S. Shaukat Hussain **Test Performed By:** **Dr. /Engr. Umbreen Sahir**

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

Client Reference: **CC/58/Mirpur** **SOM Lab Ref:** **304(Page-1/1)**

Dated: **15-02-2019** **Dated:** **15-02-2019**

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	1.506	6	0.751	0.44	0.443	23.75	25.66	119050	118250	128610	127740	0.60	8.0	7.5	
2	1.457	6	0.738	0.44	0.428	15.74	19.37	78890	81100	97080	99800	1.10	8.0	13.8	
3	0.648	4	0.492	0.20	0.190	7.00	8.69	77230	81290	95770	100810	1.20	8.0	15.0	
4	0.653	4	0.494	0.20	0.192	7.31	8.94	80600	83960	98580	102690	1.10	8.0	13.8	
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-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	

BEND TEST:

--	No Bend test performed

Note:-

Only Four Samples Received and Tested

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

Sub Divisional Officer
Buildings Sub Division, Jaranwala

Test Performed By: Dr. /Engr. M Rizwan Riaz

Client Reference: 2375/J
Dated: 28-01-2019

SOM Lab Ref: 276 (Page-1/1)
Dated: 11-02-2019

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	2.788	8	1.021	0.79	0.819	26.30	39.52	73420	70820	110330	106430	1.10	8.0	13.8	
2	2.793	8	1.022	0.79	0.821	26.40	39.35	73710	70930	109850	105700	1.00	8.0	12.5	
3	1.626	6	0.780	0.44	0.478	19.93	23.04	99890	91950	115480	106300	0.90	8.0	11.3	
4	1.550	6	0.762	0.44	0.456	15.60	19.32	78180	75430	96830	93430	1.00	8.0	12.5	
5	0.682	4	0.505	0.20	0.200	8.18	9.73	90150	90150	107350	107350	1.00	8.0	12.5	
6	0.685	4	0.506	0.20	0.201	7.03	9.60	77560	77180	105890	105360	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
# 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

Sub Divisional Officer
Buildings Sub Division, No 12, Lahore

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

Client Reference: **24/SDO 12th**
Dated: **12-01-2019**

SOM Lab Ref: **305 (Page-1/1)**
Dated: **15-02-2019**

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	2.668	8	0.999	0.79	0.784	26.42	35.60	73770	74330	99380	100140	1.40	8.0	17.5	
2	2.671	8	1.000	0.79	0.785	26.52	35.68	74050	74520	99600	100240	1.30	8.0	16.3	
3	1.538	6	0.759	0.44	0.452	13.48	19.44	67550	65760	97440	94850	1.50	8.0	18.8	
4	1.507	6	0.751	0.44	0.443	13.68	19.90	68570	68110	99740	99060	1.40	8.0	17.5	
5	0.684	4	0.506	0.20	0.201	6.14	9.02	67670	67340	99480	98990	1.30	8.0	16.3	
6	0.685	4	0.506	0.20	0.201	6.07	8.94	66890	66550	98580	98090	1.40	8.0	17.5	
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BEND TEST:

--	No Bend test performed

Note:-

Only Six Samples Received and Tested

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

Executive Engineer (UCET)
University of Sargodha

Test Performed By: Dr. /Engr. M Yousaf

Client Reference: SU/XEN/357
Dated: 12-02-2019

SOM Lab Ref: 306(Page-1/3)
Dated: 15-02-2019

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	2.719	8	1.009	0.79	0.799	32.62	40.47	91070	90040	112980	111710	1.10	8.0	13.8	
2	2.735	8	1.012	0.79	0.804	32.42	40.88	90500	88920	114120	112130	1.20	8.0	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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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

Executive Engineer (UCET)
University of Sargodha

Test Performed By: Dr. /Engr. M Yousaf

Client Reference: SU/XEN/355
Dated: 12-02-2019

SOM Lab Ref: 306(Page-2/3)
Dated: 15-02-2019

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	1.527	6	0.756	0.44	0.449	16.00	21.10	80220	78610	105770	103650	1.30	8.0	16.3	
2	1.528	6	0.756	0.44	0.449	16.21	21.15	81240	79610	106020	103900	1.20	8.0	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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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

Executive Engineer (UCET)
University of Sargodha

Test Performed By: Dr. /Engr. M Yousaf

Client Reference: SU/XEN/354
Dated: 12-02-2019

SOM Lab Ref: 306(Page-3/3)
Dated: 15-02-2019

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	0.703	4	0.513	0.20	0.207	6.63	9.28	73070	70600	102290	98830	1.20	8.0	15.0	
2	0.701	4	0.512	0.20	0.206	6.65	9.33	73290	71160	102860	99860	1.30	8.0	16.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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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

Deputy Director(Engg.)
Faisalabad Dev: Authority, Faisalabad

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

Client Reference: **AD/FDA-2019/R-86/100-02**
Dated: 06-02-2019

SOM Lab Ref: 307(Page-1/1)
Dated: 15-02-2019

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	2.568	8	0.980	0.79	0.755	30.78	35.68	85940	89930	99600	104220	1.10	8.0	13.8	
2	2.518	8	0.971	0.79	0.740	31.60	36.56	88220	94180	102080	108980	1.10	8.0	13.8	
3	1.492	6	0.747	0.44	0.438	13.57	18.71	68010	68320	93760	94190	1.20	8.0	15.0	
4	1.527	6	0.756	0.44	0.449	14.58	18.65	73070	71600	93510	91630	1.30	8.0	16.3	
5	0.677	4	0.503	0.20	0.199	7.70	9.19	84870	85300	101390	101900	1.10	8.0	13.8	
6	0.679	4	0.505	0.20	0.200	7.34	9.02	80940	80940	99480	99480	1.00	8.0	12.5	
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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 Nine Samples Received and Tested

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

Akbar & Associates **Test Performed By:** Dr. /Engr. **M Rizwan Riaz**

Consulting Engineers, C- 406, 4th Floor City Tower, Lahore

Client Reference: **AA/L/LSM/01/2019** **SOM Lab Ref:** **308(Page-1/1)**

Dated: **15-02-2019** **Dated:** **15-02-2019**

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	2.671	8	1.000	0.79	0.785	24.89	33.89	69500	69940	94620	95230	1.70	8.0	21.3	
2	2.671	8	1.000	0.79	0.785	25.03	33.86	69870	70310	94540	95140	1.60	8.0	20.0	
3	1.522	6	0.754	0.44	0.447	13.17	18.40	66020	64980	92230	90780	1.50	8.0	18.8	
4	1.513	6	0.753	0.44	0.445	13.10	18.35	65660	64920	91970	90940	1.60	8.0	20.0	
5	0.646	4	0.492	0.20	0.190	6.60	9.04	72730	76560	99710	104960	1.30	8.0	16.3	
6	0.650	4	0.493	0.20	0.191	6.60	9.02	72730	76160	99480	104170	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
# 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

Maj Adnan khalid® **Test Performed By:** Dr. /Engr. **M. Rizwan Riaz**

Dy Dir MTL, Const of Mosque , Sector -L, DHA Ph-V - (M/S Ghazi Builders)

Client Reference: **408/241/E/Lab/453/002** **SOM Lab Ref:** **309(Page-1/1)**

Dated: **15-02-2019** **Dated:** **15-02-2019**

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

Gauge Length: **8 inch** **Sample Type:** **Deformed Bar (Mughal 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	2.595	8	0.986	0.79	0.763	30.68	39.14	85660	88690	109280	113150	1.20	8.0	15.0	
2	2.560	8	0.979	0.79	0.752	29.28	37.53	81730	85860	104780	110080	1.00	8.0	12.5	
3	1.440	6	0.734	0.44	0.423	16.36	20.59	82010	85300	103210	107360	1.10	8.0	13.8	
4	1.447	6	0.736	0.44	0.425	17.43	21.20	87370	90460	106280	110030	1.00	8.0	12.5	
5	0.657	4	0.496	0.20	0.193	7.08	8.84	78130	80960	97460	100990	1.10	8.0	13.8	
6	0.652	4	0.494	0.20	0.192	7.24	8.97	79810	83140	98920	103040	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
# 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