

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

To,
M/S Riz Builders
Lahore
(Monoo Squash Court, Aitchison College Lahore)

Reference # CED/TFL <u>37552 (Dr. Usman Akmal)</u>
Reference of the request letter # Nil
Dated: 21-12-2021

Tension Test Report (Page -1/1)

Date of Test 23-12-2021 Gauge length 8 inches

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

Sr. No.	Weight	Diam si		Aı (iı	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)	H %	R
1	0.387	3	0.380	0.11	0.114	3100	4600	62200	60120	92200	89300	1.40	17.5	
-	ı	-	ı	-	-	-	-	1	-	-	-	-	1	
-	ı	-	-	-	-	-	-	ı	-	-	-	-	ı	
-	ı	-	-	-	-	-	-	ı	-	-	-	-	1	
1	•	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			N	ote: on	ly one s	ample fo	r tensile	and one	sample fo	or Bend t	est			
							Bend T	est						
#3	Bar Ber	nd Test	Through	h 180° i	s Satisf	actory								

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,
Assistant Engineer
B&W Department
UET Lahore
Construction Site of Girls Hostel UET Lahore

Reference # CED/TFL <u>37553 (Dr. Usman Akmal)</u>
Reference of the request letter # B&W/AEN//3025

Dated: 21-12-2021

Tension Test Report (Page -1/1)

Date of Test 23-12-2021 Gauge length 8 inches

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

Sr. No.	Weight	Diam si			rea n²)	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)	H %	Re
1	0.365	3	0.370	0.11	0.107	4000	5100	80200	82130	102200	104800	0.90	11.3	el
2	0.364	3	0.369	0.11	0.107	4000	5200	80200	82460	104200	107200	0.80	10.0	AF Steel
-	ı	-	-	1	-	1	-	-	-	-	-	-	1	A
-	ı	-	-	1	-	1	-	-	-	-	-	-	1	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Note: only two samples for tensile and one sample for bend test										test			
							Bend T	Cost						
#3	Bar Ben	d Test	Γhrough	180° is	s Satisfa	ictory	bena 1	est						

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

Ref: CED/TFL/12/37554, 583 Dated: 21-12-2021

Dated of Test: <u>23-12-2021</u>

To Resident Engineer NESPAK Construction of Sheranwala Flyover, Lahore

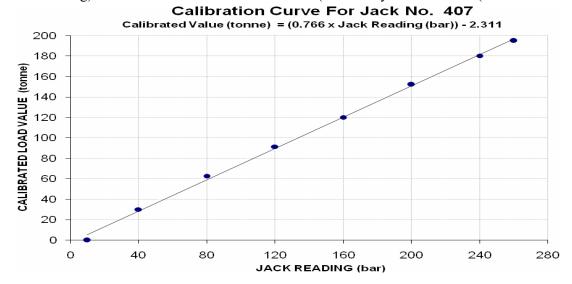
Subject: - CALIBRATION OF HYDRAULIC JACK (MARK: TFL/12/37554) (Page -1/2)

Reference to your Letter No. 3772/SF/103/MWA/04/203, dated: 20/12/2021 on the subject cited above. One Hydraulic Jack (Jack No. 407, Gauge No. SF-407) as received by us has been calibrated. The results are tabulated as under:

Total Range : Zero - 1000 (bar) Calibrated Range : Zero - 260 (bar)

Hydraulic Jack Read	ding (bar)	10	40	80	120	160	200	240	260
Calibrated Load	(kg)	0	30000	62800	91400	120200	152200	180400	195100
Calibrated Load	(Tonne)	0	30.00	62.80	91.40	120.20	152.20	180.40	195.10
Calibrated Pressure	(bar)	0	40.06	83.87	122.06	160.52	203.26	240.92	260.55

(1 Tonne = 1000 kg) The Ram Area of Jack = 733.975 cm² (Witness by Awais Akram (A.R.E NESPAK)



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



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

Ref: CED/TFL/12/37554, 583 Dated: 21-12-2021

Dated of Test: <u>23-12-2021</u>

To Resident Engineer NESPAK Construction of Sheranwala Flyover, Lahore

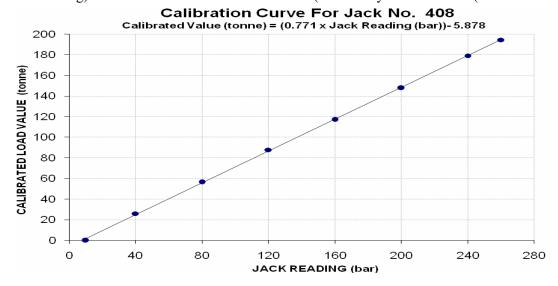
Subject: - CALIBRATION OF HYDRAULIC JACK (MARK: TFL/12/37554) (Page -2/2)

Reference to your Letter No. 3772/SF/103/MWA/04/203, dated: 20/12/2021 on the subject cited above. One Hydraulic Jack (Jack No. 408, Gauge No. SF-408) as received by us has been calibrated. The results are tabulated as under:

Total Range : Zero - 1000 (bar) Calibrated Range : Zero - 260 (bar)

Hydraulic Jack Rea	ding (bar)	10	40	80	120	160	200	240	260
Calibrated Load	(kg)	0	26000	56600	87800	117100	147800	179200	194400
Cambrated Load	(Tonne)	0	26.00	56.60	87.80	117.10	147.80	179.20	194.40
Calibrated Pressure	e (bar)	0	34.72	75.59	117.25	156.38	197.38	239.32	259.61

(1 Tonne = 1000 kg) The Ram Area of Jack = 733.975 cm² (Witness by Awais Akram (A.R.E NESPAK)



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 Director Overseas Construction Co. (Pvt) Ltd. Gulberg City Centre, Lahore

Reference # CED/TFL <u>37556 (Dr. Usman Akmal)</u>
Reference of the request letter # Nil

Dated: 21-12-2021
Dated: 21-11-2021

Tension Test Report (Page -1/1)

Date of Test 23-12-2021 Gauge length 8 inches

#10 Bar Bend Test Through 180° is Satisfactory

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

Sr. No.	Weight		neter/ ze		rea n²)	Yield load	Breaking Load		Stress si)		e Stress si)	Elongation	% Elongation	Remarks
S 2	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	Э %	R
1	0.376	3	0.375	0.11	0.111	3900	5000	78200	77780	100200	99800	0.90	11.3	
2	0.371	3	0.373	0.11	0.109	4100	5000	82200	82840	100200	101100	1.10	13.8	
3	4.154	10	1.247	1.27	1.221	38000	58800	66000	68590	102100	106200	1.40	17.5	
4	4.147	10	1.246	1.27	1.219	38200	58600	66300	69070	101700	106000	1.40	17.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			No	te: only	four s	amples fo	or tensile	and two	samples	for Bend	test			
							Bend T	est						
#3	Bar Ber	nd Test	Throug	h 180° i	s Satisf	actory								

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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STRUCTURAL ENGINEERING DIVISION Test Floor Laboratory



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

Ref: <u>CED/TFL/12/37557</u> Dated: <u>21-12-2021</u>

Dated of Test: 23-12-2021

To Muhammad Hanif Anjum M. Hanif Anjum R.C.C. Pipe Factory Rajna Road Toba Tek Singh

Subject: - CALIBRATION OF HYDRAULIC JACK (MARK: TFL/12/37557)

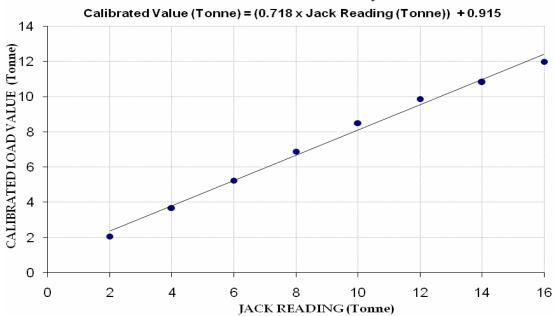
Reference to your Letter No. Nil, Dated: 21/12/2021 on the subject cited above. One Hydraulic Jack as received by us has been calibrated. The results are tabulated as under:

Total Range : Zero - 20 (Tonne) Calibrated Range : Zero - 16 (Tonne)

Hydraulic Jack Read	ling (Tonne)	2	4	6	8	10	12	14	16
Calibrated Load	(kg)	2060	3680	5240	6880	8500	9860	10820	11980
	Tonne	2.06	3.68	5.24	6.88	8.50	9.86	10.82	11.98

1 Tonne = 1000 Kg

Calibration Curve For Jack



I/C Testing Laboratoires UET Lahore, Pakistan.

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

To, Sub Division Officer Highway Sub Division Gojra

Dualization of Faisalabd – Jhang Road (Section Dandewal to Chiraghabad) (km No. 169.05 to 170.35 and 170.35 to 170.75) Length = 1.50 km (Part-II) Bridge Work (ADP 2020-21) District Toba Tek Singh

Reference # CED/TFL 37560 (Dr. Usman Akmal)

Reference of the request letter # 51/G

Tension Test Report (Page -1/1)

Date of Test 23-12-2021 Gauge length 8 inches

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

Sr. No.	Weight	Diam si	neter/ ze		rea n²)	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)	3 %	Re
1	0.370	3	0.372	0.11	0.109	2700	4200	54100	54710	84200	85100	1.50	18.8	
-	-	ı	ı	1	-	-	1	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	ı	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	_	-	
			N	ote: on	ly one s	ample fo	r tensile	and one	sample fo	or Bend t	est	1		ı
							- 1 m							
#3	Bar Ber	nd Test	Throug	h 180° i	s Satisfa	actory	Bend T	est						

I/C Testing Laboratoires UET Lahore, Pakistan.

Dated: 21-12-2021

Dated: 11-11-2021

- 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
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- 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, Khurram Iqbal Lahore

Reference # CED/TFL <u>37561 (Dr. Usman Akmal)</u>

Reference of the request letter # Nil

Dated: 21-12-2021

Tension Test Report (Page -1/1)

Date of Test 23-12-2021 Gauge length 8 inches

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

Sr. No.	Weight	Diam si	neter/ ze		rea n²)	Yield load	Breaking Load		Stress si)	Ultimat (p	e Stress si)	Elongation	% Elongation	Remarks
S	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	Re
1	0.378	3	0.376	0.11	0.111	4200	5000	84200	83290	100200	99200	0.80	10.0	
-	-	-	-	-	-	-	-	-	-	_	-	-	-	
-	-	-	-	-	-	-	-	-	-	_	-	-	-	
-	-	-	-	-	-	-	-	-	-	_	-	-	-	
-	-	ı	1	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			N	ote: on	ly one s	sample fo	r tensile	and one	sample fo	or Bend t	est	1		
#3	Bar Ber	nd Test	Throug	h 180° i	s Satisf	actory	Bend T	est						

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 Ans Associates
Lahore
(Construction of National Foods Galaxy Project FIEDMC, Sahiwal, Faisalabad)

Reference # CED/TFL <u>37562 (Dr. Usman Akmal)</u>

Reference of the request letter # ANS/LHR/P-001/3

Dated: 21-12-2021

Tension Test Report (Page -1/1)

Date of Test 23-12-2021 Gauge length 8 inches

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

Sr. No.	Weight		neter/ ze		rea n²)	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	Re
1	0.366	3	0.370	0.11	0.108	3900	4700	78200	79810	94200	96200	1.00	12.5	:=
2	0.374	3	0.374	0.11	0.110	4000	4800	80200	80160	96200	96200	1.00	12.5	Amreli Steel
-	-	-	-	-	-	-	-	-	-	-	-	-	-	A
-	ı	1	ı	1	-	-	-	-	-	-	-	-	1	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			No	ote: on	ly two s	amples f	or tensile	and one	sample f	or 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.
- 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 Main Brothers Precast (Pvt) Ltd Shahkot

Reference # CED/TFL <u>37563 (Dr. Usman Akmal)</u>

Reference of the request letter # MBP/UET/21/0836

Dated: 21-12-2021

Tension Test Report (Page -1/1)

Date of Test 23-12-2021 Gauge length 2 inches

Description MS Wire Tensile Test

Sr. No.	Weight		neter/ ize	A (m	rea m²)	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	0.154	5	5.00		19.6	960	1120	481	561	0.20	10.0	
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-	ı	-	ı	-	ı	-	-	-	-	-	-	
-	•	-	ı	-	•	-	-	-	-	-	-	
-	•	-	1	-	•	-	-	-	-	-	-	
-	•	-	ı	-	•	-	-	-	-	-	-	
				N	ote: only	one sam	ole for ten	sile test	I		1	
						<u> </u> Γest						
						Dena	1 431					

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, Resident Engineer NESPAK

Punjab Intermediate Cities Improvement Investment Program (PICIIP) Consultancy Services for Engineering, Procurement and Construction Management Trunk Main Sewer Lines and Allied Work (NCB-WORK/PICIIP-03 (Lot-02))

Reference # CED/TFL <u>37567 (Dr. Usman Akmal)</u>
Reference of the request letter # 3976/11/URJ/Lot-02/258

Dated: 21-12-2021
Dated: 15-12-2021

Tension Test Report (Page -1/1)

Date of Test 23-12-2021 Gauge length 8 inches

Description Deformed Steel Bar Tensile and Bend Test

Sr. No.	Weight	Si	neter/ ze ch)		rea n²)	Yield load	Breaking Load		Stress si)		e Stress si)	Elongation	% Elongation	Remarks
S	(lbs/ft)	Nominal	Actual	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	Re
1	0.162	1/4	0.246		0.048	1900	2500		88050		115900	1.80	22.5	
2	0.165	1/4	0.248		0.048	1800	2550		81980		116200	1.60	20.0	
-	-	-	-	-	-	ı	-	-	-	-	-	-	-	
-	ı	-	-	-	-	ı	-	-	-	-	-	-	ı	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	ı	-	-	-	-	ı	-	-	-	-	-	-	ı	
	Note: only two samples for tensile and one sample for bend test													
							D 17							
1 / 4	" D:- D-	D d	T4 T1	1.	1000:~ (Satisfacto	Bend T	est						

1/4" Dia 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, Resident Engineer Sitara Heights (Pvt) Ltd Sitara Icon Tower Faisalabad

Reference # CED/TFL <u>37568 (Dr. Usman Akmal)</u>
Reference of the request letter # Nil
Dated: 21-12-2021

Tension Test Report (Page -1/1)

Date of Test 23-12-2021 Gauge length 8 inches

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

Sr. No.	Weight		neter/ ze		rea n²)	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)	3 %	Re
1	0.374	3	0.374	0.11	0.110	3200	4900	64200	64130	98200	98200	1.40	17.5	
2	0.375	3	0.375	0.11	0.110	3400	4900	68200	67940	98200	98000	1.60	20.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	_	-	-	-	-	
			N	ote: on	ly two s	amples f	or tensile	and one	sample f	or bend t	test			
							Bend T	`est						
#3	Bar Ben	d Test	Through	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, Manager

Sinohydro Corporation Limited

Procurement of Plant, Design, Supply, Installation, Testing and Commissioning of Three (03) 220 kV Transmission Lines Associated with Lahore North Substation

Reference # CED/TFL **37570** (Engr. Amina Rajput) Dated: 22-12-2021 Reference of the request letter # ADB-301B/2018/331 Dated: 21-12-2021

Tension Test Report (Page -1/1)

Date of Test 23-12-2021 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
S	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	Re
1	4.231	10	1.258	1.27	1.244	36400	55200	63200	64520	95800	97900	1.50	18.8	
2	4.267	10	1.264	1.27	1.254	36200	55400	62900	63610	96200	97400	1.40	17.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Note: only two samples for tensile and one sample for bend test													
#10	Bend Test #10 Bar Bend Test Through 180° is Satisfactory													

Witness by Amjad Tufail (CM NESPAK)

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.
- 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
Unirazz Services
Construction of Nestle Head Office at Shahrah-e-Roomi, Amer Sidhu, Lahore

Reference # CED/TFL <u>37571 (Dr. Usman Akmal)</u>

Reference of the request letter # USPL/PMALL/2112-1

Dated: 22-12-2021

Dated: 21-11-2021

Tension Test Report (Page -1/1)

Date of Test 23-12-2021 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
S	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	3 %	R
1	0.373	3	0.374	0.11	0.110	3200	4800	64200	64300	96200	96500	1.20	15.0	
2	0.373	3	0.374	0.11	0.110	3100	4800	62200	62290	96200	96500	1.30	16.3	
-	ī	-	ı	1	-	-	-	1	-	-	-	-	ı	
-	-	-	1	1	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			No	ote: onl	y two s	amples f	or tensile	and one	sample f	or Bend	test			
	Bend Test													
#3	#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
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Test Floor Laboratory Department of Civil Engineering University of Engineering and Technology Lahore, 54890 Pakistan, Ph: 92-42-99029202

Ref: <u>CED/TFL/12/37572</u> Dated: <u>22-12-2021</u>

Date of Test: 23-12-2021

To,
Executive Engineer
Highway Division Taunsa
(Rehabilitation of Metalled Road from Vehova to Kotani Length = 7.50 km, District DG Khan)

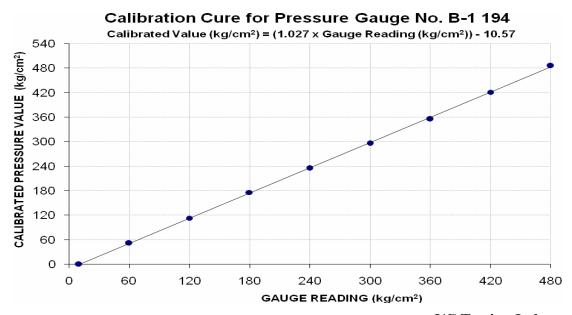
Subject: - CALIBRATION OF PRESSURE GAUGE (MARK: TFL/12/37572) (Page # 1/2)

Reference to your Letter No. 1837, Dated: 20/12/2021 on the subject cited above. One Pressure Gauge No. B-1 194 as received by us has been calibrated. The results are tabulated as under:

Total Range : Zero - 10000 (kg/cm²) Calibrated Range : Zero - 480 (kg/cm²)

Pressure Gauge Reading (kg/cm²)		60	120	180	240	300	360	420	480
Calibrated Load (kg)	0	10200	22400	34800	46600	58600	70400	83400	96200
Calibrated Pressure (kg/cm²)	0	52	113	176	235	296	356	421	486

The Ram Area for Calibration = 198 cm²



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

Ref: <u>CED/TFL/12/37572</u> Dated: <u>22-12-2021</u>

Date of Test: 23-12-2021

To,
Executive Engineer
Highway Division Taunsa
(Rehabilitation of Metalled Road from Vehova to Kotani Length = 7.50 km, District DG Khan)

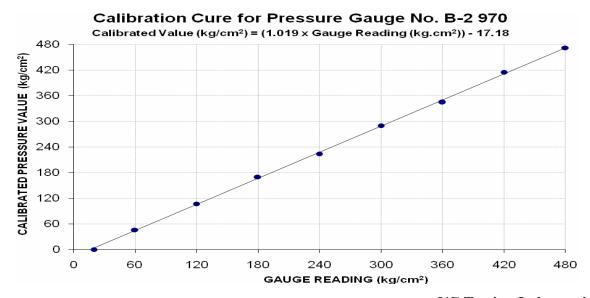
Subject: - CALIBRATION OF PRESSURE GAUGE (MARK: TFL/12/37572) (Page # 1/2)

Reference to your Letter No. 1837, Dated: 20/12/2021 on the subject cited above. One Pressure Gauge No. B-2 970 as received by us has been calibrated. The results are tabulated as under:

Total Range : Zero - 10000 (kg/cm²) Calibrated Range : Zero - 480 (kg/cm²)

Pressure Gauge Reading (kg/cm²)		60	120	180	240	300	360	420	480
Calibrated Load (kg)	0	9100	21200	33600	44300	57400	68200	82200	93400
Calibrated Pressure (kg/cm²)	0	46	107	170	224	290	344	415	472

The Ram Area for Calibration = 198 cm²



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 Defence Housing Authority.

Lahore Cantt

(Construction of 1 Kanal Houses NGV DRGCC (52 Units) DHA Phase-VI) – (M/s Linker

Developers (Pvt) Ltd)

Reference # CED/TFL <u>37574 (Dr. Usman Akmal)</u> Dated: 22-12-2021

Reference of the request letter # 408/241/E/Lab/190/382 Dated: 21-12-2021

Tension Test Report (Page -1/1)

Date of Test 23-12-2021 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 Stres (psi)		Elongation	% Elongation	Remarks
S	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	Re
1	0.359	3	0.366	0.11	0.105	3400	5500	68200	71110	110200	115100	1.00	12.5	eel
2	0.360	3	0.367	0.11	0.106	3400	5500	68200	70790	110200	114500	1.00	12.5	Afco Steel
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-	-	-	1	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	_	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			N	ote: onl	ly two s	amples f	or tensile	and one	sample f	for bend 1	test			
<u></u>	Bend Test													
#3	#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, M/S Cade Creets Associates (Jv) Masood Enterprises Lahore

Reference # CED/TFL <u>36575 (Dr. Usman Akmal)</u>
Reference of the request letter # Nil
Dated: 22-12-2021

Tension Test Report (Page – 1/1)

Date of Test 23-04-2021 Gauge length 2 inches

Description Angel Section & Channel Section Steel Strip Tensile and Bend Test

Sr. No.	Designation	Size of Strip	X Section Area	Yield load	Breaking Load	Yield Stress	Ultimate Stress	Elongation	% Elongation	Remarks		
	(mm)	(mm)	(mm ²)	(kg)	(kg)	(MPa)	(MPa)	(in)				
1	Angle Section	19.20x7.80	149.76	4500	7800	295	511	0.50	25.00	Iqbal G		
2		19.20x7.50	144.00	4400	7400	300	504	0.50	25.00	Iql		
3	Amala Castian	19.20x8.10	155.52	5700	9300	360	587	0.45	22.50	Irfan Steel		
4	Angle Section	19.40x8.10	157.14	6400	9800	400	612	0.45	22.50	Irfan Steel		
5	Channel	19.00x5.80	110.20	4000	6900	356	614	0.40	20.00	Iqbal G		
6	Section	19.10x5.80	110.78	4100	6600	363	584	0.40	20.00	Iqt C		
	Only Six Samples for Tensile and Three Samples for Bend Test											

Bend Test

Strip Taken from Angle Section Bend Test Through 180° is Satisfactory

Strip Taken from Angle Section Bend Test Through 180° is Satisfactory

Strip Taken from Channel Section 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.
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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 Building Standards
Lahore
(Construction of Residential Building at Plot No. 18/3, V-Block, DHA, Lahore)

Reference # CED/TFL <u>37576 (Dr. Usman Akmal)</u>

Reference of the request letter # GT/LTR/211222-142

Dated: 22-12-2021

Tension Test Report (Page -1/1)

Date of Test 23-12-2021 Gauge length 8 inches

Description Deformed Steel Bar Tensile Test as per ASTM-A615

Sr. No.	M Size Size		Area (in²)		Yield load	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks	
S	(lbs/ft)	(lbs/ft) Nominal (#) Actual (inch)		Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	3 %	Re
1	0.409	3	0.391	0.11	0.120	3200	4200	64200	58700	84200	77100	1.50	18.8	
-	•	-	-	1	-	-	-	-	-	-	-	-	-	
-	ı	1	-	1	-	1	-	1	-	-	-	-	1	
-	ı	ı	-	ı	-	ı	-	ı	-	-	•	-	ı	
-	•	-	-	1	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
					No	te: only o	ne samp	le for ten	sile test	I	I	ı		
							Bend T	est						

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
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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 Defence Housing Authority. Lahore Cantt

(Const of Girls School & College at Sector -1, B-Block DHA Phase-XI – (M/s DHA - C)

Reference # CED/TFL **37584** (Dr. M Rizwan Riaz)

Reference of the request letter # 408/241/E/Lab/189/286

Dated: 23-12-2021

Dated: 21-12-2021

Tension Test Report (Page -1/1)

Date of Test 23-12-2021 Gauge length 8 inches

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

Sr. No.	Weight	Meight Diameter/size		Area (in²)		Yield load	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
<i>S</i> 2	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	Re
1	0.390	3	0.382	0.11	0.115	3800	4800	76200	73100	96200	92400	1.00	12.5	al
2	0.384	3	0.379	0.11	0.113	3900	4900	78200	76060	98200	95600	0.90	11.3	Mughal Steel
-	-	-	-	-	-	-	-	-	-	-	-	-	-	N
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			No	ote: on	ly two s	amples f	or tensile	and one	sample f	or bend	test	1		
#3	Bend Test #2 Par Pard Test Through 1909 is Satisfactory													
#3	#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
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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.

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