Furqan - Ul-Haq **Test Performed By:** **Dr. /Engr.** S. Asad Ali Gillani

General Manager, AYQ Developers Pvt. Ltd. Lahore

Client Reference: Nil **SOM Lab Ref:** 3916(Page-1/1)

Dated: 25-02-2021 **Dated:** 25-02-2021

Test: Tension Test & Bend Test **Test Specification:** ASTM-A-615

Gauge Length: 8 inch **Sample Type:** Deformed Bar

S.No.	Weight	Dia.		Area		Yield Load	Ultimate Load	Yield Stress		Ult. Stress		Elongation	Gauge Length	%age Elongation	Remarks
		Nominal	Calculated	Nominal	Calculated			(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)				
	lb/ft	#	in	in^2	in^2	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	1.499	6	0.749	0.44	0.441	12.28	16.97	61570	61430	85070	84880	1.30	8.0	16.3	
2	1.485	6	0.745	0.44	0.436	13.07	18.35	65510	66110	91970	92820	1.40	8.0	17.5	
3	1.498	6	0.748	0.44	0.440	12.59	17.48	63100	63100	87630	87630	1.30	8.0	16.3	
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BEND TEST:

# 6	Sample bend through 180 degrees Satisfactorily without any crack

Note:-

Only Four Samples Received and Tested

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

Engr. Tajmmal Farooq **Test Performed By:** **Dr. /Engr.** S. Asad Ali Gillani
Resident Engineer, (AZEA) Sargodha Mianwali Road, Mianwali

Client Reference: RE/MWI-177 **SOM Lab Ref:** 3917 (Page-1/1)
Dated: 17-02-2021 **Dated:** 25-02-2021

Test: Tension Test & Bend Test **Test Specification:** ASTM-A-615
Gauge Length: 8 inch **Sample Type:** Deformed Bar(Moiz Steel)

S.No.	Weight	Dia.		Area		Yield Load	Ultimate Load	Yield Stress		Ult. Stress		Elongation	Gauge Length	%age Elongation	Remarks
		Nominal	Calculated	Nominal	Calculated			(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)				
	lb/ft	#	in	in^2	in^2	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	1.528	6	0.756	0.44	0.449	13.58	19.18	68060	66700	96160	94230	1.20	8.0	15.0	
2	1.534	6	0.758	0.44	0.451	13.71	19.11	68730	67050	95800	93470	1.20	8.0	15.0	
3	0.672	4	0.501	0.20	0.197	6.83	9.09	75320	76460	100270	101800	1.10	8.0	13.8	
4	0.678	4	0.503	0.20	0.199	6.60	8.97	72730	73100	98920	99420	1.10	8.0	13.8	
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BEND TEST:

# 6	Sample bend through 180 degrees Satisfactorily without any crack
# 4	Sample bend through 180 degrees Satisfactorily without any crack

Note:-

Only Six Samples Received and Tested

Salman Zahur **Test Performed By:** **Dr. /Engr.** S. Asad Ali Gillani

CEO, Linker Developers, (Project: 5 Narla House Construction Project, DGW)

Client Reference: Nil **SOM Lab Ref:** 3918(Page-1/1)

Dated: 25-02-2021 **Dated:** 25-02-2021

Test: Tension Test & Bend Test **Test Specification:** ASTM-A-615

Gauge Length: 8 inch **Sample Type:** Deformed Bar

S.No.	Weight	Dia.		Area		Yield Load	Ultimate Load	Yield Stress		Ult. Stress		Elongation	Gauge Length	%age Elongation	Remarks
		Nominal	Calculated	Nominal	Calculated			(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)				
	lb/ft	#	in	in^2	in^2	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	1.517	6	0.754	0.44	0.446	16.31	18.81	81750	80650	94270	93000	1.00	8.0	12.5	
2	1.518	6	0.754	0.44	0.446	16.26	18.67	81500	80400	93610	92350	1.10	8.0	13.8	
3	0.667	4	0.500	0.20	0.196	6.24	8.07	68800	70200	89030	90850	1.20	8.0	15.0	
4	0.667	4	0.500	0.20	0.196	6.49	8.12	71610	73070	89590	91420	1.10	8.0	13.8	
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BEND TEST:

# 6	Sample bend through 180 degrees Satisfactorily without any crack
# 4	Sample bend through 180 degrees Satisfactorily without any crack

Note:-

Only Six Samples Received and Tested

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

Nafiz OZCAN **Test Performed By:** **Dr. /Engr.** S. Asad Ali Gillani

Contractor's Representative, SA - RA Energy, Construction Trade and Industry Inc. Lahore

Client Reference: MIG/2021/163 **SOM Lab Ref:** 3922(Page-1/2)

Dated: 25-02-2021 **Dated:** 25-02-2021

Test: Tension Test & Bend Test **Test Specification:** ASTM-A-615

Gauge Length: 8 inch **Sample Type:** Deformed Bar(SJ Steel)

S.No.	Weight	Dia.		Area		Yield Load	Ultimate Load	Yield Stress		Ult. Stress		Elongation	Gauge Length	%age Elongation	Remarks
		Nominal	Calculated	Nominal	Calculated			(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)				
	lb/ft	#	in	in^2	in^2	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.708	8	1.007	0.79	0.796	29.84	35.90	83300	82670	100230	99470	1.00	8.0	12.5	
2	2.710	8	1.007	0.79	0.796	27.34	34.58	76330	75750	96530	95800	1.30	8.0	16.3	
3	2.672	8	1.000	0.79	0.785	27.70	35.02	77320	77810	97750	98380	1.40	8.0	17.5	
4	2.009	7	0.867	0.60	0.590	21.71	26.68	79810	81160	98060	99720	1.30	8.0	16.3	
5	2.009	7	0.867	0.60	0.590	23.34	28.00	85810	87260	102930	104670	1.00	8.0	12.5	
6	2.034	7	0.873	0.60	0.598	23.34	28.13	85810	86090	103420	103760	1.30	8.0	16.3	
7	1.553	6	0.762	0.44	0.456	16.31	19.62	81750	78890	98360	94910	1.40	8.0	17.5	
8	1.549	6	0.761	0.44	0.455	14.80	20.10	74190	71750	100760	97440	1.30	8.0	16.3	
9	1.552	6	0.762	0.44	0.456	16.38	19.67	82110	79230	98610	95150	1.50	8.0	18.8	
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Witnessed By: Sohaib Ali, Sub Engineer, NESPAK

BEND TEST:

# 8(Sr. 1&2)	Sample bend through 180 degrees Satisfactorily without any crack
# 8 (Sr 3)	Sample bend through 180 degrees Satisfactorily without any crack
# 7(Sr 4&5)	Sample bend through 180 degrees Satisfactorily without any crack
# 7(Sr. 6)	Sample bend through 180 degrees Satisfactorily without any crack
# 6(Sr7,8.9)	Sample bend through 180 degrees Satisfactorily without any crack

Note:-

Only Eighteen Samples Received and Tested

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

Nafiz OZCAN **Test Performed By:** **Dr. /Engr.** S. Asad Ali Gillani

Contractor's Representative, SA - RA Energy, Construction Trade and Industry Inc. Lahore

Client Reference: MIG/2021/163 **SOM Lab Ref:** 3922(Page-2/2)

Dated: 25-02-2021 **Dated:** 25-02-2021

Test: Tension Test & Bend Test **Test Specification:** ASTM-A-615

Gauge Length: 8 inch **Sample Type:** Deformed Bar(SJ Steel)

S.No.	Weight	Dia.		Area		Yield Load	Ultimate Load	Yield Stress		Ult. Stress		Elongation	Gauge Length	%age Elongation	Remarks
		Nominal	Calculated	Nominal	Calculated			(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)				
	lb/ft	#	in	in^2	in^2	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	0.721	4	0.520	0.20	0.212	7.08	9.55	78130	73700	105330	99370	1.10	8.0	13.8	
2	0.713	4	0.517	0.20	0.210	7.59	9.99	83750	79760	110160	104920	1.00	8.0	12.5	
3	0.717	4	0.518	0.20	0.211	6.90	9.50	76100	72140	104770	99300	1.00	8.0	12.5	
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Witnessed By: Sohaib Ali, Sub Engineer, NESPAK

BEND TEST:

# 4(Sr. 1&2)	Sample bend through 180 degrees Satisfactorily without any crack
# 4 (Sr 3)	Sample bend through 180 degrees Satisfactorily without any crack

Note:-

Only Six Samples Received and Tested

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

Test Performed By: **Dr. /Engr.** S. Asad Ali Gillani

Maj Adnan Khalid ®

Dy Dir MTL.

Testing of Anchor Bolt – External Electrification Works (U/G) Pkg E-2 & E-4, Prism-IX, - (M/S NLC)

Client Reference: 408/241/E/38 / 459 **Dated:** 23-02-2021

SOM Lab Ref: CED/SOM/3915(Page-1/1) **Dated:** 25-02-2021

Test: Tension Test **Test Specification:** ASTM-F – 606

Sample Type: Y Bolt **Gauge Length:** **50** mm

S.No.	Dia.		Area	Yield Load	Ultimate Load	Yield Stress	Ultimate. Stress	Elongation	Gauge Length	%age Elongation	Reduction of Area (%)
	Original Diameter	Tested Diameter									
	mm	mm	mm^2	kN	kN	MPa	MPa	mm	mm	%	
1	12	8.0	50.27	17.8.	26.0	354	517	10.0	50.0	20.0	43.0
2	12	8.0	50.27	19.2	28.5	381	566	11.3	50.0	22.5	52.7
3	12	8.0	50.27	20.0	28.7	397	570	10.0	50.0	20.0	57.5

Note:-

Only Three Samples Received and Tested

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

Test Performed by: Dr. M. Irfan ul Hassan

Manager
Junaid (Pvt) Ltd.
Office, 617, Sector A-1, Towship, Lahore

Client Reference No.: JPL/ Equipment/01 Dated: 17-02-2021

SOM Lab Ref: CED/SOM/3919(Page-1/1) Dated: 25-02-2021

Test Type: Load Test

Sample Type: Equipment

Load Test Results:

S No	Sample Type	Proof Load (Tons /kN)	Time for Load (minute)	Remarks
1	Hydraulic Toe Jack Model: JH 6G plus Sr No. 0600604976	6.0 / 59.0	1 min	OK
2	Hydraulic Toe Jack Model: JH 6G plus Sr No. 0600604977	6.0 / 59.0	1 min	OK
3	Hydraulic Toe Jack Model: JH 6G plus Sr No. 0600604978	6.0 / 59.0	1 min	OK
4	Hydraulic Toe Jack Model: JH 6G plus Sr No. 0600604979	6.0 / 59.0	1 min	OK
5	Swivel Turntable/Steerable Trolley Model: JLB 16 S Sr No. 051610111	16.0 / 157.0	1 min	OK
6	SKATES Adjustable Trolley Model: JLB 16 S Vu Sr No. 061610128	8.0 / 79.0	1 min	OK
7	SKATES Adjustable Trolley Model: JLB 16 S Vu Sr No. 061610128	8.0 / 79.0	1 min	OK

Witness by:-
Engr. Sardar Muhammad Mudassir, (representative POF)

Engr. Junaid Ahmad Javaid (representative JPL)

Test Performed by: Dr.S. Asad ali Gillani

Assistant Engineer Tamirat Aama

Public Health Engineering City-III

Sub Division Muzaff rabad

Client Reference No.: 40-42/AE/City-III/2021 Dated: 22-02-2021

SOM Lab Ref: CED/SOM/3921(Page 1/1) Dated: 25-02-2021

Test Type: Hardness Test

Sample Type: G I Pipe (8". 6", 4" Diameter)

Hardness Test Details:

Machine used: Avery Rockwell Hardness Testing Machine

(Minor Load: 10 Kgf Major Load: 90.0 kgf Scale: B)

Hardness Test Results

Sample No.	Sample Type	Hardness
1	G. I. Pipe (8" Dia)	HR – 72.50 – B
2	G. I. Pipe (6" Dia)	HR – 58.50 – B
3	G. I. Pipe (4" Dia)	HR – 67.50 – B

Note: Please always confirm the results on web www.uet-civil.edu.pk

Test Performed by: .S. Asad Ali Gillani

Vision Engineering Services,
New Kot Juspat Shahdara Town Lahore

Client Reference No.: Nil Dated: 25-02-2021

SOM Lab Ref: CED/SOM/3923 (Page 1/1) Dated: 25-02-2021

Test Type: Tensile Test

Sample Type: Nut - Bolts (30mm)

Test Specification: ASTM – F-606

Tensile Test Results

Sample No.	Sample Type	Tested Diameter of Bolt (mm)	Ultimate Load (kN)	Ultimate Tensile Stress (MPa)	% Elongation
1	Nut- Bolt (30 x 140mm)	20.2	273.7	854.0	10.0

Note: Please always confirm the results on web www.uet-civil.edu.pk

Test Performed by: .S. Asad Ali Gillani

Vision Engineering Services,
New Kot Juspat Shahdara Town Lahore

Client Reference No.: Nil Dated: 25-02-2021

SOM Lab Ref: CED/SOM/3924 (Page 1/1) Dated: 55-02-2021

Test Type: Tensile Test

Sample Type: Nut - Bolts (30mm)

Test Specification: ASTM – F-606

Tensile Test Results

Sample No.	Sample Type	Tested Diameter of Bolt (mm)	Ultimate Load (kN)	Ultimate Tensile Stress (MPa)	% Elongation
1	Nut- Bolt (30 x 140mm)	20.0	241.7	769.0	15.0

Note: Please always confirm the results on web www.uet-civil.edu.pk

Test Performed By: Dr. S. Asad Ali Gillni

Maj. Adnan Khalid ®,
Deputy Director, MTL
Testing of Fibreglass Blind Pipe Installation of Permanent Bore for Tube Well at OHWT # 03, DHA, Ph-IX Rahber Sector - (M/S DHA Const)

Client Reference: 408/241/E/Lab/39/40-41 Dated 25-02-2021
SOM Laboratory Reference: CED/SOM/3925(Page-1/1) Dated 25-02-2021
Test: Stiffness Test, Tensile Test & Hoop Tensile Test
Sample Type: Fiberglass Blind Pipe

Stiffness Test (Parallel Plate Loading Test as per ASTM-D-2412)

Total Length = 310 mm, External Diameter = 263 mm, Wall Thickness = 6.7 mm

Percentage Reduction in Diameter of Sample	Compression Load, P (kN)	Stiffness (Corrected)			Remarks
		Pipe Stiffness (kN/m^2)	Stiffness Factor (N-m)	Specific Tangential initial Stiffness (N/m^2)	
5%	5.2	1379	432	27810	No Crack Observed

Tensile Test

Sample Type	Size of Sample (mm)	Ultimate Load (kN)	Ultimate Stress (MPa)
Fiberglass Blind Pipe	28.0 x 6.5	26.5	142.85

Hoop Tensile Test (ASTM-D-2290-04)

Sample Size (mm)				Hoop Tensile Load (kN)	Hoop Stress (MPa)
b_1	t_1	b_2	t_2		
12.0	7.0	12.0	7.0	75.0	446.42

Note: Please always confirm the results of above report on web: www.uet-civil.edu.pk