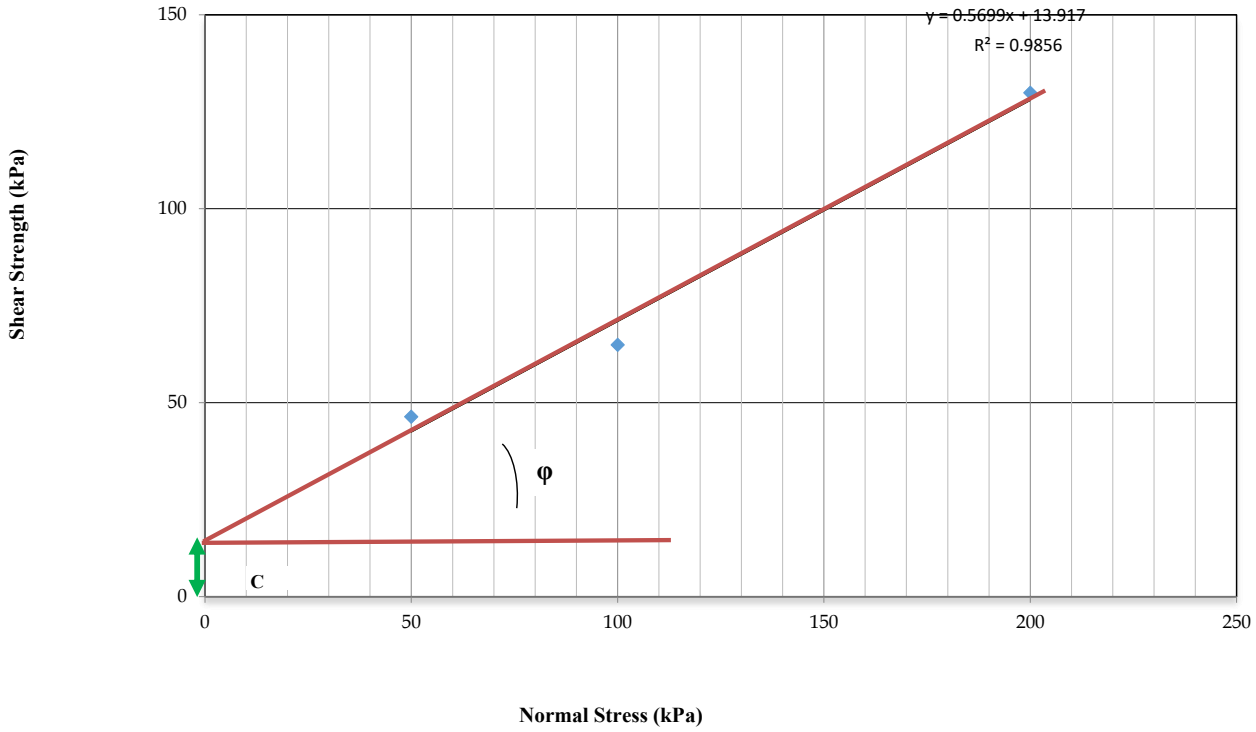
OVERVIEW OF RESULTS

No	Location	Borehole	Sample No	Sampling depth (m)	Cohesion	Angle of Internal Friction	Unified Soil Classification According (Uscs)
					(C) KPa	(degree) φ	
1	Bugesera, Nyanza and Gisagara districts	BH1	BTP/014/02/2025	2.00	13.92	29.68	SC; Clayey sand with gravel
2			BTP/015/02/2025	4.00	13.92	34.06	SC; Clayey sand
3		BH2	BTP/016/02/2025	2.00	9.28	35.09	SC; Clayey sand
4			BTP/017/02/2025	4.00	16.24	31.09	SC; Clayey sand
5		BH3	BTP/018/02/2025	2.00	9.28	16.26	CL; Sandy lean clay
6			BTP/019/02/2025	4.00	18.56	32.73	CL; Sandy lean clay
7		BH4	BTP/020/02/2025	2.00	20.88	28.81	CL; Sandy lean clay
8			BTP/021/02/2025	4.00	24.35	30.95	CL; Sandy lean clay
9		BH5	BTP/022/02/2025	2.00	18.56	37.31	SC; Clayey sand
10			BTP/023/02/2025	4.00	23.19	31.09	CL; Sandy lean clay
11		BH6	BTP/024/02/2025	2.00	16.24	34.32	CL; Sandy lean clay
12			BTP/025/02/2025	4.00	23.19	38.49	CL; Sandy lean clay
13		BH7	BTP/026/02/2025	2.00	27.83	31.92	CL; Sandy lean clay
14			BTP/027/02/2025	4.00	13.92	35.59	SC; Clayey sand

DIRECT SHEAR TEST ACCORDIND TO ASTM D 3080

Reseacher	IRADULUNDA Jeremie	**Sample ID**	BTP/014/02/2025
Project	BUGESERA - NYANZA - MAMBA TRANSIMISSION LINE	**Testing date**	5 February to 19 February 2025
Location	Bugesera District	**Depth (m)**	2
Date sample received in Lab	01 February 2025		
Borehole	BH1		

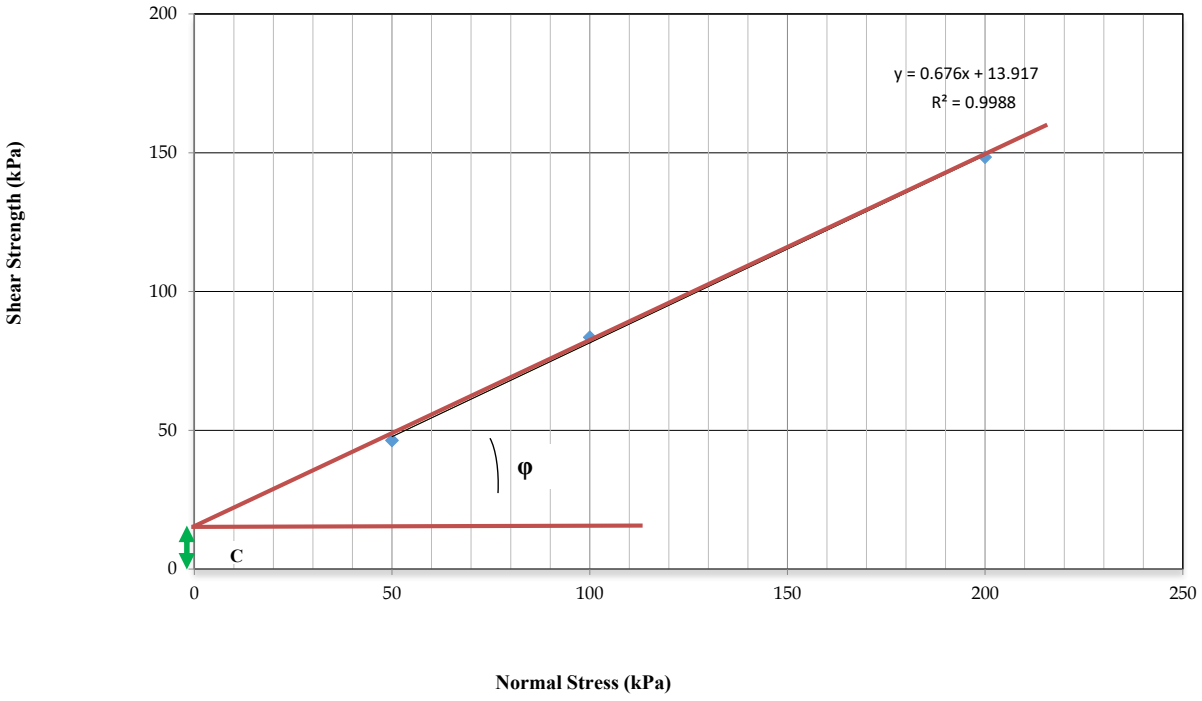
Shear box size	(60*60*20)mm		
Normal Stress δ_n (kpa)	Shear strength ts (kPa)	Cohesion C (kPa)	Angle of Internal Friction Φ (degree)
50.0	46.39	13.92	29.68
100.0	64.94		
200.0	129.89		



RINCENT BTP				
Date	Operator	Checked by	Approved by Lab Manager	Remark
	BANGAMWABO Emmanuel	KAMBARI Benitha	IRADUKUNDA Jeremie	

DIRECT SHEAR TEST ACCORDIND TO ASTM D 3080			
Reseacher	IRADULUNDA Jeremie	**Sample ID**	BTP/015/02/2025
Project	BUGESERA - NYANZA - MAMBA TRANSIMISSION LINE	**Testing date**	5 February to 19 February 2025
Location	Bugesera District	**Depth (m)**	4
Date sample received in Lab	01 February 2025		
Borehole	BH1		

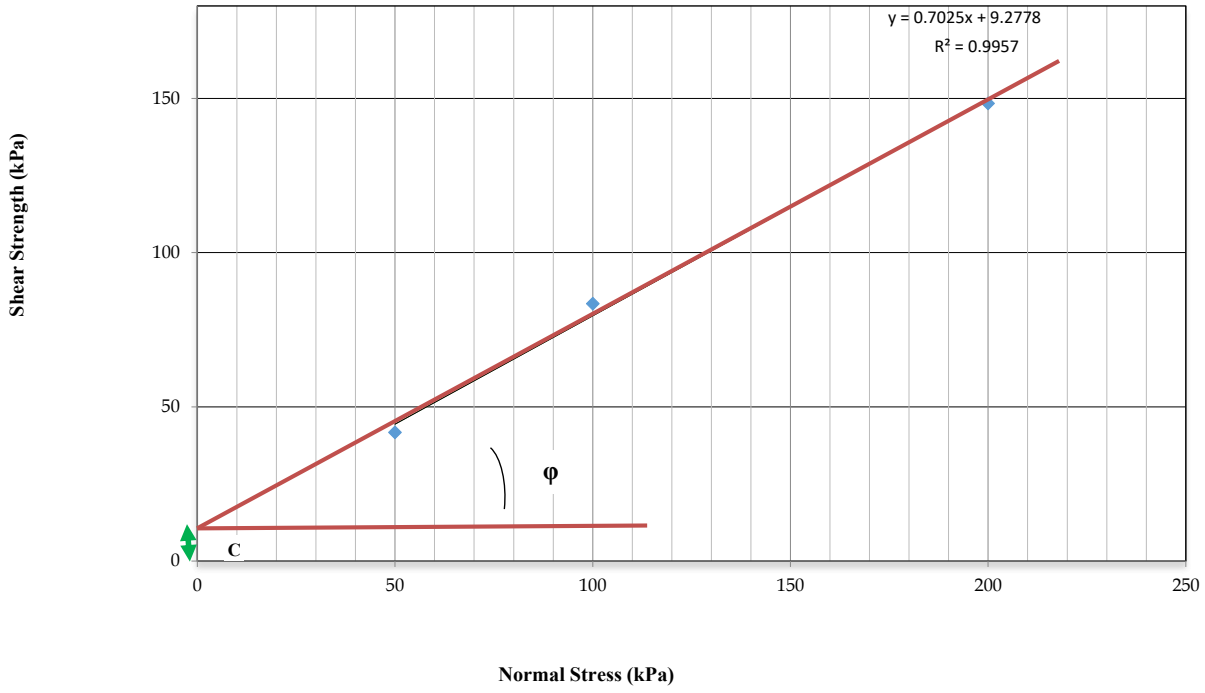
Shear box size	(60*60*20)mm		
Normal Stress δ_n (kpa)	Shear strength ts (kPa)	Cohesion C (kPa)	Angle of Internal Friction Φ (degree)
50.0	46.39	13.92	34.06
100.0	83.50		
200.0	148.44		



RINCENT BTP				
Date	Operator	Checked by	Approved by Lab Manager	Remark
	BANGAMWABO Emmanuel	KAMBARI Benitha	IRADUKUNDA Jeremie	

DIRECT SHEAR TEST ACCORDIND TO ASTM D 3080			
Reseacher	IRADULUNDA Jeremie	**Sample ID**	BTP/016/02/2025
Project	BUGESERA - NYANZA - MAMBA TRANSIMISSION LINE	**Testing date**	5 February to 19 February 2025
Location	Bugesera District	**Depth (m)**	2
Date sample received in Lab	01 February 2025		
Borehole	BH2		

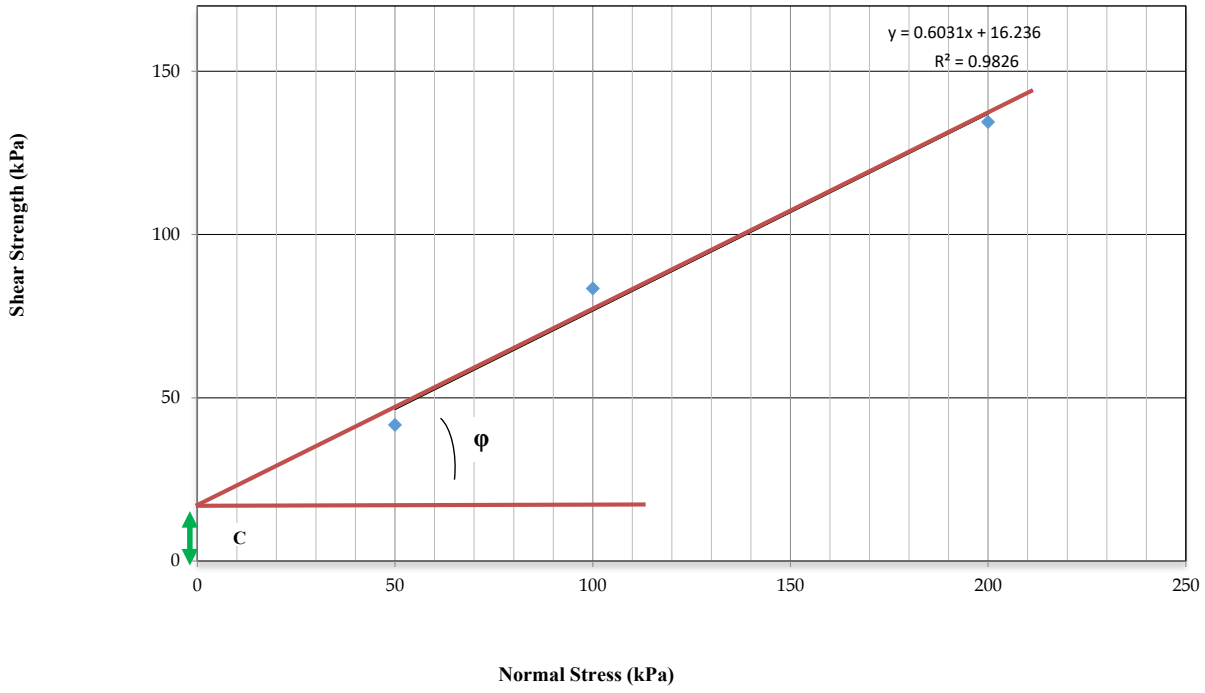
Shear box size	(60*60*20)mm		
Normal Stress δ_n (kpa)	Shear strength ts (kPa)	Cohesion C (kPa)	Angle of Internal Friction Φ (degree)
50.0	41.75	9.28	35.09
100.0	83.50		
200.0	148.44		



RINCENT BTP				
Date	Operator	Checked by	Approved by Lab Manager	Remark
	BANGAMWABO Emmanuel	KAMBARI Benitha	IRADUKUNDA Jeremie	

DIRECT SHEAR TEST ACCORDIND TO ASTM D 3080			
Reseacher	IRADULUNDA Jeremie	**Sample ID**	BTP/017/02/2025
Project	BUGESERA - NYANZA - MAMBA TRANSIMISSION LINE	**Testing date**	5 February to 19 February 2025
Location	Bugesera District	**Depth (m)**	4
Date sample received in Lab	01 February 2025		
Borehole	BH2		

Shear box size	(60*60*20)mm		
Normal Stress δ_n (kpa)	Shear strength ts (kPa)	Cohesion C (kPa)	Angle of Internal Friction Φ (degree)
50.0	41.75	16.24	31.09
100.0	83.50		
200.0	134.53		

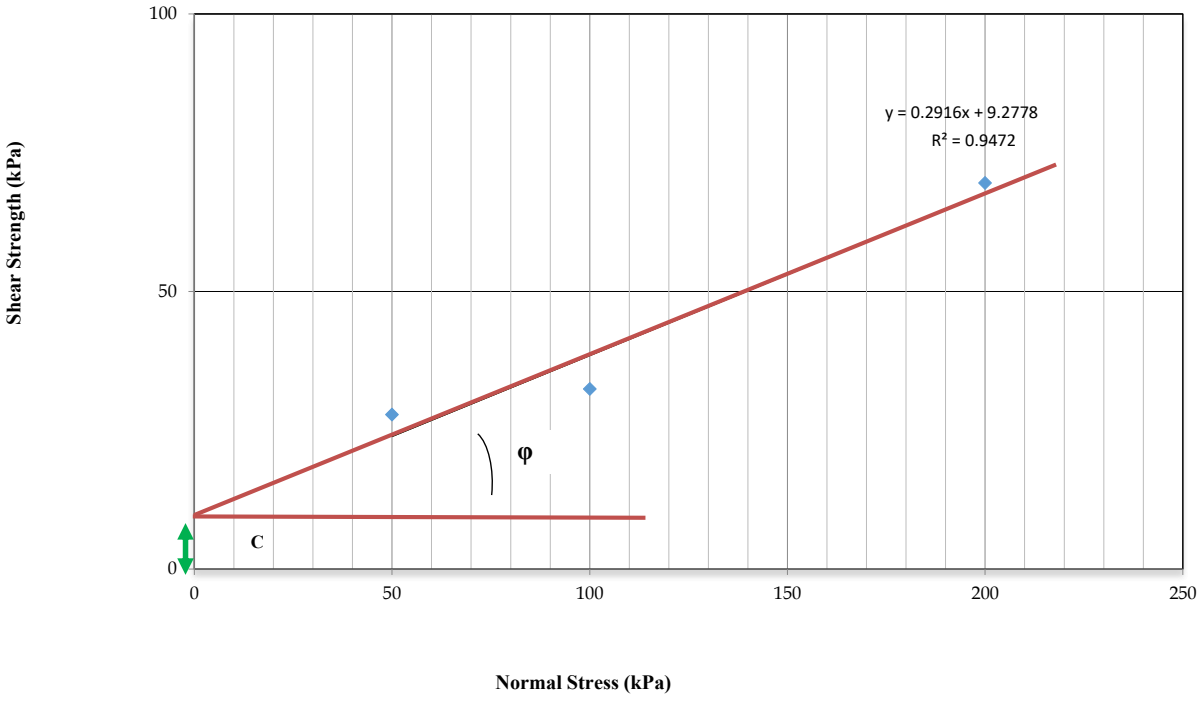


RINCENT BTP				
Date	Operator	Checked by	Approved by Lab Manager	Remark
	BANGAMWABO Emmanuel	KAMBARI Benitha	IRADUKUNDA Jeremie	

DIRECT SHEAR TEST ACCORDIND TO ASTM D 3080

Reseacher	IRADULUNDA Jeremie	**Sample ID**	BTP/018/02/2025
Project	BUGESERA - NYANZA - MAMBA TRANSIMISSION LINE	**Testing date**	5 February to 19 February 2025
Location	Bugesera District	**Depth (m)**	2
Date sample received in Lab	01 February 2025		
Trial pit	BH3		

Shear box size	(60*60*20)mm		
Normal Stress δ_n (kpa)	Shear strength ts (kPa)	Cohesion C (kPa)	Angle of Internal Friction Φ (degree)
50.0	27.83	9.28	16.26
100.0	32.47		
200.0	69.58		

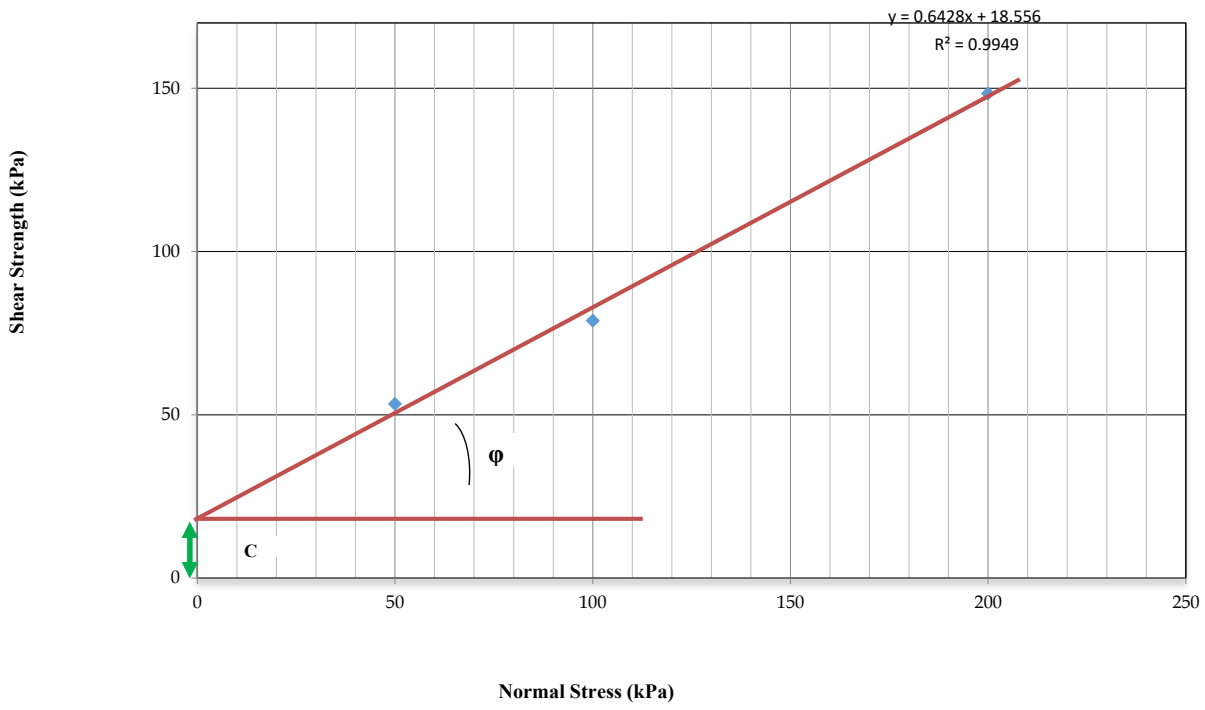


RINCENT BTP

Date	Operator	Checked by	Approved by Lab Manager	Remark
	BANGAMWABO Emmanuel	KAMBARI Benitha	IRADUKUNDA Jeremie	

DIRECT SHEAR TEST ACCORDIND TO ASTM D 3080			
Reseacher	IRADULUNDA Jeremie	**Sample ID**	BTP/019/02/2025
Project	BUGESERA - NYANZA - MAMBA TRANSIMISSION LINE	**Testing date**	5 February to 19 February 2025
Location	Bugesera District	**Depth (m)**	4
Date sample received in Lab	01 February 2025		
Borehole	BH3		

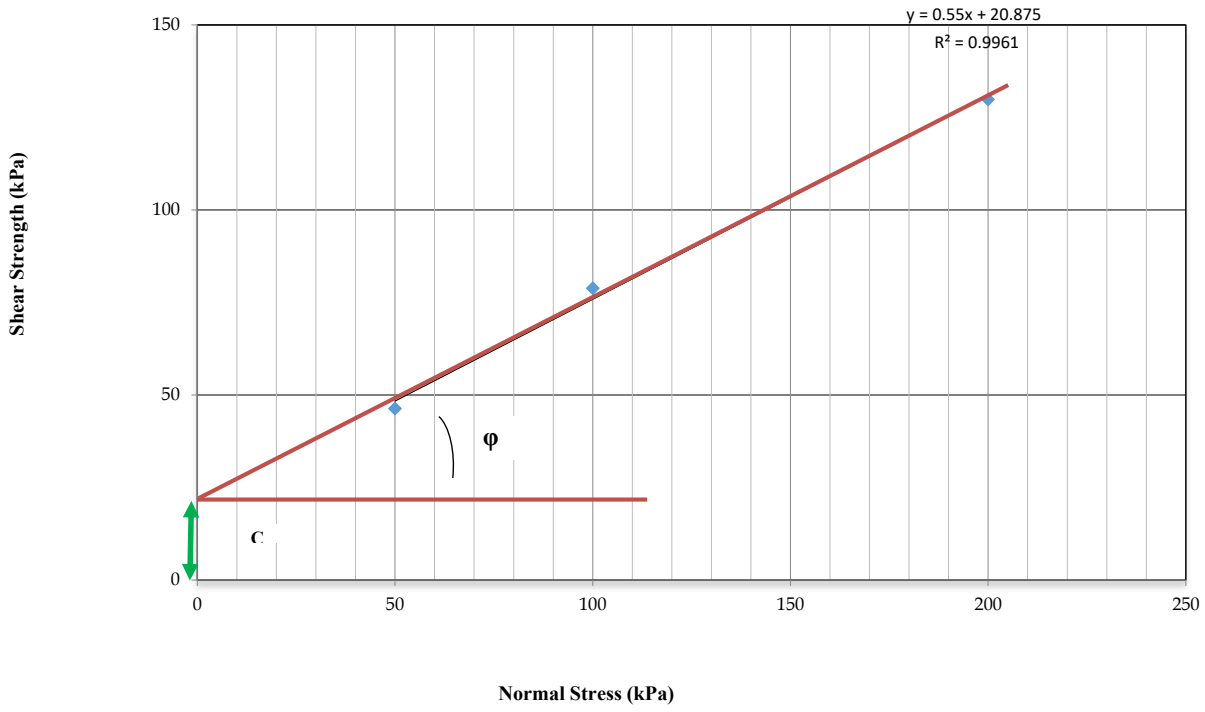
Shear box size	(60*60*20)mm		
Normal Stress δ_n (kpa)	Shear strength ts (kPa)	Cohesion C (kPa)	Angle of Internal Friction Φ (degree)
50.0	53.35	18.56	32.73
100.0	78.86		
200.0	148.44		



RINCENT BTP				
Date	Operator	Checked by	Approved by Lab Manager	Remark
	BANGAMWABO Emmanuel	KAMBARI Benitha	IRADUKUNDA Jeremie	

DIRECT SHEAR TEST ACCORDIND TO ASTM D 3080			
Reseacher	IRADULUNDA Jeremie	**Sample ID**	BTP/020/02/2025
Project	BUGESERA - NYANZA - MAMBA TRANSIMISSION LINE	**Testing date**	5 February to 19 February 2025
Location	Bugesera District	**Depth (m)**	2
Date sample received in Lab	01 February 2025		
Borehole	BH4		

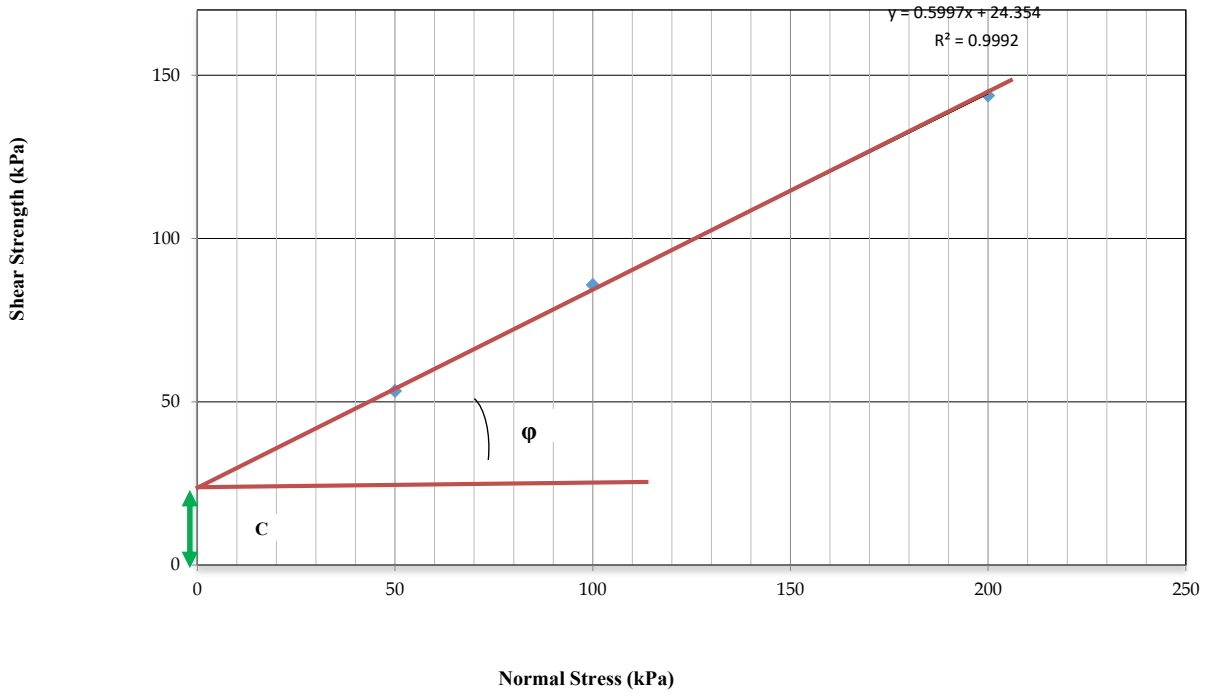
Shear box size	(60*60*20)mm		
Normal Stress δ_n (kpa)	Shear strength ts (kPa)	Cohesion C (kPa)	Angle of Internal Friction Φ (degree)
50.0	46.39	20.88	28.81
100.0	78.86		
200.0	129.89		



RINCENT BTP				
Date	Operator	Checked by	Approved by Lab Manager	Remark
	BANGAMWABO Emmanuel	KAMBARI Benitha	IRADUKUNDA Jeremie	

DIRECT SHEAR TEST ACCORDIND TO ASTM D 3080			
Reseacher	IRADULUNDA Jeremie	**Sample ID**	BTP/021/02/2025
Project	BUGESERA - NYANZA - MAMBA TRANSIMISSION LINE	**Testing date**	5 February to 19 February 2025
Location	Bugesera District	**Depth (m)**	4
Date sample received in Lab	01 February 2025		
Borehole	BH4		

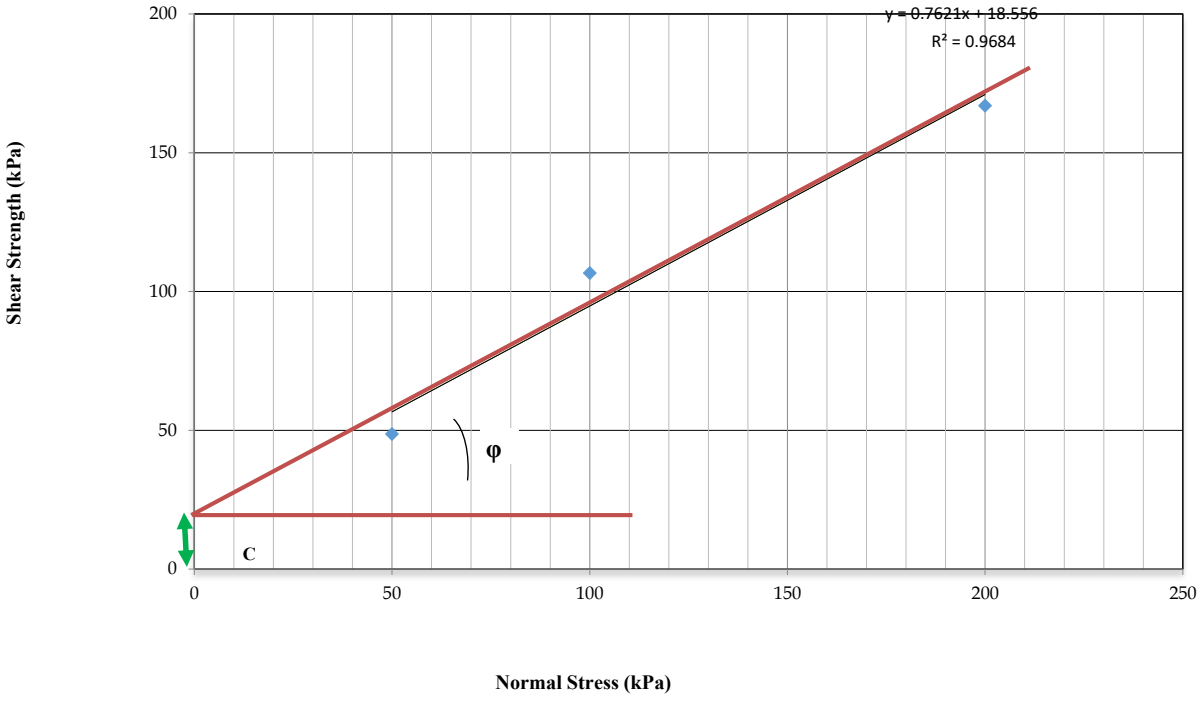
Shear box size	(60*60*20)mm		
Normal Stress δ_n (kpa)	Shear strength ts (kPa)	Cohesion C (kPa)	Angle of Internal Friction Φ (degree)
50.0	53.35	24.35	30.95
100.0	85.82		
200.0	143.81		



RINCENT BTP				
Date	Operator	Checked by	Approved by Lab Manager	Remark
	BANGAMWABO Emmanuel	KAMBARI Benitha	IRADUKUNDA Jeremie	

DIRECT SHEAR TEST ACCORDIND TO ASTM D 3080			
Reseacher	IRADULUNDA Jeremie	**Sample ID**	BTP/022/02/2025
Project	BUGESERA - NYANZA - MAMBA TRANSIMISSION LINE	**Testing date**	5 February to 19 February 2025
Location	Bugesera District	**Depth (m)**	2
Date sample received in Lab	01 February 2025		
Borehole	BH5		

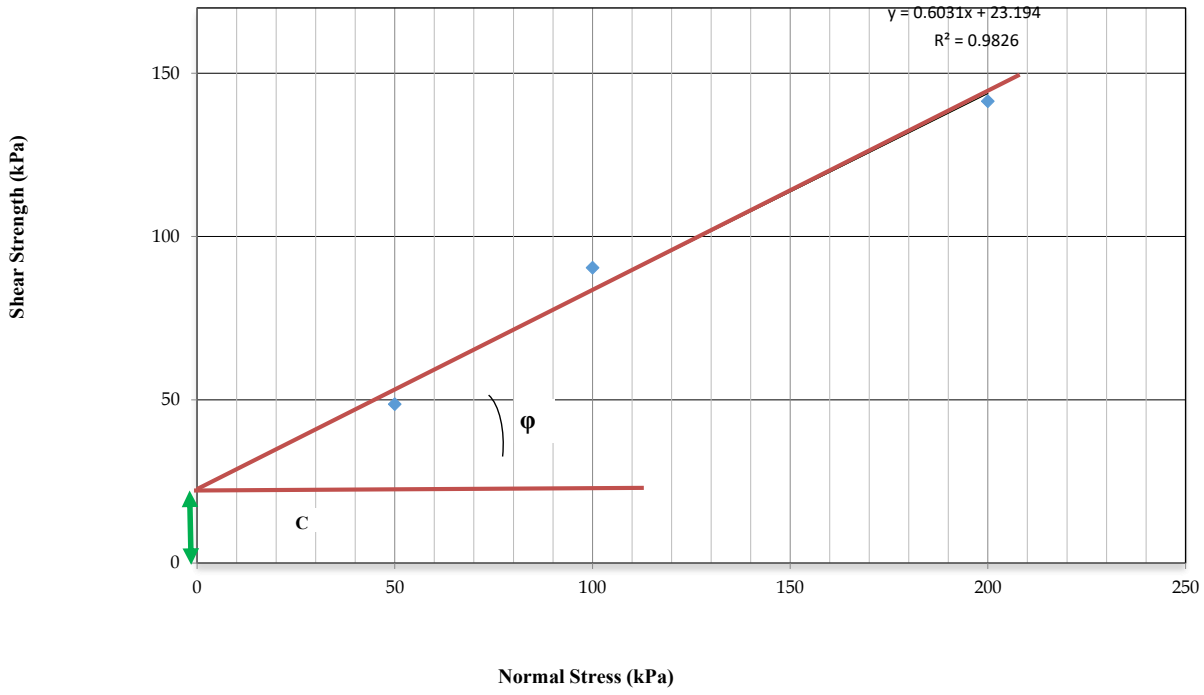
Shear box size	(60*60*20)mm		
Normal Stress δ_n (kpa)	Shear strength ts (kPa)	Cohesion C (kPa)	Angle of Internal Friction Φ (degree)
50.0	48.71	18.56	37.31
100.0	106.69		
200.0	167.00		



RINCENT BTP				
Date	Operator	Checked by	Approved by Lab Manager	Remark
	BANGAMWABO Emmanuel	KAMBARI Benitha	IRADUKUNDA Jeremie	

DIRECT SHEAR TEST ACCORDIND TO ASTM D 3080			
Reseacher	IRADULUNDA Jeremie	**Sample ID**	BTP/023/02/2025
Project	BUGESERA - NYANZA - MAMBA TRANSIMISSION LINE	**Testing date**	5 February to 19 February 2025
Location	Bugesera District	**Depth (m)**	4
Date sample received in Lab	01 February 2025		
Borehole	BH5		

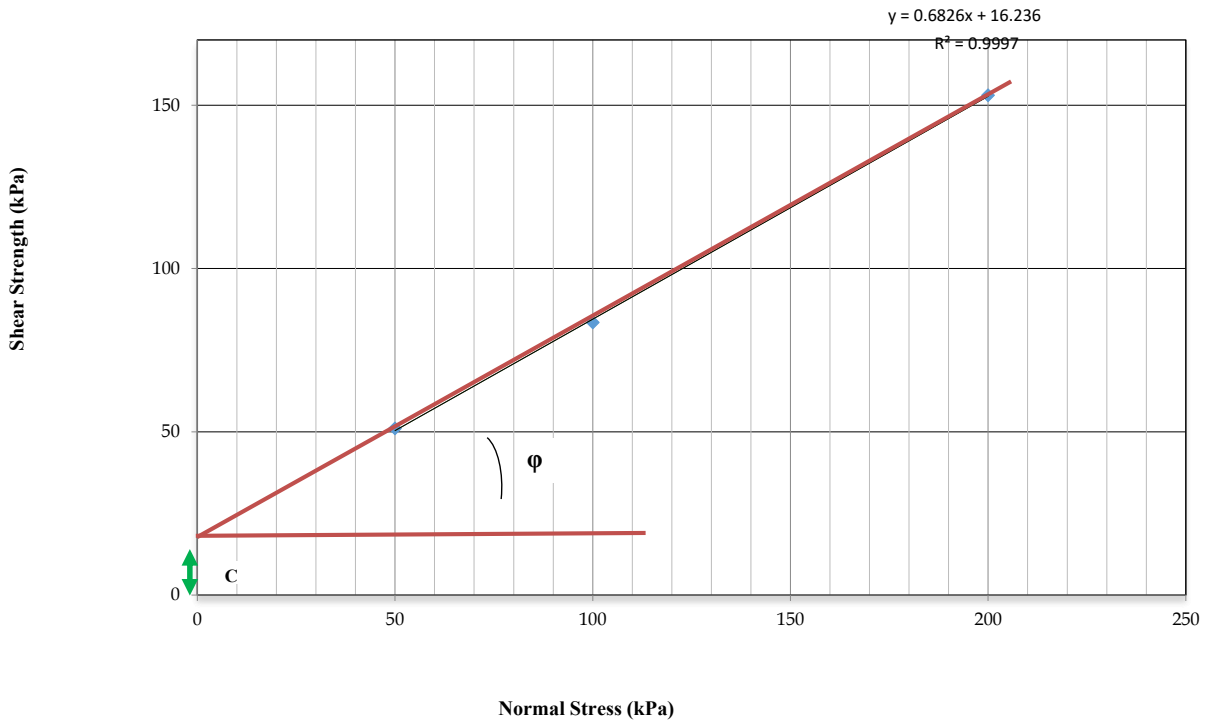
Shear box size	(60*60*20)mm		
Normal Stress δ_n (kpa)	Shear strength ts (kPa)	Cohesion C (kPa)	Angle of Internal Friction Φ (degree)
50.0	48.71	23.19	31.09
100.0	90.46		
200.0	141.49		



RINCENT BTP				
Date	Operator	Checked by	Approved by Lab Manager	Remark
	BANGAMWABO Emmanuel	KAMBARI Benitha	IRADUKUNDA Jeremie	

DIRECT SHEAR TEST ACCORDIND TO ASTM D 3080			
Reseacher	IRADULUNDA Jeremie	**Sample ID**	BTP/024/02/2025
Project	BUGESERA - NYANZA - MAMBA TRANSIMISSION LINE	**Testing date**	5 February to 19 February 2025
Location	Bugesera District	**Depth (m)**	2
Date sample received in Lab	01 February 2025		
Borehole			

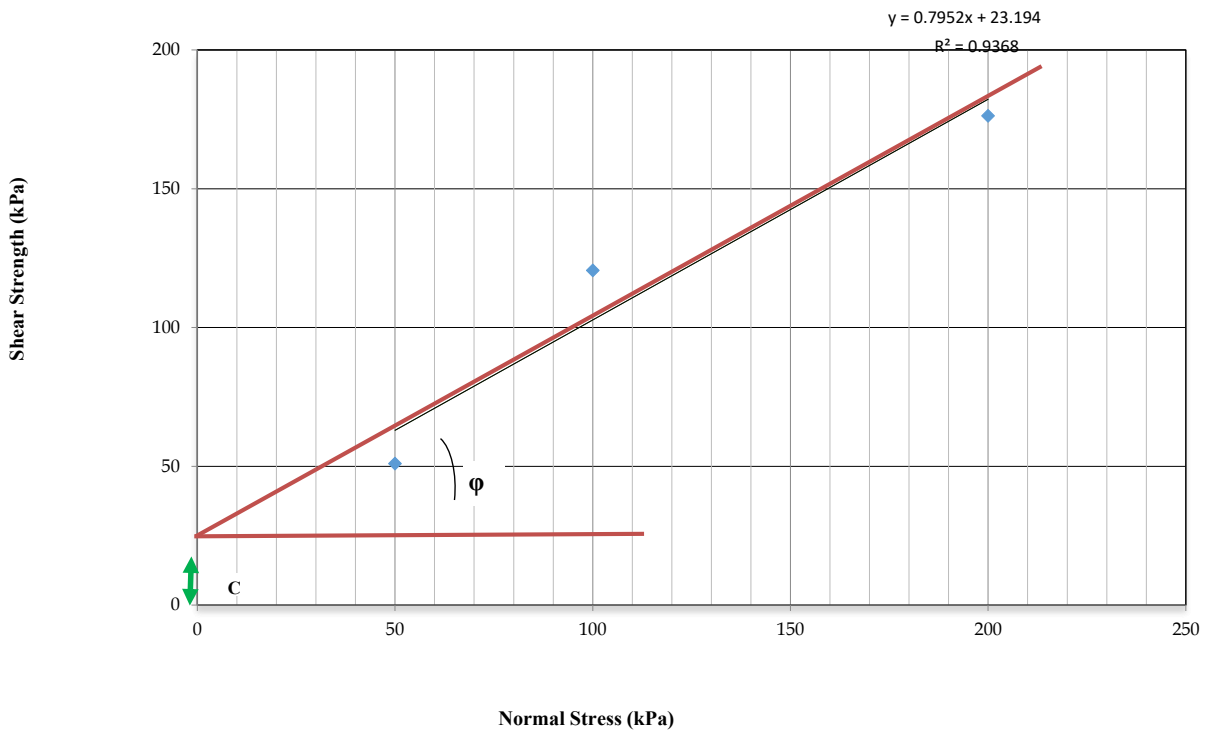
Shear box size	(60*60*20)mm		
Normal Stress δ_n (kpa)	Shear strength ts (kPa)	Cohesion C (kPa)	Angle of Internal Friction Φ (degree)
50.0	51.03	16.24	34.32
100.0	83.50		
200.0	153.08		



RINCENT BTP				
Date	Operator	Checked by	Approved by Lab Manager	Remark
	BANGAMWABO Emmanuel	KAMBARI Benitha	IRADUKUNDA Jeremie	

DIRECT SHEAR TEST ACCORDIND TO ASTM D 3080			
Reseacher	IRADULUNDA Jeremie	**Sample ID**	BTP/025/02/2025
Project	BUGESERA - NYANZA - MAMBA TRANSIMISSION LINE	**Testing date**	5 February to 19 February 2025
Location	Bugesera District	**Depth (m)**	4
Date sample received in Lab	01 February 2025		
Borehole	BH6		

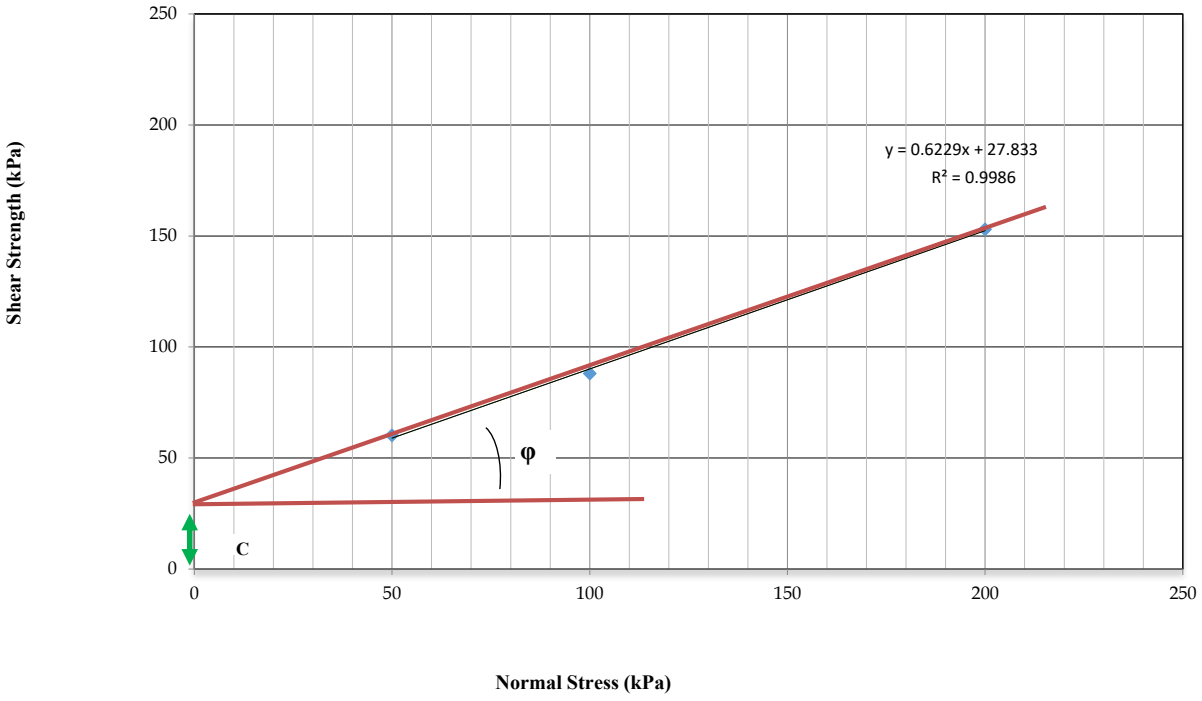
Shear box size	(60*60*20)mm		
Normal Stress δ_n (kpa)	Shear strength ts (kPa)	Cohesion C (kPa)	Angle of Internal Friction Φ (degree)
50.0	51.03	23.19	38.49
100.0	120.61		
200.0	176.28		



RINCENT BTP				
Date	Operator	Checked by	Approved by Lab Manager	Remark
	BANGAMWABO Emmanuel	KAMBARI Benitha	IRADUKUNDA Jeremie	

DIRECT SHEAR TEST ACCORDIND TO ASTM D 3080			
Reseacher	IRADULUNDA Jeremie	**Sample ID**	BTP/026/02/2025
Project	BUGESERA - NYANZA - MAMBA TRANSIMISSION LINE	**Testing date**	5 February to 19 February 2025
Location	Gisagara District	**Depth (m)**	
Date sample received in Lab	01 February 2025		
Trial pit			

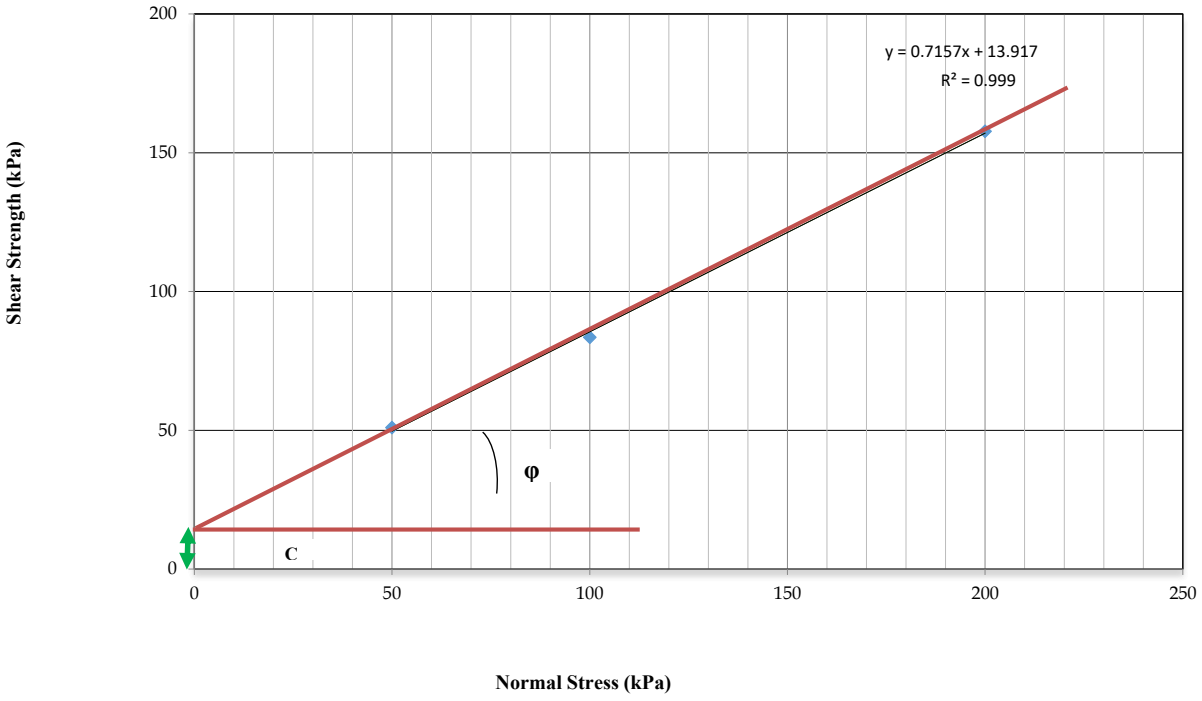
Shear box size	(60*60*20)mm		
Normal Stress δ_n (kpa)	Shear strength ts (kPa)	Cohesion C (kPa)	Angle of Internal Friction Φ (degree)
50.0	60.31	27.83	31.92
100.0	88.14		
200.0	153.08		



RINCENT BTP				
Date	Operator	Checked by	Approved by Lab Manager	Remark
	BANGAMWABO Emmanuel	KAMBARI Benitha	IRADUKUNDA Jeremie	

DIRECT SHEAR TEST ACCORDIND TO ASTM D 3080			
Reseacher	IRADULUNDA Jeremie	**Sample ID**	BTP/027/02/2025
Project	BUGESERA - NYANZA - MAMBA TRANSIMISSION LINE	**Testing date**	5 February to 19 February 2025
Location	Gisagara District	**Depth (m)**	
Date sample received in Lab	01 February 2025		
Borehole			

Shear box size	(60*60*20)mm		
Normal Stress δ_n (kpa)	Shear strength ts (kPa)	Cohesion C (kPa)	Angle of Internal Friction Φ (degree)
50.0	51.03	13.92	35.59
100.0	83.50		
200.0	157.72		



RINCENT BTP				
Date	Operator	Checked by	Approved by Lab Manager	Remark
	BANGAMWABO Emmanuel	KAMBARI Benitha	IRADUKUNDA Jeremie	