



**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/03/1192

Dated: 31-03-2022

Date of Test: 04-04-2022

To,  
Resident Engineer  
NESPAK

Dualization of Lilla Interchange (M-2) via P.D. Khan to Jhelum I/C Bypasses (02 Nos)  
Length 128 km, District Jhelum

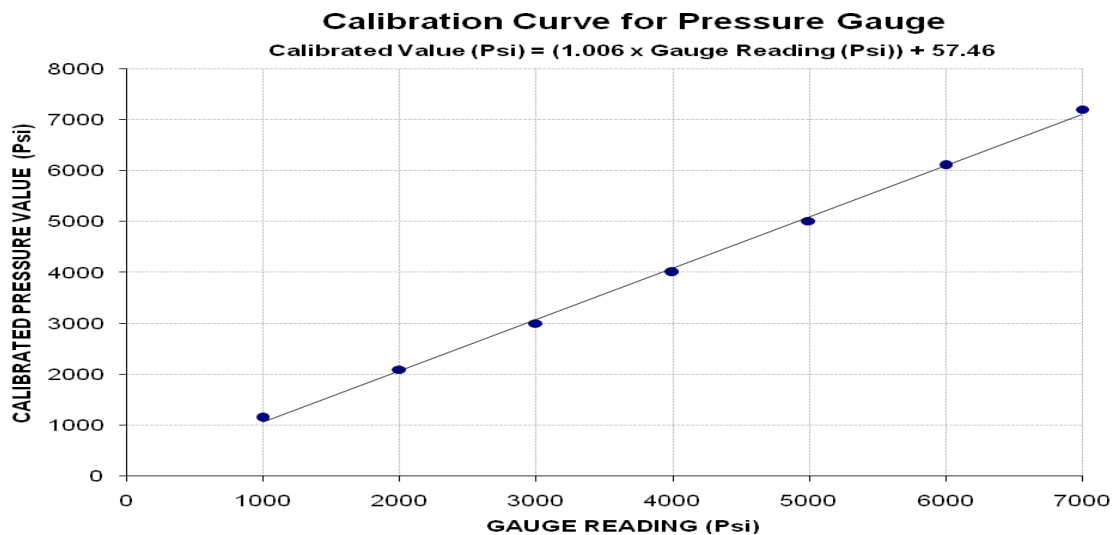
Subject: - CALIBRATION OF PRESSURE GAUGE (MARK: TFL/03/1192) (Page # 1/1)

Reference to your Letter No. NESPAK/RE/JH/22/067, Dated: 31/03/2022 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 - 15000 (Psi)  
Calibrated Range : Zero - 7000 (Psi)

Pressure Gauge Reading (Psi)	1000	2000	3000	4000	5000	6000	7000
Calibrated Load (kg)	16000	29200	41800	55800	69800	85000	100200
Calibrated Pressure (Psi)	1149	2098	3003	4008	5014	6106	7198

The Ram Area for Calibration = 198 cm<sup>2</sup>



**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,  
RE (QA/QC)  
DBH Jv MC Projects

Reference # CED/TFL **1204** (Dr. Qasim Khan)  
Reference of the request letter # DBHJVMC/QAQC//2022/09/UET

Dated: 04-04-2022

Dated: 04-04-2022

**Tension Test Report** (Page -1/3)

Date of Test 04-04-2022  
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)			
1	12.70 (1/2")	775.0	787.0	17400	170.69	19000	186.39	199	>3.50	xx
2	12.70 (1/2")	775.0	784.0	17300	169.71	19200	188.35	199	>3.50	xx
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-

**Only two 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.**

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**

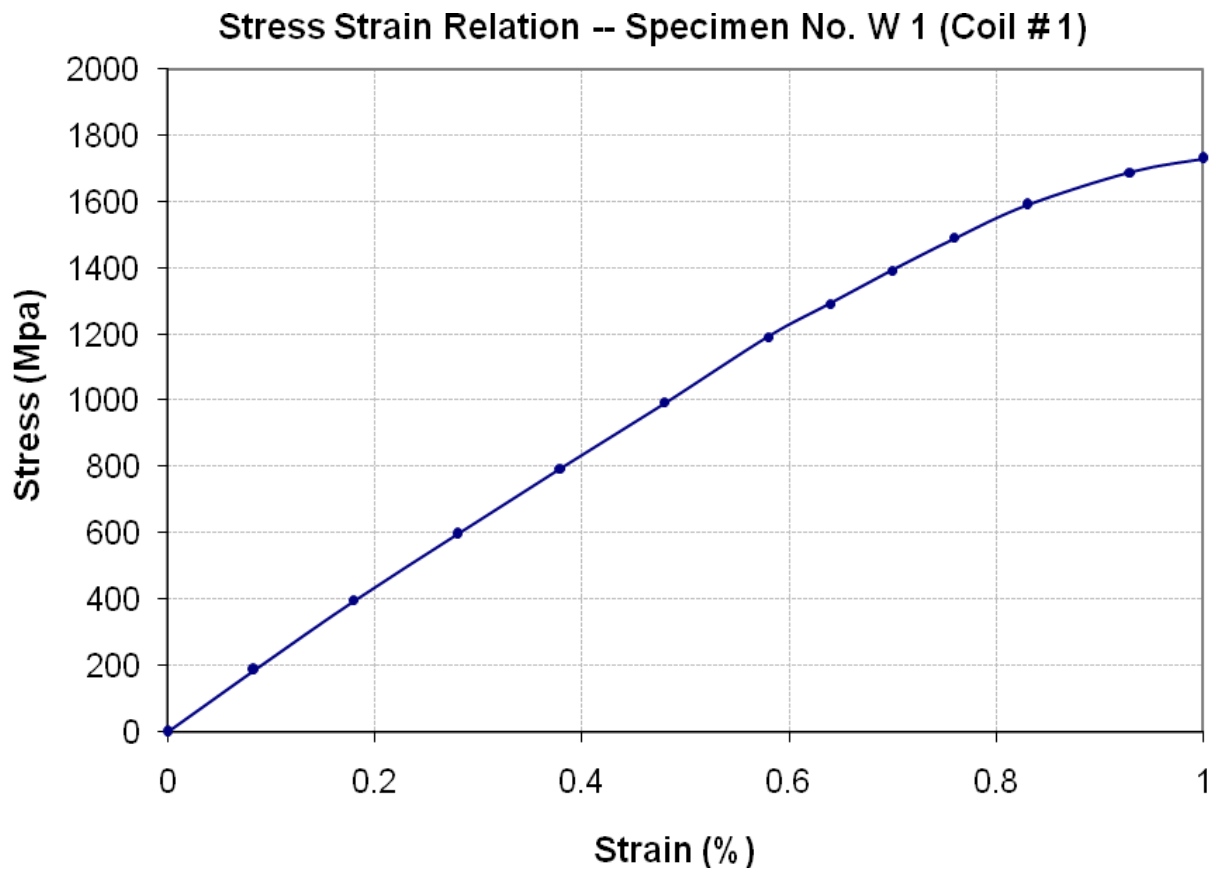
To,  
RE (QA/QC)  
DBH Jv MC Projects

Reference # CED/TFL **1204** (Dr. Qasim Khan)  
Reference of the request letter # DBHJVMC/QAQC//2022/09/UET

Dated: 04-04-2022

Dated: 04-04-2022

**Graph** (Page – 2/3)



**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**

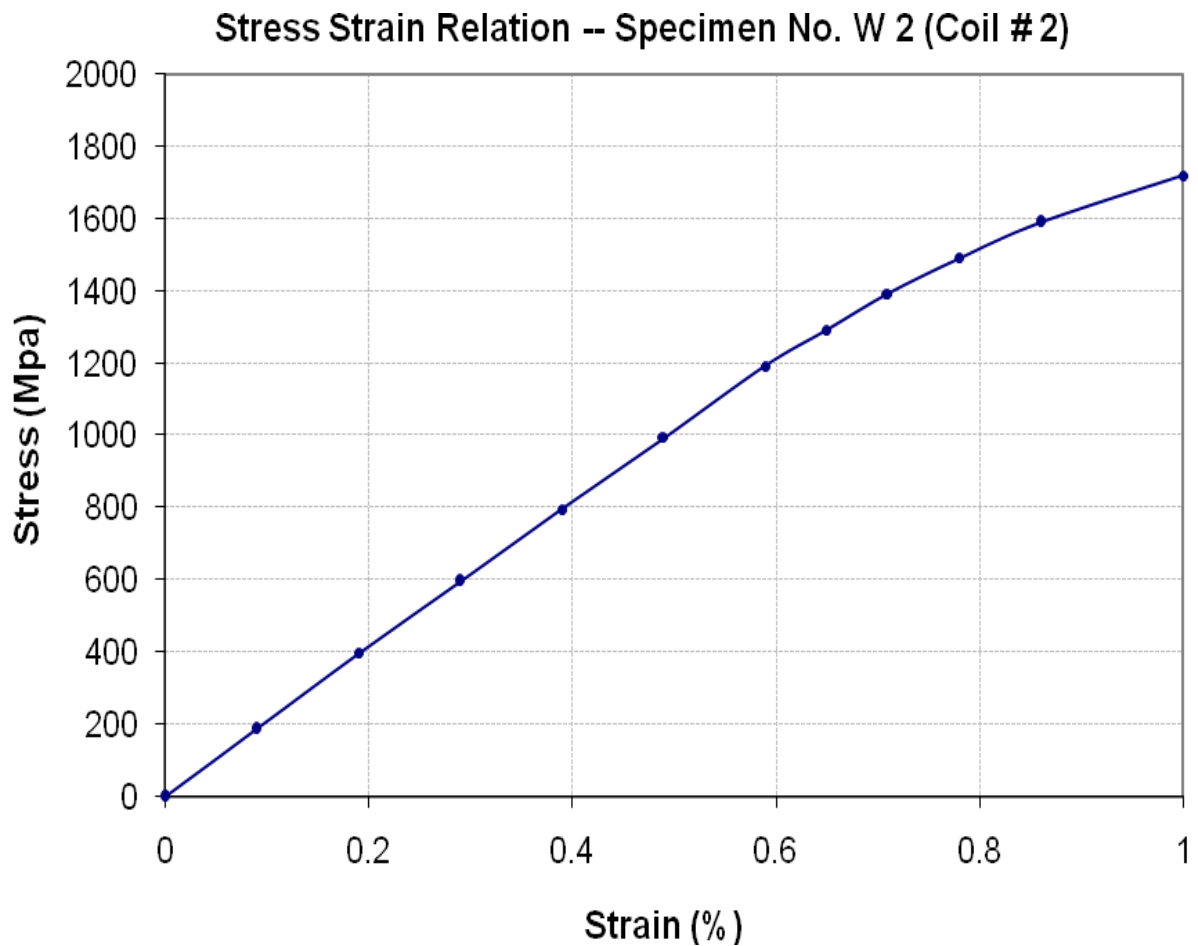
To,  
RE (QA/QC)  
DBH Jv MC Projects

Reference # CED/TFL **1204** (Dr. Qasim Khan)  
Reference of the request letter # DBHJVMC/QAQC//2022/09/UET

Dated: 04-04-2022

Dated: 04-04-2022

**Graph** (Page – 3/3)



**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