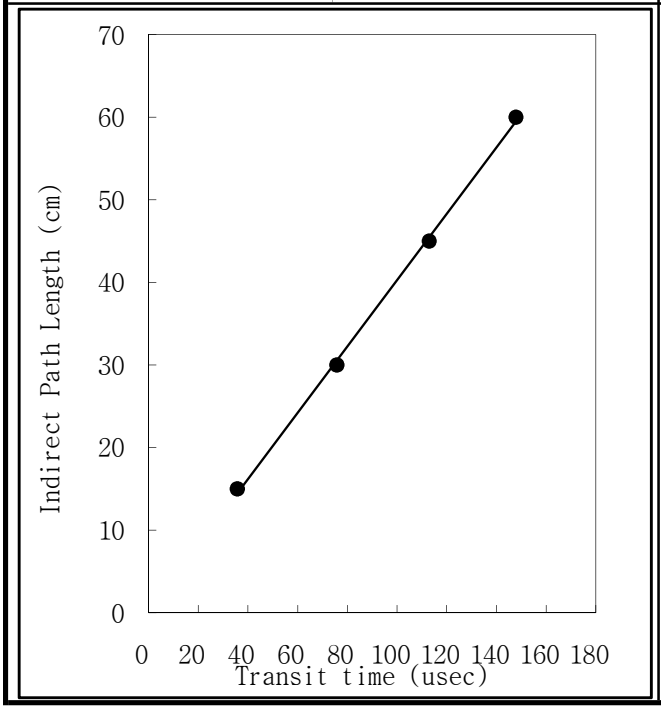
PUNDIT	이산포IC Ramp-I교 초음파탐사 DATA		
PROJECT TITLE :			
Company	㈜ 명 성 엔 지 니 어 링	Client	㈜ 일 산 대 교
Model	J.U.S.T – 900	Method	초음파법

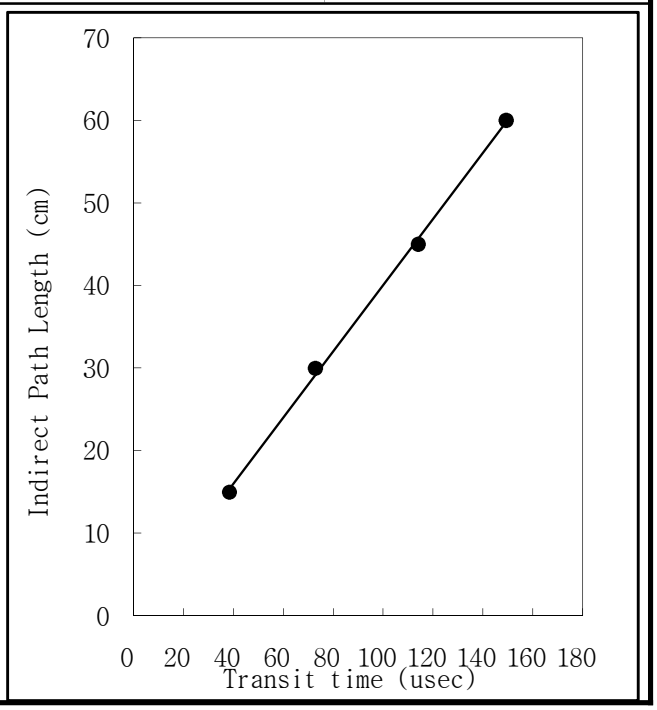
Pulse Velocity Data

(Vi : Indirect Pluse Velocity, Vd : Direct Pluse Velocity)

부 재 명	S1(건전부)	부 재 명	S2(건전부)
X	Transit Time (usec)	X	Transit Time (usec)
Y	Indirect Path Length (cm)	Y	Indirect Path Length (cm)

X	Y	X	Y
35.7	15	38.3	15
75.8	30	72.9	30
112.8	45	114.0	45
147.7	60	149.3	60
Best fit line (Equation)		Best fit line (Equation)	
Y = 4.018 X + 1.371		Y = 4.005 X + 0.011	
Vi (km/s)	4.018	Vi (km/s)	4.005
Correction Ration (Vi → Vd)	4.219	Correction Ration (Vi → Vd)	4.205
압축강도(F')	28.2	압축강도(F')	27.9



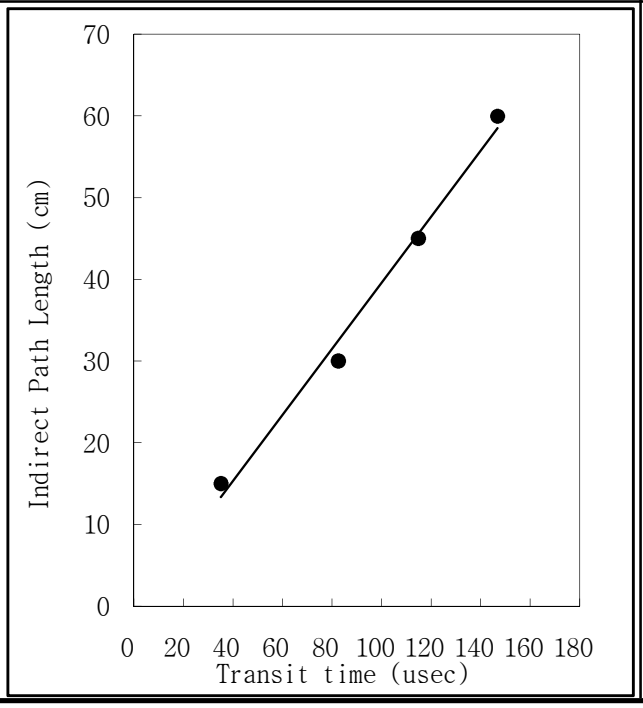


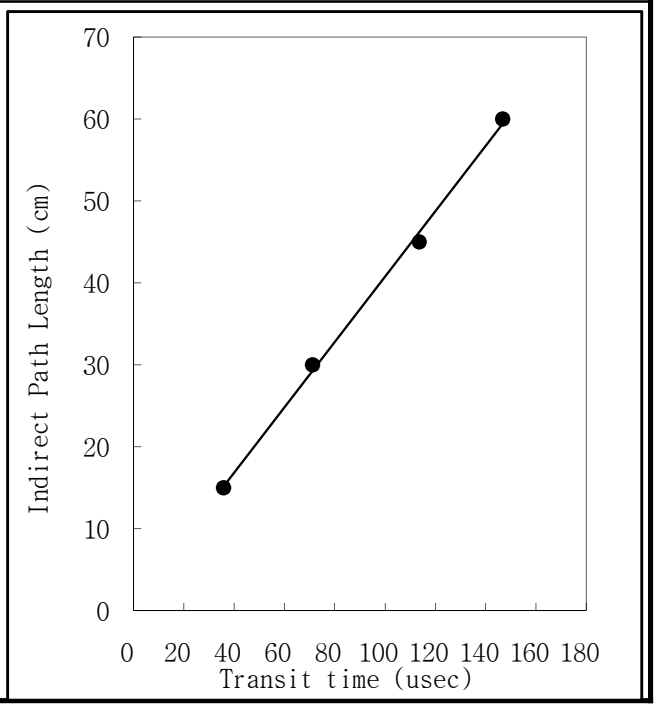
Pulse Velocity Data

(Vi : Indirect Pluse Velocity, Vd : Direct Pluse Velocity)

부 재 명	S3(건전부)	부 재 명	S4(건전부)
X	Transit Time (usec)	X	Transit Time (usec)
Y	Indirect Path Length (cm)	Y	Indirect Path Length (cm)

X	Y	X	Y
35.1	15	35.8	15
82.6	30	71.2	30
114.9	45	113.5	45
146.8	60	146.8	60
Best fit line (Equation)		Best fit line (Equation)	
Y = 4.040 X − 8.172		Y = 3.989 X + 8.708	
Vi (km/s)	4.040	Vi (km/s)	3.989
Correction Ration (Vi → Vd)	4.242	Correction Ration (Vi → Vd)	4.188
압축강도(F')	28.6	압축강도(F')	27.5



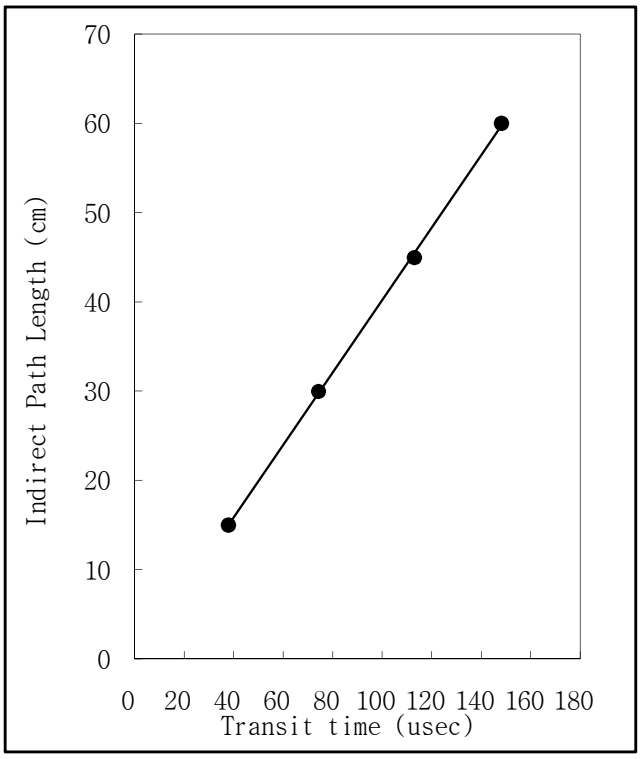


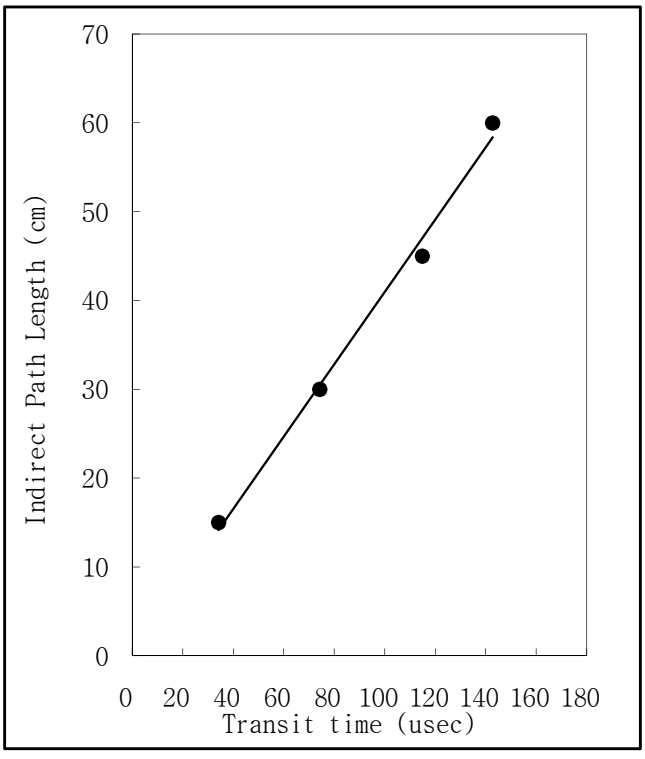
Pulse Velocity Data

(Vi : Indirect Pluse Velocity, Vd : Direct Pluse Velocity)

부 재 명	S5(건전부)	부 재 명	S6(건전부)
X	Transit Time (usec)	X	Transit Time (usec)
Y	Indirect Path Length (cm)	Y	Indirect Path Length (cm)

X	Y	X	Y
37.9	15	34.2	15
74.2	30	74.3	30
113.0	45	114.8	45
148.2	60	142.8	60
Best fit line (Equation)		Best fit line (Equation)	
Y = 4.056 X − 3.532		Y = 4.068 X + 2.698	
Vi (km/s)	4.056	Vi (km/s)	4.068
Correction Ration (Vi → Vd)	4.259	Correction Ration (Vi → Vd)	4.271
압축강도(F')	29.0	압축강도(F')	29.2



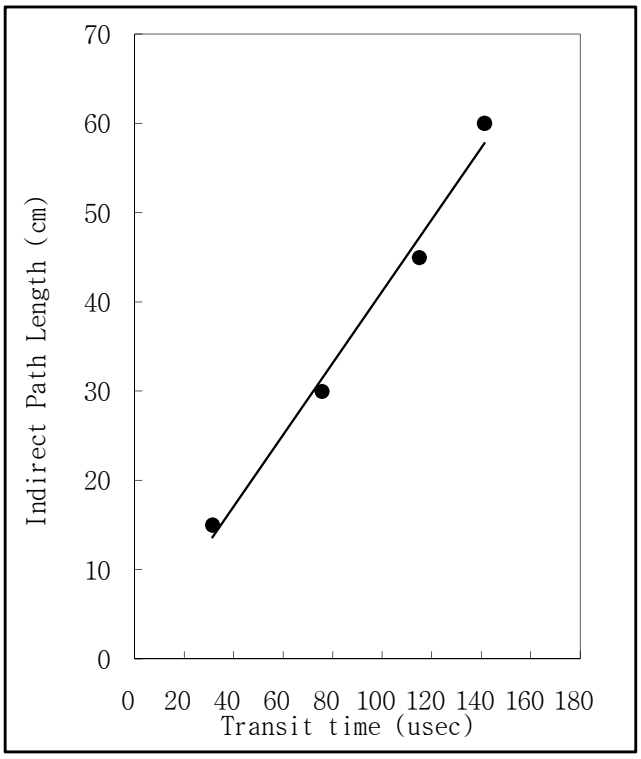


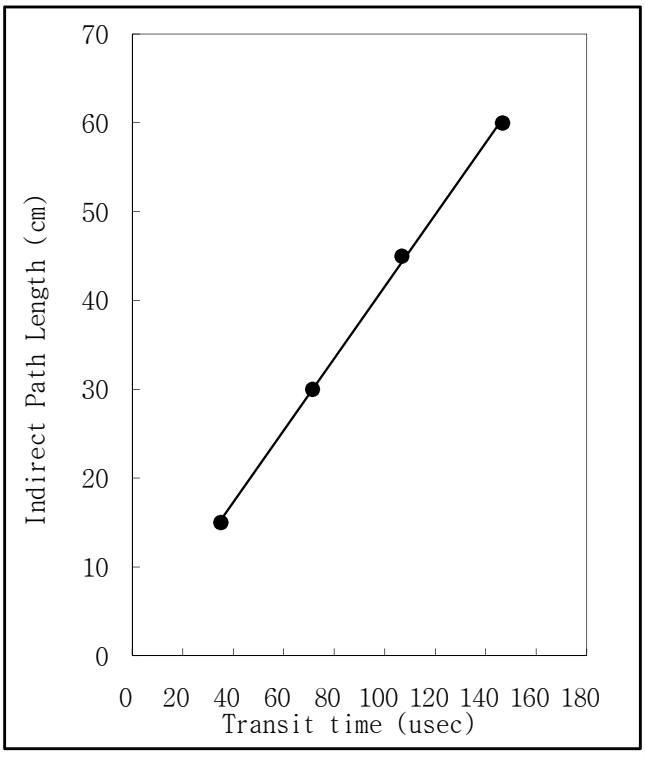
Pulse Velocity Data

(Vi : Indirect Pluse Velocity, Vd : Direct Pluse Velocity)

부 재 명	S7(건전부)	부 재 명	S8(건전부)
X	Transit Time (usec)	X	Transit Time (usec)
Y	Indirect Path Length (cm)	Y	Indirect Path Length (cm)

X	Y	X	Y
31.4	15	35.1	15
75.6	30	71.3	30
114.9	45	106.7	45
141.3	60	146.7	60
Best fit line (Equation)		Best fit line (Equation)	
Y = 4.016 X + 10.309		Y = 4.049 X + 10.804	
Vi (km/s)	4.016	Vi (km/s)	4.049
Correction Ration (Vi → Vd)	4.217	Correction Ration (Vi → Vd)	4.251
압축강도(F')	28.2	압축강도(F')	28.8





Pulse Velocity Data

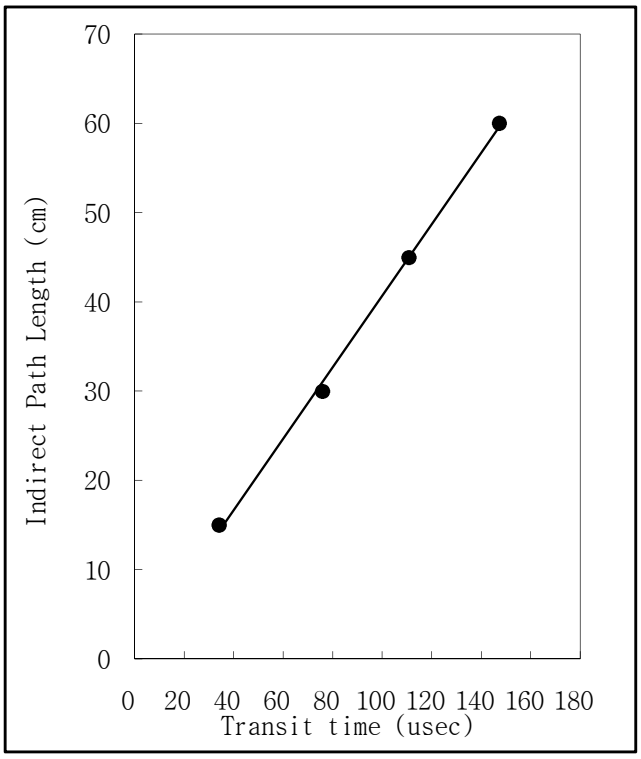
(Vi : Indirect Pluse Velocity, Vd : Direct Pluse Velocity)

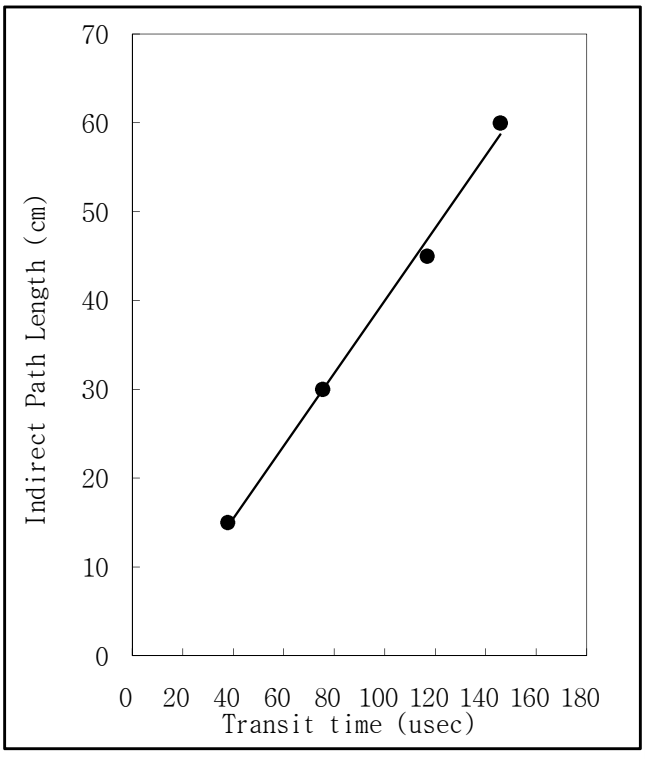
부 재 명	S9(건전부)	부 재 명	S10(건전부)
X	Transit Time (usec)	X	Transit Time (usec)
Y	Indirect Path Length (cm)	Y	Indirect Path Length (cm)

X	Y	X	Y
34.2	15	37.7	15
75.9	30	75.4	30
110.8	45	116.7	45
147.2	60	145.8	60

Best fit line (Equation)	Best fit line (Equation)
Y = 4.006 X + 6.369	Y = 4.084 X − 8.48

Vi (km/s)	4.006	Vi (km/s)	4.084
Correction Ration (Vi → Vd)	4.206	Correction Ration (Vi → Vd)	4.288
압축강도(F')	27.9	압축강도(F')	29.6



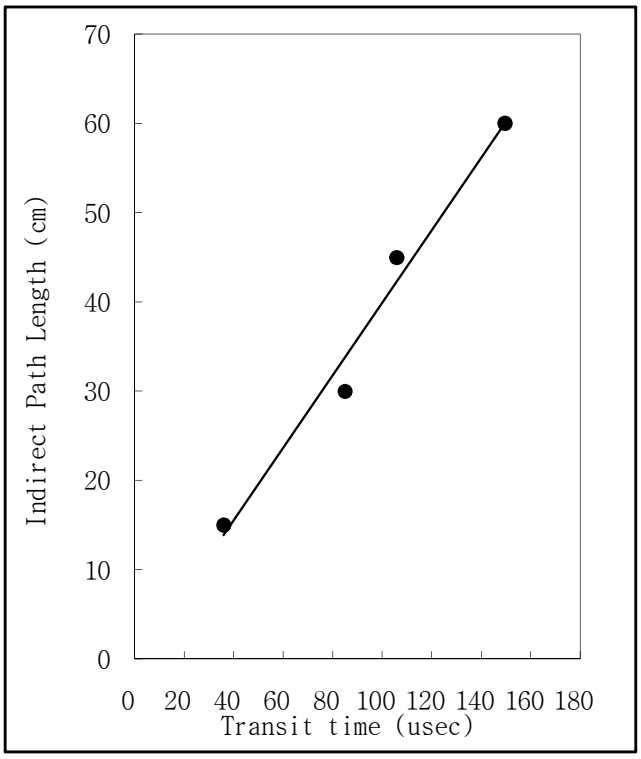


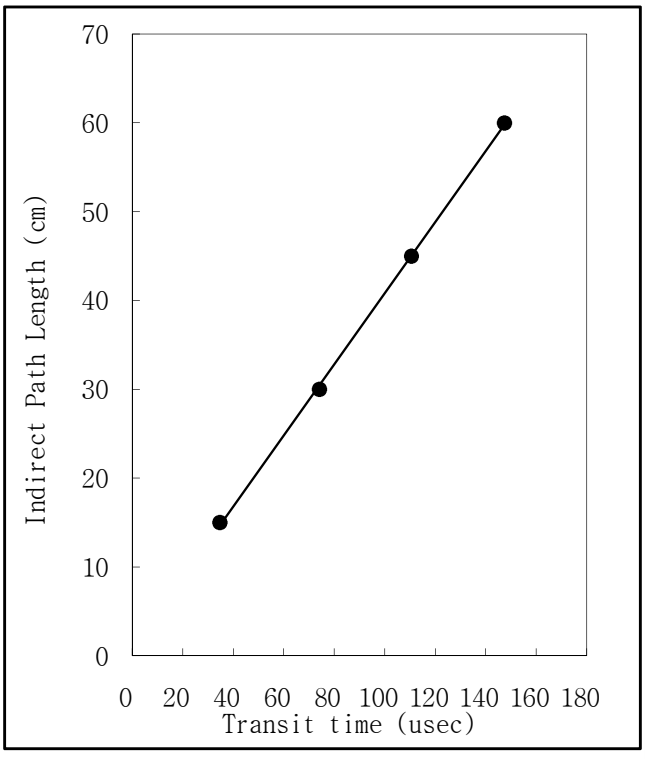
Pulse Velocity Data

(Vi : Indirect Pluse Velocity, Vd : Direct Pluse Velocity)

부 재 명	S11(건전부)	부 재 명	S12(건전부)
X	Transit Time (usec)	X	Transit Time (usec)
Y	Indirect Path Length (cm)	Y	Indirect Path Length (cm)

X	Y	X	Y
35.9	15	34.7	15
84.9	30	74.2	30
105.9	45	110.5	45
149.6	60	147.5	60
Best fit line (Equation)		Best fit line (Equation)	
Y = 4.059 X − 6.812		Y = 4.002 X + 7.928	
Vi (km/s)	4.059	Vi (km/s)	4.002
Correction Ration (Vi → Vd)	4.262	Correction Ration (Vi → Vd)	4.202
압축강도(F')	29.0	압축강도(F')	27.8



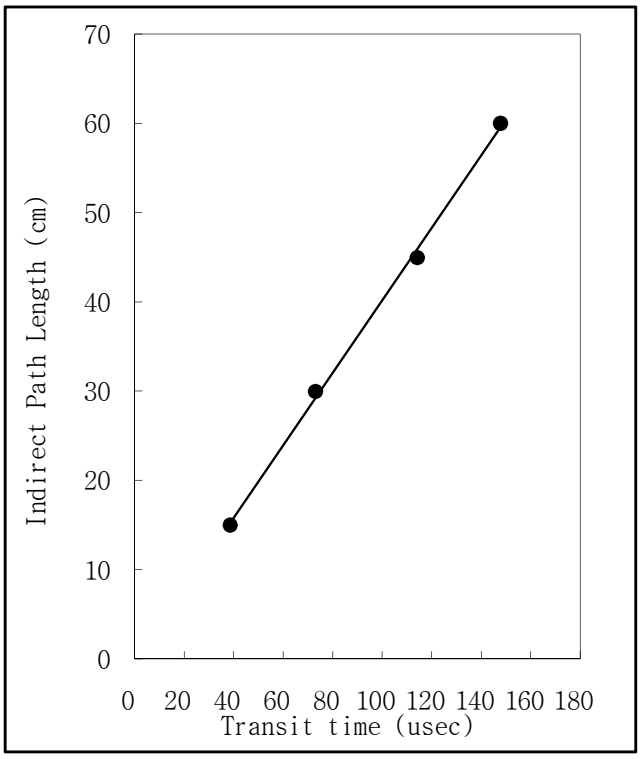


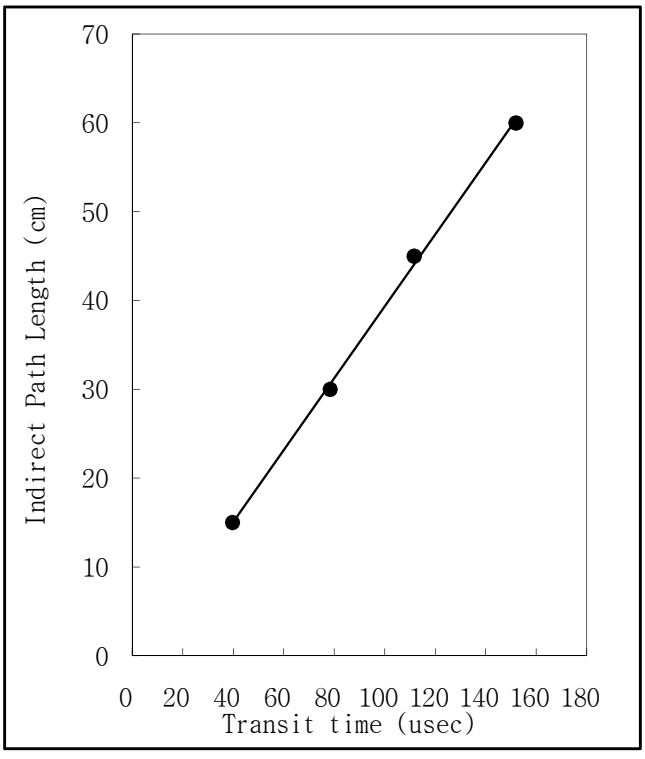
Pulse Velocity Data

(Vi : Indirect Pluse Velocity, Vd : Direct Pluse Velocity)

부 재 명	S13(건전부)	부 재 명	S14(건전부)
X	Transit Time (usec)	X	Transit Time (usec)
Y	Indirect Path Length (cm)	Y	Indirect Path Length (cm)

X	Y	X	Y
38.5	15	39.6	15
73.1	30	78.3	30
114.2	45	111.7	45
147.8	60	152.0	60
Best fit line (Equation)		Best fit line (Equation)	
Y = 4.059 X − 4.115		Y = 4.043 X − 10.677	
Vi (km/s)	4.059	Vi (km/s)	4.043
Correction Ration (Vi → Vd)	4.262	Correction Ration (Vi → Vd)	4.245
압축강도(F')	29.0	압축강도(F')	28.7



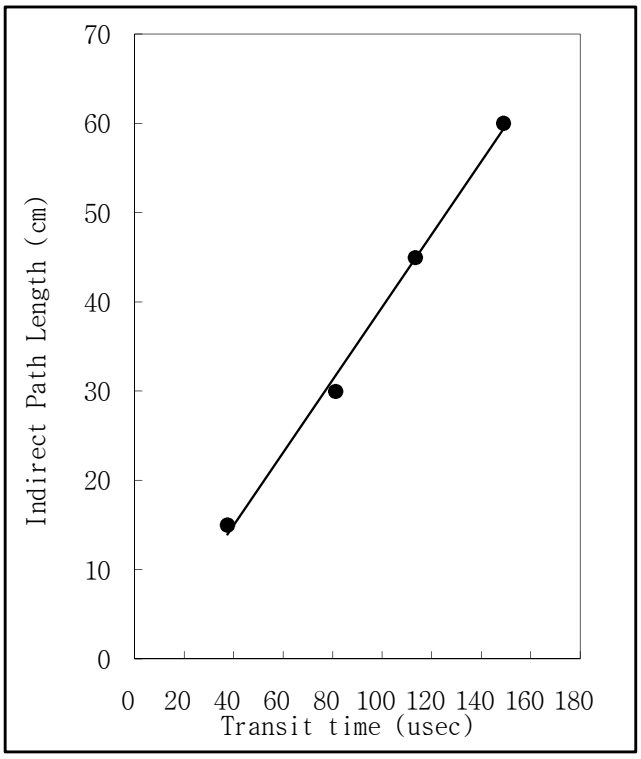


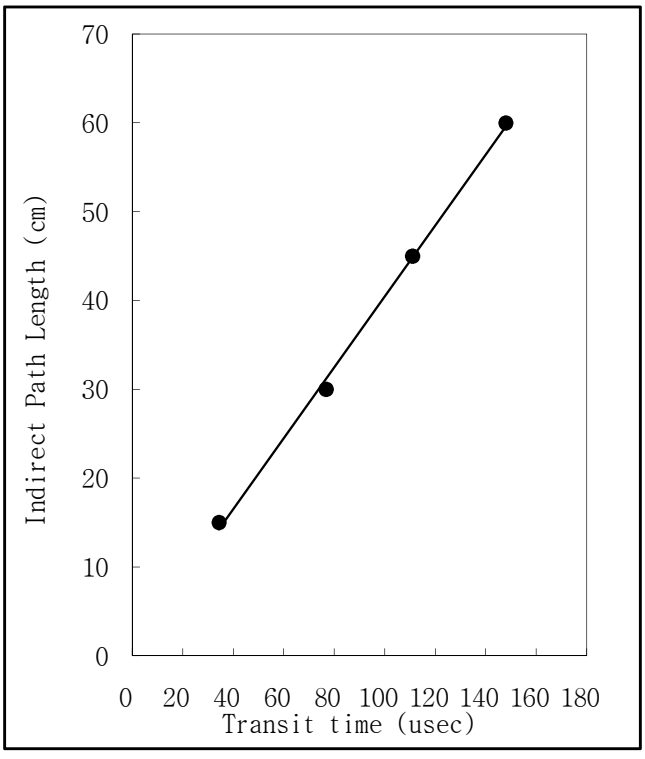
Pulse Velocity Data

(Vi : Indirect Pluse Velocity, Vd : Direct Pluse Velocity)

부 재 명	S15(건전부)	부 재 명	S16(건전부)
X	Transit Time (usec)	X	Transit Time (usec)
Y	Indirect Path Length (cm)	Y	Indirect Path Length (cm)

X	Y	X	Y
37.5	15	34.3	15
81.2	30	76.8	30
113.4	45	111.1	45
148.9	60	147.9	60
Best fit line (Equation)		Best fit line (Equation)	
Y = 4.077 X − 13.337		Y = 3.991 X + 5.726	
Vi (km/s)	4.077	Vi (km/s)	3.991
Correction Ration (Vi → Vd)	4.281	Correction Ration (Vi → Vd)	4.191
압축강도(F')	29.4	압축강도(F')	27.6



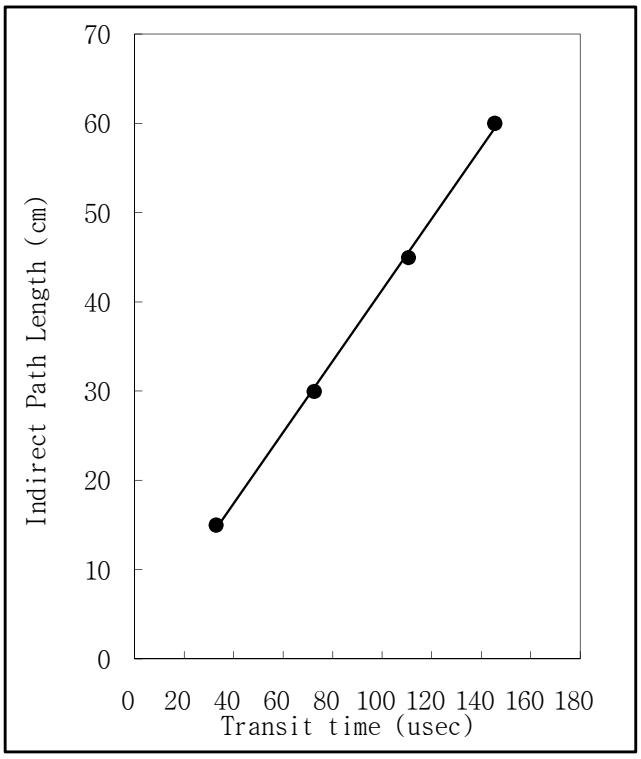


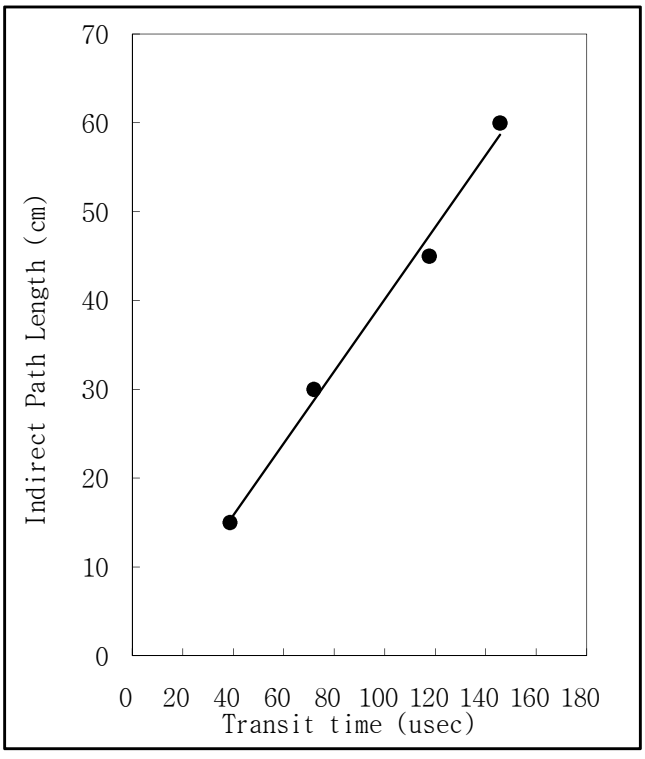
Pulse Velocity Data

(Vi : Indirect Pluse Velocity, Vd : Direct Pluse Velocity)

부 재 명	S17(건전부)	부 재 명	S18(건전부)
X	Transit Time (usec)	X	Transit Time (usec)
Y	Indirect Path Length (cm)	Y	Indirect Path Length (cm)

X	Y	X	Y
32.8	15	38.6	15
72.6	30	71.8	30
110.5	45	117.7	45
145.5	60	145.7	60
Best fit line (Equation)		Best fit line (Equation)	
Y = 3.986 X + 14.857		Y = 4.053 X − 3.73	
Vi (km/s)	3.986	Vi (km/s)	4.053
Correction Ration (Vi → Vd)	4.185	Correction Ration (Vi → Vd)	4.256
압축강도(F')	27.5	압축강도(F')	28.9



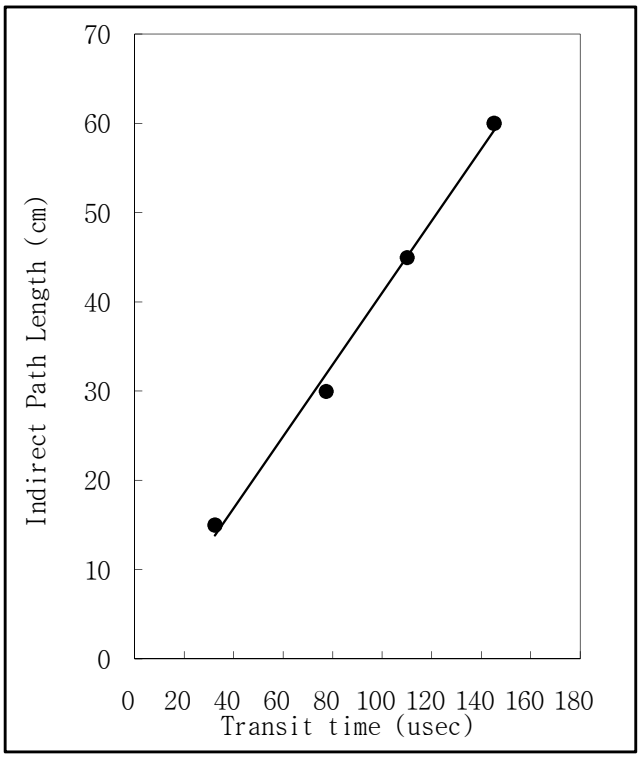


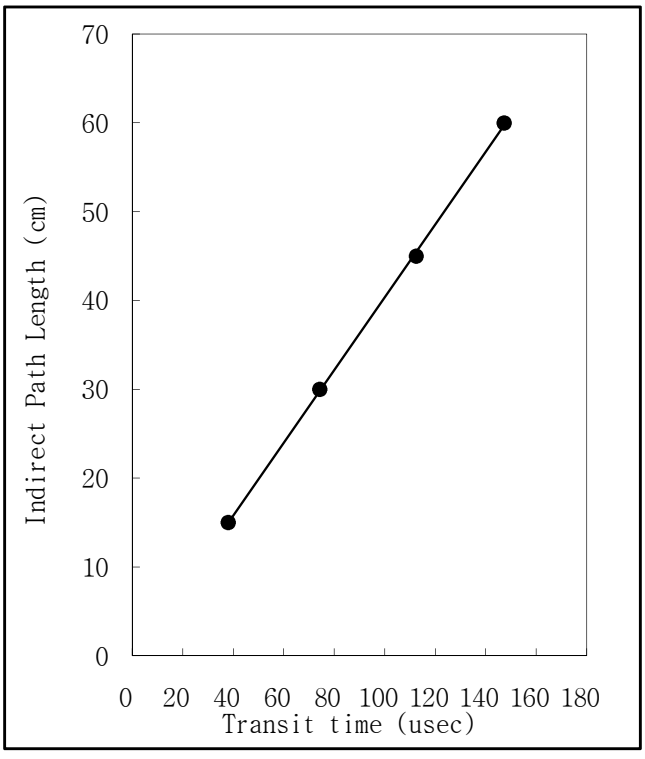
Pulse Velocity Data

(Vi : Indirect Pluse Velocity, Vd : Direct Pluse Velocity)

부 재 명	S19(건전부)	부 재 명	S20(건전부)
X	Transit Time (usec)	X	Transit Time (usec)
Y	Indirect Path Length (cm)	Y	Indirect Path Length (cm)

X	Y	X	Y
32.5	15	38.0	15
77.3	30	74.3	30
110.0	45	112.4	45
145.2	60	147.3	60
Best fit line (Equation)		Best fit line (Equation)	
Y = 4.026 X + 7.666		Y = 4.097 X − 6.049	
Vi (km/s)	4.026	Vi (km/s)	4.097
Correction Ration (Vi → Vd)	4.227	Correction Ration (Vi → Vd)	4.302
압축강도(F')	28.4	압축강도(F')	29.9





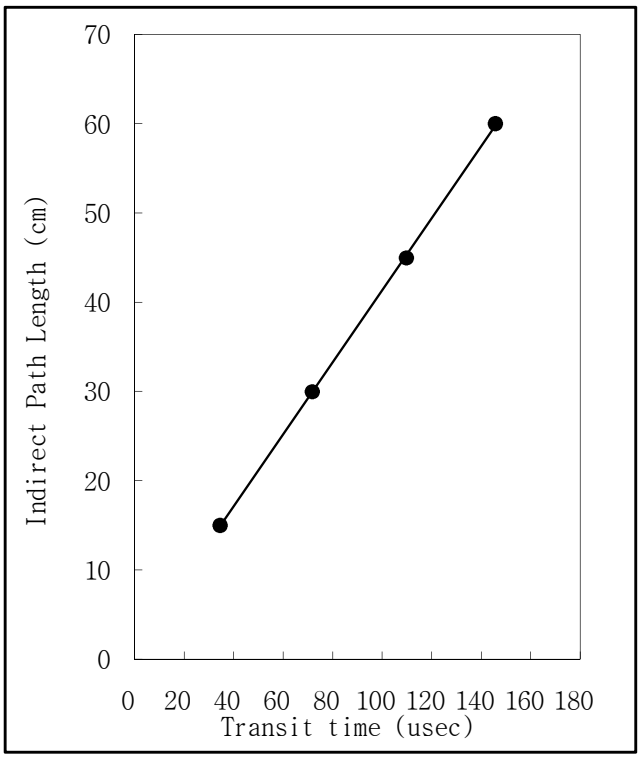
Pulse Velocity Data

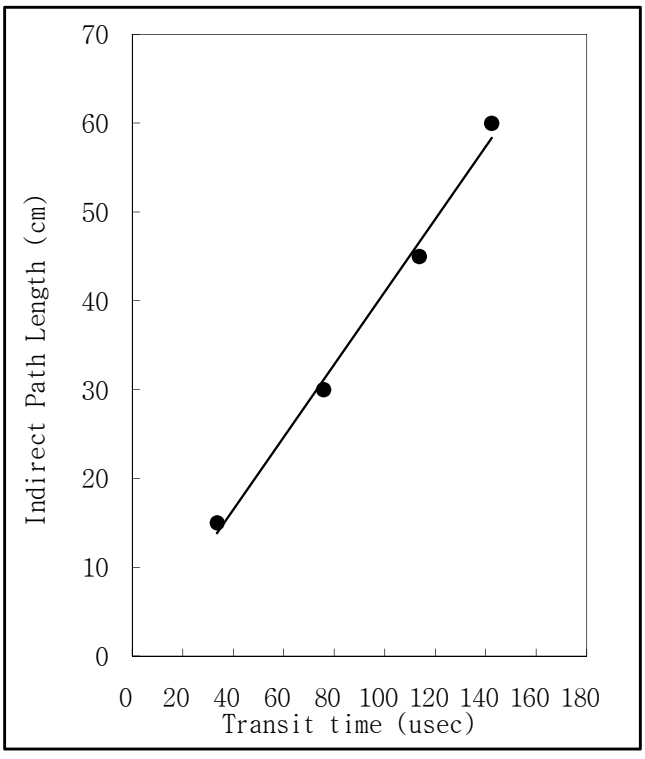
(Vi : Indirect Pluse Velocity, Vd : Direct Pluse Velocity)

부 재 명	S21(건전부)	부 재 명	S22(건전부)
X	Transit Time (usec)	X	Transit Time (usec)
Y	Indirect Path Length (cm)	Y	Indirect Path Length (cm)

X	Y	X	Y
34.6	15	33.5	15
71.8	30	75.8	30
109.8	45	113.7	45
145.7	60	142.4	60

line (Eq .		Best fit line (Equation)	
Y = 4.039 X + 9.538		Y = 4.085 X + 1.838	
Vi (km/s)	4.039	Vi (km/s)	4.085
Correction Ration (Vi → Vd)	4.241	Correction Ration (Vi → Vd)	4.289
압축강도(F')	28.6	압축강도(F')	29.6



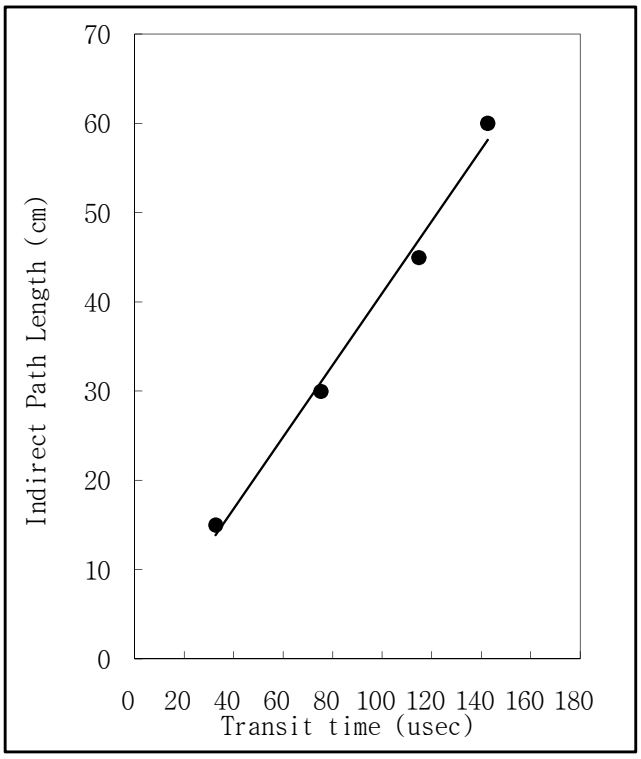


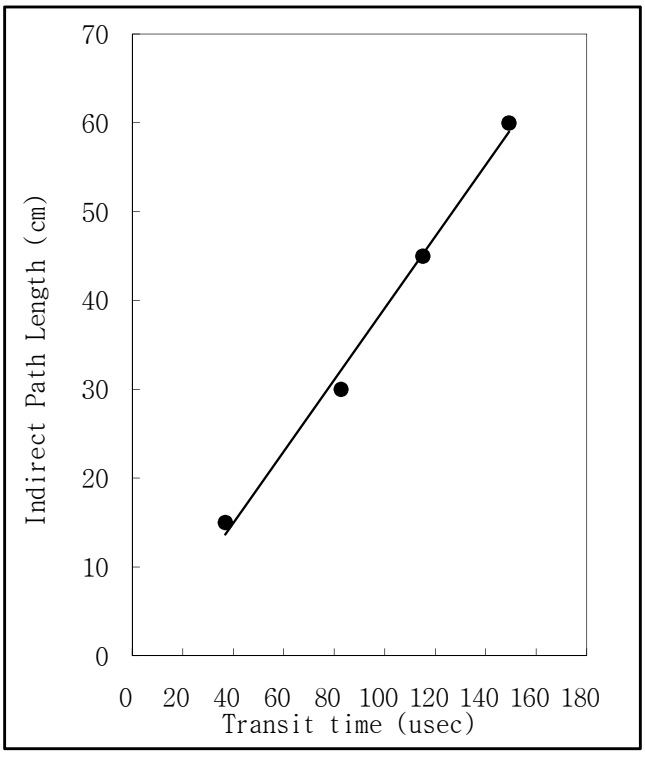
Pulse Velocity Data

(Vi : Indirect Pluse Velocity, Vd : Direct Pluse Velocity)

부 재 명	S23(건전부)	부 재 명	S24(건전부)
X	Transit Time (usec)	X	Transit Time (usec)
Y	Indirect Path Length (cm)	Y	Indirect Path Length (cm)

X	Y	X	Y
32.7	15	36.9	15
75.3	30	82.6	30
114.8	45	115.1	45
142.6	60	149.2	60
Best fit line (Equation)		Best fit line (Equation)	
Y = 4.028 X + 7.016		Y = 4.034 X − 12.088	
Vi (km/s)	4.028	Vi (km/s)	4.034
Correction Ration (Vi → Vd)	4.229	Correction Ration (Vi → Vd)	4.236
압축강도(F')	28.4	압축강도(F')	28.5



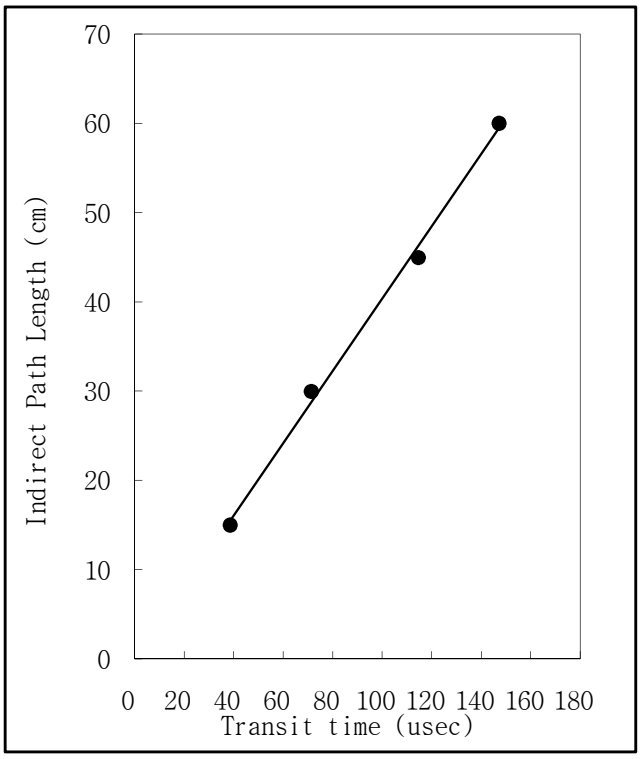


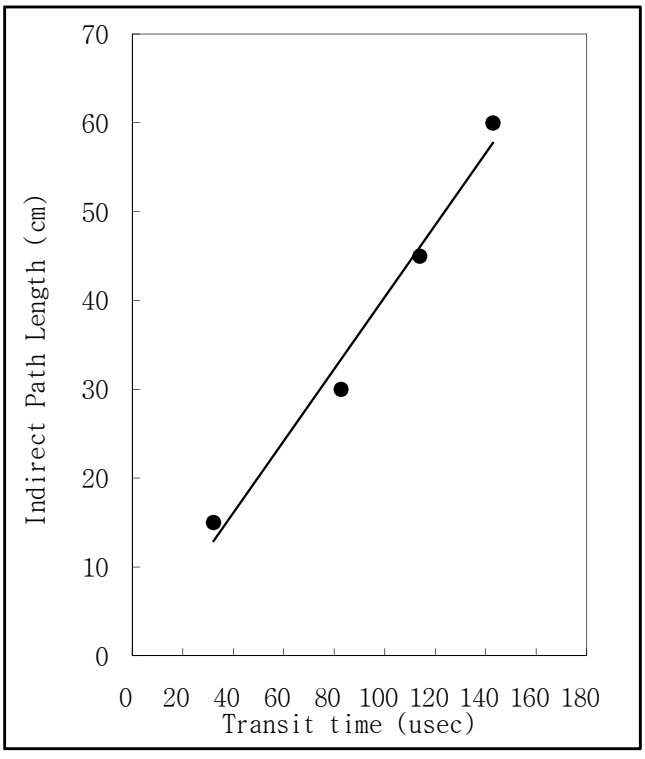
Pulse Velocity Data

(Vi : Indirect Pluse Velocity, Vd : Direct Pluse Velocity)

부 재 명	S25(건전부)	부 재 명	S26(건전부)
X	Transit Time (usec)	X	Transit Time (usec)
Y	Indirect Path Length (cm)	Y	Indirect Path Length (cm)

X	Y	X	Y
38.5	15	32.2	15
71.4	30	82.6	30
114.5	45	113.8	45
147.1	60	142.9	60
Best fit line (Equation)		Best fit line (Equation)	
Y = 4.053 X − 1.456		Y = 4.050 X − 1.166	
Vi (km/s)	4.053	Vi (km/s)	4.050
Correction Ration (Vi → Vd)	4.256	Correction Ration (Vi → Vd)	4.253
압축강도(F')	28.9	압축강도(F')	28.8





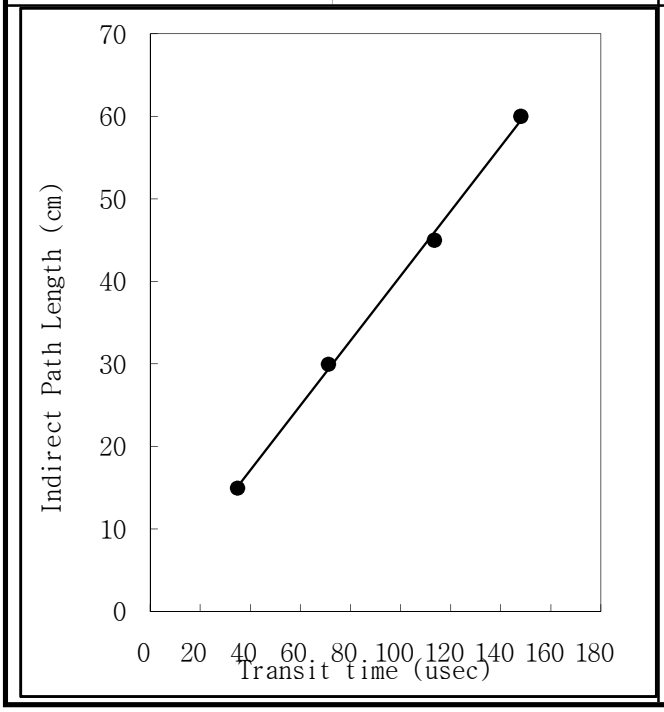
PUNDIT	이산포IC Ramp-I교 초음파탐사 DATA		
PROJECT TITLE :			
Company	㈜ 명 성 엔 지 니 어 링	Client	㈜ 일 산 대 교
Model	J.U.S.T – 900	Method	초음파법

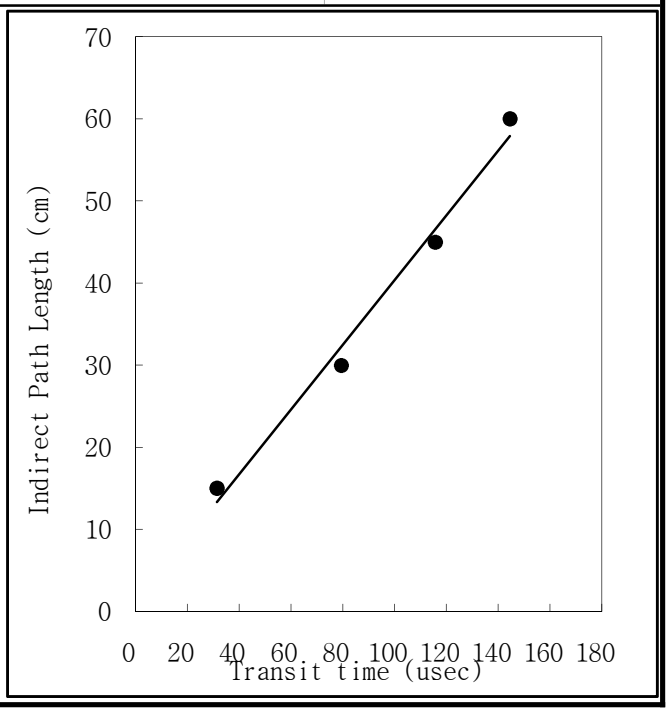
Pulse Velocity Data

(Vi : Indirect Pluse Velocity, Vd : Direct Pluse Velocity)

부 재 명	IA1 벽체	부 재 명	IA2 벽체
X	Transit Time (usec)	X	Transit Time (usec)
Y	Indirect Path Length (cm)	Y	Indirect Path Length (cm)

X	Y	X	Y
34.9	15	31.6	15
71.2	30	79.4	30
113.5	45	115.8	45
148.0	60	144.5	60
Best fit line (Equation)		Best fit line (Equation)	
Y = 3.925 X + 14.27		Y = 3.947 X + 8.585	
Vi (km/s)	3.925	Vi (km/s)	3.947
Correction Ration (Vi → Vd)	4.121	Correction Ration (Vi → Vd)	4.144
압축강도(F')	26.1	압축강도(F')	26.6



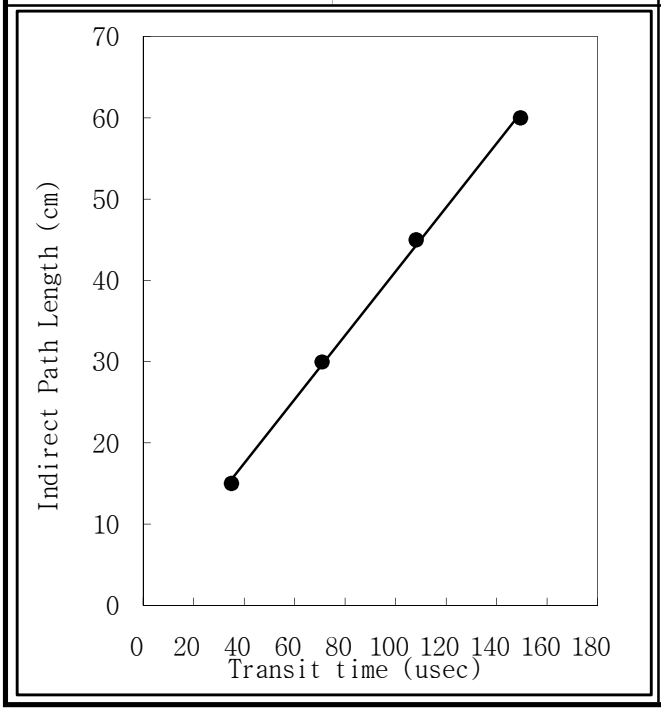


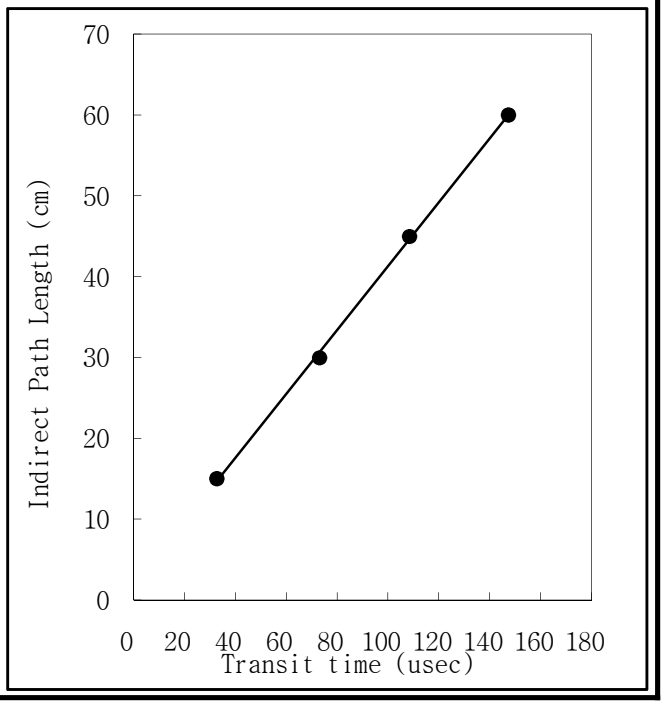
Pulse Velocity Data

(Vi : Indirect Pluse Velocity, Vd : Direct Pluse Velocity)

부 재 명	IP1 기둥부	부 재 명	IP2 코핑부
X	Transit Time (usec)	X	Transit Time (usec)
Y	Indirect Path Length (cm)	Y	Indirect Path Length (cm)

X	Y	X	Y
35.0	15	32.7	15
70.9	30	73.1	30
108.2	45	108.5	45
149.5	60	147.4	60
Best fit line (Equation)		Best fit line (Equation)	
Y = 3.935 X + 17.314		Y = 3.950 X + 17.796	
Vi (km/s)	3.935	Vi (km/s)	3.950
Correction Ration (Vi → Vd)	4.132	Correction Ration (Vi → Vd)	4.148
압축강도(F')	26.3	압축강도(F')	26.7



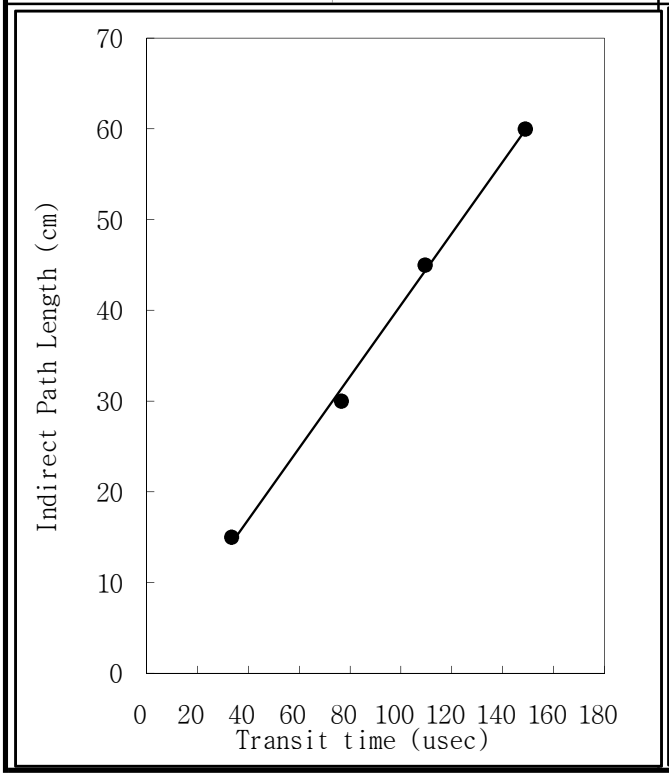


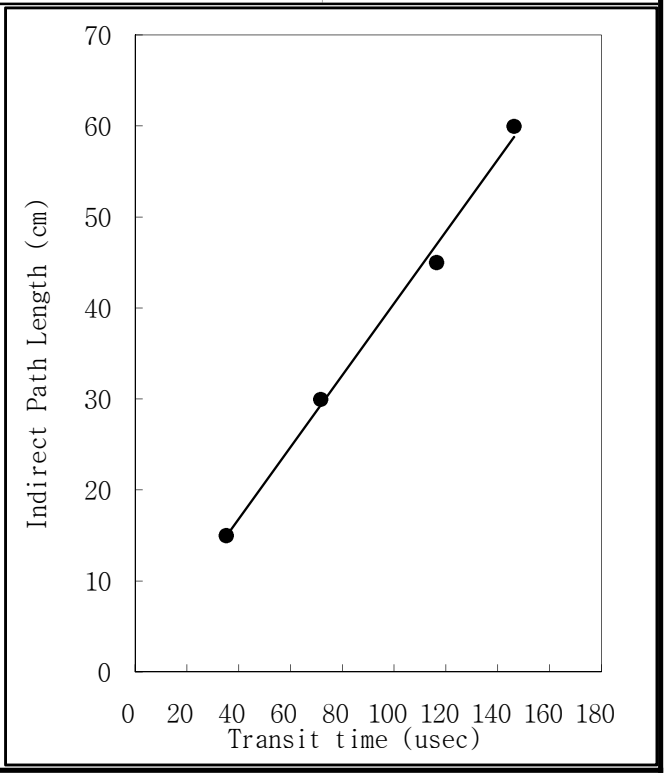
Pulse Velocity Data

(Vi : Indirect Pluse Velocity, Vd : Direct Pluse Velocity)

부 재 명	IP3 기둥부	부 재 명	IP4 코핑부
X	Transit Time (usec)	X	Transit Time (usec)
Y	Indirect Path Length (cm)	Y	Indirect Path Length (cm)

X	Y	X	Y
33.3	15	35.2	15
76.5	30	71.7	30
109.5	45	116.4	45
148.9	60	146.3	60
Best fit line (Equation)		Best fit line (Equation)	
Y = 3.940 X + 12.328		Y = 3.948 X + 10.24	
Vi (km/s)	3.940	Vi (km/s)	3.948
Correction Ration (Vi → Vd)	4.137	Correction Ration (Vi → Vd)	4.145
압축강도(F')	26.4	압축강도(F')	26.6



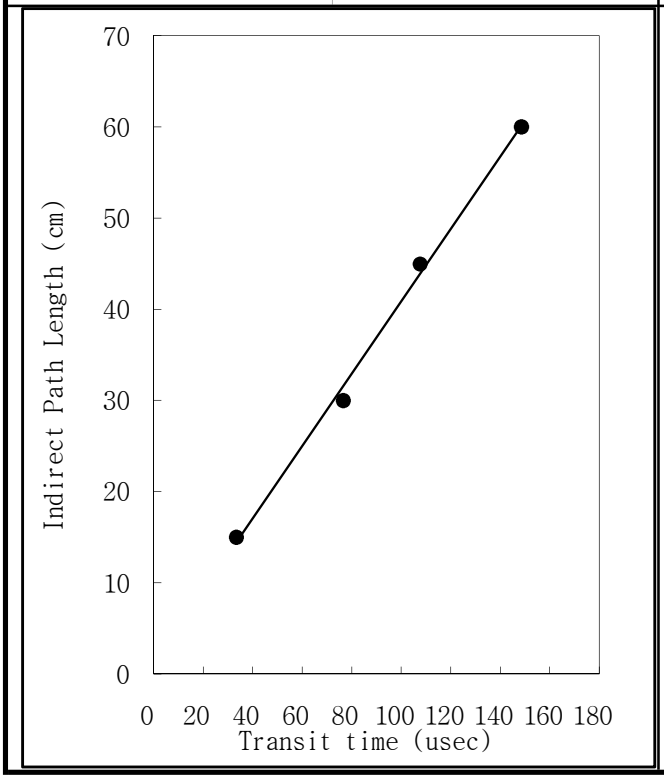


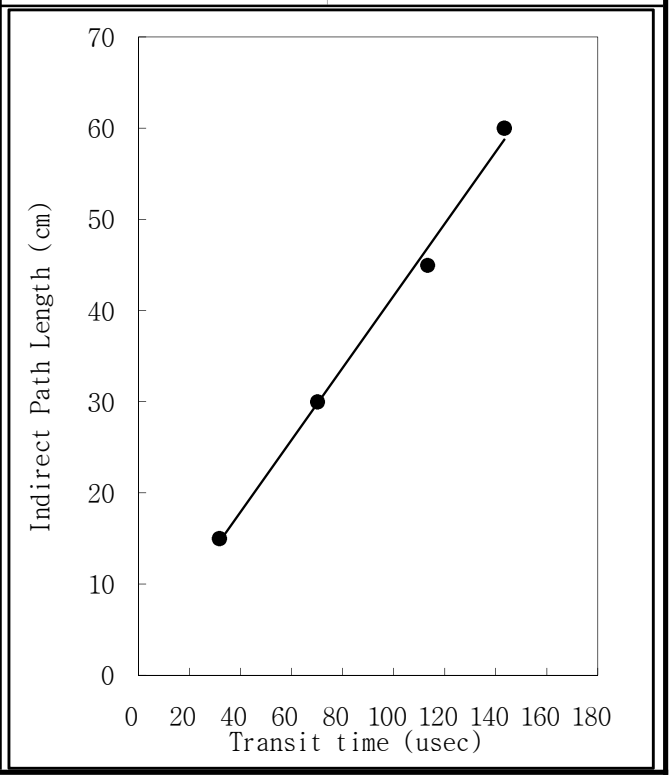
Pulse Velocity Data

(Vi : Indirect Pluse Velocity, Vd : Direct Pluse Velocity)

부 재 명	IP5 기둥부	부 재 명	IP6 코핑부
X	Transit Time (usec)	X	Transit Time (usec)
Y	Indirect Path Length (cm)	Y	Indirect Path Length (cm)

X	Y	X	Y
33.3	15	31.8	15
76.5	30	70.1	30
107.5	45	113.2	45
148.6	60	143.4	60
Best fit line (Equation)		Best fit line (Equation)	
Y = 3.965 X + 12.271		Y = 3.952 X + 20.842	
Vi (km/s)	3.965	Vi (km/s)	3.952
Correction Ration (Vi → Vd)	4.163	Correction Ration (Vi → Vd)	4.150
압축강도(F')	27.0	압축강도(F')	26.7



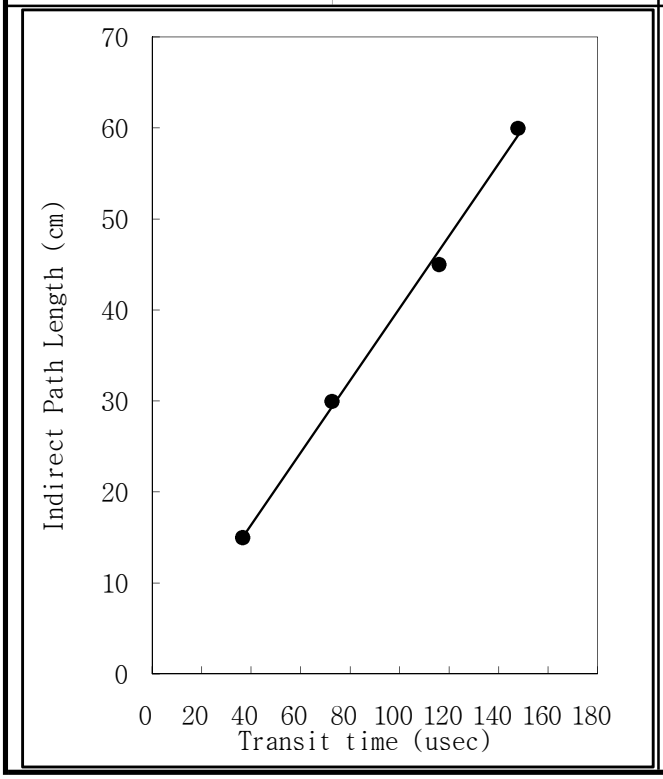


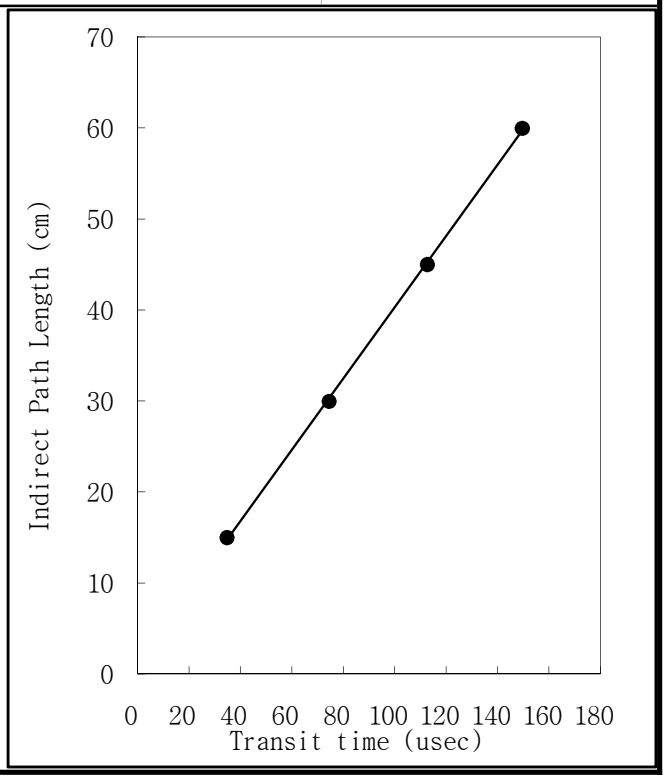
Pulse Velocity Data

(Vi : Indirect Pluse Velocity, Vd : Direct Pluse Velocity)

부 재 명	IP7 기둥부	부 재 명	IP8 기둥부
X	Transit Time (usec)	X	Transit Time (usec)
Y	Indirect Path Length (cm)	Y	Indirect Path Length (cm)

X	Y	X	Y
36.6	15	34.7	15
72.7	30	74.4	30
115.8	45	112.6	45
147.8	60	149.6	60
Best fit line (Equation)		Best fit line (Equation)	
Y = 3.970 X + 4.857		Y = 3.916 X + 11.451	
Vi (km/s)	3.970	Vi (km/s)	3.916
Correction Ration (Vi → Vd)	4.169	Correction Ration (Vi → Vd)	4.112
압축강도(F')	27.1	압축강도(F')	25.9



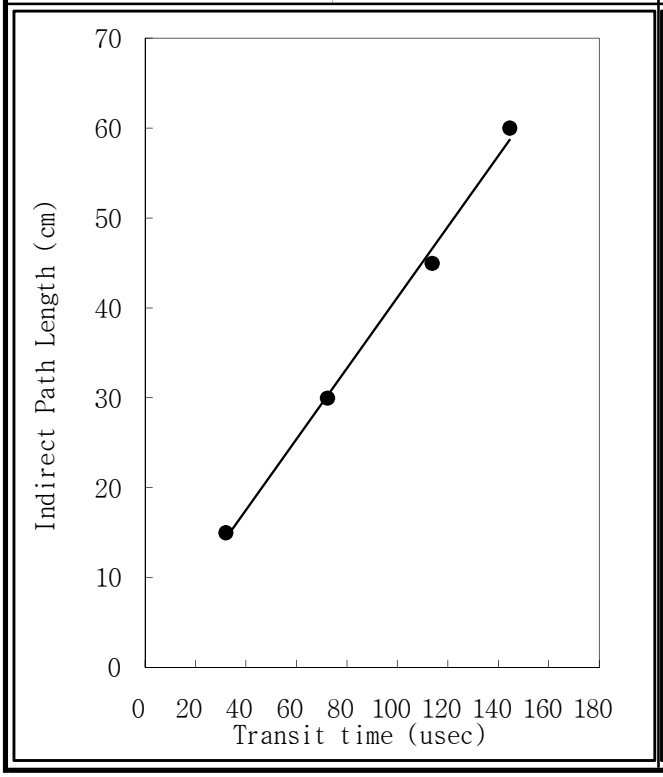


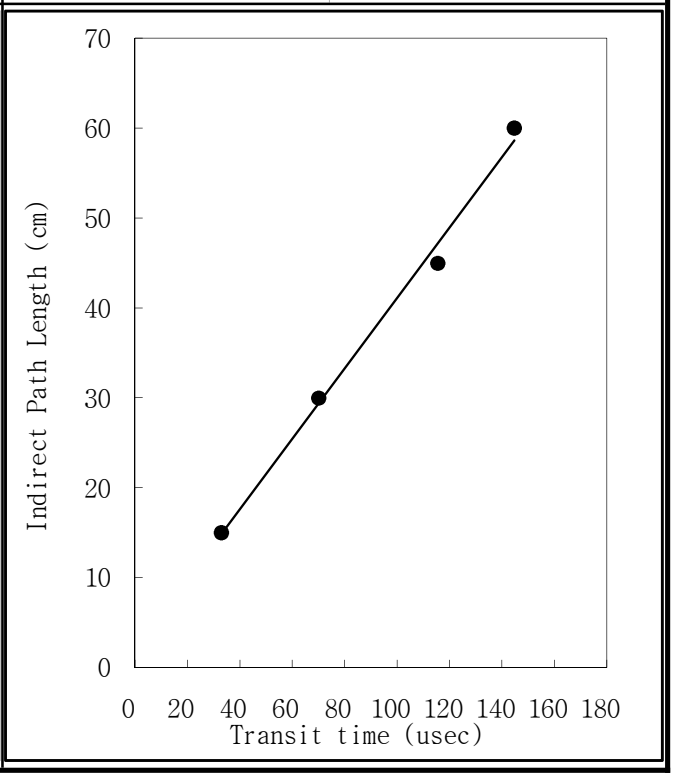
Pulse Velocity Data

(Vi : Indirect Pluse Velocity, Vd : Direct Pluse Velocity)

부 재 명	IP9 기둥부	부 재 명	IP10 기둥부
X	Transit Time (usec)	X	Transit Time (usec)
Y	Indirect Path Length (cm)	Y	Indirect Path Length (cm)

X	Y	X	Y
31.9	15	33.0	15
72.3	30	70.1	30
113.8	45	115.5	45
144.4	60	144.7	60
Best fit line (Equation)		Best fit line (Equation)	
Y = 3.941 X + 17.976		Y = 3.917 X + 19.193	
Vi (km/s)	3.941	Vi (km/s)	3.917
Correction Ration (Vi → Vd)	4.138	Correction Ration (Vi → Vd)	4.113
압축강도(F')	26.5	압축강도(F')	25.9



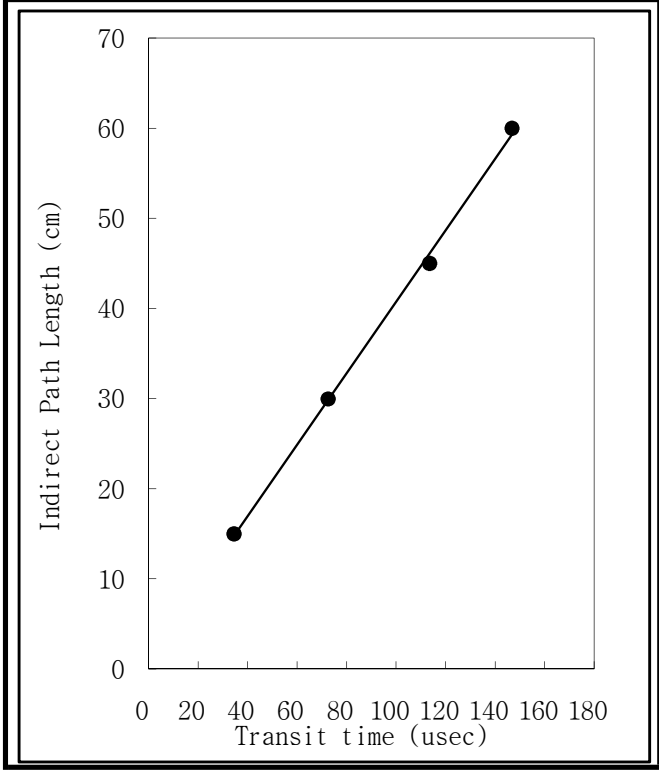


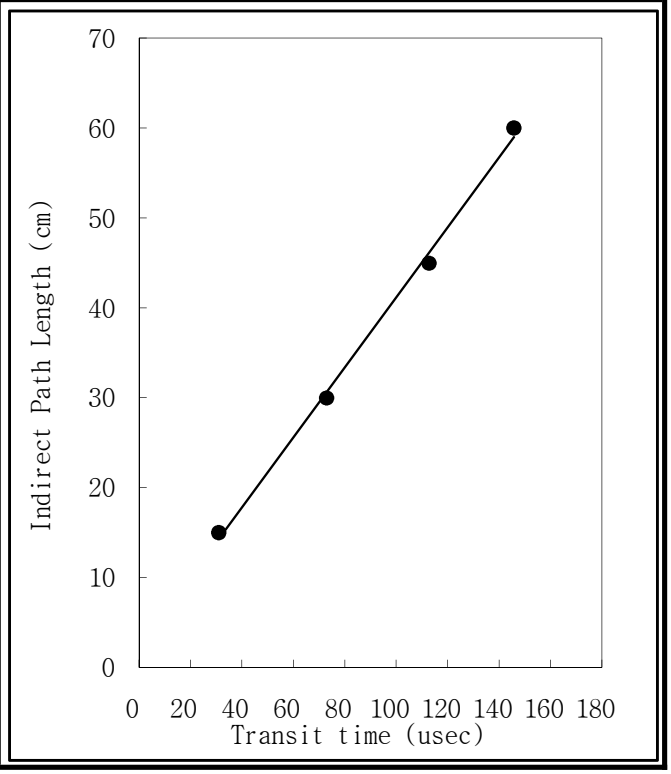
Pulse Velocity Data

(Vi : Indirect Pluse Velocity, Vd : Direct Pluse Velocity)

부 재 명	IP11 기둥부	부 재 명	IP12 기둥부
X	Transit Time (usec)	X	Transit Time (usec)
Y	Indirect Path Length (cm)	Y	Indirect Path Length (cm)

X	Y	X	Y
34.6	15	31.0	15
72.6	30	73.0	30
113.5	45	112.8	45
146.7	60	145.8	60
Best fit line (Equation)		Best fit line (Equation)	
Y = 3.970 X + 10.326		Y = 3.893 X + 22.102	
Vi (km/s)	3.970	Vi (km/s)	3.893
Correction Ration (Vi → Vd)	4.169	Correction Ration (Vi → Vd)	4.088
압축강도(F')	27.1	압축강도(F')	25.4



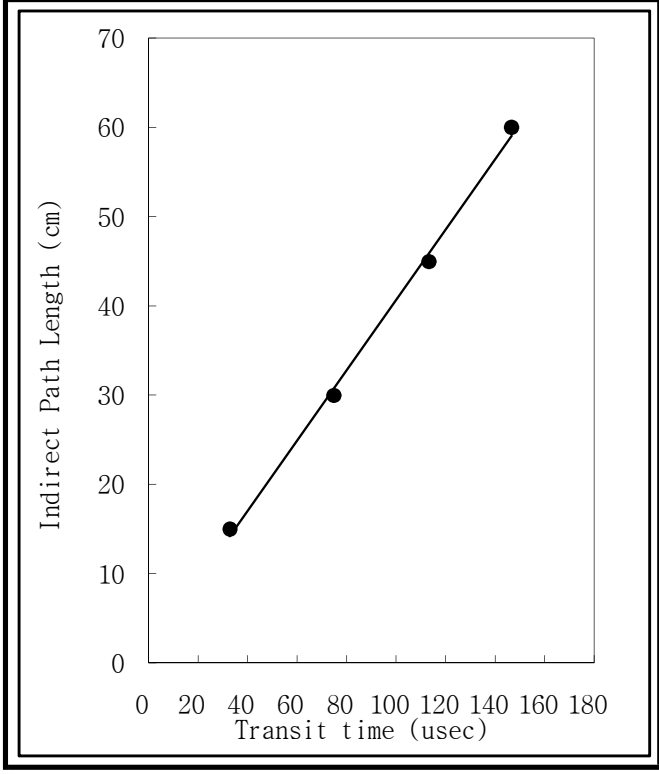


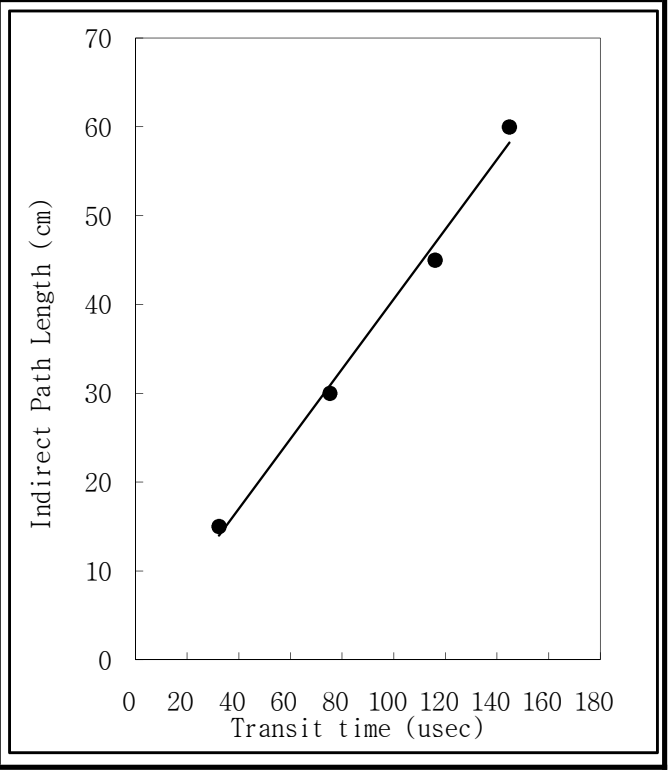
Pulse Velocity Data

(Vi : Indirect Pluse Velocity, Vd : Direct Pluse Velocity)

부 재 명	IP13 기둥부	부 재 명	IP14 기둥부
X	Transit Time (usec)	X	Transit Time (usec)
Y	Indirect Path Length (cm)	Y	Indirect Path Length (cm)

X	Y	X	Y
32.8	15	32.4	15
74.9	30	75.2	30
113.3	45	116.1	45
146.6	60	144.8	60
Best fit line (Equation)		Best fit line (Equation)	
Y = 3.939 X + 13.022		Y = 3.937 X + 12.312	
Vi (km/s)	3.939	Vi (km/s)	3.937
Correction Ration (Vi → Vd)	4.136	Correction Ration (Vi → Vd)	4.134
압축강도(F')	26.4	압축강도(F')	26.4



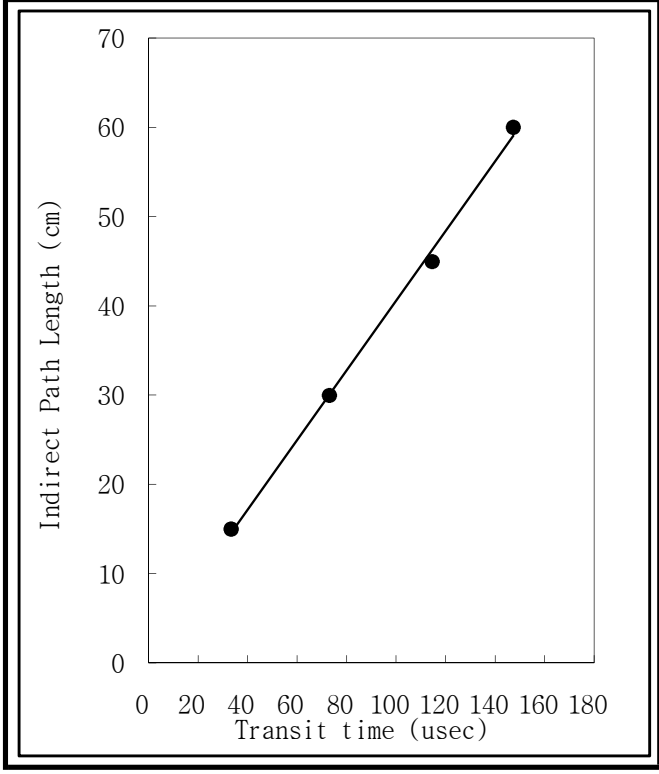


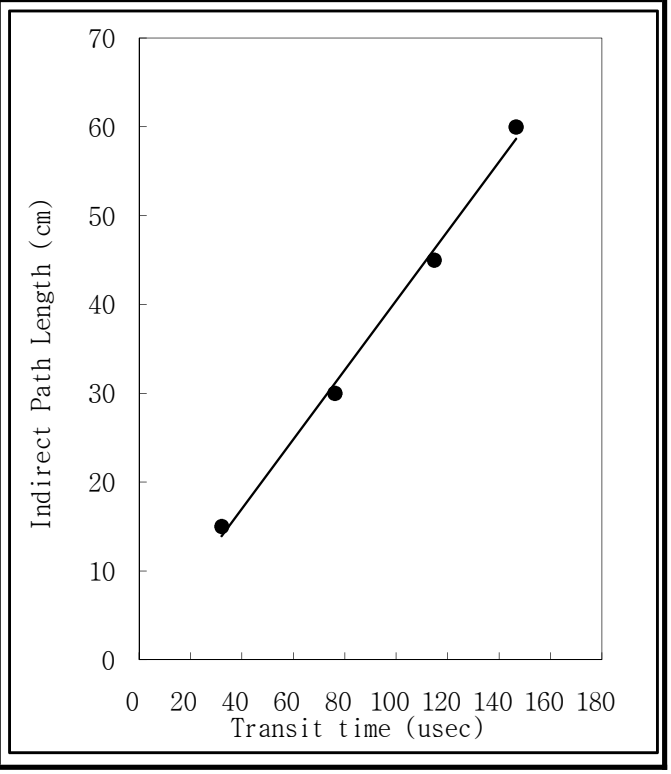
Pulse Velocity Data

(Vi : Indirect Pluse Velocity, Vd : Direct Pluse Velocity)

부 재 명	IP15 기둥부	부 재 명	IP16 기둥부
X	Transit Time (usec)	X	Transit Time (usec)
Y	Indirect Path Length (cm)	Y	Indirect Path Length (cm)

X	Y	X	Y
33.4	15	32.1	15
73.1	30	76.2	30
114.6	45	114.7	45
147.2	60	146.6	60
Best fit line (Equation)		Best fit line (Equation)	
Y = 3.908 X + 15.198		Y = 3.907 X + 14.016	
Vi (km/s)	3.908	Vi (km/s)	3.907
Correction Ration (Vi → Vd)	4.103	Correction Ration (Vi → Vd)	4.102
압축강도(F')	25.7	압축강도(F')	25.7



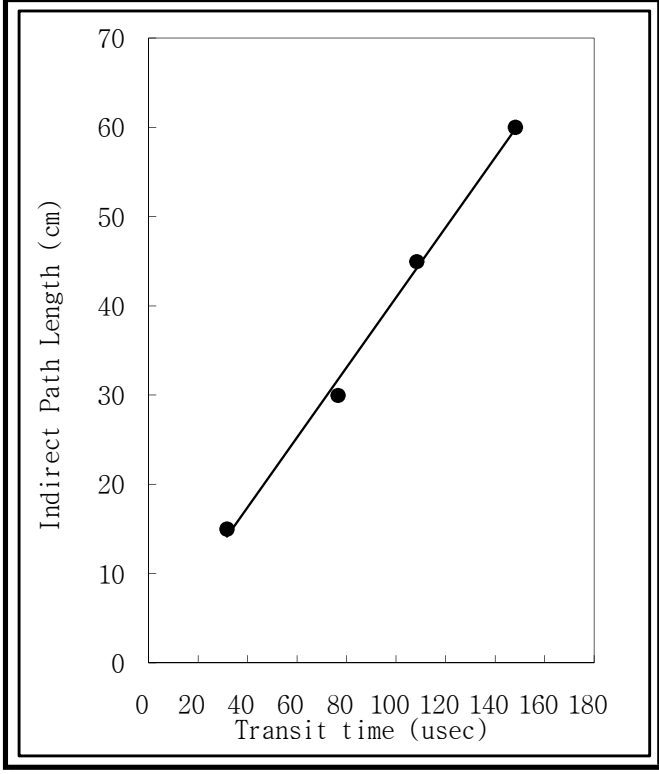


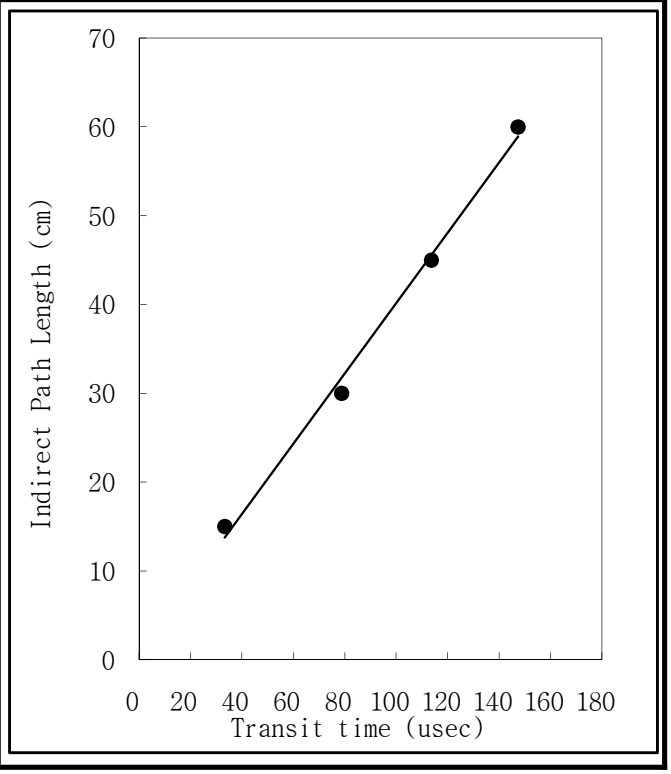
Pulse Velocity Data

(Vi : Indirect Pluse Velocity, Vd : Direct Pluse Velocity)

부 재 명	IP17 기둥부	부 재 명	IP18 코핑부
X	Transit Time (usec)	X	Transit Time (usec)
Y	Indirect Path Length (cm)	Ydirect Path Length (cm)	

X	Y	X	Y
31.7	15	33.4	15
76.6	30	78.8	30
108.4	45	113.6	45
148.2	60	147.4	60
Best fit line (Equation)		Best fit line (Equation)	
Y = 3.918 X + 17.543		Y = 3.960 X + 5.573	
Vi (km/s)	3.918	Vi (km/s)	3.960
Correction Ration (Vi → Vd)	4.114	Correction Ration (Vi → Vd)	4.158
압축강도(F')	26.0	압축강도(F')	26.9



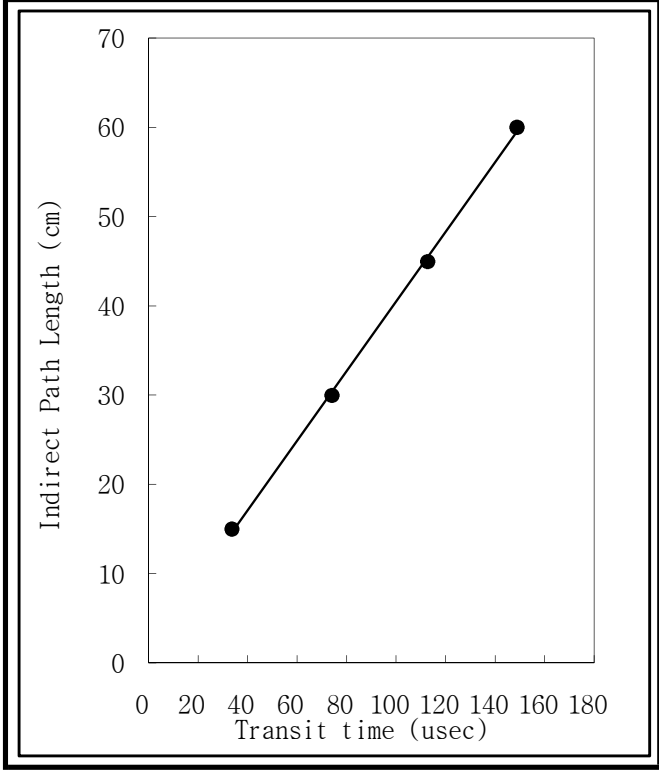


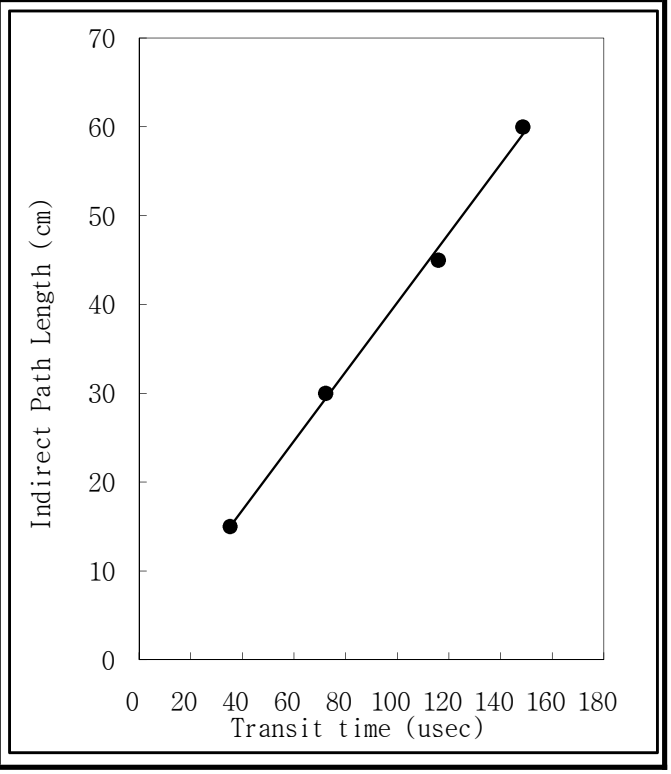
Pulse Velocity Data

(Vi : Indirect Pluse Velocity, Vd : Direct Pluse Velocity)

부 재 명	IP19 기둥부	부 재 명	IP20 코핑부
X	Transit Time (usec)	X	Transit Time (usec)
Y	Indirect Path Length (cm)	Y	Indirect Path Length (cm)

X	Y	X	Y
33.6	15	35.2	15
74.1	30	72.3	30
112.8	45	116.0	45
148.8	60	148.7	60
Best fit line (Equation)		Best fit line (Equation)	
Y = 3.901 X + 14.886		Y = 3.893 X + 12.711	
Vi (km/s)	3.901	Vi (km/s)	3.893
Correction Ration (Vi → Vd)	4.096	Correction Ration (Vi → Vd)	4.088
압축강도(F')	25.6	압축강도(F')	25.4



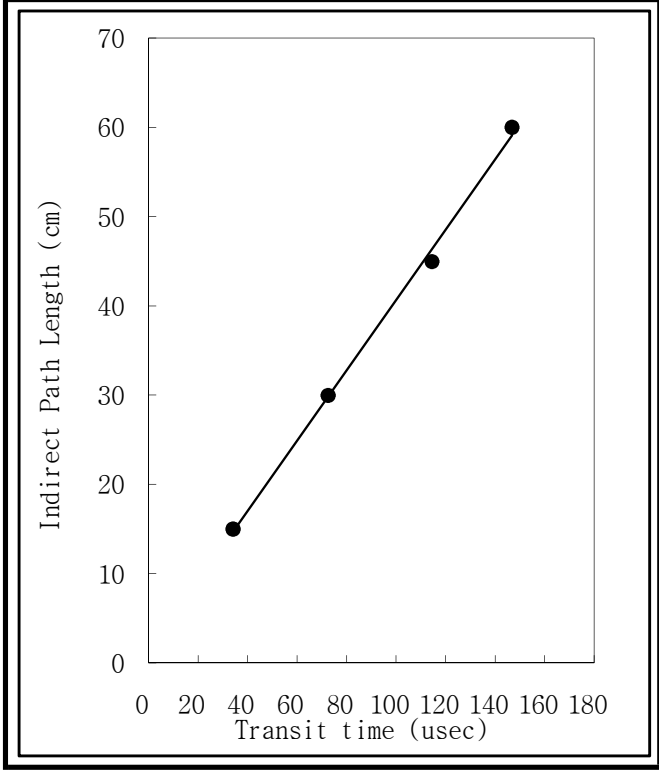


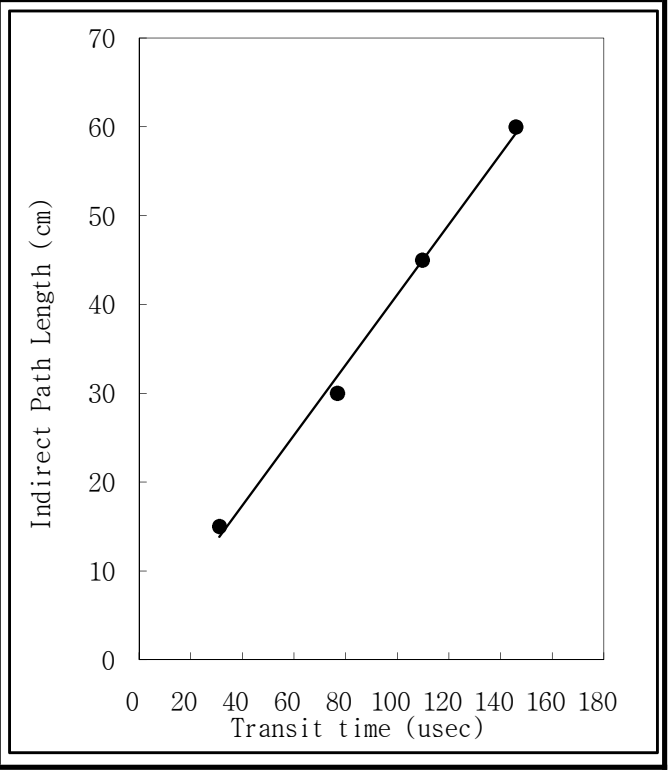
Pulse Velocity Data

(Vi : Indirect Pluse Velocity, Vd : Direct Pluse Velocity)

부 재 명	IP21 기둥부	부 재 명	IP22 코핑부
X	Transit Time (usec)	X	Transit Time (usec)
Y	Indirect Path Length (cm)	Y	Indirect Path Length (cm)

X	Y	X	Y
34.2	15	31.1	15
72.6	30	76.9	30
114.4	45	109.7	45
146.7	60	145.9	60
Best fit line (Equation)		Best fit line (Equation)	
Y = 3.945 X + 12.16		Y = 3.956 X + 15.365	
Vi (km/s)	3.945	Vi (km/s)	3.956
Correction Ration (Vi → Vd)	4.142	Correction Ration (Vi → Vd)	4.154
압축강도(F')	26.6	압축강도(F')	26.8



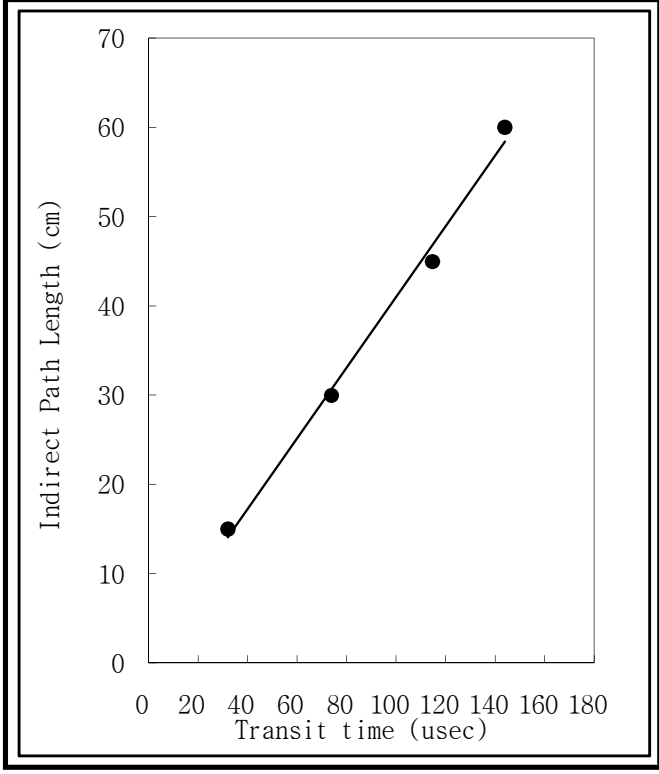


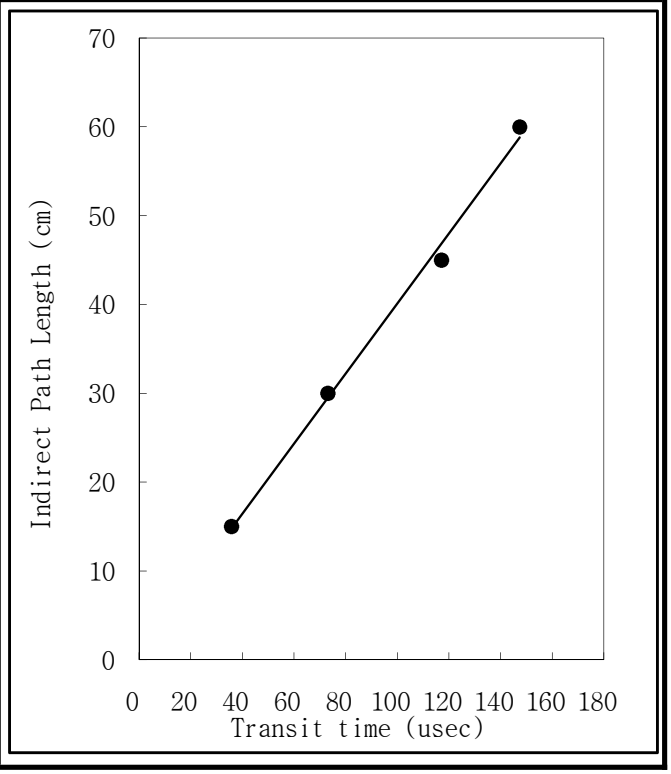
Pulse Velocity Data

(Vi : Indirect Pluse Velocity, Vd : Direct Pluse Velocity)

부 재 명	IP23 기둥부	부 재 명	IP24 코핑부
X	Transit Time (usec)	X	Transit Time (usec)
Y	Indirect Path Length (cm)	Y	Indirect Path Length (cm)

X	Y	X	Y
32.1	15	35.9	15
73.8	30	73.2	30
114.7	45	117.2	45
143.9	60	147.4	60
Best fit line (Equation)		Best fit line (Equation)	
Y = 3.961 X + 14.054		Y = 3.945 X + 6.485	
Vi (km/s)	3.961	Vi (km/s)	3.945
Correction Ration (Vi → Vd)	4.159	Correction Ration (Vi → Vd)	4.142
압축강도(F')	26.9	압축강도(F')	26.6





Pulse Velocity Data

(Vi : Indirect Pluse Velocity, Vd : Direct Pluse Velocity)

부 재 명	IP25 기둥부	부 재 명	
X	Transit Time (usec)	X	Transit Time (usec)
Y	Indirect Path Length (cm)	Y	Indirect Path Length (cm)

X	Y	X	Y
32.7	15		15
73.9	30		30
111.3	45		45
148.7	60		60
Best fit line (Equation)		Best fit line (Equation)	
Y = 3.890 X + 18.501		#DIV/0!	
Vi (km/s)	3.890	Vi (km/s)	#DIV/0!
Correction Ration (Vi → Vd)	4.085	Correction Ration (Vi → Vd)	#DIV/0!
압축강도(F')	25.3	압축강도(F')	#DIV/0!