



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
 Zaheer Associates
 AR Developers & Town Planer
 “Plaza # 74 & 75, Al-Rehman Garden Ph-II Lahore.”

Reference # CED/TFL **2100** (Dr. Usman Akmal)
 Reference of the request letter # Z.A/A.R/31-22

Dated: 12-10-2022
 Dated: 10-10-2022

Tension Test Report (Page -1/1)

Date of Test 17-10-2022
 Gauge length 8 inches
 Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size		Area (in ²)		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal (#)	Actual (inch)	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.378	3	0.376	0.11	0.111	3300	4700	66200	65470	94200	93300	1.40	17.5	Amreli Steel
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only one sample 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.

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 Amanah Noor Residence
Wapda Town, Lahore

Reference # CED/TFL **2101** (Dr. Usman Akmal)
Reference of the request letter # Nil

Dated: 12-10-2022
Dated: 11-10-2022

Tension Test Report (Page -1/1)

Date of Test 17-10-2022
Gauge length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size		Area (in ²)		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal (#)	Actual (inch)	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.372	3	0.373	0.11	0.109	3400	4700	68200	68620	94200	94900	1.20	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only one sample 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.

Note:

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To,
 Sub Divisional Officer
 Highway Sub Division Division No. I
 Gujrat
 (Dualization of Road from Shadiwal to Chak Gillan Length = 16.50 kms District Gujrat (Group No. II km no. 8.50 to 16.50 L= 8.00 kms)
 Reference # CED/TFL **2102** (Dr. Usman Akmal) Dated: 12-10-2022
 Reference of the request letter # 68/GTI Dated: 09-03-2022

Tension Test Report (Page -1/1)

Date of Test 17-10-2022
 Gauge length 8 inches
 Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size (inch)		Area (in ²)		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal	Actual	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.378	3/8	0.376	0.11	0.111	3200	4600	64200	63410	92200	91200	1.40	17.5	
2	0.382	3/8	0.378	0.11	0.112	4100	5000	82200	80410	100200	98100	0.90	11.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
3/8" Dia Bar Bend Test Through 180° is Satisfactory														

I/C Testing Laboratoires
UET Lahore, Pakistan.

Note:

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To,
 Asst Dir Lab
 Defence Housing Authority
 Bahawalpur
 Sec-B, Residential Unit (Myco Engineers Construction)

Reference # CED/TFL **2104** (Dr. Usman Akmal)
 Reference of the request letter # 530/QC/MTL

Dated: 12-10-2022
 Dated: 11-10-2022

Tension Test Report (Page -1/1)

Date of Test 17-10-2022
 Gauge length 8 inches
 Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size		Area (in ²)		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal (#)	Actual (inch)	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.384	3	0.379	0.11	0.113	3500	4800	70200	68370	96200	93800	1.30	16.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only one sample 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.

Note:

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STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
Department of Civil Engineering
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To,
M/S Ikan Engineering Services (Pvt) Ltd
Lahore

Reference # CED/TFL **2106** (Dr. Usman Akmal)
Reference of the request letter # IK-2833-04 Hyundai Motor

Dated: 12-10-2022
Dated: 12-10-2022

Tension Test Report (Page -1/1)

Date of Test 17-10-2022
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	0.376	3/8	0.375	0.11	0.111	3200	4800	64200	63820	96200	95800	1.50	18.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only one sample for tensile test														
Bend Test														

I/C Testing Laboratories
UET Lahore, Pakistan.

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To,
 Resident Engineer
 Dongil Engineering Consultants Co., Ltd.
 Central Asia Regional Economic Cooperation (CAREC) Corridor Development Program – Tranche-1 Project
 Construction of Additional 2-Lane Carriageway from Ratodero to Shikarpur Section-2 (N-55) from km 0+000 to km 43+400 (43.4km)

Reference # CED/TFL **2109** (Dr. Usman Akmal)
 Reference of the request letter # RE/RS/S-2/N55/LB/846/A

Dated: 12-10-2022
 Dated: 04-10-2022

Tension Test Report (Page -1/1)

Date of Test 17-10-2022
 Gauge length 8 inches
 Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size (mm)		Area (in ²)		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal	Actual	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	4.308	32	32.25	1.25	1.266	39600	54400	69842	68930	95944	94700	1.60	20.0	SJ Steel
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only one sample for tensile and one sample for bend test														
Bend Test														
32mm Dia Bar Bend Test Through 180° is Satisfactory														

I/C Testing Laboratoires
UET Lahore, Pakistan.

Note:

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To,
 Manager
 Sinohydro Corporation Limited
 Procurement of Plant, Design, Supply, Installation, Testing and Commission of Three (03) 220
 kV Transmission Lines Associated with Lahore North Sub Station.
 Reference # CED/TFL 2111 (Dr. Usman Akmal) Dated: 12-10-2022
 Reference of the request letter # ADB-301B/2018/541 Dated: 05-10-2022

Tension Test Report (Page -1/1)

Date of Test 17-10-2022
 Gauge length 8 inches
 Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size		Area (in ²)		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal (#)	Actual (inch)	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	3.977	10	1.220	1.27	1.169	30600	45600	53200	57690	79200	86000	1.70	21.3	Batala Steel
2	3.966	10	1.218	1.27	1.166	31000	45800	53800	58610	79500	86600	1.60	20.0	
3	4.061	10	1.233	1.27	1.194	32000	46600	55600	59090	80900	86100	1.80	22.5	
4	4.110	10	1.240	1.27	1.208	32000	47200	55600	58390	82000	86200	1.70	21.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only four samples for tensile and two samples for bend test														
Bend Test														
#10 Bar Bend Test Through 180° is Satisfactory														
#10 Bar Bend Test Through 180° is Satisfactory														

Witness by Asad Nawab (Sr. Engr. Barqaab)

I/C Testing Laboratoires
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To,
 Planning and Coordination Engineer
 Muhammad Rammzan Construction
 Bopet Film Line (Novatex) Sheikhpura

Reference # CED/TFL 2112 (Dr. Usman Akmal)
 Reference of the request letter # MRC/P-43-II/STEEL-012

Dated: 12-10-2022
 Dated: 06-10-2022

Tension Test Report (Page -1/1)

Date of Test 17-10-2022
 Gauge length 8 inches
 Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size		Area (in ²)		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal (#)	Actual (inch)	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.390	3	0.382	0.11	0.115	3600	5500	72200	69130	110200	105700	1.20	15.0	
2	0.384	3	0.379	0.11	0.113	3600	5400	72200	70240	108200	105400	1.20	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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 Laboratories
UET Lahore, Pakistan.

Note:

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STRUCTURAL ENGINEERING DIVISION
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To,
 XEN
 GE (Army) – II
 Okara

(CA No. ENC-A-06/2013: Const of 6x D Type Flats Block (G+2), HQ 2 ALRG at Okara)

Reference # CED/TFL **2113** (Dr. Usman Akmal)
 Reference of the request letter # 6000/MT/9/E-6

Dated: 12-10-2022
 Dated: 26-09-2022

Tension Test Report (Page -1/1)

Date of Test 17-10-2022
 Gauge length 8 inches
 Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size (inch)		Area (in ²)		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal	Actual	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.397	3/8	0.385	0.11	0.117	3300	4900	66200	62390	98200	92700	1.50	18.8	SJ Steel
2	0.394	3/8	0.384	0.11	0.116	3300	4900	66200	62780	98200	93300	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 180° is Satisfactory														

I/C Testing Laboratoires
UET Lahore, Pakistan.

Note:

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- 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

To,
M/S Ahmed Traders
Lahore

Reference # CED/TFL **2114** (Dr. Usman Akmal)
Reference of the request letter # Nil

Dated: 12-10-2022
Dated: 12-10-2022

Tension Test Report (Page -1/1)

Date of Test 17-10-2022
Gauge length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size		Area (in ²)		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal (#)	Actual (inch)	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.385	3	0.380	0.11	0.113	3700	5000	74200	72070	100200	97400	1.00	12.5	
2	0.360	3	0.367	0.11	0.106	2700	4100	54100	56200	82200	85400	1.00	12.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile test														
Bend Test														

I/C Testing Laboratoires
UET Lahore, Pakistan.

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Ref: CED/TFL/10/2115

Dated: 13-10-2022

Dated of Test: 17-10-2022

To

Deputy Director (QCD)
Water and Sanitation Agency
Faisalabad
(M/s Subhan RCC Pipe Manufacturing Factory Bhai Wala Phatak, Jhumra Road, Faisalabad)

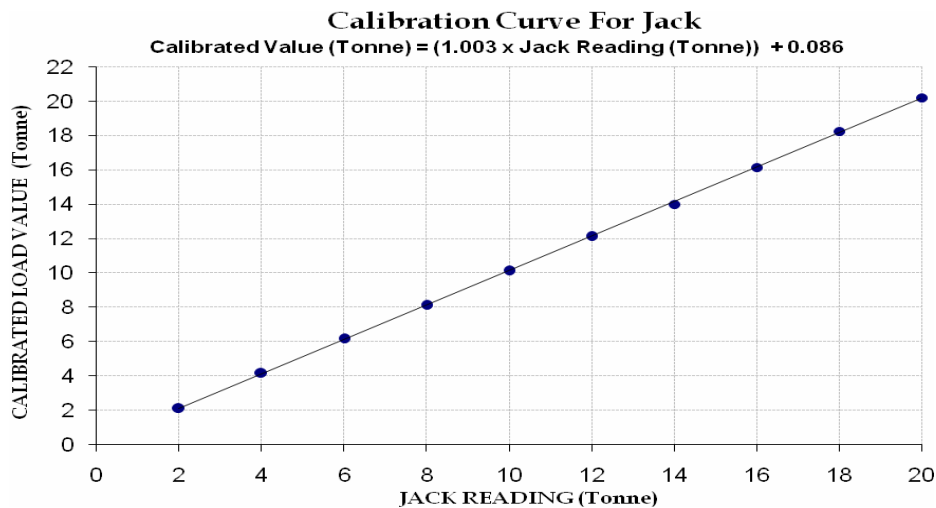
Subject: - CALIBRATION OF HYDRAULIC JACK WITH GAUGE
(MARK: TFL/10/2115)

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 - 25 (Tonne)
Calibrated Range : Zero - 20 (Tonne)

Hydraulic Jack Reading (Tonne)	2	4	6	8	10	12	14	16	18	20	
Calibrated Load	(kg)	2100	4150	6150	8100	10100	12100	14000	16150	18250	20200
	(Tonne)	2.10	4.15	6.15	8.10	10.10	12.10	14.00	16.15	18.25	20.20

1000 kg = 1 Tonne



I/C Testing Laboratories
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STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
Department of Civil Engineering
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To,
 Engineer Representative
 Osmani & Company (Pvt) Ltd.
 Construction of Greenfield Aerodrome for General Aviation Activities at Muridke

Reference # CED/TFL **2116** (Dr. Usman Akmal) Dated: 13-10-2022
 Reference of the request letter # OCL/CAA/MAD-ER/10-2/K22/20 Dated: 11-10-2022

Tension Test Report (Page -1/1)

Date of Test 17-10-2022
 Gauge length 8 inches
 Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size		Area (in ²)		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal (#)	Actual (inch)	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.370	3	0.372	0.11	0.109	3100	4600	62200	62810	92200	93200	1.20	15.0	SJ Steel
2	0.368	3	0.371	0.11	0.108	3000	4600	60200	61060	92200	93700	1.30	16.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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.

Note:

- 1- You can See your reports On Internet in the following web site
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STRUCTURAL ENGINEERING DIVISION
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To,
 Senior Manager Project - Civil
 Volka Food International Limited
 Multan

Reference # CED/TFL **2119** (Dr. Usman Akmal)
 Reference of the request letter # VFI/Civil/15

Dated: 13-10-2022
 Dated: 13-10-2022

Tension Test Report (Page -1/1)

Date of Test 17-10-2022
 Gauge length 8 inches
 Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size (inch)		Area (in ²)		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal	Actual	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.374	3/8	0.374	0.11	0.110	3300	4900	66200	66090	98200	98200	1.20	15.0	
2	0.386	3/8	0.380	0.11	0.113	3500	4800	70200	67980	96200	93300	1.40	17.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
3/8" Dia Bar Bend Test Through 180° 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
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- 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
 ACE Limited, Sambrial Sialkot
 Establishment of University of Applied Engineering and Emerging Technologies (UAEET)
 Sambrial, Sialkot

Reference # CED/TFL **2120** (Dr. Usman Akmal)
 Reference of the request letter # TE/UAEET/ACE/2022/45

Dated: 13-10-2022
 Dated: 12-10-2022

Tension Test Report (Page -1/1)

Date of Test 17-10-2022
 Gauge length 8 inches
 Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size		Area (in ²)		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal (#)	Actual (inch)	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.389	3	0.382	0.11	0.114	4000	5100	80200	77050	102200	98300	0.80	10.0	AF Steel
2	0.375	3	0.374	0.11	0.110	3700	5700	74200	74070	114300	114100	1.10	13.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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.

Note:

- 1- You can See your reports On Internet in the following web site
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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,
 Resident Engineer
 ACES ,
 PC 150' B/W Sector-T, X & W1, W2), DHA Multan

Reference # CED/TFL 2122 (Dr. Usman Akmal)
 Reference of the request letter # RE/W1&W2/Lab/01

Dated: 13-10-2022
 Dated: 07-10-2022

Tension Test Report (Page -1/1)

Date of Test 17-10-2022
 Gauge length 8 inches
 Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size		Area (in ²)		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal (#)	Actual (inch)	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.357	3	0.366	0.11	0.105	3000	4600	60200	62950	92200	96600	1.20	15.0	SJ Steel
2	0.356	3	0.365	0.11	0.105	2900	4500	58200	61120	90200	94900	0.90	11.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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.

Note:

- 1- You can See your reports On Internet in the following web site
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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: CED/TFL/10/2124
Dated of Test: 17-10-2022

Dated: 13-10-2022

To,
M/S Amjad Engineering Services
Lahore

Subject: - CALIBRATION OF PRESSURE GAUGE (MARK: TFL/10/2124) (Page -1/2)

Reference to your Letter No. Nil, Dated: 13/10/2022 on the subject cited above. One Pressure Gauge No. AES-3201 as received by us has been calibrated. The results are tabulated as under:

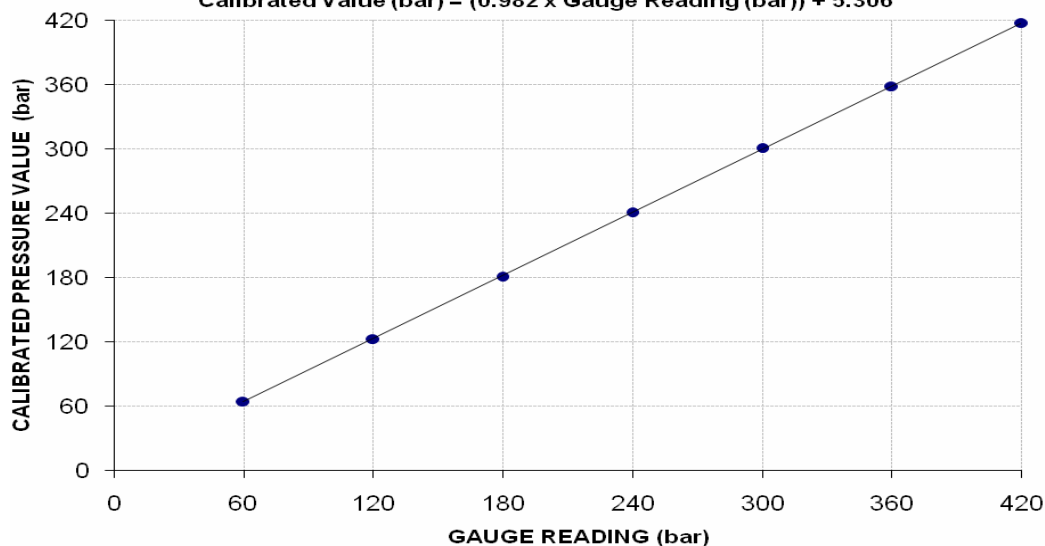
Total Range : Zero - 1000 (bar)
Calibrated Range : Zero - 420 (bar)

Pressure Gauge Reading (bar)	60	120	180	240	300	360	420
Calibrated Load (kg)	13100	24800	36600	48700	60800	72400	84400
Calibrated Pressure (bar)	65	123	181	241	301	359	418

The Ram Area use for Calibration = 198 cm^2

Calibration Curve for Pressure Gauge No. AES-3201

Calibrated Value (bar) = $(0.982 \times \text{Gauge Reading (bar)}) + 5.306$



I/C Testing Laboratories
UET Lahore, Pakistan.

Note:

- 1- You can See your reports On Internet in the following web site
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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: CED/TFL/10/2124
Dated of Test: 17-10-2022

Dated: 13-10-2022

To,
M/S Amjad Engineering Services
Lahore

Subject: - CALIBRATION OF PRESSURE GAUGE (MARK: TFL/10/2124) (Page -2/2)

Reference to your Letter No. Nil, Dated: 13/10/2022 on the subject cited above. One Pressure Gauge No. AES-3202 as received by us has been calibrated. The results are tabulated as under:

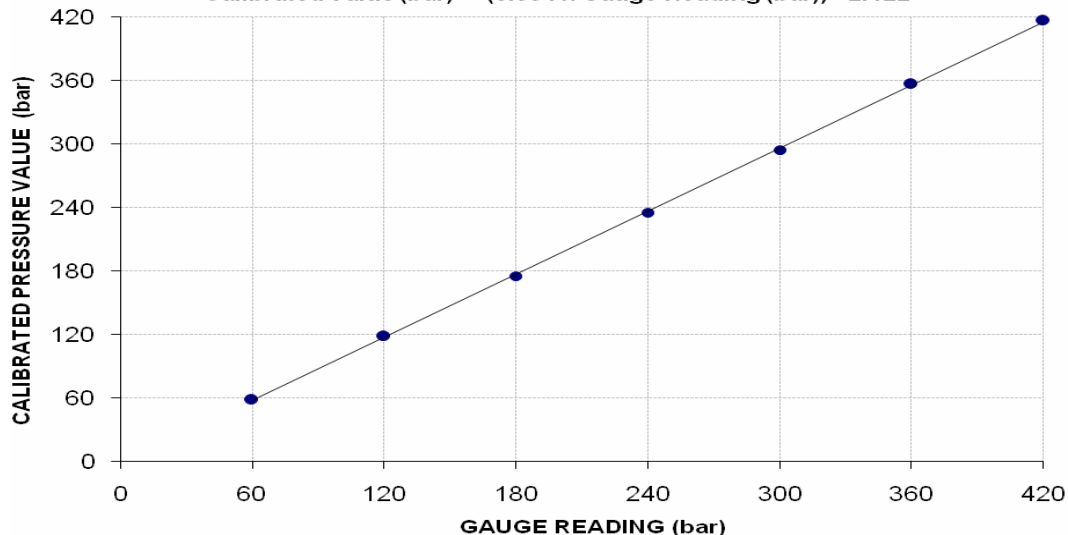
Total Range : Zero - 1000 (bar)
Calibrated Range : Zero - 420 (bar)

Pressure Gauge Reading (bar)	60	120	180	240	300	360	420
Calibrated Load (kg)	11800	23900	35400	47500	59500	72000	84100
Calibrated Pressure (bar)	58	118	175	235	295	357	417

The Ram Are use for Calibration = 198 cm²

Calibration Curve for Pressure Gauge No. AES-3202

Calibrated Value (bar) = (0.994 x Gauge Reading (bar)) - 2.122



I/C Testing Laboratoires
UET Lahore, Pakistan.

Note:

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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,
 Construction Manager
 Guarantee Engineers (Pvt) Ltd
 Nishat Denium Unit Bhikhi
 (Steel Lot 01)
 Reference # CED/TFL 2127 (Dr. Usman Akmal)
 Reference of the request letter # GEPL/NDU-04

Dated: 14-10-2022
 Dated: 12-10-2022

Tension Test Report (Page -1/1)

Date of Test 17-10-2022
 Gauge length 8 inches
 Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size (mm)		Area (in ²)		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal	Actual	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.432	10	10.21	0.12	0.127	4000	5100	73487	69480	93696	88600	1.30	16.3	
2	0.430	10	10.19	0.12	0.126	3900	5000	71650	67990	91858	87200	1.00	12.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
10mm Dia Bar Bend Test Through 180° is Satisfactory														

I/C Testing Laboratoires
UET Lahore, Pakistan.

Note:

- 1- You can See your reports On Internet in the following web site
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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,
 Project Manager
 Union Developers
 Construction of Union Luxury Apartments, Etihad Town, Lahore

Reference # CED/TFL **2128** (Dr. Usman Akmal)
 Reference of the request letter # UA/SO/2022/027

Dated: 14-10-2022
 Dated: 13-10-2022

Tension Test Report (Page -1/1)

Date of Test 17-10-2022
 Gauge length 8 inches
 Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size		Area (in ²)		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal (#)	Actual (inch)	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.360	3	0.367	0.11	0.106	3600	4700	72200	74950	94200	97900	0.90	11.3	Afco Steel
2	0.373	3	0.374	0.11	0.110	3900	4700	78200	78310	94200	94400	0.80	10.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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.

Note:

- 1- You can See your reports On Internet in the following web site
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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,
 Project Manager
 Defence Housing Authority
 Gujranwala
 “Executive Block”

Reference # CED/TFL **2129** (Dr. Usman Akmal)
 Reference of the request letter # 111/15/PM/RS/Exec B/13

Dated: 14-10-2022
 Dated: 13-10-2022

Tension Test Report (Page -1/1)

Date of Test 17-10-2022
 Gauge length 8 inches
 Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size		Area (in ²)		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal (#)	Actual (inch)	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.375	3	0.375	0.11	0.110	3600	4800	72200	72030	96200	96100	1.00	12.5	FF Steel
2	0.377	3	0.376	0.11	0.111	3500	4700	70200	69570	94200	93500	1.10	13.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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.

Note:

- 1- You can See your reports On Internet in the following web site
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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,
 Project Manager
 Defence Housing Authority
 Gujranwala
 "Sector G"

Reference # CED/TFL **2130** (Dr. Usman Akmal)
 Reference of the request letter # 111/15/PE/RS/Pkg-2B/832

Dated: 14-10-2022
 Dated: 13-10-2022

Tension Test Report (Page -1/1)

Date of Test 17-10-2022
 Gauge length 8 inches
 Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size		Area (in ²)		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal (#)	Actual (inch)	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.369	3	0.372	0.11	0.109	3200	4200	64200	64950	84200	85300	1.40	17.5	Union Steel
2	0.369	3	0.371	0.11	0.108	3200	4200	64200	65110	84200	85500	1.50	18.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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.

Note:

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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: CED/TFL/10/2131

Dated: 14-10-2022

Dated of Test: 17-10-2022

To

Deputy Director (QCD)
Water and Sanitation Agency
Faisalabad
(M/s Saleem Engineering RCC Pipe Manufacturing Factory, Satiyana Road,
Faisalabad)

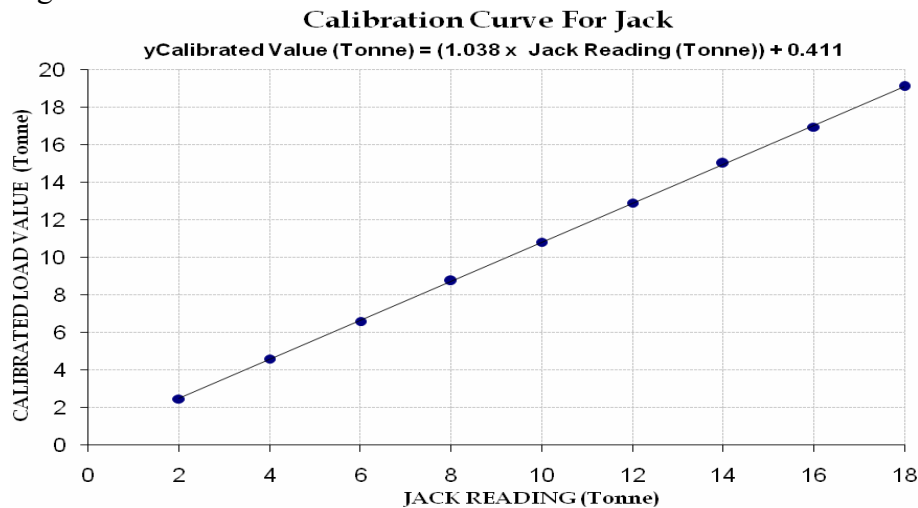
Subject: - CALIBRATION OF HYDRAULIC JACK WITH GAUGE
(MARK: TFL/10/2131)

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 Reading (Tonne)		2	4	6	8	10	12	14	16	18
Calibrated Load	(kg)	2450	4600	6600	8750	10800	12900	15000	16950	19100
	(Tonne)	2.45	4.60	6.60	8.75	10.80	12.90	15.00	16.95	19.10

1000 kg = 1 Tonne



I/C Testing Laboratoires
UET Lahore, Pakistan.

Note:

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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: CED/TFL/11/2132

Dated: 14-10-2022

Dated of Test: 17-10-2022

To

Deputy Director (QCD)
Water and Sanitation Agency
Faisalabad
(M/s Rasheed RCC Pipe Manufacturing Factory, Dawoo Road, Near Saim
Nala,
Faisalabad

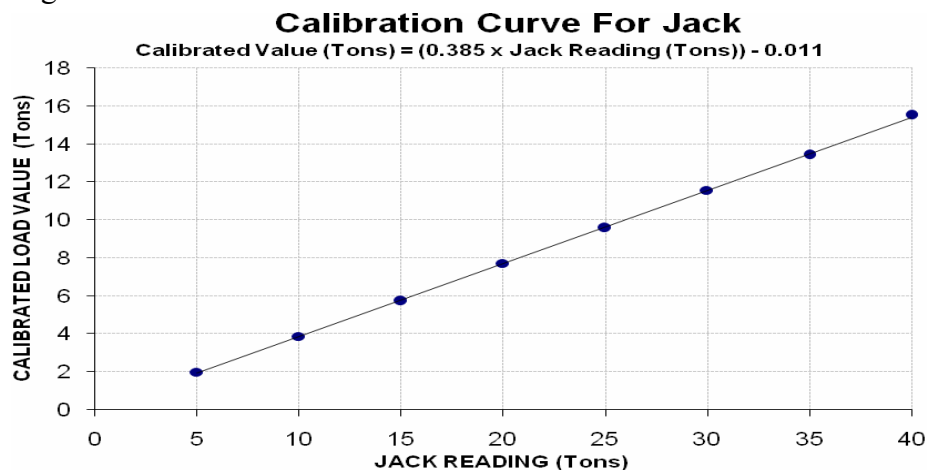
Subject: - **CALIBRATION OF HYDRAULIC JACK WITH GAUGE**
(MARK: TFL/10/2132)

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 - 50 (Ton)
Calibrated Range : Zero - 40 (Ton)

Hydraulic Jack Reading (Ton)	5	10	15	20	25	30	35	40
Calibrated Load (kg)	1800	3500	5200	7000	8700	10500	12200	14100
Calibrated Load (Ton)	1.98	3.85	5.73	7.71	9.58	11.56	13.43	15.53

1000 kg = 1.1011 Ton



I/C Testing Laboratoires
UET Lahore, Pakistan.

Note:

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