
Water-Data Report 2009

08290000 RIO CHAMA NEAR CHAMITA, NM

Upper Rio Grande Basin
Rio Chama Subbasin

LOCATION.--Lat 36°04'24.8", long 106°06'42.1" referenced to North American Datum of 1983, Rio Arriba County, NM, Hydrologic Unit 13020102, in San Juan Pueblo Grant, near left downstream corner of bridge on U.S. Highway 285, 0.5 mi west of Chamita, 2.5 mi northwest of San Juan Pueblo, and at mile 2.8.

DRAINAGE AREA.--3,144 mi² of which 100 mi² probably is noncontributing.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1912 to current year. Monthly discharge only for some periods, published in WSP 1312. Published as "Chama River near Chamita" prior to 1928, and "Chama River at Chamita" 1929-30.

REVISED RECORDS.--WSP 1512: 1913-15, 1934, 1936. WSP 1632: 1929(M). WSP 1732: 1931(M). WSP 1923: drainage area.

GAGE.--Water-stage recorder with satellite telemetry. Concrete control since Jan. 1, 1964. Datum of gage is 5,653.61 ft above NGVD of 1929. Prior to Oct. 4, 1933, at railroad bridge 2.3 mi downstream at different datums. Oct. 4, 1933, to Mar. 1, 1942, at site 50 ft downstream at datum 0.22 ft higher. Mar. 2, 1942, to Dec. 31, 1963, at site 200 ft downstream, present datum.

REMARKS.--Water-discharge records fair except for those estimated, which are poor. Diversions upstream from station for irrigation of about 27,600 acres. Chamita ditch (station 08289500), on left bank, and Hernandez ditch (station 08289800), on right bank, bypass gage for irrigation of several hundred acres downstream from station. Flow regulated by El Vado Reservoir (station 08285000), 74.9 mi upstream, since Jan. 1935 and Abiquiu Reservoir (station 08286900), 29.3 mi upstream, since Feb. 1963. Since May 1971 flow affected by release of transmountain water from Heron Reservoir (station 08284510) 83.0 mi upstream. No flow at times some years.

EXTREMES OUTSIDE PERIOD OF RECORD.--The floods of Sept. 29, 1904, and Oct. 4 or 5, 1911, probably exceeded 15,000 ft³/s. Another major flood occurred in 1884, from newspaper accounts.

08290000 RIO CHAMA NEAR CHAMITA, NM—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009
DAILY MEAN VALUES
[*e*, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	626	84	81	e220	123	374	786	2,240	1,250	436	712	728
2	641	82	79	e206	124	374	751	2,180	1,410	434	707	810
3	668	79	77	e208	122	380	631	2,260	1,430	421	700	832
4	690	82	81	e207	126	361	509	2,180	1,440	436	643	855
5	673	99	80	e207	113	278	536	2,390	1,430	422	659	854
6	591	106	80	e206	108	292	528	2,410	1,410	285	775	850
7	526	102	81	e207	111	309	523	2,430	1,510	275	905	788
8	507	92	82	e207	117	370	538	2,410	1,520	425	911	721
9	513	90	85	e208	119	372	591	2,320	1,510	437	953	695
10	487	102	81	e209	122	383	599	2,230	1,560	485	1,060	679
11	621	100	101	e211	117	374	653	2,150	1,580	502	1,010	644
12	385	87	117	e212	118	321	665	2,070	1,550	500	912	636
13	267	76	121	211	121	312	637	2,000	1,540	573	976	589
14	229	80	117	205	110	312	690	1,940	1,560	656	884	547
15	133	80	108	206	93	307	737	1,900	1,530	706	798	465
16	103	79	200	206	116	306	791	1,860	1,420	788	739	467
17	97	79	333	202	238	297	803	1,840	1,060	927	715	394
18	97	78	372	207	232	302	774	1,830	764	1,070	651	266
19	96	81	360	204	233	303	754	1,800	680	1,040	644	244
20	91	83	e280	148	231	310	734	1,800	402	942	768	242
21	96	82	e272	146	137	228	736	1,760	401	1,190	815	236
22	217	82	e273	148	125	209	953	1,620	486	1,030	908	195
23	217	80	e271	143	200	298	1,330	1,640	463	606	883	e230
24	227	76	e272	144	248	530	1,500	1,710	457	374	818	e290
25	227	70	e275	147	260	696	1,810	1,860	475	479	732	e330
26	175	62	e277	144	269	697	e1,880	1,810	596	703	657	e340
27	172	84	e281	e135	349	711	1,730	1,840	457	622	590	e330
28	160	91	e280	e120	364	826	1,720	1,840	449	582	578	e404
29	153	84	e281	e123	---	821	1,770	1,750	445	536	580	454
30	152	81	e270	e124	---	804	1,930	1,640	438	609	661	e530
31	92	---	e263	e125	---	783	---	1,210	---	694	694	---
Total	9,929	2,533	5,931	5,596	4,746	13,240	28,589	60,920	31,223	19,185	24,038	15,645
Mean	320	84.4	191	181	170	427	953	1,965	1,041	619	775	522
Max	690	106	372	220	364	826	1,930	2,430	1,580	1,190	1,060	855
Min	91	62	77	120	93	209	509	1,210	401	275	578	195
Ac-ft	19,690	5,020	11,760	11,100	9,410	26,260	56,710	120,800	61,930	38,050	47,680	31,030

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 2009, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	291	270	289	196	246	448	1,050	1,492	1,030	598	492	435
Max	1,273	1,224	1,291	876	1,677	1,705	2,534	2,741	2,346	1,477	1,114	1,164
(WY)	(1988)	(1980)	(1976)	(1986)	(1987)	(1987)	(1985)	(1983)	(1984)	(1983)	(2000)	(1987)
Min	37.3	51.4	63.4	63.5	56.1	85.1	120	204	117	170	95.5	83.1
(WY)	(1979)	(2002)	(2003)	(1975)	(2002)	(1977)	(1977)	(1972)	(1976)	(1972)	(1979)	(1974)

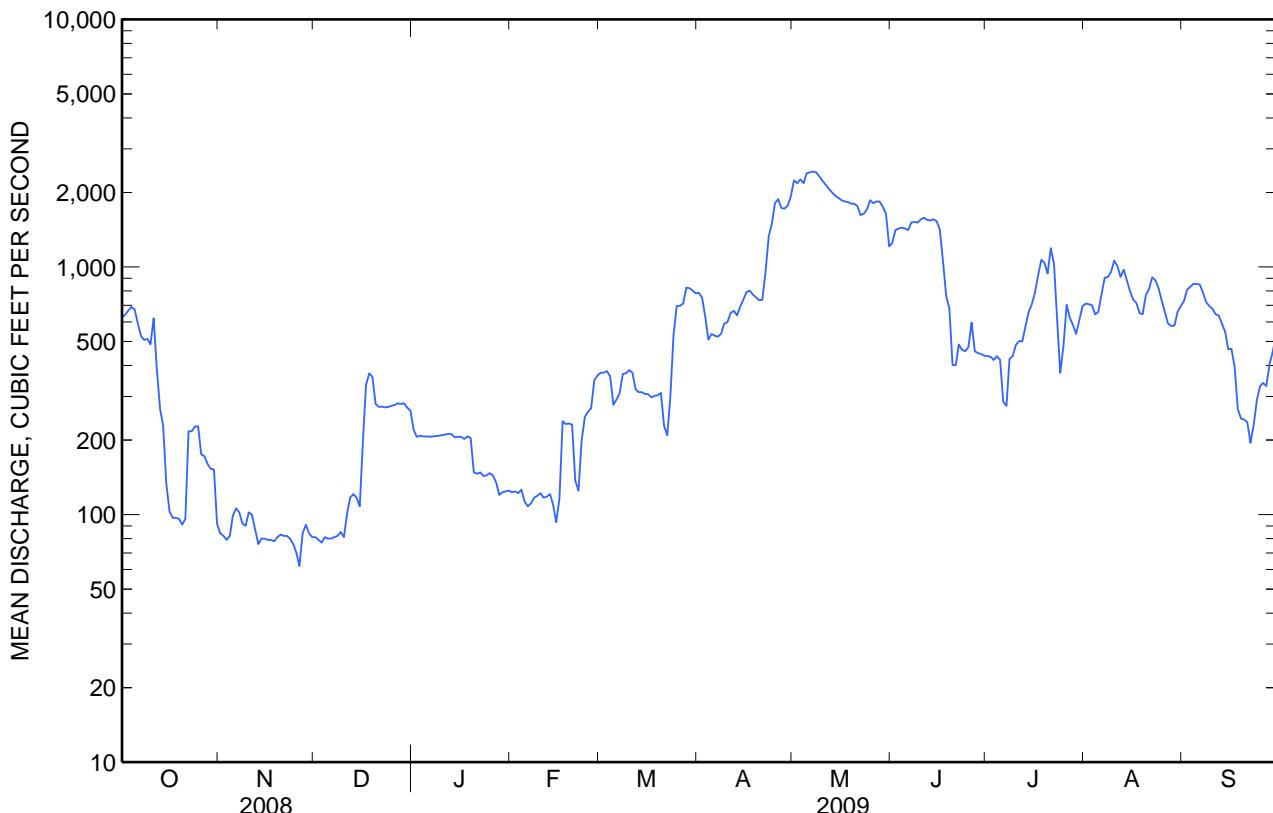
08290000 RIO CHAMA NEAR CHAMITA, NM—Continued**SUMMARY STATISTICS**

	Calendar Year 2008		Water Year 2009		Water Years 1971 - 2009	
Annual total	269,583		221,575			
Annual mean	737		607		4571	
Highest annual mean					923	1987
Lowest annual mean					234	1972
Highest daily mean	2,510	Apr 25	2,430	May 7	3,570	May 5, 1985
Lowest daily mean	62	Nov 26	62	Nov 26	1.2	Sep 16, 1971
Annual seven-day minimum	76	Nov 20	76	Nov 20	1.7	Sep 10, 1971
Maximum peak flow			3,140	Jul 21	b15,000	May 22, 1920
Maximum peak stage			6.66	Jul 21	c11.68	Sep 1, 1994
Instantaneous low flow			57	Nov 26	1.2	Sep 16, 1971
Annual runoff (ac-ft)	534,700		439,500		413,500	
10 percent exceeds	1,900		1,600		1,600	
50 percent exceeds	527		425		319	
90 percent exceeds	92		92		75	

^a Average discharge for 58 years (water years 1913-70), 541 ft³/s, 392,000 acre-ft/yr, prior to release of transmountain water.

^b From rating curve extended above 2,000 ft³/s.

^c From floodmarks of slope-area measurement of peak flow.



08290000 RIO CHAMA NEAR CHAMITA, NM—Continued**WATER-QUALITY RECORDS**

PERIOD OF RECORD.--Water years 1948 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1963 to December 1974, December 2004 to current year. WATER TEMPERATURE: January 1950 to December 1974, December 2004 to current year.

INSTRUMENTATION.--Hourly specific conductance and thermistor data logged since December 2004.

REMARKS.--Daily values from October 1950 to December 1974 furnished by the Army Corps of Engineers, Albuquerque District. Interruptions in the record were due to malfunctions of the instrument.

Temperature and specific conductance readings were taken on January 11, at locations upstream, downstream, and instream from the probe. Data showed no variability in temperature but as much as 75 microsiemens variability in specific conductance. The variability in specific conductance was mostly in areas of high flow.

Sediment continued to be a problem for the probe until April 19th when a baffle was installed around the probe housing. Since its installation, the baffle structure has been successful in preventing sand from causing probe fouling and reducing the variability in specific conductance reading.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 1,010 microsiemens, July 25, 1970; minimum daily, 167 microsiemens, May 24, 2005. WATER TEMPERATURE: Maximum daily, 36.0 °C, August 19, 1974; minimum daily, freezing point many days during winter months. Probes removed for bridge construction 11/03/2005, reinstalled 09/13/2006 and removed (final) 10/01/2006.

EXTREMES FOR CURRENT YEAR.--

**WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009**

Part 1 of 22

[Remark codes: <, less than; E, estimated; M, presence verified but not quantified; R, radchem non-detect, below ssLc.]

Date	Time	Baro-metric pressure, mm Hg (00025)	Temper-ature, deg C (00020)	Instan-taneous dis-charge, ft³/s (00061)	Dis-solved oxygen, mg/L (00300)	pH, water, unfiltrd field, std units (00400)	pH, water, unfiltrd lab, std units (00403)	Specif-conduc-tance, wat unf lab, μS/cm @ 25 degC (90095)	Specif-conduc-tance, wat unf lab, μS/cm @ 25 degC (00095)	Temper-ature, deg C (00010)	Turbdty white light, det ang 90+/-30 corrtd NTRU (63676)	Dis-solved solids dried @ 180degC wat flt (70300) mg/L (00915) mg/L (00915)	
Nov 06...	0935	628	7.0	85	10.8	8.2	8.0	411	411	2.5	72	254	42.2
May 05...	1545	623	25.0	2,740	10.4	8.2	7.9	237	212	11.5	76	167	29.0
Aug 12...	1140	632	29.5	901	8.6	7.9	8.2	276	253	15.0	--	178	35.4

08290000 RIO CHAMA NEAR CHAMITA, NM—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 2 of 22

[Remark codes: <, less than; E, estimated; M, presence verified but not quantified; R, radchem non-detect, below ssLc.]

Date	Magnes-	Potas-	Sodium,	Alka-	Alka-	Bicar-	Carbon-				Ammonia	Ammonia	
	ium, water, filtrd,	sium, water, filtrd,	Sodium, water, filtrd,	wat flt fxd end	wat flt inf tit	wat flt infl pt	wat flt titr., field,	Chlor- ide, water, filtrd,	Fluor- ide, water, filtrd,	Silica, water, filtrd,	Sulfate	+ org-N, water, filtrd,	+ org-N, water, unfiltrd
	mg/L (00925)	mg/L (00935)	mg/L (00930)	CaCO ₃ (29801)	CaCO ₃ (39086)	mg/L (00453)	mg/L (00452)	mg/L (00940)	mg/L (00950)	SiO ₂ (00955)	mg/L (00945)	as N (00623)	mg/L (00625)
Nov 06...	8.68	2.57	25.3	135	128	154	1	10.0	.28	16.4	59.1	.25	.33
May 05...	4.60	1.75	10.1	73	70	84	.0	2.51	.10	14.1	35.8	.38	.47
Aug 12...	5.03	1.77	10.6	82	79	96	.0	2.06	.12	14.1	46.6	.26	.36

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 3 of 22

[Remark codes: <, less than; E, estimated; M, presence verified but not quantified; R, radchem non-detect, below ssLc.]

Date	Ammonia	Ammonia	Nitrate	Ortho-	Phos-	Phos-	E coli,	Fecal					
	water, filtrd,	water, unfiltrd	+ nitrite	nitrite	phosphate,	phorus,	m-TEC	coliform,	Alum-	Barium,	Beryll-	Cadmium	
	mg/L as N (00608)	mg/L as N (00610)	water, mg/L as N (00631)	water, mg/L as N (00613)	water, filtrd,	water, filtrd,	water, unfiltrd	MF, water, col/ 100 mL	MF, water, col/ 100 mL	water, filtrd,	water, filtrd,	water, filtrd,	
Nov 06...	<.020	.190	<.04	<.002	E.007	.006	.075	120	7	<4.0	77	<.02	<.02
May 05...	<.020	.290	<.04	E.001	.011	.014	.352	47	57	24.1	50	<.02	<.02
Aug 12...	<.020	--	.09	.002	.018	.021	.228	38	62	E3.8	65	<.02	<.02

08290000 RIO CHAMA NEAR CHAMITA, NM—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 4 of 22

[Remark codes: <, less than; E, estimated; M, presence verified but not quantified; R, radchem non-detect, below ssLc.]

Date	Chrom-	Cobalt	Copper,	Iron,	Lead,	Lithium	Mangan-	Mercury	water,	Molyb-	Nickel,	Silver,	Stront-
	ium, water, fltrd, µg/L (01030)	water, fltrd, µg/L (01035)	water, fltrd, µg/L (01040)	water, fltrd, µg/L (01046)	water, fltrd, µg/L (01049)	water, fltrd, µg/L (01130)	ese, water, fltrd, µg/L (01056)	Mercury water, fltrd, µg/L (71890)	unfltrd recover -able, µg/L (71900)	denum, water, fltrd, µg/L (01060)	water, fltrd, µg/L (01065)	water, fltrd, µg/L (01075)	ium, water, fltrd, µg/L (01080)
Nov 06...	E.11	.13	1.1	4	E.04	44.4	17.9	<.010	<.010	1.3	.95	<.008	365
May 05...	.16	.09	E.94	24	.10	9.2	6.9	<.010	E.006	.8	.82	<.008	222
Aug 12...	E.09	.11	E.78	8	<.06	8.4	3.1	<.010	--	1.0	.95	<.008	271

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 5 of 22

[Remark codes: <, less than; E, estimated; M, presence verified but not quantified; R, radchem non-detect, below ssLc.]

Date	Thall-	Vana-	Zinc,	Anti-	Arsenic	Boron,	Selen-	Selen-	1,2,3-	Tri-	Dibromo	1,2-Di-	1,2-Di-	1,2-Di-
	ium, water, fltrd, µg/L (01057)	dium, water, fltrd, µg/L (01085)	water, fltrd, µg/L (01090)	mony, water, fltrd, µg/L (01095)	water, fltrd, µg/L (01000)	water, fltrd, µg/L (01020)	ium, water, fltrd, µg/L (01145)	ium, water, unfltrd µg/L (01147)	chloro-	chloro-	chloro-	bromo-	chloro-	chloro-
Nov 06...	<.04	2.6	E1.1	.10	2.7	49	.27	--	--	--	--	--	--	--
May 05...	<.04	2.1	<2.0	.09	1.3	18	.28	.22	--	--	--	--	--	--
Aug 12...	<.04	2.3	<2.0	.10	1.6	18	.32	--	<.2	<.5	<.2	<.2	<.1	

08290000 RIO CHAMA NEAR CHAMITA, NM—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 6 of 22

[Remark codes: <, less than; E, estimated; M, presence verified but not quantified; R, radchem non-detect, below ssLc.]

Date	2,4,6-	2-	4-	alpha-	Endo-	Atra-	Bromo-						
	1,3-Di-chloro-propane water, unfltrd	1,4-Di-chloro-benzene water, unfltrd	Tri-chloro-phenol, water, unfltrd	2,4-Di-chloro-phenol, water, unfltrd	2,4-Di-methyl-phenol, water, unfltrd	Methyl-4,6-di-nitro-phenol, wat unf	Chloro-3-methyl-phenol, wat unf	4-Nitro-phenol, wat unf	Acrylo-nitrile, wat unf	Aldrin, wat unf	sulfan, wat unf	zine, wat unf	cil, wat unf
	µg/L (77173)	µg/L (34571)	µg/L (34621)	µg/L (34601)	µg/L (34606)	µg/L (34657)	µg/L (34452)	µg/L (34646)	µg/L (34215)	µg/L (39330)	µg/L (39388)	µg/L (39630)	µg/L (30234)
Nov 06...	--	--	--	--	--	--	--	--	--	--	--	--	--
May 05...	--	--	--	--	--	--	--	--	--	--	--	--	--
Aug 12...	<.2	<.1	<.6	<.39	<.8	<.77	<.55	<.51	<2.5	<.01	<.01	<.20	<.8

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 7 of 22

[Remark codes: <, less than; E, estimated; M, presence verified but not quantified; R, radchem non-detect, below ssLc.]

Date	Bromo-methane	Camphor	Car-baryl,	Carba-zole,	Chlor-dane,	cis-1,3-Di-chloro-	Diazi-non,	Di-chlor-vos,	Diel-drin,	Hepta-chlor			
	µg/L (34413)	µg/L (62817)	µg/L (39750)	µg/L (77571)	µg/L (39350)	µg/L (38932)	µg/L (34704)	µg/L (61947)	µg/L (39570)	µg/L (30218)	µg/L (39380)	µg/L (39390)	µg/L (39420)
Nov 06...	--	--	--	--	--	--	--	--	--	--	--	--	--
May 05...	--	--	--	--	--	--	--	--	--	--	--	--	--
Aug 12...	<.4	<.2	<.2	<.2	<.1	<.2	<.2	<.2	<.2	<.2	<.008	<.01	<.009

08290000 RIO CHAMA NEAR CHAMITA, NM—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 8 of 22

[Remark codes: <, less than; E, estimated; M, presence verified but not quantified; R, radchem non-detect, below ssLc.]

Date	Hepta-chlor, water, unfltrd	Hexa-chloro-benzene water, unfltrd	Lindane water, unfltrd	Metal-axyl, water, unfltrd	Metola-chlor, water, unfltrd	Mirex, water, unfltrd	p,p'-DDD, water, unfltrd	p,p'-DDE, water, unfltrd	p,p'-DDT, water, unfltrd	p,p'-oxy-chlor, water, unfltrd	p-Chresol, water, unfltrd	Penta-chloro-phenol, water, unfltrd	Promo-ton, water, unfltrd
	µg/L (39410)	µg/L (39700)	µg/L (39340)	µg/L (04254)	µg/L (82612)	µg/L (39755)	µg/L (39360)	µg/L (39365)	µg/L (39370)	µg/L (39480)	µg/L (77146)	µg/L (39032)	µg/L (39056)
Nov 06...	--	--	--	--	--	--	--	--	--	--	--	--	--
May 05...	--	--	--	--	--	--	--	--	--	--	--	--	--
Aug 12...	<.01	<.30	<.014	<.2	<.2	<.006	<.016	<.014	<.010	<.002	<.2	<1	<.2

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 9 of 22

[Remark codes: <, less than; E, estimated; M, presence verified but not quantified; R, radchem non-detect, below ssLc.]

Date	Thiaben-dazole, water, filtrd	Toxa-phene, water, unfltrd	trans-1,3-Di-chloro-propene water, unfltrd	PCBs, water, unfltrd	1,1,1,2-Tetra-chloro-ethane, water, unfltrd	1,1,1-Tri-chloro-ethane, water, unfltrd	1,1,2,2-Tetra-chloro-ethane, water, unfltrd	CFC-113 µg/L (34506)	1,1,2-Tri-chloro-ethane, water, unfltrd	1,1-Di-chloro-ethane, water, unfltrd	1,1-Di-chloro-ethene, water, unfltrd	1,1-Di-chloro-propene, water, unfltrd	1,2,3-Tri-chloro-benzene water, unfltrd
	µg/L (62801)	µg/L (39400)	µg/L (34699)	µg/L (39516)	µg/L (77562)	µg/L (34506)	µg/L (34516)	µg/L (77652)	µg/L (34511)	µg/L (34496)	µg/L (34501)	µg/L (77168)	µg/L (77613)
Nov 06...	--	--	--	--	--	--	--	--	--	--	--	--	--
May 05...	--	--	--	--	--	--	--	--	--	--	--	--	--
Aug 12...	<.060	<1	<.2	<.1	<.2	<.1	<.2	<.1	<.2	<.1	<.1	<.2	<.2

08290000 RIO CHAMA NEAR CHAMITA, NM—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 10 of 22

[Remark codes: <, less than; E, estimated; M, presence verified but not quantified; R, radchem non-detect, below ssLc.]

Date	1,2,4-Tri-chloro-benzene water, unfltrd	1,2,4-Tri-methyl benzene water, unfltrd	1,2-Di-chloro-benzene water, unfltrd	1,2-Di-phenyl-hydrazine, water, unfltrd	1,3,5-Tri-methyl-chloro-benzene water, unfltrd	1,3-Di-chloro-benzene water, unfltrd	1,7-Di-methyl-chloro-naphthalene, water, filtrd	1-Methyl-naphthalene, water, unfltrd	2,2-Di-chloro-propane water, unfltrd	2,4-Di-nitro-phenol, water, unfltrd	2,4-Di-nitro-toluene, water, unfltrd	2,6-Di-methyl-naphthalene, water, unfltrd	2,6-Di-nitrotoluene, water, unfltrd	
	µg/L (34551)	µg/L (77222)	µg/L (34536)	µg/L (82626)	µg/L (77226)	µg/L (34566)	µg/L (62030)	µg/L (81696)	µg/L (77170)	µg/L (34616)	µg/L (34611)	µg/L (62805)	µg/L (34626)	
Nov 06...	--	--	--	--	--	--	--	--	--	--	--	--	--	
May 05...	--	--	--	--	--	--	--	--	--	--	--	--	--	
Aug 12...	<.2	<.2	<.1	<.30	<.2	<.1	<.120	<.2	<.2	<.2	<1	<.6	<.2	<.43

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 11 of 22

[Remark codes: <, less than; E, estimated; M, presence verified but not quantified; R, radchem non-detect, below ssLc.]

Date	2-Chloro-naphthalene, water, unfltrd	2-chloro-phenol, water, unfltrd	2-Chloro-toluene, water, unfltrd	2-Methyl-naphthalene, water, unfltrd	2-nitro-phenol, water, unfltrd	3,3'-Di-chloro-benzo-diene, water, unfltrd	3,4-Di-chlorophenyl, iso-cyanate wat unf	3-beta-Copros-tanol, wat unf	3-Methyl-1H-indole, water, unfltrd	3-tert-Butyl-4-hydroxy-anisole, wat unf	4-Butyl-phenyl, wat unf	4-Bromo-phenyl, wat unf	4-Chloro-phenyl, wat unf	4-Chloro-toluene, water, unfltrd
	µg/L (34581)	µg/L (34586)	µg/L (77275)	µg/L (30194)	µg/L (34591)	µg/L (34631)	µg/L (63145)	µg/L (62806)	µg/L (62807)	µg/L (61702)	µg/L (34636)	µg/L (34641)	µg/L (77277)	
Nov 06...	--	--	--	--	--	--	--	--	--	--	--	--	--	--
May 05...	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Aug 12...	<.2	<.42	<.2	<.2	<.4	<.4	<1.6	<2	<.2	<.2	<.36	<.34	<.2	

08290000 RIO CHAMA NEAR CHAMITA, NM—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 12 of 22

[Remark codes: <, less than; E, estimated; M, presence verified but not quantified; R, radchem non-detect, below ssLc.]

Date	4-Cumyl-phenol, water, unfltrd	4-Iso-propyl-toluene, water, unfltrd	4-n-Octyl-phenol, water, unfltrd	Nonyl-phenol, all isomers	4-Nonyl-phenol, di-ethoxylate, wat unf	4-Nonyl-phenol, mono-ethoxylate, wat unf	4t-Octyl-phenol, di-ethoxylate, wat unf	4t-Octyl-phenol, mono-ethoxylate, wat unf	5-Meth-yl-1H- benzo-quinone, water, unfltrd	9,10-Antha-quinone, water, unfltrd	9H-Fluor-ene, water, unfltrd	Ace-naphth-ene, water, unfltrd	
	µg/L (62808)	µg/L (77356)	µg/L (62809)	µg/L (62829)	µg/L (61703)	µg/L (61704)	µg/L (62486)	µg/L (62485)	µg/L (62810)	µg/L (61944)	µg/L (62813)	µg/L (34381)	µg/L (34205)
Nov 06...	--	--	--	--	--	--	--	--	--	--	--	--	--
May 05...	--	--	--	--	--	--	--	--	--	--	--	--	--
Aug 12...	<.2	<.2	<.2	M	<3	<1.6	<.5	<1	<.4	<2	<.2	<.33	<.28

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 13 of 22

[Remark codes: <, less than; E, estimated; M, presence verified but not quantified; R, radchem non-detect, below ssLc.]

Date	Ace-naphth-ylene, water, unfltrd	Acet-amino-phen, water, filtrd,	Aceto-phenone, water, unfltrd	AHTN, water, unfltrd	Albut-erol, water, unfltrd	Anthra-congenr 47, water, unfltrd	BDE Benzene water, unfltrd	Benzo-[a]-anthra-cene, water, unfltrd	Benzo-[a]-pyrene, water, unfltrd	Benzo-[b]-fluor-anthene, water, unfltrd	Benzo-[ghi]-per-ylene, water, unfltrd	Benzo-[k]-fluor-anthene water, unfltrd	
	µg/L (34200)	µg/L (62000)	µg/L (62811)	µg/L (62812)	µg/L (62020)	µg/L (34220)	µg/L (63147)	µg/L (34030)	µg/L (34526)	µg/L (34247)	µg/L (34230)	µg/L (34521)	µg/L (34242)
Nov 06...	--	--	--	--	--	--	--	--	--	--	--	--	--
May 05...	--	--	--	--	--	--	--	--	--	--	--	--	--
Aug 12...	<.30	<.080	<.4	<.2	<.060	<.39	<.3	<.1	<.26	<.33	<.40	<.4	<.4

08290000 RIO CHAMA NEAR CHAMITA, NM—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 14 of 22

[Remark codes: <, less than; E, estimated; M, presence verified but not quantified; R, radchem non-detect, below ssLc.]

Date	Benzyl n-butyl phenone water, unfltrd	Benzyl phthal- ate, water, unfltrd	beta- Sitos- terol,	beta- Stigmas-	Bis(2- chloro- ethoxy)	Bis(2- chloro- ethyl)	Bis(2- chloro- iso- propyl)	Bis(2- ethyl- hexyl)	Bisphe- nol A,	Bis(2- ethyl- hexyl)	Bromo- chloro- methane	Bromo- chloro- methane	Bromo- di- chloro- methane	Caf- feine, water, unfltrd
	µg/L (62814)	µg/L (34292)	µg/L (62815)	µg/L (61948)	µg/L (34278)	µg/L (34273)	µg/L (34283)	µg/L (39100)	µg/L (62816)	µg/L (81555)	µg/L (77297)	µg/L (32101)	µg/L (50305)	
Nov 06...	--	--	--	--	--	--	--	--	--	--	--	--	--	
May 05...	--	--	--	--	--	--	--	--	--	--	--	--	--	
Aug 12...	<.2	<2	<2	<2	<.2	<.30	<.38	<2	<.4	<.2	<.2	<.1	<.200	

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 15 of 22

[Remark codes: <, less than; E, estimated; M, presence verified but not quantified; R, radchem non-detect, below ssLc.]

Date	Caf- feine, water, unfltrd	Carbam- azepine water, filtrd,	Chloro- benzene water, unfltrd	Chloro- ethane, water, unfltrd	Chloro- methane water, unfltrd	Choles- terol, water, unfltrd	Chrys- ene, water, unfltrd	cis- 1,2-Di- chloro- ethene, water, unfltrd	Codeine water, unfltrd	Cot- inine, water, unfltrd	Coti- mine, water, unfltrd	De- hydro- nife- dipine, water, unfltrd	Di- benzo- [a,h]- anthra- cene, water, unfltrd
	µg/L (81436)	µg/L (62793)	µg/L (34301)	µg/L (34311)	µg/L (34418)	µg/L (62818)	µg/L (34320)	µg/L (77093)	µg/L (62003)	µg/L (62005)	µg/L (61945)	µg/L (62004)	µg/L (34556)
Nov 06...	--	--	--	--	--	--	--	--	--	--	--	--	--
May 05...	--	--	--	--	--	--	--	--	--	--	--	--	--
Aug 12...	<.2	<.040	<.1	<.2	<.2	<2	<.33	<.1	<.040	<.026	<.8	<.080	<.4

08290000 RIO CHAMA NEAR CHAMITA, NM—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 16 of 22

[Remark codes: <, less than; E, estimated; M, presence verified but not quantified; R, radchem non-detect, below ssLc.]

Date	Di-bromo-chloro-methane water, unfltrd	Di-bromo-methane water, unfltrd	Di-chloro-fluoro-methane water, wat unf	Di-chloro-methane water, unfltrd	Di-ethyl phthalate, water, unfltrd	Diltiazem, water, filtrd,	Di-methyl phthalate, water, unfltrd	Di-n-butyl phthalate, water, unfltrd	Di-n-octyl phthalate, water, unfltrd	Diphen-hydramine, water, filtrd,	D-Limonene, water, unfltrd	Ethyl-benzene, water, unfltrd	Fluor-anthene, water, unfltrd
	µg/L (32105)	µg/L (30217)	µg/L (34668)	µg/L (34423)	µg/L (34336)	µg/L (62008)	µg/L (34341)	µg/L (39110)	µg/L (34596)	µg/L (62796)	µg/L (62819)	µg/L (34371)	µg/L (34376)
Nov 06...	--	--	--	--	--	--	--	--	--	--	--	--	--
May 05...	--	--	--	--	--	--	--	--	--	--	--	--	--
Aug 12...	<.2	<.2	<.2	<.2	<.61	<.080	<.4	<1	<.6	<.040	E.1	<.1	<.30

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 17 of 22

[Remark codes: <, less than; E, estimated; M, presence verified but not quantified; R, radchem non-detect, below ssLc.]

Date	Hexa-chloro-buta-diene, water, unfltrd	Hexa-chloro-penta-diene, water, wat unf	Hexa-chloro-ethane, water, unfltrd	Indeno-[1,2,3-cd]-pyrene, water, unfltrd	Indole, water, unfltrd	Isoborneol, water, unfltrd	Iso-phorone, water, unfltrd	Iso-propylbenzene, water, unfltrd	Iso-quinoline, water, unfltrd	Menthol, water, unfltrd	Methyl salicylate, water, unfltrd	Methyl t-butyl ether, water, unfltrd	
	µg/L (39702)	µg/L (34386)	µg/L (34396)	µg/L (62823)	µg/L (34403)	µg/L (62824)	µg/L (62825)	µg/L (34408)	µg/L (77223)	µg/L (62826)	µg/L (62827)	µg/L (62828)	µg/L (78032)
Nov 06...	--	--	--	--	--	--	--	--	--	--	--	--	--
May 05...	--	--	--	--	--	--	--	--	--	--	--	--	--
Aug 12...	<.2	<.4	<.2	<.2	<.4	<.2	<.2	<.4	<.2	<.2	<.2	<.2	<.2

08290000 RIO CHAMA NEAR CHAMITA, NM—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 18 of 22

[Remark codes: <, less than; E, estimated; M, presence verified but not quantified; R, radchem non-detect, below ssLc.]

Date	Naph-	n-Butyl	Nitro-	N-	N-	n-	sec-						
	alene, water, unfltrd	benzene water, unfltrd	benzene water, unfltrd	-di-methyl- amine, wat unf	-di-n-propyl- amine, wat unf	-di-n-phenyl- amine, wat unf	Propyl- benzene water, unfltrd	Organic carbon, water, filtrd,	Organic carbon, water, unfltrd	Phenan- threne, water, unfltrd	Phenol, water, unfltrd	Pyrene, water, unfltrd	Butyl- benzene water, unfltrd
	µg/L (34696)	µg/L (77342)	µg/L (34447)	µg/L (34438)	µg/L (34428)	µg/L (34433)	µg/L (77224)	mg/L (00681)	mg/L (00680)	µg/L (34461)	µg/L (34694)	µg/L (34469)	µg/L (77350)
Nov 06...	--	--	--	--	--	--	--	4.0	--	--	--	--	--
May 05...	--	--	--	--	--	--	--	8.9	--	--	--	--	--
Aug 12...	<.5	<.2	<.2	<.2	<.4	<.4	<.2	3.8	5.2	<.32	<.4	<.35	<.2

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 19 of 22

[Remark codes: <, less than; E, estimated; M, presence verified but not quantified; R, radchem non-detect, below ssLc.]

Date	Sulfa- methox- Styrene water, unfltrd	tert- Butyl- azole, benzene water, filtrd,	Tetra- chloro- ethene, water, unfltrd	Tetra- chloro- methane water, unfltrd	Toluene water, unfltrd	trans- 1,2-Di- chloro- ethene water, unfltrd	Tri- bromo- methane water, unfltrd	Tri- butyl- phosphate, water, unfltrd	Tri- chloro- ethene, water, unfltrd	Tri- chloro- methane water, unfltrd	Tri- fluoro- methane water, unfltrd	Tri- chloro- methane water, unfltrd	Tri- closan, water, unfltrd
	µg/L (77128)	µg/L (62021)	µg/L (77353)	µg/L (34475)	µg/L (32102)	µg/L (34010)	µg/L (34546)	µg/L (32104)	µg/L (62832)	µg/L (39180)	µg/L (34488)	µg/L (32106)	µg/L (61708)
Nov 06...	--	--	--	--	--	--	--	--	--	--	--	--	--
May 05...	--	--	--	--	--	--	--	--	--	--	--	--	--
Aug 12...	<.1	<.160	<.2	<.1	<.2	<.1	<.1	<.2	<.2	<.1	<.2	<.1	<.2

08290000 RIO CHAMA NEAR CHAMITA, NM—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 20 of 22

[Remark codes: <, less than; E, estimated; M, presence verified but not quantified; R, radchem non-detect, below ssLc.]

Date	Tri-ethyl citrate water, unfltrd	Tri-methoprim, water, unfltrd	Tri-phenyl phosphate, water, unfltrd	Tris(2-phenoxyethyl) phosphate, water unf	Tris(2-chloroethyl) phosphate, water unf	Tris-(diCl-i-Pr) phosphate, water unf	Vinyl chloride, water, unfltrd	Warfarin, water, fltrd, unfltrd	Xylene, water, unfltrd	Am-241, suspnd	Pu-238, suspnd	Pu-240, suspnd	Alpha radioactivity water, fltrd, Th-230,
	µg/L (62833)	µg/L (62023)	µg/L (62834)	µg/L (62830)	µg/L (62831)	µg/L (61707)	µg/L (39175)	µg/L (62024)	µg/L (81551)	pCi/g (49980)	pCi/g (49974)	pCi/g (49976)	pCi/L (04126)
Nov 06...	--	--	--	--	--	--	--	--	--	--	--	--	--
May 05...	--	--	--	--	--	--	--	--	--	--	--	--	--
Aug 12...	<.2	<.020	<.2	<.2	<.2	<.2	<.2	<.100	<.2	R-.03	R-.005	R.000	R.7

WATER-QUALITY DATA
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009

Part 21 of 22

[Remark codes: <, less than; E, estimated; M, presence verified but not quantified; R, radchem non-detect, below ssLc.]

Date	Gross beta radioac	Pu-239 +	Ra-226, water, filtrd, radon method	Pu-240, water, filtrd, radon method	Ra-228, water, filtrd, radon method	Sr-90, water, filtrd, radon method	Tritium, water, unfltrd	Uranium natural water, filtrd, radon method	U-234, water, filtrd, radon method	U-235, water, filtrd, radon method	U-238, water, filtrd, radon method	Suspnd. sediment sieve diametr percent <0.0625 mm	
	Am-241, water, filtrd, Cs-137, pCi/L (29867)	Pu-238, water, filtrd, Cs-137, pCi/L (03515)	Pu-240, water, filtrd, Cs-137, pCi/L (22001)	Pu-240, water, filtrd, Cs-137, pCi/L (49940)	Pu-240, water, filtrd, Cs-137, pCi/L (09511)	Pu-240, water, filtrd, Cs-137, pCi/L (81366)	Pu-240, water, filtrd, Cs-137, pCi/L (13503)	Pu-240, water, filtrd, Cs-137, pCi/L (07000)	Pu-240, water, filtrd, Cs-137, pCi/L (22703)	Pu-240, water, filtrd, Cs-137, pCi/L (22610)	Pu-240, water, filtrd, Cs-137, pCi/L (22620)	Pu-240, water, filtrd, Cs-137, pCi/L (22603)	
Nov 06...	--	--	--	--	--	--	--	3.11	--	--	--	--	95
May 05...	--	--	--	--	--	--	--	.72	--	--	--	--	--
Aug 12...	R-.05	1.2	R-.004	R-.007	.060	R.14	.07	23.9	.63	.41	R.006	.27	--

08290000 RIO CHAMA NEAR CHAMITA, NM—Continued

**WATER-QUALITY
DATA
WATER YEAR
OCTOBER 2008 TO
SEPTEMBER 2009**

Part 22 of 22

[Remark codes:

<, less than;

E, estimated;

M, presence verified
but not quantified;

R, radchem non-
detect, below ssLc.]

Date	Sus- pended sediment concen- tration mg/L (80154)
Nov 06...	114
May 05...	<.5
Aug 12...	--