

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

Ref: <u>CED/TFL/11/6047</u> Dated of Test: <u>03-12-2024</u> Dated: 27-11-2024

То

Resident Engineer NESPAK Rain Water Management Drainage Arrangement for Sore Point at Nishter Park Sports Complex (Qaddafi Stadium), Lahore.

Subject: TESTING OF R.C.C. PIPE [ASTM-C76 - 08a]

Reference to your letter No. 3882/MZA/420, dated 18.11.2024 on the

subject cited above. One R.C.C. Pipe as received by us has been tested. The results are

tabulated as under.

Sr. No	Nominal Size	Total Length	Loaded Length	External Diameter	Internal Diameter	Wall Thickness	Proof load	Ultimate Load	Proof Stress	Ultimate Stress
•	(inch)	(foot)	(foot)	(inch)	(inch)	(inch)	(kg)	(kg)	Pound/Linear foot/foot	Pound/Linear foot/foot
1	12	7.74	7.34	15.87	11.98	1.94	11800	14500	3551	4364

I/C Testing Laboratoires UET Lahore, Pakistan.

Note:

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

Ref: <u>CED/TFL/11/6059</u> Dated of Test: <u>03-12-2024</u> Dated: 28-11-2024

То

Material / QC Engineer NESPAK Punjab Rural Municipal Services Company Procurement of Civil Works, South-III, Tehsil Taunsa Package TAU-III (Village: Sonra & Dona)

Subject: TESTING OF R.C.C. PIPE [ASTM-C76 - 08a]

Reference to your letter No. NESPAK/PRSWSSP/TAUNSA/ME/417,

dated 04.11.2024 on the subject cited above. Three R.C.C. Pipes as received by us have

been tested. The results are tabulated as under.

Sr. No	Nominal Size	Total Length	Loaded Length	External Diameter	Internal Diameter	Wall Thickness	Proof load	Ultimate Load	Proof Stress	Ultimate Stress
•	(inch)	(foot)	(foot)	(inch)	(inch)	(inch)	(kg)	(kg)	Pound/Linear foot/foot	Pound/Linear foot/foot
1	12	7.78	7.37	15.98	12.07	1.96	12500	15200	3719	4523
2	12	7.79	7.38	16.14	11.99	2.07	12200	16800	3648	5024
3	12	7.78	7.35	15.94	12.08	1.93	11900	15000	3546	4470

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/11/6063</u> Dated of Test: 03-12-2024 Dated: 29-11-2024

То

GM QA/QC Vision Developers Pvt. Ltd. Park View City Lahore.

Subject: TESTING OF R.C.C. PIPE

Reference to your letter No. Nil, dated 29.11.2024 on the subject cited above. Two R.C.C. Pipes as received by us have been tested. The results are tabulated as under.

Sr. No	Nominal Size	Total Length	Loaded Length	External Diameter	Internal Diameter	Wall Thickness	Proof load	Ultimate Load	Proof Stress	Ultimate Stress
•	(inch)	(foot)	(foot)	(inch)	(inch)	(inch)	(kg)	(kg)	Pound/Linear foot/foot	Pound/Linear foot/foot
1	9	7.75	7.28	12.56	9.44	1.56	11500	14300	4430	5508
2	9	7.83	7.28	12.60	9.02	1.79	8000	13000	3225	5241

I/C Testing Laboratoires UET Lahore, Pakistan.

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AUDIC CONTRACTOR

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/11/6065</u> Dated of Test: <u>03-12-2024</u> Dated: 29-11-2024

То

Resident Engineer NESPAK Improvement of Infrastructure in Mohlanwal Housing Scheme Lahore (Package-3)

Subject: TESTING OF R.C.C. PIPE [ASTM-C76 - 08a] (Page -1/1)

Reference to your letter No. 2599/13/RK/05/MWL/P-3/288, dated

18.11.2024 on the subject cited above. Two R.C.C. Pipes as received by us have been

tested. The results are tabulated as under.

Sr. No	Nominal Size	Total Length	Loaded Length	External Diameter	Internal Diameter	Wall Thickness	Proof load	Ultimate Load	Proof Stress	Ultimate Stress
•	(inch)	(foot)	(foot)	(inch)	(inch)	(inch)	(kg)	(kg)	Pound/Linear foot/foot	Pound/Linear foot/foot
1	12	7.80	7.32	16.14	11.96	2.09	12500	15500	3779	4686
2	15	7.81	7.35	19.61	14.90	2.35	7500	15000	1812	3624

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

<u>Ref: CED/TFL/11/6068</u>

Dated: 29-11-2024

Dated of Test: 03-12-2024

То

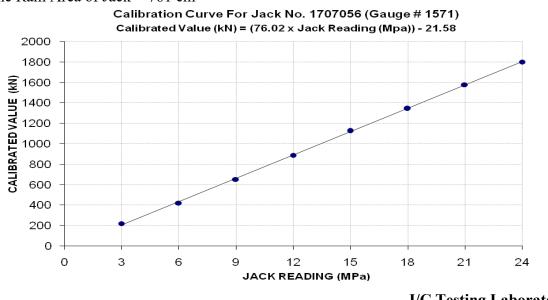
Site Manager Descon Engineering Limited Mohmand Dam Hydro-Power Project.

Subject: - CALIBRATION OF HYDRAULIC JACK (MARK: TFL/11/6068) (Page -1/16)

Reference to your Letter No. MDHP-DEL-LABT-239, dated: 29/11/2024 on the subject cited above. One Hydraulic Jack (Jack No. 1707056, Gauge No. 1571) as received by us has been calibrated. The results are tabulated as under:

Total Range	:	Zero -	50 (MPa)
Calibrated Range	•	Zero -	24 (MPa)

Hydraulic Jack Readin (MPa)	ıg	3	6	9	12	15	18	21	24
Calibrated Load	(kg)	22600	43000	66600	90600	114800	137200	161000	183600
Calibrated Load	(kN)	222	422	653	889	1126	1346	1579	1801
Calibrated Pressure (N	2.9	5.5	8.6	11.7	14.8	17.7	20.7	23.7	
The Ram Area of Jack = 761 cm^2									



I/C Testing Laboratoires UET Lahore, Pakistan.

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<u>Ref: CED/TFL/11/6068</u>

Dated: 29-11-2024

Dated of Test: 03-12-2024

То

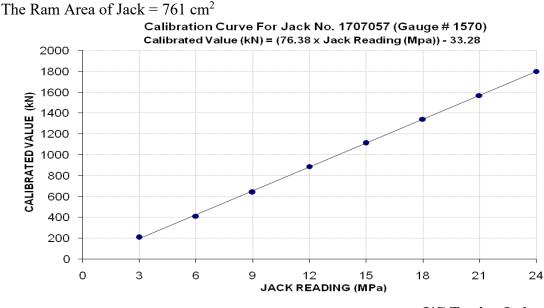
Site Manager Descon Engineering Limited Mohmand Dam Hydro-Power Project.

Subject: - CALIBRATION OF HYDRAULIC JACK (MARK: TFL/11/6068) (Page -2/16)

Reference to your Letter No. MDHP-DEL-LABT-239, dated: 29/11/2024 on the subject cited above. One Hydraulic Jack (Jack No. 1707057, Gauge No. 1570) as received by us has been calibrated. The results are tabulated as under:

Total Range	:	Zero -	50 (MPa)
Calibrated Range	•	Zero -	24 (MPa)

Hydraulic Jack Readi (MPa)	ing	3	6	9	12	15	18	21	24
Calibrated Load	(kg)	21400	42200	65400	90600	113600	137000	160000	183600
Cambrated Load	(kN)	210	414	642	889	1114	1344	1570	1801
Calibrated Pressure (Mpa)		2.8	5.4	8.4	11.7	14.6	17.7	20.6	23.7



I/C Testing Laboratoires UET Lahore, Pakistan.

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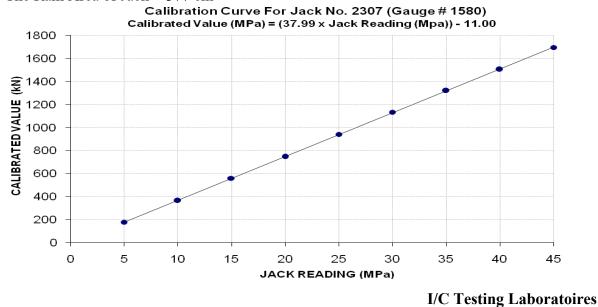
Site Manager Descon Engineering Limited Mohmand Dam Hydro-Power Project.

Subject: - CALIBRATION OF HYDRAULIC JACK (MARK: TFL/11/6068) (Page -3/16)

Reference to your Letter No. MDHP-DEL-LABT-239, dated: 29/11/2024 on the subject cited above. One Hydraulic Jack (Jack No. 2307, Gauge No. 1580) as received by us has been calibrated. The results are tabulated as under:

Total Range	:	Zero -	50 (MPa)
Calibrated Range	:	Zero -	45 (MPa)

Hydraulic Jack Readi (MPa)	ng	5	10	15	20	25	30	35	40	45
Callibrated Load	(kg)	18200	37200	57200	76200	96000	115600	134600	153400	173000
Calibrated Load	(kN)	179	365	561	748	942	1134	1320	1505	1697
Calibrated Pressure (4.7	9.7	14.9	19.8	25.0	30.1	35.0	39.9	45.0	
The Ram Ar	ea of Jac	k = 377	cm ²	1	1	1			1	1



UET Lahore, Pakistan.

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Dated: 29-11-2024

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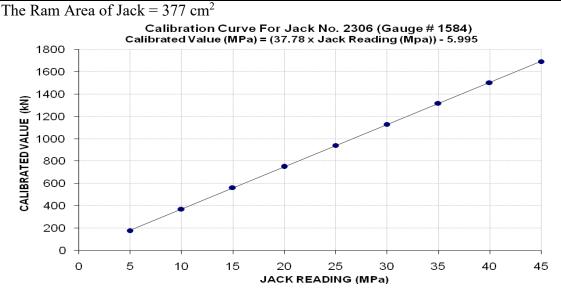
Site Manager Descon Engineering Limited Mohmand Dam Hydro-Power Project.

Subject: - CALIBRATION OF HYDRAULIC JACK (MARK: TFL/11/6068) (Page -4/16)

Reference to your Letter No. MDHP-DEL-LABT-239, dated: 29/11/2024 on the subject cited above. One Hydraulic Jack (Jack No. 2306, Gauge No. 1584) as received by us has been calibrated. The results are tabulated as under:

Total Range	:	Zero -	50 (MPa)
Calibrated Range	•	Zero -	45 (MPa)

Hydraulic Jack Rea (MPa)	ding	5	10	15	20	25	30	35	40	45
Calibrated Load (kg)		18200	37800	57400	76600	96000	115200	134400	153200	172400
Calibrated Load	(kN)	179	371	563	751	942	1130	1318	1503	1691
Calibrated Pressure (Mpa)		4.7	9.8	14.9	19.9	25.0	30.0	35.0	39.9	44.8



I/C Testing Laboratoires UET Lahore, Pakistan.

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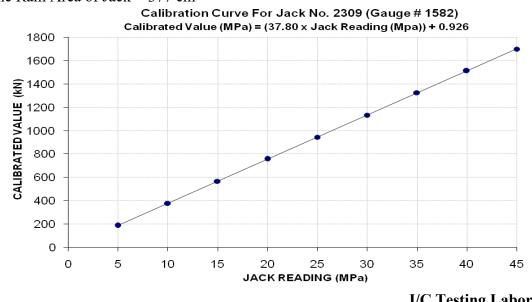
Site Manager Descon Engineering Limited Mohmand Dam Hydro-Power Project.

Subject: - CALIBRATION OF HYDRAULIC JACK (MARK: TFL/11/6068) (Page -5/16)

Reference to your Letter No. MDHP-DEL-LABT-239, dated: 29/11/2024 on the subject cited above. One Hydraulic Jack (Jack No. 2309, Gauge No. 1582) as received by us has been calibrated. The results are tabulated as under:

Total Range	•	Zero -	50 (MPa)
Calibrated Range	:	Zero -	45 (MPa)

Hydraulic Jack Re (MPa)	eading	5	10	15	20	25	30	35	40	45
Calibrated Load	(kg)	19200	38600	58000	77400	96400	115600	135200	154200	173400
Calibrated Load (1	(kN)	188	379	569	759	946	1134	1326	1513	1701
Calibrated Pressure (Mpa)		5.0	10.0	15.1	20.1	25.1	30.1	35.2	40.1	45.1
The Ram Area of Jack = 377 cm^2										



I/C Testing Laboratoires UET Lahore, Pakistan.

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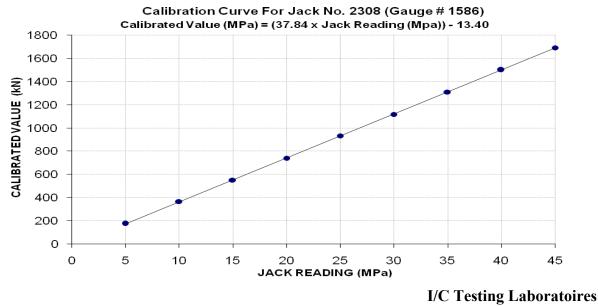
Site Manager Descon Engineering Limited Mohmand Dam Hydro-Power Project.

Subject: - CALIBRATION OF HYDRAULIC JACK (MARK: TFL/11/6068) (Page -6/16)

Reference to your Letter No. MDHP-DEL-LABT-239, dated: 29/11/2024 on the subject cited above. One Hydraulic Jack (Jack No. 2308, Gauge No. 1586) as received by us has been calibrated. The results are tabulated as under:

Total Range	•	Zero -	50 (MPa)
Calibrated Range	:	Zero -	45 (MPa)

Hydraulic Jack Read (MPa)	ling	5	10	15	20	25	30	35	40	45
Callibrate d I as d	(kg)	18000	37400	56400	75600	95200	114000	133600	153000	172400
Calibrated Load	(kN)	177	367	553	742	934	1118	1311	1501	1691
Calibrated Pressure (Mpa)		4.7	9.7	14.7	19.7	24.8	29.7	34.8	39.8	44.8
The Ram Area of Jack = 377 cm^2										



UET Lahore, Pakistan.

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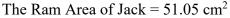
Site Manager Descon Engineering Limited Mohmand Dam Hydro-Power Project.

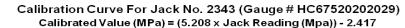
Subject: - CALIBRATION OF HYDRAULIC JACK (MARK: TFL/11/6068) (Page -7/16)

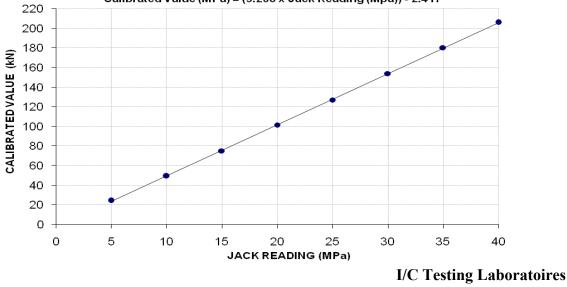
Reference to your Letter No. MDHP-DEL-LABT-239, dated: 29/11/2024 on the subject cited above. One Hydraulic Jack (Jack No. 2343, Gauge No. HC675202029) as received by us has been calibrated. The results are tabulated as under:

Total Range Calibrated Rar	: nge :		_	ero - Zero -	•	50 (MPa) 40 (MPa)	
aulic Iack Reading (MPa)	5	10	15	20	25	30	35

Hydraulic Jack Reading (MPa)		5	10	15	20	25	30	35	40
Calibrated Load	(kg)	2500	5050	7650	10350	12950	15700	18400	21000
Calibrated Load	(kN)	25	50	75	102	127	154	181	206
Calibrated Pressure (Mpa)		4.8	9.7	14.7	19.9	24.9	30.2	35.3	40.3







UET Lahore, Pakistan.

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<u>Ref: CED/TFL/11/6068</u>

Dated: 29-11-2024

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То

Site Manager Descon Engineering Limited Mohmand Dam Hydro-Power Project.

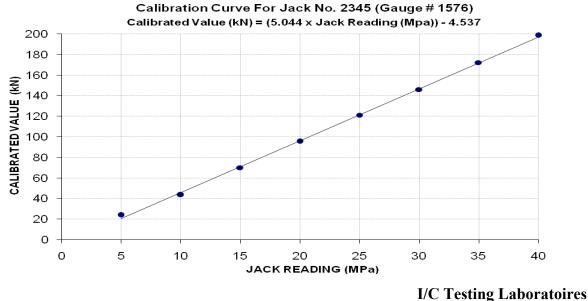
Subject: - CALIBRATION OF HYDRAULIC JACK (MARK: TFL/11/6068) (Page -8/16)

Reference to your Letter No. MDHP-DEL-LABT-239, dated: 29/11/2024 on the subject cited above. One Hydraulic Jack (Jack No. 2345, Gauge No. 1576) as received by us has been calibrated. The results are tabulated as under:

Total Range	:	Zero -	50 (MPa)
Calibrated Range	:	Zero -	40 (MPa)

Hydraulic Jack Reading (MPa)		5	10	15	20	25	30	35	40
Calibrated Load	(kg)	2450	4850	7550	10150	12750	15300	17950	20650
Calibrated Load	(kN)	24	48	74	100	125	150	176	203
Calibrated Pressure (Mpa)		4.7	9.3	14.5	19.5	24.5	29.4	34.5	39.7

The Ram Area of Jack = 51.05 cm^2



UET Lahore, Pakistan.

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Site Manager Descon Engineering Limited Mohmand Dam Hydro-Power Project.

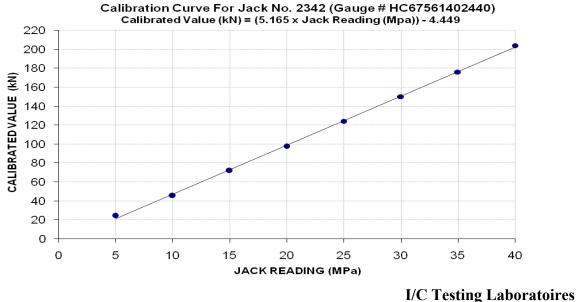
Subject: - CALIBRATION OF HYDRAULIC JACK (MARK: TFL/11/6068) (Page -9/16)

Reference to your Letter No. MDHP-DEL-LABT-239, dated: 29/11/2024 on the subject cited above. One Hydraulic Jack (Jack No. 2342, Gauge No. HC67561402440) as received by us has been calibrated. The results are tabulated as under:

Total Range	:	Zero -	50 (MPa)
Calibrated Range	:	Zero -	40 (MPa)

Hydraulic Jack I (MPa)	Reading	5	10	15	20	25	30	35	40
Calibrated	(kg)	2500	5050	7750	10350	13050	15700	18350	21200
Load	(kN)	25	50	76	102	128	154	180	208
Calibrated Press	ure (Mpa)	4.8	9.7	14.9	19.9	25.1	30.2	35.3	40.7

The Ram Area of Jack = 51.05 cm^2



UET Lahore, Pakistan.

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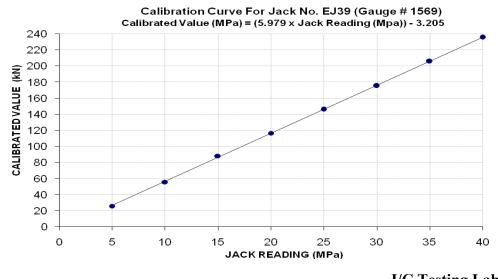
Site Manager Descon Engineering Limited Mohmand Dam Hydro-Power Project.

Subject: - CALIBRATION OF HYDRAULIC JACK (MARK: TFL/11/6068) (Page - 10/16)

Reference to your Letter No. MDHP-DEL-LABT-239, dated: 29/11/2024 on the subject cited above. One Hydraulic Jack (Jack No. EJ39, Gauge No. 1569) as received by us has been calibrated. The results are tabulated as under:

	Total Range : Zero - 50 (MPa) Calibrated Range : Zero - 40 (MPa)								
Hydraulic Jack (MPa)	Reading	5	10	15	20	25	30	35	40
Calibrated	(kg)	2650	5700	9000	11900	14900	17900	21000	24050
Load	(kN)	26	56	88	117	146	176	206	236
Calibrated Pre	ssure (Mpa)	5.1	11.0	17.3	22.9	28.6	34.4	40.3	46.2

The Ram Area of Jack = 51.05 cm^2



I/C Testing Laboratoires UET Lahore, Pakistan.

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Dated: 29-11-2024

Dated of Test: 03-12-2024

То

Site Manager Descon Engineering Limited Mohmand Dam Hydro-Power Project.

Subject: - CALIBRATION OF DIAL GAUGES (MARK: TFL/11/6068) (Page # 11/16)

Reference to your Letter No. MDHP-DEL-LABT-239, dated: 29/11/2024 on the subject cited above. Four Dial Gauges as received by us have been calibrated on standard calibration device. The results are tabulated as under.

То	tal Range :	Zero -	100 (mm)							
Cal	ibrated Range :	Zero -	50 (mm)							
Standard	Dial Gauge Readings									
Reading	Dial Gauge No. I (7116538)	Dial Gauge No. II (3B22914)	Dial Gauge No. III (HC19017)	Dial Gauge No. IV (6310176)						
400	403	393	397	396						
800	804	794	796	797						
1200	1204	1193	1196	1196						
1600	1604	1592	1596	1596						
2000	2004	1992	1996	1996						
2400	2404	2391	2396	2396						
2800	2802	2793	2796	2796						
3200	3203	3191	3196	3196						
3600	3602	3592	3596	3596						
4000	4003	3993	3996	3996						
4400	4400	4391	4395	4395						
4800	4799	4793	4794	4796						
5000	4999	4993	4994	4996						

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То

Site Manager Descon Engineering Limited Mohmand Dam Hydro-Power Project.

Subject: - CALIBRATION OF DIAL GAUGES (MARK: TFL/11/6068) (Page # 12/16)

Reference to your Letter No. MDHP-DEL-LABT-239, dated: 29/11/2024 on the subject cited above. Four Dial Gauges as received by us have been calibrated on standard calibration device. The results are tabulated as under.

Total Range :		Zero -	100 (mm)					
Ca	Calibrated Range :		50 (mm)					
Standard	Dial Gauge Readings							
Reading	Dial Gauge No. I (7116483)	Dial Gauge No. II (3B22903)	Dial Gauge No. III (3B25649)	Dial Gauge No. IV (CD054756)				
400	400	397	380	397				
800	797	798	781	799				
1200	1198	1197	1180	1200				
1600	1598	1597	1581	1600				
2000	1997	1998	1981	2000				
2400	2397	2398	2381	2401				
2800	2796	2799	2781	2800				
3200	3196	3200	3181	3200				
3600	3595	3600	3582	3600				
4000	3994	4001	3985	4000				
4400	4394	4401	4384	4399				
4800	4793	4802	4784	4799				
5000	4990	5002	4981	4996				

I/C Testing Laboratoires UET Lahore, Pakistan.

Note:

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

2. The above results pertain to sample /samples supplied to this laboratory.



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

<u>Ref: CED/TFL/11/6068</u>

Dated: 29-11-2024

Dated of Test: 03-12-2024

То

Site Manager Descon Engineering Limited Mohmand Dam Hydro-Power Project.

Subject: - CALIBRATION OF DIAL GAUGES (MARK: TFL/11/6068) (Page # 13/16)

Reference to your Letter No. MDHP-DEL-LABT-239, dated: 29/11/2024 on the subject cited above. Four Dial Gauges as received by us have been calibrated on standard calibration device. The results are tabulated as under.

	tal Range :	Zero -	100 (mm)					
Cal	ibrated Range :	Zero -	50 (mm)					
Standard	Dial Gauge Readings							
Reading	Dial Gauge No. I (6614818)	Dial Gauge No. II (3B22902)	Dial Gauge No. III (3B22946)	Dial Gauge No. IV (3B22897)				
400	400	394	392	394				
800	800	794	790	793				
1200	1202	1194	1191	1193				
1600	1602	1594	1590	1592				
2000	2003	1994	1988	1990				
2400	2404	2393	2389	2390				
2800	2805	2792	2788	2790				
3200	3206	3192	3189	3191				
3600	3607	3591	3589	3590				
4000	4007	3990	3988	3991				
4400	4407	4389	4389	4390				
4800	4805	4789	4786	4790				
5000	5004	4988	4986	4990				

I/C Testing Laboratoires UET Lahore, Pakistan.

Note:

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

2. The above results pertain to sample /samples supplied to this laboratory.



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

<u>Ref: CED/TFL/11/6068</u>

Dated: 29-11-2024

Dated of Test: 03-12-2024

То

Site Manager Descon Engineering Limited Mohmand Dam Hydro-Power Project.

Subject: - CALIBRATION OF DIAL GAUGES (MARK: TFL/11/6068) (Page # 14/16)

Reference to your Letter No. MDHP-DEL-LABT-239, dated: 29/11/2024 on the subject cited above. Four Dial Gauges as received by us have been calibrated on standard calibration device. The results are tabulated as under.

Total Range	:	Zero -	10 (mm)
Calibrated Range	•	Zero -	10 (mm)

Standard	Dial Gauge Readings							
Reading	Dial Gauge No. I (4202645)	Dial Gauge No. II (OC12688)	Dial Gauge No. III (3402016)	Dial Gauge No. IV (3714428)				
100	93	95	96	92				
200	192	194	195	191				
300	291	294	295	291				
400	392	394	394	390				
500	491	493	494	490				
600	591	593	594	590				
700	690	693	693	690				
800	790	793	793	785				
900	889	893	893	885				
1000	988	992	993	985				

I/C Testing Laboratoires UET Lahore, Pakistan.

Note:

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

The above results pertain to sample /samples supplied to this laboratory.



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

<u>Ref: CED/TFL/11/6068</u>

Dated: 29-11-2024

Dated of Test: 03-12-2024

То

Site Manager Descon Engineering Limited Mohmand Dam Hydro-Power Project.

Subject: - CALIBRATION OF DIAL GAUGES (MARK: TFL/11/6068) (Page # 15/16)

Reference to your Letter No. MDHP-DEL-LABT-239, dated: 29/11/2024 on the subject cited above. Four Dial Gauges as received by us have been calibrated on standard calibration device. The results are tabulated as under.

Total Range	:	Zero -	10 (mm)
Calibrated Range	•	Zero -	10 (mm)

Standard	Dial Gauge Readings							
Reading	Dial Gauge No. I (4203040)	Dial Gauge No. II (3421608)	Dial Gauge No. III (3422292)	Dial Gauge No. IV (3714476)				
100	84	93	95	98				
200	182	193	195	198				
300	283	292	294	297				
400	383	392	394	397				
500	482	492	494	496				
600	582	592	594	596				
700	681	691	694	695				
800	781	791	794	795				
900	881	890	893	894				
1000	981	993	993	993				

I/C Testing Laboratoires UET Lahore, Pakistan.

Note:

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

2. The above results pertain to sample /samples supplied to this laboratory.



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

Ref: CED/TFL/11/6068

Dated: 29-11-2024

Dated of Test: 03-12-2024

То

Site Manager Descon Engineering Limited Mohmand Dam Hydro-Power Project.

Subject: - CALIBRATION OF DIAL GAUGES (MARK: TFL/11/6068) (Page # 16/16)

Reference to your Letter No. MDHP-DEL-LABT-239, dated: 29/11/2024 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 -	10 (mm)
Calibrated Range	:	Zero -	10 (mm)

Standard	Dial Gauge Readings							
Reading	Dial Gauge No. I (3714441)	Dial Gauge No. II (3224648)	Dial Gauge No. III (2A27040)					
100	95	96	95					
200	195	195	195					
300	295	295	295					
400	394	394	394					
500	494	494	494					
600	594	594	594					
700	693	694	694					
800	793	794	793					
900	893	893	893					
1000	992	993	992					

I/C Testing Laboratoires UET Lahore, Pakistan.

Note:

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

2. The above results pertain to sample /samples supplied to this laboratory.



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

Ref: <u>CED/TFL/11/6070</u>

Dated: 02-12-2024

Dated of Test: 03-12-2024

То

Dy Dir Infra **Defence Housing Authority** Gujranwala "Sector I"

Subject: TESTING OF R.C.C. PIPE [ASTM-C76 - 08a] (Page -1/1)

Reference to your letter No. 111/15/DD/Lab/J/478, dated 25.11.2024 on

the subject cited above. Four R.C.C. Pipes as received by us have been tested. The

results are tabulated as under.

Sr. No	Nominal Size	Total Length	Loaded Length	External Diameter	Internal Diameter	Wall Thickness	Proof load	Ultimate Load	Proof Stress	Ultimate Stress
	(inch)	(foot)	(foot)	(inch)	(inch)	(inch)	(kg)	(kg)	Pound/Linear foot/foot	Pound/Linear foot/foot
1	9	7.78	7.26	10.87	8.75	1.06	8500	10500	3543	4377
2	12	7.76	7.29	16.06	12.00	2.03	13200	17000	3995	5145
3	15	7.81	7.33	19.49	14.88	2.30	8500	15600	2061	3783
4	21	7.74	7.24	26.69	20.99	2.85	16000	22000	2783	3827

I/C Testing Laboratoires UET Lahore, Pakistan.

Note:

- 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 2. The above results pertain to sample /samples supplied to this laboratory.



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

To,

Dy Dir Infra Defence Housing Authority, Gujranwala "Plot 13 & 16 Comm Plaza."

Reference # CED/TFL 6072 (Dr. Ali Ahmed)	Dated: 02-12-2024
Reference of the request letter # 111/DD/Dev/Plot 13 & 16 Comm/62	Dated: 14-11-2024

Tension Test Report (Page -1/1)

Date of Test Gauge length Description 03-12-2024 8 inches Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight	Diam Si	neter/ ze		rea 1 ²)	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	0.366	3	0.370	0.11	0.108	3770	4960	75600	77260	99400	101700	1.20	15.0	
2	0.363	3	0.369	0.11	0.107	3740	4940	75000	77220	99000	102000	1.20	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Note: only two samples for tensile and one sample for bend test													
	Bend Test													
#3	Bar Ben	d Test [Fhrough	180° is	s Satisfa	ctory								

I/C Testing Laboratoires UET Lahore, Pakistan.

Note:

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

2. The above results pertain to sample /samples supplied to this laboratory.



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

To,

Assistant Director (QCD) WASA, LDA, Lahore. (M/s Al Madina Pipe Industry).

Reference # CED/TFL <u>6073 (Dr. Ali Ahmed)</u> Reference of the request letter # QCD/2401 Dated: 02-12-2024 Dated: 02-12-2024

Tension Test F	Report (Page -1/1)
Date of Test	03-12-2024
Gauge length	8 inches
Description	Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight	tu کی Size Size		Area (in²)		Yield load	Breaking Load		Stress si)			Elongation	% Elongation	Remarks
S	S (lbs/ft) Nominal		Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	R
1	0.377	3	0.376	0.11	0.111	3790	4960	76000	75370	99400	98700	1.40	17.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			Ν	ote: on	ly one s	sample fo	or tensile	and one	sample fo	or bend t	est			
#3	Bar Ben	d Test I	Through	n 180° is	s Satisfa	actory	Bend T	est						

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
- 2. The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples



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

To,

Project Engineer Baig Construction Co. Construction of Jinnah Square Mall, Raiwind Road, Lahore.

Reference # CED/TFL <u>6074 (Dr. Ali Ahmed)</u> Reference of the request letter # ST/UET/02122024/3000 Dated: 02-12-2024 Dated: 02-12-2024

Tension Test Report (Page -1/1)

Date of Test Gauge length Description 03-12-2024 8 inches 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
S	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	Re
1	0.366	3	0.370	0.11	0.108	3520	5450	70600	72160	109200	111800	1.00	12.5	
2	0.375	3	0.375	0.11	0.110	3410	5420	68400	68170	108600	108400	1.30	16.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			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	Through (180° is	s Satisfa	ctory								

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
- 2. The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples



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

To,

Assistant Director (QCD) WASA, LDA, Lahore. (M/s Shezone Pipe Industry).

Reference # CED/TFL <u>6075 (Dr. Ali Ahmed)</u> Reference of the request letter # QCD/2370 Dated: 02-12-2024 Dated: 28-11-2024

Tension Test Report (Page -1/1)

Date of Test Gauge length Description 03-12-2024 8 inches

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

Sr. No.	Sr. No. Nominal Nominal Actual Actual		Area (in ²)		Yield load	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks	
S			Actual	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	Re
1	0.380	3/8	0.377	0.11	0.112	3410	4990	68400	67280	100000	98500	1.10	13.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
I	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			N	ote: on	ly one s	ample fo	or tensile	and one	sample f	or bend t	est			
							Bend T	est						
3/8	" Dia Ba	ır Bend	Test Th	nrough	180° is S	Satisfacto	ry							

I/C Testing Laboratoires UET Lahore, Pakistan.

Note:

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

2. The above results pertain to sample /samples supplied to this laboratory.



To

STRUCTURAL ENGINEERING DIVISION

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

Resident Engineer NESPAK – TurkPak JV Reconstruction of Lady Willingdon Hospital, Lahore.

Reference # CED/TFL <u>6076 (Dr. Ali Ahmed)</u> Reference of the request letter # 4729/13/MA/04/141 Dated: 02-12-2024 Dated: 29-11-2024

Tension Test Report (Page -1/1)

Date of Test Gauge length Description 03-11-2024 8 inches Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight	(lbs/ft) Weight Nominal Nominal Neight (#) (#) Actual (inch)		er/ Area (in ²)		Yield load	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
S	(lbs/ft)			Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	R
1	0.372	3	0.373	0.11	0.109	3540	5120	71000	71320	102600	103200	1.10	13.8	el
2	0.371	3	0.373	0.11	0.109	3490	5050	70000	70540	101200	102100	1.20	15.0	AF 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 🛛	Fhrough	180° is	s Satisfa	ctory								

I/C Testing Laboratoires UET Lahore, Pakistan.

Note:

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

2. The above results pertain to sample /samples supplied to this laboratory.



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>6078 (Dr. Ali Ahmed)</u> Reference of the request letter # GCL/Purchase/UET/TEST/008 Dated: 03-12-2024 Dated: 03-12-2024

Tension Test Report (Page -1/1)

Date of Test Gauge length Description 03-12-2024 8 inches Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight	Diameter/ Size (mm)		Area (in²)		Yield load	Breaking Load	Yield Stress (psi)			e Stress si)	Elongation	% Elongation	Remarks
S	(lbs/ft)	Nominal	Actual	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	Re
1	0.407	10	9.92	0.12	0.120	3920	5860	72017	72150	107658	107900	1.30	16.3	
2	0.410	10	9.95	0.12	0.120	3870	5810	71098	70800	106739	106300	1.20	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
			N	ote: on	ly two s	amples f	or tensile	and one	sample f	or bend t	test			
							Bend T	est						
101	nm Dia I	Bar Bei	nd Test	Throug	h 180° i	s Satisfac	tory							

I/C Testing Laboratoires UET Lahore, Pakistan.

Note:

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

2. The above results pertain to sample /samples supplied to this laboratory.



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

To,

M/S ITC Sialkot

Reference # CED/TFL <u>6085 (Dr. Ali Ahmed)</u> Reference of the request letter # Nil Dated: 03-12-2024 Dated: 03-12-2024

Tension Test Report(Page -1/1)Date of Test03-12-2024Gauge length8 inchesDescriptionDeformed Steel Bar Tensile Test as per ASTM-A615

Sr. No.	Actual (inch) (i		Area (in ²) Xield load		Breaking Load	Yield Stress (psi)			e Stress si)	Elongation	% Elongation	Remarks		
S			Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)	% E	R	
1	0.377	3	0.376	0.11	0.111	3790	4740	76000	75320	95000	94200	1.30	16.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
					No	te: only o	one samp	le for ten	sile test			1	n	
							Bend T	`est						

I/C Testing Laboratoires UET Lahore, Pakistan.

Note:

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

2. The above results pertain to sample /samples supplied to this laboratory.



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

> I/C Testing Laboratoires UET Lahore, Pakistan.

Note:

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

2. The above results pertain to sample /samples supplied to this laboratory.