Arslan Jajeel Qureshi Test Performed By: Dr. /Engr. S Asad Ali Gillani

Deputy Project Manager, Proj Mgmt Unit Chaman (CT-1) NLC C/o Chaman

 Client Reference:
 607/NLC/CAMEOS/Lab/ 0005
 Dated:
 02-12-2020

 SOM Lab Ref:
 CED/SOM/3380 (Page-1/1)
 Dated:
 07-12-2020

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

Sample Type: Steel (Plain Bar)Amreli Steel Gauge Length: 200 mm

	Weight	D	ia.	Ar	ea	Yield	Ultimate	Yield	Stress	Ult. S	Stress		_	_	
S.No.		Weight Nominal Calculated	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
	kg/m	mm	mm	mm ²	mm ²	kN	kN	MPa	MPa	MPa	MPa	mm	mm	%	
1	2.224	19	18.98	284	283	95.70	135.00	338	339	476	478	50.0	200	25.0	
2	2.238	19	19.05	284	285	91.70	134.00	323	322	473	470	35.0	200	17.5	
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BEND TEST:

19mm	Sample bend through 180 degrees Satisfactorily without any crack	Note:-
		Only Three Samples
		Received and Tested

Muhammad Saleem Test Performed By: Dr. /Engr. Sasad Ali Gillani

Project Director (North-3) PAEC, Chashma

SOM Lab

Client Reference: <u>WASO-P(KCI)-LOI-002-)323)/2020</u> Ref: 3381(Page-1/1)

Dated: 02-12-2020 Dated: 07-12-2020

Deformed

Gauge Length: 8 inch Sample Type: Bar

		D	ia.	Α	Area		Ultimate	Yield	Stress	Ult. S	tress			u	
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	1.541	6	0.759	0.44	0.453	13.58	20.20	68060	66110	101270	98370	1.60	8.0	20.0	
2	1.565	6	0.765	0.44	0.460	14.50	22.43	72660	69500	112410	107520	1.60	8.0	20.0	
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BEND TEST:

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

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

Manager, Sinohydro Corporation Limited, Pakistan

Tension Test & Bend Test

SOM Lab

Client Reference: ADIB-301B/2018/157 Ref: 3382(Page-1/1) 07-12-2020 Dated:

07-12-2020 Dated:

Test:

Test Specification: ASTM-A-615

Deformed

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

		D	ia.	Α	Area		Ultimate	Yield	Stress	Ult. S	tress		Æ	٦	
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	1.508	6	0.751	0.44	0.443	13.35	18.40	66940	66480	92230	91600	1.30	8.0	16.3	
2	1.500	6	0.749	0.44	0.441	13.53	18.73	67810	67650	93860	93650	1.40	8.0	17.5	
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Witnessed Day M. Zekid Charif NECDAM Daymack IV									•		•				

Witnessed By: M. Zahid Sharif, NESPAK - Barqaab JV

BEND TEST:

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

Japan Center, Test Performed By: Dr. /Engr. Gillani

Nazed Pindi Stop Peco Road, Township Lahore

SOM Lab

 Client Reference:
 nil
 Ref:
 3383(Page-1/1)

 Dated:
 07-12-2020
 Dated:
 07-12-2020

Deformed

Gauge Length: 0 inch Sample Type: Bar

		Dia.		Α	rea	Yield	Ultimate	Yield	Stress	Ult. S	tress			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	2.679	8	1.001	0.79	0.787	32.01	38.76	89360	89700	108200	108610	1.10	8.0	13.8	
2	0.643	4	0.491	0.20	0.189	5.73	8.51	63180	66850	93860	99330	1.10	8.0	13.8	
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BEND TEST:

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

Sub Divisional Officer

Test Performed By:

Dr. /Engr.

S. Asad Ali

Gillani

Buildings Sub Division No. 9, Lahore

SOM Lab

 Client Reference:
 178/9th
 Ref:
 3384(Page-1/1)

 Dated:
 19-10-2020
 Dated:
 07-12-2020

Deformed

Gauge Length: 8 inch Sample Type: Bar

		D	Dia.		Area		Ultimate	Yield	Stress	Ult. S	tress		_	u	
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	1.521	6	0.754	0.44	0.447	14.14	19.11	70870	69760	95800	94300	1.20	8.0	15.0	
2	0.721	4	0.520	0.20	0.212	9.02	10.57	99480	93850	116570	109970	1.00	8.0	12.5	
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BEND TEST:

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