STRUCTURAL ENGINEERING DIVISION

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

To,
SLT / OIC Labs
DBH JVMC,
DHA Valley Projects
Islamabad

Reference # CED/TFL **36849** (Dr. Asad Ali) Dated: 10-08-2021
Reference of the request letter # DBH/JVMC/QA/QC/2021/02/UET Dated: 09-08-2021

Tension Test Report (Page -1/1)

Date of Test 12-08-2021
Gauge length 8 inches
Description Gabion Wire Tensile Test

Sr. No.	Weight	Diameter/ size		Area (mm^2)		Yield load	Breaking Load	Yield Stress (MPa)	Ultimate Stress (MPa)	Elongation	% Elongation	Remarks
	(kg/m)	Nominal (mm)	Actual (mm)	Nominal	Actual	(kg)	(kg)	Actual	Actual	(inch)		
1	0.028	2	2.12	-------	3.5	-------	120	-------	334	1.00	12.5	
2	0.026	2	2.05	-------	3.3	-------	130	-------	387	0.70	8.8	
3	0.028	2	2.13	-------	3.6	-------	120	-------	330	1.00	12.5	
4	0.099	4	4.01	-------	12.6	-------	540	-------	420	1.00	12.5	
5	0.099	4	4.00	-------	12.6	-------	540	-------	421	0.80	10.0	
6	0.100	4	4.02	-------	12.7	-------	540	-------	417	0.60	7.5	
Note: only six samples for tensile test												
Bend Test												

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

STRUCTURAL ENGINEERING DIVISION

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

To,
SLT / OIC Labs
DBH JVMC,
DHA Valley Projects
Islamabad

Reference # CED/TFL **36849** (Dr. Asad Ali) Dated: 10-08-2021
Reference of the request letter # DBH/JVMC/QA/QC/2021/02/UET Dated: 09-08-2021

Size Test Report (Page – 2/2)

Date of Test 12-08-2021
Description Gabion Wire Size Test

Sr. No.	Diameter/ size		Remarks
	Nominal (mm)	Measured (mm)	
	(mm)	(mm)	
1	2	2.00	
2	4	4.00	
-	-	-	
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	
Only Two Samples for Test			

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

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 Sulman Developers
Lahore
(Grand Square Mall)

Reference # CED/TFL **36858** (Dr. Usman Akmal) Dated: 11-08-2021
Reference of the request letter # Nil Dated: 11-08-2021

Tension Test Report (Page -1/1)

Date of Test 12-08-2021
Gauge length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight	Diameter/ Size (inch)		Area (in^2)		Yield load	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
	(lbs/ft)	Nominal	Actual	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)		
1	0.384	3/8	0.379	0.11	0.113	3700	4800	74200	72220	96200	93700	1.00	12.5	
2	0.381	3/8	0.378	0.11	0.112	3800	4600	76200	74700	92200	90500	1.00	12.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
3/8" Dia Bar Bend Test Through 180º 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
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,
Project Manager
MA Engineering Services
ENGRO ENFRASHARE B2S Towers – Site ID: ALT-SUK0790, S-7735, KHI0756, S-7802, T-CODE-2020-63, REP_T-CODE-2020-63, REP_REP_JAMSHORO, C5-21, REP_SITE-328, QY_SITE 6
Reference # CED/TFL **36860** (Dr. Usman Akmal) Dated: 11-08-2021
Reference of the request letter # MA/UET/LH/009 Dated: 04-08-2021

Tension Test Report (Page -1/2)

Date of Test 12-08-2021
Gauge length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight	Diameter/ Size (mm)		Area (in^2)		Yield load	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
	(lbs/ft)	Nominal	Actual	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)		
1	0.422	10	10.09	0.12	0.124	3800	5200	69812	67580	95533	92500	1.30	16.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only one sample for tensile and one sample for bend test														
Bend Test														
10mm Dia Bar Bend Test Through 180º 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
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,
Project Manager
MA Engineering Services
ENGRO ENFRASHARE USF Towers – Site ID: USFGS03, USFGS05, USFGS06, USFGS15, USFGS16, USFGS17, USFGS18, USFGS18, USFGS19, USFGS20, USFGS21, New Site Req 02, New Site Req 07, New Site Req 08
Reference # CED/TFL **36860** (Dr. Usman Akmal) Dated: 11-08-2021
Reference of the request letter # MA/UET/LH/010 Dated: 06-08-2021

Tension Test Report (Page -2/2)

Date of Test 12-08-2021
Gauge length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight	Diameter/ Size (mm)		Area (in^2)		Yield load	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
	(lbs/ft)	Nominal	Actual	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)		
1	0.426	10	10.14	0.12	0.125	3700	5200	67975	65130	95533	91600	1.50	18.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only one sample for tensile and one sample for bend test														
Bend Test														
10mm Dia Bar Bend Test Through 180º 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
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
Metroplan - Asian Jv
Resident Construction Supervision for Establishment of 200 Bedded Mother & Child Hospital and Nursing College, District Mianwali

Reference # CED/TFL **36861, 868** (Dr. Usman Akmal) Dated: 11-08-2021
Reference of the request letter # Metroplan Asian Jv-Nexus-MMCH-RE-838Dated: 12-04-2021

Tension Test Report (Page -1/1)

Date of Test 12-08-2020
Gauge length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight	Diameter/ Size		Area (in^2)		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)		
1	0.372	3	0.373	0.11	0.109	3700	4800	74200	74640	96200	96900	1.00	12.5	SJ Steel
2	0.388	3	0.381	0.11	0.114	3900	5200	78200	75290	104200	100400	0.90	11.3	
3	0.392	3	0.383	0.11	0.115	3700	5000	74200	70820	100200	95800	1.20	15.0	
4	0.381	3	0.378	0.11	0.112	3400	4700	68200	66850	94200	92400	1.20	15.0	
5	4.348	10	1.276	1.27	1.278	41800	55000	72600	72080	95500	94900	1.70	21.3	
6	4.295	10	1.268	1.27	1.263	41200	54600	71500	71930	94800	95400	1.50	18.8	

Note: only six samples for tensile and three samples for bend test

Bend Test

#3 Bar Bend Test Through 180º is Satisfactory
#3 Bar Bend Test Through 180º is Satisfactory
#10 Bar Bend Test Through 180º 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
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,
X.E.N Tamirat Committee
Anjuman Himayat-I-Islam
119 Multan Road, Lahore
"Construction of Charity Plaza Anjuman Himayat Islam, Lhr"

Reference # CED/TFL **36862** (Dr. Usman Akmal) Dated: 11-08-2021
Reference of the request letter # AHI/TM:1160 Dated: 26-05-2021

Tension Test Report (Page -1/1)

Date of Test 12-08-2021
Gauge length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight	Diameter/ size		Area (in^2)		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)		
1	0.386	3	0.380	0.11	0.113	3800	4900	76200	73840	98200	95300	1.10	13.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only one sample for tensile and one sample for bend test														
Bend Test														
#3 Bar Bend Test Through 180º 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
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,
Executive Engineer (UCET)
University of Sargodha
Construction of Student Hostel at University College of Engineering & Technology, University of Sargodha

Reference # CED/TFL **36863** (Dr. Usman Akmal) Dated: 11-08-2021
Reference of the request letter # SU/XEN(UCET)/856 Dated: 09-08-2021

Tension Test Report (Page -1/1)

Date of Test 12-08-2021
Gauge length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight	Diameter/ Size (inch)		Area (in^2)		Yield load	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
	(lbs/ft)	Nominal	Actual	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)		
1	0.385	3/8	0.379	0.11	0.113	3400	5000	68200	66260	100200	97500	1.40	17.5	
2	0.373	3/8	0.373	0.11	0.110	3100	4900	62200	62390	98200	98700	1.30	16.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
3/8" Dia Bar Bend Test Through 180º 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
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,
Acting Chief Resident Engineer
Trimmu Panjnad Barrages Consultants
Trimmu Panjnad Barrages Improvement Project (TPBIP)

Reference # CED/TFL **36864** (Dr. Usman Akmal) Dated: 11-08-2021
Reference of the request letter # TPBC/CRE/NCB-01/5154 Dated: 01-08-2021

Tension Test Report (Page -1/1)

Date of Test 12-08-2021
Gauge length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight	Diameter/ size		Area (in^2)		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)		
1	0.389	3	0.381	0.11	0.114	3500	4500	70200	67520	90200	86800	1.30	16.3	Mughal Steel
2	0.387	3	0.381	0.11	0.114	3400	4800	68200	65820	96200	93000	1.10	13.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Note: only two samples for tensile and one sample for bend test

Bend Test

#3 Bar Bend Test Through 180º 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
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 Haris & Company
Lahore
(HTLL Sahiwal Depot Boundary Wall)

Reference # CED/TFL **36866** (Dr. Usman Akmal) Dated: 11-08-2021
Reference of the request letter # Nil Dated: 10-08-2021

Tension Test Report (Page -1/1)

Date of Test 12-08-2021
Gauge length 8 inches
Description Deformed Steel Bar Tensile Test as per ASTM-A615

Sr. No.	Weight	Diameter/ Size (mm)		Area (in^2)		Yield load	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
	(lbs/ft)	Nominal	Actual	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)		
1	0.431	10	10.20	0.12	0.127	4200	5600	77161	73070	102881	97500	1.30	16.3	
2	0.431	10	10.20	0.12	0.127	4100	5600	75324	71370	102881	97500	1.30	16.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile test														
Bend Test														

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

STRUCTURAL ENGINEERING DIVISION

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

To,
Sub Divisional Officer
Buildings Sub Division No. 10
Bahawalpur
(Construction of 10 Nos. Residences Grade 15-17, Bachelor Accommodation for Judicial Officers, Mosque, Guard Romsand Boundary Wall in Judicial Complex (Residential Block) at Bahawalpur
Reference # CED/TFL **36867** (Dr. Usman Akmal) Dated: 11-08-2021
Reference of the request letter # 134/Bwp Dated: 04-08-2021

Tension Test Report (Page -1/1)

Date of Test 12-08-2021
Gauge length 8 inches
Description Deformed Steel Bar Tensile Test as per ASTM-A615

Sr. No.	Weight	Diameter/ Size (inch)		Area (in^2)		Yield load	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
	(lbs/ft)	Nominal	Actual	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)		
1	0.366	3/8	0.370	0.11	0.108	3700	4900	74200	75820	98200	100500	0.90	11.3	
2	0.366	3/8	0.370	0.11	0.108	3700	5000	74200	75840	100200	102500	1.10	13.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile test														
Bend Test														

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

STRUCTURAL ENGINEERING DIVISION

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

To,
Sr Engineer (QA/QC)
Engineering Kinetics (Pvt) Ltd
MOL P-618 (Construction of Maramzai Compression Facility

Reference # CED/TFL **36869** (Dr. Usman Akmal) Dated: 11-08-2021
Reference of the request letter # Nil Dated: 11-08-2021

Tension Test Report (Page -1/1)

Date of Test 12-08-2021
Gauge length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight	Diameter/ size		Area (in^2)		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)		
1	0.369	3	0.372	0.11	0.109	3100	4300	62200	62930	86200	87300	1.50	18.8	
2	0.371	3	0.372	0.11	0.109	3200	4400	64200	64740	88200	89100	1.30	16.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
#3 Bar Bend Test Through 180º 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
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,
Deputy General Manager Projects
Habib Rafiq Engineering (Pvt) Ltd
Construction of Sky Gardens Tower, Lahore

Reference # CED/TFL **36875** (Dr. M Rizwan Riaz) Dated: 12-08-2021
Reference of the request letter # HRLE/SKG2021/016 Dated: 12-08-2021

Tension Test Report (Page -1/1)

Date of Test 12-08-2021
Gauge length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight	Diameter/ Size (mm)		Area (in^2)		Yield load	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
	(lbs/ft)	Nominal	Actual	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)		
1	0.447	10	10.39	0.12	0.132	4800	6000	88184	80440	110230	100600	1.00	12.5	AFCO
2	0.445	10	10.37	0.12	0.131	4600	5900	84510	77490	108393	99400	1.00	12.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
10mm Dia Bar Bend Test Through 180º 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
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,
Project Manager
China Energy Engineering Group
Northeast No. 2 Electric Power Construction Co., Ltd
Procurement of Plant – Design, Manufacture, Supply, Isstallation, Testing & Commissioning of 500kV DoubleCircut Quad Bundle Transmission Line from Suki Kinari Hydro Power Station to Interconnection Point of Existing Neelum Jhelum 500kV Double Circuit Quad Bundle Transmission Line (approx. 75km)

Reference # CED/TFL **36877** (Dr. M Rizwan Riaz) Dated: 12-08-2021
Reference of the request letter # DD-401A-FA-482 Dated: 11-08-2021

Tension Test Report (Page -1/1)

Date of Test 12-08-2021
Gauge length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight	Diameter/ Size		Area (in^2)		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)		
1	0.372	3	0.373	0.11	0.109	3100	4600	62200	62420	92200	92700	1.30	16.3	
2	0.367	3	0.371	0.11	0.108	3000	4400	60200	61260	88200	89900	1.40	17.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and two samples for bend test														
Bend Test														
#3 Bar Bend Test Through 180º is Satisfactory														
#3 Bar Bend Test Through 180º is Satisfactory														

Witness by Suhail Ashraf Minhas (Project Director)

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