

## **2009 Taos Water Quality Sampling Report – Rio Hondo, Rio Fernando and Rio Pueblo de Taos**

**Lead: Sentinels-Rios de Taos**

**Support: Amigos Bravos**

**Abstract:** Surface water quality sampling was conducted in the Taos NM area in June and November 2009. Samples were collected from 4 sites in the Rio Hondo, 3 sites in the Rio Pueblo de Taos, and 5 sites in the Rio Fernando de Taos. All Samples in the Rio Hondo met water quality standards for all tested constituents on both testing dates. In June one site in the Rio Pueblo de Taos had *E. coli* levels above standards and the Fred Baca Park Rio Fernando site had *E. coli* and conductivity readings above standards. The *E. coli* level at the Fred Baca was extremely high. In November the two lower sites on the Rio Pueblo and on the Rio Fernando had conductivity readings above standards. All other samples met water quality standards for all tested constituents. Based on these results, where both the Rio Pueblo de Taos and Rio Fernando had conductivity readings above standards in multiple samples, it is recommended that these two streams be listed as impaired for conductivity. In addition, 2009 sampling confirms the recommendation from the 2008 sampling report to list the Rio Fernando as impaired for *E. coli*.

**Introduction:** This sampling project was initiated by Sentinels – Rios de Taos due to a concern that inadequate data were available to accurately assess the health of the Rio Hondo, Rio Fernando, and Rio Pueblo de Taos watersheds. Sentinels- Rios de Taos contacted Amigos Bravos in 2005 with concerns about water quality in local watersheds. Specifically, there was some concern about nutrient loading in the upper Rio Hondo. With Amigos Bravos' assistance Sentinels-Rios de Taos identified sampling locations and developed a monitoring plan. Sentinels-Rios de Taos contacted Rivers and Birds in Arroyo Seco to invite them and the youth that they work with to participate in the project. National representatives from Sierra Club's Water Sentinels program traveled to Taos and gave several trainings to the Sentinels-Rios de Taos' volunteers. Sampling was initiated first in February of 2007 by Sentinels- Rios de Taos with assistance from Amigos Bravos and Rivers and Birds. Two previous sampling reports have been prepared for sampling that occurred in 2007 and 2008 respectively. This report covers the sampling that occurred in 2009.

**Methods:** Surface water quality samples were collected from 4 sites in the Rio Hondo, 3 sites in the Rio Pueblo de Taos and 5 sites in the Rio Fernando de Taos (Appendix A and Appendix C). All samples were kept on ice until they were processed by Sangre de Cristo labs in Alamosa Colorado. Laboratory samples were collected for nitrates, biological oxygen demand, *E. coli*, and phosphate. All laboratory samples were collected and processed within a 8hr holding time (Appendix D). EPA approved methods and holding times were used to analyze the samples (Appendix B). Field measurements for pH, temperature, dissolved oxygen and conductivity were conducted (Appendix B).

**Results:**

### **Rio Hondo:**

June 2, 2009: Four laboratory samples were collected in the Rio Hondo. These samples were and analyzed for *E. coli*, nitrate, and BOD. Field readings for temperature, pH, conductivity, and dissolved oxygen were also taken for three of these samples. No water quality standard exceedences were recorded during this period (Appendix C)

November 6, 2009: Four laboratory samples were collected in the Rio Hondo. These samples were and analyzed for *E. coli*, nitrate, and phosphate. Field readings for temperature, pH, conductivity, and dissolved oxygen were also taken for these samples. No water quality standard exceedences were recorded during this period (Appendix C)

### **Rio Pueblo:**

June 2, 2009: Three laboratory samples were collected in the Rio Pueblo de Taos and analyzed for *E. coli*, nitrate, and BOD. Field readings for temperature, pH, DO, and conductivity were also taken. At P2 (About 15 yards downstream from bridge at Ranchitos Road and Culebra Road – Los Cordovas Bridge) *E.coli* was recorded at 240 cfu/100ml which is above the applicable water quality standard that is protective of primary contact (235 cfu/100ml). No other tested parameters, either in the laboratory samples or field samples, were above water quality standards (Appendix C).

November 6, 2009: Three laboratory samples were collected in the Rio Pueblo de Taos and analyzed for *E. coli*, nitrate, and phosphate. Field readings for temperature, pH, DO, and conductivity were also taken. At both P2 (About 15 yards downstream from bridge at Ranchitos Road and Culebra Road – Los Cordovas Bridge) and P3 (near confluence with Rio Grande) conductivity was recorded at 410 microsiemens/cm which is above the applicable water quality standard of  $\leq 400$ . No other tested parameters, either in the laboratory samples or field samples, were above water quality standards (Appendix C).

### **Rio Fernando:**

June 2, 2009: Four laboratory samples were collected in the Rio Fernando and analyzed for *E. coli*, nitrate and BOD. Field readings for temperature, pH, DO, and conductivity were also taken. The conductivity level at F4 (Rio Fernando at Fred Baca Park) of 800 microsiemens/cm exceeded the applicable water quality standard of  $\leq 500$ . *E. coli* levels at F4 were so high that they were too numerous to count. No other tested parameters, either in the laboratory samples or field samples, were above water quality standards (Appendix C).

November 6, 2009: Five samples were collected in the Rio Fernando and analyzed for for *E. coli*, nitrate and phosphate. (Appendix C). Field readings for temperature, pH, DO, and conductivity were also taken. The conductivity level at F4 (Rio Fernando at Fred Baca Park) of 980 microsiemens/cm and at F4G (???) of 750 microsiemens/cm exceeded the applicable water quality standard of  $\leq 500$ . No other tested parameters, either in the laboratory samples or field samples, were above water quality standards (Appendix C).

## **Discussion:**

Two of the three streams that were monitored had conductivity readings above the water quality standard at multiple sites. These results indicate that the Rio Pueblo de Taos and the Rio Fernando should be listed on the state's 303d list as impaired for conductivity.

Levels of *E. coli* found in two of the three streams sampled were above water quality standards for one sampling event though it is important to note that only two samples were collected during 2009, while in previous years 4 or more samples were collected each year. The extremely high levels of *E. coli* found at the lower Rio Fernando site (Rio Fernando at Fred Baca Park) are a cause for concern and are consistent with spring and summer sampling at this site from 2008. This result along with 2008 data could indicate a possible seasonal source of contamination in the Rio Fernando. The high level of *E. coli* recorded in June at P2 is also consistent with sampling in previous years, indicating a constant source of *E. coli* contamination in this stretch of the river.

It is interesting to note that in all three streams no water quality standards exceedences were observed at the sites in the upper parts of the watersheds.

## **Conclusion:**

- The Rio Pueblo and Rio Fernando both had levels of *E. coli* above water quality standards during the June sampling event. These results indicate that both streams should be listed on the state's 303d list as impaired for *E. coli*. Combined with data from 2007 and 2008 all three streams (Rio Hondo, Rio Fernando, and Rio Pueblo de Taos) should be listed on the state's 303d list as impaired for *E. coli*
- Conductivity in the lower Rio Fernando and middle and lower Rio Pueblo was measured above standards at multiple locations. Combined with monitoring data from 2007 and 2008 both the Rio Pueblo de Taos and Rio Fernando should be listed on the state's 303d list as impaired for conductivity.
- During 2009 all water quality exceedences were detected in the lower segments of the watersheds, perhaps indicating a connection between increased human presence and water quality exceedences.

## APPENDIX A

### SENTINELS-RIOS de TAOS WATER SAMPLING SITES

#### ON THE RIO FERNANDO

- F1A Above Shadybrook Development, about 5 miles east of Taos, by bridge on road to Valle Escondido
- F1B About 200 meters downstream from Shadybrook, by NF La Sombra campground.
- F 1 About 10 yards downstream from the west bridge by the USFS parking lot at the Divisidero/South Boundarytrailhead. On the north bank.
- F2 About 10 yards upstream from Paseo del Pueblo Sur, across street from ABC Lock.  
On the north bank. We'll usually use this site only when a storm is in progress.
- F3 About 25 yards downstream for Paseo del Pueblo Sur, by ABC Lock. On the south bank, by a concrete bar.
- F4 Fred Baca Park, about 50 yards downstream from the footbridge at the bend. On northwest side. of stream.  
N36 23' 56.8"  
W105 35' 23.2"

#### ON THE RIO PUEBLO

- P 1 About 27 yards downstream from the stop sign on Upper Ranchitos Road at Paseo del Pueblo Norte. On north side of stream by the car wash.  
N36 25' 13"  
W105 34' 23"
- P1A N36 25' 08.4"  
W 105 34' 45.7"
- P1B Ranchitos Rd. Near bridge by Callegon Rd and SR 240 (near Hacienda de los Martinez). Mile Marker 4.
- P1C Ranchitos Rd near mile marker 13 go down dirt road to the left by road to Blackstone Ranch.  
N36 23' 34.6"  
W 105 37' 26.4"
- P 2 About 15 yards downstream from bridge at Ranchitos Road and Culebra Road.  
On  
north side of stream by survey sign.

P 3 About 10 yards upstream from the road barrier from the parking lot on the northeast corner of Taos Junction Bridge area. On east bank of stream.

ON THE RIO HONDO

H 1 Above Phoenix Restaurant, which is upstream from the Bavarian Inn

H 2A Rio Hondo just upstream from where the branch coming from Bavarian Inn (after going through the culvert under the trail) empties into the Rio Hondo.

H2B Branch coming from Bavarian Inn just before it empties into the main Rio Hondo.

H 2C About 10 yards upstream from the bridge near the day care center in the Ski Village. On the north bank.

H2C2 Directly above Taos Ski Valley Effluent Pipe

H2D Just above the Riverside property, about 175 yards downstream from the stop sign at the intersection of the Village of TSV maintenance road and Route 150. North bank.

H2E Rio Hondo directly downstream of effluent pipe  
N36 35' 47"  
W105 27' 43"

H2F Taos Ski Valley effluent pipe

H 3 Cuchilla Campground, just downstream from entrance road. North bank.

H 4 Kaufman Property. About 20 yards downstream from footbridge. South bank.  
N 36 32' 14.8"  
W 105 38' 43.4"

H4A Just downstream from Route 522 Bridge, north bank.  
N 36 32' 07.1"  
W 105 40' 02.7"

H 5 About 20 yards upstream from bridge in Lower Arroyo Hondo, just before the road crosses the Rio Hondo and goes uphill towards New Buffalo. North bank.  
N 36 32' 59.1"  
W 105 40' 55.3

H 6 About 10 yards upstream from confluence with Rio Grande.

HVB N 36 31' 58.5"  
W 105 35' 04.0" need description of site

HVG 5 M downstream from bridge on lane to Jackie Garcia property  
N 36 32' 07.6"  
W 105 34' 12.2".

## **APPENDIX B**

### **SENTINELS--RIOS de TAOS**

#### **QUALITY ASSURANCE PROJECT PLAN (QAPP)**

##### **Project Description**

The goal of the Sentinels--Rios de Taos water monitoring project is to provide additional water quality data to local, state, and federal decision makers, as well as the public at large. This project was initiated due to a concern that inadequate data was available to accurately assess the health of the Rio Hondo, Rio Fernando, and Rio Pueblo de Taos watersheds. The cumulative impact of point and nonpoint sources of pollution will be characterized by collecting data on those parameters that are basic indicators of water quality and watershed health. Surface water samples collected by volunteer monitors will be analyzed for some or all of the following constituents:

- Nitrates
- Phosphorous
- Total Dissolved Solids
- E. Coli
- pH
- Conductivity
- Dissolved Oxygen
- Temperature
- Biological Oxygen Demand (BOD)

##### **Sampling Locations**

Sampling sites may change in attempt to identify sources of pollution. Some identified sampling sites include:

##### **SENTINELS-RIOS de TAOS WATER SAMPLING SITES**

###### **ON THE RIO FERNANDO**

- |     |  |
|-----|--|
| F1A | Above Shadybrook Development, about 5 miles east of Taos, by bridge on road to Valle Escondido |
| F1B | About 200 meters downstream from Shadybrook, by NF La Sombra campground.                       |

- F 1 About 10 yards downstream from the west bridge by the USFS parking lot at the Divisidero/South Boundary trailhead. On the north bank.
- F2 About 10 yards upstream from Paseo del Pueblo Sur, across street from ABC Lock.  
On the north bank. We'll usually use this site only when a storm is in progress.
- F3 About 25 yards downstream for Paseo del Pueblo Sur, by ABC Lock. On the south bank, by a concrete bar.
- F4 Fred Baca Park, about 50 yards downstream from the footbridge at the bend. On northwest side. of stream.  
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- P1B Ranchitos Rd. Near bridge by Callegon Rd and SR 240 (near Hacienda de los Martinez). Mile Marker 4.
- P1C Ranchitos Rd near mile marker 13 go down dirt road to the left by road to Blackstone Ranch.  
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#### ON THE RIO HONDO

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- H2B Branch coming from Bavarian Inn just before it empties into the main Rio Hondo.

H 2C	About 10 yards upstream from the bridge near the day care center in the Ski Village. On the north bank.
H2C2	Directly above Taos Ski Valley Effluent Pipe
H2D	Just above the Riverside property, about 175 yards downstream from the stop sign at the intersection of the Village of TSV maintenance road and Route 150. North bank.
H2E	Rio Hondo directly downstream of effluent pipe N36 35' 47" W105 27' 43"
H2F	Taos Ski Valley effluent pipe
H 3	Cuchilla Campground, just downstream from entrance road. North bank.
H 4	Kaufman Property. About 20 yards downstream from footbridge. South bank. N 36 32' 14.8" W 105 38' 43.4"
H4A	Just downstream from Route 522 Bridge, north bank. N 36 32' 07.1" W 105 40' 02.7"
H 5	About 20 yards upstream from bridge in Lower Arroyo Hondo, just before the road crosses the Rio Hondo and goes uphill towards New Buffalo. North bank. N 36 32' 59.1" W 105 40' 55.3
H 6	About 10 yards upstream from confluence with Rio Grande.
HVB	N 36 31' 58.5" W 105 35' 04.0"
HVG	5 M downstream from bridge on lane to Jackie Garcia property N 36 32' 07.6" W 105 34' 12.2".

Testing results will be sent to Region 6 of the Environmental Protection Agency (EPA), the State of New Mexico Environmental Department's Surface Water Quality Bureau, Amigos Bravos, and local newspapers and publications. Sampling results will be stored in the Sierra Club Sentinels--Rios de Taos data base.



## **Project Organization**

### *Project Coordinator Contact information:*

Eric E. Patterson  
Box 334  
Valdez, NM 87580  
505-776-2833  
eepatt@gmail.com

The project coordinator ensures all components of the project identified by this QAPP are completed in an efficient and timely manner. This includes oversight on sample collection, delivery, analysis, and reporting.

### *Sample Collector Contact Information*

Eric E. Patterson, contact person (see above)

Mary Pickett	Nora Patterson	Rachel Conn
Gary Grief	Dorothy Wells	Betsy Wolf
Annouk Ellis	Jeanne Green	
Roberta Salazar	Flowers Espinosa	

Sample collectors will conduct sample collection activities according to the methods identified by this QAPP. Responsibilities include:

- Calibration, maintenance and utilization of field equipment for analysis of dissolved oxygen (DO), temperature, pH, and conductivity.
- Obtaining needed sample containers and preservatives for sampling events.
- Following quality assurance procedures for sample collection identified by this QAPP.
- Filling out chain of custody (COC) forms.

### *Sample Transport Contact Information*

Eric E. Patterson (see above)

Sample Transport will ensure that water samples are delivered to Sangre de Cristo Laboratory, Inc., Alamosa, CO, or another EPA certified laboratory, in a secure and timely manner. Responsibilities include:

- Keeping samples secure between sampling site and the laboratory.

- Maintaining COC document according to procedures identified.
- Delivering samples within specified holding times.

*Sample Analysis/Laboratory Contact Information:*

Sangre de Cristo Laboratory, Inc., an EPA certified laboratory  
Tierra del Sol Industrial Park  
2329 Lava Lane  
Alamosa, CO 81101

Sample Analysis Staff will ensure that samples are analyzed in a manner that provides the most accurate data possible. Responsibilities include:

- Analyzing samples according the methods identified in Standard Operating Procedures(SOPs).
- Analyzing samples within established holding times.
- Reporting results to Project Coordinator

*Data Reporting Contact Information*

Rachel Conn, Amigos Bravos Clean Water Circuit Rider and Policy Analyst  
Box 238  
Taos, NM 87571  
505-758-3874  
rconn@amigosbravos.org

Data reporting will ensure the data collected by the project is stored appropriately and disseminated to interested parties. Responsibilities include:

- Organization of final report on data collected by the project.
- Dissemination of report to specified local, state and federal agencies.
- Dissemination of report to newspapers and other local news media and presentation of project information to the public upon request.
- Entering data into Sierra Club's Water Sentinel data base.

### **Quality Assurance of Field Analysis**

Measurements will be made using the following equipment:

- CHEMets Dissolved Oxygen Kit, Model K-7512
- Fisher Alcohol Thermometer, Model 15021B
- Oakton Conductivity ECTester Meter, Model 5-0082
- LaMotte Wide Range pH Test Kit Model P-5985 Code 2119

<b>PARAMETER</b>	<b>DETECTION LIMIT</b>	<b>ACCURACY</b>
Dissolved Oxygen	1 to 12 mg/L	+/- 1 ppm
Temperature	-10° to 110° C	+/- 1° C
Conductivity	0 to 1990 µS/cm	+/-10 µS/cm
pH	5.0 to 8.5 ph units	+/-0.3 pH units

Field instruments will be calibrated according to manufacturers' instructions <24 hours prior to each sampling event. The conductivity meter will be calibrated using a known standard solution. Chemicals used for dissolved oxygen and pH analysis will be replaced according to expiration dates provided by the manufacturer. Samples will be collected using the containers, preservatives, volumes and holding times identified in Appendix A

### **Field Sample Collection Procedures**

Samples will be collected:

- Midstream just below the water's surface.
- Facing upstream to avoid disturbances caused by the sample collector.
- Upstream of minor temporal or spatial impacts, such as bridges and campsites.
- Free of floating debris.
- Using appropriate sample containers and preservatives specified in Appendix A.

Samples will be tagged appropriately with identifying number/information and delivered to appropriate laboratory personnel accompanied by appropriately completed and signed Chain of Custody(COC) forms.

**Quality Assurance of Laboratory Analysis**

Quality assurance of laboratory methods is the sole responsibility of the sample analysis/laboratory coordinator previously identified. Samples will be analyzed using methods contained in the laboratory's Standard Operating Procedures. These are located at Sangre de Cristo Laboratory, Inc. and can be obtained from the sample analysis coordinator upon request.

<b>METHODS FOR LABORATORY ANALYSIS</b>		
MATRIX	PARAMETER	METHOD
Nonpotable water	Total Dissolved Solids	EPA 160.1
Nonpotable water	Nitrates	EPA 300.0
Nonpotable water	Total Phosphorus	EPA 365.2
Nonpotable water	E. Coli	EPA 10029
Nonpotable water	BOD	SM 5210B

## SENTINELS-RIOS de TAOS

## WATER SAMPLING DATA

SITE	DATE	degrees C TEMPERATURE	pH units pH	ppm D.O.	microsiemens/cm conductivity	/100ml e. coli	mG/L TDS	mg/L nitrate	mg/L BOD	mg/L Phosphate
<b>RIO HONDO</b>										
<b>Water Quality Standard</b>		<b>&lt;=20</b>	<b>6.6-8.8</b>	<b>&gt;=6</b>	<b>&lt;=400</b>	<b>&lt;=410</b>		<b>10</b>		
H2A	2/22/07		7.5	8		0	112	0.7	2	
H3	2/22/07		7.7	9		0	126	0.59	2	
H4	2/22/07		7.5	8		0	126	0.59	2	
H5	3/2/07	3	8	7.5						
H2A	3/5/07	2.7	7.4	8		0	100	0.81	1	
H2B	5-Mar	1.5	7.5	9		0	100	0.91	1	
H2C	3/5/07	2	7.3	7.5					1	
H2D	3/5/07	2.5	7.6	8.5		0	121	0.59	1	
H3	3/8/07	3	7.0-7.5	7	180					
H5	4/5/07	15	7.5	7						
H5	4/27/07	15	7.2	6	230					
H3	5/3/07	10	7.5	7	110					
H3	5/21/07	7	7.5	8	110	0	76	0.5	6	
H5	5/21/07	11	7.5	9	160	>1000	90	<0.15	5	
H6	5/21/07	12.5	8	7	170	895	119	0.52	3	
H3	7/18/07	10	7.5	7	120					
H4	7/24/07	13	7.5	7	200	44				
H4B	7/24/07	15	7.5	7	320	96				
H5	7/24/07	17	7.5	9	430	100				
H6	7/24/07	18	7.25	6.5	410	52				
H3	9/19/07	7	7.5	6	150	0				
H4	9/19/07	11	7.5	7	210	18				
H4B	9/19/07	11	7.5	7	300	7				
H5	9/19/07	12	8	8	380	13				
H6	9/19/07	12	8.5	8.5	390	13				
HV6	9/19/07	9	7.5	8	160	25				
H2C2	12/3/07					<1				
H2F	12/3/07					<1				
H2E	12/3/07					<1				

HVB	12/3/07					12.1				
HVG	12/3/07					2				
H4	12/3/07					6.3				
H4A	12/3/07					4.1				
H5	12/3/07					7.5				
H5	12/3/07					5.2				
HVB	3/10/08					<1				
H4	3/10/08					52				
H4B	3/10/08					3.1				
H5	3/10/08					5.2				
H6	3/10/08					<1				
H2E	6/10/08	8	7.5	8	140	0	86	0.28	2	
H4A	6/10/08	7	7.5	9	120	0	79	0.22	2	
H5	6/10/08	8	7.5	8	170	440	114	0.33	2	
H6	6/10/08	8	7.5	9	130	46	92	0.18	2	
H2E	7/22/08					19	94	1.33		
H4E	7/22/08					84	114	ND		
H5	7/22/08					80	150	1.99		
H6	7/22/08					48	153	0.33		
H2E	9/15/08	4	7	7	150	1	104	0.53		
H4A	9/15/08	9.5	7.5	8	190	14	132	ND		
H5	9/15/08	10	7.5	7	290	18	199	0.31		
H6	9/15/08	10	7.5	7	300	27	204	1.35		
HBV	6/2/09					2		ND	3	
H3	6/2/09	5	7	8	110	0		ND	3	
H5	6/2/09	7	7.5	7	170	144		ND	3	
H6	6/2/09	8	7.5	8	180	160		ND	3	
HBV	11/6/09	3	7.2	9	160	140		1		4.5
H3	11/6/09	2	7.2	8	150	3		<0.11		0.18
H5	11/6/09	4	7.5	10	250	89		1.92		0.24
H6	11/6/09	4	7.5	10	270	110		0.22		0.99

### Appendix C

#### RIO PUEBLO DE TAOS

##### Water Quality Standard

		<b>&lt;=20</b>	<b>6.6-8.8</b>	<b>&gt;=6</b>	<b>&lt;=400</b>	<b>235</b>		<b>10</b>	
P1	5/21/07	7	7	7	140	0	21	0.53	5
P2	5/21/07	9	7.5	8	230	665	147	0.47	3
P3	5/21/07	11	8	8	250	640	170	<0.15	8

P1	7/24/07	14	7.5	7	250	98			
P2	7/24/07	19	7.8	7	350	62			
P3	7/24/07	20	8.5	5	450	384			
P1	9/19/07	9	7.7	8	230	5			
P2	9/19/07	11	7.7	7	330	9			
P3	9/19/07	13	8	7	430	3			
P1	12/3/07					5.2			
P1A	12/3/07					7.5			
P1B	12/3/07					29.8			
P2	12/3/07					435.2			
P3	12/3/07					59.1			
P3	12/3/07					55.6			
P1	3/10/08					<1			
P1A	3/10/08					<1			
P1B	3/10/08					5.2			
P1C	3/10/08					4.1			
P2	3/10/08					7.4			
P3	3/10/08					<1			
P3	3/10/08 (duplicate)					<1			
P1	6/10/08	4	7.5	7	130	6	88		
P1A	6/10/08	7	7.5	9	150	20	90		
P1C	6/10/08	10	7.3	8.5	160	148	102	0.49	
P2	6/10/00	10	7	9	170	88	108		
P3	6/10/08	11	8	7	210	46	152		
P1A	7/22/08					48	140	1.7	
P1C	7/22/08					34	186	1.87	
P2	7/22/08					260	192	1.17	
P3	7/22/08					11	261	0.64	
P1	9/15/08	10	7.5	7	220	33	152	ND	
P1A	9/15/08	11	7.5	7	230	20	156	ND	
P1C	9/15/08	15	7.5	7	320	37	218	ND	
P3	9/15/08	15	8	7	380	14	267	ND	
P1	6/2/09	12	7.5	9	130	60		ND	3
P2	6/2/09	11	7	9	210	240		ND	2
P3	6/2/09	10.4	7.5	6	320	106		ND	3
P1	11/6/09	5	7.5	8.5	300	38		ND	0.63
P2	11/6/09	5	8	9	410	59		ND	0.51
P3	11/6/09	7	8	8	410	52	0.33		0.6

P1 6/30/10 15 7.5 7 230

**RIO FERNANDO DE TAOS**

Standards		<=20	6.6-8.8	>=6	<=500	235		10	
F1	5/21/07	9	7.7	6	260	18	202	<0.15	5
F3	5/21/07	10	8	7	310	36	213	<0.15	8
F4	5/21/07	10	7.7	7	320	40	233	<0.15	5
F1	7/24/07	13	7.3		460	28			
F3	7/24/07								
F4	7/24/07	14	7.5			48			
F1	9/19/07	10	8.2	5.5	470	55			
F4	9/19/07	10	7.2	3	690	r			
F1	12/3/07					2			
F1A	12/3/07					28.5			
F1B	12/3/07					8.6			
F1	3/10/08					1			
F1	3/10/08 (duplicate)					1			
F1B	3/10/08					2			
F3	3/10/08					6.3			
F4	3/10/08					16.1			
F1	6/10/08	9	8	6	410	310	290		2
F1B	6/10/08	9	8.2	7	370	260	261		4
F3	6/10/08	11	7.5	6	450	290	342		4
F4	6/10/08	13	8	7	730	288	509		3
F1	7/22/08					596	313	ND	
F1B	7/22/08					180	286	0.19	
F4	7/22/08					610	524	0.18	
F1	9/15/08	10	7.5	7	470	28	332	0.26	
F1B	9/15/08	9.5	7.5	6	450	4	320	ND	
F4	9/15/08	13	7.5	5	780	111	531	ND	
F1	6/2/09	10	8	6	450	16		1.75	
F1A	6/2/09	10	7.5	6	370	94		ND	
F1B	6/2/09	9.8	7.5	6	410	18		ND	
F4	6/2/09	12	7.5	7	800	*TNTC		ND	
F1	11/6/09	2	8	8	460	14		ND	0.33
F1A	11/6/09	4	8	8	400	38		ND	0.39
F1B	11/6/09	2	7.5	8	450	41		0.32	0.18
F4	11/6/09	8	7	7	980	62		2.3	0.12



F4G

11/6/09

5

7.5

6

750

47

ND

0.39