

To,

## STRUCTURAL ENGINEERING DIVISION

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

Adnan Jamil Civil Engineer National Management Foundation Construction of "Yusuf Shirazi Complex" at LUMS Campus.

Reference # CED/TFL 4917 (Dr. Usman Akmal)Dated: 05-04-2024Reference of the request letter # NMF/GM/C-39/856Dated: 04-04-2024

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

Date of Test16-04-2024Gauge length640 mmDescriptionSteel Strand Tensile Test as per ASTM A-416-94a

Sr. No.	Nominal Diameter (mm)	Nominal Weight (kg/km)	Measured weight (kg/km)	Yield strength clause (6.3) (kg) (kN)		Breaking strength clause (6.2) (kg) (kN)		Young's Modulus of Elasticity "E"	% Elongation	Remarks / Coil No.	
1	12.70 (1/2")	780.0	781.0	17600	172.66	18800	184.43	199	>3.50	XX	
2	12.70 (1/2")	780.0	781.0	18100	177.56	19000	186.39	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

2. The above results pertain to sample /samples supplied to this laboratory.

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



To,

## STRUCTURAL ENGINEERING DIVISION

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

Adnan Jamil Civil Engineer National Management Foundation Construction of "Yusuf Shirazi Complex" at LUMS Campus.

Reference # CED/TFL <u>4917 (Dr. Usman Akmal)</u>	Dated: 05-04-2024
Reference of the request letter # NMF/GM/C-39/856	Dated: 04-04-2024

Graph (Page – 2/3)



Stress Strain Relation -- Specimen No. W 1

I/C Testing Laboratoires UET Lahore, Pakistan.

- 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
- 2. The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples



To,

## STRUCTURAL ENGINEERING DIVISION

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

Adnan Jamil Civil Engineer National Management Foundation Construction of "Yusuf Shirazi Complex" at LUMS Campus.

Reference # CED/TFL <u>4917 (Dr. Usman Akmal)</u>	Dated: 05-04-2024
Reference of the request letter # NMF/GM/C-39/856	Dated: 04-04-2024

Graph (Page – 3/3)



Stress Strain Relation -- Specimen No. W 2

I/C Testing Laboratoires UET Lahore, Pakistan.

- 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
- 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,

M/S Vision Engineering (Pvt) Ltd Lahore

Reference # CED/TFL <u>4921 (Dr. Usman Akmal)</u> Reference of the request letter # VECO/2024/0408/001 Dated: 08-04-2024 Dated: 08-04-2024

# Tension Test Report(Page - 1/1)Date of Test16-04-2024Gauge length640 mmDescriptionSteel Strand Tensile Test as per ASTM A-416-94a

Sr. No.	Nominal Diameter	Nominal Weight	Measured Yield str weight clause		trength e (6.3)	Brea strength (6.	king 1 clause 2)	Elongation	rks / Coil No.		
	(mm)	(kg/km)	(kg/km)	(kg)	(kN)	(kg)	(kN)	%	Rema		
1	9.53 (3/8")	430.0	444.0	9600	94.18	10800	105.95	>3.50	1		
2	9.53 (3/8")	430.0	446.0	10000	98.10	10800	105.95	>3.50	2		
3	9.53 (3/8")	430.0	446.0	9800	96.14	10700	104.97	>3.50	3		
-	-	-	-	-	-	-	-	-			
-	-	-	-	-	-	-	-	-			
-	-	-	-	-	-	-	-	-			
Only three samples for Test											

I/C Testing Laboratoires UET Lahore, Pakistan.

- 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
- 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 Projects Sheikhoo Sugar Mills (Steel Division) Sheikhoo Steel Anwar Abad Kot Addu, Muzaffargarh

Reference # CED/TFL <u>4926 (Dr. Asad Ali)</u> Reference of the request letter # Nil Dated: 16-04-2024 Dated: 14-04-2024

# Tension Test Report(Page -1/1)Date of Test16-04-2024Gauge length8 inchesDescriptionDeformed Steel Bar Tensile Test as per ASTM-A615

Sr. No.	Weight	Diameter/ Size		Area (in²)		Yield load	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	longation	emarks
	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	R
1	0.367	3	0.371	0.11	0.108	3620	4910	72600	73880	98400	100300	1.20	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only one sample for tensile test														
Bend Test														

I/C Testing Laboratoires UET Lahore, Pakistan.

- 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
- 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

> 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

2. The above results pertain to sample /samples supplied to this laboratory.

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