

# Test Floor Laboratory Department of Civil Engineering University of Engineering and Technology Lahore, 54890 Pakistan. Ph: 92-42-99029202

Ref: CED/TFL/04/33112 Dated: 19-04-19

To Resident Engineer NESPAK – Zeeruk (Jv) CPEC (Western Route), Package-II Iskhel

(China Pakistan Economic Corridor (CPEC), Western Route Hakla (on M1) to D.I. Khan Motorway – Rehmani Khel to Kot Belian – Package 2C)

Subject: - CALIBRATION OF HYDRAULIC JACK (MARK: TFL/04/33112) (Page -1/2)

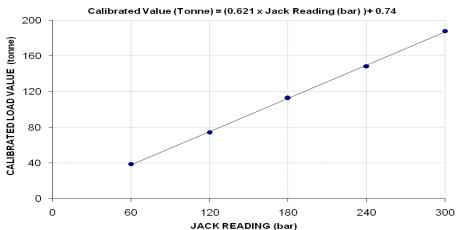
Reference to your Letter No. RE/NESPAK/P-2/CPEC-WR/771, Dated: 12/04/2019 on the subject cited above. One Hydraulic Jack (Jack No 313, Gauge No. AES-313) as received by us has been calibrated. The results are tabulated as under:

Total Range : Zero - 1000 (bar) Calibrated Range : Zero - 300 (bar)

Hydraulic Jack Re	eading (bar)	60	120	180	240	300
Calibrated Load	(Kg)	38800	74400	112800	148600	188000
Cambrated Load	Tonne	38.80	74.40	112.80	148.60	188.00
Calibrated Pressu	re (bar)	63.20	121.18	183.73	242.04	306.22

1 Tonne = 1000 Kg, The Ram Area of Jack =  $602.09 \text{ cm}^2$ 

### Calibration Curve For Jack No. AES 313



I/C Testing Laboratoires UET Lahore, Pakistan.

- 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



## Test Floor Laboratory Department of Civil Engineering University of Engineering and Technology Lahore, 54890 Pakistan, Ph: 92-42-99029202

Ref: CED/TFL/04/33112 Dated: 19-04-19

To Resident Engineer NESPAK – Zeeruk (Jv) CPEC (Western Route), Package-II Iskhel

 $(China\ Pakistan\ Economic\ Corridor\ (CPEC),\ Western\ Route\ Hakla\ (on\ M1)\ to\ D.I.\ Khan\ Motorway-Rehmani\ Khel\ to\ Kot\ Belian-Package\ 2C)$ 

Subject: - CALIBRATION OF HYDRAULIC JACK (MARK: TFL/04/33112) (Page -2/2)

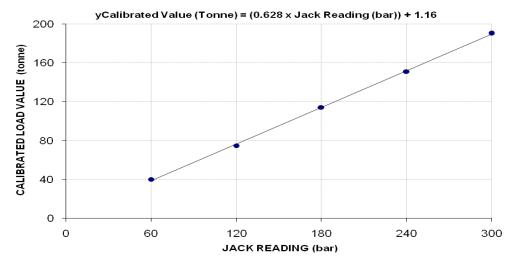
Reference to your Letter No. RE/NESPAK/P-2/CPEC-WR/771, Dated: 12/04/2019 on the subject cited above. One Hydraulic Jack (Jack No 314, Gauge No. AES-314) as received by us has been calibrated. The results are tabulated as under:

Total Range : Zero - 1000 (bar) Calibrated Range : Zero - 300 (bar)

Hydraulic Jack Re	eading (bar)	60	120	180	240	300
Calibrated Load	(Kg)	40200	74800	114400	151200	190400
Cambrateu Loau	Tonne	40.20	74.80	114.40	151.20	190.40
Calibrated Pressu	re (bar)	65.48	121.84	186.34	246.28	310.13

1 Tonne = 1000 Kg, The Ram Area of Jack =  $602.09 \text{ cm}^2$ 

### Calibration Curve For Jack No. AES 314



I/C Testing Laboratoires UET Lahore, Pakistan.

- 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
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# Test Floor Laboratory Department of Civil Engineering University of Engineering and Technology Lahore, 54890 Pakistan. Ph: 92-42-99029202

To, Chief Resident Engineer Osmani & Company (Pvt) Ltd Swat Motorway Project

Reference # CED/TFL **33268** (Dr. M Rizwan Riaz) Dated: 21-05-2019 Reference of the request letter # 293/CRE/QAT/SMP/2019 Dated: 16-05-2019

**Tension Test Report** (Page – 1/3)

Date of Test 27-05-2019 Gauge length 2 inches

Description MS Pipe & Base Plate Steel Strip Tensile and Bend Test

mm)  Designation	)	Size of Strip	X Section Area  Area	(kg)	Breaking (Sa) Load	(MPa)	Ultimate Stress	(ii) Elongation	% Elongation	Remarks
MC D	50	27.30x3.00	81.90	2500	3200	299.45	383.30	0.50	25.00	
MS Pipe	50	27.20x3.00	81.60	2500	3200	300.55	384.71	0.50	25.00	
MC Ding	100	27.40x3.00	82.20	3500	4500	417.70	537.04	0.50	25.00	
MIS Pipe	100	27.30x2.90	79.17	3500	4700	433.69	582.38	0.45	22.50	
MC Dina	125	27.20x3.00	81.60	2600	3300	312.57	396.73	0.50	25.00	
MS Pipe	125	27.20x3.00	81.60	2500	3300	300.55	396.73	0.50	25.00	
MS Dina	450	27.40x5.90	161.66	6200	8000	376.23	485.46	0.60	30.00	
Mis i ipe	450	27.50x5.90	162.25	5900	8100	356.73	489.74	0.60	30.00	
Race Plate	25	27.50x25.00	687.50	23000	34400	328.19	490.86	0.95	47.50	
Dasc I late	25	27.50x25.00	687.50	20000	34200	285.38	488.00	0.90	45.00	
T	Oı	nly Ten Sampl	es for Ter	sile and	Five Sam	ples for I	Bend Tes	<u>st</u>	ı	
				Bend Te	st	<u> </u>				
Taken fron	n MS Pi	pe 50mm Bend	Test Thro	ough 180°	'is Satisfac	ctory				
Taken fron	n MS Pi	pe 100mm Ben	d Test Th	rough 180	O° is Satisfa	actory				
Taken fron	n MS Pi	pe 125mm Ben	d Test Th	rough 180	o is Satisfa	actory				
Taken fron	n MS Pi	pe 450mm Ben	d Test Th	rough 180	O° is Satisfa	actory				
	(mm  MS Pipe  MS Pipe  MS Pipe  MS Pipe  Base Plate  Taken from Taken from Taken from	(mm)       MS Pipe     50       MS Pipe     100       MS Pipe     125       MS Pipe     450       450     25       25     25       Or     Taken from MS Pipe       Taken from MS Pipe     Taken from MS Pipe	(mm)         (mm)           MS Pipe         50         27.30x3.00           50         27.20x3.00         27.40x3.00           MS Pipe         100         27.30x2.90           MS Pipe         125         27.20x3.00           125         27.20x3.00         27.40x5.90           450         27.50x5.90         25           25         27.50x25.00         25           Only Ten Sample         25         27.50x25.00           Only Ten Sample         27           Only Ten Sample         27           Only Ten Sample         27           Only Ten Sample         27           Only Ten Sample         27	(mm)         (mm²)           MS Pipe         50         27.30x3.00         81.90           MS Pipe         100         27.40x3.00         82.20           MS Pipe         125         27.20x3.00         81.60           MS Pipe         450         27.40x5.90         161.66           450         27.50x25.00         687.50           Only Ten Samples for Ten           Taken from MS Pipe 50mm Bend Test Throw Taken from MS Pipe 100mm Bend Test Throw Taken from MS Pipe 125mm Bend Test Throw	(mm)         (mm)         (mm²)         (kg)           MS Pipe         50         27.30x3.00         81.90         2500           MS Pipe         100         27.40x3.00         81.60         2500           MS Pipe         100         27.30x2.90         79.17         3500           MS Pipe         125         27.20x3.00         81.60         2600           MS Pipe         450         27.40x5.90         161.66         6200           MS Pipe         25         27.50x5.90         162.25         5900           Base Plate         25         27.50x25.00         687.50         23000           Only Ten Samples for Tensile and           Draken from MS Pipe 50mm Bend Test Through 180°           Taken from MS Pipe 100mm Bend Test Through 180°           Taken from MS Pipe 125mm Bend Test Through 180°	(mm)         (mm)         (mm²)         (kg)         (kg)           MS Pipe         50         27.30x3.00         81.90         2500         3200           MS Pipe         100         27.40x3.00         82.20         3500         4500           MS Pipe         100         27.30x2.90         79.17         3500         4700           MS Pipe         125         27.20x3.00         81.60         2600         3300           MS Pipe         450         27.40x5.90         161.66         6200         8000           MS Pipe         450         27.50x5.90         162.25         5900         8100           Base Plate         25         27.50x25.00         687.50         23000         34400           Only Ten Samples for Tensile and Five Sam         50         50         50         50         50           Taken from MS Pipe 50mm Bend Test Through 180° is Satisfactor Taken from MS Pipe 100mm Bend Test Through 180° is Satisfactor Taken from MS Pipe 125mm Bend Test Through 180° is Satisfactor Taken from MS Pipe 125mm Bend Test Through 180° is Satisfactor Taken from MS Pipe 125mm Bend Test Through 180° is Satisfactor Taken from MS Pipe 100mm Bend Test Through 180° is Satisfactor Taken from MS Pipe 100mm Bend Test Through 180° is Satisfactor Taken from MS Pipe 100mm Bend Test Through 180° is Satisfactor Taken from MS Pipe 100mm Bend Test Through 180° is Satisfactor Taken from MS Pipe 100	(mm)         (mm²)         (kg)         (kg)         (MPa)           MS Pipe         50         27.30x3.00         81.90         2500         3200         299.45           MS Pipe         50         27.20x3.00         81.60         2500         3200         300.55           MS Pipe         100         27.40x3.00         82.20         3500         4500         417.70           MS Pipe         125         27.20x3.00         81.60         2600         3300         312.57           MS Pipe         450         27.40x5.90         161.66         6200         8000         376.23           MS Pipe         450         27.50x5.90         162.25         5900         8100         356.73           Base Plate         25         27.50x25.00         687.50         23000         34400         328.19           Only Ten Samples for Tensile and Five Samples for Institute and Five Samples for Institute S	(mm)         (mm)         (mm²)         (kg)         (kg)         (MPa)         (MPa)           MS Pipe         50         27.30x3.00         81.90         2500         3200         299.45         383.30           MS Pipe         100         27.40x3.00         82.20         3500         4500         417.70         537.04           MS Pipe         100         27.30x2.90         79.17         3500         4700         433.69         582.38           MS Pipe         125         27.20x3.00         81.60         2600         3300         312.57         396.73           MS Pipe         450         27.40x5.90         161.66         6200         8000         376.23         485.46           MS Pipe         450         27.50x5.90         162.25         5900         8100         356.73         489.74           Base Plate         25         27.50x25.00         687.50         23000         34400         328.19         490.86           25         27.50x25.00         687.50         20000         34200         285.38         488.00           Bend Test           Taken from MS Pipe 50mm Bend Test Through 180° is Satisfactory           Taken from MS Pipe 100mm Bend	(mm)         (mm²)         (kg)         (kg)         (MPa)         (MPa)         (in)           MS Pipe         50         27.30x3.00         81.90         2500         3200         299.45         383.30         0.50           MS Pipe         100         27.40x3.00         82.20         3500         4500         417.70         537.04         0.50           MS Pipe         100         27.30x2.90         79.17         3500         4700         433.69         582.38         0.45           MS Pipe         125         27.20x3.00         81.60         2600         3300         312.57         396.73         0.50           MS Pipe         450         27.40x5.90         161.66         6200         8000         376.23         485.46         0.60           MS Pipe         450         27.50x5.90         162.25         5900         8100         356.73         489.74         0.60           Base Plate         25         27.50x25.00         687.50         23000         34400         328.19         490.86         0.95           25         27.50x25.00         687.50         20000         34200         285.38         488.00         0.90           Only Ten S	(mm)         (mm)         (kg)         (kg)         (MPa)         (MPa)         (in)           MS Pipe         50         27.30x3.00         81.90         2500         3200         299.45         383.30         0.50         25.00           MS Pipe         100         27.40x3.00         82.20         3500         4500         417.70         537.04         0.50         25.00           MS Pipe         100         27.30x2.90         79.17         3500         4700         433.69         582.38         0.45         22.50           MS Pipe         125         27.20x3.00         81.60         2600         3300         312.57         396.73         0.50         25.00           MS Pipe         450         27.40x5.90         161.66         6200         8000         376.23         485.46         0.60         30.00           MS Pipe         450         27.50x5.90         162.25         5900         8100         356.73         489.74         0.60         30.00           Base Plate         25         27.50x25.00         687.50         23000         34400         328.19         490.86         0.95         47.50           Only Ten Samples for Tensile and Five Samples for Bend 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.

Strip Taken from Base Plate 25mm Bend Test Through 180° is Satisfactory

3- Sealed sample / Unsealed sample / Marked sample/Signed Samples



# Test Floor Laboratory Department of Civil Engineering University of Engineering and Technology Lahore, 54890 Pakistan. Ph: 92-42-99029202

To, Chief Resident Engineer Osmani & Company (Pvt) Ltd Swat Motorway Project

Reference # CED/TFL **33268** (Dr. M Rizwan Riaz) Dated: 21-05-2019 Reference of the request letter # 293/CRE/QAT/SMP/2019 Dated: 16-05-2019

**Weight & Size Test Report** (Page – 2/3)

Date of Test 27-05-2019

Gauge length -----

Description M.S Pipe Weight and Size Test

Sr. No.	Designation	Weight	Length	Weight per Unit Length	External Diameter	Internal Dia meter	Wall Thickness	Remark
	(mm)	(g)	(mm)	(kg/m)	(mm)	(mm)	(mm)	
1	50	372	90.0	4.13	59.90	53.9	3.00	
2	100	714	87.30	8.18	111.90	105.9	3.00	
3	125	889	87.50	10.16	138.40	132.4	3.00	
4	450	6399	94.60	67.64	471.50	459.5	6.00	
-	-	-	-	-	-		-	
-	-	-	-	-	-		-	
-	-	-	-	-	-		-	
-	-	-	-	-	-		-	
-	-	-	-	-	-		-	
	1		Only Four	r Samples	for Test		1	1

I/C Testing Laboratoires UET Lahore, Pakistan.

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To, Chief Resident Engineer Osmani & Company (Pvt) Ltd Swat Motorway Project

Reference # CED/TFL **33268** (Dr. M Rizwan Riaz) Dated: 21-05-2019 Reference of the request letter # 293/CRE/QAT/SMP/2019 Dated: 16-05-2019

**Weight &Size Test Report** (Page – 3/3)

Date of Test 27-05-2019

Gauge length ----

Description Base Plate Weight and Size Test

Sr. No.	Designation	Weight	Length	Width (b)	Weight per Unit Length	Thickness	Remark
	(mm)	(g)	(mm)	(mm)	(kg/m)	(mm)	
1	25	1854	97.40	97.40	195.43	25.00	
-	-	-	-	-	-	-	
-	-	-	-	-	-	-	
-	-	-	-	-	-	-	
-	-	-	-	-	-	-	
-	-	-	-	-	-	-	
-	-	-	-	-	-	-	
-	-	-	-	-	-	-	
-	-	-	-	-	-	-	
		Onl	y One San	nple for T	est		

I/C Testing Laboratoires UET Lahore, Pakistan.

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# Test Floor Laboratory Department of Civil Engineering University of Engineering and Technology Lahore, 54890 Pakistan. Ph: 92-42-99029202

To, M/S Transtech Engineering Company NESPAK-CMEC PTPL

Construction of 1263 MW Punjab Thermal Power Plant, Jhang (Ittefaq Steel)

Reference # CED/TFL **33283** (Dr. M Rizwan Riaz) Dated: 23-05-2019 Reference of the request letter # TEC/UET/19042001 Dated: 22-05-2019

**Tension Test Report** (Page -1/2)

Date of Test 27-05-2019 Gauge length 8 inches

Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight	Si	neter/ ze m)		Area (in²)		Breaking Load		Stress si)	Ultimat (p	e Stress si)	Elongation	% Elongation	Heat No
<b>S</b> 2	(lbs/ft)	Nominal	Actual	Nominal Actual		(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	H %	H
1	0.404	10	9.88	0.11	0.119	3600	5700	72200	66830	114300	105900	1.20	15.0	1942
2	0.402	10	9.86	0.11	0.118	3700	5700	74200	68950	114300	106300	1.20	15.0	19
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			N	ote: on	ly two s	amples f	or tensile	and one	sample f	or bend t	test			
							Bend T	'est						
10ı	nm Dia	Bar Bei	nd Test	Throug	h 180° i	s Satisfac	ctory							

I/C Testing Laboratoires UET Lahore, Pakistan.

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# Test Floor Laboratory Department of Civil Engineering University of Engineering and Technology Lahore, 54890 Pakistan. Ph: 92-42-99029202

To, M/S Transtech Engineering Company NESPAK-CMEC PTPL

Construction of 1263 MW Punjab Thermal Power Plant, Jhang (Ittefaq Steel)

Reference # CED/TFL **33283** (Dr. M Rizwan Riaz) Dated: 23-05-2019 Reference of the request letter # TEC/UET/19052101 Dated: 22-05-2019

**Tension Test Report** (Page -2/2)

Date of Test 27-05-2019 Gauge length 8 inches

Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight	Si	neter/ ize nm)	Area (in²)		Yield load	Breaking Load		Stress si)		e Stress si)	Elongation	% Elongation	Heat No
<b>S</b> 2	(lbs/ft)	Nominal	Actual	Nominal	Actual	(kg)	(kg)	N A ON		Actual	(inch)	∃%	H	
1	4.189	32	31.80	1.27	1.231	43200	55000	75000	77330	95500	98500	1.40	17.5	1478
2	4.156	32	31.68	1.27	1.222	43400	55000	75400	78300	95500	99300	1.40	17.5	14
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			N	ote: on	ly two s	amples f	or tensile	and one	sample f	or bend	test			
							Bend T	est						
321	nm Dia	Bar Be	nd Test	Throug	h 180° i	s Satisfac	ctory							

I/C Testing Laboratoires UET Lahore, Pakistan.

- 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
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# Test Floor Laboratory Department of Civil Engineering University of Engineering and Technology Lahore, 54890 Pakistan. Ph: 92-42-99029202

To,
M/S Five Star Corporation
Bahawalpur
(Construction of Noor Care Hospital Rajanpur)

Reference # CED/TFL **33287** (Dr. M Rizwan Riaz)

Reference of the request letter # 633/UET/LHR

Dated: 24-05-2019

Dated: 23-05-2019

**Tension Test Report** (Page -1/1)

Date of Test 27-05-2019 Gauge length 8 inches

Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight	Si	neter/ ize ch)	Area (in²)		Yield load	Breaking Load		Stress si)		e Stress si)	Elongation	% Elongation	Remarks
S	(lbs/ft)	Nominal	Actual	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal			∃ %	R
1	0.393	3/8	0.383	0.11	0.116	3500	5300	70200	66790	106200	101200	1.00	12.5	
•	-	-	-	-	-	-	-	-	-	-	-	-	•	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
•	-	-	-	-	-	-	-	-	-	-	-	-	•	
ı	-	-	-	-	-	-	-	-	-	-	-	-	•	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			N	ote: on	ly one s	ample fo	or tensile	and one	sample f	or bend to	est			
3/8	Bend Test  3/8" Dia Bar Bend Test Through 180° is Satisfactory													

I/C Testing Laboratoires UET Lahore, Pakistan.

- 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
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# Test Floor Laboratory Department of Civil Engineering University of Engineering and Technology Lahore, 54890 Pakistan. Ph: 92-42-99029202

To, Sub Divisional Officer Building Sub Division Kamoke

(Re-Const. Of School Building of Govt. FD Islamia High School District Gujranwala)

Reference # CED/TFL **33288** (Dr. M Rizwan Riaz)

Reference of the request letter # 151/K

Dated: 24-05-2019

Dated: 06-04-2019

**Tension Test Report** (Page -1/1)

Date of Test 27-05-2019 Gauge length 8 inches

Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight	Si	Diameter/ Size (inch)  Are (in²			Yield load	Breaking Load		Stress si)		e Stress si)	Elongation	% Elongation	Remarks
S	(1J/sqI)	Nominal	Actual	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	Re
1	0.375	3/8	0.375	0.11	0.110	3300	4500	66200	66000	90200	90000	1.10	13.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			N	ote: on	ly one s	ample fo	r tensile	and one	sample fo	or bend t	est			
	Bend Test													
3/8	" Dia Ba	ır Bend	Test Th	rough	180° is \$	Satisfacto	ry							

I/C Testing Laboratoires UET Lahore, Pakistan.

- 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
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# Test Floor Laboratory Department of Civil Engineering University of Engineering and Technology Lahore, 54890 Pakistan. Ph: 92-42-99029202

To,

Assistant Engineer (C) University of Sargodha

Construction of 03 Nos. Residences for BPS (20 & above) at Main Campus University of Sargodha (M/s N.M.T Engineers & Builders)

Reference # CED/TFL **33290** (Dr. M Rizwan Riaz) Reference of the request letter # SU/P.D(W)/15034

**Tension Test Report** (Page -1/1)

Date of Test 27-05-2019 Gauge length 8 inches

Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight	Si	neter/ ize ch)	Nominal Actual Actual		Yield load	Breaking Load		Stress si)		te Stress si)	Elongation	% Elongation	Remarks
<i>S</i> <sub>2</sub>	(lbs/ft)	Nominal	Actual			(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	<b>3</b> %	R
1	0.403	3/8	0.388	0.11	0.118	3000	4600	60200	55850	92200	85700	1.40	17.5	
2	0.407	3/8	0.390	0.11	0.120	2800	4700	56200	51590	94200	86600	1.40	17.5	
-	-	-	-	-	-	-	-	•	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			N	ote: on	ly two s	amples f	or tensile	and one	sample f	or bend t	test			
							Bend T	est						
3/8	" Dia Ba	r Bend	Test Th	nrough	180° is \$	Satisfacto	ry							

I/C Testing Laboratoires UET Lahore, Pakistan.

Dated: 24-05-2019

Dated: 22-05-2019

- 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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### STRUCTURAL ENGINEERING DIVISION

# Test Floor Laboratory Department of Civil Engineering University of Engineering and Technology Lahore, 54890 Pakistan. Ph: 92-42-99029202

To, Amna/Noor 32-C/1 Gulberg III Lahore

Reference # CED/TFL **33291** (Dr. M Rizwan Riaz) Dated: 24-05-2019 Reference of the request letter # ST/TF04/19 Dated: 24-05-2019

**Tension Test Report** (Page -1/1)

Date of Test 27-05-2019 Gauge length 8 inches

Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight		Diameter/ Size		rea 1 <sup>2</sup> )	Yield load	Breaking Load		Stress si)		e Stress si)	Elongation	% Elongation	Remarks
S	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	∃%	Re
1	0.381	3	0.378	0.11	0.112	3700	4800	74200	72760	96200	94400	1.10	13.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	•	-	-	•	-	-	•	•	-	-	•	-	ı	
-	•	-	-	•	-	-	-	•	-	-	•	-	1	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			N	ote: on	ly one s	sample fo	r tensile	and one	sample fo	or bend t	est			
							Bend T	<u>'est</u>						
#3	Bar Ben	d Test	Through	180° is	s Satisfa	ctory								

I/C Testing Laboratoires UET Lahore, Pakistan.

- 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.
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### 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 Ali & Company Lahore (Ali Trade Center)

Reference # CED/TFL **33293** (Dr. M Rizwan Riaz)

Reference of the request letter # Nil

Dated: 27-05-2019

Dated: 27-05-2019

**Tension Test Report** (Page -1/1)

Date of Test 27-05-2019 Gauge length 8 inches

Description Deformed Steel Bar Tensile Test as per ASTM-A615

Sr. No.	Weight		Diameter/ size	Aı (iı	rea n²)	Yield load	Breaking Load		Stress si)		te Stress si)	Elongation	% Elongation	Remarks
S	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	Actu (incl		Re
1	0.376	3	0.375	0.11	0.110	3100	4700	62200	61880	94200	93900	1.00	12.5	
2	0.379	3	0.377	0.11	0.111	3000	000 4300 60200 59390		86200	85200	1.20	15.0		
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		1			Not	e: only t	wo sampl	les for ter	nsile test	1	1	1	1	
							Bend T	'est						

I/C Testing Laboratoires UET Lahore, Pakistan.

- 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
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