

CHEMICAL ANALYSIS
WATER SOURCES

MONTERRAT WATER AUTHORITY
CHEMICAL ANALYSIS - WATER SOURCES
FEBRUARY '97

Sampling Date	Water Type	Location	Temp. C	pH	Conductivity mS/cm	TDS g/l	Fluoride mg/l	Chloride mg/l	Sulphate mg/l	Analysis Date
	Untreated	Spring Source								
02/20/97	Drinking water	Blackwood	22.9	6.21	0.326	0.163	0.40	50	ND	02/21/97
02/20/97	Drinking water	Underwood	22.4	6.19	0.327	0.163	0.35	38	ND	02/21/97
02/20/97	Drinking water	Gingerground	22.5	7.13	0.320	0.160	0.25	38	3	02/21/97
02/20/97	Drinking water	Fogarthly	22.6	7.30	0.316	0.158	0.20	46	ND	02/21/97
		Olveston:								
02/20/97	Drinking water	1st. catchment	23.0	7.73	0.292	0.146	0.10	40	ND	02/21/97
02/20/97	Drinking water	2nd. catchment	23.2	7.03	0.267	0.133	0.10	28	ND	02/21/97
02/20/97	Drinking water	3rd. catchment	23.0	7.09	0.267	0.133	0.20	36	ND	02/21/97
		Hope:								
02/20/97	Drinking water	Upper left catchment	18.2	7.10	0.280	0.140	0.05	33.5	ND	02/21/97
02/20/97	Drinking water	2nd. catchment	17.6	7.73	0.258	0.129	0.20	20.5	ND	02/21/97
02/20/97	Drinking water	Upper right catchment	17.5	7.48	0.282	0.141	0.20	41	ND	02/21/97
02/20/97	Drinking water	right of upper left	18.0	6.51	0.243	0.121	0.10	18.8	ND	02/21/97
		Lawyer's:								
02/20/97	Drinking water	left catchment	17.8	7.10	0.271	0.135	0.10	35.5	ND	02/21/97
02/20/97	Drinking water	3rd. catchment	18.1	7.61	0.259	0.129	0.20	21.8	5	02/21/97
02/20/97	Drinking water	2nd. catchment	17.6	7.73	0.258	0.129	0.20	20.5	ND	02/21/97
02/20/97	Drinking water	Quashie	17.7	7.32	0.259	0.129	0.10	22.5	ND	02/21/97

WHO GUIDELINE VALUES

pH: 6.5 -8.5
TDS: 10 g/l
Fluorides 1.5 mg/l
Chlorides: 250 mg/l
Sulphates 250 mg/l

**MONTSERRAT WATER AUTHORITY
CHEMICAL ANALYSIS: WATER SOURCES
MAY '97**

Sampling Date	Sampling Time	Location	Temp. °C	pH	Conductivity mS/cm	TDS g/l	Fluorides mg/l	Chlorides mg/l	Sulphat mg/l	Analysis Date
05/23/97	9:54	Ginger Ground: 1st Catchment	24.7	8.14	0.329	0.165	0.25	45	ND	05/24/97
05/23/97	10:36	2nd. Catchment	24.0	6.34	0.330	0.166	0.35	50	ND	05/24/97
05/23/97	10:19	1st. Catchment	23.6	6.67	0.398	0.199	0.30	54	7	05/24/97
Fogarty:										
05/09/97	7:15	1st Catchment	22.7	7.69	0.282	0.141	0.10	60	ND	05/12/97
05/09/97	7:12	4th. Catchment	22.7	7.53	0.310	0.155	0.10	44	ND	05/12/97
Lawyer's:										
05/09/97	11:02	1st Catchment	23.4	7.67	0.255	0.127	0.10	46	ND	05/12/97
05/09/97	11:05	Middle Catchment	23.3	7.95	0.255	0.127	0.05	44	3	05/12/97
05/09/97	11:08	Left Catchment	23.3	7.87	0.255	0.127	0.05	46	ND	05/12/97
05/09/97	11:12	Top Catchment	23.4	7.30	0.259	0.129	0.10	40	ND	05/12/97
05/09/97	11:16	Uppermost Catchment	23.1	7.19	0.257	0.128	0.05	42	ND	05/12/97
Quashie:										
05/09/97	10:37	2nd Catchment	23.1	7.85	0.259	0.129	0.10	45	ND	05/12/97
05/09/97	10:40	4th Catchment	23.2	7.50	0.259	0.129	0.10	44	3	05/12/97
Oliveston:										
05/09/97	6:31	1st. Catchment	23.1	7.23	0.268	0.134	0.20	44	3	05/12/97
05/09/97	6:33	2nd Catchment	23.0	7.34	0.267	0.133	0.05	41	3	05/12/97
05/09/97	6:37	3rd. Catchment	23.0	7.27	0.275	0.137	0.10	44	ND	05/12/97
Hope:										
05/09/97	10:03	Upper left Catchment	23.1	7.52	0.281	0.140	0.10	32	ND	05/12/97
05/09/97	10:13	2nd. Catchment	22.7	7.67	0.275	0.137	0.05	50	ND	05/12/97
05/09/97	10:09	Upper right Catchment	22.9	7.90	0.291	0.145	0.10	40	3	05/12/97
05/09/97	10:06	Upper mid. Catchment	23.0	6.96	0.268	0.134	0.10	56	ND	05/12/97

CHEMICAL ANALYSIS: WATER SOURCES
JULY '97

Sampling Date	Sampling Time	Location Spring Source	Temp. °C	pH	Conductivity mS/cm	TDS g/l	Fluorides mg/l	Chlorides mg/l	Sulpha mg/l	Analysis Date
Ginger Ground:										
07/07/97	9:03	Catchment 1-A	24.6	8.34	0.327	0.163	0.35	25	ND	07/07/97
Blackwood:										
07/07/97	10:08	2nd. Catchment	24.1	6.37	0.335	0.167	0.40	44	ND	07/07/97
Underwood:										
07/07/97	9:52	1st Catchment	23.6	6.70	0.418	0.209	0.35	45	7	07/07/97
Fogarty:										
07/07/97	9:13	1st. Catchment	23.0	7.68	0.315	0.157	0.10	46	ND	07/07/97
07/07/97	9:17	4th. Catchment (top)	22.7	7.40	0.308	0.154	0.20	32	ND	07/07/97
Lawyer's:										
07/07/97	7:03	1st. Catchment	23.2	7.44	0.256	0.128	0.10	38	ND	07/07/97
07/07/97	7:07	Middle Catchment	23.4	7.68	0.255	0.127	0.10	41	ND	07/07/97
07/07/97	7:10	Left Catchment	23.4	7.73	0.255	0.127	0.05	43	ND	07/07/97
07/07/97	7:14	Top Catchment	23.1	7.35	0.256	0.128	0.05	41	ND	07/07/97
07/07/97	7:17	Uppermost Catchment	23.1	7.09	0.255	0.127	0.20	45	ND	07/07/97
Quashje:										
07/07/97	7:44	Left Catchment	23.0	7.50	0.258	0.129	0.10	38	ND	07/07/97
07/07/97	7:48	Catchment under trunk	23.1	7.76	0.259	0.129	0.20	36	ND	07/07/97
07/07/97	7:51	2nd Catchment	23.2	7.73	0.258	0.129	0.10	41	ND	07/07/97
Olveston:										
07/07/97	6:40	1st. Catchment	23.1	7.41	0.268	0.134	0.20	40	ND	07/07/97
07/07/97	6:43	2nd. Catchment	23.0	7.32	0.267	0.133	0.10	22	ND	07/07/97
07/07/97	6:48	3rd Catchment	23.3	7.08	0.272	0.136	0.10	40	ND	07/07/97
Hope:										
07/07/97	8:15	Upper left Catchment	23.0	7.29	0.282	0.141	0.05	32	ND	07/07/97
07/07/97	8:19	2nd. Catchment	22.8	7.65	0.277	0.138	0.25	28	ND	07/07/97
07/07/97	8:23	Upper right Catchment	22.8	7.86	0.294	0.147	0.20	58	7	07/07/97
07/07/97	8:28	Upper mid. Catchment	22.9	7.15	0.278	0.139	0.20	40	3	07/07/97

**MOUNTAIN VULCAN OBSERVATORY
RAINWATER ANALYSIS
MAY '97**

Sampling Date	Location	Temp C	pH	Conductivity mS/cm	TDS g/l	Fluoride mg/l	Chloride mg/l	Sulphate mg/l	Analysis Date
05/11/97	Weekes	26.7	5.56	0.051	0.025	0.25	11.8	3	05/11/97
05/11/97	Police Head Quarters	27.1	2.98	*	*	*	*	*	05/11/97
05/11/97	Amersham, Upper	26.8	2.69	1.525	0.764	0.85	166	37	05/11/97
05/11/97	Upper Amersham trough	26.7	7.74	0.284	0.141	0.20	38	ND	05/11/97
05/11/97	Trial's Reservoir, O'flow	26.8	7.78	0.776	0.388	0.40	103	38	05/11/97
05/17/97	Weekes	29.1	3.82	0.272	0.136	0.65	50	37	05/18/97
05/17/97	Police Head Quarters	29.2	2.73	3.51	1.75	ND	710	560	05/18/97
05/17/97	Amersham, Upper	29.3	2.42	2.45	1.22	ND	315	107	05/18/97
05/17/97	Amersham, Lower	29.1	2.78	4.26	2.13	ND	760	97	05/18/97
05/25/97	Weekes	27.5	2.61	1.286	0.644	>1.50	133	5	05/25/97
05/25/97	Amersham, Upper	27.4	1.96	7.24	3.62	0.20	1000	93	05/25/97
05/25/97	Amersham, cattle trough	27.5	7.72	0.335	0.168	0.55	56	ND	05/25/97
05/25/97	Trial's Reservoir, O'flow	27.4	7.86	0.827	0.414	0.35	112	42	05/25/97
05/27/97	Hope	25.4	2.81	0.739	0.370	>1.50	70	ND	05/27/97
05/28/97	Weekes	28.3	2.52	1.557	0.778	>1.50	126	ND	05/29/97
05/28/97	Molyneux	28.3	2.57	1.312	0.657	>1.50	94	7	05/29/97
05/28/97	Dyer's	28.2	2.84	0.702	0.351	1.40	80	3	05/29/97
05/28/97	Lawyer's	28.3	3.03	0.460	0.230	1.25	52	ND	05/29/97
05/28/97	M V O	28.3	2.76	0.813	0.432	>1.50	80	3	05/29/97

insufficient quantities for analysis of other parameters

WHO GUIDELINE VALUES

pH: 6.5 - 8.5
TDS: 1.0 g/l
Fluorides: 1.5 mg/l
Chlorides: 250 mg/l
Sulphates: 250 mg/l

**RAINWATER ANALYSIS
APRIL '97**

Sampling Date	Location	Temp. C	pH	Conductivity mS/cm	TDS g/l	Fluoride mg/l	Chloride mg/l	Sulphate mg/l	Analysis Date
04/06/97	Weekes	*	*	0.653	0.327	>1.50	100.0	124	04/16/97
04/06/97	Police Head Quarters	*	*	1.015	0.508	**	**	**	04/16/97
04/06/97	Amersham, Lower	*	*	1.223	0.613	**	**	**	04/16/97
04/06/97	Amersham, Upper	*	*	1.291	0.647	**	**	**	04/16/97
04/06/97	Amersham Rd	*	*	2.79	1.39	**	**	**	04/16/97
04/12/97	Weekes	*	*	0.112	0.055	0.55	20.0	3	04/16/97
04/12/97	Police Head Quarters	*	*	0.243	0.121	>1.50	28.5	**	04/16/97
04/12/97	Amersham, Lower	*	*	0.300	0.150	>1.50	64	32	04/16/97
04/12/97	Amersham Upper	*	*	0.235	0.117	1.40	135.5	20	04/16/97
04/29/97	Weekes	27.1	5.21	0.223	0.111	1.20	54.0	8	05/12/97
04/29/97	Police Head Quarters	27.4	3.26	0.622	0.311	0.25	**	**	05/12/97
04/29/97	Amersham, Lower	27.4	2.90	1.166	0.584	>1.50	**	**	05/12/97
04/29/97	Amersham, Upper	27.2	2.60	1.902	0.953	0.60	**	**	05/12/97

Problematic pH probe insufficient quantities

WHO GUIDELINE VALUES

pH: 6.5 - 8.5
TDS: 1.0 g/l
Fluorides: 1.5 mg/l
Chlorides: 250 mg/l
Sulphates 250 mg/l

