STEERING THE STEER

STRUCTURAL ENGINEERING DIVISION

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

Ref: <u>CED/TFL/07/33623</u> Dated: <u>24-07-19</u>

To DCRE Zeeruk International (Pvt) Ltd Lahore Sialkot Motorway Project

Subject: - TEST RESULT REPORT FOR BEARING DEVICE (PAD)

Reference to your letter no. LSMP/RE-II/St/19/413, Dated: 22/07/2019 on the above mentioned subject. Two Elastromeric Bearing Rubber Pads (EBRP) (Source: Interbuna) have been received by us. The same was tested and results are given below.

Laboratory : TEST FLOOR LAB

Machine : SHIMADZU

Sample No. : 1/2

Dimensions of EBRP : $500 \times 450 \times 76.40 \text{ mm}$

TEST RESULTS - SHORT DURATION

Load Duration : 5+5 minutes Test Load : 196 TONS

Bulging Pattern : Uniform Buldging.

Laminated Parallelism : Parallel

Cracks : No crack was observed

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,
Resident Engineer
RENARDET S.A ((M-4), Package-II)
Construction of Faisalabad-Khanewal Motorway (M-4) Project, Package-II, Jamani-Shorkot,
Section 2B (M/s China Railway First Group)

Reference # CED/TFL **33625** (Dr. Ali Ahmed) Dated: 24-07-2019 Reference of the request letter # RE/M-4/2B/2019/568 Dated: 22-07-2019

Tension Test Report (Page - 1/1)

Date of Test 29-07-2019

Gauge length -----

Description Chain Link Face Wire Tensile Test as per AASHTO-M-181

Sr. No.	Diameter Wire (mm)	Breaking Load (kN)	Remarks						
1	3.30	4.00							
-	-	-							
-	-	-							
-	-	-							
-	-	-							
-	-	-							
-	-	-							
-	-	-							
Only One Sample for Test									

I/C Testing Laboratoires UET Lahore, Pakistan.

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To,

M/S Defence Housing Authority.

Lahore Cantt

(Const. of OHWT & Tube Well X-Block Pha-III)(M/s N.A Associates)

Reference # CED/TFL **33631** (Dr. Ali Ahmed) Dated: 26-07-2019 Reference of the request letter # 408/241/E/Lab/647/223 Dated: 22-07-2019

Tension Test Report (Page -1/1)

Date of Test 29-07-2019 Gauge length 8 inches

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

Sr. No.	Weight	Diameter/ size			rea n²)	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)	% E	Re
1	0.367	3	0.370	0.11	0.108	3100	4700	62200	63380	94200	96100	1.20	15.0	4
2	0.366	3	0.370	0.11	0.107	3400	4700	68200	69740	94200	96400	1.20	15.0	Ittefaq Steel
-	-	-	-	-	-	-	-	-	-	-	-	-	-	I
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
що	D a # D - :-	d Test 7	Th	1000:	. Catiaf-		Bend T	est						
#3	Bar Ben	a rest	nrougn	1 180° 1	s Sausta	ctory								

I/C Testing Laboratoires UET Lahore, Pakistan.

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To,
Resident Engineer
NESPAK – Zeeruk (Jv)
China Pakistan Economic Corridor (CPEC) Western Route Hakla (no M1) to D.I.Khan
Motorway – Rehmani Khel to Kot Balian – Package IIB

Reference # CED/TFL **33633** (Dr. Ali Ahmed)

Reference of the request letter # RE/NESPAK/P-2B/CPEC-WR/881

Dated: 26-07-2019

Dated: 22-07-2019

Tension Test Report (Page - 1/1)

Date of Test 29-07-2019

Gauge length -----

Description Chain Link Face Wire Tensile Test as per AASHTO-M-181

Sr. No.	Diameter Wire (mm)	Breaking Load (kN)	Remarks							
1	3.20	4.05								
-	-	-								
-	-	-								
-	-	-								
-	-	-								
-	-	-								
-	-	-								
-	-	-								
Only Six Samples for Test										

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

Ref: <u>CED/TFL/07/33634</u> Dated: <u>26-07-2019</u>

To,
M/S Unze Trading Pvt Ltd
Lahore
(Leasing out of MEPCO PC Pole Plant Lodhran)

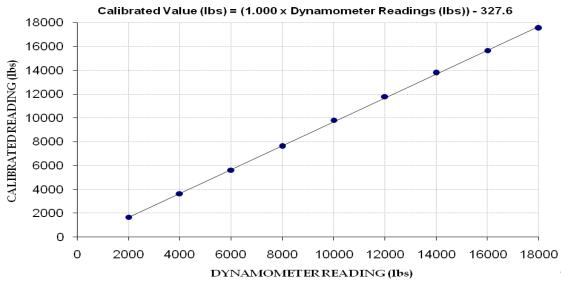
Subject: - CALIBRATION OF DYNAMOMETER (MARK: TFL/07/33634)

Ref: Your letter No. UNZE/370/2019, dated: 26/07/2019 on the subject cited above. One Dynamometer (Pat No. 3,277,705) as received by us has been calibrated. The results are tabulated as under:

Total Range : Zero - 20000 (lbs) Calibrated Range : Zero - 18000 (lbs)

Dynamometer Reading (lbs)	2000	4000	6000	8000	10000	12000	14000	16000	18000	
Calibrated Boadings	(kg)	750	1650	2550	3450	4450	5350	6250	7100	7950
Calibrated Readings	(lbs)	1653	3638	5622	7606	9810	11795	13779	15653	17527

Calibration Curve for Dynamometer



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To, Sub-Divisional Officer (Civil) GC University Faisalabad

(Comnstruction of Sports Facilities. Multipurpose Hall/ Gymnaium at New Campus Government College University, Faisalabad)

Reference # CED/TFL **33635** (Dr. Ali Ahmed)

Reference of the request letter # GCUF/EC/1157

Dated: 26-07-2019

Dated: 25-07-2019

Tension Test Report (Page -1/1)

Date of Test 29-07-2019 Gauge length 8 inches

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

Sr. No.	M Diameter/ Size (inch)		Marea (inch) Marea (in ²) Area (in ²) Breaking (in ²)		Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks		
S	(lbs/ft)	Nominal	Actual	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	3 %	Re
1	0.364	3/8	0.369	0.11	0.107	3700	5100	74200	76180	102200	105000	0.80	10.0	
2	0.365	3/8	0.369	0.11	0.107	3900	5100	78200	80190	102200	104900	0.75	9.4	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
							Bend T	est						
3/8	" Dia Ba	ar Bend	Test Th	nrough	180° is \$	Satisfacto	ry							

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, Executive Engineer Highway Division Narowal

(Construction of Road from Qila Ahmed abad Dhamthal Road to Kotli Sangayvia Cheema and

Lala (Length -6.60 km) Part - 1 L -2.50 km) in District Narowal

Reference # CED/TFL **33636** (Dr. Ali Ahmed)

Reference of the request letter # 1134/CB

Dated: 26-07-2019

Dated: 19-07-2019

Tension Test Report (Page -1/1)

Date of Test 29-07-2019 Gauge length 8 inches

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

Sr. No.	M Diameter/ Size (inch)		Size $\frac{\text{Area}}{(\text{in}^2)}$		Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks			
S	(1J/sqI)	Nominal	Actual	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	H %	Re
1	0.382	3/8	0.378	0.11	0.112	2800	4100	56200	54920	82200	80500	1.50	18.8	
2	0.380	3/8	0.377	0.11	0.112	2800	4000	56200	55310	80200	79100	1.60	20.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Note: only two samples for tensile and one sample for bend test													
							Bend T	<u>'est</u>						
3/8	" Dia Ba	r Bend	Test Th	rough	180° is \$	Satisfacto	ry							

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