Evaluación del Potencial de Licuación

MÉTODO SIMPLIFICADO DE SEED E IDRISS

Solicitado

Proyecto PUENTE QUILCA

Fecha

Valor de la Magnitud	**Ms=**	**7.50**
Aceleración Máxima	**a máx**	**0.20**

Sondaje	**PL-1**
Profundidad Nivel freático	**2.00**
Cota Nivel Freático	**2.00**
Cota Inicio del Suelo	**0.00**
Peso Unitario Agua (TON/M3)	**1**
Presión total (Kg/cm^2)	

2	0.56789
3	-0.55238
4	-0.52268
5	-0.4032
6	-0.38537
7	-0.33813
8	-0.25238
9	-0.23287

$$\text{Logit}(P_L) = \ln(P_L/(1-P_L)) = -7.633 + 2.256\,M_W - 0.258\,(N_1)_{60cs} + 3.095\,\ln CRR \quad (27)$$

<0.3 <1.1

	Prof. Tota Estratos (m)	Cota Estratos	Espesor Estratos (m)	Prof Total Estratos (pie)	SUCS	γ_t (Tn/m^3)	Finos (%)	N´60 SPT (Glp/ ft)	Efzo. Total (Kg/cm^2)	sfzo. Eftv (Kg/cm^2)	Cn	N1 SPT (Glp/ft)	Δ(N1)60	N160(cs)	Fct. Rduc. Rd	Cσ	Kσ	CRR Tavs (Kg/cm^2)	CSR Tav (Kg/cm^2)	FS		PL
1	2	4		6.562		1.6	32		0.320												**1**	
2	2.3	3.7	0.300	7.546	SP	1.6	32	**8**	0.368	0.338	1.700	14	5	19	0.995	0.105	1.118	0.22	0.14	NO LICUA	**2**	**0.415**
3	5	1	2.700	16.404	SP	2.1	13.2	**6**	0.935	0.635	0.798	5	3	7	0.976	0.075	1.037	0.10	0.19	LICUA	**3**	**0.595**
4	6.5	-0.5	1.500	21.325	SP	1.7	25.2	**6**	1.190	0.740	0.710	4	5	9	0.956	0.073	1.024	0.12	0.20	LICUA	**4**	**0.554**
5	8.5	-2.5	2.000	27.887	SP	1.7	5.4	**15**	1.530	0.880	0.687	10	0	10	0.920	0.093	1.015	0.12	0.21	LICUA	**5**	**0.529**
6	9.6	-3.6	1.100	31.496	SP	1.7	5.4	**6**	1.717	0.957	0.664	4	0	4	0.896	0.072	1.006	0.08	0.21	LICUA	**6**	**0.616**
7	12.5	-6.5	2.900	41.011	SP	1.7	13.6	**8**	2.210	1.160	0.593	5	3	7	0.827	0.075	0.991	0.10	0.20	LICUA	**7**	**0.56**
8	15.7	-9.7	3.200	51.509	SP	1.7	26.1	**7**	2.754	1.384	0.580	4	5	9	0.742	0.073	0.979	0.11	0.19	LICUA	**8**	**0.521**
9	17.5	-11.5	1.800	57.415	SP	1.7	16.1	**8**	3.060	1.510	0.557	4	4	8	0.694	0.074	0.972	0.10	0.18	LICUA	**9**	**0.536**

PROF	SUCS	ESTRATO	N	PROF+0.30	PROF CR	CR	CE	CB	CS	**N60**
1.8	SP	1	5	2.1	2.7	0.75	1	1	1	**3.75**
14.1	SP	1	50	14.4	15.00	1	1	1	1	**50**
16.5	SP	1	5	16.8	17.40	1	1	1	1	**5**
18.1	SP	1	6	18.4	19.00	1	1	1	1	**6**
19.5	SP	1	6	19.8	20.4	1	1	1	1	**6**
25.2	SP	1	7	25.5	26.1	1	1	1	1	**7**
26.9	SP	1	8	27.2	27.8	1	1	1	1	**8**
28.5	SP	1	7	28.8	29.4	1	1	1	1	**7**