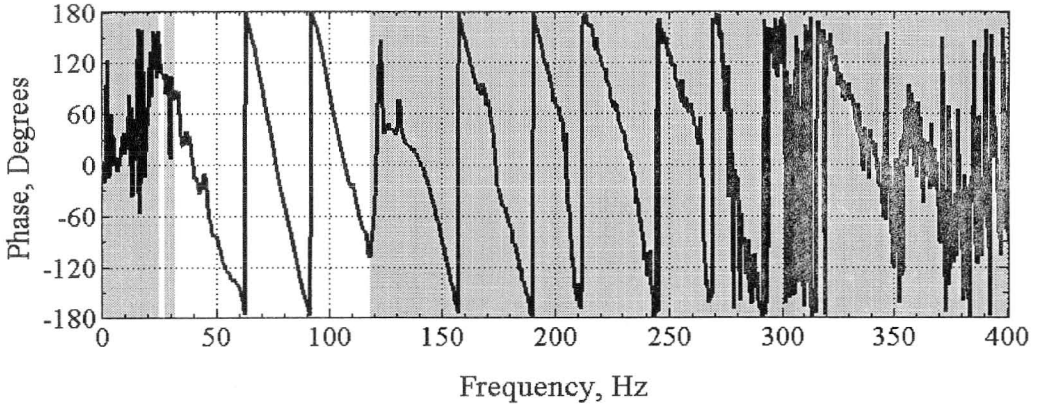

Figure D.13 Phase Plots Measured by SASW Testing with 18-ft Receiver Spacing (SC6_F_43.DAT)

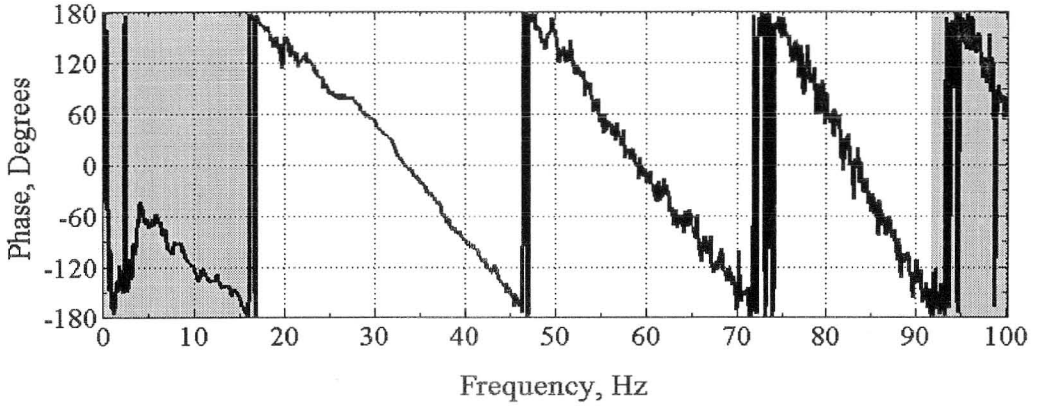

Figure D.14 Phase Plots Measured by SASW Testing with 25-ft Receiver Spacing (G1_F_21.DAT)

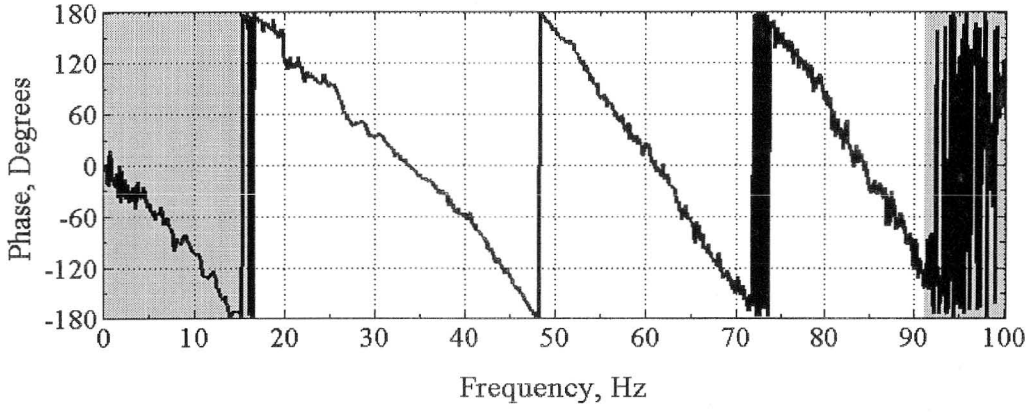

Figure D.15 Phase Plots Measured by SASW Testing with 25-ft Receiver Spacing (G1_F_43.DAT)

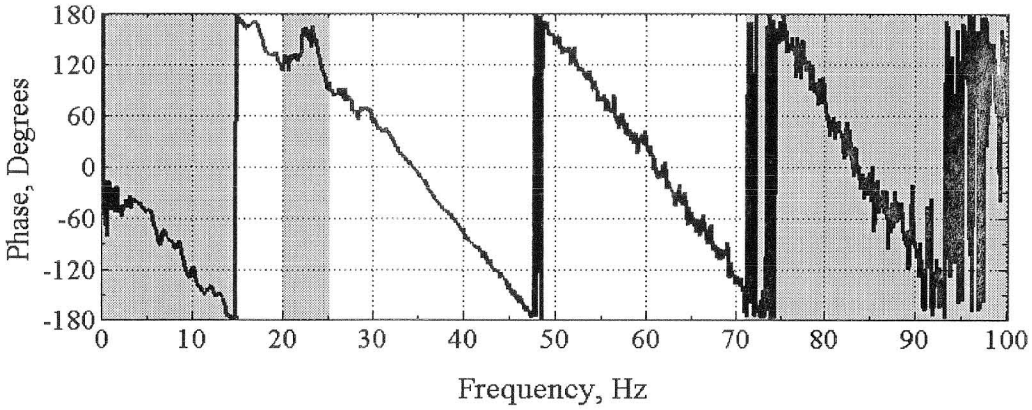

Figure D.16 Phase Plots Measured by SASW Testing with 25-ft Receiver Spacing (G4_F_21.DAT)

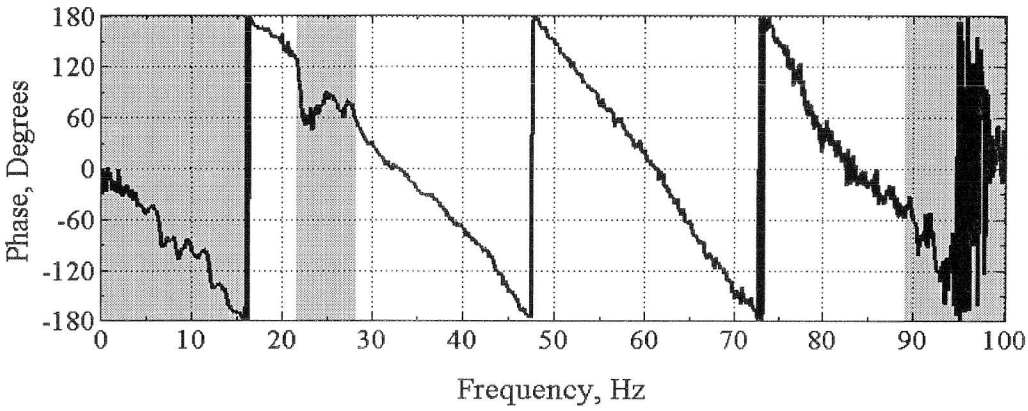

Figure D.17 Phase Plots Measured by SASW Testing with 25-ft Receiver Spacing (G4_F_43.DAT)

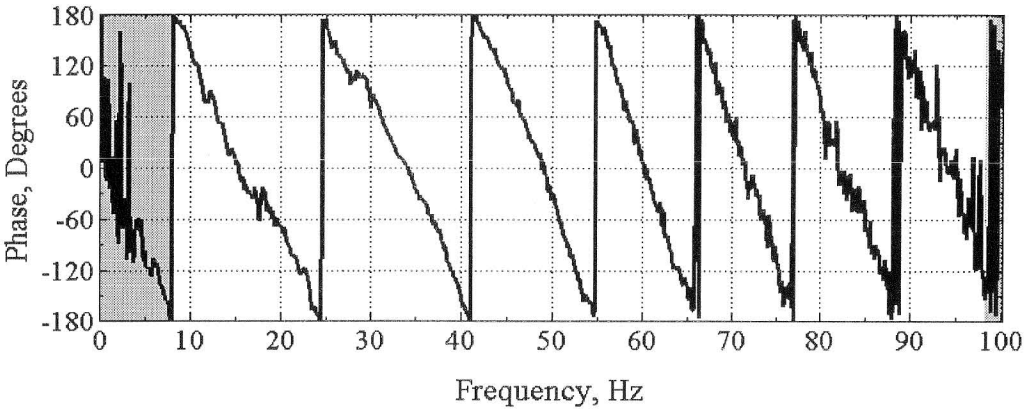

Figure D.18 Phase Plots Measured by SASW Testing with 50-ft Receiver Spacing (G2_F_21.DAT)

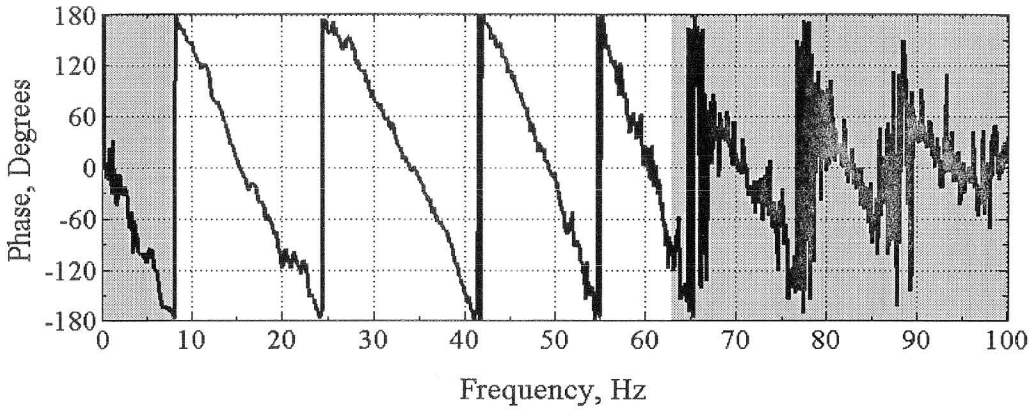

Figure D.19 Phase Plots Measured by SASW Testing with 50-ft Receiver Spacing (G3_F_21.DAT)

Table D.1 Tables of Masking Parameters Used on Data Collected during First Site Visit at Site C

Receiver Spacing (ft)	Masking Interval	Masking Start Frequency, Hz	Masking Stop Frequency, Hz	Number of Jumps	Filename
1	1	0	246	1	SC2_F_21.DAT
1	1	0	263	1	SC7_F_21.DAT
	2	591	800	-	
2	1	0	139	1	SC1_F_43.DAT
	2	492	800	-	
2	1	0	156	1	SC2_F_43.DAT
	2	527	800	-	
2	1	0	141	1	SC7_F_43.DAT
	2	763	800	-	
2	1	0	142	1	SC8_F_43.DAT
	2	565	800	-	
3	1	0	96	1	SC3_F_21.DAT
	2	118	141	1	
	3	367	800	-	
6	1	0	59	1	SC3_F_43.DAT
	2	109	137	1	
	3	275	800	-	
6	1	0	58	1	SC4_F_43.DAT
	2	117	136	1	
	3	322	800	-	
9	1	0	38.5	1	SC5_F_21.DAT
	2	160	400	-	
9	1	0	37.5	1	SC6_F_21.DAT
	2	108.5	400	-	
18	1	0	27.5	1	SC5_F_43.DAT
	2	29	32	1	
	3	109	400	-	
18	1	0	25.5	1	SC6_F_43.DAT
	2	27.5	31.5	1	
	3	118	400	-	
25	1	0	17	1	G1_F_21.DAT
	2	91.5	100	-	

Performed by Jiabei Yuan Checked by Yin-Cheng Lin

Table D.2 Tables of Masking Parameters Used on Data Collected during First Site Visit at Site C (Continued)

Receiver Spacing (ft)	Masking Interval	Masking Start Frequency, Hz	Masking Stop Frequency, Hz	Number of Jumps	Filename
25	1	0	16.62	1	G1_F_43.DAT
	2	90.88	100	-	
25	1	0	14.88	1	G4_F_21.DAT
	2	20	25.12	1	
	3	70.88	100	-	
25	1	0	16.38	1	G4_F_43.DAT
	2	21.62	28.12	1	
	3	88.88	100	-	
50	1	0	8.12	1	G2_F_21.DAT
	2	98	100	-	
50	1	0	8.25	1	G3_F_21.DAT
	2	62.88	100	-	

Performed by Jiabei Yuan Checked by Yin-Cheng Lin

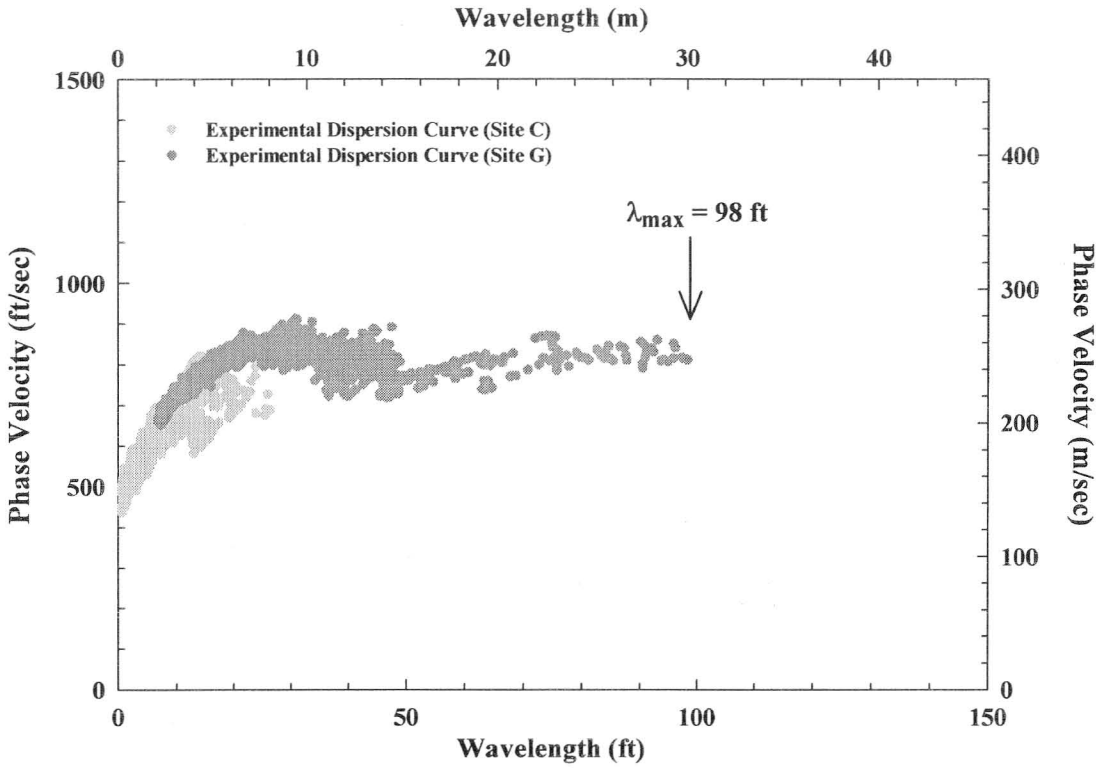

Figure D.20 Experimental Dispersion Curve Measured during First Site Visit at Site C at Vogtle, GA; Linear Wavelength Axis

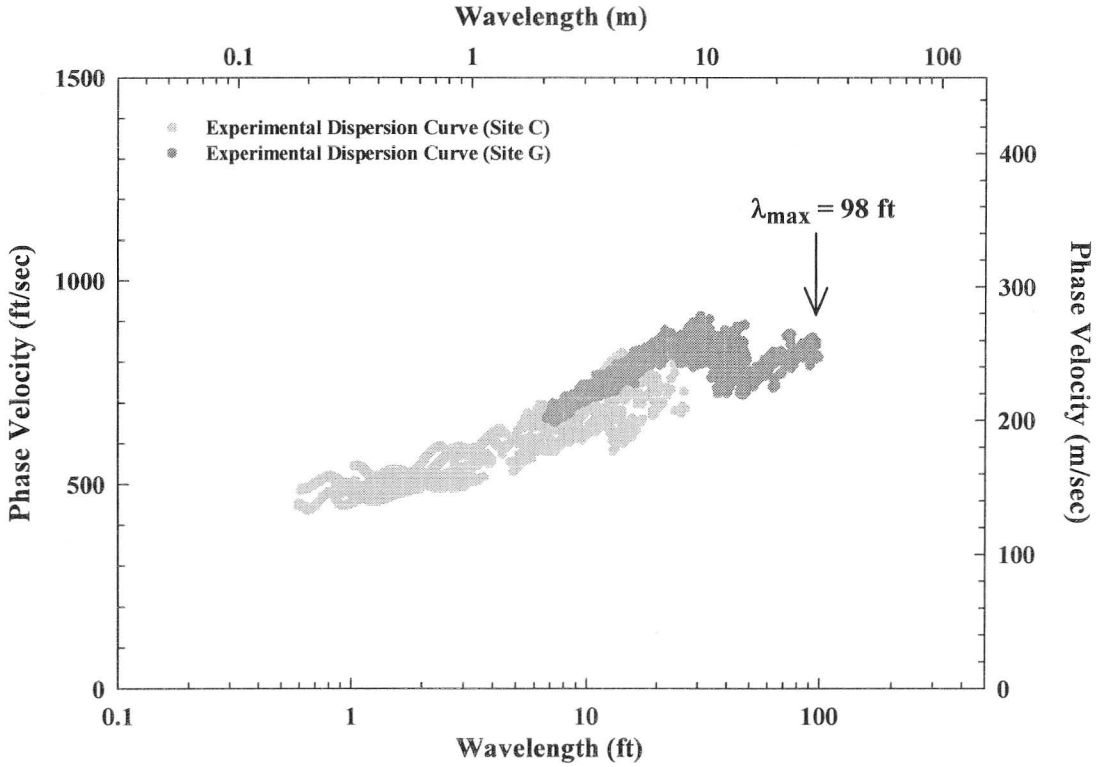

Figure D.21 Experimental Dispersion Curve Measured during First Site Visit at Site C at Vogtle, GA; Logarithmic Wavelength Axis

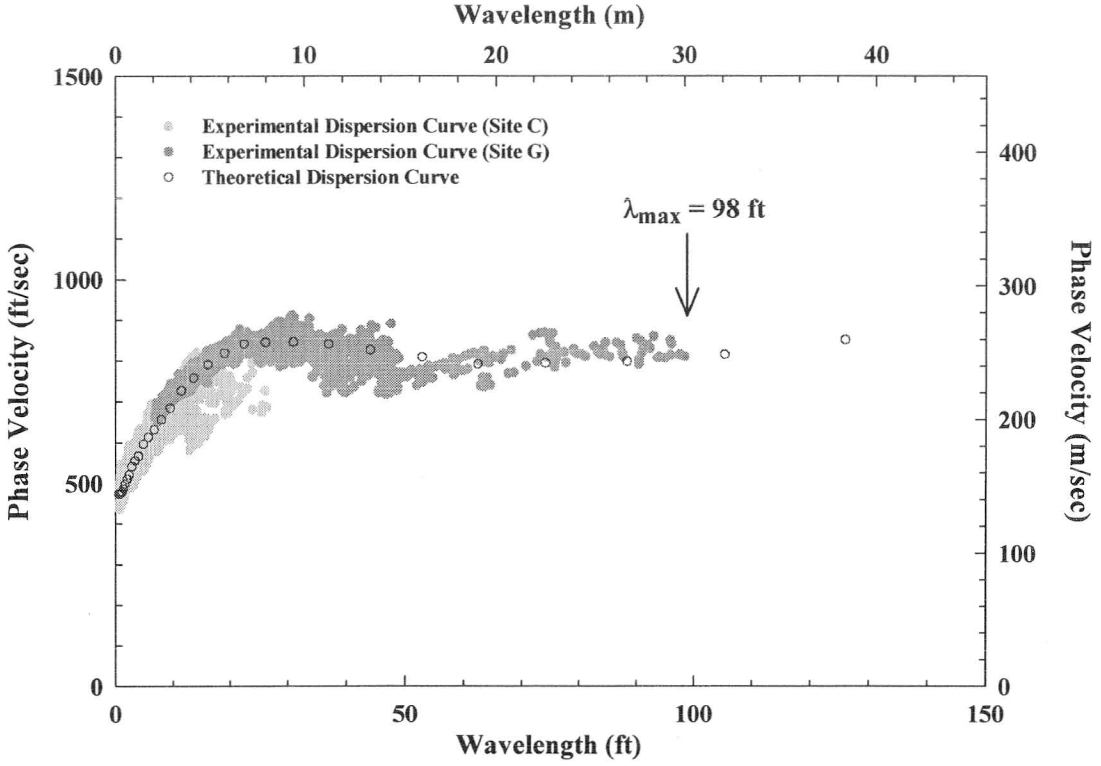

Figure D.22 Experimental and Theoretical Dispersion Curves from Site C in First Site Visit at Vogtle, GA; Linear Wavelength Axis

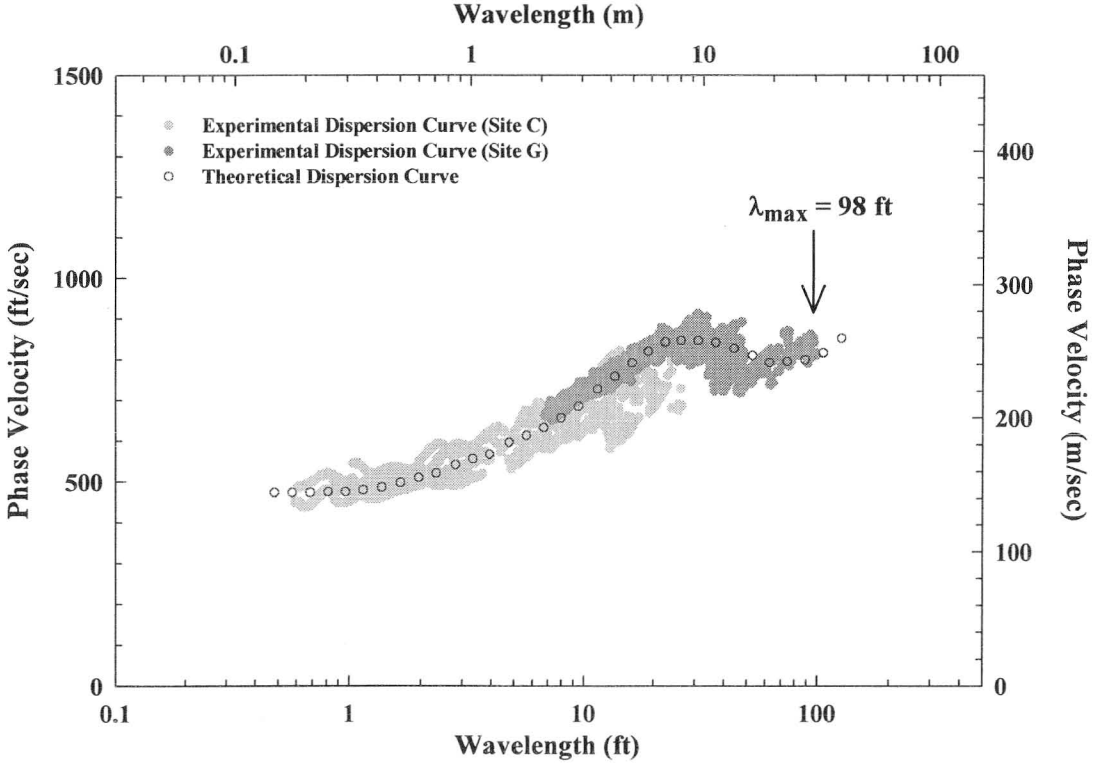

Figure D.23 Experimental and Theoretical Dispersion Curves from Site C in First Site Visit at Vogtle, GA; Logarithmic Wavelength Axis

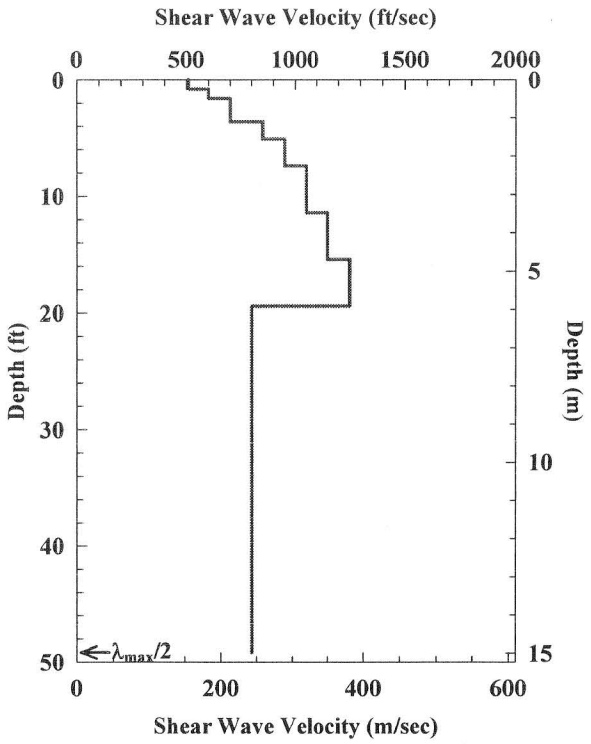

Figure D.24 Shear Wave Velocity Profile Determined at Site C during First Site Visit at Vogtle, GA

Table D.3 Profile Parameters Used to Develop Preliminary Theoretical Dispersion Curve at Site C in the First 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	1	0.8	0.0	510	0.24	872
2	2	0.8	0.8	600	0.24	1026
3	3	2.0	1.6	700	0.24	1197
4	4	1.5	3.6	850	0.24	1453
5	5	2.3	5.1	950	0.24	1624
6	6	4.0	7.4	1050	0.24	1795
7	7	4.0	11.4	1150	0.24	1966
8	8	4.0	15.4	1250	0.24	2137
9	9	29.6	19.4	800	0.24	1368
10*	10	16.4	49.0	800	0.24	1368
11*#	11	30.0	65.4	1900	0.42	5000
12*#	12	Half Space	95.4	2200	0.38	5000

* 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, II Kenneth H. Stokoe, II

Appendix E

SASW Measurements of First Site Visit at Vogtle, GA
Site Location: Site D

3 - Receiver SASW Data Sheet

Project : Vogtle

Location : SD (SA #4)

Date/(Time) : Dec/ 9 / 2007 (: ~ :)

Personnel : Stokoe, Minjae, Yuan

Recorded by : Yuan

Checked by : Minjae

R1 I.D. : GEC 92003 Near

R2 I.D. : GEC 92002 Center

R3 I.D. : GEC 92001 Far

Data Sheet # : SA #4

Disk # : SA #4

Sketch

Distance (ft)			Impact Direction		Impact Source	Record #	Freq. Range (Hz)	Notes
S - R1	R1 - R2	R2 - R3						
1	1	2	(For)	Rev	Small Hammer	SD1	0 ~ 800	
1	1	2	For	(Rev)	"	SD2	0 ~ 800	
3	3	6	For	(Rev)	"	SD3	0 ~ 800	
3	3	6	(For)	Rev	"	SD4	0 ~ 800	
9	9	18	(For)	Rev	Medium Hammer	SD5	0 ~ 400	
9	9	18	For	(Rev)	"	SD6	0 ~ 400	
1	1	2	(For)	Rev	Small Hammer	SD7	0 ~ 800	
1	1	2	For	(Rev)	"	SD8	0 ~ 800	
			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 : Vogtle

Location : G (SA #7)

Date/(Time) : Dec 9, 2007 (: ~ :)

Personnel : Stokoe, Minjae, Yuan

Recorded by : Yuan

Checked by : Minjae

R1 I.D. : GEC 92003

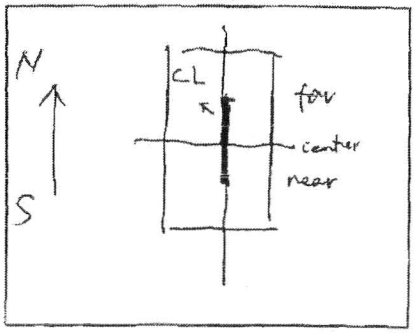
R2 I.D. : GEC 92002

R3 I.D. : GEC 92001

Data Sheet # : SA#7

Disk # : SA#7

Sketch



Distance (ft) S - R1	Distance (ft) R1 - R2	Distance (ft) R2 - R3	Impact Direction		Impact Source	Record #	Freq. Range (Hz)	Notes
25	25	25	(For)	Rev	Bulldozer	G1	0 ~ 100	
			For	Rev			~	
50	50		(For)	Rev	"	G2	0 ~ 100	
			For	Rev			~	
50	50		For	(Rev)	"	G3	0 ~ 100	
			For	Rev			~	
25	25	25	For	(Rev)	"	G4	0 ~ 100	
			For	Rev			~	
			For	Rev			~	
			For	Rev			~	
			For	Rev			~	
			For	Rev			~	
			For	Rev			~	
			For	Rev			~	
			For	Rev			~	
			For	Rev			~	
			For	Rev			~	

When I reverse directin locatin (Geophone not changed

* 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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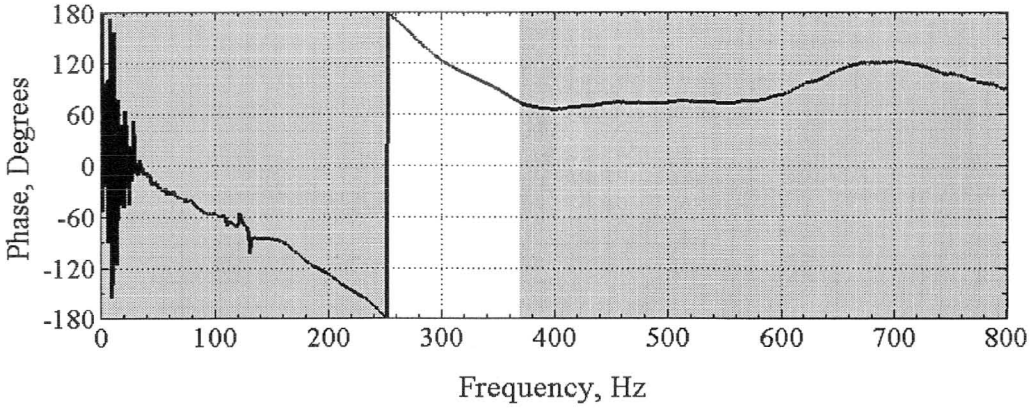

Figure E.1 Phase Plots Measured by SASW Testing with 1-ft Receiver Spacing (SD7_F_21.DAT)

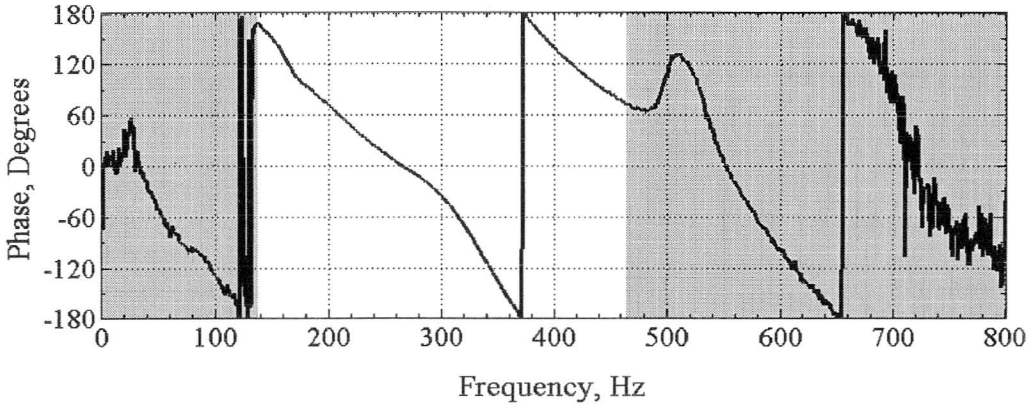

Figure E.2 Phase Plots Measured by SASW Testing with 2-ft Receiver Spacing (SD2_F_43.DAT)

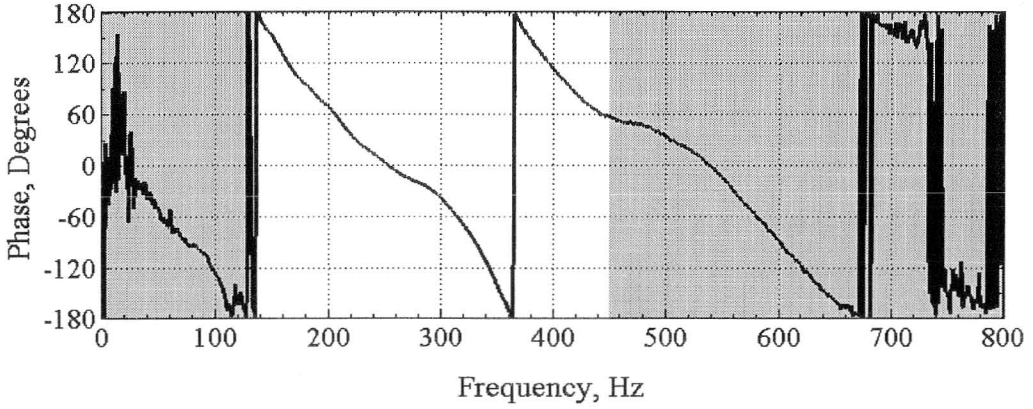

Figure E.3 Phase Plots Measured by SASW Testing with 2-ft Receiver Spacing (SD8_F_43.DAT)

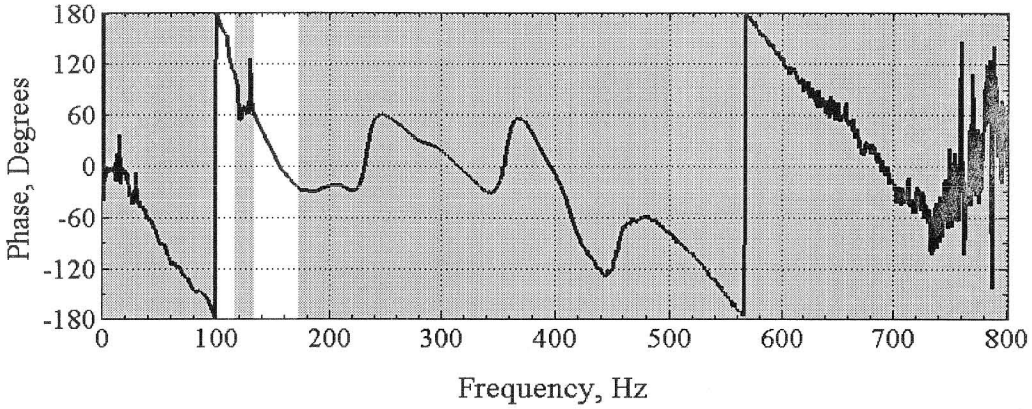

Figure E.4 Phase Plots Measured by SASW Testing with 3-ft Receiver Spacing (SD3_F_21.DAT)

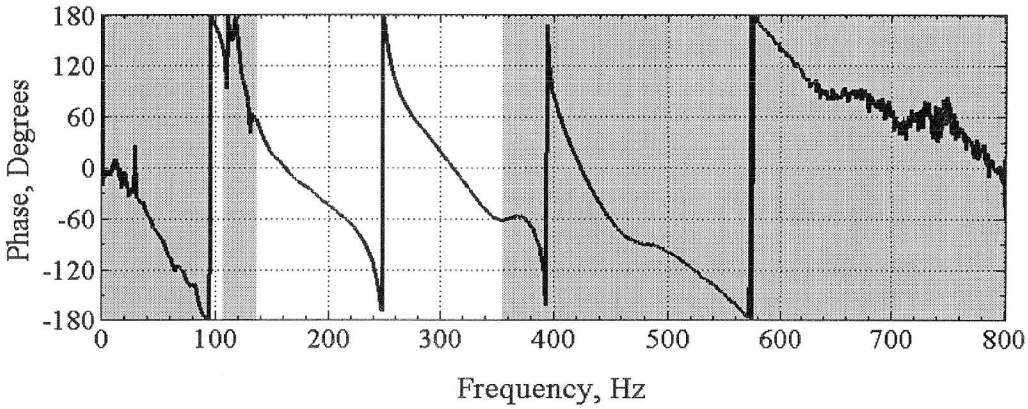

Figure E.5 Phase Plots Measured by SASW Testing with 3-ft Receiver Spacing (SD4_F_21.DAT)

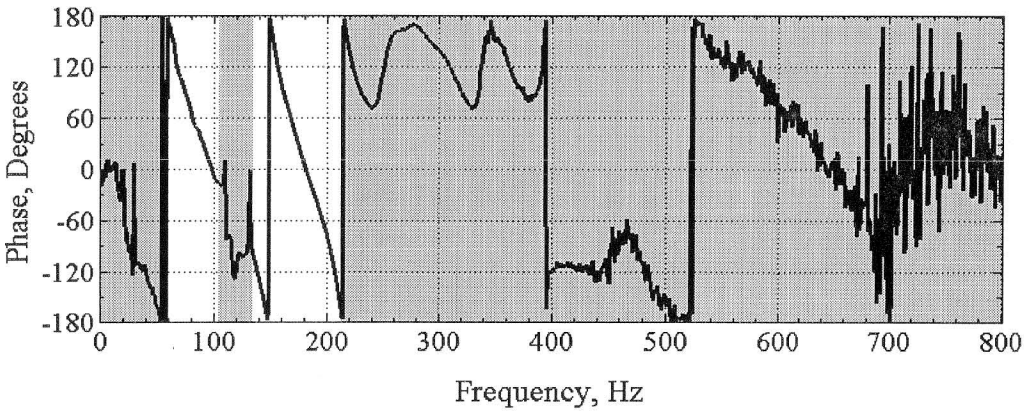

Figure E.6 Phase Plots Measured by SASW Testing with 6-ft Receiver Spacing (SD4_F_43.DAT)

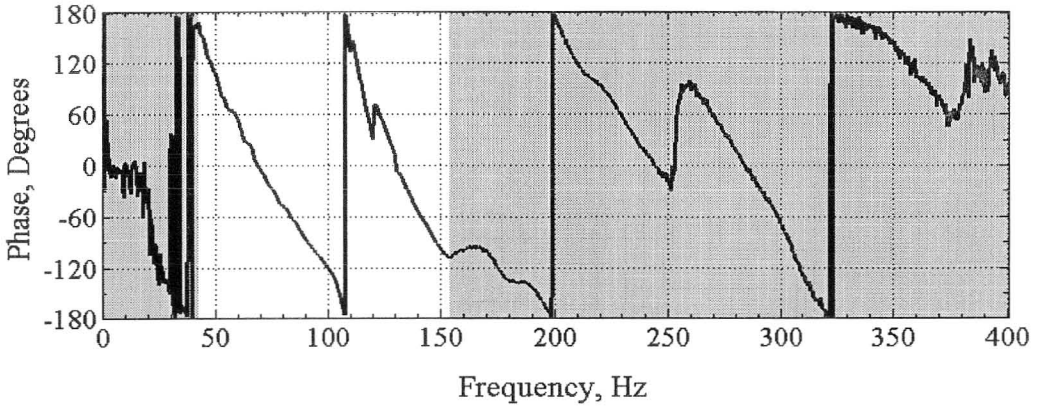

Figure E.7 Phase Plots Measured by SASW Testing with 9-ft Receiver Spacing (SD5_F_21.DAT)

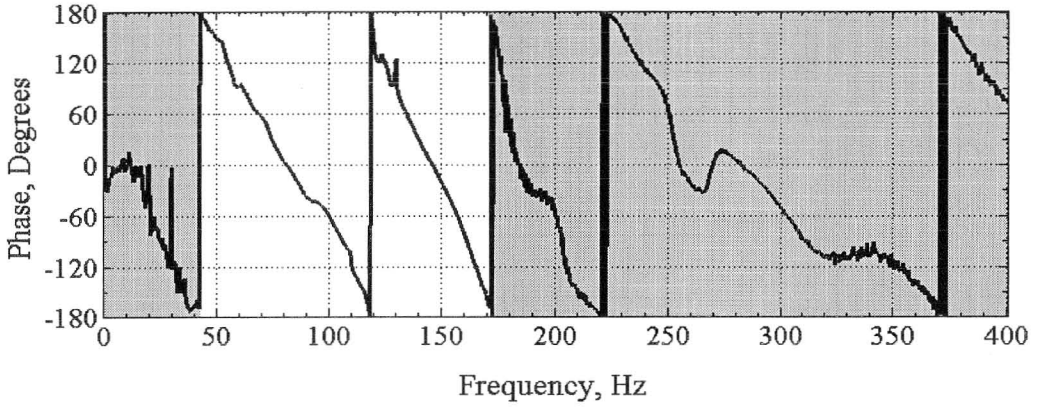

Figure E.8 Phase Plots Measured by SASW Testing with 9-ft Receiver Spacing (SD6_F_21.DAT)

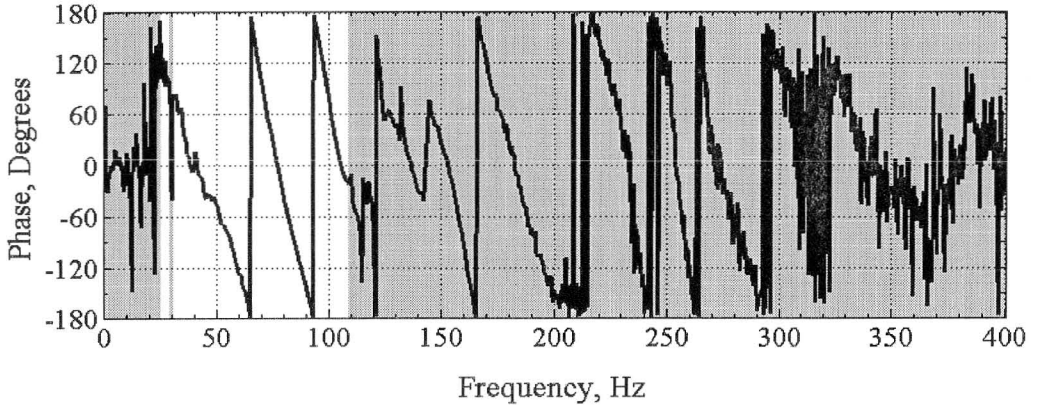

Figure E.9 Phase Plots Measured by SASW Testing with 18-ft Receiver Spacing (SD5_F_43.DAT)