



STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
Pakistan. Ph: 92-42-99029202

To,
 Chief Engineer (HVDC) NTDC
 National Transmission & Despatch Company Ltd
 +600 kV HVDC Matiari Lahore Transmission Project (Lot-7 & 8)
 (SPO-07-Lot-07 Bakshan Khan)(Kamran Steel)
 Reference # CED/TFL **34685** (Engr. Amina Rajput)
 Reference of the request letter # 9172-76/CE/HVDC/LHR

Dated: 14-02-2020
 Dated: 12-02-2020

Tension Test Report (Page -1/1)

Date of Test 18-02-2020
 Gauge length 8 inches
 Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ size		Area (in ²)		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal (#)	Actual (inch)	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.367	3	0.371	0.11	0.108	3410	5100	68400	69610	102200	104200	1.20	15.0	
2	0.367	3	0.371	0.11	0.108	3430	5100	68800	70060	102200	104200	1.00	12.5	
3	0.368	3	0.371	0.11	0.108	3410	5170	68400	69560	103600	105500	1.20	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only three samples for tensile and three samples for bend test														
Bend Test														
#3 Bar Bend Test Through 180° is Satisfactory														
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#3 Bar Bend Test Through 180° is Satisfactory														

Witness by M. Umair Aslam (DM (HVDC) NTDC), M. Bilal Butt (OE) & Dr. Ali Adnan (CET Lot 7 & 8)

I/C Testing Laboratoires
UET Lahore, Pakistan.

Note:

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Ref: CED/TFL/02/34667

Dated: 13-02-2020

Dated of Test: 18-02-2020

To

Chief Engineer
Air One Pvt Ltd
Lahore Cantt

Subject: - AIRCRAFT JACKS FOR LOAD TEST

Reference to your letter no. AO/FFL/ADM/2020-2001, Dated: 13/02/2020 on the above mentioned subject. Two aircraft jacks as received by us have been tested. The results are as follows.

Sr. No.	Jack No.	Applied Load (Ton)	Remarks
1	Aircraft Main Jack P/N 02-1036-0111 S/N 2083140402	10	Ok
2	Aircraft Main Jack P/N 02-1036-0111 S/N 2083140401	10	Not Ok*

* = Does not sustained load at 10 ton

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Ref: CED/TFL/02/34668

Dated: 13-02-2020

Dated of Test: 18-02-2020

To

Chief Engineer
Air One Pvt Ltd
Lahore Cantt

Subject: - AIRCRAFT JACKS FOR LOAD TEST

Reference to your letter no. AO/FFL/ADM/2020-2002, Dated: 13/02/2020 on the above mentioned subject. Two aircraft jacks as received by us have been tested. The results are as follows.

Sr. No.	Jack No.	Applied Load (Ton)	Remarks
	Aircraft Nose Jack P/N 02-1032-0111 S/N 4645130201	10	Not Ok*
	Aircraft Jack P/N 02-7813C0100-0111 S/N 8237140307	12	Ok

* = Does not sustained load at 10 ton

I/C Testing Laboratoires
UET Lahore, Pakistan.

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Ref: CED/TFL/02/34689

Dated: 17-02-2020

Dated: 18-02-2020

To
M/S CGGC
Suki Kinari Project Management in Pakistan
874 MW Suki Kinari Hydropower Project

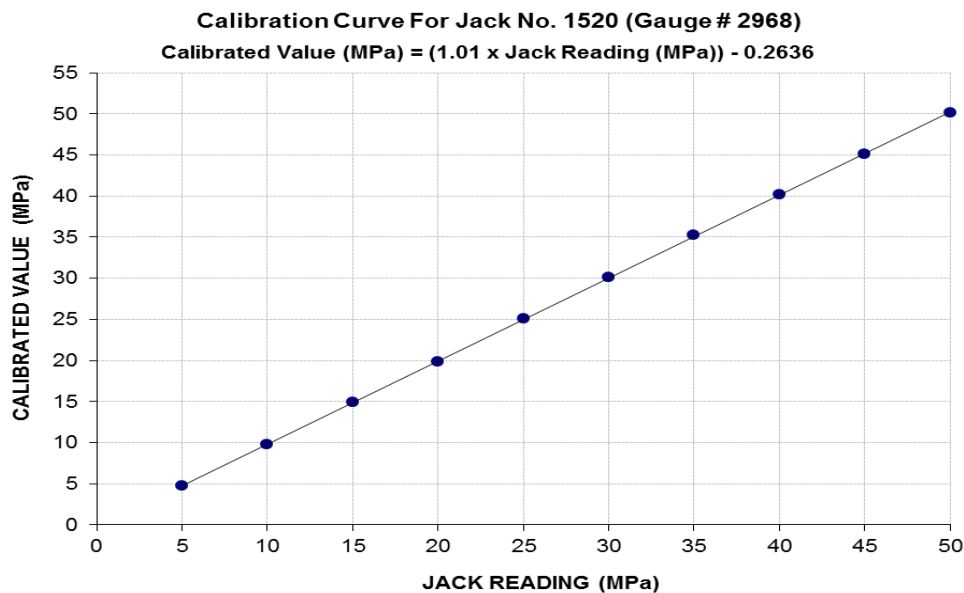
Subject: - CALIBRATION OF HYDRAULIC JACK (MARK: TFL/02/34689) (Page -1/4)

Reference to your Letter No. Nil, dated: 17/02/2020 on the subject cited above. One Hydraulic Jack (Jack No. 1520, Gauge No. 2968) as received by us has been calibrated. The results are tabulated as under:

Total Range : Zero - 60 (MPa)
Calibrated Range : Zero - 50 (MPa)

Hydraulic Jack Reading (MPa)	5	10	15	20	25	30	35	40	45	50
Calibrated Load (Kg)	18400	37400	57200	76400	96600	115600	135400	154600	173200	192800
Calibrated Pressure (Mpa)	4.79	9.73	14.88	19.87	25.13	30.07	35.22	40.22	45.05	50.15

The Ram Area of Jack = 377 cm^2



I/C Testing Laboratories
UET Lahore, Pakistan.

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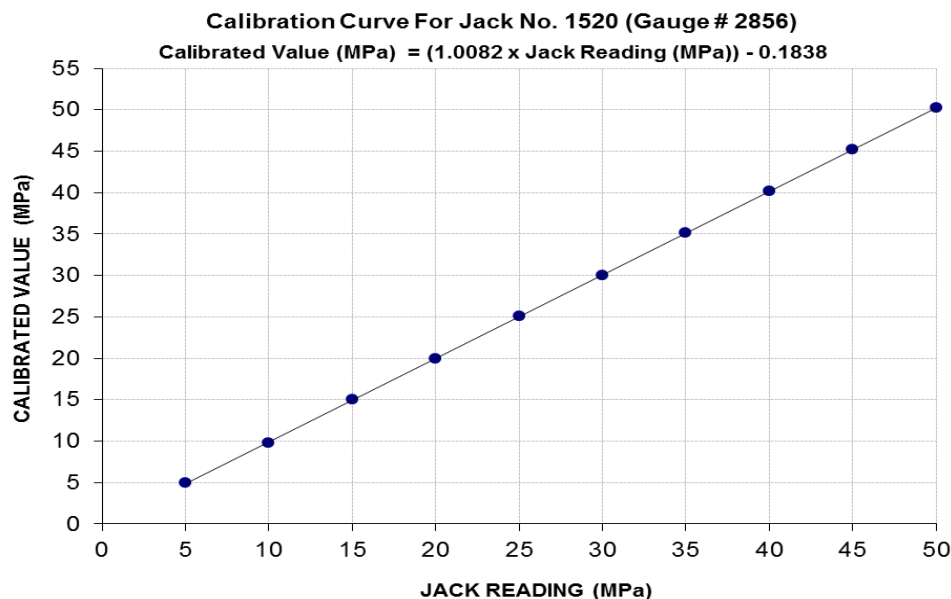
Subject: - CALIBRATION OF HYDRAULIC JACK (MARK: TFL/02/34689) (Page -2/4)

Reference to your Letter No. Nil, dated: 17/02/2020 on the subject cited above. One Hydraulic Jack (Jack No. 1520, Gauge No. 2856) as received by us has been calibrated. The results are tabulated as under:

Total Range : Zero - 60 (MPa)
Calibrated Range : Zero - 50 (MPa)

Hydraulic Jack Reading (MPa)	5	10	15	20	25	30	35	40	45	50
Calibrated Load (Kg)	19000	37600	57600	76600	96400	115400	135000	154400	173800	193000
Calibrated Pressure (Mpa)	4.94	9.78	14.98	19.93	25.08	30.02	35.12	40.16	45.21	50.21

The Ram Area of Jack = 377 cm²



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Dated: 18-02-2020

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Suki Kinari Project Management in Pakistan
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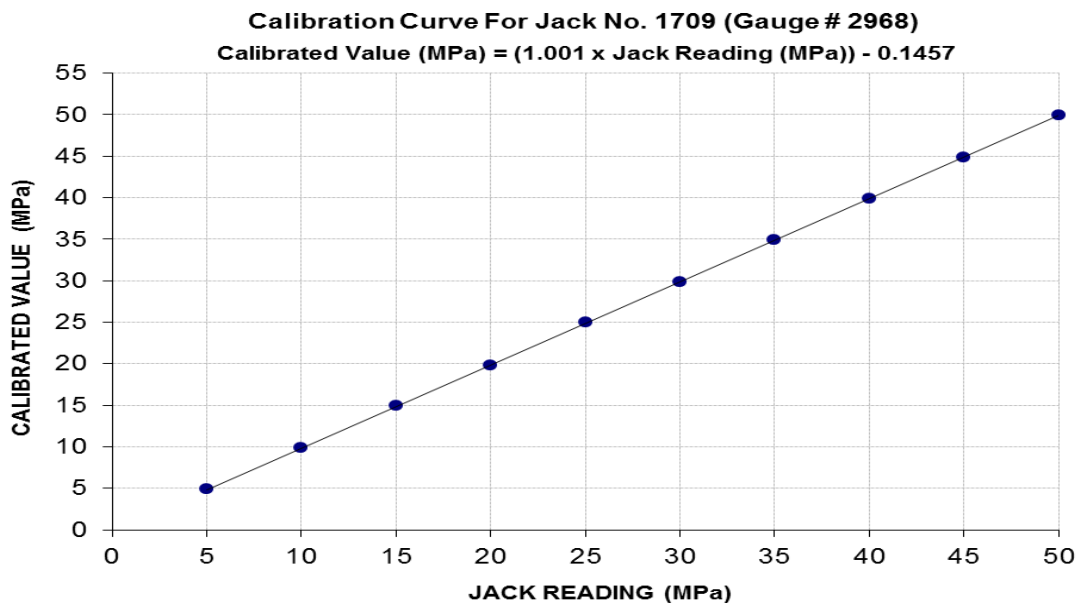
Subject: - CALIBRATION OF HYDRAULIC JACK (MARK: TFL/02/34689) (Page -3/4)

Reference to your Letter No. Nil, dated: 17/02/2020 on the subject cited above. One Hydraulic Jack (Jack No. 1709, Gauge No. 2968) as received by us has been calibrated. The results are tabulated as under:

Total Range : Zero - 60 (MPa)
Calibrated Range : Zero - 50 (MPa)

Hydraulic Jack Reading (MPa)	5	10	15	20	25	30	35	40	45	50
Calibrated Load (Kg)	18800	37800	57400	76000	96000	114600	134200	153200	172600	192000
Calibrated Pressure (Mpa)	4.89	9.83	14.93	19.77	24.97	29.81	34.91	39.85	44.90	49.95

The Ram Area of Jack = 377 cm²



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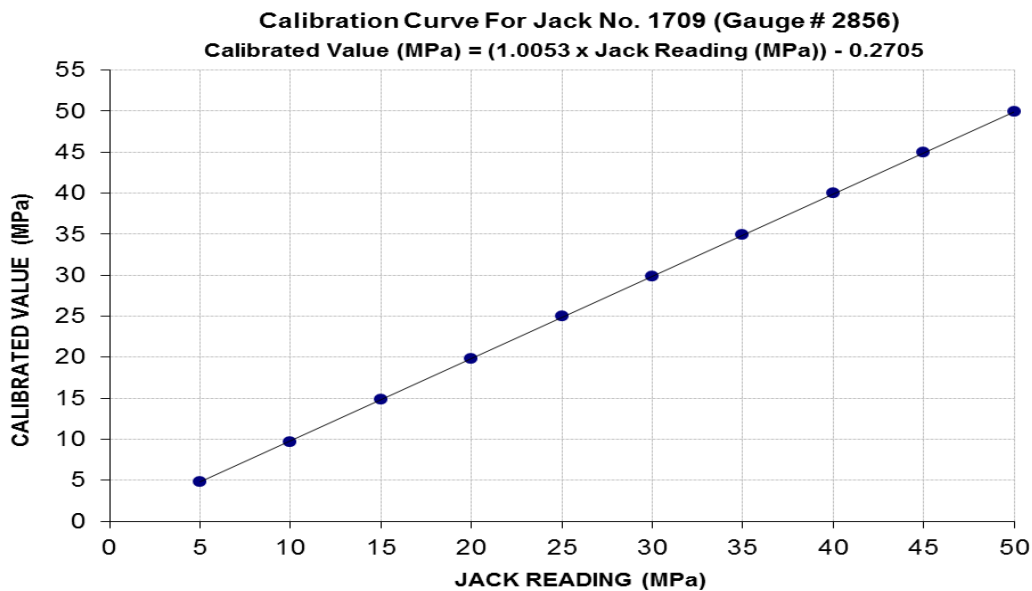
Subject: - CALIBRATION OF HYDRAULIC JACK (MARK: TFL/02/34689) (Page -4/4)

Reference to your Letter No. Nil, dated: 17/02/2020 on the subject cited above. One Hydraulic Jack (Jack No. 1709, Gauge No. 2856) as received by us has been calibrated. The results are tabulated as under:

Total Range : Zero - 60 (MPa)
Calibrated Range : Zero - 50 (MPa)

Hydraulic Jack Reading (MPa)	5	10	15	20	25	30	35	40	45	50
Calibrated Load (Kg)	18400	37200	57000	76000	96200	114800	134400	153600	172800	192000
Calibrated Pressure (Mpa)	4.79	9.68	14.83	19.77	25.02	29.86	34.96	39.96	44.95	49.95

The Ram Area of Jack = 377 cm²



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To,
Senior District Engineer
Lahore & Kasur Districts
HUMQADAM - School Construction and Rehabilitation Programme

Reference # CED/TFL **34700** (Dr. M Rizwan Riaz)

Dated: 18-02-2020

Reference of the request letter # IMC-LHR/SCR/2020/Material Testing/LHR-2054 Dated: 17-02-2020

Tension Test Report (Page – 1/1)

Date of Test 18-02-2020

Gauge length -----

Description Galvanized Wire Mesh Tensile Test

Sr. No.	Diameter Wire	Breaking Load	Remarks
	(mm)	(kN)	
1	1.50	0.975	
2	1.50	0.765	
3	1.50	0.975	
-	-	-	
-	-	-	
-	-	-	
Only three Samples for Test			

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