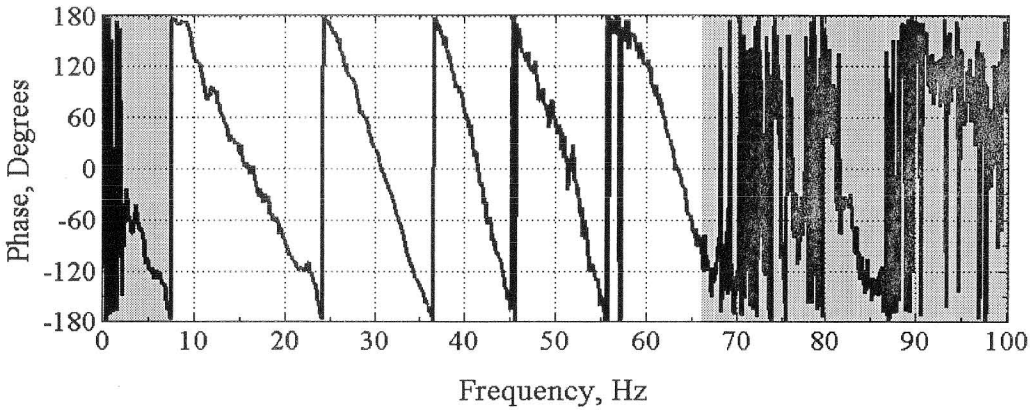


Figure K.16 Phase Plots Measured by SASW Testing with 50-ft Receiver Spacing (2G3_F_21.DAT)

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

Receiver Spacing (ft)	Masking Interval	Masking Start Frequency, Hz	Masking Stop Frequency, Hz	Number of Jumps	Filename
2	1	0	132	1	2D1_F_43.DAT
	2	144	162	1	
	3	210	800	-	
2	1	0	166	1	2D2_F_43.DAT
	2	215	800	-	
3	1	0	96.5	1	2D3_F_21.DAT
	2	133.5	400	-	
3	1	0	96.5	1	2D4_F_21.DAT
	2	166.5	400	-	
6	1	0	53	1	2D3_F_43.DAT
	2	113	400	-	
6	1	0	53	1	2D4_F_43.DAT
	2	115	400	-	
9	1	0	38.5	1	2D5_F_21.DAT
	2	72.25	200	-	
9	1	0	38.5	1	2D6_F_21.DAT
	2	79	200	-	
18	1	0	24.75	1	2D5_F_43.DAT
	2	109.75	200	-	
18	1	0	26	1	2D6_F_43.DAT
	2	29.25	30.75	1	
	3	94.25	200	-	
25	1	0	15.12	1	2G1_F_21.DAT
	2	19.88	25.88	1	
	3	76.75	100	-	
25	1	0	18.25	1	2G1_F_43.DAT
	2	73.75	100	-	
25	1	0	16.38	1	2G4_F_21.DAT
	2	71.5	100	-	
25	1	0	17.38	1	2G4_F_43.DAT
	2	79.75	100	-	
50	1	0	8.25	1	2G2_F_21.DAT
	2	21.62	24.5	2	
	3	45.25	100	-	
50	1	0	7.62	1	2G3_F_21.DAT
	2	66.12	100	-	

Performed by Jiabei Yuan Checked by Yin-Cheng Lin

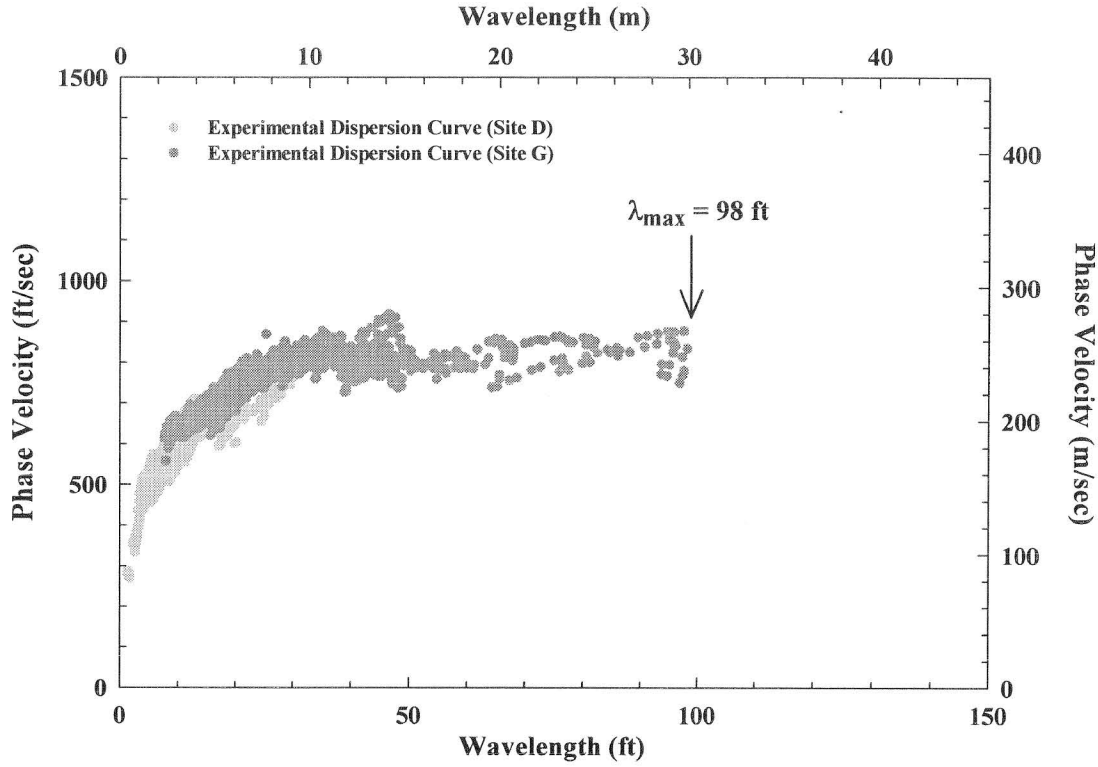


Figure K.17 Experimental Dispersion Curve Measured during Second Site Visit at Site D at Vogtle, GA; Linear Wavelength Axis

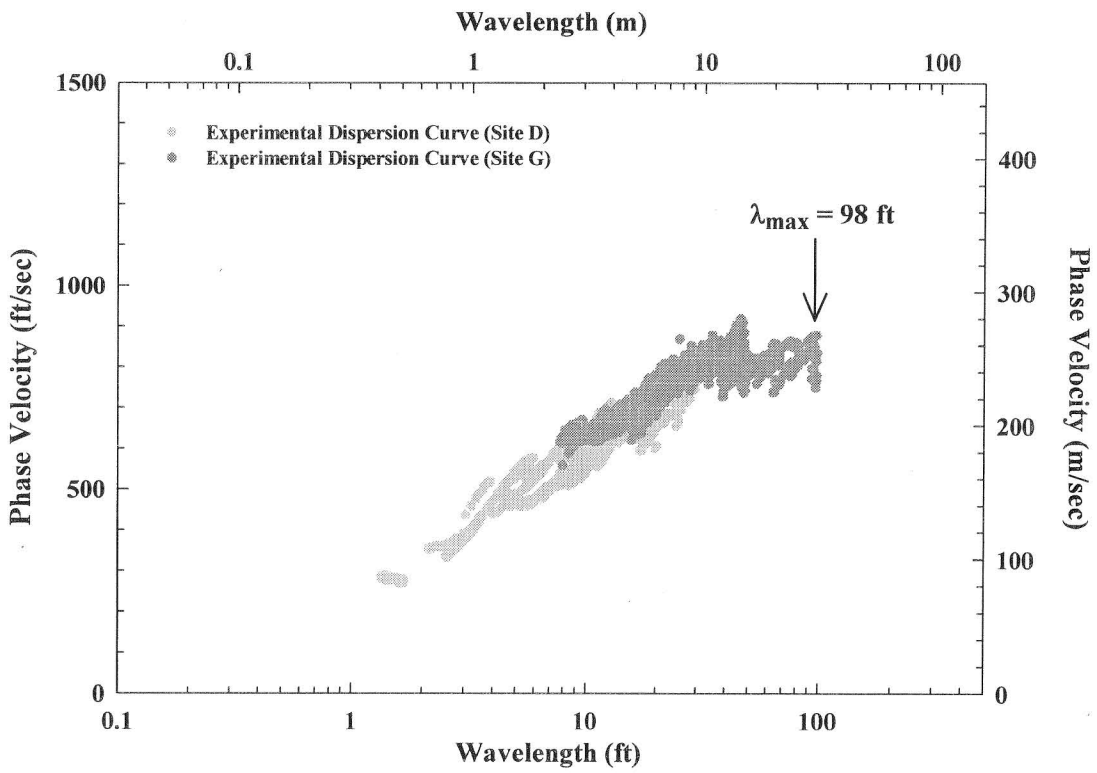


Figure K.18 Experimental Dispersion Curve Measured during Second Site Visit at Site D at Vogtle, GA; Logarithmic Wavelength Axis

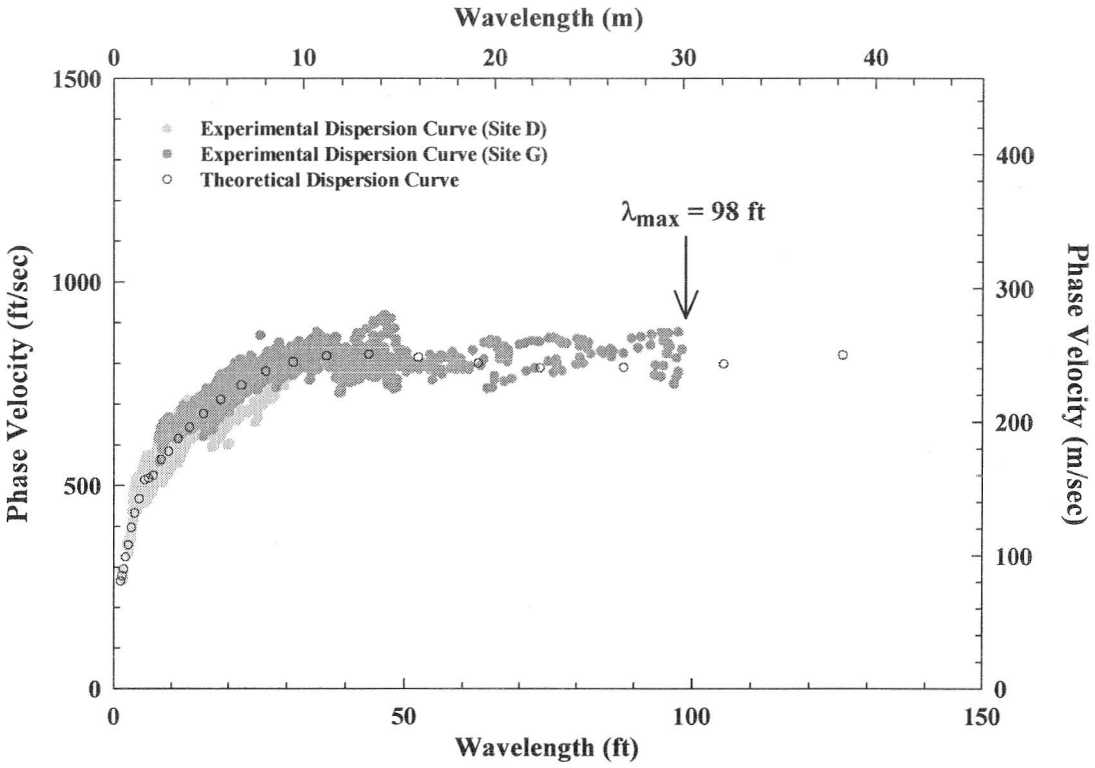


Figure K.19 Experimental and Theoretical Dispersion Curves from Site D in Second Site Visit at Vogtle, GA; Linear Wavelength Axis

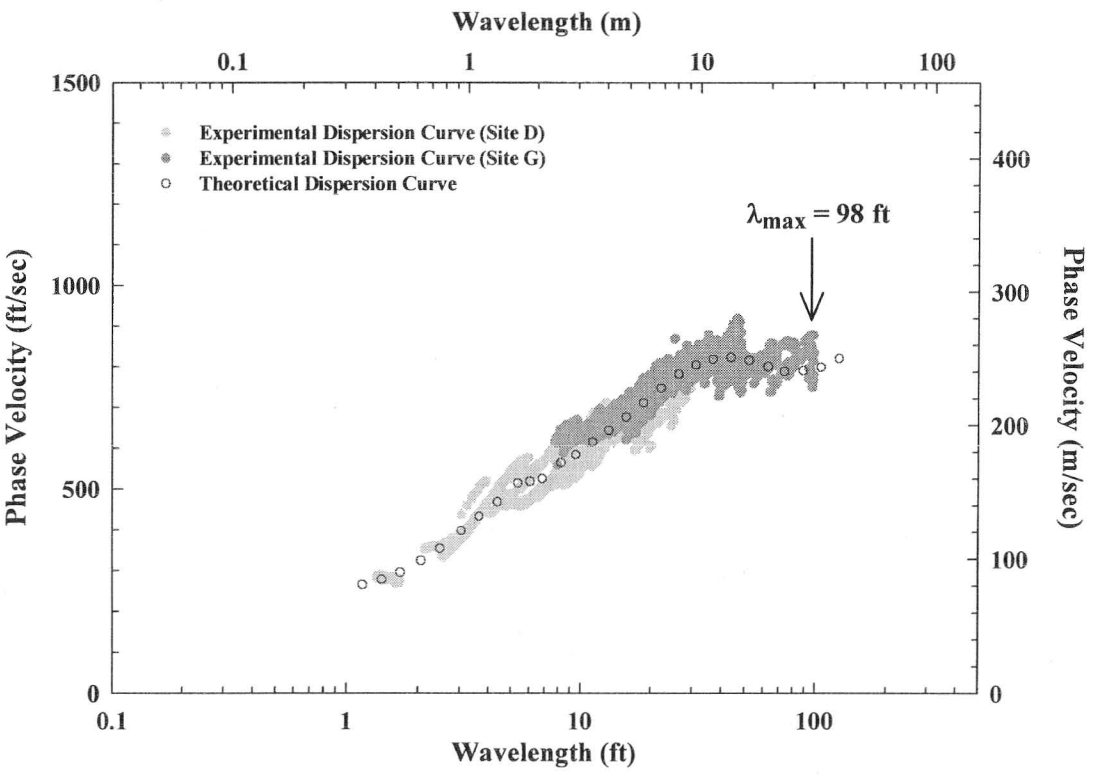


Figure K.20 Experimental and Theoretical Dispersion Curves from Site D in Second Site Visit at Vogtle, GA; Logarithmic Wavelength Axis

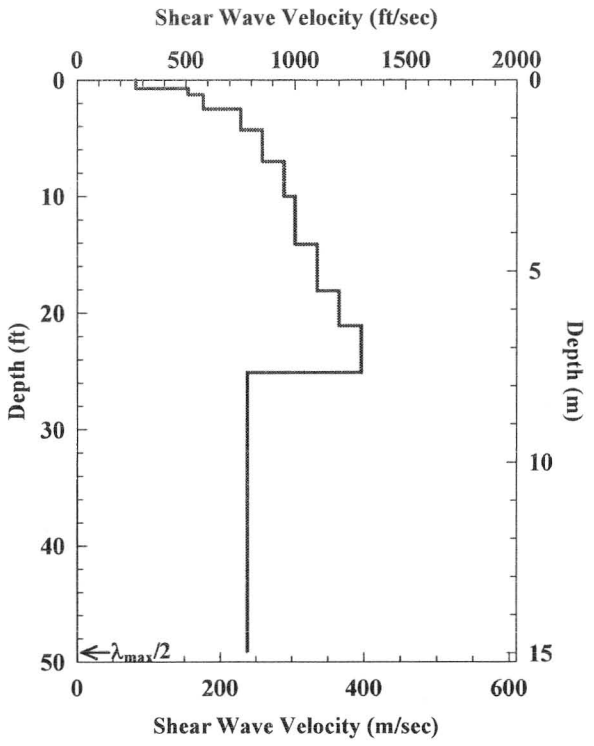


Figure K.21 Shear Wave Velocity Profile Determined at Site D during Second Site Visit at Vogtle, GA

Table K.2 Profile Parameters Used to Develop Preliminary Theoretical Dispersion Curve at Site D in the Second 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	0.75	0.0	270	0.24	462	128
2	0.5	0.75	510	0.24	872	128
3	1.25	1.25	580	0.24	992	128
4	1.8	2.5	750	0.24	1282	128
5	2.7	4.3	850	0.24	1453	128
6	3.0	7.0	950	0.24	1624	128
7	4.1	10.0	1000	0.24	1710	128
8	4.0	14.1	1100	0.24	1881	128
9	3.0	18.1	1200	0.24	2052	128
10	4.0	21.1	1300	0.24	2223	128
11	23.9	25.1	780	0.24	1334	128
12*	22.1	49.0	780	0.24	1334	128
13*#	30.0	71.1	1900	0.42	5000	135
14*#	Half Space	101.1	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 L

SASW Measurements of Second Site Visit at Vogtle, GA
Site Location: Site E

1. Data Sheet(s) L.2
2. Phase Plots from SASW Tests L.4
3. Table of Masking Parameters L.9
4. Experimental Dispersion Curves L.10
5. Matching the Experimental and Theoretical Dispersion Curves L.11
6. Shear Wave Velocity Profile L.12
7. Table of Profile Parameters L.12

3 - Receiver SASW Data Sheet

Project : Vogtle

Location : E (SA2#5)

Date/(Time) : Dec 16 / 2007 (: ~11 AM :36)

Personnel : Stokoe, Jung, Jiabei Yuan

Recorded by : Yuan

Checked by : Jung

R1 I.D. : UT07-45HZ-04

R2 I.D. : UT07-45HZ-02

R3 I.D. : UT07-45HZ-03

Data Sheet # : SA2#5

Disk # : SA2#5

elev: 229.5 ft

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	2E1	0 - 800	
1	1	2	For	Rev	"	2E2	0 - 800	
3	3	6	For	Rev	medium hammer	2E3	0 - 400	
3	3	6	For	Rev	"	2E4	0 - 400	
9	9	18	For	Rev	big hammer	2E5	0 - 200	
9	9	18	For	Rev	"	2E6	0 - 200	
			For	Rev			~	
			For	Rev			~	
			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

University of Texas at Austin

3 - Receiver SASW Data Sheet

Page ___ of ___

Project : Voytle

Data Sheet # : SA2#7

Location : G (SA2#7)

Disk # : SA2 #7

Date/(Time) : Dec / 16 / 2007 (13:07 PM ~ :)

Personnel : Stokoe, Jung, Yuan

Recorded by : Yuan.

Checked by : Jung

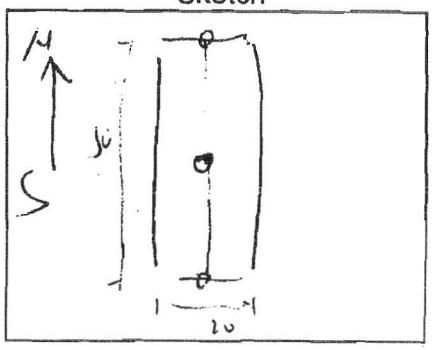
1 Hz Geophones

R1 I.D. : 3773

R2 I.D. : 3774

R3 I.D. : 3775

Sketch



Distance (ft)			Impact Direction		Impact Source	Record #	Freq. Range (Hz)	Notes
S - R1	R1 - R2	R2 - R3						
25	25	25	For	Rev	bulldozer	2G1	0 ~ 100	
30	30		For	Rev	"	2G2	0 ~ 100	
30	30		For	Rev	"	2G3	0 ~ 100	
25	25	25	For	Rev	"	2G4	0 ~ 100	
			For	Rev			~	
			For	Rev			~	
			For	Rev			~	
			For	Rev			~	
			For	Rev			~	
			For	Rev			~	
			For	Rev			~	
			For	Rev			~	
			For	Rev			~	
			For	Rev			~	
			For	Rev			~	
			For	Rev			~	

R1, R3

* 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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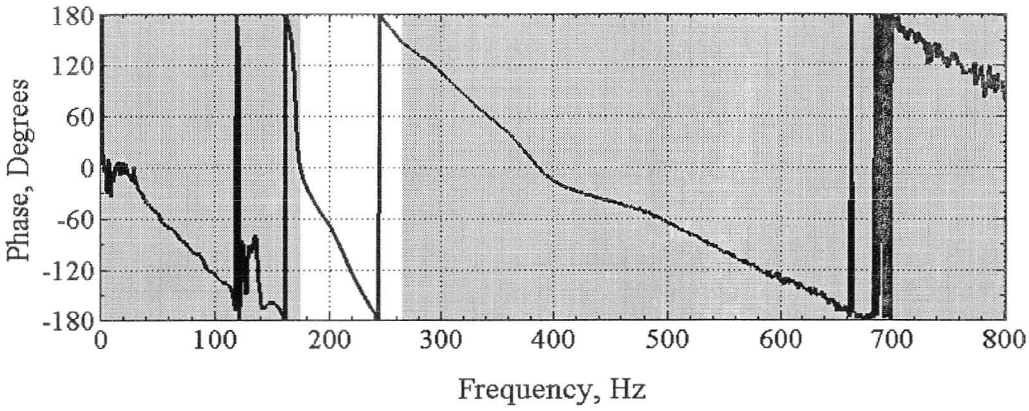

Figure L.1 Phase Plots Measured by SASW Testing with 2-ft Receiver Spacing (2E1_F_43.DAT)

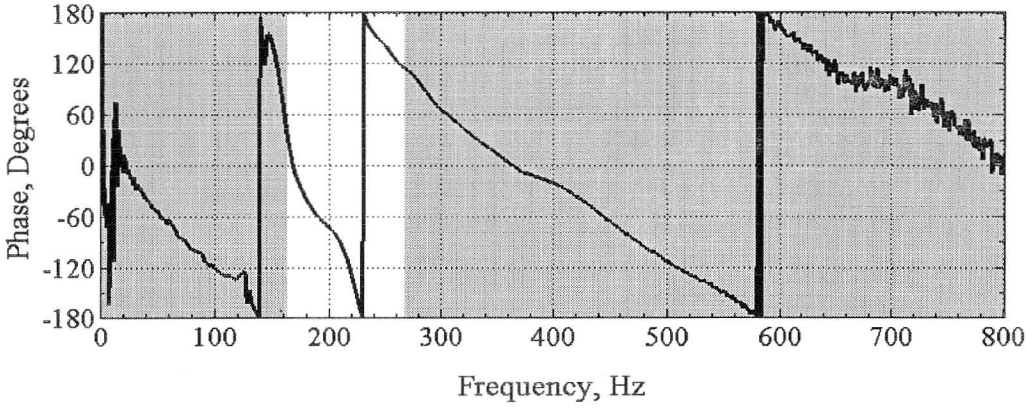

Figure L.2 Phase Plots Measured by SASW Testing with 2-ft Receiver Spacing (2E2_F_43.DAT)

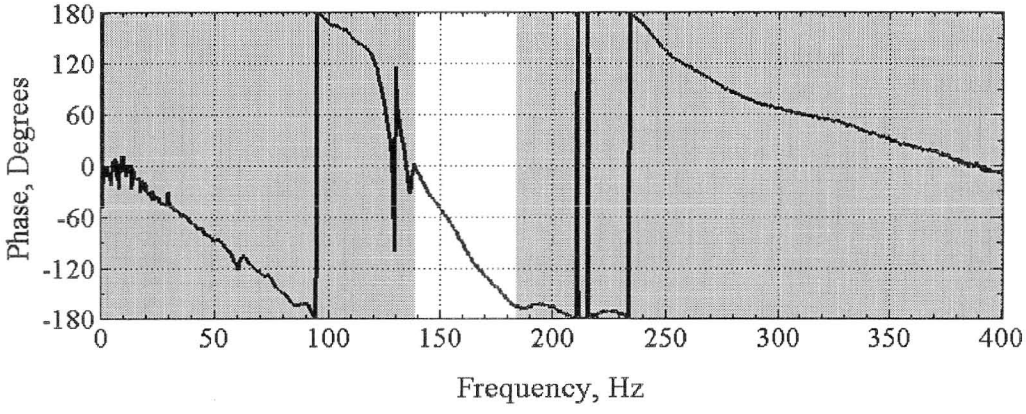

Figure L.3 Phase Plots Measured by SASW Testing with 3-ft Receiver Spacing (2E3_F_21.DAT)

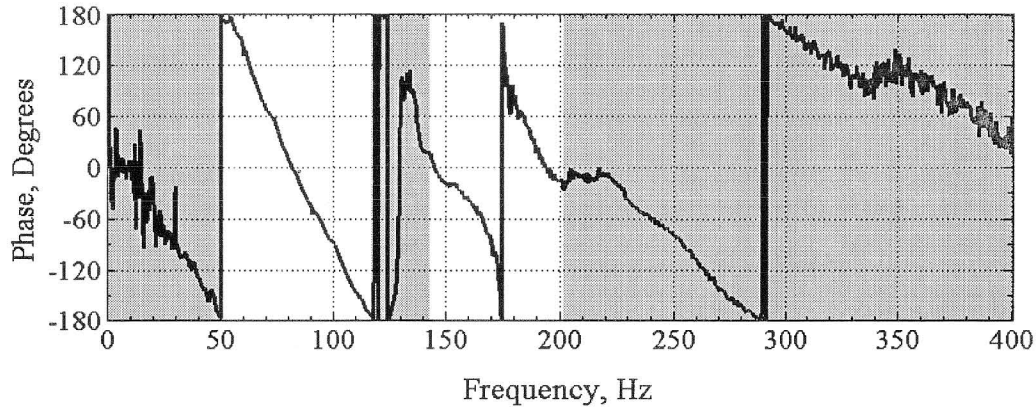

Figure L.4 Phase Plots Measured by SASW Testing with 6-ft Receiver Spacing (2E3_F_43.DAT)

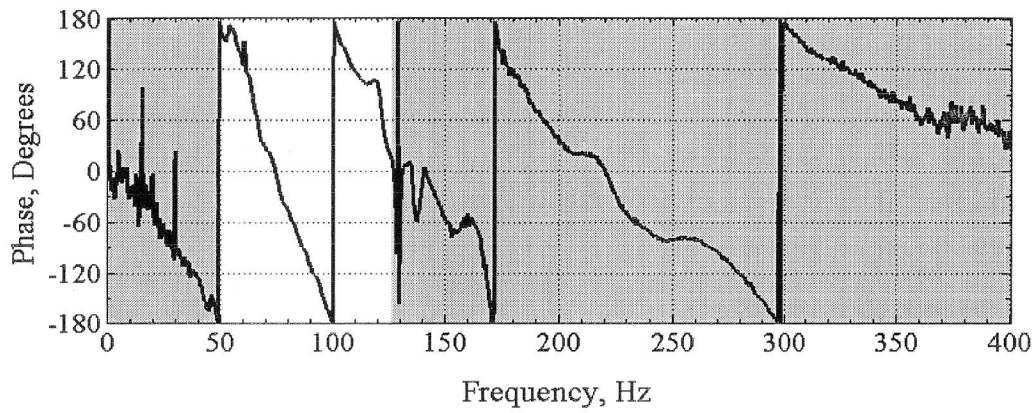

Figure L.5 Phase Plots Measured by SASW Testing with 6-ft Receiver Spacing (2E4_F_43.DAT)

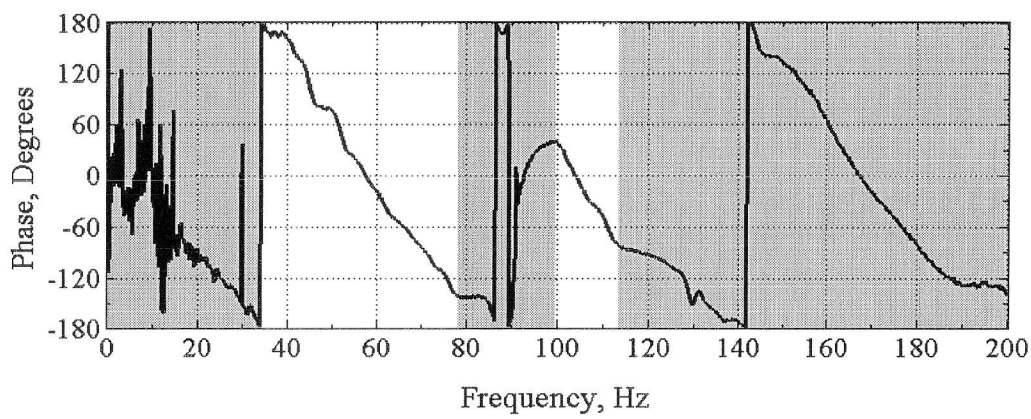

Figure L.6 Phase Plots Measured by SASW Testing with 9-ft Receiver Spacing (2E5_F_21.DAT)

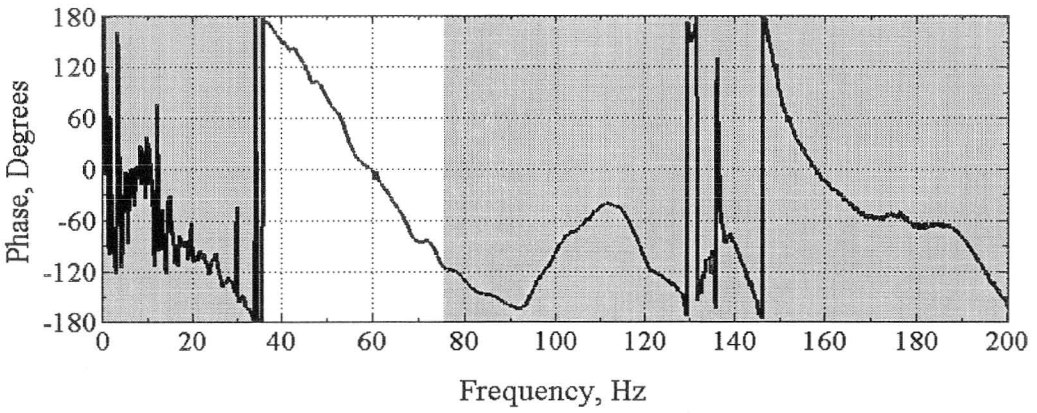

Figure L.7 Phase Plots Measured by SASW Testing with 9-ft Receiver Spacing (2E6_F_21.DAT)

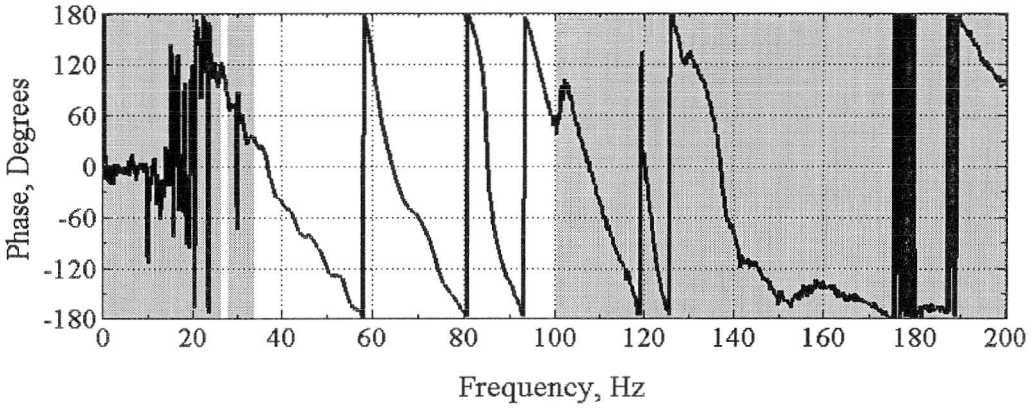

Figure L.8 Phase Plots Measured by SASW Testing with 18-ft Receiver Spacing (2E5_F_43.DAT)

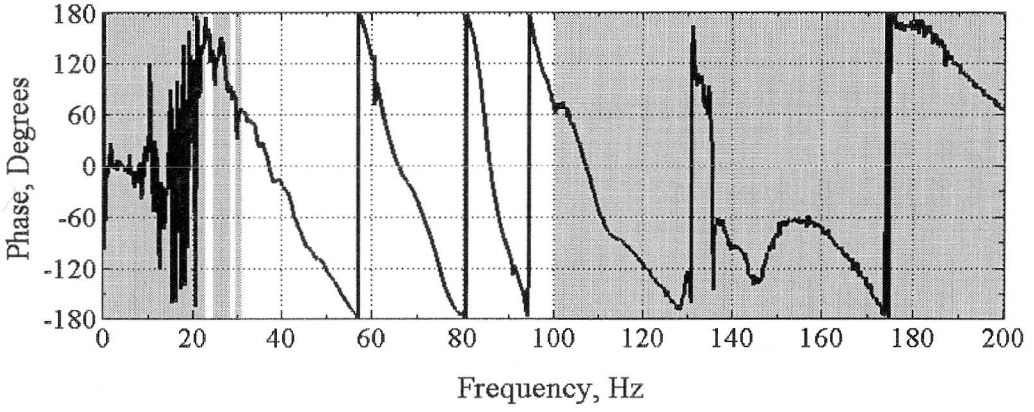

Figure L.9 Phase Plots Measured by SASW Testing with 18-ft Receiver Spacing (2E6_F_43.DAT)

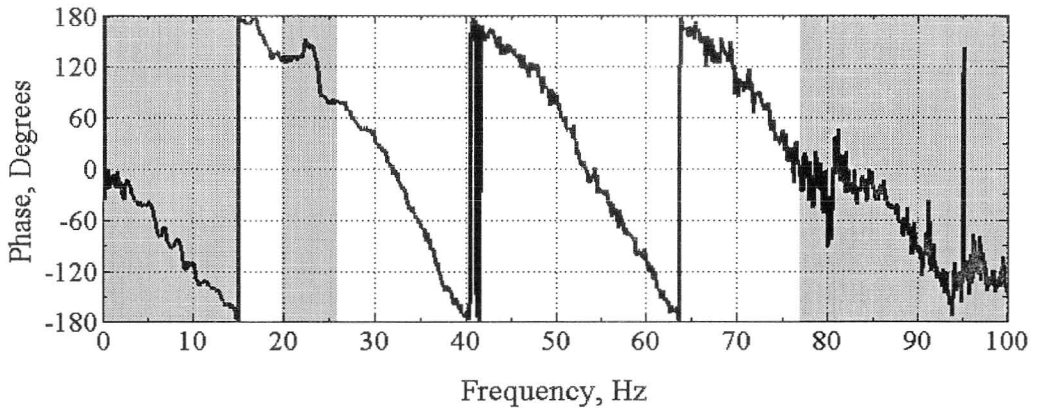

Figure L.10 Phase Plots Measured by SASW Testing with 25-ft Receiver Spacing (2G1_F_21.DAT)

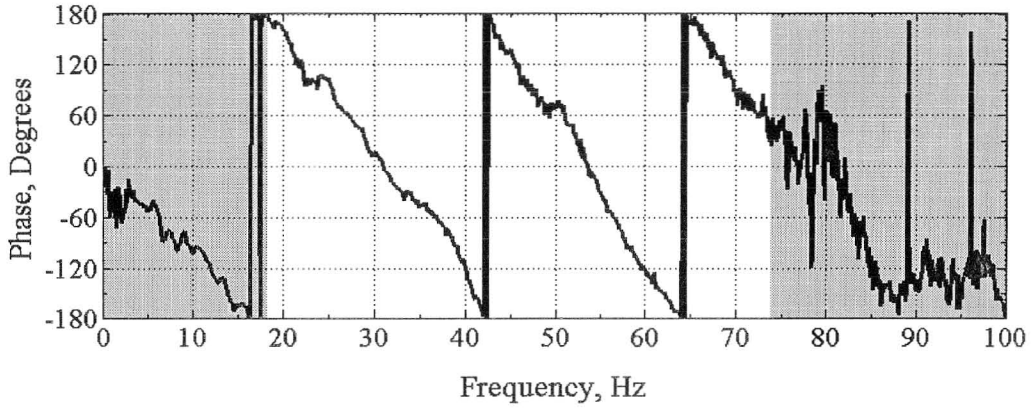

Figure L.11 Phase Plots Measured by SASW Testing with 25-ft Receiver Spacing (2G1_F_43.DAT)

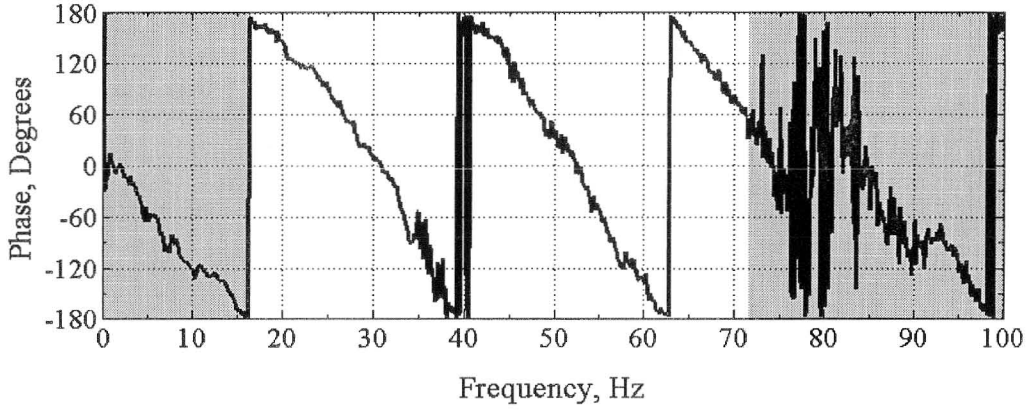

Figure L.12 Phase Plots Measured by SASW Testing with 25-ft Receiver Spacing (2G4_F_21.DAT)

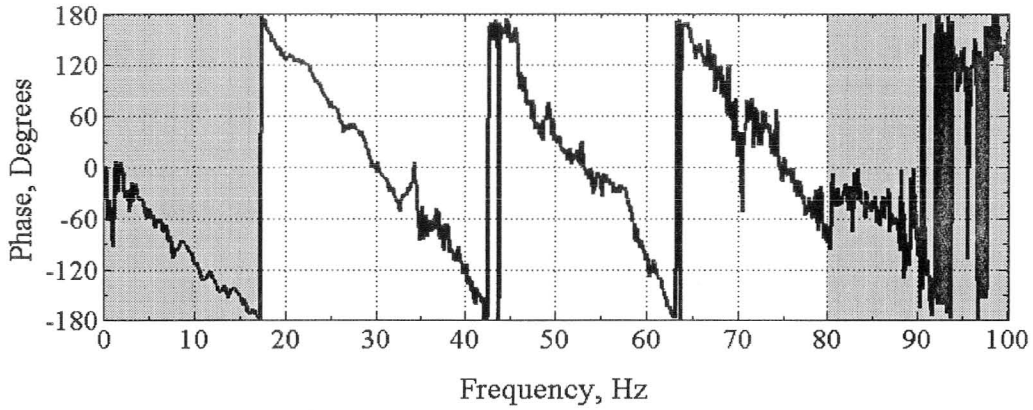

Figure L.13 Phase Plots Measured by SASW Testing with 25-ft Receiver Spacing (2G4_F_43.DAT)

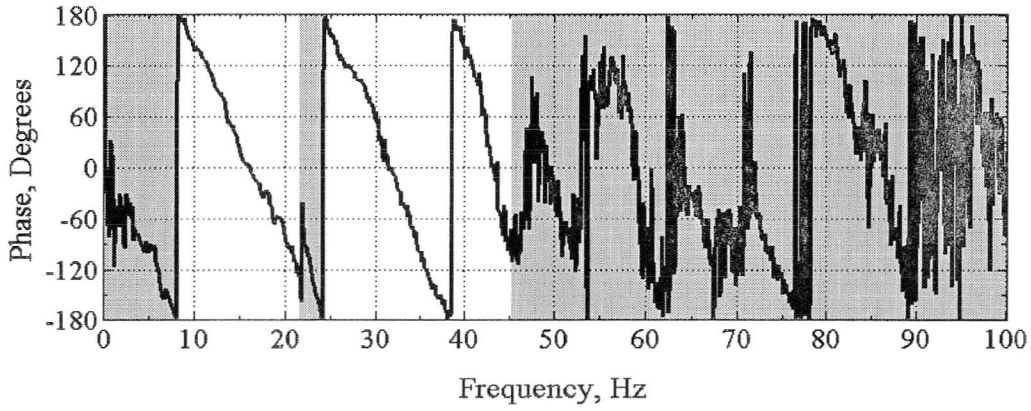

Figure L.14 Phase Plots Measured by SASW Testing with 50-ft Receiver Spacing (2G2_F_21.DAT)

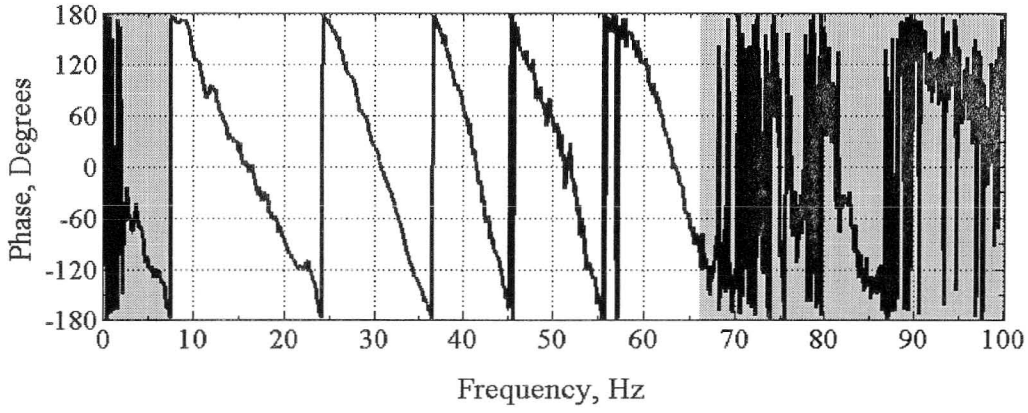

Figure L.15 Phase Plots Measured by SASW Testing with 50-ft Receiver Spacing (2G3_F_21.DAT)

Table L.1 Tables of Masking Parameters Used on Data Collected during Second Site Visit at Site E

Receiver Spacing (ft)	Masking Interval	Masking Start Frequency, Hz	Masking Stop Frequency, Hz	Number of Jumps	Filename
2	1	0	175	1	2E1_F_43.DAT
	2	266	800	-	
2	1	0	163	1	2E2_F_43.DAT
	2	268	800	-	
3	1	0	138.5	1	2E3_F_21.DAT
	2	184	400	-	
6	1	0	50.5	1	2E3_F_43.DAT
	2	117	142.5	2	
	3	201.5	400	-	
6	1	0	49.5	1	2E4_F_43.DAT
	2	126.5	400	-	
9	1	0	34.25	1	2E5_F_21.DAT
	2	78.25	99.5	2	
	3	113.25	200	-	
9	1	0	36	1	2E6_F_21.DAT
	2	75.5	200	-	
18	1	0	26.5	1	2E5_F_43.DAT
	2	28	33.75	1	
	3	100.25	200	-	
18	1	0	23	1	2E6_F_43.DAT
	2	24.75	28.5	1	
	3	29.75	31	1	
	4	100.25	200	-	
25	1	0	15.12	1	2G1_F_21.DAT
	2	19.88	25.88	1	
	3	76.75	100	-	
25	1	0	18.25	1	2G1_F_43.DAT
	2	73.75	100	-	
25	1	0	16.38	1	2G4_F_21.DAT
	2	71.5	100	-	
25	1	0	17.38	1	2G4_F_43.DAT
	2	79.75	100	-	
50	1	0	8.25	1	2G2_F_21.DAT
	2	21.62	24.5	2	
	3	45.25	100	-	
50	1	0	7.62	1	2G3_F_21.DAT
	2	66.12	100	-	

Performed by Jiabei Yuan Checked by Yin-Cheng Lin

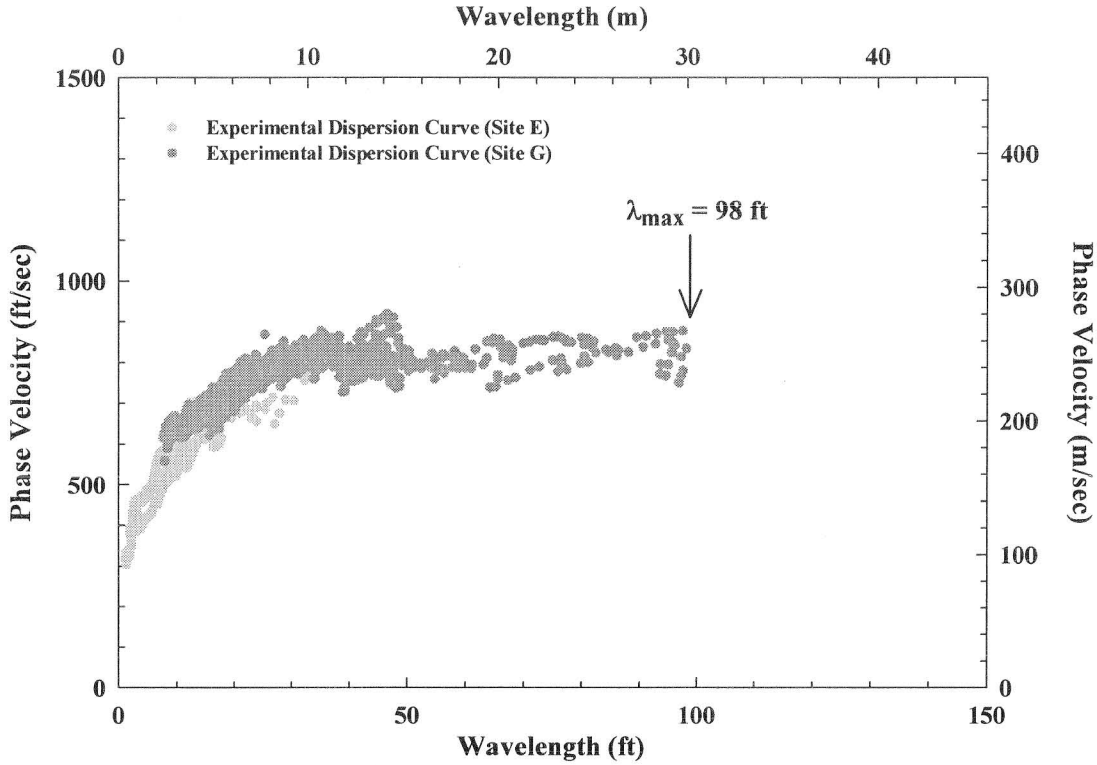

Figure L.16 Experimental Dispersion Curve Measured during Second Site Visit at Site E at Vogtle, GA; Linear Wavelength Axis

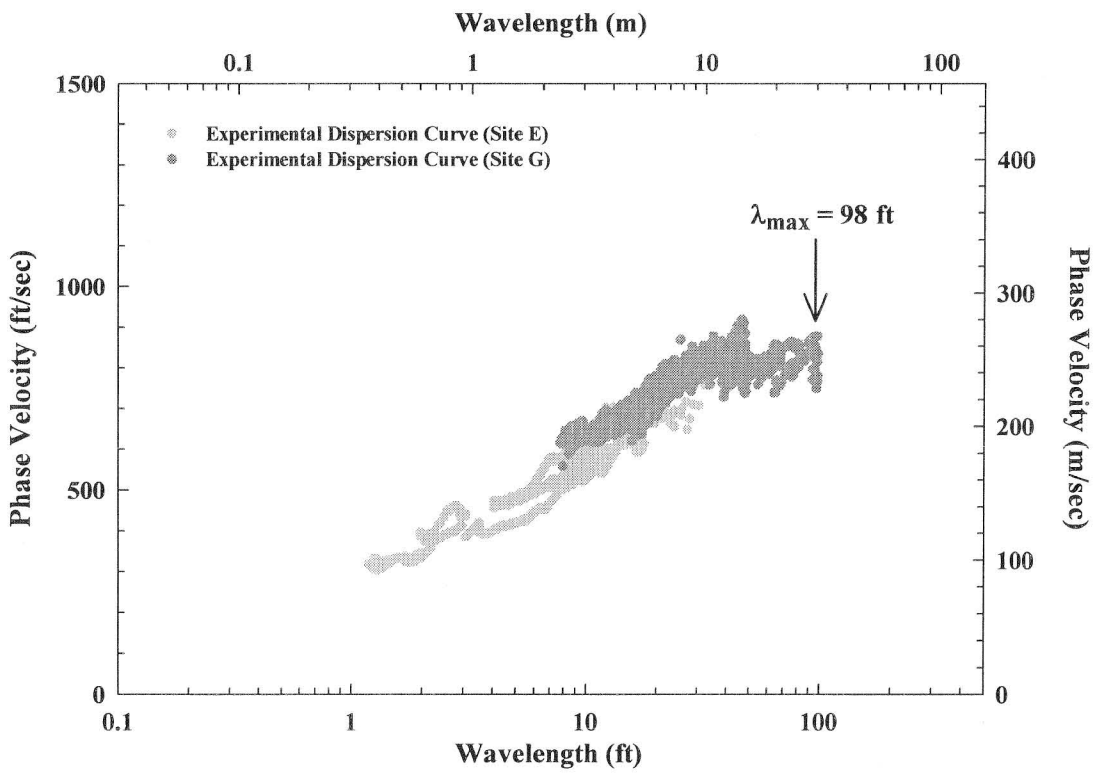

Figure L.17 Experimental Dispersion Curve Measured during Second Site Visit at Site E at Vogtle, GA; Logarithmic Wavelength Axis

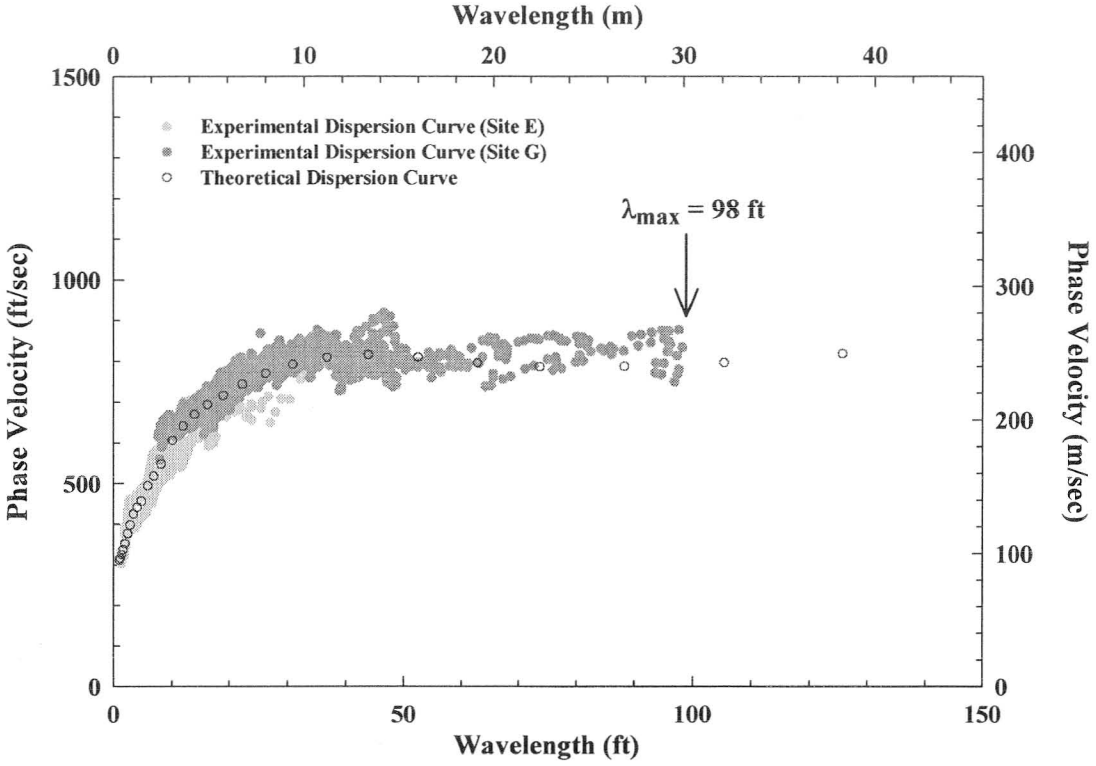

Figure L.18 Experimental and Theoretical Dispersion Curves from Site E in Second Site Visit at Vogtle, GA; Linear Wavelength Axis

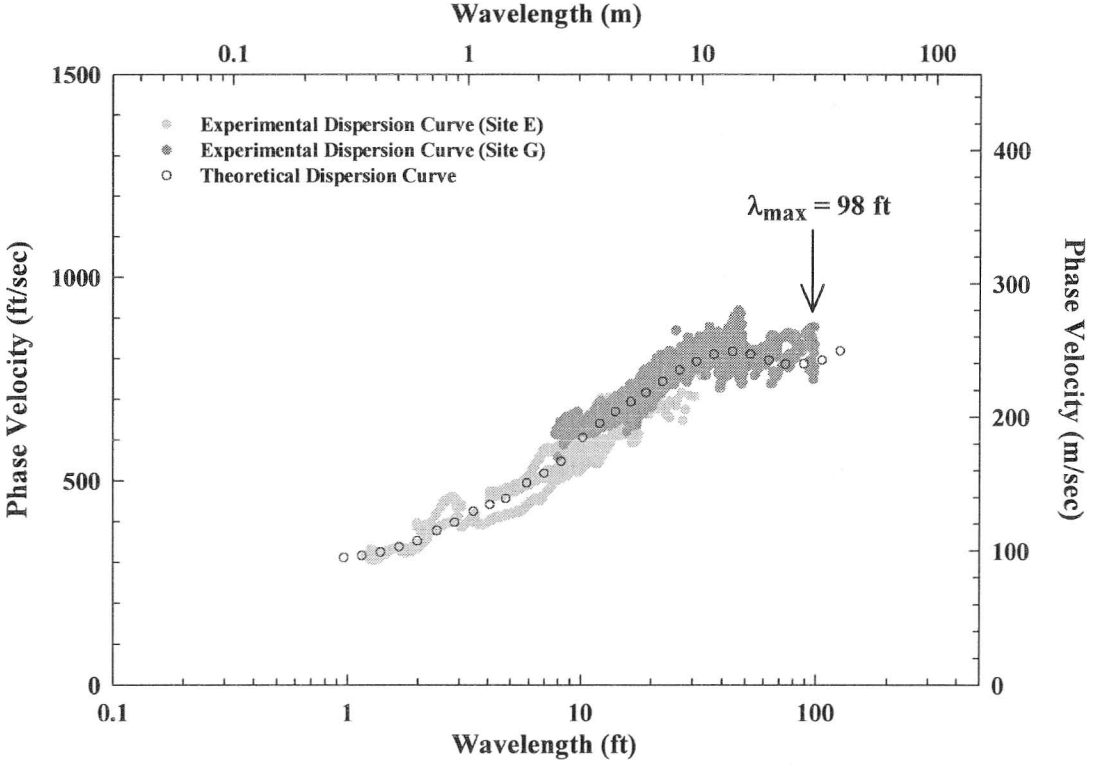

Figure L.19 Experimental and Theoretical Dispersion Curves from Site E in Second Site Visit at Vogtle, GA; Logarithmic Wavelength Axis

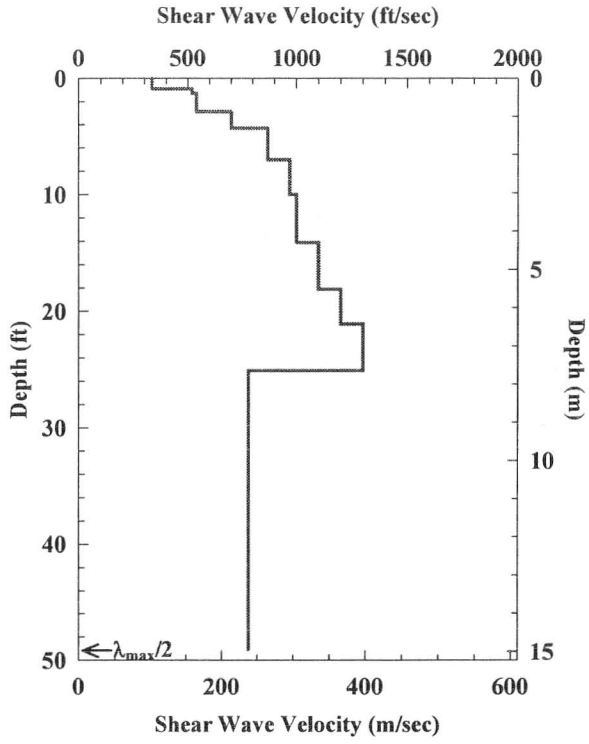

Figure L.20 Shear Wave Velocity Profile Determined at Site E during Second Site Visit at Vogtle, GA

Table L.2 Profile Parameters Used to Develop Preliminary Theoretical Dispersion Curve at Site E in the Second 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	0.9	0.0	335	0.24	573	128
2	0.4	0.9	520	0.24	889	128
3	1.6	1.3	540	0.24	923	128
4	1.4	2.9	700	0.24	1197	128
5	2.7	4.3	870	0.24	1487	128
6	3.0	7.0	970	0.24	1658	128
7	4.1	10.0	1000	0.24	1710	128
8	4.0	14.1	1100	0.24	1881	128
9	3.0	18.1	1200	0.24	2052	128
10	4.0	21.1	1300	0.24	2223	128
11	23.9	25.1	780	0.24	1334	128
12*	22.1	49.0	780	0.24	1334	128
13*#	30.0	71.1	1900	0.42	5000	135
14*#	Half Space	101.1	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 M

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

1. Data Sheet(s) M.2
2. Phase Plots from SASW Tests M.4
3. Table of Masking Parameters M.10
4. Experimental Dispersion Curves M.11
5. Matching the Experimental and Theoretical Dispersion Curves M.12
6. Shear Wave Velocity Profile M.13
7. Table of Profile Parameters M.13

3 - Receiver SASW Data Sheet

Page ___ of ___

Project : Vogtle

Location : F (SA2#6)

Date/(Time) : Dec, 16, 2007 (11 AM :36 ~~12~~ AM :04)

Personnel : stokoe, Jung, Yuan

Recorded by : Yuan

Checked by : Jung

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

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

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

Data Sheet # : SA2 #6

Disk # : SA2 #6

elev = 229.6 ft

Sketch

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

Project : Voytle

Data Sheet # : SA2#7

Location : G (SA2#7)

Disk # : SA2 #7

Date/(Time) : Dec / 16 / 2007 (13:07 PM ~ :)

Personnel : Stokoe, Jung, Yuan

Recorded by : Yuan

Checked by : Jung

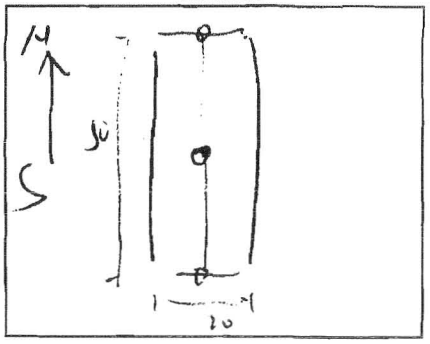
1 Hz Geophones

R1 I.D. : 3773

R2 I.D. : 3774

R3 I.D. : 3775

Sketch



Distance (ft)			Impact Direction		Impact Source	Record #	Freq. Range (Hz)	Notes
S - R1	R1 - R2	R2 - R3						
25	25	25	For	Rev	bulldozer	2G1	0 ~ 100	
50	50		For	Rev	"	2G2	0 ~ 100	
50	50		For	Rev	"	2G3	0 ~ 100	
25	25	25	For	Rev	"	2G4	0 ~ 100	
			For	Rev			~	
			For	Rev			~	
			For	Rev			~	
			For	Rev			~	
			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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