

THE SOUTH STAFFORDSHIRE WATERWORKS COMPANY
REGROUPING - UTTOXETER U.D.C. AND UTTOXETER R.D.C. WATER UNDERTAKINGS
DETAILS OF PUMPING STATIONS AND BOOSTER STATIONS

| Name | Date Installed | Wells | | Boreholes | | Lic- enced Yield M.G.D. | Engine House Floor Level A.O.D. | Delivery Head Above E.H.F.L. | Prime Mover | Total H.P. | Total Capa- city M.G.D. | Treat- ment |
|---|--|-------------------------|-----------------------|-----------|---------------|----------------------------------|--|---------------------------------------|----------------------|--------------------|----------------------------------|----------------|
| | | Dia. | Depth | Dia. | Max. Depth | | | | | | | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) |
| <u>Pumping Stations</u> Mayfield B.H. | 1912 No.1 Sub. 1953 No.2 Sub. 1958 | | | 10 1/4" | 254'6" | 0.180 | 438.66 | 220' | Electric Electric | (1)12.5 (2)25 | .100 .132 | C C |
| | | | | 18" | 320' | | | | | | | |
| Crumpwood Springs | 1924 | 5'0" 3'6" 5'0"sq. | 7'9" 4'0" 10'6" | | | 0.40 | | | | | | C |
| Crumpwood (Pumps Crumpwood Springs and Hulme Springs Water) | No.1 1924 | | | | | | 306.0 | 240' | Turbine | (1)11 (2)11 | .120 .120 | C C |
| | No.2 1937 | | | | | | 306.6 | 240' | Electric | (3)11 (4)30 | .120 .360 | C C |
| Hulme Springs Bores | 1937 | | | 6" 6" | 100' 100' | 0.40 | | | | | | None C |
| <u>Boosters</u> Mayfield Booster | | | | | | | 639 | 440' | Electric | (1)15 (2)15 | .072 .072 | |
| Bramshall Booster | 1954 | | | | | | | 280' | Electric | (1)17.5 (2)17.5 | .122 .122 | |

A.O.D. = Above Ordnance Datum M.G.D. = Millions of Gallons per day
E.H.F.L. = Engine House Floor Level C. = Chlorination.
H.P. = Horse Power

TO BE KEPT AT THE HEAD OF THE FILE.

16th. August, 1947.

UTTOXETER URBAN DISTRICT COUNCIL.

BRAMSHALL WATERWORKS.

On Saturday August 16th. I interviewed Mr. Hawthorn Clerk to the Council for the purpose of discussing in detail the obligations of the Council in connection with the provision of Compensation Water as laid down in the Uttoxeter Water Act, 1892 Clause 18, when it was agreed that the Councils responsibilities comprised of water to the water troughs which were situated in land belonging to Lord Willoughby de Broke the Vendor concerned at the time the Bramshall supply was negotiated, and in detail consists of the troughs in the North East corner of Mr Armetts field near the roadway leading from the Bramshall Road to the Council's Main Collecting and Compensation Water Chamber, the trough on land now belonging to Mr. Steele and situated on the opposite side of the roadway mentioned above and near to the same chamber, and thirdly to the troughs situated in land now belonging to Mr. Statham and situated to the North of the Main Collecting and Compensation Water Chamber.

The total amount to be supplied in this way is to be equal to $\frac{1}{4}$ the total supply, the surplus from which passes on to land at a lower level and belonging to other owners, not forming part of the Walloughby de Broke Estate.

Having supplied a continuous supply in this manner, the obligations of the Council were considered to have been fully met.

Extract from Minutes of Meetings held 31st July, 1944.

Health Committee.

Councillor E. M. Mellor as Chairman of the Committee will move the following recommendations, viz:-

1. Water Supply. That an application be made immediately to the Uttoxeter Rural District Council, and through them to the Ministry of Supply for a supply to nine houses on the fringe of Bramshall.
2. That the Order of execution of the general scheme of water supply be as follows:-
 - (a) New 9" rising main from Crumpwood to Prestwood.
 - (b) An additional service reservoir at the Bramshall Water Works to be provided, the capacity to be left undecided until the estimated cost of a Reservoir of 250,000 gallons and one of 500,000 gallons has been provided by the Surveyor.
 - (c) That negotiations to be opened for the purchase of the necessary land sufficient for a Reservoir of 500,000 gallons.
 - (d) That in view of the consideration of the Council of a comprehensive supply, Uttoxeter Rural District Council be asked what amount of water they will require now and in the near future.

STAFFORDSHIRE POTTERIES WATER BOARD

Telephone : 2218 STOKE-ON-TRENT

P. WILKINSON, Assoc. M.Inst. C.E.
ENGINEER

YOUR REFERENCE

ENGINEER'S OFFICE,

ALBION STREET,

HANLEY,

STOKE-ON-TRENT.

IN REPLY PLEASE QUOTE

PW/WT

10th November 1943.

Dear Mr. Proud:

I wish to acknowledge receipt of the papers on the "Legal Rights in Underground Waters."

I also return a letter addressed to Mr. Hawthorn which was evidently sent to me in error.

Yours faithfully,

Enc:

P. Wilkinson

S.S. Proud, Esq.,
Uttoxeter U.D.C.,
Town Hall,
Uttoxeter,
Staffs.

All communications on
this subject to be
addressed to
THE ENGINEER

.....
Ellastone and Wootton Water Supplies.

Letter read from the Ministry of Health asking if the Council had yet reached a decision to afford a supply of water to the above Parishes.

That a supply of water not exceeding 8,000 gallons a day be afforded to these Parishes at the rate of 1/- per 1,000 gallons subject to a minimum half-yearly payment by the Uttoxeter Rural District Council of a sum of £36.10.00

.....

W4

26th April 1935.

6600) 215836 (32
19800
-17830

INFORMATION FROM MR. SNART FOR MEETING
ON 26th APRIL 1935.

Water Supplies. Maximum per day at

| Location | Maximum per day | Half Year March 1938 |
|--------------------------------|-----------------|----------------------|
| Denstone | 5,000 gallons. | Present supply 3153. |
| <i>Increase 30000</i> Rocester | 25,000 " | do 9662 |
| Bramshall | 5,000 " | do 3973 |
| Stramshall | 5,000 " | do 2653 |
| <i>Overidge</i> | <u>40000</u> | <u>9014</u> |

28455

Consider supply to Ellastone & Wootton.

Maximum Quantity.

Price per 1,000 gallons.

261945 gals per day
less metered supplies 46109
within district
215836
6600 = 32 gals per head per day

1/- per 1,000 the other supplies.

Maximum quantity required for Ellastone & Wootton
15,000 gallons per day

Present consumption = From consumption

| | | | |
|-------------------------|--------|-----------------------|---------------|
| 21 hrs @ 10000 per hour | 210000 | " Somerset | 32400 |
| | | " Bramshall | 48000 |
| | | | <u>290400</u> |
| | | less metered supplies | 28455 |
| | | outside district | <u>261945</u> |

Population 8

with water taken as 6600

$\frac{261945}{6600} = 40$ gals per head per day

COPY.

C H A R T .

SHOWING THE STRATA PASSED THROUGH AT MR. STRETCH'S BOREHOLE,
ASH LEA, UTTOXETER.

| | | | | | | | ft. | In. | Ft. | In. |
|---------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Mould. | ... | ... | ... | ... | ... | ... | 1 | 6 | | |
| Gravel. | ... | ... | ... | ... | ... | ... | 9 | 6 | 11 | 0 |
| Red Sand. | ... | ... | ... | ... | ... | ... | 1 | 0 | 12 | 0 |
| Gravel $\frac{1}{2}$ | ... | ... | ... | ... | ... | ... | 8 | 0 | 20 | 0 |
| Red Sandy Marl. | ... | ... | ... | ... | ... | ... | 19 | 6 | 39 | 9 |
| Light Sandstone. | ... | ... | ... | ... | ... | ... | | 6 | 40 | 0 |
| Red Marl. | ... | ... | ... | ... | ... | ... | 40 | 0 | 80 | 0 |
| Blue Marl. | ... | ... | ... | ... | ... | ... | 3 | 6 | 83 | 6 |
| Red Marl. | ... | ... | ... | ... | ... | ... | 12 | 6 | 96 | 6 |
| Red Shale. | ... | ... | ... | ... | ... | ... | 6 | 0 | 102 | 0 |
| Red Marl. | ... | ... | ... | ... | ... | ... | 38 | 0 | 140 | 0 |
| Hard Red Shale. | ... | ... | ... | ... | ... | ... | 60 | 0 | 200 | 0 |
| Hard Red Sandstone. | ... | ... | ... | ... | ... | ... | 6 | 0 | 206 | 0 |
| Hard Red Shale. | ... | ... | ... | ... | ... | ... | 9 | 0 | 215 | 2 |
| Light Green Rock. | ... | ... | ... | ... | ... | ... | 1 | 6 | 216 | 6 |
| Hard Red Shale. | ... | ... | ... | ... | ... | ... | 83 | 6 | 302 | 0 |
| Hard Grey Rock. | ... | ... | ... | ... | ... | ... | 8 | 0 | 310 | 0 |
| Grey Rock and Red Shale. | ... | ... | ... | ... | ... | ... | 38 | 6 | 348 | 6 |
| Hard Shale and Gypsum. | ... | ... | ... | ... | ... | ... | 10 | 0 | 358 | 6 |
| Red Sand. | ... | ... | ... | ... | ... | ... | | 6 | 359 | 0 |
| Hard Red Shale. | ... | ... | ... | ... | ... | ... | 15 | 6 | 374 | 6 |
| Red Mottled Marl. | ... | ... | ... | ... | ... | ... | 89 | 6 | 464 | 0 |
| Hard Red Sandstone. | ... | ... | ... | ... | ... | ... | 6 | 6 | 470 | 6 |
| Hard Red Marl. | ... | ... | ... | ... | ... | ... | 10 | 6 | 481 | 0 |
| Hard Red Sandstone. | ... | ... | ... | ... | ... | ... | 1 | 6 | 482 | 6 |
| Hard Red Marl. | ... | ... | ... | ... | ... | ... | 8 | 0 | 490 | 6 |
| Hard Red Sandstone. | ... | ... | ... | ... | ... | ... | 5 | 9 | 496 | 3 |
| Hard Red Marl. | ... | ... | ... | ... | ... | ... | 19 | 9 | 516 | 0 |
| Hard Red Marl and Gypsum. | ... | ... | ... | ... | ... | ... | 16 | 10 | 532 | 10 |
| Grey Sandstone. | ... | ... | ... | ... | ... | ... | 6 | 9 | 539 | 7 |
| Hard Red Marl. | ... | ... | ... | ... | ... | ... | 13 | 5 | 553 | 0 |
| Grey Sandstone. | ... | ... | ... | ... | ... | ... | 25 | 6 | 578 | 6 |
| Hard Red Marl. | ... | ... | ... | ... | ... | ... | 5 | 0 | 583 | 6 |
| Red Sandstone. | ... | ... | ... | ... | ... | ... | 10 | 3 | 593 | 9 |
| Hard Red Marl. | ... | ... | ... | ... | ... | ... | 6 | 9 | 600 | 6 |
| Grey and Red Sandstone. | ... | ... | ... | ... | ... | ... | 69 | 6 | | |

COPY.

10, Victoria Street,
Wolverhampton.
June 19th 1905.

CERTIFICATE to Messrs. Willcox & Haikes, Birmingham.
SAMPLE of "Water from New Bore Hole, at Uttoxeter,"
received 10th inst.

| | Grains per gallon. |
|--|--------------------|
| Total solid matter dried at 212°F. | 37.8 |
| Free and Saline Ammonia | 0.0127 |
| Albuminoid | 0.0007 |
| Nitric Nitrogen | 0.00 |
| Combined Chlorine... | 2.87 |
| Oxygen absorbed in 4 hrs @ 80°F. | 0.000 |
| Injurious Metallic contamination | None. |
| Color thro' 2 feet.. . . . very pale bluish green tinge. | |
| Appearance, clear | clear. |
| Hardness before boiling... | 10.0° |
| " after " | 3.0 |
| Temporary Hardness. | 7.0 |

The above is the usual tabulation for shewing the character of a water for drinking and household purposes, but in the case of an entirely new source of supply it is desirable to know something of its saline constituents, hence the following :-

| | Grains per gallon. |
|---|--------------------|
| Lime | 3. 64 |
| Magnesia | 1. 19 |
| Soda | 14.57 |
| Potash | 0.23 |
| Silicia | 0.59 |
| Sulphuric Acid (SO ₃) | 3. 61 |
| Chlorine | 2.87 |
| Carbonic Acid. (CO ₂) | 10.85 |
| Combined Water, &c. | 0.91 |
| | <u>38.46</u> |
| Less Oxygen for Chlorine.. . . . | 0.66 |
| | <u>37.80</u> |

Probably combined as follows:-

| | |
|------------------------------|--------------|
| Carbonate of Lime | 6.50 |
| " " Magnesia | 2.50 |
| Chloride of Sodium | 4.73 |
| Carbonate of Soda | 16.10 |
| Sulphate of Soda | 6.05 |
| " " Potash | 0.42 |
| Silicia | 0.59 |
| Combined Water, &c.. . . . | 0.91 |
| | <u>37.80</u> |

The water is very good organically, and quite above suspicion of any sewage or animal contamination; it has rather a high temporary hardness, boiling deposits almost all the Lime present, and the water is then slightly alkaline; if my assumption of the combinations is correct, it contains about 2 grains per pint of Carbonate of Soda. I do not consider this at all injurious, except perhaps for brewing, for which it could be made suitable by being sulphated.

Organically it is a splendid water, and generally I consider it quite suitable for a town supply.

(signed)

E. V. T. JONES.

7/100
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