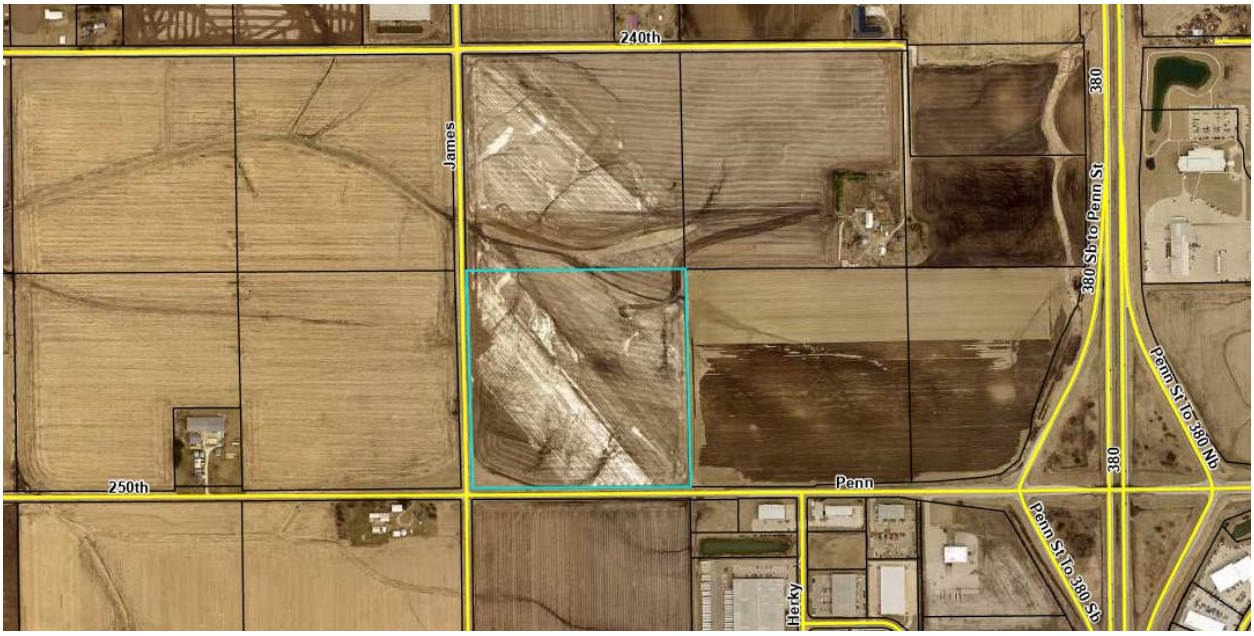

Land Application Field 160

John P Rarick Family Trust

Parcel # 0610251001 – 38 Acres

Johnson County

Sec 10 Twp 80 Rng 7

Johnson County, Iowa (IA103)

Johnson County, Iowa (IA103)

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
11B	Colo-Ely complex, 0 to 5 percent slopes	3.0	7.9%
83B	Kenyon loam, 2 to 5 percent slopes	0.1	0.2%
184	Klinger silty clay loam, 1 to 4 percent slopes	16.1	42.2%
377B	Dinsdale silty clay loam, 2 to 5 percent slopes	13.7	35.9%
382	Maxfield silty clay loam, 0 to 2 percent slopes	5.2	13.7%
Totals for Area of Interest		**38.2**	**100.0%**



Report — Map Unit Description

Johnson County, Iowa

11B—Colo-Ely complex, 0 to 5 percent slopes

Map Unit Setting

National map unit symbol: 2t3dx
Elevation: 560 to 1,190 feet
Mean annual precipitation: 34 to 39 inches
Mean annual air temperature: 46 to 51 degrees F
Frost-free period: 149 to 179 days
Farmland classification: Prime farmland if drained

Map Unit Composition

Colo and similar soils: 50 percent
Ely and similar soils: 40 percent
Minor components: 10 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Colo

Setting

Landform: Drainageways
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Base slope
Down-slope shape: Linear
Across-slope shape: Concave
Parent material: Silty alluvium

Typical profile

Ap - 0 to 8 inches: silty clay loam
A1 - 8 to 14 inches: silty clay loam
A2 - 14 to 34 inches: silty clay loam
BA - 34 to 40 inches: silty clay loam
Bg - 40 to 46 inches: silty clay loam
BCg - 46 to 52 inches: silty clay loam
Cg - 52 to 79 inches: silty clay loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.14 to 1.42 in/hr)
Depth to water table: About 0 to 12 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 10.1 inches)

Report — Map Unit Description

Johnson County, Iowa

83B—Kenyon loam, 2 to 5 percent slopes

Map Unit Setting

National map unit symbol: 2r18q
Elevation: 620 to 1,400 feet
Mean annual precipitation: 32 to 37 inches
Mean annual air temperature: 44 to 50 degrees F
Frost-free period: 160 to 198 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Kenyon and similar soils: 90 percent
Minor components: 10 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Kenyon

Setting

Landform: Interfluves
Landform position (two-dimensional): Summit, shoulder, backslope
Landform position (three-dimensional): Nose slope, side slope, crest
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Erosional sediments from fine-loamy till over loamy till

Typical profile

Ap - 0 to 9 inches: loam
A - 9 to 14 inches: loam
AB - 14 to 19 inches: loam
2Bw1 - 19 to 41 inches: loam
2Bw2 - 41 to 55 inches: loam
2BC1 - 55 to 71 inches: loam
2BC2 - 71 to 79 inches: loam

Properties and qualities

Slope: 2 to 5 percent
Surface area covered with cobbles, stones or boulders: 0.0 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.14 in/hr)
Depth to water table: About 48 to 72 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 10 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)

Report — Map Unit Description

Johnson County, Iowa

184—Klinger silty clay loam, 1 to 4 percent slopes

Map Unit Setting

National map unit symbol: 2t3fs
Elevation: 900 to 1,140 feet
Mean annual precipitation: 32 to 38 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 148 to 169 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Klinger and similar soils: 95 percent
Minor components: 5 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Klinger

Setting

Landform: Interfluves
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Loess over till

Typical profile

Ap - 0 to 8 inches: silty clay loam
A - 8 to 14 inches: silty clay loam
AB - 14 to 19 inches: silty clay loam
Bg1 - 19 to 29 inches: silty clay loam
2Bg2 - 29 to 45 inches: loam
2Bg3 - 45 to 59 inches: loam
2BC1 - 59 to 72 inches: loam
2BC2 - 72 to 79 inches: loam

Properties and qualities

Slope: 1 to 4 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.14 in/hr)
Depth to water table: About 12 to 42 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 9.7 inches)

Report — Map Unit Description

Johnson County, Iowa

377B—Dinsdale silty clay loam, 2 to 5 percent slopes

Map Unit Setting

National map unit symbol: 2t3f9
Elevation: 560 to 1,270 feet
Mean annual precipitation: 34 to 38 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 152 to 169 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Dinsdale and similar soils: 90 percent
Minor components: 10 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Dinsdale

Setting

Landform: Interfluves
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Loess over till

Typical profile

Ap - 0 to 7 inches: silty clay loam
A - 7 to 12 inches: silty clay loam
AB - 12 to 19 inches: silty clay loam
Bt1 - 19 to 28 inches: silty clay loam
Bt2 - 28 to 34 inches: silty clay loam
2Bt3 - 34 to 46 inches: loam
2BC1 - 46 to 58 inches: loam
2BC2 - 58 to 79 inches: loam

Properties and qualities

Slope: 2 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.14 in/hr)
Depth to water table: About 48 to 72 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 25 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 9.3 inches)

Report — Map Unit Description

Johnson County, Iowa

382—Maxfield silty clay loam, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 2vw4h
Elevation: 520 to 1,310 feet
Mean annual precipitation: 23 to 41 inches
Mean annual air temperature: 43 to 54 degrees F
Frost-free period: 155 to 210 days
Farmland classification: Prime farmland if drained

Map Unit Composition

Maxfield and similar soils: 90 percent
Minor components: 10 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Maxfield

Setting

Landform: Interfluves
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Loess over till

Typical profile

Ap - 0 to 12 inches: silty clay loam
A - 12 to 19 inches: silty clay loam
Bg - 19 to 29 inches: silty clay loam
2Bw - 29 to 55 inches: loam
2BC - 55 to 79 inches: loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.14 in/hr)
Depth to water table: About 0 to 12 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 7.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2w



Land Application Field 161

John P Rarick Family Trust

Parcel # 0610226001 – 38 Acres

Johnson County

Sec 10 Twp 80 Rng 7

Johnson County, Iowa (IA103)

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
11B	Colo-Ely complex, 0 to 5 percent slopes	6.5	16.5%
184	Klinger silty clay loam, 1 to 4 percent slopes	15.9	40.2%
377B	Dinsdale silty clay loam, 2 to 5 percent slopes	13.1	33.1%
382	Maxfield silty clay loam, 0 to 2 percent slopes	4.1	10.3%
Totals for Area of Interest		**39.6**	**100.0%**



Report — Map Unit Description

Johnson County, Iowa

11B—Colo-Ely complex, 0 to 5 percent slopes

Map Unit Setting

National map unit symbol: 2t3dx
Elevation: 560 to 1,190 feet
Mean annual precipitation: 34 to 39 inches
Mean annual air temperature: 46 to 51 degrees F
Frost-free period: 149 to 179 days
Farmland classification: Prime farmland if drained

Map Unit Composition

Colo and similar soils: 50 percent
Ely and similar soils: 40 percent
Minor components: 10 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Colo

Setting

Landform: Drainageways
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Base slope
Down-slope shape: Linear
Across-slope shape: Concave
Parent material: Silty alluvium

Typical profile

Ap - 0 to 8 inches: silty clay loam
A1 - 8 to 14 inches: silty clay loam
A2 - 14 to 34 inches: silty clay loam
BA - 34 to 40 inches: silty clay loam
Bg - 40 to 46 inches: silty clay loam
BCg - 46 to 52 inches: silty clay loam
Cg - 52 to 79 inches: silty clay loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.14 to 1.42 in/hr)
Depth to water table: About 0 to 12 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 10.1 inches)

Report — Map Unit Description

Johnson County, Iowa

184—Klinger silty clay loam, 1 to 4 percent slopes

Map Unit Setting

National map unit symbol: 2t3fs
Elevation: 900 to 1,140 feet
Mean annual precipitation: 32 to 38 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 148 to 169 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Klinger and similar soils: 95 percent
Minor components: 5 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Klinger

Setting

Landform: Interfluves
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Loess over till

Typical profile

Ap - 0 to 8 inches: silty clay loam
A - 8 to 14 inches: silty clay loam
AB - 14 to 19 inches: silty clay loam
Bg1 - 19 to 29 inches: silty clay loam
2Bg2 - 29 to 45 inches: loam
2Bg3 - 45 to 59 inches: loam
2BC1 - 59 to 72 inches: loam
2BC2 - 72 to 79 inches: loam

Properties and qualities

Slope: 1 to 4 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.14 in/hr)
Depth to water table: About 12 to 42 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 9.7 inches)

Report — Map Unit Description

Johnson County, Iowa

377B—Dinsdale silty clay loam, 2 to 5 percent slopes

Map Unit Setting

National map unit symbol: 2t3f9
Elevation: 560 to 1,270 feet
Mean annual precipitation: 34 to 38 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 152 to 169 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Dinsdale and similar soils: 90 percent
Minor components: 10 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Dinsdale

Setting

Landform: Interfluves
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Loess over till

Typical profile

Ap - 0 to 7 inches: silty clay loam
A - 7 to 12 inches: silty clay loam
AB - 12 to 19 inches: silty clay loam
Bt1 - 19 to 28 inches: silty clay loam
Bt2 - 28 to 34 inches: silty clay loam
2Bt3 - 34 to 46 inches: loam
2BC1 - 46 to 58 inches: loam
2BC2 - 58 to 79 inches: loam

Properties and qualities

Slope: 2 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.14 in/hr)
Depth to water table: About 48 to 72 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 25 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 9.3 inches)

Report — Map Unit Description

Johnson County, Iowa

382—Maxfield silty clay loam, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 2vw4h
Elevation: 520 to 1,310 feet
Mean annual precipitation: 23 to 41 inches
Mean annual air temperature: 43 to 54 degrees F
Frost-free period: 155 to 210 days
Farmland classification: Prime farmland if drained

Map Unit Composition

Maxfield and similar soils: 90 percent
Minor components: 10 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Maxfield

Setting

Landform: Interfluves
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Loess over till

Typical profile

Ap - 0 to 12 inches: silty clay loam
A - 12 to 19 inches: silty clay loam
Bg - 19 to 29 inches: silty clay loam
2Bw - 29 to 55 inches: loam
2BC - 55 to 79 inches: loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.14 in/hr)
Depth to water table: About 0 to 12 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 7.0 inches)



Land Application Field 162

John P Rarick Family Trust

Parcel # 0610201001 – 39 Acres

33 acres usable for Biosolids application

Johnson County

Sec 10 Twp 80 Rng 7

Johnson County, Iowa (IA103)

Johnson County, Iowa (IA103)

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
11B	Colo-Ely complex, 0 to 5 percent slopes	0.4	1.3%
184	Klinger silty clay loam, 1 to 4 percent slopes	13.8	41.8%
377B	Dinsdale silty clay loam, 2 to 5 percent slopes	14.1	42.7%
382	Maxfield silty clay loam, 0 to 2 percent slopes	4.4	13.2%
761	Franklin silt loam, 1 to 3 percent slopes	0.3	1.0%
Totals for Area of Interest		**33.0**	**100.0%**



Report — Map Unit Description

Johnson County, Iowa

11B—Colo-Ely complex, 0 to 5 percent slopes

Map Unit Setting

National map unit symbol: 2t3dx
Elevation: 560 to 1,190 feet
Mean annual precipitation: 34 to 39 inches
Mean annual air temperature: 46 to 51 degrees F
Frost-free period: 149 to 179 days
Farmland classification: Prime farmland if drained

Map Unit Composition

Colo and similar soils: 50 percent
Ely and similar soils: 40 percent
Minor components: 10 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Colo

Setting

Landform: Drainageways
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Base slope
Down-slope shape: Linear
Across-slope shape: Concave
Parent material: Silty alluvium

Typical profile

Ap - 0 to 8 inches: silty clay loam
A1 - 8 to 14 inches: silty clay loam
A2 - 14 to 34 inches: silty clay loam
BA - 34 to 40 inches: silty clay loam
Bg - 40 to 46 inches: silty clay loam
BCg - 46 to 52 inches: silty clay loam
Cg - 52 to 79 inches: silty clay loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.14 to 1.42 in/hr)
Depth to water table: About 0 to 12 inches
Frequency of flooding: None
Frequency of ponding: None
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 10.1 inches)

Report — Map Unit Description

Johnson County, Iowa

184—Klinger silty clay loam, 1 to 4 percent slopes

Map Unit Setting

National map unit symbol: 2t3fs
Elevation: 900 to 1,140 feet
Mean annual precipitation: 32 to 38 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 148 to 169 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Klinger and similar soils: 95 percent
Minor components: 5 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Klinger

Setting

Landform: Interfluves
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Loess over till

Typical profile

Ap - 0 to 8 inches: silty clay loam
A - 8 to 14 inches: silty clay loam
AB - 14 to 19 inches: silty clay loam
Bg1 - 19 to 29 inches: silty clay loam
2Bg2 - 29 to 45 inches: loam
2Bg3 - 45 to 59 inches: loam
2BC1 - 59 to 72 inches: loam
2BC2 - 72 to 79 inches: loam

Properties and qualities

Slope: 1 to 4 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.14 in/hr)
Depth to water table: About 12 to 42 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 9.7 inches)

Report — Map Unit Description

Johnson County, Iowa

377B—Dinsdale silty clay loam, 2 to 5 percent slopes

Map Unit Setting

National map unit symbol: 2t3f9
Elevation: 560 to 1,270 feet
Mean annual precipitation: 34 to 38 inches
Mean annual air temperature: 45 to 50 degrees F
Frost-free period: 152 to 169 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Dinsdale and similar soils: 90 percent
Minor components: 10 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Dinsdale

Setting

Landform: Interfluves
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Loess over till

Typical profile

Ap - 0 to 7 inches: silty clay loam
A - 7 to 12 inches: silty clay loam
AB - 12 to 19 inches: silty clay loam
Bt1 - 19 to 28 inches: silty clay loam
Bt2 - 28 to 34 inches: silty clay loam
2Bt3 - 34 to 46 inches: loam
2BC1 - 46 to 58 inches: loam
2BC2 - 58 to 79 inches: loam

Properties and qualities

Slope: 2 to 5 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Moderately well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.14 in/hr)
Depth to water table: About 48 to 72 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 25 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 9.3 inches)

Report — Map Unit Description

Johnson County, Iowa

382—Maxfield silty clay loam, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 2vw4h
Elevation: 520 to 1,310 feet
Mean annual precipitation: 23 to 41 inches
Mean annual air temperature: 43 to 54 degrees F
Frost-free period: 155 to 210 days
Farmland classification: Prime farmland if drained

Map Unit Composition

Maxfield and similar soils: 90 percent
Minor components: 10 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Maxfield

Setting

Landform: Interfluves
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Concave
Across-slope shape: Linear
Parent material: Loess over till

Typical profile

Ap - 0 to 12 inches: silty clay loam
A - 12 to 19 inches: silty clay loam
Bg - 19 to 29 inches: silty clay loam
2Bw - 29 to 55 inches: loam
2BC - 55 to 79 inches: loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Poorly drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.14 in/hr)
Depth to water table: About 0 to 12 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 15 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: Moderate (about 7.0 inches)

Report — Map Unit Description

Johnson County, Iowa

761—Franklin silt loam, 1 to 3 percent slopes

Map Unit Setting

National map unit symbol: 2y8q0
Elevation: 520 to 1,310 feet
Mean annual precipitation: 23 to 41 inches
Mean annual air temperature: 43 to 54 degrees F
Frost-free period: 155 to 210 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Franklin and similar soils: 95 percent
Minor components: 5 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Franklin

Setting

Landform: Interfluves
Landform position (two-dimensional): Summit, footslope
Landform position (three-dimensional): Interfluve
Down-slope shape: Linear
Across-slope shape: Convex
Parent material: Fine-silty loess over loamy till

Typical profile

Ap - 0 to 6 inches: silt loam
E - 6 to 13 inches: silt loam
Bt - 13 to 28 inches: silty clay loam
2Bt - 28 to 46 inches: loam
2BC - 46 to 79 inches: loam

Properties and qualities

Slope: 1 to 3 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Somewhat poorly drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately low (0.00 to 0.14 in/hr)
Depth to water table: About 12 to 42 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum content: 10 percent
Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)
Available water supply, 0 to 60 inches: High (about 9.0 inches)