

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

Ref: <u>CED/TFL/05/5054</u> Dated: <u>09-05-</u>

2024

Dated of Test: 16-05-2024

To

Sub Divisional Officer PHE Sub Division-II, D.G. Khan (Provision of Brick Soling Nali Tuff Tiles Drainage and Sewerage in Union No. 10, 13, 16 Dera Ghazi Khan City.)

Subject: TESTING OF R.C.C. PIPE [ASTM-C76 - 08a] (Page # 1/1)

Reference to your letter No. 562-64, dated 22.04.2024 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	30	8.02	7.67	37.32	29.94	3.69	9470	13730	1091	1582

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



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

To,

Project Incharge Ijaz Cotton Pvt Ltd. At 34 km Nabi Baksh Derozpur Road Lahore.

Reference # CED/TFL **5071** (Dr. Rizwan Azam) Dated: 14-05-2024

Reference of the request letter # MST./First Floor Lantor + Beams and for Secondfloor

Coulmn's Dated: 13-05-2024

Tension Test Report (Page -1/1)

Date of Test 16-5-2024 Gauge length 8 inches

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

Sr. No.	Weight	Diameter/ Size (#) (ch)		rea 1 ²)	Yield load	Breaking Load		Stress si)		e Stress si)	Elongation	% Elongation	Remarks	
S	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg) (kg)		Nominal	Actual	Nominal	Actual	(inch)	% E	Re
1	0.376	3	0.375	0.11	0.111	3400	4900	68200	67750	98200	97700	1.20	15.0	
2	0.369	3	0.372	0.11	0.109	3300	4800	66200	66990	96200	97500	1.30	16.3	
-	-	1	ı	1	-	1	-	-	-	-	-	-	1	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	1	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			No	ote: on	ly two s	amples f	or tensile	and one	sample f	or bend t	test			
							D 17							
112	D D	1 00 - 1	F1 1	1000 '	G 1: C		Bend T	est						
#3	Bar Ben	a lest	ınrough	1 180° 1	s Satisfa	ictory								

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

WERMS AND SERVICE AND SERVICE

STRUCTURAL ENGINEERING DIVISION

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

To,

APM PMU Nathe Khalsa Project.

Reference # CED/TFL <u>5076 (Dr. Rizwan Azam)</u>

Reference of the request letter # 60712/Proj/NLC

Dated: 14-05-2024

Dated: 02-05-2024

Tension Test Report (Page -1/1)

Date of Test 16-5-2024 Gauge length 8 inches

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

Sr. No.	Weight				rea 1 ²)	Yield load	Breaking Load		Stress si)		ee Stress si)	Elongation	% Elongation	Remarks
S	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	Re
1	0.370	3	0.372	0.11	0.109	3600	5100	72200	73040	102200	103500	1.20	15.0	, le
-	-	-	-	-	-	-	-	-	-	-	-	-	-	FF Steel
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			N	ote: on	ly one s	sample fo	r tensile	and one	sample f	or bend t	est			
#3	Bend Test #3 Bar Bend Test Through 180° is Satisfactory													

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



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

To,

Sub Divisional Officer
Building Sub Division,
Hafizabad
(Establishment of University of Hafizabad. (Group No. 2), Construction of Academic Block.)

Reference # CED/TFL 5078 (Dr. Rizwan Azam)

Reference of the request letter # 565/HZ

Tension Test Report (Page -1/1)

Date of Test 16-5-2024 Gauge length 8 inches

Description Deformed Steel Bar Tensile Test as per ASTM-A615

Sr. No.			ze		ea 1 ²)	Yield load	Breaking Load		Stress si)		te Stress si)	Elongation	Elongation	Remarks
S	(lbs/ft)	Nominal	Actual	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	3 %	Re
1	0.372	3/8	0.373	0.11	0.109	3500	4900	70200	70460	98200	98700	1.20	15.0	
2	0.372	3/8	0.373	0.11	0.109	3600	4900	72200	72500	98200	98700	1.10	13.8	
1	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	ı	-	1	-	-	-	1	-	-	-	-	ı	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			1		Not	e: only t	wo sampl	es for te	nsile test	1	1	1		
							Dond T	agt						
							Bend T	est						

I/C Testing Laboratoires UET Lahore, Pakistan.

Dated: 14-05-2024

Dated: 18-03-2024

- 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



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

To,

Resident Engineer NESPAK

Remodeling and Upgradation of Ada Nullah & Walton Road (Package-I).

Reference # CED/TFL <u>5079 (Dr. Rizwan Azam)</u>
Reference of the request letter # 4702/13/HSR/09/52
Dated: 14-05-2024
Dated: 07-05-2024

Tension Test Report (Page -1/1)

Date of Test 16-5-2024 Gauge length 8 inches

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

Sr. No.	Weight		neter/ ze		rea 1 ²)	Yield load	Breaking Load		Stress si)		e Stress si)	Elongation	% Elongation	Remarks
S	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	R
1	0.369	3	0.372	0.11	0.108	3900	5200	78200	79300	104200	105800	0.80	10.0	u
2	0.367	3	0.371	0.11	0.108	3700	5000	74200	75620	100200	102200	0.90	11.3	Kamran Steel
-	-	-	-	-	-	-	-	-	-	-	-	-	-	Ka
-	-	-	-	-	-	-	_	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Note: only two samples for tensile and one sample for bend test													
							Bend T	est						
#3	Bar Ben	d Test	Γhrough	180° is	s Satisfa	ctory								

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

To,

M/S Pakistan Wire Industries (Pvt) Limited Karachi

Reference # CED/TFL <u>5080 (Dr. Rizwan Azam)</u>

Reference of the request letter # WRD/010/LAB031

Dated: 14-05-2024

Dated: 14-05-2024

Tension Test Report (Page – 1/3)

Date of Test 16-05-2024

Description Steel Wire Rope (HC Ungalvanized) Tensile Test

Sr. No.	Nominal Diameter	Measured weight	Breaking Load	Remarks / Coil No.
	(mm)	(kg/m)	(kg)	Rema
1	18 (6x19)	1.05	17400	
-	-	-	-	
-	-	-	-	
-	-	-	-	
-	-	-	-	
		Only one sample for Test	t .	

Witness by Muhammad Wasim Khan (Pakistan Wire Industries)

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

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

To,

M/S Pakistan Wire Industries (Pvt) Limited Karachi

Reference # CED/TFL <u>5080 (Dr. Rizwan Azam)</u> Reference of the request letter # WRD/010/LAB032

Tension Test Report (Page – 2/3)

Date of Test 16-05-2024

Description Steel Wire Rope (HC Galvanized) Tensile Test

Sr. No.	Nominal Diameter	Measured weight	Breaking Load	Remarks / Coil No.
	(mm)	(kg/m)	(kg)	Rema
1	18 (6x19)	1.25	18600	
-	-	-	-	
-	-	-	-	
-	-	-	-	
-	-	-	-	
		Only one sample for Test	t .	
****	1 M 1 1W	M. (D.I., W. I.I.		

Witness by Muhammad Wasim Khan (Pakistan Wire Industries)

I/C Testing Laboratoires UET Lahore, Pakistan.

Dated: 14-05-2024

Dated: 14-05-2024

- 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

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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 Pakistan Wire Industries (Pvt) Limited Karachi

Reference # CED/TFL <u>5080 (Dr. Rizwan Azam)</u> Reference of the request letter # WRD/010/LAB033

Tension Test Report (Page – 3/3)

Date of Test 16-05-2024

Description Steel Wire Rope (HC Galvanized) Tensile Test

Sr. No.	Nominal Diameter	Measured weight	Breaking Load	Remarks / Coil No.
	(mm)	(kg/m)	(kg)	Rema
1	25 (6x19)	2.12	29500	
-	-	-	-	
-	-	-	-	
-	-	-	-	
-	-	-	-	
		Only one sample for Test	t	
777.	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	M. (D.I., W. I.I.		

Witness by Muhammad Wasim Khan (Pakistan Wire Industries)

I/C Testing Laboratoires UET Lahore, Pakistan.

Dated: 14-05-2024

Dated: 14-05-2024

- 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



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

To,

Resident Engineer Sialkot Tannery Association (Guarantee) Limited. Construction of Chorme Recovery Plant for Sialkot Tannery Zone.

Reference # CED/TFL <u>5081 (Dr. Rizwan Azam)</u>

Reference of the request letter # Nil

Dated: 14-05-2024

Tension Test Report (Page -1/1)

Date of Test 16-05-2024 Gauge length 8 inches

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

Sr. No.	Weight			rea 1 ²)	Yield load	Breaking Load		Stress si)		e Stress si)	Elongation	% Elongation	Remarks	
S	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	3 %	R
1	0.372	3	0.373	0.11	0.109	3800	5000	76200	76610	100200	100800	1.20	15.0	
2	0.377	3	0.376	0.11	0.111	3900	5000	78200	77500	100200	99400	1.10	13.8	
-	-	-	-	-	-	-	-	-	-	_	-	-	-	
-	-	-	-	-	-	-	-	-	-	_	-	-	-	
-	-	-	-	-	-	-	-	-	-	_	-	-	-	
-	-	-	-	-	-	-	-	-	-	_	-	-	-	
	Note: only two samples for tensile and one sample for bend test													
					~		Bend T	est						
#3	Bar Ben	d Test	l'hrough	180° is	s Satisfa	ctory								

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



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

To,

Director (Civil) Mineral Development Project Islamabad (New Lab)

Reference # CED/TFL <u>5084 (Dr. Rizwan Azam)</u>

Reference of the request letter # MDP-C&S-Gen(1)/2024

Dated: 14-05-2024

Dated: 29-04-2024

Tension Test Report (Page -1/1)

Date of Test 16-5-2024 Gauge length 8 inches

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

Sr. No.	Weight	Diam Si	ieter/ ze	Ar (ir	rea 1 ²)	Yield load	Breaking Load		Stress si)		e Stress si)	Elongation	% Elongation	Remarks
S	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	Re
1	0.362	3	0.368	0.11	0.106	3700	5100	74200	76580	102200	105600	1.30	16.3	e e
2	0.365	3	0.369	0.11	0.107	3600	5000	72200	74040	100200	102900	1.00	12.5	FF Steel
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Note: only two samples for tensile and one sample for bend test													
					• -		Bend T	est						
#3	Bar Ben	d Test T	Through	180° is	Satisfa	ctory								

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



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

To,

Maj For Mommand 9 Sig Bn Gujranwala Cantt.

(Construction of Voice Procedure Room L-60ftx W-33ftx H-14 ft.)

Reference # CED/TFL 5087 (Dr. Rizwan Azam)

Reference of the request letter # 110/G

Tension Test Report (Page -1/1)

Date of Test 16-05-2024 Gauge length 8 inches

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

Sr. No.	Weight		neter/ ze		rea 1 ²)	Yield load	Breaking Load		Stress si)		te Stress si)	Elongation	% Elongation	Remarks
S	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	R
1	0.360	3	0.367	0.11	0.106	3600	4800	72200	75060	96200	100100	1.20	15.0	hal el
2	0.367	3	0.370	0.11			4500	70200	71570	90200	92100	1.20	15.0	Mughal Steel
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	ı	-	ı	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		I	No	ote: onl	ly two s	amples f	or tensile	and one	sample f	or bend	test	I	I	
	D D			1000:			Bend T	est						

#3 Bar Bend Test Through 180° is Satisfactory

I/C Testing Laboratoires UET Lahore, Pakistan.

Dated: 15-05-2024

Dated: 14-05-2024

- 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



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

To,

Admin Manager Linker Developers (Pvt) Ltd. Construction of Quaid-e-Azam Public School Dream Garden Wazirabad.

Reference # CED/TFL <u>5088 (Dr. Rizwan Azam)</u>

Reference of the request letter # Nil

Dated: 15-05-2024

Tension Test Report (Page -1/1)

Date of Test 16-05-2024 Gauge length 8 inches

Description Deformed Steel Bar Tensile Test as per ASTM-A615

Sr. No.	Weight	(#) Actual (inch)		rea 1 ²)	Yield load	Breaking Load		Stress si)		e Stress si)	Elongation	% Elongation	Remarks	
S	(lbs/ft)		Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	3%	Re	
1	0.380	3	0.377	0.11	0.112	3400	5300	68200	67120	106200	104700	1.10	13.8	ır
2	0.377	3	3 0.376 0.11 0.111				5400	70200	69620	108200	107500	0.90	11.3	Markhor Steel
-	-	-	-	-	-	-	_	-	-	-	-	-	-	Ma
-	-	-	-	-	-	-	_	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	_	-	-	-	-	-	-	
					Not	e: only t	wo sampl	les for ter	nsile 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



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

To,

General Manager Union Developers (Pvt) Ltd. Construction Union Luxury Apartments, Etihad Town, Lahore.

Reference # CED/TFL <u>5089 (Dr. Rizwan Azam)</u>

Reference of the request letter # ME/QA/QC/2301

Dated: 15-05-2024

Dated: 14-05-2024

Tension Test Report (Page -1/1)

Date of Test 16-05-2024 Gauge length 8 inches

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

Sr. No.	Weight	Diameter/ Size		Area (in²)		Yield load	Breaking Load	Yield Stress (psi)		Ultimat (p	0.0		% Elongation	Remarks
S	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	Ŗ
1	0.375	3	0.375	0.11	0.110	3400	4900	68200	67910	98200	97900	1.10	13.8	ıza el
2	0.371	3	0.372	0.11	0.109	3200	4900	64200	64750	98200	99200	0.90	11.3	Hunza Steel
-	1	-	-	-	-	-	-	ı	-	-	-	-	-	
-	-	-	-	-	-	-	_	-	-	-	-	-	-	
-	-	-	-	-	-	-	_	-	-	-	-	-	-	
-	-	-	-	-	-	-	_	-	-	-	-	-	-	
	Note: only two samples for tensile and one sample for bend test													
Bend Test														
#3 Bar Bend Test Through 180° is Satisfactory														

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



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

To,

Chief Resident Engineer
UMDS Consultants JV (Mincinsult, CEC and Jers)
NCB Works / PICIIP-04: Road Upgradation, Lot-01 Sialkot.

Reference # CED/TFL <u>5094 (Dr. Rizwan Azam)</u>

Reference of the request letter # UMDS-JV/SOS/CRE/336

Dated: 16-05-2024

Dated: 03-05-2024

Tension Test Report (Page -1/1)

Date of Test 16-05-2024 Gauge length 8 inches

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

Sr. No.	(lbs/ft)	nal						Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
		Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	Re
1 (0.376	3	0.375	0.11	0.111	3000	4400	60200	59790	88200	87700	1.50	18.8	1
2 (0.371	3	0.373	0.11	0.109	2900	4400	58200	58580	88200	88900	1.20	15.0	Steel
-	-	-	-	-	-	-	-	-	-	-	-	-	-	HUnza
-	-	-	-	-	-	-	-	-	-	-	-	-	-	H
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	_	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test #3 Bar Bend Test Through 180° is Satisfactory														

Witness by Mahwish Rana (Material Engineer UMDS Sahiwal) & Waseem M.E KAPEC)

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



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

To,

Chief Resident Engineer
UMDS Consultants JV (Mincinsult, CEC and Jers)
NCB Works / PICIIP-04: Road Upgradation, Lot-01 Sahiwal.

Reference # CED/TFL <u>5095 (Dr. Rizwan Azam)</u>

Reference of the request letter # UMDS-JV/SOS/CRE/336-A

Dated: 16-05-2024

Tension Test Report (Page -1/1)

Date of Test 16-05-2024 Gauge length 8 inches

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

Sr. No.	Weight	Diameter/ Size		Area (in²)		Yield load	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	R
1	0.374	3	0.374	0.11	0.110	2900	4600	58200	58170	92200	92300	1.00	12.5	
2	0.371	3	0.373	0.11	0.109	3200	4800	64200	64690	96200	97100	1.40	17.5	Steel
-	-	-	-	-	-	-	_	-	-	-	-	-	-	Hunza
-	-	-	-	-	-	-	_	-	-	-	-	-	-	Н
-	-	-	-	-	-	-	_	-	-	-	-	-	-	
-	-	-	-	-	-	-	_	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
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#3 Bar Bend Test Through 180° is Satisfactory														

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