



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
 Barqaab Consulting Services (Pvt) Limited
 Procurement of Plant, Design, Supply, Installation, Testing and Commissioning of
 500/220/132kV Lahore North Substation and Extension Works at 500/220/132kV Nokhar
 Substation Under ADB Loan-3677-Pak Second Power Transmission Enhancement
 Investment Program Trench-III.

Reference # CED/TFL **3987** (Dr. M Kashif)

Dated: 28-09-2023

Reference of the request letter # 500kV/SS/N-LHR/BQB/147

Dated: 27-09-2023

Tension Test Report (Page -1/1)

Date of Test 09-10-2023

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	0.383	3	0.379	0.11	0.113	3200	4600	64200	62620	92200	90100	1.30	16.3	FF Steel
2	0.365	3	0.369	0.11	0.107	3400	4800	68200	69950	96200	98800	1.50	18.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and two samples for bend test														
Bend Test														
#3 Bar Bend Test Through 180° is Satisfactory														

Witness by M Farhan (Barqaab) and Muhsin Bhatti (COS NTDC)

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/10/4004

Dated: 04-10-2023

Dated of Test: 09-10-2023

To

Resident Engineer
Pakistan Environmental Planning & Architectural Consultants Limited.
Establishment of Workers Welfare Complex (Phase-I), Adjacent to Sundar
Industrial Estate District Kasur. Package-S.

Subject: **TESTING OF R.C.C. PIPE [ASTM-C76 - 08a]**

Reference to your letter No. RE/PEPAC/Sunder/S-06, dated 07.09.2023

on the subject cited above. Six R.C.C. Pipes as received by us have been tested. The results are tabulated as under.

Sr. No	Nominal Size	Total Length	Loaded Length	External Diameter	Internal Diameter	Wall Thickness	Proof load	Ultimate Load	Proof Stress	Ultimate Stress
	(inch)	(foot)	(foot)	(inch)	(inch)	(inch)	(kg)	(kg)	Pound/Linear foot/foot	Pound/Linear foot/foot
1	9	7.80	7.30	10.83	8.82	1.00	7500	9000	3080	3696
2	12	7.71	7.24	16.06	12.23	1.91	9000	10500	2689	3137
3	15	7.78	7.33	19.49	14.61	2.44	13000	18000	3212	4448
4	18	7.71	7.31	23.03	17.99	2.52	12000	14500	2414	2917
5	24	7.78	7.11	29.92	23.66	3.13	17990	32910	2831	5179
6	30	7.97	7.59	37.01	29.88	3.57	13730	20120	1601	2347

I/C Testing Laboratoires
UET Lahore, Pakistan.

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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/10/4005

Dated: 04-10-2023

Date of Test: 10-10-2023

To,

Architect
MAZ Developers
Construcrtion of MAZ Opulence-I, SMC, Sialkot

Subject: - **CALIBRATION OF PRESSURE GAUGE (MARK: TFL/10/4005)** (Page # 1/2)

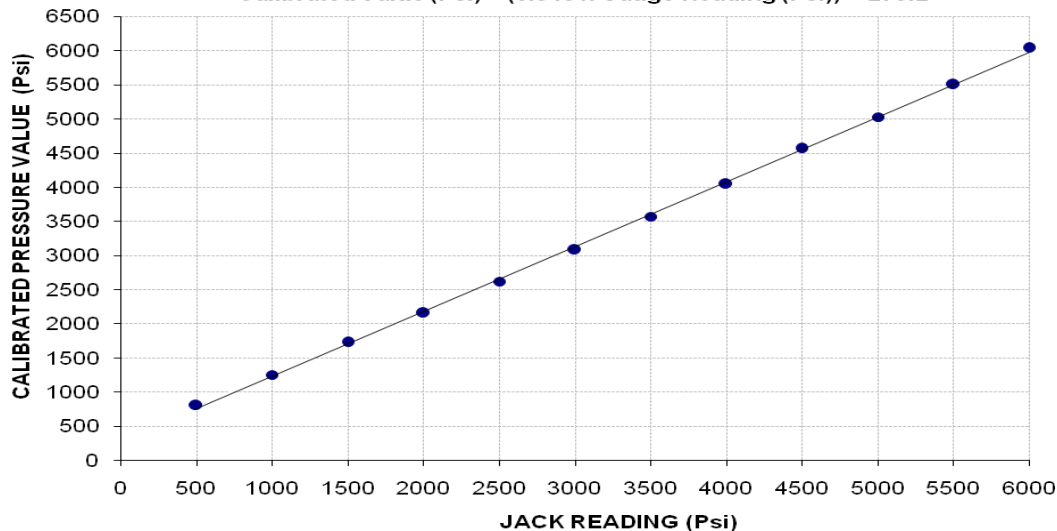
Reference to your Letter No. Nil, Dated: 04/10/2023 on the subject cited above. One Pressure Gauge No. EN 837-1 as received by us has been calibrated. The results are tabulated as under:

Total Range : Zero - 15000 (Psi)
Calibrated Range : Zero - 6000 (Psi)

Gauge Reading (Psi)	500	1000	1500	2000	2500	3000	3500	4000	4500	5000	5500	6000
Calibrated Load (kg)	11200	17400	24000	30000	36400	42900	49700	56300	63500	70000	76600	84000
Calibrated Pressure (Psi)	805	1250	1724	2155	2615	3082	3570	4044	4561	5028	5502	6034

The Ram Area for Calibration = 198 cm²

Calibration Curve for Gauge No. EN 837-1
Calibrated Value (Psi) = (0.949 × Gauge Reading (Psi)) + 279.2



I/C Testing Laboratoires
UET Lahore, Pakistan.

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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/10/4005

Dated: 04-10-2023

Date of Test: 10-10-2023

To,

Architect
MAZ Developers
Construction of MAZ Opulence-I, SMC, Sialkot

Subject: - CALIBRATION OF DIAL GAUGES (MARK: TFL/10/4005) (Page # 2/2)

Reference to your Letter No. Nil, Dated: 04/10/2023 on the subject cited above. Three Dial Gauges as received by us have been calibrated on standard calibration device. The results are tabulated as under.

Total Range : Zero - 100 (mm)
Calibrated Range : Zero - 50 (mm)

Standard Reading	Dial Gauge Readings		
	Dial Gauge No. I (008012)	Dial Gauge No. II (4C18890)	Dial Gauge No. III (4C19006)
400	393	386	396
800	794	787	797
1200	1192	1187	1196
1600	1592	1587	1596
2000	1991	1987	1996
2400	2392	2386	2396
2800	2793	2787	2795
3200	3193	3188	3195
3600	3592	3587	3593
4000	3992	3987	3993
4400	4391	4387	4393
4800	4795	4775	4792
5000	4993	4979	4992

I/C Testing Laboratories
UET Lahore, Pakistan.

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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/10/4010

Dated: 05-10-2023

Dated of Test: 09-10-2023

To

District Officer
District Council Okara
(Construction of Drain, Doling, Sullage Carrier, Culverts, Tuff Tile, Sewerage
at Chak 32/2L Tehsil & District Okara Phase I.)

Subject: **TESTING OF R.C.C. PIPE [ASTM-C76 - 08a]**

Reference to your letter No. 240/DO(I&S), dated 19.01.2023 on the subject cited above. Two R.C.C. Pipes as received by us have been tested. The results are tabulated as under.

Sr. No	Nominal Size	Total Length	Loaded Length	External Diameter	Internal Diameter	Wall Thickness	Proof load	Ultimate Load	Proof Stress	Ultimate Stress
	(inch)	(foot)	(foot)	(inch)	(inch)	(inch)	(kg)	(kg)	Pound/Linear foot/foot	Pound/Linear foot/foot
1	12	7.79	7.35	16.06	12.09	1.99	10500	14500	3127	4319
2	18	7.71	7.31	23.03	17.99	2.52	12000	15500	2414	3118

I/C Testing Laboratoires
UET Lahore, Pakistan.

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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 Best Builders
 Lahore
 (Construction of New TCF Primary School Building in Chinacovindi Lahore)

Reference # CED/TFL **4012** (Dr. M Kashif)
 Reference of the request letter # Nil

Dated: 05-10-2023
 Dated: 02-10-2023

Tension Test Report (Page -1/1)

Date of Test 09-10-2023
 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	3300	4900	66200	66430	98200	98700	1.40	17.5	Ittefaq 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:

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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 Riaz Construction Company
 Lahore
 (Construction of New TCF Secondary School Building in Noorpur Virkan Sheikhpura)

Reference # CED/TFL **4013** (Dr. M Kashif)
 Reference of the request letter # Nil

Dated: 05-10-2023
 Dated: 02-10-2023

Tension Test Report (Page -1/1)

Date of Test 09-10-2023
 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	0.373	3	0.374	0.11	0.110	3400	4900	68200	68340	98200	98500	1.20	15.0	Ittefaq 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.

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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,

Team Leader / Project Manager
 BWRDSP Consultants
 Balochistan Water Resources Development Sector Project
 Construction of Killi Sardar Akhtar Perennial Irrigation Subproject Zhob River Basin
 (NCB-06)

Reference # CED/TFL **4016** (Dr. M Kashif)

Dated: 05-10-2023

Reference of the request letter #4078/061/HAB/01/NCB-06/1397

Dated: 18-10-2023

Tension Test Report (Page -1/1)

Date of Test 09-10-2023

Gauge length 8 inches

Description Deformed Steel Bar Tensile 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	0.418	3	0.396	0.11	0.123	3700	5300	74200	66350	106200	95100	1.50	18.8	Moiz Steel
2	0.416	3	0.395	0.11	0.122	3600	5400	72200	64880	108200	97400	1.40	17.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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

To,
Arshad Rafiq
Lahore

Reference # CED/TFL **4017** (Dr. M Kashif)
Reference of the request letter # Nil

Dated: 06-10-2023
Dated: 06-10-2023

Tension Test Report (Page -1/1)

Date of Test 09-10-2023
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	0.370	3	0.372	0.11	0.109	3700	4800	74200	74910	96200	97200	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 Laboratories
UET Lahore, Pakistan.

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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,

Material Engineer
NESPAK
Punjab Rural Sustainable Water Supply & Sanitation Project (PRSWSSP)
Engineering Design and Construction Supervision (EDCS)
Cluster Central - I, Tehsil Bhowan (Contract Package –BNA-01)

Reference # CED/TFL **4018** (Dr. M Kashif)

Dated: 06-10-2023

Reference of the request letter # NESPAK(PRSWSSP)BHOWANA-RE-18 Dated: 26-09-2023

Tension Test Report (Page -1/1)

Date of Test 09-10-2023

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	0.375	3	0.374	0.11	0.110	3000	4800	60200	60050	96200	96100	1.40	17.5	Mehboob Super Steel
2	0.376	3	0.375	0.11	0.111	3100	4800	62200	61830	96200	95800	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.

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STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
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To,

Senior Resident Engineer
ESAC DHA Multan
Construction of Parking Plaza & Boundary Wall at Main Office Building, DHA Multan

Reference # CED/TFL **4019** (Dr. M Kashif)

Dated: 06-10-2023

Reference of the request letter # RE/ESAC/SECTOR K/RIA/26

Dated: 05-10-2023

Tension Test Report (Page -1/1)

Date of Test 09-10-2023

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	0.366	3	0.370	0.11	0.108	3100	4800	62200	63510	96200	98400	1.40	17.5	
2	0.365	3	0.369	0.11	0.107	3000	4800	60200	61700	96200	98800	1.40	17.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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.

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

To,

Zahid Majeed
House # 703 D-Block,
EME DHA Phase 12, Lahore

Reference # CED/TFL **4020** (Dr. M Kashif)
Reference of the request letter # Nil

Dated: 06-10-2023
Dated: 06-10-2023

Tension Test Report (Page -1/1)

Date of Test 09-10-2023
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	0.374	3	0.374	0.11	0.110	3400	4800	68200	68180	96200	96300	1.30	16.3	
2	0.378	3	0.376	0.11	0.111	3400	4800	68200	67440	96200	95200	1.40	17.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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.

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STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
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To,
Asst Dir Lab
Defence Housing Authority, Bahawalpur
(Masjid Sector-B)(M/s Multiline Engineering)

Reference # CED/TFL **4022** (Dr. M Kashif)
Reference of the request letter # 530/QC/MTL

Dated: 06-10-2023
Dated: 05-10-2023

Tension Test Report (Page -1/1)

Date of Test 09-10-2023
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	0.391	3	0.383	0.11	0.115	3500	5100	70200	67040	102200	97700	1.20	15.0	Ittehad Steel
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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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
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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,
Site Engineer (Civil)
S. Mehboob & Company

Reference # CED/TFL **4023** (Dr. M Kashif)
Reference of the request letter # SMC/Carrefour/LHR/DHA11/04

Dated: 06-10-2023
Dated: 06-10-2023

Tension Test Report (Page -1/1)

Date of Test 09-10-2023
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	0.150	2	0.237	-----	0.044	1680	1840	-----	83780	-----	91800	1.00	12.5	
2	0.153	2	0.239	-----	0.045	1640	1840	-----	80470	-----	90300	0.90	11.3	
3	0.154	2	0.240	-----	0.045	1520	1960	-----	74050	-----	95500	0.80	10.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only three samples for tensile and one sample for bend test														
Bend Test														
#2 Bar Bend Test Through 180° is Satisfactory														

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/10/4024

Dated: 06-10-2023

Dated of Test: 09-10-2023

To

Resident Engineer
AZ Engineering Associates
Rehabilitation / Renovation of Existing Office Building and Construction of
Office Block of Commissioner Office at Lahore.

Subject: **TESTING OF R.C.C. PIPE [ASTM-C76 - 08a]**

Reference to your letter No. AZEA/RE/C.O/44, dated 12.09.2023 on the subject cited above. Four R.C.C. Pipes as received by us have been tested. The results are tabulated as under.

Sr. No	Nominal Size	Total Length	Loaded Length	External Diameter	Internal Diameter	Wall Thickness	Proof load	Ultimate Load	Proof Stress	Ultimate Stress
	(inch)	(foot)	(foot)	(inch)	(inch)	(inch)	(kg)	(kg)	Pound/Linear foot/foot	Pound/Linear foot/foot
1	9	7.75	7.25	10.87	8.72	1.07	8500	11000	3556	4602
2	9	7.74	7.25	10.75	8.59	1.08	9000	11000	3822	4671
3	12	7.78	7.32	15.75	11.55	2.10	12500	17000	3909	5316
4	12	7.79	7.35	16.30	12.16	2.07	11000	15500	3256	4587

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,
Asst Dir Infra
Defence Housing Authority, Gujranwala
“Boundry Wall (Sec G, K & L)”

Reference # CED/TFL **4025** (Dr. M Kashif)
Reference of the request letter # 111/15/AD/Lab/BW/G,K,L/54

Dated: 06-10-2023
Dated: 06-10-2023

Tension Test Report (Page -1/1)

Date of Test 10-10-2023
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	0.374	3	0.374	0.11	0.110	3200	4500	64200	64220	90200	90300	1.30	16.3	Sheikhoo Steel
2	0.374	3	0.374	0.11	0.110	3400	4500	68200	68230	90200	90300	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 Laboratoires
UET Lahore, Pakistan.

Note:

- 1- You can See your reports On Internet in the following web site
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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,
 Asst Dir Infra
 Defence Housing Authority, Gujranwala
 "Sector K"

Reference # CED/TFL **4027** (Dr. M Kashif)
 Reference of the request letter # 111/15/AD/RS/Lab/Sec/K/387

Dated: 06-10-2023
 Dated: 05-10-2023

Tension Test Report (Page -1/1)

Date of Test 09-10-2023
 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	0.395	3	0.385	0.11	0.116	3900	5000	78200	73960	100200	94900	0.90	11.3	Union Steel
2	0.375	3	0.375	0.11	0.110	4200	5100	84200	83880	102200	101900	1.00	12.5	
3	4.354	10	1.277	1.27	1.280	43400	57800	75400	74740	100400	99600	1.60	20.0	
4	4.367	10	1.278	1.27	1.284	43000	57000	74700	73830	99000	97900	1.50	18.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only four samples for tensile and two samples for bend test														
Bend Test														
#3 Bar Bend Test Through 180° is Satisfactory														
#10 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,

Engr. Haseeb Afzal
Project Manager
Parking Area Bhohtian Lahore

Reference # CED/TFL **4028** (Dr. M Kashif)
Reference of the request letter # Nil

Dated: 06-10-2023
Dated: 06-10-2023

Tension Test Report (Page -1/1)

Date of Test 10-10-2023
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	0.337	3	0.355	0.11	0.099	2800	4400	56200	62310	88200	98000	1.30	16.3	
2	0.339	3	0.356	0.11	0.100	2800	4500	56200	61900	90200	99500	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
Test Floor Laboratory
Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
Pakistan. Ph: 92-42-99029202

Ref: CED/TFL/10/4029

Dated: 06-10-2023

Dated of Test: 09-10-2023

To

Assistant Director (QCD)
WASA, LDA, Lahore
(M/s Allah Hoo Yasir Pipe Factory)

Subject: - CALIBRATION OF HYDRAULIC JACK WITH GAUGE
(MARK: TFL/10/4029)

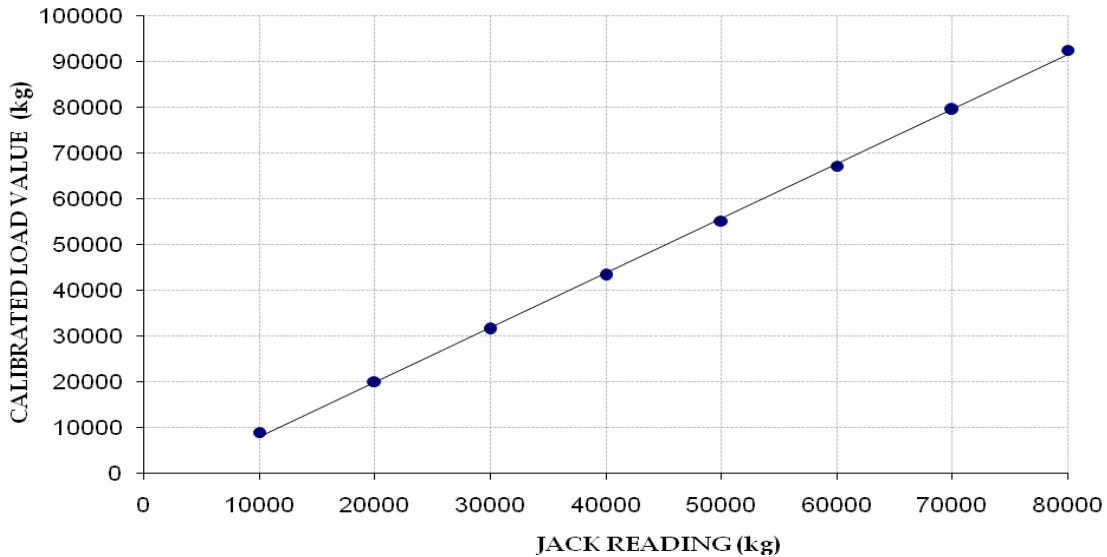
Reference to your Letter No. QCD/1618-19, Dated: 05/10/2023 on the subject cited above. One Hydraulic Jack with Gauge as received by us has been calibrated. The results are tabulated as under:

Total Range : Zero - 100000 (kg)
Calibrated Range : Zero - 80000 (kg)

Hydraulic Jack Reading (kg)	10000	20000	30000	40000	50000	60000	70000	80000
Calibrated Load (kg)	9000	20100	31500	43300	55100	67200	79500	92500

Calibration Curve For Jack

Calibrated Value (kg) = (1.191 x Jack Reading (kg)) - 3817.



I/C Testing Laboratories
UET Lahore, Pakistan.

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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
 MM Pakistan (Pvt) Ltd.
 Rehabilitation of 36 i/d Damaged Sewer Line along Stadium Road in Daska City, (Package-I)

Reference # CED/TFL **4030** (Dr. M Kashif)

Dated: 06-10-2023

Reference of the request letter # SSK/CON/1094/SW/112/2023

Dated: 05-10-2023

Tension Test Report (Page -1/1)

Date of Test 09-10-2023

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	0.380	3/8	0.377	0.11	0.112	3000	4500	60200	59250	90200	88900	1.60	20.0	
2	0.377	3/8	0.376	0.11	0.111	2700	4300	54100	53720	86200	85600	1.60	20.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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
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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 Al Furqan Corporation
Sukkur

Reference # CED/TFL **4033** (Dr. M Kashif)
Reference of the request letter # Nil

Dated: 10-10-2023
Dated: 09-10-2023

Tension Test Report (Page -1/1)

Date of Test 10-10-2023
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	0.391	10	9.72	0.12	0.115	3400	4600	62464	65180	84510	88200	1.40	17.5	Irtihad Steel
2	0.383	10	9.62	0.12	0.113	3400	4600	62464	66490	84510	90000	1.60	20.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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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