CALCULOS MECANICOS RED SUBTERRANEA													
Ruta	Longitud [m]	Parametros mecanicos						Camaras y secciones					
		Llenado ducto [%]	Relacion atoramiento J	Factor peso triangular	Factor peso cuna/V	Peso 3 cables [kgf/m]	Tension maxima permisible [kgf]	Longitud mecanica posible [m]	Max. separacion camaras [m]	Secciones de tiro [und]	Camaras interiores [und]	Cambio direccion [und]	Paso adicional [und]
T01 Punto de conexión-Punto Y	2086,091	6,015	7,062095	1,036282	1,013890	2,100	611,830	544,858	78,095	45	44	41	3
T02 Punto Y- Orión	2436,876	6,015	7,062095	1,036282	1,013890	2403,492	2403,492	544,858	79,861	42	41	19	1202
T03 Orión-La Ponderosa	2792,051	6,015	7,062095	1,036282	1,013890	2753,801	2753,801	544,858	78,492	60	59	50	1377
T04 La Ponderosa- El Zafiro	1396,510	6,015	7,062095	1,036282	1,013890	1377,378	1377,378	544,858	75,517	28	27	25	689
T05 Punto Y- Oasis	1248,674	6,015	7,062095	1,036282	1,013890	1231,568	1231,568	544,858	78,641	21	20	10	616
T06 El Oasis-Antares	4677,746	6,015	7,062095	1,036282	1,013890	4613,662	4613,662	544,858	79,518	72	71	33	2307

Halado				Curvatura y presion lateral					Cantidades				
Angulo max. real [°]	Tension en recta [kgf]	Tension salida curva [kgf]	Utilizacion halado [%]	Radio minimo [m]	Radio instalado [m]	PL triangular [kgf/m]	PL cuna/V [kgf/m]	PL diseno [kgf/m]	Camaras con empalme MT [und]	Cable monopolar [m]	Ductos [m]	Empalmes tripolares [und]	Longitud de tiro [m]
19,381	87,694	104,418	17,066	0,25896	1,00000	38,594	52,934	52,934	4	6446,020	4255,625	4	78,095
1201,746	89,677	181,562	29,675	0,25896	1,00000	67,108	92,042	92,042	5	7529,948	4971,228	2	79,861
1376,900	88,140	186,576	30,495	0,25896	1,00000	68,961	94,584	94,584	5	8627,438	5695,784	2	78,492
688,689	84,800	131,684	21,523	0,25896	1,00000	48,672	66,757	66,757	2	4315,215	2848,880	1	75,517
615,784	88,307	123,626	20,206	0,25896	1,00000	45,694	62,671	62,671	2	3858,401	2547,294	1	78,641
2306,831	89,292	124,016	20,270	0,25896	1,00000	45,838	62,869	62,869	9	14454,235	9542,602	3	79,518