

# Clay Liner Material Source

Aggregation Method: Dominant Condition  
Tie-break Rule: Higher

Ontario County, New York  
Survey Area Version and Date: 23 - 09/05/2023

Map symbol	Map unit name	Rating	Component name and % composition Rating reasons
1A	Fluvaquents-Udifuvents complex, 0 to 3 percent slopes, frequently flooded	Poor	Fluvaquents, frequently flooded 45% Wetness Flooding Area reclaim difficult Hard to pack Small stones Udifuvents, frequently flooded 40% Wetness Flooding Area reclaim difficult Hard to pack Small stones Wayland 10% Wetness Flooding Hard to pack Area reclaim difficulty Naples Creek 5% Wetness Flooding Hard to pack Area reclaim difficulty
2A	Geneseo silty clay loam, 0 to 3 percent slopes	Poor	Geneseo 90% Wetness Flooding Hard to pack Area reclaim difficulty Small stone content Naples Creek 10% Wetness Flooding Hard to pack Area reclaim difficulty
3A	Hemlock silty clay loam, 0 to 3 percent slopes	Poor	Hemlock 90% Wetness Flooding Hard to pack Area reclaim difficulty Small stone content Naples Creek 10% Wetness Flooding Hard to pack Area reclaim difficulty
4A	Naples Creek silty clay loam, 0 to 3 percent slopes	Poor	Naples Creek 90% Wetness Flooding Hard to pack Area reclaim difficulty Wayland 5% Wetness Flooding Hard to pack Area reclaim difficulty Hemlock 5% Wetness Flooding Hard to pack Area reclaim difficulty Small stone content

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5A	Wayland soils complex, 0 to 3 percent slopes, frequently flooded	Poor	Wayland 60% Wetness Flooding Hard to pack Area reclaim difficulty Wayland, very poorly drained 30% Wetness Flooding Ponding Hard to pack Area reclaim difficulty Wakeville 10% Hard to pack Wetness Flooding Small stone content Area reclaim difficulty
12D	Rockriff channery silt loam, 15 to 25 percent slopes	Poor	Rockriff 85% Small stones Slope Large stones Hard to pack Area reclaim difficulty Mongaup, very stony 10% Slope Large stones Small stones Hard to pack Layer thickness 50-170cm Willdin 5% Hard to pack Slope Wetness Large stones Small stones
13F	Rock outcrop-Arnot complex, 25 to 70 percent slopes	Not rated	Rock outcrop 55%
14D	Cadosia channery silt loam, 15 to 25 percent slopes	Poor	Cadosia 85% Slope Large stones Small stones Hard to pack Area reclaim difficulty Lordstown, very stony 10% Slope Large stones Hard to pack Small stones Layer thickness 50-170cm Mardin 5% Hard to pack Slope Wetness Large stones Small stones

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Map symbol	Map unit name	Rating	Component name and % composition Rating reasons
15A	Guyanoga channery silt loam, fan, 0 to 3 percent slopes	Poor	Guyanoga, fan 90% Large stones Hard to pack Small stones Wetness Area reclaim difficulty Chenango, fan 5% Hard to pack Small stones Large stones Wetness Area reclaim difficulty Hemlock 5% Wetness Flooding Hard to pack Area reclaim difficulty Small stone content
15B	Guyanoga channery silt loam, fan, 3 to 8 percent slopes	Poor	Guyanoga, fan 90% Large stones Hard to pack Small stones Wetness Slope Hemlock 5% Wetness Flooding Hard to pack Area reclaim difficulty Small stone content Chenango, fan 5% Hard to pack Small stones Large stones Wetness Area reclaim difficulty
16A	Almond channery silt loam, 0 to 3 percent slopes	Poor	Almond 80% Wetness Large stones Hard to pack Small stone content Area reclaim difficulty Norchip 8% Wetness Hard to pack Small stones Large stones Area reclaim difficulty Ontusia 7% Wetness Large stones Hard to pack Small stones Gretor 5% Wetness Large stones Small stones Hard to pack Layer thickness 50-170cm

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16B	Almond channery silt loam, 3 to 8 percent slopes	Poor	Almond 80% Wetness Large stones Hard to pack Small stone content Slope Gretor 5% Slope Wetness Large stones Small stones Hard to pack Salamanca 5% Slope Wetness Large stones Small stones Hard to pack Ontusia 5% Wetness Large stones Hard to pack Small stones Slope Norchip 5% Wetness Hard to pack Small stones Large stones Area reclaim difficulty
16C	Almond channery silt loam, 8 to 15 percent slopes	Poor	Almond 80% Slope Wetness Large stones Hard to pack Small stone content Salamanca 5% Slope Wetness Large stones Small stones Hard to pack Norchip 5% Wetness Hard to pack Small stones Large stones Area reclaim difficulty Ontusia 5% Slope Wetness Large stones Hard to pack Small stones Gretor 5% Slope Wetness Large stones Small stones Hard to pack

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18A	Homer fine sandy loam, 0 to 3 percent slopes	Poor	Homer 90% Hard to pack Wetness Small stones Large stones favorable Area reclaim difficulty Phelps 5% Hard to pack Small stones Wetness Large stones favorable Area reclaim difficulty Fine-loamy, mixed, active, mesic Typic Argiaquolls 5% Wetness Hard to pack Small stones Large stones Area reclaim difficulty
19A	Fine-loamy, mixed, active, mesic, Typic Argiaquolls, 0 to 3 percent slopes	Poor	Fine-loamy, mixed, active, mesic Typic Argiaquolls 80% Wetness Ponding Hard to pack Small stones Large stones Homer 8% Hard to pack Wetness Small stones Large stones favorable Area reclaim difficulty Atherton 7% Wetness Hard to pack Small stones Large stones favorable Area reclaim difficulty Palms, undrained 5% Hard to pack Small stones Wetness Ponding Area reclaim difficult

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20A	Atherton and Fine-loamy, mixed, active, mesic, Typic Argiaquolls, 0 to 3 percent slopes	Poor	Atherton 41% Wetness Hard to pack Small stones Large stones favorable Area reclaim difficulty Fine-loamy, mixed, active, mesic Typic Argiaquolls 39% Wetness Ponding Hard to pack Small stones Large stones Homer 8% Hard to pack Wetness Small stones Large stones favorable Area reclaim difficulty Canandaigua 7% Wetness Hard to pack Area reclaim difficulty Castile 5% Hard to pack Small stones Wetness Large stones Area reclaim difficulty
24A	Howard gravelly loam, 0 to 3 percent slopes	Poor	Howard 80% Hard to pack Small stones Large stones favorable Area reclaim difficulty Palmyra 10% Hard to pack Small stones Area reclaim difficulty Large stones favorable Arkport 5% Hard to pack Area reclaim difficult Phelps 5% Hard to pack Small stones Wetness Large stones favorable Area reclaim difficulty

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Map symbol	Map unit name	Rating	Component name and % composition Rating reasons
24B	Howard gravelly loam, 3 to 8 percent slopes	Poor	Howard 80% Hard to pack Small stones Large stones favorable Slope Area reclaim difficulty Palmyra 10% Hard to pack Small stones Large stones Slope Area reclaim difficulty Arkport 5% Hard to pack Area reclaim difficult Slope Phelps 5% Hard to pack Small stones Wetness Large stones favorable Slope
24C	Howard gravelly loam, 8 to 15 percent slopes	Poor	Howard 80% Hard to pack Small stones Slope Large stones favorable Area reclaim difficulty Palmyra 10% Hard to pack Small stones Slope Large stones Area reclaim difficulty Arkport 5% Hard to pack Slope Area reclaim difficult Phelps 5% Hard to pack Small stones Wetness Large stones favorable Area reclaim difficulty

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24D	Howard soils, 15 to 25 percent slopes	Poor	Howard 65% Hard to pack Small stones Slope Large stones favorable Area reclaim difficulty Palmyra 20% Hard to pack Small stones Slope Large stones Area reclaim difficulty Arkport 13% Hard to pack Slope Area reclaim difficult Phelps 2% Hard to pack Small stones Wetness Large stones favorable Area reclaim difficulty
25A	Chenango gravelly loam, 0 to 3 percent slopes	Poor	Chenango 90% Hard to pack Small stones Large stones Area reclaim difficulty Castile 8% Hard to pack Small stones Wetness Large stones Area reclaim difficulty Valois 2% Hard to pack Small stones Large stones Area reclaim difficulty
25B	Chenango gravelly loam, 3 to 8 percent slopes	Poor	Chenango 90% Hard to pack Small stones Large stones Slope Area reclaim difficulty Castile 5% Hard to pack Small stones Wetness Large stones Slope Valois 5% Hard to pack Small stones Large stones Slope Area reclaim difficulty



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25C	Chenango gravelly loam, 8 to 15 percent slopes	Poor	Chenango 90% Hard to pack Small stones Slope Large stones Area reclaim difficulty Castile 5% Hard to pack Small stones Slope Wetness Large stones Valois 5% Hard to pack Small stones Slope Large stones Area reclaim difficulty
25D	Chenango gravelly loam, 15 to 25 percent slopes	Poor	Chenango 90% Hard to pack Small stones Slope Large stones Area reclaim difficulty Castile 8% Hard to pack Small stones Slope Wetness Large stones Valois 2% Hard to pack Small stones Slope Large stones Area reclaim difficulty
25E	Chenango gravelly loam, 25 to 35 percent slopes	Poor	Chenango 90% Hard to pack Small stones Slope Large stones Area reclaim difficulty Valois 10% Hard to pack Small stones Slope Large stones Area reclaim difficulty

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26B	Chenango channery loam, fan, 3 to 8 percent slopes	Poor	Chenango, fan 85% Hard to pack Small stones Large stones Wetness Area reclaim difficulty Guyanoga, fan 5% Large stones Hard to pack Small stones Wetness Slope Castile 5% Hard to pack Small stones Wetness Large stones Slope Hemlock 5% Wetness Flooding Hard to pack Area reclaim difficulty Small stone content
27B	Castile gravelly silt loam, 3 to 8 percent slopes	Poor	Castile 85% Hard to pack Small stones Wetness Large stones Slope Phelps 5% Hard to pack Small stones Wetness Large stones favorable Area reclaim difficulty Chenango 5% Hard to pack Small stones Large stones Slope Area reclaim difficulty Homer 5% Hard to pack Wetness Small stones Large stones favorable Area reclaim difficulty
31A	Collamer silt loam, 0 to 3 percent slopes	Poor	Collamer 85% Hard to pack Wetness Area reclaim difficulty Niagara 10% Wetness Hard to pack Area reclaim difficulty Small stone content Schoharie 5% Wetness Area reclaim difficulty Hard to pack

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31B	Collamer silt loam, 3 to 8 percent slopes	Poor	Collamer 85% Wetness Hard to pack Slope Area reclaim difficulty Small stone content Niagara 10% Wetness Hard to pack Slope Area reclaim difficulty Small stone content Schoharie 5% Wetness Area reclaim difficulty Slope Hard to pack
31C	Collamer silt loam, 8 to 15 percent slopes	Poor	Collamer 85% Slope Wetness Hard to pack Area reclaim difficulty Small stone content Niagara 10% Wetness Hard to pack Slope Area reclaim difficulty Small stone content Schoharie 5% Slope Wetness Area reclaim difficulty Hard to pack
31D	Collamer silt loam, 15 to 25 percent slopes	Poor	Collamer 90% Slope Wetness Hard to pack Area reclaim difficulty Small stone content Schoharie 5% Slope Wetness Area reclaim difficulty Hard to pack Niagara 5% Slope Wetness Hard to pack Area reclaim difficulty Small stone content

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32A	Dunkirk fine sandy loam, 0 to 3 percent slopes	Poor	Dunkirk 90% Hard to pack Area reclaim difficulty Arkport 4% Hard to pack Area reclaim difficult Schoharie 3% Wetness Area reclaim difficulty Hard to pack Niagara 3% Wetness Hard to pack Area reclaim difficulty Small stone content
32B	Dunkirk fine sandy loam, 3 to 8 percent slopes	Poor	Dunkirk 90% Hard to pack Area reclaim difficulty Slope Arkport 4% Hard to pack Area reclaim difficult Slope Schoharie 3% Wetness Area reclaim difficulty Slope Hard to pack Niagara 3% Wetness Hard to pack Slope Area reclaim difficulty Small stone content
33A	Dunkirk silt loam, 0 to 3 percent slopes	Poor	Dunkirk 90% Hard to pack Area reclaim difficulty Small stone content Arkport 4% Hard to pack Area reclaim difficult Niagara 3% Wetness Hard to pack Area reclaim difficulty Small stone content Schoharie 3% Wetness Area reclaim difficulty Hard to pack

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33B	Dunkirk silt loam, 3 to 8 percent slopes	Poor	Dunkirk 90% Hard to pack Slope Area reclaim difficulty Small stone content Arkport 4% Hard to pack Area reclaim difficult Slope Schoharie 3% Wetness Area reclaim difficulty Slope Hard to pack Niagara 3% Wetness Hard to pack Slope Area reclaim difficulty Small stone content
33C	Dunkirk silt loam, 8 to 15 percent slopes	Poor	Dunkirk 90% Slope Hard to pack Area reclaim difficulty Small stone content Arkport 4% Hard to pack Slope Area reclaim difficult Schoharie 3% Slope Wetness Area reclaim difficulty Hard to pack Niagara 3% Wetness Hard to pack Slope Area reclaim difficulty Small stone content
33D	Dunkirk silt loam, 15 to 25 percent slopes	Poor	Dunkirk 90% Slope Hard to pack Area reclaim difficulty Small stone content Schoharie 5% Slope Wetness Area reclaim difficulty Hard to pack Arkport 5% Hard to pack Slope Area reclaim difficult

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33E	Dunkirk silt loam, 25 to 35 percent slopes	Poor	Dunkirk 90% Slope Hard to pack Area reclaim difficulty Small stone content Schoharie 5% Slope Wetness Area reclaim difficulty Hard to pack Arkport 5% Hard to pack Slope Area reclaim difficult
34A	Lakemont silty clay loam, 0 to 3 percent slopes	Poor	Lakemont 85% Wetness Area reclaim difficulty Hard to pack Odessa 5% Wetness Hard to pack Area reclaim difficulty Fonda 4% Wetness Ponding Area reclaim difficulty Hard to pack Canandaigua 4% Wetness Hard to pack Area reclaim difficulty Barre 2% Wetness Hard to pack Small stone content Area reclaim difficulty Large stones favorable
35A	Odessa silt loam, 0 to 3 percent slopes	Poor	Odessa 85% Wetness Hard to pack Area reclaim difficulty Lakemont 5% Wetness Hard to pack Area reclaim difficulty Schoharie 5% Wetness Hard to pack Area reclaim difficulty Churchville 3% Wetness Hard to pack Small stone content Area reclaim difficulty Large stones favorable Rhinebeck 2% Wetness Area reclaim difficulty Hard to pack Small stone content

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35B	Odessa silty clay loam, 3 to 8 percent slopes	Poor	Odessa 85% Wetness Area reclaim difficulty Hard to pack Slope Schoharie 6% Wetness Slope Hard to pack Area reclaim difficulty Lakemont 4% Wetness Area reclaim difficulty Hard to pack Churchville 3% Wetness Hard to pack Small stone content Slope Area reclaim difficulty Rhinebeck 2% Wetness Area reclaim difficulty Slope Hard to pack Small stone content
36A	Schoharie silty clay loam, 0 to 3 percent slopes	Poor	Schoharie 85% Wetness Hard to pack Area reclaim difficulty Cazenovia 5% Hard to pack Wetness Small stone content Large stones favorable Area reclaim difficulty Odessa 5% Wetness Area reclaim difficulty Hard to pack Cayuga 3% Hard to pack Wetness Small stone content Area reclaim difficulty Large stones favorable Collamer 2% Hard to pack Wetness Area reclaim difficulty

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36B	Schoharie silty clay loam, 3 to 8 percent slopes	Poor	Schoharie 85% Wetness Slope Hard to pack Area reclaim difficulty Cazenovia 5% Hard to pack Wetness Small stone content Slope Large stones favorable Odessa 5% Wetness Area reclaim difficulty Hard to pack Slope Cayuga 3% Hard to pack Wetness Small stone content Slope Area reclaim difficulty Collamer 2% Hard to pack Wetness Slope Area reclaim difficulty
36C	Schoharie silty clay loam, 8 to 15 percent slopes	Poor	Schoharie 85% Slope Wetness Hard to pack Area reclaim difficulty Cazenovia 5% Hard to pack Slope Wetness Small stone content Large stones favorable Odessa 5% Slope Wetness Area reclaim difficulty Hard to pack Cayuga 3% Hard to pack Slope Wetness Small stone content Area reclaim difficulty Collamer 2% Hard to pack Slope Wetness Area reclaim difficulty



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36D	Schoharie silty clay loam, 15 to 25 percent slopes	Poor	Schoharie 85% Slope Wetness Hard to pack Area reclaim difficulty Cazenovia 5% Hard to pack Slope Wetness Small stone content Large stones favorable Odessa 5% Slope Wetness Area reclaim difficulty Hard to pack Cayuga 3% Hard to pack Slope Wetness Small stone content Area reclaim difficulty Collamer 2% Hard to pack Slope Wetness Area reclaim difficulty
36E	Schoharie silty clay loam, 25 to 45 percent slopes	Poor	Schoharie 85% Slope Wetness Hard to pack Area reclaim difficulty Odessa 5% Slope Wetness Area reclaim difficulty Hard to pack Cazenovia 5% Hard to pack Slope Wetness Small stone content Large stones favorable Cayuga 3% Hard to pack Slope Wetness Small stone content Area reclaim difficulty Collamer 2% Hard to pack Slope Wetness Area reclaim difficulty

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37A	Schoharie silt loam, 0 to 3 percent slopes	Poor	Schoharie 85% Wetness Hard to pack Area reclaim difficulty Cazenovia 5% Hard to pack Wetness Small stone content Large stones favorable Area reclaim difficulty Odessa 5% Wetness Area reclaim difficulty Hard to pack Cayuga 3% Hard to pack Wetness Small stone content Area reclaim difficulty Large stones favorable Collamer 2% Hard to pack Wetness Area reclaim difficulty
37B	Schoharie silt loam, 3 to 8 percent slopes	Poor	Schoharie 85% Wetness Hard to pack Slope Area reclaim difficulty Cazenovia 5% Hard to pack Wetness Small stone content Slope Large stones favorable Odessa 5% Wetness Area reclaim difficulty Hard to pack Slope Cayuga 3% Hard to pack Wetness Small stone content Slope Area reclaim difficulty Collamer 2% Hard to pack Wetness Slope Area reclaim difficulty

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38A	Niagara silt loam, 0 to 3 percent slopes	Poor	Niagara 85% Wetness Hard to pack Area reclaim difficulty Small stone content Canandaigua 5% Wetness Hard to pack Area reclaim difficulty Rhinebeck 5% Wetness Area reclaim difficulty Hard to pack Small stone content Collamer 5% Hard to pack Wetness Area reclaim difficulty
38B	Niagara silt loam, 3 to 8 percent slopes	Poor	Niagara 85% Wetness Hard to pack Slope Area reclaim difficulty Small stone content Canandaigua 5% Wetness Hard to pack Slope Area reclaim difficulty Rhinebeck 5% Wetness Area reclaim difficulty Slope Hard to pack Small stone content Collamer 5% Wetness Hard to pack Slope Area reclaim difficulty Small stone content
39A	Rhinebeck silty clay loam, 0 to 3 percent slopes	Poor	Rhinebeck 90% Wetness Area reclaim difficulty Hard to pack Small stone content Lakemont 5% Wetness Area reclaim difficult Hard to pack Niagara 5% Wetness Hard to pack Area reclaim difficulty Small stone content

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41A	Aeric Epiaquepts, 0 to 3 percent slopes	Poor	Aeric Epiaquepts 50% Wetness Area reclaim difficult Hard to pack Aeric Epiaquepts 45% Wetness Area reclaim difficult Hard to pack Elnora 5% Hard to pack Wetness Area reclaim difficult
43A	Canandaigua silt loam, 0 to 3 percent slopes	Poor	Canandaigua 90% Wetness Hard to pack Area reclaim difficulty Canandaigua 4% Wetness Ponding Hard to pack Area reclaim difficulty Lakemont 3% Wetness Area reclaim difficult Hard to pack Niagara 3% Wetness Hard to pack Area reclaim difficulty Small stone content
44A	Canandaigua mucky silt loam, 0 to 3 percent slopes	Poor	Canandaigua 90% Wetness Ponding Hard to pack Area reclaim difficulty Canandaigua 5% Wetness Hard to pack Area reclaim difficulty Lakemont 3% Wetness Area reclaim difficult Hard to pack Palms, undrained 2% Hard to pack Small stones Wetness Ponding Area reclaim difficult

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45A	Fonda mucky silt loam, 0 to 3 percent slopes	Poor	Fonda 95% Wetness Ponding Area reclaim difficulty Hard to pack Canandaigua 3% Wetness Ponding Hard to pack Area reclaim difficulty Palms, undrained 2% Hard to pack Small stones Wetness Ponding Area reclaim difficult
46A	Galen fine sandy loam, 0 to 3 percent slopes	Poor	Galen 90% Hard to pack Wetness Area reclaim difficult Aeric Epiaquepts 5% Wetness Area reclaim difficult Hard to pack Kendaia 5% Wetness Hard to pack Small stones Area reclaim difficulty
46B	Galen fine sandy loam, 3 to 8 percent slopes	Poor	Galen 90% Hard to pack Wetness Area reclaim difficult Slope Kendaia 5% Wetness Hard to pack Small stones Slope Area reclaim difficulty Aeric Epiaquepts 5% Wetness Area reclaim difficult Hard to pack
48A	Arkport fine sandy loam, 0 to 3 percent slopes	Poor	Arkport 95% Hard to pack Area reclaim difficult Dunkirk 3% Hard to pack Area reclaim difficulty Galen 2% Hard to pack Wetness Area reclaim difficult

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48B	Arkport fine sandy loam, 3 to 8 percent slopes	Poor	Arkport 95% Hard to pack Area reclaim difficult Slope Dunkirk 3% Hard to pack Area reclaim difficulty Slope Galen 2% Hard to pack Wetness Area reclaim difficult Slope
48C	Arkport fine sandy loam, 8 to 15 percent slopes	Poor	Arkport 95% Hard to pack Slope Area reclaim difficult Dunkirk 3% Slope Hard to pack Area reclaim difficulty Galen 2% Hard to pack Wetness Area reclaim difficult Slope
48D	Arkport fine sandy loam, 15 to 25 percent slopes	Poor	Arkport 90% Hard to pack Slope Area reclaim difficult Dunkirk 8% Slope Hard to pack Area reclaim difficulty Palmyra 2% Hard to pack Slope Small stones Area reclaim difficulty Large stones favorable
49B	Arkport loamy fine sand, 3 to 8 percent slopes	Poor	Arkport 95% Hard to pack Area reclaim difficult Slope Dunkirk 3% Hard to pack Area reclaim difficulty Slope Galen 2% Hard to pack Wetness Area reclaim difficult Slope

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49D	Arkport loamy fine sand, 15 to 25 percent slopes	Poor	Arkport 95% Hard to pack Slope Area reclaim difficult Small stone content Dunkirk 3% Slope Hard to pack Area reclaim difficulty Palmyra 2% Hard to pack Slope Small stones Area reclaim difficulty Large stones favorable
49E	Arkport loamy fine sand, 25 to 35 percent slopes	Poor	Arkport 90% Hard to pack Slope Area reclaim difficult Small stone content Dunkirk 8% Slope Hard to pack Area reclaim difficulty Palmyra 2% Hard to pack Slope Small stones Area reclaim difficulty Large stones favorable
49F	Arkport loamy fine sand, 35 to 55 percent slopes	Poor	Arkport 90% Hard to pack Slope Area reclaim difficult Small stone content Dunkirk 8% Slope Hard to pack Area reclaim difficulty Palmyra 2% Hard to pack Slope Small stones Area reclaim difficulty Large stones favorable
50B	Dunkirk-Arkport complex, 3 to 8 percent slopes	Poor	Dunkirk 50% Hard to pack Slope Area reclaim difficulty Small stone content Arkport 45% Hard to pack Area reclaim difficult Slope Collamer 5% Wetness Hard to pack Slope Area reclaim difficulty Small stone content

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50C	Dunkirk-Arkport complex, 8 to 15 percent slopes	Poor	Dunkirk 60% Slope Hard to pack Area reclaim difficulty Small stone content Arkport 35% Hard to pack Slope Area reclaim difficult Collamer 5% Slope Wetness Hard to pack Area reclaim difficulty Small stone content
50D	Dunkirk-Arkport complex, 15 to 25 percent slopes	Poor	Dunkirk 60% Slope Hard to pack Area reclaim difficulty Small stone content Arkport 35% Hard to pack Slope Area reclaim difficult Collamer 5% Slope Wetness Hard to pack Area reclaim difficulty Small stone content
53A	Lamson fine sandy loam, 0 to 3 percent slopes	Poor	Lamson 90% Hard to pack Wetness Area reclaim difficult Lamson 5% Hard to pack Wetness Ponding Area reclaim difficult Canandaigua 3% Wetness Hard to pack Area reclaim difficulty Galen 2% Hard to pack Wetness Area reclaim difficult
54A	Lamson mucky fine sandy loam, 0 to 3 percent slopes	Poor	Lamson 90% Hard to pack Wetness Ponding Area reclaim difficult Canandaigua 5% Wetness Hard to pack Area reclaim difficulty Lamson 5% Hard to pack Wetness Area reclaim difficult



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56A	Elnora loamy fine sand, 0 to 3 percent slopes	Poor	Elnora 90% Hard to pack Wetness Area reclaim difficult Aeric Epiaquepts 10% Wetness Area reclaim difficult Hard to pack
58B	Colonie loamy fine sand, 3 to 8 percent slopes	Poor	Colonie 95% Hard to pack Area reclaim difficult Slope Elnora 5% Hard to pack Wetness Area reclaim difficult Slope
58C	Colonie loamy fine sand, 8 to 15 percent slopes	Poor	Colonie 95% Hard to pack Slope Area reclaim difficult Elnora 5% Hard to pack Wetness Area reclaim difficult Slope
62B	Mardin channery silt loam, 3 to 8 percent slopes	Poor	Mardin 85% Wetness Large stones Hard to pack Small stones Slope Lordstown 5% Large stones Hard to pack Small stones Layer thickness 50-170cm Slope Bath 5% Hard to pack Slope Wetness Large stones Small stones Volusia 5% Wetness Hard to pack Large stones Small stones

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62C	Mardin channery silt loam, 8 to 15 percent slopes	Poor	Mardin 88% Slope Wetness Large stones Hard to pack Small stones Bath 5% Hard to pack Slope Wetness Large stones Small stones Volusia 5% Wetness Hard to pack Large stones Small stones Slope Lordstown 2% Slope Large stones Hard to pack Small stones Layer thickness 50-170cm
62D	Mardin channery silt loam, 15 to 25 percent slopes	Poor	Mardin 85% Slope Wetness Large stones Hard to pack Small stones Lordstown 5% Slope Large stones Hard to pack Small stones Layer thickness 50-170cm Volusia 5% Slope Wetness Hard to pack Large stones Small stones Bath 5% Hard to pack Slope Wetness Large stones Small stones

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Map symbol	Map unit name	Rating	Component name and % composition Rating reasons
62E	Mardin channery silt loam, 25 to 35 percent slopes	Poor	Mardin 80% Slope Wetness Large stones Hard to pack Small stones Bath 8% Hard to pack Slope Wetness Large stones Small stones Lordstown, very stony 7% Slope Large stones Hard to pack Small stones Layer thickness 50-170cm Volusia 5% Slope Wetness Hard to pack Large stones Small stones
63B	Langford channery silt loam, 3 to 8 percent slopes	Poor	Langford 85% Wetness Large stones Small stones Hard to pack Slope Erie 10% Wetness Large stones Small stones Hard to pack Schuyler 5% Wetness Large stones Small stones Hard to pack Slope

# Clay Liner Material Source

Aggregation Method: Dominant Condition  
Tie-break Rule: Higher

Ontario County, New York  
Survey Area Version and Date: 23 - 09/05/2023

Map symbol	Map unit name	Rating	Component name and % composition Rating reasons
63C	Langford channery silt loam, 8 to 15 percent slopes	Poor	Langford 85% Slope Wetness Large stones Small stones Hard to pack Chadakoin 5% Hard to pack Slope Small stones Large stones favorable Area reclaim difficulty Erie 5% Wetness Large stones Small stones Hard to pack Slope Schuyler 5% Slope Wetness Large stones Small stones Hard to pack
63D	Langford channery silt loam, 15 to 25 percent slopes	Poor	Langford 80% Slope Wetness Large stones Small stones Hard to pack Erie 5% Slope Wetness Large stones Small stones Hard to pack Schuyler 5% Slope Wetness Large stones Small stones Hard to pack Towerville 5% Slope Wetness Large stones Hard to pack Layer thickness 50-170cm Chadakoin 5% Hard to pack Slope Small stones Large stones favorable Area reclaim difficulty

# Clay Liner Material Source

Aggregation Method: Dominant Condition  
Tie-break Rule: Higher

Ontario County, New York  
Survey Area Version and Date: 23 - 09/05/2023

Map symbol	Map unit name	Rating	Component name and % composition Rating reasons
64B	Langford-Erie channery silt loams, 3 to 8 percent slopes	Poor	Langford 50% Wetness Large stones Small stones Hard to pack Slope Erie 40% Wetness Large stones Small stones Hard to pack Slope Chippewa 5% Wetness Hard to pack Small stones Large stones Area reclaim difficulty Fremont 5% Wetness Large stones Hard to pack Small stone content Slope

# Clay Liner Material Source

Aggregation Method: Dominant Condition  
Tie-break Rule: Higher

Ontario County, New York  
Survey Area Version and Date: 23 - 09/05/2023

Map symbol	Map unit name	Rating	Component name and % composition Rating reasons
66A	Lyons soils, 0 to 3 percent slopes	Poor	Lyons 75% Wetness Hard to pack Small stones Area reclaim difficulty Lyons, frequently ponded 15% Wetness Ponding Hard to pack Small stones Area reclaim difficulty Appleton 3% Hard to pack Wetness Small stone content Large stones favorable Area reclaim difficulty Canandaigua 3% Wetness Hard to pack Area reclaim difficulty Kendaia 2% Wetness Hard to pack Small stones Slope Area reclaim difficulty Palms, undrained 1% Hard to pack Small stones Wetness Ponding Area reclaim difficult Iliion 1% Hard to pack Wetness Small stone content Large stones favorable Area reclaim difficulty
68A	Volusia channery silt loam, 0 to 3 percent slopes	Poor	Volusia 90% Wetness Hard to pack Large stones Small stones Chippewa 5% Wetness Hard to pack Small stones Large stones Area reclaim difficulty Mardin 5% Wetness Large stones Hard to pack Small stones Slope

# Clay Liner Material Source

Aggregation Method: Dominant Condition  
Tie-break Rule: Higher

Ontario County, New York  
Survey Area Version and Date: 23 - 09/05/2023

Map symbol	Map unit name	Rating	Component name and % composition Rating reasons
68B	Volusia channery silt loam, 3 to 8 percent slopes	Poor	Volusia 90% Wetness Hard to pack Large stones Small stones Slope Chippewa 5% Wetness Hard to pack Small stones Large stones Area reclaim difficulty Mardin 5% Slope Wetness Large stones Hard to pack Small stones
68C	Volusia channery silt loam, 8 to 15 percent slopes	Poor	Volusia 90% Slope Wetness Hard to pack Large stones Small stones Mardin 6% Slope Wetness Large stones Hard to pack Small stones Chippewa 4% Wetness Hard to pack Small stones Large stones Slope
68D	Volusia channery silt loam, 15 to 25 percent slopes	Poor	Volusia 90% Slope Wetness Hard to pack Large stones Small stones Mardin 7% Slope Wetness Large stones Hard to pack Small stones Chippewa 3% Wetness Hard to pack Small stones Large stones Slope

# Clay Liner Material Source

Aggregation Method: Dominant Condition  
Tie-break Rule: Higher

Ontario County, New York  
Survey Area Version and Date: 23 - 09/05/2023

Map symbol	Map unit name	Rating	Component name and % composition Rating reasons
69A	Erie channery silt loam, 0 to 3 percent slopes	Poor	Erie 80% Wetness Large stones Small stones Hard to pack Chippewa 10% Wetness Hard to pack Small stones Large stones Area reclaim difficulty Fremont 5% Wetness Large stones Hard to pack Small stone content Slope Langford 5% Wetness Large stones Small stones Hard to pack Slope
69B	Erie channery silt loam, 3 to 8 percent slopes	Poor	Erie 80% Wetness Large stones Small stones Hard to pack Slope Langford 10% Slope Wetness Large stones Small stones Hard to pack Chippewa 5% Wetness Hard to pack Small stones Large stones Area reclaim difficulty Fremont 5% Wetness Large stones Hard to pack Small stone content Slope



# Clay Liner Material Source

Aggregation Method: Dominant Condition  
Tie-break Rule: Higher

Ontario County, New York  
Survey Area Version and Date: 23 - 09/05/2023

Map symbol	Map unit name	Rating	Component name and % composition Rating reasons
69C	Erie channery silt loam, 8 to 15 percent slopes	Poor	Erie 80% Slope Wetness Large stones Small stones Hard to pack Langford 10% Slope Wetness Large stones Small stones Hard to pack Fremont 5% Slope Wetness Large stones Hard to pack Small stone content Chippewa 5% Wetness Hard to pack Small stones Large stones Area reclaim difficulty
71A	Darien silt loam, 0 to 3 percent slopes	Poor	Darien 95% Wetness Large stones Small stone content Hard to pack Area reclaim difficulty Illion 4% Wetness Small stone content Hard to pack Large stones favorable Area reclaim difficulty Angola 1% Wetness Layer thickness 50-170cm Large stones favorable Hard to pack Area reclaim difficulty
71B	Darien silt loam, 3 to 8 percent slopes	Poor	Darien 95% Wetness Large stones Small stone content Hard to pack Slope Illion 4% Wetness Small stone content Hard to pack Large stones favorable Slope Angola 1% Wetness Layer thickness 50-170cm Large stones favorable Hard to pack Slope

# Clay Liner Material Source

Aggregation Method: Dominant Condition  
Tie-break Rule: Higher

Ontario County, New York  
Survey Area Version and Date: 23 - 09/05/2023

Map symbol	Map unit name	Rating	Component name and % composition Rating reasons
71C	Darien silt loam, 8 to 15 percent slopes	Poor	Darien 95% Slope Wetness Large stones Small stone content Hard to pack Illion 4% Wetness Small stone content Hard to pack Slope Large stones favorable Angola 1% Slope Wetness Layer thickness 50-170cm Large stones favorable Hard to pack
72A	Darien-Illion silt loams, 0 to 3 percent slopes	Poor	Darien 68% Wetness Large stones Small stone content Hard to pack Area reclaim difficulty Illion 27% Wetness Small stone content Hard to pack Large stones favorable Area reclaim difficulty Angola 5% Wetness Layer thickness 50-170cm Large stones favorable Hard to pack Area reclaim difficulty
72B	Darien-Illion silt loams, 3 to 8 percent slopes	Poor	Darien 68% Wetness Large stones Small stone content Hard to pack Slope Illion 27% Wetness Small stone content Hard to pack Large stones favorable Slope Angola 5% Wetness Layer thickness 50-170cm Large stones favorable Hard to pack Slope

# Clay Liner Material Source

Aggregation Method: Dominant Condition  
Tie-break Rule: Higher

Ontario County, New York  
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Map symbol	Map unit name	Rating	Component name and % composition Rating reasons
73B	Gretor silt loam, 3 to 8 percent slopes	Poor	Gretor 95% Wetness Large stones Hard to pack Small stones Layer thickness 50-170cm Gretor, poorly drained 5% Wetness Large stones Hard to pack Small stones Layer thickness 50-170cm
73C	Gretor silt loam, 8 to 15 percent slopes	Poor	Gretor 95% Slope Wetness Large stones Hard to pack Small stones Gretor, poorly drained 5% Wetness Large stones Hard to pack Small stones Layer thickness 50-170cm
73D	Gretor channery silt loam, 15 to 25 percent slopes	Poor	Gretor 90% Slope Wetness Large stones Hard to pack Small stones Mongaup, very stony 8% Slope Large stones Small stones Hard to pack Layer thickness 50-170cm Gretor, poorly drained 2% Wetness Large stones Hard to pack Small stones Layer thickness 50-170cm
76B	Orpark silt loam, 3 to 8 percent slopes	Poor	Orpark 95% Wetness Large stones Small stones Layer thickness 50-170cm Hard to pack Orpark, poorly drained 5% Wetness Large stones Small stones Layer thickness 50-170cm Hard to pack

# Clay Liner Material Source

Aggregation Method: Dominant Condition  
Tie-break Rule: Higher

Ontario County, New York  
Survey Area Version and Date: 23 - 09/05/2023

Map symbol	Map unit name	Rating	Component name and % composition Rating reasons
76C	Orpark silt loam, 8 to 15 percent slopes	Poor	Orpark 95% Slope Wetness Large stones Small stones Layer thickness 50-170cm Orpark, poorly drained 5% Wetness Large stones Small stones Layer thickness 50-170cm Hard to pack
76D	Orpark channery silt loam, 15 to 25 percent slopes	Poor	Orpark 90% Slope Wetness Large stones Small stones Layer thickness 50-170cm Orpark, poorly drained 5% Wetness Large stones Small stones Layer thickness 50-170cm Hard to pack Lordstown, very stony 5% Slope Large stones Hard to pack Small stones Layer thickness 50-170cm
77A	Chippewa silt loam, 0 to 3 percent slopes	Poor	Chippewa 85% Wetness Hard to pack Small stones Large stones Area reclaim difficulty Chippewa, very poorly drained 10% Wetness Ponding Hard to pack Small stones Large stones Volusia 5% Wetness Hard to pack Large stones Small stones Slope

# Clay Liner Material Source

Aggregation Method: Dominant Condition  
Tie-break Rule: Higher

Ontario County, New York  
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Map symbol	Map unit name	Rating	Component name and % composition Rating reasons
77B	Chippewa silt loam, 3 to 8 percent slopes	Poor	Chippewa 85% Wetness Hard to pack Small stones Large stones Slope Volusia 10% Slope Wetness Hard to pack Large stones Small stones Chippewa, very poorly drained 5% Wetness Ponding Hard to pack Small stones Large stones
82B	Manlius channery silt loam, 3 to 8 percent slopes	Poor	Manlius 95% Small stones Large stones Hard to pack Layer thickness 50-170cm Area reclaim difficulty Gretor 5% Wetness Large stones Hard to pack Small stones Layer thickness 50-170cm
82C	Manlius channery silt loam, 8 to 15 percent slopes	Poor	Manlius 95% Small stones Slope Large stones Hard to pack Layer thickness 50-170cm Gretor 5% Slope Wetness Large stones Hard to pack Small stones
82D	Manlius channery silt loam, 15 to 25 percent slopes	Poor	Manlius 95% Small stones Slope Large stones Hard to pack Layer thickness 50-170cm Arnot, very stony 4% Hard to pack Thin layer, <50cm Small stones Slope Large stones Gretor 1% Slope Wetness Large stones Hard to pack Small stones

# Clay Liner Material Source

Aggregation Method: Dominant Condition  
Tie-break Rule: Higher

Ontario County, New York  
Survey Area Version and Date: 23 - 09/05/2023

Map symbol	Map unit name	Rating	Component name and % composition Rating reasons
91A	Palms muck, 0 to 3 percent slopes	Poor	Palms, undrained 55% Hard to pack Small stones Wetness Ponding Area reclaim difficult Palms, drained 40% Hard to pack Small stones Wetness Area reclaim difficult Canandaigua 5% Wetness Ponding Hard to pack Area reclaim difficulty
92A	Carlisle muck, 0 to 3 percent slopes	Poor	Carlisle, undrained 45% Hard to pack Small stones Wetness Ponding Area reclaim difficult Carlisle, drained 40% Hard to pack Small stones Wetness Area reclaim difficult Palms, undrained 10% Hard to pack Small stones Wetness Ponding Area reclaim difficult Canandaigua 5% Wetness Ponding Hard to pack Area reclaim difficulty
93A	Edwards muck, 0 to 3 percent slopes	Poor	Edwards, undrained 50% Hard to pack Small stones Wetness Ponding Area reclaim difficult Edwards, drained 35% Hard to pack Small stones Wetness Area reclaim difficult Martisco, undrained 10% Hard to pack Wetness Ponding Area reclaim difficult Canandaigua 5% Wetness Ponding Hard to pack Area reclaim difficulty

# Clay Liner Material Source

Aggregation Method: Dominant Condition  
Tie-break Rule: Higher

Ontario County, New York  
Survey Area Version and Date: 23 - 09/05/2023

Map symbol	Map unit name	Rating	Component name and % composition Rating reasons
94A	Martisco muck, 0 to 3 percent slopes	Poor	Martisco, undrained 55% Hard to pack Wetness Ponding Area reclaim difficult Martisco, drained 35% Hard to pack Wetness Area reclaim difficult Canandaigua 5% Wetness Ponding Hard to pack Area reclaim difficulty Palms, drained 5% Hard to pack Small stones Wetness Area reclaim difficult
95A	Saprists, 0 to 3 percent slopes, inundated	Poor	Saprists, inundated 85% Hard to pack Small stones Wetness Ponding Area reclaim difficult Palms, undrained 5% Hard to pack Small stones Wetness Ponding Area reclaim difficult Fluvaquents, frequently flooded 5% Wetness Flooding Area reclaim difficult Hard to pack Small stones Carlisle, undrained 5% Hard to pack Small stones Wetness Ponding Area reclaim difficult

# Clay Liner Material Source

Aggregation Method: Dominant Condition  
Tie-break Rule: Higher

Ontario County, New York  
Survey Area Version and Date: 23 - 09/05/2023

Map symbol	Map unit name	Rating	Component name and % composition Rating reasons
101A	Honeoye loam, 0 to 3 percent slopes	Poor	Honeoye 85% Hard to pack Small stones Area reclaim difficulty Lima 5% Wetness Hard to pack Small stones Area reclaim difficulty Lansing 4% Hard to pack Small stones Area reclaim difficulty Kendaia 4% Wetness Hard to pack Small stones Area reclaim difficulty Wassaic 2% Hard to pack Small stones Layer thickness 50-170cm Large stones favorable Area reclaim difficulty
101B	Honeoye loam, 3 to 8 percent slopes	Poor	Honeoye 85% Hard to pack Small stones Slope Area reclaim difficulty Lima 5% Wetness Hard to pack Small stones Slope Area reclaim difficulty Kendaia 4% Wetness Hard to pack Small stones Slope Area reclaim difficulty Lansing 4% Hard to pack Small stones Slope Area reclaim difficulty Wassaic 2% Hard to pack Small stones Layer thickness 50-170cm Slope Large stones favorable



# Clay Liner Material Source

Aggregation Method: Dominant Condition  
Tie-break Rule: Higher

Ontario County, New York  
Survey Area Version and Date: 23 - 09/05/2023

Map symbol	Map unit name	Rating	Component name and % composition Rating reasons
101C	Honeoye loam, 8 to 15 percent slopes	Poor	Honeoye 85% Slope Hard to pack Small stones Area reclaim difficulty Lima 5% Slope Wetness Hard to pack Small stones Area reclaim difficulty Lansing 4% Slope Hard to pack Small stones Area reclaim difficulty Kendaia 4% Slope Wetness Hard to pack Small stones Area reclaim difficulty Wassaic 2% Hard to pack Slope Small stones Layer thickness 50-170cm Large stones favorable
101D	Honeoye loam, 15 to 25 percent slopes	Poor	Honeoye 85% Slope Hard to pack Small stones Area reclaim difficulty Lima 5% Slope Wetness Hard to pack Small stones Area reclaim difficulty Lansing 4% Slope Hard to pack Small stones Area reclaim difficulty Kendaia 4% Slope Wetness Hard to pack Small stones Area reclaim difficulty Wassaic 2% Hard to pack Slope Small stones Layer thickness 50-170cm Large stones favorable

# Clay Liner Material Source

Aggregation Method: Dominant Condition  
Tie-break Rule: Higher

Ontario County, New York  
Survey Area Version and Date: 23 - 09/05/2023

Map symbol	Map unit name	Rating	Component name and % composition Rating reasons
101E	Honeoye loam, 25 to 35 percent slopes	Poor	Honeoye 85% Slope Hard to pack Small stones Area reclaim difficulty Lima 5% Slope Wetness Hard to pack Small stones Area reclaim difficulty Kendaia 4% Slope Wetness Hard to pack Small stones Area reclaim difficulty Lansing 4% Slope Hard to pack Small stones Area reclaim difficulty Wassaic 2% Hard to pack Slope Small stones Layer thickness 50-170cm Large stones favorable
104A	Honeoye loam, 0 to 3 percent slopes, lower clay surface	Poor	Honeoye, lower clay surface 85% Hard to pack Small stones Area reclaim difficulty Lima 5% Wetness Hard to pack Small stones Area reclaim difficulty Lansing 4% Hard to pack Small stones Area reclaim difficulty Kendaia 4% Wetness Hard to pack Small stones Area reclaim difficulty Wassaic 2% Hard to pack Small stones Layer thickness 50-170cm Large stones favorable Area reclaim difficulty

# Clay Liner Material Source

Aggregation Method: Dominant Condition  
Tie-break Rule: Higher

Ontario County, New York  
Survey Area Version and Date: 23 - 09/05/2023

Map symbol	Map unit name	Rating	Component name and % composition Rating reasons
104B	Honeoye loam, 3 to 8 percent slopes, lower clay surface	Poor	Honeoye, lower clay surface 85% Hard to pack Small stones Slope Area reclaim difficulty Lima 5% Wetness Hard to pack Small stones Slope Area reclaim difficulty Lansing 4% Hard to pack Small stones Slope Area reclaim difficulty Kendaia 4% Wetness Hard to pack Small stones Slope Area reclaim difficulty Wasaiaic 2% Hard to pack Small stones Layer thickness 50-170cm Slope Large stones favorable
104C	Honeoye loam, 8 to 15 percent slopes, lower clay surface	Poor	Honeoye, lower clay surface 85% Slope Hard to pack Small stones Area reclaim difficulty Lima 5% Slope Wetness Hard to pack Small stones Area reclaim difficulty Kendaia 4% Slope Wetness Hard to pack Small stones Area reclaim difficulty Lansing 4% Slope Hard to pack Small stones Area reclaim difficulty Wasaiaic 2% Hard to pack Slope Small stones Layer thickness 50-170cm Large stones favorable

# Clay Liner Material Source

Aggregation Method: Dominant Condition  
Tie-break Rule: Higher

Ontario County, New York  
Survey Area Version and Date: 23 - 09/05/2023

Map symbol	Map unit name	Rating	Component name and % composition Rating reasons
106B	Danley-Lansing complex, 3 to 8 percent slopes	Poor	Danley 50% Wetness Large stones Hard to pack Small stone content Slope Lansing 45% Hard to pack Small stones Slope Area reclaim difficulty Conesus 2% Wetness Hard to pack Small stones Large stones favorable Slope Kendaia 1% Wetness Hard to pack Small stones Slope Area reclaim difficulty Palatine 1% Hard to pack Small stones Layer thickness 50-170cm Area reclaim difficulty Slope Appleton 1% Hard to pack Wetness Small stone content Slope Large stones favorable

# Clay Liner Material Source

Aggregation Method: Dominant Condition  
Tie-break Rule: Higher

Ontario County, New York  
Survey Area Version and Date: 23 - 09/05/2023

Map symbol	Map unit name	Rating	Component name and % composition Rating reasons
107B	Conesus-Lansing complex, 3 to 8 percent slopes	Poor	Conesus 50% Wetness Hard to pack Small stones Large stones favorable Slope Lansing 45% Hard to pack Small stones Slope Area reclaim difficulty Kendaia 2% Wetness Hard to pack Small stones Slope Area reclaim difficulty Appleton 1% Hard to pack Wetness Small stone content Slope Large stones favorable Danley 1% Wetness Large stones Hard to pack Small stone content Slope Palatine 1% Hard to pack Small stones Layer thickness 50-170cm Area reclaim difficulty Slope

# Clay Liner Material Source

Aggregation Method: Dominant Condition  
Tie-break Rule: Higher

Ontario County, New York  
Survey Area Version and Date: 23 - 09/05/2023

Map symbol	Map unit name	Rating	Component name and % composition Rating reasons
108C	Lansing loam, 8 to 15 percent slopes	Poor	Lansing 85% Slope Hard to pack Small stones Area reclaim difficulty Conesus 8% Slope Wetness Hard to pack Small stones Large stones favorable Kendaia 3% Wetness Hard to pack Small stones Slope Area reclaim difficulty Appleton 2% Hard to pack Slope Wetness Small stone content Large stones favorable Danley 1% Slope Wetness Large stones Hard to pack Small stone content Wassaic 1% Hard to pack Slope Small stones Layer thickness 50-170cm Large stones favorable

# Clay Liner Material Source

Aggregation Method: Dominant Condition  
Tie-break Rule: Higher

Ontario County, New York  
Survey Area Version and Date: 23 - 09/05/2023

Map symbol	Map unit name	Rating	Component name and % composition Rating reasons
108D	Lansing loam, 15 to 25 percent slopes	Poor	Lansing 85% Slope Hard to pack Small stones Area reclaim difficulty Conesus 9% Slope Wetness Hard to pack Small stones Large stones favorable Wassaic 3% Hard to pack Slope Small stones Layer thickness 50-170cm Large stones favorable Kendaia 2% Wetness Hard to pack Small stones Slope Area reclaim difficulty Appleton 1% Hard to pack Wetness Slope Small stone content Large stones favorable
108E	Lansing loam, 25 to 35 percent slopes	Poor	Lansing 85% Slope Hard to pack Small stones Area reclaim difficulty Cazenovia 10% Slope Wetness Hard to pack Small stone content Large stones favorable Aurora 5% Slope Wetness Hard to pack Large stones Small stone content

# Clay Liner Material Source

Aggregation Method: Dominant Condition  
Tie-break Rule: Higher

Ontario County, New York  
Survey Area Version and Date: 23 - 09/05/2023

Map symbol	Map unit name	Rating	Component name and % composition Rating reasons
112B	Ontario fine sandy loam, 3 to 8 percent slopes	Poor	Ontario 85% Hard to pack Small stones Area reclaim difficulty Slope Honeoye 5% Hard to pack Small stones Slope Area reclaim difficulty Hilton 5% Wetness Hard to pack Small stones Area reclaim difficulty Slope Cazenovia 3% Hard to pack Wetness Small stone content Slope Large stones favorable Appleton 2% Wetness Hard to pack Small stones Slope Area reclaim difficulty
112C	Ontario fine sandy loam, 8 to 15 percent slopes	Poor	Ontario 85% Slope Hard to pack Small stones Area reclaim difficulty Honeoye 5% Slope Hard to pack Small stones Area reclaim difficulty Hilton 5% Slope Wetness Hard to pack Small stones Area reclaim difficulty Cazenovia 3% Hard to pack Slope Wetness Small stone content Large stones favorable Appleton 2% Slope Wetness Hard to pack Small stones Area reclaim difficulty



# Clay Liner Material Source

Aggregation Method: Dominant Condition  
Tie-break Rule: Higher

Ontario County, New York  
Survey Area Version and Date: 23 - 09/05/2023

Map symbol	Map unit name	Rating	Component name and % composition Rating reasons
112D	Ontario fine sandy loam, 15 to 25 percent slopes	Poor	Ontario 85% Slope Hard to pack Small stones Area reclaim difficulty Cazenovia 5% Hard to pack Slope Wetness Small stone content Large stones favorable Honeoye 5% Slope Hard to pack Small stones Area reclaim difficulty Hilton 3% Slope Wetness Hard to pack Small stones Area reclaim difficulty Appleton 2% Slope Wetness Hard to pack Small stones Area reclaim difficulty
112E	Ontario fine sandy loam, 25 to 35 percent slopes	Poor	Ontario 85% Slope Hard to pack Small stones Area reclaim difficulty Cazenovia 5% Hard to pack Slope Wetness Small stone content Large stones favorable Honeoye 5% Slope Hard to pack Small stones Area reclaim difficulty Hilton 3% Slope Wetness Hard to pack Small stones Area reclaim difficulty Appleton 2% Slope Wetness Hard to pack Small stones Area reclaim difficulty

# Clay Liner Material Source

Aggregation Method: Dominant Condition  
Tie-break Rule: Higher

Ontario County, New York  
Survey Area Version and Date: 23 - 09/05/2023

Map symbol	Map unit name	Rating	Component name and % composition Rating reasons
114B	Ontario gravelly loam, 3 to 8 percent slopes	Poor	Ontario 85% Hard to pack Small stones Slope Area reclaim difficulty Hilton 5% Wetness Hard to pack Small stones Slope Area reclaim difficulty Honeoye 5% Hard to pack Small stones Slope Area reclaim difficulty Cazenovia 3% Hard to pack Wetness Small stone content Slope Large stones favorable Appleton 2% Wetness Hard to pack Small stones Slope Area reclaim difficulty
114C	Ontario gravelly loam, 8 to 15 percent slopes	Poor	Ontario 85% Slope Hard to pack Small stones Area reclaim difficulty Hilton 5% Slope Wetness Hard to pack Small stones Area reclaim difficulty Honeoye 5% Slope Hard to pack Small stones Area reclaim difficulty Cazenovia 3% Hard to pack Slope Wetness Small stone content Large stones favorable Appleton 2% Slope Wetness Hard to pack Small stones Area reclaim difficulty

# Clay Liner Material Source

Aggregation Method: Dominant Condition  
Tie-break Rule: Higher

Ontario County, New York  
Survey Area Version and Date: 23 - 09/05/2023

Map symbol	Map unit name	Rating	Component name and % composition Rating reasons
114D	Ontario gravelly loam, 15 to 25 percent slopes	Poor	Ontario 85% Slope Hard to pack Small stones Area reclaim difficulty Honeoye 5% Slope Hard to pack Small stones Area reclaim difficulty Hilton 5% Slope Wetness Hard to pack Small stones Area reclaim difficulty Cazenovia 3% Hard to pack Slope Wetness Small stone content Large stones favorable Appleton 2% Slope Wetness Hard to pack Small stones Area reclaim difficulty
116B	Ontario loam, 3 to 8 percent slopes	Poor	Ontario 85% Hard to pack Small stones Slope Area reclaim difficulty Honeoye 5% Hard to pack Small stones Slope Area reclaim difficulty Hilton 5% Wetness Hard to pack Small stones Slope Area reclaim difficulty Cazenovia 3% Hard to pack Wetness Small stone content Slope Large stones favorable Appleton 2% Wetness Hard to pack Small stones Slope Area reclaim difficulty

# Clay Liner Material Source

Aggregation Method: Dominant Condition  
Tie-break Rule: Higher

Ontario County, New York  
Survey Area Version and Date: 23 - 09/05/2023

Map symbol	Map unit name	Rating	Component name and % composition Rating reasons
116C	Ontario loam, 8 to 15 percent slopes	Poor	Ontario 85% Slope Hard to pack Small stones Area reclaim difficulty Honeoye 5% Slope Hard to pack Small stones Area reclaim difficulty Hilton 5% Slope Wetness Hard to pack Small stones Area reclaim difficulty Cazenovia 3% Hard to pack Slope Wetness Small stone content Large stones favorable Appleton 2% Slope Wetness Hard to pack Small stones Area reclaim difficulty
116D	Ontario loam, 15 to 25 percent slopes	Poor	Ontario 85% Slope Hard to pack Small stones Area reclaim difficulty Cazenovia 5% Hard to pack Slope Wetness Small stone content Large stones favorable Honeoye 5% Slope Hard to pack Small stones Area reclaim difficulty Hilton 3% Slope Wetness Hard to pack Small stones Area reclaim difficulty Appleton 2% Slope Wetness Hard to pack Small stones Area reclaim difficulty

# Clay Liner Material Source

Aggregation Method: Dominant Condition  
Tie-break Rule: Higher

Ontario County, New York  
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Map symbol	Map unit name	Rating	Component name and % composition Rating reasons
118F	Ontario, Honeoye, and Lansing soils, 35 to 55 percent slopes	Poor	Ontario 40% Slope Hard to pack Small stones Area reclaim difficulty Honeoye 35% Slope Hard to pack Small stones Area reclaim difficulty Lansing 20% Slope Hard to pack Small stones Area reclaim difficulty Aurora 5% Slope Wetness Hard to pack Large stones Small stone content
120E	Palmyra and Howard soils, 25 to 45 percent slopes	Poor	Palmyra 55% Hard to pack Small stones Slope Large stones Area reclaim difficulty Howard 40% Hard to pack Small stones Slope Large stones favorable Area reclaim difficulty Colonie 5% Hard to pack Slope Area reclaim difficult
122A	Palmyra cobbly loam, 0 to 3 percent slopes	Poor	Palmyra 95% Hard to pack Small stones Large stones Area reclaim difficulty Honeoye, lower clay surface 5% Hard to pack Small stones Area reclaim difficulty
122B	Palmyra cobbly loam, 3 to 8 percent slopes	Poor	Palmyra 95% Hard to pack Small stones Large stones Slope Area reclaim difficulty Honeoye, lower clay surface 5% Hard to pack Small stones Slope Area reclaim difficulty

# Clay Liner Material Source

Aggregation Method: Dominant Condition  
Tie-break Rule: Higher

Ontario County, New York  
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Map symbol	Map unit name	Rating	Component name and % composition Rating reasons
124A	Palmyra fine sandy loam, 0 to 3 percent slopes	Poor	Palmyra 90% Hard to pack Small stones Area reclaim difficulty Large stones favorable Howard 10% Hard to pack Small stones Large stones favorable Area reclaim difficulty
124B	Palmyra fine sandy loam, 3 to 8 percent slopes	Poor	Palmyra 90% Hard to pack Small stones Area reclaim difficulty Slope Large stones favorable Howard 10% Hard to pack Small stones Large stones favorable Slope Area reclaim difficulty
126A	Palmyra gravelly loam, 0 to 3 percent slopes	Poor	Palmyra 95% Hard to pack Small stones Large stones Area reclaim difficulty Arkport 5% Hard to pack Area reclaim difficult
126B	Palmyra gravelly loam, 3 to 8 percent slopes	Poor	Palmyra 95% Hard to pack Small stones Large stones Slope Area reclaim difficulty Arkport 5% Hard to pack Area reclaim difficult Slope
126C	Palmyra gravelly loam, 8 to 15 percent slopes	Poor	Palmyra 90% Hard to pack Small stones Slope Large stones Area reclaim difficulty Arkport 10% Hard to pack Slope Area reclaim difficult
126D	Palmyra gravelly loam, 15 to 25 percent slopes	Poor	Palmyra 90% Hard to pack Small stones Slope Large stones Area reclaim difficulty Arkport 10% Hard to pack Slope Area reclaim difficult

# Clay Liner Material Source

Aggregation Method: Dominant Condition  
Tie-break Rule: Higher

Ontario County, New York  
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Map symbol	Map unit name	Rating	Component name and % composition Rating reasons
128A	Palmyra gravelly sandy loam, 0 to 3 percent slopes	Poor	Palmyra 90% Hard to pack Small stones Large stones Area reclaim difficulty Arkport 10% Hard to pack Area reclaim difficult
128B	Palmyra gravelly sandy loam, 3 to 8 percent slopes	Poor	Palmyra 90% Hard to pack Small stones Large stones Slope Area reclaim difficulty Arkport 10% Hard to pack Area reclaim difficult Slope
128C	Palmyra gravelly sandy loam, 8 to 15 percent slopes	Poor	Palmyra 90% Hard to pack Small stones Slope Large stones Area reclaim difficulty Arkport 10% Hard to pack Slope Area reclaim difficult
130A	Farmington loam, 0 to 3 percent slopes	Poor	Farmington 90% Thin layer, <50cm Hard to pack Small stone content Large stones favorable Area reclaim difficulty Galoo 5% Hard to pack Thin layer, <50cm Small stones Area reclaim difficulty Nuhi 5% Wetness Small stones Large stones favorable Hard to pack Layer thickness 50-170cm

# Clay Liner Material Source

Aggregation Method: Dominant Condition  
Tie-break Rule: Higher

Ontario County, New York  
Survey Area Version and Date: 23 - 09/05/2023

Map symbol	Map unit name	Rating	Component name and % composition Rating reasons
130B	Farmington loam, 3 to 8 percent slopes	Poor	Farmington 90% Thin layer, <50cm Hard to pack Small stone content Slope Large stones favorable Galoo 5% Hard to pack Thin layer, <50cm Small stones Slope Area reclaim difficulty Nuhi 5% Wetness Small stones Large stones favorable Hard to pack Layer thickness 50-170cm
132A	Galoo loam, 0 to 3 percent slopes, rocky	Poor	Galoo 95% Hard to pack Thin layer, <50cm Small stones Area reclaim difficulty Nuhi 4% Wetness Small stones Large stones favorable Hard to pack Layer thickness 50-170cm
132B	Galoo loam, 3 to 8 percent slopes, rocky	Poor	Galoo 95% Hard to pack Thin layer, <50cm Small stones Area reclaim difficulty Slope Nuhi 4% Wetness Small stones Large stones favorable Hard to pack Layer thickness 50-170cm
134A	Camillus silt loam, 0 to 3 percent slopes	Poor	Camillus 95% Hard to pack Large stones Layer thickness 50-170cm Small stone content Area reclaim difficulty Angola 5% Wetness Layer thickness 50-170cm Large stones favorable Hard to pack Area reclaim difficulty



# Clay Liner Material Source

Aggregation Method: Dominant Condition  
Tie-break Rule: Higher

Ontario County, New York  
Survey Area Version and Date: 23 - 09/05/2023

Map symbol	Map unit name	Rating	Component name and % composition Rating reasons
134B	Camillus silt loam, 3 to 8 percent slopes	Poor	Camillus 95% Hard to pack Large stones Layer thickness 50-170cm Small stone content Slope Angola 5% Wetness Layer thickness 50-170cm Large stones favorable Hard to pack Slope
151C	Willdin-Norchip complex, 3 to 15 percent slopes	Poor	Willdin 60% Wetness Large stones Hard to pack Small stones Slope Norchip 38% Wetness Hard to pack Small stones Large stones Area reclaim difficulty Palms, undrained 2% Hard to pack Small stones Wetness Ponding Area reclaim difficult
152B	Valois gravelly loam, 3 to 8 percent slopes	Poor	Valois 85% Hard to pack Small stones Large stones Slope Area reclaim difficulty Cadosia 5% Large stones Small stones Hard to pack Area reclaim difficulty Slope Volusia 5% Wetness Hard to pack Large stones Small stones Mardin 5% Hard to pack Wetness Large stones Small stones Slope

# Clay Liner Material Source

Aggregation Method: Dominant Condition  
Tie-break Rule: Higher

Ontario County, New York  
Survey Area Version and Date: 23 - 09/05/2023

Map symbol	Map unit name	Rating	Component name and % composition Rating reasons
152C	Valois gravelly loam, 8 to 15 percent slopes	Poor	Valois 85% Hard to pack Small stones Slope Large stones Area reclaim difficulty Mardin 5% Hard to pack Slope Wetness Large stones Small stones Cadusia 5% Slope Large stones Small stones Hard to pack Area reclaim difficulty Volusia 5% Wetness Hard to pack Large stones Small stones Slope
152D	Valois gravelly loam, 15 to 25 percent slopes	Poor	Valois 85% Hard to pack Small stones Slope Large stones Area reclaim difficulty Cadusia 6% Slope Large stones Small stones Hard to pack Area reclaim difficulty Mardin 6% Hard to pack Slope Wetness Large stones Small stones Volusia 3% Slope Wetness Hard to pack Large stones Small stones

# Clay Liner Material Source

Aggregation Method: Dominant Condition  
Tie-break Rule: Higher

Ontario County, New York  
Survey Area Version and Date: 23 - 09/05/2023

Map symbol	Map unit name	Rating	Component name and % composition Rating reasons
152E	Valois gravelly loam, 25 to 35 percent slopes	Poor	Valois 85% Hard to pack Small stones Slope Large stones Area reclaim difficulty Cadosia 6% Slope Large stones Small stones Hard to pack Area reclaim difficulty Mardin 6% Hard to pack Slope Wetness Large stones Small stones Towerville, extremely stony 3% Slope Wetness Large stones Small stones Hard to pack
153B	Valois gravelly loam, cool, 3 to 8 percent slopes	Poor	Valois, cool 85% Hard to pack Small stones Large stones Slope Area reclaim difficulty Ontusia 5% Wetness Large stones Hard to pack Small stones Rockrift 5% Small stones Large stones Hard to pack Area reclaim difficulty Slope Willdin 5% Hard to pack Wetness Large stones Small stones Slope

# Clay Liner Material Source

Aggregation Method: Dominant Condition  
Tie-break Rule: Higher

Ontario County, New York  
Survey Area Version and Date: 23 - 09/05/2023

Map symbol	Map unit name	Rating	Component name and % composition Rating reasons
153C	Valois gravelly loam, cool, 8 to 15 percent slopes	Poor	Valois, cool 85% Hard to pack Small stones Slope Large stones Area reclaim difficulty Ontusia 5% Wetness Large stones Hard to pack Small stones Slope Rockrift 5% Small stones Slope Large stones Hard to pack Area reclaim difficulty Willdin 5% Hard to pack Slope Wetness Large stones Small stones
153D	Valois gravelly loam, cool, 15 to 25 percent slopes	Poor	Valois, cool 85% Hard to pack Small stones Slope Large stones Area reclaim difficulty Rockrift 6% Small stones Slope Large stones Hard to pack Area reclaim difficulty Willdin 6% Hard to pack Slope Wetness Large stones Small stones Ontusia 3% Slope Wetness Large stones Hard to pack Small stones

# Clay Liner Material Source

Aggregation Method: Dominant Condition  
Tie-break Rule: Higher

Ontario County, New York  
Survey Area Version and Date: 23 - 09/05/2023

Map symbol	Map unit name	Rating	Component name and % composition Rating reasons
153E	Valois gravelly loam, cool, 25 to 35 percent slopes	Poor	Valois, cool 85% Hard to pack Small stones Slope Large stones Area reclaim difficulty Rockrift 6% Small stones Slope Large stones Hard to pack Area reclaim difficulty Willdin 6% Hard to pack Slope Wetness Large stones Small stones Ischua 3% Slope Wetness Large stones Small stones Hard to pack
162B	Willdin channery silt loam, 3 to 8 percent slopes	Poor	Willdin 85% Wetness Large stones Hard to pack Small stones Slope Lewbath 5% Hard to pack Slope Wetness Large stones Small stones Middlebrook 5% Hard to pack Wetness Small stones Large stones Layer thickness 50-170cm Ontusia 5% Wetness Large stones Hard to pack Small stones

# Clay Liner Material Source

Aggregation Method: Dominant Condition  
Tie-break Rule: Higher

Ontario County, New York  
Survey Area Version and Date: 23 - 09/05/2023

Map symbol	Map unit name	Rating	Component name and % composition Rating reasons
162C	Willdin channery silt loam, 8 to 15 percent slopes	Poor	Willdin 85% Slope Wetness Large stones Hard to pack Small stones Ontusia 6% Wetness Large stones Hard to pack Small stones Slope Lewbath 6% Hard to pack Slope Wetness Large stones Small stones Middlebrook 3% Hard to pack Slope Wetness Small stones Large stones
162D	Willdin channery silt loam, 15 to 25 percent slopes	Poor	Willdin 80% Slope Wetness Large stones Hard to pack Small stones Lewbath 10% Hard to pack Slope Wetness Large stones Small stones Mongaup 5% Hard to pack Small stones Slope Large stones Layer thickness 50-170cm Ontusia 5% Slope Wetness Large stones Hard to pack Small stones

# Clay Liner Material Source

Aggregation Method: Dominant Condition  
Tie-break Rule: Higher

Ontario County, New York  
Survey Area Version and Date: 23 - 09/05/2023

Map symbol	Map unit name	Rating	Component name and % composition Rating reasons
168A	Ontusia channery silt loam, 0 to 3 percent slopes	Poor	Ontusia 88% Wetness Large stones Hard to pack Small stones Willdin 5% Wetness Large stones Hard to pack Small stones Slope Norchip 5% Wetness Hard to pack Small stones Large stones Area reclaim difficulty Greter 2% Wetness Large stones Small stones Hard to pack Layer thickness 50-170cm
168B	Ontusia channery silt loam, 3 to 8 percent slopes	Poor	Ontusia 90% Wetness Large stones Hard to pack Small stones Slope Norchip 5% Wetness Hard to pack Small stones Large stones Area reclaim difficulty Willdin 5% Slope Wetness Large stones Hard to pack Small stones
168C	Ontusia channery silt loam, 8 to 15 percent slopes	Poor	Ontusia 90% Slope Wetness Large stones Hard to pack Small stones Norchip 5% Wetness Hard to pack Small stones Large stones Slope Willdin 5% Slope Wetness Large stones Hard to pack Small stones

# Clay Liner Material Source

Aggregation Method: Dominant Condition  
Tie-break Rule: Higher

Ontario County, New York  
Survey Area Version and Date: 23 - 09/05/2023

Map symbol	Map unit name	Rating	Component name and % composition Rating reasons
168D	Ontusia channery silt loam, 15 to 25 percent slopes	Poor	Ontusia 90% Slope Wetness Large stones Hard to pack Small stones Willdin 7% Slope Wetness Large stones Hard to pack Small stones Norchip 3% Wetness Hard to pack Small stones Large stones Slope
171C	Lordstown-Manlius-Towerville complex, 8 to 15 percent slopes, very stony	Poor	Lordstown, very stony 40% Slope Large stones Hard to pack Small stones Layer thickness 50-170cm Towerville, very stony 20% Slope Wetness Large stones Small stones Hard to pack Manlius, very stony 20% Small stones Slope Large stones Area reclaim difficult Hard to pack Cadosia, very stony 10% Slope Large stones Small stones Hard to pack Area reclaim difficulty Mardin, very stony 5% Slope Wetness Large stones Hard to pack Small stones Arnot, very stony 5% Hard to pack Thin layer, <50cm Small stones Slope Large stones



# Clay Liner Material Source

Aggregation Method: Dominant Condition  
Tie-break Rule: Higher

Ontario County, New York  
Survey Area Version and Date: 23 - 09/05/2023

Map symbol	Map unit name	Rating	Component name and % composition Rating reasons
171D	Lordstown-Manlius-Towerville complex, 15 to 25 percent slopes, very stony	Poor	Lordstown, very stony 40% Slope Large stones Hard to pack Small stones Layer thickness 50-170cm Manlius, very stony 20% Small stones Slope Large stones Area reclaim difficult Hard to pack Towerville, very stony 20% Slope Wetness Large stones Small stones Hard to pack Cadosia, very stony 10% Slope Large stones Small stones Hard to pack Area reclaim difficulty Arnot, very stony 5% Hard to pack Thin layer, <50cm Small stones Slope Large stones Mardin 5% Slope Wetness Large stones Hard to pack Small stones

# Clay Liner Material Source

Aggregation Method: Dominant Condition  
Tie-break Rule: Higher

Ontario County, New York  
Survey Area Version and Date: 23 - 09/05/2023

Map symbol	Map unit name	Rating	Component name and % composition Rating reasons
171E	Lordstown-Manlius-Towerville complex, 25 to 35 percent slopes, extremely stony	Poor	<p>Lordstown, extremely stony 40%</p> <ul style="list-style-type: none"> <li>Slope</li> <li>Large stones</li> <li>Hard to pack</li> <li>Small stones</li> <li>Layer thickness 50-170cm</li> </ul> <p>Towerville, extremely stony 20%</p> <ul style="list-style-type: none"> <li>Slope</li> <li>Wetness</li> <li>Large stones</li> <li>Small stones</li> <li>Hard to pack</li> </ul> <p>Manlius, extremely stony 20%</p> <ul style="list-style-type: none"> <li>Small stones</li> <li>Slope</li> <li>Large stones</li> <li>Area reclaim difficult</li> <li>Hard to pack</li> </ul> <p>Cadosia, extremely stony 10%</p> <ul style="list-style-type: none"> <li>Slope</li> <li>Large stones</li> <li>Small stones</li> <li>Hard to pack</li> <li>Area reclaim difficulty</li> </ul> <p>Arnot, very stony 5%</p> <ul style="list-style-type: none"> <li>Hard to pack</li> <li>Thin layer, &lt;50cm</li> <li>Small stones</li> <li>Slope</li> <li>Large stones</li> </ul> <p>Mardin, extremely stony 5%</p> <ul style="list-style-type: none"> <li>Slope</li> <li>Wetness</li> <li>Large stones</li> <li>Hard to pack</li> <li>Small stones</li> </ul>

# Clay Liner Material Source

Aggregation Method: Dominant Condition  
Tie-break Rule: Higher

Ontario County, New York  
Survey Area Version and Date: 23 - 09/05/2023

Map symbol	Map unit name	Rating	Component name and % composition Rating reasons
171F	Lordstown-Manlius-Towerville complex, 35 to 80 percent slopes, extremely stony	Poor	Lordstown, extremely stony 40% Slope Large stones Hard to pack Small stones Layer thickness 50-170cm Towerville, extremely stony 20% Slope Wetness Large stones Small stones Hard to pack Manlius, extremely stony 20% Small stones Slope Large stones Area reclaim difficult Hard to pack Arnot, extremely stony 10% Hard to pack Thin layer, <50cm Small stones Slope Large stones Cadosia, extremely stony 10% Slope Large stones Small stones Hard to pack Area reclaim difficulty
177A	Norchip silt loam, 0 to 3 percent slopes	Poor	Norchip 85% Wetness Hard to pack Small stones Large stones Area reclaim difficulty Norchip, very poorly drained 10% Wetness Ponding Hard to pack Small stones Large stones Ontusia 5% Wetness Large stones Hard to pack Small stones Slope

# Clay Liner Material Source

Aggregation Method: Dominant Condition  
Tie-break Rule: Higher

Ontario County, New York  
Survey Area Version and Date: 23 - 09/05/2023

Map symbol	Map unit name	Rating	Component name and % composition Rating reasons
177B	Norchip silt loam, 3 to 8 percent slopes	Poor	Norchip 85% Wetness Hard to pack Small stones Large stones Slope Norchip, very poorly drained 10% Wetness Ponding Hard to pack Small stones Large stones Ontusia 5% Slope Wetness Large stones Hard to pack Small stones
181B	Mongaup-Ischua complex, 3 to 8 percent slopes	Poor	Mongaup 45% Large stones Small stones Hard to pack Layer thickness 50-170cm Slope Ischua 40% Wetness Large stones Small stones Hard to pack Layer thickness 50-170cm Rockrift 10% Small stones Large stones Hard to pack Area reclaim difficulty Slope Willdin 3% Hard to pack Wetness Large stones Small stones Slope Greter 2% Wetness Large stones Hard to pack Small stones Layer thickness 50-170cm

# Clay Liner Material Source

Aggregation Method: Dominant Condition  
Tie-break Rule: Higher

Ontario County, New York  
Survey Area Version and Date: 23 - 09/05/2023

Map symbol	Map unit name	Rating	Component name and % composition Rating reasons
181C	Mongaup-Ischua complex, 8 to 15 percent slopes	Poor	Mongaup 45% Slope Large stones Small stones Hard to pack Layer thickness 50-170cm Ischua 40% Slope Wetness Large stones Small stones Hard to pack Rockrift 10% Small stones Slope Large stones Hard to pack Area reclaim difficulty Willdin 3% Hard to pack Slope Wetness Large stones Small stones Gretor 2% Slope Wetness Large stones Hard to pack Small stones
181D	Mongaup-Ischua complex, 15 to 25 percent slopes, very stony	Poor	Mongaup, very stony 45% Slope Large stones Small stones Hard to pack Layer thickness 50-170cm Ischua, very stony 40% Slope Wetness Large stones Small stones Hard to pack Rockrift 10% Small stones Slope Large stones Hard to pack Area reclaim difficulty Willdin 3% Hard to pack Slope Wetness Large stones Small stones Gretor 2% Slope Wetness Large stones Hard to pack Small stones

# Clay Liner Material Source

Aggregation Method: Dominant Condition  
Tie-break Rule: Higher

Ontario County, New York  
Survey Area Version and Date: 23 - 09/05/2023

Map symbol	Map unit name	Rating	Component name and % composition Rating reasons
181E	Mongaup-Ischua complex, 25 to 35 percent slopes, extremely stony	Poor	Mongaup, extremely stony 45% Slope Large stones Small stones Hard to pack Layer thickness 50-170cm Ischua, extremely stony 40% Slope Wetness Large stones Small stones Hard to pack Rockrift 10% Small stones Slope Large stones Hard to pack Area reclaim difficulty Willdin 3% Hard to pack Slope Wetness Large stones Small stones Greter 2% Slope Wetness Large stones Hard to pack Small stones
182B	Mongaup channery loam, 3 to 8 percent slopes	Poor	Mongaup 75% Large stones Small stones Hard to pack Layer thickness 50-170cm Slope Rockrift 10% Small stones Large stones Hard to pack Area reclaim difficulty Slope Willdin 8% Hard to pack Wetness Large stones Small stones Slope Ischua 5% Wetness Large stones Small stones Hard to pack Layer thickness 50-170cm Greter 2% Wetness Large stones Hard to pack Small stones Layer thickness 50-170cm

# Clay Liner Material Source

Aggregation Method: Dominant Condition  
Tie-break Rule: Higher

Ontario County, New York  
Survey Area Version and Date: 23 - 09/05/2023

Map symbol	Map unit name	Rating	Component name and % composition Rating reasons
182C	Mongaup channery loam, 8 to 15 percent slopes	Poor	Mongaup 75% Slope Large stones Small stones Hard to pack Layer thickness 50-170cm Rockrift 10% Small stones Slope Large stones Hard to pack Area reclaim difficulty Willdin 8% Hard to pack Slope Wetness Large stones Small stones Ischua 5% Slope Wetness Large stones Small stones Hard to pack Gretor 2% Slope Wetness Large stones Hard to pack Small stones
201A	Lima loam, 0 to 3 percent slopes	Poor	Lima 85% Wetness Hard to pack Small stones Area reclaim difficulty Honeoye 5% Hard to pack Small stones Area reclaim difficulty Kendaia 3% Wetness Hard to pack Small stones Area reclaim difficulty Appleton 3% Wetness Hard to pack Small stones Area reclaim difficulty Cazenovia 2% Wetness Hard to pack Small stone content Large stones favorable Area reclaim difficulty Lyons 2% Wetness Hard to pack Small stones Area reclaim difficulty

# Clay Liner Material Source

Aggregation Method: Dominant Condition  
Tie-break Rule: Higher

Ontario County, New York  
Survey Area Version and Date: 23 - 09/05/2023

Map symbol	Map unit name	Rating	Component name and % composition Rating reasons
201B	Lima loam, 3 to 8 percent slopes	Poor	Lima 85% Wetness Hard to pack Small stones Slope Area reclaim difficulty Honeoye 6% Hard to pack Small stones Slope Area reclaim difficulty Kendaia 3% Wetness Hard to pack Small stones Slope Area reclaim difficulty Appleton 3% Wetness Hard to pack Small stones Slope Area reclaim difficulty Cazenovia 2% Wetness Hard to pack Small stone content Large stones favorable Slope Lyons 1% Wetness Hard to pack Small stones Slope Area reclaim difficulty



# Clay Liner Material Source

Aggregation Method: Dominant Condition  
Tie-break Rule: Higher

Ontario County, New York  
Survey Area Version and Date: 23 - 09/05/2023

Map symbol	Map unit name	Rating	Component name and % composition Rating reasons
201C	Lima loam, 8 to 15 percent slopes	Poor	Lima 85% Slope Wetness Hard to pack Small stones Area reclaim difficulty Honeoye 7% Slope Hard to pack Small stones Area reclaim difficulty Appleton 3% Slope Wetness Hard to pack Small stones Area reclaim difficulty Kendaia 3% Slope Wetness Hard to pack Small stones Area reclaim difficulty Cazenovia 2% Slope Wetness Hard to pack Small stone content Large stones favorable
204A	Lima loam, 0 to 3 percent slopes, lower clay surface	Poor	Lima 85% Wetness Hard to pack Small stones Area reclaim difficulty Honeoye 5% Hard to pack Small stones Area reclaim difficulty Appleton 3% Wetness Hard to pack Small stones Area reclaim difficulty Kendaia 3% Wetness Hard to pack Small stones Area reclaim difficulty Lyons 2% Wetness Hard to pack Small stones Area reclaim difficulty Cazenovia 2% Wetness Hard to pack Small stone content Large stones favorable Area reclaim difficulty

# Clay Liner Material Source

Aggregation Method: Dominant Condition  
Tie-break Rule: Higher

Ontario County, New York  
Survey Area Version and Date: 23 - 09/05/2023

Map symbol	Map unit name	Rating	Component name and % composition Rating reasons
204B	Lima loam, 3 to 8 percent slopes, lower clay surface	Poor	Lima 85% Wetness Hard to pack Small stones Slope Area reclaim difficulty Honeoye 6% Hard to pack Small stones Slope Area reclaim difficulty Appleton 3% Wetness Hard to pack Small stones Slope Area reclaim difficulty Kendaia 3% Wetness Hard to pack Small stones Slope Area reclaim difficulty Cazenovia 2% Wetness Hard to pack Small stone content Large stones favorable Slope Lyons 1% Wetness Hard to pack Small stones Slope Area reclaim difficulty
210A	Phelps gravelly silt loam, 0 to 3 percent slopes	Poor	Phelps 85% Hard to pack Small stones Wetness Large stones favorable Area reclaim difficulty Galen 10% Hard to pack Wetness Area reclaim difficult Homer 5% Hard to pack Wetness Small stones Large stones favorable Area reclaim difficulty

# Clay Liner Material Source

Aggregation Method: Dominant Condition  
Tie-break Rule: Higher

Ontario County, New York  
Survey Area Version and Date: 23 - 09/05/2023

Map symbol	Map unit name	Rating	Component name and % composition Rating reasons
210B	Phelps gravelly silt loam, 3 to 8 percent slopes	Poor	Phelps 85% Hard to pack Small stones Wetness Large stones favorable Area reclaim difficulty Galen 10% Hard to pack Wetness Area reclaim difficult Slope Homer 5% Hard to pack Wetness Small stones Slope Large stones favorable
212A	Nuhi silt loam, 0 to 3 percent slopes	Poor	Nuhi 85% Wetness Small stones Large stones favorable Hard to pack Layer thickness 50-170cm Farmington 10% Thin layer, <50cm Hard to pack Small stone content Large stones favorable Area reclaim difficulty Nuhi, poorly drained 5% Wetness Small stones Large stones favorable Hard to pack Layer thickness 50-170cm
240B	Aurora-Angola silt loams, 3 to 8 percent slopes	Poor	Aurora 60% Wetness Hard to pack Large stones Small stone content Layer thickness 50-170cm Angola 30% Wetness Layer thickness 50-170cm Large stones favorable Hard to pack Slope Danley 5% Wetness Large stones Hard to pack Small stone content Slope Darien 5% Wetness Large stones Small stone content Hard to pack Slope

# Clay Liner Material Source

Aggregation Method: Dominant Condition  
Tie-break Rule: Higher

Ontario County, New York  
Survey Area Version and Date: 23 - 09/05/2023

Map symbol	Map unit name	Rating	Component name and % composition Rating reasons
240C	Aurora-Angola silt loams, 8 to 15 percent slopes	Poor	Aurora 60% Slope Wetness Hard to pack Large stones Small stone content Angola 30% Slope Wetness Layer thickness 50-170cm Large stones favorable Hard to pack Darien 5% Slope Wetness Large stones Small stone content Hard to pack Danley 5% Slope Wetness Large stones Hard to pack Small stone content
240D	Aurora-Angola silt loams, 15 to 25 percent slopes	Poor	Aurora 60% Slope Wetness Hard to pack Large stones Small stone content Angola 30% Slope Wetness Layer thickness 50-170cm Large stones favorable Hard to pack Darien 5% Slope Wetness Large stones Small stone content Hard to pack Danley 5% Slope Wetness Large stones Hard to pack Small stone content

# Clay Liner Material Source

Aggregation Method: Dominant Condition  
Tie-break Rule: Higher

Ontario County, New York  
Survey Area Version and Date: 23 - 09/05/2023

Map symbol	Map unit name	Rating	Component name and % composition Rating reasons
241B	Aurora silt loam, 3 to 8 percent slopes	Poor	Aurora 85% Wetness Hard to pack Large stones Small stone content Layer thickness 50-170cm Angola 10% Wetness Layer thickness 50-170cm Large stones favorable Hard to pack Slope Danley 5% Wetness Large stones Hard to pack Small stone content Slope
241C	Aurora silt loam, 8 to 15 percent slopes	Poor	Aurora 85% Slope Wetness Hard to pack Large stones Small stone content Angola 8% Slope Wetness Layer thickness 50-170cm Large stones favorable Hard to pack Danley 7% Slope Wetness Large stones Hard to pack Small stone content
241D	Aurora silt loam, 15 to 25 percent slopes	Poor	Aurora 85% Slope Wetness Hard to pack Large stones Small stone content Danley 10% Slope Wetness Large stones Hard to pack Small stone content Angola 5% Slope Wetness Layer thickness 50-170cm Large stones favorable Hard to pack

# Clay Liner Material Source

Aggregation Method: Dominant Condition  
Tie-break Rule: Higher

Ontario County, New York  
Survey Area Version and Date: 23 - 09/05/2023

Map symbol	Map unit name	Rating	Component name and % composition Rating reasons
255B	Cazenovia silt loam, 3 to 8 percent slopes	Poor	Cazenovia 85% Wetness Hard to pack Small stone content Slope Large stones favorable Ovid 10% Wetness Hard to pack Small stone content Slope Area reclaim difficulty Cayuga 5% Wetness Large stones Small stone content Hard to pack Area reclaim difficulty
255C	Cazenovia silt loam, 8 to 15 percent slopes	Poor	Cazenovia 85% Slope Wetness Hard to pack Small stone content Large stones favorable Cayuga 8% Slope Wetness Large stones Small stone content Hard to pack Ovid 7% Wetness Slope Hard to pack Small stone content Area reclaim difficulty
255D	Cazenovia silt loam, 15 to 25 percent slopes	Poor	Cazenovia 85% Slope Wetness Hard to pack Small stone content Large stones favorable Cayuga 10% Slope Wetness Large stones Small stone content Hard to pack Ovid 5% Slope Wetness Hard to pack Small stone content Area reclaim difficulty

# Clay Liner Material Source

Aggregation Method: Dominant Condition  
Tie-break Rule: Higher

Ontario County, New York  
Survey Area Version and Date: 23 - 09/05/2023

Map symbol	Map unit name	Rating	Component name and % composition Rating reasons
260B	Cayuga silt loam, 3 to 8 percent slopes	Poor	Cayuga 85% Wetness Large stones Small stone content Hard to pack Area reclaim difficulty Schoharie 10% Wetness Area reclaim difficulty Hard to pack Slope Odessa 5% Wetness Area reclaim difficulty Hard to pack Slope
260C	Cayuga silt loam, 8 to 15 percent slopes	Poor	Cayuga 85% Slope Wetness Large stones Small stone content Hard to pack Schoharie 10% Slope Wetness Area reclaim difficulty Hard to pack Odessa 5% Wetness Slope Area reclaim difficulty Hard to pack
260D	Cayuga silt loam, 15 to 25 percent slopes	Poor	Cayuga 85% Slope Wetness Large stones Small stone content Hard to pack Lansing 10% Slope Hard to pack Small stones Area reclaim difficulty Schoharie 5% Slope Wetness Area reclaim difficulty Hard to pack

# Clay Liner Material Source

Aggregation Method: Dominant Condition  
Tie-break Rule: Higher

Ontario County, New York  
Survey Area Version and Date: 23 - 09/05/2023

Map symbol	Map unit name	Rating	Component name and % composition Rating reasons
304A	Kendaia loam, 0 to 3 percent slopes	Poor	Kendaia 85% Wetness Hard to pack Small stones Area reclaim difficulty Lima 6% Wetness Hard to pack Small stones Area reclaim difficulty Lyons 5% Wetness Hard to pack Small stones Area reclaim difficulty Ovid 2% Wetness Hard to pack Small stone content Area reclaim difficulty Large stones favorable Churchville 2% Wetness Hard to pack Small stone content Area reclaim difficulty Large stones favorable
304B	Kendaia loam, 3 to 8 percent slopes	Poor	Kendaia 85% Wetness Hard to pack Small stones Slope Area reclaim difficulty Lima 7% Wetness Hard to pack Small stones Slope Area reclaim difficulty Lyons 4% Wetness Hard to pack Small stones Slope Area reclaim difficulty Churchville 2% Wetness Hard to pack Small stone content Slope Area reclaim difficulty Ovid 2% Wetness Hard to pack Small stone content Slope Area reclaim difficulty



# Clay Liner Material Source

Aggregation Method: Dominant Condition  
Tie-break Rule: Higher

Ontario County, New York  
Survey Area Version and Date: 23 - 09/05/2023

Map symbol	Map unit name	Rating	Component name and % composition Rating reasons
342A	Angola silt loam, 0 to 3 percent slopes	Poor	Angola 90% Wetness Layer thickness 50-170cm Large stones favorable Hard to pack Area reclaim difficulty Darien 5% Wetness Large stones Small stone content Hard to pack Area reclaim difficulty Illion 5% Wetness Small stone content Hard to pack Large stones favorable Area reclaim difficulty
356A	Ovid silt loam, 0 to 3 percent slopes	Poor	Ovid 85% Wetness Hard to pack Small stone content Area reclaim difficulty Large stones favorable Odessa 10% Wetness Area reclaim difficulty Hard to pack Lakemont 5% Wetness Area reclaim difficult Hard to pack
356B	Ovid silt loam, 3 to 8 percent slopes	Poor	Ovid 85% Wetness Hard to pack Small stone content Slope Area reclaim difficulty Odessa 10% Wetness Slope Area reclaim difficulty Hard to pack Lakemont 5% Wetness Area reclaim difficult Hard to pack

# Clay Liner Material Source

Aggregation Method: Dominant Condition  
Tie-break Rule: Higher

Ontario County, New York  
Survey Area Version and Date: 23 - 09/05/2023

Map symbol	Map unit name	Rating	Component name and % composition Rating reasons
357B	Ovid silty clay loam, 3 to 8 percent slopes	Poor	Ovid 85% Wetness Hard to pack Small stone content Slope Area reclaim difficulty Odessa 10% Wetness Slope Area reclaim difficulty Hard to pack Lakemont 5% Wetness Area reclaim difficult Hard to pack
357C	Ovid silty clay loam, 8 to 15 percent slopes	Poor	Ovid 85% Slope Wetness Hard to pack Small stone content Area reclaim difficulty Odessa 10% Wetness Slope Area reclaim difficulty Hard to pack Lakemont 5% Wetness Area reclaim difficult Hard to pack
400A	Udorthents, loamy, 0 to 3 percent slopes	Poor	Udorthents, loamy 80% Area reclaim difficult Hard to pack Small stones Large stones Howard 5% Hard to pack Small stones Large stones favorable Area reclaim difficulty Ontario 5% Hard to pack Small stones Slope Area reclaim difficulty Palmyra 5% Hard to pack Small stones Area reclaim difficulty Large stones favorable Lima 5% Wetness Hard to pack Small stones Area reclaim difficulty
401D	Udorthents, refuse substratum. 0 to 25 percent slopes	Not rated	Udorthents, refuse substratum 90%
PG	Pits, gravel and sand	Not rated	Pits, gravel and sand 75%
PQ	Pits, quarry	Not rated	Pits, quarry 80%
W	Water	Not rated	Water 100%

# Clay Liner Material Source

## Rating Options

Attribute Name: Clay Liner Material Source

DHS - Department of Homeland Security

Using natural clayey soil material to line the bottom of a landfill pit is a method of assist in the sealing the pit that may have excessively high water transmission capabilities in the soil layer below the excavation. This interpretation shows the degree and kinds of properties that make soil material suitable for use as a clay liner.

The soil is evaluated from the surface to 79 inches. The ratings are based on the soil properties that affect ease of excavation, compactability of the material, the thickness of the soil layer, reclamation of the area, and erosion from the site.

Soils that flood or have a water table within the depth of excavation present a potential pollution hazard and are difficult to excavate. Soils that are shallow to bedrock, ice, a cemented pan, or stones and boulders are limited because these features interfere with the excavation of the site or the suitability of the material. Slope is an important consideration because it affects the work involved in road construction, the performance of the roads, and the control of surface water around the borrow area.

The ratings are both verbal and numerical. Numerical ratings in the table indicate the level of suitability of the soil as a clay liner source. The ratings are shown in decimal fractions ranging from 1.00 to 0.01. They indicate gradations between the point at which a soil feature has the greatest positive impact on the use (1.00) and the point at which the soil feature has the greatest negative impact (0.00).

Rating class terms indicate the extent to which the soils are made suitable by all of the soil features that affect the suitability of soil material for this use. "Good" indicates that the soil has characteristics that are favorable for the specified use. The liner will have good performance and the material will not need any amendments to enhance its performance. "Fair" indicates that the soil has features that are moderately favorable for the specified use. The suitability as a liner may be enhanced by making a thicker layer, or adding bentonite to the soil material used for the liner. The soil may be difficult to work or contain rock fragments. "Poor" indicates that the soil has one or more features that are unfavorable for the specified use. While any material could be used as a clay liner, a poorly suited material will require large amounts of bentonite or other sealing material in order to achieve the expected level of performance.

The map unit components listed for each map unit in the accompanying Summary by Map Unit table in Web Soil Survey or the Aggregation Report in Soil Data Viewer are determined by the aggregation method chosen. An aggregated rating class is shown for each map unit. The components listed for each map unit are only those that have the same rating class as listed for the map unit. The percent composition of each component in a particular map unit is presented to help the user better understand the percentage of each map unit that has the rating presented.

Other components with different ratings may be present in each map unit. The ratings for all components, regardless of the map unit aggregated rating, can be viewed by generating the equivalent report from the Soil Reports tab in Web Soil Survey or from the Soil Data Mart site. Onsite investigation may be needed to validate these interpretations and to confirm the identity of the soil on a given site.

### References:

USDA. Natural Resources Conservation Service. 1997. Agricultural Waste management Field Handbook. Chapter 10. 31 pages.

US Army Corps of Engineers. August 2004. Unified Facilities Guide Specifications No. 023377. 17 pages.  
<http://www.ccb.org/docs/ufgshome/pdf/02377.pdf>

Aggregation Method: Dominant Condition

Aggregation is the process by which a set of component attribute values is reduced to a single value to represent the map unit as a whole.

A map unit is typically composed of one or more "components". A component is either some type of soil or some nonsoil entity, e.g., rock outcrop. The components in the map unit name represent the major soils within a map unit delineation. Minor components make up the balance of the map unit. Great differences in soil properties can occur between map unit components and within short distances. Minor components may be very different from the major components. Such differences could significantly affect use and management of the map unit. Minor components may or may not be documented in the database. The results of aggregation do not reflect the presence or absence of limitations of the components which are not listed in the database. An on-site investigation is required to identify the location of individual map unit components.

For each of a map unit's components, a corresponding percent composition is recorded. A percent composition of 60 indicates that the corresponding component typically makes up approximately 60% of the map unit. Percent composition is a critical factor in some, but not all, aggregation methods.

For the attribute being aggregated, the first step of the aggregation process is to derive one attribute value for each of a map unit's components. From this set of component attributes, the next step of the aggregation process derives a single value that represents the map unit as a whole. Once a single value for each map unit is derived, a thematic map for soil map units can be generated. Aggregation must be done because, on any soil map, map units are delineated but components are not.

## Clay Liner Material Source

The aggregation method "Dominant Condition" first groups like attribute values for the components in a map unit. For each group, percent composition is set to the sum of the percent composition of all components participating in that group. These groups now represent "conditions" rather than components. The attribute value associated with the group with the highest cumulative percent composition is returned. If more than one group shares the highest cumulative percent composition, the corresponding "tie-break" rule determines which value should be returned. The "tie-break" rule indicates whether the lower or higher group value should be returned in the case of a percent composition tie. The result returned by this aggregation method represents the dominant condition throughout the map unit only when no tie has occurred.

Tie-break Rule: Higher

The tie-break rule indicates which value should be selected from a set of multiple candidate values, or which value should be selected in the event of a percent composition tie.