



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
Imperium Developers
Construction of Sixty6 at Gulberg-III, Lahore

Reference # CED/TFL 4288 (Dr. Asad Ali)
Reference of the request letter # IMP/66/04/108

Dated: 04-12-2023
Dated: 02-12-2023

Tension Test Report (Page -1/1)

Date of Test 05-12-2023
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	0.377	3	0.376	0.11	0.111	3540	5250	71000	70430	105200	104500	1.10	13.8	
2	0.369	3	0.372	0.11	0.108	3470	5170	69600	70540	103600	105100	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														

Witness by M Husnain Imran (Site Engr. Imperium Developers)

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 Pakistan Wire Industries (Pvt) Limited
Karachi
(Peoples Steel Mills Ltd.)

Reference # CED/TFL **4293** (Dr. M Rizwan Riaz)
Reference of the request letter # WRD/010/LAB021

Dated: 04-12-2023
Dated: 04-12-2023

Tension Test Report (Page – 1/1)

Date of Test 05-12-2023
Description Steel Wire Rope (IWRC Ungalvanized) Tensile Test

Sr. No.	Nominal Diameter	Measured weight	Breaking Load	Remarks / Coil No.
	(mm)	(kg/m)	(kg)	
1	12	0.59	6320	
-	-	-	-	
-	-	-	-	
-	-	-	-	
-	-	-	-	
Only one sample for Test				

Witness by Muhammad Wasim Khan (Pakistan Wire Industries)

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

Ref: CED/TFL/11/4297, 4299

Dated: 04-12-2023

Dated: 05-12-2023

To

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

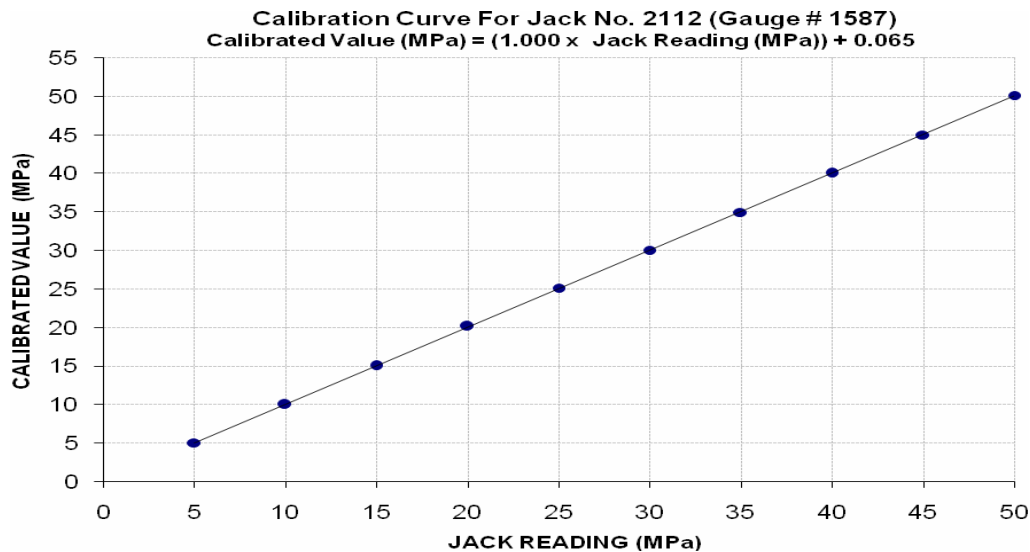
Subject: - **CALIBRATION OF HYDRAULIC JACK (MARK: TFL/11/4297)** (Page -1/4)

Reference to your Letter No. DBCG/Lab/PF JV/2023/061, dated: 02/12/2023 on the subject cited above. One Hydraulic Jack (Jack No. 2112, Gauge No. 1587) 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)	5	10	15	20	25	30	35	40	45	50
Calibrated Load (kg)	19400	38600	57800	77600	96600	115600	134400	154000	173000	192800
Calibrated Pressure (Mpa)	5	10	15	20	25	30	35	40	45	50

The Ram Area of Jack = 377 cm²



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

Ref: CED/TFL/11/4297, 4299

Dated: 04-12-2023

Dated: 05-12-2023

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/11/4297)** (Page -2/4)

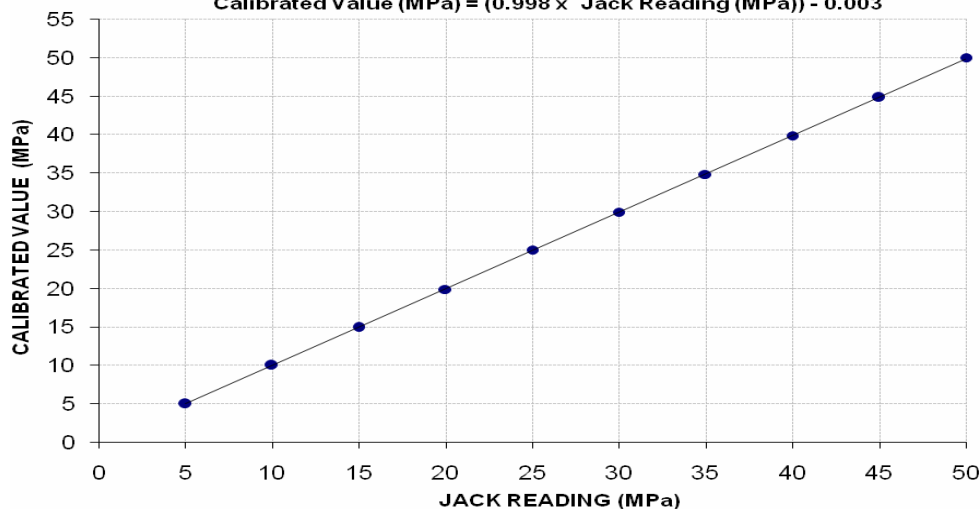
Reference to your Letter No. DBCG/Lab/PF JV/2023/061, dated: 02/12/2023 on the subject cited above. One Hydraulic Jack (Jack No. 2112, Gauge No. 1577) as received by us has been calibrated. The results are tabulated as under:

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

Hydraulic Jack Reading (MPa)	5	10	15	20	25	30	35	40	45	50
Calibrated Load (kg)	19200	38600	57400	76600	96200	115200	134000	153400	172400	192400
Calibrated Pressure (Mpa)	5	10	15	20	25	30	35	40	45	50

The Ram Area of Jack = 377 cm²

Calibration Curve For Jack No. 2112 (Gauge # 1577)
Calibrated Value (MPa) = (0.998 x Jack Reading (MPa)) - 0.003



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

Ref: CED/TFL/11/4297, 4299

Dated: 04-12-2023

Dated: 05-12-2023

To

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

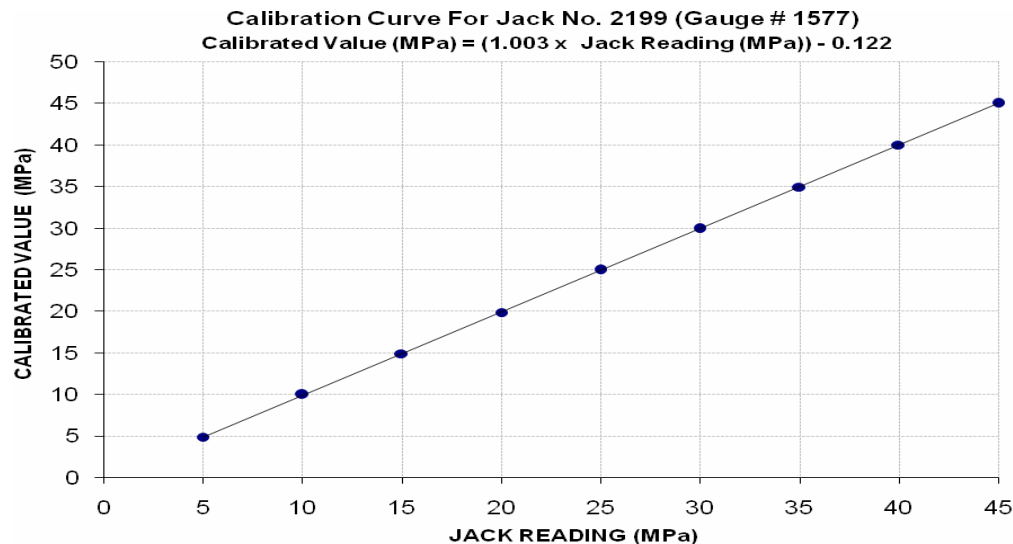
Subject: - CALIBRATION OF HYDRAULIC JACK (MARK: TFL/11/4297) (Page -3/4)

Reference to your Letter No. DBCG/Lab/PF JV/2023/061, dated: 02/12/2023 on the subject cited above. One Hydraulic Jack (Jack No. 2199, Gauge No. 1577) 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)	5	10	15	20	25	30	35	40	45
Calibrated Load (kg)	2550	5200	7750	10350	13000	15600	18200	20850	23450
Calibrated Pressure (Mpa)	5	10	15	20	25	30	35	40	45

The Ram Area of Jack = 51.05 cm²



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

Ref: CED/TFL/11/4297, 4299

Dated: 04-12-2023

Dated: 05-12-2023

To

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

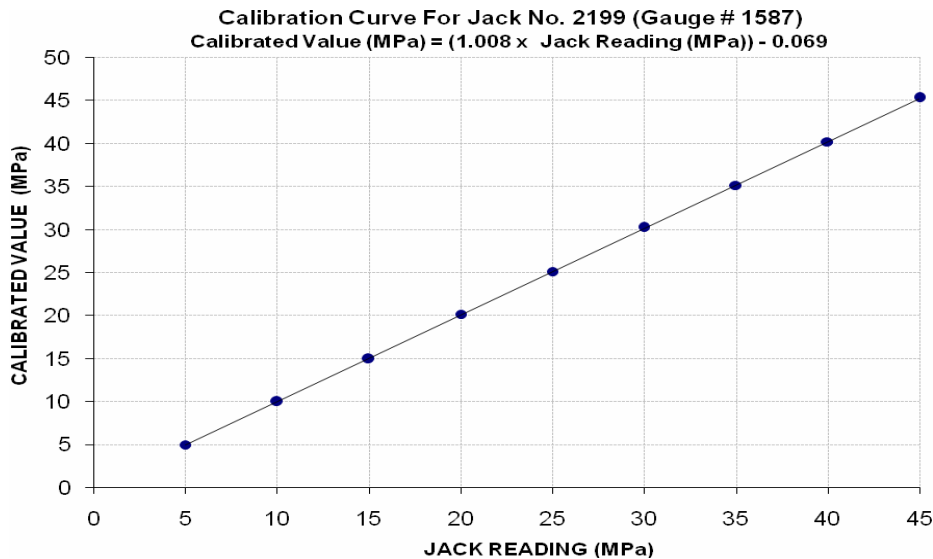
Subject: - **CALIBRATION OF HYDRAULIC JACK (MARK: TFL/11/4297)** (Page -4/4)

Reference to your Letter No. DBCG/Lab/PF JV/2023/061, dated: 02/12/2023 on the subject cited above. One Hydraulic Jack (Jack No. 2199, Gauge No. 1587) 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)	5	10	15	20	25	30	35	40	45
Calibrated Load (kg)	2600	5200	7800	10500	13100	15750	18300	20950	23600
Calibrated Pressure (Mpa)	5	10	15	20	25	30	35	40	45

The Ram Area of Jack = 51.05 cm²



I/C Testing Laboratories
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 Vision Engineering (Pvt) Ltd
Lahore

Reference # CED/TFL **4302** (Dr. M Rizwan Riaz)
Reference of the request letter # VECO/2023/0523/

Dated: 05-12-2023

Dated: 05-12-2023

Tension Test Report (Page – 1/2)

Date of Test 05-12-2023
Gauge length 640 mm
Description Steel Strand Tensile Test as per ASTM A-416-94a

Sr. No.	Nominal Diameter	Nominal Weight	Measured weight	Yield strength clause (6.3)		Breaking strength clause (6.2)		% Elongation	Remarks / Coil No.
	(mm)	(kg/km)	(kg/km)	(kg)	(kN)	(kg)	(kN)		
1	9.53 (3/8")	430.0	444.0	9700	95.16	10500	103.01	>3.50	02
-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	
Only one samples for Test									

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 Vision Engineering (Pvt) Ltd
Lahore

Reference # CED/TFL **4302** (Dr. M Rizwan Riaz)
Reference of the request letter # VECO/2023/0523/

Dated: 05-12-2023

Dated: 05-12-2023

Tension Test Report (Page -2/2)

Date of Test 05-12-2023
Gauge length 640 mm
Description Steel Strand Tensile Test as per ASTM A-416-94a

Sr. No.	Nominal Diameter	Nominal Weight	Measured weight	Yield strength clause (6.3)		Breaking strength clause (6.2)		% Elongation	Remarks / Coil No.
	(mm)	(kg/km)	(kg/km)	(kg)	(kN)	(kg)	(kN)		
1	9.53 (3/8")	430.0	448	10000	98.10	10600	103.99	>3.50	03
-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	
Only one samples for Test									

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