



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 Bilal Corporation
Lahore

Reference # CED/TFL **34135** (Dr. Qasin Khan)
Reference of the request letter # Nil

Dated: 05-11-2019

Dated: 05-11-2019

Tension Test Report (Page – 1/2)

Date of Test 08-11-2019
Gauge length 2 inches
Description Clump 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 ²)	(kg)	(kg)	(MPa)	(MPa)	(in)		
1	Clump	18.40x1.60	29.44	760	1160	253.25	386.54	0.80	40.00	
.	
.	
.	
.	
.	
Only One Sample for Tensile Test										
Bend Test										

I/C Testing Laboratoires
UET Lahore, Pakistan.

Note:

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To,
M/S Bilal Corporation
Lahore

Reference # CED/TFL **34135** (Dr. Qasin Khan)
Reference of the request letter # Nil

Dated: 05-11-2019
Dated: 05-11-2019

Size Test Report (Page – 2/2)
Date of Test 08-11-2019
Gauge length -----
Description Clump & Bolt Size Test

Dia of Clamp (Internal) = 90.20 mm
Width of Clamp = 23.40 mm
Thickness of Clamp = 1.60 mm

I/C Testing Laboratoires
UET Lahore, Pakistan.

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Ref: CED/TFL/11/34139

Dated: 06-11-19

Date of Test: 08-11-19

To,
Project Manager
Deepwell Corporation (Pvt) Ltd
Sky Gardens Lahore

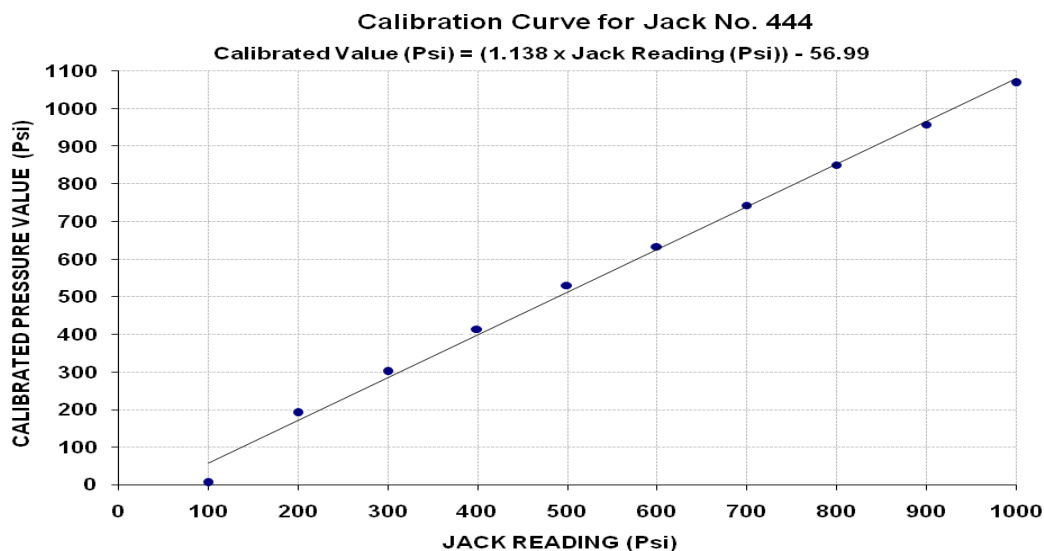
Subject: - CALIBRATION OF HYDRAULIC JACK WITH PRESSURE GAUGE
(MARK: TFL/11/34139) (Page # 1/1)

Reference to your Letter No. Nil, Dated: 06/11/2019 on the subject cited above. One Hydraulic Jack No. 444 with Pressure Gauge as received by us has been calibrated. The results are tabulated as under:

Total Range : Zero - 6000 (Psi)
Calibrated Range : Zero - 1000 (Psi)

Hydraulic Jack Reading (Psi)	100	200	300	400	500	600	700	800	900	1000
Calibrated Load (kg)	800	32900	51900	71300	91400	109100	128100	146600	165300	184300
Calibrated Pressure (Psi)	4.64	190.81	301.00	413.51	530.08	632.74	742.93	850.22	958.67	1068.87

The Ram Area of Jack = 380.13 in²



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STRUCTURAL ENGINEERING DIVISION
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Pakistan. Ph: 92-42-99029202

To,
M/S Darab Enterprises
Kharian Cantt
(Pak Army Fence Project)

Reference # CED/TFL **34140** (Dr. Qasin Khan)
Reference of the request letter # Nil

Dated: 06-11-2019
Dated: 06-11-2019

Tension Test Report (Page – 1/2)

Date of Test 08-11-2019
Gauge length 2 inches
Description Clamp 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 ²)	(kg)	(kg)	(MPa)	(MPa)	(in)		
1	Clamp	14.10x1.60	22.56	720	1000	313.09	434.84	0.50	25.00	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
Only One Sample for Tensile Test										
Bend Test										

I/C Testing Laboratoires
UET Lahore, Pakistan.

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To,
M/S Darab Enterprises
Kharian Cantt
(Pak Army Fence Project)

Reference # CED/TFL **34140** (Dr. Qasin Khan)
Reference of the request letter # Nil

Dated: 06-11-2019
Dated: 06-11-2019

Size Test Report (Page – 2/2)

Date of Test 08-11-2019
Gauge length -----
Description Clamp & Bolt Size Test

Dia of Clamp (Internal) = 89.20 mm
Width of Clamp = 24.20 mm
Thickness of Clamp = 1.60 mm
Thickness of Bolt = 10.00 mm

I/C Testing Laboratoires
UET Lahore, Pakistan.

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STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
Department of Civil Engineering
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To,
 Senior Resident Engineer
 ProMag Pvt Ltrd
 Civil Infrastructure Works Main Truk Sewer Package II DHA Multan
 (SMS Steel)

Reference # CED/TFL **34141** (Dr. Qasim Khan)
 Reference of the request letter # CRE/Sec-D/365

Dated: 07-11-2019
 Dated: 31-10-2019

Tension Test Report (Page -1/2)

Date of Test 08-11-2019
 Gauge length 8 inches
 Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A496

Sr. No.	Weight (Kg/m)	Diameter/ Size (mm)		Area (mm ²)		Yield load (kg)	Breaking Load (kg)	Yield Stress (Mpa)		Ultimate Stress (Mpa)		Remarks
		Nominal	Actual	Nominal	Actual			Nominal	Actual	Nominal	Actual	
1	0.171	5	5.27	19.40	21.84	1120	1520	566	503	769	683	
2	0.169	5	5.23	19.40	21.48	1160	1560	587	530	789	713	
3	0.268	6	6.59	32.30	34.16	1800	2360	547	517	717	678	
4	0.258	6	6.47	32.30	32.91	1600	2160	486	477	656	644	
5	0.412	8	8.17	51.60	52.43	1920	2720	365	359	517	509	
6	0.410	8	8.15	51.60	52.19	2440	3400	464	459	646	639	
Note: only six samples for tensile and three samples for bend test												
Bend Test												
5mm Dia Bar Bend Test Through 180° is Satisfactory												
6mm Dia Bar Bend Test Through 180° is Satisfactory												
8mm 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,
 Senior Resident Engineer
 ProMag Pvt Ltrd
 Civil Infrastructure Works Main Truk Sewer Package II DHA Multan
 (Amreli Steel)

Reference # CED/TFL **34141** (Dr. Qasim Khan)
 Reference of the request letter # CRE/Sec-D/365

Dated: 07-11-2019
 Dated: 31-10-2019

Tension Test Report (Page -2/2)

Date of Test 08-11-2019
 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 ²)		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	0.403	3	0.388	0.11	0.118	4500	5600	90200	83720	112300	104200	1.00	12.5	
2	0.405	3	0.389	0.11	0.119	4500	5600	90200	83310	112300	103700	1.00	12.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
#3 Bar Bend Test Through 180° is Satisfactory														

I/C Testing Laboratoires
UET Lahore, Pakistan.

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STRUCTURAL ENGINEERING DIVISION
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To,
M/S Defence Housing Authority.
Lahore Cantt
(Const of Mosque Sector-D, DHA Ph-VI (M/s SCION))

Reference # CED/TFL **34143** (Dr. Qasim Khan)
Reference of the request letter # 408/241/E/Lab/761/510

Dated: 07-11-2019
Dated: 07-11-2019

Tension Test Report (Page -1/1)

Date of Test 08-11-2019
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 ²)		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	0.370	3	0.372	0.11	0.109	3200	5000	64200	64780	100200	101300	1.30	16.3	Ittefaq Steel
2	0.388	3	0.381	0.11	0.114	3500	5500	70200	67640	110200	106300	1.30	16.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
#3 Bar Bend Test Through 180° is Satisfactory														

I/C Testing Laboratoires
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To,
 Resident Engineer
 NESPAK
 Construction of Retention Ponds at Package-III, Depot
 (Super Joint SJ)

Reference # CED/TFL **34144** (Dr. Qasim Khan)
 Reference of the request letter # 4024/NESPAK/TEST/11

Dated: 07-11-2019
 Dated: 06-11-2019

Tension Test Report (Page -1/1)

Date of Test 08-11-2019
 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 ²)		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	0.368	3	0.371	0.11	0.108	3700	5250	74200	75320	105200	106900	1.00	12.5	
2	0.368	3	0.371	0.11	0.108	3900	5400	78200	79480	108200	110100	1.00	12.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
#3 Bar Bend Test Through 180° is Satisfactory														

I/C Testing Laboratoires
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To,
M.E
M/S AS Enterprises
Style Textile Mill Raiwind
(AA Associates)(Afco)

Reference # CED/TFL **34145** (Dr. Qasim Khan)
Reference of the request letter # USD/ASE/16

Dated: 07-11-2019
Dated: 07-11-2019

Tension Test Report (Page -1/1)

Date of Test 08-11-2019
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 ²)		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	0.422	10	10.09	0.12	0.124	4300	5200	78998	76480	95533	92500	1.20	15.0	
2	0.423	10	10.11	0.12	0.124	4300	5300	78998	76210	97370	94000	1.10	13.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
10mm Dia Bar Bend Test Through 180° is Satisfactory														

I/C Testing Laboratoires
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To,
 Chief Engineer (HVDC) NTDC
 National Transmission & Despatch Company Ltd
 (Lot-02 & 03)(Agha Steel)

Reference # CED/TFL **34149** (Dr. Qasim Khan)
 Reference of the request letter # 7730-33/CE/HVDC/NTDC/LHR

Dated: 08-11-2019
 Dated: 06-11-2019

Tension Test Report (Page -1/1)

Date of Test 08-11-2019
 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 ²)		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	0.402	3	0.388	0.11	0.118	4500	5500	90200	83950	110200	102600	0.90	11.3	
2	0.403	3	0.388	0.11	0.118	4400	5400	88200	81860	108200	100500	1.10	13.8	
3	0.391	3	0.383	0.11	0.115	4100	5000	82200	78530	100200	95800	1.00	12.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only three samples for tensile and three samples for bend test														
Bend Test														
#3 Bar Bend Test Through 180° is Satisfactory														
#3 Bar Bend Test Through 180° is Satisfactory														
#3 Bar Bend Test Through 180° is Satisfactory														

Witness by M Umair Aslam (DM (HVDC) NTDC), M. Abbas (OE) & Hassan Afzal (CET)

I/C Testing Laboratories
UET Lahore, Pakistan.

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