SERIAL NO.- 15-16/5

# OFFICE OF THE EXECUTIVE ENGINEER
# JAL NIGAM YANTRIK KHAND
# U.P. JAL NIGAM MEERUT

## COMPLETION PLAN OF TUBEWELL

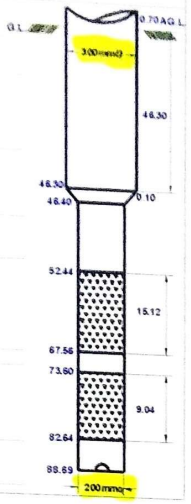
(YEAR - 2014-2015)

NAME OF SCHEME - FIROZPUR-BANGAR W/S SCHEME DISTT. MUZAFFARNAGAR.
TOTAL NO. OF TUBE WELL PROVIDED IN THE SCHEME - 1 NO.
LOCATION OF TUBE WELL - INSIDE PRIMARY SCHOOL.
NAME OF CONTRACTOR - M/S PIONEER DRILLING CO. PVT. LTD. GZB.

SPRING WATER LEVEL IN MTRS - 22.00 M
SIZE OF BORE - 550 X 450 MM.
DATE OF COMPLETION OF T.W. - 20.07.2015

| DEPTH B.GL METER | BORING PRESENTATION | LITHOLOGICAL LOGS |
|---|---|---|
| 0.00 | | SURFACE CLAY |
| 3.00 | | SANDY CLAY |
| 18.00 | | FINE-MEDIUM SAND |
| 40.00 | | SANDY CLAY |
| 48.00 | | YELLOW MEDIUM SAND |
| 51.00 | | FINE-MEDIUM SAND |
| 69.00 | | SANDY CLAY |
| 72.00 | | MEDIUM SAND |
| 84.00 | | SANDY CLAY |
| 97.56 | | |

EXECUTED ASSEMBLY




### ABSTRACT

| | | |
|---|---|---|
| 1. | DRILLING STARTED ON | 06.04.2015 |
| 2. | DRILLING COMPLETED ON | 26.04.2015 |
| 3. | LOWERING ON | 28.04.2015 |
| 4. | DRILLING DEPTH | 97.56 M |
| 5. | 200 MM DIA HOUSING PIPE | 47.01 M |
| 6. | 200X150 MM DIA REDUCER | 0.10 M |
| 7. | 150 MM DIA BLIND PIPE | 18.13 M |
| 8. | 150 MM DIA SLOTTED PIPE | 24.16 M |
| 9. | DISCHARGE BY COMPRESSOR | 611 L.P.M |
| 10. | DISCHARGE BY O.P UNIT | 700 L.P.M |
| 11. | PUMPING PLANT :- MAKE - VARUNA; DISCHARGE - 700 LPM; HEAD - 51 M; H.P - 15; COLUMN PIPES - 100 MM DIA X 39 M | |

## YIELD TEST OF T/W BY COMPRESSOR

DATE OF TEST - 18.07.2015 STATIC W/L - 21.50 M TASTE OF WATER . SWEET

| DISCHARGE BY V.NOTCH | | SAND CONTENTS IN PPM | | | | | | REMARKS |
|---|---|---|---|---|---|---|---|---|
| Height Of Water | Discharge In Lpm | starting | After 5 min | After 10 min | After 15 min | After 30 min | After 60min | |
| 05.50" | 611 | 1500 | 700 | 300 | 100 | Tr. | CL. | |

## YIELD TEST OF T/W BY O.P UNIT

(As Per IS - 2800)

DATE OF TEST - 20.07.2015 STATIC W/L - 21.50 M TASTE OF WATER - SWEET

| ORIFIE TUBE HEIGHT IN INCH. | DISCHARGE IN L.P.M | SWL IN Mts. | RWL IN Mts. | DEPRESSION IN L.P.M | STARTING | SAND CONTENTS IN P.P.M After 5 MIN | After 10 MIN | After 15 MIN | After 20 MIN | After 30 MIN | RECOMMENDATIONS. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 01" | 503 | 21.50 | 23.40 | 1.90 | 50 | CL. | CL. | CL. | CL. | CL. | Recommended discharge 500LPM at 1.90Mt. depression. Pump should be run in byepass for 5 minutes before supply of water in rising main. |
| 02" | 612 | 21.50 | 23.40 | 1.90 | 50 | CL | CL | CL | CL | CL | |
| 03" | 707 | 21.50 | 23.45 | 1.95 | 100 | Tr | CL | CL | CL | CL | |
| 04" | 794 | 21.50 | 23.50 | 2.00 | 200 | 100 | CL | CL | CL | CL | |
| 05" | 945 | 21.50 | 23.60 | 2.10 | 300 | 150 | CL | CL | CL | CL | |

## CHEMICAL TEST REPORT

(As Per IS - 10500)

DATE OF TEST - 23.07.2015 AGENCY - EE Ist DIV U.P Jal Nigam Mrt.

| S. NO. | SUBSTANCE OR CHARACTERISTIC | LIMIT DESIRABLE | MAX. | ACTUAL |
|---|---|---|---|---|
| 1. | Colour,Hazen,Unit | 5 | 25 | ---- |
| 2. | Turbidity,NTU | 5 | 10 | ---- |
| 3. | PH value | 6.5 to 8.5 | No Relaxation | 7.62 |
| 4. | Total Hardness as ($caco_3$) mg/L | 300 | 600 | 130 |
| 5. | Iron as (Fe),mg/L | 0.3 | 1.00 | 0.033 |
| 6. | Chlorides as (Cl),mg/L | 250 | 1000 | 19 |
| 7. | Residual Free Chlorine,mg/L | 0.2 | ---- | ---- |
| 8. | Fluoride as (F),mg/L | 1.0 | 1.5 | 0.110 |
| 9. | Dissolved solids mg/L | 500 | 2000 | 218 |
| 10. | Calcium as(Ca) mg/L | 75 | 200 | ---- |
| 11. | Magnesium* as (Mn), mg/L | 30 | 100 | ---- |
| 12. | Copper as (Cu) mg/L | 0.05 | 1.5 | ---- |
| 13. | Sulphate as ($SO_4$) mg/L | 200 | 400 | 26.30 |
| 14. | Nitrate as($NO_3$) mg/L | 45 | 100 | 3.98 |
| 15. | Alkalinity,mg/L | 200 | 600 | 160 |

Note -. All dimensions are in metres.

J.E A.E E.E

AnyScanner