



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

To,  
 Resident Engineer  
 NESPAK

China – Pakistan Economic Corridor (CPEC), Western Route HAKla (On M1) – Yark (D.I. Khan) Motorway, Package-3 (Tarap to Kot Belian)(Ishtiaq Steel Lahore)

Reference # CED/TFL 32921 (Dr.Usman Akmal)

Dated: 25-03-2019

Reference of the request letter # CPEC/NESPAK/CS/RE/PKG3/19/864

Dated: 23-03-2019

**Tension Test Report** (Page – 1/4)

Date of Test 04-04-2019

Gauge length 2 inches

Description Steel Structure Steel Strip Tensile and Bend Test as per ASTM A36

Sr. No.	Designation		Size of Strip	X Section Area	Yield load	Breaking Load	Yield Stress	Ultimate Stress	Elongation	% Elongation	Remarks
	(mm)										
1	Base Plate	20	25.90x19.60	507.64	17800	24900	343.98	481.19	0.80	40.00	
2		20	26.10x19.60	511.56	17700	24800	339.43	475.58	0.70	35.00	
3	Cross Plate	8	26.30x9.70	255.11	7500	12700	288.41	488.37	0.70	35.00	
4		8	26.30x9.70	255.11	7800	12800	299.94	492.21	0.70	35.00	
5	Stiffener Plate	10	25.20x12.00	302.40	9000	14600	291.96	473.63	0.80	40.00	
6		10	25.20x12.00	302.40	9000	14600	291.96	473.63	0.80	40.00	
7	Channel	6.00	26.00x4.80	124.80	4100	7100	322.28	558.10	0.60	30.00	
8		6.00	26.10x4.80	125.28	4000	6800	313.22	532.47	0.50	25.00	
9	Cross Angle	6.3	13.10x6.25	81.88	3200	4800	383.41	575.12	0.45	22.50	
10		6.30	13.15x6.25	82.19	3200	4900	381.96	584.87	0.60	30.00	
<b>Only Ten Samples for Tensile and Five Samples for Bend Test</b>											
<b>Bend Test</b>											
Strip Taken from Base Plate 20mm Bend Test Through 180° is Satisfactory											
Strip Taken from Cross Plate 8mm Bend Test Through 180° is Satisfactory											
Strip Taken from Stiffener Plate 10mm Bend Test Through 180° is Satisfactory											
Strip Taken from Channel 6mm Bend Test Through 180° is Satisfactory											
Strip Taken from Cross Angle 6.3mm Bend Test Through 180° is Satisfactory											

**I/C Testing Laboratoires**  
**UET Lahore, Pakistan.**

Note:

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To,  
Resident Engineer  
NESPAK  
China – Pakistan Economic Corridor (CPEC), Western Route HAKla (On M1) – Yark (D.I.  
Khan) Motorway, Package-3 (Tarap to Kot Belian)(Ishtiaq Steel Lahore)

Reference # CED/TFL **32921** (Dr.Usman Akmal) Dated: 25-03-2019  
Reference of the request letter # CPEC/NESPAK/CS/RE/PKG3/19/864 Dated: 23-03-2019

**Weight & Size Test Report** (Page – 2/4)

Date of Test 04-04-2019  
Gauge length -----  
Description Plate Weight and Size Test

Sr. No.	Designation		Weight	Length	Width	Weight per Unit Area	Thickness	Remark
	(mm)	(mm)						
1	Base Plate	20	6980	306.5	150.2	151.62	19.80	
2	Cross Plate	8	4153	305.6	177.6	76.52	9.80	
3	Stiffener Plate	10	3935	315.0	110.6	112.95	12.00	
-			-	-	-	-	-	
-			-	-	-	-	-	
-	-		-	-	-	-	-	
-	-		-	-	-	-	-	
-	-		-	-	-	-	-	
-	-		-	-	-	-	-	
<b>Only Three Samples for Test</b>								

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**UET Lahore, Pakistan.**

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China – Pakistan Economic Corridor (CPEC), Western Route HAKla (On M1) – Yark (D.I.  
Khan) Motorway, Package-3 (Tarap to Kot Belian)(Ishtiaq Steel Lahore)

Reference # CED/TFL **32921** (Dr.Usman Akmal) Dated: 25-03-2019  
Reference of the request letter # CPEC/NESPAK/CS/RE/PKG3/19/864 Dated: 23-03-2019

**Weight & Size Test Report** (Page – 3/4)

Date of Test 04-04-2019  
Gauge length -----  
Description Channel Weight and Size Test

Sr. No.	Designation	Weight	Length	Weight per Unit Length	Depth (d)	Flange Width (b <sub>f</sub> )	Flange Thickness (t <sub>f</sub> )	Web Thickness (t <sub>w</sub> )	Remark
	(mm)	(g)	(mm)	(kg/m)	mm	mm	mm	mm	
1	6.0	3251	310.50	10.47	125.20	64.90	11.80	4.50	
-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	
<b>Only One Sample for Test</b>									

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**UET Lahore, Pakistan.**

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To,  
Resident Engineer  
NESPAK  
China – Pakistan Economic Corridor (CPEC), Western Route HAKla (On M1) – Yark (D.I.  
Khan) Motorway, Package-3 (Tarap to Kot Belian)(Ishtiaq Steel Lahore)

Reference # CED/TFL **32921** (Dr.Usman Akmal) Dated: 25-03-2019  
Reference of the request letter # CPEC/NESPAK/CS/RE/PKG3/19/864 Dated: 23-03-2019

**Weight & Size Test Report** (Page – 4/4)

Date of Test 04-04-2019  
Gauge length -----  
Description Cross Angle Weight and Size Test

Sr. No.	Designation	Weight	Length	Weight per Unit Length	L-1	L-2	Thickness	Remark
	(mm)	(g)	(mm)	(kg/m)	(mm)	(mm)	(mm)	
1	6.30	1014	297.0	3.41	38.40	39.60	6.30	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
<b>Only One Sample for Test</b>								

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To,  
 Resident Engineer  
 NESPAK  
 China – Pakistan Economic Corridor (CPEC), Western Route HAKla (On M1) – Yark (D.I. Khan) Motorway, Package-3 (Tarap to Kot Belian)(Shalimar Steel Lahore)

Reference # CED/TFL **32922** (Dr. Qasim Khan) Dated: 25-03-2019  
 Reference of the request letter # CPEC/NESPAK/CS/RE/PKG3/19/865 Dated: 23-03-2019

**Tension Test Report** (Page – 1/2)

Date of Test 04-04-2019  
 Gauge length 2 inches  
 Description Base Plate Steel Strip Tensile and Bend Test as per ASTM A36

Sr. No.	Designation	Size of Strip	X Section Area	Yield load	Breaking Load	Yield Stress	Ultimate Stress	Elongation	% Elongation	Remarks
	(mm)	(mm)	(mm <sup>2</sup> )	(kg)	(kg)	(MPa)	(MPa)	(in)		
1	Base Plate	25.30x19.85	502.21	14200	23900	277.38	466.86	1.00	50.00	
2		25.30x19.90	503.47	14300	24000	278.63	467.63	1.00	50.00	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
<b>Only Two Samples for Tensile and One Sample for Bend Test</b>										
<b>Bend Test</b>										
Strip Taken from Base Plate Bend Test Through 180° is Satisfactory										

**I/C Testing Laboratoires**  
**UET Lahore, Pakistan.**

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To,  
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China – Pakistan Economic Corridor (CPEC), Western Route HAKla (On M1) – Yark (D.I.  
Khan) Motorway, Package-3 (Tarap to Kot Belian)(Ishtiaq Steel Lahore)

Reference # CED/TFL **32922** (Dr. Qasim Khan) Dated: 25-03-2019  
Reference of the request letter # CPEC/NESPAK/CS/RE/PKG3/19/865 Dated: 23-03-2019

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

Date of Test 04-04-2019  
Gauge length -----  
Description Base Plate Weight and Size Test

Sr. No.	Designation	Weight	Length	Width	Weight per Unit Area	Thickness	Remark
	(mm)	(g)	(mm)	(mm)	(kg/m <sup>2</sup> )	(mm)	
1	Base Plate	6980	306.5	150.2	151.62	19.90	
-	-	-	-	-	-	-	
-	-	-	-	-	-	-	
-	-	-	-	-	-	-	
-	-	-	-	-	-	-	
-	-	-	-	-	-	-	
-	-	-	-	-	-	-	
-	-	-	-	-	-	-	
<b>Only One Sample for Test</b>							

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**University of Engineering and Technology Lahore, 54890**  
**Pakistan. Ph: 92-42-99029202**

To,  
M/S Riaz-ud-Din Engineering  
Lahore

Reference # CED/TFL **32962** (Dr. Qasim Khan)  
Reference of the request letter # Nil

Dated: 29-03-2019  
Dated: 29-03-2019

**Tension Test Report** (Page – 1/3)

Date of Test 04-04-2019  
Gauge length 2 inches  
Description GI Sheet Steel 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)	(mm <sup>2</sup> )	(kg)	(kg)	(MPa)	(MPa)	(in)		
1	2	42.10x2.00	84.20	4000	4600	466.03	535.94	0.40	20.00	
2		42.10x2.00	84.20	4200	4800	489.33	559.24	0.40	20.00	
	.	.	.	.	.	.	.	.	.	
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.	.	.	.	.	.	.	.	.	.	
.	.	.	.	.	.	.	.	.	.	
<b>Only Two Samples for Tensile Test</b>										
<b>Bend Test</b>										

**I/C Testing Laboratoires**  
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**Pakistan. Ph: 92-42-99029202**

To,  
M/S Riaz-ud-Din Engineering  
Lahore

Reference # CED/TFL **32962** (Dr. Qasim Khan)  
Reference of the request letter # Nil

Dated: 29-03-2019

Dated: 29-03-2019

**Tension Test Report** (Page – 2/3)

Date of Test 04-04-2019  
Gauge length 2 inches  
Description Steel 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)	(mm <sup>2</sup> )	(kg)	(kg)	(MPa)	(MPa)	(in)		
1	4	42.30x3.85	162.86	6800	8100	409.62	487.92	0.60	30.00	
2		42.30x3.85	162.86	6800	8200	409.62	493.95	0.60	30.00	
3	5	42.30x4.80	203.04	9900	11500	478.32	555.63	0.50	25.00	
4		42.30x4.80	203.04	9800	11300	473.49	545.97	0.50	25.00	
5	6	42.30x6.00	253.80	10200	13100	394.26	506.35	0.70	35.00	
6		42.30x6.00	253.80	9900	12800	382.66	494.75	0.70	35.00	
<b>Only Six Samples for Tensile Test</b>										
<b>Bend Test</b>										

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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 Riaz-ud-Din Engineering  
Lahore

Reference # CED/TFL **32962** (Dr. Qasim Khan)  
Reference of the request letter # Nil

Dated: 29-03-2019

Dated: 29-03-2019

**Tension Test Report** (Page – 3/3)

Date of Test 04-04-2019  
Gauge length 2 inches  
Description GI Sheet Steel 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)	(mm <sup>2</sup> )	(kg)	(kg)	(MPa)	(MPa)	(in)		
1	8	42.30x7.90	334.17	13200	16700	387.50	490.25	0.70	35.00	
2		42.30x7.90	334.17	13400	16900	393.37	496.12	0.70	35.00	
3	10	42.30x10.00	423.00	16200	23300	375.70	540.36	0.70	35.00	
4		42.30x10.00	423.00	17400	24600	403.53	570.51	0.70	35.00	
5	12	42.40x12.10	513.04	18500	28400	353.74	543.05	0.80	40.00	
6		42.40x12.10	513.04	19400	29700	370.95	567.90	0.80	40.00	
<b>Only Six Samples for Tensile Test</b>										
<b>Bend Test</b>										

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**Pakistan. Ph: 92-42-99029202**

To,  
 Executive Engineer/DOT  
 For Project Director/DOT  
 Pakistan Railways, Lahore  
 Construction of 04 No. Class-III Staff Quarters (BPS-11) on North Side of Quarter No. 137-A-B  
 at Sahiwal (Mul End) in Connection with Doubling of Track on KWL-RND Section  
 Reference # CED/TFL **32984** (Dr. Usman Akmal) Dated: 03-04-2019  
 Reference of the request letter # 211-W/301-C/DOT/KWL-RND Dated: 01-04-2019

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

Date of Test 04-04-2019  
 Gauge length 8 inches  
 Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size (inch)		Area (in <sup>2</sup> )		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal	Actual	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.349	3/8	0.361	0.11	0.103	2800	4500	56200	60160	90200	96700	1.10	13.8	
2	0.346	3/8	0.360	0.11	0.102	2800	4900	56200	60770	98200	106400	0.90	11.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only two samples for tensile and one sample for bend test</b>														
<b>Bend Test</b>														
3/8" Dia Bar Bend Test Through 180° is Satisfactory														

**I/C Testing Laboratoires**  
**UET Lahore, Pakistan.**

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**Pakistan. Ph: 92-42-99029202**

To,  
M/S Riaz Construction Company  
Lahore  
(TCF High School, Kot Radha Kishan)

Reference # CED/TFL **32985** (Dr. Usman Akmal)  
Reference of the request letter # Nil

Dated: 03-04-2019  
Dated: 03-04-2019

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

Date of Test 04-04-2019  
Gauge length 8 inches  
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size		Area (in <sup>2</sup> )		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal (#)	Actual (inch)	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.382	3	0.378	0.11	0.112	3600	6000	72200	70690	120300	117900	0.80	10.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only one sample for tensile and one sample for bend test</b>														
Bend Test														
#3 Bar Bend Test Through 180° is Satisfactory														

**I/C Testing Laboratoires**  
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To,  
M/S Ambition Apparel  
20-km Ferozpur Road Glaxo Town, Lahore

Reference # CED/TFL **32987** (Dr. Usman Akmal)  
Reference of the request letter # Nil

Dated: 03-04-2019  
Dated: 01-04-2019

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

Date of Test 04-04-2019  
Gauge length 8 inches  
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size		Area (in <sup>2</sup> )		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal (#)	Actual (inch)	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.375	3	0.375	0.11	0.110	3100	4700	62200	62010	94200	94100	1.40	17.5	ASI
2	0.372	3	0.373	0.11	0.109	3600	4900	72200	72480	98200	98700	0.90	11.3	KSR
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Note: only two samples for tensile and two samples for bend test</b>														
Bend Test														
#3 Bar Bend Test Through 180° is Satisfactory														
#3 Bar Bend Test Through 180° is Satisfactory														

**I/C Testing Laboratoires**  
**UET Lahore, Pakistan.**

Note:

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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 Shengli Trading Company  
DHA, Lahore  
((PKM Multan to Sukkur)(CSCEC)

Reference # CED/TFL **32988** (Dr. Ali Ahmed)  
Reference of the request letter # Nil

Dated: 03-04-2019  
Dated: 03-04-2019

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

Date of Test 04-04-2019  
Gauge length -----  
Description Iron Fence Wire Tensile Test

Sr. No.	Weight (kg/m)	Diameter/ size		Area (mm <sup>2</sup> )		Yield load (kN)	Breaking Load (kN)	Yield Stress (MPa) Actual	Ultimate Stress (MPa) Actual	Remarks
		Nominal (mm)	Actual (mm)	Nominal	Actual					
1	0.075	-----	3.49	-----	9.6	-----	6.2	-----	646	
2	0.076	-----	3.52	-----	9.7	-----	5.97	-----	615	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
<b>Note: only two samples for tensile test</b>										
Bend Test										

**I/C Testing Laboratoires**  
**UET Lahore, Pakistan.**

Note:

- 1- You can See your reports On Internet in the following web site  
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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 Shengli Trading Company  
DHA, Lahore  
(PKM Multan to Sukkur)(CSCEC)

Reference # CED/TFL **32988** (Dr. Ali Ahmed)  
Reference of the request letter # Nil

Dated: 03-04-2019  
Dated: 03-04-2019

**Diameter Test Report** (Page – 2/2)

Date of Test                04-04-2019  
Gauge length                -----  
Description                 Iron Fence Wire Size Test

Sr. No.	Designation	Diameter	Remark
		(mm)	
1	Iron Fence Wire	3.40	
-	-	-	
-	-	-	
-	-	-	
-	-	-	
-	-	-	
-	-	-	
<b>Only One Sample for Test</b>			

**I/C Testing Laboratoires**  
**UET Lahore, Pakistan.**

**Note:**

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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**

Ref: CED/TFL/04/32989

Dated: 03-04-19

To  
Chief Resident Engineer  
Osmani & Company  
Swat Motorway Project

Subject: - CALIBRATION OF HYDRAULIC JACK (MARK: TFL/04/32989) (Page -1/2)

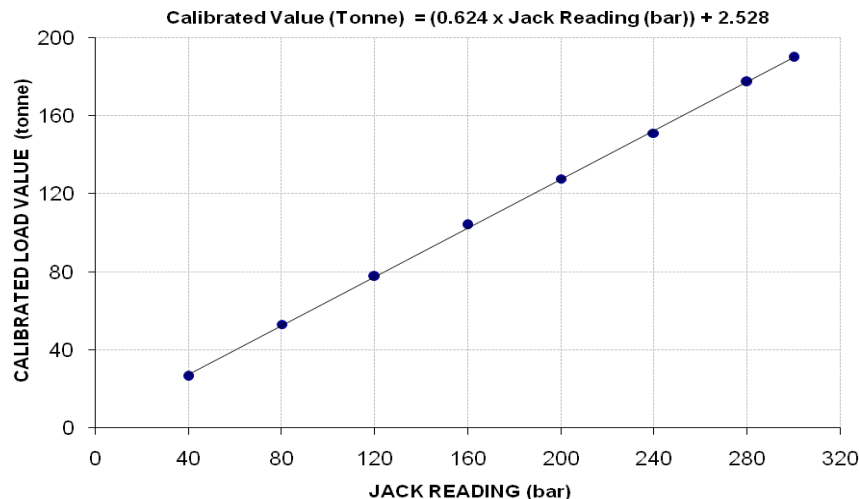
Reference to your Letter No. 277/CRE/QAT/SMP/2019, Dated: 30/03/2019 on the subject cited above. One Hydraulic Jack (Jack No 313, Gauge No. AES-313) as received by us has been calibrated. The results are tabulated as under:

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

Hydraulic Jack Reading (bar)		40	80	120	160	200	240	280	300
Calibrated Load	(Kg)	26400	53000	77600	104000	127800	151200	177400	190000
	Tonne	26.40	53.00	77.60	104.00	127.80	151.20	177.40	190.00
Calibrated Pressure (bar)		43.00	86.33	126.40	169.40	208.16	246.28	288.95	309.48

1 Tonne = 1000 Kg, The Ram Area of Jack = 602.09 cm<sup>2</sup>

**Calibration Curve For Jack No. AES 313**



**I/C Testing Laboratoires**  
**UET Lahore, Pakistan.**

Note:

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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**

Ref: CED/TFL/04/32989

Dated: 03-04-19

To  
Chief Resident Engineer  
Osmani & Company  
Swat Motorway Project

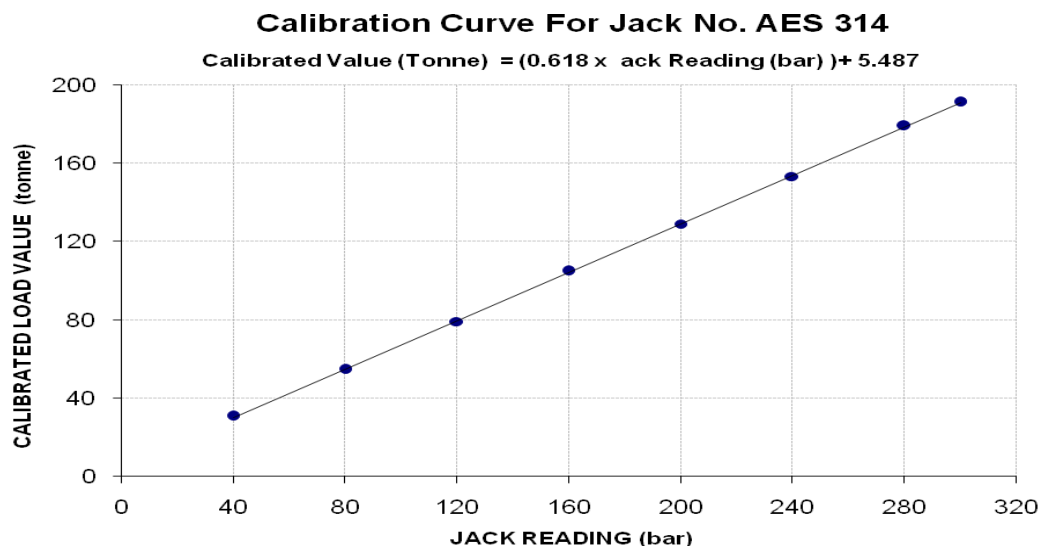
Subject: - CALIBRATION OF HYDRAULIC JACK (MARK: TFL/04/32989) (Page -2/2)

Reference to your Letter No. 277/CRE/QAT/SMP/2019, Dated: 30/03/2019 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 Reading (bar)		40	80	120	160	200	240	280	300
Calibrated Load	(Kg)	30800	54600	79200	105000	129000	153200	179200	191200
	Tonne	30.80	54.60	79.20	105.00	129.00	153.20	179.20	191.20
Calibrated Pressure (bar)		50.17	88.93	129.00	171.03	210.12	249.54	291.89	311.43

1 Tonne = 1000 Kg, The Ram Area of Jack = 602.09 cm<sup>2</sup>



**I/C Testing Laboratories**  
**UET Lahore, Pakistan.**

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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,  
 General Manager (Projects)  
 A.S Enterprises  
 (Style Textile Mills Ltd)(AA Associates)(Afco)

Reference # CED/TFL **32990** (Dr. Usman Akmal)  
 Reference of the request letter # USD/ASE/01

Dated: 03-04-2019  
 Dated: 03-04-2019

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

Date of Test 04-04-2019  
 Gauge length 8 inches  
 Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size (mm)		Area (in <sup>2</sup> )		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal	Actual	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.421	10	10.08	0.11	0.124	4600	6000	92200	81920	120300	106900	0.90	11.3	
2	0.416	10	10.03	0.11	0.122	5000	6100	100200	90070	122300	109900	0.90	11.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only two samples for tensile and one sample for bend test</b>														
Bend Test														
10mm Dia Bar Bend Test Through 180° is Satisfactory														

**I/C Testing Laboratoires**  
**UET Lahore, Pakistan.**

Note:

- 1- You can See your reports On Internet in the following web site  
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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,  
 General Manager (Projects)  
 A.S Enterprises  
 (US Apparel & Textile Mills Ltd)(US & Dynamo(AA Associates)(Afco)

Reference # CED/TFL **32991** (Dr. Usman Akmal)  
 Reference of the request letter # US/ASE/14

Dated: 03-04-2019  
 Dated: 01-04-2019

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

Date of Test 04-04-2019  
 Gauge length 8 inches  
 Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size (mm)		Area (in <sup>2</sup> )		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal	Actual	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.407	10	9.92	0.11	0.120	4200	5500	84200	77320	110200	101300	0.80	10.0	
2	0.401	10	9.84	0.11	0.118	4200	5500	84200	78560	110200	102900	0.90	11.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only two samples for tensile and one sample for bend test</b>														
Bend Test														
10mm Dia Bar Bend Test Through 180° is Satisfactory														

**I/C Testing Laboratoires**  
**UET Lahore, Pakistan.**

Note:

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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,  
 Additional Director Development  
 DHA Phase-XI (Rahbar)  
 Construction of DHGA Girls School at Block-'B' Sector-I, DHA Phase-XI (Rahbar)

Reference # CED/TFL **32992, 993** (Dr. Usman Akmal) Dated: 03-04-2019  
 Reference of the request letter # 700/3/Girls School/Ph-XI/Projs/1205 Dated: 03-04-2019

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

Date of Test 04-04-2019  
 Gauge length 8 inches  
 Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size (inch)		Area (in <sup>2</sup> )		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal	Actual	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.368	3/8	0.371	0.11	0.108	3100	4800	62200	63210	96200	97900	1.30	16.3	Moiz Steel
2	0.374	3/8	0.374	0.11	0.110	3100	4850	62200	62210	97200	97400	1.20	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Note: only two samples for tensile and one sample for bend test</b>														
Bend Test														
3/8" Dia Bar Bend Test Through 180° is Satisfactory														

**I/C Testing Laboratoires**  
**UET Lahore, Pakistan.**

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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,  
Resident Engineer  
Al-Imam Enterprises Pvt. Ltd  
Construction of Penta Square, Phase-V, D.H.A, Lahore

Reference # CED/TFL **32994** (Dr. M Rizwan Riaz)  
Reference of the request letter # Al-Imam/746/PS-1/DHA/LHE/827

Dated: 04-04-2019  
Dated: 03-04-2019

**Weight & Size Test Report** (Page – 1/1)

Date of Test 04-04-2019  
Gauge length -----  
Description G.I Pipe Weight and Size Test

Sr. No.	Designation	Weight	Length	Weight per Unit Length	External Diameter	Internal Diameter	Thickness	Remark
	(mm)	(g)	(cm)	(kg/m)	(mm)	(mm)	(mm)	
1	25	1403	60.90	2.30	33.7	27.7	3.00	
2	40	2083	60.90	3.42	47.9	41.9	3.00	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
<b>Only Two Samples for Test</b>								

**I/C Testing Laboratories**  
**UET Lahore, Pakistan.**

Note:

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