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## UTTAR PRADESH JAL NIGAM

6, Rana Pratap Marg, Lucknow-226001

Ref.

### Geophysical Borehole Logging Report

Name of the site : Bheera

District : Mau

Date : 05.10.2015

Depth logged : 265.0 mbgl

Depth drilled : 274.0 mbgl

Logger used : GWIC

Presence : Er. Surendra Yadav, A.E.

Based on the interpretation of geophysical logs, following information may be deciphered, particularly with respect to salinity of the formation water.

| Sl.No. | Depth range(mbgl) | Thickness(m) | Remarks  |
|--------|-------------------|--------------|----------|
| 1      | 40.0-----70.0     | 30.0         | Good all |
| 2      | 82.0-----86.0     | 4.0          |          |
| 3      | 88.0-----95.0     | 7.0          |          |
| 4      | 139.0-----146.0   | 7.0          |          |
| 5      | 155.0-----162.0   | 7.0          |          |
| 6      | 208.0-----221.0   | 13.0         |          |
| 7      | 228.0-----235.0   | 7.0          |          |
| 8      | 251.0-----261.0   | 10.0         |          |

Note.

(Dr.R.A.Yadav)  
Manager(Ground Water)

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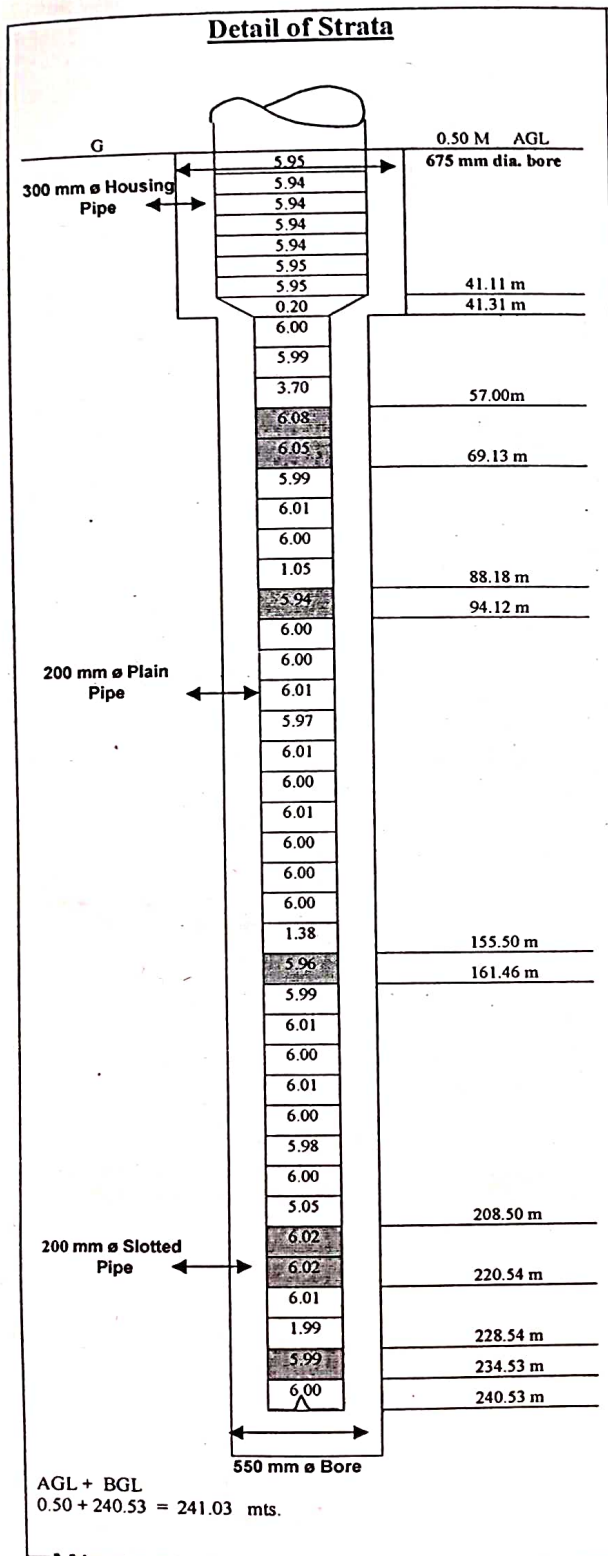
1. C.E.(E/M), U.P.Jal Nigam, Lucknow.
2. E.E., T.C.D.(E/M), U.P.Jal Nigam, Mau for information and necessary action.



**OFFICE OF THE EXECUTIVE ENGINEER TEMP. CONST.DIV.(E&M)**  
**U.P. JAL NIGAM, MAU**

**Actual Completion Plan of Tube well Assembly Chart cum strata Chart For Bheera T.W.**  
**water supply scheme, Block- Badraon, District- Mau.**

(Not to Scale)



| Detail of Lowering |                               |                  |
|--------------------|-------------------------------|------------------|
| 1                  | Drilling depth                | 274 mts.         |
| 2                  | Drilling by contractor        | D.C. Rig M/C     |
| 3                  | Drilling started on           | 26-09-2015       |
| 4                  | Drilling completed on         | 14-10-2015       |
| 5                  | Date of lowering              | 15-10-2015       |
| 6                  | Total housing pipe dia 300 mm | 41.61 mt.        |
| 7                  | Total Plain pipe dia 200 mm   | 157.16 mt.       |
| 8                  | Total Slotted pipe dia 200mm  | 42.06 mt.        |
| 9                  | Size of assembly lowering     | 300mmø x 200 mmø |
| 10                 | M.S. Reducer 300mmø x 200 mmø | 0.20 mt.         |

| Detail of Strata |        |           |                            |
|------------------|--------|-----------|----------------------------|
| From (m)         | To (m) | Thick (m) | Desperation of the Strata  |
| 0                | 6      | 6         | Surface Clay               |
| 6                | 12     | 6         | Clay                       |
| 12               | 42     | 30        | Very very Fine sand        |
| 42               | 93     | 51        | Fine Sand                  |
| 93               | 111    | 18        | Clay Kankar                |
| 111              | 117    | 6         | Fine Sand                  |
| 117              | 138    | 21        | Kankar with Clay           |
| 138              | 148    | 10        | Very Fine Sand with Kankar |
| 148              | 154    | 6         | Clay with Kankar           |
| 154              | 165    | 11        | Very Fine Sand             |
| 165              | 171    | 6         | Medium Sand                |
| 171              | 207    | 36        | Clay Kankar                |
| 207              | 236    | 29        | Fine Sand                  |
| 236              | 250    | 14        | Very Fine Sand with Kankar |
| 250              | 262    | 12        | Kankar With Clay           |
| 262              | 274    | 12        | Kankar with Sandy Clay     |

**Logging Report**

Date 05-10-2015

| SLN. | Depth Range (mbgl) | Thicknees (m) | Remark   |
|------|--------------------|---------------|----------|
| 1    | 40.0 - 70.0        | 30.0          | Good all |
| 2    | 82.0 - 86.0        | 4.0           |          |
| 3    | 88.0 - 95.0        | 7.0           |          |
| 4    | 139.0 - 146.0      | 7.0           |          |
| 5    | 155.0 - 162.0      | 7.0           |          |
| 6    | 208.0 - 221.0      | 13.0          |          |
| 7    | 228.0 - 235.0      | 7.0           |          |
| 8    | 251.0 - 261.0      | 10.0          |          |

**TEST REPORT OF T.W. DEVELOPMENT BY AIR COMPRESSOR**

Discharge measured by 90° "V" Notch.

Date of Test : - 14-05-2016

| Sl. No.                                                | Discharge |          | Air Pressure in Kg/cm <sup>2</sup> |        | Depression in mts  |      | Starting Sand in P.P.M. | Sand contents in P.P.M. After |       |       |       | Remark |
|--------------------------------------------------------|-----------|----------|------------------------------------|--------|--------------------|------|-------------------------|-------------------------------|-------|-------|-------|--------|
|                                                        | In Inches | In L.P.M | Startng                            | Runnng | Kg/cm <sup>2</sup> |      |                         | 5Min                          | 10Min | 15Min | 20Min |        |
| 1                                                      | 10 1/4    | 3087     | 22.50                              | 22.00  | 0.50               | 5.00 | 16000                   | 3500                          | 2400  | 1500  | 1000  |        |
| Note- Recommended for development of T/W by O.P. Unit. |           |          |                                    |        |                    |      |                         |                               |       |       |       |        |

**YIELD TEST REPORT OF T.W BY O.P. UNIT**

Discharge measured by orifice meter- 6"x5" mm size. Date of Test : - 28-05-2016

| Discharge test at 2.20 M depression. Motor 10 HP. 1450 RPM. Size: 10" Dia. Date of Test: 26-05-2016   |           |          |                     |        |                      |                         |       |        |        |        |                                                     |
|-------------------------------------------------------------------------------------------------------|-----------|----------|---------------------|--------|----------------------|-------------------------|-------|--------|--------|--------|-----------------------------------------------------|
| Sl. No.                                                                                               | Discharge |          | Water level in mts. |        | Depression in meters | Sand contents in P.P.M. |       |        |        |        | Remark                                              |
|                                                                                                       | In Inches | In L.P.M | Running             | Static |                      | Starting                | After |        |        |        |                                                     |
|                                                                                                       |           |          |                     |        |                      |                         | 5 Min | 10 Min | 15 Min | 20 Min |                                                     |
| 1                                                                                                     | 40        | 3563     | 13.50               | 10.00  | 3.50                 | 2300                    | 1100  | 700    | 600    | 500    | Recommended discharge 1200 LPM at 2.20 M depression |
| 2                                                                                                     | 35        | 3291     | 12.80               | 10.00  | 2.80                 | 1700                    | 500   | 400    | 300    | 200    |                                                     |
| 3                                                                                                     | 30        | 3041     | 12.60               | 10.00  | 2.60                 | 900                     | 300   | 200    | 150    | 100    |                                                     |
| 4                                                                                                     | 25        | 2769     | 12.45               | 10.00  | 2.45                 | 500                     | 50    | 25     | 20     | 20     |                                                     |
| 5                                                                                                     | 20        | 2497     | 12.35               | 10.00  | 2.35                 | 300                     | 25    | 20     | Tr     | Cl     |                                                     |
| 6                                                                                                     | 14        | 2080     | 12.25               | 10.00  | 2.25                 | 250                     | 20    | Tr     | Cl     | Cl     |                                                     |
| 7                                                                                                     | 6         | 1362     | 12.20               | 10.00  | 2.20                 | 200                     | Tr    | Cl     | Cl     | Cl     |                                                     |
| Note - Recommended 10 minute operation initially of pumping plant in by pass due to fine sand strata. |           |          |                     |        |                      |                         |       |        |        |        |                                                     |

**M/s Harish Chandra Singh**

(M/s Harishchandra Singh)  
**Manager**  
 Gorakhpur  
 Contractor

(Surendra Yadav)  
**J. E.**

(S.N. Singh)  
**Assistant Engineer**

(N.A. Khan)  
**Executive Engineer**