

$$\text{IET} = \frac{4}{4} = 1.00$$

TRAMO II (0+000 AL 10+000)

KM: Del 0 al 1				
Progresiva		Long.	Pend. %	Pend.xLong.
Inicio	Término			
0+000.	0+030.	30.00	3.50	105.0000
0+030.	0+130.	100.00	4.00	400.0000
0+130.	0+215.	85.00	5.00	425.0000
0+215.	0+315.	100.00	8.20	820.0000
0+315.	0+435.	120.00	5.00	600.0000
0+435.	0+560.	125.00	5.56	695.0000
0+560.	0+690.	130.00	12.10	1,573.0000
0+690.	0+810.	120.00	10.90	1,308.0000
0+810.	0+900.	90.00	12.50	1,125.0000
0+900.	1+000.	100.00	4.69	469.0000
		0.00		0.0000
		0.00		0.0000
		1,000.00		7,520.0000

$$\text{Pend.} = \frac{7,520.000}{1,000.00} = 7.52 \%$$

KM: Del 1 al 2				
Progresiva		Long.	Pend. %	Pend.xLong.
Inicio	Término			
1+000.	1+130.	130.00	2.80	364.0000
1+130.	1+276.	146.00	2.77	404.4200
1+276.	1+391.	115.00	5.30	609.5000
1+391.	1+471.	80.00	8.25	660.0000
1+471.	1+550.	79.00	8.26	652.5400
1+550.	1+660.	110.00	7.25	797.5000
1+660.	1+755.	95.00	9.68	919.6000
1+755.	1+805.	50.00	9.20	460.0000
1+805.	1+900.	95.00	5.12	486.4000
1+900.	2+000.	100.00	7.25	725.0000
		0.00		0.0000
		0.00		0.0000
		0.00		0.0000
		0.00		0.0000
		0.00		0.0000
		0.00		0.0000
		0.00		0.0000
		1,000.00		6,078.9600

$$\text{Pend.} = \frac{6,078.960}{1,000.00} = 6.08\%$$

KM: Del 2 al 3				
Progresiva		Long.	Pend. %	Pend.xLong.
Inicio	Término			
2+000.	2+160.	160.00	8.25	1,320.000
2+160.	2+275.	115.00	6.25	718.750
2+275.	2+393.	118.00	7.65	902.700
2+393.	2+478.	85.00	7.60	646.000
2+478.	2+568.	90.00	7.2	648.000
2+568.	2+666.	98.00	7.25	710.500
2+666.	2+714.	48.00	5.60	268.800
2+714.	2+834.	120.00	8.25	990.000
2+834.	2+885.	51.00	4.25	216.750
2+885.	3+000.	115.00	8.25	948.750
		0.00		0.000
		0.00		0.000
		0.00		0.000
		0.00		0.000
		0.00		0.000
		0.00		0.000
		1,000.00		7,370.250

$$\text{Pend.} = \frac{7,370.250}{1,000.00} = \boxed{7.37} \%$$

KM: Del 3 al 4				
Progresiva		Long.	Pend. %	Pend.xLong.
Inicio	Término			
3+000.	3+120.	120.00	5.25	630.000
3+120.	3+176.	56.00	6.38	357.280
3+176.	3+272.	96.00	5.48	526.080
3+272.	3+380.	108.00	9.25	999.000
3+380.	3+410.	30.00	5.30	159.000
3+410.	3+495.	85.00	5.20	442.000
3+495.	3+582.	87.00	2.00	174.000
3+582.	3+725.	143.00	6.00	858.000
3+725.	3+830.	105.00	5.40	567.000
3+830.	3+910.	80.00	6.25	500.000
3+910.	4+000.	90.00	3.85	346.500
		1,000.00		5,558.860

$$\text{Pend.} = \frac{5,558.860}{1,000.00} = 5.56\%$$

KM: Del 0		al 1		
Progresiva		Talud h (ml)	Tipo de Material	Estabil del talud
Inicio	Término			
0+000.	0+250.	0.00	MS	1
0+250.	0+500.	0.85	MS	1
0+500.	0+750.	2.00	MS	1
0+750.	1+000.	0.00	MS	1
		TOTAL		4

$$\text{IET} = \frac{4}{4} = 1.00$$

[illegible]

$$IET = \frac{4}{4} = 1.00$$

KM: Del		2	al	3	
Progresiva		Talud h (ml)	Tipo de Material	Estabil del talud	
Inicio	Término				
2+000.	2+250.	0.76	MS	1	
2+250.	2+500.	1.26	MS	1	
2+500.	2+750.	0.46	MS	1	
2+750.	3+000.	0.96	MS	1	
			TOTAL	4	

$$\text{IET} = \frac{4}{4} = 1.00$$

[illegible]

$$\text{IET} = \frac{4}{4} = 1.00$$

$$\text{IET} = \frac{4}{4} = 1.00$$

TRAMO III (0+000 AL 03+634.44)