LAHORE -

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 S.A. Sheikh & Co Lahore

Reference # CED/TFL **2065** (Dr. M Rizwan Riaz)

Reference of the request letter # SASheikh/WB-SMS/INSP09222

Dated: 04-10-2022

Tension Test Report (Page - 1/2)

Date of Test 11-10-2022 Gauge length 2 inches

Description Steel Strip Tensile Test

Sr. No.	Designation	(mm) Size of Strip	X Section Area	(gg) Xield load	Breaking (%) Load	(MPa)	Ultimate Stress	(ui) Elongation	% Elongation	Remarks
1	Steel Strip	25.40x8.50	215.90	8400	13100	382	595	0.50	25.00	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	1	-	-	•	-	
-	ı	1	-	-	ı	-	•	ı	-	
-	-	-	-	-	-	-	-	-	-	
			Only One	Sample	for Tensil	e Test			1	
				Bend '	<u> </u>]	

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

LAHORE -

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 S.A. Sheikh & Co Lahore

Reference # CED/TFL **2065** (Dr. M Rizwan Riaz)

Reference of the request letter # SASheikh/WB-SMS/INSP09221

Dated: 04-10-2022

Tension Test Report (Page - 2/2)

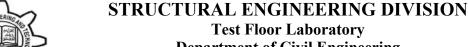
Date of Test 11-10-2022 Gauge length 2 inches

Description Steel Strip Tensile Test

Sr. No.	Designation	(mm) Size of Strip	X Section Area	(kg) Xield load	Breaking Load	(MPa)	Ultimate Stress	(ui) Elongation	% Elongation	Remarks
1	Steel Strip	25.50x6.70	170.85	6200	9800	356	563	0.50	25.00	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	1	-	-	-	-	-	-	ı	-	
-	ı	-	-	-	-	-	-	•	-	
-	ı	-	-	-	-	-	-	•	-	
		I	Only One	Sample	for Tensil	e Test	I			
				Bend '	 					
				Benu	1000					

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: <u>CED/TFL/10/2083, 2097</u> Dated: <u>07-10-2022</u>

Dated of Test: 11-10-2022

To

Engineer's Representative

NESPAK

Construction of Additional Block at Pakistan Engineering Council (PEC) Headquarters, G-5/2, Islamanbad

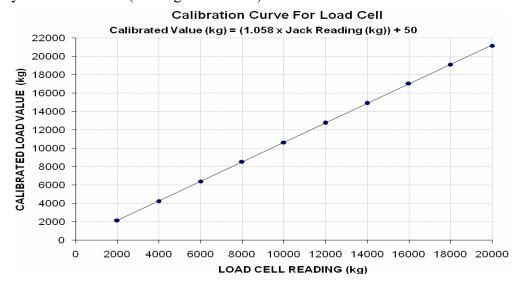
Subject: - CALIBRATION OF LOAD CELL (MARK: TFL/10/2083) (Page -1/3)

Reference to your Letter No. 4125/321/NS/05/497, Dated: 05/10/2022 on the subject cited above. One Load Cell as received by us has been calibrated. The results are tabulated as under:

Total Range : Zero - 50000 (kg) Calibrated Range : Zero - 20000 (kg)

Load Cell Reading (kg)	2000	4000	6000	8000	10000	12000	14000	16000	18000	20000
Calibrated Load (kg)	2150	4250	6400	8550	10650	12750	14900	17050	19100	21150

Witness by Mudassar Zafar (Sr. Engr. 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

Ref: <u>CED/TFL/10/2083, 2097</u> Dated: <u>07-10-2022</u>

Dated of Test: 11-10-2022

To

Engineer's Representative

NESPAK

Construction of Additional Block at Pakistan EngineeringCouncil (PEC) Headquarters, G-5/2, Islamabad

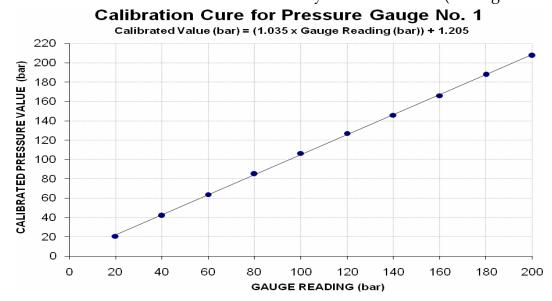
Subject: - CALIBRATION OF PRESSURE GAUGE (MARK: TFL/09/2007) (Page # 2/3)

Reference to your Letter No. 4125/321/NS/05/497, Dated: 05/10/2022 on the subject cited above. One Pressure Gauge No. 1 as received by us has been calibrated. The results are tabulated as under:

Total Range : Zero - 250 (bar) Calibrated Range : Zero - 200 (bar)

Pressure Gauge Reading (bar)	20	40	60	80	100	120	140	160	180	200
Calibrated Load (kg)	4150	8450	12850	17150	21450	25600	29400	33500	37900	41850
Calibrated Pressure (bar)	20.56	41.85	63.65	84.94	106.24	126.80	145.62	165.93	187.72	207.28

The Ram Area of Calibration = 198 cm² Witness by Mudassar Zafar (Sr. Engr. 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

Ref: CED/TFL/10/2083, 2097 Dated: <u>07-10-2022</u>

Dated of Test: 11-10-2022

To

Engineer's Representative

NESPAK

Construction of Additional Block at Pakistan EngineeringCouncil Headquarters, G-5/2, Islamabad

Subject: - CALIBRATION OF PRESSURE GAUGE (MARK: TFL/09/2007) (Page # 3/3)

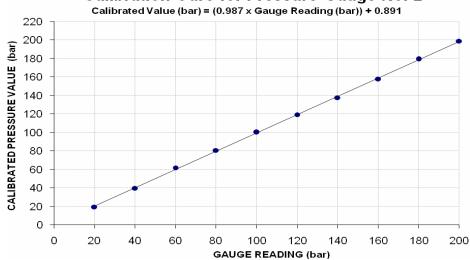
Reference to your Letter No. 4125/321/NS/05/497, Dated: 05/10/2022 on the subject cited above. One Pressure Gauge No. 2 as received by us has been calibrated. The results are tabulated as under:

> **Total Range** 250 (bar) Zero -Zero -Calibrated Range: 200 (bar)

Pressure Gauge Reading (bar)	20	40	60	80	100	120	140	160	180	200
Calibrated Load (kg)	3950	8050	12500	16300	20250	24100	27800	31900	36200	40150
Calibrated Pressure (bar)	19.56	39.87	61.91	80.73	100.30	119.37	137.69	158.00	179.30	198.86

The Ram Area of Calibration = 198 cm² Witness by Mudassar Zafar (Sr. Engr. NESPAK)





I/C Testing Laboratoires **UET Lahore, Pakistan.**

- 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
- 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,
The Executive Engineer
(Mega Projects)Division – I
C & W Deptt. Bacah Khan Chowk, Peshawar

Reference # CED/TFL **2085** (Dr. M Rizwan Riaz)

Reference of the request letter # 469/Stdn/C&W

Dated: 07-10-2022

Dated: 04-10-2022

Tension Test Report (Page -1/2)

Date of Test 11-10-2022 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
	(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	3600	5000	72200	72200	100200	100300	1.30	16.3	
2	0.375	3	0.374	0.11	0.110	3700	5000	74200	74060	100200	100100	1.20	15.0	Grad -60
3	4.240	10	1.260	1.27	1.246	38000	52200	66000	67210	90600	92400	1.80	22.5	Grac
4	4.250	10	1.261	1.27	1.249	38000	52400	66000	67050	91000	92500	1.80	22.5	
5	0.387	3	0.381	0.11	0.114	2600	3700	52100	50350	74200	71700	2.00	25.0	-pr
6	0.388	3	0.381	0.11	0.114	2600	3700	52100	50270	74200	71600	2.10	26.3	Grad-
			No	te: only	y six saı	nples for	tensile a	nd three	samples	for bend	test			
							Bend T	est						
#3	Bar Ben	d Test	Through	180° is	s Satisfa	ctory								
#10) Bar Be	nd Test	Throug	gh 180°	is Satist	factory								

I/C Testing Laboratoires UET Lahore, Pakistan.

Note:

#3 Bar Bend Test Through 180° is Satisfactory

- 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,
The Executive Engineer
(Mega Projects)Division – I
C & W Deptt. Bacah Khan Chowk, Peshawar

Reference # CED/TFL **2085** (Dr. M Rizwan Riaz)

Reference of the request letter # 469/Stdn/C&W

Dated: 07-10-2022

Dated: 04-10-2022

Tension Test Report (Page -2/2)

Date of Test 11-10-2022 Gauge length 2 inches

Description Deformed Steel Bar Tensile and Bend Test as per BS-4449

Sr. No.	Weight		neter/ ze		rea m²)	Yield load	Breaking Load		Stress Pa)		e Stress Pa)	Elongation	% Elongation	Remarks
S	(kg/m)	Nominal (#)	Actual (mm)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	Re
1	0.567	3	9.59	71.00	72.23	3600	4800	497	489	663	652	0.5	25.0	
2	0.570	3	9.61	71.00	72.56	3700	4800	511	500	663	649	0.6	30.0	
-	•	-	-	-	-	-	-	-	-	-	-	-	-	
-	ı	-	1	-	-	-	-	1	-	-	1	ı	-	
-	ı	-	1	-	-	-	-	1	-	-	ı	ı	1	
-	-	-	-	-	-	-	-	-	-	_	-	-	-	
		T	N	ote: on	y two s	amples f	or tensile	and one	sample f	or bend t	test		ı	
							Dond T	agt						
#3	Bar Ben	d Test	Γhrough	n 180° is	s Satisfa	ctory	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, Project Manager Aitchison College, Lahore Staff Housing, Aitchison College, Lahore

Reference # CED/TFL **2091** (Dr. M Rizwan Riaz)

Reference of the request letter # 1708

Dated: 10-10-2022

Dated: 07-10-2022

Tension Test Report (Page -1/1)

Date of Test 11-10-2022 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)		e Stress si)	Elongation	% Elongation	Remarks
S	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	R
1	0.380	3	0.377	0.11	0.112	3700	4900	74200	72940	98200	96600	1.10	13.8	
-	-	-	ı	ı	-	-	-	-	-	-	-	-	1	
•	-	-	ı	1	-	-	-	-	-	-	-	-	ı	
ı	-	-	ı	-	-	-	-	-	-	-	-	-	ı	
	-	-	ı	1	-	-	-	-	-	-	-	1	ı	
1	-	-	1	-	-	-	-	-	-	-	-	1	1	
		Г	N	ote: on	ly one s	ample fo	r tensile	and one	sample fo	or bend t	est			1
#2	Don D	d Tost 5	Bend Test st Through 180° is Satisfactory											
#3	Bar Ben	d Test	I'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,
Manager Civil
Nishat Mills Limited
Dyeing & Finishing Plant, Lahore
"Construction of Nishat Stitching Bath Division" Lahore

Reference # CED/TFL **2092** (Dr. M Rizwan Riaz)

Reference of the request letter # NDF/ST/004

Dated: 10-10-2022

Tension Test Report (Page -1/1)

Date of Test 11-10-2022 Gauge length 8 inches

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

Sr. No.	Weight	Si	neter/ ze m)		rea 1 ²)	Yield load	Breaking Load		Stress si)		te Stress si)	Elongation	% Elongation	Remarks
3 2	(lbs/ft)	Nominal	Actual	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	3 %	R
1	0.416	10	10.02	0.12	0.122	3600	5100	66138	64900	93696	92000	1.50	18.8	e
2	0.417	10	10.03	0.12	0.122	3800	5200	69812	68410	95533	93700	1.20	15.0	Kamran Steel
-	-	-	-	-	-	-	-	-	-	-	-	-	-	mra
-	-	-	-	-	-	-	-	-	-	-	-	-	-	Ka
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	•		No	ote: onl	ly two s	amples f	or tensile	and one	sample f	or bend	test	•	l	,
							Bend T	est						
101	nm Dia 1	Bar Bei	nd Test	Throug	h 180° i	s Satisfac	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

Ref: <u>CED/TFL/10/2096</u> Dated: <u>11-10-2022</u>

Dated of Test: 11-10-2022

To

Deputy Director (QCD) Water and Sanitation Agency Faisalabad

(M/s Waqas RCC Pipe Manufacturing Factory Dawoo Road, Near Sitra Sapna City, Faisalabad)

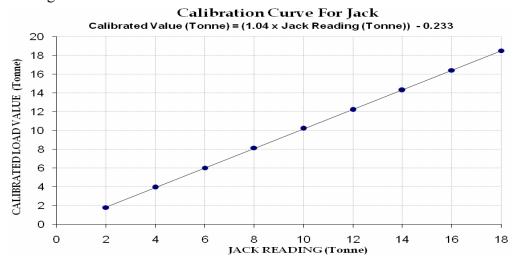
Subject: - CALIBRATION OF HYDRAULIC JACK WITH GAUGE (MARK: TFL/10/2096)

Reference to your Letter No. 122/DD (QCD)/WASA/2022, Dated: 01/10/2022 on the subject cited above. One Hydraulic Jack with Gauge as received by us has been calibrated. The results are tabulated as under:

Total Range : Zero - 20 (Tonne) Calibrated Range : Zero - 18 (Tonne)

Hydraulic Jack Read (Tonne)	2	4	6	8	10	12	14	16	18	
Calibrated Load	(kg)	1800	3950	6000	8150	10200	12200	14300	16400	18500
Calibrated Load (Tonne)		1.80	3.95	6.00	8.15	10.20	12.20	14.30	16.40	18.50

1000 kg = 1 Tonne



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