M.Nadeem Zafar Ullah **Test Performed By:** Dr. /Engr. Asad Ali Gillani

Incharge (Civil), SNGPL. (Const And Domestic Meter Inspection Shop At Multan)

SOM Lab

CC/DMIS/MLN 276 (Page-1/1) **Client Reference:** Ref: 30-04-2022 Dated: 09-05-2022 Dated:

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

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

		D	ia.	A	rea	Yield	Ultimate	Yield	Stress	Ult. S	tress			ū	
S.No.	Weight	Nominal	Calculated	Nominal	Calculated	Load	Load	(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)	Elongation	Gauge Length	%age Elongation	Remarks
	lb/ft	#	in	in ²	in ²	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.624	8	0.991	0.79	0.771	23.41	32.28	65370	66980	90130	92350	1.30	8.0	16.3	
2	2.616	8	0.990	0.79	0.769	23.39	32.39	65310	67100	90410	92880	1.40	8.0	17.5	
3	1.625	6	0.780	0.44	0.478	18.20	22.48	91210	83960	112660	103710	0.80	8.0	10.0	
4	1.622	6	0.779	0.44	0.477	18.45	22.40	92480	85310	112260	103550	0.80	8.0	10.0	
5	0.606	4	0.476	0.20	0.178	5.96	7.26	65760	73890	80040	89930	1.10	8.0	13.8	
6	0.606	4	0.476	0.20	0.178	6.29	7.72	69360	77930	85100	95610	1.00	8.0	12.5	
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BEND TEST:

 No Bend test performed	Note:-
	Only Six Samples
	Received and Tested

Test Performed By: Deputy Director (Engg) Dr. /Engr. Asad Ali Gillani PHA Grw.(Renovation Of Gulshan-e-Iqbal Park Including Track Lighting Sys And Functioning Of Lake) **SOM Lab** Client Reference: DDE/PHA/GRW-22/ Ref: 277 (Page-1/1) Dated: 09-05-2022 Dated: 09-05-2022 Test: Tension Test & Bend Test **Test Specification:** ASTM-A-615 Sample Type: Gauge Length: 8 inch **Deformed Bar** Dia. Area Yield Ultimate **Yield Stress** Ult. Stress %age Elongation Gauge Length Load Load (according to measured area) (according to measured area) (according to nominal area) (according to nominal area) Elongation Remarks Weight Salculated Calculated S.No. Nominal Nominal in^2 in^2 lb/ft # in Tons psi % Tons psi psi psi in in 1 0.592 4 0.471 0.20 0.174 6.66 8.10 73410 84370 89370 102720 1.10 8.0 13.8 --**BEND TEST:** Note:-No Bend test performed Only One Sample Received and Tested

BSD NNB.(Const. For The Project GS. No. 5817 (Group-2) For The Year 2021-22)

SOM Lab

Client Reference: 1058/SDO/BSD/NNS Ref: 278 (Page-1/4)

Dated: 22-04-2022 **Dated:** 09-05-2022

Test:Tension Test & Bend TestTest Specification:ASTM-A-615Gauge Length:8 inchSample Type:Deformed Bar

		D	ia.	A	rea	Yield	Ultimate	Yield	Stress	Ult. Stress				'n	
S.No.	Weight	Nominal	Calculated	Nominal	Calculated	Load	Load	(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)	Elongation	Gauge Length	%age Elongation	Remarks
	lb/ft	#	in	in ²	in ²	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.685	8	1.002	0.79	0.789	30.99	38.71	86510	86620	108060	108190	1.20	8.0	15.0	
2	1.502	6	0.749	0.44	0.441	16.72	21.22	83800	83610	106380	106140	1.10	8.0	13.8	
3	0.592	4	0.471	0.20	0.174	6.19	7.80	68230	78430	85990	98840	0.90	8.0	11.3	
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BEND TEST:

# 8	Sample bend through 180 degrees Satisfactorily without any crack	Note:-
# 6	Sample bend through 180 degrees Satisfactorily without any crack	
# 4	Sample bend through 180 degrees Satisfactorily without any crack	Only Six Samples
		Received and Tested

BSD NNB.(Const. For The Project Basic Health Unit Fatha Thatha For The Year 2021-22)

SOM Lab

 Client Reference:
 1061/SDO/BSD/NNS
 Ref:
 278 (Page-2/4)

 Dated:
 22-04-2022
 Dated:
 09-05-2022

Test:Tension Test & Bend TestTest Specification:ASTM-A-615Gauge Length:8 inchSample Type:Deformed Bar

		D	ia.	Α	rea	Yield	Ultimate	Yield	Stress	Ult. S	tress			Ē	
S.No.	Weight	Nominal	Calculated	Nominal	Calculated	Load	Load	(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)	Elongation	Gauge Length	%age Elongation	Remarks
	lb/ft	#	in	in ²	in ²	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.646	8	0.995	0.79	0.778	30.60	38.53	85430	86750	107570	109230	1.20	8.0	15.0	
2	1.488	6	0.746	0.44	0.437	16.69	21.02	83640	84220	105360	106080	1.20	8.0	15.0	
3	0.595	4	0.472	0.20	0.175	6.42	7.95	70820	80940	87680	100210	1.30	8.0	16.3	
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BEND TEST:

# 8	Sample bend through 180 degrees Satisfactorily without any crack	Note:-
# 6	Sample bend through 180 degrees Satisfactorily without any crack	
# 4	Sample bend through 180 degrees Satisfactorily without any crack	Only Six Samples
		Received and Tested

BSD NNB.(Const. For The Project GS. No. 5817 (Group-3) For The Year 2021-22)

SOM Lab

Client Reference: 1059/SDO/BSD/NNS Ref: 278 (Page-3/4)

Dated: 22-04-2022 **Dated:** 09-05-2022

Test:Tension Test & Bend TestTest Specification:ASTM-A-615Gauge Length:8 inchSample Type:Deformed Bar

		D	ia.	А	rea	Yield Ultimate		Yield	Stress	Ult. S	Stress			L	
S.No.	Weight	Nominal	Calculated	Nominal	Calculated	Load	Load	(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)	Elongation	Gauge Length	%age Elongation	Remarks
	lb/ft	#	in	in ²	in ²	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.637	8	0.993	0.79	0.775	30.70	38.63	85720	87380	107860	109940	1.30	8.0	16.3	
2	1.500	6	0.749	0.44	0.441	16.72	20.87	83800	83610	104590	104360	1.20	8.0	15.0	
3	0.594	4	0.472	0.20	0.175	6.44	8.05	71040	81190	88800	101490	1.20	8.0	15.0	
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BEND TEST:

# 8	Sample bend through 180 degrees Satisfactorily without any crack	Note:-
# 6	Sample bend through 180 degrees Satisfactorily without any crack	
# 4	Sample bend through 180 degrees Satisfactorily without any crack	Only Six Samples
		Received and Tested

BSD NNB.(Const. For The Project GS. No. 5817 (Group-1) For The Year 2021-22)

SOM Lab

Client Reference: 1057/SDO/BSD/NNS Ref: 278 (Page-4/4)

Dated: 22-04-2022 **Dated:** 09-05-2022

Test:Tension Test & Bend TestTest Specification:ASTM-A-615Gauge Length:8 inchSample Type:Deformed Bar

		D	ia.	А	rea	Yield	Ultimate	Yield	Stress	Ult. S	Stress			n	
S.No.	Weight	Nominal	Calculated	Nominal	Calculated	Load	Load	(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)	Elongation	Gauge Length	%age Elongation	Remarks
	lb/ft	#	in	in ²	in ²	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.557	8	0.978	0.79	0.751	23.50	31.60	65600	69000	88220	92800	1.40	8.0	17.5	
2	1.495	6	0.748	0.44	0.439	16.72	21.00	83800	83990	105260	105500	1.10	8.0	13.8	
3	0.596	4	0.472	0.20	0.175	6.39	7.92	70480	80550	87340	99820	1.00	8.0	12.5	
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BEND TEST:

# 8	Sample bend through 180 degrees Satisfactorily without any crack	Note:-
# 6	Sample bend through 180 degrees Satisfactorily without any crack	
# 4	Sample bend through 180 degrees Satisfactorily without any crack	Only Six Samples
		Received and Tested

BSD Shahkot .(Const Of Distt Jail Nankana Sahib ADP No.5740, For The Year 21-22)

SOM Lab

 Client Reference:
 2660-A
 Ref:
 279 (Page-1/1)

 Dated:
 24-03-2022
 Dated:
 09-05-2022

Test:Tension Test & Bend TestTest Specification:ASTM-A-615Gauge Length:8 inchSample Type:Deformed Bar

		D	ia.	Α	rea	Yield	Ultimate	Yield	Stress	Ult. S	tress			_	
S.No.	Weight	Nominal	Calculated	Nominal	Calculated	Load	Load	(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)	Elongation	Gauge Length	%age Elongation	Remarks
	lb/ft	#	in	in ²	in ²	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	0.594	4	0.472	0.20	0.175	4.51	6.83	49690	56790	75320	86070	1.00	8.0	12.5	
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BEND TEST:

# 4	Sample bend through 180 degrees Satisfactorily without any crack	Note:-
		Only Two Samples
		Received and Tested