LANGE .

STRUCTURAL ENGINEERING DIVISION

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

To,

Sr. Engineer (C), WASO
Pakistan Atomic Energy Commission
"Construction of Mock-up Hall Near Chashma."

Reference # CED/TFL <u>6022 (Dr. M Yousaf)</u> Dated: 20-11-2024 Reference of the request letter # WASO-CMD-LOI-029/2024/1530Dated: 18-11-2024

Tension Test Report (Page -1/1)

Date of Test 22-11-2024
Gauge length 8 inches

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

Sr. No.	Weight	M Cight Size		Area (in²)		Yield load	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	Elongation	Remarks
S	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	R
1	0.369	3	0.372	0.11	0.108	3920	5350	78600	79700	107200	108800	1.00	12.5	, 2
-	0.381	3	0.378	0.11	0.112	4050	5560	81200	79640	111500	109400	1.00	12.5	Heat # 1, SJ Steel
-	-	-	-	-	-	-	-	-	-	-	-	-	-	He S.
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
1	-	-	-	-	-	-	-	-	-	-	-	-	-	
			N	ote: on	ly one s	sample fo	or tensile	and one	sample f	or bend t	est			
#2	Don Don	d Tost 7	Theon al	. 1000 :	Satisfa	untom.	Bend T	est						
#3	Bar Ben	u rest	ı nrougr	1 180° 18	s Sausia	ctory								

Witness by Tariq Aleem (PE. QAD-DTS) and Zair Ullah (Sr. Tech. S&SD-DTS)

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 Jaffar Builders Lahore (Coca Cola Sunder Green Lahore.)

Reference # CED/TFL <u>6029 (Dr. M Rizwan Riaz)</u>

Reference of the request letter # Nil

Dated: 21-11-2024

Tension Test Report (Page -1/1)

Date of Test 22-11-2024 Gauge length 8 inches

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

Weight	Diameter/ Size		Area (in²)		Yield load	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	longation	Remarks
(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	3 %	Re
0.345	3	0.359	0.11	0.101	3310	4740	66400	71920	95000	103000	1.30	16.3	
-	-	-	ı	-	-	-	ı	-	-	-	-	-	
-	-	-	ı	-	-	-	ı	-	-	-	-	-	
-	-	-	ı	-	-	-	-	-	-	-	-	-	
-	-	-	ı	-	-	-	-	-	-	-	-	-	
-	-	-	ı	-	-	-	ı	-	-	-	-	-	
		N	ote: on	ly one s	sample fo	or tensile	and one	sample fo	or bend t	est			
Bend Test													
#3 Bar Bend Test Through 180° is Satisfactory													
	(tJ/sql) 0.345	(#) (Hps/ft)	(lbs/ft)	(lps/ft) (lps/ft) (lps/ft) (inch) Nominal (inch) Note: on	(lps/ft)	(kg) 0.345 3 0.359 0.11 0.101 3310	(kg) (kg)	Company Comp	Company Comp	Table Tabl	The color of the	The color of the	The color of the

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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

NESPAK

Punjab Rural Sustainable Water Supply and Sanitation Project (PRSWSSP).

Darya Khan (Package-I)

Reference # CED/TFL <u>6030 (Dr. M Rizwan Riaz)</u>

Reference of the request letter # 4608/PRSWSSP/RE/DYK/304

Dated: 21-11-2024

Dated: 08-11-2024

Tension Test Report (Page -1/1)

Date of Test 22-11-2024 Gauge length 8 inches

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

Sr. No.	Weight	Diameter/ Size		Area (in²)		Yield load	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
3 2	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	H %	Ŗ
1	0.367	3	0.371	0.11	0.108	3870	5100	77600	79120	102200	104300	1.10	13.8	۶. el
2	0.367	3	0.370	0.11	0.108	3870	5060	77600	79140	101400	103500	0.90	11.3	FF Steel
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			No	ote: onl	ly two s	amples f	or tensile	and one	sample f	or bend	test			
							Bend T	est						
#3	Bar Ben	d Test	Γhrough	180° is	s Satisfa	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,

Resident Engineer

NESPAK

Resolving Traffic Congestion Issues at Serena Chowk and Convention Centre Chowk Islamabad.

Reference # CED/TFL 6031 (Dr. M Rizwan Riaz)

Reference of the request letter # SA-527/103/KTSN/01/05

Dated: 21-11-2024

Dated: 11-11-2024

Tension Test Report (Page -1/1)

Date of Test 22-11-2024 Gauge length 8 inches

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

Sr. No.	Weight			Area (in²)		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)	% E	R
1	0.376	3	0.375	0.11	0.110	3690	4640	74000	73690	93000	92700	1.00	12.5	teel
2	0.373	3	0.374	0.11	0.110	3720	4690	74600	74720	94000	94300	1.00	12.5	MughalSteel
3	4.230	10	1.258	1.27	1.243	39000	53400	67700	69140	92700	94700	1.50	18.8	Mug
4	4.195	10	1.253	1.27	1.233	39800	54200	69100	71150	94100	96900	1.40	17.5	
-	1	1	-	1	-	1	-	-	-	-	1	-	1	
-	ı	ı	-	ı	-	ı	-	-	-	-	ı	-	ı	
			No	te: only	y four s	amples f	or tensile	and two	samples	for bend	test	1		
							D 17							
							Bend T	est						

#3 Bar Bend Test Through 180° is Satisfactory

#10 Bar Bend Test Through 180° is Satisfactory

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To,

Resident Engineer

NESPAK

Reconstruction of Cross Drainage Structure of Jahanpur Minor Dammaged During Flood 2022 at RD 250+00 of Qutab Drain.

Reference # CED/TFL <u>6034 (Dr. M Rizwan Riaz)</u>
Reference of the request letter # 4688/13/MAB/03/31
Dated: 21-11-2024
Dated: 18-11-2024

Tension Test Report (Page -1/1)

Date of Test 22-11-2024 Gauge length 8 inches

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

Sr. No.	Weight	Diameter/ Size		Area (in²)		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)	H %	Ŗ
1	0.378	3	0.376	0.11	0.111	3430	5250	68800	68040	105200	104200	1.10	13.8	ne el
2	0.375	3	0.374	0.11	0.110	3380	5170	67800	67640	103600	103500	1.10	13.8	Prime Steel
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	1	1	-	ı	-	-	-	1	-	-	-	-	-	
-	1	1	-	ı	-	-	-	1	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Note: only two samples for tensile and one sample for bend test													
							Bend T	est						
#3	Bar Ben	d Test	Through	180° is	s Satisfa	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,

Manager Procurement Gharibwal Cement Limited. Lahore

Reference # CED/TFL <u>6036 (Dr. M Rizwan Riaz)</u>

Reference of the request letter # GCL/Purchase/UET/TEST/007

Dated: 22-11-2024

Tension Test Report (Page -1/1)

Date of Test 22-11-2024 Gauge length 8 inches

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

Sr. No.	Weight			Area (in²)		Yield load	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
	(lbs/ft)	Nominal	Actual	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	H %	R
1	4.237	32	31.98	1.25	1.245	42400	54600	74780	75040	96297	96700	1.60	20.0	
2	4.252	32	32.04	1.25	1.250	42600	55000	75133	75120	97002	97000	1.50	18.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			N	ote: on	ly two s	amples f	or tensile	and one	sample f	or bend	test	1	ı	
						s Satisfac	Bend T	est est						

32mm Dia Bar Bend Test Through 180° is Satisfactory

I/C Testing Laboratoires UET Lahore, Pakistan.

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To,

Head Construction Site
ABL – UML P-199 & 200
Allied Bank
Construction of ABL Upper Mall Lahore Plot No. 199, 200.

Reference # CED/TFL <u>6038 (Dr. M Rizwan Riaz)</u>

Reference of the request letter # ABL-UML-AMC-QAQC-98

Dated: 22-11-2024

Dated: 22-11-2024

Tension Test Report (Page -1/1)

Date of Test 22-11-2024
Gauge length 8 inches

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

Sr. No.	Weight			Area (in²)		Yield load	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
6 2	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	H %	R
1	0.366	3	0.370	0.11	0.108	3840	5120	77000	78670	102600	104900	1.00	12.5	e e
2	0.372	3	0.373	0.11	0.109	3820	5100	76600	76930	102200	102800	0.90	11.3	FF Steel
-	-	-	-	-	-	-	-	-	-	-	-	_	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			N	ote: on	ly two s	amples f	or tensile	and one	sample f	or bend	test			
							Bend T	est						
#3	Bar Ben	d Test	Γhrough	180° is	s Satisfa	ctory								

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