To,
Executive Engineer
Public Health Engg: Division Chakwal
Construction of Rural Water Supply Sceme in Village Badshahpur Tehsil Choa Saiden Shah
District Chakwal

Reference # CED/TFL **7042** (Dr. Ali Ahmed) Dated: 30-05-2025
Reference of the request letter # 457/CH Dated: 27-05-2025

Tension Test Report (Page – 1/2)

Date of Test 05-06-2025
Gauge length 2 inches
Description Strip Tensile Test

Sr. No.	Designation	Size of Strip	X Section Area	Yield load	Breaking Load	Yield Stress	Ultimate Stress	Elongation	% Elongation	Remarks
	------	(mm)	(mm^2)	(kg)	(kg)	(MPa)	(MPa)	(in)		
1	**G.I Pipe (162)**	**4.40x37.30**	**164.12**	**-**	**8200**	**-**	**490.1**	**0.60**	**30.00**	
2	**G.I Pipe (56)**	**4.30x30.80**	**132.44**	**-**	**6400**	**-**	**474.1**	**0.60**	**30.00**	**-**
3	**G.I Pipe (42)**	**3.20x35.00**	**112.00**	**-**	**4200**	**-**	**367.9**	**0.60**	**30.00**	**-**
4	**G.I Pipe (208)**	**3.80x32.20**	**122.36**	**-**	**5700**	**-**	**457.0**	**0.60**	**30.00**	**-**
5	**G.I Pipe (204)**	**3.20x37.40**	**119.68**	**-**	**5900**	**-**	**483.6**	**0.70**	**35.00**	**-**
-	-	-	-	-	-	-	-	-	-	-
Only five Samples for Tensile Test										
Bend Test										

Test Performed and Verified by:

To,
Executive Engineer
Public Health Engg: Division Chakwal
Construction of Rural Water Supply Sceme in Village Badshahpur Tehsil Choa Saiden Shah District Chakwal

Reference # CED/TFL **7042** (Dr. Ali Ahmed) Dated: 30-05-2025
Reference of the request letter # 457/CH Dated: 27-05-2025

Weight &Size Test Report (Page – 2/2)

Date of Test 05-06-2025
Description Unit Weight and Size Test

Sr. No.	Designation	Weight	Length	Weight per Unit Length	Dia	Thickness	Remark
	(inch)	(g)	(mm)	(kg/m)	(mm)	(mm)	
1	**G.I Pipe (162)**	**1869**	**150.70**	**12.40**	**114.50**	**4.40**	**-**
2	**G.I Pipe (56)**	**1302**	**151.70**	**8.58**	**88.50**	**4.30**	**-**
3	**G.I Pipe (42)**	**835**	**151.80**	**5.50**	**76.20**	**3.20**	**-**
4	**G.I Pipe (208)**	**750**	**152.50**	**4.92**	**60.60**	**3.80**	**-**
5	**G.I Pipe (204)**	**526**	**150.30**	**3.50**	**48.90**	**3.20**	**-**
-	-	-	-	-		-	-
-	-	-	-	-		-	-
-	-	-	-	-		-	-
Only five Samples for Test							

Test Performed and Verified by:

To,

Resident Engineer (Nespak RRR)
Nespak (Pvt.) Ltd.
Construction of Rawalpindi Ring Road (38.3KM) Main Carriageway (MCW) from Baanth (N-5) to Thallian (M-2)
Wire Manufacturing Industry

Reference # CED/TFL **7043** (Dr. Ali Ahmed) Dated: 30-05-2025
Reference of the request letter # 4713/RRR/IUK/25/221 Dated: 05-05-2025

Tension Test Report (Page -1/4)

Date of Test 05-06-2025
Gauge length 600 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)		Young's Modulus of Elasticity "E"	% Elongation	Remarks / Coil No.
	(mm)	(kg/1000m)	(kg/1000m)	(kg)	(kN)	(kg)	(kN)	GPa		
1	**12.70 (1/2")**	**780.0**	**789.0**	**17000**	**166.77**	**19200**	**188.35**	**199**	**>3.50**	**26713**
2	**12.70 (1/2")**	**780.0**	**789.0**	**18600**	**182.47**	**19900**	**195.22**	**199**	**>3.50**	**26715**
3	**12.70 (1/2")**	**780.0**	**785.0**	**17400**	**170.69**	**19600**	**192.28**	**199**	**>3.50**	**26716**
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	
Only three samples 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

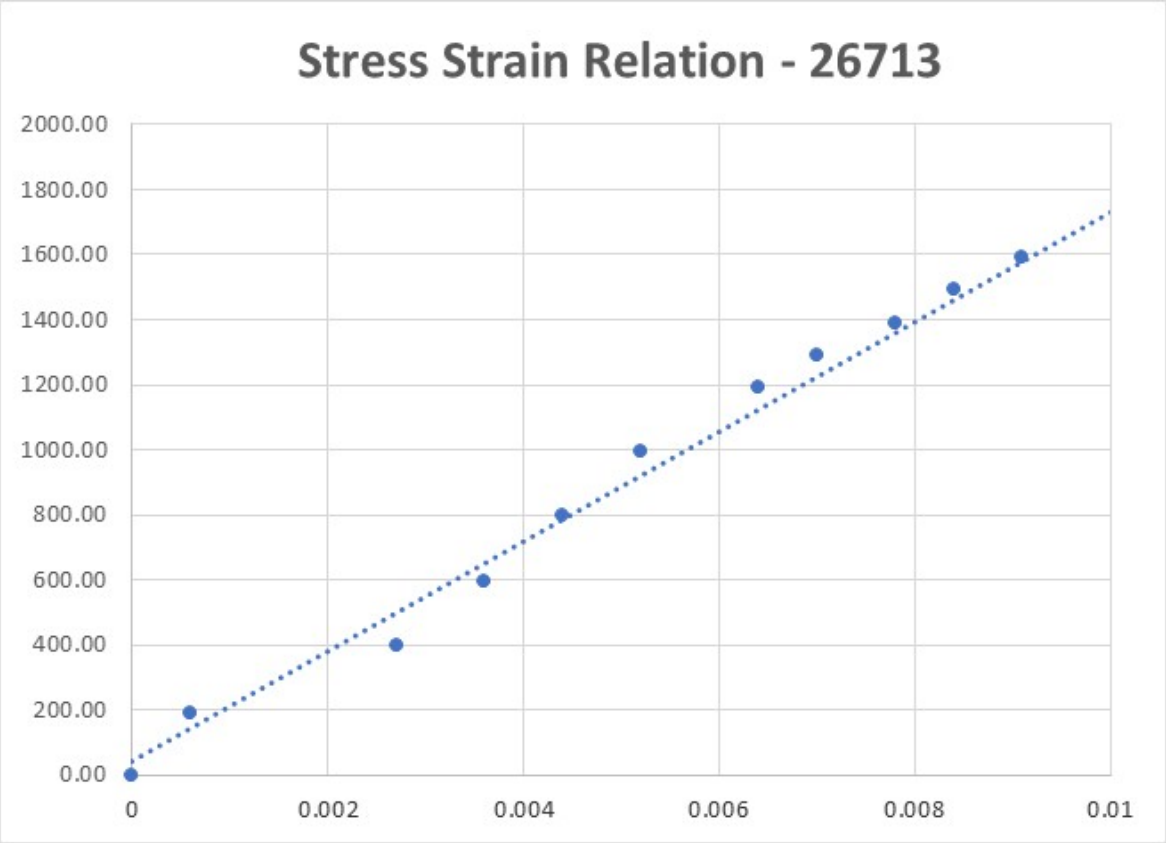
Test Performed and Verified by:

To,

Resident Engineer (Nespak RRR)
Nespak (Pvt.) Ltd.
Construction of Rawalpindi Ring Road (38.3KM) Main Carriageway (MCW) from Baanth (N-5) to Thallian (M-2)
Wire Manufacturing Industry

Reference # CED/TFL **7043** (Dr. Ali Ahmed) Dated: 30-05-2025
Reference of the request letter # 4713/RRR/IUK/25/221 Dated: 05-05-2025

Graph (Page – 2/4)



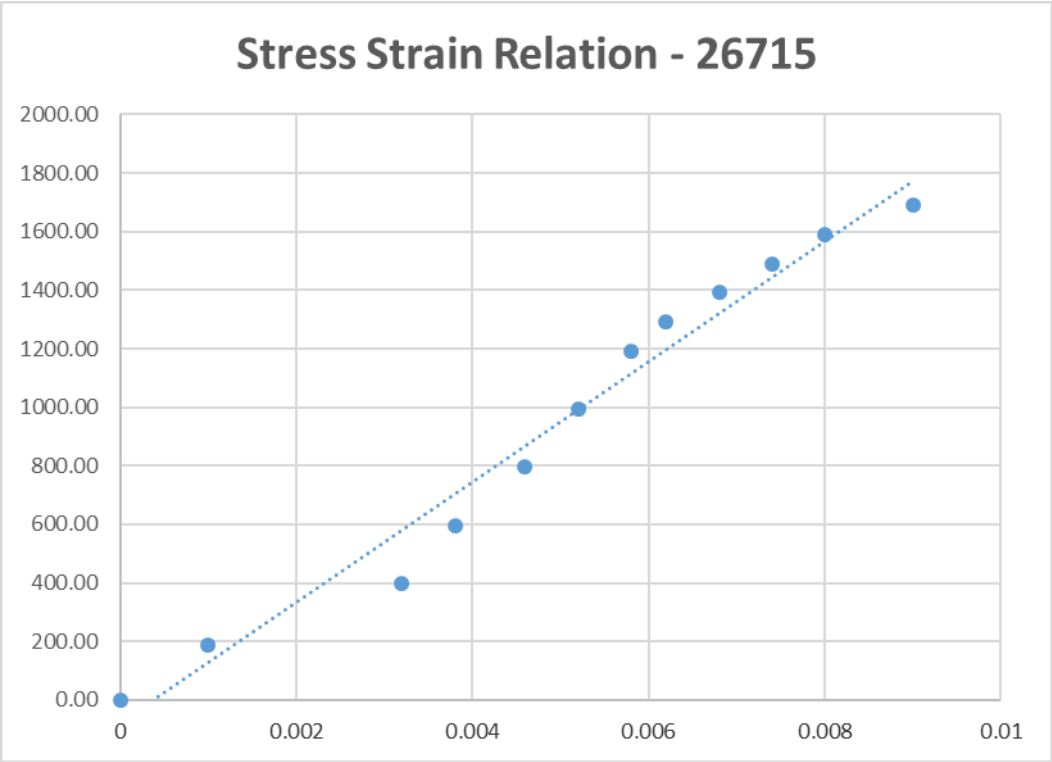
Test Performed and Verified by:

To,

Resident Engineer (Nespak RRR)
Nespak (Pvt.) Ltd.
Construction of Rawalpindi Ring Road (38.3KM) Main Carriageway (MCW) from Baanth (N-5) to Thallian (M-2)
Wire Manufacturing Industry

Reference # CED/TFL **7043** (Dr. Ali Ahmed) Dated: 30-05-2025
Reference of the request letter # 4713/RRR/IUK/25/221 Dated: 05-05-2025

Graph (Page – 3/4)



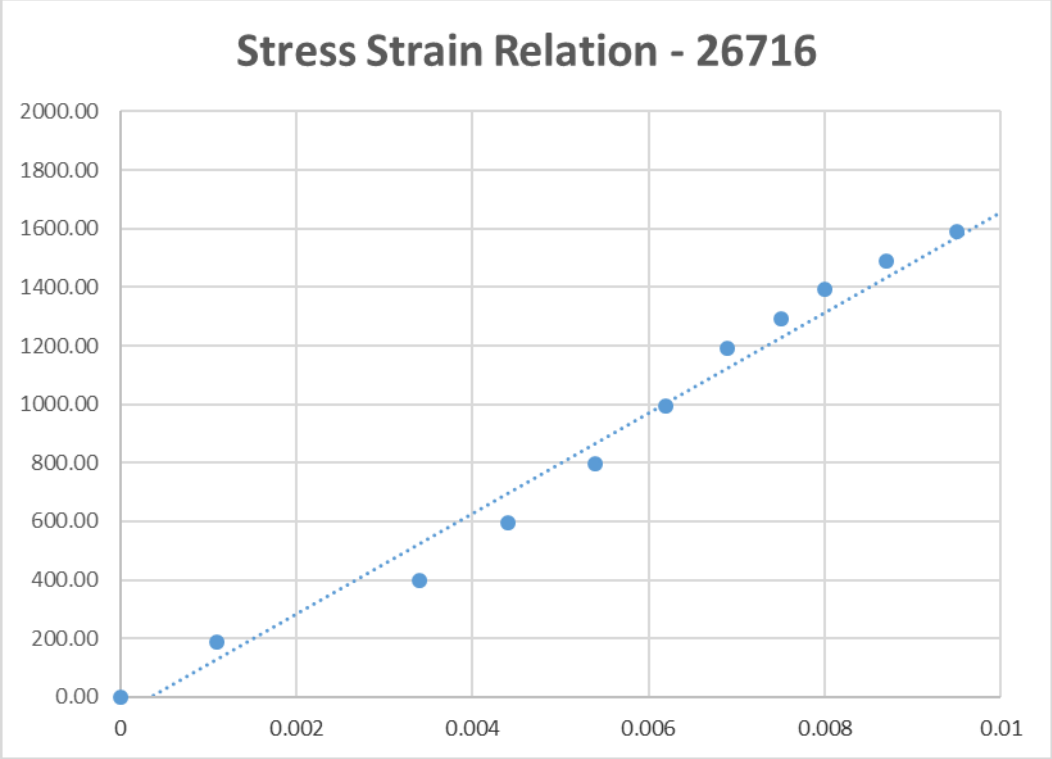
Test Performed and Verified by:

To,

Resident Engineer (Nespak RRR)
Nespak (Pvt.) Ltd.
Construction of Rawalpindi Ring Road (38.3KM) Main Carriageway (MCW) from Baanth (N-5) to Thallian (M-2)
Wire Manufacturing Industry

Reference # CED/TFL **7043** (Dr. Ali Ahmed) Dated: 30-05-2025
Reference of the request letter # 4713/RRR/IUK/25/221 Dated: 05-05-2025

Graph (Page – 4/4)



Test Performed and Verified by:

To,

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

Reference # CED/TFL **7056** (Dr. Ali Ahmed) Dated: 02-06-2025
Reference of the request letter # DBCG/Lab/PFJV/2025/038 Dated: 20-05-2025

Tension Test Report (Page -1/1)

Date of Test 05-06-2025
Gauge length 600 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/1000m)	(kg/1000m)	(kg)	(kN)	(kg)	(kN)		
1	**15.24 (0.6")**	**1102.0**	**1120.0**	**26500**	**259.97**	**27700**	**271.74**	**>3.50**	**7356 & 7357**
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-

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:

Ref: CED/TFL/06/7062 Dated: 03-06-2025

Dated of Test: 05-06-2025 **(Dr. Ali Ahmed)**

To,

Depuyty Director (QCD)
Water and Sanitation Agency
Faisalabad
(M/s United (I-II) RCC Pipe Manufacturing Factory, New Grace Hosiery, 117/JB, Faisalabad.)

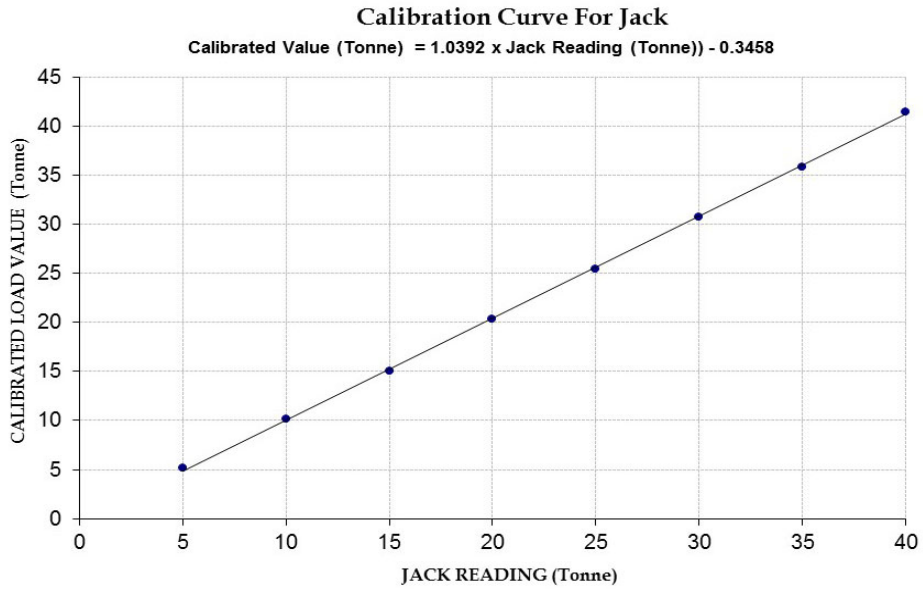
Subject: **- CALIBRATION OF HYDRAULIC JACK WITH GAUGE**
(MARK: TFL/06/7062)

Reference to your Letter No. 204/DD(QCD)/WASA/2025, Dated: 17/05/2025 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 (Tonne)
Calibrated Range : Zero - 40 (Tonne)

Hydraulic Jack Reading (Tonne)		**5**	**10**	**15**	**20**	**25**	**30**	**35**	**40**	**45**
Calibrated Load	**(kg)**	**5150**	**10100**	**15050**	**20350**	**25450**	**30750**	**35800**	**41450**	**46600**
	(Tonne)	**5.15**	**10.10**	**15.05**	**20.35**	**25.45**	**30.75**	**35.80**	**41.45**	**46.60**

1000 kg = 1 Tonne



Test Performed and Verified by:

To,

Mr. Asad Masood (assistant Engineer Civil)
GC University, Faisalabad
Construction of Community School at New Campus Government College University, Faisalabad
Sheikhoo Steel

Reference # CED/TFL **7068** (Dr. Ali Ahmad) Dated: 04-06-2025
Reference of the request letter # GCUF/EC/7378 Dated: 16-05-2025

Tension Test Report (Page-1/1)

Date of Test 05-06-2025
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	**0.409**	**3**	**0.391**	**0.110**	**0.12**	**3800**	**5300**	**76138**	**69765**	**106193**	**97304**	**1.3**	**16.3**	-
2	**0.366**	**3**	**0.370**	**0.110**	**0.107**	**3500**	**4700**	**70127**	**71804**	**94171**	**96422**	**1.2**	**15.0**	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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,

Mr. Aamir Ali (ME)
PMU Nathe Khalsa Project
FF Steel

Reference # CED/TFL **7069** (Dr. Ali Ahmad) Dated: 04-06-2025
Reference of the request letter # 30001/Proj/NLC Dated: 04-06-2025

Tension Test Report (Page-1/1)

Date of Test 05-06-2025
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	**0.403**	**3**	**0.388**	**0.110**	**0.118**	**3600**	**5000**	**72131**	**67032**	**100182**	**93100**	**1.2**	**15.0**	-
2	**0.407**	**3**	**0.390**	**0.110**	**0.12**	**3700**	**5000**	**74135**	**68229**	**100182**	**92201**	**1.3**	**16.3**	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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,
Executive Engineer
Public Health Engg: Division Chakwal
Construction of Rural Water Supply Sceme in Village Badshahpur Tehsil Choa Saiden Shah
District Chakwal

Reference # CED/TFL **7042** (Dr. Ali Ahmed) Dated: 30-05-2025
Reference of the request letter # 457/CH Dated: 27-05-2025

Tension Test Report (Page – 1/2)

Date of Test 05-06-2025
Gauge length 2 inches
Description Strip Tensile Test

Sr. No.	Designation	Size of Strip	X Section Area	Yield load	Breaking Load	Yield Stress	Ultimate Stress	Elongation	% Elongation	Remarks
	------	(mm)	(mm^2)	(kg)	(kg)	(MPa)	(MPa)	(in)		
1	**G.I Pipe (162)**	**4.40x37.30**	**164.12**	**-**	**8200**	**-**	**490.1**	**0.60**	**30.00**	
2	**G.I Pipe (56)**	**4.30x30.80**	**132.44**	**-**	**6400**	**-**	**474.1**	**0.60**	**30.00**	**-**
3	**G.I Pipe (42)**	**3.20x35.00**	**112.00**	**-**	**4200**	**-**	**367.9**	**0.60**	**30.00**	**-**
4	**G.I Pipe (208)**	**3.80x32.20**	**122.36**	**-**	**5700**	**-**	**457.0**	**0.60**	**30.00**	**-**
5	**G.I Pipe (204)**	**3.20x37.40**	**119.68**	**-**	**5900**	**-**	**483.6**	**0.70**	**35.00**	**-**
-	-	-	-	-	-	-	-	-	-	-
Only five Samples for Tensile Test										
Bend Test										

Test Performed and Verified by:

To,
Executive Engineer
Public Health Engg: Division Chakwal
Construction of Rural Water Supply Sceme in Village Badshahpur Tehsil Choa Saiden Shah District Chakwal

Reference # CED/TFL **7042** (Dr. Ali Ahmed) Dated: 30-05-2025
Reference of the request letter # 457/CH Dated: 27-05-2025

Weight &Size Test Report (Page – 2/2)

Date of Test 05-06-2025
Description Unit Weight and Size Test

Sr. No.	Designation	Weight	Length	Weight per Unit Length	Dia	Thickness	Remark
	(inch)	(g)	(mm)	(kg/m)	(mm)	(mm)	
1	**G.I Pipe (162)**	**1869**	**150.70**	**12.40**	**114.50**	**4.40**	**-**
2	**G.I Pipe (56)**	**1302**	**151.70**	**8.58**	**88.50**	**4.30**	**-**
3	**G.I Pipe (42)**	**835**	**151.80**	**5.50**	**76.20**	**3.20**	**-**
4	**G.I Pipe (208)**	**750**	**152.50**	**4.92**	**60.60**	**3.80**	**-**
5	**G.I Pipe (204)**	**526**	**150.30**	**3.50**	**48.90**	**3.20**	**-**
-	-	-	-	-		-	-
-	-	-	-	-		-	-
-	-	-	-	-		-	-
Only five Samples for Test							

Test Performed and Verified by:

To,

Resident Engineer (Nespak RRR)
Nespak (Pvt.) Ltd.
Construction of Rawalpindi Ring Road (38.3KM) Main Carriageway (MCW) from Baanth (N-5) to Thallian (M-2)
Wire Manufacturing Industry

Reference # CED/TFL **7043** (Dr. Ali Ahmed) Dated: 30-05-2025
Reference of the request letter # 4713/RRR/IUK/25/221 Dated: 05-05-2025

Tension Test Report (Page -1/4)

Date of Test 05-06-2025
Gauge length 600 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)		Young's Modulus of Elasticity "E"	% Elongation	Remarks / Coil No.
	(mm)	(kg/1000m)	(kg/1000m)	(kg)	(kN)	(kg)	(kN)	GPa		
1	**12.70 (1/2")**	**780.0**	**789.0**	**17000**	**166.77**	**19200**	**188.35**	**199**	**>3.50**	**26713**
2	**12.70 (1/2")**	**780.0**	**789.0**	**18600**	**182.47**	**19900**	**195.22**	**199**	**>3.50**	**26715**
3	**12.70 (1/2")**	**780.0**	**785.0**	**17400**	**170.69**	**19600**	**192.28**	**199**	**>3.50**	**26716**
-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	
Only three samples 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

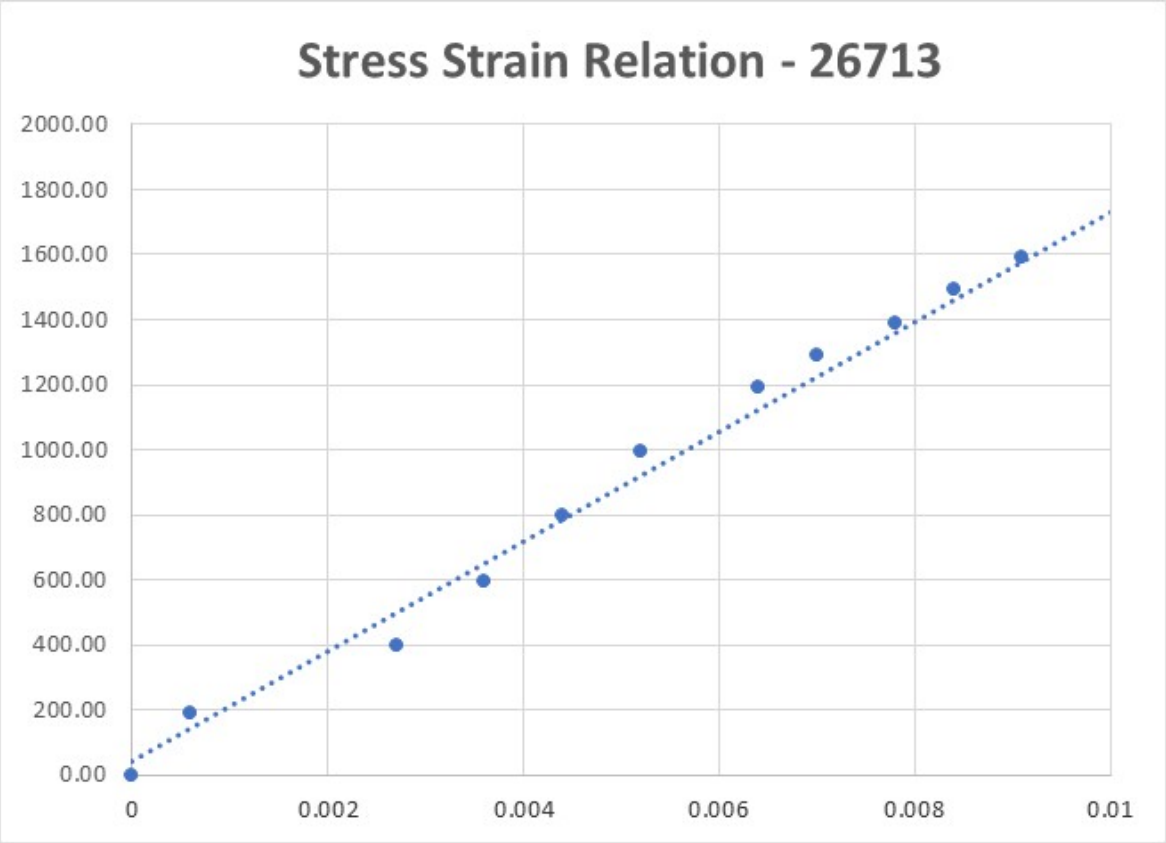
Test Performed and Verified by:

To,

Resident Engineer (Nespak RRR)
Nespak (Pvt.) Ltd.
Construction of Rawalpindi Ring Road (38.3KM) Main Carriageway (MCW) from Baanth (N-5) to Thallian (M-2)
Wire Manufacturing Industry

Reference # CED/TFL **7043** (Dr. Ali Ahmed) Dated: 30-05-2025
Reference of the request letter # 4713/RRR/IUK/25/221 Dated: 05-05-2025

Graph (Page – 2/4)



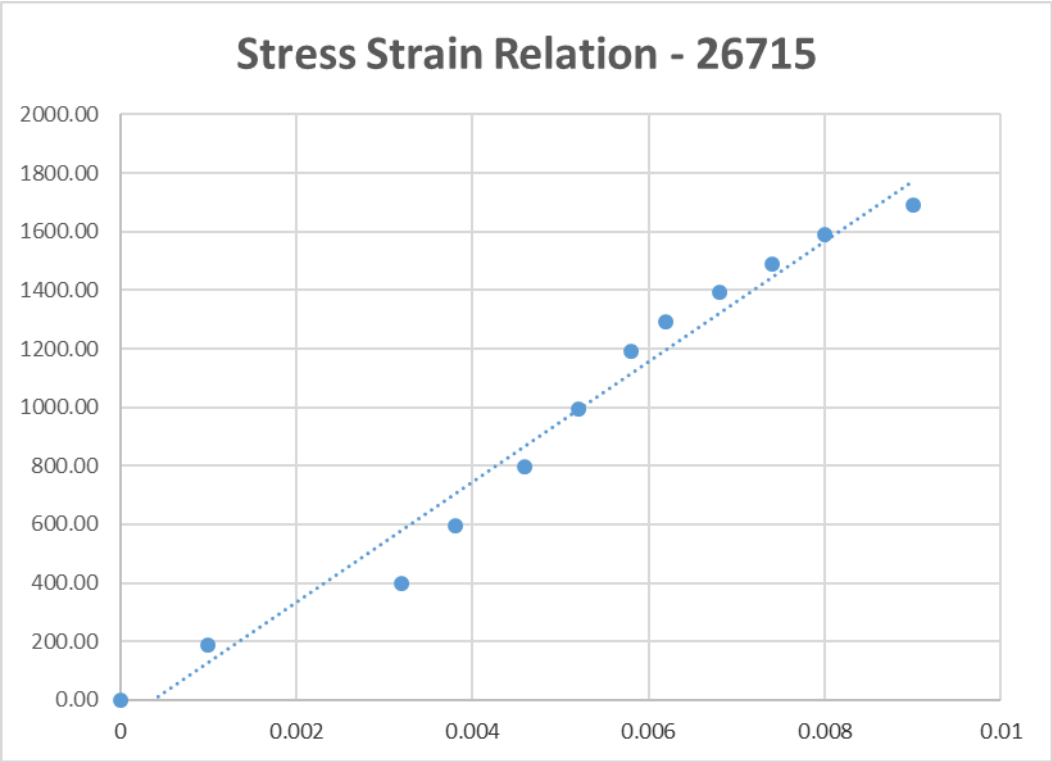
Test Performed and Verified by:

To,

Resident Engineer (Nespak RRR)
Nespak (Pvt.) Ltd.
Construction of Rawalpindi Ring Road (38.3KM) Main Carriageway (MCW) from Baanth (N-5) to Thallian (M-2)
Wire Manufacturing Industry

Reference # CED/TFL **7043** (Dr. Ali Ahmed) Dated: 30-05-2025
Reference of the request letter # 4713/RRR/IUK/25/221 Dated: 05-05-2025

Graph (Page – 3/4)



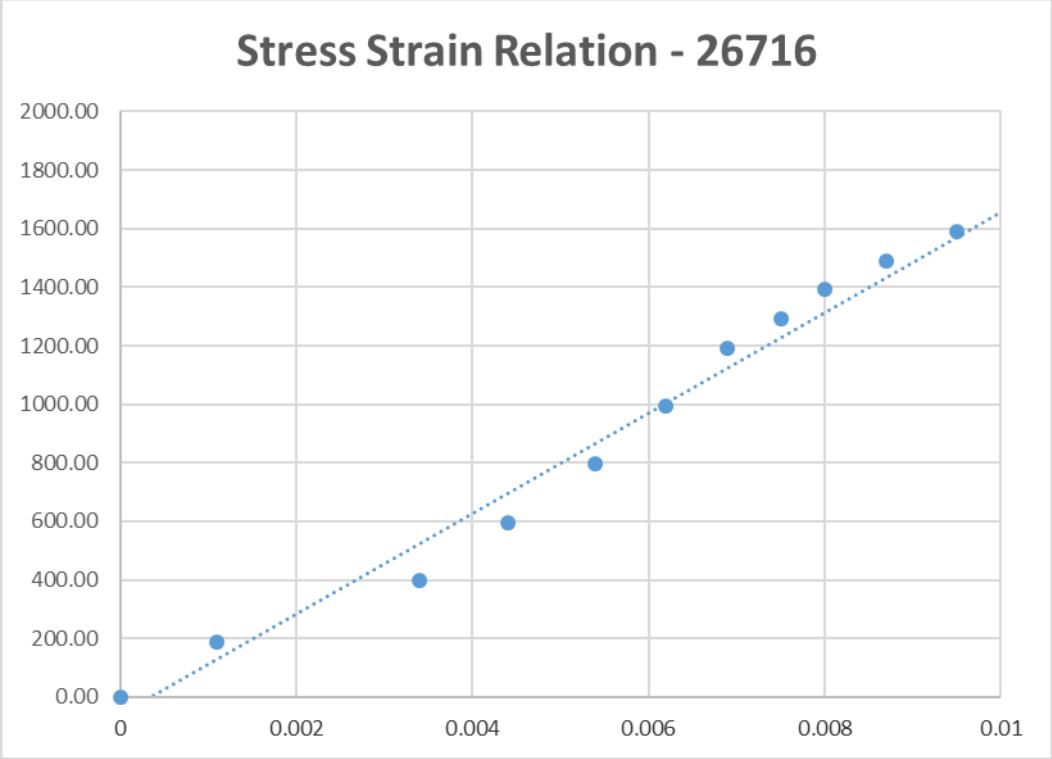
Test Performed and Verified by:

To,

Resident Engineer (Nespak RRR)
Nespak (Pvt.) Ltd.
Construction of Rawalpindi Ring Road (38.3KM) Main Carriageway (MCW) from Baanth (N-5) to Thallian (M-2)
Wire Manufacturing Industry

Reference # CED/TFL **7043** (Dr. Ali Ahmed) Dated: 30-05-2025
Reference of the request letter # 4713/RRR/IUK/25/221 Dated: 05-05-2025

Graph (Page – 4/4)



Test Performed and Verified by:

To,

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

Reference # CED/TFL **7056** (Dr. Ali Ahmed) Dated: 02-06-2025
Reference of the request letter # DBCG/Lab/PFJV/2025/038 Dated: 20-05-2025

Tension Test Report (Page -1/1)

Date of Test 05-06-2025
Gauge length 600 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/1000m)	(kg/1000m)	(kg)	(kN)	(kg)	(kN)		
1	**15.24 (0.6")**	**1102.0**	**1120.0**	**26500**	**259.97**	**27700**	**271.74**	**>3.50**	**7356 & 7357**
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-

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:

Ref: CED/TFL/06/7062 Dated: 03-06-2025

Dated of Test: 05-06-2025 **(Dr. Ali Ahmed)**

To,

Depuyty Director (QCD)
Water and Sanitation Agency
Faisalabad
(M/s United (I-II) RCC Pipe Manufacturing Factory, New Grace Hosiery, 117/JB, Faisalabad.)

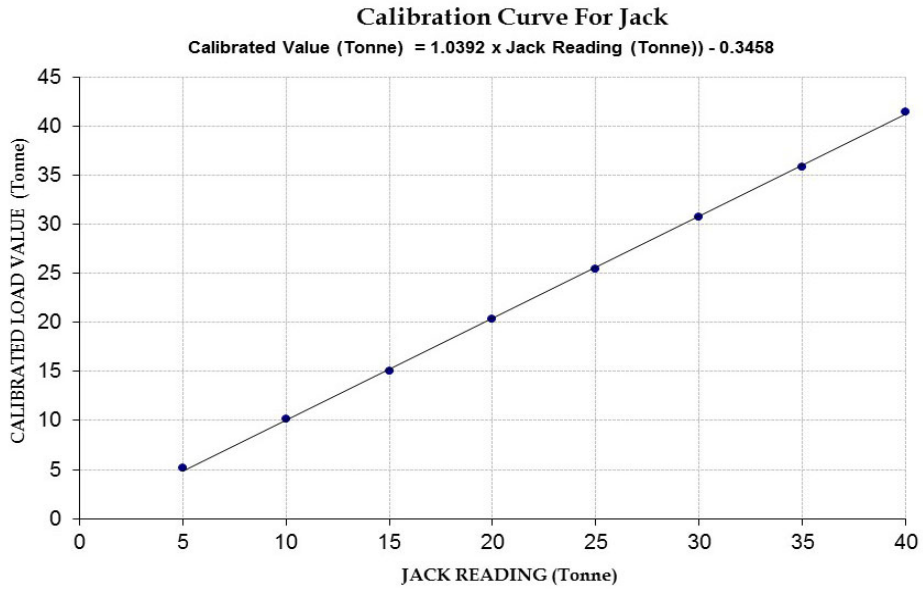
Subject: **- CALIBRATION OF HYDRAULIC JACK WITH GAUGE**
(MARK: TFL/06/7062)

Reference to your Letter No. 204/DD(QCD)/WASA/2025, Dated: 17/05/2025 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 (Tonne)
Calibrated Range : Zero - 40 (Tonne)

Hydraulic Jack Reading (Tonne)		**5**	**10**	**15**	**20**	**25**	**30**	**35**	**40**	**45**
Calibrated Load	**(kg)**	**5150**	**10100**	**15050**	**20350**	**25450**	**30750**	**35800**	**41450**	**46600**
	(Tonne)	**5.15**	**10.10**	**15.05**	**20.35**	**25.45**	**30.75**	**35.80**	**41.45**	**46.60**

1000 kg = 1 Tonne



Test Performed and Verified by:

To,

Mr. Asad Masood (assistant Engineer Civil)
GC University, Faisalabad
Construction of Community School at New Campus Government College University, Faisalabad
Sheikhoo Steel

Reference # CED/TFL **7068** (Dr. Ali Ahmad) Dated: 04-06-2025
Reference of the request letter # GCUF/EC/7378 Dated: 16-05-2025

Tension Test Report (Page-1/1)

Date of Test 05-06-2025
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	**0.409**	**3**	**0.391**	**0.110**	**0.12**	**3800**	**5300**	**76138**	**69765**	**106193**	**97304**	**1.3**	**16.3**	-
2	**0.366**	**3**	**0.370**	**0.110**	**0.107**	**3500**	**4700**	**70127**	**71804**	**94171**	**96422**	**1.2**	**15.0**	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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,

Mr. Aamir Ali (ME)
PMU Nathe Khalsa Project
FF Steel

Reference # CED/TFL **7069** (Dr. Ali Ahmad) Dated: 04-06-2025
Reference of the request letter # 30001/Proj/NLC Dated: 04-06-2025

Tension Test Report (Page-1/1)

Date of Test 05-06-2025
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	**0.403**	**3**	**0.388**	**0.110**	**0.118**	**3600**	**5000**	**72131**	**67032**	**100182**	**93100**	**1.2**	**15.0**	-
2	**0.407**	**3**	**0.390**	**0.110**	**0.12**	**3700**	**5000**	**74135**	**68229**	**100182**	**92201**	**1.3**	**16.3**	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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: