ALLEGATO 2

Indagini geognostiche estratte dal database della Provincia di Pisa

Prof. m	Letture di campagna punta	laterale	qc kg/cm²	fs	qc/fs	Prof. m	Letture di campagna punta	laterale	qc kg/cm²	fs	qc/fs
0,20	—	—	–	0,53	—	10,20	121,0	153,0	121,0	2,93	41,0
0,40	3,0	11,0	3,0	0,60	5,0	10,40	89,0	133,0	89,0	1,67	53,0
0,60	4,0	13,0	4,0	0,47	9,0	10,60	124,0	149,0	124,0	1,93	64,0
0,80	4,0	11,0	4,0	0,40	10,0	10,80	61,0	90,0	61,0	1,73	35,0
1,00	10,0	16,0	10,0	0,40	25,0	**11,00**	68,0	94,0	68,0	1,60	42,0
1,20	11,0	17,0	11,0	0,40	27,0	11,20	63,0	87,0	63,0	1,13	56,0
1,40	16,0	22,0	16,0	0,67	24,0	11,40	69,0	86,0	69,0	1,27	54,0
1,60	13,0	23,0	13,0	0,73	18,0	11,60	79,0	98,0	79,0	1,73	46,0
1,80	10,0	21,0	10,0	0,67	15,0	11,80	70,0	96,0	70,0	1,87	37,0
2,00	12,0	22,0	12,0	0,73	16,0	**12,00**	39,0	67,0	39,0	1,40	28,0
2,20	14,0	25,0	14,0	0,73	19,0	12,20	38,0	59,0	38,0	1,07	36,0
2,40	14,0	25,0	14,0	0,73	19,0	12,40	52,0	68,0	52,0	1,40	37,0
2,60	8,0	19,0	8,0	1,13	7,0	12,60	64,0	85,0	64,0	1,73	37,0
2,80	15,0	32,0	15,0	0,40	37,0	12,80	17,0	43,0	17,0	1,20	14,0
3,00	18,0	24,0	18,0	0,53	34,0	**13,00**	56,0	74,0	56,0	1,33	42,0
3,20	19,0	27,0	19,0	0,53	36,0	13,20	18,0	38,0	18,0	0,87	21,0
3,40	19,0	27,0	19,0	0,80	24,0	13,40	20,0	33,0	20,0	0,73	27,0
3,60	19,0	31,0	19,0	0,87	22,0	13,60	19,0	30,0	19,0	1,00	19,0
3,80	24,0	37,0	24,0	0,73	33,0	13,80	11,0	26,0	11,0	0,67	16,0
4,00	19,0	30,0	19,0	1,00	19,0	**14,00**	12,0	22,0	12,0	0,60	20,0
4,20	31,0	46,0	31,0	1,07	29,0	14,20	15,0	24,0	15,0	0,73	20,0
4,40	37,0	53,0	37,0	0,93	40,0	14,40	16,0	27,0	16,0	0,73	22,0
4,60	43,0	57,0	43,0	1,33	32,0	14,60	17,0	28,0	17,0	0,67	25,0
4,80	55,0	75,0	55,0	1,40	39,0	14,80	10,0	20,0	10,0	0,60	17,0
5,00	32,0	53,0	32,0	1,73	18,0	**15,00**	7,0	16,0	7,0	0,47	15,0
5,20	37,0	63,0	37,0	0,93	40,0	15,20	29,0	36,0	29,0	0,67	43,0
5,40	30,0	44,0	30,0	1,53	20,0	15,40	20,0	30,0	20,0	0,80	25,0
5,60	52,0	75,0	52,0	1,93	27,0	15,60	20,0	32,0	20,0	0,67	30,0
5,80	58,0	87,0	58,0	1,60	36,0	15,80	10,0	20,0	10,0	0,47	21,0
6,00	97,0	121,0	97,0	1,07	91,0	**16,00**	10,0	17,0	10,0	0,40	25,0
6,20	63,0	79,0	63,0	1,73	36,0	16,20	11,0	17,0	11,0	0,47	24,0
6,40	82,0	108,0	82,0	2,13	38,0	16,40	9,0	16,0	9,0	0,60	15,0
6,60	49,0	81,0	49,0	1,40	35,0	16,60	9,0	18,0	9,0	0,60	15,0
6,80	51,0	72,0	51,0	1,27	40,0	16,80	9,0	18,0	9,0	0,47	19,0
7,00	32,0	51,0	32,0	1,40	23,0	**17,00**	9,0	16,0	9,0	0,60	15,0
7,20	22,0	43,0	22,0	1,27	17,0	17,20	6,0	15,0	6,0	0,20	30,0
7,40	32,0	51,0	32,0	1,20	27,0	17,40	8,0	11,0	8,0	0,27	30,0
7,60	53,0	71,0	53,0	1,47	36,0	17,60	6,0	10,0	6,0	0,33	18,0
7,80	65,0	87,0	65,0	1,73	37,0	17,80	9,0	14,0	9,0	0,40	22,0
8,00	77,0	103,0	77,0	1,93	40,0	**18,00**	8,0	14,0	8,0	0,27	30,0
8,20	50,0	79,0	50,0	1,93	26,0	18,20	9,0	13,0	9,0	0,40	22,0
8,40	51,0	80,0	51,0	2,33	22,0	18,40	10,0	16,0	10,0	0,53	19,0
8,60	75,0	110,0	75,0	1,27	59,0	18,60	18,0	26,0	18,0	0,80	22,0
8,80	80,0	99,0	80,0	1,33	60,0	18,80	18,0	30,0	18,0	1,07	17,0
9,00	62,0	82,0	62,0	2,07	30,0	**19,00**	18,0	34,0	18,0	0,93	19,0
9,20	52,0	83,0	52,0	1,27	41,0	19,20	15,0	29,0	15,0	0,93	16,0
9,40	116,0	135,0	116,0	2,67	43,0	19,40	15,0	29,0	15,0	0,60	25,0
9,60	98,0	138,0	98,0	3,60	27,0	19,60	16,0	25,0	16,0	0,87	18,0
9,80	147,0	201,0	147,0	3,93	37,0	19,80	11,0	24,0	11,0	0,73	15,0
10,00	158,0	217,0	158,0	2,13	74,0	**20,00**	9,0	20,0	9,0	—	—

- PENETROMETRO STATICO tipo PAGANI da 10/20t
- COSTANTE DI TRASFORMAZIONE Ct = 10 - Velocità Avanzamento punta 2 cm/s
- punta meccanica tipo Begemann ø = 35.7 mm (area punta 10 cm² - apertura 60°)
- manicotto laterale (superficie 150 cm²)

Prof. m	Letture di campagna punta	laterale	qc kg/cm²	fs	qc/fs
0,20	—	—	—	0,67	—
0,40	15,0	25,0	15,0	0,73	20,0
0,60	14,0	25,0	14,0	0,80	17,0
0,80	11,0	23,0	11,0	0,93	12,0
1,00	13,0	27,0	13,0	0,73	18,0
1,20	17,0	28,0	17,0	0,80	21,0
1,40	11,0	23,0	11,0	0,80	14,0
1,60	17,0	29,0	17,0	0,73	23,0
1,80	11,0	22,0	11,0	0,60	18,0
2,00	12,0	21,0	12,0	0,60	20,0
2,20	15,0	24,0	15,0	0,33	45,0
2,40	14,0	19,0	14,0	0,47	30,0
2,60	15,0	22,0	15,0	0,80	19,0
2,80	11,0	23,0	11,0	0,60	18,0
3,00	12,0	21,0	12,0	0,27	45,0
3,20	19,0	23,0	19,0	0,93	20,0
3,40	14,0	28,0	14,0	0,80	17,0
3,60	11,0	23,0	11,0	0,73	15,0
3,80	12,0	23,0	12,0	0,53	22,0
4,00	13,0	21,0	13,0	0,27	49,0
4,20	24,0	28,0	24,0	0,67	36,0
4,40	18,0	28,0	18,0	0,87	21,0
4,60	41,0	54,0	41,0	1,07	38,0
4,80	40,0	56,0	40,0	1,07	37,0
5,00	35,0	51,0	35,0	1,27	28,0
5,20	31,0	50,0	31,0	1,27	24,0
5,40	35,0	54,0	35,0	1,33	26,0
5,60	46,0	66,0	46,0	2,00	23,0
5,80	20,0	50,0	20,0	1,67	12,0
6,00	32,0	57,0	32,0	1,07	30,0
6,20	52,0	68,0	52,0	1,27	41,0
6,40	34,0	53,0	34,0	0,60	57,0
6,60	48,0	57,0	48,0	1,00	48,0
6,80	30,0	45,0	30,0	1,20	25,0
7,00	38,0	56,0	38,0	1,27	30,0
7,20	41,0	60,0	41,0	1,93	21,0
7,40	76,0	105,0	76,0	1,67	46,0
7,60	87,0	112,0	87,0	1,60	54,0

Prof. m	Letture di campagna punta	laterale	qc kg/cm²	fs	qc/fs
7,80	76,0	100,0	76,0	2,67	28,0
8,00	34,0	74,0	34,0	0,87	39,0
8,20	61,0	74,0	61,0	1,60	38,0
8,40	18,0	42,0	18,0	0,87	21,0
8,60	11,0	24,0	11,0	0,87	13,0
8,80	8,0	21,0	8,0	1,07	7,0
9,00	16,0	32,0	16,0	1,60	10,0
9,20	22,0	46,0	22,0	0,73	30,0
9,40	29,0	40,0	29,0	0,93	31,0
9,60	50,0	64,0	50,0	1,13	44,0
9,80	38,0	55,0	38,0	1,00	38,0
10,00	43,0	58,0	43,0	1,13	38,0
10,20	81,0	98,0	81,0	2,13	38,0
10,40	105,0	137,0	105,0	2,20	48,0
10,60	110,0	143,0	110,0	2,87	38,0
10,80	92,0	135,0	92,0	6,00	15,0
11,00	44,0	134,0	44,0	2,27	19,0
11,20	140,0	174,0	140,0	3,73	37,0
11,40	136,0	192,0	136,0	2,13	64,0
11,60	182,0	214,0	182,0	2,27	80,0
11,80	172,0	206,0	172,0	2,13	81,0
12,00	136,0	168,0	136,0	2,13	64,0
12,20	133,0	165,0	133,0	1,33	100,0
12,40	104,0	124,0	104,0	1,20	87,0
12,60	19,0	37,0	19,0	1,13	17,0
12,80	14,0	31,0	14,0	0,67	21,0
13,00	16,0	26,0	16,0	0,87	18,0
13,20	19,0	32,0	19,0	1,00	19,0
13,40	18,0	33,0	18,0	0,93	19,0
13,60	19,0	33,0	19,0	1,00	19,0
13,80	20,0	35,0	20,0	1,00	20,0
14,00	17,0	32,0	17,0	0,87	20,0
14,20	17,0	30,0	17,0	0,73	23,0
14,40	15,0	26,0	15,0	0,67	22,0
14,60	13,0	23,0	13,0	0,67	19,0
14,80	13,0	23,0	13,0	0,33	39,0
15,00	16,0	21,0	16,0	—	—

- PENETROMETRO STATICO tipo PAGANI da 10/20t
- COSTANTE DI TRASFORMAZIONE Ct = 10 - Velocità Avanzamento punta 2 cm/s
- punta meccanica tipo Begemann ø = 35.7 mm (area punta 10 cm² - apertura 60°)
- manicotto laterale (superficie 150 cm²)

Prof. m	Letture di campagna punta	laterale	qc kg/cm²	fs	qc/fs	Prof. m	Letture di campagna punta	laterale	qc kg/cm²	fs	qc/fs
0,20	—	—	—	0,27	—	10,20	7,0	17,0	7,0	0,60	12,0
0,40	7,0	11,0	7,0	0,67	10,0	10,40	9,0	18,0	9,0	0,40	22,0
0,60	10,0	20,0	10,0	0,93	11,0	10,60	14,0	20,0	14,0	0,73	19,0
0,80	13,0	27,0	13,0	1,20	11,0	10,80	14,0	25,0	14,0	0,67	21,0
1,00	12,0	30,0	12,0	1,53	8,0	**11,00**	12,0	22,0	12,0	0,47	26,0
1,20	16,0	39,0	16,0	1,60	10,0	11,20	11,0	18,0	11,0	0,87	13,0
1,40	16,0	40,0	16,0	1,87	9,0	11,40	13,0	26,0	13,0	0,80	16,0
1,60	19,0	47,0	19,0	2,00	10,0	11,60	21,0	33,0	21,0	1,13	19,0
1,80	20,0	50,0	20,0	2,27	9,0	11,80	19,0	36,0	19,0	1,13	17,0
2,00	19,0	53,0	19,0	2,13	9,0	**12,00**	17,0	34,0	17,0	0,93	18,0
2,20	25,0	57,0	25,0	2,47	10,0	12,20	18,0	32,0	18,0	0,80	22,0
2,40	36,0	73,0	36,0	3,27	11,0	12,40	11,0	23,0	11,0	0,67	16,0
2,60	44,0	93,0	44,0	4,40	10,0	12,60	9,0	19,0	9,0	0,20	45,0
2,80	43,0	109,0	43,0	4,67	9,0	12,80	14,0	17,0	14,0	0,80	17,0
3,00	36,0	106,0	36,0	3,93	9,0	**13,00**	22,0	34,0	22,0	0,80	27,0
3,20	36,0	95,0	36,0	3,93	9,0	13,20	19,0	31,0	19,0	0,53	36,0
3,40	38,0	97,0	38,0	4,33	9,0	13,40	24,0	32,0	24,0	0,93	26,0
3,60	47,0	112,0	47,0	3,27	14,0	13,60	18,0	32,0	18,0	1,20	15,0
3,80	29,0	78,0	29,0	3,33	9,0	13,80	22,0	40,0	22,0	0,47	47,0
4,00	22,0	72,0	22,0	2,73	8,0	**14,00**	23,0	30,0	23,0	1,40	16,0
4,20	19,0	60,0	19,0	1,93	10,0	14,20	21,0	42,0	21,0	0,73	29,0
4,40	18,0	47,0	18,0	1,73	10,0	14,40	32,0	43,0	32,0	1,47	22,0
4,60	27,0	53,0	27,0	1,47	18,0	14,60	43,0	65,0	43,0	1,73	25,0
4,80	46,0	68,0	46,0	2,13	22,0	14,80	21,0	47,0	21,0	1,53	14,0
5,00	41,0	73,0	41,0	2,00	20,0	**15,00**	60,0	83,0	60,0	1,73	35,0
5,20	44,0	74,0	44,0	2,07	21,0	15,20	42,0	68,0	42,0	0,60	70,0
5,40	33,0	64,0	33,0	2,07	16,0	15,40	39,0	48,0	39,0	1,80	22,0
5,60	36,0	67,0	36,0	2,13	17,0	15,60	16,0	43,0	16,0	0,53	30,0
5,80	25,0	57,0	25,0	2,00	12,0	15,80	19,0	27,0	19,0	2,47	8,0
6,00	28,0	58,0	28,0	2,33	12,0	**16,00**	21,0	58,0	21,0	3,07	7,0
6,20	30,0	65,0	30,0	2,53	12,0	16,20	25,0	71,0	25,0	1,27	20,0
6,40	31,0	69,0	31,0	2,33	13,0	16,40	39,0	58,0	39,0	1,00	39,0
6,60	31,0	66,0	31,0	2,27	14,0	16,60	34,0	49,0	34,0	1,60	21,0
6,80	35,0	69,0	35,0	2,60	13,0	16,80	45,0	69,0	45,0	1,13	40,0
7,00	28,0	67,0	28,0	2,27	12,0	**17,00**	37,0	54,0	37,0	1,00	37,0
7,20	22,0	56,0	22,0	1,60	14,0	17,20	38,0	53,0	38,0	1,13	34,0
7,40	20,0	44,0	20,0	1,40	14,0	17,40	39,0	56,0	39,0	1,33	29,0
7,60	15,0	36,0	15,0	1,13	13,0	17,60	40,0	60,0	40,0	1,07	37,0
7,80	14,0	31,0	14,0	0,60	23,0	17,80	53,0	69,0	53,0	1,07	50,0
8,00	17,0	26,0	17,0	0,67	25,0	**18,00**	56,0	72,0	56,0	1,67	34,0
8,20	17,0	27,0	17,0	0,93	18,0	18,20	44,0	69,0	44,0	1,33	33,0
8,40	15,0	29,0	15,0	1,13	13,0	18,40	57,0	77,0	57,0	1,33	43,0
8,60	20,0	37,0	20,0	0,93	21,0	18,60	42,0	62,0	42,0	1,33	31,0
8,80	15,0	29,0	15,0	0,93	16,0	18,80	56,0	76,0	56,0	1,53	37,0
9,00	14,0	28,0	14,0	0,53	26,0	**19,00**	43,0	66,0	43,0	1,53	28,0
9,20	22,0	30,0	22,0	0,60	37,0	19,20	50,0	73,0	50,0	1,73	29,0
9,40	10,0	19,0	10,0	0,60	17,0	19,40	36,0	62,0	36,0	1,73	21,0
9,60	10,0	19,0	10,0	0,53	19,0	19,60	50,0	76,0	50,0	1,00	50,0
9,80	12,0	20,0	12,0	0,47	26,0	19,80	48,0	63,0	48,0	1,20	40,0
10,00	11,0	18,0	11,0	0,67	16,0	**20,00**	49,0	67,0	49,0	—	—

- PENETROMETRO STATICO tipo PAGANI da 10/20t
- COSTANTE DI TRASFORMAZIONE Ct = 10 - Velocità Avanzamento punta 2 cm/s
- punta meccanica tipo Begemann ø = 35.7 mm (area punta 10 cm² - apertura 60°)
- manicotto laterale (superficie 150 cm²)

Prof. m	Letture di campagna punta	laterale	qc kg/cm²	fs	qc/fs	Prof. m	Letture di campagna punta	laterale	qc kg/cm²	fs	qc/fs
0,20	—	—	–	0,33	—	10,20	13,0	19,0	13,0	0,60	22,0
0,40	12,0	17,0	12,0	0,73	16,0	10,40	10,0	19,0	10,0	0,47	21,0
0,60	10,0	21,0	10,0	0,87	12,0	10,60	13,0	20,0	13,0	0,60	22,0
0,80	11,0	24,0	11,0	1,33	8,0	10,80	15,0	24,0	15,0	0,67	22,0
1,00	11,0	31,0	11,0	1,27	9,0	**11,00**	13,0	23,0	13,0	0,60	22,0
1,20	16,0	35,0	16,0	1,27	13,0	11,20	15,0	24,0	15,0	0,87	17,0
1,40	15,0	34,0	15,0	1,60	9,0	11,40	17,0	30,0	17,0	0,80	21,0
1,60	18,0	42,0	18,0	1,73	10,0	11,60	13,0	25,0	13,0	0,67	19,0
1,80	19,0	45,0	19,0	2,07	9,0	11,80	12,0	22,0	12,0	0,60	20,0
2,00	20,0	51,0	20,0	0,87	23,0	**12,00**	10,0	19,0	10,0	0,53	19,0
2,20	26,0	39,0	26,0	0,67	39,0	12,20	8,0	16,0	8,0	0,47	17,0
2,40	35,0	45,0	35,0	0,87	40,0	12,40	12,0	19,0	12,0	0,73	16,0
2,60	19,0	32,0	19,0	0,87	22,0	12,60	22,0	33,0	22,0	0,47	47,0
2,80	20,0	33,0	20,0	0,87	23,0	12,80	35,0	42,0	35,0	0,47	75,0
3,00	18,0	31,0	18,0	1,27	14,0	**13,00**	24,0	31,0	24,0	1,00	24,0
3,20	17,0	36,0	17,0	0,73	23,0	13,20	13,0	28,0	13,0	0,40	32,0
3,40	18,0	29,0	18,0	0,93	19,0	13,40	15,0	21,0	15,0	0,67	22,0
3,60	20,0	34,0	20,0	0,80	25,0	13,60	12,0	22,0	12,0	0,60	20,0
3,80	26,0	38,0	26,0	1,20	22,0	13,80	12,0	21,0	12,0	0,60	20,0
4,00	31,0	49,0	31,0	2,20	14,0	**14,00**	17,0	26,0	17,0	0,67	25,0
4,20	44,0	77,0	44,0	2,93	15,0	14,20	8,0	18,0	8,0	0,40	20,0
4,40	73,0	117,0	73,0	3,73	20,0	14,40	9,0	15,0	9,0	0,47	19,0
4,60	60,0	116,0	60,0	3,27	18,0	14,60	9,0	16,0	9,0	0,40	22,0
4,80	53,0	102,0	53,0	3,47	15,0	14,80	13,0	19,0	13,0	0,53	24,0
5,00	40,0	92,0	40,0	3,27	12,0	**15,00**	11,0	19,0	11,0	0,47	24,0
5,20	26,0	75,0	26,0	2,33	11,0	15,20	11,0	18,0	11,0	0,67	16,0
5,40	29,0	64,0	29,0	2,40	12,0	15,40	10,0	20,0	10,0	0,67	15,0
5,60	26,0	62,0	26,0	2,33	11,0	15,60	14,0	24,0	14,0	0,53	26,0
5,80	26,0	61,0	26,0	2,07	13,0	15,80	35,0	43,0	35,0	0,53	66,0
6,00	22,0	53,0	22,0	2,27	10,0	**16,00**	15,0	23,0	15,0	0,73	20,0
6,20	21,0	55,0	21,0	1,47	14,0	16,20	13,0	24,0	13,0	0,33	39,0
6,40	26,0	48,0	26,0	1,87	14,0	16,40	10,0	15,0	10,0	0,33	30,0
6,60	26,0	54,0	26,0	2,13	12,0	16,60	11,0	16,0	11,0	0,60	18,0
6,80	28,0	60,0	28,0	2,00	14,0	16,80	8,0	17,0	8,0	0,60	13,0
7,00	20,0	50,0	20,0	1,33	15,0	**17,00**	8,0	17,0	8,0	0,80	10,0
7,20	17,0	37,0	17,0	0,73	23,0	17,20	24,0	36,0	24,0	0,87	28,0
7,40	14,0	25,0	14,0	0,60	23,0	17,40	24,0	37,0	24,0	0,93	26,0
7,60	14,0	23,0	14,0	0,60	23,0	17,60	24,0	38,0	24,0	0,73	33,0
7,80	12,0	21,0	12,0	0,60	20,0	17,80	33,0	44,0	33,0	0,80	41,0
8,00	14,0	23,0	14,0	0,60	23,0	**18,00**	35,0	47,0	35,0	1,27	28,0
8,20	19,0	28,0	19,0	0,87	22,0	18,20	30,0	49,0	30,0	1,20	25,0
8,40	20,0	33,0	20,0	1,07	19,0	18,40	36,0	54,0	36,0	1,13	32,0
8,60	19,0	35,0	19,0	0,87	22,0	18,60	28,0	45,0	28,0	1,07	26,0
8,80	21,0	34,0	21,0	1,07	20,0	18,80	34,0	50,0	34,0	1,13	30,0
9,00	22,0	38,0	22,0	1,00	22,0	**19,00**	26,0	43,0	26,0	1,07	24,0
9,20	17,0	32,0	17,0	0,87	20,0	19,20	29,0	45,0	29,0	1,13	26,0
9,40	12,0	25,0	12,0	0,53	22,0	19,40	22,0	39,0	22,0	1,07	21,0
9,60	11,0	19,0	11,0	0,60	18,0	19,60	29,0	45,0	29,0	0,73	40,0
9,80	9,0	18,0	9,0	0,47	19,0	19,80	28,0	39,0	28,0	0,67	42,0
10,00	12,0	19,0	12,0	0,40	30,0	**20,00**	28,0	38,0	28,0	—	—

- PENETROMETRO STATICO tipo PAGANI da 10/20t
- COSTANTE DI TRASFORMAZIONE Ct = 10 - Velocità Avanzamento punta 2 cm/s
- punta meccanica tipo *Begemann* ø = 35.7 mm (area punta 10 cm² - apertura 60°)
- manicotto laterale (superficie 150 cm²)

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COMMITTENTE	Comune di San Miniato (PI)	PIEZOMETRO	Assente			
LOCALITA'	Comune di Cerreto Guidi (FI)					
NOTE	CAMPIONI CAROTIERE SEMPLICE ○ SPT ● INDISTURBATI ■	LIVELLO ACQUA DATA / MT. dal P.C.	PROF. FORO	PROF. RIVEST.	ASSISTENTI C. Mattiazzo	
			15,00	15,00	OPERATORI G. Rossi	

mt.	QUOTA da P.C.	SIMBOLOGIA	CAMPIONI TIPO	NUM.	PROF.	DESCRIZIONE STRATIGRAFICA	POCKET kg/cm²	TORVANE kg/cm²	PIEZOMETRO
	0,20					Terreno di riporto limoso con laterizi e ghiaia.			
1	1,70					Limo nocciola da consistente a poco consistente, con concrezioni calcaree ocra.			
2						Limo debolmente argilloso nocciola, da mediamente a poco consistente.	4,6		
3			■	SH1	2,70 3,40		4,6 2,6		
4	4,00						1,0		
5	5,00					Alternanze di limo sabbioso e sabbia debolmente limosa, nocciola con rara ghiaia medio fine.	2,1 2,1 2,4		
6						Livelli di sabbia fine debolmente limosa di colore nocciola con trovante decimetrico di composizione arenacea alla quota di 6m.	1,4 0,8		
7			●	SPT1	7,20				
8					7,65 11/9/8				
9	9,20								
10						Sabbia medio grossa pulita nocciola, debolmente limosa alla base.			
11	11,00								
12	12,20		●	SPT2	11,00 11,45 11/10/12	Sabbia medio grossa da pulita a debolmente limosa, di colore nocciola.			
13	13,60					Sabbia di colore grigio, da pulita a debolmente limosa.			
14			■	SH2	13,80 14,50	Argilla grigia poco consistente, al tetto debolmente limosa, con un livello centimetrico torboso a quota 14,90 m.	1,1 1,1 1,9 1,7 1,4	0,5 0,7	
15	15,00								
16									
17									
18									
19									
20									

Sond.aggio Camp.	Prof. m	W %	γ kn/mc	Ghiaia %	Sabbia %	Limo %	Argilla %	Wl	Wp	Ip	φ °	C kPa	Cu (UU) kPa	Cu (CU) kPa	φ (CU) °	C' (CD) kPa	φ' (CD) °	cv cmq/s	k cm/s	k (c.v.) cm/s
10-1	2.7 – 3.2	24.1	18.8	0	28	44	28	32	19	13						3	26	0.00207	1.1E-08	
10-2	13.8 – 14.5	32.5	18.5	0	1	46	53	57	24	33			78							

Prof. = Profondità, W = Contenuto di acqua, γ = Peso di volume, Wl = Limite di liquidità, Wp = Limite di plasticità, Ip = Indice di plasticità, φ = Angolo di attrito interno, C = coesione (prova di taglio diretto), Cu (UU) = Coesione non drenata (prova triassiale non consolidata non drenata), Cu (CU) = Coesione nel campo degli sforzi totali (prova triassiale consolidata non drenata), φ (CU) = Angolo di attrito interno nel campo degli sforzi totali (prova triassiale consolidata non drenata), C' (CD) = Coesione nel campo degli sforzi efficaci (prova triassiale consolidata drenata), φ' (CD) = Angolo di attrito interno nel campo degli sforzi efficaci (prova triassiale consolidata drenata), cv = coefficiente di consolidazione (prova edometrica), k = permeabilità (prova edometrica), k (c.v.) = permeabilità (prova a carico variabile)

Rivestimento metallico diametro 127 mm

COMMITTENTE	Comune di San Miniato (PI)	PIEZOMETRO	Assente				
LOCALITA'	S. Pierino Comune di San Miniato (PI)						
NOTE	CAMPIONI CAROTIERE SEMPLICE SPT INDISTURBATI	LIVELLO ACQUA DATA	MT. dal P.C.	PROF. FORO	PROF. RIVEST.	ASSISTENTI F. D'Ambrosi	
		22/05/03	10,20	30,00	21,00	OPERATORI R. Sacchetti	

mt.	QUOTA da P.C.	SIMBOLOGIA	CAMPIONI TIPO	CAMPIONI NUM.	CAMPIONI PROF.	DESCRIZIONE STRATIGRAFICA	POCKET kg/cm²	TORVANE kg/cm²	PIEZOMETRO
1						Limo di colore nocciola a tratti debolmente sabbioso.	4,80		
2							2,30 1,80 2,50		
3			▮	SH1	2.50 3.00				
4	3,90								
5	5,40		▮	SH2	4.00 4.50	Sabbia medio fine debolmente limosa a tratti limosa sabbiosa di colore marrone.	1,60	0,80	
6	6,00					Limo debolmente argilloso di colore marrone.	2,50	1,20	
7	7,00					Argilla a tratti debolmente limosa di colore marrone.	1,00 1,50 1,30	0,60 0,60 0,40	
8						Argilla a tratti debolmente limosa, consistente, di colore variegato grigio verde.	1,30 1,30	0,60 0,60	
9							2,00 2,00	0,80 0,88	
10	10,20		▮	SH3	9.50		1,80 1,80	0,90 0,80	
11	11,30				10.10	Limo di colore variegato grigio nocciola.			
12	12,70					Argilla da limosa a debolmente limosa di colore grigio, con rare striature brune di ossidazione al tetto.	1,20 2,00	0,50 0,80	
13						Limo argilloso e argilla limosa di colore grigio.	1,60	0,80	
14							0,60		
15							1,20 0,60		
16							0,60 1,70	0,80	
17							1,80 1,50	0,80 0,72	
18	18,30		▮	SH4	17.30 18.00				
19	19,00					Limo da debolmente sabbioso a sabbioso di colore grigio.			
20			●	SPT1	19,50 19,95 8/10/13	Sabbia medio grossa debolmente limosa di colore grigio, con resti sparsi di conchiglie e abbondante sostanza organica.			
21									
22									
23									
24									
25									
26	26,00								
27	27,30					Argilla di colore grigio con rare concrezioni calcaree sparse.	1,60 1,40	0,80 0,80	
28	28,00					Limo sabbioso e sabbia limosa di colore grigio.	1,60	0,84	
29	29,40					Argilla da limosa a debolmente limosa di colore grigio.	1,80 1,90	0,68 0,68	
30	30,00					Limo debolmente sabbioso a sabbia limosa di colore grigio.	1,60	0,72	

Sond.aggio Camp.	Prof. m	W %	γ kn/mc	Ghiaia %	Sabbia %	Limo %	Argilla %	Wl	Wp	Ip	φ °	C kPa	Cu (UU) kPa	Cu (CU) kPa	φ (CU) °	C' (CD) kPa	φ' (CD) °	cv cmq/s	k cm/s	k (c.v.) cm/s
13-1	2.5 – 3.0	15.9	18.0																	
13-2	4.0 – 4.5	18.7	20.0	0	51	27	22	22	16	6	32	0								
13-3	9.5 – 10.1	28.4	18.8	0	2	41	57	56	27	29			79							
13-4	17.3 – 18.0	28.2	18.4																	

Prof. = Profondità, W = Contenuto di acqua, γ = Peso di volume, Wl = Limite di liquidità, Wp = Limite di plasticità, Ip = Indice di plasticità, φ = Angolo di attrito interno, C = coesione (prova di taglio diretto), Cu (UU) = Coesione non drenata (prova triassiale non consolidata non drenata), Cu (CU) = Coesione nel campo degli sforzi totali (prova triassiale consolidata non drenata), φ (CU) = Angolo di attrito interno nel campo degli sforzi totali (prova triassiale consolidata non drenata), C' (CD) = Coesione nel campo degli sforzi efficaci (prova triassiale consolidata drenata), φ' (CD) = Angolo di attrito interno nel campo degli sforzi efficaci (prova triassiale consolidata drenata), cv = coefficiente di consolidazione (prova edometrica), k = permeabilità (prova edometrica), k (c.v.) = permeabilità (prova a carico variabile)

COMMITTENTE Comune di San Miniato (PI)		PIEZOMETRO Assente	
LOCALITA' S. Pierino Comune di San Miniato (PI)			
NOTE	CAMPIONI CAROTIERE SEMPLICE SPT INDISTURBATI	LIVELLO ACQUA DATA / MT. dal P.C.	PROF. FORO 30,00 / PROF RIVEST. 27,00
		ASSISTENTI F. D'Ambrosi	OPERATORI R. Sacchetti

mt.	QUOTA da P.C.	SIMBOLOGIA	CAMPIONI TIPO	CAMPIONI NUM.	CAMPIONI PROF.	DESCRIZIONE STRATIGRAFICA	POCKET kg/cm²	TORVANE kg/cm²	PIEZOMETRO
1	1,40					Terreno di riporto costituito da limo nocciola ghiaia e laterizi.			
2	2,30				2.00	Limo nocciola con striature grigio verdi e resti di laterizi			
3				SH1	2.40	Riporto di natura eterogenea con sabbia nerastra e limo verdastro, resti di plastica, vetro, ghiaia e laterizi.			
4	4,10								
5						Da limo sabbioso a sabbia debolmente limosa, nocciola, con ghiaia medio fine e laterizi.			
6									
7	7,50			SH2	6.20 6.70				
8	8,50					Sabbia medio grossa nocciola con rara ghiaia medio fine.			
9	9,30					Livelli decimetrici di limo argilloso nocciola con lenti di sabbia alternati a livelli a decimetrici di limo argilloso grigio azzurro con lenti sabbiose color nocciola.			
10			●	SPT1	9,50 9,95 13/12/16				
11						Sabbia medio grosa a tratti debolmente limosa, nocciola, con qualche resto di laterizio e vetro. Presente un livello di argilla limosa nocciola da 10,40 a 10,50 metri.			
12	12,00								
13						Sabbia medio grossa, pulita, color nocciola.			
14	14,50								
15						Sabbia medio grossa colore grigio, a tratti debolmente limosa.			
16				SH3	15.00 15.60				
17	17,40		●	SPT2	15,60 16,05 5/13/19				
18						Sabbia medio grossa a tratti debolmente limosa di colore grigio, con ghiaia da fine a media subangolare; da 18,0 a 19,0 metri presenti molti resti di conchiglie.			
19	19,00								
	19,30					Argilla di colore grigio, mediamente consistente, con concrezioni calcaree.			
20									
21						Sabbia medio fine da debolmente limosa a limosa, grigio, con rari livelli millimetrici torbosi.			
22									
23									
24	24,00								
25	25,00					Sabbia medio grossa, grigio, con presenza di conchiglie.	1,80	1,00	
	25,50					Da argilla ad argilla limosa, grigia, con qualche concrezione calcarea.	1,60	1,00	
26							1,60	0,80	
27	26,80			SH4	26.50 27.00	Alternanze di limi sabbiosi e sabbie fini limose, grigio.	1,40	0,64	
	27,50					Argilla da limosa a debolmente limosa di colore grigio.			
28	28,40					Sabbia fine limosa di colore grigio.	1,50	0,84	
29						Limo argilloso e argilla limosa, grigia, con livelli centimetrici di sabbia fine limosa.	1,70 1,60	1,00 0,86	
30	30,00						1,90	1,00	

Sond.aggio Camp.	Prof. m	W %	γ kn/mc	Ghiaia %	Sabbia %	Limo %	Argilla %	Wl	Wp	Ip	φ °	C kPa	Cu (UU) kPa	Cu (CU) kPa	φ (CU) °	C' (CD) kPa	φ' (CD) °	cv cmq/s	k cm/s	k (c.v.) cm/s
14-1																				
14-2	6.2 – 6.7	18.7	19.0								36	0								
14-3	15.0 – 15.6	18.5	19.8																	
14-4	26.5 – 27.0	23.0	18.8	0	2	46	52	44	22	22			73							

Prof. = Profondità, W = Contenuto di acqua, γ = Peso di volume, Wl = Limite di liquidità, Wp = Limite di plasticità, Ip = Indice di plasticità, φ = Angolo di attrito interno, C = coesione (prova di taglio diretto), Cu (UU) = Coesione non drenata (prova triassiale non consolidata non drenata), Cu (CU) = Coesione nel campo degli sforzi totali (prova triassiale consolidata non drenata), φ (CU) = Angolo di attrito interno nel campo degli sforzi totali (prova triassiale consolidata non drenata), C' (CD) = Coesione nel campo degli sforzi efficaci (prova triassiale consolidata drenata), φ' (CD) = Angolo di attrito interno nel campo degli sforzi efficaci (prova triassiale consolidata drenata), cv = coefficiente di consolidazione (prova edometrica), k = permeabilità (prova edometrica), k (c.v.) = permeabilità (prova a carico variabile)

COMMITTENTE	Comune di San Miniato (PI)	PIEZOMETRO	Assente				
LOCALITA'	S. Pierino Comune di San Miniato (PI)						
NOTE	CAMPIONI CAROTIERE SEMPLICE SPT INDISTURBATI	LIVELLO ACQUA DATA	MT. dal P.C.	PROF. FORO	PROF. RIVEST.	ASSISTENTI C. Matiazzo	
		23/05/03	8,15	20,00	15,00	OPERATORI R. Sacchetti	

mt.	QUOTA da P.C.	SIMBOLOGIA	CAMPIONI TIPO	CAMPIONI NUM.	CAMPIONI PROF.	DESCRIZIONE STRATIGRAFICA	POCKET kg/cm²	TORVANE kg/cm²	PIEZOMETRO
1 2						Argilla da debolmente limosa a limosa, molto consistente, di colore marrone con rare concrezioni calcaree e striature brune di ossidazione.	> 6,0 5,20 4,80 3,20 3,50 3,20 3,80 3,00	2,00 1,80 1,80	
3	2,80								
4	4,00			SH1	3.00 3.40	Limo di colore marrone con al tetto una lente argillosa centimetrica.			
5 6	6,00					Sabbia medio fine debolmente limosa, di colore marrone.			
7 8 9 10	9,80					Sabbia medio grossa, debolmente limosa, colore marrone. Presente una lente argillosa di spessore decimetrico a partire dagli 8,0 metri.			
11 12 13 14 15 16	16,00			SH2	14.00 14.70	Alternanze di argilla debolmente limosa e limo, di colore grigio, con rare concrezioni calcaree e lenti sabbiose centimetriche.	1,20 1,20 0,80 1,40 1,60 1,30 1,40	0,64 0,40 0,40 0,80 0,80 0,60 0,64	
17	16,80					Limo a tratti sabbioso di colore grigio.			
18 19 20	20,00					Sabbia di colore grigio, debolmente limosa.			

Sond.aggio Camp.	Prof. m	W %	γ kn/mc	Ghiaia %	Sabbia %	Limo %	Argilla %	Wl	Wp	Ip	φ °	C kPa	Cu (UU) kPa	Cu (CU) kPa	φ (CU) °	C' (CD) kPa	φ' (CD) °	cv cmq/s	k cm/s	k (c.v.) cm/s
15-1	3.0 – 3.4	21.2	19.1	0	4	67	29	36	20	16						0	29	0.00257	5.4E-08	
15-2	14.0 – 14.6	28.4	18.8	0	2	49	49	48	21	27			83							

Prof. = Profondità, W = Contenuto di acqua, γ = Peso di volume, Wl = Limite di liquidità, Wp = Limite di plasticità, Ip = Indice di plasticità, φ = Angolo di attrito interno, C = coesione (prova di taglio diretto), Cu (UU) = Coesione non drenata (prova triassiale non consolidata non drenata), Cu (CU) = Coesione nel campo degli sforzi totali (prova triassiale consolidata non drenata), φ (CU) = Angolo di attrito interno nel campo degli sforzi totali (prova triassiale consolidata non drenata), C' (CD) = Coesione nel campo degli sforzi efficaci (prova triassiale consolidata drenata), φ' (CD) = Angolo di attrito interno nel campo degli sforzi efficaci (prova triassiale consolidata drenata), cv = coefficiente di consolidazione (prova edometrica), k = permeabilità (prova edometrica), k (c.v.) = permeabilità (prova a carico variabile)

COMMITTENTE	Comune di San Miniato (PI)	PIEZOMETRO	Assente
LOCALITA'	S. Pierino Comune di San Miniato (PI)		

NOTE	CAMPIONI	LIVELLO ACQUA DATA	LIVELLO ACQUA MT. dal P.C.	PROF. FORO	PROF. RIVEST.	ASSISTENTI
	CAROTIERE SEMPLICE					C. Matiazzo
	SPT			5,50		OPERATORI
	INDISTURBATI					R. Sacchetti

mt.	QUOTA da P.C.	SIMBOLOGIA	CAMPIONI TIPO	CAMPIONI NUM.	CAMPIONI PROF.	DESCRIZIONE STRATIGRAFICA	POCKET kg/cm²	TORVANE kg/cm²	PIEZOMETRO
	0,30					Terreno di riporto limoso, nocciola, con laterizi e ghiaia.			
1	1,75					Argilla limosa, nocciola, molto consistente.	4,80 > 6,0 > 6,0	1,60 1,60	
2	2,70			LF1 SH1	1,50 2,50 2.50	Limo argilloso, nocciola, molto consistente, con un livello ghiaioso da 2,0 a 2,3 metri.	5,90		
3 4	4,10				3.00	Da argilla ad argilla debolmente limosa, nocciola, molto consistente.	5,00 5,20 4,90 4,00 4,30	1,50 1,64 1,62	
5	5,50			SH2	5.00 5.50	Limo e limo argilloso, con livelli centimetrici di limo sabbioso, nocciola, da mediamente a poco consistente.	2,50 3,40 1,80 1,20 1,50	0,40 0,42 0,30	
6									
7									
8									
9									
10									

Sond.aggio Camp.	Prof. m	W %	γ kn/mc	Ghiaia %	Sabbia %	Limo %	Argilla %	Wl	Wp	Ip	φ °	C kPa	Cu (UU) kPa	Cu (CU) kPa	φ (CU) °	C' (CD) kPa	φ' (CD) °	cv cmq/s	k cm/s	k (c.v.) cm/s
15A-1	2.5 – 3.0	21.4	19.1	0	0	60	40	48	21	27	28	37						0.000114	9.3E-09	
15A-2	5.0 – 5.5	22.9	16.9																	

Prof. = Profondità, W = Contenuto di acqua, γ = Peso di volume, Wl = Limite di liquidità, Wp = Limite di plasticità, Ip = Indice di plasticità, φ = Angolo di attrito interno, C = coesione (prova di taglio diretto), Cu (UU) = Coesione non drenata (prova triassiale non consolidata non drenata), Cu (CU) = Coesione nel campo degli sforzi totali (prova triassiale consolidata non drenata), φ (CU) = Angolo di attrito interno nel campo degli sforzi totali (prova triassiale consolidata non drenata), C' (CD) = Coesione nel campo degli sforzi efficaci (prova triassiale consolidata drenata), φ' (CD) = Angolo di attrito interno nel campo degli sforzi efficaci (prova triassiale consolidata drenata), cv = coefficiente di consolidazione (prova edometrica), k = permeabilità (prova edometrica), k (c.v.) = permeabilità (prova a carico variabile)

www.sylgeo.it — Rivestimento metallico diametro 127 mm

COMMITTENTE	Comune di San Miniato (PI)	PIEZOMETRO	Tubo in PVC pesante diam. 3", lunghezza 15,0 m, microfessurato da - 12,0 a -15,0 m dal p.c.
LOCALITA'	S. Pierino Comune di San Miniato (PI)		

NOTE	CAMPIONI	LIVELLO ACQUA DATA	LIVELLO ACQUA MT dal P.C.	PROF. FORO	PROF. RIVEST.	ASSISTENTI
	CAROTIERE SEMPLICE SPT INDISTURBATI			15,50	7,50	C. Matiazzo OPERATORI R. Sacchetti

mt.	QUOTA da P.C.	SIMBOLOGIA	CAMPIONI TIPO	CAMPIONI NUM.	CAMPIONI PROF.	DESCRIZIONE STRATIGRAFICA	POCKET kg/cm²	TORVANE kg/cm²	PIEZOMETRO
	0,30					Terreno di riporto limoso, nocciola, con ghiaia.			
1						Limo da debolmente argilloso ad argilloso, consistente, nocciola.	> 6,0		TUBO IN PVC CIECO
			■	SH1	1.50		> 6,0		
2					2.00		> 6,0		
							> 6,0		
							4,30	1,30	
3	3,00						4,40	1,56	
						Argilla limosa, nocciola con striature bruno ocra e puntinature nerastre. Alla base son presenti due livelletti centimetrici di sabbia debolmente limosa,	3,40	1,00	
4							2,30	0,80	
							2,70		
5	4,90						1,70		
						Argilla debolmente limosa, grigia, poco consistente, con alcuni livelli centimetrici di sabbia fine debolmente limosa.	1,40	0,40	
6							1,00	0,40	
							0,60	0,42	
	6,60		■	SH2	6.00 6.50		0,50	0,22	
7						Limo sabbioso, grigio, poco consistente, con qualche livello centimetrico di sabbia fine.			
8	8,30		●	SPT1	8,50				
9	9,20				8,95 7/9/11	Sabbia debolmente limosa, nocciola.			BENTONITE
10	10,00					Argilla debolmente limosa, nocciola, con concrezioni calcaree bruno ocra e puntinature nerastre; alla base presenza di un livello decimetrico di argilla grigia.	2,50	1,00	
11	11,80					Limo debolmente argilloso a tratti sabbioso color grigio nocciola.			GHIAIETTO
12	12,20		●	SPT2	12,00 12,45	Limo sabbioso, grigio, debolmente consistente.	1,40	0,80	TUBO IN PVC MICROFESSURATO
13	13,00				9/8/10	Argilla, grigia con puntinature nerastre.	2,20 1,50	0,74	
14						Sabbia fine a tratti debolmente limosa, grigia.			
15	15,50		●	SPT3	15,00 15,45				
16					6/7/12				
17									
18									
19									
20									

Sond.aggio Camp.	Prof. m	W %	γ kn/mc	Ghiaia %	Sabbia %	Limo %	Argilla %	Wl	Wp	Ip	φ °	C kPa	Cu (UU) kPa	Cu (CU) kPa	φ (CU) °	C' (CD) kPa	φ' (CD) °	cv cmq/s	k cm/s	k (c.v.) cm/s
17-1	1.5 – 2.0	17.5	20.9	0	1	56	43	47	21	26	28	26								
17-2	6.0 – 6.5	31.5	15.7																	

Prof. = Profondità, W = Contenuto di acqua, γ = Peso di volume, Wl = Limite di liquidità, Wp = Limite di plasticità, Ip = Indice di plasticità, φ = Angolo di attrito interno, C = coesione (prova di taglio diretto), Cu (UU) = Coesione non drenata (prova triassiale non consolidata non drenata), Cu (CU) = Coesione nel campo degli sforzi totali (prova triassiale consolidata non drenata), φ (CU) = Angolo di attrito interno nel campo degli sforzi totali (prova triassiale consolidata non drenata), C' (CD) = Coesione nel campo degli sforzi efficaci (prova triassiale consolidata drenata), φ' (CD) = Angolo di attrito interno nel campo degli sforzi efficaci (prova triassiale consolidata drenata), cv = coefficiente di consolidazione (prova edometrica), k = permeabilità (prova edometrica), k (c.v.) = permeabilità (prova a carico variabile)