

Name of Water Supply Zone - Overton zone

Schedule 1 Parameters

	Units	PCV	Number of Samples	Number of Samples > PCV	% > PCV	Number of Samples above Auth dep	% > Auth dep	Min	Mean	Max
COLOUR	mg/l Pt/Co	20	12	0	0	-	-	1.00	1.73	4.00
TURBIDITY	N.T.U.	4	12	0	0	-	-	0.06	0.16	0.32
ODOUR (QUANTITATIVE)	DIL. NO.	3	13	0	0	-	-	0	0	0
TASTE (QUANTITATIVE)	DIL. NO.	3	12	0	0	-	-	0	0	0
HYDROGEN ION	pH value	9	12	0	0	-	-	6.83	7.46	8.00
SODIUM	mg Na/l	200	8	0	0	-	-	4.38	14.84	26.80
NITRATE	mg NO ₃ /l	50	8	0	0	-	-	3.94	5.22	7.40
NITRITE IN ZONES	mg NO ₂ /l	0.5	8	0	0	-	-	<0.004	<0.008	<0.010
NO ₃ NO ₂ CALCULATION		1	8	0	0	-	-	0.08	0.11	0.15
ALUMINIUM	ug Al/l	200	12	1	8.33	-	-	12.00	57.73	289.00
IRON	ug Fe/l	200	12	0	0	-	-	8.00	13.33	30.00
MANGANESE	ug Mn/l	50	12	0	0	-	-	2.00	5.83	11.00
COPPER	mg Cu/l	2	8	0	0	-	-	<0.003	0.016	0.082
ARSENIC	ug As/l	10	8	0	0	-	-	<0.20	0.24	0.30
CADMIUM	ug Cd/l	5	8	0	0	-	-	<0.02	0.02	0.03
CHROMIUM	ug Cr/l	50	8	0	0	-	-	<0.20	0.40	1.30
NICKEL	ug Ni/l	20	8	0	0	-	-	<0.50	1.64	6.20
LEAD	ug Pb/l	10	8	0	0	-	-	0.10	0.31	0.90
ANTIMONY	ug Sb/l	5	8	0	0	-	-	<0.10	0.21	0.50
SELENIUM	ug Se/l	10	8	0	0	-	-	<0.30	0.34	0.40
P.A.H (TOTAL)	ug/l	0.1	8	0	0	-	-	0	<0.003	<0.004
E.COLI	CFU/100ml	0	25	0	0	-	-	N/A	N/A	N/A
ENTEROCOCCI	CFU/100ml	0	8	0	0	-	-	N/A	N/A	N/A
BENZO (a) PYRENE	ug/l	0.01	8	0	0	-	-	0	0.001	<0.002
TOTAL TRIHALOMETHANES	ug/l	100	8	0	0	-	-	30.00	43.03	68.30
BROMATE	ug BrO ₃ /l	10	8	0	0	-	-	<0.20	<0.43	<1.10

Indicator Parameters

	Units	Specification	Number of samples	Number of samples > specification	% > Specification	Min	Mean	Max
AMMONIUM	mg NH ₄ /l	0.5	12	0	0	<0.01	<0.01	<0.02
TOTAL COLIFORMS	CFU/100ml	0	25	1	4	0	0	2
COLONY COUNTS(22C)	CFU/1ml	50	12	0	0	0	16	160
FREE CHLORINE	mg/l	0.05	25	0	0	0.02	0.06	0.30
TOTAL CHLORINE	mg/l	10	25	0	0	0.03	0.08	0.35
COLONY COUNTS(37C)	CFU/1ml	10	12	0	0	0	3	32

Commentary on Water Quality

PAH (Total) calculated from the sum of Benzo (b) fluoranthene, Benzo (k) fluoranthene, Benzo ghi perylene and Indeno (1,2,3-Cd) Pyrene

Total Trihalomethanes calculated from the sum of Chloroform, Bromoform, Dibromochloromethane and Bromodichloromethane

Colony count specification is an internal limit, used to represent no significant change

There was an aluminium exceedence in Overton zone due to issues with Llwyn Onn treatment works. All resamples were satisfactory and there was no water quality impact on Overton zone.

Treatment works supplying: Llwyn Onn TW
Reservoirs supplying: Cinders SR
Estimated population: 8,485

There were no authorised departures or undertakings in this zone.

Name of Supply Point - Llwyn Onn supply point

Volume supplied: 29,428 m³/d

Name of water supply zones supplied by supply point: Brymbo low zone, Cefn zone, Glyndwr south zone, Legacy zone, Llwyn Onn gravity zone, Maelor zone, Overton zone, Southsea and Wrexham zone

Schedule 1 Parameters

	Units	PCV	Number of Samples	Number of Samples > PCV	% > PCV	Number of Samples above Auth dep	% > Auth dep	Min	Mean	Max
FLUORIDE	mg F/l	1.5	8	0	0	-	-	0.02	0.03	0.04
TOTAL CYANIDE	ug CNI	50	8	0	0	-	-	<0.40	0.49	<0.60
MERCURY	ug Hg/l	1	8	0	0	-	-	<0.10	<0.10	<0.10
TOTAL PESTICIDE	ug/l	0.5	8	0	0	-	-	0	0.02	0.04
BORON	mg B/l	1	8	0	0	-	-	0	0.01	0.01
TETRACHLOROMETHANE	ug/l	3	8	0	0	-	-	<0.05	<0.09	<0.10
SUM OF TETRAB AND TRICH	ug/l	10	8	0	0	-	-	0	<0.15	<0.20
1,2 DICHLOROETHANE	ug/l	3	8	0	0	-	-	<0.05	<0.16	<0.20
BENZENE	ug/l	1	8	0	0	-	-	<0.02	<0.04	<0.05
BROMATE	ug BrO3/l	10	8	0	0	-	-	<0.20	<0.39	<1.10
ALDRIN	ug/l	0.03	8	0	0	-	-	<0.002	<0.009	<0.009
ATRAZINE	ug/l	0.1	8	0	0	-	-	<0.001	<0.003	<0.010
BROMOXYNIL	ug/l	0.1	8	0	0	-	-	<0.008	<0.009	<0.010
CHLOROTHALONIL	ug/l	0.1	8	0	0	-	-	<0.010	<0.010	<0.011
CLOPYRALID	ug/l	0.1	8	0	0	-	-	<0.010	<0.010	<0.010
DIAZINON	ug/l	0.1	8	0	0	-	-	<0.002	<0.004	<0.010
DIELDRIN	ug/l	0.03	8	0	0	-	-	<0.003	<0.004	<0.005
FENPROPIMORPH	ug/l	0.1	8	0	0	-	-	<0.007	<0.008	<0.010
FLUROXYPYR	ug/l	0.1	8	0	0	-	-	<0.004	<0.006	<0.010
HEPTACHLOR	ug/l	0.03	8	0	0	-	-	<0.001	<0.004	<0.005
HEPTACHLOR EPOXIDE	ug/l	0.03	8	0	0	-	-	<0.003	<0.006	<0.007
ISOPROTURON	ug/l	0.1	7	0	0	-	-	<0.002	<0.003	<0.010
LINURON	ug/l	0.1	8	0	0	-	-	<0.010	<0.010	<0.010
MECOPROP	ug/l	0.1	8	0	0	-	-	<0.004	<0.006	<0.010
MCPA	ug/l	0.1	8	0	0	-	-	<0.003	<0.009	<0.030
MCPB	ug/l	0.1	8	0	0	-	-	<0.007	<0.008	<0.010
PROPETAMPHOS	ug/l	0.1	8	0	0	-	-	<0.002	<0.004	<0.010
TRIFLURALIN	ug/l	0.1	8	0	0	-	-	<0.007	<0.008	<0.010
2,4-DB	ug/l	0.1	8	0	0	-	-	<0.007	<0.008	<0.010
PENDIMETHALIN	ug/l	0.1	8	0	0	-	-	<0.010	<0.010	<0.010
TRICLOPYR	ug/l	0.1	8	0	0	-	-	<0.003	0.005	<0.010
ASULAM	ug/l	0.1	8	0	0	-	-	<0.010	<0.018	<0.020
FLUSILAZOLE	ug/l	0.1	8	0	0	-	-	<0.004	<0.006	<0.010
CHLORMEQUAT	ug/l	0.1	8	0	0	-	-	<0.010	<0.078	<0.100
EPOXICONAZOLE	ug/l	0.1	8	0	0	-	-	<0.006	<0.007	<0.010

Indicator Parameters

	<i>Units</i>	<i>Specification</i>	<i>Number of samples</i>	<i>Number of samples > specification</i>	<i>% > Specification</i>	<i>Min</i>	<i>Mean</i>	<i>Max</i>
SULPHATE	mg SO ₄ /l	250	8	0	0	34.00	41.81	56.70
TOTAL ORGANIC CARBON	mgC/l	50	8	0	0	1.20	1.59	2.10
CLOSTRIDIUM PERFRINGENS	CFU/100ml	0	105	2	1.9	N/A	N/A	N/A
CONDUCTIVITY	uS/cm	2500	105	0	0	12	223	312
CHLORIDE	mg Cl/l	250	8	0	0	15.60	21.83	28.00
RADIO.ALPHA	Bq/l	0.1	8	0	0	0.02	0.02	0.03
RADIO.BETA	Bq/l	1	8	0	0	0.04	0.10	0.18

Specification for Total Organic Carbon is an internal limit, based on no abnormal change
 Total Pesticides parameter is calculated from the sum of all pesticides analysed on any sample
 Gross Alpha and Gross Beta specifications are used to ensure the Total Indicative Dose value of 0.1mSv/Year is not exceeded

There was an Isoproturon shortfall at Llwyn Onn due to loss of a sample during transit to laboratory.