



**STRUCTURAL ENGINEERING DIVISION**  
**Test Floor Laboratory**  
**Department of Civil Engineering**  
**University of Engineering and Technology Lahore, 54890**  
**Pakistan. Ph: 92-42-99029202**

Ref: CED/TFL/06/3452  
2023

Dated: 13-06-

Dated of Test: 20-06-2023

To

**Resident Engineer**  
**NESPAK**

**Infrastructure Development at Chahar Bagh Underpass Ravi Riverfornt Urban  
Development Project.**

Subject: **TESTING OF R.C.C. PIPE [ASTM-C76 - 08a]**

Reference to your letter No. 4559/13/MAA/09/127, dated 12.06.2023 on the subject cited above. One R.C.C. Pipe as received by us has been tested. The results are tabulated as under.

Sr. No	Nominal Size	Total Length	Loaded Length	External Diameter	Internal Diameter	Wall Thickness	Proof load	Ultimate Load	Proof Stress	Ultimate Stress
	(inch)	(foot)	(foot)	(inch)	(inch)	(inch)	(kg)	(kg)	Pound/Linear foot/foot	Pound/Linear foot/foot
1	24	7.82	7.16	29.84	24.57	2.64	6750	9940	1015	1494

**I/C Testing Laboratoires**  
**UET Lahore, Pakistan.**

Note:

- 1- You can See your reports On Internet in the following web site  
[http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing\\_reports](http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing_reports)
- 2- The above results pertain to sample /samples supplied to this laboratory.
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**Department of Civil Engineering**  
**University of Engineering and Technology Lahore, 54890**  
**Pakistan. Ph: 92-42-99029202**

Ref: CED/TFL/06/3467

Dated: 14-06-2023

Dated of Test: 20-06-2023

To

**Assistant Director (QCD)**  
**WASA, LDA, Lahore**  
**(M/s Riaz Pipes Factory)**

**Subject: - CALIBRATION OF HYDRAULIC JACK WITH GAUGE**  
**(MARK: TFL/06/3467)**

Reference to your Letter No. QCD/1105-06, Dated: 14/06/2023 on the subject cited above. One Hydraulic Jack with Gauge as received by us has been calibrated. The results are tabulated as under:

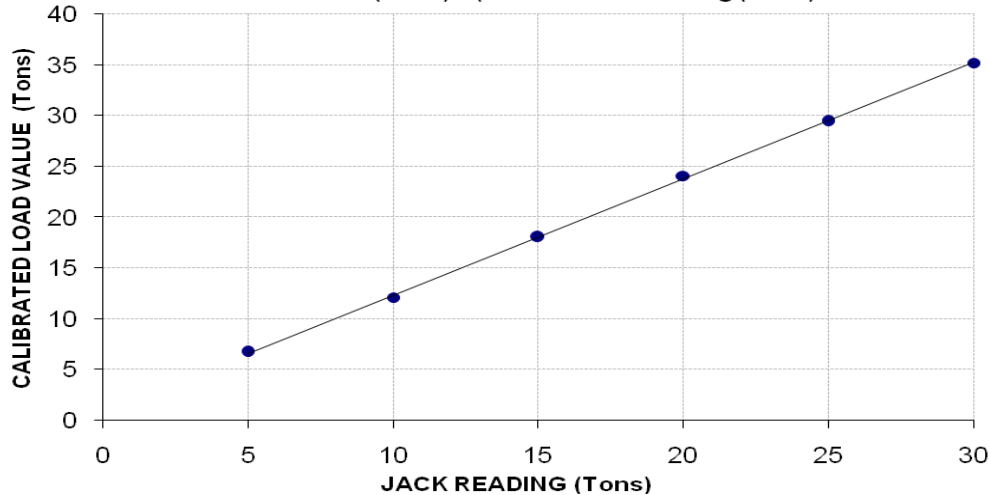
**Total Range : Zero - 50 (Ton)**  
**Calibrated Range : Zero - 30 (Ton)**

Hydraulic Jack Reading (Ton)		5	10	15	20	25	30
Calibrated Load	(kg)	6100	11000	16400	21900	26750	32000
	(Ton)	6.72	12.11	18.06	24.11	29.45	35.24

1000 Kg = 1.1011 Ton

**Calibration Curve For Jack**

**Calibrated Value (Tons) = (1.146 x Jack Reading (Tons) + 0.880)**



**I/C Testing Laboratories**  
**UET Lahore, Pakistan.**

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**Pakistan. Ph: 92-42-99029202**

Ref: CED/TFL/06/3469

Dated: 15-06-2023

Dated of Test: 20-06-2023

To

**Resident Engineer**  
**NESPAK**

**Construction of Multi-Level Grade Separation Flyover at Shahdra Moor,**  
**Lahore**

Subject: **TESTING OF R.C.C. PIPE [ASTM-C76 - 08a]**

Reference to your letter No. 4537/03/MSA/09/62, dated 14.06.2023 on the subject cited above. One R.C.C. Pipe as received by us has been tested. The results are tabulated as under.

Sr. No	Nominal Size	Total Length	Loaded Length	External Diameter	Internal Diameter	Wall Thickness	Proof load	Ultimate Load	Proof Stress	Ultimate Stress
	(inch)	(foot)	(foot)	(inch)	(inch)	(inch)	(kg)	(kg)	Pound/Linear foot/foot	Pound/Linear foot/foot
1	18	7.76	7.16	29.84	25.24	2.30	7500	10500	1098	1538

**I/C Testing Laboratoires**  
**UET Lahore, Pakistan.**

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**Department of Civil Engineering**  
**University of Engineering and Technology Lahore, 54890**  
**Pakistan. Ph: 92-42-99029202**

To,

Resident Engineer  
 Metroplan-Asian Jv  
 Establishment of Tertiary Care Hospital, Nishtar-II, Multan.  
 (MIR # 04, Dated 23-03-2023)

Reference # CED/TFL **3473** (Dr. M Kashif)

Dated: 16-06-2023

Reference of the request letter # Metroplan-Asian JV-Nishtar-II-RE-1743-2023 Dated: 18-04-2023

**Tension Test Report** (Page -1/1)

Date of Test 20-06-2023  
 Gauge length 8 inches  
 Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size		Area (in <sup>2</sup> )		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal (#)	Actual (inch)	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.383	3	0.379	0.11	0.113	3600	5200	72200	70470	104200	101800	1.00	12.5	SJ Gujjar Steel
2	0.390	3	0.382	0.11	0.115	3600	5400	72200	69140	108200	103800	1.00	12.5	
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<b>Note: only two samples for tensile and one sample for bend test</b>														
Bend Test														
#3 Bar Bend Test Through 180° is Satisfactory														

**I/C Testing Laboratories**  
**UET Lahore, Pakistan.**

Note:

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To,

Sub Divisional Officer  
Public Health Engineering Sub Division  
Noor Pur Thal  
(Water Supply Scheme Mitha Khooh (Installation of R.O Filtration Plants 500-Liter)  
District Khushab)

Reference # CED/TFL **3480** (Dr. M Kashif)  
Reference of the request letter # 51/NPT

Dated: 19-06-2023  
Dated: 12-04-2023

**Tension Test Report** (Page -1/1)

Date of Test 20-06-2023  
Gauge length 8 inches  
Description Deformed Steel Bar Tensile Test as per ASTM A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size (inch)		Area (in <sup>2</sup> )		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal	Actual	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.345	3/8	0.360	0.11	0.102	3100	4600	62200	67300	92200	99900	1.60	20.0	
2	0.354	3/8	0.364	0.11	0.104	2700	3400	54100	57260	68200	72100	1.70	21.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only two samples for tensile test</b>														
Bend Test														

**I/C Testing Laboratories**  
**UET Lahore, Pakistan.**

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**Test Floor Laboratory**  
**Department of Civil Engineering**  
**University of Engineering and Technology Lahore, 54890**  
**Pakistan. Ph: 92-42-99029202**

To,

Resident Engineer  
Diamer Basha Consultants Group (DBCg)  
NESPAK - ACE -MMP - MWH - ROYRY - DOLSAR Jv  
Diamer Basha Dam Project

Reference # CED/TFL **3483** (Dr. M Kashif)

Dated: 19-06-2023

Reference of the request letter # DBCg/Lab/PF JV/2023/031

Dated: 17-06-2023

**Tension Test Report** (Page -1/4)

Date of Test 20-06-2023

Gauge length 640 mm

Description Steel Strand Tensile Test as per ASTM A-416-94a

Sr. No.	Nominal Diameter	Nominal Weight	Measured weight	Yield strength clause (6.3)		Breaking strength clause (6.2)		Young's Modulus of Elasticity "E"	% Elongation	Remarks / Coil No.
	(mm)	(kg/km)	(kg/km)	(kg)	(kN)	(kg)	(kN)	GPa		
1	15.24 (0.6")	1102.0	1114.0	24200	237.40	27300	267.81	199	>3.50	WS-S1-2023-01 6891
2	15.24 (0.6")	1102.0	1110.0	24100	236.42	27300	267.81	198	>3.50	WS-S1-2023-01A 6900
3	15.24 (0.6")	1102.0	1116.0	24400	239.36	27300	267.81	199	>3.50	WS-S1-2023-01B 6909
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
<b>Only three samples for Test</b>										

Note:

1. Modulus of Elasticity is based on nominal steel area of the steel strand vide clause 13.3 of ASTM – A416a
2. Load versus percentage strain graphs are attached

**I/C Testing Laboratories**  
**UET Lahore, Pakistan.**

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To,

Resident Engineer  
Diamer Basha Consultants Group (DBCG)  
NESPAK - ACE -MMP - MWH - ROYRY - DOLSAR Jv  
Diamer Basha Dam Project

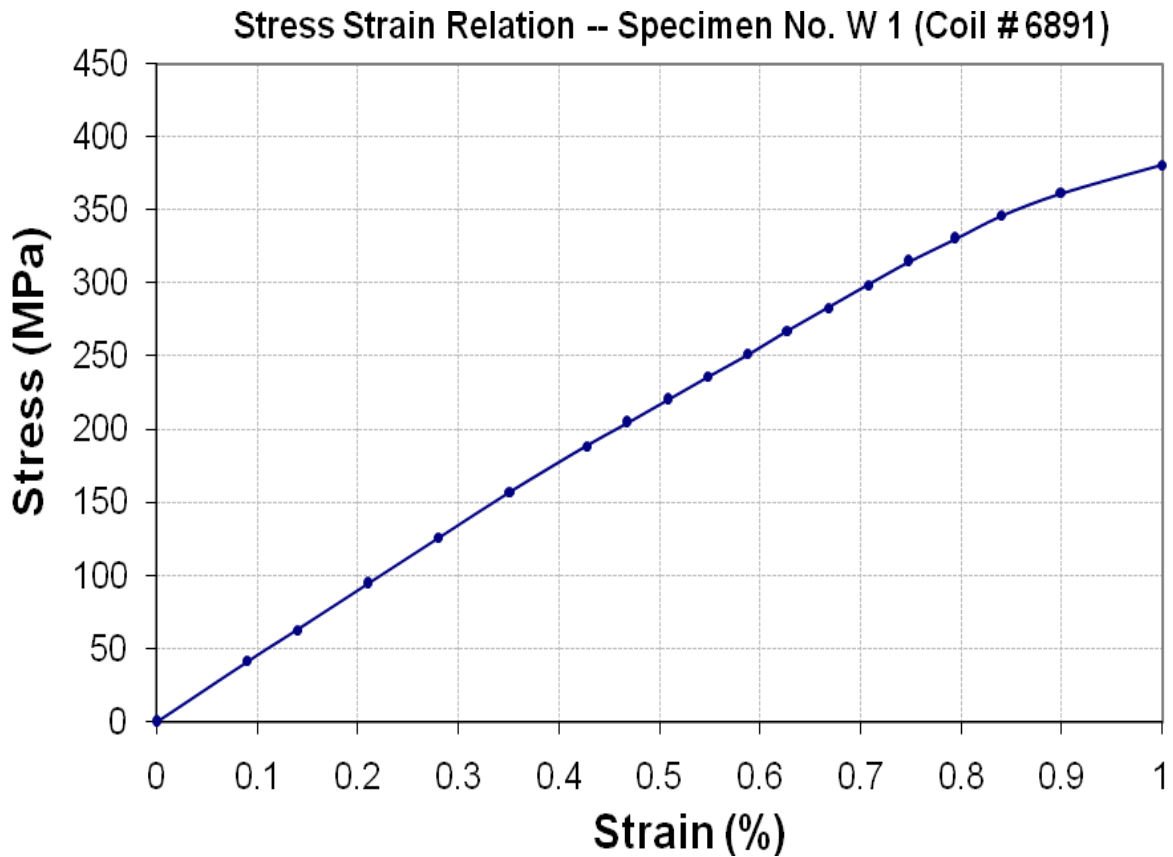
Reference # CED/TFL **3483** (Dr. M Kashif)

Dated: 19-06-2023

Reference of the request letter # DBCG/Lab/PF JV/2023/031

Dated: 17-06-2023

**Graph** (Page – 2/4)



**I/C Testing Laboratories**  
**UET Lahore, Pakistan.**

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To,

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Diamer Basha Consultants Group (DBCg)  
NESPAK - ACE -MMP - MWH - ROYRY - DOLSAR Jv  
Diamer Basha Dam Project

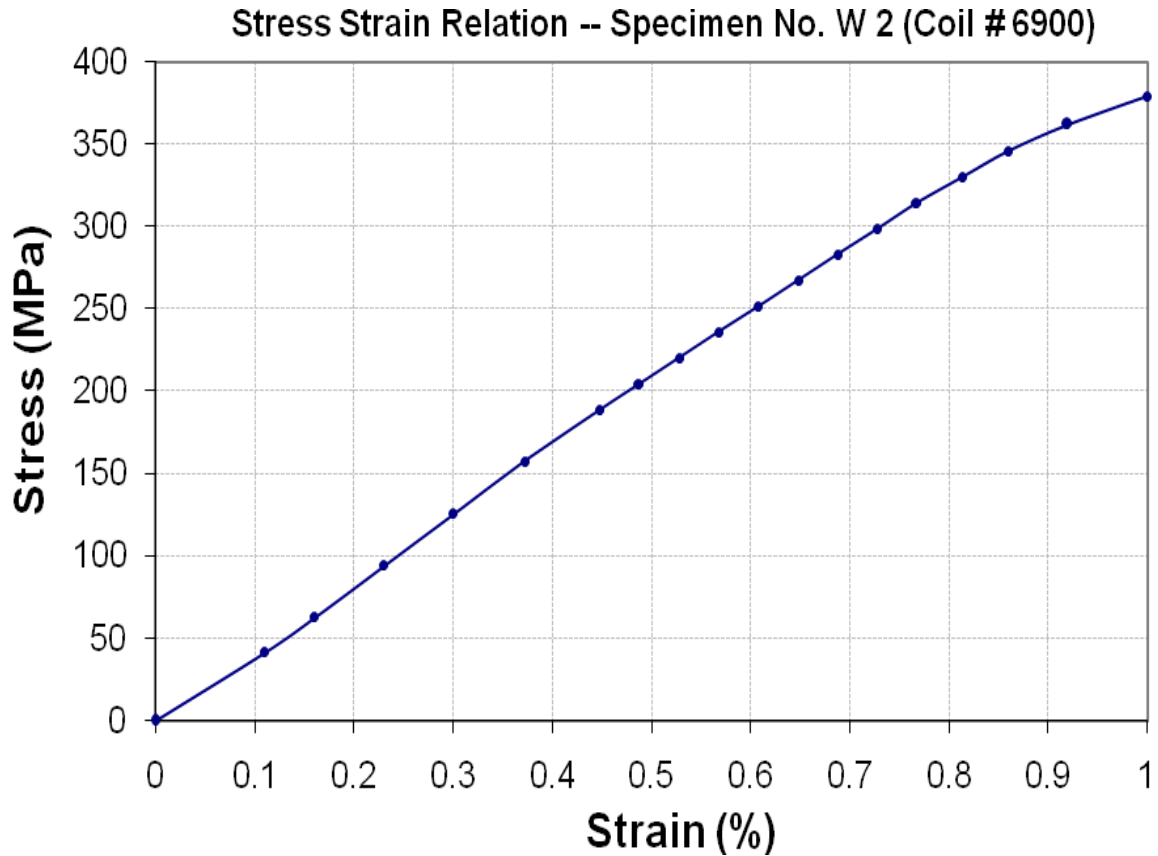
Reference # CED/TFL **3483** (Dr. M Kashif)

Dated: 19-06-2023

Reference of the request letter # DBCG/Lab/PF JV/2023/031

Dated: 17-06-2023

**Graph** (Page – 3/4)



**I/C Testing Laboratories**  
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To,

Resident Engineer  
Diamer Basha Consultants Group (DBCG)  
NESPAK - ACE -MMP - MWH - ROYRY - DOLSAR Jv  
Diamer Basha Dam Project

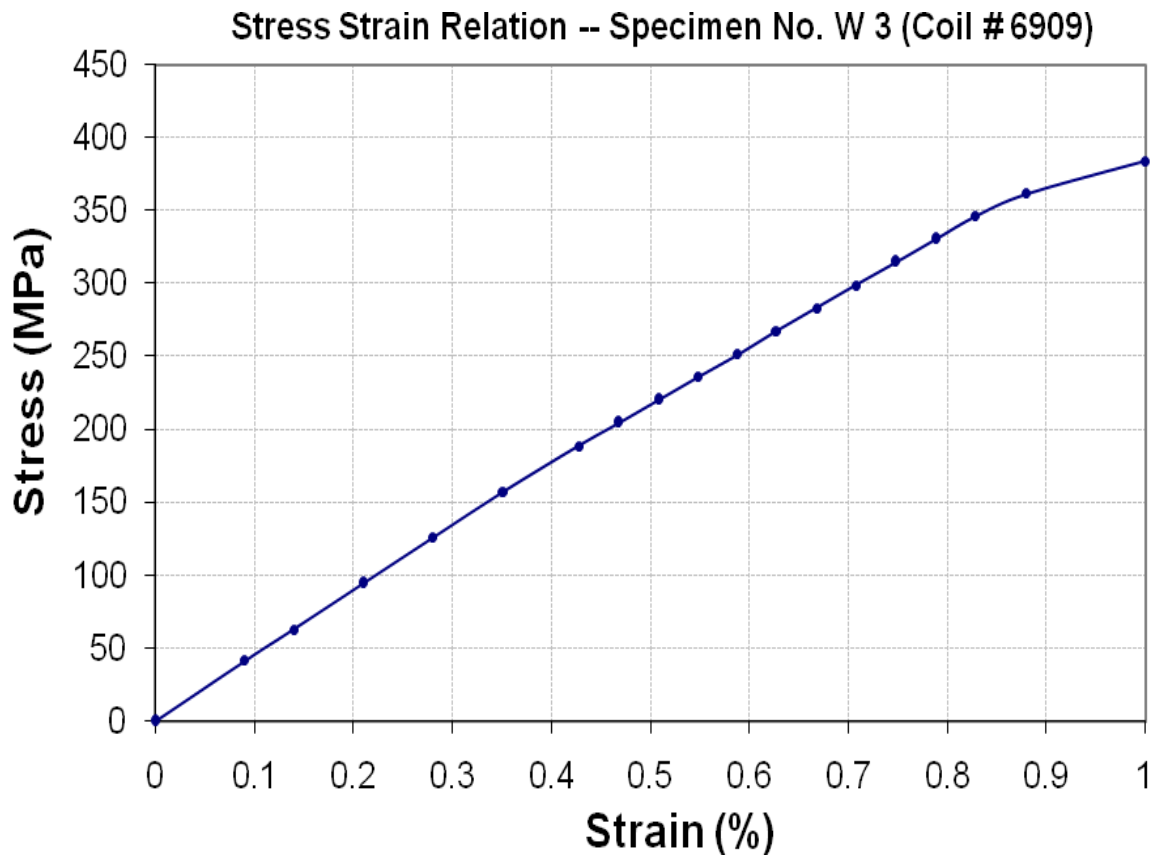
Reference # CED/TFL **3483** (Dr. M Kashif)

Dated: 19-06-2023

Reference of the request letter # DBCG/Lab/PF JV/2023/031

Dated: 17-06-2023

**Graph** (Page – 4/4)



**I/C Testing Laboratories**  
**UET Lahore, Pakistan.**

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To,

M/S United Wire Industries (Pvt) Ltd  
Lahore

Reference # CED/TFL **3487** (Dr. M Kashif)  
Reference of the request letter # UWIL/D-1418

Dated: 19-05-2023

Dated: 19-06-2023

**Tension Test Report** (Page – 1/1)

Date of Test 20-06-2023

Gauge length 640 mm

Description Steel Strand Tensile Test as per ASTM A-416-94a

Sr. No.	Nominal Diameter	Nominal Weight	Measured weight	Yield strength clause (6.3)		Breaking strength clause (6.2)		% Elongation	Remarks/ Coil No.
	(mm)	(kg/km)	(kg/km)	(kg)	(kN)	(kg)	(kN)		
1	15.24 (0.6")	1102.0	1115.0	24200	237.40	26700	261.93	>3.50	1234
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
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-	-	-	-	-	-	-	-	-	-
<b>Only one sample for Test</b>									

**I/C Testing Laboratoires**  
**UET Lahore, Pakistan.**

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**STRUCTURAL ENGINEERING DIVISION**  
**Test Floor Laboratory**  
**Department of Civil Engineering**  
**University of Engineering and Technology Lahore, 54890**  
**Pakistan. Ph: 92-42-99029202**

To,

Chief Resident Engineer  
Zeeruk International (Pvt) Ltd  
Construction of Sialkot Kharian Project - SKM  
(Ibrahim Nizami Wire Industry Lahore)

Reference # CED/TFL **3488** (Dr. M Kashif)  
Reference of the request letter # SKMP/CRE/2023/135

Dated: 19-06-2023

Dated: 19-06-2023

**Tension Test Report** (Page -1/4)

Date of Test 20-06-2023  
Gauge length 640 mm  
Description Steel Strand Tensile Test as per ASTM A-416-94a

Sr. No.	Nominal Diameter	Nominal Weight	Measured weight	Yield strength clause (6.3)		Breaking strength clause (6.2)		Young's Modulus of Elasticity "E"	% Elongation	Remarks / Coil No.
	(mm)	(kg/km)	(kg/km)	(kg)	(kN)	(kg)	(kN)	GPa		
1	12.70 (1/2")	775.0	778.0	18100	177.56	19800	194.24	199	>3.50	xx
2	12.70 (1/2")	775.0	777.0	18100	177.56	19600	192.28	198	>3.50	xx
3	12.70 (1/2")	775.0	777.0	18100	177.56	19400	190.31	199	>3.50	xx
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	

**Only three samples for Test**

Note:

1. Modulus of Elasticity is based on nominal steel area of the steel strand vide clause 13.3 of ASTM – A416a
2. Load versus percentage strain graphs are attached

**I/C Testing Laboratoires**  
**UET Lahore, Pakistan.**

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**University of Engineering and Technology Lahore, 54890**  
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To,

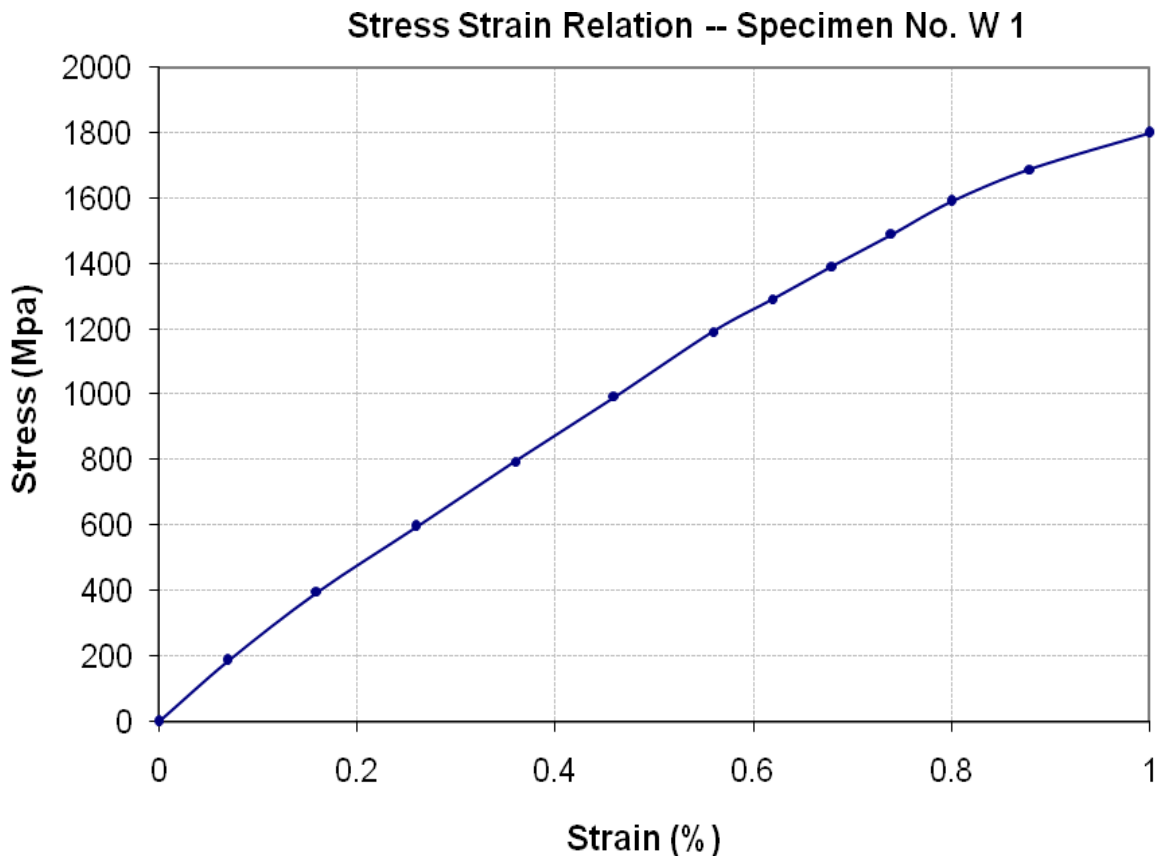
Chief Resident Engineer  
Zeeruk International (Pvt) Ltd  
Construction of Sialkot Kharian Project - SKM  
(Ibrahim Nizami Wire Industry Lahore)

Reference # CED/TFL **3488** (Dr. M Kashif)  
Reference of the request letter # SKMP/CRE/2023/135

Dated: 19-06-2023

Dated: 19-06-2023

**Graph** (Page – 2/4)



**I/C Testing Laboratoires**  
**UET Lahore, Pakistan.**

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To,

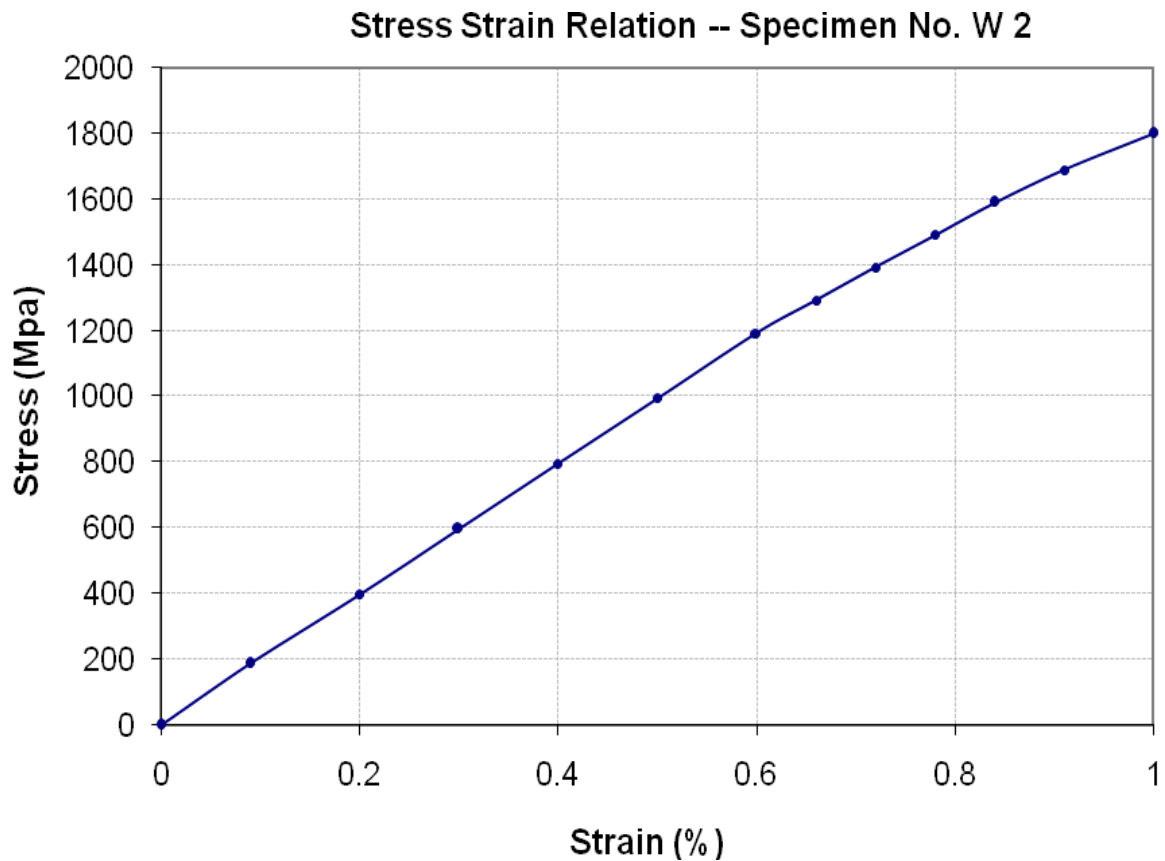
Chief Resident Engineer  
Zeeruk International (Pvt) Ltd  
Construction of Sialkot Kharian Project - SKM  
(Ibrahim Nizami Wire Industry Lahore)

Reference # CED/TFL **3488** (Dr. M Kashif)  
Reference of the request letter # SKMP/CRE/2023/135

Dated: 19-06-2023

Dated: 19-06-2023

**Graph** (Page – 3/4)



**I/C Testing Laboratoires**  
**UET Lahore, Pakistan.**

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To,

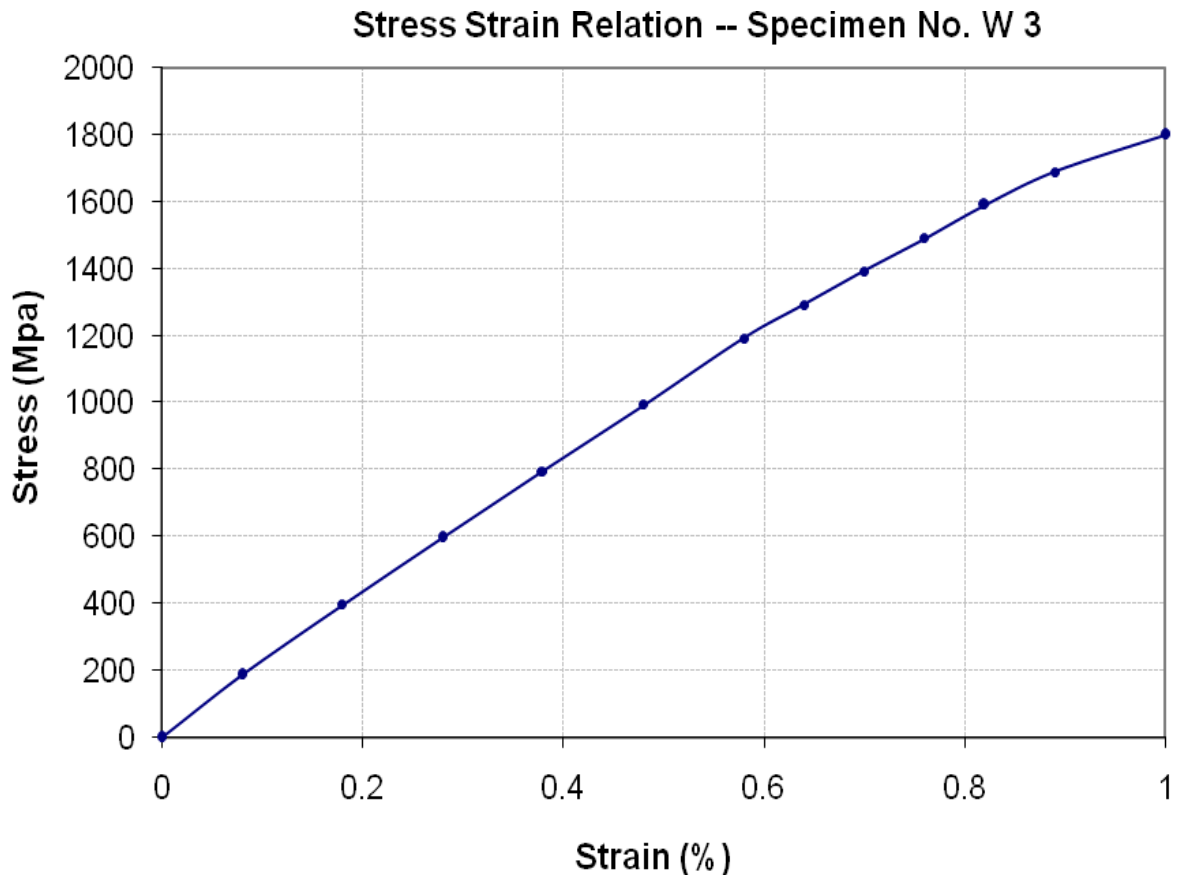
Chief Resident Engineer  
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Construction of Sialkot Kharian Project - SKM  
(Ibrahim Nizami Wire Industry Lahore)

Reference # CED/TFL **3488** (Dr. M Kashif)  
Reference of the request letter # SKMP/CRE/2023/135

Dated: 19-06-2023

Dated: 19-06-2023

**Graph** (Page – 4/4)



**I/C Testing Laboratories**  
**UET Lahore, Pakistan.**

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**University of Engineering and Technology Lahore, 54890**  
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Ref: CED/TFL/06/3489

Dated: 19-06-2023

Date of Test: 20-06-2023

To,

**Resident Engineer**  
**NESPAK**  
**Development of Nilore Heights (G+9) Frash Town Islamabad.**

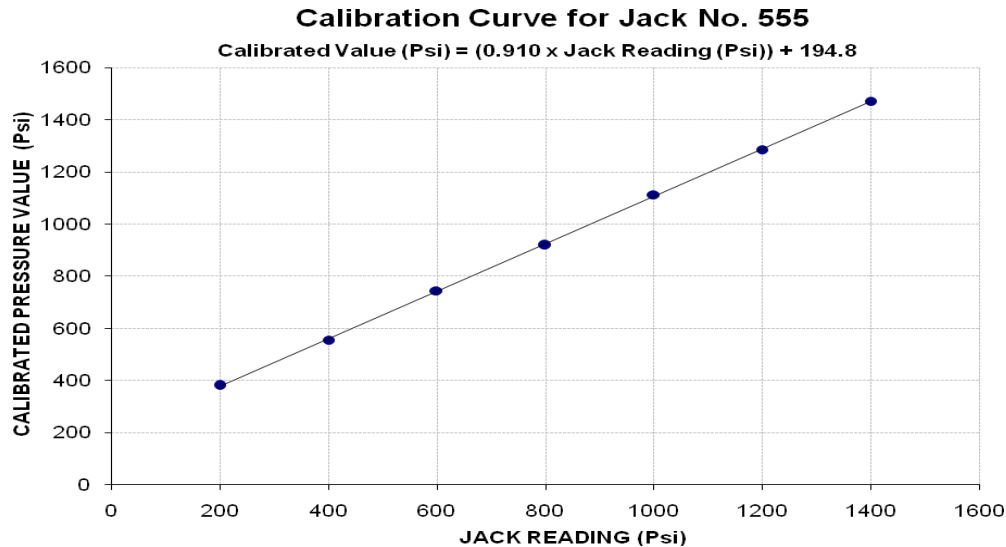
**Subject: - CALIBRATION OF HYDRAULIC JACK WITH PRESSURE GAUGE**  
**(MARK: TFL/06/3489) (Page # 1/3)**

Reference to your Letter No. 4425/021/ZA/93, Dated: 15/06/2023 on the subject cited above. One Hydraulic Jack No. 555 with Pressure Gauge No. EN 837-1 as received by us has been calibrated. The results are tabulated as under:

**Total Range : Zero - 6000 (Psi)**  
**Calibrated Range : Zero - 1400 (Psi)**

Jack Reading (Psi)	200	400	600	800	1000	1200	1400
Calibrated Load (kg)	46400	67600	90800	112000	135600	156800	179400
Calibrated Pressure (Psi)	380	554	744	918	1112	1285	1471

The Ram Area for Calibration = 268.91 in<sup>2</sup> (Witness by Muhammad Zeeshan (Sub Engr. NESPAK))



**I/C Testing Laboratories**  
**UET Lahore, Pakistan.**

Note:

- 1- You can See your reports On Internet in the following web site  
[http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing\\_reports](http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing_reports)
- 2- The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples



**STRUCTURAL ENGINEERING DIVISION**  
**Test Floor Laboratory**  
**Department of Civil Engineering**  
**University of Engineering and Technology Lahore, 54890**  
**Pakistan. Ph: 92-42-99029202**

Ref: CED/TFL/06/3489

Dated: 19-06-2023

Date of Test: 20-06-2023

To,

**Resident Engineer**  
**NESPAK**  
**Development of Nilore Heights (G+9) Frash Town Islamabad.**

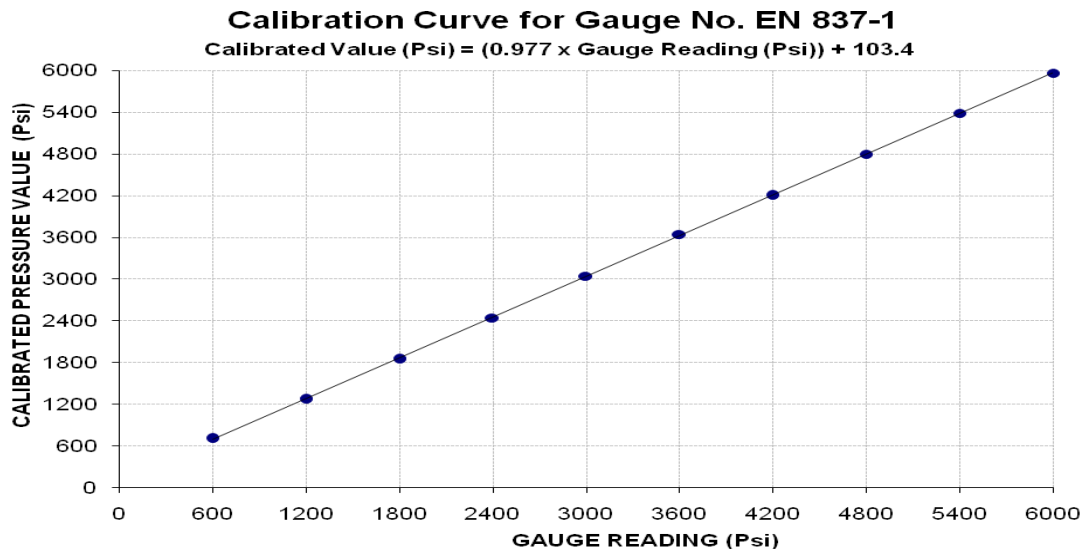
Subject: - **CALIBRATION OF PRESSURE GAUGE (MARK: TFL/06/3489)** (Page # 2/3)

Reference to your Letter No. 4425/021/ZA/93, Dated: 15/06/2023 on the subject cited above. One Pressure Gauge No. EN 837-1 as received by us has been calibrated. The results are tabulated as under:

**Total Range : Zero - 10000 (Psi)**  
**Calibrated Range : Zero - 6000 (Psi)**

<b>Gauge Reading (Psi)</b>	600	1200	1800	2400	3000	3600	4200	4800	5400	6000
<b>Calibrated Load (kg)</b>	9800	17700	25700	34000	42300	50700	58500	66800	75000	83000
<b>Calibrated Pressure (Psi)</b>	704	1271	1846	2442	3039	3642	4202	4798	5388	5962

The Ram Area for Calibration = 198 cm<sup>2</sup> (Witness by Muhammad Zeeshan (Sub Engr. NESPAK))



**I/C Testing Laboratories**  
**UET Lahore, Pakistan.**

Note:

- 1- You can See your reports On Internet in the following web site  
[http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing\\_reports](http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing_reports)
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**STRUCTURAL ENGINEERING DIVISION**  
**Test Floor Laboratory**  
**Department of Civil Engineering**  
**University of Engineering and Technology Lahore, 54890**  
**Pakistan. Ph: 92-42-99029202**

Ref: CED/TFL/06/3489

Dated: 19-06-2023

Date of Test: 20-06-2023

To,

**Resident Engineer**  
**NESPAK**

**Development of Nilore Heights (G+9) Frash Town Islamabad.**

**Subject: - CALIBRATION OF DIAL GAUGES (MARK: TFL/06/3489) (Page # 3/3)**

Reference to your Letter No. 4425/021/ZA/93, Dated: 15/06/2023 on the subject cited above. Three Dial Gauges as received by us have been calibrated on standard calibration device. The results are tabulated as under.

**Total Range : Zero - 100 (mm)**  
**Calibrated Range : Zero - 50 (mm)**

<b>Standard Reading</b>	<b>Dial Gauge Readings</b>		
	<b>Dial Gauge No. I (GE 146632)</b>	<b>Dial Gauge No. II (GE 146633)</b>	<b>Dial Gauge No. III (GE 146635)</b>
<b>400</b>	<b>394</b>	<b>397</b>	<b>392</b>
<b>800</b>	<b>793</b>	<b>797</b>	<b>792</b>
<b>1200</b>	<b>1193</b>	<b>1196</b>	<b>1193</b>
<b>1600</b>	<b>1594</b>	<b>1596</b>	<b>1591</b>
<b>2000</b>	<b>1994</b>	<b>1996</b>	<b>1992</b>
<b>2400</b>	<b>2394</b>	<b>2396</b>	<b>2392</b>
<b>2800</b>	<b>2794</b>	<b>2797</b>	<b>2792</b>
<b>3200</b>	<b>3194</b>	<b>3197</b>	<b>3194</b>
<b>3600</b>	<b>3596</b>	<b>3597</b>	<b>3593</b>
<b>4000</b>	<b>3995</b>	<b>3998</b>	<b>3993</b>
<b>4400</b>	<b>4395</b>	<b>4398</b>	<b>4392</b>
<b>4800</b>	<b>4795</b>	<b>4798</b>	<b>4793</b>
<b>5000</b>	<b>4995</b>	<b>4998</b>	<b>4993</b>

(Witness by Muhammad Zeeshan (Sub Engr. NESPAK))

**I/C Testing Laboratories**  
**UET Lahore, Pakistan.**

Note:

- 1- You can See your reports On Internet in the following web site  
[http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing\\_reports](http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing_reports)
- 2- The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples



**STRUCTURAL ENGINEERING DIVISION**  
**Test Floor Laboratory**  
**Department of Civil Engineering**  
**University of Engineering and Technology Lahore, 54890**  
**Pakistan. Ph: 92-42-99029202**

To,

Director PMO  
 University of Management and Technology Lahore  
 9<sup>th</sup> and 10<sup>th</sup> and 11<sup>th</sup> floor Columns & Beam Shear Walls and Slab  
 (Ikram Amjad Trader & Engineering Works)

Reference # CED/TFL **3490** (Dr. M Kashif)  
 Reference of the request letter # CB-2/51/22

Dated: 19-06-2023  
 Dated: 19-06-2023

**Tension Test Report** (Page -1/1)

Date of Test 20-06-2023  
 Gauge length 8 inches  
 Description Deformed Steel Bar Tensile Test as per ASTM A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size		Area (in <sup>2</sup> )		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal (#)	Actual (inch)	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.365	3	0.370	0.11	0.107	3300	4800	66200	67760	96200	98600	1.40	17.5	Ittefaq Steel
2	0.367	3	0.371	0.11	0.108	3100	4900	62200	63270	98200	100000	1.40	17.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only two samples for tensile test</b>														
Bend Test														

**I/C Testing Laboratories**  
**UET Lahore, Pakistan.**

Note:

- 1- You can See your reports On Internet in the following web site  
[http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing\\_reports](http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing_reports)
- 2- The above results pertain to sample /samples supplied to this laboratory.
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**STRUCTURAL ENGINEERING DIVISION**  
**Test Floor Laboratory**  
**Department of Civil Engineering**  
**University of Engineering and Technology Lahore, 54890**  
**Pakistan. Ph: 92-42-99029202**

To,  
Material Engineer  
Banu Mukhtar Contracting (Pvt) Ltd  
Burj – 1 by Ajwa Builders.

Reference # CED/TFL **3491** (Dr. M Kashif)  
Reference of the request letter # DOC-BMC/AJWA/081

Dated: 19-06-2023  
Dated: 19-06-2023

**Tension Test Report** (Page -1/1)

Date of Test 20-06-2023  
Gauge length 8 inches  
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size		Area (in <sup>2</sup> )		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal (#)	Actual (inch)	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.381	3	0.378	0.11	0.112	3200	4500	64200	62980	90200	88600	1.40	17.5	
2	0.369	3	0.372	0.11	0.109	3100	4400	62200	62930	88200	89400	1.20	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only two samples for tensile and one sample for bend test</b>														
Bend Test														
#3 Bar Bend Test Through 180° is Satisfactory														

**I/C Testing Laboratoires**  
**UET Lahore, Pakistan.**

Note:

- 1- You can See your reports On Internet in the following web site  
[http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing\\_reports](http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing_reports)
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**STRUCTURAL ENGINEERING DIVISION**  
**Test Floor Laboratory**  
**Department of Civil Engineering**  
**University of Engineering and Technology Lahore, 54890**  
**Pakistan. Ph: 92-42-99029202**

To,  
Resident Engineer  
NESPAK

Reference # CED/TFL **3492** (Dr. M Kashif)  
Reference of the request letter # MECONS/TLC-17/529

Dated: 19-06-2023  
Dated: 19-06-2023

**Tension Test Report** (Page -1/1)

Date of Test 20-06-2023  
Gauge length 8 inches  
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size		Area (in <sup>2</sup> )		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal (#)	Actual (inch)	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.386	3	0.380	0.11	0.114	3100	4800	62200	60190	96200	93200	1.50	18.8	
2	0.389	3	0.382	0.11	0.114	3100	4800	62200	59700	96200	92500	1.40	17.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only two samples for tensile and one sample for bend test</b>														
Bend Test														
#3 Bar Bend Test Through 180° is Satisfactory														

**I/C Testing Laboratoires**  
**UET Lahore, Pakistan.**

Note:

- 1- You can See your reports On Internet in the following web site  
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**STRUCTURAL ENGINEERING DIVISION**  
**Test Floor Laboratory**  
**Department of Civil Engineering**  
**University of Engineering and Technology Lahore, 54890**  
**Pakistan. Ph: 92-42-99029202**

To,

Executive Engineer (KSK)  
 University of Engineering and Technology, Lahore  
 “Construction of Girls Hostel for Department of Computer Science at New Campus  
 (KSK) of UET, Lahore.”

Reference # CED/TFL **3493** (Dr. M Kashif)

Dated: 19-06-2023

Reference of the request letter # B&W/XEN/KSK 1272

Dated: 19-06-2023

**Tension Test Report** (Page -1/1)

Date of Test 20-06-2023

Gauge length 8 inches

Description Deformed Steel Bar Tensile Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size (inch)		Area (in <sup>2</sup> )		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal	Actual	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.377	3/8	0.376	0.11	0.111	4200	4800	84200	83480	96200	95500	1.00	12.5	
2	0.376	3/8	0.375	0.11	0.111	4200	4800	84200	83710	96200	95700	1.00	12.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only two samples for tensile test</b>														
Bend Test														

**I/C Testing Laboratories**  
**UET Lahore, Pakistan.**

Note:

- 1- You can See your reports On Internet in the following web site  
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- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples



**STRUCTURAL ENGINEERING DIVISION**  
**Test Floor Laboratory**  
**Department of Civil Engineering**  
**University of Engineering and Technology Lahore, 54890**  
**Pakistan. Ph: 92-42-99029202**

To,

State Grid

Procurement of Plant, Design, Manufacturing, Supply, Installation, Testing & Commissioning of 500/220/132 kV Lahore North Substation and Extension Works at 500/220/132 kV Lahore North Substation.

Reference # CED/TFL 3494 (Dr.M Kashif)

Dated: 19-06-2023

Reference of the request letter # CET/ADB-300AR/2023-253

Dated: 19-06-2023

**Tension Test Report** (Page -1/1)

Date of Test 20-06-2023

Gauge length 8 inches

Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size		Area (in <sup>2</sup> )		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal (#)	Actual (inch)	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.362	3	0.368	0.11	0.106	3400	4600	68200	70370	92200	95200	1.40	17.5	
2	0.362	3	0.368	0.11	0.106	3300	4600	66200	68330	92200	95300	1.00	12.5	
-	0.364	3	0.369	0.11	0.107	3500	4700	70200	72130	94200	96900	1.20	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only three samples for tensile and three samples for bend test</b>														
Bend Test														
#3 Bar Bend Test Through 180° is Satisfactory														
#3 Bar Bend Test Through 180° is Satisfactory														
#3 Bar Bend Test Through 180° is Satisfactory														

Witness by Amir Sohail (Site Engineer CET)

**I/C Testing Laboratoires**  
**UET Lahore, Pakistan.**

Note:

- 1- You can See your reports On Internet in the following web site  
[http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing\\_reports](http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing_reports)
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- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples



**STRUCTURAL ENGINEERING DIVISION**  
**Test Floor Laboratory**  
**Department of Civil Engineering**  
**University of Engineering and Technology Lahore, 54890**  
**Pakistan. Ph: 92-42-99029202**

To,

Resident Engineer  
AZ Engineering Associates  
Rehabilitation / Renovation of Existing Office Buildings and Construction of New Office  
Block of Commissioner Office at Lahore.

Reference # CED/TFL **3495** (Dr. M Kashif)  
Reference of the request letter # AZEA/RE/C.O/18

Dated: 19-06-2023  
Dated: 26-05-2023

### Tension Test Report

Date of Test 20-06-2023  
Gauge length 8 inches  
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size (inch)		Area (in <sup>2</sup> )		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal	Actual	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.374	3/8	0.374	0.11	0.110	3500	4800	70200	70140	96200	96200	1.80	22.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only one sample for tensile and one sample for bend test</b>														
Bend Test														
3/8" Dia Bar Bend Test Through 180° is Satisfactory														

**I/C Testing Laboratoires**  
**UET Lahore, Pakistan.**

Note:

- 1- You can See your reports On Internet in the following web site  
[http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing\\_reports](http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing_reports)
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**STRUCTURAL ENGINEERING DIVISION**  
**Test Floor Laboratory**  
**Department of Civil Engineering**  
**University of Engineering and Technology Lahore, 54890**  
**Pakistan. Ph: 92-42-99029202**

To,

Project Engineer  
 OZ Developers Pvt Ltd  
 Construction a High-Rise Building “Bahria Sky” at Bahria Orchard Phase 4 Lahore

Reference # CED/TFL **3496** (Dr. M Kashif)  
 Reference of the request letter # Nil

Dated: 20-06-2023  
 Dated: 20-06-2023

**Tension Test Report** (Page -1/1)

Date of Test 20-06-2023  
 Gauge length 8 inches  
 Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size		Area (in <sup>2</sup> )		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal (#)	Actual (inch)	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	4.345	10	1.275	1.27	1.277	44600	56800	77500	76970	98600	98100	1.30	16.3	
2	4.323	10	1.272	1.27	1.271	46400	58400	80600	80490	101400	101400	1.30	16.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only two samples for tensile and one sample for bend test</b>														
Bend Test														
#10 Bar Bend Test Through 180° is Satisfactory														

**I/C Testing Laboratoires**  
**UET Lahore, Pakistan.**

Note:

- 1- You can See your reports On Internet in the following web site  
[http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing\\_reports](http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing_reports)
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**STRUCTURAL ENGINEERING DIVISION**  
**Test Floor Laboratory**  
**Department of Civil Engineering**  
**University of Engineering and Technology Lahore, 54890**  
**Pakistan. Ph: 92-42-99029202**

To,  
M/S Vision Engineering (Pvt) Ltd  
Lahore

Reference # CED/TFL **3500** (Dr. M Kashif)  
Reference of the request letter # VECO/2023/0620/8036

Dated: 20-06-2023  
Dated: 20-06-2023

**Tension Test Report** (Page – 1/1)

Date of Test 20-06-2023  
Gauge length 640 mm  
Description Steel Strand Tensile Test as per ASTM A-416-94a

Sr. No.	Nominal Diameter	Nominal Weight	Measured weight	Yield strength clause (6.3)		Breaking strength clause (6.2)		% Elongation	Remarks / Coil No.
	(mm)	(kg/km)	(kg/km)	(kg)	(kN)	(kg)	(kN)		
1	9.53 (3/8")	432.0	448.0	9600	94.18	10800	105.95	>3.50	xx
2	9.53 (3/8")	432.0	442.0	10100	99.08	11100	108.89	>3.50	xx
-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	
Only two samples for Test									

**I/C Testing Laboratoires**  
**UET Lahore, Pakistan.**

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- 1- You can See your reports On Internet in the following web site  
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