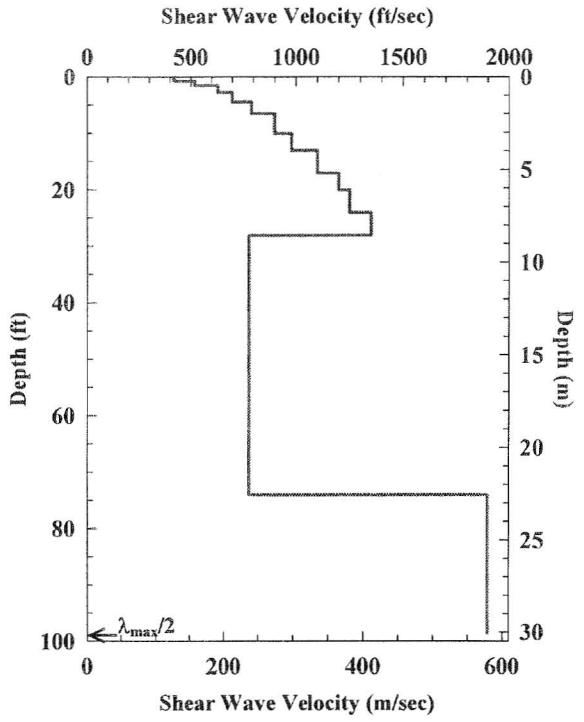

Figure R.35 Shear Wave Velocity Profile Determined at Site E during Third Site Visit at Vogtle, GA

Table R.4 Profile Parameters Used to Develop Preliminary Theoretical Dispersion Curve at Site E in the Third Site Visit at Vogtle, GA

Layer No.	Thickness, ft	Depth to Top of Layer, ft	S-Wave Velocity, ft/s	Assumed Poisson's Ratio	P-Wave Velocity, ft/s	Assumed Total Unit Weight, pcf
1	0.8	0.0	420	0.24	718	128
2	0.8	0.8	520	0.24	889	128
3	1.2	1.6	630	0.24	1077	128
4	1.7	2.8	700	0.24	1197	128
5	2.0	4.5	790	0.24	1351	128
6	3.6	6.5	900	0.24	1539	128
7	3.0	10.1	980	0.24	1676	128
8	4.0	13.1	1100	0.24	1881	128
9	3.0	17.1	1200	0.24	2052	128
10	4.0	20.1	1250	0.24	2137	128
11	4.0	24.1	1350	0.24	2308	128
12	46.0	28.1	780	0.24	1334	128
13#	24.9	74.1	1900	0.42	5000	135
14*#	5.1	99.0	1900	0.42	5000	135
15*#	Half Space	104.1	2200	0.38	5000	135

* Layer below maximum depth of the V_S Profile.

\# Layer below water tatble.

Performed by Yin-Cheng Lin Checked by K. H. Stokoe

Yin-Cheng Lin Kenneth H. Stokoe, II

Appendix S

SASW Measurements of Third Site Visit at Vogtle, GA
Site Location: Site F

3 - Receiver SASW Data Sheet

Page 1 of 1

Project : Voglte

Location : F (SA3 #6)

Date/(Time) : Dec 27, 2007 (: ~ :)

Personnel : Stokoe Yuan

Recorded by : Yuan

Checked by : Stokoe

Data Sheet # : SA3 #6

Disk # : SA3 #6

elev = 232.59

Sketch

R1 I.D. : UT07-4.5HZ-04

R2 I.D. : UT07-4.5HZ-02

R3 I.D. : UT07-4.5HZ-03

Distance (ft)			Impact Direction		Impact Source	Record #	Freq. Range (Hz)	Notes
S - R1	R1 - R2	R2 - R3						
1	1	2	For	Rev	small	3F1	0 - 800	soft hit small hammer on med
1	1	2	For	Rev	"	3F2	0 - 800	"
3	3	6	For	Rev	med	3F3	0 - 400	soft hit
3	3	6	For	Rev	"	3F4	0 - 400	"
9	9	18	For	Rev	big	3F5	0 - 200	
9	9	18	For	Rev	sledge	3F6	0 - 200	
9	9	18	For	Rev	big	3F7	0 - 200	
9	9	18	For	Rev	sledge	3F8	0 - 200	
			For	Rev			~	
			For	Rev			~	
			For	Rev			~	
			For	Rev			~	
			For	Rev			~	
			For	Rev			~	
			For	Rev			~	
			For	Rev			~	

* Autosequence 3R_SASW saves F_2/1, C_2/1, F_4/3, C_4/3, Lin_1, Lin_2, Lin_4

* Autosequence 3R_SEWPSIN saves F_2/1, Var_2, F_4/3, Var_4, Lin_1, Lin_2, Lin_4

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3 - Receiver SASW Data Sheet

Page 1 of 1

Project : Voght

Location : G (SA3#7)

Date/(Time) : Dec / 27 / 2007 (: ~ :)

Personnel : Stokoe, Tuan

Recorded by : Tuan

Checked by : Stokoe

Data Sheet # : SA3#7

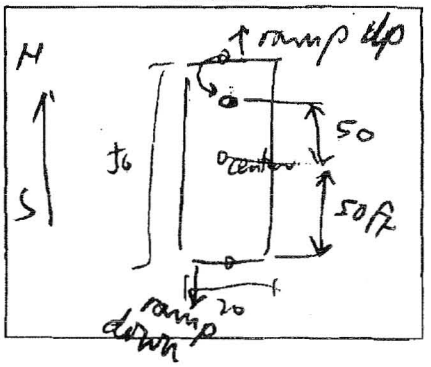
Disk # : SA3#7

R1 I.D. : 3773 (1Hz) Cable C26

R2 I.D. : 3774 (1Hz) C27

R3 I.D. : 3775 (1Hz) C25

Sketch



Distance (ft)			Impact Direction		Impact Source	Record #	Freq. Range (Hz)	Notes (input voltage)
S - R1	R1 - R2	R2 - R3						
25	25	25	(For)	Rev	bull dozer	361	0 - 100	500 mV
50	50		(For)	Rev	"	362	0 - 100	
50	50	50	(For)	Rev	"	363	0 - 100	
50	50	50	(For)	Rev	"	364	0 - 50	250 mV
100	100		(For)	Rev	"	365	0 - 50	100 mV
25	25	25	For	(Rev)	bull dozer	366	0 - 100	500 mV
50	50		For	(Rev)	"	367	0 - 50	250 mV
85	50	50	For	(Rev)	"	368	0 - 50	150 mV
100	100		For	(Rev)	"	369	0 - 50	100 mV
			For	Rev			~	
			For	Rev			~	
			For	Rev			~	
			For	Rev			~	
			For	Rev			~	
			For	Rev			~	
			For	Rev			~	

* Autosequence 3R_SASW saves F_2/1, C_2/1, F_4/3, C_4/3, Lin_1, Lin_2, Lin_4

* Autosequence 3R_SEWPSIN saves F_2/1, Var_2, F_4/3, Var_4, Lin_1, Lin_2, Lin_4

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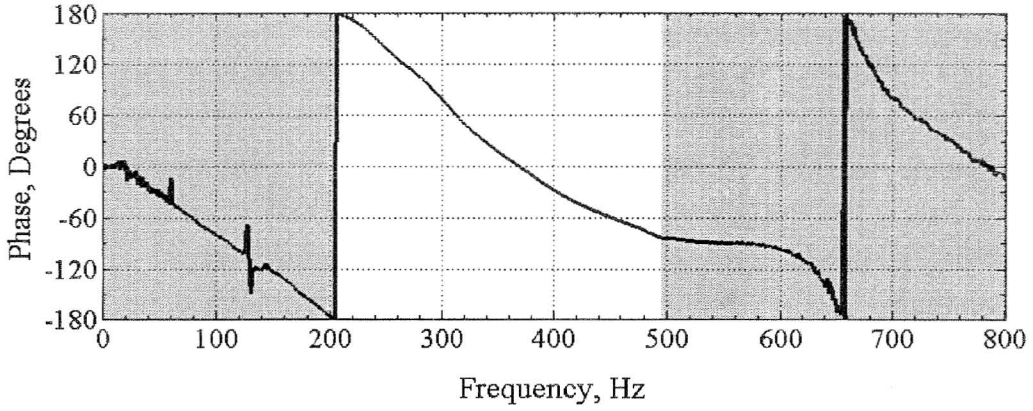

Figure S.1 Phase Plots Measured by SASW Testing with 1-ft Receiver Spacing (3F1_F_21.DAT)

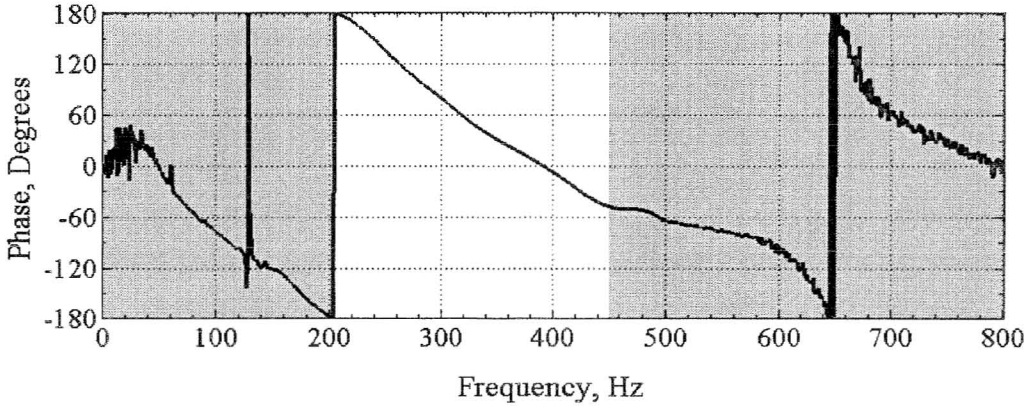

Figure S.2 Phase Plots Measured by SASW Testing with 1-ft Receiver Spacing (3F2_F_21.DAT)

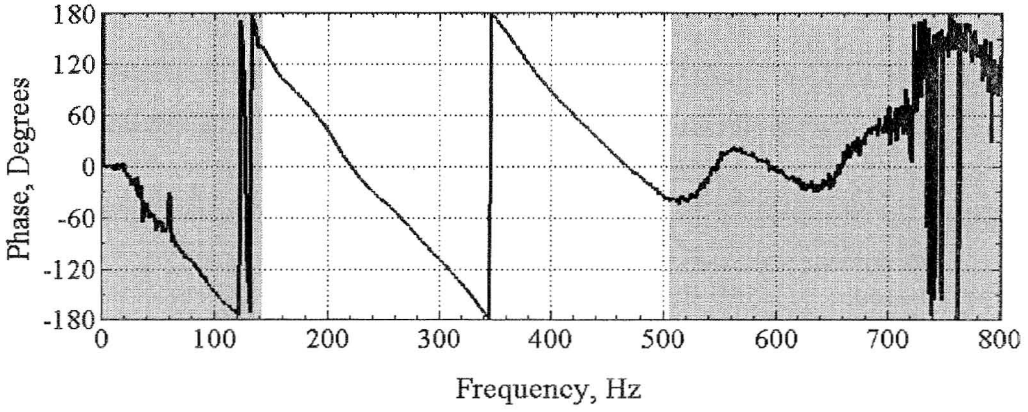

Figure S.3 Phase Plots Measured by SASW Testing with 2-ft Receiver Spacing (3F1_F_43.DAT)

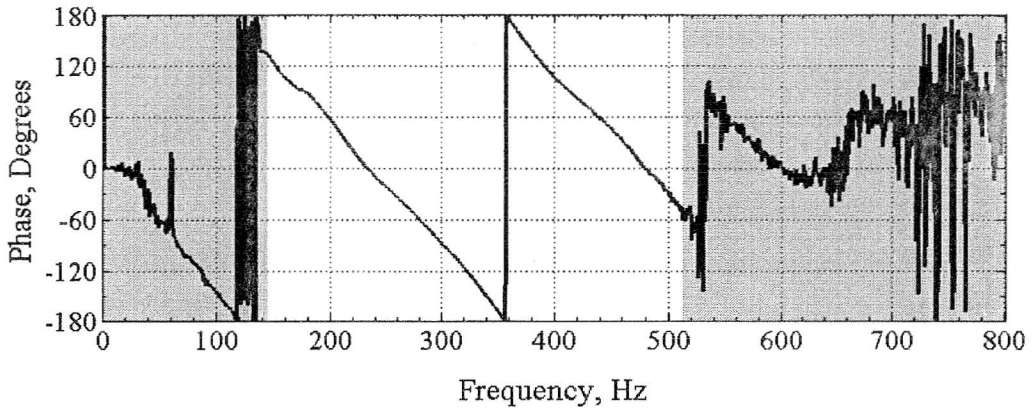

Figure S.4 Phase Plots Measured by SASW Testing with 2-ft Receiver Spacing (3F2_F_43.DAT)

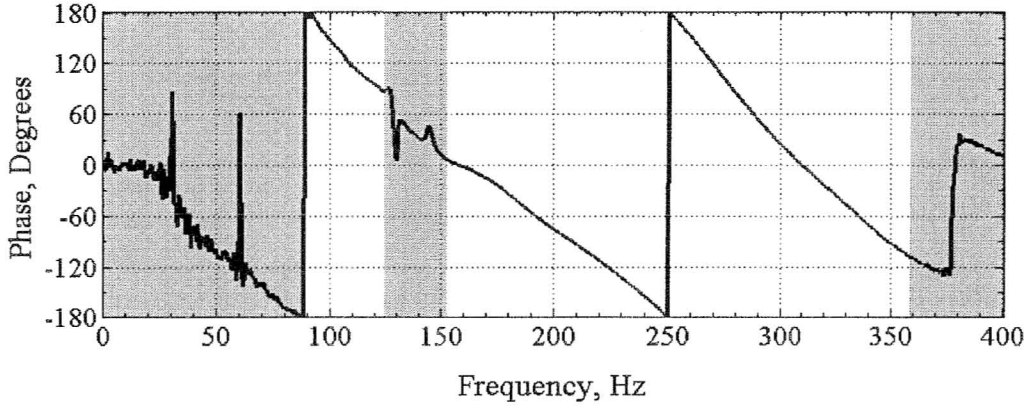

Figure S.5 Phase Plots Measured by SASW Testing with 3-ft Receiver Spacing (3F3_F_21.DAT)

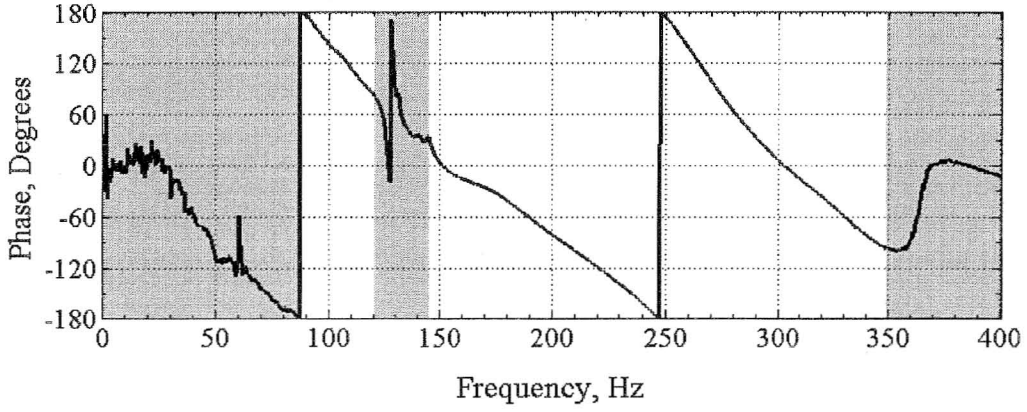

Figure S.6 Phase Plots Measured by SASW Testing with 3-ft Receiver Spacing (3F4_F_21.DAT)

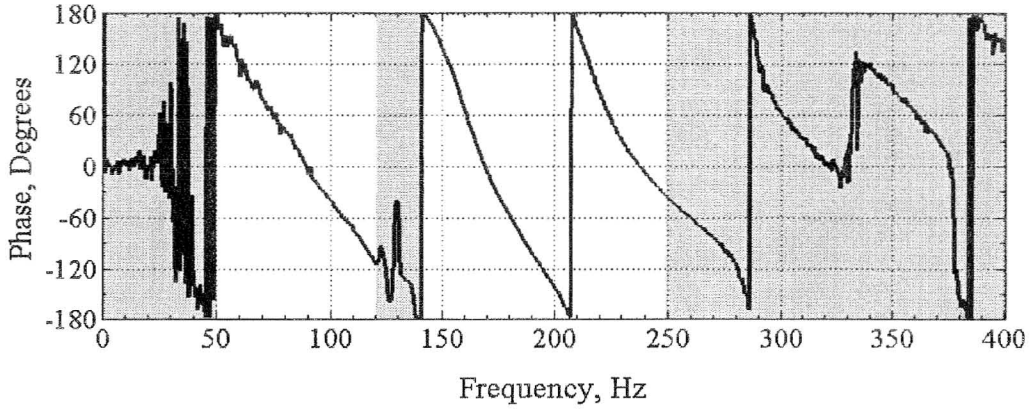

Figure S.7 Phase Plots Measured by SASW Testing with 6-ft Receiver Spacing (3F3_F_43.DAT)

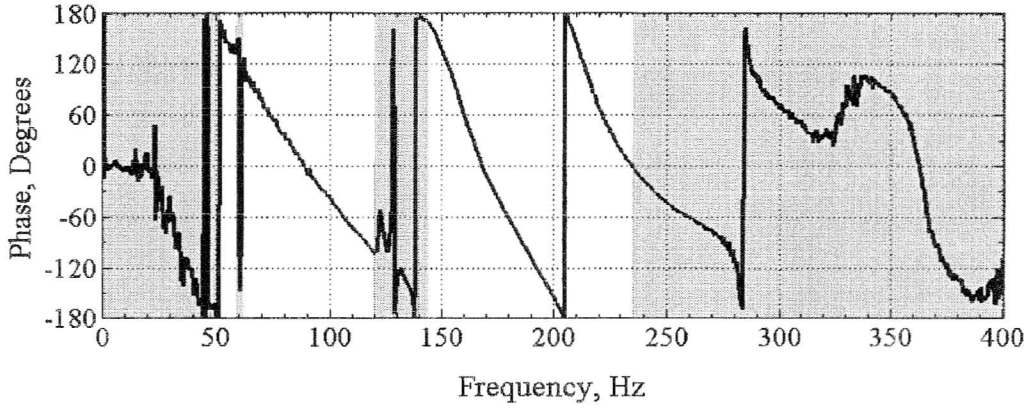

Figure S.8 Phase Plots Measured by SASW Testing with 6-ft Receiver Spacing (3F4_F_43.DAT)

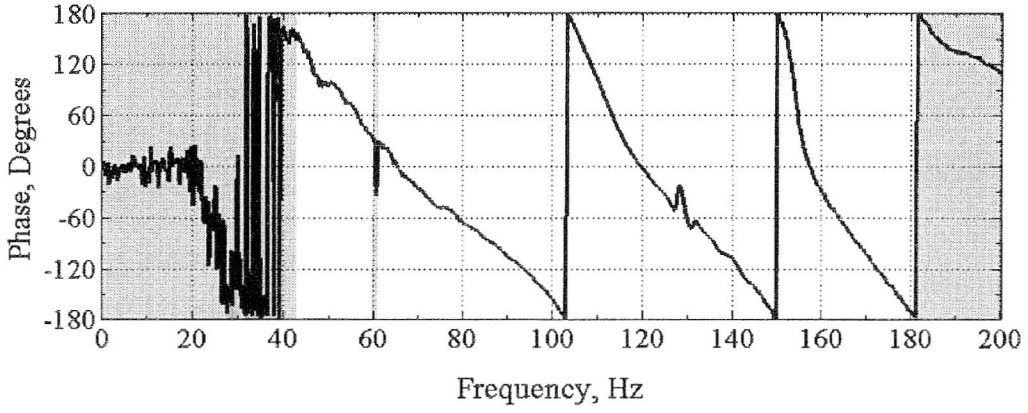

Figure S.9 Phase Plots Measured by SASW Testing with 9-ft Receiver Spacing (3F5_F_21.DAT)

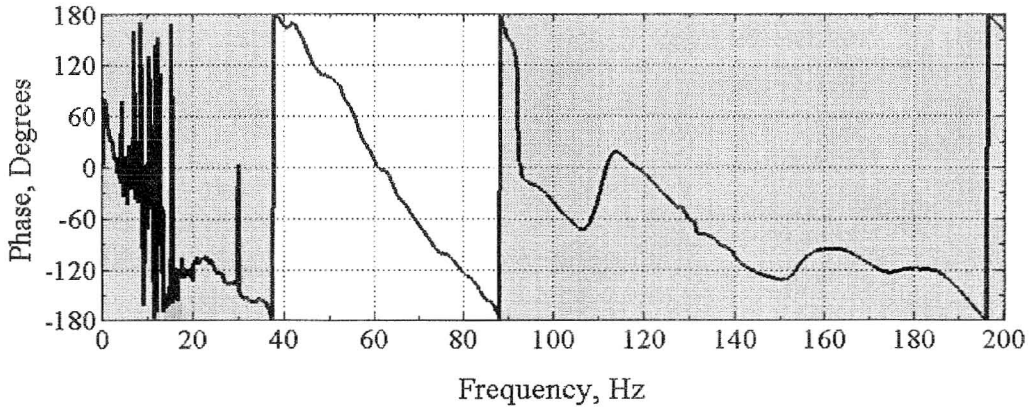

Figure S.10 Phase Plots Measured by SASW Testing with 9-ft Receiver Spacing (3F6_F_21.DAT)

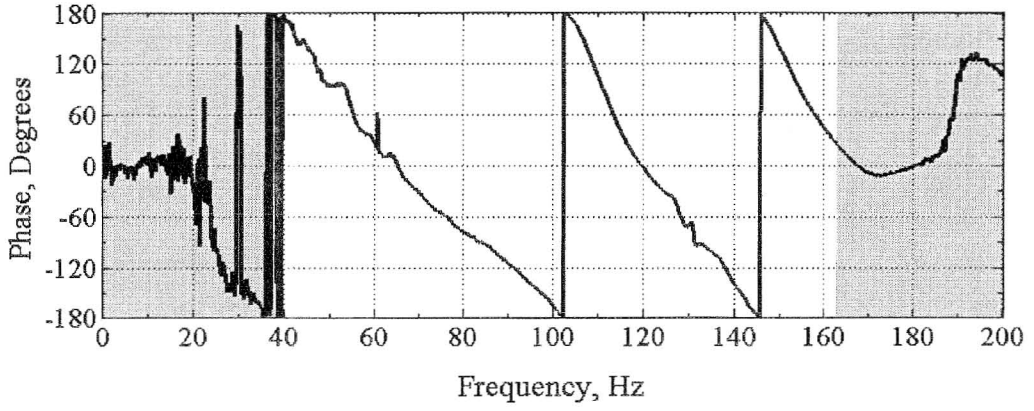

Figure S.11 Phase Plots Measured by SASW Testing with 9-ft Receiver Spacing (3F7_F_21.DAT)

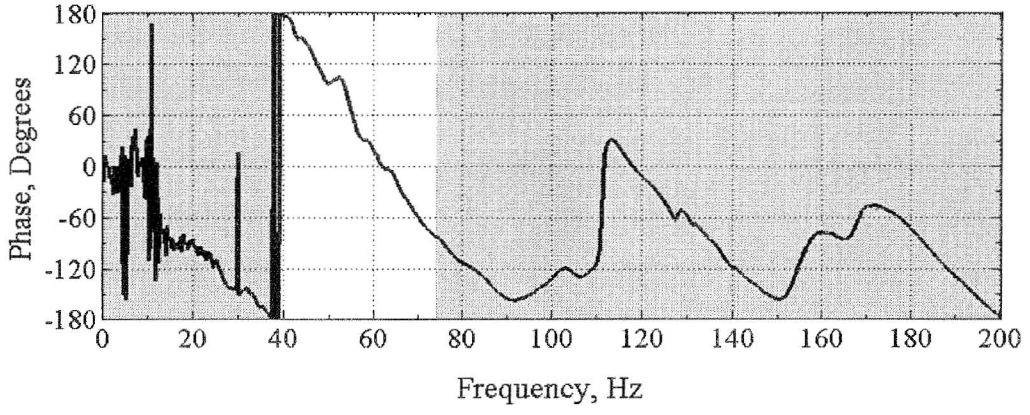

Figure S.12 Phase Plots Measured by SASW Testing with 9-ft Receiver Spacing (3F8_F_21.DAT)

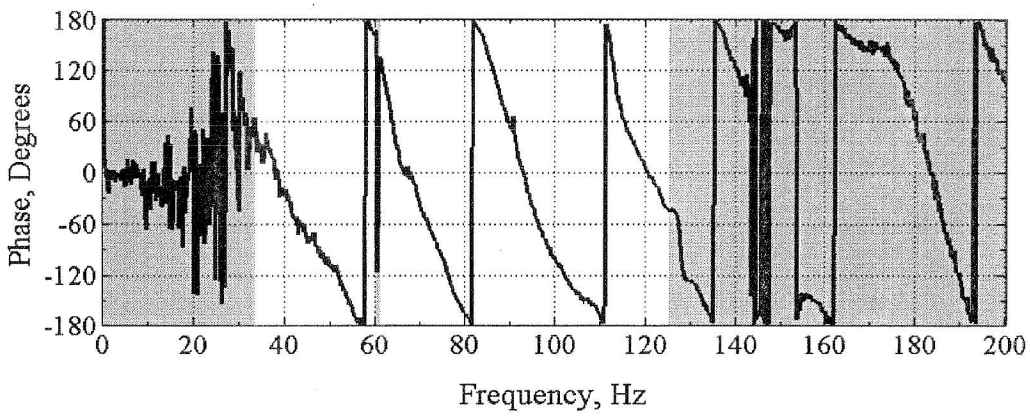

Figure S.13 Phase Plots Measured by SASW Testing with 18-ft Receiver Spacing (3F5_F_43.DAT)

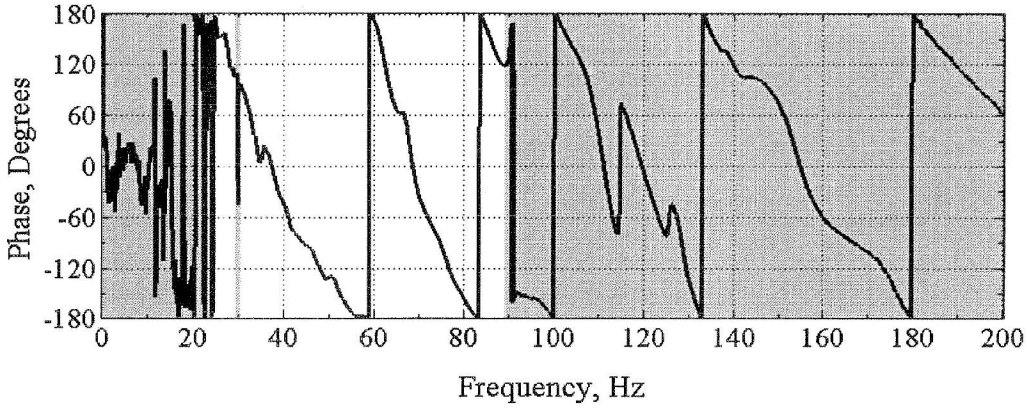

Figure S.14 Phase Plots Measured by SASW Testing with 18-ft Receiver Spacing (3F6_F_43.DAT)

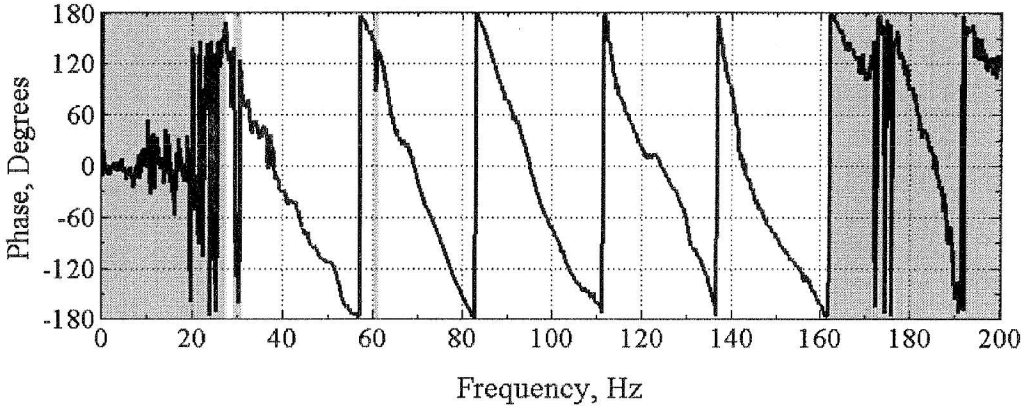

Figure S.15 Phase Plots Measured by SASW Testing with 18-ft Receiver Spacing (3F7_F_43.DAT)

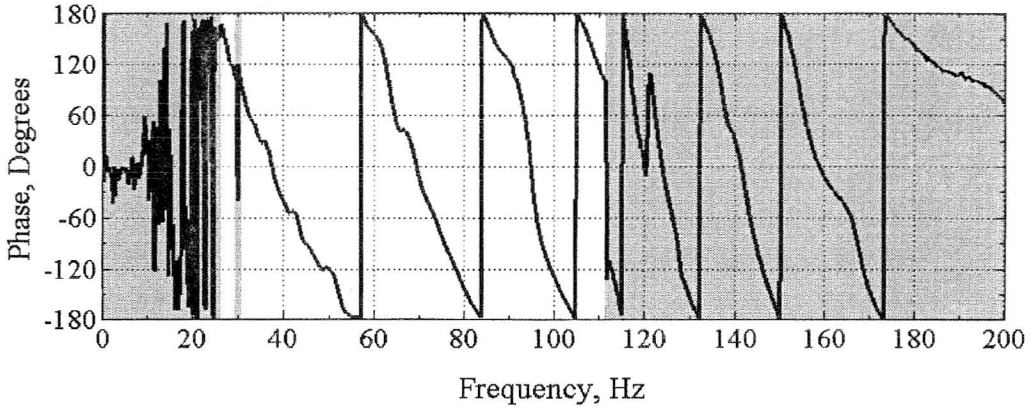

Figure S.16 Phase Plots Measured by SASW Testing with 18-ft Receiver Spacing (3F8_F_43.DAT)

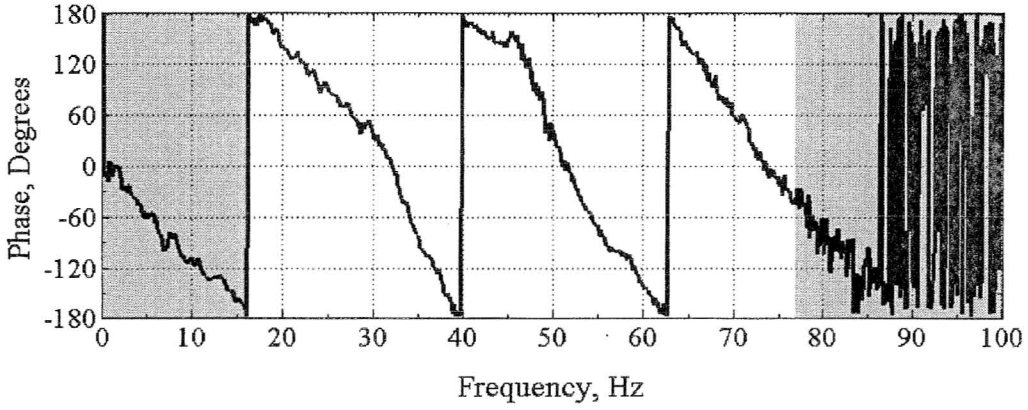

Figure S.17 Phase Plots Measured by SASW Testing with 25-ft Receiver Spacing (3G1_F_21.DAT)

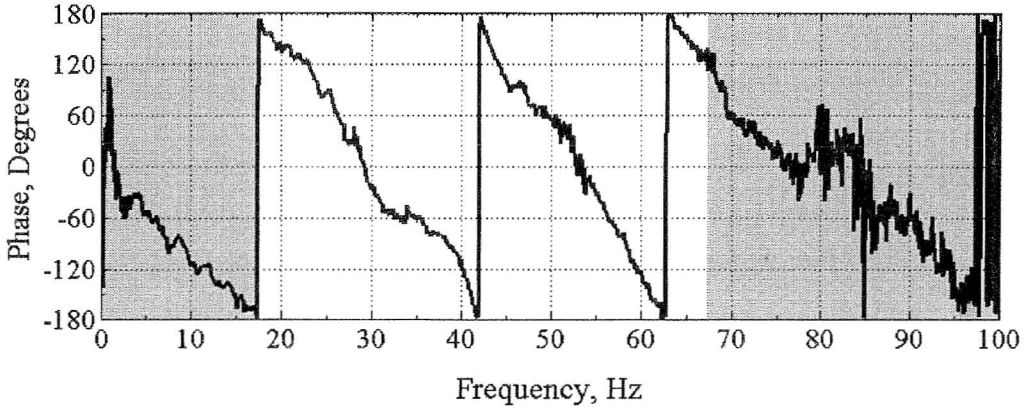

Figure S.18 Phase Plots Measured by SASW Testing with 25-ft Receiver Spacing (3G1_F_43.DAT)

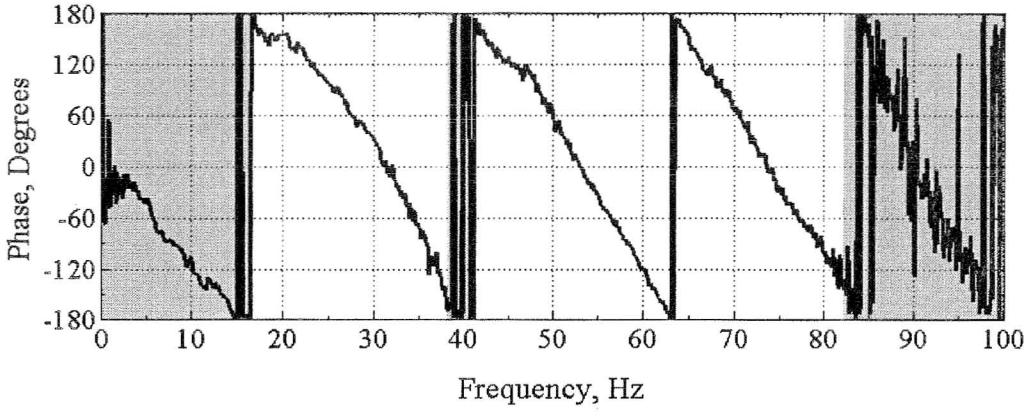

Figure S.19 Phase Plots Measured by SASW Testing with 25-ft Receiver Spacing (3G6_F_21.DAT)

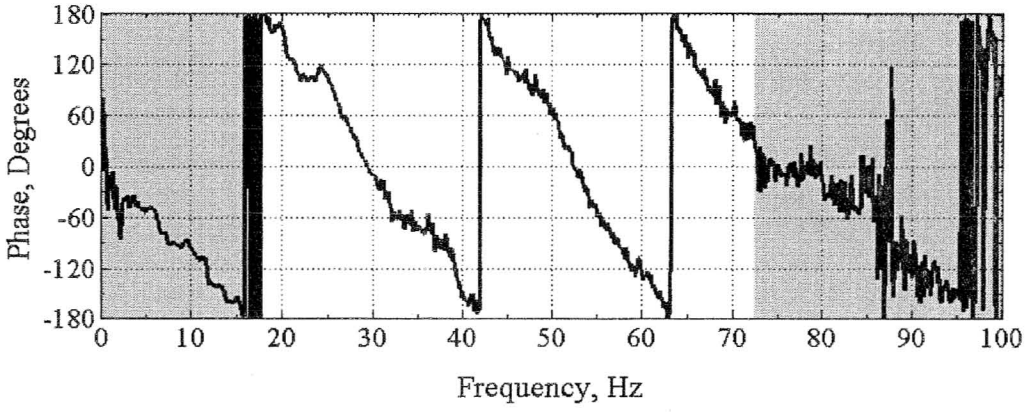

Figure S.20 Phase Plots Measured by SASW Testing with 25-ft Receiver Spacing (3G6_F_43.DAT)

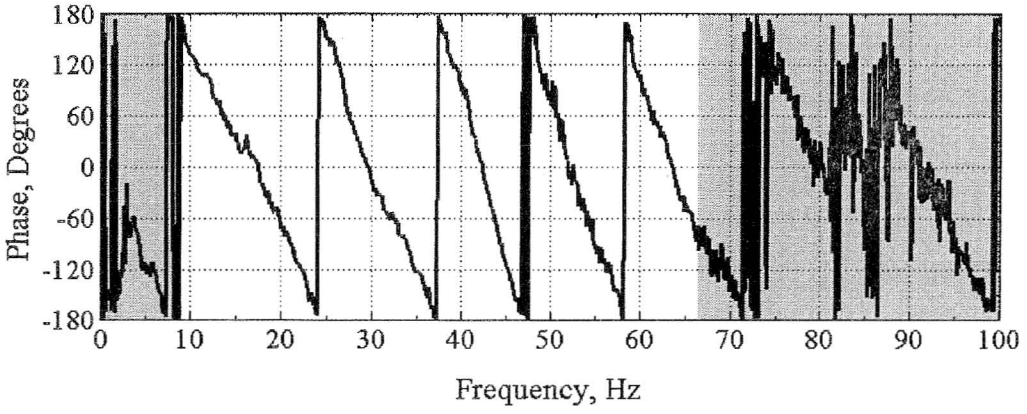

Figure S.21 Phase Plots Measured by SASW Testing with 50-ft Receiver Spacing (3G2_F_21.DAT)

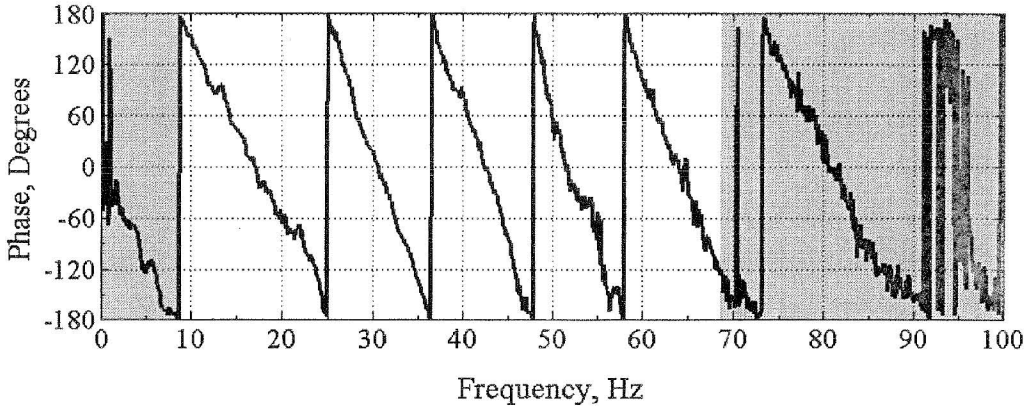

Figure S.22 Phase Plots Measured by SASW Testing with 50-ft Receiver Spacing (3G3_F_21.DAT)

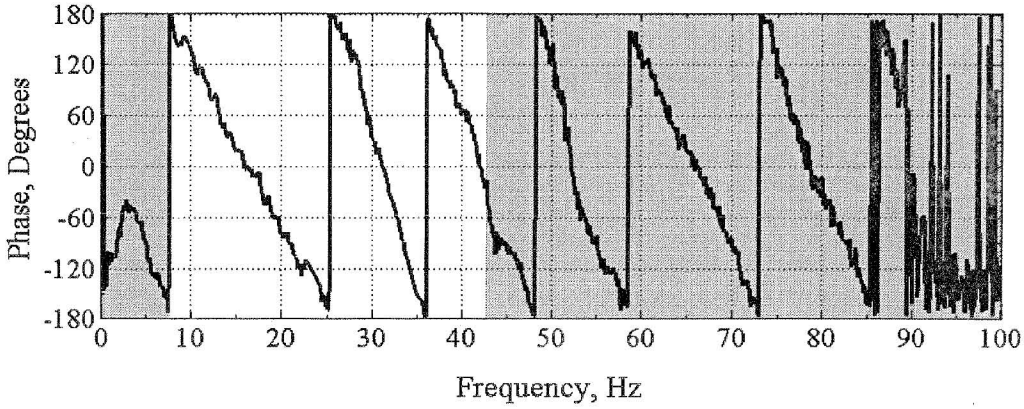

Figure S.23 Phase Plots Measured by SASW Testing with 50-ft Receiver Spacing (3G3_F_43.DAT)

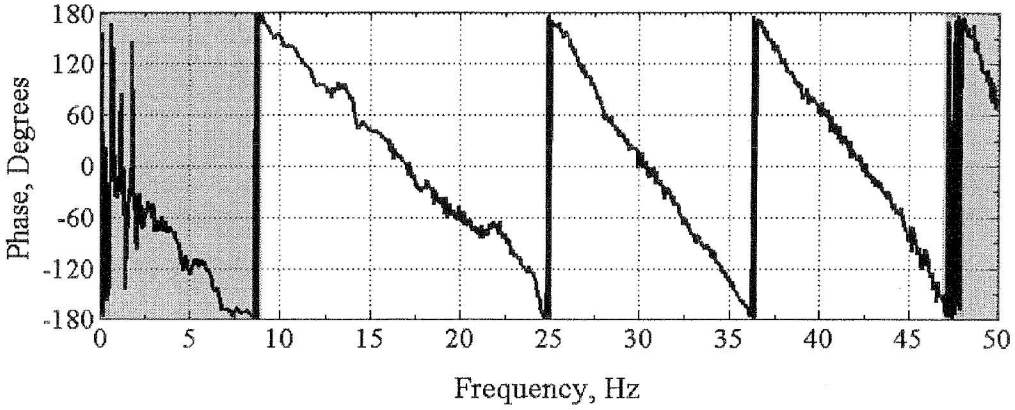

Figure S.24 Phase Plots Measured by SASW Testing with 50-ft Receiver Spacing (3G4_F_21.DAT)

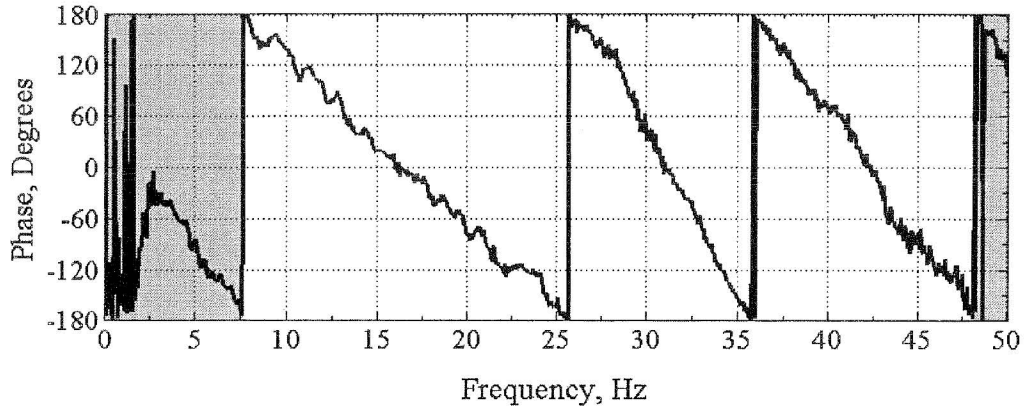

Figure S.25 Phase Plots Measured by SASW Testing with 50-ft Receiver Spacing (3G4_F_43.DAT)

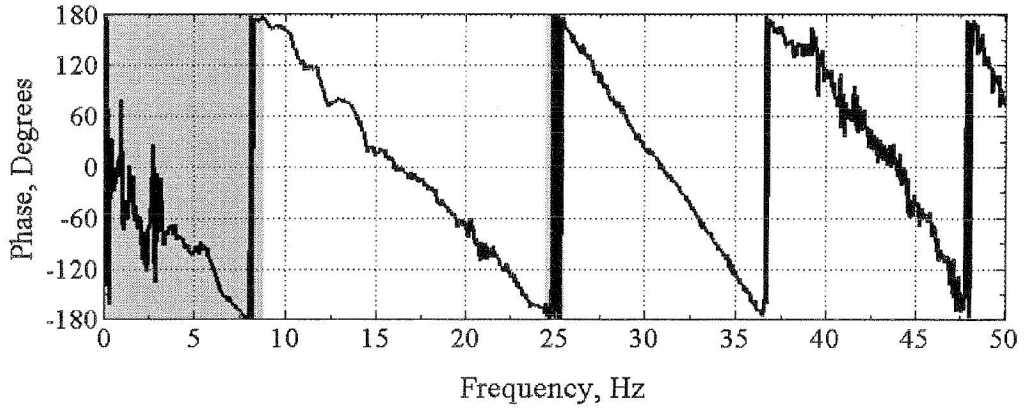

Figure S.26 Phase Plots Measured by SASW Testing with 50-ft Receiver Spacing (3G7_F_21.DAT)

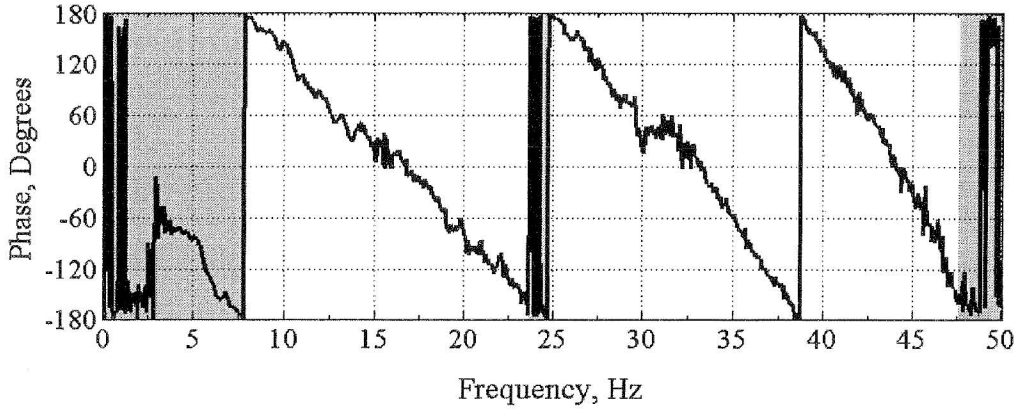

Figure S.27 Phase Plots Measured by SASW Testing with 50-ft Receiver Spacing (3G8_F_21.DAT)

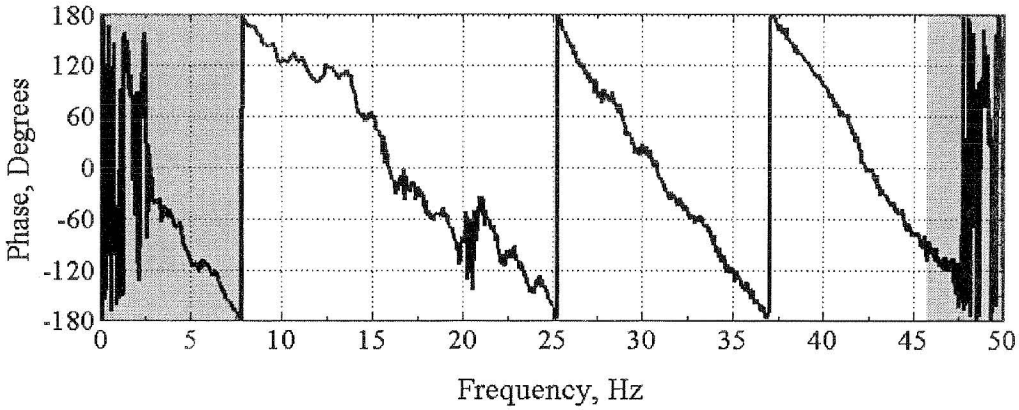

Figure S.28 Phase Plots Measured by SASW Testing with 50-ft Receiver Spacing (3G8_F_43.DAT)

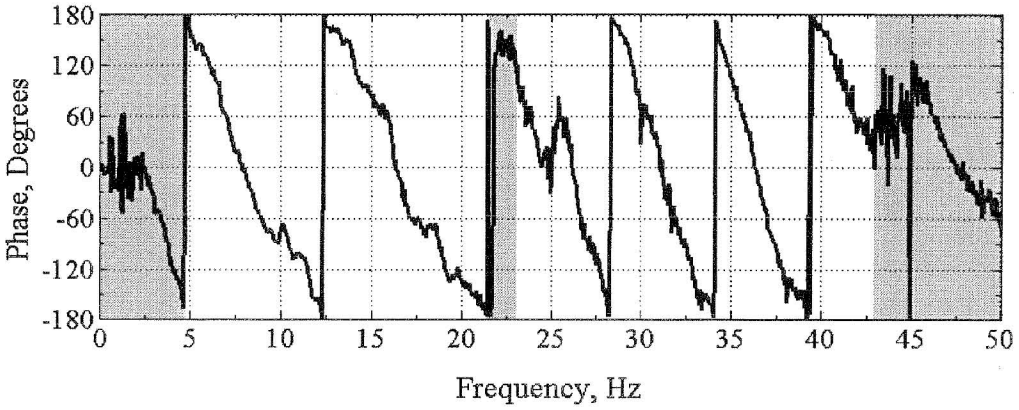

Figure S.29 Phase Plots Measured by SASW Testing with 100-ft Receiver Spacing (3G5_F_21.DAT)

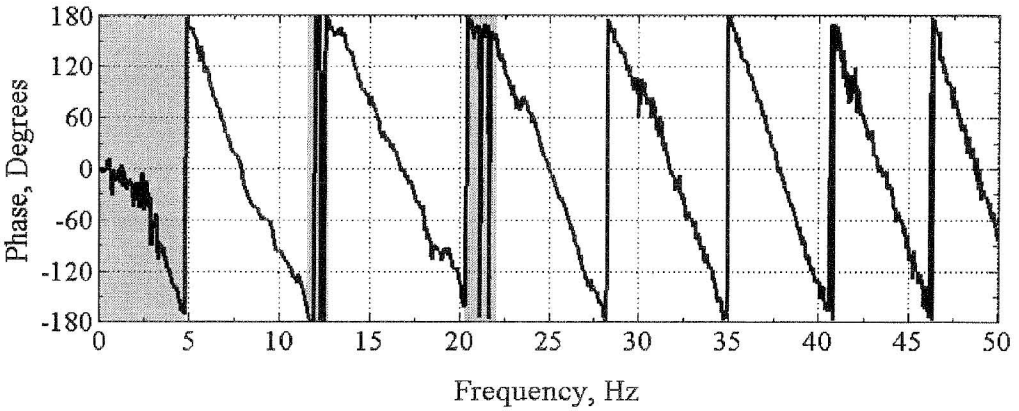

Figure S.30 Phase Plots Measured by SASW Testing with 100-ft Receiver Spacing (3G9_F_21.DAT)

Table S.1 Tables of Masking Parameters Used on Data Collected during Third Site Visit at Site F

Receiver Spacing (ft)	Masking Interval	Masking Start Frequency, Hz	Masking Stop Frequency, Hz	Number of Jumps	Filename
1	1	0	206	1	3F1_F_21.DAT
	2	495	800	-	
1	1	0	205	1	3F2_F_21.DAT
	2	450	800	-	
2	1	0	142	1	3F1_F_43.DAT
	2	505	800	-	
2	1	0	144	1	3F2_F_43.DAT
	2	512	800	-	
3	1	0	89	1	3F3_F_21.DAT
	2	124.5	153	1	
	3	357.5	400	-	
3	1	0	87.5	1	3F4_F_21.DAT
	2	120.5	145	1	
	3	347.5	400	-	
6	1	0	50.5	1	3F3_F_43.DAT
	2	120.5	141	2	
	3	248.5	400	-	
6	1	0	52	1	3F4_F_43.DAT
	2	58.5	62.5	1	
	3	120	144	2	
	4	235	400	-	
9	1	0	43	1	3F5_F_21.DAT
	2	60	61	1	
	3	180.75	200	-	
9	1	0	37.75	1	3F6_F_21.DAT
	2	87.75	200	-	
9	1	0	40	1	3F7_F_21.DAT
	2	162.5	200	-	
9	1	0	39.5	1	3F8_F_21.DAT
	2	74	200	-	

Performed by Jiabei Yuan Checked by Yin-Cheng Lin

Table S.2 Tables of Masking Parameters Used on Data Collected during Third Site Visit at Site F (Continued)

Receiver Spacing (ft)	Masking Interval	Masking Start Frequency, Hz	Masking Stop Frequency, Hz	Number of Jumps	Filename
18	1	0	33.5	1	3F5_F_43.DAT
	2	60.25	61.25	2	
	3	125.25	200	-	
18	1	0	24.75	1	3F6_F_43.DAT
	2	29.25	30.5	1	
	3	89	200	-	
18	1	0	27.5	1	3F7_F_43.DAT
	2	29	31.25	1	
	3	60.25	61.5	2	
	4	161.5	200	-	
18	1	0	26.5	1	3F8_F_43.DAT
	2	29.5	30.75	1	
	3	111.25	200	-	
25	1	0	16.25	1	3G1_F_21.DAT
	2	76.62	100	-	
25	1	0	17.62	1	3G1_F_43.DAT
	2	67.25	100	-	
25	1	0	16.62	1	3G6_F_21.DAT
	2	38.25	41.25	2	
	3	82	100	-	
25	1	0	17.88	1	3G6_F_43.DAT
	2	72.25	100	-	
50	1	0	9	1	3G2_F_21.DAT
	2	66.38	100	-	
50	1	0	8.88	1	3G3_F_21.DAT
	2	68.62	100	-	
50	1	0	7.75	1	3G3_F_43.DAT
	2	42.62	100	-	
50	1	0	9	1	3G4_F_21.DAT
	2	46.75	50	-	
50	1	0	7.69	1	3G4_F_43.DAT
	2	48	50	-	

Performed by Jiabei Yuan Checked by Yin-Cheng Lin

Table S.3 Tables of Masking Parameters Used on Data Collected during Third Site Visit at Site F (Continued)

Receiver Spacing (ft)	Masking Interval	Masking Start Frequency, Hz	Masking Stop Frequency, Hz	Number of Jumps	Filename
50	1	0	8.81	1	3G7_F_21.DAT
	2	24.44	25.5	2	
	3	49.94	50	-	
50	1	0	7.88	1	3G8_F_21.DAT
	2	23.63	24.75	2	
	3	47.5	50	-	
50	1	0	7.88	1	3G8_F_43.DAT
	2	45.63	50	-	
100	1	0	4.88	1	3G9_F_21.DAT
	2	11.56	12.69	2	
	3	20.25	22	3	
	4	49.88	50	-	

Performed by Jiabei Yuan Checked by Yin-Cheng Lin

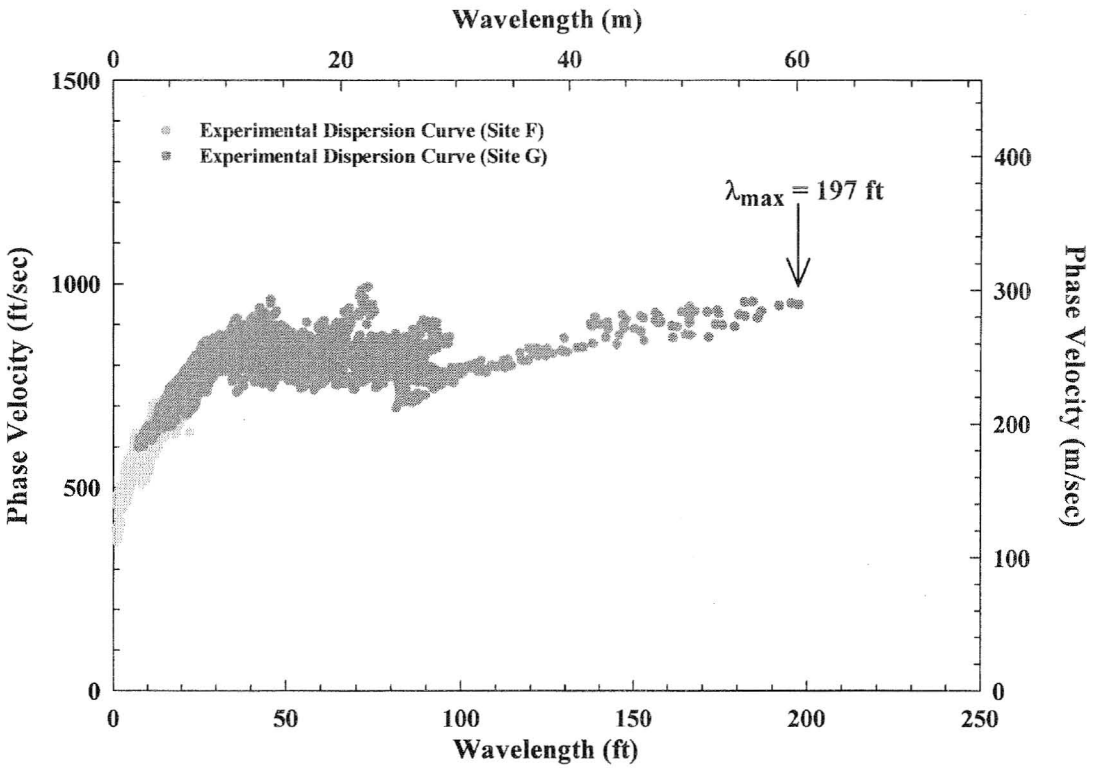

Figure S.31 Experimental Dispersion Curve Measured during Third Site Visit at Site F at Vogtle, GA; Linear Wavelength Axis

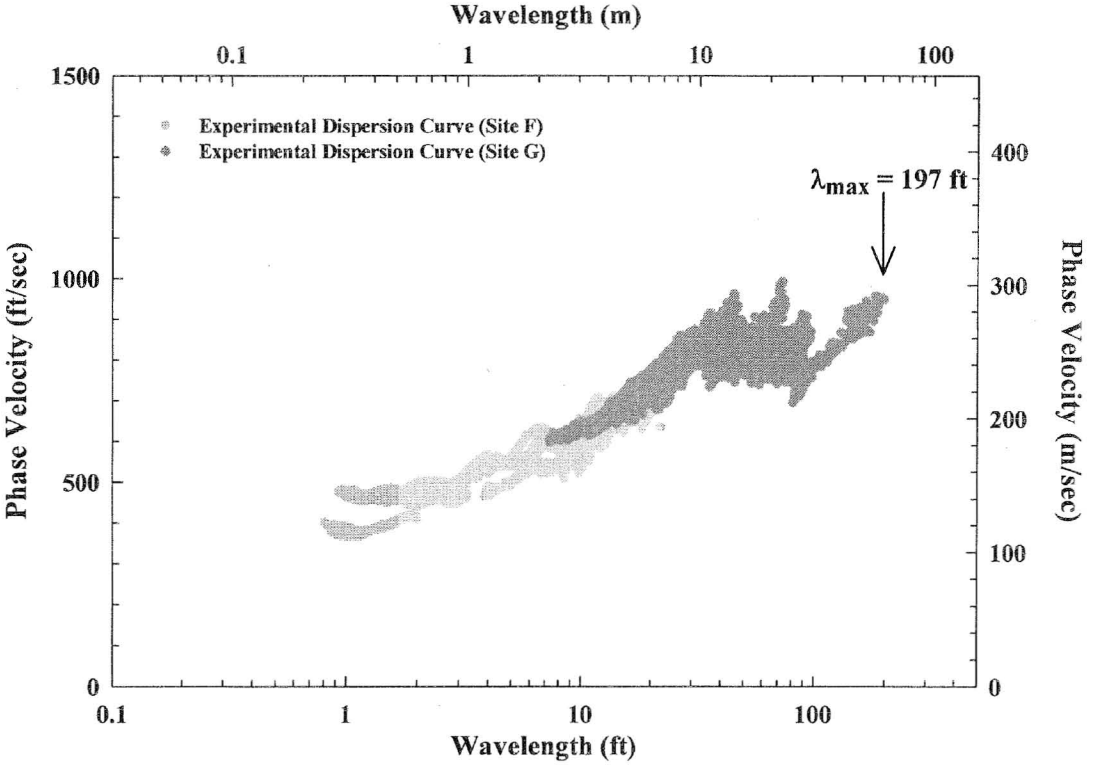

Figure S.32 Experimental Dispersion Curve Measured during Third Site Visit at Site F at Vogtle, GA; Logarithmic Wavelength Axis

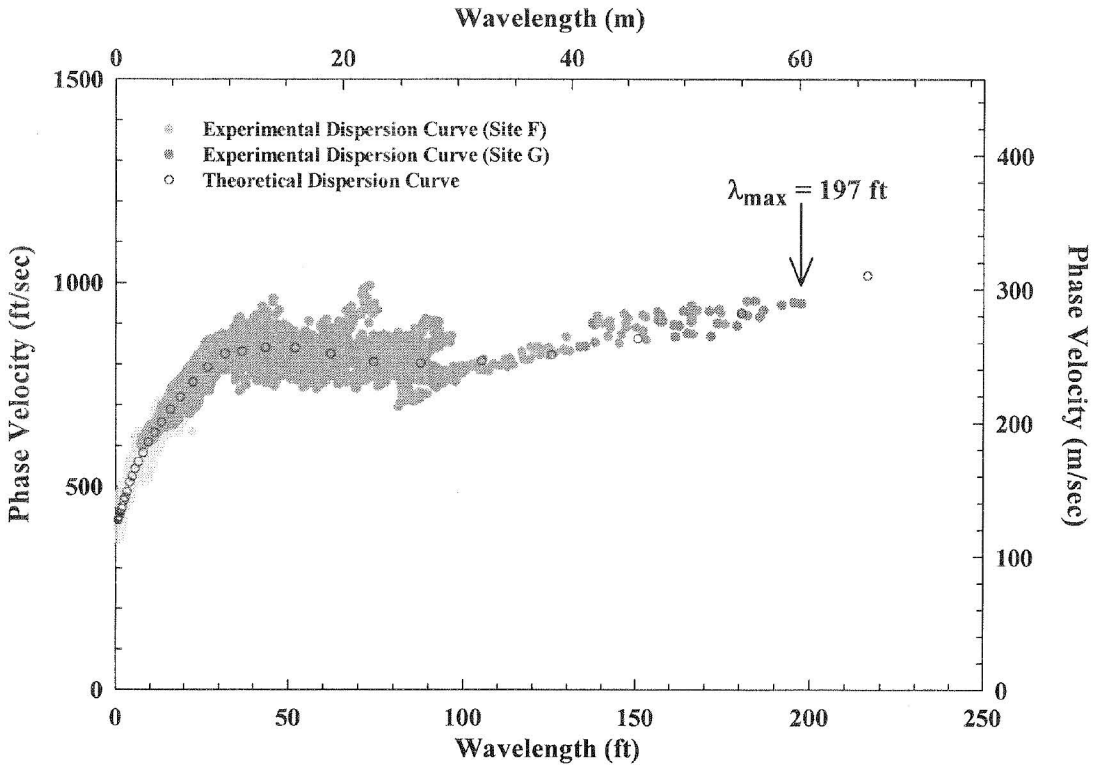

Figure S.33 Experimental and Theoretical Dispersion Curves from Site F in Third Site Visit at Vogtle, GA; Linear Wavelength Axis

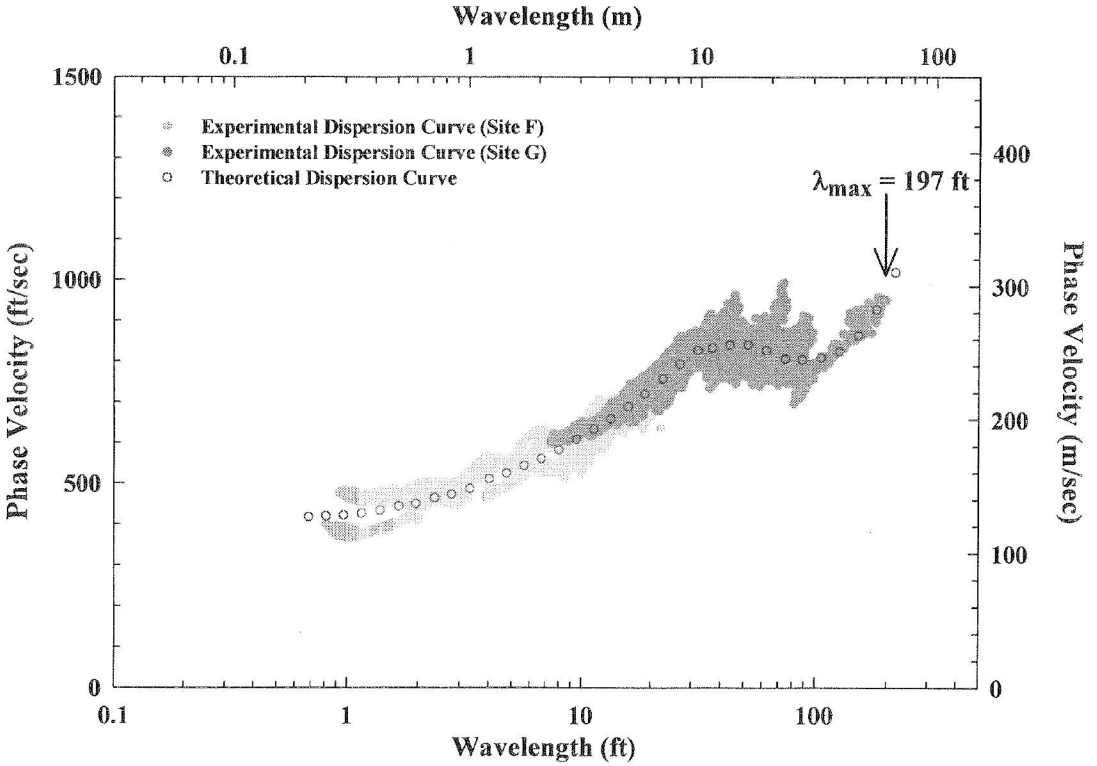

Figure S.34 Experimental and Theoretical Dispersion Curves from Site F in Third Site Visit at Vogtle, GA; Logarithmic Wavelength Axis

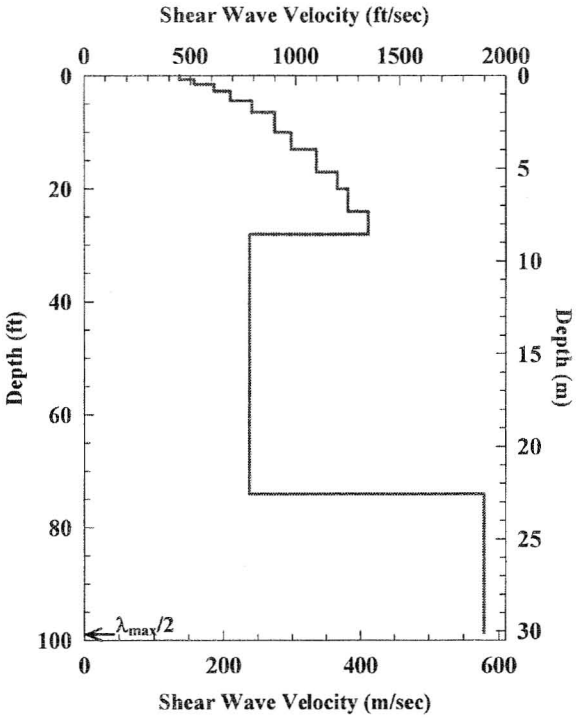

Figure S.35 Shear Wave Velocity Profile Determined at Site F during Third Site Visit at Vogtle, GA

Table S.4 Profile Parameters Used to Develop Preliminary Theoretical Dispersion Curve at Site F in the Third Site Visit at Vogtle, GA

Layer No.	Thickness, ft	Depth to Top of Layer, ft	S-Wave Velocity, ft/s	Assumed Poisson's Ratio	P-Wave Velocity, ft/s	Assumed Total Unit Weight, pcf
1	0.7	0.0	450	0.24	769	128
2	0.9	0.7	520	0.24	889	128
3	1.2	1.6	610	0.24	1043	128
4	1.7	2.8	690	0.24	1180	128
5	2.0	4.5	790	0.24	1351	128
6	3.6	6.5	900	0.24	1539	128
7	3.0	10.1	980	0.24	1676	128
8	4.0	13.1	1100	0.24	1881	128
9	3.0	17.1	1200	0.24	2052	128
10	4.0	20.1	1250	0.24	2137	128
11	4.0	24.1	1350	0.24	2308	128
12	46.0	28.1	780	0.24	1334	128
13#	24.9	74.1	1900	0.42	5000	135
14*#	5.1	99.0	1900	0.42	5000	135
15*#	Half Space	104.1	2200	0.38	5000	135

* Layer below maximum depth of the V_S Profile.

\# Layer below water tatble.

Performed by Yin-Cheng Lin Yin-Cheng Lin Checked by K. H. Stokoe Kenneth H. Stokoe, II

Appendix T

SASW Measurements of Fourth Site Visit at Vogtle, GA
Site Location: Site A