

Syed Mubashar Hassan

Test Performed By:

Dr. /Engr.

Wasim Abbas

RE Nespak.(Upgradation Of Kalabagh/ Shakardara Road, Distt Mianwali)

Client Reference: 4376/SMH/22/1652

SOM Lab

Ref:

333 (Page-2/2)

Dated: 29-03-2022

Dated:

19-05-2022

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Gauge Length: 8 inch

Sample Type:

Deformed Bar

| S.No. | Weight | Dia.    |            | Area            |                 | Yield Load | Ultimate Load | Yield Stress                |                              | Ult. Stress                 |                              | Elongation | Gauge Length | %age Elongation | Remarks |
|-------|--------|---------|------------|-----------------|-----------------|------------|---------------|-----------------------------|------------------------------|-----------------------------|------------------------------|------------|--------------|-----------------|---------|
|       |        | Nominal | Calculated | Nominal         | Calculated      |            |               | (according to nominal area) | (according to measured area) | (according to nominal area) | (according to measured area) |            |              |                 |         |
|       | lb/ft  | #       | in         | in <sup>2</sup> | in <sup>2</sup> | Tons       | Tons          | psi                         | psi                          | psi                         | psi                          | in         | in           | %               |         |
| 1     | 2.649  | 8       | 0.995      | 0.79            | 0.778           | 27.12      | 33.86         | 75700                       | 76870                        | 94540                       | 96000                        | 1.30       | 8.0          | 16.3            |         |
| 2     | 2.658  | 8       | 0.997      | 0.79            | 0.781           | 27.17      | 33.89         | 75840                       | 76720                        | 94620                       | 95710                        | 1.40       | 8.0          | 17.5            |         |
| 3     | 1.655  | 6       | 0.787      | 0.44            | 0.486           | 10.11      | 16.23         | 50690                       | 45890                        | 81340                       | 73650                        | 1.50       | 8.0          | 18.8            |         |
| 4     | 1.656  | 6       | 0.787      | 0.44            | 0.487           | 10.16      | 16.11         | 50940                       | 46030                        | 80730                       | 72940                        | 1.50       | 8.0          | 18.8            |         |
| 5     | 1.123  | 5       | 0.648      | 0.31            | 0.330           | 9.60       | 13.07         | 68320                       | 64180                        | 92970                       | 87340                        | 1.20       | 8.0          | 15.0            |         |
| 6     | 1.116  | 5       | 0.646      | 0.31            | 0.328           | 9.70       | 13.20         | 69040                       | 65250                        | 93920                       | 88760                        | 1.20       | 8.0          | 15.0            |         |
| 7     | 0.611  | 4       | 0.479      | 0.20            | 0.180           | 4.30       | 6.22          | 47440                       | 52710                        | 68570                       | 76190                        | 1.50       | 8.0          | 18.8            |         |
| 8     | 0.584  | 4       | 0.468      | 0.20            | 0.172           | 4.71       | 7.19          | 51940                       | 60390                        | 79250                       | 92150                        | 1.30       | 8.0          | 16.3            |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |

**BEND TEST:**

|     |  |  |
|-----|--|--|
| # 8 | Sample bend through 180 degrees Satisfactorily without any crack | <b>Note:-</b><br><br>Only Twelve Samples Received and Tested |
| # 6 | Sample bend through 180 degrees Satisfactorily without any crack |  |
| # 5 | Sample bend through 180 degrees Satisfactorily without any crack |  |
| # 4 | Sample bend through 180 degrees Satisfactorily without any crack |  |
|     |  |  |

Note: Please always confirm the results of above report on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)

Syed Mubashar Hassan

Test Performed By:

Dr. /Engr. Wasim Abbas

RE Nespak.(Upgradation Of Kalabagh/ Shakardara Road, Distt Mianwali)

Client Reference: 4376/SMH/22/1651

SOM Lab

Ref: 333 (Page-1/2)

Dated: 29-03-2022

Dated: 19-05-2022

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Gauge Length: 8 inch

Sample Type:

Deformed Bar

| S.No. | Weight | Dia.    |            | Area            |                 | Yield Load | Ultimate Load | Yield Stress                |                              | Ult. Stress                 |                              | Elongation | Gauge Length | %age Elongation | Remarks |
|-------|--------|---------|------------|-----------------|-----------------|------------|---------------|-----------------------------|------------------------------|-----------------------------|------------------------------|------------|--------------|-----------------|---------|
|       |        | Nominal | Calculated | Nominal         | Calculated      |            |               | (according to nominal area) | (according to measured area) | (according to nominal area) | (according to measured area) |            |              |                 |         |
|       | lb/ft  | #       | in         | in <sup>2</sup> | in <sup>2</sup> | Tons       | Tons          | psi                         | psi                          | psi                         | psi                          | in         | in           | %               |         |
| 1     | 2.589  | 8       | 0.984      | 0.79            | 0.761           | 19.13      | 29.38         | 53420                       | 55450                        | 82020                       | 85140                        | 1.70       | 8.0          | 21.3            |         |
| 2     | 2.583  | 8       | 0.983      | 0.79            | 0.759           | 19.18      | 29.43         | 53560                       | 55750                        | 82160                       | 85520                        | 1.70       | 8.0          | 21.3            |         |
| 3     | 1.524  | 6       | 0.755      | 0.44            | 0.448           | 15.51      | 20.54         | 77770                       | 76380                        | 102960                      | 101120                       | 1.30       | 8.0          | 16.3            |         |
| 4     | 1.522  | 6       | 0.754      | 0.44            | 0.447           | 15.34      | 20.61         | 76900                       | 75700                        | 103310                      | 101700                       | 1.30       | 8.0          | 16.3            |         |
| 5     | 1.058  | 5       | 0.629      | 0.31            | 0.311           | 8.74       | 13.73         | 62150                       | 61950                        | 97690                       | 97370                        | 1.30       | 8.0          | 16.3            |         |
| 6     | 1.038  | 5       | 0.623      | 0.31            | 0.305           | 8.84       | 13.83         | 62880                       | 63910                        | 98410                       | 100030                       | 1.40       | 8.0          | 17.5            |         |
| 7     | 0.605  | 4       | 0.476      | 0.20            | 0.178           | 4.70       | 6.32          | 51820                       | 58230                        | 69700                       | 78310                        | 1.50       | 8.0          | 18.8            |         |
| 8     | 0.574  | 4       | 0.464      | 0.20            | 0.169           | 4.84       | 7.54          | 53400                       | 63190                        | 83180                       | 98440                        | 1.30       | 8.0          | 16.3            |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |

**BEND TEST:**

|     |  |  |
|-----|--|--|
| # 8 | Sample bend through 180 degrees Satisfactorily without any crack | <b>Note:-</b><br><br>Only Twelve Samples Received and Tested |
| # 6 | Sample bend through 180 degrees Satisfactorily without any crack |  |
| # 5 | Sample bend through 180 degrees Satisfactorily without any crack |  |
| # 4 | Sample bend through 180 degrees Satisfactorily without any crack |  |
|     |  |  |

Note: Please always confirm the results of above report on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)

Talha Khalid Khan

Test Performed By:

Dr. /Engr.

Asad Ali Gillani

A/XEN E&M GE (Air) Rafiqui.(Rehabilitation Of Followers Quarters At PAF Base Rafiqui)

Client Reference: 6581/21/E-6

SOM Lab

Ref:

334 (Page-1/1)

Dated: 10-05-2022

Dated:

19-05-2022

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Gauge Length: 8 inch

Sample Type:

Deformed Bar

| S.No. | Weight | Dia.    |            | Area            |                 | Yield Load | Ultimate Load | Yield Stress                |                              | Ult. Stress                 |                              | Elongation | Gauge Length | %age Elongation | Remarks |
|-------|--------|---------|------------|-----------------|-----------------|------------|---------------|-----------------------------|------------------------------|-----------------------------|------------------------------|------------|--------------|-----------------|---------|
|       |        | Nominal | Calculated | Nominal         | Calculated      |            |               | (according to nominal area) | (according to measured area) | (according to nominal area) | (according to measured area) |            |              |                 |         |
|       | lb/ft  | #       | in         | in <sup>2</sup> | in <sup>2</sup> | Tons       | Tons          | psi                         | psi                          | psi                         | psi                          | in         | in           | %               |         |
| 1     | 0.622  | 4       | 0.483      | 0.20            | 0.183           | 5.12       | 7.41          | 56430                       | 61670                        | 81720                       | 89310                        | 1.40       | 8.0          | 17.5            |         |
| 2     | 0.624  | 4       | 0.483      | 0.20            | 0.183           | 5.12       | 7.46          | 56430                       | 61670                        | 82290                       | 89930                        | 1.30       | 8.0          | 16.3            |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |

**BEND TEST:**

|     |  |   |
|-----|--|---|
| # 4 | Sample bend through 180 degrees Satisfactorily without any crack | <b>Note:-</b><br><br>Only Three Samples Received and Tested |
|     |  |   |
|     |  |   |
|     |  |   |

Note: Please always confirm the results of above report on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)

Khurram Shahzad  
Sr. Engineer (Civil), SWP PAEC, D.G.Khan

Test Performed By: Dr. /Engr. Asad Ali Gillani

Client Reference: WASO-CMD-LOI 75/C  
Dated: 17-05-2022  
Test: Tension Test & Bend Test  
Gauge Length: 8 inch

SOM Lab  
Ref: 335 (Page-1/1)  
Dated: 19-05-2022  
ASTM-A-615  
Deformed Bar

| S.No. | Weight | Dia.    |            | Area            |                 | Yield Load | Ultimate Load | Yield Stress                |                              | Ult. Stress                 |                              | Elongation | Gauge Length | %age Elongation | Remarks |
|-------|--------|---------|------------|-----------------|-----------------|------------|---------------|-----------------------------|------------------------------|-----------------------------|------------------------------|------------|--------------|-----------------|---------|
|       |        | Nominal | Calculated | Nominal         | Calculated      |            |               | (according to nominal area) | (according to measured area) | (according to nominal area) | (according to measured area) |            |              |                 |         |
|       | lb/ft  | #       | in         | in <sup>2</sup> | in <sup>2</sup> | Tons       | Tons          | psi                         | psi                          | psi                         | psi                          | in         | in           | %               |         |
| 1     | 0.660  | 4       | 0.497      | 0.20            | 0.194           | 6.80       | 8.41          | 74980                       | 77300                        | 92740                       | 95610                        | 1.30       | 8.0          | 16.3            |         |
| 2     | 0.660  | 4       | 0.497      | 0.20            | 0.194           | 6.24       | 8.66          | 68800                       | 70920                        | 95550                       | 98500                        | 1.20       | 8.0          | 15.0            |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |

**BEND TEST:**

|     |  |   |
|-----|--|---|
| # 4 | Sample bend through 180 degrees Satisfactorily without any crack | <b>Note:-</b><br><br>Only Three Samples Received and Tested |
|     |  |   |
|     |  |   |
|     |  |   |

Note: Please always confirm the results of above report on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)

Col Tajamal Hussain Riaz ®

Test Performed By: Dr. /Engr. Bilal Khokhar

RE ACE Limited.Multan.(Const Of Govt. Officer`s Residences In South Punjab Secretariat)

Client Reference: ACE/RE/GOR/2022/043

SOM Lab

Ref: 336 (Page-1/1)

Dated: 16-05-2022

Dated: 19-05-2022

Test: Tension Test & Bend Test

Test Specification: ASTM-A-615

Gauge Length: 8 inch

Sample Type: Deformed Bar (FF Steel)

| S.No. | Weight | Dia.    |            | Area            |                 | Yield Load | Ultimate Load | Yield Stress                |                              | Ult. Stress                 |                              | Elongation | Gauge Length | %age Elongation | Remarks |
|-------|--------|---------|------------|-----------------|-----------------|------------|---------------|-----------------------------|------------------------------|-----------------------------|------------------------------|------------|--------------|-----------------|---------|
|       |        | Nominal | Calculated | Nominal         | Calculated      |            |               | (according to nominal area) | (according to measured area) | (according to nominal area) | (according to measured area) |            |              |                 |         |
|       | lb/ft  | #       | in         | in <sup>2</sup> | in <sup>2</sup> | Tons       | Tons          | psi                         | psi                          | psi                         | psi                          | in         | in           | %               |         |
| 1     | 1.476  | 6       | 0.743      | 0.44            | 0.434           | 13.68      | 19.42         | 68570                       | 69520                        | 97340                       | 98680                        | 1.50       | 8.0          | 18.8            |         |
| 2     | 1.479  | 6       | 0.744      | 0.44            | 0.435           | 12.90      | 18.62         | 64640                       | 65380                        | 93350                       | 94420                        | 1.40       | 8.0          | 17.5            |         |
| 3     | 0.668  | 4       | 0.500      | 0.20            | 0.196           | 6.78       | 9.16          | 74750                       | 76280                        | 101060                      | 103120                       | 1.20       | 8.0          | 15.0            |         |
| 4     | 0.676  | 4       | 0.503      | 0.20            | 0.199           | 6.73       | 8.87          | 74190                       | 74560                        | 97800                       | 98290                        | 1.30       | 8.0          | 16.3            |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |

**BEND TEST:**

|     |  |   |
|-----|--|---|
| # 6 | Sample bend through 180 degrees Satisfactorily without any crack | <b>Note:-</b><br><br>Only Six Samples Received and Tested |
| # 4 | Sample bend through 180 degrees Satisfactorily without any crack |   |
|     |  |   |
|     |  |   |

Note: Please always confirm the results of above report on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)

Qaisar Abbas

Test Performed By: Dr. /Engr. Wasim Abbas

Project Dir, IDAP.(Pilot Program For Hub And Spoke Model At Zahir Pir Rahim Yar Khan)

Client Reference: PD/ZP/IDAP/SO/2022/16

SOM Lab

Ref: 337 (Page-1/1)

Dated: 17-05-2022

Dated: 19-05-2022

Test: Tension Test & Bend Test

Test Specification: ASTM-A-615

Gauge Length: 8 inch

Sample Type: Deformed Bar (Five Mega Star)

| S.No. | Weight | Dia.    |            | Area            |                 | Yield Load | Ultimate Load | Yield Stress                |                              | Ult. Stress                 |                              | Elongation | Gauge Length | %age Elongation | Remarks |
|-------|--------|---------|------------|-----------------|-----------------|------------|---------------|-----------------------------|------------------------------|-----------------------------|------------------------------|------------|--------------|-----------------|---------|
|       |        | Nominal | Calculated | Nominal         | Calculated      |            |               | (according to nominal area) | (according to measured area) | (according to nominal area) | (according to measured area) |            |              |                 |         |
|       | lb/ft  | #       | in         | in <sup>2</sup> | in <sup>2</sup> | Tons       | Tons          | psi                         | psi                          | psi                         | psi                          | in         | in           | %               |         |
| 1     | 1.477  | 6       | 0.743      | 0.44            | 0.434           | 12.90      | 20.76         | 64640                       | 65530                        | 104080                      | 105520                       | 1.20       | 8.0          | 15.0            |         |
| 2     | 1.477  | 6       | 0.743      | 0.44            | 0.434           | 12.86      | 20.69         | 64480                       | 65380                        | 103720                      | 105160                       | 1.10       | 8.0          | 13.8            |         |
| 3     | 0.652  | 4       | 0.494      | 0.20            | 0.192           | 5.42       | 8.18          | 59800                       | 62300                        | 90150                       | 93910                        | 1.20       | 8.0          | 15.0            |         |
| 4     | 0.659  | 4       | 0.497      | 0.20            | 0.194           | 5.40       | 8.23          | 59580                       | 61420                        | 90720                       | 93520                        | 1.10       | 8.0          | 13.8            |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |

**BEND TEST:**

|     |  |   |
|-----|--|---|
| # 6 | Sample bend through 180 degrees Satisfactorily without any crack | <b>Note:-</b><br><br>Only Six Samples Received and Tested |
| # 4 | Sample bend through 180 degrees Satisfactorily without any crack |   |
|     |  |   |
|     |  |   |

Note: Please always confirm the results of above report on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)

Tahir Mehmood

Test Performed By:

Dr. /Engr.

Asad Ali Gillani

Chief Engr. Zaitoon, New Lahore City. (Const Of Jamia Mosque New Lahore City Ph-III)

Client Reference: NLC/CE/047

SOM Lab

Ref:

338 (Page-1/1)

Dated: 18-05-2022

Dated:

19-05-2022

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Gauge Length: 8 inch

Sample Type:

Deformed Bar (Amerli Steel)

| S.No. | Weight | Dia.    |            | Area            |                 | Yield Load | Ultimate Load | Yield Stress                |                              | Ult. Stress                 |                              | Elongation | Gauge Length | %age Elongation | Remarks |
|-------|--------|---------|------------|-----------------|-----------------|------------|---------------|-----------------------------|------------------------------|-----------------------------|------------------------------|------------|--------------|-----------------|---------|
|       |        | Nominal | Calculated | Nominal         | Calculated      |            |               | (according to nominal area) | (according to measured area) | (according to nominal area) | (according to measured area) |            |              |                 |         |
|       | lb/ft  | #       | in         | in <sup>2</sup> | in <sup>2</sup> | Tons       | Tons          | psi                         | psi                          | psi                         | psi                          | in         | in           | %               |         |
| 1     | 2.684  | 8       | 1.002      | 0.79            | 0.789           | 26.40      | 34.25         | 73710                       | 73800                        | 95620                       | 95740                        | 1.10       | 8.0          | 13.8            |         |
| 2     | 2.689  | 8       | 1.003      | 0.79            | 0.790           | 27.42      | 34.93         | 76550                       | 76550                        | 97530                       | 97530                        | 1.50       | 8.0          | 18.8            |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |

**BEND TEST:**

|     |  |   |
|-----|--|---|
| # 8 | Sample bend through 180 degrees Satisfactorily without any crack | <b>Note:-</b><br><br>Only Three Samples Received and Tested |
|     |  |   |
|     |  |   |
|     |  |   |

Note: Please always confirm the results of above report on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)

Engr. Tajammal Farooq

**Test Performed By:**

Dr. /Engr. S Asad Ali Gillani

RE (AZEA) QABP Skp.(Const. Of Multi Purpose Complex At Quaid-E-Azam Business Park On M-2)

**Client Reference:** RE/AZE/MPC-193

**SOM Lab**

**Ref:** 339 (Page-1/1)

**Dated:** 22-02-2022

**Dated:** 19-05-2022

**Test:** Tension Test & Bend Test

**Test Specification:** ASTM-A-615

**Gauge Length:** 8 inch

**Sample Type:**

Deformed Bar (Faizan Steel)

| S.No. | Weight | Dia.    |            | Area            |                 | Yield Load | Ultimate Load | Yield Stress                |                              | Ult. Stress                 |                              | Elongation | Gauge Length | %age Elongation | Remarks |
|-------|--------|---------|------------|-----------------|-----------------|------------|---------------|-----------------------------|------------------------------|-----------------------------|------------------------------|------------|--------------|-----------------|---------|
|       |        | Nominal | Calculated | Nominal         | Calculated      |            |               | (according to nominal area) | (according to measured area) | (according to nominal area) | (according to measured area) |            |              |                 |         |
|       | lb/ft  | #       | in         | in <sup>2</sup> | in <sup>2</sup> | Tons       | Tons          | psi                         | psi                          | psi                         | psi                          | in         | in           | %               |         |
| 1     | 2.609  | 8       | 0.988      | 0.79            | 0.767           | 28.72      | 37.02         | 80170                       | 82570                        | 103360                      | 106460                       | 1.20       | 8.0          | 15.0            |         |
| 2     | 2.659  | 8       | 0.997      | 0.79            | 0.781           | 27.54      | 36.21         | 76900                       | 77780                        | 101080                      | 102250                       | 1.20       | 8.0          | 15.0            |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |

**BEND TEST:**

|     |  |   |
|-----|--|---|
| # 8 | Sample bend through 180 degrees Satisfactorily without any crack | <b>Note:-</b><br><br>Only Three Samples Received and Tested |
|     |  |   |
|     |  |   |
|     |  |   |

Note: Please always confirm the results of above report on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)



M.Nadeem Zafar Ullah

Test Performed By:

Dr. /Engr.

Asad Ali Gillani

Incharge (Civil),SNGPL.(Const And Domestic Meter Inspection Shop At Multan)

Client Reference: CC/DMIS/MLN

SOM Lab

Ref:

340 (Page-1/1)

Dated: 19-05-2022

Dated:

19-05-2022

Test: Tension Test & Bend Test

Test Specification:

ASTM-A-615

Gauge Length: 8 inch

Sample Type:

Deformed Bar

| S.No. | Weight | Dia.    |            | Area            |                 | Yield Load | Ultimate Load | Yield Stress                |                              | Ult. Stress                 |                              | Elongation | Gauge Length | %age Elongation | Remarks |
|-------|--------|---------|------------|-----------------|-----------------|------------|---------------|-----------------------------|------------------------------|-----------------------------|------------------------------|------------|--------------|-----------------|---------|
|       |        | Nominal | Calculated | Nominal         | Calculated      |            |               | (according to nominal area) | (according to measured area) | (according to nominal area) | (according to measured area) |            |              |                 |         |
|       | lb/ft  | #       | in         | in <sup>2</sup> | in <sup>2</sup> | Tons       | Tons          | psi                         | psi                          | psi                         | psi                          | in         | in           | %               |         |
| 1     | 0.593  | 4       | 0.471      | 0.20            | 0.174           | 5.47       | 8.23          | 60370                       | 69390                        | 90720                       | 104270                       | 1.10       | 8.0          | 13.8            |         |
| 2     | 0.593  | 4       | 0.471      | 0.20            | 0.174           | 5.37       | 8.23          | 59240                       | 68090                        | 90720                       | 104270                       | 1.20       | 8.0          | 15.0            |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               | -       |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               | -       |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               | -       |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               | -       |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               | -       |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               | -       |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               | -       |

**BEND TEST:**

|     |  |   |
|-----|--|---|
| # 4 | Sample bend through 180 degrees Satisfactorily without any crack | <b>Note:-</b><br><br>Only Three Samples Received and Tested |
|     |  |   |
|     |  |   |
|     |  |   |

Note: Please always confirm the results of above report on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)

Engr. Zia Ul Hassan Khan

**Test Performed By:** Dr. /Engr. Bilal Khokhar

RE,Dev Consultancy Services.(Const Of 02 Nos Academic Block At Chiniot Campus Of GCU,Fsd)

**Client Reference:** DCS/RE/UET/GCUF/2022/051

**SOM Lab**

**Ref:** 341 (Page-1/1)

**Dated:** 13-05-2022

**Dated:** 19-05-2022

**Test:** Tension Test & Bend Test

**Test Specification:** ASTM-A-615

**Gauge Length:** 8 inch

**Sample Type:** Deformed Bar

| S.No. | Weight | Dia.    |            | Area            |                 | Yield Load | Ultimate Load | Yield Stress                |                              | Ult. Stress                 |                              | Elongation | Gauge Length | %age Elongation | Remarks |
|-------|--------|---------|------------|-----------------|-----------------|------------|---------------|-----------------------------|------------------------------|-----------------------------|------------------------------|------------|--------------|-----------------|---------|
|       |        | Nominal | Calculated | Nominal         | Calculated      |            |               | (according to nominal area) | (according to measured area) | (according to nominal area) | (according to measured area) |            |              |                 |         |
|       | lb/ft  | #       | in         | in <sup>2</sup> | in <sup>2</sup> | Tons       | Tons          | psi                         | psi                          | psi                         | psi                          | in         | in           | %               |         |
| 1     | 1.473  | 6       | 0.743      | 0.44            | 0.433           | 14.17      | 19.34         | 71020                       | 72170                        | 96930                       | 98500                        | 1.30       | 8.0          | 16.3            |         |
| 2     | 1.474  | 6       | 0.743      | 0.44            | 0.433           | 15.15      | 20.92         | 75930                       | 77160                        | 104850                      | 106540                       | 1.20       | 8.0          | 15.0            |         |
| 3     | 0.665  | 4       | 0.498      | 0.20            | 0.195           | 6.17       | 8.66          | 68010                       | 69750                        | 95550                       | 98000                        | 0.80       | 8.0          | 10.0            |         |
| 4     | 0.659  | 4       | 0.497      | 0.20            | 0.194           | 6.03       | 8.43          | 66550                       | 68610                        | 92960                       | 95840                        | 0.80       | 8.0          | 10.0            |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |
| -     | -      | -       | -          | -               | -               | -          | -             | -                           | -                            | -                           | -                            | -          | -            | -               |         |

**BEND TEST:**

|     |  |   |
|-----|--|---|
| # 6 | Sample bend through 180 degrees Satisfactorily without any crack | <b>Note:-</b><br><br>Only Six Samples Received and Tested |
| # 4 | Sample bend through 180 degrees Satisfactorily without any crack |   |
|     |  |   |
|     |  |   |

Note: Please always confirm the results of above report on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)

**Test Performed By: Dr. /Engr. S. Asad Ali Gillani**

Kamran Tahir Sandhu

ME DHA Multan.(Electrical Works Of Sec A,H And U (M/S Barqtron))

**Client Reference:** 701/92/Planning/DHA

**Dated:** 18-05-2022

**SOM Lab Ref:** CED/SOM/343(Page-1/2)

**Dated:** 19-05-2022

**Test:** Tension Test

**Test Specification:** ASTM-F -1554

**Sample Type:** Anchor- Bolt (L-Shaped)

**Gauge Length:** 200 mm

| S.No. | Diameter | Area            | Yield Load | Ultimate Load | Yield Stress | Ultimate. Stress | Elongation | Gauge Length | %age Elongation | Reduction of Area (%) |
|-------|----------|-----------------|------------|---------------|--------------|------------------|------------|--------------|-----------------|-----------------------|
|       | mm       | mm <sup>2</sup> | kN         | kN            | MPa          | MPa              | mm         | mm           | %               |                       |
| 1     | 25       | 491             | 185.70     | 287.90        | 378          | 587              | 35.0       | 200          | 17.5            | 49.30                 |
| 2     | 25       | 491             | 186.00     | 288.50        | 379          | 588              | 42.5       | 200          | 21.3            | 45.82                 |
|       |          |                 |            |               |              |                  |            |              |                 |                       |

**Note:-**

Only Two Samples  
Received and Tested

Note: Please always confirm the results of above report on web [www.uet-civil.edu.pk](http://www.uet-civil.edu.pk)

**Test Performed By: Dr. /Engr. S. Asad Ali Gillani**

Kamran Tahir Sandhu

ME DHA Multan.(Electrical Works Of Sec A,H And U (M/S Barqtron))

**Client Reference:** 701/92/Planning/DHA

**Dated:** 18-05-2022

**SOM Lab Ref:** CED/SOM/343(Page-2/2)

**Dated:** 19-05-2022

**Test:** Tension Test

**Test Specification:** ASTM-F -1554

**Sample Type:** Anchor- Bolt (Y-Shaped)

**Gauge Length:** 50 mm

| S.No.   | Diameter |         | Area            | Yield Load | Ultimate Load | Yield Stress | Ultimate Stress | Elongation                              | Gauge Length | %age Elongation | Reduction of Area (%) |
|---|----------|---------|-----------------|------------|---------------|--------------|-----------------|---|--------------|-----------------|-----------------------|
|   | Actual   | Measure |                 |            |               |              |                 |   |              |                 |                       |
|   | mm       | mm      | mm <sup>2</sup> | kN         | kN            | MPa          | MPa             | mm                                      | mm           | %               |                       |
| 1   | 12       | 8       | 50.28           | 18.4       | 24.5          | 366          | 487             | 7.5                                     | 50           | 15.0            | 68.3                  |
| 2   | 12       | 8       | 50.28           | 19.0       | 25.7          | 378          | 511             | 10.0                                    | 50           | 20.0            | 66.69                 |
|   |          |         |                 |            |               |              |                 |   |              |                 |                       |
|   |          |         |                 |            |               |              |                 | <b>Note:-</b>                           |              |                 |                       |
|   |          |         |                 |            |               |              |                 | Only Two Samples<br>Received and Tested |              |                 |                       |
| Note: Please always confirm the results of above report on web <a href="http://www.uet-civil.edu.pk">www.uet-civil.edu.pk</a> |          |         |                 |            |               |              |                 |   |              |                 |                       |

