OMERLI KASKAT HAVALANDIRMA VE ON OZON TEMAS TANKI

Q total 1,100,000.00 m^3/day 12.73 m^3/sec 4.33 140.53

A. Boru yük kayıpları

1. Dagıtım Yapısı - Orhaniye

Tesis Giriş Kotu=	137.50	m
Q1=	6.37	
tC	25.00	C
nu=	9.068E-07	m^2/sec
L:=	600.00	m
D=	2000.00	mm
V=	2.03	m/s
eps=	0.00030	
Re=	4.47146E+06	
f=	0.017	
V2/(2*g)=	0.21	
hlfriction	1.08	m
Kgiris=	0.50	
Kçıkış=	1.00	
# of pipe	2.00	
Qpipe=	6.37	m^3/s
Dpipe=	2.00	m
Vpipe=	2.03	m/s
K for Butterfly	0.70	
1.00	0.19	
Chosen K for the valve	0.19	
Minor HL	0.35	m
Total Head Loss	1.44	m
Giris Kotu + HL	138.94	

2.00 m

1. Dagıtım Yapısı - Muradiye

Tesis Giriş Kotu=	138.87	m
Q1=	6.37	
tC	10	C
nu=	1.336E-06	m^2/s
L:=	100	m
D=	1600	mm
V=	3.17	m/s
eps=	0.00030	
Re=	3.79263E+06	
f=	0.018	
V2/(2*g)=	0.51	
hl	0.58	m
Total Head Loss	0.93	m
Giris Kotu + HL	139.80	

1.60 m

B.Ön Ozon Temas Tankı

tr	6.22	min	
Volume	4751.39	m^3	
# of tanks	3.00		
Q per tank	366667	m^3/day	4.24 m^3/sec
Volume of each tank	1584	m^3	
Height of water	6.00	m	
Clear Space above water	1.50		
Height of tank	0.00	m	
Area of the tank	264	m^2	
L/W ratio	1.62		
Width of the tank	12.77	m	13.00 m
Length of the tank	20.67	m	21.00 m

RUN

Head Loss Calculations

Free Fall HL

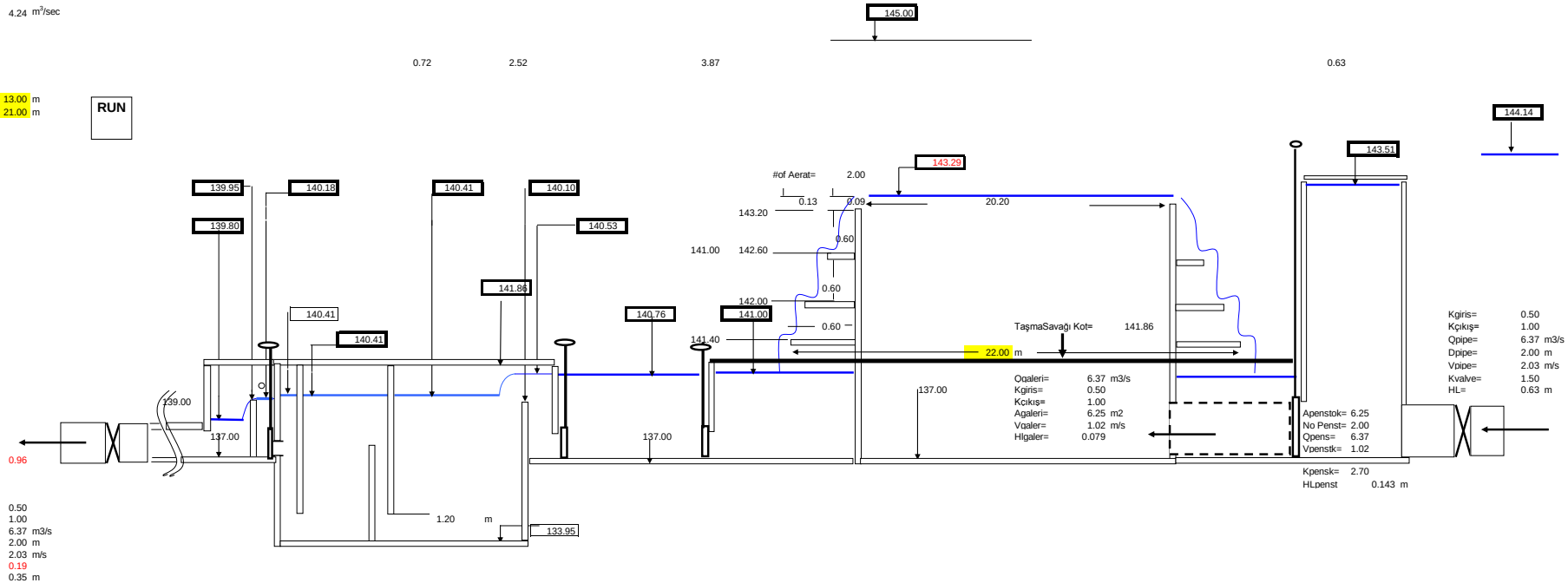
Elavation at the effluent channel	139.80	m
Distance of free fall	0.15	m
Effluent weir level	139.95	m
Critical depth	22.15	cm

Penstock HL

Penstock K	2.70	
penstock size,m' W=H	1.80	m
Penstock Area	3.24	m^2
velocity tru penstock	1.31	m/s
v2/2g=	0.09	m
HL penstock=	0.24	m

Baffle HLs

Flow Area	1.20	m
Flow area under baffle	15.60	m^2
Velocity through the baffle	0.27	m/sec
Head Loss tru Submrqd Orifice	0.01	m
Head loss due to direction change	0.01	m
Total baffle HL	0.00	
HL due to submerged weir	0.11	m
Total head loss=	0.96	m
Ozon Chamber Entrance Elavatn	140.76	m

0.96

Kgiris= 0.50
Kçıkış= 1.00
Qpipe= 6.37 m3/s
Dpipe= 2.00 m
Vpipe= 2.03 m/s
Kvalve= 0.19
HL= 0.35 m