

Water-Data Report 2011

15565447 YUKON RIVER AT PILOT STATION, AK

Lower Yukon Basin
Yukon Delta Subbasin

LOCATION.--Lat 61°56'04", long 162°52'50" referenced to North American Datum of 1927, in SW ¼ SE ¼ sec.5, T.21 N., R.74 W., Wade Hampton Division, AK, Hydrologic Unit 19040805, (Marshall D-3 quad), on the right bank, .2 mi downstream from village of Pilot Station, 2.4 mi downstream from Atchuelinguk River, and 19 mi upstream from Andreafsky River.

DRAINAGE AREA.--321,000 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1975 to September 1996, April 2001 to current year.

REVISED RECORDS.--WRD-AK-85-1: 1982

GAGE.--Water-stage recorder. Elevation of gage is 20 ft above sea level from topographic map.

REMARKS.--Records fair, except for estimated daily discharges, which are poor. GOES satellite telemetry at station.

15565447 YUKON RIVER AT PILOT STATION, AK—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011
DAILY MEAN VALUES

[e, estimated; $\times 10^6$, million]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	299,000	e126,000	e71,000	e61,000	e55,500	e51,000	e47,500	e73,000	577,000	405,000	448,000	430,000
2	286,000	e119,000	e69,000	e61,000	e55,500	e50,500	e47,500	e82,000	599,000	408,000	449,000	431,000
3	275,000	e112,000	e67,000	e61,000	e55,000	e50,500	e47,500	e93,000	618,000	419,000	447,000	431,000
4	267,000	e104,000	e66,000	e60,000	e55,000	e50,500	e47,500	e100,000	623,000	432,000	443,000	429,000
5	258,000	e97,000	e65,500	e60,000	e55,000	e50,000	e47,500	e110,000	633,000	445,000	442,000	428,000
6	248,000	e92,000	e65,500	e60,000	e54,500	e50,000	e47,500	e123,000	643,000	456,000	442,000	428,000
7	238,000	e88,000	e65,000	e59,500	e54,500	e50,000	e47,500	e140,000	652,000	469,000	443,000	424,000
8	229,000	e84,000	e65,000	e59,500	e54,500	e49,500	e47,000	e152,000	655,000	479,000	442,000	417,000
9	221,000	e82,000	e65,000	e59,500	e54,000	e49,500	e47,000	e168,000	652,000	486,000	446,000	408,000
10	215,000	e80,000	e64,500	e59,000	e54,000	e49,500	e47,000	e185,000	646,000	490,000	450,000	400,000
11	209,000	e79,000	e64,500	e59,000	e54,000	e49,000	e47,000	e205,000	629,000	492,000	455,000	392,000
12	201,000	e78,000	e64,500	e59,000	e53,500	e49,000	e47,000	e230,000	606,000	493,000	466,000	386,000
13	193,000	e77,000	e64,000	e58,500	e53,500	e49,000	e47,000	e260,000	593,000	494,000	477,000	381,000
14	187,000	e76,000	e64,000	e58,500	e53,500	e48,500	e47,000	e285,000	576,000	495,000	487,000	374,000
15	182,000	e75,000	e64,000	e58,500	e53,000	e48,500	e47,000	e310,000	565,000	495,000	495,000	369,000
16	176,000	e74,000	e63,500	e58,000	e53,000	e48,500	e47,000	e340,000	551,000	493,000	500,000	362,000
17	e171,000	e73,000	e63,500	e58,000	e53,000	e48,500	e47,000	e365,000	537,000	490,000	499,000	355,000
18	e166,000	e72,000	e63,500	e58,000	e52,500	e48,500	e47,000	e400,000	523,000	485,000	495,000	349,000
19	e161,000	e71,000	e63,000	e57,500	e52,500	e48,000	e47,000	e450,000	510,000	479,000	491,000	342,000
20	e157,000	e70,000	e63,000	e57,500	e52,500	e48,000	e47,000	e500,000	497,000	473,000	486,000	340,000
21	e154,000	e70,000	e63,000	e57,500	e52,000	e48,000	e47,000	e519,000	486,000	467,000	478,000	336,000
22	e152,000	e70,000	e63,000	e57,000	e52,000	e48,000	e47,000	529,000	471,000	460,000	470,000	331,000
23	e149,000	e71,000	e62,500	e57,000	e52,000	e48,000	e47,000	532,000	459,000	452,000	461,000	327,000
24	e146,000	e72,000	e62,500	e57,000	e51,500	e48,000	e47,000	531,000	447,000	446,000	456,000	324,000
25	e141,000	e73,000	e62,500	e56,500	e51,500	e48,000	e47,500	526,000	440,000	440,000	449,000	323,000
26	e136,000	e73,000	e62,000	e56,500	e51,500	e48,000	e48,500	519,000	433,000	436,000	444,000	322,000
27	e131,000	e74,000	e62,000	e56,500	e51,000	e47,500	e50,000	510,000	422,000	436,000	441,000	323,000
28	e130,000	e74,000	e62,000	e56,000	e51,000	e47,500	e54,000	505,000	416,000	438,000	438,000	324,000
29	e131,000	e74,000	e61,500	e56,000	---	e47,500	e60,000	510,000	411,000	440,000	434,000	323,000
30	e132,000	e73,000	e61,500	e56,000	---	e47,500	e68,000	528,000	407,000	443,000	432,000	323,000
31	e130,000	---	e61,500	e55,500	---	e47,500	---	554,000	---	445,000	432,000	---
Total	5,871,000	2,453,000	1,985,000	1,804,500	1,491,000	1,512,000	1,459,500	10.33 $\times 10^6$	16.27 $\times 10^6$	14.28 $\times 10^6$	14.23 $\times 10^6$	11.13 $\times 10^6$
Mean	189,400	81,770	64,030	58,210	53,250	48,770	48,650	333,400	542,600	460,700	459,300	371,100
Max	299,000	126,000	71,000	61,000	55,500	51,000	68,000	554,000	655,000	495,000	500,000	431,000
Min	130,000	70,000	61,500	55,500	51,000	47,500	47,000	73,000	407,000	405,000	432,000	322,000
Ac-ft	11.65 $\times 10^6$	4,866,000	3,937,000	3,579,000	2,957,000	2,999,000	2,895,000	20.50 $\times 10^6$	32.29 $\times 10^6$	28.33 $\times 10^6$	28.24 $\times 10^6$	22.08 $\times 10^6$
Cfs/m	0.59	0.25	0.20	0.18	0.17	0.15	0.15	1.04	1.69	1.44	1.43	1.16
In.	0.68	0.28	0.23	0.21	0.17	0.18	0.17	1.20	1.89	1.65	1.65	1.29

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1976 - 2011, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	251,900	128,400	75,540	61,280	52,720	47,650	46,550	310,500	567,500	440,100	391,600	355,300
Max	344,900	211,800	94,840	76,000	65,360	56,770	58,970	784,400	844,600	563,500	515,800	481,300
(WY)	(2006)	(2003)	(1986)	(1986)	(1994)	(1980)	(2005)	(2005)	(1985)	(1992)	(1981)	(1994)
Min	150,600	72,500	50,000	47,000	38,380	35,160	38,430	100,200	334,200	314,000	276,700	226,700
(WY)	(2005)	(1989)	(1988)	(2007)	(1984)	(1984)	(1976)	(1985)	(2010)	(1996)	(2009)	(2004)

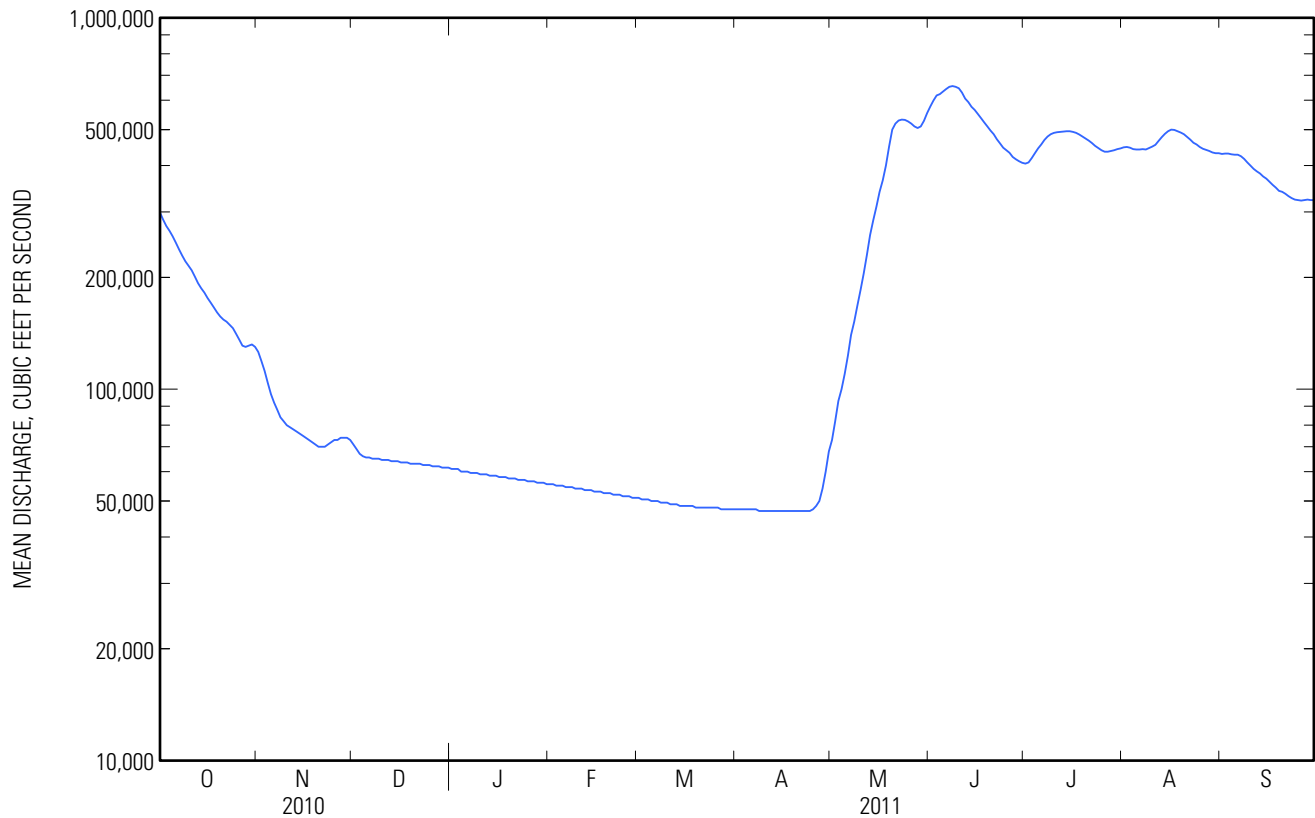
15565447 YUKON RIVER AT PILOT STATION, AK—Continued

SUMMARY STATISTICS

	Calendar Year 2010		Water Year 2011		Water Years 1976 - 2011 [#]	
Annual total	72,606,500		82,838,000			
Annual mean	198,900		227,000		227,400	
Highest annual mean					254,600	
Lowest annual mean					185,300	
Highest daily mean	675,000	May 22	655,000	Jun 8	1,180,000	May 16, 2005
Lowest daily mean	42,000	Apr 13	47,000	Apr 8	35,000	Feb 23, 1984
Annual seven-day minimum	42,200	Apr 10	47,000	Apr 8	35,000	Feb 23, 1984
Maximum peak flow			670,000	Jun 9	1,240,000	May 16, 2005
Maximum peak stage			25.87	Jun 9	30.23	May 24, 2009
Maximum peak stage					^a 36.25	May 25, 1989
Annual runoff (ac-ft)	144,000,000		164,300,000		164,800,000	
Annual runoff (cfsm)	0.620		0.707		0.709	
Annual runoff (inches)	8.41		9.60		9.63	
10 percent exceeds	432,000		495,000		499,000	
50 percent exceeds	97,000		110,000		133,000	
90 percent exceeds	44,300		48,000		47,000	

[#] See Period of Record; partial year was used in monthly statistics and break in record

^a Backwater from ice



15565447 YUKON RIVER AT PILOT STATION, AK—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1954-1956, 1975-96, and 2001 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: 1976 and 1978 (seasonal).

WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

Part 1 of 2

[% , percent; ft, feet; mg/L, milligrams per liter; mm Hg, millimeters of mercury; mm, millimeters; °C, degrees Celsius; µS/cm, microsiemens per centimeter]

Date	Sample start time	Depth to bottom at sample location, ft (81903)	Sample location, relative to right bank, looking downstream, ft (72103)	Gage height, ft (00065)	Sampling method (82398)	Specific conductance, water, unfiltered, µS/cm at 25 °C (00095)	pH, water, unfiltered, field, standard units (00400)	Temperature, water, °C (00010)	Temperature, air, °C (00020)
January 4, 2011	1330	--	1,056	--	--	338	7.4	.0	-.5
January 4, 2011	1415	--	592.0	--	--	338	7.3	.0	-.5
January 4, 2011	1430	--	284.0	--	--	334	7.4	.0	-.5
January 4, 2011	1450	--	1,251	--	--	343	7.4	.0	-.5
January 4, 2011	1500	--	1,674	--	--	346	7.3	.0	-.5
March 14, 2011	2100	--	675.0	--	--	--	7.4	.0	-9.8
March 14, 2011	2110	--	175.0	--	--	--	--	.0	-9.8
March 14, 2011	2120	--	425.0	--	--	--	--	.0	-9.8
March 14, 2011	2130	--	1,025	--	--	343	--	.0	-9.8
March 14, 2011	2140	--	1,600	--	--	344	--	.0	-9.8
May 24, 2011	1700	--	364.0	--	--	170	8.0	2.7	11.5
May 24, 2011	1715	--	675.0	--	--	170	8.0	2.7	11.5
May 24, 2011	1735	--	1,034	--	--	170	7.9	2.7	11.5
May 24, 2011	1805	--	1,488	--	--	169	8.0	2.8	11.5
May 24, 2011	1820	--	2,033	--	--	170	8.0	2.8	11.5
June 14, 2011	1535	--	2,418	--	--	184	7.8	14.0	11.1
June 14, 2011	1539	--	1,948	--	--	184	7.8	14.0	11.1
June 14, 2011	1541	--	1,539	--	--	184	7.8	14.0	11.1
June 14, 2011	1543	--	1,185	--	--	184	7.8	14.0	11.1
June 14, 2011	1547	--	901.0	--	--	183	7.8	14.0	11.1
June 29, 2011	1450	--	1,914	--	--	217	7.8	15.6	13.5
June 29, 2011	1458	--	1,274	--	--	216	7.8	15.6	13.5
June 29, 2011	1511	--	865.0	--	--	214	7.8	15.6	13.5
June 29, 2011	1524	--	574.0	--	--	214	7.8	15.5	13.5
June 29, 2011	1536	--	302.0	--	--	211	7.8	15.6	13.5
August 2, 2011	1055	69.0	320.0	21.08	Point sample	243	8.0	16.2	--
August 2, 2011	1115	70.0	635.0	21.06	Point sample	247	8.0	16.3	--
August 2, 2011	1142	62.0	960.0	21.08	Point sample	246	8.0	16.3	--
August 2, 2011	1158	50.0	1,385	21.07	Point sample	246	8.0	16.3	--
August 2, 2011	1210	40.0	1,970	21.07	Point sample	247	8.0	16.3	--
September 14, 2011	1250	--	312.0	--	--	230	7.8	11.0	14.4
September 14, 2011	1325	--	586.0	--	--	237	7.8	11.1	14.4
September 14, 2011	1340	--	903.0	--	--	239	7.8	11.1	14.4
September 14, 2011	1350	--	1,300	--	--	239	7.8	11.1	14.4
September 14, 2011	1405	--	1,944	--	--	240	7.8	11.1	14.4

15565447 YUKON RIVER AT PILOT STATION, AK—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

Part 2 of 2

[% , percent; ft, feet; mg/L, milligrams per liter; mm Hg, millimeters of mercury; mm, millimeters; °C, degrees Celsius; µS/cm, microsiemens per centimeter]

Date	Sample start time	Barometric pressure, mm Hg (00025)	Dissolved oxygen, water, unfiltered, mg/L (00300)	Dissolved oxygen, water, unfiltered, % saturation (00301)	Suspended sediment concentration, mg/L (80154)	Suspended sediment, sieve diameter, percent smaller than 0.0625 mm (70331)
January 4, 2011	1330	737	6.2	44	--	--
January 4, 2011	1415	737	6.2	44	--	--
January 4, 2011	1430	737	6.3	44	--	--
January 4, 2011	1450	737	6.2	44	--	--
January 4, 2011	1500	737	6.1	43	--	--
March 14, 2011	2100	746	3.5	--	--	--
March 14, 2011	2110	746	3.3	--	--	--
March 14, 2011	2120	746	2.9	--	--	--
March 14, 2011	2130	746	2.6	18	--	--
March 14, 2011	2140	746	2.8	20	--	--
May 24, 2011	1700	758	11.6	86	--	--
May 24, 2011	1715	758	11.5	85	--	--
May 24, 2011	1735	758	11.5	85	--	--
May 24, 2011	1805	758	11.5	85	--	--
May 24, 2011	1820	758	11.5	85	--	--
June 14, 2011	1535	762	8.6	83	449	69
June 14, 2011	1539	762	8.6	83	543	55
June 14, 2011	1541	762	8.7	84	425	73
June 14, 2011	1543	762	8.7	84	409	59
June 14, 2011	1547	762	8.7	84	357	69
June 29, 2011	1450	752	8.9	90	--	--
June 29, 2011	1458	752	8.9	90	--	--
June 29, 2011	1511	752	8.9	90	--	--
June 29, 2011	1524	752	8.9	90	--	--
June 29, 2011	1536	752	8.9	90	--	--
August 2, 2011	1055	755	9.0	92	471	96
August 2, 2011	1115	755	9.0	92	520	94
August 2, 2011	1142	755	9.0	92	591	86
August 2, 2011	1158	755	9.0	92	599	88
August 2, 2011	1210	755	9.0	92	615	85
September 14, 2011	1250	751	10.7	98	157	94
September 14, 2011	1325	751	10.7	99	184	93
September 14, 2011	1340	751	10.7	99	240	78
September 14, 2011	1350	751	10.7	99	257	76
September 14, 2011	1405	751	10.7	99	234	83

15565447 YUKON RIVER AT PILOT STATION, AK—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

Part 1 of 18

[%, percent; CaCO₃, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO₂, silicon dioxide; cm, centimeter; ft, feet; ft/s, feet per second; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; mm, millimeters; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; WS, Surface water; <, less than; E, estimated; 9, Regular]

Date	Sample start time	Medium code	Sample type code	Stream width, ft (00004)	Gage height, ft (00065)	Discharge, instantaneous, ft ³ /s (00061)	Sampling method (82398)	Sampler type (84164)
January 4, 2011	1700	WS	9	2,310	--	58,900	EDI	Weighted-bottle
March 14, 2011	1950	WS	9	2,300	--	48,700	EDI	Weighted-bottle
May 24, 2011	1740	WS	9	2,490	22.60	530,000	EDI	US D-96 bag sampler
June 14, 2011	1440	WS	9	2,740	24.67	581,000	EDI	US D-96 bag sampler
June 29, 2011	1340	WS	9	2,500	19.87	410,000	EDI	US D-96 bag sampler
August 2, 2011	1140	WS	9	2,630	21.07	450,000	EDI	US D-96 bag sampler
September 14, 2011	1330	WS	9	2,550	18.21	374,000	EDI	US D-96 bag sampler

WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

Part 2 of 18

[%, percent; CaCO₃, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO₂, silicon dioxide; cm, centimeter; ft, feet; ft/s, feet per second; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; mm, millimeters; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; WS, Surface water; <, less than; E, estimated; 9, Regular]

Date	Sample start time	Purpose, site visit (50280)	Type of quality assurance data associated with sample (99111)	Type of replicate (99105)	Velocity at point in stream, ft/s (81904)	Specific conductance, water, unfiltered, µS/cm at 25 °C (00095)	pH, water, unfiltered, field, standard units (00400)	Temperature, water, °C (00010)
January 4, 2011	1700	Fixed frequency SW	No assoc QA data	--	--	338	7.3	.0
March 14, 2011	1950	Fixed frequency SW	No assoc QA data	--	--	334	7.9	.0
May 24, 2011	1740	Fixed frequency SW	No assoc QA data	--	--	170	8.0	2.7
June 14, 2011	1440	Fixed frequency SW	Blank	--	--	184	7.8	14.0
June 29, 2011	1340	Fixed frequency SW	Blank	--	3.61	214	7.8	15.6
August 2, 2011	1140	Fixed frequency SW	Replicate sample	Concurrent	--	246	8.0	16.3
September 14, 2011	1330	Fixed frequency SW	No assoc QA data	--	--	239	7.8	11.1

15565447 YUKON RIVER AT PILOT STATION, AK—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

Part 3 of 18

[%, percent; CaCO₃, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO₂, silicon dioxide; cm, centimeter; ft, feet; ft/s, feet per second; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; mm, millimeters; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; WS, Surface water; <, less than; E, estimated; 9, Regular]

Date	Sample start time	Temperature, air, °C (00020)	Turbidity, water, unfiltered, broad band light source (400-680 nm), detectors at multiple angles including 90 +/- 30 degrees, ratiometric correction, NTRU (63676)	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)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, water, unfiltered, mg/L (00300)	Dissolved oxygen, water, unfiltered, % saturation (00301)
January 4, 2011	1700	-5	E 7.18	.0808	.0524	737	6.2	44
March 14, 2011	1950	-9.8	E 9.09	.0607	.0436	746	2.9	20
May 24, 2011	1740	11.5	170	.4645	.3475	758	11.5	85
June 14, 2011	1440	11.1	121	.3518	.2643	762	8.7	84
June 29, 2011	1340	13.5	102	.2193	.1612	752	8.9	90
August 2, 2011	1140	12.7	384	.1533	.1109	755	9.0	92
September 14, 2011	1330	14.4	87.9	.2209	.1630	751	10.7	99

WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

Part 4 of 18

[%, percent; CaCO₃, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO₂, silicon dioxide; cm, centimeter; ft, feet; ft/s, feet per second; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; mm, millimeters; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; WS, Surface water; <, less than; E, estimated; 9, Regular]

Date	Sample start time	Hardness, water, mg/L as CaCO ₃ (00900)	Calcium, water, filtered, mg/L (00915)	Magnesium, water, filtered, mg/L (00925)	Sodium, water, filtered, mg/L (00930)	Potassium, water, filtered, mg/L (00935)	Bicarbonate, water, filtered, inflection-point, incremental titration method, field, mg/L (00453)	Carbonate, water, filtered, inflection-point, incremental titration method, field, mg/L (00452)	Alkalinity, water, filtered, inflection-point, incremental titration method, field, mg/L as CaCO ₃ (39086)
January 4, 2011	1700	179	51.3	12.3	4.30	1.45	163	< 2	134
March 14, 2011	1950	182	53.6	11.7	3.94	1.60	157	< 2	129
May 24, 2011	1740	89.5	25.9	6.02	2.24	1.17	76	< 2	63
June 14, 2011	1440	85.9	25.7	5.27	1.74	1.21	81	< 2	67
June 29, 2011	1340	104	29.1	7.52	2.58	1.22	--	--	--
August 2, 2011	1140	116	31.9	8.80	2.87	1.32	94.9	< 2	77.8
September 14, 2011	1330	115	30.9	9.02	2.79	1.02	88	< 2	72

15565447 YUKON RIVER AT PILOT STATION, AK—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

Part 5 of 18

[%, percent; CaCO₃, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO₂, silicon dioxide; cm, centimeter; ft, feet; ft/s, feet per second; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; mm, millimeters; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; WS, Surface water; <, less than; E, estimated; 9, Regular]

Date	Sample start time	Sulfate, water, filtered, mg/L (00945)	Chloride, water, filtered, mg/L (00940)	Fluoride, water, filtered, mg/L (00950)	Silica, water, filtered, mg/L as SiO ₂ (00955)	Dissolved solids dried at 180 °C, water, filtered, mg/L (70300)	Dissolved solids, water, filtered, sum of constituents, mg/L (70301)	Nitrite, water, filtered, mg/L as N (00613)	Nitrate plus nitrite, water, filtered, mg/L as N (00631)
January 4, 2011	1700	37.5	1.15	.139	13.5	211	203	.00258	.181
March 14, 2011	1950	33.0	1.09	.105	12.3	207	196	.0018	.211
May 24, 2011	1740	22.4	.897	.046	5.35	134	102	.002	.098
June 14, 2011	1440	24.2	.541	.065	5.24	127	105	.00183	.067
June 29, 2011	1340	32.3	.799	.092	7.06	144	128	< .0010	.076
August 2, 2011	1140	41.1	.670	.091	6.62	145	141	< .0010	.080
September 14, 2011	1330	38.5	.612	.101	7.79	141	135	< .0010	.094

WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

Part 6 of 18

[%, percent; CaCO₃, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO₂, silicon dioxide; cm, centimeter; ft, feet; ft/s, feet per second; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; mm, millimeters; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; WS, Surface water; <, less than; E, estimated; 9, Regular]

Date	Sample start time	Nitrate, water, filtered, mg/L as N (00618)	Ammonia, water, filtered, mg/L as N (00608)	Ammonia plus organic nitrogen, water, unfiltered, mg/L as N (00625)	Ammonia plus organic nitrogen, water, filtered, mg/L as N (00623)	Phosphorus, water, unfiltered, mg/L as P (00665)	Phosphorus, water, filtered, mg/L as P (00666)	Orthophosphate, water, filtered, mg/L as P (00671)	Arsenic, water, filtered, µg/L (01000)
January 4, 2011	1700	.178	.115	.266	.260	.0206	.0030	.00983	.420
March 14, 2011	1950	.209	.0730	.154	.132	.0190	< .0030	.00507	.352
May 24, 2011	1740	.096	.0409	.942	.430	.755	.0141	.00499	.956
June 14, 2011	1440	.065	< .010	.643	.290	.377	.0123	.00761	1.15
June 29, 2011	1340	.076	< .010	.468	.230	.297	.0088	.00893	1.01
August 2, 2011	1140	.080	< .010	.527	.184	.589	.0068	.00639	.958
September 14, 2011	1330	.094	.0104	.340	.171	.239	.0105	.00816	1.11

15565447 YUKON RIVER AT PILOT STATION, AK—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

Part 7 of 18

[% , percent; CaCO₃, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO₂, silicon dioxide; cm, centimeter; ft, feet; ft/s, feet per second; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; mm, millimeters; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; WS, Surface water; <, less than; E, estimated; 9, Regular]

Date	Sample start time	Boron, water, filtered, µg/L (01020)	Iron, water, filtered, µg/L (01046)	Lithium, water, filtered, µg/L (01130)	Selenium, water, filtered, µg/L (01145)	Strontium, water, filtered, µg/L (01080)	Vanadium, water, filtered, µg/L (01085)	Organic carbon, water, filtered, mg/L (00681)	Inorganic carbon, suspended sediment, total, mg/L (00688)
January 4, 2011	1700	11.6	154	3.24	.423	198	.119	3.06	< .03
March 14, 2011	1950	11.8	44.3	3.08	.417	199	< .08	2.28	< .03
May 24, 2011	1740	6.2	352	1.72	.286	98.9	.649	13.5	1.56
June 14, 2011	1440	6.8	279	2.32	.357	92.1	.899	9.60	.864
June 29, 2011	1340	8.9	200	2.45	.504	118	.714	5.39	.737
August 2, 2011	1140	8.2	74.6	2.76	.519	146	.665	5.00	4.54
September 14, 2011	1330	6.5	234	2.47	.469	144	.699	5.84	.777

WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

Part 8 of 18

[% , percent; CaCO₃, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO₂, silicon dioxide; cm, centimeter; ft, feet; ft/s, feet per second; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; mm, millimeters; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; WS, Surface water; <, less than; E, estimated; 9, Regular]

Date	Sample start time	Organic carbon, suspended sediment, total, mg/L (00689)	Carbon (inorganic plus organic), suspended sediment, total, mg/L (00694)	Particulate nitrogen, suspended in water, mg/L (49570)	Suspended sediment concentration, mg/L (80154)	Suspended sediment discharge, tons per day (80155)	Suspended sediment, sieve diameter, percent smaller than 0.0625 mm (70331)	1-Naphthol, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (49295)	2,6-Diethyl-aniline, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82660)
January 4, 2011	1700	.476	.480	.041	5	795	98	--	--
March 14, 2011	1950	.406	.422	.035	5	657	96	--	--
May 24, 2011	1740	6.17	7.74	.465	633	906,000	82	--	--
June 14, 2011	1440	6.26	7.12	.412	433	679,000	65	< .036	< .0060
June 29, 2011	1340	3.68	4.42	.282	249	276,000	81	< .036	< .0060
August 2, 2011	1140	4.70	9.24	.370	559	679,000	90	< .036	< .0060
September 14, 2011	1330	3.05	3.83	.241	214	216,000	85	--	--

15565447 YUKON RIVER AT PILOT STATION, AK—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

Part 9 of 18

[%, percent; CaCO₃, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO₂, silicon dioxide; cm, centimeter; ft, feet; ft/s, feet per second; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; mm, millimeters; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; WS, Surface water; <, less than; E, estimated; 9, Regular]

Date	Sample start time	2-Chloro-2',6'-diethylacetanilide, water, filtered, recoverable, µg/L (61618)	2-Ethyl-6-methyl-aniline, water, filtered, recoverable, µg/L (61620)	3,4-Dichloro-aniline, water, filtered, recoverable, µg/L (61625)	3,5-Di-chloro-aniline, water, filtered, recoverable, µg/L (61627)	4-Chloro-2-methyl-phenol, water, filtered, recoverable, µg/L (61633)	Aceto-chlor, water, filtered, recoverable, µg/L (49260)	Alachlor, water, filtered, recoverable, µg/L (46342)	alpha-Endo-sulfan, water, filtered, recoverable, µg/L (34362)
January 4, 2011	1700	--	--	--	--	--	--	--	--
March 14, 2011	1950	--	--	--	--	--	--	--	--
May 24, 2011	1740	--	--	--	--	--	--	--	--
June 14, 2011	1440	< .010	< .010	< .0042	< .0040	< .0046	< .010	< .008	< .006
June 29, 2011	1340	< .010	< .010	< .0042	< .0040	< .0046	< .010	< .008	< .006
August 2, 2011	1140	< .010	< .010	< .0042	< .0040	< .0046	< .010	< .008	< .006
September 14, 2011	1330	--	--	--	--	--	--	--	--

WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

Part 10 of 18

[%, percent; CaCO₃, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO₂, silicon dioxide; cm, centimeter; ft, feet; ft/s, feet per second; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; mm, millimeters; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; WS, Surface water; <, less than; E, estimated; 9, Regular]

Date	Sample start time	Atrazine, water, filtered, recoverable, µg/L (39632)	Azinphos-methyl oxygen analog, water, filtered, recoverable, µg/L (61635)	Azinphos-methyl, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82686)	Benfluralin, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82673)	2-Chloro-4-isopropyl-amino-6-amino-s-triazine, water, filtered, recoverable, µg/L (04040)	Carbofuran, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82674)	Carbaryl, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82680)	Chlorpyrifos oxygen analog, water, filtered, recoverable, µg/L (61636)
January 4, 2011	1700	--	--	--	--	--	--	--	--
March 14, 2011	1950	--	--	--	--	--	--	--	--
May 24, 2011	1740	--	--	--	--	--	--	--	--
June 14, 2011	1440	< .008	< .042	< .12	< .014	< .006	< .060	< .06	< .06
June 29, 2011	1340	< .008	< .042	< .12	< .014	< .006	< .060	< .06	< .06
August 2, 2011	1140	< .008	< .042	< .12	< .014	< .006	< .060	< .06	< .06
September 14, 2011	1330	--	--	--	--	--	--	--	--

15565447 YUKON RIVER AT PILOT STATION, AK—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

Part 11 of 18

[%, percent; CaCO₃, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO₂, silicon dioxide; cm, centimeter; ft, feet; ft/s, feet per second; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; mm, millimeters; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; WS, Surface water; <, less than; E, estimated; 9, Regular]

Date	Sample start time	Chlorpyrifos, water, filtered, recoverable, µg/L (38933)	cis-Permethrin, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82687)	cis-Propiconazole, water, filtered, recoverable, µg/L (79846)	Cyanazine, water, filtered, recoverable, µg/L (04041)	Cyfluthrin, water, filtered, recoverable, µg/L (61585)	lambda-Cyhalothrin, water, filtered, recoverable, µg/L (61595)	Cypermethrin, water, filtered, recoverable, µg/L (61586)	DCPA, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82682)
January 4, 2011	1700	--	--	--	--	--	--	--	--
March 14, 2011	1950	--	--	--	--	--	--	--	--
May 24, 2011	1740	--	--	--	--	--	--	--	--
June 14, 2011	1440	< .0036	< .010	< .008	< .022	< .016	< .010	< .020	< .0076
June 29, 2011	1340	< .0036	< .010	< .008	< .022	< .016	< .010	< .020	< .0076
August 2, 2011	1140	< .0036	< .010	< .008	< .022	< .016	< .010	< .020	< .0076
September 14, 2011	1330	--	--	--	--	--	--	--	--

WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

Part 12 of 18

[%, percent; CaCO₃, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO₂, silicon dioxide; cm, centimeter; ft, feet; ft/s, feet per second; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; mm, millimeters; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; WS, Surface water; <, less than; E, estimated; 9, Regular]

Date	Sample start time	Desulfinyl-fipronil, water, filtered, recoverable, µg/L (62170)	Desulfinyl-fipronil amide, water, filtered, recoverable, µg/L (62169)	Diazinon, water, filtered, recoverable, µg/L (39572)	Dichlorvos, water, filtered, recoverable, µg/L (38775)	Dicrotophos, water, filtered, recoverable, µg/L (38454)	Dieldrin, water, filtered, recoverable, µg/L (39381)	Dimethoate, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82662)	Disulfoton sulfone, water, filtered, recoverable, µg/L (61640)
January 4, 2011	1700	--	--	--	--	--	--	--	--
March 14, 2011	1950	--	--	--	--	--	--	--	--
May 24, 2011	1740	--	--	--	--	--	--	--	--
June 14, 2011	1440	< .012	< .029	< .0060	< .04	< .08	< .008	< .006	< .014
June 29, 2011	1340	< .012	< .029	< .0060	< .04	< .08	< .008	< .006	< .014
August 2, 2011	1140	< .012	< .029	< .0060	< .04	< .08	< .008	< .006	< .014
September 14, 2011	1330	--	--	--	--	--	--	--	--

15565447 YUKON RIVER AT PILOT STATION, AK—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

Part 13 of 18

[%, percent; CaCO₃, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO₂, silicon dioxide; cm, centimeter; ft, feet; ft/s, feet per second; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; mm, millimeters; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; WS, Surface water; <, less than; E, estimated; 9, Regular]

Date	Sample start time	Disulfoton, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82677)	Endosulfan sulfate, water, filtered, recoverable, µg/L (61590)	Ethion monoxon, water, filtered, recoverable, µg/L (61644)	Ethion, water, filtered, recoverable, µg/L (82346)	Ethoprop, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82672)	EPTC, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82668)	Fenami-phos sulfone, water, filtered, recoverable, µg/L (61645)	Fenami-phos sulfoxide, water, filtered, recoverable, µg/L (61646)
January 4, 2011	1700	--	--	--	--	--	--	--	--
March 14, 2011	1950	--	--	--	--	--	--	--	--
May 24, 2011	1740	--	--	--	--	--	--	--	--
June 14, 2011	1440	< .040	< .016	< .021	< .008	< .016	< .0056	< .054	< .08
June 29, 2011	1340	< .040	< .016	< .021	< .008	< .016	< .0056	< .054	< .08
August 2, 2011	1140	< .040	< .016	< .021	< .008	< .016	< .0056	< .054	< .08
September 14, 2011	1330	--	--	--	--	--	--	--	--

WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

Part 14 of 18

[%, percent; CaCO₃, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO₂, silicon dioxide; cm, centimeter; ft, feet; ft/s, feet per second; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; mm, millimeters; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; WS, Surface water; <, less than; E, estimated; 9, Regular]

Date	Sample start time	Fenami-phos, water, filtered, recoverable, µg/L (61591)	Fipronil sulfide, water, filtered, recoverable, µg/L (62167)	Fipronil sulfone, water, filtered, recoverable, µg/L (62168)	Fipronil, water, filtered, recoverable, µg/L (62166)	Fonofos, water, filtered, recoverable, µg/L (04095)	Hexa-zinone, water, filtered, recoverable, µg/L (04025)	Iprodione, water, filtered, recoverable, µg/L (61593)	Isofen-phos, water, filtered, recoverable, µg/L (61594)
January 4, 2011	1700	--	--	--	--	--	--	--	--
March 14, 2011	1950	--	--	--	--	--	--	--	--
May 24, 2011	1740	--	--	--	--	--	--	--	--
June 14, 2011	1440	< .030	< .012	< .024	< .018	< .0048	< .008	< .014	< .006
June 29, 2011	1340	< .030	< .012	< .024	< .018	< .0048	< .008	< .014	< .006
August 2, 2011	1140	< .030	< .012	< .024	< .018	< .0048	< .008	< .014	< .006
September 14, 2011	1330	--	--	--	--	--	--	--	--

15565447 YUKON RIVER AT PILOT STATION, AK—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

Part 15 of 18

[% , percent; CaCO₃, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO₂, silicon dioxide; cm, centimeter; ft, feet; ft/s, feet per second; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; mm, millimeters; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; WS, Surface water; <, less than; E, estimated; 9, Regular]

Date	Sample start time	Malaoxon, water, filtered, recoverable, µg/L (61652)	Malathion, water, filtered, recoverable, µg/L (39532)	Metalaxyl, water, filtered, recoverable, µg/L (61596)	Methidathion, water, filtered, recoverable, µg/L (61598)	Methyl parathion, water, filtered, recoverable, µg/L (61664)	Metolachlor, water, filtered, recoverable, µg/L (39415)	Metribuzin, water, filtered, recoverable, µg/L (82630)	Molinate, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82671)
January 4, 2011	1700	--	--	--	--	--	--	--	--
March 14, 2011	1950	--	--	--	--	--	--	--	--
May 24, 2011	1740	--	--	--	--	--	--	--	--
June 14, 2011	1440	< .022	< .016	< .014	< .012	< .014	< .020	< .012	< .0040
June 29, 2011	1340	< .022	< .016	< .014	< .012	< .014	< .020	< .012	< .0040
August 2, 2011	1140	< .022	< .016	< .014	< .012	< .014	< .020	< .012	< .0040
September 14, 2011	1330	--	--	--	--	--	--	--	--

WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

Part 16 of 18

[% , percent; CaCO₃, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO₂, silicon dioxide; cm, centimeter; ft, feet; ft/s, feet per second; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; mm, millimeters; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; WS, Surface water; <, less than; E, estimated; 9, Regular]

Date	Sample start time	Methyl parathion, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82667)	Myclobutanol, water, filtered, recoverable, µg/L (61599)	Oxyfluorfen, water, filtered, recoverable, µg/L (61600)	Pendimethalin, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82683)	Phorate, water, filtered (0.7 micron glass fiber filter), recoverable, µg/L (82664)	Phosmet oxygen analog, water, filtered, recoverable, µg/L (61668)	Phosmet, water, filtered, recoverable, µg/L (61601)	Prometryn, water, filtered, recoverable, µg/L (04036)
January 4, 2011	1700	--	--	--	--	--	--	--	--
March 14, 2011	1950	--	--	--	--	--	--	--	--
May 24, 2011	1740	--	--	--	--	--	--	--	--
June 14, 2011	1440	< .008	< .010	< .006	< .012	< .020	< .0511	< .14	< .006
June 29, 2011	1340	< .008	< .010	< .006	< .012	< .020	< .0511	< .14	< .006
August 2, 2011	1140	< .008	< .010	< .006	< .012	< .020	< .0511	< .14	< .006
September 14, 2011	1330	--	--	--	--	--	--	--	--

15565447 YUKON RIVER AT PILOT STATION, AK—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

Part 17 of 18

[% , percent; CaCO₃, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO₂, silicon dioxide; cm, centimeter; ft, feet; ft/s, feet per second; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; mm, millimeters; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; WS, Surface water; <, less than; E, estimated; 9, Regular]

Date	Sample start time	Prometon, water, filtered, recoverable, µg/L (04037)	Propyz-amide, water, filtered, (0.7 micron glass fiber filter), recoverable, µg/L (82676)	Propanil, water, filtered, (0.7 micron glass fiber filter), recoverable, µg/L (82679)	Propargite, water, filtered, (0.7 micron glass fiber filter), recoverable, µg/L (82685)	Simazine, water, filtered, recoverable, µg/L (04035)	Tebu-thiuron, water, filtered, (0.7 micron glass fiber filter), recoverable, µg/L (82670)	Tefluthrin, water, filtered, recoverable, µg/L (61606)	Terbufos oxygen analog sulfone, water, filtered, recoverable, µg/L (61674)
January 4, 2011	1700	--	--	--	--	--	--	--	--
March 14, 2011	1950	--	--	--	--	--	--	--	--
May 24, 2011	1740	--	--	--	--	--	--	--	--
June 14, 2011	1440	< .012	< .0036	< .010	< .020	< .006	< .028	< .010	< .045
June 29, 2011	1340	< .012	< .0036	< .010	< .020	< .006	< .028	< .010	< .045
August 2, 2011	1140	< .012	< .0036	< .010	< .020	< .006	< .028	< .010	< .045
September 14, 2011	1330	--	--	--	--	--	--	--	--

WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

Part 18 of 18

[% , percent; CaCO₃, calcium carbonate; N, nitrogen; NTRU, nephelometric turbidity ratio unit; P, phosphorus; SiO₂, silicon dioxide; cm, centimeter; ft, feet; ft/s, feet per second; ft³/s, cubic feet per second; mg/L, milligrams per liter; mm Hg, millimeters of mercury; mm, millimeters; nm, nanometers; °C, degrees Celsius; µS/cm, microsiemens per centimeter; µg/L, micrograms per liter; WS, Surface water; <, less than; E, estimated; 9, Regular]

Date	Sample start time	Terbufos, water, filtered, (0.7 micron glass fiber filter), recoverable, µg/L (82675)	Terbuthyl-azine, water, filtered, recoverable, µg/L (04022)	Thioben-carb, water, filtered, (0.7 micron glass fiber filter), recoverable, µg/L (82681)	trans-Propicon-azole, water, filtered, recoverable, µg/L (79847)	Tribuphos, water, filtered, recoverable, µg/L (61610)	Trifluralin, water, filtered, (0.7 micron glass fiber filter), recoverable, µg/L (82661)
January 4, 2011	1700	--	--	--	--	--	--
March 14, 2011	1950	--	--	--	--	--	--
May 24, 2011	1740	--	--	--	--	--	--
June 14, 2011	1440	< .018	< .0060	< .016	< .010	< .018	< .018
June 29, 2011	1340	< .018	< .0060	< .016	< .010	< .018	< .018
August 2, 2011	1140	< .018	< .0060	< .016	< .010	< .018	< .018
September 14, 2011	1330	--	--	--	--	--	--