Soil Survey Investigations Report No. 35

Soil Survey Laboratory Data and Descriptions for Some Soils of...

... LOUISIANA

SOIL CONSERVATION SERVICE • U.S. DEPARTMENT OF AGRICULTURE
In cooperation with Louisiana Agricultural Experiment Station

Soil survey investigations reports already published:

SSIR No. 1 Soil Survey Laboratory Methods and Procedures for Collecting Soil Samples

Soil Survey Laboratory Data and Descriptions for Some Soils of:

SSIR No. 2 North Dakota
SSIR No. 3 Iowa
SSIR No. 4 Kansas
SSIR No. 5 Nebraska
SSIR No. 6 Arkansas, Louisiana, and Missouri
SSIR No. 7 Montana
SSIR No. 8 Wyoming
SSIR No. 9 Minnesota
SSIR No. 10 Colorado
SSIR No. 11 Oklahoma
SSIR No. 12 Puerto Rico and the Virgin Islands
SSIR No. 13 Mississippi
SSIR No. 14 Kentucky
SSIR No. 15 Tennessee
SSIR No. 16 North Carolina, South Carolina, and Georgia
SSIR No. 17 Wisconsin
SSIR No. 18 Indiana
SSIR No. 19 Illinois
SSIR No. 20 New England States
SSIR No. 21 A Toposequence of Soils in Tonalite Grus in the Southern California Peninsular Range

Soil Survey Laboratory Data and Descriptions for Some Soils of:

SSIR No. 22 Alabama and Florida
SSIR No. 23 Nevada
SSIR No. 24 California
SSIR No. 25 New York
SSIR No. 26 New Jersey
SSIR No. 27 Pennsylvania
SSIR No. 28 Arizona
SSIR No. 29 Hawaii
SSIR No. 30 Texas
SSIR No. 31 Iowa
SSIR No. 32 Wyoming
SSIR No. 33 Minnesota
SSIR No. 34 Wisconsin

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PREFACE

The Soil Survey Investigations Report (SSIR) series was established to preserve and make available technical information resulting from soil survey investigations. SSIR No. 1, "Soil Survey Laboratory Methods and Procedures for Collecting Soil Samples", revised April 1972, describes in detail the methods used in the soil survey laboratories. SSIR No. 21 reports a single specific study. Other reports in the series contain pedon descriptions and data from the individual states and Puerto Rico and the Virgin Islands. The entire series is listed on the inside front cover.

This report contains pedon descriptions and data obtained in Louisiana from 1945 to 1974. Data from Arkansas and Missouri as well as Louisiana were published in SSIR No. 6. These Louisiana data and pedon descriptions are republished in this document to give the current classification and provide all the data in one source. The majority of laboratory analyses were conducted at the Soil Survey Laboratory Unit, Lincoln, Nebraska.

Laboratory data for different soils cannot always be compared without allowance for the method. Methods are indexed by code or footnote in data sheet column headings and are identified briefly on the code sheets. Detailed explanations of coded procedures are in SSIR No. 1.

Many of the soil descriptions published herein were prepared as working documents, not necessarily for publication. Some contain unusually detailed information pertinent to specific soil survey investigations. Such information, including older concepts of soil series, relationships among pedons, and field estimates of properties such as texture, is useful in a publication of this type. Editing is, therefore, minimal with emphasis toward preservation of descriptive data.

Many pedons no longer represent the soil series with which they were originally identified. All were classified during the period 1975 to 1978. Some series names changed and are footnoted where the original name carries useful connotations. Pedons that are not included within the limits of recognized series are classified only to the family level. In the taxonomic and geographic indexes and in the body of the text, pedons are arranged by taxonomic unit.

METHODS CODE SYMBOLS

1. SAMPLE COLLECTION AND PREPARATION
   A. Field sampling
      1. Site selection
      2. Soil sampling
         a. Stony soils
         b. Marsh and swamp soils
   B. Laboratory preparation
      1. Standard (airdry)
         a. Square-hole 2-mm sieve
         b. Round-hole 2-mm sieve
      2. Field moist
      3. Carbonate-containing material
      4. Carbonate-indurated material
2. CONVENTIONS
   A. Size-fraction base for reporting
      1. < 2-mm
      2. <.size specified
   B. Data sheet symbols
      tr: trace, not measurable by quantitative procedure used or less than reportable amount
      tr(s): trace, detectable only by qualitative procedure more sensitive than quantitative procedure used
      blank: analysis not run
      <: less than reported amount or none present
3. PARTICLE-SIZE ANALYSES
   A. Particles < 2-mm (pipet method)
      1. Airdry samples
         a. Carbonate and noncarbonate clay
         b. Fine clay
         c. Water-dispersible clay
      2. Moist samples
         a. Carbonate and noncarbonate clay
         b. Fine clay
         c. Water-dispersible clay
   B. Particles > 2-mm
      1. Weight estimates
         a. By field and laboratory weighing
         b. From volume and weight estimates
      2. Volume estimates
4. FABRIC-RELATED ANALYSES
   A. Bulk density
      1. Saran-coated clods
         a. Field state
         b. Airdry
         c. 30-cm absorption
         d. 1/3-bar desorption I
         e. 1/3-bar desorption II
         f. 1/3-bar desorption III
         g. 1/10-bar desorption
         h. Ovendry
   B. Water retention
      1. Pressure-plate extraction (1/3 or 1/10-bar)
         a. Sieved samples
         b. Soil pieces
         c. Natural clods
      2. Pressure-membrane extraction (15-bars)
         a. Field-moist samples
      3. Field state
      4. Airdry
   C. Water-retention difference
      1. 1/3 bar to 15 bars
      2. 1/10 bar to 15 bars
   D. Linear extensibility
      1. Dry to moist
   E. Micromorphology
      1. Thin sections
         a. Preparation
         b. Interpretation
         c. Moved-clay percentage
   F. Plasticity index
      1. Liquid limit
      2. Upper plastic limit
5. ION-EXCHANGE ANALYSES
   A. Cation-exchange capacity
      1. NH_4OAc, pH 7.0
         a. Direct distillation
      2. NaOAc, pH 8.2
         a. Centrifuge method
      3. Sum of cations
         a. Acidity by $BaCl_2$-TEA, pH 8.2; bases by NH_4OAc, pH 7.0
         b. Sum of bases plus Al
      4. NH_4OAc, pH 7.0 leaching tube
         a. Direct distillation
   B. Extractable bases
      1. NH_4OAc extraction
         a. Uncorrected
         b. Corrected (exchangeable)
         c. See 5B4
      2. KCl-TEA extraction, pH 8.2
      3. KCl-TEA, pH 8.2 (revised)
         a. Uncorrected
         b. Corrected (exchangeable)
      4. NH_4OAc, pH 7.0 (modified)
         a. Uncorrected
         b. Corrected (exchangeable)
   C. Base saturation
      1. NH_4OAc, pH 7.0
      2. NaOAc, pH 8.2
      3. Sum of cations
   D. Sodium saturation (exchangeable Na pct.)
      1. NaOAc, pH 8.2
      2. NH_4OAc, pH 7.0
   E. Sodium-adsorption ratio
   F. Calcium saturation
      1. NH_4OAc, pH 7.0
6. CHEMICAL ANALYSES
   A. Organic carbon
      1. Acid-dichromate digestion
         a. $FeSO_4$ titration
         b. CO_2 evolution, gravimetric
   B. Nitrogen
      1. Kjeldahl digestion
         a. Ammonia distillation
   C. Iron
      1. Dithionite extraction
         a. Dichromate titration
         b. EDTA titration
      2. Dithionite-citrate extraction
         a. Orthophenanthroline colorimetry
         b. Atomic absorption
      3. Dithionite-citrate-bicarbonate extraction
         a. Potassium thiocyanate colorimetry
      4. Sodium-pyrophosphate extraction
         a. Atomic absorption
      5. Ammonium oxalate extraction
         a. Atomic absorption
   D. Calcium carbonate
      1. HCl treatment
         a. Manometric
         b. Titrimetric
   F. Gypsum
      1. Water extract
         a. Precipitation in acetone
         b. Indirect estimate
   G. Aluminum
      1. KCl extraction I, 30 min.
         a. Fluoride titration
         b. Atomic absorption
      2. Sodium pyrophosphate extraction
         a. Atomic absorption
      3. Ammonium oxalate extraction
         a. Atomic absorption
      4. Dithionite-citrate extraction
         a. Atomic absorption

METHODS CODE SYMBOLS

6. CHEMICAL ANALYSES (cont.)
   H. Extractable acidity
      1. $BaCl_2$-triethanolamine I
         a. Back-titration with HCl
      2. $BaCl_2$-triethanolamine II
         a. Back-titration with HCl
   I. Carbonate
      1. Saturation extract
         a. Acid titration
   J. Bicarbonate
      1. Saturation extract
         a. Acid titration
   K. Chloride
      1. Saturation extract
         a. Mohr titration
         b. Potentiometric
   L. Sulfate
      1. Saturation extract
         a. Gravimetric $BaSO_4$
         b. EDTA titration
   M. Nitrate
      1. Saturation extract
         a. PDS acid colorimetry
         b. Diphenylamine
   N. Calcium
      1. Saturation extract
         a. EDTA titration
         b. Atomic absorption
      2. NH_4OAc extraction
         a. EDTA-alcohol separation
         b. Oxalate-permanganate I
         c. Oxalate-permanganate II
            Fe, Al, and Mn removed
         d. Oxalate-cerate
         e. Atomic absorption
      3. KCl-TEA extraction
         a. EDTA titration
         b. Atomic absorption
   O. Magnesium
      1. Saturation extract
         a. EDTA titration
         b. Atomic absorption
      2. NH_4OAc extraction
         a. EDTA-alcohol separation
         b. Phosphate titration
         c. Atomic absorption
      3. NH_4Cl-EtOH extraction
         a. EDTA titration
      4. KCl-TEA extraction
         a. Phosphate titration
         b. EDTA titration
         c. Atomic absorption
   P. Sodium
      1. Saturation extract
         a. Flame photometry
         b. Atomic absorption
      2. NH_4OAc extraction
         a. Flame photometry
         b. Atomic absorption

6. CHEMICAL ANALYSES (cont.)
   Q. Potassium
      1. Saturation extract
         a. Flame photometry
         b. Atomic absorption
      2. NH_4OAc extraction
         a. Flame photometry
         b. Atomic absorption
   R. Sulfur
      1. $NaHCO_3$ extract, pH 8.5
         a. Methylene blue
      2. HCl release (sulfide)
         a. Iodine titration
   S. Total phosphorus
      1. Perchloric acid digestion
         a. Molybdovanadophosphoric acid colorimetry
7. MINERALOGY
   A. Instrumental analysis
      1. Preparation
         a. Carbonate removal
         b. Organic-matter removal
         c. Iron removal
         d. Particle-size fractionation
         e. PSDA pretreatment
      2. X-ray diffraction
         a. Thin film on glass, solution pretreatment
         b. Thin film on glass, resin pretreatment
      3. Differential thermal analysis
   B. Optical analysis
      1. Grain studies
      2. Electron microscopy
   C. Total analysis
      1. Chemical
      2. X-ray emission spectrography
   D. Surface area
      1. Glycerol retention
8. MISCELLANEOUS
   A. Saturated paste, mixed
      1. Saturation extract
         a. Conductivity
         b. Conductivity, quick test
      2. Conductivity, saturated paste
   B. Saturated paste, capillary rise
      1. Saturation extract
         a. Conductivity
   C. pH
      1. Soil suspensions
         a. Water dilution
         b. Saturated paste
         c. KCl
         d. NaF
         e. $CaCl_2$
   D. Ratios and estimates
      1. To total clay
      2. To noncarbonate clay
      3. Ca to Mg (extractable)
      4. Estimated clay percentage
      5. Estimated total salt
   E. Soil resistivity
      1. Saturated paste

CLASSIFICATION INDEX

ALFISOL

AQUALF

Page

ALBAQUALF

Typic Albaqualf
fine, montmorillonitic, thermic
Crowley S57LA-1-3 3

fine-silty, mixed, thermic
Crowley taxadjunct S57LA-27-1 5

GLOSSAQUALF

Typic Glossaqualf
fine-silty, siliceous, thermic
Caddo S57LA-6-3 7
Caddo S57LA-6-4 9
Guyton S68LA-37-4 11

fine-silty, mixed, thermic
Calhoun S61LA-17-8 13
Foley taxadjunct S73LA-62-1 15
Series not designated S61LA-17-5 17
Wrightsville taxadjunct S57LA-1-4 19

coarse-loamy, siliceous, thermic
Series not designated S70LA-60-1 21

NATRAQUALF

Albic Glossic Natraqualf
fine-silty, mixed, thermic
Foley S67LA-42-1 23
Foley S73LA-62-2 25

fine, montmorillonitic, thermic
Series not designated S57LA-1-1 27

Glossic Natraqualf
fine-silty, mixed, thermic
Verdun S61LA-17-9 29
Verdun S61LA-17-10 31

OCHRAQUALF

Typic Ochraqualf
fine, montmorillonitic, thermic
Forestdale S72LA-62-5 33

fine-silty, mixed, thermic
Forestdale taxadjunct S72LA-62-6 35
Series not designated S57LA-27-2 37

Aeric Ochraqualf
fine-silty, mixed, thermic
Dundee S63LA-54-3 39
Dundee S63LA-54-4 41
Series not designated S57LA-1-2 43

fine, montmorillonitic, thermic
Wrightsville taxadjunct S56LA-8-3 45

Vertic Ochraqualf
fine, montmorillonitic, thermic
Series not designated S56LA-8-1 47
Series not designated S57LA-8-4 49

UDALF

FRAGIUDALF

Typic Fragiudalf
fine-silty, mixed, thermic
Loring S61LA-17-2 51
Loring S61LA-17-3 53

Page

FRAGIUDALF (cont.)

Aquic Fragiudalf
fine-silty, mixed, thermic
Olivier S61LA-17-1 55
Olivier S61LA-17-4 57
Olivier S61LA-17-6 59
Olivier S61LA-17-7 61

Glossaquic Fragiudalf
fine-silty, mixed, thermic
Calloway S63LA-42-2 63

Glossic Fragiudalf
fine-silty, mixed, thermic
Grenada S63LA-42-1 65
Grenada S63LA-42-3 67
Grenada S63LA-42-6 69

GLOSSUDALF

Aquic Glossudalf
fine-silty, siliceous, thermic
Series not designated S57LA-6-1 71

HAPLUDALF

Typic Hapludalf
coarse-loamy, siliceous, thermic
Series not designated S55LA-8-1 73
Series not designated S55LA-8-2 75

fine-silty, mixed, thermic
Memphis S69LA-23-10 77
Memphis S69LA-23-11 79

Ultic Hapludalf
fine-silty, mixed, thermic
Dexter S63LA-42-4 81
Dexter S63LA-42-5 83

fine-loamy, siliceous, thermic
Series not designated S56LA-53-1 85
Series not designated S56LA-53-2 87

Vertic Hapludalf
fine, montmorillonitic, thermic
Natchitoches S72LA-35-1 89
Woodtell S74LA-17-7 91

very-fine, montmorillonitic, thermic
Woodtell taxadjunct S74LA-17-8 93

PALEUDALF

Typic Paleudalf
fine-loamy, siliceous, thermic
Attoyac S66LA-60-1 95

coarse-loamy, siliceous, thermic
Series not designated S45LA-56-1 97

Rhodic Paleudalf
fine, kaolonitic, thermic
Series not designated S72LA-43-8 99

Vertic Paleudalf
fine, mixed, thermic
Boswell S45LA-7-1 101

very-fine, montmorillonitic, thermic
Forbing S74LA-17-9 103
Forbing S74LA-17-10 105
Forbing S74LA-17-11 107

CLASSIFICATION INDEX

ENTISOL

AQUENT

Page

FLUVAQUENT

Aeric Fluvaquent
fine-silty, mixed, nonacid, thermic
Commerce S63LA-54-1 109
Commerce S63LA-54-2 111

HYDRAQUENT

Typic Hydraquent
very-fine, montmorillonitic, nonacid, thermic
Barbary S68LA-47-13 113
Barbary taxadjunct S68LA-48-9 115
Barbary taxadjunct S71LA-26-2 117
Barbary S71LA-26-11 119
Gentilly S71LA-36-5 121
Series not Designated S71LA-26-7 123

HISTISOL

HEMIST

MEDIHEMIST

Hydric Medihemist
euic, thermic
Carlin S68LA-48-5 125

SAPRIST

MEDISAPRIST

Typic Medisaprist
euic, thermic
Kenner taxadjunct S71LA-26-4 127
Lafitte S69LA-23-4 129
Lafitte S71LA-36-1 131
Lafitte S71LA-36-2 133
Maurepas S68LA-48-6 135
Maurepas S69LA-23-3 137
Maurepas S69LA-23-8 139
Series not Designated S69LA-26-2 141

Fluvaquentic Medisaprist
euic, thermic
Kenner S71LA-26-1 143
Kenner S71LA-26-6 145
Kenner S71LA-26-13 147
Series not Designated S69LA-23-9 149
Series not Designated S71LA-26-5 151

Terric Medisaprist
clayey, montmorillonitic, euic, thermic
Allemands S68LA-48-7 153

clayey, mixed, euic, thermic
Allemands taxadjunct S68LA-29-2 155

loamy, mixed, euic, thermic
Delcomb S69LA-23-6 157
Delcomb S69LA-23-7 159

clayey, montmorillonitic, dysic, thermic
Series not Designated S71LA-26-3 161
Series not Designated S71LA-26-8 163

INCEPTISOL

AQUEPT

Page

HAPLAQUEPT

Typic Haplaquept
very-fine, montmorillonitic, nonacid, thermic
Series not Designated S68LA-29-1 165

Aeric Haplaquept
fine-silty, mixed, nonacid, thermic
Series not Designated S57LA-8-8 167

Vertic Haplaquept
very-fine, montmorillonitic, nonacid, thermic
Perry taxadjunct S72LA-62-2 169
Perry taxadjunct S72LA-62-3 171
Sharkey S71LA-26-12 173
Sharkey S72LA-62-1 175

fine, mixed, nonacid, thermic
Series not Designated S57LA-8-7 177

fine, montmorillonitic, acid, thermic
Series not Designated S57LA-8-6 179

MOLLISOL

AQUOLL

ARGIAQUOLL

Typic Argiaquoll
fine-silty, mixed, thermic
Andry S69LA-23-2 181
Andry S69LA-23-5 183

Vertic Argiaquoll
fine, montmorillonitic, thermic
Baldwin taxadjunct Pedon No. 21 185

HAPLAQUOLL

Typic Haplaquoll
fine-silty, mixed, thermic
Series not Designated S69LA-23-1 187

Vertic Haplaquoll
fine, montmorillonitic, thermic
Iberia Pedon No. 22 189

ULTISOL

AQUULT

OCHRAQUULT

Typic Ochraquult
fine-loamy, siliceous thermic
Series not Designated S45LA-56-2 191

UDULT

FRAGIUDULT

Typic Fragiudult
fine-silty, siliceous, thermic
Shatta taxadjunct S57LA-8-2 193
Shatta taxadjunct S57LA-8-3 195

ULTISOL

UDULT (cont.)

Page

HAPLUDULT

Typic Hapludult
fine-loamy, siliceous, thermic
Cahaba S45LA-31-2 197

PALEUDULT

Typic Paleudult
fine-loamy, siliceous, thermic
Ruston S57LA-8-1 199
Ruston taxadjunct S57LA-8-2 201
Series not Designated S45LA-31-3 203

fine, mixed, thermic
Series not Designated S45LA-31-1 205

Plinthaquic Paleudult
fine-silty, siliceous, thermic
Beauregard S57LA-6-2 207

Plinthic Paleudult
fine-loamy, siliceous, thermic
Malbis S57LA-6-6 209

fine-silty, siliceous, thermic
Series not Designated S57LA-6-5 211

GEOGRAPHICAL INDEX

Classification	Soil Series	Page
ACADIA PARISH		
Alfisol		
Aqualf		
Albaqualf	Crowley	3
Glossaqualf	Wrightsville taxadjunct	19
Natraqualf	Series not designated	27
Ochraqualf	Series not designated	43
BEAUREGARD PARISH		
Alfisol		
Aqualf		
Glossaqualf	Caddo	7
	Caddo	9
Udalf		
Glossudalf	Series not designated	71
Ultisol		
Udult		
Paleudult	Beauregard	207
	Malbis	209
	Series not designated	211
BIENVILLE PARISH		
Alfisol		
Udalf		
Paleudalf	Boswell	101
BOSSIER PARISH		
Alfisol		
Aqualf		
Ochraqualf	Wrightsville taxadjunct	45
	Series not designated	47
	Series not designated	49
Udalf		
Hapludalf	Series not designated	73
	Series not designated	75
Inceptisol		
Aquept		
Haplaquept	Series not designated	167
	Series not designated	177
	Series not designated	179
Ultisol		
Udult		
Fragiudult	Shatta taxadjunct	193
	Shatta taxadjunct	195
Paleudult	Ruston	199
	Ruston taxadjunct	201
CADDO PARISH		
Alfisol		
Udalf		
Hapludalf	Woodtell	91
	Woodtell taxadjunct	93
Paleudalf	Forbing	103
	Forbing	105
	Forbing	107
EAST BATON ROUGE PARISH		
Alfisol		
Aqualf		
Glossaqualf	Calhoun	13
	Series not designated	17
Natraqualf	Verdun	29
	Verdun	31
Udalf		
Fragiudalf	Loring	51
	Loring	53
	Olivier	55
	Olivier	57
	Olivier	59
	Olivier	61
IBERIA PARISH		
Alfisol		
Udalf		
Hapludalf	Memphis	77
	Memphis	79
Histosol		
Saprist		
Medisaprist	Lafitte	129
	Maurepas	137
	Maurepas	139
	Series not designated	149
	Delcomb	157
	Delcomb	159
Mollisol		
Aquoll		
Argiaquoll	Andry	181
	Andry	183
Haplaquoll	Series not designated	187
JEFFERSON PARISH		
Entisol		
Aquent		
Hydraquent	Barbary taxadjunct	117
	Barbary	119
	Series not designated	123
Histosol		
Saprist		
Medisaprist	Kenner taxadjunct	127
	Series not designated	141
	Kenner	143
	Kenner	145
	Kenner	147
	Series not designated	151
	Series not designated	161
	Series not designated	163
Inceptisol		
Aquept		
Haplaquept	Sharkey	173
JEFFERSON DAVIS PARISH		
Alfisol		
Aqualf		
Albaqualf	Crowley taxadjunct	5
Ochraqualf	Series not designated	37

GEOGRAPHICAL INDEX

Classification	Soil Series	Page
LAFOURCHE PARISH		
Histosol		
Saprist		
Medisaprist	Allemands taxadjunct	155
Inceptisol		
Aquept		
Haplaquept	Series not designated	165
LINCOLN PARISH		
Ultisol		
Udult		
Hapludult	Cahaba	197
Paleudult	Series not designated	203
	Series not designated	205
NATCHITOCHES PARISH		
Alfisol		
Udalf		
Hapludalf	Natchitoches	89
ORLEANS PARISH		
Entisol		
Aquent		
Hydraquent	Gentilly	121
Histosol		
Saprist		
Medisaprist	Lafitte	131
	Lafitte	133
OUACHITA PARISH		
Alfisol		
Aqualf		
Glossaqualf	Guyton	11
RICHLAND PARISH		
Alfisol		
Aqualf		
Natraqualf	Foley	23
Udalf		
Fragiudalf	Calloway	63
	Grenada	65
	Grenada	67
	Grenada	69
Hapludalf	Dexter	81
	Dexter	83
SABINE PARISH		
Alfisol		
Udalf		
Paleudalf	Series not designated	99
ST. JAMES PARISH		
Entisol		
Aquent		
Hydraquent	Barbary	113
ST. JOHN THE BAPTIST PARISH		
Entisol		
Aquent		
Hydraquent	Barbary taxadjunct	115
Histosol		
Hemist		
Medihemist	Carlin	125
Saprist		
Medisaprist	Maurepas	135
	Allemands	153
ST. MARY PARISH		
Mollisol		
Aquoll		
Argiaquoll	Baldwin taxadjunct	185
Haplaquoll	Iberia	189
TANGIPAHOA PARISH		
Alfisol		
Udalf		
Hapludalf	Series not designated	85
	Series not designated	87
TENSAS PARISH		
Alfisol		
Aqualf		
Ochraqualf	Dundee	39
	Dundee	41
Entisol		
Aquent		
Fluvaquent	Commerce	109
	Commerce	111
UNION PARISH		
Alfisol		
Udalf		
Paleudalf	Series not designated	97
Ultisol		
Aquult		
Ochraquult	Series not designated	191
WEBSTER PARISH		
Alfisol		
Aqualf		
Glossaqualf	Series not designated	21
Udalf		
Paleudalf	Attoyac	95
WEST CARROLL PARISH		
Alfisol		
Aqualf		
Glossaqualf	Foley taxadjunct	15
Natraqualf	Foley	25
Ochraqualf	Forestdale	33
	Forestdale taxadjunct	35
Inceptisol		
Aquept		
Haplaquept	Perry taxadjunct	169
	Perry taxadjunct	171

SOIL SERIES INDEX

Series	Soil Survey No. 1/	Classification	Page
Allemands taxadjunct	S68LA-29-2	Medisaprist	155
Allemands	S68LA-48-7	Medisaprist	153
Andry	S69LA-23-2	Argiaquoll	181
Andry	S69LA-23-5	Argiaquoll	183
Attoyac	S66LA-60-1	Paleudalf	95
Barbary	S68LA-47-13	Hydraquent	113
Barbary taxadjunct	S68LA-48-9	Hydraquent	115
Barbary taxadjunct	S71LA-26-2	Hydraquent	117
Barbary	S71LA-26-11	Hydraquent	119
Baldwin taxadjunct	Pedon 21	Argiaquoll	185
Beauregard	S57LA-6-2	Paleudult	207
Boswell	S45LA-7-1	Paleudalf	101
Caddo	S57LA-6-3	Glossaqualf	7
Caddo	S57LA-6-4	Glossaqualf	9
Cahaba	S45LA-31-2	Hapludult	197
Calhoun	S61LA-17-8	Glossaqualf	13
Calloway	S63LA-42-2	Fragiudalf	63
Carlin	S68LA-48-5	Medihemist	125
Commerce	S63LA-54-1	Fluvaquent	109
Commerce	S63LA-54-2	Fluvaquent	111
Crowley	S57LA-1-3	Albaqualf	3
Crowley taxadjunct	S57LA-27-1	Albaqualf	5
Delcomb	S69LA-23-6	Medisaprist	157
Delcomb	S69LA-23-7	Medisaprist	159
Dexter	S63LA-42-4	Hapludalf	81
Dexter	S63LA-42-5	Hapludalf	83
Dundee	S63LA-54-3	Ochraqualf	39
Dundee	S63LA-54-4	Ochraqualf	41
Foley	S67LA-42-1	Natraqualf	23
Foley	S73LA-62-2	Natraqualf	25
Foley taxadjunct	S73LA-62-1	Glossaqualf	15
Forbing	S74LA-17-9	Paleudalf	103
Forbing	S74LA-17-10	Paleudalf	105
Forbing	S74LA-17-11	Paleudalf	107
Forestdale	S72LA-62-5	Ochraqualf	33
Forestdale taxadjunct	S72LA-62-6	Ochraqualf	35
Gentilly	S71LA-36-5	Hydraquent	121
Grenada	S63LA-42-1	Fragiudalf	65
Grenada	S63LA-42-3	Fragiudalf	67
Grenada	S63LA-42-6	Fragiudalf	69
Guyton	S68LA-37-4	Glossaqualf	11
Iberia	Pedon 22	Haplaquoll	189
Kenner	S71LA-26-1	Medisaprist	143
Kenner	S71LA-26-6	Medisaprist	145
Kenner	S71LA-26-13	Medisaprist	147
Kenner taxadjunct	S71LA-26-4	Medisaprist	127
Lafitte	S69LA-23-4	Medisaprist	129
Lafitte	S71LA-36-1	Medisaprist	131
Lafitte	S71LA-36-2	Medisaprist	133
Loring	S61LA-17-2	Fragiudalf	51
Loring	S61LA-17-3	Fragiudalf	53
Malbis	S57LA-6-6	Paleudalf	209
Maurepas	S68LA-48-6	Medisaprist	135
Maurepas	S69LA-23-3	Medisaprist	137
Maurepas	S69LA-23-8	Medisaprist	139
Memphis	S69LA-23-10	Hapludalf	77
Memphis	S69LA-23-11	Hapludalf	79
Natchitoches	S72LA-35-1	Hapludalf	89
Olivier	S61LA-17-1	Fragiudalf	55
Olivier	S61LA-17-4	Fragiudalf	57
Olivier	S61LA-17-6	Fragiudalf	59
Olivier	S61LA-17-7	Fragiudalf	61
Perry taxadjunct	S72LA-62-2	Haplaquept	169
Perry taxadjunct	S72LA-62-3	Haplaquept	171
Ruston	S57LA-8-1	Paleudult	199
Ruston taxadjunct	S57LA-8-2	Paleudult	201
Series not designated	S45LA-31-1	Paleudult	205
" " "	S45LA-31-3	Paleudult	203
" " "	S45LA-56-1	Paleudalf	97
" " "	S45LA-56-2	Ochraquult	191
" " "	S55LA-8-1	Hapludalf	73
" " "	S55LA-8-2	Hapludalf	75
" " "	S56LA-8-1	Ochraqualf	47
" " "	S56LA-53-1	Hapludalf	85
" " "	S56LA-53-2	Hapludalf	87
" " "	S57LA-1-1	Natraqualf	27
" " "	S57LA-1-2	Ochraqualf	43
" " "	S57LA-6-1	Glossudalf	71
" " "	S57LA-6-5	Paleudult	211

SOIL SERIES INDEX

Series	Soil Survey No. 1/	Classification	Page
Series not designated	S57LA-8-4	Ochraqualf	49
" " "	S57LA-8-6	Haplaquept	179
" " "	S57LA-8-7	Haplaquept	177
" " "	S57LA-8-8 .	Haplaquept	167
" " "	S57LA-27-2	Ochraqualf	37
" " "	S61LA-17-5	Glossaqualf	17
" " "	S68LA-29-1	Haplaquept	165
" " "	S69LA-23-1	Haplaquoll	187
" " "	S69LA-23-9	Medisaprist	149
" " "	S69LA-26-2	Medisaprist	141
" " "	S70LA-60-1	Glossaqualf	21
" " "	S71LA-26-3	Medisaprist	161
" " "	S71LA-26-5	Medisaprist	151
" " "	S71LA-26-7	Hydraquent	123
" " "	S71LA-26-8	Medisaprist	163
Series not designated	S72LA-43-8	Paleudalf	99
Sharkey	S71LA-26-12	Haplaquept	173
Sharkey	S72LA-62-1	Haplaquept	175
Shatta taxadjunct	S56LA-8-2	Fragiudult	193
Shatta taxadjunct	S57LA-8-3	Fragiudult	195
Verdun	S61LA-17-9	Natraqualf	29
Verdun	S61LA-17-10	Natraqualf	31
Woodtell	S74LA-17-7	Hapludalf	91
Woodtell taxadjunct	S74LA-17-8	Hapludalf	93
Wrightsville taxadjunct	S56LA-8-3	Ochraqualf	45
Wrightsville taxadjunct	S57LA-1-4	Glossaqualf	19

1/ Parish numbers (the number following LA in the Soil Survey No.) are as follows:

Projects sampled before 1974:

1. Acadia
6. Beauregard
7. Bienville
8. Bossier
17. East Baton Rouge
23. Iberia
26. Jefferson
27. Jefferson Davis
29. Lafourche
31. Lincoln
35. Natchitoches
36. Orleans
37. Ouachita
42. Richland
43. Sabine
47. St. James
48. St. John the Baptist
53. Tangipahoa
54. Tensas
56. Union
60. Webster
62. West Carroll

Projects sampled during 1974:

17. Caddo

SOIL CLASSIFICATION-

SERIES - - - - - - -

SOIL NO- - - - - - -

GENERAL METHODS- - -

U.S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE, NRTSC
SOIL SURVEY INVESTIGATIONS UNIT
LINCOLN, NEBRASKA

COUNTY - - -

SAMPLE NOS.-

DEPTH IN	HORIZON	PARTICLE SIZE ANALYSIS, LT 2MM, 3A1, 3A1A, 3A1B (PCT LT 2MM)																RATIO
		SAND 2-.05	SILT .05-.002	CLAY LT .002	FINE CLAY LT .0002	VCOS 2-1	CORS 1-.5	MEDS .5-.25	FNES .25-.10	VFNS .10-.05	COSI .05-.02	FNSI .02-.002	VFSI .005-.002	FAML TEXT SAND 2-.1	INTR II .2-.02	FINE CLAY TO CLAY	NON-CO3-CLAY	8D1 15-BAR TO CLAY

Depth (in.)	Horizon	Size class and particle diameter (mm): Total: Sand (2-0.05)	Silt (0.05-0.002)	Clay (<0.002)	Fine clay (<0.0002)	Sand: Very coarse (2-1)	Coarse (1-0.5)	Medium (0.5-0.25)	Fine (0.25-0.1)	Very fine (0.1-0.05)	Silt: (0.05-0.02)	Int. III (0.02-0.002)	(0.005-0.002)	Family texture sand (2-0.1)	International II (0.2-0.02)	Ratio fine clay to clay	Non-carbonate clay pct	Ratio 15-bar to clay
		Pct of < 2mm																
COLUMN 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19

DEPTH IN	PARTICLE SIZE ANALYSIS, MM, 3B, 3B1, 3B2 (PCT LT 75)						BULK DENSITY				WATER CONTENT				CARBONATE		PH	
	VOL. GT 2	WEIGHT GT 75	75-20	20-5	5-2	LT .074	20-2 PCT LT20	4A1D 1/3-BAR G/CC	4A1H OVEN DRY G/CC	4D1 COLE	4B1C 1/10 BAR	4B1C 1/3-BAR	4B2 15-BAR	4C1 WRD CM/CM	6E1B LT 2 PCT	3A1A LT .002 PCT	8C1A 1/1 H2O	8C1E 1/2 CACL

Depth (in.)	Size class and particle diameter (mm): Volume > 2 pct	Weight > 75 pct	75-20	20-5	5-2	<0.074 Pass 200 mesh	20-2 pct < 20	Bulk density: 1/3-bar g/cc	Oven-dry g/cc	COLE	Water content: 1/10-bar pct	1/3-bar pct	15-bar pct	1/3- to 15-bar cm/cm (in./in.)		Carbonate as $CaCO_3$: < 2mm pct	<0.002 mm pct	pH: (1:1) H_2O	(1:2) $CaCl_2$
		Pct < 75mm																	
COLUMN 1	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38

DEPTH IN	ORGANIC MATTER 6A1A ORGN CARB PCT	6B1A NITG PCT	C/N	IRON 6C2A EXT FE PCT	PHOS 6S1A TOTL PCT	EXTRACTABLE BASES 5B4A (MEQ / 100 G) 6N2E CA	6O2D MG	6P2A NA	6Q2A K	SUM EXTB	ACTY 6H1A BACL TEA	AL 6G1D KCL EXT	(CAT EXCH) 5A3A EXTB ACTY	5A6A NHAC	RATIO 8D1 NHAC TO CLAY	RATIO 8D3 CA TO MG	CA 5F SAT NHAC PCT	(BASE SAT) 5C3 EXTB ACTY PCT	5C1 NHAC PCT

Depth (in.)	Organic matter: Organic carbon pct	Nitrogen pct	C/N	Ext. iron as Fe pct	Total phosphorus pct	Extractable bases 5B (meq/100g): Ca	Mg	Na	K	Sum extractable bases	Ext. acidity	KCl ext. Al	Cat. exch. cap.: Sum of bases plus acidity	NH_4OAc	Ratio NH_4OAc to clay	Ratio Ca to Mg	Ca saturation NH_4OAc pct	Base saturation: Extractable acidity pct	NH_4OAc CEC pct
COLUMN 1	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57

DEPTH IN	SATURATED PASTE 8E1 REST OHM-CM	8C1B PH	8A H2O PCT	NA 5D2 ESP PCT	NA 5E SAR	SALT 8D5 TOTL SOLU PPM	GYP 6F1A PCT	SATURATION EXTRACT 8A1 (MEQ / LITER): 8A1A EC MMHOS/CM	6N1B CA	6O1B MG	6P1A NA	6Q1A K	6I1A CO3	6J1A HCO3	6K1A CL	6L1A SO4	6M1A NO3	ATTERBERG 4F1 LQID LMIT PCT	4F2 PLST INDX

Depth (in.)	Saturated paste: Resistivity ohm-cm	pH	Water at sat. pct	Exch. Na pct	Sodium adsorption ratio	Total soluble salt ppm	Gypsum pct	Saturation extract: Electrical conductivity mmhos/cm	Ca	Mg	Na	K	CO_3	HCO_3	Cl	SO_4	NO_3	Atterberg: Liquid limit pct	Plastic index
									meq/liter										
COLUMN 1	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76

Remarks: EXAMPLE DATA SHEET HEADINGS--This page alternates computer data sheet headings with printed data sheet headings and column numbers. Column numbers refer to more complete column headings on an adjoining page.

COLUMN HEADINGS FOR COMPUTER PRINTED DATA SHEETS

Column	
1	Depth in centimeters
2	Horizon
	Columns 3 through 16 display numbers which are percents of the total wei; of particles 2 millimeters or less in size.
3	Total sand (particles range from .05 to 2 millimeters)
4	Total silt (particles range from .002 to .05 millimeter)
5	Total clay (particles are smaller than .002 millimeter)
6	Total fine clay (particles are smaller than .0002 millimeter)
7	Very coarse sand (particles range from 1 to 2 millimeters)
8	Coarse sand (particles range from 0.5 to 1 millimeter)
9	Medium sand (particles range from 0.25 to 0.5 millimeter)
10	Fine sand (particles range from 0.1 to 0.25 millimeter)
11	Very fine sand (particles range from .05 to 0.1 millimeter)
12	Coarse silt (particles range from .02 to .05 millimeter)
13	Fine silt (particles range from .002 to .02 millimeter; these limits also define the range of total silt on the International Soil Science Society Scale.)
14	Very fine silt (particles range from .002 to .005 millimeter)
15	Family texture sand (particles range from 0.1 to 2 millimeters)
16	International II (particles range from .02 to 0.2 millimeter; these limits define the range of the fine sand on the International Soil Science Society Scale.)
17	Fine clay to clay (this is the ratio of fine clay to total clay expressed as percent.)
18	Noncarbonate clay (this is the percentage of total clay, column 5, minus the percentage of carbonate clay, column 36.)
19	Ratio of 15-bar water percentage to total clay percentage
20	Volume of material greater than 2 millimeters given as a percent of total (sample volume)
21	Greater than 75 millimeter material given as a percent of total sample weight
22	Particle size range from 20 to 75 millimeters given as a weight percent of all material 75 millimeters or less in the sample
23	Particle size range from 5 to 20 millimeters given as a weight percent of all material 75 millimeters or less in the sample
24	Particle size range from 2 to 5 millimeters given as a weight percent of all material 75 millimeters or less in the sample
25	Particle size range less than 0.74 millimeter given as a weight percent of all material 75 millimeters or less
26	Particle size range from 2 to 20 millimeters given as a weight percent of all material 20 millimeters or less
27	Bulk density of soil desorbed to 1/3-bar given in grams per cubic centimeter
28	Bulk density of oven dry soil given in grams per cubic centimeter
29	Coefficient of linear extensibility
30	Water content of soil desorbed to 1/10-bar given as a percent of oven dry weight
31	Water content of soil desorbed to 1/3-bar given as a percent of oven dry weight
32	Water content of soil fragments desorbed to 15 bars given as a percent of oven dry weight
33	Water retention difference given in centimeter per centimeter
34	Column used for any water content measurement different from those given in columns 30 through 33
35	Carbonate content of the material 2 millimeters or less given as a percent
36	Carbonate content of the material .002 millimeter or less given as a percent
37	pH of a 1:1 suspension of soil in distilled water
38	pH of a 1:2 suspension of soil in .01 M $CaCl_2$
39	Organic carbon given as a percent
40	Nitrogen given as a percent
41	Organic carbon to nitrogen ratio
42	Extractable iron given as a percent
43	Total phosphorus given as a percent
44	Extractable calcium given in milliequivalents per 100 grams of soil
45	Extractable magnesium given in milliequivalents per 100 grams of soil
46	Extractable sodium given in milliequivalents per 100 grams of soil
47	Extractable potassium given in milliequivalents per 100 grams of soil
48	Sum of the extractable bases given in milliequivalents per 100 grams of soil
49	Acidity - barium chloride with triethanolamine measurement - given in milliequivalents per 100 grams of soil
50	Aluminum - potassium chloride extraction - given in milliequivalents per 100 grams of soil
51	Cation exchange capacity by sum of the extractable bases plus the acidity given in milliequivalents per 100 grams of soil
52	Cation exchange capacity as measured by ammonium acetate given in milliequivalents per 100 grams of soil
53	Ratio of ammonium acetate cation exchange capacity to total clay
54	Ratio of extractable calcium to extractable magnesium
55	Calcium saturation of the ammonium acetate cation exchange capacity given as a percent
56	Base saturation - sum of the extractable bases divided by the acidity plus the sum of the extractable bases - given as a percent

COLUMN HEADINGS FOR COMPUTER PRINTED DATA SHEETS

Column	
57	Base saturation - sum of the extractable bases divided by the ammonium acetate cation exchange capacity - given as a percent
58	Saturated paste (soil plus water) resistivity given in ohm-cm
59	Saturated paste (soil plus water) pH
60	Saturated paste (soil plus water) water content given as a percent
61	Exchangeable sodium percentage
62	Sodium adsorption ratio
63	Total soluble salt given in parts per million
64	Gypsum given in percent
65	Electrical conductivity of the saturation extract given in mmhos per centimeter
66	Calcium content of the saturation extract given in milliequivalents per liter
67	Magnesium content of the saturation extract given in milliequivalents per liter
68	Sodium content of the saturation extract given in milliequivalents per liter
69	Potassium content of the saturation extract given in milliequivalents per liter
70	Carbonate (CO_3) content of the saturation extract given in milliequivalents per liter
71	Bicarbonate (HCO_3) content of the saturation extract given in milliequivalents per liter
72	Chloride content of the saturation extract given in milliequivalents per liter
73	Sulfate (SO_4) content of the saturation extract given in milliequivalents per liter
74	Nitrate (NO_3) content of the saturation extract given in milliequivalents per liter
75	Liquid limit given as percent water - percentage basis is soil material less than 0.4 millimeter
76	Plastic index

OIL SURVEY LABORATORY Lincoln, Nebr. Aug., 1958

SOIL TYPE Crowley **LOCATION** Acadia Parish, Louisiana

SURVEY NOS. S57La-1-3 **LAB. NOS.** 7153-7158

DEPTH INCHES	HORIZON	1B1a PARTICLE SIZE DISTRIBUTION (in mm.) (per cent) VERY COARSE SAND 2-1	COARSE SAND 1-0.5	MEDIUM SAND 0.5-0.25	FINE SAND 0.25-0.10	VERY FINE SAND 0.10-0.05	SILT 0.05-0.002	CLAY < 0.002	0.2-0.02	3A1 0.02-0.002	> 2	TEXTURAL CLASS
0-4	Ap1	-	0.2a	0.1b	2.8c	18.8c	68.1	10.0	52.0	37.6	Tr.	sil
4-8	Ap2	1.0a	1.5a	0.4b	2.6c	17.3c	62.5	14.7	45.9	36.3	-	sil
8-16	A2g	1.8a	2.1a	0.5b	2.6c	15.6c	59.3	18.1	42.2	35.1	Tr.	sil
16-29	B21tg	0.5a	0.3a	0.1b	1.9c	12.0c	48.6	36.6	33.1	29.3	Tr.	sicl
29-48	B22tg	0.1a	0.3a	0.1b	1.8c	12.7c	55.2	29.8	36.0	33.6	Tr.	sicl
48-60+	B3g	0.4a	0.2a	0.1b	2.7c	18.1c	49.4	29.1	43.3	26.8	Tr.	cl

pH 8C1a 1:1	1:5	1:10	ORGANIC MATTER 6A1a ORGANIC CARBON %	6B1a NITROGEN %	C/N			$CaCO_3$ equivalent %		MOISTURE TENSIONS 1/10 ATMOS. %	1/3 ATMOS. %	4B2 15 ATMOS. %
5.0			1.04	0.085	12.2							4.9
5.9			0.60	0.059	10							6.7
5.3			0.42	0.050	8							8.0
5.4			0.56	0.064	9							15.2
7.4			0.11					-				13.2
7.9			0.02					-				12.6

5A1a CATION EXCHANGE CAPACITY NH_4Ac	EXTRACTABLE CATIONS 6N2b Ca	6O2b Mg	6H1a H	6P2a Na	6Q2a K	BASE SAT. % NH_4Ac EXCH. 5C1	Base Sat. % on Sum + H 5C3	5B1a Sum - H	5A3a Sum + H	Ca/Mg
	milliequivalents per 100g. soil →									
7.0	1.8	0.7	4.9	0.1	0.2	40	36	2.8	7.7	2.6
8.9	4.2	2.8	3.7	0.3	0.1	83	67	7.4	11.1	1.5
9.2	2.9	1.8	5.3	0.4	0.1	56	50	5.2	10.5	1.6
19.0	7.2	5.7	6.7	1.2	0.3	76	68	14.4	21.1	1.3
18.4	9.1	7.4	0.8	2.0	0.3	100	96	18.8	19.6	1.2
17.8	9.3	7.1	0.4	1.9	0.3	100	98	18.6	19.0	1.3

a. Many, smooth and irregular light brown to dark brown concr. (Fe-Mn?)
b. Common, smooth and irregular light brown to dark brown concr. (Fe-Mn?)
c. Few, smooth and irregular light brown to dark brown concr. (Fe-Mn?)

Classification: Fine, montmorillonitic, thermic Typic Albaqualf 1/.
Soil series: Crowley.
Series classification: Same as pedon.

Pedon No.: S57LA-1-3.
Location: Acadia Parish, Louisiana, 4.5 miles north of Egan; 2.3 miles east of Highway 91; 69 feet south of road center, NW NE sec. 3, T. 9 S., R. 1 W.
Vegetation: Tall prairie grasses; in rice-pasture rotation for approximately last 50 years.
Relief: Level (0 - .6 percent slope), pimple mounds were present before land leveling.
Drainage: Somewhat poorly drained; slow internal drainage and runoff.
Permeability: Very slow.
Parent material: Prairie formation of the Pleistocene terrace from old alluvium of the Mississippi and/or Red Rivers.
Climate: Precipitation 56 inches, Temperature 68 degrees F.
Sampled by: James S. Allen and Henry L. Clark.
Described by: L. L. Loftin, 11/13/57. Pedon redescribed by David F. Slusher, 8/14/75.

Ap1--0 to 10 cm (0 to 4 in.); gray (10YR 5/1) silt loam; many fine distinct yellowish red streaks and stains around root channels; weak fine granular structure; firm; strongly acid; abrupt smooth boundary.

Ap2--10 to 20 cm (4 to 8 in.); dark gray (10YR 4/1) silt loam; common fine distinct dark brown mottles; massive; firm; many fine soft black bodies; medium acid; clear smooth boundary.

A2g--20 to 41 cm (8 to 16 in.); grayish brown (10YR 5/2) silt loam; few fine faint dark yellowish brown mottles; massive; firm; common fine pores; few fine brown and black concretions; strongly acid; abrupt wavy boundary.

B21tg--41 to 74 cm (16 to 29 in.); gray (10YR 5/1) silty clay; many fine prominent red mottles; surfaces of peds have continuous coatings of dark gray (10YR 4/1) in the upper part grading to gray (10YR 5/1) in the lower part; moderate fine angular blocky structure; very firm; distinct continuous clay films; common black concretions; about 7 percent of horizon is vertical streaks of dark gray silt loam 1 to 2 inches in diameter; medium acid; gradual wavy boundary.

B22tg--74 to 122 cm (29 to 48 in.); gray (10YR 5/1) silty clay loam; many medium distinct yellowish brown mottles; surfaces of peds have discontinuous coatings of gray (10YR 5/1) streaked with dark gray (10YR 4/1); moderate medium subangular blocky structure; very firm; distinct patchy clay films; common black concretions; streaks of dark gray silt loam as above; neutral; gradual wavy boundary.

B3g--122 to 152 cm (48 to 60 in.); light brownish gray (10YR 6/2) silty clay loam; many fine distinct yellowish brown mottles; weak coarse subangular blocky structure; few black concretions; a few soft carbonate bodies and concretions; mildly alkaline.

Remarks: Munsell colors for moist soil.

1/ A purely weighted average of clay content of the particle size control section results in a clay content of 34.2 percent and placement as a fine-silty family. However, because of the gradual boundary between the B21tg (13 inches thick - 36.6 percent clay) and the upper 7 inches of the B22tg (29.8 percent clay) the average clay content of the particle size control section is estimated to be within the range of the fine family.

SOIL SURVEY LABORATORY Lincoln, Nebr. Aug., 1958

SOIL TYPE Crowley Taxadjunct **LOCATION** Jefferson Davis Parish, Louisiana

SURVEY NOS. 857La-27-1 **LAB. NOS.** 7168-7174

DEPTH INCHES	HORIZON	1B1a PARTICLE SIZE DISTRIBUTION (in mm.) (per cent) VERY COARSE SAND 2-1	COARSE SAND 1-0.5	MEDIUM SAND 0.5-0.25	FINE SAND 0.25-0.10	VERY FINE SAND 0.10-0.05	SILT 0.05-0.002	CLAY < 0.002	0.2-0.02	3A1 0.02-0.002	> 2	TEXTURAL CLASS
0-5	Ap1	0.2a	0.2a	0.1b	4.1c	28.0c	60.1	7.3	60.9	31.1	Tr.	sil
5-8	Ap2	0.2a	0.1a	0.1b	4.1c	26.9c	60.8	7.8	58.8	32.9	-	sil
8-12	A21g	0.7a	0.4a	0.1b	3.8c	25.5c	62.2	7.3	56.7	34.7	-	sil
12-22	A22g	0.9a	0.4a	0.1b	3.8c	24.6c	62.4	7.8	56.0	34.7	Tr.	sil
22-40	B2tg	0.2a	0.1a	0.1b	2.8c	17.8c	44.5	34.5	40.2	24.8	Tr.	cl
40-52	B31g	-	-	-	3.2c	21.9c	46.0	28.9	47.9	23.1	-	cl
52-60+	B32g	-	-	-	4.4c	28.3c	42.0	25.3	57.4	17.3	-	l

pH 8C1a 1:1	1:5	1:10	ORGANIC MATTER 6A1a ORGANIC CARBON %	6B1a NITROGEN %	C/N			6E1a $CaCO_3$ equivalent %		MOISTURE TENSIONS 1/10 ATMOS. %	1/3 ATMOS. %	4B2 15 ATMOS. %
5.3			1.28	0.101	12.7							3.9
5.7			0.76	0.072	11							3.9
6.0			0.35	0.040	9							3.6
5.4			0.28	0.034	8							3.5
5.0			0.29	0.053	5							14.0
5.2			0.08									11.9
5.9			0.02					-				10.6

5A1a CATION EXCHANGE CAPACITY NH_4Ac	EXTRACTABLE CATIONS 6N2b Ca	6O2b Mg	6H1a H	6P2a Na	6Q2a K	BASE SAT. % NH_4Ac EXCH. 5C1	Base Sat. % on Sum + H 5C3	5B1a Sum - H	5A3a Sum + H	Ca/Mg
←	milliequivalents per 100g. soil				→					
6.1	1.7	1.0	3.6	0.2	0.1	49	45	3.0	6.6	1.7
5.2	1.8	1.0	4.9	0.2	-	58	38	3.0	7.9	1.8
4.4	1.8	1.1	1.2	0.2	-	70	72	3.1	4.3	1.6
4.1	0.9	0.8	2.8	0.2	-	46	40	1.9	4.7	1.1
16.4	3.7	3.3	9.4	0.9	0.2	49	46	8.1	17.5	1.1
14.2	4.8	4.2	4.5	0.9	0.2	71	69	10.1	14.6	1.1
14.1	6.1	5.2	2.9	1.0	0.2	89	81	12.5	15.4	1.2

a. Many, smooth and irregular light brown to dark brown concr. (Fe-Mn?)
b. Common, smooth and irregular light brown to dark brown concr. (Fe-Mn?)
c. Few, smooth and irregular light brown to dark brown concr. (Fe-Mn?)

Classification: Fine-silty, mixed, thermic Typic Albaqualf.
Soil series: Crowley taxadjunct 1/.
Series classification: Fine, montmorillonitic, thermic Typic Albaqualfs.

Pedon No.: S57LA-27-1.
Location: Jefferson Davis Parish, La.; 2 miles northwest of Raymond, SE¼ SE¼ sec. 1, T. 8 S., R. 4 W., 340 ft. from cross fence; 152 ft. north of road center.
Vegetation: Rice-pasture rotation for approximately last 50 years.
Relief: Level (0 - .6 percent slope), pimple mounds were present before land leveling.
Drainage: Imperfectly drained; slow internal drainage and runoff.
Permeability: Very slow.
Climate: Precipitation 56 inches, Temperature 65 degrees F.
Parent material: Alluvium; Prairie-age Pleistocene terrace.
Sampled by: James S. Allen and Henry L. Clark.
Described by: Lester L. Loftin, 11/14/57; horizon designations reinterpreted by David F. Slusher, 12/8/75.

Ap1--0 to 13 cm (0 to 5 in.); dark grayish brown (10YR 4/2) silt loam; weak fine granular structure; friable; common fine to medium dark hard concretions; staining around roots dark reddish brown (5YR 3/4) strongly acid; abrupt smooth boundary.

Ap2--13 to 20 cm (5 to 8 in.); gray (10YR 5/1) silt loam; moderate medium platy; firm (plow pan); staining around roots and peds dark reddish brown (5YR 3/4); few fine soft to hard dark concretions; medium acid; abrupt smooth boundary.

A21g--20 to 30 cm (8 to 12 in.); gray (10YR 6/1) silt loam; massive; firm (plow pan); many fine soft to hard dark concretions; staining around roots dark reddish brown (5YR 5/3); slightly acid; gradual wavy boundary.

A22g--30 to 56 cm (12 to 22 in.); light brownish gray (10YR 6/2) silt loam; massive; friable; few fine soft to hard dark concretions; many pinholes; yellowish red (5YR 4/6) around peds and small root channels; strongly acid; abrupt wavy boundary.

B2tg--56 to 102 cm (22 to 40 in.); light brownish gray (10YR 6/2) clay; many large prominent red (10YR 4/8) to strong brown (7.5YR 5/8) mottles; moderate medium prismatic structure that breaks into moderate very fine angular blocky structure; firm; few fine dark soft to hard concretions; peds coated with dark gray (10YR 4/1) silt loam; few large vertical cracks or root channels filled with light brownish gray (10YR 6/2) very fine sandy loam with many pinholes; very strongly acid; diffuse wavy boundary.

B31g--102 to 132 cm (40 to 52 in.); light brownish gray (10YR 6/2) sandy clay; many medium to large distinct red (2.5YR 4/8) to strong brown (7.5YR 58) mottles; moderate coarse prismatic structure that breaks into moderate medium angular blocky structure; firm; few fine soft to hard dark concretions; few small dark root fossils; few large vertical cracks or root chanels filled with light brownish gray (10YR 6/2) very fine sandy loam with many pinholes; very strongly acid; diffuse wavy boundary.

B32g--132 to 152 cm (52 to 60 in.); light gray (10YR 7/2) sandy clay; common large prominent yellowish brown (10YR 5/8) mottles; moderate coarse prismatic structure that breaks into moderate medium angular blocky structure; firm; few large vertical cracks or root channels filled with light brownish gray (10YR 6/2) fine sandy loam with many pinholes; few small dark root fossils; strongly acid.

C1g--152 to 191 cm (60 to 75 in.); light gray (10YR 7/2) sandy clay loam; mottled with brownish yellow.

C2--191 to 229 cm (75 to 90 in.); variegated yellowish brown (10YR 5/6) and light gray (10YR 7/1) clay; slightly acid.

Remarks: Munsell colors for moist soil unless indicated otherwise. Cracks or root channels filled with loamy material are interpreted to be krotovinas rather than tongues of albic material.

1/ Pedon is a taxadjunct because the clay content of the particle size control section is about 1 percent too low.

SOIL SURVEY LABORATORY Lincoln, Nebr. Aug., 1958

SOIL TYPE Caddo **LOCATION** Beauregard Parish, Louisiana

SURVEY NOS. S57La-6-3 **LAB. NOS.** 7110-7116

DEPTH INCHES	HORIZON	1B1a VERY COARSE SAND 2-1	COARSE SAND 1-0.5	MEDIUM SAND 0.5-0.25	FINE SAND 0.25-0.10	VERY FINE SAND 0.10-0.05	SILT 0.05-0.002	CLAY < 0.002	0.2-0.02	3A1 0.02-0.002	2A2 > 2	TEXTURAL CLASS
		PARTICLE SIZE DISTRIBUTION (in mm.) (per cent)										
0-3	A1	0.3a	0.3a	0.2b	2.1b	15.5b	74.1	7.5	54.4	37.0	Tr.	sil
3-5	A21g	0.5a	0.3a	0.2b	2.3b	16.2b	73.3	7.2	54.5	37.0	Tr.	sil
5-12	A22g	1.0a	0.3a	0.2b	2.3b	15.1b	68.5	12.6	50.5	35.1	Tr.	sil
12-18	A23g	0.5a	0.3a	0.2b	2.1b	15.6b	66.8	14.5	45.8	38.4	Tr.	sil
18-26	A24g	0.6a	0.2a	0.2b	2.0b	14.4b	69.2	13.4	49.0	36.4	Tr.	sil
26-39	A25g	0.5a	0.3a	0.2b	1.8b	13.6b	69.2	14.4	46.9	37.5	Tr.	sil
39-60+	B21tg	0.4a	0.3a	0.2b	1.6b	12.1b	61.2	24.2	41.8	32.9	Tr.	sil

8C1a pH 1:1	pH 1:5	pH 1:10	6A1a ORGANIC CARBON %	6B1a NITROGEN %	C/N			$CaCO_3$ equivalent %		MOISTURE TENSIONS 1/10 ATMOS. %	1/3 ATMOS. %	4B2 15 ATMOS. %
4.8			1.77	0.096	18.4							4.6
5.0			0.64	0.038	17							3.6
5.0			0.20	0.023	9							5.5
5.0			0.19	0.024	8							5.8
5.1			0.12	0.017	7							5.7
5.2			0.09									6.2
5.2			0.08									10.3

5A1a CATION EXCHANGE CAPACITY NH_4Ac	EXTRACTABLE CATIONS 6N2b Ca	6O2b Mg	6H1a H	6P2a Na	5B1a 6Q2a K	BASE SAT. % NH_4Ac EXCH. 5C1	Base Sat. % on Sum + H 5C3	5B1a Sum - H	5A3a Sum + H	Ca/Mg		
	milliequivalents per 100g. soil →											
7.2	0.6	0.1	7.7	-	-	10	8	0.7	8.4	6.0		
4.9	0.2	-	5.7	-	-	4	3	0.2	5.9	-		
5.6	0.1	0.1	6.5	-	-	4	3	0.2	6.7	1.0		
5.6	-	0.1	6.5	-	-	2	2	0.1	6.6	-		
5.6	-	0.1	6.9	-	-	2	1	0.1	7.0	-		
6.1	0.1	0.2	6.1	0.1	-	6	6	0.4	6.5	0.5		
10.7	1.5	1.7	8.6	0.3	0.1	34	30	3.6	12.2	0.9		

a. Many, smooth light brown concr. Also few, smooth black concr. (Fe-Mn?)
b. Few, smooth light brown concr. (Fe-Mn?)

Classification: Fine-silty, siliceous, thermic Typic Glossaqualf.
Soil series: Caddo 1/.
Series classification: Same as pedon.

Pedon No.: S57LA-6-3 and S57(64)LA-6-3.
Location: Beauregard Parish, La. one mile north of Hollinsworth, .5 mile east of U.S. 171 on access road, 150 feet north of road opposite gasoline plant. NW¼NE¼ sec. 19, T. 6 S., R. 8 W.
Vegetation: Reforested slash pine (30 yr.); original cover was longleaf pine. Wax myrtle plentiful. Few loblolly pine, sweetgum, blackgum and water oak. Thick ground cover of muhlygrass.
Relief: Gently undulating Pleistocene terrace. Site of sample, level.
Drainage: Surface drainage slow to very slow; somewhat poorly drained internally.
Permeability: Very slow.
Parent material: Pleistocne material, presumbly Red River alluvium deposited before the river was diverted eastward.
Climate: Precipitation 53 inches, Temperature 67 degrees F.
Sampled by: D. L. Fontenot, James Allen, Lester Loftin, Warren Cockerham, and Francis Ezernack.
Described by: Marvin Lawson, 11/6/57. Horizons redesignated by David F. Slusher 8/13/75.

A1--0 to 8 cm (0 to 3 in.); dark gray (10YR 4/1) silt loam; weak fine and very fine subangular blocky structure; very friable; many fine roots; few roots up to ½ inch diameter; strongly acid; clear wavy boundary.

A21g--8 to 13 cm (3 to 5 in.); gray (10YR 5/1) silt loam; few fine mottles of brownish yellow (10YR 6/6); weak fine and medium subangular blocky structure; very friable; few fine hard concretions; roots common; few wormcasts; very strongly acid; clear wavy boundary.

A22g--13 to 30 cm (5 to 12 in.); gray (10YR 6/1) silt loam; many medium mottles of brownish yellow (10YR 6/6); weak fine subangular blocky structure; friable; very porous, tubular pores common; few fine hard concretions; roots common; very strongly acid; gradual wavy boundary.

A23g--30 to 46 cm (12 to 18 in.); gray (10YR 6/1) silty clay loam; many medium and coarse brownish yellow (10YR 6/6) few medium strong brown (7.5YR 5/8) mottles; weak fine subangular blocky structure; friable, somewhat plastic; patchy clay skins, tubular pores common with clay films; occasional fine hard concretions; medium acid; gradual wavy boundary.

A24g--46 to 66 cm (18 to 26 in.); gray (10YR 6/1) silt loam; many medium and coarse mottles of strong brown (7.5YR 5/8) and brownish yellow (10YR 6/6); weak fine and medium subangular blocky structure; firm, compact in place; patchy clay skins; common tubular pores, few roots; very strongly acid; wavy and irregular boundary.

A25g--66 to 99 cm (26 to 39 in.); light brownish gray (10YR 6/2) silt loam; common medium mottles of strong brown (7.5YR 5/8); weak medium subangular blocky structure; friable; few clay skins; common tubular pores well coated with clay; occasional fine hard concretions; few charcoal fragments; very strongly acid; wavy irregular boundary.

B21tg--99 to 152 cm (39 to 60 in.); gray (10YR 6/1) clay or silty clay; common medium to coarse mottles of reddish yellow (7.5YR 6/8) and brownish yellow (10YR 6/6); massive large clods; firm; considerable red in interiors of clods; reddish material silty clay loam; clay skins prominent; few tubular pores well lined with clay; occasional fine roots; very strongly acid.

B3g--152 to 254 cm (60 to 100 in.); light gray color extends to a depth of about 100 inches. There were a few coarse splotches of red, medium acid; (examined from auger boring).

Remarks: Munsell colors for moist soil. Plugs of grayish brown silt loam up to 4 inches in diameter and extending to various depths, as much as 4 feet, were common around the perimeter of the pit. Most were vertical but some were curved. The 60 to 87 inch depth was sampled by Louisiana State University (S72LA-6-6) and base saturation (sum of actions) was determined to be 52 percent.

1/ Classification is based on the assumption that the base saturation increases to 35 percent at a depth of 1.8 meters.

SOIL SURVEY LABORATORY Lincoln, Nebr. Aug., 1958

SOIL TYPE Caddo **LOCATION** Beauregard Parish, Louisiana

SURVEY NOS. S57La-6-4 **LAB. NOS.** 7117-7122

DEPTH INCHES	HORIZON	1B1a VERY COARSE SAND 2-1	COARSE SAND 1-0.5	MEDIUM SAND 0.5-0.25	FINE SAND 0.25-0.10	VERY FINE SAND 0.10-0.05	SILT 0.05-0.002	CLAY < 0.002	0.2-0.02	0.02-0.002	3A1 2A1 > 2	TEXTURAL CLASS
		PARTICLE SIZE DISTRIBUTION (in mm.) (per cent)										
0-4	A1	0.4a	0.5a	0.1b	2.7b	21.1b	70.1	5.1	62.4	31.3	Tr.	sil
4-10	A21	0.6a	0.3a	0.1b	2.2b	18.1b	65.1	13.6	53.2	32.0	Tr.	sil
10-16	A22g	0.4a	0.3a	0.1b	2.0b	16.6b	64.7	15.9	51.3	31.8	Tr.	sil
16-27	A23g	0.3a	0.3a	0.1b	1.9b	16.0b	65.3	16.1	50.2	32.9	Tr.	sil
27-50	B21g	-	0.2a	0.2b	1.5b	13.7b	60.7	23.7	46.6	29.2	Tr.	sil
50-60+	B31g	-	0.1a	0.1b	1.5b	13.8b	58.6	25.9	41.4	32.4	Tr.	sil

8C1a pH 1:1	pH 1:5	pH 1:10	6A1a ORGANIC CARBON %	6B1a NITROGEN %	C/N			$CaCO_3$ equivalent %		MOISTURE TENSIONS 1/10 ATMOS. %	1/3 ATMOS. %	4B2 15 ATMOS. %
			ORGANIC MATTER									
4.8			1.40	0.062	22.6							3.6
4.8			0.25	0.023	11							6.4
4.9			0.17	0.020	8							6.8
5.2			0.11	0.014	8							6.8
5.3			0.09									10.3
5.2			0.04									11.4

5A1a CATION EXCHANGE CAPACITY NH_4Ac	6N2b Ca	6O2b Mg	6H1a H	6P2a Na	6Q2a K	BASE SAT. % NH_4Ac EXCH.	Base Sat. % on Sum + H	Sum - H	Sum + H	Ca/Mg
	EXTRACTABLE CATIONS									
←	milliequivalents per 100g. soil				→	5C1	5C3	5B1a	5A3a	
6.3	0.9	0.5	6.1	-	-	22	19	1.4	7.5	1.8
6.9	0.7	0.9	6.5	-	0.1	25	21	1.7	8.2	0.8
7.4	0.4	0.9	7.3	0.1	0.1	20	17	1.5	8.8	0.4
7.0	-	0.9	7.3	0.1	0.1	16	13	1.1	8.4	-
10.8	1.5	2.5	8.6	0.4	0.1	42	34	4.5	13.1	0.6
12.6	3.6	3.8	4.9	0.7	0.2	66	63	8.3	13.2	0.9

a. Many, smooth light brown concr. (Fe-Mn?)
b. Common, smooth light brown concr. (Fe-Mn?)

Classification: Fine-silty, siliceous, thermic Typic Glossaqualf.
Soil series: Caddo.
Series classification: Same as pedon.

Pedon No.: S57LA-6-4.
Location: Beauregard Parish, La., 4 miles south of Longville. SW¼SW¼ sec. 8, T. 6 S., R. 8 W.; 1.2 mi. east of U.S. Highway 71 on access road; 100 feet south of road.
Vegetation: Slash and loblolly pine, occasional longleaf pine, wax myrtle and holly abundant; some annual holly, blackgun, and water oak. Muhlygrass, rushes and sedges common. Few orchids. Burned frequently until late years; commonly grazed.
Relief: Gently undulating Pleistocene terrace. Site slope, level.
Drainage: Surface drainage slow to very slow, somewhat poor internal drainage.
Permeability: Very slow.
Parent material: Pleistocene material, presumably derived from Red River alluvium deposited before the river was diverted eastward.
Climate: Precipitation 53 inches, Temperature 67 degrees F.
Sampling by: James Allen, Lester Loftin, D. L. Fontenot, Marvin Lawson, Warren Cockerham, and Francis E. Ezernack.
Described by: Marvin Lawson, 11/6/57. Horizons redesignated by David F. Slusher, 8/12/75.

A1--0 to 10 cm (0 to 4 in.); gray (10YR 5/1) silt loam; weak very fine subangular blocky structure; very friable; many roots; common fine and medium tubular pores; strongly acid; clear wavy boundary.

A21g--10 to 25 cm (4 to 10 in.); gray (10YR 6/1) light silty clay loam; common medium mottles of brownish yellow (10YR 6/6); weak fine subangular blocky structure; friable; many roots; medium tubular pores; occasional fine hard concretion; very strongly acid; arbitrary boundary.

A22g--25 to 41 cm (10 to 16 in.); gray (10YR 6/1) light silty clay loam; common medium mottles of brownish yellow (10YR 6/6) weak fine subangular blocky structure; friable; medium tubular pores common; many roots; occasional fine hard concretion; very strongly acid; diffuse smooth boundary.

A23g--41 to 69 cm (16 to 27 in.); gray (10YR 6/1) light silty clay loam; common medium mottles of brownish yellow (10YR 6/6) and few medium mottles of reddish yellow (7.5YR 7/8); weak medium tubular pores, clay lined; few patchy clay skins; common roots; very strongly acid; gradual irregular boundary.

B2tg--69 to 127 cm (27 to 50 in.); gray (10YR 6/1) silty clay with inclusions of silty clay loam; few medium mottles of brownish yellow (10YR 6/6) and common medium mottles of red (2.5YR 4/8); weak fine angular blocky structure; somewhat plastic; few medium tubular pores with thin clay lining; patchy clay skins; no roots observed; clear irregular boundary.

B31g--127 to 152 cm (50 to 60 in.); gray (10YR 6/1) silt loam; few fine and medium mottles of yellow (10YR 7/8); massive; friable; few pores, appears dense; few charcoal fragments; occasional hard concretion; very strongly acid.

B32--152 to 261 cm (60 to 103 in.); examined by bucket auger. Strongly acid at 103 inches. Below about 70 inches was massive light gray clay (10YR 7/1) with large splotches of reddish yellow (7.5YR 7/8).

Remarks: Munsell colors for moist soil. Silt filled channels, animal burrows or tree root size were common about the perimeter of the pit.

SOIL CLASSIFICATION-TYPIC GLOSSAQUALF
FINE-SILTY, SILICEOUS, THERMIC
SERIES - - - - - - -GUYTON

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE, MTSC
NATIONAL SOIL SURVEY LABORATORY
LINCOLN, NEBRASKA

SOIL NO - - - - - - S68LA-37-4 OUACHITA PARISH

GENERAL METHODS- - -1A,1B1B,2A1,2B SAMPLE NOS. 68L0318-68L0319

DEPTH CM	HORIZON	PARTICLE SIZE ANALYSIS, LT 2MM, 3A1, 3A1A, 3A1B: SAND 2-.05	SILT .05-.002	CLAY LT .002	FINE CLAY LT .0002	VCOS 2-1	CORS 1-.5	MEDS .5-.25	FNES .25-.10	VFNS .10-.05	COSI .05-.02	FNSI .02-.002	VFSI .005-.002	SAND 2-.10	INTR II .2-.02	FINE CLAY TO CLAY PCT	RATIO NON-CO3-CLAY PCT	RATIO 8C1 15-BAR TO CLAY
		PCT LT 2MM																
53-97	B21TG	14.9	60.0	25.1		.5	.6	.4	7.2	6.2	13.8	46.2		8.7	25.8			
152-206	C1G																	

DEPTH CM	VOL. GT 2 PCT	WEIGHT GT 75 PCT	75-20	20-5	5-2	PARTICLE SIZE ANALYSIS, MM, 3B, 3B1, 3B2: LT .074	20-2 PCT LT75	BULK DENSITY 4A1D 1/3-BAR G/CC	4A1H OVEN DRY G/CC	4D1 COLE	4B1C 1/10 BAR PCT	WATER CONTENT 4B1C 1/3-BAR PCT	4B2 15-BAR PCT	4C1 WRD CM/CM	CARBONATE 6E1B LT 2 PCT	3A1A LT .002 PCT	PH 8C1A 1/1 H2O	PH 8C1E 1/2 CACL
53-97						88											4.0	3.7
152-206																	4.1	4.0

DEPTH CM	ORGANIC MATTER 6A1A ORGN CARB PCT	6B1A NITG PCT	C/N	IRON 6C2B EXT FE PCT	PHOS TOTL PCT	EXTRACTABLE BASES 584A: CA 6N2E	MG 6O2D	NA 6P2B	K 6Q2B	SUM EXTB / 100	ACTY 6H1A BACL TEA	AL 6G1E KCL EXT	CAT EXCH 5A3A EXTB ACTY	5A6A NHAC	RATIO 8D1 NHAC TO CLAY	RATIO 8D3 CA TO MG	CA 5F1 SAT NHAC PCT	BASE SAT 5C3 EXTB ACTY PCT	BASE SAT 5C1 NHAC PCT
						MEQ					G								
53-97						1.4	2.6	1.8	.1	5.9	8.2	3.0	14.1	10.7	.43	.5		42	55
152-206						2.0	4.9	7.5	.2	14.6	6.9	1.4	21.5	15.9		.4		70	92

DEPTH CM	SATURATED PASTE 8E1 REST OHM-CM	8C1B PH	8A H2O PCT	NA 5D2 ESP PCT	NA 5E SAR	SALT 8D5 TOTL SOLU PPM	GYP 6F1A PCT	SATURATION EXTRACT 8A1: EC 8A1A MMHOS/CM	CA 6N1B	MG 6O1B	NA 6P1B	K 6Q1B	CO3 6I1A	HCO3 6J1A	CL 6K1A	SO4 6L1A	NO3 6M1A	ATTERBERG LIQID LMIT PCT 4F1	ATTERBERG PLST INDX 4F2
								MEQ / LITER											
53-97																			
152-206	650	4.2	5C.9	39		2150		3.38			14.0								

Classification: Fine-silty, siliceous, thermic Typic Glossaqualf.
Soil series: Guyton.
Series classification: Same as pedon.

Pedon No.: S68LA-37-4.
Location: Ouachita Parish, La., about 10 miles southwest of West Monroe, NE¼ NE¼, sec. 9, T. 16 N., R. 2 E. on flood plain of Longs Creek, 105 ft. west of gravel road, 30 ft. north of logging road.
Vegetation and use: Woodland, hardwood dominant, scattered pine.
Slope and land form: Level flood plain of major stream.
Drainage and permeability: Poorly drained, subject to frequent flooding during winter and spring, slow permeability.
Climate: Precipitation 51 inches, Temperature 65 degrees F.
Parent material: Silty alluvium from watersheds within the coastal plains.
Sampled by: Dayton Matthews, June 19, 1968.
Described by: Dayton Matthews, Tracey Weems and Emmett Reynolds, June 19, 1968.

A1--0 to 10 cm (0 to 4 in.); dark grayish brown (10YR 4/2) silt loam; few fine faint grayish brown and yellowish brown mottles; weak medium subangular blocky structure; friable; very strongly acid; clear smooth boundary.

A21g--10 to 23 cm (4 to 9 in.); grayish brown (10YR 5/2) silt loam; common medium faint dark yellowish brown (10YR 4/4) and yellowish brown (10YR 5/6) mottles; weak medium subangular blocky structure; friable; very strongly acid; clear smooth boundary.

A22g--23 to 38 cm (9 to 15 in.); light brownish gray (10YR 6/2) silt loam; common medium faint yellowish brown (10YR 5/6) mottles; weak medium subangular blocky structure; friable; very strongly acid; clear wavy boundary.

A&B--38 to 53 cm (15 to 21 in.); light brownish gray light silt loam (A1) surrounding heavy silt loam (B); weak medium subangular blocky structure; friable; few fine pores; few fine brown concretions; few thin patchy clay films; very strongly acid; clear irregular boundary.

B21tg--53 to 97 cm (21 to 38 in.); grayish brown (10YR 5/2) light silty clay loam; common medium distinct strong brown (7.5YR 5/6) mottles; weak medium subangular blocky structure; friable; few tongues of light brownish gray (10YR 6/2) silt loam; few fine and medium brown concretions; many thin discontinuous clay films associated with the brown mottles; few thin clay films on peds; very strongly acid; clear wavy boundary.

B22tg--97 to 152 cm (38 to 60 in.); gray (10YR 6/1) silty clay loam; common medium distinct strong brown (7.5YR 5/6) and light brownish gray (10YR 6/2) mottles; weak medium subangular blocky structure; firm; few thin clay films on peds and in pores; thin light gray (10YR 7/1) silt coatings on vertical faces of peds; very strongly acid; clear smooth boundary.

C1g--152 to 206 cm (60 to 81 in.); gray (10YR 6/1) silty clay loam; common medium distinct strong brown (7.5YR 5/6) mottles; massive; few fine concretions; very strongly acid; clear smooth boundary.

C2g--206 to 241 cm (81 to 95 in.); gray (10YR 6/1) and strong brown (7.5YR 5/6) silt loam; firm and compact; very strongly acid.

Remarks: Munsell colors for moist soil.

SOIL CLASSIFICATION Typic Glossaqualf; fine-silty, mixed, thermic

SOIL Calhoun LOCATION East Baton Rouge Parish, Louisiana

SOIL NOS. S61La-17-8 LAB. NOS. 15084-15089 January, 1962

SOIL SURVEY LABORATORY Lincoln, Nebraska

GENERAL METHODS 1A, 1B1a, 2A1, 2B

DEPTH INCHES	HORIZON	PARTICLE SIZE DISTRIBUTION (in mm.) (per cent) VERY COARSE SAND 2-1	COARSE SAND 1-0.5	MEDIUM SAND 0.5-0.25	FINE SAND 0.25-0.10	VERY FINE SAND 0.10-0.05	SILT 0.05-0.002	CLAY < 0.002	0.2-0.02	0.02-0.002	3A1 2A2 > 2	TEXTURAL CLASS
0-5	Ap	1.5a	0.5a	0.1c	0.3c	1.3	87.4	8.9	54.8	34.1	-	si
5-16	A2g	0.4a	0.2a	0.1a	0.3c	1.0c	81.7	16.3	37.5	45.4	-	sil
16-31	B21tg&A2	0.6a	0.5a	0.2a	0.3b	0.8b	69.7	27.9	34.7	36.0	-	sicl
31-41	B22tg	0.9a	0.8a	0.3a	0.4b	1.1b	72.9	23.6	41.7	32.5	-	sil
41-51	B31	0.8a	1.1a	0.5a	0.8b	1.3b	77.6	17.9	45.5	33.8	-	sil
51-64	B32	0.7a	1.3a	0.8a	1.1b	1.6b	77.8	16.7	49.0	30.9	-	sil

8C1b pH 1:1	Organic Matter O.C. 6A1a %	N 6B1a %	C/N	Bulk Density Field Moist 4B4 % M.	4A1a g/cc	30 cm. 4B3 % M.	4A1c g/cc	A.D. 4A1b g/cc	MOISTURE TENSIONS 4B1b 1/3 ATMOS. Pieces %	1/3 ATMOS. Sieved %	4B2 15 ATMOS. Sieved %
5.1	0.91	0.085	11	27.4	1.38	31.3	1.35	1.41	25.2		5.1
5.0	0.29	0.036	8								7.2
4.7	0.11	0.021		24.5	1.48	29.2	1.41	1.54	26.8		12.9
5.2	0.06										11.9
5.9	0.06										9.5
6.4	0.05			24.5	1.53	30.4	1.42	1.57	21.8		9.9

5A1a CATION EXCHANGE CAPACITY NH4OAc	5B1a 6N2b Ca	EXTRACTABLE CATIONS 6O2b Mg	6H1a H	6P2a Na	6Q2a K	BASE SAT. % NH4OAc EXCH. 5C1	Base Sat. % on Sum Cations 5C3	Sum Ext. Bases 5B1a	Sum Ext. Cations 5A3a	8D3 Ca/Mg	6C1a Ext. Iron as Fe Pct.	Ext. Al me/100g
←	milliequivalents per 100g. soil				→							
6.0	2.0	0.6	5.6	0.1	0.1	47	33	2.8	8.4		1.3	
7.8	2.2	1.0	6.5	0.3	0.1	46	36	3.6	10.1	2.2	0.6	
14.8	5.6	3.3	8.5	0.8	0.2	67	54	9.9	18.4	1.7	0.8	
14.8	7.4	4.1	4.9	1.0	0.2	86	72	12.7	17.6	1.8	0.8	
12.4	7.1	3.6	3.3	1.0	0.2	96	78	11.9	15.2	2.0	1.1	
12.8	8.0	3.6	3.0	1.1	0.2	101	81	12.9	15.9	2.2	1.1	

a. Many Fe/Mn-bearing(?) aggregates.
b. Few Fe/Mn-bearing(?) aggregates.
c. Common Fe/Mn-bearing(?) aggregates.

Classification: Fine-silty, mixed, thermic Typic Glossaqualf.
Soil series: Calhoun.
Series classification: Same as pedon.

Pedon No.: S61LA-17-8.
Location: East Baton Rouge Parish, Louisiana, about 2 miles east of Baton Rouge. One and one-tenth miles west of intersection of Perkins Road and Siegen Road and 200 feet north of Perkins Road, southwest part sec. 57, T. 8 S., R. 1 E.
Vegetation and use: Native grass pasture including carpetgrass, bermudagrass, dallisgrass, vaseygrass, broomsedge and some sedges.
Slope and land form: Level ridgetop of less than one percent slope; bordering on gently sloping areas. Elevation 38 feet.
Drainage and permeability: Poorly drained. Surface runoff and internal drainage slow to very slow, permeability slow in fragipan layers; moderately permeable in upper soil layers.
Parent material: Loess or loess-like material more than 5 feet thick.
Climate: Precipitation 60 inches, Temperature 67 degrees F.
Sampled by: J. S. Allen, D. C. McMurtry, Leon Nugent, H. L. Clark and J. E. Seaholm, May 11, 1961.
Described by: J. E. Seaholm, H. L. Clark, S. A. Lytle, May 11, 1961. Horizons redesignated 12/17/75 by Warren L. Cockerham.

Ap--0 to 13 cm (0 to 5 in.); light brownish gray (10YR 6/2) silt loam, light gray (10YR 7/2) dry; few faint fine mottles of brown and many distinct dark brown (7.5YR 4/4) mottles which appear to be weak concretions; strong medium granular structure; friable; slightly hard dry; many fine and coarse roots; 5 percent brown and black concretions; strongly acid; abrupt smooth boundary.

A2g--13 to 41 cm (5 to 16 in.); gray (10YR 6/1) silt loam, light gray (10YR 7/1) dry; common medium and fine faint pale brown (10YR 6/3) and common distinct yellowish brown (10YR 5/4) mottles; mottled 3 percent with strong brown (7.5YR 5/6) which appear to be weak concretions; massive to weak medium prismatic and weak medium subangular blocky structure; slightly firm moist, slightly hard dry; many fine roots with yellowish brown (10YR 5/8) staining in root channels; very strongly acid; gradual irregular boundary.

B21tg--41 to 79 cm (16 to 31 in.); gray (10YR 6/1) silty clay loam, light gray (10YR 7/1) dry; common medium faint pale brown (10YR 6/3) and common medium distinct yellowish brown (10YR 5/4) mottles; moderate medium and fine prismatic and moderate medium subangular blocky structure; friable moist, hard when dry; many fine roots in gray silt filling between peds; few small thin patches of black manganese oxide coating on some ped surfaces; peds almost completely coated with gray (10YR 6/1) silt; numerous small vertical veins and a few large krotovinas (crayfish burrows) of gray (10YR 6/1) silt or silt loam; 3 percent soft and hard brown and black concretions; very strongly acid; gradual wavy boundary.

B22tg--79 to 104 cm (31 to 41 in.); gray (10YR 5/1) to grayish brown (2.5Y 5/2) light silty clay loam to heavy silt loam, light gray (10YR 7/1) dry; mottled 10 percent with yellowish brown (10YR 5/4 and 5/6); moderate to strong medium and coarse prismatic and moderate medium subangular blocky structure; somewhat firm moist, hard when dry; few fine roots in light brownish gray (10YR 6/2) silt coating and filling between peds, light gray (10YR 7/2) dry; many pores in cross-section of prisms; common vertical veins and a few krotovinas (crayfish burrows) of light brownish gray (10YR 6/2) silt or silt loam; 3 percent soft and hard brown and black concretions; very strongly acid; abrupt smooth boundary.

B31--104 to 130 cm (41 to 51 in.); grayish brown (2.5Y 5/2) silt loam, light brownish gray (2.5Y 6/2) dry; mottled 5 percent with grayish brown (10YR 5/2), yellowish brown (10YR 5/4), and dark grayish brown (10YR 4/2); moderate fine and medium platy structure which also has a weak medium prismatic cleavage; somewhat firm moist, hard when dry; light gray (10YR 7/2) silt common on some horizontal plates; many fine pores; common vertical veins of gray (5Y 5/1) silt; few large krotovinas of grayish brown (2.5Y 5/2) silt or silt loam; slightly acid; abrupt smooth boundary.

B32--130 to 163 cm (51 to 64 in.); yellowish brown (10YR 5/6) and dark brown (7.5YR 4/4) silt loam, mottled 30 to 40 percent with grayish brown (2.5Y 5/2); weak medium and coarse prismatic structure which breaks out into weak medium sized plates; somewhat firm moist, hard when dry; many fine pores; occasional fine veins of black manganese oxide within prisms; common vertical veins and a few krotovinas (crayfish burrows) of grayish brown (2.5Y 5/2) silt or silt loam; 2 percent soft and hard black and brown concretions; slightly acid.

Remarks: Munsell colors for moist soil unless indicated otherwise.

SOIL CLASSIFICATION-TYPIC GLOSSAQUALF
FINE-SILTY, MIXED, THERMIC
SERIES - - - - - - -FOLEY TAXADJUNCT

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE, MTSC
NATIONAL SOIL SURVEY LABORATORY
LINCOLN, NEBRASKA

SOIL NO - - - - - - S73LA-62-1 WEST CARROL PARISH

GENERAL METHODS- - -1A,1B1B,2A1,2B SAMPLE NOS. 73L0690-73L0694

DEPTH CM	HORIZON	PARTICLE SIZE ANALYSIS, LT 2MM, 3A1, 3A1A, 3A1B (PCT LT 2MM) SAND 2-.05	SILT .05-.002	CLAY LT .002	FINE CLAY LT .0002	VCDS 2-1	CORS 1-.5	MEDS .5-.25	FNES .25-.10	VFNS .10-.05	COSI .05-.02	FNSI .02-.002	VFSI .005-.002	SILT SAND 2-.10	INTR II .2-.02	FINE CLAY TO CLAY	NON-CO3-CLAY PCT	RATIO 8D1 15-BAR TO CLAY
33-48	B1G																	
48-74	B21TG																	
74-102	B22TG																	
102-142	B23TG																	
142-268	B3T																	

DEPTH CM	PARTICLE SIZE ANALYSIS, MM, 3B, 3B1, 3B2 VOL. GT 2 PCT	WEIGHT GT 75 PCT	75-20	20-5	5-2	LT .074	20-2 PCT LT20	BULK DENSITY 4A1D 1/3-BAR G/CC	4A1H OVEN DRY G/CC	4D1 COLE	4B1C 1/10 BAR PCT	WATER CONTENT 4B1C 1/3-BAR PCT	4B2 15-BAR PCT	4C1 WRD CM/CM	CARBONATE 6E1B LT 2 PCT	3A1A LT .002 PCT	PH 8C1A 1/1 H2O	8C1E 1/2 CACL
33-48													10.8				5.6	4.8
48-74													12.9				5.4	4.9
74-102													14.7				6.6	6.3
102-142													14.5				7.1	6.8
142-268													11.1				7.4	7.1

DEPTH CM	ORGANIC MATTER 6A1A ORGN CARB PCT	6B1A NITG PCT	C/N	IRON 6C2B EXT FE PCT	PHOS TOTL PCT	EXTRACTABLE BASES 5B4A 6N2E CA	6O2D MG	6P2B NA	6Q2B K	SUM EXTB MEQ / 100 G	ACTY 6H1A BACL TEA	AL 6G1E KCL EXT	CAT EXCH 5A3A EXTB ACTY	5A6A NHAC	RATIO 8D1 NHAC TO CLAY	RATIO 8D3 CA TO MG	CA 5F1 SAT NHAC PCT	BASE SAT 5C3 EXTB ACTY PCT	5C1 NHAC PCT
33-48						6.0	6.5	1.5	.1	14.1				15.7		.9			90
48-74						6.0	9.8	3.1	.2	19.1				19.2		.6			99
74-102						6.9	13.8	5.1	.2	26.0				23.9		.5			109
102-142						7.2	15.6	5.5	.2	28.5				25.0		.5			114
142-268						5.7	13.0	4.7	.2	23.6				19.4		.4			122

DEPTH CM	SATURATED PASTE 8E1 REST OHM-CM	8C1B PH	8A H2O PCT	NA 5D2 ESP PCT	NA 5E SAR	SALT 8D5 TOTL SOLU PPM	GYP 6F1A PCT	SATURATION EXTRACT 8A1 8A1A EC MMHOS/CM	6N1B CA	6O1B MG	6P1B NA	6Q1B K	6I1A CO3	6J1A HCO3	6K1A CL	6L1A SO4	6M1A NO3	ATTERBERG 4F1 LQID LMIT PCT	4F2 PLST INDX
								MEQ / LITER											
33-48	2200	5.0	39.5	8	7	170		.71	.5	.7	5.5	TR							
48-74	930	4.9	50.3	12	10	610		1.91	1.5	2.7	14.8	TR							
74-102	530	6.2	60.0	15	11	1500		3.86	3.7	8.2	26.0	TR							
102-142	470	6.9	63.6	14	10	1900		4.62	4.8	11.6	30.0	.1							
142-268	470	7.2	55.3	13	11	220		5.47	6.4	16.8	38.0	.1							

Classification: Fine-silty, mixed, thermic Typic Glossaqualf.
Soil series: Foley taxadjunct 1/.
Series classification: Fine-silty, mixed, thermic Albic Glossic Natraqualf.

Pedon No.: S73LA-62-1.
Location: West Carroll Parish, Louisiana, about 3 miles west of Mitchner, 222 feet north of parish line road and 1,632 feet east of section line between section 33 and 34. SE¼ SE¼ sec. 34, T. 19 N., R. 9 E.
Vegetation and use: Native grasses pasture.
Slope and land form: ½ percent slope, low nearly level terrace.
Drainage and permeability: Poorly drained, runoff slow, internal drainage slow, permeability very slow or slow.
Climate: Precipitation 52 inches, Temperature 65 degrees F.
Parent material: Silty late Pleistocene age alluvium.
Described by: Tracey A. Weems and Emmett F. Reynolds, June 19, 1973.

Ap--0 to 13 cm (0 to 5 in.); grayish brown (10YR 5/2) silt loam; few fine faint light brownish gray and few fine faint yellowish brown mottles; weak medium subangular blocky structure; friable; common fine roots; neutral; abrupt smooth boundary.

A2--13 to 33 cm (5 to 13 in.); light brownish gray (10YR 6/2) silt loam; common fine faint yellowish brown and few fine faint grayish brown mottles; weak medium subangular blocky structure; friable; common fine roots; slightly acid; clear smooth boundary.

B1g--33 to 48 cm (13 to 19 in.); light brownish gray (10YR 6/2) silt loam; common medium faint grayish brown (10YR 5/2) and few fine faint yellowish brown mottles; weak coarse prisms that part to weak coarse subangular blocky structure; common fine roots; common interfingers of silt between prisms; few clay bands 1 to 4 mm wide; few very dark gray stains; slightly acid; clear smooth boundary.

B21tg--48 to 74 cm (19 to 29 in.); light brownish gray (2.5Y 6/2) silty clay loam; common medium distinct grayish brown (10YR 5/2) and few fine distinct yellowish brown mottles; weak coarse prisms that part to moderate medium subangular blocky structure; friable; common very fine roots; silt interfingers between prisms; distinct thin clay films on surfaces of peds; few very dark gray stains on some ped surfaces; few fine black and brown concretions; neutral; clear smooth boundary.

B22tg--74 to 102 cm (29 to 40 in.); light brownish gray (2.5Y 6/2) silty clay loam; few fine faint light olive brown mottles; weak coarse prisms that part to moderate medium subangular blocky structure; friable; few fine roots; common patchy clay films on surfaces of peds; common very dark gray stains on peds; few fine black and brown concretions; few pockets of white crystals; moderately alkaline; clear smooth boundary.

B23tg--102 to 142 cm (40 to 56 in.); light brownish gray (2.5Y 6/2) silty clay loam; common fine distinct yellowish brown mottles; weak medium subangular blocky structure; friable; common patchy clay films on peds; common fine black concretions; moderately alkaline; clear smooth boundary.

B3t--142 to 268 cm (56 to 66 in.); light brownish gray (2.5Y 6/2) silt loam; few fine prominent strong brown mottles; weak medium subangular blocky structure; friable; common fine black concretions; moderately alkaline.

Remarks: Munsell colors for moist soil.

1/ This pedon is a taxadjunct to the Foley series because the ESP in the B horizon is 0.2 percent too low.

SOIL CLASSIFICATION Typic Glossaqualf; fine-silty, mixed, thermic

SOIL Series not Designated LOCATION East Baton Rouge Parish, Louisiana

SOIL NOS. S61La-17-5 LAB. NOS. 15065-15070 January, 1962

SOIL SURVEY LABORATORY Lincoln, Nebraska

GENERAL METHODS 1A, 1B1a, 2A1, 2B

DEPTH INCHES	HORIZON	PARTICLE SIZE DISTRIBUTION (in mm.) (per cent) VERY COARSE SAND 2-1	COARSE SAND 1-0.5	MEDIUM SAND 0.5-0.25	FINE SAND 0.25-0.10	VERY FINE SAND 0.10-0.05	SILT 0.05-0.002	CLAY < 0.002	0.2-0.02	0.02-0.002	3A1 2A2 > 2	TEXTURAL CLASS
0-6	Ap	1.2a	0.8a	0.4a	0.4a	1.3b	85.1	10.8	48.9	37.7	-	si
6-12	A2g	0.9a	0.7a	0.2a	0.4a	1.2b	86.8	9.8	44.2	44.0	-	si
12-21	A&B	0.2a	0.3a	0.2a	0.3a	1.5c	80.2	17.3	43.3	38.6	-	sil
21-34	B&A	<0.1	0.2a	0.2a	0.4a	1.3a	67.7	30.2	37.5	31.7	-	sicl
34-47	B21t	<0.1	0.1a	0.1a	0.4a	1.3a	73.0	25.1	39.8	34.7	-	sil
47-60	B22t	<0.1	0.2a	0.2a	0.5a	1.4a	76.0	21.7	43.4	34.3	-	sil

pH 8C1b 1:1	Organic Matter O.C. 6A1a %	N 6B1a %	C/N	Bulk Density Field Moist 4B4 % M.	4A1a g/cc	30 cm. 4B3 % M.	4A1c g/cc	A. D. 4A1b g/cc	MOISTURE TENSIONS 4B1b 1/3 ATMOS. Pieces %	1/3 ATMOS. Sieved %	4B2 15 ATMOS. Sieved %
6.4	0.96	0.094	10	21.0	1.45	29.1	1.42	1.47	21.2		5.7
6.2	0.22	0.031	7	19.1	1.52	26.1	1.48	1.52	19.8		4.4
4.6	0.14	0.031									6.9
4.4	0.14	0.042		21.8	1.50	26.9	1.46	1.56	24.8		12.4
4.6	0.11										10.8
4.9	0.06			23.7	1.52	28.8	1.46	1.56	24.4		10.7

5A1a CATION EXCHANGE CAPACITY NH_4OAc	5B1a EXTRACTABLE CATIONS 6N2b Ca	6O2b Mg	6H1a H	6P2a Na	6Q2a K	BASE SAT. % NH_4OAc EXCH. 5C1	Base Sat. % on Sum Cations 5C3	Sum Ext. Bases 5B1a	Sum Ext. Cations 5A3a	8D3 Ca/Mg	6C1a Ext. Iron as Fe Pct.	Ext. Al 6G1a me/100g
←	milliequivalents per 100g. soil				→							
8.2	6.5	1.3	2.6	0.1	0.1	98	75	8.0	10.6	5.0	0.6	<1
4.8	3.5	0.5	2.3	0.2	0.1	90	65	4.3	6.6		0.8	<1
7.6	2.9	1.6	6.0	0.3	0.1	64	45	4.9	10.9	1.8	1.1	1
13.5	2.8	2.8	12.2	0.5	0.3	47	34	6.4	18.6	1.0	1.6	4
12.2	2.6	2.9	10.3	0.6	0.2	52	38	6.3	16.6	0.9	1.3	3
6.7	1.8	0.9	8.4	0.2	0.1	45	26	3.0	11.4		1.3	2

a. Many Fe/Mn-bearing(?) aggregates.
b. Few Fe/Mn-bearing(?) aggregates.
c. Common Fe/Mn-bearing(?) aggregates.

1/ This soil is included in Calhoun silt loam in field mapping, but has higher chroma in the 21- to 47-inch horizons than defined for the Calhoun series.

Classification: Fine-silty, mixed, thermic Typic Glossaqualf.
Soil series: Not designated 1/.

Pedon No.: S61LA-17-5.
Location: East Baton Rouge Parish, Louisiana, Baton Rouge, one mile northeast of intersection of Perkins Road and Pecue Road and 100 feet east of Pecue Road; northwest part of sec. 49, T. 8 S., R. 2 E.
Vegetation and use: Mixed, partially improved pasture. Includes bermudagrass, dallisgrass, carpetgrass, white Dutch clover, and sedges.
Slope and land form: Level to gently undulating ridgetop on slope of less than one percent; borders on gently sloping area which extends down to drainageway; elevation 30 feet.
Drainage and permeability: Poorly drained soil with slow surface runoff and slow internal drainage. Permeability is moderate in horizons above fragipan; fragipan layers are slowly permeable.
Parent material: Loess or loess-like material 5 to 10 feet thick.
Climate: Precipitation 60 inches, Temperature 67 degrees F.
Sampled by: J. S. Allen, D. C. McMurtry, J. Seaholm, Leon Nugent, H. L. Clark, May 10, 1961.
Described by: J. E. Seaholm, H. L. Clark, S. A. Lytle, May 10, 1961. Horizons redesignated 12/17/75, by Warren L. Cockerham.

Ap--0 to 15 cm (0 to 6 in.); gray (10YR 5/1) silt loam; weak very fine granular structure, weak thin platy structure in lower part; friable; many coarse and fine roots; few small soft and hard black concretions slightly acid; abrupt smooth boundary.

A2g--15 to 30 cm (6 to 12 in.); light brownish gray (10YR 6/2) silt loam, light gray (10YR 7/1) dry; many medium faint brown (10YR 5/3) mottles; massive; friable; few fine roots; many fine pores; 3 percent small and medium soft brown and black concretions; medium acid; gradual irregular boundary.

A&B--30 to 53 cm (12 to 21 in.); grayish brown (10YR 5/2) silt loam, light gray (10YR 7/1) dry; many fine faint brown mottles; moderate medium subangular blocky structure; firm; few fine roots; many fine pores; 3 percent soft and hard brown and black concretions; very strongly acid. This horizon includes 15 to 20 percent brown (10YR 4/3) silty clay loam as patchy, irregular areas having moderate medium prismatic structure and strong medium subangular blocky structure; the peds are coated with grayish brown (10YR 5/2) silt which is light gray (10YR 7/1) dry, few black and brown patchy areas of manganese oxide coatings on some peds. This represents the remains of a degraded B horizon of a better drained soil; gradual irregular boundary.

B&A--53 to 86 cm (21 to 34 in.); mottled yellowish brown (10YR 5/6 and 5/8), dark brown (10YR 3/3), and grayish brown (10YR 5/2) light silty clay loam; moderate coarse prismatic and moderate medium subangular blocky structure; firm moist, hard dry; numerous fine pores; common coarse and fine black thin coatings of manganese oxide on vertical and horizontal surfaces of some peds and few weak concretions of some material within peds; thin patchy dull gray (10YR 5/1) clay films on some ped surfaces; vertical veins and krotovinas of light brownish gray (10YR 6/2) silt, light gray (10YR 7/2) dry; very strongly acid; arbitrary boundary.

B21t--86 to 119 cm (34 to 47 in.); mottled yellowish brown (10YR 5/6 and 5/8), dark brown (10YR 3/3 and 7.5YR 4/4) and grayish brown (10YR 5/2) light silty clay loam; moderate medium subangular blocky and moderate coarse prismatic structure; firm moist, hard dry; many fine pores; common large and small thin black coatings of manganese oxide on vertical and horizontal ped surfaces; few weak black concretions within peds; thin patchy dull gray (10YR 5/1) silt films on some ped surfaces; common vertical veins and a few large krotovinas of light brownish gray (10YR 6/2) silt; very strongly acid; gradual wavy bounday.

B22t--119 to 152 cm (47 to 60 in.); mottled yellowish brown (10YR 5/6), dark brown (10YR 3/3), and grayish brown (10YR 5/2) silt loam; moderate coarse prismatic structure and weak medium subangular blocky structure; firm moist, hard dry; many fine pores; peds partially coated with gray (10YR 5/1) silt or silt loam; common vertical veins and old root channels filled with gray (10YR 5/1) silt; very strongly acid.

Remarks: Munsell color for moist soil unless indicated otherwise.

1/ This pedon was sampled as a representative of the Calhoun series. Color of the 53-86 cm horizon and the 86-119 cm horizon is 10YR 5/6; the series range is limited to 1 and 2 chromas.

SOIL SURVEY LABORATORY Lincoln, Nebr. Aug., 1958

SOIL TYPE Wrightsville Taxadjunct **LOCATION** Acadia Parish, Louisiana

SURVEY NOS. S57La-1-4 **LAB. NOS.** 7159-7167

DEPTH INCHES	HORIZON	1B1a VERY COARSE SAND 2-1	COARSE SAND 1-0.5	MEDIUM SAND 0.5-0.25	FINE SAND 0.25-0.10	VERY FINE SAND 0.10-0.05	SILT 0.05-0.002	CLAY < 0.002	0.2-0.02	3A1 0.02-0.002	2A2 > 2	TEXTURAL CLASS
		PARTICLE SIZE DISTRIBUTION (in mm.) (per cent)										
0-1	A1	0.8a	0.5a	0.2b	3.8c	16.8c	71.2	6.7	46.7	44.9	Tr.	sil
1-4	A21g	0.7a	0.6a	0.2b	4.0c	17.0c	70.9	6.6	46.5	45.3	Tr.	sil
4-8	A22g	1.6a	1.0a	0.2b	3.6c	15.6c	67.7	10.3	42.9	43.8	Tr.	sil
8-12	A23g	0.8a	0.6a	0.1b	3.3c	15.5c	65.7	14.0	41.8	42.6	Tr.	sil
12-17	B21tg	0.6a	0.4a	0.1b	2.5c	12.0c	55.3	29.1	32.7	37.0	Tr.	sicl
17-28	B22tg	0.2a	0.1a	-	2.3c	11.4c	48.0	38.0	28.9	32.7	-	sicl
28-34	B23tg	-	0.1a	-	2.5c	12.8c	51.0	33.6	31.6	34.7	Tr.	sicl
34-46	B24t	0.1a	0.2a	0.1b	2.8c	13.6c	51.8	31.4	33.9	34.2	Tr.	sicl
46-60+	B3	0.3a	0.3a	0.1b	2.9c	14.9c	48.9	32.6	34.8	31.8	Tr.	sicl

pH 8C1a 1:1	pH 1:5	pH 1:10	ORGANIC MATTER 6A1a ORGANIC CARBON %	6B1a NITROGEN %	C/N			$CaCO_3$ equivalent %		MOISTURE TENSIONS 1/10 ATMOS. %	1/3 ATMOS. %	4B2 15 ATMOS. %
5.6			1.94	0.085	22.8							4.3
5.6			1.04	0.055	18.9							3.8
5.2			0.17	0.018	9							4.8
5.0			0.10	0.015	7							6.0
4.7			0.16	0.019	8							12.9
4.6			0.14	0.015	9							16.1
4.8			0.09									14.6
5.8			0.09					-				13.5
7.3			0.06					-				14.6

5A1a CATION EXCHANGE CAPACITY NH_4Ac	EXTRACTABLE CATIONS 6N2b Ca	6O2b Mg	6H1a H	6P2a Na	6Q2a K	BASE SAT. % NH_4Ac EXCH.	Base Sat. % on Sum + H	Sum - H	Sum + H	Ca/Mg
←	milliequivalents per 100g. soil				→	5C1	5C3	5B1a	5A3a	
9.5	3.6	1.3	6.5	0.1	0.1	54	44	5.1	11.6	2.8
6.6	2.5	1.1	4.0	0.1	-	56	48	3.7	7.7	2.3
5.8	1.9	1.1	3.2	0.1	-	53	49	3.1	6.3	1.7
7.7	1.2	1.0	6.1	0.3	0.1	34	30	2.6	8.7	1.2
17.9	2.8	2.5	11.5	0.9	0.2	36	36	6.4	17.9	1.1
20.7	5.2	4.2	11.1	2.0	0.3	56	51	11.7	22.8	1.2
20.4	6.6	5.1	6.2	2.7	0.3	72	70	14.7	20.9	1.3
19.6	8.3	5.6	2.0	3.5	0.3	90	90	17.7	19.7	1.5
20.4	9.6	6.2	0.8	4.6	0.3	100	96	20.7	21.5	1.5

a. Many, smooth and irregular light brown to dark brown concr. (Fe-Mn?)
b. Common, smooth and irregular light brown to dark brown concr. (Fe-Mn?)
c. Few, smooth and irregular light brown to dark brown concr. (Fe-Mn?)

Classification: Fine-silty, mixed, thermic Typic Glossaqualf.
Soil series: Wrightsville taxadjunct 1/.
Series classification: Fine, mixed, thermic Typic Glossaqualfs.

Pedon No.: S57LA-1-4.
Location: Acadia Parish, Louisiana, 3 miles west of Iota. NW¼ sec. 26, T. 8 S., R. 2 W.; 2,000 ft. south of road.
Vegetation: Pine-hardwood forest (loblolly pine, oaks, pinehill bluestem grass).
Relief: Level (0-.6% slope), few pimple mounds.
Drainage: Poorly drained; slow to very slow internal drainage and runoff.
Permeability: Very slow.
Parent material: Prairie formation of the Pleistocene terrace from old alluvium of Red River.
Climate: Precipitation 56 inches, Temperature 68 degrees F.
Sampled by: James S. Allen and Henry L. Clark.
Described by: Lester L. Loftin, 11/13/57, Horizons redesignated by David F. Slusher, 8/14/75.

A1--0 to 3 cm (0 to 1 in.); dark grayish brown (10YR 4/2) silt loam; moderate fine granular structure; very friable; medium acid; abrupt smooth boundary.

A21g--3 to 10 cm (1 to 4 in.); light brownish gray (10YR 6/2) silt loam; weak medium platy structure; friable; few fine hard reddish concretions; medium acid; clear smooth boundary.

A22g--10 to 20 cm (4 to 8 in.); light gray (10YR 7/2) silt loam; few large faint grayish brown (10YR 5/2) mottles; massive; brittle, firm; many fine to medium hard dark and reddish concretions; many fine pin holes; strongly acid; clear smooth boundary.

A23g--20 to 30 cm (8 to 12 in.); light gray (2.5Y 7/2) silt loam; common medium distinct brownish yellow (10YR 6/6) mottles; massive; friable to firm, somewhat brittle; few fine hard dark and reddish concretions; extremely acid clear irregular boundary.

B21tg--30 to 43 cm (12 to 17 in.); light brownish gray (10YR 6/2) silty clay with common medium distinct brownish yellow (10YR 6/6) mottles; moderate fine angular blocky structure; firm; few fine reddish hard concretions; extremely acid; clear wavy boundary.

B22tg--43 to 71 cm (17 to 28 in.); light brownish gray (10YR 6/2) clay; many medium prominent red (2.5YR 5/8) mottles; weak coarse prismatic structure that breaks into moderate very fine angular blocky structure; firm; few large cracks or root channels filled with gray (10YR 5/1) silt loam; very strongly acid; gradual wavy boundary.

B23tg--71 to 86 cm (28 to 34 in.); yellowish brown (10YR 5/6) clay; many medium faint light brownish gray (10YR 6/2) mottles; weak coarse prismatic structure that breaks into moderate fine to medium angular blocky structure; firm; few fine dark hard concretions; few large cracks or root channels filled with gray (10YR 5/1) silt loam; medium acid; diffuse wavy boundary.

B24t--86 to 117 cm (34 to 46 in.); yellowish brown (10YR 5/6) clay; many medium faint light brownish gray (10YR 6/2) mottles; weak coarse prismatic structure that breaks into moderate fine to medium angular blocky structure; firm; few fine dark hard concretions; many fine dark root fossils; few large cracks or root channels filled with gray (10YR 5/1) silt loam; medium acid; diffuse wavy boundary.

B3--117 to 152 cm (46 to 60 in.); light brownish gray (10YR 6/2) clay; many medium distinct yellowish brown (10YR 5/6) mottles; weak coarse prismatic structure that breaks into moderate medium angular blocky structure; very firm; common medium dark hard concretions; few large cracks or root channels filled with gray (10YR 5/1) silt loam; moderately alkaline.

C1--152 to 183 cm (60 to 72 in.); brownish yellow (10YR 6/6) clay with gray (N 6/) mottles.

C2--183 to 229 cm (72 to 90 in.); brown (7.5YR 5/4) clay with few fine lime concretions.

C3--229 to 244 cm (90 to 96 in.); light gray (10Y 7/1) clay; moderately alkaline.

Remarks: Munsell colors are for moist soil. The vertical cracks or root channels extend to variable depths from 17-55 inches. 60-96 inches examined by bucket type soil auger.

1/ Particle size control section has only 34.9 percent clay and colors of lower B horizons are outside of the series range (2/73).

SOIL CLASSIFICATION-TYPIC GLOSSAQUALF
COARSE-LOAMY, SILICEOUS, THERMIC
SERIES - - - - - - -NOT DESIGNATED

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE, MTSC
NATIONAL SOIL SURVEY LABORATORY
LINCOLN, NEBRASKA

SOIL NO - - - - - - S70LA-60-1 WEBSTER PARISH

GENERAL METHODS- - -1A,1B1B,2A1,2B SAMPLE NOS. 7CL1008-7OL1013

DEPTH CM	HORIZON	PARTICLE SIZE ANALYSIS, LT 2MM, 3A1, 3A1A, 3A1B (PCT LT 2MM) SAND 2-.05	SILT .05-.002	CLAY LT .002	FINE CLAY LT .0002	SAND VCOS 2-1	CORS 1-.5	MEDS .5-.25	FNES .25-.10	VFNS .10-.05	COSI .05-.02	SILT FNSI .02-.002	VFSI .005-.002	SAND 2-.10	INTR II .2-.02	FINE CLAY TO CLAY PCT	NON-CO3-CLAY PCT	RATIO 8D1 15-BAR TO CLAY
5-23	A12	41.1	44.7	14.2		.3	.4	2.9	27.4	10.1	16.0	28.7		31.0	42.7			.44
23-61	B21TG	37.1	44.7	13.2		.3	.3	2.4	23.3	10.8	15.4	29.3		26.3	41.7			.41
61-97	B22TG	40.9	43.0	16.1		1.2	1.2	2.8	24.3	11.4	15.2	27.8		29.5	42.9			.42
97-107	A&B	42.8	41.4	15.8		1.3	1.2	3.1	25.6	11.6	14.4	27.0		31.2	42.7			.38
107-132	B*21TG	43.6	32.9	23.5		.5	1.1	3.3	27.3	11.4	11.8	21.1		32.2	40.7			.40
132-203	B*22TG																	

DEPTH CM	PARTICLE SIZE ANALYSIS, MM, 3B, 3B1, 3B2 (PCT) VOL. GT 2	WEIGHT GT 75	75-20	20-5	5-2	LT .074	20-2 PCT LT20	4A1D 1/3-BAR G/CC	4A1H OVEN DRY G/CC	4D1 COLE	BULK DENSITY 4B1C 1/10 BAR PCT	4B1C 1/3-BAR PCT	WATER CONTENT 4B2 15-BAR PCT	4C1 WRD CM/CM	CARBONATE 6E1B LT 2 PCT	3A1A LT .002 PCT	PH 8C1A 1/1 H2O	8C1E 1/2 CACL
5-23			0	TR	1	62	1						6.3				4.3	3.7
23-61			0	TR	3	66	3						7.4				4.2	3.6
61-97			0	1	3	61	4						6.7				4.2	3.6
97-107			0	TR	3	60	3						6.0				4.2	3.6
107-132			0	TR	2	60	2						9.4				4.1	3.6
132-203			0	0	TR		TR						13.7				4.0	3.6

DEPTH CM	ORGANIC MATTER 6A1A ORGN CARB PCT	6B1A NITG PCT	C/N	IRON 6C2B EXT FE PCT	PHOS TOTL PCT	EXTRACTABLE BASES 5B4A (MEQ / 100 G) 6N2E CA	6O2D MG	6P2B NA	6Q2B K	SUM EXTB	ACTY 6H1A BACL TEA	AL 6G1E KCL EXT	CAT EXCH 5A3A EXTB ACTY	5A6A NHAC	RATIO 8C1 NHAC TO CLAY	RATIO 8D3 CA TO MG	CA 5F1 SAT NHAC PCT	BASE SAT 5C3 EXTB ACTY PCT	5C1 NHAC PCT
5-23																			
23-61																			
61-97																			
97-107						.8	.5	.1	.1	1.5	6.7	2.5	8.2	6.2	.39		13	18	24
107-132						2.0	1.4	.5	.1	4.0	9.0	2.9	13.0	10.3	.44	1.4	19	31	39
132-203						3.8	2.7	1.1	.2	7.8	11.8	3.5	19.6	15.3		1.4	25	40	51

Classification: Coarse-loamy, siliceous, thermic Typic Glossaqualf.
Soil series: Not designated 1/.

Pedon No.: S70LA-60-1.
Location: Webster Parish, Louisiana, about 5 miles southeast of Cotton Valley, SW¼ SE¼ sec. 32, T. 21, R. 9 W.
Vegetation and use: Hardwood trees, woodland.
Slope and land form: Less than 1 percent slope; nearly level stream flood plain.
Parent material: Alluvium from Coastal Plain sediments.
Climate: Precipitation 51 inches, Temperature 65 degrees F.
Sampled by: C. L. Butler, Nov. 12, 1968.
Described by: Bruce F. Chaffin and Jerol W. Magoun, November 12, 1968.

A11--0 to 5 cm (0 to 2 in.); dark brown (10YR 3/3) silt loam; weak fine granular structure; strongly acid; clear wavy boundary.

A12--5 to 23 cm (2 to 9 in.); dark brown (7.5YR 4/4) silt loam; many medium distinct grayish brown (10YR 5/2) mottles; weak fine subangular blocky structure; friable; many roots; strongly acid; clear wavy boundary.

B21tg--23 to 61 cm (9 to 24 in.); grayish brown (10YR 5/2) loam; common fine and medium distinct dark brown (7.5YR 4/4) mottles; weak medium subangular blocky structure; extremely hard; few hard brown concretions; strongly acid; clear wavy boundary.

B22tg--61 to 97 cm (24 to 38 in.); grayish brown (10YR 5/2) loam; common medium distinct dark brown (10YR 4/4) mottles and many coarse faint light grayish brown (10YR 6/2) mottles; weak medium subangular blocky structure; extremely hard; common hard brown concretions; very strongly acid; clear wavy boundary.

A&B--97 to 107 cm (38 to 42 in.); light gray (10YR 6/1) silt loam; many medium distinct dark grayish brown (10YR 4/2) and common medium distinct grayish brown (10YR 5/2) mottles; massive; friable; common pores; light gray material is silt and dispersed throughout mass and intermingled with dark grayish brown B bodies; very strongly acid; abrupt wavy boundary.

B'21tg--107 to 132 cm (42 to 52 in.); light gray (10YR 5/1) light silty clay; common medium and distinct dark yellowish brown (10YR 4/4) mottles; weak coarse prismatic structure that parts into weak subangular blocky structure; extremely hard; nearly continuous thick dark gray clay films on surfaces of peds; common light gray silt coats on some peds; common fine white silt specks inside of most peds; common tongues of light gray silt that are 1 to 2 inches wide extend into the upper 3 inches of horizon; very strongly acid; gradual smooth boundary.

B'22tg--132 to 203 cm (52 to 80 in.); gray (10YR 5/1) silty clay; common medium prominent dark red (10R 3/4) and yellowish brown (10YR 5/6) mottles; weak coarse prismatic structure; firm; common thick dark gray clay films on ped surfaces; very strongly acid.

Remarks: Munsell colors for moist soil.

1/ Pedon was sampled as a representative of the Arkabutla series. (Fine-silty, mixed, acid, thermic; Aeric Fluvaquents.)

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

SOIL Foley SOIL Nos. S67La-42-1 LOCATION Richland Parish, Louisiana

SOIL SURVEY LABORATORY Lincoln, Nebraska LAB. Nos. 67L457-67L460

GENERAL METHODS: 1A, 1B1b, 2A1, 2B

Depth (in.)	Horizon	Size class and particle diameter (mm) 3A1 — Total: Sand (2–0.05) a	Total: Silt (0.05–0.002)	Total: Clay (< 0.002)	Sand: Very coarse (2–1)	Sand: Coarse (1–0.5)	Sand: Medium (0.5–0.25)	Sand: Fine (0.25–0.1)	Sand: Very fine (0.1–0.05)	Silt: 0.05–0.02	Silt: Int. III (0.02–0.002)	Int. II (0.2–0.02)	(2–0.1)	< 0.074		Coarse fragments 2A2: > 2 Pct.	2 – 19 (Pct. of < 76 mm)	19 – 76 (Pct. of < 76 mm)
		Pct. of < 2 mm																
15-22	B&A	20.7	50.9	28.4	tr	0.1	0.5	10.8	9.3	18.8	32.1	35.4	11.4	84.6		-		
22-27	B21t	22.1	50.3	27.6	0.1	0.1	0.5	11.0	10.4	18.0	32.3	36.2	11.7	83.8		-		
27-36	B22tg	22.5	51.0	26.5	0.1	0.3	0.6	11.1	10.4	17.9	33.1	36.1	12.1	83.5		-		
36-44	B31tg	24.0	48.8	27.2	0.2	0.3	0.6	11.8	11.1	17.9	30.9	37.3	12.9	82.2		-		

Depth (in.)	Organic carbon Pct.	Nitrogen Pct.	C/N		6E2a Carbonate as $CaCO_3$ Pct.		Bulk density g/cc	g/cc	g/cc		Water content Pct.	Pct.	Pct.			pH 8C1b Sat. Paste	8C1a (1:1)	8C1a (1:10)
15-22																4.6	4.9	5.5
22-27																5.1	5.2	5.4
27-36					-(s)											6.2	6.7	6.9
36-44					-(s)											7.0	7.7	7.7

Depth (in.)	Extractable bases 5B1a: 6N2a Ca	6O2a Mg	6P2a Na	6Q2a K	Sum	6H1a Ext. Acidity	Cat. Exch. Cap.: 5A3a Sum Cations	5A1a NH_4OAc	Water extract from saturated paste 8B1: 6N1a Ca	6O1a Mg	6P1a Na	6Q1a K		6I1a CO_3	6J1a HCO_3	6K1a Cl	6L1a SO_4	8B1a Electrical conductivity
	meq/100 g								meq/liter									mmho/cm
15-22	3.8	5.0	2.0	0.2	11.0	8.9	19.9	15.8			6.8	0.1						0.91
22-27	4.5	6.9	3.1	0.3	14.8	7.5	22.3	17.2			8.9	0.1						1.09
27-36	5.3	8.4	5.3	0.2	19.2	2.5	21.7	19.3			14.9	0.5		-	0.8	12.1	4.5	2.00
36-44	5.5	8.5	6.1	0.2	20.3	2.1	22.4	18.9	1.3	2.1	22.5	0.7		-	0.8	18.3	7.2	2.76

Depth (in.)	8B Water at Saturation Pct.	5D2 Exchangeable Na Pct.	8E1 Resistivity ohms-cm.	6F1a Gypsum Pct.		Base Sat. 5C3 Sum Cations Pct.	5C1 NH_4OAc Pct.
15-22	41.1	11		-(s)		55	70
22-27	50.6	15		-(s)		66	86
27-36	58.5	23		-(s)		88	99
36-44	55.0	26	900	-(s)		91	107

a. Fe-Mn nodules: > 50 percent (2.0-0.25 mm).

Exchangeable sodium percentage is defined using cation exchange capacity determined with NaOAc at pH 8.2. The ESP reported is calculated using CEC by NH_4OAc at pH 7. ESP as defined would be equal or less than the reported value and more than that calculated using sum of cations as the exchange capacity.

Classification: Fine-silty, mixed, thermic Albic Glossic Natraqualf.
Soil series: Foley 1/.
Series classification: Same as pedon.

Pedon No.: S67LA-42-1.
Location: Richland Parish, Louisiana, about 6 miles south of Rayville, 45 feet south of fence along gravel road, 75 feet west of farm road, NW¼ NE¼ sec. 9, T. 16 N., R. 7 E.
Vegetation and use: Pasture, common bermudagrass (Cynodon dactylon), bitterweed (Helenium tenuifolium), wooly croton (Croton capitatus), and palmetto (Sabal louisiana).
Slope and land form: Nearly level low terrace.
Drainage and permeability: Poorly drained, very slow permeability.
Parent material: Alluvium of low sand content.
Climate: Precipitation 51 inches, Temperature 65 degrees F.
Sampled by: David F. Slusher, July 28, 1967.
Described by: Tracey A. Weems and David F. Slusher, July 28, 1967.

Ap--0 to 10 cm (0 to 4 in.); grayish brown (10YR 5/2) silt loam; many fine faint yellowish brown mottles; weak very fine granular structure; friable; slightly acid; abrupt smooth boundary.

A2--10 to 20 cm (4 to 8 in.); light brownish gray (10YR 6/2) and light gray (10YR 7/1) silt loam; common medium distinct yellowish brown (10YR 5/6) mottles; massive to weak very fine granular structure; friable; common fine pores; medium acid; abrupt irregular boundary with tongues and krotovinas ¼ - 3 inches wide extending to a maximum depth of 30 inches. (Tongues make up 15 to 25 percent of pit wall. Horizontal bands 1-2 mm thick of very dark grayish brown clay are common in lower extensions.)

A&B--20 to 38 cm (8 to 15 in.); light brownish gray (10YR 6/2) silt loam; common medium distinct yellowish brown (10YR 5/6) areas of B; weak medium subangular blocky structure; slightly hard; medium acid ranging to mildly alkaline; within the pedon; clear irregular boundary.

B&A--38 to 56 cm (15 to 22 in.); light brownish gray (2.5Y 6/2) silty clay loam; many medium prominent strong brown (7.5YR 5/6) mottles; distinct discontinuous coatings of dark grayish brown (2.5YR 4/2) on surfaces of peds; weak medium subangular blocky structure; hard; distinct patchy clay films; numerous spots and streaks of light brownish gray (10YR 6/2) to light gray (10YR 7/2) silt loam A2; few black concretions; medium acid ranging to moderately alkaline with the pedon; clear wavy boundary.

B21t--56 to 69 cm (22 to 27 in.); light brownish gray (2.5Y 6/2) silty clay loam; many medium distinct yellowish brown (10YR 5/6) mottles; weak medium subangular blocky and weak medium prismatic structure; hard; distinct patchy clay films; few black concretions; slightly acid ranging to moderately alkaline within the pedon; clear smooth boundary.

B22tg--69 to 91 cm (27 to 36 in.); light brownish gray (2.5Y 6/2) silty clay loam; few medium distinct strong brown (7.5YR 5/6) mottles; weak medium subangular blocky and weak medium prismatic structure; hard; distinct patchy clay films; few black concretions; moderately alkaline; clear smooth boundary.

B31tg--91 to 112 cm (36 to 44 in.); light brownish gray (2.5Y 6/2) silt loam; common medium distinct yellowish brown (10YR 5/6) mottles; weak medium subangular blocky structure; hard; few patchy clay films; few black concretions; few carbonate concretions within the pedon but not in vertical section described; moderately alkaline; clear smooth boundary.

B32tg--112 to 127 cm (44 to 50 in.); grayish brown (2.5Y 5/2) light silty clay loam; common fine distinct yellowish brown mottles; weak medium subangular blocky structure; firm; few patchy clay films; few carbonate concretions; moderately alkaline; clear boundary.

B33tg--127 to 165 cm (50 to 65 in.); light brownish gray (2.5Y 6/2) silty clay loam; common medium distinct yellowish brown (10YR 5/4) mottles; weak medium subangular blocky structure; firm; few carbonate concretions and few black concretions; few patchy clay films; moderately alkaline; gradual boundary.

C--165 to 183 cm (65 to 72 in.); strong brown (7.5YR 5/8) silty clay loam; few fine distinct gray mottles; weak medium subangular blocky structure; firm; moderately alkaline.

Remarks: Munsell colors are for moist soil.

1/ Pedon is slightly outside the range of the Foley series (1/74) because the B horizon has tongues of albic material rather than interfingers.

SOIL CLASSIFICATION-ALBIC GLOSSIC NATRAQUALF
FINE-SILTY, MIXED, THERMIC
SERIES - - - - - - -FCLEY

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE, MTSC
NATIONAL SOIL SURVEY LABORATORY
LINCOLN, NEBRASKA

SOIL NO - - - - - - S73LA-62-2 WEST CARROLL PARISH

GENERAL METHODS- - -1A,1B1B,2A1,2B SAMPLE NOS. 73L0685-73L0689

DEPTH CM	HORIZON	PARTICLE SIZE ANALYSIS, LT 2MM, 3A1, 3A1A, 3A1B (PCT LT 2MM) SAND 2-.05	SILT .05-.002	CLAY LT .002	FINE CLAY LT .0002	VCOS 2-1	CORS 1-.5	MEDS .5-.25	FNES .25-.10	VFNS .10-.05	COSI .05-.02	FNSI .02-.002	VFSI .005-.002	SILT SAND 2-.10	INTR II .2-.02	FINE CLAY TO CLAY PCT	NON-CO3-CLAY PCT	RATIO 8D1 15-BAR TO CLAY
25-53	A&B																	
53-71	B21TG																	
71-102	B22TG																	
102-122	B23TG																	
122-183	B3T																	

DEPTH CM	PARTICLE SIZE ANALYSIS, MM, 3B, 3B1, 3B2 VCL. GT 2 PCT	GT 75 PCT	WEIGHT 75-20	20-5	5-2	LT .074	20-2 PCT LT20	BULK DENSITY 4A1D 1/3-BAR G/CC	4A1H OVEN DRY G/CC	4D1 COLE	WATER CONTENT 4B1C 1/10 BAR PCT	4B1C 1/3-BAR PCT	4B2 15-BAR PCT	4C1 WRD CM/CM	CARBONATE 6E1B LT 2 PCT	3A1A LT .002 PCT	PH 8C1A 1/1 H2O	8C1E 1/2 CACL
25-53													12.9				5.5	4.6
53-71													15.1				6.8	6.2
71-102													15.8				7.4	6.8
102-122													13.6				8.0	7.4
122-183													12.6				8.1	7.8

DEPTH CM	ORGANIC MATTER 6A1A ORGN CARB PCT	6B1A NITG PCT	C/N	IRON 6C2B EXT FE PCT	PHOS TOTL PCT	EXTRACTABLE BASES 5B4A (MEQ / 100 G) 6N2E CA	6O2D MG	6P2B NA	6Q2B K	SUM EXTB	ACTY 6H1A BACL TEA	AL 6G1E KCL EXT	CAT EXCH 5A3A EXTB ACTY	5A6A NHAC	RATIO 8D1 NHAC TO CLAY	RATIO 8D3 CA TO MG	CA 5F1 SAT NHAC PCT	BASE SAT 5C3 EXTB ACTY PCT	5C1 NHAC PCT
25-53						6.1	8.2	1.8	.2	16.3				19.1		.7	32		85
53-71						6.2	12.5	3.7	.2	22.6				22.8		.5	27		99
71-102						6.1	15.1	4.9	.2	26.3				26.0		.4	23		101
102-122							15.2	5.1	.2					24.2					
122-183							16.3	5.9	.2					23.2					

DEPTH CM	SATURATED PASTE 8E1 REST OHM-CM	8C1B PH	8A H2O PCT	NA 5D2 ESP PCT	NA 5E SAR	SALT 8D5 TOTL SOLU PPM	GYP 6F1A PCT	SATURATION EXTRACT 8A1 EC MMHOS/CM	6N1B CA	6O1B MG	6P1B NA	6Q1B K	6I1A CO3	6J1A HCO3	6K1A CL	6L1A SO4	6M1A NO3	ATTERBERG 4F1 LQID LMIT PCT	4F2 PLST INDX
25-53	2100	4.8	43.7	8	7	160		.58	.4	.5	4.7	TR							
53-71	1400	6.4	58.7	14	12	260		.74	.2	.4	6.4	.0							
71-102	1100	6.9	68.0	17	14	450		1.07	.3	.6	9.5	.0							
102-122	890	7.8	62.8	16	15	920		2.19	.9	2.6	19.3	TR							
122-183	520	7.8	60.2	16	15	1900		4.62	2.6	9.7	36.0	TR							

Classification: Fine-silty, mixed, thermic Albic Glossic Natraqualf.
Soil series: Foley.
Series classification: Same as pedon.

Pedon No.: S73LA-62-2.
Location: West Carroll Parish, Louisiana, about 8 miles southwest of Oak Grove, 165 feet north of intersection of gravel roads 30 feet east of center of north-south road. SW¼ SW¼ sec. 10, T. 21 N., R. 9 E.
Vegetation and use: Native grasses, pasture.
Slope and land form: Nearly level stream terrace.
Drainage and permeability: Poorly drained and permeability is slow.
Climate: Precipitation 52 inches, Temperature 65 degrees F.
Parent material: Silty Pleistocene age deposits.
Described by: Tracey A. Weems and Emmett Reynolds, 1973.

Ap--0 to 10 cm (0 to 4 in.); dark grayish brown (10YR 4/2) silt loam; few fine faint yellowish brown mottles; weak medium subangular blocky structure; friable; common fine roots; medium acid; abrupt smooth boundary.

A2--10 to 25 cm (4 to 10 in.); light brownish gray (10YR 6/2) silt loam; common medium distinct yellowish brown (10YR 5/6) mottles; weak medium subangular blocky structure; friable; few fine roots; strongly acid; clear smooth boundary.

A&B--25 to 53 cm (10 to 21 in.); light brownish gray (10YR 6/2) silt loam; common medium faint grayish brown (10YR 5/2) and few medium faint yellowish brown mottles (10YR 5/4); weak medium subangular blocky structure; friable; common dark grayish brown clay bands; yellowish brown mottles (Bt) are slightly higher in clay content; medium acid; clear smooth boundary.

B21tg--53 to 71 cm (21 to 28 in.); light brownish gray (2.5Y 6/2) silty clay loam; few fine distinct yellowish brown mottles; weak coarse prisms that part to medium subangular blocky structure; firm; few fine roots; common silt fillings 3 to 5 mm thick between prisms; few very dark gray stains in lower part of this horizon; common patchy clay films on peds; moderately alkaline; clear smooth boundary.

B22tg--71 to 102 cm (28 to 40 in.); light brownish gray (2.5Y 6/2) silty clay loam; few fine distinct yellowish brown mottles; weak coarse prisms that part to moderate medium subangular blocky structure; firm; few silt fillings interfingers 3 to 5 mm thick between prisms; common patchy clay films on peds; few fine black concretions; few dark stains on peds; moderately alkaline; clear smooth boundary.

B23t--102 to 122 cm (40 to 48 in.); light brownish gray (2.5Y 6/2) silty clay loam; common medium distinct yellowish brown (10YR 5/6) mottles; moderate medium subangular blocky structure; firm; few fine roots; thin patchy clay films on peds; common fine and medium black concretions; few black stains on peds; moderately alkaline; clear smooth boundary.

B3t--122 to 183 cm (48 to 72 in.); light brownish gray (2.5Y 6/2) silt loam; common fine distinct yellowish brown mottles; weak medium subangular blocky structure; friable; thin patchy clay films; common fine black concretions; few black stains; few medium carbonate concretions; moderately alkaline.

Remarks: Munsell colors for moist soil.

SOIL SURVEY LABORATORY Lincoln, Nebr. Aug., 1958

SOIL TYPE Series not Designated **LOCATION** Acadia Parish, Louisiana

SURVEY NOS. 857La-1-1 **LAB. NOS.** 7137-7145

DEPTH INCHES	HORIZON	1B1a PARTICLE SIZE DISTRIBUTION (in mm.) (per cent) VERY COARSE SAND 2-1	COARSE SAND 1-0.5	MEDIUM SAND 0.5-0.25	FINE SAND 0.25-0.10	VERY FINE SAND 0.10-0.05	SILT 0.05-0.002	CLAY < 0.002	0.2-0.02	3A1 0.02-0.002	> 2	TEXTURAL CLASS
0-1½	A1	1.0a	0.4a	0.1b	1.2b	8.7b	81.6	7.0	48.2	43.1	-	si
1½-5	A21g	1.8a	1.1a	0.2b	1.1b	8.4b	81.9	5.5	47.1	44.2	-	si
5-10	A22g	1.6a	1.3a	0.2c	1.0c	7.5c	80.3	8.1	42.8	45.9	-	si
10-20	B21tg	0.2a	0.4a	0.1c	0.8c	4.9c	57.1	36.5	26.9	35.8	-	sicl
20-28	B22tg	-	0.1a	-	0.5c	5.1c	57.1	37.2	27.1	35.6	-	sicl
28-34	B23tg	0.1a	0.1a	-	0.5b	5.2b	59.2	34.9	28.2	36.7	-	sicl
34-41	B24tg	-	0.1a	0.1b	0.7b	5.6b	60.1	33.4	28.9	37.4	-	sicl
41-53	B31	0.2a	0.2a	0.1b	0.6b	6.3b	60.6	32.0	30.9	36.6	-	sicl
53-60+	B32	0.2a	0.1a	-	4.4b	5.6b	56.2	33.5	35.7	30.1	-	sicl

8C1a pH 1:1	pH 1:5	pH 1:10	ORGANIC MATTER 6A1a ORGANIC CARBON %	6B1a NITROGEN %	C/N			6E1a $CaCO_3$ equivalent %		MOISTURE TENSIONS 1/10 ATMOS. %	1/3 ATMOS. %	4B2 15 ATMOS. %
5.4			4.18	0.186	22.5							6.4
6.0			0.44	0.029	15							2.7
5.6			0.09	0.015	6							3.5
4.7			0.20	0.024	8							15.7
4.8			0.16	0.023	7							16.2
4.9			0.11									15.2
5.6			0.10					-				14.8
7.2			0.15					-				12.9
7.6			0.08					-				14.1

5A1a CATION EXCHANGE CAPACITY NH_4Ac	EXTRACTABLE CATIONS 6N2b Ca	6O2b Mg	6H1a H	6P2a Na	6Q2a K	BASE SAT. % NH_4Ac EXCH. 5C1	Base Sat. % on Sum + H 5C3	Sum - H 5B1a	Sum + H 5A3a	Ca/Mg		
←	milliequivalents per 100g. soil				→							
12.9	5.7	2.5	8.6	0.1	0.2	66	50	8.5	17.1	2.3		
3.5	1.8	0.4	2.0	-	-	63	52	2.2	4.2	4.5		
4.0	1.3	0.5	4.5	0.1	-	48	30	1.9	6.4	2.6		
19.3	4.3	3.8	11.1	2.0	0.2	53	48	10.3	21.4	1.1		
19.7	6.1	4.9	5.8	4.1	0.3	78	73	15.4	21.2	1.2		
19.8	6.8	5.2	4.1	4.8	0.3	86	81	17.1	21.2	1.3		
19.0	7.4	5.4	2.9	5.6	0.3	98	86	18.7	21.6	1.4		
18.3	7.9	5.6	1.2	5.9	0.3	100	94	19.7	20.9	1.4		
19.2	8.3	6.1	0.4	6.2	0.3	100	98	20.9	21.3	1.4		

a. Many, smooth and irregular light brown to black concr. (Fe-Mn?)
b. Common, smooth and irregular light brown to black concr. (Fe-Mn?)
c. Few, smooth and irregular light brown to black concr. (Fe-Mn?)

Classification: Fine, montmorillonitic, thermic Albic Glossic Natraqualf.
Soil series: Not designated 1/.

Pedon No.: S57LA-1-1.
Location: Acadia Parish, La., 2 miles north of Egan, SE¼NW¼ sec. 16, T. 9 S., R. 2 W.; 800 feet SE from Bayou Point Aux Loups and 143 feet south of road center.
Vegetation: Pine-hardwood forest (Loblolly pine, sweetgun, oak, French mulberry, and pinehill bluestemgrass).
Relief: Level (0 - .6 percent slope), few pimple mounds.
Drainage: Poorly drained; slow to very slow internal drainage and runoff.
Permeability: Very slow.
Parent material: Prairie formation of the Pleistocene terrace from old alluvium of Red River.
Climate: Precipitation 56 inches, Temperature 68 degrees F.
Sampled by: James S. Allen, D. L. Fontenot, and Henry L. Clark.
Described by: Lester L. Loftin, 11/12/57. Horizons redesignated by David F. Slusher 8/14/75.

A1--0 to 4 cm (0 to 1½ in.); very dark gray (10YR 3/1) silt loam; moderate fine granular structure; very friable; common fine to medium dark hard concretions; medium acid; abrupt smooth boundary.

A21g--4 to 13 cm (1½ to 5 in.); light gray (10YR 7/2) silt loam; weak medium platy structure; friable; common fine to medium dark hard concretions; surface of concretions dark brown (10YR 3/3); medium acid; clear smooth boundary.

A22g--13 to 25 cm (5 to 10 in.); light gray (10YR 7/2) silt loam; common medium distinct yellowish brown (10YR 5/6) mottles; massive; firm; brittle; many fine to medium dark hard concretions; many pin holes; strongly acid; abrupt irregular boundary.

B21tg--25 to 51 cm (10 to 20 in.); light brownish gray (2.5YR 6/2) silty clay; many large distinct yellowish brown (10YR 5/6) and light olive brown (2.5YR 5/6) mottles; moderate very fine angular blocky structure; firm; common fine-medium dark hard concretions; a few large vertical cracks or root channels filled with white (10YR 8/2) silt loam mottled with brown; very strongly acid; clear wavy boundary.

B22tg--51 to 71 cm (20 to 28 in.); gray (10YR 6/1) clay; many medium prominent red (2.5YR 4/8) mottles; weak medium prismatic structure that breaks into moderate very fine angular blocky structure; very firm; a few large vertical cracks or root channels filled with white (10YR 8/2) silt loam mottled with brown; very strongly acid; gradual wavy boundary.

B23t--71 to 86 cm (28 to 34 in.); dark yellowish brown (10YR 5/4) clay; weak medium prismatic structure that breaks into weak fine to medium subangular blocky structure; firm; few dark soft concretions; few large vertical cracks or root channels filled with white (10YR 8/2) silt loam mottled with brown; very strongly acid; gradual wavy boundary.

B24t--86 to 104 cm (34 to 41 in.); yellowish brown (10YR 5/4) clay; weak medium prismatic structure that breaks into weak fine to medium subangular blocky structure; firm; many small dark root fossils; few dark and reddish concretions; few large vertical cracks or root channels filled with white (10YR 8/2) silt loam mottled with brown; medium acid; gradual wavy boundary.

B31--104 to 135 cm (41 to 53 in.); variegated gray (10YR 6/1) and yellowish brown (10YR 5/6) clay; moderate coarse prismatic structure that breaks into weak medium subangular blocky structure; very firm; few fine to medium dark hard concretions; few small dark root fossils; few large vertical cracks or root channels filled with white (10YR 8/2) silt loam mottled with brown; neutral; gradual wavy boundary.

B32--135 to 152 cm (53 to 60 in.); variegated gray (10YR 6/1) and yellowish brown (10YR 5/6) silty clay; moderate coarse prismatic structure that breaks into weak medium subangular blocky structure; very firm; few fine to medium dark hard concretions; few small dark root fossils; mildly alkaline.

C1--152 to 213 cm (60 to 84 in.); variegated light gray (2.5Y 7/2) and reddish yellow (5YR 6/8) clay; mildly alkaline.

C2--213 to 244 cm (84 to 96 in.); light brown (7.5YR 6/4) fine sandy loam; moderately alkaline.

Remarks: Munsell colors for moist soil. The vertical cracks or root channels extend to variable depths from 10 to 53 inches. 60-96 inch depth examined by bucket type soil auger.

1/ Sampled as a representative of the Wrightsville series. (Fine, mixed, thermic; Typic Glossaqualfs.)

SOIL SURVEY LABORATORY Lincoln, Nebr. January, 1962

SOIL TYPE Verdun LOCATION East Baton Rouge Parish, Louisiana

SOIL NOS. S61La-17-9 LAB. NOS. 15090-15097

DEPTH INCHES	HORIZON	1B1a PARTICLE SIZE DISTRIBUTION (in mm.) (per cent) VERY COARSE SAND 2-1	COARSE SAND 1-0.5	MEDIUM SAND 0.5-0.25	FINE SAND 0.25-0.10	VERY FINE SAND 0.10-0.05	SILT 0.05-0.002	CLAY < 0.002	3A1 0.2-0.02	0.02-0.002	2A2 > 2 (<19mm)	TEXTURAL CLASS
0-4	Ap1	2.0a	1.5a	0.3b	0.4b	2.0b	83.5	10.3	46.9	38.8	-	si
4-7	Ap2	1.8a	1.6a	0.3a	0.4a	1.4c	79.5	15.0	40.4	40.7	-	sil
7-11	B21t	0.6a	0.4a	0.2b	0.4b	1.1c	68.6	28.7	34.1	35.8	-	sicl
11-15	B22t	0.1a	0.1a	0.1b	0.3b	1.3c	69.7	28.4	37.4	33.8	-	sicl
15-21	B23t	<0.1	0.1a	0.1b	0.3b	1.4	70.6	27.5	37.8	34.4	-	sicl/sil
21-32	B24t	0.2a	0.3a	0.2a	0.3d	1.3d	69.7	28.0	35.7	35.5	5	sicl
32-44	B31	0.2a	0.3a	0.1a	0.3d	1.1d	73.8	24.2	39.3	35.8	-	sil
44-60+	C	0.1a	0.2a	0.1a	0.3a	1.3	75.4	22.6	32.5	44.4	-	sil

8C1b pH SATURATED PASTE	6E1c $CaCO_3$ Equivalent %	Organic Matter 6A1a O.C. %	6B1a N %	C/N.	Bulk Density Field Moist 4B4 % M.	4A1a g/cc	30 Cm. 4B3 % M.	4A1c g/cc	4A1b A.D. g/cc	MOISTURE TENSIONS 4B1b 1/3 ATMOS. Pieces %	1/3 ATMOS. Sieved %	4B2 15 ATMOS. Sieved %
5.5		1.42	0.115	12	23.8	1.43	29.6	1.38	1.45	24.9		6.2
5.8		0.71	0.072	10								7.8
6.7	< 1	0.52	0.068	8								14.9
7.4	< 1	0.29	0.038	8								14.5
7.9	< 1	0.24	0.031									14.9
8.4	< 1	0.11	0.018		16.7	1.60	29.0	1.40	1.70	26.1		16.2
8.3	< 1	0.06										14.4
8.0	< 1	0.03			21.0	1.60	30.8	1.41	1.68	25.1		13.1

5A1a CATION EXCHANGE CAPACITY NH_4OAc	EXTRACTABLE CATIONS 6N2b Ca	6O2b Mg	6H1a H	6P2a Na	6Q2a K	5B1a 5D2 Exch. Na on NH_4OAc CEC %	Sat. Ext. 8L1 6P1a Na	6Q1a K	8A1a Elec. Cond. $EC \times 10^3$ mmhos.	8A Moist. at Sat. %	6C1a Free Iron Fe_2O_3 %	6G1a Ext. Al me/100g.
	milliequivalents per 100g. soil						me. per liter					
6.8	1.9	1.0	6.2	0.4	0.1	4	3.1	0.1	0.5	42.9	1.8	< 1
7.6	1.7	1.0	6.5	1.2	0.1	14	3.4	<0.1	0.4	37.9	1.9	< 1
15.5	5.6	4.0	4.5	5.2	0.2	32	4.2	<0.1	0.5	65.8	1.3	< 1
17.7	6.4	5.0	1.9	6.2	0.2	33	4.1	0.1	0.5	70.0	0.9	
17.0	6.6	5.3	1.6	6.7	0.2	38	4.1	<0.1	0.5	76.4	0.9	
16.7	8.9	5.1	0.7	7.2	0.2	40	6.4	<0.1	0.8	93.9	1.6	
15.5	9.0	4.2	1.4	5.7	0.2	34	6.6	<0.1	0.8	80.2	1.6	
15.1	8.3	3.8	1.2	4.6	0.2	28	4.8	<0.1	0.6	71.8	1.2	

a. Many Fe/Mn-bearing(?) aggregates.
b. Common Fe/Mn-bearing(?) aggregates.
c. Few Fe/Mn-bearing(?) aggregates.
d. Few Fe/Mn-bearing(?) aggregates. Trace carbonate concr. $CaCO_3$?

Classification: Fine-silty, mixed, thermic Glossic Natraqualf.
Soil series: Verdun.
Series classification: Same as pedon.

Pedon No.: S61LA-17-9.
Location: East Baton Rouge Parish, La., in city of Baton Rouge; 0.5 mile south of Sharp Station and 100 feet east of Sharp Station Road; western part of sec. 6, T. 7 S., R. 2 E.
Vegetation and use: Unimproved pasture; poor growth of bermudagrass; some carpetgrass, broomsedge.
Slope and land form: Level; slightly undulating microrelief in places; less than one percent slope; elevation 50 feet, which is the high elevation between Comite River on the north and Ward Creek on the south.
Drainage and permeability: Upper soil layers restricted in drainage and slowly permeable, lower soil layers are moderately permeable; surface runoff slow to very slow; internal drainage slow. Below the surface layer, this soil has the oxidized brown color characteristic of well-drained soils.
Climate: Precipitation 6 inches, Temperature 67 degrees F.
Parent material: Loess.
Sampled by: J. S. Allen, D. C. McMurtry, Leon Nugent, H. L. Clark, J. E. Seaholm, May 11, 1961.
Described by: H. L. Clark, J. E. Seaholm, S. A. Lytle, May 11, 1961. Horizon designations reinterpreted by David F. Slusher, November 28, 1975.

Ap1--0 to 10 cm (0 to 4 in.); grayish brown (10YR 5/2) silt loam, light brownish gray (10YR 6/2) dry; strong very fine and fine granular structure; friable; many medium and fine roots; few small soft brown concretions; strongly acid; abrupt smooth boundary.

Ap2--10 to 18 cm (4 to 7 in.); grayish brown (10YR 5/2) silt loam; many fine distinct dark brown or dark grayish brown mottles or stainings of manganese oxide; moderate very fine and fine granular structure; firm; many fine and medium sized roots; common small soft and hard black and brown concretions; strongly acid; abrupt wavy boundary.

B21t--18 to 28 cm (7 to 11 in.); very dark grayish brown (10YR 3/2) light silty clay; moderate to strong coarse prismatic structure; very firm moist, very hard dry; wet sticky clay or silty clay on top of prisms and as coating on upper parts of prisms; common ped coatings of grayish brown (10YR 5/2) silt or silt loam, pale brown to light gray dry (10YR 6/2 to 7/2); common fine roots, most of which are on outside of prisms; few small soft brown concretions; slightly acid; diffuse wavy boundary.

B22t--28 to 38 cm (11 to 15 in.); olive brown (2.5Y 4/4) light silty clay to silty clay loam, grayish brown (2.5Y 5/2) dry; strong medium subangular blocky structure and moderate coarse prismatic structure; very firm moist; peds commonly coated with light gray (10YR 7/2) silt; few ped coatings and vertical veins of very dark grayish brown (10YR 3/2) silt clay; few fine roots between peds; common small soft black and brown concretions; moderately alkaline; diffuse wavy boundary.

B23t--38 to 53 cm (15 to 21 in.); dark yellowish brown (10YR 4/4) silty clay loam, light olive brown (2.5Y 4/4) dry; massive to weak medium subangular blocky structure; firm; common ped coatings of light brown gray (10YR 6/2) silt, light gray (10YR 7/2) dry; few patchy ped coatings and root channel fillings of very dark grayish brown (10YR 3/2) silty clay; few fine roots; common small soft brown and black concretions; moderately alkaline; diffuse wavy boundary.

B24t--53 to 81 cm (21 to 32 in.); olive brown (2.5Y 4/4) silt loam to silty clay loam, yellowish brown (10YR 5/6) dry; few fine distinct mottles of light brownish gray (10YR 6/2); massive; friable moist, firm dry; few vertical veins of brown (10YR 5/3) silt or silt loam and very dark grayish brown (10YR 3/2) silty clay; few small and large (1/8 inch to 3 inch) lime-silica concretions; 3 percent small soft and hard brown and black concretions; moderately alkaline; diffuse smooth boundary.

B31--81 to 112 cm (32 to 44 in.); light olive brown (2.5Y 5/4) silt loam to light silty clay loam, light yellowish brown (2.5Y 6/4) dry; few fine faint yellowish brown (10YR 5/6) and strong brown (7.5YR 5/6) mottles; massive; friable moist, firm dry; occasional small vertical veins of very dark grayish brown (10YR 3/2) silty clay; few small and large (1/8 inch to 3 inch) lime-silica concretions; few small soft black and brown concretions; moderately alkaline; arbitrary boundary.

C--112 to 152 cm (44 to 60 in.); light olive brown (2.5Y 5/4) silt loam to light silty clay loam, light yellowish brown (2.5Y 6/4) dry; few fine faint yellowish brown (10YR 5/6) and strong brown (7.5YR 5/6) mottles; massive; friable moist, firm dry; few large and small lime-silica concretions; 3 percent small soft black and brown concretions; moderately alkaline; several feet thick.

Remarks: Munsell colors for moist soil unless otherwise indicated.

SOIL SURVEY LABORATORY Lincoln, Nebr. January, 1962

SOIL TYPE Verdun **LOCATION** East Baton Rouge Parish, Louisiana

SURVEY NOS. 861Ia-17-10 **LAB. NOS.** 15098-15104

DEPTH INCHES	HORIZON	1B1a VERY COARSE SAND 2-1	COARSE SAND 1-0.5	MEDIUM SAND 0.5-0.25	FINE SAND 0.25-0.10	VERY FINE SAND 0.10-0.05	SILT 0.05-0.002	CLAY < 0.002	0.2-0.02	3A1 0.02-0.002	2A2 > 2	TEXTURAL CLASS
		PARTICLE SIZE DISTRIBUTION (in mm.) (per cent)										
0-4	Ap1	2.3a	1.8a	0.4a	0.4c	1.7c	85.9	7.5	51.3	36.5	-	si
4-6	Ap2	1.7a	1.8a	0.4a	0.4c	1.6c	82.7	11.4	46.5	38.0	-	si/sil
6-11	B21t	0.5a	0.7a	0.2a	0.3a	1.2b	66.1	31.0	33.6	33.9	-	sicl
11-19	B22t	<0.1	0.2a	0.1a	0.2a	1.2	65.6	32.7	33.5	33.4	-	sicl
19-35	B23t	0.1a	0.2a	0.1a	0.1a	1.2	71.6	26.7	37.1	35.8	-	sil/sicl
35-48	B3	<0.1	0.2a	0.1a	0.2a	1.5	74.0	24.0	39.8	35.8	-	sil
48-60	C	0.2a	0.4a	0.1a	0.2a	1.9	73.4	23.8	41.4	34.0	-	sil

pH SATURATED PASTE 8C1b	$CaCO_3$ Equivalent 6E1c %	Organic Matter 6A1a O.C. %	6B1a N %	C/N	Bulk Density Field Moist 4B4 % M.	4A1a g/cc	30 Cm. 4B3 % M.	4A1c g/cc	A.D. 4A1b g/cc	MOISTURE TENSIONS 4B1b 1/3 ATMOS. Pieces %	1/3 ATMOS. Sieved %	4B2 15 ATMOS. Sieved %
5.7		1.50	0.126	12	18.7	1.49	27.8	1.46	1.49	20.3		5.1
6.8	< 1	0.70	0.070	10								6.1
7.5	< 1	0.71	0.081	9								16.3
8.2	< 1	0.28	0.036	8								18.2
8.1	< 1	0.10	0.017	6	13.0	1.64	24.8	1.48	1.66	28.4		15.8
8.0	< 1	0.05			14.6	1.69	28.1	1.46	1.72	24.6		15.3
7.9	< 1	0.04										13.2

5H1a CATION EXCHANGE CAPACITY NH_4OAc	EXTRACTABLE CATIONS 6N2b Ca	6O2b Mg	6h1a H	6P2a Na	5B1a 6Q2a K	5D2 EXCH. Na %	Sat. Ext. Sol. 8A1 6P1a Na	6Q1a K	8A1a Elec. Cond. ECx10³ mmhos. per cm	8A Moist. at Saturation %	6C1a Free Iron (Fe_2O_3) %	6G1a Ext. Al me/100g.
	milliequivalents per 100g. soil →						me. per liter					
6.4	2.8	1.2	4.0	0.4	0.1	5	3.2	0.1	0.6	43.3	2.0	
7.4	3.5	1.4	3.0	1.3	0.1	15	6.5	<0.1	0.8	34.3	2.3	
17.6	7.7	4.4	3.3	5.2	0.2	27	5.7	<0.1	0.7	62.9	1.5	
19.5	8.7	6.4	1.4	6.6	0.2	31	7.2	<0.1	0.9	82.8	1.7	
16.8	6.4	5.4	1.2	6.2	0.2	34	5.2	<0.1	0.6	90.0	1.6	
16.2	6.4	5.2	1.2	5.5	0.2	32	3.7	<0.1	0.5	88.2	1.4	
15.7	6.7	5.0	0.9	4.8	0.2	29	3.3	<0.1	0.4	78.8	1.2	

a. Many Fe/Mn-bearing(?) aggregates.
b. Few Fe/Mn-bearing(?) aggregates.
c. Common Fe/Mn-bearing(?) aggregates.

Classification: Fine-silty, mixed, thermic Glossic Natraqualf.
Soil series: Verdun.
Series classification: Same as pedon.

Pedon No.: S61LA-17-10.
Location: East Baton Rouge Parish, La.; in city of Baton Rouge. Approximately 1.1 miles east of intersection of Hammond Highway and Sharp Station Road and 250 feet south of Hammond Highway in pasture of Mr. Lively; SW¼ SW¼, sec. 5 T. 7 S., R. 2 E.
Vegetation and use: Poor unimproved pasture; poor, very short bermudagrass; occasional clumps of broomsedge; some sedges.
Slope and land form: Level to gently undulating slope of less than 1 percent. Elevation 45 feet to 50 feet.
Drainage and permeability: Surface runoff slow to very slow; internal drainage slow. Upper soil layers very slowly permeable due to the slow permeability of the prismatic silty clay or silty clay loam upper subsoil layer which swells when wet; lower subsoil layers are generally well oxidized and moderately permeable.
Climate: Precipitation 60 inches, Temperature 67 degrees F.
Parent material: Loess.
Sampled by: J. S. Allen, D. C. McMurtry, H. L. Clark, J. E. Seaholm and Leon Nugent, May 11, 1961.
Described by: J. E. Seaholm, H. L. Clark, S. A. Lytle, May 11, 1961. Horizon designations by David F. Slusher, 12/8/75.

Ap1--0 to 10 cm (0 to 4 in.); grayish brown (10YR 5/2) silt loam, light brownish gray (10YR 6/2) dry; few fine distinct dark yellowish brown (10YR 3/4) mottles or weak concretions; moderate to strong fine and medium granular structure and weak thin platy structure; friable; many fine and medium roots; common small and few medium black concretions; medium acid; abrupt smooth boundary.

Ap2--10 to 15 cm (4 to 6 in.); dark grayish brown (10YR 4/2) silt loam, light brownish gray (10YR 6/2) dry; common faint light brownish gray (10YR 6/2) mottles and few fine distinct light yellowish brown (10YR 6/4) mottles; moderate medium platy structure; friable moist; firm dry; many fine roots; common small and a few fine soft and hard black concretions; slightly acid; abrupt wavy boundary.

B21t--15 to 28 cm (6 to 11 in.); dark yellowish brown (10YR 3/4) light silty clay, dark grayish brown (10YR 4/2) dry; many fine faint very dark grayish brown (10YR 3/2) and many fine distinct strong brown (7.5YR 5/6) mottles or weak concretions; moderate coarse prismatic and moderate coarse subangular blocky structure; very firm moist; peds partially coated with light gray (10YR 7/2) silt; some very dark brown (10YR 2/2) thin staining on some ped surfaces; numerous fine roots; especially in the light gray silt filling between prisms; moderately alkaline; diffuse irregular boundary.

B22t--28 to 48 cm (11 to 19 in.); olive brown (2.5Y 4/4) light silty clay loam, light yellowish brown (2.5Y 6/4) dry; few fine faint mottles of yellowish brown (10YR 5/8) and strong brown (7.5YR 5/6); 2 percent mottled pale brown (10YR 6/3); weak medium subangular blocky structure; somewhat firm moist, very firm dry; peds partially coated with grayish brown (10YR 5/2) silt, light brownish gray (10YR 6/2) dry; some thin ped coatings of very dark grayish brown (10YR 3/2), dark grayish brown (10YR 4/2) dry; few fine roots between peds; few small lime-silica concretions; common small soft and hard black and brown concretions; moderately alkaline; diffuse irregular boundary.

B23t--48 to 89 cm (19 to 35 in.); light olive brown (2.5Y 5/4) light silty clay loam to silt loam, light yellowish brown (2.5Y 6/4) dry; few fine faint yellowish brown (10YR 5/8), few fine distinct light brownish gray (2.5Y 6/2) mottles; massive; somewhat firm moist, very firm dry; veins, old root channels, and krotovinas (crayfish burrows) filled with grayish brown (10YR 5/2) silt or silt loam, light gray (10YR 7/2) dry; some very dark brown and black manganese oxide staining in old root channels and vertical veins; few large lime-silica concretions; common medium soft black concretions; moderately alkaline; diffuse irregular boundary.

B3--89 to 122 cm (35 to 48 in.); light olive brown (2.5Y 5/4) silt loam to light silty clay loam, light yellowish brown dry; few fine faint yellowish brown (10YR 5/8), few fine distinct light brownish gray (2.5Y 6/2) mottles; massive; friable moist, very firm dry; vertical veins, old root channels, and few krotovinas filled with grayish brown (10YR 5/2) silt or silt loam, light gray (10YR 7/2) dry; common very dark brown and black manganese oxide staining, some of which is clay or silty clay, in veins and root channels; few fine pores; few large lime-silica concretions; common medium soft black concretions; moderately alkaline; arbitrary boundary.

C--122 to 152 cm (48 to 60 in.); light olive brown (2.5Y 5/4) silt loam to light silty clay loam, light yellowish brown (2.5Y 6/4) dry; few fine faint yellowish brown (10YR 5/8), few fine distinct light brownish gray (2.5Y 6/2) mottles; massive; friable moist, very firm dry; vertical veins, old root channels, and a few krotovinas filled with grayish brown (10YR 5/2) silt or silt loam, light gray (10YR 7/2) dry; common very dark brown and black stainings and weak concretions of manganese oxide; some small veins or old root channels of very dark brown or black silty clay; few fine pores; few large lime-silica concretions; common medium soft black concretions; moderately alkaline.

Remarks: Munsell colors for moist soil unless otherwise indicated.

SOIL CLASSIFICATION-TYPIC OCHRAQUALF
FINE- MONTMORILLONITIC, THERMIC
SERIES - - - - - - -FORESTDALE

SOIL NO - - - - - - S72LA-62-5 WEST CARROLL PARISH

GENERAL METHODS- - -1A,1B1B,2A1,2B SAMPLE NOS. 72L1173-72L1175

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE, MTSC
NATIONAL SOIL SURVEY LABORATORY
LINCOLN, NEBRASKA

DEPTH CM	HORIZON	PARTICLE SIZE ANALYSIS, LT 2MM, 3A1, 3A1A, 3A1B: SAND 2-.05	SILT .05-.002	CLAY LT .002	FINE CLAY LT .0002	VCOS 2-1	CORS 1-.5	MEDS .5-.25	FNES .25-.10	VFNS .10-.05	COSI .05-.02	FNSI .02-.002	VFSI .005-.002	SAND 2-.10	INTR II .2-.02	FINE CLAY TO CLAY	NON-CO3-CLAY PCT	RATIO 8D1 15-BAR TO CLAY
		PCT LT 2MM																
0-15	AP	7.2	53.8	39.0	21.7	.1	.1	.4	1.2	5.4	16.4	37.4		1.8	22.4	56		.40
30-71	B22TG	6.5	52.4	41.1	24.6	.0	TR	.3	.8	5.4	15.4	37.0		1.1	21.2	60		.38
71-107	B23TG	5.9	57.1	37.0	22.6	TR	TR	.2	.6	5.1	15.1	42.0		.8	20.5	61		.41

DEPTH CM	PARTICLE SIZE ANALYSIS, MM, 3B, 3B1, 3B2: VOL. GT 2 PCT	VOL. GT 75 PCT	WEIGHT 75-20 PCT LT 75	WEIGHT 20-5 PCT LT 75	WEIGHT 5-2 PCT LT 75	LT .074	20-2 PCT LT20	BULK DENSITY 4A1D 1/3-BAR G/CC	4A1H OVEN DRY G/CC	4D1 COLE	WATER CONTENT 4B1C 1/10 BAR PCT	4B1C 1/3-BAR PCT	4B2 15-BAR PCT	4C1 WRD CM/CM	CARBONATE 6E1B LT 2 PCT	3A1A LT .002 PCT	PH 8C1A 1/1 H2O	8C1E 1/2 CACL
0-15	0	0	0	0	0	97	0						15.5					
30-71	0	0	0	0	0	98	0						15.7					
71-107	0	0	0	0	0	98	0						15.0					

CLAY MINERALOGY (7A2C)).
B22TG HORIZON, 72L1174.
CLAY IS DOMINATED BY A WELL ORDERED SMECTITE (GROUP NAME, INCLUDING MONTMORILLONITE, FOR EXPANDING 2:1 LAYER SILICATES) AND HAS SMALL AMOUNTS OF KAOLINITE, MICA (OR ILLITE) AND QUARTZ. CLAY MINERALOGY IS MONTMORILLONITIC.

MICROMORPHOLOGY (4E1B).
AS VEIWED UNDER REFLECTED LIGHT, THE B22TG (72L1174) AND B23TG (72L1175) HORIZONS EXHIBIT VERY SCATTERED DARK CLAY FILMS. THE B22TG WAS EXAMINED IN THIN SECTION. CLAY FILMS ARE COMMON. MANY ARE 0.1 TO 0.2 MM THICK AND SHOW MODERATE TO STRONG INTERNAL ORIENTATION. THE CLAY FILMS COMMONLY SHOW A BANDED PATTERN OF YELLOWISH BROWN AND GRAYISH BROWN AND SOME ARE COMPLETELY GRAYISH BROWN. THE LATTER CORRESPOND TO DARK COATINGS AS VEIWED UNDER REFLECTED LIGHT. THE GRAYISH BROWN PARTS OF THE CLAY FILMS COMMONLY HAVE LOWER INTERFERENCE COLOR AND APPEAR COMPOSED OF COARSER PARTICALS. SAND AND SILT GRAINS COMMONLY HAVE PATCHY COATINGS OF ORIENTED CLAY. THE MATRIX SHOWS SHORT RANGE CLAY ORIENTATION AND THE PLASMA HAS LOW INTERFERENCE COLOR. REDDISH BROWN PARTS OF THE FABRIC SHOW STRONGER MORE CONTINUOUS INTERFERENCE COLOR. IN BREWER'S TERMINOLOGY, MOST OF THE FABRIC IS ASEPIC.

Classification: Fine, montmorillonitic, thermic Typic Ochraqualf.
Soil series: Forestdale 1/.
Series classification: Same as pedon.

Pedon No.: S72LA-62-5.
Location: West Carroll Parish, Louisiana, about 9 miles west of Pioneer, 63 feet east of gravel road; 7 feet north of center of turn row; SW¼ NE¼ sec. 31 T. 21 N., R. 9 E.
Vegetation and use: Cropland, soybean field.
Slope and land form: Slightly depressed, alluvial plain, less than ½ percent slope.
Drainage and permeability: Poorly drained, surface runoff slow, permeability very slow.
Climate: Precipitation 52 inches, Temperature 65 degrees F.
Parent material: Silty and clayey alluvium.
Described by: T. A. Weems, E. F. Reynolds and R. Venson, 1972.

Ap--0 to 15 cm (0 to 6 in.); dark grayish brown (10YR 4/2) silty clay loam; few fine faint yellowish brown mottles; weak medium subangular blocky structure; sticky; many fine roots; neutral; abrupt smooth boundary.

B21tg--15 to 30 cm (6 to 12 in.); gray (10YR 5/1) silty clay; common medium distinct strong brown (7.5YR 5/6) mottles; weak coarse subangular blocky structure; firm; common fine roots; thin patchy clay films; strongly acid; clear smooth boundary.

B22tg--30 to 71 cm (12 to 28 in.); gray (20YR 6/1) silty clay loam; common medium distinct strong brown (7.5YR 5/6) mottles; moderate medium subangular blocky structure; firm; few fine roots; few pine black and brown concretions; thin patchy clay films; medium acid; clear smooth boundary.

B23tg--71 to 107 cm (28 to 42 in.); light brownish gray (10YR 6/2) silty clay loam; few fine distinct light olive brown mottles; moderate medium subangular blocky structure; firm; few fine roots; few fine black concretions; few thin clay films in pores and root channels; neutral.

Remarks: Munsell colors for moist soil.

1/ This pedon is slightly outside the range of the Forestdale series (7/72) because the reaction of the B23tg horizon is one pH unit too high.

SOIL CLASSIFICATION-TYPIC OCHRAQUALF
FINE-SILTY, MIXED, THERMIC
SERIES - - - - - - -FORESTDALE TAXADIUNCT

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE, MTSC
NATIONAL SOIL SURVEY LABORATORY
LINCOLN, NEBRASKA

SOIL NO - - - - - - S72LA-62-6 WEST CARROLL PARISH

GENERAL METHODS- - -1A,1B1B,2A1,2B SAMPLE NOS. 72L1176-72L1178

DEPTH CM	HORIZON	PARTICLE SIZE ANALYSIS, LT 2MM, 3A1, 3A1A, 3A1B (PCT LT 2MM) SAND 2-.05	SILT .05-.002	CLAY LT .002	FINE CLAY LT .0002	VCOS 2-1	CORS 1-.5	MEDS .5-.25	FNES .25-.10	VFNS .10-.05	COSI .05-.02	FNSI .02-.002	VFSI .002-.10	SAND 2-.02	INTR II .2-.02	FINE CLAY TO CLAY	NON-CO3-CLAY	RATIO 8C1 15-BAR TO CLAY
0-18	AP	23.6	48.9	27.5	15.7	.3	.2	.2	6.8	16.1	20.8	28.1		7.5	42.9	57		.42
18-33	B21TG	21.9	46.2	31.9	19.4	.1	.1	.1	5.8	15.8	18.5	27.7		6.1	39.7	61		.41
64-94	B23TG	17.8	48.5	33.7	22.4	.1	.3	.1	4.2	13.1	16.0	32.5		4.7	32.9	66		.42

DEPTH CM	PARTICLE SIZE ANALYSIS, MM, 3B, 3B1, 3B2 VOL. GT 2 PCT	GT 75 PCT	WEIGHT (PCT LT 75) 75-20	20-5	5-2	LT .074	20-2 PCT LT20	BULK DENSITY 4A1D 1/3-BAR G/CC	4A1H OVEN DRY G/CC	4D1 COLE	WATER CONTENT 4B1C 1/10 BAR PCT	4B1C 1/3-BAR PCT	4B2 15-BAR PCT	4C1 WRD CM/CM	CARBONATE 6E1B LT 2 PCT	3A1A LT .002 PCT	PH 8C1A 1/1 H2O	8C1E 1/2 CACL
0-18		0	0	0	TR	85	TR						11.6					
18-33	0	0	0	0	0	86	0						13.0					
64-94	0	0	0	0	0	89	0						14.2					

CLAY MINERALOGY (7A2C).
B21TG HORIZON, 72L1177.
CLAY IS DOMINATED BY A WELL ORDERED SMECTITE (GROUP NAME, INCLUDING MONTMORILLONITE, FOR EXPANDING 2:1 LAYER SILICATES), AND HAS SMALL AMOUNTS OF KAOLINITE, MICA (OR ILLITE) AND QUARTZ. CLAY MINEROLOGY IS MONTMORILLONITIC.

MICROMORPHOLOGY (4E1B).
THE B21TG (72L1177) AND THE B23TG (72L1178) HORIZONS WERE EXAMINED UNDER REFLECTED LIGHT. OCCASIONAL CLAY FILMS ARE PRESENT IN THE B21TG; THEY ARE MORE ABUNDANT IN PARTS WITH HIGHER CHROMA. VERY OCCASIONAL CLAY FILMS OCCUR IN THE B23TG; SOME ARE THICK AND DARK. THE B23TG WAS EXAMINED IN THIN SECTION. THE PRESENCE OF CLAY FILMS IS CONFIRMED. SOME ARE 0.5 MM ACROSS. STRONG SEGREGATION OF IRON. THIN DISCONTINUOUS SEGREGATIONS OF ORIENTED CLAY AROUND SAND AND SILT GRAINS. LITTLE LONG RANGE ORIENTATION OF CLAY EXCEPT FOR THE CLAY FILMS. THE PLASMA HAS LOW INTERFERENCE COLOR. INBREWER'S TERMINOLOGY, MOST OF THE FABRIC IS ASEPIC.

Classification: Fine-silty, mixed, thermic Typic Ochraqualf.
Soil series: Forestdale taxadjunct 1/.
Series classification: Fine, montmorillonitic, thermic Typic Ochraqualfs.

Pedon No.: S72LA-62-6.
Location: West Carroll Parish, Louisiana about 10 miles northwest of Elps, 147 feet east of north-south gravel road and 48 feet south of east-west gravel road; NW¼ SW¼ sec. 24, T. 10 N., R. 8 E.
Vegetation and use: Cropland, soybean field.
Slope and land form: Nearly level, less than ½ percent slopes, alluvial plain.
Drainage and permeability: Poorly drained, surface runoff slow, permeability very slow.
Climate: Precipitation 52 inches, Temperature 65 degrees F.
Parent material: Silty and clayey alluvium.
Described by: Terry Hargroder, R. Venson, E. F. Reynolds and T. A. Weems, 1972.

Ap--0 to 18 cm (0 to 7 in.); dark grayish brown (10YR 4/2) silt loam; few fine faint yellowish brown mottles; weak fine granular structure; sticky; many fine roots; mildly alkaline; abrupt smooth boundary.

B21tg--18 to 33 cm (7 to 13 in.); gray (10YR 5/1) silty clay loam; common medium faint yellowish brown (10YR 5/6) and few fine distinct dark brown mottles; weak coarse subangular blocky structure; firm; common fine roots; few patchy clay films in root channels and voids; strongly acid; clear smooth boundary.

B22tg--33 to 64 cm (13 to 25 in.); gray (10YR 6/1) silty clay loam; many medium distinct dark brown (7.5YR 4/4) mottles; moderately medium subangular blocky structure; firm; few fine roots; patchy clay films; strongly acid; clear smooth boundary.

B23tg--64 to 94 cm (25 to 37 in.); gray (10YR 6/1) silty clay loam; common medium faint yellowish brown (10YR 5/6) mottles; weak coarse and medium subangular blocky structure; firm; few fine roots; common discontinuous clay films; few fine brown and black concretions; few dark gray streaks extending through horizon; neutral; clear smooth boundary.

B24tg--94 to 112 cm (37 to 44 in.); gray (10YR 6/1) silty clay loam; common medium faint yellowish brown (10YR 5/4) and few fine distinct strong brown mottles; moderate medium subangular blocky structure; friable; very few roots; few clay films on ped faces; common fine black concretions; neutral.

Remarks: Munsell colors for moist soil.

1/ This pedon is a taxadjunct to the Forestdale series because the clay content of the control section is slightly too low.

SOIL SURVEY LABORATORY Lincoln, Nebr. Aug., 1958

SOIL TYPE Series not Designated **LOCATION** Jefferson Davis Parish, Louisiana

SURVEY NOS. S57La-27-2 **LAB. NOS.** 7175-7181

DEPTH INCHES	HORIZON	1B1a VERY COARSE SAND 2-1	COARSE SAND 1-0.5	MEDIUM SAND 0.5-0.25	FINE SAND 0.25-0.10	VERY FINE SAND 0.10-0.05	SILT 0.05-0.002	CLAY < 0.002	0.2-0.02	3A1 0.02-0.002	2A2 > 2	TEXTURAL CLASS
		PARTICLE SIZE DISTRIBUTION (in mm.) (per cent)										
0-5	Ap1	0.2a	0.3a	0.1b	0.4c	3.1c	84.8	11.1	37.9	50.3	Tr.	si
5-9	Ap2	1.8a	0.8a	0.2b	0.5c	2.8c	78.9	15.0	33.9	48.2	Tr.	sil
9-17	A2	1.8a	1.1a	0.2b	0.4c	2.8c	79.2	14.5	34.5	47.8	Tr.	sil
17-24	B1g	1.1a	0.6a	0.1b	0.4c	2.3c	74.0	21.5	31.5	45.1	Tr.	sil
24-44	B2tg	0.8a	0.4a	0.1b	0.3c	2.0c	59.6	36.8	25.0	36.8	Tr.	sicl
44-50	B31g	0.8a	0.3a	0.1b	0.2c	2.3c	69.1	27.2	30.2	41.4	Tr.	sicl
50-60+	B32g	0.4a	0.3a	0.1b	0.2c	2.1c	65.6	31.3	29.3	38.6	Tr.	sicl

8C1a pH 1:1	pH 1:5	pH 1:10	6A1a ORGANIC CARBON %	6B1a NITROGEN %	C/N			$CaCO_3$ equivalent %		MOISTURE TENSIONS 1/10 ATMOS. %	1/3 ATMOS. %	4B2 15 ATMOS. %
5.1			1.06	0.093	11.4							5.2
6.3			0.49	0.060	8							6.7
5.1			0.26	0.039	7							6.1
5.2			0.29	0.046	6							9.0
5.4			0.42									15.4
5.5			0.09									11.4
5.7			0.05									13.0

5A1a CATION EXCHANGE CAPACITY NH_4Ac	EXTRACTABLE CATIONS 6N2b Ca	6O2b Mg	6H1a H	6P2a Na	6Q2a K	BASE SAT. NH_4Ac EXCH.	Base Sat. % on Sum + H	Sum - H	Sum + H	Ca/Mg		
← milliequivalents per 100g. soil →						5C1	5C3	5B1a	5A3a			
7.2	2.0	1.0	4.5	0.2	0.2	47	43	3.4	7.9	2.0		
8.0	3.8	1.6	2.8	0.2	0.1	71	67	5.7	8.5	2.4		
6.6	1.6	1.1	3.6	0.2	-	44	45	2.9	6.5	1.4		
9.6	1.7	1.5	5.3	0.4	0.1	38	41	3.7	9.0	1.1		
17.0	4.4	3.8	9.0	0.9	0.2	55	51	9.3	18.3	1.2		
13.5	5.2	4.4	3.3	0.8	0.2	78	76	10.6	13.9	1.2		
15.3	6.8	5.6	2.5	0.9	0.2	88	84	13.5	16.0	1.2		

a. Many, smooth and irregular light brown to dark brown concr. (Fe-Mn?)
b. Common, smooth and irregular light brown to dark brown concr. (Fe-Mn?)
c. Few, smooth and irregular light brown to dark brown concr. (Fe-Mn?)

Classification: Fine-silty, mixed, thermic Typic Ochraqualf.
Soil series: Not designated 1/.

Pedon No.: S57LA-27-2.
Location: Jefferson Davis Parish, La., 3 miles south of Elton, SW¼ SW¼ sec. 17, T. 7 S., R. 3 W., 382 ft. east of intersection; 100 ft. north of road center.
Vegetation: Rice-pasture rotation for approximately last 50 years.
Relief: Level (0 - .6 percent slope). Pimple mounds were present before land leveling.
Drainage: Imperfectly drained; slow internal drainage and runoff.
Permeability: Very slow.
Climate: Precipitation 56 inches, Temperature 69 degrees F.
Parent material: Alluvium; Prairie age Pleistocene terrace.
Sampled by: James S. Allen and Henry L. Clark.
Described by: Lesster L. Loftin, 11/14/57; horizons designations by David F. Slusher, 12/8/75.

Ap1--0 to 13 cm (0 to 5 in.); grayish brown (10YR 5/2) silt loam; weak very fine granular structure; friable; staining around roots dark yellowish brown (10YR 3/4); many fine hard brownish concretions; strongly acid; abrupt smooth boundary.

Ap2--13 to 23 cm (5 to 9 in.); gray (10YR 5/1) silt loam; moderate medium platy structure; firm (plow pan); dark brown staining around roots and peds; common small soft to hard brownish concretions; slightly acid; abrupt smooth boundary.

A2--23 to 43 cm (9 to 17 in.); light brownish gray (10YR 6/2) silty clay loam; common fine distinct yellowish brown (10YR 5/8) mottles; massive; firm (plow pan); common soft to hard brownish concretions; many pinholes; very strongly acid; gradual wavy boundary.

B1g--43 to 61 cm (17 to 24 in.); light brownish gray (10YR 6/2) silty clay; many medium prominent red (10YR 4/8) mottles; moderate medium prismatic structure that breaks into moderate very fine angular blocky structure; firm; few fine hard concretions; few large vertical cracks or root channels filled with light brownish gray (10YR 6/2) silt loam with many pinholes; very strongly acid; gradual wavy boundary.

B2tg--61 to 112 cm (24 to 44 in.); light brownish gray (10YR 6/2) clay; many large prominent dark red (10R 3/6) to red (10R 4/8) mottles; moderate medium prismatic structure that breaks into strong very fine angular blocky structure; firm; few large vertical cracks or root channels filled with light brownish gray (10YR 6/2) silt loam with many pinholes; peds coated with gray (10YR 5/1) silt loam; common fine dark hard concretions; very strongly acid; diffuse wavy boundary.

B31g--112 to 127 cm (44 to 50 in.); light brownish gray (10YR 6/2) silty clay; many large prominent red (2.5YR 4/8) to yellowish brown (10YR 5/8) mottles; moderate coarse prismatic structure that breaks into weak medium angular blocky structure; firm; few large vertical cracks or root channels filled with light brownish gray (10YR 6/2) silt loam; many fine hard brownish concretions; few small dark root fossils; strongly acid; diffuse wavy boundary.

B32g--127 to 152 cm (50 to 60 in.); gray (10YR 6/1) silty clay; many large prominent yellowish brown (10YR 5/8) mottles; moderate coarse prismatic structure that breaks into weak medium angular blocky structure; firm; few large vertical cracks or root channels filled with light brownish gray (10YR 6/2) silt loam; few fine dark hard concretions; few small dark root fossils; medium acid.

C1g--152 to 211 cm (65 to 83 in.); mottled gray clay.

C2--211 to 244 cm (83 to 96 in.); strong brown (7.5YR 5/6) clay; slightly acid.

Remarks: Munsell colors for moist soil unless otherwise indicated. Cracks or root channels filled with loamy material are interpreted to be krotovinas rather than tongues of albic material.

1/ Sampled as a representative of the Crowley series, thick surface phase. (Fine, montmorillonitic, thermic; Typic Albaqualfs.)

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

SOIL CLASSIFICATION: Aeric Ochraqualf; fine-silty, mixed, thermic

SOIL: Dundee SOIL Nos. 863La-54-3 LOCATION: Tensas Parish, Louisiana

SOIL SURVEY LABORATORY: Lincoln, Nebraska LAB. Nos. 19170-19180 January, 1966

General Methods: 1B1b, 2A1, 2B, 1A

Depth (In.)	Horizon	Size class and particle diameter (mm) 3A1 — Total: Sand (2–0.05)	Total: Silt (0.05–0.002)	Total: Clay (< 0.002)	Sand: Very coarse (2–1)	Sand: Coarse (1–0.5)	Sand: Medium (0.5–0.25)	Sand: Fine (0.25–0.1)	Sand: Very fine (0.1–0.05)	Silt: 0.05–0.02	Silt: Int. III (0.02–0.002)	Int. II (0.2–0.02)	(2–0.1)			2A2 Coarse fragments > 2 (Pct.)	2 – 19 (Pct. of < 76mm)	19 – 76 (Pct. of < 76mm)
		Pct. of < 2 mm																
0-5	Ap1	44.8	42.8	12.4	Tr.a	0.1a	0.2a	4.3	40.2	34.8	8.0	79.0	4.6			-		
5-8	Ap2	44.8	42.9	12.3	Tr.a	0.1a	0.2a	4.2	40.3	34.6	8.3	78.7	4.5			-		
8-15	B21tg	27.9	42.4	29.7	-	0.1a	0.1a	1.0	26.7	27.4	15.0	55.0	1.2			-		
15-23	B22tg	30.7	42.3	27.0	Tr.a	0.1a	0.1a	2.5	28.0	29.6	12.7	59.8	2.7			-		
23-30	B3tg	44.3	35.0	20.7	0.1a	0.2a	0.2a	9.3	34.5	25.5	9.5	69.0	9.8			-		
30-41	C1g	57.6	28.7	13.7	-	0.2a	0.2a	9.1	48.1	21.2	7.5	77.9	9.5			-		
41-53	C2g	36.1	49.2	14.7	-	0.2a	0.3a	3.5	32.1	35.3	13.9	70.3	4.0			-		
53-65	C3g	52.5	38.6	8.9	-	0.1b	0.2b	9.3	42.9	30.5	8.1	82.2	9.6			-		
65-76	C4g	36.2	49.0	14.8	-	0.1b	0.2b	7.2	28.7	34.0	15.0	69.3	7.5			-		
76-90	C5g	29.6	53.6	16.8	-	0.1a	0.2a	6.0	23.3	27.9	25.7	56.8	6.3			-		
90-102	C6g	76.3	18.7	5.0	-	0.1b	0.6b	39.9	35.7	14.8	3.9	88.1	40.6			-		

Depth (In.)	6A1a Organic carbon c/ (Pct.)	6B1a Nitrogen (Pct.)	C/N		6E1b 6E2a Carbonate as $CaCO_3$ (Pct.)	6C2a Ext. Iron as Fe (Pct.)	Bulk density: 4A1a Field State (g/cc)	4A1d 1/3-Bar (g/cc)	4A1b Air-Dry (g/cc)	4D1 COLE	Water content: 4B4 Field-State (Pct.)	4B1c 1/3-Bar (Pct.)	4B2 15-Bar (Pct)	4C1 1/3- to 15-Bar (in./in.)		pH		8C1a (1:1)
0-5	0.59	0.048	12			0.5	1.39	1.34	1.37	0.007	4.1	18.4	4.9	0.18				6.1
5-8	0.41	0.043	10			0.4	1.58	1.53	1.57	0.010	4.6	13.4	5.2	0.12				5.7
8-15	0.45	0.049	9			0.6	1.74	1.59	1.75	0.032	11.8	20.1	13.0	0.11				5.2
15-23	0.33	0.041	8			0.6	1.61	1.48	1.62	0.032	11.1	22.5	12.8	0.14				5.2
23-30	0.25					0.7	1.58	1.48	1.60	0.024	11.1	19.4	9.6	0.14				5.4
30-41	0.16					0.6	1.51	1.45	1.52	0.017	8.3	18.3	7.4	0.16				5.5
41-53	0.13					0.7	1.45	1.39	1.46	0.017	9.2	23.5	8.0	0.22				5.4
53-65	0.10					0.6	1.42	1.40	1.42	0.003	6.5	17.7	5.0	0.18				5.8
65-76	0.09					0.8	1.50	1.43	1.51	0.017	10.2	19.4	7.8	0.16				6.1
76-90	0.11					1.0							8.9					6.1
90-102	0.06					0.6							3.0					6.4

Depth (In.)	Extractable bases 5H1a: 6H2a Ca (meq/100 g)	6G2a Mg	6P2a Na	6Q2a K	Sum	6H1a Ext. Acidity	Cat. Exch. Cap.: 5A3a Sum Cations	5A1a NH_4OAc	6G1d KCl-Ext. Al					8D3 Ca/Mg		Base saturation: 5C3 Sum Cations (Pct.)	5C1 NH_4OAc (Pct.)
0-5	6.1	2.5	0.1	0.3	9.0	3.1	12.1	9.5						2.4		74	95
5-8	5.3	1.9	0.1	0.2	7.5	3.9	11.4	9.0						2.8		66	83
8-15	12.0	3.6	0.4	0.5	16.5	9.1	25.6	20.2	0.9					3.3		64	82
15-23	11.4	3.4	0.6	0.5	15.9	8.8	24.7	19.6	1.0					3.4		64	81
23-30	9.6	2.8	0.6	0.4	13.4	6.9	20.3	15.9	0.8					3.4		66	84
30-41	7.5	1.9	0.4	0.3	10.1	4.9	15.0	12.0	-					3.9		67	84
41-53	8.7	2.0	0.4	0.3	11.4	5.0	16.4	13.0	0.5					4.4		70	88
53-65	6.7	1.6	0.3	0.3	8.9	3.3	12.2	9.5						4.2		73	94
65-76	9.4	2.5	0.4	0.4	12.7	3.7	16.4	12.9						3.8		77	98
76-90	11.0	2.9	0.5	0.5	14.9	3.6	18.5	14.9						3.8		80	100
90-102	4.6	1.1	0.2	0.2	6.1	1.9	8.0	6.4						4.2		76	95

Depth (In.)	Ratios to Clay 8D1: NH_4OAc	Ext. Iron	15-Bar Water		
0-5	0.77	0.04	0.40		
5-8	0.73	0.03	0.42		
8-15	0.68	0.02	0.44		
15-23	0.72	0.02	0.47		
23-30	0.77	0.03	0.46		
30-41	0.88	0.04	0.54		
41-53	0.88	0.05	0.54		
53-65	1.07	0.07	0.56		
65-76	0.87	0.05	0.53		
76-90	0.89	0.06	0.53		
90-102	1.32	0.12	0.60		

a. > 50 percent Fe-Mn. 5-25 percent mica-like.
b. > 50 percent mica-like. 5-25 percent Fe-Mn.
c. 5.8 kg/m^2 to 60 inches (Method 6A).

Classification: Fine-silty, mixed, thermic Aeric Ochraqualf.
Soil series: Dundee.
Series classification: Same as pedon.

Pedon No.: S63LA-54-3.
Location: Tensas Parish, Louisiana, 1.5 miles west of Waterproof, 800 feet north and 360 feet west of intersection of Louisiana Highways 566 and 3044, Spanish Land Grant sec. 39, T. 10 N., R. 10 E.
Vegetation and use: Cultivated (cotton stubble).
Slope and land form: East facing slight convex slope of about ½ percent on natural levee of a small bayou on the Mississippi River flood plain.
Drainage and permeability: Somewhat poorly drained; runoff slow; moderately slow permeability; internal drainage slow.
Parent material: Mississippi River Alluvium.
Climate: Precipitation 52 inches, Termperature 66 degrees F.
Sampled by: James DeMent, J. L. Walker, Don A. Brown, Ronald Phillips, S. A. Lytle, George Caldwell and Billie Nutt, October 29, 1963.
Described by: David F. Slusher and Tracey Weems, October 29, 1963.

Ap1--0 to 13 cm (0 to 5 in.); brown (10YR 4/3, 6/2 dry) very sandy loam; weak very fine granular; friable; roots common; neutral; clear smooth boundary.

Ap2--13 to 20 cm (5 to 8 in.); brown (10YR 4/3, 6/3 dry) very fine sandy loam; massive in place but breaks to weak coarse platy structure; firm; a few roots; a few fine faint dark brown aggregates; a few clods of B21t, apparently from subsoiling, occured throughout but were excluded in sampling; medium acid; abrupt irregular boundary.

B21tg--20 to 38 cm (8 to 15 in.); very dark grayish brown (10YR 3/2) (50 percent) and dark grayish brown (10YR 4/2) (50 percent) on ped surfaces; medium clay loam; dark grayish brown mottles inside peds; moderate fine and medium subangular blocky adhering as weak medium prismatic structure; firm; few roots; common fine pores in peds; distinct clay films in pores and on 60 percent of vertical and horizontal ped surfaces; common fine dark brown aggregates; very strongly acid; clear smooth boundary.

B22tg--38 to 58 cm (15 to 23 in.); very dark grayish brown (10YR 3/2) (60 percent) and dark grayish brown (10YR 4/2) (40 percent) on ped surfaces; light clay loam; dark grayish brown (10YR 4/2), common fine distinct dark yellowish brown and grayish brown mottles inside peds; moderate medium subangular blocky adhering as weak medium prismatic structure; firm; a few roots; common fine pores in peds; distinct clay films in most pores and patchy clay films on 50 percent of ped surfaces; common soft dark brown aggregates; very strongly acid; clear smooth boundary.

B3tg--58 to 76 cm (23 to 30 in.); dark grayish brown (10YR 4/2) on ped surfaces; heavy loam; grayish brown (10YR 5/2) with common fine distinct dark yellowish brown mottles inside peds; weak coarse subangular blocky adhering as weak medium prismatic structure; firm; very few roots; few fine pores in peds; distinct patchy clay films on 15 percent of ped surfaces; very few dark brown aggregates; very strongly acid; clear smooth boundary.

C1g--76 to 104 cm (30 to 41 in.); grayish brown (10YR 5/2) very fine sandy loam; common fine distinct dark yellowish brown mottles; massive; friable; very few roots; few fine pores; very few soft dark brown aggregates; strongly acid; clear smooth boundary.

C2g--104 to 135 cm (41 to 53 in.); grayish brown (10YR 5/2) silt loam; common fine distinct brown mottles; massive; friable; very few roots; few fine pores; very few soft dark brown aggregates; strongly acid; gradual smooth boundary.

C3g--135 to 165 cm (53 to 65 in.); light brownish gray (10YR 6/2) very fine sandy loam; common fine distinct brown mottles; massive; friable; very few roots; very few fine pores; very few soft dark brown aggregates; medium acid; clear smooth boundary.

C4g--165 to 193 cm (65 to 76 in.); grayish brown (10YR 5/2) loam; common fine distinct brown mottles; massive; friable; very few fine pores; very few dark brown aggregates; medium acid; gradual smooth boundary. At 65 to 67 inches was a stratum of light gray silty clay loam that was excluded from the sample.

C5g--193 to 229 cm (76 to 90 in.); grayish brown (10YR 5/2) heavy silt loam in upper part grading to very fine sandy loam in lower part; common fine distinct dark yellowish brown and few fine faint yellowish brown mottles; massive; friable; a few fine soft dark brown aggregates; medium acid; gradual smooth boundary.

C6g--229 to 259 cm (90 to 102 in.); dark grayish brown (10YR 4/2) loamy fine sand; common distinct dark yellowish brown (10YR 4/4) mottles; single grain; loose; medium acid.

Remarks: Dry to 90 inches when sampled, free water at 12 feet. One vertical krotovina from 41 to 53 inches excluded from sample. Field has been subsoiled 8 to 12 inches deep for last 3 or 4 years. Munsell colors for moist soil unless otherwise stated.

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

SOIL CLASSIFICATION: Aeric Ochraqualf; fine-silty, mixed, thermic

SOIL Dundee SOIL Nos. S63La-54-4 LOCATION Tensas Parish, Louisiana

SOIL SURVEY LABORATORY Lincoln, Nebraska LAB. Nos. 19181-19192 January, 1966

General Methods: 1B1b, 2A1, 2B, 1A

Depth (In.)	Horizon	Size class and particle diameter (mm) 3A1 — Total: Sand (2–0.05)	Total: Silt (0.05–0.002)	Total: Clay (< 0.002)	Sand: Very coarse (2–1)	Sand: Coarse (1–0.5)	Sand: Medium (0.5–0.25)	Sand: Fine (0.25–0.1)	Sand: Very fine (0.1–0.05)	Silt: 0.05–0.02	Silt: Int. III (0.02–0.002)	Int. II (0.2–0.02)	(2–0.1)			2A2 Coarse fragments > 2 Pct.	2 – 19	19 – 76
		Pct. of < 2 mm															Pct. of < 76mm	
0-5	Ap	33.1	50.6	16.3	-	0.2a	0.3a	2.1	30.5	37.5	13.1	69.7	2.6			-		
5-9	B21tg	26.0	45.0	29.0	-	0.1a	0.1a	1.6	24.2	28.6	16.4	54.2	1.8			-		
9-15	B22tg	37.9	36.9	25.2	-	0.1a	0.2a	2.6	35.0	25.3	11.6	62.7	2.9			-		
15-21	B23tg	50.7	28.9	20.4	Tr.a	Tr.a	0.2a	3.9	46.6	20.4	8.5	70.7	4.1			-		
21-27	B31tg	47.5	32.9	19.6	Tr.a	0.2a	0.2a	2.6	44.5	24.5	8.4	71.3	3.0			-		
27-34	B32tg	21.5	54.5	24.0	Tr.a	0.2a	0.2a	1.0	20.1	37.0	17.5	57.8	1.4			-		
34-36	B33tg	10.1	55.7	34.2	-	0.1a	0.2a	0.6	9.2	27.9	27.8	37.5	0.9			-		
36-40	C1g	26.1	54.5	19.4	Tr.a	0.3a	0.3a	0.9	24.6	41.4	13.1	66.6	1.5			-		
40-43	C2g	11.3	61.2	27.5	0.1a	0.4a	0.3a	0.7	9.8	33.3	27.9	43.5	1.5			-		
43-55	C3g	47.6	38.7	13.7	-	0.1a	0.2a	1.6	45.7	30.8	7.9	77.7	1.9			-		
55-66	C4g	2.7	53.5	43.8	-	Tr.a	Tr.a	0.3a	2.4	19.9	33.6	22.5	0.3			-		
66-74	C5g	20.0	60.2	19.8	-	0.1a	0.3a	1.0a	18.6	3.1	16.9	62.5	1.4					

Depth (In.)	6A1a Organic carbon b/ Pct.	6B1a Nitrogen Pct.	C/N		Carbonate as $CaCO_3$ Pct.		Bulk density: 4A1a Field-State g/cc	4A1d 1/3-Bar g/cc	4A1b Air-Dry g/cc	4D1 COLE	Water content: 4B4 Field-State Pct	4B1c 1/3-Bar Pct.	4B2 15-Bar Pct.	4C1 1/3- to 15-Bar in./in.		pH		8C1a (1:1)
0-5	0.79	0.078	10				1.61	1.53	1.60	0.014	4.0	15.7	6.6	0.14				5.6
5-9	0.53						1.70	1.57	1.71	0.028	10.0	19.7	12.2	0.12				5.5
9-15	0.33						1.50c	1.41d	1.50c	0.02C	10.9	20.0	11.2	0.12				5.5
15-21	0.24						1.58	1.49	1.58	0.020	9.3	15.7	9.8	0.09				5.6
21-27	0.24						1.54	1.46	1.56	0.020	11.4	18.2	9.2	0.13				5.6
27-34	0.21						1.50e	1.40	1.52f	0.028	12.9	23.0	11.8	0.16				5.4
34-36	0.25						1.46	1.30	1.80	0.12	26.9	34.6	16.2	0.24				5.4
36-40	0.17						1.47	1.42	1.50	0.017	12.4	19.7	10.1	0.14				5.5
40-43	0.21						1.53	1.46	1.62	0.036	18.0	24.4	13.1	0.16				5.4
43-55	0.13						1.46	1.40	1.50	0.024	13.5	20.4	6.9	0.19				5.8
55-66	0.19						1.50	1.42	1.62	0.044	20.0	26.2	19.7	0.10				5.6
66-74	0.12												10.2					6.1

Depth (In.)	Extractable bases 6N2a Ca	6O2a Mg	6P2a Na	6Q2a K	Sum	5E1a	6H1a Ext. Acidity	Cat. Exch. Cap. 5A3a Sum Cations	5A1a NH_4OAc	6G1d KCl-Ext. Al					8D3 Ca/Mg		Base saturation 5C3 Sum Cations	5C1 NH_4OAc
	meq/100 g.																Pct.	Pct.
0-5	7.6	2.2	0.1	0.5	10.4		4.9	15.3	12.0						3.4		68	87
5-9	12.7	3.4	0.3	0.6	17.0		7.5	24.5	19.5	0.3					3.7		69	87
9-15	11.8	3.5	0.4	0.5	16.2		7.8	24.0	18.1	0.4					3.4		68	90
15-21	10.1	3.1	0.4	0.4	14.0		6.3	20.3	15.5	-					3.2		69	90
21-27	10.0	2.8	0.3	0.4	13.5		5.8	19.3	14.9	-					3.6		70	91
27-34	12.3	3.5	0.4	0.5	16.7		6.5	23.2	18.1	0.4					3.5		72	92
34-36	16.6	4.9	0.5	0.7	22.7		7.8	30.5	23.6	0.5					3.4		74	96
36-40	10.7	3.1	0.3	0.4	14.5		5.8	20.3	15.8	-					3.4		71	92
40-43	14.5	4.1	0.4	0.6	19.6		7.0	26.6	20.2	0.4					3.5		74	97
43-55	8.2	4.1	0.2	0.3	12.8		4.4	17.2	12.0						2.0		74	107
55-66	21.4	7.3	0.6	1.0	30.3		7.5	37.8	28.9						2.9		80	105
66-74	11.8	4.2	0.3	0.5	16.8		4.3	21.1	16.7						2.8		80	100

Depth (In.)	Ratios to Clay 8H1 NH_4OAc		15-Bar Water	
0-5	0.74		0.40	
5-9	0.67		0.42	
9-15	0.72		0.44	
15-21	0.76		0.48	
21-27	0.76		0.47	
27-34	0.75		0.49	
34-36	0.69		0.47	
36-40	0.81		0.52	
40-43	0.73		0.48	
43-55	0.88		0.50	
55-66	0.66		0.45	
66-74	0.84		0.52	

a. > 50 percent Fe-Mn. 5-25 percent mica-like.
b. 6.2 kg/m² to 60 inches (Method 6A).
c. Range in duplicate clods is 0.15 g/cc.
d. Range in duplicate clods is 0.14 g/cc.
e. Range in duplicate clods is 0.12 g/cc.
f. Range in duplicate clods is 0.11 g/cc.

Classification: Fine-silty, mixed, thermic Aeric Ochraqualf.
Soil series: Dundee.
Series classification: Same as pedon.

Pedon No.: S63LA-54-4.
Location: Tensas Parish, Louisiana, 8 miles west and 1 mile north of Waterproof, on west center of low ridge 1.5 miles south of Louisiana Highway 571, NE¼NW¼ sec. 27, T. 10 N., R. 9 E.
Vegetation and use: Carpetgrass and dallisgrass pasture (formerly cultivated).
Slope and land form: Near crest of slightly convex slope of about ½ percent on Mississippi River flood plain.
Drainage and permeability: Somewhat poorly drained; runoff slow; moderately slow permeability; internal drainage slow.
Parent material: Mississippi River Alluvium.
Sampled by: James DeMent, J. L. Walker, Don A. Brown, Ronald Phillips, George Caldwell, Billie Nutt, Jim Seaholm, Garland Colvin, and Charles Martin, October 28, 1963.
Described by: David F. Slusher, Tracey Weems, and S. A. Lytle, October 28, 1963.

Ap--0 to 13 cm (0 to 5 in.); brown (10YR 4/3) very fine sandy loam; weak very fine granular structure; friable; medium acid; abrupt smooth boundary.

B21tg--13 to 23 cm (5 to 9 in.); dark grayish brown (10YR 4/2) clay loam; many very dark grayish brown (10YR 3/2) streaks on ped surfaces and common fine distinct yellowish brown mottles inside peds; weak medium subangular blocky structure; firm; very fine pores; few roots; distinct patchy clay films on vertical and horizontal ped surfaces; a few soft dark brown aggregates; strongly acid; clear smooth boundary.

B22tg--23 to 38 cm (9 to 15 in.); dark grayish brown (10YR 4/2) and very dark grayish brown (10YR 3/2) clay loam; many fine distinct dark yellowish brown mottles; moderate medium subangular blocky structure; firm; distinct clay films on peds; strongly acid; clear smooth boundary.

B23tg--38 to 53 cm (15 to 21 in.); dark grayish brown (10YR 4/2) loam; common fine distinct dark yellowish brown mottles; moderate medium subangular blocky structure; firm; few roots; common fine pores; distinct patchy clay films on peds; strongly acid; clear smooth boundary.

B31tg--53 to 69 cm (21 to 27 in.); grayish brown (10YR 5/2) loam; common fine distinct dark yellowish brown mottles; weak coarse subangular blocky structure; firm; few roots; few fine pores; common thin patchy clay films on peds; few fine dark brown concretions; medium acid; abrupt smooth boundary.

B32tg--69 to 86 cm (27 to 34 in.); grayish brown (10YR 5/2) loam; common fine distinct dark yellowish brown mottles; weak coarse subangular blocky structure; firm; few roots; few patchy clay films on peds; medium acid; abrupt smooth boundary.

B33tg--86 to 91 cm (34 to 36 in.); dark grayish brown (10YR 4/2) silty clay loam; common fine distinct dark yellowish brown mottles; moderate medium subangular blocky structure; firm; few fine pores; thin continuous clay films; medium acid; abrupt smooth boundary.

C1g--91 to 102 cm (36 to 40 in.); grayish brown (10YR 5/2) loam; common fine distinct dark yellowish brown mottles; massive; friable; few fine pores; few dark brown concretions; medium acid; abrupt smooth boundary.

C2g--102 to 109 cm (40 to 43 in.); grayish brown (10YR 5/2) silty clay loam; common fine distinct dark yellowish brown mottles; weak fine subangular blocky structure; firm; few fine pores; few faint patchy clay films; medium acid; abrupt smooth boundary.

C3g--109 to 140 cm (43 to 55 in.); grayish brown (10YR 5/2) very fine sandy loam; many fine distinct dark yellowish brown mottles; massive; friable; few fine pores; few soft dark brown aggregates; medium acid; abrupt smooth boundary.

C4g--140 to 168 cm (55 to 66 in.); gray (10YR 5/1) silty clay; few fine distinct dark yellowish brown mottles; moderate medium subangular blocky structure; firm; medium acid; abrupt smooth boundary.

C5g--168 to 188 cm (66 to 74 in.); grayish brown (10YR 5/2) silt loam; many fine distinct dark yellowish brown mottles; massive; friable; medium acid.

Remarks: From 43 to 55 inches was a very dark grayish brown silt loam krotovina 1 to 2 inches in diameter. Profile dry to 55 inches. Free water at 12½ feet. Munsell colors for moist soil. Soil temperature:

DEPTH (feet)	DEGREES CELSIUS
4	24.2
9	23.8
14	21.9
19	20.5
23	19.6
25	19.8

SOIL SURVEY LABORATORY Lincoln, Nebr. Aug., 1958

SOIL TYPE Series not Designated **LOCATION** Acadia Parish, Louisiana

SURVEY NOS. S57La-1-2 **LAB. NOS.** 7146-7152

DEPTH INCHES	HORIZON	1B1a PARTICLE SIZE DISTRIBUTION (in mm.) (per cent) VERY COARSE SAND 2-1	COARSE SAND 1-0.5	MEDIUM SAND 0.5-0.25	FINE SAND 0.25-0.10	VERY FINE SAND 0.10-0.05	SILT 0.05-0.002	CLAY < 0.002	0.2-0.02	3A1 0.02-0.002	2A2 > 2	TEXTURAL CLASS
0-3	Ap1	0.1a	0.1a	0.1b	5.6b	15.0b	65.6	13.5	49.3	36.8	-	sil
3-7	Ap2	0.4a	0.7a	0.2b	6.8b	14.2b	63.0	14.7	43.1	40.7	-	sil
7-12	A21g	1.8a	1.5a	0.2c	6.9b	14.6b	61.5	13.5	43.7	39.2	-	sil
12-16	A22g	1.2a	1.1a	0.1c	6.3b	13.6b	56.7	21.0	40.5	36.0	Tr.	sil
16-24	B21tg	0.5a	0.2a	0.1c	6.3b	12.0b	47.1	33.8	34.4	30.9	Tr.	sicl/cl
24-39	B22tg	0.5a	0.3a	0.1c	8.3b	15.2b	45.9	29.7	40.2	29.1	Tr.	cl
39-60+	B3g	0.5a	0.3a	0.1c	15.4b	19.7b	32.1	31.9	49.3	17.7	Tr.	cl

pH 8C1a 1:1	pH 1:5	pH 1:10	ORGANIC MATTER 6A1a ORGANIC CARBON %	6B1a NITROGEN %	C/N	$CaCO_3$ equivalent %	MOISTURE TENSIONS 1/10 ATMOS. %	1/3 ATMOS. %	4B2 15 ATMOS. %
5.0			0.89	0.084	11				6.0
6.1			0.57	0.060	10				6.9
5.7			0.32	0.039	8				6.0
5.3			0.43	0.062	7				9.0
5.3			0.52	0.067	8				13.8
6.6			0.20			-			12.8
7.2			0.05			-			13.9

5A1a CATION EXCHANGE CAPACITY NH_4Ac	EXTRACTABLE CATIONS 6N2b Ca	6O2b Mg	6H1a H	6P2a Na	5B1a 6Q2a K	BASE SAT. % NH_4Ac EXCH.	Base Sat. % on Sum + H	Sum - H	Sum + H	Ca/Mg
←	milliequivalents per 100g. soil				→	5C1	5C3	5B1a	5A3a	
4.7	2.0	0.7	5.3	0.2	0.1	64	36	3.0	8.3	2.8
8.0	4.0	1.8	2.8	0.4	0.1	79	69	6.3	9.1	2.2
6.7	2.3	1.3	3.2	0.4	0.1	61	56	4.1	7.3	1.8
10.0	2.9	1.6	5.7	0.7	0.1	53	48	5.3	11.0	1.8
15.1	5.8	3.5	7.0	1.4	0.2	72	61	10.9	17.9	1.6
15.9	8.4	5.0	2.0	2.0	0.3	99	89	15.7	17.7	1.7
16.0	8.9	5.2	0.8	2.2	0.3	100	95	16.6	17.4	1.7

a. Many, smooth and irregular light brown to black concr. (Fe-Mn?)
b. Few, smooth and irregular light brown to black concr. (Fe-Mn?)
c. Common, smooth and irregular light brown to black concr. (Fe-Mn?)

Classification: Fine-silty, mixed, thermic Aeric Ochraqualf.
Soil series: Not designated 1/.

Pedon No.: S57LA-1-2.
Location: Acadia Parish, Louisiana, 1.25 miles east of Iota; 900 feet east of road junction; 77 feet south of road center, NW¼NE¼ sec. 28, T. 8 S., R. 1 W.
Vegetation: Tall prairiegrasses; in rice-pasture rotation for approximately last 50 years.
Drainage: Somewhat poorly drained, slow internal drainage and runoff.
Permeability: Very slow.
Parent material: Prairie formation of the Pleistocene terrace from old alluvium of the Mississippi and/or Red Rivers.
Climate: Precipitation 56 inches, Temperature 68 degrees F.
Sampled by: James S. Allen, D. L. Fontenot, and Henry L. Clark.
Described by: Lester L. Loftin, 11/12/57. Revised 7/59. Horizons redesignated by David F. Slusher 8/15/75.

Ap1--0 to 8 cm (0 to 3 in.); gray (10YR 5/1) or dark gray (10YR 4/1) silt loam; moderate fine granular structure; friable; staining around roots yellowish red (5YR 4/8); few pinholes; strongly acid; abrupt smooth boundary.

Ap2--8 to 18 cm (3 to 7 in.); dark gray (10YR 4/1) silt loam; moderate medium to coarse platy structure; firm, (plow pan); dark reddish brown (5YR 3/4) around roots; many fine soft dark concretions; slightly acid; clear smooth boundary.

A21g--18 to 30 cm (7 to 12 in.); gray (20YR 5/1) silt loam; few fine distinct dark yellowish brown (10YR 3/4) mottles; massive; very firm (plow pan); common fine soft dark concretions; many pinholes; medium acid; gradual wavy boundary.

A22g--30 to 41 cm (12 to 16 in.); gray (10YR 5/1) silt loam; few fine distinct dark yellowish brown (10YR 3/4) mottles; massive; friable; pinholes common; common fine soft dark concretions; strongly acid; clear wavy boundary.

B21tg--41 to 61 cm (16 to 24 in.); gray (10YR 5/1) clay; many medium prominent red (10R 4/8) mottles; moderate coarse prismatic structure that breaks into strong fine angular blocky structure; firm; peds have coats of dark gray (10YR 4/1) silt loam over distinct complete clay films; few large vertical cracks filled with dark gray (10YR 4/1) silt loam; strongly acid; diffuse wavy boundary.

B22tg--61 to 99 cm (24 to 39 in.); yellowish brown (10YR 5/6) clay with few fine prominent gray (10YR 6/1) mottles; moderate coarse angular blocky structure; firm; peds have coats of gray (10YR 6/1) silt loam over distinct complete clay films; few large vertical cracks filled with dark gray (10YR 4/1) silt loam; few fine dark root fossils; few fine dark hard concretions; medium acid; diffuse wavy boundary.

B3g--99 to 152 cm (39 to 60 in.); gray (10YR 6/1) silty clay with common large distinct yellowish brown (10YR 5/8) mottles; moderate coarse angular blocky structure; firm; many medium dark hard concretions; mildly alkaline.

C1--152 to 203 cm (60 to 80 in.); variegated yellowish brown (10YR 5/8) and light gray (10YR 7/1) sandy clay.

IIc2--203 to 244 cm (80 to 96 in.); reddish yellow (7.5YR 6/6) fine sandy loam; mildly alkaline.

Remarks: Munsell colors for moist soil. 60 to 96 inches examined from soil auger.

1/ Sampled as a representative of the Crowley series. (Fine, montmorillonitic, thermic; Typic Albaqualfs.)

SOIL SURVEY LABORATORY Beltsville, Maryland

SOIL TYPE Wrightsville Taxadjunct **LOCATION** Bossier Parish, Louisiana

URVEY NOS. S56La-8-3 **LAB. NOS.** 56622-56629

DEPTH INCHES	HORIZON	1B1a VERY COARSE SAND 2-1	COARSE SAND 1-0.5	MEDIUM SAND 0.5-0.25	FINE SAND 0.25-0.10	VERY FINE SAND 0.10-0.05	SILT 0.05-0.002	CLAY < 0.002	0.2-0.02	3A1 0.02-0.002	2A2 > 2	TEXTURAL CLASS
		PARTICLE SIZE DISTRIBUTION (in mm.) (per cent)										
* 0-2	A1	0.1	0.4	0.5	3.6	20.6	57.7	17.1	58.2	22.7	--	sil
* 2-11	A2g	0.0	0.2	0.2	3.2	28.4	55.5	12.5	69.3	17.2	--	sil
*11-23	A23g	0.1	0.5	0.4	2.4	20.6	55.2	20.8	55.7	22.1	--	sil
*23-28	A3g	0.1	0.4	0.2	2.0	17.1	56.5	23.7	51.9	23.2	--	sil
*28-40	B21tg	0.0	0.1	0.1	1.2	11.7	49.4	37.5	36.2	25.9	--	sicl
*40-55	B22tg	0.1	0.1	0.1	1.0	12.3	45.5	40.9	33.7	25.0	--	sic/sicl
*55-60	B31	0.0	0.0	0.0	0.8	14.7	44.0	40.5	35.9	23.4	--	sic/sicl
*60-65	B32	0.0	0.1	0.1	1.3	17.3	44.3	36.9	41.4	21.2	--	sicl

* A small amount of concretions present in sands

8C1a pH 1:1 *	pH 1:5	pH 1:10	6A1a ORGANIC CARBON %	6B1a NITROGEN* %	C/N*	EST% SALT (BUREAU CUP)	ELECTRICAL CONDUCTIVITY EC×10³ MILLIMHOS PER CM 25°C.	$CaCO_3$ equivalent %	GYPSUM me./100g. SOIL	MOISTURE TENSIONS 1/10 ATMOS. %	1/3 ATMOS. %	15 ATMOS. %
			ORGANIC MATTER									
5.5			2.43	0.116	11.3							
5.0			0.59									
5.0			0.04									
5.0			0.14	0.021	8.2							
5.0			0.17	0.022	6.6							
5.2			0.10									
5.0			0.10									
8.0			0.04									

*Furnished by B. N. Driskell - Louisiana State University

5A1a CATION EXCHANGE CAPACITY (Sum)	6N2b Ca	6O2b Mg	6H1a H	6P2a Na	6Q2a K	BASE SAT. %	SATURATION EXTRACT SOLUBLE Na	K				MOISTURE AT SATURATION %
	EXTRACTABLE CATIONS 5B1a											
	milliequivalents per 100g. soil →						← milliequivalents per liter →					
16.4	5.7	2.7	7.5	0.2	0.3	54						
9.2	2.6	1.6	4.8	0.1	0.1	48						
12.7	3.4	2.6	6.3	0.2	0.2	50						
14.2	3.4	3.2	7.0	0.4	0.2	51						
22.2	6.6	6.1	8.3	0.8	0.4	63						
26.8	9.2	8.8	6.4	2.0	0.4	76						
27.0	10.2	9.7	4.6	2.0	0.5	83						
30.3	15.8	9.8	0.2	4.0	0.5	99						

Classification: Fine, montmorillonitic, thermic Aeric Ochraqualf.
Soil series: Wrightsville taxadjunct 1/.
Series classification: Fine, mixed, thermic Typic Glossaqualfs.

Pedon No.: S56LA-8-3.
Location: Bossier Parish, La. Pipeline on road east of Swindleville and west of Rocky Mount. T. 12 N., R. 13 W.
Vegetation: Willow oak, post oak, shortleaf pine, ash and red haw.
Climate: Precipitation 46 inches, Temperature 65 degrees F.
Parent material: Clayey alluvium of Pleistocene terrace.
Described by: Marvin Lawson and L. L. Loftin, 7/24/56. Horizon designations reinterpreted by David F. Slusher, November 28, 1975.

A1--0 to 5 cm (0 to 2 in.); dark brown (10YR 4/3) silt loam; with many small mottles of pale brown (10YR 6/3); strong medium and fine subangular blocky structure; friable; many roots; strongly acid.

A21g--5 to 15 cm (2 to 6 in.); light brownish gray (10YR 6.2) silt loam; many large distinct mottles of very dark grayish brown (10YR 3/2) and yellowish brown (10YR 5/6); massive; compact; many small vesicles and many small roots; very strongly acid.

A22g--15 to 28 cm (6 to 11 in.); light brownish gray (10YR 6/2) silt loam; mottled dark brown (10YR 3/4); compact weak subangular blocky structure; contains numerous small brown concretions; very strongly acid.

A23g--28 to 58 cm (11 to 23 in.); grayish brown (10YR 5/2) silty clay loam; mottled dark reddish brown (5YR 3/4) and contains a few mottles of yellowish brown (10YR 5/4); weak subangular blocky structure; compact; very strongly acid.

A3g--58 to 71 cm (23 to 28 in.); brown (10YR 5/3) silt loam mottled light brownish gray (10YR 6/2); weak medium angular blocky structure; few yellowish brown concretions; few scattered small and medium sized pieces of black carbonaceous material; very strongly acid.

B21tg--71 to 102 cm (28 to 40 in.); grayish brown (10YR 5/2) clay mottled 20 percent with dark brown (7.5YR 4/4); massive; plastic; strongly acid.

B22tg--102 to 140 cm (40 to 55 in.); grayish brown (10YR 5/2) clay; mottled yellowish red (5YR 4/8), dark brown (7.5YR 4/4) and dark red (2.5YR 3/5); massive; noticeable weak coarse prismatic in places; plastic; strongly acid.

B31--140 to 152 cm (55 to 60 in.); reddish brown (2.5 YR 5/4) clay; mottled brown (7.5YR 5/2); massive, plastic; very strongly acid.

B32--152 to 165 cm (60 to 65 in.); yellowish red (5YR 4/8) clay with fine splotches and veins of black manganese and charcoal; plastic; medium acid.

C--165 to 229 cm (65 to 90 in.); yellowish red (5YR 4/8) friable sandy clay; lenses of sandy clay loam and dark red (2.5YR 3/6) plastic clay; contains black streaks, black concretions and clay skins; lime concretions at 90 inches; temperature at 90 inches was 69° F; moderately alkaline.

Remarks: Munsell colors for moist soil.

1/ Lack of tongues of A2 in the argillic horizon and dominance of montmorillonite in the argillic horizon are outside the series range.

SOIL SURVEY LABORATORY Beltsville, Maryland

OIL TYPE Series not Designated **LOCATION** Bossier Parish, Louisiana

SURVEY NOS. S56La-8-1 **LAB. NOS.** 56608 - 56613

DEPTH INCHES	HORIZON	1B1a VERY COARSE SAND 2-1	COARSE SAND 1-0.5	MEDIUM SAND 0.5-0.25	FINE SAND 0.25-0.10	VERY FINE SAND 0.10-0.05	SILT 0.05-0.002	CLAY < 0.002	0.2-0.02	3A1 0.02-0.002	2A2 > 2	TEXTURAL CLASS
		PARTICLE SIZE DISTRIBUTION (in mm.) (per cent)										
0-2	A11	0.2	0.6	0.5	2.5	7.5	54.6	34.1	32.6	31.3	--	sicl
2-9	A12	0.1	0.1	0.1	1.3	8.0	50.8	39.6	28.8	31.2	--	sicl/sic
9-18	B21tg	0.0	0.1	0.0	1.0	6.0	43.0	49.9	22.5	27.3	--	sic
18-32	B22tg	0.0	0.1	0.1	1.0	5.7	42.6	50.5	20.4	28.7	--	sic
32-47	B3g	0.0	0.1	0.1	1.0	5.5	40.5	52.8	20.7	26.1	--	sic/c
47-60	C1g	0.0	0.1	0.1	1.0	5.7	41.4	51.7	22.7	25.3	--	sic
60-70	Not sampled											
70-100	Not sampled											

pH 8C1a 1:1 *	pH 1:5	pH 1:10	ORGANIC MATTER 6A1a ORGANIC CARBON %	ORGANIC MATTER 6B1a NITROGEN* %	ORGANIC MATTER C/N *	EST% SALT (BUREAU CUP)	ELECTRICAL CONDUCTIVITY EC×10³ MILLIMHOS PER CM @25°C.	$CaCO_3$ equivalent %	GYPSUM me./100g. SOIL	MOISTURE TENSIONS 1/10 ATMOS. %	MOISTURE TENSIONS 1/3 ATMOS. %	MOISTURE TENSIONS 15 ATMOS. %
4.6			2.75	0.141	14.6							
4.5			0.40									
4.6			0.26	0.028	12.2							
4.5			0.10									
4.5			0.19									
4.5			0.04	0.026	7.2							

*Furnished by B. N. Driskell - Louisiana State University

5A1a CATION EXCHANGE CAPACITY (Sum)	EXTRACTABLE CATIONS 6N2b Ca	6O2b Mg	6H1a H	6P2a Na	6Q2a K	BASE SAT. % 5C3	SATURATION EXTRACT SOLUBLE Na	K				MOISTURE AT SATURATION %
	milliequivalents per 100g. soil →						← milliequivalents per liter →					
29.4	7.6	5.6	15.6	0.2	0.4	47						
26.4	5.8	5.8	14.1	0.3	0.4	46						
32.2	8.9	8.4	13.7	0.7	0.5	57						
32.6	10.7	10.1	10.3	1.0	0.5	68						
36.5	12.5	12.0	9.5	2.0	0.5	74						
36.5	13.4	12.5	8.0	2.0	0.6	78						

Classification: Fine, montmorillonitic, thermic Vertic Ochraqualf.
Soil series: Not designated 1/.

Pedon No. S56LA-8-1.
Location: Bossier Parish, La. Flatwood about 4 miles north of Benton and west of highway; northwest part of T. 20 N., R. 13 W.
Parent material: Clayey alluvium of Pleistocene terrace.
Climate: Precipitation 47 inches, Temperature 65 degrees F.
Described by: Marvin Lawson and L. L. Loftin, 7/23/56. Horizons redesignated by David F. Slusher 8/15/75.

A11--0 to 5 cm (o to 2 in.); gray (10YR 5/1) dry silty clay; mottled light brownish clay (10YR 6/2), scattered small distinct mottles of dark yellowish brown (10YR 4/4); moderate thin platy structure which breaks down into moderate fine granular structure; hard; contains many fine roots; very strongly acid.

A12--5 to 23 cm (2 to 9 in.); light brownish gray (10YR 6/2) dry; silty clay or clay mottled with dark brown (7.5YR 4/4); dry coarse subangular blocky structure; hard; very strongly acid.

B21tg--23 to 46 cm (9 to 18 in.); light brownish gray (10YR 6/2) clay; mottled 20 percent with yellowish brown; very large prismatic structure; plastic; contains a few roots, few vertical cracks as much as 3/4 inch wide; very strongly acid.

B22tg--46 to 81 cm (18 to 32 in.); light brownish gray (10YR 6/2) clay; mottled 20 percent with yellowish brown; very large prismatic structure; plastic; contains a few roots, few vertical cracks as much as 3/4 inch wide; very strongly acid.

B3g--81 to 119 cm (32 to 47 in.); grayish brown (10YR 5/2) clay; mottled 25 percent dark yellowish brown (10YR 4/4); massive; plastic; contains a few roots and a few vertical cracks; 2 or 3 percent of the mass is dark reddish brown (5YR 3/2 and 3/4) organic matter coating on clays; very strongly acid.

C1g--119 to 152 cm (47 to 60 in.); dark grayish brown (10YR 4/2) clay; scattered distinct mottles of yellowish brown (10YR 5/6) and light olive brown (2.5Y 5/4); few splotches of dark reddish brown (5YR 3/4) which appear to be organic matter; massive; plastic; strongly acid.

C2g--152 to 178 cm (60 to 70 in.); grayish brown (10YR 5/2) clay; mottled pale brown (10YR 6/3); massive; plastic; contains a few roots; medium acid.

C3g--178 to 254 cm (70 to 100 in.); mottled light brownish gray (10YR 6/2) and yellowish brown (10YR 5/6) clay; massive; plastic; numerous black fine vein-like streaks of manganese; neutral.

Remarks: Munsell colors for moist soil unless indicated otherwise.

1/ Sampled as a representative of the Wrightsville series. (Fine, mixed, thermic; Typic Glossaqualfs.)

SOIL SURVEY LABORATORY Lincoln, Nebr. Aug., 1958

SOIL TYPE Series not Designated **LOCATION** Bossier Parish, Louisiana

SURVEY NOS. S57La-8-4 **LAB. NOS.** 5661-5666

DEPTH INCHES	HORIZON	1B1a VERY COARSE SAND 2-1	COARSE SAND 1-0.5	MEDIUM SAND 0.5-0.25	FINE SAND 0.25-0.10	VERY FINE SAND 0.10-0.05	SILT 0.05-0.002	CLAY < 0.002	0.2-0.02	0.02-0.002	3A1 2A2 > 2	TEXTURAL CLASS
		PARTICLE SIZE DISTRIBUTION (in mm.) (per cent)										
0-2	A1	0.5a	0.3a	0.1b	2.3b	9.7b	49.6	37.5	31.9	29.5	-	sicl
2-8	B1g	-	0.1b	0.1b	2.4b	9.6b	48.3	39.5	31.3	28.8	-	sicl
8-15	B21g	-	0.1b	0.1b	2.5b	10.0b	43.7	43.6	31.3	24.7	-	sic
15-22	B22g	0.1b	-	0.1b	1.7b	7.0b	32.6	58.5	22.8	18.3	-	c
22-30	B23g	-	-	-	1.8b	7.6b	35.4	55.2	25.0	19.6	-	c
30-42+	B3g	0.1b	0.1b	0.1b	1.8b	8.4b	37.3	52.2	26.6	20.7	-	c

pH 8C1a 1:1	1:5	1:10	ORGANIC MATTER 6A1a ORGANIC CARBON %	6B1a NITROGEN %	C/N			$CaCO_3$ equivalent %		MOISTURE TENSIONS 1/10 ATMOS. %	1/3 ATMOS. %	4B2 15 ATMOS. %
4.5			5.61	0.290	19.3							17.9
4.3			1.88	0.114	16.5							16.2
4.4			0.50	0.032	16							17.4
4.4			0.41	0.019	22							23.6
4.4			0.26	0.018	14							21.4
4.6			0.19									20.4

5A1a CATION EXCHANGE CAPACITY NH_4Ac	EXTRACTABLE CATIONS 6N2b Ca	6O2b Mg	6H1a H	6P2a Na	5B1a 6Q2a K	BASE SAT. % NH_4Ac EXCH. 5C1	Base Sat. % on Sum + H 5C3	Sum - H 5B1a	Sum + H 5A3a	Ca/Mg		
←	milliequivalents per 100g. soil				→							
34.4	5.8	5.8	28.8	0.1	0.8	36	30	12.5	41.3	1.0		
28.6	0.6	4.8	27.8	0.1	0.4	21	18	5.9	33.7	0.1		
28.0	4.6	7.9	18.2	0.5	0.4	48	42	13.4	31.6	0.6		
38.8	10.6	12.8	18.6	1.1	0.5	64	57	25.0	43.6	0.8		
36.5	12.7	14.2	12.4	1.6	0.5	79	70	29.0	41.4	0.9		
35.7	13.9	15.5	8.2	2.6	0.5	91	80	32.5	40.7	0.9		

a. Organic matter, and common, smooth brown concr. (Fe-Mn?)
b. Common, smooth brown concr. (Fe-Mn?)

Classification: Fine, montmorillonitic, thermic Vertic Ochraqualf.
Soil series: Not designated 1/.

Pedon No.: S57LA-8-4.
Location: Bossier Parish, La., 6 miles north of Plain Dealing, NE¼NE¼ sec. 11, T. 23 N., R. 13 W.; 1007 feet east of railroad track then north 49 feet from center of road.
Vegetation: Hardwood-pine forest.
Relief: Level (1 - .5 percent slope).
Drainage: Poorly drained; very slow internal drainage and runoff.
Permeability: Slow.
Climate: Precipitation 46 inches, Temperature 65 degrees F.
Parent material: Pleistocene age alluvium.
Sampled by: James S. Allen and Bruce Chaffin.
Described by: Lester L. Loftin, 5/21/57. Horizons desginations reinterpreted by David F. Slusher, November 28, 1975.

A1--0 to 5 cm (0 to 2 in.); very dark gray (10YR 3/1) silty clay; weak fine granular structure; friable; many roots; extremely acid; clear wavy boundary.

B1g--5 to 20 cm (2 to 8 in.); light brownish gray (2.5YR 6/2) silty clay; common medium distinct yellowish brown (10YR 5/6) mottles; weak medium subangular blocky structure; firm; roots common; extremely acid; clear wavy boundary.

B21tg-20 to 38 cm (8 to 15 in.); gray (5Y 5/1) clay; many medium distinct yellowish brown (10YR 5/6) mottles; weak fine angular blocky structure; very firm; few roots; extremely acid.

B22tg--38 to 56 cm (15 to 22 in.); same as B21tg; separated for sampling purpose; clear wavy boundary.

B23tg--56 to 76 cm (22 to 30 in.); gray (5Y 5/1) clay; many medium distinct brownish yellow (10YR 6/8) mottles; weak fine angular blocky structure; very firm; very few roots; very strongly acid.

B3g--76 to 107 cm (30 to 42 in.); gray (5Y 5/1) clay; common medium prominent red (2.5YR 4/8) mottles; weak fine angular blocky structure; very firm; strongly acid.

Remarks: Munsell colors for moist soil.

1/ Sampled as a typical representative of the Wrightsville series. (Fine, mixed, thermic; Typic Glossaqualfs.)

SOIL SURVEY LABORATORY Lincoln, Nebr. January, 1962

SOIL TYPE Loring LOCATION East Baton Rouge Parish, Louisiana

SURVEY NOS. S61La-17-2 LAB. NOS. 15044-15050

DEPTH INCHES	HORIZON	1B1a PARTICLE SIZE DISTRIBUTION (in mm.) (per cent) VERY COARSE SAND 2-1	COARSE SAND 1-0.5	MEDIUM SAND 0.5-0.25	FINE SAND 0.25-0.10	VERY FINE SAND 0.10-0.05	SILT 0.05-0.002	CLAY < 0.002	0.2-0.02	3A1 0.02-0.002	2A2 > 2	TEXTURAL CLASS
0-10	Ap	<0.1	<0.1	0.1c	0.2c	0.6	89.4	9.7	51.8	38.3	-	si
10-13	B1	0.1c	0.1c	0.2c	0.4c	1.3	76.7	21.2	47.0	31.2	-	sil
13-23	B2	<0.1	<0.1	<0.1	0.1c	0.8	67.9	31.2	36.3	32.5	-	sicl
23-38	Bx1	0.1	<0.1	<0.1	0.1c	0.7	75.4	23.7	39.2	37.0	-	sil
38-49	Bx2	<0.1	<0.1	<0.1	0.2c	0.8	77.9	21.1	41.1	37.7	-	sil
49-60	Bx3	<0.1	0.1c	0.2c	0.6c	1.2	80.0	17.9	46.4	35.1	-	sil
60-70	Bx4	0.4a	0.5a	0.8c	1.9c	1.9	78.3	16.2	47.6	33.5	-	sil

8C1a pH 1:1	Organic Matter 6A1a O.C. %	6B1a N %	C/N	Bulk Density Field Moist 4B4 % M.	4A1a g/cc	30 cm. 4B3 % M.	4A1c g/cc	A.D. 4A1h g/cc	MOISTURE TENSIONS 4B1b 1/3 ATMOS. Pieces %	1/3 ATMOS. Sieved %	4B2 15 ATMOS. Sieved %
5.2	0.63	0.068	9	19.6	1.43	29.6	1.40	1.44	18.0		4.6
4.8	0.38	0.050	8								8.6
4.9	0.23	0.046	5	23.6	1.48	27.2	1.46	1.60	27.4		12.8
5.0	0.13	0.029	4	23.9	1.51	27.3	1.47	1.58	25.8		10.6
5.0	0.08										9.8
5.0	0.06			22.3	1.57	24.6	1.51	1.61	20.9		8.3
5.1	0.03										7.4

5A1a CATION EXCHANGE CAPACITY NH_4OAc	EXTRACTABLE CATIONS 6N2b Ca	6O2b Mg	6H1a H	6P2a Na	5B1a 6Q2a K	BASE SAT. % NH_4OAc EXCH. 5C1	Base Sat. % on Sum Cations 5C3	Sum Ext. Bases 5B1a	Sum Ext. Cations 5A3a	Ca/Mg	6C1a Free Iron (Fe_2O_3) %	6G1d Ext. Al me/100g
←	milliequivalents per 100g. soil				→							
5.4	2.3	0.6	5.5	<0.1	0.1	56	35	3.0	8.5	3.8	0.8	<1
8.4	3.1	1.9	6.9	0.1	0.1	62	43	5.2	12.1	1.6	1.7	1
12.7	2.8	2.9	11.8	0.1	0.2	47	34	6.0	17.8	1.0	2.3	3
10.9	1.9	3.2	9.6	0.1	0.2	50	36	5.4	15.0	0.6	2.3	3
9.7	1.9	3.0	8.2	0.2	0.2	55	39	5.3	13.5	0.6	2.1	2
9.0	1.7	2.5	7.7	0.2	0.2	51	37	4.6	12.3	0.7	1.6	2
7.4	1.7	1.9	6.0	0.1	0.1	51	39	3.8	9.8	0.9	1.4	2

a. Many Fe/Mn-bearing(?) aggregates.
c. Common Fe/Mn-bearing(?) aggregates.

Classification: Fine-silty, mixed, thermic Typic Fragiudalf.
Soil series: Loring.
Series classification: Same as pedon.
Pedon No.: S61LA-17-2.
Location: East Baton Rouge Parish, Louisiana approximately 1 1/2 miles west of Plains and 500 feet north of the Port Hudson-Plains Highway; southern part of the northern segment of land grant sec. 61, T 4 S., R 1 W.
Vegetation and use: Pasture; mostly volunteer grasses, bermudagrass, carpetgrass, broomsedge, with some white Dutch and hop clover. Native vegetation was mixed hardwood trees.
Slope and land form: Nearly level to gently sloping areas of 1 to 3 percent, bordering the level areas of Calloway silt loam. Elevation 115 to 120 feet.
Drainage and permeability: Moderately well drained; moderately permeable above fragipan fragipan layers slowly permeable; surface runoff and internal drainage moderate.
Climate: Precipitation 60 inches, Temperature 67 degrees F.
Parent material: Loess or loess-like materials 5 to 10 feet thick over coarser textured Coastal Plain materials. Pleistocene Montgomery terrace.
Sampled by: J. S. Allen, D. C. McMurtry, J. E. Seaholm, H. L. Clark, William Upchurch, May 9, 1961.
Described by: J. E. Seaholm, H. L. Clark, S. A. Lytle, May 9, 1961. Horizons redesignated December 18, 1975 by Warren Cockerham.

Ap--0 to 25 cm (0 to 10 in.); brown (10YR 5/3) silt loam, pale brown dry; many fine mottles of dark brown (10YR 3/3) and dark yellowish brown (10YR 4/4) which are weak concretions moderate medium and fine granular structure; friable; many fine and coarse roots; 2 percent soft black concretions; slightly acid; abrupt smooth boundary.

B1--25 to 33 cm (10 to 13 in.); dark brown (7.5YR 4/4) silt loam, yellowish brown (10YR 5/4) dry; weak to moderate medium subangular blocky structure; friable moist, firm when dry; many fine roots; few large pores; strongly acid; clear smooth boundary.

B2t--33 to 58 cm (13 to 23 in.); dark brown (7.5YR 4/4) silty clay loam, dark brown dry; strong medium subangular blocky structure; somewhat firm moist; some dark brown (10YR 4/3) silt coatings and a few thin patchy dark reddish brown (5YR 3/4) clay films on some peds; few thin black manganese oxide ped coatings; many fine roots; very strongly acid; clear wavy boundary.

Bx1--58 to 97 cm (23 to 38 in.); dark brown (7.5YR 4/4) heavy silt loam to light silty clay loam; strong medium prismatic structure; firm moist, hard when dry; many fine roots; thin black manganese oxide coatings on a few ped surfaces; few thin patchy dark brown (10YR 4/3) clay films; brown (10YR 5/3) silt, pale brown (10YR 6/3) dry, coating on prisms and filling between prisms; many fine pores in prisms; very strongly acid; gradual irregular boundary.

Bx2--97 to 124 cm (38 to 49 in.); dark yellowish brown (10YR 4/4) silt loam, yellowish brown (10YR 5/4) dry; strong coarse prismatic structure; firm moist prisms containing many fine and a few large pores; filling between prisms and prism coatings of brown (10YR 5/3) and pale brown (10YR 6/3); one percent black concretions; very strongly acid; arbitrary boundary.

Bx3--124 to 152 cm (49 to 60 in.); dark yellowish brown (10YR 4/4) silt loam, yellowish brown (10YR 5/4) dry; strong coarse prismatic structure; firm moist; many fine pores and few large pores; brown (10YR 5/3) and pale brown (10YR 6/3) silt coatings on prisms and filling between prisms, the silt is pale brown (10YR 6/3) and light gray (10YR 7/2) dry; one percent black concretions; very strongly acid; gradual irregular boundary.

Bx4--152 to 178 cm (60 to 70 in.); yellowish brown (10YR 5/6) silt loam; light yellowish brown (10YR 6/4) dry; moderate to strong coarse prismatic structure; firm moist; prisms contain many fine pores; silt filling between prisms in pale brown (10YR 6/3) and gray (10YR 6/1), very pale brown (10YR 7/3) and light gray when dry; 3 percent small soft and hard brown and black concretions; slightly acid.

Remarks: Munsell colors for moist soil unless indicated otherwise.

SOIL CLASSIFICATION Typic Fragiudalf; fine-silty, mixed, thermic

SOIL Loring LOCATION East Baton Rouge Parish, Louisiana

SOIL NOS. S61La-17-3 LAB. NOS. 15051-15057 January, 1962

SOIL SURVEY LABORATORY Lincoln, Nebraska

GENERAL METHODS 1A, 1B1a, 2A1, 2B

DEPTH INCHES	HORIZON	PARTICLE SIZE DISTRIBUTION (in mm.) (per cent) VERY COARSE SAND 2-1	COARSE SAND 1-0.5	MEDIUM SAND 0.5-0.25	FINE SAND 0.25-0.10	VERY FINE SAND 0.10-0.05	SILT 0.05-0.002	CLAY < 0.002	3A1 0.2-0.02	0.02-0.002	2A2 > 2	TEXTURAL CLASS
0-7	Ap	<0.1	0.2b	0.3b	0.6b	1.9	89.4	7.6	54.6	37.0	-	si
7-10	B11	<0.1	0.1b	0.2b	0.4b	1.1	83.4	14.8	40.8	43.9	-	sil
10-13	B12	<0.1	0.1b	0.1b	0.2b	0.9	76.5	22.2	41.6	35.9	-	sil
13-23	B2t	<0.1	<0.1	<0.1	0.1b	0.9	68.5	30.5	38.5	31.0	-	sicl
23-35	Bx1	<0.1	<0.1	0.1c	0.2c	0.9c	70.9	27.9	37.0	34.9	-	sicl
35-42	Bx2	<0.1	<0.1	0.1c	0.2c	0.9b	74.4	24.4	37.6	37.8	-	sil
42-61	Bx3	<0.1	<0.1	<0.1	0.1b	1.1b	79.4	19.4	44.4	36.2	-	sil

8C1b pH 1:1	Organic Matter O.C. 6A1a %	N 6B1a %	C/N	Bulk Density Field Moist 4B4 % M.	4A1a g/cc	30 cm. 4B3 % M.	4A1c g/cc	A.D. 4A1b g/cc	MOISTURE TENSIONS 4B1b 1/3 ATMOS. Pieces %	1/3 ATMOS. Sieved %	4B2 15 ATMOS. Sieved %
6.1	0.90	0.086	10	22.9	1.41	30.2	1.38	1.42	18.2		4.4
6.1	0.34	0.046	7								6.2
5.9	0.34	0.050	7								9.5
5.5	0.29	0.051	6	22.8	1.48	26.4	1.46	1.58	28.0		13.0
5.2	0.15	0.033		25.6	1.48	28.4	1.45	1.57	26.9		12.1
5.1	0.10										11.2
5.1	0.06			25.2	1.50	28.1	1.46	1.55	22.9		9.4

5A1a CATION EXCHANGE CAPACITY NH4OAc	5B1a EXTRACTABLE CATIONS 6N2b Ca	6O2b Mg	6H1a H	6P2a Na	6Q2a K	BASE SAT. % NH4OAc EXCH. 5C1	Base Sat. % on Sum Cations 5C3	Sum Ext. Bases 5B1a	Sum Ext. Cations 5A3a	8D3 Ca/Mg	6C1a Ext. Iron as Fe Pct.	Ext. Al me/100g
←				milliequivalents per 100g. soil		→						
5.7	4.3	0.4	3.0	<0.1	0.1	84	62	4.8	7.8		0.4	
6.3	4.3	1.0	3.2	0.1	0.1	87	63	5.5	8.7	4.3	0.8	
8.8	5.4	1.8	4.2	0.1	0.2	85	64	7.5	11.7	3.0	1.1	
13.1	6.8	3.3	6.6	0.1	0.3	80	61	10.5	17.1	2.1	1.5	
12.7	5.3	3.6	7.3	0.2	0.2	73	56	9.3	16.6	1.5	1.6	
11.6	5.0	3.7	6.4	0.2	0.2	78	59	9.1	15.5	1.4	1.5	
10.4	4.4	3.2	5.9	0.2	0.2	77	58	8.0	13.9	1.4	1.3	

b. Few Fe/Mn-bearing(?) aggregates.
c. Common Fe/Mn-bearing(?) aggregates.

Classification: Fine-silty, mixed, thermic Typic Fragiudalf.
Soil series: Loring.
Series classification: Same as pedon.
Pedon No.: S61LA-17-3.
Location: East Baton Rouge Parish, Louisiana, Mt. Pleasant; 500 feet south of Fintania Church; in NW¼W1/3 of oblong sec. 39, T. 5 S., R. 2 W., approximately one mile south of southwest of Port Hudson National Cemetery.
Vegetation and use: Improved clover pasture; dominantly white clover with hop and Persian clover, some bermudagrass.
Slope and land form: Gentle slopes of 1 to 2 percent bordering a level bench of more poorly drained soils. Elevation 97 feet.
Drainage and permeability: Moderately well drained; surface runoff and internal drainage moderate; soil layer above fragipan is moderately permeable; fragipan layers slowly permeable.
Climate: Precipitation 60 inches, Temperature 67 degrees F.
Parent material: Loess or loess-like materials from 5 to 10 feet in thickness.
Sampled by: J. S. Allen, D. C. McMurtry, J. E. Seaholm, H. L. Clark, Wm. Upchurch, May 9, 1961.
Described by: J. E. Seaholm, H. L. Clark, S. A. Lytle, May 9, 1961. Horizons redesignated by Warren L. Cockerham, December 17, 1975.

Ap--0 to 18 cm (0 to 7 in.); dark brown (10YR 4/3) silt loam, pale brown (10YR 6/3) to light brownish gray (10YR 6/2) dry; mottled 15 percent with dark brown (10YR 3/3) and dark reddish brown (5YR 3/2); moderate medium granular structure; friable; many fine and coarse roots with dark brown (7.5YR 4/4) colored materials in root channels; many fine soft black and brown concretions; slightly acid; abrupt clear boundary.

B11--18 to 25 cm (7 to 10 in.); dark brown (7.5YR 4/4) silt loam, brown (7.5YR 5/4) dry mottled 7 percent with brown (10YR 5/3); weak medium granular structure; friable; many fine roots; 2 percent soft brown and black concretions; slightly acid; clear smooth boundary.

B12--25 to 33 cm (10 to 13 in.); dark brown (7.5YR 4/4) silt loam; brown (7.5YR 5/4) dry; weak medium subangular blocky structure; friable; many fine roots; slightly acid; clear smooth boundary.

B2t--33 to 58 cm (13 to 23 in.); dark brown (7.5YR 4/4) silty clay loam, brown (7.5YR 5/4) dry; strong medium subangular blocky structure; somewhat firm moist; few thin patchy reddish brown (5YR 3/3) clay films on ped surfaces; many fine roots; strongly acid; gradual wavy boundary.

Bx1--58 to 89 cm (23 to 35 in.); dark brown (7.5YR 4/4) silty clay loam, brown (7.5YR 5/4) dry; strong medium and coarse prismatic structure; firm moist; many fine pores in the prisms; silt coating and filling between peds brown (10YR 5/3), pale brown (10YR 6/3), and light brownish gray (10YR 6/2) dry; few thin black manganese oxide coatings and few reddish brown (5YR 4/3) clay films on some peds; very strongly acid; gradual irregular boundary.

Bx2--89 to 107 cm (35 to 42 in.); dark yellowish brown (10YR 4/4) light silty clay loam, yellowish brown (10YR 5/6) dry; mottled 15 percent with dark brown (10YR 5/6) dry; mottled 15 percent with dark brown (10YR 4/3); strong medium and coarse prismatic structure; firm moist; many fine pores within prisms; filling between prisms and prism coatings brown (10YR 5/3), light brownish gray (10YR 6/2 dry) silt; few thin black manganese coatings and few thin reddish brown (5YR 4/3) clay films on some prism surfaces; very strongly acid; gradual irregular boundary.

Bx3--107 to 155 cm (42 to 61 in.); yellowish brown (10YR 5/6) silt loam; brownish yellow (10YR 6/6) dry; strong medium and coarse prismatic structure; firm moist; many fine pores in prisms; prisms coated with silt or silt loam which is brown (10YR 5/3) and dries out pale brown (10YR 6/3) and light brownish gray (10YR 6/2); few thin patchy areas of dull reddish brown (5YR 4/3) on some prism faces; strongly acid.

Remarks: Munsell colors for moist soil.

SOIL CLASSIFICATION Aquic Fragiudalf; fine-silty, mixed, thermic

SOIL Olivier LOCATION East Baton Rouge Parish, Louisiana

SOIL NOS. S61La-17-1 LAB. NOS. 15036-15043 January, 1962

SOIL SURVEY LABORATORY Lincoln, Nebraska

GENERAL METHODS 1A, 1B1a, 2A1, 2B

DEPTH INCHES	HORIZON	1B1a PARTICLE SIZE DISTRIBUTION (in mm.) (per cent) VERY COARSE SAND 2-1	COARSE SAND 1-0.5	MEDIUM SAND 0.5-0.25	FINE SAND 0.25-0.10	VERY FINE SAND 0.10-0.05	SILT 0.05-0.002	CLAY < 0.002	0.2-0.02	3A1 0.02-0.002	2A2 > 2	TEXTURAL CLASS
0-6	Ap	0.2a	0.5a	0.4a	0.4a	1.2b	89.0	8.3	48.4	42.0	-	si
6-9	A2	0.1a	0.3a	0.4a	0.4b	1.0b	78.5	19.3	38.4	41.3	-	sil
9-15	B21t	0.1a	0.2a	0.2a	0.4b	1.1b	72.3	25.7	34.5	39.1	-	sil
15-22	B22t	<0.1	0.2a	0.2a	0.6a	1.5a	70.6	26.9	32.8	39.7	-	sil/sicl
22-30	B23t	0.2a	0.3a	0.2a	0.5a	1.2a	72.1	25.5	32.5	41.1	-	sil
30-37	Bx&A	0.2a	0.5a	0.3a	0.5a	1.2a	75.8	21.5	33.0	44.3	-	sil
37-52	Bx2	0.1a	0.2a	0.4a	0.7a	1.3a	77.6	19.7	37.2	42.1	-	sil
52-64	B3	0.1a	0.1a	0.3a	0.6a	1.3a	78.2	19.4	45.1	34.7	-	sil

8C1b pH 1:1	Organic Matter O.C. 6A1a %	N 6B1a %	C/N	Bulk Density Field Moist 4B4 % M.	4A1a g/cc	30 cm. 4B3 % M.	4A1c g/cc	A.D. 4A1b g/cc	MOISTURE TENSIONS 4B1b 1/3 ATMOS. Pieces %	1/3 ATMOS. Sieved %	4B2 15 ATMOS. Sieved %
5.8	0.78	0.077	10	23.0	1.49	27.7	1.46	1.50	20.5		5.0
5.6	0.24	0.040	6								9.0
5.2	0.22	0.045	5								11.3
5.0	0.15	0.042		26.2	1.44	28.9	1.40	1.52	27.0		12.3
4.9	0.11	0.032									11.6
5.0	0.07			25.4	1.49	27.9	1.44	1.54	26.1		10.8
5.2	0.03										10.2
5.4	0.01			21.0	1.60	25.8	1.52	1.64	22.3		8.8

5A1a CATION EXCHANGE CAPACITY NH4OAc	5B1a EXTRACTABLE CATIONS 6N2b Ca	6O2b Mg	6H1a H	6P2a Na	6Q2a K	BASE SAT. % NH4OAc EXCH. 5C1	Base Sat. % on Sum Cations 5C3	Sum Ext. Bases 5B1a	Sum Ext. Cations 5A3a	8D3 Ca/Mg	6C1a Ext. Iron as Fe Pct.	Ext. Al me/100g
←	milliequivalents per 100g. soil				→							
6.2	4.4	0.6	4.8	0.2	0.1	85	52	5.3	10.1		1.0	
8.5	5.4	1.1	4.3	0.2	0.1	80	61	6.8	11.1	4.9	1.1	
10.7	5.4	2.1	6.7	0.3	0.2	75	54	8.0	14.7	2.6	1.4	
11.6	3.7	2.4	9.4	0.3	0.2	57	41	6.6	16.0	1.5	1.7	
11.2	2.5	3.0	9.4	0.3	0.2	54	39	6.0	15.4	0.8	1.8	
10.5	1.9	3.2	8.7	0.3	0.2	53	39	5.6	14.3	0.6	1.8	
10.8	2.1	3.4	8.2	0.3	0.2	56	42	6.0	14.2	0.6	1.4	
10.8	2.9	3.8	6.7	0.3	0.2	67	52	7.2	13.9	0.8	1.1	

a. Many Fe/Mn-bearing(?) aggregates.
b. Few Fe/Mn-bearing(?) aggregates.

Classification: Fine-silty, mixed, thermic Aquic Fragiudalf.
Soil series: Olivier.
Series classification: Same as pedon.

Pedon No.: S61LA-17-1.
Location: East Baton Rouge Parish, Louisiana about one mile west of Plains, 100 feet north of the Plains-Port Hudson Highway; southeast part of northern segment of sec. 61, T. 4 S., R. 1 W.
Vegetation and use: Pasture; mostly broomsedge, bermudagrass, carpetgrass; some white Dutch and hop clover, some sedges. Native vegetation was mixed hardwoods.
Slope and land form: Gently undulating ridgetop, slope less than one percent; bordered by gently sloping areas of 2 to 3 percent slopes. Elevation 120 to 125 feet.
Drainage and permeability: Somewhat poorly drained soil; surface runoff and internal drainage slow; layers above fragipan are moderatley permeable; fragipan layers are slowly permeable.
Parent material: Loess or loess-like materials more than 5 feet thick over coarser textured Coastal Plain materials of the Pleistocene Montgomery terrace.
Climate: Precipitation 60 inches, Temperature 67 degrees F.
Sampled by: J. S. Allen, D. C. McMurtry, J. E. Seaholm, H. L. Clark, Wm. Upchurch, May 9, 1961.
Described by: J. E. Seaholm, H. L. Clark, S. A. Lytle, May 9, 1961. Horizons redesignated by Warren L. Cockerham, 12/17/75.

Ap--0 to 15 cm (0 to 6 in.); grayish brown (10YR 5/2) silt loam, pale brown (10YR 6/3) dry; mottled 15 percent; dark brown (10YR 3/4) soft concretions; weak medium granular structure; slightly firm moist; many coarse and fine roots having dark brown (7.5YR 4/4) colored material in root channels; 2 percent soft black and brown concretions; slightly acid; abrupt smooth boundary.

A2--15 to 23 cm (6 to 9 in.); yellowish brown (10YR 5/4) silt loam, light yellowish brown (10YR 6/4) dry; few faint mottles of grayish brown (10YR 5/2); massive to weak medium and coarse granular structure; friable; moist; many fine roots; 2 percent soft brown and black concretions; slightly acid; clear smooth boundary.

B21t--23 to 38 cm (9 to 15 in.); yellowish brown (10YR 5/4) light silty clay loam, pale brown (10YR 6/3) dry; mottled 7 percent with yellowish red (5YR 4/8) and dark brown (7.5YR 4/4) weak concretions; moderate medium subangular blocky structure; friable; many ped coatings and mottles of brown (10YR 5/3); light brownish gray (10YR 6/2) dry, and yellowish brown (10YR 5/4) silt; few fine roots; 2 percent soft black and brown concretions; slightly acid; clear wavy boundary.

B22t--38 to 56 cm (15 to 22 in.); yellowish brown (10YR 5/6) silty clay loam, brownish yellow (10YR 6/6) dry; moderate medium and fine prismatic structure; firm, moist; many fine roots on the outside of prisms in the grayish brown silt; common fine distinct mottles of red and dark brown on inside of prisms; few splotches of black manganese coatings on some ped surfaces; many mottlings and silt coatings on some ped surfaces; many mottlings and silt coatings on peds of brown (10YR 5/3), pale brown (10YR 6/3) dry, and grayish brown (10YR 5/2), light gray (10YR 7/2) dry; many small and medium sized vertical veins and krotovinas of grayish brown (20YR 5/2) silt; some of these are filled crayfish burrows; many fine pores in prisms; 3 percent soft and hard brown and black concretions; strongly acid; arbitrary boundary.

B23t--56 to 76 cm (22 to 30 in.); yellowish brown (10YR 5/4) silty clay loam, light yellowish brown (10YR 6/4) dry; strong fine and medium prismatic structure; firm moist; few fine roots; many fine pores in cross-sections of prisms; inside of prisms mottled 10 percent with red (2.5YR 4/8), dark brown (7.5YR 4/4) and strong brown (7.5YR 5/6) which may be weak concretions; prisms coated with grayish brown (10YR 5/2) silt, light gray (10YR 7/1) dry; few small vertical veins and few large krotovinas (crayfish burrows) filled with grayish brown (10YR 5/2) silt; 2 percent brown and black concretions; very strongly acid; gradual irregular boundary.

Bx&A--76 to 94 cm (30 to 37 in.); yellowish brown (10YR 5/4) silt loam, pale brown (10YR 6/3) dry; mottled 5 percent with yellowish red (5YR 4/8); strong medium and coarse prismatic structure; firm moist; prisms contain many fine pores and are coated with brown (10YR 5/3) and grayish brown (10YR 5/2) silt which dries out pale brown (10YR 6/3) and light gray (10YR 7/2); common small vertical veins between prisms and a few large krotovinas (crayfish burrows) filled with grayish brown (10YR 5/2) silt, light gray (10YR 7/2) dry; 2 percent soft and hard brown and black concretions; very strongly acid; arbitrary boundary.

Bx2--94 to 132 cm (37 to 52 in.); yellowish brown (10YR 5/4) silt loam, brownish yellow (10YR 5/5) dry; mottled 15 percent with grayish brown (10YR 5/2), light gray (10YR 7/2) dry, and yellowish brown (10YR 5/6); strong medium and coarse prismatic structure; somewhat firm moist; many fine pores; prisms coated with light brownish gray (10YR 6/2) silt, light gray (10YR 7/2) dry; light brownish gray silt filling in vertical and horizontal areas between prisms and in a few large krotovinas (crayfish burrows); 2 percent soft brown and black concretions; very strongly acid; diffuse wavy boundary.

B3--132 to 163 cm (52 to 64 in.); yellowish brown (10YR 5/6) silt loam, brownish yellow (10YR 6/6) dry; weak medium and coarse prismatic structure; somewhat firm; many fine pores in prisms; light brownish gray (10YR 6/2) silt (light gray 10YR 7/2 dry) between prisms, coating prisms and filling a few large krotovinas (crayfish burrows); strongly acid.

Remarks: Munsell colors for moist soil unless otherwise indicated.

SOIL CLASSIFICATION Aquic Fragiudalf; fine-silty, mixed, thermic

SOIL Olivier LOCATION East Baton Rouge Parish, Louisiana

SOIL NOS. S61La-17-4 LAB. NOS. 15058-15064 January, 1962

SOIL SURVEY LABORATORY Lincoln, Nebraska

GENERAL METHODS 1A, 1B1a, 2A1, 2B

DEPTH INCHES	HORIZON	1B1a PARTICLE SIZE DISTRIBUTION (in mm.) (per cent) VERY COARSE SAND 2-1	COARSE SAND 1-0.5	MEDIUM SAND 0.5-0.25	FINE SAND 0.25-0.10	VERY FINE SAND 0.10-0.05	SILT 0.05-0.002	CLAY < 0.002	3A1 0.2-0.02	0.02-0.002	2A2 > 2	TEXTURAL CLASS
0-6	Ap	1.2a	1.0a	0.5a	1.0a	2.1	86.0	8.2	59.1	29.5	-	si
6-12	B1	0.1a	0.5a	0.4a	0.6a	1.4c	75.2	21.8	41.7	35.2	-	sil
12-20	B21t	0.1a	0.8a	0.5a	0.8a	1.5c	71.7	24.6	39.3	34.3	-	sil
20-28	Bx1	0.1a	0.5a	0.4a	0.8a	1.2c	70.4	26.6	38.6	33.4	-	sil/sicl
28-37	Bx2	<0.1a	0.1a	0.1a	0.4a	1.1c	73.3	25.0	39.2	35.4	-	sil
37-49	Bx3	<0.1	<0.1	0.1c	0.4c	1.1b	79.0	19.4	43.0	37.3	-	sil
49-62	Bx4	<0.1	0.1b	0.4b	1.3b	1.4b	78.2	18.6	49.3	30.8	-	sil

pH 8C1b 1:1	Organic Matter O.C. 6A1a %	N 6B1a %	C/N	Bulk Density Field Moist 4B4 % M.	4A1a g/cc	30 cm. 4B3 % M.	4A1c g/cc	A.D. 4A1b g/cc	MOISTURE TENSIONS 4B1b 1/3 ATMOS. Pieces %	1/3 ATMOS. Sieved %	4B2 15 ATMOS. Sieved %
6.2	0.67	0.066	10	19.9	1.44	28.7	1.42	1.45	17.1		5.0
5.3	0.23	0.047	5								9.1
4.7	0.16	0.044		23.6	1.48	27.6	1.45	1.56	29.0		10.7
4.6	0.15	0.037									11.8
4.8	0.11			27.3	1.46	28.8	1.43	1.52	27.3		11.2
4.9	0.06										8.7
5.1	0.04			24.7	1.52	28.0	1.46	1.56	25.4		8.4

5A1a CATION EXCHANGE CAPACITY NH4OAc	5B1a EXTRACTABLE CATIONS 6N2b Ca	6Q2b Mg	6H1a H	6P2a Na	6Q2a K	BASE SAT. % NH4OAc EXCH. 5C1	Base Sat. % on Sum Cations 5C3	Sum Ext. Bases 5B1a	Sum Ext. Cations 5A3a	8D3 Ca/Mg	6C1a Ext. Iron as Fe Pct.	Ext. Al 6G1a me/100g
←		milliequivalents per 100g. soil			→							
5.9	3.4	1.4	3.5	0.1	0.2	86	59	5.1	8.6	2.4	0.8	<1
8.4	4.7	1.7	4.9	0.3	0.2	82	58	6.9	11.8	2.8	1.0	<1
11.5	5.5	2.4	7.2	0.2	0.2	72	54	8.3	15.5	2.3	1.4	1
12.8	4.8	3.0	9.4	0.3	0.2	65	47	8.3	17.7	1.6	1.6	2
12.0	4.5	3.3	8.9	0.2	0.2	68	48	8.2	17.1	1.4	1.5	1
10.7	3.7	2.9	7.0	0.2	0.2	65	50	7.0	14.0	1.3	1.3	1
10.8	4.1	3.2	6.8	0.3	0.2	72	53	7.8	14.6	1.3	1.2	1

a. Many Fe/Mn-bearing(?) aggregates.
b. Few Fe/Mn-bearing(?) aggregates.
c Common Fe/Mn-bearing(?) aggregates.

Classification: Fine-silty, mixed, thermic Aquic Fragiudalf.
Soil series: Olivier.
Series classification: Same as pedon.

Pedon No.: S61LA-17-4.
Location: East Baton Rouge, Parish, Louisiana, at Mt. Pleasant; approximately 600 feet east of Fontania Church in sec. 39, T. 5 S., R. 2 W.; 9/10 mile south southwest of Port Hudson National Cemetery.
Vegetation and use: Improved clover pasture; white Dutch clover; native cover was hardwood trees.
Slope and land form: Undulating to level bench of less than one percent slope which extends westward for 1/5 mile to the ravine-cut abrupt escarpment of the Mississippi River; it extends eastward for a distance of 3/10 mile to the gentle slopes of a ravine. Elevation 97 feet.
Drainage and permeability: Somewhat poorly drained; slow runoff and slow internal drainage; soil horizons above the fragipan are moderately permeable; permeability of the fragipan is slow.
Parent material: Loess or loess-like materials more than 5 feet thick and underlain at 8 to 12 feet by silty clay.
Climate: Precipitation 60 inches, Temperature 67 degrees F.
Sampled by: J. S. Allen, D. C. McMurtry, J. E. Seaholm, H. L. Clark, Leon Nugent, May 10, 1961.
Described by: J. E. Seaholm, H. L. Clark, S. A. Lytle, May 10, 1961. Horizons redesignated by Warren L. Cockerham, 12/18/75.

Ap--0 to 15 cm (0 to 6 in.); grayish brown (10YR 5/2) silt loam, light brownish gray (10YR 6/2) dry; few fine faint brown (10YR 4/3) mottles or weak concretions; weak fine granular structure; friable moist, hard dry; many fine roots; 2 percent small soft brown and black concretions; slightly acid; abrupt smooth boundary.

B1--15 to 30 cm (6 to 12 in.); brown (10YR 5/3) silt loam, pale brown (10YR 6/3) dry; many medium and fine faint brown mottles or weak concretions; weak fine granular and weak coarse subangular blocky structure; friable, hard when dry; few fine roots; many fine pores; one percent small soft black concretions; medium acid; gradual wavy boundary.

B21t--30 to 51 cm (12 to 20 in.); yellowish brown (10YR 5/4) light silty clay loam; many faint coarse brown (10YR 4/3) mottles; moderate medium subangular blocky and moderate medium prismatic structure; friable, hard when dry; few fine roots; many fine pores within peds; peds coated with grayish brown (10YR 5/2) silt, light brownish gray (10YR 6/2) dry; few thin black and dark brown manganese oxide coatings on some ped surfaces; 3 percent small soft black and brown concretions; very strongly acid; diffuse wavy boundary.

Bx1--51 to 71 cm (20 to 28 in.); yellowish brown (10YR 5/4) light silty clay loam; many fine faint mottles of pale brown (10YR 6/3), very pale brown (10YR 7/3) dry; many medium faint yellowish brown (10YR 5/6) mottles; strong coarse prismatic structure and moderate medium subangular blocky structure; firm, very hard dry; many fine pores within peds; common black and dark brown manganese oxide coatings on some peds; common vertical veins and ped coatings and a few krotovinas of brown (10YR 5/3) and pale brown (10YR 6/3) silts, very pale brown (10YR 7/3) dry; few soft black and brown concretions; very strongly acid; arbitrary boundary.

Bx2--71 to 94 cm (28 to 37 in.); yellowish brown (10YR 5/4) light silt clay loam; many fine faint mottles of pale brown, very pale brown dry; many medium faint mottles of yellowish brown (10YR 5/6); strong coarse prismatic structure which breaks readily into moderate medium subangular blocks; firm, very hard dry; many fine pores within peds; common black and dark brown manganese oxide coatings on some peds; common vertical veins, ped coatings and a few krotovinas of pale brown (10YR 6/3) silt, very pale brown (10YR 7/3) dry; few soft black and brown concretions; very strongly acid; gradual wavy boundary.

Bx3--94 to 124 cm (37 to 49 in.); yellowish brown (10YR 5/4) silt loam; many fine dark brown (7.5YR 4/4) and many medium and coarse brown (10YR 4/3) mottles or weak concretions and manganese oxide streaks; strong coarse prismatic structure; firm; common fine pores in prisms; common ped coatings, vertical veins and a few krotovinas of pale brown (10YR 6/3) silt, light gray (10YR 7/2) dry; very strongly acid; arbitrary boundary.

Bx4--124 to 157 cm (49 to 62 in.); yellowish brown (10YR 5/4) silt loam; many fine dark brown and many medium and coarse brown (10YR 4/3) mottles or weak concretions and manganese oxide streaks; strong coarse prismatic structure; firm; common fine pores in prisms; common vertical veins and ped coatings and a few large krotovinas of pale brown silt, light gray (10YR 7/2) dry; very strongly acid; this layer may be several feet thick or may be replaced by a C horizon.

Remarks: Munsell colors for moist soil unless indicated otherwise.

SOIL CLASSIFICATION Aquic Fragiudalf; fine-silty, mixed, thermic

SOIL Olivi r LOCATION East Baton Rouge Parish, Louisiana

SOIL NOS. S61La-17-6 LAB. NOS. 15071-15076 January, 1962

SOIL SURVEY LABORATORY Lincoln, Nebraska

GENERAL METHODS 1A, 1B1a, 2A1, 2B

DEPTH INCHES	HORIZON	1B1a PARTICLE SIZE DISTRIBUTION (in mm.) (per cent) VERY COARSE SAND 2-1	COARSE SAND 1-0.5	MEDIUM SAND 0.5-0.25	FINE SAND 0.25-0.10	VERY FINE SAND 0.10-0.05	SILT 0.05-0.002	CLAY < 0.002	0.2-0.02	0.02-0.002	3A1 2A2 > 2	TEXTURAL CLASS
0-6	Ap	1.5a	0.4a	0.1a	0.3a	1.6	86.8	9.3	54.7	33.8	-	si
6-13	A3	0.3a	0.5a	0.2a	0.4a	1.3	80.5	16.8	46.3	35.7	-	sil
13-22	B2t	0.4a	0.9a	0.4a	0.5a	1.3a	64.6	31.9	34.3	31.9	-	sicl
22-32	Bx1	1.0a	0.9a	0.3a	0.4a	1.2a	67.6	28.6	37.5	31.5	-	sicl
32-44	Bx2	1.2a	0.8a	0.2a	0.2a	0.9a	73.0	23.7	41.0	33.0	-	sil
44-50	B3	0.2a	0.4a	0.2a	0.4a	1.3c	80.1	17.4	47.1	34.5	-	sil

8C1b pH 1:1	Organic Matter O.C. 6A1a %	N 6B1a %	C/N	Bulk Density Field Moist 4B4 % M.	4A1a g/cc	30 cm. 4B3 % M.	4A1c g/cc	A.D. 4A1b g/cc	MOISTURE TENSIONS 4B1b 1/3 ATMOS. Pieces %	1/3 ATMOS. Sieved %	4B2 15 ATMOS. Sieved %
5.0	0.66	0.063	10	25.7	1.43	29.5	1.39	1.45	21.8		4.3
5.0	0.18	0.028									7.3
4.8	0.16	0.036		23.0	1.55	26.6	1.49	1.64	25.9		14.1
5.1	0.10	0.030									12.8
5.5	0.09			20.8	1.62	25.9	1.52	1.68	28.1		11.9
6.3	0.06										9.4

5A1a CATION EXCHANGE CAPACITY NH_4OAc	5B1a EXTRACTABLE CATIONS 6N2b Ca	6O2b Mg	6H1a H	6P2a Na	6Q2a K	BASE SAT. % NH_4OAc EXCH. 5C1	Base Sat. % on Sum Cations 5C3	Sum Ext. Bases 5B1a	Sum Ext. Cations 5A3a	8D3 Ca/Mg	6C1a Ext. Iron as Fe Pct.	Ext. Al 6G1a me/100g
	milliequivalents per 100g. soil →											
14.0	3.3	3.4	5.8	0.5	0.2	53	56	7.4	13.2	1.0	1.2	<1
12.0	3.7	3.4	7.0	0.8	0.2	68	54	8.1	15.1	1.1	1.2	2
14.6	2.9	3.2	11.5	0.4	0.2	46	37	6.7	18.2	0.9	1.8	4
13.4	4.2	4.6	8.9	0.6	0.3	72	52	9.7	18.6	0.9	1.6	2
13.0	6.0	5.4	4.4	0.7	0.2	95	74	12.3	16.7	1.1	1.4	<1
11.5	6.3	4.4	4.0	0.6	0.2	100	74	11.5	15.5	1.4	1.3	<1

a. Many Fe/Mn-bearing(?) aggregates.
c. Common Fe/Mn-bearing(?) aggregates.

Classification: Fine-silty, mixed, thermic Aquic Fragiudalf.
Soil series: Olivier.
Series classification: Same as pedon.

Pedon No.: S61LA-17-6.
Location: East Baton Rouge Parish, Louisiana, about 2 miles east of Baton Rouge, 1.3 miles west of intersection of Perkins Road and Slegen Road; approximately 250 feet north of Perkins Road and 3/10 mile west of land to Kleinpeter house; northwest part of southern ¼ of rectangular sec. 57, T. 8 S., R. 1 E.
Vegetation and use: Native grass pasture; carpetgrass, bermudagrass, dallisgrass, vaseygrass and broomsedge.
Slope and land form: Gently sloping 2 to 3 percent slope between the lower drainageways and the higher broad flats. Elevation 35 feet.
Drainage and permeability: Somewhat poorly drained soil on seasonally wet, seepy slopes; surface runoff moderate; internal drainage moderately slow; soil layers above fragipan are moderately permeable; permeability of fragipan is in slow.
Parent material: Loess or loess-like material more than 5 feet thick. Pleistocene Prairie terrace.
Climate: Precipitation 60 inches, Temperature 67 degrees F.
Sampled by: J. S. Allen, D. C. McMurtry, J. E. Seaholm, H. L. Clark, Leon Nugent, May 10, 1961.
Described by: J. E. Seaholm, H. L. Clark, S. A. Lytle, May 10, 1961. Horizons redesignated by Warren L. Cockerham, 12/17/75.

Ap--0 to 15 cm (0 to 6 in.); grayish brown (10YR 5/2) silt loam, light gray (10YR 7/2) dry; common medium distinct dark yellowish brown (10YR 4/4) mottles which appear to be weak concretions; weak fine granular structure; friable; many fine and coarse roots; common medium soft black and brown concretions; strongly acid; abrupt smooth boundary.

A3--15 to 33 cm (6 to 13 in.); pale brown (10YR 6/3) silt loam, light gray (10YR 7/2) dry; many medium distinct yellowish brown (10YR 5/6) mottles; weak to moderate coarse and fine granular structure and weak medium subangular blocky structure; firm; many fine roots; few fine soft and hard dark red (2.5YR 3/6) brown and black concretions; very strongly acid; abrupt wavy boundary.

B2t--33 to 56 cm (13 to 22 in.); yellowish brown (10YR 5/4) silty clay loam with many medium faint mottles of pale brown (10YR 6/3), very pale brown (10YR 7/3) dry; many medium faint yellowish brown (10YR 5/8) and few fine and medium distinct yellowish red (5YR 4/8) mottles which are weak concretions; moderate medium subangular blocky and moderate medium prismatic structure; friable; few fine roots; peds coated with grayish brown (10YR 5/2) silt, light brownish gray (10YR 6/2) dry; few vertical veins and krotovinas of light brownish gray (10YR 6/2) silt; few hard and soft black concretions; very strongly acid; gradual wavy boundary.

Bx1--56 to 81 cm (22 to 32 in.); yellowish brown (10YR 5/4) silty clay loam; many fine faint yellowish brown (10YR 5/8) mottles or weak concretions; moderate medium prismatic and moderate medium subangular blocky structure; few fine roots; firm; peds coated with gray (10YR 5/1) silt, light gray (10YR 7/1) dry; common dark brown and black thin manganese oxide coatings on some peds; common fine pores; common vertical veins; filling between peds and a few large krotovinas of light brownish gray (10YR 6/2) silt, light gray (10YR 7/1) dry; 3 percent brown and black concretions; very strongly acid; arbitrary boundary.

Bx2--81 to 112 cm (32 to 44 in.); yellowish brown (10YR 5/4) silty clay loam; many fine faint yellowish brown (10YR 5/8) mottles or weak concretions; moderate medium prismatic and moderate medium subangular blocky structure; firm; few fine roots; common fine pores; peds coated with gray (10YR 5/1) silt; common dark brown and black thin manganese oxide coatings on some peds; common filling between peds and a few large krotovinas of light brownish gray (10YR 6/2) silt, light gray (10YR 7/1) dry; 3 percent brown and black concretions; very strongly acid; gradual wavy boundary.

B3--112 to 152 cm (44 to 60 in.); yellowish brown (10YR 5/6) silt loam; few fine distinct grayish brown mottles; massive; firm; few fine pores; common small and large dark brown and black soft manganese oxide mottles or weak concretions; few vertical veins of gray (10YR 6/1) silt, light gray (10YR 7/1) dry; medium acid.

Remarks: Munsell colors for moist soil unless indicated otherwise.

SOIL CLASSIFICATION Aquic Fragiudalf; fine-silty, mixed, thermic

SOIL Olivier LOCATION East Baton Rouge Parish, Louisiana

SOIL NOS. S61La-17-7 LAB. NOS. 15077-15083 January, 1962

SOIL SURVEY LABORATORY Lincoln, Nebraska

GENERAL METHODS 1A, 1B1a, 2A1, 2B

DEPTH INCHES	HORIZON	1B1a PARTICLE SIZE DISTRIBUTION (in mm.) (per cent) VERY COARSE SAND 2-1	COARSE SAND 1-0.5	MEDIUM SAND 0.5-0.25	FINE SAND 0.25-0.10	VERY FINE SAND 0.10-0.05	SILT 0.05-0.002	CLAY < 0.002	0.2-0.02	0.02-0.002	3A1 2A2 > 2	TEXTURAL CLASS
0-5	Ap	0.3a	0.6a	0.2a	0.4a	1.6c	86.3	10.6	54.6	33.5	-	si
5-9	A3	0.3a	0.4a	0.2a	0.3a	1.8	84.3	12.7	51.2	35.1	-	sil
9-11	B1	0.1a	0.2a	0.2a	0.3a	1.4	79.5	18.3	46.8	34.3	-	sil
11-22	B2t	<0.1	0.1a	0.1a	0.3a	1.1b	72.5	25.9	39.0	34.8	-	sil
22-33	Bx1	<0.1	0.2a	0.2a	0.3a	1.1b	76.6	21.6	44.3	33.6	-	sil
33-42	Bx2	0.2a	0.3a	0.2a	0.4a	1.3a	77.8	19.8	44.4	34.9	-	sil
42-60	Bx3	0.3a	0.4a	0.2a	0.4c	1.3	76.0	21.4	44.5	33.0	-	sil

8C1b pH 1:1	Organic Matter O.C. 6A1a %	N 6B1a %	C/N	Bulk Density Field Moist 4B4 % M.	4A1a g/cc	30 cm. 4B3 % M.	4A1c g/cc	A. D. 4A1b g/cc	MOISTURE TENSIONS 4B1b 1/3 ATMOS. Pieces %	1/3 ATMOS. Sieved %	4B2 15 ATMOS. Sieved %
6.5	1.23	0.116	11	21.2	1.45	30.6	1.41	1.47	22.4		6.2
6.4	0.36	0.045	8								6.3
5.3	0.24	0.038	6								8.6
4.8	0.21	0.039	5	24.3	1.42	28.4	1.40	1.50	27.7		11.9
5.0	0.13	0.025									10.1
4.7	0.10			24.1	1.55	27.0	1.50	1.60	25.2		9.6
5.0	0.09										10.4

5A1a CATION EXCHANGE CAPACITY NH_4OAc	5B1a EXTRACTABLE CATIONS 6N2b Ca	6O2b Mg	6H1a H	6P2a Na	6Q2a K	BASE SAT. % NH_4OAc EXCH. 5C1	Base Sat. % on Sum Cations 5C3	Sum Ext. Bases 5B1a	Sum Ext. Cations 5A3a	8D3 Ca/Mg	6C1a Ext. Iron as Fe Pct.	Ext. Al me/100g
←	milliequivalents per 100g. soil				→							
9.2	7.0	2.0	3.7	0.1	0.1	100	71	9.2	12.9	3.5	0.8	
6.6	4.3	1.1	3.5	0.1	0.1	85	62	5.6	9.1	3.9	0.9	
8.0	4.4	1.5	4.9	0.1	0.1	76	55	6.1	11.0	2.9	1.3	
12.3	3.9	2.6	9.6	0.2	0.2	56	42	6.9	16.5	1.5	1.8	
10.4	2.7	2.6	8.6	0.3	0.2	56	40	5.8	14.4	1.0	1.8	
10.7	2.5	2.6	8.6	0.4	0.2	53	40	5.7	14.3	1.0	1.6	
12.1	3.0	3.0	9.1	0.4	0.2	54	42	6.6	15.7	1.0	1.3	

a. Many Fe/Mn-bearing(?) aggregates.
b. Few Fe/Mn-bearing(?) aggregates.
c. Common Fe/Mn-bearing(?) aggregates.

Classification: Fine-silty, mixed, thermic Aquic Fragiudalf.
Soil series: Olivier.
Series classification: Same as pedon.

Pedon No.: S61LA-17-7.
Location: East Baton Rouge Parish, Louisiana, Baton Rouge, 6/10 mile northeast of the intersection of Perkins Road and Pecue Road and ¼ mile east of Pecue Road; sec. 49, T. 8 S., R. 2 E.
Vegetation and use: Mixed, partially improved pasture; bermudagrass, dallisgrass, carpetgrass, white Dutch clover.
Slope and land form: Gentle slopes of 2 to 3 percent which typically border the flat ridgetops. Elevation 25 to 30 feet.
Drainage and permeability: Somewhat poorly drained soil with moderate surface runoff and slow internal drainage; soil layers above fragipan are moderately permeable; permeability of fragipan is slow.
Parent material: Loess or loess-like material from 5 to 10 feet thick.
Climate: Precipitation 60 inches, Temperature 67 degrees F.
Sampled by: J. S. Allen, D. C. McMurtry, Leon Nugent, J. E. Seaholm, H. L. Clark, May 10, 1961.
Described by: J. E. Seaholm, H. L. Clark, S. A. Lytle, May 10, 1961. Horizons redesignated 12/17/75 by Warren L. Cockerham.

Ap--0 to 13 cm (0 to 5 in.); grayish brown (10YR 5/2) silt loam; many fine distinct dark yellowish brown (10YR 3/4) mottles or weak concretions; weak fine granular and weak thin platy structure; friable; many fine and coarse roots; 3 percent small soft black concretions; medium acid; abrupt smooth boundary.

A3--13 to 23 cm (5 to 9 in.); grayish brown (10YR 5/2) silt loam; many fine distinct dark yellowish brown and dark brown mottles or weak concretions; massive to weak medium subangular blocky structure; firm; many fine roots; 3 percent small soft black concretions; medium acid; abrupt wavy boundary.

B1--23 to 28 cm (9 to 11 in.); yellowish brown (10YR 5/4) silt loam; many fine faint dark yellowish brown mottles or weak concretions; weak medium prismatic and moderate medium subangular blocky structure; firm; few fine roots; common ped coatings of light brownish gray (10YR 6/2) silt, light gray dry; common vertical veins and a few krotovinas of light brownish gray (10YR 6/2) silt, light gray (10YR 7/2) dry; 3 percent small soft black concretions; strongly acid; abrupt wavy boundary.

B2t--28 to 56 cm (11 to 22 in.); dark yellowish brown (10YR 4/4) silty clay loam; common distinct pale brown (10YR 6/3), few fine faint brown, few fine prominent yellowish red, few fine distinct yellowish brown mottles or weak concretions; strong medium subangular blocky structure and weak medium prismatic structure; firm moist, hard dry; few fine roots; peds almost completely coated with pale brown (10YR 6/3) silt, light gray (10YR 7/2) dry; few patchy thin ped coatings of manganese oxide which are very dark gray (10YR 3/1) to dark brown (7.5YR 4/4); common vertical veins and a few krotovinas of light brownish gray (10YR 6/2) to pale brown (10YR 6/3) silt, light gray (10YR 7/2) dry; common small soft black concretions; very strongly acid; gradual to diffuse irregular boundary.

Bx1--56 to 84 cm (22 to 33 in.); yellowish brown (10YR 5/6) silty clay loam; few fine faint brown mottles; weak coarse prismatic and moderate medium and coarse subangular blocky structure; firm; few fine roots in the light brownish gray (10YR 6/2) silt filling between peds and in the few krotovinas of light brownish gray silt; many fine pores; nearly complete ped coatings of light brownish gray (10YR 6/2), light gray dry (10YR 7/2) silt; few very dark gray (10YR 3/1) and very dark brown (10YR 2/2) patchy ped coatings of manganese oxide; few medium and large yellowish red (5YR 4/8) mottles or thin staining on some peds; common small soft black concretions; very strongly acid; arbitrary boundary.

Bx2--84 to 107 cm (33 to 42 in.); yellowish brown (10YR 5/6) silty clay loam; few fine faint brown mottles; weak coarse prismatic and moderate medium and coarse subangular blocky structure; firm; few fine roots in the light brownish gray (10YR 6/2) silt coating between peds and in the few krotovinas of light brownish gray silt; many fine pores; nearly complete ped coatings of light brownish gray (10YR 6/2) silt, light gray (10YR 7/2) dry; few large dark brown and black manganese oxide coatings on some peds; few medium and large yellowish red (5YR 4/8) mottles or thin staining; common small soft black concretions; very strongly acid.

Bx3--107 to 152 cm (42 to 60 in.); yellowish brown (10YR 5/6) silt loam; few faint brown mottles; weak medium angular blocky structure; firm; few fine roots in the silt fillings between peds; many fine pores; common black and dark brown patches of manganese oxide on some peds; some peds have thin staining of yellowish red (5YR 4/8) in places; coating on peds is commonly light brownish gray (10YR 6/2) silt or silt loam; common small soft black concretions; very strongly acid.

Remarks: Munsell colors for moist soil unless indicated otherwise.

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

CLASSIFICATION: Calloway — Glossaquic Fragiudalf; fine-silty, mixed, thermic

SOIL: Calloway — SOIL Nos. 363La-42-2 — LOCATION: Richland Parish, Louisiana

SOIL SURVEY LABORATORY: Lincoln, Nebraska — LAB. Nos. 19210-19226 — May, 1967

General Methods: 1A, 1B1b, 2A1, 2B

Depth (in.)	Horizon	Total: Sand (2-0.05)	Total: Silt (0.05-0.002)	Total: Clay (< 0.002)	Sand: Very coarse (2-1)	Sand: Coarse (1-0.5)	Sand: Medium (0.5-0.25)	Sand: Fine (0.25-0.1)	Sand: Very fine (0.1-0.05)	Silt: 0.05-0.02	Silt: Int. III (0.02-0.002)	Int. II (0.2-0.02)	(2-0.1)		<0.074	Coarse fragments 2A2: > 2	2-19	19-76
		Size class and particle diameter (mm) 3B1 — Pct. of < 2 mm														Pct	Pct. of < 76mm	
0-5	Ap	4.8a	84.4	10.8	1.0	1.3	0.6	0.9	1.0	43.0	41.4	44.5	3.8		95.9	-		
5-9	B1	2.b	78.0	19.4	0.3	0.7	0.3	0.5	0.8	31.8	46.2	4.9	1.8		98.0	-		
9-18	B21	2.6b	72.6	24.8	0.2	0.8	0.5	0.5	0.6	29.1	43.5	30.0	2.0			-		
18-22	B22	3.6b	76.4	19.8	0.6	1.3	0.6	0.6	0.7	23.4	44.0	33.4	3.1		96.7	-		
22-25	A&B	3.0b	75.8	21.2	0.2	0.9	0.5	0.6	0.8	35.4	40.4	36.5	2.2		97.6	-		
25-31	Bx1	1.8b	71.8	26.4	tr	0.3	0.3	0.5	0.7	34.2	37.6	35.2	1.1		98.7	-		
31-38	Bx2	1.4b	74.6	24.0	tr	0.1	0.2	0.4	0.7	34.4	40.2	35.3	0.7			-		
38-56	Bx3	2.1b	74.8	23.1	0.1	0.1	0.2	0.6	1.1	30.6	44.2	32.1	1.0		98.7	-		
56-68	Bx4	4.3a	73.9	21.8	0.2	0.5	0.3	0.9	2.4	24.6	49.3	27.7	1.9		97.4	-		
68-85	Bx5	8.0a	70.4	21.6	0.1	0.2	0.2	1.5	6.0	25.7	44.7	33.0	2.0		96.4	-		
85-96	IIB31	14.0a	63.9	22.1	0.2	0.3	0.2	1.8	11.5	32.8	31.1	45.9	2.5		95.1	-		
96-108	IIB32	11.5a	54.9	33.6	tr	0.1	0.2	0.6	10.6	29.9	25.0	41.0	0.9			-		
108-120	IIB33	28.8	50.3	20.9	-	0.1	0.2	1.3	27.2	33.6	16.7	61.8	1.6		93.9	-		
132-143	IIIC2	92.3	6.3	1.4	-	tr	0.8	48.2	43.3	4.6	1.7	78.0	49.0			-		
18-22"	IIIC4	98.2	1.6	0.2	-	0.8	4.7	79.3	3.4	1.4	0.2	37.4	94.8		3.0	-		
22-24'	IIIC5	98.5	1.5	tr	-	5.8	30.8	58.6	3.3	1.1	0.4	18.3	95.2		2.9	tr		
24-27'	IIIC6	99.4	0.4	0.2	-	2.8	51.7	33.4	1.5	0.2	0.4	9.7	97.9			tr		

Depth (in.)	6A1a Organic carbon C	6B1a Nitrogen	C/N		6E2a Carbonate as $CaCO_3$	6C2a Ext. Iron as Fe	Bulk density: 4A1a Field-State	4A1d 1/3-Bar	4A1b Air-Dry	4D1 COLE	Water content: 4B4 Field-State	4B1c 1/3-Bar	4B2 15-Bar	4C1 1/3-to 15-Bar		pH: 8C1b Sat. Paste		8C1a (1:1)
	Pct.	Pct			Pct.	Pct	g/cc	g/cc	g/cc		Pct	Pct	Pct.	in/in.				
0.5	0.72	0.071	10			1.1	1.47	1.45	1.47	0.003	6.8	19.8	5.2	0.21				5.5
5-9	0.24	0.041				1.1	1.52	1.48	1.52	0.010	12.3	22.6	7.6	0.22				5.2
9-18	0.16					1.4	1.41	1.37	1.44	0.017	15.6	24.6	9.6	0.21				5.1
18-22	0.07					1.6	1.46	1.43	1.48	0.010	13.6	22.4	9.5	0.18				5.1
22-25	0.09					1.8	1.48	1.45	1.48	0.007	16.0	22.1	10.0	0.18				4.9
25-31	0.11					1.6	1.60	1.54	1.62	0.017	14.7	22.8	12.4	0.16				4.7
31-38	0.05					1.4	1.54	1.43	1.60	0.040	16.9	25.4	12.1	0.19				4.7
38-56	0.07					1.4	1.46	1.34	1.51	0.040	18.5	28.9	12.1	0.23	0	4.4		4.8
56-68	0.05					1.3	1.56	1.44	1.58	0.032	13.9	27.7	11.2	0.24				5.2
68-85	0.04					1.1	1.64	1.50	1.64	0.032	11.5	25.5	10.8	0.22				6.2
85-96	0.05					0.8							10.6					6.9
96-108	0.04					0.9							16.8					7.1
108-120	0.04					0.9							11.0					7.2
132-143	0.01				-(s)	0.4							1.5					7.7
18-22'	0.01				tr(s)	0.2							0.9					8.4
22-24'	0.01				tr(s)	0.2							0.4					7.5
24-27	0.02				tr(s)	0.2							0.5					7.7

Depth (in.)	Extractable bases: 6N2a Ca	6O2a Mg	6P2a Na	6Q2a K	5H1a Sum	6H1a Ext. Acidity	Ext. Extr. Cat.: 5A3a Sum Cations	5A1a NH_4OAc	6G1d KCl-Ext. Al	8E1 Resistivity	8H1a Elec. Cond.	6F1a Sol. Na	5D2 Exch. Na	8B Water at Sat.	8D3 Ca/Mg	5F1 Ca Sat. (NH_4OAc)	Base saturation: 5C3 Sum Cations	5C1 NH4) Ac
	mea/100 g									ohms-cm.	mmhos/cm.	me./l.	Pct.	Pct.		Pct.	Pct	Pct
0-5	2.1	0.8	0.1	0.1	3.1	6.3	9.4	6.7	0.3							31	33	46
5-9	2.2	1.0	0.4	0.1	3.7	7.6	11.3	7.9	1.0						2.2	28	33	47
9-18	1.7	1.6	0.7	0.2	4.2	11.0	15.2	10.9	3.7						1.1	16	28	39
18-22	1.3	1.6	0.6	0.2	3.7	11.7	15.4	11.4	4.8						0.8	11	24	32
22-25	1.2	2.5	0.7	0.3	4.7	11.8	16.5	12.0	4.9						0.5	10	28	39
25-31	2.2	3.7	1.0	0.3	7.2	13.3	20.5	15.4	5.9						0.6	14	35	47
31-38	3.1	4.7	1.2	0.3	9.3	10.7	20.0	15.9	4.2						0.7	19	47	58
38-56	4.7	5.9	1.6	0.4	12.6	9.0	21.6	17.4	1.7	4100	0.27	1.7	9	44.7	0.8	27	58	72
56-68	5.9	6.1	1.9	0.3	14.2	5.2	19.4	16.1	0.4						1.0	37	73	88
68-85	6.6	6.0	2.4	0.3	15.3	3.4	18.7	15.8							1.1	42	82	97
85-96	6.4	5.5	2.4	0.3	14.6	2.7	17.3	14.7							1.2	44	84	99
96-108	10.4	9.0	3.9	0.5	23.8	2.8	26.6	23.2							1.2	45	89	103
108-120																		
122-143																		
18-22'																		
22-24																		
24-27																		

	Ratios to Clay: 8D1 NH_4OAc CED	Ext. Iron	15-Bar Water	5A3b Bases plus Al me/100g Clay
0-5	0.62	0.10	0.48	31
5-9	0.41	0.06	0.39	24
9-18	0.44	0.06	0.39	32
18-22	0.58	0.08	0.48	43
22-25	0.57	0.08	0.47	45
25-31	0.58	0.06	0.47	50
31-38	0.66	0.06	0.50	56
38-56	0.75	0.06	0.52	62
56-68	0.74	0.06	0.51	67
68-85	0.73	0.05	0.50	71
85-96	0.67	0.04	0.48	66
96-108	0.69	0.03	0.50	71
108-120		0.04	0.53	
132-143				
18-22'				
22-24'				
24-27'				

a. Fe-Mn nodules: > 50 percent (2-0.1 mm); 5-25 percent (0.1-0.05 mm).
b. Fe-Mn nodules: > 50 percent (2-0.05 mm).
c. 3.3 kg/m² to 60 inches (Method 6A).

Classification: Fine-silty, mixed, thermic Glossaquic Fragiudalf.
Soil series: Calloway[1/]
Series classification: Same as pedon.

Pedon No.: S63LA-42-2.
Location: Richland Parish, Louisiana, 1½ miles northwest of Delhi, 460 feet east and 160 feet north of the southwest corner of the SE¼ sec. 2, T. 17 N., R. 9 E.
Vegetation and use: Johnsongrass pasture (formerly cultivated).
Slope and land form: Slightly convex slope of about 3/4 percent on loess-mantled Pleistocene terrace of very low relief.
Drainage and permeability: Somewhat poorly drained; internal drainage slow; runoff slow; slow permeability.
Climate: Precipitation 51 inches, Temperature 65 degrees F.
Parent material: Silty material of very low sand content, very likly of aeolian origin over alluvium.
Sampled by: James DeMent, J. L. Walker, George Caldwell, S. A. Lytle, Lester Loftin, Dayton Matthews, and Billie Nutt, October 31, 1963.
Described by: David F. Slusher and Tracey Weems, October 31, 1963. Horizons redesignated January 6, 1976 by Warren L. Cockerham.

Ap--0 to 13 cm (0 to 5 in.); brown (10YR 4/3, 6/2 dry) silt loam; weak very fine granular structure; friable; common roots; few fine hard black and soft brown concretions; strongly acid; abrupt smooth boundary.

B1--13 to 23 cm (5 to 9 in.); yellowish brown (10YR 5/4) silt loam; weak fine subangular blocky structure; friable; few roots; very few medium pores; a few fine soft black concretions; very strongly acid; clear smooth boundary.

B21--23 to 46 cm (9 to 18 in.); yellowish brown (10YR 5/6) silt loam; many fine distinct light brownish gray mottles; moderate medium subangular blocky structure; friable; few roots; few fine pores; few fine dark brown concretions; very strongly acid; gradual wavy boundary.

B22--46 to 56 cm (18 to 22 in.); yellowish brown (10YR 5/6) and light brownish gray (10YR 6/2) inside peds; silt loam; light brownish gray (10YR 6/2) on ped surfaces; moderate medium subangular blocky structure; few roots; few fine and medium pores; common hard dark brown concretions; very strongly acid; gradual wavy boundary.

A&B--56 to 64 cm (22 to 25 in.); light brownish gray (10YR 6/2, 8/1 dry) silt; massive with many moderate medium subangular blocky aggregates of yellowish brown (10YR 5/4); few medium pores; very strongly acid; abrupt smooth boundary.

Bx1--64 to 79 cm (25 to 31 in.); light brownish gray (10YR 6/2) silty clay loam; few fine faint yellowish brown mottles; moderate fine prismatic structure; firm, brittle; few fine pores; many fine distinct brown (10YR 4/3) aggregates inside prisms that appear as mottles when prism is broken; patchy white (10YR 8/1 dry) silt coats about 1 mm thick on 5 percent of area of prism surface; thin almost continuous clay films; extremely acid; gradual wavy boundary.

Bx2--79 to 97 cm (31 to 38 in.); pale brown (10YR 6/3) on ped surfaces; brown (10YR 4/3 and 5/3) inside peds; silt loam; moderate medium prismatic structure; firm, brittle; few fine pores; many thin patchy clay films on peds and in pores; ped surfaces have common patchy thin silt coatings; common dark brown concretions; very strongly acid; gradual smooth boundary.

Bx3--97 to 142 cm (38 to 56 in.); yellowish brown (10YR 5/4) on ped surfaces, silt loam, brown (10YR 4/3) and yellowish brown (10YR 5/4) with common fine faint light brownish gray (10YR 6/2) mottles inside peds; weak coarse prismatic structure; firm, brittle; common fine pores lined with clay films and patchy clay films on ped surfaces; common patchy silt coatings on peds; common dark brown and black concretions; strongly acid; gradual smooth boundary.

Bx4--142 to 173 cm (56 to 68 in.); yellowish brown (10YR 5/4) silt loam; many fine distinct pale brown mottles; weak coarse prismatic structure; firm, brittle; common fine pores; few clay films in pores and on prism surfaces; few fine dark brown concretions; many black stains in pores and on prism surfaces; very strongly acid; gradual smooth boundary.

Bx5--173 to 216 cm (68 to 85 in.); yellowish brown (10YR 5/4) silt loam; many fine faint pale brown mottles; weak coarse prismatic structure; firm, brittle; a very few patchy clay films in fine pores; few soft dark brown concretions; strongly acid; clear smooth boundary.

IIB31--216 to 244 cm (85 to 96 in.); brown (10YR 5/3) silt loam; common fine faint dark yellowish brown mottles; weak coarse prismatic structure; firm; few fine pores; a few distinct patchy clay films in pores and on prism surfaces; a few black concretions; prism surfaces are partially coated with thin black stains; slightly acid; clear smooth boundary.

IIB32--244 to 274 cm (96 to 108 in.); brown (7.5YR 5/3) silty clay loam; moderate medium subangular blocky structure; firm; few black concretions; neutral.

IIB33--274 to 305 cm (108 to 120 in.); yellowish brown (10YR 5/4) loam; few fine faint dark yellowish brown mottles; weak coarse subangular blocky structure; firm; distinct clay films in pores; mildly alkaline.

Remarks: Horizons below 108 inches sampled from bucket auger. Munsell colors for moist soils unless indicated.

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

SOIL CLASSIFICATION: Glossic Fragiudalf; fine silty, mixed, thermic

SOIL: Grenada — SOIL Nos. S63LA-42-1 — LOCATION: Richland Parish, Louisiana

SOIL SURVEY LABORATORY: Lincoln, Nebraska — LAB Nos. 19193-19209 — May, 1967

General Methods: 1A, 1B1b, 2A1, 2B

Depth (in.)	Horizon	Total: Sand (2-0.05)	Total: Silt (0.05-0.002)	Total: Clay (< 0.002)	Very coarse (2-1)	Sand: Coarse (1-0.5)	Sand: Medium (0.5-0.25)	Sand: Fine (0.25-0.1)	Sand: Very fine (0.1-0.05)	Silt: Int. III (0.05-0.02)	Silt: Int. II (0.2-0.02)	(2-0.1)	<0.074	Coarse fragments 2A2: >2	2-19	19-76
		Pct.				Pct. of < 2 mm								Pct.	Pct. of < 76mm	
0-5	Ap	6.1a	82.4	11.5	1.1	1.1	0.6	1.4	1.9	47.6	34.6	50.5	4.2	-		
5-8	B1	2.1a	74.8	23.1	0.2	0.3	0.3	0.5	0.8	39.4	35.4	40.5	1.3	-		
8-16	B21	2.4b	70.0	27.6	0.1	0.4	0.4	0.6	0.9	30.8	39.2	32.0	1.5	-		
16-23	B22	2.4b	73.6	24.0	tr	0.3	0.4	0.7	1.0	32.9	40.7	34.3	1.4	-		
23-28	B23	2.3b	78.1	19.6	0.1	0.2	0.4	0.7	0.9	36.3	41.8	37.6	1.4	-		
28-33	A&B	1.8b	82.1	16.1	tr	0.2	0.3	0.5	0.8	40.1	42.0	41.2	1.0	-		
33-44	B'x1	1.5b	75.6	22.9	tr	0.1	0.2	0.5	0.7	36.6	39.0	37.6	0.8	-		
44-58	B'x2	1.5b	76.3	22.2	tr	0.1	0.2	0.5	0.7	35.1	41.2	36.1	0.8	-		
58-71	B'x3	1.6b	75.6	22.8	tr	0.1	0.1	0.4	1.0	27.2	48.4	28.5	0.6	-		
71-90	B'x4	1.8b	76.5	21.7	tr	0.2	0.2	0.5	0.9	25.1	51.4	26.3	0.9	-		
90-110	IIC1	4.4a	74.4	21.2	0.4	0.5	0.2	0.7	2.6	36.4	38.0	39.5	1.8	-		
110-126	IIC2	5.0a	71.8	23.2	0.1	0.4	0.3	0.7	3.5	38.0	32.8	43.0	1.5			
126-142	IIC3	7.7	65.0	27.3	0.1	0.3	0.3	1.8	5.2	29.8	36.2	36.1	2.5	-		
142-154	IIC4	5.8	65.8	28.4	tr	tr	0.1	0.6	5.1	28.2	37.6	33.7	0.7	-		
154-162	IIC5	11.0	59.1	30.9	tr	tr	tr	0.6	9.4	26.8	32.3	36.7	0.6	-		
162-174	IIC6	7.0	64.1	28.9	tr	tr	tr	0.6	6.4	27.5	36.6	34.4	0.6	-		
174-180	IIC7	3.8	52.8	43.5	-	-	-	0.4	2.4	23.4	23.2	26.1	0.4	-		

Depth (in.)	6A1a Organic carbon C	6B1a Nitrogen	C/N		Carbonate as $CaCO_3$	6G2a Ext. Iron as Fe	4A1a Field-State	4A1d 1/3-Bar	4A1b Air-Dry	4D1 COLE	4B4 Field-State	4B1c 1/3-Bar	4B2 15-Bar	4C1 1/3- to 15-Bar		8C1b Sat. paste		8C1a (1:1)
							Bulk density				Water content					pH		
	Pct	Pct.			Pct.	Pct.	g/cc	g/cc	g/cc		Pct	Pct.	Pct.	g/g				
0-5	0.60	0.057	11			1.3	1.52	1.49d	1.51	0.003	3.1	23.5e	4.8	0.28f				5.2
5-8	0.15	0.035				1.4	1.46	1.50	1.56	0.014	9.8	22.0	8.9	0.20				4.9
8-16	0.08					1.8	1.48	1.42	1.50	0.017	13.6	24.4	11.3	0.19				5.1
16-23	0.09					1.7	1.42	1.38	1.44	0.014	14.6	25.5	10.5	0.21				5.1
23-28	0.08					1.7	1.42	1.39	1.43	0.010	15.7	23.8	9.9	0.19				5.0
28-33	0.03					1.3	1.53	1.50	1.54	0.010	16.1	22.3	8.0	0.21				4.9
33-44	0.07					1.5	1.54	1.48	1.58	0.020	18.9	24.7	10.9	0.20		4.6		4.7
44-58	0.04					1.4	1.50	1.41	1.54	0.028	23.0	27.7	11.8	0.22				4.6
58-71	0.06					1.4	1.50	1.40	1.53	0.028	23.6	29.3	12.1	0.24				4.8
71-90	0.07					1.4	1.52	1.42	1.55	0.028	22.7	27.9	11.6	0.23				5.2
90-110	0.07					1.1							10.0					5.9
110-126	0.08					0.9							11.0					6.1
126-142	0.07					1.0							12.6					6.5
142-154	0.07					1.1							13.5					6.5
154-162	0.02					1.2							14.4					6.7
162-174	0.04					1.1							13.9					6.8
174-180	0.07					1.1							17.8					6.8

Depth (in.)	6H2a Ca	6G2a Mg	6F2a Na	6G2a K	Sum	6H1a Ext. acidity	Cat. Exch. Cap: 5A3a Sum bases	5A1a NH_4OAc	6G1d KCl-Ext. Al	8E1 Resistivity	8H1a Elec. Cond.	6P1a Sol. Na	5D2 Exch. Na	8B Water at Sat.	8D3 Ca/Mg	5F1 Ca Sat. (NH_4OAc)	5C3 Base saturation: Sum bases	5C1 NH_4OAc
	Extractable bases																	
	me/100 g									ohms-cm.	mmhos/cm	me/l.	Pct	Pct.		Pct.	Pct	Pct
0-5	1.3	1.2	0.1	0.2	2.8	6.3	9.1	6.4	0.3						1.1	20	31	44
5-8	1.4	1.8	0.4	0.2	3.8	10.5	14.3	9.5	3.2						0.8	15	27	40
8-16	1.2	2.4	0.7	0.3	4.6	14.2	18.8	13.5	5.5						0.5	9	24	34
16-23	1.1	2.3	0.6	0.3	4.3	13.7	18.0	12.6	5.1						0.5	9	24	34
23-28	1.0	2.1	0.5	0.3	3.9	12.9	16.8	11.6	4.6						0.5	9	23	34
28-33	1.2	2.3	0.4	0.3	4.2	10.6	14.8	10.2	3.9						0.5	12	28	41
33-44	2.9	4.2	0.8	0.3	8.2	10.9	19.1	13.9	3.4	8600	0.20	1.2	5	18.5	0.7	21	43	59
44-58	3.6	5.6	1.0	0.3	10.5	9.6	20.1	14.8	1.9						0.6	24	52	71
58-71	4.8	5.9	1.3	0.3	12.3	7.8	20.1	15.2	0.8						0.8	32	61	81
71-90	5.5	5.6	1.4	0.3	12.8	5.7	18.5	14.2	0.4						1.0	39	69	90
90-110	5.3	4.7	1.3	0.3	11.6	3.4	16.9	13.3							1.1	43	73	94
110-126	5.3	4.6	1.5	0.3	11.1	2.1	17.2	13.7							1.3	47	76	96
126-142	6.5	6.3	1.9	03	17.0	3.5	20.5	17.2							1.3	49	83	99
142-154	9.	6.7	2.1	0	18.9	3.3	22.2	18.5							1.4	52	85	102
154-162	9.7	6.9	2.1	0.4	19.1	2.9	22.0	19.0							1.4	51	87	101
162-174	9.4	6.8	2.0	0.4	18.6	2.8	21.0	18.2							1.5	56	87	100
174-180	12.5	8.2	2.6	0.5	23.8	3.4	27.2	23.3							1.5	54	88	102

Depth (in.)	Ratios to Clay 8H1: NH_4OAc CEC	Ext. Iron	15-Bar Water	5A3b Bases NH_4OAc Clay
0-5	0.56	0.11	0.42	27
5-8	0.41	0.06	0.39	30
8-16	0.49	0.07	0.41	37
16-23	0.53	0.07	0.44	39
23-28	0.59	0.09	0.51	45
28-33	0.63	0.08	0.50	50
33-44	0.61	0.07	0.48	51
44-58	0.67	0.06	0.53	56
58-71	0.67	0.06	0.53	57
71-90	0.65	0.06	0.53	61
90-110	0.58	0.05	0.47	55
110-126	0.59	0.04	0.47	56
126-142	0.63	0.04	0.46	62
142-154	0.65	0.04	0.48	67
154-162	0.61	0.04	0.47	62
162-174	0.63	0.04	0.48	63
174-180	0.57	0.03	0.44	59

a. Fe-Mn nodules: > 50 percent (2-0.10 mm); 5-25 percent (0.10-0.05 mm).
b. Fe-Mn nodules: > 50 percent (2-0.05 mm).
c. 2.5 kg/m² to 60 inches (Method 6A).
d. 1/10-Bar (Method 4A1g).
e. 1/10-Bar (Method 4B1c).
f. 1/10-to-15-Bar (Method 4C2).

Classification: Fine-silty, mixed, thermic Glossic Fragiudalf.
Soil series: Grenada.
Series classification: Same as pedon.

Pedon No.: S63LA-42-1.
Location: Richland Parish, Louisiana 1½ miles north of Delhi, SW¼SE¼ sec. 6, T. 17 N., R. 10 E., 400 feet east and 800 feet north of the southwest corner of section 6.
Vegetation and use: Bermudagrass pasture (formerly cultivated).
Slope and land form: Upper edge of 2 percent convex east facing slope on loess-mantled Pleistocene terrace of very low relief.
Drainage and permeability: Moderately well drained; internal drainage slow; runoff medium; slow permeability.
Parent material: I. Silty material of very low sand content, very likely of aeolian origin. II. Alluvium.
Climate: Precipitation 51 inches, Temperature 65 degrees F.
Sampled by: James DeMent, J. L. Walker, George Caldwell, S. A. Lytle, Dayton Matthews, and Billie Nutt, October 30, 1963.
Described by: David F. Slusher and Tracey Weems, October 30, 1963.

Ap--0 to 13 cm (0 to 5 in.); brown (10YR 4/3) silt; weak very fine granular structure; friable; many roots; strongly acid; abrupt smooth boundary.

B1--13 to 20 cm (5 to 8 in.); yellowish brown (10YR 5/4) silt loam; weak fine subangular blocky structure; firm; few soft dark brown aggregates; few roots; few fine pores; very strongly acid; clear smooth boundary.

B21--20 to 41 cm (8 to 16 in.); yellowish brown (10YR 5/6) silty clay loam; moderate fine subangular blocky structure; firm; very few soft dark brown aggregates; few roots; few fine pores; very strongly acid; gradual smooth boundary.

B22--41 to 58 cm (16 to 23 in.); yellowish brown (10YR 5/4) silt loam; strong fine subangular blocky structure; friable; few roots; few fine pores; few distinct patchy dark brown clay films; very strongly acid; gradual smooth boundary.

B23--58 to 71 cm (23 to 28 in.); pale brown (10YR 6/3) silt loam; moderate fine subangular blocky structure; friable; few roots; few fine pores; strongly acid; gradual smooth boundary.

A&B--71 to 84 cm (28 to 33 in.); light gray (10YR 8/1) silt; massive; friable; many pores; approximately 10 percent of horizon consists of very firm weakly cemented yellowish brown (10YR 5/4) silt loam 5 to 15 mm in diameter that break readily from rest of mass; very strongly acid; clear wavy boundary.

B'x1--84 to 112 cm (33 to 44 in.); brown (10YR 4/3) inside peds, silty clay loam; common fine distinct gray (10YR 6/1) streaks inside prisms; moderate medium prismatic structure; firm and brittle; distinct continuous thick clay films on peds; very strongly acid; gradual smooth boundary.

B'x2--112 to 147 cm (44 to 58 in.); brown (10YR 4/3) silt loam; common fine distinct light brownish gray (10YR 6/2) streaks inside prisms; moderate coarse prismatic structure; firm and brittle; distinct patchy clay films in pores and on ped surfaces; a few soft dark brown aggregates; very strongly acid; gradual smooth boundary.

B'x3--147 to 180 cm (58 to 71 in.); brown (10YR 4/3) silt loam; common fine distinct light brownish gray (10YR 6/2) streaks inside peds; weak coarse subangular blocky adhering as moderate coarse prismatic structure; firm and brittle; a few clay films in fine pores; very strongly acid; clear smooth boundary.

B'x4--180 to 229 cm (71 to 90 in.); brown (10YR 4/3) silt loam; few fine distinct light brownish gray streaks inside peds; weak coarse prismatic structure; firm and brittle; few distinct clay films in pores; very strongly acid; clear smooth boundary.

IIC1--229 to 279 cm (90 to 110 in.); brown (7.5YR 5/4) silt loam; weak coarse prismatic structure; firm; few fine pores; a few soft black aggregates, strongly acid.

IIC2--279 to 320 cm (110 to 126 in.); brown (7.5YR 4/4) silt loam; medium acid.

IIC3--320 to 361 cm (126 to 142 in.); brown (7.5YR 4/4) silty clay loam; slightly acid.

IIC4--361 to 391 cm (142 to 154 in.); reddish brown (5YR 4/4) silty clay loam; few fine faint brown mottles; few soft black aggregates; slightly acid.

IIC5--391 to 411 cm (154 to 162 in.); reddish brown (5YR 4/4) heavy silty clay loam.

IIC6--411 to 442 cm (162 to 174 in.); reddish brown (5YR 4/4) light silty clay loam.

IIC7--442 to 453 cm (174 to 180 in.); reddish brown (5YR 4/4) heavy silty clay loam.

Remarks: Samples from 110 to 180 inches taken from bucket auger. Munsell colors for moist soil unless otherwise indicated. Reaction by Hellige-Truog field kit. Soil dry when sampled.

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

SOIL CLASSIFICATION: Glossic Fragiudalf; fine-silty, mixed, thermic

SOIL Grenada SOIL Nos. S63La-42-3 LOCATION Richal d Parish, Louisiana

SOIL SURVEY LABORATORY Lincoln, Nebraska LAB. Nos. 19227-19239 May, 1967

General Methods: 1A, 1B1b, 2A1, 2B

Depth (In.)	Horizon	Size class and particle diameter (mm) 3A1 — Total: Sand (2-0.05)	Total: Silt (0.05-0.002)	Total: Clay (< 0.002)	Sand: Very coarse (2-1)	Sand: Coarse (1-0.5)	Sand: Medium (0.5-0.25)	Sand: Fine (0.25-0.1)	Sand: Very fine (0.1-0.05)	Silt: 0.05-0.02	Silt: Int. III (0.02-0.002)	Int. II (0.2-0.02)	(2-0.1)		<0.074	Coarse fragments 2A2: > 2 (Pct.)	2-19 (Pct. of < 76mm)	19-76 (Pct. of < 76mm)
		Pct. of < 2 mm																
0-3	Ap	5.5a	82.3	12.2	0.2	0.5	0.3	2.0	2.5	40.4	41.9	44.6	3.0		96.0	-		
5-6	B1	3.1a	76.3	20.6	0.2	0.3	0.2	1.1	1.3	31.8	44.5	34.0	1.8		97.7	-		
6-14	B21	2.6a	71.7	25.7	0.1	0.6	0.3	0.7	0.9	27.0	44.7	28.5	1.7			-		
14-19	B22	4.2a	73.8	22.0	0.5	1.5	0.6	0.8	0.8	27.8	46.0	29.1	3.4		96.3	-		
19-22	A'2	6.1a	77.0	16.9	1.3	2.1	0.7	1.0	1.0	27.2	49.8	28.9	5.1			-		
22-27	B'x1	3.3a	72.1	24.6	0.1	0.7	0.5	0.9	1.1	29.0	43.1	30.7	2.2		97.4	-		
27-34	B'x2	2.8a	71.5	25.7	tr	0.1	0.2	1.1	1.4	25.0	46.5	27.3	2.8			-		
34-45	B'x3	4.6a	71.5	23.9	-	0.1	0.2	1.9	2.4	25.5	46.0	29.5	2.2		96.7	-		
45-57	B'x4	8.5b	68.9	22.6	-	tr	0.2	3.5	4.8	25.7	43.2	33.6	3.7		94.2	-		
57-82	B'x5	16.2b	61.7	22.1	-	tr	0.1	6.8	9.3	33.1	28.6	48.9	6.9			-		
82-92	IIC1	53.6	29.5	16.9	-	tr	0.1	22.0	31.5	19.1	10.4	71.7	22.1		61.7	-		
92-105	IIC2	78.8	8.0	13.2	-	0.1	0.1	46.4	32.2	5.4	2.6	82.4	46.6		34.4	-		
105-115	IIIC3	91.6	6.2	2.2	-	tr	0.1	57.3	34.2	4.4	1.8	94.7	57.4		22.7	-		

Depth (In.)	6A1a Organic carbon c (Pct.)	6B1a Nitrogen (Pct.)	C/N		6E2a Carbonate as $CaCO_3$ (Pct.)	6C2a Ext. Iron as Fe (Pct.)	Bulk density: 4A1a Field-State (g/cc)	4A1d 1/3-Bar (g/cc)	4A1b Air-Dry (g/cc)	4D1 COLE	Water content: 4B4 Field-State (Pct.)	4B1c 1/3-Bar (Pct.)	4B2 15-Bar (Pct.)	4C1 1/3-to 15-Bar (in./in.)		pH: 8C1b Sat. Paste		8A1 (1:1)
0-3	1.91	0.142	13			0.9	1.45	1.41	1.42	0.003	3.2	23.5	6.2	0.24	0			5.3
3-6	0.52	0.065	8			1.2	1.45	1.40	1.44	0.010	6.6	22.4	7.3	0.21				5.0
6-14	0.28	0.049	6			1.6	1.38	1.32	1.36	0.010	9.3	24.1	9.8	0.19				4.7
14-19	0.16					2.3	1.36	1.32	1.37	0.014	10.1	25.2	9.9	0.20				5.0
19-22	0.12					2.5	1.50	1.47	1.50	0.007	8.1	22.3	8.5	0.20				5.0
22-27	0.11					1.6	1.62	1.58	1.66	0.017	14.6	22.2	11.7	0.17				4.8
27-34	0.10					1.5	1.54	1.48	1.60	0.024	17.6	23.9	12.4	0.17				4.6
34-45	0.09					1.4	1.53	1.45	1.58	0.028	16.9	23.5	12.2	0.17		4.9		5.1
45-57	0.11					1.1	1.58	1.44	1.61	0.040	13.2	25.9	10.8	0.22				6.9
57-82	0.11				-(s)	0.9	1.64	1.56	1.66	0.020	12.5	20.8	10.0	0.17				7.8
82-92	0.05				tr(s)	0.7							8.5					8.1
92-105	0.04				-(s)	0.6							6.6					8.0
105-115	0.01				-(s)	0.4							2.1					8.0

Depth (In.)	Extractable bases: 6N2a Ca	6O2a Mg	6P2a Na	5B1a 6Q2a K	Sum	6H1a Ext. Acidity	Cat. Exch. Cap.: 5A3a Sum Cations	5A1a NH_4 OAc	6G1d KCl-Ext. Al	8E1 Resistivity	8B1a Elec. Cond.	6F1a Sol. Na	5D2 Exch. Na	8B Water at Sat.	8D3 Ca/Mg	5F1 Ca Sat. (NH_4OAc)	Base saturation: 5C3 Sum Cations	5C1 NH_4 OAc
	meq/100 g									ohms-cm	mmhos/cm	me./l	Pct.	Pct.		Pct.	Pct.	Pct.
0-3	2.2	1.5	0.2	0.4	4.3	8.5	12.8	8.5	0.2						1.5	26	34	51
3-6	1.6	1.4	0.1	0.2	3.3	8.7	12.0	8.3	0.9						1.1	19	28	40
6-14	0.9	1.9	0.2	0.2	3.2	10.8	14.0	9.6	3.8							9	23	33
14-19	0.7	2.0	0.4	0.2	3.3	11.8	15.1	10.4	4.6							7	22	32
19-22	0.5	1.8	0.5	0.2	3.0	9.9	12.9	8.9	4.1							6	23	34
22-27	1.3	3.9	1.2	0.3	6.7	11.2	17.9	13.6	4.7						0.3	10	37	49
27-44	1.9	5.2	1.7	0.4	9.2	10.2	19.4	14.8	3.1						0.4	13	47	62
34-45	3.0	6.5	2.2	0.3	12.0	6.3	18.3	14.6	0.7	3800	0.35	2.9	14	47.5	0.5	21	66	82
45-57	3.8	6.3	2.6	0.3	13.0	3.0	16.0	13.2							0.6	29	81	98
57-82	4.6	5.3	2.8	0.3	13.0	1.9	14.9	12.3							0.9	37	87	106
82-92	4.6	4.7	2.5	0.2	12.0	1.5	13.5	11.0							1.0	42	89	109
92-105	3.7	3.8	2.0	0.2	9.7	1.4	11.1	8.9							1.0	42	87	109
105-115	1.5	1.3	0.8	0.1	3.7	0.3	4.0	3.1							1.2	48	93	119

Depth (In.)	Ratios to Clay: NH_4 OAc CEC	Ext. Iron	15-Bar Water	5A3b Bases Plus Al me/100g Clay	
0-3	0.70	0.07	0.51	37	
3-6	0.40	0.06	0.35	20	
6-14	0.37	0.06	0.38	27	
14-19	0.47	0.10	0.45	36	
19-22	0.53	0.15	0.50	42	
22-27	0.55	0.07	0.48	46	
27-34	0.58	0.06	0.48	48	
34-45	0.61	0.06	0.51	53	
45-57	0.58	0.05	0.48	58	
57-82	0.56	0.04	0.45	59	
82-92	0.65	0.04	0.50	71	
92-105	0.67	0.05	0.50	73	
105-115					

a. Fe-Mn nodules: > 50 percent (2-0.025 mm); 15-25 percent (0.25-0.05 mm).
b. Fe-Mn nodules: > 50 percent (2-0.025 mm); 1-5 percent (0.25-0.05 mm).
c. 5.4 kg/m^2 to 60 inches (Method 6A).

Classification: Fine-silty, mixed, thermic Glossic Fragiudalf.
Soil series: Grenada 1/.
Series classification: Same as pedon.

Pedon No.: S63LA-42-3.
Location: Richland Parish, Louisiana, 3 miles southwest of Dunn, 900 feet west and 900 feet north of intersection of State Road 609 and gravel road on south side of sec. 25, SE¼ SW¼, T. 17 N., R. 8 E.
Vegetation and use: Bermudagrass pasture (formerly cultivated).
Slope and land form: Near top of east slope on slightly convex ridge of about 1 percent on loess mantled Pleistocene terrace of very low relief.
Drainage and permeability: Moderately well drained; internal drainage slow; runoff medium; slow permeability.
Parent material: Silty material of very low sand content, very likely of aeolian origin over alluvium.
Climate: Precipitation 51 inches, Temperature 62 degrees F.
Sampled by: James DeMent, J. L. Walker, Billie Nutt, S. A. Lytle, October 31, 1963.
Described by: David F. Slusher and Tracey Weems, October 31, 1963.

Ap--0 to 8 cm (0 to 3 in.); brown (10YR 5/3) light silt loam; weak very fine granular structure adhering as massive or cloddy; friable; many roots; common fine soft strong brown aggregates; very strongly acid; clear smooth boundary.

B1--8 to 15 cm (3 to 6 in.); dark brown (7.5YR 4/4) light silt loam; massive (plow pan); hard; roots common; a few fine soft dark brown and hard black aggregates; a few brown mixings and wormcasts from horizon above; very strongly acid; clear smooth boundary.

B21--15 to 36 cm (6 to 14 in.); strong brown (7.5YR 5/6) medium silt loam; weak fine and medium subangular blocky; slightly hard, few roots; common fine pores; common fine soft dark brown aggregates; a few brown mixings and wormcasts; very strongly acid; clear smooth boundary.

B22--36 to 48 cm (14 to 19 in.); yellowish brown (10YR 5/6) grading to light yellowish brown (10YR 6/4) in lower part; medium silt loam; weak fine subangular blocky structure; slighty hard; a few roots; common fine pores; common fine soft dark brown and strong brown and a few hard black 2 to 5 mm aggregates; very strongly acid; gradual boundary.

A'2--48 to 56 cm (19 to 22 in.); light gray (10YR 7/2, 8/1 dry) light silt loam; massive in places but breaks readily to fine granules; soft; many hard strong brown and dark brown aggregates; very strongly acid; abrupt boundary tongues ¼ to ½ inch deep and 1/8 to 1/4 inch wide into underlying horizon.

B'x1--56 to 69 cm (22 to 27 in.); light gray (10YR 7/2) light silty clay loam; common fine distinct brown mottles; moderate fine subangular blocky; firm, slightly hard and brittle; common thin patchy clay films on peds and in fine pores; a few thin patchy white (10YR 8/1 dry) silt coatings on peds when dry; many fine hard brown and black aggregates; extremely acid; clear smooth boundary.

B'x2--69 to 86 cm (27 to 34 in.); brown (10YR 4/3) and yellowish brown (10YR 5/4) light silty clay loam; many fine distinct light gray (10YR 7/2) mottles; moderate medium subangular blocky structure; slightly hard, firm, and brittle; thin distinct patchy clay films on peds and in fine pores; a few thin patchy white (10YR 8/1 dry) silt coats on peds when dry; very strongly acid; gradual smooth boundary.

B'x3--86 to 114 cm (34 to 45 in.); yellowish brown (10YR 5/4) heavy silt loam; common fine faint very pale brown and dark brown mottles; weak coarse subangular blocky structure; slightly hard, firm, brittle; few thin patchy clay films on peds and in fine pores; a few soft dark brown aggregates; very strongly acid; gradual smooth boundary.

B'x4--114 to 145 cm (45 to 57 in.); yellowish brown (10YR 5/4) silt loam; common fine distinct very pale brown and few fine faint dark brown mottles; weak medium prismatic structure; slightly hard, firm, brittle; a few thin patchy clay films on prisms and in fine pores; distinct patchy black manganiferous stains along vertical cleavage planes; a few soft dark brown aggregates; slightly acid; gradual smooth boundary.

Classification: Fine-silty, mixed, thermic Glossic Fragiudalf.
Soil series: Grenada 1/.
Series classification: Same as pedon.
Pedon No.: S63LA-42-3.
Location: Richland Parish, Louisiana, 3 miles southwest of Dunn, 900 feet west and 900 feet north of intersection of State Road 609 and gravel road on south side of sec. 25, SE¼ SW¼, T. 17 N., R. 8 E.
Vegetation and use: Bermudagrass pasture (formerly cultivated).
Slope and land form: Near top of east slope on slightly convex ridge of about 1 percent on loess mantled Pleistocene terrace of very low relief.
Drainage and permeability: Moderately well drained; internal drainage slow; runoff medium; slow permeability.
Parent material: Silty material of very low sand content, very likely of aeolian origin over alluvium.
Climate: Precipitation 51 inches, Temperature 62 degrees F.
Sampled by: James DeMent, J. L. Walker, Billie Nutt, S. A. Lytle, October 31, 1963.
Described by: David F. Slusher and Tracey Weems, October 31, 1963.

B'x5--145 to 208 cm (57 to 82 in.); dark yellowish brown (10YR 4/4) silt loam; common fine distinct very pale brown mottles; weak coarse prismatic structure; hard, firm, brittle; a few faint patchy clay films; common black streaks in fine pores and on some prisms; many patchy very pale brown (10YR 7/3) silt coatings on prisms; mildly alkaline; clear smooth boundary.

IIC1--208 to 234 cm (82 to 92 in.); yellowish brown (10YR 5/4) loam; few fine faint pale brown mottles; massive; hard, weakly cemented; few thin patchy clay films in pores; few fine dark brown aggregates; moderately alkaline; gradual smooth boundary.

IIC2--234 to 267 cm (92 to 105 in.); dark brown (7.5YR 4/4) fine sandy loam; few fine streaks of pale brown (10YR 6/3); massive; hard weakly cemented; moderately alkaline; gradual smooth boundary.

IIC3--267 to 292 cm (105 to 115 in.); yellowish brown (10YR 5/4) loamy very fine sand; few fine faint pale brown (10YR 6/3) mottles; massive; slightly hard, weakly cemented; moderately alkaline.

Remarks: Munsell colors for moist soil unless otherwise indicated. Reaction by Hellige-Truog field kit. Soil dry when sampled.

1/ Pedon is slightly outside the range of the Grenada series (1/72) because the color of the B'x1 horizon is 2 values too high and 1 chroma too low.

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

SOIL CLASSIFICATION: Glossic Fragiudalf; fine-silty, mixed, thermic

SOIL Grenada SOIL Nos. S63La-42-6 LOCATION Richland Parish, Louisiana

SOIL SURVEY LABORATORY Lincoln, Nebraska LAB. Nos. 19240-19246 May, 1967

General Methods: 1A, 1B1b, 2A1, 2B

Depth (In.)	Horizon	Size class and particle diameter (mm) 3A1 — Total: Sand (2–0.05)	Total: Silt (0.05–0.002)	Total: Clay (< 0.002)	Sand: Very coarse (2–1)	Sand: Coarse (1–0.5)	Sand: Medium (0.5–0.25)	Sand: Fine (0.25–0.1)	Sand: Very fine (0.1–0.05)	Silt: 0.05–0.02	Silt: Int. III (0.02–0.002)	Int. II (0.2–0.02)	(2–0.1)		<0.074	Coarse fragments 2A2: > 2	2 – 19	19 – 76
		Pct. of < 2 mm														Pct.	Pct. of < 76mm	
6-18	B21	5.8a	66.0	28.2	0.2	0.4	0.3	2.0	2.9	21.8	44.2	26.3	2.9		96.0	-		
28-34	B'x1	8.0a	63.2	28.8	0.1	0.4	0.4	2.9	4.2	19.6	43.6	26.0	3.8			-		
34-60	B'x2	17.4a	59.6	23.0	0.1	0.3	0.4	6.1	10.5	20.8	38.8	35.7	6.9		89.5	-		
60-72	IIB'x	37.8a	40.7	21.5	-	0.1	0.4	10.0	27.3	24.4	16.3	58.6	10.5		81.2	-		
72-82	IIC	77.9	12.1	10.0	-	tr	0.2	46.9	30.8	9.3	2.8	80.4	47.1		39.0	-		
120-132	VC3	57.4	37.9	4.7	0.2	0.2	0.5	24.6	31.9	29.7	8.2	79.9	25.5		66.6	-		
147-204	VIIIC	63.8b	30.7	5.5	tr	0.1	0.2	2.4	61.1	26.5	4.2	89.7	2.7		85.5	-		

Depth (In.)	6A1a Organic carbon	6B1a Nitrogen	C/N	Carbonate as $CaCO_3$: 6E1b 6E2a <2mm	3A1a <0.002 mm	6C2a Ext. Iron as Fe	Bulk density				Water content		4B2 15-Bar		pH: 8C1b Sat. Paste		8C1a (1:1)
	Pct.	Pct.		Pct.	Pct.	Pct.	g/cc	g/cc	g/cc		Pct.	Pct.	Pct.				
6-18	0.25	0.050	5			1.8							11.7				4.7
28-34	0.12					1.7							13.0				4.7
34-60	0.09					1.1							11.1		5.8		6.0
60-72	0.08					1.0							10.6				7.5
72-82	0.05			-(s)		0.7							4.2				7.7
120-132	0.04			tr(s)	-	0.6							3.6				8.3
147-204	0.08			18	-	0.2							3.0				8.2

Depth (In.)	Extractable bases 5B1a: 6N2a Ca	6O2a Mg	6P2a Na	6Q2a K	Sum	6H1a Ext. Acidity	Cat. Exch. Cap.: 5A3a Sum Cations	5A1a NH_4OAc	6G1d KCl-Ext. Al	8E1 Resistivity	8B1a Elec. Cond.	6P1a Sol. Na	5D2 Exch. Na	8B Water at Sat.	8D3 Ca/Mg	5F1 Ca Sat. (NH_4OAc)	Base saturation: 5C3 Sum Cations	5C1 NH_4OAc
	meq/100 g									ohms-cm	mmhos/cm	me./l.	Pct.	Pct.		Pct.	Pct.	Pct.
6-18	1.4	2.4	0.2	0.3	4.3	11.5	15.8	11.0	4.0						0.6	13	27	39
28-34	1.4	6.9	1.6	0.3	10.2	9.0	19.2	14.4	2.2						0.2	10	53	71
34-60	2.3	7.4	2.6	0.2	12.5	3.8	16.3	12.9		2700	0.76	6.2	18	43.0	0.3	18	77	97
60-72	3.1	7.7	2.9	0.2	13.9	1.9	15.8	13.0							0.4	24	88	107
72-82	1.7	3.6	1.2	0.1	6.6	1.2	7.8	5.9							0.5	29	85	112
120-132																		
147-204																		

Depth (In.)	Ratios to Clay: NH_4OAc CEC	8D1 Ext. Iron	15-Bar Water c	5A3b Bases Plus Al me/100g Clay
6-18	0.39	0.06	0.41	29
28-34	0.50	0.06	0.45	43
34-60	0.56	0.05	0.48	54
60-72	0.60	0.05	0.49	65
72-82	0.59	0.07	0.42	66
120-132		0.13	0.77	
147-204		0.04	0.55	

a. Fe-Mn nodules: > 50 percent (2-0.25 mm); 15-25 percent (0.25-0.05 mm)
b. Mica-like flakes: > 50 percent (2-0.5 mm); carbonate: 1-5 percent (0.5-0.05 mm).
c. Some values for clay and 15-bar water content are low. As these values decrease, the relative error of the 15-bar to clay ratio increases. Anomalous appearing ratios may result from these low values.

Classification: Fine-silty, mixed, thermic Glossic Fragiudalf.
Soil series: Grenada 1/.
Series classification: Same as pedon.

Pedon No.: S63LA-42-6.
Location: Richland Parish, Louisiana, 1 mile east of Dehlco 640 feet west and 240 feet south of the northeast corner of sec. 9, T. 16 S., R. 7 E.
Vegetation and use: Pasture.
Slope and land form: Slightly convex slope of about ½ percent on loess mantled Pleistocene terrace of very low relief.
Drainage and permeability: Moderately well drained; internal drainage slow; runoff slow; slow permeability.
Climate: Precipitation 51 inches, Temperature 65 degrees F.
Parent material: Silty material of very low sand content very likely of aeolian origin over alluvium.
Sampled by: James DeMent, J. L. Walker, Lester Loftin and Billie Nutt, November 1, 1963.
Described by: David F. Slusher and Tracey Weems, November 1, 1963.

A--0 to 15 cm (0 to 6 in.); silt loam; strongly acid.

B21--15 to 46 cm (6 to 18 in.); yellowish brown (10YR 5/4) silt loam; strongly acid.

B22--46 to 58 cm (18 to 23 in.); yellowish brown (10YR 5/4) and pale brown (10YR 6/3) silt loam; strongly acid.

A1--58 to 71 cm (23 to 28 in.); light gray (10YR 7/2, 8/1 dry) silt; strongly acid.

B'x1--71 to 86 cm (28 to 34 in.); yellowish brown (10YR 5/6) and light gray (10YR 7/2) medium silty clay loam; strongly acid.

B'x2--86 to 152 cm (34 to 60 in.); yellowish brown (10YR 5/6) silt loam mottled with light brownish gray (10YR 6/2); medium acid.

IIB'x--152 to 183 cm (60 to 72 in.); brown (7.5YR 4/4) heavy loam or light clay loam; mildlyalkaline grading to moderately alkaline with depth.

IIC--183 to 208 cm (72 to 82 in.); yellowish brown (10YR 5/4) loamy fine sand; moderately alkaline.

IIIC--208 to 244 cm (82 to 96 in.); strong brown (7.5YR 5/6) loam; moderately alkaline (not sampled).

IVC--244 to 264 cm (96 to 104 in.); yellowish brown (10YR 5/4) very fine sandy loam or loamy fine sand; moderately alkaline.

VC1--264 to 295 cm (104 to 116 in.); light gray (10YR 7/2) and yellowish brown (10YR 5/4) light silt loam; moderately alkaline; calcareous.

VC2--295 to 305 cm (116 to 120 in.); pale brown (10YR 6/3) light silt loam; yellowish brown (10YR 5/4) mottles; moderately alkaline; calcareous.

VC3--305 to 335 cm (120 to 132 in.); yellowish brown (10YR 5/6) coarse silt loam or very fine sandy loam; moderately alkaline; calcareous.

VIC--335 to 366 cm (132 to 144 in.); brown (10YR 5/3) loamy fine sand; moderately alkaline; calcareous.

VIIC--366 to 373 cm (144 to 147 in.); light brownish gray (10YR 7/2) light silty clay loam; common fine faint pinkish gray mottles.

VIIIC--373 to 512 cm (147 to 204 in.); grayish brown loamy very fine sand.

Remarks: Sampled and described from bucket auger. Munsell colors for moist soils. Reaction by Hellige-Troug field kit. Water table at 152 inches.

1/ Pedon is slightly outside the range of the Grenada series (1/72) because the B'x2 horizon has 18 percent exchangeable sodium. Soil lacks physical properties associated with Natraqualfs.

SOIL SURVEY LABORATORY Lincoln, Nebr. Aug., 1958

SOIL TYPE Series not Designated **LOCATION** Beauregard Parish, Louisiana

SURVEY NOS. 857La-6-1 **LAB. NOS.** 7096-7103

DEPTH INCHES	HORIZON	1B1a VERY COARSE SAND 2-1	COARSE SAND 1-0.5	MEDIUM SAND 0.5-0.25	FINE SAND 0.25-0.10	VERY FINE SAND 0.10-0.05	SILT 0.05-0.002	CLAY < 0.002	3A1 0.2-0.02	0.02-0.002	2A2 > 2	TEXTURAL CLASS
		PARTICLE SIZE DISTRIBUTION (in mm.) (per cent)										
0-2½	A1	0.4a	0.6a	0.2b	3.1b	17.0b	71.7	7.0	62.6	28.6	Tr.	sil
2½-6	A2	0.5a	0.6a	0.2b	2.5b	16.1b	71.0	9.1	60.5	28.7	Tr.	sil
6-10	B1	0.8a	0.4a	0.2b	2.2b	14.8b	65.5	16.1	55.9	26.2	Tr.	sil
10-19	B21t	0.7a	0.8a	0.2c	1.8c	13.3c	63.3	19.9	50.5	27.6	Tr.	sil
19-29	B&A1	0.5a	0.6a	0.2c	1.8c	12.3c	63.1	21.5	48.4	28.5	Tr.	sil
29-41	B&A2	0.2a	0.5a	0.2c	1.9c	13.0c	61.8	22.4	48.2	28.2	Tr.	sil
41-50	B22t	0.1a	0.2a	0.1c	1.4c	10.3c	52.8	35.1	39.9	24.4	Tr.	sicl
50-72+	B3	0.1a	0.1a	-	0.5c	4.8c	54.6	39.9	27.1	32.7	-	sicl/sic

pH 8C1a 1:1	1:5	1:10	ORGANIC MATTER 6A1a ORGANIC CARBON %	6B1a NITROGEN %	C/N			$CaCO_3$ equivalent %		MOISTURE TENSIONS 1/10 ATMOS. %	1/3 ATMOS. %	4B2 15 ATMOS. %
5.6			2.10	0.086	24.4							5.0
5.4			0.53	0.030	18							4.3
5.3			0.26	0.022	12							7.2
5.3			0.16	0.019	8							8.4
5.5			0.10	0.016	6							8.7
5.4			0.08									9.1
5.5			0.10									14.0
5.7			0.06									16.7

5A1a CATION EXCHANGE CAPACITY NH_4Ac	EXTRACTABLE CATIONS 6N2b Ca	6O2b Mg	6H1a H	6P2a Na	5B1a 6Q2a K	BASE SAT. % NH_4Ac EXCH. 5C1	Base Sat. % on Sum + H 5C3	Sum - H 5B1a	Sum + H 5A3a	Ca/Mg		
← milliequivalents per 100g. soil →												
9.6	2.4	0.8	7.3	0.1	0.1	35	32	3.4	10.7	3.0		
5.3	0.8	0.6	4.5	0.1	-	28	25	1.5	6.0	1.3		
7.0	0.9	1.1	5.7	0.2	0.1	33	29	2.3	8.0	0.8		
8.0	0.9	1.7	6.9	0.2	0.1	36	30	2.9	9.8	0.5		
8.3	1.1	1.5	6.9	0.2	0.1	35	30	2.9	9.8	0.7		
8.8	1.2	1.5	7.4	0.2	0.1	34	29	3.0	10.4	0.8		
13.4	2.9	3.8	8.2	0.5	0.2	55	47	7.4	15.6	0.8		
22.8	9.0	9.5	5.0	1.3	0.5	89	80	20.3	25.3	0.9		

a. Many, smooth light brown concr. (Fe-Mn?)
b. Common, smooth light brown concr. (Fe-Mn?)
c. Few, smooth light brown concr. (Fe-Mn?)

Classification: Fine-silty, siliceous, thermic Aquic Glossudalf.
Soil series: Not designated 1/.

Pedon No.: S57LA-6-1.
Location: Beauregard Parish, Louisiana 1½ mile south of Longville on U.S. Hwy. 171, east 1.6 miles on oilfield access road, 100 feet south of road; NW¼SE¼ sec. 32, T. 5 S., R. 8 W.
Vegetation: At time of settlement longleaf pine. Present vegetation, scattered longleaf, slash and loblolly pine, blackjack and post oaks, and wax myrtle; little bluestem, three awn, and muhlygrasses, asters and orchid forbs.
Relief: Gently undulating Pleistocene terrace. Slope: two percent northeast.
Drainage: Surface runoff moderate; internal drainage, moderately well.
Permeability: Slow.
Parent material: Pleistocene alluvium.
Climate: Precipitation 53 inches, Temperature 67 degrees F.
Sampled by: D. L. Fontenot, J. Allen, L. L. Loftin, Warren Cockerham and Francis Ezernack.
Described by: Marvin Lawson, 11/5/57. Horizons redesignated by David F. Slusher, 8/14/75.

A1--0 to 6 cm (0 to 2½ in.); very dark grayish brown (10YR 3/2) silt loam; weak very fine subangular blocky structure; very friable; many fine roots; many wormcasts; charcoal fragments common, medium acid; clear wavy boundary.

A2--6 to 15 cm (2½ to 6 in.); light yellowish brown (10YR 6/4) silt loam; few spots of pale brown (10YR 6/3) that does not appear to be due to reduction; weak fine subangular blocky structure; very friable; very porous, but few tubular pores; fine roots common; many wormcasts; strongly acid; clear wavy boundary projects several inches into lower horizons, apparently in old root channels or animal burrows, in places.

B1--15 to 25 cm (6 to 10 in.); pale brown (10YR 6/3) light silt clay loam with about 10 percent medium prominent mottles of brownish yellow (10YR 6/8); weak fine angular blocky structure; friable; tubular pores common and lined with thin clay film; scattered clay films on peds; few fine hard concretions; common roots; wormcasts common; very strongly acid; gradual wavy boundary.

B21t--25 to 48 cm (10 to 19 in.); brownish yellow (10YR 6/6) silty clay loam; many medium and coarse mottles of light gray (10YR 7/2) and occasional red mottles where soft concretions are broken; weak fine angular and subangular blocky structure; friable; slightly plastic; few fine roots; few fine hard concretions; some friable concretions red internally; few tubular pores, lined with clay film; clay skins scattered on aggregates; very strongly acid; diffuse wavy boundary.

B&A1--48 to 74 cm (19 to 29 in.); light gray (10YR 7/1) silty clay loam; common coarse red (10R 4/6) and medium reddish yellow (7.5YR 6/6) mottles; red seams included in soft friable concretionary material; weak medium angular blocky structure; friable; slightly plastic; few tubular pores with thin clay lining; few patchy clay skins; occasional fine roots; very strongly acid; gradual wavy boundary.

B&A2--74 to 104 cm (29 to 41 in.); light gray (10YR 7/1) silty clay loam; numerous medium reddish yellow (7.5YR 6/6) mottles; few coarse red (10R 4/6) mottles that are part of soft concretionary material; weak medium angular blocky structure; friable, slightly plastic; few tubular pores with thin clay lining; few patchy clay skins; occasional fine roots; very strongly acid; gradual wavy boundary.

B22t--104 to 127 cm (41 to 50 in.); red (2.5YR 5/8) silty clay loam, masses interspersed with masses of light gray (5Y 7/1) clay, clay sections containing some mottles of yellowish brown; medium and coarse angular blocky structure; red masses firm to friable; gray masses plastic; red soil makes about two-thirds of the soil mass; red soil is more porous than the clay soil; medium tubular pores with clay lining are common; no roots were observed; strongly acid; diffuse wavy boundary.

B3--127 to 183 cm (50 to 72 in.); light gray (5Y 7/1) clay; medium and coarse mottles of red (10YR 5/6) through the soil mass; massive; sticky and plastic; few black streaks, apparently organic matter at 60 inches. Medium acid at 72 inches. At 86 inches brown (7.5YR 5/4) clay, practically unmottled; medium acid.

Remarks: Munsell colors are for moist soil. There were filled channels 1 to 6 inches in diameter, 1 to 2 feet apart, extending 2 to 4 feet into the profile. The channel fill was silt loam from the A2. Features at depths below 60 inches were determined by bucket auger.

1/ Sampled as a representative of the Beauregard series. (Fine-silty, siliceous, thermic; Plinthaquic Paleudults.)

SOIL SURVEY LABORATORY Beltsville, Maryland

SOIL TYPE Series not Designated **LOCATION** Bossier Parish, Louisiana

SURVEY NOS. S55La-8-1 **LAB. NOS.** 56460 - 56465

DEPTH INCHES	HORIZON	1B1a VERY COARSE SAND 2-1	COARSE SAND 1-0.5	MEDIUM SAND 0.5-0.25	FINE SAND 0.25-0.10	VERY FINE SAND 0.10-0.05	SILT 0.05-0.002	CLAY < 0.002	0.2-0.02	3A1 0.02-0.002	2A2 > 2	TEXTURAL CLASS
		PARTICLE SIZE DISTRIBUTION (in mm.) (per cent)										
0-5	Ap	0.0	0.2	0.2	25.4	36.8	32.8	4.6	83.9	8.8	5	vfsl
5-8	B21t	0.1	0.2	0.2	20.9	31.1	37.6	9.9	73.0	14.7	4	vfsl/l
8-18	B22t	0.0	0.1	0.0	20.3	31.8	38.2	9.6	73.5	15.4	21	vfsl/l
18-31	B23t	0.0	0.1	0.2	18.8	28.0	39.1	13.8	68.9	15.3	7	l
31-43	B24t	0.0	0.0	0.1	20.2	31.0	35.0	13.7	69.4	15.2	39	l
43-49+	B3	0.0	0.0	0.1	22.1	32.7	33.7	11.4	75.6	11.3	31	vfsl

8C1a pH 1:1	pH 1:5	pH 1:10	6A1a ORGANIC CARBON %	NITROGEN %	C/N	EST% SALT (BUREAU CUP)	ELECTRICAL CONDUCTIVITY EC×10³ MILLIMHOS PER CM @25°C.	$CaCO_3$ equivalent %	GYPSUM mm./100g. SOIL	MOISTURE TENSIONS 1/10 ATMOS. %	1/3 ATMOS. %	15 ATMOS. %
6.0			0.37									
5.4			0.15									
5.6			0.15									
5.5			0.06									
5.3			0.04									
5.2			0.02									

5A1a CATION EXCHANGE CAPACITY (Sum)	6N2b Ca	6O2b Mg	6H1a H	6P2a Na	6Q2a K	BASE SAT. % 5C3	SATURATION EXTRACT SOLUBLE Na	K				MOISTURE AT SATURATION %
	EXTRACTABLE CATIONS 5B1a milliequivalents per 100g. soil →						← milliequivalents per liter →					
3.2	1.0	0.4	1.5	< 0.1	0.3	53						
4.3	1.3	0.3	0.3	< 0.1	0.4	46						
4.0	1.5	0.5	1.7	< 0.1	0.3	58						
5.2	1.9	1.1	1.9	< 0.1	0.3	63						
5.1	2.0	0.9	1.9	< 0.1	0.3	63						
4.4	1.5	0.9	1.7	< 0.1	0.3	61						

Classification: Coarse-loamy, siliceous, thermic Typic Hapludalf.
Soil series: Not designated 1/.

Pedon No.: S55LA-8-1.
Location: Bossier Parish, La., 12 miles southeast of Bossier City, 100 feet south of farm road, .3 mile west of Highway 157, in NW¼NE¼, NE¼NW¼ sec. 4, T. 16 N., R. 11 W.
Vegetation and use: Native vegetation was oak, hickory, sweetgum, blackgum and loblolly and shortleaf pine. Has been in cultivation many years, in corn in 1955. Reported to have had 500 pounds 8-8-8 fertilizer. When in cotton in previous years was sprayed several times each year with sulfur insecticides.
Slope and land form: Sample site was a low ridge surrounded by Wrightsville silt loam and other planosols.
Parent material: River terrace of the Montgomery formation of Pleistocene age.
Climate: Precipitation 46 inches, Temperature 64 degrees F.
Collected and described by: Marvin Lawson, S. A. Lytle, James DeMent, Bruce Chaffin and John Millet, November 8, 1955. Horizon designations reinterpreted by David F. Slusher, November 28, 1975.

Ap--0 to 13 cm (0 to 5 in.); dark brown (7.5YR 4/4) fine sandy loam; weak medium and fine subangular blocky structure; very friable; medium acid; abrupt wavy boundary.

B21t--13 to 20 cm (5 to 8 in.); yellowish red (5YR 4/6) fine sandy loam; medium and coarse subangular blocky structure; firm; a few small dark brown hard concretions; traffic pan; medium acid; clear wavy boundary.

B22t--20 to 46 cm (8 to 18 in.); yellowish red (5YR 4/6) loam or fine sandy loam; few mottles of light reddish brown (5YR 6/3); fine and medium moderate subangular blocky structure; very friable; some small holes and small brown hard concretions; medium acid; diffuse smooth boundary.

B23t--46 to 79 cm (18 to 31 in.); yellowish red (5YR 4/6); fine sandy loam; about 10 percent light reddish brown (5YR 6/3) mottling; medium moderate subangular blocky structure; very friable; some footholes and a few small hard brown concretions; medium acid; diffuse smooth boundary.

B24t--79 to 109 cm (31 to 43 in.); yellowish red (5YR 4/6) fine sandy loam; a few brown spots and 10 percent light reddish brown (5YR 6/3) mottling; moderate medium subangular blocky structure; slightly brittle dry, very friable, moist; few medium and fine small brown concretions; small rootholes common; medium acid; clear smooth boundary.

B3--109 to 124 cm (43 to 49 in.); yellowish red (5YR 4/6) very fine sandy loam; 30 percent coarse mottles of brown (7.5YR 5/4); weak medium subangular blocky structure; very friable; some medium brown and black hard concretions; neutral.

Remarks: Munsell colors for moist soils.

1/ Sampled as a representative of the Cahaba series. (Fine-loamy, siliceous, thermic; Typic Hapludults.)

SOIL URVEY LABORATORY Beltsville, Maryland

SOIL TYPE Series not Designated **LOCATION** Bossier Parish, Louisiana

SURVEY NOS. S55La-8-2 **LAB. NOS.** 56466 - 56471

DEPTH INCHES	HORIZON	1B1b PARTICLE SIZE DISTRIBUTION (in mm.) (per cent) VERY COARSE SAND 2-1	COARSE SAND 1-0.5	MEDIUM SAND 0.5-0.25	FINE SAND 0.25-0.10	VERY FINE SAND 0.10-0.05	SILT 0.05-0.002	CLAY < 0.002	3A1 0.2-0.02	0.02-0.002	2A2 > 2	TEXTURAL CLASS
0-5	Ap	0.0	0.1	0.6	46.3	29.4	20.6	3.0	77.1	8.3	4	lfs
5-9	B1	0.0	0.0	0.6	41.3	25.0	24.7	8.4	68.8	13.4	1	fsl
9-16	B21t	0.0	0.1	0.6	38.6	24.0	24.0	12.7	64.6	13.1	7	fsl
16-29	B22t	0.0	0.1	0.6	37.4	23.6	23.0	15.3	63.5	12.7	8	fsl
29-42	B23t	0.0	0.2	0.6	39.0	24.3	22.5	13.4	65.8	12.4	22	fsl
42-52	B3	0.0	0.1	0.6	42.6	26.0	18.7	12.0	69.7	9.0	24	fsl

8C1a pH 1:1	1:5	1:10	ORGANIC MATTER 6A1a ORGANIC CARBON %	NITROGEN %	C/N	EST% SALT (BUREAU CUP)	ELECTRICAL CONDUCTIVITY EC×10³ MILLIMHOS PER CM @25°C.	$CaCO_3$ equivalent %	GYPSUM me./100g. SOIL	MOISTURE TENSIONS 1/10 ATMOS. %	1/3 ATMOS. %	15 ATMOS. %
5.6			0.18									
5.5			0.15									
5.5			0.11									
5.2			0.06									
5.2			0.04									
5.4			0.02									

5A1a CATION EXCHANGE CAPACITY Sum	EXTRACTABLE CATIONS 6N2b Ca	6O2b Mg	6H1a H	6P2a Na	5B1a 6Q2a K	BASE SAT. % 5C3	SATURATION EXTRACT SOLUBLE Na	K				MOISTURE AT SATURATION %
	milliequivalents per 100g. soil						milliequivalents per liter					
3.0	0.7	0.2	1.7	<0.1	0.4	43						
4.3	1.3	0.3	2.3	<0.1	0.4	46						
4.3	1.3	0.4	2.3	<0.1	0.3	46						
6.1	2.7	0.7	2.5	<0.1	0.2	59						
5.5	2.2	0.8	2.3	<0.1	0.2	58						
4.4	1.7	0.7	1.7	<0.1	0.3	61						

Classification: Coarse-loamy, siliceous, thermic Typic Hapludalf.
Soil series: Not designated 1/.

Pedon No.: S55LA-8-2.
Location: Bossier Parish, Louisiana, 7.2 miles east of Plain Dealing, south of Highway 2, located in NW¼NW¼, NW¼NW¼ sec. 14, T. 22 N., R. 12 W.
Vegetation and use: Cropland, in cotton, sprayed with sulfur-carrying insecticides. Fertilized.
Climate: Precipitation 47 inches, Temperature 65 degrees F.
Parent material: River terrace of the Montgomery formation of Pleistocene age.
Collected and described by: Marvin Lawson, S. A. Lytle, James DeMent, Bruce Chaffin and John Millet, November 8, 1955. Horizon designations reinterpreted by David F. Slusher, November 28, 1975.

Ap--0 to 13 cm (0 to 5 in.); dark brown (10YR 4/3) fine sandy loam; weak medium angular blocky structure; very friable; medium acid; abrupt smooth boundary.

B1--13 to 23 cm (5 to 9 in.); dark reddish brown (5YR 3/3) fine sandy loam; massive firm; common; fine roots and small brown hard concretions; traffic pan; medium acid; clear wavy boundary.

B21t--23 to 41 cm (9 to 16 in.); yellowish red (5YR 4/6) fine sandy loam; fine and medium moderate subangular blocky structure; very friable; few dark hard concretions; numerous fine roots; medium acid; diffuse smooth boundary.

B22t--41 to 74 cm (16 to 29 in.); yellowish red (5YR 4/6) sandy clay loam; few faint mottles of light color; moderate medium and coarse angular blocky structure; firm to very firm; few fine roots; few medium black hard concretions; medium acid; diffuse smooth boundary.

B23t--74 to 107 cm (29 to 42 in.); yellowish red (5YR 4/6) sandy clay loam; mottled 4 percent with light brown (7.5YR 6/4); moderate medium to coarse subangular blocky structure; firm; few fine roots and small dark hard concretions; medium acid; gradual wavy boundary.

B3--107 to 132 cm (42 to 52 in.); yellowish red (5YR 4/8) fine sandy loam; 10 percent medium mottles of yellowish red (5YR 5/8); weak moderate subangular blocky structure; very friable; slightly acid.

Remarks: Munsell colors for moist soil.

1/ Sampled as a representative of the Cahaba series. (Fine-loamy, siliceous, thermic; Typic Hapludults.)

SOIL CLASSIFICATION-TYPIC HAPLUDALF
FINE-SILTY , MIXED , THERMIC
SERIES - - - - - - -MEMPHIS

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE, MTSC
NATIONAL SOIL SURVEY LABORATORY
LINCOLN, NEBRASKA

SOIL NO - - - - - - 69LA-23-10 IBERIA PARISH

GENERAL METHODS- - -1A,1B1B,2A1,2B SAMPLE NOS. 69L165-69L167

DEPTH CM	HORIZON	PARTICLE SIZE ANALYSIS, LT 2MM, 3A1, 3A1A, 3A1B (PCT LT 2MM) SAND 2-.05	SILT .05-.002	CLAY LT .002	FINE CLAY LT .0002	VCOS 2-1	CORS 1-.5	MEDS .5-.25	FNES .25-.10	VFNS .10-.05	COSI .05-.02	FNSI .02-.002	VFSI .005-.002	SAND 2-.10	INTR II .2-.02	FINE CLAY TO CLAY PCT	NON-CO3-CLAY PCT	RATIO 8D1 15-BAR TO CLAY
15-38	B21T	.5	70.2	29.3		.0	.0	.1	.3	.2	31.2	39.0		.3	31.5			.42
64-91	B23T	.9	75.6	23.5	12.3	.0	.1	.2	.4	.3	34.8	40.8		.6	35.3	52		.51
155-170	2B23T	5.5	73.3	21.2	12.4	.0	.2	1.1	2.4	1.9	24.4	48.9		3.6	27.5	58		.51

DEPTH CM	(PARTICLE SIZE ANALYSIS, MM, 3B, 3B1, 3B2) VOL. GT 2 PCT	VOL. GT 75 PCT	WEIGHT 75-20 PCT	20-5 PCT	5-2 PCT	LT 75 LT .074	20-2 LT20	BULK DENSITY 4A1D 1/3-BAR G/CC	4A1H OVEN DRY G/CC	4D1 COLE	4B1C 1/10 BAR PCT	4B1C 1/3-BAR PCT	4B2 15 BAR PCT	4C1 WRD CM/CM	CARBONATE 6E1B LT 2 PCT	3A1A LT .002 PCT	PH 8C1A 1/1 H2O	8C1E 1/2 CACL
15-38	0	0	0	0	0	100	0						12.4					
64-91	0	0	0	0	0	99	0						12.0					
155-170	0	0	0	0	0	96	0						10.8					

CLAY MINERALOGY (7A2C).
064-91 MI3 KK2 VR1 MT1.
155-170 MI2 KK2 MT1 VR1.
COMMENTS: CLAYS ARE RATHER POORLY ORDERED. CLAY MINERALOGY IS MIXED.
RELATIVE AMOUNTS: (X-RAY) 5 = DOMINANT 4 = ABUNDANT 3 = MODERATE 2 = SMALL 1 = TRACE.
MINERAL CODE: MT = MONTMORILLONITE MI = MICA KK = KAOLINITE VR = VERMICULITE

Classification: Fine-silty, mixed, thermic Typic Hapludalf.
Soil series: Memphis.
Series classification: Same as pedon.

Pedon No.: S69LA-23-10.
Location: Iberia Parish, Louisiana, about 1.2 miles south of Avery Island toll gate, east end of Spanish Land Grant sec. 56, T. 13 S., R. 4 E., 400 feet south of road junction, top of hill between two lakes.
Vegetation and use: Pasture, bermudagrass.
Slope and land form: Crest of ridge about two percent slope on drainage divide, 85 feet elevation. Circular island (salt dome) surrounded by marsh.
Drainage and permeability: Well drained, moderately permeable.
Climate: Precipitation 60 inches, Temperature 68 degrees F.
Sampled by: David Slusher, Warren Lynn, and Henry Clark.
Described by: Warren L. Cockerham, 2/13/69.

Ap--0 to 15 cm (0 to 6 in.); brown (7.5YR 4/4) silt loam; weak medium coarse subangular blocky that parts to weak fine granular structure; many fine grass roots; gradual smooth boundary.

B21t--15 to 38 cm (6 to 15 in.); dark brown (7.5YR 4/4) silty clay loam; moderate medium subangular blocky structure; slightly firm; few very fine roots; few fine pores; distinct discontinuous clay films on vertical and horizonatal surfaces of peds; gradual smooth boundary.

B22t--38 to 64 cm (15 to 25 in.); brown (7.5YR 5/4) ped interiors and dark brown (7.5YR 4/4) ped exteriors silt loam; moderate medium subangular blocky structure; friable; few very fine roots; few fine pores; few very thin bleached silt coats on some peds; distinct patchy clay films on faces of peds and in pores; gradual smooth boundary.

B23t--64 to 91 cm (25 to 36 in.); same as above with slightly more very fine sand (less than 5 percent).

B31--91 to 155 cm (36 to 61 in.); yellowish brown (10YR 5/4) silt loam; weak medium blocky structure; friable; distinct discontinuous clay films in pores, few thin patches of uncoated silt, less than 5 percent very fine sand.

IIB32--155 to 170 cm (61 to 67 in.); yellowish brown (10YR 5/6) silt loam; common fine faint pale brown and light gray mottles; weak coarse subangular blocky structure; friable; common fine and medium black concretions; about 12 percent very fine sand.

IIB33--170 to 196 cm (67 to 77 in.); same as above. Separated for sampling.

IIIC--196 to 229 cm (77 to 90 in.); olive (5Y 5/3) clay; massive; firm.

Remarks: Munsell colors for moist soil.

SOIL CLASSIFICATION-TYPIC HAPLUDALF
FINE-SILTY, MIXED, THERMIC
SERIES - - - - - - -MEMPHIS

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE, MTSC
NATIONAL SOIL SURVEY LABORATORY
LINCOLN, NEBRASKA

SOIL NO - - - - - - S69LA-23-11 IBERIA PARISH

GENERAL METHODS- - -1A,1B1B,2A1,2B SAMPLE NOS. 69L168-69L170

DEPTH CM	HORIZON	PARTICLE SIZE ANALYSIS, LT 2MM, 3A1, 3A1A, 3A1B (PCT LT 2MM) SAND 2-.05	SILT .05-.002	CLAY LT .002	FINE CLAY LT .0002	VCOS 2-1	CORS 1-.5	MEDS .5-.25	FNES .25-.10	VFNS .10-.05	COSI .05-.02	FNSI .02-.002	VFSI .005-.002	SAND 2-.10	INTR II .2-.02	FINE CLAY TO CLAY	NON-CO3-CLAY	RATIO 8D1 15-BAR TO CLAY
10-46	B21T	.4	74.5	25.1		.0	.0	.0	.2	.2	32.4	42.1		.2	32.8			.39
81-117	B32T	.5	79.7	19.8		.0	.0	.0	.3	.2	35.5	44.2		.3	36.0			.43
191-231	2B3S	16.2	64.2	19.6		.7	1.9	.9	3.5	9.2	31.8	32.4		7.0	43.8			.45

DEPTH CM	PARTICLE SIZE ANALYSIS, MM, 3B, 3B1, 3B2 VOL. GT 2 PCT	VOL. GT 75 PCT	WEIGHT 75-20	20-5	5-2	LT .074	20-2 PCT LT20	BULK DENSITY 4A1D 1/3-BAR G/CC	4A1H OVEN DRY G/CC	4D1 COLE	WATER CONTENT 4B1C 1/10 BAR PCT	4B1C 1/3-BAR PCT	4B2 15 BAR PCT	4C1 WRD CM/CM	CARBONATE 6E1B LT 2 PCT	3A1A LT .002 PCT	PH 8C1A 1/1 H2O	8C1E 1/2 CACL
10-46	0	0	0	0	0	100	0						9.8					
81-117	0	0	0	0	0	100	0						8.5					
191-231	0	0	0	0	0	89	0						8.8					

Classification: Fine-silty, mixed, thermic Typic Hapludalf.
Soil series: Memphis.
Series classification: Same as pedon.

Pedon No.: S69LA-23-11.
Location: Iberia Parish, Louisiana, Avery Island, 1 mile southeast of toll gate; east end of Spanish Land Grant sec. 55, T. 13 S., R. 4 E., 100 feet south of oil well on north facing slope.
Vegetation and use: Pasture, native grass.
Slope and land form: Five percent slope, 85 feet elevation, 500 feet north of toe slope on circular island (salt dome) surrounded by marshland.
Drainage and permeability: Well drained, moderately permeable.
Climate: Precipitation 60 inches, Temperature 68 degrees F.
Sampled by: David Slusher, Warren Lynn, Henry Clark.
Described by: Warren L. Cockerham, 2/13/69.

Ap--0 to 10 cm (0 to 4 in.); brown (7.5YR 5/4) silt loam; weak fine granular structure; friable; many fine roots; abrupt smooth boundary.

B21t--10 to 46 cm (4 to 18 in.); dark brown (7.5YR 4/4) silty clay loam; moderate medium subangular blocky structure; friable; few fine roots; few fine pores; distinct discontinuous clay films on faces of peds and in pores; less than 5 percent very fine sand; gradual smooth boundary.

B31t--46 to 81 cm (18 to 32 in.); dark brown (7.5YR 4/4) silt loam; weak coarse subangular blocky structure; friable; few fine roots; few fine pores; distinct discontinuous clay films in pores; less than 5 percent very fine sand; gradual smooth boundary.

B32t--81 to 117 cm (32 to 46 in.); yellowish brown (10YR 5/6) silt loam; weak coarse subangular blocky structure; friable; few fine pores; few clay films in pores; gradual smooth boundary.

B33t--117 to 168 cm (46 to 66 in.); yellowish brown (10YR 5/6) silt loam; weak coarse angular blocky structure; friable; few pores lined with clay; few fine and medium black concretions; less than 5 percent very fine sand.

I-IIB34--168 to 191 cm (66 to 75 in.); yellowish brown (10YR 5/4) silt loam; few medium distinct pale brown (10YR 6/3) mottles; massive; friable; about 8 percent very fine sandy loam.

IIB35--191 to 231 cm (75 to 91 in.); yellowish brown (10YR 5/6) silt loam; massive; slightly firm; few fine and medium black and brown concretions; few black stains; about 15 percent very fine sand.

Remarks: Munsell colors for moist soil.

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

SOIL CLASSIFICATION: Ultic Hapludalf; fine-silty, mixed, thermic

SOIL Dexter SOIL Nos. S63La-42-4 LOCATION Richland Parish, Louisiana

SOIL SURVEY LABORATORY Lincoln, Nebraska LAB. Nos. 19247-19251 May, 1967

General Methods: 1A, 1B1b, 2A1, 2B

Depth (In.)	Horizon	Size class and particle diameter (mm) 3A1 — Total: Sand (2–0.05)	Total: Silt (0.05–0.002)	Total: Clay (< 0.002)	Sand: Very coarse (2–1)	Sand: Coarse (1–0.5)	Sand: Medium (0.5–0.25)	Sand: Fine (0.25–0.1)	Sand: Very fine (0.1–0.05)	Silt: 0.05–0.02	Silt: Int III (0.02–0.002)	Silt: Int. II (0.2–0.02)	(2–0.1)		<0.074	Coarse fragments 2A2: > 2 Pct.	2–19 (Pct. of < 76mm)	19–76 (Pct. of < 76mm)
		Pct. of < 2 mm																
8-32	B2t	17.7	52.8	29.5	-	0.1	1.4	8.1	8.1	19.3	33.5	32.1	9.6		87.1	-		
32-48	IIB3	42.4	38.5	19.1	-	0.1	3.0	18.3	21.0	18.2	20.3	49.7	21.4		70.4	-		
48-70	IIC1	52.8	33.2	14.0	-	0.2	4.2	25.6	22.8	18.5	14.7	55.3	30.0		61.1	-		
86-130	IIIC	69.1	27.8	3.1	-	0.1	1.6	13.1	54.3	20.4	7.4	81.8	14.8		66.6	-		
130-150	IVC	92.9	6.4	0.7	-	0.2	6.2	69.9	16.6	5.1	1.3	45.1	76.3		17.3	-		

Depth (In.)	6A1a Organic carbon Pct.	6B1a Nitrogen Pct.	C/N		Carbonate as $CaCO_3$ Pct.	6C2a Ext. Iron as Fe Pct.	Bulk density g/cc	g/cc	g/cc		Water content Pct.	Pct.	4B2 15-Bar Pct.			pH	8C1a (1:1)
8-32	0.17	0.048				1.7							11.8				4.7
32-48	0.09					1.1							7.3				5.0
48-70	0.07					0.9							5.9				4.9
86-130	0.05					0.6							3.3				5.2
130-150	0.03					0.4							1.4				5.5

Depth (In.)	Extractable bases 6N2a Ca	6O2a Mg	6P2a Na	5B1a 6Q2a K	Sum	6H1a Ext. Acidity	Cat. Exch. Cap. 5A3a Sum Cations	5A1a NH_4OAc	6G1d KCl-Ext. Al				8D3 Ca/Mg	5F1 Ca Sat. (NH_4OAc)	Base saturation 5C3 Sum Cations	5C1 NH_4OAc
	meq/100 g													Pct.	Pct.	Pct.
8-32	2.4	3.8	0.2	0.3	6.7	9.0	15.7	11.7	2.0				0.6	21	43	57
32-48	1.7	2.9	0.3	0.3	5.2	6.3	11.5	7.6	1.5				0.6	22	45	68
48-70	1.0	2.3	0.2	0.2	3.7	5.4	9.1	6.5	1.4				0.4	15	41	57
86-130						2.5			0.3							
130-150																

Depth (In.)	Ratios to Clay: NH_4OAc CEC	Ext. Iron	8D1 15-Bar Water	5A3b Bases Plus Al me/100g Clay
8-32	0.40	0.06	0.40	29
32-48	0.40	0.06	0.38	35
48-70	0.46	0.06	0.42	36
86-130				
130-150				

Classification: Fine-silty, mixed, thermic Ultic Hapludalf.
Soil series: Dexter.
Series classification: Same as pedon.

Pedon No.: S63LA-42-4.
Location: Richland Parish, Louisiana, northwest edge of Archibald, 200 feet northwest of oil or gas substation, 300 feet west and 220 feet north of the southeast corner, SW¼ SW¼ sec. 20, T. 16 N., R. 7 E.
Vegetation and use: Idle (formerly cultivated).
Slope and land form: ½ percent convex slope on Pleistocene terrace of very low relief.
Drainage and permeability: Well drained; internal drainage medium; runoff slow; moderately slow permeability.
Parent material: Silty material of very low sand content, alluvial or aeolian origin over alluvium.
Climate: Precipitation 51 inches, Temperature 65 degrees F.
Sampled by: J. L. Walker, Billie Nutt, Lester Loftin, and S. A. Lytle, November 1, 1963.
Described by: David F. Slusher and Tracey Weems, November 1, 1963.

A--0 to 20 cm (0 to 8 in.); brown (10YR 5/3) silt loam.

B2t--20 to 81 cm (8 to 32 in.); brown (7.5YR 4/4) silty clay loam; very strongly acid.

IIB3--81 to 122 cm (32 to 48 in.); brown (7.5YR 4/4) loam.

IIC1--122 to 178 cm (48 to 70 in.); brown (7.5YR 4/4) very fine sandy loam; strongly acid.

IIC3--178 to 218 cm (70 to 86 in.); yellowish brown (10YR 5/6) loamy fine sand; strongly acid.

IIIC--218 to 330 cm (86 to 130 in.); pale brown (10YR 6/3) silt loam and very fine sandy loam in alternating strata 8 to 10 inches thick; medium acid.

IVC--330 to 381 cm (130 to 150 in.); pale brown (10YR 6/3) loamy sand; medium acid.

Remarks: Profile sampled and described from bucket auger. Munsell colors for moist soils. Reaction by Hellige-Truog field kit.

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

SOIL CLASSIFICATION: Ultic Hapludalf; fine-silty, mixed, thermic

SOIL Dexter SOIL Nos. S63La-42-5 LOCATION Richland Parish, Louisiana

SOIL SURVEY LABORATORY Lincoln, Nebraska LAB. Nos. 19252-19261 May, 1967

General Methods: 1A, 1B1b, 2A1, 2B

Depth (In.)	Horizon	Total Sand (2-0.05)	Total Silt (0.05-0.002)	Total Clay (< 0.002)	Sand: Very coarse (2-1)	Sand: Coarse (1-0.5)	Sand: Medium (0.5-0.25)	Sand: Fine (0.25-0.1)	Sand: Very fine (0.1-0.05)	Silt: 0.05-0.02	Silt: Int. III (0.02-0.002)	Int. II (0.2-0.02)	(2-0.1)		<0.074	Coarse fragments 2A2: > 2 Pct.	2-19 (Pct. of < 76mm)	19-76 (Pct. of < 76mm)
		Pct. of < 2 mm																
0-6	Ap	32.4a	61.0	6.6	-	0.1	0.4	21.0	10.9	31.3	29.7	60.6	21.5		72.3	-		
6-10	B1	22.3	59.3	18.4	tr	tr	0.1	14.4	7.8	23.3	36.0	44.2	14.5		81.1	-		
10-17	B21t	16.4	49.5	34.1	-	tr	0.1	10.4	5.9	16.7	32.8	32.0	10.5		86.2	-		
17-25	B22t	21.4	45.9	32.7	-	-	0.1	13.7	7.6	16.5	29.4	36.4	13.8			-		
25-32	IIB23t	33.7	38.4	27.9	-	-	0.2	21.6	11.9	14.2	24.2	45.7	21.8		71.3	-		
32-44	IIB31t	50.8	28.8	20.4	-	tr	0.1	32.1	18.6	12.3	16.5	60.4	32.2		57.5	-		
44-59	IIB32t	61.0	23.9	15.1	-	-	0.1	34.1	26.8	13.1	10.8	71.8	34.2		52.6	-		
59-67	IIIC1	86.0	6.8	7.2	-	-	0.1	54.3	21.6	3.7	3.1	86.0	64.4		21.1	-		
67-77	IVC2	78.2	8.2	13.6	-	-	0.1	59.9	18.2	4.0	4.2	78.9	60.0		28.1	-		
77-87	IVC3	89.7	4.0	6.3	-	-	0.3	54.1	25.3	2.2	1.8	85.2	64.4		17.6	-		

Depth (In.)	6A1a Organic carbon b Pct.	6B1a Nitrogen Pct.	C/N		Carbonate as $CaCO_3$ Pct.	6C2a Ext. Iron as Fe Pct.	Bulk density: 4A1a Field-State g/cc	4A1d 1/3-Bar g/cc	4A1b Air-Dry g/cc	4D1 COLE	Water content: 4B4 Field-State Pct	4B1c 1/3-Bar Pct.	4B2 15-Bar Pct.	4C1 1/3-to 15-Bar in./in.		pH		8C1a (1:1)
0-6	0.65	0.064	10			0.5	1.55	1.54c	1.55	0.003	10.0	20.7d	2.8	0.28e				6.8
6-10	0.29	0.044	7			0.9	1.65	1.59	1.64	0.010	6.6	17.4	6.9	0.17				5.5
10-17	0.22					1.7	1.61	1.52	1.64	0.024	13.7	21.5	13.2	0.13				5.5
17-25	0.20					1.7	1.62	1.55	1.65	0.020	13.9	21.7	12.9	0.14				5.2
25-32	0.12					1.4	1.67	1.62	1.68	0.014	11.4	20.2	10.0	0.17				5.1
32-44	0.08					0.9	1.68	1.66	1.70	0.007	10.0	17.2	7.8	0.16				5.1
44-59	0.08					0.8	1.67	1.66	1.69	0.007	10.3	13.8	6.2	0.13				5.2
59-67	0.07					0.5	1.52	1.52c	1.52	-	6.2	8.0d	3.4	0.07e				5.5
67-77	0.02					0.7	1.57	1.55	1.59	0.010	10.4	14.9	5.4	0.15				5.4
77-87	0.04					0.6	1.55	1.56c	1.55	-	7.7	7.3d	3.0	0.07e				5.4

Depth (In.)	Extractable bases (meq/100 g): 6N2a Ca	6O2a Mg	6P2a Na	5B1a 6Q2a K	Sum	6H1a Ext. Acidity	Cat. Exch. Cap: 5A3a Sum Cations	5A1a NH_4OAc	6G1d KCl-Ext. Al					8D3 Ca/Mg	5F1 Ca Sat. NH_4OAc Pct.	Base saturation: 5C3 Sum Cations Pct	5C1 NH_4OAc Pct.
0-6	2.5	1.5	tr	tr	4.0	1.9	5.9	4.7						1.7	53	68	85
6-10	3.2	1.0	0.1	0.2	4.5	4.0	8.5	6.9						3.2	46	53	65
10-17	6.8	3.2	0.2	0.4	10.6	5.9	16.5	13.3	0.2					2.1	51	64	80
17-25	5.7	3.7	0.2	0.4	10.0	6.5	16.5	12.9	0.5					1.5	44	61	78
25-32	3.7	3.1	0.2	0.3	7.3	6.3	13.6	10.5	0.8					1.2	35	54	70
32-44	2.6	2.5	0.2	0.2	5.5	4.3	9.8	8.3	0.9					1.0	31	56	66
44-59	2.2	2.2	0.1	0.2	4.7	3.5	8.2	7.0	0.6					1.0	31	57	67
59-67	1.1	1.3	0.1	0.1	2.6	2.3	4.9	4.0	0.3					0.8	28	53	65
67-77	2.4	2.5	0.1	0.2	5.2	3.0	8.2	7.0	0.4					1.0	34	63	74
77-87	1.4	1.4	0.1	0.1	3.0	1.6	4.6	4.0	0.6					1.0	35	65	75

Depth (In.)	NH_4OAc CEC	Ext. Iron	15-Bar Water	5A3b Bases Plus Al me/100g Clay	
0-6	0.71	0.08	0.42	61	
6-10	0.38	0.05	0.38	24	
10-17	0.39	0.05	0.39	32	
17-25	0.39	0.05	0.39	32	
25-32	0.38	0.05	0.36	29	
32-44	0.41	0.04	0.38	31	
44-59	0.46	0.05	0.41	35	
59-67	0.56	0.07	0.47	40	
67-77	0.51	0.05	0.40	41	
77-87	0.63	0.10	0.48	57	

a. Fe-Mn nodules: > 50 percent (1-0.5 mm).
b. 4.5 kg/m^2 to 60 inches (Method 6A).
c. 1/10-Bar (Method 4A1g).
d. 1/10-Bar (Method 4B1c).
e. 1/10-to 15-Bar (Method 4C2).

Classification: Fine-silty, mixed, thermic Ultic Hapludalf.
Soil series: Dexter.
Series classification: Same as pedon.

Pedon No.: S63LA-42-5.
Location: Richland Parish, Louisiana, 3 miles south of Alto, 240 feet east and 1,100 feet south of the northwest corner of sec. 4, T. 15 N., R. 6 E.
Vegetation and use: Pasture (formerly cultivated).
Drainage and permeability: Well drained; internal drainage medium; runoff slow; moderately slow permeability.
Parent material: Silty material of very low sand content alluvial or II to IV alluvium.
Climate: Precipitation 51 inches, Temperature 65 degrees F.
Sampled by: James DeMent, J. L. Walker, Lester Loftin, and Billie Nutt, November 1, 1963.
Described by: David F. Slusher and Tracey Weems, November 1, 1963.

Ap--0 to 15 cm (0 to 6 in.); brown (10YR 4/3, 6/3 dry) very fine sandy loam; weak very fine granular structure in top 2 inches and weak coarse platy below; friable; many roots; few fine soft dark brown aggregates; slightly acid; clear smooth boundary.

B1--15 to 25 cm (6 to 10 in.); brown (7.5YR 4/4) silt loam; weak fine subangular blocky structure; slightly hard; few roots; few fine pores; very few soft dark brown aggregates; strongly acid; clear smooth boundary.

B21t--25 to 43 cm (10 to 17 in.); brown (7.5YR 4/4) inside peds, heavy silty clay loam; reddish brown (5YR 4/4) on ped surfaces; strong medium subangular blocky structure; hard; thin almost continuous clay films; a few patchy black (manganiferous) stains on peds; very strongly acid; gradual smooth boundary.

B22t--43 to 64 cm (17 to 25 in.); brown (7.5YR 4/4) inside peds; medium silty clay loam; reddish brown (5YR 4/4) on ped surfaces; strong medium subangular blocky structure; hard; few roots; few fine pores; common thin patchy clay films; a few soft dark brown aggregates; few patchy black (manganiferous ?) stains on peds; very strongly acid; gradual smooth boundary.

IIB23t--64 to 81 cm (25 to 32 in.); reddish brown (5YR 4/4) inside peds, light clay loam; yellowish red (5YR 4/6) on ped surfaces; moderate medium subangular blocky structure; hard; few roots; few fine pores; common thin patchy clay films; common black patchy (manganiferous?) stains on peds; very strongly acid.

IIB31t--81 to 112 cm (32 to 44 in.); reddish brown (5YR 4/4) light sandy clay loam; moderate coarse subangular blocky structure adhering as weak medium prismatic; hard; few roots; few fine pores; common thin patchy clay films; common patchy black (manganiferous) stains on peds; very strongly acid; clear smooth boundary.

IIB32t--112 to 150 cm (44 to 59 in.); brown (7.5YR 4/4) inside prisms, loam; few pale brown (10YR 6/3) streaks inside prisms and pale brown (10YR 6/3, 8/2 dry) sand coatings 1 mm thick on many prisms; weak coarse prismatic structure; very few thin patchy clay films; a few dark brown soft aggregates; strongly acid; clear smooth boundary.

IIIC1--150 to 170 cm (59 to 67 in.); brown (7.5YR 4/4) loamy fine sand; massive; slightly hard; strongly acid; abrupt smooth boundary.

IVC2--170 to 196 cm (67 to 77 in.); reddish brown (5YR 4/4) light fine sandy loam; massive; hard; weakly cemented; very strongly acid; clear smooth boundary.

IVC3--196 to 221 cm (77 to 87 in.); brown (7.5YR 4/4) loamy fine sand; massive; friable; strongly acid.

Remarks: Profile dry when sampled. Munsell color for moist soils unless otherwise indicated. Reaction by Hellige-Truog field kit.

SOIL SURVEY LABORATORY Beltsville, Maryland

SOIL TYPE Series not Designated **LOCATION** Tangipahoa Parish, Louisiana

SOIL NOS. S56La-53-1 **LAB. NOS.** 56492-56497

DEPTH INCHES	HORIZON	1B1b PARTICLE SIZE DISTRIBUTION (in mm.) (per cent) 3A1 VERY COARSE SAND 2-1	COARSE SAND 1-0.5	MEDIUM SAND 0.5-0.25	FINE SAND 0.25-0.10	VERY FINE SAND 0.10-0.05	SILT 0.05-0.002	CLAY < 0.002	0.2-0.02	0.02-0.002	2A2 > 2 (<19mm)	TEXTURAL CLASS
0-4	Ap	0.4	4.8	16.0	27.2	7.5	31.5	12.6	39.2	10.6	< 1	fsl
4-12	B21	0.3	1.8	6.1	12.9	4.8	47.7	26.4	32.2	25.9	< 1	l/cl
12-17	B22	0.3	1.9	8.0	18.7	6.9	44.6	19.6	35.8	23.2	< 1	l
17-21	B31	0.2	1.7	8.6	20.1	7.9	44.1	17.4	38.7	21.7	< 1	l
21-27	B32	0.1	2.0	8.9	22.4	9.7	41.2	15.7	40.9	19.9	< 1	l
27-34	Bm	0.3	2.8	9.3	25.8	12.8	34.0	15.0	43.5	16.2	< 1	l/sl
34+	D	Horizon not sampled										

8C1a pH 1:1	pH 1:5	pH 1:10	6A1a ORGANIC CARBON %	6B1a NITROGEN %	C/N	ELECTRICAL CONDUCTIVITY EC×10³ MILLIMHOS PER CM @25°C.	$CaCO_3$ equivalent %	GYPSUM me./100g. SOIL			
5.8			0.75	0.075	10						
4.8			0.16								
4.4			0.08								
4.7			0.02								
4.4			0.00								
4.3			0.02								

5A3a CATION EXCHANGE CAPACITY Sum	EXTRACTABLE CATIONS 5B1a 6N2d Ca	6O2b Mg	6H1a H	6P2a Na	6Q2a K	BASE SAT. % on Sum Cations 5C3						MOISTURE AT SATURATION %
	milliequivalents per 100g. soil →											
7.4	3.0	1.1	2.9	0.1	0.3	61						
10.2	3.5	0.7	5.7	0.1	0.2	44						
7.5	1.9	0.4	5.0	0.1	0.1	33						
6.0	1.3	0.4	4.2	<0.1	0.1	30						
5.3	1.0	0.4	3.8	<0.1	0.1	28						
5.1	0.8	0.6	3.6	<0.1	0.1	29						

Classification: Fine-loamy, siliceous, thermic Ultic Hapludalf.
Soil series: Not designated 1/.

Pedon No.: S56LA-53-1.
Location: Tangipahoa Parish, La. 1¼ miles north, ¼ mile east of Amite, Louisiana, 400 feet north of home on Dr. Faulkes' farm. T. 4 S., R. 7 E.
Native vegetation: Mixed pine and hardwood forest.
Use: Long history of cultivation. In grass - legume pasture past 5 years. Has been limed and had fertilizer applications up to 1,000 pounds per acre of 4-8-4 and sodium nitrate in addition when cultivated.
Topography: Gently undulating. Two percent slope.
Parent material: Coastal plain deposits and loess.
Climate: Precipitation 62 inches, Temperature 68 degrees F.
Physiography: Terrace of Tangipahoa River. Headwaters of river cut into tertiary material. Known deposits of Mississippi River alluvium occur a few miles downstream.
Sampled and described by: Marvin Lawson, Lester Loftin, and A. G. White, April 10, 1956. Horizons redesignated by David F. Slusher, August 12, 1975.

Ap--0 to 10 cm (0 to 4 in.); yellowish red (5YR 4/6) fine sandy loam; moderate, medium, subangular blocky structure; friable; medium acid.

B21t--10 to 30 cm (4 to 12 in.); yellowish red (5YR 5/8) sandy clay loam; moderate, medium subangular blocky structure; friable; medium acid; diffuse wavy boundary.

B22t--30 to 43 cm (12 to 17 in.); yellowish red (5YR 5/6) sandy clay loam; moderate coarse subangular blocky structure; friable; strongly acid; diffuse smooth boundary.

B23t--43 to 53 cm (17 to 21 in.); strong brown (7.5YR 5/6) sandy clay loam; moderate coarse subangular blocky structure; friable; strongly acid; diffuse smooth boundary.

B24t--53 to 69 cm (21 to 27 in.); strong brown (7.5YR 5/8) sandy loam; weak coarse angular blocky structure; very strongly acid; very friable; clear wavy boundary.

B3--69 to 86 cm (27 to 34 in.); strong brown (7.5YR 5/6) sandy loam; common large brownish yellow (10YR 6/6) mottles; massive; firm; many pinholes; medium acid; abrupt smooth boundary.

IIC--86+ cm (34+ in.); coarse gravelly (chert) sandy loam; hard.

Remarks: Gravel bed and mottling were not found at auger test hole a few feet away made before digging pit. Munsell colors for moist soil.

1/ Sampled as a representative of the Amite series.

SOIL SURVEY LABORATORY Beltsville, Maryland

SOIL TYPE Series not Designated LOCATION Tangipahoa Parish, Louisiana

SOIL NOS. S56Ia-53-2 LAB. NOS. 56498-56505

DEPTH INCHES	HORIZON	1B1b VERY COARSE SAND 2-1	COARSE SAND 1-0.5	MEDIUM SAND 0.5-0.25	FINE SAND 0.25-0.10	VERY FINE SAND 0.10-0.05	SILT 0.05-0.002	CLAY < 0.002	0.2-0.02	0.02-0.002	2A2 > 2 (<19mm)	TEXTURAL CLASS
		PARTICLE SIZE DISTRIBUTION (in mm.) (per cent) 3A1										
0-5	A1	0.1	8.7	19.2	23.3	7.6	34.7	6.4	38.5	14.3	< 1	fsl
5-11	A2	0.2	7.8	18.4	22.9	7.9	35.2	7.6	37.4	16.3	< 1	fsl
11-16	B1	0.1	6.7	15.0	19.3	6.9	36.0	16.0	35.8	16.5	< 1	l
16-22	B21	0.1	5.3	11.1	16.4	6.2	37.3	23.6	32.8	19.2	< 1	l
22-31	B22	0.0	4.1	9.4	19.6	8.4	37.4	21.1	38.5	17.7	< 1	l
31-36	B3	0.0	5.2	12.2	26.5	10.9	30.7	14.5	39.9	15.7	< 1	fsl
36-40	C1	0.2	11.7	22.6	30.1	9.2	17.8	8.4	33.0	8.1	< 1	sl/fsl
40-48+	C2	0.6	14.3	34.5	34.8	5.1	7.1	3.6	20.9	3.7	< 1	s

pH 8C1a 1:1	pH 1:5	pH 1:10	ORGANIC MATTER 6A1a ORGANIC CARBON %	ORGANIC MATTER 6B1a NITROGEN %	ORGANIC MATTER C/N	ELECTRICAL CONDUCTIVITY EC×10³ MILLIMHOS PER CM @25°C.	$CaCO_3$ equivalent %	GYPSUM me./100g. SOIL
5.7			1.48	0.071	20			
4.9			0.52	0.034	15			
4.5			0.13					
4.5			0.14					
4.7			0.08					
4.6			0.02					
4.6			0.02					
4.7			0.00					

5A3a CATION EXCHANGE CAPACITY Sum	EXTRACTABLE CATIONS 5B1a 6N2d Ca	6O2b Mg	6H1a H	6P2a Na	6Q2a K	BASE SAT. % on Sum Cations 5C3	MOISTURE AT SATURATION %
	milliequivalents per 100g. soil →						
8.8	3.1	0.8	4.6	0.1	0.2	48	
5.6	0.6	0.4	4.4	<0.1	0.2	21	
6.3	0.4	0.5	5.2	<0.1	0.2	17	
9.3	0.3	0.8	8.0	<0.1	0.2	14	
8.5	0.2	0.9	7.2	<0.1	0.2	15	
5.9	0.2	0.6	5.0	<0.1	0.1	15	
3.5	0.2	0.3	2.9	<0.1	0.1	17	
1.9	0.6	0.1	1.2	<0.1	<0.1	37	

Classification: Fine-loamy, siliceous, thermic Ultic Hapludalf.
Soil series: Not designated 1/.

Pedon No.: S56LA-53-2.
Location: Tangipahoa Parish, La., 3/4 mile southeast of Independence, Louisiana, 400 feet east of parish road on farm access road by pine woods., T. 5 S., R. 7 E.
Native vegetation: Mixed pine and hardwood forest, never cultivated or pastured.
Physiography: Terrace of Tangipahoa River. Headwaters of river cut into tertiary material. Known deposits of Mississippi River alluvium occur a few miles downstream.
Topography: Gently undulating. Two percent slope.
Climate: Precipitation 62 inches, Temperature 68 degrees F.
Parent material: Coastal plain deposits and loess.
Sampled and described by: Marvin Lawson, Lester Loftin, and A. G. White, April 10, 1956. Horizon designations reinterpreted by David F. Slusher, November 28, 1975.

A1--0 to 13 cm (0 to 5 in.); very dark brown (10YR 2/2) fine sandy loam; moderate medium subangular structure; very friable; neutral; gradual smooth boundary.

A2--13 to 28 cm (5 to 11 in.); brown (10YR 4/3) fine sandy loam; moderate medium subangular blocky structure; very friable; slightly acid; gradual smooth boundary.

B21t--28 to 41 cm (11 to 16 in.); yellowish red (5YR 4/6) sandy clay loam; moderate medium subangular blocky structure; friable; medium acid; diffuse smooth boundary.

B22t--41 to 56 cm (16 to 22 in.); yellowish red (5YR 4/8) sandy clay loam; moderate medium subangular blocky structure; firm; medium acid; clear smooth boundary.

B23t--56 to 79 cm (22 to 31 in.); yellowish red (5YR 4/6) sandy clay loam; moderate medium subangular; blocky structure; medium acid; clear smooth boundary.

B24t--79 to 91 cm (31 to 36 in.); yellowish red (5YR 5/8) sandy clay loam; moderate medium angular blocky structure; friable; medium acid; clear smooth boundary.

IIC1--91 to 102 cm (36 to 40 in.); strong brown (7.5YR 5/8) sandy loam; weak medium subangular blocky structure; very friable; medium acid; abrupt wavy boundary.

IIC2--102 to 122 cm (40 to 48 in.); strong brown (7.5YR 5/8) loamy sand; single grained; loose; medium acid.

Remarks: Munsell colors for moist soil.

1/ Sampled as a representative of the Amite series.

SOIL CLASSIFICATION-VERTIC HAPLUDALF
FINE, MONTMORILLONITIC, THERMIC
SERIES - - - - - - - -NATCHITOCHES

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE, MTSC
NATIONAL SOIL SURVEY LABORATORY
LINCOLN, NEBRASKA

SOIL NO - - - - - - - S72LA-35-1 NATCHITOCHES PARISH

GENERAL METHODS- - - 1A,1B1B,2A1,2B SAMPLE NOS. 72L0642-72L0646

DEPTH CM	HORIZON	PARTICLE SIZE ANALYSIS, LT 2MM, 3A1, 3A1A, 3A1B (PCT LT 2MM) SAND 2-.05	SILT .05-.002	CLAY LT .002	FINE CLAY LT .0002	SAND VCOS 2-1	CORS 1-.5	MEDS .5-.25	FNES .25-.10	VFNS .10-.05	SILT COSI .05-.02	FNSI .02-.002	VFSI .005-.002	SAND 2-.10	INTR II .2-.02	FINE CLAY TO CLAY PCT	RATIO NON-CO3-CLAY PCT	RATIO 8D1 15-BAR TO CLAY
0-10	A1	63.4	20.9	15.7	10.2	.4	5.4	16.9	28.7	12.0	10.3	10.6		51.4	35.5	65		.80
10-28	B21T	39.3	13.9	46.8	34.6	.2	2.7	10.6	19.2	6.6	6.7	7.2		32.7	22.1	74		.51
28-97	B22T	29.5	9.7	60.8	44.7	.1	3.1	9.0	13.0	4.3	3.6	6.1		25.2	13.7	74		.49
97-117	C1																	
117-160	C2	29.1	19.4	51.5		.4	2.7	11.2	11.0	3.8	5.0	14.4		25.3	13.5			.59

DEPTH CM	(PARTICLE SIZE ANALYSIS, MM, 3B, 3F1, 3E2) VCL. GT 2 PCT	GT 75 PCT	75-20	20-5	5-2	WEIGHT (PCT LT 75) LT .074	20-2 LT20	(BULK DENSITY) 4A1D 1/3-BAR G/CC	4A1E OVEN DRY G/CC	4D1 COLE	(WATER CONTENT) 4B1C 1/10 BAR PCT	4B1C 1/3-BAR PCT	4B2 15-BAR PCT	4C1 WRD CM/CM	CARBONATE 6E1B LT 2 PCT	3A1A LT .002 PCT	(PH) 8C1A 1/1 H2O	8C1E 1/2 CACL
0-10		0	0	TR	TR	43	TR						12.5				5.4	5.0
10-28		0	0	TR	TR	64	TR						23.9				4.5	4.1
28-97	0	0	0	0	0	73	0						29.8				4.6	4.2
97-117	0	0	0	0	0		0						35.2				5.7	5.7
117-160	0	0	0	0	0	73	0						30.2		10		7.4	7.5

DEPTH CM	(ORGANIC MATTER) 6A1A ORGN CARB PCT	6B1A NITG PCT	C/N	IRON 6C2B EXT FE PCT	PHOS TOTL PCT	(EXTRACTABLE BASES 5B4A) 6N2E CA	6O2D MG	6P2B NA	6Q2B K	SUM EXTB / 100	ACTY 6H1A BACL TEA G-	AL 6G1E KCL EXT	(CAT EXCH) 5A3A EXTB ACTY	5A6A NHAC	RATIO 8D1 NHAC TO CLAY	RATIO 8D3 CA TO MG	CA 5F1 SAT NHAC PCT	(BASE SAT) 5C3 EXTB ACTY PCT	5C1 NHAC PCT
0-10						14.3	3.2	.2	.8	18.5	11.2		29.7	25.9	1.6	4.5	55	62	71
10-28						17.7	4.9	.3	.6	23.5	21.5		45.0	38.6	.82	3.6	46	52	61
28-97						26.3	6.6	.6	.7	34.2	20.2		54.4	47.0	.77	4.0	56	63	73
97-117																			
117-160						36.2A	8.9A	1.9	.9	47.9				45.5	.88	4.1			

(A) METHODS 6N4C FOR CA AND 6O4C FOR MG.

Classification: Fine, montmorillonitic, thermic Vertic Hapludalf.
Soil series: Natchitoches.
Series classification: Same as pedon.

Pedon No.: S72LA-35-1.
Location: Natchitoches Parish, Louisiana; approximately .5 mile west of Chestnut, on parish road 479; 225 yards due south in woods; sec. 6, T. 12 N., R. 17 W.
Use and vegetation: Woodland, pine and mixed hardwood.
Slope and land form: Gently sloping Forested Coastal Plain ridge.
Drainage and permeability: Well drained; permeability is very slow; runoff is moderate to rapid.
Parent material: Alkaline clayey sediment of Eocene Age in the Cook Mountain formation.
Climate: Precipitation 49 inches, Temperature 66 degrees F.
Sampled by: Larry Butler, 7/72.
Described by: Larry Butler, 7/72.

A1--0 to 10 cm (0 to 4 in.); dark reddish brown (5YR 3/2) loam; weak fine granular structure; friable; common roots; medium acid; clear wavy boundary.

B21t--10 to 28 cm (4 to 11 in.); reddish brown (5YR 4/4) clay; few fine red mottles moderate fine subangular blocky structure; firm; common roots; thick continuous clay films; black sand grains on faces of peds; strongly acid; clear wavy boundary.

B22t--28 to 97 cm (11 to 38 in.); red (10R 4/6) clay; many medium olive (5Y 5/3) mottles; moderate medium subangular blocky structure; firm; few fine roots; patchy clay films; common pressure faces; many slickensides that do not intersect; many black sand grains on faces of peds; very strongly acid; clear wavy boundary.

C1--97 to 117 cm (38 to 46 in.); yellowish brown (10YR 5/6) and light olive brown (2.5Y 5/4) clay; common fine distinct light olive gray mottles; massive; firm; common slickensides that do not intersect; many greenish sand size grains throughout peds; slightly acid; clear wavy boundary.

C2--117 to 160 cm (46 to 63 in.); light yellowish brown (2.5Y 6/4) sandy clay; common fine distinct strong brown and yellowish brown mottles; massive; firm; many black sand grains throughout peds; common soft carbonate spots; common medium carbonate concretions; neutral.

Remarks: Munsell colors for moist soil.

SOIL CLASSIFICATION-VERTIC HAPLUDALF
FINE, MONTMORILLONITIC, THERMIC
SERIES - - - - - - -WOODTELL

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE, MTSC
NATIONAL SOIL SURVEY LABORATORY
LINCOLN, NEBRASKA

SOIL NO - - - - - - S74LA-17-7 CADDO PARISH

GENERAL METHODS- - -1A,1E1B,2A1,2B SAMPLE NOS. 74LC198-74LC199

DEPTH CM	HORIZON	PARTICLE SIZE ANALYSIS, LT 2MM, 3A1, 3A1A, 3A1B (PCT LT 2MM) SAND 2-.05	SILT .05-.002	CLAY LT .002	FINE CLAY LT .0002	VCOS 2-1	COARS 1-.5	MEDS .5-.25	FINES .25-.10	VFNS .10-.05	COSI .05-.02	FNSI .02-.002	VFSI .002-.002	SAND 2-.10	INTR II .2-.02	FINE CLAY TO CLAY PCT	NON-CO3-CLAY PCT	RATIO 8D1 15-BAR TO CLAY
25-38	B22T	38.0	12.4	49.6	35.8	TR	TR	1.6	31.3	5.1	3.9	8.5		32.9	22.9	72		.41
38-97	B23T	42.0	13.3	44.7	33.2	.0	TR	1.7	35.2	5.1	3.4	9.9		36.9	24.0	74		.42

DEPTH CM	VCL. GT 2 PCT	GT 75 PCT	(PARTICLE SIZE ANALYSIS, MM, 3B, 3E1, 3E2) WEIGHT (PCT LT 75) 75-20	20-5	5-2	LT .074 PCT LT20	20-2	(BULK DENSITY) 4A1D 1/3-BAR G/CC	4A1B OVEN DRY G/CC	4D1 COLE	(WATER CONTENT) 4B1C 1/10 BAR PCT	4B1C 1/3-BAR PCT	4B2 15-BAR PCT	4C1 WRD CM/CM	CARBONATE 6E1B LT 2 PCT	3A1A LT .002 PCT	(PH) 8C1A 1/1 H2O	8C1B 1/2 CACL
25-38	0	0	0	0	0	64	0						20.4					
38-97		0	0	0	TR	60	TR						18.9					

CLAY MINERALOGY (7A2C) PLACEMENT: MONTMORILLONITIC.
25-38 PT4 KK2 HI1
COMMENTS: CLAYS FAIRLY WELL ORDERED. MONTMORILLONITE CONTAINS CHLORITIC INTERLAYER MATERIAL.
RELATIVE AMOUNTS: (X-RAY) 5 = DOMINANT 4 = ABUNDANT 3 = MODERATE 2 = SMALL 1 = TRACE.
MINERAL CODE: MT = MONTMORILLONITE MI = MICA KK = KAOLINITE

Classification: Fine, montmorillonitic, thermic Vertic Hapludalf.
Soil series: Woodtell 1/.
Series classification: Same as pedon.

Pedon No.: S74LA-17-7.
Location: Caddo Parish, La., 5 miles southwest of Shreveport, 2.05 miles north on Jefferson Paige Road from intersection of US 80, 750 feet west of Jefferson Paige Road, 26 steps north of pipeline, NW¼NW¼ sec. 18, T. 15 W., R. 17 N.
Vegetation and use: Mixed woodland, pine and red oak.
Slope and land form: 18 percent slope to the east.
Drainage and permeability: Moderately well drained very slowly permeable.
Climate: Precipitation 46 inches; Temperature 65 degrees F.
Collected by: Jimmy Edwards and Wayne Magoun.
Described by: Jimmy Edwards and Wayne Magoun, 2/8/74.

A1--0 to 5 cm (0 to 2 in.); very dark grayish brown (10YR 3/2) fine sandy loam; weak fine granular structure; friable; many fine roots; few wormcasts; slightly acid; clear smooth boundary.

A12--5 to 10 cm (2 to 4 in.); dark yellowish brown (10YR 4/4) fine sandy loam; weak fine granular structure; friable; many fine roots; common pores; common fine iron concretions; medium acid; clear wavy boundary.

B21t--10 to 25 cm (4 to 10 in.); red (2.5YR 4/8) clay; moderate medium subangular blocky structure; plastic; common fine roots; common fine pores; pressure faces; very strongly acid; clear wavy boundary.

B22t--25 to 38 cm (10 to 15 in.); red (2.5YR 4/8) clay; common medium distinct light yellowish brown (2.5Y 6/4) mottles; moderate medium subangular blocky structure; plastic; common fine roots; common fine pores; pressure faces; very strongly acid; clear wavy boundary.

B23t--38 to 97 cm (15 to 38 in.); light brown gray (10YR 6/2) clay; common medium prominent red (2.5YR 4/6) mottles; weak coarse prismatic structure that parts to weak medium subangular blocky structure; plastic; common medium and fine roots; few pores; common slickensides; very strongly acid; clear wavy boundary.

B3--97 to 130 cm (38 to 51 in.); mottled light brownish gray (10YR 6/2), red (2.5YR 4/8), and yellowish brown (10YR 5/6) sandy clay; weak medium subangular blocky structure; plastic; few fine roots; common pores; very strongly acid; clear wavy boundary.

C--130 to 165 cm (51 to 65 in.); stratified strong brown (7.5YR 5/8), light yellowish brown (10YR 6/4), and red (2.5YR 4/8) sandy loam and sandy clay; layers of hard sandy loam about ½ inch thick but can be cut with spade; few flatten roots; strongly acid.

Remarks: Munsell colors for moist soil unless indicated otherwise.

1/ The upper B2t horizon lacks gray mottles which are definitive for the Woodtell series.

SOIL CLASSIFICATION-VERTIC HAPLUDALF
VERY-FINE, MONTMORILLONITIC, THERMIC
SERIES - - - - - - - -WOODTELL TAXADJUNCT

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE, MTSC
NATIONAL SOIL SURVEY LABORATORY
LINCOLN, NEBRASKA

SOIL NO - - - - - - S74LA-17-8 CADDO PARISH

GENERAL METHODS- - -1A,1B1B,2A1,2B SAMPLE NOS. 74L0200-74L0202

DEPTH	HORIZON	(- - - PARTICLE SIZE ANALYSIS, LT 2MM, 3A1, 3A1A, 3A1B - - -																RATIO
					FINE	(- - - SAND - - -					)(- - -SILT- - -)				INTR	FINE	NON-	8D1
		SAND 2- .05	SILT .05- .002	CLAY LT .002	CLAY LT .0002	VCOS 2- 1	CORS 1- .5	MEDS .5- .25	FNES .25- .10	VFNS .10- .05	COSI .05 .02	FNSI .02 .002	VFSI .005- .002	SAND 2- .10	II .2- .02	CLAY TO CLAY	CO3- CLAY	15- BAR TO
CM		(- - - - - - - -						PCT LT 2MM						- - - -)		PCT	PCT	CLAY
28-51	B22T	13.5	22.0	64.5	48.5	TR	TR	.1	1.3	12.1	9.6	12.4		1.4	22.8	75		.43
51-109	B23T	13.7	22.8	63.5	46.3	.1	.1	.1	1.6	11.8	9.8	13.0		1.9	23.1	73		.43
135-155	C1	22.1	51.4	26.5		.3	.2	.2	2.3	19.4	21.7	29.7		2.7	43.1			.71

DEPTH	(PARTICLE SIZE ANALYSIS, MM, 3B, 3B1, 3B2)							(BULK DENSITY)			(- - - -WATER CONTENT- - - -)				CARBONATE		(- -PH - -)	
	VOL.	(- - - - WEIGHT - - - - -)						4A1D	4A1H	4D1	4B1C	4B1C	4B2	4C1	6E1B	3A1A	8C1A	8C1E
	GT 2	GT 75	75-20	20-5	5-2	LT .074	20-2 PCT	1/3- BAR	OVEN DRY	COLE	1/10 BAR	1/3- BAR	15- BAR	WRD CM/	LT 2	LT .002	1/1 H2O	1/2 CACL
CM	PCT	PCT	(- - - PCT LT 75		- - -)		LT20	G/CC	G/CC		PCT	PCT	PCT	CM	PCT	PCT		
28-51		0	0	0	TR	94	TR						27.5					
51-109		0	0	0	TR	94	TR						27.2					
135-155	0	0	0	0	0	93	C						18.8					

CLAY MINERALOGY (7A2C) PLACEMENT: MONTMORILLONITIC
28-51 MT4 KK2 MI1
COMMENTS: CLAYS FAIRLY WELL ORDERED.
RELATIVE AMOUNTS: (X-RAY) 5 = DOMINANT 4 = ABUNDANT 3 = MODERATE 2 = SMALL 1 = TRACE.
MINERAL CODE: MT = MONTMORILLONITE MI = MICA KK = KAOLINITE

Classification: Very-fine, montmorillonitic, thermic Vertic Hapludalf.
Soil series: Woodtell taxadjunct 1/.
Series classification: Fine, montmorillonitic, thermic Vertic Hapludalfs.

Pedon No.: S74LA-17-8.
Location: Caddo Parish, La., 6 miles southwest of Shreveport, .9 mile south on Kimberly Road from intersection of La. 511, 46 steps east of Kimberly Road, SW¼SW¼ sec. 30, T. 17 N., R. 15 W.
Vegetation and use: Young red oaks, scattered pines, native grasses; native pasture.
Slope and land form: 5 percent side slope.
Climate: Precipitation 46 inches, Temperature 65 degrees F.
Parent material: Tertiary sediments of the Wilcox group.
Collected by: Jimmy P. Edwards.
Described by: W. Wayne Kilpatrick, J. W. Magoun, and J. P. Edwards, 1/31/74.

Ap--0 to 13 cm (0 to 5 in.); dark brown (10YR 4/3) fine sandy loam; common medium distinct pale brown (10YR 6/3) mottles; weak fine granular structure; friable; many fine and medium roots; many fine pores; common fine and medium black concretions; strongly acid; clear smooth boundary.

B21t--13 to 28 cm (5 to 11 in.); red (2.5YR 4/8) silty clay; few fine prominent yellowish brown mottles; weak medium subangular blocky structure; plastic; many fine roots; pressure faces; pockets of material from horizons above between peds; very strongly acid; gradual wavy boundary.

B22t--28 to 51 cm (11 to 20 in.); red (2.5YR 4/8) silty clay; many medium prominent light brownish gray (10YR 6/2) mottles and few fine prominent yellowish brown mottles; weak medium subangular blocky structure; very plastic; common fine and few medium roots, few pores, pressure faces; very strongly acid; gradual wavy boundary.

B23t--51 to 109 cm (20 to 43 in.); mottled light brownish gray (10YR 6/2); red (2.5YR 4/8) silty clay; weak coarse prismatic structure that parts to weak medium subangular blocky structure; very plastic; common fine roots; pressure faces, gleyed colors around old root channels; strongly acid; clear wavy boundary.

B3t--109 to 135 cm (43 to 53 in.); light brownish gray (2.5YR 6/2) silty clay; common medium prominent red (2.5YR 4/6) and common medium distinct yellowish brown (10YR 5/6) mottles; weak medium subangular blocky structure; firm; few dead roots; strongly acid; clear wavy boundary.

C1--135 to 155 cm (53 to 61 in.); stratified coarse to very fine platy light brownish gray (2.5Y 6/2) and yellowish brown (10YR 5.6) clay loam; firm; few flattened roots; few black specks; medium acid.

Remarks: Munsell colors for moist soil unles otherwise indicated.

1/ Pedon is a taxadjunct to the Woodtell series because the control section has slightly too much clay.

SOIL CLASSIFICATION-TYPIC PALEUDALF
FINE-LOAMY, SILICEOUS, THERMIC
SERIES - - - - - - - -ATTOYAC

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE, NTSC
NATIONAL SOIL SURVEY LABORATORY
LINCOLN, NEBRASKA

SOIL NO - - - - - - S66LA-60-1 WEBSTER PARISH

GENERAL METHODS- - -1A,1B1B,2A1,2B SAMPLE NOS. 67L0011-67L0013

DEPTH IN	HORIZON	PARTICLE SIZE ANALYSIS, LT 2MM, 3A1, 3A1A, 3A1B: SAND 2-.05 (PCT LT 2MM)	SILT .05-.002	CLAY LT .002	FINE CLAY LT .0002	SAND VCOS 2-1	SAND COBS 1-.5	SAND MEDS .5-.25	SAND FNES .25-.10	SAND VFNS .10-.05	SILT COSI .05-.02	SILT FNSI .02-.002	SILT VFSI .005-.002	SAND 2-.10	INTB II .2-.02	FINE CLAY TO CLAY PCT	NON-CO3-CLAY PCT	RATIO 8D1 15-BAR TO CLAY
5-30	B21T	41.4A	36.9	21.7		.1	.3	.9	16.5	23.6	18.3	18.6		17.8	55.9			.40
30-45	B22T																	
45-57	B23T	44.9A	31.9	23.2		.1	.2	.9	18.0	25.7	19.1	12.8		19.2	60.0			.36

DEPTH IN	(PARTICLE SIZE ANALYSIS, MM, 3B, 3B1, 3B2) VOL. GT 2 PCT	WEIGHT GT 75 PCT	75-20	20-5	5-2	LT .074 (PCT LT 75)	BULK DENSITY 4A1D 20-2 PCT LT20	4A1H 1/3-BAR G/CC	4D1 OVEN DRY G/CC	COLE	WATER CONTENT 4B1C 1/10 BAR PCT	4B1C 1/3-BAR PCT	4B2 15-BAR PCT	4C1 WRD CH/CH	CARBONATE 6E1B LT 2 PCT	3A1A LT .002 PCT	PH 8C1A 1/1 H2O	8C1B 1/2 CACL
5-30						70							8.7				5.2	
30-45													7.8				5.2	
45-57						68							8.3				5.2	

DEPTH IN	(ORGANIC MATTER) 6A1A ORGN CARB PCT	6B1A NITG PCT	C/N	IRON 6C2B EXT FE PCT	PHOS TOTL PCT	(EXTRACTABLE BASES 5B4A) 6N2E CA (HEQ / 100 G)	6O2D MG	6P2B NA	6Q2B K	SUM EXTB	ACTY 6H1A BACL TEA	AL 6G1E KCL EXT	(CAT EXCH) 5A3A EXTB ACTY	5A6A NHAC	RATIO 8D1 NHAC TO CLAY	RATIO 8D3 CA TO MG	CA 5F1 SAT NHAC PCT	(BASE SAT) 5C3 EXTB ACTY PCT	5C1 NHAC PCT
5-30						1.6	1.3	TR	.2	3.1	5.4		8.5	6.0	.28	1.2		36	52
30-45																			
45-57						1.1	1.4	TR	.3	2.8	4.8		7.6	5.4	.23	.8		37	52

(A) FE-MN >50 PERCENT (2-0.5 MM).

Classification: Fine-loamy, siliceous, thermic Typic Paleudalf.
Soil series: Attoyac
Series classification: Same as pedon.

Pedon No.: S66LA-60-1.
Location: Webster Parish, Louisiana, about 2.9 miles north of Cotton Valley, on north-south blacktop road, 80 feet east of road, 100 feet south of gravel yard; NW¼ NE¼ sec. 33, T. 22 N., R. 10 W.
Vegetation and use: Pasture, native grasses.
Slope and land form: Disected Red River terrace.
Drainage and permeability: Well drained, moderate permeability, runoff medium to slow.
Climate: Precipitation 47 inches, Temperature 65 degrees F.
Parent material: Montgomery age Red River alluvium.
Sampled by: Keith Young, November 17, 1966.
Described by: Keith Young and Bruce Chaffin, November 17, 1966.

Ap--0 to 13 cm (0 to 5 in.); brown (7.5YR 4/4) very fine sandy loam; massive; very friable; medium acid; abrupt smooth boundary.

B21t--13 to 76 cm (5 to 30 in.); red (2.5YR 4/6) loam; weak coarse subangular blocky structure; friable; many fine pores, common medium pores; very few patchy clay films; very strongly acid; clear wavy boundary.

B22t--76 to 114 cm (30 to 45 in.); red (2.5YR 4/6) heavy loam; weak coarse subangular blocky structure; common patchy red clay films; very strongly acid; arbitrary boundary.

B23t--114 to 145 cm (45 to 57 in.); Same as above horizon; split for sampling purposes; clear smooth boundary.

B3--145 to 229 cm (57 to 90 in.); yellowish red (5YR 5/6) and red (2.5YR 4/6) about equally mottled loam; very strongly acid.

Remarks: Munsell colors for moist soil.

Soil Classification: Typic Paleudalf; coarse-loamy, siliceous, thermic.
Series not Designated

Lab. Nos. 45642-648 (45 La56-1-1 thru 7)

Depth inches	Size classes % 1B1a Clay	III	USDA silt	VFS	FS	MS	CS	VCS	3A1 Horizon
0- 6	4.7	20.9	30.5	4.2	49.8	10.4	0.4	0.0	A_p
6-12	6.7	28.3	35.3	3.7	45.2	8.8	0.3	0.0	A_2
12-16	12.9	28.0	36.8	3.2	38.1	8.7	0.3	0.0	B_1
16-27	18.6	20.7	28.1	3.5	41.9	7.7	0.2	0.0	B_2
27-36	10.5	17.6	25.5	4.2	49.2	10.3	0.3	0.0	B_3
36-52	8.1	18.3	24.9	3.9	52.4	10.4	0.3	0.0	C_1
52-63	25.0	16.6	22.0	2.7	40.3	9.7	0.3	0.0	C_2

Depth inches	M.E./100 g soil 6N2b Ca	6Q2b Mg	6Q2b K	6D1a Mn	H1a H	6L1a S+	% B. Sat 5C3	pH 8C1a	% O.C. 6A1a	P ppm 6S1a
0- 6	.9	.4	.2	.06	1.4	3.0	53	6.0	.48	2.0
6-12	.7	.4	.3	.03	.7	2.1	67	6.1	.21	8.0
12-16	1.8	.7	.2	.02	1.5	4.2	64	5.5		0.8
16-27	1.9	1.2	.3	T	3.6	7.0	49	4.9		2.8
27-36	.8	1.0	.2	.02	1.0	3.0	67	5.1		0.4
36-52	.4	.8	.2	T+	1.2	2.6	54	5.1		3.2
52-63	.8	2.7	.4	T	4.4	8.3	47	4.9		2.8

Horizon	Depth inches	Exchange capacity m.e/100 g 5A3a	Surface M^2/g Total	Exterior	Inner	% Inner surface	Kaolin %	Quartz %	Gibbsite %
A_2	6-12						15		0
B_2	16-27	38	250	75	175	25	25	10	0
C_2	52-63	33	220	115	105	15	35	15	0

Results of X-ray diffraction patterns of oriented samples.
16-27 Kaolin with some mixed layer mineral.
52-63 Kaolin with a 14 A non-expanding mineral.

Classification: Coarse-loamy, siliceous, thermic Typic Paleudalf.
Soil series: Not designated 1/.

Pedon No.: S45LA-56-1.
Location: Union Parish, La., 2.9 miles north of Downsville; T. 19 N., R. 1 E., old field west of gravel road immediately north and across road from small wooden church.
Vegetation: The field has probably been idle 10 to 15 years. It has a thick cover of native grasses and weeds including broomsedge, bermudagrass, needlegrass, partridge pea, lespedeza, oxeye daisy, beggarweed, and ragweed. There is also a scattered growth of persimmons, sassafras, and young pine trees.
Topography: The region is a well dissected plain with relatively smooth interfluves and rolling to steep lands near the streams. The site of the profile is a slope of 4 to 5 percent to the north.
Climate: Precipitation 50 inches, Temperature 65 degrees F.
Sampled by: L. T. Alexander, I. L. Martin, A. E. Shearin, R. W. Simonson, M. E. Sturgis, and E. H. Templin.
Described by: A. E. Shearin and R. W. Simonson, June 23, 1945. Horizons redesignated by David F. Slusher, December 12, 1975.

Ap--0 to 15 cm (0 to 6 in.); nearly loose, fine sandy loam with weak fine granular structure. Pinholes and wormholes are common, and there are some variegations in color. The moist soil is brown (10YR 5/3) crushed, slightly darker uncrushed, and light gray (10YR 7/2) dry. The lower boundary is diffuse.

A2--15 to 30 cm (6 to 12 in.); nearly loose fine sandy loam with weak fine granular structure; pinholes are numerous and wormholes are common in the horizon. The moist soil has a variegated yellowish brown (10YR 5/4) and strong brown (7.5YR 5/6) pattern, uncrushed. The proportion of brown is higher in the lower part of the horizon. When dry and crushed the soil is very pale brown (10YR 7/3) in which there are a few lighter spots and streaks. Diffuse boundary.

B1t--30 to 41 cm (12 to 16 in.); this is a transitional horizon of very friable, light sandy clay loam with medium poorly blocky structure. The blocks break down readily into weak medium granular structure. Pinholes are common and wormholes are few in this horizon. The moist soil in place is largely red (2.5YR 4/6) with few variegations of strong brown (7.5YR 5/6). The light brown variegations are few in the lower parts of the layer. The dry soil is variegated reddish yellow (7.5YR 6/6) and light gray (10YR 7/2) in place, reddish yellow (7.5YR 7/6), when crushed. Diffuse boundary.

B2t--41 to 69 cm (16 to 27 in.); friable and slightly plastic sandy clay loam with weak medium blocky structure. The blocks break down readily to very weak medium granular structure. There are a few pinholes and wormholes. The moist soil is red (2.5YR 4/8) in place and becomes slightly higher when crushed. The dry soil in place is yellowish red (5YR 5/6) and when crushed is reddish yellow (5YR 6/8).

B&A--69 to 91 cm (27 to 36 in.); friable heavy sandy loam in which pockets of sandy clay loam occur. The horizon has a very weak coarse blocky structure with few pinholes and wormholes. The moist soil in place has a matrix color of red (2.5YR 4/8) to (2.5YR 5/8). Light yellowish brown to brownish yellow (10YR 6/4 to 6/6) spots and pockets, both circular and elliptical in cross section are common in the horizon. These have diameters or long axes ranging from 15 to 30 mm.

A&B--91 to 132 cm (36 to 52 in.); friable sandy loam that seems to be massive and slightly indurated in place. (Simonson considers horizon a faint brittle pan.) There are a few pinholes in the horizon. When moist in place the soil is reddish yellow (5YR 5/8), (slightly lighter when crushed) with spots of yellowish brown (10YR 5/6). These spots are numerous, medium to coarse in size, and of medium contrast. The proportion of yellowish brown increases with depth in the horizon and exceeds that of reddish yellow in the lower part. When dry the soil is reddish yellow (7.5YR 6/6) and very pale brown (10YR 8/4).

B't--132 to 160 cm (52 to 63 in.); friable, slightly plastic light sandy clay loam with weak medium blocky structure. A few pinholes present. Moist and in place the soil has a dark red (10R 3/6 to 2.5YR 3/6) color marbled with brownish yellow (10YR 6/6) and reddish yellow (7.5YR 6/6). The pattern of marbling is intermediate in size and of medium contrast.

Remarks: Munsell colors for moist soil unless indicated otherwise.

1/ Sampled as a representative of the Ruston series.

SOIL CLASSIFICATION-RHODIC PALEUDALF
FINE, KAOLINITIC, THERMIC
SERIES - - - - - - - NOT DESIGNATED.

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE, MTSC
NATIONAL SOIL SURVEY LABORATORY
LINCOLN, NEBRASKA

SOIL NO - - - - - - - S72LA-43-8 SABIN PARISH

GENERAL METHODS- - - 1A,1B1B,2A1,2B SAMPLE NOS. 72L0691-72L0693

DEPTH	HORIZON	(- - - PARTICLE SIZE ANALYSIS, LT 2MM, 3A1, 3A1A, 3A1B - - -																)RATIO
					FINE	(- - - SAND				- - -)(	- - SILT		- - -)		INTR	FINE	NON-	8D1
		SAND	SILT	CLAY	CLAY	VCOS	CORS	MEDS	FNES	VFNS	COSI	FNSI	VFSI	SAND	II	CLAY	CO3-	15-
		2-	.05-	LT	LT	2-	1-	.5-	.25-	.10-	.05	.02	.005-	2-	.2-	TO	CLAY	BAR
		.05	.002	.002	.0002	1	.5	.25	.10	.05	.02	.002	.002	.10	.02	CLAY		TO
CM		(- - -							PCT LT 2MM						- - -)	PCT	PCT	CLAY
25-71	B21T	33.4	31.9	34.7		3.8	2.0	1.9	10.0	15.7	16.3	15.6		17.7	38.9			.37
71-152	B22T	22.2	28.4	49.4		3.2	3.0	2.0	4.4	9.6	11.7	16.7		12.6	24.0			.40
152-178	B3T	19.9	12.1	68.0		4.7	5.6	2.9	3.7	3.0	4.0	8.1		16.9	8.8			.46

DEPTH	(PARTICLE SIZE ANALYSIS, MM, 3B, 3E1, 3E2)							(BULK DENSITY		)	(- - - WATER	CONTENT		- - -)	CARBONATE		(- - PH	- -)
	VCL.	(- - - WEIGHT					- - -)	4A1D	4A1H	4D1	4B1C	4B1C	4B2	4C1	6E1B	3A1A	8C1A	8C1E
	GT	GT	75-20	20-5	5-2	LT	20-2	1/3-	OVEN	COLE	1/10	1/3-	15-	WRD	LT	LT	1/1	1/2
	2	75				.074	PCT	BAR	DRY		BAR	BAR	BAR	CM/	2	.002	H2O	CACL
CM	PCT	PCT	(- - - PCT LT 75			- - -)	LT20	G/CC	G/CC		PCT	PCT	PCT	CM	PCT	PCT		
25-71		0	0	1	2	74	3						12.8					
71-152		0	0	TR	2	83	2						19.7					
152-178	0	0	0	0	0	82	0						31.0					

DEPTH	(ORGANIC MATTER		)	IRON	PHOS	(- - EXTRACTABLE BASES 5B4A			- -)		ACTY	AL	(CAT EXCH)		RATIO	RATIO	CA	(BASE	SAT)
	6A1A	6B1A	C/N	6C2B		6N2E	6O2D	6P2B	6Q2B		6H1A	6G1E	5A3A	5A6A	8D1	8D3	5F1	5C3	5C1
	ORGN	NITG		EXT	TOTL	CA	MG	NA	K	SUM	BACL	KCL	EXTB	NHAC	NHAC	CA	SAT	EXTB	NHAC
	CARB			FE						EXTB	TEA	EXT	ACTY		TO	TO	NHAC	ACTY	
CM	PCT	PCT		PCT	PCT	(- - -			- MEQ	/ 100	G- - -			- - -)	CLAY	MG	PCT	PCT	PCT
25-71																			
71-152																			
152-178						6.0	11.1	.3	.5	17.9	25.9		43.8	36.2		.5	17	41	19

CLAY MINERALOGY (7A2C)
25-71 MODERATE AMOUNT OF KAOLINITE AND A SMALL AMOUNT OF A 2:1 LAYER SILICATE COMPLEX. CLAY MINERALOGY IS KAOLINITIC ACCORDING TO X-RAY DIFFRACTION EVIDENCE.

Classification: Fine, kaolintic, thermic Rhodic Paleudalf.
Soil series: Not designated 1/.

Pedon No.: S72LA-43-8.
Location: Sabine Parish, Louisiana, about 15 miles southwest of Many, 300 yards north of Little Flock Baptist Church; NE¼ sec. 32, T. 5 N., R. 12 W.
Vegetation and use: Woodland, pine plantation.
Drainage and permeability: Well drained, moderate permeability.
Climate: Precipitation 48 inches, Temperature 65 degrees F.
Parent material: Cook Mountain formation clayey deposits.
Sampled by: Arville Touchet and Wayne Magoun, April 12, 1972.
Described by: Arville Touchet and Wayne Magoun, April 12, 1972.

A1--0 to 25 cm (0 to 10 in.); dark red (2.5YR 3/6) fine sandy loam; moderate medium and fine granular structure; friable; many medium and fine roots; common fine pores; strongly acid; clear wavy boundary.

B21t--25 to 71 cm (10 to 28 in.); dark red (10R 3/6) clay; moderate medium and strong fine subangular blocky structure; friable; few medium and fine roots; common pores; discontinuous clay films; 5 to 10 percent ironstone concretions up to ½ inch in diameter; strongly acid; clear wavy boundary.

B22t--71 to 152 cm (28 to 60 in.); dark red (10R 3/6) clay; moderate and strong medium and fine subangular blocky structure; friable; few medium and fine roots; common pores; discontinuous clay films; 10 to 15 percent ironstone concretions up to ½ inch in diameter; strongly acid; clear wavy boundary.

B3t--152 to 178 cm (60 to 70 in.); red (2.5YR 4/6) clay and partially weathered olive yellow (5Y 6/6) glauconite; 30 percent red ironstone gravels; faces of ironstone are coated with clay; patchy clay films; strongly acid.

Remarks: Munsell colors for moist soil.

1/ This pedon was sampled as a representative of the Nacogdoches, however the base saturation is too high for that series.

Soil Classification: Vertic Paleudalf; fine, mixed, thermic.

Boswell

Lab. Nos. 45618-626 (45 La 07-1-1 thru 9)

Depth inches	1B1a Clay	III	USDA silt	VFS	FS	MS	CS	VCS	3A1 Horizon
	Size classes %								
0- 3	9.3	19.9	52.0	24.2	8.4	1.0	2.1	3.0	A_1
3- 6	11.8	23.9	51.1	23.1	7.5	0.7	2.0	3.8	A_2
6- 9	25.3	21.4	44.5	19.3	5.6	0.5	1.4	3.4	B_1
9-16	60.6	13.4	25.2	10.8	1.9	0.1	0.4	1.1	B_{21}
16-25	64.0	13.3	24.1	8.5	1.8	0.3	0.6	0.7	B_{22}
25-36	57.6	13.6	26.5	11.4	2.7	0.3	0.7	0.8	B_{31}
36-48	55.3	12.6	26.0	15.3	2.7	0.1	0.3	0.3	B_{32}
48-56	52.5	13.0	27.1	17.1	3.0	0.1	0.1	0.1	B_{33}
56-72	51.1	11.7	25.4	22.8	0.7	0.0	0.0	0.0	C

Depth inches	M.E./100 g soil 6N2b Ca	6Q2b Mg	6Q2b K	6D1a Mn	H1a H	6L1a S+	% B. sat 5C3	pH 8C1a	% O.C. 6A1a	P ppm 6S1a
0- 3	4.2	1.3	.4	.04	5.2	11.1	53	5.4	1.94	8.8
3- 6	1.8	1.0	.4	.01	4.0	7.2	44	5.0	.78	4.8
6- 9	2.4	2.4	.3	T	7.4	12.5	41	4.7	.65	8.0
9-16	.9	5.4	.4	T	23.3	30.0	23	4.1	.30	2.4
16-25	1.3	5.0	.5	T	24.2	31.0	22	3.9	.42	4.4
25-36	2.4	4.2	.5	T	20.6	27.7	26	4.1	.55	1.2
36-43	5.9	6.2	.5	T	21.5	34.1	37	3.9	.21	2.4
43-56	2.4	7.4	.6	T	20.0	30.4	34	3.7	.16	2.4
56-72	3.8	9.3	.6	T	15.8	29.5	46	3.7		2.8

Classification: Fine, mixed, thermic Vertic Paleudalf.
Soil series: Boswell.
Series classification: Same as pedon.

Pedon No.: S45LA-07-1.
Location: Bienville Parish, La. Wooded area along the south side of US Highway No. 80, two miles east of Gibsland, T. 18 N., R. 6 W.
Vegetation: Predominantly shortleaf pine trees with some post oak, white oak, hickory, southern red oak, and winged elm trees. There is a very sparse undercover of short grasses, weeds, and shrubs.
Topography: The land surface is a generally dissected plain in which stream valleys are notched 15 to 35 feet below the ridge crests. The immediate profile site is slope of 3 percent to the east.
Sampled by: L. T. Alexander, I. L. Martin, A. E. Shearin, R. W. Simonson, M. B. Sturgis, and E. H. Templin.
Described by: A. E. Shearin and R. W. Simonson, June 22, 1945. Horizons redesignated by David F. Slusher, January 5, 1976.

A1--0 to 8 cm (0 to 3 in.); very friable very fine sandy loam with fine, weakly granular structure. The soil is dark grayish brown (10YR 4/2) when crushed moist, very dark gray (10YR 3/1) uncrushed moist, grayish brown (2.5Y 5/2) when crushed dry. Numerous roots and a few small, angular pebbles occur in the horizon which has a diffuse lower boundary.

A2--8 to 15 cm (3 to 6 in.); very friable very fine sandy loam with fine, weakly granular structure. The soil is light yellowish brown (10YR 6/4) when crushed moist and light gray (10YR 7/2) when crushed dry. There is a gradation in color from top to bottom of the horizon, with the lower part being yellowish red (5YR 5/6) when moist. The moist soil is slightly darker uncrushed than crushed. The horizon has a diffuse lower boundary and contains a few small angular pebbles.

B1--15 to 23 cm (6 to 9 in.); friable clay loam with medium, poorly granular structure. The moist soil is yellowish red (5YR 5/6) when crushed or uncrushed and is the same color dry. A few pinholes occur in the horizon which contains a few small angular pebbles and has a diffuse lower boundary.

B21t--23 to 41 cm (9 to 16 in.); firm clay with fine and medium moderate granular structure. The soil digs out in irregular pieces that break down readily to granules. The moist soil when crushed or uncrushed is red (2.5YR 4/8) with a few fine mottlings of pale olive (5Y 6/3) of medium contrast in the lower part of the horizon. The dry soil is red (2.5YR 5/6) when crushed, strongly plastic when wet and very hard when dry. A few dark specks or accretions less than 1 mm in diameter and a few charcoal pieces present. Diffuse lower boundary.

B22t--41 to 64 cm (16 to 25 in.); this layer is comparable to the overlying one except that irregular pieces are bigger and the granular structure is less evident. Dark spots and streaks, probably charcoal, are common; most of them small. The color of the moist soil is red (2.5YR 4/8) with numerous fine and medium high contrast mottlings of light olive gray (5Y 6/2). The mottles become coarser toward the bottom of the horizon. When dry, the soil is red (2.5YR 5/6) mottled with light gray (5Y 7/2).

Classification: Fine, mixed, thermic Vertic Paleudalf.
Soil series: Boswell.
Series classification: Same as pedon.
Pedon No.: S45LA-07-1.
Location: Bienville Parish, La. Wooded area along the south side of U.S. Highway No. 80, two miles east of Gibsland, T. 18 N., R. 6 W.
Vegetation: Predominantly shortleaf pine trees with some post oak, white oak, hickory, southern red oak, and winged elm trees. There is a very sparse undercover of short grasses, weeds, and shrubs.
Topography: The land surface is a generally dissected plain in which stream valleys are notched 15 to 35 feet below the ridge crests. The immediate profile site is slope of 3 percent to the east.
Sampled by: L. T. Alexander, I. L. Martin, A. E. Shearin, R. W. Simonson, M. B. Sturgis, and E. H. Templin.
Described by: A. E. Shearin and R. W. Simonson, June 22, 1945. Horizons redesignated by David F. Slusher, January 5, 1976.

B31t--64 to 91 cm (25 to 36 in.); firm clay which is strongly plastic when wet and very hard when dry. The soil digs out in coarse irregular pieces that break down into medium, moderate granular to blocky structure. In place the horizon is uniformly mottled gray to light olive gray (5Y 6/1 to 6/2) and red (2.5YR 4/8) when moist. The pattern of mottling is generally fine and medium in size and of high contrast. There are some coarse mottles in the horizon. When dry, the soil is light gray (5Y 7/2) with the mottles or red unchanged. A few dark specks less than 1 mm in diameter are present.

B32t--91 to 122 cm (36 to 48 in.); firm massive clay which is strongly plastic and very hard. It is largely comparable to the overlying horizon but seems more firm in place. Moist soil is light gray to light olive gray (5Y 6/1 to 6/2) with numerous mottlings of red (2.5YR 4/8). The mottlings are chiefly fine and medium in size with a few coarse ones among them. All are of high contrast. When dry, the soil is light gray (5Y 7/2) with the mottles unchanged.

B33t--122 to 142 cm (48 to 56 in.); this is comparable to the overlying horizon in texture, structure, and consistence. The colors are also similar except that mottlings are coarser and the matrix color is slightly lighter. The horizon is light gray (5Y 7/2) mottled with red (2.5YR 4/8) when moist or dry.

C--142 to 183 cm (56 to 72 in.); firm, massive clay which is strongly plastic and very hard and contains pockets of very fine sand. The layer when moist is light gray (5Y 7/2) mottled with yellowish red (5YR 5/8) and reddish yellow (7.5YR 6/8). The mottles are fine, common, and of medium contrast. There are also a few mottles or red (2.5YR 4/8) which are fine and of high contrast. When dry the soil matrix is light gray (5Y 7/2) and the mottles are chiefly brownish yellow (10YR 6/8).

Remarks: Munsell colors for moist soil unless indicated otherwise.

SOIL CLASSIFICATION-VERTIC PALEUDALF
VERY-FINE, MONTMORILLONITIC, THERMIC
SERIES - - - - - - -FORBING

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE, WTSC
NATIONAL SOIL SURVEY LABORATORY
LINCOLN, NEBRASKA

SOIL NO - - - - - - S74LA-17-9 CADDO PARISH

GENERAL METHODS- - -1A,1B1B,2A1,2B SAMPLE NOS. 74L0203-74L0204

DEPTH CM	HORIZON	PARTICLE SIZE ANALYSIS, IT 2MM, 3A1, 3A1A, 3A1B (PCT LT 2MM) SAND 2-.05	SILT .05-.002	CLAY LT .002	FINE CLAY LT .0002	VCOS 2-1	CORS 1-.5	MEDS .5-.25	FNES .25-.10	VFNS .10-.05	COSI .05-.02	FNSI .02-.002	VFSI .005-.002	SAND 2-.10	INTF II .2-.02	FINE CLAY TO CLAY PCT	NON-CO3-CLAY PCT	RATIO 8D1 15-BAR TO CLAY
18-38	B22T	15.8	27.1	57.1	36.3	TR	.1	.2	1.2	14.3	10.6	16.5		1.5	25.9	64		.34
38-61	B23T	11.7	28.6	59.7	30.2	1.2	.4	.6	1.5	8.0	6.8	21.8		3.7	15.7	51		.34

DEPTH CM	VOL. GT 2 PCT	WEIGHT GT 75 PCT	75-20	20-5	5-2	LT .074 IT20	20-2 PCT	4A1D 1/3-BAR G/CC	4A1H OVEN DRY G/CC	4D1 COLE	4B1C 1/10 BAR PCT	4B1C 1/3-BAR PCT	4E2 15-BAR PCT	4C1 WRD CR/CM	CARBONATE 6E1B LT 2 PCT	3A1A IT .002 PCT	PH 8C1A 1/1 H2O	8C1E 1/2 CACL
18-38	0	0	0	0	0	96	C						19.5					
38-61		0	0	TR	TR	95	TR						20.3		2			

CLAY MINERALOGY (7A2C) PLACEMENT: MONTMORILLONITIC.
18-38 MT4 KK2 MI2 VR1
COMMENTS: CLAY MINERALS WELL ORDERED.
RELATIVE AMOUNTS: (X-RAY) 5 = DOMINANT 4 = ABUNDANT 3 = MODERATE 2 = SMALL 1 = TRACE.
MINERAL CODE: MT = MONTMORILLONITE MI = MICA KK = KAOLINITE VR = VERMICULITE

Classification: Very-fine, montmorillonitic, thermic Vertic Paleudalf.
Soil series: Forbing 1/.
Series classification: Same as pedon.

Pedon No.: S74LA-17-9.
Location: Caddo Parish, Louisiana, about 7 miles south of Greenwood and 2.9 miles south of intersection of La. 526, and Wallace Lake Road; 100 feet east of Wallace Lake Road; NW¼ NE¼, sec. 30, T. 16 N., R. 13 W.
Vegetation and use: Native pasture.
Slope and land form: About 4 percent slope adjacent to drainageway.
Drainage and permeability: Moderately well drained, very slowly permeable.
Climate: Precipitation 46 inches, Temperature 65 degrees F.
Parent material: Prairie age clayey sediments derived from the Permain Red Beds.
Sampled by: Jimmy Edwards.
Described by: Wayne Magoun, Jimmy Edwards, and Wayne Kilpatrick, August 6, 1973.

Ap--0 to 10 cm (0 to 4 in.) brown (10YR 4/3) silt loam; weak medium granular structure; very friable; many fine and medium roots; common fine pores; slightly acid; clear wavy boundary.

B21t--10 to 18 cm (4 to 7 in.); yellowish red (5YR 4/6) silty clay; moderate medium subangular blocky structure; very firm; many fine and medium roots; common fine pores; thin patchy clay films on surfaces of peds; very thin coating of light yellowish brown silt loam on vertical surfaces of peds; medium acid; clear wavy boundary.

B22t--18 to 38 cm (7 to 15 in.); yellowish red (5YR 4/6) silty clay; weak medium subangular blocky structure; very firm; common fine roots; few fine pores; thin patchy clay films; few black stains on peds; neutral; clear wavy boundary.

B23t--38 to 61 cm (15 to 24 in.); yellowish red (5YR 4/6) silty clay; moderate medium subangular blocky structure; very firm; common fine roots; common black stains in channels and on peds; common fine calcium carbonate concretions; moderately alkaline; clear wavy boundary.

B24t--61 to 152 cm (24 to 60 in.); yellowish red (5YR 4/6) clay; weak medium subangular blocky structure; very firm; few fine roots; common slickensides that do not intersect; common fine and coarse calcium carbonate concretions; few soft powdery carbonate masses; moderately alkaline; strongly effervescent.

Remarks: Munsell colors for moist soil.

1/ Forbing is a tentative soil series.

SOIL CLASSIFICATION-VERTIC PALEUDALF
VERY-FINE, MONTMORILLONITIC, THERMIC
SERIES - - - - - - - -FORBING

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE, MTSC
NATIONAL SOIL SURVEY LABORATORY
LINCOLN, NEBRASKA

SOIL NO - - - - - - S74LA-17-10 CADDO PARISH

GENERAL METHODS- - -1A,1B1B,2A1,2B SAMPLE NOS. 74L0205

DEPTH CM	HORIZON	PARTICLE SIZE ANALYSIS, LT 2MM, 3A1, 3A1A, 3A1B (PCT LT 2MM) SAND 2-.05	SILT .05-.002	CLAY LT .002	FINE CLAY LT .0002	SAND VCOS 2-1	CORS 1-.5	MEDS .5-.25	FNES .25-.10	VFNS .10-.05	SILT COSI .05-.02	FNSI .02-.002	VFSI .005-.002	SAND 2-.10	INTB II .2-.02	FINE CLAY TO CLAY PCT	NON-CO3-CLAY PCT	RATIO 8D1 15-BAR TO CLAY
13-46	B21T	5.1	26.4	68.5	50.7	.2	.4	.3	1.6	2.6	6.2	20.2		2.5	9.8	74		.37

DEPTH CM	(PARTICLE SIZE ANALYSIS, MM, 3B, 3B1, 3B2) VOL. GT 2 PCT	WEIGHT GT 75 PCT	75-20	20-5	5-2	LT .074 PCT (PCT LT 75)	20-2 PCT LT20	BULK DENSITY 4A1D 1/3-BAR G/CC	4A1H OVEN DRY G/CC	4D1 COLE	WATER CONTENT 4B1C 1/10 BAR PCT	4B1C 1/3-BAR PCT	4B2 15-BAR PCT	4C1 WRD CM/CM	CARBONATE 6E1B LT 2 PCT	3A1A LT .002 PCT	PH 8C1A 1/1 H2O	8C1B 1/2 CACL
13-46		0	0	TR	TR	96	TR						25.4					

CLAY MINERALOGY (7A2C) PLACEMENT: MONTMORILONITIC.
13-46 MT4 KK2 MI1
COMMENTS: CLAYS FAIRLY WELL ORDERED.
RELATIVE AMOUNTS: (X-RAY) 5 = DOMINANT 4 = ABUNDANT 3 = MODERATE 2 = SMALL 1 = TRACE.
MINERAL CODE: MT = MONTMORILLONITE MI = MICA KK = KAOLINITE

Classification: Very-fine, montmorillonitic, thermic Vertic Paleudalf.
Soil series: Forbing 1/
Series classification: Same as pedon.

Pedon No.: S74LA-17-10.
Location: Caddo Parish, Louisiana, about ½ mile northwest of Summer Grove, 1,200 feet north of Kingston Road, 240 feet west of powerline, SW¼ SW¼, sec. 5, T. 16 N., R. 14 W.
Vegetation and use: Woodland, pine and mixed hardwoods.
Slope and land form: About 2 percent west side slope on Prairie terrace.
Drainage and permeability: Moderately well drained, very slow permeability.
Climate: Precipitation 46 inches, Temperature 65 degrees F.
Parent material: Pleistocene age - clayey sediments derived from the Permian Red Beds.
Sampled by: Jimmy Edwards and Wayne Magoun.
Described by: Wayne Magoun and Jimmy Edwards.

A1--0 to 5 cm (0 to 2 in.); very dark grayish brown (10YR 3/2) silt loam; weak medium granular structure; friable; many fine and medium roots; strongly acid; clear wavy boundary.

A2--5 to 13 cm (2 to 5 in.); light yellowish brown (10YR 6/4) silt loam; weak medium subangular blocky structure; friable; many fine and medium roots; strongly acid; clear wavy boundary.

B21t--13 to 46 cm (5 to 18 in.); yellowish red (5YR 4/6) silty clay; common medium distinct pale brown (10YR 6/4) mottles; weak medium subangular blocky structure; firm; common fine roots; medium acid; clear wavy boundary.

B22t--46 to 61 cm (18 to 24 in.); red (2.5YR 4/6) clay; weak medium subangular blocky structure; sticky; common and fine medium black concretions; common black stains on surfaces of peds; common fine roots; neutral; clear wavy boundary.

B3--61 to 152 cm (24 to 60 in.); red (2.5YR 4/6) clay; weak coarse subangular blocky structure; sticky and plastic; many slickensides; many medium carbonate concretions; moderately alkaline; strongly effervescent.

Remarks: Munsell colors for moist soil unless indicated otherwise.

1/ Forbing is a tentative soil series.

SOIL CLASSIFICATION-VERTIC PALEUDALF
VERY-FINE, MONTMORILLONITIC, THERMIC
SERIES - - - - - - -RORBING

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE, NTSC
NATIONAL SOIL SURVEY LABORATORY
LINCOLN, NEBRASKA

SOIL NO - - - - - - S74LA-17-11 CADDO PARISH

GENERAL METHODS- - -1A,1B1B,2A1,2B SAMPLE NOS. 74L206

DEPTH CM	HORIZON	PARTICLE SIZE ANALYSIS, LT 2MM, 3A1, 3A1B (PCT LT 2MM) SAND 2-.05	SILT .05-.002	CLAY LT .002	FINE CLAY LT .0002	SAND VCOS 2-1	CORS 1-.5	MEDS .5-.25	FNES .25-.10	VFNS .10-.05	SILT COSI .05-.02	FNSI .02-.002	VFSI .005-.002	SAND 2-.10	INTR TO .2-.02	FINE CLAY TO CLAY PCT	NON-CO3-CLAY PCT	RATIO 8D1 15-BAR TO CLAY
23-51	B22T	3.9	28.4	67.7	39.8	.2	.2	.2	.7	2.6	7.2	21.2		1.3	10.3	59		.33

DEPTH CM	(PARTICLE SIZE ANALYSIS, MM, 3B, 3B1, 3B2) VCL. GT 2 PCT	GT 75 PCT	WEIGHT (PCT LT 75) 75-20	20-5	5-2	LT .074	20-2 PCT LT20	BULK DENSITY 4A1D 1/3-BAR G/CC	4A1B OVEN DRY G/CC	4D1 COLE	WATER CONTENT 4B1C 1/10 BAR PCT	4B1C 1/3-BAR PCT	4B2 15-BAR PCT	4C1 WRD CM/CM	CARBONATE 6B1B LT 2 PCT	3A1A LT .002 PCT	pH 8C1A 1/1 H2O	8C1B 1/2 CACL
23-51		0	C	TR	TR	98	TR						22.5					

CLAY MINERALOGY (7A2C) PLACEMENT: MONTMORILLONITIC.
23-51 MT4 KK2 MI2
COMMENTS: CLAYS FAIRLY WELL ORDERED.
RELATIVE AMOUNTS: (X-RAY) 5 = DOMINANT 4 = ABUNDANT 3 = MODERATE 2 = SMALL 1 = TRACE.
MINERAL CODE: MT = MONTMORILLONITE MI = MICA KK = KAOLINITE

Classification: Very-fine, montmorillonitic, thermic Vertic Paleudalf.
Soil series: Forbing 1/.
Series classification: Same as pedon.

Pedon No.: S74LA-17-11.
Location: Caddo Parish, Louisiana about 5 miles southeast of Blanchard, 750 feet northwest of North Lakeshore Drive and Kansas City Southern Railroad, 200 feet southwest of tracks, SE¼ NW¼ NW¼ sec. 29, T. 18 N., R. 14 W.
Vegetation and use: Pasture consisting of common bermudagrass, johnsongrass and dallisgrass.
Slope and land form: Crest of ridge on two percent slope.
Drainage and permeability: Moderately well drained, very slowly permeable.
Climate: Precipitation 46 inches, Temperature 65 degrees F.
Parent material: Pleistocene age clayey sediments, derived from the Permain Red Beds.
Sampled by: Jimmy Edwards.
Described by: Wayne Magoun, Jimmy Edwards, and Wayne Kilpatrick, August, 1973.

Ap--0 to 5 cm (0 to 2 in.); dark grayish brown (10YR 4/2) silty clay loam; weak medium subangular blocky structure; firm; many fine and medium roots; few wormcasts of reddish brown material from horizon below; medium acid; clear smooth boundary.

B21t--5 to 23 cm (2 to 9 in.); reddish brown (5YR 4/4) silty clay; weak medium subangular blocky structure; firm; common fine roots; dark grayish brown material in root channels and most ped surfaces; slightly acid; clear wavy boundary.

B22t--23 to 51 cm (9 to 20 in.); yellowish red (5YR 4/6) silty clay; weak medium subangular blocky structure; firm; few fine roots; few fine pores; common fine and medium black concretions; common medium calcium carbonate concretions; neutral; clear wavy boundary.

B23t--51 to 104 cm (20 to 41 in.); dark red (2.5YR 3/6) clay; weak medium subangular blocky structure; firm; few fine roots; common fine black accretions; common fine to coarse calcium carbonate concretions; many slickensides; moderately alkaline; strongly effervescent; abrupt boundary.

B3t--104 to 152 cm (41 to 60 in.); dark red (2.5YR 3/6) clay; weak medium subangular blocky structure; firm; common black stains in root channels; common soft carbonate masses; common fine to coarse calcium carbonate concretions; moderately alkaline; strongly effervescent.

Remarks: Munsell colors for moist soil.

1/ Forbing is a tentative soil series.

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

SOIL CLASSIFICATION: Aeric Fluvaquent; fine-silty, mixed, nonacid, thermic

SOIL Commerce SOIL Nos. 863La-54-1 LOCATION Tensas Parish, Louisiana

SOIL SURVEY LABORATORY Lincoln, Nebraska LAB. Nos. 19150-19161 January, 1966

General Methods: 1B1b, 2A1, 2B, 1A

Depth (In.)	Horizon	Size class and particle diameter (mm) 3A1 — Total: Sand (2–0.05)	Total: Silt (0.05–0.002)	Total: Clay (< 0.002)	Sand: Very coarse (2–1)	Sand: Coarse (1–0.5)	Sand: Medium (0.5–0.25)	Sand: Fine (0.25–0.1)	Sand: Very fine (0.1–0.05)	Silt: 0.05–0.02	Silt: Int. III (0.02–0.002)	Int. II (0.2–0.02)	(2–0.1)	Clay 3A1a Carbonate		Coarse fragments 3A2: > 2 (Pct.)	2 – 19 (Pct. of < 76mm)	19 – 76 (Pct. of < 76mm)
		Pct. of < 2 mm																
0-6	Ap1	26.2	64.1	9.7	-	Tr.b	0.2b	3.1	22.9	41.8	22.3	67.4	33			-		
6-10	Ap2	24.5	63.5	12.0	-	Tr.b	0.1b	2.9	21.5	38.7	24.8	62.7	3.0			-		
10-19	B2g	12.4	55.7	31.9	-	Tr.b	Tr.b	2.1	10.3	24.0	31.7	36.1	2.1			-		
19-25	B3g	16.5	58.4	25.1	-	-	0.1b	1.8	14.6	33.3	25.1	49.5	1.9			-		
25-32	C1g	22.4	56.7	20.9	Tr.b	0.2b	0.2b	1.0	21.0	35.4	21.3	57.1	1.4			-		
32-36	A1b1	15.9	58.4	25.7	-	0.1b	0.1b	0.7	15.0	27.5	30.9	43.0	0.9			-		
36-44	C2g	24.4	62.2	13.4	Tr.b	0.2b	0.2b	1.1	22.9	47.0	15.2	70.7	1.5	-		-		
44-54	C3g	14.6	70.9	14.5	Tr.b	0.1b	0.1b	0.8	13.6	45.2	25.7	59.5	1.0	-		-		
54-60	A1b2	1.5	56.5	42.0	-	0.1b	Tr.b	0.1	1.3	43.6	21.1	22.5	0.2	-		-		
60-62	C4g	2.0	76.0	22.0	-	Tr.b	Tr.b	0.1	1.9	44.1	31.9	46.1	0.1	-		-		
62-70	A1b3	0.6	62.4	37.0	-	Tr.c	Tr.c	Tr.c	0.6d	20.2	42.2	20.8	Tr.	-		-		
36-54	a/	18.2	56.6	25.2	-	0.1b	0.1b	1.2	16.8	31.6	25.0	49.4	1.4	-		-		

Depth (In.)	6A1a Organic carbon (Pct.)	6H1a Nitrogen (Pct.)	C/N		6E1b 6E2a Carbonate as $CaCO_3$ (Pct.)	6C2a Ext. Iron as Fe (Pct.)	Bulk density 4A1a Field-State (g/cc)	4A1d 1/3-Bar (g/cc)	4A1h Air-Dry (g/cc)	4D1 COLE	Water content 4B4 Field-State (Pct.)	4B1e 1/3-Bar (Pct.)	4B2 15-Bar (Pct.)	4C1 1/3- to 15-Bar (in./in.)		pH		8C1a (1:1)
0-6	0.93	0.087	11			0.4							5.2					6.6
6-10	0.60	0.063	10			0.5	1.61	1.55	1.61	0.014	6.0	17.7	6.1	0.18				6.1
10-19	0.59	0.065	9		-(a)	0.8	1.58e	1.43e	1.64e	0.047	17.2	26.1	15.2	0.16				6.8
19-25	0.44	0.044	10		-(a)	0.7	1.46	1.36	1.50	0.032	13.8	24.8	12.4	0.17				7.2
25-32	0.33				tr(a)	0.7	1.43e	1.32e	1.45e	0.032	12.7	25.4	10.5	0.20				7.6
32-36	0.41				tr(a)	0.8	1.40	1.30	1.44	0.036	14.6	26.7	13.1	0.18				7.7
36-44	0.20				1	0.6	1.36e	1.32e	1.36e	0.010	7.5	29.0	7.1	0.29				7.9
44-54	0.20				3	0.6	1.36f	1.31g	1.38	0.017	10.8	31.0	7.9	0.30				8.0
54-60	0.46				tr(a)	1.0	1.38	1.28	1.54	0.064	24.1	32.5	18.9	0.17				7.7
60-62	0.28				1	0.7							11.1					7.8
62-70	0.43				1	0.8	1.34	1.28	1.55	0.064	26.7	32.1	18.2	0.18				7.7
36-54	0.41				tr(a)	0.6							12.2					7.7

Depth (In.)	Extractable bases 5E1a: 6N2a Ca	6O2a Mg	6P2a Na	6Q2a K	5Sum	6H1a Ext. Acidity	Cat. Exch. Cap. 5A3a Sum Cations	5A1a NH_4OAc						8D3 Ca/Mg		Base saturation 5G3 Sum Cations (Pct.)	5G1 NH_4OAc (Pct.)
	meq/100 g																
0-6	7.7	2.3	Tr.	0.7	10.7	3.0	13.7	10.4						3.3		78	103
6-10	8.5	2.2	0.1	0.4	11.2	3.1	14.3	11.4						3.9		78	98
10-19	19.5	5.2	0.2	0.7	25.6	4.2	29.8	23.6						3.8		86	108
19-25	16.7	4.6	0.2	0.6	22.1	2.4	24.5	19.9						3.6		90	111
25-32	14.8 h	4.5 i	0.3	0.5	20.1			17.6						3.3			114
32-36	16.8 h	5.6 i	0.4	0.6	23.4			20.7						3.0			113
36-44	10.1 h	3.6 i	0.3	0.4	14.4			12.8						2.8			112
44-54	12.0 h	3.8 i	0.2	0.5	16.5			14.1						3.2			117
54-60	23.5 h	7.5 i	0.3	1.0	32.3			28.9						3.1			112
60-62	15.1 h	4.6 i	0.2	0.7	20.6			18.3						3.3			112
62-70	22.0 h	6.4 i	0.3	1.0	29.7			26.3						3.4			113
36-54	15.7 h	4.9 i	0.4	0.6	21.6			19.2						3.2			112

Depth (In.)	Ratios to Clay 8B1: NH_4OAc	Ext. Iron	15-Bar Water		
0-6	1.07	0.04	0.54		
6-10	0.95	0.04	0.51		
10-19	0.74	0.02	0.48		
19-25	0.79	0.03	0.49		
25-32	0.84	0.03	0.50		
32-36	0.80	0.03	0.51		
36-44	0.98	0.04	0.53		
44-54	0.97	0.04	0.54		
54-60	0.69	0.02	0.45		
60-62	0.83	0.03	0.50		
62-70	0.71	0.02	0.49		
36-54	0.76	0.02	0.48		

a. Special sample - see profile description.
b. > 50 percent mica-like.
c. > 50 percent Fe-Mn.
d. 25-50 percent Fe-Mn.
e. One clod.
f. Range in duplicate clods is 0.11 g/cc.
g. Range in duplicate clods is 0.12 g/cc.
h. NH_4Cl-EtOH extract (6N3a).
i. NH_4Cl-EtOH extract (6O3a).

Classification: Fine-silty, mixed, nonacid, thermic Aeric Fluvaquent.
Soil series: Commerce.
Series classification: Same as pedon.

Pedon No.: S63LA-54-1.
Location: Tensas Parish, Louisiana about 2 miles north of St. Joseph on Northeast Louisiana Agricultural Experiment Station, 1050 feet east of old Highway 65, 1200 feet northeast of Experiment Station Office, NE¼NW¼ sec. 35, T. 11 N., R. 12 E.
Vegetation and use: Cultivated (corn stubble).
Slope and land form: 1/2 percent convex slope to the west, Mississippi River flood plain.
Drainage and permeability: Somewhat poorly drained; runoff slow; moderately slow permeability; internal drainage slow.
Climate: Precipitation 52 inches, Temperature 66 degrees F.
Parent material: Mississippi River alluvium.
Sampled by: James DeMent, J. L. Walker, Don A. Brown and Ronald Phillips, October 28, 1963.
Described by: David F. Slusher and Tracey Weems, October 28, 1963.

Ap1--0 to 15 cm (0 to 6 in.); dark grayish brown (10YR 4/2, 6/2) dry silt loam: weak very fine granular structure: friable: few roots: slightly acid; abrupt smooth boundary.

Ap2--15 to 25 cm (6 to 10 in.); dark grayish brown (10YR 4/2, 6/2) dry silt loam; massive to week coarse platy structure: firm hard, few roots; common fine soft dark brown bodies; medium acid; abrupt smooth boundary.

B2g--25 to 48 cm (10 to 19 in.); very dark grayish brown (10YR 3/2, 4/2) dry on ped surfaces, light silty clay loam; dark grayish brown (10YR 4/2) inside peds; common fine faint dark yellowish brown (10YR 3/4) and few fine faint very dark grayish brown mottles; moderate fine and medium subangular blocky structure; firm; few roots; a few fine pores in peds; neutral; clear smooth boundary.

B3g--48 to 64 cm (19 to 25 in.); dark grayish brown (10YR 4/2) silt loam; common fine distinct dark yellowish brown mottles; few fine faint very dark grayish brown streaks on peds; weak medium subangular blocky structure; friable very few roots; common fine pores; a few soft dark brown nodules; neutral; gradual smooth boundary.

C1g--64 to 81 cm (25 to 32 in.); grayish brown (10YR 5/2) silt loam; common fine distinct dark yellowish brown mottles; weak coarse subangular blocky structure; friable; very few roots; a few soft dark brown nodules; moderately alkaline; noncalcareous; clear smooth boundary.

A1b1--81 to 91 cm (32 to 36 in.); dark gray to dark grayish brown (10YR 4/1 to 4/2) on ped surfaces, silt loam; gray to grayish brown (10YR 5/1 to 5/2) inside peds; common fine distinct dark yellowish brown mottles; moderate medium subangular blocky structure; firm; common fine pores in peds; few soft dark brown nodules; moderately alkaline; noncalcareous; clear smooth boundary.

C2g--91 to 112 (36 to 44 in.); grayish brown (10YR 5/2) silt loam; common fine distinct dark yellowish brown mottles; finely banded faint color striations 1 to 2 mm thick are evident throughout; massive with some horizontal cleavage; friable; few fine pores; few fine soft dark brown nodules; moderately alkaline; noncalcareous; gradual smooth boundary.

Classification: Fine-silty, mixed, nonacid, thermic Aeric Fluvaquent.
Soil series: Commerce.
Series classification: Same as pedon.
Pedon No.: S63LA-54-1.
Location: Tensas Parish, Louisiana about 2 miles north of St. Joseph on Northeast Louisiana Agricultural Experiment Station, 1,050 feet east of old Highway 65, 1,200 feet northeast of Experiment Station Office, NE¼NW¼ sec. 35, T. 11 N., R. 12 E.
Vegetation and use: Cultivated (corn stubble).
Slope and land form: 1/2 percent convex slope to the west, Mississippi River flood plain.
Drainage and permeability: Somewhat poorly drained; runoff slow; moderately slow permeability; internal drainage slow.
Climate: Precipitation 52 inches, Temperature 66 degrees F.
Parent material: Mississippi River alluvium.
Sampled by: James DeMent, J. L. Walker, Don A. Brown and Ronald Phillips, October 28, 1963.
Described by: David F. Slusher and Tracey Weems, October 28, 1963.

C3g--112 to 137 cm (44 to 54 in.); grayish brown (10YR 5/2) coarse silt loam; common fine distinct dark yellowish brown mottles; finely banded faint color striations 1 to 2 mm thick are evident throughout; massive with some horizontal cleavage; friable; few fine soft dark brown nodules; moderately alkaline; noncalcareous; abrupt smooth boundary.

A1b2--137 to 152 cm (54 to 60 in.); dark gray (10YR 4/1) silty clay common fine distinct dark yellowish brown mottles; moderate medium subangular blocky; firm; few fine pores in peds; few soft dark brown nodules; moderately alkaline; noncalcareous; abrupt wavy boundary.

C4g--152 to 157 cm (60 to 62 in.); grayish brown (10YR 5/2) coarse silt loam; common fine distinct dark yellowish brown mottles; massive; friable; few fine pores; few soft dark brown nodules; mildly alkaline; noncalcareous; abrupt smooth boundary.

Remarks: 36 to 54 inches. Very dark grayish brown (10YR 3/2) silt loam vertical krotivinas (2 each) 1 to 2 inches wide from 19 to 54 inches sampled from 36 to 54 inches.

Water table at 84 inches over heavy silty clay loam. Soil dry to depth of sampling. Munsell colors for moist soil unless otherwise stated. Soil temperatures:

DEPTH (inches)	DEGREES CELSIUS
0 to 5	27.5
58	22.2 (from auger)
58	22.0 (pit wall)
84	21.4 gray mottled heavy silty clay loam
150	20.1 gray mottled heavy silty clay loam

SOIL CLASSIFICATION: Aeric Fluvaquent; fine-silty, mixed, nonacid, thermic

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

SOIL Commerce SOIL Nos. S63La-54-2 LOCATION Tensas Parish, Louisiana

SOIL SURVEY LABORATORY Lincoln, Nebraska LAB. Nos. 19162-19169 January, 1966

General Methods: 1B1b, 2A1, 2B, 1A

Depth (In.)	Horizon	Size class and particle diameter (mm) 3A1 Total: Sand (2-0.05)	Total: Silt (0.05-0.002)	Total: Clay (< 0.002)	Sand: Very coarse (2-1)	Sand: Coarse (1-0.5)	Sand: Medium (0.5-0.25)	Sand: Fine (0.25-0.1)	Sand: Very fine (0.1-0.05)	Silt: 0.05-0.02	Silt: Int. III (0.02-0.002)	Int. II (0.2-0.02)	(2-0.1)			2 A2 Coarse fragments > 2 Pct	2-19 (Pct. of < 76mm)	19-76 (Pct. of < 76mm)
		Pct. of < 2 mm																
0-8	Ap	9.5	73.6	16.9	-	-	Tr.a	0.6	8.9	42.5	31.1	51.9	0.6			-		
8-18	B2g	8.4	62.9	28.7	-	-	0.1a	0.8	7.5	32.5	30.4	40.7	0.9			-		
18-25	B31g	30.9	54.3	14.8	-	Tr.a	0.1a	3.2	27.6	37.9	16.4	68.4	3.3			-		
25-29	B32g	31.3	51.6	17.1	-	0.2a	0.2b	1.5	29.4	36.7	14.9	67.3	1.9			-		
29-35	C1g	30.7	54.4	14.9	-	0.1a	0.2b	1.2	29.2	39.3	15.1	69.4	1.5			-		
35-36	Alb1	8.6	65.6	25.8	-	0.1a	0.1b	0.3	8.1	35.9	29.7	44.2	0.5			-		
36-46	C2g	26.8	60.4	12.8	-	0.1a	0.2b	0.9c	25.6	45.1	15.3	71.3	1.2			-		
46-60	C3g	39.8	49.2	11.0	-	0.2d	0.4d	1.7c	37.5	39.7	9.5	78.4	2.3			-		

Depth (In.)	6A1a Organic carbon Pct.	6E1a Nitrogen Pct.	C/N		6E1b 6E2a Carbonate as $CaCO_3$ Pct.		Bulk density 4A1a Field-State g/cc	4A1d 1/3-Bar g/cc	4A1b Air-Dry g/cc	4I1 COLE	Water content 4B4 Field-State Pct	4B1c 1/3-Bar Pct.	4B2 15-Bar Pct.	4C1 1/3-to 15-Bar in./in.		pH		8C1a (1:1)
0-8	0.76	0.083	9										8.3					5.7
8-18	0.53						1.62	1.49	1.66	0.036	15.1	24.7	14.1	0.16				6.2
18-25	0.20						1.45e	1.37e	1.45e	0.020	9.2	20.0	8.1	0.16				6.4
25-29	0.20						1.40	1.32	1.40	0.020	9.5	22.0	8.6	0.18				6.4
29-35	0.24						1.41	1.34	1.41	0.017	9.0	20.8	8.1	0.17				6.4
35-36	0.37												13.1					6.3
36-46	0.25						1.40	1.38	1.41	0.007	13.4	14.6	7.5	0.10				6.6
46-60	0.24				Tr(s)		1.38	1.32	1.39	0.017	7.0	22.7	5.6	0.22				7.7

Depth (In.)	Extractable bases 5B1a: 6N2a Ca	6Q2a Mg	6P2a Na	6Q2a K	Sum	6H1a Ext. Acidity	Cat. Exch. Cap. 5A3a Sum Cations	5A1a NH_4OAc						8D3 Ca/Mg		Base saturation 5C3 Sum Cations	5C1 NH_4OAc
	meq/100 g															Pct.	Pct.
0-8	9.0	3.2	0.1	0.6	12.9	5.2	18.1	14.2						2.8		71	91
8-18	16.2	4.9	0.2	0.6	21.9	5.1	27.0	21.1						3.3		81	104
18-25	9.6	3.2	0.2	0.3	13.3	3.1	16.4	12.8						3.0		81	104
25-29	9.6	3.7	0.2	0.4	13.9	3.3	17.2	13.5						2.6		81	103
29-35	9.6	3.6	0.2	0.4	13.8	3.6	17.4	13.2						2.7		79	104
35-36	14.2	5.6	0.3	0.6	20.7	4.7	25.4	19.6						2.5		81	106
36-46	8.6	3.7	0.3	0.3	12.9	2.4	15.3	12.3						2.3		84	105
46-60	7.2f	3.9g	0.3	0.3	11.7	1.4	12.1	10.7						1.8		97	109

Depth (In.)	Ratios to Clay 8I1: NH_4OAc		15-Bar Water	
0-8	0.84		0.49	
8-18	0.74		0.49	
18-25	0.86		0.55	
25-29	0.79		0.50	
29-35	0.88		0.54	
35-36	0.76		0.51	
36-46	0.96		0.58	
46-60	0.97		0.51	

a. >50 percent mica-like.
b. 25-50 percent mica-like.
c. 5-25 percent Fe-Mn.
d. >50 percent Fe-Mn.
e. One clod.
f. NH_4Cl-EtOH Extract (6N3a).
g. NH_4Cl-EtOH Extract (6Q3a).

Classification: Fine-silty, mixed, nonacid, thermic Aeric Fluvaquent
Soil series: Commerce.
Series classification: Same as pedon.

Pedon No.: S63LA-54-2.
Location: Tensas Parish, Louisiana, approximately 2 and 3/4 miles southeast of Newellton; 750 feet southeast of center of Louisiana Highway 605, 1,860 feet south southwest of intersection of Louisiana Highway 605 and 608, and 1,650 feet southwest of Louisiana Highway 608; Spanish Land Grant sec. 14, T. 12 N., R. 12 E.
Vegetation and use: Cultivated (corn stubble).
Slope and land form: Near top of low ridge with convex slope of about 1/2 percent on Mississippi River flood plain.
Drainage and permeability: Somewhat poorly drained; runoff slow; internal drainage slow; permeability moderately slow.
Climate: Precipitation 52 inches, Temperature 66 degrees F.
Parent material: Mississippi River alluvium.
Sampled by: James DeMent, J. L. Walker, Don A. Brown, Ronald Phillips, and Billie Nutt, October 28, 1963.
Described by: David F. Slusher and Tracey Weems, October 28, 1963.

Ap--0 to 20 cm (0 to 8 in.); dark grayish brown (10YR 4/2) silt loam (high in very fine sand); weak very fine granular structure adhering as massive; friable; few roots; medium acid; abrupt smooth boundary.

B2g--20 to 46 cm (8 to 18 in.); very dark grayish brown (10YR 3/2) on ped surfaces; light silty clay loam; dark grayish brown with common fine faint dark yellowish brown mottles and a few very dark grayish brown streaks inside peds; moderate medium subangular blocky adhering as weak medium prismatic structure; firm; few roots; few fine pores in peds; few fine dark brown aggregates; slightly acid; clear smooth boundary.

B31g--46 to 64 cm (18 to 25 in.); dark grayish brown (10YR 4/2) very fine sandy loam; common fine distinct dark yellowish brown mottles; weak medium subangular blocky structure; friable; a few roots; common fine pores in peds; very few dark brown aggregates; slightly acid; clear smooth boundary.

B32g--64 to 74 cm (25 to 29 in.); dark grayish brown (10YR 4/2) very fine sandy loam (coarser than horizon above); common fine distinct dark yellowish brown and grayish brown mottles; weak medium subangular blocky structure; friable; few roots; common fine pores in peds; a few fine dark brown aggregates; slightly acid; clear smooth boundary.

C1g--74 to 89 cm (29 to 35 in.); grayish brown (10YR 5/2) very fine sandy loam; common fine distinct dark yellowish brown mottles; massive; friable; common fine pores; very few fine dark brown aggregates; neutral; clear smooth boundary.

A1b--89 to 91 cm (35 to 36 in.); dark grayish brown (10YR 4/2) light silty clay loam; common fine distinct dark yellowish brown mottles; moderate medium subangular blocky; firm; few fine pores in peds; a few fine dark brown aggregates; neutral; abrupt smooth boundary.

C2g--91 to 117 cm (36 to 46 in.); grayish brown (10YR 5/2) very fine sandy loam; common fine distinct dark yellowish brown mottles; some areas have horizontal strata 1 to 2 mm thick or dark grayish brown (10YR 4/2); massive with some horizontal cleavage; friable; a few fine dark brown aggregates; common fine and a few medium pores; neutral; gradual smooth boundary.

C3g--117 to 152 cm (46 to 60 in.); grayish brown (10YR 5/2) very fine sandy loam; common fine distinct dark yellowish brown mottles; has 1/2 to 1 mm strata 1 to 2 mm apart of dark grayish brown (10YR 4/2) throughout; massive with some horizontal cleavage; friable; moderately alkaline; noncalcareous.

C4--1.5 to 3 m (5 to 11 feet); very fine sandy loam (not sampled).

C5--3 to 8.5 m (11 to 28 feet); dark gray (N 4/) silty clay loam stratified with silty clay and clay (not sampled).

IIC-6--8.5 m (28 feet); buried wood.

Remarks: One vertical krotovina of very dark grayish brown (10YR 3/2) silty clay loam from 18 to 46 inches. Profile dry to 84 inches. Munsell colors for moist soil unless otherwise indicated. Soil temperature:

DEPTH	DEGREES CELSIUS
10 feet	21.0
14 feet	20.7
19 feet	19.0
23 feet	18.5
25 feet	18.0
26 feet	18.2

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

SOIL Barbary SOIL Nos. S68La-47-13 LOCATION St. James Parish Louisiana

SOIL SURVEY LABORATORY Lincoln, Nebraska LAB. Nos. 68L847-68L850 February, 1970

GENERAL METHODS: 1B1b, 2A1, 2B

Depth (in.)	Horizon	Size class and particle diameter (mm) 3A2 Total: Sand (2-0.05)	Total: Silt (0.05-0.002)	Total: Clay (< 0.002)	Sand: Very coarse (2-1)	Sand: Coarse (1-0.5)	Sand: Medium (0.5-0.25)	Sand: Fine (0.25-0.1)	Sand: Very fine (0.1-0.05)	Silt: 0.05-0.02	Silt: Int. III (0.02-0.002)	Int. II (0.2-0.02)	(2-0.1)	<0.074	Clay <0.002 a/	2A2 Coarse fragments: 3B1 > 2	2 - 19	19 - 76
		Pct. of < 2 mm														Pct.	Pct. of < 76 mm	
0-6	O2	0.5	22.6	76.9	-	-	-	-	0.5	3.7	18.9	4.2	-	99.8	39	-		
6-12	A1g																	
12-40	C1g	.0.1	7.0	92.9	-	-	-	-	0.1	0.3	6.7	0.4	-	100.0	85	-		
40-50+	C2g																	

Depth (in.)	Organic Carbon 6A1a Wet Comb.	6A2b Dry Comb.	Organic Mat. b/	Ash 400°C. c/	Fiber c/ > 100 mesh Pct. of Whole Soil	Pct. of Organ. Mat.	pH Water 8C1a Air-Dry 1:2	Water Field-State	CaCl2 8C1e Air-Dry 1:3	Field-State	Water Content c/ Maximum Ret.	c/ As Recd.	4B2 15-Bar	4B2a 15-Bar	N Value d/	6R2a Sulfides e/
	Pct.	Pct.	Pct.	Pct.							Pct.	Pct.	Pct.	Pct.		me/100g
0-6	28.9		49.8	43.5	27	54	6.0	5.7	5.5	5.5	770	492	51.1	74.8	3.3	-
6-12																
12-40	5.01		8.64	88.7	-	-	6.1	6.3	5.5	6.3	184	146	37.8	46.9	1.4	-
40-50+																

Classification: Very-fine, montmorillonitic, nonacid, thermic Typic Hydraquent.
Soil series: Barbary.
Series classification: Same as pedon.

Pedon No.: S68LA-47-13.
Location: St. James Parish, Louisiana, 19 miles west of LaPlace, 1.2 miles east of point where 61 crosses St. James-Ascension Parish line; 700 yards south of U. S. 61, sec. 35, T. 10 S., R. 4 E.
Vegetation and use: Woodland, cypress, tupelo gum, water maple.
Drainage and permeability: Very poorly drained, ponded, very slow permeability.
Climate: Precipitation 60 inches, Temperature 68 degrees F.
Parent material: Clayey semifluid Mississippi River alluvium.
Described by: Warren L. Cockerham and Ray Dance, 7/17/68.
Sampled by: Warren L. Cockerham and Ray Dance, 7/17/68.

O2--15 to 0 cm (6 to 0 in.); very dark grayish brown (10YR 3/2) muck; massive; common wood fragments and partly decomposed spanish moss; about 60 percent organic matter; slightly acid; gradual wavy boundary.

A1g--0 to 15 cm (0 to 6 in.); dark gray (5Y 4/1) mucky clay; few fine distinct dark yellowish brown mottles; massive; nonsticky; semifluid, flows easily between fingers when squeezed; fragments of partly decomposed wood; about 20 percent organic matter; neutral; clear smooth boundary.

C1g--15 to 86 cm (6 to 34 in.); greenish gray (5GY 5/1) clay; massive; nonsticky; semifluid, flows easily between fingers when squeezed; about 5 percent organic matter; neutral; clear smooth boundary.

C2g--86 to 152 cm (34 to 60 in.); dark gray (5Y 4/1) nearly liquid clay; massive; nonsticky; underlain at 50 inches by a layer of undecomposed logs and fragments of wood; neutral.

Remarks: Water table at the surface when described and sampled. Munsell colors for wet soil.

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE

SOIL Barbary taxadjunct SOIL Nos. S68La-48-9 LOCATION St. John Parish, Louisiana

SOIL SURVEY LABORATORY Lincoln, Nebraska LAB. Nos. 68L841-68L846 February, 1970

GENERAL METHODS: 1B1b, 2A1, 2B

Depth (in.)	Horizon	Size class and particle diameter (mm) 3A2														2A2 Coarse fragments		
		Total			Sand					Silt					Clay	3B1		
		Sand (2–0.05)	Silt (0.05–0.002)	Clay (< 0.002)	Very coarse (2–1)	Coarse (1–0.5)	Medium (0.5–0.25)	Fine (0.25–0.1)	Very fine (0.1–0.05)	0.05–0.02	Int. III (0.02–0.002)	Int. II (0.2–0.02)	(2–0.1)	<0.074	< 0.002 a/	> 2	2 – 19	19 – 76
		Pct. of < 2 mm														Pct.	Pct. of < 76 mm	
0-5	A1	1.2	24.3	74.5	-	-	-	-	1.2	8.6	15.7	9.8	-	100.0	30	-		
5-15	C1g															-		
15-25	C2g																	
25-35	C3g	0.1	17.3	82.6	-	-	-	-	0.1	0.7	16.6	0.8	-	100.0	80	-		
35-45	2C2																	

Depth (in.)	Organic Carbon 6A1a Wet Comb.	6A2b Dry Comb.	Organ. Mat. b/	Ash 400° C c/	Fiber c/ > 100 mesh Pct. of Whole Soil	Pct. of Organ. Mat.	pH Water 8C1a Air-Dry 1:2	Field-State	CaCl2 8C1e Air-Dry 1:3	Field-State	Water Content c/ Maximum Ret.	c/ As Recd.	4B2 15-Bar	4B2a 15-Bar	N Value d/	6R2a Sulfides e/
	Pct.	Pct.	Pct.	Pct.							Pct.	Pct.	Pct.	Pct.		me/100g
0-5	34.4		59.3	35.3	55	93	6.0	6.0	5.5	5.8	737	502	58.1	77.7	2.8	-
5-10	23.7		40.9	56.3	33	81	6.3	6.0	5.8	6.0	483	295	47.7	71.6		
10-20																
20-30	1.80		3.1	93.6	-	-	7.6	7.2	7.2	7.2	139	97.7	36.0	41.2	1.3	-
30-40																
40-70																

Classification: Very-fine, montmorillonitic, nonacid, thermic, Typic Hydraquent.
Soil series: Barbary taxadjunct.
Series classification: Same as pedon.

Pedon No.: S68LA-48-9.
Location: St. John Parish, Louisiana, 3.5 miles north of Garyville; 2.4 miles north of U.S. 61; 100 feet west of Oilfield Road, sec. 86, T. 10 S., R. 6 E.
Vegetation and use: Woodland and wildlife habitat; cypress, tupelo gum and water maple.
Slope and land form: Broad level, depressed, Mississippi River backswamp.
Drainage and permeability: Very poorly drained, ponded and flooded most of the year, very slow permeability.
Climate: Precipitation 60 inches, Temperature 68 degrees F.
Parent material: Thin layer of woody peat over semifluid Mississippi River alluvium.
Sampled by: Warren L. Cockerham and Ray Dance, 7/17/68.
Described by: Warren L. Cockerham and Ray Dance, 7/17/68.

O2--13 to 0 cm (5 to 0 in.); black (10YR 2/1) semifluid muck; weak fine granular structure; common partly decomposed wood fragments; 40 percent mineral; slightly acid; clear wavy boundary.

A1--0 to 13 cm (0 to 5 in.); very dark grayish brown (10YR 3/2) mucky clay; moderate medium breaking into weak fine granular structure; semifluid; common wood fragments; about 15 percent organic matter; neutral; clear smooth boundary.

C1g--13 to 38 cm (5 to 15 in.); dark gray (5Y 4/1) clay; massive; semifluid; plastic; sticky; mildly alkaline; clear smooth boundary.

C2g--38 to 64 cm (15 to 25 in.); dark gray (5Y 4/1) clay; massive; semifluid; moderately alkaline; clear smooth boundary.

C3g--64 to 89 cm (25 to 35 in.); gray (5GY 5/1) clay with few faint dark yellowish brown mottles; massive; semifluid; moderately alkaline; clear smooth boundary.

II02--89 to 114 cm (35 to 45 in.); dark grayish brown (10YR 4/2) muck; semifluid; mat of logs and undecomposed wood fragments.

Remarks: Munsell color for wet soil.
Water table at the surface when described.

1/ Pedon is a taxadjunct to the Barbary Series because the O horizon is 2 inches too thick.

SOIL CLASSIFICATION-TYPIC HYDRAQUENT
VERY-FINE MONTMORILLONITIC, NONACID, THERMIC
SERIES - - - - - - - -BARBARY TAXADJUNCT

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE, NTSC
NATIONAL SOIL SURVEY LABORATORY
LINCOLN, NEBRASKA

SOIL NO - - - - - - - S71LA-26-2 JEFFERSON PARISH

GENERAL METHODS- - -1A,1B1B,2A1,2B SAMPLE NOS. 71L0494-71L0497

DEPTH CM	HORIZON	SAND 2-.05	SILT .05-.002	CLAY LT .002	FINE CLAY LT .0002	VCOS 2-1	CORS 1-.5	MEDS .5-.25	FINES .25-.10	VFNS .10-.05	COSI .05-.02	FNSI .02-.002	VFSI .005-.002	SAND 2-.10	INTR .2-.02	FINE CLAY TO CLAY PCT	NON-CO3-CLAY PCT	8D1 15-BAR TO CLAY
		PARTICLE SIZE ANALYSIS, LT 2MM, 3A1, 3A1A, 3A1B (PCT LT 2MM)														RATIO		
0-15	O2																	
15-46	A11G																	
46-56	A12	.1	21.4	78.5	34.7	.0	.0	.0	.0	.1	1.1	20.3		.0	1.2	44		
56-107	C2G	.1	7.4	92.5	49.9	.0	.0	.0	.0	.1	.2	7.2		.0	.2	54		
MOIST																		
0-15	C2																	
15-46	A11G																	
46-56	A12	.1	12.6	87.3	38.5	.0	.0	.0	.0	.1	.8	11.8		.0	.9	44		
56-107	C2G	.2	7.5	92.3	46.2	.0	.0	.0	.0	.2	.5	7.0		.0	.7	54		

DEPTH CM	VOL. GT 2 PCT	GT 75 PCT	75-20	20-5	5-2	LT .074 PCT LT75	20-2 PCT LT20	4A1D 1/3-BAR G/CC	4A1H OVEN DRY G/CC	4D1 COLE	4B1C 1/10 BAR PCT	4B1C 1/3-BAR PCT	4B2 15-BAR PCT	4C1 WRD CM/CM	6E1B LT 2 PCT	3A1A LT .002 PCT	8C1A 1/1 H2O	8C1B 1/2 CACL
	(PARTICLE SIZE ANALYSIS, MM, 3B, 3B1, 3B2) WEIGHT							(BULK DENSITY)			(WATER CONTENT)				CARBONATE		(PH)	
0-15	0	0	0	0	0		0										5.7	5.7
15-46	0	0	0	0	0		0										6.5	6.5
46-56	0	0	0	0	0		0										6.2	6.1
56-107	0	0	0	0	0		0										6.7	6.6
MOIST																		
0-15																		
15-46																		
46-56																		
56-107																		

DEPTH CM	6A1A ORGN CARB PCT	6B1A NITG PCT	C/N	6C2B EXT FE PCT	TOTL PCT	6N2E CA	6O2E MG	6P2B NA	6Q2B K	SUM EXTB	6H1A BACL TEA G/100	6G1E KCL EXT	5A3A EXTB ACTY	5A6A NHAC	8D1 NHAC TO CLAY	8D3 CA TO MG	5F1 SAT NHAC PCT	5C3 EXTB ACTY PCT	5C1 NHAC PCT
	(ORGANIC MATTER)			IRON	PHOS	(EXTRACTABLE BASES 5B4A) MEQ					ACTY	AL	(CAT EXCH)		RATIO	RATIO	CA	(BASE SAT)	
0-15		1.89		.3		67.9	24.1	18.4	1.2	112	58.4		170	91.8		2.8	74	66	
15-46		.149		.4		13.4	7.8	4.3	.7	26.2	.4		26.6	24.3		1.7	55	98	
46-56		.661		.3		50.1	22.0	16.2	1.1	89.4	44.0		133	71.5		2.3	70	67	
56-107		.445		.2		33.6	22.9	11.5	1.2	69.2	21.4		90.6	62.7		1.5	54	76	
MOIST																			
0-15																			
15-46																			
46-56																			
56-107																			

DEPTH CM	8E1 REST OHM-CM	8C1B PH	8A H2O PCT	5D2 ESP PCT	NA 5E SAR	SALT 8D5 TOTL SOLU PPM	GYP 6F1A PCT	8A1A EC MMHOS/CM	6N1B CA	6O1B MG	6P1B NA	6Q1B K	6I1A CO3	6J1A HCO3	6K1A CL	6L1A SO4	6M1A NO3	4F1 LQID LMIT PCT	4F2 PLST INDX
	(SATURATED PASTE)			NA	NA	SALT	GYP	(SATURATION EXTRACT 8A1) MEQ / LITER										ATTERBERG	
0-15	340	4.7	624	5	5	26000		5.63	29.5	18.0	22.5	.7			32.3	47.4			
15-46	520	6.0	75.4	10	7	2300		4.22	11.8	10.0	24.0	.4			18.8	26.7			
46-56	280	3.8	420	9	4	22000		7.03	29.8	27.9	24.0	.7			28.3	60.6			
56-107	300	5.0	256	7	6	11000		6.17	26.0	22.0	28.0	.6			21.6	53.6			
MOIST																			
0-15																			
15-46																			
46-56																			
56-107																			

DEPTH CM	8F MINL CONT PCT	8G (FIBER UNRB PCT	VCL) RUB PCT	8H PYROPHOSPHT SOLUBILITY (MUNSELL COLOR)	PH 8C1E .01M CACL	(BULK DEN) 4A3A FIELD STAT G/CC	4A1I 1/3B REWT G/CC	COLE 4D1 RE-WET	SUBS RES-IDUE PCT	(WATER CONTENT) 4B4 FIELD STAT PCT	4B1C 1/3B REWT PCT	4B2 15-BAR PCT	8C1 WRD CM/CM
	(HISTOSOL CHARACTERIZATION)												
		(STATE OF DECOMPOSITION)											
0-15	52	52	20	10YR 7/3	6.0	.15			5	590			
15-46	96					.80			51	82		21.6	
46-56	75	33	6	10YR 7/3	6.0	.29			15	248		41.3	
56-107	84					.45			25	186		42.6	
MOIST													
0-15													
15-46													
46-56													
56-107													

Classification: Very-fine montmorillonitic, nonacid, thermic Typic Hydraquent.
Soil series: Barbary taxadjunct 1/.
Series classification: Same as pedon.

Pedon No.: S71LA-26-2.
Location: Jefferson Parish, Louisiana, about 1 mile south of Bayou Segnette boat landing.
Vegetation and use: Woodland - maple, cypress, tupelo gum and alligator weed.
Slope and land form: Depressed swamp near sea level.
Drainage and permeability: Very poorly drained, very slowly permeable, runoff very slow to none.
Parent material: Mississippi River clayey alluvium.
Climate: Precipitation 60 inches, Temperature 70 degrees F.
Sampled by: Warren Lynn - 6/71.
Described by: Warren Cockerham and Dayton Matthews - 6/71.

O2--0 to 15 cm (0 to 6 in.); dark reddish brown (7.5YR 3/2); same pressed and rubbed; about 40 percent fiber, about 3 percent rubbed; massive; flows easily between fingers when squeezed and leaves small residue in hand; dominantly woody fiber; many logs, sticks and partially decomposed wood fragments; about 50 percent mineral; slightly acid; clear smooth boundary.

A11g--15 to 46 cm (6 to 18 in.); gray (5Y 5/1) clay; massive; semifluid, flows easily between fingers when squeezed and leaves small residue in hand; many roots and partially decomposed fibers; neutral; clear smooth boundary.

A12--46 to 56 cm (18 to 22 in.); dark reddish brown (7.5YR 3/2) clay; massive; semifluid, flows easily between fingers and leaves small residue in hand; common roots; few wood fragments up to 4 percent in diameter; neutral clear smooth boundary.

C2g--56 to 107 cm (22 to 42 in.); gray (5Y 5/1) clay; massive; semifluid, flows easily between fingers when squeezed and leaves small residue in hand; common roots, logs and stumps; moderately alkaline; clear smooth boundary.

C3g--107 to 122 cm (42 to 48 in.); dark gray (2.5Y 4/1) clay; massive; semifluid, flows easily between fingers when squeezed and leaves hand empty; moderately alkaline; clear smooth boundary.

C4g--122 to 145 cm (48 to 57 in.); gray (5Y 5/1) clay; massive; semifluid, flows easily between fingers when squeezed and leaves hand empty; moderately alkaline.

Remarks: Water table 6 inches below the surface. Munsell colors for wet soil.

1/ This pedon is slightly outside of the Barbary series (4/73) because the A horizon is too thick and the color of the A12 horizon is one hue and one chroma outside the range.

SOIL CLASSIFICATION-TYPIC HYDRAQUENT
VERY-FINE, MONTMORILLONITIC, NONACID, THERMIC
SERIES - - - - - - -BARBARY

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE, NTSC
NATIONAL SOIL SURVEY LABORATORY
LINCOLN, NEBRASKA

SOIL NO - - - - - - S71LA-26-11 JEFFERSON PARISH

GENERAL METHODS- - -1A,1B1B,2A1,2B SAMPLE NCS. 71L498-71L500

DEPTH CM	HORIZON	PARTICLE SIZE ANALYSIS, LT 2MM, 3A1, 3A1A, 3A1B (PCT LT 2MM) SAND 2- .05	SILT .05- .002	CLAY LT .002	FINE CLAY LT .0002	VCOS 2- 1	CORS 1- .5	MEDS .5- .25	FNES .25- .10	VFNS .10- .05	COSI .05 .02	FNSI .02 .002	VFSI .005- .002	SAND 2- .10	INTR II .2- .02	FINE CLAY TO CLAY PCT	NON- CO3- CLAY PCT	RATIO 8D1 15- BAR TO CLAY
18-0	C2																	
0-20	C1																	
20-28	2C2																	

DEPTH CM	8F FIBER CONT PCT	8G (STATE OF DECOMPOSITION) UNRE PCT	VCL) RUB PCT	8H HYDROGEN SOLUBILITY (MUNS COLOR)	PH 8C1B .01M CACL	(BULK DEN) 4A3A FILD STAT G/CC	4A1I 1/3B REWT G/CC	COLE 4E1 RE-WET	SUBS RES-IDUE PCT	(WATER CONTENT) 4B4 FILD STAT PCT	4E1C 1/3B REWT PCT	4E2 15-BAR PCT	4C1 WRD CM/CM
18-0	42					.09				1150			
0-20	92					.32				140			
20-28	92					.63				107			

Classification: Very-fine, montmorillonitic, nonacid, thermic Typic Hydraquent.
Soil series: Barbary.
Series classification: Same as pedon.

Pedon No.: S71LA-26-11.
Location: Jefferson Parish, Louisiana; about 7 miles south of Marrero, ¼ mile west of La. Hwy. 30, 30 feet south of pipeline right-of-way, sec. 62, T. 14 S., R. 23 E.
Vegetation and use: Wildlife habitat, cypress, maple and tupelo gum.
Slope and land form: Depressed swampland.
Drainage and Permeability: Very poorly drained, very slowly permeable.
Climate: Precipitation 60 inches, Temperature 70 degrees F.
Parent material: Woody plant remains and clayey Mississippi River alluvium that was deposited underwater and never air dried.
Sampled by: James Coover and Warren Lynn, June 17, 1971.
Described by: Dayton Matthews and Warren Cockerham.

O2--18 to 0 cm (7 to 0 in.); black (10YR 2/1) muck, same pressed and rubbed; about 60 percent fiber, about 10 percent rubbed; massive; flows easily between fingers and leaves small residue in hand; many live roots and partially decomposed wood fragments up to 2 inches in diameter; clear wavy boundary.

C1--0 to 20 cm (0 to 8 in.); gray (5Y 5/1) clay; massive; flows easily between fingers when squeezed and leaves hand empty; many fine roots; few wood fragments up to 2 inches in diameter.

IIO22--20 to 28 cm (8 to 11 in.); black (10YR 2/1) fluid organic layer.

IIIC--28 to 46 cm (11 to 18 in.); dark gray (5Y 4/1) clay; massive; flows easily between fingers when squeezed and leaves hand empty; common partially decomposed wood fragments up to 3 inches in diameter; nearly continuous layer of logs, stumps and roots at 25 inches.

Remarks: Munsell colors are for wet soil.
Water table at the surface when sampled.

SOIL CLASSIFICATION-TYPIC HYDRAQUENT
VERY-FINE, MONTMORILLONITIC, NONACID, THERMIC
SERIES - - - - - - -GENTILLY

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE, MYSC
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LINCOLN, NEBRASKA

SOIL NO - - - - - - 571LA-36-5 JEFFERSON PARISH

GENERAL METHODS- - -1A,1B1B,2A1,2B SAMPLE NOS. 71L0501-71L0506

DEPTH CM	HORIZON	PARTICLE SIZE ANALYSIS, LT 2MM, 3A1, 3A1A, 3A1B: SAND 2-.05	SILT .05-.002	CLAY LT .002	FINE CLAY LT .0002	VCOS 2-1	CORS 1-.5	MEDS .5-.25	FNES .25-.10	VFNS .10-.05	COSI .05-.02	FNSI .02-.002	VFSI .005-.002	SAND 2-.10	INTR II .2-.02	FINE CLAY TO CLAY	NON-CO3-CLAY PCT	RATIO 8D1 15-BAR TO CLAY
		PCT LT 2MM																
0-13	O21																	
13-30	O22	12.1	51.5	36.4	17.5	TR	.1	.3	1.2	10.5	22.1	29.4		1.6	33.4	48		
30-48	C1G	15.3	58.3	26.4	14.1	TR	.1	.3	1.1	13.8	31.3	27.0		1.5	46.0	53		
48-71	C2G	13.9	60.3	25.8	14.0	.0	.1	.2	.8	12.8	40.2	20.1		1.1	53.6	54		
71-97	C3G	9.8	44.9	45.3	18.6	.3	.5	.4	1.1	7.5				1.2		41		
97-152	C4G																	
MOIST																		
0-13	O21																	
13-30	O22	4.5	61.3	34.2	11.9	.0	TR	.1	.5	3.9	33.4	27.9		.6	37.7	35		
30-48	C1G	13.4	59.4	27.2	14.5	.0	.0	.1	.9	12.4	32.4	27.0		1.0	45.7	53		
48-71	C2G	14.0	56.3	29.7	17.3	TR	.0	.1	.9	13.0	29.4	26.9		1.0	43.3	58		
71-97	C3G	8.1	56.2	35.7	18.2	TR	TR	.1	.5	7.5				.6		51		
97-152	C4G																	

DEPTH CM	PARTICLE SIZE ANALYSIS, PM, 3B, 3B1, 3B2: VOL. GT 2 PCT	WEIGHT GT 75 PCT	75-20	20-5	5-2	LT .074 PCT LT 75	BULK DENSITY: 4A1D 1/3-BAR G/CC	4A1H OVEN DRY G/CC	4D1 COLE	4B1C 1/10 BAR PCT	WATER CONTENT: 4B1C 1/3-BAR PCT	4B2 15-BAR PCT	4C1 WRD CM/CM	CARBONATE: 6E1B LT 2 PCT	3A1A LT .002 PCT	PH: 8C1A 1/1 H2O	8C1B 1/2 CACL
0-13	0	0	0	0	0	0										5.0	5.0
13-30	0	0	0	0	0	0										4.7	4.7
30-48	0	0	0	0	0	0										4.3	4.3
48-71	0	0	0	0	0	0										4.4	4.4
71-97	0	0	0	0	0	0										6.6	6.4
97-152	0	0	0	0	0	0											
MOIST																	
0-13																	
13-30																	
30-48																	
48-71																	
71-97																	
97-152																	

DEPTH CM	ORGANIC MATTER: 6A1A ORGN CARB PCT	6B1A NITG PCT	C/N	IRON 6C2B EXT FE PCT	PHOS TOTL PCT	EXTRACTABLE BASES 5B4A: 6N2E CA	6O2D MG	6P2B NA	6Q2B K	SUM	ACTY 6H1A BACL TEA G-	AL 6G1E KCL EXT	CAT EXCH: 5A3A EXTB ACTY	5A6A NHAC	RATIO 8D1 NHAC TO CLAY	RATIO 8D3 CA TO MG	CA 5F1 SAT NHAC PCT	BASE SAT: 5C3 EXTB ACTY PCT	5C1 NHAC PCT
						MEQ / 100													
0-13		1.08		.5		11.4	19.7	30.5	2.4	64.0	27.9		91.9	51.9		.6	22	70	
13-30		.772		.4		7.7	12.9	16.3	1.4	38.3	38.8		77.1	42.7		.6	18	50	90
30-48		.122		.2		4.8	8.2	6.7	1.0	20.2	10.1		30.3	19.8		.5	22	67	102
48-71		.054		.3		5.7	11.3	6.0	1.3	24.3	4.3		28.6	21.2		.5	27	85	
71-97		.049		1.0		8.4	17.2	10.5	1.7	37.8	4.3		42.1	30.1		.5	28	90	
97-152																			
MOIST																			
0-13																			
13-30																			
30-48																			
48-71																			
71-97																			
97-152																			

DEPTH CM	SATURATED PASTE: 8E1 REST OHM-CM	8C1B PH	EA H2O PCT	NA 5D2 ESP PCT	NA 5E SAR	SALT 8D5 TOTL SOLU PPM	GYP 6F1A PCT	SATURATION EXTRACT 8A1: 8A1A EC MMHOS/CM	6N1B CA	6O1B MG	6P1B NA	6Q1B K	6I1A CO3	6J1A HCO3	6K1A CL	6L1A SO4	6M1A NO3	ATTERBERG: 4F1 LQID LMIT PCT	4F2 PLST INDX
								MEQ / LITER											
0-13	200	4.3	304	9	18	31000		12.70	13.5	33.5	85.5	2.7			90.7	46.1			
13-30	280	3.9	206	7	14	16000		10.10	12.3	30.0	65.0	2.0			63.9	44.3			
30-48	350	3.8	69.1	15	13	4400		8.43	9.8	22.3	54.0	1.7			47.7	42.2			
48-71	300	4.8	78.5	9	14	4700		7.91	7.8	19.8	52.5	1.7			45.8	36.7			
71-97	300	6.3	88.2	19	16	5200		7.67	7.0	18.5	55.5	1.5			45.6	38.8			
97-152																			
MOIST																			
0-13																			
13-30																			
30-48																			
48-71																			
71-97																			
97-152																			

DEPTH CM	HISTOSOL CHARACTERIZATION: 8F MINL CONT PCT	(STATE OF DECOMPOSITION) 8G (FIBER VOL) UNRB PCT	RUB PCT	8H PYROPHOSPHT SOLUBILITY (MUNS COLOR)	PH 8C1E .01M CACL	(BULK DEN) 4A3A FILD STAT G/CC	4A1I 1/3B REWT G/CC	COLE 4D1 RE-WET	SUBS RES-IDUE PCT	WATER CONTENT: 4B4 FILD STAT PCT	4B1C 1/3B REWT PCT	4B2 15-BAR PCT	4C1 WRD CM/CM
0-13	70A	22	4	10YR 5/4	4.8	.36			17	250		35.5	
13-30	77	16	5	10YR 5/4	4.8	.98			50	62		17.4	
30-48	96					1.27			81	42		13.8	
48-71	98					1.14			74	47		14.0	
71-97	98											16.6	
97-152													
MOIST													
0-13													
13-30													
30-48													
48-71													
71-97													
97-152													

CLAY MINERALOGY (A2C) PLACEMENT (571LA-36-5) MONTMORILLONITIC.
048-71 MT5 KK2 MI2.
COMMENTS: CLAYS WELL ORDERED.
RELATIVE AMOUNTS: (X-RAY) 5 = DOMINANT 4 = ABUNDANT 3 = MODERATE 2 = SMALL 1 = TRACE.
MINERAL CODE: MT = MONTMORILLONITE MI = MICA KK = KAOLINITE

(A) ESTIMATE.

Classification: Very-fine, montmorillonitic, nonacid, thermic Typic Hydraquent.
Soil series: Gentilly.
Series classification: Same as pedon.

Pedon No.: S71LA-36-5.
Location: Orleans Parish, Louisiana, about 14 miles northeast of New Orleans; 1 mile north of U.S. Hwy.90, 270 feet west of U.S. Hwy.11, T. 11 S., R. 13 E.
Vegetation and use: Wildlife habitat, cattail, cutgrass, marshhay cordgrass, bit cordgrass.
Slope and land form: Depressed marshland.
Drainage and permeability: Very poorly drained, the water level is at or above the surface most of the time; internal drainage is very slow to none; permeability is very slow.
Parent material: Herbaceous plant remains over semifluid Mississippi River clayey alluvium.
Climate: Precipitation 61 inches, Temperature 70 degrees F.
Sampled by: Warren Lynn - 6/15/71.
Described by: Warren Cockerham and Dayton Matthews, 6/15/71.

O21--0 to 13 cm (0 to 5 in.); very dark gray (10YR 3/1) mucky peat, same color pressed and rubbed; about 30 percent fiber, about 15 percent rubbed; massive; flows easily between fingers when squeezed and leaves large residue in hand; many live roots; about 70 percent mineral; strongly acid; abrupt smooth boundary.

O22--13 to 30 cm (5 to 12 in.); black (10YR 2/1) muck, same color pressed and rubbed; about 25 percent fiber, less than 1 percent rubbed; massive; flows easily between fingers when squeezed and leaves small residue in hand; about 65 percent mineral; medium acid; abrupt smooth boundary.

C1g--30 to 48 cm (12 to 19 in.); dark gray (5Y 4/1) clay; common medium prominent yellowish brown (10YR 3/4) mottles; massive; semifluid, flows easily between fingers when squeezed and leaves small residue in hand; slightly acid.

C2g--48 to 71 cm (19 to 28 in.); gray (5Y 5/1) clay; common medium prominent dark brown (7.5YR 4/4) mottles; massive; semifluid, flows with some difficulty between fingers when squeezed and leaves large residue in hand; neutral.

C3g--71 to 97 cm (28 to 38 in.); greenish gray (5GY 4/1) clay; common medium prominent dark brown (7.5YR 4/4) mottles; massive; semifluid, flows with some difficulty between fingers when squeezed and leaves large residue in hand; neutral.

C4g--97 to 152 cm (38 to 60 in.); greenish gray (5GY 4/1) clay; massive; will not flow between fingers when squeezed; plastic and sticky; neutral.

Remarks: Water table at surface when sampled. Munsell colors for wet soil unless indicated otherwise. Pedon is within about 20 feet of the typifying pedon for the official series (rev. 5/73).

SOIL CLASSIFICATION-TYPIC HYDRAQUENT
VERY-FINE, MONTMORILLONITIC, NONACID, THERMIC
SERIES - - - - - - -NOT DESIGNATED

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE, MTSC
NATIONAL SOIL SURVEY LABORATORY
LINCOLN, NEBRASKA

SOIL NC - - - - - - S71LA-26-7 JEFFERSON PARISH,

GENERAL METHODS- - -1A,1B1B,2A1,2B SAMPLE NOS. 71L0510-71L0513

DEPTH CM	HORIZON	PARTICLE SIZE ANALYSIS, LT 2MM, 3A1, 3A1A, 3A1B (PCT LT 2MM) SAND 2-.05	SILT .05-.002	CLAY LT .002	FINE CLAY LT .0002	VCOS 2-1	CORS 1-.5	MEDS .5-.25	FNES .25-.10	VFNS .10-.05	COSI .05-.02	FNSI .02-.002	VFSI .002-.002	SAND 2-.10	INTR II .2-.02	FINE CLAY TO CLAY PCT	RATIO NON-CO3-CLAY PCT	RATIO 8D1 15-BAR TO CLAY
33-0	02																	
0-48	C1G	.5	16.2	83.3	37.2	.0	.0	.0	.1	.4	.6	15.6		.1	1.0	45		
48-89	C2G	.1	3.4	96.5	48.9	.0	.0	.0	.0	.1	1.0	2.4		.0	1.1	51		
89-119	ABG	.1	2.0	97.9	57.9	.0	.0	.0	.0	.1	.2	1.8		.0	.3	59		
MOIST																		
33-0	02																	
0-48	C1G	TR	46.1	53.9	24.3	.0	.0	.0	.0	TR	6.8	39.3		.0	6.8	45		
48-89	C2G	TR	4.7	95.3	54.7	.0	.0	.0	.0	TR	1.2	3.5		.0	1.2	57		
89-119	ABG	.1	8.4	91.5	42.1	.0	.0	.0	TR	.1	2.8	5.6		TR	2.9	46		

DEPTH CM	(PARTICLE SIZE ANALYSIS, MM, 3B, 3B1, 3B2) VOL. GT 2 PCT	WEIGHT GT 75 PCT	75-20	20-5	5-2 (PCT LT 75)	LT .074	20-2 PCT LT20	BULK DENSITY 4A1D 1/3-BAR G/CC	4A1H OVEN DRY G/CC	4D1 COLE	4B1C 1/10 BAR PCT	WATER CONTENT 4B1C 1/3-BAR PCT	4B2 15-BAR PCT	4C1 WRD CM/CM	CARBONATE 6E1B LT 2 PCT	3A1A LT .002 PCT	PH 8C1A 1/1 H2O	PH 8C1E 1/2 CACL
33-0	0	0	0	0	0		0										4.7	4.7
0-48	0	0	0	0	0		0										6.6	6.5
48-89	0	0	0	0	0		0										7.7	7.3
89-119	0	0	0	0	0		0										6.7	6.7
MOIST																		
33-0																		
0-48																		
48-89																		
89-119																		

DEPTH CM	ORGANIC MATTER 6A1A ORGN CARB PCT	6B1A NITG PCT	C/N	IRON 6C2B EXT FE PCT	PHOS TOTL PCT	EXTRACTABLE BASES 5B4A- 6N2E CA	6O2D MG	6P2B NA	6Q2B K	SUM EXTB / 100 (MEQ)	ACTY 6H1A BACL TEA G-	AL 6G1E KCL EXT	CAT EXCH 5A3A EXTB ACTY	5A6A NHAC	RATIO 8D1 NHAC TO CLAY	RATIO 8D3 CA TO MG	CA 5F1 SAT NHAC PCT	BASE SAT 5C3 EXTB ACTY PCT	5C1 NHAC PCT
33-0		2.56		.9		71.7	23.9	27.7	.5	124	59.1		183	88.3		3.0	81	68	
0-48		.228		.8		48.1	22.1	15.1	.5	85.8	18.6		104	66.0		2.2	73	82	
48-89		.505		.2		47.5	25.9	15.3	1.0	89.7	22.0		112	65.8		1.8	72	80	
89-119		1.09		.2		62.1	29.5	22.6	.8	115	37.9		153	85.3		2.1	73	75	
MOIST																			
33-0																			
0-48																			
48-89																			
89-119																			

DEPTH CM	HISTOSOL CHARACTERIZATION 8F MINL CONT PCT	STATE OF DECOMPOSITION 8G (FIBER UNRB PCT	VCL) RUB PCT	8H PYROPHOSPHT SOLUBILITY (MUNS COLOR)	PH 8C1E .01M CACL	BULK DEN 4A3A FILD STAT G/CC	4A1I 1/3B REWT G/CC	COLE 4D1 RE-WET	SUBS RES-IDUE PCT	WATER CONTENT 4B4 FILD STAT PCT	4B1C 1/3B REWT PCT	4B2 15-BAR PCT	4C1 WRD CM/CM
33-0	27	46	12	10YR 6/4	5.5	.08			22	676		79.2	
0-48	96					.87				75		26.6	
48-89	92	4	2	10YR 6/3	8.0	.46				174		42.3	
89-119	63	20	4	10YR 7/3	8.0	.19			39	423		50.7	
MOIST													
33-0													
0-48													
48-89													
89-119													

CLAY MINERALOGY (7A2C) PLACEMENT (S71LA-26-7) MONTMORILLONITIC.
0B2-122 MT5 KK3 MI2.
COMMENTS: CLAYS WELL ORDERED.
RELATIVE AMOUNTS: (X-RAY) 5 = DOMINANT 4 = ABUNDANT 3 = MODERATE 2 = SMALL 1 = TRACE.
MINERAL CODE: MT = MONTMORILLONITE MI = MICA KK = KAOLINITE

Classification: Very-fine, montmorillonitic, nonacid, thermic Typic Hydraquent
Soil series: Not designated 1/.

Pedon No.: S71LA-26-7.
Location: Jefferson Parish, Louisiana; about 2 miles west of West Wego and about ½ mile southwest of Bayou Segnette pumping station; about .5 mile east of Churchill Farm headquarters; 300 feet south of gravel road, 200 feet south of power line, sec. 16, T. 14 S., R. 23 E.
Use and vegetation: Wildlife habitat, cattail, alligatorgrass, bull tongue, and paille fine.
Slope and land form: Level marshland.
Drainage and permeability: Very poorly drained, very slowly permeable.
Climate: Precipitation 60 inches, Temperature 50 degrees F.
Parent material: Herbaceous plant remains over soft Mississippi River clayey alluvium.
Sampled by: Warren Lynn, 6/15/71.
Described by: Warren Cockerham and Dayton Matthews.

O2--33 to 0 cm (13 to 0 in.); very dark gray (10YR 3/1), same pressed and rubbed; about 70 percent fiber, about 5 percent rubbed; massive; will not flow between fingers when squeezed; mat of live roots; about 50 percent mineral; strongly acid; abrupt smooth boundary.

C1g--0 to 48 cm (0 to 19 in.); dark gray (5Y 4/1) clay; massive; flows easily between fingers when squeezed and leaves small residue in hand; many roots and partially decomposed herbaceous organic material; mildly alkaline; clear smooth boundary.

C2g--48 to 89 cm (19 to 35 in.); dark gray (5Y 4/1) clay; massive; flows easily between fingers when squeezed and leaves hand empty; common roots and partially decomposed organic fibers; moderately alkaline; clear smooth boundary.

Abg--89 to 119 cm (35 to 47 in.); very dark grayish brown (10YR 3/2) mucky clay; massive; flows easily between fingers when squeezed and leaves hand empty; moderately alkaline.

Remarks: Munsell colors for wet soil.
Water table at the surface.

1/ Pedon was sampled as a representative of an unnamed series field mapped Hydraquents.

SOIL CLASSIFICATION-HYDRIC HEDEEMIST
HUIC, THERMIC
SERIES - - - - - - - -CAFLIN

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE, FTSC
NATIONAL SOIL SURVEY LABORATORY
LINCOLN, NEBRASKA

SOIL NO - - - - - - - S68LA-48-5 ST. JOHN PARISH

GENERAL REMARKS- - -1A,1B1B,2A1,2B SAMPLE NOS. 68L0855-68L0856

DEPTH IN	HORIZON	SAND 2-.05 PCT	SILT .05-.002 PCT	CLAY LT .002 PCT	FINE CLAY LT .0002 PCT	VCOS 2-1 PCT	COBS 1-.5 PCT	MEDS .5-.25 PCT	FNES .25-.10 PCT	VFNS .10-.05 PCT	COSI .05-.02 PCT	FNSI .02-.002 PCT	VFSI .005-.002 PCT	SAND 2-.10 PCT	INTP II .2-.02 PCT	FINE CLAY TO CLAY PCT	NON-CO3-CLAY PCT	8D1 15-BAR TO CLAY
12-20	OE1																	
30-60	CE3	3.9	43.0	53.1		.0	.2	.1	.1	3.5	17.3	25.7						

DEPTH IN	VCL. GT 2 PCT	GT 75 PCT	75-20	20-5	5-2	LT .074 PCT	20-2 LT20	4A1E 1/3-BAR G/CC	4A1H OVEN DRY G/CC	4D1 COLE	4B1C 1/10 BAR PCT	4B1C 1/3-BAR PCT	4B2 15-BAR PCT	4C1 WRD CM/CM	6E1B LT 2 PCT	3A1A LT .002 PCT	8C1A 1/1 H2O	8C1E 1/2 CACL
12-20													63.8				5.6	5.2
30-60						99							71.3				5.3	5.0

DEPTH IN	6A1A ORGN CARB PCT	6B1A NITG PCT	C/N	6C2B EXT FE PCT	TOTL PCT	6N2E CA	6O2I MG	6P2B NA	6Q2B K	SUM EXTB	6B1A BACL TEA	6G1E KCI EXT	5A3A EXTE ACTY	5A6A NHAC	8D1 NHAC TO CLAY	8D3 CA TO MG	CA SAT NHAC PCT	5C3 EXTE ACTY PCT	5C1 NHAC PCT
						-MEQ / 100 G-													
12-20	33.9																		
30-60	28.5																		

DEPTH IN	8F BISL CONT PCT	8G (STATE OF DECOMPOSITION) (FIBER VOL) UNRB PCT	8H RUB PCT	8B PYROPHOSPHT SOLUBILITY (MUNS COLOR)	PH 8C1E .01M CACL	(BULK DEN) 4A3A FILD STAT G/CC	4A1I 1/3B REWT G/CC	COLE 4D1 RE-WET	SUBS RES-IDUE PCT	4B4 FILD STAT PCT	(WATER CONTENT) 4E1C 1/3B REWT PCT	4E2 15-BAR PCT	4C1 WRD CM/CM
12-20	39	37			5.5					1060			
30-60	49	21			5.1					867			

Classification: Euic, thermic Hydric Medihemist.
Soil series: Carlin.
Series classification: Same as pedon.

Pedon No.: S68LA-48-5.
Location: St. John Parish, La., about 10 mi. southeast of Vacherie, 3/4 mi. north of outlet of Bayou Chevreuil, southwest of Fausse Point, sec. 37, T. 13 S., R. 18 E.
Vegetation and use: Wildlife habitat, paille fine, bushy top bluestem.
Slope and land form: Level, floating tidal marsh.
Microrelief: Narrow micro rills and ridges with 6-inch difference in elevations.
Drainage and permeability: Very poorly drained, rapid permeability.
Climate: Precipitation 60 inches, Temperature 68 degrees F.
Parent material: Partly decomposed herbaceous plant remains over loamy sediment.
Described by: W. L. Cockerham and Ray Dance, November 20, 1967.

Oi1--0 to 15 cm (0 to 6 in.); very dark grayish brown (10YR 3/1), black (10YR 2/1) pressed, same rubbed fibric material; about 75 percent fiber after rubbing; massive; about 30 percent mineral content; slightly acid; clear smooth boundary.

Oi2--15 to 30 cm (6 to 12 in.); very dark grayish brown (10YR 3/2), very dark gray (10YR 3/1) rubbed, same pressed fibric material; about 70 percent fiber after rubbing; massive; herbaceous; 30 percent mineral content; slightly acid; clear wavy boundary.

Oe1--30 to 51 cm (12 to 20 in.); very dark grayish brown (10YR 3/2), same pressed and rubbed; very dark gray (10YR 3/1) broken face after exposure to air hemic material; about 30 percent fiber after rubbing; massive; 35 percent mineral content; herbaceous fiber; neutral; clear wavy boundary.

Oe2--51 to 76 cm (20 to 30 in.); very dark grayish brown (10YR 3/2), same pressed and rubbed hemic material; about 30 percent fiber after rubbing; herbaceous; 30 percent mineral content; fluid, thickness varies with water level (tide); neutral.

Oe3--76 to 152 cm (30 to 60 in.); very dark gray (10YR 3/1), same pressed and rubbed hemic material; about 15 percent fiber after rubbing; massive; nearly liquid; 30 percent mineral content; mildly alkaline.

Ab--152 to 183 cm (60 to 72 in.); greenish gray (5GY 5/1) sandy clay loam; massive; nearly liquid; moderately alkaline.

Remarks: 1. Described from slice obtained with posthole digger to 42 inches, below 42 inches with Belgian Auger.

2. Munsell colors for wet soil unless indicated otherwise.

3. Water table at the surface when described and sampled.

SOIL CLASSIFICATION-TYPIC MEDISAPRIST
EUIC. THERMIC
SERIES - - - - - - -KENNER TAXADJUNCT

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE, MTSC
NATIONAL SOIL SURVEY LABORATORY
LINCOLN, NEBRASKA

SOIL NO - - - - - - S71LA-26-4 JEFFERSON PARISH

GENERAL METHODS- - -1A,1B1B,2A1,2B SAMPLE NOS. 71L0522-71L0528

DEPTH CM	HORIZON	SAND 2- .05	SILT .05- .002	CLAY LT .002	FINE CLAY LT .0002	VCOS 2- 1	CORS 1- .5	MEDS .5- .25	FNES .25- .10	VFNS .10- .05	COSI .05- .02	FNSI .02- .002	VFSI .005- .002	SAND 2- .10	INTR II .2- .02	FINE CLAY TO CLAY	NON-CO3-CLAY	RATIO 8D1 15-BAR TO CLAY
		PARTICLE SIZE ANALYSIS, LT 2MM, 3A1, 3A1A, 3A1B - - - - - - - - - - PCT LT 2MM																
0-18	A1																	
18-46	OA1																	
46-66	CA2																	
66-97	OA3																	
97-132	OA4																	
132-191	OA5																	
191-221	2CG	1.2	24.2	74.6	34.6	.0	.0	TR	.1	1.1	5.1	19.1		.1	6.3	46		
MOIST																		
0-18	A1																	
18-46	OA1																	
46-66	CA2																	
66-97	OA3																	
97-132	CA4																	
132-191	OA5																	
191-221	2CG	1.2	20.3	78.3	28.6	.0	TR	.1	.2	.9	3.5	16.8		.3	4.5	36		

DEPTH CM	VOL. GT 2 PCT	WEIGHT GT 75 PCT	75-20 PCT	20-5 PCT	5-2 PCT	LT .074 PCT LT20	4A1D 1/3-BAR G/CC	4A1H OVEN DRY G/CC	4D1 COLE	4B1C 1/10 BAR PCT	4B1C 1/3-BAR PCT	4B2 15-BAR PCT	4C1 WRD CM/CM	6E1B LT 2 PCT	6A1A LT .002 PCT	8C1A 1/1 H2O	8C1E 1/2 CACL
	PARTICLE SIZE ANALYSIS, MM, 3B, 3B1, 3B2						BULK DENSITY			WATER CONTENT				CARBONATE		PH	
0-18	0	0	0	0	0	0	.93	1.31	.121		54.5					4.0	3.8
18-46	0	0	0	0	0	0	.28	.82	.431	254	51					3.4	3.3
46-66	0	0	0	0	0	0	.17	.66	.570	434	36					4.1	4.1
66-97	0	0	0	0	0	0	.16	.70	.654	516	90					4.4	4.4
97-132	0	0	0	0	0	0										5.2	5.2
132-191	0	0	0	0	0	0										5.9	5.9
191-221	0	0	0	0	0	0										7.3	7.3
MOIST																	
0-18																	
18-46																	
46-66																	
66-97																	
97-132																	
132-191																	
191-221																	

DEPTH CM	6A1A ORGN CARB PCT	6B1A NITG PCT	C/N	6C2B EXT FE PCT	PHOS TOTL PCT	6N2E CA	6C2D MG	6P2B NA	6Q2B K	SUM EXTB MEQ / 100 G	5B4A- ACTY 6H1A BACL TEA	AL 6G1E KCL EXT	5A3A EXTB ACTY	5A6A NHAC	RATIO 8D1 NHAC TO CLAY	RATIO 8D3 CA TO MG	CA 5F1 SAT NHAC PCT	5C3 EXTB ACTY PCT	5C1 NHAC PCT
	ORGANIC MATTER			IRON		EXTRACTABLE BASES							CAT EXCH				BASE SAT		
0-18		.740		1.1		12.8	11.2	.3	.9	25.2	46.9		72.1	63.9		1.1	20	35	39
18-46		2.68		1.1		34.7	16.4	1.2	.5	52.8	217		270	158		2.1	22	20	33
46-66		2.90		.7		57.8	27.4	5.0	.1	90.3	161		252	143		2.1	40	36	63
66-97		2.76		.9		79.4	48.0	11.1	.1	139	163		302	137		1.7	58	46	101
97-132		2.69		.4		47.1	62.2	18.1	.5	128	163		291	105		.8	45	44	
132-191		1.42		.2		35.7	37.6	16.1	1.4	94.8	83.7		179	57.3		1.1	69	53	
191-221		.156		.2		20.5	24.6	12.9	2.4	59.8	5.0		64.8	42.2		.8	49	92	
MOIST																			
0-18																			
18-46																			
46-66																			
66-97																			
97-132																			
132-191																			
191-221																			

DEPTH CM	8E1 REST OHM-CM	8C1B PH	8A H2O PCT	NA ESP PCT	NA SAR	SALT 8D5 TOTL SOLU PPM	GYP 6F1A PCT	8A1A EC MMHOS/CM	6N1B CA	6O1B MG	6P1B NA	6Q1B K	6I1A CO3	6J1A HCO3	6K1A CL	6L1A SO4	6M1A NO3	4F1 LQID LMIT PCT	4F2 PLST INDX
	SATURATED PASTE								SATURATION EXTRACT 8A1									ATTERBERG	
									MEQ / LITER										
0-18																			
18-46	1000	3.3	342			5000		2.20	8.8	8.8	1.4	.4			.2	12.7			
46-66	760	3.9	647	1	1	11000		2.53	11.5	12.8	5.0	.1			2.1	17.9			
66-97	330	3.8	721	2	2	29000		5.44	26.8	39.3	11.3	.2			6.9	72.3			
97-132	250	3.3	642	4	3	42000		8.58	25.0	80.0	22.0	.5			15.4	122			
132-191	170	2.8	312	4	6	31000		12.3	24.3	103	44.5	.9			29.0	179			
191-221	230	5.3	158	17	6	11000		9.04	26.0	40.5	32.2	1.6			32.5	86.8			
MOIST																			
0-18																			
18-46																			
46-66																			
66-97																			
97-132																			
132-191																			
191-221																			

DEPTH CM	8F MINL CONT PCT	8G (FIBER VOL) UNRB PCT	RUB PCT	8H PYROPHOSPHT SOLUBILITY (MUNS COLOR)	PH 8C1E .01M CACL	BULK DEN 4A3A FILD STAT G/CC	4A1I 1/3B REWT G/CC	4D1 COLE RE-WET	SUBS RES-IDUE PCT	WATER CONTENT 4B4 FILD STAT PCT	4B1C 1/3B REWT PCT	4B2 15-BAR PCT	4C1 WRD CM/CM
	HISTOSOL CHARACTERIZATION												
		STATE OF DECOMPOSITION											
0-18												31.3	
18-46	12	54	1	7.5YR 4/4		.22			90	319		60.3	
46-66	9	72	4	10YR 5/3		.16			81	513		70.4	
66-97	17	58	4	10YR 6/3	5.5	.14			65	530		66.7	
97-132	34	48	3	10YR 6/3	6.5	.15			55	509		67.0	
132-191	70	24	1			.30			55	278		43.3	
191-221	93					.63				118		29.2	
MOIST													
0-18													
18-46													
46-66													
66-97													
97-132													
132-191													
191-221													

Classification: Euic, thermic Typic Medisaprist.
Soil series: Kenner taxadjunct 1/.
Series classification: Fluvaquentic, euic, thermic Typic Medisaprists.

Pedon No.: S71LA-26-4.
Location: Jefferson Parish, Louisiana; 4 miles north of Kenner, ¼ mile south of Lake Pontchartrain; 1/8 mile east of canal, 35 yards south of shell road, sec. 37, T. 12 S., R. 10 E.
Vegetation and use: Idle land, paille fine, vaseygrass, goldenrod.
Slope and land form: Depressed, drained freshwater marshland.
Drainage and permeability: Poorly drained, moderate to rapid permeability.
Parent material: Organic materials derived from herbaceous plants and clayey Mississippi River alluvium.
Climate: Precipitation 60 inches, Temperature 70 degrees F.
Sampled by: Warren Lynn - 6/9/71.
Described by: Dayton Matthews and Warren Cockerham 10/2/69.

A1--0 to 18 cm (0 to 7 in.); very dark gray (10YR 3/1) clay; common medium prominent dark brown (7.5YR 4/4) mottles; weak, coarse subangular blocky structure; very hard; many roots; very strongly acid; clear smooth boundary.

Oa1--18 to 46 cm (7 to 18 in.); black (10YR 2/1) sapric material; same color pressed and rubbed; less than 1 percent fiber; weak coarse prisms that part to weak coarse subangular blocky structure; friable; about 65 percent mineral; strongly acid; clear smooth boundary.

Oa2--46 to 66 cm (18 to 26 in.); black (10YR 2/1) sapric material, same color pressed and rubbed; about 8 percent fiber; less than 1 percent rubbed; massive, friable; about 60 percent mineral content; strongly acid; gradual smooth boundary.

Oa3--66 to 97 cm (26 to 38 in.); black (10YR 2/1), same pressed and rubbed; about 15 percent fiber, less than 1 percent rubbed; massive, friable; about 55 percent mineral; strongly acid; gradual smooth boundary.

Oa4--97 to 132 cm (38 to 52 in.); very dark gray (10YR 3/1) sapric material, same color pressed and rubbed; about 35 percent fiber, less and 1 percent rubbed; massive; flows easily between fingers when squeezed and leaves small residue in hand; about 50 percent mineral content; moderately alkaline; clear smooth boundary.

Oa5--132 to 191 cm (52 to 75 in.); dark olive gray (5Y 3/2) sapric material; same color pressed and rubbed; color changes to very dark gray (10YR 3/1) after exposure to air; less than 1 percent fiber; massive; flows easily between fingers when squeezed and leaves small residue in hand; moderately alkaline; abrupt wavy boundary.

IICg--191 to 221 cm (75 to 87 in.); greenish gray (5GY 5/1) clay; massive; semifluid, flows easily between fingers when squeezed and leaves small residue in hand; moderately alkaline.

Remarks: Munsell colors for moist soil unless indicated otherwise.

1/ Pedon is a taxadjunct to the Kenner series because it lacks thin mineral layers below the surface layer.

SOIL CLASSIFICATION-TYPIC MEDISAPRIST
EUIC, THERMIC
SERIES - - - - - - -LAFITTE

SOIL NO - - - - - - S69LA-23-4 IBERIA PARISH

GENERAL METHODS- - -1A,1B1B,2A1,2B SAMPLE NOS. 69L133-69L140

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE, MTSC
NATIONAL SOIL SURVEY LABORATORY
LINCOLN, NEBRASKA

DEPTH	HORIZON	(- - - PARTICLE SIZE ANALYSIS, LT 2MM, 3A1, 3A1A, 3A1B - - -															)RATIO
					FINE (- - - SAND - - -					)(- - -SILT- - -)				INTR	FINE	NON-	8D1
		SAND 2- .05	SILT .05- .002	CLAY LT .002	CLAY LT .0002	VCOS 2- 1	CORS 1- .5	MEDS .5- .25	FNES .25- .10	VFNS .10- .05	COSI .05 .02	FNSI .02 .002	VFSI .005- .002	SAND 2- .10	II .2- .02	CLAY TO CLAY	CO3- CLAY	15- BAR TO
CM		(- - - PCT LT 2MM - - -)														PCT	PCT	CLAY
0-41	OI																	
41-76	OE1																	
76-109	OE2																	
109-135	OE3																	
135-160	OA1																	
160-229	OA2																	
229-335	OA3																	
335-350	2CG	.3	9.9	89.8	41.1	.0	.0	.0	.0	.3	.9	9.0		.0	1.2	46		

DEPTH	(PARTICLE SIZE ANALYSIS, MM, 3B, 3B1, 3B2)							(BULK DENSITY		)	(- - - -WATER CONTENT- - -			)	CARBONATE		(- -PH - -)	
	VOL.	(- - - WEIGHT - - -					)	4A1D	4A1H	4D1	4B1C	4B1C	4B2	4C1	6E1B	3A1A	8C1A	8C1E
	GT 2	GT 75	75-20	20-5	5-2	LT .074	20-2 PCT	1/3- BAR	OVEN DRY	COLE	1/10 BAR	1/3- BAR	15- BAR	WRD CM/	LT 2	LT .002	1/1 H2O	1/2 CACL
CM	PCT	PCT	(- - - PCT LT 75 - - -)				LT20	G/CC	G/CC		PCT	PCT	PCT	CM	PCT	PCT		
0-41	0	0	0	0	0		0	.13	.27		298	84	71.4	.28				
41-76	0	0	0	0	0		0	.20	.74		294	49	71.7	.35				
76-109	0	0	0	0	0		0	.22	1.09		325	03	85.5	.48				
109-135	0	0	0	0	0		0	.16	.94		432	88	105	.45				
135-160	0	0	0	0	0		0	.32	1.04		237	23	105	.53				
160-229	0	0	0	0	0		0						78.6					
229-335	0	0	0	0	0		0											
335-350	0	0	0	0	0	100	0											

DEPTH	(ORGANIC MATTER	)	IRON	PHOS	(- -EXTRACTABLE BASES 5B4A- -)					ACTY	AL	(CAT EXCH)		RATIO	RATIO	CA	(BASE SAT)	
	6A1A	6B1A	C/N	6C2B		6N2E	6O2D	6P2B	6Q2B		6H1A	6G1E	5A3A	5A6A	8D1	8D3	5F1	5C3	5C1
	ORGN CARB	NITG		EXT FE	TOTL	CA	MG	NA	K	SUM EXTB	BACL TEA	KCL EXT	EXTB ACTY	NHAC	NHAC TO	CA TO	SAT NHAC	EXTB ACTY	NHAC
CM	PCT	PCT		PCT	PCT	(- - - -MEQ / 100 G- - -								)	CLAY	MG	PCT	PCT	PCT
0-41	40.1	1.72	23	.1		25.9	37.0	44.5	2.7	110				77.9		.7	33		
41-76	27.0	1.46	18	.1		39.2	66.1	78.4	2.3	186				85.9		.6	46		
76-109	29.0	1.53	19	TR		35.5	62.6	76.7	2.7	178				78.0		.6	46		
109-135	33.9	2.06	16	.1		44.8	87.6	110	2.3	245				109		.5	41		
135-160	37.0	2.06	18	.1		51.6	93.9	103	2.5	251				109		.5	47		
160-229	30.9	1.59	19	.1		34.2	65.0	68.3	2.7	170				87.4		.5	39		
229-335																			
335-350																			

DEPTH	(SATURATED PASTE)		NA	NA	SALT	GYP	(- - - SATURATION EXTRACT 8A1- - -										)	ATTERBERG	
	8E1	8C1B	8A	5D2	5E	8D5	6F1A	8A1A	6N1B	6O1B	6P1B	6Q1B	6I1A	6J1A	6K1A	6L1A	6M1A	4F1	4F2
	REST OHM-	PH	H2O	ESP	SAR	TOTL SOLU		EC MMHOS/	CA	MG	NA	K	CO3	HCO3	CL	SO4	NO3	LQID LMIT	PLST INDX
CM	CM		PCT	PCT		PPM	PCT	CM	(- - - MEQ / LITER - - -								)	PCT	
0-41	360	6.1	891	11	16	38000		5.80	3.1	9.0	40.0	1.6	.0	.9	47.2	7.8			
41-76	210	5.3	785	23	17	63000		10.4	8.5	26.0	70.0	1.9	.0	.4	81.7	30.2			
76-109																			
109-135	140	5.0	929	27	18	95000		13.0	11.0	36.3	89.0	2.1	.0	.2	106	39.8			
135-160																			
160-229																			
229-335																			
335-350																			

DEPTH	(- - - HISTOSOL CHARACTERIZATION- - -												)
		(STATE OF DECOMPOSITION)			PH	(BULK DEN)		COLE	SUBS	(- -WATER CONTENT- -)			
	8F	8G		8H	8C1E	4A3A	4A1I	4D1		4B4	4B1C	4B2	4C1
	MINL CONT	(FIBER VOL) UNRB	RUB	PYROPHOSPHT SOLUBILITY	.01M CACL	FILD STAT	1/3B REWT	RE- WET	RES- IDUE	FILD STAT	1/3B REWT	15- BAR	WRD CM/
CM	PCT	PCT	PCT	(MUNS COLOR)		G/CC	G/CC		PCT	PCT	PCT	PCT	CM
0-41	24	39	30	10YR 5/3	6.1	.09			25	841			
41-76	53	28	7	10YR 5/3	6.7	.10	.63		26	850	49.3		
76-109	44	24	8	10YR 5/3	6.9	.10			31	860			
109-135	38	44	4	10YR 7/2	6.8	.11			38	860			
135-160	27	40	3	10YR 6/3	6.7	.13			53	700			
160-229	47	31	2	10YR 4.5/3	6.8					633			
229-335	38									663			
335-350													

CLAY MINERALOGY (7A2C)
336-350 MT5 MI2 KK2.
COMMENTS: CLAYS WELL ORDERED. CLAY MINERALOGY IS MONTMORILLONITIC.
RELATIVE AMOUNTS: (X-RAY) 5 = DOMINANT 4 = ABUNDANT 3 = MODERATE 2 = SMALL 1 = TRACE.
MINERAL CODE: MT = MONTMORILLONITE MI = MICA KK = KAOLINITE

Classification: Euic, thermic Typic Medisaprist.
Soil series: Lafitte.
Series classification: Same as pedon.

Pedon No.: S69LA-23-4.
Location: Iberia Parish, Louisiana about 2½ miles south-southeast of Avery Island; 1,000 feet north of Intracoastal Waterway, 2½ miles east of Petite Anase; 100 yards southeast of Bayou, T. 14 S., R. 4 E.
Vegetation and use: Wildlife habitat; marshhay cordgrass, cutgrass, switchgrass, three square and needlerush.
Slope and land form: Level brackish marsh land; less than one foot above sea level.
Drainage and permeability: Very poorly drained; moderately permeable in organic layers; very slowly permeable in underlying mineral horizons.
Parent material: Thick organic materials derived mainly from herbaceous plants over silty Prairie Age sediments.
Climate: Precipitation 60 inches, Temperature 68 degrees F.
Sampled by: David f. Slusher, Warren Lynn, Leo Juve, Henry Clark, Almond White and Al Wilhite.
Described by: Warren L. Cockerham and William McKinzie, 2/11/69.

Oi--0 to 41 cm (0 to 16 in.); dark brown (10YR 4/3) fibric material; about 90 percent fiber, more than 50 percent after rubbing; massive; nonsticky; mat of live roots; herbaceous fiber; about 35 percent mineral content; medium acid; gradual smooth boundary.

Oe1--41 to 76 cm (16 to 30 in.); very dark grayish brown (10YR 3/2), dark brown (10YR 2/2) pressed or rubbed hemic material; about 50 percent fiber, about 15 percent after rubbing; massive; semifluid, nonsticky; many live roots; pyrophosphate color (10YR 3/3); dominantly herbaceous fiber; about 30 percent mineral content; strong odor of sulphide after treatment with dilute HCL; neutral; gradual smooth boundary.

Oe2--76 to 109 cm (30 to 43 in.); same as above. Separated for sampling.

Oe3--109 to 135 cm (43 to 53 in.); same as Oe1 (16-30 inches), separated for sampling.

Oa1--135 to 160 cm (53 to 63 in.); black (10YR 2/1) sapric material; about 25 percent fiber, less than 5 percent after rubbing; massive; semifluid, nonsticky; few roots; pyrophosphate color (10YR 5/2); dominantly herbaceous fiber; about 55 percent mineral content; strong odor of sulphide after treatment with dilute HCL; neutral; gradual smooth boundary.

Oa2--160 to 229 cm (63 to 90 in.); very dark gray (10YR 3/1) sapric material; about 30 percent fiber, less than 5 percent after rubbing; massive; semifluid, nonsticky; dominantly herbaceous fiber; about 50 percent mineral content; neutral.

Oa3--229 to 335 cm (90 to 132 in.); dark grayish brown (5YR 3/2) sapric material; about 20 percent fiber, less than 5 percent after rubbing; massive; semifluid, nonsticky; dominantly woody fiber; common wood fragments; neutral.

IIcg--335 to 350 cm (132 to 138 in.); dark gray (5Y 4/1) silty clay; massive; firm and compact.

Remarks: Munsell colors for moist soil. Generally considered not firm enough to support livestock for grazing. Dense surface mat of living roots firm enough to support human foot traffic. Area is spongy and when surface mat of roots is broken through, trafficability is very poor.

SOIL CLASSIFICATION-TYPIC HEMISAPRIST
FOLIC, THERMIC
SERIES - - - - - - - -LAFITTE

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE, MTSC
NATIONAL SOIL SURVEY LABORATORY
LINCOLN, NEBRASKA

SOIL NO - - - - - - - S71LA-36-1 ORLEANS PARISH

GENERAL METHODS- - -1A,1B1B,2A1,2B SAMPLE NOS. 71L0539-71L0543

DEPTH CM	HORIZON	SAND 2-.05	SILT .05-.002	CLAY LT .002	FINE CLAY LT .0002	VCOS 2-1	COBS 1-.5	MEDS .5-.25	FNES .25-.10	VFNS .10-.05	COSI .05-.02	FNSI .02-.002	VFSI .005-.002	SAND 2-.10	INTF II .2-.02	FINE CLAY TO CLAY	NON-CO3-CLAY PCT	BD1 15-BAR TO CLAY
		(- - - - - - - - - - - - - - - - PARTICLE SIZE ANALYSIS, IT 2MM, 3A1, 3A1A, 3A1B - - - - - - - - - -)																RATIO
					FINE (- - - - - SAND - - - - - -)						(- - -SILT- - - -)							
					PCT LT 2MM													
0-15	OA1																	
15-41	OA2																	
41-76	CA3																	
76-122	CA4																	
122-132	OA5																	

DEPTH CM	VCI. GT 2 PCT	GT 75 PCT	75-20	20-5	5-2	LT .074	20-2 PCT IT2C	BULK DENSITY 4A1E 1/3-BAR G/CC	4A1F OVEN DRY G/CC	4D1 COLE	4B1C 1/1C BAR PCT	4B1C 1/3-BAR PCT	4B2 15-BAR PCT	4C1 WRD CM/CM	CARBONATE 6E1B IT 2 PCT	3A1A LT .002 PCT	(- -PH - -) 8C1A 1/1 H2O	8C1B 1/2 CACL
			(- - - PCT LT 75 - - -)								(- - - -WATER CONTENT- - - -)							
			WEIGHT - - - - - - -)															
			(PARTICLE SIZE ANALYSIS, MM, 3B, 3B1, 3B2)															
0-15	0	0	0	0	0		0										5.5	5.7
15-41	0	0	0	0	0		0										5.9	6.0
41-76	0	0	0	0	0		0										5.7	5.9
76-122	0	0	0	0	0		0										5.9	6.0
122-132	0	0	0	0	0	0		0										

DEPTH CM	ORGANIC MATTER 6A1A ORGN CARB PCT	6B1A NITG PCT	C/N	IRON 6C2B EXT FE PCT	PHOS TOTL PCT	EXTRACTABLE BASES 5B4A 6N2E CA	6C2D MG	6P2B NA	6Q2B K	SUM EXTB MEQ / 100	ACTY 6H1A BACL TEA G	AL 6G1E KCL EXT	(CAT EXCH) 5A3A EXTB ACTY	5A6A NHAC	RATIO 8D1 NHAC TO CLAY	RATIO 8D3 CA TO MG	CA SAT NHAC PCT	(BASE SAT) 5C3 EXTB ACTY PCT	5C1 NHAC PCT
0-15		2.62		.2		72.4	76.8	93.6	2.6	245	54.1		300	137		.9	53	82	
15-41		2.42		.1		71.2	95.7	61.9	1.7	231	74.1		305	155		.7	46	76	
41-76		2.11		.1		74.8	97.6	80.2	1.8	254	88.8		343	166		.8	45	74	
76-122		2.07		.1		90.0	116	95.9	2.0	304	69.6		374	168		.8	54	81	
122-132																			

DEPTH CM	(SATURATED PASTE) 8F1 REST OHM-CM	8C1B PH	8A H2O PCT	NA 5D2 ESP PCT	NA 5E SAR	SALT 8D5 TOTL SOLU PPM	GYP 6F1B PCT	(- - - - - - - - - SATURATION EXTRACT 8A1- - - - - - - - -) 8A1A EC MMHOS/CM	6N1B CA	6O1B MG	6F1B NA	6Q1B K	6I1A CO3	6J1A HCO3	6K1A CL	6L1A SO4	6M1A NO3	ATTERBERG 4F1 LQID LMIT PCT	4F2 PLST INDX
									(- - - - - - - - - - MEQ / LITER - - - - - - - - - - -)										
0-15	150	5.1	856	9	16	998000		14.1	21.8	46.5	94.5	1.8			103	54.7			
15-41	210	5.1	969	8	12	662000		8.43	9.5	30.3	51.8	1.2			53.4	37.0			
41-76	140	4.6	751	8	14	886000		14.1	22.8	62.5	90.0	1.6			90.5	83.2			
76-122	130	5.1	838	8	16	999000		14.9	20.0	52.5	97.5	1.6			107	61.4			
122-132																			

DEPTH CM	(- - - - - - - - - - - - - - HISTOSOL CHARACTERIZATION- - - - - - - - - - - - - -) 8F MINL CONT PCT	(STATE OF DECOMPOSITION) 8G (FIBER VOL) UNRB PCT	8H PYROPHOSPHT SOLUBILITY RUB PCT	(HUNS COLOR)	PH 8C1E .01M CACL	(BULK DEN) 4A3A FIED STAT G/CC	4A1I 1/3B REWT G/CC	COLE 4D1 RE-WET	SUBS DES-IDUE PCT	(- -WATER CONTENT- -) 4B4 FIED STAT PCT	4B1C 1/3B REWT PCT	4B2 15-BAR PCT	4C1 WRD CM/CM
0-15	23	40	4	10YR 6/3	4.8	.10			29	778		98.2	
15-41	21	30	8	10YR 6/3	6.0	.07			26A	1240		91.4	
41-76	31	10		10YR 5/3	7.0	.14			54	763		88.0	
76-122	29	8	8	10YR 5/3	7.0	.14			55	770		83.7	
122-132	26	40	12	10YR 5/3	7.0	.14			58	816			

(A) COMPUTED AS 1/2 SURFACE AND 1/2 SUBSURFACE.

Classification: Euic, thermic Typic Medisaprist.
Soil series: Lafitte.
Series classification: Same as pedon.

Pedon No.: S71LA-36-1.
Location: Orleans Parish, Louisiana, 3 4/10 miles northeast of Littlewoods, 1/10 mile east of bridge, 150 yards south of I-10, T. 11 S., R. 13 E.
Vegetation and use: Wildlife habitat, salt tolerant herbaceous plants.
Drainage and permeability: Very poorly drained; very slowly permeable.
Slope and land form: Level to depressed marshland.
Parent material: Organic materials derived from salt tolerant herbaceous plants underlain by Mississippi River alluvium.
Climate: Precipitation 61 inches, Temperature 70 degrees F.
Sampled by: Dayton Matthews and Kent Milton, September 22, 1969.
Described by: Dayton Matthews and Kent Milton, September 22, 1969 and Warren Lynn, June 14, 1971.

Oa1--0 to 15 cm (0 to 6 in.); very dark brown (10YR 2/2) sapric material, same color pressed and rubbed; about 5 percent fiber, less than 1 percent rubbed; weak coarse subangular blocky structure; flows slowly through fingers when squeezed leaving small residue in hand; many fine live roots; about 50 percent mineral; very dark reddish brown (5YR 3/4) fragments of woody fiber; moderately alkaline; gradual smooth boundary.

Oa2--15 to 41 cm (6 to 16 in.); black (10YR 2/1) sapric material, same color pressed and rubbed; about 6 percent fiber, 1 to 2 percent rubbed; weak medium granular structure; flows with slight difficulty through fingers when squeezed leaving a small residue in hand; dominant herbaceous fiber; about 60 percent mineral; moderately alkaline; gradual smooth boundary.

Oa3--41 to 76 cm (16 to 30 in.); black (10YR 2/1) sapric material, same color pressed and rubbed; about 3 percent fiber, less than 1 percent rubbed; weak fine granular structure; flows freely through fingers when squeezed leaving a very small residue in hand; about 50 percent mineral; moderately alkaline; gradual smooth boundary.

Oa4--76 to 122 cm (30 to 48 in.); black (10YR 2/1) sapric material, same color pressed and rubbed; about 5 percent fiber, 1 percent rubbed; weak fine granular structure; flows with difficulty through fingers when squeezed leaving large residue in hand; about 55 percent mineral; moderately alkaline; clear smooth boundary.

Oa5--122 to 132 cm (48 to 52 in.); black (10YR 2/1) sapric material, same color pressed and rubbed; weak coarse subangular blocky structure; flows with difficulty through fingers when squeezed leaving large residue in hand; about 60 percent mineral; moderately alkaline.

Oa6--132 to 191 cm (52 to 75 in.); very dark brown (10YR 2/2) sapric material, same color pressed, dark reddish brown (5YR 3/2) rubbed; about 20 percent fiber, 5 percent rubbed; weak coarse granular structure; flows freely between fingers when squeezed leaving a large residue in hand; about 55 percent mineral; moderately alkaline; abrupt smooth boundary.

IIC--191 to 208 cm (75 to 82 in.); dark grayish brown (2.5YR 4/2) clay; massive; sticky; semifluid, flows through fingers with slight difficulty when squeezed leaving hand empty; moderately alkaline; abrupt smooth boundary.

Remarks: Water level 8 inches above soil surface when sampled. Munsell colors for wet soil unless otherwise indicated.

SOIL CLASSIFICATION-TYPIC MEDISAPRIST
EUIC, THERMIC
SERIES - - - - - - -LAFITTE

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SOIL CONSERVATION SERVICE, NTSC
NATIONAL SOIL SURVEY LABORATORY
LINCOLN, NEBRASKA

SOIL NO - - - - - - S71LA-36-2 ORLEANS PARISH

GENERAL METHODS- - -1A,1B1B,2A1,2B SAMPLE NOS. 71L544-71L545

DEPTH CM	HORIZON	SAND 2-.05	SILT .05-.002	CLAY LT .002	FINE CLAY LT .0002	VCOS 2-1	CORS 1-.5	MEDS .5-.25	FNES .25-.10	VFNS .10-.05	COSI .05-.02	FNSI .02-.002	VFSI .005-.002	SAND 2-.10	INTR II .2-.02	FINE CLAY TO CLAY PCT	NON-CO3-CLAY PCT	RATIO 8D1 15-BAR TO CLAY
		(- - - PARTICLE SIZE ANALYSIS, LT 2MM, 3A1, 3A1A, 3A1B				(- - SAND				- -)	(- - SILT		- -)					
		(- - - PCT LT 2MM													- - -)			
0-25	OE1																	
25-152	OA1																	

(- - - - - - - - - - - - - - -HISTOSOL CHARACTERIZATION- - - - - - - - - - - - - -)

DEPTH CM	8F FIBI CONT PCT	8G (FIBER VCL) UNRB PCT	8G (FIBER VCL) RUB PCT	8H PYROPHOSPHT SOLUBILITY (MUNS COLOR)	PH 8C1E .01M CACL	(BULK DEN) 4A3A FILD STAT G/CC	(BULK DEN) 4A1I 1/3B REWT G/CC	COLE 4D1 RE-WET	SUBS RES-IDUE PCT	(- -WATER CONTENT- -) 4B4 FILD STAT PCT	4B1C 1/3B REWT PCT	4B2 15-BAR PCT	4C1 WRD CM/CM
		(STATE OF DECOMPOSITION)											
0-25		56	20	10YR 7/2	4.8								
25-152	24	38	4	10YR 5/3	6.0	.13				635			

Classification: Euic, thermic Typic Medisaprist.
Soil series: Lafitte.
Series classification: Same as pedon.

Pedon No.: S71LA-36-2.
Location: Orleans Parish, Louisiana, about 8 miles west of Chef Menteur and about 4.4 miles northeast of junction of LA-47 and I-10; 200 feet west of exit, T. 11 S., R. 13 E.
Vegetation and use: Wildlife habitat - cattail, marshhay cordgrass, big cordgrass, salt marsh bullrush.
Slope and land form: Slightly depressed marshland.
Drainage and permeability: Very poorly drained, permeability is rapid. Water level is at or above the surface most of the time.
Climate: Precipitation 61 inches, Temperature 70 degrees F.
Parent material: Organic materials derived from herbaceous plant remains.
Sampled by: Warren Lynn - 6/14/71.
Described by: Warren Cockerham and Dayton Matthews.

Oe1--0 to 25 cm (0 to 10 in.); black (10YR 2/1) hemic material; about 60 percent fiber, about 10 percent fiber rubbed; massive; flows easily between fingers when squeezed and leaves large residue in hand; abput 60 percent mineral; moderately alkaline; clear smooth boundary.

Oa1--25 to 152 cm (10 to 60 in.); black (10YR 2/1) sapric material; about 10 percent fiber, less than 1 percent rubbed; massive; flows easily between fingers when squeezed and leaves small residue in hand; moderately alkaline.

Remarks: Munsell colors for wet soil.
Water table 10 inches below the surface when sampled.

SOIL CLASSIFICATION-TYPIC MEDISAPRIST
EUIC, THERMIC
SERIES - - - - - - -MAUREPAS

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LINCOLN, NEBRASKA

SOIL NO - - - - - - S68LA-48-6 ST. JOHN PARISH

GENERAL METHODS- - -1A,1B1B,2A1,2E SAMPLE NOS. 68L0839-68L0840

DEPTH CM	HORIZON	PARTICLE SIZE ANALYSIS, LT 2MM, 3A1, 3A1A, 3A1B: SAND 2-.05	SILT .05-.002	CLAY LT .002	FINE CLAY LT .0002	VCOS 2-1	CORS 1-.5	MEDS .5-.25	FNES .25-.10	VFNS .10-.05	COSI .05-.02	FNSI .02-.002	VFSI .005-.002	SAND 2-.10	INTR II .2-.02	FINE CLAY TO CLAY PCT	NON-CO3-CLAY PCT	RATIO 8D1 15-BAR TO CLAY
		PCT LT 2MM																
20-51	0A2	8.7	19.2	72.1							1.1	18.1			1.1			
51-76	0A3	2.5	21.4	76.1							1.0	20.4			1.4			

DEPTH CM	PARTICLE SIZE ANALYSIS, MM, 3B, 3B1, 3B2: VOL. GT 2 PCT	WEIGHT GT 75 PCT	75-20	20-5	5-2	LT .074 PCT LT 75 IT20	BULK DENSITY: 4A1D 1/3-BAR G/CC	4A1H OVEN DRY G/CC	4D1 COLE	WATER CONTENT: 4B1C 1/10 BAR PCT	4B1C 1/3-BAR PCT	4B2 15-BAR PCT	4C1 WRD CM/CM	CARBONATE: 6E1B LT 2 PCT	3A1A LT .002 PCT	PH: 8C1A 1/1 H2O	8C1B 1/2 CACL
20-51						S1						94.1				5.9	5.6
51-76						S8						108				5.8	5.4

DEPTH CM	ORGANIC MATTER: 6A1A CRBN PCT	6B1A NITG PCT	C/N	IRON 6C2B EXT FE PCT	PHOS TOTL PCT	EXTRACTABLE BASES 5B4A-MEQ/100: 6N2E CA	6C2D MG	6P2B NA	6Q2B K	SUM EXTB	ACTY 6H1A BACI TEA G-	BI 6G1E KCI EXT	(CAT EXCH) 5A3A EXTB ACTY	5A6A NHAC	RATIO 8D1 NHAC TO CLAY	RATIO 8D3 CA TO MG	CA 5F1 SAT NHAC PCT	(BASE SAT) 5C3 EXTB ACTY PCT	5C1 NHAC PCT
20-51	30.9																		
51-76	36.5																		

DEPTH CM	HISTOSOL CHARACTERIZATION: 8F MINL CONT PCT	(STATE OF DECOMPOSITION) 8G (FIBER VOL) UNRB PCT	RUB PCT	8H PYROPHOSPHT SOLUBILITY (MUNS COLOR)	PH 8C1E .01M CACL	(BULK DEN) 4A3A FIBD STAT G/CC	4A1I 1/3B REWT G/CC	CCLE 4D1 RE-WET	SUBS RES-IDUE PCT	WATER CONTENT: 4B4 FIBD STAT PCT	4B1C 1/3B REWT PCT	4B2 15-BAR PCT	4C1 WRD CM/CM
20-51	32	45			6.1					585		66.2	
51-76	21	49			5.6					663		71.3	

Classification: Euic, thermic Typic Medisaprist.
Soil series: Maurepas.
Series classification: Same as pedon.

Pedon No.: S68LA-48-6.
Location: St. John the Baptist Parish, Louisiana; 15 miles north of LaPlace, 200 feet east of IC Railroad, sec. 28, T. 9 S., R. 8 E.
Vegetation and use: Sparce stand of cypress, 15 percent crown cover, dense ground cover of alligatorgrass, limited timber production and wildlife habitat.
Slope and land form: Broad depressed deltaic swamp.
Drainage and permeability: Very poorly drained, water table continuously at the surface or up to 2 feet above; rapid permeability.
Climate: Precipitation 60 inches, Temperature 68 degrees F.
Parent material: Dominantly woody plain remains.
Sampled by: Warren L. Cockerham, 7/17/68.
Described by: Warren L. Cockerham and Ray Dance; 7/17/68.

Oa1--0 to 20 cm (0 to 8 in.); dark brown (7.5YR 3/2), sapric material, same color pressed and rubbed; very dark gray (10YR 3/1) after exposure to air; massive; about 15 percent fiber, about 3 percent rubbed; about 40 percent mineral matter; neutral; clear smooth boundary.

Oa2--20 to 51 cm (8 to 20 in.); dark brown (7.5YR 3/2), sapric material, same color pressed and rubbed; very dark gray (10YR 3/1) after exposure to air; massive; about 30 percent fiber; about 2 percent rubbed; about 30 percent mineral matter; common wood fragments; moderately alkaline; clear smooth boundary.

Oa3--51 to 76 cm (20 to 30 in.); dark brown (7.5YR 3/2), sapric material, same color pressed and rubbed; very dark grayish brown (10YR 3/2), after exposure to air; massive; about 30 percent fiber, less than 1 percent rubbed; about 20 percent mineral matter; common logs and wood fragments; moderately alkaline; clear smooth boundary.

Oa4--76 to 183 cm (30 to 72 in.); very dark grayish brown (10YR 3/2), sapric material, same color pressed and rubbed; massive; about 8 percent fiber, less than 1 percent after rubbing; 20 percent mineral matter; layer of wood and logs at 30 inches; three inch layer of semifluid gray clay at 60 inches; moderately alkaline.

Remarks: Munsell colors for wet soil unless indicated otherwise.

SOIL CLASSIFICATION-TYPIC MEDISAPRIST
EUIC, THERMIC
SERIES - - - - - - -MAUREPAS

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE, MTSC
NATIONAL SOIL SURVEY LABORATORY
LINCOLN, NEBRASKA

SOIL NO - - - - - - S69LA-23-3 IBERIA PARISH

GENERAL METHODS- - -1A,1B1B,2A1,2B SAMPLE NOS. 69L151-69L156

DEPTH CM	HORIZON	PARTICLE SIZE ANALYSIS, LT 2MM, 3A1, 3A1A, 3A1B: SAND 2-.05	SILT .05-.002	CLAY LT .002	FINE CLAY LT .0002	SAND VCOS 2-1	CORS 1-.5	MEDS .5-.25	FNES .25-.10	VFNS .10-.05	SILT COSI .05-.02	FNSI .02-.002	VFSI .005-.002	SAND 2-.10	INTR II .2-.02	FINE CLAY TO CLAY	NON-CO3-CLAY	RATIO 8D1 15-BAR TO CLAY
		PCT LT 2MM														PCT	PCT	
0-30	OA1																	
30-69	OA2																	
69-91	OA3																	
91-127	OA4																	
127-259	OA5																	
259-274	2CG1 (A)																	

DEPTH CM	PARTICLE SIZE ANALYSIS, MM, 3B, 3B1, 3B2: VOL. GT 2 PCT	WEIGHT GT 75 PCT	75-20 PCT LT 75	20-5	5-2	LT .074	20-2 PCT LT20	BULK DENSITY 4A1D 1/3-BAR G/CC	4A1H OVEN DRY G/CC	4D1 COLE	WATER CONTENT 4B1C 1/10 BAR PCT	4B1C 1/3-BAR PCT	4B2 15 BAR PCT	4C1 WRD CM/CM	CARBONATE 6E1B LT 2 PCT	3A1A LT .002 PCT	PH 8C1A 1/1 H2O	8C1E 1/2 CACL
0-30	0	0	0	0	0		0	.21	.88		287	88	78.6	.44				
30-69	0	0	0	0	0		0						91.0					
69-91	0	0	0	0	0		0	.16	.66		387	62	100	.42				
91-127	0	0	0	0	0		0						94.7					
127-259	0	0	0	0	0		0						94.2					
259-274	0	0	0	0	0		0											

DEPTH CM	ORGANIC MATTER 6A1A ORGN CARB PCT	6B1A NITG PCT	C/N	IRON 6C2B EXT FE PCT	PHOS TOTL PCT	EXTRACTABLE BASES 5B4A-: 6N2E CA MEQ / 100 G	6O2D MG	6P2B NA	6Q2B K	SUM EXTB	ACTY 6H1A BACL TEA	AL 6G1E KCL EXT	CAT EXCH 5A3A EXTB ACTY	5A6A NHAC	RATIO 8D1 NHAC TO CLAY	RATIO 8D3 CA TO MG	CA 5F1 SAT NHAC PCT	BASE SAT 5C3 EXTB ACTY PCT	5C1 NHAC PCT
0-30	41.1	1.27	32																
30-69	43.1	2.76	16																
69-91	45.9	2.17	21																
91-127	44.3	2.23	20																
127-259																			
259-274	10.5																		
						.2B	11.0B	47.1B	.8B										

DEPTH CM	SATURATED PASTE 8E1 REST OHM-CM	8C1B PH	8A H2O PCT	NA 5D2 ESP PCT	NA 5E SAR	SALT 8D5 TOTL SOLU PPM	GYP PCT	SATURATION EXTRACT 8A1: 8A1A EC MMHOS/CM	6N1B CA	6O1B MG	6P1B NA	6Q1B K	6I1A CO3	6J1A HCO3	6K1A CL	6L1A SO4	6M1A NO3	ATTERBERG 4F1 LQID LMIT PCT	4F2 PLST INDX
								MEQ / LITER											
0-30																			
30-69																			
69-91																			
91-127																			
127-259																			
259-274																			
					20			6.38	.2	11.0	47.1	.8							

DEPTH CM	HISTOSOL CHARACTERIZATION: 8F MINL CONT PCT	STATE OF DECOMPOSITION: 8G (FIBER VOL) UNRB PCT	RUB PCT	8H PYROPHOSPHT SOLUBILITY (MUNS COLOR)	PH 8C1E .01M CACL	BULK DEN 4A3A FILD STAT G/CC	4A1I 1/3B REWT G/CC	COLE 4D1 RE-WET	SUBS RES-IDUE PCT	WATER CONTENT 4B4 FILD STAT PCT	4B1C 1/3B REWT PCT	4B2 15-BAR PCT	4C1 WRD CM/CM
0-30	18	54	2	10YR 6/4	5.8	.12			36	683			
30-69	14	53	1	10YR 7/3	6.1	.13			62	670			
69-91	14	53	3	10YR 6/3	6.2	.08			38	845			
91-127	17	56	14	10YR 6/3	6.2					816			
127-259	17	56	26	10YR 5/4	6.6					988			
259-274													

(A) GROUND WATER (69L173).
(B) MEQ/LITER WATER ANALYSIS.

Classification: Euic, thermic Typic Medisaprist.
Soil series: Maurepas.
Series classification: Same as pedon.

Pedon No.: S69LA-23-3.
Location: Iberia Parish, Louisiana, three and three-fourths miles south of Lydia; 200 feet south of canal; one mile north of junction of Stump Bayou and canal, NE¼ SE¼, sec. 47, T. 13 S., R. 3 E.
Vegetation and use: Wildlife habitat; wax myrtle, sweet bay, palmetto, and eastern baccharis.
Slope and land form: Level with scattered microridges and swales that are about 20 feet wide and differ in elevation by about 10 inches.
Drainage and permeability: Very poorly drained; moderately permeable, water table at surface.
Parent material: Thick deposits of organic materials derived mainly from woody fiber.
Climate: Precipitation 60 inches, Temperature 68 degrees F.
Sampled by: David F. Slusher, Warren Lynn, Leo Juve, Henry Clark, Almond White and Al Wilhite.
Described by: Warren L. Cockerham and William McKinzie, 2/11/69.

Oa1--0 to 30 cm (0 to 12 in.); dark brown (7.5YR 3/2), dark reddish brown (5YR 3/2) pressed or rubbed sapric material; exposure to air for 15 minutes color changes to very dark gray (10YR 3/1); about 50 percent fiber, about 7 percent rubbed; weak fine granular structure; nonsticky; many live roots; sodium pyrophosphate color (10YR 7/3); dominantly woody fiber; fine partially decomposed wood fragments; about 30 percent mineral content; medium acid; gradual smooth boundary.

Oa2--30 to 69 cm (12 to 27 in.); dark brown (7.5YR 3/2), dark reddish brown (5YR 3/2) pressed or rubbed sapric material; about 8 percent fiber, less than 1 percent after rubbing; weak fine and medium granular structure; semifluid, nonsticky; common roots; sodium pyrophosphate color (10YR 7/3); dominantly woody fiber; common partially decomposed logs, stumps and wood fragments; about 35 percent mineral content; few charcoal fragments; slightly acid; gradual smooth boundary.

Oa3--69 to 91 cm (27 to 36 in.); dark grayish brown (7.5YR 3/2), dark reddish brown (5YR 3/2) pressed or rubbed sapric material; about 15 percent fiber, less than 10 percent after rubbing; weak coarse granular structure; semifluid, nonsticky; common roots; sodium pyrophosphate color (10YR 7/3); dominantly woody fiber; many logs and wood fragments in varying degrees of decomposition; about 40 percent mineral content; slightly acid; gradual smooth boundary.

Oa4--91 to 127 cm (36 to 50 in.); separated for sampling. Same as above except unrubbed fiber content increases to about 30 percent at 40 inches.

Oa5--127 to 259 cm (50 to 102 in.); separated for sampling. Same as Oa3.

IICg1--259 to 274 cm (102 to 108 in.); greenish gray (5GY 5/1) silty clay; massive; semifluid; few partially decomposed wood fragments; neutral.

Remarks: Munsell colors for wet soil unless indicated otherwise. Scattered soft swales severely restricts foot traffic.

SOIL CLASSIFICATION-TYPIC MEDISAPRIST
EUIC, THERMIC
SERIES - - - - - - -MAUREPAS

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE, NTSC
NATIONAL SOIL SURVEY LABORATORY
LINCOLN, NEBRASKA

SOIL NO - - - - - - S69LA-23-8 IBERIA PARISH

GENERAL METHODS- - -1A,1B1B,2A1,2B SAMPLE NOS. 69L157-69L164

DEPTH CM	HORIZON	PARTICLE SIZE ANALYSIS, LT 2MM, 3A1, 3A1A, 3A1B (PCT LT 2MM) SAND 2-.05	SILT .05-.002	CLAY LT .002	FINE CLAY LT .0002	SAND VCOS 2-1	CORS 1-.5	MEDS .5-.25	FNES .25-.10	VFNS .10-.05	COSI .05-.02	SILT FNSI .02-.002	VFSI .005-.002	SAND 2-.10	INTR II .2-.02	FINE CLAY TO CLAY PCT	NON-CO3-CLAY PCT	RATIO 8D1 15-TO CLAY
0-15	OA1																	
15-30	OE																	
30-51	OA2																	
51-94	OA3																	
94-122	OA4																	
122-155	OA5																	
244-335	2AG																	
335-366	2CG																	
	(A)																	
	(B)																	

DEPTH CM	PARTICLE SIZE ANALYSIS, MM, 3B, 3B1, 3B2 VOL. GT 2 PCT	WEIGHT GT 75 PCT	75-20 PCT LT 75	20-5	5-2	LT .074	20-2 PCT LT20	BULK DENSITY 4A1D 1/3-BAR G/CC	4A1H OVEN DRY G/CC	4D1 COLE	WATER CONTENT 4B1C 1/10 BAR PCT	4B1C 1/3-BAR PCT	4B2 15-BAR PCT	4C1 WRD CM/CM	CARBONATE 6E1B LT 2 PCT	3A1A LT .002 PCT	PH 8C1A 1/1 H2O	8C1B 1/2 CACL
0-15	0	0	0	0	0		0	.19	.83		350	40						
15-30	0	0	0	0	0		0	.20	.78		294	77	74.7					
30-51	0	0	0	0	0		0						79.9					
51-94	0	0	0	0	0		0						102					
94-122	0	0	0	0	0		0						90.4					
122-155	0	0	0	0	0		0						90.6					
244-335	0	0	0	0	0		0						86.5					
335-366	0	0	0	0	0		0											

DEPTH CM	ORGANIC MATTER 6A1A ORGN CARB PCT	6B1A NITG PCT	C/N	IRON 6C2B EXT FE PCT	PHOS TOTL PCT	EXTRACTABLE BASES 5B4A CA	MG	NA	K	SUM EXTB MEQ / 100 G	ACTY 6H1A BACL TEA	AL 6G1E KCL EXT	CAT EXCH 5A3A EXTB ACTY	5A6A NHAC	RATIO 8D1 NHAC TO CLAY	RATIO 8D3 CA TO MG	CA 5F1 SAT NHAC PCT	BASE SAT 5C3 EXTB ACTY PCT	5C1 NHAC PCT
0-15	32.9	2.06	16	.3		33.0	39.2	30.4	2.4	105				103					
15-30	31.8	2.09	15	.1		30.0	38.0	26.2	1.0	95.2				84.6					
30-51	44.9	1.48	30	TR															
51-94	41.1	1.93	21	.1		49.1	59.6	35.1	.4	144				98.4					
94-122	40.8	1.81	23	.1		46.4	58.2	36.4	.7	142				90.5					
122-155	41.1	1.67	25	.1		42.5	54.4	37.2	.9	135				92.2					
244-335																			
335-366																			
						.0C	3.4C	23.0C	.3C										
						.4C	6.0C	132 C	.8C										

DEPTH CM	SATURATED PASTE 8E1 REST OHM-CM	8C1B PH	8A H2O PCT	NA 5D2 ESP PCT	NA 5E SAR	SALT 8D5 TOTL SOLU PPM	GYP 6F1A PCT	SATURATION EXTRACT 8A1 8A1A EC MMHOS/CM	6N1B CA	6O1B MG	6P1B NA	6Q1B K	6I1A CO3	6J1A HCO3	6K1A CL	6L1A SO4	6M1A NO3	ATTERBERG 4F1 LQID LMIT PCT	4F2 PLST INDX
0-15	600	6.0	606	17	15	12000		2.91	1.3	2.7	21.5	.9	.0	1.8	22.7	.0			
15-30																			
30-51																			
51-94																			
94-122	390	5.1	981	8	9	35000		4.88	5.8	13.5	29.0	.9	.0	.4	27.5	21.9			
122-155																			
305-335																			
335-366																			
					18			3.12	.0	3.4	23.0	.3							
					74			14.3	.4	6.0	132	.8							

DEPTH CM	HISTOSOL CHARACTERIZATION 8F MINL CONT PCT	STATE OF DECONPOSITION 8G (FIBER VOL) UNRB PCT	8G RUB PCT	8H PYROPHOSPHT SOLUBILITY (HUNS COLOR)	PH 8C1E .01M CACL	BULK DEN 4A3A FILD G/CC	4A1I 1/3B REWT G/CC	COLE 4D1 RE-WET	SUBS RES-IDUE PCT	WATER CONTENT 4B4 FILD STAT PCT	4B1C 1/3B REWT PCT	4B2 15-BAR PCT	4C1 WRD CM/CM
0-15	38	44	10	10YR 5/3	5.7	.16	.74		37	519	35.9		
15-30	38	52	4	10YR 4/3	5.6	.13			30	577			
30-51	12	52	8	10YR 5/3	5.9					753			
51-94	18	56	14	10YR 5/3	6.1					882			
94-122	19	50	16	7.5YR 5/4	6.1					920			
122-155	18				6.2					735		11.8	
305-335												12.4	
335-366													

(A) GROUND WATER (69L177).
(B) CANAL WATER (69L178).
(C) MEQ/LITER WATER ANALYSIS.

Classification: Euic, thermic Typic Medisaprist.
Soil series: Maurepas.
Series classification: Same as pedon.

Pedon No.: S69LA-23-8.
Location: Iberia Parish, Louisiana, 2.4 miles southeast of Avery Island toll gate, 5 yards southeast of end of canal, NE¼ SE¼ sec. 46, T. 13 S., R. 4 E.
Vegetation and use: Palmetto, waxmyrtle, sweet maple, sweet bay, cyoress, marshhay cordgrass. Used for limited timber production and wildlife habitat.
Slope and land form: Level swamp land; few soft depressions, about 1 foot above sea level.
Drainage and permeability: Very poorly drained, moderately permeable. Water table at the surface.
Parent material: Thick deposits of woody organic material over deltaic mineral sediments.
Climate: Precipitation 60 inches, Temperature 68 degrees F.
Described by: Warren L. Cockerham and William McKinzie, February, 1969.
Sampled by: David F. Slusher, Warren Lynn, Leo Juve, Henry Clark, Almond White, and Al Wilhite.

Oa1--0 to 15 cm (0 to 6 in.); dark reddish brown (5YR 2/2) sapric material; about 25 percent fiber, about 8 percent rubbed; weak fine granular structure; friable; many live roots; dominantly woody fiber; common partially decomposed wood fragments; about 30 percent mineral; medium acid; gradual smooth boundary.

Oe--15 to 30 cm (6 to 12 in.); dark reddish brown (5YR 3/3) hemic material; about 45 percent fiber, 15 percent rubbed; weak fine granular structure; friable; common live roots; sodium pyrophosphate color (10YR 8/1); dominantly woody fiber; common partially decomposed wood fragments; about 20 percent mineral content; medium acid; gradual smooth boundary.

Oa2--30 to 51 cm (12 to 20 in.); dark reddish brown (5YR 3/3) sapric material; about 40 percent fiber, 7 percent after rubbing; weak fine granular structure; semifluid, when squeezed in hand flows easily between fingers leaving small amount of fiber in hand; few live roots; sodium pyrophosphate color (7.5YR 4/4); dominantly woody fiber; common firm log fragments; about 25 percent mineral content; medium acid.

Oa3--51 to 94 cm (20 to 37 in.); dark reddish brown (5YR 3/2) sapric material; about 35 percent fiber, 7 percent after rubbing; weak fine granular structure; semifluid, when squeezed in hand flows easily between fingers leaving small amount of fiber in hand; sodium pyrophosphate color (7.5YR 4/4); about 70 percent woody fiber, the remainder herbaceous; common log fragments; about 25 percent mineral content; slightly acid.

Oa4--94 to 122 cm (37 to 48 in.); dark reddish brown (5YR 3/2) sapric material; about 40 percent fiber, 5 percent after rubbing; weak fine granular structure; semifluid, when squeezed in hand flows easily between fingers leaving small amount of fiber in hand; dominantly woody fiber; common log fragments; about 30 percent mineral content; slightly acid.

Oa5--122 to 155 cm (48 to 61 in.); dark reddish brown (5YR 3/2) sapric material; about 50 percent fiber, less than 10 percent after rubbing; weak fine granular structure; semifluid, when squeezed in hand flows easily between fingers leaving small amount of fiber in hand; dominantly woody fiber; common partially decomposed wood fragments; about 40 percent mineral content; slightly acid.

Oa6--155 to 244 cm (61 to 96 in.); very dark reddish brown (5YR 3/2) sapric material; about 35 percent fiber, 5 percent after rubbing; weak fine granular structure; semifluid, when squeezed in hand flows easily between fingers leaving small amount of fiber in hand; dominantly woody fiber; common partially decomposed wood fragments; about 55 percent mineral; slightly acid.

IIAg--244 to 335 cm (96 to 132 in.); very dark gray (5Y 3/1) silty clay loam; massive; plastic and sticky; neutral.

IICg--335 to 366 cm (132 to 144 in.); greenish gray (5GY 5/1) silty clay loam; massive; plastic and sticky; neutral.

Remarks: Sampled from pit dug with posthole digger to 45 inches; below 45 inches samples were taken with auger.

Munsell color for wet soil. Soil is apparently continually saturated to the surface. Scattered soft depressions severely restricts foot traffic. Color of all organic horizons changed to very dark gray after exposure to air.

SOIL CLASSIFICATION-TYPIC HEMISAPRIST
EUIC, THERMIC
SERIES - - - - - - - -NOT DESIGNATED

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE, WTSC
NATIONAL SOIL SURVEY LABORATORY
LINCOLN, NEBRASKA

SOIL NO - - - - - - - S69LA-26-2 JEFFERSON PARISH

GENERAL METHODS- - -1A,1B1B,2A1,2E SAMPLE NOS. 69L1066-691067

DEPTH CM	HORIZON	PARTICLE SIZE ANALYSIS, IT 2MM, 3A1, 3A1A, 3A1B (PCT LT 2MM) SAND 2-.05	SILT .05-.002	CLAY LT .002	FINE CLAY LT .0002	VCOS 2-1	COAR 1-.5	MEDS .5-.25	FINES .25-.10	VFNS .10-.05	COSI .05-.02	FNSI .02-.002	VFSI .002-.10	SAND 2-.10	INTR II .2-.02	FINE CLAY TO CLAY PCT	NON-CO3-CLAY PCT	RATIO 8D1 15-BAR TO CLAY
10-46	OA1																	
46-122	CA2																	

DEPTH CM	(PARTICLE SIZE ANALYSIS, MM, 3B, 3E1, 3E2) GT 2 PCT	GT 75 PCT	75-20	20-5	5-2	LT .074 PCT (PCT LT 75)	(BULK DENSITY) 20-2 LT20	1/3-BAR G/CC	OVEN DRY G/CC	COLE	(WATER CONTENT) 4B1C 1/10 BAR PCT	4B1C 1/3-BAR PCT	4E2 15-BAR PCT	4C1 WRD CM/CM	CARBONATE 6E1B LT 2 PCT	3A1A LT .002 PCT	(PH) 8C1A 1/1 H2O	8C1E 1/2 CACL
10-46													103				3.4	3.4
46-122													103				3.8	3.8

DEPTH CM	(ORGANIC MATTER) 6A1A ORGN CARB PCT	6B1A MTTG PCT	C/N	IRON 6C2B EXT FE PCT	PHOS TOTL PCT	(EXTRACTABLE BASES 5B4A) 6N2E CA	6O2E MG	6P2B NA	6Q2B K	SUM EXTB MEQ / 100	ACTY BACI TRA G	AL 6G1E KCL EXT	(CAT EXCH) 5A3A EXTB ACTY	5A6A NHAC	RATIO 8E1 NHAC TO CLAY	RATIO 8D3 CA TO MG	CA 5F1 SAT NHAC PCT	(BASE SAT) 5C3 EXTB ACTY PCT	5C1 NHAC PCT
10-46	39.0																		
46-122	45.1																		

DEPTH CM	(SATURATED PASTE) 8E1 REST OHM-CM	8C1B PH	8A H2O PCT	NA 5D2 ESP PCT	NA 5E SAR	SALT 8D5 TOTL SOLU PPM	GYP 6F1A PCT	(SATURATION EXTRACT 8A1) 8A1A EC MMHOS/CM	6N1B CA	6O1B MG	6P1B NA	6Q1B K	6I1A CO3	6J1A HCO3	6K1A CL	6L1A SO4	6M1A NO3	ATTERBERG 4F1 LQID LMIT PCT	4F2 PLST INDX
10-46	670	3.4	430			8800		2.95	11.5	12.5	9.3				7.7	22.1			
46-122	640	3.8	878			16000		2.65	9.5	11.0	9.0				6.2	22.8			

DEPTH CM	(HISTOSOL CHARACTERIZATION) 8F FINI CONT PCT	(STATE OF DECOMPOSITION) 8G (FIBER VOL) UNRB PCT	RUB PCT	8H PYROPHOSPHT SOLUBILITY (MUNS COLOR)	PH 8C1E .01M CACL	(BULK DEN) 4A3A FILD STAT G/CC	4A1I 1/3B REWT G/CC	COLE 4D1 RE-WET	SUBS RES-IDUE PCT	(WATER CONTENT) 4B4 FILD STAT PCT	4E1C 1/3B REWT PCT	4E2 15-BAR PCT	8C1 WRD CM/CM
10-46	11	38	1	10YR 3/2								63.4	
46-122	6	68	4	7.5YR 4/4								68.3	

Classification: Euic, thermic Typic Medisaprist.
Soil series: Not designated 1/.

Pedon No.: S69LA-26-2.
Location: Jefferson Parish, Louisiana, about 4 miles north of Kenner, 1/4 mile south of Lake Pontchartrain; 35 yards south of Shell Road, 1/8 mile east of canal, sec. 37, T. 11 S., R. 10 E.
Vegetation and use: Idle land planned for residential development - goldenrod and vaseygrass.
Slope and land form: Level, drained freshwater marsh that has subsided to about 5 feet below sea level.
Drainage and permeability: Poorly drained, moderate to rapid permeability.
Parent material: Organic materials derived from herbaceous plant remains.
Climate: Precipitation 60 inches, Temperature 40 degrees F.
Sampled by: Kent Milton, October 2, 1969.
Described by: Dayton Matthews and Warren Cockerham, October 2, 1969.

A--0 to 10 (0 to 4 in.); dark gray (10YR 4/1) mucky clay (may be spoil); common medium distinct dark yellowish brown (10YR 3/4) mottles; weak medium subangular blocky and weak fine granular structure; hard; very strongly acid; clear smooth boundary.

Oa1--10 to 46 (4 to 18 in.); black (10YR 2/1) sapric material; about 10 percent fiber, 1 percent rubbed; weak medium subangular blocky and weak medium granular structure; hard; about 65 percent mineral; strongly acid; clear smooth boundary.

Oa2--46 to 122 (18 to 48 in.); black (10YR 2/1) sapric material; about 40 percent fiber, 1 percent rubbed; massive; wet, will not flow through fingers when squeezed; dominantly herbaceous fiber; about 60 percent mineral; strongly acid; gradual smooth boundary.

Oa3--122 to 244 (48 to 96 in.); very dark grayish brown (10YR 3/2) sapric material; about 5 percent fiber, less than 1 percent rubbed; massive; flows easily through fingers when squeezed leaving small residue in hand; dominantly herbaceous fiber; about 68 percent mineral; moderately alkaline; abrupt smooth boundary.

IICg--244 to 274 (96 to 108 in.); dark greenish gray (5GY 4/1) clay; massive; flows easily through fingers when squeezed leaving hand empty; moderately alkaline.

Remarks: Munsell colors for moist soil. Water table at 60 inches below the surface.

1/ This pedon was sampled as a representative of an unnamed series field mapped as a land type - Freshwater marsh, drained.

SOIL CLASSIFICATION-FLUVAQUENTIC MEDISAPRIST
EUIC, THERMIC
SERIES - - - - - - -KENNER

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE, MTSC
NATIONAL SOIL SURVEY LABORATORY
LINCOLN, NEBRASKA

SOIL NO - - - - - - S71LA-26-1 JEFFERSON PARISH

GENERAL METHODS- - -1A,1B1B,2A1,2B SAMPLE NOS. 71L0514-71L0519

DEPTH CM	HORIZON	SAND 2-.05	SILT .05-.002	CLAY LT .002	FINE CLAY LT .0002	VCOS 2-1	CORS 1-.5	MEDS .5-.25	FNES .25-.10	VFNS .10-.05	COSI .05-.02	FNSI .02-.002	VFSI .005-.002	SAND 2-.10	INTR II .2-.02	FINE CLAY TO CLAY PCT	NON-CO3-CLAY PCT	RATIO 8D1 15-BAR TO CLAY
		(- - - PARTICLE SIZE ANALYSIS, LT 2MM, 3A1, 3A1A, 3A1B - - -)																
		(- - - PCT LT 2MM - - -)																
0-33	CE1																	
33-48	2C1G	TR	38.7	61.3	29.2	.0	.0	.0	.0	TR	.9	37.8		.0	.9	48		
48-107	CA1																	
107-119	2C2G	TR	8.6	91.4	48.3	.0	.0	.0	.0	TR	1.8	6.8		.0	1.8	53		
119-173	OA2																	
173-274	CA3																	
MOIST																		
0-33	OE1																	
33-48	2C1G	.1	46.8	53.1	24.4	.0	.0	.0	.0	.1	1.5	45.3		.0	1.6	46		
48-107	OA																	
107-119	2C2G	.2	4.8	95.0	52.3	.0	.0	.0	.0	.2				.0		55		
119-173	CA2																	
173-274	OA3																	

DEPTH CM	VOL. GT 2 PCT	WEIGHT GT 75 PCT	75-20	20-5	5-2	LT .074	20-2 PCT LT20	BULK DENSITY 4A1D 1/3-BAR G/CC	4A1H OVEN DRY G/CC	4D1 COLE	WATER CONTENT 4B1C 1/10 BAR PCT	4B1C 1/3-BAR PCT	4B2 15-BAR PCT	4C1 WRC CM/CM	CARBONATE 6E1B LT 2 PCT	3A1A LT .002 PCT	PH 8C1A 1/1 H2O	PH 8C1E 1/2 CACL
	(PARTICLE SIZE ANALYSIS, MM, 3B, 3B1, 3B2)		(- - - PCT LT 75 - - -)															
0-33	0	0	0	0	0		0										5.7	5.7
33-48	0	0	0	0	0		0										6.6	6.6
48-107	0	0	0	0	0		0										5.7	5.7
107-119	0	0	0	0	0		0										6.3	6.2
119-173	0	0	0	0	0		0											
173-274	0	0	0	0	0		0											
MOIST																		
0-33																		
33-48																		
48-107																		
107-119																		
119-173																		
173-274																		

DEPTH CM	ORGANIC MATTER 6A1A ORGN CARB PCT	6B1A NITG PCT	C/N	IRON 6C2B EXT FE PCT	PHOS TOTL PCT	EXTRACTABLE BASES 5B4A 6N2E CA	6O2D MG	6P2B NA	6Q2B K	SUM EXTB	ACTY 6H1A BACL TEA	AL 6G1E KCL EXT	CAT EXCH 5A3A EXTB ACTY	5A6A NHAC	RATIO 8D1 NHAC TO CLAY	RATIO 8D3 CA TO MG	CA 5F1 SAT NHAC PCT	BASE SAT 5C3 EXTB ACTY PCT	5C1 NHAC PCT
						(- - - MEQ / 100 G- - -)													
0-33		2.64		.6		58.8	27.2	33.0	1.4	120	91.9		212	87.7		2.2	67	57	
33-48		.211		.4		21.8	13.8	6.7	.9	43.2	11.7		54.9	37.4		1.6	58	79	
48-107		1.36		.6		59.4	24.5	16.8	.7	101	48.2		149	87.2		2.4	68	68	
107-119		.67		.4		48.5	23.6	12.7	.9	85.7	12.5		98.2	71.6		2.1	68	87	
119-173																			
173-274																			
MOIST																			
0-33																			
33-48																			
48-107																			
107-119																			
119-173																			
173-274																			

DEPTH CM	SATURATED PASTE 8E1 REST OHM-CM	8C1B PH	8A H2O PCT	NA 5D2 ESP PCT	NA 5E SAR	SALT 8D5 TOTL SOLU PPM	GYP 6F1A PCT	SATURATION EXTRACT 8A1 8A1A EC MMHOS/CM	6N1B CA	6O1B MG	6P1B NA	6Q1B K	6I1A CO3	6J1A HCO3	6K1A CL	6L1A SO4	6M1A NO3	ATTERBERG 4F1 LQID LMIT PCT	4F2 PLST INDX
									(- - - MEQ / LITER - - -)										
0-33	300	4.2	832	13	5	43000		6.75	31.5	20.8	26.5	1.0			26.6	46.9			
33-48	430	5.6	138	9	6	4600		4.60	15.3	14.3	24.0	.6			19.5	34.2			
48-107	330	4.8	546	3	6	22000		5.50	21.8	15.8	26.0	.4			24.9	37.6			
107-119	330	5.3	285	7	6	11000		5.50	21.8	15.8	26.0	.4			23.8	39.5			
119-173																			
173-274																			
MOIST																			
0-33																			
33-48																			
48-107																			
107-119																			
119-173																			
173-274																			

DEPTH CM	HISTOSOL CHARACTERIZATION 8F MINL CONT PCT	STATE OF DECOMPOSITION 8G (FIBER VOL) UNRB PCT	8G RUB PCT	8H PYROPHOSPHT SOLUBILITY (MUNS COLOR)	PH 8C1E .01M CACL	BULK DEN 4A3A FILD STAT G/CC	4A1I 1/3B REWT G/CC	COLE 4D1 RE-WET	SUBS RES-IDUE PCT	WATER CONTENT 4B4 FILD STAT PCT	4B1C 1/3B REWT PCT	4B2 15-BAR PCT	4C1 WRD CM/CM
0-33	23	58	14	10YR 7/3	5.5	.09			26	1000		79.2	
33-48	95					.58				113		27.1	
48-107	50	32	6	10YR 5/3	5.5	.13			36	624		51.2	
107-119	87									226		43.5	
119-173	54	50	4	10YR 4/3	6.0	.16			41	590			
173-274													
MOIST													
0-33													
33-48													
48-107													
107-119													
119-173													
173-274													

Classification: Euic, thermic Fluvaquentic Medisaprist.
Soil series: Kenner.
Series classification: Same as pedon.

Pedon No.: S71LA-26-1.
Location: Jefferson Parish, Louisiana, about 2 miles southwest of Westwego, about 2 1/2 miles southwest of waterway and 1/2 mile west of Bayou Segnette, near southwest end of sec. 92, T. 14 S., R. 22 E., 330 feet southeast of Lake Cataouatchie protection levee canal.
Vegetation and use: Native vegetation is paille fine, cattail, common reed, bulrush and cutgrass. The use is wildlife habitat.
Drainage and permeability: Very poorly drained; the water table is at the surface most of the time unless protected and pumped. Internal drainage is slow to none. Permeability is slow or very slow.
Climate: Precipitation 60 inches, Temperature 70 degrees F.
Parent material: herbaceous plant remains and Mississippi River clay alluvium.
Profile described by: Warren L. Cockerham and Dayton Matthews, 6/8/71.

Oe1--0 to 33 cm (0 to 13 in.); very dark gray (10YR 3/1) hemic material; about 40 percent fiber, 18 percent rubbed; weak fine granular structure; flows with difficulty between fingers when squeezed, leaves a large residue in hand; many coarse live roots; dominantly herbaceous fiber; about 45 percent mineral; neutral; abrupt smooth boundary.

IIC1g--33 to 48 cm (13 to 19 in.); gray (5Y 5/1) clay; massive; flows easily between fingers when squeezed and leaves hand empty; few fine live roots; mildly alkaline; abrupt smooth boundary.

Oa1--48 to 107 cm (19 to 42 in.); very dark grayish brown (10YR 3/2) sapric material; about 20 percent fiber, 3 percent rubbed; massive; flows easily between fingers when squeezed and leaves a small residue in hand; few live roots; dominantly herbaceous fiber; about 50 percent mineral; mildly alkaline; abrupt smooth boundary.

IIC2g--107 to 119 cm (42 to 47 in.); dark gray (5Y 4/1) clay; massive; flows easily between fingers when squeezed and leaves hand empty; mildly alkaline; abrupt smooth boundary.

Oa2--119 to 173 cm (47 to 68 in.); black (10YR 2/1) sapric material; about 15 percent fiber; 2 percent rubbed; massive; flows easily between fingers when squeezed leaving a small residue in hand; dominantly herbaceous fiber; about 65 percent mineral; several 1/2 inch strata with fiber content ranging from 10 to 30 percent; mildly alkaline.

Oa3--173 to 274 cm (68 to 108 in.); black (10YR 2/1) sapric material; about 15 percent fiber, 2 percent rubbed; massive; flows easily between fingers when squeezed leaving a small residue in hand; dominantly herbaceous fiber; about 65 percent mineral; several 1/2 inch strata with a fiber content ranging from 10 to 30 percent; mildly alkaline.

Remarks: Munsell colors for moist soil.

SOIL CLASSIFICATION-FLUVAQUENTIC MESISAPRIST
FUIC, THERMIC
SERIES + + + + + + -KENNER

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SOIL NO + + + + + + S71LA-26-6 JEFFERSON PARISH

GENERAL METHODS- - -1A,1B1B,2A1,2B SAMPLE NCS. 71L0520-71L0521

DEPTH CM	HORIZON	PARTICLE SIZE ANALYSIS, LT 2MM, 3A1, 3A1A, 3A1B: SAND 2-.05 PCT LT 2MM	SILT .05-.002 PCT LT 2MM	CLAY LT .002 PCT LT 2MM	FINE CLAY LT .0002 PCT LT 2MM	VCOS 2-1 PCT LT 2MM	CORS 1-.5 PCT LT 2MM	MEDS .5-.25 PCT LT 2MM	FNES .25-.10 PCT LT 2MM	VFNS .10-.05 PCT LT 2MM	COSI .05-.02 PCT LT 2MM	FNSI .02-.002 PCT LT 2MM	VFSI .005-.002 PCT LT 2MM	SAND 2-.10 PCT LT 2MM	INTR II .2-.02 PCT LT 2MM	FINE CLAY TO CLAY PCT LT 2MM	NON-CO3-CLAY PCT LT 2MM	RATIO 8D1 15-BAR TO CLAY
10+41	OA2																	
51+104	OA3																	

DEPTH CM	8F FIBL COPT PCT	8G (STATE OF DECOMPOSITION) (FIBER VOL) UNRB PCT	8G (STATE OF DECOMPOSITION) (FIBER VOL) RUB PCT	8H PYROPHOSPHT SOLUBILITY (MUNS COLOR)	PH 8C1E .01M CACL	(BULK DEN) 4A3A FILE STAT G/CC	(BULK DEN) 4A1I 1/3B REWT G/CC	COLE 4D1 RE-WET	SUBS RES-IDUE PCT	(WATER CONTENT) 4B4 FIID STAT PCT	(WATER CONTENT) 4B1C 1/3B REWT PCT	(WATER CONTENT) 4B2 15-BAR PCT	4C1 WRD CM/CM
10+41	28	52	30	10YR 8/3		.06				1460			
51+104	32	38	6	10YR 6/3		.10				994			

Classification: Euic, thermic Fluvaquentic Medisaprist.
Soil series: Kenner.
Series classification: Same as pedon.

Pedon No.: S71LA-26-6.
Location: Jefferson Parish, Louisiana, about 3 miles south of West Wego; 2¼ miles south of boat landing on Bayou Segnette; 100 feet southwest of end of oil field canal, sec. 73, T. 14 S., R. 23 E.
Vegetation and use: Wildlife habitat; freshwater marsh grasses including bulltongue, paille fine and cattail.
Slope and land form: Level, depressed marshland.
Drainage and permeability: Very poorly drained; organic layers are rapidly permeable; mineral layers are very slowly permeable.
Climate: Precipitation 60 inches, Temperature 70 degrees F.
Parent material: Organic materials derived from herbaceous plant remains and Mississippi River clayey alluvium.
Sampled by: Warren Lynn and Warren Cockerham, 6/11/71.
Described by: Dayton Matthews and David F. Slusher.

Oa1--0 to 10 cm (0 to 4 in.); very dark brown (10YR 2/2) sapric material; about 70 percent fiber, about 6 percent rubbed; flows with difficulty between fingers when squeezed and leaves large residue in hand; massive; about 45 percent mineral; medium acid; gradual smooth boundary.

Oa2--10 to 41 cm (4 to 16 in.); very dark brown (10YR 2/2) sapric material; about 60 percent fiber, about 8 percent rubbed; flows with difficulty between fingers when squeezed and leaves large residue in hand; massive; about 50 percent mineral; neutral; abrupt wavy boundary.

IIClg--41 to 51 cm (16 to 20 in.); gray (5Y 5/1) clay; massive; flows easily between fingers when squeezed and leaves hand empty; moderately alkaline; clear smooth boundary.

Oa3--51 to 104 cm (20 to 41 in.); black (10YR 2/1) sapric material; about 25 percent fiber, less than 1 percent rubbed; massive; flows easily between fingers when squeezed and leaves hand empty; about 50 percent mineral; moderately alkaline; abrupt smooth boundary.

IIIC2g--104 to 109 cm (41 to 43 in.); dark gray (5Y 4/1) clay; massive; flows easily between fingers when squeezed and leaves hand empty; moderately alkaline; abrupt smooth boundary.

Oa4--109 to 256 cm (43 to 101 in.); black (10YR 2/1) sapric material; about 15 percent fiber, less than 1 percent rubbed; flows easily between fingers when squeezed and leaves small residue in hand; about 60 percent mineral; moderately alkaline.

Remarks: Munsell colors for wet soil.
Water table at the surface when sampled.

SOIL CLASSIFICATION- Euic, thermic Fluvaquentic Mediaqrist.

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SERIES - - - - - - -NEBNEF

SOIL NO - - - - - - - S71L1-26-13 JEFFERSON PARISH

GENERAL METHODS- - -1A,1B1B,2A1,2E SAMPLE NOS. 71L533-71L535

DEPTH CM	HORIZON	SAND 2-.05	SILT .05-.002	CLAY LT .002	FINE CLAY LT .0002	VCOS 2-1	COBS 1-.5	MEIS .5-.25	FMES .25-.10	VFMS .10-.05	COSI .05-.02	FMSI .02-.002	VFSI .005-.002	SAND 2-.10	INTR II .2-.02	FINE CLAY TO CLAY	NON-CO3-CLAY	RATIO 8D1 15-BAR TO CLAY
		(- - - - - - - - - - - - - - - - PARTICLE SIZE ANALYSIS, LT 2MM, 3A1, 3A1A, 3A1B - - - - - - - - - -)																
8-61	CA1																	
61-86	CA2																	
86-107	CA3																	

DEPTH CM	OF HIWL CONT PCT	(STATE OF DECOMPOSITION) 8G (FIBER VOL) UNRB PCT	RUB PCT	8H PYROPHOSPHT SOLUBILITY (MUNS COLOR)	PH 8C1E .01M CACL	(BULK DEN) 4A1 FILD STAT G/CC	4A1I 1/3B REWT G/CC	COLE 4C1 RE-WET	SUBS RES-IDUE PCT	(- -WATER CONTENT- -) 4B4 FILD STAT PCT	4B1C 1/3B REWT PCT	4B2 15-BAR PCT	4C1 WRD CM/CM
		(- - - - - - - - - - - - - - - - MISTOSOL CHARACTERIZATION- - - - - - - - - - - - - - -)											
8-61	28					.27				210			
61-86	46					.21				389			
86-107	42					.19				429			

Classification: Euic, thermic Fluvaquentic Medisaprist.
Soil series: Kenner.
Series classification: Same as pedon.

Pedon No.: S71LA-26-13.
Location: Jefferson Parish, Louisiana, about 1.5 miles north of New Orleans International Airport, sec. 42, T. 12 S., R. 9 E.
Vegetation and use: Bermudagrass; in the process of being developed to residential uses.
Slope and land form: Level, depressed marsh that has been drained and subsided to about 5 feet below sea level.
Drainage and permeability: Very poorly drained, rapidly permeable.
Climate: Precipitation 60 inches, Temperature 70 degrees F.
Parent material: Herbaceous plant remains and clayey Mississippi River sediments.
Sampled by: Warren Lynn and James R. Coover - 6/17/71.
Described by: Warren Cockerham and Dayton Matthews.

A1--0 to 8 cm (0 to 3 in.); dark grayish brown (10YR 4/2) clay; common fine distinct dark brown (7.5YR 4/4) mottles; weak medium subangular blocky structure; hard; abrupt smooth boundary.

Oa1--8 to 61 cm (3 to 24 in.); black (N 2/) sapric material; about 5 percent fiber, less than 1 percent rubbed, massive; hard; about 50 percent mineral; many fine roots.

Oa2--61 to 86 cm (24 to 34 in.); very dark brown (10YR 2/2) sapric material; about 30 percent fiber, about 1 percent rubbed; massive; friable; about 50 percent mineral; common fine roots.

Oa3--86 to 107 cm (34 to 42 in.); very dark gray (10YR 3/1) sapric material; about 10 percent fiber, less than 1 percent rubbed; massive; friable; about 40 percent mineral; dark gray (10YR 4/1) clay strata at 36-38 inches.

Remarks: Munsell color for moist soil unless indicated otherwise.

SOIL CLASSIFICATION-FLUVAQUENTIC MESISAPRIST
EUIC, THERMIC
SERIES - - - - - - -NOT DESIGNATED

U. S. DEPARTMENT OF AGRICULTURE
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LINCOLN, NEBRASKA

SOIL NO - - - - - - S69LA-23-9 IBERIA PARISH

GENERAL METHODS- - -1A,1B1B,2A1,2B SAMPLE NOS. 69L141-69L150

DEPTH CM	HORIZON	PARTICLE SIZE ANALYSIS, LT 2MM, 3A1, 3A1A, 3A1B (PCT LT 2MM) SAND 2-.05	SILT .05-.002	CLAY LT .002	FINE CLAY LT .0002	VCOS 2-1	COAR 1-.5	MEDS .5-.25	FNES .25-.10	VFNS .10-.05	COSI .05-.02	FNSI .02-.002	VFSI .005-.002	SAND 2-.10	INTR SIL .2-.02	FINE CLAY TO CLAY PCT	NON-CLAY PCT	RATIO 8D1 15-BAR TO CLAY
0-18	OI																	
18-30	OE																	
30-43	OA1																	
43-69	OA2																	
69-91	OA3																	
91-99	2A1																	
99-135	3OA4																	
135-178	3OA5																	
239-274	3OA5																	
295-335	4CG (A)	1.0	73.8	25.2	14.7	TR	.1	.2	.4	.4	34.2	39.6		.6	34.8	58		.41

DEPTH CM	PARTICLE SIZE ANALYSIS, MM, 3B, 3B1, 3B2 VOL. GT 2 PCT	GT 75 PCT	75-20	20-5	5-2	LT .074	20-2 PCT LT20	BULK DENSITY 4A1D 1/3-BAR G/CC	4A1H OVEN DRY G/CC	4D1 COLE	WATER CONTENT 4B1C 1/10 BAR PCT	4B1C 1/3-BAR PCT	4B2 15-BAR PCT	4C1 WRD CM/CM	CARBONATE 6E1B LT 2 PCT	3A1A LT .002 PCT	PH 8C1A 1/1 H2O	8C1E 1/2 CACL
0-18	0	0	0	0	0		0						60.4					
18-30	0	0	0	0	0		0						91.7					
30-43	0	0	0	0	0		0						78.2					
43-69	0	0	0	0	0		0						98.7					
69-91	0	0	0	0	0		0						83.0					
91-99	0	0	0	0	0		0						33.7				6.7	6.7
99-135	0	0	0	0	0		0						86.9					
135-178	0	0	0	0	0		0						78.3					
239-274	0	0	0	0	0		0											
295-335	0	0	0	0	0	99	0											

DEPTH CM	ORGANIC MATTER 6A1A ORGN CARB PCT	6B1A NITG PCT	C/N	IRON 6C2B EXT FE PCT	PHOS TOTL PCT	EXTRACTABLE BASES 5B4A 6N2E CA	6O2D MG	6P2B NA	6Q2B K	SUM EXTB MEQ / 100 G	ACTY 6H1A BACL TEA	AL 6G1E KCL EXT	CAT EXCH 5A3A EXTB ACTY	5A6A NHAC	RATIO 8D1 NHAC TO CLAY	RATIO 8D3 CA TO MG	CA SAT NHAC PCT	BASE SAT 5C3 EXTB ACTY PCT	5C1 NHAC PCT
0-18	36.2	1.58	23																
18-30	42.7	1.94	22																
30-43	27.6	1.56	18																
43-69	28.2	1.67	17																
69-91	30.0	1.65	18																
91-99	11.3	.57	20																
99-135	27.6	1.64	17																
135-178	27.5	1.73	16																
239-244																			
295-335						.18	6.88	33.48	.58										

DEPTH CM	SATURATED PASTE 8E1 REST OHM-CM	8C1B PH	8A H2O PCT	NA 5D2 ESP PCT	NA 5E SAR	SALT 8D5 TOTL SOLU PPM	GYP 6F1A PCT	SATURATION EXTRACT 8A1 8A1A EC MMHOS/CM	6N1B CA	6O1B MG	6P1B NA	6Q1B K	6I1A CO3	6J1A HCO3	6K1A CL	6L1A SO4	6M1A NO3	ATTERBERG 4F1 LQID LMIT PCT	4F2 PLST INDX
0-18																			
18-30																			
30-43																			
43-69																			
69-91																			
91-99																			
99-135																			
135-178																			
239-244																			
295-335					18			4.29	.1	6.8	33.4	.5							

DEPTH CM	HISTOSOL CHARACTERIZATION 8F MINL CONT PCT	(STATE OF DECOMPOSITION) 8G (FIBER VOL) UNRB PCT	8H RUB PCT	PYROPHOSPHT SOLUBILITY (MUNS COLOR)	PH 8C1E CACL	(BULK DEN) 4A3A FILD STAT G/CC	4A1I 1/3B REMT G/CC	COLE 4D1 RE-WET	SUBS RES-IDUE PCT	WATER CONTENT 4B4 FILD STAT PCT	4B1C 1/3B REMT PCT	4B2 15-BAR PCT	4C1 WRD CM/CM
0-18	42	59	35	10YR 6/3	5.7					619			
18-30	32	36	12	10YR 5/3	7.1					917			
30-43	46	28	8	10YR 4/3	7.2					857			
43-69	50	33	5	10YR 4/3	7.1					692			
69-91	48	28	5	10YR 5/4	7.1					678			
91-99	80	20	2	10YR 6/3	7.2					264		27.0	
99-135	48	26	1	10YR 5/3	7.1					643			
135-178	43	24	1	10YR 5/3	7.1					579			
239-244	49									513			
295-335												10.3	

CLAY MINERALOGY (7A2C).
295-336 MI3 KK2 MT1 VC1.
COMMENTS: CLAYS MINERALOGY IS MIXED.
RELATIVE AMOUNTS: (X-RAY) 5 = DOMINANT 4 = ABUNDANT 3 = MODERATE 2 = SMALL 1 = TRACE.
MINERAL CODE: MT = MONTMORILLONITE MI = MICA KK = KAOLINITE VC = VERMICULITE-CHLORITE.

(A) SURFACE WATER (69L179).
(B) MEQ/LITER WATER ANALYSIS.

Classification: Euic, thermic Fluvaquentic Medisaprist.
Soil series: Not designated 1/.

Pedon No.: S69LA-23-9.
Location: Iberia Parish, three miles southwest of Avery Island, ¼ mile east of junction Three Bayou and Bayou Petite, 200 yards northeast of north bank of Three Bayou; northeast part of T. 14 S., R. 5 E. (no section number).
Vegetation and use: Wildlife habitat, marshhay cordgrass and needlerush.
Slope and land form: Level brackish marsh land less than one foot above sea level.
Drainage and permeability: Very poorly drained, moderately permeable in organic layers, very slowly permeable in underlying mineral horizons.
Parent material: Thick, decomposed organic material derived mainly from herbaceous plants over silty Prairie Age sediment.
Climate: Precipitation 60 inches, Temperature 68 degrees F.
Sampled by: David F. Slusher, Warren Lynn, Leo Juve, Henry Clark, Almond White, Al Wilhite.
Described by: Warren L. Cockerham and William McKinzie, 2/13/69.

Oi--0 to 18 cm (0 to 7 in.); very dark grayish brown (10YR 3/3) fibric material; about 75 percent fiber, about 50 percent rubbed; massive; nonsticky; mat of live roots; dominantly herbaceous fiber; about 20 percent mineral content; roots in 2-7 inch zone are vertically oriented; medium acid; gradula smooth boundary.

Oe--18 to 30 cm (7 to 12 in.); very dark grayish brown (10YR 3/2) hemic material; about 60 percent fiber, about 25 percent rubbed; massive; nonsticky; many live roots; pyrophosphate color (10YR 6/3); dominantly herbaceous fiber, about 35 percent mineral content; neutral; gradual smooth boundary.

Oa1--30 to 43 cm (12 to 17 in.); very dark brown (10YR 2/1) sapric material; about 30 percent fiber, slightly less than 10 percent rubbed; massive; nonsticky; many live roots; pyrophosphate color (7.5YR 4/4); dominantly herbaceous fiber; about 65 percent mineral content; neutral; gradual smooth boundary.

Oa2--43 to 69 cm (17 to 27 in.); very dark greenish brown (10YR 3/2) sapric material; very dark brown (10YR 2/2) pressed and rubbed; about 35 percent fiber; slightly less than 10 percent rubbed; massive; nonsticky; common live roots; dominantly herbaceous fiber; about 50 percent mineral content; neutral.

Oa3--69 to 91 cm (27 to 36 in.); very dark grayish brown (10YR 3/2) sapric material; very dark brown pressed and rubbed; about 35 percent fiber, less than 10 percent rubbed; massive; nonsticky; common roots; pyrophosphate color (10YR 5/3); dominantly herbaceous fiber; about 55 percent mineral content; neutral.

IIA1--91 to 99 cm (36 to 39 in.); black (10YR 2/1) mucky silty clay loam; massive; semifluid, when squeezed in hand flows easily between fingers leaving hand empty; neutral.

IIIOa4--99 to 135 cm (39 to 53 in.); black (10YR 2/1); about 20 percent fiber sapric material; about 5 percent rubbed; massive; semifluid, when squeezed in hand flows easily between fingers leaving hand empty; few live roots; dominantly herbaceous fiber; about 60 percent mineral content; strong sulphide odor after treatment with HCl; neutral.

IIIOa5--135 to 274 cm (53 to 108 in.); black (10YR 2/1); about 15 percent fiber, about 5 percent rubbed; massive; nonsticky; few roots; pyrophosphate color (10YR 6/2); dominantly herbaceous fiber; about 65 percent mineral content; thin (less than 2 inches) mineral horizons throughout; neutral.

IVA1--274 to 295 cm (108 to 116 in.); very dark brown (10YR 2/2) silty clay loam; massive; semifluid, when squeezed in hand flows easily between fingers, leaving hand empty; neutral.

IVCg--295 to 335 cm (116 to 132 in.); greenish gray silty clay loam; massive; semifluid, when squeezed in hand flows easily between fingers, leaving hand empty; neutral.

Remarks: Water table at the surface. Surface is spongy but will support human foot traffic. Numerous micro rills that are very soft. Munsell color for wet soil.

1/ This pedon was sampled as a representative of an unnamed series (Brackish marsh, peat land type).

SOIL CLASSIFICATION- FLUVAQUENTIC MEDISAPRIST
EUIC, THERMIC

SERIES - - - - - - - -NOT DESIGNATED

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE, NTSC
NATIONAL SOIL SURVEY LABORATORY
LINCOLN, NEBRASKA

SOIL NO - - - - - - - S71LA-26-5 JEFFERSON PARISH

GENERAL METHODS- - -1A,1B1B,2A1,2B SAMPLE NOS. 71L0554-71L0559

DEPTH CM	HORIZON	PARTICLE SIZE ANALYSIS, LT 2MM, 3A1, 3A1A, 3A1B: SAND 2-.05	SILT .05-.002	CLAY LT .002	FINE CLAY LT .0002	VCOS 2-1	CORS 1-.5	MEDS .5-.25	FNES .25-.10	VFNS .10-.05	COSI .05-.02	FNSI .02-.002	VFSI .002-.002	SAND 2-.10	INTR II .2-.02	FINE CLAY TO CLAY PCT	NON-CO3-CLAY PCT	RATIO 8D1 15-BAR TO CLAY
		PCT LT 2MM																
0-30	OE																	
30-51	2C1G																	
51-58	CA1																	
58-69	2C2G																	
69-97	OA2																	
97-152	CA3																	

DEPTH CM	HISTOSOL CHARACTERIZATION: 8F RUBB CONT PCT	8G (STATE OF DECOMPOSITION) (FIBER VOL) UNRB PCT	8G RUB PCT	8H PYROPHOSPHT SOLUBILITY (MUNS COLOR)	PH 8C1E .01M CACL	(BULK DEN) 4A3A FIELD STAT G/CC	4A1I 1/3B REWT G/CC	COLE 4E1 RE-WET	SUBS RES-IDUE PCT	(WATER CONTENT) 4B4 FIELD STAT PCT	4E1C 1/3B REWT PCT	4E2 15-BAR PCT	4C1 WRD CM/CM
0-30	57	64	18	10YR 7/3		.14				643			
30-51	96					.81				83			
51-58		54	16	10YR 5/3									
58-69													
69-97	78	32	10	10YR 5/3		.19				480			
97-152	60	30	12	10YR 7/2		.15				570			

Classification: Euic, thermic, Fluvaquentic Medisaprist.
Soil series: Not designated 1/.

Pedon No.: S71LA-26-5.
Location: Jefferson Parish, Louisiana, about 3 miles south of Westwego, 2 miles south of pumping station on Bayou Segnette across from oil well, sec. 73, T. 14 S., R. 23 E.
Vegetation and use: Wildlife habitat, cypress trees, alligatorgrass smartweed, bull tongue, red maple.
Slope and land form: Depressed swamp, decomposed woody and herbaceous organic materials and clayey Mississippi River sediments.
Drainage and permeability: Very poorly drained, very slowly permeable.
Climate: Precipitation 60 inches, Temperature 70 degrees F.
Parent material: Herbaceous woody plant remains and fine textured Mississippi River sediments.
Sampled by: Warren Lynn, 6/11/71.
Described by: David Slusher and Dayton Matthews, 6/11/71.

Oe--0 to 30 cm (0 to 12 in.) dark brown (7.5YR 3/2) hemic material; about 60 percent fiber; less than 20 percent rubbed; massive; flows with difficulty between fingers and leaves large residue in hand; many partly decomposed sticks and wood fragments up to 1/4 inch in diameter; about 50 percent mineral content; abrupt wavy boundary.

IIClg--30 to 51 cm (12 to 20 in.) gray (N 5/) clay; massive; flows easily between fingers when squeezed and leaves large residue in hand; gradual wavy boundary.

Oa1--51 to 58 cm (20 to 23 in.); dark brown (7.5YR 3/2) sapric material; color changes to very dark gray (10YR 3/1) after exposure to air; about 30 percent fiber, less than 5 percent rubbed; massive; flows with difficulty between fingers when squeezed and leaves large residue in hand; partially decomposed wood fragments up to 2 inches in diameter; about 50 percent mineral; abrupt wavy boundary.

IIICg--58 to 69 cm (23 to 27 in.); gray (N 5/) clay; massive; flows easily between fingers and leaves small residue in hand; abrupt wavy boundary.

Oa2--69 to 97 (27 to 38 in.); dark gray (10YR 3/1) sapric material; about 40 percent fiber, about 3 percent rubbed; massive; flows easily between fingers when squeezed and leaves small residue in hand; thin clayey mineral layer at 36-37 inches; about 60 percent mineral; clear, wavy boundary.

Oa3--97 to 152 cm (38 to 60 in.); dark gray (10YR 4/1) sapric material; about 60 percent fiber, about 3 percent rubbed; massive; flows easily between fingers when squeezed and leaves small residue in hand.

Remarks: Munsell colors for wet soil.
Water table at the surface.

1/ This pedon sampled as a representative of an unnamed series.

SOIL CLASSIFICATION-TERRIC MEDISAPRIST
CLAYEY, MONTMORILLONITIC, EUIC, THERMIC
SERIES - - - - - - - -ALLEMANDS

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE, MTSC
NATIONAL SOIL SURVEY LABORATORY
LINCOLN, NEBRASKA

SOIL NO - - - - - - S68LA-48-7 ST. JOHN PARISH

GENERAL METHODS- - -1A,1B1B,2A1,2B SAMPLE NOS. 68L0837-68L0838

DEPTH CM	HORIZON	SAND 2-.05	SILT .05-.002	CLAY LT .002	FINE CLAY LT .0002	VCOS 2-1	COS 1-.5	MEDS .5-.25	FNES .25-.10	VFNS .10-.05	COSI .05-.02	FNSI .02-.002	VFSI .005-.002	SAND 2-.10	INTR II .2-.02	FINE CLAY TO CLAY PCT	NON-CO3-CLAY PCT	RATIO 8D1 15-BAR TO CLAY
		(- - PARTICLE SIZE ANALYSIS, LT 2MM, 3A1, 3A1A, 3A1B - - PCT LT 2MM - -)																
23-53	CA1	.2	17.2	82.6						.2	.6	16.6			.8			
53-84	CA2	.3	12.2	87.5						.3	.8	11.4			1.1			

DEPTH CM	VOL. GT 2 PCT	WEIGHT GT 75 PCT	75-20	20-5	5-2	LT .074	20-2 PCT LT20	4A1D 1/3-BAR G/CC	4A1H OVEN DRY G/CC	4D1 COLE	4B1C 1/10 BAR PCT	4B1C 1/3-BAR PCT	4B2 15-BAR PCT	4C1 WRD CM/CM	CARBONATE 6E1B LT 2 PCT	3A1A LT .002 PCT	PH 8C1A 1/1 H2O	PH 8C1E 1/2 CACL
	(PARTICLE SIZE ANALYSIS, MM, 3B, 3B1, 3B2)		(- - PCT LT 75 - -)					(BULK DENSITY)			(- - -WATER CONTENT- - -)							
23-53						100							72.8				6.3	6.0
53-84						100							80.5				5.7	5.6

DEPTH CM	ORGANIC MATTER 6A1A ORGN CARB PCT	6B1A NITG PCT	C/N	IRON 6C2B EXT FE PCT	PHOS TOTL PCT	6N2E CA	6O2D MG	6P2B NA	6Q2B K	SUM EXTB	ACTY 6H1A BACL TEA	AL 6G1E KCL EXT	(CAT EXCH) 5A3A EXTB ACTY	5A6A NHAC	RATIO 8D1 NHAC TO CLAY	RATIO 8D3 CA TO MG	CA 5F1 SAT NHAC PCT	(BASE SAT) 5C3 EXTB ACTY PCT	5C1 NHAC PCT
						(- -EXTRACTABLE BASES 5B4A- -) MEQ / 100 G													
23-53	26.7																		
53-84	29.3																		

DEPTH CM	8F FIBER CONT PCT	8G (FIBER VCL) UNRB PCT	8G RUB PCT	8H PYROPHOSPHT SOLUBILITY (MUNS COLOR)	PH 8C1E .01M CACL	(BULK DEN) 4A3A FILD STAT G/CC	4A1I 1/3B REWT G/CC	COLE 4D1 RE-WET	SUBS RES-IDUE PCT	(- -WATER CONTENT- -) 4B4 FILD STAT PCT	4B1C 1/3B REWT PCT	4B2 15-BAR PCT	4C1 WRD CM/CM
	(- - -HISTOSOL CHARACTERIZATION- - -) (STATE OF DECOMPOSITION)												
23-53	42	27			5.6					637			
53-84	45	22			5.4					370			

Classification: Clayey, montmorillonitic, euic, thermic Terric Medisaprist.
Soil series: Allemands.
Series classification: Same as pedon.

Pedon No.: S68LA-48-7.
Location: St. John Parish, Louisiana, about two miles southeast of Lower Vacherie, 1-1/4 mile west of Pleasure Bend Club; 75 yards north of Vacherie Canal, sec. 37, T. 13 S., R. 18 E.
Vegetation and use: Wildlife habitat, dominantly paille fine and scattered cattails.
Slope and land form: Broad level.
Drainage and permeability: Very poorly drained. Runoff is very slow. Internal drainage and permeability are rapid in the upper horizons and very slow in the lower clay horizons.
Climate: Precipitation 60 inches, Temperature 68 degrees F.
Parent material: Herbaceous plain over recent Mississippi sediments.
Described by: W. L. Cockerham and Ray Dance, November 9, 1967.

Oe--0 to 23 cm (0 to 9 in.); very dark gray (10YR 3/1), same pressed and rubbed hemic material, about 20 percent fiber after rubbing; massive; all herbaceous fibers; about 25 percent mineral content; n-value less the 0.5; medium acid; clear smooth boundary.

Oa1--23 to 53 cm (9 to 21 in.); black (10YR 2/1), same pressed and rubbed sapric material; about 5 percent fiber after rubbing; massive; about 30 percent mineral content; n-value less than 0.5; slightly acid; clear smooth boundary.

Oa2--53 to 84 cm (21 to 33 in.); black (10YR 2/1), same pressed and rubbed sapric material; massive; about 1 percent fiber after rubbing; 45 percent mineral content; n-value less than 0.5; neutral; clear smooth boundary.

Ab--84 to 127 cm (33 to 50 in.); gray (5Y 4/1) semifluid clay; moderately alkaline; clear smooth boundary.

IIC--127 to 152 cm (50 to 60 in.); dark greenish gray (5GY 4/1) fine sandy loam; massive; slightly sticky; moderately alkaline.

Remarks: 1. Munsell colors for wet soil.

2. Described from slice obtained with posthole digger to 45 inches, below 45 inches Belgian Auger.

3. Water table at the surface when sampled and described.

SOIL CLASSIFICATION-TERRIC MEDISAPRIST
CLAYEY, MIXED, EUIC, THERMIC
SERIES - - - - - - -ALLEMANDS TAXADJUNCT

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE, MTSC
NATIONAL SOIL SURVEY LABORATORY
LINCOLN, NEBRASKA

SOIL NO - - - - - - S68LA-29-2 LAFOURCHE PARISH

GENERAL METHODS- - -1A,1B1B,2A1,2B SAMPLE NOS. 68L196 68L200

DEPTH CM	HORIZON	SAND 2-.05	SILT .05-.002	CLAY LT .002	FINE CLAY LT .0002	VCOS 2-1	CORS 1-.5	MEDS .5-.25	FNES .25-.10	VFNS .10-.05	COSI .05-.02	FNSI .02-.002	VFSI .005-.002	SAND 2-.10	INTR II .2-.02	FINE CLAY TO CLAY PCT	NON CO3 CLAY PCT	RATIO 8D1 15-BAR TO CLAY
		(- - - PARTICLE SIZE ANALYSIS, LT 2MM, 3A1, 3A1A, 3A1B - - -)			FINE	(- - SAND - -				)	(- - SILT - -		-)					
		(- - - PCT LT 2MM - - -													-)			
0-20	OA1	1.1	15.5	83.4		.0	.0	.0	.2	.9	.5	15.0		.2	1.5			.81
20-30	OA2																	
30-61	OA3																	
61-79	OA4	.2	4.7	95.1		.0	.0	.0	.0	.2	.4	4.3		.0	.6			.74
79-114	2CG	.1	5.6	94.3		.0	.0	.0	.0	.1	.9	4.7		.0	1.1			.54

DEPTH CM	VOL. GT 2 PCT	GT 75 PCT	75-20	20-5	5-2	LT .074	20-2 PCT LT20	4A1D 1/3-BAR G/CC	4A1H OVEN DRY G/CC	4D1 COLE	4B1C 1/10 BAR PCT	4B1C 1/3-BAR PCT	4B2A 15-BAR PCT	4C1 WRD CM/CM	CARBONATE 6E1B LT 2 PCT	3A1A LT .002 PCT	PH 8C1A 1/1 H2O	PH 8C1E 1/2 CACL
	(PARTICLE SIZE ANALYSIS, MM, 3B, 3B1, 3B2)	(- - WEIGHT	(- - - PCT LT 75 - - -)					(BULK DENSITY		)	(- - -WATER CONTENT- - -)							
0-20	0	0	0	0	0	98	0						67.8				5.4	4.9
20-30	0	0	0	0	0		0						74.8				5.2	4.7
30-61	0	0	0	0	0		0						99.0				5.2	4.8
61-79	0	0	0	0	0	100	0						70.6				5.1	4.7
79-114	0	0	0	0	0	99	0						51.0				5.8	5.3

DEPTH CM	6A1A ORGN CARB PCT	6B1A NITG PCT	C/N	IRON 6C2B EXT FE PCT	PHOS TOTL PCT	6N2E CA	6O2D MG	6P2B NA	6Q2B K	SUM EXTB	ACTY 6H1A BACL TEA	AL 6G1E KCL EXT	5A3A EXTB ACTY	5A6A NHAC	RATIO 8D1 NHAC TO CLAY	RATIO 8D3 CA TO MG	CA 5F1 SAT NHAC PCT	5C3 EXTB ACTY PCT	5C1 NHAC PCT
	(ORGANIC MATTER	)				(- -EXTRACTABLE BASES 5B4A- -)							(CAT EXCH)					(BASE SAT)	
						(- - - - - - MEQ / 100 G- - -								-)					
0-20		1.77		.8		49.3	12.8	3.3	1.2	66.6	42.2	.3	109.0	89.2	1.1	3.9		61	75
20-30	30.7	1.76	17	1.5		50.0	9.6	2.7	.4	62.7	57.7	.3	120.0	93.9		5.2		52	67
30-61	37.4	2.13	18	1.5		57.7	11.9	3.3	.3	73.2	57.4	.4	131.0	96.8		4.8		56	76
61-79	14.3	1.61	9	.9		33.5	10.3	2.6	.6	47.0	63.1	3.2	110.0	64.0	.67	3.3		43	73
79-114	4.59	.437	11	.8		32.1	13.0	2.3	.6	48.0	38.4	5.0	86.0	55.0	.58	2.5		56	86

DEPTH CM	8E1 REST OHM-CM	8C1B PH	8A H2O PCT	NA 5D2 ESP PCT	NA 5E SAR	SALT 8D5 TOTL SOLU PPM	GYP 6F1A PCT	8A1A EC MMHOS/CM	6N1B CA	6O1B MG	6P1B NA	6Q1B K	6I1A CO3	6J1A HCO3	6K1A CL	6L1A SO4	6M1A NO3	ATTERBERG 4F1 LQID LMIT PCT	4F2 PLST INDX
	(SATURATED PASTE)							(- - - SATURATION EXTRACT 8A1- - -)	(- - - MEQ / LITER								-)		
0-20	3540		640	2	2			.39	.9	.4	1.9	.1		.8	1.5	.8			
20-30																			
30-61																			
61-79	750		555	1	1			2.03	14.5	5.5	3.3	TR		.5	2.0	23.1			
79-114																			

DEPTH CM	8F MINL CONT PCT	8G (FIBER VOL) UNRB PCT	8G RUB PCT	8H PYROPHOSPHT SOLUBILITY (MUNS COLOR)	PH 8C1E .01M CACL	(BULK DEN) 4A3A FILD STAT G/CC	4A1I 1/3B REWT G/CC	COLE 4D1 RE-WET	SUBS RES-IDUE PCT	4B4 FILD STAT PCT	4B1C 1/3B REWT PCT	4B2 15-BAR PCT	4C1 WRD CM/CM
	(- - - HISTOSOL CHARACTERIZATION- - -	(STATE OF DECOMPOSITION)								(- -WATER CONTENT- -)			
0-20	50		37	10YR 7/2								55.9	
20-30	38		25	10YR 6/4								53.7	
30-61	25		37	10YR 6/4								47.2	
61-79	70		10	10YR 8/2								44.9	
79-114	91											35.1	

DEPTH CM	6A2B ORGN CARB PCT	6R2A SUL-FIDES (C) ME/100G	8C1A (A) H2O 1:1	8C1C (A) KCL 1:1	8C1C KCL 1:1
			(-----PH	------)	
0-20	26.2	.4	6.5	5.4	4.9
20-30	34.4	.2	6.3	5.6	4.7
30-61	43.0	.1	6.3	5.7	4.8
61-79	17.7	.3	6.4	5.6	4.7
79-114	4.48	.7	6.7	5.7	5.3

CLAY MINERALOGY (7A2).
68L0199 61-79 CM THE CLAY CONTAINS SMALL TO MODERATE AMOUNTS OF KAOLINITE AND MICA, BOTH WELL ORDERED, AND A SMALL AMOUNT OF SOMEWHAT POORLY ORDERED MONTMORILLONITE. THE LATTER CONTAINS SOME INTERLAYER COMPONENTS. THE CLAY MINERALOGY IS MIXED.

(A) DETERMINED ON FEILD-MOIST SAMPLE.
(B) FIBER CONTENT. FEILD-MOIST SAMPLE IMMERSED IN CALGON SOLUTION OVERNIGHT, SHAKEN 1 MINUTE, AND GENTLY WASHED ON 100-MESH (0.15MM.) SEIVE.
(C) SULFIDES ON FEILD-MOIST SAMPLE H2S EVOLVED ON TREATMENT WITH 6N HCL IN NITROGEN ATMOSPHERE.

Classification: Clayey, mixed, euic, thermic Terric Medisaprist.
Soil series: Allemands taxadjunct 1/.
Series classification: Clayey, montmorilltonitic, euic, thermic Terric Medisaprists.

Pedon No.: S68LA-29-2.
Location: Lafourche Parish, Louisiana, at Raceland along U.S. Highway 90, 350 feet south of highway, 350 feet west of McMahon Canal, T. 16 S., R. 18 E.
Vegetation and use: Range and wildlife habitat, paille fine.
Slope and land form: Level or depressed deltaic marsh. Approximately one foot above sea level, microrelief is 2 to 4 inches. Firm enough to support cattle.
Drainage and permeability: Very poorly drained and very slowly permeable. Water table at surface.
Parent material: Organic accumulations over Mississippi River Alluvium.
Climate: Precipitation 58 inches, Temperature 70 degrees F.
Sampled and Described by: Warren L. Cockerham and David F. Slusher, April 18, 1965.

Oa1--0 to 20 cm (0 to 8 in.); very dark gray sapric material (10YR 3/1), same color pressed and rubbed; about 50 percent herbaceous fibers, less than 10 percent after rubbing; horizon includes about 30 percent live herbaceous roots; 40 percent mineral content; slightly acid; clear boundary.

Oa2--20 to 30 cm (8 to 12 in.); black (10YR 2/1) sapric material, same color pressed or rubbed; moderate fine granular and moderate fine subangular blocky structure; nonsticky; about 10 percent herbaceous fiber, less than one percent after rubbing; about 5 percent live herbaceous roots; mineral content estimated as 20 percent neutral; clear boundary.

Oa3--30 to 61 cm (12 to 24 in.); very dark gray (10YR 3/1) sapric material, same color rubbed, very dark grayish brown (10YR 3/2) pressed; about 10 percent of horizon is dark yellowish brown (10YR 3/4) when broken changing to very dark gray (10YR 3/1) after exposure to air for 10 minutes; massive; nonsticky; about 40 percent herbaceous fiber, less than 5 percent unrubbed; mineral content about 25 percent; slightly acid; clear boundary.

Oa4--61 to 79 cm (24 to 31 in.); dark grayish brown (10YR 4/2) sapric material, same color pressed or rubbed; about 20 percent herbaceous fiber, less than 1 percent after rubbing; massive; slightly sticky; mineral content about 70 percent; neutral; clear boundary.

IICg--79 to 114 (31 to 45 in.); gray (5Y 5/1) clay; massive and almost fluid, no odor of H_2S when treated with dilute HCL; mildly alkaline.

Remarks: Sampled with posthole digger. Samples placed in one gallon cans, filled with water from hole and sealed immediately. Reaction by Hellige-Truog field kit. Colors for wet soil unless indicated otherwise.

1/ Pedon is a taxadjunct to the Allemands series because the family mineralogy is slightly outside the montmorillonitic class.

SOIL CLASSIFICATION-TERRIC MEDISAPRIST
LOAMY, MIXED, EUIC, THERMIC
SERIES - - - - - - -DELCOMB

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE, MTSC
NATIONAL SOIL SURVEY LABORATORY
LINCOLN, NEBRASKA

SOIL NO - - - - - - S69LA-23-6 IBERIA PARISH

GENERAL METHODS- - -1A,1B1B,2A1,2B SAMPLE NOS. 69L114-69L123

DEPTH CM	HORIZON	SAND 2- .05	SILT .05- .002	CLAY LT .002	FINE CLAY LT .0002	VCOS 2- 1	CORS 1- .5	MEDS .5- .25	FNES .25- .10	VFNS .10- .05	COSI .05- .02	FNSI .02- .002	VFSI .005- .002	SAND 2- .10	INTR II .2- .02	FINE CLAY TO CLAY	NON- CO3 CLAY PCT	BD1 15 BAR TO CLAY
		PARTICLE SIZE ANALYSIS, LT 2MM, 3A1, 3A1A, 3A1B PCT LT 2MM																RATIO
0-8	OI																	
8-30	OE																	
30-58	OA1																	
58-84	OA2																	
84-99	OA3																	
99-117	2A11G	.6	72.8	26.6	14.4	.0	.1	.1	.2	.2	30.8	42.0		.4	31.1	54		.50
117-132	2A12G	.7	75.6	23.7		.0	.1	.1	.2	.3	35.3	40.3		.4	35.7			.46
132-147	2C1G	.5	65.7	33.8	22.7	.0	.1	.1	.2	.2	27.8	37.9		.3	28.1	67		.49
163-170	2C1G																	
191-198	2C1G (A)																	

DEPTH CM	VOL. GT 2 PCT	GT 75 PCT	75-20	20-5	5-2	LT .074	20-2 PCT LT20	4A1D 1/3- BAR G/CC	4A1H OVEN DRY G/CC	4D1 COLE	4B1C 1/10 BAR PCT	4B1C 1/3- BAR PCT	4B2 15- BAR PCT	4C1 WRD CM/ CM	6E1B LT 2 PCT	3A1A LT .002 PCT	8C1A 1/1 H2O	8C1E 1/2 CACL
	PARTICLE SIZE ANALYSIS, MM, 3B, 3B1, 3B2 PCT LT 75							BULK DENSITY			WATER CONTENT				CARBONATE		PH	
0-8	0	0	0	0	0		0	.18	.46		273	260	65.7	.35				
8-30	0	0	0	0	0		0	.14	.41		297	279	75.3	.29				
30-58	0	0	0	0	0		0	.16	.64		368	357	87.1	.43				
58-84	0	0	0	0	0		0	.17	.55		347	343	81.1	.45				
84-99	0	0	0	0	0		0	.52	.94		133	127	29.4	.51			5.7	5.7
99-117	0	0	0	0	0	100	0						16.9				6.4	6.3
117-132	0	0	0	0	0	100	0	1.34	1.46	.028	34.5	33.4	18.2	.20			7.1	6.8
132-147	0	0	0	0	0	100	0	1.36	1.59	.052	35.1	33.9	16.5	.24			7.2	7.0
163-170	0	0	0	0	0		0	1.38	1.60	.052	33.8	33.2						
191-198	0	0	0	0	0		0	1.43	1.61	.040	32.4	31.3						

DEPTH CM	6A1A ORGN CARB PCT	6B1A NITG PCT	C/N	6C2B EXT FE PCT	PHOS TOTL PCT	6N2E CA	6O2D MG	6P2B NA	6Q2B K	SUM EXTB	6H1A BACL TEA	AL 6G1E KCL EXT	5A3A EXTB ACTY	5A6A NHAC	8D1 NHAC TO CLAY	8D3 CA TO MG	5F1 CA SAT NHAC PCT	5C3 EXTB ACTY PCT	5C1 NHAC PCT
	ORGANIC MATTER			IRON		EXTRACTABLE BASES 5B4A					ACTY		CAT EXCH		RATIO	RATIO		BASE SAT	
						MEQ / 100 G													
0-8	24.9	1.43	17																
8-30	30.1	1.25	24																
30-58	34.2	2.13	16																
58-84	34.6	1.91	18																
84-99	17.3	1.01	17																
99-117	3.21			.1		9.5	12.4	7.7	1.2	30.8	9.2		40.0	21.5	.81	.8	44	77	143
117-132	.88			.1		4.9	8.8	5.4	.9	20.0				14.7	.62	.6	33		
132-147	.63			.1		6.8	10.2	6.6	1.3	24.9				17.8	.53	.7	38		
163-170																			
191-198																			
						.28	11.88	59.58	.98										

DEPTH CM	8E1 REST OHM-CM	8C1B PH	8A H2O PCT	NA 5D2 ESP PCT	NA 5E SAR	SALT 8D5 TOTL SOLU PPM	GYP 6F1A PCT	8A1A EC MMHOS/ CM	6N1B CA	6O1B MG	6P1B NA	6Q1B K	6I1A CO3	6J1A HCO3	6K1A CL	6L1A SO4	6M1A NO3	4F1 LQID LMIT PCT	4F2 PLST INDX
	SATURATED PASTE							SATURATION EXTRACT 8A1										ATTERBERG	
								MEQ / LITER											
0-8																			
8-30																			
30-58																			
58-84																			
84-99																			
99-117	280	4.3	90.2	13	9	7200		10.4	25.0	42.5	55.0	2.2	.0	.0	49.4	84.1			
117-132	290	4.0	78.9	12	9	5300		8.71	19.3	33.3	47.0	2.1	.0	.2	38.1	73.8			
132-147																			
163-170																			
191-198																			
					24			7.65	.2	11.8	59.5	.9							

DEPTH CM	8F MINL CONT PCT	8G (FIBER VOL) UNRB PCT	8G (FIBER VOL) RUB PCT	8H PYROPHOSPHT SOLUBILITY (MUNS COLOR)	PH 8C1E .01M CACL	(BULK DEN) 4A3A FILD STAT G/CC	(BULK DEN) 4A1I 1/3B REWT G/CC	COLE 4D1 RE-WET	SUBS RES-IDUE PCT	4B4 FILD STAT PCT	4B1C 1/3B REWT PCT	4B2 15-BAR PCT	4C1 WRD CM/CM
	HISTOSOL CHARACTERIZATION									WATER CONTENT			
0-8	61	42	19	10YR 7/3	6.3	.17	.42		25	432	87.3		
8-30	53	49	14	10YR 5/3	6.4	.13	.42		23	566	93.8		
30-58	35	47	8	10YR 5/2	6.6	.10	.68		36	858	56.9		
58-84	41	43	8	10YR 3/3	6.6	.12	.53		39	733	61.4		
84-99	60	41	10	10YR 5/3	6.6	.19	.83		42	613	45.1	27.5	.15
99-117	94				6.7					80.2		13.2	
117-132	98				7.4	1.17	1.35			41.1	28.9	10.9	.24
132-147	99				7.3	1.20	1.38			48.5	28.8	16.6	.17
163-170							1.39				26.4		
191-198							1.40				29.2		

CLAY MINERALOGY (7A2C).
099-117 KK1 MI1 MT1.
132-147 MI2 MC2 KK2 MT1.
COMMENTS: CLAYS IN 2A11G(99-117 CM) POORLY ORDERED, AN AMORPHOUS COMPONENT INFERRED.
RELATIVE AMOUNTS: (X-RAY) 5 = DOMINANT 4 = ABUNDANT 3 = MODERATE 2 = SMALL 1 = TRACE.
MINERAL CODE: MT = MONTMORILLONITE MI = MICA KK = KAOLINITE MC = MONTMORILLONITE-CHLORITE

(A) GROUND WATER (69L175).
(B) MEQ/LITER WATER ANALYSIS.

Classification: Loamy, mixed, euic, thermic Terric Medisaprist.
Soil series: Delcomb.
Series classification: Same as pedon.

Pedon No.: S69LA-23-6.
Location: Iberia Parish, Louisiana, about 3 miles southeast of Delcambre, 134 yards east of canal, SW¼ SW¼ sec. 11, T. 13 S., R. 5 E.
Vegetation and use: Wildlife habitat; recently burned; marshhay cordgrass, needlerush, and switchgrass.
Slope and land form: Brackish marsh, level, 0 to 1 foot above sea level; numerous soft rills that are 10 to 30 inches wide.
Drainage and permeability: Moderately thick organic materials that are derived dominantly from herbaceous fiber over silty Prairie Age deposits.
Climate: Precipitation 60 inches, Temperature 68 degrees F.
Sampled by: David F. Slusher, Warren Lynn, Leo Juve, Henry Clark, Almond White, Al Wilhite.
Described by: Warren L. Cockerham, William McKinzie, 2/12/69.

Oi--0 to 8 cm (0 to 3 in.); dense mat of live herbaceous roots.

Oe--8 to 30 cm (3 to 12 in.); very dark grayish brown (10YR 3/2), dark gray (10YR 4/1) pressed or rubbed hemic material; about 85 percent fiber, about 30 percent rubbed; massive; firm, nonsticky; many live roots; dominantly herbaceous fiber; mineral content about 30 percent; slightly acid; gradual smooth boundary.

Oa1--30 to 58 cm (12 to 23 in.); dark brown (10YR 2/2), black (10YR 2/1) pressed or rubbed sapric material; about 50 percent fiber, about 8 percent rubbed; massive; semifluid, nonsticky; common live roots; about 55 percent mineral content; general accumulation of sulphides evidenced by strong odor of H_2S when treated with dilute HCl; neutral; gradual smooth boundary.

Oa2--58 to 84 cm (23 to 33 in.); same as above, separated for sampling.

Oa3--84 to 99 cm (33 to 39 in.); dark grayish brown (10YR 4/2), black (10YR 2/1) pressed or rubbed sapric material; about 65 percent fiber, about 7 percent rubbed; massive; semifluid, when squeezed in hand flows easily between fingers leaving some fiber in hand; few roots; dominantly herbaceous fiber; about 35 percent mineral content; neutral; abrupt smooth boundary.

IIA11g--99 to 117 cm (39 to 46 in.); black (5Y 2/1) mucky silty clay loam; massive; semifluid, plastic and sticky; many roots; mildly alkaline; gradual smooth boundary.

A12g--117 to 132 cm (46 to 52 in.); very dark gray (5Y 3/1) silty clay loam; few fine distinct yellowish brown mottles; weak coarse prismatic structure; plastic, sticky; few roots; mildly alkaline; gradual smooth boundary.

IIC1g--132 to 208 cm (52 to 82 in.); greenish gray (5GY 6/1) heavy silty clay loam; common medium distinct dark gray (5Y 4/1) mottles; weak coarse prismatic structure; plastic and sticky; mildly alkaline.

IIC2g--208 to 376 cm (82 to 148 in.); greenish gray (5GY 6/1) silty clay loam; many medium distinct olive (5Y 4/4) mottles; massive; olive mottles increase with depth and become dominant color at 120 inches; moderately alkaline.

Remarks: Described from pit to 16 inches; from 16 to 52 inches with posthole digger; below 52 inches with auger. Munsell colors for wet soil.

SOIL CLASSIFICATION-TERRIC MEDISAPRIST
LOAMY, MIXED, EUIC, THERMIC
SERIES - - - - - - -DELCOMB

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE, MTSC
NATIONAL SOIL SURVEY LABORATORY
LINCOLN, NEBRASKA

SOIL NO - - - - - - S69LA-23-7 IBERIA PARISH

GENERAL METHODS- - -1A,1B1B,2A1,2B SAMPLE NOS. 69L125-69L132

DEPTH	HORIZON	(- - PARTICLE SIZE ANALYSIS, LT 2MM, 3A1, 3A1A, 3A1B - -																RATIO
					FINE	(- - SAND - -)					(- - SILT - -)				INTR	FINE	NON-	8D1
		SAND 2-.05	SILT .05-.002	CLAY LT .002	CLAY LT .0002	VCOS 2-1	CORS 1-.5	MEDS .5-.25	FNES .25-.10	VFNS .10-.05	COSI .05-.02	FNSI .02-.002	VFSI .005-.002	SAND 2-.10	II .2-.02	CLAY TO CLAY	CO3-CLAY	15-BAR TO CLAY
CM		(- - PCT LT 2MM - -													-)	PCT	PCT	
0-15	OI																	
15-30	OA1																	
30-51	OA2																	
51-74	OA3																	
74-94	2A11G	.8	81.1	18.1		TR	.1	.2	.2	.3	34.6	46.5		.5	35.0			.65
94-109	2A12G	1.1	79.6	19.3		.1	.2	.2	.3	.4	38.1	41.5		.7	38.6			.53
109-122	2C1G	1.1	76.0	22.9		.1	.2	.2	.3	.3	35.5	40.5		.8	35.9			.50
122-152	2C2G (A)	1.2	70.8	28.0		.1	.1	.3	.5	.3	31.7	39.1		.8	32.2			.51

DEPTH	(PARTICLE SIZE ANALYSIS, MM, 3B, 3B1, 3B2)							(BULK DENSITY		)	(- - -WATER CONTENT- - -)				CARBONATE		(- -PH - -)	
	VOL.	(- - WEIGHT - - -)						4A1D	4A1H	4D1	4B1C	4B1C	4B2	4C1	6E1B	3A1A	8C1A	8C1E
	GT 2	GT 75	75-20	20-5	5-2	LT .074	20-2 PCT	1/3- BAR	OVEN DRY	COLE	1/10 BAR	1/3- BAR	15- BAR	WRD CM/	LT 2	LT .002	1/1 H2O	1/2 CACL
CM	PCT	PCT	(- - - PCT LT 75 - - -)				LT20	G/CC	G/CC		PCT	PCT	PCT	CM	PCT	PCT		
0-15	0	0	0	0	0		0	.28	.90		270	26	60.8	.46				
15-30	0	0	0	0	0		0	.26	1.08		298	84	65.9	.57				
30-51	0	0	0	0	0		0	.23	.78		315	80	77.4	.47				
51-74	0	0	0	0	0		0						60.3					
74-94	0	0	0	0	0	99	0	1.32	1.41	.020	37.1	36.0	13.8	.29			6.4	6.3
94-109	0	0	0	0	0	99	0	1.43	1.64	.047	31.0	30.4	12.2	.26			7.2	6.9
109-122	0	0	0	0	0	99	0						14.6				7.4	7.2
122-152	0	0	0	0	0	99	0	1.47	1.71	.052	28.5	28.5	15.6	.19			7.4	7.3

DEPTH	(ORGANIC MATTER	)		IRON	PHOS	(- -EXTRACTABLE BASES 5B4A- -)					ACTY	AL	(CAT EXCH)		RATIO	RATIO	CA	(BASE SAT)	
	6A1A	6B1A	C/N	6C2B		6N2E	6O2D	6P2B	6Q2B		6H1A	6G1E	5A3A	5A6A	8D1	8D3	5F1	5C3	5C1
	ORGN CARB	NITG		EXT FE	TOTL	CA	MG	NA	K	SUM EXTB	BACL TEA	KCL EXT	EXTB ACTY	NHAC	NHAC TO CLAY	CA TO MG	SAT NHAC	EXTB ACTY	NHAC
CM	PCT	PCT		PCT	PCT	(- - -MEQ / 100 G- - -)											PCT	PCT	PCT
0-15	20.5	1.33	15																
15-30	21.8	1.31	17																
30-51	32.1	1.81	18																
51-74	22.1	1.55	14																
74-94	3.48	.22	16			7.4	9.5	6.8	1.0	24.7				16.0	.88	.8	46		
94-109	.86	.04	20			5.8	8.3	6.2	1.0	21.3				14.8	.77	.7	39		
109-122	.57					6.0	10.2	7.4	1.4	25.0				17.8	.78	.6	34		
122-152	.42					7.9	10.1	8.2	1.4	27.6				19.4	.69	.8	41		
						2.98	6.68	47.18	.78										

DEPTH	(SATURATED PASTE)		NA	NA		SALT	GYP	(- - SATURATION EXTRACT 8A1- -									)	ATTERBERG	
	8E1	8C1B	8A	5D2	5E	8D5	6F1A	8A1A	6N1B	6O1B	6P1B	6Q1B	6I1A	6J1A	6K1A	6L1A	6M1A	4F1	4F2
	REST OHM-	PH	H2O	ESP	SAR	TOTL SOLU		EC MMHOS/	CA	MG	NA	K	CO3	HCO3	CL	SO4	NO3	LQID LMIT	PLST INDX
CM	CM		PCT	PCT		PPM	PCT	CM	(- - MEQ / LITER - -								)	PCT	
0-15																			
15-30																			
30-51																			
51-74																			
74-94																			
94-109																			
109-122																			
122-152																			
					22			6.05	2.9	6.6	47.1	.7							

DEPTH	(- - -HISTOSOL CHARACTERIZATION- -												)
		(STATE OF DECOMPOSITION)			PH	(BULK DEN)		COLE	SUBS	(- -WATER CONTENT- -)			
	8F	8G		8H	8C1E	4A3A	4A1I	4D1		4B4	4B1C	4B2	4C1
	MINL CONT	(FIBER VOL) UNRB	RUB	PYROPHOSPHT SOLUBILITY	.01M CACL	FILD STAT	1/3B REWT	RE-WET	RES-IDUE	FILD STAT	1/3B REWT	15- BAR	WRD CM/
CM	PCT	PCT	PCT	(MUNS COLOR)		G/CC	G/CC		PCT	PCT	PCT	PCT	CM
0-15	65	36	14	10YR 6/3	6.6	.18			23	507			
15-30	67	23	6	10YR 5/3	6.5	.21			26	476			
30-51	43	30	9	10YR 5/3	6.4	.12			38	653			
51-74	54	46	6	10YR 5/2	6.5	.15			38	642			
74-94	94				6.9	.86	1.34			77.3	28.3	11.8	.22
94-109	98				7.4	1.25	1.36			41.8	26.8	10.2	.23
109-122	99				7.7							11.5	
122-152	99				7.8	1.23	1.41			53.2	27.1	14.2	.18

(A) GROUND WATER (69L176).
(B) MEQ/LITER WATER ANALYSIS.

Classification: Loamy, mixed, euic, thermic TerricMedisaprist.
Soil series: Delcomb.
Series classification: Same as pedon.

Pedon No.: S69LA-23-7.
Location: Iberia Parish, 3/10 miles north of toll gate at Avery Island; 180 yards west of canal, T. 13 S., R. 4 E. (Section not numbered).
Vegetation and use: Wildlife habitat; recently burned; marshhay cordgrass and needlerush.
Slope and land form: Level, brackish marsh, 0 to 1 foot above sea level; numerous rills that are very soft and up to three feet wide.
Drainage and permeability: Very slowly permeable; very poorly drained.
Parent material: Moderately thick organic materials that are derived mainly from herbaceous fiber over silty Prairie Age deposits.
Climate: Precipitation 60 inches, Temperature 68 degrees F.
Sampled by: David F. Slusher, Warren Lynn, Leo Juve, Henry Clark, Almond White, and Al Wilhite.
Described by: Warren L. Cockerham and William McKinzie, 2/12/69.

Oi--0 to 15 cm (0 to 6 in.); dark grayish brown (10YR 3/2) fibric material; dense mat of live roots; about 60 percent silty material; moderately alkaline; gradual smooth boundary.

Oa1--15 to 30 cm (6 to 12 in.); very dark gray (10YR 3/1) very dark grayish brown (10YR 3/2) rubbed sapric material; about 50 percent fiber, less than 10 percent rubbed; massive; semifluid; many live roots; sodium pyrophosphate color (10YR 5/2); moderately alkaline; gradual smooth boundary.

Oa2--30 to 51 cm (12 to 20 in.); very dark gray (10YR 3/1), black (10YR 3/1) rubbed sapric material; about 30 percent fiber, less than 10 percent rubbed; massive; semifluid, when squeezed in hand flows easily between fingers, leaving small amount of fiber in hand; common roots; sodium pyrophosphate color (10YR 5/2); about 52 percent mineral content; moderately alkaline; gradual smooth boundary.

Oa3--51 to 74 cm (20 to 29 in.); same as Oa2. Separated for sampling.

IIA11g--74 to 94 cm (29 to 37 in.); very dark gray (N 3/) mucky silty clay loam; massive; slightly plastic and sticky; few live roots; moderately alkaline; gradual smooth boundary.

IIA12g--94 to 109 cm (37 to 43 in.); very dark gray (5Y 3/1) silty clay loam; weak coarse prismatic structure; sticky and plastic; few roots; moderately alkaline; gradual smooth boundary.

IIC1g--109 to 122 cm (43 to 48 in.); greenish gray (5GY 5/1) silty clay loam; few fine distinct olive mottles; weak coarse prismatic structure; sticky and plastic; few live roots; moderately alkaline; gradual smooth boundary.

IIC2g--122 to 152 cm (48 to 60 in.); greenish gray (5G 5/1) silty clay loam; few fine faint dark gray mottles; weak coarse subangular blocky structure; plastic and slightly sticky; few dead roots; few soft brown accretions; moderately alkaline.

Remarks: IIC2g horizon sampled in the 48-53 inch zone only. Water table at the surface. Surface is very spongy but will support human foot traffic when surface mat is not broken. Surface in rills is very soft and will not support human foot traffic. Trafficability is considered too poor to support cattle. Sampled to 48 inches with posthole digger; below 48 inches with auger. Munsell color for wet soil. Reaction by Hellige-Truog field kit.

SOIL CLASSIFICATION-TERRIC MEDISAPRIST
CLAYEY, MONTMORILLONITIC, DYSIC, THERMIC
SERIES - - - - - - - -NOT DESIGNATED

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE, MTSC
NATIONAL SOIL SURVEY LABORATORY
LINCOLN, NEBRASKA

SOIL NO - - - - - - - S71LA-26-3 JEFFERSON PARISH

GENERAL METHODS- - -1A,1B1B,2A1,2B SAMPLE NOS. 71L0484-71L0493

DEPTH CM	HORIZON	SAND 2-.05	SILT .05-.002	CLAY LT .002	FINE CLAY LT .0002	VCOS 2-1	CORS 1-.5	MEDS .5-.25	FNES .25-.10	VFNS .10-.05	COSI .05-.02	FNSI .02-.002	VFSI .005-.002	SAND 2-.10	INTR II .2-.02	FINE CLAY TO CLAY PCT	NON-CO3-CLAY PCT	RATIO 8D1 15-BAR TO CLAY
		(- - - PARTICLE SIZE ANALYSIS, LT 2MM, 3A1, 3A1A, 3A1B - - -																
		(- - - PCT LT 2MM - - -)																
0-20	CA1																	
20-25	2C1	.4	5.9	93.7	39.2	.0	.0	.0	TR	.4	1.2	4.7		TR	1.6	42		
25-51	CA2																	
51-76	OA3																	
76-84	2C2	.7	8.7	90.6	26.7	.0	.0	.0	TR	.7	2.5	6.2		TR	3.2	29		
84-102	OA4																	
102-117	2C3	3.8	68.4	27.8	14.1	TR	.1	.1	.2	3.4	31.0	37.4		.4	34.6	51		
117-160	2C4G	3.4	66.8	29.8	13.9	TR	TR	.1	.2	3.1	29.1	37.7		.3	32.3	47		
160-185	2C5G	4.0	65.9	30.1	11.4	.0	TR	.1	.2	3.7	24.1	41.8		.3	27.9	38		
185-216	2C6G	1.3	66.7	32.0	11.3	TR	TR	TR	.1	1.2	22.5	44.2		.1	23.7	35		
20-25	2C1 (A)	.8	4.6	94.6	51.4	.2	.2	.1	.2	.1	.5	4.1		.7	.7	54		
76-84	2C2 (A)	.5	5.5	94.0	49.9	TR	TR	.1	.2	.2	.7	4.8		.3	1.0	53		
102-117	2C3 (A)	4.0	69.6	26.4	12.8	TR	TR	TR	.2	3.8	31.1	38.5		.2	35.1	48		
117-160	2C4G (A)	5.3	69.5	25.2	9.2	.1	TR	.1	.4	4.7	30.4	39.1		.6	35.4	37		
160-185	2C5G (A)	3.2	70.3	26.5	8.3	TR	.0	TR	.2	3.0	22.7	47.6		.2	25.9	31		

DEPTH CM	VOL. GT 2 PCT	GT 75 PCT	75-20	20-5	5-2	LT .074	20-2 PCT LT20	4A1D 1/3-BAR G/CC	4A1H OVEN DRY G/CC	4D1 COLE	4B1C 1/10 BAR PCT	4B1C 1/3-BAR PCT	4B2 15-BAR PCT	4C1 WRD CM/CM	6E1B CARBONATE LT 2 PCT	3A1A LT .002 PCT	8C1A PH 1/1 H2O	8C1E PH 1/2 CACL
	(PARTICLE SIZE ANALYSIS, MM, 3B, 3B1, 3B2)	(- - WEIGHT - -)	(- - - PCT LT 75 - - -)					(BULK DENSITY)			(- - - -WATER CONTENT- - - -)							
0-20	0	0	0	0	0		0										3.6	3.4
20-25	0	0	0	0	0		0	.61	1.24	.268		04					3.1	3.0
25-51	0	0	0	0	0		0	.43	.83	.242	151	37					3.1	3.1
51-76	0	0	C	0	0		0	.37	1.11	.440	206	97					3.6	3.6
76-84	0	0	0	0	0		0										3.6	3.6
84-102	0	0	0	0	0		0											
102-117	0	0	0	0	0		0										5.0	5.0
117-160	0	0	0	0	0		0										7.1	7.1
160-185	0	C	C	0	0		0										7.1	7.1
185-216	0	0	0	0	0		0										7.5	7.4
20-25																		
76-84																		
102-117																		
117-160																		
160-185																		

DEPTH CM	6A1A ORGN CARB PCT	6B1A NITG PCT	C/N	6C2B IRON EXT FE PCT	PHOS TOTL PCT	6N2E CA	6O2D MG	6P2B NA	6Q2B K	SUM EXTB	6H1A ACTY BACL TEA	6G1E AL KCL EXT	5A3A EXTB ACTY	5A6A NHAC	8D1 RATIO NHAC TO CLAY	8D3 RATIO CA TO MG	5F1 CA SAT NHAC PCT	5C3 EXTB ACTY PCT	5C1 NHAC PCT
	(ORGANIC MATTER)					(- -EXTRACTABLE BASES 5B4A- -)							(CAT EXCH)					(BASE SAT)	
						(- - - MEQ / 100 G- - -)													
0-20		.838		1.1		12.9	4.9	.3	1.0	19.1	48.2		67.3	59.6		2.6	22	28	32
20-25		.245		1.3		6.9	3.4	.4	.5	11.2	106		118	89.2		2.0	8	10	13
25-51		1.02		1.3		13.7	6.3	2.2	.5	22.7	165		188	127		2.2	11	12	18
51-76		1.91		1.8		27.7	13.7	7.9	.8	50.1	152		202	127		2.0	22	25	40
76-84		1.32		1.3		33.7	25.5	13.6	1.2	74.0	68.2		142	83.9		1.3	40	52	88
84-102		1.62		1.2		58.2	32.5	28.8	1.3	121	100		221	113		1.8	51	55	
102-117		.319		.5		27.0	14.7	9.2	.9	51.8	21.8		73.6	33.8		1.8	80	70	
117-160		.057		.4		11.8	9.3	6.8	1.0	28.9	3.0		31.9	21.4		1.3	55	91	
160-185		.061		.6		14.7	11.6	6.8	1.4	34.5	1.9		36.4	22.7		1.3	65	95	
185-216		.047		.8		13.9	11.5	7.4	1.5	34.3	1.2		35.5	22.2		1.2	63	97	
20-25																			
76-84																			
102-117																			
117-160																			
160-185																			

Continued

Soil Classification-Terric Medisaprist, clayey, montmorillonitic, dysic, thermic
Series--Not designated
Soil No.--S71LA-26-3
General Methods--1A, 1B1B, 2A1,2B

Jefferson Parish

Sample Nos. 71L0484-71L0493

U.S. Department of Agriculture
Soil Conservation Service, MTSC
National Soil Survey Laboratory
Lincoln, Nebraska

DEPTH CM	(SATURATED PASTE) 8E1 REST OHM-CM	8C1B PH	8A H2O PCT	NA 5D2 ESP PCT	NA 5E SAR	SALT 8D5 TOTL SOLU PPM	GYP 6F1A PCT	(- - - - - - - - - - SATURATION EXTRACT 8A1- - - - - - - - - -) 8A1A EC MMHOS/CM	6N1B CA	6O1B MG	6P1B NA	6Q1B K	6I1A CO3	6J1A HCO3	6K1A CL	6L1A SO4	6M1A NO3	ATTERBERG 4F1 LQID LMIT PCT	4F2 PLST INDX
								(- - - - - - - - - - MEQ / LITER - - - - - - - - - - - -)											
0-20	1100	3.1	209			2700		1.87	7.8	5.0	1.0	.3			.7	5.1			
20-25	640	3.1	330	1	1	7200		3.16	15.5	10.0	4.6	.4			2.9	18.0			
25-51	530	3.5	434	2	3	11000		3.61	16.3	13.3	12.1	.4			10.2	23.7			
51-76	290	4.0	286	6	5	15000		6.81	28.5	30.3	28.5	.6			23.0	65.6			
76-84	270	4.4	346	14	7	22000		8.43	29.0	28.8	36.5	.7			29.9	66.8			
84-102	280	4.1	125	9	9	8800		9.04	28.3	33.3	48.0	.9			35.2	77.4			
102-117	310	5.6	66.6	15	10	4400		8.72	25.5	28.5	54.0	1.2			33.5	82.6			
117-160	310	7.1	70.3	17	8	4600		8.58	25.8	29.0	41.0	.9			30.6	84.3			
160-185	310	7.4	69.6	17	11	4600		8.58	22.8	23.0	51.8	1.0			34.7	65.1			
185-216																			
20-25																			
76-84																			
102-117																			
117-160																			
160-185																			

DEPTH CM	(- - - - - - - - - - - - - - - HISTOSOL CHARACTERIZATION- - - - - - - - - - - - - -) (STATE OF DECOMPOSITION) 8F MINL CONT PCT	8G (FIBER VOL) UNRB PCT	RUB PCT	8H PYROPHOSPHT SOLUBILITY (MUNS COLOR)	PH 8C1E .01M CACL	(BULK DEN) 4A3A FILD STAT G/CC	4A1I 1/3B RENT G/CC	COLE 4D1 RE-WET	SUBS RES-IDUE PCT	(- -WATER CONTENT- -) 4B4 FILD STAT PCT	4B1C 1/3B RENT PCT	4B2 15-BAR PCT	4C1 WRD CM/CM
0-20												33.5	
20-25	76											40.3	
25-51	33	26	2	10YR 4/4	3.6	.26			83A	115		49.5	
51-76	70	54	2	10YR 4/3	3.6	.36			60	251		46.7	
76-84	75	17	1	10YR 5/3	4.5	.37			51	221		44.7	
84-102	69	56	4	7.5YR 3/2	4.5	.37			64	216		43.5	
102-117	92	9	2	10YR 5/3	5.5	.77				204		18.2	
117-160	99					1.12				89		15.3	
160-185										46		14.9	
185-216						1.10				47		15.2	
20-25													
76-84													
102-117													
117-160													
160-185													

CLAY MINERALOGY (7A2C) PLACEMENT (S71LA-26-3)
076-84 MT5 KK2 MI2.
160-185 MT5 KK2 MI2.
COMMENTS: CLAYS WELL ORDERED. MINERAL PORTICN IS MONTMORILLCNITIC.
RELATIVE AMOUNTS: (X-RAY) 5 = DOMINANT 4 = ABUNDANT 3 = MODERATE 2 = SMALL 1 = TRACE.
MINERAL CODE: MT = MONTMORILLONITE MI = MICA KK = KAOLINITE

(A) SUBSIDENCE COMPUTED AS 2/5 SURAFACE AND 3/5 SUBSURFACE LAYERS.

Classification: Clayey, montmorillonitic, dysic, thermic Terric Medisaprist.
Soil series: Not designated. 1/

Pedon No.: S71LA-26-3.
Location: Jefferson Parish, Louisiana; 1¼ miles north of New Orleans International Airport; 7/8 mile west of Williamson Boulevard; sec. 37, T. 12 S., R. 9 E.
Vegetation and use: Woodland and wildlife habitat, cypress, tupelogum, blackberry vines and cypress weed.
Slope and land form: Depressed, drained swampland.
Drainage and permeability: Very poorly drained; very slowly permeable.
Parent material: Decomposed woody and herbaceous organic material over clayey Mississippi River Alluvium.
Climate: Precipitation 60 inches, Temperature 70 degrees F.
Sampled by: Warren Lynn - 6/9/71.
Described by: Dayton Matthews and Warren Cockerham, 6/9/71.

Oa1--0 to 20 cm (0 to 8 in.); dark grayish brown (10YR 4/2) sapric material; same color pressed and rubbed; about 2 percent fiber, less than 1 percent rubbed; moderate, medium subangular blocky structure; friable; dominantly herbaceous fiber; about 65 percent mineral; extremely acid; clear smooth boundary.

IIC1g--20 to 25 cm (8 to 10 in.); very dark gray (10YR 3/1) clay; massive; hard, few fine pores about 20 percent organic matter; abrupt smooth boundary.

Oa2--25 to 51 cm (10 to 20 in.); black (10YR 2/1) sapric material; same color pressed and rubbed; less than 1 percent fiber; moderate, medium granular structure; friable; dominantly herbaceous fiber; 1 inch strata of black (10YR 2/1) clay at 17 to 18 inches; about 60 percent mineral; extremely acid; clear smooth boundary.

Oa3--51 to 76 cm (20 to 30 in.); black (10YR 2/1) sapric material; same color pressed and rubbed; about 3 percent fiber; less than 1 percent rubbed; weak, coarse granular structure; friable; 1 inch strata of very dark gray (10YR 3/1) clay at 26 to 27 inches; extremely acid; clear smooth boundary.

IIIC--76 to 84 cm (30 to 33 in.); very dark gray (5Y 3/1) clay; massive; flows with difficulty between fingers and leaves large residue in hand; few fine pores; extremely acid; abrupt smooth boundary.

Oa4--84 to 102 cm (33 to 40 in.); very dark grayish brown (10YR 3/2) sapric material; same color pressed and rubbed; about 3 percent fiber, less than 1 percent rubbed; flows with difficulty between fingers and leaves large residue in hand; about 65 percent mineral; extremely acid; abrupt smooth boundary.

IVC--102 to 117 cm (40 to 46 in.); very dark gray (10YR 3/1) clay; few medium prominent olive brown (2.5Y 4/4) mottles; massive; plastic and sticky; flows with difficulty between fingers and leaves large residue; very strongly acid; abrupt smooth boundary.

IVCg--117 to 160 cm (46 to 63 in.); greenish gray (5GY 5/1) clay; common and medium prominent dark yellowish brown (10YR 4/4) stains along channels; massive; flows with difficulty between fingers when squeezed and leaves large residue in hand; slightly acid; gradual wavy boundary.

IVC3g--160 to 185 cm (63 to 73 in.); greenish gray (5GY 5/1) clay; massive; flows with difficulty between fingers when squeezed and leaves large residue in hand; few fine roots; slightly acid.

IVC4g--185 to 216 cm (73 to 85 in.); same as above. Separated for sampling.

Remarks: Water table at 65 inches below the soil surface. The area has been protected and pumped for approximately 50 years. Munsell colors for moist soil.

1/ Sampled as a representative of the Allemands series, this pedon has pH values too low for that series.

SOIL CLASSIFICATION-TERIC MEDISAPRIST
CLAYEY, MONTMORILLONITIC, EUIC, THERMIC
SERIES - - - - - - -ECT DESIGNATED

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE, MTSC
NATIONAL SOIL SURVEY LABORATORY
LINCOLN, NEBRASKA

SOIL NO - - - - - - S71LA-26-8 JEFFERSON PARISH

GENERAL METHODS- A -1A,1B1B,2A1,2B SAMPLE NOS. 71L0507-71L0509

DEPTH CM	HORIZON	PARTICLE SIZE ANALYSIS, LT 2MM, 3A1, 3A1A, 3A1B SAND 2-.05	SILT .05-.002	CLAY LT .002	FINE CLAY LT .0002	VCOS 2-1	CORS 1-.5	MEDS .5-.25	FINES .25-.10	VFNS .10-.05	COSI .05-.02	FNSI .02-.002	VFSI .002-.005	SAND 2-.10	INTR IT .2-.02	FINE CLAY TO CLAY PCT	NON-COH CLAY PCT	RATIO 8D1 15-BAR TO CLAY
		PCT LT 2MM																
0-38	A1																	
38-76	CA1																	
76-119	CA2																	

DEPTH CM	8F FIBI CONT PCT	8G (STATE OF DECOMPOSITION) (FIBER UNRB PCT	VCL) RUB PCT	8H PYROPHOSPHT SOLUBILITY (MUNS COLOR)	PH 8C1E .01M CACL	(BULK DEN) 4A3A FILD STAT G/CC	4A1I 1/3B REWT G/CC	COLE 4D1 RE-WET	SUBS RES-IDUE PCT	(WATER CONTENT) 4B4 FILD STAT PCT	4E1C 1/3B RFWT PCT	4E2 15-BAR PCT	MC1 WRD CM/CM
0-38	84			10YR 5/4	3.6	.58				81			
38-76	33	40	8	10YR 4/3	3.9	.17				432			
76-119	43	40	8	10YR 5/4	4.5	.17				452			

Classification: Clayey, montmorillonitic, euic, thermic Terric Medisaprist.
Soil series: Not designated 1/.

Pedon No.: S71LA-26-8.
Location: Jefferson Parish, Louisiana, about 3 miles west of West Wego and about 1 mile south of Avondale subdivision, 100 feet west of field road, sec. 20, T. 14 S., R. 10 E.
Vegetation and use: Wildlife habitat - bermudagrass and willow trees.
Slope and land form: Depressed marshland that has been drained for about 50 years.
Drainage and permeability: Very poorly drained, very slowly permeable; artifically drained.
Parent material: Herbaceous organic materials and clayey Mississippi River alluvium.
Climate: Precipitation 60 inches, Temperature 70 degrees F.
Sampled by: Warren Lynn - 6/15/71.
Described by: Warren Cockerham and Dayton Matthews.

A1--0 to 38 cm (0 to 15 in.); very dark gray (10YR 3/1) clay; few fine prominent dark brown mottles; weak, very coarse prismatic structure; very hard; many fine roots; continuous network of cracks 4 to 6 inches wide around polygons that were about 30 inches in diameter; abrupt smooth boundary.

Oa1--38 to 76 cm (15 to 30 in.); very dark grayish brown (10YR 3/1), same pressed and rubbed; 20 percent fiber, less than 1 percent rubbed; massive; friable common fine roots; about 65 percent mineral; gradual wavy boundary.

Oa2--76 to 119 cm (30 to 47 in.); black (10YR 2/1), about 30 percent fiber, about 1 percent rubbed; massive; flows with difficulty between fingers and leaves small residue in hand; about 65 percent mineral; clear smooth boundary.

IICg--119 to 152 cm (47 to 60 in.); gray (5Y 5/1) clay; massive; flows easily between fingers when squeezed and leaves small residue in hand.

Remarks: Munsell colors for moist soil.

1/ Sampled as a representative of an unnamed series. Field mapped as "Haplaquepts."

SOIL CLASSIFICATION-TYPIC HAPLAQUEPT
VERY-FINE, MONTMORILLONITIC, NONACID, THERMIC
SERIES - - - - - - -NOT DESIGNATED

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE, MTSC
NATIONAL SOIL SURVEY LABORATORY
LINCOLN, NEBRASKA

SOIL NO - - - - - - S68LA-29-1 LAFOURCHE PARISH

GENERAL METHODS- - -1A,1B1B,2A1,2B SAMPLE NOS. 68L0190-68L0195

DEPTH CM	HORIZON	PARTICLE SIZE ANALYSIS, LT 2MM, 3A1, 3A1A, 3A1B - PCT LT 2MM: SAND 2-.05	SILT .05-.002	CLAY LT .002	FINE CLAY LT .0002	SAND VCOS 2-1	CORS 1-.5	MEDS .5-.25	FNES .25-.10	VFNS .10-.05	SILT COSI .05-.02	FNSI .02-.002	VFSI .002-.002	SAND 2-.10	INTR II .2-.02	FINE CLAY TO CLAY PCT	NON CO3 CLAY PCT	RATIO 8D1 15 BAR TO CLAY
0-10	AP	.7	8.5	90.8		.1	.1	.1	.2	.2	.8	7.7		.5				.42
10-30	2B21G	.5	5.3	94.2		.0	TR	TR	.3	.2	.5	4.8		.3				.51
30-51	2B22G	.3	10.7	89.0		.0	TR	TR	TR	.3	.4	10.3		TR				.47
51-76	2AB	.3	18.0	81.7		.0	.0	.0	.1	.2	.6	17.4		.1				.59
76-109	2C1	6.2	56.4	37.4		.0	.0	TR	.4	5.8	13.7	42.7		.4				.63
109-127	3C2	92.1	5.2	2.7		.0	.1	.1	47.8	44.1	3.3	1.9		48.0				

DEPTH CM	PARTICLE SIZE ANALYSIS, MM, 3B, 3B1, 3B2 VOL. GT 2 PCT	WEIGHT GT 75 PCT	75-20	20-5	5-2	LT .074 PCT LT 75	20-2 LT20	BULK DENSITY 4A1D 1/3-BAR G/CC	4A1H OVEN DRY G/CC	4D1 COLE	4B1C 1/10 BAR PCT	WATER CONTENT 4B1C 1/3-BAR PCT	4B2A 15-BAR PCT	4C1 WRD CM/CM	CARBONATE 6E1B LT 2 PCT	3A1A LT .002 PCT	PH 8C1A 1/1 H2O	8C1E 1/2 CACL
0-10	0	0	0	0	0	99	0	.76	.95			50.9	38.0	.10			3.9	3.1
10-30	0	0	0	0	0	100	0	.87	1.63			67.4	48.1	.17			4.0	3.2
30-51	0	0	0	0	0	100	0	.88	1.77			70.6	42.0	.25			5.0	4.1
51-76	0	0	0	0	0	100	0	.57	1.67			125	48.0	.44			4.9	4.4
76-109	0	0	0	0	0	99	0						23.4		2		7.5	6.9
109-127	0	0	0	0	0	23	0						2.5		2		7.8	7.1

DEPTH CM	ORGANIC MATTER 6A1A ORGN CARB PCT	6B1A NITG PCT	C/N	IRON 6C2B EXT FE PCT	PHOS TOTL PCT	EXTRACTABLE BASES 5B4A- MEQ / 100 G 6N2E CA	6O2D MG	6P2B NA	6Q2B K	SUM EXTB	ACTY 6H1A BACL TEA	AL 6G1E KCL EXT	(CAT EXCH) 5A3A EXTB ACTY	5A6A NHAC	RATIO 8D1 NHAC TO CLAY	RATIO 8D3 CA TO MG	CA 5F1 SAT NHAC PCT	(BASE SAT) 5C3 EXTB ACTY PCT	5C1 NHAC PCT
0-10	16.3	1.68	10	1.5		9.1	3.2	.2	.8	13.3	81.2	17.9	94.5	75.0	.83	2.8		14	18
10-30	2.49	.294	8	1.6		18.7	8.2	.5	.4	27.8	42.5	17.5	70.3	53.5	.57	2.3		40	52
30-51	1.75	.223	8	1.2		27.4	12.4	.8	.2	40.8	15.1	1.5	55.9	53.4	.60	2.2		73	76
51-76	5.93	.430	14	.8		31.3	13.7	1.6	.3	46.9	25.4	1.3	72.3	52.1	.62	2.3		65	90
76-109	1.16	.095	12	.7			7.3	1.4	.4					27.0	.72				
109-127	.14	.011	13	.3			1.6	.5	.1					4.9	1.8				

DEPTH CM	SATURATED PASTE 8E1 REST OHM-CM	8C1B PH	8A H2O PCT	NA 5D2 ESP PCT	NA 5E SAR	SALT 8D5 TOTL SOLU PPM	GYP 6F1A PCT	SATURATION EXTRACT 8A1- MEQ / LITER 8A1A EC MMHOS/CM	6N1B CA	6O1B MG	6P1B NA	6Q1B K	6I1A CO3	6J1A HCO3	6K1A CL	6L1A SO4	6M1A NO3	ATTERBERG 4F1 LQID LMIT PCT	4F2 PLST INDX
0-10	1710		109					.57	9.6	4.8	.8	.2				.6	16.5		
10-30																			
30-51																			
51-76																			
76-109	980		127					1.45	7.6	2.9	4.5	.1		1.8	3.7	10.8			
109-127																			

DEPTH CM	8F MINL CONT PCT	HISTOSOL CHARACTERIZATION (STATE OF DECOMPOSITION) 8G (FIBER VOL) UNRB PCT	RUB PCT	8H PYROPHOSPHT SOLUBILITY (MUNS COLOR)	PH 8C1E .01M CACL	(BULK DEN) 4A3A FILD STAT G/CC	4A1I 1/3B REWT G/CC	COLE 4D1 RE-WET	SUBS RES-IDUE PCT	WATER CONTENT 4B4 FILD STAT PCT	4B1C 1/3B REWT PCT	4B2 15-BAR PCT	4C1 WRD CM/CM
0-10	67			10YR 4/3								33.9	
10-30												35.7	
30-51												33.3	
51-76												35.2	
76-109												18.4	
109-127												2.1	

DEPTH CM	6A2B ORGN CARB PCT	6R2A SUL-FIDES (C) ME/100G	8C1A (A) H2O 1:1	8C1C (A) KCL 1:1	8C1C KCL 1:1
0-10	17.9		3.8	3.2	3.1
10-30	2.93		4.4	3.3	3.2
30-51	2.16		5.5	3.9	4.1
51-76	6.16		5.2	4.5	4.4
76-109	1.36	.1	7.3	6.5	6.9
109-127	.28	.7	8.0	6.6	7.1

CLAY MINERALOGY (72A).
68L0192, 30-51 CM. THE CLAY IS DOMINATED BY A FAIRLY WELL ORDERED MONTMORILLONITE. SMALL AMOUNTS OF KAOLINITE, MICA OR ILLITE ARE PRESENT. THE CLAY MINERALOGY IS MONTMORILLONITIC.

(A) DETERMINED ON FEILD-MOIST SAMPLE.
(B) FIBER CONTENT. FEILD-MOIST SAMPLE IMMERSED IN CALGON SOLUTION OVERNIGHT, SHAKEN 1 MINUTE, AND GENTLY WASHED ON 100-MESH (0.15MM.) SEIVE.
(C) SULFIDES ON FEILD-MOIST SAMPLE H2S EVOLVED ON TREATMENT WITH 6N HCL IN NITROGEN ATMOSPHERE.

Classification: Very fine, montmorillonitic, nonacid, thermic Typic Haplaquept.
Soil series: Not designated 1/.

Pedon No.: S68LA-29-1.
Location: Lafourche Parish, Louisiana, 2.75 miles southwest of Raceland along U.S. Highway 90, 400 feet east of McMahon Canal, 300 feet south of highway, T. 16 S., R. 18 E.
Vegetation and use: Pasture, common bermudagrass.
Slope and land form: Level deltaic plain that has been leveed and pumped for 60 years. Approximate elevation one foot below sea level. Elevation before drainage about one foot above sea level. Several thousand acres in pumpoff area.
Drainage and permeability: Poorly drained and very slowly permeable. Water level 24 inches below the surface.
Parent material: Organic accumulations over Mississippi River Alluvium.
Climate: Precipitation 58 inches, Temperature 70 degrees F.
Sampled and described by: Warren L. Cockerham and David F. Slusher, April 18, 1968.

Ap--0 to 10 cm (0 to 4 in.); black (10YR 2/1) muck; moderate fine and medium granular structure; friable; many fine roots; extremely acid; clear wavy boundary.

IIB21g--10 to 30 cm (4 to 12 in.); gray (10YR 5/1) silty clay; common distinct streaks of strong brown (7.5YR 5/6) 2 to 3 mm wide along root channels and as patchy coatings on peds; moderate medium subangular blocky structure; firm and plastic; common fine roots concentrated along surfaces of peds; few fine tubular pores; few thin streaks of granular muck between vertical cleavage planes in upper 2 inches of horizon; extremely acid; clear boundary.

IIB22g--30 to 51 cm (12 to 20 in.); gray (10YR 5/1) clay; common medium and coarse distinct yellowish brown (10YR 5/6) mottles, few coarse distinct dark brown (7.5YR 4/4) patches on peds; weak coarse subangular blocky structure; sticky and plastic; few fine roots; few fine tubular pores; medium acid; clear wavy boundary.

IIAb--51 to 76 cm (20 to 30 in.); dark gray (5Y 4/1) clay; value becomes ½ unit lower on exposure to air; few fine distinct dark yellowish brown mottles along root channels and on some peds; weak coarse platy structure; very firm; few fine roots; few fine tubular pores; at about 2 foot intervals around pit there are vertical cracks ½ inch wide throughout this horizon and that are water bearing below 24 inches, the surfaces of the cracks are yellowish brown (10YR 5/6) and have pits or craters 2-4 mm wide that appear to be solution cavities; neutral; clear boundary.

IIC1g--76 to 109 cm (30 to 43 in.); dark greenish gray (5GY 4/1) clay loam; massive, semifluid and slightly sticky; moderately alkaline; gradual boundary.

IIIC2g--109 to 127 cm (43 to 50 in.); dark greenish gray (5GY 4/1) fine sandy loam; massive, friable; slight effervesence with dilute HCL; moderately alkaline.

Remarks: Munsell color for moist soil.

1/ Pedon was sampled as a drained phase of the Harris series. (Fine, montmorillonitic, thermic; Typic Haplaquolls.)

SOIL SURVEY LABORATORY Lincoln, Nebr. Aug., 1958

SOIL TYPE Series not Designated **LOCATION** Bossier Parish, Louisiana

SURVEY NOS. S57Ia-8-8 **LAB. NOS.** 5678-5684

DEPTH INCHES	HORIZON	1B1a PARTICLE SIZE DISTRIBUTION (in mm.) (per cent) VERY COARSE SAND 2-1	COARSE SAND 1-0.5	MEDIUM SAND 0.5-0.25	FINE SAND 0.25-0.10	VERY FINE SAND 0.10-0.05	SILT 0.05-0.002	CLAY < 0.002	0.2-0.02	3A1 0.02-0.002	2A2 > 2	TEXTURAL CLASS
0-5	A11	-	0.1a	-	0.3	3.1	25.5	71.0	9.1	19.7	-	c
5-9	A12	-	-	-	0.1	2.0	22.2	75.7	5.3	19.0	-	c
9-17	Agb	-	-	-	0.5	21.4	43.5	34.6	47.7	17.7	-	cl
17-26	Bb1	-	-	-	0.4b	22.0b	41.7	35.9	49.0	15.1	-	cl
26-35	Bb2	-	-	-	0.5	25.8	42.7	31.0	54.6	14.4	-	cl
35-40	Bb3	-	-	-	0.4	21.8	55.1	22.7	57.8	19.5	-	sil
40-46+	Bb4	-	-	-	0.1	16.6	61.3	22.0	55.3	22.7	-	sil

8C1a pH 1:1	pH 1:5	pH 1:10	ORGANIC MATTER 6A1a ORGANIC CARBON %	6B1a NITROGEN %	C/N			$CaCO_3$ equivalent %		MOISTURE TENSIONS 1/10 ATMOS. %	1/3 ATMOS. %	4B2 15 ATMOS. %
6.7			1.48	0.114	13.0			-				22.5
6.6			1.25	0.097	12.9			-				23.6
6.0			0.83	0.068	12							13.3
5.5			0.56	0.054	10							14.6
5.4			0.33									13.0
5.6			0.17									9.9
6.1			0.12									10.0

5A1a CATION EXCHANGE CAPACITY NH_4Ac	EXTRACTABLE CATIONS 6N2b Ca	6Q2b Mg	6H1a H	6P2a Na	5B1a 6Q2a K	BASE SAT. % NH_4Ac EXCH. 5C1	Base Sat. % on Sum + H 5C3	Sum - H 5B1a	Sum + H 5A3a	Ca/Mg	
←	milliequivalents per 100g. soil				→						
38.7	24.9	12.9	4.3	0.1	1.4	100	90	39.3	43.6	1.9	
42.6	27.4	13.4	7.3	0.1	1.1	98	85	42.0	49.3	2.0	
20.3	13.2	5.3	5.4	0.1	0.3	93	78	18.9	24.3	2.5	
21.4	12.4	5.1	7.0	0.1	0.4	84	72	18.0	25.0	2.4	
19.2	10.9	4.5	6.6	0.1	0.4	83	71	15.9	22.5	2.4	
13.9	8.5	3.6	3.7	0.1	0.3	90	77	12.5	16.2	2.4	
14.2	9.4	3.8	2.9	0.1	0.3	96	82	13.6	16.5	2.5	

a. Organic matter
b. Common, smooth brown concr. (Fe-Mn?)

Classification: Fine-silty, mixed, nonacid, thermic Aeric Haplaquept.
Soil series: Not designated 1/.

Pedon No.: S57LA-8-8.
Location: Bossier Parish, La., 6 miles northwest of Plain Dealing, SW¼NE¼ sec. 23, T. 23 N., R. 14 W.; 150 feet east of levee and 50 feet north of fence.
Vegetation: Native - hardwood forest; present - mostly johnsongrass.
Relief: Level (0 - .5 percent slope).
Drainage: Somewhat poorly drained; slow runoff and internal drainage.
Permeability: Slow.
Parent material: Recent Red River alluvium deposited over old lake bed.
Climate: Precipitation 47 inches, Temperature 65 degrees F.
Sampled by: James Allen and Bruce Chaffin.
Described by: Lester L. Loftin, May 23, 1957. Horizons redesignated by David F. Slusher, August 12, 1975.

A11--0 to 13 cm (0 to 5 in.); dark reddish brown (5YR 3/3) clay; common fine faint dark gray (5YR 4/1) mottles; moderate medium subangular blocky structure that breaks into moderate very fine subangular blocky structure; very firm; many roots; neutral; abrupt wavy boundary.

A12--13 to 23 cm (5 to 9 in.); dark reddish brown (5YR 3/3) clay; with few streaks and pockets of gray and with common fine distinct dark gray (N 4/0) mottles; moderate medium subangular blocky structure that breaks into moderate very fine subangular blocky structure; very firm; many roots; mildly alkaline; abrupt wavy boundary.

Agb--23 to 43 cm (9 to 17 in.); dark gray (10YR 4/1) clay; many medium prominent dark reddish brown (2.5YR 3/4) mottles; weak medium subangular blocky structure; very firm; roots common; medium acid; clear wavy boundary.

Bb1--43 to 66 cm (17 to 26 in.); dark brown (7.5YR 4/2) clay; many fine distinct dark reddish brown (2.5YR 3/4) mottles; weak medium subangular structure; very firm; roots common; very strongly acid; clear wavy boundary.

Bb2--66 to 89 cm (26 to 35 in.); dark brown (7.5YR 4/4) clay; many fine prominent dark reddish brown (2.5YR 3/4) and dark brown (10YR 4/3) mottles; weak medium subangular blocky structure; very firm; roots common; strongly acid; clear wavy boundary.

Bb3--89 to 102 cm (35 to 40 in.); dark brown (7.5YR 4/4) silty clay; common fine faint strong brown (7.5YR 5/6) mottles; weak coarse subangular blocky structure; firm; few roots; medium acid; clear wavy boundary.

Bb4--102 to 117 cm (35 to 40 in.); yellowish red (5YR 4/6) silty clay loam; weak medium subangular blocky structure; friable; few roots; neutral.

Remarks: Munsell colors for moist soil.

1/ Sampled as a representative of the Buxin series. (Fine, mixed, thermic; Vertic Hapludolls.)

SOIL CLASSIFICATION-VERTIC HAPLAQUEPT
VERY-FINE, MONTMORILLONITIC, NONACID, THERMIC
SERIES - - - - - - - -PERRY TAXADJUNCT

SOIL NO - - - - - - - S72LA-62-2 WEST CARROL PARISH

GENERAL METHODS- - -1A,1B1B,2A1,2B SAMPLE NOS. 72L1166-72L1167

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE, MTSC
NATIONAL SOIL SURVEY LABORATORY
LINCOLN, NEBRASKA

DEPTH CM	HORIZON	SAND 2-.05	SILT .05-.002	CLAY LT .002	FINE CLAY LT .0002	VCOS 2-1	CORS 1-.5	MEDS .5-.25	FNES .25-.10	VFNS .10-.05	COSI .05-.02	FNSI .02-.002	VFSI .005-.002	SAND 2-.10	INTR II .2-.02	FINE CLAY TO CLAY PCT	NON-CO3-CLAY PCT	RATIO 8D1 15-BAR TO CLAY
		(- - - - PARTICLE SIZE ANALYSIS, LT 2MM, 3A1, 3A1A, 3A1B - - - - PCT LT 2MM - - - -)				(- - SAND - -)					(- - SILT - -)							
0-10	AP	5.5	35.8	58.7	31.5	TR	.1	.2	3.0	2.2	8.3	27.5		3.3	12.6	54		.35
36-74	B22G	6.6	28.6	64.8	36.7	.0	.1	.3	3.6	2.6	7.6	21.0		4.0	12.6	57		.38

DEPTH CM	(PARTICLE SIZE ANALYSIS, MM, 3B, 3B1, 3B2) VOL. GT 2 PCT	WEIGHT GT 75 PCT	75-20	20-5	5-2	LT .074	20-2 PCT LT20	(BULK DENSITY) 4A1D 1/3-BAR G/CC	4A1H OVEN DRY G/CC	4D1 COLE	(WATER CONTENT) 4B1C 1/10 BAR PCT	4B1C 1/3-BAR PCT	4B2 15-BAR PCT	4C1 WRD CM/CM	CARBONATE 6E1B LT 2 PCT	3A1A LT .002 PCT	(PH) 8C1A 1/1 H2O	8C1B 1/2 CACL
			(- - - PCT LT 75 - - -)															
0-10	0	0	0	0	0	96	0						20.6					
36-74	0	0	0	0	0	95	0						24.4					

CLAY MINERALOGY (7A2C).
B22G HORIZON, 72L1167. CLAY IS DOMINATED BY A WELL ORDERED SMECTITE (GROUP NAME, INCLUDING MONTMORILLONITE, FOR EXPANDING 2:1 LAYER SILICATES) AND HAS SMALL AMOUNTS OF KAOLINITE, MICA (OR ILLITE) AND QUARTZ. CLAY MINERALOGY IS MONTMORILLONITIC

Classification: Very-fine, montmorillonitic, nonacid thermic Vertic Haplaquept.
Soil series: Perry taxadjunct 1/.
Series classification: Same as pedon.

Pedon No.: S72LA-62-2.
Location: West Carroll Parish, Louisiana, about 6 miles west of Kilbourne; 5 feet south of State line; SE¼ SW¼ sec. 2, T. 23 N., R. 10 E.
Vegetation and use: Cropland, soybean field.
Slope and land form: Nearly level, less than 1 percent slope, alluvial plain.
Drainage and permeability: Poorly drained; surface runoff slow; permeability very slow.
Climate: Precipitation 52 inches, Temperature 65 degrees F.
Parent material: Clayey alluvium.
Described by: Tracey Weems, Emmett Reynolds and Ronnie Venson, 1972.
Sampled by: Tracey Weems, 1972.

Ap--0 to 10 cm (0 to 4 in.); dark grayish brown (10YR 4/2) clay; common medium faint dark brown (10YR 4/3) mottles; weak fine subangular blocky structure; very sticky; few fine roots; neutral; abrupt smooth boundary.

B21g--10 to 36 cm (4 to 14 in.); gray (10YR 5/1) clay; common medium faint dark yellowish brown (10YR 4/4) and few fine distinct strong brown mottles; moderate medium subangular blocky structure; sticky; few fine roots; strongly acid; clear smooth boundary.

B22g--36 to 74 cm (14 to 29 in.); gray (10YR 5/1) clay; common medium distinct dark brown (7.5YR 4/4) and few fine faint dark yellowish brown mottles; weak coarse subangular blocky structure; firm; few fine roots; few fine black concretions; slightly acid; clear smooth boundary.

B23g--74 to 112 cm (29 to 44 in.); gray (10YR 5/1) clay; many medium distinct strong brown (7.5YR 5/6) and few fine faint dark gray mottles; moderate medium subangular blocky structure; firm; common fine black concretions; mildly alkaline.

Remarks: Munsell colors for moist soil.

1/ This pedon is a taxadjunct to the Perry series because it lacks a reddish IIB horizon within a depth of 36 inches.

SOIL CLASSIFICATION-VERTIC HAPLAQUEPT
VERY-FINE, MONTMORILLONITIC, NONACID THERMIC
SERIES - - - - - - -PERRY TAXADJUNCT

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE, NTSC
NATIONAL SOIL SURVEY LABORATORY
LINCOLN, NEBRASKA

SOIL NO - - - - - - S72LA-62-3

WEST CARROLL PARISH

GENERAL METHODS- - -1A,1B1B,2A1,2B

SAMPLE NOS. 72L1168-72L1169

DEPTH CM	HORIZON	PARTICLE SIZE ANALYSIS, LT 2MM, 3A1, 3A1A, 3A1B: SAND 2-.05	SILT .05-.002	CLAY LT .002	FINE CLAY LT .0002	SAND: VCOS 2-1	CORS 1-.5	MEDS .5-.25	FNES .25-.10	VFNS .10-.05	SILT: COSI .05-.02	FNSI .02-.002	VFSI .005-.002	SAND 2-.10	INTP II .2-.02	FINE CLAY TO CLAY PCT	NON-CO3 CLAY PCT	RATIO 801 15-BAR TO CBAY
		PCT LT 2MM																
0-15	AP	8.8	36.1	55.5	30.1	.6	.7	.8	8.5	1.8	11.7	24.4		6.6	15.9	54		.38
46-84	B22G	5.5	34.3	60.2	36.0	.0	.1	.8	3.4	1.2	10.2	24.1		4.3	12.6	60		.37

DEPTH CM	(PARTICLE SIZE ANALYSIS, MM, 3B, 3B1, 3B2) VOL. GT 2 PCT	WEIGHT GT 75 PCT	75-20	20-5	5-2	LT .074	20-2 PCT LT20	(BULK DENSITY) 4A1D 1/3-BAR G/CC	4A1H OVEN DRY G/CC	4D1 COLE	(WATER CONTENT) 4B1C 1/10 BAR PCT	4B1C 1/3-BAR PCT	4B2 15-BAR PCT	4C1 WRD CM/CM	CARBONATE 6E1B LT 2 PCT	3A1A LT .002 PCT	(PH) 8C1A 1/1 H2O	8C1E 1/2 CACL
			PCT LT 75															
0-15	0	0	0	0	0	0	93	0					21.2					
46-84	0	0	0	0	0	95	0						22.5					

CLAY MINERALOGY (7A2C)
B22G HORIZON, 72L1169. CLAY IS DOMINATED BY A WELL ORDERED SMECTITE (GROUP NAME, INCLUDING MONTMORILLONITE, FOR EXPANDING 2:1 LAYER SILICATES) AND HAS SMALL AMOUNTS OF KAOLINITE, MICA (OR ILLITE) AND QUARTZ. CLAY MINERALOGY IS MONTMORILLONITIC

Classification: Very-fine, montmorillonitic, nonacid, thermic Vertic Haplaquept.
Soil series: Perry taxadjunct 1/.
Series classification: Same as pedon.

Pedon No.: S72LA-62-3.
Location: West Carroll Parish, Louisiana, about 8 miles northwest of Oak Grove, 21 feet west of field drain; 24 feet north of center of field road; NE¼ SE¼ sec. 29 T. 23 N., R. 10 E.
Vegetation and use: Cropland, soybean field.
Slope and land form: Slightly depressed, less than ½ percent slope, alluvial plain.
Drainage and permeability: Poorly drained, surface runoff slow, permeability very slow.
Climate: Precipitation 52 inches, Temperature 65 degrees F.
Parent material: Clayey alluvium.
Sampled by: T. A. Weems.
Described by: T. A. Weems, E. F. Reynolds and R. Venson.

Ap--0 to 15 cm (0 to 6 in.); dark gray (10YR 4/1) silty clay; common fine faint yellowish brown mottles; weak medium subangular blocky structure; firm; common fine roots; mildly alkaline; abrupt smooth boundary.

B21g--15 to 46 cm (6 to 18 in.); gray (10YR 5/1) clay; common medium distinct dark brown (7.5YR 4/4) and few strong brown mottles; weak coarse subangular blocky structure; very firm; few fine roots; strongly acid; clear smooth boundary.

B22g--46 to 84 cm (18 to 33 in.); gray (10YR 5/1) clay; common medium distinct dark brown (7.5YR 4/4) mottles; moderate medium subangular blocky structure; firm; few fine roots; few fine black concretions; medium acid; clear smooth boundary.

B23g--84 to 117 cm (33 to 46 in.); gray (10YR 6/1) clay; common medium distinct strong brown (7.5YR 5/6) mottles; moderate medium subangular blocky structure; firm; few fine roots; few fine black concretions; few slickensides about one inch across; neutral; clear smooth boundary.

B24g--117 to 152 cm (46 to 60 in.); gray (10YR 5/1) silty clay; few fine faint yellowish brown mottles; weak medium subangular blocky structure; firm; many fine black concretions; common white crystals on faces of peds; moderately alkaline; clear smooth boundary.

B3--152 to 191 cm (60 to 75 in.); light brownish gray (2.5Y 6/2) silty clay; common medium faint light olive brown (2.5Y 5/4) mottles; weak medium subangular blocky structure; firm; common fine black and brown concretions; moderately alkaline.

Remarks: Munsell colors for moist soil.

1/ This pedon is a taxadjunct to the Perry series because it lacks a reddish IIB horizon within 36 inches of the surface.

SOIL CLASSIFICATION-VERTIC HAPLAQUEPT
VERY-FINE, MONTMORILLONITIC, THERMIC
SERIES - - - - - - -SHARKEY

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE, NTSC
NATIONAL SOIL SURVEY LABORATORY
LINCOLN, NEBRASKA

SOIL NO - - - - - - S71LA-26-12 JEFFERSON PARISH

GENERAL METHODS- - -1A,1B1B,2A1,2B SAMPLE NOS. 71L551-71L553

DEPTH CM	HORIZON	PARTICLE SIZE ANALYSIS, LT 2MM, 3A1, 3A1A, 3A1B (PCT LT 2MM) SAND 2-.05	SILT .05-.002	CLAY LT .002	FINE CLAY LT .0002	VCOS 2-1	COBS 1-.5	MEDS .5-.25	FNES .25-.10	VFNS .10-.05	COSI .05-.02	FNSI .02-.002	VFSI .005-.002	SAND 2-.10	INTR II .2-.02	FINE CLAY TO CLAY PCT	NON-CO3-CLAY PCT	RATIO 8D1 15-BAR TO CLAY
8-38	B21G																	
38-56	B22G																	
127-152	C2G																	

DEPTH CM	8F WTBL CONT PCT	(STATE OF DECOMPOSITION) 8G (FIBER VOL) UNRB PCT	8G (FIBER VOL) RUB PCT	8H HYDROPHOSPHT SOLUBILITY (HUNS COLOR)	PH 8C1E .01M CACL	(BULK DEN) 4A3A FILD STAT G/CC	(BULK DEN) 4A1I 1/3B REWT G/CC	COLE 4D1 RE-WET	SUBS RES-IDUE PCT	(WATER CONTENT) 4B4 FILD STAT PCT	4B1C 1/3B REWT PCT	4B2 15-BAR PCT	4C1 WRD CM/CM
8-36	96									27			
38-56	97					1.08				38			
127-152	98									42			

Classification: Very-fine, montmorillontic, thermic Vertic Haplaquept.
Soil series: Sharkey.
Series classification: Same as pedon.

Pedon No.: S71LA-26-12.
Location: Jefferson Parish, Louisiana, about 7 miles south of Marrero, about 200 yards west of La. Hwy. 30, edge of pipe line right-of-way, sec. 62, T. 14 S., R. 23 E.
Vegetation and use: Wildlife habitat and woodland - sweetgum, oak, ash, and hackberry.
Slope and land form: Low level area between the natural levee of a distributary of the Mississippi River and the backswamp.
Drainage and permeability: Poorly drained, very slowly permeable.
Climate: Precipitation 60 inches, Temperature 70 degrees F.
Parent material: Clayey Mississippi River sediments.
Sampled by: James Coover and Warren Lynn - 6/17/71.
Described by: Warren Cockerham and Dayton Matthews.

O2--3 to 0 cm (1 to 0 in.); very dark gray (10YR 3/1) partially decomposed litter consisting of leaves, twigs and mosses.

A1--0 to 8 cm (0 to 3 in.); dark grayish brown (10YR 4/2) clay; weak medium subangular blocks that part to weak medium granular structure; very firm; many roots; clear smooth boundary.

B21g--8 to 38 cm (3 to 15 in.); gray (10YR 5/1) clay; few fine distinct dark yellowish brown mottles; moderate medium subangular blocky structure; firm common fine and very fine roots.

B22g--38 to 56 cm (15 to 22 in.); gray (5Y 5/1) clay; common medium distinct dark yellowish brown (10YR 4/4) mottles; moderate medium subangular blocky structure; firm; few fine and very fine roots.

B3g--56 to 114 cm (22 to 45 in.); gray (5Y 5/1) clay; common medium distinct dark brown (10YR 4/3) mottles; weak medium subangular blocky structure; firm; few very fine roots.

C1g--114 to 127 cm (45 to 50 in.); gray (5Y 5/1) silty clay loam; common medium distinct yellowish brown (10YR 5/4) mottles; massive; plastic and sticky.

C2g--127 to 152 cm (50 to 60 in.); gray (5Y 5/1) clay; massive; plastic and sticky; will not flow between fingers when squeezed in hand.

Remarks: Munsell colors for moist soil.

SOIL CLASSIFICATION-VERTIC HAPLAQUEPT
VERY FINE, MONTMORILLONITIC, NONACID, THERMIC
SERIES - - - - - - - SHARKEY
SOIL NO - - - - - - S72LA-62-1
GENERAL METHODS- - - 1A,1B1B,2A1,2B

WEST CARROLL PARISH
SAMPLE NOS. 72L1164-72L1165

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE, MTSC
NATIONAL SOIL SURVEY LABORATORY
LINCOLN, NEBRASKA

DEPTH CM	HORIZON	SAND 2-.05	SILT .05-.002	CLAY LT .002	FINE CLAY LT .0002	VCOS 2-1	CORS 1-.5	MEDS .5-.25	FNES .25-.10	VFNS .10-.05	COSI .05-.02	FNSI .02-.002	VFSI .005-.002	SAND 2-.10	INTR II .2-.02	FINE CLAY TO CLAY PCT	NON-CO3-CLAY PCT	RATIO 8D1 15-BAR TO CLAY
		(- - - PARTICLE SIZE ANALYSIS, LT 2MM, 3A1, 3A1A, 3A1B; PCT LT 2MM - - -)				(- - SAND - -)					(- - SILT - -)							
0-13	A	2.1	35.8	62.1	34.7	.0	TR	.1	.4	1.6	13.1	22.7		.5	14.9	56		.34
43-58	B22G	1.7	35.5	62.8	38.2	.0	.1	.1	.3	1.2	11.8	23.7		.5	13.2	61		.37

DEPTH CM	VOL. WT 2 PCT	WT 75 PCT	75-20	20-5	5-2	LT .074	20-2 PCT LT20	4A1D 1/3-BAR G/CC	4A1H OVEN DRY G/CC	4D1 COLE	4B1C 1/10 BAR PCT	4B1C 1/3-BAR PCT	4B2 15-BAR PCT	4C1 WRD CM/CM	6E1B LT 2 PCT	3A1A LT .002 PCT	8C1A 1/1 H2O	8C1E 1/2 CACL
	(PARTICLE SIZE ANALYSIS, MM, 3B, 3B1, 3B2)	(- - WEIGHT - -)	(- - PCT LT 75 - -)					(BULK DENSITY)			(- - WATER CONTENT - -)				CARBONATE		(- - PH - -)	
0-13	0	0	0	0	0	99	0						21.4					
43-58	0	0	0	0	0	99	0						23.1					

CLAY MINERALOGY (7A2C),
B22G HORIZON, 72L1165. CLAY IS DOMINATED BY A WELL ORDERED SMECTITE (GROUP NAME, INCLUDING MONTMORILLONITE, FOR EXPANDING 2:1 LAYER SILICATES) AND HAS SMALL AMOUNTS OF KAOLINITE, MICA (OR ILLITE) AND QUARTZ. CLAY MINERALOGY IS MONTMORILLONITIC

Classification: Very-fine, montmorillonitic, nonacid, thermic Vertic Haplaquepts.
Soil series: Sharkey.
Series classification: Same as pedon.

Pedon No.: S72LA-62-1.
Location: West Carroll Parish, Louisiana; 8 miles west of Oak Grove, 486 feet north of corner of gravel road; SW¼ SE¼, sec. 22, T. 22 N., R. 9 E.
Vegetation and use: Cropland, soybeans.
Slope and land form: Broad nearly level stream alluvial plain.
Drainage and permeability: Poorly drained, surface runoff slow, permeability very slow.
Climate: Precipitation 52 inches, Temperature 34 degrees F.
Parent material: Clayey recent alluvium.
Described by: E. F. Reynolds and T. A. Weems 1972.

Ap--0 to 13 cm (0 to 5 in.); dark brown (10YR 4/3) silty clay; weak medium subangular blocky structure; sticky; common fine roots; slightly acid; abrupt smooth boundary.

B21tg--13 to 43 cm (5 to 17 in.); gray (10YR 5/1) clay; few medium distinct strong brown (7.5YR 5/6) mottles; weak coarse subangular blocky structure; firm; few fine roots; few vertical cracks filled with dark brown silty clay; medium acid; clear smooth boundary.

B22g--43 to 58 cm (17 to 23 in.); gray (10YR 5/1) clay; common medium distinct strong brown (7.5YR 5/6) mottles; firm; few fine roots; medium acid; clear smooth boundary.

B3g--58 to 119 cm (23 to 47 in.); gray (10YR 6/1) clay; many medium distinct strong brown (7.5YR 5/6) and few fine faint dark yellowish brown mottles; weak coarse subangular blocky structure; very firm; few fine roots; few fine small black and brown concretions; medium acid.

Remark: Munsell colors for moist soil.

SOIL SURVEY LABORATORY Lincoln, Nebr. Aug., 1958

SOIL TYPE Series not Designated **LOCATION** Bossier Parish, Louisiana

SURVEY NOS. 857La-8-7 **LAB. NOS.** 5672-5677

DEPTH INCHES	HORIZON	1B1a PARTICLE SIZE DISTRIBUTION (in mm.) (per cent) VERY COARSE SAND 2-1	COARSE SAND 1-0.5	MEDIUM SAND 0.5-0.25	FINE SAND 0.25-0.10	VERY FINE SAND 0.10-0.05	SILT 0.05-0.002	CLAY < 0.002	3A1 0.2-0.02	0.02-0.002	2A2 > 2	TEXTURAL CLASS
0-5	A11	-	-	-	0.1	0.7	24.8	74.4	2.5	23.1	-	c
5-9	A12	-	-	0.1a	0.9a	2.7a	33.6	62.7	10.0	27.0	-	c
9-21	Agb	-	0.3a	0.3a	2.0a	5.8a	41.5	50.1	21.6	27.3	-	sic
21-34	Bb1	-	0.1	0.1	2.1	7.7	41.7	48.3	27.7	23.5	-	sic
34-46	Bb2	-	0.1	0.1	5.5	14.2	43.9	36.2	42.8	20.2	-	sicl/cl
46-50+	Bb3	-	0.1	0.1	9.5	21.8	37.6	30.9	53.0	14.9	-	cl

8C1a pH 1:1	1:5	1:10	6A1a ORGANIC CARBON %	6B1a NITROGEN %	C/N			$CaCO_3$ equivalent %		1/10 ATMOS. %	1/3 ATMOS. %	4B2 15 ATMOS. %
6.7			1.46	0.104	14.0			-				23.2
6.8			1.07	0.085	12.6			-				22.0
7.0			0.95	0.066	14			-				18.2
7.3			0.44	0.042	10			-				18.1
7.4			0.26					-				14.3
7.4			0.20					-				12.9

5A1a CATION EXCHANGE CAPACITY NH_4Ac	EXTRACTABLE CATIONS 6N2b Ca	6O2b Mg	6H1a H	6P2a Na	5B1a 6Q2a K	BASE SAT. % NH_4Ac EXCH. 5C1	Base Sat. % on Sum + H 5C3	5B1a Sum - H	5A3a Sum + H	Ca/Mg		
←	milliequivalents per 100g. soil				→							
41.4	28.7	12.7	4.3	0.2	1.3	100	91	42.9	47.2	2.2		
37.2	25.4	10.6	4.3	0.3	0.8	100	90	37.1	41.4	2.4		
30.7	20.5	9.7	3.4	0.2	0.5	100	90	30.9	34.3	2.1		
28.8	17.7	10.0	2.5	0.3	0.5	99	92	28.5	31.0	1.8		
22.2	12.1	9.6	1.7	0.4	0.4	100	93	22.5	24.2	1.3		
18.9	10.1	8.7	1.2	0.5	0.4	100	94	19.7	20.9	1.2		

a. Common, smooth brown concr. (Fe-Mn?)

Classification: Fine, mixed, nonacid, thermic Vertic Haplaquept.
Soil series: Not designated 1/.

Pedon No.: S57LA-8-7.
Location: Bossier Parish, La., 8 miles northwest of Plain Dealing; SW¼NE¼ sec. 22, T. 23 N., R. 14 W.; along road 281 feet east of west forty line then 115 feet north of center of road.
Vegetation: Native - hardwood forest; present - mostly johnsongrass.
Relief: Level (0 - .5 percent slope).
Drainage: Somewhat poorly drained; slow runoff and internal drainage.
Permeability: Slow.
Parent material: Recent Red River alluvium deposited over old lake bed.
Climate: Precipitation 47 inches, Temperature 65 degrees F.
Sampled by: James S. Allen and Bruce Chaffin.
Described by: Lester L. Loftin, May 23, 1957. Horizons redesignated by David F. Slusher, August 12, 1975.

A11--0 to 13 cm (0 to 5 in.); dark brown (7.5YR 3/2) clay; strong medium angular blocky structure that breaks into strong fine subangular blocky structure; very firm; many roots; mildly alkaline; abrupt smooth boundary.

A12--13 to 23 cm (5 to 9 in.); dark reddish gray (5YR 4/2) clay; common fine distinct dark reddish brown (2.5YR 3/4) mottles; moderate very fine angular blocky structure; very firm; roots common; moderately alkaline; clear wavy boundary.

Agb--23 to 53 cm. (9 to 21 in.); variegated very dark gray (5YR 3/1) and dark reddish brown (5YR 3/2) clay; moderate very fine angular blocky structure; very firm; few roots; moderately alkaline; clear wavy boundary.

Bb1--53 to 86 cm (21 to 34 in.); variegated dark reddish gray (5YR 4/2) and dark reddish brown (5YR 3/4) clay; moderate very fine subangular blocky structure; very firm; moderately alkaline.

Bb2--86 to 117 cm (34 to 46 in.); Same as above. Separated for sampling; clear wavy boundary.

Bb3--117to 127 cm (46 to 50 in.); dark brown (7.5YR 4/2) silty clay; many fine and medium faint dark brown (7.5YR 4/4) mottles; moderate medium subangular blocky structure; mildly alkaline.

Remarks: Munsell colors for moist soil.

1/ Sampled as a representative of the Buxin series. (Fine, mixed, thermic; Vertic Hapludolls.)

SOIL SURVEY LABORATORY Lincoln, Nebr. Aug., 1958

SOIL TYPE Series not Designated **LOCATION** Bossier Parish, Louisiana

SURVEY NOS. S57La-8-6 **LAB. NOS.** 5667-5671

DEPTH INCHES	HORIZON	1B1a PARTICLE SIZE DISTRIBUTION (in mm.) (per cent) VERY COARSE SAND 2-1	COARSE SAND 1-0.5	MEDIUM SAND 0.5-0.25	FINE SAND 0.25-0.10	VERY FINE SAND 0.10-0.05	SILT 0.05-0.002	CLAY < 0.002	0.2-0.02	3A1 0.02-0.002	2A2 > 2	TEXTURAL CLASS
0-4	A1	0.3a	0.3a	0.2b	1.8b	3.0b	47.6	46.8	17.4	34.6	-	sic
4-11	B21g	0.1b	0.2b	0.2b	2.0b	2.9b	46.4	48.2	17.0	33.9	-	sic
11-22	B22g	0.1b	0.2b	0.2b	1.6b	2.7b	43.5	51.7	16.3	31.2	-	sic
22-31	B23g	-	0.1b	0.1b	1.4b	2.5b	41.6	54.3	14.8	30.5	-	sic
31-38+	B24g	-	-	0.1b	1.5b	2.6b	40.7	55.1	15.2	29.4	-	sic

8C1a pH 1:1	pH 1:5	pH 1:10	ORGANIC MATTER 6A1a ORGANIC CARBON %	6B1a NITROGEN %	C/N			$CaCO_3$ equivalent %		MOISTURE TENSIONS 1/10 ATMOS. %	1/3 ATMOS. %	4B2 15 ATMOS. %
5.1			5.95	0.366	16.2							22.2
4.5			1.06	0.094	11.3							18.6
4.4			0.61	0.050	12							19.4
4.4			0.42	0.030	14							20.0
4.4			0.27									20.7

5A1a CATION EXCHANGE CAPACITY NH_4Ac	EXTRACTABLE CATIONS 6N2b Ca	6O2b Mg	6H1a H	6P2a Na	6Q2a K	BASE SAT. % NH_4Ac EXCH. 5C1	Base Sat. % on Sum + H 5C3	5B1a Sum - H	5A3a Sum + H	Ca/Mg		
←	milliequivalents per 100g. soil				→							
34.4	15.1	6.7	21.0	0.1	0.7	66	52	22.6	43.6	2.2		
27.5	6.1	5.6	21.6	0.1	0.4	44	36	12.2	33.8	1.1		
29.8	7.0	6.6	19.6	0.2	0.4	48	42	14.2	33.8	1.1		
31.3	9.2	7.8	17.5	0.4	0.4	57	50	17.8	35.3	1.2		
32.0	11.3	9.3	14.5	0.6	0.4	68	60	21.6	36.1	1.2		

a. Organic matter
b. Common, smooth brown concr. (Fe-Mn?)

Classification: Fine, montmorillonitic, acid, thermic Vertic Haplaquepts.
Soil series: Not designated 1/.

Pedon No.: S57LA-8-6.
Location: Bossier Parish, La., 6 miles north of Plain Dealing; SE¼SW¼ sec. 11, T. 23 N., R. 13 W.; 3494 feet south of road intersection then 105 feet west of center of highway (LA-3).
Vegetation: Hardwood - Pine forest.
Relief: Level (0 - .5 percent slope).
Drainage: Poorly drained; very slow internal drainage and runoff.
Permeability: Slow.
Climate: Precipitation 46 inches; Temperature 65 degrees F.
Parent material: Pleistocene age alluvium.
Sampled by: James S. Allen and Bruce Chaffin.
Described by: Lester L. Loftin, 5/21/57. Horizons designations reinterpreted by David F. Slusher, November 28, 1975.

A1--0 to 10 cm (0 to 4 in.); very dark grayish brown (10YR 3/2) silty clay; moderate fine granular structure; friable; many roots; very strongly acid; clear wavy boundary.

B21g--10 to 28 cm (4 to 11 in.); gray (10YR 5/1) clay; many fine distinct dark brown (7.5YR 4/4) mottles; moderate very fine subangular blocky structure; firm; roots common; very strongly acid; clear wavy boundary.

B22g--28 to 56 cm (11 to 22 in.); gray (2.5YR 5/0) clay; common fine distinct strong brown (7.5YR 5/8) mottles; very firm; very strongly acid.

B23g--56 to 79 cm (22 to 31 in.); same as B22g, separated for sampling.

B24g--79 to 97 cm (31 to 38 in.); same as B22g, separated for sampling; extremely acid.

Remarks: Munsell colors for moist soil.

1/ Sampled as a typical representative of the Wrightsville series. (Fine, mixed, thermic; Typic Glossaqualfs.)

SOIL CLASSIFICATION-TYPIC ARGIAQUOLL
FINE-SILTY, MIXED, THERMIC
SERIES - - - - - - -ANDRY

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE, MTSC
NATIONAL SOIL SURVEY LABORATORY
LINCOLN, NEBRASKA

SOIL NO - - - - - - - S69LA-23-2 IBERIA PARISH

GENERAL METHODS- - -1A,1B1B,2A1,2B SAMPLE NOS. 69L100-69L106

DEPTH CM	HORIZON	PARTICLE SIZE ANALYSIS, LT 2MM, 3A1, 3A1A, 3A1B (PCT LT 2MM) SAND 2-.05	SILT .05-.002	CLAY LT .002	FINE CLAY LT .0002	VCOS 2-1	CORS 1-.5	MEDS .5-.25	FNES .25-.10	VFNS .10-.05	COSI .05-.02	FNSI .02-.002	VFSI .005-.002	SAND 2-.10	INTR II .2-.02	FINE CLAY TO CLAY PCT	NON-CO3-CLAY PCT	8D1 15-BAR TO CLAY RATIO
36-18	O21																	
18-0	O22																	
0-13	A1	1.7	68.7	29.6		TR	.1	TR	.3	1.3	26.7	42.0		.4	28.2			.64
13-28	A12G	1.6	70.2	28.2		.0	.0	.0	.3	1.3	29.1	41.1		.3	30.6			.49
28-51	A3G	1.3	62.7	36.0		.0	.0	.0	.2	1.1	25.0	37.7		.2	26.3			.48
51-94	B21CAG	7.1	63.0	29.9	12.4	1.3	1.9	.8	1.2	1.7	26.2	36.8		5.3	28.7	41		.48
94-130	B22G (A)	3.3	71.0	25.7	7.8	.8	.8	.4	.5	.8	28.6	42.4		2.5	29.7	30		.48

DEPTH CM	(PARTICLE SIZE ANALYSIS, MM, 3B, 3B1, 3B2) VOL. GT 2 PCT	GT 75 PCT	75-20	20-5	5-2	WEIGHT LT .074	20-2 PCT LT20	BULK DENSITY 4A1D 1/3-BAR G/CC	4A1H OVEN DRY G/CC	4D1 COLE	4B1C 1/10 BAR PCT	4B1C 1/3-BAR PCT	WATER CONTENT 4B2 15-BAR PCT	4C1 WRD CM/CM	CARBONATE 6E1B LT 2 PCT	3A1A LT .002 PCT	PH 8C1A 1/1 H2O	8C1E 1/2 CACL
36-18	0	0	0	0	0		0											
18-0	0	0	0	0	0		0											
0-13	0	0	0	0	0	99	0	.64	1.27	.26	105	06	18.9	.56			6.9	6.9
13-28	0	0	0	0	0	99	0						13.9				7.4	7.2
28-51	0	0	0	0	0	100	0	1.36	1.57	.047	34.8	34.2	17.2	.23			7.4	7.3
51-94	0	0	0	0	0	94	0	1.38	1.80	.092	34.4	33.5	14.4	.26	9		7.8	7.7
94-130	0	0	0	0	0	97	0						12.4		2	0	7.8	7.7

DEPTH CM	(ORGANIC MATTER) 6A1A ORGN CARB PCT	6B1A NITG PCT	C/N	IRON 6C2B EXT FE PCT	PHOS TOTL PCT	(EXTRACTABLE BASES 5B4A) 6N2E CA	6O2D MG	6P2B NA	6Q2B K	SUM EXTB MEQ / 100	ACTY 6H1A BACL TEA G	AL 6G1E KCL EXT	(CAT EXCH) 5A3A EXTB ACTY	5A6A NHAC	RATIO 8D1 NHAC TO CLAY	RATIO 8D3 CA TO MG	CA 5F1 SAT NHAC PCT	(BASE SAT) 5C3 EXTB ACTY PCT	5C1 NHAC PCT
36-18	25.2	1.52	17																
18-0	15.0	.938	16																
0-13	4.89	.291	17	.1		15.5	14.2	10.2	.9	40.8	13.9		54.7	28.3	.96	1.1	55	75	144
13-28	1.22	.063	19	.1		10.2	9.0	6.6	.6	26.4	7.9		34.3	19.3	.68	1.1	53	77	137
28-51	.58	.041	14	.5		13.9	12.9	9.3	.7	36.8	3.9		40.7	27.5	.76	1.1	51	90	134
51-94	.24			.4		9.2	8.2	7.0	.7	25.1				20.4	.68				
94-130	.27			.7		9.7	7.3	7.0	.2	24.2				20.4	.79				
						1.0B	5.5B	37.5B	.2B										

DEPTH CM	(SATURATED PASTE) 8E1 REST OHM-CM	8C1B PH	8A H2O PCT	NA 5D2 ESP PCT	NA 5E SAR	SALT 8D5 TOTL SOLU PPM	GYP 6F1A PCT	(SATURATION EXTRACT 8A1) 8A1A EC MMHOS/CM	6N1B CA	6O1B MG	6P1B NA	6Q1B K	6I1A CO3	6J1A HCO3	6K1A CL	6L1A SO4	6M1A NO3	ATTERBERG 4F1 LQID LMIT PCT	4F2 PLST INDX
									(MEQ / LITER										
36-18																			
18-0																			
0-13	230	5.2	138	8	12	110000		9.38	19.3	26.3	56.5	1.1	.0	.0	54.2	54.7			
13-28	280	5.8	83.3	11	13	5300		8.41	15.0	18.5	53.0	.7	.0	.0	50.9	42.2			
28-51																			
51-94																			
94-130	360	7.7	72.6	19	16	3500		6.51	8.5	7.5	44.5	.2	.0	1.3	52.3	9.9			
					21			4.74	1.0	5.5	37.5	.7							

DEPTH CM	(HISTOSOL CHARACTERIZATION) 8F MINL CONT PCT	(STATE OF DECOMPOSITION) 8G (FIBER UNRB PCT	VOL) RUB PCT	8H PYROPHOSPHT SOLUBILITY (MUNS	COLOR)	PH 8C1E .01M CACL	(BULK DEN) 4A3A FILD STAT G/CC	4A1I 1/3B REWT G/CC	COLE 4D1 RE-WET	SUBS RES-IDUE PCT	(WATER CONTENT) 4B4 FILD STAT PCT	4B1C 1/3B REWT PCT	4B2 15-BAR PCT	4C1 WRD CM/CM
36-18	53	34	16	10YR	6/4	6.4					510			
18-0	66	33	10	10YR	6/3	6.7					270			
0-13	93					6.8	.67	1.01			105	41.9	18.9	.23
13-28	98					7.4					38.7		13.9	
28-51	99					7.3	1.25	1.37			42.4	30.4	17.2	.18
51-94	99					7.2	1.40	1.37			39.5	30.8	14.4	.22
94-130						7.1					29.6		12.4	

CLAY MINERALOGY (7A2C)
051-94 MC4 KK2 MI2.
094-130 MT3 MI2 KK2.
COMMENTS: CLAYS IN LOWER HORIZON ARE BETTER ORDERED. CLAY MINERALOGY IS MONTMORILLONITIC BORDERING ON MIXED.
RELATIVE AMOUNTS: (X-RAY) 5 = DOMINANT 4 = ABUNDANT 3 = MODERATE 2 = SMALL 1 = TRACE.
MINERAL CODE: MT = MONTMORILLONITE MI = MICA KK = KAOLINITE MC = MONTMORILLONITE-CHLORITE

(A) SURFACE WATER (69L172).
(B) MEQ/LITER WATER ANALYSIS.

Classification: Fine-silty, mixed, thermic Typic Argiaquoll.
Soil series: Andry.
Series classification: Same as pedon.

Pedon No.: S69LA-23-2.
Location: Iberia Parish, Louisiana, about three miles southeast of Delcambre; 42 yards south of canal, 99 yards east of section line; NW¼ NW¼ sec. 15, T. 13 S., R. 5 E.
Vegetation and use: Wildlife habitat and range; marshhay cordgrass.
Slope and land form: Level, brackish marsh; less than one foot above sea level.
Drainage and permeability: Very poorly drained, very slowly permeable.
Parent material: Thin herbaceous organic materials over Prairie Age silty deposits.
Climate: Precipitation 60 inches, Temperature 68 degrees F.
Sampled by: David F. Slusher, Warren Lynn, Leo Juve, Henry Clark, Almond White, and Al Wilhite.
Described by: Warren L. Cockerham and William McKinzie, 2/10/69.

O21--36 to 18 cm (14 to 7 in.); very dark grayish brown (10YR 3/2) peat; about 50 percent fiber, 25 percent after rubbing; massive; nonplastic; about 50 percent mineral; strongly acid; clear smooth boundary.

O22--18 to 0 cm (7 to 0 in.); very dark grayish brown (10YR 3/2) mucky peat; about 40 percent fiber, 30 percent after rubbing; massive; nonsticky; many roots; dominantly herbaceous fiber; strongly acid; gradual smooth boundary.

A1--0 to 13 cm (0 to 5 in.); black (10YR 2/1) silty clay loam; massive; plastic and sticky; common roots; strongly acid; gradual smooth boundary.

A12g--13 to 28 cm (5 to 11 in.); very dark gray (10YR 3/1) silty clay loam; massive; common roots; plastic and sticky; strongly acid; gradual smooth boundary.

A3g--28 to 51 cm (11 to 20 in.); dark gray (N 4/) silty clay loam; common medium distinct gray (5Y 5/1) mottles and streaks; massive; plastic and sticky; few roots; medium acid; gradual smooth boundary.

B21cag--51 to 94 cm (20 to 37 in.); gray (5Y 5/1) silty clay loam; massive; plastic and sticky; about 25 percent calcium carbonate concretions; moderately alkaline.

B22g--94 to 130 cm (37 to 51 in.); greenish gray (5GY 5/1) silty clay loam; few fine faint light olive brown mottles; massive; compact and firm; moderately alkaline.

Remarks: Water table two inches below surface. Sampled from posthole digger hole to 37 inches; below 37 inches with bucket auger. Munsell colors for wet soil.

SOIL CLASSIFICATION-TYPIC ARGIAQUOLL
FINE-SILTY, MIXED, THERMIC
SERIES - - - - - - -ANDRY

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE, MTSC
NATIONAL SOIL SURVEY LABORATORY
LINCOLN, NEBRASKA

SOIL NO - - - - - - S69LA-23-5 IBERIA PARISH

GENERAL METHODS- - -1A,1B1B,2A1,2B SAMPLE NOS. 69L107-69L113

DEPTH CM	HORIZON	PARTICLE SIZE ANALYSIS, LT 2MM, 3A1, 3A1A, 3A1B (PCT LT 2MM) SAND 2-.05	SILT .05-.002	CLAY LT .002	FINE CLAY LT .0002	VCOS 2-1	CORS 1-.5	MEDS .5-.25	FNES .25-.10	VFNS .10-.05	COSI .05-.02	FNSI .02-.002	VFSI .002-.10	SAND 2-.02	INTR II .2-.02	FINE CLAY TO CLAY PCT	NON-CO3- CLAY PCT	RATIO 8D1 15-BAR TO CLAY
30-15	O21																	
15-0	O22																	
0-15	A11	1.0	78.8	20.2		.1	.2	.1	.2	.4	32.0	46.8		.6				.61
15-33	A12	.8	78.7	20.5		.1	.1	.1	.2	.4	33.1	45.6		.4				.47
33-66	B21TG	.8	69.5	29.7		.1	.2	.1	.2	.3	28.5	41.0		.5				.47
66-84	B22TG	1.4	65.8	32.8		.1	.4	.3	.4	.3	27.3	38.5		1.1				.49
84-152	B3G (A)	2.2	68.0	29.8		.3	.6	.3	.6	.3	28.3	39.7		1.9				.49

DEPTH CM	PARTICLE SIZE ANALYSIS, MM, 3B, 3B1, 3B2 VOL. GT 2 PCT	GT 75 PCT	75-20	20-5	5-2	WEIGHT (PCT LT 75) LT .074	20-2 LT20 PCT	BULK DENSITY 4A1D 1/3-BAR G/CC	4A1H OVEN DRY G/CC	4D1 COLE	WATER CONTENT 4B1C 1/10 BAR PCT	4B1C 1/3-BAR PCT	4B2 15-BAR PCT	4C1 WRD CM/CM	CARBONATE 6E1B LT 2 PCT	3A1A LT .002 PCT	PH 8C1A 1/1 H2O	8C1E 1/2 CACL
30-15	0	0	0	0	0		0						59.6					
15-0	0	0	0	0	0		0						78.1					
0-15	0	0	0	0	0	99	0	1.22	1.63	.10	43.7	41.3	18.5	.28			6.5	6.2
15-33	0	0	0	0	0	100	0	1.51	1.65	.028	25.4	24.4	12.4	.18			6.9	6.6
33-66	0	0	0	0	0	99	0	1.49	1.66	.037	28.5	28.7	14.8	.21			6.9	6.6
66-84	0	0	0	0	0	99	0						18.5				7.0	6.8
84-152	0	0	0	0	0	98	0						18.3		TR	0	7.1	6.9

DEPTH CM	ORGANIC MATTER 6A1A ORGN CARB PCT	6B1A NITG PCT	C/N	IRON 6C2B EXT FE PCT	PHOS TOTL PCT	EXTRACTABLE BASES 5B4A (MEQ / 100 G) 6N2E CA	6O2D MG	6P2B NA	6Q2B K	SUM EXTB	ACTY 6H1A BACL TEA	AL 6G1E KCL EXT ACTY	(CAT EXCH) 5A3A EXTB ACTY	5A6A NHAC	RATIO 8D1 NHAC TO CLAY	RATIO 8D3 CA TO MG	CA 5F1 SAT NHAC PCT	(BASE SAT) 5C3 EXTB ACTY PCT	5C1 NHAC PCT
30-15	25.3	1.40	18																
15-0	30.6	1.93	16																
0-15	3.89	.195	20			8.5	10.9	6.6	.8	26.8	8.9		35.7	21.1	1.04	.8	40	75	127
15-33	.87	.043	20			3.4	6.5	5.7	.7	16.3	2.2		18.5	11.2	.55	.5	30	88	146
33-66	.46					3.8	7.4	7.1	.7	19.0	8.4		27.4	13.2	.44	.5	29	69	144
66-84	.31					4.4	8.1	7.6	.8	20.9	3.6		24.5	13.5	.41	.5	33	85	155
84-152	.27					4.7	7.4	8.2	.6	20.9				14.4	.48				
						1.6B	6.2B	35.5B	.5B										

DEPTH CM	SATURATED PASTE 8E1 REST OHM-CM	8C1B PH	8A H2O PCT	NA 5D2 ESP PCT	NA 5E SAR	SALT 8D5 TOTL SOLU PPM	GYP 6F1A PCT	SATURATION EXTRACT 8A1 (MEQ / LITER) 8A1A EC MMHOS/CM	6N1B CA	6O1B MG	6P1B NA	6Q1B K	6I1A CO3	6J1A HCO3	6K1A CL	6L1A SO4	6M1A NO3	ATTERBERG 4F1 LQID LMIT PCT	4F2 PLST INDX
30-15																			
15-0																			
0-15																			
15-33																			
33-66																			
66-84																			
84-152																			
					18			4.72	1.6	6.2	35.5	.5							

DEPTH CM	HISTOSOL CHARACTERIZATION 8F MINL CONT PCT	(STATE OF DECOMPOSITION) 8G (FIBER VOL) UNRB PCT	RUB PCT	8H PYROPHOSPHT SOLUBILITY (MUNS COLOR)	PH 8C1E .01M CACL	(BULK DEN) 4A3A FILD STAT G/CC	4A1I 1/3B REWT G/CC	COLE 4D1 RE-WET	SUBS RES-IDUE PCT	(WATER CONTENT) 4B4 FILD STAT PCT	4B1C 1/3B REWT PCT	4B2 15-BAR PCT	4C1 WRD CM/CM
30-15	59	51	26	10YR 7/3	6.6					428			
15-0	48	40	16	10YR 6/3	6.1	.22			42	576			
0-15	94				6.5	1.20	1.28			63.4	30.1	12.4	.23
15-33	98				7.0	1.40	1.48			34.8	24.9	9.7	.22
33-66	99				6.6	1.30	1.45			39.0	26.4	14.0	.18
66-84	99				6.6					39.0		16.1	
84-152	99				6.6					38.7		14.7	

(A) GROUND WATER SAMPLE (69L174).
(B) MEQ/LITER WATER ANALYSIS.

Classification: Fine-silty, mixed, thermic Typic Argiaquoll.
Soil series: Andry.
Series classification: Same as pedon.

Pedon No.: S69LA-23-5.
Location: Iberia Parish, Louisiana, about 3 3/4 mile south-southeast of Delcambre, 50 yards west of canal, NE¼ SE¼ sec. 21, T. 13 S., R. 5 E.
Vegetation and use: Wildlife habitat; marshhay cordgrass, three square, switchgrass, needlerush.
Slope and land form: Level and depressed; slightly saline marshland; 0 to 1 foot above sea level. Numerous narrow rills.
Drainage and permeability: Very poorly drained, very slowly permeable.
Parent material: Thin layers of organic material derived from herbaceous fiber over silty Prairie terrace.
Climate: Precipitation 60 inches, Temperature 68 degrees F.
Sampled by: David F. Slusher, Warren Lynn, Leo Juve, Henry Clark, Almond White and Al Wilhite.
Described by: Warren Cockerham and William McKinzie, 2/10/69.

O21--30 to 15 cm (12 to 6 in.); very dark grayish brown (10YR 3/2) hemic material; about 50 percent fiber, about 30 percent rubbed; massive; nonsticky; many live roots; neutral; gradual wavy boundary.

O22--15 to 0 cm (6 to 0 in.); very dark grayish brown (10YR 3/2) hemic material; about 20 percent rubbed; massive; nonsticky; mineral content about 50 percent; slightly acid; gradual smooth boundary.

A11-0 to 15 cm (0 to 6 in.); black (10YR 2/1) silt loam; weak granular structure; nonsticky; many medium roots; about 12 percent fiber after rubbing; neutral; gradual smooth boundary.

A12--15 to 33 cm (6 to 13 in.); very dark gray (10YR 3/1) silt loam; dark gray (N 4/) when wet and first exposed to air; weak medium subangular blocky structure; very plastic and sticky; common medium and fine roots; neutral; gradual smooth boundary.

B21tg--33 to 66 cm (13 to 26 in.); silty clay loam; dark gray (N 4/) when wet and first exposed to air; many medium and coarse prominent light olive brown (2.5YR 4/4) mottles; weak medium subangular blocky structure; plastic and sticky; few fine roots; few soft Fe-Mn accumulations; few thin patchy clay films; neutral; gradual smooth boundary.

B22tg--66 to 84 cm (26 to 33 in.); greenish gray (5GY 5/1) silt clay loam; many medium and coarse distinct olive (5Y 5/3) mottles; weak medium and coarse subangular blocky structure; plastic and sticky; few fine roots; few Fe-Mn concretions; thin patchy clay films; neutral; gradual smooth boundary.

B3g--84 to 152 cm (33 to 60 in.); greenish gray (5GY 6/1) and gray (N 6/) silty clay loam; many coarse distinct olive (5Y 5/3) mottles; weak very coarse prismatic structure; plastic; neutral.

Remarks: Water table three inches below the surface. Ground water pH 5.5. B3g horizon sampled from 33-44 inches. Sampled with posthole digger to 26 inches, below 26 inches with auger. Munsell color for wet soil unless indicated otherwise.

SOIL CLASSIFICATION-VERTIC ARGIAQUOLL
FINE, MONTMORILLONITIC, THERMIC
SERIES - - - - - - - -BALDWIN TAXADJUNCT

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE, NTSC
NATIONAL SOIL SURVEY LABORATORY
LINCOLN, NEBRASKA

SOIL NO - - - - - - - 21 ST. MARY PARISH

GENERAL METHODS- - -1A, 1B1B, 2A1, 2B SAMPLE NOS. 52900 - 52905

DEPTH CM	HORIZON	PARTICLE SIZE ANALYSIS, LT 2MM, 3A1, 3A1A, 3A1B (PCT LT 2MM) SAND 2-.05	SILT .05-.002	CLAY LT .002	FINE CLAY LT .0002	SAND VCOS 2-1	CORS 1-.5	MEDS .5-.25	FNES .25-.10	VFNS .10-.05	SILT COSI .05-.02	FNSI .02-.002	VFSI .005-.002	SAND 2-.10	INTR II .2-.02	FINE CLAY TO CLAY PCT	RATIO NON-CO3-CLAY PCT	8D1 15-BAR TO CLAY
0-18	AP1	13.0	69.2	17.8		.1	.2	.2	.8	11.7	41.6	27.6		1.3	53.8			
18-25	AP2	9.8	67.7	22.5		.0	.1	.2	.5	9.0	36.2	31.5		.8	45.5			
25-30	B1	4.7	59.3	36.0		.1	.2	.1	.3	4.0	28.3	31.0		.7	32.5			
30-46	B21TG	3.8	59.2	37.0		.1	.2	.1	.2	3.2	27.5	31.7		.6	30.8			
46-81	B22TG	4.8	59.5	35.7		.5	.4	.2	.5	3.2	26.2	33.3		1.6	29.6			
81-112	B3G	2.9	59.4	37.7		.2	.5	.2	.3	1.7	22.0	37.4		1.2	23.9			

DEPTH CM	(PARTICLE SIZE ANALYSIS, MM, 3B, 3P1, 3B2) VOL. GT 2 PCT	WEIGHT GT 75 PCT	75-20	20-5	5-2	LT .074	20-2 PCT LT20	(BULK DENSITY) 4A1D 1/3-BAR G/CC	4A1H OVEN DRY G/CC	4D1 COLE	(WATER CONTENT) 4B1C 1/10 BAR PCT	4B1C 1/3-BAR PCT	4B2 15-BAR PCT	4C1 WRD CM/CM	CARBONATE 6E1B LT 2 PCT	3A1A LT .002 PCT	(PH) 8C1A 1/1 H2O	8C1P 1/2 CACL
0-18	0	0	0	0	0		0										5.8	
18-25	0	0	0	0	0		0										5.9	
25-30	0	0	0	0	0		0										6.2	
30-46	0	0	0	0	0		0										6.4	
46-81	0	0	0	0	0		0										6.8	
81-112	0	0	0	0	0		0										6.8	

DEPTH CM	(ORGANIC MATTER) 6A1A ORGN CARB PCT	6B1A NITG PCT	C/N	IRON 6C2B EXT FE PCT	PHOS TOTL PCT	(EXTRACTABLE BASES 5B4A) 6N2B CA	6O2B MG	6P2B NA	6Q2B K	SUM EXTB. / 100	ACTY 6H1A BACL TEA G-	AL 6G1B KCL EXT	(CAT EXCH) 5A3A EXTB ACTY	5A6A NHAC	RATIO 8D1 NHAC TO CLAY	RATIO 8D3 CA TO MG	CA 5F1 SAT NHAC PCT	(BASE SAT) 5C3 EXTB ACTY PCT	5C1 NHAC PCT
0-18	.91					11.0	3.2	.2	.1		5.5		20.0					72	
18-25	1.12					12.8	4.1	.2	.1		5.5		22.7					76	
25-30	1.16					18.7	7.1	.3	.2		6.4		32.7					80	
30-46	.89					18.6	7.7	.3	.2		5.5		32.3					83	
46-81	.30					17.1	8.3	.2	.2		3.4		29.2					88	
81-112	.31					17.4	9.2	.4	.3		3.6		30.9					88	

Classification: Fine, montmorillonitic, thermic Vertic Argiaquoll.
Soil series: Baldwin taxadjunct 1/.
Series classification: Fine, montmorillonitic, thermic Vertic Ochraqualfs.

Pedon No.: 21.
Location: St. Mary Parish, La.; 2 miles southeast of Baldwin; ½ mile southwest of Katy Sugar Mill.
Slope: 0 to 1 percent.
Drainage and permeability: Poorly drained; very slow permeability.
Parent material: Mississippi River alluvium.
Climate: Precipitation 59 inches, Temperature 69 degrees F.
Sampled by: B. N. Driskell, September 24, 1952.
Described by: S. A. Lytle, September 24, 1952, horizon designations by David F. Slusher, 12/8/75.

Ap1--0 to 18 cm (0 to 7 in.); very dark grayish brown (10YR 3/2) silt loam; moderate medium and small crumb structure; medium acid.

Ap2--18 to 25 cm (7 to 10 in.); very dark grayish brown (10YR 3/2) heavy silt loam to light silty clay loam; moderate medium platy structure (plow sole); slightly acid.

B1--25 to 30 cm (10 to 12 in.); very dark gray (10YR 3/2) clay; strong medium platy structure (plow sole); hard when dry; many fine mottles of dark yellowish brown (10YR 4/4); slightly acid.

B21tg--30 to 46 cm (12 to 18 in.); dark gray (10YR 4/1) clay; mottled light yellowish brown (10YR 6/4); strong medium angular blocky structure; plastic, sticky; neutral.

B22tg--46 to 81 cm (18 to 32 in.); mottled gray (10YR 5/1) and pale brown (10YR 6/3) silty clay; strong medium angular blocky structure with moderate medium columnar cleavage; slightly sticky and plastic; mildly alkaline.

B3g--81 to 112 cm (32 to 44 in.); light brownish gray (10YR 6/2) silty clay loam; mottled dark brown (7.5YR 4/4) and dark gray (10YR 4/1); weak medium angular blocky structure; slightly plastic and sticky wet.

Remarks: Munsell colors for moist soil unless indicated otherwise.

1/ Taxadjunct because the dark colored surface layers are two inches too thick.

SOIL CLASSIFICATION-TYPIC HAPLAQUOLL
FINE-SILTY, MIXED, THERMIC
SERIES - - - - - - -NOT DESIGNATED

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE, NTSC
NATIONAL SOIL SURVEY LABORATORY
LINCOLN, NEBRASKA

SOIL NO - - - - - - S69LA-23-1 IBERIA PARISH

GENERAL METHODS- - -1A,1B1B,2A1,2B SAMPLE NOS. 69L091-69L097

DEPTH CM	HORIZON	PARTICLE SIZE ANALYSIS, LT 2MM, 3A1, 3A1A, 3A1B (PCT LT 2MM) SAND 2-.05	SILT .05-.002	CLAY LT .002	FINE CLAY LT .0002	SAND VCOS 2-	SAND CORS 1-	SAND MEDS .5-.25	SAND FNES .25-.10	SAND VFNS .10-.05	SILT COSI .05-.02	SILT FNSI .02-.002	SILT VFSI .005-.002	SAND 2-.10	INTR II .2-.02	FINE CLAY TO CLAY PCT	NON-CO3-CLAY PCT	RATIO 8D1 15-BAR TO CLAY
5-0	O2																	
0-25	A11	1.2	68.5	30.3		.0	.2	.1	.2	.6	27.5	41.0		.5	28.2			.57
25-36	A12	.7	73.1	26.2		.0	.0	.0	.2	.5	31.7	41.4		.1	32.3			.49
36-48	A3	.6	72.6	26.8		.0	.0	.0	.1	.5	32.0	40.6		.0	32.6			.47
48-74	B21CAG	10.6	65.2	24.2		2.5	2.9	1.5	2.2	1.6	27.0	38.2		9.0	29.8			.45
74-102	B22CAG	8.5	68.9	22.6		2.8	2.8	1.0	1.0	.8	29.3	39.6		7.6	30.7			.48
102-147	B31G (A)	1.6	74.9	23.5	9.2	.1	.4	.3	.4	.4	30.8	44.1		1.2	31.4	39		.47

DEPTH CM	(PARTICLE SIZE ANALYSIS, MM, 3B, 3B1, 3B2) VOL. GT 2 PCT	WEIGHT GT 75 PCT	75-20	20-5	5-2	LT .074	20-2 LT20 PCT	BULK DENSITY 4A1D 1/3-BAR G/CC	4A1H OVEN DRY G/CC	4D1 COLE	WATER CONTENT 4B1C 1/10 BAR PCT	4B1C 1/3-BAR PCT	4B2 15-BAR PCT	4C1 WRD CM/CM	CARBONATE 6E1B LT 2 PCT	3A1A LT .002 PCT	(-PH-) 8C1A 1/1 H2O	8C1E 1/2 CACL
5-0	0	0	0	0	0		0						50.5				5.8	5.8
0-25	0	0	0	0	0	99	0	1.30	1.55	.059		31.5	23.4	.11			5.8	5.7
25-36	0	0	0	0	0	100	0	1.50	1.61	.024		28.2	16.9	.17			6.9	6.8
36-48	0	0	0	0	0	100	0	1.43	1.54	.025		26.9	18.0	.13	TR		7.3	7.3
48-74	0	0	0	0	0	90	0	1.55	1.61	.013		21.7	13.4	.13	28		7.8	7.7
74-102	0	0	0	0	0	92	0	1.54	1.59	.011		24.0	13.1	.17	19		7.9	7.8
102-147	0	0	0	0	0	99	0	1.56	1.74	.037		24.6	15.0	.15	4	0	7.8	7.6

DEPTH CM	(ORGANIC MATTER) 6A1A ORGN CARB PCT	6B1A NITG PCT	C/N	IRON 6C2B EXT FE PCT	PHOS TOTL PCT	(EXTRACTABLE BASES 5B4A) 6N2E CA	6O2D MG	6P2B NA	6Q2B K	SUM EXTB (MEQ / 100 G)	ACTY 6H1A BACL TEA	AL 6G1E KCL EXT	(CAT EXCH) 5A3A EXTB ACTY	5A6A NHAC	RATIO 8D1 NHAC TO CLAY	RATIO 8D3 CA TO MG	CA 5F1 SAT NHAC PCT	(BASE SAT) 5C3 EXTB ACTY PCT	5C1 NHAC PCT
5-0	22.9	1.32	17																
0-25	4.30	.318	14	.2		19.3	11.3	7.5	.2	38.3	14.0		52.3	31.7	1.05	1.7	61	73	121
25-36	1.08	.066	17	.3		13.7	8.9	5.3	.2	28.1				23.5	.90	1.5			
36-48	.81	.058	14	.3		12.0	7.8	5.2	.3	25.3				22.2	.83				
48-74	.24			.6		11.7	6.0	4.4	.2	22.3				17.3	.71				
74-102	.16			.5		11.0	5.5	4.3	.2	21.0				17.6	.78				
102-147	.16			.8		9.6	6.4	5.1	.2	21.3				18.3	.78				
						27.8B	26.5B	70.0B	.2B										

DEPTH CM	(SATURATED PASTE) 8E1 REST OHM-CM	8C1B PH	8A H2O PCT	NA 5D2 ESP PCT	NA 5E SAR	SALT 8D5 TOTL SOLU PPM	GYP 6F1A PCT	(SATURATION EXTRACT 8A1) 8A1A EC MMHOS/CM	6N1B CA	6O1B MG	6P1B NA	6Q1B K	6I1A CO3	6J1A HCO3	6K1A CL	6L1A SO4	6M1A NO3	ATTERBERG 4F1 LQID LMIT PCT	4F2 PLST INDX
5-0																			
0-25	260	4.5	101	8	9	8400		10.5	35.0	30.5	50.5	.2	.0	.2	42.7	34.1			
25-36																			
36-48																			
48-74	510	7.8	46.7	16	11	1800		5.30	11.0	7.3	33.5	.2	.0	1.1	36.9	12.2			
74-102																			
102-147	410	7.6	70.8	15	12	2800		5.30	10.3	7.3	34.5	.2	.0	.4	39.0	12.2			
					13			11.0	27.8	26.5	70.0	.2							

DEPTH CM	(HISTOSOL CHARACTERIZATION) 8F MINL CONT PCT	(STATE OF DECOMPOSITION) 8G (FIBER VOL) UNRB PCT	RUB PCT	8H PYROPHOSPHT SOLUBILITY (MUNS COLOR)	PH 8C1E .01M CACL	(BULK DEN) 4A3A FILD STAT G/CC	4A1I 1/3B REWT G/CC	COLE 4D1 RE-WET	SUBS RES-IDUE PCT	(WATER CONTENT) 4B4 FILD STAT PCT	4B1C 1/3B REWT PCT	4B2 15-BAR PCT	4C1 WRD CM/CM
5-0	65	32	8	10YR 5/3	5.6				199			42.7	
0-25	91				5.7	1.46	1.41			44.5	22.1	17.4	.07
25-36					7.2	1.78	1.46			26.6	27.9	12.9	.23
36-48					7.3	1.48	1.42			29.8	25.1	12.6	.18
48-74					7.5	1.58	1.50			20.2	20.4	10.9	.14
74-102					7.4	1.58	1.51			19.0	22.9	10.8	.18
102-147					7.2	1.62	1.55			28.0	23.3	11.1	.19

CLAY MINERALOGY (7A2C)
048-74 MT3 MC2 MI2 KK2.
102-127 MT3 MI2 KK2.
COMMENTS: CLAY MINERALOGY MONTMORILLONITIC BORDERING ON MIXED. CLAYS BETTER ORDERED IN B31G HORIZON. IDENTIFICATION OF KAOLINITE SOMEWHAT TENTATIVE BECAUSE 2ND ORDER MC PEAK COINCIDES WITH KK PEAK AT 7 ANGSTROMS.
RELATIVE AMOUNTS: (X-RAY) 5 = DOMINANT 4 = ABUNDANT 3 = MODERATE 2 = SMALL 1 = TRACE.
MINERAL CODE: MT = MONTMORILLONITE MI = MICA KK = KAOLINITE MC = MONTMORILLONITE-CHLORITE

(A) GROUND WATER (69L171).
(B) MEQ/LITER WATER ANALYSIS.

Classification: Fine-silty, mixed, thermic Typic Haplaquoll.
Soil series: Not designated 1/.

Pedon No.: S69LA-23-1.
Location: Iberia Parish, Louisiana, about 3 miles southeast of Delcambre, 99 yards west of field road, SW¼ SW¼ sec. 10, T. 13 S., R. 5 E.
Vegetation and use: Pasture recently burned; marshhay cordgrass, three square needlerush.
Slope and land form: Level, less than one percent slope, drained marshland.
Drainage and permeability: Very poorly drained, very slowly permeable.
Parent material: Prairie Age silty deposits.
Climate: Precipitation 60 inches, Temperature 68 degrees F.
Sampled by: David F. Slusher, Warren Lynn, Leo Juve, Henry Clark, A. G. White, Al Wilhite.
Described by: Warren L. Cockerham, William McKinzie, 2/10/69.

O2--5 to 0 cm (2 to 0 in.); very dark gray (10YR 3/1) muck; weak medium and fine granular structure; nonplastic; many live roots; about 50 percent herbaceous fiber, 9 percent after rubbing; strong odor of hydrogen sulphide after dilute addition of HCl; medium acid; abrupt smooth boundary.

A11--0 to 25 cm (0 to 10 in.); black (10YR 2/1) silty clay loam; very coarse prismatic structure that parts into moderate medium subangular blocky structure; plastic, slightly sticky; many roots; few fine light olive brown concretions; few olive brown stains on horizontal ped faces and in channels; medium acid; gradual smooth boundary.

A12--25 to 36 cm (10 to 14 in.); very dark gray (10YR 3.5/1) silty clay loam; weak very coarse prisms that part into weak coarse and medium subangular blocky structure; plastic, nonsticky; few fine roots; thin discontinuous olive brown ped coatings; vertical cracks up to 5 mm wide; neutral; gradual wavy boundary.

A3--36 to 48 cm (14 to 19 in.); very dark gray (10YR 3.5/1) silty clay loam; few fine distinct light olive brown mottles; weak medium subangular blocks that part into weak fine granular structure; few fine roots; few fine pores thin patchy clay films; few vertical cracks up to 5 mm wide; neutral; abrupt wavy boundary.

B21cag--48 to 74 cm (19 to 29 in.); gray (5Y 5/1) silty clay loam; weak coarse prisms that part into moderate fine subangular blocky structure; friable; few fine roots; common fine pores; many irregular shaped lime concretions of up to ½ inch in diameter; mildly alkaline.

B22cag--74 to 102 cm (29 to 40 in.); same as above; separated for sampling.

B31g--102 to 147 cm (40 to 58 in.); light olive brown (2.5Y 5/4) silty clay loam; many medium and coarse distinct gray (5Y 5/1) mottles; weak moderate subangular blocky structure; firm, compact; few fine roots; thin patchy clay films on surfaces of peds; mildly alkaline.

B32g--147 to 224 cm (58 to 88 in.); gray (5Y 5/1) silty clay loam; many medium distinct light olive brown (2.5Y 5/4) mottles and common fine distinct gray mottles; massive; very compact and firm; few fine black specks throughout mass; neutral.

Remarks: Water table at 12 inches. Munsell colors for moist soil. Sampled from pit to 52 inches; below 52 inches with bucket auger.

1/ This pedon was sampled as a variant of the Harris series, which is in a fine, montmorillonitic family.

SOIL CLASSIFICATION-VERTIC HAPLAQUOLL
FINE, MONTMORILLONITIC, THERMIC
SERIES - - - - - - -IBERIA

U. S. DEPARTMENT OF AGRICULTURE
SOIL CONSERVATION SERVICE, MTSC
NATIONAL SOIL SURVEY LABORATORY
LINCOLN, NEBRASKA

SOIL NO - - - - - - 22 ST. MARY PARISH.

GENERAL METHODS- - -1A,1B1B,2A1,2B SAMPLE NOS. 52906-52910

DEPTH CM	HORIZON	SAND 2-.05	SILT .05-.002	CLAY LT .002	FINE CLAY LT .0002	VCOS 2-1	CORS 1-.5	MEDS .5-.25	FNES .25-.10	VFNS .10-.05	COSI .05-.02	FWSI .02-.005	VFSI .005-.002	SAND 2-.10	INTR II .2-.02	FINE CLAY TO CLAY PCT	NON-CO3-CLAY PCT	RATIO 8D1 15-BAR TO CLAY
		(- - - - - - - - - - - - - - - - PARTICLE SIZE ANALYSIS, LT 2MM, 3A1, 3A1A, 3A1B - - - - - - - - - -)																
						(- - - - - SAND - - - - - -)					(- - -SILT- - - -)							
		(- PCT LT 2MM -)																
0-10	AP	12.7	60.7	26.6		.0	.1	.2	1.5	10.9	26.4	34.3		1.8	38.6			
10-25	A12	9.0	62.0	29.0		.0	.1	.1	1.0	7.8	25.4	36.6		1.2	34.1			
25-56	B21G	9.9	49.3	40.8		.0	.1	.3	.7	8.8	24.5	24.8		1.1	33.8			
56-71	B22G	12.9	47.3	39.8		.7	.9	.4	1.3	9.6	23.8	23.5		3.3	34.2			
71-112	B3	10.1	56.9	33.0		.1	.2	.2	.5	9.1	28.3	28.6		1.0	37.8			

DEPTH CM	(PARTICLE SIZE ANALYSIS, MM, 3B, 3B1, 3B2) VCL. GT 2 PCT	GT 75 PCT	75-20	20-5	5-2	LT .074	20-2 PCT LT20	(BULK DENSITY) 4A1D 1/3-BAR G/CC	4A1B OVEN DRY G/CC	4D1 COLE	(- - - -WATER CONTENT- - - -) 4B1C 1/10 BAR PCT	4B1C 1/3-BAR PCT	4B2 15-BAR PCT	4C1 WRD CM/CM	CARBONATE 6E1B LT 2 PCT	3A1A LT .002 PCT	(- -PH - -) 8C1A 1/1 H2O	8C1B 1/2 CACL
	(- - - - - - - WEIGHT - - - - - - -)																	
			(- - - PCT LT 75 - - -)															
0-10	0	0	0	0	0		0										6.2	
10-25	0	0	0	0	0		0										6.4	
25-56	0	0	0	0	0		0										7.6	
56-71	0	0	0	0	0		0										7.9	
71-112	0	0	0	0	0		0										7.6	

DEPTH CM	(ORGANIC MATTER) 6A1A ORGN CARB PCT	6B1A NITG PCT	C/N	IRON 6C2B EXT FE PCT	PHOS TOTL PCT	(- -EXTRACTABLE BASES 5B4A- -) 6N2E CA	6O2D MG	6P2B NA	6Q2B K	SUM EXTB	ACTY 6H1A BACL TEA	AL 6G1E KCL EXT	(CAT EXCH) 5A3A EXTR ACTY	5A6A NHAC	RATIO 8D1 NHAC TO CLAY	RATIO 8D3 CA TO MG	CA 5F1 SAT NHAC PCT	(BASE SAT) 5C3 EXTB ACTY PCT	5C1 NHAC PCT
						(- - - - - - - - - - -MEQ / 100 G- - - - - - - - - -)													
0-10	1.65					14.8	8.8	.2	.1		5.1		30.0					80	
10-25	1.66					15.9	10.2	.3	.1		5.8		32.3					82	
25-56	1.06					19.3	14.6	.5	.2		3.1		37.7					92	
56-71	.69					26.2	13.9	.5	.2		1.3		42.1					97	
71-112	.29					13.5	10.8	.4	.2		1.8		26.7					93	

Classification: Fine, montmorillonitic, thermic Vertic Haplaquoll.
Soil series: Iberia.
Series classification: Same as pedon.

Pedon No.: 22.
Location: St. Mary Parish, La., about 9 miles northwest of Franklin; Home Place Plantation.
Slope: 0 to 1 percent.
Drainage and permeability: Poorly drained; very slow permeability.
Parent material: Mississippi River alluvium.
Climate: Precipitation 59 inches, Temperature 69 degrees F.
Sampled by: B. N. Driskell, September 26, 1952.
Described by: S. A. Lytle, September 26, 1952, horizon designations by David F. Slusher, 12/9/75.

Ap--0 to 10 cm (0 to 4 in.); very dark gray (10YR 3/1) and black (10YR 2/1) silty clay; strong fine granular structure; slightly plastic; neutral.

A12--10 to 25 cm (4 to 10 in.); very dark gray (10YR 3/1) silty clay; moderate medium platy and moderate medium angular blocky structure (plow sole); compact; slightly plastic; neutral.

B21g--25 to 56 cm (10 to 22 in.); very dark gray (10YR 3/1) clay; occasional distinct fine mottles of brown (10YR 5/3) and light yellowish brown (10YR 6/4) in lower part; strong medium angular blocky structure; plastic; moderately alkaline.

B22g--56 to 71 cm (22 to 28 in.); dark gray (10YR 4/1) clay; mottled pale brown (10YR 6/3), yellowish brown (10YR 5/4) and brown (10YR 5/3); strong medium angular blocky structure; plastic, sticky; few small soft rounded iron concretions; few marble size, irregular shaped soft and hard lime concretions; moderately alkaline.

B3--71 to 112 cm (28 to 44 in.); light yellowish brown (10YR 6/4) silty clay loam to light silty clay; mottled light brownish gray (10YR 6/2) with large mottles and veins of dark gray (10YR 4/1) and gray (10YR 5/1); massive to weak columnar structure; friable; slightly plastic; few lime concretions; moderately alkaline.

Remarks: Munsell colors for moist soil unless indicated otherwise.

Soil Classification: Typic Ochraquult; fine-loamy, siliceous, thermic.

Series not Designated

Lab. Nos. 46697-704 (45 La 56-2-1 thru 8)

Depth inches	1B1a Clay	III	USDA silt	VFS	FS	MS	CS	VCS	3A1 Horizon
	Size classes %								
0- 1	21.2	20.2	34.0	24.7	18.7	0.7	0.6	0.1	A_{11}
1- 4	16.7	20.4	35.1	27.6	20.1	0.2	0.2	0.1	A_{12}
4- 8	11.7	22.1	36.0	31.0	21.2	0.1	0.0	0.0	A_2
8-16	19.8	17.5	31.8	28.7	19.6	0.1	0.0	0.0	B_1
16-25	26.4	21.2	34.1	22.7	16.6	0.1	0.1	0.0	B_{21}
25-40	32.5	15.3	26.5	26.9	13.9	0.1	0.1	0.0	B_{22}
40-48	27.3	11.5	21.4	31.4	19.4	0.2	0.2	0.1	B_3
48-61	24.8	11.0	21.7	32.8	20.4	0.2	0.1	0.0	C

Depth inches	6N2b Ca	602b Mg	M.E./100 g soil K	Mn	H1a H	6L1a S+	% B. sat	pH 8C1a	% O.C. 6A1a	P ppm 6S1a
			6Q2b	6D1a			5C3			
0- 1	2.9	.5	.2	.06	1.8	5.5	67	4.9	3.42	8.0
1- 4	2.0	.4	.2	.01	1.3	3.9	17	5.1	1.83	4.4
4- 8	.7	.2	.2	T	8.0	9.1	12	4.8	.50	5.6
8-16	.1	.4	.1	T	8.2	8.8	7	4.3	.35	4.4
16-25	.1	.5	.1	0	10.8	11.5	6	4.2	.24	4.0
25-40	.2	.6	.2	T	12.6	13.6	7	4.2	.22	2.8
40-48	.2	.5	.2	T	12.6	13.5	7	4.1	.16	4.4
48-61	.2	.4	.1	T	12.4	13.1	5	4.0	.15	2.8

Horizon	Depth inches	Exchange capacity m.e.100 g 5A3a	Surface M^2/g Total	Exterior	Inner	% Inner surface	Kaolin %	Quartz %	Gibbsite %
A_1	0- 1		190	65	125	15	25		
A_2	1- 4		235	75	160	20	25		
B_1	8-16	44	315	110	205	30	25		
B_{22}	25-40	42	340	170	170	25	25		

Results of X-ray diffraction patterns of oriented samples.

0-1 Kaolin, mixed layer mineral.

1-4 Kaolin, mixed layer mineral containing expandable layers.

8-16 Kaolin, mixed layer mineral containing expandable layers.

25-40 Kaolin, mixed layer mineral containing expandable layers.

Classification: Fine-loamy, siliceous, thermic, Typic Ochraquult.
Soil series: Not designated 1/.

Pdeon No.: S45LA-56-2.
Location: Union Parish, Louisiana; 1.6 miles southwest of Farmerville, T. 20 N., R. 1 W., on State Highway 33, on low terrace (20 to 25 feet above flood plain) of Bayou D'Arbonne.
Topography: Nearly level with low circular mounds. Sample collected on nearly level area.
Vegetation: Recently cut-over mixed pine and hardwoods. Principal species are red gum, swamp white oak, water oak, black gum, with a scattering of shortleaf and loblolly pine; thick undergrowth of red gum sprouts, youpon, bull briers, French mulberry and other shrubs, weeds, and briars.
Climate: Precipitation 50 inches, Temperature 65 degrees F.
Sampled by: L. T. Alexander, I. L. Martin, A. E. Shearin, and E. H. Templin; November 3, 1945.
Described by: A. E. Shearin. Horizons redesignated by David F. Slusher, January 5, 1976.

A11--0 to 3 cm (0 to 1 in.); dark grayish brown (2.5Y 4/2), grayish brown (10YR 5/2) dry, very friable, very fine sandy loam with well developed fine and medium granular structure. Very fine brownish spots and streaks noticeable. Well matted with roots.

A12--3 to 10 cm (1 to 4 in.); mottled grayish brown (10YR 4/2) and dark brown (7.5YR 4/2), very friable very fine sandy loam with weakly developed fine granular structure. The soil when dry is dominantly light brownish gray (10YR 6/2). Mottlings are of low contrast. Roots less numerous than above. Diffuse lower boundary.

A2g--10 to 20 cm (4 to 8 in.); mottled light brownish gray (2.5Y 6/2) and yellowish brown (10YR 5/8) very friable, very fine sandy loam. When dry the soil is dominantly light brownish gray (10YR 6/2). Mottles are of low contrast. Displaced pieces break into irregular coarse fragments which break under slight pressure into poorly developed fine and medium granular structure. Pinholes fairly numerous, as are fine roots.

B1tg--20 to 41 cm (8 to 16 in.); mottled light brownish gray (2.5Y 6/2), yellowish brown (10YR 5/8), and red (2.5YR 5/8) friable, silty clay loam with weakly developed fine and medium blocky structure. Mottles are of medium contrast. When dry, the soil is mottled light gray (2.5Y 7/2) and brownish yellow (10YR 6/8). Few fine roots present; pinholes fairly numerous. Moderately plastic when wet, hard when dry.

B21t--41 to 64 cm (16 to 25 in); coarsely mottled light brownish gray (2.5Y 6/2), yellowish brown (10YR 5/8) and red (2.5YR 5/8) friable heavy clay loam or light clay with weakly developed medium and coarse blocky structure. Mottles are of medium contrast. When dry the soil is gray (5YR 6/1) brownish yellow (10YR 6/8) and red (2.5YR 5/8). The material is moderately plastic when wet, and hard when dry. Pinholes are numerous, and few rootcasts are present.

B22tg--64 to 102 cm (25 to 40 in.); mottled light brownish gray (2.5Y 6/2) yellowish brown (10YR 5/8) and red (2.5YR 4/8) firm light silty clay with same structure as in layer above. Light brownish gray (2.5Y 6/2) makes up about half of the mass. Mottles are of strong contrast. The soil is mottled gray (5YR 6/1), brownish yellow (10YR 6/8), and red (2.5YR 5/8) when dry. Moderately to strongly plastic when wet, hard to very hard when dry. A few root channels coated with light brownish gray (2.5Y 6/2) and pinholes are present. Diffuse boundary.

B31g--102 to 122 cm (40 to 48 in.); colors moist and dry are same as above, but proportion of red (2.5YR 5/8) is lower. Mottlings are coarse and of strong contrast. This is a firm clay loam with pockets of silty clay and sandy loam, essentially structureless. Dead rootcasts coated with light brownish gray (2.5Y 6/2) fairly numerous; few pinholes. Moderately to strongly plastic when wet. Diffuse boundary.

B32g--122 to 155 cm (48 to 61 in.); mottled light olive gray (5Y 6/2) strong brown (7.5YR 5/8), and red (2.5YR 4/8) friable, sandy clay loam with pockets of silty clay and sandy loam; plastic. Mottlings are coarse and of strong contrast. The soil is mottled light gray (5Y 7/2), reddish yellow (7.5YR 6/8), and red (2.5YR 4/8) when dry.

Remarks: Munsell colors for moist soil unless otherwise indicated.

1/ Sampled as a representative of the Leaf series.

SOIL SURVEY LABORATORY Beltsville, Maryland

SOIL TYPE Shatta Taxadjunct **LOCATION** Bossier Parish, Louisiana

SURVEY NOS. S56La-8-2 **LAB. NOS.** 56614 - 56621

DEPTH INCHES	HORIZON	1B1a PARTICLE SIZE DISTRIBUTION (in mm.) (per cent) VERY COARSE SAND 2-1	COARSE SAND 1-0.5	MEDIUM SAND 0.5-0.25	FINE SAND 0.25-0.10	VERY FINE SAND 0.10-0.05	SILT 0.05-0.002	CLAY < 0.002	3A1 0.2-0.02	0.02-0.002	2A2 > 2	TEXTURAL CLASS
0-7	A_p	0.6	0.7	0.3	5.4	41.9	46.0	5.1	79.5	12.8	--	vfsl
7-9	A_3	0.3	0.6	0.2	2.9	24.7	54.3	17.0	59.2	22.1	--	sil
9-20	B21t	0.4	0.6	0.2	2.6	25.2	47.6	23.4	54.1	20.9	--	l
20-27	B22t	0.2	0.4	0.2	2.6	28.5	45.2	22.9	57.9	18.0	--	l
* 27-31	Bx1	0.2	0.2	0.1	2.4	27.3	47.8	22.0	61.1	16.1	--	l
* 31-38	Bx2	0.1	0.1	0.1	2.0	27.3	45.3	25.1	59.0	15.4	--	l
* 38-45	Bx3	0.1	0.0	0.0	1.3	28.3	39.5	30.8	57.0	11.8	--	cl
* 45-61	Bx4	0.0	0.0	0.0	0.5	31.1	40.1	28.3	60.6	10.9	--	cl

*A few concretions present in sands

8C1a pH 1:1 *	1:5	1:10	ORGANIC MATTER 6A1a ORGANIC CARBON %	6B1a NITROGEN* %	C/N*	EST% SALT (BUREAU CUP)	ELECTRICAL CONDUCTIVITY EC×10³ MILLIMHOS PER CM @25°C.	$CaCO_3$ equivalent %	GYPSUM me./100g. SOIL	MOISTURE TENSIONS 1/10 ATMOS. %	1/3 ATMOS. %	15 ATMOS. %
5.8			0.20	0.032	11.5							
5.6			0.17									
5.3			0.13	0.029	7.5							
5.1			0.04									
5.1			0.00									
5.1			0.00									
5.0			0.00									
4.8			0.04									

*Furnished by B. N. Driskell - Louisiana State University

5A1a CATION EXCHANGE CAPACITY (Sum)	EXTRACTABLE CATIONS 6N2b Ca	6O2b Mg	6H1a H	6P2a Na	6Q2a K	5B1a BASE SAT. %	SATURATION EXTRACT SOLUBLE Na	K				MOISTURE AT SATURATION %
	milliequivalents per 100g. soil →					5C3	← milliequivalents per liter →					
4.3	1.4	0.6	2.1	< 0.1	0.2	51						
7.4	2.7	1.3	3.1	< 0.1	0.3	58						
10.5	2.8	2.4	4.9	0.1	0.3	53						
10.2	0.9	1.8	7.1	0.1	0.3	30						
9.2	0.4	1.8	6.7	0.1	0.2	27						
10.8	0.5	1.9	8.0	0.1	0.3	26						
13.1	0.2	2.5	9.9	0.2	0.3	24						
14.9	0.2	3.4	10.8	0.2	0.3	28						

Classification: Fine-silty, siliceous, thermic Typic Fragiudult.
Soil series: Shatta taxadjunct 1/.
Series classification: Same as pedon.

Pedon No.: S56LA-8-2.
Location: Bossier Parish, La., 1.5 miles southwest of Ivan, near Egan Young's Store; NE¼NE¼ sec. 36, T. 21 N., R. 12 W.
Parent material: Loamy alluvium of a terrace.
Climate: Precipitation 47 inches, Temperature 65 degrees F.
Described by: Marvin Lawson and L. L. Loftin, 7/24/56. Horizons redesignated by David F. Slusher, 8/15/75.

Ap--0 to 18 cm (0 to 7 in.); dark brown (7.5YR 4/4) very fine sandy loam; moderate to strong fine granular structure; friable; medium acid.

A3--18 to 23 cm (7 to 9 in.); dark brown (7.5YR 4/4) very fine sandy loam; massive; compact and hard when dry; medium acid.

B21t--23 to 51 cm (9 to 20 in.); yellowish red (5YR 4/6) silty clay loam; moderate medium subangular blocky structure; friable; moist, compact and firm when dry; clay skins of darker shade of color on peds; few roots; strongly acid.

B22t--51 to 69 cm (20 to 27 in.); strong brown (7.5YR 5/6) silty clay loam; weak medium subangular blocky structure; friable; few brown concretions; few small vesicles and small roots; few brown concretions; some pinkish gray (7.5YR 6/2) silt coating on peds and in cracks; very strongly acid.

Bx1--69 to 79 cm (27 to 31 in.); mottled strong brown (7.5YR 5/6) and yellowish red (5YR 5/8) heavy silt loam; contains a few mottles of reddish yellow (5YR 6/8) and a few streaks of light yellowish brown (10YR 6/4); moderate medium subangular blocky structure; compact and firm; contains many fine vesicles; very strongly acid.

Bx2--79 to 97 cm (31 to 38 in.); yellowish red (5YR 5/6) sandy clay loam; mottled red (2.5YR 4/8); strong medium subangular blocky structure; friable; compact and firm when dry; contains many small vesicles; few reddish brown concretions and a few streaks of light brown (7.5YR 6/4); very strongly acid.

Bx3--97 to 114 cm (38 to 45 in.); yellowish red (5YR 4/8) silty clay loam; reddish yellow (5YR 6/6); moderate to strong medium angular blocky structure; friable; contains a few streaks of pinkish gray (7.5YR 6/2); very strongly acid.

Bx4--114 to 155 cm (45 to 61 in.); red (2.5YR 4/8) sandy clay loam; mottled dark red (2.5YR 3/6); strong coarse angular blocky structure; friable; veins of pinkish gray (7.5YR 6/2) very fine sand in cracks and on some peds; very strongly acid.

Remarks: Munsell colors for moist soil.

1/ 2.5YR and 5YR hues are outside the series range (12/72).

SOIL SURVEY LABORATORY Lincoln, Nebr. Aug., 1958

SOIL TYPE Shatta Taxadjunct LOCATION Bossier Parish, Louisiana

SURVEY NOS. S57La-8-3 LAB. NOS. 5654-5660

DEPTH INCHES	HORIZON	PARTICLE SIZE DISTRIBUTION (in mm.) (per cent) 1B1a VERY COARSE SAND 2-1	COARSE SAND 1-0.5	MEDIUM SAND 0.5-0.25	FINE SAND 0.25-0.10	VERY FINE SAND 0.10-0.05	SILT 0.05-0.002	CLAY < 0.002	3A1 0.2-0.02	0.02-0.002	2A2 > 2	TEXTURAL CLASS
0-5	Ap	1.0	0.5	0.2	12.4	45.0	36.0	4.9	83.8	9.0	-	vfsl
5-11	B21t	0.8	0.4	0.1	7.8	30.1	41.3	19.5	61.7	17.2	-	l
11-17	B22t	0.4a	0.4a	0.1a	7.2a	26.7a	39.5	25.7	55.0	18.2	-	l
17-25	B23t	0.7a	0.3a	0.1a	5.1a	28.9a	38.7	26.2	54.9	17.7	-	l
25-33	B24	0.8a	0.3a	0.1a	7.7a	30.7a	38.3	22.1	60.0	16.6	-	l
33-44	Bx	0.5a	0.5a	0.2a	8.9a	34.0a	37.9	18.0	63.7	16.9	-	l
44-54+		0.1a	0.2a	0.1a	5.6a	24.0a	27.0	43.0	44.3	12.2	-	c

pH 8C1a 1:1	1:5	1:10	ORGANIC MATTER 6A1a ORGANIC CARBON %	6B1a NITROGEN %	C/N			$CaCO_3$ equivalent %		MOISTURE TENSIONS 1/10 ATMOS. %	1/3 ATMOS. %	4B2 15 ATMOS. %
6.1			0.45	0.038	12							2.2
5.0			0.20	0.026	8							6.9
4.7			0.14	0.029	5							9 8
4.8			0.11	0.026	4							10.1
5.0			0.06									8.4
5.1			0.05									6.5
4.6			0.06									17.0

5A1a CATION EXCHANGE CAPACITY NH_4Ac	EXTRACTABLE CATIONS 6N2b Ca	6O2b Mg	6H1a H	6P2a Na	6Q2a K	BASE SAT. % NH_4Ac EXCH. 5C1	Base Sat. % on Sum + H 5C3	5B1a Sum - H	5A2a Sum + H	Ca/Mg		
	milliequivalents per 100g. soil →											
3.1	1.4	0.8	2.0	-	0.2	77	54	2.4	4.4	1.8		
7.1	1.7	1.6	5.7	0.1	0.2	51	39	3.6	9.3	1.1		
10.5	-	1.5	9.4	-	0.2	16	15	1.7	11.1	-		
9.8	-	1.2	10.7	0.1	0.2	15	12	1.5	12.2	-		
8.4	-	1.0	8.6	0.1	0.1	14	12	1.2	9.8	-		
6.8	-	0.9	6.1	0.1	0.1	16	15	1.1	7.2	-		
21.7	-	4.8	17.2	1.1	0.4	29	27	6.3	23.5	-		

a. Common, smooth brown condr. (Fe-Mn?)

Classification: Fine-silty, siliceous, thermic Typic Fragiudult.
Soil series: Shatta taxadjunct 1/.
Series classification: Same as pedon.

Pedon No.: S57LA-8-3.
Location: Bossier Parish, La. 12 miles southeast of Plain Dealing, NW¼NE¼ sec. 17; R. 11 W., T. 21 N.; 1288 feet north of center of road intersection (LA-160 and LA-529), then 157 feet east of center of La-529.
Vegetation: Native - pine-hardwood forest; present - ryegrass and crimson clover.
Relief: Nearly level (1-3 percent slope) terrace.
Drainage: Moderately well drained; medium runoff and internal drainage.
Permeability: Moderately slow.
Climate: Precipitation 47 inches, Temperature 65 degrees F.
Sampled by: James S. Allen and Bruce Chaffin.
Described by: Lester L. Loftin, 5/21/57. Horizons redesignated by David F. Slusher, 8/15/75.

Ap--0 to 13 cm (0 to 5 in.); brown (10YR 5/3) very fine sandy loam; weak medium granular structure; very friable; common small soft to hard dark concretions; numerous roots; medium acid; abrupt smooth boundary.

B21t--13 to 28 cm (5 to 11 in.); yellowish red (5YR 4/6) clay loam; weak medium subangular structure; friable; many roots; very strongly acid; clear smooth boundary.

B22t--28 to 43 cm (11 to 17 in.); yellowish red (5YR 4/6) clay loam; weak medium subangular structure; friable; many roots; very strongly acid; clear smooth boundary.

B23t--43 to 64 cm (17 to 25 in.); yellowish brown (10YR 5/4) silty clay loam; very faint mottling of yellowish red; weak medium angular blocky structure; friable; few roots; common small soft to hard dark concretions; very strongly acid; clear smooth boundary.

B24t--64 to 84 cm (25 to 33 in.); light yellowish brown (10YR 6/4) loam; many medium prominent strong brown (7.5YR 5/6) mottles; strong coarse angular blocky structure that breaks into moderate medium subangular blocky structure; firm; few small soft to hard dark concretions; very strongly acid; abrupt wavy boundary.

Bx--84 to 112 cm (33 to 44 in.); light gray (10YR 7/2) silty clay loam; common medium and large distinct brownish yellow (10YR 6/6) mottles; weak coarse prismatic structure that breaks into weak medium subangular blocky structure; very firm; very hard when dry; many medium soft to hard dark concretions; very strongly acid; abrupt wavy boundary.

IIB3--112 to 137 cm (44 to 54 in.); light gray (2.5YR 7/2) clay; common medium prominent yellowish red (5YR 4/6) mottles; weak coarse prismatic structure that breaks into strong very fine angular blocky structure; very firm, very hard when dry; films of very fine sand between prisms; extremely acid.

Remarks: Munsell colors for moist soil.

1/ 5YR hues of B21t and B22t and clay texture of IIB3 are outside the series range (11/73).

Soil Classification: Typic Hapludult; fine-loamy, siliceous, thermic.

Cuba
Lab. Nos. 45635-641 (45 La 31-2-1 thru 7)

Depth inches	1B1a				Size classes %				3A1
	Clay	III	USDA silt	VFS	FS	MS	CS	VCS	Horizon
0- 6.5	7.7	18.6	38.4	26.4	25.8	1.0	0.4	0.3	A_p
6.5-12.5	10.5	17.7	37.4	27.2	23.9	0.6	0.3	0.1	A_2
12.5-16	13.4	17.6	37.3	26.2	22.3	0.5	0.2	0.1	A_3
16-22	23.1	18.2	36.2	23.5	16.7	0.3	0.1	0.1	B_{21}
22-34	30.1	18.7	39.6	21.9	8.2	0.2	0	0	B_{22}
34-46	32.9	36.9	45.1	14.6	7.1	0.3	0	0	B_3
46-57	21.0	12.1	17.9	17.6	41.9	1.5	0.1	0	C

Depth inches	M.E./100 g soil						% B. sat	pH	% O.C.	PP ppm
	Ca	Mg	K	Mn	H	S+				
	6N2b	6O2b	6Q2b	6D1a	H1a	6L1a	5C3	8C1a	6A1a	6S1a
0- 6.5	3.6	.9	.4	.06	1.9	6.9	72	6.3		1.0
6.5-12.5	.7	1.2	.4	.11	2.3	4.7	51	5.4		3.2
12.5-16	.4	1.1	.5	.13	4.6	6.7	32	4.8		6.8
16-22	.6	1.8	.5	.03	6.6	9.5	30	4.6		4.8
22-34	.9	2.0	.4	0	8.9	12.1	27	4.6		2.8
34-46	1.4	2.2	.4	0	10.0	13.9	28	4.6		4.4
46-57	.6	1.2	.2	0	6.5	8.7	24	4.6		2.4

Horizon	Depth inches	Exchange capacity m.e/100 g	Surface M^2/g			% Inner surface	Kaolin %	Quartz %	Gibbsite %
			Total	Exterior	Inner				
		5A3a							
A_p	0-6.5	90	170	65	105	15	20		0
A_2	6.5-12.5	45	170	75	95	10	25		0
A_3 B	12.5-16	50	190	175	15	5	25	15	0
B_{21}	16-22	41	210	90	120	15	25		0

Results of X-ray diffraction patterns of oriented samples.
0-6 1/2 Kaolin, non-expanding 14A mineral.
6 1/2-12 1/2 Kaolin, non-expanding 14A mineral.
12 1/2-16 Kaolin, non-expanding 14A mineral.
16-22 Kaolin, non-expanding 14A mineral.

Classification: Fine-loamy, siliceous, thermic Typic Hapludult.
Soil series: Cahaba.
Series classification: Same as pedon.

Pedon No.: S45LA-31-2.
Location: Lincoln Parish, La., 3.2 miles east of Choudrant, T. 18 N., R. 1 W., an old abandoned field or small cut-over area at east edge of low terrace, 10 to 20 feet above the flood plain of a stream, north of U.S. Highway 80.
Vegetation: There is a thick growth of young oak, sassafras, red gum, and weeds. The weeds include oxeye daisies, goldenrod, beggarweeds, and broom sedge.
Topography: The terrace as a whole is gently undulating to undulating with some low spots in which there are imperfectly drained or poorly drained soils. The immediate site has a slope of about 1 percent to the southeast.
Climate: Precipitation 50 inches, Temperature 65 degrees F.
Sampled by: L. T. Alexander, I. L. Martin, A. E. Shearin, R. W. Simonson, M. B. Sturgis, and E. H. Templin.
Described by: A. E. Shearin and R. W. Simonson, June 22, 1945. Horizons redesignated by David F. Slusher, January 5, 1976.

Ap--0 to 17 cm (0 to 6½ in.); nearly loose, fine poorly granular fine sandy loam in which pinholes and wormholes are common. The horizon when moist is very dark grayish brown (10YR 3/2) in the upper part and dark brown to brown (10YR 4/3) in the lower part. When dry the soil is light brownish gray (10YR 6/2).

A2--17 to 32 cm (6½ to 12½ in.); very friable, fine poorly granular fine sandy loam in which pinholes and wormholes are common. A few cores of darker material extend down from the overlying horizon into this one. The moist soil is dark yellowish brown (10YR 4/4) uncrushed and slightly lighter crushed. There is a gradation toward brown (7.5YR 4/4) in the deeper part of the horizon. When dry the soil is yellowish brown (10YR 5/4).

A3--32 to 41 cm (12½ to 16 in.); very friable, fine weakly granular fine sandy loam in which pinholes and wormholes are common. Small worm pellets of darker material are common throughout the entire layer. The moist soil is yellowish red (5YR 5/6) uncrushed and slightly lighter crushed. When dry the soil is strong brown (7.5YR 5/6).

B21t--41 to 56 cm (16 to 22 in.); friable, medium poorly blocky sandy clay loam in which pinholes and wormholes are common. The blocks crush readily to fine, poorly granular structure. The moist soil is yellowish red (5YR 4/8) uncrushed and slightly lighter crushed. When dry the soil is yellowish red (5YR 5/8).

B22t--56 to 86 cm (22 to 34 in.); friable, medium moderately blocky sandy clay loam which is slightly heavier than the overlying horizon. There are a few pinholes and wormholes. Moist soil is red (2.5YR 4/8) whereas the dry soil is yellowish red (5YR 5/8). The color does not change with crushing.

B23t--86 to 117 cm (34 to 46 in.); friable, medium and fine blocky silty clay loam in which there are a few pinholes and wormholes. The soil is slightly plastic when wet. The moist uncrushed soil is uniformly mottled yellowish red (5YR 5/6) and brownish yellow (10YR 6/6). The pattern of mottling is of fine size; the mottles are numerous and of low contrast. Colors of the dry soil are pale yellow (2.5Y 7/4 and 2.5Y 8/3).

B3--117 to 145 cm (46 to 57 in.); friable sandy clay loam with poorly blocky structure in the upper part of the horizon and massive in the lower part. There are a few strata of sandy loam in the horizon. Pinholes are few. The moist uncrushed soil is uniformly mottled with pale yellow (2.5Y 7/4), olive brown (2.5Y 4/6) and pale yellow (5Y 7/4). The pattern of mottling is of medium size and contrast. Dry colors are comparable to those of the overlying horizon.

Remarks: Munsell colors for moist soil unless indicated otherwise.

SOIL SURVEY LABORATORY Lincoln, Nebr. Revised July, 1959

SOIL TYPE Ruston **LOCATION** Bossier Parish, Louisiana

URVEY NOS. S57La-8-1 **LAB. NOS.** 5640-5646

DEPTH INCHES	HORIZON	1B1a PARTICLE SIZE DISTRIBUTION (in mm.) (per cent) VERY COARSE SAND 2-1	COARSE SAND 1-0.5	MEDIUM SAND 0.5-0.25	FINE SAND 0.25-0.10	VERY FINE SAND 0.10-0.05	SILT 0.05-0.002	CLAY < 0.002	0.2-0.02	3A1 0.02-0.002	2A2 > 2	TEXTURAL CLASS
0-6	Ap	1.7	1.8	2.6	35.2	22.7	29.3	6.7	70.4	9.9	3.1	fsl
6-10	B1	1.5	1.2	1.9	28.0	20.8	33.6	13.0	64.5	13.6	Tr.	fsl
10-18	B21t	1.6	0.8	1.5	24.0	18.5	31.3	22.3	56.6	13.6	Tr.	l
18-24	B22t	3.2	3.3	1.5	19.0	16.2	29.9	26.9	47.1	14.4	4.1	l
24-29	B23t	3.2	1.2	1.4	22.6	18.8	28.0	24.8	55.4	10.5	4.8	l/scl
29-36	B&A1	3.4	1.5	1.6	24.7	20.0	25.8	23.0	57.2	9.2	7.9	scl
36-46+	B&A2	8.1	1.9	1.8	23.5	19.2	22.5	23.0	54.1	7.3	12.6	scl

pH 8C1a 1:1	1:5	1:10	ORGANIC MATTER 6A1a ORGANIC CARBON %	6B1a NITROGEN %	C/N			$CaCO_3$ equivalent %		MOISTURE TENSIONS 1/10 ATMOS. %	1/3 ATMOS. %	4B2 15 ATMOS. %
5.7			1.01	0.059	17.1							3.0
5.3			0.28	0.025	11							4.4
5.2			0.24	0.027	9							7.8
5.2			0.14	0.021	7							9.7
5.1			0.12									9.2
5.2			0.07									8.2
5.2			0.09									9.1

5A1a CATION EXCHANGE CAPACITY NH_4Ac	EXTRACTABLE CATIONS 6N2b Ca	6O2b Mg	6H1a H	6P2a Na	5B1a 6Q2a K	BASE SAT. % NH_4Ac EXCH. 5C1	Base Sat. % on Sum + H 5C3	5B1a Sum - H	5A3a Sum + H	Ca/Mg		
←	milliequivalents per 100g. soil				→							
4.7	1.4	0.5	3.2	-	0.2	45	40	2.1	5.3	2.8		
3.7	1.0	0.5	2.8	-	0.1	43	36	1.6	4.4	2.0		
6.4	1.2	1.4	5.7	-	0.1	42	32	2.7	8.4	0.8		
8.8	0.8	1.7	7.0	-	0.1	30	27	2.6	9.6	0.5		
7.1	0.4	1.4	7.0	-	0.1	27	21	1.9	8.9	0.3		
6.8	-	1.2	6.1	-	0.1	19	18	1.3	7.4	-		
7.6	-	1.5	6.6	-	0.1	21	20	1.6	8.2	-		

Classification: Fine-loamy, siliceous, thermic Typic Paleudult.
Soil series: Ruston 1/.
Series classification: Same as pedon.

Pedon No.: S57LA-8-1.
Location: Bossier Parish, La., 2.5 miles southeast of Plain Dealing, NW¼NE¼ sec. 19, T. 22 N., R. 12 W., 645 feet east from center of road intersection then 156 feet north of center of road up lane then west 21 feet.
Vegetation and use: Native - pine-hardwood forest; present - pine trees and carpetgrass. Was in cultivation approximately 15 years ago.
Relief: Nearly level (1 - 3 percent slope) upland.
Drainage: Well drained; medium runoff and internal drainage.
Permeability: Moderately slow.
Climate: Precipitation 47 inches, Temperature 65 degrees F.
Sampled by: James S. Allen and Bruce Chaffin, May 20, 1957.
Described by: Lester L. Loftin. Horizons redesignated by David F. Slusher, August 12, 1975.

Ap--0 to 15 cm (0 to 6 in.); dark brown (10YR 4/3) fine sandy loam; weak medium granular structure; very friable; few small hard concretions; numerous roots: medium acid; abrupt smooth boundary.

B1--15 to 25 cm (6 to 10 in.); yellowish red (5YR 4/8) fine sandy loam; weak fine and medium subangular blocky structure; friable; few small hard concretions; many roots; strongly acid; clear smooth boundary.

B21t--25 to 46 cm (10 to 18 in.); yellowish red (5YR 4/8) sandy clay loam; moderate fine and medium subangular blocky structure; friable; few medium hard concretions; roots common; very strongly acid; clear smooth boundary.

B22t-- 46 to 61 cm (18 to 24 in.); strong brown (7.5YR 5/6) sandy clay loam; moderate medium angular blocky structure; friable; common medium hard concretions; roots common; very strongly acid; clear wavy boundary.

B23t--61 to 74 cm (24 to 29 in.); strong brown (7.5YR 5/6) loam; few medium distinct mottles of dark red (2.5YR 3/6); moderate fine subangular blocky structure; friable, common medium hard concretions; few roots; very strongly acid; clear wavy boundary.

B&A1--74 to 91 cm (29 to 36 in.); variegated dark red (2.5YR 3/6) and yellowish brown (10YR 5/4) sandy clay loam with pockets of sandy loam; weak fine angular blocky structure; firm; hard and brittle when dry; common medium and large hard concretions; few roots; very strongly acid; gradual smooth boundary.

B&A2--91 to 117 cm (36 to 46 in.); variegated dark red (2.5YR 3/6) and yellowish brown (10YR 5/4) sandy clay loam with pockets of sandy loam; weak fine angular blocky structure; very firm; very hard and brittle when dry; common medium and large hard concretions; very few roots; very strongly acid.

Remarks: Munsell colors for moist soil.

1/ Colors of B horizon are outside the series range.

SOIL SURVEY LABORATORY Lincoln, Nebr. Revised July, 1959

SOIL TYPE Ruston Taxadjunct **LOCATION** Bossier Parish, Louisiana

SURVEY NOS. S57La-8-2 **LAB. NOS.** 5647-5653

DEPTH INCHES	HORIZON	1B1a PARTICLE SIZE DISTRIBUTION (in mm.) (per cent) VERY COARSE SAND 2-1	COARSE SAND 1-0.5	MEDIUM SAND 0.5-0.25	FINE SAND 0.25-0.10	VERY FINE SAND 0.10-0.05	SILT 0.05-0.002	CLAY < 0.002	0.2-0.02	3A1 0.02-0.002	2A2 > 2	TEXTURAL CLASS
0-5	Ap	2.8	0.8	0.9	46.7	24.9	20.2	3.7	80.3	7.1	13.9	lfs
5-10	A31	2.7	0.7	0.5	36.9	22.8	27.0	9.4	70.9	11.0	3.4	fsl
10-17	A32	2.8	0.5	0.4	37.6	21.9	25.1	11.7	69.4	10.8	5.0	fsl
17-27	B21t	3.0	0.6	0.4	30.7	17.7	19.8	27.8	55.0	9.2	9.5	scl
27-33	B22t	2.4	0.6	0.4	31.1	17.8	15.5	32.2	54.7	6.2	7.2	scl
33-45	B&A1	0.6	0.2	0.2	29.7	17.1	11.6	40.6	51.5	4.4	1.0	sc
45-55+	B&A2	0.1	0.1	0.1	37.0	17.4	9.8	35.5	56.9	4.5	-	scl

8C1a pH 1:1	1:5	1:10	6A1a ORGANIC CARBON %	6B1a NITROGEN %	C/N			$CaCO_3$ equivalent %		MOISTURE TENSIONS 1/10 ATMOS. %	1/3 ATMOS. %	4B2 15 ATMOS. %
5.9			0.57	0.041	14							2.1
5.5			0.25	0.019	13							2.7
5.3			0.13	0.013	10							4.1
5.2			0.11	0.021	5							9.8
5.1			0.08									11.5
4.9			0.06									15.2
4.9			0.06									12.0

5A1a CATION EXCHANGE CAPACITY NH_4Ac	EXTRACTABLE CATIONS 6N2b Ca	6O2b Mg	6H1a H	6P2a Na	6Q2a K	BASE SAT. % NH_4Ac EXCH. 5C1	Base Sat. % on Sum + H 5C3	5B1a Sum - H	5A3a Sum + H	Ca/Mg		
←	milliequivalents per 100g. soil				→							
2.9	0.8	0.4	2.8	-	0.1	45	32	1.3	4.1	2.0		
2.9	0.6	0.4	1.6	-	0.2	41	43	1.2	2.8	1.5		
3.5	0.4	0.5	2.8	-	0.1	28	26	1.0	3.8	0.8		
8.7	-	2.0	7.0	-	0.2	25	24	2.2	9.2	-		
10.3	-	2.0	7.8	-	0.2	21	22	2.2	10.0	-		
11.5	0.6	2.9	8.7	-	0.2	32	30	3.7	12.4	0.2		
12.1	-	2.4	7.8	-	0.1	21	24	2.5	10.3	-		

Classification: Fine-loamy, siliceous, thermic Typic Paleudult.
Soil series: Ruston taxadjunct 1/.
Series classification: Same as pedon.

Pedon No.: S57LA-8-2.
Location: Bossier Parish, La. about 5 miles northwest of Plain Dealing, SE¼SW¼ sec. 23, R. 13 W., T. 22 N.; 395 feet south of center of road intersection, then 43 feet west of center of road.
Vegetation: Native - pine-hardwood forest; present - volunteer native grasses; was in cultivation three years ago.
Relief: Nearly level (1 - 3 percent slope) upland.
Drainage: Well drained; medium runoff and internal drainage.
Permeability: Moderately slow.
Climate: Precipitation 47 inches, Temperature 65 degrees F.
Sampled by: James S. Allen and Bruce Chaffin.
Described by: Lester L. Loftin, 5/21/57. Revised 7/59. Horizons redesignated by David F. Slusher, 8/15/75.

Ap--0 to 13 cm (0 to 5 in.); brown (10YR 5/3) fine sandy loam; moderate fine granular structure; very friable; few medium hard concretions; many roots; medium acid; abrupt smooth boundary.

A31--13 to 25 cm (5 to 10 in.); strong brown (7.5YR 5/6) fine sandy loam; massive (traffic pan); friable; few medium hard concretions; many roots; strongly acid; clear smooth boundary.

A32--25 to 43 cm (10 to 17 in.); strong brown (7.5YR 5/6) fine sandy loam; weak medium subangular blocky structure; very friable; few medium hard concretions; many roots; strongly acid; abrupt wavy boundary.

B21t--43 to 69 cm (17 to 27 in.); yellowish red (5YR 4/8) clay loam; moderate medium subangular blocky structure; friable; common medium hard concretions; few roots; very strongly acid; abrupt wavy boundary.

B22t--69 to 84 cm (27 to 33 in.); yellowish red (5YR 5/8) sandy clay loam; moderate medium angular blocky structure; friable; common medium hard concretions; few roots; very strongly acid; abrupt wavy boundary.

B&A1--84 to 114 cm (33 to 45 in.); red (2.5YR 4/8) sandy clay with pockets of fine sandy loam; common medium distinct strong brown (7.5YR 5/6) mottles; moderate medium angular blocky structure; firm; hard and brittle when dry; extremely acid; gradual wavy boundary.

B&A2--114 to 140 cm (45 to 55 in.); dark red (2.5YR 3/6) sandy clay with pockets of fine sandy loam; common large distinct strong brown (7.5YR 5/8) mottles; moderate fine angular blocky structure; very firm; very hard and brittle when dry; extremely acid.

Remarks: Munsell colors for moist soil.

1/ Clay content of the B&A horizons exceeds the series range (11/73).

Soil Classification: Typic Paleudult; fine-loamy, siliceous, thermic.

Series not Designated

Lab. Nos. 45649-656 (45La31-3-1 thru 8)

Depth inches	1B1a Clay	III	USDA silt	VFS	FS	MS	CS	VCS	Horizon
	Size classes %								3A1
0- 4	5.4	17.8	29.6	12.0	35.1	15.5	2.0	0.4	A_p
4-10	5.4	19.3	30.9	12.1	34.3	15.3	1.8	0.2	A_2
10-13	15.8	18.6	29.1	11.1	30.8	11.6	1.4	0.2	B_1
13-21	30.3	15.4	23.0	9.1	26.0	10.3	1.1	0.2	B_2
21-26	22.5	12.9	21.2	11.1	30.8	13.0	1.1	0.3	B_{31}
26-37	18.5	10.6	19.3	12.6	33.2	14.6	1.7	0.1	B_{32}
37-46	16.5	9.0	22.1	17.9	27.5	12.3	2.3	1.4	
46-58	29.7	7.8	26.5	20.3	12.2	6.8	2.0	2.5	C

Depth inches	M.E./100 g soil 6N2b Ca	6O2b Mg	6Q2b K	6D1a Mn	H1a H	6L1a S+	% B. sat 5C3	pH 8C1a	% O.C. 6A1a	P ppm 6S1a
0- 4	2.5	.8	.1	.06	4.7	8.2	43	5.6	1.78	9.2
4-10	.6	.4	.1	.01	1.3	2.4	46	5.8	.43	4.8
10-13	.8	1.2	.3	T	3.1	5.4	43	5.1	.28	3.2
13-21	.5	1.7	.5	T	7.7	10.4	26	4.7	.30	2.8
21-26	.1	1.5	.3	0	5.9	7.8	24	4.7		2.8
26-37	.1	.8	.3	0	4.5	5.7	21	4.8		0.8
37-46	.1	1.2	.2	T	3.7	5.2	29	4.8		4.8
46-58	.1	.9	.2	0	6.9	8.1	15	4.8		1.2

Classification: Fine-loamy, siliceous, thermic Typic Paleudult.
Soil series: Not designated 1/.

Pedon No.: S45LA-31-3.
Location: Lincoln Parish, La., forested area immediately west of U.S. Highway 167, 3.3 miles south of Ruston, T. 17 N., R. 3 E.
Vegetation: Principally shortleaf pines with a few hickory, southern red oak, post oak, red gum, and loblolly pine trees. There is a thin scattering of shrubs and grasses including buckhorn, sumac, and poison ivy beneath the trees. Area has been grazed.
Climate: Precipitation 50 inches, Temperature 65 degrees F.
Topography: The region seems to be a slightly dissected plain with stream valleys cut 10 to 15 feet below the level of the ridge crests. The profile sample site was a slope of 3 percent west-southwest.
Sampled by: L. T. Alexander, I. L. Martin, A. E. Shearin, R. W. Simonson, M. B. Sturgis, and E. H. Templin.
Described by: A. E. Shearin and R. W. Simonson, June 23, 1945. Horizons redesignated by David F. Slusher, January 5, 1976.

Ap--0 to 10 cm (0 to 4 in.); very friable, fine sandy loam with weak fine granular structure; pinholes and wormholes are common. The moist uncrushed soil is dark grayish brown (10YR 4/2), whereas the dry soil crushed is light to brownish gray (10YR 6/2).

A2--10 to 25 cm (4 to 10 in.); very friable, weak fine granular fine sandy loam in which pinholes, wormholes, and small worm pellets of darker material are numerous. The moist soil in place is light yellowish brown (10YR 6/4) with small flecks of strong brown (7.5YR 5/6). The flecks are few in the upper part, common in the lower part of the horizon. The dry soil is pale yellow (2.5Y 7/4 to 8/4) when crushed.

B1t--25 to 33 cm (10 to 13 in.); this is a transitional horizon of friable, heavy sandy loam with very weak medium blocky structure. Pinholes and wormholes are common. The moist soil in place is yellowish red (5YR 5/8) with some mottlings of light yellowish brown (10YR 6/4) in the upper part. The dry crushed soil is reddish yellow (7.5YR 7/8). Diffuse boundary.

B21t--33 to 53 cm (13 to 21 in.); friable sandy clay loam with weak medium blocky structure. There are a few pinholes and a few black concretions 3 to 4 mm in diameter. The moist soil is red (2.5YR 4/8) to yellowish red (5YR 4/8) in place and yellowish red (5YR 5/8) when crushed. The dry crushed soil is also yellowish red to reddish yellow (5YR 5/8 to 6/8). Diffuse lower boundary.

B22t--53 to 66 cm (21 to 26 in.); friable sandy clay loam with very weak medium blocky structure in the upper part of the horizon but massive in the lower part. There are a few pinholes. There are a few darker faces on blocks in the upper horizon. The moist soil in place is yellowish red (5YR 5/8) and it is slightly lighter when crushed. When dry the soil is reddish yellow (7.5YR 6/8). Diffuse boundary.

B3--66 to 94 cm (26 to 37 in.); very friable, heavy sandy loam which is essentially structureless and contains a few small gravel 10 mm in diameter. The moist soil is strong brown (7.5YR 5/8) in place and becomes slightly lighter when crushed. The dry, crushed soil is reddish yellow (7.5YR 6/8). Distinct boundary.

B&Bir--94 to 117 cm (37 to 46 in.); this is the ironpan horizon which consists of soil material between ironstone pieces. The plates are mainly dark red (2.5YR 3/6) with some thin layers of yellowish red (5YR 5/8). They range from 3 to 10 mm in thickness, lie horizontal for the most part and are discontinuous but make up a large part of the volume of the horizon. The plates are numerous enough to form a distinct hardpan. Soil material between the plates is a friable sandy clay loam with a mottled pattern of strong brown (7.5YR 5/8) and pale yellow (2.5Y 7/4) when moist in place. When crushed dry the soil is brownish yellow (10YR 6/8). Distinct boundary.

C--117 to 147 cm (46 to 58 in.); thinly stratified silty clay, silt, and fine sand. The soil is firm, moderately plastic, and hard or very hard. In place, the moist soil is uniformly mottled brownish yellow (10YR 6/8) and yellowish red (5YR 5/8). The pattern of mottling is fine and of a medium contrast. When dry and crushed the soil is brownish yellow (10YR 6/8).

Remarks: Munsell colors for moist soil unless indicated otherwise.

1/ Sampled as a representative of the Ruston series (ironpan phase).

Soil Classification: Typic Paleudult; fine, mixed, thermic.

Series not Designated

Lab. Nos. 45627-634 (45 La 31-1-1 thru 8)

Depth inches	1B1a Clay	III	USDA silt	VFS	FS	MS	CS	VCS	3A1 Horizon
	Size classes %								
3/4-0	9.8	9.7	22.2	13.4	43.4	6.7	2.8	1.7	A_0
0- 2	4.9	7.1	19.6	15.6	48.8	5.7	1.3	4.1	A_1
2- 6	7.9	9.7	22.8	14.6	42.8	5.6	1.1	5.2	A_2
6-15	56.3	8.9	16.8	8.4	14.0	1.8	1.1	1.6	B_{21}
15-22	53.9	9.7	18.9	10.8	12.6	1.4	1.2	1.2	B_{22}
22-33	49.3	10.1	19.7	13.6	12.1	1.4	1.9	2.0	B_{31}
33-48	49.7	11.4	21.1	13.5	11.9	1.0	1.0	1.8	B_{32}
48-65	57.5	19.0	29.7	11.1	0.8	0.2	0.5	0.2	C

Depth inches	M.E./100 g soil Ca	Mg	K	Mn	H	S+	% B. sat	pH	% O.C.	P ppm
	6N2b	6O2b	6Q2b	6D1a	H1a	6L1a	5C3	8C1a	6A1a	6S1a
3/4-0										
0- 2	2.8	1.3	.3	T	2.6	7.0	63	6.0	1.39	12.8
2- 6	2.4	1.0	.2	.03	2.0	5.6	64	5.5	.49	5.6
6-15	.8	3.2	.6	T	16.8	21.4	21	4.5	.48	1.2
15-22	.3	.2	.2	T	17.6	18.3	4	4.4	.38	2.8
22-33	.1	2.5	.4	T	16.6	19.6	15	4.3	.26	.8
33-48	.1	2.5	.3	T	18.3	21.2	14	4.2	.25	6.4
48-65	.0	4.1	.6	T	25.3	30.0	16	4.2	.30	4.8

Horizon	Depth inches	Exchange capacity m.e/100 g 5A3a	Surface M^2/g Total	Exterior	Inner	% Inner surface	Kaolin %	Quartz %	Gibbsite %
A_2	2- 6		160	95	65	10	35	15	
B_{21}	6-15	38	315	85	230	30	40	5	1
B_{31}	15-22	34	220	85	135	20	40	5	
C	48-65	52	335	110	245	35	30	10	

Results of X-ray patterns of oriented samples.
2-6 Kaolin, mixed layer mineral, quartz
6-15 Kaolin, mixed layer mineral, quartz
15-22 Kaolin, mixed layer mineral
48-65 Kaolin, montmorillonite with some chlorite.

Classification: fine, mixed, thermic Typic Paleudult.
Soil series: Not designated 1/.

Pedon No.: S45LA-31-1.
Location: Lincoln Parish, La., 3.75 miles northwest of Choudrant, T. 18 N., R. 2 W., in small forested area immediately south of gravelled road.
Vegetation: Primarily sweetgum, hickory, winged elm, southern red oak, and white oak trees, with a scattering of shortleaf and loblolly pines. There is a fairly thick undergrowth of shrubs, grasses, and weeds, including briars, sumac, oxeye daisies, poison ivy, and the like.
Topography: General region is highly dissected with stream valleys lying 30 to 45 feet below the general levels of the ridgetops. The immediate site of the samples was a slope of 6 percent to the north. A short distance north of the sample site becomes steeper and has a gradient of 15 to 20 percent.
Climate: Precipitation 50 inches, Temperature 65 degrees F.
Sampled by: L. T. Alexander, I. L. Martin, A. E. Shearin, R. W. Simonson, M. B. Sturgis, and E. H. Templin.
Described by: A. E. Shearin and R. W. Simonson, June 22, 1945. Horizons redesignated by David F. Slusher, January 5, 1976.

O2--2 to 0 cm (3/4 to 0 in.); partially decomposed organic matter containing some sand grains. No plant structures are evident in the mass which, when moist, is dark brown (10YR 2/2) speckled with light colored grains of coarse sand. The lower boundary is diffuse.

A1--0 to 5 cm (0 to 2 in.); nearly loose fine sandy loam with fine poorly granular structure. The moist soil is variegated brown (10YR 5/3) to dark grayish brown (10YR 4/2) uncrushed and becomes brown (10YR 4/3) when crushed. The dry soil is pale brown and very pale brown (10YR 6/3 and 7/3). The horizon contains a few small angular ironstone fragments and has diffuse boundaries.

A2--5 to 15 cm (2 to 6 in.); nearly loose fine sandy loam with fine, poorly granular structure. The moist soil is brown (10YR 5/3) in the upper part and strong brown (7.5YR 5/6) in the lower part. Cores and small round pockets of very dark grayish brown (10YR 3/2) material are common in the upper part of the horizon, and a few pockets of olive (5YR 5/6) material are present in the lower part. When dry, the soil is light gray (10YR 7/2). The horizon contains numerous small angular ironstone fragments approximately 10 mm on the long axis. The lower boundary is distinct.

B21t--15 to 38 cm (6 to 15 in.); firm, strongly plastic clay with medium and fine moderate blocky structure. The clay is very hard when dry. Small ironstone fragments are common, especially in the upper part. When moist the soil is red (2.5YR 4/8) uncrushed and slightly lighter crushed. The color changes to red (2.5YR 4/6) as the soil dries. Boundary is diffuse.

B22t--38 to 56 cm (15 to 22 in.); firm, strongly plastic clay with well developed blocky structure. The blocks break down under moderate pressure to fine moderate granular structure. Many blocks have glossy or slick surfaces. The horizon when moist and in place has uniformly finely mottled pattern of red (2.5YR 4/6) and pale olive (5Y 6/3) of medium to low contrast. Mottling tends to become coarse in lower part. The color of the soil when dry is the same as that when moist. Boundary of the horizon is diffuse.

B23t--56 to 81 cm (22 to 32 in.); firm, strongly plastic and very hard clay with medium, moderately blocky structure. The structure is less distinct than that of the overlying horizon, and the blocks crush under slight pressure to fine weakly granular structure. Some blocks have glossy or slick surfaces. The color of the soil when moist in place is a uniformly mottled pale yellow (5Y 7/3) red (2.5YR 4/8) and yellowish red (5YR 5/6). The brown colors are dominant in the upper part of the horizon, whereas the yellow is dominant in the lower part. Colors of the dry and moist soil are the same. The lower boundary of the horizon is diffuse.

B3--81 to 122 cm (32 to 48 in.); firm, strongly plastic and very hard clay with coarse poorly blocky structure. The moist uncrushed soil is light gray (5Y 7/2) finely mottled with yellowish red (2.5YR 4/8) and red (2.5YR 5/6). Mottles are numerous, of high contrast, and chiefly fine, though there are some medium and coarse ones. In places the horizon has a speckled appearance. Colors do not change as the soil becomes dry.

C--122 to 165 cm (48 to 65 in.); pale yellow (5Y 7/3) clay mottled with red (2.5Y 4/8). Mottlings are common, fine, and of high contrast. The clay is firm and strongly plastic and has a medium to coarse, moderate platy structure in place. The structure is due to the laminated beds of clay, apparently inherited. Midway in the horizon there is a band, about 2 inches thick, in which mottlings are numerous as compared to parts above and below it.

Remarks: Munsell colors for moist soil unless otherwise indicated.

1/ Sampled as a representative of the Boswell series.

SOIL SURVEY LABORATORY Lincoln, Nebr. Aug., 1958

SOIL TYPE Beauregard **LOCATION** Beauregard Parish, Louisiana

SURVEY NOS. S57La-6-2 **LAB. NOS.** 7104-7109
S57(64)La-6-2

DEPTH INCHES	HORIZON	1B1a VERY COARSE SAND 2-1	COARSE SAND 1-0.5	MEDIUM SAND 0.5-0.25	FINE SAND 0.25-0.10	VERY FINE SAND 0.10-0.05	SILT 0.05-0.002	CLAY < 0.002	0.2-0.02	3A1 0.02-0.002	2A2 > 2	TEXTURAL CLASS
		PARTICLE SIZE DISTRIBUTION (in mm.) (per cent)										
0-3	A1	0.8a	0.9a	0.2b	3.8b	29.2b	60.2	4.9	73.3	19.5	Tr.	sil
3-8	A2	0.8a	0.6a	0.2b	3.0b	27.4b	56.7	11.3	67.5	19.3	Tr.	sil
8-16	B1	0.5a	0.5a	0.1b	2.4b	22.5b	54.0	20.0	57.6	21.1	Tr.	sil
16-27	B21g	1.0a	0.6a	0.2b	2.2b	19.3b	52.8	23.9	50.6	23.5	Tr.	sil
27-40	B22g	0.5a	0.3a	0.1b	2.2b	20.9b	53.1	22.9	52.6	23.4	Tr.	sil
40-60+	B3g	0.4a	0.3a	0.1b	1.8b	17.1b	48.1	32.2	44.9	21.9	Tr.	sicl
S57(64)La-6-2												
22-27	B21t	1.0	0.6	0.2	2.2	19.3	52.8	23.9		23.5		

8C1a pH 1:1	pH 1:5	pH 1:10	6A1a ORGANIC CARBON %	6B1a NITROGEN %	C/N	6C2b Ext. Fe Pct.		$CaCO_3$ equivalent %		MOISTURE TENSIONS 1/10 ATMOS. %	1/3 ATMOS. %	4B2 15 ATMOS. %
5.2			1.60	0.063	25.4							3.6
5.1			0.46	0.023	20							5.0
5.1			0.20	0.019	10							8.5
5.2			0.14	0.016	9							10.0
5.4			0.05									9.2
5.3			0.01									13.0
						1.7						

5A1a CATION EXCHANGE CAPACITY NH_4Ac	EXTRACTABLE CATIONS 6N2b Ca	6O2b Mg	6H1a H	6P2b Na	5B1a 6Q2b K	BASE SAT. % NH_4Ac EXCH. 5C1	Base Sat. % on Sum + H 5C3	5B1a Sum - H	5A3a Sum + H	Ca/Mg	
←	milliequivalents per 100g. soil				→						
6.2	1.0	0.3	6.1	-	0.1	22	19	1.4	7.5	3.3	
5.2	0.5	0.3	4.9	0.1	-	17	16	0.9	5.8	1.7	
7.3	0.2	0.4	8.1	0.1	0.1	11	9	0.8	8.9	0.5	
9.3	0.5	0.7	9.0	0.1	0.1	15	13	1.4	10.4	0.7	
3.4	0.4	0.9	8.2	0.1	0.1	18	15	1.5	9.7	0.4	
12.6	1.4	2.3	9.8	0.4	0.1	33	30	4.2	14.0	0.6	
9.3											

a. Many, smooth light brown concr. (Fe-Mn?)
b. Few, smooth light brown concr. (Fe-Mn?)

Classification: Fine-silty, siliceous, thermic Plinthaquic Paleudult.
Soil series: Beauregard.
Series classification: Same as pedon.

Pedon No.: S57LA-6-2 and S57(64)LA-6-2.
Location: Beauregard Parish, La., 2 miles south of Longville on U.S. 171, 2 miles west on access road, 1 mile south, .15 mile east, 100 feet south of road. NW¼ NW¼ sec. 11, T. 6 S., R. 9 W.
Vegetation: Scattered longleaf pine; little bluestem, muhly, three awn, and some tall panicum grasses; aster, orchid and ambrosia forbs. The area has been clean cut of longleaf pine; was frequently burned until late years; and is commonly grazed on native grasses.
Relief: Gently undulating Pleistocene alluvial terraces. Slope three percent east.
Drainage: Internal, moderately well; surface runoff moderate.
Permeability: Slow.
Parent material: Pleistocene alluvium.
Climate: Precipitation 53 inches, Temperature 67 degrees F.
Sampled by: S. L. Fontenot, J. Allen, L. L. Loftin, Warren Cockerham, and Francis Ezernack.
Described by: Marvin Lawson, 11/5/57. Pedon reexamined, colors revised and horizons redesignated by David F. Slusher 8/13/75.

A1--0 to 8 cm (0 to 3 in.); very dark grayish brown (10YR 3/2) silt loam; weak fine and very fine subangular blocky structure; very friable; very porous; many fine roots; medium acid; clear smooth boundary.

A2--8 to 20 cm (3 to 8 in.); light yellowish brown (10YR 6/4) silt loam; light peppering of fine pale brown mottles; tends to be massive but breaks readily into weak fine subangular blocky structure; many wormcasts; porous; few dark spots of humus, few roots; very strongly acid; clear wavy boundary.

B1t--20 to 41 cm (8 to 16 in.); brownish yellow (10YR 6/8) silt clay loam; some shading to light yellowish brown and few medium mottles of reddish yellow (5YR 6/8); fine weak subangular blocky structure; friable, slightly plastic, wormcasts common; patchy clay skins; tubular pores common; strongly acid; few roots; gradual wavy boundary.

B21t--41 to 69 cm (16 to 27 in.); yellowish brown (10YR 5/6) silty clay loam; many medium mottles of light gray (10YR 7/2) and some mottles of red (2.5YR 5/8) on sliced or broken surfaces due to medium soft friable concretions of red material; weak fine angular blocky structure; tubular pores common and line with clay; clay skins common on aggregates; very strongly acid; gradual wavy boundary.

B22tg--69 to 102 cm (27 to 40 in.); light gray (10YR 7/1) silty clay loam; many coarse mottles of yellowish brown (10YR 5/8) and few red mottles (10R 4/8) from friable concretions which have red internal mass; weak fine angular blocky structure; friable; occasional fine roots; few pores, thinly filmed with clay; very strongly acid; diffuse boundary.

B23tg--102 to 165 cm (40 to 65 in.); light gray (10YR 7/1) silty clay loam with many coarse mottles of yellowish brown (10YR 5/8) and few red mottles (10YR 4/8). the red colors seem to be from friable concretions which have red interior mass. The horizon consists of interspersed portions of silty clay, clay, and silty clay loam, the brown portions of the soil coarser in texture than the gray portions; very strongly acid; few patchy clay skins; few pores, the few tubular pores have thin clay skins.

B3--165 to 229 cm (65 to 90 in.); light gray clay (5Y 7/1) silt loam with few large splotches of red (10YR 4/6) medium acid at 90 inches (layer examined from auger).

Remarks: Munsell colors for moist soil. There were common filled channels up to 4 inches in diameter from the surface to a depth of 2 to 3 feet; a few appearing to be root channels to depth of pit. The fill was of the A2 material.

SOIL SURVEY LABORATORY Lincoln, Nebr. Aug., 1958

SOIL TYPE Malbis **LOCATION** Beauregard Parish, Louisiana

SURVEY NOS. S57La-6-6 **LAB. NOS.** 7129-7136
S57(64)La-6-6

DEPTH INCHES	HORIZON	1B1a VERY COARSE SAND 2-1	COARSE SAND 1-0.5	MEDIUM SAND 0.5-0.25	FINE SAND 0.25-0.10	VERY FINE SAND 0.10-0.05	SILT 0.05-0.002	CLAY < 0.002	0.2-0.02	3A1 0.02-0.002	2A2 > 2	TEXTURAL CLASS
		PARTICLE SIZE DISTRIBUTION (in mm.) (per cent)										
0-5½	A1	0.5a	0.4a	0.8b	25.2b	41.8b	28.5	2.8	83.6	6.8	0.6	vfsl
5½-9	A2	0.4a	0.4a	0.7b	24.5b	40.9b	28.8	4.3	80.7	8.5	Tr.	vfsl
9-18	B21t	0.4a	0.4a	0.4b	16.6b	30.5b	26.9	24.8	60.3	10.6	1.6	scl
18-24	B22t	0.5a	0.2a	0.3b	16.3b	30.2b	28.1	24.4	60.6	11.1	1.8	l/scl
24-36	B23t	-	0.1a	0.3b	16.8b	31.8b	26.7	24.3	63.3	9.4	Tr.	scl
36-49	B24t	0.1a	0.1a	0.2b	17.6b	31.4b	22.3	28.3	61.4	7.6	Tr.	scl
49-56	B25t	-	0.1a	0.2b	22.8b	26.9b	19.2	30.8	58.8	7.2	-	scl
56-60+	B3	-	-	0.2b	46.2b	17.3b	6.4	29.9	57.1	3.1	-	scl
S57(64)La-6-6												
18-24	B22t	0.5	0.2	0.3	16.3	30.2	28.1	24.4		11.1		

8C1a pH 1:1	pH 1:5	pH 1:10	6A1a ORGANIC CARBON %	6B1a NITROGEN %	C/N			$CaCO_3$ equivalent %		MOISTURE TENSIONS 1/10 ATMOS. %	1/3 ATMOS. %	4B2 15 ATMOS. %
			ORGANIC MATTER									
5.4			1.16	0.052	22.3							1.8
5.6			0.37	0.023	16							1.9
5.2			0.31	0.026	12							9.8
5.2			0.16	0.016	10							9.6
5.2			0.07									9.9
5.1			0.02									11.5
4.9			0.04									12.2
4.8			-									11.6

5A1a CATION EXCHANGE CAPACITY NH_4Ac	6N2b Ca	6O2b Mg	6H1a H	6P2b Na	6Q2b K	BASE SAT. % NH_4Ac EXCH. 5C1	Base Sat. % on Sum + H 5C3	5B1a Sum - H	5A3a Sum + H	Ca/Mg		
	EXTRACTABLE CATIONS											
	milliequivalents per 100g. soil											
4.0	0.7	0.2	4.0	-	0.1	25	20	1.0	5.0	3.5		
2.2	0.6	0.1	2.0	-	-	32	26	0.7	2.7	6.0		
6.9	1.2	0.7	6.1	-	0.1	29	25	2.0	8.1	1.7		
6.4	0.6	1.3	6.9	-	0.1	31	22	2.0	8.9	0.5		
7.0	-	1.0	6.9	-	-	14	13	1.0	7.9	-		
7.9	-	1.8	7.3	-	0.1	24	21	1.9	9.2	-		
9.1	0.7	1.8	7.7	-	0.1	29	25	2.6	10.3	0.4		
10.0	0.7	2.1	7.3	-	0.1	29	28	2.9	10.2	0.3		
6.4												

a. Many, smooth and irregular light brown to black concr. (Fe-Mn?)
b. Common, smooth and irregular light brown to black concr. (Fe-Mn?)

Classification: Fine-loamy, siliceous, thermic Plinthic Paleudult.
Soil series: Malbis 1/.
Series classification: Same as pedon.

Pedon No.: S57LA-6-6 and S57(64)LA-6-6.
Location: Beauregard Parish, La., 6 miles southwest of DeRidder. Center of SW¼NE¼ sec. 17 T. 3 S., R. 8 W., 2.2 miles east of U.S. 171 on La. 26, 0.6 mile south of church, 200 feet east of road near crest of hill.
Vegetation: Scattered longleaf pine, wax myrtle. Grasses, the dominant type of ground cover, include muhly, three awn, little bluestem, split beard bluestem, few tall paspalums and panicums. Few scattered forbs of aster, ambrosia, and orchids. Burning was frequent until late years. Commonly grazed.
Relief: Gently rolling Pleistocene terrace plain. Site slope 2 percent southeast.
Drainage: Surface drainage moderate; moderately well drained internally.
Permeability: Moderate.
Parent material: Pleistocene terrace plain, probably derived from Red River alluvium before the river was diverted eastward.
Climate: Precipitation 53 inches, Temperature 67 degrees F.
Sampled by: Lester Loftin, James Allen, D. L. Fontenot, A. Kerr and Warren Cockerham.
Described by: Marvin Lawson, 11/7/57. Re-examined and horizons redesignated by David F. Slusher and B. Arville Touchet 7/13/71.

A1--0 to 14 cm (0 to 5½ in.); dark gray (10YR 4/1) fine sandy loam; weak fine and medium granular structure; very friable; very porous; many fine roots; medium acid; clear wavy boundary.

A2--14 to 23 cm (5½ to 9 in.); pale brown (10YR 6/3) fine sandy loam; few dark gray streaks; weak fine subangular blocky structure; very friable; many roots; medium acid; clear wavy boundary.

B21t--23 to 46 cm (9 to 18 in.); strong brown (7.5YR 5/6) sandy clay loam or silty clay loam; weak medium subangular blocky structure; friable; slightly plastic; thin patchy clay skins, very few medium hard concretions; common roots; very porous but few tubular pores; strongly acid; gradual smooth boundary.

B22t--46 to 61 cm (18 to 24 in.); yellowish brown (10YR 5/6) sandy clay loam; weak medium subangular blocky structure; friable; patchy clay skins; few medium and coarse hard concretions; few tubular pores; few roots; very strongly acid; arbitrary boundary.

B23t--61 to 91 cm (24 to 36 in.); brownish yellow (10YR 6/6) sandy clay loam; weak medium subangular blocky structure; friable; patchy clay skins; few medium and coarse hard concretions; few tubular pores; few roots; very strongly acid; arbitrary boundary.

B24t--91 to 124 cm (36 to 49 in.); brownish yellow (10YR 6/6) sandy clay loam; few medium mottles of red (2.5YR 5/8); weak fine and medium angular blocky structure; friable to somewhat firm; clay skins common but discontinuous; few clay-lined tubular pores; few roots; few coarse hard concretions; strongly acid; gradual smooth boundary.

B25t--124 to 142 cm (49 to 56 in.); brownish yellow (10YR 6/6) light sandy clay loam; strong coarse angular blocky structure; somewhat brittle, moist, though readily crushed; continuous clay skins; no roots observed; light gray (10YR 7/1) sand grains on vertical ped faces; about 10 percent red (10R 4/6) plinthite; strongly acid; gradual wavy boundary.

B3--142 to 152 cm (56 to 60 in,); intermixed large segments of red (10R 4/6) coarse sandy loam and light gray and yellowish brown mottled sandy clay; coarse sandy loam very friable; sandy clay sticky and plastic; massive; few tubular pores; some containing red sand; very strongly acid. Re-examination showed horizon to extend to 88 inches.

Remarks: Munsell colors for moist soil.

1/ Pedon has 28 percent base saturation at 50 inches which is 8 percent too high for the series range (3/71).

SOIL SURVEY LABORATORY Lincoln, Nebr. Aug., 1958

SOIL TYPE Series not Designated **LOCATION** Beauregard Parish, Louisiana

SURVEY NOS. S57La-6-5 **LAB. NOS.** 7123-7128

DEPTH INCHES	HORIZON	1B1a PARTICLE SIZE DISTRIBUTION (in mm.) (per cent) VERY COARSE SAND 2-1	COARSE SAND 1-0.5	MEDIUM SAND 0.5-0.25	FINE SAND 0.25-0.10	VERY FINE SAND 0.10-0.05	SILT 0.05-0.002	CLAY < 0.002	0.2-0.02	0.02-0.002	3A1 2A2 > 2	TEXTURAL CLASS
0-3½	A1	1.2a	2.2a	1.8b	12.4b	34.7b	44.9	2.8	78.4	11.5	1.5	vfsl
3½-11	A2	0.8a	1.6a	1.7b	11.5b	32.4b	47.1	4.9	75.6	13.5	1.8	vfsl
11-21	B21t	1.1a	1.0a	0.8b	5.8b	19.3b	40.5	31.5	47.8	17.0	3.5	cl
21-31	B22t	1.3a	1.0a	0.6b	5.8b	19.9b	43.2	28.2	50.6	17.6	3.1	cl
31-43	B23t	0.7a	0.8a	0.6b	5.9b	23.0b	43.7	25.3	54.2	17.7	0.8	l
43-60+	B24t	0.5a	1.1a	0.9b	7.2b	22.1b	41.4	26.8	53.5	16.2	1.3	l

pH 8C1a 1:1	1:5	1:10	ORGANIC MATTER 6A1a ORGANIC CARBON %	6B1a NITROGEN %	C/N			$CaCO_3$ equivalent %		MOISTURE TENSIONS 1/10 ATMOS. %	1/3 ATMOS. %	4B2 15 ATMOS. %
5.0			1.44	0.060	24.0							2.5
5.4			0.39	0.023	17							2.3
5.0			0.16	0.020	8							13.1
5.1			0.08	0.014	6							11.6
5.1			0.01									10.5
5.0			0.01									11.6

5A1a CATION EXCHANGE CAPACITY NH_4Ac	EXTRACTABLE CATIONS 6N2b Ca	6O2b Mg	6H1a H	6P2a Na	5B1a-6Q2a K	BASE SAT. % NH_4Ac Exch 5C1	Base Sat. % on Sum + H 5C3	5B1a Sum - H	5A3a Sum + H	Ca/Mg		
←	milliequivalents per 100g. soil				→							
5.7	0.6	-	5.7	-	0.1	12	11	0.7	6.4	-		
2.6	0.4	0.2	2.0	-	-	23	23	0.6	2.6	2.0		
10.0	1.0	1.4	9.0	-	0.1	25	22	2.5	11.5	0.7		
8.8	-	1.1	8.1	-	0.1	14	13	1.2	9.3	-		
8.4	-	1.1	6.9	-	0.1	14	15	1.2	8.1	-		
9.2	-	1.5	8.1	-	0.1	17	16	1.6	9.7	-		

a. Many, smooth light brown and black concr. (Fe-Mn?)
b. Common, smooth light brown and black concr. (Fe-Mn?)

Classification: Fine-silty, siliceous, thermic Plinthic Paleudult.
Soil series: Not designated 1/.

Pedon No.: S57LA-6-5.
Location: Beauregard Parish, La., 14 miles southeast of DeRidder, 8.2 miles east on Hwy. La.-26 from junction with La.-U.S. Hwy. 171; 5.2 miles southerly; 100 feet east of road. NW¼ sec. 26, T. 3 S., R. 7 W.
Vegetation: Trees, scattered longleaf pine, post oak, blackjack oak, and wax myrtle. Grasses, which provide nearly all the ground cover at present, are muhly, three awn, little bluestem, and a few tall panicums. Forbs consist of a few asters and orchids. the area was frequently burned until late years and is commonly grazed.
Relief: Gently rolling Pleistocene terrace plain. Site slope four percent northeast.
Drainage: Surface drainage rapid; moderately well drained internally.
Permeability: Moderate.
Parent material: Apparently developed on a Pleistocene terrace plain, presumably Red River alluvium deposited before the river was diverted eastward.
Climate: Precipitation 53 inches, Temperature 67 degrees F.
Sampled by: D. L. Fontenot, James Allen, Lester Loftin, A. Kerr, and Warren Cockerham.
Described by: Marvin Lawson, 11/7/57. Horizons redesignated by David F. Slusher 8/13/75.

A1--0 to 9 cm (0 to 3½ in.); dark gray (10YR 4/1) fine sandy loam; weak fine and very fine subangular blocky structure; very friable; very porous, including a network of tubular pores; many roots; slightly acid; clear wavy boundary.

A2--9 to 28 cm (3½ to 11 in.); grayish brown (10YR 5/2) fine sandy loam; weak fine subangular blocky structure; very friable; humus spots scattered through horizon; very porous including numerous tubular pores; many wormcasts; many roots; strongly acid; gradual wavy boundary.

B21t--28 to 53 cm (11 to 21 in.); strong brown (7.5YR 5/6) silty clay loam or sandy clay loam; moderate fine and medium subangular blocky structure; friable; clay skins nearly continuous; many fine pores, tubular pores with clay film lining; few fine hard concretions; few rounded chert gravels up to 1/2 inch diameter; common roots; very strongly acid; smooth boundary.

B22t--53 to 79 cm (21 to 31 in.); yellowish brown (10YR 5/6) silty clay loam or sandy clay loam; few medium spots of red (10R 4/6) which seem to be soft concretions; moderate medium subangular blocky structure; friable; few fine hard concretions; few rounded chert gravels up to 1/2 inch diameter; clay skins nearly continuous; few tubular pores lined with clay; few roots; very strongly acid; gradual smooth boundary.

B23t--79 to 109 cm (31 to 43 in.); strong brown (7.5YR 5/8) sandy clay loam; few fine mottles; moderate coarse angular blocky structure; firm; clay skins prominent; common clay-lined tubular pores; few fine hard concretions; few rounded chert gravels up to 1/2 inch diameter, occasional fine root; few coarse friable red concretions; few shrinkage cracks; strongly acid; diffuse smooth boundary.

B24t--109 to 152 cm (43 to 60 in.); variegated strong brown (7.5YR 5/6) and red (2.5YR 5/6) sandy clay loam; few fine light gray (10YR 7/1) mottles; massive, compact in place; friable; clay film common; common tubular pores coated with clay; few fine hard concretions; few rounded chert gravels up to 1/2 inch diameter; some coarse gray vertical streaks appear to mark shrinkage cracks; no roots observed; strongly acid.

B3--152 to 254 cm (60 to 100 in.); from a few inches below 60 inches the material was massive intermixed white clay and reddish brown sandy clay to a depth of 80 inches. 82-100 inch zone was red (10R 4/6) sandy clay loam; strongly acid at 100 inches; horizon examined by auger.

Remarks: Munsell colors for moist soil. There were a few coarse root channels and animal burrows filled with sandy loam to a few feet depth.

1/ Sampled as a representative of the Bowie series, which is in a fine-loamy family.

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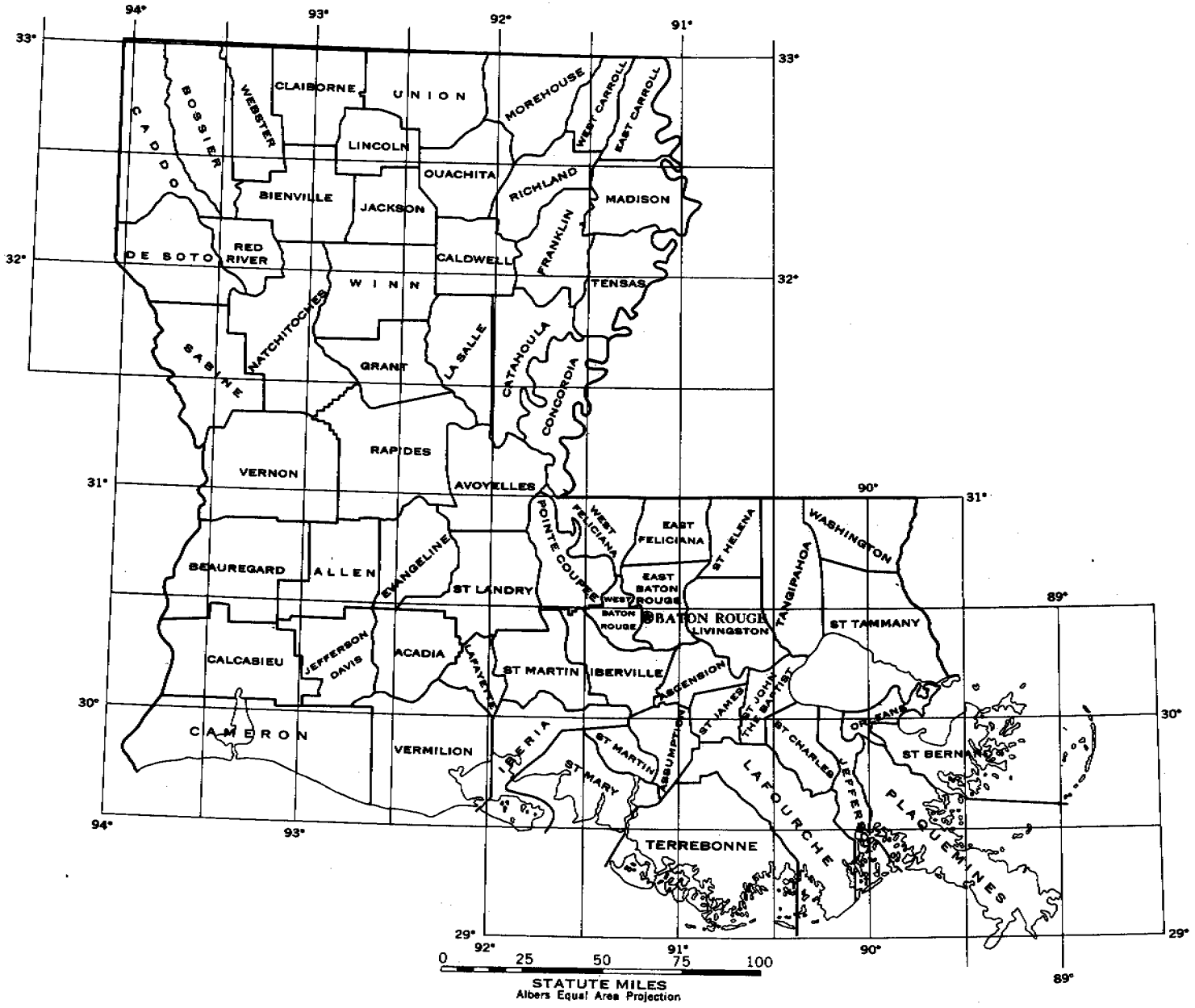
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EAST CARROLL
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BEAUREGARD
ALLEN
EVANGELINE
ST LANDRY
EAST BATON ROUGE
WEST BATON ROUGE
BATON ROUGE
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ST MARTIN
ASSUMPTION
ST CHARLES
JEFFERSON
ST BERNARD
ST MARY
LAFOURCHE
PLAQUEMINES
TERREBONNE
94°
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STATUTE MILES
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