.9	69	272
12/22/2002	201500	3.9	8.2	5.9	53.4	69	271
12/22/2002	203000	3.9	8.2	6.1	55.4	70	272
12/22/2002	204500	3.8	8.2	6.1	54.7	70	271
12/22/2002	210000	3.8	8.2	6.1	54.8	70	272
12/22/2002	211500	3.7	8.2	6.1	54.9	71	272
12/22/2002	213000	3.7	8.2	6.1	55.2	71	272
12/22/2002	214500	3.7	8.2	5.9	53.6	71	272
12/22/2002	220000	3.7	8.2	6.0	53.9	71	272
12/22/2002	221500	3.7	8.2	5.8	52.2	71	273
12/22/2002	223000	3.7	8.2	6.4	57.4	71	272
12/22/2002	224500	3.6	8.3	6.4	57.4	71	271
12/22/2002	230000	3.5	8.3	6.4	57.0	71	272
12/22/2002	231500	3.5	8.3	6.6	59.0	71	272
12/22/2002	233000	3.4	8.3	7.3	65.6	72	272
12/22/2002	234500	3.4	8.3	7.7	68.8	72	272
12/23/2002	000000	3.3	8.3	7.2	64.3	71	271
12/23/2002	001500	3.2	8.3	8.0	71.6	71	271
12/23/2002	003000	3.2	8.3	7.4	65.6	71	272
12/23/2002	004500	3.2	8.3	7.2	64.1	71	271
12/23/2002	010000	3.2	8.3	6.8	60.9	71	271
12/23/2002	011500	3.2	8.3	6.8	60.5	72	271
12/23/2002	013000	3.3	8.3	6.5	58.3	72	270
12/23/2002	014500	3.2	8.3	7.1	63.6	72	271
12/23/2002	020000	3.2	8.3	7.4	66.1	71	270
12/23/2002	021500	3.1	8.3	7.3	64.5	71	270
12/23/2002	023000	3.1	8.3	7.2	63.6	71	270
12/23/2002	024500	3.1	8.3	7.5	66.6	71	270
12/23/2002	030000	3.0	8.3	7.3	64.9	72	271
12/23/2002	031500	3.0	8.3	7.8	68.9	72	271
12/23/2002	033000	3.0	8.3	7.7	68.3	72	271
12/23/2002	034500	3.0	8.3	7.6	67.0	72	271
12/23/2002	040000	3.0	8.3	7.4	65.2	72	271
12/23/2002	041500	3.0	8.3	7.2	63.4	72	271

Table 8.2.2.--Continuous Monitoring Data for Rio Grande at La Orilla
December 19 through December 23, 2002

Date	Time (HHMMSS)	Temp (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
12/23/2002	043000	3.0	8.3	7.4	65.0	72	271
12/23/2002	044500	2.9	8.3	7.3	64.6	72	272
12/23/2002	050000	2.9	8.3	7.4	65.3	72	272
12/23/2002	051500	2.9	8.3	7.4	65.0	73	271
12/23/2002	053000	2.9	8.3	7.4	65.0	73	271
12/23/2002	054500	2.9	8.3	7.6	66.9	73	271
12/23/2002	060000	2.9	8.3	8.0	70.6	73	271
12/23/2002	061500	2.9	8.3	8.0	70.2	73	270
12/23/2002	063000	2.8	8.3	8.1	71.5	74	270
12/23/2002	064500	2.8	8.3	8.0	70.2	74	269
12/23/2002	070000	2.8	8.3	7.8	68.8	74	269
12/23/2002	071500	2.8	8.3	7.9	69.1	74	269
12/23/2002	073000	2.8	8.3	8.1	71.7	74	270
12/23/2002	074500	2.8	8.3	7.9	69.3	74	270
12/23/2002	080000	2.8	8.3	7.4	65.5	74	270
12/23/2002	081500	2.8	8.3	7.7	68.0	74	271
12/23/2002	083000	2.8	8.3	7.4	65.4	74	271
12/23/2002	084500	2.8	8.3	7.6	66.6	74	271
12/23/2002	090000	2.8	8.3	7.6	66.8	74	271
12/23/2002	091500	2.8	8.3	7.8	68.3	74	271
12/23/2002	093000	2.8	8.3	7.5	65.7	74	271
12/23/2002	094500	2.8	8.3	8.2	72.6	75	271
12/23/2002	100000	2.8	8.3	8.1	70.9	75	272
12/23/2002	101500	2.8	8.3	8.2	72.5	77	272
12/23/2002	103000	2.8	8.3	7.6	67.1	78	271
12/23/2002	104500	2.8	8.3	7.9	69.6	79	271
12/23/2002	110000	2.9	8.3	7.8	68.8	79	270
12/23/2002	111500	3.0	8.3	8.0	71.1	79	270
12/23/2002	113000	3.0	8.3	7.4	65.7	80	271
12/23/2002	114500	3.1	8.3	8.1	72.3	80	269
12/23/2002	120000	3.2	8.3	7.4	66.0	80	269

Descriptive Statistics (statistics before probe	*Temp (°C)*	*pH*	*DO (mg/L)*	*DO (%)*	*SPC (uS/cm)*	*Turbidity (NTU)*
Mean	2.3	8.3	10.4	90.0	257	~ 231
Standard Error	0.21	0.00	0.11	1.04	8	~ 16
Median	1.9	8.3	10.7	93.2	290	~ 202
Mode	-0.2	8.3	10.9	93.5	289	> 1000
Standard Deviation	2.05	0.04	1.06	10.03	80	~ 156
Sample Variance	4.21	0.00	1.13	100.58	6429	~ 24301
Kurtosis	-1.09	-1.25	3.85	5.03	1	~18
Skewness	0.43	0.49	-2.01	-2.43	-2	~ 4
Range	6.3	0.1	4.5	43.8	229	~ 926
Minimum	-0.2	8.3	7.0	56.7	78	75
Maximum	6.1	8.4	11.5	100.5	307	> 1000
Sum	212.8	776.0	963.3	8374.1	23864	~ 21520
Count	93	93	93	93	93	93

Table 8.2.3.--Continuous Monitoring Data for Rio Grande at La Orilla
February 28 through March 3, 2003

[--, no data; °C, degrees Celsius; mg/L, milligrams per liter; % sat, percent saturation; uS/cm, microsiemens per centimeter; NTU, Nephelometric turbidity units.]

DataSonde4a40184
LogFileName:LA ORILLA 2/28/2003
SetupDate(MMDDYY):22803
SetupTime(HHMMSS):114658
StartingDate(MMDDYY):22803
StartingTime(HHMMSS):150500
StoppingDate(MMDDYY):30303
StoppingTime(HHMMSS):230000
Interval(HHMMSS):1500
Sensorwarmup(HHMMSS):200
Circltrwarmup(HHMMSS):100

Date	Time (HHMMSS)	Temp (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
2/28/2003	150500	8.7	8.3	9.7	100.4	319	--
2/28/2003	152000	8.6	8.3	9.7	100.2	320	--
2/28/2003	153500	8.6	8.3	9.7	100.2	313	--
2/28/2003	155000	8.5	8.3	9.7	99.7	318	--
2/28/2003	160500	8.5	8.3	9.7	99.3	312	--
2/28/2003	162000	8.4	8.3	9.7	99.6	314	--
2/28/2003	163500	8.3	8.3	9.7	99.1	316	--
2/28/2003	165000	8.3	8.3	9.7	99.0	317	--
2/28/2003	170500	8.2	8.3	9.7	98.7	315	--
2/28/2003	172000	8.2	8.3	9.6	98.4	314	--
2/28/2003	173500	8.1	8.3	9.6	97.7	317	--
2/28/2003	175000	8.1	8.3	9.5	97.0	305	--
2/28/2003	180500	8.0	8.3	9.5	97.0	290	--
2/28/2003	182000	7.9	8.3	7.6	77.5	142	--
2/28/2003	183500	7.9	8.3	6.3	63.8	130	--
2/28/2003	185000	7.9	8.2	6.3	64.2	125	--
2/28/2003	190500	8.0	8.2	6.6	67.4	122	--
2/28/2003	192000	8.0	8.2	6.2	63.3	121	--
2/28/2003	193500	8.0	8.2	5.7	58.3	119	--
2/28/2003	195000	7.9	8.2	5.6	56.6	117	--
2/28/2003	200500	7.7	8.2	6.4	64.4	115	--
2/28/2003	202000	7.2	8.3	6.9	69.0	113	--
2/28/2003	203500	6.6	8.3	7.6	74.5	112	--
2/28/2003	205000	6.1	8.3	9.7	94.1	312	--
2/28/2003	210500	6.0	8.3	9.6	93.3	312	--
2/28/2003	212000	5.9	8.3	9.7	93.6	310	--
2/28/2003	213500	5.8	8.3	9.7	93.5	310	--
2/28/2003	215000	5.8	8.3	9.8	94.3	310	--
2/28/2003	220500	5.7	8.3	9.9	94.7	309	--
2/28/2003	222000	5.7	8.3	9.9	94.9	310	--
2/28/2003	223500	5.7	8.3	9.9	95.5	310	--
2/28/2003	225000	5.7	8.3	9.9	95.1	309	--
2/28/2003	230500	5.7	8.3	10.0	95.6	309	--
2/28/2003	232000	5.6	8.3	9.9	95.1	309	--
2/28/2003	233500	5.6	8.3	10.0	95.3	309	--
2/28/2003	235000	5.5	8.3	10.0	95.3	309	--
3/1/2003	000500	5.4	8.3	10.0	95.6	309	--

Table 8.2.3.--Continuous Monitoring Data for Rio Grande at La Orilla
February 28 through March 3, 2003

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
3/1/2003	002000	5.4	8.3	10.0	95.4	310	--
3/1/2003	003500	5.4	8.3	10.0	94.8	308	--
3/1/2003	005000	5.3	8.3	10.0	95.0	307	--
3/1/2003	010500	5.3	8.3	10.0	95.2	309	--
3/1/2003	012000	5.3	8.3	9.9	94.1	236	--
3/1/2003	013500	5.2	8.3	9.5	89.5	167	--
3/1/2003	015000	5.1	8.3	10.0	94.8	312	--
3/1/2003	020500	5.0	8.3	10.0	94.3	314	--
3/1/2003	022000	5.0	8.3	10.1	95.2	314	--
3/1/2003	023500	4.9	8.3	10.1	95.2	316	--
3/1/2003	025000	4.9	8.3	10.1	94.9	307	--
3/1/2003	030500	4.8	8.3	10.1	95.0	315	--
3/1/2003	032000	4.7	8.3	10.1	94.7	318	--
3/1/2003	033500	4.7	8.3	10.1	94.8	313	--
3/1/2003	035000	4.6	8.3	10.2	94.9	313	--
3/1/2003	040500	4.5	8.3	10.2	94.6	314	--
3/1/2003	042000	4.5	8.3	10.1	94.3	314	--
3/1/2003	043500	4.4	8.3	10.1	93.9	315	--
3/1/2003	045000	4.3	8.2	10.0	92.8	313	--
3/1/2003	050500	4.2	8.2	10.0	92.0	260	--
3/1/2003	052000	4.1	8.2	10.1	93.3	250	--
3/1/2003	053500	4.0	8.2	10.2	93.3	258	--
3/1/2003	055000	3.9	8.2	10.2	92.9	237	--
3/1/2003	060500	3.7	8.2	10.2	92.6	216	--
3/1/2003	062000	3.6	8.2	10.2	92.7	243	--
3/1/2003	063500	3.5	8.2	10.2	92.9	252	--
3/1/2003	065000	3.4	8.2	10.4	93.7	295	--
3/1/2003	070500	3.4	8.2	10.4	93.8	299	--
3/1/2003	072000	3.4	8.2	10.4	94.0	299	--
3/1/2003	073500	3.4	8.2	10.4	94.1	299	--
3/1/2003	075000	3.4	8.2	10.5	94.7	301	--
3/1/2003	080500	3.5	8.2	10.5	95.5	300	--
3/1/2003	082000	3.6	8.2	10.5	95.7	297	--
3/1/2003	083500	3.8	8.2	10.4	95.4	271	--
3/1/2003	085000	4.0	8.2	10.4	95.5	218	--
3/1/2003	090500	4.2	8.2	10.4	96.0	249	--
3/1/2003	092000	4.4	8.2	10.4	96.7	286	--
3/1/2003	093500	4.8	8.2	10.3	96.8	240	--
3/1/2003	095000	5.1	8.2	10.3	97.7	244	--
3/1/2003	100500	5.4	8.2	10.4	98.8	300	--
3/1/2003	102000	5.8	8.2	10.1	97.2	304	--
3/1/2003	103500	6.2	8.2	8.9	86.3	261	--
3/1/2003	105000	6.6	8.2	10.2	99.9	306	--
3/1/2003	110500	6.9	8.2	10.2	100.8	307	--
3/1/2003	112000	7.2	8.2	10.2	102.0	305	--
3/1/2003	113500	7.5	8.2	10.1	101.3	308	--
3/1/2003	115000	7.9	8.2	10.0	101.2	301	--
3/1/2003	120500	8.3	8.2	10.0	102.9	279	--
3/1/2003	122000	8.7	8.2	10.0	102.8	253	--
3/1/2003	123500	9.1	8.2	9.9	103.1	277	--
3/1/2003	125000	9.3	8.2	9.9	104.1	298	--

Table 8.2.3.--Continuous Monitoring Data for Rio Grande at La Orilla
February 28 through March 3, 2003

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
3/1/2003	130500	9.5	8.2	9.9	103.9	298	--
3/1/2003	132000	9.7	8.2	9.8	103.5	307	--
3/1/2003	133500	9.8	8.2	9.8	103.7	308	--
3/1/2003	135000	10.2	8.2	9.7	103.9	309	--
3/1/2003	140500	10.3	8.2	9.7	104.0	308	--
3/1/2003	142000	10.2	8.2	9.7	103.6	307	--
3/1/2003	143500	10.2	8.2	9.5	102.1	308	--
3/1/2003	145000	10.3	8.2	9.5	101.5	309	--
3/1/2003	150500	10.2	8.2	9.4	101.2	306	--
3/1/2003	152000	10.1	8.2	9.4	100.7	306	--
3/1/2003	153500	10.2	8.2	9.3	99.7	289	--
3/1/2003	155000	10.2	8.2	9.3	99.6	268	--
3/1/2003	160500	10.2	8.2	9.2	98.7	290	--
3/1/2003	162000	10.2	8.2	9.3	99.7	308	--
3/1/2003	163500	10.0	8.3	9.3	99.0	307	--
3/1/2003	165000	9.9	8.3	9.2	97.5	307	--
3/1/2003	170500	9.8	8.3	9.1	97.0	276	--
3/1/2003	172000	9.7	8.3	9.2	96.9	288	--
3/1/2003	173500	9.5	8.3	9.2	97.0	307	--
3/1/2003	175000	9.3	8.3	9.2	96.2	304	--
3/1/2003	180500	9.1	8.3	9.2	96.4	305	--
3/1/2003	182000	9.0	8.3	7.9	82.0	149	--
3/1/2003	183500	8.9	8.3	8.0	83.3	136	--
3/1/2003	185000	8.7	8.3	8.0	83.1	120	--
3/1/2003	190500	8.6	8.3	8.2	85.1	161	--
3/1/2003	192000	8.6	8.3	7.1	72.8	161	--
3/1/2003	193500	8.5	8.3	6.8	70.0	177	--
3/1/2003	195000	8.3	8.3	7.1	72.6	170	--
3/1/2003	200500	8.2	8.3	7.3	74.9	164	--
3/1/2003	202000	8.0	8.3	7.4	75.7	160	--
3/1/2003	203500	7.9	8.3	7.7	78.2	157	--
3/1/2003	205000	7.7	8.3	8.0	81.2	243	--
3/1/2003	210500	7.6	8.3	9.4	94.4	309	--
3/1/2003	212000	7.5	8.3	9.4	94.7	308	--
3/1/2003	213500	7.3	8.3	9.4	94.4	309	--
3/1/2003	215000	7.2	8.3	9.5	94.3	309	--
3/1/2003	220500	7.0	8.3	9.5	93.8	304	--
3/1/2003	222000	6.9	8.3	9.6	94.6	309	--
3/1/2003	223500	6.7	8.3	9.6	94.4	309	--
3/1/2003	225000	6.6	8.3	9.6	94.5	309	--
3/1/2003	230500	6.5	8.3	9.6	94.3	312	--
3/1/2003	232000	6.3	8.3	9.6	94.1	310	--
3/1/2003	233500	6.2	8.3	9.7	94.4	311	--
3/1/2003	235000	6.0	8.3	9.7	94.2	309	--
3/2/2003	000500	5.9	8.3	9.7	93.9	309	--
3/2/2003	002000	5.7	8.3	9.9	94.9	310	--
3/2/2003	003500	5.6	8.3	9.9	94.9	308	--
3/2/2003	005000	5.5	8.3	10.0	95.1	308	--
3/2/2003	010500	5.3	8.3	10.0	95.1	308	--
3/2/2003	012000	5.2	8.3	9.9	93.5	309	--
3/2/2003	013500	5.0	8.3	9.4	88.3	125	--

Table 8.2.3.--Continuous Monitoring Data for Rio Grande at La Orilla
February 28 through March 3, 2003

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
3/2/2003	015000	4.9	8.3	10.2	95.4	309	--
3/2/2003	020500	4.7	8.3	10.2	95.5	309	--
3/2/2003	022000	4.6	8.3	10.2	94.8	309	--
3/2/2003	023500	4.5	8.3	10.2	95.0	310	--
3/2/2003	025000	4.3	8.3	10.3	95.1	310	--
3/2/2003	030500	4.2	8.3	10.3	95.2	309	--
3/2/2003	032000	4.1	8.3	10.3	95.0	309	--
3/2/2003	033500	3.9	8.3	10.4	95.4	310	--
3/2/2003	035000	3.8	8.3	10.4	95.5	310	--
3/2/2003	040500	3.7	8.3	10.5	95.6	310	--
3/2/2003	042000	3.6	8.3	10.6	95.8	310	--
3/2/2003	043500	3.5	8.2	10.5	94.9	310	--
3/2/2003	045000	3.3	8.2	10.5	95.0	311	--
3/2/2003	050500	3.2	8.2	10.5	94.7	316	--
3/2/2003	052000	3.1	8.2	10.6	94.8	309	--
3/2/2003	053500	3.0	8.2	10.6	95.1	296	--
3/2/2003	055000	2.9	8.2	10.7	95.7	296	--
3/2/2003	060500	2.8	8.2	10.8	95.8	301	--
3/2/2003	062000	2.7	8.2	10.8	95.4	310	--
3/2/2003	063500	2.6	8.2	10.7	94.7	316	--
3/2/2003	065000	2.5	8.2	10.8	95.0	310	--
3/2/2003	070500	2.4	8.2	10.8	95.2	300	--
3/2/2003	072000	2.4	8.2	10.8	94.8	293	--
3/2/2003	073500	2.3	8.2	10.9	95.5	306	--
3/2/2003	075000	2.4	8.2	10.9	96.1	311	--
3/2/2003	080500	2.5	8.2	11.0	96.6	311	--
3/2/2003	082000	2.6	8.2	11.0	97.1	312	--
3/2/2003	083500	2.8	8.2	11.0	97.7	312	--
3/2/2003	085000	3.0	8.2	11.0	98.5	312	--
3/2/2003	090500	3.3	8.2	11.0	98.9	313	--
3/2/2003	092000	3.6	8.2	10.9	99.3	312	--
3/2/2003	093500	3.9	8.2	10.9	100.1	307	--
3/2/2003	095000	4.2	8.2	10.9	101.1	310	--
3/2/2003	100500	4.6	8.2	10.9	101.3	310	--
3/2/2003	102000	5.0	8.2	10.9	102.5	310	--
3/2/2003	103500	5.5	8.2	10.8	103.3	310	--
3/2/2003	105000	5.9	8.2	10.8	103.8	311	--
3/2/2003	110500	6.4	8.2	10.7	104.3	310	--
3/2/2003	112000	6.9	8.2	10.6	105.2	312	--
3/2/2003	113500	7.3	8.2	10.5	105.4	311	--
3/2/2003	115000	7.8	8.2	10.4	105.4	313	--
3/2/2003	120500	8.3	8.2	10.4	106.0	310	--
3/2/2003	122000	8.6	8.2	10.2	105.4	309	--
3/2/2003	123500	9.3	8.2	10.1	106.3	308	--
3/2/2003	125000	9.5	8.2	10.0	105.7	307	--
3/2/2003	130500	9.8	8.2	10.0	106.4	305	--
3/2/2003	132000	10.2	8.2	10.0	106.7	306	--
3/2/2003	133500	10.8	8.2	9.8	106.8	303	--
3/2/2003	135000	11.4	8.2	9.6	106.1	306	--
3/2/2003	140500	11.8	8.2	9.6	106.3	253	--
3/2/2003	142000	12.1	8.2	9.4	105.3	300	--

Table 8.2.3.--Continuous Monitoring Data for Rio Grande at La Orilla
February 28 through March 3, 2003

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
3/2/2003	143500	12.4	8.2	9.3	104.9	277	--
3/2/2003	145000	12.5	8.2	9.3	104.8	302	--
3/2/2003	150500	12.5	8.2	9.2	103.6	302	--
3/2/2003	152000	12.3	8.2	9.1	102.1	305	--
3/2/2003	153500	12.4	8.2	9.0	101.6	266	--
3/2/2003	155000	12.4	8.2	9.1	102.4	297	--
3/2/2003	160500	12.4	8.2	9.1	102.1	294	--
3/2/2003	162000	12.5	8.3	9.0	101.6	301	--
3/2/2003	163500	12.5	8.2	8.9	101.1	301	--
3/2/2003	165000	12.5	8.3	8.9	100.6	301	--
3/2/2003	170500	12.4	8.2	8.9	99.7	300	--
3/2/2003	172000	12.2	8.3	8.8	98.9	301	--
3/2/2003	173500	12.0	8.3	8.8	98.5	298	--
3/2/2003	175000	11.8	8.3	8.9	98.6	298	--
3/2/2003	180500	11.6	8.3	8.8	97.4	297	--
3/2/2003	182000	11.4	8.3	8.9	97.5	297	--
3/2/2003	183500	11.2	8.3	8.7	95.7	294	--
3/2/2003	185000	11.0	8.3	8.9	97.3	303	--
3/2/2003	190500	10.9	8.3	8.7	94.9	301	--
3/2/2003	192000	10.7	8.3	8.7	94.6	296	--
3/2/2003	193500	10.5	8.3	8.7	94.2	299	--
3/2/2003	195000	10.3	8.3	8.7	93.5	279	--
3/2/2003	200500	10.1	8.3	8.8	94.4	289	--
3/2/2003	202000	9.8	8.3	9.0	95.1	293	--
3/2/2003	203500	9.6	8.3	8.9	94.0	297	--
3/2/2003	205000	9.3	8.3	9.0	94.5	296	--
3/2/2003	210500	9.0	8.3	9.1	94.9	302	--
3/2/2003	212000	8.8	8.3	9.1	93.9	303	--
3/2/2003	213500	8.5	8.3	9.1	93.9	301	--
3/2/2003	215000	8.3	8.3	9.2	93.9	298	--
3/2/2003	220500	8.1	8.3	9.2	93.9	249	--
3/2/2003	222000	8.0	8.3	9.3	94.5	230	--
3/2/2003	223500	7.8	8.3	9.3	94.2	237	--
3/2/2003	225000	7.6	8.3	9.3	93.6	268	--
3/2/2003	230500	7.5	8.3	9.3	93.7	296	--
3/2/2003	232000	7.3	8.3	9.4	94.2	295	--
3/2/2003	233500	7.2	8.3	9.4	93.9	293	--
3/2/2003	235000	7.0	8.3	9.5	94.0	296	--
3/3/2003	000500	6.8	8.3	9.5	93.8	294	--
3/3/2003	002000	6.7	8.3	9.6	94.1	294	--
3/3/2003	003500	6.5	8.3	9.6	94.3	302	--
3/3/2003	005000	6.3	8.3	9.7	94.3	303	--
3/3/2003	010500	6.1	8.3	9.7	94.1	307	--
3/3/2003	012000	6.0	8.3	9.8	94.8	305	--
3/3/2003	013500	5.8	8.3	9.8	94.6	304	--
3/3/2003	015000	5.7	8.3	9.9	95.1	308	--
3/3/2003	020500	5.5	8.3	9.9	94.9	308	--
3/3/2003	022000	5.3	8.3	10.0	95.0	306	--
3/3/2003	023500	5.2	8.3	10.0	95.0	307	--
3/3/2003	025000	5.0	8.3	10.1	94.9	307	--
3/3/2003	030500	4.9	8.3	10.1	94.7	308	--

Table 8.2.3.--Continuous Monitoring Data for Rio Grande at La Orilla
February 28 through March 3, 2003

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
3/3/2003	032000	4.8	8.3	10.1	94.2	307	--
3/3/2003	033500	4.6	8.3	10.1	94.1	307	--
3/3/2003	035000	4.5	8.3	10.1	94.3	307	--
3/3/2003	040500	4.4	8.3	10.2	94.9	306	--
3/3/2003	042000	4.3	8.3	10.3	94.8	308	--
3/3/2003	043500	4.1	8.3	10.4	95.5	301	--
3/3/2003	045000	4.0	8.3	10.4	95.4	304	--
3/3/2003	050500	3.9	8.2	10.4	95.2	308	--
3/3/2003	052000	3.8	8.2	10.4	95.4	306	--
3/3/2003	053500	3.7	8.2	10.4	95.1	307	--
3/3/2003	055000	3.6	8.2	10.5	95.2	308	--
3/3/2003	060500	3.5	8.2	10.5	94.8	308	--
3/3/2003	062000	3.4	8.2	10.5	94.8	313	--
3/3/2003	063500	3.3	8.2	10.5	94.8	310	--
3/3/2003	065000	3.3	8.2	10.5	95.0	311	--
3/3/2003	070500	3.2	8.2	10.5	94.3	311	--
3/3/2003	072000	3.2	8.2	10.6	95.2	308	--
3/3/2003	073500	3.2	8.2	10.6	95.3	310	--
3/3/2003	075000	3.2	8.2	10.6	95.5	272	--
3/3/2003	080500	3.3	8.2	10.7	96.3	289	--
3/3/2003	082000	3.5	8.2	10.7	97.1	298	--
3/3/2003	083500	3.7	8.2	10.6	96.9	273	--
3/3/2003	085000	3.9	8.2	10.7	97.8	303	--
3/3/2003	090500	4.2	8.2	10.6	97.6	268	--
3/3/2003	092000	4.5	8.2	10.6	98.7	240	--
3/3/2003	093500	4.8	8.2	10.6	99.6	261	--
3/3/2003	095000	5.1	8.2	10.6	99.9	281	--
3/3/2003	100500	5.5	8.2	10.5	100.0	296	--
3/3/2003	102000	5.9	8.2	10.6	102.3	301	--
3/3/2003	103500	6.4	8.2	10.4	101.7	312	--
3/3/2003	105000	6.8	8.2	10.4	102.2	311	--
3/3/2003	110500	7.2	8.2	10.3	102.9	311	--
3/3/2003	112000	7.7	8.2	10.2	103.4	310	--
3/3/2003	113500	8.2	8.2	10.1	103.5	311	--
3/3/2003	115000	8.7	8.2	10.1	104.2	307	--
3/3/2003	120500	9.1	8.2	10.0	104.4	303	--
3/3/2003	122000	9.6	8.2	9.9	104.5	305	--
3/3/2003	123500	10.0	8.2	9.8	105.1	297	--
3/3/2003	125000	10.5	8.2	9.7	104.7	304	--
3/3/2003	130500	10.9	8.2	9.5	103.7	293	--
3/3/2003	132000	11.3	8.2	9.6	105.1	300	--
3/3/2003	133500	11.6	8.2	9.5	105.5	301	--
3/3/2003	135000	11.9	8.2	9.3	104.0	301	--
3/3/2003	140500	12.2	8.2	9.2	103.8	303	--
3/3/2003	142000	12.5	8.2	9.1	103.2	303	--
3/3/2003	143500	12.8	8.3	9.1	102.9	291	--
3/3/2003	145000	12.9	8.2	9.0	102.3	259	--
3/3/2003	150500	13.1	8.3	8.9	102.2	239	--
3/3/2003	152000	13.2	8.2	8.8	100.8	230	--
3/3/2003	153500	13.3	8.3	8.7	99.8	243	--
3/3/2003	155000	13.3	8.2	8.7	99.7	242	--

Table 8.2.3.--Continuous Monitoring Data for Rio Grande at La Orilla
February 28 through March 3, 2003

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
3/3/2003	160500	13.3	8.3	8.6	98.8	232	--

Descriptive Statistics	*Temp (°C)*	*pH*	*DO (mg/L)*	*DO (%)*	*SPC (uS/cm)*	*Turbidity (NTU)*
Mean	7.0	8.3	9.7	95.7	286	--
Standard Error	0.17	0.00	0.06	0.46	2.74	--
Median	6.6	8.3	9.9	95.4	305	--
Mode	5.0	8.2	9.7	94.9	310	--
Standard Deviation	2.91	0.04	0.94	7.89	46.84	--
Sample Variance	8.47	0.00	0.89	62.22	2194.27	--
Kurtosis	-0.86	-0.95	4.05	7.62	5.50	--
Skewness	0.40	0.65	-1.74	-2.37	-2.50	--
Range	11.0	0.1	5.4	50.2	208	--
Minimum	2.3	8.2	5.6	56.6	112	--
Maximum	13.3	8.3	11.0	106.8	320	--
Sum	2041.6	2420.8	2839.6	28049.5	83855.4	--
Count	293	293	293	293	293	--

Table 8.3.1.--Continuous Monitoring Data for Rio Grande at Barelas, August 22 through August 23, 2002

[--, no data; °C, degrees Celsius; mg/L, milligrams per liter; % sat, percent saturation; uS/cm, microsiemens per centimeter; NTU, Nephelometric turbidity units.]

DataSonde 4a 40183
Log File Name : BARELAS 8-22-02
Setup Date (MMDDYY) : 082202
Setup Time (HHMMSS) : 080156
Starting Date (MMDDYY) : 082202
Starting Time (HHMMSS) : 090000
Stopping Date (MMDDYY) : 082902
Stopping Time (HHMMSS) : 120000
Interval (HHMMSS) : 001500
Sensor warmup (HHMMSS) : 000200
Circltr warmup (HHMMSS) : 000100

Date	Time (HHMMSS)	Temp (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
8/22/2002	091500	20.3	8.2	7.2	95.1	363	465
8/22/2002	093000	20.4	8.2	7.6	99.5	362	383
8/22/2002	094500	20.6	8.2	7.7	101.7	363	363
8/22/2002	100000	20.8	8.2	7.6	100.5	366	362
8/22/2002	101500	21.0	8.2	7.5	100.6	366	619
8/22/2002	103000	21.3	8.2	7.6	101.2	366	357
8/22/2002	104500	21.6	8.2	7.4	99.7	366	334
8/22/2002	110000	21.9	8.2	7.4	100.9	366	336
8/22/2002	111500	22.3	8.2	7.3	100.3	366	333
8/22/2002	113000	22.7	8.2	7.3	100.4	366	333
8/22/2002	114500	23.1	8.2	7.3	100.9	366	331
8/22/2002	120000	23.5	8.2	7.2	101.3	366	330
8/22/2002	121500	23.9	8.2	7.2	101.8	366	344
8/22/2002	123000	24.4	8.2	7.1	101.2	366	326
8/22/2002	124500	24.1	8.2	6.8	95.4	364	828
8/22/2002	130000	25.2	8.2	7.1	101.9	366	322
8/22/2002	131500	25.6	8.2	6.7	97.7	366	315
8/22/2002	133000	26.1	8.2	6.8	99.2	365	312
8/22/2002	134500	26.5	8.2	6.6	98.2	365	313
8/22/2002	140000	27.0	8.2	6.5	97.1	364	308
8/22/2002	141500	27.3	8.2	6.5	97.5	365	310
8/22/2002	143000	27.7	8.2	6.3	95.5	364	307
8/22/2002	144500	28.0	8.2	6.3	96.2	366	307
8/22/2002	150000	28.3	8.2	6.3	96.0	363	312
8/22/2002	151500	28.6	8.2	6.1	94.1	363	306
8/22/2002	153000	28.9	8.2	6.1	93.7	363	313
8/22/2002	154500	29.2	8.2	6.0	92.9	363	300
8/22/2002	160000	29.4	8.2	5.9	91.9	362	311
8/22/2002	161500	29.6	8.2	5.9	91.9	352	310
8/22/2002	163000	29.7	8.2	6.0	93.0	354	310
8/22/2002	164500	29.7	8.2	5.9	92.0	362	313
8/22/2002	170000	29.8	8.2	5.7	90.0	364	314
8/22/2002	171500	29.8	8.2	5.8	90.6	359	309
8/22/2002	173000	29.9	8.2	5.8	91.1	360	315
8/22/2002	174500	29.8	8.2	5.8	90.3	355	320
8/22/2002	180000	29.7	8.2	5.7	88.7	350	322
8/22/2002	181500	29.6	8.3	5.7	88.2	355	324
8/22/2002	183000	29.4	8.2	5.7	88.1	354	332
8/22/2002	184500	29.3	8.2	5.6	87.2	355	331
8/22/2002	190000	29.1	8.2	5.7	88.1	356	325
8/22/2002	191500	29.0	8.2	5.7	87.8	354	325

Table 8.3.1.--Continuous Monitoring Data for Rio Grande at Barelas,
August 22 through August 23, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
8/22/2002	193000	28.8	8.2	5.7	88.2	354	333
8/22/2002	194500	28.6	8.2	5.6	85.1	353	343
8/22/2002	200000	28.4	8.2	5.6	84.8	344	343
8/22/2002	201500	28.2	8.2	5.6	84.7	344	340
8/22/2002	203000	28.0	8.2	5.7	86.8	336	347
8/22/2002	204500	27.8	8.2	5.6	85.2	345	351
8/22/2002	210000	27.7	8.2	5.6	85.3	344	352
8/22/2002	211500	27.5	8.2	5.7	85.2	342	351
8/22/2002	213000	27.4	8.2	5.7	86.1	345	342
8/22/2002	214500	27.2	8.2	5.7	85.6	345	355
8/22/2002	220000	26.9	8.3	5.7	85.3	342	353
8/22/2002	221500	26.7	8.2	5.8	86.3	341	351
8/22/2002	223000	26.6	8.2	5.8	86.3	340	352
8/22/2002	224500	26.4	8.2	5.8	84.8	341	361
8/22/2002	230000	26.2	8.2	5.8	85.4	341	382
8/22/2002	231500	26.0	8.2	5.8	85.0	341	382
8/22/2002	233000	25.8	8.2	5.9	86.1	341	393
8/22/2002	234500	25.6	8.3	5.8	84.6	341	398
8/23/2002	000000	25.4	8.2	5.9	85.2	339	388
8/23/2002	001500	25.3	8.2	5.9	85.7	340	393
8/23/2002	003000	25.0	8.2	6.1	87.7	341	388
8/23/2002	004500	24.9	8.2	6.1	86.9	340	388
8/23/2002	010000	24.7	8.2	6.0	86.1	341	381
8/23/2002	011500	24.5	8.2	6.0	86.0	341	393
8/23/2002	013000	24.3	8.2	6.1	86.7	341	403
8/23/2002	014500	24.1	8.2	6.1	85.8	342	395
8/23/2002	020000	23.9	8.2	6.1	85.8	342	406
8/23/2002	021500	23.8	8.2	6.2	86.5	342	391
8/23/2002	023000	23.6	8.2	6.3	87.7	343	403
8/23/2002	024500	23.5	8.2	6.2	87.0	343	394
8/23/2002	030000	23.3	8.2	6.2	86.1	342	405
8/23/2002	031500	23.1	8.2	6.3	86.9	344	410
8/23/2002	033000	22.9	8.2	6.3	86.9	343	417
8/23/2002	034500	22.8	8.2	6.3	86.7	340	415
8/23/2002	040000	22.6	8.2	6.3	86.7	346	402
8/23/2002	041500	22.5	8.2	6.3	86.8	345	401
8/23/2002	043000	22.3	8.2	6.5	88.5	347	397
8/23/2002	044500	22.1	8.2	6.4	87.0	349	401
8/23/2002	050000	22.0	8.2	6.4	86.7	349	397
8/23/2002	051500	21.8	8.2	6.4	86.9	349	400
8/23/2002	053000	21.6	8.2	6.5	87.6	349	399
8/23/2002	054500	21.5	8.2	6.5	86.9	341	398
8/23/2002	060000	21.3	8.2	6.5	87.4	348	382
8/23/2002	061500	21.1	8.2	6.6	87.7	346	406
8/23/2002	063000	21.0	8.2	6.6	87.6	344	396
8/23/2002	064500	20.8	8.2	6.5	86.8	341	386
8/23/2002	070000	20.7	8.2	6.6	87.6	342	387
8/23/2002	071500	20.6	8.2	6.6	87.5	348	394
8/23/2002	073000	20.5	8.2	6.7	89.0	345	394
8/23/2002	074500	20.4	8.2	6.7	88.8	346	383
8/23/2002	080000	20.4	8.2	6.7	88.2	339	382
8/23/2002	081500	20.4	8.2	6.8	89.8	337	378
8/23/2002	083000	20.4	8.2	6.7	88.6	344	365
8/23/2002	084500	20.4	8.2	6.8	89.1	338	371
8/23/2002	090000	20.5	8.2	6.9	90.5	334	371

Table 8.3.1.--Continuous Monitoring Data for Rio Grande at Barelas,
August 22 through August 23, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
8/23/2002	091500	20.6	8.2	6.8	90.1	340	366
8/23/2002	093000	20.6	8.2	6.8	89.6	346	358
8/23/2002	094500	20.7	8.2	6.9	90.7	347	357
8/23/2002	100000	21.0	8.2	6.9	91.6	344	352
8/23/2002	101500	21.2	8.2	6.9	91.7	339	344
8/23/2002	103000	21.6	8.2	6.8	91.8	340	345
8/23/2002	104500	21.8	8.2	6.8	92.1	344	357
8/23/2002	110000	22.1	8.2	6.9	94.5	336	349
8/23/2002	111500	22.4	8.2	6.9	94.0	341	349
8/23/2002	113000	22.8	8.2	6.8	94.5	344	335
8/23/2002	114500	23.2	8.2	6.7	93.8	338	334
8/23/2002	120000	23.6	8.2	6.7	94.3	346	336
8/23/2002	121500	24.0	8.2	6.7	94.8	345	331
8/23/2002	123000	24.5	8.2	6.7	96.0	341	330
8/23/2002	124500	24.8	8.2	6.7	95.4	347	318
8/23/2002	130000	25.1	8.2	6.6	94.6	347	330
8/23/2002	131500	25.3	8.2	6.5	94.4	348	326
8/23/2002	133000	25.7	8.2	6.5	94.6	347	317
8/23/2002	134500	26.2	8.2	6.3	92.7	347	338
8/23/2002	140000	26.7	8.2	6.5	95.7	349	330
8/23/2002	141500	26.9	8.2	6.3	94.0	347	325
8/23/2002	143000	27.2	8.2	6.3	94.8	349	336
8/23/2002	144500	27.2	8.2	6.3	94.9	347	324
8/23/2002	150000	27.4	8.2	6.2	93.9	349	325
8/23/2002	151500	27.8	8.2	6.2	93.3	350	322
8/23/2002	153000	28.0	8.2	6.1	91.8	348	327
8/23/2002	154500	28.0	8.2	6.0	91.6	349	312
8/23/2002	160000	28.1	8.2	6.1	92.5	346	308
8/23/2002	161500	28.1	8.2	6.0	91.7	344	286
8/23/2002	163000	28.3	8.2	6.0	91.3	345	325

Descriptive Statistics	*Temp (°C)*	*pH*	*DO (mg/L)*	*DO (%)*	*SPC (uS/cm)*	*Turbidity (NTU)*
Mean	24.9	8.2	6.4	74.1	350	359
Standard Error	0.27	0.00	0.05	0.27	0.85	5.29
Median	24.8	8.2	6.3	73.4	347	348
Mode	20.4	8.2	6.3	73.4	366	325
Standard Deviation	3.08	0.02	0.53	2.77	9.54	59.38
Sample Variance	9.50	0.00	0.28	7.67	90.97	3526.13
Kurtosis	-1.35	0.36	-0.50	4.16	-1.03	33.00
Skewness	0.04	-0.79	0.46	2.03	0.61	4.68
Range	9.6	0.1	2.1	14.5	32	542
Minimum	20.3	8.2	5.6	71.2	334	286
Maximum	29.9	8.3	7.7	85.7	366	828
Sum	3133.8	1035.1	802.7	7560.1	44064	45211
Count	126	126	126	102	126	126

Table 8.3.2.--Continuous Monitoring Data for Rio Grande at Barelas, January 17 through January 19, 2003

[--, no data; ~, approximately; >, greater than; °C, degrees Celsius; mg/L, milligrams per liter; % sat, percent saturation; uS/cm, microsiemens per centimeter; NTU, Nephelometric turbidity units.]

DataSonde 4a 40184
Log File Name : BARELAS 1-17-03
Setup Date (MMDDYY) : 011703
Setup Time (HHMMSS) : 083935
Starting Date (MMDDYY) : 011703
Starting Time (HHMMSS) : 091500
Stopping Date (MMDDYY) : 012503
Stopping Time (HHMMSS) : 120000
Interval (HHMMSS) : 001500
Sensor warmup (HHMMSS) : 000200
Circltr warmup (HHMMSS) : 000100

Date	Time	Temp (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
1/17/2003	094500	1.8	8.2	11.3	96.5	279	183
1/17/2003	100000	1.9	8.2	11.3	96.9	280	191
1/17/2003	101500	2.1	8.2	11.4	97.6	281	190
1/17/2003	103000	2.2	8.2	11.4	98.2	281	193
1/17/2003	104500	2.4	8.2	11.3	98.3	282	192
1/17/2003	110000	2.6	8.2	11.3	98.6	282	196
1/17/2003	111500	2.9	8.2	11.3	99.2	283	204
1/17/2003	113000	3.1	8.2	11.3	99.8	284	197
1/17/2003	114500	3.3	8.2	11.2	99.8	284	202
1/17/2003	120000	3.7	8.2	11.2	100.5	285	198
1/17/2003	121500	4.0	8.2	11.2	100.8	286	206
1/17/2003	123000	4.3	8.2	11.1	100.8	286	208
1/17/2003	124500	4.6	8.2	11.1	101.4	287	206
1/17/2003	130000	4.9	8.2	11.0	101.6	288	212
1/17/2003	131500	5.2	8.3	10.9	101.5	288	222
1/17/2003	133000	5.5	8.3	10.8	101.0	289	> 1000
1/17/2003	134500	5.8	8.3	10.7	101.4	289	> 1000
1/17/2003	140000	6.0	8.3	10.6	101.2	290	> 1000
1/17/2003	141500	6.3	8.3	10.6	101.7	290	220
1/17/2003	143000	6.5	8.3	10.5	100.9	290	226
1/17/2003	144500	6.7	8.3	10.4	100.4	290	223
1/17/2003	150000	6.9	8.3	10.3	100.4	290	224
1/17/2003	151500	7.0	8.3	10.3	100.5	290	228
1/17/2003	153000	7.2	8.3	10.1	99.4	290	230
1/17/2003	154500	7.3	8.3	10.1	99.0	290	232
1/17/2003	160000	7.4	8.3	10.0	98.9	290	234
1/17/2003	161500	7.4	8.3	10.0	98.6	290	237
1/17/2003	163000	7.4	8.3	9.9	97.4	289	232
1/17/2003	164500	7.5	8.3	9.8	96.3	285	244
1/17/2003	170000	7.5	8.3	9.8	96.7	292	240
1/17/2003	171500	7.4	8.3	9.7	95.5	291	243
1/17/2003	173000	7.4	8.3	9.7	95.2	291	239
1/17/2003	174500	7.3	8.3	9.6	94.9	290	240
1/17/2003	180000	7.3	8.3	9.7	94.9	289	238
1/17/2003	181500	7.2	8.3	9.6	94.5	288	232

Table 8.3.2.--Continuous Monitoring Data for Rio Grande at Barelas, January 17 through January 19, 2003

Date	Time	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
1/17/2003	183000	7.1	8.3	9.6	93.4	284	236
1/17/2003	184500	7.0	8.3	9.6	93.3	283	235
1/17/2003	190000	6.9	8.3	9.6	93.8	281	229
1/17/2003	191500	6.7	8.3	9.6	93.3	279	230
1/17/2003	193000	6.6	8.3	9.5	92.3	277	229
1/17/2003	194500	6.5	8.3	9.7	93.1	277	225
1/17/2003	200000	6.4	8.3	9.6	92.3	276	227
1/17/2003	201500	6.2	8.3	9.6	92.3	275	225
1/17/2003	203000	6.1	8.3	9.6	91.8	274	220
1/17/2003	204500	6.0	8.3	9.6	91.3	271	221
1/17/2003	210000	5.8	8.3	9.6	91.1	272	219
1/17/2003	211500	5.7	8.3	9.6	91.2	271	211
1/17/2003	213000	5.6	8.3	9.6	90.8	270	206
1/17/2003	214500	5.5	8.3	9.7	90.8	268	> 1000
1/17/2003	220000	5.3	8.3	9.6	90.2	264	> 1000
1/17/2003	221500	5.2	8.3	9.9	91.8	258	> 1000
1/17/2003	223000	5.0	8.3	9.8	90.9	230	> 1000
1/17/2003	224500	4.9	8.3	9.8	90.5	226	> 1000
1/17/2003	230000	4.8	8.3	9.9	91.3	227	> 1000
1/17/2003	231500	4.7	8.3	9.8	90.2	227	198
1/17/2003	233000	4.5	8.3	10.0	91.4	226	195
1/17/2003	234500	4.4	8.3	10.0	91.3	225	196
1/18/2003	000000	4.3	8.3	10.0	91.1	224	192
1/18/2003	001500	4.2	8.3	10.0	91.1	215	190
1/18/2003	003000	4.1	8.3	10.0	90.9	196.5	195
1/18/2003	004500	4.0	8.3	10.0	90.5	162.8	195
1/18/2003	010000	3.9	8.3	10.0	90.4	162.2	191
1/18/2003	011500	3.8	8.3	10.1	91.1	162.9	190
1/18/2003	013000	3.7	8.3	10.1	90.7	162.3	194
1/18/2003	014500	3.6	8.4	10.2	91.2	162.4	191
1/18/2003	020000	3.5	8.3	10.3	91.4	161.2	192
1/18/2003	021500	3.3	8.3	10.3	91.0	148.9	195
1/18/2003	023000	3.2	8.4	10.2	90.5	139.4	188
1/18/2003	024500	3.1	8.4	10.4	91.6	134.7	183
1/18/2003	030000	3.0	8.3	10.5	91.9	129.6	189
1/18/2003	031500	2.9	8.3	10.4	91.3	129.9	188
1/18/2003	033000	2.8	8.3	10.5	92.0	134.2	184
1/18/2003	034500	2.6	8.3	10.5	91.5	133.7	186
1/18/2003	040000	2.5	8.3	10.5	91.5	133.6	191
1/18/2003	041500	2.4	8.3	10.7	92.8	127.5	192
1/18/2003	043000	2.3	8.3	10.8	93.0	125	188
1/18/2003	044500	2.2	8.3	10.7	91.7	123.8	184
1/18/2003	050000	2.1	8.3	10.7	92.1	124	181
1/18/2003	051500	2.0	8.3	10.8	92.0	126.3	188
1/18/2003	053000	1.9	8.3	10.8	92.5	127.1	185
1/18/2003	054500	1.8	8.3	10.8	91.9	127.3	184
1/18/2003	060000	1.7	8.3	10.9	92.7	126.7	183
1/18/2003	061500	1.6	8.3	11.0	92.9	127.2	180
1/18/2003	063000	1.4	8.3	11.1	93.3	127.1	175
1/18/2003	064500	1.3	8.3	11.1	93.5	126	179
1/18/2003	070000	1.2	8.3	11.2	93.7	125.9	177

Table 8.3.2.--Continuous Monitoring Data for Rio Grande at Barelas, January 17 through January 19, 2003

Date	Time	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
1/18/2003	071500	1.1	8.3	11.2	93.6	125.1	176
1/18/2003	073000	1.0	8.3	11.1	92.8	124.8	183
1/18/2003	074500	0.9	8.3	11.2	92.9	125.1	178
1/18/2003	080000	0.9	8.3	11.1	92.5	119.4	170
1/18/2003	081500	0.8	8.3	11.2	92.4	118.5	186
1/18/2003	083000	0.8	8.3	11.1	92.0	117.7	179
1/18/2003	084500	0.8	8.3	11.2	92.8	117.1	187
1/18/2003	090000	0.9	8.3	11.3	93.9	116.4	330
1/18/2003	091500	0.9	8.3	11.3	94.0	112.9	305
1/18/2003	093000	1.0	8.3	11.3	94.5	112.2	274
1/18/2003	094500	1.2	8.3	11.4	95.3	111.9	213
1/18/2003	100000	1.3	8.3	11.3	95.1	111.9	223
1/18/2003	101500	1.5	8.3	11.3	95.0	111.9	292
1/18/2003	103000	1.6	8.3	9.7	82.0	111.3	447
1/18/2003	104500	1.7	8.3	10.1	85.6	111	457
1/18/2003	110000	1.8	8.3	9.5	81.2	110.2	449
1/18/2003	111500	2.0	8.3	8.6	73.8	109.3	461
1/18/2003	113000	2.3	8.3	7.8	67.0	108.8	510
1/18/2003	114500	2.6	8.3	8.3	72.3	108.5	592
1/18/2003	120000	2.8	8.3	8.3	72.9	108.3	598
1/18/2003	121500	3.1	8.3	8.3	73.5	108.3	591
1/18/2003	123000	3.5	8.3	8.2	72.9	108.2	564
1/18/2003	124500	3.7	8.3	8.0	71.7	108.1	524
1/18/2003	130000	3.9	8.3	8.0	71.8	108.2	515
1/18/2003	131500	4.3	8.3	7.4	67.1	107.9	510
1/18/2003	133000	4.6	8.3	7.4	67.9	108.2	> 1000
1/18/2003	134500	4.9	8.3	7.4	68.2	108.2	> 1000
1/18/2003	140000	5.2	8.3	7.4	69.0	108.1	> 1000
1/18/2003	141500	5.5	8.3	7.7	72.1	108.3	493
1/18/2003	143000	5.6	8.3	6.7	63.6	108.5	488
1/18/2003	144500	5.8	8.3	6.6	62.6	108.5	488
1/18/2003	150000	6.0	8.3	6.9	65.3	108.3	493
1/18/2003	151500	6.4	8.3	7.0	67.0	108.3	501
1/18/2003	153000	6.5	8.3	6.4	61.3	108.4	498
1/18/2003	154500	6.3	8.3	7.0	66.9	108.6	496
1/18/2003	160000	6.6	8.3	6.5	63.2	108.4	495
1/18/2003	161500	6.6	8.3	6.3	61.2	108.5	490
1/18/2003	163000	6.7	8.3	6.5	63.4	108.9	484
1/18/2003	164500	6.9	8.3	6.6	64.7	109	481
1/18/2003	170000	7.1	8.3	6.7	65.0	108.9	478
1/18/2003	171500	7.0	8.3	5.9	57.9	108.8	479
1/18/2003	173000	7.0	8.3	6.3	61.5	109	478
1/18/2003	174500	6.9	8.3	6.4	62.3	109.1	479
1/18/2003	180000	6.8	8.3	6.2	60.5	109	478
1/18/2003	181500	6.8	8.3	6.4	62.4	109.8	478
1/18/2003	183000	6.7	8.3	6.4	61.9	109.9	473
1/18/2003	184500	6.7	8.3	6.4	61.7	109.8	467
1/18/2003	190000	6.6	8.2	6.4	61.5	109.9	461
1/18/2003	191500	6.6	8.3	6.5	62.7	109.3	461
1/18/2003	193000	6.5	8.3	6.0	57.7	109	463
1/18/2003	194500	6.4	8.3	6.8	64.9	108.7	463

Table 8.3.2.--Continuous Monitoring Data for Rio Grande at Barelas, January 17 through January 19, 2003

Date	Time	Temp (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
1/18/2003	200000	6.3	8.3	6.3	60.4	108.3	461
1/18/2003	201500	6.2	8.3	6.6	62.7	108.3	469
1/18/2003	203000	6.0	8.3	6.2	59.0	107.9	465
1/18/2003	204500	6.0	8.3	6.2	59.1	107.7	470
1/18/2003	210000	5.8	8.3	6.7	63.6	107.5	474
1/18/2003	211500	5.6	8.3	6.2	58.3	108.3	473
1/18/2003	213000	5.6	8.3	6.0	56.3	108.3	475
1/18/2003	214500	5.6	8.3	6.3	59.1	107.9	476
1/18/2003	220000	5.5	8.3	6.0	56.0	107.6	478
1/18/2003	221500	5.3	8.3	6.0	56.4	107.4	478
1/18/2003	223000	5.2	8.3	6.8	63.0	107.4	480
1/18/2003	224500	5.0	8.3	6.7	62.3	108.3	475
1/18/2003	230000	4.9	8.3	6.2	57.1	108.5	479
1/18/2003	231500	4.8	8.3	6.7	62.1	107.9	478
1/18/2003	233000	4.6	8.3	6.0	55.0	107.2	474
1/18/2003	234500	4.5	8.3	6.2	56.9	106.8	485
1/19/2003	000000	4.4	8.3	6.7	61.5	106.1	483
1/19/2003	001500	4.3	8.3	6.8	62.1	105.6	> 1000
1/19/2003	003000	4.2	8.3	6.8	61.5	105.3	> 1000
1/19/2003	004500	4.1	8.3	7.0	63.4	104.9	> 1000
1/19/2003	010000	4.0	8.3	6.8	61.0	104.9	> 1000
1/19/2003	011500	4.0	8.3	7.0	63.3	104.8	> 1000
1/19/2003	013000	3.9	8.3	6.9	61.9	104.5	> 1000
1/19/2003	014500	3.8	8.3	6.9	61.8	104.2	841
1/19/2003	020000	3.8	8.3	7.0	63.0	104.1	699
1/19/2003	021500	3.7	8.3	6.8	60.6	104.2	> 1000
1/19/2003	023000	3.7	8.3	6.9	61.4	104	> 1000
1/19/2003	024500	3.5	8.3	6.9	61.7	104.2	493
1/19/2003	030000	3.4	8.3	7.3	64.7	104.3	478
1/19/2003	031500	3.3	8.3	7.0	62.1	104.4	478
1/19/2003	033000	3.2	8.3	6.6	58.7	104.2	487
1/19/2003	034500	3.1	8.3	6.4	56.8	104.1	488
1/19/2003	040000	3.1	8.3	6.4	56.4	104.1	484
1/19/2003	041500	3.0	8.3	6.8	59.9	104	483
1/19/2003	043000	2.8	8.3	7.2	62.8	104	481
1/19/2003	044500	2.6	8.3	7.7	66.6	104.2	477
1/19/2003	050000	2.5	8.3	7.2	62.3	104.1	470
1/19/2003	051500	2.4	8.3	7.7	66.3	103.8	467
1/19/2003	053000	2.4	8.3	7.9	68.5	103.8	468
1/19/2003	054500	2.3	8.3	7.3	63.4	103.8	464
1/19/2003	060000	2.3	8.3	7.7	66.0	103.6	461
1/19/2003	061500	2.2	8.3	7.8	67.5	103.6	460
1/19/2003	063000	2.2	8.3	7.2	61.8	103.7	456
1/19/2003	064500	2.2	8.3	6.8	58.4	103.5	455
1/19/2003	070000	2.1	8.3	7.0	60.2	103.4	453
1/19/2003	071500	2.0	8.3	7.4	63.1	103.4	452
1/19/2003	073000	1.8	8.3	7.2	61.0	103.4	448
1/19/2003	074500	1.8	8.3	7.2	61.6	103.5	448
1/19/2003	080000	1.7	8.3	7.3	61.7	103.9	443
1/19/2003	081500	1.4	8.3	9.0	75.9	105.1	419
1/19/2003	083000	1.4	8.3	9.4	78.9	104.5	405

Table 8.3.2.--Continuous Monitoring Data for Rio Grande at Barelas, January 17 through January 19, 2003

Date	Time	Temp (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
1/19/2003	084500	1.4	8.3	10.0	84.3	104.1	170
1/19/2003	090000	1.5	8.3	9.9	83.1	103.5	141
1/19/2003	091500	1.6	8.3	9.7	82.2	103.3	135
1/19/2003	093000	1.7	8.3	9.9	83.9	103	134
1/19/2003	094500	1.9	8.3	10.1	86.2	102.9	126
1/19/2003	100000	2.0	8.3	10.0	85.8	102.8	115
1/19/2003	101500	2.2	8.3	9.7	83.9	102.6	111
1/19/2003	103000	2.4	8.3	9.5	82.2	102.4	107
1/19/2003	104500	2.6	8.3	8.9	77.5	102.4	106
1/19/2003	110000	2.8	8.3	8.4	73.9	102.2	104
1/19/2003	111500	3.1	8.3	8.5	74.7	102.2	102
1/19/2003	113000	3.4	8.3	9.9	88.2	102.4	105
1/19/2003	114500	3.7	8.3	9.5	85.4	102.2	103
1/19/2003	120000	4.0	8.3	9.7	87.4	102.3	396
1/19/2003	121500	4.4	8.3	8.6	78.7	102.1	> 1000
1/19/2003	123000	4.7	8.3	8.6	79.2	102.3	> 1000
1/19/2003	124500	5.0	8.3	8.7	80.3	102.6	99
1/19/2003	130000	5.3	8.3	8.1	75.9	102.5	99

Descriptive Statistics (statistics before probe burial)	*Temp (°C)*	*pH*	*DO (mg/L)*	*DO (%)*	*SPC (uS/cm)*	*Turbidity (NTU)*
Mean	5.4	8.3	10.2	95.9	274	> 334
Standard Error	0.21	0.01	0.08	0.52	3	~ 37
Median	5.7	8.3	10.0	95.9	283	~ 225
Mode	7.2	8.3	9.6	92.3	290	> 1000
Standard Deviation	1.66	0.04	0.65	4.02	23	~ 283
Sample Variance	2.76	0.00	0.42	16.16	551	~ 80065
Kurtosis	-0.58	-0.29	-1.13	-1.60	2	~ 2
Skewness	-0.64	-0.75	0.69	0.03	-2	~ 2
Range	5.7	0.2	1.8	11.5	96	~ 818
Minimum	1.8	8.2	9.5	90.2	197	183
Maximum	7.5	8.3	11.4	101.7	292	> 1000
Sum	327.0	496.6	613.5	5751.8	16426	~ 20050
Count	60	60	60	60	60	60

Table 8.4.1.--Continuous Monitoring Data of the Albuquerque Waste Water Treatment Plant Outfall, August 6 through 8, 2002

[--, no data; °C, degrees Celsius; mg/L, milligrams per liter; % sat, percent saturation; uS/cm, microsiemens per centimeter; NTU, Nephelometric turbidity units.]

DataSonde 4a 40184
Log File Name : ABQ WWTP 8-6-02
Setup Date (MMDDYY) : 080602
Setup Time (HHMMSS) : 083633
Starting Date (MMDDYY) : 080602
Starting Time (HHMMSS) : 090000
Stopping Date (MMDDYY) : 081402
Stopping Time (HHMMSS) : 120000
Interval (HHMMSS) : 001500
Sensor warmup (HHMMSS) : 000200
Circltr warmup (HHMMSS) : 000100

Date	Time (HHMMSS)	Temp (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
8/6/2002	103000	28.5	6.8	5.4	82.4	847	3
8/6/2002	104500	28.5	6.7	5.3	81.8	846	4
8/6/2002	110000	28.5	6.8	5.3	81.1	845	4
8/6/2002	111500	28.6	6.8	5.3	82.0	845	5
8/6/2002	113000	28.6	6.8	5.3	81.2	844	5
8/6/2002	114500	28.7	6.8	5.3	81.6	845	7
8/6/2002	120000	28.8	6.8	5.3	81.2	844	5
8/6/2002	121500	28.8	6.8	5.3	82.4	844	6
8/6/2002	123000	28.9	6.8	5.4	83.4	844	4
8/6/2002	124500	28.9	6.8	5.4	83.6	843	5
8/6/2002	130000	28.9	6.8	5.2	80.5	843	4
8/6/2002	131500	29.0	6.8	5.3	81.9	844	7
8/6/2002	133000	29.0	6.8	5.2	80.9	843	6
8/6/2002	134500	29.0	6.8	5.2	80.7	843	6
8/6/2002	140000	29.0	6.7	5.2	80.4	843	5
8/6/2002	141500	29.0	6.7	5.2	79.9	843	5
8/6/2002	143000	29.0	6.7	5.1	79.2	842	6
8/6/2002	144500	29.0	6.7	5.1	78.5	842	7
8/6/2002	150000	29.0	6.7	5.1	78.8	842	6
8/6/2002	151500	29.1	6.7	5.1	78.1	841	5
8/6/2002	153000	29.1	6.7	5.1	78.3	842	7
8/6/2002	154500	29.1	6.7	5.0	78.0	841	7
8/6/2002	160000	29.1	6.7	5.0	77.8	840	7
8/6/2002	161500	29.1	6.7	5.1	78.4	840	6
8/6/2002	163000	29.1	6.7	5.0	77.0	846	6
8/6/2002	164500	29.1	6.7	5.0	77.3	845	7
8/6/2002	170000	29.0	6.7	5.0	77.9	845	6
8/6/2002	171500	29.0	6.7	4.9	75.9	844	10
8/6/2002	173000	29.0	6.7	5.0	76.6	844	6
8/6/2002	174500	29.0	6.7	4.9	75.0	843	6
8/6/2002	180000	28.9	6.7	4.8	74.6	843	6
8/6/2002	181500	28.9	6.7	4.8	74.0	843	6
8/6/2002	183000	28.9	6.7	4.8	74.3	841	6
8/6/2002	184500	28.8	6.7	4.8	73.5	841	6

Table 8.4.1.--Continuous Monitoring Data of the Albuquerque Waste Water Treatment Plant Outfall, August 6 through 8, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
8/6/2002	190000	28.8	6.7	4.7	71.9	840	5
8/6/2002	191500	28.8	6.7	4.7	72.5	839	10
8/6/2002	193000	28.8	6.7	4.7	72.7	838	7
8/6/2002	194500	28.8	6.7	4.9	74.7	838	7
8/6/2002	200000	28.8	6.7	4.8	74.2	837	6
8/6/2002	201500	28.7	6.7	4.8	73.5	837	7
8/6/2002	203000	28.7	6.6	4.8	73.7	837	6
8/6/2002	204500	28.7	6.6	4.8	73.7	838	6
8/6/2002	210000	28.7	6.6	4.8	73.3	839	11
8/6/2002	211500	28.6	6.6	4.7	72.4	838	6
8/6/2002	213000	28.7	6.6	4.7	72.7	839	6
8/6/2002	214500	28.7	6.6	4.7	72.8	839	6
8/6/2002	220000	28.7	6.6	4.7	72.6	839	6
8/6/2002	221500	28.6	6.6	4.8	73.1	840	6
8/6/2002	223000	28.6	6.6	4.8	73.1	840	6
8/6/2002	224500	28.6	6.6	4.8	73.8	840	7
8/6/2002	230000	28.6	6.6	4.7	72.8	840	7
8/6/2002	231500	28.6	6.6	4.7	71.5	840	6
8/6/2002	233000	28.6	6.6	4.6	70.9	841	6
8/6/2002	234500	28.6	6.6	4.6	70.2	841	6
8/7/2002	000000	28.6	6.6	4.6	70.3	841	7
8/7/2002	001500	28.6	6.6	4.6	70.9	842	6
8/7/2002	003000	28.6	6.6	4.8	72.9	842	7
8/7/2002	004500	28.6	6.6	4.8	73.0	842	5
8/7/2002	010000	28.6	6.6	4.7	72.0	842	5
8/7/2002	011500	28.6	6.6	4.7	72.6	843	5
8/7/2002	013000	28.6	6.6	4.6	71.2	846	7
8/7/2002	014500	28.6	6.6	4.6	71.1	846	5
8/7/2002	020000	28.6	6.6	4.6	70.6	847	6
8/7/2002	021500	28.6	6.7	4.6	71.0	847	6
8/7/2002	023000	28.6	6.7	4.7	72.2	847	7
8/7/2002	024500	28.6	6.7	4.8	72.9	847	6
8/7/2002	030000	28.6	6.7	4.9	75.1	848	6
8/7/2002	031500	28.5	6.7	4.9	75.2	848	6
8/7/2002	033000	28.5	6.7	4.9	75.6	848	5
8/7/2002	034500	28.5	6.7	4.9	75.1	848	5
8/7/2002	040000	28.5	6.7	4.9	75.3	848	6
8/7/2002	041500	28.5	6.7	4.9	74.7	848	5
8/7/2002	043000	28.5	6.7	4.9	74.3	848	5
8/7/2002	044500	28.5	6.8	4.8	73.2	847	4
8/7/2002	050000	28.5	6.8	4.7	72.3	847	5
8/7/2002	051500	28.5	6.8	4.8	73.2	846	4
8/7/2002	053000	28.5	6.8	4.7	71.6	846	4
8/7/2002	054500	28.4	6.8	4.7	72.6	846	5

Table 8.4.1.--Continuous Monitoring Data of the Albuquerque Waste Water Treatment Plant Outfall, August 6 through 8, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
8/7/2002	060000	28.4	6.8	4.6	70.4	845	5
8/7/2002	061500	28.4	6.8	4.7	71.8	844	6
8/7/2002	063000	28.4	6.8	4.7	72.1	843	5
8/7/2002	064500	28.4	6.8	4.7	71.7	842	5
8/7/2002	070000	28.4	6.8	4.8	73.0	841	6
8/7/2002	071500	28.4	6.8	4.8	73.5	841	5
8/7/2002	073000	28.4	6.8	4.7	71.1	839	5
8/7/2002	074500	28.4	6.8	4.6	69.6	838	5
8/7/2002	080000	28.4	6.8	4.7	71.3	836	5
8/7/2002	081500	28.4	6.8	4.6	70.4	835	6
8/7/2002	083000	28.4	6.8	4.6	69.9	835	6
8/7/2002	084500	28.4	6.8	4.7	71.7	834	6
8/7/2002	090000	28.4	6.8	4.6	71.0	833	7
8/7/2002	091500	28.4	6.7	4.8	72.8	833	5
8/7/2002	093000	28.4	6.7	4.8	74.2	832	5
8/7/2002	094500	28.4	6.7	4.9	74.7	831	6
8/7/2002	100000	28.5	6.7	5.0	77.1	830	5
8/7/2002	101500	28.5	6.7	5.0	76.1	829	5
8/7/2002	103000	28.5	6.7	4.9	75.1	829	6
8/7/2002	104500	28.5	6.7	5.0	76.9	827	5
8/7/2002	110000	28.6	6.8	4.9	75.4	824	6
8/7/2002	111500	28.6	6.7	4.9	75.2	824	8
8/7/2002	113000	28.6	6.7	5.0	76.7	833	6
8/7/2002	114500	28.7	6.7	5.0	76.7	834	6
8/7/2002	120000	28.7	6.7	5.1	77.7	833	3
8/7/2002	121500	28.8	6.8	5.0	76.8	833	6
8/7/2002	123000	28.8	6.8	5.0	77.6	833	7
8/7/2002	124500	28.9	6.8	5.0	76.8	832	7
8/7/2002	130000	28.9	6.8	5.0	76.5	832	6
8/7/2002	131500	29.0	6.8	5.0	77.0	832	6
8/7/2002	133000	29.0	6.8	5.0	77.7	831	6
8/7/2002	134500	29.0	6.8	5.0	77.8	831	6
8/7/2002	140000	29.1	6.8	5.1	78.1	830	6
8/7/2002	141500	29.1	6.7	5.0	77.3	830	7
8/7/2002	143000	29.1	6.7	5.0	76.9	831	6
8/7/2002	144500	29.1	6.7	4.9	76.5	829	6
8/7/2002	150000	29.2	6.7	5.0	76.7	829	6
8/7/2002	151500	29.2	6.7	4.9	76.4	830	6
8/7/2002	153000	29.1	6.7	4.9	75.8	829	7
8/7/2002	154500	29.1	6.7	4.8	73.6	829	19
8/7/2002	160000	29.1	6.7	4.6	71.3	829	50
8/7/2002	161500	29.1	6.7	4.4	68.7	829	56
8/7/2002	163000	29.1	6.7	4.6	71.1	831	13
8/7/2002	164500	29.1	6.7	4.6	70.6	830	8

Table 8.4.1.--Continuous Monitoring Data of the Albuquerque Waste Water Treatment Plant Outfall, August 6 through 8, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
8/7/2002	170000	29.1	6.7	4.3	66.1	829	69
8/7/2002	171500	29.0	6.6	3.6	56.1	827	161
8/7/2002	173000	29.0	6.6	3.3	51.2	828	188
8/7/2002	174500	28.9	6.6	2.7	42.3	827	329
8/7/2002	180000	28.9	6.6	2.4	36.7	826	422
8/7/2002	181500	28.9	6.6	2.3	34.7	826	447
8/7/2002	183000	28.8	6.6	2.2	33.6	824	437
8/7/2002	184500	28.8	6.6	2.2	33.8	823	430
8/7/2002	190000	28.7	6.6	2.2	34.5	823	405
8/7/2002	191500	28.7	6.6	2.3	35.4	824	419
8/7/2002	193000	28.7	6.6	3.4	51.8	825	168
8/7/2002	194500	28.6	6.6	4.0	60.8	824	76
8/7/2002	200000	28.6	6.6	4.2	64.8	825	31
8/7/2002	201500	28.6	6.6	4.3	65.8	825	22
8/7/2002	203000	28.7	6.6	4.3	65.6	823	17
8/7/2002	204500	28.7	6.6	4.3	65.4	823	14
8/7/2002	210000	28.6	6.6	4.2	64.7	821	11
8/7/2002	211500	28.7	6.6	4.2	64.2	826	11
8/7/2002	213000	28.7	6.6	4.1	63.4	820	10
8/7/2002	214500	28.6	6.6	4.2	64.0	817	10
8/7/2002	220000	28.6	6.7	4.1	63.7	817	11
8/7/2002	221500	28.6	6.7	4.2	65.2	816	10
8/7/2002	223000	28.6	6.7	4.3	65.9	815	10
8/7/2002	224500	28.6	6.7	4.3	65.6	816	8
8/7/2002	230000	28.6	6.7	4.2	65.1	814	10
8/7/2002	231500	28.6	6.6	4.3	66.6	814	9
8/7/2002	233000	28.6	6.7	4.3	66.7	818	8
8/8/2002	000000	28.6	6.6	4.3	66.2	813	10
8/8/2002	001500	28.6	6.6	4.3	66.2	810	9
8/8/2002	003000	28.6	6.6	4.4	67.5	811	9
8/8/2002	004500	28.6	6.7	4.5	68.3	814	8
8/8/2002	010000	28.6	6.6	4.5	68.2	821	9
8/8/2002	011500	28.5	6.6	4.4	67.9	826	10
8/8/2002	013000	28.5	6.7	4.4	68.0	826	9
8/8/2002	014500	28.5	6.7	4.5	68.4	827	11
8/8/2002	020000	28.5	6.7	4.4	67.3	831	9
8/8/2002	021500	28.5	6.7	4.4	67.6	826	9
8/8/2002	023000	28.5	6.7	4.4	67.7	828	8
8/8/2002	024500	28.5	6.7	4.4	67.9	827	9
8/8/2002	030000	28.5	6.7	4.5	69.0	826	8
8/8/2002	031500	28.5	6.7	4.6	69.8	824	9
8/8/2002	033000	28.5	6.7	4.6	70.0	824	8
8/8/2002	034500	28.5	6.7	4.6	71.0	826	9
8/8/2002	040000	28.5	6.7	4.5	68.3	824	8

Table 8.4.1.--Continuous Monitoring Data of the Albuquerque Waste Water Treatment Plant Outfall, August 6 through 8, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
8/8/2002	041500	28.5	6.7	4.5	68.5	821	9
8/8/2002	043000	28.4	6.8	4.5	69.3	822	9
8/8/2002	044500	28.4	6.8	4.5	68.6	822	9
8/8/2002	050000	28.4	6.8	4.5	68.3	822	12
8/8/2002	051500	28.4	6.8	4.5	69.3	821	9
8/8/2002	053000	28.4	6.8	4.6	69.7	821	8
8/8/2002	054500	28.4	6.8	4.6	69.7	821	9
8/8/2002	060000	28.4	6.8	4.4	67.4	821	10
8/8/2002	061500	28.4	6.8	4.5	68.1	820	9
8/8/2002	063000	28.4	6.8	4.6	69.5	818	11
8/8/2002	064500	28.4	6.8	4.6	69.6	817	24
8/8/2002	070000	28.3	6.8	4.6	70.0	815	20
8/8/2002	071500	28.3	6.8	4.6	70.1	817	12
8/8/2002	073000	28.3	6.8	4.4	66.6	815	12
8/8/2002	074500	28.3	6.8	4.4	66.7	815	13
8/8/2002	080000	28.3	6.8	4.3	65.2	813	14
8/8/2002	081500	27.9	6.9	5.2	79.1	820	10
8/8/2002	083000	26.7	6.9	5.1	76.2	818	12
8/8/2002	084500	25.9	7.0	3.7	54.7	819	10
8/8/2002	090000	25.4	6.9	3.3	48.4	821	8
8/8/2002	091500	25.0	7.0	3.7	53.4	821	8
8/8/2002	093000	24.8	7.0	3.3	46.9	821	8
8/8/2002	094500	24.7	7.0	4.8	68.8	816	9
8/8/2002	100000	24.6	7.0	5.1	73.0	816	9
8/8/2002	101500	24.5	7.0	5.0	71.7	816	9
8/8/2002	103000	24.4	7.0	5.0	70.8	816	9
8/8/2002	104500	24.3	7.0	5.0	70.7	816	11
8/8/2002	110000	24.3	7.0	4.9	69.4	816	10
8/8/2002	111500	24.2	7.0	4.8	68.7	816	10
8/8/2002	113000	24.2	7.0	4.9	69.1	816	10
8/8/2002	114500	24.2	7.0	4.9	69.2	816	11
8/8/2002	120000	24.2	7.0	4.8	68.5	817	11
8/8/2002	121500	24.1	7.0	4.8	68.3	817	10
8/8/2002	123000	24.1	7.0	4.8	68.2	817	25
8/8/2002	124500	24.1	7.0	4.8	67.4	817	10
8/8/2002	130000	24.1	7.0	4.7	66.4	817	9
8/8/2002	131500	24.1	7.0	4.7	65.9	818	9
8/8/2002	133000	24.2	7.0	4.6	65.5	818	10
8/8/2002	134500	24.2	7.0	4.6	65.3	818	10
8/8/2002	140000	24.3	7.0	4.5	64.5	818	10
8/8/2002	141500	24.3	7.0	4.5	63.8	819	10
8/8/2002	143000	24.3	7.0	4.5	63.3	819	9
8/8/2002	144500	24.4	7.0	4.4	62.6	820	10
8/8/2002	150000	24.4	7.0	4.4	62.0	820	9

Table 8.4.1.--Continuous Monitoring Data of the Albuquerque Waste Water Treatment Plant Outfall, August 6 through 8, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
8/8/2002	151500	24.5	7.0	4.3	60.9	820	9
8/8/2002	153000	24.5	7.0	4.2	60.1	820	9
8/8/2002	154500	24.6	7.0	4.2	60.2	820	10
8/8/2002	160000	24.6	7.0	4.1	59.1	821	10
8/8/2002	161500	24.7	7.0	4.1	59.2	821	9
8/8/2002	163000	24.7	7.0	4.1	58.8	822	10
8/8/2002	164500	24.8	7.0	4.1	58.0	822	10
8/8/2002	170000	24.8	7.0	4.0	57.3	822	9
8/8/2002	171500	24.9	7.0	4.0	56.9	823	11
8/8/2002	173000	25.0	7.0	3.9	56.2	823	9
8/8/2002	174500	24.9	7.0	3.8	55.2	824	9
8/8/2002	180000	24.6	7.0	3.8	54.4	823	9
8/8/2002	181500	24.3	7.0	3.8	53.4	823	9
8/8/2002	183000	24.2	7.0	3.8	53.2	824	9
8/8/2002	184500	24.5	7.0	3.7	52.8	825	9
8/8/2002	190000	24.8	7.0	3.7	52.5	825	10
8/8/2002	191500	25.0	7.0	3.6	51.9	826	9
8/8/2002	193000	25.3	7.0	3.6	51.6	827	8
8/8/2002	194500	25.4	7.0	3.6	51.4	827	9
8/8/2002	200000	25.6	7.0	3.5	50.5	828	8
8/8/2002	201500	25.8	7.0	3.5	51.0	828	11
8/8/2002	203000	26.0	7.0	3.4	49.5	830	9

Descriptive Statistics	*Temp (°C)*	*pH*	*DO (mg/L)*	*DO (%)*	*SPC (uS/cm)*	*Turbidity (NTU)*
Mean	27.8	6.8	4.5	68.9	831	23
Standard Error	0.11	0.01	0.04	0.63	0.70	4.73
Median	28.6	6.7	4.7	71.0	829	8
Mode	28.6	7.0	5.0	68.3	821	6
Standard Deviation	1.67	0.13	0.59	9.57	10.70	72.01
Sample Variance	2.79	0.02	0.34	91.61	114.40	5185.72
Kurtosis	0.26	-0.71	4.60	2.87	-1.34	25.07
Skewness	-1.44	0.73	-1.86	-1.53	0.09	5.06
Range	5.1	0.5	3.2	50.0	38	444
Minimum	24.1	6.6	2.2	33.6	810	3
Maximum	29.2	7.0	5.4	83.6	848	447
Sum	6455.6	1568.6	1054.6	15988.0	192700	5410
Count	232	232	232	232	232	232

Table 8.4.2.--Continuous Monitoring Data for Albuquerque Waste Water Treatment Plant Outfall, January 29 through February 3, 2003

[--, no data; °C, degrees Celsius; mg/L, milligrams per liter; % sat, percent saturation; uS/cm, microsiemens per centimeter; NTU, Nephelometric turbidity units.]

MiniSonde4a 36754
Log File Name : ABQ WWTP 01-29-03
Setup Date (MMDDYY) : 012903
Setup Time (HHMMSS) : 090350
Starting Date (MMDDYY) : 012903
Starting Time (HHMMSS) : 093000
Stopping Date (MMDDYY) : 020703
Stopping Time (HHMMSS) : 120000
Interval (HHMMSS) : 001500
Sensor warmup (HHMMSS) : 000200
Circltr warmup (HHMMSS) : 000100

Date	Time (HHMMSS)	Temp (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
1/29/2003	100000	19.26	6.91	6.02	77.2	638	--
1/29/2003	101500	19.31	6.91	6.10	78.4	637	--
1/29/2003	103000	19.36	6.91	6.14	79.0	637	--
1/29/2003	104500	19.37	6.90	6.05	77.8	636	--
1/29/2003	110000	19.42	6.90	6.06	78.0	635	--
1/29/2003	111500	19.50	6.89	6.09	78.6	634	--
1/29/2003	113000	19.57	6.88	5.90	76.3	634	--
1/29/2003	114500	19.62	6.88	5.94	76.8	632	--
1/29/2003	120000	19.66	6.87	5.88	76.1	633	--
1/29/2003	121500	19.70	6.87	5.93	76.8	632	--
1/29/2003	123000	19.74	6.86	5.72	74.1	631	--
1/29/2003	124500	19.77	6.86	5.79	75.1	631	--
1/29/2003	130000	19.79	6.86	5.87	76.1	630	--
1/29/2003	131500	19.81	6.85	5.80	75.2	630	--
1/29/2003	133000	19.82	6.86	5.67	73.6	629	--
1/29/2003	134500	19.84	6.85	5.75	74.7	629	--
1/29/2003	140000	19.86	6.84	5.72	74.3	629	--
1/29/2003	141500	19.87	6.83	5.68	73.8	629	--
1/29/2003	143000	19.88	6.83	5.64	73.3	629	--
1/29/2003	144500	19.89	6.82	5.66	73.5	628	--
1/29/2003	150000	19.89	6.82	5.55	72.1	628	--
1/29/2003	151500	19.88	6.81	5.60	72.8	629	--
1/29/2003	153000	19.88	6.81	5.65	73.4	628	--
1/29/2003	154500	19.87	6.81	5.57	72.3	628	--
1/29/2003	160000	19.87	6.80	5.43	70.6	628	--
1/29/2003	161500	19.86	6.80	5.55	72.2	628	--
1/29/2003	163000	19.86	6.79	5.52	71.7	627	--
1/29/2003	164500	19.85	6.79	5.43	70.6	627	--
1/29/2003	170000	19.84	6.79	5.53	71.8	627	--
1/29/2003	171500	19.83	6.79	5.52	71.7	627	--
1/29/2003	173000	19.82	6.79	5.55	72.0	627	--
1/29/2003	174500	19.81	6.79	5.46	70.9	627	--
1/29/2003	180000	19.82	6.79	5.41	70.2	627	--
1/29/2003	181500	19.81	6.79	5.45	70.8	627	--
1/29/2003	183000	19.81	6.79	5.45	70.7	626	--
1/29/2003	184500	19.81	6.78	5.37	69.7	627	--
1/29/2003	190000	19.81	6.79	5.51	71.5	626	--

Table 8.4.2.--Continuous Monitoring Data for Albuquerque Waste Water Treatment Plant Outfall, January 29 through February 3, 2003

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
1/29/2003	191500	19.80	6.79	5.43	70.5	626	--
1/29/2003	193000	19.80	6.79	5.45	70.7	626	--
1/29/2003	194500	19.79	6.78	5.45	70.7	626	--
1/29/2003	200000	19.79	6.78	5.42	70.3	627	--
1/29/2003	201500	19.78	6.78	5.54	71.9	627	--
1/29/2003	203000	19.78	6.78	5.45	70.6	626	--
1/29/2003	204500	19.78	6.78	5.47	71.0	627	--
1/29/2003	210000	19.77	6.78	5.48	71.0	627	--
1/29/2003	211500	19.77	6.78	5.52	71.6	627	--
1/29/2003	213000	19.76	6.78	5.52	71.6	627	--
1/29/2003	214500	19.76	6.78	5.36	69.5	628	--
1/29/2003	220000	19.76	6.78	5.53	71.7	628	--
1/29/2003	221500	19.76	6.78	5.53	71.6	628	--
1/29/2003	223000	19.76	6.78	5.46	70.8	629	--
1/29/2003	224500	19.75	6.78	5.55	72.0	629	--
1/29/2003	230000	19.75	6.77	5.43	70.4	630	--
1/29/2003	231500	19.75	6.77	5.50	71.3	630	--
1/29/2003	233000	19.75	6.77	5.42	70.2	630	--
1/29/2003	234500	19.74	6.77	5.40	70.0	630	--
1/30/2003	000000	19.74	6.77	5.28	68.5	630	--
1/30/2003	001500	19.74	6.77	5.37	69.6	630	--
1/30/2003	003000	19.73	6.77	5.37	69.6	631	--
1/30/2003	004500	19.72	6.78	5.33	69.1	631	--
1/30/2003	010000	19.72	6.77	5.27	68.3	631	--
1/30/2003	011500	19.72	6.78	5.33	69.0	631	--
1/30/2003	013000	19.71	6.78	5.32	68.9	630	--
1/30/2003	014500	19.70	6.78	5.23	67.8	629	--
1/30/2003	020000	19.70	6.78	5.22	67.6	629	--
1/30/2003	021500	19.69	6.78	5.37	69.6	630	--
1/30/2003	023000	19.68	6.79	5.26	68.2	630	--
1/30/2003	024500	19.66	6.79	5.34	69.1	630	--
1/30/2003	030000	19.65	6.79	5.43	70.3	630	--
1/30/2003	031500	19.64	6.80	5.31	68.7	629	--
1/30/2003	033000	19.63	6.80	5.37	69.5	629	--
1/30/2003	034500	19.61	6.81	5.40	69.8	629	--
1/30/2003	040000	19.60	6.82	5.39	69.6	629	--
1/30/2003	041500	19.59	6.82	5.47	70.7	628	--
1/30/2003	043000	19.57	6.82	5.40	69.8	628	--
1/30/2003	044500	19.55	6.83	5.42	70.0	627	--
1/30/2003	050000	19.54	6.84	5.45	70.3	627	--
1/30/2003	051500	19.52	6.84	5.34	69.0	626	--
1/30/2003	053000	19.51	6.85	5.41	69.9	626	--
1/30/2003	054500	19.49	6.86	5.43	70.0	625	--
1/30/2003	060000	19.48	6.86	5.37	69.3	624	--
1/30/2003	061500	19.47	6.87	5.43	70.0	624	--
1/30/2003	063000	19.45	6.87	5.53	71.2	623	--
1/30/2003	064500	19.44	6.87	5.36	69.0	623	--
1/30/2003	070000	19.43	6.88	5.41	69.7	622	--
1/30/2003	071500	19.41	6.88	5.36	69.1	622	--
1/30/2003	073000	19.39	6.88	5.50	70.8	621	--
1/30/2003	074500	19.38	6.89	5.51	70.9	621	--

Table 8.4.2.--Continuous Monitoring Data for Albuquerque Waste Water Treatment Plant Outfall, January 29 through February 3, 2003

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
1/30/2003	080000	19.36	6.89	5.59	71.8	620	--
1/30/2003	081500	19.35	6.90	5.48	70.4	620	--
1/30/2003	083000	19.34	6.90	5.68	73.0	619	--
1/30/2003	084500	19.34	6.90	5.57	71.6	619	--
1/30/2003	090000	19.35	6.91	5.66	72.8	618	--
1/30/2003	091500	19.34	6.91	5.75	73.9	618	--
1/30/2003	093000	19.35	6.91	5.82	74.8	617	--
1/30/2003	094500	19.36	6.92	5.84	75.2	616	--
1/30/2003	100000	19.39	6.92	5.94	76.5	616	--
1/30/2003	101500	19.43	6.92	5.92	76.2	615	--
1/30/2003	103000	19.49	6.92	6.04	77.9	615	--
1/30/2003	104500	19.54	6.92	5.88	75.9	613	--
1/30/2003	110000	19.59	6.91	6.05	78.2	613	--
1/30/2003	111500	19.62	6.90	5.88	76.0	612	--
1/30/2003	113000	19.65	6.90	5.89	76.1	612	--
1/30/2003	114500	19.69	6.89	5.99	77.6	611	--
1/30/2003	120000	19.73	6.88	5.87	76.1	611	--
1/30/2003	121500	19.76	6.88	5.70	74.0	611	--
1/30/2003	123000	19.80	6.87	5.72	74.2	610	--
1/30/2003	124500	19.83	6.87	5.77	74.9	610	--
1/30/2003	130000	19.85	6.87	5.73	74.4	610	--
1/30/2003	131500	19.86	6.87	5.80	75.3	608	--
1/30/2003	133000	19.89	6.87	5.71	74.3	608	--
1/30/2003	134500	19.91	6.86	5.65	73.4	608	--
1/30/2003	140000	19.91	6.85	5.71	74.3	608	--
1/30/2003	141500	19.92	6.85	5.65	73.5	608	--
1/30/2003	143000	19.92	6.84	5.65	73.5	608	--
1/30/2003	144500	19.92	6.84	5.59	72.8	608	--
1/30/2003	150000	19.92	6.84	5.60	72.8	608	--
1/30/2003	151500	19.92	6.83	5.58	72.6	608	--
1/30/2003	153000	19.90	6.83	5.49	71.4	608	--
1/30/2003	154500	19.87	6.82	5.38	69.9	608	--
1/30/2003	160000	19.85	6.82	5.47	71.1	608	--
1/30/2003	161500	19.85	6.81	5.37	69.8	608	--
1/30/2003	163000	19.83	6.81	5.41	70.3	608	--
1/30/2003	164500	19.81	6.80	5.25	68.1	608	--
1/30/2003	170000	19.80	6.80	5.24	68.0	608	--
1/30/2003	171500	19.80	6.80	5.20	67.4	608	--
1/30/2003	173000	19.80	6.80	5.20	67.4	607	--
1/30/2003	174500	19.80	6.79	5.21	67.6	608	--
1/30/2003	180000	19.78	6.79	5.25	68.2	608	--
1/30/2003	181500	19.77	6.79	5.20	67.5	608	--
1/30/2003	183000	19.76	6.79	5.37	69.7	607	--
1/30/2003	184500	19.73	6.79	5.27	68.3	606	--
1/30/2003	190000	19.71	6.79	5.24	67.9	607	--
1/30/2003	191500	19.69	6.79	5.21	67.5	607	--
1/30/2003	193000	19.68	6.79	5.34	69.1	606	--
1/30/2003	194500	19.67	6.78	5.34	69.1	607	--
1/30/2003	200000	19.66	6.78	5.30	68.5	606	--
1/30/2003	201500	19.66	6.78	5.32	68.8	607	--
1/30/2003	203000	19.66	6.78	5.35	69.2	606	--

Table 8.4.2.--Continuous Monitoring Data for Albuquerque Waste Water Treatment Plant Outfall, January 29 through February 3, 2003

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
1/30/2003	204500	19.66	6.78	5.29	68.4	606	--
1/30/2003	210000	19.65	6.78	5.32	68.9	606	--
1/30/2003	211500	19.64	6.78	5.23	67.6	606	--
1/30/2003	213000	19.64	6.77	5.35	69.2	606	--
1/30/2003	214500	19.65	6.77	5.40	69.8	606	--
1/30/2003	220000	19.64	6.77	5.29	68.4	606	--
1/30/2003	221500	19.63	6.77	5.21	67.4	606	--
1/30/2003	223000	19.64	6.77	5.25	67.9	606	--
1/30/2003	224500	19.66	6.77	5.35	69.3	607	--
1/30/2003	230000	19.67	6.76	5.27	68.2	607	--
1/30/2003	231500	19.67	6.77	5.31	68.7	607	--
1/30/2003	233000	19.66	6.76	5.38	69.7	608	--
1/30/2003	234500	19.65	6.76	5.27	68.2	608	--
1/31/2003	000000	19.65	6.76	5.19	67.2	607	--
1/31/2003	001500	19.64	6.76	5.24	67.8	607	--
1/31/2003	003000	19.63	6.76	5.23	67.6	608	--
1/31/2003	004500	19.63	6.76	5.17	66.9	608	--
1/31/2003	010000	19.63	6.77	5.01	64.8	608	--
1/31/2003	011500	19.63	6.76	5.28	68.2	608	--
1/31/2003	013000	19.64	6.77	5.16	66.7	609	--
1/31/2003	014500	19.64	6.77	5.05	65.3	608	--
1/31/2003	020000	19.63	6.77	5.10	65.9	609	--
1/31/2003	021500	19.62	6.77	5.07	65.5	610	--
1/31/2003	023000	19.62	6.77	5.04	65.1	609	--
1/31/2003	024500	19.61	6.77	5.26	68.1	610	--
1/31/2003	030000	19.60	6.77	5.23	67.5	610	--
1/31/2003	031500	19.60	6.78	5.04	65.2	610	--
1/31/2003	033000	19.59	6.78	5.11	66.0	610	--
1/31/2003	034500	19.58	6.78	5.11	66.0	610	--
1/31/2003	040000	19.57	6.78	5.26	67.9	610	--
1/31/2003	041500	19.56	6.80	5.15	66.6	610	--
1/31/2003	043000	19.55	6.79	5.16	66.6	610	--
1/31/2003	044500	19.53	6.80	5.21	67.3	610	--
1/31/2003	050000	19.53	6.80	5.12	66.1	610	--
1/31/2003	051500	19.52	6.81	4.98	64.2	610	--
1/31/2003	053000	19.50	6.80	5.42	69.9	610	--
1/31/2003	054500	19.50	6.81	5.07	65.4	610	--
1/31/2003	060000	19.48	6.83	5.05	65.1	609	--
1/31/2003	061500	19.48	6.82	5.12	66.0	610	--
1/31/2003	063000	19.46	6.83	5.17	66.6	609	--
1/31/2003	064500	19.46	6.83	5.17	66.7	610	--
1/31/2003	070000	19.44	6.83	5.08	65.4	610	--
1/31/2003	071500	19.43	6.82	5.09	65.6	610	--
1/31/2003	073000	19.42	6.82	5.41	69.7	610	--
1/31/2003	074500	19.41	6.84	5.14	66.2	611	--
1/31/2003	080000	19.40	6.85	5.29	68.2	611	--
1/31/2003	081500	19.40	6.85	5.24	67.4	612	--
1/31/2003	083000	19.40	6.84	5.24	67.5	612	--
1/31/2003	084500	19.40	6.85	5.28	68.0	612	--
1/31/2003	090000	19.40	6.85	5.51	70.9	613	--
1/31/2003	091500	19.42	6.86	5.43	69.9	613	--

Table 8.4.2.--Continuous Monitoring Data for Albuquerque Waste Water Treatment Plant Outfall, January 29 through February 3, 2003

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
1/31/2003	093000	19.43	6.85	5.44	70.1	613	--
1/31/2003	094500	19.44	6.86	5.61	72.2	614	--
1/31/2003	100000	19.47	6.86	5.59	72.1	615	--
1/31/2003	101500	19.51	6.86	5.55	71.6	616	--
1/31/2003	103000	19.57	6.87	5.53	71.4	617	--
1/31/2003	104500	19.62	6.87	5.52	71.4	618	--
1/31/2003	110000	19.68	6.85	5.55	71.9	619	--
1/31/2003	111500	19.71	6.83	5.69	73.7	619	--
1/31/2003	113000	19.73	6.84	5.56	72.0	620	--
1/31/2003	114500	19.78	6.84	5.38	69.8	621	--
1/31/2003	120000	19.83	6.82	5.44	70.7	622	--
1/31/2003	121500	19.87	6.82	5.55	72.1	623	--
1/31/2003	123000	19.91	6.82	5.30	68.9	623	--
1/31/2003	124500	19.95	6.81	5.30	69.0	624	--
1/31/2003	130000	19.98	6.81	5.31	69.1	624	--
1/31/2003	131500	20.01	6.81	5.30	69.0	626	--
1/31/2003	133000	20.04	6.81	5.21	67.9	627	--
1/31/2003	134500	20.06	6.79	5.38	70.1	628	--
1/31/2003	140000	20.07	6.79	5.20	67.8	631	--
1/31/2003	141500	20.08	6.79	5.28	68.9	631	--
1/31/2003	143000	20.10	6.79	5.31	69.3	633	--
1/31/2003	144500	20.10	6.78	5.09	66.5	634	--
1/31/2003	150000	20.10	6.79	5.28	68.9	635	--
1/31/2003	151500	20.10	6.79	5.32	69.4	636	--
1/31/2003	153000	20.11	6.78	5.18	67.6	638	--
1/31/2003	154500	20.10	6.78	5.23	68.3	639	--
1/31/2003	160000	20.10	6.76	5.05	65.9	640	--
1/31/2003	161500	20.09	6.75	4.69	61.3	641	--
1/31/2003	163000	20.08	6.75	4.84	63.1	642	--
1/31/2003	164500	20.06	6.74	4.84	63.1	642	--
1/31/2003	170000	20.05	6.74	4.64	60.6	643	--
1/31/2003	171500	20.04	6.74	4.68	61.0	643	--
1/31/2003	173000	20.04	6.73	4.68	61.0	643	--
1/31/2003	174500	20.03	6.73	4.77	62.2	644	--
1/31/2003	180000	20.02	6.73	4.69	61.1	644	--
1/31/2003	181500	20.02	6.72	4.81	62.7	644	--
1/31/2003	183000	20.02	6.73	4.72	61.5	644	--
1/31/2003	184500	20.02	6.73	4.70	61.3	645	--
1/31/2003	190000	20.02	6.73	4.72	61.5	645	--
1/31/2003	191500	20.02	6.73	4.82	62.8	646	--
1/31/2003	193000	20.01	6.74	4.67	60.8	646	--
1/31/2003	194500	20.00	6.74	4.81	62.6	647	--
1/31/2003	200000	19.99	6.75	4.91	63.9	647	--
1/31/2003	201500	19.99	6.74	4.71	61.4	647	--
1/31/2003	203000	19.99	6.73	4.66	60.7	647	--
1/31/2003	204500	19.98	6.73	4.77	62.2	647	--
1/31/2003	210000	19.98	6.73	4.67	60.8	646	--
1/31/2003	211500	19.98	6.72	4.67	60.9	647	--
1/31/2003	213000	19.97	6.72	4.62	60.2	645	--
1/31/2003	214500	19.97	6.72	4.59	59.7	645	--
1/31/2003	220000	19.96	6.72	4.60	59.9	645	--

Table 8.4.2.--Continuous Monitoring Data for Albuquerque Waste Water Treatment Plant Outfall, January 29 through February 3, 2003

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
1/31/2003	221500	19.96	6.71	4.74	61.7	645	--
1/31/2003	223000	19.95	6.72	4.60	59.9	646	--
1/31/2003	224500	19.94	6.72	4.57	59.4	645	--
1/31/2003	230000	19.93	6.72	4.71	61.2	645	--
1/31/2003	231500	19.93	6.72	4.63	60.3	644	--
1/31/2003	233000	19.92	6.72	4.69	61.0	644	--
1/31/2003	234500	19.91	6.72	4.75	61.8	643	--
2/1/2003	000000	19.91	6.72	4.77	62.1	644	--
2/1/2003	001500	19.92	6.72	4.62	60.2	643	--
2/1/2003	003000	19.91	6.72	4.70	61.2	643	--
2/1/2003	004500	19.91	6.73	4.58	59.5	642	--
2/1/2003	010000	19.90	6.74	4.79	62.3	641	--
2/1/2003	011500	19.90	6.73	4.75	61.8	641	--
2/1/2003	013000	19.89	6.74	4.64	60.3	641	--
2/1/2003	014500	19.88	6.74	4.66	60.5	640	--
2/1/2003	020000	19.87	6.74	4.65	60.4	639	--
2/1/2003	021500	19.86	6.74	4.73	61.5	639	--
2/1/2003	023000	19.85	6.75	4.81	62.5	639	--
2/1/2003	024500	19.85	6.75	4.63	60.2	638	--
2/1/2003	030000	19.83	6.75	4.66	60.4	637	--
2/1/2003	031500	19.82	6.75	4.94	64.2	637	--
2/1/2003	033000	19.81	6.76	4.66	60.5	635	--
2/1/2003	034500	19.80	6.76	4.78	62.0	635	--
2/1/2003	040000	19.78	6.77	4.70	61.0	634	--
2/1/2003	041500	19.76	6.78	4.62	59.9	635	--
2/1/2003	043000	19.75	6.78	4.71	61.1	635	--
2/1/2003	044500	19.74	6.78	4.61	59.8	634	--
2/1/2003	050000	19.73	6.78	4.89	63.4	633	--
2/1/2003	051500	19.72	6.79	4.83	62.5	633	--
2/1/2003	053000	19.70	6.80	4.79	62.0	633	--
2/1/2003	054500	19.68	6.80	4.91	63.5	633	--
2/1/2003	060000	19.67	6.80	4.74	61.3	633	--
2/1/2003	061500	19.66	6.81	4.71	60.9	633	--
2/1/2003	063000	19.65	6.81	4.72	61.1	632	--
2/1/2003	064500	19.64	6.82	4.87	62.9	633	--
2/1/2003	070000	19.62	6.82	4.59	59.4	633	--
2/1/2003	071500	19.61	6.83	4.53	58.5	632	--
2/1/2003	073000	19.60	6.83	4.51	58.3	633	--
2/1/2003	074500	19.59	6.83	4.65	60.1	632	--
2/1/2003	080000	19.58	6.84	4.60	59.5	633	--
2/1/2003	081500	19.57	6.84	4.65	60.1	633	--
2/1/2003	083000	19.56	6.84	4.62	59.6	633	--
2/1/2003	084500	19.56	6.85	4.73	61.1	633	--
2/1/2003	090000	19.56	6.85	4.77	61.6	633	--
2/1/2003	091500	19.56	6.86	4.81	62.1	633	--
2/1/2003	093000	19.57	6.86	4.79	61.8	633	--
2/1/2003	094500	19.57	6.87	4.86	62.8	634	--
2/1/2003	100000	19.59	6.87	4.77	61.7	634	--
2/1/2003	101500	19.60	6.87	4.96	64.1	634	--
2/1/2003	103000	19.62	6.88	4.73	61.2	634	--
2/1/2003	104500	19.65	6.88	4.90	63.4	635	--

Table 8.4.2.--Continuous Monitoring Data for Albuquerque Waste Water Treatment Plant Outfall, January 29 through February 3, 2003

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
2/1/2003	110000	19.69	6.88	5.03	65.2	636	--
2/1/2003	111500	19.73	6.88	4.98	64.5	636	--
2/1/2003	113000	19.76	6.89	5.16	66.9	637	--
2/1/2003	114500	19.80	6.90	5.10	66.2	638	--
2/1/2003	120000	19.85	6.90	4.98	64.6	638	--
2/1/2003	121500	19.88	6.89	5.03	65.4	638	--
2/1/2003	123000	19.90	6.89	5.14	66.8	639	--
2/1/2003	124500	19.97	6.88	5.17	67.3	640	--
2/1/2003	130000	20.01	6.87	5.20	67.7	640	--
2/1/2003	131500	20.03	6.86	5.06	66.0	640	--
2/1/2003	133000	20.05	6.86	5.05	65.9	641	--
2/1/2003	134500	20.07	6.85	5.06	66.1	642	--
2/1/2003	140000	20.08	6.84	4.94	64.5	643	--
2/1/2003	141500	20.09	6.83	5.12	66.9	644	--
2/1/2003	143000	20.10	6.83	5.12	66.8	645	--
2/1/2003	144500	20.10	6.82	5.03	65.7	645	--
2/1/2003	150000	20.08	6.81	4.91	64.1	645	--
2/1/2003	151500	20.08	6.81	4.86	63.4	646	--
2/1/2003	153000	20.08	6.81	4.60	60.1	647	--
2/1/2003	154500	20.07	6.80	4.58	59.8	647	--
2/1/2003	160000	20.06	6.79	4.78	62.3	648	--
2/1/2003	161500	20.04	6.79	4.52	59.0	648	--
2/1/2003	163000	20.02	6.78	4.75	62.0	648	--
2/1/2003	164500	20.02	6.78	4.62	60.2	649	--
2/1/2003	170000	20.00	6.78	4.42	57.5	649	--
2/1/2003	171500	19.99	6.78	4.47	58.2	649	--
2/1/2003	173000	19.99	6.78	4.40	57.3	648	--
2/1/2003	174500	19.98	6.77	4.48	58.4	648	--
2/1/2003	180000	19.98	6.77	4.42	57.5	648	--
2/1/2003	181500	19.97	6.77	4.40	57.2	647	--
2/1/2003	183000	19.96	6.77	4.47	58.1	647	--
2/1/2003	184500	19.95	6.77	4.49	58.4	647	--
2/1/2003	190000	19.94	6.77	4.57	59.5	646	--
2/1/2003	191500	19.93	6.77	4.54	59.0	644	--
2/1/2003	193000	19.93	6.77	4.32	56.2	644	--
2/1/2003	194500	19.92	6.77	4.44	57.7	643	--
2/1/2003	200000	19.91	6.77	4.61	59.9	643	--
2/1/2003	201500	19.90	6.77	4.72	61.4	642	--
2/1/2003	203000	19.89	6.77	4.49	58.4	642	--
2/1/2003	204500	19.89	6.77	4.62	60.1	641	--
2/1/2003	210000	19.88	6.77	4.62	60.1	640	--
2/1/2003	211500	19.87	6.77	4.49	58.3	639	--
2/1/2003	213000	19.87	6.77	4.50	58.5	638	--
2/1/2003	214500	19.86	6.78	4.57	59.4	637	--
2/1/2003	220000	19.86	6.78	4.54	58.9	637	--
2/1/2003	221500	19.85	6.78	4.67	60.7	636	--
2/1/2003	223000	19.85	6.78	4.39	57.0	635	--
2/1/2003	224500	19.84	6.78	4.81	62.5	635	--
2/1/2003	230000	19.84	6.78	4.54	59.0	634	--
2/1/2003	231500	19.83	6.79	4.53	58.9	632	--
2/1/2003	233000	19.82	6.79	4.61	59.9	632	--

Table 8.4.2.--Continuous Monitoring Data for Albuquerque Waste Water Treatment Plant Outfall, January 29 through February 3, 2003

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
2/1/2003	234500	19.81	6.79	4.58	59.5	630	--
2/2/2003	000000	19.81	6.79	4.55	59.0	631	--
2/2/2003	001500	19.81	6.80	4.56	59.2	629	--
2/2/2003	003000	19.80	6.80	4.53	58.8	628	--
2/2/2003	004500	19.80	6.80	4.62	59.9	627	--
2/2/2003	010000	19.79	6.81	4.64	60.2	626	--
2/2/2003	011500	19.79	6.81	4.56	59.1	626	--
2/2/2003	013000	19.78	6.80	4.67	60.6	626	--
2/2/2003	014500	19.78	6.80	4.46	57.9	624	--
2/2/2003	020000	19.77	6.81	4.47	58.0	624	--
2/2/2003	021500	19.77	6.82	4.42	57.3	624	--
2/2/2003	023000	19.76	6.82	4.38	56.8	623	--
2/2/2003	024500	19.75	6.82	4.43	57.4	622	--
2/2/2003	030000	19.75	6.82	4.51	58.5	623	--
2/2/2003	031500	19.74	6.82	4.43	57.4	621	--
2/2/2003	033000	19.73	6.83	4.48	58.0	621	--
2/2/2003	034500	19.73	6.83	4.42	57.3	620	--
2/2/2003	040000	19.72	6.83	4.60	59.6	620	--
2/2/2003	041500	19.71	6.84	4.52	58.5	621	--
2/2/2003	043000	19.70	6.84	4.31	55.9	619	--
2/2/2003	044500	19.69	6.85	4.53	58.7	619	--
2/2/2003	050000	19.69	6.86	4.51	58.4	619	--
2/2/2003	051500	19.69	6.86	4.43	57.3	619	--
2/2/2003	053000	19.68	6.87	4.52	58.6	618	--
2/2/2003	054500	19.68	6.87	4.31	55.8	619	--
2/2/2003	060000	19.66	6.88	4.32	55.8	617	--
2/2/2003	061500	19.66	6.88	4.31	55.7	617	--
2/2/2003	063000	19.65	6.89	4.25	55.0	616	--
2/2/2003	064500	19.64	6.89	4.33	56.0	616	--
2/2/2003	070000	19.63	6.89	4.16	53.8	616	--
2/2/2003	071500	19.62	6.90	4.11	53.2	616	--
2/2/2003	073000	19.61	6.90	4.17	53.8	616	--
2/2/2003	074500	19.60	6.90	4.35	56.3	616	--
2/2/2003	080000	19.59	6.91	4.42	57.1	615	--
2/2/2003	081500	19.58	6.92	4.18	53.9	615	--
2/2/2003	083000	19.57	6.92	4.20	54.3	615	--
2/2/2003	084500	19.56	6.92	4.35	56.2	614	--
2/2/2003	090000	19.56	6.92	4.38	56.5	614	--
2/2/2003	091500	19.56	6.93	4.41	57.0	613	--
2/2/2003	093000	19.55	6.93	4.30	55.5	613	--
2/2/2003	094500	19.55	6.94	4.32	55.8	613	--
2/2/2003	100000	19.56	6.94	4.30	55.6	613	--
2/2/2003	101500	19.55	6.94	4.42	57.1	613	--
2/2/2003	103000	19.56	6.96	4.49	58.0	612	--
2/2/2003	104500	19.58	6.96	4.43	57.3	612	--
2/2/2003	110000	19.60	6.95	4.55	58.8	612	--
2/2/2003	111500	19.64	6.96	4.56	59.0	612	--
2/2/2003	113000	19.66	6.96	4.62	59.7	612	--
2/2/2003	114500	19.67	6.96	4.76	61.6	611	--
2/2/2003	120000	19.69	6.96	4.97	64.3	611	--
2/2/2003	121500	19.73	6.96	4.69	60.8	611	--

Table 8.4.2.--Continuous Monitoring Data for Albuquerque Waste Water Treatment Plant Outfall, January 29 through February 3, 2003

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
2/2/2003	123000	19.76	6.96	4.84	62.8	610	--
2/2/2003	124500	19.81	6.96	4.86	63.1	610	--
2/2/2003	130000	19.82	6.95	4.91	63.7	610	--
2/2/2003	131500	19.81	6.94	4.70	61.1	609	--
2/2/2003	133000	19.81	6.94	4.82	62.6	609	--
2/2/2003	134500	19.81	6.93	4.56	59.2	609	--
2/2/2003	140000	19.78	6.92	4.50	58.3	609	--
2/2/2003	141500	19.77	6.91	4.92	63.8	609	--
2/2/2003	143000	19.76	6.90	4.56	59.1	610	--
2/2/2003	144500	19.75	6.90	4.70	60.9	610	--
2/2/2003	150000	19.74	6.90	4.58	59.4	610	--
2/2/2003	151500	19.73	6.89	4.68	60.6	608	--
2/2/2003	153000	19.73	6.88	4.49	58.1	609	--
2/2/2003	154500	19.71	6.88	4.49	58.1	610	--
2/2/2003	160000	19.70	6.87	4.28	55.5	610	--
2/2/2003	161500	19.68	6.86	4.40	57.0	609	--
2/2/2003	163000	19.67	6.86	4.37	56.5	610	--
2/2/2003	164500	19.63	6.86	4.48	58.0	608	--
2/2/2003	170000	19.59	6.85	4.40	56.8	608	--
2/2/2003	171500	19.57	6.85	4.14	53.5	608	--
2/2/2003	173000	19.54	6.85	4.26	55.0	608	--
2/2/2003	174500	19.51	6.84	4.11	53.1	608	--
2/2/2003	180000	19.48	6.84	4.18	54.0	608	--
2/2/2003	181500	19.45	6.84	4.17	53.7	608	--
2/2/2003	183000	19.43	6.83	4.18	53.9	608	--
2/2/2003	184500	19.40	6.83	4.40	56.7	607	--
2/2/2003	190000	19.38	6.83	4.10	52.8	607	--
2/2/2003	191500	19.38	6.83	4.25	54.6	607	--
2/2/2003	193000	19.39	6.82	4.18	53.8	607	--
2/2/2003	194500	19.39	6.82	4.07	52.4	606	--
2/2/2003	200000	19.37	6.82	4.19	53.9	606	--
2/2/2003	201500	19.37	6.82	4.29	55.2	605	--
2/2/2003	203000	19.36	6.82	4.05	52.1	605	--
2/2/2003	204500	19.36	6.82	4.26	54.8	605	--
2/2/2003	210000	19.36	6.81	4.33	55.7	603	--
2/2/2003	211500	19.36	6.82	4.24	54.5	603	--
2/2/2003	213000	19.37	6.81	4.22	54.2	602	--
2/2/2003	214500	19.37	6.81	4.02	51.7	601	--
2/2/2003	220000	19.38	6.81	4.15	53.4	600	--
2/2/2003	221500	19.39	6.81	4.47	57.5	600	--
2/2/2003	223000	19.41	6.81	4.47	57.5	599	--
2/2/2003	224500	19.41	6.82	4.34	55.8	599	--
2/2/2003	230000	19.43	6.80	4.20	54.1	598	--
2/2/2003	231500	19.43	6.80	4.24	54.5	598	--
2/2/2003	233000	19.41	6.82	4.35	56.0	597	--
2/2/2003	234500	19.41	6.82	4.16	53.5	595	--
2/3/2003	000000	19.42	6.82	4.20	54.0	595	--
2/3/2003	001500	19.41	6.82	4.25	54.7	594	--
2/3/2003	003000	19.41	6.82	4.20	54.0	594	--
2/3/2003	004500	19.42	6.81	4.04	52.1	591	--
2/3/2003	010000	19.40	6.81	4.15	53.4	590	--

Table 8.4.2.--Continuous Monitoring Data for Albuquerque Waste Water Treatment Plant Outfall, January 29 through February 3, 2003

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
2/3/2003	011500	19.40	6.82	4.41	56.8	591	--
2/3/2003	013000	19.38	6.84	4.24	54.5	591	--
2/3/2003	014500	19.38	6.84	4.36	56.1	591	--
2/3/2003	020000	19.37	6.85	4.36	56.1	589	--
2/3/2003	021500	19.36	6.85	4.05	52.1	589	--
2/3/2003	023000	19.36	6.85	4.15	53.4	587	--
2/3/2003	024500	19.35	6.86	4.24	54.6	588	--
2/3/2003	030000	19.34	6.87	4.33	55.6	586	--
2/3/2003	031500	19.33	6.87	4.19	53.9	586	--
2/3/2003	033000	19.31	6.87	4.13	53.0	584	--
2/3/2003	034500	19.30	6.88	4.19	53.8	584	--
2/3/2003	040000	19.29	6.88	4.33	55.6	583	--
2/3/2003	041500	19.27	6.89	4.31	55.3	582	--
2/3/2003	043000	19.25	6.89	4.26	54.6	582	--
2/3/2003	044500	19.24	6.90	4.18	53.6	581	--
2/3/2003	050000	19.24	6.91	4.39	56.3	581	--
2/3/2003	051500	19.23	6.91	4.30	55.1	581	--
2/3/2003	053000	19.23	6.91	4.51	57.9	582	--
2/3/2003	054500	19.22	6.92	4.26	54.6	582	--
2/3/2003	060000	19.21	6.93	4.26	54.6	581	--
2/3/2003	061500	19.20	6.93	4.26	54.6	581	--
2/3/2003	063000	19.19	6.94	4.21	54.0	580	--
2/3/2003	064500	19.18	6.94	4.22	54.1	580	--
2/3/2003	070000	19.16	6.94	4.12	52.8	580	--
2/3/2003	071500	19.16	6.95	4.19	53.7	579	--
2/3/2003	073000	19.14	6.95	4.29	54.9	579	--
2/3/2003	074500	19.13	6.95	4.09	52.3	578	--
2/3/2003	080000	19.13	6.95	4.25	54.4	578	--
2/3/2003	081500	19.12	6.96	4.27	54.6	578	--
2/3/2003	083000	19.11	6.97	4.15	53.1	578	--
2/3/2003	084500	19.10	6.97	4.38	56.0	578	--
2/3/2003	090000	19.09	6.98	4.38	56.1	578	--
2/3/2003	091500	19.11	6.98	4.37	55.9	578	--
2/3/2003	093000	19.11	6.98	4.56	58.4	578	--
2/3/2003	094500	19.12	6.98	4.52	57.8	578	--
2/3/2003	100000	19.14	6.98	4.47	57.3	577	--
2/3/2003	101500	19.17	6.99	4.47	57.3	577	--
2/3/2003	103000	19.21	6.99	4.42	56.7	576	--
2/3/2003	104500	19.28	6.99	4.58	58.8	576	--
2/3/2003	110000	19.28	6.98	4.77	61.2	576	--
2/3/2003	111500	19.27	6.97	4.58	58.8	576	--
2/3/2003	113000	19.32	6.96	4.79	61.5	575	--
2/3/2003	114500	19.37	6.96	4.57	58.7	576	--
2/3/2003	120000	19.39	6.96	4.68	60.2	575	--
2/3/2003	121500	19.42	6.95	4.64	59.8	574	--
2/3/2003	123000	19.47	6.95	4.54	58.5	574	--
2/3/2003	124500	19.52	6.94	4.55	58.7	574	--
2/3/2003	130000	19.56	6.94	4.49	57.9	573	--
2/3/2003	131500	19.55	6.94	4.49	58.0	573	--
2/3/2003	133000	19.54	6.93	4.52	58.4	575	--
2/3/2003	134500	19.58	6.93	4.73	61.0	576	--

Table 8.4.2.--Continuous Monitoring Data for Albuquerque Waste Water Treatment Plant Outfall, January 29 through February 3, 2003

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
2/3/2003	140000	19.58	6.92	4.48	57.9	576	--
2/3/2003	141500	19.60	6.92	4.48	57.9	574	--
2/3/2003	143000	19.60	6.91	4.34	56.0	576	--
2/3/2003	144500	19.60	6.91	4.46	57.7	575	--
2/3/2003	150000	19.60	6.90	4.50	58.2	575	--
2/3/2003	151500	19.58	6.90	4.51	58.2	577	--
2/3/2003	153000	19.57	6.89	4.44	57.4	577	--

Descriptive Statistics	*Temp (°C)*	*pH*	*DO (mg/L)*	*DO (%)*	*SPC (uS/cm)*	*Turbidity (NTU)*
Mean	19.7	6.8	5.4	69.9	621	--
Standard Error	0.01	0.00	0.02	0.25	0.75	--
Median	19.7	6.8	5.4	69.8	622	--
Mode	19.7	6.8	5.4	69.1	608	--
Standard Deviation	0.20	0.05	0.30	3.75	11.43	--
Sample Variance	0.04	0.00	0.09	14.09	130.72	--
Kurtosis	-0.65	-0.62	0.48	0.26	-1.01	--
Skewness	0.04	0.49	-0.07	-0.06	0.30	--
Range	0.8	0.2	1.5	18.4	41	--
Minimum	19.3	6.7	4.6	60.6	606	--
Maximum	20.1	6.9	6.1	79.0	647	--
Sum	4571.9	1580.7	1253.0	16227.7	144045	--
Count	232	232	232	232	232	--

Table 8.5.1.--Continous Monitoring Data for Rio Grande at Los Padillas
July 25 through July 31, 2002

[--, no data; °C, degrees Celsius; mg/L, milligrams per liter; % sat, percent saturation; uS/cm, microsiemens per centimeter; NTU, Nephelometric turbidity units.]

MiniSonde4a 36755
Log File Name : LOS PAD 7-25-02
Setup Date (MMDDYY) : 072502
Setup Time (HHMMSS) : 084612
Starting Date (MMDDYY) : 072502
Starting Time (HHMMSS) : 090000
Stopping Date (MMDDYY) : 073102
Stopping Time (HHMMSS) : 120000
Interval (HHMMSS) : 001500
Sensor warmup (HHMMSS) 1.00
Circltr warmup (HHMMSS) : 000100

Date	Time (HH:MM:SS)	Temp (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
7/25/2002	9:30:00	24.3	8.1	6.6	93.0	483	--
7/25/2002	9:45:00	24.7	8.1	6.6	93.3	481	--
7/25/2002	10:00:00	25.2	8.1	6.6	94.5	479	--
7/25/2002	10:15:00	25.6	8.1	6.5	94.1	477	--
7/25/2002	10:30:00	26.1	8.1	6.5	94.8	475	--
7/25/2002	10:45:00	26.6	8.1	6.5	95.3	473	--
7/25/2002	11:00:00	27.0	8.1	6.4	93.9	471	--
7/25/2002	11:15:00	27.5	8.1	6.3	93.7	468	--
7/25/2002	11:30:00	28.0	8.1	6.4	95.4	467	--
7/25/2002	11:45:00	28.4	8.1	6.3	94.6	465	--
7/25/2002	12:00:00	28.9	8.1	6.3	95.6	464	--
7/25/2002	12:15:00	29.4	8.1	6.2	95.2	463	--
7/25/2002	12:30:00	29.8	8.1	6.1	94.8	461	--
7/25/2002	12:45:00	30.2	8.1	6.0	94.4	460	--
7/25/2002	13:00:00	30.6	8.1	5.9	93.3	460	--
7/25/2002	13:15:00	30.9	8.1	6.0	94.3	460	--
7/25/2002	13:30:00	31.2	8.1	5.9	94.2	461	--
7/25/2002	13:45:00	31.5	8.1	5.9	94.5	462	--
7/25/2002	14:00:00	31.8	8.1	5.8	92.6	465	--
7/25/2002	14:15:00	32.1	8.1	5.8	92.9	469	--
7/25/2002	14:30:00	32.3	8.1	5.7	92.7	476	--
7/25/2002	14:45:00	32.6	8.1	5.7	92.5	483	--
7/25/2002	15:00:00	32.9	8.1	5.6	92.0	488	--
7/25/2002	15:15:00	33.0	8.1	5.6	91.5	490	--
7/25/2002	15:30:00	33.1	8.1	5.6	91.7	495	--
7/25/2002	15:45:00	33.2	8.1	5.5	90.7	501	--
7/25/2002	16:00:00	33.2	8.1	5.5	90.7	505	--
7/25/2002	16:15:00	33.3	8.1	5.4	89.4	506	--
7/25/2002	16:30:00	33.4	8.1	5.4	89.2	509	--
7/25/2002	16:45:00	33.3	8.1	5.4	88.5	512	--
7/25/2002	17:00:00	33.3	8.1	5.5	90.0	514	--
7/25/2002	17:15:00	33.2	8.1	5.4	89.0	516	--
7/25/2002	17:30:00	33.1	8.0	5.4	88.7	517	--
7/25/2002	17:45:00	32.7	8.0	5.3	87.0	519	--
7/25/2002	18:00:00	32.3	8.0	5.4	86.9	520	--
7/25/2002	18:15:00	31.7	8.0	5.4	86.4	525	--
7/25/2002	18:30:00	31.3	8.0	5.4	85.1	526	--

Table 8.5.1.--Continous Monitoring Data for Rio Grande at Los Padillas
July 25 through July 31, 2002

Date	Time (HH:MM:SS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
7/25/2002	18:45:00	31.2	8.0	5.5	86.9	529	--
7/25/2002	19:00:00	31.1	8.0	5.5	86.4	531	--
7/25/2002	19:15:00	30.8	8.0	5.5	86.2	530	--
7/25/2002	19:30:00	30.4	8.0	5.5	85.9	530	--
7/25/2002	19:45:00	29.9	8.0	5.5	85.1	531	--
7/25/2002	20:00:00	29.6	8.0	5.5	84.4	530	--
7/25/2002	20:15:00	29.4	8.0	5.6	85.8	532	--
7/25/2002	20:30:00	29.1	8.0	5.6	85.4	530	--
7/25/2002	20:45:00	28.6	8.0	5.6	84.9	531	--
7/25/2002	21:00:00	28.1	8.0	5.7	85.3	530	--
7/25/2002	21:15:00	27.9	8.0	5.7	85.9	531	--
7/25/2002	21:30:00	27.6	8.0	5.8	86.9	533	--
7/25/2002	21:45:00	27.4	8.0	5.8	86.9	534	--
7/25/2002	22:00:00	27.1	8.0	5.8	86.4	535	--
7/25/2002	22:15:00	26.6	8.1	6.0	87.2	535	--
7/25/2002	22:30:00	26.3	8.1	5.9	86.1	537	--
7/25/2002	22:45:00	26.2	8.1	5.9	86.5	537	--
7/25/2002	23:00:00	25.9	8.1	6.0	87.0	540	--
7/25/2002	23:15:00	25.6	8.1	6.0	86.8	541	--
7/25/2002	23:30:00	25.4	8.1	6.0	86.4	543	--
7/25/2002	23:45:00	25.2	8.1	6.1	87.6	544	--
7/26/2002	0:00:00	25.2	8.1	6.0	86.3	546	--
7/26/2002	0:15:00	24.9	8.1	6.0	85.5	546	--
7/26/2002	0:30:00	24.7	8.1	6.1	86.4	544	--
7/26/2002	0:45:00	24.5	8.1	6.3	88.3	544	--
7/26/2002	1:00:00	24.4	8.1	6.2	86.6	544	--
7/26/2002	1:15:00	24.2	8.1	6.3	88.4	546	--
7/26/2002	1:30:00	24.1	8.1	6.3	88.3	547	--
7/26/2002	1:45:00	24.1	8.1	6.3	88.4	549	--
7/26/2002	2:00:00	24.1	8.1	6.2	86.7	547	--
7/26/2002	2:15:00	24.0	8.1	6.2	87.1	548	--
7/26/2002	2:30:00	23.8	8.1	6.3	87.8	549	--
7/26/2002	2:45:00	23.7	8.0	6.4	89.1	547	--
7/26/2002	3:00:00	23.6	8.0	6.4	88.9	546	--
7/26/2002	3:15:00	23.5	8.0	6.4	89.0	545	--
7/26/2002	3:30:00	23.4	8.0	6.3	87.5	543	--
7/26/2002	3:45:00	23.3	8.0	6.4	88.9	544	--
7/26/2002	4:00:00	23.3	8.0	6.4	88.3	544	--
7/26/2002	4:15:00	23.2	8.0	6.3	87.4	544	--
7/26/2002	4:30:00	23.1	8.0	6.4	88.4	542	--
7/26/2002	4:45:00	23.0	8.0	6.5	88.6	538	--
7/26/2002	5:00:00	22.9	8.0	6.4	87.9	538	--
7/26/2002	5:15:00	22.8	8.0	6.4	87.8	538	--
7/26/2002	5:30:00	22.7	8.0	6.4	87.6	536	--
7/26/2002	5:45:00	22.7	8.0	6.5	88.6	537	--
7/26/2002	6:00:00	22.6	8.0	6.4	87.7	536	--
7/26/2002	6:15:00	22.5	8.0	6.5	88.0	533	--
7/26/2002	6:30:00	22.4	8.0	6.5	87.9	531	--
7/26/2002	6:45:00	22.3	8.0	6.6	89.1	526	--
7/26/2002	7:00:00	22.3	8.0	6.5	87.7	523	--
7/26/2002	7:15:00	22.2	8.1	6.5	87.7	519	--

Table 8.5.1.--Continous Monitoring Data for Rio Grande at Los Padillas
July 25 through July 31, 2002

Date	Time (HH:MM:SS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
7/26/2002	7:30:00	22.2	8.0	6.5	87.6	515	--
7/26/2002	7:45:00	22.3	8.0	6.6	89.4	511	--
7/26/2002	8:00:00	22.4	8.1	6.5	88.6	507	--
7/26/2002	8:15:00	22.6	8.1	6.7	90.8	503	--
7/26/2002	8:30:00	22.9	8.1	6.6	90.9	499	--
7/26/2002	8:45:00	23.0	8.1	6.7	91.4	494	--
7/26/2002	9:00:00	23.1	8.1	6.6	90.2	491	--
7/26/2002	9:15:00	23.5	8.1	6.6	91.4	488	--
7/26/2002	9:30:00	24.0	8.1	6.6	92.7	486	--
7/26/2002	9:45:00	24.4	8.1	6.6	92.5	483	--
7/26/2002	10:00:00	24.8	8.1	6.5	91.7	480	--
7/26/2002	10:15:00	25.3	8.1	6.4	92.1	480	--
7/26/2002	10:30:00	25.6	8.0	6.4	92.0	481	--
7/26/2002	10:45:00	26.0	8.0	6.3	90.9	479	--
7/26/2002	11:00:00	26.6	8.0	6.3	91.6	474	--
7/26/2002	11:15:00	27.0	8.0	6.3	93.3	470	--
7/26/2002	11:30:00	27.4	8.0	6.2	92.0	468	--
7/26/2002	11:45:00	27.9	8.0	6.2	92.2	466	--
7/26/2002	12:00:00	28.4	8.0	6.1	91.9	464	--
7/26/2002	12:15:00	29.0	8.0	6.1	93.2	461	--
7/26/2002	12:30:00	29.5	8.0	6.0	93.0	458	--
7/26/2002	12:45:00	29.9	8.1	6.0	93.3	458	--
7/26/2002	13:00:00	30.3	8.1	5.8	91.2	459	--
7/26/2002	13:15:00	30.6	8.1	5.9	93.2	459	--
7/26/2002	13:30:00	30.9	8.1	5.9	93.3	459	--
7/26/2002	13:45:00	31.3	8.1	5.9	93.2	458	--
7/26/2002	14:00:00	31.7	8.1	5.8	93.0	458	--
7/26/2002	14:15:00	32.2	8.1	5.7	92.7	460	--
7/26/2002	14:30:00	32.6	8.1	5.6	91.0	464	--
7/26/2002	14:45:00	32.9	8.1	5.7	92.8	471	--
7/26/2002	15:00:00	33.2	8.0	5.6	91.8	478	--
7/26/2002	15:15:00	33.5	8.0	5.5	91.0	485	--
7/26/2002	15:30:00	33.4	8.0	5.4	89.2	492	--
7/26/2002	15:45:00	32.8	8.0	5.5	89.2	497	--
7/26/2002	16:00:00	32.3	8.0	5.4	87.9	502	--
7/26/2002	16:15:00	31.6	8.0	5.5	87.6	506	--
7/26/2002	16:30:00	31.0	8.0	5.5	86.8	511	--
7/26/2002	16:45:00	30.7	8.0	5.4	85.8	516	--
7/26/2002	17:00:00	30.5	8.0	5.5	86.4	521	--
7/26/2002	17:15:00	30.2	8.0	5.5	85.4	523	--
7/26/2002	17:30:00	29.8	8.0	5.5	85.4	525	--
7/26/2002	17:45:00	29.5	8.0	5.5	84.4	526	--
7/26/2002	18:00:00	29.0	8.0	5.5	84.8	529	--
7/26/2002	18:15:00	28.3	8.0	5.7	85.6	528	--
7/26/2002	18:30:00	27.8	8.0	5.8	86.6	532	--
7/26/2002	18:45:00	27.5	8.0	5.7	85.4	536	--
7/26/2002	19:00:00	27.2	8.0	5.8	85.7	538	--
7/26/2002	19:15:00	26.9	8.0	5.8	84.7	540	--
7/26/2002	19:30:00	26.6	8.0	5.8	84.8	539	--
7/26/2002	19:45:00	26.3	8.0	5.8	85.1	537	--
7/26/2002	20:00:00	26.0	8.0	6.0	87.3	537	--

Table 8.5.1.--Continous Monitoring Data for Rio Grande at Los Padillas
July 25 through July 31, 2002

Date	Time (HH:MM:SS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
7/26/2002	20:15:00	25.8	8.0	6.0	87.3	539	--
7/26/2002	20:30:00	25.6	8.0	6.1	87.2	539	--
7/26/2002	20:45:00	25.6	8.0	6.1	87.7	539	--
7/26/2002	21:00:00	25.6	8.0	6.1	87.2	540	--
7/26/2002	21:15:00	25.5	8.0	6.1	87.5	542	--
7/26/2002	21:30:00	25.5	8.0	6.0	86.1	542	--
7/26/2002	21:45:00	25.3	8.0	6.1	86.9	545	--
7/26/2002	22:00:00	25.1	8.0	6.0	86.0	545	--
7/26/2002	22:15:00	24.9	8.0	6.2	88.1	543	--
7/26/2002	22:30:00	24.8	8.0	6.1	86.1	543	--
7/26/2002	22:45:00	24.6	8.0	6.1	86.4	543	--
7/26/2002	23:00:00	24.5	8.0	6.2	88.1	543	--
7/26/2002	23:15:00	24.5	8.0	6.3	88.2	543	--
7/26/2002	23:30:00	24.4	8.0	6.2	86.7	545	--
7/27/2002	0:00:00	24.1	8.0	6.2	86.7	542	--
7/27/2002	0:15:00	24.0	8.0	6.3	87.9	539	--
7/27/2002	0:30:00	23.9	8.0	6.2	86.2	539	--
7/27/2002	0:45:00	23.7	8.0	6.2	86.4	538	--
7/27/2002	1:00:00	23.6	8.0	6.3	86.8	537	--
7/27/2002	1:15:00	23.5	8.0	6.3	86.8	536	--
7/27/2002	1:30:00	23.3	8.0	6.4	88.4	535	--
7/27/2002	1:45:00	23.2	8.0	6.4	88.1	534	--
7/27/2002	2:00:00	23.2	8.0	6.4	88.7	534	--
7/27/2002	2:15:00	23.1	8.0	6.5	88.6	534	--
7/27/2002	2:30:00	23.0	8.0	6.4	88.2	531	--
7/27/2002	2:45:00	22.9	8.0	6.5	88.9	532	--
7/27/2002	3:00:00	22.7	8.0	6.4	87.5	533	--
7/27/2002	3:15:00	22.7	8.0	6.4	87.6	532	--
7/27/2002	3:30:00	22.6	8.0	6.4	87.8	532	--
7/27/2002	3:45:00	22.6	8.0	6.5	88.8	530	--
7/27/2002	4:00:00	22.5	8.0	6.5	87.6	529	--
7/27/2002	4:15:00	22.4	8.0	6.6	89.1	526	--
7/27/2002	4:30:00	22.3	8.0	6.5	88.6	525	--
7/27/2002	4:45:00	22.3	8.0	6.5	88.2	522	--
7/27/2002	5:00:00	22.2	8.0	6.5	88.1	518	--
7/27/2002	5:15:00	22.1	8.0	6.6	88.5	517	--
7/27/2002	5:30:00	22.1	8.0	6.6	88.3	517	--
7/27/2002	5:45:00	22.1	8.0	6.6	89.2	516	--
7/27/2002	6:00:00	22.0	8.0	6.6	88.6	514	--
7/27/2002	6:15:00	22.0	8.0	6.6	88.3	514	--
7/27/2002	6:30:00	21.9	8.0	6.5	87.7	511	--
7/27/2002	6:45:00	21.9	8.0	6.5	87.9	506	--
7/27/2002	7:00:00	21.9	8.0	6.7	90.0	503	--
7/27/2002	7:15:00	22.0	8.0	6.7	90.0	501	--
7/27/2002	7:30:00	22.1	8.0	6.7	90.6	498	--
7/27/2002	7:45:00	22.2	8.0	6.7	90.3	496	--
7/27/2002	8:00:00	22.3	8.0	6.7	90.3	494	--
7/27/2002	8:15:00	22.2	8.0	6.6	89.5	490	--
7/27/2002	8:30:00	22.3	8.0	6.7	91.0	487	--
7/27/2002	8:45:00	22.6	8.0	6.7	91.8	485	--
7/27/2002	9:00:00	23.1	8.0	6.6	91.2	482	--

Table 8.5.1.--Continous Monitoring Data for Rio Grande at Los Padillas
July 25 through July 31, 2002

Date	Time (HH:MM:SS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
7/27/2002	9:15:00	23.4	8.0	6.6	91.0	479	--
7/27/2002	9:30:00	23.7	8.0	6.7	92.5	477	--
7/27/2002	9:45:00	24.0	8.1	6.7	93.3	474	--
7/27/2002	10:00:00	24.4	8.1	6.6	92.6	472	--
7/27/2002	10:15:00	24.9	8.1	6.6	93.9	469	--
7/27/2002	10:30:00	25.4	8.1	6.5	93.4	465	--
7/27/2002	10:45:00	25.7	8.1	6.5	93.0	461	--
7/27/2002	11:00:00	25.9	8.1	6.5	94.1	459	--
7/27/2002	11:15:00	26.3	8.1	6.4	93.4	455	--
7/27/2002	11:30:00	26.7	8.1	6.4	94.5	454	--
7/27/2002	11:45:00	27.3	8.1	6.3	93.6	452	--
7/27/2002	12:00:00	27.9	8.1	6.3	94.3	449	--
7/27/2002	12:15:00	28.4	8.0	6.3	95.0	448	--
7/27/2002	12:30:00	28.8	8.0	6.1	93.1	446	--
7/27/2002	12:45:00	29.2	8.1	6.1	93.2	444	--
7/27/2002	13:00:00	29.5	8.0	6.2	95.2	442	--
7/27/2002	13:15:00	29.9	8.0	6.0	93.5	442	--
7/27/2002	13:30:00	30.2	8.1	6.0	93.4	442	--
7/27/2002	13:45:00	30.5	8.1	6.0	93.4	443	--
7/27/2002	14:00:00	30.8	8.1	5.9	93.2	445	--
7/27/2002	14:15:00	31.2	8.1	5.9	93.0	447	--
7/27/2002	14:30:00	31.3	8.0	5.9	93.7	450	--
7/27/2002	14:45:00	31.1	8.1	5.8	92.0	453	--
7/27/2002	15:00:00	31.2	8.1	5.8	91.8	456	--
7/27/2002	15:15:00	31.0	8.1	5.7	91.0	460	--
7/27/2002	15:30:00	30.8	8.1	5.7	89.6	465	--
7/27/2002	15:45:00	30.7	8.1	5.6	88.3	471	--
7/27/2002	16:00:00	30.4	8.1	5.7	89.0	476	--
7/27/2002	16:15:00	30.2	8.1	5.6	88.1	481	--
7/27/2002	16:30:00	30.0	8.0	5.6	87.8	488	--
7/27/2002	16:45:00	29.8	8.0	5.7	89.1	493	--
7/27/2002	17:00:00	29.8	8.0	5.7	88.2	497	--
7/27/2002	17:15:00	29.6	8.0	5.7	87.3	501	--
7/27/2002	17:30:00	29.2	8.0	5.7	87.6	504	--
7/27/2002	17:45:00	28.8	8.0	5.8	87.8	510	--
7/27/2002	18:00:00	28.5	8.0	5.7	86.5	513	--
7/27/2002	18:15:00	28.3	8.0	5.8	87.5	517	--
7/27/2002	18:30:00	28.1	8.0	5.8	86.7	520	--
7/27/2002	18:45:00	27.9	8.0	5.8	87.1	523	--
7/27/2002	19:00:00	27.7	8.0	5.9	87.6	525	--
7/27/2002	19:15:00	27.4	8.0	5.8	86.2	526	--
7/27/2002	19:30:00	27.2	8.0	5.9	87.8	527	--
7/27/2002	19:45:00	26.9	8.0	5.9	87.4	527	--
7/27/2002	20:00:00	26.8	8.0	5.9	86.3	526	--
7/27/2002	20:15:00	26.5	8.0	6.0	87.8	529	--
7/27/2002	20:30:00	26.2	8.0	5.9	86.2	531	--
7/27/2002	20:45:00	26.0	8.0	5.9	86.2	533	--
7/27/2002	21:00:00	25.9	8.0	6.0	87.1	533	--
7/27/2002	21:15:00	25.7	8.0	6.0	86.7	533	--
7/27/2002	21:30:00	25.5	8.0	6.0	86.7	533	--
7/27/2002	21:45:00	25.3	8.0	6.0	85.3	534	--

Table 8.5.1.--Continous Monitoring Data for Rio Grande at Los Padillas
July 25 through July 31, 2002

Date	Time (HH:MM:SS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
7/27/2002	22:00:00	25.1	8.0	6.0	85.7	535	--
7/27/2002	22:15:00	25.0	8.0	6.0	85.7	533	--
7/27/2002	22:30:00	24.9	7.9	5.9	84.3	535	--
7/27/2002	22:45:00	24.7	7.9	5.9	83.4	536	--
7/27/2002	23:00:00	24.6	7.9	6.0	85.1	535	--
7/27/2002	23:15:00	24.4	7.9	6.0	84.3	533	--
7/27/2002	23:30:00	24.3	7.9	6.0	83.8	534	--
7/27/2002	23:45:00	24.1	7.9	6.0	84.1	532	--
7/28/2002	0:00:00	23.9	7.9	6.1	85.0	534	--
7/28/2002	0:15:00	23.7	7.9	6.1	85.5	531	--
7/28/2002	0:30:00	23.6	7.9	6.2	86.1	529	--
7/28/2002	0:45:00	23.4	7.9	6.2	85.1	530	--
7/28/2002	1:00:00	23.3	7.9	6.1	84.7	528	--
7/28/2002	1:15:00	23.1	7.9	6.2	85.1	527	--
7/28/2002	1:30:00	23.0	7.9	6.2	84.9	527	--
7/28/2002	1:45:00	22.9	7.9	6.2	84.7	526	--
7/28/2002	2:00:00	22.8	7.9	6.2	85.0	526	--
7/28/2002	2:15:00	22.7	7.9	6.2	85.1	526	--
7/28/2002	2:30:00	22.6	7.9	6.3	85.1	526	--
7/28/2002	2:45:00	22.5	7.9	6.3	85.8	525	--
7/28/2002	3:00:00	22.4	8.0	6.3	86.0	523	--
7/28/2002	3:15:00	22.3	8.0	6.3	85.9	522	--
7/28/2002	3:30:00	22.2	8.0	6.5	87.6	521	--
7/28/2002	3:45:00	22.1	8.0	6.4	86.5	520	--
7/28/2002	4:00:00	22.0	8.0	6.5	87.9	519	--
7/28/2002	4:15:00	21.9	8.0	6.5	87.9	517	--
7/28/2002	4:30:00	21.8	8.0	6.5	86.8	516	--
7/28/2002	4:45:00	21.8	8.0	6.5	87.7	515	--
7/28/2002	5:00:00	21.7	8.0	6.5	86.8	516	--
7/28/2002	5:15:00	21.6	8.0	6.6	87.7	515	--
7/28/2002	5:30:00	21.5	8.0	6.7	88.6	514	--
7/28/2002	5:45:00	21.4	8.0	6.6	87.2	513	--
7/28/2002	6:00:00	21.4	8.0	6.5	86.9	511	--
7/28/2002	6:15:00	21.3	8.0	6.7	88.9	510	--
7/28/2002	6:30:00	21.3	8.0	6.7	88.9	510	--
7/28/2002	6:45:00	21.2	8.0	6.7	88.9	508	--
7/28/2002	7:00:00	21.1	8.0	6.7	89.2	507	--
7/28/2002	7:15:00	21.1	8.0	6.7	87.9	505	--
7/28/2002	7:30:00	21.1	8.0	6.7	88.2	501	--
7/28/2002	7:45:00	21.2	8.0	6.7	88.5	499	--
7/28/2002	8:00:00	21.3	8.0	6.8	90.5	497	--
7/28/2002	8:15:00	21.5	8.0	6.7	89.8	496	--
7/28/2002	8:30:00	21.7	8.0	6.8	90.3	493	--
7/28/2002	8:45:00	22.0	8.0	6.8	90.8	490	--
7/28/2002	9:00:00	22.4	8.0	6.9	93.4	487	--
7/28/2002	9:15:00	22.7	8.0	6.8	92.1	484	--
7/28/2002	9:30:00	23.2	8.0	6.8	93.5	483	--
7/28/2002	9:45:00	23.6	8.0	6.7	92.6	480	--
7/28/2002	10:00:00	24.1	8.0	6.7	93.9	478	--
7/28/2002	10:15:00	24.6	8.0	6.7	94.9	476	--
7/28/2002	10:30:00	25.1	8.0	6.7	95.7	474	--

Table 8.5.1.--Continous Monitoring Data for Rio Grande at Los Padillas
July 25 through July 31, 2002

Date	Time (HH:MM:SS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
7/28/2002	10:45:00	25.6	8.1	6.5	94.2	472	--
7/28/2002	11:00:00	26.1	8.1	6.5	94.5	470	--
7/28/2002	11:15:00	26.7	8.1	6.4	94.0	468	--
7/28/2002	11:30:00	27.2	8.1	6.5	95.7	467	--
7/28/2002	11:45:00	27.7	8.1	6.3	94.8	465	--
7/28/2002	12:00:00	28.3	8.1	6.3	94.4	464	--
7/28/2002	12:15:00	28.8	8.1	6.2	94.9	463	--
7/28/2002	12:30:00	29.3	8.1	6.1	94.0	461	--
7/28/2002	12:45:00	29.7	8.1	6.2	95.3	460	--
7/28/2002	13:00:00	29.9	8.1	6.1	94.8	458	--
7/28/2002	13:15:00	30.2	8.1	6.0	93.5	457	--
7/28/2002	13:30:00	30.4	8.1	6.0	94.2	456	--
7/28/2002	13:45:00	30.4	8.1	5.9	92.6	455	--
7/28/2002	14:00:00	30.4	8.1	5.9	92.7	456	--
7/28/2002	14:15:00	30.6	8.1	5.9	93.3	456	--
7/28/2002	14:30:00	31.0	8.1	5.8	92.0	456	--
7/28/2002	14:45:00	31.2	8.1	5.8	92.2	457	--
7/28/2002	15:00:00	30.9	8.1	5.8	91.1	458	--
7/28/2002	15:15:00	31.2	8.1	5.8	92.6	461	--
7/28/2002	15:30:00	31.0	8.1	5.8	91.9	465	--
7/28/2002	15:45:00	30.9	8.1	5.8	91.3	470	--
7/28/2002	16:00:00	31.0	8.1	5.8	91.1	474	--
7/28/2002	16:15:00	30.9	8.1	5.8	91.5	478	--
7/28/2002	16:30:00	30.6	8.1	5.7	89.4	484	--
7/28/2002	16:45:00	30.5	8.1	5.8	90.9	488	--
7/28/2002	17:00:00	30.6	8.1	5.7	90.1	493	--
7/28/2002	17:15:00	30.4	8.1	5.7	89.6	498	--
7/28/2002	17:30:00	30.2	8.1	5.7	89.2	502	--
7/28/2002	17:45:00	30.1	8.1	5.8	90.7	507	--
7/28/2002	18:00:00	30.3	8.1	5.8	90.0	510	--
7/28/2002	18:15:00	30.3	8.1	5.8	90.2	512	--
7/28/2002	18:30:00	30.2	8.1	5.7	89.7	515	--
7/28/2002	18:45:00	29.9	8.1	5.7	87.9	518	--
7/28/2002	19:00:00	29.4	8.1	5.8	88.7	522	--
7/28/2002	19:15:00	29.2	8.1	5.8	88.4	525	--
7/28/2002	19:30:00	29.0	8.0	5.8	88.1	528	--
7/28/2002	19:45:00	28.7	8.0	5.7	86.3	530	--
7/28/2002	20:00:00	28.5	8.0	5.7	85.7	532	--
7/28/2002	20:15:00	28.2	8.0	5.7	85.8	533	--
7/28/2002	20:30:00	27.9	8.0	5.7	85.7	533	--
7/28/2002	20:45:00	27.6	8.0	5.7	85.5	534	--
7/28/2002	21:00:00	27.3	8.0	5.8	86.3	534	--
7/28/2002	21:15:00	27.0	8.0	5.7	84.7	534	--
7/28/2002	21:30:00	26.8	8.0	5.8	85.2	535	--
7/28/2002	21:45:00	26.5	8.0	5.8	84.6	536	--
7/28/2002	22:00:00	26.3	8.0	5.8	85.1	536	--
7/28/2002	22:15:00	26.1	8.0	5.8	84.7	537	--
7/28/2002	22:30:00	25.8	8.0	6.0	86.5	537	--
7/28/2002	22:45:00	25.6	8.0	6.0	86.3	537	--
7/28/2002	23:00:00	25.4	8.0	5.9	84.9	539	--
7/28/2002	23:15:00	25.1	8.0	6.1	86.5	538	--

Table 8.5.1.--Continous Monitoring Data for Rio Grande at Los Padillas
July 25 through July 31, 2002

Date	Time (HH:MM:SS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
7/28/2002	23:30:00	24.9	8.0	6.1	86.7	538	--
7/28/2002	23:45:00	24.6	8.0	6.0	85.1	538	--
7/29/2002	0:00:00	24.4	8.0	6.0	85.0	537	--
7/29/2002	0:15:00	24.2	8.0	6.2	86.7	537	--
7/29/2002	0:30:00	24.1	8.0	6.2	86.6	537	--
7/29/2002	0:45:00	23.9	8.0	6.2	86.2	536	--
7/29/2002	1:00:00	23.7	8.0	6.3	86.9	537	--
7/29/2002	1:15:00	23.4	8.0	6.2	85.5	536	--
7/29/2002	1:30:00	23.2	8.0	6.2	85.8	536	--
7/29/2002	1:45:00	23.0	8.0	6.4	87.4	535	--
7/29/2002	2:00:00	22.9	8.0	6.4	87.4	536	--
7/29/2002	2:15:00	22.8	8.0	6.3	86.1	535	--
7/29/2002	2:30:00	22.6	8.0	6.3	86.1	535	--
7/29/2002	2:45:00	22.5	8.0	6.4	87.0	534	--
7/29/2002	3:00:00	22.3	8.0	6.4	86.2	534	--
7/29/2002	3:15:00	22.2	8.0	6.4	86.2	534	--
7/29/2002	3:30:00	22.1	8.0	6.5	87.0	534	--
7/29/2002	3:45:00	22.0	8.0	6.4	86.5	533	--
7/29/2002	4:00:00	21.8	8.0	6.5	87.6	533	--
7/29/2002	4:15:00	21.7	8.0	6.5	87.0	532	--
7/29/2002	4:30:00	21.6	8.0	6.6	88.4	532	--
7/29/2002	4:45:00	21.5	8.0	6.5	86.6	532	--
7/29/2002	5:00:00	21.4	8.0	6.5	86.9	531	--
7/29/2002	5:15:00	21.2	8.0	6.6	87.8	530	--
7/29/2002	5:30:00	21.1	8.0	6.6	87.6	529	--
7/29/2002	5:45:00	21.0	8.0	6.7	87.8	530	--
7/29/2002	6:00:00	20.9	8.0	6.6	86.8	530	--
7/29/2002	6:15:00	20.8	8.0	6.7	87.9	529	--
7/29/2002	6:30:00	20.7	8.0	6.6	87.1	528	--
7/29/2002	6:45:00	20.6	8.0	6.7	87.5	527	--
7/29/2002	7:00:00	20.5	8.0	6.7	87.6	525	--
7/29/2002	7:15:00	20.5	8.0	6.8	89.2	524	--
7/29/2002	7:30:00	20.6	8.0	6.7	88.0	522	--
7/29/2002	7:45:00	20.6	8.0	6.9	90.0	519	--
7/29/2002	8:00:00	20.7	8.0	6.9	90.2	517	--
7/29/2002	8:15:00	20.9	8.0	6.9	90.8	514	--
7/29/2002	8:30:00	21.0	8.0	6.9	90.5	511	--
7/29/2002	8:45:00	21.3	8.0	6.8	90.1	508	--
7/29/2002	9:00:00	21.6	8.0	6.8	90.7	505	--
7/29/2002	9:15:00	22.0	8.1	6.9	92.6	502	--
7/29/2002	9:30:00	22.4	8.1	6.7	91.4	499	--
7/29/2002	9:45:00	22.8	8.1	6.8	92.5	496	--
7/29/2002	10:00:00	23.3	8.1	6.8	93.1	493	--
7/29/2002	10:15:00	23.8	8.1	6.7	93.8	491	--
7/29/2002	10:30:00	24.3	8.1	6.7	93.7	488	--
7/29/2002	10:45:00	24.9	8.1	6.6	94.2	485	--
7/29/2002	11:00:00	25.5	8.1	6.7	95.5	482	--
7/29/2002	11:15:00	26.1	8.1	6.6	96.0	479	--
7/29/2002	11:30:00	26.7	8.1	6.6	96.8	477	--
7/29/2002	11:45:00	27.3	8.1	6.5	95.7	475	--
7/29/2002	12:00:00	27.9	8.1	6.5	97.6	472	--

Table 8.5.1.--Continous Monitoring Data for Rio Grande at Los Padillas
July 25 through July 31, 2002

Date	Time (HH:MM:SS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
7/29/2002	12:15:00	28.5	8.1	6.4	96.8	470	--
7/29/2002	12:30:00	29.0	8.1	6.3	96.8	469	--
7/29/2002	12:45:00	29.5	8.1	6.3	97.7	469	--
7/29/2002	13:00:00	30.0	8.1	6.3	97.6	468	--
7/29/2002	13:15:00	30.6	8.1	6.2	97.7	468	--
7/29/2002	13:30:00	31.1	8.1	6.2	97.9	467	--
7/29/2002	13:45:00	31.6	8.1	6.1	97.3	467	--
7/29/2002	14:00:00	32.0	8.1	6.0	97.0	467	--
7/29/2002	14:15:00	32.3	8.1	6.0	97.7	468	--
7/29/2002	14:30:00	32.6	8.1	6.0	96.9	470	--
7/29/2002	14:45:00	32.9	8.1	5.9	96.2	474	--
7/29/2002	15:00:00	33.2	8.1	5.9	96.5	480	--
7/29/2002	15:15:00	33.0	8.1	5.9	95.8	485	--
7/29/2002	15:30:00	32.8	8.1	5.8	93.9	490	--
7/29/2002	15:45:00	32.0	8.1	5.7	91.6	495	--
7/29/2002	16:00:00	32.0	8.1	5.7	92.2	500	--
7/29/2002	16:15:00	32.2	8.1	5.7	92.5	503	--
7/29/2002	16:30:00	31.4	8.1	5.7	90.4	506	--
7/29/2002	16:45:00	31.0	8.1	5.8	92.4	509	--
7/29/2002	17:00:00	31.3	8.1	5.9	93.4	512	--
7/29/2002	17:15:00	31.5	8.1	5.8	92.6	514	--
7/29/2002	17:30:00	31.3	8.1	5.9	93.1	517	--
7/29/2002	17:45:00	31.0	8.1	5.8	92.1	520	--
7/29/2002	18:00:00	30.5	8.1	5.8	91.1	521	--
7/29/2002	18:15:00	29.9	8.1	5.8	90.3	523	--
7/29/2002	18:30:00	29.4	8.1	5.9	90.1	525	--
7/29/2002	18:45:00	28.9	8.1	5.9	89.3	526	--
7/29/2002	19:00:00	28.4	8.1	6.0	90.3	527	--
7/29/2002	19:15:00	27.9	8.1	6.0	89.3	529	--
7/29/2002	19:30:00	27.3	8.1	6.0	88.9	530	--
7/29/2002	19:45:00	26.6	8.1	5.9	86.3	532	--
7/29/2002	20:00:00	26.0	8.1	6.0	87.3	534	--
7/29/2002	20:15:00	25.5	8.1	6.0	86.4	536	--
7/29/2002	20:30:00	25.1	8.1	6.1	86.5	537	--
7/29/2002	20:45:00	24.7	8.1	6.1	85.7	538	--
7/29/2002	21:00:00	24.3	8.1	6.1	85.3	539	--
7/29/2002	21:15:00	23.9	8.1	6.2	86.1	540	--
7/29/2002	21:30:00	23.5	8.1	6.2	85.4	541	--
7/29/2002	21:45:00	23.2	8.1	6.2	85.3	542	--
7/29/2002	22:00:00	22.8	8.1	6.2	85.0	541	--
7/29/2002	22:15:00	22.5	8.1	6.4	86.9	541	--
7/29/2002	22:30:00	22.2	8.1	6.4	87.1	541	--
7/29/2002	22:45:00	22.0	8.1	6.4	86.3	542	--
7/29/2002	23:00:00	21.9	8.1	6.5	86.8	542	--
7/29/2002	23:15:00	21.8	8.1	6.5	87.4	543	--
7/29/2002	23:30:00	21.8	8.1	6.4	85.5	544	--
7/29/2002	23:45:00	21.7	8.1	6.5	86.4	545	--
7/30/2002	0:00:00	21.6	8.1	6.5	86.7	546	--
7/30/2002	0:15:00	21.4	8.0	6.5	86.8	548	--
7/30/2002	0:30:00	21.3	8.0	6.5	86.7	548	--
7/30/2002	0:45:00	21.2	8.0	6.5	85.6	549	--

Table 8.5.1.--Continous Monitoring Data for Rio Grande at Los Padillas
July 25 through July 31, 2002

Date	Time (HH:MM:SS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
7/30/2002	1:00:00	21.2	8.0	6.4	85.2	550	--
7/30/2002	1:15:00	21.1	8.0	6.6	87.1	550	--
7/30/2002	1:30:00	21.0	8.0	6.6	87.4	551	--
7/30/2002	1:45:00	20.9	8.0	6.6	86.6	552	--
7/30/2002	2:00:00	20.8	8.0	6.7	87.7	551	--
7/30/2002	2:15:00	20.8	8.0	6.7	87.8	552	--
7/30/2002	2:30:00	20.7	8.0	6.6	87.1	552	--
7/30/2002	2:45:00	20.6	8.0	6.6	86.5	551	--
7/30/2002	3:00:00	20.5	8.0	6.7	87.7	551	--
7/30/2002	3:15:00	20.5	8.0	6.7	87.0	553	--
7/30/2002	3:30:00	20.4	8.0	6.8	88.0	554	--
7/30/2002	3:45:00	20.3	8.0	6.6	86.6	554	--
7/30/2002	4:00:00	20.2	8.0	6.7	87.1	553	--
7/30/2002	4:15:00	20.2	8.0	6.8	87.9	552	--
7/30/2002	4:30:00	20.1	8.0	6.8	88.2	551	--
7/30/2002	4:45:00	20.0	8.0	6.7	86.5	550	--
7/30/2002	5:00:00	19.9	8.0	6.7	86.4	550	--
7/30/2002	5:15:00	19.8	8.0	6.7	86.5	549	--
7/30/2002	5:30:00	19.8	8.0	6.9	88.4	549	--
7/30/2002	5:45:00	19.7	8.0	6.8	87.5	550	--
7/30/2002	6:00:00	19.6	8.0	6.7	86.6	549	--
7/30/2002	6:15:00	19.6	8.0	6.9	88.4	549	--
7/30/2002	6:30:00	19.5	8.0	6.9	88.4	548	--
7/30/2002	6:45:00	19.5	8.0	6.9	88.0	546	--
7/30/2002	7:00:00	19.4	8.0	6.9	88.1	544	--
7/30/2002	7:15:00	19.4	8.0	6.9	87.6	542	--
7/30/2002	7:30:00	19.5	8.0	7.0	89.1	538	--
7/30/2002	7:45:00	19.5	8.0	6.9	88.5	535	--
7/30/2002	8:00:00	19.5	8.0	6.9	88.9	532	--
7/30/2002	8:15:00	19.6	8.0	7.1	91.4	530	--
7/30/2002	8:30:00	19.9	8.1	7.1	91.7	527	--
7/30/2002	8:45:00	20.1	8.1	7.1	92.0	523	--

Table 8.5.1.--Continous Monitoring Data for Rio Grande at Los Padillas
July 25 through July 31, 2002

Date	Time (HH:MM:SS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
7/30/2002	9:00:00	20.4	8.1	7.2	94.0	520	--
7/30/2002	9:15:00	20.6	8.1	7.2	94.5	516	--
7/30/2002	9:30:00	21.0	8.1	7.2	94.9	512	--
7/30/2002	9:45:00	21.3	8.1	7.1	94.5	510	--
7/30/2002	10:00:00	21.7	8.1	7.2	95.7	507	--
7/30/2002	10:15:00	22.3	8.1	7.1	96.7	506	--

Descriptive Statistics	*Temp (°C)*	*pH*	*DO (mg/L)*	*DO (%)*	*SPC (uS/cm)*	*Turbidity (NTU)*
Mean	25.8	8.0	6.2	89.3	511	--
Standard Error	0.18	0.00	0.02	0.15	1.38	--
Median	25.1	8.0	6.2	88.3	522	--
Mode	22.1	8.0	6.0	87.6	534	--
Standard Deviation	3.90	0.05	0.42	3.32	30.43	--
Sample Variance	15.19	0.00	0.17	11.05	926.22	--
Kurtosis	-1.14	0.03	-0.84	-0.63	-0.95	--
Skewness	0.31	0.18	-0.02	0.62	-0.60	--
Range	14.0	0.2	1.9	14.5	112	--
Minimum	19.4	7.9	5.3	83.4	442	--
Maximum	33.5	8.1	7.2	97.9	554	--
Sum	12442.2	3882.2	2997.7	43142.8	246870	--
Count	483	483	483	483	483	--

Table 8.5.2.--Continuous Monitoring Data for Rio Grande at Los Padillas
October 31 through November 1, 2002

[--, no data; ~, approximately; >, greater than; °C, degrees Celsius; mg/L, milligrams per liter; % sat, percent saturation; uS/cm, microsiemens per centimeter; NTU, Nephelometric turbidity units.]

DataSonde 4a 40183
Log File Name : LOS PADILLAS 10-31-02
Setup Date (MMDDYY) : 103102
Setup Time (HHMMSS) : 101617
Starting Date (MMDDYY) : 103102
Starting Time (HHMMSS) : 101617
Stopping Date (MMDDYY) : 110202
Stopping Time (HHMMSS) : 120000
Interval (HHMMSS) : 001500
Sensor warmup (HHMMSS) : 000200
Circltr warmup (HHMMSS) : 000100

Date	Time (HHMMSS)	Temp (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
10/31/2002	101617	11.5	7.7	8.4	91.2	399	> 1000
10/31/2002	103117	11.9	7.8	8.3	91.8	398	> 1000
10/31/2002	104617	12.3	7.8	8.2	91.2	397	> 1000
10/31/2002	110117	12.7	7.8	8.2	91.7	396	> 1000
10/31/2002	111617	13.1	7.8	8.1	91.6	395	> 1000
10/31/2002	113117	13.5	7.8	8.1	92.3	396	> 1000
10/31/2002	114617	13.9	7.8	8.0	91.8	396	> 1000
10/31/2002	120117	14.2	7.8	7.9	91.2	394	> 1000
10/31/2002	121617	14.6	7.8	7.9	92.4	393	> 1000
10/31/2002	123117	14.9	7.8	7.9	92.2	392	> 1000
10/31/2002	124617	15.2	7.8	7.8	92.4	391	> 1000
10/31/2002	130117	15.4	7.8	7.8	92.3	390	> 1000
10/31/2002	131617	15.7	7.8	7.7	91.8	389	> 1000
10/31/2002	133117	15.9	7.8	7.7	92.2	390	> 1000
10/31/2002	134617	16.2	7.8	7.6	91.7	391	> 1000
10/31/2002	140117	16.4	7.9	7.6	91.8	394	> 1000
10/31/2002	141617	16.6	7.8	7.5	91.4	398	> 1000
10/31/2002	143117	16.9	7.8	7.4	91.0	402	> 1000
10/31/2002	144617	17.0	7.8	7.3	90.1	405	> 1000
10/31/2002	150117	17.0	7.8	7.3	89.2	408	> 1000
10/31/2002	151617	17.1	7.8	7.2	89.1	410	> 1000
10/31/2002	153117	17.1	7.8	7.2	88.9	412	> 1000
10/31/2002	154617	17.1	7.8	7.2	88.0	414	> 1000
10/31/2002	160117	17.0	7.8	7.1	87.7	415	> 1000
10/31/2002	161617	17.0	7.8	7.1	87.9	412	> 1000
10/31/2002	163117	16.8	7.8	7.2	87.8	406	> 1000
10/31/2002	164617	16.7	7.8	7.1	87.1	409	> 1000
10/31/2002	170117	16.6	7.8	7.1	86.0	413	> 1000
10/31/2002	171617	16.5	7.8	7.0	85.4	416	> 1000
10/31/2002	173117	16.4	7.8	7.0	84.7	417	> 1000
10/31/2002	174617	16.2	7.8	7.0	84.7	416	> 1000
10/31/2002	180117	16.1	7.8	7.0	84.6	416	> 1000
10/31/2002	181617	16.0	7.8	7.0	84.5	416	> 1000
10/31/2002	183117	15.8	7.8	7.0	84.1	417	> 1000
10/31/2002	184617	15.7	7.8	7.0	83.7	418	> 1000
10/31/2002	190117	15.6	7.8	7.0	83.7	417	> 1000
10/31/2002	191617	15.4	7.8	7.0	83.5	408	> 1000

Table 8.5.2.--Continuous Monitoring Data for Rio Grande at Los Padillas
October 31 through November 1, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
10/31/2002	193117	15.2	7.8	7.0	83.1	405	> 1000
10/31/2002	194617	15.1	7.8	7.1	83.7	410	> 1000
10/31/2002	200117	15.0	7.8	7.1	83.5	415	> 1000
10/31/2002	201617	15.0	7.8	7.1	83.1	418	> 1000
10/31/2002	203117	14.9	7.8	7.0	82.7	420	> 1000
10/31/2002	204617	14.8	7.8	7.1	82.9	421	> 1000
10/31/2002	210117	14.6	7.7	7.1	82.7	421	> 1000
10/31/2002	211617	14.5	7.7	7.1	82.8	421	> 1000
10/31/2002	213117	14.4	7.7	7.1	82.5	421	> 1000
10/31/2002	214617	14.3	7.7	7.1	82.3	420	> 1000
10/31/2002	220117	14.2	7.7	7.1	82.6	420	> 1000
10/31/2002	221617	14.1	7.7	7.2	82.8	419	> 1000
10/31/2002	223117	13.9	7.7	7.2	82.5	420	> 1000
10/31/2002	224617	13.8	7.7	7.2	82.5	420	> 1000
10/31/2002	230117	13.6	7.7	7.2	82.5	419	> 1000
10/31/2002	231617	13.5	7.7	7.3	82.7	419	> 1000
10/31/2002	233117	13.4	7.7	7.3	82.9	420	> 1000
10/31/2002	234617	13.3	7.7	7.3	83.1	420	> 1000
11/1/2002	000117	13.1	7.7	7.4	83.8	420	> 1000
11/1/2002	001617	13.1	7.7	7.4	83.4	420	> 1000
11/1/2002	003117	13.0	7.7	7.4	83.3	419	> 1000
11/1/2002	004617	12.9	7.7	7.4	83.1	419	> 1000
11/1/2002	010117	12.8	7.7	7.5	83.7	420	> 1000
11/1/2002	011617	12.7	7.7	7.5	83.7	421	> 1000
11/1/2002	013117	12.6	7.7	7.4	83.2	420	> 1000
11/1/2002	014617	12.5	7.7	7.6	84.3	419	> 1000
11/1/2002	020117	12.4	7.7	7.6	84.1	419	> 1000
11/1/2002	021617	12.3	7.7	7.5	83.7	420	> 1000
11/1/2002	023117	12.3	7.7	7.5	83.6	420	> 1000
11/1/2002	024617	12.2	7.7	7.6	83.7	420	> 1000
11/1/2002	030117	12.1	7.7	7.6	84.2	420	> 1000
11/1/2002	031617	12.1	7.7	7.6	84.0	419	> 1000
11/1/2002	033117	12.0	7.7	7.6	83.8	418	> 1000
11/1/2002	034617	11.9	7.7	7.6	83.9	419	> 1000
11/1/2002	040117	11.9	7.7	7.6	83.9	419	> 1000
11/1/2002	041617	11.8	7.7	7.6	83.9	418	> 1000
11/1/2002	043117	11.7	7.7	7.7	83.9	418	> 1000
11/1/2002	044617	11.7	7.7	7.7	83.8	418	> 1000
11/1/2002	050117	11.6	7.7	7.7	83.8	418	> 1000
11/1/2002	051617	11.5	7.7	7.7	83.8	418	> 1000
11/1/2002	053117	11.4	7.7	7.7	84.2	417	> 1000
11/1/2002	054617	11.4	7.7	7.7	83.8	417	> 1000
11/1/2002	060117	11.3	7.7	7.7	84.0	416	> 1000
11/1/2002	061617	11.2	7.7	7.8	84.4	416	> 1000
11/1/2002	063117	11.2	7.7	7.8	84.4	415	> 1000
11/1/2002	064617	11.1	7.7	7.8	84.6	414	> 1000
11/1/2002	070117	11.1	7.7	7.8	84.6	414	> 1000
11/1/2002	071617	11.0	7.7	7.9	85.1	413	> 1000
11/1/2002	073117	10.9	7.7	7.9	84.8	410	> 1000
11/1/2002	074617	10.9	7.8	7.9	85.0	409	> 1000
11/1/2002	080117	10.9	7.8	8.0	85.6	408	> 1000

Table 8.5.2.--Continuous Monitoring Data for Rio Grande at Los Padillas
October 31 through November 1, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
11/1/2002	081617	11.0	7.8	8.0	86.1	407	> 1000
11/1/2002	083117	11.1	7.8	7.9	85.9	406	> 1000
11/1/2002	084617	11.3	7.8	8.0	86.9	404	> 1000
11/1/2002	090117	11.5	7.8	8.0	87.3	404	> 1000
11/1/2002	091617	11.8	7.8	8.0	87.7	401	> 1000
11/1/2002	093117	12.0	7.8	8.0	88.3	401	> 1000
11/1/2002	094617	12.3	7.8	8.0	88.4	399	> 1000
11/1/2002	100117	12.7	7.8	8.0	89.0	398	> 1000
11/1/2002	101617	13.0	7.8	8.0	89.7	397	> 1000
11/1/2002	103117	13.4	7.8	7.9	89.5	397	> 1000
11/1/2002	104617	13.8	7.8	7.9	90.3	397	> 1000
11/1/2002	110117	14.2	7.8	7.8	90.1	396	> 1000
11/1/2002	111617	14.5	7.8	7.8	90.5	396	> 1000
11/1/2002	113117	14.9	7.8	7.7	90.8	395	> 1000
11/1/2002	114617	15.3	7.9	7.7	90.7	391	> 1000
11/1/2002	120117	15.5	7.9	7.7	91.3	385	> 1000
11/1/2002	121617	15.7	7.9	7.6	91.2	378	> 1000
11/1/2002	123117	15.9	7.9	7.6	91.8	374	> 1000
11/1/2002	124617	16.1	7.9	7.6	91.2	372	> 1000
11/1/2002	130117	16.2	7.9	7.6	91.4	371	> 1000
11/1/2002	131617	16.2	7.9	7.5	91.0	371	> 1000
11/1/2002	133117	16.3	7.9	7.5	90.9	373	> 1000
11/1/2002	134617	16.2	7.9	7.5	90.4	378	> 1000

Descriptive Statistics	*Temp (°C)*	*pH*	*DO (mg/L)*	*DO (%)*	*SPC (uS/cm)*	*Turbidity (NTU)*
Mean	13.9	7.8	7.5	86.6	408	> 1000
Standard Error	0.19	0.00	0.03	0.33	1.27	~ 0
Median	13.9	7.8	7.6	84.8	413	> 1000
Mode	12.7	7.7	7.6	83.7	420	> 1000
Standard Deviation	1.97	0.05	0.35	3.48	13.42	~ 0
Sample Variance	3.88	0.00	0.13	12.12	180.20	~ 0
Kurtosis	-1.36	0.68	-0.94	-1.49	0.30	~ 0
Skewness	0.06	1.08	0.08	0.41	-1.04	~ 0
Range	6.2	0.2	1.4	10.1	50	~ 0
Minimum	10.9	7.7	7.0	82.3	371	> 1000
Maximum	17.1	7.9	8.4	92.4	421	> 1000
Sum	1544.6	863.3	835.9	9617.1	45237	> 111000
Count	111	111	111	111	111	111

Table 8.5.3.--Continuous Monitoring Data for Rio Grande at Los Padillas
December 18 through December 23, 2002

[--, no data; °C, degrees Celsius; mg/L, milligrams per liter; % sat, percent saturation; uS/cm, microsiemens per centimeter; NTU, Nephelometric turbidity units.]

MiniSonde4a 36754
Log File Name : LOS PADILLAS 12-18-02
Setup Date (MMDDYY) : 121802
Setup Time (HHMMSS) : 094828
Starting Date (MMDDYY) : 121802
Starting Time (HHMMSS) : 093000
Stopping Date (MMDDYY) : 122402
Stopping Time (HHMMSS) : 120000
Interval (HHMMSS) : 001500
Sensor warmup (HHMMSS) : 000200
CircItr warmup (HHMMSS) : 000100

Date	Time (HHMMSS)	Temp (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
12/18/02	100000	4.0	8.2	11.3	103.4	323	--
12/18/02	101500	4.2	8.2	10.9	100.7	323	--
12/18/02	103000	4.2	8.2	10.7	99.2	323	--
12/18/02	104500	4.4	8.2	7.6	70.7	322	--
12/18/02	110000	4.7	8.2	7.9	73.6	322	--
12/18/02	111500	5.0	8.3	7.8	73.8	321	--
12/18/02	113000	5.4	8.3	8.6	82.1	320	--
12/18/02	114500	5.7	8.3	10.9	104.8	320	--
12/18/02	120000	6.1	8.3	10.9	106.3	320	--
12/18/02	121500	6.6	8.3	10.8	105.7	320	--
12/18/02	123000	6.6	8.3	9.0	88.8	320	--
12/18/02	124500	6.2	8.3	11.0	106.5	319	--
12/18/02	130000	5.9	8.3	11.0	105.9	319	--
12/18/02	131500	5.8	8.3	11.0	105.8	319	--
12/18/02	133000	5.7	8.3	10.9	105.0	319	--
12/18/02	134500	5.6	8.3	10.9	105.0	319	--
12/18/02	140000	5.7	8.4	11.0	105.4	320	--
12/18/02	141500	5.9	8.4	11.0	105.9	321	--
12/18/02	143000	6.1	8.4	10.9	106.0	323	--
12/18/02	144500	6.2	8.4	10.9	105.8	324	--
12/18/02	150000	6.3	8.4	10.8	105.3	327	--
12/18/02	151500	6.4	8.4	10.7	104.5	328	--
12/18/02	153000	6.2	8.3	10.5	102.7	328	--
12/18/02	154500	5.8	8.3	10.4	99.9	326	--
12/18/02	160000	5.6	8.3	10.4	99.6	325	--
12/18/02	161500	6.0	8.3	10.5	101.6	328	--
12/18/02	163000	6.0	8.3	10.5	101.4	328	--
12/18/02	164500	6.1	8.3	10.5	101.5	329	--
12/18/02	170000	5.9	8.3	10.5	101.4	328	--
12/18/02	171500	5.8	8.3	10.5	101.4	328	--
12/18/02	173000	5.8	8.3	10.5	101.0	329	--
12/18/02	174500	5.7	8.3	10.4	100.3	330	--
12/18/02	180000	5.7	8.3	10.4	100.1	329	--
12/18/02	181500	5.7	8.3	10.3	98.9	330	--
12/18/02	183000	5.7	8.3	10.3	99.1	331	--
12/18/02	184500	5.7	8.3	10.2	98.0	331	--
12/18/02	190000	5.7	8.3	10.2	97.8	332	--

Table 8.5.3.--Continuous Monitoring Data for Rio Grande at Los Padillas
December 18 through December 23, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
12/18/02	191500	5.7	8.3	10.3	98.5	333	--
12/18/02	193000	5.7	8.3	10.2	98.3	333	--
12/18/02	194500	5.6	8.3	10.3	98.5	334	--
12/18/02	200000	5.6	8.3	10.2	98.2	334	--
12/18/02	201500	5.6	8.3	10.2	98.0	334	--
12/18/02	203000	5.6	8.3	10.3	98.9	334	--
12/18/02	204500	5.5	8.3	10.3	98.8	334	--
12/18/02	210000	5.3	8.3	10.4	98.7	333	--
12/18/02	211500	5.2	8.3	10.4	98.9	332	--
12/18/02	213000	5.1	8.3	10.5	99.2	332	--
12/18/02	214500	5.0	8.3	10.5	99.4	332	--
12/18/02	220000	4.9	8.3	10.5	99.1	332	--
12/18/02	221500	4.7	8.3	10.6	99.7	332	--
12/18/02	223000	4.7	8.3	10.6	99.4	333	--
12/18/02	224500	4.6	8.3	10.6	99.2	333	--
12/18/02	230000	4.5	8.3	10.7	99.6	333	--
12/18/02	231500	4.5	8.3	10.7	99.7	333	--
12/18/02	233000	4.4	8.3	10.7	99.6	334	--
12/18/02	234500	4.3	8.3	10.8	99.9	334	--
12/19/02	000000	4.3	8.3	10.7	99.5	334	--
12/19/02	001500	4.2	8.3	10.7	99.2	334	--
12/19/02	003000	4.2	8.3	10.8	99.5	334	--
12/19/02	004500	4.2	8.3	10.8	99.4	334	--
12/19/02	010000	4.2	8.3	10.7	99.1	334	--
12/19/02	011500	4.2	8.3	10.7	99.3	335	--
12/19/02	013000	4.2	8.3	10.7	99.3	334	--
12/19/02	014500	4.2	8.3	10.8	99.8	335	--
12/19/02	020000	4.2	8.3	10.8	99.6	335	--
12/19/02	021500	4.2	8.3	10.8	99.5	335	--
12/19/02	023000	4.2	8.3	10.7	99.0	335	--
12/19/02	024500	4.2	8.3	10.8	99.5	335	--
12/19/02	030000	4.1	8.3	10.8	99.7	335	--
12/19/02	031500	4.1	8.3	10.8	99.4	336	--
12/19/02	033000	4.0	8.3	10.9	100.0	336	--
12/19/02	034500	3.9	8.3	10.9	99.9	336	--
12/19/02	040000	3.9	8.3	10.9	99.6	336	--
12/19/02	041500	3.9	8.3	10.9	99.8	336	--
12/19/02	043000	3.8	8.3	10.9	100.1	335	--
12/19/02	044500	3.7	8.3	11.0	99.8	334	--
12/19/02	050000	3.6	8.3	11.0	99.8	335	--
12/19/02	051500	3.5	8.3	11.0	100.0	335	--
12/19/02	053000	3.4	8.3	11.0	99.4	334	--
12/19/02	054500	3.3	8.3	11.0	99.2	333	--
12/19/02	060000	3.3	8.3	11.0	99.1	333	--
12/19/02	061500	3.2	8.3	11.0	99.0	332	--
12/19/02	063000	3.1	8.3	11.1	99.7	332	--
12/19/02	064500	3.1	8.3	11.1	99.3	332	--
12/19/02	070000	2.9	8.3	11.1	98.9	331	--
12/19/02	071500	2.9	8.3	11.1	99.2	330	--
12/19/02	073000	2.8	8.3	11.1	99.2	330	--
12/19/02	074500	2.7	8.3	11.2	99.5	328	--

Table 8.5.3.--Continuous Monitoring Data for Rio Grande at Los Padillas
December 18 through December 23, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
12/19/02	080000	2.6	8.3	11.3	100.2	327	--
12/19/02	081500	2.6	8.3	11.4	100.8	327	--
12/19/02	083000	2.6	8.3	11.4	100.7	326	--
12/19/02	084500	2.7	8.3	11.5	101.8	326	--
12/19/02	090000	2.8	8.3	11.5	102.3	325	--
12/19/02	091500	2.9	8.3	11.5	102.6	324	--
12/19/02	093000	3.1	8.3	11.6	104.3	323	--
12/19/02	094500	3.3	8.3	11.6	104.8	323	--
12/19/02	100000	3.5	8.4	11.6	105.2	322	--
12/19/02	101500	3.8	8.4	11.6	106.0	322	--
12/19/02	103000	4.0	8.4	11.6	106.8	321	--
12/19/02	104500	4.3	8.4	11.6	107.2	320	--
12/19/02	110000	4.5	8.4	11.6	107.9	320	--
12/19/02	111500	4.8	8.4	11.5	108.2	319	--
12/19/02	113000	5.1	8.4	11.5	109.0	318	--
12/19/02	114500	5.3	8.4	11.5	109.4	318	--
12/19/02	120000	5.6	8.4	11.5	110.1	317	--
12/19/02	121500	5.8	8.4	11.5	110.8	317	--
12/19/02	123000	6.1	8.4	11.4	110.9	317	--
12/19/02	124500	6.3	8.4	11.4	111.0	317	--
12/19/02	130000	6.5	8.4	11.4	111.6	316	--
12/19/02	131500	6.6	8.4	11.3	111.1	316	--
12/19/02	133000	6.8	8.4	11.3	111.5	317	--
12/19/02	134500	6.9	8.4	11.3	111.9	317	--
12/19/02	140000	7.0	8.4	11.2	111.1	317	--
12/19/02	141500	7.0	8.4	11.2	111.1	318	--
12/19/02	143000	7.1	8.4	11.1	110.1	319	--
12/19/02	144500	7.1	8.4	11.1	110.2	320	--
12/19/02	150000	7.0	8.4	11.1	109.8	321	--
12/19/02	151500	7.0	8.4	11.1	109.8	322	--
12/19/02	153000	7.0	8.4	10.9	108.4	323	--
12/19/02	154500	6.9	8.4	10.9	107.9	323	--
12/19/02	160000	6.8	8.4	10.4	102.3	323	--
12/19/02	161500	6.7	8.4	10.2	100.6	324	--
12/19/02	163000	6.6	8.4	10.3	101.7	324	--
12/19/02	164500	6.5	8.3	10.2	100.1	323	--
12/19/02	170000	6.4	8.3	10.1	98.3	323	--
12/19/02	171500	6.2	8.3	10.2	98.9	322	--
12/19/02	173000	6.1	8.3	10.3	99.8	322	--
12/19/02	174500	5.9	8.3	10.0	96.4	322	--
12/19/02	180000	5.8	8.3	10.0	96.8	321	--
12/19/02	181500	5.7	8.3	10.6	101.3	322	--
12/19/02	183000	5.5	8.3	10.6	101.8	310	--
12/19/02	184500	5.4	8.3	10.6	100.9	277	--
12/19/02	190000	5.3	8.3	10.6	101.0	317	--
12/19/02	191500	5.2	8.3	10.6	100.1	316	--
12/19/02	193000	5.1	8.3	10.6	100.3	305	--
12/19/02	194500	5.0	8.3	10.5	99.5	278	--
12/19/02	200000	4.9	8.3	10.6	99.9	288	--
12/19/02	201500	4.8	8.3	10.6	99.6	233	--
12/19/02	203000	4.6	8.3	10.6	99.0	139	--

Table 8.5.3.--Continuous Monitoring Data for Rio Grande at Los Padillas
December 18 through December 23, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
12/19/02	204500	4.5	8.3	10.8	100.3	88	--
12/19/02	210000	4.3	8.3	10.7	99.0	80	--
12/19/02	211500	4.2	8.3	9.7	89.5	79	--
12/19/02	213000	4.0	8.3	10.7	98.5	89	--
12/19/02	214500	3.9	8.3	10.8	99.1	113	--
12/19/02	220000	3.8	8.3	10.9	99.1	124	--
12/19/02	221500	3.6	8.3	11.0	99.8	130	--
12/19/02	223000	3.5	8.3	11.1	100.5	176	--
12/19/02	224500	3.3	8.3	11.1	100.2	226	--
12/19/02	230000	3.1	8.3	11.1	99.6	143	--
12/19/02	231500	3.0	8.3	11.1	99.7	207	--
12/19/02	233000	2.9	8.3	11.2	99.9	259	--
12/19/02	234500	2.7	8.3	11.2	100.0	186	--
12/20/02	000000	2.6	8.3	11.2	99.2	149	--
12/20/02	001500	2.6	8.3	11.3	100.0	120	--
12/20/02	003000	2.4	8.3	11.3	99.1	121	--
12/20/02	004500	2.3	8.3	10.1	88.7	75	--
12/20/02	010000	2.2	8.3	11.4	99.7	68	--
12/20/02	011500	2.1	8.3	11.3	98.9	79	--
12/20/02	013000	2.1	8.3	11.3	98.7	73	--
12/20/02	014500	2.1	8.3	11.3	98.9	114	--
12/20/02	020000	2.0	8.3	11.4	99.2	149	--
12/20/02	021500	1.9	8.3	11.4	99.3	143	--
12/20/02	023000	1.9	8.3	11.5	99.5	141	--
12/20/02	024500	1.8	8.3	11.5	99.7	156	--
12/20/02	030000	1.8	8.3	11.5	99.3	145	--
12/20/02	031500	1.6	8.3	11.5	99.4	144	--
12/20/02	033000	1.6	8.3	11.6	99.5	158	--
12/20/02	034500	1.6	8.3	11.6	99.8	161	--
12/20/02	040000	1.5	8.3	11.6	99.4	163	--
12/20/02	041500	1.5	8.3	11.5	98.7	156	--
12/20/02	043000	1.5	8.3	11.4	98.1	161	--
12/20/02	044500	1.4	8.3	11.5	98.5	284	--
12/20/02	050000	1.3	8.3	9.7	82.6	89	--
12/20/02	051500	1.2	8.3	9.3	79.2	89	--
12/20/02	053000	1.2	8.3	9.8	83.1	89	--
12/20/02	054500	1.1	8.3	10.6	90.2	89	--
12/20/02	060000	1.0	8.3	10.5	88.5	88	--
12/20/02	061500	0.9	8.3	11.7	99.0	95	--
12/20/02	063000	0.8	8.3	11.8	99.2	138	--
12/20/02	064500	0.8	8.3	11.8	99.5	137	--
12/20/02	070000	0.7	8.3	11.9	99.9	84	--
12/20/02	071500	0.6	8.3	11.9	99.7	95	--
12/20/02	073000	0.5	8.3	11.9	99.3	68	--
12/20/02	074500	0.4	8.3	11.9	99.3	67	--
12/20/02	080000	0.4	8.3	12.1	100.3	67	--
12/20/02	081500	0.3	8.3	12.0	100.1	67	--
12/20/02	083000	0.4	8.3	12.0	99.5	67	--
12/20/02	084500	0.4	8.3	12.1	100.8	66	--
12/20/02	090000	0.5	8.3	12.2	101.6	66	--
12/20/02	091500	0.6	8.3	12.3	102.7	66	--

Table 8.5.3.--Continuous Monitoring Data for Rio Grande at Los Padillas
December 18 through December 23, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
12/20/02	093000	0.8	8.3	12.3	103.8	66	--
12/20/02	094500	1.0	8.4	12.4	104.9	66	--
12/20/02	100000	1.2	8.4	12.3	104.9	66	--
12/20/02	101500	1.5	8.4	12.3	105.9	66	--
12/20/02	103000	1.8	8.4	12.2	105.9	66	--
12/20/02	104500	2.0	8.4	12.2	106.5	66	--
12/20/02	110000	2.3	8.4	12.2	107.2	65	--
12/20/02	111500	2.6	8.4	12.1	107.5	65	--
12/20/02	113000	2.9	8.4	12.1	107.9	65	--
12/20/02	114500	3.2	8.4	12.1	108.5	65	--
12/20/02	120000	3.5	8.4	11.9	108.1	65	--
12/20/02	121500	3.8	8.4	11.9	109.0	65	--
12/20/02	123000	4.0	8.4	11.9	109.2	65	--
12/20/02	124500	4.1	8.4	10.6	98.0	65	--
12/20/02	130000	4.3	8.4	10.3	95.4	65	--
12/20/02	131500	4.4	8.4	10.5	97.1	65	--
12/20/02	133000	4.6	8.4	10.6	99.0	79	--
12/20/02	134500	4.7	8.4	11.7	109.4	160	--
12/20/02	140000	4.8	8.4	11.7	109.7	149	--
12/20/02	141500	4.8	8.4	11.6	109.4	155	--
12/20/02	143000	4.9	8.4	11.5	108.6	138	--
12/20/02	144500	5.0	8.4	11.5	108.6	137	--
12/20/02	150000	5.0	8.4	11.4	107.9	134	--
12/20/02	151500	5.0	8.4	11.4	107.3	112	--
12/20/02	153000	4.9	8.4	11.4	107.2	127	--
12/20/02	154500	4.8	8.4	11.4	107.1	152	--
12/20/02	160000	4.7	8.4	11.2	105.3	129	--
12/20/02	161500	4.7	8.4	11.3	105.5	134	--
12/20/02	163000	4.6	8.4	11.2	105.0	111	--
12/20/02	164500	4.5	8.4	11.2	104.1	115	--
12/20/02	170000	4.5	8.4	11.0	102.8	85	--
12/20/02	171500	4.5	8.4	11.0	102.8	85	--
12/20/02	173000	4.4	8.4	11.0	102.1	94	--
12/20/02	174500	4.4	8.4	10.9	101.2	83	--
12/20/02	180000	4.3	8.4	11.0	101.4	69	--
12/20/02	181500	4.2	8.4	10.9	101.2	62	--
12/20/02	183000	4.1	8.4	10.9	100.8	93	--
12/20/02	184500	4.1	8.3	10.9	100.7	99	--
12/20/02	190000	4.0	8.3	10.9	99.9	100	--
12/20/02	191500	4.0	8.3	10.9	99.9	100	--
12/20/02	193000	3.9	8.3	10.9	99.6	130	--
12/20/02	194500	3.8	8.3	10.9	99.6	130	--
12/20/02	200000	3.7	8.3	10.8	98.8	123	--
12/20/02	201500	3.6	8.3	11.0	99.9	131	--
12/20/02	203000	3.5	8.3	11.0	99.6	127	--
12/20/02	204500	3.4	8.3	10.2	92.0	93	--
12/20/02	210000	3.3	8.3	10.5	94.3	97	--
12/20/02	211500	3.2	8.3	10.5	94.5	114	--
12/20/02	213000	3.0	8.3	10.8	97.0	91	--
12/20/02	214500	3.0	8.3	11.1	99.0	87	--
12/20/02	220000	2.9	8.3	11.1	99.4	83	--

Table 8.5.3.--Continuous Monitoring Data for Rio Grande at Los Padillas
December 18 through December 23, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
12/20/02	221500	2.9	8.3	11.1	99.3	69	--
12/20/02	223000	2.8	8.3	11.1	99.2	64	--
12/20/02	224500	2.7	8.3	11.2	99.3	88	--
12/20/02	230000	2.6	8.3	11.2	99.1	78	--
12/20/02	231500	2.6	8.3	11.2	99.2	96	--
12/20/02	233000	2.5	8.3	11.2	98.9	101	--
12/20/02	234500	2.4	8.3	11.3	99.1	101	--
12/21/02	000000	2.4	8.3	11.3	99.2	95	--
12/21/02	001500	2.4	8.3	11.3	99.3	74	--
12/21/02	003000	2.3	8.3	11.3	99.4	88	--
12/21/02	004500	2.3	8.3	10.1	88.9	61	--
12/21/02	010000	2.2	8.3	9.0	79.0	63	--
12/21/02	011500	2.2	8.3	11.3	99.0	63	--
12/21/02	013000	2.2	8.3	11.3	99.4	62	--
12/21/02	014500	2.2	8.3	11.2	98.4	64	--
12/21/02	020000	2.1	8.3	11.2	97.5	70	--
12/21/02	021500	2.1	8.3	11.0	95.8	76	--
12/21/02	023000	2.1	8.3	8.4	73.4	63	--
12/21/02	024500	2.0	8.3	10.3	89.8	63	--
12/21/02	030000	2.0	8.3	10.1	87.6	62	--
12/21/02	031500	2.0	8.3	8.5	74.0	62	--
12/21/02	033000	2.0	8.3	10.0	87.2	62	--
12/21/02	034500	2.0	8.3	9.9	86.5	62	--
12/21/02	040000	2.0	8.3	9.6	83.4	62	--
12/21/02	041500	1.9	8.3	9.8	85.0	62	--
12/21/02	043000	1.9	8.3	9.7	84.3	62	--
12/21/02	044500	1.8	8.3	9.9	85.8	62	--
12/21/02	050000	1.8	8.3	9.7	84.3	62	--
12/21/02	051500	1.8	8.3	9.7	84.1	62	--
12/21/02	053000	1.7	8.3	9.5	82.4	62	--
12/21/02	054500	1.7	8.3	9.8	84.7	62	--
12/21/02	060000	1.7	8.3	9.7	83.5	62	--
12/21/02	061500	1.6	8.3	9.6	82.8	62	--
12/21/02	063000	1.6	8.3	9.6	82.4	62	--
12/21/02	064500	1.5	8.3	9.4	80.7	62	--
12/21/02	070000	1.5	8.3	9.4	80.8	61	--
12/21/02	071500	1.5	8.3	9.3	79.8	61	--
12/21/02	073000	1.4	8.3	9.0	77.4	61	--
12/21/02	074500	1.3	8.3	8.9	76.2	61	--
12/21/02	080000	1.4	8.3	9.0	76.8	61	--
12/21/02	081500	1.4	8.3	9.3	79.3	61	--
12/21/02	083000	1.4	8.3	9.4	80.7	61	--
12/21/02	084500	1.5	8.4	9.4	80.6	61	--
12/21/02	090000	1.6	8.4	9.3	80.0	61	--
12/21/02	091500	1.8	8.4	9.7	83.8	61	--
12/21/02	093000	1.9	8.4	8.9	77.6	61	--
12/21/02	094500	2.1	8.4	9.0	78.9	61	--
12/21/02	100000	2.2	8.4	8.8	77.1	60	--
12/21/02	101500	2.4	8.4	9.4	82.5	80	--
12/21/02	103000	2.6	8.4	9.0	80.0	74	--
12/21/02	104500	2.9	8.4	9.4	83.8	61	--

Table 8.5.3.--Continuous Monitoring Data for Rio Grande at Los Padillas
December 18 through December 23, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
12/21/02	110000	3.1	8.4	10.0	90.1	62	--
12/21/02	111500	3.2	8.4	10.1	90.8	66	--
12/21/02	113000	3.4	8.4	10.1	91.5	68	--
12/21/02	114500	3.6	8.4	9.5	86.3	66	--
12/21/02	120000	3.8	8.4	9.4	86.0	75	--
12/21/02	121500	3.9	8.4	8.5	77.5	91	--
12/21/02	123000	4.1	8.4	7.7	71.2	59	--
12/21/02	124500	4.1	8.4	9.3	85.9	58	--
12/21/02	130000	4.2	8.4	8.3	76.9	57	--
12/21/02	131500	4.2	8.4	7.7	71.4	57	--
12/21/02	133000	4.3	8.4	7.2	66.2	57	--
12/21/02	134500	4.3	8.4	6.9	64.2	57	--
12/21/02	140000	4.4	8.4	9.0	83.7	57	--
12/21/02	141500	4.4	8.4	9.8	91.1	66	--
12/21/02	143000	4.4	8.4	8.6	79.8	62	--
12/21/02	144500	4.5	8.4	8.3	77.6	57	--
12/21/02	150000	4.5	8.4	9.2	86.0	57	--
12/21/02	151500	4.6	8.4	9.5	88.8	57	--
12/21/02	153000	4.6	8.4	9.5	88.3	57	--
12/21/02	154500	4.6	8.4	9.9	92.4	57	--
12/21/02	160000	4.6	8.4	10.0	93.2	57	--
12/21/02	161500	4.6	8.4	9.4	87.9	57	--
12/21/02	163000	4.6	8.4	9.2	86.3	58	--
12/21/02	164500	4.6	8.4	9.5	89.0	100	--
12/21/02	170000	4.7	8.4	9.2	85.7	100	--
12/21/02	171500	4.6	8.4	8.9	83.2	101	--
12/21/02	173000	4.6	8.4	8.4	78.7	79	--
12/21/02	174500	4.6	8.4	8.0	75.0	68	--
12/21/02	180000	4.6	8.3	8.8	81.8	66	--
12/21/02	181500	4.6	8.3	9.0	83.8	68	--
12/21/02	183000	4.7	8.3	9.0	84.5	66	--
12/21/02	184500	4.6	8.3	9.0	84.3	68	--
12/21/02	190000	4.6	8.3	8.8	81.9	68	--
12/21/02	191500	4.6	8.3	8.5	79.8	67	--
12/21/02	193000	4.6	8.3	8.6	80.3	69	--
12/21/02	194500	4.6	8.3	9.0	83.6	69	--
12/21/02	200000	4.6	8.3	8.6	80.2	68	--
12/21/02	201500	4.5	8.3	8.4	78.1	67	--
12/21/02	203000	4.5	8.3	8.3	77.2	69	--
12/21/02	204500	4.5	8.3	8.1	75.6	68	--
12/21/02	210000	4.5	8.3	8.0	74.6	63	--
12/21/02	211500	4.4	8.3	7.4	68.9	62	--
12/21/02	213000	4.3	8.3	7.4	68.3	59	--
12/21/02	214500	4.3	8.3	7.1	65.5	59	--
12/21/02	220000	4.2	8.3	8.0	73.4	59	--
12/21/02	221500	4.2	8.2	8.3	76.9	59	--
12/21/02	223000	4.1	8.2	8.8	81.1	59	--
12/21/02	224500	4.1	8.2	9.1	83.7	59	--
12/21/02	230000	4.1	8.2	8.9	81.8	59	--
12/21/02	231500	4.1	8.2	8.5	77.9	59	--
12/21/02	233000	4.0	8.2	8.2	75.6	60	--

Table 8.5.3.--Continuous Monitoring Data for Rio Grande at Los Padillas
December 18 through December 23, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
12/21/02	234500	4.0	8.2	7.9	73.0	59	--
12/22/02	000000	3.9	8.2	8.1	74.2	59	--
12/22/02	001500	3.9	8.2	8.2	75.5	59	--
12/22/02	003000	3.9	8.2	8.0	73.6	59	--
12/22/02	004500	3.9	8.2	7.2	66.1	61	--
12/22/02	010000	3.9	8.2	7.6	69.9	60	--
12/22/02	011500	3.9	8.2	7.8	71.2	60	--
12/22/02	013000	3.9	8.2	8.4	77.2	60	--
12/22/02	014500	3.8	8.2	7.7	70.2	60	--
12/22/02	020000	3.8	8.2	8.3	75.9	61	--
12/22/02	021500	3.8	8.2	8.5	77.7	60	--
12/22/02	023000	3.8	8.2	8.4	76.8	60	--
12/22/02	024500	3.8	8.2	8.2	75.1	60	--
12/22/02	030000	3.8	8.2	8.4	76.3	60	--
12/22/02	031500	3.7	8.2	7.7	69.8	59	--
12/22/02	033000	3.7	8.2	7.4	67.6	59	--
12/22/02	034500	3.7	8.2	7.6	69.3	59	--
12/22/02	040000	3.7	8.2	7.8	70.9	59	--
12/22/02	041500	3.7	8.2	8.0	72.8	59	--
12/22/02	043000	3.6	8.2	8.1	73.7	59	--
12/22/02	044500	3.6	8.2	8.0	72.4	59	--
12/22/02	050000	3.6	8.2	8.0	72.3	59	--
12/22/02	051500	3.6	8.2	7.8	70.9	59	--
12/22/02	053000	3.5	8.2	8.4	76.1	59	--
12/22/02	054500	3.5	8.2	8.5	77.3	59	--
12/22/02	060000	3.5	8.2	8.6	77.6	59	--
12/22/02	061500	3.5	8.2	8.8	79.9	59	--
12/22/02	063000	3.4	8.2	8.3	75.5	59	--
12/22/02	064500	3.3	8.2	8.3	74.5	59	--
12/22/02	070000	3.3	8.2	8.1	72.9	58	--
12/22/02	071500	3.2	8.2	7.8	70.3	58	--
12/22/02	073000	3.2	8.2	7.9	71.1	58	--
12/22/02	074500	3.1	8.3	7.9	70.9	58	--
12/22/02	080000	3.0	8.3	7.5	66.9	58	--
12/22/02	081500	3.0	8.3	8.2	73.7	58	--
12/22/02	083000	2.9	8.3	8.3	73.7	58	--
12/22/02	084500	2.9	8.3	8.0	71.1	58	--
12/22/02	090000	2.9	8.3	8.1	72.4	58	--
12/22/02	091500	2.9	8.3	8.6	76.5	58	--
12/22/02	093000	3.0	8.3	8.9	79.5	58	--
12/22/02	094500	3.1	8.3	8.9	79.5	58	--
12/22/02	100000	3.2	8.3	9.2	82.6	58	--
12/22/02	101500	3.3	8.3	8.8	79.4	58	--
12/22/02	103000	3.5	8.3	8.5	77.3	58	--
12/22/02	104500	3.6	8.3	8.3	75.0	57	--
12/22/02	110000	3.6	8.3	8.4	76.9	58	--
12/22/02	111500	3.7	8.3	8.7	79.3	57	--
12/22/02	113000	3.8	8.3	7.6	69.2	57	--
12/22/02	114500	4.1	8.3	8.5	78.5	57	--
12/22/02	120000	4.3	8.3	7.8	72.7	57	--
12/22/02	121500	4.5	8.4	8.4	77.9	58	--

Table 8.5.3.--Continuous Monitoring Data for Rio Grande at Los Padillas
December 18 through December 23, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
12/22/02	123000	4.6	8.4	7.5	70.0	58	--
12/22/02	124500	4.7	8.4	7.6	70.9	58	--
12/22/02	130000	4.8	8.4	7.6	71.2	58	--
12/22/02	131500	4.9	8.4	8.1	76.4	57	--
12/22/02	133000	5.0	8.4	7.5	70.3	57	--
12/22/02	134500	5.0	8.4	7.6	71.3	57	--
12/22/02	140000	5.0	8.4	7.7	72.6	57	--
12/22/02	141500	5.0	8.4	8.3	78.2	58	--
12/22/02	143000	5.0	8.4	8.2	77.0	57	--
12/22/02	144500	5.1	8.4	8.6	81.7	58	--
12/22/02	150000	5.1	8.4	8.6	81.6	58	--
12/22/02	151500	5.2	8.4	7.3	69.3	58	--
12/22/02	153000	5.2	8.4	7.5	71.6	58	--
12/22/02	154500	5.3	8.3	7.7	72.8	58	--
12/22/02	160000	5.3	8.3	7.0	66.1	58	--
12/22/02	161500	5.2	8.3	7.4	69.9	58	--
12/22/02	163000	5.2	8.3	6.9	65.2	58	--
12/22/02	164500	5.2	8.3	7.6	72.3	58	--
12/22/02	170000	5.2	8.4	7.6	72.0	58	--
12/22/02	171500	5.2	8.3	7.3	69.5	58	--
12/22/02	173000	5.2	8.3	7.5	71.4	58	--
12/22/02	174500	5.2	8.3	6.8	64.7	64	--
12/22/02	180000	5.2	8.3	7.3	69.1	61	--
12/22/02	181500	5.2	8.3	7.5	71.1	61	--
12/22/02	183000	5.2	8.3	7.3	69.1	61	--
12/22/02	184500	5.2	8.2	7.0	66.5	61	--
12/22/02	190000	5.3	8.2	6.9	65.2	62	--
12/22/02	191500	5.3	8.2	7.1	67.6	62	--
12/22/02	193000	5.3	8.2	7.5	71.7	61	--
12/22/02	194500	5.3	8.2	7.6	72.6	61	--
12/22/02	200000	5.3	8.2	8.0	76.1	61	--
12/22/02	201500	5.3	8.2	7.5	71.6	61	--
12/22/02	203000	5.2	8.2	7.6	72.3	61	--
12/22/02	204500	5.1	8.2	7.7	72.8	61	--
12/22/02	210000	5.1	8.2	7.2	68.2	61	--
12/22/02	211500	5.1	8.2	7.0	66.7	61	--
12/22/02	213000	5.1	8.2	6.8	64.7	61	--
12/22/02	214500	5.1	8.3	7.8	74.0	62	--
12/22/02	220000	5.1	8.2	7.2	68.4	62	--
12/22/02	221500	5.1	8.3	7.5	71.3	62	--
12/22/02	223000	5.0	8.2	7.6	71.8	62	--
12/22/02	224500	5.0	8.3	7.3	68.6	62	--
12/22/02	230000	5.0	8.2	6.9	64.8	62	--
12/22/02	231500	4.9	8.2	7.9	74.2	62	--
12/22/02	233000	4.9	8.2	8.5	80.2	62	--
12/22/02	234500	4.9	8.2	7.1	66.3	62	--
12/23/02	000000	4.8	8.2	7.4	69.7	62	--
12/23/02	001500	4.8	8.2	7.6	71.4	62	--
12/23/02	003000	4.7	8.2	7.8	73.1	62	--
12/23/02	004500	4.7	8.2	7.6	71.1	62	--
12/23/02	010000	4.6	8.2	7.6	70.8	62	--

Table 8.5.3.--Continuous Monitoring Data for Rio Grande at Los Padillas
December 18 through December 23, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
12/23/02	011500	4.5	8.2	7.3	68.1	62	--
12/23/02	013000	4.4	8.2	7.9	73.2	62	--
12/23/02	014500	4.4	8.2	7.9	73.6	61	--
12/23/02	020000	4.4	8.2	7.8	72.3	61	--
12/23/02	021500	4.4	8.2	8.0	74.3	61	--
12/23/02	023000	4.3	8.2	7.5	69.1	61	--
12/23/02	024500	4.3	8.2	7.5	69.6	61	--
12/23/02	030000	4.3	8.2	7.3	67.5	61	--
12/23/02	031500	4.2	8.2	7.5	69.5	61	--
12/23/02	033000	4.2	8.2	7.5	69.1	61	--
12/23/02	034500	4.1	8.2	7.4	68.4	61	--
12/23/02	040000	4.1	8.2	7.8	71.4	61	--
12/23/02	041500	4.0	8.2	7.7	70.8	61	--
12/23/02	043000	4.0	8.2	7.8	71.4	60	--
12/23/02	044500	4.0	8.2	7.1	65.1	60	--
12/23/02	050000	4.0	8.2	7.4	68.2	60	--
12/23/02	051500	3.9	8.2	7.2	66.0	61	--
12/23/02	053000	3.9	8.2	7.3	66.8	61	--
12/23/02	054500	3.8	8.2	8.2	75.1	60	--
12/23/02	060000	3.8	8.2	7.9	72.4	60	--
12/23/02	061500	3.8	8.2	7.8	71.1	60	--
12/23/02	063000	3.8	8.2	8.4	77.1	60	--
12/23/02	064500	3.7	8.2	7.9	71.7	60	--
12/23/02	070000	3.7	8.2	7.7	70.4	60	--
12/23/02	071500	3.7	8.2	7.4	67.7	60	--
12/23/02	073000	3.6	8.2	7.8	71.1	60	--
12/23/02	074500	3.6	8.2	8.1	73.5	60	--
12/23/02	080000	3.5	8.2	7.7	70.2	60	--
12/23/02	081500	3.5	8.2	7.6	69.1	60	--
12/23/02	083000	3.4	8.2	7.8	70.9	60	--
12/23/02	084500	3.4	8.2	7.6	68.9	60	--
12/23/02	090000	3.4	8.2	7.9	71.6	60	--
12/23/02	091500	3.4	8.2	8.3	74.7	60	--
12/23/02	093000	3.4	8.2	7.4	67.0	60	--
12/23/02	094500	3.4	8.2	7.7	69.4	60	--
12/23/02	100000	3.4	8.2	8.2	73.8	60	--
12/23/02	101500	3.4	8.2	7.8	70.3	59	--
12/23/02	103000	3.4	8.3	7.8	70.6	59	--
12/23/02	104500	3.5	8.3	7.7	69.4	59	--
12/23/02	110000	3.6	8.3	8.3	75.4	59	--
12/23/02	111500	3.6	8.3	8.0	72.4	59	--
12/23/02	113000	3.7	8.3	8.1	73.6	59	--
12/23/02	114500	3.9	8.3	7.9	72.3	59	--
12/23/02	120000	3.9	8.3	7.4	68.0	59	--
12/23/02	121500	3.9	8.3	7.4	68.0	59	--
12/23/02	123000	4.0	8.3	7.2	66.0	59	--
12/23/02	124500	4.0	8.3	7.4	67.9	59	--
12/23/02	130000	4.1	8.3	8.0	74.1	59	--
12/23/02	131500	4.3	8.3	7.4	68.4	59	--
12/23/02	133000	4.4	8.3	8.0	74.6	59	--

Table 8.5.3.--Continuous Monitoring Data for Rio Grande at Los Padillas
December 18 through December 23, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
12/23/02	134500	4.3	8.3	8.1	75.5	59	--
12/23/02	140000	4.3	8.3	8.3	77.2	59	--
12/23/02	141500	4.3	8.3	7.9	73.2	59	--

Descriptive Statistics	*Temp (°C)*	*pH*	*DO (mg/L)*	*DO (%)*	*SPC (uS/cm)*	*Turbidity (NTU)*
Mean	3.9	8.3	9.6	88.4	145	--
Standard Error	0.06	0.00	0.07	0.63	5	--
Median	4.1	8.3	10.1	90.5	67	--
Mode	4.2	8.3	11.0	99.2	334	--
Standard Deviation	1.42	0.06	1.56	14.15	115	--
Sample Variance	2.03	0.00	2.44	200.09	13243	--
Kurtosis	-0.18	-0.59	-1.42	-1.52	-1	--
Skewness	-0.30	0.19	-0.18	-0.13	1	--
Range	6.7	0.3	5.6	47.7	279	--
Minimum	0.3	8.2	6.8	64.2	57	--
Maximum	7.1	8.4	12.4	111.9	336	--
Sum	1956.1	4135.8	4802.8	44041.6	72092	--
Count	498	498	498	498	498	--

Table 8.5.4.--Continuous Monitoring Data for Rio Grande at Los Padillas
February 27 through February 28, 2003

[--, no data; °C, degrees Celsius; mg/L, milligrams per liter; % sat, percent saturation; uS/cm, microsiemens per centimeter; NTU, Nephelometric turbidity units.]

MiniSonde4a 36754
Log File Name : LOS PADILLAS 2-27-03
Setup Date (MMDDYY) : 022703
Setup Time (HHMMSS) : 162321
Starting Date (MMDDYY) : 022703
Starting Time (HHMMSS) : 170000
Stopping Date (MMDDYY) : 022803
Stopping Time (HHMMSS) : 173000
Interval (HHMMSS) : 001500
Sensor warmup (HHMMSS) : 000100
Circltr warmup (HHMMSS) : 000100

Date	Time (HHMMSS)	Temp (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
2/27/2003	170000	12.04	8.06	8.24	91.8	317	--
2/27/2003	171500	11.94	8.07	8.10	90.0	316	--
2/27/2003	173000	11.78	8.07	8.30	91.9	316	--
2/27/2003	174500	11.62	8.07	8.20	90.6	315	--
2/27/2003	180000	11.54	8.07	8.06	88.8	315	--
2/27/2003	181500	11.42	8.08	8.17	89.8	314	--
2/27/2003	183000	11.31	8.08	7.97	87.4	313	--
2/27/2003	184500	11.24	8.07	8.03	87.8	314	--
2/27/2003	190000	11.09	8.08	7.96	86.9	313	--
2/27/2003	191500	10.95	8.08	8.16	88.7	312	--
2/27/2003	193000	10.81	8.07	7.96	86.2	312	--
2/27/2003	194500	10.66	8.07	7.99	86.3	311	--
2/27/2003	200000	10.51	8.07	8.02	86.3	310	--
2/27/2003	201500	10.37	8.07	8.00	85.8	310	--
2/27/2003	203000	10.24	8.07	8.20	87.7	310	--
2/27/2003	204500	10.10	8.07	8.20	87.4	309	--
2/27/2003	210000	9.98	8.07	8.29	88.1	308	--
2/27/2003	211500	9.87	8.07	7.98	84.5	303	--
2/27/2003	213000	9.76	8.07	7.87	83.2	303	--
2/27/2003	214500	9.68	8.07	7.86	82.9	303	--
2/27/2003	220000	9.59	8.07	7.95	83.7	302	--
2/27/2003	221500	9.49	8.07	7.81	82.0	304	--
2/27/2003	223000	9.40	8.07	7.36	77.1	304	--
2/27/2003	224500	9.30	8.07	7.18	75.1	303	--
2/27/2003	230000	9.20	8.07	7.14	74.5	304	--
2/27/2003	231500	9.05	8.07	7.61	79.1	304	--
2/27/2003	233000	8.91	8.07	7.59	78.6	304	--
2/27/2003	234500	8.80	8.06	7.20	74.4	305	--
2/28/2003	000000	8.68	8.06	7.01	72.2	308	--
2/28/2003	001500	8.55	8.06	6.97	71.6	309	--
2/28/2003	003000	8.43	8.06	7.02	71.9	311	--
2/28/2003	004500	8.26	8.06	6.98	71.2	310	--
2/28/2003	010000	8.13	8.06	6.61	67.2	310	--
2/28/2003	011500	8.04	8.06	6.15	62.4	312	--
2/28/2003	013000	7.96	8.06	6.19	62.6	312	--
2/28/2003	014500	7.90	8.06	5.84	59.1	313	--
2/28/2003	020000	7.79	8.05	5.46	55.0	312	--

Table 8.5.4.--Continuous Monitoring Data for Rio Grande at Los Padillas
February 27 through February 28, 2003

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
2/28/2003	021500	7.73	8.07	5.08	51.1	313	--
2/28/2003	023000	7.63	8.05	4.98	50.0	313	--
2/28/2003	024500	7.54	8.06	4.90	49.1	313	--
2/28/2003	030000	7.49	8.06	4.69	46.9	314	--
2/28/2003	031500	7.45	8.06	4.52	45.2	314	--
2/28/2003	033000	7.41	8.05	4.33	43.2	314	--
2/28/2003	034500	7.37	8.05	4.86	48.5	315	--
2/28/2003	040000	7.29	8.04	4.58	45.6	315	--
2/28/2003	041500	7.19	8.04	4.42	43.9	314	--
2/28/2003	043000	7.09	8.04	4.22	41.8	313	--
2/28/2003	044500	6.99	8.04	4.19	41.5	313	--
2/28/2003	050000	6.90	8.04	4.84	47.7	312	--
2/28/2003	051500	6.83	8.04	4.87	47.9	312	--
2/28/2003	053000	6.78	8.04	4.62	45.4	312	--
2/28/2003	054500	6.70	8.04	4.61	45.3	311	--
2/28/2003	060000	6.62	8.04	4.65	45.5	311	--
2/28/2003	061500	6.52	8.04	4.61	45.0	312	--
2/28/2003	063000	6.42	8.04	4.22	41.1	310	--
2/28/2003	064500	6.34	8.04	3.58	34.8	311	--
2/28/2003	070000	6.26	8.04	3.10	30.1	310	--
2/28/2003	071500	6.20	8.04	2.73	26.5	311	--
2/28/2003	073000	6.19	8.05	2.48	24.1	311	--
2/28/2003	074500	6.14	8.05	2.18	21.1	311	--
2/28/2003	080000	6.12	8.06	1.97	19.1	311	--
2/28/2003	081500	6.10	8.06	1.79	17.3	310	--
2/28/2003	083000	6.13	8.06	1.66	16.1	310	--
2/28/2003	084500	6.14	8.07	1.47	14.3	309	--
2/28/2003	090000	6.32	8.07	1.37	13.3	309	--
2/28/2003	091500	6.56	8.08	1.28	12.5	309	--
2/28/2003	093000	6.88	8.09	1.12	11.1	308	--
2/28/2003	094500	7.27	8.09	1.04	10.4	309	--
2/28/2003	100000	7.64	8.09	0.97	9.7	308	--
2/28/2003	101500	7.84	8.09	0.87	8.8	307	--
2/28/2003	103000	8.11	8.11	0.74	7.5	307	--
2/28/2003	104500	8.31	8.11	0.69	7.0	307	--
2/28/2003	110000	8.23	8.11	0.64	6.6	307	--
2/28/2003	111500	8.19	8.12	0.61	6.2	306	--
2/28/2003	113000	8.23	8.13	0.64	6.5	305	--
2/28/2003	114500	8.27	8.12	0.60	6.1	304	--
2/28/2003	120000	8.39	8.12	0.55	5.7	304	--
2/28/2003	121500	8.70	8.13	0.52	5.4	304	--
2/28/2003	123000	9.16	8.14	0.46	4.8	304	--
2/28/2003	124500	9.67	8.14	0.48	5.1	305	--
2/28/2003	130000	10.12	8.14	0.47	5.1	306	--
2/28/2003	131500	10.45	8.15	0.47	5.1	306	--
2/28/2003	133000	10.76	8.15	0.43	4.7	306	--
2/28/2003	134500	10.83	8.14	0.44	4.7	306	--
2/28/2003	140000	10.86	8.13	0.40	4.3	307	--
2/28/2003	141500	10.86	8.13	0.37	4.1	307	--
2/28/2003	143000	10.98	8.12	0.36	3.9	309	--
2/28/2003	144500	11.12	8.12	0.39	4.2	311	--

Table 8.5.4.--Continuous Monitoring Data for Rio Grande at Los Padillas
February 27 through February 28, 2003

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
2/28/2003	150000	11.30	8.11	0.33	3.6	314	--
2/28/2003	151500	11.36	8.10	0.32	3.5	315	--
2/28/2003	153000	11.30	8.10	0.31	3.4	317	--
2/28/2003	154500	11.18	8.08	0.32	3.5	317	--
2/28/2003	160000	11.01	8.07	0.31	3.4	318	--
2/28/2003	161500	10.81	8.07	0.26	2.8	319	--
2/28/2003	163000	10.62	8.07	0.31	3.3	319	--
2/28/2003	164500	10.38	8.06	0.30	3.2	319	--
2/28/2003	170000	10.19	8.05	0.31	3.3	318	--
2/28/2003	171500	10.01	8.05	0.27	2.9	318	--
2/28/2003	173000	9.88	8.05	0.27	2.9	317	--

Descriptive Statistics	*Temp (°C)*	*pH*	*DO (mg/L)*	*DO (%)*	*SPC (uS/cm)*	*Turbidity (NTU)*
Mean	8.9	8.1	4.1	42.4	310	--
Standard Error	0.18	0.00	0.31	3.34	0.44	--
Median	8.7	8.1	4.5	45.0	311	--
Mode	10.8	8.1	0.3	5.1	311	--
Standard Deviation	1.79	0.03	3.10	33.24	4.36	--
Sample Variance	3.20	0.00	9.64	1104.90	18.97	--
Kurtosis	-1.32	0.11	-1.64	-1.58	-0.77	--
Skewness	0.02	0.99	0.05	0.15	0.00	--
Range	5.9	0.1	8.0	89.1	17	--
Minimum	6.1	8.0	0.3	2.8	302	--
Maximum	12.0	8.2	8.3	91.9	319	--
Sum	879.8	799.5	403.0	4196.5	30728	--
Count	99	99	99	99	99	--

Table 8.6.1.--Continuous Monitoring Data for Rio Grande at Isleta below Railroad Bridge, August 7 through August 11, 2002

[--, no data; °C, degrees Celsius; mg/L, milligrams per liter; % sat, percent saturation; uS/cm, microsiemens per centimeter; NTU, Nephelometric turbidity units.]

DataSonde 4a 40183
Log File Name : BLO BLK BRG 8-7
Setup Date (MMDDYY) : 080702
Setup Time (HHMMSS) : 083842
Starting Date (MMDDYY) : 080702
Starting Time (HHMMSS) : 093000
Stopping Date (MMDDYY) : 081502
Stopping Time (HHMMSS) : 120000
Interval (HHMMSS) : 001500
Sensor warmup (HHMMSS) : 000200
Circltr warmup (HHMMSS) : 000100

Date	Time (HHMMSS)	Temp (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
8/7/2002	093000	22.4	7.8	6.4	87.9	483	85
8/7/2002	094500	22.5	7.9	6.4	87.7	483	87
8/7/2002	100000	22.7	7.9	6.4	87.7	482	90
8/7/2002	101500	23.0	7.9	6.4	87.8	483	90
8/7/2002	103000	23.4	7.9	6.3	88.3	482	88
8/7/2002	104500	23.8	7.9	6.3	88.8	481	88
8/7/2002	110000	24.4	7.9	6.3	88.9	481	84
8/7/2002	111500	25.0	7.9	6.2	88.8	480	85
8/7/2002	113000	25.5	7.9	6.2	89.3	480	87
8/7/2002	114500	25.9	7.9	6.1	88.7	478	87
8/7/2002	120000	26.4	7.9	6.1	89.4	478	88
8/7/2002	121500	26.9	7.9	6.1	90.0	479	89
8/7/2002	123000	27.2	7.9	6.0	88.8	477	87
8/7/2002	124500	27.7	7.9	5.9	89.0	477	88
8/7/2002	130000	28.1	7.9	5.8	87.9	477	89
8/7/2002	131500	28.5	7.9	5.8	88.1	477	91
8/7/2002	133000	28.8	7.9	5.8	88.7	477	90
8/7/2002	134500	29.2	7.9	5.7	88.4	476	90
8/7/2002	140000	29.4	7.9	5.6	87.3	476	88
8/7/2002	141500	29.5	7.9	5.6	86.8	473	89
8/7/2002	143000	29.7	7.9	5.5	86.5	471	84
8/7/2002	144500	29.9	7.9	5.5	85.6	466	86
8/7/2002	150000	30.0	7.9	5.5	86.4	462	86
8/7/2002	151500	30.0	7.9	5.5	86.5	461	57
8/7/2002	153000	30.1	7.9	5.5	86.2	457	81
8/7/2002	154500	30.1	7.9	5.5	86.3	455	91
8/7/2002	160000	30.1	7.9	5.3	84.0	453	84
8/7/2002	161500	30.2	7.9	5.4	84.3	454	97
8/7/2002	163000	30.1	7.9	5.3	83.4	453	95
8/7/2002	164500	29.9	7.9	5.4	83.9	454	95
8/7/2002	170000	29.7	7.9	5.3	83.0	456	95
8/7/2002	171500	29.3	7.9	5.2	80.1	456	93
8/7/2002	173000	28.9	7.9	5.1	78.5	456	90
8/7/2002	174500	28.6	7.9	4.8	73.7	458	88
8/7/2002	180000	28.4	7.9	4.1	62.8	457	86

Table 8.6.1.--Continuous Monitoring Data for Rio Grande at Isleta below Railroad Bridge, August 7 through August 11, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
8/7/2002	181500	28.1	7.9	3.8	57.4	458	93
8/7/2002	183000	27.7	7.9	3.5	52.2	456	89
8/7/2002	184500	27.3	7.9	3.4	51.1	446	91
8/7/2002	190000	27.1	7.9	3.3	49.4	431	89
8/7/2002	191500	26.8	7.9	3.1	46.2	416	88
8/7/2002	193000	26.4	7.9	3.4	50.2	399	93
8/7/2002	194500	26.1	7.9	3.3	48.8	382	93
8/7/2002	200000	25.8	7.9	3.2	47.0	372	94
8/7/2002	201500	25.5	7.8	3.1	45.4	365	96
8/7/2002	203000	25.4	7.8	3.0	42.6	358	97
8/7/2002	204500	25.2	7.8	2.9	41.0	351	98
8/7/2002	210000	25.1	7.8	2.7	39.0	345	93
8/7/2002	211500	24.9	7.8	2.7	38.3	342	93
8/7/2002	213000	24.8	7.8	2.6	37.3	341	92
8/7/2002	214500	24.8	7.8	2.6	36.6	340	95
8/7/2002	220000	24.7	7.8	2.5	35.4	340	95
8/7/2002	221500	24.6	7.8	2.5	35.4	343	94
8/7/2002	223000	24.5	7.8	2.4	34.7	346	98
8/7/2002	224500	24.4	7.8	2.4	34.2	350	100
8/7/2002	230000	24.2	7.8	2.4	33.2	354	99
8/7/2002	231500	24.1	7.8	2.3	32.2	358	101
8/7/2002	233000	24.0	7.8	2.3	31.7	363	101
8/7/2002	234500	23.8	7.8	2.3	31.8	367	99
8/8/2002	000000	23.7	7.8	2.2	31.0	364	109
8/8/2002	001500	23.5	7.8	2.2	30.5	367	106
8/8/2002	003000	23.3	7.8	2.2	30.7	369	100
8/8/2002	004500	23.3	7.7	2.2	31.0	372	92
8/8/2002	010000	23.2	7.7	2.2	30.7	375	85
8/8/2002	011500	23.1	7.7	2.2	29.9	381	81
8/8/2002	013000	23.0	7.7	2.1	29.3	383	81
8/8/2002	014500	22.9	7.7	2.1	29.5	384	81
8/8/2002	020000	22.8	7.7	2.1	29.4	388	58
8/8/2002	021500	22.7	7.7	2.1	29.4	392	50
8/8/2002	023000	22.6	7.7	2.2	30.3	395	40
8/8/2002	024500	22.5	7.7	2.2	30.6	398	28
8/8/2002	030000	22.4	7.7	2.3	31.4	400	39
8/8/2002	031500	22.3	7.7	2.4	32.2	403	50
8/8/2002	033000	22.2	7.7	2.4	32.4	406	48
8/8/2002	034500	22.1	7.7	2.4	32.8	408	63
8/8/2002	040000	22.0	7.7	2.4	33.1	411	88
8/8/2002	041500	21.9	7.7	2.5	33.2	413	71
8/8/2002	043000	21.8	7.7	2.5	33.1	415	59
8/8/2002	044500	21.7	7.7	2.5	33.5	417	61
8/8/2002	050000	21.6	7.7	2.5	33.7	420	51
8/8/2002	051500	21.5	7.7	2.5	33.6	422	43
8/8/2002	053000	21.4	7.7	2.5	33.3	424	36
8/8/2002	054500	21.3	7.7	2.6	34.0	426	28
8/8/2002	060000	21.2	7.7	2.5	33.7	428	26
8/8/2002	061500	21.1	7.7	2.6	34.2	429	20

Table 8.6.1.--Continuous Monitoring Data for Rio Grande at Isleta below Railroad Bridge, August 7 through August 11, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
8/8/2002	063000	21.1	7.8	2.6	34.6	431	18
8/8/2002	064500	21.0	7.7	2.6	34.2	433	17
8/8/2002	070000	21.0	7.8	2.6	34.1	434	15
8/8/2002	071500	20.9	7.8	2.6	34.6	436	15
8/8/2002	073000	20.9	7.8	2.6	34.6	438	15
8/8/2002	074500	21.0	7.8	2.6	34.1	440	14
8/8/2002	080000	21.0	7.8	2.6	34.2	442	13
8/8/2002	081500	21.0	7.8	2.6	34.8	446	14
8/8/2002	083000	21.2	7.8	2.6	34.7	447	14
8/8/2002	084500	21.3	7.8	2.6	34.5	449	14
8/8/2002	090000	21.4	7.8	2.6	34.4	450	14
8/8/2002	091500	21.5	7.8	2.6	34.8	451	15
8/8/2002	093000	21.8	7.8	2.6	34.7	452	15
8/8/2002	094500	22.2	7.8	2.5	34.4	453	11
8/8/2002	100000	22.6	7.8	2.5	34.3	454	16
8/8/2002	101500	22.9	7.8	2.5	34.7	456	15
8/8/2002	103000	23.3	7.8	2.6	35.7	458	16
8/8/2002	104500	23.7	7.8	2.5	35.4	460	15
8/8/2002	110000	24.2	7.8	2.5	35.3	461	15
8/8/2002	111500	24.6	7.8	2.5	35.0	463	16
8/8/2002	113000	25.0	7.8	2.5	35.9	465	16
8/8/2002	114500	25.4	7.8	2.5	36.5	467	14
8/8/2002	120000	25.8	7.8	2.5	36.2	469	13
8/8/2002	121500	26.2	7.8	2.4	35.2	470	15
8/8/2002	123000	26.6	7.8	2.4	35.5	472	17
8/8/2002	124500	27.1	7.8	2.4	35.2	473	18
8/8/2002	130000	27.6	7.8	2.4	35.7	476	17
8/8/2002	131500	28.0	7.8	2.3	35.2	478	17
8/8/2002	133000	28.5	7.8	2.3	35.5	480	17
8/8/2002	134500	28.9	7.8	2.3	35.2	482	17
8/8/2002	140000	29.3	7.8	2.3	35.0	484	18
8/8/2002	141500	29.7	7.8	2.2	34.7	486	18
8/8/2002	143000	29.9	7.8	2.2	35.1	488	18
8/8/2002	144500	30.1	7.9	2.2	34.6	491	11
8/8/2002	150000	30.3	7.9	2.2	34.5	493	0
8/8/2002	151500	30.6	7.9	2.2	34.5	495	20
8/8/2002	153000	30.7	7.9	2.2	34.2	497	20
8/8/2002	154500	30.9	7.9	2.2	34.3	499	21
8/8/2002	160000	31.0	7.9	2.1	33.4	501	25
8/8/2002	161500	31.0	7.9	1.9	30.0	501	26
8/8/2002	163000	31.1	7.9	1.8	29.3	502	27
8/8/2002	164500	31.0	7.9	1.4	22.8	503	27
8/8/2002	170000	31.0	7.9	1.2	18.3	505	27
8/8/2002	171500	30.9	7.9	1.2	19.6	506	29
8/8/2002	173000	30.7	7.9	1.2	18.6	508	32
8/8/2002	174500	30.5	7.9	1.3	20.5	509	29
8/8/2002	180000	30.2	7.9	1.5	23.2	511	44
8/8/2002	181500	29.9	7.9	1.4	22.0	513	47
8/8/2002	183000	29.6	7.9	1.2	18.8	515	51

Table 8.6.1.--Continuous Monitoring Data for Rio Grande at Isleta below Railroad Bridge, August 7 through August 11, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
8/8/2002	184500	29.4	7.9	1.2	19.0	516	49
8/8/2002	190000	29.1	7.9	1.3	20.7	517	35
8/8/2002	191500	28.9	7.9	1.4	20.8	517	43
8/8/2002	193000	28.6	7.9	1.3	20.6	518	36
8/8/2002	194500	28.4	7.9	1.3	20.1	519	33
8/8/2002	200000	28.1	7.9	1.5	22.0	519	39
8/8/2002	201500	27.9	7.9	1.5	22.0	520	45
8/8/2002	203000	27.6	7.9	1.5	22.8	521	44
8/8/2002	204500	27.3	7.9	1.5	22.3	521	44
8/8/2002	210000	27.0	7.9	1.5	22.9	522	44
8/8/2002	211500	26.8	7.9	1.6	23.4	522	43
8/8/2002	213000	26.5	7.9	1.7	24.5	522	41
8/8/2002	214500	26.3	7.9	1.6	23.8	522	40
8/8/2002	220000	26.0	7.9	1.6	23.9	522	40
8/8/2002	221500	25.9	7.9	1.7	24.8	522	41
8/8/2002	223000	25.7	7.9	1.7	25.0	521	39
8/8/2002	224500	25.5	7.9	1.7	25.2	521	39
8/8/2002	230000	25.3	7.9	1.8	25.3	521	38
8/8/2002	231500	25.2	7.9	1.8	25.2	520	38
8/8/2002	233000	25.0	7.9	1.8	25.3	520	37
8/8/2002	234500	24.8	7.9	1.8	26.2	520	37
8/9/2002	000000	24.7	7.9	1.8	26.3	519	36
8/9/2002	001500	24.5	7.9	1.9	26.4	519	33
8/9/2002	003000	24.4	7.9	1.9	26.5	518	33
8/9/2002	004500	24.2	7.9	1.9	26.3	517	34
8/9/2002	010000	24.1	7.9	1.9	26.8	518	33
8/9/2002	011500	23.9	7.9	1.9	26.5	518	33
8/9/2002	013000	23.8	7.9	1.9	27.1	517	32
8/9/2002	014500	23.6	7.9	2.1	29.4	518	32
8/9/2002	020000	23.5	7.9	2.2	30.9	517	33
8/9/2002	021500	23.4	7.9	2.3	32.1	516	29
8/9/2002	023000	23.2	7.9	2.4	33.1	516	30
8/9/2002	024500	23.1	7.9	2.4	33.0	515	30
8/9/2002	030000	23.0	7.9	2.4	33.7	515	29
8/9/2002	031500	22.9	7.9	2.5	34.2	514	29
8/9/2002	033000	22.8	7.9	2.5	34.7	513	29
8/9/2002	034500	22.7	7.9	2.5	34.6	513	29
8/9/2002	040000	22.6	7.9	2.6	35.3	512	29
8/9/2002	041500	22.5	7.9	2.6	35.1	512	29
8/9/2002	043000	22.4	7.9	2.6	35.4	511	28
8/9/2002	044500	22.3	7.9	2.6	35.8	510	27
8/9/2002	050000	22.2	7.9	2.6	35.8	510	27
8/9/2002	051500	22.1	7.9	2.6	35.7	509	25
8/9/2002	053000	22.0	7.9	2.7	36.0	508	22
8/9/2002	054500	21.9	7.9	2.7	36.1	508	22
8/9/2002	060000	21.8	7.9	2.7	36.5	507	19
8/9/2002	061500	21.8	7.9	2.7	36.1	506	26
8/9/2002	063000	21.7	7.9	2.7	35.9	505	25
8/9/2002	064500	21.7	7.9	2.7	36.5	504	25

Table 8.6.1.--Continuous Monitoring Data for Rio Grande at Isleta below Railroad Bridge, August 7 through August 11, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
8/9/2002	070000	21.6	7.9	2.7	36.4	504	25
8/9/2002	071500	21.6	7.9	2.7	36.8	503	25
8/9/2002	073000	21.6	7.9	2.7	36.9	502	25
8/9/2002	074500	21.6	7.9	2.8	38.0	501	25
8/9/2002	080000	21.7	7.9	2.8	37.2	500	25
8/9/2002	081500	21.8	7.9	2.8	37.8	500	25
8/9/2002	083000	21.9	7.9	2.8	38.4	498	24
8/9/2002	084500	22.1	7.9	2.8	38.0	498	25
8/9/2002	090000	22.3	7.9	2.8	38.3	496	25
8/9/2002	091500	22.5	7.9	2.8	38.6	495	11
8/9/2002	093000	22.8	7.9	2.8	38.9	494	16
8/9/2002	094500	23.1	7.9	2.8	38.9	494	18
8/9/2002	100000	23.5	7.9	2.8	38.9	492	27
8/9/2002	101500	24.0	7.9	2.8	39.1	491	38
8/9/2002	103000	24.4	7.9	2.8	39.1	490	39
8/9/2002	104500	25.0	7.9	2.7	39.2	489	39
8/9/2002	110000	25.4	7.9	2.7	39.0	489	39
8/9/2002	111500	25.9	7.9	2.6	38.6	488	39
8/9/2002	113000	26.3	7.9	2.7	39.5	488	39
8/9/2002	114500	26.8	7.9	2.7	39.8	488	40
8/9/2002	120000	27.2	7.9	2.7	39.7	488	40
8/9/2002	121500	27.7	7.9	2.7	40.4	487	40
8/9/2002	123000	28.1	7.9	2.6	39.4	487	40
8/9/2002	124500	28.5	7.9	2.6	39.5	487	40
8/9/2002	130000	29.0	7.9	2.6	39.7	486	40
8/9/2002	131500	29.4	7.9	2.6	39.8	486	41
8/9/2002	133000	29.8	7.9	2.6	40.0	485	41
8/9/2002	134500	30.1	7.9	2.5	39.5	486	41
8/9/2002	140000	30.4	7.9	2.1	32.9	486	57
8/9/2002	141500	30.7	7.9	2.1	32.6	484	35
8/9/2002	143000	31.0	7.9	2.1	33.4	484	57
8/9/2002	144500	31.3	7.9	2.1	33.1	484	57
8/9/2002	150000	31.3	7.9	2.3	37.3	488	61
8/9/2002	151500	31.5	7.9	2.5	40.3	489	66
8/9/2002	153000	31.3	7.9	2.5	39.6	491	58
8/9/2002	154500	31.2	7.9	2.5	39.2	490	57
8/9/2002	160000	31.4	8.0	2.4	39.2	489	58
8/9/2002	161500	31.2	8.0	2.6	41.0	490	69
8/9/2002	163000	31.3	8.0	2.6	41.0	489	69
8/9/2002	164500	31.5	8.0	2.6	41.8	487	70
8/9/2002	170000	31.5	8.0	2.7	43.0	487	71
8/9/2002	171500	31.5	8.0	2.8	44.3	487	70
8/9/2002	173000	31.4	8.0	2.8	45.2	487	70
8/9/2002	174500	31.3	8.0	2.8	45.5	487	71
8/9/2002	180000	31.1	8.0	2.9	45.6	488	71
8/9/2002	181500	30.8	8.0	2.9	46.4	489	71
8/9/2002	183000	30.6	8.0	3.0	46.7	488	71
8/9/2002	184500	30.4	8.0	3.0	46.8	488	71
8/9/2002	190000	30.0	8.0	3.0	47.2	488	71

Table 8.6.1.--Continuous Monitoring Data for Rio Grande at Isleta below Railroad Bridge, August 7 through August 11, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
8/9/2002	191500	29.6	8.0	3.1	47.5	488	71
8/9/2002	193000	29.3	8.0	3.1	47.2	488	71
8/9/2002	194500	29.1	8.0	3.1	47.4	488	63
8/9/2002	200000	28.7	8.0	3.1	47.4	487	72
8/9/2002	201500	28.4	8.0	3.2	48.0	487	72
8/9/2002	203000	28.1	8.0	3.2	48.9	487	73
8/9/2002	204500	27.8	8.0	3.3	49.0	487	72
8/9/2002	210000	27.4	8.0	3.3	49.9	486	71
8/9/2002	211500	27.1	8.0	3.5	51.5	486	72
8/9/2002	213000	26.8	8.0	3.5	51.3	485	71
8/9/2002	214500	26.5	8.0	3.5	51.1	485	71
8/9/2002	220000	26.2	7.9	3.5	51.7	483	72
8/9/2002	221500	26.0	7.9	3.6	51.9	483	71
8/9/2002	223000	25.8	7.9	3.6	52.0	482	71
8/9/2002	224500	25.7	7.9	3.6	52.2	481	71
8/9/2002	230000	25.5	7.9	3.6	52.3	480	71
8/9/2002	231500	25.3	7.9	3.7	53.0	480	71
8/9/2002	233000	25.1	7.9	3.7	53.4	479	71
8/9/2002	234500	24.9	7.9	3.7	53.6	478	72
8/10/2002	000000	24.8	7.9	3.8	53.5	477	72
8/10/2002	001500	24.6	7.9	3.8	53.7	477	72
8/10/2002	003000	24.4	7.9	3.8	53.7	476	71
8/10/2002	004500	24.2	7.9	3.8	53.9	476	71
8/10/2002	010000	24.0	7.9	3.8	53.5	476	71
8/10/2002	011500	23.8	7.9	3.9	54.8	475	71
8/10/2002	013000	23.7	7.9	4.0	55.5	474	71
8/10/2002	014500	23.5	7.9	4.0	55.9	474	71
8/10/2002	020000	23.4	7.9	4.1	56.4	473	72
8/10/2002	021500	23.2	7.9	4.1	57.0	473	71
8/10/2002	023000	23.1	7.9	4.1	57.0	472	71
8/10/2002	024500	22.9	7.9	4.1	57.0	471	71
8/10/2002	030000	22.8	7.9	4.2	57.3	471	71
8/10/2002	031500	22.7	7.9	4.2	57.3	470	63
8/10/2002	033000	22.5	7.9	4.2	58.1	470	71
8/10/2002	034500	22.4	7.9	4.2	58.0	469	71
8/10/2002	040000	22.2	7.9	4.3	58.2	468	71
8/10/2002	041500	22.1	7.9	4.2	57.4	468	65
8/10/2002	043000	22.0	7.9	4.3	57.8	467	71
8/10/2002	044500	21.9	7.9	4.3	57.7	467	72
8/10/2002	050000	21.8	7.9	4.2	57.2	467	72
8/10/2002	051500	21.6	7.9	4.3	57.9	466	71
8/10/2002	053000	21.5	7.9	4.3	57.7	466	71
8/10/2002	054500	21.4	7.9	4.3	58.1	465	71
8/10/2002	060000	21.3	7.9	4.4	58.1	465	72
8/10/2002	061500	21.2	7.9	4.4	58.5	464	71
8/10/2002	063000	21.0	7.9	4.5	59.2	464	71
8/10/2002	064500	20.9	7.9	4.5	59.5	463	71
8/10/2002	070000	20.8	7.9	4.5	59.5	462	70
8/10/2002	071500	20.8	7.9	4.5	59.7	461	71

Table 8.6.1.--Continuous Monitoring Data for Rio Grande at Isleta below Railroad Bridge, August 7 through August 11, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
8/10/2002	073000	20.8	7.9	4.5	60.0	460	70
8/10/2002	074500	20.8	7.9	4.6	60.5	460	64
8/10/2002	080000	20.8	7.9	4.6	60.7	459	64
8/10/2002	081500	20.9	7.9	4.6	61.1	458	63
8/10/2002	083000	21.0	7.9	4.6	61.6	457	63
8/10/2002	084500	21.2	7.9	4.6	61.9	456	70
8/10/2002	090000	21.4	7.9	4.7	62.2	455	63
8/10/2002	091500	21.5	7.9	4.6	62.4	454	63
8/10/2002	093000	21.8	7.9	4.7	62.9	453	69
8/10/2002	094500	22.0	7.9	4.6	63.0	452	62
8/10/2002	100000	22.3	7.9	4.6	63.3	451	69
8/10/2002	101500	22.6	7.9	4.7	64.0	450	57
8/10/2002	103000	22.9	7.9	4.7	64.4	449	61
8/10/2002	104500	23.3	7.9	4.6	64.5	448	67
8/10/2002	110000	23.7	7.9	4.7	65.6	447	66
8/10/2002	111500	24.0	7.9	4.6	65.3	447	67
8/10/2002	113000	24.4	7.9	4.6	65.6	446	67
8/10/2002	114500	24.9	7.9	4.5	64.3	444	66
8/10/2002	120000	25.2	7.9	4.6	65.9	445	66
8/10/2002	121500	25.6	7.9	4.5	65.8	444	66
8/10/2002	123000	26.0	7.9	4.5	65.7	444	66
8/10/2002	124500	26.4	7.9	4.5	66.2	444	66
8/10/2002	130000	26.8	7.9	4.5	66.2	443	65
8/10/2002	131500	27.1	7.9	4.5	66.8	442	65
8/10/2002	133000	27.5	7.9	4.5	67.0	442	65
8/10/2002	134500	27.8	7.9	4.3	65.4	442	58
8/10/2002	140000	28.2	7.9	4.3	64.7	442	59
8/10/2002	141500	28.5	7.9	4.4	67.1	443	61
8/10/2002	143000	28.7	7.9	4.4	67.9	443	61
8/10/2002	144500	29.0	8.0	4.0	62.3	442	61
8/10/2002	150000	29.3	8.0	4.1	63.0	442	59
8/10/2002	151500	29.5	8.0	4.1	64.4	442	58
8/10/2002	153000	29.8	8.0	4.3	66.9	443	58
8/10/2002	154500	29.9	8.0	4.3	66.9	443	58
8/10/2002	160000	30.1	8.0	4.2	66.4	443	57
8/10/2002	161500	30.2	8.0	4.2	66.4	443	61
8/10/2002	163000	30.3	8.0	4.1	65.3	444	64
8/10/2002	164500	30.4	8.0	4.1	64.3	444	64
8/10/2002	170000	30.5	8.0	3.9	61.5	443	58
8/10/2002	171500	30.5	8.0	4.1	64.7	445	63
8/10/2002	173000	30.4	8.0	4.0	63.2	446	64
8/10/2002	174500	30.3	8.0	4.1	64.9	448	65
8/10/2002	180000	30.2	8.0	4.1	64.4	449	65
8/10/2002	181500	30.0	8.0	4.1	63.7	450	65
8/10/2002	183000	29.7	8.0	4.1	64.1	451	66
8/10/2002	184500	29.5	8.0	4.1	64.4	453	66
8/10/2002	190000	29.1	8.0	4.1	63.2	454	58
8/10/2002	191500	28.8	8.0	4.1	62.5	456	67
8/10/2002	193000	28.4	8.0	4.1	62.6	457	68

Table 8.6.1.--Continuous Monitoring Data for Rio Grande at Isleta below Railroad Bridge, August 7 through August 11, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
8/10/2002	194500	28.1	8.0	4.1	62.9	457	68
8/10/2002	200000	27.8	8.0	4.1	61.9	458	68
8/10/2002	201500	27.4	8.0	4.0	60.2	458	68
8/10/2002	203000	27.1	8.0	4.2	63.0	459	70
8/10/2002	204500	26.9	8.0	4.1	60.9	458	67
8/10/2002	210000	26.5	8.0	4.1	60.9	459	67
8/10/2002	211500	26.2	8.0	4.4	64.2	461	67
8/10/2002	213000	25.9	8.0	4.3	63.3	460	68
8/10/2002	214500	25.7	8.0	4.3	61.9	460	67
8/10/2002	220000	25.4	8.0	4.4	63.0	460	68
8/10/2002	221500	25.2	7.9	4.5	64.2	460	66
8/10/2002	223000	24.9	7.9	4.0	56.7	459	69
8/10/2002	224500	24.7	7.9	4.1	59.1	460	66
8/10/2002	230000	24.5	7.9	4.1	57.8	459	65
8/10/2002	231500	24.3	7.9	4.6	65.7	460	67
8/10/2002	233000	24.1	7.9	4.7	66.6	460	66
8/10/2002	234500	23.9	7.9	5.0	69.7	459	65
8/11/2002	000000	23.8	7.9	5.2	72.5	459	64
8/11/2002	001500	23.6	7.9	5.2	73.1	458	63
8/11/2002	003000	23.5	7.9	5.2	72.1	459	62
8/11/2002	004500	23.4	7.9	5.2	72.9	458	60
8/11/2002	010000	23.3	7.9	5.2	72.5	457	60
8/11/2002	011500	23.2	7.9	4.8	66.7	457	57
8/11/2002	013000	23.1	7.9	5.2	71.4	457	56
8/11/2002	014500	23.0	7.9	5.1	70.8	457	56
8/11/2002	020000	22.9	7.9	4.7	65.1	456	55
8/11/2002	021500	22.8	7.9	4.6	63.7	456	54
8/11/2002	023000	22.7	7.9	5.0	69.2	456	53
8/11/2002	024500	22.6	7.9	4.5	61.0	457	52
8/11/2002	030000	22.5	7.9	3.6	49.8	459	52
8/11/2002	031500	22.4	7.9	3.3	45.2	459	52
8/11/2002	033000	22.3	7.9	3.5	48.1	458	51
8/11/2002	034500	22.2	7.9	3.6	49.4	459	50
8/11/2002	040000	22.1	7.9	3.7	50.1	458	51
8/11/2002	041500	22.0	7.9	3.6	49.1	458	51
8/11/2002	043000	21.9	7.9	3.5	47.1	458	51
8/11/2002	044500	21.8	7.9	3.7	50.1	457	50
8/11/2002	050000	21.7	7.9	3.7	49.8	457	50
8/11/2002	051500	21.7	7.9	3.3	43.9	457	49
8/11/2002	053000	21.6	7.9	3.2	42.4	456	47
8/11/2002	054500	21.6	7.9	3.2	42.6	456	47
8/11/2002	060000	21.5	7.9	3.2	42.8	456	44
8/11/2002	061500	21.3	7.8	1.6	21.9	454	44
8/11/2002	063000	21.3	7.8	0.3	4.5	453	44
8/11/2002	064500	21.2	7.8	1.1	14.4	454	45
8/11/2002	070000	21.1	7.8	0.7	9.6	453	44
8/11/2002	071500	21.1	7.8	0.6	8.4	453	45
8/11/2002	073000	21.1	7.8	0.7	9.5	453	44
8/11/2002	074500	21.1	7.8	0.3	3.4	452	45

Table 8.6.1.--Continuous Monitoring Data for Rio Grande at Isleta below Railroad Bridge, August 7 through August 11, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
8/11/2002	080000	21.1	7.8	0.4	5.0	451	45
8/11/2002	081500	21.2	7.8	0.4	5.1	450	45
8/11/2002	083000	21.2	7.8	0.2	2.7	449	45
8/11/2002	084500	21.4	7.8	0.3	3.4	448	44
8/11/2002	090000	21.6	7.8	0.4	5.8	446	44
8/11/2002	091500	21.7	7.8	0.0	0.6	445	45
8/11/2002	093000	21.9	7.8	0.0	0.2	444	44
8/11/2002	094500	22.2	7.8	0.0	0.4	443	44
8/11/2002	100000	22.4	7.8	0.0	0.2	441	44
8/11/2002	101500	22.7	7.8	0.0	0.1	440	43
8/11/2002	103000	23.1	7.8	0.0	0.0	439	43
8/11/2002	104500	23.4	7.8	0.1	0.7	437	44
8/11/2002	110000	23.8	7.8	0.0	0.4	436	44
8/11/2002	111500	24.2	7.7	0.0	0.2	434	44
8/11/2002	113000	24.6	7.7	0.0	0.4	433	44
8/11/2002	114500	25.0	7.8	0.0	0.4	431	43
8/11/2002	120000	25.5	7.8	0.0	0.5	430	43
8/11/2002	121500	25.8	7.7	0.0	0.1	430	43
8/11/2002	123000	26.2	7.5	0.0	0.2	430	42
8/11/2002	124500	26.7	7.5	0.0	0.2	430	42
8/11/2002	130000	27.1	7.4	0.0	0.2	429	42
8/11/2002	131500	27.5	7.5	0.0	0.1	428	41
8/11/2002	133000	27.9	7.4	0.0	0.1	428	41
8/11/2002	134500	28.3	7.4	0.0	0.2	428	41
8/11/2002	140000	28.6	7.4	0.0	0.2	428	41
8/11/2002	141500	28.9	7.5	0.0	0.1	429	41
8/11/2002	143000	29.2	7.5	0.0	0.2	428	42
8/11/2002	144500	29.5	7.5	0.0	0.4	429	42
8/11/2002	150000	29.7	7.6	0.0	0.1	429	24
8/11/2002	151500	29.9	7.6	0.0	0.0	430	28
8/11/2002	153000	30.1	7.6	0.0	0.1	431	41
8/11/2002	154500	30.3	7.5	0.0	0.4	433	41
8/11/2002	160000	30.4	7.6	0.0	0.2	434	40
8/11/2002	161500	30.4	7.6	0.0	0.1	436	40
8/11/2002	163000	30.5	7.5	0.0	0.2	437	40
8/11/2002	164500	30.5	7.5	0.0	0.4	438	40
8/11/2002	170000	30.6	7.5	0.0	0.2	439	39
8/11/2002	171500	30.7	7.5	0.0	0.2	439	40
8/11/2002	173000	30.7	7.5	0.0	0.1	440	40
8/11/2002	174500	30.7	7.5	0.0	0.2	441	39
8/11/2002	180000	30.6	7.5	0.0	0.1	442	39
8/11/2002	181500	30.6	7.5	0.0	0.4	443	39
8/11/2002	183000	30.5	7.5	0.0	0.2	445	39
8/11/2002	184500	30.3	7.5	0.0	0.2	446	38
8/11/2002	190000	30.2	7.6	0.0	0.1	448	39
8/11/2002	191500	30.0	7.5	0.0	0.1	449	38
8/11/2002	193000	29.8	7.5	0.0	0.2	451	38
8/11/2002	194500	29.6	7.5	0.0	0.1	453	38
8/11/2002	200000	29.4	7.5	0.0	0.1	454	39

Table 8.6.1.--Continuous Monitoring Data for Rio Grande at Isleta below Railroad Bridge, August 7 through August 11, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
8/11/2002	201500	29.1	7.6	0.0	0.2	455	38
8/11/2002	203000	28.9	7.6	0.0	0.1	456	38
8/11/2002	204500	28.6	7.5	0.0	0.2	457	38
8/11/2002	210000	28.3	7.5	0.0	0.1	459	37
8/11/2002	211500	28.0	7.4	0.0	0.2	460	24
8/11/2002	213000	27.7	7.5	0.0	0.1	461	38
8/11/2002	214500	27.5	7.6	0.0	0.1	461	38
8/11/2002	220000	27.2	7.6	0.0	0.0	462	38
8/11/2002	221500	27.0	7.6	0.0	0.4	462	38
8/11/2002	223000	26.8	7.6	0.0	0.1	463	38
8/11/2002	224500	26.5	7.5	0.0	0.1	463	38
8/11/2002	230000	26.3	7.6	0.0	0.0	464	38
8/11/2002	231500	26.1	7.6	0.0	0.1	464	38
8/11/2002	233000	25.8	7.6	0.0	0.1	465	38
8/11/2002	234500	25.6	7.6	0.0	0.0	465	38

Descriptive Statistics (statistics before probe burial)	*Temp (°C)*	*pH*	*DO (mg/L)*	*DO (%)*	*SPC (uS/cm)*	*Turbidity (NTU)*
Mean	25.5	7.9	3.4	48.6	465	56
Standard Error	0.17	0.00	0.06	0.95	2.04	1.28
Median	24.9	7.9	3.0	45.2	467	61
Mode	26.8	7.9	2.6	34.7	457	71
Standard Deviation	3.28	0.06	1.24	18.20	39.24	24.63
Sample Variance	10.73	0.00	1.53	331.39	1540.12	606.68
Kurtosis	-1.26	0.87	-0.57	-0.50	1.58	-0.95
Skewness	0.32	-0.96	0.48	0.57	-1.14	-0.14
Range	10.8	0.3	5.3	71.7	182	109
Minimum	20.8	7.7	1.2	18.3	340	0
Maximum	31.5	8.0	6.4	90.0	522	109
Sum	9457.2	2922.1	1245.7	18023.7	172462	20750
Count	371	371	371	371	371	371

Table 8.6.2.--Continuous Monitoring Data for Rio Grande at Isleta below Railroad Bridge,
January 28, 2003 through February 5, 2003

[--, no data; °C, degrees Celsius; mg/L, milligrams per liter; % sat, percent saturation; uS/cm, microsiemens per centimeter; NTU, Nephelometric turbidity units.]

DataSonde 4a 40183
Log File Name : ISLETA 01-28-03
Setup Date (MMDDYY) : 012803
Setup Time (HHMMSS) : 091454
Starting Date (MMDDYY) : 012803
Starting Time (HHMMSS) : 094500
Stopping Date (MMDDYY) : 020903
Stopping Time (HHMMSS) : 120000
Interval (HHMMSS) : 001500
Sensor warmup (HHMMSS) : 000200
Circltr warmup (HHMMSS) : 000100

Date	Time (HHMMSS)	Temp (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
1/28/2003	100000	7.98	7.88	9.19	92.4	373	3
1/28/2003	101500	8.09	7.91	9.13	92.1	372	4
1/28/2003	103000	7.20	7.98	9.74	96.0	363	6
1/28/2003	104500	7.32	8.04	10.01	99.0	362	6
1/28/2003	110000	7.65	8.06	10.02	99.9	332	6
1/28/2003	111500	7.98	8.06	9.98	100.3	298	5
1/28/2003	113000	8.34	8.07	9.93	100.7	260	5
1/28/2003	114500	8.69	8.07	9.88	101.0	240	5
1/28/2003	120000	9.02	8.08	9.83	101.3	251	5
1/28/2003	121500	9.39	8.08	9.80	101.8	245	5
1/28/2003	123000	9.75	8.09	9.77	102.4	242	5
1/28/2003	124500	10.10	8.09	9.63	101.8	243	5
1/28/2003	130000	10.45	8.10	9.67	103.1	244	5
1/28/2003	131500	10.76	8.11	9.57	102.8	244	5
1/28/2003	133000	11.07	8.11	9.55	103.3	244	5
1/28/2003	134500	11.37	8.11	9.46	103.0	247	5
1/28/2003	140000	11.61	8.12	9.41	103.1	248	5
1/28/2003	141500	11.84	8.13	9.30	102.3	248	5
1/28/2003	143000	12.03	8.14	9.34	103.3	250	5
1/28/2003	144500	12.18	8.14	9.23	102.4	250	5
1/28/2003	150000	12.32	8.15	9.20	102.4	244	5
1/28/2003	151500	12.44	8.15	9.10	101.5	245	5
1/28/2003	153000	12.49	8.16	9.12	101.9	247	5
1/28/2003	154500	12.50	8.17	9.14	102.1	251	6
1/28/2003	160000	12.42	8.17	9.08	101.3	251	6
1/28/2003	161500	12.32	8.17	9.05	100.8	252	6
1/28/2003	163000	12.20	8.17	9.02	100.1	250	6
1/28/2003	164500	12.06	8.17	9.06	100.2	253	6
1/28/2003	170000	11.91	8.17	8.96	98.8	254	6
1/28/2003	171500	11.79	8.16	8.85	97.3	254	6
1/28/2003	173000	11.67	8.15	8.77	96.1	253	6
1/28/2003	174500	11.53	8.15	8.82	96.4	264	6
1/28/2003	180000	11.38	8.15	8.86	96.5	265	6
1/28/2003	181500	11.27	8.13	8.82	95.8	259	6
1/28/2003	183000	11.11	8.13	8.75	94.7	259	6
1/28/2003	184500	10.98	8.12	8.60	92.8	260	6
1/28/2003	190000	10.86	8.11	8.64	93.0	258	6
1/28/2003	191500	10.76	8.10	8.74	93.8	267	6
1/28/2003	193000	10.63	8.09	8.67	92.8	261	6
1/28/2003	194500	10.50	8.09	8.69	92.8	266	6
1/28/2003	200000	10.40	8.08	8.68	92.4	262	6
1/28/2003	201500	10.29	8.08	8.66	92.0	263	6

Table 8.6.2.--Continuous Monitoring Data for Rio Grande at Isleta below Railroad Bridge, January 28, 2003 through February 5, 2003

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
1/28/2003	203000	10.17	8.07	8.54	90.5	264	6
1/28/2003	204500	10.07	8.07	8.68	91.7	261	6
1/28/2003	210000	9.97	8.07	8.62	90.9	260	6
1/28/2003	211500	9.87	8.06	8.64	90.9	262	6
1/28/2003	213000	9.77	8.06	8.63	90.5	264	6
1/28/2003	214500	9.66	8.06	8.65	90.5	263	6
1/28/2003	220000	9.57	8.05	8.52	89.0	264	6
1/28/2003	221500	9.47	8.05	8.67	90.3	262	6
1/28/2003	223000	9.37	8.05	8.71	90.5	268	6
1/28/2003	224500	9.29	8.05	8.65	89.8	260	6
1/28/2003	230000	9.22	8.05	8.70	90.1	262	6
1/28/2003	231500	9.15	8.04	8.77	90.6	263	6
1/28/2003	233000	9.05	8.05	8.76	90.4	262	6
1/28/2003	234500	8.94	8.05	8.76	90.1	257	6
1/29/2003	000000	8.83	8.04	8.83	90.6	259	5
1/29/2003	001500	8.74	8.04	8.78	89.8	266	5
1/29/2003	003000	8.62	8.04	8.82	90.0	261	6
1/29/2003	004500	8.52	8.04	8.87	90.3	261	5
1/29/2003	010000	8.41	8.04	8.93	90.7	262	5
1/29/2003	011500	8.32	8.04	8.93	90.4	264	5
1/29/2003	013000	8.16	8.04	8.93	90.1	259	5
1/29/2003	014500	8.04	8.04	8.84	89.0	259	6
1/29/2003	020000	7.93	8.04	9.00	90.3	259	6
1/29/2003	021500	7.87	8.04	8.98	90.0	260	6
1/29/2003	023000	7.73	8.04	8.97	89.6	260	6
1/29/2003	024500	7.62	8.04	8.78	87.5	255	6
1/29/2003	030000	7.55	8.04	9.18	91.3	261	6
1/29/2003	031500	7.41	8.04	9.21	91.2	269	7
1/29/2003	033000	7.33	8.04	9.14	90.4	264	6
1/29/2003	034500	7.28	8.04	9.33	92.2	266	6
1/29/2003	040000	7.18	8.04	9.32	91.9	273	6
1/29/2003	041500	7.12	8.04	9.28	91.3	267	6
1/29/2003	043000	7.07	8.04	9.28	91.2	260	6
1/29/2003	044500	7.03	8.03	9.36	91.9	271	6
1/29/2003	050000	6.96	8.03	9.21	90.2	264	6
1/29/2003	051500	6.92	8.03	9.41	92.2	266	6
1/29/2003	053000	6.87	8.02	9.44	92.3	272	8
1/29/2003	054500	6.76	8.03	9.51	92.7	281	6
1/29/2003	060000	6.68	8.03	9.49	92.4	282	8
1/29/2003	061500	6.65	8.03	9.48	92.2	276	6
1/29/2003	063000	6.68	8.02	9.37	91.2	285	4
1/29/2003	064500	6.54	8.03	9.10	88.3	278	4
1/29/2003	070000	6.54	8.03	8.02	77.8	274	4
1/29/2003	071500	6.41	8.03	7.37	71.3	274	4
1/29/2003	073000	6.38	8.03	7.76	75.0	271	4
1/29/2003	074500	6.38	8.03	7.61	73.5	272	4
1/29/2003	080000	6.32	8.03	7.19	69.4	256	4
1/29/2003	081500	6.31	8.03	7.00	67.5	268	4
1/29/2003	083000	6.36	8.02	6.97	67.3	166	4
1/29/2003	084500	6.40	8.00	6.07	58.6	161	3
1/29/2003	090000	6.44	7.99	6.01	58.1	157	3
1/29/2003	091500	6.48	7.99	6.03	58.4	156	3
1/29/2003	093000	6.53	7.98	5.79	56.1	154	3
1/29/2003	094500	6.60	7.98	6.13	59.6	152	3
1/29/2003	100000	6.69	7.98	6.04	58.7	150	3
1/29/2003	101500	6.78	7.97	6.00	58.5	149	3

Table 8.6.2.--Continuous Monitoring Data for Rio Grande at Isleta below Railroad Bridge, January 28, 2003 through February 5, 2003

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
1/29/2003	103000	6.87	7.97	5.90	57.7	148	3
1/29/2003	104500	6.95	7.96	5.79	56.7	147	3
1/29/2003	110000	7.05	7.95	5.58	54.8	146	3
1/29/2003	111500	7.18	7.94	5.49	54.1	145	3
1/29/2003	113000	7.32	7.94	5.04	49.8	145	3
1/29/2003	114500	7.46	7.92	4.89	48.5	145	3
1/29/2003	120000	7.59	7.92	4.74	47.1	144	3
1/29/2003	121500	7.80	7.97	4.27	42.7	143	3
1/29/2003	123000	8.18	7.94	4.09	41.3	142	3
1/29/2003	124500	8.59	7.90	3.86	39.3	142	3
1/29/2003	130000	8.85	7.91	3.56	36.5	142	3
1/29/2003	131500	8.99	7.92	3.54	36.4	142	3
1/29/2003	133000	9.26	7.90	3.48	36.0	142	3
1/29/2003	134500	9.46	7.90	3.30	34.4	141	3
1/29/2003	140000	9.50	7.90	3.04	31.7	141	3
1/29/2003	141500	9.48	7.85	3.18	33.1	141	3
1/29/2003	143000	9.51	7.85	3.10	32.3	140	3
1/29/2003	144500	9.55	7.84	3.12	32.5	139	3
1/29/2003	150000	9.58	7.85	3.03	31.7	139	3
1/29/2003	151500	9.62	7.84	2.96	31.0	138	3
1/29/2003	153000	9.66	7.84	2.92	30.5	138	3
1/29/2003	154500	9.71	7.83	2.76	28.9	138	3
1/29/2003	160000	9.76	7.82	2.78	29.1	137	3
1/29/2003	161500	9.81	7.82	2.96	31.0	137	3
1/29/2003	163000	9.87	7.82	2.76	29.1	137	3
1/29/2003	164500	9.95	7.82	2.65	27.9	137	3
1/29/2003	170000	10.03	7.81	2.60	27.5	137	3
1/29/2003	171500	10.07	7.81	2.63	27.7	137	3
1/29/2003	173000	10.09	7.82	2.48	26.2	137	3
1/29/2003	174500	10.13	7.83	2.32	24.6	137	3
1/29/2003	180000	10.18	7.81	2.29	24.3	137	3
1/29/2003	181500	10.21	7.81	2.43	25.8	136	3
1/29/2003	183000	10.22	7.80	2.43	25.8	136	3
1/29/2003	184500	10.22	7.81	2.30	24.4	136	3
1/29/2003	190000	10.24	7.81	2.16	22.9	136	3
1/29/2003	191500	10.26	7.79	2.21	23.4	136	3
1/29/2003	193000	10.25	7.79	2.26	24.0	136	3
1/29/2003	194500	10.25	7.79	2.14	22.7	135	3
1/29/2003	200000	10.25	7.79	2.16	22.9	135	3
1/29/2003	201500	10.24	7.79	2.12	22.5	135	3
1/29/2003	203000	10.23	7.79	2.07	21.9	135	3
1/29/2003	204500	10.23	7.79	1.95	20.7	135	3
1/29/2003	210000	10.23	7.78	1.91	20.3	134	3
1/29/2003	211500	10.23	7.78	1.91	20.3	134	3
1/29/2003	213000	10.22	7.78	1.78	18.9	134	3
1/29/2003	214500	10.21	7.78	1.73	18.4	134	3
1/29/2003	220000	10.20	7.78	1.73	18.4	134	3
1/29/2003	221500	10.18	7.78	1.81	19.2	134	3
1/29/2003	223000	10.16	7.79	1.70	18.0	134	3
1/29/2003	224500	10.14	7.78	1.70	18.0	134	3
1/29/2003	230000	10.13	7.78	1.62	17.1	133	3
1/29/2003	231500	10.11	7.78	1.58	16.7	133	3
1/29/2003	233000	10.10	7.77	1.68	17.7	133	3
1/29/2003	234500	10.09	7.77	1.66	17.6	133	3
1/30/2003	000000	10.07	7.77	1.53	16.2	133	3
1/30/2003	001500	10.05	7.77	1.48	15.7	133	3

Table 8.6.2.--Continuous Monitoring Data for Rio Grande at Isleta below Railroad Bridge, January 28, 2003 through February 5, 2003

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
1/30/2003	003000	10.02	7.77	1.45	15.3	133	3
1/30/2003	004500	10.00	7.76	1.42	15.0	132	3
1/30/2003	010000	9.97	7.77	1.37	14.4	132	3
1/30/2003	011500	9.94	7.77	1.32	13.9	132	3
1/30/2003	013000	9.91	7.77	1.23	12.9	132	3
1/30/2003	014500	9.88	7.77	1.19	12.5	132	3
1/30/2003	020000	9.85	7.77	1.17	12.3	131	3
1/30/2003	021500	9.82	7.77	1.14	12.0	131	3
1/30/2003	023000	9.79	7.77	1.09	11.4	131	3
1/30/2003	024500	9.76	7.77	1.04	10.9	131	3
1/30/2003	030000	9.73	7.77	1.01	10.6	131	3
1/30/2003	031500	9.71	7.77	0.99	10.4	130	3
1/30/2003	033000	9.68	7.77	0.96	10.1	130	3
1/30/2003	034500	9.65	7.76	0.92	9.7	130	3
1/30/2003	040000	9.63	7.76	0.91	9.5	130	3
1/30/2003	041500	9.60	7.76	0.91	9.5	130	3
1/30/2003	043000	9.57	7.76	0.90	9.4	130	3
1/30/2003	044500	9.54	7.76	0.89	9.3	129	3
1/30/2003	050000	9.50	7.75	0.89	9.3	129	3
1/30/2003	051500	9.47	7.75	0.88	9.1	129	3
1/30/2003	053000	9.44	7.75	0.85	8.9	129	3
1/30/2003	054500	9.40	7.75	0.81	8.5	129	3
1/30/2003	060000	9.37	7.75	0.76	7.9	129	3
1/30/2003	061500	9.34	7.75	0.74	7.6	129	3
1/30/2003	063000	9.30	7.75	0.70	7.2	129	3
1/30/2003	064500	9.27	7.75	0.70	7.2	129	3
1/30/2003	070000	9.24	7.75	0.70	7.2	129	3
1/30/2003	071500	9.20	7.76	0.69	7.1	128	3
1/30/2003	073000	9.17	7.76	0.67	7.0	128	3
1/30/2003	074500	9.14	7.75	0.63	6.5	128	3
1/30/2003	080000	9.11	7.75	0.59	6.1	128	3
1/30/2003	081500	9.07	7.75	0.61	6.3	128	3
1/30/2003	083000	9.05	7.75	0.62	6.4	128	3
1/30/2003	084500	9.02	7.75	0.61	6.3	128	3
1/30/2003	090000	8.98	7.75	0.57	5.9	127	3
1/30/2003	091500	8.95	7.74	0.54	5.6	127	3
1/30/2003	093000	8.92	7.74	0.54	5.6	127	3
1/30/2003	094500	8.88	7.74	0.52	5.3	127	3
1/30/2003	100000	8.85	7.74	0.50	5.2	127	3
1/30/2003	101500	8.83	7.74	0.52	5.3	127	3
1/30/2003	103000	8.79	7.74	0.52	5.3	127	3
1/30/2003	104500	8.77	7.74	0.56	5.7	127	3
1/30/2003	110000	8.75	7.74	0.53	5.5	127	3
1/30/2003	111500	8.72	7.74	0.48	4.9	127	3
1/30/2003	113000	8.70	7.74	0.47	4.8	127	3
1/30/2003	114500	8.68	7.74	0.41	4.2	126	3
1/30/2003	120000	8.65	7.74	0.38	3.9	126	3
1/30/2003	121500	8.63	7.73	0.39	3.9	126	3
1/30/2003	123000	8.62	7.73	0.34	3.5	126	3
1/30/2003	124500	8.62	7.74	0.41	4.2	126	3
1/30/2003	130000	8.61	7.74	0.39	3.9	126	3
1/30/2003	131500	8.62	7.75	0.33	3.4	126	3
1/30/2003	133000	8.62	7.74	0.32	3.2	126	3
1/30/2003	134500	8.63	7.74	0.29	2.9	126	3
1/30/2003	140000	8.65	7.74	0.27	2.8	126	3
1/30/2003	141500	8.67	7.75	0.30	3.1	126	3

Table 8.6.2.--Continuous Monitoring Data for Rio Grande at Isleta below Railroad Bridge, January 28, 2003 through February 5, 2003

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
1/30/2003	143000	8.68	7.74	0.26	2.7	126	3
1/30/2003	144500	8.70	7.74	0.23	2.4	126	3
1/30/2003	150000	8.73	7.73	0.18	1.8	126	3
1/30/2003	151500	8.75	7.73	0.18	1.8	126	3
1/30/2003	153000	8.79	7.73	0.16	1.7	126	3
1/30/2003	154500	8.82	7.73	0.15	1.5	126	3
1/30/2003	160000	8.87	7.72	0.14	1.4	125	3
1/30/2003	161500	8.92	7.71	0.10	1.0	125	3
1/30/2003	163000	8.98	7.71	0.12	1.3	125	3
1/30/2003	164500	9.04	7.71	0.08	0.8	125	3
1/30/2003	170000	9.09	7.71	0.07	0.7	125	3
1/30/2003	171500	9.14	7.71	0.05	0.6	125	3
1/30/2003	173000	9.18	7.72	0.05	0.6	126	3
1/30/2003	174500	9.23	7.72	0.03	0.3	126	3
1/30/2003	180000	9.28	7.71	0.04	0.4	125	3
1/30/2003	181500	9.33	7.70	0.05	0.6	125	3
1/30/2003	183000	9.37	7.69	0.01	0.1	125	3
1/30/2003	184500	9.40	7.70	0.03	0.3	125	3
1/30/2003	190000	9.44	7.71	0.01	0.1	125	3
1/30/2003	191500	9.47	7.70	0.00	0.0	125	3
1/30/2003	193000	9.50	7.70	0.01	0.1	125	3
1/30/2003	194500	9.53	7.70	0.00	0.0	125	3
1/30/2003	200000	9.56	7.69	0.01	0.1	125	3
1/30/2003	201500	9.58	7.69	0.03	0.3	125	3
1/30/2003	203000	9.60	7.70	0.01	0.1	125	3
1/30/2003	204500	9.62	7.70	0.00	0.0	125	3
1/30/2003	210000	9.63	7.70	0.00	0.0	125	3
1/30/2003	211500	9.65	7.69	0.00	0.0	125	3
1/30/2003	213000	9.67	7.69	0.03	0.3	125	3
1/30/2003	214500	9.69	7.69	0.01	0.1	125	3
1/30/2003	220000	9.71	7.69	0.01	0.1	125	3
1/30/2003	221500	9.71	7.69	0.00	0.0	125	3
1/30/2003	223000	9.72	7.69	0.00	0.0	125	3
1/30/2003	224500	9.72	7.69	0.00	0.0	124	3
1/30/2003	230000	9.73	7.69	0.00	0.0	124	3
1/30/2003	231500	9.73	7.69	0.00	0.0	124	3
1/30/2003	233000	9.73	7.69	0.00	0.0	124	3
1/30/2003	234500	9.73	7.69	0.00	0.0	124	3
1/31/2003	000000	9.72	7.69	0.00	0.0	124	3
1/31/2003	001500	9.72	7.69	0.00	0.0	124	3
1/31/2003	003000	9.72	7.69	0.00	0.0	124	3
1/31/2003	004500	9.72	7.68	0.00	0.0	124	3
1/31/2003	010000	9.71	7.68	0.01	0.1	124	3
1/31/2003	011500	9.71	7.68	0.00	0.0	124	3
1/31/2003	013000	9.70	7.68	0.00	0.0	124	3
1/31/2003	014500	9.69	7.68	0.00	0.0	124	3
1/31/2003	020000	9.68	7.68	0.00	0.0	124	3
1/31/2003	021500	9.66	7.68	0.00	0.0	124	3
1/31/2003	023000	9.65	7.69	0.00	0.0	124	3
1/31/2003	024500	9.64	7.69	0.00	0.0	124	3
1/31/2003	030000	9.63	7.69	0.00	0.0	124	3
1/31/2003	031500	9.61	7.69	0.00	0.0	124	3
1/31/2003	033000	9.59	7.69	0.00	0.0	124	3
1/31/2003	034500	9.57	7.69	0.00	0.0	124	3
1/31/2003	040000	9.55	7.69	0.00	0.0	124	3
1/31/2003	041500	9.53	7.69	0.00	0.0	124	3

Table 8.6.2.--Continuous Monitoring Data for Rio Grande at Isleta below Railroad Bridge,
January 28, 2003 through February 5, 2003

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
1/31/2003	043000	9.51	7.69	0.00	0.0	124	3
1/31/2003	044500	9.48	7.69	0.00	0.0	124	3
1/31/2003	050000	9.46	7.69	0.00	0.0	124	3
1/31/2003	051500	9.44	7.69	0.00	0.0	124	3
1/31/2003	053000	9.41	7.69	0.00	0.0	124	3
1/31/2003	054500	9.38	7.70	0.00	0.0	124	3
1/31/2003	060000	9.36	7.70	0.00	0.0	124	3
1/31/2003	061500	9.33	7.70	0.00	0.0	124	3
1/31/2003	063000	9.30	7.70	0.00	0.0	124	3
1/31/2003	064500	9.27	7.70	0.00	0.0	124	3
1/31/2003	070000	9.25	7.70	0.00	0.0	124	3
1/31/2003	071500	9.22	7.70	0.00	0.0	124	3
1/31/2003	073000	9.19	7.71	0.00	0.0	124	3
1/31/2003	074500	9.16	7.70	0.00	0.0	124	3
1/31/2003	080000	9.13	7.71	0.00	0.0	123	3
1/31/2003	081500	9.10	7.70	0.00	0.0	123	3
1/31/2003	083000	9.08	7.70	0.00	0.0	123	3
1/31/2003	084500	9.04	7.70	0.00	0.0	123	3
1/31/2003	090000	9.01	7.71	0.00	0.0	123	3
1/31/2003	091500	8.98	7.71	0.00	0.0	123	3
1/31/2003	093000	8.95	7.71	0.00	0.0	123	3
1/31/2003	094500	8.92	7.71	0.00	0.0	123	3
1/31/2003	100000	8.89	7.71	0.00	0.0	123	3
1/31/2003	101500	8.86	7.71	0.00	0.0	123	3
1/31/2003	103000	8.83	7.71	0.00	0.0	123	3
1/31/2003	104500	8.80	7.71	0.00	0.0	123	3
1/31/2003	110000	8.78	7.71	0.00	0.0	123	3
1/31/2003	111500	8.76	7.71	0.00	0.0	123	3
1/31/2003	113000	8.74	7.72	0.00	0.0	123	3
1/31/2003	114500	8.73	7.72	0.00	0.0	123	3
1/31/2003	120000	8.71	7.72	0.00	0.0	123	3
1/31/2003	121500	8.70	7.72	0.00	0.0	123	3
1/31/2003	123000	8.70	7.72	0.00	0.0	123	3
1/31/2003	124500	8.69	7.72	0.00	0.0	123	3
1/31/2003	130000	8.69	7.72	0.00	0.0	123	3
1/31/2003	131500	8.69	7.72	0.00	0.0	123	3
1/31/2003	133000	8.69	7.72	0.00	0.0	123	3
1/31/2003	134500	8.71	7.72	0.00	0.0	123	3
1/31/2003	140000	8.73	7.72	0.00	0.0	123	3
1/31/2003	141500	8.75	7.72	0.00	0.0	123	3
1/31/2003	143000	8.78	7.72	0.00	0.0	123	3
1/31/2003	144500	8.81	7.71	0.00	0.0	123	3
1/31/2003	150000	8.84	7.71	0.00	0.0	123	3
1/31/2003	151500	8.88	7.72	0.00	0.0	123	3
1/31/2003	153000	8.93	7.72	0.00	0.0	123	3
1/31/2003	154500	8.98	7.72	0.00	0.0	123	3
1/31/2003	160000	9.04	7.71	0.00	0.0	123	3
1/31/2003	161500	9.10	7.71	0.00	0.0	123	3
1/31/2003	163000	9.17	7.71	0.00	0.0	123	3
1/31/2003	164500	9.23	7.72	0.00	0.0	123	3
1/31/2003	170000	9.30	7.72	0.00	0.0	123	3
1/31/2003	171500	9.36	7.71	0.00	0.0	123	3
1/31/2003	173000	9.43	7.70	0.00	0.0	123	3
1/31/2003	174500	9.49	7.70	0.00	0.0	123	3
1/31/2003	180000	9.56	7.70	0.00	0.0	123	3
1/31/2003	181500	9.63	7.69	0.00	0.0	123	3

Table 8.6.2.--Continuous Monitoring Data for Rio Grande at Isleta below Railroad Bridge, January 28, 2003 through February 5, 2003

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
1/31/2003	183000	9.68	7.69	0.00	0.0	123	3
1/31/2003	184500	9.74	7.69	0.00	0.0	123	3
1/31/2003	190000	9.79	7.69	0.00	0.0	123	3
1/31/2003	191500	9.85	7.69	0.00	0.0	123	3
1/31/2003	193000	9.90	7.69	0.00	0.0	122	3
1/31/2003	194500	9.94	7.68	0.00	0.0	122	3
1/31/2003	200000	9.98	7.68	0.00	0.0	122	3
1/31/2003	201500	10.02	7.68	0.00	0.0	122	3
1/31/2003	203000	10.06	7.68	0.00	0.0	122	2
1/31/2003	204500	10.09	7.67	0.00	0.0	122	3
1/31/2003	210000	10.12	7.67	0.00	0.0	122	3
1/31/2003	211500	10.15	7.67	0.00	0.0	122	3
1/31/2003	213000	10.17	7.66	0.00	0.0	122	3
1/31/2003	214500	10.19	7.66	0.00	0.0	122	3
1/31/2003	220000	10.21	7.66	0.00	0.0	122	3
1/31/2003	221500	10.22	7.65	0.00	0.0	122	2
1/31/2003	223000	10.22	7.65	0.00	0.0	122	3
1/31/2003	224500	10.23	7.65	0.00	0.0	122	3
1/31/2003	230000	10.23	7.64	0.00	0.0	122	3
1/31/2003	231500	10.23	7.64	0.00	0.0	122	3
1/31/2003	233000	10.23	7.64	0.00	0.0	122	3
1/31/2003	234500	10.23	7.63	0.00	0.0	122	2
2/1/2003	000000	10.22	7.63	0.00	0.0	122	3
2/1/2003	001500	10.22	7.63	0.00	0.0	122	3
2/1/2003	003000	10.21	7.63	0.00	0.0	122	3
2/1/2003	004500	10.20	7.64	0.00	0.0	122	3
2/1/2003	010000	10.20	7.63	0.00	0.0	122	2
2/1/2003	011500	10.19	7.63	0.00	0.0	122	2
2/1/2003	013000	10.18	7.62	0.00	0.0	122	2
2/1/2003	014500	10.17	7.62	0.00	0.0	122	2
2/1/2003	020000	10.16	7.62	0.00	0.0	122	2
2/1/2003	021500	10.15	7.62	0.00	0.0	122	2
2/1/2003	023000	10.14	7.62	0.00	0.0	122	2
2/1/2003	024500	10.12	7.62	0.00	0.0	122	2
2/1/2003	030000	10.10	7.63	0.00	0.0	122	2
2/1/2003	031500	10.09	7.63	0.00	0.0	122	2
2/1/2003	033000	10.07	7.62	0.00	0.0	121	2
2/1/2003	034500	10.04	7.62	0.00	0.0	121	2
2/1/2003	040000	10.02	7.62	0.00	0.0	121	2
2/1/2003	041500	10.00	7.62	0.00	0.0	121	2
2/1/2003	043000	9.98	7.62	0.00	0.0	121	2
2/1/2003	044500	9.95	7.62	0.00	0.0	121	2
2/1/2003	050000	9.93	7.62	0.00	0.0	121	2
2/1/2003	051500	9.91	7.62	0.00	0.0	121	2
2/1/2003	053000	9.88	7.62	0.00	0.0	121	2
2/1/2003	054500	9.86	7.62	0.00	0.0	121	2
2/1/2003	060000	9.83	7.61	0.00	0.0	121	2
2/1/2003	061500	9.81	7.61	0.00	0.0	121	2
2/1/2003	063000	9.77	7.62	0.00	0.0	121	2
2/1/2003	064500	9.75	7.62	0.00	0.0	121	2
2/1/2003	070000	9.71	7.62	0.00	0.0	121	2
2/1/2003	071500	9.68	7.62	0.00	0.0	121	2
2/1/2003	073000	9.65	7.62	0.00	0.0	121	2
2/1/2003	074500	9.62	7.62	0.00	0.0	121	2
2/1/2003	080000	9.59	7.62	0.00	0.0	121	2
2/1/2003	081500	9.55	7.62	0.00	0.0	121	2

Table 8.6.2.--Continuous Monitoring Data for Rio Grande at Isleta below Railroad Bridge, January 28, 2003 through February 5, 2003

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
2/1/2003	083000	9.52	7.62	0.00	0.0	121	2
2/1/2003	084500	9.49	7.62	0.00	0.0	121	2
2/1/2003	090000	9.45	7.62	0.00	0.0	121	2
2/1/2003	091500	9.42	7.62	0.00	0.0	120	2
2/1/2003	093000	9.39	7.62	0.00	0.0	120	2
2/1/2003	094500	9.35	7.62	0.00	0.0	120	2
2/1/2003	100000	9.32	7.62	0.00	0.0	120	2
2/1/2003	101500	9.29	7.62	0.00	0.0	120	2
2/1/2003	103000	9.26	7.61	0.00	0.0	120	2
2/1/2003	104500	9.23	7.61	0.00	0.0	120	2
2/1/2003	110000	9.20	7.61	0.00	0.0	120	2
2/1/2003	111500	9.17	7.62	0.00	0.0	120	2
2/1/2003	113000	9.15	7.61	0.00	0.0	120	2
2/1/2003	114500	9.13	7.61	0.00	0.0	120	2
2/1/2003	120000	9.11	7.62	0.00	0.0	120	2
2/1/2003	121500	9.08	7.62	0.00	0.0	120	2
2/1/2003	123000	9.07	7.61	0.00	0.0	120	2
2/1/2003	124500	9.06	7.62	0.00	0.0	120	2
2/1/2003	130000	9.06	7.62	0.00	0.0	120	2
2/1/2003	131500	9.06	7.61	0.00	0.0	120	2
2/1/2003	133000	9.06	7.61	0.00	0.0	120	2
2/1/2003	134500	9.07	7.61	0.00	0.0	120	2
2/1/2003	140000	9.08	7.60	0.00	0.0	120	2
2/1/2003	141500	9.09	7.60	0.00	0.0	120	2
2/1/2003	143000	9.11	7.61	0.00	0.0	120	2
2/1/2003	144500	9.13	7.61	0.00	0.0	120	2
2/1/2003	150000	9.15	7.60	0.00	0.0	120	2
2/1/2003	151500	9.18	7.60	0.00	0.0	120	2
2/1/2003	153000	9.21	7.59	0.00	0.0	120	2
2/1/2003	154500	9.24	7.59	0.00	0.0	120	2
2/1/2003	160000	9.28	7.58	0.00	0.0	120	2
2/1/2003	161500	9.32	7.59	0.00	0.0	120	2
2/1/2003	163000	9.36	7.58	0.00	0.0	120	2
2/1/2003	164500	9.41	7.58	0.00	0.0	120	2
2/1/2003	170000	9.46	7.58	0.00	0.0	120	2
2/1/2003	171500	9.51	7.58	0.00	0.0	120	2
2/1/2003	173000	9.57	7.58	0.00	0.0	120	2
2/1/2003	174500	9.62	7.58	0.00	0.0	120	2
2/1/2003	180000	9.67	7.57	0.00	0.0	120	2
2/1/2003	181500	9.73	7.57	0.00	0.0	120	2
2/1/2003	183000	9.77	7.58	0.00	0.0	120	2
2/1/2003	184500	9.82	7.58	0.00	0.0	120	2
2/1/2003	190000	9.86	7.57	0.00	0.0	120	2
2/1/2003	191500	9.91	7.57	0.00	0.0	120	2
2/1/2003	193000	9.95	7.57	0.00	0.0	120	2
2/1/2003	194500	9.98	7.57	0.00	0.0	120	2
2/1/2003	200000	10.02	7.57	0.00	0.0	120	2
2/1/2003	201500	10.05	7.57	0.00	0.0	120	2
2/1/2003	203000	10.08	7.56	0.00	0.0	120	2
2/1/2003	204500	10.10	7.57	0.00	0.0	120	2
2/1/2003	210000	10.12	7.57	0.00	0.0	120	2
2/1/2003	211500	10.14	7.56	0.00	0.0	120	2
2/1/2003	213000	10.16	7.56	0.00	0.0	120	2
2/1/2003	214500	10.18	7.56	0.00	0.0	120	2
2/1/2003	220000	10.19	7.56	0.00	0.0	120	2
2/1/2003	221500	10.20	7.56	0.00	0.0	120	2

Table 8.6.2.--Continuous Monitoring Data for Rio Grande at Isleta below Railroad Bridge, January 28, 2003 through February 5, 2003

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
2/1/2003	223000	10.21	7.56	0.00	0.0	120	2
2/1/2003	224500	10.22	7.56	0.00	0.0	120	2
2/1/2003	230000	10.22	7.56	0.00	0.0	120	2
2/1/2003	231500	10.23	7.56	0.00	0.0	120	2
2/1/2003	233000	10.23	7.56	0.00	0.0	120	2
2/1/2003	234500	10.23	7.56	0.00	0.0	120	2
2/2/2003	000000	10.23	7.56	0.00	0.0	120	2
2/2/2003	001500	10.23	7.56	0.00	0.0	120	2
2/2/2003	003000	10.23	7.56	0.00	0.0	120	2
2/2/2003	004500	10.22	7.56	0.00	0.0	120	2
2/2/2003	010000	10.22	7.56	0.00	0.0	120	2
2/2/2003	011500	10.21	7.56	0.00	0.0	120	2
2/2/2003	013000	10.21	7.56	0.00	0.0	120	2
2/2/2003	014500	10.20	7.56	0.00	0.0	120	2
2/2/2003	020000	10.20	7.55	0.00	0.0	120	2
2/2/2003	021500	10.19	7.55	0.00	0.0	120	2
2/2/2003	023000	10.18	7.55	0.00	0.0	120	2
2/2/2003	024500	10.16	7.56	0.00	0.0	120	2
2/2/2003	030000	10.15	7.56	0.00	0.0	119	2
2/2/2003	031500	10.14	7.55	0.00	0.0	119	2
2/2/2003	033000	10.13	7.56	0.00	0.0	119	2
2/2/2003	034500	10.11	7.55	0.00	0.0	119	2
2/2/2003	040000	10.10	7.55	0.00	0.0	119	2
2/2/2003	041500	10.08	7.55	0.00	0.0	119	2
2/2/2003	043000	10.06	7.55	0.00	0.0	119	2
2/2/2003	044500	10.05	7.55	0.00	0.0	119	2
2/2/2003	050000	10.03	7.55	0.00	0.0	119	2
2/2/2003	051500	10.01	7.55	0.00	0.0	119	2
2/2/2003	053000	9.98	7.55	0.00	0.0	119	2
2/2/2003	054500	9.96	7.55	0.00	0.0	119	2
2/2/2003	060000	9.94	7.55	0.00	0.0	119	2
2/2/2003	061500	9.91	7.55	0.00	0.0	119	2
2/2/2003	063000	9.89	7.55	0.00	0.0	119	2
2/2/2003	064500	9.86	7.55	0.00	0.0	119	2
2/2/2003	070000	9.83	7.56	0.00	0.0	119	2
2/2/2003	071500	9.81	7.56	0.00	0.0	119	2
2/2/2003	073000	9.78	7.56	0.00	0.0	119	2
2/2/2003	074500	9.75	7.56	0.00	0.0	119	2
2/2/2003	080000	9.72	7.56	0.00	0.0	119	2
2/2/2003	081500	9.70	7.56	0.00	0.0	119	2
2/2/2003	083000	9.67	7.56	0.00	0.0	119	2
2/2/2003	084500	9.64	7.56	0.00	0.0	119	2
2/2/2003	090000	9.61	7.56	0.00	0.0	119	2
2/2/2003	091500	9.58	7.56	0.00	0.0	119	2
2/2/2003	093000	9.55	7.56	0.00	0.0	119	2
2/2/2003	094500	9.53	7.56	0.00	0.0	119	2
2/2/2003	100000	9.50	7.57	0.00	0.0	119	2
2/2/2003	101500	9.47	7.57	0.00	0.0	119	2
2/2/2003	103000	9.44	7.57	0.00	0.0	119	2
2/2/2003	104500	9.42	7.57	0.00	0.0	119	2
2/2/2003	110000	9.40	7.57	0.00	0.0	118	2
2/2/2003	111500	9.38	7.58	0.00	0.0	119	2
2/2/2003	113000	9.36	7.58	0.00	0.0	119	2
2/2/2003	114500	9.34	7.58	0.00	0.0	118	2
2/2/2003	120000	9.32	7.58	0.00	0.0	118	2
2/2/2003	121500	9.30	7.58	0.00	0.0	119	2

Table 8.6.2.--Continuous Monitoring Data for Rio Grande at Isleta below Railroad Bridge, January 28, 2003 through February 5, 2003

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
2/2/2003	123000	9.29	7.58	0.00	0.0	118	2
2/2/2003	124500	9.28	7.58	0.00	0.0	118	2
2/2/2003	130000	9.26	7.58	0.00	0.0	118	2
2/2/2003	131500	9.26	7.58	0.00	0.0	118	2
2/2/2003	133000	9.25	7.57	0.00	0.0	118	2
2/2/2003	134500	9.25	7.57	0.00	0.0	118	2
2/2/2003	140000	9.25	7.58	0.00	0.0	118	2
2/2/2003	141500	9.26	7.58	0.00	0.0	118	2
2/2/2003	143000	9.27	7.57	0.00	0.0	118	2
2/2/2003	144500	9.28	7.57	0.00	0.0	118	2
2/2/2003	150000	9.30	7.57	0.00	0.0	118	2
2/2/2003	151500	9.32	7.57	0.00	0.0	118	2
2/2/2003	153000	9.34	7.57	0.00	0.0	118	2
2/2/2003	154500	9.37	7.57	0.00	0.0	118	2
2/2/2003	160000	9.40	7.57	0.00	0.0	118	2
2/2/2003	161500	9.43	7.57	0.00	0.0	118	2
2/2/2003	163000	9.47	7.57	0.00	0.0	118	2
2/2/2003	164500	9.50	7.57	0.00	0.0	118	2
2/2/2003	170000	9.53	7.57	0.00	0.0	118	2
2/2/2003	171500	9.57	7.57	0.00	0.0	118	2
2/2/2003	173000	9.61	7.57	0.00	0.0	118	2
2/2/2003	174500	9.64	7.57	0.00	0.0	118	2
2/2/2003	180000	9.68	7.57	0.00	0.0	118	2
2/2/2003	181500	9.71	7.57	0.00	0.0	118	2
2/2/2003	183000	9.74	7.57	0.00	0.0	118	2
2/2/2003	184500	9.77	7.57	0.00	0.0	118	2
2/2/2003	190000	9.79	7.57	0.00	0.0	118	2
2/2/2003	191500	9.82	7.57	0.00	0.0	118	2
2/2/2003	193000	9.84	7.57	0.00	0.0	118	2
2/2/2003	194500	9.85	7.57	0.00	0.0	118	2
2/2/2003	200000	9.87	7.57	0.00	0.0	118	2
2/2/2003	201500	9.88	7.57	0.00	0.0	118	2
2/2/2003	203000	9.89	7.57	0.00	0.0	118	2
2/2/2003	204500	9.89	7.57	0.00	0.0	118	2
2/2/2003	210000	9.89	7.57	0.00	0.0	118	2
2/2/2003	211500	9.88	7.57	0.00	0.0	118	2
2/2/2003	213000	9.88	7.57	0.00	0.0	118	2
2/2/2003	214500	9.87	7.57	0.00	0.0	118	2
2/2/2003	220000	9.86	7.57	0.00	0.0	118	2
2/2/2003	221500	9.85	7.57	0.00	0.0	118	2
2/2/2003	223000	9.84	7.57	0.00	0.0	118	2
2/2/2003	224500	9.83	7.57	0.00	0.0	117	2
2/2/2003	230000	9.81	7.57	0.00	0.0	118	2
2/2/2003	231500	9.80	7.57	0.00	0.0	118	2
2/2/2003	233000	9.78	7.57	0.00	0.0	117	2
2/2/2003	234500	9.76	7.57	0.00	0.0	117	2
2/3/2003	000000	9.74	7.57	0.00	0.0	117	2
2/3/2003	001500	9.71	7.57	0.00	0.0	117	2
2/3/2003	003000	9.69	7.57	0.00	0.0	117	2
2/3/2003	004500	9.66	7.57	0.00	0.0	117	2
2/3/2003	010000	9.63	7.57	0.00	0.0	117	2
2/3/2003	011500	9.61	7.56	0.00	0.0	117	2
2/3/2003	013000	9.58	7.56	0.00	0.0	117	2
2/3/2003	014500	9.55	7.57	0.00	0.0	117	2
2/3/2003	020000	9.52	7.57	0.00	0.0	117	2
2/3/2003	021500	9.48	7.57	0.00	0.0	117	2

Table 8.6.2.--Continuous Monitoring Data for Rio Grande at Isleta below Railroad Bridge, January 28, 2003 through February 5, 2003

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
2/3/2003	023000	9.45	7.57	0.00	0.0	117	2
2/3/2003	024500	9.42	7.57	0.00	0.0	117	2
2/3/2003	030000	9.38	7.57	0.00	0.0	117	2
2/3/2003	031500	9.35	7.57	0.00	0.0	117	2
2/3/2003	033000	9.32	7.56	0.00	0.0	117	2
2/3/2003	034500	9.28	7.57	0.00	0.0	117	2
2/3/2003	040000	9.24	7.56	0.00	0.0	117	2
2/3/2003	041500	9.20	7.56	0.00	0.0	117	2
2/3/2003	043000	9.15	7.56	0.00	0.0	117	2
2/3/2003	044500	9.11	7.56	0.00	0.0	117	2
2/3/2003	050000	9.07	7.57	0.00	0.0	117	2
2/3/2003	051500	9.03	7.56	0.00	0.0	117	2
2/3/2003	053000	8.98	7.56	0.00	0.0	117	2
2/3/2003	054500	8.94	7.56	0.00	0.0	117	2
2/3/2003	060000	8.89	7.56	0.00	0.0	117	2
2/3/2003	061500	8.85	7.55	0.00	0.0	117	2
2/3/2003	063000	8.80	7.55	0.00	0.0	117	2
2/3/2003	064500	8.76	7.55	0.00	0.0	117	2
2/3/2003	070000	8.71	7.55	0.00	0.0	117	2
2/3/2003	071500	8.67	7.55	0.00	0.0	117	2
2/3/2003	073000	8.63	7.55	0.00	0.0	116	2
2/3/2003	074500	8.58	7.54	0.00	0.0	116	2
2/3/2003	080000	8.54	7.55	0.00	0.0	116	2
2/3/2003	081500	8.49	7.54	0.00	0.0	116	2
2/3/2003	083000	8.45	7.55	0.00	0.0	116	2
2/3/2003	084500	8.40	7.55	0.00	0.0	116	2
2/3/2003	090000	8.36	7.55	0.00	0.0	116	2
2/3/2003	091500	8.32	7.55	0.00	0.0	116	2
2/3/2003	093000	8.28	7.55	0.00	0.0	116	2
2/3/2003	094500	8.25	7.55	0.00	0.0	116	2
2/3/2003	100000	8.21	7.55	0.00	0.0	116	2
2/3/2003	101500	8.18	7.55	0.00	0.0	116	2
2/3/2003	103000	8.14	7.55	0.00	0.0	116	2
2/3/2003	104500	8.11	7.55	0.00	0.0	116	2
2/3/2003	110000	8.08	7.55	0.00	0.0	116	2
2/3/2003	111500	8.05	7.55	0.00	0.0	116	2
2/3/2003	113000	8.02	7.55	0.00	0.0	116	2
2/3/2003	114500	8.00	7.55	0.01	0.1	115	2
2/3/2003	120000	7.98	7.55	0.01	0.1	115	2
2/3/2003	121500	7.96	7.55	0.04	0.4	115	2
2/3/2003	123000	7.94	7.55	0.06	0.6	115	2
2/3/2003	124500	7.93	7.55	0.10	1.0	115	2
2/3/2003	130000	7.92	7.55	0.13	1.3	115	2
2/3/2003	131500	7.92	7.55	0.17	1.7	115	2
2/3/2003	133000	7.92	7.54	0.23	2.3	115	2
2/3/2003	134500	7.93	7.55	0.28	2.8	115	2
2/3/2003	140000	7.95	7.55	0.28	2.8	115	2
2/3/2003	141500	7.97	7.55	0.28	2.8	115	2
2/3/2003	143000	8.00	7.55	0.31	3.1	114	2
2/3/2003	144500	8.04	7.55	0.32	3.3	114	2

Table 8.6.2.--Continuous Monitoring Data for Rio Grande at Isleta below Railroad Bridge, January 28, 2003 through February 5, 2003

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)

Descriptive Statistics (statistics before probe burial)	*Temp ($^{\circ}$C)*	*pH*	*DO (mg/L)*	*DO (%)*	*SPC (uS/cm)*	*Turbidity (NTU)*
Mean	9.2	8.1	9.0	93.2	266	6
Standard Error	0.20	0.01	0.06	0.78	3	0.09
Median	9.1	8.1	9.0	92.2	261	6
Mode	8.0	8.0	8.8	90.5	260	6
Standard Deviation	1.93	0.05	0.57	7.43	25	0.82
Sample Variance	3.74	0.00	0.32	55.22	646	0.68
Kurtosis	-1.25	1.26	2.51	2.63	10	1.50
Skewness	0.16	-0.14	-1.02	-1.21	3	-0.37
Range	6.2	0.3	3.0	35.8	133	5
Minimum	6.3	7.9	7.0	67.5	240	3
Maximum	12.5	8.2	10.0	103.3	373	8
Sum	829.4	726.4	809.7	8389.0	23941	500
Count	90	90	90	90	90	90

Table 8.7.1.--Continuous Monitoring Data for Rio Grande at Los Lunas
July 24 through August 4, 2002

[--, no data; ~, approximately; >, greater than; °C, degrees Celsius; mg/L, milligrams per liter; % sat, percent saturation; uS/cm, microsiemens per centimeter; NTU, Nephelometric turbidity units.]

DataSonde 4a 40184 (calibration notes in Hermes' book)
Log File Name : LOS LUNAS
Setup Date (MMDDYY) : 072402
Setup Time (HHMMSS) : 100735
Starting Date (MMDDYY) : 072402
Starting Time (HHMMSS) : 120000
Stopping Date (MMDDYY) : 120103
Stopping Time (HHMMSS) : 000000
Interval (HHMMSS) : 001500
Sensor warmup (HHMMSS) : 000200
Circltr warmup (HHMMSS) : 000200

Date	Time (HHMMSS)	Temp (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
7/24/2002	120000	25.6	8.2	6.0	86.3	493	480
7/24/2002	121500	26.1	8.2	5.9	86.4	495	486
7/24/2002	123000	26.7	8.1	5.9	86.3	488	410
7/24/2002	124500	27.3	8.1	5.7	85.1	487	403
7/24/2002	130000	27.8	8.1	5.7	85.0	488	426
7/24/2002	131500	28.4	8.1	5.6	85.2	490	430
7/24/2002	133000	29.0	8.1	5.5	84.6	490	368
7/24/2002	134500	29.5	8.1	5.4	83.5	492	358
7/24/2002	140000	30.1	8.1	5.3	82.6	494	354
7/24/2002	141500	30.6	8.1	5.3	83.1	493	334
7/24/2002	143000	31.0	8.1	5.3	84.3	492	340
7/24/2002	144500	31.4	8.1	5.2	82.8	493	342
7/24/2002	150000	31.8	8.1	5.1	82.6	495	358
7/24/2002	151500	32.1	8.1	5.2	83.6	497	368
7/24/2002	153000	32.4	8.1	5.1	82.8	493	374
7/24/2002	154500	32.6	8.1	5.0	81.3	494	374
7/24/2002	160000	32.9	8.1	4.9	80.2	493	304
7/24/2002	161500	33.1	8.1	5.0	81.8	494	324
7/24/2002	163000	33.2	8.1	4.9	80.7	496	334
7/24/2002	164500	33.4	8.1	4.8	79.6	498	342
7/24/2002	170000	33.4	8.1	4.9	80.0	496	318
7/24/2002	171500	33.5	8.1	4.8	79.0	498	370
7/24/2002	173000	33.5	8.1	4.8	78.7	479	294
7/24/2002	174500	33.3	8.1	4.8	78.2	482	356
7/24/2002	180000	33.2	8.1	4.8	79.1	475	290
7/24/2002	181500	33.1	8.1	4.8	78.1	475	328
7/24/2002	183000	33.0	8.1	4.8	77.8	478	367
7/24/2002	184500	32.8	8.1	4.7	77.3	481	355
7/24/2002	190000	32.6	8.1	4.8	77.7	484	384
7/24/2002	191500	32.3	8.1	5.0	80.0	486	392
7/24/2002	193000	32.0	8.2	5.0	80.0	488	381
7/24/2002	194500	31.6	8.2	5.0	79.7	490	399
7/24/2002	200000	31.2	8.2	4.9	77.8	476	338
7/24/2002	201500	31.0	8.2	5.0	78.9	476	332
7/24/2002	203000	30.7	8.2	5.0	78.8	475	330
7/24/2002	204500	30.4	8.2	5.0	78.6	477	348
7/24/2002	210000	30.0	8.2	5.1	79.4	475	336
7/24/2002	211500	29.4	8.2	5.1	79.1	477	353
7/24/2002	213000	29.0	8.2	5.2	79.7	478	349

Table 8.7.1.--Continuous Monitoring Data for Rio Grande at Los Lunas
July 24 through August 4, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
7/24/2002	214500	28.8	8.2	5.4	81.6	479	357
7/24/2002	220000	28.5	8.2	5.3	79.9	480	363
7/24/2002	221500	28.2	8.2	5.3	80.3	479	367
7/24/2002	223000	27.8	8.2	5.3	79.8	479	365
7/24/2002	224500	27.5	8.2	5.4	80.2	476	335
7/24/2002	230000	27.3	8.2	5.5	82.0	476	343
7/24/2002	231500	27.0	8.2	5.6	82.1	476	353
7/24/2002	233000	26.8	8.2	5.6	81.8	476	353
7/24/2002	234500	26.5	8.2	5.6	82.6	476	364
7/25/2002	000000	26.3	8.2	5.6	81.7	475	375
7/25/2002	001500	26.1	8.2	5.8	83.5	472	369
7/25/2002	003000	25.8	8.2	5.7	82.4	472	372
7/25/2002	004500	25.6	8.2	5.8	83.3	471	372
7/25/2002	010000	25.4	8.2	5.7	82.1	470	378
7/25/2002	011500	25.2	8.2	5.8	82.8	468	353
7/25/2002	013000	25.0	8.2	5.9	83.9	467	352
7/25/2002	014500	24.8	8.2	5.8	82.1	467	356
7/25/2002	020000	24.7	8.2	5.7	81.1	466	361
7/25/2002	021500	24.5	8.2	5.9	83.3	465	340
7/25/2002	023000	24.3	8.2	6.0	84.0	464	350
7/25/2002	024500	24.1	8.2	5.9	82.4	463	341
7/25/2002	030000	23.9	8.2	6.0	83.4	462	345
7/25/2002	031500	23.8	8.2	5.9	82.0	462	364
7/25/2002	033000	23.6	8.1	5.9	82.4	462	360
7/25/2002	034500	23.4	8.1	6.0	83.3	461	366
7/25/2002	040000	23.3	8.1	6.1	84.1	460	370
7/25/2002	041500	23.1	8.1	6.0	82.2	459	361
7/25/2002	043000	23.0	8.1	6.0	82.8	458	370
7/25/2002	044500	22.8	8.1	6.0	82.6	457	376
7/25/2002	050000	22.7	8.1	6.0	82.3	456	378
7/25/2002	051500	22.5	8.1	6.0	81.7	456	393
7/25/2002	053000	22.3	8.1	6.1	82.6	455	405
7/25/2002	054500	22.1	8.1	6.1	82.0	456	434
7/25/2002	060000	22.0	8.1	6.1	82.0	456	423
7/25/2002	061500	21.8	8.1	6.1	82.0	457	439
7/25/2002	063000	21.7	8.1	6.2	82.4	458	460
7/25/2002	064500	21.5	8.1	6.2	82.7	459	462
7/25/2002	070000	21.4	8.1	6.3	83.0	461	458
7/25/2002	071500	21.2	8.1	6.3	83.1	462	428
7/25/2002	073000	21.1	8.1	6.3	82.7	463	439
7/25/2002	074500	21.0	8.1	6.3	83.0	465	457
7/25/2002	080000	20.9	8.1	6.3	82.6	466	475
7/25/2002	081500	20.9	8.1	6.3	83.0	468	478
7/25/2002	083000	20.9	8.1	6.3	83.2	469	483
7/25/2002	084500	21.0	8.1	6.3	83.5	470	498
7/25/2002	090000	21.1	8.1	6.3	83.4	471	503
7/25/2002	091500	21.3	8.1	6.3	83.3	472	503
7/25/2002	093000	21.5	8.1	6.3	84.4	474	502
7/25/2002	094500	21.8	8.1	6.3	84.0	474	507
7/25/2002	100000	22.1	8.2	6.3	85.0	475	506
7/25/2002	101500	22.5	8.2	6.3	85.7	477	507
7/25/2002	103000	22.9	8.2	6.3	86.0	479	503
7/25/2002	104500	23.3	8.2	6.3	86.6	480	497

Table 8.7.1.--Continuous Monitoring Data for Rio Grande at Los Lunas
July 24 through August 4, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
7/25/2002	110000	23.8	8.2	6.2	86.0	482	492
7/25/2002	111500	24.4	8.2	6.2	86.8	483	487
7/25/2002	113000	25.0	8.2	6.1	86.3	485	474
7/25/2002	114500	25.6	8.2	6.0	86.7	487	480
7/25/2002	120000	26.2	8.2	6.0	87.0	490	468
7/25/2002	121500	26.8	8.2	5.9	86.8	492	426
7/25/2002	123000	27.5	8.2	5.8	86.1	494	425
7/25/2002	124500	28.1	8.2	5.7	86.4	496	427
7/25/2002	130000	28.7	8.2	5.7	86.2	498	428
7/25/2002	131500	29.3	8.2	5.6	85.8	500	422
7/25/2002	133000	29.9	8.2	5.6	86.3	501	413
7/25/2002	134500	30.6	8.2	5.4	85.0	501	415
7/25/2002	140000	31.2	8.2	5.4	85.9	501	406
7/25/2002	141500	31.7	8.2	5.3	85.1	502	399
7/25/2002	143000	32.2	8.2	5.1	83.1	503	398
7/25/2002	144500	32.7	8.2	5.1	83.7	503	395
7/25/2002	150000	33.1	8.2	5.3	87.3	505	396
7/25/2002	151500	33.5	8.2	5.2	85.7	505	388
7/25/2002	153000	33.9	8.2	5.0	83.4	505	386
7/25/2002	154500	34.1	8.2	4.9	82.4	506	373
7/25/2002	160000	34.4	8.2	4.9	81.7	506	383
7/25/2002	161500	34.6	8.2	5.0	84.4	507	376
7/25/2002	163000	34.8	8.2	5.1	85.5	508	376
7/25/2002	164500	34.8	8.2	4.8	80.5	508	374
7/25/2002	170000	34.9	8.2	4.8	80.2	508	> 1000
7/25/2002	171500	34.9	8.2	4.7	80.1	508	> 1000
7/25/2002	173000	35.0	8.2	4.8	80.3	509	> 1000
7/25/2002	174500	34.9	8.2	4.7	79.9	510	> 1000
7/25/2002	180000	34.7	8.2	4.8	80.7	510	> 1000
7/25/2002	181500	34.7	8.2	4.8	81.0	509	> 1000
7/25/2002	183000	34.3	8.2	4.7	79.0	508	> 1000
7/25/2002	184500	33.9	8.2	4.7	78.0	508	> 1000
7/25/2002	190000	33.4	8.2	4.8	78.3	509	> 1000
7/25/2002	191500	29.4	7.9	6.2	95.1	497	> 1000
7/25/2002	193000	28.6	8.1	5.8	87.5	303	> 1000
7/25/2002	194500	28.4	8.1	5.6	85.4	495	> 1000
7/25/2002	200000	28.2	8.1	4.2	64.0	492	> 1000
7/25/2002	201500	28.3	8.1	3.8	57.5	491	> 1000
7/25/2002	203000	28.6	8.1	3.6	54.2	490	765
7/25/2002	204500	28.9	8.1	3.5	53.2	490	536
7/25/2002	210000	29.1	8.1	3.8	57.9	425	953
7/25/2002	211500	29.3	8.1	3.7	57.2	420	733
7/25/2002	213000	29.6	8.1	3.6	55.3	417	582
7/25/2002	214500	29.9	8.1	3.4	53.2	414	491
7/25/2002	220000	30.1	8.1	3.4	53.1	411	412
7/25/2002	221500	30.3	8.0	3.3	51.5	405	363
7/25/2002	223000	30.4	8.0	3.2	49.4	410	294
7/25/2002	224500	30.5	8.0	3.1	48.5	409	260
7/25/2002	230000	30.5	8.0	3.2	49.6	407	228
7/25/2002	231500	30.5	8.0	3.1	49.3	406	179
7/25/2002	233000	30.4	8.0	3.2	50.1	405	161
7/25/2002	234500	30.3	8.0	3.3	51.3	404	148
7/26/2002	000000	30.3	8.0	3.2	50.0	403	134

Table 8.7.1.--Continuous Monitoring Data for Rio Grande at Los Lunas
July 24 through August 4, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
7/26/2002	001500	30.1	8.0	3.3	50.6	402	121
7/26/2002	003000	30.0	8.0	3.2	49.9	401	116
7/26/2002	004500	29.9	8.0	3.2	49.5	400	107
7/26/2002	010000	29.8	8.0	3.1	48.3	400	99
7/26/2002	011500	29.6	8.0	3.1	48.5	399	96
7/26/2002	013000	29.5	8.0	3.2	48.6	398	92
7/26/2002	014500	29.4	8.0	3.1	47.8	393	87
7/26/2002	020000	29.3	8.0	3.1	47.5	398	88
7/26/2002	021500	29.1	8.0	3.1	47.5	395	83
7/26/2002	023000	29.0	8.0	3.1	46.6	394	83
7/26/2002	024500	28.8	8.0	3.1	46.6	394	80
7/26/2002	030000	28.7	8.0	3.1	46.4	393	77
7/26/2002	031500	28.5	8.0	3.1	46.2	392	75
7/26/2002	033000	28.3	7.9	3.1	47.0	392	72
7/26/2002	034500	28.1	7.9	3.1	46.9	392	68
7/26/2002	040000	27.9	7.9	3.2	47.9	391	68
7/26/2002	041500	27.8	7.9	3.2	47.4	391	66
7/26/2002	043000	27.7	7.9	3.4	50.0	389	64
7/26/2002	044500	27.5	7.9	3.3	48.8	389	60
7/26/2002	050000	27.3	7.9	3.3	49.0	388	59
7/26/2002	051500	27.1	7.9	3.4	49.7	388	58
7/26/2002	053000	27.0	7.9	3.3	48.7	387	57
7/26/2002	054500	26.8	7.9	3.3	48.9	386	55
7/26/2002	060000	26.6	7.9	3.3	48.7	386	53
7/26/2002	061500	26.4	7.9	3.4	48.9	385	52
7/26/2002	063000	26.2	7.9	3.4	49.6	385	50
7/26/2002	064500	25.9	7.9	3.4	49.5	384	49
7/26/2002	070000	25.7	7.9	3.4	49.6	384	47
7/26/2002	071500	25.5	7.9	3.6	52.4	383	46
7/26/2002	073000	25.3	8.0	3.5	50.4	377	49
7/26/2002	074500	25.0	8.0	3.6	50.8	378	44

Descriptive Statistics	*Temp (°C)*	*pH*	*DO (mg/L)*	*DO (%)*	*SPC (uS/cm)*	*Turbidity (NTU)*
Mean	28.2	8.1	4.9	73.8	460	~ 387.38
Standard Error	0.30	0.01	0.08	1.11	3.17	~ 17.70
Median	28.5	8.1	5.1	81.7	475	~ 370
Mode	30.4	8.1	4.8	82.6	476	> 1000
Standard Deviation	3.95	0.08	1.09	14.76	42.05	~ 234.78
Sample Variance	15.60	0.01	1.20	218.00	1768.38	~ 55123.46
Kurtosis	-0.90	-0.31	-1.12	-0.85	0.01	~ 1.73
Skewness	-0.17	-1.03	-0.53	-0.98	-0.98	~ 1.11
Range	14.1	0.3	3.3	48.9	207	~ 957
Minimum	20.9	7.9	3.1	46.2	303	44
Maximum	35.0	8.2	6.3	95.1	510	> 1000
Sum	4961.5	1426.6	866.8	12994.7	81033	~ 68179
Count	176	176	176	176	176	176

Table 8.7.2.--Continuous Monitoring Data for Rio Grande at Los Lunas
October 30 through October 31, 2002

[--, no data; ~, approximately; >, greater than; °C, degrees Celsius; mg/L, milligrams per liter; % sat, percent saturation; uS/cm, microsiemens per centimeter; NTU, Nephelometric turbidity units.]

DataSonde 4a 40184
Log File Name : LOS LUNAS 10-30-02
Setup Date (MMDDYY) : 103002
Setup Time (HHMMSS) : 085515
Starting Date (MMDDYY) : 103002
Starting Time (HHMMSS) : 085515
Stopping Date (MMDDYY) : 103102
Stopping Time (HHMMSS) : 230000
Interval (HHMMSS) : 001500
Sensor warmup (HHMMSS) : 000200
Circltr warmup (HHMMSS) : 000100

Date	Time (HHMMSS)	Temp (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
10/30/2002	112515	10.4	8.0	9.0	95.9	352	> 1000
10/30/2002	114015	10.7	8.0	9.0	96.1	350	> 1000
10/30/2002	115515	11.1	8.0	9.0	97.0	349	> 1000
10/30/2002	121015	11.4	8.0	8.9	97.2	348	948
10/30/2002	122515	11.7	8.0	8.9	97.6	346	888
10/30/2002	124015	12.1	8.0	8.8	97.4	345	587
10/30/2002	125515	12.4	8.1	8.8	97.4	344	564
10/30/2002	131015	12.7	8.0	8.8	98.1	344	548
10/30/2002	132515	13.0	8.0	8.7	98.1	342	539
10/30/2002	134015	13.3	8.0	8.6	98.1	342	534
10/30/2002	135515	13.5	8.0	8.6	97.9	340	525
10/30/2002	141015	13.8	8.0	8.5	97.9	339	522
10/30/2002	142515	14.0	8.0	8.5	97.7	339	518
10/30/2002	144015	14.1	8.0	8.4	97.4	338	521
10/30/2002	145515	14.2	8.0	8.4	97.1	338	531
10/30/2002	151015	14.3	8.0	8.3	96.5	337	538
10/30/2002	152515	14.4	8.0	8.3	95.9	336	550
10/30/2002	154015	14.4	8.0	8.1	94.7	335	568
10/30/2002	155515	14.4	8.0	8.0	93.6	334	571
10/30/2002	161015	14.3	8.0	8.0	93.0	332	> 1000
10/30/2002	162515	14.1	8.0	8.0	93.0	332	763
10/30/2002	164015	14.0	8.0	8.1	93.1	330	852
10/30/2002	165515	13.9	8.0	8.1	92.6	329	663
10/30/2002	171015	13.8	8.0	8.0	91.7	328	666
10/30/2002	172515	13.7	8.0	8.1	92.4	327	730
10/30/2002	174015	13.7	8.0	8.0	91.7	326	825
10/30/2002	175515	13.6	8.0	8.0	91.4	324	940
10/30/2002	181015	13.5	8.0	7.9	90.2	323	> 1000
10/30/2002	182515	13.5	8.0	7.9	90.3	322	886
10/30/2002	184015	13.5	8.0	7.8	89.3	320	824
10/30/2002	185515	13.5	8.0	7.8	89.1	319	756
10/30/2002	191015	13.5	8.0	7.8	89.1	317	> 1000
10/30/2002	192515	13.5	8.0	7.8	88.9	316	> 1000
10/30/2002	194015	13.4	8.0	7.8	88.6	315	834
10/30/2002	195515	13.4	8.0	7.8	88.6	313	587
10/30/2002	201015	13.4	8.0	7.8	88.8	312	554
10/30/2002	202515	13.4	8.0	7.8	88.4	311	539

Table 8.7.2.--Continuous Monitoring Data for Rio Grande at Los Lunas
October 30 through October 31, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
10/30/2002	204015	13.3	8.0	7.8	88.3	310	549
10/30/2002	205515	13.3	8.0	7.8	88.0	309	533
10/30/2002	211015	13.3	8.0	7.8	88.6	308	520
10/30/2002	212515	13.2	8.0	7.8	88.2	307	515
10/30/2002	214015	13.1	8.0	7.8	88.1	306	527
10/30/2002	215515	13.0	8.0	7.8	88.2	305	502
10/30/2002	221015	13.0	8.0	7.8	88.0	304	579
10/30/2002	222515	12.9	8.0	7.9	88.4	304	495
10/30/2002	224015	12.8	8.0	7.8	87.7	303	514
10/30/2002	225515	12.7	8.0	7.9	88.3	302	526
10/30/2002	231015	12.6	8.0	7.8	87.7	301	532
10/30/2002	232515	12.5	8.0	7.9	88.0	301	558
10/30/2002	234015	12.5	8.0	7.9	88.2	300	550
10/30/2002	235515	12.4	8.0	7.9	88.2	300	536
10/31/2002	001015	12.3	8.0	7.9	88.0	299	583
10/31/2002	002515	12.2	8.0	8.0	88.4	299	546
10/31/2002	004015	12.1	8.0	8.0	88.2	299	561
10/31/2002	005515	12.0	8.0	8.0	88.4	298	576
10/31/2002	011015	11.9	8.0	8.0	88.3	298	531
10/31/2002	012515	11.8	8.0	8.0	87.9	299	491
10/31/2002	014015	11.7	8.1	8.0	87.7	299	513
10/31/2002	015515	11.6	8.0	8.0	87.6	299	515
10/31/2002	021015	11.4	8.0	8.1	87.7	300	529
10/31/2002	022515	11.3	8.0	8.1	87.5	301	519
10/31/2002	024015	11.2	8.0	8.1	87.3	302	541
10/31/2002	025515	11.0	8.0	8.1	86.9	303	> 1000
10/31/2002	031015	10.9	8.0	8.1	87.3	303	> 1000
10/31/2002	032515	10.8	8.0	8.1	87.1	304	> 1000
10/31/2002	034015	10.7	8.0	8.1	86.8	304	> 1000
10/31/2002	035515	10.6	8.0	8.1	86.9	304	> 1000
10/31/2002	041015	10.5	8.0	8.1	86.6	304	> 1000
10/31/2002	042515	10.4	8.0	8.2	86.9	305	> 1000
10/31/2002	044015	10.3	8.0	8.2	86.9	305	> 1000
10/31/2002	045515	10.2	8.0	8.2	86.7	305	> 1000
10/31/2002	051015	10.1	8.0	8.3	87.1	305	> 1000
10/31/2002	052515	10.0	8.0	8.3	87.2	305	> 1000
10/31/2002	054015	9.9	8.0	8.3	87.1	305	> 1000
10/31/2002	055515	9.8	8.0	8.3	87.0	305	> 1000
10/31/2002	061015	9.7	8.0	8.4	87.3	305	> 1000
10/31/2002	062515	9.6	8.0	8.4	87.3	305	> 1000
10/31/2002	064015	9.6	8.0	8.4	87.2	305	> 1000
10/31/2002	065515	9.5	8.0	8.4	87.5	305	> 1000
10/31/2002	071015	9.4	8.0	8.4	87.7	305	> 1000
10/31/2002	072515	9.4	8.0	8.5	87.7	305	> 1000
10/31/2002	074015	9.3	8.0	8.4	87.1	304	> 1000
10/31/2002	075515	9.2	8.0	8.4	87.3	304	> 1000
10/31/2002	081015	9.2	8.0	8.5	87.3	304	> 1000
10/31/2002	082515	9.2	8.0	8.5	87.6	304	> 1000
10/31/2002	084015	9.2	8.0	8.5	88.3	304	> 1000
10/31/2002	085515	9.3	8.0	8.5	88.2	304	> 1000
10/31/2002	091015	9.4	8.0	8.5	88.5	304	> 1000

Table 8.7.2.--Continuous Monitoring Data for Rio Grande at Los Lunas
October 30 through October 31, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
10/31/2002	092515	9.5	8.0	8.5	88.9	304	> 1000
10/31/2002	094015	9.6	8.0	8.6	89.3	304	> 1000
10/31/2002	095515	9.8	8.0	8.5	89.4	304	> 1000
10/31/2002	101015	10.0	8.0	8.5	90.0	304	> 1000
10/31/2002	102515	10.3	8.0	8.6	90.6	304	> 1000
10/31/2002	104015	10.5	8.0	8.6	91.1	304	> 1000
10/31/2002	105515	10.8	8.0	8.6	91.9	304	> 1000
10/31/2002	111015	11.0	8.0	8.5	91.9	304	> 1000
10/31/2002	112515	11.3	8.0	8.5	92.4	304	> 1000
10/31/2002	114015	11.6	8.0	8.5	92.8	304	> 1000
10/31/2002	115515	11.9	8.0	8.5	93.3	305	> 1000
10/31/2002	121015	12.1	8.0	8.5	93.9	305	> 1000
10/31/2002	122515	12.4	8.0	8.4	94.1	305	> 1000
10/31/2002	124015	12.7	8.0	8.4	94.0	305	> 1000
10/31/2002	125515	13.0	8.0	8.5	95.3	305	> 1000
10/31/2002	131015	13.3	8.0	8.4	95.3	305	> 1000
10/31/2002	132515	13.6	8.0	8.4	95.6	305	> 1000
10/31/2002	134015	13.8	8.0	8.3	95.8	306	> 1000
10/31/2002	135515	14.1	8.0	8.3	96.2	306	> 1000
10/31/2002	141015	14.3	8.0	8.3	96.1	306	> 1000
10/31/2002	142515	14.5	8.0	8.3	96.2	306	> 1000
10/31/2002	144015	14.7	8.0	8.2	95.8	306	> 1000
10/31/2002	145515	14.9	8.0	8.2	96.0	307	> 1000
10/31/2002	151015	15.0	8.0	8.1	95.9	307	> 1000
10/31/2002	152515	15.1	8.0	8.1	95.7	307	> 1000
10/31/2002	154015	15.2	8.0	8.1	95.5	307	> 1000
10/31/2002	155515	15.1	8.0	8.0	94.8	307	> 1000
10/31/2002	161015	15.1	8.0	8.0	94.8	307	> 1000
10/31/2002	162515	15.2	8.0	7.9	93.9	307	> 1000
10/31/2002	164015	15.2	8.0	8.0	94.2	306	> 1000
10/31/2002	165515	15.1	8.0	7.9	93.7	306	> 1000
10/31/2002	171015	15.0	8.0	7.9	93.7	306	> 1000
10/31/2002	172515	15.0	8.0	7.9	93.3	306	> 1000
10/31/2002	174015	14.9	8.0	7.9	93.0	306	> 1000
10/31/2002	175515	14.9	8.0	7.9	92.8	305	> 1000
10/31/2002	181015	14.8	8.0	7.9	92.4	305	> 1000
10/31/2002	182515	14.7	8.0	7.9	92.1	305	> 1000
10/31/2002	184015	14.6	8.0	7.8	91.0	304	> 1000
10/31/2002	185515	14.5	8.0	7.8	90.7	304	> 1000
10/31/2002	191015	14.5	8.0	7.8	90.6	303	> 1000
10/31/2002	192515	14.4	8.0	7.8	90.6	304	> 1000
10/31/2002	194015	14.3	8.0	7.7	89.8	306	598
10/31/2002	195515	14.2	8.0	7.7	89.0	307	804
10/31/2002	201015	14.2	8.0	7.7	89.1	304	628
10/31/2002	202515	14.2	8.0	7.7	89.2	302	449

Table 8.7.2.--Continuous Monitoring Data for Rio Grande at Los Lunas
October 30 through October 31, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
10/31/2002	204015	14.2	8.0	7.7	89.2	301	> 1000
10/31/2002	205515	14.1	8.0	7.8	89.8	300	> 1000
10/31/2002	211015	14.1	8.0	7.8	89.8	300	> 1000
10/31/2002	212515	14.0	8.0	7.7	89.0	299	> 1000
10/31/2002	214015	14.0	8.0	7.8	89.4	298	> 1000
10/31/2002	215515	13.9	8.0	7.8	89.4	298	> 1000
10/31/2002	221015	13.9	8.0	7.7	88.8	297	> 1000
10/31/2002	222515	13.8	8.0	7.7	88.8	297	> 1000
10/31/2002	224015	13.7	8.0	7.7	88.7	296	> 1000
10/31/2002	225515	13.7	8.1	7.7	88.5	296	> 1000

Descriptive Statistics	*Temp (°C)*	*pH*	*DO (mg/L)*	*DO (%)*	*SPC (uS/cm)*	*Turbidity (NTU)*
Mean	12.6	8.0	8.1	91.0	311	~ 837.59
Standard Error	0.15	0.00	0.03	0.30	1.18	~ 17.72
Median	13.2	8.0	8.1	89.4	305	> 1000
Mode	12.7	8.0	7.8	88.2	304	> 1000
Standard Deviation	1.81	0.02	0.33	3.55	14.15	~ 211.93
Sample Variance	3.28	0.00	0.11	12.60	200.29	4913.93420663
Kurtosis	-1.06	1.84	-0.47	-1.06	0.99	~ -1.47
Skewness	-0.46	-1.11	0.59	0.60	1.51	~ -0.65
Range	6.0	0.1	1.3	11.5	56	~ 552
Minimum	9.2	8.0	7.7	86.6	296	449
Maximum	15.2	8.1	9.0	98.1	352	> 1000
Sum	1802.9	1146.7	1164.6	13015.3	44477	~ 119775
Count	143	143	143	143	143	143

Table 8.7.3.--Continuous Monitoring Data for Rio Grande at Los Lunas
December 17 through December 20, 2002

[--, no data; °C, degrees Celsius; mg/L, milligrams per liter; % sat, percent saturation; uS/cm, microsiemens per centimeter; NTU, Nephelometric turbidity units.]

DataSonde 4a 40183
Log File Name : LOS LUNAS 12-17-02
Setup Date (MMDDYY) : 121702
Setup Time (HHMMSS) : 084352
Starting Date (MMDDYY) : 121702
Starting Time (HHMMSS) : 091500
Stopping Date (MMDDYY) : 122002
Stopping Time (HHMMSS) : 230000
Interval (HHMMSS) : 001500
Sensor warmup (HHMMSS) : 000200
Circltr warmup (HHMMSS) : 000100

Date	Time (HHMMSS)	Temp (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
12/17/2002	103000	8.1	8.3	9.0	92.2	396	7
12/17/2002	104500	8.2	8.3	9.0	92.2	396	7
12/17/2002	110000	8.3	8.3	9.0	92.2	396	7
12/17/2002	111500	8.4	8.3	9.0	92.8	396	7
12/17/2002	113000	8.6	8.3	9.0	92.6	396	7
12/17/2002	114500	8.6	8.3	9.0	93.1	397	7
12/17/2002	120000	8.8	8.3	9.0	93.0	397	7
12/17/2002	121500	8.9	8.4	8.9	93.2	397	7
12/17/2002	123000	9.0	8.4	8.9	93.1	398	7
12/17/2002	124500	9.1	8.4	8.9	92.8	399	7
12/17/2002	130000	9.1	8.4	8.9	93.3	399	7
12/17/2002	131500	9.2	8.4	8.9	92.8	399	7
12/17/2002	133000	9.2	8.4	8.9	92.8	399	7
12/17/2002	134500	9.1	8.4	8.9	92.8	399	7
12/17/2002	140000	9.2	8.4	8.9	92.8	400	7
12/17/2002	141500	9.3	8.4	8.9	93.1	400	7
12/17/2002	143000	9.3	8.4	8.8	92.6	401	7
12/17/2002	144500	9.4	8.4	8.7	91.9	401	7
12/17/2002	150000	9.4	8.4	8.7	91.4	400	7
12/17/2002	151500	9.4	8.4	8.7	91.8	400	7
12/17/2002	153000	9.3	8.4	8.7	91.9	400	8
12/17/2002	154500	9.2	8.4	8.7	91.6	400	8
12/17/2002	160000	9.1	8.4	8.7	90.8	401	7
12/17/2002	161500	9.0	8.4	8.7	91.1	400	8
12/17/2002	163000	8.9	8.4	8.7	90.4	400	7
12/17/2002	164500	8.9	8.4	8.7	90.5	399	8
12/17/2002	170000	8.8	8.4	8.7	89.9	399	7
12/17/2002	171500	8.7	8.4	8.6	88.7	397	7
12/17/2002	173000	8.6	8.4	8.6	89.2	396	7
12/17/2002	174500	8.5	8.4	8.6	89.0	395	8
12/17/2002	180000	8.4	8.4	8.6	88.8	395	8
12/17/2002	181500	8.3	8.4	8.5	87.6	393	8
12/17/2002	183000	8.2	8.4	8.6	87.8	392	8
12/17/2002	184500	8.1	8.4	8.6	87.5	392	7
12/17/2002	190000	8.0	8.3	8.6	87.6	390	8
12/17/2002	191500	7.9	8.4	8.6	87.3	388	8
12/17/2002	193000	7.9	8.3	8.6	87.5	388	8

Table 8.7.3.--Continuous Monitoring Data for Rio Grande at Los Lunas
December 17 through December 20, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
12/17/2002	194500	7.8	8.4	8.6	86.8	387	8
12/17/2002	200000	7.7	8.4	8.6	87.3	386	8
12/17/2002	201500	7.6	8.4	8.7	87.4	386	8
12/17/2002	203000	7.5	8.4	8.7	87.5	385	8
12/17/2002	204500	7.4	8.4	8.6	86.9	385	8
12/17/2002	210000	7.3	8.4	8.7	87.6	383	8
12/17/2002	211500	7.2	8.4	8.7	86.8	383	9
12/17/2002	213000	7.1	8.4	8.8	87.4	382	8
12/17/2002	214500	7.0	8.4	8.7	87.0	380	8
12/17/2002	220000	6.9	8.4	8.8	87.1	379	8
12/17/2002	221500	6.8	8.4	8.8	87.0	379	8
12/17/2002	223000	6.8	8.4	8.8	86.8	378	9
12/17/2002	224500	6.7	8.4	8.8	87.2	377	8
12/17/2002	230000	6.6	8.4	8.8	87.0	377	8
12/17/2002	231500	6.6	8.4	8.9	87.2	376	9
12/17/2002	233000	6.5	8.4	8.8	86.9	376	9
12/17/2002	234500	6.4	8.4	8.8	86.1	377	11
12/18/2002	000000	6.3	8.4	8.9	87.0	376	8
12/18/2002	001500	6.2	8.4	8.9	86.4	377	8
12/18/2002	003000	6.1	8.4	8.9	86.5	378	8
12/18/2002	004500	6.0	8.4	8.9	86.3	379	8
12/18/2002	010000	5.9	8.4	9.0	87.1	380	8
12/18/2002	011500	5.8	8.4	9.0	87.1	381	9
12/18/2002	013000	5.7	8.4	9.0	86.9	382	8
12/18/2002	014500	5.6	8.4	9.0	86.8	383	8
12/18/2002	020000	5.5	8.4	9.0	86.7	383	8
12/18/2002	021500	5.5	8.3	9.1	86.7	384	8
12/18/2002	023000	5.4	8.3	9.0	86.3	384	8
12/18/2002	024500	5.3	8.4	9.0	86.1	384	8
12/18/2002	030000	5.3	8.3	9.1	86.7	385	8
12/18/2002	031500	5.2	8.4	9.1	86.8	386	8
12/18/2002	033000	5.1	8.4	9.1	86.5	387	8
12/18/2002	034500	5.1	8.3	9.1	86.4	386	8
12/18/2002	040000	5.0	8.3	9.2	86.8	386	8
12/18/2002	041500	5.0	8.3	9.2	86.6	386	7
12/18/2002	043000	4.9	8.4	9.1	86.2	386	8
12/18/2002	044500	4.9	8.4	9.1	86.0	386	7
12/18/2002	050000	4.8	8.3	9.2	86.2	387	8
12/18/2002	051500	4.7	8.3	9.2	86.3	377	8
12/18/2002	053000	4.7	8.3	9.2	86.3	387	8
12/18/2002	054500	4.6	8.3	9.2	86.4	388	7
12/18/2002	060000	4.5	8.3	9.2	86.2	389	7
12/18/2002	061500	4.5	8.3	9.2	86.2	388	7
12/18/2002	063000	4.4	8.3	9.3	86.4	388	7
12/18/2002	064500	4.4	8.3	9.3	86.3	388	7
12/18/2002	070000	4.3	8.3	9.3	86.6	388	7
12/18/2002	071500	4.3	8.3	9.3	86.2	390	7
12/18/2002	073000	4.2	8.3	9.3	86.4	390	10
12/18/2002	074500	4.2	8.3	9.3	86.1	391	7
12/18/2002	080000	4.2	8.3	9.3	86.5	392	7
12/18/2002	081500	4.2	8.3	9.3	86.3	392	8

Table 8.7.3.--Continuous Monitoring Data for Rio Grande at Los Lunas
December 17 through December 20, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
12/18/2002	083000	4.2	8.3	9.3	86.6	393	7
12/18/2002	084500	4.2	8.3	9.4	87.0	393	7
12/18/2002	090000	4.3	8.3	9.4	87.7	392	7
12/18/2002	091500	4.4	8.4	9.5	87.9	391	7
12/18/2002	093000	4.4	8.4	9.5	88.1	392	7
12/18/2002	094500	4.5	8.4	9.5	89.0	391	7
12/18/2002	100000	4.5	8.4	9.5	89.2	395	7
12/18/2002	101500	4.6	8.4	9.6	89.7	397	7
12/18/2002	103000	4.7	8.4	9.6	89.9	396	7
12/18/2002	104500	4.8	8.4	9.6	90.7	397	8
12/18/2002	110000	5.0	8.4	9.6	90.8	397	7
12/18/2002	111500	5.3	8.4	9.8	92.9	397	8
12/18/2002	113000	5.5	8.4	9.7	93.3	399	8
12/18/2002	114500	5.7	8.4	9.7	93.5	399	8
12/18/2002	120000	6.0	8.4	9.7	94.1	400	8
12/18/2002	121500	6.2	8.4	9.7	94.9	401	8
12/18/2002	123000	6.5	8.4	9.7	95.2	400	8
12/18/2002	124500	6.7	8.4	9.6	94.6	403	8
12/18/2002	130000	6.7	8.4	9.7	95.6	401	8
12/18/2002	131500	6.7	8.4	9.6	94.4	403	8
12/18/2002	133000	6.7	8.4	9.5	94.2	402	8
12/18/2002	134500	6.6	8.4	9.5	93.3	401	8
12/18/2002	140000	6.5	8.4	9.5	93.0	403	8
12/18/2002	141500	6.3	8.4	9.5	92.7	402	8
12/18/2002	143000	6.3	8.4	9.4	92.0	403	8
12/18/2002	144500	6.3	8.4	9.4	91.7	403	8
12/18/2002	150000	6.4	8.4	9.4	91.8	403	20
12/18/2002	151500	6.5	8.4	9.4	92.1	402	8
12/18/2002	153000	6.6	8.4	9.3	92.0	402	8
12/18/2002	154500	6.7	8.4	9.3	91.4	401	8
12/18/2002	160000	6.8	8.4	9.3	91.7	401	8
12/18/2002	161500	6.8	8.4	9.2	90.9	400	7
12/18/2002	163000	6.7	8.4	9.3	91.7	400	8
12/18/2002	164500	6.7	8.4	9.2	90.7	398	8
12/18/2002	170000	6.6	8.4	9.2	90.6	398	7
12/18/2002	171500	6.6	8.4	9.2	90.4	398	7
12/18/2002	173000	6.6	8.4	9.1	90.1	396	7
12/18/2002	174500	6.5	8.4	9.1	89.7	396	8
12/18/2002	180000	6.5	8.4	9.1	89.2	396	8
12/18/2002	181500	6.4	8.4	9.2	89.8	395	8
12/18/2002	183000	6.3	8.4	9.1	88.9	394	8
12/18/2002	184500	6.3	8.4	9.1	89.2	394	8
12/18/2002	190000	6.2	8.4	9.2	89.6	393	8
12/18/2002	191500	6.2	8.4	9.1	88.9	393	8
12/18/2002	193000	6.1	8.4	9.2	89.4	392	8
12/18/2002	194500	6.1	8.4	9.1	88.7	391	8
12/18/2002	200000	6.0	8.4	9.1	88.8	391	8
12/18/2002	201500	6.0	8.4	9.1	88.6	389	8
12/18/2002	203000	6.0	8.4	9.2	89.0	389	8
12/18/2002	204500	5.9	8.4	9.1	88.5	387	8
12/18/2002	210000	5.9	8.4	9.1	88.1	388	8

Table 8.7.3.--Continuous Monitoring Data for Rio Grande at Los Lunas
December 17 through December 20, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
12/18/2002	211500	5.9	8.4	9.2	88.8	386	8
12/18/2002	213000	5.8	8.4	9.2	88.4	386	8
12/18/2002	214500	5.8	8.4	9.1	88.1	385	9
12/18/2002	220000	5.7	8.4	9.2	88.3	384	8
12/18/2002	221500	5.6	8.4	9.1	87.7	381	8
12/18/2002	223000	5.5	8.4	9.2	87.7	381	9
12/18/2002	224500	5.4	8.3	9.3	88.4	382	10
12/18/2002	230000	5.2	8.4	8.7	82.8	179	10
12/18/2002	231500	5.1	8.3	6.9	65.4	126	4
12/18/2002	233000	5.1	8.3	6.6	62.4	123	4
12/18/2002	234500	5.1	8.3	6.4	60.2	122	4
12/19/2002	000000	5.1	8.3	6.1	57.3	122	4
12/19/2002	001500	5.0	8.3	5.7	53.4	122	4
12/19/2002	003000	5.0	8.3	5.5	51.7	122	4
12/19/2002	004500	5.1	8.3	5.4	51.2	121	4
12/19/2002	010000	5.1	8.3	5.2	49.2	121	4
12/19/2002	011500	5.1	8.3	4.9	46.5	121	4
12/19/2002	013000	5.1	8.3	4.8	45.3	121	4
12/19/2002	014500	5.1	8.3	4.6	43.9	121	4
12/19/2002	020000	5.1	8.3	4.4	41.8	121	4
12/19/2002	021500	5.1	8.3	4.2	40.1	121	4
12/19/2002	023000	5.1	8.3	4.0	37.8	121	3
12/19/2002	024500	5.2	8.3	3.8	36.0	121	3
12/19/2002	030000	5.2	8.3	3.8	35.7	121	3
12/19/2002	031500	5.2	8.3	3.8	35.9	121	3
12/19/2002	033000	5.2	8.3	4.0	37.9	121	3
12/19/2002	034500	5.3	8.3	4.1	38.6	121	3
12/19/2002	040000	5.3	8.3	3.7	35.5	121	3
12/19/2002	041500	5.3	8.3	3.7	35.2	121	3
12/19/2002	043000	5.3	8.3	3.7	35.3	121	3
12/19/2002	044500	5.3	8.2	3.9	37.0	121	3
12/19/2002	050000	5.3	8.2	4.2	40.1	121	3
12/19/2002	051500	5.3	8.2	3.8	35.8	121	3
12/19/2002	053000	5.3	8.3	3.7	35.3	121	3
12/19/2002	054500	5.3	8.2	3.5	33.3	121	3
12/19/2002	060000	5.3	8.2	3.8	36.1	122	3
12/19/2002	061500	5.4	8.2	3.4	32.0	123	3
12/19/2002	063000	5.4	8.2	3.3	31.6	123	3
12/19/2002	064500	5.4	8.2	3.4	32.2	123	3
12/19/2002	070000	5.4	8.3	3.3	31.1	123	3
12/19/2002	071500	5.4	8.3	3.3	31.6	122	3
12/19/2002	073000	5.4	8.2	3.3	31.4	122	3
12/19/2002	074500	5.4	8.3	3.2	30.3	122	3
12/19/2002	080000	5.4	8.3	3.1	29.1	122	3
12/19/2002	081500	5.4	8.2	3.3	31.0	122	3
12/19/2002	083000	5.3	8.2	3.1	29.7	122	3
12/19/2002	084500	5.3	8.2	3.0	28.2	122	3
12/19/2002	090000	5.3	8.2	3.2	30.1	122	3
12/19/2002	091500	5.3	8.2	3.1	29.1	121	3
12/19/2002	093000	5.3	8.2	2.9	27.6	121	3
12/19/2002	094500	5.3	8.2	2.8	26.5	121	3

Table 8.7.3.--Continuous Monitoring Data for Rio Grande at Los Lunas
December 17 through December 20, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
12/19/2002	100000	5.2	8.2	2.8	26.2	121	3
12/19/2002	101500	5.2	8.2	2.6	25.0	121	3
12/19/2002	103000	5.2	8.2	2.6	24.5	121	3
12/19/2002	104500	5.2	8.2	2.6	24.4	121	3
12/19/2002	110000	5.2	8.2	2.6	25.0	121	3
12/19/2002	111500	5.2	8.2	2.7	25.2	121	3
12/19/2002	113000	5.2	8.2	2.9	27.8	121	3
12/19/2002	114500	5.2	8.2	2.8	26.2	121	3
12/19/2002	120000	5.2	8.2	2.6	24.4	120	3
12/19/2002	121500	5.2	8.2	2.6	24.7	120	3
12/19/2002	123000	5.2	8.2	2.6	24.2	120	3
12/19/2002	124500	5.2	8.2	2.7	25.6	120	3
12/19/2002	130000	5.2	8.2	2.7	25.9	120	3
12/19/2002	131500	5.2	8.2	2.8	26.7	120	3
12/19/2002	133000	5.2	8.3	2.4	23.0	121	3
12/19/2002	134500	5.2	8.3	2.3	21.9	121	3
12/19/2002	140000	5.2	8.3	2.2	21.3	122	3
12/19/2002	141500	5.2	8.3	2.2	21.1	121	3
12/19/2002	143000	5.2	8.2	2.1	20.3	121	3
12/19/2002	144500	5.2	8.3	2.3	21.4	122	3
12/19/2002	150000	5.2	8.3	2.2	21.1	121	3
12/19/2002	151500	5.2	8.2	2.1	20.0	121	3
12/19/2002	153000	5.2	8.3	2.0	19.4	121	3
12/19/2002	154500	5.2	8.3	2.0	19.1	121	3
12/19/2002	160000	5.3	8.2	1.9	18.3	121	3
12/19/2002	161500	5.3	8.2	2.0	19.4	121	3
12/19/2002	163000	5.3	8.2	2.1	19.5	120	3
12/19/2002	164500	5.3	8.2	1.9	17.7	121	3
12/19/2002	170000	5.4	8.2	1.9	17.6	121	3
12/19/2002	171500	5.4	8.2	1.8	17.0	121	3
12/19/2002	173000	5.4	8.2	1.8	17.3	121	3
12/19/2002	174500	5.4	8.2	1.8	17.0	121	3
12/19/2002	180000	5.4	8.2	1.7	16.4	120	3
12/19/2002	181500	5.5	8.2	1.7	16.1	120	3
12/19/2002	183000	5.5	8.2	1.7	15.9	120	3
12/19/2002	184500	5.5	8.2	1.6	15.7	120	3
12/19/2002	190000	5.5	8.2	1.7	16.4	119	3
12/19/2002	191500	5.5	8.2	1.7	16.7	119	3
12/19/2002	193000	5.6	8.2	1.8	17.1	119	3
12/19/2002	194500	5.6	8.2	1.7	16.5	119	3
12/19/2002	200000	5.6	8.2	1.6	15.7	119	3
12/19/2002	201500	5.6	8.2	1.7	16.5	119	3
12/19/2002	203000	5.6	8.2	1.6	15.6	119	3
12/19/2002	204500	5.6	8.2	1.5	14.8	119	3
12/19/2002	210000	5.7	8.2	1.4	13.9	119	3

Table 8.7.3.--Continuous Monitoring Data for Rio Grande at Los Lunas
December 17 through December 20, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
12/19/2002	211500	5.7	8.1	1.5	14.8	119	3
12/19/2002	213000	5.7	8.1	1.7	16.0	119	3
12/19/2002	214500	5.7	8.1	1.6	15.2	119	3
12/19/2002	220000	5.7	8.1	1.5	14.5	119	3
12/19/2002	221500	5.7	8.1	1.5	14.6	119	3
12/19/2002	223000	5.7	8.1	1.5	14.6	119	3
12/19/2002	224500	5.7	8.1	1.5	14.1	119	3
12/19/2002	230000	5.7	8.1	1.4	13.7	119	3
12/19/2002	231500	5.7	8.1	1.5	14.0	119	3
12/19/2002	233000	5.8	8.1	1.4	13.7	119	3
12/19/2002	234500	5.8	8.1	1.4	13.4	119	3
12/20/2002	000000	5.8	8.1	1.5	14.0	119	3
12/20/2002	001500	5.8	8.1	1.4	13.7	119	3
12/20/2002	003000	5.8	8.1	1.4	13.5	119	3
12/20/2002	004500	5.8	8.1	1.4	13.5	120	3
12/20/2002	010000	5.8	8.1	1.3	12.9	119	3
12/20/2002	011500	5.8	8.1	1.4	13.2	120	3
12/20/2002	013000	5.8	8.1	1.5	14.7	121	3
12/20/2002	014500	5.8	8.1	1.8	17.1	120	3
12/20/2002	020000	5.8	8.1	1.7	16.1	120	3
12/20/2002	021500	5.7	8.1	1.5	14.3	120	3
12/20/2002	023000	5.7	8.1	1.4	13.4	120	3
12/20/2002	024500	5.7	8.1	1.3	12.3	120	3
12/20/2002	030000	5.7	8.1	1.3	12.0	120	3
12/20/2002	031500	5.7	8.1	1.2	11.8	119	3
12/20/2002	033000	5.7	8.1	1.2	11.5	118	3
12/20/2002	034500	5.6	8.1	1.1	10.6	118	3
12/20/2002	040000	5.6	8.1	1.1	10.6	118	3
12/20/2002	041500	5.6	8.1	1.1	10.6	118	3
12/20/2002	043000	5.5	8.1	1.1	10.2	118	3
12/20/2002	044500	5.5	8.1	1.0	9.9	118	3
12/20/2002	050000	5.5	8.1	1.1	10.0	119	3
12/20/2002	051500	5.4	8.1	1.1	10.2	118	3
12/20/2002	053000	5.4	8.1	1.0	9.6	118	3
12/20/2002	054500	5.3	8.1	0.9	8.5	118	3
12/20/2002	060000	5.3	8.1	0.8	7.9	118	3
12/20/2002	061500	5.2	8.1	0.8	7.3	119	3
12/20/2002	063000	5.2	8.1	0.7	7.0	119	3
12/20/2002	064500	5.1	8.1	0.7	6.4	119	3
12/20/2002	070000	5.1	8.1	0.6	6.1	119	3
12/20/2002	071500	5.0	8.1	0.6	5.6	119	3
12/20/2002	073000	4.9	8.1	0.6	5.3	120	3
12/20/2002	074500	4.9	8.1	0.6	5.5	120	3
12/20/2002	080000	4.8	8.1	0.6	5.2	121	3
12/20/2002	081500	4.8	8.1	0.5	4.9	121	3
12/20/2002	083000	4.7	8.1	0.5	4.4	122	3
12/20/2002	084500	4.7	8.1	0.4	3.8	121	3
12/20/2002	090000	4.6	8.1	0.5	4.6	121	3
12/20/2002	091500	4.6	8.1	0.9	8.6	120	3
12/20/2002	093000	4.6	8.1	1.1	10.7	120	3
12/20/2002	094500	4.6	8.1	1.1	10.1	119	3

Table 8.7.3.--Continuous Monitoring Data for Rio Grande at Los Lunas
December 17 through December 20, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
12/20/2002	100000	4.5	8.1	1.1	9.9	119	3
12/20/2002	101500	4.4	8.1	0.9	7.9	119	3
12/20/2002	103000	4.4	8.1	1.3	12.1	119	3
12/20/2002	104500	4.4	8.1	2.5	23.3	119	3
12/20/2002	110000	4.5	8.1	3.7	34.0	120	3
12/20/2002	111500	4.4	8.1	4.3	40.3	119	3
12/20/2002	113000	4.4	8.1	4.7	43.7	119	3
12/20/2002	114500	4.4	8.1	4.8	44.2	119	3
12/20/2002	120000	4.4	8.1	5.3	48.9	119	3
12/20/2002	121500	4.4	8.1	5.3	48.9	119	3
12/20/2002	123000	4.4	8.1	5.4	49.8	119	3
12/20/2002	124500	4.4	8.1	5.3	49.5	119	3
12/20/2002	130000	4.5	8.1	5.4	50.5	119	3
12/20/2002	131500	4.5	8.1	5.6	52.2	118	3
12/20/2002	133000	4.6	8.1	5.1	47.8	118	3
12/20/2002	134500	4.6	8.1	4.9	46.2	118	3
12/20/2002	140000	4.7	8.1	4.3	40.3	119	3
12/20/2002	141500	4.7	8.1	4.0	37.3	119	3
12/20/2002	143000	4.8	8.1	3.8	35.7	119	3
12/20/2002	144500	4.8	8.1	3.7	34.7	119	3
12/20/2002	150000	4.9	8.1	3.2	30.5	119	3
12/20/2002	151500	4.9	8.1	3.2	29.8	118	3
12/20/2002	153000	4.9	8.1	3.7	34.8	118	3
12/20/2002	154500	5.0	8.1	4.5	42.6	117	3
12/20/2002	160000	5.1	8.1	5.1	48.6	116	3
12/20/2002	161500	5.1	8.1	5.4	51.3	116	3
12/20/2002	163000	5.1	8.1	5.5	51.8	116	3
12/20/2002	164500	5.2	8.1	5.1	48.5	116	3
12/20/2002	170000	5.2	8.1	4.6	43.8	116	3
12/20/2002	171500	5.3	8.1	3.9	36.9	118	3
12/20/2002	173000	5.3	8.1	3.3	31.2	118	3
12/20/2002	174500	5.3	8.1	2.7	25.7	119	3
12/20/2002	180000	5.3	8.1	3.3	31.8	118	3
12/20/2002	181500	5.3	8.1	3.7	35.3	115	3
12/20/2002	183000	5.3	8.1	4.1	39.2	115	3
12/20/2002	184500	5.3	8.1	3.7	35.3	115	3
12/20/2002	190000	5.3	8.1	3.5	33.2	115	3
12/20/2002	191500	5.2	8.1	3.6	34.6	115	3
12/20/2002	193000	5.2	8.1	3.5	33.2	115	3
12/20/2002	194500	5.1	8.1	3.4	32.3	115	3
12/20/2002	200000	5.1	8.1	3.5	33.4	114	3
12/20/2002	201500	5.0	8.1	3.8	35.7	113	3
12/20/2002	203000	5.0	8.1	4.4	41.3	113	3
12/20/2002	204500	4.9	8.1	4.8	45.6	113	3
12/20/2002	210000	4.8	8.1	5.4	50.3	113	3
12/20/2002	211500	4.8	8.1	5.6	52.8	112	3
12/20/2002	213000	4.6	8.1	5.7	53.5	112	3
12/20/2002	214500	4.5	8.1	6.0	56.2	112	3

Table 8.7.3.--Continuous Monitoring Data for Rio Grande at Los Lunas
December 17 through December 20, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
12/20/2002	220000	4.4	8.2	6.2	57.5	114	3
12/20/2002	221500	4.3	8.2	7.0	65.4	153	3
12/20/2002	223000	4.3	8.3	9.1	84.1	128	4
12/20/2002	224500	4.2	8.4	8.2	75.8	140	3
12/20/2002	230000	4.1	8.4	9.0	83.2	133	3

Descriptive Statistics (statistics before probe burial)	*Temp (°C)*	*pH*	*DO (mg/L)*	*DO (%)*	*SPC (uS/cm)*	*Turbidity (NTU)*
Mean	6.6	8.4	9.1	89.3	392	8
Standard Error	0.13	0.00	0.03	0.22	0.64	0.10
Median	6.4	8.4	9.1	88.8	392	8
Mode	8.2	8.4	8.9	92.8	400	8
Standard Deviation	1.54	0.03	0.31	2.65	7.74	1.22
Sample Variance	2.38	0.00	0.10	7.01	59.97	1.48
Kurtosis	-0.95	-0.51	-0.71	-1.05	-1.01	69.47
Skewness	0.30	0.20	0.17	0.50	-0.35	7.13
Range	5.2	0.1	1.2	9.6	27	13
Minimum	4.2	8.3	8.5	86.0	376	7
Maximum	9.4	8.4	9.8	95.6	403	20
Sum	958.0	1221.0	1325.0	13039.2	57184	1143
Count	146	146	146	146	146	146

Table 8.7.4.--Continuous Monitoring Data for Rio Grande at Los Lunas
February 26 through February 28, 2003

[--, no data; °C, degrees Celsius; mg/L, milligrams per liter; % sat, percent saturation; uS/cm, microsiemens per centimeter; NTU, Nephelometric turbidity units.]

DataSonde 4a 40183
Log File Name : LA JOYA 2-25-03 (then deployed at Los Lunas)
Setup Date (MMDDYY) : 022503
Setup Time (HHMMSS) : 100541
Starting Date (MMDDYY) : 022503
Starting Time (HHMMSS) : 104500
Stopping Date (MMDDYY) : 022803
Stopping Time (HHMMSS) : 100000
Interval (HHMMSS) : 001500
Sensor warmup (HHMMSS) : 000100
Circltr warmup (HHMMSS) : 000100

Date	Time (HHMMSS)	Temp (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
2/26/2003	174500	9.1	8.1	13.9	143.0	275	6
2/26/2003	180000	9.0	8.1	15.2	155.4	275	6
2/26/2003	181500	8.9	8.1	13.9	141.9	273	6
2/26/2003	183000	8.8	8.1	14.6	149.3	274	6
2/26/2003	184500	8.7	8.1	14.2	144.6	272	6
2/26/2003	190000	8.6	8.1	14.3	145.2	272	6
2/26/2003	191500	8.6	8.1	14.0	141.9	272	6
2/26/2003	193000	8.5	8.1	13.3	135.0	272	5
2/26/2003	194500	8.5	8.1	13.4	135.6	271	5
2/26/2003	200000	8.5	8.1	13.0	131.3	270	6
2/26/2003	201500	8.4	8.1	12.7	128.0	270	5
2/26/2003	203000	8.4	8.1	13.2	133.6	270	5
2/26/2003	204500	8.4	8.1	12.3	123.9	270	5
2/26/2003	210000	8.4	8.1	12.0	120.8	269	5
2/26/2003	211500	8.3	8.1	12.2	123.0	269	5
2/26/2003	213000	8.3	8.1	12.4	124.5	269	5
2/26/2003	214500	8.3	8.1	12.5	125.5	268	5
2/26/2003	220000	8.2	8.1	11.1	111.9	267	5
2/26/2003	221500	8.1	8.1	11.7	117.5	267	5
2/26/2003	223000	8.1	8.1	10.7	106.9	267	5
2/26/2003	224500	8.0	8.1	11.0	110.1	266	5
2/26/2003	230000	7.9	8.1	10.5	104.4	266	5
2/26/2003	231500	7.8	8.1	10.1	100.3	266	5
2/26/2003	233000	7.7	8.1	10.6	104.8	266	5
2/26/2003	234500	7.7	8.1	10.4	103.0	267	5
2/27/2003	000000	7.6	8.1	9.8	96.7	266	5
2/27/2003	001500	7.5	8.1	9.9	98.2	267	6
2/27/2003	003000	7.4	8.1	10.0	99.1	268	6
2/27/2003	004500	7.4	8.1	10.0	98.4	268	6
2/27/2003	010000	7.3	8.1	9.8	96.3	269	6
2/27/2003	011500	7.3	8.1	9.6	94.8	270	6
2/27/2003	013000	7.2	8.1	9.7	95.2	271	6
2/27/2003	014500	7.2	8.1	9.6	94.1	271	5
2/27/2003	020000	7.1	8.1	9.8	95.6	272	5
2/27/2003	021500	7.1	8.1	9.9	96.3	274	5
2/27/2003	023000	7.0	8.1	9.8	95.9	274	5
2/27/2003	024500	7.0	8.1	9.8	95.8	275	5

Table 8.7.4.--Continuous Monitoring Data for Rio Grande at Los Lunas
February 26 through February 28, 2003

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
2/27/2003	030000	6.9	8.1	9.6	93.8	276	5
2/27/2003	031500	6.8	8.1	9.7	94.4	276	5
2/27/2003	033000	6.8	8.1	9.6	93.3	276	5
2/27/2003	034500	6.7	8.1	9.6	92.9	277	6
2/27/2003	040000	6.7	8.1	9.7	93.6	277	7
2/27/2003	041500	6.6	8.1	9.5	91.7	277	7
2/27/2003	043000	6.6	8.1	9.6	93.1	278	6
2/27/2003	044500	6.5	8.1	9.6	92.6	278	6
2/27/2003	050000	6.5	8.1	9.5	91.6	277	5
2/27/2003	051500	6.5	8.1	9.6	92.7	278	6
2/27/2003	053000	6.4	8.1	9.6	92.1	277	6
2/27/2003	054500	6.4	8.1	9.6	92.0	278	6
2/27/2003	060000	6.4	8.1	9.5	91.7	277	6
2/27/2003	061500	6.4	8.1	9.5	91.4	277	6
2/27/2003	063000	6.3	8.1	9.6	91.7	278	6
2/27/2003	064500	6.3	8.1	9.6	91.7	278	7
2/27/2003	070000	6.2	8.1	9.8	94.1	279	7
2/27/2003	071500	6.2	8.1	9.9	94.7	279	8
2/27/2003	073000	6.1	8.1	9.7	92.7	279	7
2/27/2003	074500	6.2	8.1	9.6	91.9	278	7
2/27/2003	080000	6.2	8.1	9.7	92.6	279	7
2/27/2003	081500	6.3	8.1	9.6	92.2	278	7
2/27/2003	083000	6.4	8.1	9.5	91.7	278	7
2/27/2003	084500	6.5	8.1	9.6	92.3	278	7
2/27/2003	090000	6.6	8.1	9.6	93.0	278	7
2/27/2003	091500	6.8	8.1	9.6	92.8	279	7
2/27/2003	093000	7.0	8.1	9.7	94.2	278	7
2/27/2003	094500	7.1	8.1	9.6	94.5	278	7
2/27/2003	100000	7.4	8.1	9.6	94.6	278	7
2/27/2003	101500	7.7	8.1	9.6	95.1	278	7
2/27/2003	103000	8.0	8.1	9.5	95.2	279	7
2/27/2003	104500	8.4	8.1	9.4	95.3	279	7
2/27/2003	110000	8.7	8.1	9.3	95.0	279	7
2/27/2003	111500	9.1	8.1	9.3	95.9	280	7
2/27/2003	113000	9.4	8.1	9.3	96.0	280	7
2/27/2003	114500	9.6	8.1	9.2	95.9	281	7
2/27/2003	120000	10.1	8.1	9.1	95.7	281	7
2/27/2003	121500	10.6	8.1	9.1	96.4	281	7
2/27/2003	123000	11.0	8.1	8.9	95.7	282	7
2/27/2003	124500	11.4	8.1	8.9	96.2	282	7
2/27/2003	130000	11.7	8.1	8.8	96.2	282	7
2/27/2003	131500	12.0	8.1	8.7	95.6	283	7
2/27/2003	133000	12.2	8.1	8.6	94.7	283	7
2/27/2003	134500	12.6	8.1	8.5	95.1	284	7
2/27/2003	140000	12.7	8.1	8.4	94.2	284	7
2/27/2003	141500	12.5	8.1	8.4	93.4	285	7
2/27/2003	143000	12.5	8.1	8.4	93.6	285	7
2/27/2003	144500	12.4	8.1	8.4	93.2	285	7
2/27/2003	150000	12.6	8.1	8.4	93.5	285	7
2/27/2003	151500	12.6	8.1	8.4	93.1	286	7
2/27/2003	153000	12.6	8.1	8.2	91.6	286	7

Table 8.7.4.--Continuous Monitoring Data for Rio Grande at Los Lunas
February 26 through February 28, 2003

Date	Time (HHMMSS)	Temp (^oC)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
2/27/2003	154500	12.6	8.1	8.2	91.7	287	7
2/27/2003	160000	12.5	8.1	8.2	91.2	286	7
2/27/2003	161500	12.4	8.1	8.2	91.4	287	8
2/27/2003	163000	12.3	8.1	8.2	90.8	287	8
2/27/2003	164500	12.3	8.1	8.2	90.5	287	8
2/27/2003	170000	12.2	8.1	8.1	89.7	286	8
2/27/2003	171500	12.1	8.1	8.1	89.5	286	8
2/27/2003	173000	11.9	8.1	8.1	88.9	286	8
2/27/2003	174500	11.8	8.1	8.1	88.6	286	8
2/27/2003	180000	11.7	8.1	8.1	88.0	285	8
2/27/2003	181500	11.6	8.1	8.0	87.5	285	8
2/27/2003	183000	11.6	8.1	8.1	87.6	284	8
2/27/2003	184500	11.5	8.1	8.0	87.0	284	8
2/27/2003	190000	11.3	8.1	8.0	86.9	283	8
2/27/2003	191500	11.2	8.1	8.0	86.7	282	32
2/27/2003	193000	11.0	8.1	8.1	86.5	281	25
2/27/2003	194500	10.9	8.1	8.0	86.0	280	38
2/27/2003	200000	10.7	8.1	8.1	86.1	280	28
2/27/2003	201500	10.6	8.1	8.1	86.2	279	17
2/27/2003	203000	10.5	8.1	8.1	85.4	278	28
2/27/2003	204500	10.4	8.1	8.0	85.2	277	9
2/27/2003	210000	10.3	8.1	8.1	85.4	276	7
2/27/2003	211500	10.2	8.1	8.1	85.5	275	7
2/27/2003	213000	10.2	8.1	8.1	85.2	274	7
2/27/2003	214500	10.2	8.1	8.1	85.6	274	7
2/27/2003	220000	10.1	8.1	8.1	85.4	273	7
2/27/2003	221500	10.0	8.1	8.1	85.1	272	7
2/27/2003	223000	10.0	8.1	8.1	85.3	271	7
2/27/2003	224500	9.9	8.1	8.1	85.1	271	7
2/27/2003	230000	9.8	8.1	8.2	85.5	270	7
2/27/2003	231500	9.7	8.1	8.3	86.2	270	8
2/27/2003	233000	9.6	8.1	8.3	86.2	269	8
2/27/2003	234500	9.4	8.1	8.3	85.5	269	8
2/28/2003	000000	9.3	8.1	8.3	85.4	268	8
2/28/2003	001500	9.1	8.1	8.4	86.1	269	8
2/28/2003	003000	9.0	8.1	8.4	86.2	270	9
2/28/2003	004500	8.9	8.1	8.5	86.5	270	9
2/28/2003	010000	8.8	8.1	8.5	86.4	271	8
2/28/2003	011500	8.7	8.1	8.5	86.7	272	8
2/28/2003	013000	8.6	8.1	8.5	86.4	272	9
2/28/2003	014500	8.5	8.1	8.6	87.1	273	8
2/28/2003	020000	8.3	8.1	8.6	86.7	274	8
2/28/2003	021500	8.2	8.1	8.6	86.9	275	9
2/28/2003	023000	8.1	8.1	8.7	87.1	276	9
2/28/2003	024500	8.0	8.1	8.7	87.4	276	9
2/28/2003	030000	8.0	8.1	8.7	87.1	277	9
2/28/2003	031500	7.9	8.1	8.7	87.0	277	9
2/28/2003	033000	7.9	8.1	8.8	87.4	277	8
2/28/2003	034500	7.8	8.1	8.8	87.5	277	9
2/28/2003	040000	7.7	8.1	8.8	87.8	278	9
2/28/2003	041500	7.7	8.1	8.9	87.9	277	9

Table 8.7.4.--Continuous Monitoring Data for Rio Grande at Los Lunas
February 26 through February 28, 2003

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
2/28/2003	043000	7.6	8.1	8.9	87.9	277	9
2/28/2003	044500	7.6	8.1	9.0	88.6	278	9
2/28/2003	050000	7.5	8.1	9.0	88.8	278	10
2/28/2003	051500	7.5	8.1	9.0	88.7	278	9
2/28/2003	053000	7.4	8.1	9.0	88.3	278	9
2/28/2003	054500	7.4	8.1	9.0	88.8	278	9
2/28/2003	060000	7.3	8.1	9.0	89.0	278	9
2/28/2003	061500	7.2	8.1	9.1	89.1	278	10
2/28/2003	063000	7.2	8.1	9.1	89.2	278	10
2/28/2003	064500	7.1	8.1	9.2	90.0	278	12
2/28/2003	070000	7.0	8.1	9.2	89.7	278	9
2/28/2003	071500	7.0	8.1	9.1	88.7	278	11
2/28/2003	073000	6.9	8.1	9.2	89.4	277	10
2/28/2003	074500	6.9	8.1	9.2	89.6	277	10
2/28/2003	080000	6.9	8.1	9.2	89.3	277	9
2/28/2003	081500	6.9	8.1	9.2	89.6	277	11
2/28/2003	083000	6.9	8.1	9.2	89.8	278	11
2/28/2003	084500	6.9	8.1	9.3	90.2	278	12
2/28/2003	090000	7.0	8.1	9.3	90.3	277	15
2/28/2003	091500	7.2	8.1	9.3	90.9	277	13
2/28/2003	093000	7.3	8.1	9.3	91.9	277	12
2/28/2003	094500	7.6	8.1	9.2	91.4	277	19
2/28/2003	100000	7.8	8.1	9.3	92.4	278	12

Descriptive Statistics	*Temp (°C)*	*pH*	*DO (mg/L)*	*DO (%)*	*SPC (uS/cm)*	*Turbidity (NTU)*
Mean	8.7	8.1	9.5	96.3	276	8
Standard Error	0.15	0.00	0.12	1.16	0.43	0.36
Median	8.2	8.1	9.2	91.9	277	7
Mode	7.0	8.1	8.1	91.7	278	7
Standard Deviation	1.94	0.01	1.53	14.74	5.42	4.56
Sample Variance	3.75	0.00	2.34	217.22	29.42	20.82
Kurtosis	-0.68	-0.11	3.19	4.79	-0.59	19.82
Skewness	0.72	-0.32	1.86	2.34	-0.04	4.12
Range	6.6	0.0	7.1	70.3	21	33
Minimum	6.1	8.1	8.0	85.1	266	5
Maximum	12.7	8.1	15.2	155.4	287	38
Sum	1405.3	1311.3	1536.8	15598.6	44786	1319
Count	162	162	162	162	162	162

Table 8.8.1.--Continuous Monitoring Data for Rio Grande at Abeytas, September 12 through September 13, 2002

[--, no data; ~, approximately; >, greater than; °C, degrees Celsius; mg/L, milligrams per liter; % sat, percent saturation; uS/cm, microsiemens per centimeter; NTU, Nephelometric turbidity units.]

DataSonde 4a 40184
Log File Name : ABEYTAS 9-12-02
Setup Date (MMDDYY) : 091202
Setup Time (HHMMSS) : 092028
Starting Date (MMDDYY) : 091202
Starting Time (HHMMSS) : 094500
Stopping Date (MMDDYY) : 091902
Stopping Time (HHMMSS) : 120000
Interval (HHMMSS) : 001500
Sensor warmup (HHMMSS) : 000200
Circltr warmup (HHMMSS) : 000100

Date	Time (HHMMSS)	Temp (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
9/12/2002	104500	20.1	7.9	6.6	85.7	408	> 1000
9/12/2002	110000	20.4	7.9	6.3	82.2	395	> 1000
9/12/2002	111500	20.7	7.9	6.2	81.6	357	> 1000
9/12/2002	113000	21.0	7.9	6.2	81.9	337	> 1000
9/12/2002	114500	21.3	7.9	6.1	81.6	325	> 1000
9/12/2002	120000	21.6	7.9	6.0	81.1	323	> 1000
9/12/2002	121500	21.8	7.9	6.0	81.2	323	> 1000
9/12/2002	123000	22.1	7.9	5.9	80.5	325	> 1000
9/12/2002	124500	22.1	7.9	5.8	79.1	325	> 1000
9/12/2002	130000	22.2	7.8	5.7	77.7	325	> 1000
9/12/2002	131500	22.1	7.8	5.7	77.6	322	> 1000
9/12/2002	133000	22.0	7.8	5.7	77.4	320	> 1000
9/12/2002	134500	21.8	7.8	5.6	76.0	321	> 1000
9/12/2002	140000	21.7	7.8	5.6	75.9	320	> 1000
9/12/2002	141500	21.9	7.8	5.6	75.3	317	> 1000
9/12/2002	143000	22.1	7.8	5.5	74.7	316	> 1000
9/12/2002	144500	22.3	7.8	5.6	75.7	315	> 1000
9/12/2002	150000	22.4	7.8	5.5	75.2	313	> 1000
9/12/2002	151500	22.3	7.8	5.5	75.1	311	> 1000
9/12/2002	153000	22.3	7.8	5.4	74.1	311	> 1000
9/12/2002	154500	22.5	7.8	5.4	73.7	310	> 1000
9/12/2002	160000	22.5	7.8	5.4	74.3	307	> 1000
9/12/2002	161500	22.5	7.8	5.4	74.4	306	> 1000
9/12/2002	163000	22.4	7.8	5.4	73.4	303	> 1000
9/12/2002	164500	22.5	7.8	5.4	73.2	299	> 1000
9/12/2002	170000	22.5	7.8	5.4	73.0	300	> 1000
9/12/2002	171500	22.5	7.8	5.4	73.1	297	> 1000
9/12/2002	173000	22.5	7.8	5.4	73.1	297	> 1000
9/12/2002	174500	22.5	7.8	5.3	72.3	295	> 1000
9/12/2002	180000	22.4	7.8	5.4	73.6	291	> 1000
9/12/2002	181500	22.3	7.8	5.4	72.9	290	> 1000
9/12/2002	183000	22.2	7.8	5.3	72.5	289	> 1000
9/12/2002	184500	22.1	7.8	5.4	72.8	287	> 1000
9/12/2002	190000	22.1	7.8	5.4	72.4	286	> 1000
9/12/2002	191500	22.0	7.8	5.3	71.4	283	> 1000
9/12/2002	193000	21.9	7.8	5.4	72.7	283	> 1000
9/12/2002	194500	21.8	7.8	5.3	71.8	280	> 1000

Table 8.8.1.--Continuous Monitoring Data for Rio Grande at Abeytas, September 12 through September 13, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
9/12/2002	200000	21.8	7.8	5.4	72.1	280	> 1000
9/12/2002	201500	21.7	7.8	5.4	72.4	280	> 1000
9/12/2002	203000	21.7	7.8	5.3	71.8	278	> 1000
9/12/2002	204500	21.6	7.8	5.4	71.9	277	> 1000
9/12/2002	210000	21.5	7.8	5.4	72.4	276	> 1000
9/12/2002	211500	21.5	7.8	5.4	72.0	275	> 1000
9/12/2002	213000	21.4	7.8	5.4	71.7	273	> 1000
9/12/2002	214500	21.4	7.8	5.4	71.9	273	> 1000
9/12/2002	220000	21.3	7.8	5.4	72.4	273	> 1000
9/12/2002	221500	21.3	7.8	5.4	71.8	272	> 1000
9/12/2002	223000	21.3	7.8	5.4	71.6	272	> 1000
9/12/2002	224500	21.3	7.8	5.4	71.9	271	> 1000
9/12/2002	230000	21.2	7.8	5.4	71.5	271	> 1000
9/12/2002	231500	21.2	7.8	5.4	71.7	271	> 1000
9/12/2002	233000	21.1	7.8	5.4	72.3	270	> 1000
9/12/2002	234500	21.1	7.8	5.4	71.9	270	> 1000
9/13/2002	000000	21.0	7.8	5.5	72.3	270	> 1000
9/13/2002	000015	21.0	7.8	5.4	72.1	284	975
9/13/2002	000030	20.9	7.8	5.4	71.8	285	969
9/13/2002	000045	20.9	7.8	5.4	71.2	281	983
9/13/2002	010000	20.8	7.8	5.5	72.3	282	934
9/13/2002	011500	20.8	7.8	5.4	71.8	284	942
9/13/2002	013000	20.8	7.8	5.5	72.4	286	916
9/13/2002	014500	20.7	7.8	5.5	72.1	284	898
9/13/2002	020000	20.7	7.8	5.5	72.2	285	878
9/13/2002	021500	20.6	7.8	5.5	72.0	287	865
9/13/2002	023000	20.6	7.8	5.5	72.5	288	845
9/13/2002	024500	20.5	7.8	5.5	72.3	290	844
9/13/2002	030000	20.4	7.8	5.5	72.5	289	834
9/13/2002	031500	20.4	7.8	5.6	72.7	288	806
9/13/2002	033000	20.3	7.8	5.6	73.2	289	806
9/13/2002	034500	20.2	7.8	5.6	72.7	295	829
9/13/2002	040000	20.2	7.8	5.6	72.8	292	802
9/13/2002	041500	20.1	7.8	5.6	73.4	290	789
9/13/2002	043000	20.1	7.8	5.6	73.5	292	782
9/13/2002	044500	20.0	7.8	5.7	73.8	291	771
9/13/2002	050000	20.0	7.8	5.7	73.6	294	796
9/13/2002	051500	19.9	7.8	5.7	73.8	294	771
9/13/2002	053000	19.9	7.8	5.7	74.5	294	779
9/13/2002	054500	19.8	7.8	5.8	74.5	293	784
9/13/2002	060000	19.8	7.8	5.7	74.1	296	795
9/13/2002	061500	19.7	7.8	5.7	74.0	296	798
9/13/2002	063000	19.7	7.8	5.7	74.1	296	806
9/13/2002	064500	19.6	7.8	5.7	73.9	299	827
9/13/2002	070000	19.6	7.8	5.7	73.7	298	838
9/13/2002	071500	19.6	7.8	5.7	72.9	302	840
9/13/2002	073000	19.5	7.8	5.7	73.4	301	846
9/13/2002	074500	19.5	7.8	5.7	73.2	301	882
9/13/2002	080000	19.5	7.8	5.7	72.8	305	907
9/13/2002	081500	19.5	7.8	5.7	73.0	306	926
9/13/2002	083000	19.6	7.8	5.7	73.1	307	984

Table 8.8.1.--Continuous Monitoring Data for Rio Grande at Abeytas, September 12 through September 13, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
9/13/2002	084500	19.7	7.8	5.7	73.4	309	> 1000
9/13/2002	090000	19.8	7.8	5.7	73.4	309	> 1000
9/13/2002	091500	19.9	7.8	5.7	73.6	311	> 1000
9/13/2002	093000	20.0	7.8	5.7	74.3	314	> 1000
9/13/2002	094500	20.1	7.8	5.7	73.7	314	> 1000
9/13/2002	100000	20.2	7.8	5.7	74.4	318	> 1000
9/13/2002	101500	20.4	7.8	5.7	74.7	322	> 1000
9/13/2002	103000	20.6	7.8	5.7	74.9	325	> 1000
9/13/2002	104500	20.7	7.8	5.7	75.1	327	> 1000
9/13/2002	110000	20.9	7.8	5.7	74.9	331	> 1000
9/13/2002	111500	21.1	7.8	5.6	74.9	335	> 1000
9/13/2002	113000	21.3	7.8	5.7	75.6	338	> 1000
9/13/2002	114500	21.5	7.8	5.6	75.4	338	> 1000
9/13/2002	120000	21.7	7.8	5.7	76.1	343	> 1000
9/13/2002	121500	**probe power loss**					
9/13/2002	123000	**probe power loss**					

Descriptive Statistics	*Temp (°C)*	*pH*	*DO (mg/L)*	*DO (%)*	*SPC (uS/cm)*	*Turbidity (NTU)*
Mean	21.1	7.8	5.6	74.1	301	~ 952.1
Standard Error	0.09	0.00	0.02	0.27	2.39	~ 7.85
Median	21.1	7.8	5.6	73.4	296	>1000
Mode	22.5	7.8	5.4	73.4	325	>1000
Standard Deviation	0.95	0.04	0.23	2.77	24.12	~ 79.24
Sample Variance	0.90	0.00	0.05	7.67	581.84	~ 6279.32
Kurtosis	-1.27	4.07	3.76	4.16	4.41	~ -0.17
Skewness	-0.09	1.99	1.59	2.03	1.56	~ -1.24
Range	3.0	0.2	1.3	14.5	138	~ 230
Minimum	19.5	7.8	5.3	71.2	270	771
Maximum	22.5	7.9	6.6	85.7	408	>1000
Sum	2149.1	794.5	569.1	7560.1	30742	~ 97115
Count	102	102	102	102	102	102

Table 8.8.2.--Continuous Monitoring Data for Rio Grande at Abeytas, January 16 through January 19, 2003

[--, no data; °C, degrees Celsius; mg/L, milligrams per liter; % sat, percent saturation; uS/cm, microsiemens per centimeter; NTU, Nephelometric turbidity units.]

DataSonde 4a 40183
Log File Name : ABEYTAS 1-16-03
Setup Date (MMDDYY) : 011603
Setup Time (HHMMSS) : 092202
Starting Date (MMDDYY) : 011603
Starting Time (HHMMSS) : 100000
Stopping Date (MMDDYY) : 011903
Stopping Time (HHMMSS) : 120000
Interval (HHMMSS) : 001500
Sensor warmup (HHMMSS) : 000200
Circltr warmup (HHMMSS) : 000100

Date	Time (HHMMSS)	Temp (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
1/16/2003	101500	4.6	8.2	11.0	99.9	386	9
1/16/2003	103000	4.8	8.1	10.9	99.5	382	8
1/16/2003	104500	5.0	8.2	11.0	100.4	385	8
1/16/2003	110000	5.3	8.2	11.0	101.4	382	9
1/16/2003	111500	5.5	8.2	11.0	101.8	386	8
1/16/2003	113000	5.8	8.2	11.0	102.8	386	8
1/16/2003	114500	6.0	8.2	11.1	103.9	384	8
1/16/2003	120000	6.3	8.3	11.1	105.2	385	8
1/16/2003	121500	6.5	8.3	11.1	106.0	387	8
1/16/2003	123000	6.8	8.3	11.2	107.0	387	7
1/16/2003	124500	7.0	8.3	11.1	107.2	385	7
1/16/2003	130000	7.3	8.3	11.2	108.5	388	7
1/16/2003	131500	7.5	8.3	11.1	108.2	391	8
1/16/2003	133000	7.7	8.3	11.1	109.0	389	8
1/16/2003	134500	7.9	8.3	11.1	109.0	388	8
1/16/2003	140000	8.0	8.3	11.1	109.3	389	7
1/16/2003	141500	8.2	8.3	11.1	110.2	390	7
1/16/2003	143000	8.3	8.3	11.1	110.1	391	7
1/16/2003	144500	8.4	8.3	11.1	110.2	388	7
1/16/2003	150000	8.4	8.3	11.0	110.1	390	7
1/16/2003	151500	8.5	8.3	11.0	110.1	388	7
1/16/2003	153000	8.5	8.3	11.0	109.8	390	7
1/16/2003	154500	8.4	8.3	10.9	108.8	389	8
1/16/2003	160000	8.4	8.4	10.9	108.5	390	7
1/16/2003	161500	8.3	8.4	10.8	107.7	391	8
1/16/2003	163000	8.3	8.4	10.8	107.2	390	8
1/16/2003	164500	8.2	8.4	10.7	106.2	391	7
1/16/2003	170000	8.1	8.4	10.6	105.1	386	8
1/16/2003	171500	8.0	8.4	10.6	104.6	389	8
1/16/2003	173000	7.9	8.4	10.5	103.4	389	8
1/16/2003	174500	7.8	8.3	10.5	102.8	388	8
1/16/2003	180000	7.7	8.3	10.4	101.8	388	8
1/16/2003	181500	7.6	8.3	10.3	101.0	390	8
1/16/2003	183000	7.5	8.3	10.2	99.8	391	8
1/16/2003	184500	7.4	8.3	10.2	99.4	393	8

Table 8.8.2.--Continuous Monitoring Data for Rio Grande at Abeytas, January 16 through January 19, 2003

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
1/16/2003	190000	7.3	8.3	10.2	99.1	392	9
1/16/2003	191500	7.2	8.3	10.1	98.2	391	8
1/16/2003	193000	7.1	8.3	10.1	97.8	390	8
1/16/2003	194500	7.0	8.3	10.1	97.5	387	8
1/16/2003	200000	7.0	8.3	10.1	96.7	387	8
1/16/2003	201500	6.9	8.3	10.0	96.2	386	9
1/16/2003	203000	6.8	8.3	10.0	95.7	382	9
1/16/2003	204500	6.7	8.3	10.0	95.7	382	9
1/16/2003	210000	6.6	8.3	10.0	95.0	387	10
1/16/2003	211500	6.5	8.3	10.0	94.8	385	9
1/16/2003	213000	6.5	8.3	9.9	94.5	387	10
1/16/2003	214500	6.4	8.3	10.0	94.4	387	9
1/16/2003	220000	6.3	8.3	9.9	93.5	388	9
1/16/2003	221500	6.2	8.3	9.9	93.7	389	9
1/16/2003	223000	6.1	8.3	9.9	93.1	384	9
1/16/2003	224500	6.0	8.3	9.9	92.8	386	10
1/16/2003	230000	6.0	8.3	9.9	93.1	384	11
1/16/2003	231500	5.9	8.3	9.8	92.1	384	12
1/16/2003	233000	5.8	8.3	9.8	92.0	384	12
1/16/2003	234500	5.7	8.3	9.8	91.0	383	11
1/17/2003	000000	5.6	8.3	9.9	91.8	384	11
1/17/2003	001500	5.5	8.3	9.9	91.7	381	11
1/17/2003	003000	5.4	8.3	9.9	91.5	380	11
1/17/2003	004500	5.3	8.3	9.9	91.0	383	12
1/17/2003	010000	5.3	8.3	9.9	90.9	381	12
1/17/2003	011500	5.2	8.3	9.8	90.5	381	11
1/17/2003	013000	5.1	8.3	9.8	90.2	381	10
1/17/2003	014500	5.0	8.2	9.9	90.5	379	11
1/17/2003	020000	4.9	8.2	9.9	90.4	381	11
1/17/2003	021500	4.8	8.2	9.9	90.4	379	11
1/17/2003	023000	4.8	8.2	9.9	90.5	381	12
1/17/2003	024500	4.7	8.2	10.0	90.4	375	11
1/17/2003	030000	4.6	8.2	9.9	89.9	381	11
1/17/2003	031500	4.5	8.2	10.0	90.2	381	12
1/17/2003	033000	4.4	8.2	10.0	89.8	380	12
1/17/2003	034500	4.4	8.2	10.0	90.2	379	12
1/17/2003	040000	4.3	8.2	10.1	90.4	383	12
1/17/2003	041500	4.2	8.2	10.1	90.2	382	12
1/17/2003	043000	4.1	8.2	10.1	90.0	377	12
1/17/2003	044500	4.1	8.2	10.1	90.4	377	12
1/17/2003	050000	4.0	8.2	10.2	90.6	379	11
1/17/2003	051500	3.9	8.2	10.1	89.7	379	10
1/17/2003	053000	3.8	8.2	10.1	89.5	380	10
1/17/2003	054500	3.7	8.2	10.2	90.0	378	10
1/17/2003	060000	3.7	8.2	10.2	89.8	380	10
1/17/2003	061500	3.6	8.2	10.2	90.1	377	10
1/17/2003	063000	3.5	8.2	10.2	89.9	377	10
1/17/2003	064500	3.4	8.2	10.2	90.0	378	10
1/17/2003	070000	3.4	8.2	10.3	90.2	380	9

Table 8.8.2.--Continuous Monitoring Data for Rio Grande at Abeytas, January 16 through January 19, 2003

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
1/17/2003	071500	3.3	8.2	10.2	89.6	379	9
1/17/2003	073000	3.2	8.2	10.3	90.2	381	9
1/17/2003	074500	3.2	8.2	10.3	89.8	378	10
1/17/2003	080000	3.1	8.2	10.4	90.3	382	10
1/17/2003	081500	3.1	8.2	10.4	90.2	380	9
1/17/2003	083000	3.1	8.2	10.4	90.7	378	9
1/17/2003	084500	3.2	8.2	10.4	91.0	381	9
1/17/2003	090000	3.2	8.2	10.5	91.3	384	9
1/17/2003	091500	3.3	8.2	10.6	92.8	382	10
1/17/2003	093000	3.5	8.2	10.6	93.0	380	9
1/17/2003	094500	3.6	8.2	10.7	94.2	381	9
1/17/2003	100000	3.8	8.2	10.7	95.1	385	9
1/17/2003	101500	4.0	8.2	10.7	95.8	385	9
1/17/2003	103000	4.2	8.2	10.7	96.1	389	10
1/17/2003	104500	4.4	8.2	10.8	97.6	384	9
1/17/2003	110000	4.7	8.2	10.9	98.6	385	9
1/17/2003	111500	4.9	8.2	10.9	99.6	386	8
1/17/2003	113000	5.2	8.2	10.8	99.8	386	8
1/17/2003	114500	5.5	8.2	10.9	101.3	384	9
1/17/2003	120000	5.7	8.2	10.9	101.8	387	8
1/17/2003	121500	6.0	8.2	11.0	102.9	386	9
1/17/2003	123000	6.3	8.2	10.9	103.4	385	9
1/17/2003	124500	6.5	8.3	10.9	104.1	385	9
1/17/2003	130000	6.8	8.3	10.9	104.5	382	9
1/17/2003	131500	7.0	8.3	10.9	104.6	385	8
1/17/2003	133000	7.2	8.3	10.9	105.1	385	8
1/17/2003	134500	7.4	8.3	10.9	106.0	384	8
1/17/2003	140000	7.6	8.3	10.9	106.7	384	8
1/17/2003	141500	7.7	8.3	10.9	106.7	384	8
1/17/2003	143000	7.8	8.3	10.8	106.1	389	8
1/17/2003	144500	7.9	8.3	10.8	106.7	384	8
1/17/2003	150000	8.0	8.3	10.7	105.5	386	8
1/17/2003	151500	8.0	8.3	10.8	106.3	385	8
1/17/2003	153000	8.1	8.3	10.8	106.5	386	8
1/17/2003	154500	8.0	8.3	10.7	106.0	386	8
1/17/2003	160000	8.0	8.3	10.7	105.9	387	8
1/17/2003	161500	8.0	8.3	10.6	104.4	387	8
1/17/2003	163000	7.9	8.3	10.6	104.0	386	8
1/17/2003	164500	7.8	8.3	10.7	104.7	385	8
1/17/2003	170000	7.8	8.3	10.5	102.6	386	8
1/17/2003	171500	7.7	8.3	10.5	102.4	384	8
1/17/2003	173000	7.6	8.3	10.5	102.3	385	8
1/17/2003	174500	7.5	8.3	10.3	100.6	386	8
1/17/2003	180000	7.4	8.3	10.3	100.6	382	8
1/17/2003	181500	7.3	8.3	10.3	99.6	385	9
1/17/2003	183000	7.2	8.3	10.2	98.5	388	9
1/17/2003	184500	7.1	8.3	10.2	98.1	385	9
1/17/2003	190000	7.0	8.3	10.1	97.7	387	9
1/17/2003	191500	6.9	8.3	10.1	97.1	382	9

Table 8.8.2.--Continuous Monitoring Data for Rio Grande at Abeytas, January 16 through January 19, 2003

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
1/17/2003	193000	6.8	8.3	10.0	96.3	382	8
1/17/2003	194500	6.8	8.3	9.9	94.9	385	8
1/17/2003	200000	6.7	8.3	10.0	95.7	384	8
1/17/2003	201500	6.6	8.3	10.0	94.9	386	8
1/17/2003	203000	6.5	8.3	10.0	94.7	379	8
1/17/2003	204500	6.4	8.3	9.8	93.2	381	8
1/17/2003	210000	6.3	8.3	10.0	94.3	381	9
1/17/2003	211500	6.3	8.3	9.8	93.0	386	9
1/17/2003	213000	6.2	8.3	9.8	92.9	381	9
1/17/2003	214500	6.1	8.3	9.8	91.8	385	9
1/17/2003	220000	6.0	8.3	9.8	92.5	382	9
1/17/2003	221500	6.0	8.3	9.9	92.9	382	9
1/17/2003	223000	5.9	8.3	9.9	92.5	382	10
1/17/2003	224500	5.8	8.3	9.9	92.6	380	11
1/17/2003	230000	5.7	8.3	9.9	91.9	382	10
1/17/2003	231500	5.6	8.3	9.8	90.9	377	10
1/17/2003	233000	5.6	8.3	9.8	90.6	380	10
1/17/2003	234500	5.5	8.3	9.9	91.5	379	10
1/18/2003	003000	5.3	8.3	9.8	90.1	374	12
1/18/2003	004500	5.2	8.3	9.8	90.0	376	13
1/18/2003	010000	5.1	8.3	9.8	90.2	378	12
1/18/2003	011500	5.0	8.3	9.8	90.1	377	12
1/18/2003	013000	4.9	8.3	9.8	89.5	378	12
1/18/2003	014500	4.8	8.3	9.8	89.7	375	12
1/18/2003	020000	4.7	8.2	9.9	89.7	376	13
1/18/2003	021500	4.7	8.2	9.9	89.8	376	13
1/18/2003	023000	4.6	8.2	9.9	89.8	373	13
1/18/2003	024500	4.5	8.2	9.9	89.2	375	13
1/18/2003	030000	4.4	8.2	9.9	89.5	375	13
1/18/2003	031500	4.3	8.2	9.9	88.9	376	13
1/18/2003	033000	4.3	8.2	9.9	89.2	375	13
1/18/2003	034500	4.2	8.2	10.0	89.9	377	12
1/18/2003	040000	4.1	8.2	9.9	88.2	377	12
1/18/2003	041500	4.0	8.2	10.0	89.1	375	13
1/18/2003	043000	4.0	8.2	10.0	89.0	377	13
1/18/2003	044500	3.9	8.2	10.0	89.3	378	13
1/18/2003	050000	3.8	8.2	10.1	89.7	376	12
1/18/2003	051500	3.7	8.2	10.1	89.8	380	13
1/18/2003	053000	3.7	8.2	10.1	89.7	379	12
1/18/2003	054500	3.6	8.2	10.0	88.4	381	13
1/18/2003	060000	3.5	8.2	10.1	89.0	376	11
1/18/2003	061500	3.4	8.2	10.1	88.9	378	11
1/18/2003	063000	3.4	8.2	10.2	89.3	376	11
1/18/2003	064500	3.3	8.2	10.2	89.3	378	11
1/18/2003	070000	3.2	8.2	10.2	89.3	380	11
1/18/2003	071500	3.1	8.2	10.2	89.2	381	10
1/18/2003	073000	3.0	8.2	10.3	89.2	381	10
1/18/2003	074500	3.0	8.2	10.3	89.1	381	10
1/18/2003	080000	2.9	8.2	10.4	89.7	379	10

Table 8.8.2.--Continuous Monitoring Data for Rio Grande at Abeytas, January 16 through January 19, 2003

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
1/18/2003	081500	2.9	8.2	10.4	90.1	382	10
1/18/2003	083000	2.9	8.2	10.4	90.1	376	10
1/18/2003	084500	3.0	8.2	10.4	90.6	379	15
1/18/2003	090000	3.0	8.2	10.4	90.2	381	10
1/18/2003	091500	3.2	8.2	10.5	91.8	384	10
1/18/2003	093000	3.3	8.2	10.6	92.8	379	10
1/18/2003	094500	3.4	8.2	10.6	93.5	380	10
1/18/2003	100000	3.6	8.2	10.7	94.2	382	11
1/18/2003	101500	3.8	8.2	10.6	94.3	382	10
1/18/2003	103000	4.0	8.2	10.7	95.2	379	10
1/18/2003	104500	4.2	8.2	10.7	96.3	384	9
1/18/2003	110000	4.4	8.2	10.8	97.7	384	10
1/18/2003	111500	4.7	8.2	10.7	96.8	386	9
1/18/2003	113000	4.9	8.2	10.9	99.5	388	9
1/18/2003	114500	5.2	8.2	10.9	100.5	391	9
1/18/2003	120000	5.5	8.2	10.7	98.8	383	8
1/18/2003	121500	5.8	8.2	10.9	101.5	383	8
1/18/2003	123000	6.0	8.2	11.0	102.9	384	9
1/18/2003	124500	6.3	8.2	10.7	100.7	390	9
1/18/2003	130000	6.5	8.2	10.9	103.7	389	36
1/18/2003	131500	6.7	8.2	10.6	101.6	390	8
1/18/2003	133000	6.9	8.3	10.6	102.2	387	8
1/18/2003	134500	7.1	8.3	10.8	104.6	394	9
1/18/2003	140000	7.3	8.3	10.8	104.5	390	8
1/18/2003	141500	7.4	8.3	10.8	104.8	389	8
1/18/2003	143000	7.6	8.3	10.7	104.6	383	8
1/18/2003	144500	7.7	8.3	10.8	105.5	394	12
1/18/2003	150000	7.7	8.3	10.7	104.6	386	8
1/18/2003	151500	7.8	8.3	10.8	105.9	387	8
1/18/2003	153000	7.8	8.3	10.3	101.2	250	6
1/18/2003	154500	7.8	8.3	9.9	97.6	217	5
1/18/2003	160000	7.8	8.3	10.5	102.8	388	8
1/18/2003	161500	7.7	8.3	10.6	103.8	385	8
1/18/2003	163000	7.7	8.3	10.6	103.4	389	8
1/18/2003	164500	7.6	8.3	10.3	100.4	388	8
1/18/2003	170000	7.5	8.3	10.4	101.7	385	9
1/18/2003	171500	7.4	8.3	10.4	101.5	389	9
1/18/2003	173000	7.3	8.3	10.4	101.1	360	8
1/18/2003	174500	7.2	8.3	10.4	100.6	389	8
1/18/2003	180000	7.1	8.3	10.3	99.2	360	8
1/18/2003	181500	7.0	8.3	10.3	99.2	388	8
1/18/2003	183000	6.9	8.3	10.2	97.9	386	8
1/18/2003	184500	6.8	8.3	10.2	97.9	385	9
1/18/2003	190000	6.7	8.3	10.0	95.2	387	8
1/18/2003	191500	6.6	8.3	10.0	95.3	386	8
1/18/2003	193000	6.5	8.3	10.1	96.3	387	8
1/18/2003	194500	6.4	8.3	10.1	95.7	384	8
1/18/2003	200000	6.4	8.3	9.9	94.1	388	8
1/18/2003	201500	6.3	8.3	10.0	94.4	384	8

Table 8.8.2.--Continuous Monitoring Data for Rio Grande at Abeytas, January 16 through January 19, 2003

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
1/18/2003	203000	6.2	8.3	10.0	94.3	381	8
1/18/2003	204500	6.1	8.3	9.8	92.4	387	8
1/18/2003	210000	6.0	8.3	10.0	94.0	381	8
1/18/2003	211500	6.0	8.3	9.8	92.4	377	9
1/18/2003	213000	5.9	8.3	10.0	93.8	381	9
1/18/2003	214500	5.8	8.3	9.9	92.2	379	9
1/18/2003	220000	5.7	8.3	9.8	91.0	380	9
1/18/2003	221500	5.6	8.3	10.0	92.6	379	9
1/18/2003	223000	5.6	8.3	10.0	92.6	377	10
1/18/2003	224500	5.5	8.3	9.9	91.8	378	9
1/18/2003	230000	5.4	8.3	9.7	89.6	377	10
1/18/2003	231500	5.3	8.3	10.0	92.2	372	11
1/18/2003	233000	5.2	8.3	9.8	90.2	374	12
1/18/2003	234500	5.1	8.3	9.9	91.0	379	12
1/19/2003	000000	5.1	8.3	9.8	89.9	376	12
1/19/2003	001500	5.0	8.3	9.9	90.6	375	12
1/19/2003	003000	4.9	8.3	9.9	90.4	375	12
1/19/2003	004500	4.8	8.3	9.8	89.6	376	13
1/19/2003	010000	4.7	8.3	9.9	89.8	375	12
1/19/2003	011500	4.7	8.2	9.9	89.8	378	12
1/19/2003	013000	4.6	8.2	10.1	91.4	374	12
1/19/2003	014500	4.5	8.2	10.0	90.6	376	13
1/19/2003	020000	4.4	8.2	9.9	89.4	374	13
1/19/2003	021500	4.3	8.2	9.9	89.0	379	13
1/19/2003	023000	4.2	8.2	9.8	88.2	375	13
1/19/2003	024500	4.2	8.2	10.0	89.5	380	14
1/19/2003	030000	4.1	8.2	10.0	88.9	375	13
1/19/2003	031500	4.0	8.2	10.0	89.4	376	14
1/19/2003	033000	3.9	8.2	9.9	88.3	374	15
1/19/2003	034500	3.8	8.2	9.9	88.2	372	15
1/19/2003	040000	3.8	8.2	9.9	88.1	378	15
1/19/2003	041500	3.7	8.2	10.0	88.7	378	14
1/19/2003	043000	3.6	8.2	10.1	89.1	370	14
1/19/2003	044500	3.5	8.2	10.1	89.3	374	14
1/19/2003	050000	3.5	8.2	10.2	89.4	374	13
1/19/2003	051500	3.4	8.2	10.1	88.3	376	12
1/19/2003	053000	3.3	8.2	10.1	88.6	370	13
1/19/2003	054500	3.2	8.2	10.1	88.5	372	13

Table 8.8.2.--Continuous Monitoring Data for Rio Grande at Abeytas, January 16 through January 19, 2003

Date	Time (HHMMSS)	Temp (^oC)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
1/19/2003	060000	3.2	8.2	10.2	88.9	372	12
1/19/2003	061500	3.1	8.2	10.3	89.5	377	12
1/19/2003	063000	3.0	8.2	10.1	87.5	372	13
1/19/2003	064500	3.0	8.2	10.1	87.8	371	13
1/19/2003	070000	2.9	8.2	10.2	88.1	378	13
1/19/2003	071500	2.8	8.2	10.2	88.2	380	12
1/19/2003	073000	2.7	8.2	10.4	89.5	364	11
1/19/2003	074500	2.7	8.2	10.3	88.7	376	10
1/19/2003	080000	2.6	8.2	10.3	88.8	382	10
1/19/2003	081500	2.6	8.2	10.2	87.7	384	10
1/19/2003	083000	2.7	8.2	10.3	88.8	382	10
1/19/2003	084500	2.7	8.2	10.5	90.4	382	10
1/19/2003	090000	2.8	8.2	10.5	90.7	376	9
1/19/2003	091500	2.9	8.2	10.5	91.2	382	9
1/19/2003	093000	3.1	8.2	10.5	91.3	382	9
1/19/2003	094500	3.3	8.2	10.6	92.8	379	9
1/19/2003	100000	3.5	8.2	10.6	93.0	384	10
1/19/2003	101500	3.7	8.2	10.6	93.8	376	9
1/19/2003	103000	3.9	8.2	10.8	95.8	375	9
1/19/2003	104500	4.1	8.2	10.7	95.3	386	10
1/19/2003	110000	4.4	8.2	10.8	97.7	380	13
1/19/2003	111500	4.7	8.2	10.8	98.2	381	9
1/19/2003	113000	4.9	8.2	10.8	98.3	384	9
1/19/2003	114500	5.2	8.2	10.8	99.6	383	9
1/19/2003	120000	5.5	8.2	10.6	98.2	386	9

Descriptive Statistics	*Temp (°C)*	*pH*	*DO (mg/L)*	*DO (%)*	*SPC (uS/cm)*	*Turbidity (NTU)*
Mean	5.5	8.3	10.3	95.7	381	10
Standard Error	0.10	0.00	0.02	0.37	0.78	0.14
Median	5.5	8.3	10.2	93.5	382	9
Mode	4.2	8.2	10.0	90.2	384	8
Standard Deviation	1.68	0.05	0.40	6.39	13.45	2.47
Sample Variance	2.83	0.00	0.16	40.78	180.79	6.08
Kurtosis	-1.24	-1.23	-1.11	-0.85	105.78	41.94
Skewness	0.07	0.12	0.44	0.67	-9.43	4.33
Range	5.8	0.2	1.5	22.7	177	31
Minimum	2.6	8.1	9.7	87.5	217	5
Maximum	8.5	8.4	11.2	110.2	394	36
Sum	1604.4	2426.2	3032.8	28122.5	112036	2900
Count	294	294	294	294	294	294

Table 8.9.1.--Continuous Monitoring Data for Lower San Juan Drain,
August 5 through August 6, 2002

[--, no data; °C, degrees Celsius; mg/L, milligrams per liter; % sat, percent saturation; uS/cm, microsiemens per centimeter; NTU, Nephelometric turbidity units.]

DataSonde 4a 40183
Log File Name : SAN JUAN 8-5-02
Setup Date (MMDDYY) : 080502
Setup Time (HHMMSS) : 083934
Starting Date (MMDDYY) : 080502
Starting Time (HHMMSS) : 090000
Stopping Date (MMDDYY) : 080702
Stopping Time (HHMMSS) : 120000
Interval (HHMMSS) : 001500
Sensor warmup (HHMMSS) : 000200
Circltr warmup (HHMMSS) : 000100

Date	Time (HHMMSS)	Temp (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
8/5/2002	094500	21.0	7.9	6.2	81.5	673	42
8/5/2002	100000	21.1	7.9	6.1	81.2	671	44
8/5/2002	101500	21.2	7.9	6.1	81.3	670	45
8/5/2002	103000	21.3	7.9	6.1	81.8	670	46
8/5/2002	104500	21.7	7.9	6.1	82.5	669	46
8/5/2002	110000	21.8	7.9	6.1	82.1	668	47
8/5/2002	111500	22.0	8.0	6.1	82.2	667	47
8/5/2002	113000	22.1	8.0	6.1	83.0	667	46
8/5/2002	114500	22.4	7.9	6.1	83.0	666	47
8/5/2002	120000	22.5	7.9	6.1	82.6	666	47
8/5/2002	121500	22.7	7.9	6.1	83.2	665	46
8/5/2002	123000	22.9	7.9	6.1	83.4	665	44
8/5/2002	124500	22.9	8.0	6.0	82.9	665	45
8/5/2002	130000	23.2	7.9	6.0	83.4	665	37
8/5/2002	131500	23.4	7.9	6.0	83.3	664	44
8/5/2002	133000	23.6	7.9	6.0	83.2	664	45
8/5/2002	134500	23.8	7.9	6.0	83.5	664	40
8/5/2002	140000	23.7	8.0	6.0	83.3	664	40
8/5/2002	141500	24.1	7.9	6.0	84.3	664	40
8/5/2002	143000	24.3	7.9	6.0	84.6	664	40
8/5/2002	144500	24.4	7.9	6.0	84.3	665	40
8/5/2002	150000	24.7	8.0	5.9	84.6	665	39
8/5/2002	151500	25.0	8.0	5.9	84.4	666	39
8/5/2002	153000	25.3	8.0	5.9	84.5	666	39
8/5/2002	154500	25.5	8.0	5.9	84.9	665	39
8/5/2002	160000	25.7	8.0	5.9	85.0	667	40
8/5/2002	161500	26.2	8.0	5.8	85.4	665	39
8/5/2002	163000	26.4	8.0	5.8	85.1	665	39
8/5/2002	164500	26.5	8.0	5.8	85.3	665	38
8/5/2002	170000	26.6	8.0	5.8	85.2	665	38
8/5/2002	171500	26.8	8.0	5.8	85.3	666	38
8/5/2002	173000	27.0	8.0	5.7	84.9	665	37
8/5/2002	174500	27.2	8.0	5.7	84.4	665	38
8/5/2002	180000	27.3	8.0	5.7	84.7	666	39
8/5/2002	181500	27.4	8.0	5.7	84.5	665	39
8/5/2002	183000	27.3	8.0	5.7	84.4	665	38
8/5/2002	184500	27.3	8.0	5.6	84.0	664	38

Table 8.9.1.--Continuous Monitoring Data for Lower San Juan Drain,
August 5 through August 6, 2002

Date	Time (HHMMSS)	Temp (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
8/5/2002	190000	27.1	8.0	5.6	83.5	664	38
8/5/2002	191500	27.1	8.0	5.6	83.3	663	38
8/5/2002	193000	27.1	8.0	5.6	83.0	663	38
8/5/2002	194500	27.0	8.0	5.6	82.8	663	38
8/5/2002	200000	26.9	8.0	5.5	82.1	662	38
8/5/2002	201500	26.8	8.0	5.5	81.8	662	38
8/5/2002	203000	26.7	8.0	5.5	81.7	661	38
8/5/2002	204500	26.6	8.0	5.5	81.5	661	37
8/5/2002	210000	26.5	8.0	5.5	81.3	661	38
8/5/2002	211500	26.3	8.1	5.5	80.8	661	37
8/5/2002	213000	26.2	8.0	5.5	80.8	661	39
8/5/2002	214500	26.1	8.0	5.5	80.5	661	37
8/5/2002	220000	26.0	8.0	5.5	80.2	661	38
8/5/2002	221500	25.9	8.1	5.5	80.1	661	37
8/5/2002	223000	25.7	8.1	5.5	79.2	661	38
8/5/2002	224500	25.6	8.1	5.5	79.3	661	37
8/5/2002	230000	25.5	8.1	5.5	79.6	660	37
8/5/2002	231500	25.4	8.1	5.5	78.9	657	37
8/5/2002	233000	25.3	8.1	5.5	78.6	651	38
8/5/2002	234500	25.2	8.1	5.5	78.6	646	37
8/6/2002	000000	25.0	8.1	5.5	78.3	645	38
8/6/2002	001500	24.8	8.1	5.5	77.9	644	37
8/6/2002	003000	24.7	8.1	5.5	78.3	645	38
8/6/2002	004500	24.4	8.1	5.5	78.2	647	38
8/6/2002	010000	24.2	8.1	5.5	78.1	648	38
8/6/2002	011500	24.0	8.1	5.6	78.2	650	38
8/6/2002	013000	23.7	8.1	5.6	78.0	654	37
8/6/2002	014500	23.5	8.1	5.6	78.2	657	38
8/6/2002	020000	23.3	8.1	5.7	78.4	662	38
8/6/2002	021500	23.0	8.1	5.7	78.4	666	38
8/6/2002	023000	22.8	8.1	5.7	78.2	671	35
8/6/2002	024500	22.6	8.1	5.7	78.1	676	38
8/6/2002	030000	22.4	8.1	5.8	78.4	682	39
8/6/2002	031500	22.2	8.1	5.8	78.8	687	38
8/6/2002	033000	22.0	8.1	5.8	78.8	690	38
8/6/2002	034500	21.8	8.0	5.9	79.0	690	38
8/6/2002	040000	21.7	8.0	5.9	78.7	690	38
8/6/2002	041500	21.5	8.0	5.9	79.1	688	38
8/6/2002	043000	21.4	8.0	5.9	78.8	688	38
8/6/2002	044500	21.3	8.0	5.9	78.5	688	38
8/6/2002	050000	21.1	8.0	5.9	78.8	688	38
8/6/2002	051500	21.0	8.0	6.0	78.9	688	38
8/6/2002	053000	20.9	8.0	6.0	78.8	687	38
8/6/2002	054500	20.8	8.0	6.0	79.2	687	39
8/6/2002	060000	20.7	8.0	6.0	79.2	686	38
8/6/2002	061500	20.6	8.0	6.0	78.9	686	39
8/6/2002	063000	20.5	8.0	6.0	79.2	685	39
8/6/2002	064500	20.4	8.0	6.0	78.9	685	39

Table 8.9.1.--Continuous Monitoring Data for Lower San Juan Drain,
August 5 through August 6, 2002

Date	Time (HHMMSS)	Temp (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
8/6/2002	070000	20.4	8.0	6.0	79.1	685	38
8/6/2002	071500	20.3	8.0	6.0	79.0	683	39
8/6/2002	073000	20.3	8.0	6.0	78.8	683	39
8/6/2002	074500	20.2	8.0	6.1	79.1	683	39
8/6/2002	080000	20.2	8.0	6.1	79.3	683	40
8/6/2002	081500	20.2	8.0	6.1	79.5	682	40
8/6/2002	083000	20.2	8.0	6.1	80.2	683	39
8/6/2002	084500	20.2	8.0	6.1	80.0	683	39
8/6/2002	090000	20.2	8.0	6.2	80.6	682	39
8/6/2002	091500	20.1	8.0	6.2	80.3	683	39
8/6/2002	093000	20.2	8.0	6.2	80.5	683	39
8/6/2002	094500	20.2	8.0	6.2	80.4	681	39
8/6/2002	100000	20.1	8.0	6.2	80.2	681	41
8/6/2002	101500	20.4	8.0	6.2	80.8	677	40
8/6/2002	103000	20.6	8.0	6.2	81.1	677	40
8/6/2002	104500	20.8	8.0	6.2	81.4	682	40
8/6/2002	110000	21.0	8.0	6.2	81.6	678	39
8/6/2002	111500	21.3	8.0	6.1	81.9	679	39
8/6/2002	113000	21.5	8.0	6.1	82.0	679	40
8/6/2002	114500	21.5	8.0	6.1	81.7	679	40
8/6/2002	120000	21.7	8.0	6.1	82.0	683	40
8/6/2002	121500	22.0	8.0	6.1	82.5	682	40
8/6/2002	123000	22.1	8.0	6.1	82.7	688	39
8/6/2002	124500	22.5	8.0	6.1	83.2	683	39
8/6/2002	130000	22.8	8.0	6.1	83.7	687	36
8/6/2002	131500	23.1	8.0	6.1	83.7	683	39
8/6/2002	133000	23.4	8.0	6.0	83.9	681	39

Descriptive Statistics	*Temp (°C)*	*pH*	*DO (mg/L)*	*DO (%)*	*SPC (uS/cm)*	*Turbidity (NTU)*
Mean	23.4	8.0	5.9	81.3	671	39
Standard Error	0.22	0.00	0.02	0.22	1.13	0.25
Median	23.0	8.0	5.9	81.3	666	39
Mode	20.2	8.0	6.0	78.8	665	38
Standard Deviation	2.38	0.04	0.24	2.31	11.91	2.61
Sample Variance	5.65	0.00	0.06	5.34	141.95	6.82
Kurtosis	-1.34	-0.92	-1.37	-1.34	-0.80	2.33
Skewness	0.23	-0.02	-0.37	0.17	-0.10	1.74
Range	7.3	0.2	0.7	7.5	46	12
Minimum	20.1	7.9	5.5	77.9	644	35
Maximum	27.4	8.1	6.2	85.4	690	47
Sum	2616.5	895.9	656.5	9104.3	75115	4412
Count	112	112	112	112	112	112

Table 8.9.2.--Continuous Monitoring Data for Lower San Juan Drain
January 27 through January 31, 2003

[--, no data; °C, degrees Celsius; mg/L, milligrams per liter; % sat, percent saturation; uS/cm, microsiemens per centimeter; NTU, Nephelometric turbidity units.]

DataSonde 4a 40184
Log File Name : SAN JUAN DRN 01-27-03
Setup Date (MMDDYY) : 012703
Setup Time (HHMMSS) : 100554
Starting Date (MMDDYY) : 012703
Starting Time (HHMMSS) : 103000
Stopping Date (MMDDYY) : 013103
Stopping Time (HHMMSS) : 120000
Interval (HHMMSS) : 001500
Sensor warmup (HHMMSS) : 000200
Circltr warmup (HHMMSS) : 000100

Date	Time	Temp (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
1/27/2003	110000	7.5	8.1	10.0	97.6	503	41
1/27/2003	111500	7.7	8.0	9.9	97.8	504	40
1/27/2003	113000	7.9	8.1	10.0	98.4	504	41
1/27/2003	114500	8.2	8.1	10.0	99.1	505	42
1/27/2003	120000	8.5	8.1	10.0	99.7	505	41
1/27/2003	121500	8.8	8.1	10.0	100.6	505	45
1/27/2003	123000	9.1	8.1	10.0	101.1	505	41
1/27/2003	124500	9.4	8.1	9.9	101.8	505	42
1/27/2003	130000	9.7	8.1	9.9	102.3	506	43
1/27/2003	131500	10.0	8.1	9.9	102.5	506	52
1/27/2003	133000	10.3	8.1	9.9	103.3	506	54
1/27/2003	134500	10.5	8.1	9.8	103.3	506	62
1/27/2003	140000	10.8	8.1	9.8	103.8	506	44
1/27/2003	141500	11.0	8.1	9.8	104.1	506	42
1/27/2003	143000	11.2	8.1	9.7	104.2	506	43
1/27/2003	144500	11.4	8.1	9.7	104.0	506	43
1/27/2003	150000	11.6	8.1	9.6	103.9	506	44
1/27/2003	151500	11.8	8.1	9.6	103.9	506	41
1/27/2003	153000	12.0	8.1	9.5	103.2	507	155
1/27/2003	154500	12.1	8.1	9.5	103.2	507	43
1/27/2003	160000	12.2	8.1	9.4	102.5	506	45
1/27/2003	161500	12.3	8.1	9.3	102.0	507	43
1/27/2003	163000	12.4	8.1	9.2	101.1	506	43
1/27/2003	164500	12.5	8.1	9.1	100.5	506	42
1/27/2003	170000	12.6	8.2	9.0	99.8	506	42
1/27/2003	171500	12.7	8.1	8.9	98.8	506	43
1/27/2003	173000	12.7	8.1	8.9	98.1	506	43
1/27/2003	174500	12.8	8.1	8.8	97.4	506	47
1/27/2003	180000	12.8	8.1	8.7	96.6	506	47
1/27/2003	181500	12.9	8.1	8.7	96.3	506	46
1/27/2003	183000	12.8	8.1	8.6	95.7	506	49
1/27/2003	184500	12.8	8.1	8.6	95.2	506	50
1/27/2003	190000	12.8	8.1	8.5	94.4	505	54
1/27/2003	191500	12.7	8.1	8.5	94.1	505	54
1/27/2003	193000	12.6	8.1	8.5	93.8	505	55
1/27/2003	194500	12.5	8.1	8.5	93.1	505	58
1/27/2003	200000	12.5	8.1	8.4	92.7	505	57
1/27/2003	201500	12.4	8.1	8.4	91.7	505	59
1/27/2003	203000	12.3	8.0	8.4	91.7	505	60
1/27/2003	204500	12.3	8.1	8.3	90.9	505	62
1/27/2003	210000	12.2	8.0	8.3	90.9	505	62
1/27/2003	211500	12.0	8.1	8.3	90.4	505	63
1/27/2003	213000	11.9	8.1	8.3	90.1	504	65
1/27/2003	214500	11.8	8.1	8.3	89.9	504	65

Table 8.9.2.--Continuous Monitoring Data for Lower San Juan Drain
January 27 through January 31, 2003

Date	Time	Temp (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
1/27/2003	220000	11.6	8.1	8.3	89.6	504	68
1/27/2003	221500	11.5	8.1	8.3	89.6	504	67
1/27/2003	223000	11.4	8.1	8.3	89.4	504	70
1/27/2003	224500	11.2	8.1	8.3	89.0	504	71
1/27/2003	230000	11.1	8.1	8.4	89.0	504	74
1/27/2003	231500	10.9	8.1	8.4	88.9	504	72
1/27/2003	233000	10.8	8.1	8.4	88.7	504	72
1/27/2003	234500	10.7	8.1	8.4	88.3	504	72
1/28/2003	000000	10.5	8.1	8.4	88.5	504	72
1/28/2003	001500	10.4	8.1	8.4	88.5	504	71
1/28/2003	003000	10.2	8.1	8.4	88.2	504	73
1/28/2003	004500	10.1	8.1	8.5	88.1	504	72
1/28/2003	010000	10.0	8.1	8.5	87.8	504	73
1/28/2003	011500	9.8	8.1	8.5	87.4	504	74
1/28/2003	013000	9.7	8.1	8.5	87.5	504	74
1/28/2003	014500	9.5	8.1	8.5	87.4	504	73
1/28/2003	020000	9.4	8.1	8.5	87.4	504	72
1/28/2003	021500	9.3	8.0	8.5	87.1	504	71
1/28/2003	023000	9.2	8.0	8.6	87.2	504	73
1/28/2003	024500	9.1	8.0	8.5	86.8	504	74
1/28/2003	030000	9.0	8.0	8.6	86.9	504	72
1/28/2003	031500	8.9	8.0	8.6	86.5	504	74
1/28/2003	033000	8.8	8.0	8.6	86.5	504	76
1/28/2003	034500	8.7	8.0	8.6	86.7	504	81
1/28/2003	040000	8.6	8.0	8.6	86.7	504	80
1/28/2003	041500	8.5	8.0	8.7	86.7	504	77
1/28/2003	043000	8.3	8.0	8.7	86.9	504	73
1/28/2003	044500	8.2	8.0	8.7	86.8	504	75
1/28/2003	050000	8.1	8.0	8.7	86.8	504	74
1/28/2003	051500	8.0	8.0	8.8	86.9	504	74
1/28/2003	053000	7.9	8.0	8.8	86.8	504	73
1/28/2003	054500	7.7	8.0	8.8	87.0	504	70
1/28/2003	060000	7.6	8.0	8.9	86.9	504	69
1/28/2003	061500	7.5	8.0	8.9	87.2	504	69
1/28/2003	063000	7.4	8.0	8.9	86.9	504	67
1/28/2003	064500	7.3	8.0	9.0	87.1	503	66
1/28/2003	070000	7.2	8.0	9.0	87.2	504	65
1/28/2003	071500	7.0	8.0	9.0	87.3	503	61
1/28/2003	073000	7.0	8.0	9.1	87.7	503	58
1/28/2003	074500	6.9	8.1	9.1	88.2	503	57
1/28/2003	080000	6.9	8.1	9.2	88.7	503	53
1/28/2003	081500	6.9	8.1	9.3	89.4	503	52
1/28/2003	083000	6.9	8.1	9.3	89.8	503	52
1/28/2003	084500	6.9	8.1	9.4	90.3	503	50
1/28/2003	090000	6.9	8.1	9.4	90.5	503	49
1/28/2003	091500	6.9	8.1	9.4	90.7	504	48
1/28/2003	093000	7.0	8.1	9.5	91.4	504	46
1/28/2003	094500	7.0	8.1	9.5	92.1	504	46
1/28/2003	100000	7.1	8.1	9.5	92.4	504	46
1/28/2003	101500	7.3	8.1	9.6	93.0	504	45
1/28/2003	103000	7.5	8.1	9.6	93.8	504	43
1/28/2003	104500	7.6	8.1	9.6	94.0	504	42
1/28/2003	110000	7.8	8.1	9.6	94.8	504	42
1/28/2003	111500	8.0	8.1	9.6	95.4	504	41
1/28/2003	113000	8.2	8.1	9.6	95.9	504	42
1/28/2003	114500	8.5	8.1	9.7	97.0	504	43
1/28/2003	120000	8.8	8.1	9.6	97.3	505	42
1/28/2003	121500	9.1	8.1	9.6	97.8	505	41

Table 8.9.2.--Continuous Monitoring Data for Lower San Juan Drain
January 27 through January 31, 2003

Date	Time	Temp (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
1/28/2003	123000	9.4	8.1	9.6	98.5	505	39
1/28/2003	124500	9.7	8.1	9.6	99.5	505	39
1/28/2003	130000	10.0	8.1	9.6	99.6	506	39
1/28/2003	131500	10.2	8.1	9.6	100.2	506	39
1/28/2003	133000	10.5	8.1	9.6	100.6	506	46
1/28/2003	134500	10.8	8.1	9.5	101.0	506	41
1/28/2003	140000	11.0	8.1	9.5	101.4	506	40
1/28/2003	141500	11.3	8.1	9.5	101.7	507	42
1/28/2003	143000	11.5	8.1	9.5	101.7	507	41
1/28/2003	144500	11.7	8.1	9.4	101.9	507	42
1/28/2003	150000	11.9	8.1	9.4	101.8	507	44
1/28/2003	151500	12.0	8.1	9.3	101.3	507	42
1/28/2003	153000	12.2	8.1	9.3	101.2	507	42
1/28/2003	154500	12.3	8.1	9.2	100.4	507	40
1/28/2003	160000	12.4	8.1	9.2	100.9	508	41
1/28/2003	161500	12.5	8.2	9.1	100.1	508	42
1/28/2003	163000	12.6	8.1	9.0	99.3	508	42
1/28/2003	164500	12.6	8.2	8.9	98.6	508	42
1/28/2003	170000	12.7	8.1	8.9	97.9	508	43
1/28/2003	171500	12.8	8.2	8.7	96.8	507	45
1/28/2003	173000	12.8	8.1	8.7	96.2	508	45
1/28/2003	174500	12.8	8.1	8.6	95.7	508	46
1/28/2003	180000	12.9	8.1	8.6	95.1	507	48
1/28/2003	181500	12.9	8.1	8.5	94.8	507	46
1/28/2003	183000	12.9	8.1	8.5	94.3	507	50
1/28/2003	184500	12.9	8.1	8.4	93.5	507	51
1/28/2003	190000	12.9	8.1	8.4	93.0	506	52
1/28/2003	191500	12.9	8.1	8.4	92.7	506	54
1/28/2003	193000	12.9	8.1	8.3	92.4	506	55
1/28/2003	194500	12.8	8.1	8.3	91.8	506	57
1/28/2003	200000	12.8	8.1	8.2	91.1	506	60
1/28/2003	201500	12.7	8.1	8.2	90.9	506	61
1/28/2003	203000	12.6	8.1	8.2	90.3	505	62
1/28/2003	204500	12.5	8.1	8.2	89.8	505	65
1/28/2003	210000	12.4	8.0	8.1	89.4	505	65
1/28/2003	211500	12.4	8.0	8.1	89.1	505	68
1/28/2003	213000	12.3	8.1	8.1	88.7	506	67
1/28/2003	214500	12.1	8.0	8.1	88.2	506	71
1/28/2003	220000	12.0	8.1	8.1	88.1	506	71
1/28/2003	221500	11.9	8.1	8.2	88.4	506	72
1/28/2003	223000	11.7	8.1	8.1	87.8	505	71
1/28/2003	224500	11.6	8.1	8.2	87.8	506	67
1/28/2003	230000	11.4	8.1	8.2	87.8	506	67
1/28/2003	231500	11.3	8.1	8.2	87.5	506	68
1/28/2003	233000	11.2	8.1	8.2	87.4	506	69
1/28/2003	234500	11.0	8.1	8.2	87.2	506	70
1/29/2003	000000	10.9	8.1	8.2	86.8	506	73
1/29/2003	001500	10.8	8.1	8.2	87.1	506	72
1/29/2003	003000	10.7	8.1	8.2	87.0	506	72
1/29/2003	004500	10.5	8.1	8.2	86.7	506	71
1/29/2003	010000	10.4	8.1	8.3	86.7	506	72
1/29/2003	011500	10.2	8.1	8.3	86.2	506	71
1/29/2003	013000	10.1	8.1	8.3	86.5	506	71
1/29/2003	014500	10.0	8.0	8.3	86.3	506	71
1/29/2003	020000	9.9	8.0	8.3	86.3	506	71
1/29/2003	021500	9.7	8.0	8.3	86.1	506	72
1/29/2003	023000	9.6	8.0	8.3	85.9	506	72
1/29/2003	024500	9.6	8.0	8.3	85.6	506	69

Table 8.9.2.--Continuous Monitoring Data for Lower San Juan Drain
January 27 through January 31, 2003

Date	Time	Temp (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
1/29/2003	030000	9.5	8.0	8.3	85.5	506	70
1/29/2003	031500	9.4	8.0	8.4	85.6	506	68
1/29/2003	033000	9.3	8.0	8.4	85.9	506	68
1/29/2003	034500	9.2	8.0	8.4	85.8	506	69
1/29/2003	040000	9.1	8.0	8.5	86.1	506	68
1/29/2003	041500	9.0	8.0	8.5	86.2	506	70
1/29/2003	043000	9.0	8.0	8.5	86.3	506	66
1/29/2003	044500	8.8	8.0	8.5	86.2	506	69
1/29/2003	050000	8.8	8.0	8.5	86.1	506	69
1/29/2003	051500	8.7	8.0	8.6	86.3	505	72
1/29/2003	053000	8.6	8.0	8.6	86.4	505	71
1/29/2003	054500	8.5	8.0	8.6	86.3	505	66
1/29/2003	060000	8.4	8.0	8.6	86.4	505	67
1/29/2003	061500	8.3	8.0	8.7	86.7	505	67
1/29/2003	063000	8.2	8.0	8.7	86.4	505	63
1/29/2003	064500	8.1	8.0	8.7	86.8	505	63
1/29/2003	070000	8.1	8.0	8.8	86.8	505	62
1/29/2003	071500	8.0	8.0	8.8	87.0	505	61
1/29/2003	073000	7.9	8.0	8.8	87.2	505	59
1/29/2003	074500	7.9	8.0	8.9	87.4	505	57
1/29/2003	080000	7.8	8.0	8.9	88.2	505	55
1/29/2003	081500	7.8	8.0	9.0	88.3	505	57
1/29/2003	083000	7.7	8.0	9.0	88.4	505	54
1/29/2003	084500	7.7	8.1	9.0	88.7	505	54
1/29/2003	090000	7.7	8.1	9.1	90.0	505	52
1/29/2003	091500	7.8	8.1	9.2	91.0	505	50
1/29/2003	093000	7.8	8.1	9.2	91.1	505	50
1/29/2003	094500	8.0	8.1	9.3	91.8	505	49
1/29/2003	100000	8.0	8.1	9.3	92.2	505	47
1/29/2003	101500	8.1	8.1	9.3	92.8	505	47
1/29/2003	103000	8.3	8.1	9.4	93.7	505	47
1/29/2003	104500	8.4	8.1	9.4	94.0	505	46
1/29/2003	110000	8.6	8.1	9.4	94.6	505	45
1/29/2003	111500	8.8	8.1	9.4	95.2	505	45
1/29/2003	113000	9.1	8.1	9.5	96.1	505	44
1/29/2003	114500	9.3	8.1	9.4	96.6	506	44
1/29/2003	120000	9.6	8.1	9.4	97.1	505	42
1/29/2003	121500	9.9	8.1	9.4	97.8	505	43
1/29/2003	123000	10.1	8.1	9.5	98.5	506	43
1/29/2003	124500	10.4	8.1	9.5	99.2	506	44
1/29/2003	130000	10.6	8.1	9.5	99.7	506	45
1/29/2003	131500	10.9	8.1	9.4	100.2	506	45
1/29/2003	133000	11.2	8.1	9.4	100.6	506	45
1/29/2003	134500	11.4	8.1	9.4	101.0	506	43
1/29/2003	140000	11.7	8.1	9.4	101.4	506	45
1/29/2003	141500	11.9	8.1	9.4	101.7	506	45
1/29/2003	143000	12.1	8.1	9.3	102.0	506	44
1/29/2003	144500	12.3	8.1	9.3	101.9	506	45
1/29/2003	150000	12.5	8.1	9.2	101.7	507	42
1/29/2003	151500	12.6	8.1	9.2	102.0	507	41
1/29/2003	153000	12.8	8.2	9.2	101.6	507	43
1/29/2003	154500	12.9	8.2	9.1	101.2	507	44
1/29/2003	160000	13.0	8.1	9.1	100.7	507	44
1/29/2003	161500	13.1	8.1	9.0	100.1	507	42
1/29/2003	163000	13.1	8.1	8.9	99.4	507	43
1/29/2003	164500	13.2	8.1	8.8	98.5	507	43
1/29/2003	170000	13.3	8.1	8.7	97.7	507	44
1/29/2003	171500	13.3	8.1	8.6	96.9	507	44

Table 8.9.2.--Continuous Monitoring Data for Lower San Juan Drain
January 27 through January 31, 2003

Date	Time	Temp (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
1/29/2003	173000	13.4	8.1	8.6	96.1	507	45
1/29/2003	174500	13.4	8.1	8.5	95.4	507	47
1/29/2003	180000	13.4	8.1	8.4	94.6	506	48
1/29/2003	181500	13.4	8.1	8.4	94.2	506	51
1/29/2003	183000	13.4	8.1	8.3	93.6	506	48
1/29/2003	184500	13.4	8.1	8.3	93.0	506	52
1/29/2003	190000	13.3	8.1	8.3	92.5	506	54
1/29/2003	191500	13.3	8.1	8.2	91.8	506	57
1/29/2003	193000	13.2	8.1	8.2	91.3	506	59
1/29/2003	194500	13.1	8.1	8.2	91.3	505	59
1/29/2003	200000	13.1	8.1	8.1	90.5	505	60
1/29/2003	201500	13.0	8.1	8.1	89.8	505	61
1/29/2003	203000	12.9	8.1	8.1	89.7	505	60
1/29/2003	204500	12.8	8.1	8.1	89.3	505	62
1/29/2003	210000	12.7	8.1	8.0	88.8	505	62
1/29/2003	211500	12.5	8.1	8.1	88.7	505	63
1/29/2003	213000	12.4	8.1	8.0	88.2	505	65
1/29/2003	214500	12.3	8.1	8.0	88.1	505	66
1/29/2003	220000	12.1	8.0	8.0	87.7	505	70
1/29/2003	221500	12.0	8.0	8.0	87.2	505	72
1/29/2003	223000	11.8	8.1	8.1	87.3	505	70
1/29/2003	224500	11.7	8.1	8.0	86.8	505	72
1/29/2003	230000	11.5	8.1	8.1	86.8	504	71
1/29/2003	231500	11.3	8.1	8.1	86.8	504	73
1/29/2003	233000	11.2	8.1	8.1	86.6	504	71
1/29/2003	234500	11.0	8.1	8.1	86.7	504	71
1/30/2003	000000	10.9	8.1	8.2	86.5	504	71
1/30/2003	001500	10.7	8.1	8.2	86.3	504	71
1/30/2003	003000	10.6	8.1	8.2	86.3	504	72
1/30/2003	004500	10.4	8.0	8.2	86.1	504	68
1/30/2003	010000	10.2	8.0	8.3	86.2	504	70
1/30/2003	011500	10.1	8.0	8.2	85.8	504	70
1/30/2003	013000	9.9	8.0	8.3	85.8	504	69
1/30/2003	014500	9.8	8.0	8.3	85.6	504	68
1/30/2003	020000	9.6	8.0	8.3	85.7	504	68
1/30/2003	021500	9.5	8.0	8.3	85.6	505	67
1/30/2003	023000	9.4	8.0	8.4	85.5	504	65
1/30/2003	024500	9.2	8.0	8.4	85.2	504	66
1/30/2003	030000	9.1	8.0	8.4	85.5	504	67
1/30/2003	031500	9.0	8.0	8.4	85.1	504	67
1/30/2003	033000	8.9	8.0	8.4	85.3	504	66
1/30/2003	034500	8.8	8.0	8.5	85.6	504	66
1/30/2003	040000	8.7	8.0	8.5	85.7	504	67
1/30/2003	041500	8.5	8.0	8.5	85.7	504	65
1/30/2003	043000	8.4	8.0	8.6	85.6	504	67
1/30/2003	044500	8.3	8.0	8.6	85.7	504	67
1/30/2003	050000	8.2	8.0	8.6	85.9	504	66
1/30/2003	051500	8.1	8.0	8.7	85.8	504	62
1/30/2003	053000	7.9	8.0	8.7	86.0	504	63
1/30/2003	054500	7.8	8.0	8.7	85.7	504	63
1/30/2003	060000	7.7	8.0	8.7	85.5	504	62
1/30/2003	061500	7.6	8.0	8.8	85.8	503	62
1/30/2003	063000	7.5	8.0	8.8	86.1	504	63
1/30/2003	064500	7.3	8.0	8.8	85.9	504	62
1/30/2003	070000	7.2	8.0	8.9	86.0	503	60
1/30/2003	071500	7.1	8.0	8.9	85.9	503	60
1/30/2003	073000	7.0	8.0	8.9	86.4	503	56
1/30/2003	074500	7.0	8.0	9.0	86.7	503	57

Table 8.9.2.--Continuous Monitoring Data for Lower San Juan Drain
January 27 through January 31, 2003

Date	Time	Temp (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
1/30/2003	080000	6.9	8.0	9.1	87.2	503	54
1/30/2003	081500	6.8	8.1	9.1	87.6	503	53
1/30/2003	083000	6.8	8.1	9.1	87.9	503	52
1/30/2003	084500	6.8	8.1	9.2	88.4	503	51
1/30/2003	090000	6.8	8.1	9.3	89.0	503	49
1/30/2003	091500	6.8	8.1	9.3	89.6	503	50
1/30/2003	093000	6.9	8.1	9.4	90.2	503	48
1/30/2003	094500	7.0	8.1	9.4	90.7	503	47
1/30/2003	100000	7.1	8.1	9.4	91.1	503	46
1/30/2003	101500	7.2	8.1	9.4	91.6	503	46
1/30/2003	103000	7.3	8.1	9.5	92.5	503	45
1/30/2003	104500	7.5	8.1	9.5	92.9	503	45
1/30/2003	110000	7.7	8.1	9.5	93.7	503	43
1/30/2003	111500	7.9	8.1	9.6	94.4	503	43
1/30/2003	113000	8.2	8.1	9.5	94.9	503	42
1/30/2003	114500	8.5	8.1	9.5	95.6	503	43
1/30/2003	120000	8.8	8.1	9.6	96.5	504	42
1/30/2003	121500	9.1	8.1	9.5	96.7	504	40
1/30/2003	123000	9.4	8.1	9.5	97.3	504	41
1/30/2003	124500	9.7	8.1	9.5	97.9	504	41
1/30/2003	130000	10.0	8.1	9.5	98.8	504	43
1/30/2003	131500	10.3	8.1	9.5	99.2	504	41
1/30/2003	133000	10.6	8.1	9.4	99.4	505	43
1/30/2003	134500	10.8	8.1	9.5	100.2	505	39
1/30/2003	140000	11.1	8.1	9.4	100.3	505	39
1/30/2003	141500	11.3	8.1	9.4	100.6	505	40
1/30/2003	143000	11.6	8.1	9.4	100.9	505	41
1/30/2003	144500	11.8	8.1	9.3	101.0	505	40
1/30/2003	150000	12.0	8.1	9.3	101.1	505	41
1/30/2003	151500	12.2	8.1	9.2	101.0	505	42
1/30/2003	153000	12.3	8.1	9.1	99.8	505	43
1/30/2003	154500	12.4	8.1	9.1	99.9	505	41
1/30/2003	160000	12.5	8.1	9.1	100.0	505	41
1/30/2003	161500	12.6	8.2	9.0	99.0	505	40
1/30/2003	163000	12.7	8.1	8.9	97.9	505	42
1/30/2003	164500	12.8	8.1	8.8	97.2	506	41
1/30/2003	170000	12.9	8.1	8.7	96.3	505	42
1/30/2003	171500	13.0	8.1	8.6	96.0	505	43
1/30/2003	173000	13.0	8.1	8.6	95.3	505	44
1/30/2003	174500	13.1	8.1	8.5	94.3	505	45
1/30/2003	180000	13.1	8.1	8.4	93.7	505	45
1/30/2003	181500	13.1	8.1	8.4	93.1	505	47
1/30/2003	183000	13.0	8.1	8.3	92.8	505	46
1/30/2003	184500	13.0	8.1	8.3	92.3	505	47
1/30/2003	190000	12.9	8.1	8.3	91.9	505	49
1/30/2003	191500	12.9	8.1	8.2	91.2	505	51
1/30/2003	193000	12.8	8.1	8.2	90.6	505	56
1/30/2003	194500	12.8	8.1	8.1	90.2	504	56
1/30/2003	200000	12.7	8.1	8.1	89.5	504	56
1/30/2003	201500	12.6	8.1	8.0	88.8	504	60
1/30/2003	203000	12.5	8.0	8.1	88.8	504	62
1/30/2003	204500	12.5	8.0	8.0	88.4	504	60
1/30/2003	210000	12.4	8.0	8.0	88.0	504	60
1/30/2003	211500	12.2	8.1	8.0	87.7	504	61
1/30/2003	213000	12.1	8.1	8.0	87.5	504	62
1/30/2003	214500	12.0	8.1	8.0	87.1	504	64
1/30/2003	220000	11.8	8.1	8.0	86.8	503	66
1/30/2003	221500	11.7	8.1	8.1	87.1	503	67

Table 8.9.2.--Continuous Monitoring Data for Lower San Juan Drain
January 27 through January 31, 2003

Date	Time	Temp (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
1/30/2003	223000	11.6	8.1	8.0	86.5	503	66
1/30/2003	224500	11.4	8.1	8.1	86.5	503	66
1/30/2003	230000	11.3	8.1	8.1	86.4	503	68
1/30/2003	231500	11.1	8.1	8.1	86.2	503	69
1/30/2003	233000	11.0	8.1	8.1	85.8	503	68
1/30/2003	234500	10.8	8.1	8.1	85.9	503	70
1/31/2003	000000	10.7	8.1	8.1	85.7	503	69
1/31/2003	001500	10.6	8.1	8.1	85.4	503	69
1/31/2003	003000	10.4	8.1	8.2	85.6	503	68
1/31/2003	004500	10.2	8.0	8.2	85.6	503	68
1/31/2003	010000	10.1	8.0	8.2	85.5	503	69
1/31/2003	011500	10.0	8.0	8.2	85.5	503	68
1/31/2003	013000	9.8	8.0	8.2	85.3	503	68
1/31/2003	014500	9.7	8.0	8.2	85.1	503	70
1/31/2003	020000	9.6	8.0	8.3	85.2	504	67
1/31/2003	021500	9.5	8.0	8.3	85.1	504	67
1/31/2003	023000	9.4	8.0	8.3	85.0	504	68
1/31/2003	024500	9.2	8.0	8.3	84.9	504	68
1/31/2003	030000	9.1	8.0	8.3	84.8	504	68
1/31/2003	031500	9.0	8.0	8.4	85.0	504	70
1/31/2003	033000	8.9	8.0	8.4	84.9	503	66
1/31/2003	034500	8.8	8.0	8.4	84.8	503	69
1/31/2003	040000	8.7	8.0	8.4	84.8	503	64
1/31/2003	041500	8.6	8.0	8.5	85.1	503	64
1/31/2003	043000	8.5	8.0	8.5	85.1	503	61
1/31/2003	044500	8.3	8.0	8.6	85.5	503	61
1/31/2003	050000	8.2	8.0	8.6	85.6	503	66
1/31/2003	051500	8.1	8.0	8.6	85.4	503	63
1/31/2003	053000	8.0	8.0	8.7	85.7	503	60
1/31/2003	054500	7.9	8.0	8.7	85.7	503	62
1/31/2003	060000	7.8	8.0	8.7	85.7	503	61
1/31/2003	061500	7.7	8.0	8.7	85.9	503	61
1/31/2003	063000	7.6	8.0	8.8	85.9	502	60
1/31/2003	064500	7.5	8.0	8.8	86.0	502	58
1/31/2003	070000	7.4	8.0	8.8	85.7	502	59
1/31/2003	071500	7.4	8.0	8.8	86.0	502	56
1/31/2003	073000	7.3	8.0	8.9	86.5	503	54
1/31/2003	074500	7.2	8.0	8.9	86.9	503	54
1/31/2003	080000	7.2	8.0	9.0	87.2	503	53
1/31/2003	081500	7.2	8.0	9.1	87.8	503	52
1/31/2003	083000	7.1	8.1	9.1	87.9	502	53
1/31/2003	084500	7.1	8.1	9.2	88.9	502	51
1/31/2003	090000	7.1	8.1	9.2	89.4	502	49
1/31/2003	091500	7.2	8.1	9.2	89.6	502	47
1/31/2003	093000	7.2	8.1	9.3	90.3	502	44
1/31/2003	094500	7.3	8.1	9.3	90.9	502	44
1/31/2003	100000	7.4	8.1	9.4	91.4	502	43
1/31/2003	101500	7.5	8.1	9.4	92.3	502	43
1/31/2003	103000	7.7	8.1	9.4	92.5	502	43
1/31/2003	104500	7.9	8.1	9.4	93.2	502	43
1/31/2003	110000	8.1	8.1	9.5	94.1	502	42
1/31/2003	111500	8.3	8.1	9.5	94.5	503	42
1/31/2003	113000	8.6	8.1	9.5	95.4	503	41
1/31/2003	114500	8.9	8.1	9.5	95.8	503	41
1/31/2003	120000	9.2	8.1	9.5	96.3	503	42

Table 8.9.2.--Continuous Monitoring Data for Lower San Juan Drain
January 27 through January 31, 2003

Date	Time	Temp (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
Descriptive Statistics		*Temp (°C)*	*pH*	*DO (mg/L)*	*DO (%)*	*SPC (uS/cm)*	*Turbidity (NTU)*
Mean		10.1	8.1	8.8	91.6	505	56
Standard Error		0.10	0.00	0.03	0.29	0.07	0.65
Median		10.1	8.1	8.7	89.6	505	57
Mode		10.0	8.0	8.3	86.8	504	43
Standard Deviation		2.07	0.04	0.54	5.69	1.36	12.74
Sample Variance		4.28	0.00	0.29	32.36	1.85	162.40
Kurtosis		-1.41	-1.09	-1.14	-0.98	-0.56	7.43
Skewness		-0.02	0.37	0.33	0.63	0.15	1.20
Range		6.6	0.2	2.0	19.4	6	116
Minimum		6.8	8.0	8.0	84.8	502	39
Maximum		13.4	8.2	10.0	104.2	508	155
Sum		3941.8	3140.6	3421.3	35643.9	196320	21946
Count		389	389	389	389	389	389

Table 8.10.1.--Continuous Monitoring Data for Rio Grande at La Joya
July 23 through July 24, 2002

[--, no data; °C, degrees Celsius; mg/L, milligrams per liter; % sat, percent saturation; uS/cm, microsiemens per centimeter; NTU, Nephelometric turbidity units.]

MiniSonde4a 36755
Log File Name : LA JOYA 7-23-02
Setup Date (MMDDYY) : 072302
Setup Time (HHMMSS) : 092813
Starting Date (MMDDYY) : 072302
Starting Time (HHMMSS) : 100000
Stopping Date (MMDDYY) : 121203
Stopping Time (HHMMSS) : 000000
Interval (HHMMSS) : 001500
Sensor warmup (HHMMSS) : 000200
Circltr warmup (HHMMSS) : 000200

Date	Time (HHMMSS)	Temp (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
7/23/2002	101500	21.0	8.0	6.7	87.8	524	--
7/23/2002	103000	21.5	8.0	6.8	91.0	525	--
7/23/2002	104500	21.6	8.1	6.6	88.4	525	--
7/23/2002	110000	21.7	8.1	6.6	87.7	525	--
7/23/2002	111500	21.9	8.1	6.4	86.3	525	--
7/23/2002	113000	22.2	8.1	6.5	87.7	526	--
7/23/2002	114500	22.5	8.1	6.5	88.2	526	--
7/23/2002	120000	23.0	8.1	6.5	89.0	526	--
7/23/2002	121500	23.4	8.1	6.4	88.9	526	--
7/23/2002	123000	24.0	8.1	6.4	89.1	526	--
7/23/2002	124500	24.4	8.1	6.3	88.9	525	--
7/23/2002	130000	24.9	8.1	6.3	89.2	525	--
7/23/2002	131500	25.5	8.1	6.2	88.7	524	--
7/23/2002	133000	25.9	8.1	6.3	91.9	523	--
7/23/2002	134500	26.4	8.1	6.3	92.2	523	--
7/23/2002	140000	26.7	8.1	6.2	91.4	521	--
7/23/2002	141500	26.9	8.1	6.2	91.4	521	--
7/23/2002	143000	27.0	8.1	6.1	90.1	520	--
7/23/2002	144500	27.4	8.1	6.2	91.6	520	--
7/23/2002	150000	27.6	8.1	6.1	91.0	522	--
7/23/2002	151500	27.7	8.1	6.1	90.5	525	--
7/23/2002	153000	27.7	8.1	5.9	88.8	528	--
7/23/2002	154500	27.4	8.1	5.9	88.2	533	--
7/23/2002	160000	27.1	8.1	5.8	86.1	535	--
7/23/2002	161500	26.5	8.1	5.8	85.4	538	--
7/23/2002	163000	26.1	8.1	5.8	84.4	539	--
7/23/2002	164500	25.8	8.1	5.9	84.6	538	--
7/23/2002	170000	25.8	8.1	5.9	84.9	536	--
7/23/2002	171500	25.9	8.1	5.8	83.7	533	--
7/23/2002	173000	26.0	8.1	5.8	83.6	531	--
7/23/2002	174500	26.1	8.1	5.8	83.7	527	--
7/23/2002	180000	26.1	8.1	5.7	82.8	523	--
7/23/2002	181500	26.1	8.1	5.7	83.4	516	--
7/23/2002	183000	25.9	8.1	5.8	83.5	509	--
7/23/2002	184500	25.7	8.1	5.8	83.4	514	--
7/23/2002	190000	25.5	8.1	5.8	82.7	514	--
7/23/2002	191500	25.4	8.1	5.8	83.1	512	--
7/23/2002	193000	25.4	8.1	5.9	84.0	508	--
7/23/2002	194500	25.5	8.1	5.8	82.7	505	--
7/23/2002	200000	25.5	8.1	5.7	82.6	499	--
7/23/2002	201500	25.5	8.1	5.7	82.4	497	--

Table 8.10.1.--Continuous Monitoring Data for Rio Grande at La Joya
July 23 through July 24, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
7/23/2002	203000	25.5	8.1	5.9	84.0	496	--
7/23/2002	204500	25.4	8.1	5.8	82.7	496	--
7/23/2002	210000	25.3	8.1	5.8	83.1	495	--
7/23/2002	211500	25.3	8.1	5.8	83.5	494	--
7/23/2002	213000	25.2	8.1	5.8	83.5	494	--
7/23/2002	214500	25.2	8.1	5.8	83.2	494	--
7/23/2002	220000	25.1	8.1	5.9	83.9	494	--
7/23/2002	221500	25.0	8.1	5.6	80.2	494	--
7/23/2002	223000	24.9	8.1	5.6	79.8	495	--
7/23/2002	224500	24.8	8.1	5.6	79.9	494	--
7/23/2002	230000	24.7	8.1	5.5	78.4	494	--
7/23/2002	231500	24.6	8.1	5.8	81.4	495	--
7/23/2002	233000	24.5	8.1	5.9	83.1	495	--
7/23/2002	234500	24.4	8.1	5.9	82.8	496	--
7/24/2002	000000	24.4	8.1	3.9	55.5	494	--
7/24/2002	001500	24.3	8.1	2.7	38.1	482	--
7/24/2002	003000	24.3	8.1	2.3	32.0	483	--
7/24/2002	004500	24.3	8.1	2.3	31.9	484	--
7/24/2002	010000	24.2	8.1	2.2	30.9	485	--
7/24/2002	011500	24.2	8.1	2.4	33.9	485	--
7/24/2002	013000	24.2	8.1	2.0	27.8	486	--
7/24/2002	014500	24.2	8.0	1.8	25.8	486	--
7/24/2002	020000	24.1	8.0	1.8	25.7	486	--
7/24/2002	021500	24.1	8.0	1.6	22.8	487	--
7/24/2002	023000	24.1	7.9	1.5	20.7	487	--
7/24/2002	024500	24.1	7.9	1.3	17.9	488	--
7/24/2002	030000	24.1	7.9	1.1	15.1	489	--
7/24/2002	031500	24.1	7.9	1.0	13.3	490	--
7/24/2002	033000	24.1	7.9	0.8	11.4	491	--
7/24/2002	034500	24.1	7.9	0.6	8.7	491	--
7/24/2002	040000	24.1	7.9	0.3	3.8	492	--
7/24/2002	041500	24.0	7.9	0.2	2.3	493	--
7/24/2002	043000	24.0	7.9	0.2	2.3	493	--
7/24/2002	044500	24.0	7.9	0.1	1.7	494	--
7/24/2002	050000	24.0	7.9	0.0	0.5	496	--
7/24/2002	051500	23.9	7.9	0.0	0.3	497	--
7/24/2002	053000	23.9	7.9	0.0	0.2	498	--
7/24/2002	054500	23.9	7.9	0.0	0.4	499	--
7/24/2002	060000	23.8	7.9	0.0	0.3	500	--
7/24/2002	061500	23.8	8.0	0.1	0.8	500	--
7/24/2002	063000	23.8	8.0	0.1	0.7	502	--
7/24/2002	064500	23.7	8.0	0.0	0.4	503	--
7/24/2002	070000	23.7	8.0	0.1	0.7	508	--
7/24/2002	071500	23.6	8.0	0.0	0.0	508	--
7/24/2002	073000	23.6	8.0	0.0	0.0	508	--
7/24/2002	074500	23.6	8.0	0.0	0.5	508	--
7/24/2002	080000	23.5	8.0	0.1	0.7	510	--
7/24/2002	081500	23.5	8.0	0.0	0.3	509	--
7/24/2002	083000	23.4	8.0	0.0	0.2	512	--
7/24/2002	084500	23.3	8.1	0.0	0.0	511	--
7/24/2002	090000	23.3	8.1	0.1	0.7	512	--
7/24/2002	091500	23.2	8.1	0.1	1.3	508	--
7/24/2002	093000	23.2	8.1	0.1	1.3	508	--
7/24/2002	094500	23.1	8.1	0.0	0.4	507	--
7/24/2002	100000	23.1	8.1	0.0	0.6	506	--

Table 8.10.1.--Continuous Monitoring Data for Rio Grande at La Joya
July 23 through July 24, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
7/24/2002	101500	23.1	8.1	0.1	0.6	508	--
7/24/2002	103000	23.1	8.1	0.1	0.9	507	--
7/24/2002	104500	23.1	8.1	0.1	1.3	508	--
7/24/2002	110000	23.1	8.1	0.0	0.5	510	--
7/24/2002	111500	23.1	8.2	0.1	0.8	512	--
7/24/2002	113000	23.2	8.2	0.2	2.3	512	--
7/24/2002	114500	23.3	8.2	0.1	1.7	512	--
7/24/2002	120000	23.3	8.2	0.1	0.9	512	--
7/24/2002	121500	23.4	8.1	0.1	1.4	512	--
7/24/2002	123000	23.5	8.2	0.1	1.1	512	--
7/24/2002	124500	23.6	8.2	0.1	1.6	512	--
7/24/2002	130000	23.7	8.2	0.1	1.1	514	--
7/24/2002	131500	23.8	8.2	0.1	0.7	516	--
7/24/2002	133000	23.9	8.2	0.0	0.3	516	--
7/24/2002	134500	23.9	8.2	0.0	0.6	517	--

Descriptive Statistics (statistics before probe burial)	*Temp (°C)*	*pH*	*DO (mg/L)*	*DO (%)*	*SPC (uS/cm)*	*Turbidity (NTU)*
Mean	25.2	8.1	6.0	85.7	516	--
Standard Error	0.22	0.00	0.04	0.48	2.01	--
Median	25.5	8.1	5.9	84.4	522	--
Mode	26.1	8.1	5.8	83.5	525	--
Standard Deviation	1.64	0.03	0.31	3.59	14.93	--
Sample Variance	2.69	0.00	0.10	12.91	222.99	--
Kurtosis	0.44	0.11	-0.41	-1.01	-1.32	--
Skewness	-0.88	-0.18	0.83	0.19	-0.36	--
Range	6.7	0.1	1.3	13.8	45	--
Minimum	21.0	8.0	5.5	78.4	494	--
Maximum	27.7	8.1	6.8	92.2	539	--
Sum	1384.0	444.8	330.3	4714.5	28364	--
Count	55	55	55	55	55	--

Table 8.10.2.--Continuous Monitoring Data for Rio Grande at La Joya
September 10 through September 12, 2002

[--, no data; °C, degrees Celsius; mg/L, milligrams per liter; % sat, percent saturation; uS/cm, microsiemens per centimeter; NTU, Nephelometric turbidity units.]

MiniSonde4a 36754
Log File Name : LA JOYA 9-10-2
Setup Date (MMDDYY) : 091002
Setup Time (HHMMSS) : 090922
Starting Date (MMDDYY) : 091002
Starting Time (HHMMSS) : 093000
Stopping Date (MMDDYY) : 091302
Stopping Time (HHMMSS) : 120000
Interval (HHMMSS) : 001500
Sensor warmup (HHMMSS) : 000200

Date	Time (HHMMSS)	Temp (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
9/10/2002	094500	19.9	8.2	7.2	93.2	608	--
9/10/2002	100000	19.8	8.2	7.1	91.6	601	--
9/10/2002	101500	19.8	8.2	7.1	91.4	597	--
9/10/2002	103000	19.8	8.2	6.9	88.5	590	--
9/10/2002	104500	19.7	8.2	6.8	87.7	577	--
9/10/2002	110000	19.5	8.2	6.2	78.9	508	--
9/10/2002	111500	19.3	8.1	6.7	85.9	459	--
9/10/2002	113000	18.7	8.2	6.6	82.9	290	--
9/10/2002	114500	18.4	8.3	6.5	81.9	233	--
9/10/2002	120000	18.5	8.3	6.7	83.8	253	--
9/10/2002	121500	18.7	8.2	6.8	85.9	301	--
9/10/2002	123000	18.9	8.2	6.6	83.6	358	--
9/10/2002	124500	19.2	8.2	5.1	64.9	427	--
9/10/2002	130000	19.4	8.2	5.4	69.0	472	--
9/10/2002	131500	19.6	8.1	4.9	62.7	501	--
9/10/2002	133000	19.8	8.1	4.2	54.6	504	--
9/10/2002	134500	19.8	8.1	4.3	55.7	478	--
9/10/2002	140000	19.7	8.1	3.9	50.4	406	--
9/10/2002	141500	19.7	8.1	3.9	50.4	345	--
9/10/2002	143000	19.7	8.1	3.9	50.3	299	--
9/10/2002	144500	19.7	8.1	4.0	51.1	278	--
9/10/2002	150000	19.8	8.1	4.1	52.6	284	--
9/10/2002	151500	19.9	8.1	4.2	53.8	306	--
9/10/2002	153000	20.1	8.1	4.3	55.7	346	--
9/10/2002	154500	20.2	8.1	4.4	56.7	386	--
9/10/2002	160000	20.2	8.1	4.5	58.7	423	--
9/10/2002	161500	20.2	8.1	4.4	57.2	457	--
9/10/2002	163000	20.3	8.1	4.3	56.6	485	--
9/10/2002	164500	20.5	8.1	4.4	57.5	509	--
9/10/2002	170000	20.6	8.1	4.4	57.4	527	--
9/10/2002	171500	20.6	8.1	4.2	54.7	572	--
9/10/2002	173000	20.5	8.0	3.8	49.8	654	--
9/10/2002	174500	20.4	8.0	3.7	48.4	678	--
9/10/2002	180000	20.3	8.0	3.6	46.6	583	--
9/10/2002	181500	20.3	8.0	2.1	27.5	310	--
9/10/2002	183000	20.3	8.0	1.2	15.0	232	--
9/10/2002	184500	20.3	8.1	0.9	11.6	224	--
9/10/2002	190000	20.3	8.1	0.7	8.5	224	--

Table 8.10.2.--Continuous Monitoring Data for Rio Grande at La Joya
September 10 through September 12, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
9/10/2002	191500	20.2	8.1	0.5	6.1	225	--
9/10/2002	193000	20.1	8.1	0.4	4.7	224	--
9/10/2002	194500	19.9	8.1	0.3	3.6	223	--
9/10/2002	200000	19.8	8.1	0.2	2.6	224	--
9/10/2002	201500	19.7	8.1	0.2	2.6	223	--
9/10/2002	203000	19.6	8.0	0.2	1.9	221	--
9/10/2002	204500	19.6	8.0	0.2	2.1	219	--
9/10/2002	210000	19.5	8.0	0.1	1.7	219	--
9/10/2002	211500	19.4	8.0	0.2	1.9	219	--
9/10/2002	213000	19.4	8.0	0.1	1.4	219	--
9/10/2002	214500	19.4	8.0	0.1	1.8	218	--
9/10/2002	220000	19.4	8.0	0.1	1.6	218	--
9/10/2002	221500	19.4	8.0	0.1	1.9	218	--
9/10/2002	223000	19.4	8.0	0.1	1.5	217	--
9/10/2002	224500	19.4	8.0	0.1	1.8	217	--
9/10/2002	230000	19.4	8.0	0.1	1.6	217	--
9/10/2002	231500	19.3	8.0	0.1	1.4	216	--
9/10/2002	233000	19.3	8.0	0.1	1.8	216	--
9/10/2002	234500	19.2	7.9	0.1	1.8	216	--
9/11/2002	000000	19.2	7.9	0.1	1.4	216	--
9/11/2002	001500	19.1	7.9	0.1	1.5	215	--
9/11/2002	003000	19.1	7.9	0.1	1.5	215	--
9/11/2002	004500	19.0	7.9	0.1	1.8	214	--
9/11/2002	010000	19.0	7.9	0.1	1.7	213	--
9/11/2002	011500	19.0	7.9	0.1	1.6	213	--
9/11/2002	013000	18.9	7.9	0.1	1.7	213	--
9/11/2002	014500	18.9	7.9	0.1	1.5	212	--
9/11/2002	020000	18.8	7.9	0.1	1.7	211	--
9/11/2002	021500	18.8	7.9	0.1	1.8	211	--
9/11/2002	023000	18.8	7.9	0.1	1.5	210	--
9/11/2002	024500	18.8	7.9	0.1	1.5	210	--
9/11/2002	030000	18.7	7.9	0.1	1.8	210	--
9/11/2002	031500	18.7	7.9	0.1	1.5	210	--
9/11/2002	033000	18.7	7.9	0.1	1.4	210	--
9/11/2002	034500	18.6	7.9	0.2	1.8	210	--
9/11/2002	040000	18.5	7.9	0.1	1.5	210	--
9/11/2002	041500	18.5	7.9	0.1	1.5	209	--
9/11/2002	043000	18.5	7.9	0.1	1.8	208	--
9/11/2002	044500	18.5	7.9	0.2	1.8	208	--
9/11/2002	050000	18.4	7.9	0.1	1.8	207	--
9/11/2002	051500	18.4	7.9	0.1	1.5	207	--
9/11/2002	053000	18.3	7.9	0.1	1.8	206	--
9/11/2002	054500	18.3	7.9	0.2	1.8	206	--
9/11/2002	060000	18.3	7.9	0.1	1.8	205	--
9/11/2002	061500	18.3	7.9	0.2	1.8	205	--
9/11/2002	063000	18.3	7.9	0.2	1.8	205	--
9/11/2002	064500	18.3	7.9	0.2	1.8	204	--
9/11/2002	070000	18.3	7.9	0.2	1.8	204	--
9/11/2002	071500	18.3	7.9	0.2	1.8	204	--
9/11/2002	073000	18.2	7.9	0.1	1.5	204	--
9/11/2002	074500	18.2	7.9	0.1	1.8	203	--

Table 8.10.2.--Continuous Monitoring Data for Rio Grande at La Joya
September 10 through September 12, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
9/11/2002	080000	18.1	7.9	0.1	1.5	204	--
9/11/2002	081500	18.0	8.0	0.2	1.8	204	--
9/11/2002	083000	17.9	8.0	0.1	1.7	203	--
9/11/2002	084500	17.8	8.0	0.1	1.5	203	--

Descriptive Statistics (statistics before probe burial)	*Temp (°C)*	*pH*	*DO (mg/L)*	*DO (%)*	*SPC (uS/cm)*	*Turbidity (NTU)*
Mean	19.7	8.1	5.1	65.4	445	--
Standard Error	0.11	0.01	0.22	2.68	21.72	--
Median	19.8	8.1	4.4	57.4	459	--
Mode	19.8	8.2	3.9	85.9		--
Standard Deviation	0.61	0.07	1.24	15.37	124.80	--
Sample Variance	0.37	0.00	1.53	236.33	15574.75	--
Kurtosis	-0.11	-0.52	-1.47	-1.39	-1.07	--
Skewness	-0.70	0.09	0.55	0.57	0.00	--
Range	2.2	0.3	3.5	45.0	445	--
Minimum	18.4	8.0	3.6	46.6	233	--
Maximum	20.6	8.3	7.1	91.6	678	--
Sum	651.0	268.3	167.7	2156.9	14687	--
Count	33	33	33	33	33	--

Table 8.10.3.--Continuous Monitoring Data for Rio Grande at La Joya
December 13 through 16, 2002

[--, no data; ~, approximately; >, greater than; °C, degrees Celsius; mg/L, milligrams per liter; % sat, percent saturation; uS/cm, microsiemens per centimeter; NTU, Nephelometric turbidity units.]

DataSonde 4a 40184
Log File Name : LA JOYA 12-13-02
Setup Date (MMDDYY) : 121302
Setup Time (HHMMSS) : 090249
Starting Date (MMDDYY) : 121302
Starting Time (HHMMSS) : 090249
Stopping Date (MMDDYY) : 121602
Stopping Time (HHMMSS) : 230000
Interval (HHMMSS) : 001500
Sensor warmup (HHMMSS) : 000200
Circltr warmup (HHMMSS) : 000100

Date	Time (HHMMSS)	Temp (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
12/13/2002	101749	3.0	8.3	10.7	94.0	432	476
12/13/2002	103249	3.1	8.3	10.9	95.4	433	464
12/13/2002	104749	3.2	8.3	10.8	95.5	432	456
12/13/2002	110249	3.3	8.4	10.8	95.5	432	424
12/13/2002	111749	3.4	8.4	10.8	96.1	431	448
12/13/2002	113249	3.6	8.4	10.9	96.9	432	456
12/13/2002	114749	3.7	8.4	10.9	97.7	432	422
12/13/2002	120249	3.9	8.4	10.8	97.1	432	404
12/13/2002	121749	4.1	8.4	10.8	97.6	431	406
12/13/2002	123249	4.2	8.4	10.8	98.0	431	394
12/13/2002	124749	4.4	8.4	9.7	88.3	144	411
12/13/2002	130249	4.5	8.4	7.6	69.2	127	213
12/13/2002	131749	4.5	8.4	6.9	62.9	125	146
12/13/2002	133249	4.6	8.4	9.1	83.1	125	191
12/13/2002	134749	4.9	8.5	7.6	69.9	123	262
12/13/2002	140249	5.0	8.4	7.3	67.0	123	248
12/13/2002	141749	5.2	8.4	7.1	65.8	122	215
12/13/2002	143249	5.2	8.4	7.2	66.8	121	216
12/13/2002	144749	5.3	8.4	8.8	81.6	122	217
12/13/2002	150249	5.6	8.4	7.9	74.2	121	217
12/13/2002	151749	5.8	8.4	6.9	65.3	120	223
12/13/2002	153249	6.0	8.4	6.8	64.0	120	88
12/13/2002	154749	6.1	8.5	6.8	64.1	120	72
12/13/2002	160249	6.2	8.5	6.2	59.1	119	62
12/13/2002	161749	6.2	8.5	6.6	63.0	119	61
12/13/2002	163249	6.2	8.5	6.3	60.0	118	58
12/13/2002	164749	6.2	8.5	5.9	56.1	118	67
12/13/2002	170249	6.2	8.5	6.0	56.9	118	73
12/13/2002	171749	6.2	8.4	8.3	79.2	118	72
12/13/2002	173249	6.3	8.5	6.2	58.9	117	78
12/13/2002	174749	6.4	8.4	6.4	61.0	117	81
12/13/2002	180249	6.5	8.5	6.0	57.2	117	92
12/13/2002	181749	6.5	8.5	5.6	53.9	117	96
12/13/2002	183249	6.5	8.5	6.4	60.8	117	101
12/13/2002	184749	6.4	8.4	6.0	57.8	117	102
12/13/2002	190249	6.4	8.4	6.3	60.7	117	108
12/13/2002	191749	6.5	8.5	6.6	62.9	118	111

Table 8.10.3.--Continuous Monitoring Data for Rio Grande at La Joya
December 13 through 16, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
12/13/2002	193249	6.5	8.5	6.3	60.1	118	144
12/13/2002	194749	6.5	8.5	5.7	54.4	118	146
12/13/2002	200249	6.5	8.5	6.1	58.9	118	147
12/13/2002	201749	6.5	8.5	5.6	54.0	118	147
12/13/2002	203249	6.5	8.5	5.6	53.3	118	144
12/13/2002	204749	6.5	8.5	5.5	52.8	118	149
12/13/2002	210249	6.5	8.5	7.5	71.5	118	141
12/13/2002	211749	6.5	8.6	7.9	75.5	119	150
12/13/2002	213249	6.4	8.7	6.1	58.5	224	156
12/13/2002	214749	6.4	8.7	6.6	63.3	132	158
12/13/2002	220249	6.3	8.7	7.4	70.4	131	161
12/13/2002	221749	6.3	8.7	6.0	57.5	130	161
12/13/2002	223249	6.3	8.7	7.0	66.5	131	164
12/13/2002	224749	6.3	8.7	7.5	71.2	131	164
12/13/2002	230249	6.2	8.7	7.4	70.4	131	133
12/13/2002	231749	6.1	8.7	7.6	72.3	131	139
12/13/2002	233249	6.1	8.7	6.5	61.6	132	141
12/13/2002	234749	5.8	8.7	10.0	94.7	442	34
12/14/2002	000249	5.8	8.7	9.9	93.6	443	54
12/14/2002	001749	5.7	8.7	10.0	94.3	128	47
12/14/2002	003249	5.6	8.7	6.1	56.9	128	49
12/14/2002	004749	5.5	8.7	6.5	60.5	128	114
12/14/2002	010249	5.5	8.7	6.1	57.4	128	180
12/14/2002	011749	5.4	8.7	5.9	54.9	128	235
12/14/2002	013249	5.4	8.7	6.9	64.5	128	171
12/14/2002	014749	5.3	8.7	6.5	60.4	128	167
12/14/2002	020249	5.2	8.7	7.3	67.4	128	225
12/14/2002	021749	5.0	8.6	6.6	60.4	131	217
12/14/2002	023249	4.9	8.6	6.3	57.8	130	213
12/14/2002	024749	4.8	8.6	5.8	53.6	128	219
12/14/2002	030249	4.7	8.6	5.8	53.1	127	234
12/14/2002	031749	4.6	8.6	5.7	51.9	126	228
12/14/2002	033249	4.6	8.6	5.6	50.9	126	232
12/14/2002	034749	4.5	8.6	5.9	53.6	127	252
12/14/2002	040249	4.5	8.6	6.3	57.4	127	249
12/14/2002	041749	4.3	8.6	5.7	51.6	127	269
12/14/2002	043249	4.2	8.6	5.6	50.6	126	267
12/14/2002	044749	4.1	8.5	5.9	53.4	125	259
12/14/2002	050249	4.1	8.6	6.1	54.7	125	261
12/14/2002	051749	4.1	8.6	6.2	55.5	125	271
12/14/2002	053249	4.0	8.6	5.9	53.4	124	243
12/14/2002	054749	3.9	8.6	5.6	50.1	124	269
12/14/2002	060249	3.7	8.6	6.2	55.0	123	233
12/14/2002	061749	3.7	8.6	6.8	60.8	123	240
12/14/2002	063249	3.7	8.6	6.5	58.1	123	238
12/14/2002	064749	3.6	8.6	6.1	53.9	123	239
12/14/2002	070249	3.5	8.5	6.3	56.2	123	245
12/14/2002	071749	3.4	8.5	6.7	59.2	123	267
12/14/2002	073249	3.4	8.5	6.5	57.5	122	268
12/14/2002	074749	3.3	8.5	5.8	51.4	122	256
12/14/2002	080249	3.1	8.5	5.8	51.0	122	277

Table 8.10.3.--Continuous Monitoring Data for Rio Grande at La Joya
December 13 through 16, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
12/14/2002	081749	3.1	8.5	6.3	55.6	122	283
12/14/2002	083249	3.0	8.5	7.6	66.9	122	278
12/14/2002	084749	3.0	8.5	6.3	55.3	121	278
12/14/2002	090249	3.0	8.5	6.0	52.8	121	281
12/14/2002	091749	3.0	8.5	6.4	55.7	121	274
12/14/2002	093249	3.0	8.5	6.4	55.6	120	271
12/14/2002	094749	3.0	8.5	9.9	86.9	439	129
12/14/2002	100249	3.1	8.5	10.6	93.6	438	120
12/14/2002	101749	3.2	8.5	10.4	92.1	424	88
12/14/2002	103249	3.3	8.5	7.7	67.6	133	242
12/14/2002	104749	3.4	8.5	7.4	65.7	132	231
12/14/2002	110249	3.5	8.5	8.3	73.5	131	255
12/14/2002	111749	3.6	8.5	7.3	64.9	129	245
12/14/2002	113249	3.8	8.5	6.0	53.4	128	282
12/14/2002	114749	3.9	8.5	5.9	52.9	126	228
12/14/2002	120249	4.0	8.5	6.8	61.4	126	253
12/14/2002	121749	4.1	8.5	6.8	61.3	126	234
12/14/2002	123249	4.5	8.5	10.5	95.8	436	124
12/14/2002	124749	4.6	8.5	10.6	96.8	436	123
12/14/2002	130249	4.8	8.5	10.7	98.3	435	122
12/14/2002	131749	5.0	8.5	10.8	99.7	434	105
12/14/2002	133249	5.2	8.5	9.3	86.1	154	104
12/14/2002	134749	5.3	8.5	6.3	58.8	134	134
12/14/2002	140249	5.5	8.5	6.4	59.5	133	160
12/14/2002	141749	5.7	8.5	7.5	70.6	406	201
12/14/2002	143249	5.8	8.5	10.5	99.5	434	89
12/14/2002	144749	6.0	8.5	10.6	100.8	435	130
12/14/2002	150249	6.1	8.5	10.7	101.6	435	121
12/14/2002	151749	6.2	8.5	7.4	69.9	135	216
12/14/2002	153249	6.2	8.5	7.3	69.8	132	181
12/14/2002	154749	6.3	8.5	10.8	103.6	431	130
12/14/2002	160249	6.4	8.5	10.7	102.7	434	86
12/14/2002	161749	6.4	8.6	10.7	102.3	433	106
12/14/2002	163249	6.5	8.6	10.9	104.4	433	92
12/14/2002	164749	6.6	8.6	9.9	95.3	133	577
12/14/2002	170249	6.6	8.6	6.9	66.3	131	> 1000
12/14/2002	171749	6.6	8.5	7.6	73.4	130	182
12/14/2002	173249	6.6	8.5	6.5	62.6	128	206
12/14/2002	174749	6.7	8.6	10.7	102.7	432	109
12/14/2002	180249	6.7	8.6	10.6	102.4	433	101
12/14/2002	181749	6.7	8.6	10.5	101.8	430	74
12/14/2002	183249	6.7	8.6	10.7	103.6	437	102
12/14/2002	184749	6.7	8.6	10.6	102.0	438	852
12/14/2002	190249	6.8	8.7	10.0	96.3	439	> 1000
12/14/2002	191749	6.7	8.7	7.2	69.9	140	137
12/14/2002	193249	6.7	8.7	7.9	76.1	437	39
12/14/2002	194749	6.7	8.7	10.5	101.4	440	135
12/14/2002	200249	6.7	8.7	10.4	100.3	440	134
12/14/2002	201749	6.7	8.7	10.4	100.6	440	160
12/14/2002	203249	6.6	8.7	10.5	101.5	440	125
12/14/2002	204749	6.6	8.7	10.4	99.6	442	103

Table 8.10.3.--Continuous Monitoring Data for Rio Grande at La Joya
December 13 through 16, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
12/14/2002	210249	6.6	8.7	7.0	67.1	132	> 1000
12/14/2002	211749	6.5	8.7	7.3	69.9	131	226
12/14/2002	213249	6.5	8.7	7.9	75.5	129	212
12/14/2002	214749	6.4	8.7	6.4	60.8	129	212
12/14/2002	220249	6.4	8.7	5.1	49.1	269	226
12/14/2002	221749	6.3	8.7	5.8	55.5	150	213
12/14/2002	223249	6.3	8.7	6.2	58.9	145	196
12/14/2002	224749	6.3	8.7	6.4	60.9	145	192
12/14/2002	230249	6.2	8.7	6.3	59.6	145	229
12/14/2002	231749	6.1	8.7	6.4	61.2	144	231
12/14/2002	233249	6.0	8.7	6.0	56.9	144	239
12/14/2002	234749	5.9	8.7	10.0	94.3	450	117
12/15/2002	000249	5.8	8.7	10.1	95.0	450	165
12/15/2002	001749	5.8	8.7	9.9	93.2	450	167
12/15/2002	003249	5.7	8.6	10.0	93.6	450	133
12/15/2002	004749	5.6	8.6	10.0	93.6	450	118
12/15/2002	010249	5.5	8.6	9.9	92.9	450	133
12/15/2002	011749	5.4	8.6	9.9	92.4	450	167
12/15/2002	013249	5.3	8.6	10.0	92.8	450	161
12/15/2002	014749	5.2	8.6	8.7	80.5	400	108
12/15/2002	020249	5.2	8.6	9.9	92.1	449	54
12/15/2002	021749	5.1	8.6	10.0	93.0	449	42
12/15/2002	023249	5.0	8.6	9.9	91.4	450	44
12/15/2002	024749	4.9	8.6	10.0	92.3	450	74
12/15/2002	030249	4.8	8.6	9.7	89.5	450	158
12/15/2002	031749	4.8	8.5	10.1	93.1	450	121
12/15/2002	033249	4.7	8.5	10.1	92.7	450	137
12/15/2002	034749	4.6	8.5	9.7	88.4	437	91
12/15/2002	040249	4.5	8.5	7.9	71.6	158	113
12/15/2002	041749	4.4	8.5	7.0	63.9	136	80
12/15/2002	043249	4.4	8.5	9.8	89.5	449	142
12/15/2002	044749	4.3	8.5	10.0	90.8	449	140
12/15/2002	050249	4.2	8.5	10.1	91.7	448	115
12/15/2002	051749	4.1	8.5	10.2	91.9	448	105
12/15/2002	053249	4.1	8.5	10.1	91.3	447	102
12/15/2002	054749	4.0	8.5	10.1	90.6	447	139
12/15/2002	060249	3.9	8.5	10.2	91.5	446	84
12/15/2002	061749	3.9	8.5	10.1	90.9	446	156
12/15/2002	063249	3.8	8.5	10.1	90.2	446	137
12/15/2002	064749	3.8	8.5	10.1	90.2	446	102
12/15/2002	070249	3.7	8.5	10.3	91.7	445	83
12/15/2002	071749	3.7	8.5	10.2	90.8	444	150
12/15/2002	073249	3.6	8.5	10.3	91.6	433	64
12/15/2002	074749	3.6	8.5	10.2	91.1	444	66
12/15/2002	080249	3.5	8.5	10.3	91.3	444	87
12/15/2002	081749	3.5	8.5	10.3	91.7	443	63
12/15/2002	083249	3.5	8.5	10.3	91.3	443	107
12/15/2002	084749	3.5	8.5	10.3	91.4	442	60
12/15/2002	090249	3.5	8.5	10.3	91.7	442	54
12/15/2002	091749	3.4	8.5	10.4	92.2	441	46
12/15/2002	093249	3.4	8.5	10.4	92.5	421	44

Table 8.10.3.--Continuous Monitoring Data for Rio Grande at La Joya
December 13 through 16, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
12/15/2002	094749	3.5	8.5	10.3	91.5	441	47
12/15/2002	100249	3.6	8.5	10.4	92.7	440	46
12/15/2002	101749	3.7	8.5	10.4	92.7	440	54
12/15/2002	103249	3.7	8.5	10.4	93.4	439	53
12/15/2002	104749	3.8	8.5	10.5	94.2	439	50
12/15/2002	110249	3.9	8.5	10.5	94.0	438	52
12/15/2002	111749	4.0	8.5	10.5	94.1	437	60
12/15/2002	113249	4.0	8.5	10.5	94.6	437	58
12/15/2002	114749	4.1	8.5	10.5	94.6	437	55
12/15/2002	120249	4.2	8.5	10.5	94.8	436	59
12/15/2002	121749	4.4	8.5	10.5	95.5	436	54
12/15/2002	123249	4.5	8.5	10.5	96.3	436	55
12/15/2002	124749	4.7	8.5	10.6	97.0	435	51
12/15/2002	130249	4.8	8.5	10.5	96.9	435	49
12/15/2002	131749	4.9	8.5	10.4	95.8	433	45
12/15/2002	133249	5.0	8.5	10.6	97.7	435	39
12/15/2002	134749	5.1	8.5	10.5	96.9	435	43
12/15/2002	140249	5.2	8.5	10.5	97.8	434	38
12/15/2002	141749	5.3	8.5	10.5	98.2	409	42
12/15/2002	143249	5.5	8.5	10.8	100.8	140	41
12/15/2002	144749	5.6	8.5	9.1	84.9	138	53
12/15/2002	150249	5.6	8.5	10.7	100.1	434	48
12/15/2002	151749	5.7	8.5	10.6	99.5	434	42
12/15/2002	153249	5.7	8.5	10.6	99.4	433	50
12/15/2002	154749	5.8	8.5	10.7	100.8	433	44
12/15/2002	160249	5.9	8.5	10.7	100.8	433	566
12/15/2002	161749	6.0	8.5	10.7	101.1	429	45
12/15/2002	163249	6.0	8.5	10.6	100.3	432	343
12/15/2002	164749	6.1	8.6	10.7	102.0	433	213
12/15/2002	170249	6.1	8.6	10.7	102.1	432	454
12/15/2002	171749	6.1	8.6	10.6	100.5	433	279
12/15/2002	173249	6.2	8.6	10.5	99.8	432	668
12/15/2002	174749	6.2	8.6	10.6	100.4	432	611
12/15/2002	180249	6.2	8.6	10.7	101.8	433	> 1000
12/15/2002	181749	6.2	8.6	10.4	99.3	434	361
12/15/2002	183249	6.2	8.6	10.2	97.4	139	221
12/15/2002	184749	6.2	8.6	7.8	74.6	429	49
12/15/2002	190249	6.2	8.6	10.5	100.6	435	> 1000
12/15/2002	191749	6.3	8.7	10.6	101.3	435	862
12/15/2002	193249	6.3	8.7	10.5	100.5	434	> 1000
12/15/2002	194749	6.3	8.7	10.6	101.4	434	909
12/15/2002	200249	6.3	8.7	10.5	100.3	433	> 1000
12/15/2002	201749	6.3	8.7	10.6	100.8	433	732
12/15/2002	203249	6.3	8.7	10.4	99.5	432	> 1000
12/15/2002	204749	6.3	8.7	10.5	100.3	433	270
12/15/2002	210249	6.3	8.7	10.5	100.3	433	753
12/15/2002	211749	6.2	8.7	10.4	98.8	433	> 1000
12/15/2002	213249	6.2	8.7	10.5	100.1	433	> 1000
12/15/2002	214749	6.2	8.7	10.2	97.3	434	> 1000
12/15/2002	220249	6.2	8.7	10.3	97.6	434	> 1000
12/15/2002	221749	6.1	8.7	10.2	96.7	435	605

Table 8.10.3.--Continuous Monitoring Data for Rio Grande at La Joya
December 13 through 16, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
12/15/2002	223249	6.1	8.7	10.2	97.4	437	> 1000
12/15/2002	224749	6.1	8.7	10.1	96.3	437	689
12/15/2002	230249	6.0	8.7	10.1	96.2	439	436
12/15/2002	231749	6.0	8.7	10.2	96.9	440	943
12/15/2002	233249	5.9	8.7	10.0	94.8	441	16
12/15/2002	234749	5.9	8.7	9.9	93.7	442	6
12/16/2002	000249	5.8	8.6	10.0	94.2	444	145
12/16/2002	001749	5.8	8.6	9.9	93.0	445	140
12/16/2002	003249	5.7	8.6	9.9	93.2	446	200
12/16/2002	004749	5.7	8.6	9.9	92.8	447	21
12/16/2002	010249	5.6	8.6	9.9	92.6	448	20
12/16/2002	011749	5.5	8.6	9.9	92.5	449	20
12/16/2002	013249	5.4	8.6	9.9	92.8	450	19
12/16/2002	014749	5.3	8.6	9.8	91.5	451	19
12/16/2002	020249	5.3	8.6	9.9	92.1	451	19
12/16/2002	021749	5.2	8.6	9.9	91.8	452	19
12/16/2002	023249	5.1	8.6	9.9	91.8	452	19
12/16/2002	024749	5.0	8.6	9.9	91.7	453	18
12/16/2002	030249	4.9	8.6	9.9	90.8	453	19
12/16/2002	031749	4.8	8.5	10.0	92.3	453	19
12/16/2002	033249	4.7	8.5	10.0	91.4	453	19
12/16/2002	034749	4.7	8.5	10.0	91.6	453	19
12/16/2002	040249	4.6	8.5	10.0	91.6	453	19
12/16/2002	041749	4.5	8.5	10.0	91.0	453	19
12/16/2002	043249	4.4	8.5	10.0	91.3	453	19
12/16/2002	044749	4.3	8.5	10.0	90.9	453	19
12/16/2002	050249	4.2	8.5	10.0	90.3	452	20
12/16/2002	051749	4.2	8.5	10.0	90.4	452	28
12/16/2002	053249	4.1	8.5	10.1	90.9	452	23
12/16/2002	054749	4.0	8.5	10.0	90.1	452	21
12/16/2002	060249	3.9	8.5	10.1	90.5	451	29
12/16/2002	061749	3.9	8.5	10.1	91.0	450	26
12/16/2002	063249	3.8	8.5	10.1	90.5	450	21
12/16/2002	064749	3.7	8.5	10.1	89.8	448	22
12/16/2002	070249	3.6	8.5	10.1	89.9	448	21
12/16/2002	071749	3.6	8.5	10.1	90.3	447	29
12/16/2002	073249	3.5	8.5	10.3	91.2	446	24
12/16/2002	074749	3.4	8.5	10.2	90.7	445	23
12/16/2002	080249	3.4	8.5	10.2	90.7	444	22
12/16/2002	081749	3.3	8.5	10.3	90.7	444	22
12/16/2002	083249	3.3	8.5	10.3	90.9	443	22
12/16/2002	084749	3.2	8.5	10.4	91.3	442	23
12/16/2002	090249	3.2	8.5	10.3	90.9	442	22
12/16/2002	091749	3.2	8.5	10.3	90.5	441	22
12/16/2002	093249	3.2	8.5	10.3	91.1	441	21
12/16/2002	094749	3.3	8.5	10.4	92.1	440	21
12/16/2002	100249	3.4	8.5	10.4	92.2	439	21
12/16/2002	101749	3.4	8.5	10.5	92.8	439	21
12/16/2002	103249	3.6	8.5	10.4	93.0	438	20
12/16/2002	104749	3.7	8.5	10.5	93.9	438	21
12/16/2002	110249	3.8	8.5	10.5	93.8	437	21

Table 8.10.3.--Continuous Monitoring Data for Rio Grande at La Joya
December 13 through 16, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
12/16/2002	111749	4.0	8.5	10.5	94.4	437	20
12/16/2002	113249	4.1	8.5	10.5	95.0	436	20
12/16/2002	114749	4.3	8.5	10.5	95.3	436	20
12/16/2002	120249	4.4	8.5	10.5	95.3	436	20
12/16/2002	121749	4.6	8.5	10.5	96.3	435	19
12/16/2002	123249	4.8	8.5	10.5	96.4	435	20
12/16/2002	124749	4.9	8.5	10.4	95.9	435	20
12/16/2002	130249	4.9	8.5	10.6	97.5	434	21
12/16/2002	131749	5.0	8.5	10.4	96.4	434	21
12/16/2002	133249	5.0	8.5	10.5	97.1	434	21
12/16/2002	134749	5.1	8.5	10.5	96.8	433	27
12/16/2002	140249	5.3	8.5	10.5	98.3	433	48
12/16/2002	141749	5.6	8.5	10.6	99.7	433	21
12/16/2002	143249	5.8	8.5	10.6	100.2	433	20
12/16/2002	144749	5.9	8.5	10.6	100.3	433	> 1000
12/16/2002	150249	6.1	8.5	10.6	100.4	432	> 1000

Descriptive Statistics	*Temp (°C)*	*pH*	*DO (mg/L)*	*DO (%)*	*SPC (uS/cm)*	*Turbidity (NTU)*
Mean	5.0	8.5	9.0	82.9	323	~ 200
Standard Error	0.07	0.01	0.11	0.97	8.61	~ 13.6
Median	5.1	8.5	10.0	91.4	433	~ 132
Mode	3.4	8.5	10.5	100.3	433	> 1000
Standard Deviation	1.15	0.09	1.86	17.11	151.16	~ 239.5
Sample Variance	1.32	0.01	3.45	292.59	22848.47	~ 57368.8
Kurtosis	-1.35	-0.83	-1.29	-1.23	-1.72	~ 4.65
Skewness	-0.19	0.23	-0.68	-0.64	-0.52	~ 2.26
Range	3.8	0.4	5.8	55.3	336	~ 995
Minimum	3.0	8.3	5.1	49.1	117	6
Maximum	6.8	8.7	10.9	104.4	453	> 1000
Sum	1549.6	2629.1	2761.1	25521.0	99361.5	~ 61604
Count	308	308	308	308	308	308

Table 8.10.4.--Continuous Monitoring Data for Rio Grande at La Joya
February 25 through February 26, 2003

[--, no data; °C, degrees Celsius; mg/L, milligrams per liter; % sat, percent saturation; uS/cm, microsiemens per centimeter; NTU, Nephelometric turbidity units.]

DataSonde 4a 40183
Log File Name : LA JOYA 2-25-03
Setup Date (MMDDYY) : 022503
Setup Time (HHMMSS) : 100541
Starting Date (MMDDYY) : 022503
Starting Time (HHMMSS) : 104500
Stopping Date (MMDDYY) : 022803
Stopping Time (HHMMSS) : 100000
Interval (HHMMSS) : 001500
Sensor warmup (HHMMSS) : 000100
Circltr warmup (HHMMSS) : 000100

Date	Time (HHMMSS)	Temp (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
2/25/2003	104500	5.8	8.2	10.2	96.2	307	19
2/25/2003	110000	5.9	8.2	10.2	96.7	304	19
2/25/2003	111500	6.0	8.2	10.2	97.0	307	19
2/25/2003	113000	6.0	8.2	10.2	97.2	306	19
2/25/2003	114500	6.1	8.2	10.2	97.4	307	19
2/25/2003	120000	6.2	8.2	10.2	97.7	307	19
2/25/2003	121500	6.4	8.2	10.2	98.5	310	19
2/25/2003	123000	6.5	8.2	10.2	98.3	306	19
2/25/2003	124500	6.7	8.2	10.1	98.1	307	19
2/25/2003	130000	6.8	8.2	10.2	98.7	307	19
2/25/2003	131500	6.9	8.2	10.2	99.1	307	19
2/25/2003	133000	7.1	8.2	10.2	99.8	307	19
2/25/2003	134500	7.3	8.2	10.1	99.2	307	20
2/25/2003	140000	7.5	8.2	10.0	98.8	307	19
2/25/2003	141500	7.7	8.2	10.0	98.8	307	19
2/25/2003	143000	8.0	8.2	10.0	99.5	308	19
2/25/2003	144500	8.2	8.2	9.9	99.9	308	19
2/25/2003	150000	8.3	8.2	9.9	99.6	308	19
2/25/2003	151500	8.3	8.2	9.9	99.7	309	19
2/25/2003	153000	8.3	8.2	9.8	99.2	310	19
2/25/2003	154500	8.4	8.2	9.8	99.4	310	19
2/25/2003	160000	8.4	8.2	9.8	99.3	310	19
2/25/2003	161500	8.4	8.2	9.9	99.5	311	19
2/25/2003	163000	8.4	8.2	9.8	99.3	310	19
2/25/2003	164500	8.3	8.2	9.8	98.4	312	19
2/25/2003	170000	8.3	8.2	9.8	98.5	313	19
2/25/2003	171500	8.2	8.2	9.8	98.4	310	19
2/25/2003	173000	8.2	8.2	9.7	97.7	311	19
2/25/2003	174500	8.2	8.2	9.7	97.3	311	19
2/25/2003	180000	8.2	8.2	9.6	96.7	311	19
2/25/2003	181500	8.1	8.2	9.6	96.5	312	19
2/25/2003	183000	8.1	8.2	9.6	96.7	312	18
2/25/2003	184500	8.1	8.2	9.6	96.3	310	18
2/25/2003	190000	8.1	8.2	9.5	95.5	312	18
2/25/2003	191500	8.1	8.2	9.5	95.6	314	18
2/25/2003	193000	8.1	8.2	9.5	95.7	315	18
2/25/2003	194500	8.1	8.2	9.5	95.0	314	18

Table 8.10.4.--Continuous Monitoring Data for Rio Grande at La Joya
February 25 through February 26, 2003

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
2/25/2003	200000	8.1	8.2	9.4	94.3	316	18
2/25/2003	201500	8.1	8.2	9.4	94.2	317	17
2/25/2003	203000	8.1	8.2	9.4	94.0	319	18
2/25/2003	204500	8.1	8.2	9.3	93.5	319	18
2/25/2003	210000	8.1	8.2	9.3	93.2	319	18
2/25/2003	211500	8.0	8.2	9.2	92.4	317	18
2/25/2003	213000	8.0	8.2	9.3	92.8	316	18
2/25/2003	214500	7.9	8.2	9.2	92.1	316	18
2/25/2003	220000	7.8	8.2	9.3	92.3	316	18
2/25/2003	221500	7.8	8.2	9.3	92.1	316	18
2/25/2003	223000	7.8	8.2	9.3	92.0	317	18
2/25/2003	224500	7.7	8.2	9.3	91.9	318	17
2/25/2003	230000	7.7	8.2	9.3	92.0	317	18
2/25/2003	231500	7.6	8.2	9.3	91.8	319	18
2/25/2003	233000	7.6	8.2	9.2	91.3	318	18
2/25/2003	234500	7.5	8.2	9.3	91.9	316	17
2/26/2003	000000	7.5	8.2	9.3	91.6	318	17
2/26/2003	001500	7.4	8.2	9.3	92.0	318	17
2/26/2003	003000	7.4	8.2	9.3	91.7	316	17
2/26/2003	004500	7.3	8.2	9.3	91.6	315	17
2/26/2003	010000	7.3	8.2	9.3	91.3	317	17
2/26/2003	011500	7.2	8.2	9.3	91.6	317	17
2/26/2003	013000	7.1	8.2	9.3	90.8	316	17
2/26/2003	014500	7.1	8.2	9.4	91.5	313	18
2/26/2003	020000	7.0	8.2	9.4	91.5	316	17
2/26/2003	021500	6.9	8.2	9.4	91.5	316	18
2/26/2003	023000	6.8	8.2	9.4	91.6	316	18
2/26/2003	024500	6.8	8.2	9.5	92.0	315	18
2/26/2003	030000	6.7	8.2	9.5	91.7	316	19
2/26/2003	031500	6.7	8.2	9.5	91.8	314	19
2/26/2003	033000	6.6	8.2	9.5	91.6	314	19
2/26/2003	034500	6.5	8.2	9.5	91.8	315	20
2/26/2003	040000	6.5	8.2	9.5	91.9	314	21
2/26/2003	041500	6.4	8.2	9.5	91.7	314	22
2/26/2003	043000	6.4	8.2	9.5	91.7	314	24
2/26/2003	044500	6.4	8.2	9.5	90.9	314	25
2/26/2003	050000	6.3	8.2	9.4	90.6	314	27
2/26/2003	051500	6.3	8.2	9.5	90.9	314	28
2/26/2003	053000	6.3	8.2	9.5	90.8	314	28
2/26/2003	054500	6.3	8.2	9.5	90.8	313	28
2/26/2003	060000	6.3	8.2	9.5	91.1	313	28
2/26/2003	061500	6.2	8.2	9.5	91.0	312	28
2/26/2003	063000	6.2	8.2	9.5	91.3	312	28
2/26/2003	064500	6.2	8.2	9.5	91.2	311	27
2/26/2003	070000	6.2	8.2	9.6	91.3	310	27
2/26/2003	071500	6.1	8.2	9.6	91.4	311	27
2/26/2003	073000	6.1	8.2	9.6	91.3	309	27
2/26/2003	074500	6.1	8.2	9.6	91.6	309	26
2/26/2003	080000	6.1	8.2	9.6	91.8	309	25
2/26/2003	081500	6.1	8.2	9.6	92.0	308	25
2/26/2003	083000	6.2	8.2	9.6	91.6	308	25

Table 8.10.4.--Continuous Monitoring Data for Rio Grande at La Joya
February 25 through February 26, 2003

Date	Time (HHMMSS)	Temp (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
2/26/2003	084500	6.2	8.2	9.6	91.8	307	24
2/26/2003	090000	6.2	8.2	9.6	92.2	306	25
2/26/2003	091500	6.3	8.2	9.6	92.3	304	25
2/26/2003	093000	6.4	8.2	9.6	92.7	306	24
2/26/2003	094500	6.5	8.2	9.7	93.4	302	23
2/26/2003	100000	6.6	8.2	9.7	93.8	306	23
2/26/2003	101500	6.9	8.2	9.6	93.8	303	23
2/26/2003	103000	7.1	8.2	9.6	94.4	304	23
2/26/2003	104500	7.2	8.2	9.6	94.3	304	23
2/26/2003	110000	7.1	8.2	9.6	94.2	303	23
2/26/2003	111500	7.0	8.2	9.7	94.4	302	23
2/26/2003	113000	7.0	8.2	9.7	94.2	301	23
2/26/2003	114500	7.1	8.2	9.6	94.3	301	23
2/26/2003	120000	7.3	8.2	9.7	95.4	301	23
2/26/2003	121500	7.5	8.2	9.6	95.3	301	23
2/26/2003	123000	7.8	8.2	9.6	95.5	300	24
2/26/2003	124500	7.9	8.2	9.6	95.7	300	24
2/26/2003	130000	8.0	8.2	9.5	95.4	300	24
2/26/2003	131500	8.1	8.2	9.6	95.8	300	24
2/26/2003	133000	8.3	8.2	9.5	95.9	300	24
2/26/2003	134500	8.5	8.2	9.5	96.5	301	24
2/26/2003	140000	8.7	8.2	9.5	96.7	301	24
2/26/2003	141500	8.9	8.2	9.4	96.5	300	24
2/26/2003	143000	9.2	8.2	9.4	96.7	300	24
2/26/2003	144500	9.4	8.2	9.3	96.6	301	24
2/26/2003	150000	9.5	8.2	9.3	96.8	301	24
2/26/2003	151500	9.7	8.2	9.3	97.0	301	24

Descriptive Statistics	*Temp (°C)*	*pH*	*DO (mg/L)*	*DO (%)*	*SPC (uS/cm)*	*Turbidity (NTU)*
Mean	7.3	8.2	9.6	94.5	310	21
Standard Error	0.08	0.00	0.03	0.27	0.53	0.31
Median	7.3	8.2	9.6	94.2	310	19
Mode	8.0	8.2	9.5	91.6	307	19
Standard Deviation	0.91	0.02	0.27	2.94	5.67	3.36
Sample Variance	0.83	0.00	0.08	8.65	32.10	11.32
Kurtosis	-0.80	-1.57	-0.02	-1.32	-1.03	-0.86
Skewness	0.23	0.10	0.84	0.36	-0.29	0.69
Range	3.8	0.1	1.0	9.3	19	11
Minimum	5.8	8.2	9.2	90.6	300	17
Maximum	9.7	8.2	10.2	99.9	319	28
Sum	842.1	941.2	1104.3	10869.1	35651	2403
Count	115	115	115	115	115	115

Table 8.11.1.--Continuous Monitoring Data for Rio Grande at Lemitar
August 21 through August 23, 2002

[--, no data; ~, approximately; >, greater than; °C, degrees Celsius; mg/L, milligrams per liter; % sat, percent saturation; uS/cm, microsiemens per centimeter; NTU, Nephelometric turbidity units.]

DataSonde 4a 40184
Log File Name : LEMITAR 8-21-02
Setup Date (MMDDYY) : 082102
Setup Time (HHMMSS) : 081909
Starting Date (MMDDYY) : 082102
Starting Time (HHMMSS) : 090000
Stopping Date (MMDDYY) : 082302
Stopping Time (HHMMSS) : 010000
Interval (HHMMSS) : 001500
Sensor warmup (HHMMSS) : 000100
Circltr warmup (HHMMSS) : 000100

Date	Time (HHMMSS)	Temp (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
8/21/2002	091500	20.3	7.7	6.1	79.5	695	682
8/21/2002	093000	20.5	7.8	6.0	78.2	695	787
8/21/2002	094500	20.8	7.8	6.0	78.6	695	896
8/21/2002	100000	21.0	7.8	6.0	80.0	697	966
8/21/2002	101500	21.4	7.8	6.0	79.5	699	> 1000
8/21/2002	103000	21.8	7.8	6.0	80.8	701	> 1000
8/21/2002	104500	22.2	7.9	5.9	79.9	703	> 1000
8/21/2002	110000	22.7	7.9	5.9	81.1	706	> 1000
8/21/2002	111500	23.2	7.9	6.0	82.7	707	> 1000
8/21/2002	113000	23.7	7.9	6.0	83.5	709	> 1000
8/21/2002	114500	24.2	7.9	5.9	83.4	710	> 1000
8/21/2002	120000	24.7	7.9	5.8	82.8	711	> 1000
8/21/2002	121500	25.2	7.9	5.8	83.3	713	> 1000
8/21/2002	123000	25.9	7.9	5.7	83.0	714	405
8/21/2002	124500	26.4	7.9	5.7	83.6	716	423
8/21/2002	130000	27.1	7.9	5.6	83.4	717	425
8/21/2002	131500	27.4	7.9	5.5	82.5	718	434
8/21/2002	133000	27.8	7.9	5.5	82.3	720	447
8/21/2002	134500	28.0	7.9	5.4	81.9	721	462
8/21/2002	140000	28.0	7.9	5.4	81.6	723	477
8/21/2002	141500	28.0	7.9	5.4	81.7	724	483
8/21/2002	143000	27.8	7.9	5.3	80.2	727	530
8/21/2002	144500	27.8	7.9	5.3	78.9	728	495
8/21/2002	150000	27.4	8.0	5.3	79.7	730	494
8/21/2002	151500	27.7	8.0	5.4	80.2	731	489
8/21/2002	153000	28.0	8.0	5.3	80.1	733	554
8/21/2002	154500	28.2	8.0	5.3	79.6	735	> 1000
8/21/2002	160000	28.4	8.0	5.4	81.4	736	> 1000
8/21/2002	161500	28.5	8.0	5.4	81.6	737	647
8/21/2002	163000	28.6	8.0	5.4	82.8	739	652
8/21/2002	164500	28.5	8.0	5.5	82.9	739	645
8/21/2002	170000	28.0	8.0	5.4	82.2	740	623
8/21/2002	171500	27.7	8.1	5.5	81.7	741	628
8/21/2002	173000	27.5	8.1	5.4	81.3	743	602
8/21/2002	174500	27.3	8.1	5.5	82.0	745	574
8/21/2002	180000	27.1	8.1	5.5	82.1	749	565
8/21/2002	181500	26.9	8.1	5.6	82.4	753	579

Table 8.11.1.--Continuous Monitoring Data for Rio Grande at Lemitar
August 21 through August 23, 2002

Date	Time (HHMMSS)	Temp (^oC)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
8/21/2002	183000	26.9	8.1	5.6	82.2	757	577
8/21/2002	184500	27.0	8.1	5.5	81.3	762	586
8/21/2002	190000	26.9	8.1	5.5	81.8	767	561
8/21/2002	191500	26.8	8.1	5.5	81.7	771	609
8/21/2002	193000	26.7	8.1	5.6	82.4	775	638
8/21/2002	194500	26.6	8.1	5.6	81.9	779	727
8/21/2002	200000	26.4	8.1	5.4	79.6	781	587
8/21/2002	201500	26.2	8.1	5.5	80.4	782	580
8/21/2002	203000	26.1	8.1	5.5	79.8	782	581
8/21/2002	204500	25.9	8.1	5.4	79.0	783	628
8/21/2002	210000	25.7	8.1	5.5	79.9	783	632
8/21/2002	211500	25.4	8.0	5.6	79.9	782	794
8/21/2002	213000	25.1	8.0	5.6	80.3	776	870
8/21/2002	214500	24.8	8.0	5.6	80.1	767	634
8/21/2002	220000	24.5	8.0	5.7	80.3	759	590
8/21/2002	221500	24.3	8.0	5.6	78.9	751	636
8/21/2002	223000	24.2	8.0	5.7	80.4	744	970
8/21/2002	224500	24.1	8.1	5.7	80.2	738	701
8/21/2002	230000	24.0	8.1	5.8	81.1	732	> 1000
8/21/2002	231500	23.8	8.1	5.9	82.1	730	760
8/21/2002	233000	23.7	8.1	5.9	82.7	728	> 1000
8/21/2002	234500	23.7	8.1	5.9	82.4	726	> 1000
8/22/2002	000000	23.6	8.1	5.9	82.1	724	655
8/22/2002	001500	23.5	8.1	5.9	82.3	723	> 1000
8/22/2002	003000	23.3	8.1	6.1	84.3	723	488
8/22/2002	004500	23.2	8.2	6.1	83.9	722	467
8/22/2002	010000	23.0	8.2	6.2	84.8	722	435
8/22/2002	011500	22.9	8.2	6.2	85.2	722	420
8/22/2002	013000	22.8	8.2	6.2	84.4	722	392
8/22/2002	014500	22.6	8.2	6.2	84.2	721	370
8/22/2002	020000	22.5	8.2	6.3	85.2	722	355
8/22/2002	021500	22.4	8.2	6.3	85.0	722	349
8/22/2002	023000	22.2	8.2	6.3	85.8	723	336
8/22/2002	024500	22.1	8.2	6.3	84.8	724	339
8/22/2002	030000	21.9	8.2	6.3	85.3	725	353
8/22/2002	031500	21.7	8.2	6.3	84.8	728	417
8/22/2002	033000	21.5	8.2	6.3	84.9	732	498
8/22/2002	034500	21.3	8.2	6.4	85.1	736	609
8/22/2002	040000	21.2	8.2	6.4	84.8	741	653
8/22/2002	041500	21.0	8.2	6.4	84.2	745	670
8/22/2002	043000	20.8	8.1	6.4	84.6	749	674
8/22/2002	044500	20.7	8.1	6.4	84.8	753	645
8/22/2002	050000	20.5	8.1	6.4	84.6	756	607
8/22/2002	051500	20.4	8.1	6.4	83.6	759	563
8/22/2002	053000	20.2	8.1	6.4	83.4	760	514
8/22/2002	054500	20.1	8.1	6.5	84.1	762	491
8/22/2002	060000	19.9	8.1	6.4	83.6	762	> 1000
8/22/2002	061500	19.8	8.1	6.5	84.0	763	> 1000
8/22/2002	063000	19.7	8.1	6.5	83.9	763	> 1000
8/22/2002	064500	19.6	8.1	6.5	83.4	764	> 1000
8/22/2002	070000	19.4	8.1	6.5	83.1	764	> 1000

Table 8.11.1.--Continuous Monitoring Data for Rio Grande at Lemitar
August 21 through August 23, 2002

Date	Time (HHMMSS)	Temp (^oC)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
8/22/2002	071500	19.4	8.1	6.5	83.7	764	> 1000
8/22/2002	073000	19.3	8.1	6.6	84.6	764	> 1000
8/22/2002	074500	19.3	8.1	6.7	85.4	764	> 1000
8/22/2002	080000	19.4	8.1	6.7	86.2	765	520
8/22/2002	081500	19.4	8.1	6.7	85.9	765	572
8/22/2002	083000	19.6	8.1	6.8	87.6	766	640
8/22/2002	084500	19.8	8.1	6.7	86.7	767	674
8/22/2002	090000	20.0	8.1	6.7	87.6	768	712
8/22/2002	091500	20.4	8.1	6.8	88.6	769	712
8/22/2002	093000	20.7	8.1	6.8	89.3	769	693
8/22/2002	094500	21.2	8.1	6.8	90.2	770	661
8/22/2002	100000	21.6	8.1	6.7	90.3	770	633
8/22/2002	101500	22.1	8.1	6.7	90.9	770	599
8/22/2002	103000	22.6	8.1	6.7	91.1	768	573
8/22/2002	104500	23.1	8.1	6.7	92.3	767	558
8/22/2002	110000	23.5	8.1	6.5	90.8	764	539
8/22/2002	111500	24.0	8.1	6.4	90.1	760	540
8/22/2002	113000	24.6	8.1	6.4	91.0	755	535
8/22/2002	114500	25.0	8.1	6.4	90.8	750	547
8/22/2002	120000	25.6	8.1	6.3	90.5	744	550
8/22/2002	121500	26.1	8.1	6.2	90.5	738	548
8/22/2002	123000	26.5	8.1	6.1	90.0	731	547
8/22/2002	124500	26.9	8.1	6.1	90.4	723	516
8/22/2002	130000	27.3	8.1	6.0	90.0	715	493
8/22/2002	131500	27.7	8.1	6.0	89.5	708	492
8/22/2002	133000	28.1	8.1	5.9	89.1	702	482
8/22/2002	134500	28.6	8.1	5.9	89.3	697	463
8/22/2002	140000	29.0	8.1	5.8	89.7	692	457
8/22/2002	141500	29.3	8.1	5.8	89.7	689	452
8/22/2002	143000	29.6	8.1	5.7	88.8	687	456
8/22/2002	144500	29.9	8.1	5.6	87.5	686	436
8/22/2002	150000	30.1	8.1	5.5	86.3	686	455
8/22/2002	151500	30.4	8.1	5.5	85.8	688	468
8/22/2002	153000	30.0	8.0	5.3	82.5	690	503
8/22/2002	154500	29.8	8.0	5.4	83.8	690	517
8/22/2002	160000	30.2	8.0	5.3	83.3	688	536
8/22/2002	161500	30.1	8.0	5.4	84.0	686	519
8/22/2002	163000	29.9	8.1	5.4	84.5	687	499
8/22/2002	164500	29.7	8.1	5.5	85.6	690	484
8/22/2002	170000	29.6	8.1	5.4	84.1	693	462
8/22/2002	171500	29.3	8.1	5.4	84.1	696	433
8/22/2002	173000	28.9	8.1	5.6	85.5	700	419
8/22/2002	174500	28.6	8.1	5.6	85.3	703	405
8/22/2002	180000	28.3	8.1	5.7	85.6	705	401
8/22/2002	181500	27.9	8.1	5.7	86.1	708	385
8/22/2002	183000	27.7	8.2	5.8	86.3	710	378
8/22/2002	184500	27.5	8.2	5.7	85.4	712	371
8/22/2002	190000	27.2	8.2	5.8	85.8	714	361
8/22/2002	191500	27.0	8.2	5.8	85.6	717	360
8/22/2002	193000	26.7	8.2	5.9	86.3	719	356
8/22/2002	194500	26.3	8.2	5.9	86.0	721	353

Table 8.11.1.--Continuous Monitoring Data for Rio Grande at Lemitar
August 21 through August 23, 2002

Date	Time (HHMMSS)	Temp (^oC)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
8/22/2002	200000	26.0	8.2	6.0	86.6	723	352
8/22/2002	201500	25.7	8.2	6.0	86.3	724	> 1000
8/22/2002	203000	25.5	8.2	6.0	85.8	725	> 1000
8/22/2002	204500	25.2	8.2	6.0	86.1	727	> 1000
8/22/2002	210000	25.0	8.2	6.0	85.7	727	> 1000
8/22/2002	211500	24.7	8.2	6.1	86.1	728	> 1000
8/22/2002	213000	24.4	8.2	6.1	85.9	729	> 1000
8/22/2002	214500	24.1	8.2	6.1	85.6	729	> 1000
8/22/2002	220000	23.8	8.2	6.1	86.0	730	> 1000
8/22/2002	221500	23.6	8.2	6.2	85.6	731	> 1000
8/22/2002	223000	23.3	8.2	6.2	85.5	730	> 1000
8/22/2002	224500	23.0	8.2	6.3	86.1	730	> 1000
8/22/2002	230000	22.8	8.2	6.3	86.0	731	> 1000
8/22/2002	231500	22.6	8.2	6.3	85.6	731	> 1000
8/22/2002	233000	22.5	8.2	6.3	86.3	728	> 1000
8/22/2002	234500	22.3	8.2	6.3	86.1	732	> 1000
8/23/2002	000000	22.1	8.2	6.4	86.1	732	> 1000
8/23/2002	001500	22.0	8.2	6.4	85.9	733	> 1000
8/23/2002	003000	21.8	8.2	6.4	85.8	733	> 1000
8/23/2002	004500	21.6	8.2	6.4	86.5	733	> 1000
8/23/2002	010000	21.4	8.2	6.4	85.6	733	> 1000

Descriptive Statistics	*Temp (°C)*	*pH*	*DO (mg/L)*	*DO (%)*	*SPC (uS/cm)*	*Turbidity (NTU)*
Mean	24.7	8.1	6.0	84.4	733	~ 666.2
Standard Error	0.25	0.01	0.03	0.25	2.05	~ 18.3
Median	24.5	8.1	6.0	84.4	730	~ 594.5
Mode	23.2	8.1	5.4	85.6	723	> 1000
Standard Deviation	3.14	0.11	0.43	3.18	25.99	~ 231.9
Sample Variance	9.85	0.01	0.18	10.12	675.41	~ 53768.98
Kurtosis	-1.16	0.48	-1.10	-0.39	-0.83	~ -1.30
Skewness	-0.01	-0.88	0.18	0.33	0.09	~ 0.44
Range	11.0	0.5	1.6	14.1	97	~ 665
Minimum	19.3	7.7	5.3	78.2	686	336
Maximum	30.4	8.2	6.8	92.3	783	> 1000
Sum	3945.1	1292.3	953.3	13500.2	117256	~ 106585
Count	160	160	160	160	160	160

Table 8.11.2.--Continuous Monitoring Data for Rio Grande at Lemitar
January 15 through January 17, 2003

[--, no data; °C, degrees Celsius; mg/L, milligrams per liter; % sat, percent saturation; uS/cm, microsiemens per centimeter; NTU, Nephelometric turbidity units.]

MiniSonde4a 36755
Log File Name : LEMITAR 1-15-03
Setup Date (MMDDYY) : 011503
Setup Time (HHMMSS) : 102352
Starting Date (MMDDYY) : 011503
Starting Time (HHMMSS) : 104500
Stopping Date (MMDDYY) : 011703
Stopping Time (HHMMSS) : 120000
Interval (HHMMSS) : 001500
Sensor warmup (HHMMSS) : 000200
Circltr warmup (HHMMSS) : 000100

Date	Time (HHMMSS)	Temp (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
1/15/2003	111500	5.3	8.3	9.9	92.0	392	--
1/15/2003	113000	5.4	8.3	10.0	92.9	393	--
1/15/2003	114500	5.5	8.3	10.1	94.1	393	--
1/15/2003	120000	5.7	8.3	10.1	95.0	394	--
1/15/2003	121500	5.9	8.3	10.1	95.2	394	--
1/15/2003	123000	6.0	8.3	10.0	94.1	394	--
1/15/2003	124500	6.2	8.3	10.1	96.2	394	--
1/15/2003	130000	6.4	8.3	10.0	95.5	394	--
1/15/2003	131500	6.5	8.3	10.0	95.7	394	--
1/15/2003	133000	6.7	8.3	9.9	95.6	394	--
1/15/2003	134500	6.8	8.3	9.9	95.6	394	--
1/15/2003	140000	7.0	8.3	10.0	97.0	394	--
1/15/2003	141500	7.1	8.3	10.0	97.1	395	--
1/15/2003	143000	7.2	8.3	9.9	96.9	394	--
1/15/2003	144500	7.3	8.3	9.8	96.1	395	--
1/15/2003	150000	7.4	8.3	9.9	96.6	395	--
1/15/2003	151500	7.5	8.4	9.8	96.0	394	--
1/15/2003	153000	7.6	8.3	9.8	96.2	394	--
1/15/2003	154500	7.6	8.3	9.7	95.6	394	--
1/15/2003	160000	7.6	8.3	9.8	96.7	393	--
1/15/2003	161500	7.6	8.3	9.8	96.6	393	--
1/15/2003	163000	7.6	8.3	9.8	96.6	393	--
1/15/2003	164500	7.6	8.3	9.8	96.2	393	--
1/15/2003	170000	7.5	8.4	9.8	96.1	392	--
1/15/2003	171500	7.5	8.4	9.6	94.5	392	--
1/15/2003	173000	7.4	8.4	9.6	94.4	391	--
1/15/2003	174500	7.3	8.4	9.7	94.3	391	--
1/15/2003	180000	7.2	8.4	9.6	93.4	390	--
1/15/2003	181500	7.2	8.4	9.6	93.2	390	--
1/15/2003	183000	7.1	8.4	9.6	93.6	389	--
1/15/2003	184500	7.1	8.4	9.6	93.2	389	--
1/15/2003	190000	7.1	8.4	9.5	92.6	388	--
1/15/2003	191500	7.0	8.4	9.7	93.7	388	--
1/15/2003	193000	7.0	8.4	9.6	92.6	387	--
1/15/2003	194500	6.9	8.4	9.5	92.1	387	--
1/15/2003	200000	6.9	8.4	9.5	91.8	387	--

Table 8.11.2.--Continuous Monitoring Data for Rio Grande at Lemitar
January 15 through January 17, 2003

Date	Time (HHMMSS)	Temp (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
1/15/2003	201500	6.8	8.4	9.6	92.3	386	--
1/15/2003	203000	6.8	8.4	9.6	92.8	386	--
1/15/2003	204500	6.8	8.4	9.6	92.9	386	--
1/15/2003	210000	6.7	8.4	9.6	92.4	386	--
1/15/2003	211500	6.7	8.4	9.5	91.4	386	--
1/15/2003	213000	6.6	8.4	9.6	92.1	385	--
1/15/2003	214500	6.6	8.4	9.6	91.6	385	--
1/15/2003	220000	6.5	8.4	9.6	92.2	385	--
1/15/2003	221500	6.5	8.4	9.5	91.2	385	--
1/15/2003	223000	6.4	8.4	9.5	90.4	385	--
1/15/2003	224500	6.4	8.4	9.7	92.2	385	--
1/15/2003	230000	6.3	8.4	9.6	91.0	385	--
1/15/2003	231500	6.3	8.4	9.6	91.3	385	--
1/15/2003	233000	6.2	8.4	9.7	91.9	385	--
1/15/2003	234500	6.2	8.4	9.7	91.7	385	--
1/16/2003	000000	6.1	8.4	9.6	90.6	385	--
1/16/2003	001500	6.1	8.4	9.6	90.6	385	--
1/16/2003	003000	6.0	8.4	9.5	90.2	385	--
1/16/2003	004500	6.0	8.4	9.6	91.0	386	--
1/16/2003	010000	5.9	8.4	9.7	91.5	386	--
1/16/2003	011500	5.9	8.4	9.6	90.0	385	--
1/16/2003	013000	5.9	8.4	9.6	90.7	385	--
1/16/2003	014500	5.8	8.4	9.6	90.0	385	--
1/16/2003	020000	5.8	8.4	9.6	89.9	386	--
1/16/2003	021500	5.7	8.4	9.6	90.0	387	--
1/16/2003	023000	5.7	8.4	9.6	90.3	388	--
1/16/2003	024500	5.6	8.4	9.8	91.5	389	--
1/16/2003	030000	5.6	8.4	9.6	90.0	389	--
1/16/2003	031500	5.6	8.4	9.7	90.5	390	--
1/16/2003	033000	5.5	8.4	9.7	91.0	391	--
1/16/2003	034500	5.5	8.4	9.7	90.4	390	--
1/16/2003	040000	5.5	8.4	9.7	90.9	391	--
1/16/2003	041500	5.4	8.4	9.6	89.9	392	--
1/16/2003	043000	5.4	8.4	9.8	91.1	392	--
1/16/2003	044500	5.3	8.4	9.8	90.8	393	--
1/16/2003	050000	5.3	8.4	9.8	90.6	392	--
1/16/2003	051500	5.3	8.4	9.7	90.4	392	--
1/16/2003	053000	5.2	8.4	9.7	89.7	392	--
1/16/2003	054500	5.2	8.4	9.8	90.3	391	--
1/16/2003	060000	5.1	8.4	9.9	91.3	392	--
1/16/2003	061500	5.1	8.4	9.9	91.1	392	--
1/16/2003	063000	5.0	8.4	9.8	90.3	392	--
1/16/2003	064500	5.0	8.4	9.7	89.6	393	--
1/16/2003	070000	4.9	8.4	9.8	90.3	394	--
1/16/2003	071500	4.9	8.4	9.9	91.1	394	--
1/16/2003	073000	4.8	8.4	9.9	91.1	394	--
1/16/2003	074500	4.7	8.4	9.8	89.7	394	--
1/16/2003	080000	4.7	8.4	9.9	90.5	395	--
1/16/2003	081500	4.6	8.4	10.0	90.7	395	--
1/16/2003	083000	4.5	8.4	10.0	91.2	394	--

Table 8.11.2.--Continuous Monitoring Data for Rio Grande at Lemitar
January 15 through January 17, 2003

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
1/16/2003	084500	4.5	8.4	9.9	90.0	395	--
1/16/2003	090000	4.4	8.4	10.1	91.4	395	--
1/16/2003	091500	4.4	8.4	10.0	90.5	394	--
1/16/2003	093000	4.5	8.4	10.0	90.5	394	--
1/16/2003	094500	4.5	8.4	10.0	91.2	394	--
1/16/2003	100000	4.5	8.4	10.1	91.8	395	--
1/16/2003	101500	4.6	8.4	10.1	91.9	395	--
1/16/2003	103000	4.7	8.4	10.2	92.9	395	--
1/16/2003	104500	4.8	8.4	10.2	93.3	394	--
1/16/2003	110000	4.9	8.4	10.1	92.5	394	--
1/16/2003	111500	5.0	8.4	10.1	92.9	394	--
1/16/2003	113000	5.2	8.4	10.3	95.0	394	--
1/16/2003	114500	5.3	8.4	10.2	94.6	396	--
1/16/2003	120000	5.5	8.4	10.2	94.6	396	--
1/16/2003	121500	5.6	8.4	10.2	95.6	396	--
1/16/2003	123000	5.8	8.4	10.1	95.3	397	--
1/16/2003	124500	5.9	8.4	10.2	96.3	397	--
1/16/2003	130000	6.1	8.4	10.1	95.5	397	--
1/16/2003	131500	6.2	8.4	10.2	97.0	396	--
1/16/2003	133000	6.4	8.4	10.1	96.0	396	--
1/16/2003	134500	6.5	8.4	10.0	96.1	396	--
1/16/2003	140000	6.7	8.4	10.2	97.5	396	--
1/16/2003	141500	6.8	8.4	10.1	97.0	396	--
1/16/2003	143000	6.9	8.4	10.0	96.5	396	--
1/16/2003	144500	7.1	8.4	10.0	96.9	396	--
1/16/2003	150000	7.1	8.4	9.9	96.3	395	--
1/16/2003	151500	7.2	8.4	10.0	97.3	396	--
1/16/2003	153000	7.3	8.4	10.0	97.9	395	--
1/16/2003	154500	7.3	8.4	10.0	97.9	394	--
1/16/2003	160000	7.3	8.4	9.8	96.2	393	--
1/16/2003	161500	7.3	8.4	9.9	96.8	394	--
1/16/2003	163000	7.3	8.4	9.8	96.0	393	--
1/16/2003	164500	7.3	8.4	9.8	96.1	392	--
1/16/2003	170000	7.3	8.4	9.9	96.8	392	--
1/16/2003	171500	7.2	8.4	9.9	96.1	392	--
1/16/2003	173000	7.1	8.4	9.8	95.7	390	--
1/16/2003	174500	7.1	8.4	9.7	94.6	390	--
1/16/2003	180000	7.0	8.4	9.7	94.2	390	--
1/16/2003	181500	6.9	8.4	9.8	94.9	389	--
1/16/2003	183000	6.9	8.4	9.7	93.3	388	--
1/16/2003	184500	6.8	8.4	9.6	93.0	389	--
1/16/2003	190000	6.8	8.4	9.7	93.0	388	--
1/16/2003	191500	6.7	8.4	9.6	92.5	387	--
1/16/2003	193000	6.7	8.4	9.7	93.3	387	--
1/16/2003	194500	6.6	8.4	9.7	93.3	386	--
1/16/2003	200000	6.6	8.4	9.6	92.4	387	--
1/16/2003	201500	6.5	8.4	9.7	92.8	386	--
1/16/2003	203000	6.5	8.4	9.6	91.8	385	--
1/16/2003	204500	6.4	8.4	9.6	91.9	385	--
1/16/2003	210000	6.4	8.4	9.7	92.8	384	--

Table 8.11.2.--Continuous Monitoring Data for Rio Grande at Lemitar
January 15 through January 17, 2003

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
1/16/2003	211500	6.3	8.4	9.7	92.7	385	--
1/16/2003	213000	6.2	8.4	9.6	91.3	383	--
1/16/2003	214500	6.2	8.4	9.7	91.8	383	--
1/16/2003	220000	6.1	8.4	9.7	92.2	383	--
1/16/2003	221500	6.1	8.4	9.6	90.8	383	--
1/16/2003	223000	6.0	8.4	9.7	92.0	383	--
1/16/2003	224500	5.9	8.4	9.7	91.7	383	--
1/16/2003	230000	5.9	8.4	9.7	90.9	382	--
1/16/2003	231500	5.8	8.4	9.7	90.9	383	--
1/16/2003	233000	5.7	8.4	9.7	91.3	382	--
1/16/2003	234500	5.7	8.4	9.8	91.8	383	--
1/17/2003	000000	5.6	8.4	9.7	90.9	383	--
1/17/2003	001500	5.6	8.4	9.7	91.0	383	--
1/17/2003	003000	5.5	8.4	9.7	90.6	383	--
1/17/2003	004500	5.5	8.4	9.8	91.4	384	--
1/17/2003	010000	5.4	8.4	9.8	91.2	383	--
1/17/2003	011500	5.4	8.4	9.8	91.2	384	--
1/17/2003	013000	5.3	8.4	9.8	91.2	384	--
1/17/2003	014500	5.3	8.4	9.9	91.4	384	--
1/17/2003	020000	5.2	8.4	9.7	90.0	385	--
1/17/2003	021500	5.2	8.4	9.7	90.1	385	--
1/17/2003	023000	5.1	8.4	9.7	89.6	385	--
1/17/2003	024500	5.1	8.4	9.8	90.8	384	--
1/17/2003	030000	5.0	8.4	9.7	89.7	387	--
1/17/2003	031500	5.0	8.4	9.8	90.3	388	--
1/17/2003	033000	5.0	8.4	9.9	91.0	388	--
1/17/2003	034500	4.9	8.4	9.8	90.4	389	--
1/17/2003	040000	4.9	8.4	9.8	89.9	389	--
1/17/2003	041500	4.9	8.4	9.8	89.6	389	--
1/17/2003	043000	4.8	8.4	9.8	89.9	391	--
1/17/2003	044500	4.8	8.4	9.9	90.6	389	--
1/17/2003	050000	4.8	8.4	9.8	89.6	391	--
1/17/2003	051500	4.7	8.4	9.9	90.3	390	--
1/17/2003	053000	4.7	8.4	9.9	90.0	388	--
1/17/2003	054500	4.6	8.5	10.0	90.9	388	--
1/17/2003	060000	4.6	8.4	9.9	90.2	389	--
1/17/2003	061500	4.5	8.4	10.0	90.6	387	--
1/17/2003	063000	4.5	8.5	9.9	90.1	387	--
1/17/2003	064500	4.4	8.5	10.0	90.3	389	--
1/17/2003	070000	4.4	8.5	9.9	89.5	388	--
1/17/2003	071500	4.4	8.5	9.9	90.1	388	--
1/17/2003	073000	4.3	8.5	9.9	89.7	389	--
1/17/2003	074500	4.3	8.4	10.0	90.6	388	--
1/17/2003	080000	4.2	8.4	9.9	89.3	388	--
1/17/2003	081500	4.1	8.4	9.9	89.1	388	--
1/17/2003	083000	4.1	8.4	10.1	90.6	388	--
1/17/2003	084500	4.0	8.4	10.0	90.0	390	--
1/17/2003	090000	4.0	8.4	10.1	90.8	389	--
1/17/2003	091500	4.0	8.4	10.1	91.0	389	--
1/17/2003	093000	4.0	8.4	10.0	89.7	389	--

Table 8.11.2.--Continuous Monitoring Data for Rio Grande at Lemitar
January 15 through January 17, 2003

Date	Time (HHMMSS)	Temp (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
1/17/2003	094500	4.1	8.4	10.1	90.6	389	--
1/17/2003	100000	4.1	8.4	10.0	90.3	390	--
1/17/2003	101500	4.2	8.4	10.1	90.6	390	--
1/17/2003	103000	4.3	8.4	10.1	91.2	389	--
1/17/2003	104500	4.4	8.4	10.2	92.0	389	--
1/17/2003	110000	4.5	8.4	10.1	91.8	388	--
1/17/2003	111500	4.6	8.4	10.2	93.3	389	--
1/17/2003	113000	4.7	8.4	10.1	92.3	389	--
1/17/2003	114500	4.8	8.4	10.3	94.1	390	--
1/17/2003	120000	5.0	8.4	10.1	93.3	390	--

Descriptive Statistics	*Temp (°C)*	*pH*	*DO (mg/L)*	*DO (%)*	*SPC (uS/cm)*	*Turbidity (NTU)*
Mean	5.8	8.4	9.8	92.5	390	--
Standard Error	0.07	0.00	0.01	0.17	0.29	--
Median	5.8	8.4	9.8	91.8	389	--
Mode	7.3	8.4	9.6	90.6	394	--
Standard Deviation	1.04	0.03	0.19	2.36	4.07	--
Sample Variance	1.08	0.00	0.04	5.59	16.58	--
Kurtosis	-1.20	-1.04	-0.88	-0.83	-1.18	--
Skewness	0.03	0.16	0.29	0.68	-0.06	--
Range	3.6	0.1	0.8	8.8	15	--
Minimum	4.0	8.3	9.5	89.1	382	--
Maximum	7.6	8.5	10.3	97.9	397	--
Sum	1141.7	1644.5	1926.7	18131.0	76391	--
Count	196	196	196	196	196	--

Table 8.12.1.--Continuous Monitoring Data for Rio Grande at Arroyo del Tajo
July 22 through July 23, 2002

[--, no data; °C, degrees Celsius; mg/L, milligrams per liter; % sat, percent saturation; uS/cm, microsiemens per centimeter; NTU, Nephelometric turbidity units.]

DataSonde 4a 40183
Log File Name : ARROYO TAJO
Setup Date (MMDDYY) : 072202
Setup Time (HHMMSS) : 100752
Starting Date (MMDDYY) : 072202
Starting Time (HHMMSS) : 100000
Stopping Date (MMDDYY) : 121203
Stopping Time (HHMMSS) : 120000
Interval (HHMMSS) : 001500
Sensor warmup (HHMMSS) : 000200
Circltr warmup (HHMMSS) : 000200

Date	Time (HHMMSS)	Temp (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
7/22/2002	113000	22.6	8.2	6.5	88.4	399	301
7/22/2002	114500	22.7	8.2	6.5	88.4	401	182
7/22/2002	120000	22.8	8.2	6.5	88.4	403	227
7/22/2002	121500	22.9	8.2	6.5	88.4	407	149
7/22/2002	123000	22.9	8.2	6.4	88.2	410	134
7/22/2002	124500	22.7	8.2	6.4	87.8	412	109
7/22/2002	130000	22.5	8.2	6.5	88.5	405	104
7/22/2002	131500	22.5	8.2	6.5	88.0	413	82
7/22/2002	133000	22.5	8.2	6.4	87.3	414	92
7/22/2002	134500	22.5	8.2	6.4	87.1	417	89
7/22/2002	140000	22.5	8.2	6.5	87.8	422	89
7/22/2002	141500	22.5	8.2	6.5	87.7	423	90
7/22/2002	143000	22.5	8.2	6.4	87.1	425	81
7/22/2002	144500	22.5	8.2	6.4	86.7	425	83
7/22/2002	150000	22.6	8.2	6.3	86.2	429	79
7/22/2002	151500	22.7	8.2	6.4	86.9	433	78
7/22/2002	153000	22.8	8.2	6.4	87.0	437	81
7/22/2002	154500	23.2	8.2	6.3	87.1	443	64
7/22/2002	160000	23.3	8.2	6.3	87.4	449	64
7/22/2002	161500	23.2	8.2	6.3	86.3	458	58
7/22/2002	163000	23.0	8.2	6.3	85.8	465	53
7/22/2002	164500	22.8	8.2	6.2	85.2	474	1001
7/22/2002	170000	22.7	8.2	6.3	86.0	485	1001
7/22/2002	171500	22.6	8.2	6.3	85.9	495	1001
7/22/2002	173000	22.7	8.2	6.3	85.3	506	1001
7/22/2002	174500	22.7	8.2	6.2	85.1	518	1001
7/22/2002	180000	22.8	8.2	6.3	85.4	528	1001
7/22/2002	181500	23.0	8.2	6.2	85.5	536	1001
7/22/2002	183000	23.1	8.2	6.3	86.1	544	1001
7/22/2002	184500	23.2	8.2	6.2	85.9	551	1001
7/22/2002	190000	23.3	8.2	6.2	85.8	556	1001
7/22/2002	191500	23.3	8.2	6.2	85.8	560	1001
7/22/2002	193000	23.2	8.2	6.3	86.0	561	1001
7/22/2002	194500	23.1	8.2	6.2	85.4	561	1001
7/22/2002	200000	23.0	8.2	6.2	85.6	561	1001
7/22/2002	201500	23.0	8.2	6.2	85.3	561	1001
7/22/2002	203000	23.0	8.2	6.2	85.1	559	1001

Table 8.12.1.--Continuous Monitoring Data for Rio Grande at Arroyo del Tajo
July 22 through July 23, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
7/22/2002	204500	22.9	8.2	6.2	85.4	556	1001
7/22/2002	210000	22.9	8.2	6.2	85.2	553	1001
7/22/2002	211500	22.8	8.2	6.2	85.2	551	1001
7/22/2002	213000	22.7	8.2	6.3	85.3	550	1001
7/22/2002	214500	22.6	8.2	6.2	84.6	545	1001
7/22/2002	220000	22.5	8.2	6.1	83.4	538	1001
7/22/2002	221500	22.6	8.1	5.9	79.9	525	1001
7/22/2002	223000	22.4	8.1	5.6	75.4	522	1001
7/22/2002	224500	22.2	8.0	5.2	70.0	605	859
7/22/2002	230000	22.0	7.8	4.9	66.0	794	476
7/22/2002	231500	21.6	7.7	4.6	61.1	974	274
7/22/2002	233000	21.3	7.7	4.5	59.3	1097	231
7/22/2002	234500	21.3	7.7	4.3	57.3	653	6
7/23/2002	000000	21.4	7.7	1.5	20.0	439	7
7/23/2002	001500	21.4	7.7	0.8	10.7	432	9
7/23/2002	003000	21.3	7.7	0.4	4.8	430	10
7/23/2002	004500	21.2	7.6	1.4	18.9	1166	8
7/23/2002	010000	21.1	7.6	2.1	28.2	1150	3
7/23/2002	011500	20.5	7.6	5.1	66.1	1144	46
7/23/2002	013000	20.4	7.7	5.3	69.9	1119	461
7/23/2002	014500	20.4	7.7	5.6	73.4	1088	444
7/23/2002	020000	20.4	7.8	5.6	73.6	1045	699
7/23/2002	021500	20.5	7.8	2.1	28.0	337	804
7/23/2002	023000	20.5	7.7	1.7	22.2	951	977
7/23/2002	024500	20.6	7.7	5.7	75.0	916	812
7/23/2002	030000	20.6	7.7	3.1	41.2	866	691
7/23/2002	031500	20.6	7.7	2.0	25.7	440	376
7/23/2002	033000	20.6	7.7	6.1	79.3	787	336
7/23/2002	034500	20.5	7.9	6.2	81.5	755	301
7/23/2002	040000	20.5	7.9	6.1	79.1	724	66
7/23/2002	041500	20.5	8.0	6.1	80.1	681	82
7/23/2002	043000	20.5	7.9	5.4	71.1	656	20
7/23/2002	044500	20.5	7.8	2.6	33.7	199	1001
7/23/2002	050000	20.5	7.8	2.2	28.3	189	987
7/23/2002	051500	20.5	7.9	6.3	82.0	587	1001
7/23/2002	053000	20.1	8.1	6.2	81.0	565	626
7/23/2002	054500	20.1	8.1	6.4	82.4	550	667
7/23/2002	060000	20.1	8.1	6.4	83.3	533	472
7/23/2002	061500	20.1	8.1	6.4	82.2	212	927
7/23/2002	063000	20.0	8.1	6.4	82.6	508	465
7/23/2002	064500	20.0	8.1	6.4	82.9	498	571
7/23/2002	070000	19.9	8.1	6.6	85.8	489	520
7/23/2002	071500	19.9	8.2	6.6	84.7	481	272
7/23/2002	073000	19.9	8.2	6.3	81.2	473	517
7/23/2002	074500	19.9	8.1	2.9	37.8	145	530
7/23/2002	080000	19.9	8.1	2.8	36.6	144	857
7/23/2002	081500	19.9	8.1	2.3	30.1	142	565
7/23/2002	083000	20.0	8.1	2.2	28.8	141	429
7/23/2002	084500	20.0	8.1	2.2	28.2	140	501
7/23/2002	090000	20.1	8.1	2.0	26.4	138	512
7/23/2002	091500	20.1	8.1	1.8	23.4	138	482

Table 8.12.1.--Continuous Monitoring Data for Rio Grande at Arroyo del Tajo
July 22 through July 23, 2002

Date	Time (HHMMSS)	Temp (^oC)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
7/23/2002	093000	20.2	8.1	2.8	36.3	133	252
7/23/2002	094500	20.3	8.2	6.5	83.9	444	38
7/23/2002	100000	20.3	8.2	6.5	84.7	136	77
7/23/2002	101500	20.4	8.2	2.6	33.8	132	39
7/23/2002	103000	20.4	8.2	2.4	31.8	132	54
7/23/2002	104500	20.5	8.2	2.2	29.1	132	60
7/23/2002	110000	20.6	8.1	2.0	26.2	132	59
7/23/2002	111500	20.7	8.1	2.2	28.6	131	58
7/23/2002	113000	20.8	8.1	2.2	29.2	131	66
7/23/2002	114500	20.9	8.1	1.9	24.6	130	61
7/23/2002	120000	21.0	8.1	1.6	21.0	131	44
7/23/2002	121500	21.0	8.1	1.4	18.6	131	40
7/23/2002	123000	21.1	8.0	1.8	24.0	130	38
7/23/2002	124500	21.2	8.0	1.4	19.0	130	31
7/23/2002	130000	21.3	8.0	1.3	17.5	130	30
7/23/2002	131500	21.4	8.0	1.5	20.1	129	25
7/23/2002	133000	21.5	8.0	1.2	15.8	129	23
7/23/2002	134500	21.6	8.0	1.0	13.4	130	23
7/23/2002	140000	21.7	8.0	0.9	12.2	130	25
7/23/2002	141500	21.9	8.0	0.9	12.2	130	26

Descriptive Statistics	*Temp (°C)*	*pH*	*DO (mg/L)*	*DO (%)*	*SPC (uS/cm)*	*Turbidity (NTU)*
Mean	21.6	8.1	4.7	63.1	465	438
Standard Error	0.11	0.02	0.20	2.73	25.72	38.56
Median	21.4	8.1	6.2	81.4	454	301
Mode	22.5	8.2	6.2	88.4	561	> 1000
Standard Deviation	1.16	0.18	2.08	28.37	267.29	400.68
Sample Variance	1.35	0.03	4.34	804.58	71442.47	160547.12
Kurtosis	-1.62	-0.15	-1.26	-1.30	0.48	-1.55
Skewness	0.02	-1.13	-0.72	-0.69	0.74	0.40
Range	3.4	0.6	6.3	83.7	1037	998
Minimum	19.9	7.6	0.4	4.8	129	3
Maximum	23.3	8.2	6.6	88.5	1166	> 1000
Sum	2328.0	869.7	508.5	6816.2	50239.5	47282
Count	108	108	108	108	108	108

Table 8.12.2.--Continuous Monitoring Data for Rio Grande at Arroyo del Tajo
September 9 through September 10, 2002

[--, no data; °C, degrees Celsius; mg/L, milligrams per liter; % sat, percent saturation; uS/cm, microsiemens per centimeter; NTU, Nephelometric turbidity units.]

DataSonde 4a 40184
Log File Name : A TAJO 9-9-2
Setup Date (MMDDYY) : 090902
Setup Time (HHMMSS) : 083141
Starting Date (MMDDYY) : 090902
Starting Time (HHMMSS) : 090000
Stopping Date (MMDDYY) : 091302
Stopping Time (HHMMSS) : 120000
Interval (HHMMSS) : 001500
Sensor warmup (HHMMSS) : 000200
Circltr warmup (HHMMSS) : 000100

Date	Time (HHMMSS)	Temp (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
9/9/2002	100000	20.9	8.3	7.1	92.9	681	650
9/9/2002	101500	21.3	8.3	7.0	92.4	678	714
9/9/2002	103000	21.9	8.3	6.9	92.6	675	708
9/9/2002	104500	22.4	8.3	6.9	93.4	673	711
9/9/2002	110000	23.0	8.3	6.8	93.4	670	692
9/9/2002	111500	23.7	8.3	6.7	93.6	668	668
9/9/2002	113000	24.3	8.3	6.7	93.9	666	677
9/9/2002	114500	24.8	8.3	6.7	94.7	663	665
9/9/2002	120000	25.3	8.3	6.7	95.2	660	654
9/9/2002	121500	25.9	8.3	6.5	94.1	656	661
9/9/2002	123000	26.3	8.3	6.5	94.7	652	643
9/9/2002	124500	26.7	8.2	6.4	94.3	650	642
9/9/2002	130000	27.2	8.2	6.3	92.8	647	636
9/9/2002	131500	27.6	8.2	6.2	92.8	647	628
9/9/2002	133000	28.1	8.2	6.2	92.9	648	617
9/9/2002	134500	28.6	8.2	6.2	93.6	650	593
9/9/2002	140000	29.0	8.3	6.1	93.2	652	579
9/9/2002	141500	29.4	8.2	6.0	92.9	655	567
9/9/2002	143000	29.6	8.3	6.0	92.7	658	557
9/9/2002	144500	29.8	8.3	5.9	92.2	663	563
9/9/2002	150000	30.2	8.3	5.9	92.8	668	543
9/9/2002	151500	30.1	8.3	5.9	92.0	674	539
9/9/2002	153000	30.0	8.3	5.9	91.9	680	523
9/9/2002	154500	30.2	8.3	5.9	92.6	688	517
9/9/2002	160000	30.2	8.2	5.9	92.2	700	592
9/9/2002	161500	30.1	8.2	5.6	87.6	706	550
9/9/2002	163000	30.0	8.1	5.3	82.0	701	446
9/9/2002	164500	29.8	8.0	5.0	76.9	697	1001
9/9/2002	170000	29.5	7.9	4.5	69.2	704	1001
9/9/2002	171500	29.2	7.9	4.2	64.5	726	577
9/9/2002	173000	28.8	7.8	3.9	59.2	746	308
9/9/2002	174500	28.4	7.7	3.7	55.6	753	207
9/9/2002	180000	28.0	7.7	3.5	52.3	749	216
9/9/2002	181500	27.6	7.7	3.5	51.5	738	131
9/9/2002	183000	27.1	7.7	3.5	51.7	727	112
9/9/2002	184500	26.8	7.7	3.5	51.0	718	583

Table 8.12.2.--Continuous Monitoring Data for Rio Grande at Arroyo del Tajo
September 9 through September 10, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
9/9/2002	190000	26.5	7.6	3.3	48.7	717	68
9/9/2002	191500	26.3	7.6	3.1	45.5	721	28
9/9/2002	193000	26.0	7.6	2.9	42.4	726	473
9/9/2002	194500	25.8	7.6	2.8	40.9	731	35
9/9/2002	200000	25.6	7.6	2.7	38.8	736	69
9/9/2002	201500	25.4	7.6	2.7	38.1	702	28
9/9/2002	203000	25.2	7.6	2.7	38.2	721	27
9/9/2002	204500	25.0	7.6	2.7	38.7	690	209
9/9/2002	210000	24.8	7.6	2.8	40.4	685	27
9/9/2002	211500	24.6	7.6	2.9	41.4	673	19
9/9/2002	213000	24.4	7.6	3.1	43.4	656	319
9/9/2002	214500	24.2	7.6	3.2	45.1	643	30
9/9/2002	220000	24.1	7.6	3.4	47.4	653	75
9/9/2002	221500	23.9	7.6	3.6	49.6	649	33
9/9/2002	223000	23.7	7.6	3.7	51.1	665	35
9/9/2002	224500	23.5	7.6	3.8	52.7	638	269
9/9/2002	230000	23.4	7.6	3.9	54.3	644	39
9/9/2002	231500	23.2	7.6	4.1	55.9	647	24
9/9/2002	233000	23.1	7.6	4.2	57.4	632	454
9/9/2002	234500	23.0	7.6	4.3	58.6	620	46
9/10/2002	000000	22.9	7.7	4.3	59.2	629	110
9/10/2002	001500	22.7	7.7	4.5	61.6	616	53
9/10/2002	003000	22.6	7.7	4.5	61.8	616	56
9/10/2002	004500	22.5	7.7	4.6	63.1	617	394
9/10/2002	010000	22.4	7.7	4.7	63.9	621	62
9/10/2002	011500	22.3	7.7	4.8	65.3	618	34
9/10/2002	013000	22.2	7.7	4.9	66.2	616	628
9/10/2002	014500	22.2	7.7	5.0	67.9	620	73
9/10/2002	020000	22.1	7.7	5.2	69.4	611	147
9/10/2002	021500	22.0	7.7	5.1	69.1	617	81
9/10/2002	023000	21.9	7.7	5.2	69.9	619	86
9/10/2002	024500	21.8	7.7	5.2	69.4	623	515
9/10/2002	030000	21.8	7.7	5.2	69.6	629	91
9/10/2002	031500	21.7	7.7	5.3	70.7	630	45
9/10/2002	033000	21.6	7.7	5.4	71.7	633	801
9/10/2002	034500	21.5	7.7	5.3	71.0	633	102
9/10/2002	040000	21.4	7.7	5.4	71.7	635	187
9/10/2002	041500	21.3	7.7	5.4	72.1	635	109
9/10/2002	043000	21.3	7.7	5.5	72.8	633	113
9/10/2002	044500	21.2	7.8	5.5	72.8	633	650
9/10/2002	050000	21.1	7.8	5.5	73.1	632	120
9/10/2002	051500	21.0	7.8	5.6	73.5	632	51
9/10/2002	053000	20.9	7.8	5.7	74.5	631	999
9/10/2002	054500	20.9	7.8	5.7	74.9	630	133
9/10/2002	060000	20.8	7.8	5.7	75.5	629	225
9/10/2002	061500	20.8	7.8	5.7	75.4	629	144
9/10/2002	063000	20.7	7.8	5.8	75.5	629	148
9/10/2002	064500	20.7	7.8	5.8	75.7	629	821
9/10/2002	070000	20.6	7.8	5.9	76.8	623	163
9/10/2002	071500	20.4	7.8	6.1	79.9	604	61

Table 8.12.2.--Continuous Monitoring Data for Rio Grande at Arroyo del Tajo
September 9 through September 10, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
9/10/2002	073000	20.3	7.8	6.2	80.3	590	1001
9/10/2002	074500	20.2	7.8	6.2	80.4	586	179
9/10/2002	080000	20.2	7.8	6.2	80.5	584	286
9/10/2002	081500	20.2	7.8	6.2	80.1	585	201
9/10/2002	083000	20.2	7.8	6.2	80.1	590	210
9/10/2002	084500	20.1	7.8	6.2	80.7	588	1001
9/10/2002	090000	20.1	7.8	6.2	81.0	586	223
9/10/2002	091500	20.1	7.8	6.3	81.4	585	77
9/10/2002	093000	20.2	7.9	6.2	80.9	587	1001
9/10/2002	094500	20.3	7.9	6.2	81.1	589	257
9/10/2002	100000	20.3	7.9	6.3	82.0	593	1001
9/10/2002	101500	20.4	7.9	6.3	81.9	592	288
9/10/2002	103000	20.4	7.9	6.3	81.8	583	91
9/10/2002	104500	20.4	7.9	6.3	82.1	567	1001
9/10/2002	110000	20.4	7.9	6.3	82.6	540	310
9/10/2002	111500	20.3	7.9	6.4	83.5	517	1001
9/10/2002	113000	20.4	7.9	6.3	82.0	531	304
9/10/2002	114500	20.6	7.9	6.2	80.8	523	379
9/10/2002	120000	20.6	7.9	6.0	78.9	465	372
9/10/2002	121500	20.7	7.9	6.0	78.3	409	488
9/10/2002	123000	20.8	7.9	6.0	78.6	379	618
9/10/2002	124500	20.9	7.9	6.1	79.8	376	704
9/10/2002	130000	21.1	7.9	6.1	79.9	389	746
9/10/2002	131500	21.3	7.9	6.1	80.5	413	724

Descriptive Statistics	*Temp (°C)*	*pH*	*DO (mg/L)*	*DO (%)*	*SPC (uS/cm)*	*Turbidity (NTU)*
Mean	23.7	7.9	5.3	72.8	633	388
Standard Error	0.31	0.02	0.12	1.59	7.01	29.20
Median	22.5	7.8	5.7	75.6	635	309
Mode	20.9	8.2	6.2	92.9	629	1001
Standard Deviation	3.29	0.24	1.22	16.68	73.49	306.30
Sample Variance	10.85	0.06	1.50	278.37	5400.87	93819.75
Kurtosis	-0.88	-0.89	-0.67	-0.74	3.51	-0.96
Skewness	0.70	0.73	-0.75	-0.53	-1.52	0.47
Range	10.1	0.7	4.4	57.1	377	982
Minimum	20.1	7.6	2.7	38.1	376	19
Maximum	30.2	8.3	7.1	95.2	753	1001
Sum	2610.6	864.9	577.9	8013.1	69635	42643
Count	110	110	110	110	110	110

Table 8.12.3.--Continuous Monitoring Data for Rio Grande below Arroyo del Tajo
December 12 through December 16, 2002

[--, no data; °C, degrees Celsius; mg/L, milligrams per liter; % sat, percent saturation; uS/cm, microsiemens per centimeter; NTU, Nephelometric turbidity units.]

MiniSonde4a 36755
Log File Name : ARROYO DEL TAJO 12-12-02
Setup Date (MMDDYY) : 121202
Setup Time (HHMMSS) : 134735
Starting Date (MMDDYY) : 121202
Starting Time (HHMMSS) : 140000
Stopping Date (MMDDYY) : 121602
Stopping Time (HHMMSS) : 230000
Interval (HHMMSS) : 001500
Sensor warmup (HHMMSS) : 000200
Circltr warmup (HHMMSS) : 000100

Date	Time (HHMMSS)	Temp (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
12/12/2002	143000	6.2	8.3	10.6	100.6	139	--
12/12/2002	144500	6.3	8.3	10.4	98.6	139	--
12/12/2002	150000	6.4	8.3	9.5	90.9	138	--
12/12/2002	151500	6.4	8.3	9.8	93.9	137	--
12/12/2002	153000	6.5	8.3	10.2	97.9	137	--
12/12/2002	154500	6.5	8.3	10.3	98.6	137	--
12/12/2002	160000	6.5	8.3	9.6	92.2	137	--
12/12/2002	161500	6.6	8.3	10.0	95.7	136	--
12/12/2002	163000	6.6	8.3	8.1	77.4	136	--
12/12/2002	164500	6.5	8.3	9.5	91.1	136	--
12/12/2002	170000	6.5	8.3	9.6	91.9	137	--
12/12/2002	171500	6.4	8.3	6.9	65.7	137	--
12/12/2002	173000	6.4	8.3	9.5	90.2	136	--
12/12/2002	174500	6.3	8.3	9.4	89.5	137	--
12/12/2002	180000	6.3	8.3	9.7	91.8	137	--
12/12/2002	181500	6.3	8.3	9.5	90.3	137	--
12/12/2002	183000	6.2	8.3	9.6	91.6	137	--
12/12/2002	184500	6.2	8.3	9.8	93.0	137	--
12/12/2002	190000	6.1	8.3	9.7	92.1	137	--
12/12/2002	191500	6.1	8.3	9.9	93.7	137	--
12/12/2002	193000	6.0	8.3	9.7	91.7	137	--
12/12/2002	194500	6.0	8.3	9.8	92.3	137	--
12/12/2002	200000	6.0	8.3	7.4	69.4	138	--
12/12/2002	201500	6.0	8.3	8.0	75.1	138	--
12/12/2002	203000	5.8	8.3	9.8	92.2	138	--
12/12/2002	204500	5.7	8.3	9.4	87.7	138	--
12/12/2002	210000	5.7	8.3	9.9	92.6	139	--
12/12/2002	211500	5.6	8.3	9.9	92.6	139	--
12/12/2002	213000	5.6	8.3	9.8	91.9	139	--
12/12/2002	214500	5.5	8.3	9.8	91.3	139	--
12/12/2002	220000	5.4	8.3	9.8	91.1	139	--
12/12/2002	221500	5.4	8.3	9.8	91.2	139	--
12/12/2002	223000	5.3	8.3	10.0	92.5	139	--
12/12/2002	224500	5.2	8.3	9.7	90.0	138	--
12/12/2002	230000	5.1	8.3	9.8	90.1	138	--
12/12/2002	231500	5.0	8.3	9.7	89.5	138	--
12/12/2002	233000	4.9	8.3	8.0	73.7	138	--
12/12/2002	234500	4.8	8.3	9.9	90.7	138	--
12/13/2002	000000	4.7	8.3	9.8	89.8	138	--

Table 8.12.3.--Continuous Monitoring Data for Rio Grande below Arroyo del Tajo
December 12 through December 16, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
12/13/2002	001500	4.6	8.3	7.5	68.4	138	--
12/13/2002	003000	4.5	8.3	7.6	69.3	138	--
12/13/2002	004500	4.4	8.3	9.9	89.3	138	--
12/13/2002	010000	4.3	8.3	9.8	88.8	138	--
12/13/2002	011500	4.2	8.3	10.5	94.7	138	--
12/13/2002	013000	4.1	8.3	10.2	91.9	138	--
12/13/2002	014500	4.1	8.3	10.2	91.9	137	--
12/13/2002	020000	4.0	8.3	9.3	83.2	137	--
12/13/2002	021500	3.9	8.3	10.0	89.8	137	--
12/13/2002	023000	3.8	8.3	9.9	88.6	137	--
12/13/2002	024500	3.7	8.3	10.1	89.7	137	--
12/13/2002	030000	3.7	8.3	10.2	91.0	137	--
12/13/2002	031500	3.6	8.3	9.4	83.0	137	--
12/13/2002	033000	3.6	8.3	10.0	89.0	137	--
12/13/2002	034500	3.5	8.3	10.4	91.7	137	--
12/13/2002	040000	3.5	8.3	10.3	90.9	137	--
12/13/2002	041500	3.4	8.3	10.0	88.4	137	--
12/13/2002	043000	3.3	8.3	10.5	92.6	137	--
12/13/2002	044500	3.3	8.3	10.2	89.6	137	--
12/13/2002	050000	3.2	8.3	10.3	90.2	136	--
12/13/2002	051500	3.1	8.3	10.1	88.5	136	--
12/13/2002	053000	3.1	8.3	10.3	90.2	136	--
12/13/2002	054500	3.0	8.3	10.2	89.0	136	--
12/13/2002	060000	3.0	8.3	10.4	90.4	136	--
12/13/2002	061500	2.9	8.3	10.2	88.6	136	--
12/13/2002	063000	2.9	8.3	10.0	87.2	136	--
12/13/2002	064500	2.8	8.3	10.2	88.8	136	--
12/13/2002	070000	2.7	8.3	10.4	90.4	136	--
12/13/2002	071500	2.7	8.3	10.2	88.3	136	--
12/13/2002	073000	2.6	8.3	10.1	86.9	136	--
12/13/2002	074500	2.6	8.3	10.8	92.8	136	--
12/13/2002	080000	2.6	8.3	10.7	92.3	136	--
12/13/2002	081500	2.5	8.3	10.5	90.4	136	--
12/13/2002	083000	2.5	8.3	9.2	78.9	136	--
12/13/2002	084500	2.5	8.3	8.7	75.2	136	--
12/13/2002	090000	2.5	8.3	10.5	90.7	136	--
12/13/2002	091500	2.6	8.3	10.4	89.4	136	--
12/13/2002	093000	2.7	8.3	10.4	89.5	135	--
12/13/2002	094500	2.7	8.3	10.4	90.0	135	--
12/13/2002	100000	2.8	8.3	8.5	73.6	136	--
12/13/2002	101500	2.9	8.3	8.2	71.5	136	--
12/13/2002	103000	3.2	8.3	9.3	81.2	136	--
12/13/2002	104500	3.3	8.3	7.7	67.7	136	--
12/13/2002	110000	3.6	8.3	10.2	90.8	136	--
12/13/2002	111500	3.8	8.3	9.5	84.4	136	--
12/13/2002	113000	3.9	8.3	8.8	79.1	137	--
12/13/2002	114500	4.1	8.3	8.4	75.4	137	--
12/13/2002	120000	4.2	8.3	7.6	68.8	137	--
12/13/2002	121500	4.3	8.3	8.0	72.0	137	--
12/13/2002	123000	4.5	8.3	7.7	69.8	137	--
12/13/2002	124500	4.6	8.3	7.6	69.1	137	--
12/13/2002	130000	5.3	8.4	10.3	95.3	137	--
12/13/2002	131500	5.3	8.4	7.9	72.9	138	--

Table 8.12.3.--Continuous Monitoring Data for Rio Grande below Arroyo del Tajo
December 12 through December 16, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
12/13/2002	133000	5.3	8.3	6.7	62.2	138	--
12/13/2002	134500	5.3	8.3	7.8	71.9	138	--
12/13/2002	140000	5.9	8.4	10.2	96.4	138	--
12/13/2002	141500	6.1	8.4	9.8	93.1	139	--
12/13/2002	143000	6.2	8.4	9.9	93.9	139	--
12/13/2002	144500	6.2	8.4	7.8	73.8	139	--
12/13/2002	150000	6.4	8.4	10.1	96.7	139	--
12/13/2002	151500	6.5	8.4	10.1	96.9	139	--
12/13/2002	153000	6.5	8.4	9.6	92.2	139	--
12/13/2002	154500	6.6	8.4	7.2	69.0	139	--
12/13/2002	160000	6.6	8.4	6.5	61.8	139	--
12/13/2002	161500	6.6	8.4	7.2	68.9	139	--
12/13/2002	163000	6.7	8.4	9.8	94.1	139	--
12/13/2002	164500	6.7	8.4	7.1	68.5	139	--
12/13/2002	170000	6.6	8.3	6.7	64.1	139	--
12/13/2002	171500	6.6	8.3	6.9	66.2	140	--
12/13/2002	173000	6.6	8.3	7.1	67.8	140	--
12/13/2002	174500	6.6	8.3	9.9	94.4	140	--
12/13/2002	180000	6.5	8.3	10.0	96.0	140	--
12/13/2002	181500	6.5	8.3	9.8	93.7	140	--
12/13/2002	183000	6.5	8.3	8.3	78.9	140	--
12/13/2002	184500	6.5	8.3	7.1	68.0	140	--
12/13/2002	190000	6.4	8.3	9.7	92.1	140	--
12/13/2002	191500	6.3	8.3	10.0	94.9	140	--
12/13/2002	193000	6.3	8.3	9.6	90.8	140	--
12/13/2002	194500	6.3	8.3	7.3	69.7	140	--
12/13/2002	200000	6.2	8.3	6.9	65.8	140	--
12/13/2002	201500	6.2	8.3	6.3	60.1	140	--
12/13/2002	203000	6.0	8.3	9.7	91.1	140	--
12/13/2002	204500	5.9	8.3	9.6	90.6	140	--
12/13/2002	210000	5.9	8.3	9.8	92.3	140	--
12/13/2002	211500	5.8	8.3	9.6	90.2	140	--
12/13/2002	213000	5.7	8.3	9.5	89.5	140	--
12/13/2002	214500	5.7	8.3	7.5	70.4	140	--
12/13/2002	220000	5.7	8.3	5.8	54.3	140	--
12/13/2002	221500	5.7	8.3	7.2	67.3	140	--
12/13/2002	223000	5.5	8.3	9.6	89.6	141	--
12/13/2002	224500	5.3	8.3	9.5	87.9	140	--
12/13/2002	230000	5.3	8.3	7.5	69.6	140	--
12/13/2002	231500	5.2	8.3	7.9	73.3	141	--
12/13/2002	233000	5.0	8.3	9.8	89.8	140	--
12/13/2002	234500	5.0	8.3	8.0	73.1	140	--
12/14/2002	000000	5.0	8.3	8.1	74.4	141	--
12/14/2002	001500	4.9	8.3	8.1	74.6	141	--
12/14/2002	003000	4.8	8.3	7.6	69.6	140	--
12/14/2002	004500	4.8	8.3	7.4	68.2	141	--
12/14/2002	010000	4.7	8.3	7.9	72.3	141	--
12/14/2002	011500	4.6	8.3	8.0	72.8	141	--
12/14/2002	013000	4.2	8.3	10.0	89.7	141	--
12/14/2002	014500	4.2	8.3	9.8	88.3	140	--
12/14/2002	020000	4.2	8.3	6.9	61.8	140	--
12/14/2002	021500	4.1	8.3	7.2	64.4	141	--
12/14/2002	023000	4.1	8.3	6.6	59.7	141	--

Table 8.12.3.--Continuous Monitoring Data for Rio Grande below Arroyo del Tajo
December 12 through December 16, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
12/14/2002	024500	4.0	8.3	7.7	69.2	140	--
12/14/2002	030000	3.9	8.3	7.4	66.3	141	--
12/14/2002	031500	3.9	8.3	7.0	62.2	140	--
12/14/2002	033000	3.8	8.3	7.1	62.9	141	--
12/14/2002	034500	3.8	8.3	7.0	62.8	141	--
12/14/2002	040000	3.8	8.3	6.8	60.3	141	--
12/14/2002	041500	3.8	8.3	7.1	62.8	141	--
12/14/2002	043000	3.7	8.3	7.3	64.7	142	--
12/14/2002	044500	3.6	8.3	7.3	65.2	142	--
12/14/2002	050000	3.6	8.3	7.2	64.0	141	--
12/14/2002	051500	3.4	8.3	7.3	64.2	141	--
12/14/2002	053000	3.3	8.3	7.5	66.4	142	--
12/14/2002	054500	3.3	8.3	7.5	65.7	142	--
12/14/2002	060000	3.2	8.3	6.4	56.2	142	--
12/14/2002	061500	3.2	8.3	6.4	56.0	142	--
12/14/2002	063000	3.1	8.3	7.3	64.1	142	--
12/14/2002	064500	3.1	8.3	7.2	62.8	142	--
12/14/2002	070000	3.0	8.3	7.3	64.1	143	--
12/14/2002	071500	3.0	8.3	7.5	65.4	143	--
12/14/2002	073000	2.9	8.3	7.6	65.9	143	--
12/14/2002	074500	2.9	8.3	7.0	61.1	143	--
12/14/2002	080000	2.8	8.3	6.7	57.8	143	--
12/14/2002	081500	2.8	8.3	7.0	60.6	143	--
12/14/2002	083000	2.7	8.3	7.0	60.7	143	--
12/14/2002	084500	2.7	8.3	6.9	59.7	143	--
12/14/2002	090000	2.6	8.3	7.2	62.4	144	--
12/14/2002	091500	2.7	8.3	7.1	61.7	144	--
12/14/2002	093000	2.7	8.3	7.2	62.7	144	--
12/14/2002	094500	2.7	8.3	7.2	62.3	144	--
12/14/2002	100000	2.8	8.3	7.2	62.7	144	--
12/14/2002	101500	2.8	8.3	7.2	62.4	144	--
12/14/2002	103000	2.9	8.3	7.3	63.5	144	--
12/14/2002	104500	3.0	8.3	7.2	63.2	144	--
12/14/2002	110000	3.1	8.3	7.3	63.7	144	--
12/14/2002	111500	3.3	8.3	7.2	63.2	144	--
12/14/2002	113000	3.4	8.3	6.9	61.1	144	--
12/14/2002	114500	3.5	8.3	6.6	58.5	144	--
12/14/2002	120000	3.5	8.3	7.5	66.0	144	--
12/14/2002	121500	3.8	8.3	7.5	66.5	145	--
12/14/2002	123000	4.2	8.3	7.4	66.3	144	--
12/14/2002	124500	4.3	8.3	7.0	63.6	144	--
12/14/2002	130000	4.4	8.3	7.1	64.6	144	--
12/14/2002	131500	4.6	8.3	7.0	63.7	144	--
12/14/2002	133000	4.9	8.3	7.6	69.8	144	--
12/14/2002	134500	5.2	8.3	7.3	67.3	144	--
12/14/2002	140000	5.4	8.3	7.1	66.0	144	--
12/14/2002	141500	5.5	8.3	6.7	62.1	144	--
12/14/2002	143000	5.6	8.3	6.5	60.3	143	--
12/14/2002	144500	5.6	8.3	6.1	57.4	143	--
12/14/2002	150000	5.7	8.3	6.6	61.4	143	--
12/14/2002	151500	5.9	8.3	6.4	60.5	143	--
12/14/2002	153000	6.0	8.3	6.3	59.6	143	--
12/14/2002	154500	6.1	8.3	6.8	64.7	143	--

Table 8.12.3.--Continuous Monitoring Data for Rio Grande below Arroyo del Tajo
December 12 through December 16, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
12/14/2002	160000	6.2	8.3	6.4	60.6	144	--
12/14/2002	161500	6.1	8.3	6.1	57.8	144	--
12/14/2002	163000	6.2	8.3	6.1	57.6	144	--
12/14/2002	164500	6.2	8.3	6.0	56.5	144	--
12/14/2002	170000	6.2	8.3	6.2	58.8	144	--
12/14/2002	171500	6.5	8.3	6.5	62.5	145	--
12/14/2002	173000	6.5	8.3	6.3	60.1	145	--
12/14/2002	174500	6.5	8.3	6.3	60.2	145	--
12/14/2002	180000	6.5	8.3	6.4	61.2	145	--
12/14/2002	181500	6.5	8.3	6.5	62.0	145	--
12/14/2002	183000	6.6	8.3	6.6	62.8	145	--
12/14/2002	184500	6.6	8.3	6.6	63.4	145	--
12/14/2002	190000	6.5	8.3	5.8	55.3	145	--
12/14/2002	191500	6.5	8.3	5.6	53.4	145	--
12/14/2002	193000	6.5	8.3	5.7	54.4	145	--
12/14/2002	194500	6.5	8.3	5.8	55.1	146	--
12/14/2002	200000	6.5	8.3	6.3	59.8	146	--
12/14/2002	201500	6.4	8.3	5.7	54.2	146	--
12/14/2002	203000	6.4	8.3	5.6	53.3	146	--
12/14/2002	204500	6.4	8.3	6.2	59.3	146	--
12/14/2002	210000	6.3	8.3	5.8	55.4	146	--
12/14/2002	211500	6.1	8.3	6.7	63.9	147	--
12/14/2002	213000	6.1	8.3	7.1	66.9	147	--
12/14/2002	214500	6.1	8.3	7.2	67.9	147	--
12/14/2002	220000	6.0	8.3	7.0	65.9	148	--
12/14/2002	221500	5.9	8.3	6.5	61.1	148	--
12/14/2002	223000	5.9	8.3	7.0	65.7	148	--
12/14/2002	224500	5.8	8.3	6.8	64.3	148	--
12/14/2002	230000	5.8	8.3	6.8	64.1	148	--
12/14/2002	231500	5.7	8.3	6.5	61.0	148	--
12/14/2002	233000	5.7	8.3	6.5	60.8	149	--
12/14/2002	234500	5.6	8.3	6.2	58.1	149	--
12/15/2002	000000	5.6	8.3	6.5	60.2	149	--
12/15/2002	001500	5.5	8.3	6.7	62.4	149	--
12/15/2002	003000	5.4	8.3	6.1	56.4	149	--
12/15/2002	004500	5.3	8.3	6.2	57.8	149	--
12/15/2002	010000	5.3	8.3	6.1	56.2	149	--
12/15/2002	011500	5.2	8.3	6.4	59.2	149	--
12/15/2002	013000	5.1	8.3	6.2	57.1	149	--
12/15/2002	014500	5.1	8.3	6.1	56.1	149	--
12/15/2002	020000	5.1	8.3	5.9	53.9	149	--
12/15/2002	021500	5.0	8.3	6.1	55.9	149	--
12/15/2002	023000	4.9	8.3	6.5	59.6	149	--
12/15/2002	024500	4.8	8.3	6.7	61.2	149	--
12/15/2002	030000	4.7	8.3	6.8	62.2	149	--
12/15/2002	031500	4.6	8.3	6.8	61.4	149	--
12/15/2002	033000	4.5	8.3	7.1	64.9	149	--
12/15/2002	034500	4.4	8.3	7.2	65.1	149	--
12/15/2002	040000	4.3	8.3	6.7	61.0	149	--
12/15/2002	041500	4.3	8.3	6.5	58.3	149	--
12/15/2002	043000	4.3	8.3	6.5	58.8	149	--
12/15/2002	044500	4.2	8.3	6.3	57.1	149	--
12/15/2002	050000	4.2	8.3	6.0	54.0	149	--

Table 8.12.3.--Continuous Monitoring Data for Rio Grande below Arroyo del Tajo
December 12 through December 16, 2002

Date	Time (HHMMSS)	Temp (^oC)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
12/15/2002	051500	4.2	8.3	6.3	57.0	149	--
12/15/2002	053000	4.1	8.3	6.5	58.8	149	--
12/15/2002	054500	4.0	8.3	6.3	56.7	149	--
12/15/2002	060000	4.0	8.3	6.5	58.1	149	--
12/15/2002	061500	3.9	8.3	6.8	60.6	149	--
12/15/2002	063000	3.8	8.3	6.7	60.0	149	--
12/15/2002	064500	3.7	8.3	6.7	59.4	149	--
12/15/2002	070000	3.7	8.3	6.5	58.2	149	--
12/15/2002	071500	3.6	8.3	6.4	56.7	149	--
12/15/2002	073000	3.6	8.3	6.4	56.6	149	--
12/15/2002	074500	3.6	8.3	6.5	57.5	149	--
12/15/2002	080000	3.5	8.3	6.5	58.0	149	--
12/15/2002	081500	3.5	8.3	6.6	58.7	149	--
12/15/2002	083000	3.4	8.3	6.7	59.2	149	--
12/15/2002	084500	3.4	8.3	6.6	58.3	149	--
12/15/2002	090000	3.4	8.3	6.6	57.8	149	--
12/15/2002	091500	3.3	8.3	6.6	58.2	149	--
12/15/2002	093000	3.3	8.3	6.6	58.4	149	--
12/15/2002	094500	3.3	8.3	6.6	57.8	149	--
12/15/2002	100000	3.3	8.3	6.4	56.6	149	--
12/15/2002	101500	3.3	8.3	6.6	58.1	149	--
12/15/2002	103000	3.4	8.3	6.5	57.1	149	--
12/15/2002	104500	3.4	8.3	6.5	56.9	149	--
12/15/2002	110000	3.4	8.3	6.4	56.5	149	--
12/15/2002	111500	3.5	8.3	6.5	57.4	149	--
12/15/2002	113000	3.6	8.3	6.9	60.8	149	--
12/15/2002	114500	3.8	8.3	6.8	60.2	149	--
12/15/2002	120000	3.9	8.3	6.8	60.7	149	--
12/15/2002	121500	4.0	8.3	6.7	60.2	149	--
12/15/2002	123000	4.2	8.3	6.9	61.9	149	--
12/15/2002	124500	4.3	8.3	6.8	61.7	149	--
12/15/2002	130000	4.4	8.3	6.5	59.1	149	--
12/15/2002	131500	4.5	8.3	6.3	56.9	149	--
12/15/2002	133000	4.6	8.3	6.1	55.9	149	--
12/15/2002	134500	4.6	8.3	6.3	57.0	150	--
12/15/2002	140000	4.7	8.3	6.5	59.5	149	--
12/15/2002	141500	4.9	8.3	6.3	57.6	150	--
12/15/2002	143000	5.0	8.3	6.2	56.6	150	--
12/15/2002	144500	5.0	8.3	6.2	57.0	150	--
12/15/2002	150000	5.1	8.3	6.3	58.3	150	--
12/15/2002	151500	5.3	8.3	6.1	56.6	150	--
12/15/2002	153000	5.3	8.3	6.0	56.1	150	--
12/15/2002	154500	5.4	8.3	6.1	56.3	150	--
12/15/2002	160000	5.5	8.3	5.9	55.1	150	--
12/15/2002	161500	5.5	8.3	5.8	54.1	150	--
12/15/2002	163000	5.5	8.3	5.6	51.8	150	--
12/15/2002	164500	5.6	8.3	5.6	52.6	150	--
12/15/2002	170000	5.6	8.3	5.6	52.1	150	--
12/15/2002	171500	5.7	8.3	5.8	54.2	151	--
12/15/2002	173000	5.7	8.3	5.9	55.2	151	--
12/15/2002	174500	5.8	8.3	5.9	55.3	151	--
12/15/2002	180000	5.8	8.3	6.0	55.9	151	--
12/15/2002	181500	5.9	8.3	5.8	55.0	151	--

Table 8.12.3.--Continuous Monitoring Data for Rio Grande below Arroyo del Tajo
December 12 through December 16, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
12/15/2002	183000	5.9	8.3	6.0	56.8	151	--
12/15/2002	184500	5.9	8.3	5.9	55.6	151	--
12/15/2002	190000	5.9	8.3	5.9	55.5	152	--
12/15/2002	191500	5.9	8.3	6.0	56.3	152	--
12/15/2002	193000	5.9	8.3	5.8	54.5	152	--
12/15/2002	194500	5.9	8.3	6.0	56.1	152	--
12/15/2002	200000	5.9	8.3	5.8	54.7	152	--
12/15/2002	201500	5.9	8.3	5.8	54.2	152	--
12/15/2002	203000	5.9	8.3	6.2	58.5	152	--
12/15/2002	204500	5.9	8.3	6.0	56.8	152	--
12/15/2002	210000	5.9	8.3	6.2	58.5	152	--
12/15/2002	211500	5.9	8.3	5.8	54.7	152	--
12/15/2002	213000	5.9	8.3	5.9	55.2	152	--
12/15/2002	214500	5.9	8.3	5.8	54.2	153	--
12/15/2002	220000	5.8	8.3	6.0	56.7	153	--
12/15/2002	221500	5.8	8.3	6.2	58.6	153	--
12/15/2002	223000	5.7	8.3	6.7	63.2	153	--
12/15/2002	224500	5.7	8.3	6.7	62.4	153	--
12/15/2002	230000	5.6	8.3	6.5	61.1	153	--
12/15/2002	231500	5.6	8.3	6.5	60.8	154	--
12/15/2002	233000	5.5	8.3	6.5	60.2	153	--
12/15/2002	234500	5.5	8.3	6.6	61.8	154	--
12/16/2002	000000	5.4	8.3	6.5	60.8	154	--
12/16/2002	001500	5.3	8.3	6.6	61.4	154	--
12/16/2002	003000	5.3	8.3	6.5	60.0	154	--
12/16/2002	004500	5.2	8.3	6.6	60.8	154	--
12/16/2002	010000	5.1	8.3	6.7	61.5	154	--
12/16/2002	011500	5.1	8.3	6.7	61.5	154	--
12/16/2002	013000	5.0	8.3	6.6	60.4	154	--
12/16/2002	014500	4.9	8.3	6.6	60.2	154	--
12/16/2002	020000	4.8	8.3	6.9	63.5	154	--
12/16/2002	021500	4.7	8.3	6.8	62.3	154	--
12/16/2002	023000	4.6	8.3	6.6	60.5	154	--
12/16/2002	024500	4.6	8.3	6.5	59.6	154	--
12/16/2002	030000	4.5	8.3	6.7	61.2	154	--
12/16/2002	031500	4.5	8.3	6.7	60.5	154	--
12/16/2002	033000	4.4	8.3	6.7	60.6	154	--
12/16/2002	034500	4.3	8.3	6.8	61.6	154	--
12/16/2002	040000	4.2	8.3	6.7	60.7	154	--
12/16/2002	041500	4.2	8.3	6.9	62.0	154	--
12/16/2002	043000	4.1	8.3	6.9	62.0	154	--
12/16/2002	044500	4.0	8.3	6.8	60.9	154	--
12/16/2002	050000	4.0	8.3	6.7	60.2	154	--
12/16/2002	051500	3.9	8.3	6.7	60.1	154	--
12/16/2002	053000	3.8	8.3	6.8	60.7	153	--
12/16/2002	054500	3.8	8.3	6.8	60.2	153	--
12/16/2002	060000	3.7	8.3	6.7	59.7	153	--
12/16/2002	061500	3.7	8.3	6.7	59.4	153	--
12/16/2002	063000	3.6	8.3	6.5	58.0	153	--
12/16/2002	064500	3.6	8.3	6.4	56.8	153	--
12/16/2002	070000	3.6	8.3	6.8	60.3	153	--
12/16/2002	071500	3.5	8.3	6.7	59.4	153	--
12/16/2002	073000	3.4	8.3	6.9	60.8	153	--

Table 8.12.3.--Continuous Monitoring Data for Rio Grande below Arroyo del Tajo
December 12 through December 16, 2002

Date	Time (HHMMSS)	Temp (^oC)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
12/16/2002	074500	3.3	8.3	6.8	60.3	153	--
12/16/2002	080000	3.3	8.3	6.9	60.5	153	--
12/16/2002	081500	3.3	8.3	6.9	60.6	153	--
12/16/2002	083000	3.2	8.3	6.9	60.8	153	--
12/16/2002	084500	3.2	8.3	6.9	60.4	153	--
12/16/2002	090000	3.2	8.3	6.8	59.7	153	--
12/16/2002	091500	3.1	8.3	7.0	61.3	153	--
12/16/2002	093000	3.1	8.3	7.2	62.7	153	--
12/16/2002	094500	3.1	8.3	7.0	61.3	153	--
12/16/2002	100000	3.1	8.3	6.7	58.7	153	--
12/16/2002	101500	3.1	8.3	7.0	60.9	153	--
12/16/2002	103000	3.2	8.3	6.8	59.8	153	--
12/16/2002	104500	3.2	8.3	6.9	60.8	153	--
12/16/2002	110000	3.3	8.3	6.8	59.4	153	--
12/16/2002	111500	3.4	8.3	6.9	60.6	153	--
12/16/2002	113000	3.5	8.3	7.0	62.1	153	--
12/16/2002	114500	3.6	8.3	7.0	61.8	153	--
12/16/2002	120000	3.8	8.3	6.7	60.0	153	--
12/16/2002	121500	3.9	8.3	6.8	60.7	153	--
12/16/2002	123000	4.0	8.3	6.8	60.8	153	--
12/16/2002	124500	4.2	8.3	6.5	58.5	153	--
12/16/2002	130000	4.3	8.3	6.5	58.7	153	--
12/16/2002	131500	4.5	8.3	6.6	60.1	153	--
12/16/2002	133000	4.7	8.3	6.4	58.5	153	--
12/16/2002	134500	4.8	8.3	6.3	57.3	153	--
12/16/2002	140000	4.9	8.3	6.3	57.4	153	--
12/16/2002	141500	5.1	8.3	6.6	60.7	153	--

Descriptive Statistics	*Temp (°C)*	*pH*	*DO (mg/L)*	*DO (%)*	*SPC (uS/cm)*	*Turbidity (NTU)*
Mean	4.7	8.3	7.5	69.0	145	--
Standard Error	0.06	0.00	0.08	0.70	0.31	--
Median	4.7	8.3	6.9	62.3	144	--
Mode	6.5	8.3	6.5	60.8	149	--
Standard Deviation	1.23	0.03	1.49	13.72	6.13	--
Sample Variance	1.52	0.00	2.23	188.25	37.58	--
Kurtosis	-1.31	-0.31	-0.85	-0.82	-1.47	--
Skewness	-0.06	0.87	0.82	0.88	0.06	--
Range	4.2	0.1	5.2	48.8	19	--
Minimum	2.5	8.3	5.6	51.8	135	--
Maximum	6.7	8.4	10.8	100.6	154	--
Sum	1809.6	3183.5	2899.0	26481.1	55540.8	--
Count	384	384	384	384	384	--

Table 8.12.4.--Continuous Monitoring Data for Rio Grande at Arroyo del Tajo
February 24 through February 26, 2003

[--, no data; °C, degrees Celsius; mg/L, milligrams per liter; % sat, percent saturation; uS/cm, microsiemens per centimeter; NTU, Nephelometric turbidity units.]

DataSonde 4a 40184
Log File Name : ARROYO DT 2-24-03
Setup Date (MMDDYY) : 022403
Setup Time (HHMMSS) : 093305
Starting Date (MMDDYY) : 022403
Starting Time (HHMMSS) : 100000
Stopping Date (MMDDYY) : 022803
Stopping Time (HHMMSS) : 120000
Interval (HHMMSS) : 001500
Sensor warmup (HHMMSS) : 000200
Circltr warmup (HHMMSS) : 000100

Date	Time (HHMMSS)	Temp (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
2/24/2003	101500	7.3	8.2	9.4	92.1	309	974
2/24/2003	103000	7.4	8.2	9.4	92.8	312	969
2/24/2003	104500	7.6	8.2	9.4	93.4	304	962
2/24/2003	110000	7.7	8.2	9.4	93.1	305	933
2/24/2003	111500	7.8	8.2	9.4	93.2	302	967
2/24/2003	113000	7.9	8.2	9.4	94.2	306	940
2/24/2003	114500	8.1	8.2	9.4	93.8	315	961
2/24/2003	120000	8.2	8.3	9.3	93.9	310	945
2/24/2003	121500	8.3	8.3	9.3	94.1	309	940
2/24/2003	123000	8.4	8.3	9.3	94.2	317	935
2/24/2003	124500	8.6	8.3	9.3	94.5	321	943
2/24/2003	130000	8.7	8.3	9.3	94.5	317	936
2/24/2003	131500	8.9	8.3	9.3	94.7	325	925
2/24/2003	133000	8.9	8.3	9.3	94.7	324	894
2/24/2003	134500	9.0	8.3	9.3	95.3	335	902
2/24/2003	140000	9.1	8.3	9.2	94.4	327	932
2/24/2003	141500	9.3	8.3	9.2	94.7	331	939
2/24/2003	143000	9.3	8.3	9.2	95.0	330	927
2/24/2003	144500	9.3	8.3	9.2	94.7	332	909
2/24/2003	150000	9.4	8.3	9.2	94.8	324	907
2/24/2003	151500	9.4	8.3	9.1	94.1	325	911
2/24/2003	153000	9.4	8.3	9.1	94.5	330	927
2/24/2003	154500	9.4	8.3	9.2	94.6	326	936
2/24/2003	160000	9.3	8.3	9.1	94.3	335	907
2/24/2003	161500	9.3	8.3	9.1	94.4	339	893
2/24/2003	163000	9.3	8.3	9.1	94.1	336	904
2/24/2003	164500	9.3	8.3	9.1	94.0	333	932
2/24/2003	170000	9.3	8.3	9.1	94.0	334	914
2/24/2003	171500	9.3	8.3	9.1	93.5	337	911
2/24/2003	173000	9.3	8.3	9.1	93.6	331	908
2/24/2003	174500	9.2	8.3	9.1	93.8	326	909
2/24/2003	180000	9.2	8.3	9.1	93.6	327	917
2/24/2003	181500	9.2	8.3	9.1	93.6	336	917
2/24/2003	183000	9.1	8.3	9.1	93.5	333	912
2/24/2003	184500	9.1	8.3	9.1	93.7	336	909
2/24/2003	190000	9.0	8.3	9.1	93.0	334	909
2/24/2003	191500	8.9	8.3	9.1	92.9	328	911

Table 8.12.4.--Continuous Monitoring Data for Rio Grande at Arroyo del Tajo
February 24 through February 26, 2003

Date	Time (HHMMSS)	Temp (^oC)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
2/24/2003	193000	8.9	8.2	9.1	92.6	330	916
2/24/2003	194500	8.8	8.2	9.1	92.9	335	911
2/24/2003	200000	8.7	8.2	9.1	92.6	334	938
2/24/2003	201500	8.6	8.2	9.2	93.1	336	925
2/24/2003	203000	8.5	8.2	9.2	92.9	336	947
2/24/2003	204500	8.5	8.2	9.1	92.4	339	918
2/24/2003	210000	8.4	8.2	9.2	93.1	336	936
2/24/2003	211500	8.3	8.2	9.2	92.6	336	925
2/24/2003	213000	8.2	8.2	9.2	92.8	334	950
2/24/2003	214500	8.1	8.2	9.2	92.5	336	956
2/24/2003	220000	8.0	8.2	9.2	92.4	340	954
2/24/2003	221500	7.9	8.2	9.3	92.4	338	951
2/24/2003	223000	7.7	8.2	9.3	92.6	338	946
2/24/2003	224500	7.6	8.2	9.3	92.5	339	940
2/24/2003	230000	7.5	8.2	9.3	92.4	340	946
2/24/2003	231500	7.4	8.2	9.4	92.4	337	944
2/24/2003	233000	7.3	8.2	9.4	92.2	337	951
2/24/2003	234500	7.3	8.2	9.4	92.7	341	944
2/25/2003	000000	7.2	8.2	9.5	92.7	337	926
2/25/2003	001500	7.1	8.2	9.4	92.4	345	941
2/25/2003	003000	7.0	8.2	9.5	92.2	337	952
2/25/2003	004500	6.9	8.2	9.5	92.4	340	944
2/25/2003	010000	6.8	8.2	9.4	91.6	334	943
2/25/2003	011500	6.7	8.2	9.5	91.7	337	941
2/25/2003	013000	6.6	8.2	9.5	91.6	336	964
2/25/2003	014500	6.5	8.2	9.5	91.5	337	966
2/25/2003	020000	6.4	8.2	9.5	91.8	335	962
2/25/2003	021500	6.3	8.2	9.5	91.6	339	931
2/25/2003	023000	6.2	8.2	9.5	91.3	336	950
2/25/2003	024500	6.2	8.2	9.6	91.7	335	938
2/25/2003	030000	6.1	8.2	9.6	92.0	334	933
2/25/2003	031500	6.0	8.2	9.7	92.1	336	931
2/25/2003	033000	6.0	8.2	9.7	91.9	335	943
2/25/2003	034500	5.9	8.2	9.7	92.4	336	920
2/25/2003	040000	5.8	8.2	9.8	92.4	337	956
2/25/2003	041500	5.8	8.2	9.7	92.2	334	954
2/25/2003	043000	5.7	8.2	9.8	92.2	328	919
2/25/2003	044500	5.7	8.2	9.7	91.6	335	934
2/25/2003	050000	5.7	8.2	9.7	91.7	332	915
2/25/2003	051500	5.6	8.2	9.8	92.1	334	925
2/25/2003	053000	5.6	8.2	9.7	91.8	331	917
2/25/2003	054500	5.6	8.2	9.8	92.1	334	929
2/25/2003	060000	5.6	8.2	9.8	92.0	331	909
2/25/2003	061500	5.5	8.2	9.8	92.2	338	912
2/25/2003	063000	5.5	8.2	9.8	92.4	337	911
2/25/2003	064500	5.4	8.2	9.9	92.5	336	914
2/25/2003	070000	5.4	8.2	9.8	91.8	336	909
2/25/2003	071500	5.3	8.2	9.9	92.3	337	901
2/25/2003	073000	5.3	8.2	9.9	92.4	342	925
2/25/2003	074500	5.3	8.2	9.9	92.3	343	897
2/25/2003	080000	5.3	8.2	9.9	92.6	343	890

Table 8.12.4.--Continuous Monitoring Data for Rio Grande at Arroyo del Tajo
February 24 through February 26, 2003

Date	Time (HHMMSS)	Temp (^oC)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
2/25/2003	081500	5.3	8.2	9.9	92.4	343	894
2/25/2003	083000	5.3	8.2	9.9	92.5	343	893
2/25/2003	084500	5.3	8.2	9.9	92.3	342	887
2/25/2003	090000	5.4	8.2	9.9	92.6	341	906
2/25/2003	091500	5.5	8.2	9.9	92.9	345	870
2/25/2003	093000	5.6	8.2	9.9	93.2	347	893
2/25/2003	094500	5.7	8.2	9.9	93.6	351	890
2/25/2003	100000	5.8	8.2	10.0	94.3	357	881
2/25/2003	101500	5.9	8.2	9.9	94.4	356	880
2/25/2003	103000	6.0	8.2	9.9	94.4	359	882
2/25/2003	104500	6.2	8.2	9.9	94.7	362	876
2/25/2003	110000	6.5	8.2	9.9	95.2	366	887
2/25/2003	111500	6.7	8.2	9.9	95.7	371	888
2/25/2003	113000	6.9	8.2	9.9	96.1	372	879
2/25/2003	114500	7.1	8.2	9.8	96.3	376	884
2/25/2003	120000	7.3	8.2	9.8	96.6	381	902
2/25/2003	121500	7.7	8.2	9.8	97.1	388	886
2/25/2003	123000	8.0	8.2	9.6	96.4	387	872
2/25/2003	124500	8.4	8.2	9.6	96.9	390	873
2/25/2003	130000	8.7	8.2	9.6	97.3	393	874
2/25/2003	131500	9.0	8.2	9.6	98.0	393	873
2/25/2003	133000	9.3	8.2	9.4	97.4	394	894
2/25/2003	134500	9.6	8.2	9.4	97.4	393	883
2/25/2003	140000	9.5	8.2	9.4	97.8	396	875
2/25/2003	141500	9.5	8.2	9.3	96.5	392	893
2/25/2003	143000	9.4	8.2	9.3	96.5	396	851
2/25/2003	144500	9.3	8.2	9.3	96.2	398	870
2/25/2003	150000	9.3	8.2	9.2	95.2	397	859
2/25/2003	151500	9.3	8.2	9.3	95.5	399	868
2/25/2003	153000	9.3	8.2	9.2	95.4	401	865
2/25/2003	154500	9.3	8.2	9.3	95.7	403	851
2/25/2003	160000	9.3	8.2	9.2	95.4	404	861
2/25/2003	161500	9.4	8.2	9.2	95.1	404	873
2/25/2003	163000	9.5	8.2	9.1	94.5	404	857
2/25/2003	164500	9.5	8.2	9.1	94.6	402	872
2/25/2003	170000	9.5	8.2	9.1	94.3	402	869
2/25/2003	171500	9.4	8.2	9.0	93.6	402	874
2/25/2003	173000	9.4	8.2	9.1	93.7	403	887
2/25/2003	174500	9.4	8.2	9.1	93.9	402	878
2/25/2003	180000	9.4	8.2	9.1	93.8	401	897
2/25/2003	181500	9.4	8.2	9.1	94.5	402	876
2/25/2003	183000	9.4	8.2	9.1	93.7	402	895
2/25/2003	184500	9.3	8.2	9.1	93.5	402	903
2/25/2003	190000	9.2	8.2	9.0	93.1	402	887
2/25/2003	191500	9.1	8.2	9.0	92.7	401	887
2/25/2003	193000	8.9	8.2	9.1	92.8	401	907
2/25/2003	194500	8.8	8.2	9.1	92.5	400	900
2/25/2003	200000	8.7	8.2	9.0	92.1	400	922
2/25/2003	201500	8.6	8.2	9.1	92.1	400	913
2/25/2003	203000	8.5	8.2	9.2	92.8	400	923
2/25/2003	204500	8.3	8.2	9.2	92.6	399	907

Table 8.12.4.--Continuous Monitoring Data for Rio Grande at Arroyo del Tajo
February 24 through February 26, 2003

Date	Time (HHMMSS)	Temp (^oC)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
2/25/2003	210000	8.2	8.2	9.2	92.2	399	935
2/25/2003	211500	8.1	8.2	9.2	92.1	398	933
2/25/2003	213000	8.0	8.2	9.2	92.1	400	943
2/25/2003	214500	7.9	8.2	9.2	92.1	400	938
2/25/2003	220000	7.8	8.2	9.2	91.9	399	924
2/25/2003	221500	7.7	8.2	9.2	91.8	398	942
2/25/2003	223000	7.6	8.2	9.3	92.1	396	932
2/25/2003	224500	7.5	8.2	9.3	91.7	395	949
2/25/2003	230000	7.4	8.2	9.3	91.6	395	946
2/25/2003	231500	7.3	8.2	9.3	91.7	392	966
2/25/2003	233000	7.2	8.2	9.4	92.1	392	960
2/25/2003	234500	7.1	8.2	9.4	92.0	393	954
2/26/2003	000000	7.0	8.2	9.4	92.2	393	954
2/26/2003	001500	6.9	8.2	9.4	91.7	391	943
2/26/2003	003000	6.8	8.2	9.4	91.7	390	964
2/26/2003	004500	6.7	8.2	9.5	91.9	389	953
2/26/2003	010000	6.6	8.2	9.5	91.6	389	936
2/26/2003	011500	6.6	8.2	9.5	91.6	389	973
2/26/2003	013000	6.5	8.2	9.5	91.6	387	948
2/26/2003	014500	6.4	8.2	9.5	91.6	387	939
2/26/2003	020000	6.3	8.2	9.5	91.4	384	939
2/26/2003	021500	6.3	8.2	9.5	90.9	385	942
2/26/2003	023000	6.2	8.2	9.6	91.6	384	949
2/26/2003	024500	6.2	8.2	9.6	91.7	385	929
2/26/2003	030000	6.1	8.2	9.6	91.8	384	953
2/26/2003	031500	6.1	8.2	9.6	91.9	383	953
2/26/2003	033000	6.0	8.2	9.6	91.0	381	978
2/26/2003	034500	6.0	8.2	9.6	91.4	381	942
2/26/2003	040000	5.9	8.2	9.6	91.6	381	942
2/26/2003	041500	5.9	8.2	9.6	91.5	381	946
2/26/2003	043000	5.9	8.2	9.6	91.5	381	955
2/26/2003	044500	5.9	8.2	9.7	91.9	382	957
2/26/2003	050000	5.9	8.2	9.7	91.7	380	967
2/26/2003	051500	5.9	8.2	9.6	91.3	380	928
2/26/2003	053000	5.9	8.2	9.7	92.0	380	918
2/26/2003	054500	5.9	8.2	9.7	91.8	380	951
2/26/2003	060000	5.9	8.2	9.7	92.1	379	942
2/26/2003	061500	5.9	8.2	9.7	91.9	379	921
2/26/2003	063000	5.9	8.2	9.7	92.2	380	942
2/26/2003	064500	5.9	8.2	9.7	91.9	378	951
2/26/2003	070000	5.9	8.2	9.6	91.5	378	932
2/26/2003	071500	5.9	8.2	9.6	91.3	373	961
2/26/2003	073000	6.0	8.2	9.6	91.7	377	936
2/26/2003	074500	6.0	8.2	9.6	91.7	377	919
2/26/2003	080000	6.0	8.2	9.6	91.8	372	938
2/26/2003	081500	6.0	8.2	9.7	92.2	376	924
2/26/2003	083000	6.1	8.2	9.7	92.2	376	899
2/26/2003	084500	6.2	8.2	9.7	92.3	377	909
2/26/2003	090000	6.2	8.2	9.6	91.9	376	923
2/26/2003	091500	6.3	8.2	9.6	92.4	378	906
2/26/2003	093000	6.4	8.2	9.6	92.5	378	907

Table 8.12.4.--Continuous Monitoring Data for Rio Grande at Arroyo del Tajo
February 24 through February 26, 2003

Date	Time (HHMMSS)	Temp (^oC)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
2/26/2003	094500	6.5	8.2	9.6	92.7	377	918
2/26/2003	100000	6.8	8.2	9.6	93.0	378	912
2/26/2003	101500	6.8	8.2	9.6	93.2	377	887
2/26/2003	103000	7.0	8.2	9.6	94.1	380	912
2/26/2003	104500	7.0	8.2	9.6	93.9	381	901
2/26/2003	110000	7.1	8.2	9.6	93.5	379	886
2/26/2003	111500	7.3	8.2	9.6	94.3	381	895
2/26/2003	113000	7.4	8.2	9.5	94.1	382	915
2/26/2003	114500	7.5	8.2	9.5	93.7	379	913
2/26/2003	120000	7.7	8.2	9.5	94.4	382	890
2/26/2003	121500	8.1	8.2	9.5	95.2	383	889
2/26/2003	123000	8.4	8.2	9.5	95.5	384	897
2/26/2003	124500	8.5	8.2	9.4	95.3	383	900
2/26/2003	130000	8.5	8.2	9.4	95.4	384	877
2/26/2003	131500	8.7	8.2	9.3	94.7	384	868
2/26/2003	133000	8.9	8.2	9.4	95.7	386	858
2/26/2003	134500	9.1	8.2	9.3	95.8	386	858
2/26/2003	140000	9.2	8.2	9.3	96.1	387	855
2/26/2003	141500	9.3	8.2	9.3	95.7	387	864

Descriptive Statistics	*Temp (°C)*	*pH*	*DO (mg/L)*	*DO (%)*	*SPC (uS/cm)*	*Turbidity (NTU)*
Mean	7.5	8.2	9.4	93.2	362	918
Standard Error	0.10	0.00	0.02	0.11	2.03	2.07
Median	7.4	8.2	9.4	92.7	376	919
Mode	5.9	8.2	9.4	92.4	336	909
Standard Deviation	1.40	0.03	0.26	1.57	29.36	29.95
Sample Variance	1.95	0.00	0.07	2.45	862.27	897.05
Kurtosis	-1.48	-0.05	-1.10	0.13	-1.45	-0.81
Skewness	0.00	0.95	0.17	0.93	-0.14	-0.25
Range	4.3	0.1	0.9	7.1	102	127
Minimum	5.3	8.2	9.0	90.9	302	851
Maximum	9.6	8.3	10.0	98.0	404	978
Sum	1566.4	1714.2	1972.1	19487.9	75723	191820
Count	209	209	209	209	209	209

Table 8.13.1.--Continuous Monitoring Data for Rio Grande at San Pedro
August 20 through 21, 2002

[--, no data; °C, degrees Celsius; mg/L, milligrams per liter; % sat, percent saturation; uS/cm, microsiemens per centimeter; NTU, Nephelometric turbidity units.]

MiniSonde4a 36754
Log File Name : SAN PEDRO 8-20-02
Setup Date (MMDDYY) : 082002
Setup Time (HHMMSS) : 095612
Starting Date (MMDDYY) : 082002
Starting Time (HHMMSS) : 090000
Stopping Date (MMDDYY) : 082602
Stopping Time (HHMMSS) : 120000
Interval (HHMMSS) : 001500
Sensor warmup (HHMMSS) : 000200
Circltr warmup (HHMMSS) : 000100

Date	Time (HHMMSS)	Temp (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
8/20/2002	093000	18.6	8.1	7.3	92.6	763	--
8/20/2002	094500	18.9	8.2	7.3	92.7	762	--
8/20/2002	100000	19.2	8.2	7.4	94.5	763	--
8/20/2002	101500	19.7	8.2	7.4	95.6	763	--
8/20/2002	103000	20.1	8.2	7.2	93.8	762	--
8/20/2002	104500	20.6	8.2	7.0	92.1	762	--
8/20/2002	110000	21.2	8.2	7.2	95.6	763	--
8/20/2002	111500	21.7	8.3	7.1	95.4	763	--
8/20/2002	113000	22.3	8.3	7.1	96.3	764	--
8/20/2002	114500	22.9	8.3	7.1	97.9	765	--
8/20/2002	120000	23.5	8.3	6.9	96.5	765	--
8/20/2002	121500	24.2	8.3	7.0	98.1	765	--
8/20/2002	123000	24.9	8.3	6.9	97.9	765	--
8/20/2002	124500	25.5	8.3	6.8	98.1	766	--
8/20/2002	130000	26.1	8.3	6.9	101.2	767	--
8/20/2002	131500	26.7	8.3	6.7	99.4	767	--
8/20/2002	133000	27.3	8.3	6.8	101.9	768	--
8/20/2002	134500	27.8	8.3	6.7	100.4	768	--
8/20/2002	140000	28.4	8.3	6.7	101.9	767	--
8/20/2002	141500	28.8	8.3	6.5	98.6	767	--
8/20/2002	143000	29.2	8.3	6.5	100.3	768	--
8/20/2002	144500	29.5	8.3	6.4	98.8	746	--
8/20/2002	150000	29.8	8.3	6.2	97.3	672	--
8/20/2002	151500	30.1	8.4	6.2	96.3	642	--
8/20/2002	153000	30.2	8.3	6.2	96.8	617	--
8/20/2002	154500	29.9	8.4	6.0	93.5	601	--
8/20/2002	160000	29.6	8.3	5.3	81.7	585	--
8/20/2002	161500	29.2	8.4	5.0	76.4	539	--
8/20/2002	163000	28.9	8.4	4.6	69.9	533	--
8/20/2002	164500	28.5	8.4	4.1	62.5	530	--
8/20/2002	170000	28.2	8.4	2.2	33.4	528	--
8/20/2002	171500	27.9	8.4	2.1	31.3	527	--
8/20/2002	173000	27.6	8.4	2.1	31.8	526	--
8/20/2002	174500	27.3	8.4	2.0	29.1	524	--
8/20/2002	180000	27.1	8.4	1.9	27.9	524	--
8/20/2002	181500	26.9	8.4	1.9	27.4	524	--
8/20/2002	183000	26.7	8.4	1.9	28.0	524	--
8/20/2002	184500	26.5	8.4	2.0	28.7	524	--
8/20/2002	190000	26.3	8.4	2.1	30.7	524	--

Table 8.13.1.--Continuous Monitoring Data for Rio Grande at San Pedro
August 20 through 21, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
8/20/2002	191500	26.0	8.4	1.9	27.7	524	--
8/20/2002	193000	25.7	8.4	1.9	27.1	524	--
8/20/2002	194500	25.4	8.4	1.9	27.3	524	--
8/20/2002	200000	25.1	8.4	1.8	25.8	524	--
8/20/2002	201500	24.8	8.3	1.7	24.0	523	--
8/20/2002	203000	24.6	8.3	1.7	24.6	522	--
8/20/2002	204500	24.3	8.3	1.7	24.3	522	--
8/20/2002	210000	24.1	8.3	1.8	25.6	522	--
8/20/2002	211500	23.9	8.3	1.8	24.6	521	--
8/20/2002	213000	23.7	8.3	1.8	25.7	521	--
8/20/2002	214500	23.5	8.3	1.8	24.7	520	--
8/20/2002	220000	23.3	8.3	1.8	24.3	520	--
8/20/2002	221500	23.1	8.3	1.9	25.8	519	--
8/20/2002	223000	22.9	8.3	1.9	25.7	519	--
8/20/2002	224500	22.7	8.3	1.9	25.9	518	--
8/20/2002	230000	22.5	8.3	1.9	26.1	518	--
8/20/2002	231500	22.3	8.3	1.9	26.1	518	--
8/20/2002	233000	22.1	8.3	1.9	26.2	517	--
8/20/2002	234500	21.9	8.3	1.9	25.8	517	--
8/21/2002	000000	21.6	8.3	1.9	25.7	517	--
8/21/2002	001500	21.4	8.3	2.0	26.3	516	--
8/21/2002	003000	21.1	8.3	2.0	26.8	516	--
8/21/2002	004500	21.0	8.3	2.1	27.2	515	--
8/21/2002	010000	20.8	8.3	2.1	27.5	515	--
8/21/2002	011500	20.6	8.3	2.1	28.1	515	--
8/21/2002	013000	20.4	8.3	2.1	28.0	514	--
8/21/2002	014500	20.3	8.3	2.2	28.1	513	--
8/21/2002	020000	20.2	8.3	2.2	28.0	512	--
8/21/2002	021500	20.0	8.3	2.2	28.6	512	--
8/21/2002	023000	19.9	8.3	2.3	29.6	512	--
8/21/2002	024500	19.8	8.3	2.2	29.0	511	--
8/21/2002	030000	19.7	8.3	2.2	28.7	510	--
8/21/2002	031500	19.5	8.3	2.2	28.7	509	--
8/21/2002	033000	19.4	8.3	2.2	28.8	509	--
8/21/2002	034500	19.2	8.3	2.3	29.1	508	--
8/21/2002	040000	19.1	8.2	2.3	28.9	508	--
8/21/2002	041500	18.9	8.2	2.3	29.6	507	--
8/21/2002	043000	18.8	8.2	2.4	29.9	507	--
8/21/2002	044500	18.7	8.2	2.3	29.5	506	--
8/21/2002	050000	18.6	8.2	2.4	30.1	506	--
8/21/2002	051500	18.4	8.2	2.4	30.1	506	--
8/21/2002	053000	18.3	8.2	2.4	30.1	506	--
8/21/2002	054500	18.2	8.2	2.3	29.3	505	--
8/21/2002	060000	18.0	8.2	2.4	29.9	505	--
8/21/2002	061500	17.9	8.2	2.4	29.8	504	--
8/21/2002	063000	17.7	8.2	2.4	29.6	504	--
8/21/2002	064500	17.6	8.2	2.3	29.0	503	--
8/21/2002	070000	17.5	8.2	2.4	29.2	503	--
8/21/2002	071500	17.4	8.2	2.4	29.5	502	--
8/21/2002	073000	17.3	8.2	2.4	29.3	502	--
8/21/2002	074500	17.2	8.2	2.4	28.9	502	--
8/21/2002	080000	17.2	8.2	2.4	29.1	502	--
8/21/2002	081500	17.2	8.1	2.4	29.4	501	--

Table 8.13.1.--Continuous Monitoring Data for Rio Grande at San Pedro
August 20 through 21, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
8/21/2002	083000	17.3	8.1	2.4	29.3	501	--
8/21/2002	084500	17.4	8.1	2.4	29.1	500	--
8/21/2002	090000	17.6	8.1	2.4	29.2	500	--
8/21/2002	091500	17.8	8.1	2.4	29.2	500	--
8/21/2002	093000	18.1	8.1	2.3	28.7	500	--
8/21/2002	094500	18.4	8.1	2.3	28.5	500	--
8/21/2002	100000	18.7	8.1	2.2	28.4	500	--
8/21/2002	101500	19.1	8.1	2.2	27.7	500	--
8/21/2002	103000	19.5	8.1	2.1	27.4	500	--
8/21/2002	104500	20.0	8.1	2.1	27.5	501	--
8/21/2002	110000	20.6	8.1	2.0	26.7	501	--
8/21/2002	111500	21.2	8.1	2.0	26.6	502	--
8/21/2002	113000	21.9	8.1	1.9	26.0	502	--
8/21/2002	114500	22.5	8.1	1.9	25.2	502	--
8/21/2002	120000	23.2	8.0	1.8	24.6	503	--
8/21/2002	121500	23.9	8.0	1.6	23.0	503	--
8/21/2002	123000	24.6	8.0	1.6	22.1	504	--
8/21/2002	124500	25.3	8.0	1.5	22.0	505	--
8/21/2002	130000	26.0	8.0	1.4	19.8	506	--
8/21/2002	131500	26.7	8.0	1.3	19.2	507	--

Descriptive Statistics (statistics before probe burial)	*Temp (°C)*	*pH*	*DO (mg/L)*	*DO (%)*	*SPC (uS/cm)*	*Turbidity (NTU)*
Mean	24.0	8.3	6.9	97.3	764	--
Standard Error	0.78	0.01	0.06	0.64	0.97	--
Median	23.9	8.3	7.0	97.9	765	--
Mode		8.3		95.6	763	--
Standard Deviation	3.65	0.05	0.30	2.99	4.54	--
Sample Variance	13.33	0.00	0.09	8.95	20.62	--
Kurtosis	-1.41	0.65	-0.66	-0.93	12.50	--
Skewness	0.05	-1.07	-0.26	-0.14	-3.14	--
Range	10.9	0.2	1.0	9.8	22	--
Minimum	18.6	8.1	6.4	92.1	746	--
Maximum	29.5	8.3	7.4	101.9	768	--
Sum	527.1	181.7	152.9	2139.6	16809	--
Count	22	22	22	22	22	--

Table 8.13.2.--Continuous Monitoring Data for Rio Grande at San Pedro
January 14 through January 15, 2003

[--, no data; ~, approximately; >, greater than; °C, degrees Celsius; mg/L, milligrams per liter; % sat, percent saturation; uS/cm, microsiemens per centimeter; NTU, Nephelometric turbidity units.]

DataSonde 4a 40184
Log File Name : SAN PEDRO 1-14-03
Setup Date (MMDDYY) : 011403
Setup Time (HHMMSS) : 104538
Starting Date (MMDDYY) : 011403
Starting Time (HHMMSS) : 104500
Stopping Date (MMDDYY) : 011503
Stopping Time (HHMMSS) : 230000
Interval (HHMMSS) : 001500
Sensor warmup (HHMMSS) : 000200
Circltr warmup (HHMMSS) : 000100

Date	Time (HHMMSS)	Temp (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
1/14/2003	104500	3.9	8.3	10.9	96.8	391	744
1/14/2003	110000	4.1	8.3	11.0	97.8	390	655
1/14/2003	111500	4.4	8.4	10.8	96.6	390	614
1/14/2003	113000	4.6	8.4	10.7	96.7	390	573
1/14/2003	114500	4.8	8.4	10.6	96.7	389	555
1/14/2003	120000	5.1	8.4	10.7	97.8	390	567
1/14/2003	121500	5.4	8.4	10.7	98.9	390	743
1/14/2003	123000	5.6	8.4	10.7	99.2	391	> 1000
1/14/2003	124500	5.9	8.4	10.5	98.3	391	> 1000
1/14/2003	130000	6.1	8.4	10.5	98.6	391	475
1/14/2003	131500	6.3	8.4	10.5	99.1	392	430
1/14/2003	133000	6.6	8.4	10.5	99.6	392	420
1/14/2003	134500	6.8	8.4	10.5	100.7	392	416
1/14/2003	140000	7.0	8.4	10.5	101.3	392	403
1/14/2003	141500	7.2	8.4	10.6	102.1	393	399
1/14/2003	143000	7.4	8.4	10.3	99.7	393	404
1/14/2003	144500	7.5	8.4	10.2	99.3	393	372
1/14/2003	150000	7.7	8.4	10.1	98.6	393	372
1/14/2003	151500	7.8	8.4	10.1	98.9	393	359
1/14/2003	153000	7.9	8.4	10.2	100.5	394	351
1/14/2003	154500	7.9	8.4	10.1	99.3	394	343
1/14/2003	160000	8.0	8.4	10.1	98.8	395	345
1/14/2003	161500	8.0	8.4	10.2	100.4	395	330
1/14/2003	163000	8.0	8.4	9.9	97.4	395	335
1/14/2003	164500	7.9	8.4	9.8	96.7	396	322
1/14/2003	170000	7.9	8.4	9.9	97.3	397	302
1/14/2003	171500	7.9	8.4	10.1	99.1	398	313
1/14/2003	173000	7.8	8.4	9.9	97.1	399	303
1/14/2003	174500	7.8	8.4	9.9	97.2	399	303
1/14/2003	180000	7.7	8.4	9.9	96.8	400	293
1/14/2003	181500	7.6	8.4	9.9	96.2	401	300
1/14/2003	183000	7.6	8.4	9.9	96.2	401	290
1/14/2003	184500	7.5	8.4	9.9	96.4	402	285
1/14/2003	190000	7.4	8.4	9.8	94.8	402	290
1/14/2003	191500	7.3	8.4	10.0	96.6	402	301
1/14/2003	193000	7.3	8.4	9.7	94.1	402	289
1/14/2003	194500	7.2	8.4	9.7	93.3	403	272

Table 8.13.2.--Continuous Monitoring Data for Rio Grande at San Pedro
January 14 through January 15, 2003

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
1/14/2003	200000	7.1	8.4	9.9	95.3	402	294
1/14/2003	201500	7.0	8.4	9.9	95.5	403	272
1/14/2003	203000	6.9	8.4	9.8	93.3	403	275
1/14/2003	204500	6.8	8.4	9.8	93.8	403	283
1/14/2003	210000	6.7	8.4	9.8	93.4	404	283
1/14/2003	211500	6.6	8.4	9.8	93.0	403	267
1/14/2003	213000	6.5	8.4	9.8	92.7	403	285
1/14/2003	214500	6.5	8.4	9.8	92.8	403	283
1/14/2003	220000	6.4	8.4	9.8	92.8	404	282
1/14/2003	221500	6.3	8.4	9.9	93.1	404	278
1/14/2003	223000	6.2	8.4	9.8	92.7	404	267
1/14/2003	224500	6.2	8.4	9.8	92.2	405	268
1/14/2003	230000	6.1	8.4	9.9	92.7	405	283
1/14/2003	231500	6.1	8.4	10.0	93.4	405	262
1/14/2003	233000	6.0	8.4	10.0	93.2	405	249
1/14/2003	234500	5.9	8.4	9.8	91.1	405	269
1/15/2003	000000	5.9	8.4	9.8	91.8	404	261
1/15/2003	001500	5.8	8.4	9.8	91.7	405	> 1000
1/15/2003	003000	5.8	8.3	9.8	91.7	406	> 1000
1/15/2003	004500	5.7	8.4	9.9	91.9	405	> 1000
1/15/2003	010000	5.7	8.4	9.9	91.6	406	> 1000
1/15/2003	011500	5.6	8.4	10.0	92.6	405	> 1000
1/15/2003	013000	5.6	8.4	10.1	93.7	406	> 1000
1/15/2003	014500	5.5	8.3	10.0	92.4	406	> 1000
1/15/2003	020000	5.5	8.4	9.9	91.0	405	> 1000
1/15/2003	021500	5.4	8.3	9.9	91.7	406	> 1000
1/15/2003	023000	5.3	8.3	10.0	91.6	406	> 1000
1/15/2003	024500	5.3	8.3	9.9	91.3	406	> 1000
1/15/2003	030000	5.2	8.3	10.2	93.5	406	> 1000
1/15/2003	031500	5.1	8.3	10.0	91.6	405	307
1/15/2003	033000	5.1	8.3	10.0	91.8	406	982
1/15/2003	034500	5.0	8.3	10.1	91.8	405	281
1/15/2003	040000	4.9	8.3	10.1	91.7	406	263
1/15/2003	041500	4.8	8.3	10.2	92.6	406	270
1/15/2003	043000	4.8	8.3	10.2	92.9	405	258
1/15/2003	044500	4.7	8.3	10.2	92.2	405	266
1/15/2003	050000	4.6	8.3	10.1	91.7	405	290
1/15/2003	051500	4.5	8.3	10.3	92.9	404	261
1/15/2003	053000	4.4	8.3	10.3	93.1	404	258
1/15/2003	054500	4.4	8.3	10.3	92.3	404	272
1/15/2003	060000	4.3	8.3	10.3	92.0	404	265
1/15/2003	061500	4.2	8.3	10.3	91.9	403	281
1/15/2003	063000	4.1	8.3	10.4	92.2	403	272
1/15/2003	064500	4.0	8.3	10.4	92.6	402	293
1/15/2003	070000	3.9	8.3	10.5	92.6	402	270
1/15/2003	071500	3.8	8.3	10.4	91.6	401	288
1/15/2003	073000	3.7	8.3	10.4	91.4	400	277
1/15/2003	074500	3.6	8.3	10.5	92.7	399	257
1/15/2003	080000	3.5	8.3	10.6	92.6	398	274
1/15/2003	081500	3.4	8.3	10.7	93.5	397	261
1/15/2003	083000	3.4	8.3	10.7	93.9	397	262

Table 8.13.2.--Continuous Monitoring Data for Rio Grande at San Pedro
January 14 through January 15, 2003

Date	Time (HHMMSS)	Temp (^oC)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
1/15/2003	084500	3.4	8.3	10.6	92.4	396	259
1/15/2003	090000	3.4	8.3	10.6	93.0	396	258
1/15/2003	091500	3.4	8.3	10.7	93.5	395	254
1/15/2003	093000	3.4	8.3	10.8	95.0	395	245
1/15/2003	094500	3.5	8.4	10.8	94.8	394	244
1/15/2003	100000	3.6	8.4	10.8	95.0	394	256
1/15/2003	101500	3.8	8.4	10.8	95.7	393	248
1/15/2003	103000	3.9	8.4	10.8	96.0	392	245
1/15/2003	104500	4.1	8.4	10.7	95.5	392	235
1/15/2003	110000	4.3	8.4	10.7	95.7	392	249
1/15/2003	111500	4.6	8.3	10.6	95.8	392	250
1/15/2003	113000	4.8	8.3	10.5	95.4	392	253
1/15/2003	114500	5.0	8.3	10.6	96.6	392	> 1000
1/15/2003	120000	5.3	8.3	10.6	97.7	392	652
1/15/2003	121500	5.6	8.3	10.6	98.1	392	> 1000
1/15/2003	123000	5.8	8.3	10.7	99.6	392	253
1/15/2003	124500	6.1	8.3	10.5	98.7	392	252
1/15/2003	130000	6.4	8.3	10.6	99.7	391	246
1/15/2003	131500	6.6	8.3	10.4	98.7	391	250

Descriptive Statistics	*Temp (°C)*	*pH*	*DO (mg/L)*	*DO (%)*	*SPC (uS/cm)*	*Turbidity (NTU)*
Mean	5.7	8.3	10.2	95.1	399	431
Standard Error	0.14	0.00	0.03	0.28	0.56	25.98
Median	5.7	8.4	10.2	94.1	400	290
Mode	3.9	8.3	10.5	91.7	392	> 1000
Standard Deviation	1.42	0.01	0.35	2.95	5.74	268.69
Sample Variance	2.01	0.00	0.13	8.69	32.98	72194.05
Kurtosis	-1.15	1.46	-1.32	-1.05	-1.60	0.47
Skewness	0.01	0.47	0.24	0.46	-0.19	1.46
Range	4.6	0.1	1.3	11.1	17	766
Minimum	3.4	8.3	9.7	91.0	389	235
Maximum	8.0	8.4	11.0	102.1	406	> 1000
Sum	609.1	893.4	1095.1	10170.9	42670	46102
Count	107	107	107	107	107	107

Table 8.14.1.--Continuous Monitoring Data for Rio Grande at North Boundary Bosque del Apache NWR, August 19 though 20, 2002

[--, no data; °C, degrees Celsius; mg/L, milligrams per liter; % sat, percent saturation; uS/cm, microsiemens per centimeter; NTU, Nephelometric turbidity units.]

DataSonde 4a 40183
Log File Name : BDANWR N 8-19-02
Setup Date (MMDDYY) : 081902
Setup Time (HHMMSS) : 084502
Starting Date (MMDDYY) : 081902
Starting Time (HHMMSS) : 100002
Stopping Date (MMDDYY) : 082102
Stopping Time (HHMMSS) : 120002
Interval (HHMMSS) : 001500
Sensor warmup (HHMMSS) : 000200
CircItr warmup (HHMMSS) : 000100

Date	Time (HHMMSS)	Temp (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
8/19/02	091502	20.2	8.3	7.7	100.6	783	791
8/19/02	093002	20.6	8.3	7.6	99.5	782	769
8/19/02	094502	21.0	8.4	7.7	101.4	782	817
8/19/02	100002	21.4	8.4	7.6	101.2	783	953
8/19/02	101502	21.8	8.4	7.6	102.3	783	937
8/19/02	103002	22.3	8.4	7.6	103.7	784	902
8/19/02	104502	22.9	8.4	7.5	103.3	784	> 1000
8/19/02	110002	23.5	8.4	7.5	103.8	785	> 1000
8/19/02	111502	23.9	8.4	7.4	103.7	785	> 1000
8/19/02	113002	24.4	8.4	7.4	104.6	786	> 1000
8/19/02	114502	24.9	8.4	7.2	103.3	786	> 1000
8/19/02	120002	25.4	8.4	7.2	103.5	787	> 1000
8/19/02	121502	25.9	8.4	7.1	103.7	788	> 1000
8/19/02	123002	26.5	8.4	7.1	104.1	788	> 1000
8/19/02	124502	26.9	8.4	7.0	103.8	789	898
8/19/02	130002	27.5	8.4	7.0	103.9	790	840
8/19/02	131502	27.9	8.4	6.9	104.1	790	808
8/19/02	133002	28.5	8.4	6.9	104.8	790	807
8/19/02	134502	28.8	8.4	6.8	103.7	791	838
8/19/02	140002	29.1	8.4	6.7	103.1	792	859
8/19/02	141502	29.6	8.4	6.5	100.8	792	904
8/19/02	143002	29.9	8.4	6.4	99.9	792	970
8/19/02	144502	30.3	8.4	6.3	99.4	793	> 1000
8/19/02	150002	30.5	8.4	6.3	99.1	793	> 1000
8/19/02	151502	30.7	8.4	6.2	98.4	793	> 1000
8/19/02	153002	30.9	8.4	6.3	99.4	794	> 1000
8/19/02	154502	30.9	8.4	6.3	100.1	795	> 1000
8/19/02	160002	30.7	8.4	6.3	99.7	796	> 1000
8/19/02	161502	30.5	8.4	6.3	99.7	797	> 1000
8/19/02	163002	30.1	8.4	6.3	98.6	797	> 1000
8/19/02	164502	29.4	8.4	6.3	96.8	799	> 1000
8/19/02	170002	28.9	8.4	6.3	96.1	801	> 1000
8/19/02	171502	28.4	8.4	6.2	94.8	801	> 1000
8/19/02	173002	27.9	8.4	6.2	94.0	793	> 1000
8/19/02	174502	27.6	8.4	6.2	92.9	795	> 1000
8/19/02	180002	27.2	8.4	6.2	92.5	792	> 1000

Table 8.14.1.--Continuous Monitoring Data for Rio Grande at North Boundary Bosque del Apache NWR, August 19 though 20, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
8/19/02	181502	26.9	8.4	6.2	92.0	788	> 1000
8/19/02	183002	26.6	8.4	6.2	91.5	791	> 1000
8/19/02	184502	26.4	8.4	6.2	91.3	794	> 1000
8/19/02	190002	26.2	8.4	6.2	90.8	792	> 1000
8/19/02	191502	26.0	8.4	6.2	89.6	779	> 1000
8/19/02	193002	25.7	8.4	6.2	89.9	762	> 1000
8/19/02	194502	25.3	8.4	6.2	88.6	755	> 1000
8/19/02	200002	25.1	8.4	6.2	88.8	756	> 1000
8/19/02	201502	24.9	8.4	6.2	88.0	759	> 1000
8/19/02	203002	24.7	8.4	6.2	88.3	758	> 1000
8/19/02	204502	24.6	8.4	6.2	87.8	758	> 1000
8/19/02	210002	24.5	8.4	6.2	87.3	759	> 1000
8/19/02	211502	24.3	8.4	6.2	87.4	760	> 1000
8/19/02	213002	24.1	8.4	6.2	87.6	760	> 1000
8/19/02	214502	24.0	8.4	6.3	87.6	760	> 1000
8/19/02	220002	23.8	8.4	6.3	87.4	758	> 1000
8/19/02	221502	23.6	8.4	6.3	87.3	756	> 1000
8/19/02	223002	23.5	8.4	6.3	87.6	753	> 1000
8/19/02	224502	23.3	8.4	6.4	88.3	748	> 1000
8/19/02	230002	23.1	8.4	6.4	87.7	744	> 1000
8/19/02	231502	22.9	8.4	6.4	88.2	741	> 1000
8/19/02	233002	22.8	8.4	6.4	87.8	741	> 1000
8/19/02	234502	22.6	8.4	6.5	88.3	744	> 1000
8/20/02	000002	22.4	8.4	6.5	88.1	750	> 1000
8/20/02	001502	22.2	8.4	6.6	88.9	757	> 1000
8/20/02	003002	22.1	8.4	6.6	89.0	766	> 1000
8/20/02	004502	21.9	8.4	6.6	89.0	773	> 1000
8/20/02	010002	21.8	8.4	6.6	88.9	780	> 1000
8/20/02	011502	21.6	8.4	6.7	89.7	785	> 1000
8/20/02	013002	21.5	8.4	6.6	88.8	789	> 1000
8/20/02	014502	21.4	8.4	6.7	88.9	793	> 1000
8/20/02	020002	21.2	8.4	6.7	89.7	795	> 1000
8/20/02	021502	21.1	8.4	6.7	89.4	797	> 1000
8/20/02	023002	21.0	8.4	6.8	89.6	798	> 1000
8/20/02	024502	20.9	8.4	6.8	89.7	799	> 1000
8/20/02	030002	20.8	8.4	6.8	90.1	799	> 1000
8/20/02	031502	20.7	8.4	6.8	90.0	799	> 1000
8/20/02	033002	20.5	8.4	6.8	89.3	799	> 1000
8/20/02	034502	20.4	8.4	6.9	90.2	799	> 1000
8/20/02	040002	20.3	8.4	6.9	89.7	799	> 1000
8/20/02	041502	20.2	8.4	6.9	90.2	799	> 1000
8/20/02	043002	20.0	8.4	6.9	90.0	800	> 1000
8/20/02	044502	19.9	8.4	6.9	90.0	800	> 1000
8/20/02	050002	19.8	8.4	7.0	90.2	801	> 1000
8/20/02	051502	19.7	8.4	7.0	90.4	801	> 1000
8/20/02	053002	19.6	8.4	7.0	90.2	801	> 1000
8/20/02	054502	19.4	8.4	7.0	90.4	801	> 1000
8/20/02	060002	19.3	8.4	7.1	90.6	802	> 1000
8/20/02	061502	19.2	8.4	7.1	91.1	801	> 1000
8/20/02	063002	19.1	8.4	7.1	90.7	801	> 1000

Table 8.14.1.--Continuous Monitoring Data for Rio Grande at North Boundary Bosque del Apache NWR, August 19 though 20, 2002

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
8/20/02	064502	19.0	8.4	7.1	90.9	801	> 1000
8/20/02	070002	18.9	8.4	7.2	91.1	800	> 1000
8/20/02	071502	18.8	8.4	7.2	91.4	799	> 1000
8/20/02	073002	18.7	8.3	7.3	92.2	799	> 1000
8/20/02	074502	18.7	8.3	7.3	92.8	798	> 1000
8/20/02	080002	18.8	8.3	7.4	94.0	798	> 1000
8/20/02	081502	18.9	8.3	7.4	94.1	797	> 1000
8/20/02	083002	19.0	8.3	7.5	95.0	797	> 1000
8/20/02	084502	19.2	8.3	7.5	95.7	796	> 1000
8/20/02	090002	19.4	8.3	7.5	96.1	796	> 1000
8/20/02	091502	19.6	8.3	7.6	97.5	796	> 1000
8/20/02	093002	19.9	8.4	7.6	98.3	796	> 1000
8/20/02	094502	20.2	8.4	7.6	99.3	796	> 1000
8/20/02	100002	20.6	8.4	7.6	100.4	796	> 1000
8/20/02	101502	21.0	8.4	7.6	100.8	796	> 1000
8/20/02	103002	21.4	8.4	7.6	101.6	796	> 1000
8/20/02	104502	21.8	8.4	7.6	102.2	796	> 1000
8/20/02	110002	22.3	8.4	7.6	103.3	796	> 1000
8/20/02	111502	22.9	8.4	7.5	103.5	797	> 1000
8/20/02	113002	23.4	8.4	7.6	104.8	797	> 1000
8/20/02	114502	24.0	8.4	7.5	105.4	797	> 1000
8/20/02	120002	24.6	8.4	7.4	105.6	797	> 1000
8/20/02	121502	25.2	8.4	7.5	107.4	798	> 1000

Descriptive Statistics	*Temp (°C)*	*pH*	*DO (mg/L)*	*DO (%)*	*SPC (uS/cm)*	*Turbidity (NTU)*
Mean	23.5	8.4	6.8	95.0	786	~ 983
Standard Error	0.34	0.00	0.05	0.60	1.61	~ 4.90
Median	22.9	8.4	6.8	92.5	793	> 1000
Mode	21.0	8.4	6.2	103.7	799	> 1000
Standard Deviation	3.58	0.02	0.52	6.22	16.81	~ 51.18
Sample Variance	12.78	0.00	0.27	38.66	282.73	~ 2619.83
Kurtosis	-0.80	1.46	-1.44	-1.44	0.52	~ 7.53
Skewness	0.54	0.33	0.17	0.37	-1.34	~ -2.94
Range	12.2	0.1	1.6	20.1	61	~ 232
Minimum	18.7	8.3	6.2	87.3	741	769
Maximum	30.9	8.4	7.7	107.4	802	> 1000
Sum	2565.4	912.9	745.7	10349.6	85681	~ 107188
Count	109	109	109	109	109	109

Table 8.14.2.--Continuous Monitoring Data for Rio Grande at North Boundary Bosque del Apache NWR January 13 through 15, 2003

[--, no data; °C, degrees Celsius; mg/L, milligrams per liter; % sat, percent saturation; uS/cm, microsiemens per centimeter; NTU, Nephelometric turbidity units.]

DataSonde 4a 40183
Log File Name : BDA NWR 1-13-03
Setup Date (MMDDYY) : 011303
Setup Time (HHMMSS) : 094520
Starting Date (MMDDYY) : 011303
Starting Time (HHMMSS) : 100000
Stopping Date (MMDDYY) : 011503
Stopping Time (HHMMSS) : 120000
Interval (HHMMSS) : 001500
Sensor warmup (HHMMSS) : 000200
Circltr warmup (HHMMSS) : 000100

Date	Time (HHMMSS)	Temp (°C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
1/13/2003	103000	3.7	8.2	11.0	96.4	425	--
1/13/2003	104500	3.8	8.3	11.0	96.8	424	--
1/13/2003	110000	3.9	8.3	10.9	96.3	424	--
1/13/2003	111500	4.1	8.3	10.9	97.2	424	--
1/13/2003	113000	4.3	8.3	10.9	97.7	423	--
1/13/2003	114500	4.5	8.3	10.9	98.3	424	--
1/13/2003	120000	4.7	8.3	10.9	98.4	423	--
1/13/2003	121500	4.9	8.3	10.8	98.4	423	--
1/13/2003	123000	5.2	8.3	10.8	99.0	423	--
1/13/2003	124500	5.4	8.3	10.9	100.1	423	--
1/13/2003	130000	5.6	8.3	10.7	99.5	423	--
1/13/2003	131500	5.8	8.3	10.7	100.1	423	--
1/13/2003	133000	6.1	8.4	10.6	99.7	423	--
1/13/2003	134500	6.3	8.3	10.6	100.0	423	--
1/13/2003	140000	6.5	8.3	10.6	100.0	423	--
1/13/2003	141500	6.6	8.3	10.6	100.4	424	--
1/13/2003	143000	6.8	8.3	10.5	100.3	423	--
1/13/2003	144500	6.9	8.3	10.4	99.5	423	--
1/13/2003	150000	7.1	8.3	10.4	99.4	423	--
1/13/2003	151500	7.2	8.3	10.4	99.7	423	--
1/13/2003	153000	7.3	8.3	10.3	99.8	423	--
1/13/2003	154500	7.3	8.3	10.2	98.3	423	--
1/13/2003	160000	7.4	8.3	10.1	98.2	423	--
1/13/2003	161500	7.4	8.3	10.1	97.7	423	--
1/13/2003	163000	7.4	8.3	10.1	97.5	423	--
1/13/2003	164500	7.4	8.3	10.0	96.6	422	--
1/13/2003	170000	7.4	8.4	10.0	96.6	423	--
1/13/2003	171500	7.3	8.3	10.0	96.4	422	--
1/13/2003	173000	7.3	8.4	10.0	96.6	423	--
1/13/2003	174500	7.3	8.4	10.0	96.3	423	--
1/13/2003	180000	7.2	8.4	9.9	95.1	423	--
1/13/2003	181500	7.2	8.4	10.0	96.1	424	--
1/13/2003	183000	7.1	8.4	9.9	95.1	424	--
1/13/2003	184500	7.1	8.4	9.9	94.7	424	--
1/13/2003	190000	7.0	8.4	9.8	94.1	425	--
1/13/2003	191500	7.0	8.4	9.8	94.0	425	--
1/13/2003	193000	6.9	8.4	9.9	94.5	425	--

Table 8.14.2.--Continuous Monitoring Data for Rio Grande at North Boundary Bosque del Apache NWR January 13 through 15, 2003

Date	Time (HHMMSS)	Temp (^oC)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
1/13/2003	194500	6.8	8.4	9.8	93.4	425	--
1/13/2003	200000	6.7	8.4	9.9	94.1	426	--
1/13/2003	201500	6.6	8.4	9.7	92.2	425	--
1/13/2003	203000	6.6	8.4	9.8	93.0	425	--
1/13/2003	204500	6.5	8.4	9.8	92.6	426	--
1/13/2003	210000	6.4	8.4	9.8	92.8	425	--
1/13/2003	211500	6.3	8.4	9.8	92.6	425	--
1/13/2003	213000	6.2	8.4	9.8	92.2	425	--
1/13/2003	214500	6.2	8.4	9.8	92.2	425	--
1/13/2003	220000	6.1	8.4	9.8	92.1	425	--
1/13/2003	221500	6.0	8.4	9.9	92.1	425	--
1/13/2003	223000	5.9	8.4	9.8	91.3	425	--
1/13/2003	224500	5.8	8.4	9.9	91.9	425	--
1/13/2003	230000	5.7	8.4	9.9	91.9	425	--
1/13/2003	231500	5.6	8.4	9.9	91.2	426	--
1/13/2003	233000	5.6	8.4	9.9	91.6	426	--
1/13/2003	234500	5.5	8.4	9.9	91.4	425	--
1/14/2003	000000	5.4	8.4	10.0	91.7	426	--
1/14/2003	001500	5.4	8.4	10.0	91.6	426	--
1/14/2003	003000	5.3	8.4	10.0	91.4	426	--
1/14/2003	004500	5.2	8.4	9.9	90.7	426	--
1/14/2003	010000	5.2	8.4	9.9	90.9	426	--
1/14/2003	011500	5.1	8.4	10.0	91.3	426	--
1/14/2003	013000	5.1	8.4	10.0	91.2	426	--
1/14/2003	014500	5.0	8.4	9.9	90.3	427	--
1/14/2003	020000	5.0	8.4	9.9	90.1	426	--
1/14/2003	021500	5.0	8.4	9.8	89.6	426	--
1/14/2003	023000	4.9	8.4	10.0	91.0	427	--
1/14/2003	024500	4.9	8.4	10.1	91.3	427	--
1/14/2003	030000	4.8	8.4	10.0	90.7	426	--
1/14/2003	031500	4.8	8.4	10.1	91.1	427	--
1/14/2003	033000	4.7	8.4	10.0	90.1	427	--
1/14/2003	034500	4.7	8.4	10.0	90.7	427	--
1/14/2003	040000	4.6	8.4	10.0	90.1	427	--
1/14/2003	041500	4.5	8.4	10.0	90.2	427	--
1/14/2003	043000	4.5	8.4	10.0	90.2	427	--
1/14/2003	044500	4.5	8.4	10.0	90.1	427	--
1/14/2003	050000	4.4	8.4	10.1	90.6	428	--
1/14/2003	051500	4.4	8.4	10.1	90.4	427	--
1/14/2003	053000	4.3	8.4	10.2	91.1	427	--
1/14/2003	054500	4.2	8.4	10.1	90.4	427	--
1/14/2003	060000	4.2	8.4	10.2	90.6	426	--
1/14/2003	061500	4.1	8.4	10.1	90.0	427	--
1/14/2003	063000	4.0	8.4	10.2	90.6	427	--
1/14/2003	064500	4.0	8.4	10.2	90.3	427	--
1/14/2003	070000	3.9	8.4	10.2	90.7	427	--
1/14/2003	071500	3.8	8.4	10.2	90.4	427	--
1/14/2003	073000	3.7	8.4	10.3	90.7	426	--
1/14/2003	074500	3.6	8.4	10.3	90.9	427	--
1/14/2003	080000	3.6	8.4	10.3	90.8	426	--
1/14/2003	081500	3.5	8.4	10.4	91.1	426	--

Table 8.14.2.--Continuous Monitoring Data for Rio Grande at North Boundary Bosque del Apache NWR January 13 through 15, 2003

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
1/14/2003	083000	3.5	8.4	10.5	91.6	425	--
1/14/2003	084500	3.5	8.4	10.4	91.1	424	--
1/14/2003	090000	3.5	8.4	10.4	91.2	424	--
1/14/2003	091500	3.5	8.4	10.4	91.4	423	--
1/14/2003	093000	3.5	8.4	10.6	92.9	423	--
1/14/2003	094500	3.6	8.4	10.5	92.7	423	--
1/14/2003	100000	3.7	8.4	10.6	93.7	423	--
1/14/2003	101500	3.8	8.4	10.6	93.6	424	--
1/14/2003	103000	3.9	8.4	10.4	92.4	425	--
1/14/2003	104500	4.1	8.4	10.5	93.7	426	--
1/14/2003	110000	4.2	8.4	10.5	94.1	427	--
1/14/2003	111500	4.4	8.4	10.5	93.9	428	--
1/14/2003	113000	4.6	8.4	10.5	94.4	427	--
1/14/2003	114500	4.8	8.4	10.6	95.6	426	--
1/14/2003	120000	5.0	8.4	10.5	95.9	424	--
1/14/2003	121500	5.2	8.4	10.5	96.5	423	--
1/14/2003	123000	5.4	8.3	10.5	96.9	421	--
1/14/2003	124500	5.6	8.3	10.5	97.1	420	--
1/14/2003	130000	5.9	8.3	10.3	96.2	420	--
1/14/2003	131500	6.1	8.4	10.3	96.8	420	--
1/14/2003	133000	6.3	8.3	10.4	98.0	420	--
1/14/2003	134500	6.5	8.3	10.4	98.5	420	--
1/14/2003	140000	6.7	8.3	10.4	98.8	420	--
1/14/2003	141500	6.9	8.3	10.3	98.5	420	--
1/14/2003	143000	7.0	8.3	10.2	98.3	420	--
1/14/2003	144500	7.2	8.3	10.2	98.4	421	--
1/14/2003	150000	7.3	8.3	10.2	98.1	421	--
1/14/2003	151500	7.5	8.3	10.2	98.6	421	--
1/14/2003	153000	7.5	8.3	10.1	98.4	421	--
1/14/2003	154500	7.6	8.3	10.1	98.2	421	--
1/14/2003	160000	7.7	8.3	10.0	97.6	421	--
1/14/2003	161500	7.7	8.3	9.9	96.9	422	--
1/14/2003	163000	7.7	8.3	9.9	96.8	422	--
1/14/2003	164500	7.7	8.3	9.9	96.6	422	--
1/14/2003	170000	7.7	8.3	9.8	95.8	422	--
1/14/2003	171500	7.7	8.3	9.8	95.7	422	--
1/14/2003	173000	7.7	8.3	9.8	95.6	423	--
1/14/2003	174500	7.6	8.3	9.8	95.4	423	--
1/14/2003	180000	7.6	8.3	9.7	94.6	424	--
1/14/2003	181500	7.5	8.3	9.7	94.1	424	--
1/14/2003	183000	7.5	8.4	9.7	93.8	425	--
1/14/2003	184500	7.4	8.4	9.6	93.1	426	--
1/14/2003	190000	7.4	8.4	9.6	92.8	426	--
1/14/2003	191500	7.3	8.4	9.6	92.6	427	--
1/14/2003	193000	7.2	8.4	9.6	92.2	428	--
1/14/2003	194500	7.2	8.4	9.5	91.9	429	--
1/14/2003	200000	7.1	8.4	9.4	90.3	429	--
1/14/2003	201500	7.0	8.4	9.5	91.2	430	--
1/14/2003	203000	6.9	8.4	9.6	91.8	431	--
1/14/2003	204500	6.9	8.4	9.6	91.5	431	--
1/14/2003	210000	6.8	8.4	9.6	91.1	431	--

Table 8.14.2.--Continuous Monitoring Data for Rio Grande at North Boundary Bosque del Apache NWR January 13 through 15, 2003

Date	Time (HHMMSS)	Temp (^oC)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
1/14/2003	211500	6.7	8.4	9.5	90.5	431	--
1/14/2003	213000	6.6	8.4	9.5	90.7	432	--
1/14/2003	214500	6.5	8.4	9.6	91.3	432	--
1/14/2003	220000	6.5	8.4	9.6	90.7	432	--
1/14/2003	221500	6.4	8.4	9.5	90.0	432	--
1/14/2003	223000	6.3	8.4	9.7	91.0	432	--
1/14/2003	224500	6.2	8.4	9.6	90.4	432	--
1/14/2003	230000	6.1	8.4	9.6	90.4	432	--
1/14/2003	231500	6.0	8.4	9.6	90.0	432	--
1/14/2003	233000	6.0	8.4	9.6	89.6	432	--
1/14/2003	234500	5.9	8.4	9.6	89.6	433	--
1/15/2003	000000	5.8	8.4	9.7	89.9	433	--
1/15/2003	001500	5.7	8.4	9.7	90.1	432	--
1/15/2003	003000	5.7	8.4	9.7	90.3	434	--
1/15/2003	004500	5.6	8.4	9.8	90.5	433	--
1/15/2003	010000	5.5	8.4	9.8	90.2	434	--
1/15/2003	011500	5.5	8.4	9.8	90.3	434	--
1/15/2003	013000	5.4	8.4	9.8	89.8	434	--
1/15/2003	014500	5.4	8.4	9.7	89.4	434	--
1/15/2003	020000	5.3	8.4	9.7	89.2	434	--
1/15/2003	021500	5.3	8.4	9.7	89.4	434	--
1/15/2003	023000	5.2	8.4	9.6	87.9	434	--
1/15/2003	024500	5.1	8.4	9.8	90.0	435	--
1/15/2003	030000	5.1	8.4	9.9	90.1	435	--
1/15/2003	031500	5.0	8.4	9.7	88.6	435	--
1/15/2003	033000	5.0	8.4	9.8	88.8	434	--
1/15/2003	034500	4.9	8.4	9.7	87.9	435	--
1/15/2003	040000	4.8	8.4	9.9	89.4	436	--
1/15/2003	041500	4.8	8.4	9.9	89.4	435	--
1/15/2003	043000	4.7	8.4	9.8	89.0	435	--
1/15/2003	044500	4.6	8.4	9.9	89.5	435	--
1/15/2003	050000	4.6	8.4	9.9	89.1	435	--
1/15/2003	051500	4.5	8.4	10.0	89.6	435	--
1/15/2003	053000	4.4	8.4	10.0	89.6	435	--
1/15/2003	054500	4.4	8.4	10.0	89.3	435	--
1/15/2003	060000	4.3	8.4	9.9	89.0	434	--
1/15/2003	061500	4.2	8.4	9.9	88.4	434	--
1/15/2003	063000	4.2	8.4	10.0	89.2	434	--
1/15/2003	064500	4.1	8.4	10.0	89.4	434	--
1/15/2003	070000	4.0	8.4	10.0	88.7	434	--
1/15/2003	071500	3.9	8.4	10.0	89.0	433	--
1/15/2003	073000	3.8	8.4	10.0	88.6	433	--
1/15/2003	074500	3.7	8.4	9.9	87.4	433	--
1/15/2003	080000	3.7	8.4	10.1	89.0	432	--
1/15/2003	081500	3.6	8.4	10.1	88.9	432	--
1/15/2003	083000	3.6	8.4	10.0	87.9	431	--
1/15/2003	084500	3.6	8.4	10.1	88.3	430	--
1/15/2003	090000	3.6	8.4	10.0	87.8	430	--
1/15/2003	091500	3.6	8.4	10.1	88.5	429	--
1/15/2003	093000	3.7	8.4	10.3	90.3	428	--
1/15/2003	094500	3.8	8.4	10.3	90.6	428	--

Table 8.14.2.--Continuous Monitoring Data for Rio Grande at North Boundary Bosque del Apache NWR January 13 through 15, 2003

Date	Time (HHMMSS)	Temp (^{o}C)	pH	DO (mg/L)	DO (% sat)	SPC (uS/cm)	Turbidity (NTU)
1/15/2003	100000	3.9	8.4	10.4	92.1	427	--
1/15/2003	101500	4.0	8.4	10.1	90.1	426	--
1/15/2003	103000	4.1	8.4	10.3	91.5	426	--
1/15/2003	104500	4.2	8.4	10.3	92.2	426	--
1/15/2003	110000	4.4	8.4	10.4	93.3	425	--
1/15/2003	111500	4.5	8.4	10.1	91.0	424	--
1/15/2003	113000	4.7	8.4	10.1	91.7	424	--
1/15/2003	114500	4.9	8.4	10.0	90.8	424	--
1/15/2003	120000	5.2	8.4	10.3	94.0	423	--

Descriptive Statistics	*Temp (°C)*	*pH*	*DO (mg/L)*	*DO (%)*	*SPC (uS/cm)*	*Turbidity (NTU)*
Mean	5.5	8.4	10.1	92.9	427	--
Standard Error	0.09	0.00	0.02	0.25	0.31	--
Median	5.4	8.4	10.0	91.6	426	--
Mode	4.2	8.4	10.0	90.7	423	--
Standard Deviation	1.32	0.02	0.35	3.46	4.31	--
Sample Variance	1.74	0.00	0.12	11.98	18.58	--
Kurtosis	-1.30	8.60	-0.15	-0.85	-0.76	--
Skewness	0.13	-2.29	0.64	0.63	0.58	--
Range	4.3	0.2	1.6	13.0	16	--
Minimum	3.5	8.2	9.4	87.4	420	--
Maximum	7.7	8.4	11.0	100.4	436	--
Sum	1096.9	1663.2	2002.3	18492.4	84929	--
Count	199	199	199	199	199	--

Table 8.15.--Summary Statistics for Continuous Monitoring Data at all Sites Measured along the Rio Grande

[--, no data; ~, approximately; >, greater than; °C, degrees Celsius; mg/L, milligram per liter; uS/cm, micorsiemens per centimeter; NTU, Nephelometric turbidity units. Note: these descriptive statistics were derived from data collected when the probe was not buried by sediment; statistics were approximated for turbidity when values were > 1000 NTU by substituting value of 1001.]

Site	Start Date	End Date or Buried	pH			DO (mg/L)			Temp (°C)			SPC (uS/cm)			Turbidity (NTU)		
			Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max
Rio Rancho WWTP Outfall #2	08/08/02	08/14/02	7.3	7.5	7.7	3.6	4.4	6.2	27.1	28.5	29.7	511	1026	1057	--	--	--
Rio Rancho WWTP Outfall #2	01/30/03	02/03/03	7.3	7.5	7.6	6.3	6.9	7.3	16.6	18.1	18.6	538	559	576	--	--	--
Rio Grande at La Orilla	07/26/02	07/30/02	8.2	8.3	8.4	4.2	5.7	6.7	20.4	25.0	31.7	130	353	406	0	20	42
Rio Grande at La Orilla	12/19/02	12/23/02	8.3	8.3	8.4	7.0	10.4	11.5	-0.2	2.3	6.1	78	257	307	75	~ 231	> 1000
Rio Grande at La Orilla	02/28/03	03/03/03	8.2	8.3	8.3	5.6	9.7	11.0	2.3	7.0	13.3	112	286	320	--	--	--
Rio Grande at Barelas	08/22/02	08/23/02	8.2	8.2	8.3	5.6	6.4	7.7	20.3	24.9	29.9	334	350	366	286	359	828
Rio Grande at Barelas	01/17/03	01/19/03	8.2	8.3	8.3	9.5	10.2	11.4	1.8	5.4	7.5	197	274	292	183	> 334	> 1000
Albuquerque WWTP Outfall	08/06/02	08/08/02	6.6	6.8	7.0	2.2	4.5	5.4	24.1	27.8	29.2	810	831	848	3	23	447
Albuquerque WWTP Outfall	01/29/03	02/03/03	6.7	6.8	6.9	4.6	5.4	6.1	19.3	19.7	20.1	606	621	647	--	--	--
Rio Grande at Los Padillas	07/25/02	07/30/02	7.9	8.0	8.1	5.3	6.2	7.2	19.4	25.8	33.5	442	511	554	--	--	--
Rio Grande at Los Padillas	10/31/02	11/01/02	7.7	7.8	7.9	7.0	7.5	8.4	10.9	13.9	17.1	371	408	421	> 1000	> 1000	> 1000
Rio Grande at Los Padillas	12/18/02	12/23/02	8.2	8.3	8.4	6.8	9.6	12.4	0.3	3.9	7.1	57	145	336	--	--	--
Rio Grande at Los Padillas	02/27/03	02/28/03	8.0	8.1	8.2	0.3	4.1	8.3	6.1	8.9	12.0	302	310	319	--	--	--
Rio Grande at Isleta below RR Bridge	08/07/02	08/11/02	7.7	7.9	8.0	1.2	3.4	6.4	20.8	25.5	31.5	340	465	522	0	56	109
Rio Grande at Isleta below RR Bridge	01/28/03	02/03/03	7.9	8.1	8.2	7.0	9.0	10.0	6.3	9.2	12.5	240	266	373	3	6	8
Rio Grande at Los Lunas	07/24/02	07/26/02	7.9	8.1	8.2	3.1	4.9	6.3	20.9	28.2	35.0	303	460	510	44	~ 387	> 1000
Rio Grande at Los Lunas	10/30/02	10/31/02	8.0	8.0	8.1	7.7	8.1	9.0	9.2	12.6	15.2	296	311	352	449	~ 838	> 1000
Rio Grande at Los Lunas	12/17/02	12/20/02	8.3	8.4	8.4	8.5	9.1	9.8	4.2	6.6	9.4	376	392	403	7	8	20
Rio Grande at Los Lunas	02/26/03	02/28/03	8.1	8.1	8.1	8.0	9.5	15.2	6.1	8.7	12.7	266	276	287	5	8	38
Rio Grande at Abeytas	09/12/02	09/13/02	7.8	7.8	7.9	5.3	5.6	6.6	19.5	21.1	22.5	270	301	408	771	~ 952	>1000
Rio Grande at Abeytas	01/16/03	01/19/03	8.1	8.3	8.4	9.7	10.3	11.2	2.6	5.5	8.5	217	381	394	5	10	36
Lower San Juan Drain	08/05/02	08/06/02	7.9	8.0	8.1	5.5	5.9	6.2	20.1	23.4	27.4	644	671	690	35	39	47
Lower San Juan Drain	01/27/03	01/31/03	8.0	8.1	8.2	8.0	8.8	10.0	6.8	10.1	13.4	502	505	508	39	56	155
Rio Grande at La Joya	07/23/02	07/24/02	8.0	8.1	8.1	5.5	6.0	6.8	21.0	25.2	27.7	494	516	539	--	--	--
Rio Grande at La Joya	09/10/02	09/10/02	8.0	8.1	8.3	3.6	5.1	7.1	18.4	19.7	20.6	233	445	678	--	--	--
Rio Grande at La Joya	12/13/02	12/16/02	8.2	8.5	8.7	5.1	9.0	10.9	3.0	5.1	10.9	117	326	517	6	~ 201	> 1000
Rio Grande at La Joya	02/25/03	02/26/03	8.2	8.2	8.2	9.2	9.6	10.2	5.8	7.3	9.7	300	310	319	17	21	28

Table 8.15.--Summary Statistics for Continuous Monitoring Data at all Sites Measured along the Rio Grande

Site	Start Date	End Date or Buried	pH			DO (mg/L)			Temp (°C)			SPC (uS/cm)			Turbidity (NTU)		
			Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max
Rio Grande at Lemitar	08/21/02	08/23/02	7.7	8.1	8.2	5.3	6.0	6.8	19.3	24.7	30.4	686	733	783	336	~ 666	> 1000
Rio Grande at Lemitar	01/15/03	01/17/03	8.3	8.4	8.5	9.5	9.8	10.3	4.0	5.8	7.6	382	390	397	--	--	--
Rio Grande at San Pedro	08/20/02	08/21/02	8.1	8.3	8.3	6.4	6.9	7.4	18.6	24.0	29.5	746	764	768	--	--	--
Rio Grande at San Pedro	01/14/03	01/15/03	8.3	8.3	8.4	9.7	10.2	11.0	3.4	5.7	8.0	389	399	406	235	~ 431	> 1000
Rio Grande below Arroyo del Tajo	07/22/02	07/23/02	7.6	8.1	8.2	0.4	4.7	6.6	19.9	21.6	23.3	129	465	1166	3	~ 438	> 1000
Rio Grande below Arroyo del Tajo	09/09/02	09/10/02	7.6	7.9	8.3	2.7	5.3	7.1	20.1	23.7	30.2	376	633	753	19	~ 388	> 1000
Rio Grande below Arroyo del Tajo	12/12/02	12/16/02	8.3	8.3	8.4	5.6	7.5	10.8	2.5	4.7	6.7	135	145	154	--	--	--
Rio Grande below Arroyo del Tajo	02/24/03	02/26/03	8.2	8.2	8.3	9.0	9.4	10.0	5.3	7.5	9.6	302	362	404	851	918	978
Rio Grande at N. Boundary Bosque del Apache	08/19/02	08/20/02	8.3	8.4	8.4	6.2	6.8	7.7	18.7	23.5	30.9	741	786	802	769	~ 983	> 1000
Rio Grande at N. Boundary Bosque del Apache	01/13/03	01/15/03	8.2	8.4	8.4	9.4	10.1	11.0	3.5	5.5	7.7	420	427	436	--	--	--

Table 9.--Fish monitoring inventory and catch per unit effort

[Fish identification and enumeration performed by New Mexico Fishery Resources Office]

Station name	Date sampled	Chemical analysis (see table 4)	Health assess-ment (see tables 10-11)	Seine hauls (random)	Seine hauls (discre-tionary)	*Hybognathus aramus*/ Rio Grande silvery minnow (random)	*Hybognathus aramus*/ Rio Grande silvery minnow (discre-tionary)	*Pimephales promelas*/ fathead minnow (random)	*Pimephales promelas*/ fathead minnow (discre-tionary)	*Cyprinella lutreusis* / red shiner (random)	*Cyprinella lutreusis* red shiner (discre-tionary)	Other fish (random)	Other fish (discre-tionary)	Number native fish	Number non-native fish	Total fish catch (random)	Total fish catch (disce-tionary)	Catch per unit effort (random)	Catch per unit effort (discre-tionary)
Rio Grande below Arroyo del Tajo	22-Jul-02	yes	yes	30	0	1	--	54	--	516	--	36	--	571	36	607	-	20.2	-
Rio Grande at La Joya	23-Jul-02	no	yes	30	5	0	0	26	0	170	41	73	13	240	83	269	54	9.0	10.8
Rio Grande at Los Lunas	24-Jul-02	yes	yes	31	5	1	0	178	123	155	55	68	23	520	83	402	201	13.0	40.2
Rio Grande at Los Padillas	25-Jul-02	yes	yes	35	6	0	0	1	2	2	1	128	78	103	109	131	81	3.7	13.5
Rio Grande at La Orilla	26-Jul-02	yes	no	40	5	0	1	6	8	10	5	19	39	61	27	35	53	0.9	10.6
Lower San Juan Drain	5-Aug-02	yes	yes	0	5	--	0	--	0	--	83	--	18	97	4	--	101	--	20.2
Albuquerque Waste Water Treatment Plant Outfall [1]	6-Aug-02	yes[2]	no	0	5	--	0	--	2	--	28	--	97	41	86	--	127	--	25.4
Rio Grande at Isleta below Railroad Bridge	7-Aug-02	yes[2]	yes[2]	0	5	--	0	--	0	--	0	--	4	0	4	--	4	--	0.8
Rio Rancho Waste Water Treatment Plant Outfall #2	8-Aug-02	yes	no	0	5	--	0	--	34	--	104	--	117	138	117	--	255	--	51.0
Rio Grande at North Boundary Bosque del Apache	19-Aug-02	yes	yes	35	5	2	0	46	0	137	28	33	3	214	35	218	31	6.2	6.2
Rio Grande at San Pedro	20-Aug-02	yes	no	45	1	1	0	9	0	417	0	27	7	428	33	454	7	10.1	7.0
Rio Grande at Lemitar	21-Aug-02	no	yes	49	0	4	--	13	--	68	--	15	--	92	8	100	--	2.0	--
Rio Grande at Barelas	22-Aug-02	no	no	53	1	0	0	0	0	0	4	20	2	5	21	20	6	0.4	6.0
Rio Grande below Arroyo del Tajo	9-Sep-02	yes	yes	53	0	0	--	16	--	208	--	51	--	225	50	275	-	5.2	--
Rio Grande at La Joya	10-Sep-02	yes	yes	50	0	0	--	10	--	174	--	120	--	186	118	304	--	6.1	--
Rio Grande at Abeytas	12-Sep-02	yes	no	46	2	0	0	0	0	18	0	15	0	18	15	33	0	0.7	0.0
Rio Grande at Los Lunas	30-Oct-02	yes (2)	yes	47	1	2	0	113	4	238	2	257	0	359	257	610	6	13.0	6.0
Rio Grande at Los Padillas	31-Oct-02	no	no	53	2	0	0	2	0	3	0	28	0	5	28	33	0	0.6	0.0
Rio Grande at La Orilla	1-Nov-02	no	yes	47	4	0	0	10	0	29	2	79	35	56	99	118	37	2.5	9.3
Rio Grande below Arroyo del Tajo	12-Dec-02	no	yes	39	2	0	0	0	4	21	11	1	6	37	6	22	21	0.6	10.5
Rio Grande at La Joya	13-Dec-02	no	yes	50	0	0	--	5	--	85	--	34	--	92	32	124	--	2.5	--
Rio Grande at Los Lunas	17-Dec-02	yes	yes	49	2	0	0	27	0	82	1	122	1	111	122	231	2	4.7	1.0
Rio Grande at Los Padillas	18-Dec-02	no	yes	47	3	0	0	3	1	7	0	3	7	12	9	13	8	0.3	2.7
Rio Grande at La Orilla	19-Dec-02	no	no	45	6	2	3	0	0	0	4	13	3	23	2	15	10	0.3	1.7
Rio Grande at North Boundary Bosque del Apache	13-Jan-03	yes	no	41	4	0	0	0	0	25	0	0	0	25	0	25	0	0.6	0.0
Rio Grande at San Pedro	14-Jan-03	yes	yes	43	1	0	0	1	0	53	2	0	0	56	0	54	2	1.3	2.0
Rio Grande at Lemitar	15-Jan-03	yes	no	47	3	0	1	2	0	21	0	0	0	24	0	23	1	0.5	0.3
Rio Grande at Abeytas	16-Jan-03	yes	yes	49	2	0	0	5	3	18	1	4	2	27	6	27	6	0.6	3.0
Rio Grande at Barelas	17-Jan-03	yes	yes	47	3	1	0	0	0	19	13	2	6	39	2	22	19	0.5	6.3
Lower San Juan Drain	27-Jan-03	yes	yes	0	5	--	0	-	0	-	39	--	1	39	1	-	40	-	8.0
Rio Grande at Isleta below Railroad Bridge	28-Jan-03	yes[2]	yes[2]	0	10	--	0	-	4	-	1	--	4	5	4	-	9	-	0.9
Albuquerque Waste Water Treatment Plant Outfall [3]	29-Jan-03	yes[2]	no	0	5	--	0	-	0	-	0	--	1	0	1	-	1	-	0.2
Rio Rancho Waste Water Treatment Plant Outfall #2	30-Jan-03	yes	no	0	10	--	0	-	4	-	20	--	1340	34	1330	-	1364	-	136.4
Rio Grande below Arroyo del Tajo	24-Feb-03	yes	no	44	6	0	0	0	0	3	2	4	3	8	4	7	5	0.2	0.8
Rio Grande at La Joya	25-Feb-03	yes	no	47	3	0	0	2	0	47	1	30	0	56	24	79	1	1.7	0.3
Rio Grande at Los Lunas	26-Feb-03	yes	yes	44	6	1	0	44	28	235	75	51	25	393	66	331	128	7.5	21.3
Rio Grande at Los Padillas	27-Feb-03	yes	yes	45	5	1	0	23	3	12	0	38	13	49	41	74	16	1.6	3.2
Rio Grande at La Orilla	28-Feb-03	yes	yes	45	5	0	1	0	1	20	6	3	3	31	3	23	11	0.5	2.2
TOTALS				1326	138	16	6	596	221	2793	529	1274	1851	4420	2866	4679	2607	4	19

[1] Fish were collected at Outfall mouth within the mixing zone of the Rio Grande.

[2] Additional fish, not inventoried in this table, were collected in order to conduct chemical analyses and/or health assessments.

[3] Seine hauls were at Outfall mouth within the mixing zone of the Rio Grande; one white bass was collected within the Outfall and a whole-body tissue chemical analysis was performed.

Table 10.1.1.--Fish Health Assessment Data for Rio Rancho Waste Water Treatment Plant Outfall #2
August 2, 2002

--insufficient sample collected for analysis--

Table 10.1.2.--*Fish Health Assessment Data for Rio Rancho Waste Water Treatment Plant Outfall #2*
January 30, 2003

--insufficient sample collected for analysis--

Table 10.2.1.--Fish Health Assessment Data for Rio Grande at La Orilla July 26, 2002

--insufficient sample collected for analysis--

Table 10.2.2.--Fish Health Assessment Data for Rio Grande at La Orilla November 1, 2002

[See table 12 for codes used below; MNFD, fathead minnow; SRRD, red shiner.]

Fish Necropsy Datasheet

Date **2-Nov-02** Unit _____ Species ***MNFH,SRRD** Quality Control # **2E**

Location **La Orilla** Fish source _____ Age _____ File Name **la orilla2**

Mark/lot _____ Egg source _____ Hatch date _____ Tissue Collection # _____

Investigator(s) **Catherine Sykes** Water temp C^0 _____ Water Hardness _____

Reason for necropsy: **RGSM fish health study** Code ___ Remarks _____

Disease survey No: _____ Custody No _____

Sample Number	Length mm	Weight g	KTL * 105	Eyes	Gills	Pseudobranchs	Thymus	Mesentery Fat	Spleen	Hind gut	Kidney	Liver	Bile	Sex	Hematocrit	Leucocrit	Plasma Protein	Fins	Opercle	Deformities	Skin lesions	Fin Deformities	Remarks
2E01	58.57	1.72	0.856	N	N	N	0	1	R	0	N	A	1	M				0	0	N	N	N	
2E02	42.53	0.558	0.725	N	N	N	0	1	R	0	N	A	2	F				0	0	N	N	N	Shiner
2E03	44.97	0.616	0.677	N	N	N	0	0	R	0	N	A	1	U				0	1	N	N	N	Shiner
2E04	42.31	0.546	0.721	N	N	N	0	1	R	0	N	A	1	U				0	1	N	N	N	Shiner
2E05	41.34	0.493	0.698	N	N	N	0	1	R	0	N	A	1	U				0	1	N	N	N	Shiner
2E06	49.41	0.884	0.733	N	N	N	0	1	R	0	N	A	2	U				0	1	N	N	N	Shiner
2E07	39.99	0.443	0.693	N	N	N	0	0	R	0	N	A	2	U				0	1	N	R	N	dorsal-lateral lesion (shipping?)
2E08	36.96	0.352	0.697	N	N	N	0	1	R	0	N	A	1	M				0	0	N	N	N	Shiner
2E09	44.46	0.612	0.696	N	N	N	0	0	R	0	N	A	2	F				0	1	N	N	N	Shiner, developing eggs
2E10	45.8	0.755	0.786	N	N	N	0	1	R	0	N	A	1	U				0	1	N	N	N	Shiner
2E11	41.82	0.574	0.785	N	N	N	0	1	G	0	N	A	1	U				0	1	N	N	N	Shiner
2E12	47.37	0.843	0.793	N	N	N	0	1	R	0	N	A	1	U				0	0	N	N	N	
2E13	46.31	0.776	0.781	N	N	N	0	1	R	0	N	A	2	F				0	0	N	N	N	
2E14	47.86	0.895	0.816	N	N	S	0	1	R	0	N	A	1	U				0	1	N	N	N	
2E15	50.34	0.945	0.741	N	N	N	0	0	R	0	N	A	1	F				0	1	N	N	N	Shiner
2E16	57.37	1.439	0.762	N	N	N	0	1	G	0	N	A	2	F				0	0	N	N	N	Shiner
2E17	56.18	1.442	0.813	N	N	N	0	1	R	0	N	A	2	M				0	1	N	R	N	lesion base of pectoral fin (shipping?)
2E18	59.75	1.607	0.753	N	N	N	0	1	R	0	N	A	2	F				0	0	N	N	N	Shiner
2E19	55.87	1.651	0.947	N	N	N	0	1	R	0	N	A	1	F				0	0	N	R	N	lesion anterior-dorsal (ship?), dev. eggs
2E20	48.25	1.113	0.991	N	N	N	0	1	R	0	N	A	1	F				0	1	N	N	N	lernea posterior to gills, dev. eggs
2E21	60.6	2.118	0.952	N	N	N	0	1	R	0	N	A	2	F				0	0	N	N	N	developing eggs
2E22	54.1	1.666	1.052	N	OT	N	0	1	R	0	N	A	2	F				0	0	N	N	N	parasite on gills, developing eggs
2E23	68.28	2.684	0.843	N	N	N	0	1	R	0	N	A	1	F				0	1	N	N	N	developing eggs
2E24	62.84	2.398	0.966	N	N	N	0	1	R	0	N	A	1	M				0	0	N	N	N	
2E25	60.9	1.844	0.816	N	N	N	0	1	R	0	N	A	1	M				0	0	N	N	N	
2E26	53.95	1.235	0.786	N	N	N	0	1	R	0	N	A	1	F				0	1	N	N	N	Shiner
2E27	57.83	1.621	0.838	N	N	N	0	1	R	0	N	A	1	F				0	1	N	N	N	developing eggs
28																							
29																							
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*(MNFH = FATHEAD MINNOW, SRRD = RED SHINER

General Remarks

Fins _____ Gonads _____

Skin _____ Other _____

Table 10.2.3.--Fish Health Assessment Data for Rio Grande at La Orilla December 19, 2002

--insufficient sample collected for analysis--

Table 10.2.4.--Fish Health Assessment Data for Rio Grande at La Orilla February 28, 2003

[See table 12 for codes used below; SRRD, red shiner.]

Fish Necropsy Datasheet

Date **1-Mar-03** Unit _____ Species ***SRRD** Strain _____ Quality Control # **4E**

Location **La Orilla** Fish source _____ Age _____ File Name **la orilla4**

Mark/lot _____ Egg source _____ Hatch date _____ Tissue Collection # _____

Investigator(s) **Catherine Sykes** Water temp C^0 _____ Water Hardness _____

Reason for necropsy: **RGSM fish health study** Code ___ Remarks _____

Disease survey No: _____ Custody No _____

Sample Number	Length mm	Weight g	KTL * 105	Eyes	Gills	Pseudobranchs	Thymus	Mesentery Fat	Spleen	Hind gut	Kidney	Liver	Bile	Sex	Hematocrit	Leucocrit	Plasma Protein	Fins	Opercle	Deformities	Skin lesions	Fin Deformities	Remarks
4E01	54.41	1.389	0.862	N	N	N	0	1	R	0	N	A	1	F				0	0	N	N	N	developing eggs
4E02	49.06	1.004	0.850	N	N	N	0	1	R	0	N	A	1	F				2	1	N	N	N	developing eggs
4E03	59.5	1.668	0.792	N	N	N	0	1	R	0	N	A	1	F				0	1	N	N	N	developing eggs
4E04	56.02	1.344	0.764	N	N	N	0	1	R	0	N	A	1	F				0	0	N	N	N	developing eggs
4E05	48.89	0.934	0.799	N	N	N	0	1	R	0	N	A	1	M				0	1	N	N	N	
4E06	48.4	0.884	0.780	N	N	N	0	1	R	0	N	A	1	M				1	1	N	N	N	
4E07	46.79	0.888	0.867	N	N	N	0	1	R	0	N	A	1	M				1	1	N	N	N	shipping stress?
4E08	41.51	0.519	0.726	N	N	N	0	1	R	0	N	A	1	M				0	1	N	N	N	
4E09	48.68	0.751	0.651	N	N	N	0	1	R	0	N	A	1	M				0	1	N	N	N	shipping stress?
4E10	43.79	0.657	0.782	N	N	N	0	1	R	0	N	A	1	M				0	0	N	N	N	
4E11	43.54	0.665	0.806	N	N	N	0	1	R	0	N	A	1	F				1	1	N	N	N	developing eggs
4E12	38.15	0.461	0.830	N	N	N	0	1	R	0	N	A	1	U				1	0	N	N	N	shipping stress?
4E13	42.17	0.536	0.715	H1	N	N	0	2	R	0	N	A	1	M				0	0	N	N	N	shipping stress?
4E14	38.66	0.452	0.782	N	N	N	0	1	R	0	N	A	1	M				0	1	N	N	N	
4E15	40.85	0.521	0.764	N	N	N	0	1	R	0	N	A	1	U				0	0	N	N	N	
4E16	41.77	0.499	0.685	N	N	N	0	1	R	0	N	A	1	F				0	0	N	N	N	
4E17	39.66	0.463	0.742	N	N	N	0	1	R	0	N	A	1	F				0	1	N	N	N	developing eggs
4E18	40.27	0.469	0.718	N	N	N	0	1	R	0	N	A	1	F				0	1	N	N	N	developing eggs
4E19	39.2	0.49	0.813	N	N	N	0	0	R	0	N	A	1	M				0	1	N	N	N	
4E20	34.33	0.325	0.803	N	N	N	0	1	R	0	N	A	1	U				1	0	N	N	N	
4E21	38.82	0.437	0.747	N	N	N	0	0	R	0	N	A	1	U				0	0	N	N	N	
4E22	38.42	0.451	0.795	N	OT	N	0	1	R	0	N	A	1	M				0	0	N	N	N	lamellae missing
4E23	38.68	0.406	0.702	N	N	N	0	0	R	0	N	A	1	U				0	0	N	N	N	
4E24	36.84	0.376	0.752	N	N	N	0	1	R	0	N	A	1	U				0	0	N	N	N	
4E25	36.09	0.37	0.787	N	N	N	0	1	R	0	N	A	1	F				0	1	N	N	N	
4E26	37.23	0.365	0.707	N	N	N	0	1	R	0	N	A	1	M				0	1	N	N	N	
4E27	37.3	0.384	0.740	N	N	N	0	1	R	0	N	A	1	U				1	0	N	N	N	
4E28	35.9	0.372	0.804	N	N	N	0	1	R	0	N	A	1	M				0	0	N	N	N	
4E29	35.53	0.334	0.745	N	N	N	0	1	R	0	N	A	1	U				0	0	N	N	N	
4E30	35.94	0.355	0.765	N	N	N	0	1	R	0	N	A	1	F				0	0	N	N	N	
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*(SRRD = RED SHINER)

General Remarks

Fins _____ Gonads _____

Skin _____ Other _____

Table 10.3.1.--Fish Health Assessment Summary for Rio Grande at Barelas
August 22, 2002

--insufficient sample collected for analysis--

Table 10.3.2.--Fish Health Assessment Data for Rio Grande at Barelas January 17, 2003

[See table 12 for codes used below; SRRD, red shiner; MNFH, fathead minnow.]

Fish Necropsy Datasheet

Date **18-Jan-03** Unit _____ Species ***SRRD,MNFH** Strain _____ Quality Control # **3N**

Location **Barelas** Fish source _____ Age _____ Excel File Name **barelas3**

Mark/lot _____ Egg source _____ Hatch date _____ Tissue Collection # _____

Investigator(s) **Catherine Sykes** Water temp C^0 _____ Water Hardness _____

Reason for necropsy: **RGSM fish health study** Code ___ Remarks _____

Disease survey No: _____ Custody No: _____

Sample Number	Length mm	Weight g	KTL * 105	Eyes	Gills	Pseudobranchs	Thymus	Mesentery Fat	Spleen	Hind gut	Kidney	Liver	Bile	Sex	Hematocrit	Leucocrit	Plasma Protein	Fins	Opercle	Deformities	Skin lesions	Fin Deformities	Remarks
3N01	55.13	1.614	0.963	N	N	N	0	1	R	0	N	A	1	F				0	1	N	N	N	fathead, developing eggs
3N02	43.04	0.725	0.909	N	N	N	0	1	R	0	N	A	1	M				0	0	N	R	N	shiner
3N03	57.8	1.784	0.924	N	N	N	0	1	R	0	N	A	1	F				0	0	N	N	N	fathead, developing eggs
3N04	59.32	2.066	0.990	N	N	N	0	2	R	0	N	A	1	F				0	0	N	N	N	fathead, developing eggs
3N05	59.75	1.923	0.901	N	N	N	0	1	R	0	N	A	1	F				0	1	N	N	N	fathead, developing eggs
3N06	59.22	1.937	0.933	N	N	N	0	1	R	0	N	A	1	F				0	0	N	N	N	fathead, developing eggs
3N07	61.76	2.102	0.892	N	N	N	0	1	R	0	N	A	1	F				0	0	N	N	N	fathead, developing eggs
3N08	66.11	2.758	0.955	N	N	N	0	1	R	0	N	A	1	F				2	1	N	N	N	fathead, developing eggs
3N09	67.31	3.073	1.008	N	N	N	0	2	R	0	N	A	1	M				0	0	N	N	N	fathead
3N10	55.32	1.473	0.870	N	N	N	0	1	R	0	N	A	1	F				0	1	N	N	N	fathead, developing eggs
3N11	48.62	0.97	0.844	N	N	N	0	1	R	0	N	A	0	F				0	1	N	N	N	fathead, developing eggs
3N12	41.75	0.582	0.800	N	N	N	0	1	R	0	N	A	1	M				0	1	N	N	N	shiner
3N13	42.5	0.634	0.826	N	N	N	0	1	R	0	N	A	1	M				0	1	N	N	N	shiner
3N14	41.99	0.613	0.828	N	N	N	0	0	R	0	N	A	1	U				0	0	N	N	N	shiner
3N15	39.13	0.44	0.734	N	N	N	0	1	R	0	N	A	1	U				0	0	N	N	N	shiner
3N16	41.99	0.639	0.863	N	N	N	0	1	R	0	N	A	1	F				0	0	N	N	N	shiner
3N17	42.44	0.585	0.765	N	N	N	0	0	R	0	N	A	1	M				0	1	N	N	N	shiner
3N18	42.72	0.535	0.686	N	N	N	0	1	R	0	N	A	1	F				0	1	N	N	N	shiner
3N19	39.07	0.456	0.765	N	N	N	0	1	R	0	N	A	1	F				0	0	N	N	N	shiner
3N20	42.01	0.585	0.789	N	N	N	0	0	R	0	N	A	1	F				0	1	N	N	N	shiner
3N21	42.84	0.607	0.772	N	N	N	0	1	R	0	N	A	1	U				0	0	N	N	N	shiner
3N22	38.62	0.425	0.738	N	N	N	0	1	R	0	N	A	1	U				0	1	N	N	N	shiner
3N23	37.15	0.383	0.747	N	N	N	0	1	R	0	N	A	1	F				1	1	N	N	N	shiner
3N24	40.18	0.577	0.890	N	N	N	0	1	R	0	N	A	1	M				0	0	N	N	N	shiner
3N25	40.12	0.456	0.706	N	N	N	0	1	R	0	N	A	1	U				0	1	N	N	N	shiner
3N26	38.19	0.445	0.799	N	N	N	0	0	R	0	N	A	1	F				0	1	N	N	N	shiner
3N27	39.37	0.456	0.747	N	N	N	0	1	R	0	N	A	1	M				0	1	N	N	N	shiner
3N28	38.39	0.446	0.788	N	N	N	0	1	R	0	N	A	1	F				1	1	N	N	N	shiner
3N29	34.89	0.35	0.824	N	N	N	0	1	R	0	N	A	1	M				0	1	N	N	N	shiner, bruised laterally (shipping?)
3N30	37.74	0.452	0.841	N	N	N	0	1	R	0	N	A	1	F				0	1	N	N	N	shiner
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*(MNFH = FATHEAD MINNOW, SRRD = RED SHINER)

General Remarks

Fins _____ Gonads _____

Skin _____ Other _____

Table 10.4.1.--Fish Health Assessment Data for Albuquerque Waste Water Treatment Plant Outfall
August 6, 2002

--insufficient sample collected for analysis--

Table 10.4.2.--Fish Health Assessment Data for Rio Grande at Albuquerque Waste Water Treatment Plant Outfall
January 29, 2003

--insufficient sample collected for analysis--

Table 10.5.1.--Fish Health Assessment Data for Rio Grande at Los Padillas July 23, 2002

--insufficient sample collected for analysis--

Table 10.5.2.--Fish Health Assessment Data for Rio Grande at Los Padillas October 31, 2002

--insufficient sample collected for analysis--

Table 10.5.3.--Fish Health Assessment Data for Rio Grande at Los Padillas December 18, 2002

[See table 12 for codes used below; MNFH, fathead minnow; SRRD, red shiner.]

Fish Necropsy Datasheet

Date **20-Dec-02** Unit _____ Species ***MNFH,SRRD** Quality Control # **3D**

Location **Los Padillas** Fish source _____ Age _____ Excel File Name **los padillas3**

Mark/lot _____ Egg source _____ Hatch date _____ Tissue Collection # _____

Investigator(s) **Catherine Sykes** Water temp C^0 _____ Water Hardness _____

Reason for necropsy: **RGSM fish health study** Code _____ Remarks **fish arrived one day late - collected on 12/18/02, seemed to be OK**

Disease survey No: _____ Custody No: _____

Sample Number	Length mm	Weight g	KTL * 105	Eyes	Gills	Pseudobranchs	Thymus	Mesentery Fat	Spleen	Hind gut	Kidney	Liver	Bile	Sex	Hematocrit	Leucocrit	Plasma Protein	Fins	Opercle	Deformities	Skin lesions	Fin Deformities	Remarks
3D01	44.88	0.677	0.749	N	N	N	0	1	R	0	N	A	1	M				0	1	N	N	N	shiner
3D02	68.69	3.312	1.022	N	N	N	0	2	R	0	N	A	1	M				0	0	N	N	N	fathead
3D03	55.14	1.385	0.826	N	N	N	0	1	R	0	N	A	1	F				0	0	N	N	N	fathead, developing eggs
3D04	60.21	1.907	0.874	N	N	N	0	1	R	0	N	A	1	M				0	0	N	N	N	fathead
3D05	67.44	2.59	0.844	N	N	N	0	1	R	0	N	A	1	F				0	1	N	N	N	fathead, developing eggs
3D06	29.92	0.191	0.713																				shiner, too small for necropsy
3D07	33.03	0.23	0.638																				too small for necropsy
3D08	28.68	0.164	0.695																				too small for necropsy
3D09	29.6	0.167	0.644																				too small for necropsy
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*(MNFH = FATHEAD MINNOW, SRRD = RED SHINER)

General Remarks

Fins _____ Gonads _____

Skin _____ Other _____

Table 10.5.4.--Fish Health Assessment Data for Rio Grande at Los Padillas February 27, 2003

[See table 12 for codes used belw; MNFH, fathead minnow.]

Fish Necropsy Datasheet

Date **28-Feb-03** Unit _____ Species ***MNFH** Strain _____ Quality Control # **4D**

Location **Los Padillas** Fish source _____ Age _____ Excel File Name **los padillas4**

Mark/lot _____ Egg source _____ Hatch date _____ Tissue Collection # _____

Investigator(s) **Catherine Sykes** Water temp C^0 _____ Water Hardness _____

Reason for necropsy: **RGSM fish health study** Code ___ Remarks _____

Disease survey No: _____ Custody No _____

Sample Number	Length mm	Weight g	KTL * 105	Eyes	Gills	Pseudobranchs	Thymus	Mesentery Fat	Spleen	Hind Gut	Kidney	Liver	Bile	Sex	Hematocrit	Leucocrit	Plasma Protein	Fins	Opercle Deformities		Skin lesions	Fin Deformities	Remarks
4D01	56.86	1.621	0.882	N	N	N	0	1	R	0	N	A	1	F				0	1	N	N	N	developing eggs
4D02	70.47	3.622	1.035	N	N	N	0	2	R	0	N	A	1	M				0	0	N	N	N	healed wound right side below dorsal fin
4D03	63.98	2.82	1.077	N	N	N	0	1	R	0	N	A	1	M				0	0	N	N	N	
4D04	56.5	1.773	0.983	N	N	N	0	1	R	0	N	A	1	M				0	0	N	N	N	
4D05	74.97	4.751	1.128	N	N	N	0	1	R	0	N	A	1	F				0	0	N	N	N	lernea in nare (photo), developing eggs
4D06	59.66	2.105	0.991	N	N	N	0	1	R	0	N	A	1	F				0	0	N	N	N	developing eggs
4D07	69.65	3.839	1.136	N	N	N	0	2	R	0	N	A	1	M				0	0	N	N	N	
4D08	53.18	1.412	0.939	N	N	N	0	1	R	0	N	A	1	M				0	0	N	N	N	
4D09	67.37	3.21	1.050	N	N	N	0	1	R	0	N	A	1	F				0	0	N	N	N	ripe
4D10	71.64	3.792	1.031	N	N	N	0	2	R	0	N	A	1	M				0	0	N	N	N	
4D11	55.09	1.712	1.024	N	N	N	0	1	R	0	N	A	1	F				0	0	N	N	N	developing eggs
4D12	58.21	1.97	0.999	N	N	N	0	1	R	0	N	A	1	F				0	0	N	N	N	developing eggs
4D13	56.94	1.73	0.937	N	N	N	0	1	R	0	N	A	1	F				0	0	N	N	N	developing eggs
4D14	57.53	1.8	0.945	N	N	N	0	1	R	0	N	A	1	F				0	1	N	N	N	developing eggs
4D15	70.31	3.972	1.143	N	N	N	0	2	R	0	N	A	1	M				0	0	N	N	N	
4D16	71.27	3.782	1.045	N	N	N	0	2	R	0	N	A	1	M				0	0	N	N	N	
4D17	55.95	1.665	0.951	N	N	N	0	1	R	0	N	A	1	F				1	0	N	N	N	developing eggs
4D18	60.67	2.164	0.969	N	N	N	0	1	R	0	N	A	1	F				0	0	N	N	N	ripe
4D19	55.97	1.712	0.976	N	N	N	0	1	R	0	N	A	1	F				0	0	N	N	N	developing eggs
4D20	62.51	2.516	1.030	N	N	N	0	1	R	0	N	A	1	F				0	0	N	N	N	developing eggs
4D21	67.43	3.388	1.105	N	N	N	0	2	R	0	N	A	1	M				0	1	N	N	N	
4D22	66.04	2.945	1.023	N	N	N	0	1	R	0	N	A	1	M				0	0	N	N	N	
4D23	61.52	2.264	0.972	N	N	N	0	1	R	0	N	A	1	M				0	0	N	N	N	
4D24	62.13	2.217	0.924	N	N	N	0	2	R	0	N	A	1	M				0	1	N	N	N	
4D25	71.91	3.631	0.976	N	N	N	0	1	R	0	N	A	1	F				0	0	N	N	N	ripe
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*(MNFH = FATHEAD MINNOW)

General Remarks

Fins _____ Gonads _____

Skin _____ Other _____

Table 10.6.1.--Fish Health Assessment Data for Rio Grande at Isleta below Railroad Bridge on August 7, 2002

[See table 12 for codes used below; MNFH, fathead minnow; SRRD, red shiner.]

Fish Necropsy Datasheet

Date **8-Aug-02** Unit _____ Species ***MNFH, SRRD** Strain _____ Quality Control # **1H**

Location **RG at Isleta b/ RR** Fish source _____ Age _____ Excel File Name **Isleta pueblo**

Mark/lot _____ Egg source _____ Hatch date _____ Tissue Collection # _____

Investigator(s) **Catherine Sykes** Water temp C^0 _____ Water Hardness _____

Reason for necropsy: **RGSM fish health study** Code ___ Remarks _____

Disease survey No: _____ Custody No _____

Comment: Fish collected from Rio Grande at Isleta below Railroad Bridge on August 7, 2002

Sample Number	Length mm	Weight g	KTL * 105	Eyes	Gills	Pseudobranchs	Thymus	Mesentery Fat	Spleen	Hind gut	Kidney	Liver	Bile	Sex	Hematocrit	Leucocrit	Plasma Protein	Fins	Opercle	Deformities	Skin lesions	Fin Deformities	Remarks
1H01	56.99	1.787	0.965	N	N	N	0	1	R	0	N	A	2	U				0	1	N	N	N	
1H02	42.44	0.641	0.839	N	N	N	0	1	R	0	N	A	2	U				1	1	N	L	N	
1H03	66.69	2.929	0.987	N	N	N	0	0	R	1	N	A	1	F				0	1	N	N	N	Shiner, ripe
1H04	33.23	0.263	0.717	N	N	N	0	0	R	0	N	A	1	U				1	1	N	N	N	
1H05	50.22	1.118	0.883	N	N	N	0	0	R	0	N	A	1	F				1	0	N	N	N	Shiner, resorbing eggs
1H06	52.67	1.162	0.795	N	N	N	0	1	R	0	N	A	2	U				0	0	N	N	N	
1H07	55.56	1.733	1.011	N	N	N	0	1	R	0	N	A	1	F				0	0	N	N	N	Shiner, resorbing eggs
1H08	41.71	0.591	0.814	N	N	N	0	1	R	0	N	A	2	U				0	0	N	N	N	
1H09	42.47	0.602	0.786	N	N	N	0	1	R	0	N	B	1	U				0	0	N	N	N	
1H10	50.19	1.116	0.883	N	N	N	0	1	R	0	N	A	2	U				0	0	N	N	N	
1H11	53.16	1.154	0.768	N	N	N	0	0	R	0	N	A	1	F				0	1	N	N	N	developing eggs
1H12	43.18	0.683	0.848	N	N	N	0	1	R	0	N	A	2	M				0	0	N	N	N	
1H13	54.93	1.267	0.764	N	N	N	0	0	R	0	N	A	2	U				0	1	N	N	N	
1H14	37.02	0.388	0.766	N	N	N	0	1	R	0	N	A	1	U				1	0	N	N	N	
1H15	43.67	0.716	0.860	N	N	N	0	1	R	0	N	A	3	M				0	0	N	N	N	
1H16	50.93	1.106	0.837	N	N	N	0	0	NO	0	N	A	2	U				0	1	N	N	N	lernea
1H17	63.58	2.361	0.919	N	N	N	0	1	R	0	N	A	2	M				0	1	N	N	N	
1H18	46.92	0.88	0.852	N	N	N	0	1	R	0	N	A	1	M				0	0	N	N	N	
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*(MNFH = FATHEAD MINNOW, SRRD = RED SHINER)

General Remarks

Fins _____ Gonads _____

Skin _____ Other _____

Table 10.6.2.--Fish Health Data for Rio Grande at Isleta below Railroad Bridge on January 28, 2003

[See table 12 for codes used below; MNFH, fathead minnow; SRRD, red shiner.]

Fish Necropsy Data

Date **29-Jan-03** Unit _____ Species ***MNFH / SRRD** Strain _____ Quality Control # **3H**

Location **Isleta Pueblo** Fish source _____ Age _____ Excel File Name **isleta pueblo2**

Mark/lot _____ Egg source _____ Hatch date _____ Tissue Collection # _____

Investigator(s) **Catherine Sykes** Water temp C^0 _____ Water Hardness _____

Reason for necropsy: **RGSM fish health study** Code ___ Remarks _____

Disease survey No: _____ Custody No _____

Fish collected from the Rio Grande at Isleta below Railroad Bridge on January 28, 2003.

	Sample Number	Length mm	Weight g	KTL * 10^5	Eyes	Gills	Pseudobranchs	Thymus	Mesentery Fat	Spleen	Hind gut	Kidney	Liver	Bile	Sex	Hematocrit	Leucocrit	Plasma Protein	Fins	Opercle	Deformities	Skin lesions	Fin Deformities	Remarks
1	3H01	57.12	1.837	0.986	N	N	N	0	1	R	0	N	A	1	F				0	0	N	N	N	developing eggs
2	3H02	54.07	1.39	0.879	N	N	N	0	1	R	0	N	A	1	F				0	0	N	N	N	developing eggs
3	3H03	61.95	2.137	0.899	N	N	N	0	1	R	0	N	A	1	M				0	1	N	N	N	
4	3H04	65.37	2.784	0.997	N	N	N	0	1	R	0	N	A	1	M				0	1	N	N	N	
5	3H05	68.42	2.805	0.876	N	N	N	0	1	R	0	N	A	1	M				0	1	N	N	N	parasite on dorsal fin (photo)
6	3H06	58.42	1.876	0.941	N	N	N	0	1	R	0	N	A	1	F				0	1	N	N	N	developing eggs
7	3H07	61.58	1.998	0.856	N	N	N	0	1	R	0	N	A	1	M				0	0	N	N	N	
8	3H08	57.99	1.779	0.912	N	N	N	0	1	R	0	N	A	1	F				0	1	N	N	N	developing eggs
9	3H09	55.22	1.441	0.856	N	N	N	0	1	R	0	N	A	1	M				0	0	N	N	N	
10	3H10	67.36	3.227	1.056	N	N	N	0	1	R	0	N	A	1	M				2	0	N	N	N	
11	3H11	57.56	1.62	0.849	N	N	N	0	1	R	0	N	A	1	F				0	0	N	N	N	developing eggs
12	3H12	54.25	1.242	0.778	N	N	N	0	1	R	0	N	A	1	M				0	0	N	N	N	
13	3H13	61.02	1.943	0.855	N	N	N	0	1	R	0	N	A	1	F				0	1	N	N	N	developing eggs
14	3H14	61.95	2.005	0.843	N	N	N	0	1	R	0	N	A	1	M				0	1	N	N	N	
15	3H15	61.46	1.97	0.849	N	N	N	0	1	R	0	N	A	0	M				0	1	N	N	N	
16	3H16	59.53	1.711	0.811	N	N	N	0	1	R	0	N	A	1	M				0	1	N	N	N	
17	3H17	56.95	1.606	0.869	N	N	N	0	1	R	0	N	A	1	M				0	1	N	N	N	
18	3H18	54.75	1.407	0.857	N	N	N	0	1	R	0	N	A	1	F				0	1	N	N	N	developing eggs
19	3H19	60.04	1.892	0.874	N	N	N	0	0	R	0	N	A	1	F				0	1	N	R	N	developing eggs, lernea base of pector.
20	3H20	68.02	3.042	0.967	N	N	N	0	1	R	0	N	C	1	M				0	0	N	N	N	
21	3H21	52.24	1.281	0.899	N	N	N	0	1	R	0	N	A	1	F				0	1	N	N	N	developing eggs
22	3H22	57.95	1.731	0.889	N	N	N	0	1	R	0	N	A	1	F				0	1	N	N	N	developing eggs
23	3H23	52.34	1.216	0.848	N	N	N	0	1	R	0	N	A	1	F				0	0	N	N	N	developing eggs
24	3H24	64.55	2.53	0.941	N	N	N	0	1	R	0	N	A	1	M				0	0	N	N	N	
25	3H25	52.96	1.346	0.906	N	N	N	0	1	R	0	N	A	1	F				0	0	N	N	N	developing eggs
26	3H26	64.59	2.447	0.908	N	N	N	0	1	R	0	N	A	1	M				0	0	N	N	N	parasite on caudal fin (photo)
27	3H27	52.51	1.281	0.885	N	N	N	0	1	R	0	N	A	1	F				0	1	N	N	N	developing eggs
28	3H28	45.31	0.747	0.803	N	N	N	0	1	R	0	N	A	1	U				0	1	N	N	N	shiner, parasite on gills (photo)
29	3H29	44.19	0.66	0.765	N	N	N	0	1	R	0	N	A	1	F				0	1	N	N	N	shiner
30	3H30	39.84	0.5	0.791	N	N	N	0	1	R	0	N	A	1	M				0	1	N	N	N	shiner
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*(FH = Fathead Minnow; SH or Shiner = Red Shiner)

General Remarks

Fins _____ Gonads _____

Skin _____ Other _____

Table 10.7.1.--Fish Health Assessment Data for Rio Grande at Los Lunas July 24, 2002

[See table 12 for codes used below; MNFH, fathead minnow.]

Fish Necropsy Datasheet

Date **25-Jul-02** Unit _____ Species ***MNFH** Strain _____ Quality Control # **1C**

Location **Los Lunas** Fish source _____ Age _____ Excel File Name **las lunas**

Mark/lot _____ Egg source _____ Hatch date _____ Tissue Collection # _____

Investigator(s) **Catherine Sykes** Water temp C^0 _____ Water Hardness _____

Reason for necropsy: **RGSM fish health study** Code _____ Remarks **60% of fish arrived dead - lost oxygen in bag, culled out 16 live fish**

Disease survey No: _____ Custody No: _____

Sample Number	Length mm	Weight g	KTL * 10^5	Eyes	Gills	Pseudobranchs	Thymus	Mesentery Fat	Spleen	Hind Gut	Kidney	Liver	Bile	Sex	Hematocrit	Leucocrit	Plasma Protein	Fins	Opercle	Deformities	Skin lesions	Fin Deformities	Remarks
1C01	44.61	0.829	0.934	H1	N	N	0	2	R	0	N	A	1	U				0	0	N	N	N	
1C02	50.23	1.265	0.998	N	N	N	0	2	R	0	N	A	1	U				0	1	N	N	N	
1C03	46.57	0.922	0.913	N	N	N	0	2	R	0	N	A	1	U				0	0	N	N	N	
1C04	40.15	0.576	0.890	N	N	N	0	1	R	0	N	A	1	U				0	1	N	N	N	
1C05	41.52	0.726	1.014	N	N	N	0	2	R	0	N	A	2	U				0	0	N	N	N	
1C06	45.11	0.974	1.061	H1	N	N	0	1	R	0	N	A	1	U				0	1	N	N	N	
1C07	44.64	0.755	0.849	N	N	N	0	1	R	0	N	A	1	U				0	1	N	N	N	
1C08	37.93	0.473	0.867	N	N	N	0	1	R	0	N	A	1	U				0	1	N	N	N	
1C09	42.77	0.661	0.845	N	N	N	0	0	R	0	N	A	2	F				0	0	N	N	N	ripe female
1C10	44.11	0.776	0.904	N	N	N	0	2	R	0	N	A	1	U				0	0	N	N	N	
1C11	42.51	0.683	0.889	N	N	N	0	2	R	0	N	A	1	U				0	0	N	N	N	
1C12	40.05	0.549	0.854	N	N	I	0	1	R	0	OT	A	2	U				0	0	N	N	N	hemorrhaging in kidney
1C13	43.78	0.827	0.986	N	N	N	0	1	R	0	N	A	1	U				0	0	N	N	N	
1C14	49.72	1.197	0.974	N	N	N	0	1	E	0	S	A	2	U				0	1	N	N	N	enlarged spleen
1C15	44.49	0.852	0.968	N	N	N	0	1	R	0	N	A	1	M				0	0	N	N	N	
1C16	44.05	0.77	0.900	N	N	N	0	2	R	0	N	A	2	U				0	1	N	N	N	lernea
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*(MNFH = FATHEAD MINNOW)

General Remarks

Fins _____ Gonads _____

Skin _____ Other consistency of spleens abnormal - may be due to shipping stress

Table 10.7.2.--Fish Health Assessment Data for Rio Grande at Los Lunas October 30, 2002

[See table 12 for codes used below; MNFH, fathead minnow.]

Fish Necropsy Datasheet

Date **31-Oct-02** Unit _____ Species ***MNFH** Strain _____ Quality Control # **2C**

Location **Los Lunas** Fish source _____ Age _____ Excel File Name **las lunas2**

Mark/lot _____ Egg source _____ Hatch date _____ Tissue Collection # _____

Investigator(s) **Catherine Sykes** Water temp C^0 _____ Water Hardness _____

Reason for necropsy: **RGSM fish health study** Code ___ Remarks _____

Disease survey No: _____ Custody No: _____

Sample Number	Length mm	Weight g	KTL * 105	Eyes	Gills	Pseudobranchs	Thymus	Mesentery Fat	Spleen	Hind gut	Kidney	Liver	Bile	Sex	Hematocrit	Leucocrit	Plasma Protein	Fins	Opercle	Deformities	Skin lesions	Fin Deformities	Remarks
2C01	43.67	0.624	0.749	N	N	N	0	1	R	0	N	A	1	U				0	0	N	R	N	lesion caused by lernea
2C02	56.84	1.65	0.899	N	N	N	0	1	R	0	N	A	1	F				0	1	N	N	N	developing eggs
2C03	62.76	2.026	0.820	N	N	N	0	1	R	0	N	A	1	M				0	0	N	N	N	
2C04	46.44	0.895	0.894	N	N	N	0	1	R	0	N	A	1	F				0	1	N	N	N	developing eggs
2C05	72.26	3.505	0.929	N	N	N	0	2	R	0	N	A	1	M				0	0	N	N	N	
2C06	60.86	2.246	0.996	N	N	N	0	2	R	0	N	A	1	M				0	1	N	N	N	
2C07	58.88	1.91	0.936	N	OT	N	0	1	R	0	N	A	1	M				0	1	N	N	N	parasite on gills
2C08	54.25	1.429	0.895	N	N	N	0	1	R	0	N	A	1	F				0	1	N	N	N	developing eggs
2C09	47.85	0.965	0.881	N	N	N	0	1	R	0	N	A	2	F				0	1	N	N	N	
2C10	58.61	1.862	0.925	N	N	N	0	1	R	0	N	A	1	F				0	0	N	N	N	
2C11	63.12	2.467	0.981	N	N	N	0	1	R	0	N	A	1	M				0	0	N	N	N	
2C12	60.02	1.815	0.839	N	N	N	0	2	R	0	N	A	1	M				0	1	N	N	N	
2C13	61.07	2.036	0.894	N	N	N	0	2	R	0	N	A	1	M				0	0	N	N	N	
2C14	62.79	2.62	1.058	N	N	N	0	1	R	0	N	A	1	M				0	0	N	N	N	
2C15	71.17	3.592	0.996	N	N	N	0	2	R	0	N	A	1	M				0	0	N	N	N	
2C16	65.76	2.763	0.972	N	N	N	0	1	R	0	N	A	1	M				0	1	N	N	N	
2C17	67.18	3.054	1.007	N	N	N	0	1	R	0	N	A	1	M				0	0	N	N	N	
2C18	66.61	2.592	0.877	N	N	N	0	1	R	0	N	A	1	M				0	1	N	N	N	
2C19	59.06	1.817	0.882	N	N	N	0	1	R	0	N	A	1	F				0	0	N	N	N	
2C20	60.73	2.097	0.936	N	N	N	0	1	R	0	N	A	1	M				1	0	N	N	N	
2C21	52.11	1.181	0.835	N	N	N	0	0	R	0	N	A	1	F				0	0	N	N	N	
2C22	62.81	2.227	0.899	N	N	N	0	1	R	0	N	A	1	M				0	1	N	N	N	
2C23	53.39	1.234	0.811	N	N	N	0	2	R	0	N	A	1	U				0	0	N	N	N	
2C24	58.47	1.765	0.883	N	N	N	0	1	R	0	N	A	1	M				0	0	N	N	N	
2C25	54.42	1.543	0.957	N	N	N	0	2	R	0	N	A	1	M				0	0	N	N	N	
2C26	56.29	1.643	0.921	N	N	N	0	1	R	0	N	A	1	F				0	0	N	N	N	developing eggs, sticker in nare
2C27	57.6	1.879	0.983	N	N	N	0	1	R	0	N	A	1	F				0	0	N	N	N	developing eggs
2C28	54.59	1.451	0.892	N	N	N	0	1	R	0	N	A	1	F				0	0	N	N	N	developing eggs
2C29	57.83	1.771	0.916	N	N	N	0	2	R	0	N	A	1	M				0	0	N	N	N	
2C30	60.93	1.892	0.836	N	N	N	0	2	R	0	N	A	1	M				0	1	N	N	N	
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*(MNFH = FATHEAD MINNOW)

General Remarks

Fins _____ Gonads _____

Skin _____ Other _____

Table 10.7.3.--Fish Health Assessment Data for Rio Grande at Los Lunas December 17, 2002

[See table 12 for codes used below; MNFH, fathead minnow.]

Fish Necropsy Datasheet

Date **18-Dec-02** Unit _____ Species ***MNFH,SRRD** Quality Control # **3C**

Location **Los Lunas** Fish source _____ Age _____ Excel File Name **los lunas3**

Mark/lot _____ Egg source _____ Hatch date _____ Tissue Collection # _____

Investigator(s) **Catherine Sykes** Water temp C^0 _____ Water Hardness _____

Reason for necropsy: **RGSM fish health study** Code _____ Remarks _____

Disease survey No: _____ Custody No: _____

Sample Number	Length mm	Weight g	KTL * 105	Eyes	Gills	Pseudobranchs	Thymus	Mesentery Fat	Spleen	Hind gut	Kidney	Liver	Bile	Sex	Hematocrit	Leucocrit	Plasma Protein	Fins	Opercle	Deformities	Skin lesions	Fin Deformities	Remarks
3C01	59.11	2.016	0.976	N	N	N	0	1	R	0	N	A	1	M				0	1	N	N	N	fathead
3C02	55.46	1.247	0.731	N	N	N	0	1	R	0	N	A	1	F				0	0	N	N	N	shiner
3C03	45.49	0.741	0.787	N	N	N	0	1	R	0	N	A	1	F				0	1	N	N	N	shiner
3C04	45.51	0.738	0.783	N	N	N	0	1	R	0	N	A	1	U				0	0	N	N	N	shiner, worm in abdominal cavity
3C05	69.75	3.508	1.034	N	N	N	0	1	R	0	N	A	1	M				2	0	N	N	N	fathead, lernea on pectoral fin
3C06	61.24	2.031	0.884	N	N	N	0	1	R	0	N	A	1	F				0	0	N	N	N	fathead, developing eggs
3C07	46.25	0.75	0.758	N	N	N	0	1	R	0	N	A	1	F				0	0	N	N	N	shienr
3C08	54.07	1.542	0.975	N	N	N	0	1	R	0	N	A	1	F				0	0	N	N	N	fathead, developing eggs
3C09	58.17	2.036	1.034	N	N	N	0	1	R	0	N	A	1	F				0	0	N	N	N	fathead, developing eggs
3C10	59.52	1.974	0.936	N	N	N	0	1	R	0	N	A	1	F				0	1	N	N	N	fathead, developing eggs
3C11	66.97	3.073	1.023	N	N	N	0	1	R	0	N	A	1	M				0	0	N	N	N	fathead
3C12	53.65	1.52	0.984	N	N	N	0	1	R	0	N	A	1	F				0	0	N	N	N	fathead, developing eggs
3C13	63.33	2.492	0.981	N	N	N	0	2	R	0	N	A	1	M				0	0	N	N	N	fathead
3C14	54.66	1.579	0.967	N	N	N	0	1	R	0	N	A	1	F				0	0	N	N	N	fathead, developing eggs
3C15	57.07	1.75	0.941	N	N	N	0	1	R	0	N	A	1	F				0	0	N	N	N	fathead, developing eggs
3C16	55	1.538	0.924	N	N	N	0	1	R	0	N	A	1	F				0	0	N	N	N	fathead, developing eggs
3C17	64.48	2.461	0.918	N	N	N	0	1	R	0	N	A	1	F				0	1	N	N	N	fathead, developing eggs
3C18	62.22	2.163	0.898	N	N	N	0	1	R	0	N	A	1	F				0	0	N	N	N	fathead, ripe
3C19	52.71	1.151	0.786	N	N	N	0	1	R	0	N	A	1	F				0	0	N	N	N	shiner
3C20	45.16	0.688	0.747	N	N	N	0	1	R	0	N	A	1	F				0	1	N	N	N	shiner
3C21	48.25	0.827	0.736	N	N	N	0	1	R	0	N	A	1	F				2	0	N	N	N	shiner, lernea, metacercaria/gills & back
3C22	43.83	0.724	0.860	N	N	N	0	1	R	0	N	A	1	U				0	0	N	N	N	fathead, worm in abdominal cavity
3C23	39.57	0.46	0.742	N	N	N	0	1	R	0	N	A	1	F				0	0	N	N	N	shiner
3C24	44.06	0.643	0.752	N	N	N	0	1	R	0	N	A	1	M				0	1	N	N	N	shiner
3C25	44.4	0.678	0.775	N	N	N	0	1	R	0	N	A	1	F				0	0	N	N	N	shiner
3C26	40.96	0.531	0.773	N	N	N	0	1	R	0	N	A	1	M				1	1	N	N	N	shiner
3C27	38.45	0.439	0.772	N	N	N	0	1	R	0	N	A	1	M				0	1	N	N	N	shiner
3C28	37.83	0.359	0.663	N	N	N	0	1	R	0	N	A	1	U				0	0	N	N	N	shiner
3C29	38.87	0.442	0.753	N	N	N	0	1	R	0	N	A	1	U				0	1	N	N	N	shiner
3C30	38.57	0.39	0.680	N	N	N	0	1	R	0	N	A	1	F				0	1	N	N	N	shiner
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*(MNFH = FATHEAD MINNOW, SRRD = RED SHINER)

General Remarks

Fins _____ Gonads _____

Skin _____ Other _____

Table 10.7.4.--Fish Health Assessment Data for Rio Grande at Los Lunas February 26, 2003

[See table 12 for codes used below; MNFH, fathead minnow.]

Fish Necropsy Datasheet

Date **27-Feb-03** Unit _____ Species ***MNFH** Strain _____ Quality Control # **4C**

Location **Los Lunas** Fish source _____ Age _____ Excel File Name **los lunas4**

Mark/lot _____ Egg source _____ Hatch date _____ Tissue Collection # _____

Investigator(s) **Catherine Sykes** Water temp C^0 _____ Water Hardness _____

Reason for necropsy: **RGSM fish health study** Code ___ Remarks _____

Disease survey No: _____ Custody No _____

Sample Number	Length mm	Weight g	KTL * 10^5	Eyes	Gills	Pseudobranchs	Thymus	Mesentery Fat	Spleen	Hind gut	Kidney	Liver	Bile	Sex	Hematocrit	Leucocrit	Plasma Protein	Fins	Opercle	Deformities	Skin lesions	Fin Deformities	Remarks
4C01	55.9	1.75	1.002	N	N	N	0	1	R	0	N	A	1	F				0	0	N	N	N	developing eggs
4C02	53.48	1.369	0.895	N	N	N	0	1	R	0	N	A	1	F				0	1	N	N	N	developing eggs
4C03	61.78	2.468	1.047	N	N	N	0	2	R	0	N	C	1	F				0	0	N	R	N	shipping?, developing eggs
4C04	54.65	1.381	0.846	N	N	N	0	1	R	0	N	F	1	M				1	0	N	N	N	
4C05	66.92	3.19	1.064	N	N	N	0	2	R	0	N	C	1	M				0	0	N	N	N	healed dorsal wound (photo)
4C06	57.16	1.901	1.018	N	N	N	0	1	R	0	N	C	1	F				0	0	N	N	N	developing eggs
4C07	59.96	2.278	1.057	N	N	N	0	1	R	0	N	A	1	F				0	0	N	N	N	developing eggs
4C08	63.06	2.688	1.072	N	N	N	0	2	R	0	N	A	1	M				0	0	N	N	N	
4C09	59.15	1.889	0.913	N	OT	N	0	1	R	0	N	F	1	F				0	1	N	N	N	short lamellae on inside raker (pic), ripe
4C10	63.98	2.662	1.016	N	N	N	0	1	R	0	N	C	1	F				0	1	N	N	N	ripe
4C11	64.1	2.805	1.065	N	N	N	0	2	R	0	N	A	1	M				0	0	N	N	N	
4C12	56.8	1.59	0.868	N	N	N	0	1	R	0	N	A	1	M				0	0	N	N	N	
4C13	58.75	1.951	0.962	N	N	N	0	1	R	0	N	A	1	F				0	1	N	N	N	ripe
4C14	61.37	2.178	0.942	N	N	N	0	1	R	0	N	A	1	F				0	1	N	N	N	parasite on gill, ripe
4C15	46.3	0.971	0.978	N	N	N	0	1	R	0	N	A	1	F				0	0	N	N	N	developing eggs
4C16	53.54	1.31	0.854	N	N	N	0	1	R	0	N	A	1	M				0	1	N	R	N	shipping stress?
4C17	54.93	1.626	0.981	N	F	N	0	1	R	0	N	A	1	F				0	0	N	N	N	developing eggs
4C18	57.31	1.88	0.999	N	N	N	0	1	R	0	N	A	1	F				2	0	N	N	N	ripe
4C19	57.09	1.808	0.972	N	N	N	0	1	R	0	N	A	1	F				2	0	N	N	N	developing eggs
4C20	58.4	1.871	0.939	N	N	N	0	1	R	0	N	A	1	F				0	1	N	N	N	ripe
4C21	51.09	1.181	0.886	N	N	N	0	1	R	0	N	A	1	F				0	0	N	R	N	shipping stress? Developing eggs
4C22	56	1.6	0.911	N	N	N	0	1	R	0	N	A	1	F				0	0	N	N	N	developing eggs
4C23	58.35	2.209	1.112	N	N	N	0	1	R	0	N	A	1	F				0	0	N	N	N	ripe
4C24	55.25	1.487	0.882	N	N	N	0	1	R	0	N	A	1	F				1	0	N	R	N	developing eggs
4C25	48.95	0.918	0.783	N	N	N	0	1	R	0	N	A	1	F				0	1	N	N	N	developing eggs
4C26	54.39	1.459	0.907	N	N	N	0	1	R	0	N	A	1	F				0	0	N	N	N	developing eggs
4C27	52.09	1.139	0.806	N	N	N	0	1	R	0	N	A	1	M				0	1	N	N	N	
4C28	56.27	1.478	0.830	N	N	N	0	1	R	0	N	A	1	M				0	0	N	N	N	
4C29	52.07	1.269	0.899	N	N	N	0	1	R	0	N	C	1	F				0	0	N	N	N	ripe
4C30	60.59	1.812	0.815	N	N	N	0	2	R	0	N	A	1	M				0	0	N	N	N	
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*(MNFH = FATHEAD MINNOW)

General Remarks

Fins _____ Gonads _____

Skin _____ Other _____

Table 10.8.1.--Fish Health Assessment Data for Rio Grande at Abeytas
September 12, 2002

--insufficient sample collected for analysis--

Table 10.8.2.--Fish Health Assessment Data for Rio Grande at Abeytas January 16, 2003

[See table 12 for codes used below; SRRD, red shiner; MNFH, fathead minnow.]

Fish Necropsy Datasheet

Date **17-Jan-03** Unit _____ Species ***SRRD,MNFH** _____ Quality Control # **3M**

Location **Abeytas** Fish source _____ Age _____ Excel File Name **abeytas3**

Mark/lot _____ Egg source _____ Hatch date _____ Tissue Collection # _____

Investigator(s) **Catherine Sykes** Water temp C^0 _____ Water Hardness _____

Reason for necropsy: **RGSM fish health study** Code ___ Remarks _____

Disease survey No: _____ Custody No: _____

Sample Number	Length mm	Weight g	KTL * 105	Eyes	Gills	Pseudobranchs	Thymus	Mesentery Fat	Spleen	Hind gut	Kidney	Liver	Bile	Sex	Hematocrit	Leucocrit	Plasma Protein	Fins	Opercle	Deformities	Skin lesions	Fin Deformities	Remarks
3M01	46.59	0.857	0.847	N	N	N	0	2	R	0	N	A	1	F				0	1	N	N	N	developing eggs, shiner
3M02	55.24	1.589	0.943	N	N	N	0	1	R	0	N	A	1	F				0	0	N	N	N	developing eggs, fathead
3M03	60.2	2.034	0.932	N	N	N	0	1	R	0	N	A	1	F				0	0	N	N	N	developing eggs,fathead
3M04	49.47	1.105	0.913	N	N	N	0	1	R	0	N	C	1	M				0	0	N	R	N	shiner
3M05	70.54	3.653	1.041	N	N	N	0	2	R	0	N	A	1	M				0	0	N	N	N	fathead
3M06	66.5	2.753	0.936	N	N	N	0	1	R	0	N	A	1	F				0	1	N	N	N	developing eggs, fathead
3M07	53.16	1.388	0.924	N	N	N	0	1	R	0	N	A	1	F				0	1	N	R	N	developing eggs, fathead
3M08	69.98	3.714	1.084	N	N	N	0	2	R	0	N	A	1	M				0	1	N	N	N	fathead
3M09	71.96	4.279	1.148	N	N	N	0	2	R	0	N	A	1	M				0	0	N	N	N	fathead
3M10	54.19	1.414	0.889	N	N	N	0	1	R	0	N	A	1	M				0	1	N	N	N	fathead
3M11	39.25	0.565	0.934	N	N	N	0	1	R	0	N	A	1	M				0	1	N	N	N	shiner
3M12	41.21	0.59	0.843	N	N	N	0	1	R	0	N	A	1	M				0	1	N	N	N	shiner
3M13	43.45	0.662	0.807	N	N	N	0	1	R	0	N	A	1	U				0	1	N	N	N	shiner
3M14	60.65	2.148	0.963	N	N	N	0	1	R	0	N	A	1	F				0	1	N	N	N	fathead
3M15	48.82	0.925	0.795	N	N	N	0	1	R	0	N	C	1	M				0	0	N	N	N	shiner
3M16	64.63	2.572	0.953	N	N	N	0	1	R	0	N	A	1	F				0	0	N	N	N	developing eggs, fathead
3M17	54.8	1.394	0.847	N	N	N	0	1	R	0	N	A	1	F				1	0	N	N	N	developing eggs, fathead
3M18	64.85	2.729	1.001	N	N	N	0	1	R	0	N	A	1	F				0	1	N	N	N	developing eggs,fathead
3M19	68.38	3.412	1.067	N	N	N	0	2	R	0	N	A	1	M				0	0	N	N	N	fathead
3M20	59.9	2.143	0.997	N	N	N	0	1	R	0	N	A	1	F				0	1	N	N	N	developing eggs, fathead
3M21	63.57	2.824	1.099	N	N	N	0	2	R	0	N	A	1	F				1	0	N	N	N	developing eggs, fathead
3M22	68.71	3.328	1.026	N	N	N	0	2	R	0	N	A	1	M				0	0	N	N	N	fathead
3M23	66.69	3.039	1.025	N	N	N	0	2	R	0	N	A	1	M				0	0	N	R	N	bruised caudal peduncle, fathead
3M24	51.73	1.213	0.876	N	N	N	0	2	R	0	N	C	1	M				0	0	N	R	N	shiner
3M25	69.77	3.647	1.074	N	N	N	0	2	R	0	N	A	1	M				0	1	N	R	N	fathead
3M26	64.19	2.896	1.095	N	N	N	0	2	R	0	N	A	1	M				0	0	N	N	N	fathead
3M27	56.52	1.814	1.005	N	N	N	0	1	R	0	N	A	1	M				0	0	N	N	N	fathead
3M28	54.42	1.437	0.892	N	N	N	0	1	R	0	N	A	1	F				0	1	N	N	N	developing eggs, fathead
3M29	48.94	1.167	0.996	N	N	N	0	1	R	0	N	A	1	M				0	0	N	N	N	fathead
3M30	55.66	1.817	1.054	N	N	N	0	1	R	0	N	A	1	M				0	0	N	N	N	fathead
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*(MNFH = FATHEAD MINNOW, SRRD = RED SHINER)

General Remarks

Fins _____ Gonads _____

Skin _____ Other _____

Table 10.9.1.--Fish Health Assessment Data for Lower San Juan Drain August 5, 2002

[see table 12 for codes used below; SRRD, red shiner]

Fish Necropsy Datasheet

Date **6-Aug-02** Unit _____ Species ***SRRD** Strain _____ Quality Control # **1F**

Location **Lower San Juan** Fish source _____ Age _____ Excel File Name **lower san juan**

Mark/lot _____ Egg source _____ Hatch date _____ Tissue Collection # _____

Investigator(s) **Catherine Sykes** Water temp C^0 _____ Water Hardness _____

Reason for necropsy: **RGSM fish health study** Code ___ Remarks _____

Disease survey No: _____ Custody No _____

Sample Number	Length mm	Weight g	KTL * 10^5	Eyes	Gills	Pseudobranchs	Thymus	Mesentery Fat	Spleen	Hind Gut	Kidney	Liver	Bile	Sex	Hematocrit	Leucocrit	Plasma Protein	Fins		Opercle Deformities	Skin lesions	Fin Deformities	Remarks
1F01	37.13	0.492	0.962	N	N	N	0	2	R	0	N	A	1	U				0	0	N	N	N	
1F02	30.26	0.221	0.798	N	N	N	0	1	R	0	N	A	1	U				1	1	N	N	N	very young juvenile
1F03	30.63	0.331	1.153	H2	N	N	0	1	R	0	N	A	1	U				0	1	N	N	N	
1F04	57.35	1.815	0.962	N	N	N	0	1	R	0	N	A	1	M				0	1	N	OP	N	lernea, opercle hemorrhaging
1F05	37.14	0.373	0.727	N	N	N	0	1	R	0	N	B	1	U				0	0	N	N	N	
1F06	59.1	1.781	0.863	N	N	N	0	0	R	0	N	A	1	F				0	0	N	N	N	resorbing eggs
1F07	35.7	0.364	0.801	N	N	N	0	1	R	0	N	A	1	U				0	1	N	N	N	
1F08	35.9	0.353	0.763	N	N	N	0	1	R	0	N	A	1	U				0	1	N	N	N	
1F09	36.88	0.45	0.897	N	N	N	0	1	R	0	N	A	2	U				0	0	N	N	N	
1F10	52.7	1.515	1.035	N	N	N	0	0	R	0	N	A	1	F				0	0	N	N	N	ripe
1F11	44.43	0.691	0.788	N	N	N	0	1	R	0	N	A	1	U				0	0	N	N	N	
1F12	38.15	0.413	0.744	N	N	N	0	1	R	0	N	A	1	M				0	1	N	N	N	
1F13	36.95	0.393	0.779	N	N	N	0	1	R	0	N	A	1	U				0	1	N	N	N	
1F14	32.98	0.279	0.777	N	N	N	0	1	R	0	N	A	1	U				0	0	N	N	N	
1F15	35.01	0.316	0.737	N	N	N	0	0	R	0	N	A	1	U				0	1	N	N	N	
1F16	57.86	1.728	0.892	N	N	N	0	0	R	0	N	A	1	M				0	0	N	N	N	lernea
1F17	51.17	1.042	0.778	N	N	N	0	1	R	0	N	A	0	U				0	0	N	N	N	
1F18	59.61	2.058	0.972	N	N	N	0	0	R	0	N	A	2	M				0	0	N	N	N	
1F19	52.55	1.111	0.765	N	N	N	0	0	R	0	N	A	2	F				0	1	N	N	N	developing eggs
1F20	58.97	2.244	1.094	N	N	N	0	0	R	0	N	A	1	F				0	0	N	N	N	resorbing eggs
1F21	52.25	1.294	0.907	N	N	N	0	1	R	0	N	A	1	U				0	1	N	N	N	
1F22	38.46	0.438	0.769	N	N	N	0	0	R	0	N	A	1	U				0	1	N	N	N	
1F23	35.03	0.357	0.830	N	N	N	0	0	R	0	N	A	1	U				0	0	N	N	N	
1F24	34.35	0.281	0.694	N	N	N	0	1	R	0	N	A	1	U				0	1	N	N	N	
1F25	33.4	0.277	0.743	N	N	N	0	1	R	0	N	A	1	U				0	1	N	N	N	
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*(SRRD = RED SHINER)

General Remarks

Fins _____ Gonads _____

Skin _____ Other _____

Table 10.9.2.--Fish Health Assessment Data for Lower San Juan Drain January 27, 2003

[see table 12 for codes used below; SRRD, red shiner]

Fish Necropsy Datasheet

Date **28-Jan-03** Unit _____ Species ***SRRD** Strain _____ Quality Control # **3F**

Location **San Juan Drain** Fish source _____ Age _____ Excel File Name **san juan drain3**

Mark/lot _____ Egg source _____ Hatch date _____ Tissue Collection # _____

Investigator(s) **Catherine Sykes** Water temp C^0 _____ Water Hardness _____

Reason for necropsy: **RGSM fish health study** Code ___ Remarks _____

Disease survey No: _____ Custody No _____

Sample Number	Length mm	Weight g	KTL * 105	Eyes	Gills	Pseudobranchs	Thymus	Mesentery Fat	Spleen	Hind gut	Kidney	Liver	Bile	Sex	Hematocrit	Leucocrit	Plasma Protein	Fins	Opercle	Deformities	Skin lesions	Fin Deformities	Remarks
3F01	42.03	0.697	0.939	N	N	N	0	2	R	0	N	A	1	M				0	1	N	N	N	
3F02	46.79	0.891	0.870	N	N	N	0	1	R	0	N	A	1	F				0	1	N	N	N	
3F03	47.03	0.929	0.893	N	N	N	0	2	R	0	N	A	1	M				0	1	N	N	N	
3F04	49.24	0.937	0.785	N	N	N	0	1	R	0	N	A	1	M				0	0	N	N	N	
3F05	48.82	0.887	0.762	N	N	N	0	1	R	0	N	A	1	M				0	0	N	N	N	
3F06	43.59	0.699	0.844	N	N	N	0	1	R	0	N	A	1	M				0	1	N	R	N	
3F07	44.66	0.799	0.897	N	N	N	0	2	R	0	N	A	1	M				0	1	N	N	N	
3F08	45.69	0.76	0.797	N	N	N	0	2	R	0	N	A	1	M				0	1	N	N	N	
3F09	46.85	0.869	0.845	N	N	N	0	2	R	0	N	A	1	M				0	1	N	N	N	
3F10	44.24	0.717	0.828	N	N	N	0	2	R	0	N	A	1	F				0	1	N	N	N	
3F11	52.29	1.247	0.872	N	N	N	0	3	R	0	N	A	1	M				0	1	N	R	N	
3F12	47.84	0.835	0.763	N	N	N	0	1	R	0	N	A	1	F				0	1	N	N	N	
3F13	46.82	0.816	0.795	N	N	N	0	1	R	0	N	A	1	M				0	0	N	N	N	
3F14	44.09	0.651	0.760	N	N	N	0	1	R	0	N	A	1	F				0	1	N	N	N	
3F15	44.7	0.699	0.783	N	N	N	0	1	R	0	N	A	1	M				0	1	N	N	N	
3F16	46.54	0.924	0.917	N	N	N	0	2	R	0	N	A	1	M				0	0	N	N	N	
3F17	45.15	0.778	0.845	N	N	N	0	1	R	0	N	A	1	M				0	1	N	N	N	
3F18	47.11	0.832	0.796	N	N	N	0	1	R	0	N	A	1	M				0	1	N	N	N	
3F19	42.6	0.712	0.921	N	N	N	0	2	R	0	N	A	1	U				0	1	N	N	N	
3F20	42.14	0.619	0.827	N	N	N	0	1	R	0	N	A	1	U				1	1	N	N	N	
3F21	42.02	0.659	0.888	N	N	N	0	1	R	0	N	A	1	M				0	0	N	N	N	
3F22	42.36	0.563	0.741	N	N	N	0	1	R	0	N	A	1	F				0	0	N	N	N	
3F23	41.62	0.547	0.759	N	N	N	0	1	R	0	N	A	1	U				0	1	N	N	N	
3F24	41.48	0.6	0.841	N	N	N	0	2	R	0	N	A	1	U				0	0	N	N	N	
3F25	42.87	0.627	0.796	N	N	N	0	1	R	0	N	A	1	U				0	1	N	N	N	
3F26	40.34	0.602	0.917	N	N	N	0	1	R	0	N	A	1	F				0	1	N	N	N	
3F27	41.02	0.481	0.697	N	N	N	0	1	R	0	N	A	1	F				0	0	N	N	N	
3F28	35.89	0.487	1.053	N	N	N	0	3	R	0	N	A	1	F				0	0	N	N	N	
3F29	39.68	0.512	0.820	N	N	N	0	1	R	0	N	A	1	U				0	1	N	N	N	
3F30	39.5	0.53	0.860	N	N	N	0	1	R	0	N	A	1	F				0	1	N	N	N	
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*(SRRD = RED SHINER)

General Remarks

Fins _____ Gonads _____

Skin _____ Other _____

Table 10.10.1.--Fish Health Assessment Data for Rio Grande at La Joya July 23, 2002

[See table 12 for codes used belw; MNFH, fathead minnow; SRRD, red shiner.]

Fish Necropsy Datasheet

Date **24-Jul-02** Unit _____ Species ***MNFH** Strain _____ Quality Control # **1B**

Location **La Joya** Fish source _____ Age _____ Excel File Name **la joya**

Mark/lot _____ Egg source _____ Hatch date _____ Tissue Collection # _____

Investigator(s) **Catherine Sykes** Water temp C^0 _____ Water Hardness _____

Reason for necropsy: **RGSM fish health study** Code ___ Remarks _____

Disease survey No: _____ Custody No _____

Sample Number	Length mm	Weight g	KTL * 10^5	Eyes	Gills	Pseudobranchs	Thymus	Mesentery Fat	Spleen	Hind Gut	Kidney	Liver	Bile	Sex	Hematocrit	Leucocrit	Plasma Protein	Fins		Opercle Deformities	Skin lesions	Fin Deformities	Remarks
1B01	42.21	0.642	0.854	N	N	N	0	1	R	0	N	A	1	U				0	0	N	N	N	
1B02	44.19	0.843	0.977	N	N	N	0	2	R	0	N	A	1	U				0	0	N	N	N	
1B03	48.56	0.999	0.872	N	N	N	0	2	R	0	N	A	1	U				0	0	N	N	N	
1B04	52.23	1.419	0.996	N	N	N	0	2	R	0	N	A	1	M				0	1	N	N	N	
1B05	38.1	0.482	0.871	N	N	N	0	1	R	0	N	B	2	U				0	1	N	N	N	
1B06	49.49	1.142	0.942	N	N	N	0	2	R	0	N	A	1	U				0	0	N	N	N	
1B07	45.25	0.831	0.897	N	N	N	0	3	R	0	N	A	2	U				0	1	N	N	N	
1B08	44.74	0.861	0.962	N	N	N	0	2	R	0	N	A	1	U				0	0	N	N	N	
1B09	53.39	1.505	0.989	N	OT	N	0	2	R	0	N	A	2	U				1	0	N	R	N	Lernea on abdomen and gills
1B10	45.48	0.928	0.986	N	N	N	0	2	R	0	N	A	1	U				0	0	N	N	N	
1B11	44.79	0.804	0.895	N	N	N	0	1	R	0	N	A	1	U				0	0	N	N	N	
1B12	41.27	0.626	0.890	N	N	N	0	1	R	0	N	A	1	U				0	0	N	N	N	
1B13	54.18	1.473	0.926	N	N	N	0	1	R	0	N	A	2	U				0	1	N	N	N	tapeworms in gut - weighed .0384
1B14	40.56	0.643	0.964	N	N	N	0	2	R	0	N	A	1	U				0	1	N	N	N	
1B15	47.29	0.933	0.882	N	N	N	0	1	R	0	N	A	1	U				0	1	N	N	N	
1B16	56.3	2.011	1.127	N	N	N	0	1	R	0	N	B	2	M				0	0	N	N	N	Lernea
1B17	35.5	0.375	0.837	N	N	N	0	0	R	0	N	A	2	U				0	1	N	N	N	Tapeworm in gut
1B18	53.07	1.359	0.909	N	N	N	0	2	R	0	N	A	1	U				0	0	N	N	N	Lernea
1B19	37.92	0.459	0.841	N	N	N	0	1	R	0	N	A	1	U				0	1	N	N	N	
1B20	53.98	1.368	0.870	N	N	N	0	1	R	0	N	A	2	U				0	0	N	N	N	
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*(MNFH = FATHEAD MINNOW)

General Remarks

Fins _____ Gonads _____

Skin _____ Other _____

Table 10.10.2.--Fish Health Assessment Data for Rio Grande at La Joya September 10, 2002

[See table 12 for codes used belw; MNFH, fathead minnow; SRRD, red shiner.]

Fish Necropsy Datasheet

Date **11-Sep-02** Unit _____ Species ***MNFH, SRRD** Quality Control # **2B**

Location **La Joya** Fish source _____ Age _____ File Name **la joya2**

Mark/lot _____ Egg source _____ Hatch date _____ Tissue Collection # _____

Investigator(s) **Catherine Sykes** Water temp C^0 _____ Water Hardness _____

Reason for necropsy: **RGSM fish health study** Code ___ Remarks **a few dead on arrival, many too small to use (<250 mg)**

Disease survey No: _____ Custody No _____

Sample Number	Length mm	Weight g	K(TL * 10^5)	Eyes	Gills	Pseudobranchs	Thymus	Mesentery Fat	Spleen	Hind gut	Kidney	Liver	Bile	Sex	Hematocrit	Leucocrit	Plasma Protein	Fins	Opercle	Deformities	Skin lesions	Fin Deformities	Remarks
2B1	36.23	0.354	0.745	N	N	N	0	0	R	0	N	A	1	U				0	1	N	N	N	juvenile
2B2	33.35	0.268	0.723	N	N	N	0	0	R	0	N	B	1	U				0	1	N	N	N	juvenile
2B3	49.19	0.92	0.773	N	N	N	0	0	OT	1	N	A	1	F				0	1	N	N	N	very small spleen w/discoloration
2B4	38.1	0.439	0.794	N	N	N	0	1	R	0	N	B	1	M				0	1	N	N	N	fathead minnow?
2B5	42.85	0.606	0.770	N	N	N	0	0	NO	0	N	A	2	M				1	1	N	N	N	small spleen w/nodules
2B6	46.45	0.859	0.857	N	N	N	0	1	R	0	N	B	1	F				0	0	N	N	N	fathead minnow?
2B7	46.6	0.858	0.848	N	P	N	0	1	R	0	N	A	1	F				0	1	N	R	N	lesion may be due to shipping
2B8	48.79	0.946	0.815	N	N	N	0	1	R	0	N	A	1	M				0	1	N	N	N	fathead minnow?
2B9	44.54	0.782	0.885	N	N	N	0	1	R	0	N	A	1	F				0	0	N	R	N	lesion may be due to shipping
2B10	40.81	0.473	0.696	N	N	N	0	0	R	0	N	A	2	M				1	1	N	N	N	lernea on dorsal fin
2B11	34.92	0.302	0.710	N	N	N	0	0	R	0	N	B	1	U				0	1	N	N	N	juvenile
2B12	34.46	0.295	0.720	N	N	N	0	1	R	0	N	B	1	U				1	1	N	N	N	juvenile
2B13	34.85	0.302	0.714	N	N	N	0	0	R	0	N	B	1	U				0	0	N	N	N	juvenile
2B14	34.78	0.301	0.715	N	N	N	0	0	R	0	N	B	2	U				0	1	N	N	N	lernea on dorsal fin, juvenile
2B15	34.06	0.295	0.747	N	N	N	0	1	R	0	N	B	1	U				0	1	N	N	N	
2B16	32.59	0.26	0.750	N	N	N	0	0	R	0	N	A	2	F				0	1	N	N	N	
2B17	32.29	0.265	0.786	N	N	N	0	0	R	0	N	A	2	U				0	1	N	N	N	juvenile
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*(MNFH = FATHEAD MINNOW, SRRD = RED SHINER)

General Remarks

Fins _____ Gonads _____

Skin _____ Other _____

Table 10.10.3.--Fish Health Assessment Data for Rio Grande at La Joya December 13, 2002

[See table 12 for codes used belw; MNFH, fathead minnow; SRRD, red shiner.]

Fish Necropsy Datasheet

Date **14-Dec-02** Unit _____ Species ***MNFH, SRRD** Quality Control # **3B**

Location **La Joya** Fish source _____ Age _____ Excel File Name **la joya3**

Mark/lot _____ Egg source _____ Hatch date _____ Tissue Collection # _____

Investigator(s) **Catherine Sykes** Water temp C^0 _____ Water Hardness _____

Reason for necropsy: **RGSM fish health study** Code _____ Remarks _____

Disease survey No: _____ Custody No: _____

Sample Number	Length mm	Weight g	KTL * 105	Eyes	Gills	Pseudobranchs	Thymus	Mesentery Fat	Spleen	Hind gut	Kidney	Liver	Bile	Sex	Hematocrit	Leucocrit	Plasma Protein	Fins	Opercle	Deformities	Skin lesions	Fin Deformities	Remarks
3B01	61.91	2.263	0.954	N	N	N	0	1	R	0	N	A	1	M				0	1	N	N	N	fathead
3B02	68.61	3.419	1.059	N	N	N	0	1	R	0	N	A	1	M				0	0	N	N	N	fathead
3B03	51.64	1.019	0.740	N	N	N	0	1	R	0	N	A	1	F				0	0	N	N	N	shiner
3B04	58.69	1.673	0.828	N	N	N	0	0	R	0	N	A	1	F				0	1	N	N	N	fathead, developing eggs
3B05	56.49	1.678	0.931	N	N	N	0	1	R	0	N	A	1	F				0	0	N	N	N	fathead, ripe
3B06	46.31	0.785	0.790	N	N	N	0	1	R	0	N	A	1	F				0	1	N	N	N	shiner
3B07	45.33	0.702	0.754	N	N	N	0	1	R	0	N	A	1	M				1	1	N	N	N	shiner
3B08	42.4	0.601	0.788	N	N	N	0	1	R	0	N	A	1	F				0	1	N	R	N	shiner
3B09	39.54	0.477	0.772	N	N	N	0	1	R	0	N	A	1	F				0	1	N	N	N	shiner
3B10	37	0.412	0.813	N	N	N	0	1	R	0	N	A	1	F				0	1	N	R	N	shiner
3B11	40.64	0.45	0.670	N	N	N	0	0	R	0	N	A	1	U				0	1	N	R	N	shiner
3B12	38.36	0.403	0.714	N	N	N	0	0	R	0	N	A	1	U				0	0	N	N	N	?
3B13	35.55	0.319	0.710	N	N	N	0	1	R	0	N	A	1	U				0	0	N	N	N	?
3B14	38.98	0.426	0.719	N	N	N	0	1	R	0	N	A	1	U				0	1	N	N	N	shiner
3B15	37.93	0.391	0.717	N	N	N	0	1	R	0	N	A	1	U				0	1	N	N	N	shiner
3B16	36.74	0.372	0.750	N	N	N	0	1	R	0	N	A	1	U				0	1	N	N	N	?
3B17	36.41	0.348	0.721																				too small for necropsy
3B18	32.61	0.231	0.666																				too small for necropsy
3B19	27.1	0.15	0.754																				too small for necropsy
3B20	36.79	0.333	0.669																				too small for necropsy
3B21	34.92	0.31	0.728																				too small for necropsy
3B22	36.53	0.372	0.763																				too small for necropsy
3B23	29.6	0.184	0.709																				too small for necropsy
3B24	30.7	0.193	0.667																				too small for necropsy
3B25	31.82	0.226	0.701																				too small for necropsy
3B26	31.42	0.227	0.732																				too small for necropsy
3B27	31.09	0.218	0.725																				too small for necropsy
3B28	29.2	0.211	0.847																				too small for necropsy
3B29	31.04	0.224	0.749																				too small for necropsy
3B30	30.01	0.193	0.714																				too small for necropsy
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*(MNFH = FATHEAD MINNOW, SRRD = RED SHINER)

General Remarks

Fins _____ Gonads _____

Skin _____ Other _____

Table 10.10.4.--Fish Health Assessment Data for Rio Grande at La Joya February 23, 2003

--insufficient sample collected for analysis--

Table 10.11.1.--Fish Health Assessment Data for Rio Grande at Lemitar August 21, 2002

[See table 12 for codes used below; MNFH, fathead minnow.]

Fish Necropsy Datasheet

Date **22-Aug-02** Unit _____ Species ***MNFH** Strain _____ Quality Control # **1L**

Location **Lemitar** Fish source _____ Age _____ Excel File Name **lemitar**

Mark/lot _____ Egg source _____ Hatch date _____ Tissue Collection # _____

Investigator(s) **Catherine Sykes** Water temp C^0 _____ Water Hardness _____

Reason for necropsy: **RGSM fish health study** Code _____ Remarks _____

Disease survey No: _____ Custody No _____

Sample Number	Length mm	Weight g	KTL * 10^5	Eyes	Gills	Pseudobranchs	Thymus	Mesentery Fat	Spleen	Hind Gut	Kidney	Liver	Bile	Sex	Hematocrit	Leucocrit	Plasma Protein	Fins		Opercle Deformities	Skin lesions	Fin Deformities	Remarks
1L01	45.15	0.738	0.802	N	N	N	0	0	R	0	N	A	1	U				0	1	N	N	N	
1L02	47.07	0.893	0.856	N	N	N	0	1	R	0	N	B	1	U				0	1	N	N	N	
1L03	40.49	0.532	0.802	N	N	N	0	1	R	0	N	A	1	U				0	1	N	N	N	
1L04	44.63	0.728	0.819	N	N	N	0	0	R	0	N	A	2	U				0	1	N	R	N	lernea on pectoral fin
1L05	52.3	1.125	0.786	N	N	N	0	0	R	0	N	A	1	U				0	0	N	N	N	
1L06	47.41	0.809	0.759	N	N	N	0	1	R	0	N	A	1	F				0	1	N	N	N	
1L07	45.3	0.723	0.778	N	N	N	0	0	R	0	N	A	1	U				0	0	N	N	N	
1L08	41.77	0.595	0.816	N	N	N	0	1	R	0	N	A	1	U				0	1	N	N	N	
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*(MNFH = FATHEAD MINNOW)

General Remarks

Fins _____ Gonads _____

Skin _____ Other _____

Table 10.11.2.--Fish Health Assessment Data for Rio Grande at Lemitar
January 15, 2003

--insufficient sample collected for analysis--

Table 10.12.1.--Fish Health Assessment Data for Rio Grande below Arroyo del Tajo July 22, 2002

[See table 12 for codes used below; MNFH, fathead minnow.]

Fish Necropsy Datasheet

Date **23-Jul-02** Unit _____ Species ***MNFH** Strain _____ Quality Control # **1A**

Location **Arroyo del Tajo** Fish source _____ Age _____ Excel File Name **arrojo del tajo**

Mark/lot _____ Egg source _____ Hatch date _____ Tissue Collection # _____

Investigator(s) **Catherine Sykes** Water temp C^0 _____ Water Hardness _____

Reason for necropsy: **RGSM fish health study** Code ___ Remarks _____

Disease survey No: _____ Custody No _____

Sample Number	Length mm	Weight g	KTL * 105	Eyes	Gills	Pseudobranchs	Thymus	Mesentery Fat	Spleen	Hind Gut	Kidney	Liver	Bile	Sex	Hematocrit	Leucocrit	Plasma Protein	Fins	Opercle	Deformities	Skin lesions	Fin Deformities	Remarks
1A01	36.44	0.476	0.983	N	C	N	0	1	R	0	N	A	1	U				0	0	N	N	N	
1A02	40.59	0.599	0.895	N	N	N	0	1	R	0	N	A	1	U				0	0	N	N	N	
1A03	49.03	1.074	0.911	N	N	N	0	1	R	0	N	A	1	U				0	0	R	N	N	nodules on rakers, inflammed viscera
1A04	33.86	0.392	1.011	H2	N	N	0	0	R	0	N	B	1	U				1	0	N	OT	N	hemrr. on opercles, gill parasites
1A05	39.71	0.579	0.924	N	N	N	0	1	R	0	N	A	1	U				0	0	N	N	N	
1A06	33.08	0.32	0.883	N	N	N	0	1	R	0	N	A	2	U				0	0	N	N	N	
1A07	29.24	0.254	1.016	N	P	N	0	1	R	0	N	B	2	U				1	0	N	R	N	
1A08	36.39	0.445	0.923	N	N	N	0	2	R	0	N	A	2	U				0	0	N	N	N	
1A09	40	0.554	0.866	N	N	N	0	1	R	0	N	A	1	U				0	0	N	N	N	
1A10	39	0.525	0.886	N	N	N	0	1	R	0	N	A	1	U				0	0	N	N	N	
1A11	54.5	1.601	0.989	N	N	N	0	2	R	0	N	A	1	U				0	0	N	N	N	
1A12	32	0.28	0.853	N	N	N	0	1	R	0	N	A	1	U				0	1	N	N	N	
1A13	35.09	0.422	0.977	N	N	N	0	2	R	0	N	A	1	U				0	1	N	N	N	
1A14	36.31	0.451	0.942	N	N	N	0	2	R	0	N	A	1	U				0	0	N	N	N	
1A15	39.28	0.607	1.002	N	N	N	0	1	R	0	N	A	1	U				0	0	N	N	N	
1A16	31.43	0.278	0.896	N	N	N	0	1	R	0	N	A	1	U				0	0	N	N	N	
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*(MNFH=FATHEAD MINNOW)

General Remarks

Fins _____ Gonads _____

Skin _____ Other _____

Table 10.12.2.--Fish Health Assessment Data for Rio Grande below Arroyo del Tajo September 9, 2002

[See table 12 for codes used below; SRRD, red shiner.]

Fish Necropsy Datasheet

Date **11-Sep-02** Unit _____ Species ***SRRD** Strain _____ Quality Control # **2A**

Location **Arroyo del Tajo** Fish source _____ Age _____ Excel File Name **arroyo del tajo2**

Mark/lot _____ Egg source _____ Hatch date _____ Tissue Collection # _____

Investigator(s) **Catherine Sykes** Water temp C^0 _____ Water Hardness _____

Reason for necropsy: **RGSM fish health study** Code ___ Remarks **condition of fish very poor on arrival - catching & shipping stress**

Disease survey No: _____ Custody No: _____

Sample Number	Length mm	Weight g	KTL * 105	Eyes	Gills	Pseudobranchs	Thymus	Mesentery Fat	Spleen	Hind gut	Kidney	Liver	Bile	Sex	Hematocrit	Leucocrit	Plasma Protein	Fins	Opercle	Deformities	Skin lesions	Fin Deformities	Remarks
2A1	49.05	1.087	0.921	N	N	N	0	0	R	0	N	A	1	U				2	1	N	N	PC	missing pectoral fin
2A2	38.16	0.407	0.732	N	N	N	0	0	OT	0	N	A	2	F				0	1	N	N	N	spleen pale, lernea
2A3	44.12	0.703	0.819	N	N	N	0	0	R	0	N	A	2	F				0	0	N	N	N	nodules on rakers (photo)
2A4	35.61	0.305	0.676	N	N	N	0	0	R	0	N	A	2	U				1	0	N	N	N	juvenile
2A5	46.06	0.819	0.838	N	N	N	0	1	R	0	N	A	2	U				0	0	N	N	N	
2A6	49.39	0.963	0.799	N	N	N	0	1	R	0	N	A	2	U				0	0	N	N	N	fathead minnow?
2A7	39.19	0.48	0.797	N	N	N	0	1	R	0	N	B	2	F				0	1	N	N	N	
2A8	39.71	0.468	0.747	H1	N	N	0	1	R	0	N	A	2	U				0	1	N	N	N	
2A9	35.15	0.285	0.656	N	N	N	0	0	R	0	N	A	2	U				1	1	N	N	N	juvenile
2A10	36.21	0.308	0.648	N	N	N	0	0	R	0	N	A	2	U				1	0	N	N	N	
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*(SRRD = RED SHINER)

General Remarks

Fins _____ Gonads _____

Skin _____ Other >50% of fish dead, most of surviving fish too small to use (<250 mg)

Table 10.12.3.--Fish Health Assessment Data for Rio Grande below Arroyo del Tajo December 12, 2002

[See table 12 for codes used below; MNFH, fathead minnow.]

Fish Necropsy Datasheet

Date **13-Dec-02** Unit _____ Species ***MNFH** Strain _____ Quality Control # **3A**

Location **Arroyo del Tajo** Fish source _____ Age _____ Excel File Name **arroyo del tajo3**

Mark/lot _____ Egg source _____ Hatch date _____ Tissue Collection # _____

Investigator(s) **Catherine Sykes** Water temp C^0 _____ Water Hardness _____

Reason for necropsy: **RGSM fish health study** Code ___ Remarks **100% mortality upon arrival**

Disease survey No: _____ Custody No: _____

Sample Number	Length mm	Weight g	KTL * 105	Eyes	Gills	Pseudobranchs	Thymus	Mesentery Fat	Spleen	Hind gut	Kidney	Liver	Bile	Sex	Hematocrit	Leucocrit	Plasma Protein	Fins	Opercle	Deformities	Skin lesions	Fin Deformities	Remarks
3A01	52.71	1.336	0.912																				
3A02	30.62	0.246	0.857																				
3A03	27.34	0.161	0.788																				
3A04	46.17	0.876	0.890																				
3A05	52.65	1.286	0.881																				
3A06	43.35	0.717	0.880																				
3A07	54.96	1.53	0.922																				
3A08	47.3	1.09	1.030																				
3A09	35.13	0.39	0.900																				
3A10	23.41	0.117	0.912																				
3A11	25.3	0.109	0.673																				
3A12	25.84	0.118	0.684																				
3A13	31.21	0.249	0.819																				
3A14	31.68	0.227	0.714																				
3A15	27.81	0.174	0.809																				
3A16	23.57	0.092	0.703																				
3A17	30.23	0.232	0.840																				
3A18	27.58	0.17	0.810																				
3A19	29.64	0.194	0.745																				
3A20	27.65	0.162	0.766																				
3A21	27.58	0.165	0.787																				
3A22	30.11	0.252	0.923																				
3A23	31.86	0.246	0.761																				
3A24	30.57	0.241	0.844																				
3A25	28.42	0.19	0.828																				
3A26	26.66	0.158	0.834																				
3A27	28.64	0.161	0.685																				
3A28	31.26	0.254	0.832																				
3A29	27.53	0.183	0.877																				
3A30	24.71	0.124	0.822																				
31																							
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34																							
35																							
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*(MNFH = FATHEAD MINNOW)

General Remarks

Fins _____ Gonads _____

Skin _____ Other _____

Table 10.12.4.--Fish Health Assessment Data for Rio Grande below Arroyo del Tajo February 24, 2003

--insufficient sample collected for analysis--

Table 10.13.1.--Fish Health Assessment Data for Rio Grande at San Pedro
August 20, 2002

--insufficient sample collected for analysis--

Table 10.13.2.--Fish Health Assessment Data for Rio Grande at San Pedro January 14, 2003

[See table 12 for codes used below; SRRD, red shiner.]

Fish Necropsy Datasheet

Date **15-Jan-03** Unit _____ Species ***SRRD** Strain _____ Quality Control # **3K**

Location **San Pedro** Fish source _____ Age _____ Excel File Name **san pedro3**

Mark/lot _____ Egg source _____ Hatch date _____ Tissue Collection # _____

Investigator(s) **Catherine Sykes** Water temp C^0 _____ Water Hardness _____

Reason for necropsy: **RGSM fish health study** Code ___ Remarks _____

Disease survey No: _____ Custody No: _____

Sample Number	Length mm	Weight g	KTL * 105	Eyes	Gills	Pseudobranchs	Thymus	Mesentery Fat	Spleen	Hind gut	Kidney	Liver	Bile	Sex	Hematocrit	Leucocrit	Plasma Protein	Fins	Opercle Deformities	Skin lesions	Fin Deformities	Remarks
3K01	30.45	0.181	0.641	N	N	N	0	1	R	0	N	A	1	F				0	0	N	N	N	
3K02	60.6	1.807	0.812	N	N	N	0	1	R	0	N	A	1	F				0	1	N	N	N	developing eggs
3K03	25.7	0.097	0.571																			too small for necropsy
3K04	30.21	0.203	0.736	N	N	N	0	1	R	0	N	A	1	F				0	0	N	N	N	
3K05	31.73	0.22	0.689	N	N	N	0	1	R	0	N	A	1	F				0	1	N	R	N	
3K06	32.45	0.241	0.705	N	N	N	0	1	R	0	N	A	1	U				0	1	N	N	N	
3K07	33.35	0.244	0.658	N	N	N	0	1	R	0	N	A	1	M				0	1	N	OT	N	lernea on left pectoral fin
3K08	34.64	0.302	0.727	N	N	N	0	1	R	0	N	A	1	F				0	1	N	N	N	
3K09	31.9	0.213	0.656	N	N	N	0	1	R	0	N	A	1	M				0	1	N	N	N	
3K10	34.27	0.358	0.889	N	N	N	0	1	R	0	N	A	1	F				0	1	N	N	CL	
3K11	24.28	0.1	0.699																			too small for necropsy
3K12	35.25	0.323	0.737	N	N	N	0	1	R	0	N	A	1	M				0	1	N	N	N	
3K13	24.96	0.113	0.727																			too small for necropsy
3K14	28.9	0.185	0.766																			too small for necropsy
3K15	26.44	0.147	0.795																			too small for necropsy
3K16	28.6	0.157	0.671																			too small for necropsy
3K17	35.54	0.318	0.708	N	N	N	0	1	R	0	N	A	1	M				0	1	N	N	N	tapeworms in gut
3K18	29.63	0.184	0.707																			too small for necropsy
3K19	32.56	0.25	0.724	N	N	N	0	1	R	0	N	A	1	M				0	1	N	OT	N	lernea above right pectoral fin
3K20	32.23	0.255	0.762	N	N	N	0	1	R	0	N	A	1	M				0	1	N	N	N	
3K21	37.55	0.343	0.648	N	N	N	0	1	R	0	N	A	1	M				1	1	N	N	N	
3K22	29.73	0.169	0.643																			too small for necropsy
3K23	29.31	0.166	0.659																			too small for necropsy
3K24	30.22	0.201	0.728	N	N	N	0	0	R	0	N	A	1	M				0	1	N	N	N	
25																						
26																						
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*(SRRD = RED SHINER)

General Remarks

Fins _____ Gonads _____

Skin _____ Other _____

Table 10.14.1.--Fish Health Assessment Data for Rio Grande at North Boundary Bosque del Apache National Wildlife Refuge
August 19, 2002

[See table 12 for codes used below; ;MNFH, fathead minnow.]

Fish Necropsies

Date **20-Aug-02** Unit _____ Species ***MNFH** Strain _____ Quality Control # **1J**

Location **Bosque del Apache** Fish source _____ Age _____ Excel File Name **bosque del apache**

Mark/lot _____ Egg source _____ Hatch date _____ Tissue Collection # _____

Investigator(s) **Catherine Sykes** Water temp C^0 _____ Water Hardness _____

Reason for necropsy: **RGSM fish health study** Code ___ Remarks **evidence of catching and/or shipping stress, 3 dead, one with head crushed**

Disease survey No: _____ Custody No: _____

Sample Number	Length mm	Weight g	KTL * 105	Eyes	Gills	Pseudobranchs	Thymus	Mesentery Fat	Spleen	Hind gut	Kidney	Liver	Bile	Sex	Hematocrit	Leucocrit	Plasma Protein	Fins	Opercle	Deformities	Skin lesions	Fin Deformities	Remarks
1J01	33.7	0.284	0.742	N	N	N	0	1	R	0	N	A	1	U				1	0	N	N	N	
1J02	45.73	0.702	0.734	N	N	N	0	1	R	0	N	A	1	U				1	0	N	R	N	lernea on caudal fin
1J03	36.54	0.332	0.680	N	N	N	0	0	E	0	N	A	1	U				0	1	N	N	N	
1J04	37.84	0.358	0.660	N	P	N	0	0	R	0	N	B	2	U				1	0	N	R	N	lernea on caudal fin
1J05	43.56	0.497	0.601	N	N	N	0	0	R	0	N	B	2	U				1	1	N	R	N	lernea on dorsal fin
1J06	43.06	0.507	0.634	H2	N	N	0	0	R	0	N	A	2	U				1	1	N	R	N	
1J07	41.33	0.548	0.776	N	N	N	0	0	R	0	N	A	1	U				0	0	R	N	N	white nodules on rakers
1J08	36.28	0.315	0.660	N	N	N	0	0	R	0	N	B	2	U				1	0	N	N	N	lernea on eye
1J09	32.02	0.248	0.754	H1	N	N	0	0	R	0	N	A	1	U				1	0	N	N	N	lernea on pelvic fin
1J10	39.52	0.526	0.852	H1	N	N	0	0	R	0	N	B	2	U				0	0	N	N	N	
1J11	46.12	0.85	0.867	H2	N	N	0	0	R	0	N	A	3	U				2	1	N	N	N	lernea on dorsal & pectoral
1J12	42.92	0.545	0.689	N	N	N	0	0	R	0	N	A	1	U				0	1	N	N	N	
1J13	46.5	0.676	0.672	N	N	N	0	0	R	0	N	B	2	U				0	0	N	N	N	lernea behind opercle
1J14	36.55	0.425	0.870	N	N	N	0	0	R	0	N	B	2	U				0	0	N	N	N	
1J15	33.6	0.285	0.750	H1	P	N	0	0	R	0	N	B	2	U				1	0	N	N	N	lernea under opercle
1J16	37.89	0.388	0.713	N	N	N	0	1	R	0	N	A	2	U				1	0	N	R	N	lernea on gill & anal fin
1J17	34.69	0.243	0.581	N	N	N	0	0	R	0	N	B	1	U				0	0	N	N	N	
1J18	37.67	0.368	0.689	N	N	N	0	0	R	0	N	A	2	U				1	0	N	F	N	
1J19	38.86	0.41	0.699	N	N	N	0	0	OT	0	N	A	1	U				0	0	N	N	N	pale spleen
1J20	39.27	0.416	0.687	N	N	N	0	0	R	0	N	A	1	U				0	1	N	OP	N	lernea on both pectoral fins
1J21	43.83	0.587	0.697	N	N	N	0	0	R	0	N	A	2	U				0	1	N	N	N	lernea on pelvic fin
1J22	41.87	0.543	0.740	N	N	N	0	0	R	0	N	A	1	U				0	1	N	N	N	
1J23	34.87	0.253	0.598	N	N	N	0	0	R	0	N	B	2	U				1	0	N	N	N	
1J24	38.05	0.426	0.774	N	N	N	0	0	R	0	N	A	1	U				0	0	N	N	N	
1J25	36.16	0.339	0.717	N	N	N	0	0	R	0	N	A	1	U				0	1	N	N	N	
1J26	34.16	0.285	0.715	N	N	N	0	0	R	0	N	B	2	U				1	0	N	N	N	
27																							
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*(MNFH = FATHEAD MINNOW)

General Remarks

Fins _____ Gonads _____

Skin _____ Other _____

Table 10.14.2.--Fish Health Assessment Data for Rio Grande at North Boundary Bosque del Apache National Wildlife Refuge January 13, 2003

--insufficient sample collected for analysis--

Table 11.1.1.--Fish Health Assessment Summary for Rio Rancho Waste Water Treatment Plant Outfall #2
August 2, 2002

--insufficient sample collected for analysis--

Table 11.1.2.--Fish Health Assessment Summary for Rio Rancho Waste Water Treatment Plant Outfall #2
January 30, 2003

--insufficient sample collected for analysis--

Table 11.2.1.--Fish Health Assessment Data for Rio Grande at La Orilla July 26, 2002

--insufficient sample collected for analysis--

Table 11.2.2.--Fish Health Assessment Summary for Rio Grande at La Orilla November 1, 2002

[See table 12 for codes used below; MNFD, fathead minnow; SRRD, red shiner.]

Summary of Necropsies

Location: La Orilla — Quality Control No.: 2E

Species:	MNFH, SRRD	(Fathead Minnow, Red Shiner)	Necropsy Date:	November 2, 2002	Sample Size: 27
Strain:			Age:		Tissue Collection No.:
Mark/Lot:					Disease Survey No.:
Unit:			Water Temp in C°:		File Name: la orilla2
Fish Source:			Water Hardness:		Custody No.:
Egg Source:			Investigators:	Catherine Sykes	Purpose Code:
Hatch Date:			Reason for Necropsy:	RGSM fish health study	
Remarks:					

	MEAN	Standard Deviation	Max	Min	Coefficient of Variance
Length (mm)	51.0	8.14	68	37	16.0%
Weight (g)	1.2	0.6	2.7	0.4	53.9%
Ktl * 105	0.8044	0.10	1.0522	0.6773	12.5%
Ctl * 104	2.9064		3.8015	2.4473	
Hematocrit					
Leucocrit					
Plasma Protein					
Deformity Index					
Skin Lesion	0.11	0.32	1		34.7%
Fin Deformities					

Values as Percent of Total Sample

Eyes	Gills	Pseudobranchs	Thymus	Mesentery Fat	Spleen	Hind gut	Kidney	Liver	Bile	Fins	Opercle	Deformities	Skin Lesions	Fin Deformities
N 100%	N 96%	N 96%	0 100%	0 15%	B	0 100%	N 100%	A 100%	0	0 100%	0 44%	N 100%	N 89%	N 100%
B1	F	S 4%	1	1 85%	R 93%	1	S	B	1 63%	1	1 56%	V	R 11%	Pc
B2	C	L	2	2	G 7%	2	M	C	2 37%	2	2	M	OP	Pl
E1	M	S&L	X 0	3	NO	X 0	G	D	3	X 0	X 0.56	C	F	An
E2	P	I		4	E		U	E	X 1.37			O	L	V
H1	OT 4%	OT		X 0.85	OT		OT	F				F	T	C
H2								OT				R	OT	Ad
M1												OT		D
M2														OT
OT														

Summary of Normals

100%	96%	96%	100%	NA	100%	100%	100%	100%	NA	100%	44%	100%	89%	100%

Summary of Means

												Mean deformities		
NA	NA	NA	0	.8 52	NA	0	NA	NA	1.37	0	0.56	0	0.11	0

Summary of Specific Percent Indices

												Percent of possible		
NA	NA	NA	0%	21.3%	NA	0%	NA	NA	45.7%	0%	27.78%		0.019	

Summary of Combined Percent Indices

Normality index: 93.7	Severity Index: 6.94	Feeding Index: 54.3

Sex: M 19% F 48% U 33%

General Remarks

Fins

Skin

Gonads

Other

Table 11.2.3.–Fish Health Assessment Data for Rio Grande at La Orilla December 19, 2002

--insufficient sample collected for analysis--

Table 11.2.4.--Fish Health Assessment Summary for Rio Grande at La Orilla February 28, 2003

[See table 12 for codes used below; SRRD, red shiner.]

Summary of Necropsies

Location:	La Orilla				Quality Control No.: 4E
Species:	SRRD	(Red Shiner)	Necropsy Date:	1-Mar-03	Sample Size: 30
Strain:			Age:		Tissue Collection No.:
Mark/Lot:					Disease Survey No.:
Unit:			Water Temp in C°:		File Name: la orilla4
Fish Source:			Water Hardness:		Custody No.:
Egg Source:			Investigators:	Catherine Sykes	Purpose Code:
Hatch Date:			Reason for Necropsy:	RGSM fish health study	
Remarks:					

	MEAN	Standard Deviation	Max	Min	Coefficient of Variance
Length (mm)	42.21	6.50	59.50	34.33	15.4%
Weight (g)	0.63	0.34	1.67	0.33	55.0%
Ktl * 105	0.77	0.05	0.87	0.65	6.7%
Ctl * 104	2.78		3.13	2.35	
Hematocrit					
Leucocrit					
Plasma Protein					
Deformity Index					
Skin Lesion					
Fin Deformities					

Values as Percent of Total Sample

Eyes	Gills	Pseudobranchs	Thymus	Mesentery Fat	Spleen	Hind gut	Kidney	Liver	Bile	Fins	Opercle	Deformities	Skin Lesions	Fin Deformities
N 97%	N 97%	N 100%	0 100%	0 10%	B	0 100%	N 100%	A 100%	0	0 77%	0 53%	N 100%	N 100%	N 100%
B1	F	S	1	1 87%	R 100%	1	S	B	1 100%	1 20%	1 47%	V	R	Pc
B2	C	L	2	2 3%	G	2	M	C	2	2 3%	2	M	OP	Pl
E1	M	S&L	X 0	3	NO	X 0	G	D	3	X 26.7%	X 0.47	C	F	An
E2	P	I		4	E		U	E	X 1.00			O	L	V
H1 3%	OT 3%	OT		X 0.93	OT		OT	F				F	T	C
H2								OT				R	OT	Ad
M1												OT		D
M2														OT
OT														
Summary of Normals														
97%	97%	100%	100%	NA	100%	100%	100%	100%	NA	77%	53%	100%	100%	100%
Summary of Means												Mean deformities		
NA	NA	NA	0	.9 33	NA	0	NA	NA	1.00	0.27	0.47	0	0	0
Summary of Specific Percent Indices												Percent of possible		
NA	NA	NA	0%	23.3%	NA	0%	NA	NA	33.3%	13.33%	23.33%			

Summary of Combined Percent Indices

Normality index: 92.3 Severity Index: 9.17 Feeding Index: 66.7

Sex: M 40% F 33% U 27%

General Remarks

Fins

Skin

Gonads

Other

Table 11.3.1.--Fish Health Assessment Summary for Rio Grande at Barelas
August 22, 2002

--insufficient sample collected for analysis--

Table 11.3.2.--Fish Health Assessment Summary for Rio Grande at Barelas January 17, 2003

[See table 12 for codes used below; SRRD, red shiner; MNFH, fathead minnow.]

Summary of Necropsies

Location:	Barelas				Quality Control No.: 3N
Species:	SRRD, MNFH	(Red Shiner, Fathead Minnow)	Necropsy Date:	18-Jan-03	Sample Size: 30
Strain:			Age:		Tissue Collection No.:
Mark/Lot:					Disease Survey No.:
Unit:			Water Temp in C°:		Excel File Name.: barelas3
Fish Source:			Water Hardness:		Custody No.:
Egg Source:			Investigators:	Catherine Sykes	Purpose Code:
Hatch Date:			Reason for Necropsy:	RGSM fish health study	
Remarks:					

	MEAN	Standard Deviation	Max	Min	Coefficient of Variance
Length (mm)	46.48	9.70	67.31	34.89	20.9%
Weight (g)	1.00	0.78	3.07	0.35	77.4%
Ktl * 105	0.84	0.09	1.01	0.69	10.3%
Ctl * 104	3.02		3.64	2.48	
Hematocrit					
Leucocrit					
Plasma Protein					
Deformity Index					
Skin Lesion	0.03	0.18	1.00		18.3%
Fin Deformities					

Values as Percent of Total Sample

Eyes	Gills	Pseudobranchs	Thymus	Mesentery Fat	Spleen	Hind gut	Kidney	Liver	Bile	Fins	Opercle	Deformities	Skin Lesions	Fin Deformities
N 100%	N 100%	N 100%	0 100%	0 13%	B	0 100%	N 100%	A 100%	0 3%	0 90%	0 40%	N 100%	N 97%	N 100%
B1	F	S	1	1 80%	R 100%	1	S	B	1 97%	1 7%	1 60%	V	R 3%	Pc
B2	C	L	2	2 7%	G	2	M	C	2	2 3%	2	M	OP	Pl
E1	M	S&L	X 0	3	NO	X 0	G	D	3	X 13.3%	X 0.60	C	F	An
E2	P	I		4	E		U	E	X 0.97			O	L	V
H1	OT	OT		X 0.93	OT		OT	F				F	TU	Cl
H2								OT				R	OT	Ad
M1												OT		Dl
M2														OT
OT														
Summary of Normals														
100%	100%	100%	100%	NA	100%	100%	100%	100%	NA	90%	40%	100%	97%	100%
Summary of Means												Mean deformities		
NA	NA	NA	0	.9 33	NA	0	NA	NA	0.97	0.13	0.60		0.03	
Summary of Specific Percent Indices												Percent of possible		
NA	NA	NA	0%	23.3%	NA	0%	NA	NA	32.2%	6.67%	30.00%		0.01	

Summary of Combined Percent Indices

Normality index: 93.0 | Severity Index: 9.17 | Feeding Index: 67.8

Sex: M 27% F 57% U 17%

General Remarks

Fins

Skin

Gonads

Other

Table 11.4.1.--Fish Health Assessment Data for Albuquerque Waste Water Treatment Plant Outfall
August 6, 2002

--insufficient sample collected for analysis--

Table 11.4.2.--Fish Health Assessment Data for Albuquerque Waste Water Treatment Plant Outfall
January 29, 2003

--insufficient sample collected for analysis--

Table 11.5.1.–Fish Health Assessment Data for Rio Grande at Los Padillas July 23, 2002

--insufficient sample collected for analysis--

Table 11.5.2.--Fish Health Assessment Data for Rio Grande at Los Padillas October 31, 2002

--insufficient sample collected for analysis--

Table 11.5.3.--Fish Health Assessment Summary for Rio Grande at Los Padillas December 18, 2002

[See table 12 for codes used below; MNFH, fathead minnow; SRRD, red shiner.]

Summary of Necropsies

Location:	Los Padillas				Quality Control No.: 3D
Species:	MNFH, SRRD	(Fathead Minnow,	Necropsy Date:	20-Dec-02	Sample Size: 5
Strain:		Red Shiner)	Age:		Tissue Collection No.:
Mark/Lot:					Disease Survey No.:
Unit:			Water Temp in C°:		Excel File Name.: los padillas3
Fish Source:			Water Hardness:		Custody No.:
Egg Source:			Investigators:	Catherine Sykes	Purpose Code:
Hatch Date:			Reason for Necropsy:	RGSM fish health study	

Remarks: fish arrived one day late - collected on 12/18/02, seemed to be OK

	MEAN	Standard Deviation	Max	Min	Coefficient of Variance
Length (mm)	46.40	16.79	68.69	28.68	36.2%
Weight (g)	1.18	1.19	3.31	0.16	100.7%
Ktl * 105	0.78	0.12	1.02	0.64	16.0%
Ctl * 104	2.81		3.69	2.31	
Hematocrit					
Leucocrit					
Plasma Protein					
Deformity Index					
Skin Lesion					
Fin Deformities					

Values as Percent of Total Sample

Eyes	Gills	Pseudobranchs	Thymus	Mesentery Fat	Spleen	Hind gut	Kidney	Liver	Bile	Fins	Opercle	Deformities	Skin Lesions	Fin Deformities
N 100%	N 100%	N 100%	0 100%	0	B	0 100%	N 100%	A 100%	0	0 100%	0 60%	N 100%	N 100%	N 100%
B1	F	S	1	1 80%	R 100%	1	S	B	1 100%	1	1 40%	V	R	Pc
B2	C	L	2	2 20%	G	2	M	C	2	2	2	M	OP	Pl
E1	M	S&L	X 0	3	NO	X 0	G	D	3	X 0	X 0.40	C	F	An
E2	P	I		4	E		U	E	X 1.00			O	L	V
H1	OT	OT		X 1.20	OT		OT	F				F	TU	Cl
H2								OT				R	OT	Ad
M1												OT		Dl
M2														OT
OT														
Summary of Normals														
100%	100%	100%	100%	NA	100%	100%	100%	100%	NA	100%	60%	100%	100%	100%
Summary of Means												**Mean deformities**		
NA	NA	NA	0	1.2	NA	0	NA	NA	1.00	0	0.40			
Summary of Specific Percent Indices												**Percent of possible**		
NA	NA	NA	0%	30.0%	NA	0%	NA	NA	33.3%	0%	20.00%			

Summary of Combined Percent Indices

Normality index: 96.0 Severity Index: 5.00 Feeding Index: 66.7

Sex: M 60% F 40% U

General Remarks

Fins

Skin

Gonads

Other

Table 11.5.4.--Fish Health Assessment Summary for Rio Grande at Los Padillas February 27, 2003

[See table 12 for codes used belw; MNFH, fathead minnow.]

Summary of Necropsies

Location:	Los Padillas			Quality Control No.:	4D
Species:	MNFH	(Fathead Minnow)	Necropsy Date: 28-Feb-03	Sample Size:	25
Strain:			Age:	Tissue Collection No.:	
Mark/Lot:				Disease Survey No.:	
Unit:			Water Temp in C°:	Excel File Name.:	los padillas4
Fish Source:			Water Hardness:	Custody No.:	
Egg Source:			Investigators: Catherine Sykes	Purpose Code:	
Hatch Date:			Reason for Necropsy: RGSM fish health study		
Remarks:					

	MEAN	Standard Deviation	Max	Min	Coefficient of Variance
Length (mm)	63.11	6.50	74.97	53.18	10.3%
Weight (g)	2.66	0.96	4.75	1.41	36.1%
Ktl * 105	1.01	0.07	1.14	0.88	6.8%
Ctl * 104	3.65		4.13	3.19	
Hematocrit					
Leucocrit					
Plasma Protein					
Deformity Index					
Skin Lesion					
Fin Deformities					

Values as Percent of Total Sample

Eyes	Gills	Pseudobranchs	Thymus	Mesentery Fat	Spleen	Hind gut	Kidney	Liver	Bile	Fins	Opercle	Deformities	Skin Lesions	Fin Deformities
N 100%	N 100%	N 100%	0 100%	0	B	0 100%	N 100%	A 100%	0	0 96%	0 84%	N 100%	N 100%	N 100%
B1	F	S	1	1 72%	R 100%	1	S	B	1 100%	1 4%	1 16%	V	R	Pc
B2	C	L	2	2 28%	G	2	M	C	2	2	2	M	OP	Pl
E1	M	S&L	X 0	3	NO	X 0	G	D	3	X 4.0%	X 0.16	C	F	An
E2	P	I		4	E		U	E	X 1.00			O	L	V
H1	OT	OT		X 1.28	OT		OT	F				F	TU	Cl
H2								OT				R	OT	Ad
M1												OT		Dl
M2														OT
OT														
Summary of Normals														
100%	100%	100%	100%	NA	100%	100%	100%	100%	NA	96%	84%	100%	100%	100%
Summary of Means												**Mean deformities**		
NA	NA	NA	0	1.2 8	NA	0	NA	NA	1.00	0.04	0.16			
Summary of Specific Percent Indices												**Percent of possible**		
NA	NA	NA	0%	32.0%	NA	0%	NA	NA	33.3%	2.00%	8.00%			

Summary of Combined Percent Indices

Normality index: 98.0 Severity Index: 2.50 Feeding Index: 66.7

Sex: M 48% F 52% U

General Remarks

Fins

Skin

Gonads

Other

Table 11.6.1.--Fish Health Assessment Summary for Rio Grande at Isleta below Railroad Bridge on August 7, 2002

[See table 12 for codes used below; MNFD, fathead minnow; SRRD, red shiner.]

Summary of Fish Necropsies

Location: Rio Grande at Isleta below Railroad Bridge on 7 August 2002 — Quality Control No.: 1H

Species: MNFH, SRRD (Fathead Minnow, Red Shiner) — Necropsy Date: August 8, 2002 — Sample Size: 18
Strain: — Age: — Tissue Collection No.:
Mark/Lot: — Disease Survey No.:
Unit: — Water Temp in C°: — Excel File Name.: Isleta pueblo
Fish Source: — Water Hardness: — Custody No.:
Egg Source: — Investigators: Catherine Sykes — Purpose Code:
Hatch Date: — Reason for Necropsy: RGSM fish health study
Remarks: Collection of fish made on August 7, 2002.

	MEAN	Standard Deviation	Max	Min	Coefficient of Variance
Length (mm)	49.20	8.75	66.69	33.23	17.8%
Weight (g)	1.14	0.69	2.93	0.26	60.7%
Ktl * 105	0.85	0.08	1.01	0.72	9.6%
Ctl * 104	3.07		3.65	2.59	
Hematocrit					
Leucocrit					
Plasma Protein					
Deformity Index					
Skin Lesion	0.06	0.24	1.00		23.6%
Fin Deformities					

Values as Percent of Total Sample

Eyes	Gills	Pseudobranchs	Thymus	Mesentery Fat	Spleen	Hind gut	Kidney	Liver	Bile	Fins	Opercle	Deformities	Skin Lesions	Fin Deformities
N 100%	N 100%	N 100%	0 100%	0 33%	B	0 94%	N 100%	A 94%	0	0 78%	0 56%	N 100%	N 94%	N 100%
B1	F	S	1	1 67%	R 94%	1 6%	S	B 6%	1 44%	1 22%	1 44%	V	R	Pc
B2	C	L	2	2	G	2	M	C	2 50%	2	2	M	OP	Pl
E1	M	S&L	X 0	3	NO 6%	X 5.56%	G	D	3 6%	X 22.2%	X 0.44	C	F	An
E2	P	I		4	E		U	E	X 1.61			O	L 6%	V
H1	OT	OT		X 0.67	OT		OT	F				F	T	C
H2								OT				R	OT	Ad
M1												OT		D
M2														OT
OT														
Summary of Normals														
100%	100%	100%	100%	NA	94%	94%	100%	100%	NA	78%	56%	100%	94%	100%
Summary of Means												Mean deformities		
NA	NA	NA	0	0.67	NA	0.06	NA	NA	1.61	0.22	0.44	0	0.06	0
Summary of Specific Percent Indices												Percent of possible		
NA	NA	NA	0%	16.7%	NA	2.78%	NA	NA	53.7%	11.11%	22.22%		0.926%	

Summary of Combined Percent Indices

Normality index: 92.2 — Severity Index: 9.03 — Feeding Index: 46.3

Sex: M 22% F 22% U 56%

General Remarks

Fins

Skin

Gonads

Other

Table 11.6.2.--Fish Health Assessment Summary for Rio Grande at Isleta below Railroad Bridge on January 28, 2003

[See table 12 for codes used below; MNFD, fathead minnow; SRRD, red shiner.]

Summary of Fish Necropsies

Location: Rio Grande at Isleta below Railroad Bridge on 28 January 2003 — Quality Control No.: 3H

Species:	*MNFH / SHRD	Necropsy Date:	29-Jan-03	Sample Size:	30
Strain:		Age:		Tissue Collection No.:	
Mark/Lot:				Disease Survey No.:	
Unit:		Water Temp in C°:		Excel File Name.:	isleta pueblo2
Fish Source:		Water Hardness:		Custody No.:	
Egg Source:		Investigators:	Catherine Sykes	Purpose Code:	
Hatch Date:		Reason for Necropsy:	RGSM Fish Health Study		

Remarks: MNFH = fathead minnow; SHRD = red shiner

	MEAN	Standard Deviation	Max	Min	Coefficient of Variance
Length (mm)	57.65	6.84	68.42	39.84	11.9%
Weight (g)	1.78	0.66	3.23	0.50	37.3%
Ktl * 105	0.88	0.07	1.06	0.76	7.4%
Ctl * 104	3.18		3.81	2.76	
Hematocrit					
Leucocrit					
Plasma Protein					
Deformity Index					
Skin Lesion	0.03	0.18	1.00		18.3%
Fin Deformities					

Values as Percent of Total Sample

Eyes	Gills	Pseudobranchs	Thymus	Mesentery Fat	Spleen	Hind gut	Kidney	Liver	Bile	Fins	Opercle	Deformities	Skin Lesions	Fin Defor
N 100%	N 100%	N 100%	0 100%	0 3%	B	0 100%	N 100%	A 97%	0 3%	0 97%	0 40%	N 100%	N 97%	N 100%
B1	F	S	1	1 97%	R 100%	1	S	B	1 97%	1	1 60%	V	R 3%	Pc
B2	C	L	2	2	G	2	M	C 3%	2	2 3%	2	M	OP	Pl
E1	M	S&L	3	NO	E	X 0	G	D	3	X 6.7%	X 0.60	C	F	An
E2	P	I	4	E	OT		U	E	X 0.97			O	L	V
H1	OT	OT	X 0.97	OT			OT	F				F	TU	Cl
H2								OT				R	OT	Ad
M1												OT		Dl
M2														OT
OT														

Summary of Normals

100%	100%	100%	100%	NA	100%	100%	100%	97%	NA	97%	40%	100%	97%	100%

Summary of Means

NA	NA	NA	0	.9 67	NA	0	NA	NA	0.97	0.07	0.60	Mean deformities	0.03	

Summary of Specific Percent Indices

NA	NA	NA	0%	24.2%	NA	0%	NA	NA	32.2%	3.33%	30.00%	Percent of possible	0.01	

Summary of Combined Percent Indices

Normality index: 93.3	Severity Index: 8.33	Feeding Index: 67.8

Sex: M 50% F 47% U 3%

General Remarks

Fins

Skin

Gonads

Other

Table 11.7.1.--Fish Health Assessment Summary for Rio Grande at Los Lunas July 24, 2002

[See table 12 for codes used below; MNFH, fathead minnow.]

Summary of Necropsies

Location: Los Lunas

Quality Control No.: 1C

Species: MNFH (Fathead Minnow) Necropsy Date: July 25, 2002 Sample Size: 16
Strain: Age: Tissue Collection No.:
Mark/Lot: Disease Survey No.:
Unit: Water Temp in C°: Excel File Name.: las lunas
Fish Source: Water Hardness: Custody No.:
Egg Source: Investigators: Catherine Sykes Purpose Code:
Hatch Date: Reason for Necropsy: RGSM fish health study
Remarks: 60% of fish arrived dead - lost oxygen in bag, culled out 16 live fish

	MEAN	Standard Deviation	Max	Min	Coefficient of Variance
Length (mm)	43.89	3.24	50.23	37.93	7.4%
Weight (g)	0.80	0.21	1.26	0.47	26.6%
Ktl * 105	0.93	0.07	1.06	0.85	7.0%
Ctl * 104	3.35		3.83	3.05	
Hematocrit					
Leucocrit					
Plasma Protein					
Deformity Index					
Skin Lesion					
Fin Deformities					

Values as Percent of Total Sample

Eyes	Gills	Pseudobranchs	Thymus	Mesentery Fat	Spleen	Hind gut	Kidney	Liver	Bile	Fins	Opercle	Deformities	Skin Lesions	Fin Deformities
N 88%	N 100%	N 94%	0 100%	0 6%	B	0 100%	N 88%	A 100%	0	0 100%	0 56%	N 100%	N 100%	N 100%
B1	F	S	1	1 50%	R 94%	1	S 6%	B	1 69%	1	1 44%	V	R	Pc
B2	C	L	2	2 44%	G	2	M	C	2 31%	2	2	M	OP	Pl
E1	M	S&L	X 0	3	NO	X 0	G	D	3	X 0	X 0.44	C	F	An
E2	P	I 6%		4	E 6%		U	E	X 1.31			O	L	V
H1 13%	OT	OT		X 1.38	OT		OT 6%	F				F	T	C
H2								OT				R	OT	Ad
M1												OT		D
M2														OT
OT														

Summary of Normals

88%	100%	94%	100%	NA	94%	100%	88%	100%	NA	100%	56%	100%	100%	100%

Summary of Means

NA	NA	NA	0	1.38	NA	0	NA	NA	1.31	0	0.44	Mean deformities 0	0	0

Summary of Specific Percent Indices

NA	NA	NA	0%	34.4%	NA	0%	NA	NA	43.8%	0%	21.88%	Percent of possible		

Summary of Combined Percent Indices

Normality index: 91.9 Severity Index: 5.47 Feeding Index: 56.3

Sex: M 6% F 6% U 88%

General Remarks

Fins

Skin

Gonads

Other consistency of spleens abnormal - may be due to shipping stress

Table 11.7.2.--Fish Health Assessment Summary for Rio Grande at Los Lunas October 30, 2002

[See table 12 for codes used below; MNFH, fathead minnow.]

Summary of Necropsies

Location:	Los Lunas			Quality Control No.:	2C
Species:	MNFH	(Fathead Minnow)	Necropsy Date: October 31, 2002	Sample Size:	30
Strain:			Age:	Tissue Collection No.:	
Mark/Lot:				Disease Survey No.:	
Unit:			Water Temp in C°:	Excel File Name:	las lunas2
Fish Source:			Water Hardness:	Custody No.:	
Egg Source:			Investigators: Catherine Sykes	Purpose Code:	
Hatch Date:			Reason for Necropsy: RGSM fish health study		
Remarks:					

	MEAN	Standard Deviation	Max	Min	Coefficient of Variance
Length (mm)	58.9	6.55	72	44	11.1%
Weight (g)	2.0	0.7	3.6	0.6	35.9%
Ktl * 105	0.9100	0.07	1.0584	0.7493	7.3%
Ctl * 104	3.2877		3.8238	2.7071	
Hematocrit					
Leucocrit					
Plasma Protein					
Deformity Index					
Skin Lesion	0.03	0.18	1		18.3%
Fin Deformities					

Values as Percent of Total Sample

Eyes	Gills	Pseudobranchs	Thymus	Mesentery Fat	Spleen	Hind gut	Kidney	Liver	Bile	Fins	Opercle	Deformities	Skin Lesions	Fin Deformities
N 100%	N 97%	N 100%	0 100%	0 3%	B	0 100%	N 100%	A 100%	0	0 97%	0 63%	N 100%	N 97%	N 100%
B1	F	S	1	1 67%	R 100%	1	S	B	1 97%	1 3%	1 37%	V	R 3%	Pc
B2	C	L	2	2 30%	G	2	M	C	2 3%	2	2	M	OP	Pl
E1	M	S&L	X 0	3	NO	X 0	G	D	3	X 3.3%	X 0.37	C	F	An
E2	P	I		4	E		U	E	X 1.03			O	L	V
H1	OT 3%	OT		X 1.27	OT		OT	F				F	T	C
H2								OT				R	OT	Ad
M1												OT		D
M2														OT
OT														
Summary of Normals														
100%	97%	100%	100%	NA	100%	100%	100%	100%	NA	97%	63%	100%	97%	100%
Summary of Means												**Mean deformities**		
NA	NA	NA	0	1.2 67	NA	0	NA	NA	1.03	0.03	0.37	0	0.03	0
Summary of Specific Percent Indices												**Percent of possible**		
NA	NA	NA	0%	31.7%	NA	0%	NA	NA	34.4%	1.67%	18.33%		0.006	

Summary of Combined Percent Indices

Normality index: 95.7 Severity Index: 5.00 Feeding Index: 65.6

Sex: M 60% F 33% U 7%

General Remarks

Fins

Skin

Gonads

Other

Table 11.7.3.--Fish Health Assessment Summary for Rio Grande at Los Lunas December 17, 2002

[See table 12 for codes used below; MNFH, fathead minnow.]

Summary of Necropsies

Location:	Los Lunas				Quality Control No.: 3C
Species:	MNFH, SRRD	(Fathead Minnow, Red Shiner)	Necropsy Date:	18-Dec-02	Sample Size: 30
Strain:			Age:		Tissue Collection No.:
Mark/Lot:					Disease Survey No.:
Unit:			Water Temp in C°:		Excel File Name.: los lunas3
Fish Source:			Water Hardness:		Custody No.:
Egg Source:			Investigators:	Catherine Sykes	Purpose Code:
Hatch Date:			Reason for Necropsy:	RGSM fish health study	
Remarks:					

	MEAN	Standard Deviation	Max	Min	Coefficient of Variance
Length (mm)	51.49	9.45	69.75	37.83	18.4%
Weight (g)	1.35	0.85	3.51	0.36	63.3%
Ktl * 105	0.85	0.11	1.03	0.66	13.4%
Ctl * 104	3.08		3.74	2.40	
Hematocrit					
Leucocrit					
Plasma Protein					
Deformity Index					
Skin Lesion					
Fin Deformities					

Values as Percent of Total Sample

Eyes	Gills	Pseudobranchs	Thymus	Mesentery Fat	Spleen	Hind gut	Kidney	Liver	Bile	Fins	Opercle	Deformities	Skin Lesions	Fin Deformities
N 100%	N 100%	N 100%	0 100%	0	B	0 100%	N 100%	A 100%	0	0 90%	0 67%	N 100%	N 100%	N 100%
B1	F	S	1	1 97%	R 100%	1	S	B	1 100%	1 3%	1 33%	V	R	Pc
B2	C	L	2	2 3%	G	2	M	C	2	2 7%	2	M	OP	Pl
E1	M	S&L	X 0	3	NO	X 0	G	D	3	X 16.7%	X 0.33	C	F	An
E2	P	I		4	E		U	E	X 1.00			O	L	V
H1	OT	OT		X 1.03	OT		OT	F				F	TU	Cl
H2								OT				R	OT	Ad
M1												OT		Dl
M2														OT
OT														
Summary of Normals														
100%	100%	100%	100%	NA	100%	100%	100%	100%	NA	90%	67%	100%	100%	100%
Summary of Means														
NA	NA	NA	0	1.0 33	NA	0	NA	NA	1.00	0.17	0.33	Mean deformities		
Summary of Specific Percent Indices														
NA	NA	NA	0%	25.8%	NA	0%	NA	NA	33.3%	8.33%	16.67%	Percent of possible		
Summary of Combined Percent Indices														
Normality index: 95.7				Severity Index: 6.25				Feeding Index: 66.7						

Sex: M 23% F 63% U 13%

General Remarks

Fins

Skin

Gonads

Other

Table 11.7.4.--Fish Health Assessment Summary for Rio Grande at Los Lunas February 26, 2003

[See table 12 for codes used below; MNFH, fathead minnow.]

Summary of Necropsies

Location:	Los Lunas			Quality Control No.:	4C
Species:	MNFH	(Fathead Minnow)	Necropsy Date: 27-Feb-03	Sample Size:	30
Strain:			Age:	Tissue Collection No.:	
Mark/Lot:				Disease Survey No.:	
Unit:			Water Temp in C°:	Excel File Name.:	los lunas4
Fish Source:			Water Hardness:	Custody No.:	
Egg Source:			Investigators: Catherine Sykes	Purpose Code:	
Hatch Date:			Reason for Necropsy: RGSM fish health study		
Remarks:					

	MEAN	Standard Deviation	Max	Min	Coefficient of Variance
Length (mm)	56.99	4.62	66.92	46.30	8.1%
Weight (g)	1.80	0.56	3.19	0.92	31.1%
Ktl * 105	0.94	0.09	1.11	0.78	9.5%
Ctl * 104	3.41		4.02	2.83	
Hematocrit					
Leucocrit					
Plasma Protein					
Deformity Index					
Skin Lesion	0.13	0.35	1.00		38.6%
Fin Deformities					

Values as Percent of Total Sample

Eyes	Gills	Pseudobranchs	Thymus	Mesentery Fat	Spleen	Hind gut	Kidney	Liver	Bile	Fins	Opercle	Deformities	Skin Lesions	Fin Deformities
N 100%	N 93%	N 100%	0 100%	0	B	0 100%	N 100%	A 77%	0	0 87%	0 70%	N 100%	N 87%	N 100%
B1	F 3%	S	1	1 83%	R 100%	1	S	B	1 100%	1 7%	1 30%	V	R 13%	Pc
B2	C	L	2	2 17%	G	2	M	C 17%	2	2 7%	2	M	OP	Pl
E1	M	S&L	X 0	3	NO	X 0	G	D	3	X 20.0%	X 0.30	C	F	An
E2	P	I		4	E		U	E	X 1.00			O	L	V
H1	OT 3%	OT		X 1.17	OT		OT	F 7%				F	TU	Cl
H2								OT				R	OT	Ad
M1												OT		Dl
M2														OT
OT														

Summary of Normals

100%	93%	100%	100%	NA	100%	100%	100%	77%	NA	87%	70%	100%	87%	100%

Summary of Means

NA	NA	NA	0	1.1 67	NA	0	NA	NA	1.00	0.20	0.30	Mean deformities	0.13	

Summary of Specific Percent Indices

NA	NA	NA	0%	29.2%	NA	0%	NA	NA	33.3%	10.00%	15.00%	Percent of possible	0.02	

Summary of Combined Percent Indices

Normality index: 92.7	Severity Index: 6.25	Feeding Index: 66.7

Sex: M 30% F 70% U

General Remarks

Fins

Skin

Gonads

Other

Table 11.8.1.--Fish Health Assessment Summary for Rio Grande at Abeytas
September 12, 2002

--insufficient sample collected for analysis--

Table 11.8.2.--Fish Health Assessment Summary for Rio Grande at Abeytas January 16, 2003

[See table 12 for codes used below; SRRD, red shiner; MNFH, fathead minnow.]

Summary of Necropsies

Location: Rio Grande at Abeytas on January 16, 2003 — Quality Control No.: 3M

Species:	SRRD, MNFH	(Red Shiner, Fathead Minnow)	Necropsy Date:	17-Jan-03	Sample Size: 30
Strain:			Age:		Tissue Collection No.:
Mark/Lot:					Disease Survey No.:
Unit:			Water Temp in C°:		Excel File Name.: abeytas3
Fish Source:			Water Hardness:		Custody No.:
Egg Source:			Investigators:	Catherine Sykes	Purpose Code:
Hatch Date:			Reason for Necropsy:	RGSM fish health study	
Remarks:					

	MEAN	Standard Deviation	Max	Min	Coefficient of Variance
Length (mm)	58.13	9.30	71.96	39.25	16.0%
Weight (g)	2.10	1.07	4.28	0.57	50.8%
Ktl * 105	0.97	0.09	1.15	0.79	9.7%
Ctl * 104	3.49		4.15	2.87	
Hematocrit					
Leucocrit					
Plasma Protein					
Deformity Index					
Skin Lesion	0.17	0.38	1.00		44.0%
Fin Deformities					

Values as Percent of Total Sample

Eyes	Gills	Pseudobranchs	Thymus	Mesentery Fat	Spleen	Hind gut	Kidney	Liver	Bile	Fins	Opercle	Deformities	Skin Lesions	Fin Deformities
N 100%	N 100%	N 100%	0 100%	0	B	0 100%	N 100%	A 90%	0	0 93%	0 57%	N 100%	N 83%	N 100%
B1	F	S	1	1 63%	R 100%	1	S	B	1 100%	1 7%	1 43%	V	R 17%	Pc
B2	C	L	2	2 37%	G	2	M	C 10%	2	2	2	M	OP	Pl
E1	M	S&L	X 0	3	NO	X 0	G	D	3	X 6.7%	X 0.43	C	F	An
E2	P	I		4	E		U	E	X 1.00			O	L	V
H1	OT	OT		X 1.37	OT		OT	F				F	TU	Cl
H2								OT				R	OT	Ad
M1												OT		Dl
M2														OT
OT														

Summary of Normals

100%	100%	100%	100%	NA	100%	100%	100%	90%	NA	93%	57%	100%	83%	100%

Summary of Means

NA	NA	NA	0	1.3 67	NA	0	NA	NA	1.00	0.07	0.43	Mean deformities	0.17	

Summary of Specific Percent Indices

NA	NA	NA	0%	34.2%	NA	0%	NA	NA	33.3%	3.33%	21.67%	Percent of possible	0.03	

Summary of Combined Percent Indices

Normality index:	94.0	Severity Index:	6.25
		Feeding Index:	66.7

Sex: M 57% F 40% U 3%

General Remarks

Fins

Skin

Gonads

Other

Table 11.9.1.--Fish Health Assessment Summary for Lower San Juan Drain August 5, 2002

[see table 12 for codes used below; SRRD, red shiner]

Summary of Necropsies

Location:	Lower San Juan			Quality Control No.:	1F
Species:	SRRD	(Red Shiner)	Necropsy Date: August 6, 2002	Sample Size:	25
Strain:			Age:	Tissue Collection No.:	
Mark/Lot:				Disease Survey No.:	
Unit:			Water Temp in C°:	Excel File Name.:	lower san juan
Fish Source:			Water Hardness:	Custody No.:	
Egg Source:			Investigators: Catherine Sykes	Purpose Code:	
Hatch Date:			Reason for Necropsy: RGSM fish health study		
Remarks:	Fish collected on August 5, 2002 at the Lower San Juan Drain				

	MEAN	Standard Deviation	Max	Min	Coefficient of Variance
Length (mm)	42.96	10.32	59.61	30.26	24.0%
Weight (g)	0.82	0.66	2.24	0.22	80.1%
Ktl * 105	0.85	0.12	1.15	0.69	14.3%
Ctl * 104	3.07		4.17	2.51	
Hematocrit					
Leucocrit					
Plasma Protein					
Deformity Index					
Skin Lesion	0.04	0.20	1.00		20.0%
Fin Deformities					

Values as Percent of Total Sample

Eyes	Gills	Pseudobranchs	Thymus	Mesentery Fat	Spleen	Hind gut	Kidney	Liver	Bile	Fins	Opercle	Deformities	Skin Lesions	Fin Deformities
N 96%	N 100%	N 100%	0 100%	0 36%	B	0 100%	N 100%	A 96%	0 4%	0 96%	0 48%	N 100%	N 96%	N 100%
B1	F	S	1	1 60%	R 100%	1	S	B 4%	1 84%	1 4%	1 52%	V	R	Pc
B2	C	L	2	2 4%	G	2	M	C	2 12%	2	2	M	OP 4%	Pl
E1	M	S&L	X 0	3	NO	X 0	G	D	3	X 4.0%	X 0.52	C	F	An
E2	P	I		4	E		U	E	X 1.08			O	L	V
H1	OT	OT		X 0.68	OT		OT	F				F	T	C
H2 4%								OT				R	OT	Ad
M1												OT		D
M2														OT
OT														
Summary of Normals														
96%	100%	100%	100%	NA	100%	100%	100%	100%	NA	96%	48%	100%	96%	100%
Summary of Means												Mean deformities		
NA	NA	NA	0	0.68	NA	0	NA	NA	1.08	0.04	0.52	0	0.04	0
Summary of Specific Percent Indices												Percent of possible		
NA	NA	NA	0%	17.0%	NA	0%	NA	NA	36.0%	2.00%	26.00%		0.667%	

Summary of Combined Percent Indices

Normality index: 94.0 Severity Index: 7.00 Feeding Index: 64.0

Sex: M 16% F 16% U 68%

General Remarks

Fins

Skin

Gonads

Other

Table 11.9.2.--Fish Health Assessment Summary for Lower San Juan Drain January 27, 2003

[see table 12 for codes used below; SRRD, red shiner]

Summary of Necropsies

Location:	San Juan Drain			Quality Control No.:	3F
Species:	SRRD	(Red Shiner)	Necropsy Date: 28-Jan-03	Sample Size:	30
Strain:			Age:	Tissue Collection No.:	
Mark/Lot:				Disease Survey No.:	
Unit:			Water Temp in C°:	Excel File Name.:	san juan drain3
Fish Source:			Water Hardness:	Custody No.:	
Egg Source:			Investigators: Catherine Sykes	Purpose Code:	
Hatch Date:			Reason for Necropsy: RGSM fish health study		
Remarks:					

	MEAN	Standard Deviation	Max	Min	Coefficient of Variance
Length (mm)	44.17	3.44	52.29	35.89	7.8%
Weight (g)	0.73	0.17	1.25	0.48	23.2%
Ktl * 105	0.84	0.07	1.05	0.70	8.7%
Ctl * 104	3.02		3.81	2.52	
Hematocrit					
Leucocrit					
Plasma Protein					
Deformity Index					
Skin Lesion	0.07	0.25	1.00		26.3%
Fin Deformities					

Values as Percent of Total Sample

Eyes	Gills	Pseudobranchs	Thymus	Mesentery Fat	Spleen	Hind gut	Kidney	Liver	Bile	Fins	Opercle	Deformities	Skin Lesions	Fin Deformities
N 100%	N 100%	N 100%	0 100%	0	B	0 100%	N 100%	A 100%	0	0 97%	0 30%	N 100%	N 93%	N 100%
B1	F	S	1	1 63%	R 100%	1	S	B	1 100%	1 3%	1 70%	V	R 7%	Pc
B2	C	L	2	2 30%	G	2	M	C	2	2	2	M	OP	Pl
E1	M	S&L	X 0	3 7%	NO	X 0	G	D	3	X 3.3%	X 0.70	C	F	An
E2	P	I		4	E		U	E	X 1.00			O	L	V
H1	OT	OT		X 1.43	OT		OT	F				F	TU	Cl
H2								OT				R	OT	Ad
M1												OT		Dl
M2														OT
OT														

Summary of Normals

100%	100%	100%	100%	NA	100%	100%	100%	100%	NA	97%	30%	100%	93%	100%

Summary of Means

NA	NA	NA	0	1.4 33	NA	0	NA	NA	1.00	0.03	0.70	Mean deformities	0.07	

Summary of Specific Percent Indices

NA	NA	NA	0%	35.8%	NA	0%	NA	NA	33.3%	1.67%	35.00%	Percent of possible	0.01	

Summary of Combined Percent Indices

Normality index: 92.7	Severity Index: 9.17	Feeding Index: 66.7

Sex: M 50% F 30% U 20%

General Remarks

Fins

Skin

Gonads

Other

Table 11.10.1.--Fish Health Assessment Summary for Rio Grande at La Joya July 23, 2002

[See table 12 for codes used belw; MNFH, fathead minnow.]

Summary of Necropsies

Location: La Joya — Quality Control No.: 1B

Species: MNFH (Fathead Minnow) — Necropsy Date: July 24, 2002 — Sample Size: 20
Strain: — Age: — Tissue Collection No.:
Mark/Lot: — Disease Survey No.:
Unit: — Water Temp in C°: — Excel File Name.: la joya
Fish Source: — Water Hardness: — Custody No.:
Egg Source: — Investigators: Catherine Sykes — Purpose Code:
Hatch Date: — Reason for Necropsy: RGSM fish health study
Remarks:

	MEAN	Standard Deviation	Max	Min	Coefficient of Variance
Length (mm)	46.43	6.11	56.30	35.50	13.2%
Weight (g)	0.99	0.42	2.01	0.37	43.1%
Ktl * 105	0.92	0.07	1.13	0.84	7.6%
Ctl * 104	3.34		4.07	3.03	
Hematocrit					
Leucocrit					
Plasma Protein					
Deformity Index					
Skin Lesion	0.05	0.22	1.00		22.4%
Fin Deformities					

Values as Percent of Total Sample

Eyes	Gills	Pseudobranchs	Thymus	Mesentery Fat	Spleen	Hind gut	Kidney	Liver	Bile	Fins	Opercle	Deformities	Skin Lesions	Fin Deformities
N 100%	N 95%	N 100%	0 100%	0 5%	B	0 100%	N 100%	A 90%	0	0 95%	0 60%	N 100%	N 95%	N 100%
B1	F	S	1	1 45%	R 100%	1	S	B 10%	1 65%	1 5%	1 40%	V	R 5%	Pc
B2	C	L	2	2 45%	G	2	M	C	2 35%	2	2	M	OP	Pl
E1	M	S&L	X 0	3 5%	NO	X 0	G	D	3	X 5.0%	X 0.40	C	F	An
E2	P	I		4	E		U	E	X 1.35			O	L	V
H1	OT 5%	OT		X 1.50	OT		OT	F				F	T	C
H2								OT				R	OT	Ad
M1												OT		D
M2														OT
OT														

Summary of Normals

100%	95%	100%	100%	NA	100%	100%	100%	100%	NA	95%	60%	100%	95%	100%

Summary of Means

NA	NA	NA	0	1.50	NA	0	NA	NA	1.35	0.05	0.40	Mean deformities 0	0.05	0

Summary of Specific Percent Indices

NA	NA	NA	0%	37.5%	NA	0%	NA	NA	45.0%	2.50%	20.00%	Percent of possible	0.833%	

Summary of Combined Percent Indices

Normality index: 95.0 — Severity Index: 5.63 — Feeding Index: 55.0

Sex: M 10% F U 90%

General Remarks

Fins

Skin

Gonads

Other

Table 11.10.2.--Fish Health Assessment Summary for Rio Grande at La Joya September 10, 2002

[See table 12 for codes used belw; MNFH, fathead minnow; SRRD, red shiner.]

Summary of Necropsies

Location: La Joya — Quality Control No.: 2B

Species: MNFH, SRRD (Fathead Minnow, Red Shiner) — Necropsy Date: September 11, 2002 — Sample Size: 17
Strain: — Age: — Tissue Collection No.:
Mark/Lot: — Disease Survey No.:
Unit: — Water Temp in C°: — File name: la joya2
Fish Source: — Water Hardness: — Custody No.:
Egg Source: — Investigators: Catherine Sykes — Purpose Code:
Hatch Date: — Reason for Necropsy: RGSM fish health study
Remarks: a few dead on arrival, many too small to use (<250 mg)

	MEAN	Standard Deviation	Max	Min	Coefficient of Variance
Length (mm)	39.11	6.05	49.19	32.29	15.5%
Weight (g)	0.50	0.26	0.95	0.26	52.7%
Ktl * 105	0.77	0.06	0.89	0.70	7.4%
Ctl * 104	2.77		3.20	2.51	
Hematocrit					
Leucocrit					
Plasma Protein					
Deformity Index					
Skin Lesion	0.12	0.33	1.00		35.4%
Fin Deformities					

Values as Percent of Total Sample

Eyes	Gills	Pseudobranchs	Thymus	Mesentery Fat	Spleen	Hind gut	Kidney	Liver	Bile	Fins	Opercle	Deformities	Skin Lesions	Fin Deformities
N 100%	N 94%	N 100%	0 100%	0 59%	B	0 94%	N 100%	A 53%	0	0 82%	0 18%	N 100%	N 88%	N 100%
B1	F	S	1	1 41%	R 88%	1 6%	S	B 47%	1 71%	1 18%	1 82%	V	R 12%	Pc
B2	C	L	2	2	G	2	M	C	2 29%	2	2	M	OP	Pi
E1	M	S&L	X 0	3	NO 6%	X 5.88%	G	D	3	X 17.6%	X 0.82	C	F	An
E2	P 6%	I		4	E		U	E	X 1.29			O	L	V
H1	OT	OT		X 0.41	OT 6%		OT	F				F	T	C
H2								OT				R	OT	Ad
M1												OT		D
M2														OT
OT														

Summary of Normals

100%	94%	100%	100%		88%	94%	100%	100%		82%	18%	100%	88%	100%

Summary of Means

			0	.4 12		0.06			1.29	0.18	0.82	Mean deformities 0	0.12	0

Summary of Specific Percent Indices

			0%	10.3%		2.94%			43.1%	8.82%	41.18%	Percent of possible	1.961%	

Summary of Combined Percent Indices

Normality index: 87.6	Severity Index: 13.24	Feeding Index: 56.9

Sex: M 24% F 29% U 47%

General Remarks

Fins

Skin

Gonads

Other

file:la joya2

Table 11.10.3.--Fish Health Assessment Summary for Rio Grande at La Joya December 13, 2002

[See table 12 for codes used belw; MNFH, fathead minnow; SRRD, red shiner.]

Summary of Necropsies

Location:	La Joya				Quality Control No.: 3B
Species:	MNFH, SRRD	(Fathead Minnow,	Necropsy Date:	14-Dec-02	Sample Size: 16
Strain:		Red Shiner)	Age:		Tissue Collection No.:
Mark/Lot:					Disease Survey No.:
Unit:			Water Temp in C°:		Excel File Name.: la joya3
Fish Source:			Water Hardness:		Custody No.:
Egg Source:			Investigators:	Catherine Sykes	Purpose Code:
Hatch Date:			Reason for Necropsy:	RGSM fish health study	
Remarks:					

	MEAN	Standard Deviation	Max	Min	Coefficient of Variance
Length (mm)	39.51	10.44	68.61	27.10	26.4%
Weight (g)	0.63	0.73	3.42	0.15	116.1%
Ktl * 105	0.76	0.09	1.06	0.67	11.6%
Ctl * 104	2.75		3.82	2.41	
Hematocrit					
Leucocrit					
Plasma Protein					
Deformity Index					
Skin Lesion	0.19	0.40	1.00		46.5%
Fin Deformities					

Values as Percent of Total Sample

Eyes	Gills	Pseudobranchs	Thymus	Mesentery Fat	Spleen	Hind gut	Kidney	Liver	Bile	Fins	Opercle	Deformities	Skin Lesions	Fin Deformities
N 100%	N 100%	N 100%	0 100%	0 19%	B	0 100%	N 100%	A 100%	0	0 94%	0 31%	N 100%	N 81%	N 100%
B1	F	S	1	1 81%	R 100%	1	S	B	1 100%	1 6%	1 69%	V	R 19%	Pc
B2	C	L	2	2	G	2	M	C	2	2	2	M	OP	Pl
E1	M	S&L	X 0	3	NO	X 0	G	D	3	X 6.3%	X 0.69	C	F	An
E2	P	I		4	E		U	E	X 1.00			O	L	V
H1	OT	OT		X 0.81	OT		OT	F				F	TU	Cl
H2								OT				R	OT	Ad
M1												OT		Dl
M2														OT
OT														

Summary of Normals

100%	100%	100%	100%	NA	100%	100%	100%	100%	NA	94%	31%	100%	81%	100%

Summary of Means

NA	NA	NA	0	.8 13	NA	0	NA	NA	1.00	0.06	0.69	Mean deformities	0.19	

Summary of Specific Percent Indices

NA	NA	NA	0%	20.3%	NA	0%	NA	NA	33.3%	3.13%	34.38%	Percent of possible	0.03	

Summary of Combined Percent Indices

Normality index:	92.5	Severity Index:	9.38	Feeding Index:	66.7

Sex: M 19% F 44% U 38%

General Remarks

Fins

Skin

Gonads

Other

Table 11.10.4.--Fish Health Assessment Data for Rio Grande at La Joya February 23, 2003

--Insufficient sample collected for analysis--

Table 11.11.1.--Fish Health Assessment Summary for Rio Grande at Lemitar August 21, 2002

[See table 12 for codes used below; MNFH, fathead minnow.]

Summary of Necropsies

Location: Lemitar — Quality Control No.: 1L

Species: MNFH (Fathead Minnow) — Necropsy Date: August 22, 2002 — Sample Size: 8
Strain: — Age: — Tissue Collection No.:
Mark/Lot: — Disease Survey No.:
Unit: — Water Temp in C°: — Excel File Name.: lemitar
Fish Source: — Water Hardness: — Custody No.:
Egg Source: — Investigators: Catherine Sykes — Purpose Code:
Hatch Date: — Reason for Necropsy: RGSM fish health study
Remarks:

	MEAN	Standard Deviation	Max	Min	Coefficient of Variance
Length (mm)	45.52	3.63	52.30	40.49	8.0%
Weight (g)	0.77	0.18	1.12	0.53	23.8%
Ktl * 105	0.80	0.03	0.86	0.76	3.7%
Ctl * 104	2.90		3.09	2.74	
Hematocrit					
Leucocrit					
Plasma Protein					
Deformity Index					
Skin Lesion	0.13	0.35	1.00		35.4%
Fin Deformities					

Values as Percent of Total Sample

Eyes	Gills	Pseudobranchs	Thymus	Mesentery Fat	Spleen	Hind gut	Kidney	Liver	Bile	Fins	Opercle	Deformities	Skin Lesions	Fin Deformities
N 100%	N 100%	N 100%	0 100%	0 50%	B	0 100%	N 100%	A 88%	0	0 100%	0 25%	N 100%	N 88%	N 100%
B1	F	S	1	1 50%	R 100%	1	S	B 13%	1 88%	1	1 75%	V	R 13%	Pc
B2	C	L	2	2	G	2	M	C	2 13%	2	2	M	OP	Pl
E1	M	S&L	X 0	3	NO	X 0	G	D	3	X 0	X 0.75	C	F	An
E2	P	I		4	E		U	E	X 1.13			O	L	V
H1	OT	OT		X 0.50	OT		OT	F				F	T	C
H2								OT				R	OT	Ad
M1												OT		D
M2														OT
OT														
Summary of Normals														
100%	100%	100%	100%	NA	100%	100%	100%	100%	NA	100%	25%	100%	88%	100%
Summary of Means														
NA	NA	NA	0	0.50	NA	0	NA	NA	1.13	0	0.75	Mean deformities 0	0.13	0
Summary of Specific Percent Indices														
NA	NA	NA	0%	12.5%	NA	0%	NA	NA	37.5%	0%	37.50%	Percent of possible	2.083%	

Summary of Combined Percent Indices

Normality index: 92.5 — Severity Index: 9.38 — Feeding Index: 62.5

Sex: M F 13% U 88%

General Remarks

Fins

Skin

Gonads

Other

Table 11.11.2.--Fish Health Assessment Summary for Rio Grande at Lemitar
January 15, 2003

--insufficient sample collected for analysis--

Table 11.12.1.--Fish Health Assessment Summary for Rio Grande below Arroyo del Tajo July 22, 2002

[See table 12 for codes used below; MNFH, fathead minnow.]

Summary of Necropsies

Location: Arroyo del Tajo — Quality Control No.: 1A

Species:	MNFH	(Fathead Minnow)	Necropsy Date:	July 23, 2002	Sample Size: 16
Strain:			Age:		Tissue Collection No.:
Mark/Lot:					Disease Survey No.:
Unit:			Water Temp in C°:		Excel File Name.: arrojo del tajo
Fish Source:			Water Hardness:		Custody No.:
Egg Source:			Investigators:	Catherine Sykes	Purpose Code:
Hatch Date:			Reason for Necropsy:	RGSM fish health study	
Remarks:					

	MEAN	Standard Deviation	Max	Min	Coefficient of Variance
Length (mm)	37.87	6.45	54.50	29.24	17.0%
Weight (g)	0.55	0.34	1.60	0.25	61.5%
Ktl * 105	0.93	0.05	1.02	0.85	5.8%
Ctl * 104	3.38		3.67	3.08	
Hematocrit					
Leucocrit					
Plasma Protein					
Deformity Index	0.06	0.25	1.00		25.0%
Skin Lesion	0.19	0.54	2.00		34.5%
Fin Deformities					

Values as Percent of Total Sample

Eyes	Gills	Pseudobranchs	Thymus	Mesentery Fat	Spleen	Hind gut	Kidney	Liver	Bile	Fins	Opercle	Deformities	Skin Lesions	Fin Deformities
N 94%	N 88%	N 100%	0 100%	0 6%	B	0 100%	N 100%	A 88%	0	0 88%	0 88%	N 94%	N 88%	N 100%
B1	F	S	1	1 69%	R 100%	1	S	B 13%	1 81%	1 13%	1 13%	V	R 6%	Pc
B2	C 6%	L	2	2 25%	G	2	M	C	2 19%	2	2	M	OP 6%	Pl
E1	M	S&L	X 0	3	NO	X 0	G	D	3	X 12.5%	X 0.13	C	F	An
E2	P 6%	I		4	E		U	E	X 1.19			O	L	V
H1	OT	OT		X 1.19	OT		OT	F				F	T 6%	C
H2 6%								OT				R 6%	OT 6%	Ad
M1												OT		D
M2														OT
OT														

Summary of Normals

94%	88%	100%	100%	NA	100%	100%	100%	100%	NA	88%	88%	94%	88%	100%

Summary of Means

NA	NA	NA	0	1.19	NA	0	NA	NA	1.19	0.13	0.13	Mean deformities 0.06	0.19	0

Summary of Specific Percent Indices

NA	NA	NA	0%	29.7%	NA	0%	NA	NA	39.6%	6.25%	6.25%	Percent of possible 0.893%	3.125%	

Summary of Combined Percent Indices

Normality index: 95.6	Severity Index: 3.13	Feeding Index: 60.4

Sex: M F U 100%

General Remarks

Fins

Skin

Gonads

Other

Table 11.12.2.--Fish Health Assessment Summary for Rio Grande below Arroyo del Tajo September 9, 2002

[See table 12 for codes used below; SRRD, red shiner.]

Summary of Necropsies

Location:	Arroyo del Tajo			Quality Control No.:	2A
Species:	SRRD (Red Shiner)	Necropsy Date:	September 11, 2002	Sample Size:	10
Strain:		Age:		Tissue Collection No.:	
Mark/Lot:				Disease Survey No.:	
Unit:		Water Temp in C°:		Excel File Name.:	arroyo del tajo2
Fish Source:		Water Hardness:		Custody No.:	
Egg Source:		Investigators:	Catherine Sykes	Purpose Code:	
Hatch Date:		Reason for Necropsy:	RGSM fish health study		
Remarks:	condition of fish very poor on arrival - catching & shipping stress				

	MEAN	Standard Deviation	Max	Min	Coefficient of Variance
Length (mm)	41.27	5.47	49.39	35.15	13.3%
Weight (g)	0.58	0.29	1.09	0.28	50.1%
Ktl * 105	0.76	0.09	0.92	0.65	11.5%
Ctl * 104	2.76		3.33	2.34	
Hematocrit					
Leucocrit					
Plasma Protein					
Deformity Index					
Skin Lesion					
Fin Deformities	0.10	0.32	1.00		31.6%

Values as Percent of Total Sample

Eyes	Gills	Pseudobranchs	Thymus	Mesentery Fat	Spleen	Hind gut	Kidney	Liver	Bile	Fins	Opercle	Deformities	Skin Lesions	Fin Deformities
N 90%	N 100%	N 100%	0 100%	0 60%	B	0 100%	N 100%	A 90%	0	0 60%	0 50%	N 100%	N 100%	N 90%
B1	F	S	1	1 40%	R 90%	1	S	B 10%	1 10%	1 30%	1 50%	V	R	Pc 10%
B2	C	L	2	2	G	2	M	C	2 90%	2 10%	2	M	OP	Pl
E1	M	S&L	X 0	3	NO	X 0	G	D	3	X 50.0%	X 0.50	C	F	An
E2	P	I		4	E		U	E	X 1.90			O	L	V
H1 10%	OT	OT		X 0.40	OT 10%		OT	F				F	T	C 9%
H2								OT				R	OT	Ad
M1												OT		D
M2														OT
OT														

Summary of Normals

90%	100%	100%	100%	NA	90%	100%	100%	100%	NA	60%	50%	100%	100%	90%

Summary of Means

NA	NA	NA	0	.4	NA	0	NA	NA	1.90	0.50	0.50	Mean deformities 0	0	0.10

Summary of Specific Percent Indices

NA	NA	NA	0%	10.0%	NA	0%	NA	NA	63.3%	25.00%	25.00%	Percent of possible		1.250%

Summary of Combined Percent Indices

Normality index: 89.0	Severity Index: 12.50	Feeding Index: 36.7

Sex: M F 30% U 70%

General Remarks

Fins

Skin

Gonads

Other >50% of fish dead, most of surviving fish too small to use (<250 mg)

Table 11.12.3.--Fish Health Assessment Summary for Rio Grande below Arroyo del Tajo December 12, 2002

[See table 12 for codes used below; MNFH, fathead minnow.]

Summary of Necropsies

Location:	Arroyo del Tajo			Quality Control No.:	3A
Species:	MNFH	(Fathead Minnow)	Necropsy Date: 13-Dec-02	Sample Size:	
Strain:			Age:	Tissue Collection No.:	
Mark/Lot:				Disease Survey No.:	
Unit:			Water Temp in C°:	Excel File Name.:	arroyo del tajo3
Fish Source:			Water Hardness:	Custody No.:	
Egg Source:			Investigators: Catherine Sykes	Purpose Code:	
Hatch Date:			Reason for Necropsy: RGSM fish health study		
Remarks:	100% mortality upon arrival - too much salt in water?				

	MEAN	Standard Deviation	Max	Min	Coefficient of Variance
Length (mm)	32.72	9.11	54.96	23.41	27.9%
Weight (g)	0.38	0.41	1.53	0.09	107.3%
Ktl * 105	0.82	0.08	1.03	0.67	10.2%
Ctl * 104	2.98		3.72	2.43	
Hematocrit					
Leucocrit					
Plasma Protein					
Deformity Index					
Skin Lesion					
Fin Deformities					

Values as Percent of Total Sample

Eyes	Gills	Pseudobranchs	Thymus	Mesentery Fat	Spleen	Hind gut	Kidney	Liver	Bile	Fins	Opercle	Deformities	Skin Lesions	Fin Deformities
N	N	N	0	0	B	0	N	A	0	0	0	N	N	N
B1	F	S	1	1	R	1	S	B	1	1	1	V	R	Pc
B2	C	L	2	2	G	2	M	C	2	2	2	M	OP	Pl
E1	M	S&L	X 0	3	NO	X 0	G	D	3	X 0	X 0	C	F	An
E2	P	I		4	E		U	E	X 0			O	L	V
H1	OT	OT		X 0	OT		OT	F				F	TU	Cl
H2								OT				R	OT	Ad
M1												OT		Dl
M2														OT
OT														
				NA	Summary of Normals				NA					
NA	NA	NA	0	0	Summary of Means NA	0	NA	NA	0	0	0	Mean deformities		
NA	NA	NA	0%	0%	Summary of Specific Percent Indices NA	0%	NA	NA	0%	0%	0%	Percent of possible		

Summary of Combined Percent Indices

Normality index: Severity Index: Feeding Index:

Sex: M F U

General Remarks

Fins

Skin

Gonads

Other

Table 11.12.4.--Fish Health Assessment Summary for Rio Grande below Arroyo del Tajo February 24, 2003

--insufficient sample collected for analysis--

Table 11.13.1.--Fish Health Assessment Summary for Rio Grande at San Pedro
August 20, 2002

--insufficient sample collected for analysis--

Table 11.13.2.--Fish Health Assessment Summary for Rio Grande at San Pedro January 14, 2003

[See table 12 for codes used below; SRRD, red shiner.]

Summary of Necropsies

Location:	San Pedro				Quality Control No.: 3K
Species:	SRRD	(Red Shiner)	Necropsy Date:	15-Jan-03	Sample Size: 15
Strain:			Age:		Tissue Collection No.:
Mark/Lot:					Disease Survey No.:
Unit:			Water Temp in C°:		Excel File Name.: san pedro3
Fish Source:			Water Hardness:		Custody No.:
Egg Source:			Investigators:	Catherine Sykes	Purpose Code:
Hatch Date:			Reason for Necropsy:	RGSM fish health study	
Remarks:					

	MEAN	Standard Deviation	Max	Min	Coefficient of Variance
Length (mm)	32.10	6.96	60.60	24.28	21.7%
Weight (g)	0.28	0.33	1.81	0.10	117.9%
Ktl * 105	0.71	0.07	0.89	0.57	9.3%
Ctl * 104	2.57		3.21	2.06	
Hematocrit					
Leucocrit					
Plasma Protein					
Deformity Index					
Skin Lesion	0.20	0.41	1.00		48.3%
Fin Deformities	0.07	0.26	1.00		25.8%

Values as Percent of Total Sample

Eyes	Gills	Pseudobranchs	Thymus	Mesentery Fat	Spleen	Hind gut	Kidney	Liver	Bile	Fins	Opercle	Deformities	Skin Lesions	Fin Deformities
N 100%	N 100%	N 100%	0 100%	0 7%	B	0 100%	N 100%	A 100%	0	0 93%	0 13%	N 100%	N 80%	N 93%
B1	F	S	1	1 93%	R 100%	1	S	B	1 100%	1 7%	1 87%	V	R 7%	Pc
B2	C	L	2	2	G	2	M	C	2	2	2	M	OP	Pl
E1	M	S&L	X 0	3	NO	X 0	G	D	3	X 6.7%	X 0.87	C	F	An
E2	P	I		4	E		U	E	X 1.00			O	L	V
H1	OT	OT		X 0.93	OT		OT	F				F	TU	Cl 7%
H2								OT				R	OT 13%	Ad
M1												OT		Dl
M2														OT
OT														

Summary of Normals

100%	100%	100%	100%	NA	100%	100%	100%	100%	NA	93%	13%	100%	80%	93%

Summary of Means

NA	NA	NA	0	.9 33	NA	0	NA	NA	1.00	0.07	0.87	Mean deformities	0.20	0.07

Summary of Specific Percent Indices

NA	NA	NA	0%	23.3%	NA	0%	NA	NA	33.3%	3.33%	43.33%	Percent of possible	0.03	0.01

Summary of Combined Percent Indices

Normality index: 90.7	Severity Index: 11.67	Feeding Index: 66.7

Sex: M 53% F 40% U 7%

General Remarks

Fins

Skin

Gonads

Other

Table 11.14.1.--Fish Health Assessment Summary for Rio Grande at North Boundary Bosque del Apache National Wildlife Refuge
August 19, 2002

[See table 12 for codes used below; ;MNFH, fathead minnow.]

Summary of Necropsies

Location: Bosque del Apache — Quality Control No.: 1J

Species:	MNFH (Fathead Minnow)	Necropsy Date:	August 20, 2002	Sample Size:	26
Strain:		Age:		Tissue Collection No.:	
Mark/Lot:				Disease Survey No.:	
Unit:		Water Temp in C°:		Excel File Name.:	bosque del apache
Fish Source:		Water Hardness:		Custody No.:	
Egg Source:		Investigators:	Catherine Sykes	Purpose Code:	
Hatch Date:		Reason for Necropsy:	RGSM fish health study		

Remarks: evidence of catching and/or shipping stress, 3 dead, one with head crushed

	MEAN	Standard Deviation	Max	Min	Coefficient of Variance
Length (mm)	38.95	4.20	46.50	32.02	10.8%
Weight (g)	0.44	0.15	0.85	0.24	35.5%
Ktl * 105	0.71	0.08	0.87	0.58	10.5%
Ctl * 104	2.58		3.14	2.10	
Hematocrit					
Leucocrit					
Plasma Protein					
Deformity Index	0.04	0.20	1.00		19.6%
Skin Lesion	0.27	0.45	1.00		59.5%
Fin Deformities					

Values as Percent of Total Sample

Eyes	Gills	Pseudobranchs	Thymus	Mesentery Fat	Spleen	Hind gut	Kidney	Liver	Bile	Fins	Opercle	Deformities	Skin Lesions	Fin Deformities
N 81%	N 92%	N 100%	0 100%	0 88%	B	0 100%	N 100%	A 62%	0	0 50%	0 65%	N 96%	N 73%	N 100%
B1	F	S	1	1 12%	R 92%	1	S	B 38%	1 46%	1 46%	1 35%	V	R 19%	Pc
B2	C	L	2	2	G	2	M	C	2 50%	2 4%	2	M	OP 4%	Pl
E1	M	S&L	X 0	3	NO	X 0	G	D	3 4%	X 53.8%	X 0.35	C	F 4%	An
E2	P 8%	I		4	E 4%		U	E	X 1.58			O	L	V
H1 12%	OT	OT		X 0.12	OT 4%		OT	F				F	T	C
H2 8%								OT				R 4%	OT	Ad
M1												OT		D
M2														OT
OT														

Summary of Normals

81%	92%	100%	100%	NA	92%	100%	100%	100%	NA	50%	65%	96%	73%	100%

Summary of Means

												Mean deformities		
NA	NA	NA	0	0.12	NA	0	NA	NA	1.58	0.54	0.35	0.04	0.27	0

Summary of Specific Percent Indices

												Percent of possible		
NA	NA	NA	0%	2.9%	NA	0%	NA	NA	52.6%	26.92%	17.31%	0.549%	4.487%	

Summary of Combined Percent Indices

Normality index: 88.1	Severity Index: 11.06	Feeding Index: 47.4

Sex: M F U 100%

General Remarks

Fins

Skin

Gonads

Other

Table 11.14.2.--Fish Health Assessment Summary for Rio Grande at North Boundary Bosque del Apache National Wildlife Refuge January 13, 2003

--insufficient sample collected for analysis--

Table 11.15.--Summary of fish health assessment metrics by site.

[--, no data; FHM, fathead minnow; RS, red shiner; M, male; F, female, U, unknown; mm, millimeter; g, grams; STD, standard deviation.]

Sampling Site	Collection Date	Species	Gender			Length (mm)		Weight (g)		Condition		Deformity		Skin lesions		Fin Deformities		Normality Index	Severity Index	Feeding Index
			M	F	U	MEAN	STD	MEAN	STD	MEAN	STD	MEAN	STD	MEAN	STD	MEAN	STD			
Rio Rancho WWTP #2 Outfall	2-Aug-02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Rio Rancho WWTP #2 Outfall	30-Jan-03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Rio Grande at La Orilla	26-Jul-02																			
Rio Grande at La Orilla	1-Nov-02	FHM,RS	19%	48%	33%	51.0	8.1	1.2	0.6	0.8	0.1	0.0	0.0	0.1	0.3	0.0	0.0	93.7	6.9	54.3
Rio Grande at La Orilla	19-Dec-02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Rio Grande at La Orilla	28-Feb-03	RS	40%	33%	27%	42.2	6.5	0.6	0.3	0.8	0.1	0.0	0.0	0.0	0.0	0.0	0.0	92.3	9.2	66.7
Rio Grande at Barelas	22-Aug-02	--																		
Rio Grande at Barelas	17-Jan-03	FHM,RS	27%	57%	16%	46.5	9.7	1.0	0.8	0.8	0.1	0.0	0.0	0.0	0.2	0.0	0.0	93.0	9.2	67.8
Albuquerque WWTP Outfall	6-Aug-02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Albuquerque WWTP Outfall	29-Jan-03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Rio Grande at Los Padillas	25-Jul-02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Rio Grande at Los Padillas	31-Oct-02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Rio Grande at Los Padillas	18-Dec-02	FHM,RS	60%	40%	0%	46.4	16.8	1.2	1.2	0.8	0.1	0.0	0.0	0.0	0.0	0.0	0.0	96.0	5.0	66.7
Rio Grande at Los Padillas	27-Feb-03	FHM	48%	52%	0%	63.1	6.5	2.7	1.0	1.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	98.0	2.5	66.7
Rio Grande at Isleta below RR Bridge	7-Aug-02	FHM,RS	22%	22%	56%	49.2	8.8	1.1	0.7	0.9	0.1	0.0	0.0	0.1	0.2	0.0	0.0	92.2	9.0	46.3
Rio Grande at Isleta below RR Bridge	28-Jan-03	FHM,RS	50%	47%	3%	57.7	6.8	1.8	0.7	0.9	0.1	0.0	0.0	0.0	0.2	0.0	0.0	93.3	8.3	67.8
Rio Grande at Los Lunas	24-Jul-02	FHM	6%	6%	88%	43.9	3.2	0.8	0.2	0.9	0.1	0.0	0.0	0.0	0.0	0.0	0.0	91.9	5.5	56.3
Rio Grande at Los Lunas	30-Oct-02	FHM	60%	33%	7%	59.0	6.6	2.0	0.7	0.9	0.1	0.0	0.0	0.0	0.2	0.0	0.0	95.7	5.0	65.6
Rio Grande at Los Lunas	17-Dec-02	FHM,RS	23%	63%	14%	51.5	9.5	1.4	0.9	0.9	0.1	0.0	0.0	0.0	0.0	0.0	0.0	95.7	6.3	66.7
Rio Grande at Los Lunas	26-Feb-03	FHM	30%	70%	0%	57.0	4.6	1.8	0.6	0.9	0.1	0.0	0.0	0.1	0.4	0.0	0.0	92.7	6.3	66.7
Rio Grande at Abeytas	12-Sep-02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Rio Grande at Abeytas	16-Jan-03	FHM,RS	57%	40%	3%	58.1	9.3	2.1	1.1	1.0	0.1	0.0	0.0	0.2	0.4	0.0	0.0	94.0	6.3	66.7
Lower San Juan Drain	5-Aug-02	RS	16%	16%	68%	43.0	10.3	0.8	0.7	0.9	0.1	0.0	0.0	0.0	0.2	0.0	0.0	94.0	7.0	64.0
Lower San Juan Drain	27-Jan-03	RS	50%	30%	20%	44.2	3.4	0.7	0.2	0.8	0.1	0.0	0.0	0.1	0.3	0.0	0.0	92.7	9.2	66.7
Rio Grande at La Joya	23-Jul-02	FHM	10%	0%	90%	46.4	6.1	1.0	0.4	0.9	0.1	0.0	0.0	0.1	0.2	0.0	0.0	95.0	5.6	55.0
Rio Grande at La Joya	10-Sep-02	FHM,RS	24%	29%	47%	39.1	6.1	0.5	0.3	0.8	0.1	0.0	0.0	0.1	0.3	0.0	0.0	87.6	13.2	56.9
Rio Grande at La Joya	13-Dec-02	FHM,RS	19%	44%	37%	39.5	10.4	0.6	0.7	0.8	0.1	0.0	0.0	0.2	0.4	0.0	0.0	92.5	9.4	66.7
Rio Grande at La Joya	25-Feb-03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 11.15.--Summary of fish health assessment metrics by site.

Sampling Site	Collection Date	Species	Gender			Length (mm)		Weight (g)		Condition		Deformity		Skin lesions		Fin Deformities		Normality Index	Severity Index	Feeding Index
			M	F	U	MEAN	STD	MEAN	STD	MEAN	STD	MEAN	STD	MEAN	STD	MEAN	STD			
Rio Grande at Lemitar	21-Aug-02	FHM	0%	13%	87%	45.5	3.6	0.8	0.2	0.8	0.0	0.0	0.0	0.1	0.4	0.0	0.0	92.5	9.4	62.5
Rio Grande at Lemitar	15-Jan-03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Rio Grande below Arroyo del Tajo	22-Jul-02	FHM	0%	0%	100%	37.9	6.5	0.6	0.3	1.0	0.1	0.1	0.3	0.2	0.5	0.0	0.0	95.6	3.1	60.4
Rio Grande below Arroyo del Tajo	9-Sep-02	RS	0%	30%	70%	41.3	5.5	0.6	0.3	0.8	0.1	0.0	0.0	0.0	0.0	0.1	0.3	89.0	12.5	36.7
Rio Grande below Arroyo del Tajo	12-Dec-02	FHM			100%	32.7	9.1	0.4	0.4	0.8	0.1			100% MORTALITY DURING SHIPMENT						
Rio Grande below Arroyo del Tajo	24-Feb-03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Rio Grande at San Pedro	20-Aug-02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Rio Grande at San Pedro	14-Jan-03	RS	53%	40%	7%	32.1	7.0	0.3	0.3	0.7	0.1	0.0	0.0	0.2	0.4	0.1	0.3	90.7	11.7	66.7
Rio Grande at North Boundary Bosque del Apache NWR	19-Aug-02	FHM	0%	0%	100%	39.0	4.2	0.4	0.2	0.7	0.1	0.0	0.2	0.3	0.5	0.0	0.0	88.1	11.1	47.4
Rio Grande at North Boundary Bosque del Apache NWR	13-Jan-03	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

Table 12.--Codes for fish health assessment datasheets and summaries

Eyes: both eyes categorized as follows:

N = Normal No aberrations, a good clear eye.

E1 or E2 = Exopthalmic Swollen protruding eye popeye); coded as E1 or E2 if present in one or two eyes, respectively.

H1 or H2 = Hemorrhagic Bleeding in the eye.

B1 or B2 = Blind This generally refers to opaque eyes.

M1 or M2 = Missing When an eye is missing from the fish.

OT = Other Any manifestations that do not fit the above descriptions.

Fins: classification is as follows:

0 = No active erosion Fins with normal appearance and no active erosion.

1 = Mild active erosion Active erosion, but no hemorrhage or secondary infection present.

2 = Severe active erosion Active erosion with hemorrhage and/or secondary infection.

Opercules: degree of shortening of the opercules is noted as follows:

0 = Normal No shortening; gills completely covered.

1 = Mild shortening Slight shortening of the opercule with a small portion of the gills exposed.

2 =Severe shortening Severe shortening of the opercule with considerable gill exposed.

Gills: appearance is as follows:

N = Normal No apparent aberrations and a deep, rich, red.

F = Frayed Erosion on the tips of the gills resulting in a ragged appearance.

C = Clubbed Swelling on the tips of the gill lamellae so that they appear bulbous or club-like.

M = Marginate A gill with a light discolored margin along distal tips of lamellae or filaments.

P = Pale Gills which are very light in color.

OT = Other Any observation which is not described above.

Pseudobranchs: grades are as follows:

N = Normal Flat or concave with no aberrations.

S = Swollen Convex.

L = Lithic Pseudobranchs with mineral deposits manifested as white amorphous spots or foci.

S&L = Swollen and lithic Lithic pseudobranchs are often also swollen.

I = Inflamed Refers to redness in the pseudobranch: may result from hemorrhage or other causes.

OT = Other Manifestations not covered by the categories listed above.

Thymus: assessment involves grading the degree of pinpoint hemorrhage as follows:

0 = No hemorrhage No pinpoint hemorrhages present.

1 = Mild hemorrhage A few (perhaps only two or three) red spots in evidence.

2 = Severe hemorrhage Many pinpoint hemorrhages with some.

Liver: grades are as follows:

A = Normal Solid red.

B = Normal Lighter or less vivid than A, but not so pale as to be general discoloration.

C = Fatty Light tan color, like coffee with cream.

D = Nodular Nodules imbedded in the liver — white mycobacterial cysts or incipient nodules.

E = Focal discoloration Change of color in local areas or foci in the liver.

F = General discoloration Color change in the whole liver.

OT = Other Aberrations or deviations which are not described above.

Table 12.--Codes for fish health assessment datasheets and summaries

Spleen: grades are as follows (the first three categories are all considered to be normal):
B = Black Very dark red.
R = Red Lighter red.
G = Granular Granular or rough appearance, easiest to see in outline.
NO = Nodular Containing nodules of varying size.
E = Enlarged Significantly and noticeably enlarged.
OT = Other Aberrations not covered by the above descriptions.

Hind gut: observations are recorded as follow (the gut contents are scraped out to expose the inner lining:
0 = No inflammation No inflammation or reddening.
1 = Mild inflammation Slight inflammation or reddening.
2 = Severe inflammation Considerable, severe inflammation or reddening.

Kidney: categories are as follows:
N = Normal Kidney lying relatively flat along the ventral surface of vertebral column. Dark red.
S = Swollen Enlarged or swollen, wholly or in part.
M = Mottled Grey discoloration, mottled or patchy in appearance.
G = Granular Granular appearance and texture.
U = Urolithiasis White or cream coloured amorphous mineral material in the tubules.
OT = Other Aberrations not described above.

Mesenteric fat: observation scores for stored fat are as follows:
0 = No fat deposited around the pyloric caeca.
1 = Less than 50% of the caecum is covered with fat.
2 = 50% of each caecum is covered in fat.
3 = More than 50% of each caecum is covered with fat.
4 = Pyloric caeca are completely covered by a large amount of fat.

Bile: ranking scheme considers the color and fullness of the gall bladder as follows:
0 = Yellow or straw color, bladder empty or only partially full.
1 = Yellow or straw color, gall bladder full.
2 = Light green to grass green.
3 = Dark green or dark blue-green.

Sex: as follows (sex of the fish are determined from the gonads):
M = Male.
F = Female.
U = Unknown.

Other Abbreviations: as follows:
mm = Millimeters total length.
g = Grams.
KTL*105 = Fish condition factor as the ratio of weight in grams x 100,000 by total length cubed.
CTL*104 = Fish condition factor in English units, obtained by multiplying KTL*105 by 3.613.
Max = Maximum.
Min = Minimum.