

3 - Receiver SASW Data Sheet

Page 1 of 1

Project : Vogtle

Data Sheet # : SA4 #1

Location : A (SA4 #1)

Disk # : SA4 #1

Date/(Time) : Jan 1 24/2008 (9^{AM} :00 ~ :)

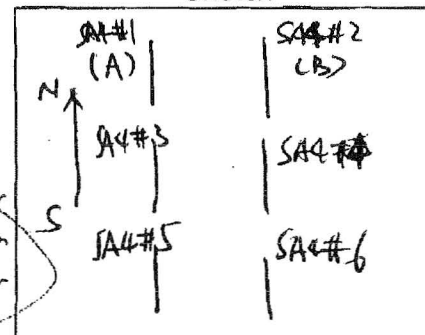
elev :

Personnel : Stokoe, Yuan, Minjae

Recorded by : Yuan

Checked by : Minjae

Sketch



R1 I.D. : UT07-45Hz-D4, GEC 92005 near

R2 I.D. : UT07-45Hz-D2 GEC 92002 on

R3 I.D. : UT07-45Hz-U3 GEC 92001 far

same for all sites

Distance (ft)			Impact		Record #	Freq. Range (Hz)	Notes
S - R1	R1 - R2	R2 - R3	Direction	Source			
1	1	2	For	Rev small hammer	4A1	0-800	hammer on plate
1	1	2	For	Rev "	4A2	0-800	"
1	1	2	For	Rev "	4A3	0-800	hammer on hammer
1	1	2	For	Rev "	4A4	0-800	"
3	3	6	For	Rev knob hammer	4A5	0-400	hammer on plate
3	3	6	For	Rev "	4A6	0-400	"
9	9	18	For	Rev steage hammer	4A7	0-200	hammer on plate
9	9	18	For	Rev "	4A8	0-100	" , last hit on soil
1	1	2	For	Rev small hammer	4A9	0-800	hammer on plate, very soft hit
1	1	2	For	Rev "	A10	0-800	" "
			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 : Vogtle

Data Sheet #: SA4#7

Location : G (SA4#7)

Disk #: SA4#7

Date/(Time) : Jan 24, 2008 (: ~ :)

Personnel : Stokoe, Tuan, Minjae

Recorded by : Tuan

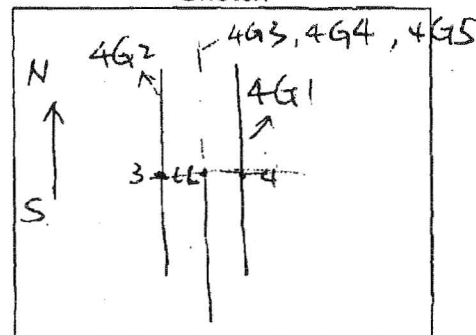
Checked by : Minjae

R1 I.D. : UT07-4.5Hz-04, GEC92003

R2 I.D. : UT07-4.5Hz-02, GEC92002

R3 I.D. : UT07-4.5Hz-03, GEC92001

Sketch



Distance (ft)			Impact Direction	Impact Source	Record #	Freq. Range	Notes
S - R1	R1 - R2	R2 - R3				(Hz)	
15	15	30	For	Rev	bulldozer	4G1	0 - 100
15	15	30	For	Rev	"	4G2	0 - 100
25	25	25	For	Rev	"	4G3	0 - 100
50	50	—	For	Rev	"	4G4	0 - 100
100	100	—	For	Rev	"	4G5	0 - 50
			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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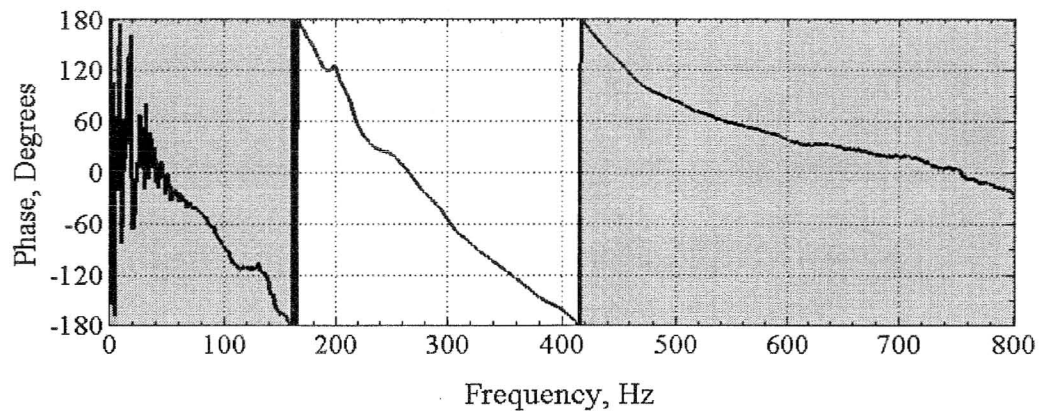


Figure T.1 Phase Plots Measured by SASW Testing with 1-ft Receiver Spacing (4A1_F_21.DAT)

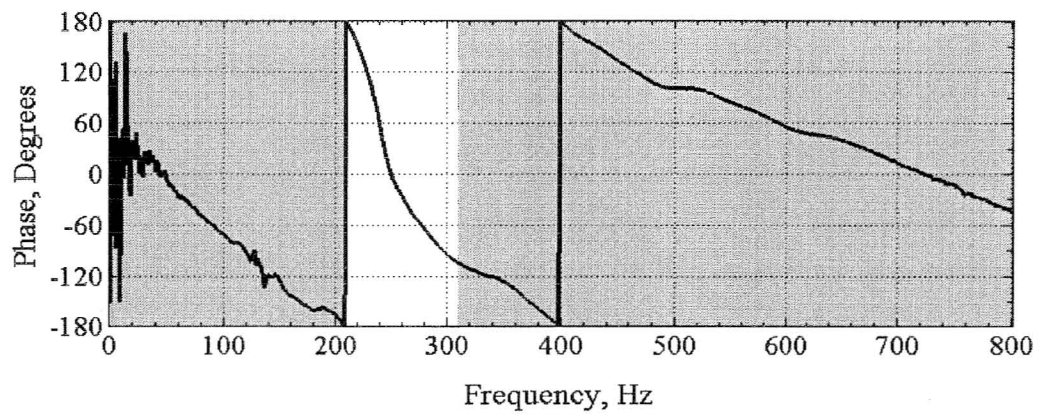


Figure T.2 Phase Plots Measured by SASW Testing with 1-ft Receiver Spacing (4A2_F_21.DAT)

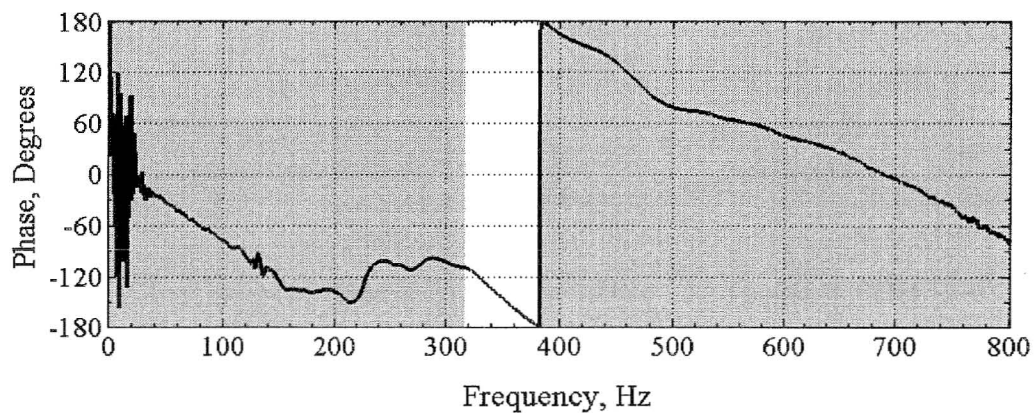


Figure T.3 Phase Plots Measured by SASW Testing with 1-ft Receiver Spacing (4A3_F_21.DAT)

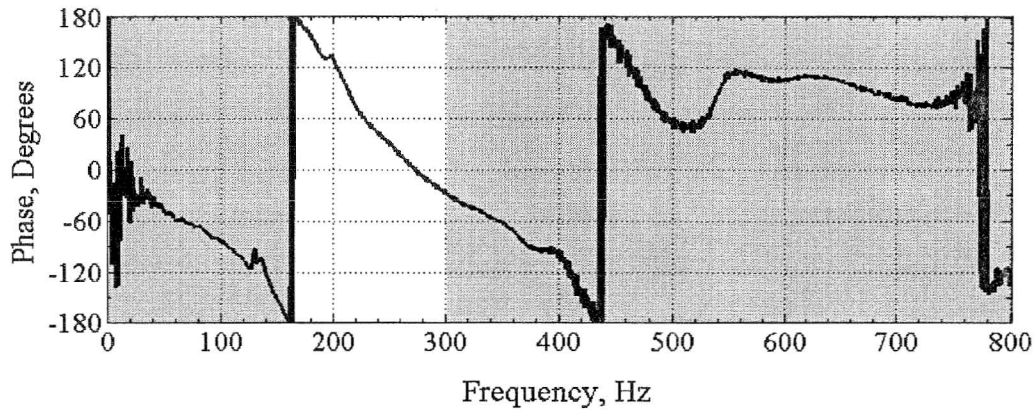


Figure T.4 Phase Plots Measured by SASW Testing with 1-ft Receiver Spacing (4A4_F_21.DAT)

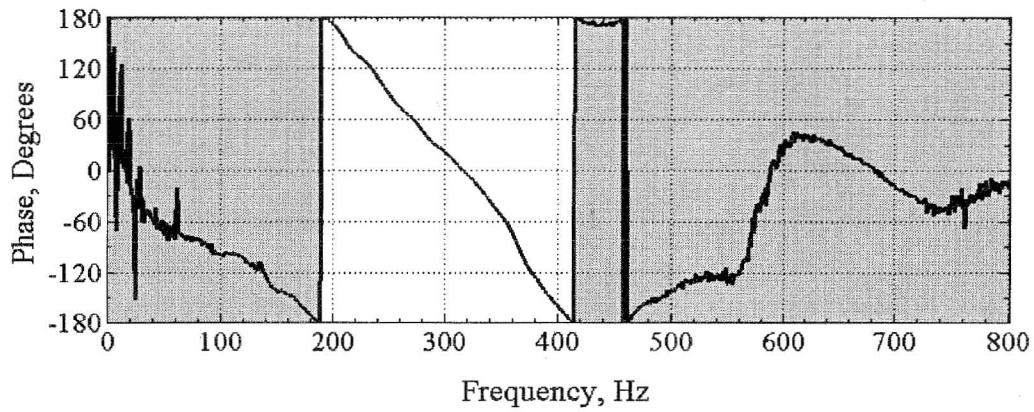


Figure T.5 Phase Plots Measured by SASW Testing with 1-ft Receiver Spacing (4A9_F_21.DAT)

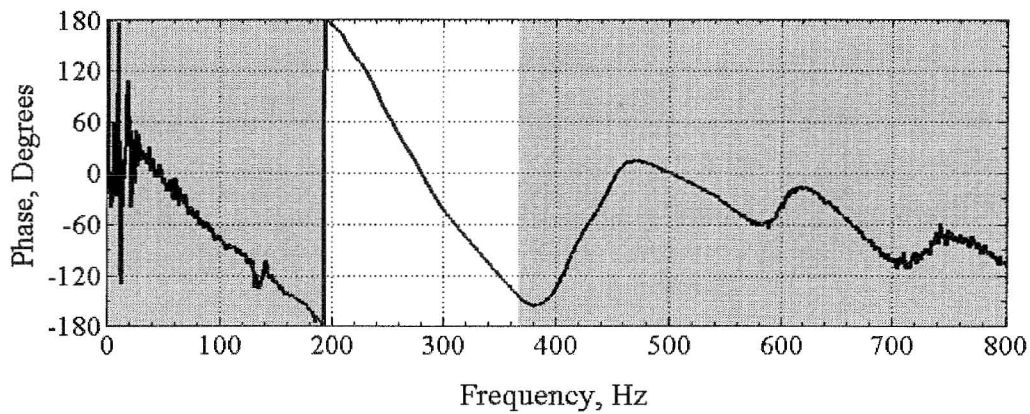


Figure T.6 Phase Plots Measured by SASW Testing with 1-ft Receiver Spacing (A10_F_21.DAT)

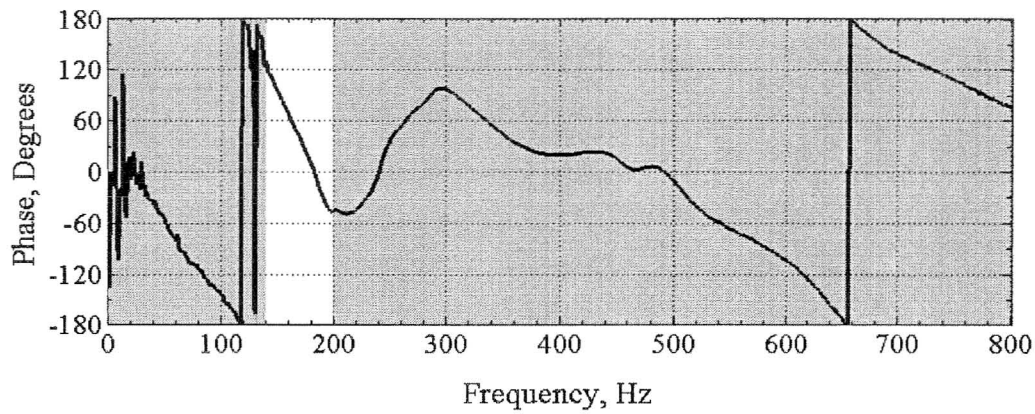


Figure T.7 Phase Plots Measured by SASW Testing with 2-ft Receiver Spacing (4A2_F_43.DAT)

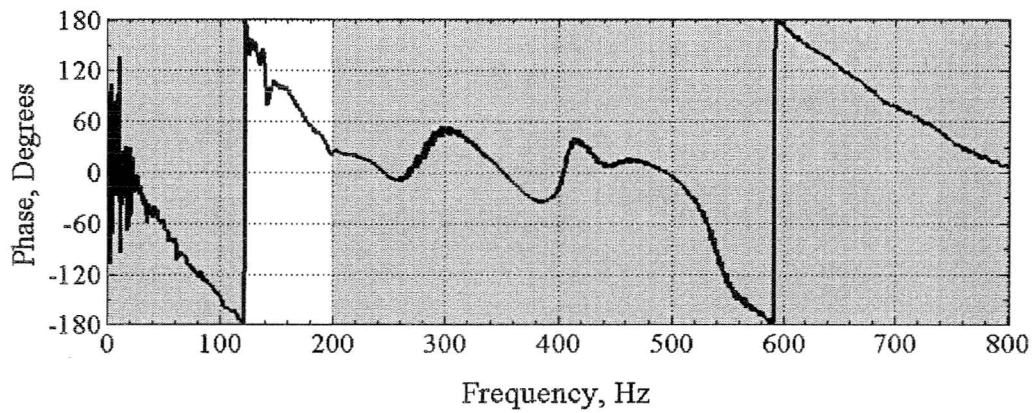


Figure T.8 Phase Plots Measured by SASW Testing with 2-ft Receiver Spacing (4A4_F_43.DAT)

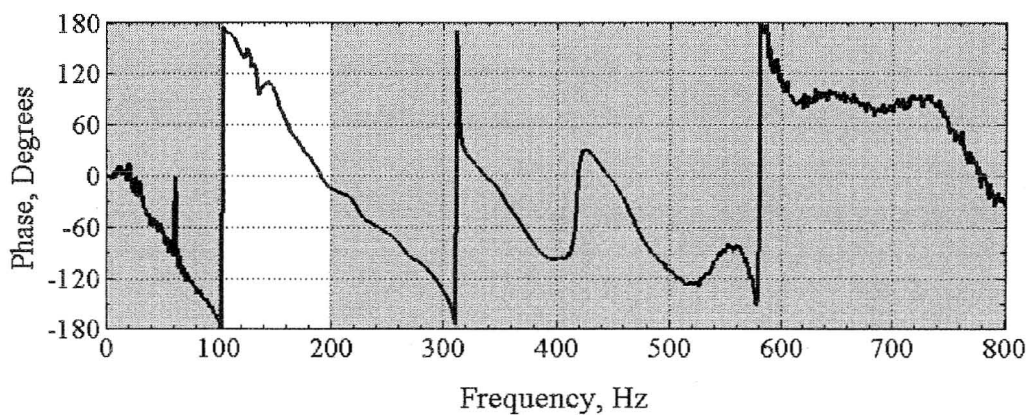


Figure T.9 Phase Plots Measured by SASW Testing with 2-ft Receiver Spacing (4A9_F_43.DAT)

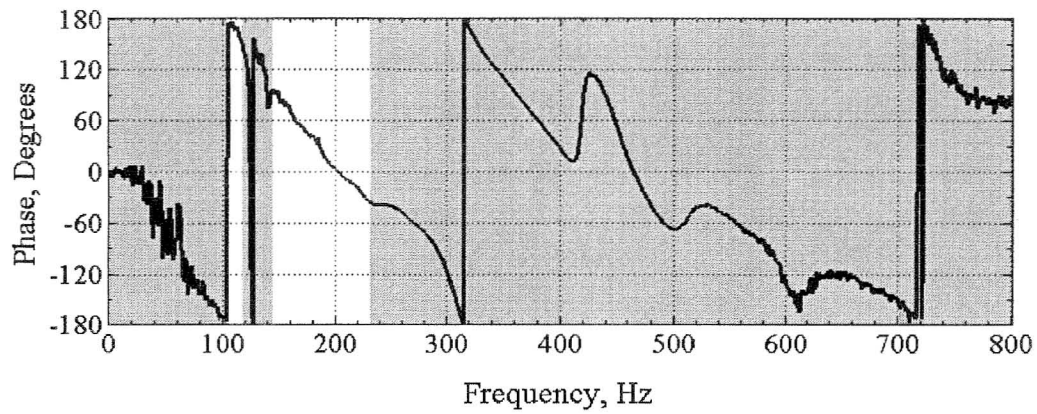


Figure T.10 Phase Plots Measured by SASW Testing with 2-ft Receiver Spacing (A10_F_43.DAT)

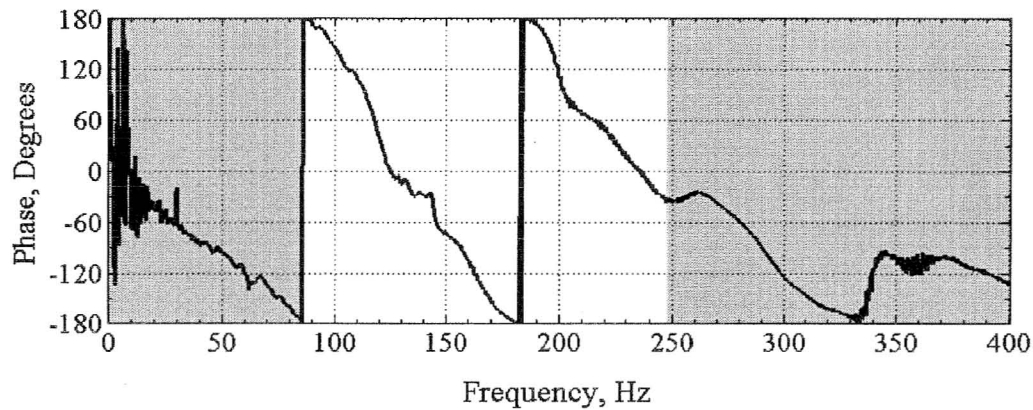


Figure T.11 Phase Plots Measured by SASW Testing with 3-ft Receiver Spacing (4A5_F_21.DAT)

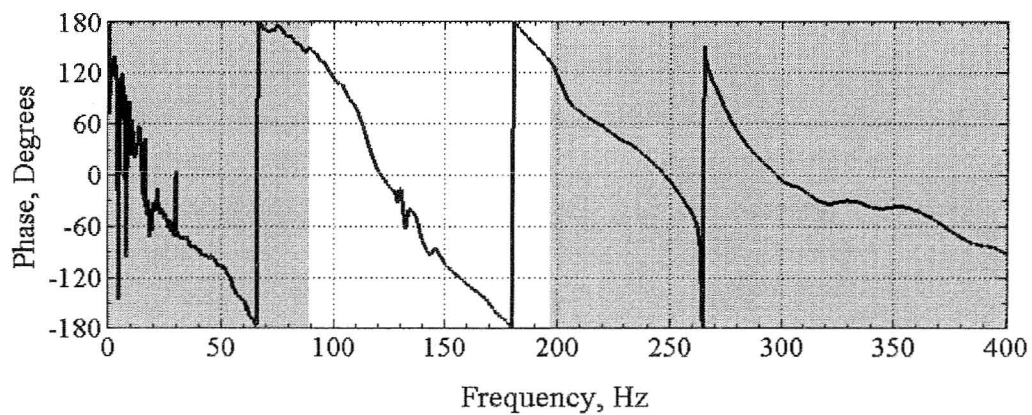


Figure T.12 Phase Plots Measured by SASW Testing with 3-ft Receiver Spacing (4A6_F_21.DAT)

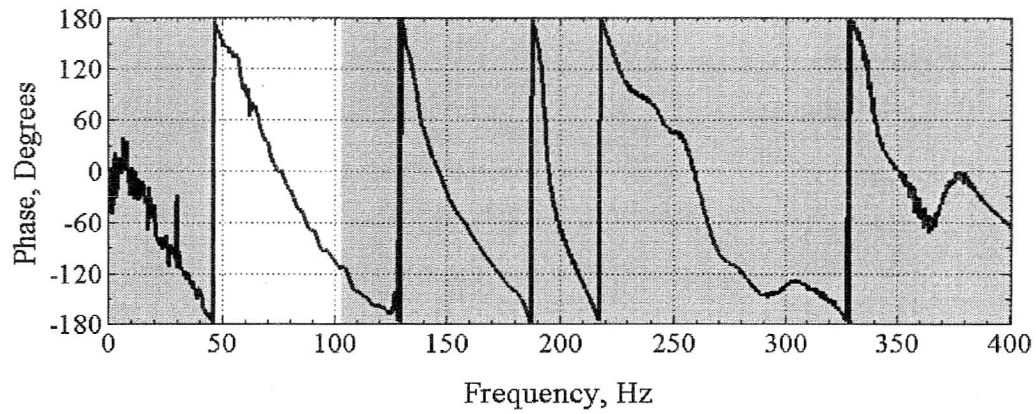


Figure T.13 Phase Plots Measured by SASW Testing with 6-ft Receiver Spacing (4A5_F_43.DAT)

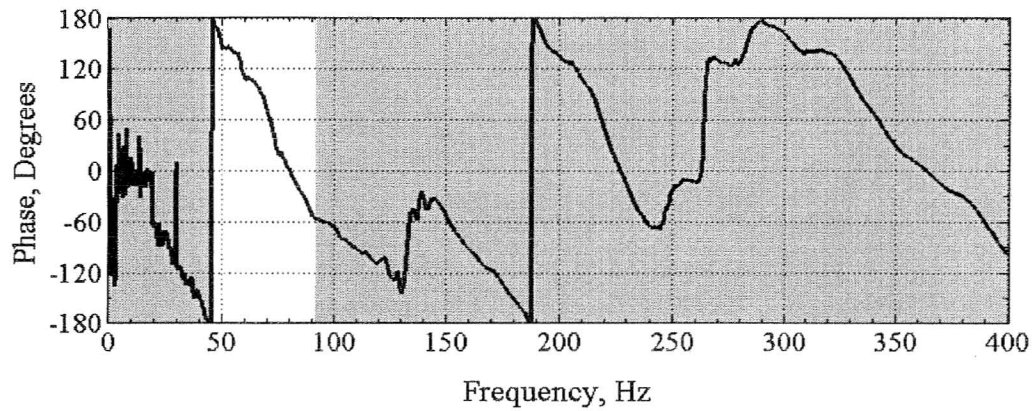


Figure T.14 Phase Plots Measured by SASW Testing with 6-ft Receiver Spacing (4A6_F_43.DAT)

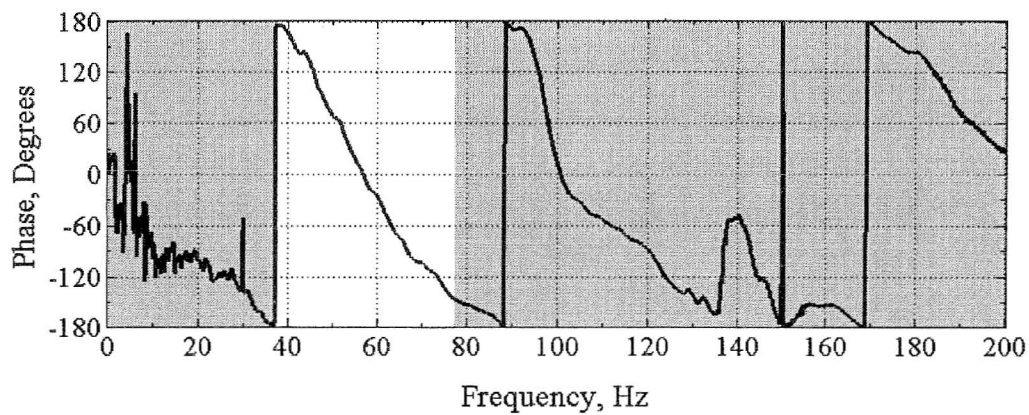


Figure T.15 Phase Plots Measured by SASW Testing with 9-ft Receiver Spacing (4A7_F_21.DAT)

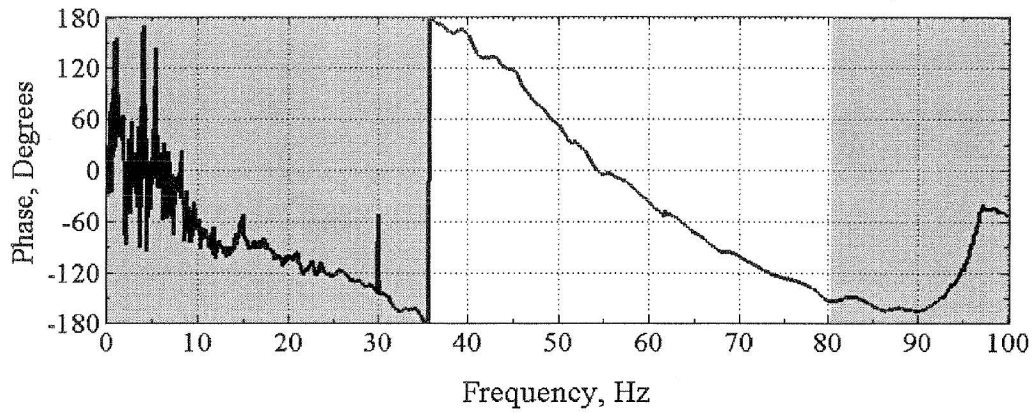


Figure T.16 Phase Plots Measured by SASW Testing with 9-ft Receiver Spacing (4A8_F_21.DAT)

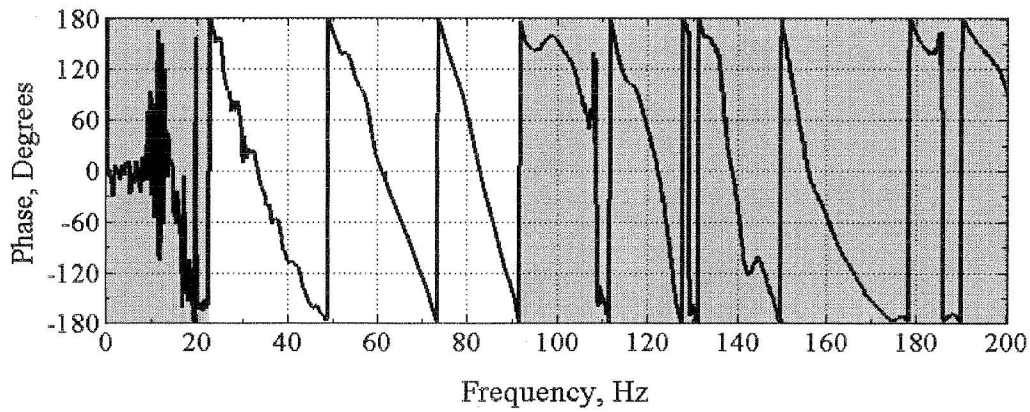


Figure T.17 Phase Plots Measured by SASW Testing with 18-ft Receiver Spacing (4A7_F_43.DAT)

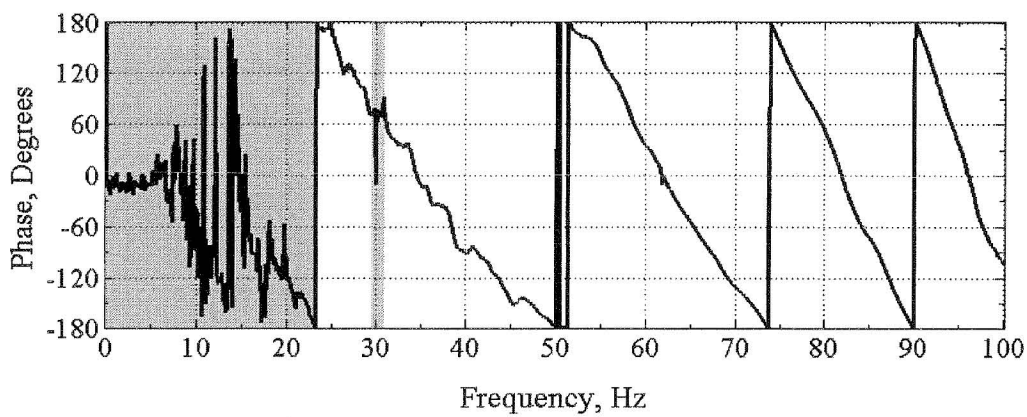


Figure T.18 Phase Plots Measured by SASW Testing with 18-ft Receiver Spacing (4A8_F_43.DAT)

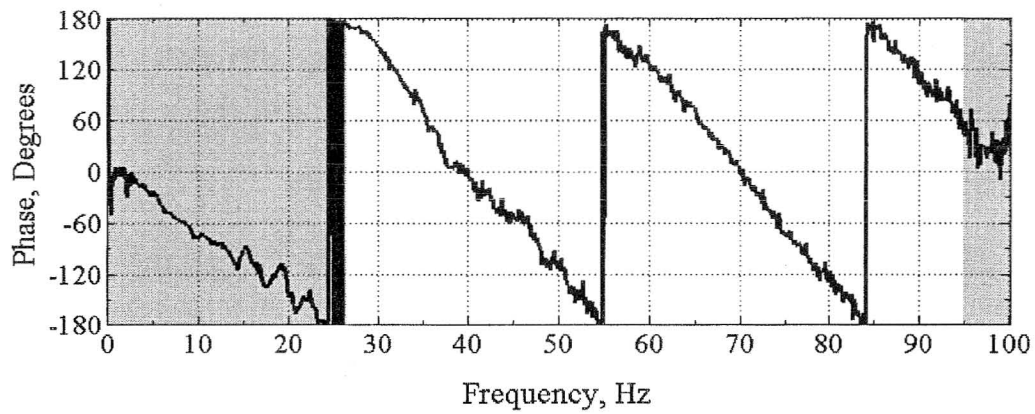


Figure T.19 Phase Plots Measured by SASW Testing with 15-ft Receiver Spacing (4G1_F_21.DAT)

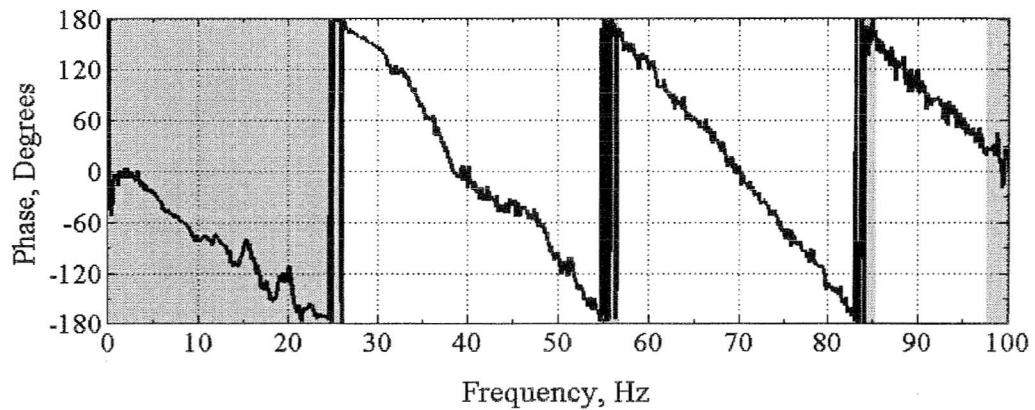


Figure T.20 Phase Plots Measured by SASW Testing with 15-ft Receiver Spacing (4G2_F_21.DAT)

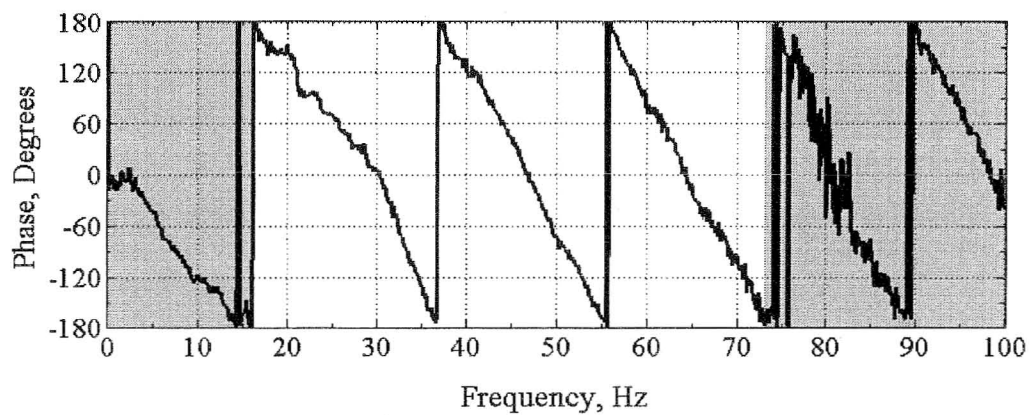


Figure T.21 Phase Plots Measured by SASW Testing with 25-ft Receiver Spacing (4G3_F_21.DAT)

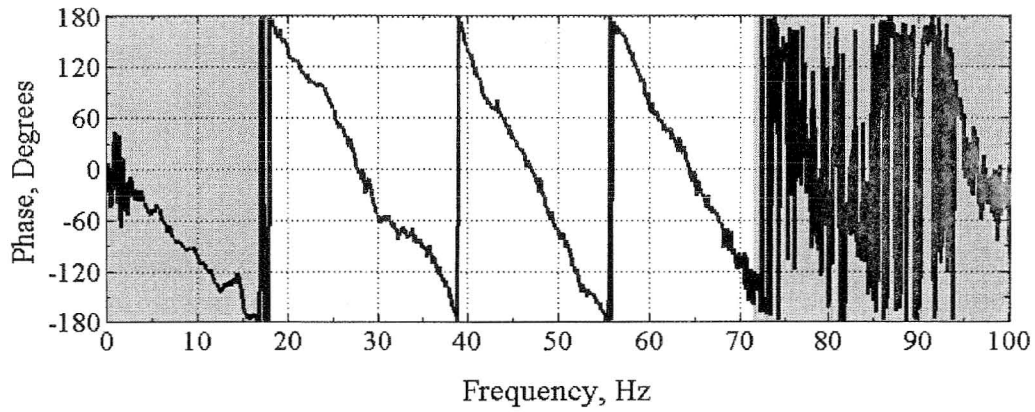


Figure T.22 Phase Plots Measured by SASW Testing with 25-ft Receiver Spacing (4G3_F_43.DAT)

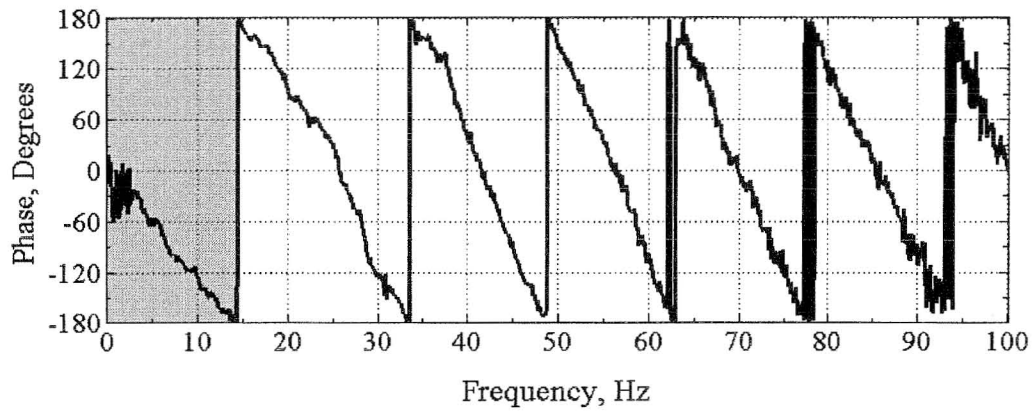


Figure T.23 Phase Plots Measured by SASW Testing with 30-ft Receiver Spacing (4G1_F_43.DAT)

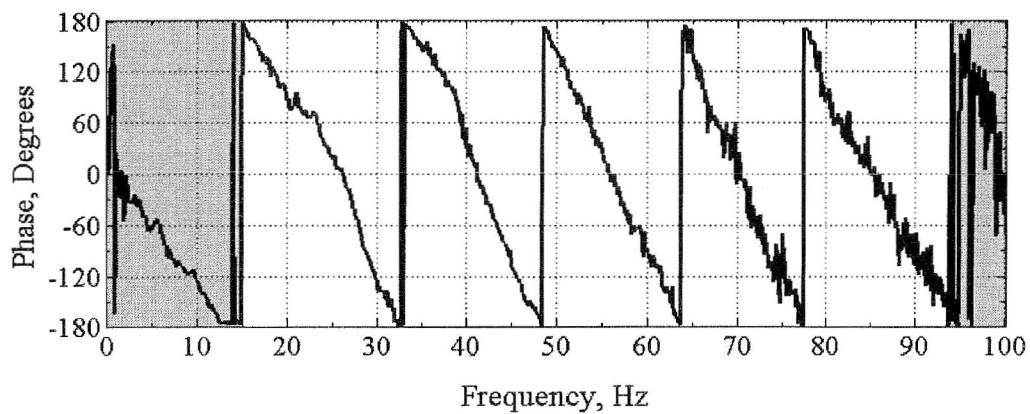


Figure T.24 Phase Plots Measured by SASW Testing with 30-ft Receiver Spacing (4G2_F_43.DAT)

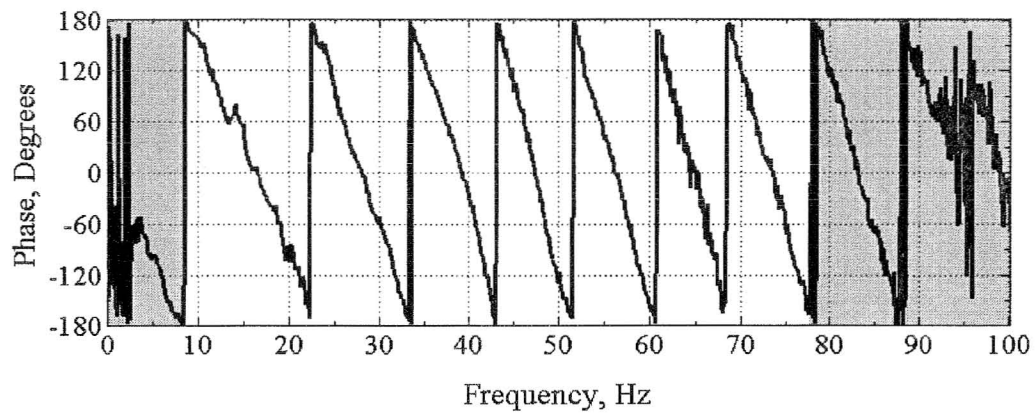


Figure T.25 Phase Plots Measured by SASW Testing with 50-ft Receiver Spacing (4G4_F_21.DAT)

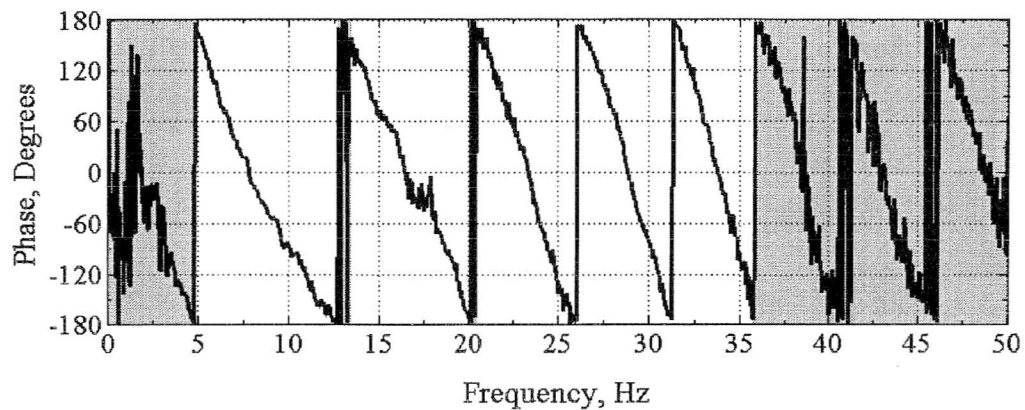


Figure T.26 Phase Plots Measured by SASW Testing with 100-ft Receiver Spacing (4G5_F_21.DAT)

Table T.1 Tables of Masking Parameters Used on Data Collected during Fourth Site Visit at Site A

Receiver Spacing (ft)	Masking Interval	Masking Start Frequency, Hz	Masking Stop Frequency, Hz	Number of Jumps	Filename
1	1	0	166	1	4A1_F_21.DAT
	2	415	800	-	
1	1	0	210	1	4A2_F_21.DAT
	2	310	800	-	
1	1	0	317	1	4A3_F_21.DAT
	2	382	800	-	
1	1	0	166	1	4A4_F_21.DAT
	2	301	800	-	
1	1	0	190	1	4A9_F_21.DAT
	2	414	800	-	
1	1	0	194	1	A10_F_21.DAT
	2	366	800	-	
2	1	0	140	1	4A2_F_43.DAT
	2	198	800	-	
2	1	0	123	1	4A4_F_43.DAT
	2	199	800	-	
2	1	0	104	1	4A9_F_43.DAT
	2	199	800	-	
2	1	0	105	1	A10_F_43.DAT
	2	118	145	1	
	3	231	800	-	
3	1	0	86	1	4A5_F_21.DAT
	2	247	400	-	
3	1	0	89.5	1	4A6_F_21.DAT
	2	197	400	-	
6	1	0	46.5	1	4A5_F_43.DAT
	2	103	400	-	
6	1	0	46	1	4A6_F_43.DAT
	2	91.5	400	-	
9	1	0	37.25	1	4A7_F_21.DAT
	2	77.25	200	-	
9	1	0	35.75	1	4A8_F_21.DAT
	2	80	100	-	

Performed by Yiabei
Yiabei Yuan

Checked by Yin-Cheng Lin
Yin-Cheng Lin

Table T.2 Tables of Masking Parameters Used on Data Collected during Fourth Site Visit at Site A (Continued)

Receiver Spacing (ft)	Masking Interval	Masking Start Frequency, Hz	Masking Stop Frequency, Hz	Number of Jumps	Filename
18	1	0	22.75	1	4A7_F_43.DAT
	2	91.5	200	-	
18	1	0	23.38	1	4A8_F_43.DAT
	2	29.5	31	1	
15	1	0	26.38	1	4G1_F_21.DAT
	2	94.75	100	-	
15	1	0	26.25	1	4G2_F_21.DAT
	2	54.62	56.62	2	
	3	82.75	85.12	3	
	4	97.38	100	-	
25	1	0	16.25	1	4G3_F_21.DAT
	2	73	100	-	
25	1	0	18	1	4G3_F_43.DAT
	2	55.38	56	3	
	3	71.38	100	-	
30	1	0	14.62	1	4G1_F_43.DAT
30	1	0	15	1	4G2_F_43.DAT
	2	32.5	33.25	2	
	3	93.5	100	-	
50	1	0	8.62	1	4G4_F_21.DAT
	2	33.25	33.75	3	
	3	77.5	100	-	
100	1	0	4.88	1	4G5_F_21.DAT
	2	12.69	13.44	2	
	3	20.06	20.5	3	
	4	35.69	50	-	

Performed by Jiabei Yuan
Jiabei Yuan

Checked by Yin-Cheng Lin
Yin-Cheng Lin

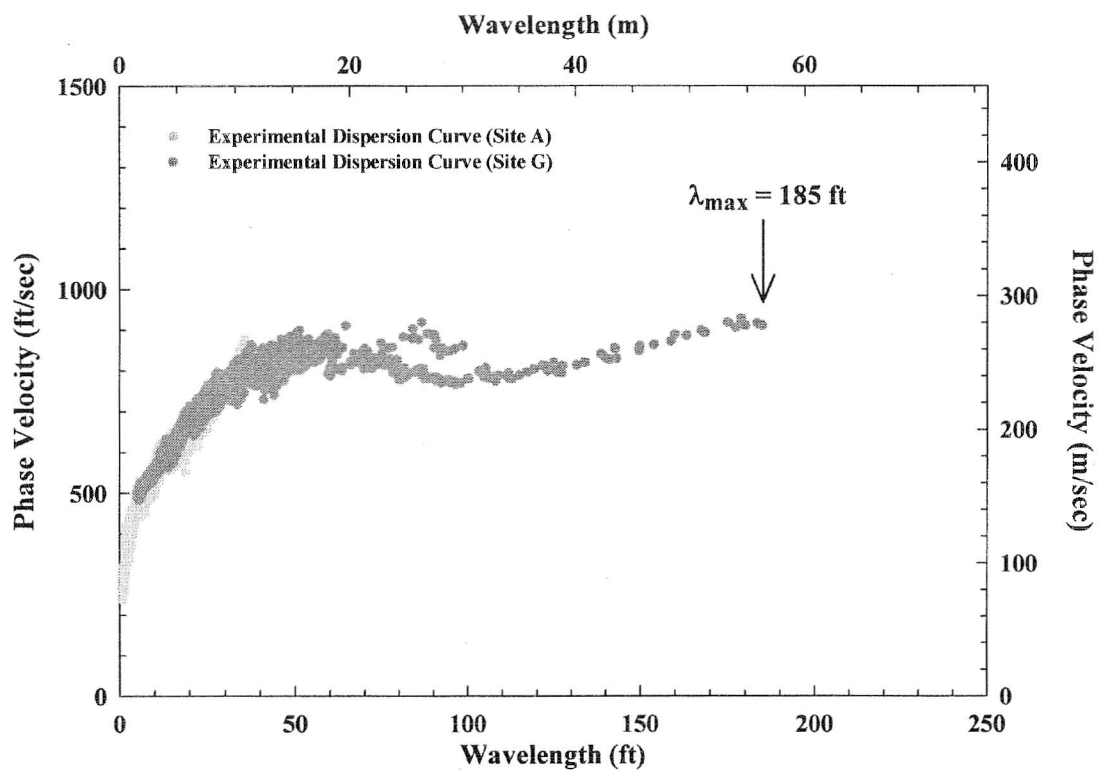


Figure T.27 Experimental Dispersion Curve Measured during Fourth Site Visit at Site A at Vogtle, GA; Linear Wavelength Axis

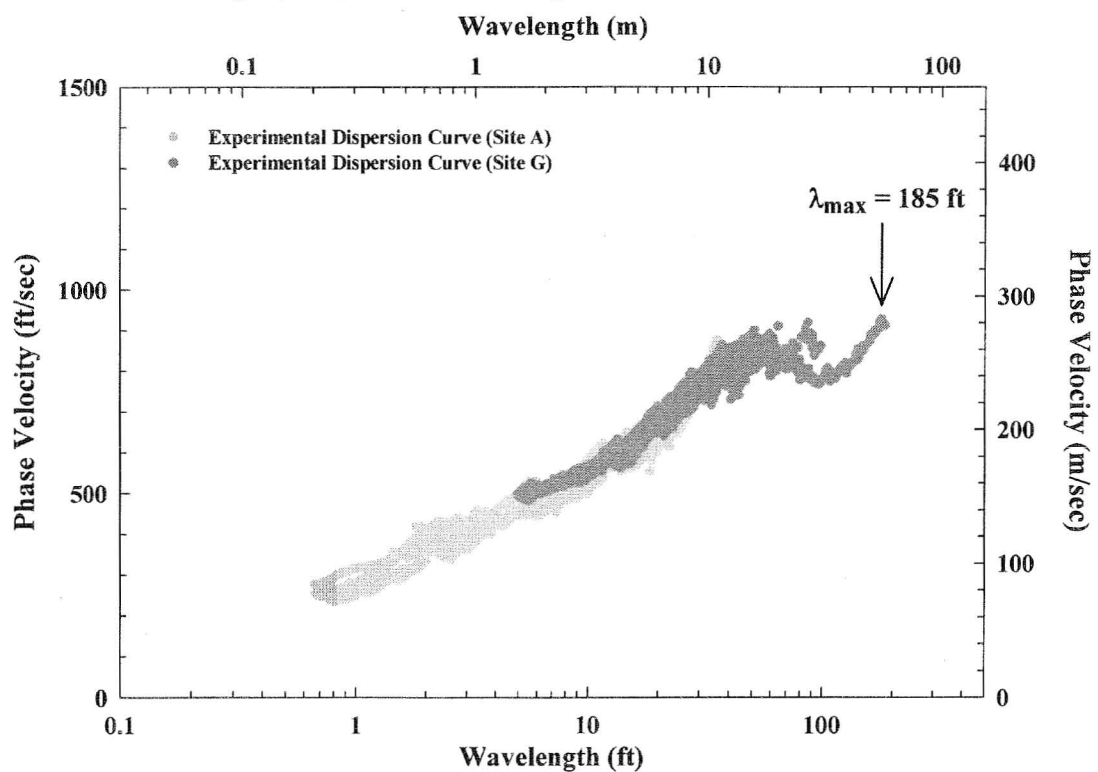


Figure T.28 Experimental Dispersion Curve Measured during Fourth Site Visit at Site A at Vogtle, GA; Logarithmic Wavelength Axis

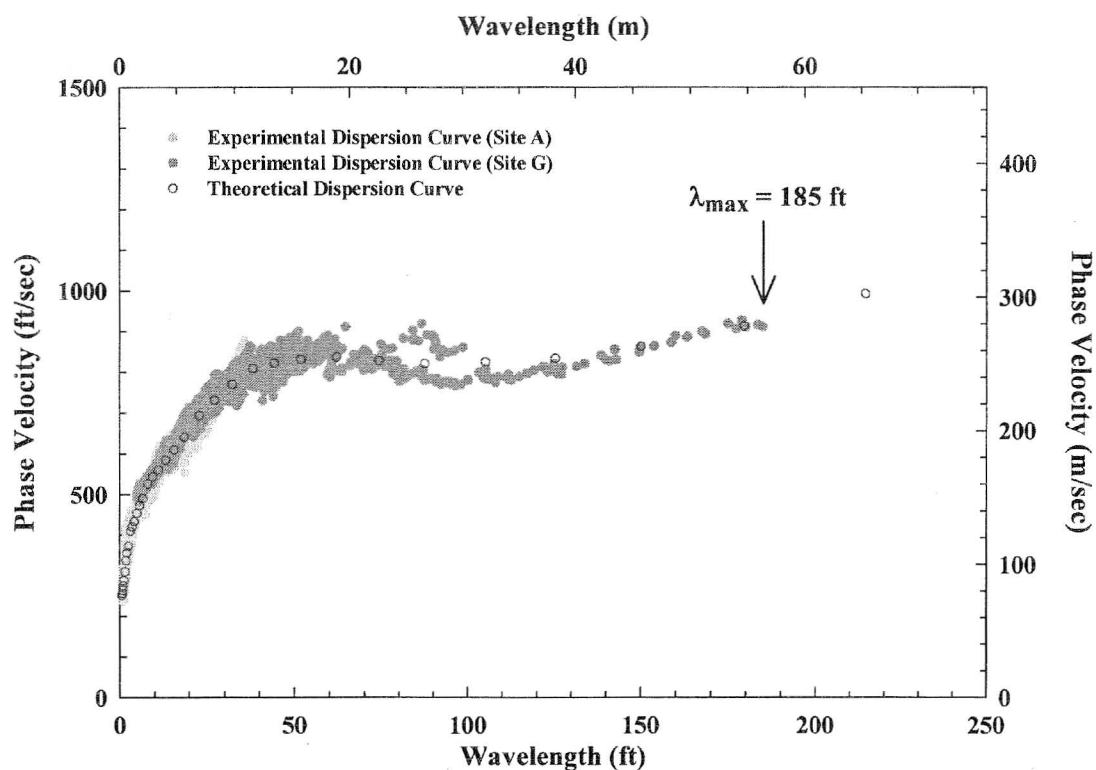


Figure T.29 Experimental and Theoretical Dispersion Curves from Site A in Fourth Site Visit at Vogtle, GA; Linear Wavelength Axis

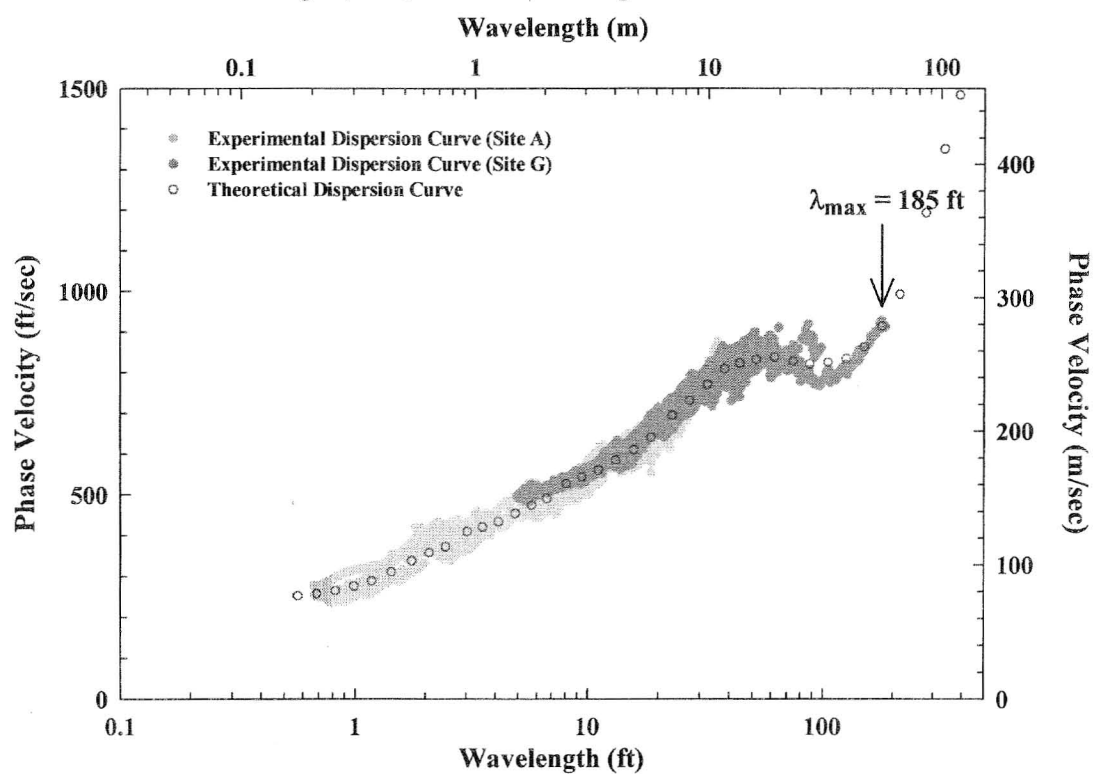


Figure T.30 Experimental and Theoretical Dispersion Curves from Site A in Fourth Site Visit at Vogtle, GA; Logarithmic Wavelength Axis

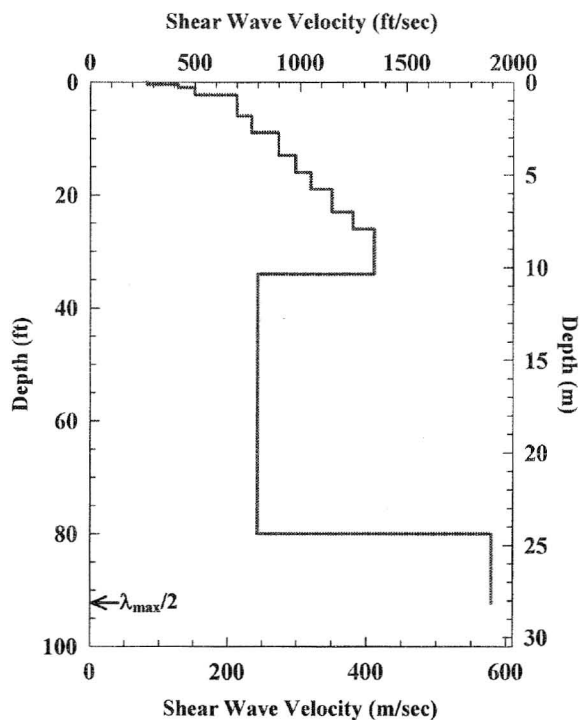


Figure T.31 Shear Wave Velocity Profile Determined at Site A during Fourth Site Visit at Vogtle, GA

Table T.3 Profile Parameters Used to Develop Preliminary Theoretical Dispersion Curve at Site A in the Fourth 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	0.5	0.0	270	0.24	462	128
2	0.5	0.5	420	0.24	718	128
3	1.3	1.0	500	0.24	855	128
4	3.7	2.3	700	0.24	1197	128
5	3.0	6.0	770	0.24	1317	128
6	4.0	9.0	900	0.24	1539	128
7	3.0	13.0	980	0.24	1676	128
8	3.0	16.0	1050	0.24	1795	128
9	4.0	19.0	1150	0.24	1966	128
10	3.0	23.0	1250	0.24	2137	128
11	8.0	26.0	1350	0.24	2308	128
12	46.0	34.0	800	0.24	1368	128
13 [#]	12.3	80.0	1900	0.42	5000	135
14 ^{*#}	17.7	92.3	2200	0.38	5000	135
15 ^{*#}	Half Space	110.0	2200	0.38	5000	135

* Layer below maximum depth of the V_s Profile.

Layer below water table.

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

Appendix U

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

1. Data Sheet(s).....	U.2
2. Phase Plots from SASW Tests.....	U.4
3. Table of Masking Parameters	U.11
4. Experimental Dispersion Curves	U.13
5. Matching the Experimental and Theoretical Dispersion Curves.....	U.14
6. Shear Wave Velocity Profile	U.15
7. Table of Profile Parameters	U.15

3 - Receiver SASW Data Sheet

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Project : Veggie

Data Sheet #: SA4 #2

Location : B(SA4#2)

Disk #: SA4 #2

Date/(Time) : Jan, 24, 2008 (: ~ :)

Personnel : Stokoe, Yuan, Minjae,

Sketch

Recorded by : Yuan

Checked by : Minjae

R1 I.D. : UT07-4.5Hz-04, GEC 92003 Near

R2 I.D. : UT07-4.5Hz-02, GEC 92002 Center

R3 I.D. : UT07-4.5Hz-03, GEC 92001 Far

Same for all sites

Distance (ft)			Impact Direction		Impact Source	Record #	Freq. Range (Hz)	Notes
S - R1	R1 - R2	R2 - R3						
1	1	2	For	Rev	small hammer	4B1	0 - 800	hammer on hammer
1	1	2	For	Rev	"	4B2	0 - 800	hammer on plate
1	1	2	For	Rev	"	4B3	0 - 800	" , very soft hit
1	1	2	For	Rev	"	4B4	0 - 800	" "
3	3	6	For	Rev	med	4B5	0 - 400	hammer on plate , soft hit
3	3	6	For	Rev	"	4B6	0 - 400	hammer on plate
3	3	6	For	Rev	"	4B7	0 - 400	"
9	9	18	For	Rev	ledge	4B8	0 - 100	"
9	9	18	For	Rev	"	4B9	0 - 100	"
			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 : Vogtle

Data Sheet # : SA4 #7

Location : G (SA4 #7)

Disk # : SA4 #7

Date/(Time) : Jan 24, 2008 : ~ :)

Personnel : Stokoe, Tuan, Minhjae

Recorded by : Tuan

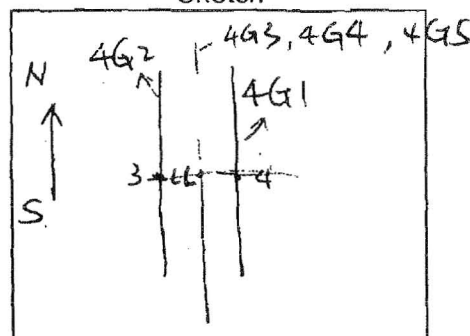
Checked by : Minjae

R1 I.D. : UT07-4.5Hz-04, GBC92003

R2 I.D. : UT07-4.5Hz-02, GBC92002

R3 I.D. : UT07-4.5Hz-03, GBC92001

Sketch



Distance (ft)			Impact Direction	Impact Source	Record #	Freq. Range	Notes
S - R1	R1 - R2	R2 - R3				(Hz)	
15	15	30	For	Rev	bulldozer	4G1	0 - 100
15	15	30	For	Rev	"	4G2	0 - 100
25	25	25	For	Rev	"	4G3	0 - 100
50	50	—	For	Rev	"	4G4	0 - 100
100	100	—	For	Rev	"	4G5	0 - 50
			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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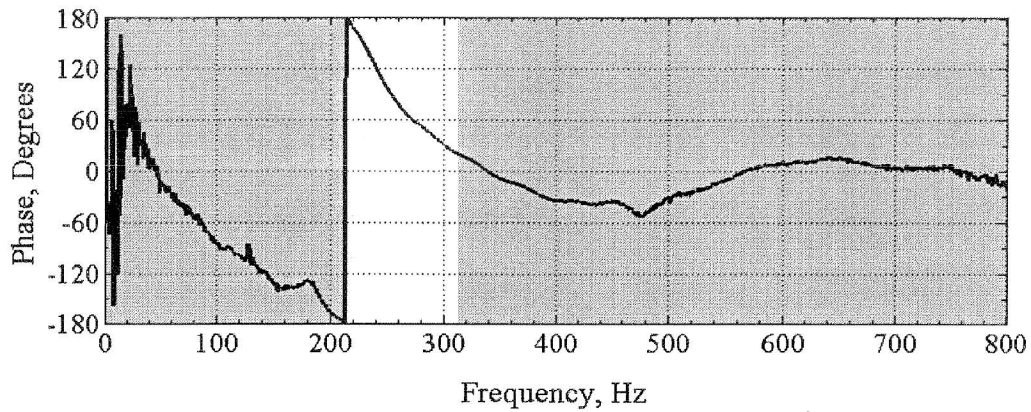


Figure U.1 Phase Plots Measured by SASW Testing with 1-ft Receiver Spacing (4B3_F_21.DAT)

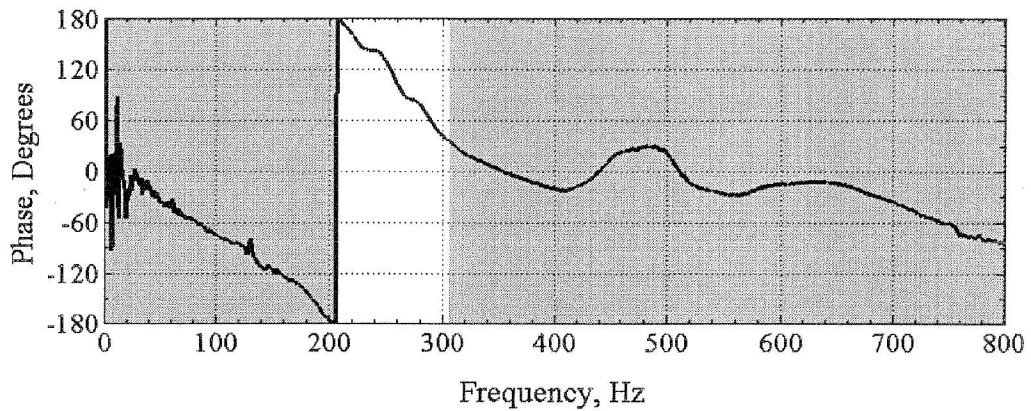


Figure U.2 Phase Plots Measured by SASW Testing with 1-ft Receiver Spacing (4B4_F_21.DAT)

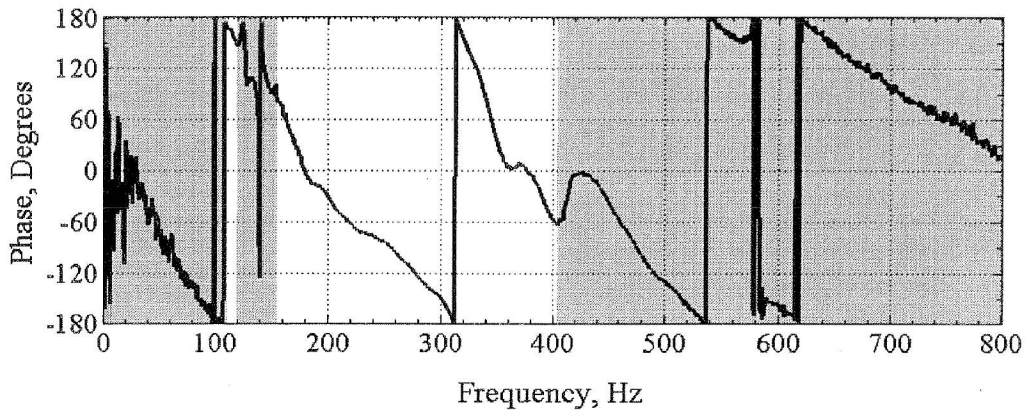


Figure U.3 Phase Plots Measured by SASW Testing with 2-ft Receiver Spacing (4B3_F_43.DAT)