

**INITIAL UPLIFT/PULLOUT PILE LOAD TEST ON 600MM DIA PILE FOR  
FOR IMPROVEMENT OF SEWAGE MANAGEMENT SYSTEM IN NASHIK  
TO PREVENT IN RIVER GODAVARI BASED ON PPP/HAM MODEL.**

**TEST LOAD:- 157.5MT**  
**(INITIAL TEST PILE PANCHAK 75 MLD STP.-TP-01)**



Submitted to

**CLIENT :- NMC.**  
**PMC:- CS TECH**  
**CONTRACTOR :- KUMBH WASTE WATER**  
**MANAGEMENT Pvt Ltd.**

**QCC**

**QCC LAB SOLUTIONS Pvt Ltd, Mumbai.**

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TABLE OF CONTENT

|     |                         |         |
|-----|-------------------------|---------|
| 1.0 | GENERAL                 | Page 02 |
| 2.0 | SCOPE OF WORK           | Page 02 |
| 3.0 | METHODOLOGY             | Page 03 |
| 4.0 | RESULTS                 | Page 05 |
| 5.0 | READINGS AND GRAPH      | Page 06 |
| 6.0 | FIELD READINGS          | Page 13 |
| 7.0 | CALIBRATION CERTIFICATE | Page 20 |



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**1.0 GENERAL**

- 1.1 Clients decided to carry out static pile testing work on 600mm diameter pile to estimate load carrying capacity in vertical direction and settlement. M/s ZedGeo Systems Private Limited, Mumbai was entrusted with work of uplift pile load test.
- 1.2 This report covers data for one Uplift/pullout pile load test and calculation of safe load capacity for pile based on data collected during fieldwork.
- 1.3 The following codes of practices have been adopted.
  - IS 2911 (Part 4) –1985 – (Reaffirmed 2013) “Code of Practice for Design and Construction of Pile Foundations -Concrete Piles -Bored Cast – In – situ piles - Load Tests on Piles”.
  - IS: 14593 – 1998 (Reaffirmed 2003). "Design and Construction of Bored Cast-in-Situ Piles Founded on Rocks – Guidelines."

**2.0 SCOPE OF WORK**

Pile details are tabulated as below.

**2.1 Pile details for Initial Pile (For Pullout Load Test)**

**Location :- Panchak 75 MLD STP.**

The details of the pile are as given below:

**Initial pile No =TP-01**

**Maximum Safe Uplift capacity of Pile =63 MT**

**Test Load = 157.5MT**

**Diameter of Pile = 600mm**

**Grade of Concrete = M-25**

**Pile Depth = 10.90 m at Test level.**

### **3.0 METHODOLOGY**

3.1 The load testing on piles was conducted as per IS: 2911 (Part 4) – 1985 (Reaffirmed 2013).

#### **Uplift Load Test On Piles**

##### **3.2 Test Load**

The Initial pile pullout load test was carried out to a test load of minimum 2.5 times the design load as per IS:2911. The design/safe load was 63T and the maximum test load was 157.5T for test pile.

##### **3.3 Uplift Resistance Test on Piles**

The pile load test was conducted by applying a series of Uplift loads on the test pile. The test pile was Lifted in increments close to 20% of the designed load till the test load was achieved i.e 197.5T and then unloaded as given in Table 3-1.is done The load was applied by means of 2 secondary girders resting on ground and The primary girders were resting on the 2 supporting secondary girders. 1 jack of 500MT were placed on the centre of the primary girder and one MS plate box was placed on top the jack. After placing the girder, jack and MS plate box pile reinforcement weld onto the MS plate box. The pile was dressed to a well-levelled surface then glasses was fixed onto the Pile on which the plunger of the dial gauges were rested and the magnetic base of the dial gauge was rested on the datum bar. The jacks were connected and operated by one pump.

The testing agency had submitted calibration charts showing the correctness of the calibration of the pressure gauges and the dial gauges before use. Readings of uplift and Elastic Rebound were recorded with the help four dial gauges of 0.01 mm sensitivity and resting on diametrically opposite ends of the pile. The dial gauges were fixed to a support at least 3 times the diameter of the pile or a minimum of 1.50 m away clear from the edge of pile. Readings on the dial gauges were observed immediately before and after application of loads, and immediately before and after release of loads.

**LOADING AND UNLOADING SHEET**

1 jack of 500T of Ram area = 706cm<sup>2</sup>.

So Effective Ram area is = 706cm<sup>2</sup>.

Design Load=63MT. Test Load = 157.5MT.

Load Increment shall be 20% of Design load (63T), so 12.6T

Increments shall be selected close to 12.6T.

Least Count of Pressure gauge is 10 kg/cm<sup>2</sup>

Table 1 – Load Sequence

| <b>Pressure Gauge (kg/cm<sup>2</sup>)</b> | <b>Load (MT)</b> | <b>Reading Time(Mins)</b>        |
|---|------------------|----------------------------------|
| 0   | 0                | 0                                |
| 20  | 14.12            | 1,15,30,45,60 <sup>th</sup> mins |
| 40  | 28.24            | 1,15,30,45,60 <sup>th</sup> mins |
| 60  | 42.36            | 1,15,30,45,60 <sup>th</sup> mins |
| 80  | 56.48            | 1,15,30,45,60 <sup>th</sup> mins |
| 100                                       | 70.60            | 1,15,30,45,60 <sup>th</sup> mins |
| 120                                       | 84.72            | 1,15,30,45,60 <sup>th</sup> mins |
| 140                                       | 98.84            | 1,15,30,45,60 <sup>th</sup> mins |
| 160                                       | 112.96           | 1,15,30,45,60 <sup>th</sup> mins |
| 180                                       | 127.08           | 1,15,30,45,60 <sup>th</sup> mins |
| 200                                       | 141.20           | 1,15,30,45,60 <sup>th</sup> mins |
| 230                                       | 162.38           | 24 hours Holding                 |
| Unloading                                 |                  |                                  |
| 180                                       | 127.08           | 1,5,15 mins                      |
| 160                                       | 112.96           | 1,5,15 mins                      |
| 140                                       | 98.84            | 1,5,15 mins                      |
| 120                                       | 84.72            | 1,5,15 mins                      |
| 100                                       | 70.60            | 1,5,15 mins                      |
| 80  | 56.48            | 1,5,15 mins                      |
| 60  | 42.36            | 1,5,15 mins                      |
| 40  | 28.24            | 1,5,15 mins                      |
| 20  | 14.12            | 1,5,15 mins                      |
| 0   | 0                | 1,5,15 mins                      |

The final load was maintained for 24 hrs and the corresponding Uplift was observed at 1hr interval. During the unloading stages, the load on the pile was maintained for a minimum of 15 minutes and the subsequent elastic rebound in the pile was measured with the help of 4 dial gauges.

### **3.4 Plant and Equipment**

All temporary work plant, equipment, reaction system, Primary and secondary girders and all necessary instruments for measurements of loads, deflection etc. was provided by the testing agency. The equipment provided was capable to apply slowly and smoothly and to maintain the load at any required value. The load was measured by a single Pressure Gauge.

## **4.0 RESULTS**

### **4.1 Acceptance Criteria for Uplift Load Test on Pile.**

The Safe Capacity of Piles is considered to be the least of the following as per IS: 2911, (Part 4):2013

- 2/3rd of the load corresponding to 12 mm Displacement/Uplift or maximum of 2 percent of pile diameter which in this case works out to be 12 mm, whichever is less.
- Half the load at which the load displacement curve shows a clear break (downward trend).

So as per the Test data and the graph the pile has shown more Uplift capacity than **63T**.

The maximum Deflection/Uplift observed as per our field record at **162.38T = 8.46mm**.

Which is less than 12mm .

Total Elastic Rebound = **3.75mm**

The Net Deflection/Uplift= **4.71mm**

**1<sup>st</sup> Nov 2025.**

**QCC LAB SOLUTIONS Pvt Ltd, Mumbai.**

  
(Authorized Signatory)

## **READINGS AND GRAPH**



**QCC LAB SOLUTIONS PVT LTD.**

**QCC LAB SOLUTIONS Pvt Ltd, Mumbai.**

RECORD OF FOOTING LOAD TEST NO:- TP-01

PROJECT:- IMPROVEMENT OF SEWAGE MANAGEMENT SYSTEM  
IN NASHIK TO PREVENT IN RIVER GODAVARI BASED ON  
PPP/HAM MODEL.

LOCATION - Panchak 75 MLD STP.

CONSULTANT :- CS TECH

CLIENT:- NASHIK MUNICIPAL CORPORATION.

Page:-1

Ic of dial gauge:- 0.01mm

Ram Area :- 706cm<sup>2</sup>

Type of Test:- Uplift Pile Load

Date of Casting :- 26-08-2025.

Test

Pile Length :- 10.90mtr

Design Load :- 63 MT

Test Load :- 157.5 MT

Mixed Design :- M25

Pile Diameter : - 600mm

| DATE<br>(Hrs) | TIME  | PRESSURE<br>GAUGE<br>READING<br>kg/cm <sup>2</sup> | LOAD IN MT | Dial Gauge   |              |              |              | AVERAGE<br>SETTLEMENT<br>IN MM | REMARK |
|---------------|-------|--|------------|--------------|--------------|--------------|--------------|--------------------------------|--------|
|               |       |  |            | Reading<br>1 | Reading<br>2 | Reading<br>3 | Reading<br>4 |                                |        |
| LOADING       |       |  |            |              |              |              |              |                                |        |
| 11-10-2025    | 11.44 | 0.00   | 0.00       | 0.00         | 0.00         | 0.00         | 0.00         | 0.00                           |        |
|               | 11.45 | 20.00  | 14.12      | 0.03         | 0.05         | 0.00         | 0.00         | 0.02                           |        |
|               | 12.00 |  |            | 0.06         | 0.08         | 0.00         | 0.00         | 0.04                           |        |
|               | 12.15 |  |            | 0.06         | 0.08         | 0.01         | 0.01         | 0.04                           |        |
|               | 12.30 |  |            | 0.06         | 0.10         | 0.10         | 0.05         | 0.08                           |        |
|               | 12.45 |  |            | 0.02         | 0.08         | 0.10         | 0.05         | 0.06                           |        |
|               | 12.46 | 40.00  | 28.24      | 0.15         | 0.20         | 0.01         | 0.05         | 0.10                           |        |
|               | 13.00 |  |            | 0.25         | 0.28         | 0.01         | 0.00         | 0.14                           |        |
|               | 13.15 |  |            | 0.27         | 0.30         | 0.01         | 0.00         | 0.15                           |        |
|               | 13.30 |  |            | 0.27         | 0.31         | 0.01         | 0.00         | 0.15                           |        |
|               | 13.45 |  |            | 0.29         | 0.33         | 0.01         | 0.00         | 0.16                           |        |
|               | 13.46 | 60.00  | 42.36      | 0.47         | 0.48         | 0.11         | 0.02         | 0.27                           |        |
|               | 14.00 |  |            | 0.47         | 0.48         | 0.11         | 0.02         | 0.27                           |        |
|               | 14.15 |  |            | 0.52         | 0.55         | 0.15         | 0.06         | 0.32                           |        |
|               | 14.30 |  |            | 0.54         | 0.60         | 0.17         | 0.08         | 0.35                           |        |
|               | 14.45 |  |            | 0.56         | 0.62         | 0.18         | 0.09         | 0.36                           |        |
|               | 14.46 | 80.00  | 56.48      | 0.93         | 0.93         | 0.42         | 0.32         | 0.65                           |        |
|               | 15.00 |  |            | 0.95         | 0.94         | 0.43         | 0.33         | 0.66                           |        |
|               | 15.15 |  |            | 0.97         | 0.95         | 0.47         | 0.34         | 0.68                           |        |
|               | 15.30 |  |            | 0.99         | 0.96         | 0.51         | 0.36         | 0.71                           |        |
|               | 15.45 |  |            | 0.90         | 0.85         | 0.53         | 0.38         | 0.67                           |        |



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LOCATION - Panchak 75 MLD STP.

CONSULTANT :- CS TECH

CLIENT:- NASHIK MUNICIPAL CORPORATION.

Page:-2

Ram Area :- 706cm<sup>2</sup>

Date of Casting :- 26-08-2025.

Pile Length :- 10.90mtr

Ic of dial gauge:- 0.01mm

Type of Test:- Uplift Pile Load  
Test

Design Load :- 63 MT

Test Load :- 157.5 MT

Mixed Design :- M25

Pile Diameter : - 600mm

| DATE<br>(Hrs) | TIME  | PRESSURE<br>GAUGE<br>READING<br>kg/cm <sup>2</sup> | LOAD IN MT | Dial Gauge   |              |              |              | AVERAGE<br>SETTLEMENT<br>IN MM | REMARK |
|---------------|-------|--|------------|--------------|--------------|--------------|--------------|--------------------------------|--------|
|               |       |  |            | Reading<br>1 | Reading<br>2 | Reading<br>3 | Reading<br>4 |                                |        |
| LOADING       |       |  |            |              |              |              |              |                                |        |
| 11-10-2025    | 15.46 | 100.00   | 70.60      | 1.19         | 1.09         | 0.78         | 0.62         | 0.92                           |        |
|               | 16.00 |  |            | 1.20         | 1.10         | 0.82         | 0.65         | 0.94                           |        |
|               | 16.15 |  |            | 1.20         | 1.10         | 0.82         | 0.65         | 0.94                           |        |
|               | 16.30 |  |            | 1.22         | 1.11         | 0.84         | 0.66         | 0.96                           |        |
|               | 16.45 |  |            | 1.22         | 1.11         | 0.84         | 0.66         | 0.96                           |        |
|               | 16.46 | 120.00   | 84.72      | 1.58         | 1.37         | 1.11         | 0.92         | 1.25                           |        |
|               | 17.00 |  |            | 1.60         | 1.39         | 1.12         | 0.94         | 1.26                           |        |
|               | 17.15 |  |            | 1.60         | 1.40         | 1.14         | 0.95         | 1.27                           |        |
|               | 17.30 |  |            | 1.61         | 1.42         | 1.15         | 0.96         | 1.29                           |        |
|               | 17.45 |  |            | 1.62         | 1.45         | 1.49         | 1.07         | 1.41                           |        |
|               | 17.46 | 140.00   | 98.84      | 2.28         | 1.96         | 1.96         | 1.50         | 1.93                           |        |
|               | 18.00 |  |            | 2.28         | 1.96         | 1.96         | 1.50         | 1.93                           |        |
|               | 18.15 |  |            | 2.28         | 1.96         | 1.96         | 1.50         | 1.93                           |        |
|               | 18.30 |  |            | 2.28         | 1.96         | 1.96         | 1.50         | 1.93                           |        |
|               | 18.45 |  |            | 2.28         | 1.96         | 1.96         | 1.50         | 1.93                           |        |
|               | 18.46 | 160.00   | 112.96     | 3.01         | 2.65         | 2.60         | 2.05         | 2.58                           |        |
|               | 19.00 |  |            | 3.01         | 2.65         | 2.60         | 2.05         | 2.58                           |        |
|               | 19.15 |  |            | 3.01         | 2.65         | 2.60         | 2.05         | 2.58                           |        |
|               | 19.30 |  |            | 3.01         | 2.65         | 2.60         | 2.05         | 2.58                           |        |
|               | 19.45 |  |            | 3.01         | 2.65         | 2.61         | 2.05         | 2.58                           |        |
|               | 19.46 | 180.00   | 127.80     | 3.87         | 3.61         | 3.37         | 2.38         | 3.31                           |        |
|               | 20.00 |  |            | 3.87         | 3.61         | 3.37         | 2.38         | 3.31                           |        |
|               | 20.15 |  |            | 3.87         | 3.61         | 3.37         | 2.38         | 3.31                           |        |
|               | 20.30 |  |            | 3.87         | 3.61         | 3.37         | 2.38         | 3.31                           |        |
|               | 20.45 |  |            | 3.88         | 3.63         | 3.60         | 2.81         | 3.48                           |        |



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**LOCATION -** Panchak 75 MLD STP.  
**CONSULTANT :-** CS TECH  
**CLIENT:-** NASHIK MUNICIPAL CORPORATION.

Page:-3

Ic of dial gauge:- 0.01mm Ram Area :- 706cm<sup>2</sup>  
Type of Test:- Uplift Pile Load Date of Casting :- 26-08-2025.  
Design Load :- 63 MT Test Pile Length :- 10.90mtr  
Test Load :- 157.5 MT Mixed Design :- M25  
Pile Diameter : - 600mm

| DATE                         | TIME<br>(Hrs) | PRESSURE<br>GAUGE<br>READING<br>kg/cm <sup>2</sup> | LOAD IN MT | Dial Gauge   |              |              |              | AVERAGE<br>SETTLEMENT<br>IN MM | REMARK |
|------------------------------|---------------|--|------------|--------------|--------------|--------------|--------------|--------------------------------|--------|
|                              |               |  |            | Reading<br>1 | Reading<br>2 | Reading<br>3 | Reading<br>4 |                                |        |
| <b>LOADING &amp; HOLDING</b> |               |  |            |              |              |              |              |                                |        |
| 11-10-2025                   | 20.46         | 200.00   | 141.20     | 5.23         | 5.33         | 7.86         | 3.75         | 5.55                           |        |
|                              | 21.00         |  |            | 5.23         | 5.34         | 7.87         | 3.75         | 5.55                           |        |
|                              | 21.15         |  |            | 5.24         | 5.34         | 7.87         | 3.75         | 5.55                           |        |
|                              | 21.30         |  |            | 5.24         | 5.34         | 7.87         | 3.75         | 5.55                           |        |
|                              | 21.45         |  |            | 5.23         | 5.33         | 7.87         | 3.74         | 5.54                           |        |
|                              | 21.46         | 230.00   | 162.38     | 6.77         | 6.95         | 10.05        | 4.89         | 7.17                           |        |
|                              | 22.46         |  |            | 6.77         | 6.95         | 10.04        | 4.93         | 7.17                           |        |
|                              | 23.46         |  |            | 6.79         | 6.97         | 10.06        | 4.95         | 7.19                           |        |
| 12-10-2025                   | 0.46          |  |            | 6.80         | 6.98         | 10.06        | 4.96         | 7.20                           |        |
|                              | 1.46          |  |            | 6.82         | 6.99         | 10.08        | 4.98         | 7.22                           |        |
|                              | 2.46          |  |            | 6.92         | 7.10         | 10.20        | 5.10         | 7.33                           |        |
|                              | 3.46          |  |            | 7.10         | 7.25         | 10.32        | 5.22         | 7.47                           |        |
|                              | 4.46          |  |            | 7.15         | 7.30         | 10.39        | 5.30         | 7.54                           |        |
|                              | 5.46          |  |            | 7.16         | 7.31         | 10.39        | 5.30         | 7.54                           |        |
|                              | 6.46          |  |            | 7.16         | 7.31         | 10.39        | 5.30         | 7.54                           |        |
|                              | 7.46          |  |            | 7.12         | 7.32         | 10.41        | 5.31         | 7.54                           |        |
|                              | 8.46          |  |            | 7.14         | 7.36         | 10.75        | 6.13         | 7.85                           |        |
|                              | 9.46          |  |            | 7.26         | 7.42         | 10.75        | 6.13         | 7.89                           |        |
|                              | 10.46         |  |            | 7.28         | 7.45         | 10.75        | 6.18         | 7.92                           |        |
|                              | 11.46         |  |            | 7.28         | 7.45         | 10.75        | 6.18         | 7.92                           |        |
|                              | 12.46         |  |            | 7.43         | 7.61         | 10.75        | 6.18         | 7.99                           |        |
|                              | 13.46         |  |            | 7.44         | 7.61         | 10.75        | 6.18         | 8.00                           |        |
|                              | 14.46         |  |            | 7.72         | 7.99         | 10.88        | 6.39         | 8.25                           |        |
|                              | 15.46         |  |            | 7.72         | 7.99         | 10.89        | 6.42         | 8.26                           |        |
|                              | 16.46         |  |            | 7.72         | 7.99         | 10.89        | 6.42         | 8.26                           |        |
|                              | 17.46         |  |            | 7.72         | 7.46         | 10.89        | 6.42         | 8.12                           |        |
|                              | 18.46         |  |            | 7.72         | 8.25         | 10.89        | 6.72         | 8.40                           |        |
|                              | 19.46         |  |            | 7.72         | 8.30         | 10.89        | 6.79         | 8.43                           |        |
|                              | 20.46         |  |            | 7.72         | 8.30         | 10.89        | 6.79         | 8.43                           |        |
|                              | 21.46         |  |            | 7.72         | 8.31         | 10.89        | 6.79         | 8.43                           |        |
|                              | 22.46         |  |            | 7.75         | 8.39         | 10.89        | 6.79         | 8.46                           |        |



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Page: 4

Ic of dial gauge:- 0.01mm  
Ram Area :- 706cm<sup>2</sup>  
Type of Test:- Uplift Pile Load Test  
Design Load :- 63 MT  
Test Load :- 157.5 MT  
Mixed Design :- M25  
Pile Diameter : - 600mm  
Date of Casting :- 26-08-2025.  
Pile Length :- 10.90mtr

| DATE             | TIME<br>(Hrs) | PRESSURE<br>GAUGE<br>READING<br>kg/cm <sup>2</sup> | LOAD IN MT | Dial Gauge   |              |              |              | AVERAGE<br>SETTLEMENT<br>IN MM | REMARK |
|------------------|---------------|--|------------|--------------|--------------|--------------|--------------|--------------------------------|--------|
|                  |               |  |            | Reading<br>1 | Reading<br>2 | Reading<br>3 | Reading<br>4 |                                |        |
| <b>UNLOADING</b> |               |  |            |              |              |              |              |                                |        |
| 12.10.2025       | 22.46         | 200.00   | 141.20     | 7.75         | 8.39         | 10.74        | 6.74         | 8.41                           |        |
|                  | 22.50         |  |            | 7.75         | 8.39         | 10.74        | 6.74         | 8.41                           |        |
|                  | 23.00         |  |            | 7.75         | 8.39         | 10.74        | 6.74         | 8.41                           |        |
|                  | 23.01         | 180.00   | 127.08     | 7.75         | 8.38         | 10.73        | 6.68         | 8.39                           |        |
|                  | 23.05         |  |            | 7.75         | 8.38         | 10.73        | 6.68         | 8.39                           |        |
|                  | 23.15         |  |            | 7.75         | 8.38         | 10.73        | 6.68         | 8.39                           |        |
|                  | 23.16         | 160.00   | 112.96     | 7.48         | 8.16         | 10.72        | 6.46         | 8.21                           |        |
|                  | 23.20         |  |            | 7.47         | 8.16         | 10.72        | 6.46         | 8.20                           |        |
|                  | 23.30         |  |            | 7.47         | 8.16         | 10.72        | 6.46         | 8.20                           |        |
|                  | 23.31         | 140.00   | 98.08      | 6.04         | 7.70         | 10.45        | 6.08         | 7.57                           |        |
|                  | 23.35         |  |            | 6.04         | 7.70         | 10.45        | 6.08         | 7.57                           |        |
|                  | 23.45         |  |            | 6.04         | 7.70         | 10.45        | 6.08         | 7.57                           |        |
|                  | 23.46         | 120.00   | 84.72      | 5.49         | 7.32         | 10.16        | 5.72         | 7.17                           |        |
|                  | 23.50         |  |            | 5.46         | 7.29         | 10.16        | 5.72         | 7.16                           |        |
|                  | 24.00         |  |            | 5.46         | 7.29         | 10.16        | 5.72         | 7.16                           |        |
|                  | 24.01         | 100.00   | 70.60      | 5.46         | 6.80         | 9.80         | 5.32         | 6.85                           |        |
|                  | 24.05         |  |            | 5.46         | 6.80         | 9.80         | 5.32         | 6.85                           |        |
|                  | 24.15         |  |            | 5.46         | 6.80         | 9.80         | 5.32         | 6.85                           |        |
|                  | 24.16         | 80.00  | 56.48      | 5.40         | 6.31         | 9.45         | 4.89         | 6.51                           |        |
|                  | 24.20         |  |            | 5.40         | 6.30         | 9.44         | 4.89         | 6.51                           |        |
|                  | 24.30         |  |            | 5.40         | 6.30         | 9.44         | 4.89         | 6.51                           |        |
|                  | 24.31         | 60.00  | 42.36      | 5.39         | 5.74         | 9.05         | 4.40         | 6.15                           |        |
|                  | 24.35         |  |            | 5.35         | 5.71         | 9.04         | 4.40         | 6.13                           |        |
|                  | 24.45         |  |            | 5.35         | 5.71         | 9.04         | 4.40         | 6.13                           |        |
|                  | 24.46         | 40.00  | 28.20      | 4.60         | 5.08         | 7.61         | 4.05         | 5.34                           |        |
| 13.10.2025       | 0.50          |  |            | 4.56         | 5.04         | 7.61         | 4.05         | 5.32                           |        |
|                  | 1.00          |  |            | 4.56         | 5.04         | 7.61         | 4.05         | 5.32                           |        |
|                  | 1.01          | 20.00  | 14.12      | 4.00         | 4.43         | 7.33         | 4.05         | 4.95                           |        |
|                  | 1.05          |  |            | 4.00         | 4.39         | 7.23         | 4.05         | 4.92                           |        |
|                  | 1.15          |  |            | 4.00         | 4.39         | 7.23         | 4.05         | 4.92                           |        |
|                  | 1.16          | 0.00   | 0.00       | 4.00         | 4.24         | 6.60         | 4.05         | 4.72                           |        |
|                  | 1.20          |  |            | 4.00         | 4.24         | 6.55         | 4.05         | 4.71                           |        |
|                  | 1.30          |  |            | 4.00         | 4.24         | 6.53         | 4.05         | 4.71                           |        |

**QCC LAB SOLUTIONS Pvt Ltd, Mumbai.**

**RECORD OF FOOTING LOAD TEST NO.- TP-01**  
**PROJECT:- IMPROVEMENT OF SEWAGE MANAGEMENT SYSTEM**  
**IN NASHIK TO PREVENT IN RIVER GODAVARI BASED ON**  
**PPR/HAM MODEL**

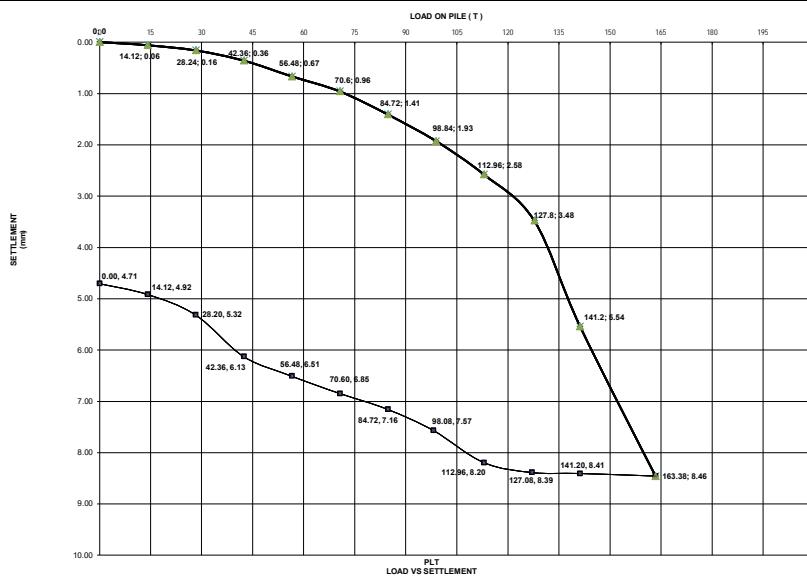
## **PPP/HAM MODEL.**

**CONSULTANT :- CS TECH**

CONSULTANT :- CS TECH  
CLIENT:- NASHIK MUNICIPAL CORPORATION

CLIENT:- NASHIK MUNICIPAL CORPORATION

QCC



Maximum Settlement at 163T: 8.46 mm

Total Rebound : 3.75 mm

Net Settlement: 4.71 mm

**QCC LAB SOLUTIONS Pvt Ltd, Mumbai.**  
**NMC/VEL/QCC.**

NMC/MEL/QCC

## **FIELD READINGS**



**QCC LAB SOLUTIONS Pvt Ltd, Mumbai.**

**Tel:- 9452200078,8369458583**

**E-mail:-calibration@qcclabsolutions.com**

**Website:- www.qcclabsolutions.com**



**ZedGeo Systems Private Limited., Mumbai**

RECORD OF PILE LOAD TEST NO.:  
PROJECT:-

LOCATION: Impovement Sewage  
CLIENTS NAME: VASHIK city management  
CONSULTANT: PANCAK STP 75 ml/d  
CONTRACTOR:

L.C OF DIAL GAUGE: 0.01 mm  
TYPE OF TEST: PILE PULLOUT  
DESIGN LOAD: 83 MT  
TEST LOAD: 83 MT  
MIXED DESIGN: 200 MM - 163.38  
PILE DIAMETER: 600 mm

PAGE: 1

RAM AREA: 706 cm<sup>2</sup>  
DATE OF CASTING: 26-08-25  
PILE DEPTH: 10.90 mtr

| DATE        | TIME                             | PRESSURE  | LOAD IN MT | INITIAL PILE UPLIFT LOAD TEST |           |           |       |                    |           |         |      | REMARK |
|-------------|----------------------------------|-----------|------------|-------------------------------|-----------|-----------|-------|--------------------|-----------|---------|------|--------|
|             |                                  |           |            | Reading                       |           |           |       | Average Deflection | SIGNATURE |         |      |        |
| (Hrs)       | GAUGE READING kg/cm <sup>2</sup> | Reading 1 | Reading 2  | Reading 3                     | Reading 4 | Test Pile | Putil |                    | Shankar   | Mant    |      |        |
| 11.11.01.25 |                                  |           |            |                               |           |           |       |                    |           |         |      |        |
| 11.44       | 00                               | 00        | 0.0        | 0.0                           | 0.0       | 0.0       | 0.0   | 0.02               | Putil     | Shankar | Mant |        |
| 11.45       | 20                               | 14.12     | 0.03       | 0.05                          | 0.0       | 0.0       | 0.02  | Putil              |           |         |      |        |
| 12.00       |                                  |           | 0.06       | 0.08                          | 0.0       | 0.0       | 0.035 | Putil              |           |         |      |        |
| 12.15       |                                  |           | 0.06       | 0.08                          | 0.01      | 0.01      | 0.04  | Putil              |           |         |      |        |
| 12.30       |                                  |           | 0.06       | 0.10                          | 0.10      | 0.05      | 0.075 | Putil              |           |         |      |        |
| 12.45       |                                  |           | 0.02       | 0.08                          | 0.10      | 0.05      | 0.065 | Putil              |           |         |      |        |
| 12.45       | 40                               | 28.24     | 0.15       | 0.20                          | 0.01      | 0.05      | 0.105 | Putil              |           |         |      |        |
| 13.00       |                                  |           | 0.25       | 0.28                          | 0.01      | 0.00      | 0.135 | Putil              |           |         |      |        |
| 13.15       |                                  |           | 0.27       | 0.30                          | 0.01      | 0.00      | 0.145 | Putil              |           |         |      |        |
| 13.30       |                                  |           | 0.27       | 0.31                          | 0.01      | 0.00      | 0.147 | Putil              |           |         |      |        |
| 13.45       |                                  |           | 0.29       | 0.33                          | 0.01      | 0.00      | 0.157 | Putil              |           |         |      |        |
| 13.46       | 60                               | 42.36     | 0.47       | 0.48                          | 0.11      | 0.02      | 0.27  | Putil              |           |         |      |        |
| 14.00       |                                  |           | 0.47       | 0.48                          | 0.11      | 0.02      | 0.27  | Putil              |           |         |      |        |
| 14.15       |                                  |           | 0.52       | 0.55                          | 0.15      | 0.06      | 0.32  | Putil              |           |         |      |        |
| 14.30       |                                  |           | 0.54       | 0.60                          | 0.17      | 0.08      | 0.342 | Putil              |           |         |      |        |
| 14.45       |                                  |           | 0.56       | 0.62                          | 0.18      | 0.09      | 0.362 | Putil              |           |         |      |        |
| 14.46       | 80                               | 56.48     | 0.93       | 0.93                          | 0.42      | 0.32      | 0.65  | Putil              |           |         |      |        |
| 15.00       |                                  |           | 0.95       | 0.94                          | 0.43      | 0.33      | 0.66  | Putil              |           |         |      |        |
| 15.15       |                                  |           | 0.97       | 0.95                          | 0.47      | 0.34      | 0.68  | Putil              |           |         |      |        |
| 15.30       |                                  |           | 0.99       | 0.96                          | 0.51      | 0.36      | 0.705 | Putil              |           |         |      |        |
| 15.45       |                                  |           | 0.90       | 0.85                          | 0.53      | 0.38      | 0.665 | Putil              |           |         |      |        |

**ZedGeo Systems Private Limited., Mumbai**  
 RECORD OF PILE LOAD TEST NO.-  
 PROJECT:-

LOCATION:- Impovement sewage management  
 CLIENTS NAME:- Nashik city  
 CONSULTANT:- PANCAK STP 75 mLD  
 CONTRACTOR:-

L.C OF DIAL GAUGE:- 0.01 mm  
 TYPE OF TEST:- PILE PULLOUT  
 DESIGN LOAD:- TEST LOAD:- 63 mT  
 i n MIXED DESIGN:- 163.88 -  
 PILE DIAMETER:- m 2.5  
 600MM

PAGE:- ②  
 RAM AREA:- 706. cm<sup>2</sup>  
 DATE OF CASTING:- 26.08.25  
 PILE DEPTH:- 10.90mtr.

| DATE     | TIME  | PRESSURE                         | LOAD IN MT | INITIAL PILE UPLIFT LOAD TEST |           |           |           |                    |       |           |  | REMARK |
|----------|-------|----------------------------------|------------|-------------------------------|-----------|-----------|-----------|--------------------|-------|-----------|--|--------|
|          |       |                                  |            | Reading                       |           |           |           | Average Deflection |       | SIGNATURE |  |        |
|          | (Hrs) | GAUGE READING kg/cm <sup>2</sup> |            | Reading 1                     | Reading 2 | Reading 3 | Reading 4 | Test Pile          |       |           |  |        |
| 16/10/25 | 15.45 | 100                              | 70.60      | 1.19                          | 1.09      | 0.78      | 0.62      | 0.92               | ZED   |           |  |        |
|          | 16.00 |                                  |            | 1.20                          | 1.10      | 0.82      | 0.65      | 0.94               | Patil |           |  |        |
|          | 16.15 |                                  |            | 1.20                          | 1.10      | 0.82      | 0.65      | 0.94               | Patil |           |  |        |
|          | 16.30 |                                  |            | 1.22                          | 1.11      | 0.84      | 0.66      | 0.95               | Patil |           |  |        |
|          | 16.45 |                                  |            | 1.22                          | 1.11      | 0.84      | 0.66      | 0.95               | Patil |           |  |        |
|          | 16.46 | 120                              | 84.72      | 1.58                          | 1.37      | 1.11      | 0.92      | 1.24               | Patil |           |  |        |
|          | 17.00 |                                  |            | 1.60                          | 1.39      | 1.12      | 0.94      | 1.26               | Patil |           |  |        |
|          | 17.15 |                                  |            | 1.60                          | 1.40      | 1.14      | 0.95      | 1.27               | Patil |           |  |        |
|          | 17.30 |                                  |            | 1.61                          | 1.42      | 1.15      | 0.96      | 1.28               |       |           |  |        |
|          | 17.45 |                                  |            | 1.62                          | 1.45      | 1.49      | 1.07      | 1.40               |       |           |  |        |
|          | 17.46 | 1210                             | 98.84      | 2.28                          | 1.96      | 1.96      | 1.50      | 1.92               |       |           |  |        |
|          | 18.00 |                                  |            | 2.28                          | 1.96      | 1.96      | 1.50      | 1.92               |       |           |  |        |
|          | 18.15 |                                  |            | 2.28                          | 1.96      | 1.96      | 1.50      | 1.92               |       |           |  |        |
|          | 18.30 |                                  |            | 2.28                          | 1.96      | 1.96      | 1.50      | 1.92               |       |           |  |        |
|          | 18.45 |                                  |            | 2.28                          | 1.96      | 1.96      | 1.50      | 1.92               | Patil |           |  |        |
|          | 18.46 | 160                              | 112.96     | 3.01                          | 2.65      | 2.60      | 2.05      | 2.577              |       |           |  |        |
|          | 19.00 |                                  |            | 3.01                          | 2.65      | 2.60      | 2.05      | 2.577              | Patil |           |  |        |
|          | 19.15 |                                  |            | 3.01                          | 2.65      | 2.60      | 2.05      | 2.577              | Patil |           |  |        |
|          | 19.30 |                                  |            | 3.01                          | 2.65      | 2.60      | 2.05      | 2.577              | Patil |           |  |        |
|          | 19.45 |                                  |            | 3.01                          | 2.65      | 2.61      | 2.05      | 2.577              | Patil |           |  |        |



**ZedGeo Systems Private Limited., Mumbai**  
RECORD OF PILE LOAD TEST NO. -  
PROJECT:

**RECORD OF PILE LOAD TEST NO.  
PROJECT:-**

LOCATION: Improvement Sewage management in Nashik city  
CLIENTS NAME: Nashik city  
CONSULTANT: Panch K STP - 75 MLD  
CONTRACTOR: Panch K STP - 75 MLD

L.C OF DIAL GAUGE:- 0.01 mm  
TYPE OF TEST:- PILE PULLOUT  
DESIGN LOAD:- 63 MT  
TEST LOAD :- 163.38  
MIXED DESIGN :- m-25  
PILE DIAMETER :- 600 mm

PAGE:- 3  
RAM AREA :- 706 cm<sup>2</sup>  
DATE OF CASTING :- 26-08-25  
PILE DEPTH :- 10' 90 mtr



**ZedGeo Systems Private Limited., Mumbai**  
RECORD OF PILE LOAD TEST NO.:  
PROJECT:-

LOCATION:-  
CLIENTS NAME:-  
CONSULTANT:-  
CONTRACTOR:-

L.C OF DIAL GAUGE:- 0.01 mm  
TYPE OF TEST:- Pile Pullout  
DESIGN LOAD:- 63 MT  
TEST LOAD:- 63 MT  
MIXED DESIGN:- 163.38  
PILE DIAMETER:- 250 mm  
600 mm

PAGE:- 4

RAM AREA :- 706 cm<sup>2</sup>  
DATE OF CASTING :- 26/8/25  
PILE DEPTH :- 10.90 mtr

| DATE     | TIME  | PRESSURE                         | LOAD IN MT | INITIAL PILE UPLIFT LOAD TEST |           |           |           |                    | REMARK |
|----------|-------|----------------------------------|------------|-------------------------------|-----------|-----------|-----------|--------------------|--------|
|          |       |                                  |            | Reading                       |           |           |           | Average Deflection |        |
|          | (Hrs) | Gauge Reading kg/cm <sup>2</sup> | Reading 1  | Reading 2                     | Reading 3 | Reading 4 | SIGNATURE |                    |        |
| 11/10/25 | 22.46 | 230                              | 163.38     | 6.77                          | 6.95      | 10.04     | 4.93      | 7.172              | ZED    |
|          | 23.46 | 163.38                           | 6.79       | 6.97                          | 10.06     | 4.95      | 7.192     | Patil              | Shaini |
| 12/10/25 | 24.46 |                                  | 6.80       | 6.98                          | 10.06     | 4.96      | 7.10      | Patil              |        |
|          | 1.46  |                                  | 6.82       | 6.94                          | 10.08     | 4.98      | 7.23      | Patil              |        |
|          | 2.46  |                                  | 6.92       | 7.10                          | 10.20     | 5.10      | 7.33      | Patil              |        |
|          | 3.46  |                                  | 7.10       | 7.25                          | 10.32     | 5.22      | 7.4722    | Patil              |        |
|          | 4.46  |                                  | 7.15       | 7.30                          | 10.39     | 5.30      | 7.535     | Patil              |        |
|          | 5.46  |                                  | 7.16       | 7.31                          | 10.39     | 5.30      | 7.54      | Patil              |        |
|          | 6.46  |                                  | 7.16       | 7.31                          | 10.39     | 5.30      | 7.54      | Patil              |        |
|          | 7.46  |                                  | 7.12       | 7.32                          | 10.41     | 5.31      | 7.55      | Patil              |        |
|          | 8.46  |                                  | 7.14       | 7.38                          | 10.45     | 6.13      | 7.84      |                    |        |
|          | 9.46  |                                  | 7.26       | 7.42                          | 10.45     | 6.13      | 7.89      |                    |        |
|          | 10.46 |                                  | 7.28       | 7.45                          | 10.45     | 6.18      | 7.91      |                    | Mant   |
|          | 11.46 |                                  | 7.28       | 7.48                          | 10.75     | 6.18      | 7.91      |                    |        |
|          | 12.46 |                                  | 7.43       | 7.61                          | 10.75     | 6.18      | 7.99      |                    |        |
|          | 13.46 |                                  | 7.44       | 7.61                          | 10.75     | 6.18      | 7.99      |                    |        |
|          | 14.46 |                                  | 7.32       | 7.99                          | 10.88     | 6.39      | 8.245     |                    | Mant   |
|          | 15.46 |                                  | 7.72       | 7.99                          | 10.89     | 6.42      | 8.255     |                    |        |
|          | 16.46 |                                  | 7.72       | 7.99                          | 10.89     | 6.42      | 8.255     |                    |        |
|          | 17.46 |                                  | 7.72       | 7.99                          | 10.89     | 6.42      | 8.255     |                    |        |
|          | 18.46 |                                  | 7.72       | 8.25                          | 10.89     | 6.72      | 8.39      |                    |        |
|          | 19.46 |                                  | 7.72       | 8.30                          | 10.89     | 6.79      | 8.42      |                    |        |
|          | 20.46 |                                  | 7.72       | 8.30                          | 10.89     | 6.79      | 8.42      |                    |        |
|          | 21.46 |                                  | 7.72       | 8.31                          | 10.89     | 6.79      | 8.42      |                    |        |
|          | 22.46 |                                  | 7.75       | 8.39                          | 10.89     | 6.79      | 8.45      |                    | Mant   |



**ZedGeo Systems Private Limited., Mumbai**

RECORD OF PILE LOAD TEST NO:-  
PROJECT:-

LOCATION :-  
CLIENTS NAME:-  
CONSULTANT:-  
CONTRACTOR:-

L.C OF DIAL GAUGE:-  
TYPE OF TEST:-  
DESIGN LOAD:-  
TEST LOAD :-  
MIXED DESIGN :-  
PILE DIAMETER :-

PAGE:- 5

RAM AREA :-  
DATE OF CASTING :-  
PILE DEPTH :-

| INITIAL PILE UPLIFT LOAD TEST |       |          |            |                |                               |           |           |                    |           |           |        |
|-------------------------------|-------|----------|------------|----------------|-------------------------------|-----------|-----------|--------------------|-----------|-----------|--------|
| DATE                          | TIME  | PRESSURE | LOAD IN MT | Reading        |                               |           |           | Average Deflection | Test Pile | SIGNATURE | REMARK |
|                               |       |          |            | GAUGE<br>(Hrs) | READING<br>kg/cm <sup>2</sup> | Reading 1 | Reading 2 | Reading 3          | Reading 4 |           |        |
| 12/10/25                      | 22.46 | 900      | 141.2      | 7.75           | 8.39                          | 10.74     | 6.74      | 8.40               | 8.40      | ZED       |        |
|                               | 22.50 |          |            | 7.75           | 8.39                          | 10.74     | 6.74      | 8.40               | 8.40      | RF        |        |
|                               | 23.00 |          |            | 7.75           | 8.39                          | 10.74     | 6.74      | 8.40               | 8.40      | RF        | Maul   |
|                               | 23.01 | 180      | 127.08     | 7.75           | 8.38                          | 10.73     | 6.68      | 8.38               | 8.38      | RF        |        |
|                               | 23.05 |          |            | 7.75           | 8.38                          | 10.73     | 6.68      | 8.38               | 8.38      | RF        | Maul   |
|                               | 23.15 |          |            | 7.75           | 8.38                          | 10.73     | 6.68      | 8.38               | 8.38      | RF        |        |
|                               | 23.16 | 160      | 112.96     | 7.48           | 8.16                          | 10.72     | 6.46      | 8.20               | 8.20      | RF        |        |
|                               | 23.20 |          |            | 7.47           | 8.16                          | 10.72     | 6.46      | 8.20               | 8.20      | RF        | Maul   |
|                               | 23.30 |          |            | 7.47           | 8.16                          | 10.72     | 6.46      | 8.20               | 8.20      | RF        |        |
|                               | 23.31 | 140      | 98.084     | 6.04           | 7.70                          | 10.45     | 6.08      | 7.56               | 7.56      | RF        |        |
|                               | 23.35 |          |            | 6.04           | 7.70                          | 10.45     | 6.08      | 7.56               | 7.56      | RF        | Maul   |
|                               | 23.45 | 23.45    |            | 6.04           | 7.70                          | 10.45     | 6.08      | 7.56               | 7.56      | RF        |        |
|                               | 23.46 | 120      | 84.72      | 5.49           | 7.32                          | 10.16     | 5.72      | 7.17               | 7.17      | RF        |        |
|                               | 23.50 |          |            | 5.46           | 7.29                          | 10.16     | 5.72      | 7.15               | 7.15      | RF        | Maul   |
| 13/10/25                      | 0.00  |          |            | 5.46           | 7.29                          | 10.16     | 5.72      | 7.15               | 7.15      | RF        |        |
|                               |       |          |            | 6.80           |                               |           |           |                    |           |           |        |
|                               | 0.01  | 100      | 70.60      | 5.46           | 6.80                          | 9.80      | 5.72      | 6.84               | 6.84      | RF        |        |
|                               | 0.05  |          |            | 5.46           | 6.80                          | 9.80      | 5.32      | 6.84               | 6.84      | RF        | Maul   |
|                               | 0.15  |          |            | 5.46           | 6.80                          | 9.80      | 5.32      | 6.84               | 6.84      | RF        |        |



**ZedGeo Systems Private Limited., Mumbai**  
RECORD OF PILE LOAD TEST NO.

**RECORD OF PILE LOAD TEST NO:**  
**PROJECT:-**

**LOCATION :-**  
**CLIENTS NAME:-**  
**CONSULTANT:-**  
**CONTRACTOR:-**

L.C OF DIAL GAUGE:  
TYPE OF TEST:-  
DESIGN LOAD:-  
TEST LOAD :-  
MIXED DESIGN :-  
PILE DIAMETER :-

PAGE:-

**RAM AREA :-**  
**DATE OF CASTING :-**  
**PILE DEPTH :-**

# CALIBRATION CERTIFICATES



**QCC LAB SOLUTIONS Pvt Ltd, Mumbai.**

Tel:- 9452200078,8369458583

E-mail:-calibration@qcclabsolutions.com

Website:- www.qcclabsolutions.com



Format No: PLTJ/01

Rev. No.- 00

**CALIBRATION CERTIFICATE**

| <b>CALIBRATION CERTIFICATE NO</b>                                   | : QCC-102-CR-01                                  |                |                             |                  |                      |
|---|--|----------------|-----------------------------|------------------|----------------------|
| <b>CALIBRATION REPORT DATE</b>                                      | : 23/03/2025                                     |                |                             |                  |                      |
| <b>NAME OF CUSTOMER</b>   | : M/s. ZEDZEO SYSTEMS PRIVET LIMITED             |                |                             |                  |                      |
| <b>PROJECT SITE ADDRESS</b>   | : NAVI MUMBAI                                    |                |                             |                  |                      |
| <b>DATE OF CALIBRATION</b>  | : 23/03/2025                                     |                |                             |                  |                      |
| <b>SUGGESTED NEXT CALIBRATION DUE DATE ( As customer Requested)</b> | 23/03/2026                                       |                |                             |                  |                      |
| <b>Details of Device Under Calibration (DUC)</b>                    |  |                |                             |                  |                      |
| Instrument Description : 500T X 250 mm Stroke Single Acting Ram Jam | Port Size : 3/8" NPT                             |                |                             |                  |                      |
| Capacity (Ton) : 500  |  |                |                             |                  |                      |
| Tag / ID No : ----  |  |                |                             |                  |                      |
| Sr. No. : 12607   |  |                |                             |                  |                      |
| Effective Area Ram (cm <sup>2</sup> ) : 706.9                       |  |                |                             |                  |                      |
| <b>Technical Details of Hydraulic Jack</b>                          |  |                |                             |                  |                      |
| Cylinder OD   | Ram, OD  | Stroke         | Retracted Height            |                  |                      |
| 399.86  | 299.97   | 250            | 557.2                       |                  |                      |
| <b>DETAIL OF MASTER EQUIPMENT USED FOR CALIBRATION</b>              |  |                |                             |                  |                      |
| Id of Instrument  | Range of Master                                  | Calibrated By  | Calibration Certificate No. | Calibration Date | Calibration Due Date |
| QCC/PGC/01  | 0- 700 bar                                       | IDEMI , Mumabi | CC/PRL/ 0305 /24-25         | 19/08/2024       | 18/08/2025           |
| <b>CALIBRATION RESULTS</b>  |  |                |                             |                  |                      |
| Calibration Method : DKD R-6 : 2016, SOP-CAL-10                     | Calibration done at Room Temp(° C) : 27.8        |                |                             |                  |                      |
| Calibration Done at Location : At Lab                               | Calibration done at Humidity(% RH) : 56          |                |                             |                  |                      |
| Pressure Transmitting Medium : Hydraulic                            | Certified Range of Hydraulic Jack (Ton) : 494.83 |                |                             |                  |                      |
| Reading on DUC (kg/cm <sup>2</sup> )                                | Effective Ram Area (cm <sup>2</sup> ), (F=PxA)   |                |                             |                  | Pressure in (Tons)   |
| P ( ACT )   |  |                |                             |                  |                      |
| 0   | 706.9  |                |                             |                  | 0.00                 |
| 60  | 706.9  |                |                             |                  | 42.41                |
| 120   | 706.9  |                |                             |                  | 84.83                |
| 180   | 706.9  |                |                             |                  | 127.24               |
| 240   | 706.9  |                |                             |                  | 169.66               |



Page 1 of 2

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**SALES:** ABHINAV TRIPATHI

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**CALIBRATION:** RATNESH GOEL

MOB: 9452200078

ratnesh@qcclabsolutions.com



Equipment Sales & Calibration Services

|     |       |        |
|-----|-------|--------|
| 300 | 706.9 | 212.07 |
| 360 | 706.9 | 254.48 |
| 420 | 706.9 | 296.90 |
| 480 | 706.9 | 339.31 |
| 540 | 706.9 | 381.73 |
| 580 | 706.9 | 410.00 |
| 650 | 706.9 | 459.49 |
| 700 | 706.9 | 494.83 |

**Remarks:**

1. The Reported Expended uncertainty is stated as a standard uncertainty multiplied by a coverage confidance level factor k=2 at ± 95%

**Note:**

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5. As found ;As left

6. The calibration results reported in the certificate are valid at the time of and under the stated conditions of measurement.

7. Calibration point don as per customer request

Calibrated by



Authorised Signatory




# QCC LAB

SOLUTIONS PVT. LTD.

Equipment Sales & Calibration Services

Format No: QCC/DG/01

Rev. No.- 00

## CALIBRATION CERTIFICATE

|   |                                      |
|---|--------------------------------------|
| Calibration Certificate No.                         | : QCC-2303-16030                     |
| Calibration Report Date                             | : 01/12/2025                         |
| Customer Name                                       | : M/s. ZEDZEO SYSTEMS PRIVET LIMITED |
| Site Address  | : Navi Mumbai                        |
| Date of Calibration                                 | : 01/04/2025                         |
| Calibration Due Date ( as per customer requirement) | : 01/04/2026                         |
| <b>DETAILS OF UNIT UNDER CALIBRATION</b>            |                                      |
| Equipement Description                              | : Analog Dial Gauge                  |
| Id of UUC   | : ZSPL/DG/02                         |
| Make.   | : BAKER                              |
| Model No.   | : FJA452                             |
| Range (mm)  | : 0-25 mm                            |
| Resolution (mm)                                     | : 0.01                               |

## DETAIL OF MASTER EQUIPMENT USED FOR CALIBRATION

| Master Equipment Description     | Range                       | Calibration Certificate No. | Make              | Calibration Date          | Calibration Date |
|----------------------------------|-----------------------------|-----------------------------|-------------------|---------------------------|------------------|
| Dial calibration Tester          | 0-25 mm                     | M-210209-25-1               | Reddy Instruments | 05/09/2024                | 05/09/2025       |
| Calibration Method               | : IS 2092 -1983, QCC/SOP/15 |                             |                   |                           |                  |
| Calibration Done on Location     | : AT LAB                    |                             |                   |                           |                  |
| Room Temp. (°C) & Humadity (%RH) | : 20.1 & 56                 |                             |                   |                           |                  |
|                                  |                             | Unit of Measurement : mm    |                   |                           |                  |
| Sr.No.                           | Set point on DUC            | Reading on master (Avg.)    | Deviation/Error   | Expanded Uncertainty in ± |                  |
| 1                                | 0.0                         | 0.0000                      | 0.0000            |                           |                  |
| 2                                | 2.5                         | 2.5003                      | 0.0003            |                           |                  |
| 3                                | 5.0                         | 5.0009                      | 0.0009            |                           |                  |
| 4                                | 7.5                         | 7.5085                      | 0.0085            |                           |                  |
| 5                                | 10.0                        | 10.0013                     | 0.0013            |                           |                  |
| 6                                | 12.5                        | 12.5019                     | 0.0019            |                           |                  |
| 7                                | 15.0                        | 15.0064                     | 0.0064            |                           |                  |
| 8                                | 17.5                        | 17.5068                     | 0.0068            |                           |                  |
| 9                                | 20.0                        | 20.0084                     | 0.0084            |                           |                  |
| 10                               | 22.5                        | 22.5093                     | 0.0093            |                           |                  |
| 11                               | 25.0                        | 25.0092                     | 0.0092            |                           |                  |

Remarks:

1. DUC stands for device under calibration.
2. The certificate shall refers only to the particuler item submitted for calibration .
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4. As found ;As left
5. The calibration results reported in the certificate are valid at the time of and under the stated conditions of measurement.
6. Calibration point don as per customer request

(Calibrated By)



(Authorised Signatory)

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CALIBRATION: RATNESH GOEL

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# QCC LAB SOLUTIONS PVT. LTD.

Equipment Sales & Calibration Services

Format No: QCC/DG/01

Rev. No.- 00

## CALIBRATION CERTIFICATE

|  |                                      |
|--|--------------------------------------|
| Calibration Certificate No.                        | : QCC-2303-16031                     |
| Calibration Report Date                            | : 01/04/2025                         |
| Customer Name                                      | : M/s. ZEDZEO SYSTEMS PRIVET LIMITED |
| Site Address                                       | : Navi Mumbai                        |
| Date of Calibration                                | : 01/04/2025                         |
| Calibration Due Date ( as per customer requirment) | : 01/04/2026                         |
| <b>DETAILS OF UNIT UNDER CALIBRATION</b>           |                                      |
| Equipement Description                             | : Analog Dial Gauge                  |
| Id of UUC  | : ZSPL/DG/01                         |
| Make.  | : BAKER                              |
| Model No.  | : FIB564                             |
| Range (mm)   | : 0-25 mm                            |
| Resolution (mm)                                    | : 0.01                               |

## DETAIL OF MASTER EQUIPMENT USED FOR CALIBRATION

| Master Equipement Description    | Range                       | Calibration Certificate No. | Make              | Calibration Date          | Calibration Date |
|----------------------------------|-----------------------------|-----------------------------|-------------------|---------------------------|------------------|
| Dial calibration Tester          | 0-25 mm                     | M-210209-25-1               | Reddy Instruments | 05/09/2024                | 05/09/2025       |
| Calibration Method               | : IS 2092 -1983, QCC/SOP/15 |                             |                   |                           |                  |
| Calibration Done on Location     | : AT LAB                    |                             |                   |                           |                  |
| Room Temp. (°C) & Humadity (%RH) | : 20.4 & 53                 |                             |                   |                           |                  |
| Unit of Measurement : mm         |                             |                             |                   |                           |                  |
| Sr.No.                           | Set point on DUC            | Reading on master (Avg.)    | Deviation/Error   | Expanded Uncertainty in ± |                  |
| 1                                | 0.0                         | 0.0000                      | 0.0000            |                           |                  |
| 2                                | 2.5                         | 2.4984                      | -0.0016           |                           |                  |
| 3                                | 5.0                         | 4.9992                      | -0.0008           |                           |                  |
| 4                                | 7.5                         | 7.4968                      | -0.0032           |                           |                  |
| 5                                | 10.0                        | 9.9983                      | -0.0017           |                           |                  |
| 6                                | 12.5                        | 12.4846                     | -0.0154           |                           |                  |
| 7                                | 15.0                        | 14.9854                     | -0.0146           |                           |                  |
| 8                                | 17.5                        | 17.4837                     | -0.0163           |                           |                  |
| 9                                | 20.0                        | 19.9914                     | -0.0086           |                           |                  |
| 10                               | 22.5                        | 22.4911                     | -0.0089           |                           |                  |
| 11                               | 25.0                        | 24.9930                     | -0.0070           | 0.007                     |                  |

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6. Calibration point don as per customer request

(Calibrated By)



(Authorised Signatory)




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## CALIBRATION CERTIFICATE

|   |                                      |
|---|--------------------------------------|
| Calibration Certificate No.                         | : QCC-2303-16032                     |
| Calibration Report Date                             | : 01/04/2025                         |
| Customer Name                                       | : M/s. ZEDZEO SYSTEMS PRIVET LIMITED |
| Site Address  | : Navi Mumbai                        |
| Date of Calibration                                 | : 01/4/2025                          |
| Calibration Due Date ( as per customer requirement) | : 01/04/2026                         |
| <b>DETAILS OF UNIT UNDER CALIBRATION</b>            |                                      |
| Equipement Description                              | : Analog Dial Gauge                  |
| Id of UUC   | : ZSPL/DG/02                         |
| Make.   | : BAKER                              |
| Model No.   | : 215357                             |
| Range (mm)  | : 0-25 mm                            |
| Resolution (mm)                                     | : 0.01                               |

## DETAIL OF MASTER EQUIPMENT USED FOR CALIBRATION

| Master Equipment Description     | Range                       | Calibration Certificate No. | Make              | Calibration Date          | Calibration Date |
|----------------------------------|-----------------------------|-----------------------------|-------------------|---------------------------|------------------|
| Dial calibration Tester          | 0-25 mm                     | M-210209-25-1               | Reddy Instruments | 05/09/2024                | 05/09/2025       |
| Calibration Method               | : IS 2092 -1983, QCC/SOP/15 |                             |                   |                           |                  |
| Calibration Done on Location     | : AT LAB                    |                             |                   |                           |                  |
| Room Temp. (°C) & Humadity (%RH) | : 20.1 & 56                 |                             |                   |                           |                  |
| Unit of Measurement : mm         |                             |                             |                   |                           |                  |
| Sr.No.                           | Set point on DUC            | Reading on master (Avg.)    | Deviation/Error   | Expanded Uncertainty in ± |                  |
| 1                                | 0.0                         | 0.0000                      | 0.0000            |                           |                  |
| 2                                | 2.5                         | 2.5003                      | 0.0003            |                           |                  |
| 3                                | 5.0                         | 5.0009                      | 0.0009            |                           |                  |
| 4                                | 7.5                         | 7.5085                      | 0.0085            |                           |                  |
| 5                                | 10.0                        | 10.0013                     | 0.0013            |                           |                  |
| 6                                | 12.5                        | 12.5019                     | 0.0019            |                           |                  |
| 7                                | 15.0                        | 15.0064                     | 0.0064            |                           |                  |
| 8                                | 17.5                        | 17.5068                     | 0.0068            |                           |                  |
| 9                                | 20.0                        | 20.0084                     | 0.0084            |                           |                  |
| 10                               | 22.5                        | 22.5093                     | 0.0093            |                           |                  |
| 11                               | 25.0                        | 25.0092                     | 0.0092            |                           |                  |

Remarks:

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4. As found ;As left
5. The calibration results reported in the certificate are valid at the time of and under the stated conditions of measurement.
6. Calibration point don as per customer request

(Calibrated By)



(Authorised Signatory)




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## CALIBRATION CERTIFICATE

|  |                                      |
|--|--------------------------------------|
| Calibration Certificate No.                        | : QCC-2303-16034                     |
| Calibration Report Date                            | : 01/04/2025                         |
| Customer Name                                      | : M/s. ZEDZEO SYSTEMS PRIVET LIMITED |
| Site Address                                       | : Navi Mumbai                        |
| Date of Calibration                                | : 01/04/2025                         |
| Calibration Due Date ( as per customer requirment) | : 01/04/2026                         |
| DETAILS OF UNIT UNDER CALIBRATION                  |                                      |
| Equipement Description                             | : Analog Dial Gauge                  |
| Id of UUC  | : ZSPL/DG/04                         |
| Make.  | : BAKER                              |
| Model No.  | : 214954                             |
| Range (mm)   | : 0-25 mm                            |
| Resolution (mm)                                    | : 0.01                               |

## DETAIL OF MASTER EQUIPMENT USED FOR CALIBRATION

| Master Equipement Description    | Range                       | Calibration Certificate No. | Make              | Calibration Date          | Calibration Date |
|----------------------------------|-----------------------------|-----------------------------|-------------------|---------------------------|------------------|
| Dial calibration Tester          | 0-25 mm                     | M-210209-25-1               | Reddy Instruments | 05/09/2024                | 05/09/2025       |
| Calibration Method               | : IS 2092 -1983, QCC/SOP/15 |                             |                   |                           |                  |
| Calibration Done on Location     | : AT LAB                    |                             |                   |                           |                  |
| Room Temp. (°C) & Humadity (%RH) | : 20.3 & 56                 |                             |                   |                           |                  |
| Unit of Measurement : mm         |                             |                             |                   |                           |                  |
| Sr.No.                           | Set point on DUC            | Reading on master (Avg.)    | Deviation/Error   | Expanded Uncertainty in ± |                  |
| 1                                | 0.0                         | 0.0000                      | 0.0000            | 0.007                     |                  |
| 2                                | 2.5                         | 2.4991                      | -0.0011           |                           |                  |
| 3                                | 5.0                         | 4.9995                      | -0.0005           |                           |                  |
| 4                                | 7.5                         | 7.4976                      | -0.0024           |                           |                  |
| 5                                | 10.0                        | 9.9997                      | -0.0003           |                           |                  |
| 6                                | 12.5                        | 12.4967                     | -0.0033           |                           |                  |
| 7                                | 15.0                        | 14.9941                     | -0.0059           |                           |                  |
| 8                                | 17.5                        | 17.4936                     | -0.0064           |                           |                  |
| 9                                | 20.0                        | 19.9985                     | -0.0015           |                           |                  |
| 10                               | 22.5                        | 22.4969                     | -0.0031           |                           |                  |
| 11                               | 25.0                        | 24.9990                     | -0.0010           |                           |                  |

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(Calibrated By)



(Authorised Signatory)