

Water-Data Report 2010

**09522000 COLORADO RIVER AT NORTHERLY INTERNATIONAL BOUNDARY, ABOVE MORELOS DAM,
NEAR ANDRADE, CA**

Lower Colorado Basin
Yuma Desert Subbasin

LOCATION.--Lat 32°43'07", long 114°43'05" referenced to North American Datum of 1927, Yuma County, AZ, Hydrologic Unit 15030108, Gila and Salt River meridian, in Yuma County, AZ, on left bank at northerly international boundary, 0.5 miles east of Andrade, 1.1 miles upstream from Morelos Dam, 1.1 miles downstream from Rockwood Gate, and 6.4 miles downstream from gaging station on Colorado River below Yuma Main Canal Waste Way.

DRAINAGE AREA.--246700. mi², approximately, including all closed basins entirely within the drainage boundary, also 3,959 mi² in Great Divide Basin in southern Wyoming.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Jan. 1950 to current year. Prior to Oct. 1958 published as "at international boundary."

GAGE.--Water-stage recorder. Datum of gage is mean sea level. Supplementary water-stage recorder 1,680 ft upstream at same datum.

COOPERATION.--Discharges are furnished by International Boundary Water Commission. These discharge figures are then rounded in accordance with standard USGS policy.

REMARKS.--No estimated daily discharges. This record exhibits flows across the Northerly International Boundary above Morales Dam. Minor diversions to the United States below this station by pumping from ground water for irrigation in the floodway between river and Yuma levee.

Station is accounting point for 1944 International Treaty detailing water delivery to Mexico.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 40,600 ft³/s, Aug. 20, 1983; maximum elevation, 115.65 ft Aug. 18 and 19, 1983; minimum discharge, 495 ft³/s Sept. 28, 1970; minimum elevation, 101.72 ft, Nov. 2, 1981.

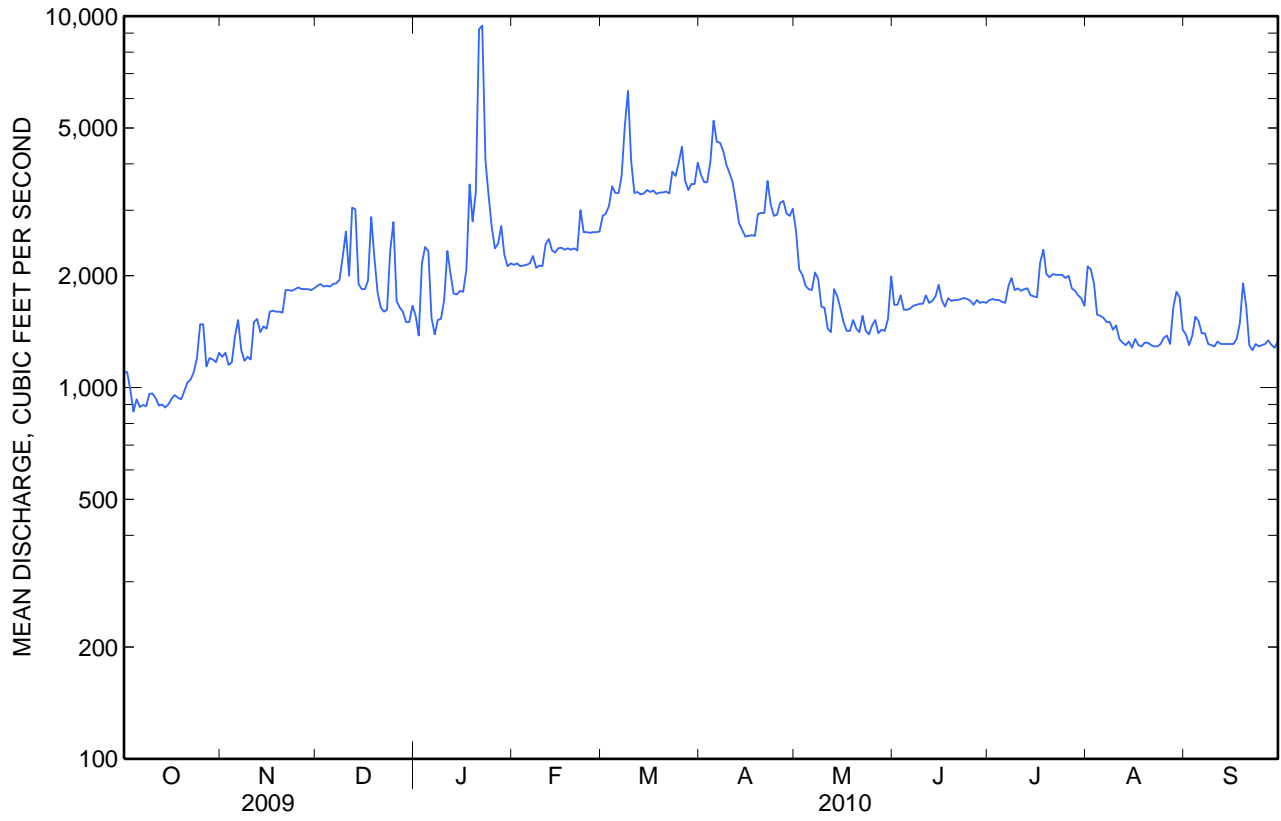
EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 9430 ft³/s, Jan 22; minimum daily discharge, 862 ft³/s, Oct. 4.

09522000 COLORADO RIVER AT NORTHERLY INTERNATIONAL BOUNDARY, ABOVE MORELOS DAM, NEAR ANDRADE, CA—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	1,100	1,210	1,880	1,560	2,140	2,900	3,740	2,640	1,670	1,720	2,120	1,390
2	1,100	1,240	1,900	1,380	2,160	2,940	3,570	2,080	1,670	1,730	2,080	1,300
3	982	1,150	1,870	2,160	2,120	3,080	3,570	2,010	1,770	1,720	1,900	1,380
4	862	1,170	1,880	2,390	2,130	3,480	4,060	1,880	1,620	1,720	1,570	1,550
5	929	1,370	1,870	2,330	2,140	3,340	5,230	1,840	1,620	1,700	1,560	1,510
6	886	1,520	1,900	1,540	2,160	3,340	4,590	1,830	1,630	1,690	1,540	1,400
7	897	1,260	1,910	1,390	2,260	3,710	4,560	2,040	1,660	1,880	1,500	1,400
8	890	1,180	1,950	1,520	2,100	5,050	4,340	1,960	1,670	1,970	1,500	1,310
9	961	1,210	2,250	1,530	2,130	6,290	3,990	1,650	1,680	1,830	1,430	1,300
10	964	1,190	2,630	1,720	2,120	4,060	3,780	1,640	1,680	1,850	1,470	1,290
11	936	1,500	2,000	2,330	2,430	3,340	3,570	1,440	1,770	1,820	1,350	1,330
12	894	1,530	3,050	2,020	2,510	3,360	3,170	1,410	1,690	1,840	1,320	1,310
13	900	1,410	3,020	1,790	2,340	3,310	2,770	1,840	1,710	1,850	1,300	1,310
14	883	1,460	1,900	1,780	2,310	3,330	2,660	1,760	1,760	1,770	1,330	1,310
15	900	1,440	1,840	1,820	2,370	3,400	2,550	1,630	1,890	1,760	1,280	1,310
16	932	1,600	1,840	1,810	2,380	3,360	2,560	1,500	1,720	1,750	1,350	1,310
17	954	1,610	1,940	2,080	2,350	3,390	2,570	1,420	1,650	2,170	1,300	1,350
18	939	1,600	2,880	3,520	2,370	3,320	2,560	1,420	1,740	2,350	1,290	1,490
19	929	1,600	2,240	2,800	2,350	3,350	2,930	1,520	1,710	2,020	1,320	1,910
20	975	1,590	1,800	3,370	2,370	3,350	2,950	1,440	1,720	1,980	1,320	1,650
21	1,030	1,830	1,640	9,220	2,340	3,370	2,950	1,410	1,720	2,020	1,300	1,300
22	1,050	1,830	1,600	9,430	3,000	3,330	3,600	1,560	1,730	2,010	1,290	1,260
23	1,100	1,820	1,620	4,100	2,620	3,810	3,110	1,420	1,740	2,010	1,290	1,310
24	1,200	1,840	2,340	3,310	2,620	3,710	2,900	1,390	1,730	2,010	1,310	1,290
25	1,480	1,860	2,790	2,710	2,610	4,030	2,920	1,470	1,710	1,970	1,360	1,300
26	1,480	1,840	1,710	2,370	2,620	4,450	3,140	1,520	1,670	2,000	1,380	1,310
27	1,140	1,840	1,640	2,440	2,620	3,600	3,180	1,400	1,720	1,850	1,310	1,340
28	1,200	1,840	1,600	2,720	2,630	3,400	2,940	1,430	1,690	1,820	1,640	1,300
29	1,190	1,830	1,500	2,280	---	3,530	2,900	1,420	1,700	1,770	1,810	1,280
30	1,170	1,850	1,500	2,120	---	3,530	3,030	1,530	1,690	1,740	1,750	1,330
31	1,240	---	1,660	2,160	---	4,030	---	1,990	---	1,660	1,430	---
Total	32,093	46,220	62,150	83,700	66,300	112,490	100,390	51,490	51,130	57,980	45,700	41,130
Mean	1,035	1,541	2,005	2,700	2,368	3,629	3,346	1,661	1,704	1,870	1,474	1,371
Max	1,480	1,860	3,050	9,430	3,000	6,290	5,230	2,640	1,890	2,350	2,120	1,910
Min	862	1,150	1,500	1,380	2,100	2,900	2,550	1,390	1,620	1,660	1,280	1,260
Ac-ft	63,660	91,680	123,300	166,000	131,500	223,100	199,100	102,100	101,400	115,000	90,650	81,580

09522000 COLORADO RIVER AT NORTHERLY INTERNATIONAL BOUNDARY, ABOVE MORELOS DAM, NEAR ANDRADE, CA—Continued



09522000 COLORADO RIVER AT NORTHERLY INTERNATIONAL BOUNDARY, ABOVE MORELOS DAM, NEAR ANDRADE, CA—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Oct. 1961 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Oct. 1969 to Sept. 1984.

REMARKS.--Discharge reported by International Boundary and Water Commission. Unpublished chemical analyses for water years 1961-68 available from Arizona Water Science Center Office in Tucson, AZ.

WATER-QUALITY DATA

WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

Part 1 of 7

[%, percent; CaCO₃, calcium carbonate; MF, membrane filter; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; col/100 mL, colonies per 100 milliliters; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; μS/cm, microsiemens per centimeter; μg/L, micrograms per liter; <, less than; E, estimated; k, counts outside acceptable range; p, value reported is preferred]

Date	Sample start time	Medium name	Sample type	Barometric pressure, mm Hg (00025)	Temperature, air, °C (00020)	Discharge, instantaneous, ft ³ /s (00061)	Dissolved oxygen, water, unfiltered, mg/L (00300)	Dissolved oxygen, water, unfiltered, % saturation (00301)	pH, water, unfiltered, field, standard units (00400)	Specific conductance, water, unfiltered, μS/cm at 25 °C (00095)
11-30-2009	0925	Surface water	Regular	767	18.5	1,870	9.7	95	8.3	1,300
02-25-2010	1026	Surface water	Regular	771	21.0	2,600	9.6	93	8.2	1,200
06-22-2010	0940	Surface water	Regular	765	32.1	1,730	7.2	88	8.1	1,420
08-16-2010	1015	Surface water	Regular	763	36.5	1,350	6.0	78	8.1	1,430

WATER-QUALITY DATA

WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

Part 2 of 7

[%, percent; CaCO₃, calcium carbonate; MF, membrane filter; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; col/100 mL, colonies per 100 milliliters; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; μS/cm, microsiemens per centimeter; μg/L, micrograms per liter; <, less than; E, estimated; k, counts outside acceptable range; p, value reported is preferred]

Date	Temperature, water, °C (00010)	Turbidity, water, unfiltered, broad band light source (400-680 nm), detectors at multiple angles including 90 +/- 30 degrees, ratiometric correction, NTRU (63676)	Dissolved solids dried at 180 °C, water, filtered, mg/L (70300)	Dissolved solids, water, filtered, sum of constituents, milligrams per liter (70301)	Dissolved solids, water, filtered, tons per acre-foot (70303)	Hardness, water, mg/L as CaCO ₃ (00900)	Noncarbonate hardness, water, filtered, field, milligrams per liter as calcium carbonate (00904)	Suspended solids, water, unfiltered, mg/L (00530)	Calcium, water, filtered, mg/L (00915)
11-30-2009	14.3	E 3.5	894	824	1.22	362	199	< 15	89.6
02-25-2010	14.7	E 8.1	834	E 784	1.13	333	177	< 15	82.9
06-22-2010	25.5	E 5.0	944	E 888	1.28	377	207	< 15	96.1 p
08-16-2010	28.8	E 4.8	917	E 851	1.25	346	184	< 15	88.3

09522000 COLORADO RIVER AT NORTHERLY INTERNATIONAL BOUNDARY, ABOVE MORELOS DAM, NEAR ANDRADE, CA—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

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[%, percent; CaCO₃, calcium carbonate; MF, membrane filter; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; col/100 mL, colonies per 100 milliliters; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; μS/cm, microsiemens per centimeter; μg/L, micrograms per liter; <, less than; E, estimated; k, counts outside acceptable range; p, value reported is preferred]

Date	Calcium, water, unfiltered, recover able, mg/L (00916)	Magne sium, water, filtered, mg/L (00925)	Magne sium, water, unfiltered, recover able, mg/L (00927)	Potassium, water, filtered, mg/L (00935)	Sodium adsorption ratio, water, number (00931)	Sodium, water, filtered, mg/L (00930)	Alkalinity, water, filtered, inflection- point, incremental titration method, field, mg/L as CaCO ₃ (39086)	Bicarbon ate, water, filtered, inflection- point, incremental titration method, field, mg/L (00453)	Carbonate, water, filtered, inflection- point titration method, field, mg/L (00452)
11-30-2009	91.2	33.7	34.3	5.24	3.36	147	164	187	6
02-25-2010	84.6	30.5	31.5	5.06	3.10	130	156	187	1
06-22-2010	91.9	33.2 p	32.3 p	5.24	3.81	170	170	203	2
08-16-2010	90.1	30.4	31.8	4.72	3.58	153	162	195	1

WATER-QUALITY DATA
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

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[%, percent; CaCO₃, calcium carbonate; MF, membrane filter; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; col/100 mL, colonies per 100 milliliters; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; μS/cm, microsiemens per centimeter; μg/L, micrograms per liter; <, less than; E, estimated; k, counts outside acceptable range; p, value reported is preferred]

Date	Chloride, water, filtered, mg/L (00940)	Fluoride, water, filtered, mg/L (00950)	Sulfate, water, filtered, mg/L (00945)	Ammonia plus organic nitrogen, water, unfiltered, mg/L as N (00625)	Ammonia, water, filtered, mg/L as N (00608)	Nitrate plus nitrite, water, filtered, mg/L as N (00631)	Organic nitrogen, water, unfiltered, mg/L (00605)	Phos phorus, water, unfiltered, mg/L as P (00665)	Total nitrogen, water, unfiltered, mg/L (00600)	Esche richia coli, modified m-TEC MF method, water, col/100 mL (90902)
11-30-2009	143	.44	305	.32	.108	.33	.22	.03	.65	E 14 k
02-25-2010	141	.45	300	.23	.037	.53	.19	.03	.76	E 15 k
06-22-2010	168	.51	309	.30	.079	.70	.22	E .02	1.0	37
08-16-2010	171	.47	302	.34	.075	.78	.26	.03	1.1	120

09522000 COLORADO RIVER AT NORTHERLY INTERNATIONAL BOUNDARY, ABOVE MORELOS DAM, NEAR ANDRADE, CA—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

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[%, percent; CaCO₃, calcium carbonate; MF, membrane filter; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; col/100 mL, colonies per 100 milliliters; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; μS/cm, microsiemens per centimeter; μg/L, micrograms per liter; <, less than; E, estimated; k, counts outside acceptable range; p, value reported is preferred]

Date	Barium, water, unfiltered, recover able, μg/L (01007)	Beryllium, water, filtered, μg/L (01010)	Beryllium, water, unfiltered, recover able, μg/L (01012)	Cadmium, water, filtered, μg/L (01025)	Cadmium, water, unfiltered, μg/L (01027)	Chromium, water, unfiltered, recover able, μg/L (01034)	Copper, water, filtered, μg/L (01040)	Copper, water, unfiltered, recover able, μg/L (01042)	Lead, water, filtered, μg/L (01049)	Lead, water, unfiltered, recover able, μg/L (01051)
11-30-2009	122	< .01	< .04	.03	E .02	< .42	< 1.0	< 1.4	.04	.17
02-25-2010	119	< .01	< .04	.03	E .03	E .38	E .62	1.7	< .03	.37
06-22-2010	116	< .01	< .04	.05	< .04	E .33	< 1.0	E 1.0	E .02	.36
08-16-2010	109	< .01	< .04	E .02	< .04	< .42	E .58	E .72	E .02	.21

WATER-QUALITY DATA
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

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[%, percent; CaCO₃, calcium carbonate; MF, membrane filter; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; col/100 mL, colonies per 100 milliliters; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; μS/cm, microsiemens per centimeter; μg/L, micrograms per liter; <, less than; E, estimated; k, counts outside acceptable range; p, value reported is preferred]

Date	Manganese, water, unfiltered, recover able, μg/L (01055)	Mercury, water, filtered, μg/L (71890)	Mercury, water, unfiltered, recover able, μg/L (71900)	Zinc, water, filtered, μg/L (01090)	Zinc, water, unfiltered, recover able, μg/L (01092)	Antimony, water, filtered, μg/L (01095)	Antimony, water, unfiltered, microgram s per liter (01097)	Arsenic, water, filtered, μg/L (01000)	Arsenic, water, unfiltered, μg/L (01002)	Boron, water, unfiltered, recoverabl e, microgram s per liter (01022)
11-30-2009	47.6	< .010	< .010	< 2.8	< 2.0	.30	E .3	2.5	2.7	190
02-25-2010	52.4	< .010	< .010	E 1.4	4.0	.34	E .3	2.7	2.9	205
06-22-2010	97.2	< .010	< .010	< 2.8	E 1.9	.30	E .3	3.5	4.4	220
08-16-2010	102	< .010	< .010	< 2.8	< 2.0	.25	E .2	3.2	4.4	218

WATER-QUALITY DATA
WATER YEAR OCTOBER 2009 TO SEPTEMBER
2010

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[%, percent; CaCO₃, calcium carbonate; MF, membrane filter; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; col/100 mL, colonies per 100 milliliters; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; °C, degrees Celsius; μS/cm, microsiemens per centimeter; μg/L, micrograms per liter; <, less than; E, estimated; k, counts outside acceptable range; p, value reported is preferred]

Date	Suspended		Suspended sediment discharge, tons per day (80155)
	Selenium, water, unfiltered, μg/L (01147)	sediment concen tration, mg/L (80154)	
11-30-2009	1.3	17	86
02-25-2010	1.8	61	428
06-22-2010	1.8	20	93
08-16-2010	1.8	7	26

09522000 COLORADO RIVER AT NORTHERLY INTERNATIONAL BOUNDARY, ABOVE MORELOS DAM, NEAR ANDRADE, CA—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

Part 1 of 15

[%, percent; CaCO₃, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO₂, silicon dioxide; cm, centimeter; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; per mil, parts per thousand; °C, degrees Celsius; μS/cm, microsiemens per centimeter; μg/L, micrograms per liter; --, no data; <, less than; A, average; E, estimated; +, improper preservation; m, value is highly variable by this method]

Date	Sample start time	Medium name	Sample type	Barometric pressure, mm Hg (00025)	Temperature, air, °C (00020)	Absorbance, UV, 254 nm, 1 cm path length, water, filtered, units per centimeter (50624)	Absorbance, UV, organic constituents, 280 nm, 1 cm path length, water, filtered, units per centimeter (61726)	Discharge, instantaneous, ft ³ /s (00061)
10-29-2009	0830	Surface water	Regular	764	15.0	.049	.033	1,100
12-29-2009	1050	Surface water	Regular	770	14.0	.048	.033	1,510
01-20-2010	1105	Surface water	Regular	763	19.0	.063	.044	3,810
01-28-2010	1040	Surface water	Regular	767	17.0	.074	.053	2,570
02-18-2010	1030	Surface water	Regular	765	25.0	.047	.033	2,340
02-25-2010	1025	Surface water	Regular	771	21.0	.048	.033	2,600
03-24-2010	1015	Surface water	Regular	765	27.0	.053	.037	3,740
03-24-2010	1025	<i>QC sample - Surface water</i>	<i>Replicate</i>	--	27.0	.054	.037	--
03-31-2010	1040	Surface water	Regular	762	24.0	.071	.051	3,960
04-22-2010	1030	Surface water	Regular	762	18.5	.094	.068	2,000
04-22-2010	1038	<i>QC sample - Artificial</i>	<i>Blank</i>	--	18.5	--	--	--
04-29-2010	1010	Surface water	Regular	762	16.0	.107	.078	2,000
06-30-2010	1010	Surface water	Regular	761	38.0	.047	.031	1,680
06-30-2010	1018	<i>QC sample - Artificial</i>	<i>Blank</i>	--	38.0	< .010	< .008	--
08-16-2010	1005	Surface water	Regular	763	36.5	.057	.041	1,350

09522000 COLORADO RIVER AT NORTHERLY INTERNATIONAL BOUNDARY, ABOVE MORELOS DAM, NEAR ANDRADE, CA—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

Part 2 of 15

[%, percent; CaCO₃, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO₂, silicon dioxide; cm, centimeter; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; per mil, parts per thousand; °C, degrees Celsius; μS/cm, microsiemens per centimeter; μg/L, micrograms per liter; --, no data; <, less than; A, average; E, estimated; +, improper preservation; m, value is highly variable by this method]

Date	Dissolved oxygen, water, unfiltered, mg/L (00300)	Dissolved oxygen, water, unfiltered, % saturation (00301)	pH, water, unfiltered, field, standard units (00400)	Specific conductance, water, unfiltered, μS/cm at 25 °C (00095)	Temperature, water, °C (00010)	Turbidity, water, unfiltered, broad band light source (400-680 nm), detectors at multiple angles including 90 +/- 30 degrees, ratiometric correction, NTRU (63676)	Dissolved solids dried at 180 °C, water, filtered, mg/L (70300)	Dissolved solids, water, filtered, sum of constituents, milligrams per liter (70301)	Dissolved solids, water, filtered, tons per acre-foot (70303)
10-29-2009	7.0	71	8.3	1,380	16.0	E 6.2	1,080	858	1.47
12-29-2009	10.5	96	8.3	1,580	11.8	E 2.3	1,030	950	1.40
01-20-2010	9.7	93	8.1	1,270	13.5	27	845	E 802	1.15
01-28-2010	10.0	96	8.2	1,410	13.7	E 8.0	932	E 877	1.27
02-18-2010	9.2	96	8.3	1,400	17.2	E 7.7	902	882	1.23
02-25-2010	9.6	93	8.2	1,200	14.7	E 7.8	842	E 783	1.15
03-24-2010	8.0	90	8.2	1,200	21.4	E 7.3	775	E 749	1.05
03-24-2010	8.1	--	8.2	1,200	21.7	E 8.7	765	E 741	1.04
03-31-2010	8.4	90	8.1	1,160	18.4	E 9.2	774	744	1.05
04-22-2010	7.2	80	8.1	1,230	20.0	E 8.1	781	765	1.06
04-22-2010	--	--	7.4	5	--	--	--	--	--
04-29-2010	6.4	71	8.1	1,280	20.8	21	775	777	1.05
06-30-2010	6.9	88	8.1	1,470	27.5	E 7.6	934	893	1.27
06-30-2010	--	--	5.5	< 5	--	--	--	--	--
08-16-2010	6.0	78	8.1	1,430	28.8	E 4.0	953	870	1.30

09522000 COLORADO RIVER AT NORTHERLY INTERNATIONAL BOUNDARY, ABOVE MORELOS DAM, NEAR ANDRADE, CA—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010

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[%, percent; CaCO₃, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO₂, silicon dioxide; cm, centimeter; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; per mil, parts per thousand; °C, degrees Celsius; μS/cm, microsiemens per centimeter; μg/L, micrograms per liter; --, no data; <, less than; A, average; E, estimated; +, improper preservation; m, value is highly variable by this method]

Date	Noncarbon ate hardness, water, filtered, field,		Calcium, water, filtered, mg/L (00915)	Magne sium, water, filtered, mg/L (00925)	Potassium, water, filtered, mg/L (00935)	Sodium adsorption ratio, water, number (00931)	Sodium, water, filtered, mg/L (00930)	Alkalinity, water, filtered, fixed endpoint (pH 4.5)	Alkalinity, water, filtered, inflection- point, incremental titration method, field, mg/L as CaCO ₃ (39086)
	Hardness, water, mg/L as CaCO ₃ (00900)	milligrams per liter as calcium carbonate (00904)						titration, laboratory, mg/L as CaCO ₃ (29801)	titration, field, mg/L as CaCO ₃ (39086)
10-29-2009	396	234	99.6	35.3	5.17	3.25	148	171	162
12-29-2009	412	A 221	102	37.6	5.25	3.65	170	191	A 191
01-20-2010	344	185	87.1	30.4	5.33	3.11	132	162	159
01-28-2010	377	201	95.4	33.4	5.85	3.28	146	178	176
02-18-2010	387	213	97.7	34.3	5.26	3.28	148	172	174
02-25-2010	338	182	84.2	30.6	5.12	3.11	131	161	156
03-24-2010	333	A 183	83.1	30.2	5.12	2.82	118	155	A 151
03-24-2010	329	179	82.4	29.7	4.82	2.78	116	143	151
03-31-2010	322	170	80.2	29.2	5.12	2.88	119	155	153
04-22-2010	324	165	81.3	29.1	5.15	3.35	138	164	159
04-22-2010	< .18	--	< .04	< .016	< .008	--	< .10	--	--
04-29-2010	303	A 138	77.5	26.3	5.49	3.47	139	167	A 165
06-30-2010	386	216	99.0	33.4	5.07	3.68	166	173	171
06-30-2010	--	--	--	--	--	--	--	--	--
08-16-2010	359	197	92.2	31.0	4.87	3.59	156	169	162

09522000 COLORADO RIVER AT NORTHERLY INTERNATIONAL BOUNDARY, ABOVE MORELOS DAM, NEAR ANDRADE, CA—Continued

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[%, percent; CaCO₃, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO₂, silicon dioxide; cm, centimeter; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; per mil, parts per thousand; °C, degrees Celsius; μS/cm, microsiemens per centimeter; μg/L, micrograms per liter; --, no data; <, less than; A, average; E, estimated; +, improper preservation; m, value is highly variable by this method]

Date	Bicarbonate, water, filtered, inflection- point, incremental titration method, field, mg/L (00453)	Carbon (inorganic plus organic), suspended sediment, total, mg/L (00694)	Carbonate, water, filtered, inflection- point incremental titration method, field, mg/L (00452)	Chloride, water, filtered, mg/L (00940)	Fluoride, water, filtered, mg/L (00950)	Inorganic carbon, suspended sediment, total, mg/L (00688)	Silica, water, filtered, mg/L as SiO ₂ (00955)	Sulfate, water, filtered, mg/L (00945)	Ammonia plus organic nitrogen, water, filtered, mg/L as N (00623)
10-29-2009	188	.24	5	146	.45	< .06	10.4	311	.35
12-29-2009	A 216	.36	8	170	.56	< .06	12.5	332	.29
01-20-2010	181	.84	6	143	.45	.21	8.47	296	.26
01-28-2010	206	.16	4	163	.45	< .06	10.7	313	.29
02-18-2010	205	.24	4	166	.43	< .06	10.8	311	.27
02-25-2010	187	.34	1	141	.44	< .06	9.32	284	.17
03-24-2010	A 176	.42	A 4	127	.42	< .06	8.66	279	.25
03-24-2010	176	.40	4	127	.43	< .06	8.57	278	.26
03-31-2010	181	.53	2	134	.43	E .04	8.28	274	.25
04-22-2010	186	.35	4	163	.46	< .06	9.11	240	.28
04-22-2010	--	--	--	E .02	< .02	--	E .04	< .02	--
04-29-2010	A 196	.30	A 3	182	.51	< .06	9.32	233	.32
06-30-2010	202	.39	3	172	.49	.12	10.9	299	.22
06-30-2010	--	E .08	--	--	--	< .06	--	--	--
08-16-2010	195	.82	1	167	.47	< .06	11.8	304	.31

09522000 COLORADO RIVER AT NORTHERLY INTERNATIONAL BOUNDARY, ABOVE MORELOS DAM, NEAR ANDRADE, CA—Continued

WATER-QUALITY DATA
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[%, percent; CaCO₃, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO₂, silicon dioxide; cm, centimeter; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; per mil, parts per thousand; °C, degrees Celsius; μS/cm, microsiemens per centimeter; μg/L, micrograms per liter; --, no data; <, less than; A, average; E, estimated; +, improper preservation; m, value is highly variable by this method]

Date	Ammonia plus organic nitrogen, water, unfiltered, mg/L as N		Nitrate plus nitrite, water, filtered, mg/L as N			Nitrite, water, filtered, mg/L as N (00613)	Organic nitrogen, water, filtered, mg/L (00607)	Organic nitrogen, water, unfiltered, mg/L (00605)	Orthophosphate, water, filtered, mg/L (00660)	Orthophosphate, water, filtered, mg/L as P (00671)
	(00625)	(00608)	(00631)	(71851)	(00618)					
10-29-2009	.37	.157	.37	1.59	.360	.014	.19	.22	.027	.009
12-29-2009	.31	.124	.66	2.87	.648	.013	.17	.18	.027	.009
01-20-2010	.39	.065	.53	2.30	.520	.008	.20	.32	.028	.009
01-28-2010	.36	.115	.41	1.76	.397	.009	.18	.25	.046	.015
02-18-2010	.20	.093	.52	2.25	.508	.010	.18	.11	.034	.011
02-25-2010	.21	.037	.52	2.28	.516	.006	.13	.18	E .042	E .014
03-24-2010	.15	.037	.55	2.39	.540	.007	.21	.11	E .017	E .005
03-24-2010	.21	.041	.54	2.38	.537	.007	.21	.17	E .019	E .006
03-31-2010	.35	.031	.51	2.21	.499	.006	.22	.32	.027	.009
04-22-2010	.36	.055	.39	1.71	.386	.008	.22	.31	.064	.021
04-22-2010	--	E .016	< .016	< .071	< .016	< .002	--	--	< .025	< .008
04-29-2010	.37	.028	.40	1.72	.388	.008	.29	.35	.126	.041
06-30-2010	.31	.068	.77	3.36	.759	.015	.15	.24	.037	.012
06-30-2010	--	--	--	--	--	--	--	--	--	--
08-16-2010	.33	.072	.77	3.31	.747	.019	.24	.26	.042	.014

09522000 COLORADO RIVER AT NORTHERLY INTERNATIONAL BOUNDARY, ABOVE MORELOS DAM, NEAR ANDRADE, CA—Continued

WATER-QUALITY DATA
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[%, percent; CaCO₃, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO₂, silicon dioxide; cm, centimeter; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; per mil, parts per thousand; °C, degrees Celsius; μS/cm, microsiemens per centimeter; μg/L, micrograms per liter; --, no data; <, less than; A, average; E, estimated; +, improper preservation; m, value is highly variable by this method]

Date	Particulate nitrogen, suspended in water, mg/L (49570)	Phos phorus, water, filtered, mg/L as P (00666)	Phos phorus, water, unfiltered, mg/L as P (00665)	Total nitrogen, water, filtered, mg/L (00602)	Total nitrogen, water, unfiltered, mg/L (00600)	Iron, water, filtered, μg/L (01046)	Lithium, water, filtered, μg/L (01130)	Strontium, water, filtered, μg/L (01080)	Vanadium, water, filtered, μg/L (01085)	Arsenic, water, filtered, μg/L (01000)
10-29-2009	< .03	< .04	< .04	.72	.75	< 6	62.9	1,390	1.9	2.3
12-29-2009	< .03	< .04	< .04	.95	.97	< 6	64.8	1,530	2.0	2.7
01-20-2010	.07	< .04	.07	.79	.86	E 4	52.5	1,340	2.4	2.7
01-28-2010	E .03	< .04	E .03	.70	.77	E 4	59.3	1,380	3.6	3.5
02-18-2010	< .03	< .04	E .02	.79	.72	< 6	65.9	1,340	1.8	2.9
02-25-2010	E .03	< .04	< .04	.69	.73	< 6	59.5	1,280	2.3	2.6
03-24-2010	.04	< .04	< .04	.79	.84	< 6	56.9	1,190	2.0	2.2
03-24-2010	.04	< .04	< .04	.80	.84	E 3	55.8	1,180	2.0	2.2
03-31-2010	.08	< .04	.04	.76	.84	< 6	57.8	1,190	2.3	2.6
04-22-2010	.04	E .02	.05	.67	.71	7	54.5	984	4.3	4.5
04-22-2010	--	--	--	--	--	< 6	< .4	< .40	< .16	< .04
04-29-2010	.05	.05	.09	.72	.77	10	47.0	1,040	4.7	5.4
06-30-2010	.06	< .04	E .02	.99	1.1	< 6	70.1	1,300	3.5	3.6
06-30-2010	< .03	--	--	--	--	--	--	--	--	--
08-16-2010	.10	< .04	E .04	1.1	1.2	< 6	49.2	1,180	2.4	3.0

09522000 COLORADO RIVER AT NORTHERLY INTERNATIONAL BOUNDARY, ABOVE MORELOS DAM, NEAR ANDRADE, CA—Continued

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[%, percent; CaCO₃, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO₂, silicon dioxide; cm, centimeter; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; per mil, parts per thousand; °C, degrees Celsius; μS/cm, microsiemens per centimeter; μg/L, micrograms per liter; --, no data; <, less than; A, average; E, estimated; +, improper preservation; m, value is highly variable by this method]

Date	Boron, water, filtered, μg/L (01020)	Selenium, water, filtered, μg/L (01145)	1- Naphthol, water, filtered (0.7 micron glass fiber filter), recover able, μg/L (49295)	2,6-Diethyl aniline, water, filtered (0.7 micron glass fiber filter), recover able, μg/L (82660)	2-Chloro- 2',6'- diethyl acetanil ide, water, filtered, recover able, μg/L (61618)	2-Chloro-4- isopropyl amino-6- amino-s- triazine, water, filtered, recover able, μg/L (04040)	2-Ethyl-6- methyl aniline, water, filtered, recover able, μg/L (61620)	3,4- Dichloro aniline, water, filtered, recover able, μg/L (61625)	3,5-Di chloro aniline, water, filtered, recover able, μg/L (61627)	4-Chloro-2- methyl phenol, water, filtered, recover able, μg/L (61633)
10-29-2009	192	1.6	<.04 m	<.006	<.010	<.014 m	<.010 m	<.009 m	<.003	<.003 m
12-29-2009	252	2.0	<.04 m	<.006	<.010	<.014 m	<.010 m	<.004 m	<.003	<.003 m
01-20-2010	168	2.0	<.04 m	<.006	<.010	<.014 m	<.010 m	<.014 m	<.003	<.003 m
01-28-2010	205	1.5	<.04 m	<.006	<.010	<.014 m	<.010 m	<.034 m	<.003	<.003 m
02-18-2010	221	1.8	<.04 m	<.006	<.010	<.014 m	<.010 m	<.004 m	<.003	<.003 m
02-25-2010	195	2.1	<.04 m	<.006	<.010	<.014 m	<.010 m	<.004 m	<.003	<.003 m
03-24-2010	184	1.8	<.04 m	<.006	<.010	<.014 m	<.010 m	<.004 m	<.003	<.003 m
03-24-2010	180	1.8	<.04 m	<.006	<.010	<.014 m	<.010 m	<.004 m	<.003	<.003 m
03-31-2010	176	2.1	<.04 m	<.006	<.010	<.014 m	<.010 m	<.004 m	<.003	<.003 m
04-22-2010	186	1.6	<.04 m	<.006	<.010	<.014 m	<.010 m	<.004 m	<.003	<.003 m
04-22-2010	< 3	<.04	--	--	--	--	--	--	--	--
04-29-2010	225	1.5	<.04 m	<.006	<.010	<.014 m	<.010 m	<.004 m	<.003	<.003 m
06-30-2010	233	1.9	<.04 m	<.006	<.010	<.014 m	<.010 m	<.004 m	<.003	<.003 m
06-30-2010	--	--	<.04 m	<.006	<.010	<.014 m	<.010 m	<.004 m	<.003	<.003 m
08-16-2010	177	2.2	<.04 m	<.006	<.010	<.014 m	<.010 m	<.004 m	<.003	<.003 m

09522000 COLORADO RIVER AT NORTHERLY INTERNATIONAL BOUNDARY, ABOVE MORELOS DAM, NEAR ANDRADE, CA—Continued

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[%, percent; CaCO₃, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO₂, silicon dioxide; cm, centimeter; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; per mil, parts per thousand; °C, degrees Celsius; μS/cm, microsiemens per centimeter; μg/L, micrograms per liter; --, no data; <, less than; A, average; E, estimated; +, improper preservation; m, value is highly variable by this method]

Date	Aceto chlor, water, filtered, recover able, μg/L (49260)	Alachlor, water, filtered, recover able, μg/L (46342)	alpha- Endo sulfan, water, filtered, recover able, μg/L (34362)	Atrazine, water, filtered, recover able, μg/L (39632)	Azinphos- methyl oxygen analog, water, filtered, recover able, μg/L (61635)	Azinphos- methyl, water, filtered (0.7 micron glass fiber filter), recover able, μg/L (82686)	Ben fluralin, water, filtered (0.7 micron glass fiber filter), recover able, μg/L (82673)	Carbaryl, water, filtered (0.7 micron glass fiber filter), recover able, μg/L (82680)	Carbo furan, water, filtered (0.7 micron glass fiber filter), recover able, μg/L (82674)
10-29-2009	< .010	< .008	< .006	< .008	< .04 m	< .120 m	< .014	< .060 m	< .060 m
12-29-2009	< .010	< .008	< .006	< .008	< .04 m	< .120 m	< .014	< .060 m	< .060 m
01-20-2010	< .010	< .008	< .006	< .007	< .04 m	< .120 m	< .014	< .060 m	< .060 m
01-28-2010	< .010	< .008	< .006	< .008	< .04 m	< .120 m	< .014	< .060 m	< .060 m
02-18-2010	< .011	< .008	< .006	< .010	< .04 m	< .120 m	< .014	< .060 m	< .060 m
02-25-2010	< .010	< .025	< .006	< .007	< .04 m	< .120 m	< .014	< .060 m	< .060 m
03-24-2010	< .010	< .021	< .006	< .007	< .04 m	< .120 m	< .014	< .060 m	< .060 m
03-24-2010	< .010	< .008	< .006	< .007	< .04 m	< .120 m	< .014	< .060 m	< .060 m
03-31-2010	< .010	< .008	< .006	< .007	< .04 m	< .120 m	< .014	< .060 m	< .060 m
04-22-2010	< .010	< .023	< .006	.009	< .04 m	< .120 m	< .014	< .060 m	< .060 m
04-22-2010	--	--	--	--	--	--	--	--	--
04-29-2010	< .010	< .029	< .006	< .008	< .04 m	< .120 m	< .014	< .060 m	< .060 m
06-30-2010	< .010	< .029	< .006	< .007	< .04 m	< .120 m	< .014	< .060 m	< .060 m
06-30-2010	< .010	< .031	< .006	< .007	< .04 m	< .120 m	< .014	< .060 m	< .060 m
08-16-2010	< .010	< .008	< .006	< .007	< .04 m	< .120 m	< .014	< .060 m	< .060 m

09522000 COLORADO RIVER AT NORTHERLY INTERNATIONAL BOUNDARY, ABOVE MORELOS DAM, NEAR ANDRADE, CA—Continued

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[%, percent; CaCO₃, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO₂, silicon dioxide; cm, centimeter; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; per mil, parts per thousand; °C, degrees Celsius; μS/cm, microsiemens per centimeter; μg/L, micrograms per liter; --, no data; <, less than; A, average; E, estimated; +, improper preservation; m, value is highly variable by this method]

Date	Chlor pyrifos oxygen analog, water, filtered, recover able, μg/L (61636)	Chlor pyrifos, water, filtered, recover able, μg/L (38933)	cis- Permeth rin, water, filtered (0.7 micron glass fiber filter), recover able, μg/L (82687)	cis- Propicon azole, water, filtered, recover able, μg/L (79846)	Cyanazine, water, filtered, recover able, μg/L (04041)	Cyfluthrin, water, filtered, recover able, μg/L (61585)	Cyper methrin, water, filtered, recover able, μg/L (61586)	DCPA, water, filtered (0.7 micron glass fiber filter), recover able, μg/L (82682)	Desulfinyl fipronil amide, water, filtered, recover able, μg/L (62169)	Desulfinyl fipronil, water, filtered, recover able, μg/L (62170)
10-29-2009	< .05 m	E .009	< .014	< .006 m	< .022	< .016 m	< .020 m	E .006	< .029 m	< .012
12-29-2009	< .05 m	< .010	< .014	< .006 m	< .022	< .016 m	< .020 m	E .004	< .029 m	< .012
01-20-2010	< .05 m	< .010	< .014	< .006 m	< .022	< .016 m	< .020 m	.009	< .029 m	< .012
01-28-2010	< .05 m	< .010	< .014	< .013 m	< .022	< .016 m	< .020 m	.011	< .029 m	< .012
02-18-2010	< .05 m	< .010	< .014	< .006 m	< .022	< .016 m	< .020 m	E .005	< .029 m	< .012
02-25-2010	< .05 m	< .010	< .014	< .006 m	< .022	< .016 m	< .020 m	E .003	< .029 m	< .012
03-24-2010	< .05 m	< .010	< .014	< .006 m	< .022	< .016 m	< .020 m	E .003	< .029 m	< .012
03-24-2010	< .05 m	< .010	< .014	< .006 m	< .022	< .016 m	< .020 m	< .008	< .029 m	< .012
03-31-2010	< .05 m	< .010	< .014	< .006 m	< .022	< .016 m	< .020 m	E .005	< .029 m	< .012
04-22-2010	< .05 m	< .010	< .023	< .006 m	< .022	< .016 m	< .020 m	E .005	< .029 m	< .012
04-22-2010	--	--	--	--	--	--	--	--	--	--
04-29-2010	< .05 m	E .008	< .022	< .006 m	< .022	< .016 m	< .020 m	E .006	< .029 m	< .012
06-30-2010	< .05 m	< .010	< .014	< .006 m	< .022	< .016 m	< .020 m	< .008	< .029 m	< .012
06-30-2010	< .05 m	< .013	< .014	< .006 m	< .022	< .016 m	< .020 m	< .008	< .029 m	< .012
08-16-2010	< .05 m	< .010	< .014	< .006 m	< .022	< .016 m	< .020 m	E .004	< .029 m	< .012

09522000 COLORADO RIVER AT NORTHERLY INTERNATIONAL BOUNDARY, ABOVE MORELOS DAM, NEAR ANDRADE, CA—Continued

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[%, percent; CaCO₃, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO₂, silicon dioxide; cm, centimeter; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; per mil, parts per thousand; °C, degrees Celsius; μS/cm, microsiemens per centimeter; μg/L, micrograms per liter; --, no data; <, less than; A, average; E, estimated; +, improper preservation; m, value is highly variable by this method]

Date	Diazinon, water, filtered, recover able, μg/L (39572)	Dichlorvos , water, filtered, recover able, μg/L (38775)	Dicro tophos, water, filtered, recover able, μg/L (38454)	Dieldrin, water, filtered, recover able, μg/L (39381)	Dimetho ate, water, filtered (0.7 micron glass fiber filter), recover able, μg/L (82662)	Di sulfoton sulfone, water, filtered, recover able, μg/L (61640)	Disulfoton, water, filtered (0.7 micron glass fiber filter), recover able, μg/L (82677)	Endo sulfan sulfate, water, filtered, recover able, μg/L (61590)	EPTC, water, filtered (0.7 micron glass fiber filter), recover able, μg/L (82668)	Ethion monoxon, water, filtered, recover able, μg/L (61644)
10-29-2009	< .005	< .02 m	< .08 m	E .004	< .007 m	< .01	< .04 m	< .014	< .005	< .02 m
12-29-2009	< .005	< .02 m	< .08 m	< .009	< .007 m	< .01	< .04 m	< .014	< .003	< .02 m
01-20-2010	< .005	< .02 m	< .08 m	< .009	< .006 m	< .01	< .04 m	< .014	< .003	< .02 m
01-28-2010	< .005	< .02 m	< .08 m	< .009	< .006 m	< .01	< .04 m	< .014	< .002	< .02 m
02-18-2010	< .010	< .02 m	< .08 m	E .006	< .006 m	< .01	< .04 m	< .014	< .002	< .02 m
02-25-2010	< .005	< .02 m	< .08 m	E .006	< .006 m	< .01	< .04 m	< .014	< .002	< .02 m
03-24-2010	< .005	< .02 m	< .08 m	E .004	< .006 m	< .01	< .04 m	< .014	< .002	< .02 m
03-24-2010	< .005	< .02 m	< .08 m	< .009	< .006 m	< .01	< .04 m	< .014	< .002	< .02 m
03-31-2010	< .005	< .02 m	< .08 m	E .003	< .006 m	< .01	< .04 m	< .014	< .002	< .02 m
04-22-2010	< .005	< .02 m	< .08 m	E .005	< .006 m	< .01	< .04 m	< .014	< .002	< .02 m
04-22-2010	--	--	--	--	--	--	--	--	--	--
04-29-2010	< .005	< .02 m	< .08 m	E .006	< .010 m	< .01	< .04 m	< .014	< .007	< .02 m
06-30-2010	< .005	< .02 m	< .08 m	E .007	< .006 m	< .01	< .04 m	< .014	< .002	< .02 m
06-30-2010	< .011	< .02 m	< .08 m	E .007	< .006 m	< .01	< .04 m	< .014	< .002	< .02 m
08-16-2010	< .005	< .02 m	< .08 m	< .009	< .006 m	< .01	< .04 m	< .014	< .002	< .02 m

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[%, percent; CaCO₃, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO₂, silicon dioxide; cm, centimeter; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; per mil, parts per thousand; °C, degrees Celsius; μS/cm, microsiemens per centimeter; μg/L, micrograms per liter; --, no data; <, less than; A, average; E, estimated; +, improper preservation; m, value is highly variable by this method]

Date	Ethion, water, filtered, recover able, μg/L (82346)	Ethoprop, water, filtered (0.7 micron glass fiber filter), recover able, μg/L (82672)	Fenami phos sulfone, water, filtered, recover able, μg/L (61645)	Fenami phos sulfoxide, water, filtered, recover able, μg/L (61646)	Fenami phos, water, filtered, recover able, μg/L (61591)	Fipronil sulfide, water, filtered, recover able, μg/L (62167)	Fipronil sulfone, water, filtered, recover able, μg/L (62168)	Fipronil, water, filtered, recover able, μg/L (62166)	Fonofos, water, filtered, recover able, μg/L (04095)	Hexa zinone, water, filtered, recover able, μg/L (04025)
10-29-2009	< .008	< .016	< .053	< .08 m	< .03	< .013	< .024	< .018 m	< .004	< .008
12-29-2009	< .008	< .016	< .053	< .08 m	< .03	< .013	< .024	< .018 m	< .004	< .008
01-20-2010	< .008	< .016	< .053	< .08 m	< .03	< .013	< .024	< .018 m	< .004	< .008
01-28-2010	< .008	< .016	< .053	< .08 m	< .03	< .013	< .024	< .018 m	< .004	< .008
02-18-2010	< .008	< .016	< .053	< .08 m	< .03	< .013	< .024	< .018 m	< .004	< .008
02-25-2010	< .008	< .016	< .053	< .08 m	< .03	< .013	< .024	< .018 m	< .004	< .008
03-24-2010	< .008	< .016	< .053	--	< .03	< .013	< .024	< .018 m	< .004	< .008
03-24-2010	< .008	< .016	< .053	< .08 m	< .03	< .013	< .024	< .018 m	< .004	< .008
03-31-2010	< .008	< .016	< .053	< .08 m	< .03	< .013	< .024	< .018 m	< .004	< .008
04-22-2010	< .008	< .016	< .053	< .08 m	< .03	< .013	< .024	< .018 m	< .004	< .011
04-22-2010	--	--	--	--	--	--	--	--	--	--
04-29-2010	< .008	< .016	< .053	< .08 m	< .03	< .013	< .024	< .018 m	< .004	< .011
06-30-2010	< .008	< .016	< .053	< .08 m	< .03	< .013	< .024	< .018 m	< .004	< .008
06-30-2010	< .008	< .016	< .053	< .08 m	< .03	< .013	< .024	< .018 m	< .004	< .008
08-16-2010	< .008	< .016	< .053	< .08 m	< .03	< .013	< .024	< .018 m	< .004	< .008

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[%, percent; CaCO₃, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO₂, silicon dioxide; cm, centimeter; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; per mil, parts per thousand; °C, degrees Celsius; μS/cm, microsiemens per centimeter; μg/L, micrograms per liter; --, no data; <, less than; A, average; E, estimated; +, improper preservation; m, value is highly variable by this method]

Date	Iprodione, water, filtered, recover able, μg/L (61593)	Isofen phos, water, filtered, recover able, μg/L (61594)	lambda- Cyhalo thrin, water, filtered, recover able, μg/L (61595)	Malaoxon, water, filtered, recover able, μg/L (61652)	Malathion, water, filtered, recover able, μg/L (39532)	Metalaxyl, water, filtered, recover able, μg/L (61596)	Methida thion, water, filtered, recover able, μg/L (61598)	Methyl paraoxon, water, filtered, recover able, μg/L (61664)	Methyl parathion, water, filtered (0.7 micron glass fiber filter), recover able, μg/L (82667)	Metola chlor, water, filtered, recover able, μg/L (39415)
10-29-2009	<.014 m	<.006	<.010 m	<.080	<.016	<.094	<.006	<.01 m	<.008	<.014
12-29-2009	<.014 m	<.006	<.010 m	<.080	<.016	<.018	<.006	<.01 m	<.008	<.014
01-20-2010	<.014 m	<.006	<.010 m	<.080	<.016	<.010	<.015	<.01 m	<.008	<.014
01-28-2010	<.014 m	<.006	<.010 m	<.080	<.016	<.017	<.006	<.01 m	<.008	<.014
02-18-2010	<.014 m	<.006	<.010 m	<.080	<.016	<.007	<.006	<.01 m	<.027	<.014
02-25-2010	<.014 m	<.006	<.010 m	<.080	<.016	<.007	<.006	<.01 m	<.008	<.014
03-24-2010	<.014 m	<.006	<.010 m	<.080	<.016	<.007	<.006	<.01 m	<.130	<.014
03-24-2010	<.014 m	<.006	<.010 m	<.080	<.016	<.007	<.006	<.01 m	<.008	<.014
03-31-2010	<.014 m	<.006	<.010 m	<.080	<.016	<.007	<.006	<.01 m	<.008	<.014
04-22-2010	<.014 m	<.006	<.010 m	<.080	<.016	<.007	<.007	<.01 m	<.140	<.014
04-22-2010	--	--	--	--	--	--	--	--	--	--
04-29-2010	<.014 m	<.006	<.010 m	<.080	<.016	<.007	<.008	<.14 m	<.138	<.014
06-30-2010	<.014 m	<.006	<.010 m	<.080	<.016	<.007	<.006	<.17 m	<.194	<.014
06-30-2010	<.014 m	<.006	<.010 m	<.080	<.023	<.482	<.006	<.01 m	<.202	<.014
08-16-2010	<.014 m	<.006	<.010 m	<.080	<.016	<.007	<.006	<.01 m	<.008	<.014

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[%, percent; CaCO₃, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO₂, silicon dioxide; cm, centimeter; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; per mil, parts per thousand; °C, degrees Celsius; μS/cm, microsiemens per centimeter; μg/L, micrograms per liter; --, no data; <, less than; A, average; E, estimated; +, improper preservation; m, value is highly variable by this method]

Date	Metribuzin , water, filtered, recover able, μg/L (82630)	Molinate, water, filtered (0.7 micron glass fiber filter), recover able, μg/L (82671)	Myclo butanil, water, filtered, recover able, μg/L (61599)	Oxy fluorfen, water, filtered, recover able, μg/L (61600)	Pendi methalin, water, filtered (0.7 micron glass fiber filter), recover able, μg/L (82683)	Phorate oxygen analog, water, filtered, recover able, μg/L (61666)	Phorate, water, filtered (0.7 micron glass fiber filter), recover able, μg/L (82664)	Phosmet oxygen analog, water, filtered, recover able, μg/L (61668)	Phosmet, water, filtered, recover able, μg/L (61601)	Prometon, water, filtered, recover able, μg/L (04037)
10-29-2009	< .012	< .003	< .010	< .010	< .012	< .03 m	< .020	< .05 m	< .034 m	< .01
12-29-2009	< .012	< .003	< .010	< .010	< .012	< .03 m	< .020	< .05 m	< .034 m	< .01
01-20-2010	< .012	< .003	< .010	< .010	< .012	< .03 m	< .020	< .05 m	< .034 m	< .01
01-28-2010	< .012	< .003	< .010	< .010	< .012	< .03 m	< .020	< .05 m	< .034 m	< .01
02-18-2010	.026	< .003	< .010	< .010	< .012	< .03 m	< .020	< .05 m	< .034 m	< .01
02-25-2010	< .012	< .003	< .010	< .010	< .012	< .03 m	< .020	< .05 m	< .034 m	< .01
03-24-2010	< .012	< .003	< .010	< .010	< .012	< .03 m	< .020	< .05 m	< .034 m	< .01
03-24-2010	E .015	< .003	< .010	< .010	< .012	< .03 m	< .020	< .05 m	< .034 m	< .01
03-31-2010	< .017	< .003	< .010	< .010	< .012	< .03 m	< .020	< .05 m	< .034 m	< .01
04-22-2010	< .012	< .003	< .010	< .010	< .012	< .03 m	< .020	< .05 m	< .034 m	< .01
04-22-2010	--	--	--	--	--	--	--	--	--	--
04-29-2010	< .012	< .003	< .010	< .010	< .012	< .04 m	< .020	< .05 m	< .034 m	< .01
06-30-2010	< .034	< .003	< .010	< .010	< .012	< .03 m	< .020	< .05 m	< .034 m	< .01
06-30-2010	< .012	< .003	< .010	< .010	< .012	< .04 m	< .020	< .05 m	< .034 m	< .01
08-16-2010	< .012	< .003	< .010	< .010	< .012	< .03 m	< .020	< .05 m	< .034 m	< .01

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[%, percent; CaCO₃, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO₂, silicon dioxide; cm, centimeter; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; per mil, parts per thousand; °C, degrees Celsius; μS/cm, microsiemens per centimeter; μg/L, micrograms per liter; --, no data; <, less than; A, average; E, estimated; +, improper preservation; m, value is highly variable by this method]

Date	Prometryn, water, filtered, recover able, μg/L (04036)	Propanil, water, filtered (0.7 micron glass fiber filter), recover able, μg/L (82679)	Propargite, water, filtered (0.7 micron glass fiber filter), recover able, μg/L (82685)	Propyz amide, water, filtered (0.7 micron glass fiber filter), recover able, μg/L (82676)	Simazine, water, filtered, recover able, μg/L (04035)	Tebu thiuron, water, filtered (0.7 micron glass fiber filter), recover able, μg/L (82670)	Teflu thrin, water, filtered, recover able, μg/L (61606)	Terbufos oxygen analog sulfone, water, filtered, recover able, μg/L (61674)	Terbufos, water, filtered (0.7 micron glass fiber filter), recover able, μg/L (82675)	Terbuthyl azine, water, filtered, recover able, μg/L (04022)
10-29-2009	< .006	< .010	< .02	< .004	< .006	< .03	< .010 m	< .04	< .02	< .01
12-29-2009	< .006	< .010	< .02	< .004	< .006	< .03	< .010 m	< .04	< .02	< .01
01-20-2010	< .006	< .010	< .02	< .004	< .006	< .03	< .010 m	< .04	< .02	< .01
01-28-2010	.011	< .010	< .02	< .004	< .006	< .03	< .010 m	< .04	< .02	< .01
02-18-2010	< .006	< .010	< .02	< .004	< .007	< .03	< .010 m	< .04	< .02	< .01
02-25-2010	< .006	< .010	< .02	< .004	< .006	< .03	< .010 m	< .04	< .02	< .01
03-24-2010	< .006	< .010	< .02	< .004	< .006	< .03	< .010 m	< .04	< .02	< .01
03-24-2010	< .006	< .010	< .02	< .004	< .006	< .03	< .010 m	< .04	< .02	.01
03-31-2010	< .006	< .010	< .02	< .004	< .006	< .03	< .010 m	< .04	< .02	< .01
04-22-2010	< .008	< .010	< .02	< .008	.011	< .03	< .010 m	< .04	< .02	.01
04-22-2010	--	--	--	--	--	--	--	--	--	--
04-29-2010	< .009	< .010	< .02	< .004	.012	< .03	< .010 m	< .04	< .02	.01
06-30-2010	< .006	< .010	< .02	< .004	< .006	< .03	< .010 m	< .04	< .02	.01
06-30-2010	< .006	< .010	< .02	< .004	< .006	< .03	< .010 m	< .04	< .02	< .01
08-16-2010	< .006	< .010	< .02	< .004	< .006	< .03	< .010 m	< .04	< .02	< .01

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[%, percent; CaCO₃, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO₂, silicon dioxide; cm, centimeter; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; nm, nanometers; per mil, parts per thousand; °C, degrees Celsius; μS/cm, microsiemens per centimeter; μg/L, micrograms per liter; --, no data; <, less than; A, average; E, estimated; +, improper preservation; m, value is highly variable by this method]

Date	Thioben carb, water, filtered (0.7 micron glass fiber filter), recoverable, μg/L (82681)	trans-Propiconazole, water, filtered, recoverable, μg/L (79847)	Tri buphos, water, filtered, recoverable, μg/L (61610)	Tri fluralin, water, filtered (0.7 micron glass fiber filter), recoverable, μg/L (82661)	Organic carbon, suspended sediment, total, mg/L (00689)	Organic carbon, water, filtered, mg/L (00681)	Deuterium/Protium ratio, water, unfiltered, per mil (82082)	Oxygen-18/Oxygen-16 ratio, water, unfiltered, per mil (82085)	Suspended sediment concen tration, mg/L (80154)	Suspended sediment discharge, tons per day (80155)
10-29-2009	<.016	<.02 m	<.018 m	<.018	.24	2.6	-93.60	-11.32	281	835
12-29-2009	<.016	<.02 m	<.018 m	<.018	.36	2.3	-94.30	-11.48	7	29
01-20-2010	<.016	<.02 m	<.018 m	<.018	.63	2.9	-92.90	-11.51	73	751
01-28-2010	<.016	<.02 m	<.018 m	<.018	.16	3.2	-88.50	-10.96	78	541
02-18-2010	<.016	<.02 m	<.018 m	<.018	.23	2.6	-92.20	-11.42	23	145
02-25-2010	<.016	<.02 m	<.018 m	<.018	.33	2.5	-94.20	-11.53	61	428
03-24-2010	<.016	<.02 m	<.018 m	E .004	.40	2.6	-93.00	-11.63	24	242
03-24-2010	<.016	<.02 m	<.018 m	<.018	.40	3.7	-94.60	-11.62	21	--
03-31-2010	<.016	<.02 m	<.018 m	E .012	.49	3.2	-91.20	-11.29	30	321
04-22-2010	<.016	<.02 m	<.018 m	E .007	.35	3.9	-84.10	-10.39	25	135
04-22-2010	--	--	--	--	--	--	--	--	--	--
04-29-2010	<.016	<.02 m	<.018 m	E .007	.28	4.2	-80.20	-10.03	19	103
06-30-2010	<.016	<.02 m	<.018 m	<.018	.27	2.4 +	-94.60	-11.65	19	86
06-30-2010	<.016	<.02 m	<.018 m	<.018	<.12	<.7	--	--	--	--
08-16-2010	<.016	<.02 m	<.018 m	<.018	.82	3.0	-94.80	-11.60	7	26