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/03/4740 Dated: 05-03-2024

Dated of Test: 07-03-2024

To

Resident Engineer
NESPAK
Construction of Flyover at Shahdara Morr & Consyttruction of Bridge over River Ravi. Lahore.

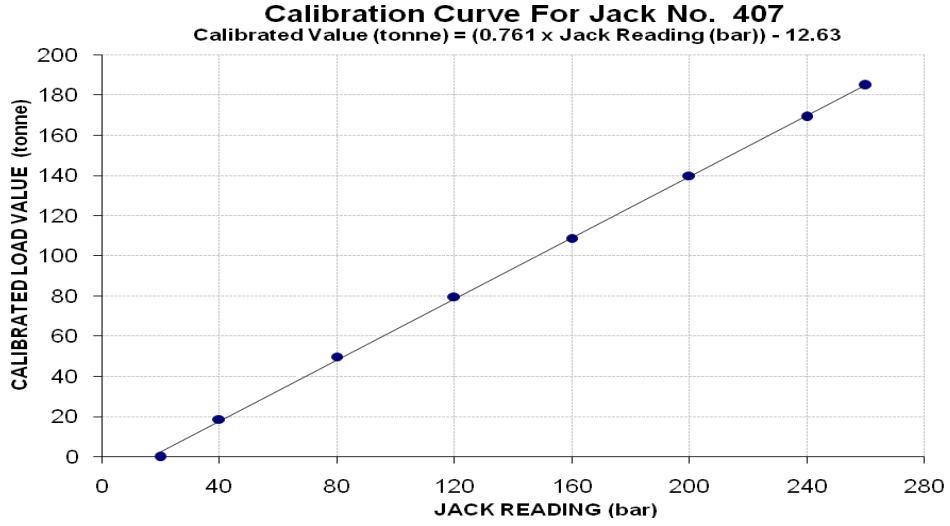
Subject: **- CALIBRATION OF HYDRAULIC JACK (MARK: TFL/03/4740)** (Page -1/2)

Reference to your Letter No. 4537/03/MSA/09/207, dated: 05/03/2024 on the subject cited above. One Hydraulic Jack (Jack No. 407, Gauge No. SF-407) as received by us has been calibrated. The results are tabulated as under:

Total Range : Zero - 1000 (bar)
Calibrated Range : Zero - 260 (bar)

Hydraulic Jack Reading (bar)		**20**	**40**	**80**	**120**	**160**	**200**	**240**	**260**
Calibrated Load	**(kg)**	**0**	**18800**	**49800**	**79800**	**108800**	**140000**	**169200**	**185000**
	(tonne)	**0**	**18.80**	**49.80**	**79.80**	**108.80**	**140.00**	**169.20**	**185.00**
Calibrated Pressure (bar)		**0**	**25.11**	**66.51**	**106.57**	**145.30**	**186.97**	**225.96**	**247.06**

The Ram Area of Jack = 734.35 cm^2



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

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To

Resident Engineer
NESPAK
Construction of Flyover at Shahdara Morr & Consyttruction of Bridge over River Ravi. Lahore.

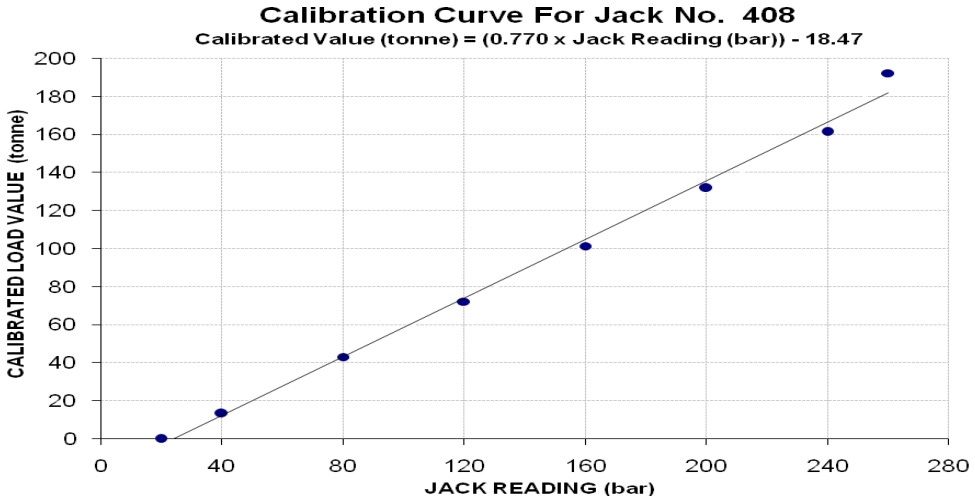
Subject: **- CALIBRATION OF HYDRAULIC JACK (MARK: TFL/03/4740)** (Page -2/2)

Reference to your Letter No. 4537/03/MSA/09/207, dated: 05/03/2024 on the subject cited above. One Hydraulic Jack (Jack No. 408, Gauge No. SF-408) as received by us has been calibrated. The results are tabulated as under:

Total Range : Zero - 1000 (bar)
Calibrated Range : Zero - 260 (bar)

Hydraulic Jack Reading (bar)		**20**	**40**	**80**	**120**	**160**	**200**	**240**	**260**
Calibrated Load	**(kg)**	**0**	**13400**	**43000**	**72200**	**101400**	**131800**	**161400**	**192200**
	(tonne)	**0**	**13.40**	**43.00**	**72.20**	**101.40**	**131.80**	**161.40**	**192.20**
Calibrated Pressure (bar)		**0**	**17.90**	**57.43**	**96.42**	**135.42**	**176.01**	**215.54**	**256.68**

The Ram Area of Jack = 734.35 cm^2



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Pakistan. Ph: 92-42-99029202

To,

Resident Engineer,
NESPAK, Pvt. Ltd.
Construction of Flyovers at Shadara Morr & Construction of Bridge Over Ravi, Lahore.

Reference # CED/TFL **4747** Dr. Ali Ahmad) Dated: 07-03-2024
Reference of the request letter # 4537/03/MSA/09/210 Dated: 06-03-2024

Tension Test Report (Page -1/1)

Date of Test 07-03-2024
Gauge length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615 (Aziz Steel)

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	5.122	11	1.385	1.56	1.506	43800	75600	61900	64120	106900	110700	1.10	13.8	H#158
2	5.173	11	1.391	1.56	1.520	44000	76200	62200	63790	107700	110500	1.10	13.8	H#536
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and two samples for bend test														
Bend Test														
#11 Bar Bend Test Through 180º is Satisfactory														

I/C Testing Laboratoires
UET Lahore, Pakistan.

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Pakistan. Ph: 92-42-99029202

To,

PE HEAD CIVIL
KCI

Reference # CED/TFL **4758** (Dr. Asad Gillani) Dated: 07-03-2024
Reference of the request letter # LPO(24/395)-122.12/1517.23 Dated: 07-03-2024

Tension Test Report (Page -1/1)

Date of Test 07-03-2024
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	0.376	3	0.375	0.11	0.111	3920	5300	78600	78100	106200	105600	1.00	12.5	FF Steel
2	0.373	3	0.374	0.11	0.110	4040	5320	81000	81200	106600	107000	1.20	15.0	
3	0.377	3	0.376	0.11	0.111	3900	5220	78200	77550	104600	103800	1.00	12.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Note: only three samples for tensile and one sample for bend test

Bend Test

#3 Bar Bend Test Through 180º is Satisfactory

Witness by: Sami Ilyas (Head Defence & Chinese Projects)

I/C Testing Laboratoires
UET Lahore, Pakistan.

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