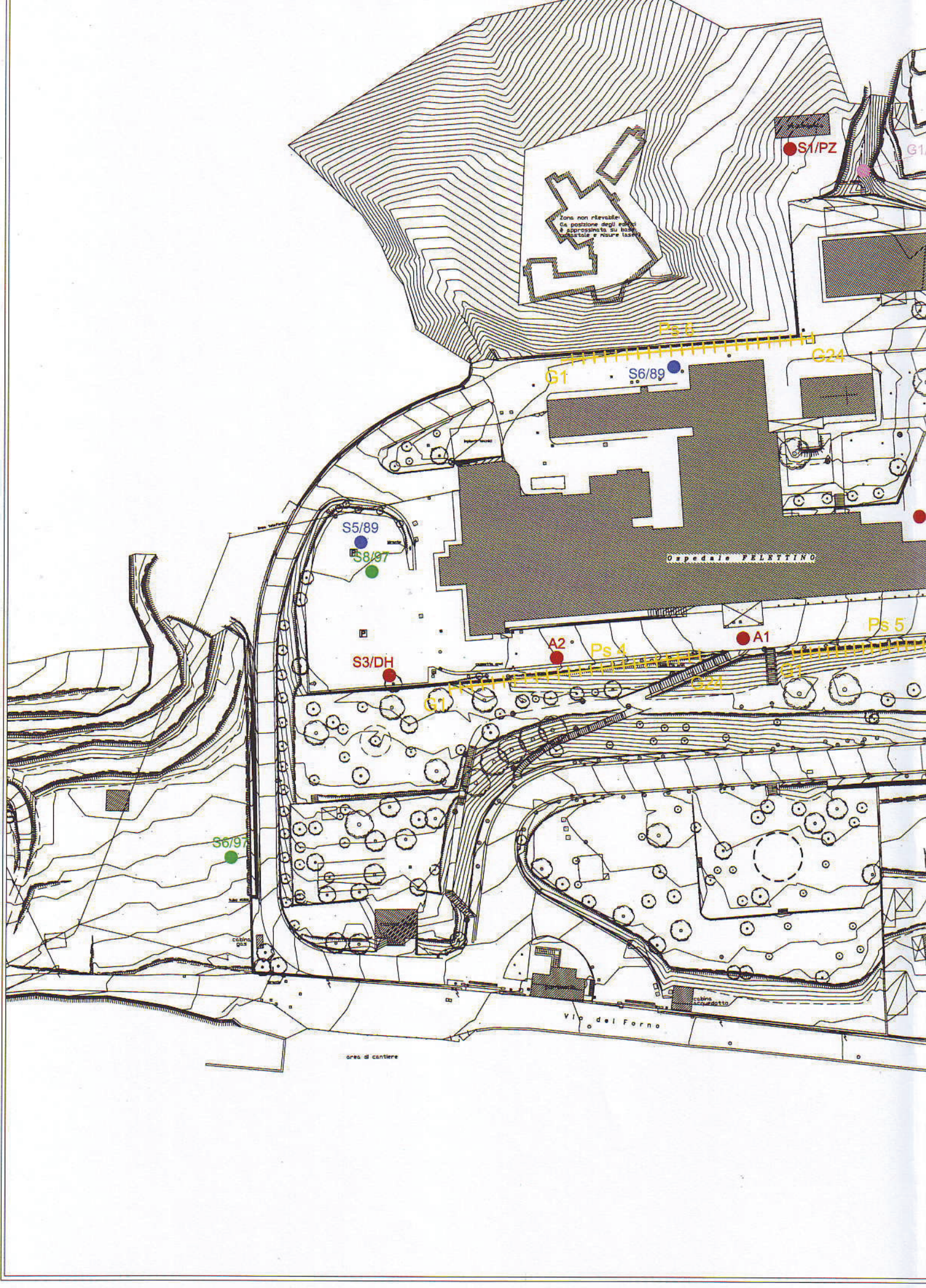


NUOVO OSPEDALE DELLA SPEZIA LOTTO C – RADIOTERAPIA PROGETTO DEFINITIVO

RELAZIONE GEOLOGICA Versione 1.1




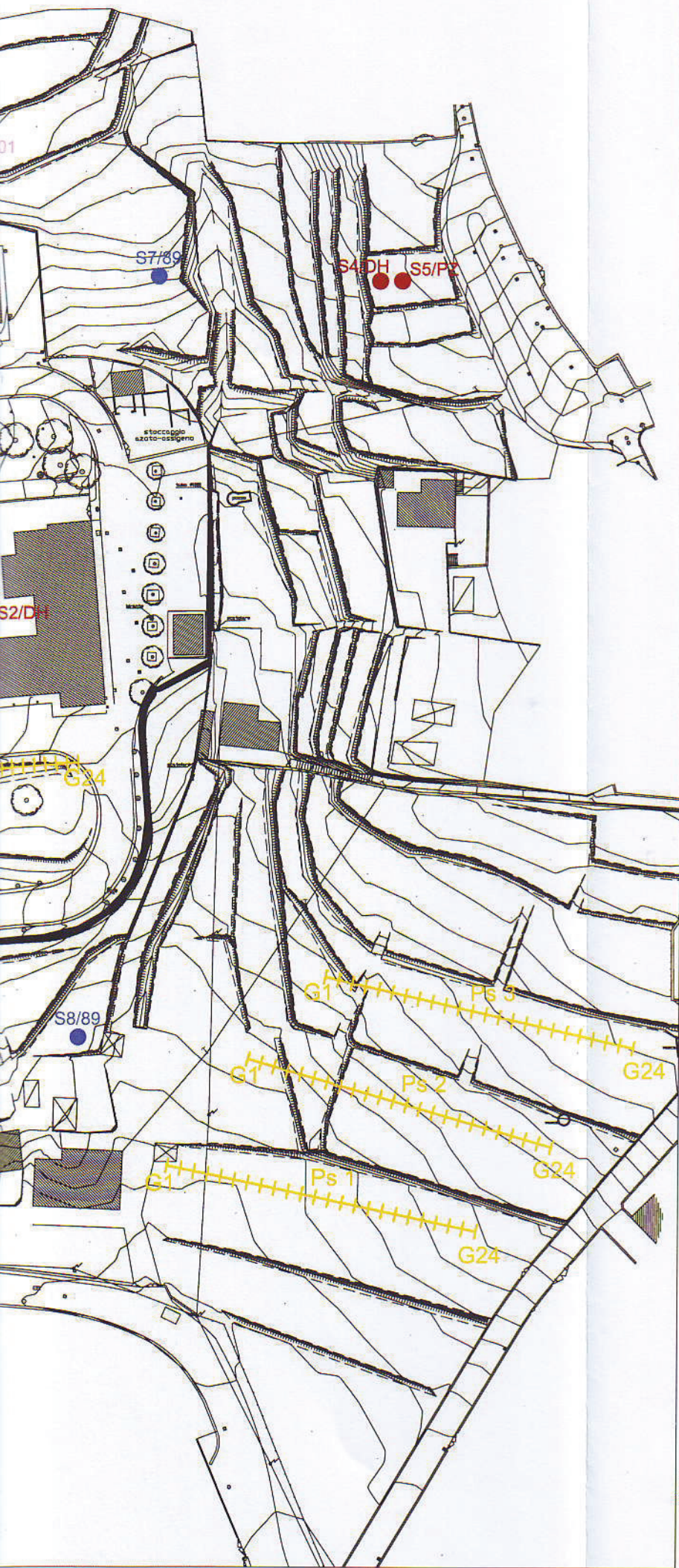
Rev	Data	Sez	Pag	Redatto	Controllato	Approvato	Descrizione
A	28/03/2011		94	P. Accolti Gil	MI	-	Per Commenti
1	16/09/2011		94	P. Accolti Gil	MI	SB	Per Emissione



UBICAZIONE INDAGINI GEOGNOSTICHE

LEGENDA

- S1/PZ** ● Sondaggio attrezzato con piezometro
 - S3/DH** ● Sondaggio attrezzato per Downhole
 - A1** ● Sondaggio ambientale
 - Ps1**  Stendimento sismico a rifrazione
 - G1/01** ● Sondaggio campagna geognostica 2001
 - S6/97** ● Sondaggio campagna geognostica 1997
 - S2/89** ● Sondaggio campagna geognostica 1989
- campagna geognostica 2011

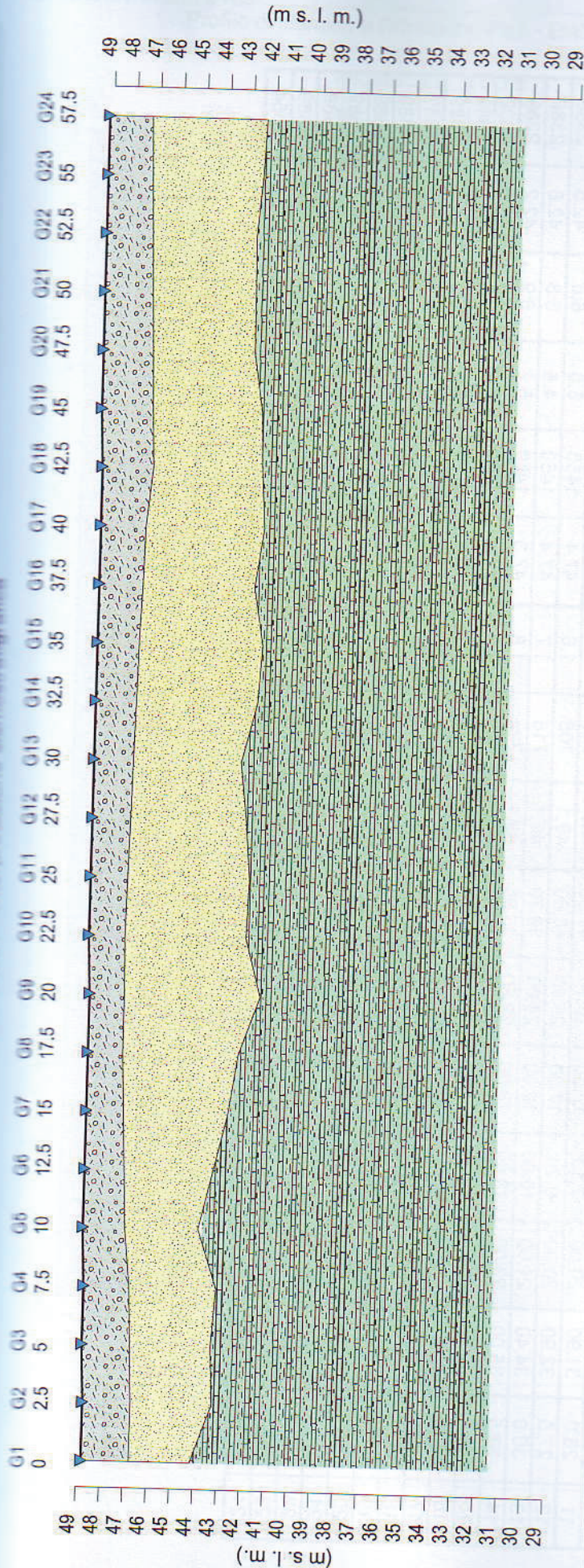


10 m

Scala grafica

10 m

Foto aerea P. Interpretazione sismografica



Z1 (m)	2.0	2.0	2.1	2.0	1.8	1.7	1.6	1.6	1.5	1.5	1.5	1.6	1.6	1.7	1.8	1.8	1.9	2.0	2.1	2.1	2.1	2.0	1.9	1.9
Z2 (m)	2.6	3.5	3.5	3.7	3.1	3.8	4.5	5.0	5.8	5.2	5.2	5.0	5.0	4.6	5.2	5.3	4.8	5.1	4.4	4.4	4.5	4.5	4.8	4.9
H2 (m)	4.7	5.5	5.5	5.7	4.9	5.5	6.1	6.5	7.3	6.8	6.8	6.6	6.6	6.3	6.9	7.1	6.7	7.1	6.5	6.5	6.5	6.5	6.7	6.8
V1 (m/s)	631	631	631	640	648	656	665	674	682	690	699	708	716	716	724	733	717	702	686	670	654	639	623	623
V2 (m/s)	1450	1450	1450	1450	1450	1450	1450	1450	1450	1450	1450	1450	1450	1450	1450	1450	1450	1450	1450	1450	1450	1450	1450	1450
V3 (m/s)	2555	2555	2555	2555	2555	2555	2555	2389	2389	2389	2389	2389	2389	2389	2389	2389	2389	2389	2389	2389	2389	2389	2389	2554

Legenda:

- Terreno naturale - materiali di riporto
- Sabbie con elementi litoidi
- Silti-argilliti-arenarie

Scala 1:250

Z1 = Spessore del primo orizzonte
 Z2 = Spessore del secondo orizzonte
 H2 = Profondità del secondo orizzonte
 V1 = Velocità del primo orizzonte sismico
 V2 = Velocità del secondo orizzonte sismico
 V3 = Velocità del terzo orizzonte sismico

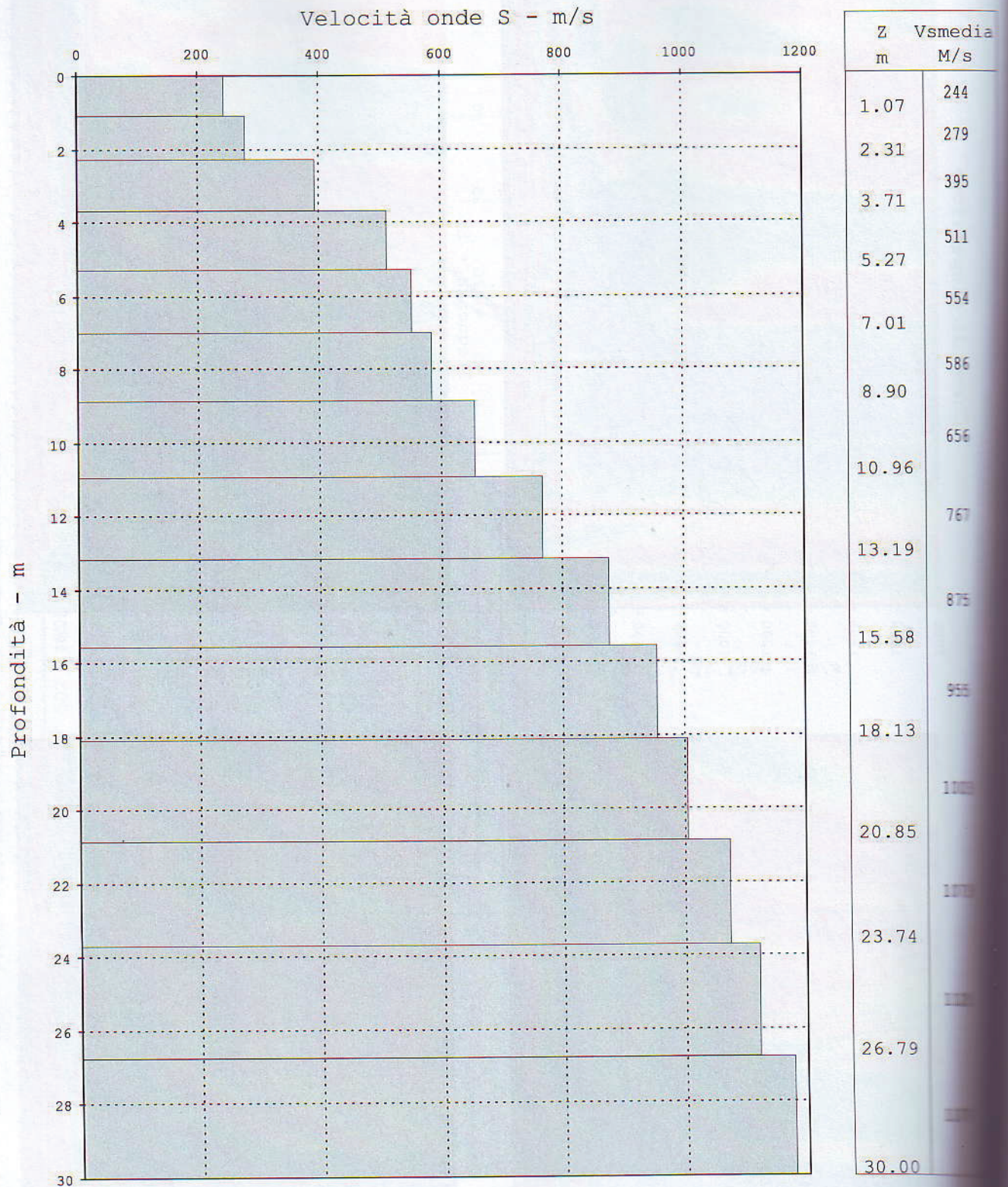
Dati Ps6 - onde P

Tempi di arrivo

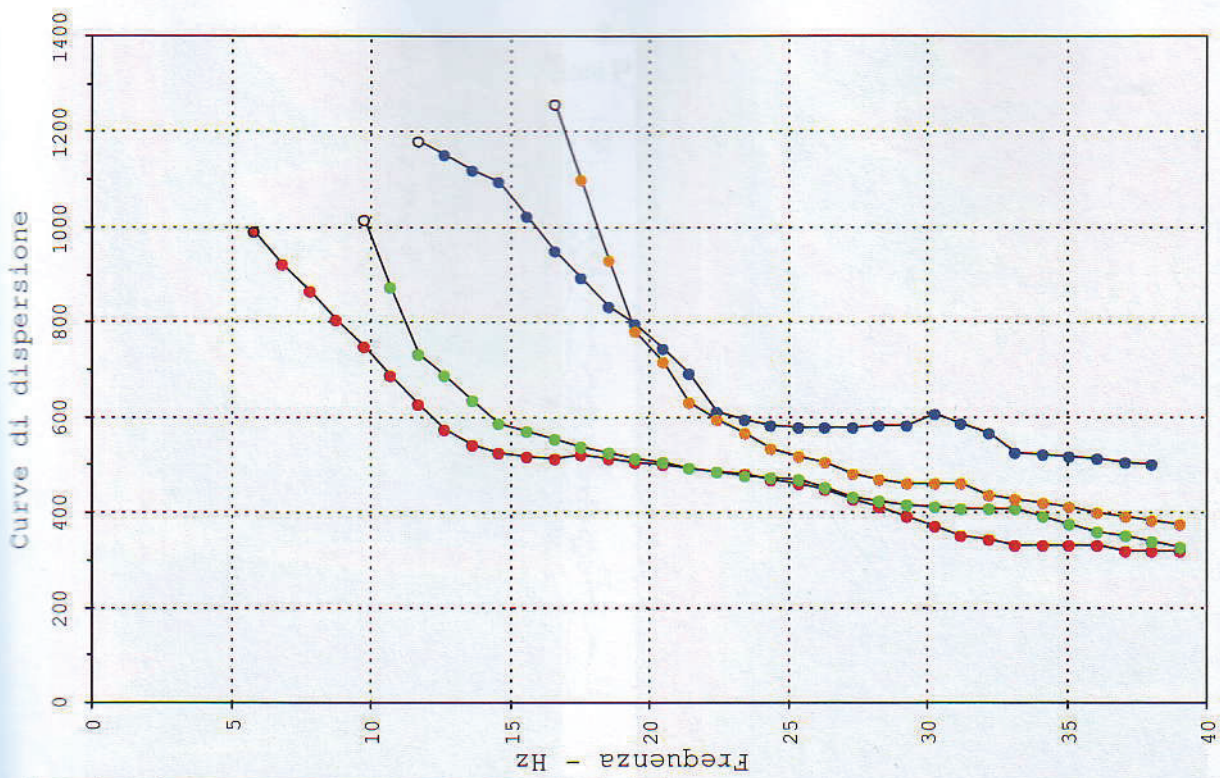
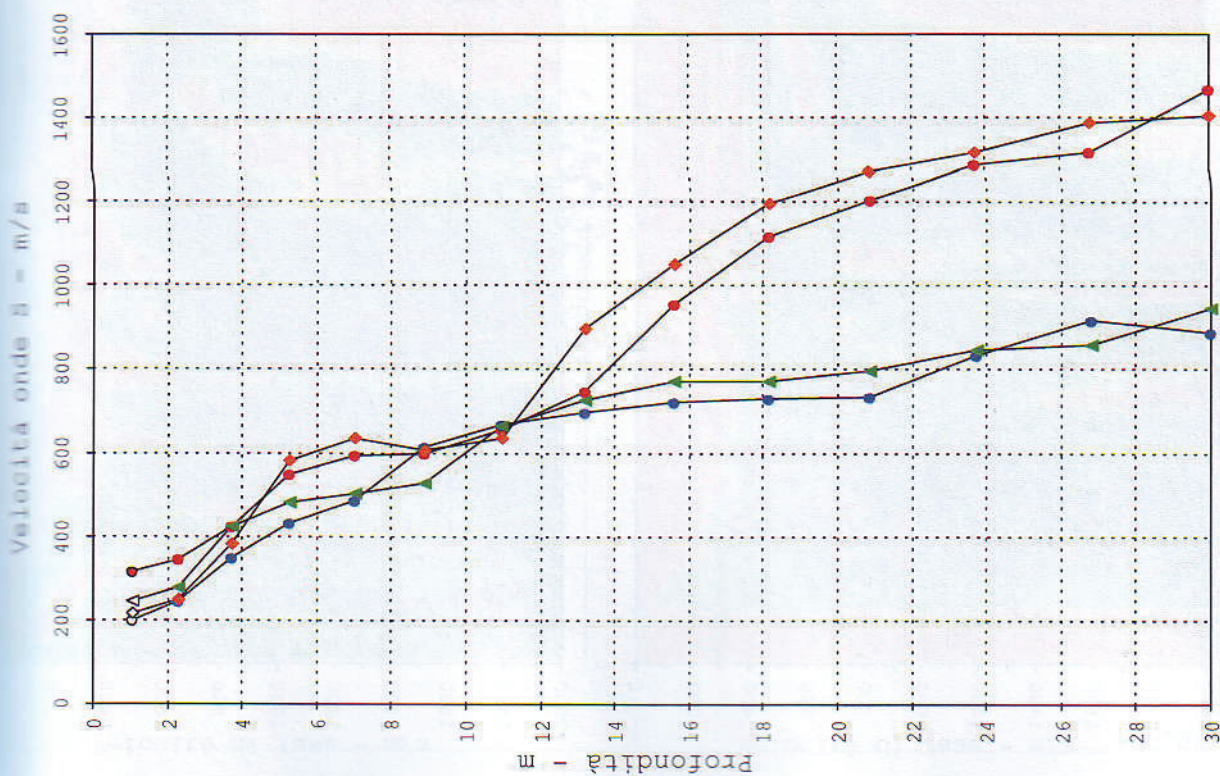
Geo. N°	Dist. m	ShotA ms	ShotB ms	ShotC ms	ShotD ms	ShotE ms	ShotF ms	Q m slm	V1 m/sec.	Z1 m	Q1 m slm	V2 m/sec.	Z2 m	H2 m	Q2 m slm	V3 m/sec.
1	0.0	22.40	3.10	20.80	28.00	34.30	50.60	48.8	631	2.0	46.8	1450	2.6	4.7	44.1	2555
2	2.5	23.50	6.60	18.00	28.00	33.20	49.80	48.8	631	2.0	46.8	1450	3.5	5.5	43.3	2555
3	5.0	25.50	9.50	15.10	27.00	32.10	48.90	48.9	631	2.1	46.8	1450	3.5	5.5	43.4	2555
4	7.5	26.30	11.10	12.50	26.00	31.30	47.50	48.9	640	2.0	47.0	1450	3.7	5.7	43.2	2555
5	10.0	27.10	12.30	9.20	25.00	30.30	46.80	49.0	648	1.8	47.2	1450	3.1	4.9	44.1	2555
6	12.5	27.30	14.00	7.50	25.00	29.70	46.20	49.0	656	1.7	47.3	1450	3.8	5.5	43.5	2555
7	15.0	28.40	15.60	4.30	24.00	28.80	46.10	49.0	665	1.6	47.4	1450	4.5	6.1	42.9	2555
8	17.5	29.40	16.50	3.50	23.00	27.80	45.30	49.0	674	1.5	47.5	1450	5.0	6.5	42.5	2389
9	20.0	29.60	17.00	3.10	22.00	26.30	44.10	49.0	682	1.5	47.5	1450	5.8	7.3	41.7	2389
10	22.5	31.30	18.00	4.60	20.00	26.20	43.20	49.1	690	1.5	47.5	1450	5.2	6.8	42.3	2389
11	25.0	31.90	20.00	7.10	19.00	26.10	41.50	49.1	708	1.6	47.4	1450	5.0	6.6	42.5	2389
12	27.5	32.90	20.00	9.20	17.00	25.10	40.60	49.1	716	1.7	47.4	1450	4.6	6.3	42.8	2389
13	30.0	34.40	21.00	10.00	16.00	24.00	39.70	49.1	724	1.8	47.3	1450	5.2	6.9	42.2	2389
14	32.5	35.00	23.00	13.00	13.00	22.80	38.80	49.1	733	1.8	47.3	1450	5.3	7.1	42.0	2389
15	35.0	36.60	24.00	14.00	12.00	20.80	37.60	49.1	717	1.9	47.2	1450	4.8	6.7	42.4	2389
16	37.5	37.70	25.00	16.00	8.00	20.80	36.70	49.1	702	2.0	47.1	1450	5.1	7.1	42.0	2389
17	40.0	38.70	26.00	18.00	7.00	20.00	35.80	49.1	686	2.2	46.9	1450	4.7	6.9	42.2	2389
18	42.5	40.20	27.00	18.80	3.00	17.50	35.00	49.1	670	2.2	47.0	1450	4.7	6.9	42.3	2389
19	45.0	41.50	29.00	19.80	3.00	15.80	34.00	49.2	654	2.1	47.1	1450	4.4	6.5	42.7	2389
20	47.5	42.50	30.00	21.10	7.00	14.50	33.10	49.2	639	2.1	47.1	1450	4.4	6.5	42.7	2389
21	50.0	43.10	31.00	22.60	11.00	12.10	32.20	49.2	623	2.0	47.2	1450	4.5	6.5	42.7	2389
22	52.5	44.00	32.00	23.50	13.00	10.10	31.30	49.2	623	1.9	47.3	1450	4.8	6.7	42.5	2389
23	55.0	44.90	32.00	24.10	16.00	6.70	30.30	49.2	623	1.9	47.3	1450	4.9	6.8	42.4	2554
24	57.5	45.90	32.00	25.10	17.00	2.00	29.40	49.2	623	1.9	47.3	1450	4.9	6.8	42.4	2554

Legenda:

Z1 = Spessore dell'orizzonte
V1 = Velocità dell'orizzonte sismico
Q = Quota del geofono in m s.l.m.



Vs30 = 680 m/s - Categoria B

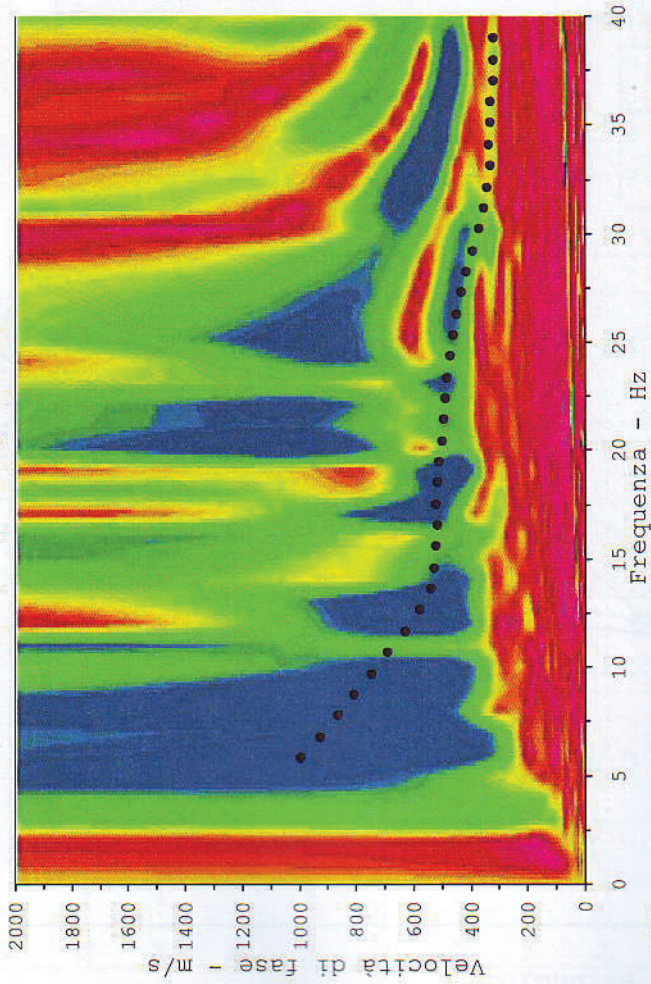


File	601	602	605	608
Shot.m	-1	-24	58.5	84
Z	VS	VS	VS	VS
m	m/s	m/s	m/s	m/s
1.07	201	315	244	215
2.31	244	343	279	250
3.71	350	422	423	384
5.27	432	549	481	583
7.01	485	593	503	634
8.90	614	597	528	607
10.96	667	658	664	635
13.19	696	749	728	897
15.58	721	954	774	1051
18.13	731	1116	774	1198
20.85	737	1205	799	1271
23.74	837	1288	848	1319
26.79	918	1318	861	1388
30.00	891	1467	946	1405

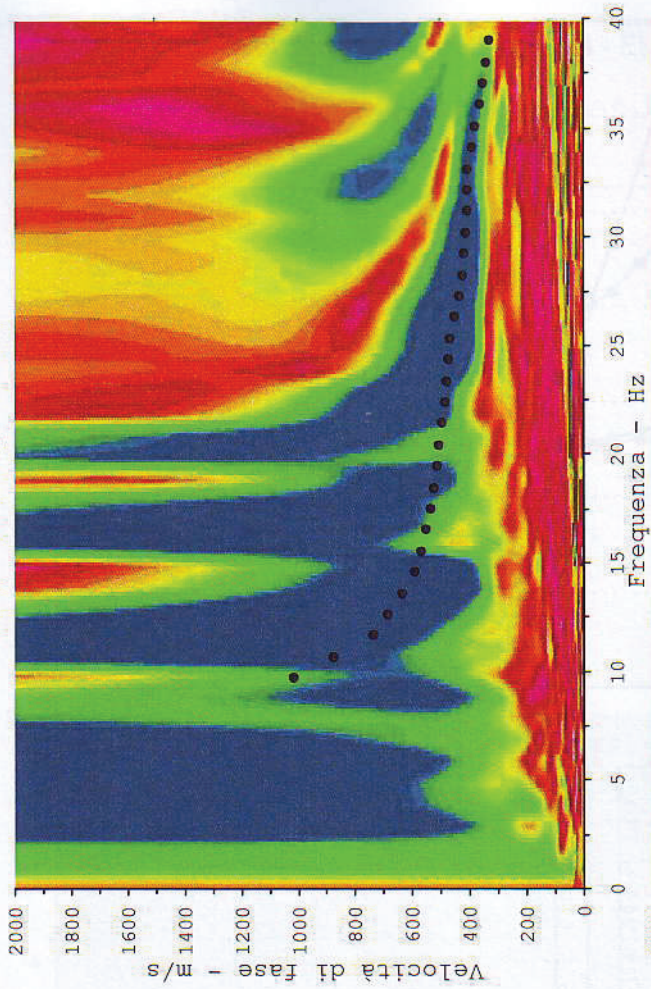
Vs30	579	766	616	731
------	-----	-----	-----	-----

Profilo di sismica a Rifrazione Ps6 - Elaborazione MASW

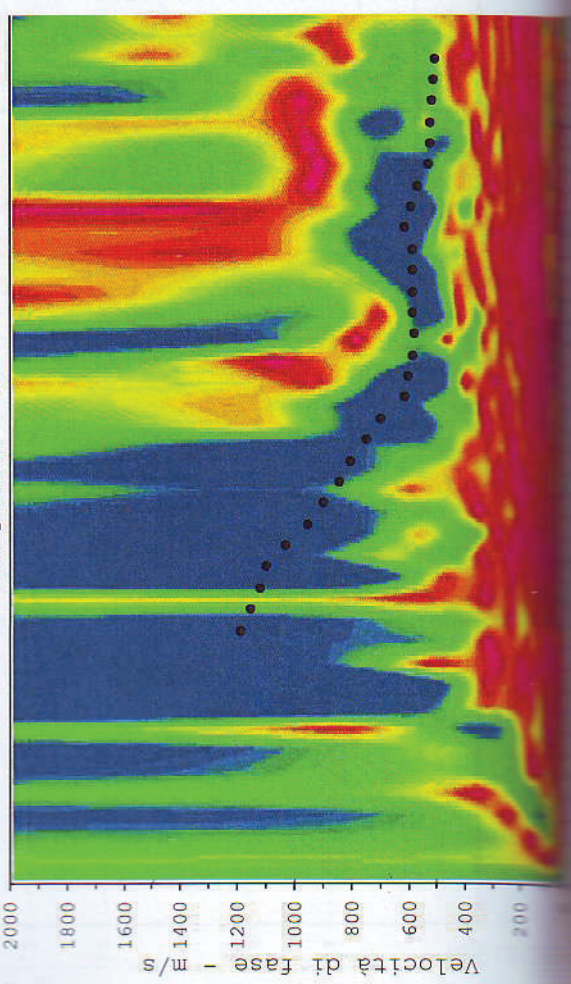
Curve di dispersione



Curve di dispersione



Curve di dispersione



Curve di dispersione

