STRUCTURAL ENGINEERING DIVISION

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

To,
Project Coordinator
TCC Construction, Multan
Utility Building Extension Green Field Project PEPSICO Multan

Reference # CED/TFL **33294** (Dr.Waseem Abbas) Dated: 27-05-2019
Reference of the request letter # Nil Dated: 23-05-2019

Tension Test Report (Page -1/1)

Date of Test 28-05-2019
Gauge length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight	Diameter/ Size (mm)		Area (in^2)		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)		
1	0.414	10	9.99	0.11	0.122	4800	6300	96200	87020	126300	114300	0.70	8.8	
2	0.411	10	9.96	0.11	0.121	4900	6200	98200	89380	124300	113100	0.70	8.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Note: only two samples for tensile and one sample for bend test

Bend Test

10mm Dia Bar Bend Test Through 180º is Satisfactory

I/C Testing Laboratoires
UET Lahore, Pakistan.

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To,
M/S Sui Northern Gas Pipelines Limited
Lahore
(Construction of Boundary Wall at Repeater Station A-5 Mauza Kheropur Daha Teh, Ahmedpur East Dist. Bahawalpur)

Reference # CED/TFL **33295** (Dr. Waseem Assab) Dated: 27-05-2019
Reference of the request letter # CC/107/B.W/BWP/A-5 Dated: 24-05-2019

Tension Test Report (Page -1/1)

Date of Test 28-05-2019
Gauge length 8 inches
Description Deformed Steel Bar Tensile Test as per ASTM-A615

Sr. No.	Weight	Diameter/ Size (inch)		Area (in^2)		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)		
1	0.375	3/8	0.375	0.11	0.110	3100	5000	62200	61980	100200	100000	1.10	13.8	
2	0.373	3/8	0.373	0.11	0.110	3100	5000	62200	62370	100200	100600	1.10	13.8	
3	0.377	3/8	0.375	0.11	0.111	3000	4900	60200	59730	98200	97600	1.20	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only three samples for tensile test														
Bend Test														

I/C Testing Laboratoires
UET Lahore, Pakistan.

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To,
Executive Engineer PWD
PHE Division Bhimber A.K
(Water Supply Scheme Bhimber Town Phase-IV District Bhimber A.K)

Reference # CED/TFL **33296** (Dr.Waseem Abbas) Dated: 27-05-2019
Reference of the request letter # 430-31 Dated: 20-05-2019

Tension Test Report (Page -1/1)

Date of Test 28-05-2019
Gauge length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight	Diameter/ Size (inch)		Area (in^2)		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)		
1	0.369	3/8	0.372	0.11	0.108	3100	5300	62200	63010	106200	107800	0.90	11.3	
2	0.369	3/8	0.371	0.11	0.108	3100	5200	62200	63070	104200	105800	0.90	11.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
3/8" Dia Bar Bend Test Through 180º is Satisfactory														

I/C Testing Laboratoires
UET Lahore, Pakistan.

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Ref: CED/TFL/05/33298 Dated: 27-05-19

To
M/S Bemsol Private Limited
Canal Bank Road, Lahore

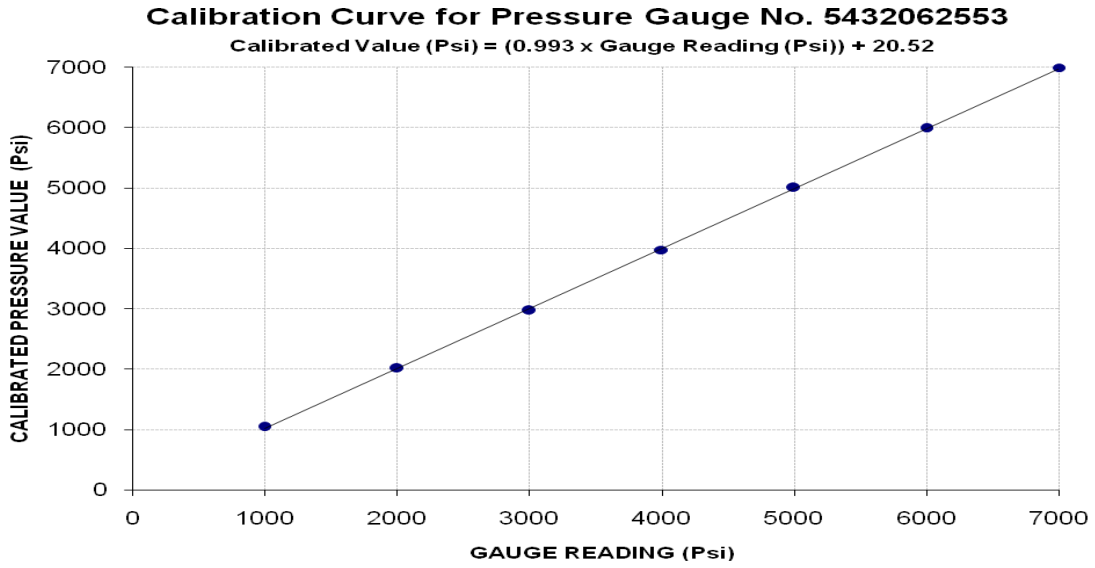
Subject: **- CALIBRATION OF PRESSURE GAUGE (MARK: TFL/05/33298)**

Reference to your Letter No. BPL/UET/302, Dated: 27/05/2019 on the subject cited above. One Pressure Gauge (No. 5432062553) as received by us has been calibrated. The results are tabulated as under:

Total Range : Zero - 10000 (Psi)
Calibrated Range : Zero - 7000 (Psi)

Pressure Gauge Reading (Psi)	**1000**	**2000**	**3000**	**4000**	**5000**	**6000**	**7000**
Calibrated Load (kg)	**14500**	**28000**	**41300**	**55300**	**69600**	**83300**	**97300**
Calibrated Pressure (Psi)	**1041.58**	**2011.33**	**2966.72**	**3972.38**	**4999.60**	**5983.72**	**6989.38**

The Ram Area use for Calibration = 198 cm^2



I/C Testing Laboratoires
UET Lahore, Pakistan.

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To,
Manager QA/QC Department
Bahria Town Private Limited, Lahore
Masjid, School at Bahria Orchard 4
(AGS)

Reference # CED/TFL **33301** (Dr. Waseem Abbas) Dated: 28-05-2019
Reference of the request letter # QA/QC-Steel-1435 Dated: 27-05-2019

Tension Test Report (Page -1/1)

Date of Test 28-05-2019
Gauge length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight	Diameter/ Size		Area (in^2)		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)		
1	0.361	3	0.367	0.11	0.106	3700	4700	74200	76920	94200	97800	1.10	13.8	
2	0.360	3	0.367	0.11	0.106	4000	4700	80200	83400	94200	98000	0.90	11.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
#3 Bar Bend Test Through 180º is Satisfactory														

I/C Testing Laboratoires
UET Lahore, Pakistan.

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Ref: CED/TFL/05/33304 Dated: 28-05-19

To
M/S Wellcon Engineers
Lahore
(870 MW Suki Kinari Hydropower Project)(Mr. Deng Siwen Project Manager, CGGC SK Project)

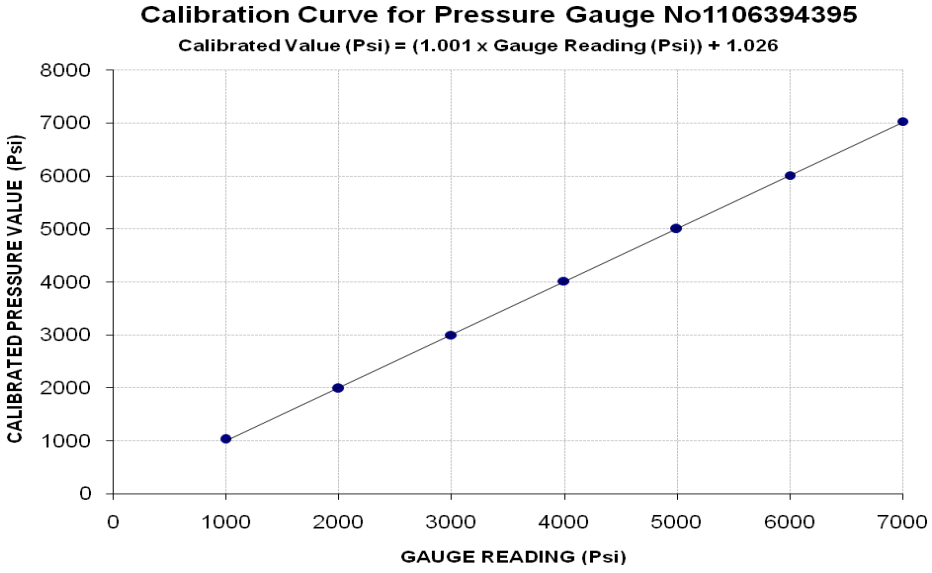
Subject: **- CALIBRATION OF PRESSURE GAUGE (MARK: TFL/05/33304)** (Page # 1/2)

Reference to your Letter No. Nil, Dated: 28/05/2019 on the subject cited above. One Pressure Gauge (EN 837-1) (No. 1106394395) as received by us has been calibrated. The results are tabulated as under:

Total Range : Zero - 10000 (Psi)
Calibrated Range : Zero - 7000 (Psi)

Pressure Gauge Reading (Psi)	**1000**	**2000**	**3000**	**4000**	**5000**	**6000**	**7000**
Calibrated Load (kg)	**14300**	**27600**	**41700**	**55900**	**69600**	**83600**	**97800**
Calibrated Pressure (Psi)	**1027.22**	**1982.60**	**2995.45**	**4015.48**	**4999.60**	**6005.27**	**7025.30**

The Ram Area use for Calibration = 198 cm^2



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UET Lahore, Pakistan.

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Ref: CED/TFL/05/33304 Dated: 28-05-19

To
M/S Wellcon Engineers
Lahore
(870 MW Suki Kinari Hydropower Project)(Mr. Deng Siwen Project Manager, CGGC SK Project)

Subject: **- CALIBRATION OF DIAL GAUGES (MARK: TFL/05/33304)** (Page # 2/2)

Reference to your Letter No. Nil, dated: 28/05/2019 on the subject cited above. Three Dial Gauges as received by us have been calibrated on standard calibration device. The results are tabulated as under.

Total Range : Zero - 50 (mm)
Calibrated Range : Zero - 30 (mm)

Standard Reading	Dial Gauge Readings		
	Dial Gauge No. I (6615345)	Dial Gauge No. II (6615430)	Dial Gauge No. III (6615119)
200	199	197	198
400	397	395	399
600	595	596	598
800	794	792	796
1000	993	992	995
1200	1194	1191	1196
1400	1394	1390	1396
1600	1594	1591	1595
1800	1794	1792	1794
2000	1993	1991	1993
2200	2193	2193	2194
2400	2393	2393	2391
2600	2592	2595	2592
2800	2791	2791	2791
3000	2990	2992	2990

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