



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 Medix (Pvt) Limited
Lahore
(Client IV & ITD)

Reference # CED/TFL **3474** (Dr. Rizwan Azam)
Reference of the request letter # Nil

Dated: 16-06-2023
Dated: 15-06-2023

Tension Test Report (Page – 1/1)

Date of Test 19-06-2023
Gauge length 2 inches
Description MS Channel & MS Plate Steel Strip Tensile Test

Sr. No.	Designation	Size of Strip	X Section Area	Yield load	Breaking Load	Yield Stress	Ultimate Stress	Elongation	% Elongation	Remarks
1	MS Channel	21.70x13.80	299.46	9500	15800	311	518	0.50	25.00	
2	MS Plate	24.00x14.30	343.20	-----	17000	-----	486	0.60	30.00	
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Only Two Samples for Tensile Test										
Bend Test										

I/C Testing Laboratoires
UET Lahore, Pakistan.

Note:

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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,

Assistant Engineer
 Engineering Wing
 University of Sahiwal, Sahiwal
 "Extension of Hall / Store Room near Cafeteria at University of Sahiwal."

Reference # CED/TFL **3475** (Dr. Rizwan Azam)
 Reference of the request letter # UOSL/EW/22-23 071

Dated: 16-06-2023
 Dated: 15-06-2023

Tension Test Report

Date of Test 19-06-2023
 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	0.370	3/8	0.372	0.11	0.109	3000	4500	60200	60780	90200	91200	1.50	18.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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Note: only one sample 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,

M/S Capital Construction Co.
 Lahore
 (Al Hamd Tower, Barket Market, Road Lahore)

Reference # CED/TFL **3476** (Dr. Rizwan Azam)
 Reference of the request letter# 1382021BCC

Dated: 16-06-2023
 Dated: 16-06-2023

Tension Test Report (Page -1/1)

Date of Test 19-06-2023
 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	0.385	3	0.380	0.11	0.113	3300	5000	66200	64200	100200	97300	1.00	12.5	Model
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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.

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To,
Resident Engineer
NESPAK
University of Child Health Sciences, Lahore.

Reference # CED/TFL **3477** (Dr. Rizwan Azam)
Reference of the request letter # 4598/13/SA/09/016

Dated: 16-06-2023
Dated: 13-06-2023

Tension Test Report

Date of Test 19-06-2023
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	0.386	3	0.380	0.11	0.114	3100	4800	62200	60190	96200	93200	1.50	18.8	Batala Gold Steel	
2	0.389	3	0.382	0.11	0.114	3100	4800	62200	59700	96200	92500	1.40	17.5		
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-	-	-	-	-	-	-	-	-	-	-	-	-	-		
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
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Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
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To,
Principal Architect
N. Jehangir & Associates

Reference # CED/TFL **3478** (Dr. Rizwan Azam)
Reference of the request letter # Nil

Dated: 16-06-2023
Dated: 15-06-2023

Tension Test Report

Date of Test 19-06-2023
Gauge length 8 inches
Description Deformed Steel Bar Tensile 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	0.370	3/8	0.372	0.11	0.109	4100	4900	82200	83080	98200	99300	0.80	10.0	
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-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only one sample for tensile test														
Bend Test														

I/C Testing Laboratories
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To,

G.M – Engineering
Mughal Pakistan (Private) Limited
Construction of Serena Hotel, Hunza.

Reference # CED/TFL **3479** (Dr. Rizwan Azam)
Reference of the request letter # 786/MPL-0075/050604/2023

Dated: 16-06-2023
Dated: 05-06-2023

Tension Test Report (Page – 1/1)

Date of Test 19-06-2023
Gauge length 2 inches
Description H Beam Steel Strip Tensile Test

Sr. No.	Designation		Size of Strip	X Section Area	Yield load	Breaking Load	Yield Stress	Ultimate Stress	Elongation	% Elongation	Remarks
	(inch)	(mm)	(mm ²)	(kg)	(kg)	(MPa)	(MPa)	(in)			
1	H Beam	8x8	26.60x11.70	311.22	10600	18100	334	571	0.70	35.00	
-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	
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-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	
Only One Sample for Tensile Test											
Bend Test											

I/C Testing Laboratoires
UET Lahore, Pakistan.

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Department of Civil Engineering
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Ref: CED/TFL/06/3481

Dated: 19-06-2023

Dated: 19-06-2023

To

Resident Engineer
Diamer Basha Consultants Group (DBCg)
NESPAK - ACE -MMP - MWH - ROYRY - DOLSAR JV
Diamer Basha Dam Project.

Subject: - CALIBRATION OF HYDRAULIC JACK (MARK: TFL/06/3481) (Page -1/4)

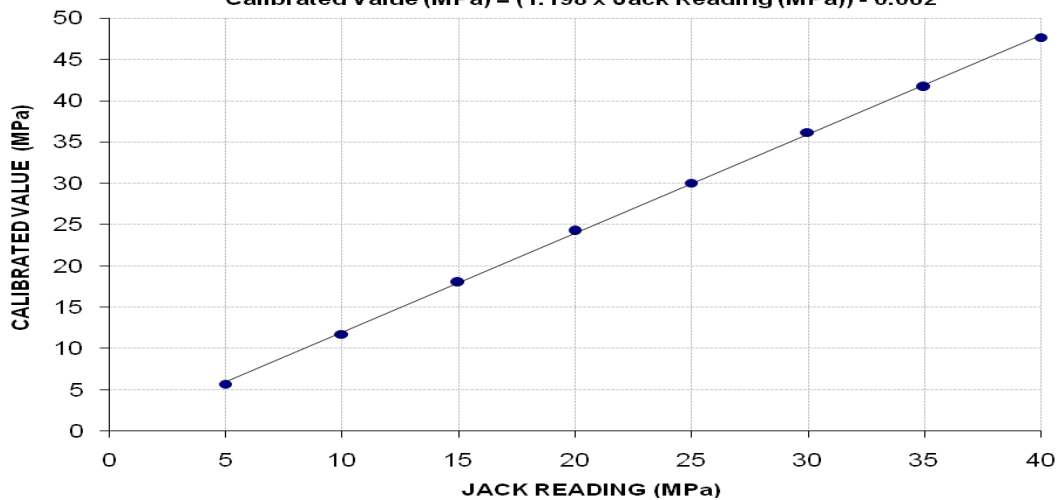
Reference to your Letter No. DBCG/Lab/PF JV/2023/033, dated: 15/06/2023 on the subject cited above. One Hydraulic Jack (Jack No. YCW 250B-15, Gauge No. HC 67581602253) as received by us has been calibrated. The results are tabulated as under:

Total Range : Zero - 60 (MPa)
Calibrated Range : Zero - 40 (MPa)

Hydraulic Jack Reading (MPa)	5	10	15	20	25	30	35	40
Calibrated Load (kg)	22000	45200	69200	93200	115400	139100	160200	183200
Calibrated Pressure (Mpa)	5.72	11.76	18.00	24.24	30.02	36.18	41.67	47.66

The Ram Area of Jack = 377 cm²

Calibration Curve For Jack No. YCW 250 B-15 (Gauge # HC 67581602253)
Calibrated Value (MPa) = (1.198 x Jack Reading (MPa)) - 0.062



I/C Testing Laboratories
UET Lahore, Pakistan.

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Ref: CED/TFL/06/3481

Dated: 19-06-2023

Dated: 19-06-2023

To

Resident Engineer
Diamer Basha Consultants Group (DBCg)
NESPAK - ACE -MMP - MWH - ROYRY - DOLSAR JV
Diamer Basha Dam Project.

Subject: - CALIBRATION OF HYDRAULIC JACK (MARK: TFL/06/3481) (Page -2/4)

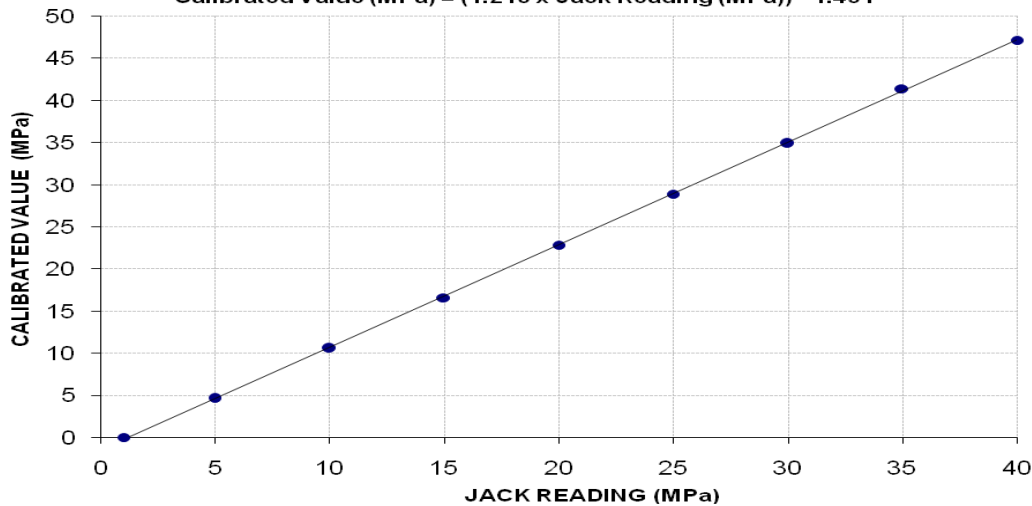
Reference to your Letter No. DBCG/Lab/PF JV/2023/033, dated: 15/06/2023 on the subject cited above. One Hydraulic Jack (Jack No. YCW 250B-15, Gauge No. HC 67581602256) as received by us has been calibrated. The results are tabulated as under:

Total Range : Zero - 60 (MPa)
Calibrated Range : Zero - 40 (MPa)

Hydraulic Jack Reading (MPa)	1	5	10	15	20	25	30	35	40
Calibrated Load (kg)	0	17800	40800	63800	87800	111200	134200	159200	181400
Calibrated Pressure (Mpa)	0	4.63	10.61	16.60	22.84	28.93	34.91	41.41	47.19

The Ram Area of Jack = 377 cm²

Calibration Curve For Jack No. YCW 250 B-15 (Gauge # HC 67581602256)
Calibrated Value (MPa) = (1.216 × Jack Reading (MPa)) - 1.451



I/C Testing Laboratoires
UET Lahore, Pakistan.

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Ref: CED/TFL/06/3481

Dated: 19-06-2023

Dated: 19-06-2023

To

Resident Engineer
Diamer Basha Consultants Group (DBCg)
NESPAK - ACE -MMP - MWH - ROYRY - DOLSAR JV
Diamer Basha Dam Project.

Subject: - **CALIBRATION OF HYDRAULIC JACK (MARK: TFL/06/3481)** (Page -3/4)

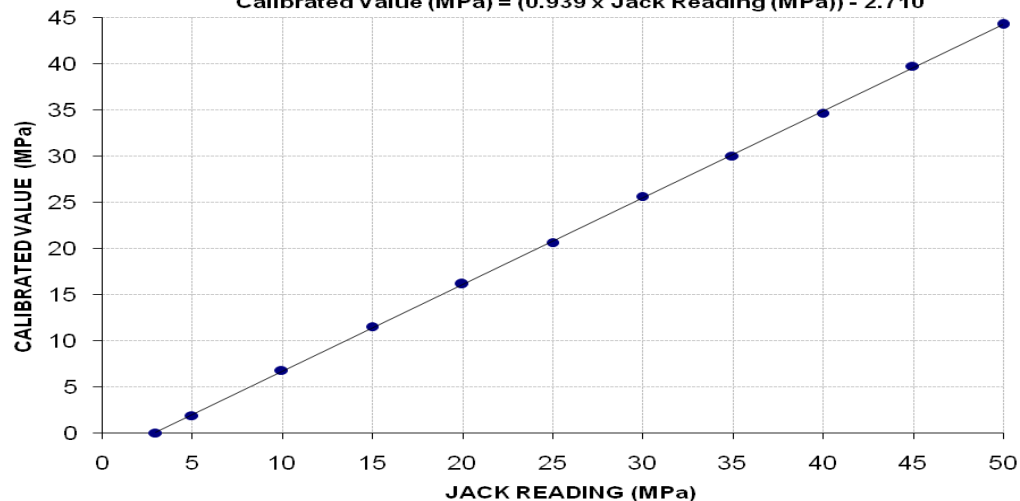
Reference to your Letter No. DBCG/Lab/PF JV/2023/033, dated: 15/06/2023 on the subject cited above. One Hydraulic Jack (Jack No. 9092490, Gauge No. HC 67581602252) as received by us has been calibrated. The results are tabulated as under:

Total Range : Zero - 60 (MPa)
Calibrated Range : Zero - 45 (MPa)

Hydraulic Jack Reading (MPa)	3	5	10	15	20	25	30	35	40	45	50
Calibrated Load (kg)	0	1000	3550	6000	8400	10750	13350	15650	18050	20700	23050
Calibrated Pressure (Mpa)	0	1.92	6.82	11.53	16.14	20.65	25.65	30.06	34.68	39.77	44.28

The Ram Area of Jack = 51.05 cm²

Calibration Curve For Jack No. 9092490 (Gauge # HC 67581602252)
Calibrated Value (MPa) = (0.939 x Jack Reading (MPa)) - 2.710



I/C Testing Laboratories
UET Lahore, Pakistan.

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STRUCTURAL ENGINEERING DIVISION
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Ref: CED/TFL/06/3481

Dated: 19-06-2023

Dated: 19-06-2023

To

Resident Engineer
Diamer Basha Consultants Group (DBCg)
NESPAK - ACE -MMP - MWH - ROYRY - DOLSAR JV
Diamer Basha Dam Project.

Subject: - CALIBRATION OF HYDRAULIC JACK (MARK: TFL/06/3481) (Page -4/4)

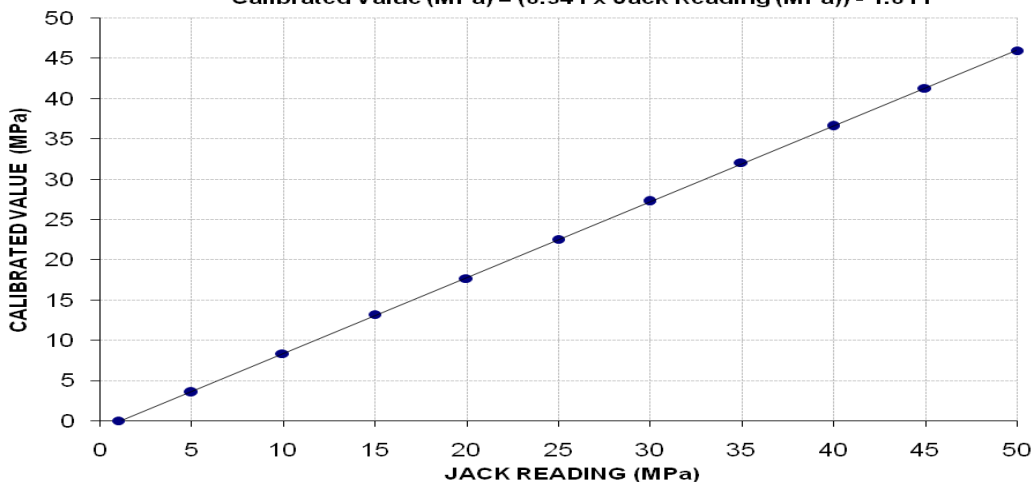
Reference to your Letter No. DBCG/Lab/PF JV/2023/033, dated: 15/06/2023 on the subject cited above. One Hydraulic Jack (Jack No. 9092490, Gauge No. HC 67581602250) as received by us has been calibrated. The results are tabulated as under:

Total Range : Zero - 60 (MPa)
Calibrated Range : Zero - 50 (MPa)

Hydraulic Jack Reading (MPa)	1	5	10	15	20	25	30	35	40	45	50
Calibrated Load (kg)	0	1850	4350	6900	9200	11750	14200	16700	19050	21500	23950
Calibrated Pressure (Mpa)	0	3.55	8.36	13.26	17.67	22.57	27.28	32.08	36.60	41.30	46.01

The Ram Area of Jack = 51.05 cm²

Calibration Curve For Jack No. 9092490 (Gauge # HC 67581602250)
Calibrated Value (MPa) = (0.941 x Jack Reading (MPa)) - 1.011



To,

I/C Testing Laboratories
UET Lahore, Pakistan.

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Resident Engineer,
 Orbit Housing
 The Spring Apartment Homes

Reference # CED/TFL **3486** (Dr. Rizwan Azam)
 Reference of the request letter# NIL

Dated: 19-06-2023
 Dated: 19-06-2023

Tension Test Report (Page -1/1)

Date of Test 19-06-2023
 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	0.378	3	0.376	0.11	0.111	3800	5100	76200	75310	102200	101100	1.10	13.8	
2	0.383	3	0.379	0.11	0.113	3600	4900	72200	70510	98200	96000	1.10	13.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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-	-	-	-	-	-	-	-	-	-	-	-	-	-	

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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