



**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/11/4264

Dated: 28-11-2023

Dated of Test: 06-12-2023

To

**Head QA/QC**  
**Vision Developers Pvt. Ltd.**  
**Park View City Lahore.**

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

Reference to your letter No. Nil, dated 27.11.2023 on the subject cited above. Two R.C.C. Pipes as received by us have 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	9	7.77	7.28	12.40	9.04	1.68	7000	9000	2813	3616
2	9	7.78	7.29	12.44	9.33	1.56	10000	12000	3893	4672

**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.
- 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  
NESPAK  
Construction of 8-Lane Overhead Bridge at Imamia Colony.

Reference # CED/TFL **4294** (Dr. Ali Ahmad)  
Reference of the request letter # RE/4537/02/MH/163

Dated: 04-12-2023  
Dated: 29-11-2023

**Tension Test Report** (Page -1/5)

Date of Test 06-12-2023  
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")	780.0	782.0	17600	172.66	19200	188.35	199	>3.50	xx
2	12.70 (1/2")	780.0	781.0	17700	173.64	19300	189.33	199	>3.50	xx
3	12.70 (1/2")	780.0	785.0	17800	174.62	19600	192.28	198	>3.50	xx
4	12.70 (1/2")	780.0	876.0	18000	176.58	19800	194.24	199	>3.50	xx
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	

**Only three samples for Test**

Witness by Mr. M Farooq (NESPAK)

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.**

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,

Resident Engineer  
NESPAK

Construction of 8-Lane Overhead Bridge at Imamia Colony.

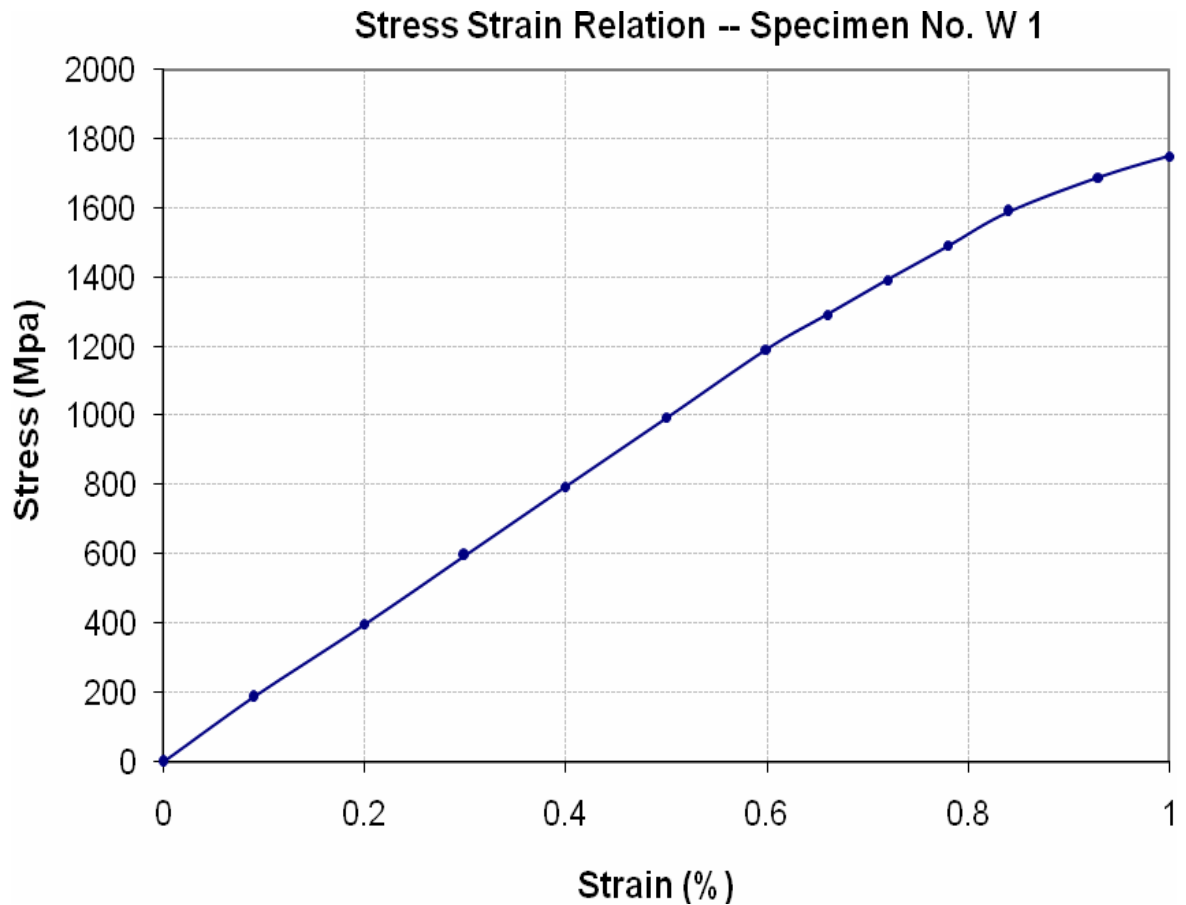
Reference # CED/TFL **4294** (Dr. Ali Ahmad)

Dated: 04-12-2023

Reference of the request letter # RE/4537/02/MH/163

Dated: 29-11-2023

**Graph** (Page – 2/5)



**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.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples



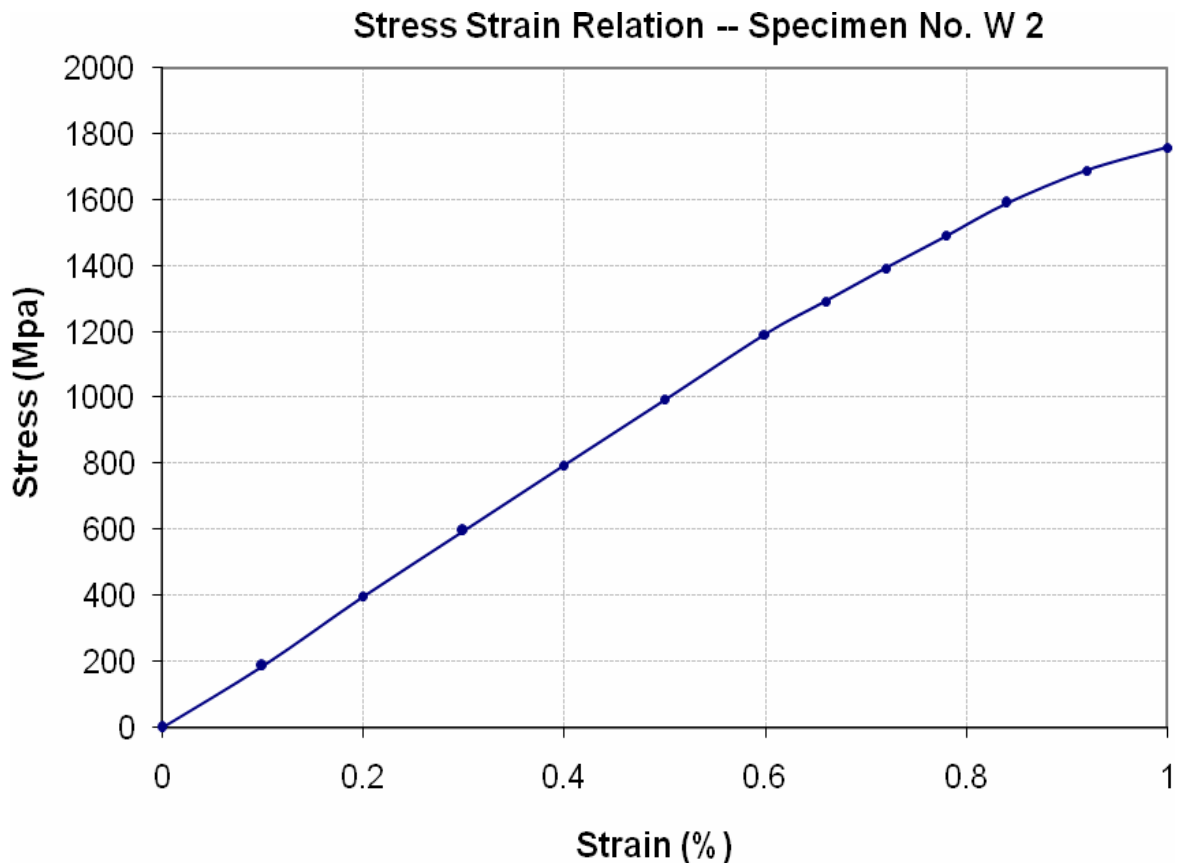
**STRUCTURAL ENGINEERING DIVISION**  
**Test Floor Laboratory**  
**Department of Civil Engineering**  
**University of Engineering and Technology Lahore, 54890**  
**Pakistan. Ph: 92-42-99029202**

To,  
Resident Engineer  
NESPAK  
Construction of 8-Lane Overhead Bridge at Imamia Colony.

Reference # CED/TFL **4294** (Dr. Ali Ahmad)  
Reference of the request letter # RE/4537/02/MH/163

Dated: 04-12-2023  
Dated: 29-11-2023

**Graph** (Page – 3/5)



**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.
- 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  
NESPAK

Construction of 8-Lane Overhead Bridge at Imamia Colony.

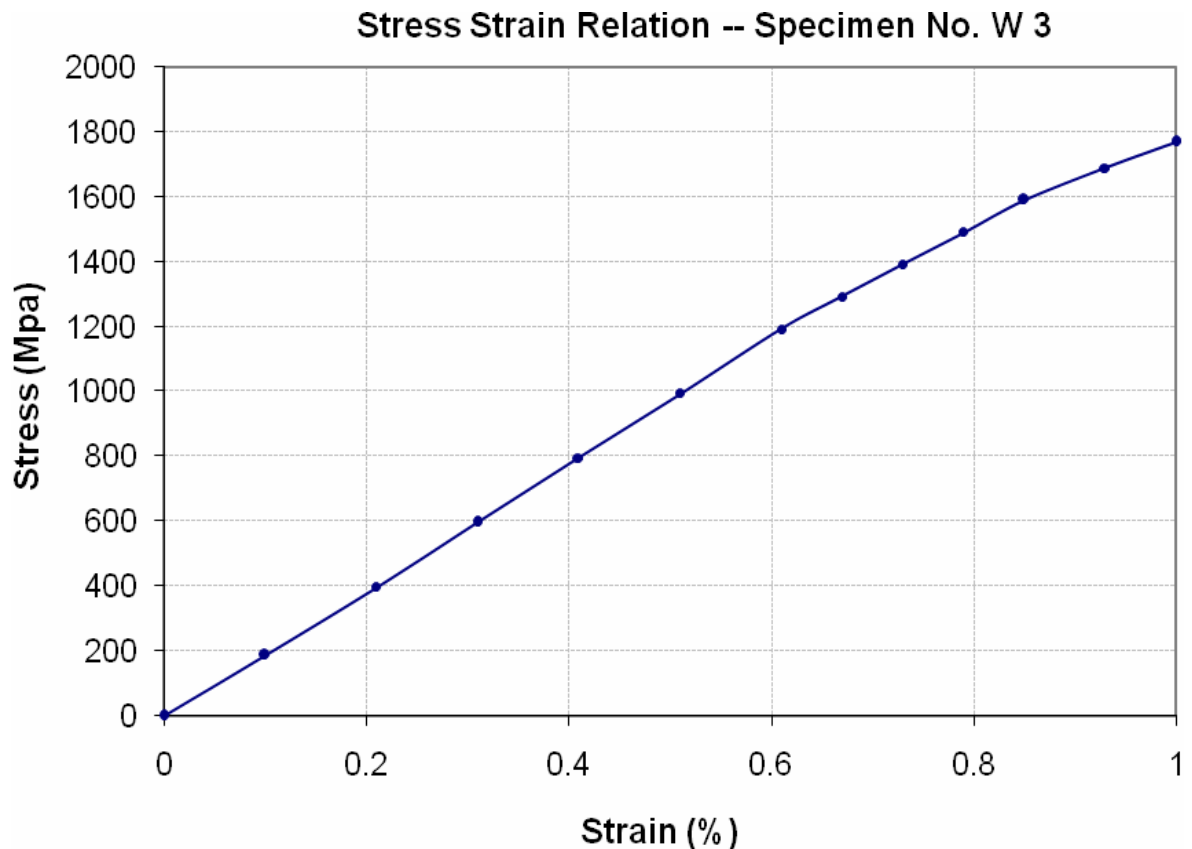
Reference # CED/TFL **4294** (Dr. Ali Ahmad)

Dated: 04-12-2023

Reference of the request letter # RE/4537/02/MH/163

Dated: 29-11-2023

**Graph** (Page – 4/5)



**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.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples



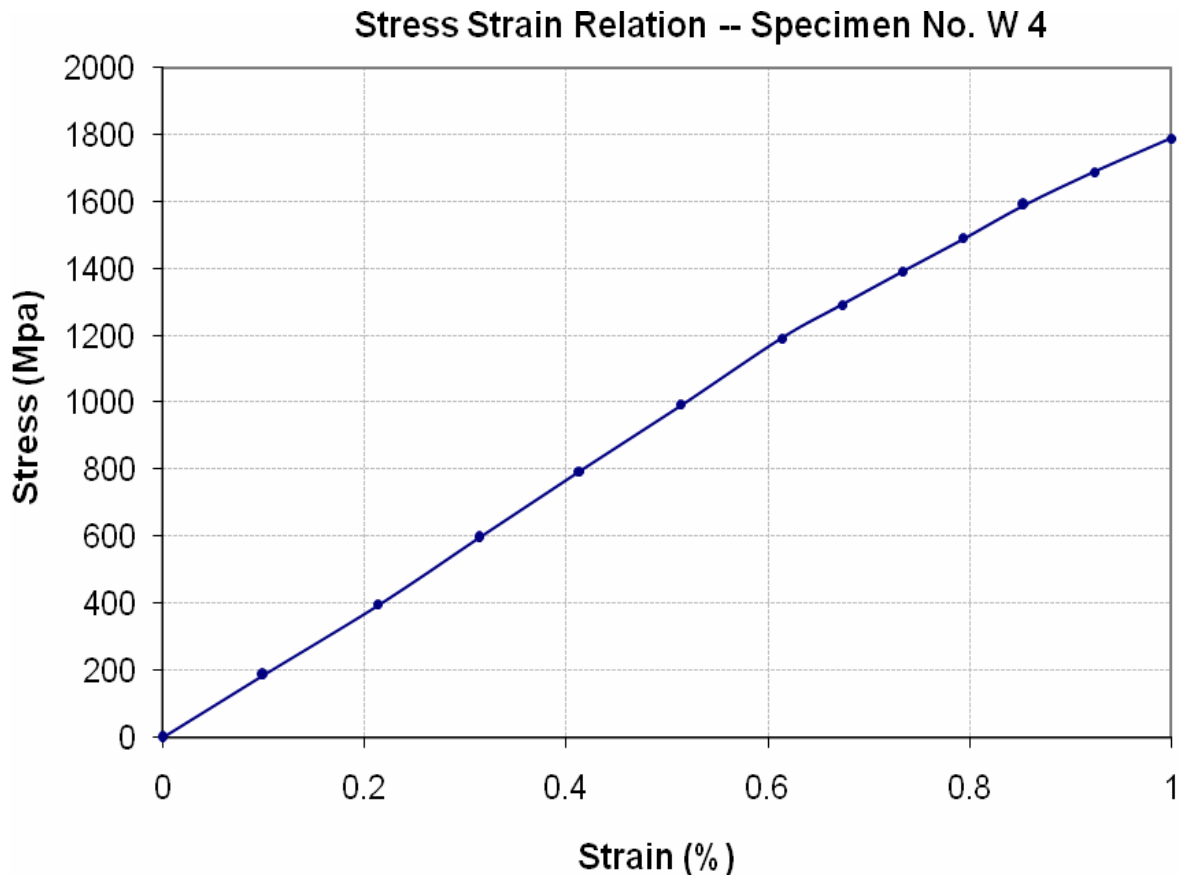
**STRUCTURAL ENGINEERING DIVISION**  
**Test Floor Laboratory**  
**Department of Civil Engineering**  
**University of Engineering and Technology Lahore, 54890**  
**Pakistan. Ph: 92-42-99029202**

To,  
Resident Engineer  
NESPAK  
Construction of 8-Lane Overhead Bridge at Imamia Colony.

Reference # CED/TFL **4294** (Dr. Ali Ahmad)  
Reference of the request letter # RE/4537/02/MH/163

Dated: 04-12-2023  
Dated: 29-11-2023

**Graph** (Page – 5/5)



**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.
- 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,

Chief Resident Engineer  
 UMDS JV Consultants (Mincinsult, CEC and Jers)  
 Punjab Intermediated Cities Improvement Investment Program (PICIP)  
 NCB-Works / PICIP-04: Road Upgradation , Lot-04: Construction of Flyover in Sialkot.

Reference # CED/TFL **4303** (Dr. Ali Ahmed)

Dated: 05-12-2023

Reference of the request letter # CRE/UMDS-JV/LOT-4/SKT/135 Dated: 29-11-2023

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

Date of Test 06-12-2023

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	4.239	10	1.260	1.27	1.246	34600	57400	60100	61210	99700	101600	1.70	21.3	Aziz Steel
2	4.260	10	1.263	1.27	1.252	34800	57800	60400	61250	100400	101800	1.60	20.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only two samples for tensile and one sample for bend test</b>														
Bend Test														
#10 Bar Bend Test Through 180° is Satisfactory														

Witness by Iqbal Majid (M.E UMDS Consultants)

**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.
- 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/11/4311

Dated: 06-12-2023

Dated of Test: 06-12-2023

To

**Site Manager**  
**Descon Engineering Limited**  
**Mohmand Dam Hydro-Power Project**

**Subject: - CALIBRATION OF HYDRAULIC JACK (MARK: TFL/11/4311) (Page -1/1)**

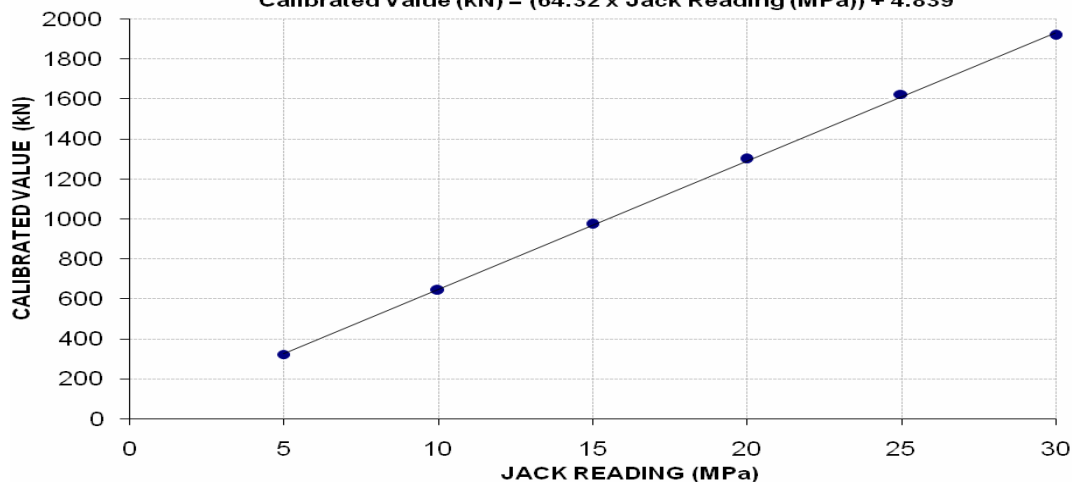
Reference to your Letter No. MDHP-DEL-LABT-202, dated: 05/12/2023 on the subject cited above. One Hydraulic Jack (Jack No. 1354, Gauge No. 1937) as received by us has been calibrated. The results are tabulated as under:

**Total Range : Zero - 60 (MPa)**  
**Calibrated Range : Zero - 30 (MPa)**

Hydraulic Jack Reading (MPa)		5	10	15	20	25	30
Calibrated Load	(kg)	32800	65600	99200	132600	165600	195600
	(kN)	322	644	973	1301	1625	1919
Calibrated Pressure (MPa)		6	11	17	23	28	33

The Ram Area of Jack =  $574 \text{ cm}^2$

**Calibration Curve For Jack No. 1354 (Gauge # 1937)**  
**Calibrated Value (kN) =  $(64.32 \times \text{Jack Reading (MPa)}) + 4.839$**



**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