Muhammad Noman **Test Performed By:** Dr. /Engr. **Ubaid A Mughal**

Site Engineer, DESCON Engineering Ltd. Lahore

Client Reference: 10-TP 2018 **Dated:** 15-01-2019

SOM Lab Ref: CED/SOM/149(Page-1/1) **Dated:** 17-01-2019

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

Sample Type: Deformed Bar **Gauge Length:** 200 mm

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)				
	kg/m	mm	mm	mm^2	mm^2	kN	kN	MPa	MPa	MPa	MPa	mm	mm	%	
1	0.860	12	11.84	113	110	64.50	81.00	570	587	716	737	27.5	200	13.8	
2	0.888	12	12.00	113	113	62.20	77.20	550	550	683	683	20.0	200	10.0	
3	0.903	12	12.10	113	115	70.20	90.00	621	611	796	783	27.5	200	13.8	
4	0.902	12	12.09	113	115	66.00	89.20	584	575	789	777	27.5	200	13.8	
5	1.548	16	15.85	201	197	102.70	135.50	511	521	674	687	27.5	200	13.8	
6	1.541	16	15.81	201	196	103.00	136.00	512	525	676	693	30.0	200	15.0	
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BEND TEST:

12mm	Sample bend through 180 degrees Satisfactorily without any crack

Note:-

Only Nine Samples Received and Tested

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

Muhammad Noman **Test Performed By:** Dr. /Engr. **Ubaid A Mughal**

Site Engineer, DESCON Engineering Ltd. Lahore

Client Reference: 10-TP 2018 **Dated:** 15-01-2019

SOM Lab Ref: CED/SOM/149(Page-1/1) **Dated:** 17-01-2019

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

Sample Type: Deformed Bar **Gauge Length:** 200 mm

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)				
	kg/m	mm	mm	mm^2	mm^2	kN	kN	MPa	MPa	MPa	MPa	mm	mm	%	
1	0.860	12	11.84	113	110	64.50	81.00	570	587	716	737	27.5	200	13.8	
2	0.888	12	12.00	113	113	62.20	77.20	550	550	683	683	20.0	200	10.0	
3	0.903	12	12.10	113	115	70.20	90.00	621	611	796	783	27.5	200	13.8	
4	0.902	12	12.09	113	115	66.00	89.20	584	575	789	777	27.5	200	13.8	
5	1.548	16	15.85	201	197	102.70	135.50	511	521	674	687	27.5	200	13.8	
6	1.541	16	15.81	201	196	103.00	136.00	512	525	676	693	30.0	200	15.0	
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BEND TEST:

12mm	Sample bend through 180 degrees Satisfactorily without any crack

Note:-

Only Nine Samples Received and Tested

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

Sub Divisional Officer **Test Performed By:** **Dr. /Engr.** **M Rizwan Riaz**

Development Sub Division-I, Bahawalnagar

Client Reference: **06-** **SOM Lab Ref:** **125 (Page-1/1)**

Dated: **07-01-2019** **Dated:** **14- 01-2019**

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

Gauge Length: **8 inch** **Sample Type:** **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	1.532	6	0.757	0.44	0.450	9.90	14.20	49630	48520	71180	69600	2.00	8.0	25.0	
2	1.527	6	0.756	0.44	0.449	9.70	14.20	48620	47650	71180	69750	1.90	8.0	23.8	
3	0.671	4	0.501	0.20	0.197	5.40	7.70	59550	60460	84920	86210	1.10	8.0	13.8	
4	0.674	4	0.502	0.20	0.198	5.20	7.70	57340	57920	84920	85770	1.00	8.0	12.5	
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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

Sub Divisional Officer
Goraya Sub division, Daska

Test Performed By: Dr. /Engr. **Ubaid A Mughal**

Client Reference: 506/29-B
Dated: 29-12-2018

SOM Lab Ref: 147 (Page-1/1)
Dated: 17-01-2019

Test: Tension Test & Bend Test
Test Specification: ASTM-A-615 Deformed
Gauge Length: 8 inch
Sample Type: 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	2.544	8	0.976	0.79	0.748	23.04	36.82	64320	67930	102790	108560	1.00	8.0	12.5	
2	1.428	6	0.731	0.44	0.420	12.35	19.03	61930	64880	95400	99940	1.00	8.0	12.5	
3	0.686	4	0.507	0.20	0.202	5.05	6.70	55650	55090	73850	73120	1.40	8.0	17.5	
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BEND TEST:

# 8	Sample bend through 180 degrees Satisfactorily without any crack
# 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

Tanvir Naqvi **Test Performed By:** Dr. /Engr. **Ubaid A Mughal**

Resident Engineer, NESPAK Zeeruk (JV) CPEC (Western Route) Package -II, Isakhel

Client Reference: **RE/NESPAK/P-2/CPEC-WR/667** **SOM Lab Ref:** **148(Page-1/1)**

Dated: **16-01-2019** **Dated:** **17-01-2019**

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	2.586	8	0.984	0.79	0.760	26.47	34.76	73910	76820	97040	100870	1.40	8.0	17.5	
2	2.646	8	0.995	0.79	0.778	25.56	34.27	71350	72450	95680	97150	1.50	8.0	18.8	
3	1.498	6	0.748	0.44	0.440	13.51	18.73	67700	67700	93860	93860	1.60	8.0	20.0	
4	1.557	6	0.764	0.44	0.458	13.63	18.95	68320	65630	94990	91250	1.20	8.0	15.0	
5	1.071	5	0.633	0.31	0.315	10.98	14.39	78110	76870	102400	100780	1.20	8.0	15.0	
6	1.045	5	0.625	0.31	0.307	10.50	14.07	74700	75430	100080	101060	1.20	8.0	15.0	
7	0.657	4	0.496	0.20	0.193	5.61	8.97	61830	64070	98920	102510	1.20	8.0	15.0	
8	0.666	4	0.500	0.20	0.196	5.61	8.99	61830	63090	99150	101170	1.10	8.0	13.8	
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BEND TEST:

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

Note:-

Only Twelve Samples Received and Tested

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

Muhammad Noman **Test Performed By:** Dr. /Engr. **Ubaid A Mughal**

Site Engineer, DESCON Engineering Ltd. Lahore

Client Reference: **10-TP 2018** **SOM Lab Ref:** **149(Page-1/1)**

Dated: **15-01-2019** **Dated:** **17-01-2019**

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

Gauge Length: **8 inch** **Sample Type:** **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	2.599	8	0.986	0.79	0.764	27.93	35.02	77980	80630	97750	101080	1.00	8.0	12.5	
2	2.604	8	0.987	0.79	0.765	27.98	35.09	78120	80670	97950	101150	1.40	8.0	17.5	
3	1.450	6	0.736	0.44	0.426	15.04	18.42	75370	77840	92330	95360	1.10	8.0	13.8	
4	1.459	6	0.739	0.44	0.429	16.97	19.72	85070	87260	98870	101400	1.00	8.0	12.5	
5	0.648	4	0.492	0.20	0.190	6.83	8.61	75320	79280	94990	99990	1.00	8.0	12.5	
6	0.646	4	0.492	0.20	0.190	6.73	8.53	74190	78100	94090	99040	1.20	8.0	15.0	
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BEND TEST:

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

Note:-

Only Nine Samples Received and Tested

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

Engr. Mian Usama Mahmood **Test Performed By:** Dr. /Engr. **Ubaid A Mughal**

Project Engineer, Dr. A Q Khan Hospital Trust, Lahore

Client Reference: **DAQKH/012** **SOM Lab Ref:** **150(Page-1/1)**

Dated: **17-01-2019** **Dated:** **17-01-2019**

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

Gauge Length: **8 inch** **Sample Type:** **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	2.605	8	0.988	0.79	0.766	24.01	34.30	67020	69120	95760	98760	1.00	8.0	12.5	
2	2.629	8	0.992	0.79	0.773	25.05	35.70	69920	71460	99660	101850	1.50	8.0	18.8	
3	0.660	4	0.497	0.20	0.194	5.96	8.61	65760	67800	94990	97920	1.20	8.0	15.0	
4	0.665	4	0.498	0.20	0.195	5.98	8.63	65990	67680	95210	97650	1.10	8.0	13.8	
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BEND TEST:

# 8	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

S. Shaukat Hussain **Test Performed By:** **Dr. /Engr. Ubaid A Mughal**

Incharge (Civil) For Managing Director, Sui Northern Gas Pipelines Ltd. Gujrat

Client Reference: **CC/60/B. W/Gujrat** **SOM Lab Ref:** **151(Page-1/1)**

Dated: **17-01-2019** **Dated:** **17-01-2019**

Test: **Tension Test** **Test Specification:** **ASTM-A-615 Deformed**

Gauge Length: **8 inch** **Sample Type:** **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	0.654	4	0.494	0.20	0.192	7.51	9.12	82850	86300	100610	104800	1.10	8.0	13.8	
2	0.672	4	0.501	0.20	0.197	8.00	9.65	88240	89590	106450	108070	1.00	8.0	12.5	
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BEND TEST:

--	No Bend test performed

Note:-

Only Two Samples Received and Tested

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

Sadaqat Ahmad **Test Performed By:** **Dr. /Engr. M Rizwan Riaz**

Resident Engineer, NESPAK (Pvt) Ltd. Const. of UET Lahore, Narowal Campus at Narowal

Client Reference: 3854/13/SA/07/480 **SOM Lab Ref: 152(Page-1/1)**

Dated: 17-01-2019 **Dated: 17-01-2019**

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

Gauge Length: 8 inch **Sample Type: Deformed Bar(Kisan & Super Kisan)**

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	1.554	6	0.763	0.44	0.457	14.65	19.88	73430	70690	99640	95930	1.40	8.0	17.5	
2	1.507	6	0.751	0.44	0.443	13.46	18.50	67450	66990	92740	92110	1.40	8.0	17.5	
3	0.708	4	0.515	0.20	0.208	7.77	9.68	85660	82360	106790	102680	0.90	8.0	11.3	
4	0.708	4	0.515	0.20	0.208	7.65	10.09	84310	81070	111290	107010	1.00	8.0	12.5	
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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

Ch Abdul Ghafoor **Test Performed By:** **Dr. /Engr. Ubaid A Mughal**

Resident Engineer, Workers Welfare Complex(Phase-I)Adjacent to Sundar Industrial Estate, Distt. Kasur

Client Reference: **RE/PEPAC/WWC-K/H69** **SOM Lab Ref:** **153(Page-1/2)**

Dated: **17-01-2019** **Dated:** **17-01-2019**

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	1.052	5	0.627	0.31	0.309	11.03	14.34	78470	78720	102040	102370	1.00	8.0	12.5	
2	1.042	5	0.624	0.31	0.306	11.72	14.53	83400	84490	103340	104700	0.90	8.0	11.3	
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BEND TEST:

# 5	Sample bend through 180 degrees Satisfactorily without any crack

Note:-

Only Three Samples Received and Tested

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

Ch Abdul Ghafoor **Test Performed By:** **Dr. /Engr. Ubaid A Mughal**

Resident Engineer, Workers Welfare Complex(Phase-I)Adjacent to Sundar Industrial Estate, Distt. Kasur

Client Reference: **RE/PEPAC/WWC-K/H71** **SOM Lab Ref:** **153(Page-2/2)**

Dated: **17-01-2019** **Dated:** **17-01-2019**

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	1.497	6	0.748	0.44	0.440	16.41	20.59	82260	82260	103210	103210	1.00	8.0	12.5	
2	1.499	6	0.749	0.44	0.441	16.41	20.71	82260	82080	103830	103590	1.00	8.0	12.5	
3	0.660	4	0.497	0.20	0.194	6.17	9.23	68010	70110	101730	104880	1.00	8.0	12.5	
4	0.657	4	0.496	0.20	0.193	6.12	9.28	67450	69890	102290	106000	1.20	8.0	15.0	
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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