Ref: CED/TFL/07/7192 Dated: 07-07-2025

Dated: 14-07-2025 (Dr. M. Kashif)

To

Mr. Ahmet KOC (Resident Engineer Lab)
Diamer Basha Consultants Group (DBCG)
Contract MW-1: DAMPart (Civil Works) and Tangir Hydropower Works

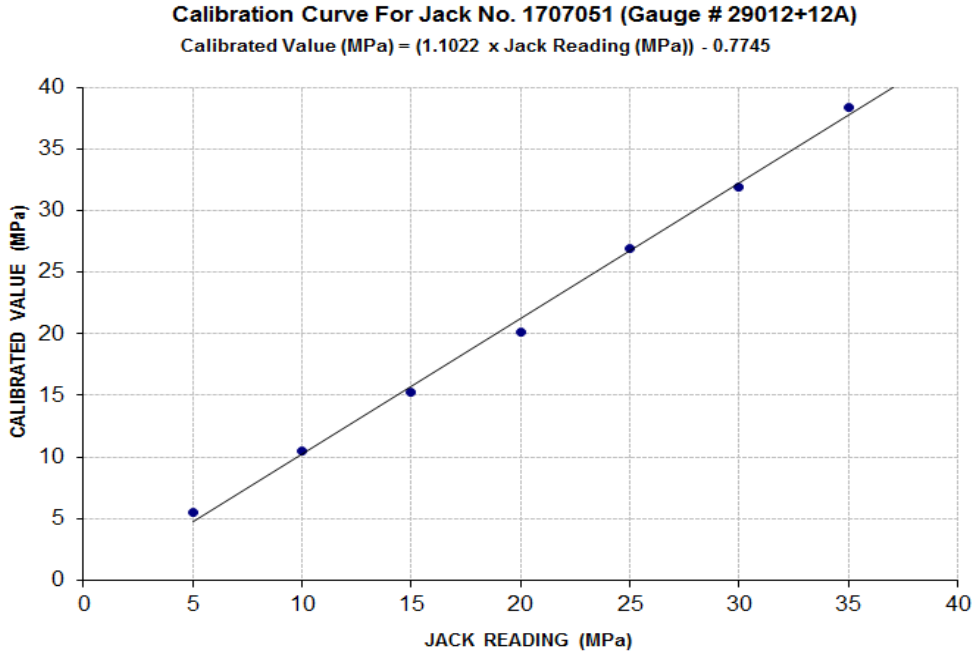
Subject: **- CALIBRATION OF HYDRAULIC JACK (MARK: TFL/07/7192)** (Page -1/5)

Reference to your Letter No. DBCG/Lab/PFJV/2025/44, dated: 03/07/2025 on the subject cited above. One Hydraulic Jack (Jack No. 1707051, Gauge No. 29012+12A) 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)	2700	5200	7400	9800	13100	15500	18650	21250
Calibrated Pressure (MPa)	5.55	10.48	15.21	20.14	26.93	31.86	38.34	43.68

The Ram Area of Jack = 47.71 cm^2



Test Performed and Verified by:

Ref: CED/TFL/07/7192 Dated: 07-07-2025

Dated: 14-07-2025 (Dr. M. Kashif)

To

Mr. Ahmet KOC (Resident Engineer Lab)
Diamer Basha Consultants Group (DBCG)
Contract MW-1: DAM Part (Civil Works) and Tangir Hydropower Works

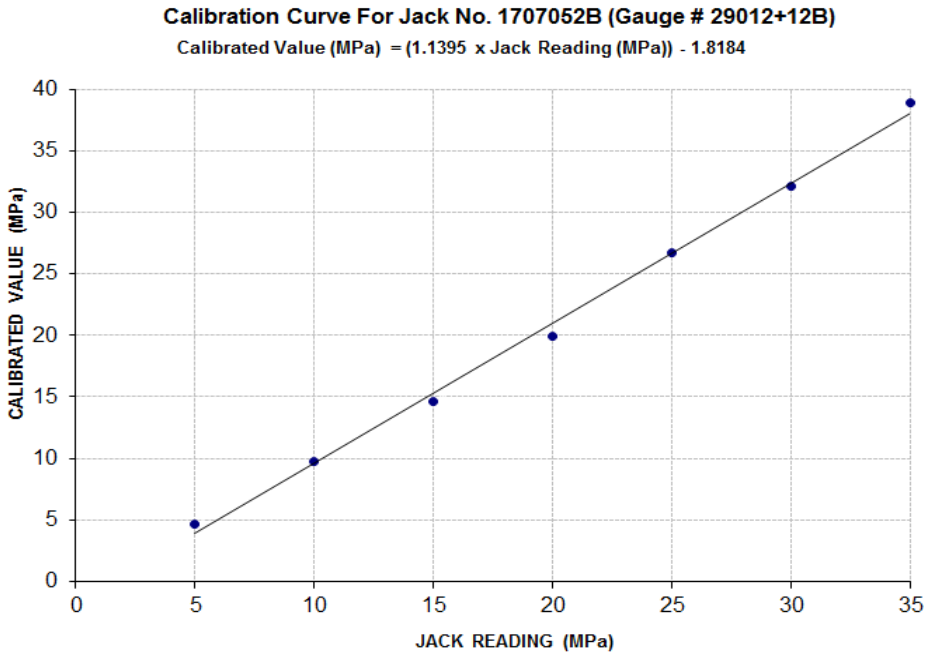
Subject: **- CALIBRATION OF HYDRAULIC JACK (MARK: TFL/07/7192)** (Page -2/5)

Reference to your Letter No. DBCG/Lab/PFJV/2025/44, dated: 03/07/2025 on the subject cited above. One Hydraulic Jack (Jack No. 1707052B, Gauge No. 29012+12B) as received by us has been calibrated. The results are tabulated as under:

Total Range : Zero - 60 (MPa)
Calibrated Range : Zero - 35 (MPa)

Hydraulic Jack Reading (MPa)	5	10	15	20	25	30	35
Calibrated Load (kg)	22000	45800	68400	93200	125200	150600	182200
Calibrated Pressure (MPa)	4.70	9.78	14.61	19.90	26.74	32.16	38.91

The Ram Area of Jack = 459.2 cm^2



Test Performed and Verified by:

Ref: CED/TFL/07/7192 Dated: 07-07-2025

Dated: 14-07-2025 (Dr. Rizwan Riaz)

To

Mr. Ahmet KOC (Resident Engineer Lab)
Diamer Basha Consultants Group (DBCG)
Contract MW-1: DAM Part (Civil Works) and Tangir Hydropower Works

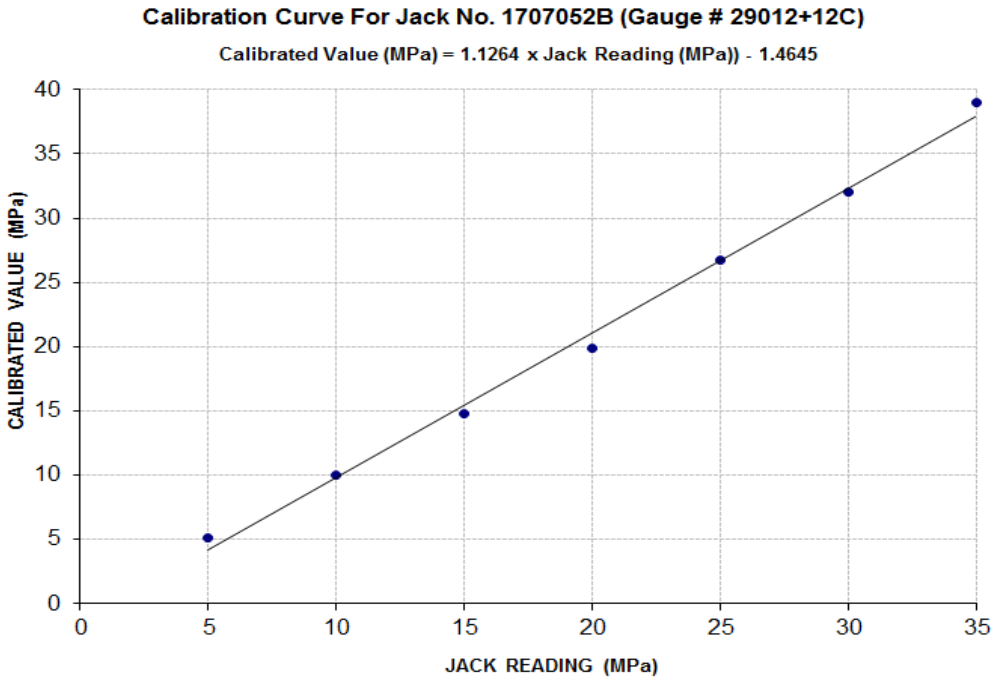
Subject: **- CALIBRATION OF HYDRAULIC JACK (MARK: TFL/07/7192)** (Page -3/5)

Reference to your Letter No. DBCG/Lab/PFJV/2025/44, dated: 03/07/2025 on the subject cited above. One Hydraulic Jack (Jack No. 1707052B, Gauge No. 29012+12C) as received by us has been calibrated. The results are tabulated as under:

Total Range : Zero - 60 (MPa)
Calibrated Range : Zero - 35 (MPa)

Hydraulic Jack Reading (MPa)	5	10	15	20	25	30	35
Calibrated Load (kg)	23800	46800	69000	93200	125200	150000	182400
Calibrated Pressure (MPa)	5.08	9.99	14.74	19.90	26.74	32.04	38.95

The Ram Area of Jack = 459.2 cm^2



Test Performed and Verified by:

Ref: CED/TFL/07/7192 Dated: 07-07-2025

Dated: 14-07-2025 (Dr. M. Kashif)

To

Mr. Ahmet KOC (Resident Engineer Lab)
Diamer Basha Consultants Group (DBCG)
Contract MW-1: DAM Part (Civil Works) and Tangir Hydropower Works

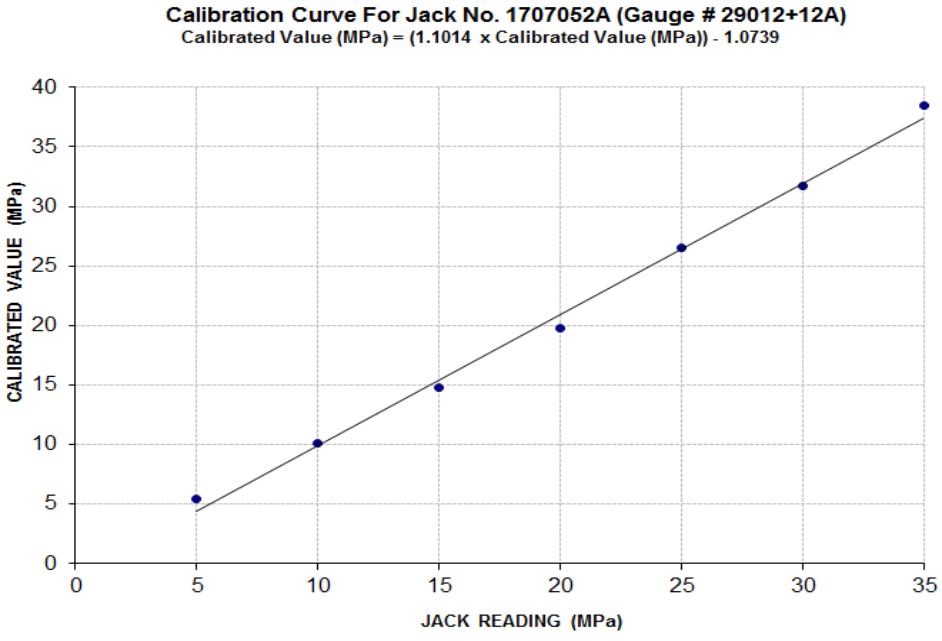
Subject: **- CALIBRATION OF HYDRAULIC JACK (MARK: TFL/07/7192)** (Page -4/5)

Reference to your Letter No. DBCG/Lab/PFJV/2025/44, dated: 03/07/2025 on the subject cited above. One Hydraulic Jack (Jack No. 1707052A, Gauge No. 29012+12A) as received by us has been calibrated. The results are tabulated as under:

Total Range : Zero - 60 (MPa)
Calibrated Range : Zero - 35 (MPa)

Hydraulic Jack Reading (MPa)	5	10	15	20	25	30	35
Calibrated Load (kg)	25200	47200	69400	92400	124000	148400	18020
Calibrated Pressure (MPa)	5.38	10.08	14.82	19.73	26.48	31.69	38.48

The Ram Area of Jack = 459.2 cm^2



Test Performed and Verified by:

Ref: CED/TFL/07/7192 Dated: 07-07-2025

Dated: 14-07-2025 (Dr. M. Kashif)

To

Mr. Ahmet KOC (Resident Engineer Lab)
Diamer Basha Consultants Group (DBCG)
Contract MW-1: DAM Part (Civil Works) and Tangir Hydropower Works

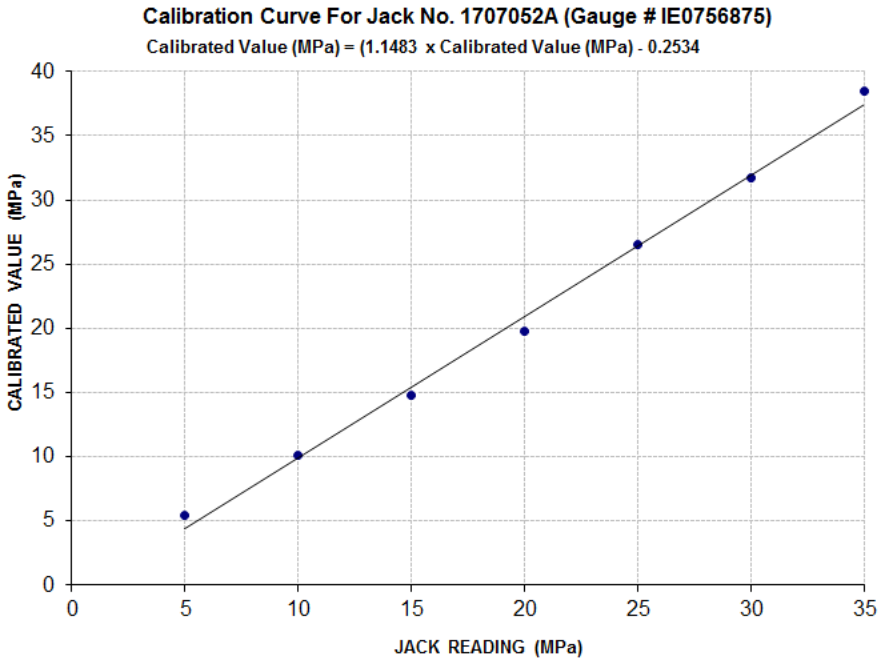
Subject: **- CALIBRATION OF HYDRAULIC JACK (MARK: TFL/07/7192)** (Page -5/5)

Reference to your Letter No. DBCG/Lab/PFJV/2025/44, dated: 03/07/2025 on the subject cited above. One Hydraulic Jack (Jack No. 1707052A, Gauge No. IE0756875) as received by us has been calibrated. The results are tabulated as under:

Total Range : Zero - 60 (MPa)
Calibrated Range : Zero - 35 (MPa)

Hydraulic Jack Reading (MPa)	5	10	15	20	25	30	35
Calibrated Load (kg)	21800	47200	71400	97800	123000	147200	172200
Calibrated Pressure (MPa)	4.66	10.08	15.25	20.89	26.27	31.44	36.78

The Ram Area of Jack = 459.2 cm^2



Test Performed and Verified by:

To,

Eagle Cables (Pvt.) Ltd.
TES Engineering (Pvt.) Ltd. P.O No. TES-10331 Dated: 24.06.2025

Reference # CED/TFL **7207** (Dr. Safeer Abbas) Dated: 09-07-2025
Reference of the request letter # ECP/UET/01/25 Dated: 08-07-2025

Tension Test Report (Page – 1/1)

Date of Test 14-07-2025
Description G.S Wire Tensile Test

Sr. No.	Nominal Diameter	Measured weight			Breaking Load	Remarks / Coil No.
	(mm)	Weight (g)	Length (cm)	(kg/m)	(kg)	
1	**12**	**760**	**105.0**	**0.72**	**9750**	**-**
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-	-	-	-	-
-	-	-			-	-
Only one sample for test						

Test Performed and Verified by:

To,

M. Saleem Construction Company
Gas Engine Hall at MPPL
-

Reference # CED/TFL **7212** (Dr. Rizwan Riaz) Dated: 11-07-2025
Reference of the request letter # Steeltest Dated: 11-07-2025

Tension Test Report (Page-1/1)

Date of Test 14-07-2025
Gauge Length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Actual Weight Per Unit Length (lb/ft)	Nominal Size (#)	Actual Diameter (inch)	Area (in^2)		Yield Load	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
				Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)		
1	**0.365**	**3**	**0.369**	**0.110**	**0.107**	**4500**	**5300**	**90164**	**92549**	**106193**	**109002**	**0.9**	**11.3**	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Note: Only 1 Samples for Tensile and 1 Samples for Bend test														

Bend Test
3 Bar Bend Test Through 180 Degree is Satisfactory

Test Performed and Verified by:

To,

Resident Engineer
ESS-I-AAR Consultant
Construction of Flyover at Nadirabad Phatak to Industrial Estate Multan, Group-II
Construction of Flyover Bridge 3, Tehsil and District Multan

Reference # CED/TFL **7213** (Dr. Rizwan Riaz) Dated: 11-07-2025
Reference of the request letter # 5118 Dated: 16-06-2025

Tension Test Report (Page-1/1)

Date of Test 14-07-2025
Gauge Length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Actual Weight Per Unit Length (lb/ft)	Nominal Size (#)	Actual Diameter (inch)	Area (in^2)		Yield Load	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
				Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)		
1	0.379	3	0.377	0.110	0.111	3400	5100	68124	67305	102185	100957	0.9	11.3	Aziz Steel
2	0.374	3	0.374	0.110	0.11	3400	5100	68124	68155	102185	102232	1.2	15.0	Aziz Steel
3	4.293	10	1.267	1.270	1.261	35800	58400	62129	62551	101349	102039	1.4	17.5	Aziz Steel
4	4.302	10	1.269	1.270	1.264	35200	58600	61087	61368	101696	102164	1.4	17.5	Aziz Steel
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Note: Only 4 Samples for Tensile and 2 Samples for Bend test

Bend Test
3 Bar Bend Test Through 180 Degree is Satisfactory
10 Bar Bend Test Through 180 Degree is Satisfactory

Test Performed and Verified by:

To,

Mr. Nasir Sadiq (Project Manager)
Innovative ® Construction Company
DHA MB Plaza 180, Lahore

Reference # CED/TFL **7214** (Dr. Rizwan Riaz) Dated: 11-07-2025
Reference of the request letter # DHA MB180/01 Dated: 10-07-2025

Tension Test Report (Page-1/1)

Date of Test 14-07-2025
Gauge Length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Actual Weight Per Unit Length (lb/ft)	Nominal Size (#)	Actual Diameter (inch)	Area (in^2)		Yield Load	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
				Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)		
1	**0.364**	**3**	**0.369**	**0.110**	**0.107**	**3300**	**4500**	**66120**	**68080**	**90164**	**92836**	**1.2**	**15.0**	-
2	**0.363**	**3**	**0.368**	**0.110**	**0.107**	**3200**	**4500**	**64116**	**66197**	**90164**	**93089**	**1.4**	**17.5**	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Note: Only 2 Samples for Tensile and 1 Samples for Bend test														

Bend Test
3 Bar Bend Test Through 180 Degree is Satisfactory

Test Performed and Verified by:

To,

M/s Al-Rehmat Enterprises (Pvt.) Ltd.

Reference # CED/TFL **7215** (Dr. Rizwan Riaz) Dated: 11-07-2025
Reference of the request letter # AR/001/2025 Dated: 10-07-2025

Tension Test Report (Page -1/1)

Date of Test 14-07-2025
Gauge length 600 mm
Description Steel Strand Tensile Test as per ASTM A-416

Sr. No.	Nominal Diameter	Nominal Weight	Measured weight	Yield strength clause (6.3)		Breaking strength clause (6.2)		% Elongation	Remarks / Coil No.
	(mm)	(kg/1000m)	(kg/1000m)	(kg)	(kN)	(kg)	(kN)		
1	**9.53 (3"/8)**	**430.0**	**444.0**	**9400**	**92.21**	**10800**	**105.95**	**>3.50**	**xx**
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
Only one sample for Test									

Note:
1. Modulus of Elasticity is based on nominal steel area of the steel strand vide clause 13.3 of ASTM – A416a
2. Load versus percentage strain graphs are attached

Test Performed and Verified by:

To,

Sub Divisional Officer
Buildings Sub Division, Kasur
Establishment of Govt. Boys Degree College Khudian Tehsil & District Kasur
(ADP No.100 for the Year 2024-25)

Reference # CED/TFL **7216** (Dr. Rizwan Riaz) Dated: 11-07-2025
Reference of the request letter # 302/k Dated: 16-05-2025

Tension Test Report (Page-1/1)

Date of Test 14-07-2025
Gauge Length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Actual Weight Per Unit Length (lb/ft)	Nominal Size (#)	Actual Diameter (inch)	Area (in^2)		Yield Load	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
				Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)		
1	0.348	3	0.361	0.110	0.102	3400	5200	68124	73199	104189	111952	1.1	13.8	3"/8
2	0.376	3	0.375	0.110	0.11	3600	5300	72131	71895	106193	105846	1.1	13.8	3"/8
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Note: Only 2 Samples for Tensile and 0 Samples for Bend test														

Bend Test

Test Performed and Verified by:

To,

Mr. M. Nadeem Zafarullah (Incharge Civil)
Sui Northern Gas
Upgradation of Existing Customer Services Centre at Regional Distribution Office Gujranwala

Reference # CED/TFL **7219** (Dr. Rizwan Riaz) Dated: 14-07-2025
Reference of the request letter # CC/CSC/RDO-GWJ Dated: 14-07-2025

Tension Test Report (Page-1/1)

Date of Test 14-07-2025
Gauge Length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Actual Weight Per Unit Length (lb/ft)	Nominal Size (#)	Actual Diameter (inch)	Area (in^2)		Yield Load	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
				Nominal	Actual	(kN)	(kN)	Nominal	Actual	Nominal	Actual	(inch)		
1	**0.370**	**3**	**0.372**	**0.110**	**0.109**	**38.20**	**47.70**	**78039**	**79008**	**97446**	**98656**	**0.9**	**11.3**	-
2	**0.370**	**3**	**0.372**	**0.110**	**0.109**	**33.50**	**45.20**	**68437**	**69165**	**92339**	**93321**	**1.4**	**17.5**	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Note: Only 2 Samples for Tensile and 0 Samples for Bend test														

Bend Test

Test Performed and Verified by: