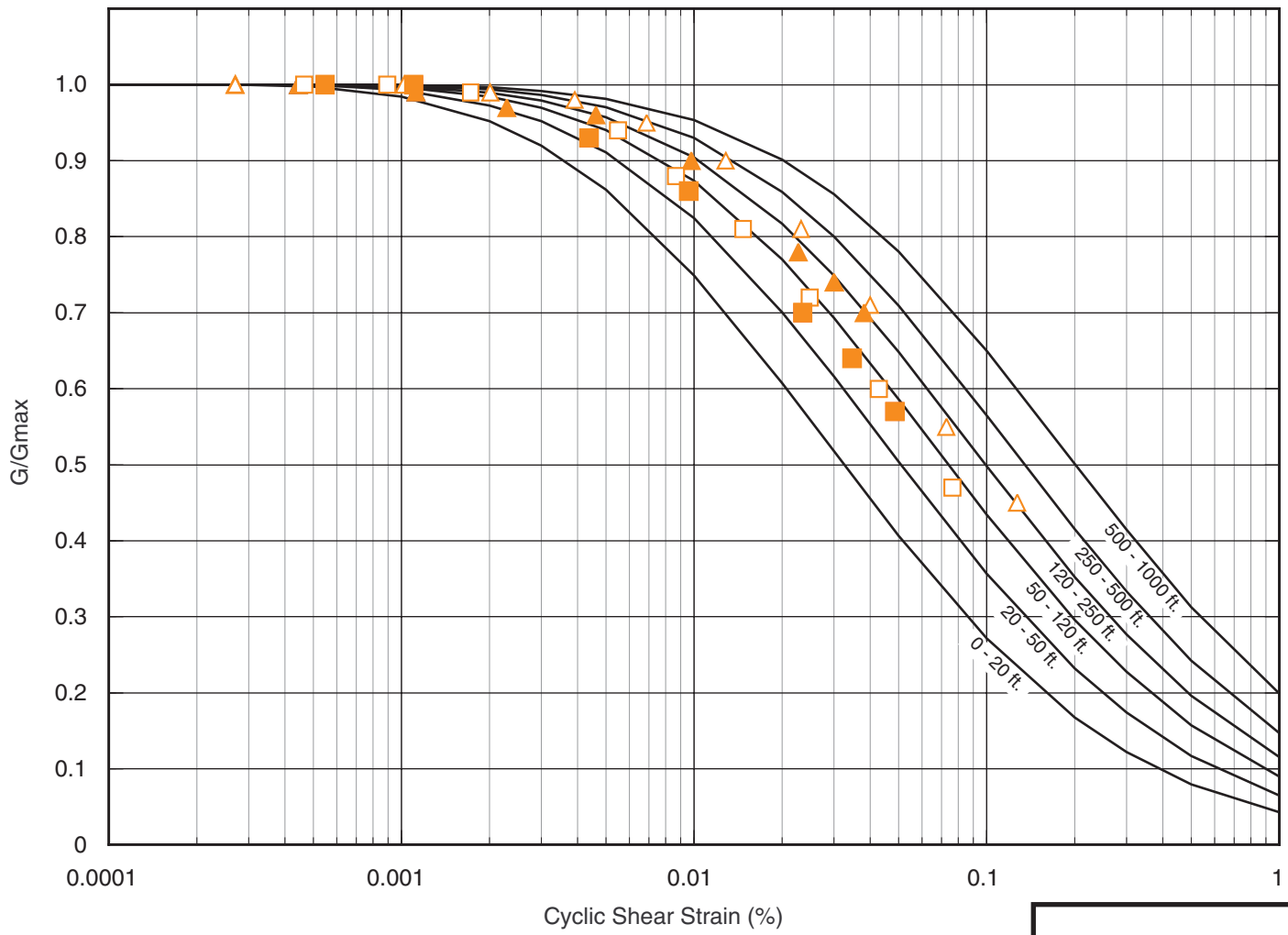

Note:
1. ksf = kips per square foot.
2. RC=Resonant Column test.
3. TS=Torsional Shear test.

Explanation

Loess

UTA Test No.	Confining Stress	Sample No.	Sample Depth
△ RC-2	(4.32 ksf);	B-2-11;	59 feet
▲ TS-2	(4.32 ksf);	B-2-11;	59 feet
□ RC-1	(2.30 ksf);	B-1-10;	30 feet
■ TS-1	(2.30 ksf);	B-1-10;	30 feet

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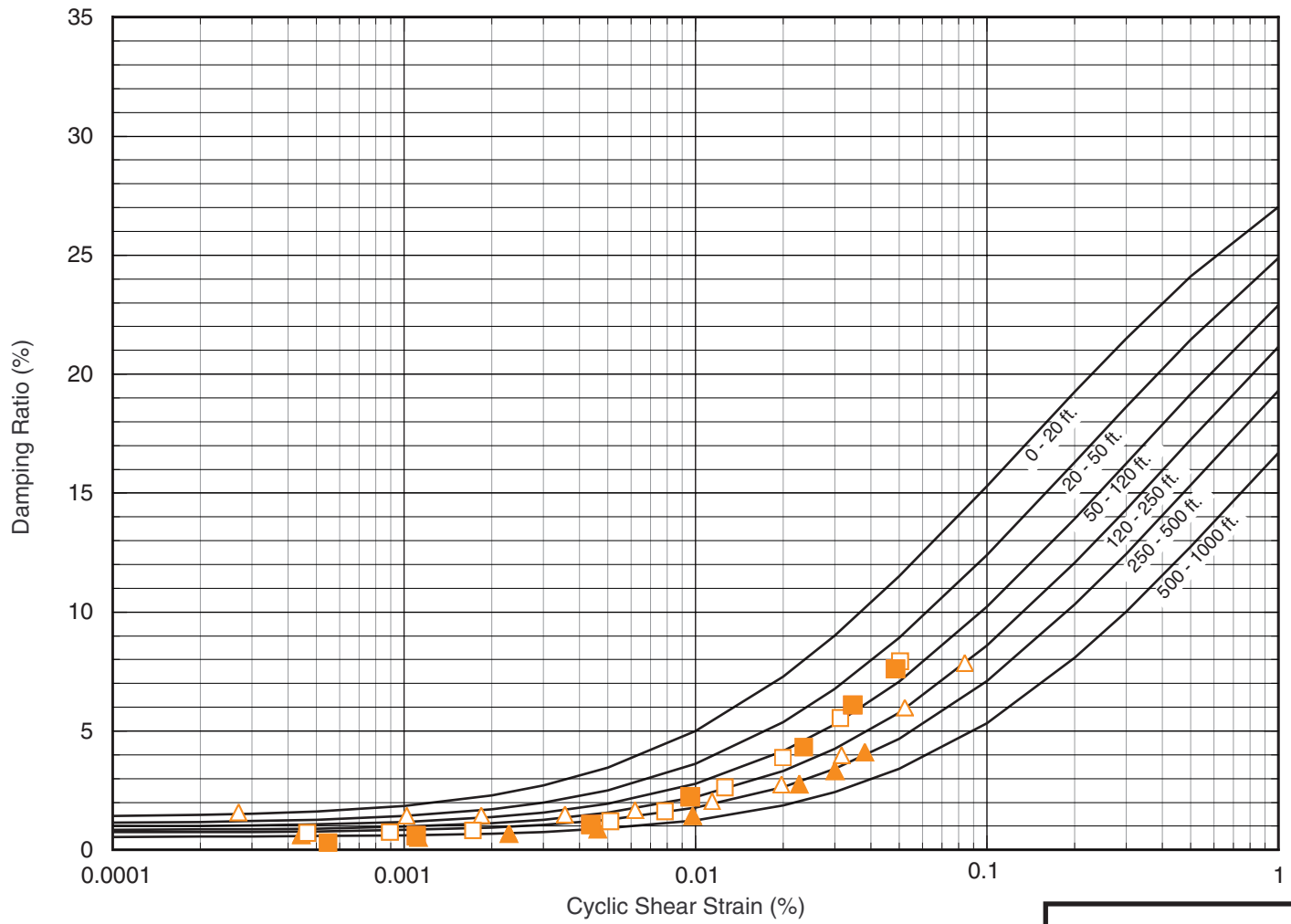
SHEAR MODULUS REDUCTON CURVES
FOR LOESS

FIGURE 2.5-87 REV. 0



Explanation

Loess

UTA Test No.	Confining Stress	Sample No.	Sample Depth
△ RC-2 (4.32 ksf); B-2-11; 59 feet			
▲ TS-2 (4.32 ksf); B-2-11; 59 feet			
□ RC-1 (2.30 ksf); B-1-10; 30 feet			
■ TS-1 (2.30 ksf); B-1-10; 30 feet			

Note:
1. ksf = kips per square foot.
2. RC=Resonant Column test.
3. TS=Torsional Shear test.

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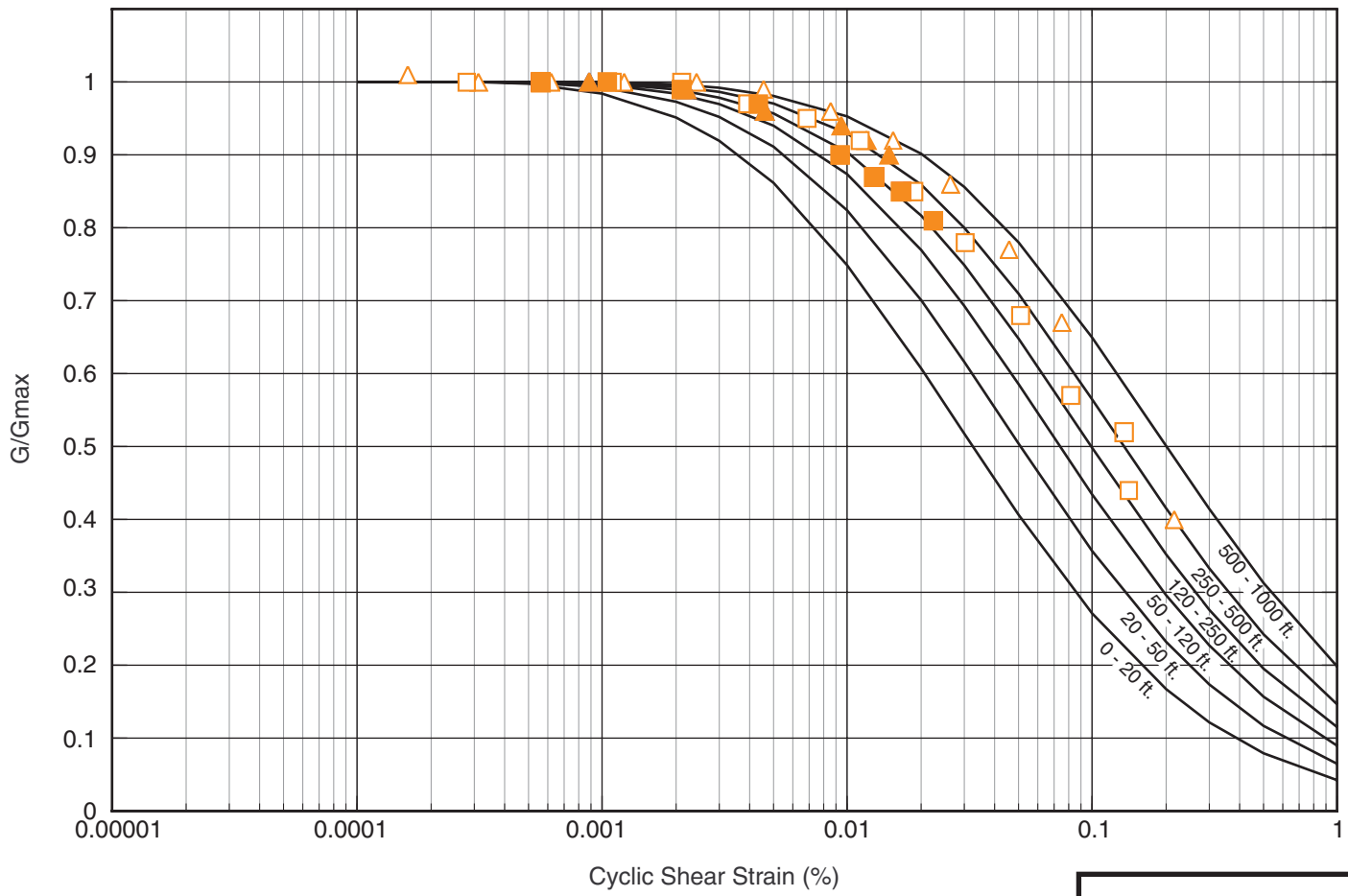
DAMPING RATIO CURVES
FOR LOESS

FIGURE 2.5-88 REV. 0



Note:
1. ksf = kips per square foot.
2. RC=Resonant Column test.
3. TS=Torsional Shear test.

Explanation

Loess

	UTA Test No.	Confining Stress	Sample No.	Sample Depth
△	RC-2	(17.28 ksf);	B-2-11;	59 feet
▲	TS-2	(17.28 ksf);	B-2-11;	59 feet
□	RC-1	(9.22 ksf);	B-1-10;	30 feet
■	TS-1	(9.22 ksf);	B-1-10;	30 feet

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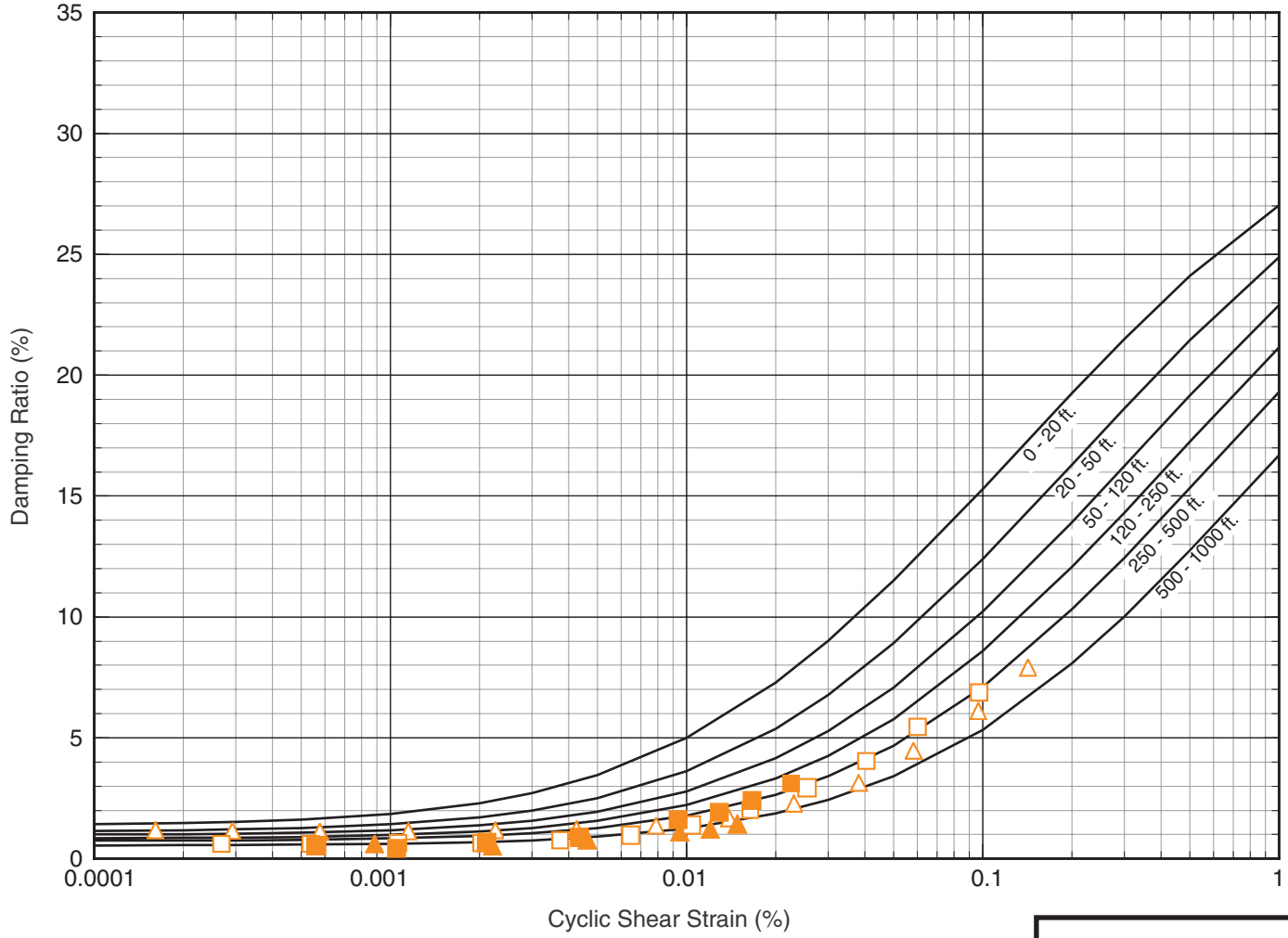
SHEAR MODULUS REDUCTON CURVES
FOR LOESS AT 4X CONFINING STRESS

FIGURE 2.5-89 REV. 0



Note:
1. ksf = kips per square foot.
2. RC=Resonant Column test.
3. TS=Torsional Shear test.

Explanation

Loess

	UTA Test No.	Confining Stress	Sample No.	Sample Depth
△	RC-2	(17.28 ksf);	B-2-11;	59 feet
▲	TS-2	(17.28 ksf);	B-2-11;	59 feet
□	RC-1	(9.22 ksf);	B-1-10;	30 feet
■	TS-1	(9.22 ksf);	B-1-10;	30 feet

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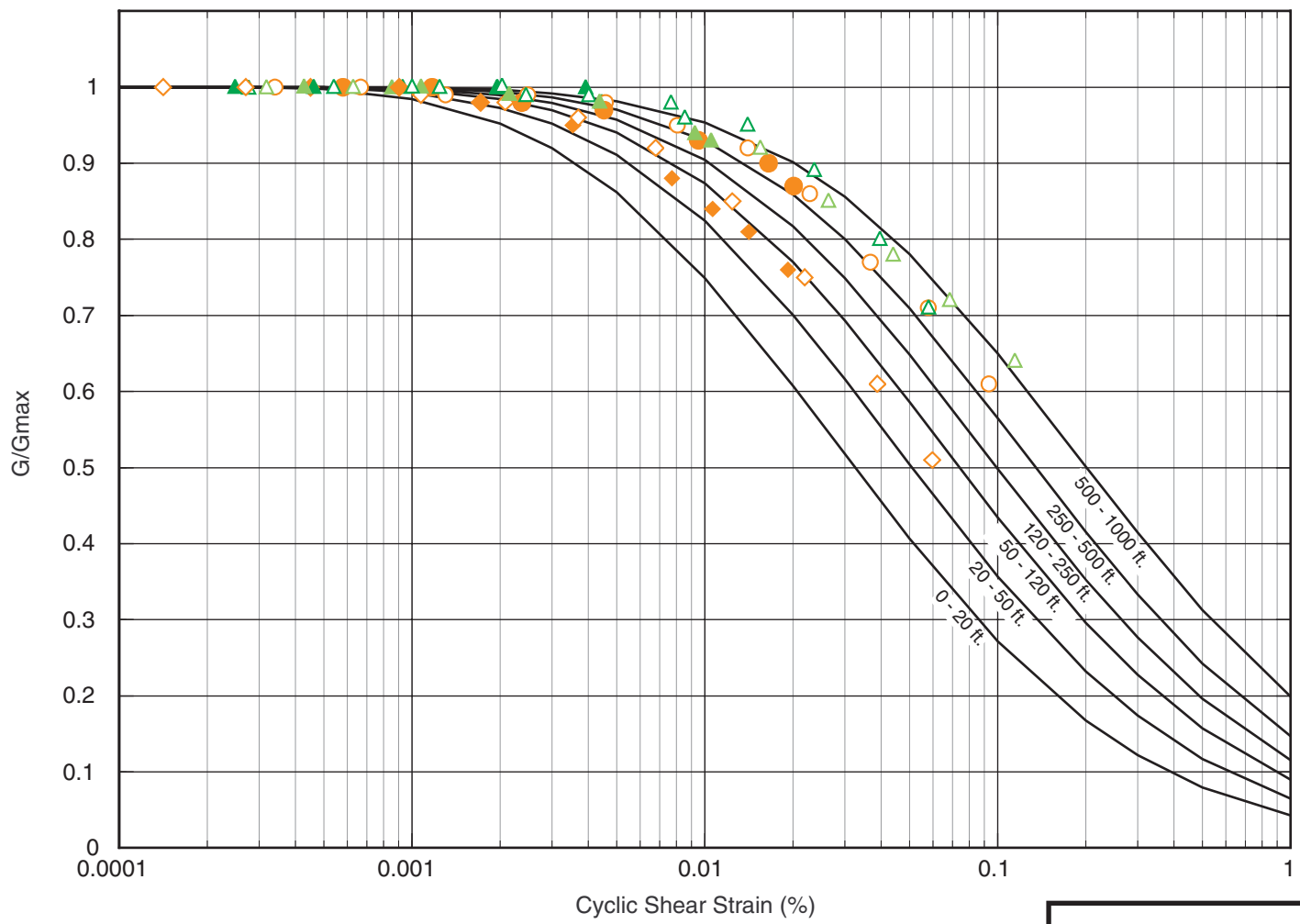
DAMPING RATIO CURVES FOR
LOESS AT 4X CONFINING STRESS

FIGURE 2.5-90 REV. 0



Explanation

Alluvium

UTA Test No.	Confining Stress	Sample No.	Sample Depth
○ RC-3 (7.92 ksf); B-1-21; 65 feet			
● TS-3 (7.92 ksf); B-1-21; 65 feet			
◇ RC-4 (8.64 ksf); B-3-13; 81 feet			
◆ TS-4 (8.64 ksf); B-3-131; 81 feet			

Old Alluvium

UTA Test No.	Confining Stress	Sample No.	Sample Depth
△ RC-6 (12.96 ksf); B-2-11; 165 feet			
▲ TS-6 (12.96 ksf); B-2-11; 165 feet			
△ RC-5 (10.37 ksf); B-2-11; 109 feet			
▲ TS-5 (10.37 ksf); B-2-11; 109 feet			

Note:
1. ksf = kips per square foot.
2. RC=Resonant Column test.
3. TS=Torsional Shear test.

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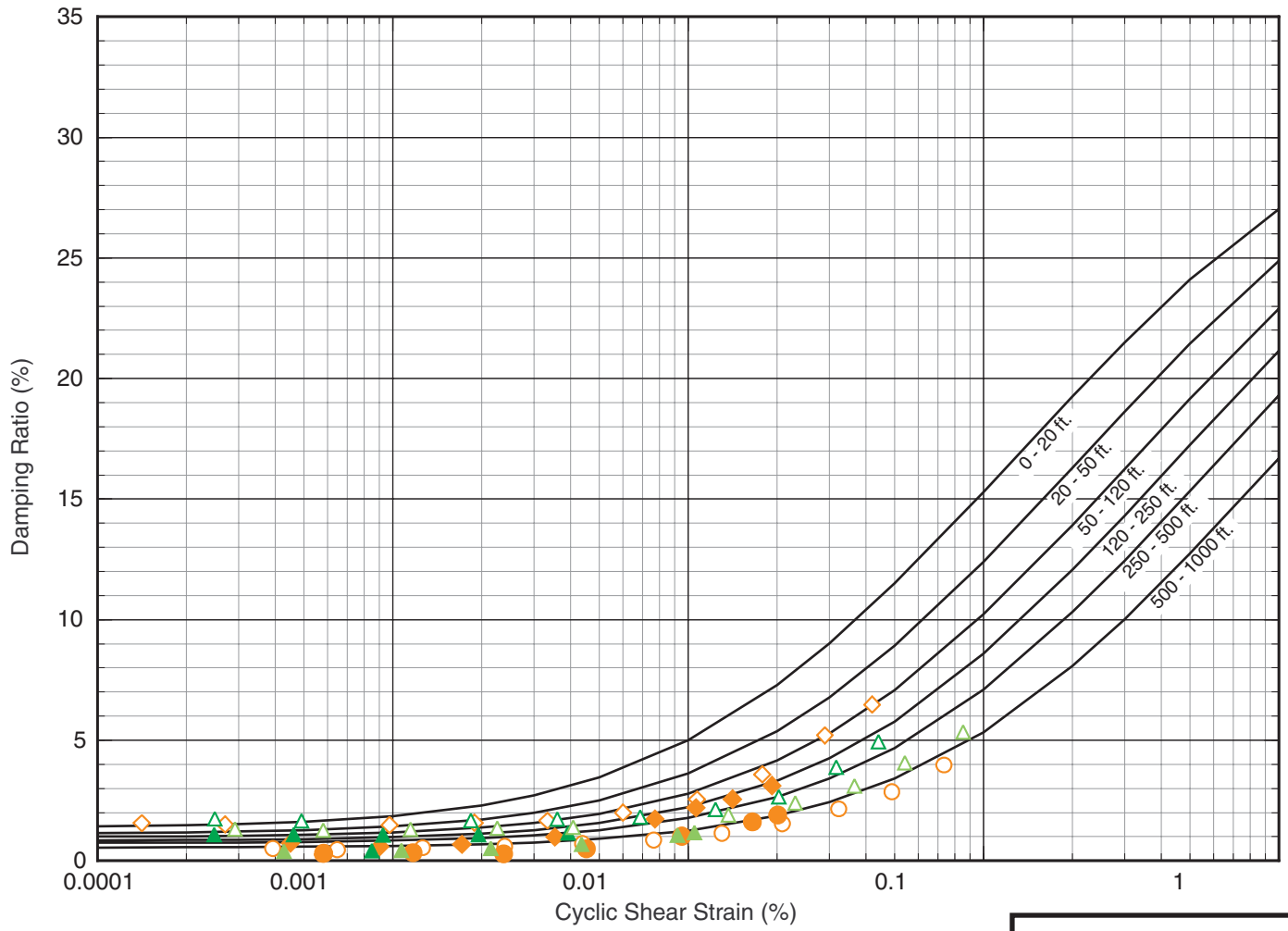
SHEAR MODULUS REDUCTION CURVES
FOR UPLAND COMPLEX ALLUVIUM
AND OLD ALLUVIUM

FIGURE 2.5-91 REV. 0



Note:
1. ksf = kips per square foot.
2. RC=Resonant Column test.
3. TS=Torsional Shear test.

Explanation

Alluvium

UTA Test No.	Confining Stress	Sample No.	Sample Depth
○ RC-3	(7.92 ksf);	B-1-21;	65 feet
● TS-3	(7.92 ksf);	B-1-21;	65 feet
◇ RC-4	(8.64 ksf);	B-3-13;	81 feet
◆ TS-4	(8.64 ksf);	B-3-13;	59 feet

Old Alluvium

UTA Test No.	Confining Stress	Sample No.	Sample Depth
△ RC-6	(12.96 ksf);	B-1-43;	165 feet
▲ TS-6	(12.96 ksf);	B-1-43;	165 feet
△ RC-5	(10.37 ksf);	B-2-16;	109 feet
▲ TS-5	(10.37 ksf);	B-2-16;	109 feet

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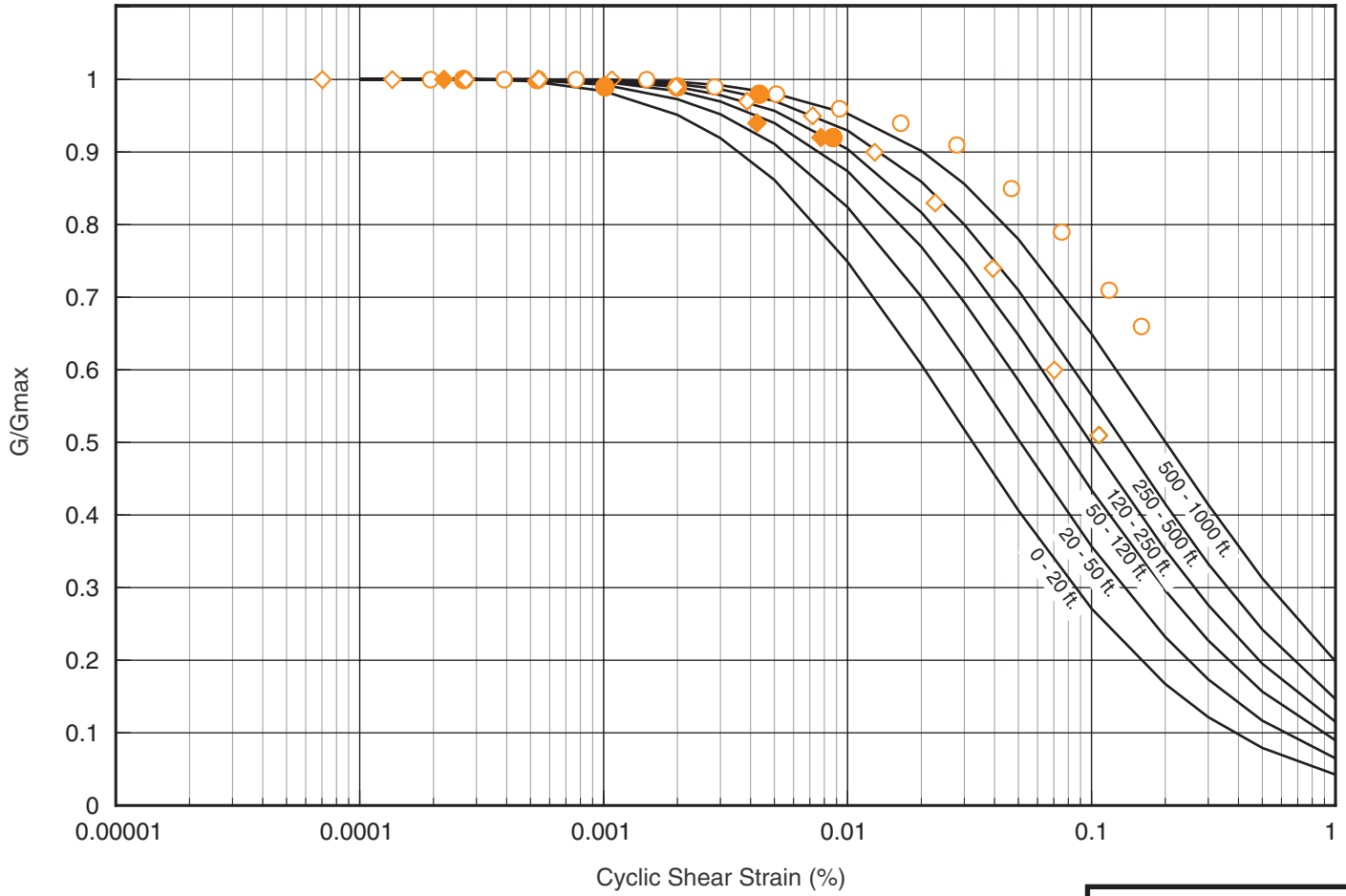
DAMPING RATIO CURVES FOR
UPLAND COMPLEX ALLUVIUM
AND OLD ALLUVIUM

FIGURE 2.5-92 REV. 0



Note:
1. ksf = kips per square foot.
2. RC=Resonant Column test.
3. TS=Torsional Shear test.

Explanation
Alluvium

	UTA Test No.	Confining Stress	Sample No.	Sample Depth
○	RC-3	(7.92 ksf);	B-1-21;	65 feet
●	TS-3	(7.92 ksf);	B-1-21;	65 feet
◇	RC-4	(8.64 ksf);	B-3-13;	81 feet
◆	TS-4	(8.64 ksf);	B-3-13;	81 feet

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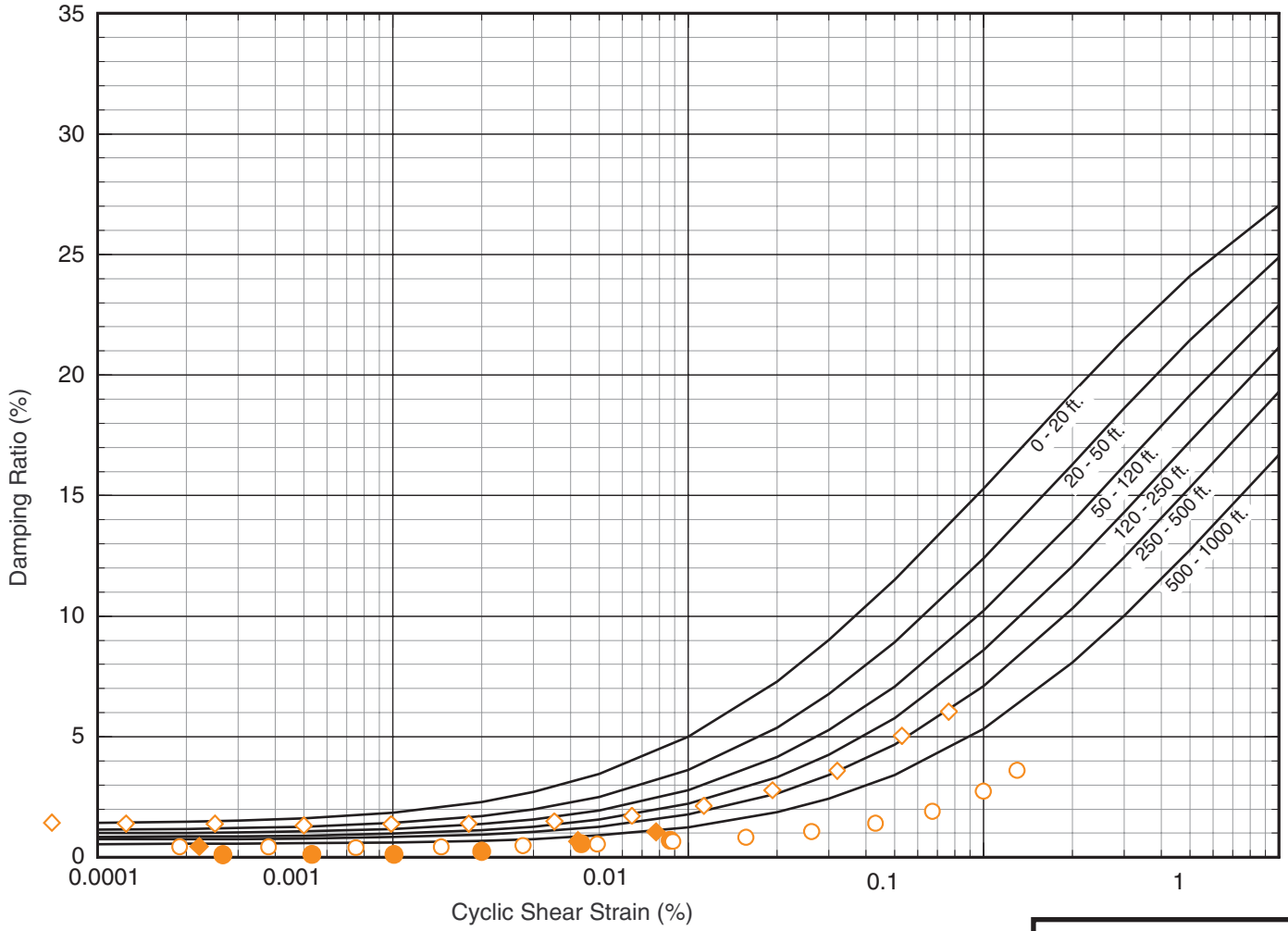
SHEAR MODULUS REDUCTION CURVES
FOR UPLAND COMPLEX ALLUVIUM AT
4X CONFINING STRESS

FIGURE 2.5-93 REV. 0



Note:
1. ksf = kips per square foot.
2. RC=Resonant Column test.
3. TS=Torsional Shear test.

Explanation

Alluvium

	UTA Test No.	Confining Stress	Sample No.	Sample Depth
○	RC-3	(7.92 ksf);	B-1-21;	65 feet
●	TS-3	(7.92 ksf);	B-1-21;	65 feet
◆	RC-4	(8.64 ksf);	B-3-13;	81 feet
◆	TS-4	(8.64 ksf);	B-3-13;	81 feet

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DAMPING RATIO CURVES FOR
UPLAND COMPLEX ALLUVIUM AT 4X
CONFINING STRESS

FIGURE 2.5-94 REV. 0

1522d Grand Gulf