

OPEN MATERIALS SITES ; SAMPLED

LEGEND

===== Trail or lane

———— Road

+ + + + + Railroad

~~~~~ Hedge or trees

~~~~~  
Name

~~~~~ Intermittent streams

~~~~~ Pond or lake

■ Open materials sites; sampled

● Open materials sites; not sampled

▼ Prospective materials sites; sampled

◆ Prospective materials sites; not sampled

⑤ Center of section

□ Dwelling

⊕ Cemetery

▣ School

⊕ Church

▣ Town or city

MATERIAL SITE DATA FORM

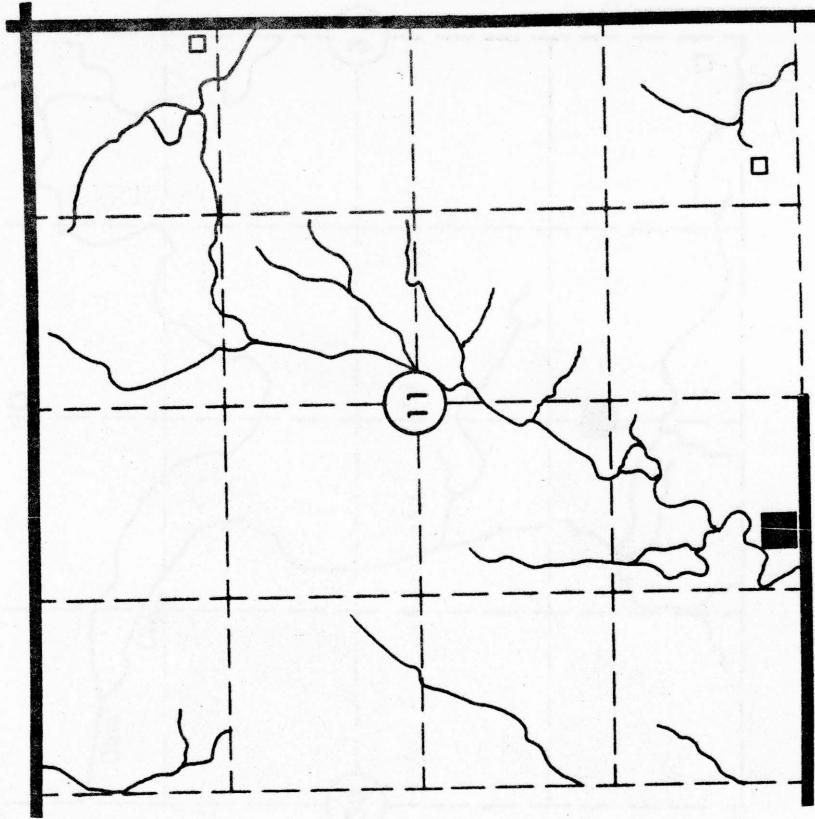
Site No. SG+1 Date April, 1976
Qt
 Material Sand & Gravel County Republic
 Location E 1/2 SW 1/4 Sec. 11 Twp. 1S Range 5W
 Owner G. Kettlerhut Bryon, Nebraska
 Name address
 Nature of Deposit Dry Accessibility Good Site Located on Plate I
 Status of Site Open Materials Site; Sampled

EXPLORATION DATA

| Test Hole | Material at Bottom of Hole | Depth of overburden | Depth of Material | Percent Retained | | | | | | Wash 200 | S.F. | L.L. | P.I. | | | |
|-----------|----------------------------|---------------------|-------------------|------------------|-----|-----|-----|------|-----|----------|------|------|------|------|----|------|
| | | | | 1 1/2 | 3/4 | 3/8 | 1/2 | 3/16 | 1/8 | | | | | | | |
| 14 | Clay | 6 | 27 | | | 0 | 1 | 2 | 5 | 13 | 53 | 95 | 8.0 | 1.69 | 18 | N.P. |
| 15 | Clay | 11 | 25 | 0 | 4 | 6 | 14 | 27 | 43 | 60 | 80 | 94 | 2.8 | 3.28 | 16 | N.P. |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |

CORRELATION DATA

Geological Age Quaternary
 Geological Source Wisconsinan Terrace
 Material Similar To KDOT Lab No. 72-720
 Specific Gravity (sat.) 2.58 1 (dry)
 Los Angeles Wear 32(D)
 Absorption 0.38 Soundness .99
 Wt. Co. ft. Str. Ratio
 Remarks KDOT Materials Department Site No. 79-22
14 & 15 represent the finest and coarsest material
that has been sampled at this site.



MATERIAL SITE DATA FORM

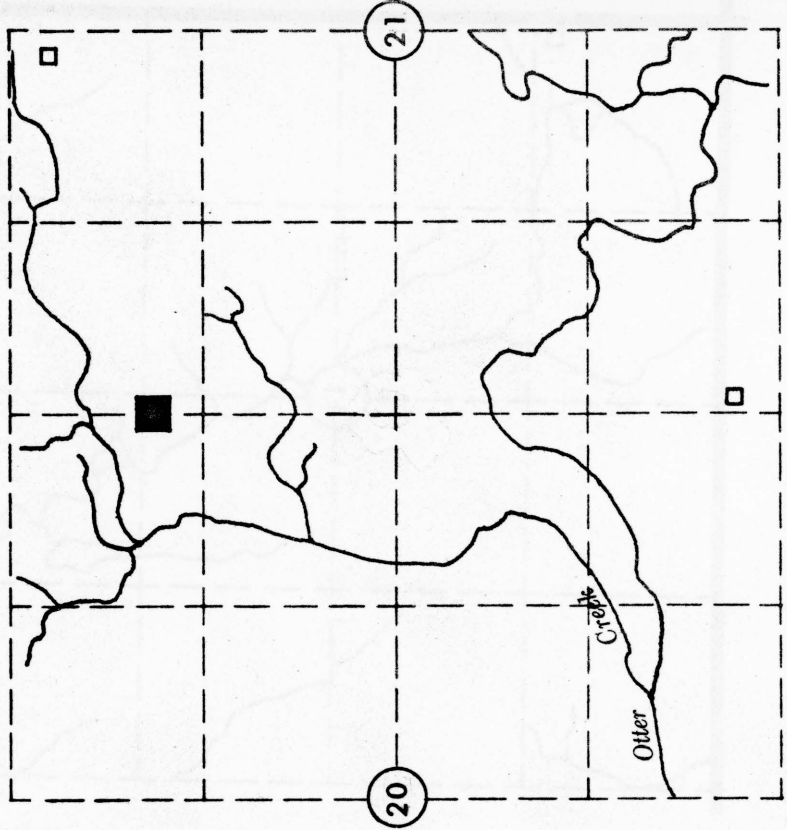
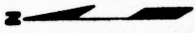
Site No. SG+2 Date April, 1976
Qds
 Material Sand & Gravel County Republic
N 1/2 NE 1/4 20 1S
 Location N 1/2 NW 1/4 Sec. 21 Twp. 1S Range 4W
Howard Miller Republic, Kansas
 Owner Clarence Rabe address
 Nature of Deposit Met accessibility Fair Site located on Plate I
 Status of Site Open Materials Site; Sampled

EXPLORATION DATA

| Test Hole | Material at Bottom of Hole | Depth of Material | Percent Retained | | | | | | No. 200 | G.F. | L.L. | P.I. |
|-----------|----------------------------|-------------------|--------------------------|-----|----|----|----|----|---------|------|------|------|
| | | | 1/2 | 3/4 | 1 | 16 | 30 | 50 | | | | |
| 1 | Sand | 20 | Similar to Holes 2 and 4 | | | | | | | | | |
| 2 | Sand | 0 | 3 | 9 | 20 | 42 | 86 | 96 | | 2.56 | | |
| 3 | Clay | 0 | 3 | 8 | 16 | 30 | 70 | 97 | | 2.24 | | |
| 4 | Sand | 0 | 6 | 10 | 20 | 48 | 84 | 98 | | 2.66 | | |

CORRELATION DATA

Geological Age Quaternary
 Geological Source Dune Sand
 Material Similar to _____
 Specific Gravity (sat.) _____ (dry) _____
 Los Angeles Wear _____
 Absorption _____ Soundness _____
 Mt. Cu.Ft. _____ Str. Ratio _____
 Remarks _____



MATERIAL SITE DATA FORM

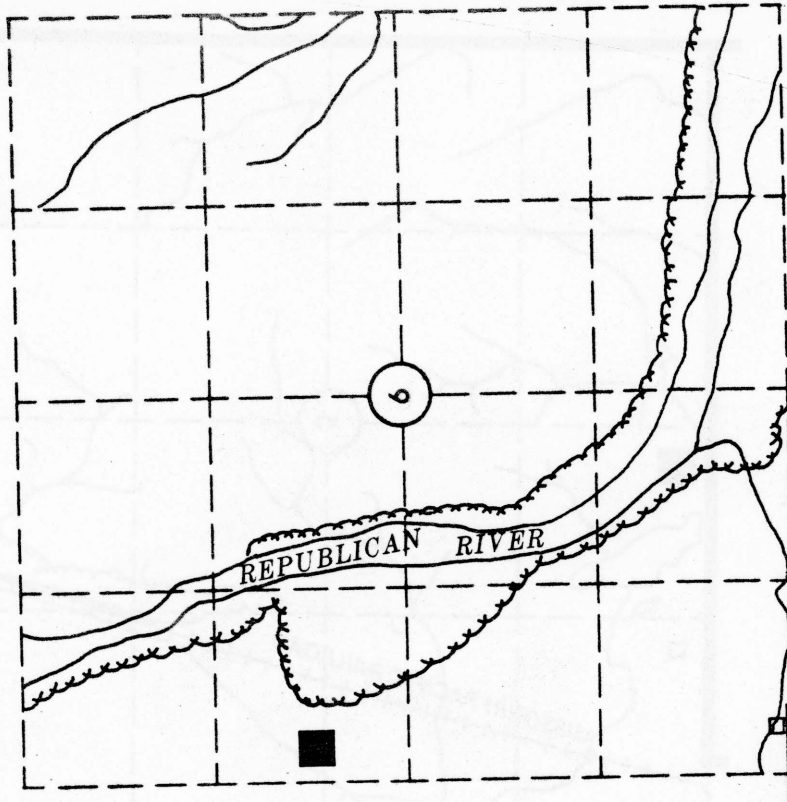
SG+3
 Site No. Qds Date April, 1976
 Material Fine Sand County Republic
 Location NW¹/₄ Sec. 6 Twp. 3S Range 4W
 Owner Herbert Sandell Manhattan, Kansas
 Name address
 Nature of Deposit Dry Accessibility Good Site located on Plate IV
 Status of Site Open Materials Site; Sampled

EXPLORATION DATA

| Test Hole | Material at bottom of Hole | Depth of over-burden | Depth of Material | Percent Retained | | | | | G.F. | L.L. | P.I. | | | | | | | | | | |
|-----------|----------------------------|----------------------|-------------------|------------------|-----|---|----|----|------|------|------|-----|-----|--|--|--|--|--|--|--|--|
| | | | | 1/2 | 3/4 | 1 | 15 | 30 | | | | 100 | 200 | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |

CORRELATION DATA

Geological Age Quaternary
 Geological Source Dune Sand
 Material Similar To _____
 Specific Gravity (Sat.) (Dry)
 Los Angeles Wear _____
 Absorption _____ Soundness _____
 Wt. Cu.Ft. _____ Str. Ratio _____
 Remarks KDOT Materials Department Site No. 79-8



Scale: 1" = 1/4 mile

MATERIAL SITE DATA FORM

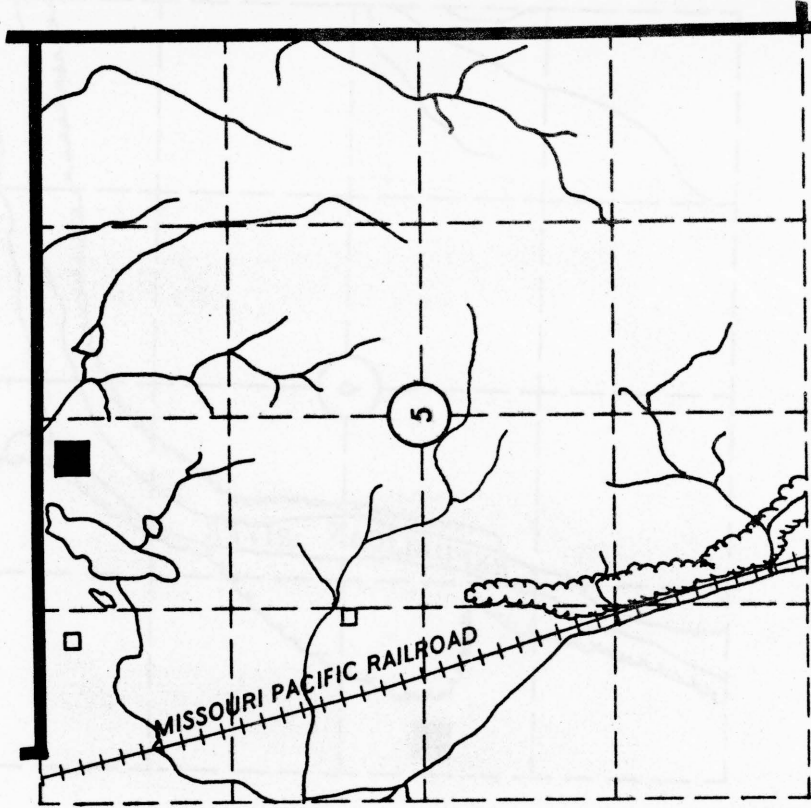
Site No. Si+4
01 Date April, 1976
 Material Silt County Republic
 Location NW 1/4 Sec. 5 Twp. 3S Range 4W
 Owner William B. Moe Scandia, Kansas
 address
 Nature of Deposit Dry accessibility Good site located on Plate IV
 Status of Site Open Materials Site; Sampled

EXPLORATION DATA

| Test Hole | Material at bottom of hole | Depth of overburden | Depth of Material | Percent Retained | | | | | Wash 200 | G.F. | L.L. | P.I. | | |
|-----------|----------------------------|---------------------|-------------------|------------------|-----|-----|-----|------|----------|------|------|------|------|------|
| | | | | 1 1/2 | 3/4 | 3/8 | 1/4 | 1/16 | | | | | 1/30 | 1/60 |
| 1 | Clay | 3 | 15 | | | | 0 | 1 | 1 | 1 | 96 | .04 | 30 | 4 |
| 2 | Clay | 2 | 15 | | | | | | 0 | 1 | 97 | .02 | 28 | 3 |
| 3 | Clay | 2 | 15 | | | | | | 0 | 1 | 98 | .01 | 29 | 5 |
| 4 | Clay | 2 | 15 | | | | | | 0 | 1 | 97 | .02 | 29 | 3 |
| 5 | Clay | 3 | 10 | | | | 0 | 1 | 1 | 2 | 95 | .05 | 28 | 4 |

CORRELATION DATA

Geological Age Quaternary
 Geological Source Loess
 Material Similar To _____
 Specific Gravity (Sat.) _____ (Dry) _____
 Los Angeles Wear _____
 Absorption _____ Soundness _____
 Mt. Cu.Ft. _____ Str. Ratio _____
 Remarks KDOT Materials Department Site No. 79-13



Scale: 1" = 1/4 mile

MATERIAL SITE DATA FORM

Site No. SG+5 Date April, 1976
Qa1
 Material Sand & Gravel County Republic
 Location SE 1/4 Sec. 7 Twp. 3S Range 4W
 Owner Lila L. Barclay Belleville, Kansas
 address
 Nature of Deposit Wet Accessibility Good Site Located on Plate IV
 Status of Site Open Materials Site; Sampled

EXPLORATION DATA

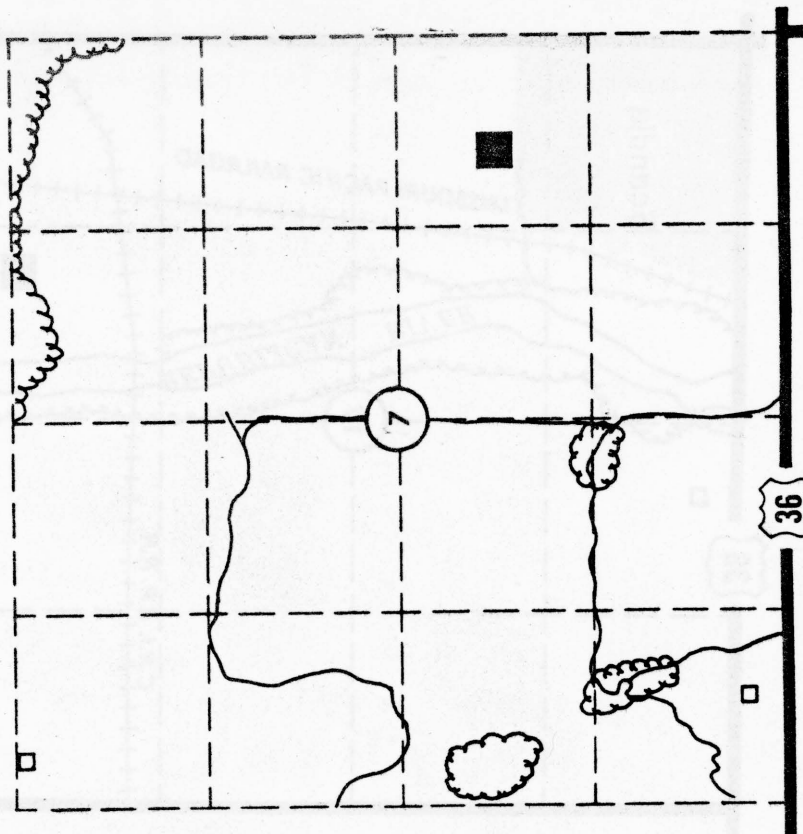
| Test Hole | Material at Bottom of Hole | Depth of over-burden | Depth of Material | Percent Retained | | | | | | | | S.F. | L.L. | P.I. | |
|-----------------|----------------------------|----------------------|-------------------|------------------|-----|---|-----|-----|-----|----|-----|------|------|------|-----|
| | | | | 1/2 | 3/4 | 1 | 3/8 | 1/2 | 3/4 | 1 | 100 | | | | 200 |
| Stockpile | | | | 0 | 1 | 8 | 35 | 75 | 88 | 93 | 94 | 5 | 3.94 | | |
| Lab. No. 68-230 | | | | 0 | 2 | 9 | 33 | 69 | 91 | 96 | 98 | 99 | 1 | 4.92 | |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |

CORRELATION DATA

Geological Age Quaternary
 Geological Source Alluvium
 Material Similar To KDOT Lab. No. 68-230

Specific Gravity (Det.) 2.57 (Dry)
 Los Angeles Bear 34(D)
 Absorption .91 Soundness .97

Pl. Co. Ft. Str. Ratio
 Remarks KDOT Materials Department Site No. 79-20
Abandoned pit



MATERIAL SITE DATA FORM

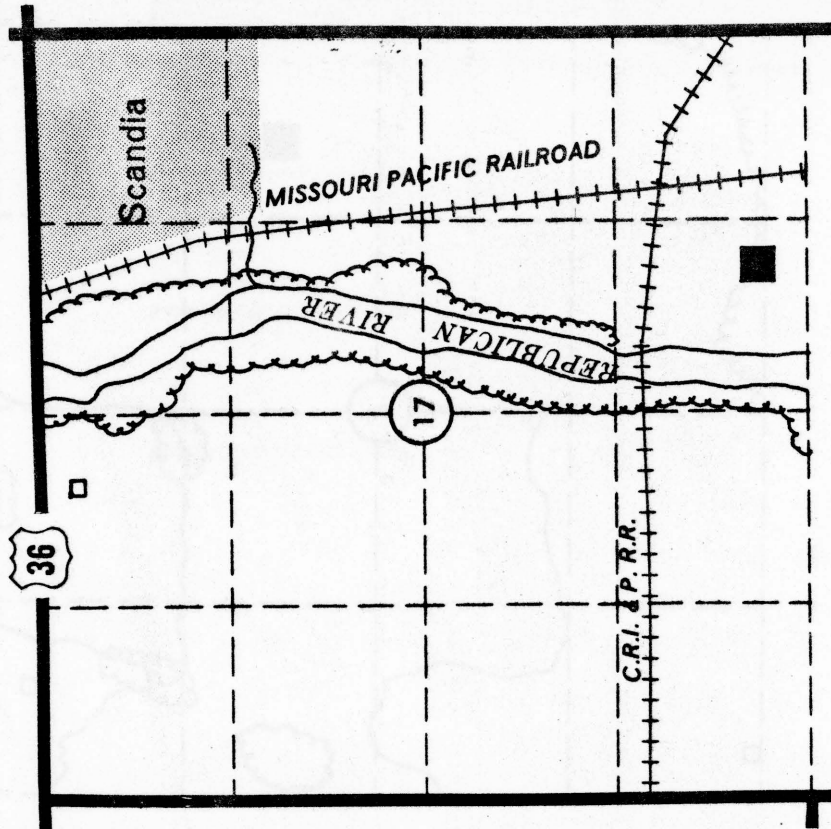
Site No. SG-6 Date April, 1976
QaT
 Material Sand & Gravel county Republic
 Location SE 1/4 Sec. 17 Twp. 3S Range 4W
 Owner Lila L. Barclay Belleville, Kansas
 name address
 Nature of Deposit Wet accessibility Good site located on Plate IV
 Status of Site Open Materials Site; Sampled

EXPLORATION DATA

| Test tube | Material at bottom of hole | Depth of over- burden | Depth of Material | Percent Retained | | | | | | | No. of 200 | S.F. | L.L. | P.L. |
|--------------|-------------------------------------|--------------------------------|-------------------------|------------------|-----|------|-------|-------|----|----|---------------|------|------|------|
| | | | | 1/2 | 3/4 | 1 | 1 1/4 | 1 1/2 | 2 | 3 | | | | |
| 65-3997 | | | 0 | 1 | 4 | 1331 | 55 | 75 | 93 | 99 | | 3.71 | | |
| 65-4040 | | | 0 | 1 | 724 | 49 | 73 | 94 | 98 | | 3.46 | | | |
| | | | | | | | | | | | | | | |

CORRELATION DATA

Geological Age Quaternary
 Geological Source Alluvium
 Material Similar To KDOT Lab No. 65-4040
 Specific Gravity (det.) 2.59 (dry)
 Los Angeles Wear 33(D)
 Absorption .40 Soundness .97
 Mt. Cu. Ft. Str. Ratio
 Remarks KDOT Materials Department Site No. 79-7
Pit inactive



MATERIAL SITE DATA FORM

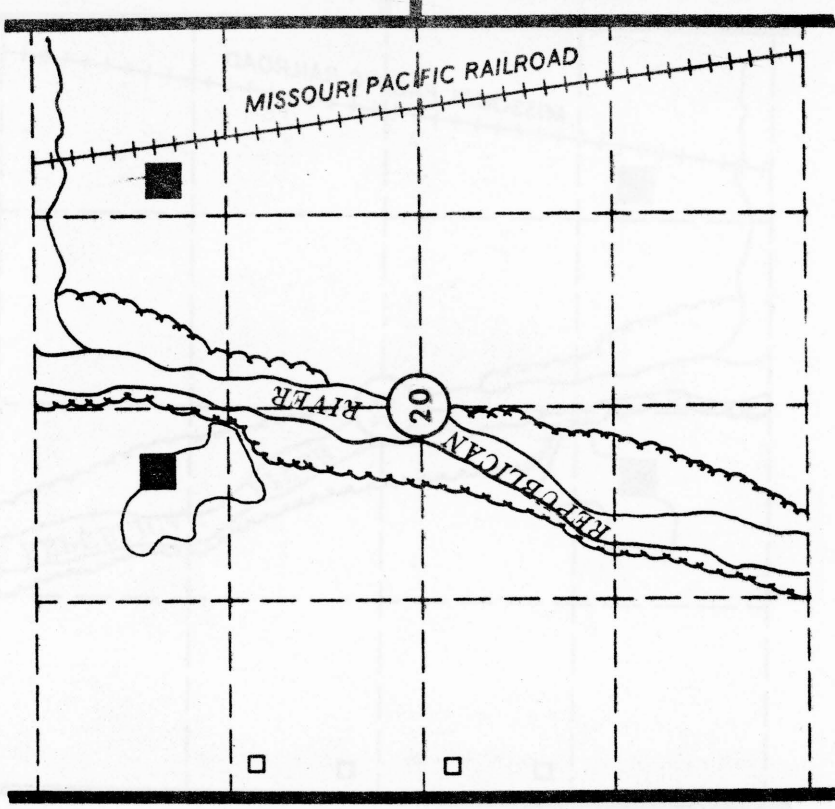
Site No. SG+7 Date April, 1976
Qa1
 Material Sand & Gravel County Republic
 Location NW 1/4 Sec. 20 Twp. 3S Range 4W
 Owner Donald Rumft, Inc. Scandia, Kansas
 address
 Nature of Deposit accessibility Site Located on Plate IV
 Status of Site Open Materials Site; Sampled

EXPLORATION DATA

| Test Hole | Material at Bottom of Hole | Depth of over-burden | Depth of Material | Percent Retained | | | | | | | Wash 200 | G.F. | L.L. | P.I. | | |
|-----------|----------------------------|----------------------|-------------------|------------------|-----|-----|-----|----|----|----|----------|------|------|------|-----|--|
| | | | | 1 1/2 | 3/4 | 3/8 | 1/4 | 16 | 30 | 50 | | | | | 100 | |
| 70-275 | | | | 0 | 4 | 17 | 45 | 79 | 95 | 98 | 99 | 1.0 | 4.37 | | | |
| 74-269 | | | | 0 | 1 | 10 | 30 | 58 | 81 | 96 | 99 | | 3.75 | | | |
| | | | | | | | | | | | | | | | | |

CORRELATION DATA

Geological Age Quaternary
 Geological Source Alluvium
 Material Similar To KDOT Lab No. 74-269
 Specific Gravity (Sat.) 2.55 (Dry)
2.60
 Los Angeles Wear 39(D)
 Absorption 0.8 Soundness .99
 Sh. Cuff. 1.57
 Remarks KDOT Materials Department Site No. 79-21



Scale: 1" = 1/4 mile

MATERIAL SITE DATA FORM

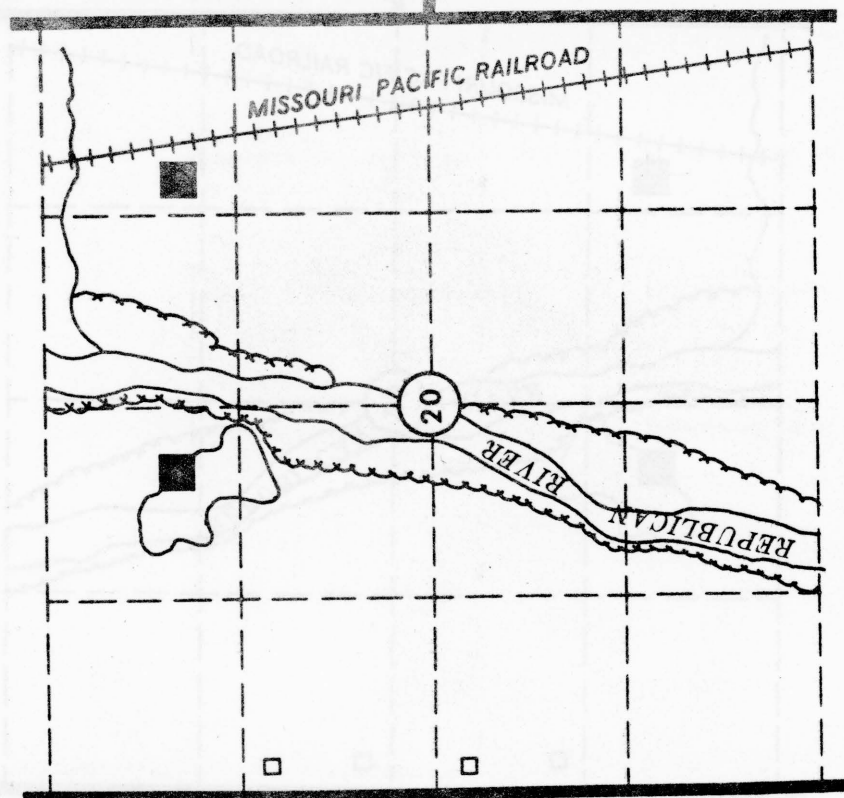
Site No. SG+8 Date April, 1976
Qa1
 Material Sand & Gravel County Republic
 Location E 1/2 NE 1/4 Sec. 20 Twp. 3S Range 4W
 Owner Herbert Sandell Manhattan, Ks.
 Nature of Deposit Wet Accessibility Good Site Located on Plate IV
 Status of Site Open Materials Site; Sampled

EXPLORATION DATA

| Test Hole | Material at Bottom of Hole | Depth of over-burden | Depth of Material | Percent Retained | | | | | | | | Mash 200 | G.F. | L.L. | P.I. | |
|-----------|----------------------------|----------------------|-------------------|------------------|-----|-----|-----|----|----|----|-----|----------|------|------|------|--|
| | | | | 1 1/2 | 3/4 | 3/8 | 1/8 | 16 | 30 | 50 | 100 | | | | | |
| 65-3997 | | | 0 | 1 | 4 | 13 | 31 | 55 | 75 | 93 | 99 | | | | | |
| 65-4040 | | | 0 | 1 | 7 | 24 | 49 | 73 | 94 | 98 | | | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | |

CORRELATION DATA

Geological Age Quaternary
 Geological Source Alluvium
 Material Similar To KDOT Lab No. 65-4040
 Specific Gravity (sat.) 2.59 (dry)
 Los Angeles Wear 33.4(D)
 Absorption .40 Soundness .97
 Wt. Co. Ft. Str. Ratio
 Remarks KDOT Materials Department Site No. 79-7
Pit inactive



Scale: 1" = 1/4 mile

MATERIAL SITE DATA FORM

Site No. SG+9 Date April, 1976
 Material Sand & Gravel County Republic
 Location SW 1/4 Sec. 21 Twp. 2S Range 3W
 Owner Eunice Carver Thompson Belleville, Kansas
 Nature of Deposit Wet & Dry accessibility Fair Site located on Plate V
 Status of Site Open Materials Site; Sampled

EXPLORATION DATA

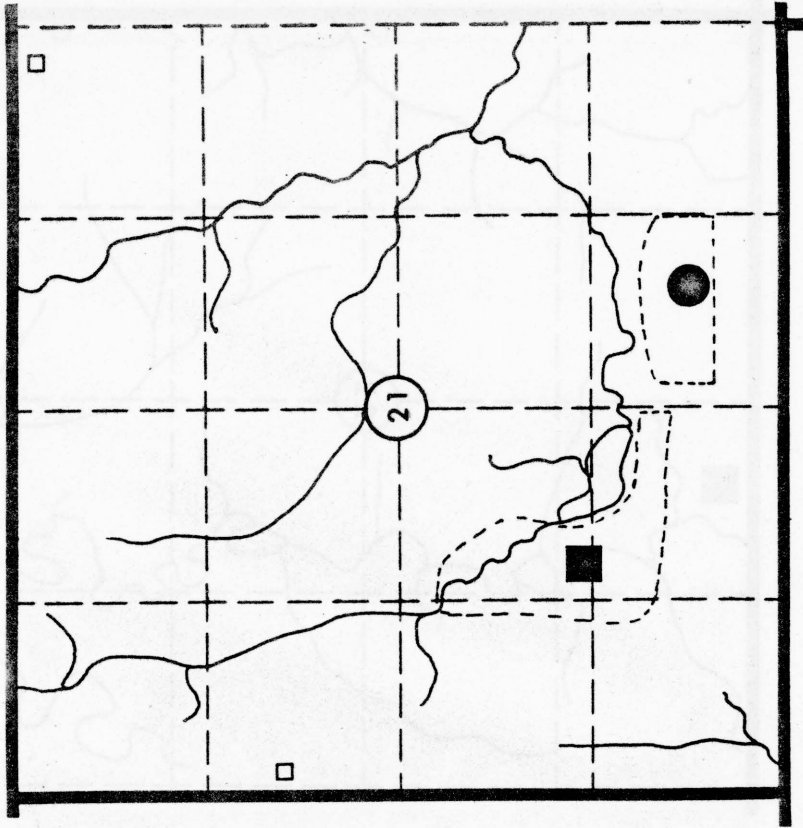
| Test Hole | Material at Bottom of Hole | Depth of over-burden | Depth of Material | Percent Retained | | | | | | | Wash 200 | G.F. | L.L. | P.I. |
|-----------|----------------------------|----------------------|-------------------|------------------|-----|-----|-----|----|----|----|----------|------|------|------|
| | | | | 1 1/2 | 3/4 | 3/8 | 1/8 | 16 | 30 | 50 | | | | |
| 1 | Clay | 4 | 5 | | | 0 | 2 | 5 | 11 | 20 | 32 | 59 | 0.70 | 16 |
| 2 | Clay | 6 | 8 | | | 0 | 1 | 4 | 21 | 45 | 73 | 92 | 3.33 | 0 |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |

CORRELATION DATA

Geological Age Quaternary
 Geological Source Meade Formation
 Material Similar To KDOT Lab. No. 56181, 62664 & 82664

Specific Gravity (Sat.) 2.61 (Dry)
 Los Angeles Wear 29 (D)
 Absorption Soundness .98
 Wt. Cu.ft. 108.1 Str. Ratio

Remarks KDOI Materials Department Site No. 79-2, 1 & 2 represent the finest and coarsest material that has been sampled at this site.



Scale: 1" = 1/4 mile

MATERIAL SITE DATA FORM

Site No. SG+10 Date April, 1976
 Material Fine Sand, Sand & Gravel county Republic
 Location E 1/2 NW 1/4 Sec. 22 Twp. 2S Range 3W
 Owner Chas Hanzlick Belleville, Kansas
 Nature of Deposit Dry accessibility Good Site Located on Plate V
 Status of Site Open Materials Site; Sampled

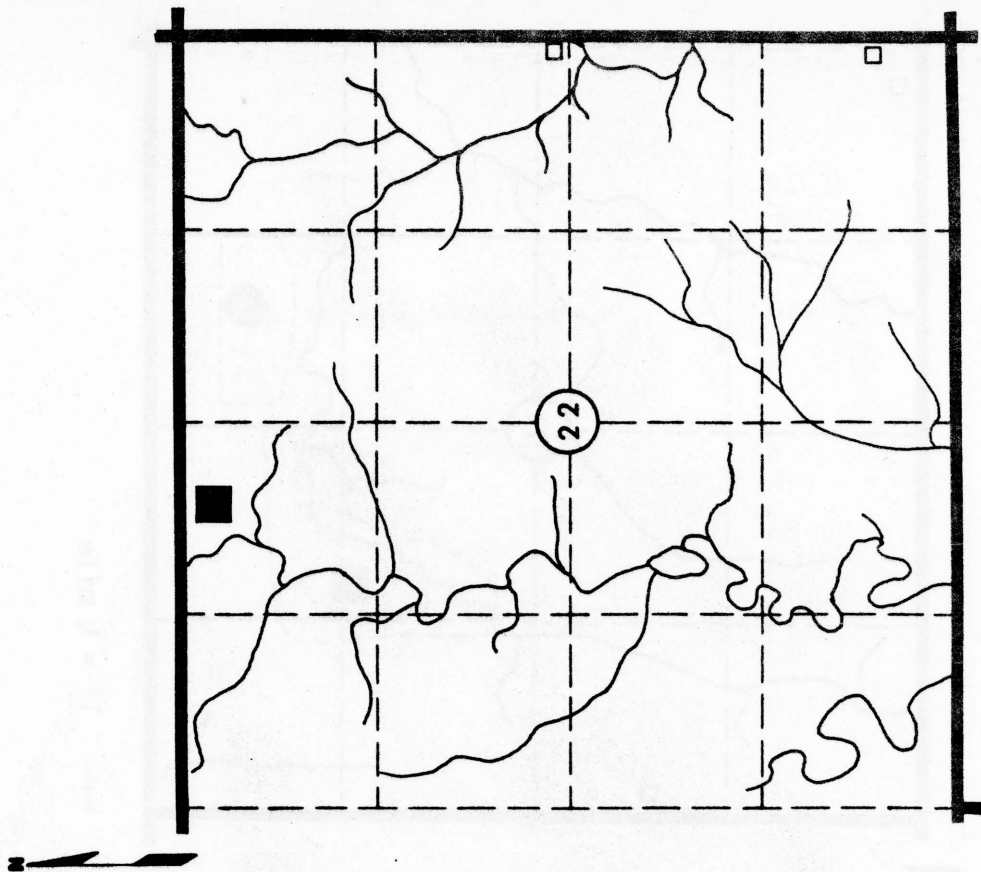
EXPLORATION DATA

| Test Hole | Material at Bottom of Hole | Depth of over-burden | Depth of Material | Percent Retained | | | | | | | Wash 200 | G.F. | L.L. | P.I. | |
|-----------|----------------------------|----------------------|-------------------|------------------|-----|-----|----|----|----|----|----------|------|------|------|-----|
| | | | | 1 1/2 | 3/4 | 3/8 | 5 | 16 | 30 | 50 | | | | | 100 |
| 1 | Clay | 11 | 20 | | | 0 | 6 | 27 | 60 | 83 | 91 | 7 | 2.67 | 19 | 3 |
| 4 | Clay | 9 | 17 | 0 | 1 | 5 | 20 | 44 | 64 | 85 | 94 | 5 | 3.13 | 20 | 3 |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |

CORRELATION DATA

Geological Age Quaternary
 Geological Source Meade Formation
 Material Similar To _____
 Specific Gravity (Sat.) (Dry)
 Los Angeles Wear _____
 Absorption _____ Soundness _____
 Mt. Cu.Ft. _____ Str. Ratio _____

Remarks KDOT Materials Department Site No. 79-18 Inactive Pit.
Insufficient quantity for quality test. 1 & 4 represent the finest and coarsest material that has been sampled at this site.



MATERIAL SITE DATA FORM

Site No. SG+12 Date April, 1976
Qm
 Material Sand & Gravel County Republic
 Location NE 1/4 Sec. 23 Twp. 2S Range 2W
 Owner Frank Filinger Cuba, Kansas
 address
 Nature of Deposit Dry Accessibility Good Site Located on Plate VI
 Status of Site Open Materials Site; Sampled

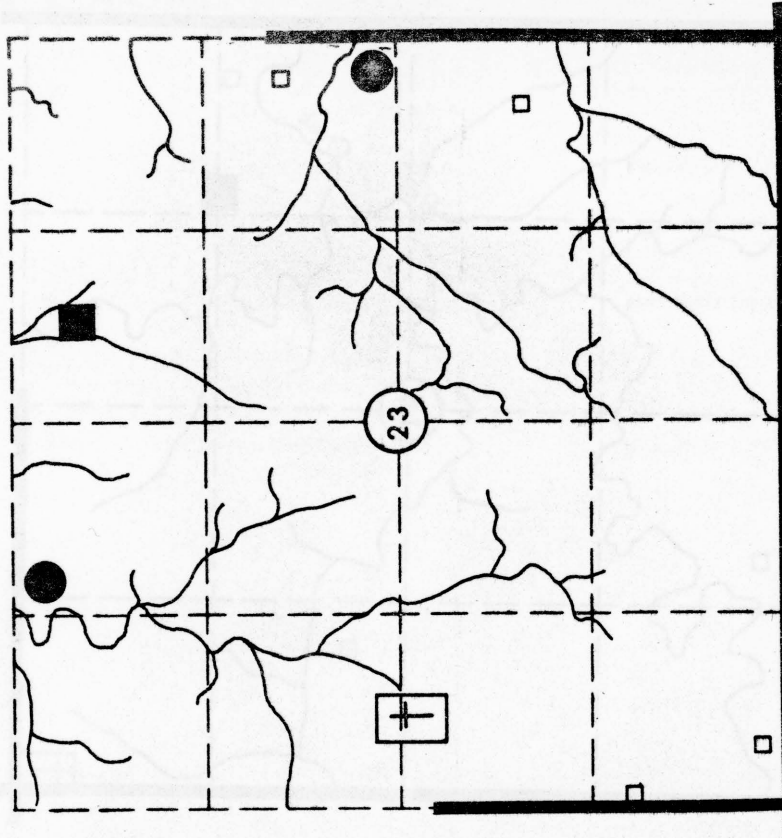
EXPLORATION DATA

| Test Hole | Material at Bottom of Hole | Depth of over-burden | Depth of Material | Percent Retained | | | | | | | No. 200 | G.F. | L.L. | P.I. | | |
|-----------|----------------------------|----------------------|-------------------|------------------|-----|---|-------|----|----|----|---------|------|------|------|----|---|
| | | | | 1/2 | 3/4 | 1 | 1 1/2 | 2 | 3 | 4 | | | | | | |
| 51A | Sand | 6 | 5 | | | | 0 | 1 | 8 | 14 | 26 | 42 | .91 | 25 | 11 | |
| 43 | Sand | 3 | 7 | | 0 | 1 | 3 | 16 | 42 | 72 | 82 | 91 | 1 | 3.07 | 20 | 6 |
| | | | | | | | | | | | | | | | | |

CORRELATION DATA

Geological Age Quaternary
 Geological Source Meade Formation
 Material Similar To _____
 Specific Gravity (Det.) (Dry)
 Los Angeles No. _____
 Absorption _____ Soundness _____
 St. Co. Ft. _____ Str. Ratio _____

Remarks KDOI Materials Department Site No. 79-5, 51A & 43
represent the finest and coarsest material that has been sampled
at this site.



Scale: 1" = 1/4 mile

MATERIAL SITE DATA FORM

Site No. SG+13 Date April, 1976
 Material Sand & Gravel County Republic
 Location SW 1/4 Sec. 24 Twp. 2S Range 2W
 Owner C. E. Heina Cuba, Kansas address
 Nature of Deposit Dry accessibility Good Site located on Plate VI
 Status of Site Open Materials Site, Sampled

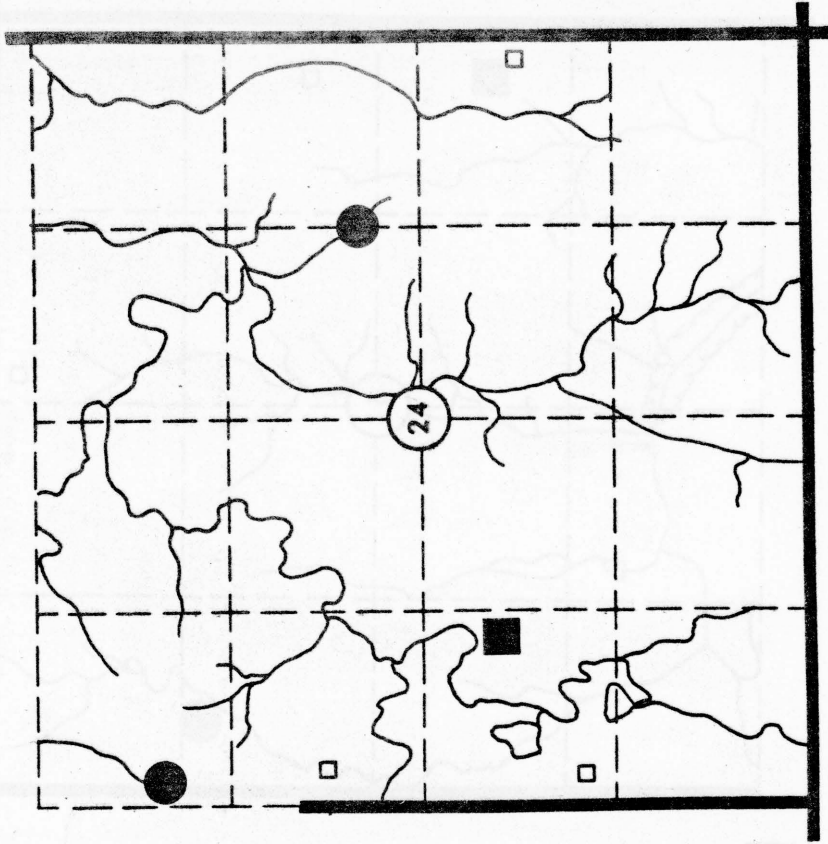
EXPLORATION DATA

| Test Hole | Material at bottom of hole | Depth of overburden | Depth of Material | Percent Retained | | | | | | | Wash 200 | G.F. | L.L. | P.I. | | |
|-----------|----------------------------|---------------------|-------------------|------------------|-----|---|-------|----|----|----|----------|------|------|------|----|---|
| | | | | 1/2 | 3/4 | 1 | 1 1/2 | 2 | 3 | 4 | | | | | | |
| 27 | Shale | 15 | 21 | | | 0 | 1 | 4 | 17 | 46 | 81 | 90 | 9 | 2.39 | 19 | 3 |
| 6 | Clay | 6 | 13 | 0 | 2 | 2 | 4 | 17 | 43 | 64 | 81 | 90 | 8 | 3.03 | 21 | 5 |
| | | | | | | | | | | | | | | | | |

CORRELATION DATA

Geological Age Quaternary
 Geological Source Meade Formation
 Material Similar To KDOT Lab. No. 75-1092
 Specific Gravity (sat.) 2.60 II (dry)
 Los Angeles Near 49(D)
 Absorption 0.3 Soundness 0.96
 Wt. Gr. Ft. Str. Ratio

Remarks KDOT Materials Department Site No. 79-3. 27 & 6 represent the finest and coarsest material that has been sampled at this site.



Scale: 1" = 1/4 mile

MATERIAL SITE DATA FORM

Site No. SG+14 Date April, 1976
 Material Sand & Gravel County Republic
 Location N $\frac{1}{2}$ E $\frac{1}{2}$ SE $\frac{1}{4}$ & E $\frac{1}{2}$ NE $\frac{1}{4}$ Sec. 19 Twp. 2S Range 1W
 Owner Frank Bartak R.R. Cuba ^{Source} Kansas
 Nature of Deposit Dry accessibility Good Site Located on Plate VI
 Status of Site Open Materials Site; Sampled

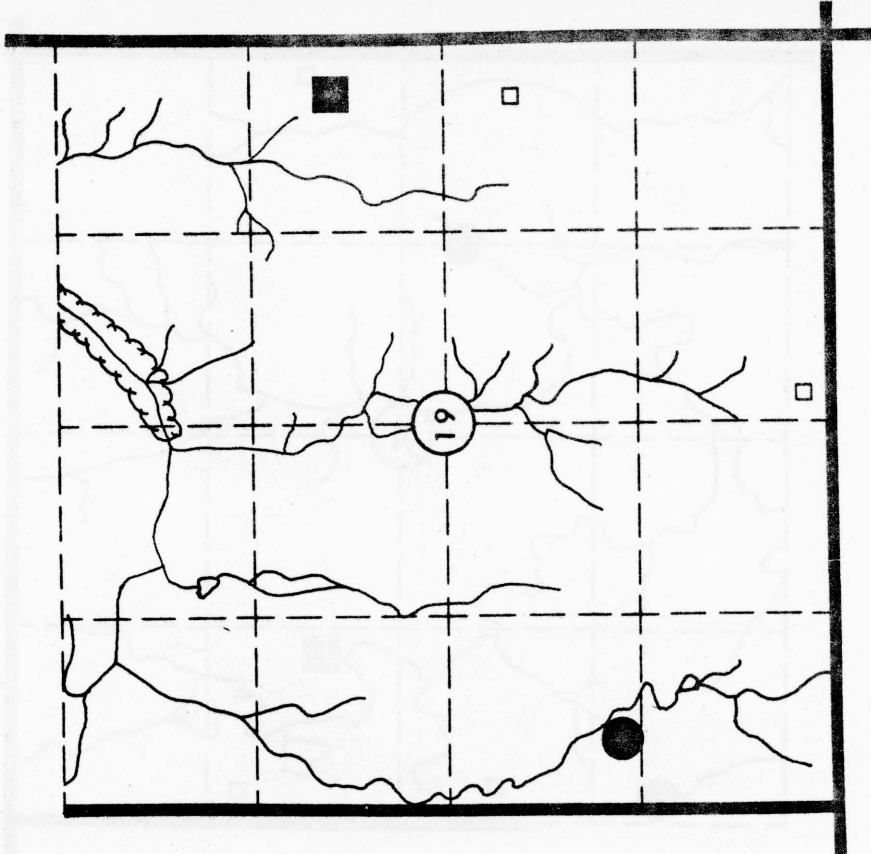
EXPLORATION DATA

| Test Hole | Material at Bottom of Hole | Depth of over-burden | Depth of Material | Percent Retained | | | | | Wash 200 | G.F. | L.L. | P.I. | | | | |
|-----------|----------------------------|----------------------|-------------------|------------------|-----|-----|-----|----|----------|------|------|------|----|------|-----|----|
| | | | | 1 1/2 | 3/4 | 3/8 | 1/8 | 16 | | | | | 30 | 50 | 100 | |
| 9 | Clay | 19 | 32 | | | 0 | 1 | 5 | 21 | 47 | 76 | 89 | 9 | 2.39 | 18 | 3 |
| 14 | Shale | 3 | 9 | | | 0 | 5 | 28 | 61 | 82 | 92 | 95 | 4 | 3.63 | 30 | 14 |
| | | | | | | | | | | | | | | | | |

CORRELATION DATA

Geological Age Quaternary
 Geological Source Meade Formation
 Material Similar to KDOT Lab. No. 75-1091
 Specific Gravity (sat.) 2.56 I (dry) 2.60 II
 Los Angeles Wear 0.8 I
 Absorption 0.3 II Soundness 0.97
 Wt. Co. fs. 44(D) Str. Ratio _____

Remarks KDOT Materials Department Site No. 79-16. 9 & 14
represent the finest and coarsest material that has been
sampled at this site.



Scale: 1" = 1/4 mile

MATERIAL SITE DATA FORM

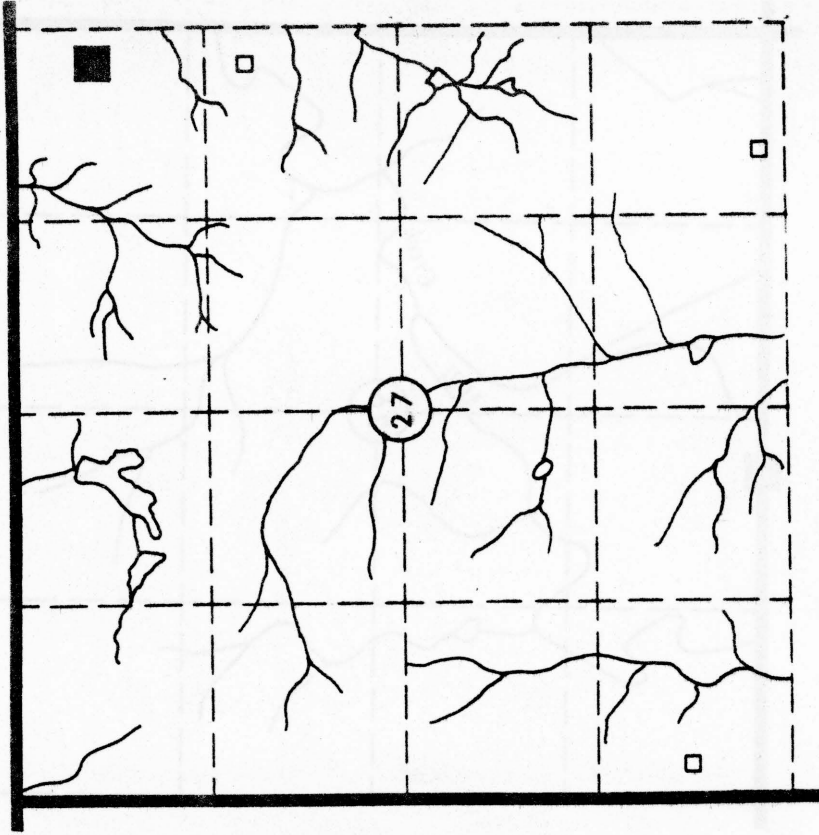
Site No. Ss+15 Date April, 1976
Kd
 Material Sandstone County Republic
 Location NE 1/4 NE 1/4 Sec. 27 Twp. 2S Range 1W
 Owner Edward Havel Narka, Kansas
name address
 Nature of Deposit Dry Accessibility Good Site Located on Plate VI
 Status of Site Open Materials Site; Sampled

EXPLORATION DATA

| Test Hole | Material at bottom of hole | Depth of over-burden | Depth of Material | Percent Retained | | | | | Wash 200 | G.F. | L.L. | P.I. | | | | |
|-----------|----------------------------|----------------------|-------------------|------------------|-----|---|----|----|----------|------|------|------|----|-----|--|--|
| | | | | 1/2 | 3/4 | 1 | 16 | 30 | | | | | 50 | 100 | | |
| 6 | Ss | 14.0 | 18.2 | | | | | 0 | 10 | | | .10 | | | | |
| 11 | Ss | 0 | | | | | | 0 | 1 | 89 | | .90 | | | | |
| | | | | | | | | | | | | | | | | |

CORRELATION DATA

Geological Age Cretaceous
 Geological Source Dakota Formation
 Material Similar to _____
 Specific Gravity (Sat.) _____ (Dry)
 Los Angeles Near _____
 Description _____ Soundness _____
 Ut. Co. Ft. _____ Str. Ratio _____
 Remarks KDOT Materials Department Site No. 79-10



Scale: 1" = 1/4 mile

MATERIAL SITE DATA FORM

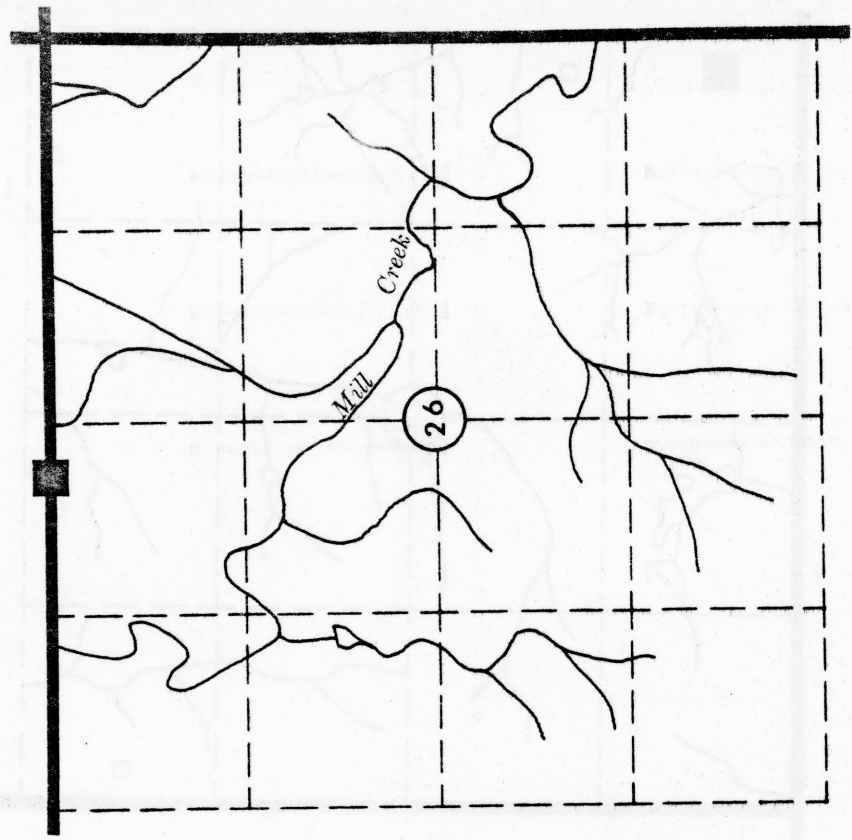
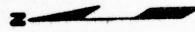
Site No. SG+16 Date April, 1976
Qm
 Material Sand & Gravel County Republic
 Location NE 1/4 NW 1/4 Sec. 26 Twp. 2S Range 1W
 Owner Edward Havel Narka, Kansas
address
 Nature of Deposit Dry Accessibility Good Site located on Plate VI
 Status of Site Open Materials Site; Sampled

EXPLORATION DATA

| Test Hole | Material at Bottom of Hole | Depth of over-burden | Depth of Material | Percent Retained | | | | | | | Wash 200 | G.F. | L.L. | P.I. | |
|-----------|----------------------------|----------------------|-------------------|------------------|-----|-----|-----|------|-----|------|----------|------|------|------|---|
| | | | | 1/2 | 3/4 | 3/8 | 1/4 | 3/16 | 1/8 | 1/16 | | | | | |
| 11 | Clay | 6 | 3 | | | | 0 | 2 | 5 | 15 | 34 | 57 | .56 | 22 | 7 |
| 1 | Shale | 2 | 9.5 | 0 | 2 | 6 | 10 | 22 | 46 | 68 | 80 | 90 | 3.24 | 18 | 4 |
| | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | |

CORRELATION DATA

Geological Age Quaternary
 Geological Source Meade Formation
 Material Similar To _____
 Specific Gravity (Sat.) _____ (Dry) _____
 Los Angeles Wear _____
 Absorption _____ Soundness _____
 Wt. Cu.Ft. _____ Str. Ratio _____
 Remarks KDOT Materials Department Site No. 79-4, 11 & 1
represent the finest and coarsest material that has been
sampled at this site.



Scale: 1" = 1/4 mile

Note: Part of pit located in SE 1/4 SW 1/4 sec. 23T. 25., R.1W.

MATERIAL SITE DATA FORM

Site No. SG+16 Date April, 1976
Qm
 Material Sand & Gravel County Republic
 Location SE 1/4 SW 1/4 Sec. 23 Twp. 2S Range 1W
 Owner George McKenna address Tulsa, Oklahoma
 Nature of Deposit Dry accessibility Good Site Located on Plate VI
 Status of Site Open Materials Site; Sampled

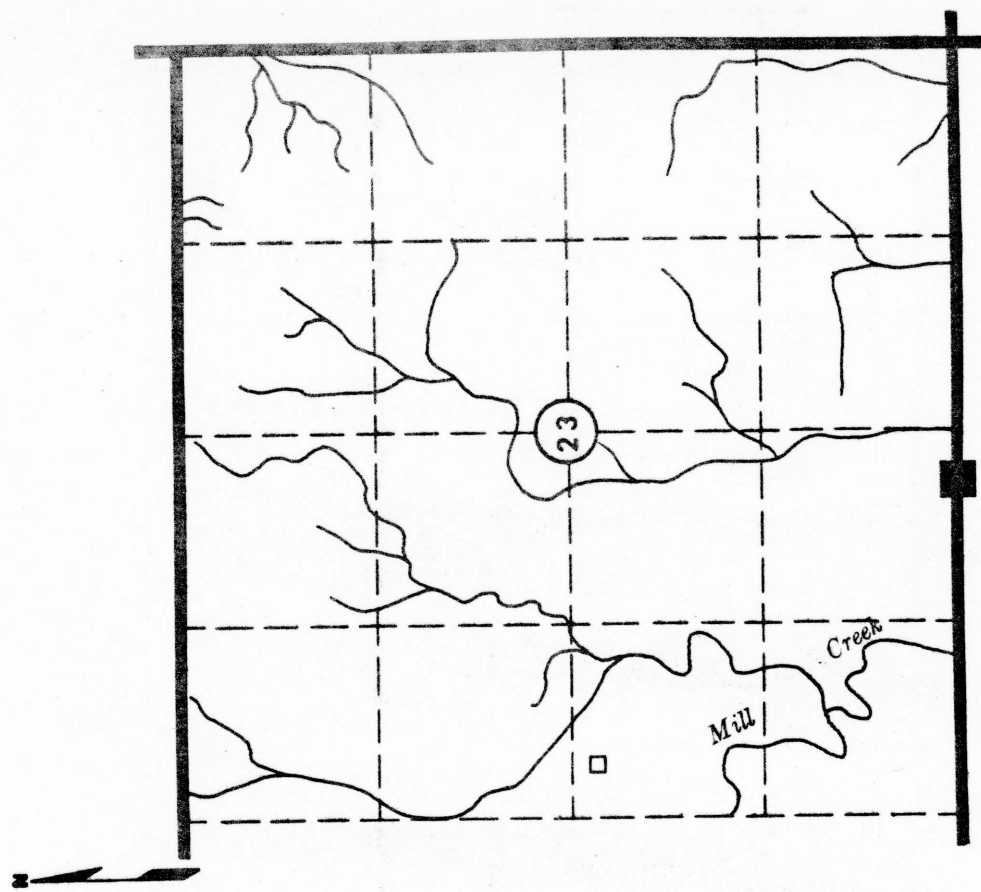
EXPLORATION DATA

| Test Hole | Material at Bottom of Hole | Depth of over-burden | Depth of Material | Percent Retained | | | | | Mesh 200 | S.F. | L.L. | P.I. | | | |
|-----------|----------------------------|----------------------|-------------------|------------------|-----|---|-------|----|----------|------|------|------|------|----|---|
| | | | | 1/2 | 3/4 | 1 | 1 1/2 | 2 | | | | | | | |
| 11 | Clay | 6 | 3 | | | | 0 | 2 | 5 | 15 | 34 | 57 | .56 | 22 | 7 |
| 1 | Shale | 2 | 9.5 | 0 | 2 | 6 | 10 | 22 | 46 | 68 | 80 | 90 | 3.24 | 18 | 4 |
| | | | | | | | | | | | | | | | |
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CORRELATION DATA

Geological Age Quaternary
 Geological Source Meade Formation
 Material Similar To _____
 Specific Gravity (Sat.) _____ (Dry) _____
 Los Angeles Wear _____
 Absorption _____ Soundness _____

Str. Cu.Ft. _____ Str. Ratio _____
 Remarks KDOT Materials Department Site No. 79-4. 11 & 1 represent the finest and coarsest material that has been sampled at this site.



Scale: 1" = 1/4 mile

Note: Part of pit located in NE 1/4 NW 1/4 Sec 26 T.2S., R.1W.

OPEN MATERIALS SITES ; NOT SAMPLED

LEGEND

===== Trail or lane

———— Road

-+--+--+ Railroad

~~~~~ Hedge or trees

~~~~~  
Name

Intermittent streams

Pond or lake

■ Open materials sites; sampled

● Open materials sites; not sampled

▼ Prospective materials sites; sampled

◆ Prospective materials sites; not sampled

⑤ Center of section

□ Dwelling

⊕ Cemetery

▣ School

⊕ Church

▣ Town or city

MATERIAL SITE DATA FORM

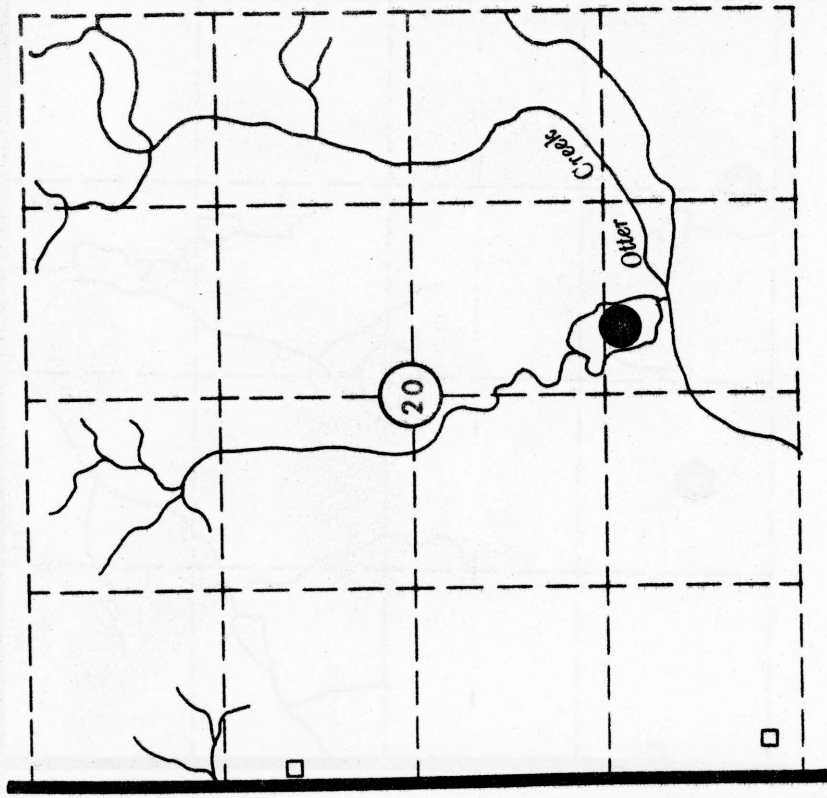
Site No. SG+18 Date April, 1976
Qds
 Material Sand & Gravel County Republic
 Location S 1/2 SE 1/4 Sec. 20 Twp. 1S Range 4W
 Owner Howard Miller Republic, Kansas
 name address
 Nature of Deposit Wet Accessibility Good site located on Plate I
 Status of Site Open Materials Site; Not Sampled

EXPLORATION DATA

| Test Hole | Material at Bottom of Hole | Depth of over-burden | Depth of Material | Percent Retained | | | | | | | Wash 200 | G.F. | L.L. | P.I. |
|-----------|----------------------------|----------------------|-------------------|------------------|-----|-----|-----|------|------|------|----------|------|------|------|
| | | | | 1 1/2 | 3/4 | 3/8 | 1/4 | 1/16 | 1/32 | 1/64 | | | | |
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CORRELATION DATA

Geological Age Quaternary
 Geological Source Dune Sand
 Material Similar To _____
 Specific Gravity (sat.) _____ (dry)
 Los Angeles Wear _____
 Absorption _____ Soundness _____
 Wt. Ca.Ft. _____ Str. Ratio _____
 Remarks _____



MATERIAL SITE DATA FORM

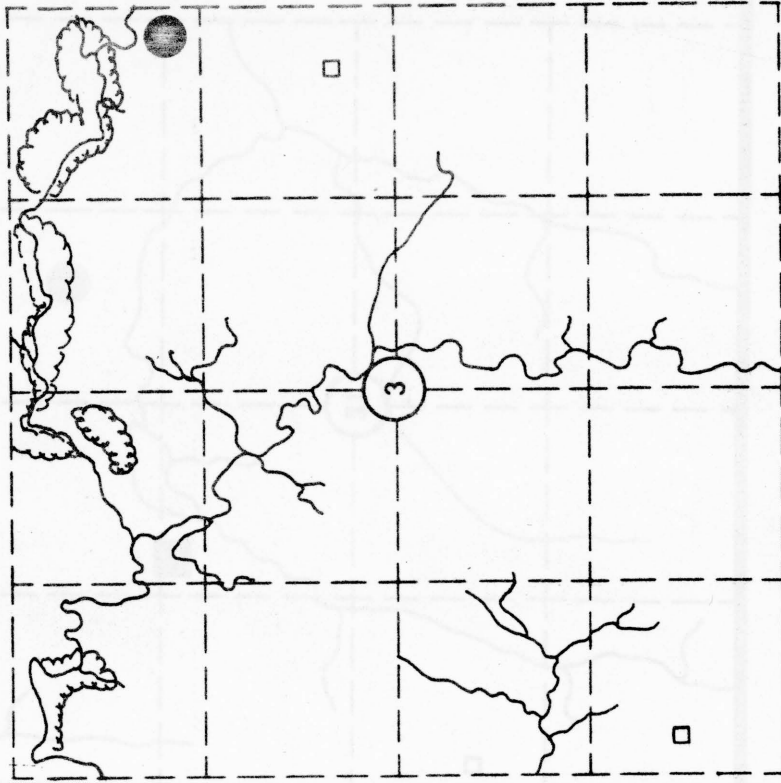
Site No. Ls+19 Date April, 1976
Kg
 Material Limestone County Republic
 Location E 1/2 NE 1/4 Sec. 3 Twp. 1S Range 1W
Frank Cerny Narka, Kansas
 Owner name address
 Nature of Deposit Dry accessibility Good Site Located on Plate III
 Status of Site Open Materials Site; Not Sampled

EXPLORATION DATA

| Test Mole | Material at Bottom of Mole | Depth of over- burden | Depth of Material | Percent Retained | | | | | | Mesh 200 | G.F. | L.L. | P.I. |
|--------------|-------------------------------------|--------------------------------|-------------------------|------------------|-----|---|-----|-----|-----|-------------|------|------|------|
| | | | | 1/2 | 3/4 | 1 | 3/8 | 1/4 | 1/8 | | | | |
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CORRELATION DATA

Geological Age Cretaceous
 Geological Source Greenhorn Limestone Formation
 Material Similar To _____
 Specific Gravity (Sat.) _____ (Dry)
 Los Angeles Wear _____
 Absorption _____ Soundness _____
 St. Cu.Ft. _____ Str. Ratio _____
 Remarks _____



Scale: 1" = 1/4 mile

MATERIAL SITE DATA FORM

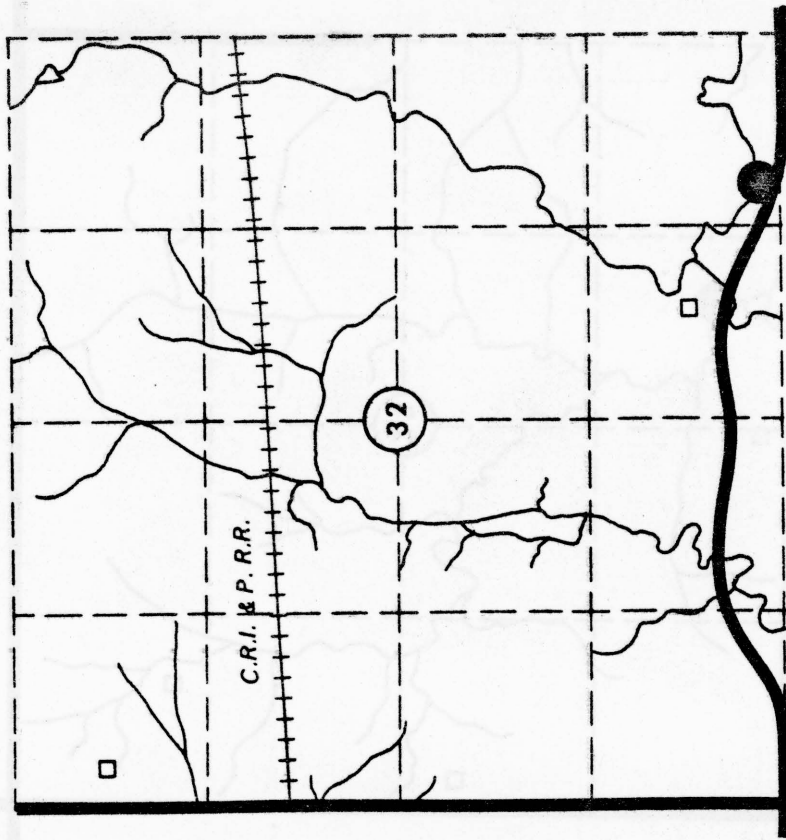
Site No. SG-21 Date April, 1976
Qt
 Material Sand & Gravel County Republic
 Location SE 1/4 SE 1/4 Sec. 32 Twp. 2S Range 2W
Marveleta Janasek Belleville, Kansas
 Owner name address
 Nature of Deposit Dry accessibility Good site located on Plate V
 Status of Site Open Materials Site; Not Sampled

EXPLORATION DATA

| Test Hole | Material at bottom of hole | Depth of overburden | Depth of Material | Percent Retained | | | | | | | Mash 200 | G.F. | L.L. | P.I. | |
|-----------|----------------------------|---------------------|-------------------|------------------|-----|-----|-----|-----|-----|-----|----------|------|------|------|--|
| | | | | 1/2 | 3/4 | 3/8 | 5/8 | 1/2 | 3/4 | 5/8 | | | | | |
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CORRELATION DATA

Geological Age Quaternary
 Geological Source Wisconsinan Terrace
 Material Similar To _____
 Specific Gravity (sat.) _____ (Dry)
 Los Angeles Wear _____
 Absorption _____ Soundness _____
 St. Co. Ft. _____ Str. Ratio _____
 Remarks _____



Scale: 1" = 1/4 mile

MATERIAL SITE DATA FORM

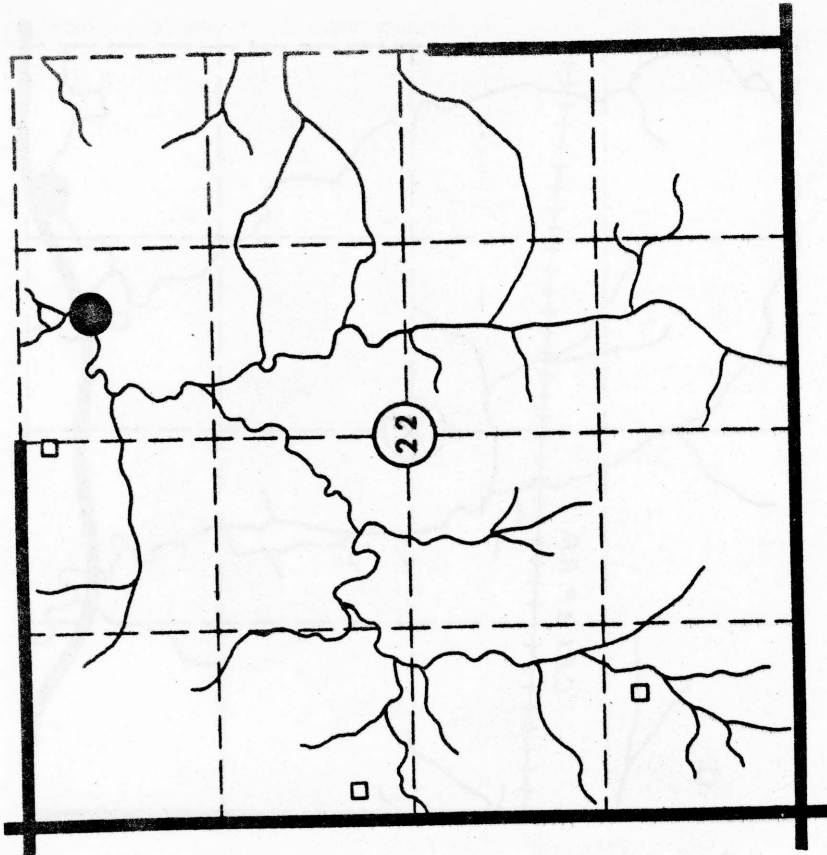
Site No. SG+22 Date April, 1976
0m
 Material Sand & Gravel County Republic
 Location W 1/2 NE 1/4 Sec. 22 Twp. 2S Range 2W
 Owner Edward Splichal Munden, Kansas
 Nature of Deposit Dry accessibility Fair site located on Plate VI
 Status of Site Open Materials Site; Not Sampled

EXPLORATION DATA

| Test Hole | Material at Bottom of Hole | Depth of over-burden | Depth of Material | Percent Retained | | | | | | Mesh 200 | G.F. | L.L. | P.I. |
|-----------|----------------------------|----------------------|-------------------|------------------|-----|-----|-----|----|----|----------|------|------|------|
| | | | | 1 1/2 | 3/4 | 3/8 | 1/4 | 16 | 30 | | | | |
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CORRELATION DATA

Geological Age Quaternary
 Geological Source Meade Formation
 Material Similar To _____
 Specific Gravity (sat.) _____ (dry) _____
 Los Angeles Near _____
 Absorption _____ Soundness _____
 Ut. Co. Ft. _____ Str. Ratio _____
 Remarks _____



Scale: 1" = 1/4 mile

MATERIAL SITE DATA FORM

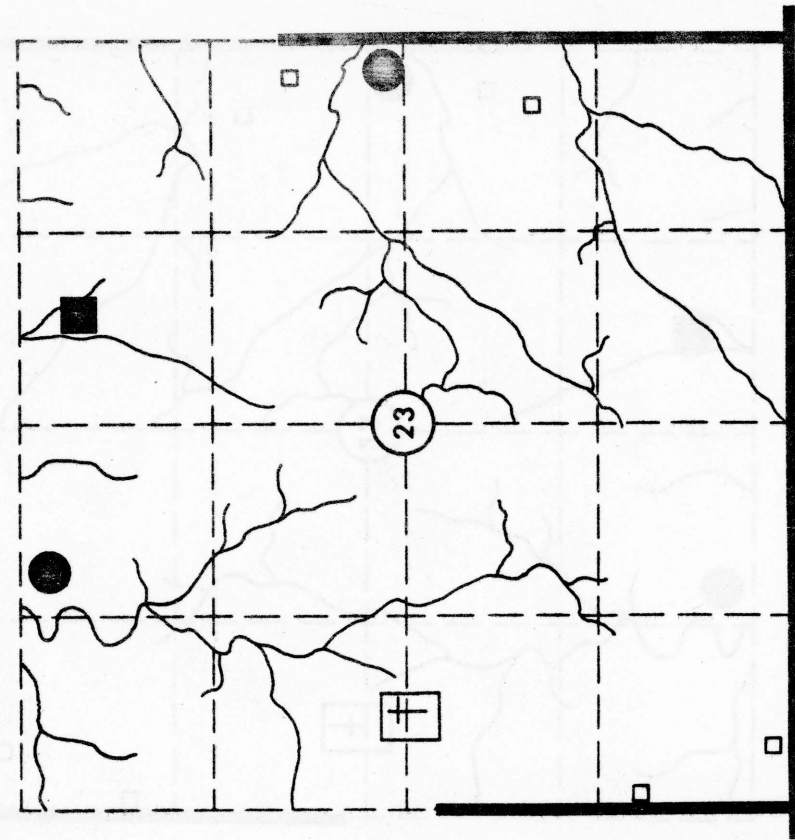
Site No. SG+23 Date April, 1976
Qm
 Material Sand & Gravel County Republic
 Location N¹/₂ NW¹/₄ Sec. 23 Twp. 2S Range 2W
 Owner Frank Filinger Cuba, Kansas
 Name address
 Nature of Deposit Dry accessibility Poor Site located on Plate VI
 Status of Site Open Materials Site; Not Sampled

EXPLORATION DATA

| Test Hole | Material at Bottom of Hole | Depth of over-burden | Depth of Material | Percent Retained | | | | | | Wash 200 | S.F. | L.L. | P.I. |
|-----------|----------------------------|----------------------|-------------------|------------------|-----|-----|-----|----|----|----------|------|------|------|
| | | | | 1 1/2 | 3/4 | 3/8 | 1/4 | 16 | 30 | | | | |
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CORRELATION DATA

Geological Age Quaternary
 Geological Source Meade Formation
 Material Similar To _____
 Specific Gravity (sat.) _____ (dry) _____
 Los Angeles Wear _____
 Absorption _____ Soundness _____
 Wt. Cu.ft. _____ Str. Ratio _____
 Remarks _____



Scale: 1" = 1/4 mile

MATERIAL SITE DATA FORM

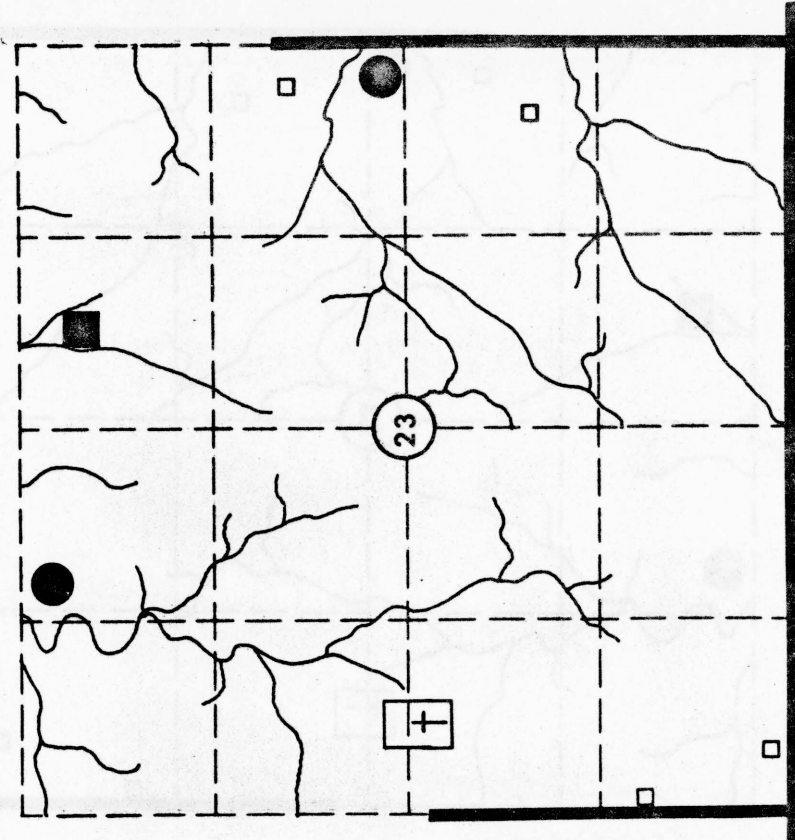
Site No. SG+24 Date April, 1976
Om County Republic
 Material Sand & Gravel
 Location NE 1/4 Sec. 23 Twp. 2S Range 2W
 Owner Frank Filingier address Cuba, Kansas
 Nature of Deposit Dry accessibility Good site located on Plate VI
 Status of Site Open Materials Sites; Not Sampled

EXPLORATION DATA

| Test Hole | Material at bottom of hole | Depth or overburden | Depth of Material | Percent Retained | | | | | | Wash 200 | L.L. | P.I. | |
|-----------|----------------------------|---------------------|-------------------|------------------|-----|-----|---|----|----|----------|------|------|----|
| | | | | 1/2 | 3/4 | 3/8 | 5 | 16 | 30 | | | | 50 |
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CORRELATION DATA

Geological Age Quaternary
 Geological Source Meade Formation
 Material Similar To _____
 Specific Gravity (Sat.) _____ (Dry) _____
 Los Angeles Wear _____
 Absorption _____ Soundness _____
 Wt. Cu.Ft. _____ Str. Ratio _____
 Remarks _____



Scale: 1" = 1/2 mile

MATERIAL SITE DATA FORM

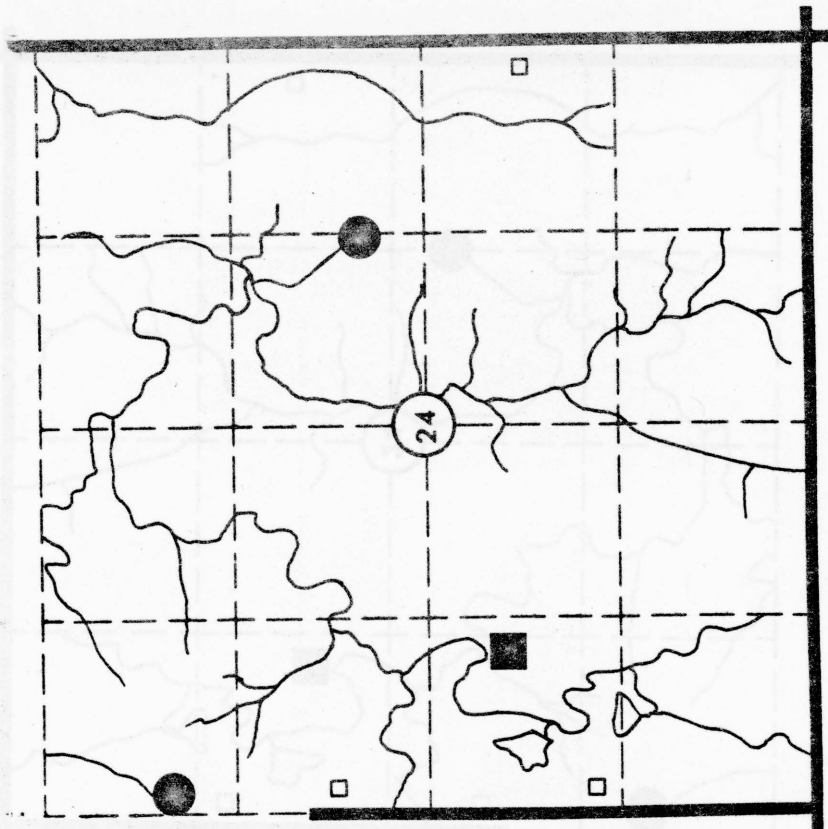
Site No. SG-25 Date April, 1976
Qm
 Material Sand & Gravel County Republic
 Location N $\frac{1}{2}$ NW $\frac{1}{4}$ Sec. 24 Twp. 2S Range 2W
 Owner Henry Starnad Munden, Kansas
name address
 Nature of Deposit Dry accessibility Fair site located on Plate VI
 Status of Site Open Materials Site; Not Sampled

EXPLORATION DATA

| Test Mile of Hole | Material at Bottom of Hole | Depth or over- burden | Depth of Material | Percent Retained | | | | | | | Wash 200 | G.F. | L.L. | P.L. | |
|-------------------------|-------------------------------------|--------------------------------|-------------------------|------------------|-----|-----|-----|----|----|----|-------------|------|------|------|-----|
| | | | | 1/2 | 3/4 | 3/8 | 5/8 | 16 | 30 | 50 | | | | | 100 |
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CORRELATION DATA

Geological Age Quaternary
 Geological Source Meade Formation
 Material Similar To _____
 Specific Gravity (Sat.) _____ (Dry) _____
 Los Angeles Wear _____
 Absorption _____ Soundness _____
 Ut. Co. Ft. _____ Str. Ratio _____
 Remarks _____



Scale: 1" = 1/4 mile

MATERIAL SITE DATA FORM

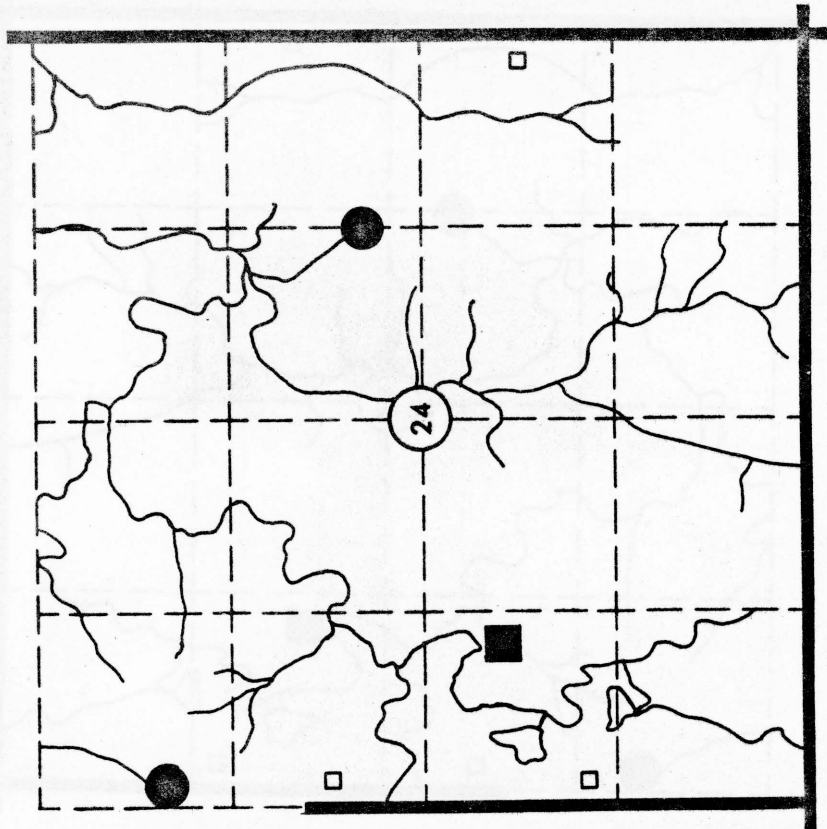
Site No. SG-26 Date April, 1976
Qm
 Material Sand & Gravel County Republic
 Location NE 1/4 Sec. 24 Twp. 2S Range 2W
 Owner Henry Starnad Munden, Kansas
 name address
 Nature of Deposit Dry Accessibility Good Site Located on Plate VI
 Status of Site Open Materials Site; Not Sampled

EXPLORATION DATA

| Test Hole | Material at Bottom of Hole | Depth of overburden | Depth of Material | Percent Retained | | | | | | Wash 200 | G.F. | L.L. | P.I. |
|-----------|----------------------------|---------------------|-------------------|------------------|-----|---|-------|---|---|----------|------|------|------|
| | | | | 1/2 | 3/4 | 1 | 1 1/2 | 2 | 3 | | | | |
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CORRELATION DATA

Geological Age Quaternary
 Geological Source Meade Formation
 Material Similar To _____
 Specific Gravity (Sat.) _____ (Dry)
 Los Angeles Wear _____
 Absorption _____ Soundness _____
 Wt. Cu.Ft. _____ Str. Ratio _____
 Remarks _____



Scale: 1" = 1/4 mile

MATERIAL SITE DATA FORM

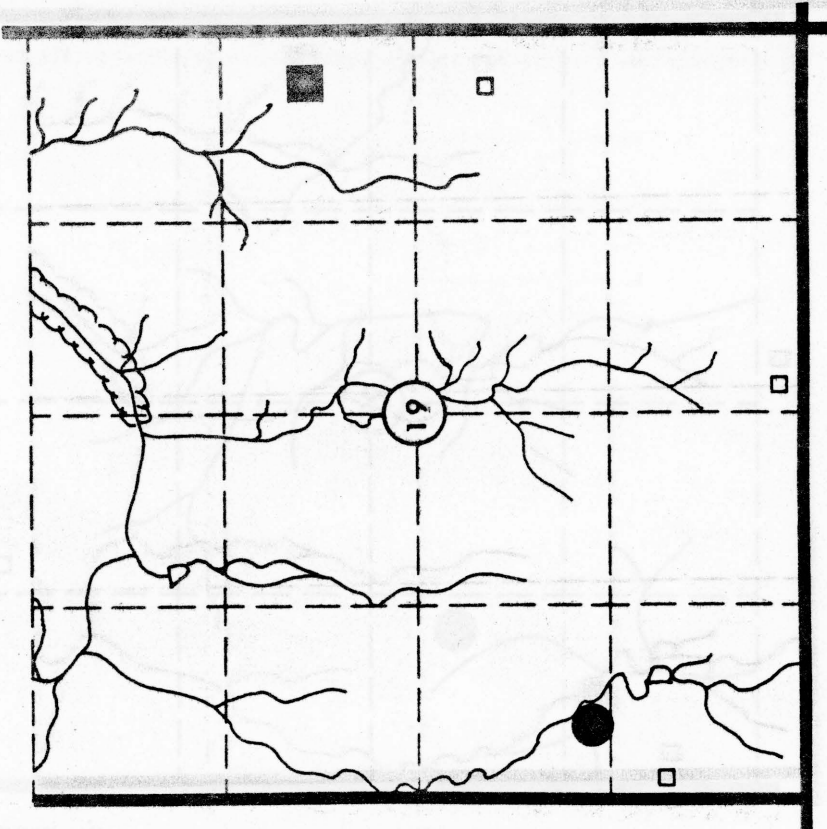
Site No. SG-27 Date April, 1976
Qm
 Material Sand & Gravel County Republic
 Location W $\frac{1}{2}$ SW $\frac{1}{4}$ Sec. 19 Twp. 2S Range 1W
 Owner Brendalu Fillinger, Jr. Cuba, Kansas address
 Nature of Deposit _____ accessibility _____ Site Located on Plate VI
 Status of Site Open Materials Site; Not Sampled

EXPLORATION DATA

| Test Tube | Material at Bottom of Hole | Depth of over- burden | Depth of Material | Percent Retained | | | | | | | Wash 200 | G.F. | L.L. | P.I. | | | |
|--------------|-------------------------------------|--------------------------------|-------------------------|------------------|-----|-----|-----|------|-----|----|-------------|------|------|------|----|----|-----|
| | | | | 1/2 | 3/4 | 3/8 | 1/4 | 3/16 | 1/8 | 16 | | | | | 30 | 50 | 100 |
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CORRELATION DATA

Geological Age Quaternary
 Geological Source Meade Formation
 Material Similar To _____
 Specific Gravity (Sat.) _____ (Dry) _____
 Los Angeles Wear _____
 Absorption _____ Soundness _____
 Mt. Cu. Ft. _____ Str. Ratio _____
 Remarks _____



Scale: 1" = 1/4 mile

MATERIAL SITE DATA FORM

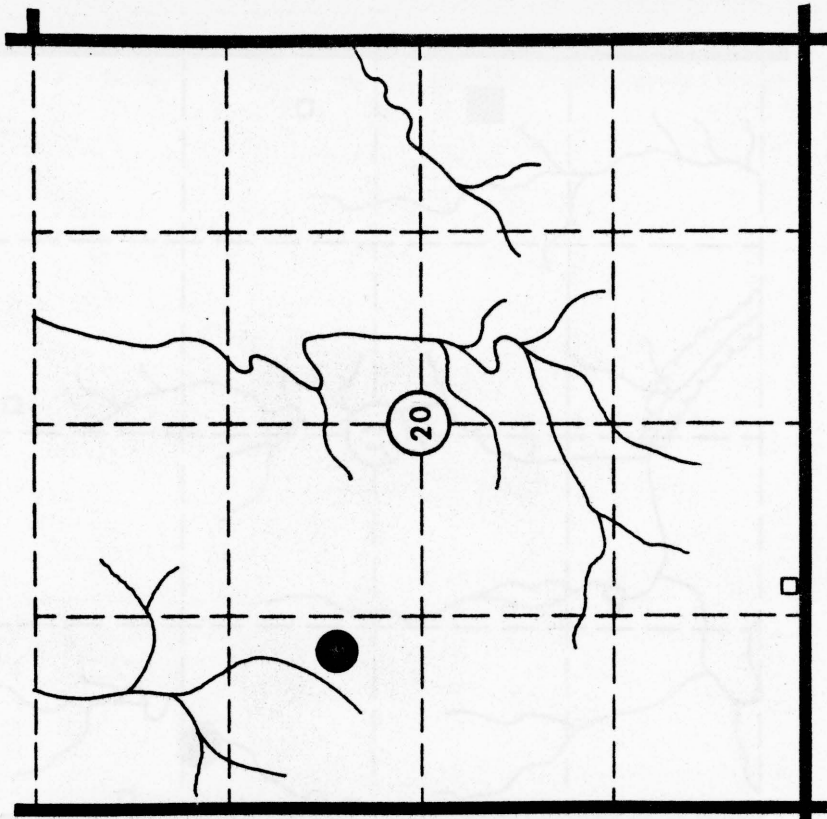
Site No. SG-28
Qm
 Date April, 1976
 Material Sand & Gravel County Republic
 Location NW $\frac{1}{4}$ Sec. 20 Twp. 2S Range 1W
 Owner Anna M. Kadlets Belleville, Kansas
 address
 Nature of Deposit Dry accessibility Fair Site located on Plate VI
 Status of Site Open Materials Site; Not Sampled

EXPLORATION DATA

| Test Hole | Material at Bottom of Hole | Depth of overburden | Depth of Material | Percent Retained | | | | | | | Wash 200 | G.F. | L.L. | P.I. | |
|-----------|----------------------------|---------------------|-------------------|------------------|-----|------|-----|------|------|------|----------|------|------|------|--|
| | | | | 1/2 | 3/8 | 3/16 | 1/8 | 1/16 | 3/32 | 1/32 | | | | | |
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CORRELATION DATA

Geological Age Quaternary
 Geological Source Meade Formation
 Material Similar to _____
 Specific Gravity (sat.) _____ (dry) _____
 Los Angeles Wear _____
 Absorption _____ Soundness _____
 Wt. Ca.ft. _____ Str. Ratio _____
 Remarks _____



Scale: 1" = 1/4 mile

MATERIAL SITE DATA FORM

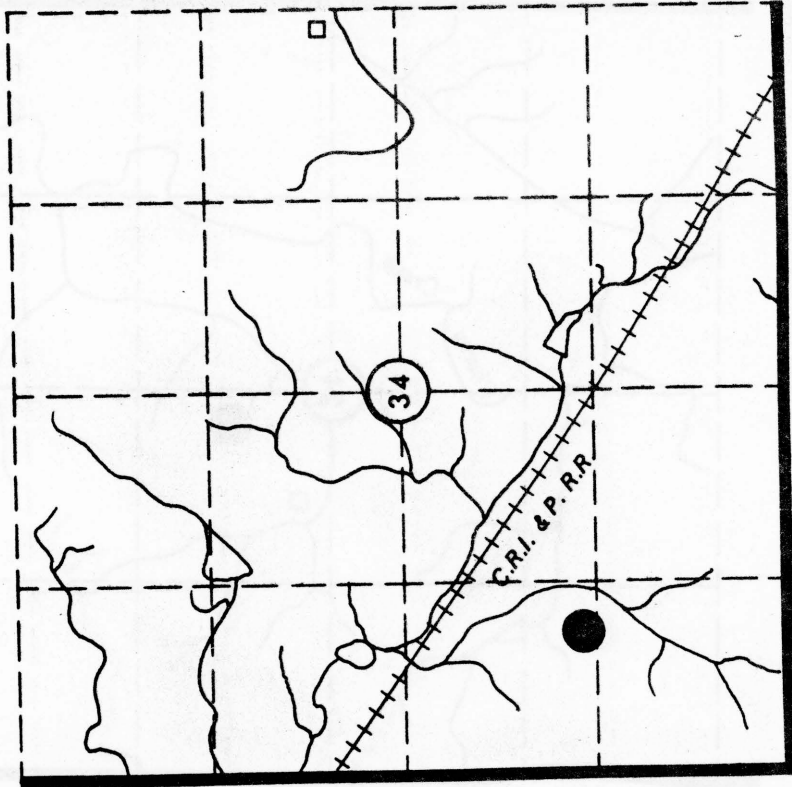
Site No. SG-30 Date April, 1976
Qm
 Material Sand & Gravel County Republic
 Location SW 1/4 Sec. 34 Twp. 2S Range 2W
 Owner Donald Wearer Belleville, Kansas
Dry address
 Nature of Deposit Dry Accessibility Good Site Located on Plate VI
 Status of Site Open Materials Site; Not Sampled

EXPLORATION DATA

| Test Hole | Material at Bottom of Hole | Depth of overburden | Depth of Material | Percent Retained | | | | | Mesh 200 | G.F. | L.L. | P.I. |
|-----------|----------------------------|---------------------|-------------------|------------------|-----|---|-------|---|----------|------|------|------|
| | | | | 1/2 | 3/4 | 1 | 1 1/2 | 2 | | | | |
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CORRELATION DATA

Geological Age Quaternary
 Geological Source Meade Formation
 Material Similar to _____
 Specific Gravity (sat.) _____ (dry)
 Los Angeles Near _____
 Absorption _____ Soundness _____
 Wt. Co. Ft. _____ Str. Ratio _____
 Remarks _____



Scale: 1" = 1/4 mile

MATERIAL SITE DATA FORM

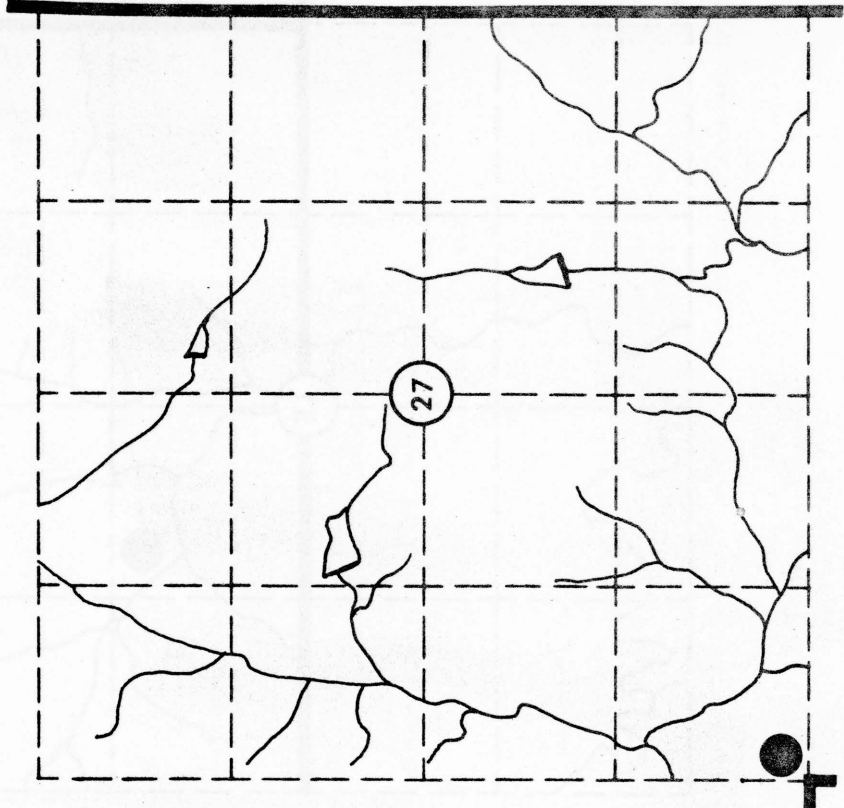
Site No. Ls+33 Date April, 1976
Kg
 Material Limestone and Shale County Republic
 Location SW $\frac{1}{4}$ SW $\frac{1}{4}$ Sec. 27 Twp. 4S Range 5W
 Owner Darrell & Shirley Larson Jamestown, Kansas
address
 Nature of Deposit Dry accessibility Good Site located on Plate VII
 Status of Site Open Materials Site; Not Sampled

EXPLORATION DATA

| Test Hole | Material at Bottom of Hole | Depth of over-burden | Depth of Material | Percent Retained | | | | | | Wash 200 | G.F. | L.L. | P.I. | |
|-----------|----------------------------|----------------------|-------------------|------------------|-----|---|----|----|----|----------|------|------|------|-----|
| | | | | 1/2 | 3/4 | 1 | 16 | 30 | 50 | | | | | 100 |
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CORRELATION DATA

Geological Age Cretaceous
 Geological Source Greenhorn Limestone
 Material Similar To _____
 Specific Gravity (Sat.) _____ (Dry) _____
 Los Angeles Wear _____
 Absorption _____ Soundness _____
 Mt. Cu.Ft. _____ Str. Ratio _____
 Remarks _____



Scale: 1" = 1/4 mile

MATERIAL SITE DATA FORM

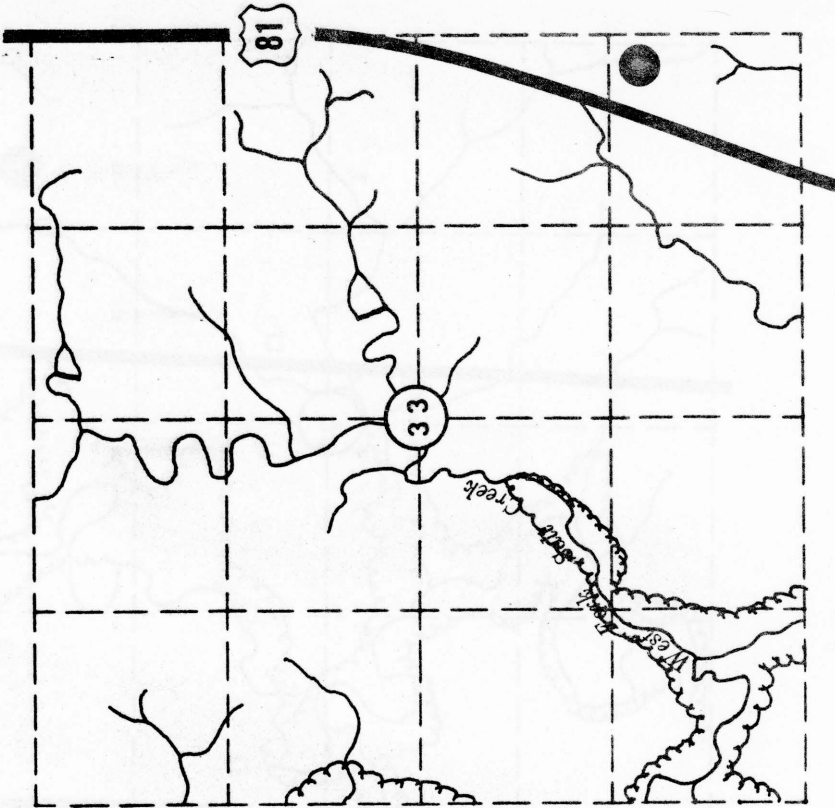
Site No. Ls+35 Date April, 1976
Kg
 Material Limestone County Republic
 Location S 1/2 SE 1/4 Sec. 33 Twp. 3S Range 3W
 Owner Glenn Kasl Belleville, Kansas
 address
 Nature of Deposit Dry accessibility Good Site Located on Plate VIII
 Status of Site Open Materials Site; Not Sampled

EXPLORATION DATA

| Test Hole | Material at Bottom of Hole | Depth of over-burden | Depth of Material | Percent Retained | | | | | | Wash 200 | G.F. | L.L. | P.I. | | |
|-----------|----------------------------|----------------------|-------------------|------------------|-----|-----|---|---|----|----------|------|------|------|----|----|
| | | | | 1/2 | 3/4 | 3/8 | 4 | 8 | 16 | | | | | 30 | 50 |
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CORRELATION DATA

Geological Age Cretaceous
 Geological Source Greenhorn Limestone Formation
 Material Similar To _____
 Specific Gravity (Sat.) _____ (dry) _____
 Los Angeles Near _____
 Absorption _____ Soundness _____
 Wt. Co. ft. _____ Str. Ratio _____
 Remarks _____



Scale: 1" = 1/4 mile

MATERIAL SITE DATA FORM

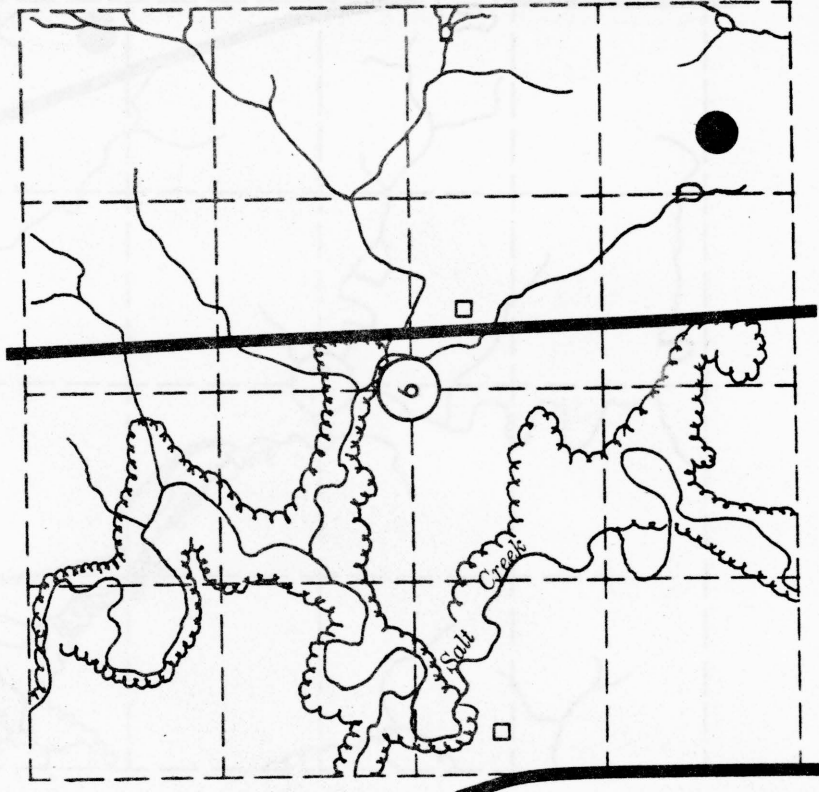
Site No. Ls+36 Date April, 1976
Kg
 Material Limestone County Republic
 Location SE 1/4 Sec. 6 Twp. 4S Range 2W
 Owner Mary Cousins Belleville, Kansas
name address
 Nature of Deposit Dry Accessibility Fair Site located on Plate VIII
 Status of Site Open Materials Site; Not Sampled

EXPLORATION DATA

| Test Hole at Bottom of Hole | Depth of over-burden | Depth of Material | Percent Retained | | | | | Mesh 200 | G.F. | L.L. | P.I. |
|-----------------------------|----------------------|-------------------|------------------|-----|-----|---|----|----------|------|------|------|
| | | | 1/2 | 3/4 | 3/8 | 5 | 15 | | | | |
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CORRELATION DATA

Geological Age Cretaceous
 Geological Source Greenhorn Limestone Formation
 Material Similar To _____
 Specific Gravity (Sat.) _____ (Dry) _____
 Los Angeles Near _____
 Absorption _____ Soundness _____
 Wt. Cu.ft. _____ Str. Ratio _____
 Remarks _____



Scale: 1" = 1/4 mile

MATERIAL SITE DATA FORM

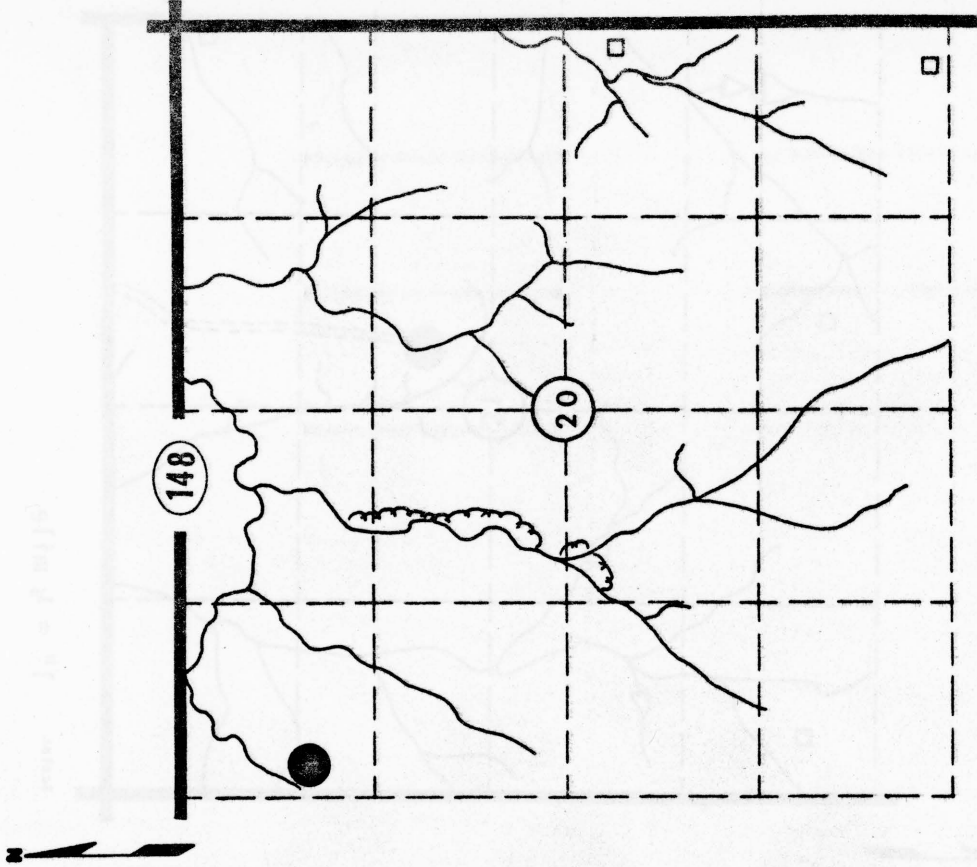
Site No. Ls+37 Date April, 1976
Kg
 Material Limestone county Republic
 Location NW¹/₄ Sec. 20 Twp. 4S Range 3W
 Owner Martha Johnson address Concordia, Kansas
 Nature of Deposit Dry accessibility Good Site Located on Plate VIII
 Status of Site Open Materials Site; Not Sampled

EXPLORATION DATA

| Test Hole | Material at Bottom of Hole | Depth of over-Burden | Depth of Material | Percent Retained | | | | | | Wash 200 | G.F. | L.L. | P.I. |
|-----------|----------------------------|----------------------|-------------------|------------------|-----|-----|---|----|----|----------|------|------|------|
| | | | | 1 1/2 | 3/4 | 3/8 | 8 | 16 | 30 | | | | |
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CORRELATION DATA

Geological Age Cretaceous
 Geological Source Greenhorn Limestone Formation
 Material Similar To _____
 Specific Gravity (Sat.) _____ (Dry)
 Los Angeles Wear _____
 Absorption _____ Soundness _____
 Wt. Cu.ft. _____ Str. Ratio _____
 Remarks _____



MATERIAL SITE DATA FORM

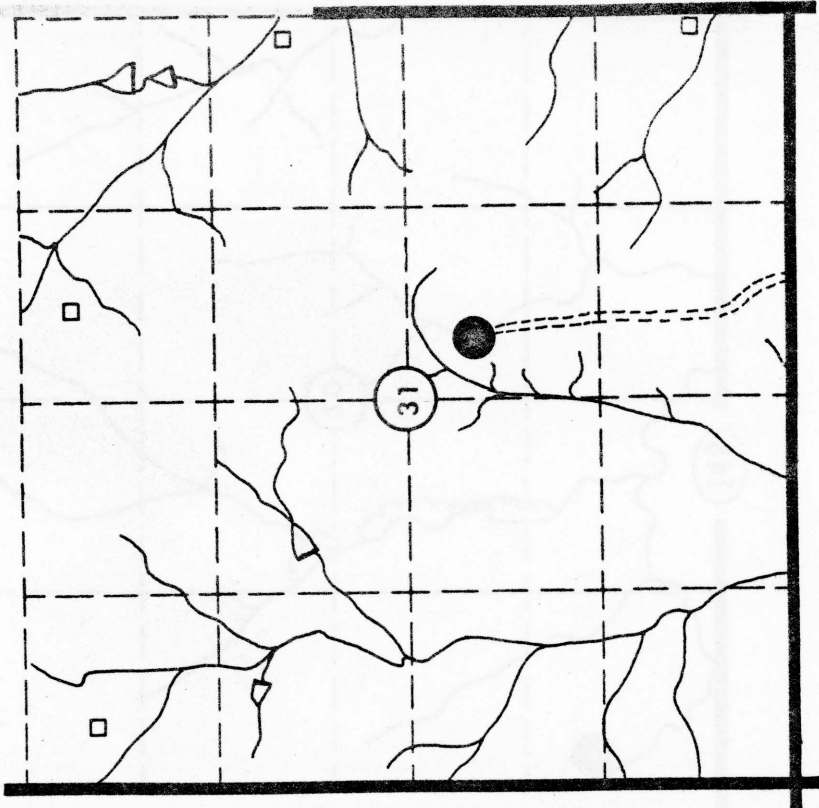
Site No. Ls+38 Date April, 1976
Kg
 Material Limestone and Shale County Republic
 Location SE 1/4 Sec. 31 Twp. 4S Range 3W
 Owner Joe Budreau address Concordia, Kansas
 Nature of Deposit Dry Accessibility Good Site Located on Plate VII
 Status of Site Open Materials Sites; Not Sampled

EXPLORATION DATA

| Test Hole | Material at Bottom of Hole | Depth of over-Burden | Depth of Material | Percent Retained | | | | | | | Wash 200 | G.F. | L.L. | P.I. | | | |
|-----------|----------------------------|----------------------|-------------------|------------------|-----|-----|---|---|----|----|----------|------|------|------|----|-----|--|
| | | | | 1/2 | 3/4 | 3/8 | 4 | 8 | 16 | 30 | | | | | 50 | 100 | |
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CORRELATION DATA

Geological Age Cretaceous
 Geological Source Greenhorn Limestone Formation
 Material Similar To _____
 Specific Gravity (Sat.) _____ (Dry)
 Los Angeles Wear _____
 Absorption _____ Soundness _____
 Wt. Cu.Ft. _____ Str. Ratio _____
 Remarks _____



Scale: 1" = 1/4 mile

MATERIAL SITE DATA FORM

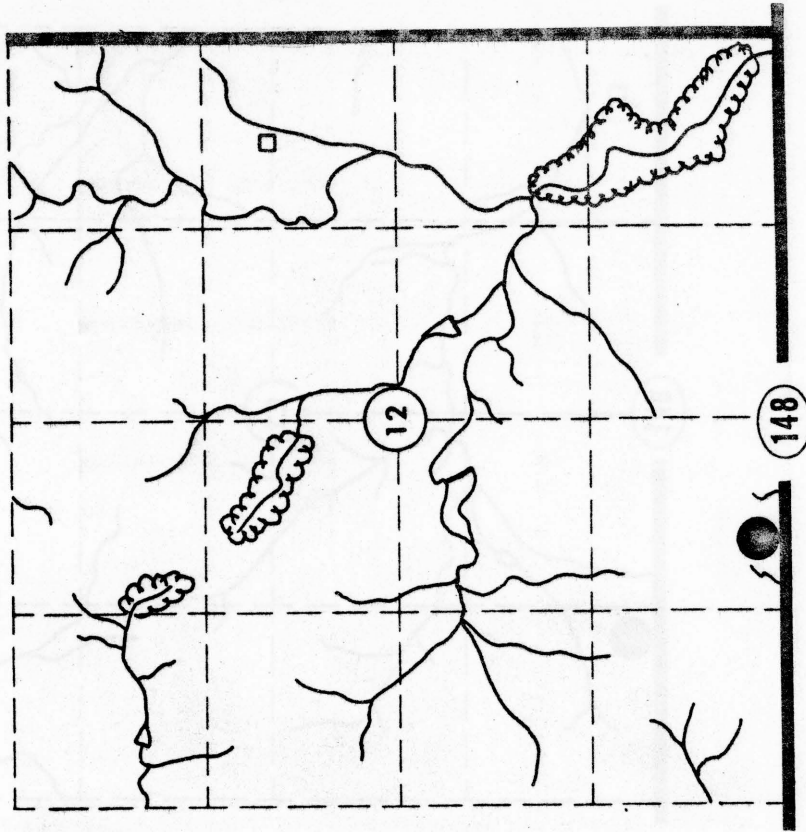
Site No. Ls+39 Date April, 1976
Kg
 Material Limestone County Republic
 Location SW 1/4 Sec. 12 Twp. 4S Range 2W
 Owner Joe Cibolski Address Agenda, Kansas
 Nature of Deposit Dry Accessibility Good Site Located on Plate IX
 Status of Site Open Materials Site; Not Sampled

EXPLORATION DATA

| Test Hole | Material at bottom of hole | Depth of overburden | Depth of Material | Percent Retained | | | | | | | Wash 200 | G.F. | L.L. | P.L. | |
|-----------|----------------------------|---------------------|-------------------|------------------|-----|-----|---|---|----|----|----------|------|------|------|----|
| | | | | 1/2 | 3/4 | 3/8 | 4 | 8 | 16 | 30 | | | | | 50 |
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CORRELATION DATA

Geological Age Cretaceous
 Geological Source Greenhorn Limestone Formation
 Material Similar To _____
 Specific Gravity (Sat.) _____ (Dry) _____
 Los Angeles Wear _____
 Absorption _____ Soundness _____
 St. Cu.Ft. _____ Str. Ratio _____
 Remarks _____



MATERIAL SITE DATA FORM

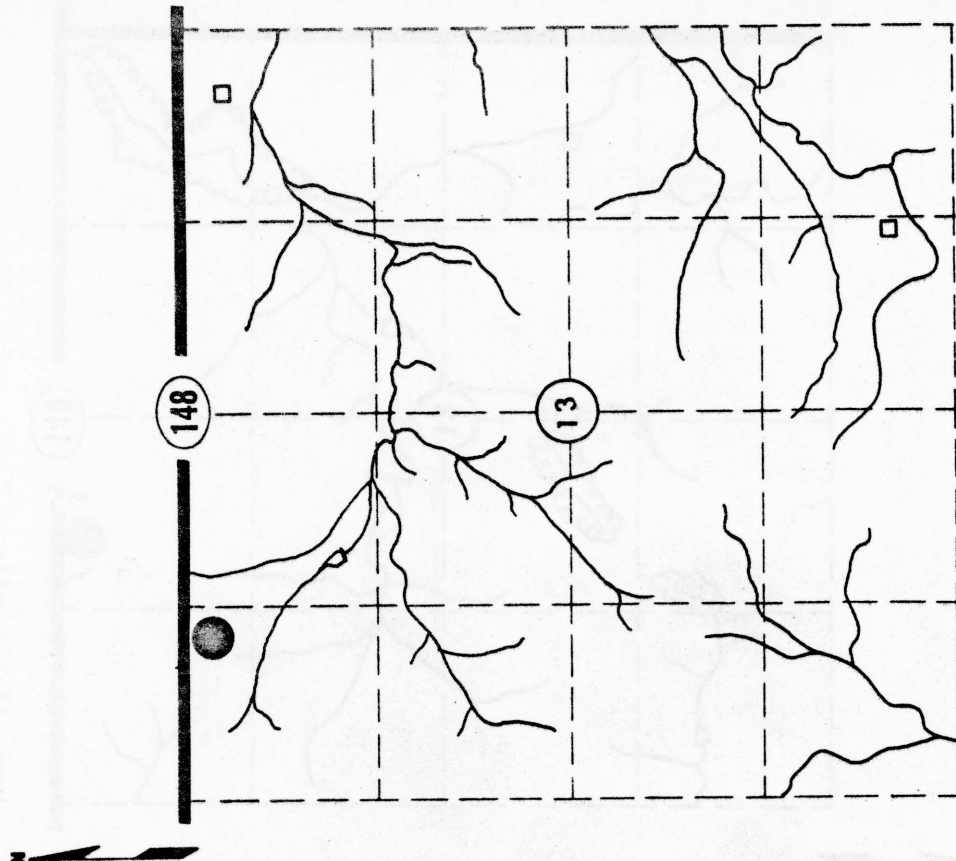
Site No. LS+40 Date April, 1976
Kg
 Material Limestone County Republic
 Location E $\frac{1}{2}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$ & NE $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 13 Twp. 4S Range 2W
 Owner Loren Hammer Agenda, Kansas
name address
 Nature of Deposit Dry Accessibility Good Site Located on Plate IX
 Status of Site Open Materials Site; Not Sampled

EXPLORATION DATA

| Test Hole | Material at Bottom of Hole | Depth of over-burden | Depth of Material | Percent Retained | | | | | | | Wash 200 | G.F. | L.L. | P.I. | | |
|-----------|----------------------------|----------------------|-------------------|------------------|-----|-----|---|---|----|----|----------|------|------|------|----|-----|
| | | | | 1/2 | 3/4 | 3/8 | 4 | 8 | 16 | 30 | | | | | 50 | 100 |
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CORRELATION DATA

Geological Age Cretaceous
 Geological Source Greenhorn Limestone Formation
 Material Similar To _____
 Specific Gravity (Set.) _____ (Dry)
 Los Angeles Near _____
 Absorption _____ Soundness _____
 wt. Co.Ft. _____ Str. Ratio _____
 Remarks _____



Scale: 1" = 1/4 mile

PROSPECTIVE MATERIALS SITES ; SAMPLED

LEGEND

===== Trail or lane

———— Road

+++++ Railroad

~~~~~ Hedge or trees

~~~~~  
Name Major streams

~~~~~ Intermittent streams

~~~~~ Pond or lake

■ Open materials sites; sampled

● Open materials sites; not sampled

▼ Prospective materials sites; sampled

◆ Prospective materials sites; not sampled

⑤ Center of section

□ Dwelling

⊕ Cemetery

▣ School

⊕ Church

▣ Town or city

MATERIAL SITE DATA FORM

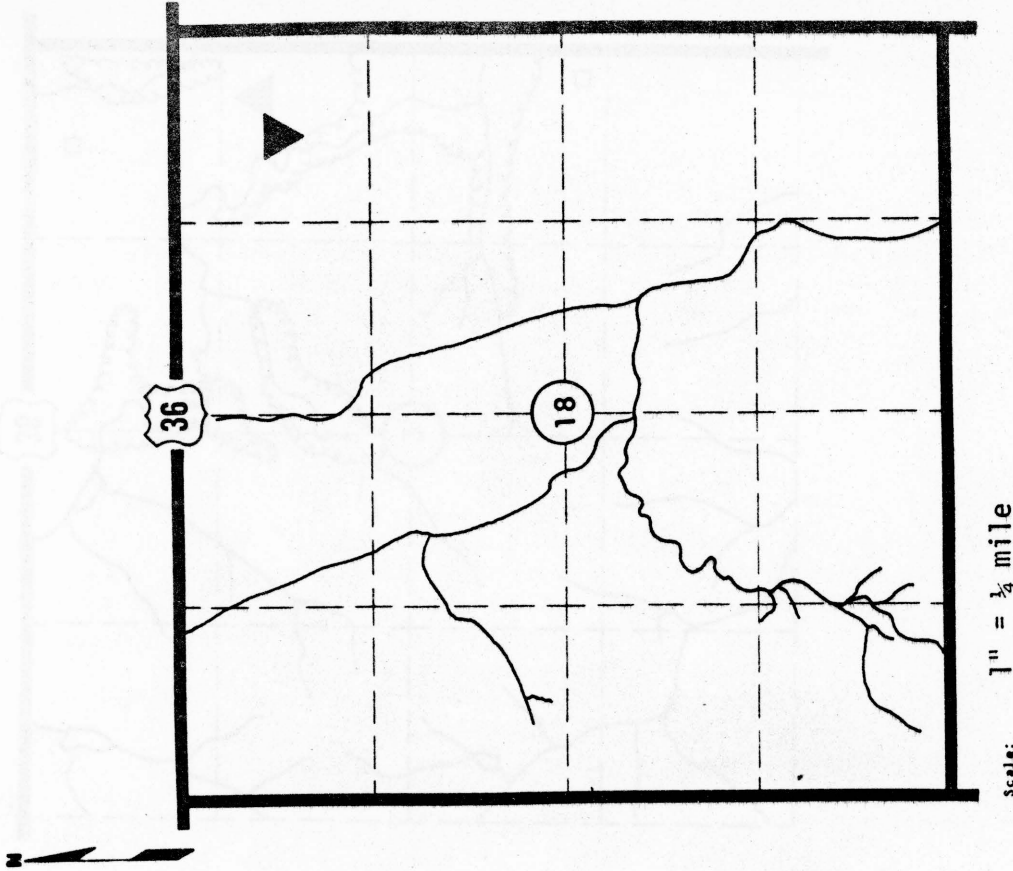
Site No. SG+42 Date April, 1976
Qa1
 Material Sand & Gravel County Republic
 Location NE 1/4 Sec. 18 Twp. 3S Range 4W
 Owner Andy Thompson Courtland, Kansas
 Name Address
 Nature of Deposit Wet Accessibility Good Site Located on Plate IV
 Status of Site Prospective Materials Site; Sampled

EXPLORATION DATA

| Test Hole | Material at Bottom of Hole | Depth of over-burden | Depth of Material | Percent Retained | | | | | | | Wash 200 | G.F. | L.L. | P.I. | | | | |
|-----------|----------------------------|----------------------|-------------------|------------------|-----|-----|---|---|----|----|----------|------|------|------|----|-----|--|--|
| | | | | 1 1/2 | 3/4 | 3/8 | 4 | 8 | 16 | 30 | | | | | 50 | 100 | | |
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CORRELATION DATA

Geological Age Quaternary
 Geological Source Alluvium
 Material Similar To _____
 Specific Gravity (Sat.) _____ (Dry)
 Los Angeles Wear _____
 Absorption _____ Soundness _____
 Wt. Cu.Ft. _____ Str. Ratio _____
 Remarks KDOT Materials Department Site No. 79-9



PROSPECTIVE MATERIALS SITES ; NOT SAMPLED

LEGEND

===== Trail or lane

————— Road

-+--+--+--+ Railroad

~~~~~ Hedge or trees

~~~~~  
Name Major streams

~~~~~ Intermittent streams

~~~~~ Pond or lake

■ Open materials sites; sampled

● Open materials sites; not sampled

▼ Prospective materials sites; sampled

◆ Prospective materials sites; not sampled

⑤ Center of section

□ Dwelling

⊕ Cemetery

▣ School

⊕ Church

▣ Town or city

MATERIAL SITE DATA FORM

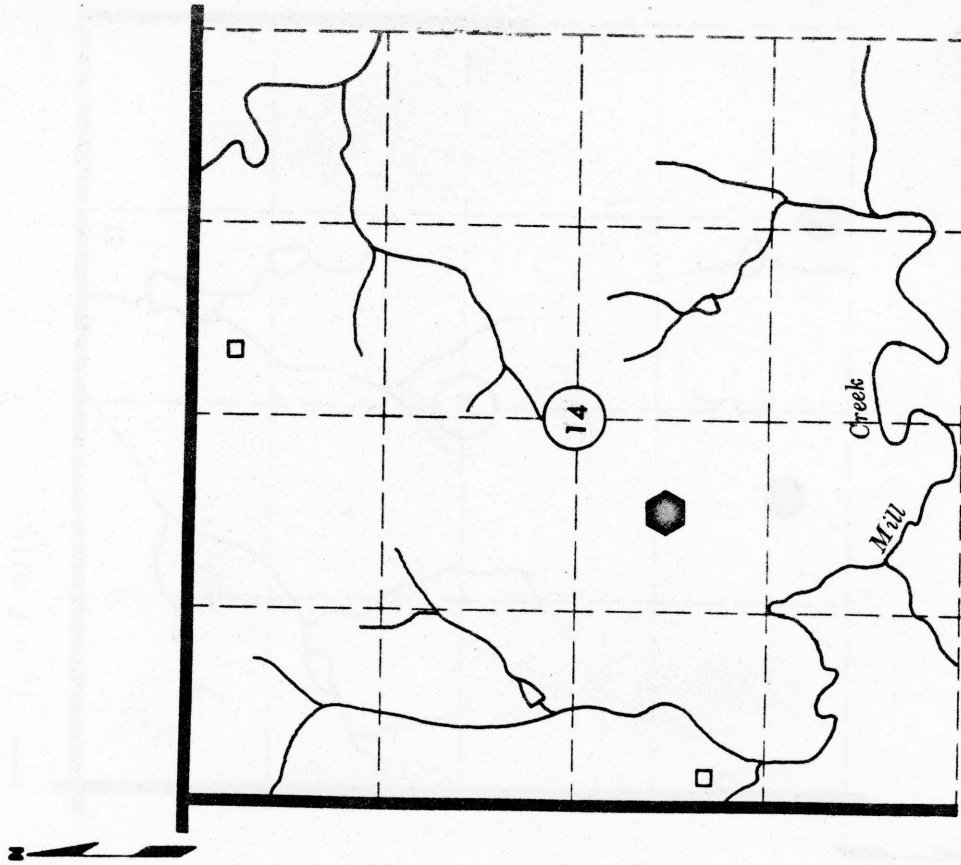
Site No. SG+44 Date April, 1976
 Material Sand & Gravel County Republic
 Location SW 1/4 Sec. 14 Twp. 2S Range 2W
 Owner Ben F. Opocensky Munden, Kansas
 name address
 Nature of Deposit VI Accessibility VI Site Located on Plate VI
 Status of Site Prospective Materials Site; Not Sampled

EXPLORATION DATA

| Test Mole | Material at Bottom of Mole | Depth of Material | Percent Retained | | | | | | | Wash 200 | G.F. | L.L. | P.I. |
|-----------|----------------------------|-------------------|------------------|-----|-----|---|---|----|----|----------|------|------|------|
| | | | 1/2 | 3/4 | 3/8 | 4 | 8 | 16 | 30 | | | | |
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CORRELATION DATA

Geological Age Quaternary
 Geological Source Meade Formation
 Material Similar To _____
 Specific Gravity (Sat.) _____ (Dry)
 Los Angeles Wear _____
 Absorption _____ Soundness _____
 wt. Cu.Ft. _____ Str. Ratio _____
 Remarks _____



MATERIAL SITE DATA FORM

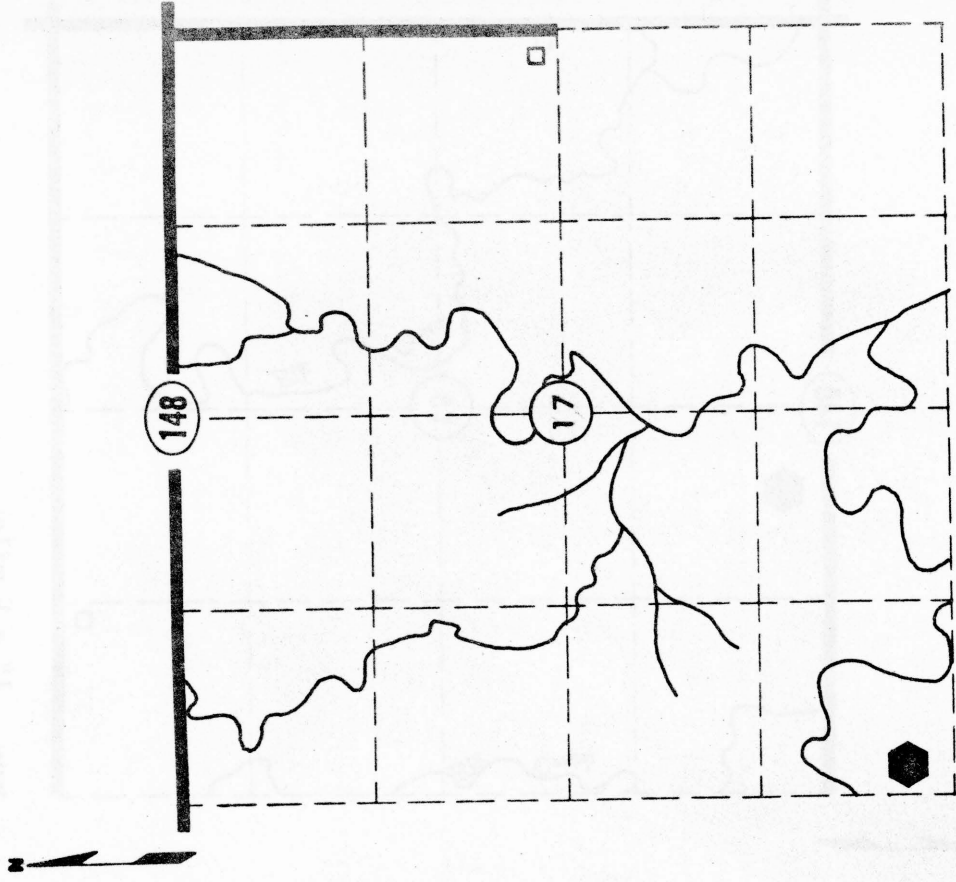
Site No. Ss+46 date April, 1976
Kd
 Material Sandstone county Republic
 Location W $\frac{1}{2}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 17 Twp. 4S Range 1W
 Owner Jerome & Marlene Kieffer Cuba, Kansas address
 Nature of Deposit accessibility Site located on Plate IX
 Status of Site Prospective Materials Site; Not Sampled

EXPLORATION DATA

| Test Hole | Material at Bottom of Hole | Depth of over-burden | Depth of Material | Percent Retained | | | | | | Wash 200 | G.F. | L.L. | P.I. | | |
|-----------|----------------------------|----------------------|-------------------|------------------|-----|-----|---|---|----|----------|------|------|------|----|----|
| | | | | 1 1/2 | 3/4 | 3/8 | 4 | 8 | 16 | | | | | 30 | 50 |
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CORRELATION DATA

Biological Age Cretaceous
 Geological Source Dakota Formation
 Material Similar To _____
 Specific Gravity (Sat.) _____ (Dry) _____
 Los Angeles Wear _____
 Absorption _____ Soundness _____
 Wt. Cu-ft. _____ Str. Ratio _____
 Remarks _____



Scale: 1" = 1/4 mile

MATERIAL SITE DATA FORM

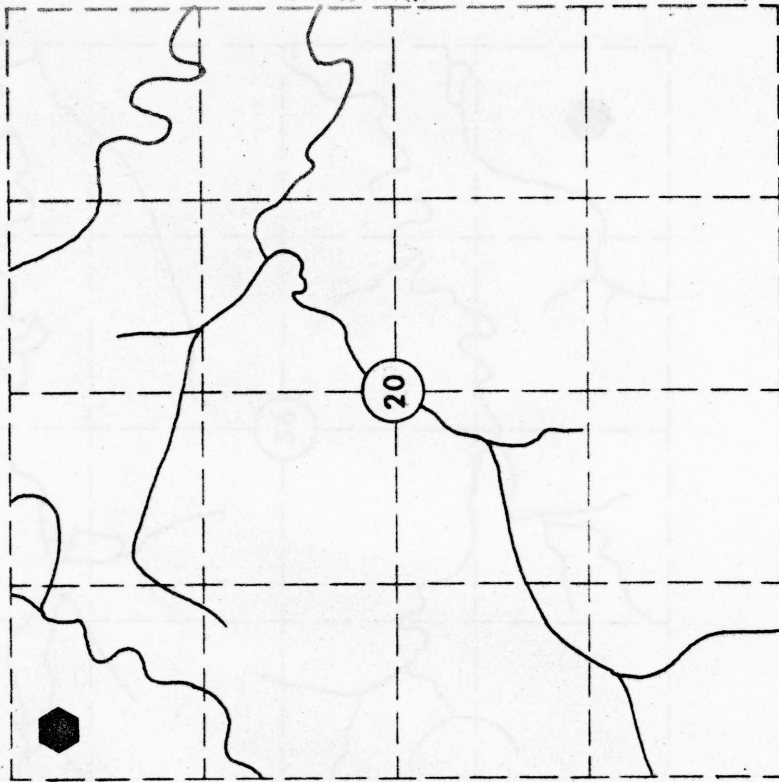
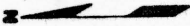
Site No. Ss+47 Date April, 1976
Kd
 Material Sandstone County Republic
 Location NW $\frac{1}{4}$ NW $\frac{1}{4}$ Sec. 20 Twp. 4S Range 1W
 Owner Frank Kolman Cuba, Kansas
name address
 Nature of Deposit IX accessibility IX Site Located on Plate
 Status of Site Prospective Materials Site; Not Sampled

EXPLORATION DATA

| Test Hole | Material at Bottom of Hole | Depth of over-burden | Depth of Material | Percent Retained | | | | | | | Wash | G.F. | L.L. | P.I. | | |
|-----------|----------------------------|----------------------|-------------------|------------------|-----|---|-----|-----|------|-----|------|------|------|------|-----|--|
| | | | | 1/2 | 3/4 | 1 | 3/8 | 5/8 | 3/16 | 1/8 | | | | | 200 | |
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CORRELATION DATA

Geological Age Cretaceous
 Geological Source Dakota Formation
 Material Similar To _____
 Specific Gravity (Sat.) (Dry)
 Los Angeles Wear _____
 Absorption _____ Soundness _____
 Mt. Cu.Ft. _____ Str. Ratio _____
 Remarks _____



Scale: 1" = 1/4 mile

GLOSSARY

A.A.S.H.O.: American Association of State Highway Officials.

A.A.S.H.T.O.: American Association of State Highway and Transportation Officials.

Absorption: Determined by tests performed in accordance with A.A.S.H.O. Designation T85.

Aggrade: To raise the grade or level of a valley or stream bed by depositing particles of clay, silt, sand, and gravel.

Aggregate: Any of several hard, inert, construction materials (such as sand, gravel, shells, slag, crushed stone, or other mineral material), or combinations thereof, used for mixing in various-sized fragments with a cementing or bituminous material to form concrete or bituminous mix.

Alluvium: A deposit of clay, silt, sand, or gravel deposited by a stream or other body of running water.

Aquifer: A body of rock that contains sufficient saturated permeable material to conduct ground water and to yield economically significant quantities of ground water to wells and springs.

Bedded: A characteristic of some rock units which shows distinct layers due to the manner in which they are deposited.

Bentonite: A clay which is formed by the decomposition of volcanic ash and is largely composed of the clay minerals montmorillonite and beidellite.

Chert: A dull, flint-like, siliceous rock.

Coarse sand: An aggregate of unconsolidated rounded minerals or rock particles, the dimensions of which are usually more than two millimeters.

Concretion: Irregularly shaped nodules that occur in sedimentary rocks which form gradually by precipitation, around a definite nucleus.

Consolidated deposit: A deposit of limestone, shale, or sandstone. In Kansas, this term generally applies to rock older than Pliocene age.

Construction aggregate: Processed rock that will meet standard specifications for concrete and bituminous construction.

Cross bedding: Term applied to sedimentary deposits whose bedding is inclined at various angles to the stratification.

Degrade: To lower the level of a stream or river valley by stream erosive action.

Dip of geologic units: Angle of incline of the bed with respect to horizontal, and the direction in which these beds are inclined.

Disconformity: An erosional or nondepositional surface between two parallel bedding planes.

Dune sand: A type of blown sand that has been piled up by wind into a sand dune, usually consisting of rounded quartz grains having diameters varying from 0.1 to 1 mm.

Eolian: Borne, deposited, produced or eroded by the wind or wind action.

Exposure patterns: Topographic features formed on the land surface by the exposure of geologic units.

Facies change: A lateral or vertical variation in the lithologic or paleontologic characteristics of sedimentary deposits caused by a change in the depositional environment.

Fine sand: An aggregate of consolidated minerals or rock particles, the dimensions of which are not less than 0.05 of a millimeter and not more than 0.42 of a millimeter. The term refers to size of grain and not to composition; however, since most sands are composed of quartz and feldspar, and the term is used without qualifications, a siliceous composition is implied.

Fluvial cycle: The stream-action cycle involving periods of deposition, erosion, and return to deposition.

Formation: A persistent body of rocks, having easily recognizable upper and lower boundaries that can be traced in the field without recourse to detailed paleontologic or petrologic analysis, and large enough to be represented on a geologic map as a practical or convenient unit for mapping and description.

Fossil: Any remains, trace, or imprint of a plant or animal that has been preserved, by natural processes, in the Earth's crust since some past geologic time.

Geologic Era: Largest unit of geologic time (e.g. Paleozoic, Mesozoic, and Cenozoic).

Geologic period: A unit of geologic time, shorter than an era and longer than an epoch (e.g. Cambrian, Cretaceous, and Tertiary).

Geologic process: Term pertaining to erosion, deposition, and diastrophic methods by which the Earth's surface has been shaped.

Geologic structure: The attitude of the rock units (i.e. whether they are horizontal or tilted).

Geologic system: A term that refers to rocks or deposits that were laid down during a particular geologic period (e.g. the Pennsylvanian, Permian, and Quaternary).

Geologic unit: A *general* term used to denote a geologic formation, member, or an unconsolidated deposit.

Gpm : Gallons per minute.

Gradation factor: The value obtained by adding the percentages of material retained on the 1½", ¾", ⅜", 4, 8, 16, 30, 50, and 100 sieves, respectively and dividing the sum by 100.

Grading A, B, C, and D: Determined by the abrasive charge for the Los Angeles wear test as specified in A.A.S.H.O. designation T96 and section 1001 of the State Highway Commission of Kansas, Standard Specifications, 1973 edition.

Ground-water: That part of the subsurface water that is the zone of saturation, including underground streams.

Hiatus: A break or interruption in the continuity of the geologic record, such as the absence in the stratigraphic sequence of rocks that would normally be present but are missing, either because of erosion or nondeposition.

Landform: Any physical, recognizable form or feature of the Earth's surface, having a characteristic shape, and produced by natural causes; it includes major forms such as plain, plateau, mountain, hill, valley, slope, esker, and dune.

Light type surfacing: A surface course construction from aggregate which is not bound by water, cement, or bituminous material.

Liquid limit: The water-content boundary between the semiliquid and the plastic states of a sediment. Determined by tests performed in accordance with the Kansas Test Method KT-10 of the State Highway Commission of Kansas Construction Manual, Part V, 1969 edition.

Lithology: Physical properties of rocks such as grain size, mineral content, and color.

Loess: Material generally composed of silt-sized particles deposited by wind.

Los Angeles wear: Determined by tests performed in accordance with A.A.S.H.O. designation T96 as modified by section 1001 of the State Highway Commission of Kansas Standard Specifications, 1973 edition.

Marine deposits: Deposits laid down in a sea.

Material source bed: A geologic unit from which construction material is being or can be produced.

Matrix: The smaller or finer-grained, continuous material enclosing, or filling the interstices between the larger grains or particles of a sediment or sedimentary rock.

Member: A division of a formation, generally of distinct lithologic character or of only local extent.

Open materials site: A pit or quarry from which materials is produced for possible construction purposes.

Petroliferous: Containing or yielding petroleum.

Physiographic division: A division of the state, based on general geologic and (or) geographic features.

Plasticity index: The water-content range of a soil at which it is plastic; determined by tests performed in accordance with the Kansas Test Method KT-10 of the State Highway Commission of Kansas Construction Manual, Part V, 1969 edition.

Pleistocene Series: Deposits laid down during the Pleistocene Epoch.

Pliocene Epoch: The youngest major subdivision of the Tertiary Period.

Prospective materials site: A location where the geologic conditions are favorable for finding and producing construction aggregate.

Quartzite: Metamorphic rock produced by recrystallization of primary quartz sandstone under heat and pressure. Term is sometimes misused for quartzose sandstones.

Quartzose: Sands and sandstones consisting chiefly of quartz.

Reactive aggregate: A siliceous aggregate whose chemical properties react with cement causing a secondary growth within the concrete.

Sand dunes: Loose sand piled or heaped up by the wind.

Sedimentary quartzite: Term locally applied to scattered zones of calcium carbonate and silica-cemented sandstone in the Dakota Formation. Material is so well bonded that a fracture will penetrate the individual grains rather than break around them.

Soundness: Determined by tests performed in accordance with section 1001 of the State Highway Commission of Kansas Standard Specifications, 1973 edition.

Specific gravity: Determined by tests performed in accordance with A.A.S.H.O. designation T84 for fine aggregate and T85 for coarse aggregate.

Stereoscopic vision: Three-dimensional vision by means of viewing identical images on two photographs exposed from equal distance but at different angles.

Stratigraphic position: The vertical position of a geologic unit in relation to other geologic units.

Stream meander: One of a series of bends or curves in the course of a stream caused by lateral movement of a stream in its valley.

Stream scour: Downward erosion of a stream through its alluvium.

Strength ratio: Determined by tests performed in accordance with A.A.S.H.O. designation T19.

Sublittoral: That part of the littoral zone that is between low tide and a depth of about 328 feet (100 m).

Sweetner: Gravel or crushed stone coarser than No. 8 sieve added to sand or sand-gravel to meet gradation specifications.

Terrace: A plain built up by the deposition of sediments by water.

Unconformity: A substantial break or gap in the geologic record where a rock unit is overlain by another that is not next in the stratigraphic succession.

Unconsolidated deposits: Sediments that are loosely arranged or unstratified, or whose particles are not cemented together, occurring either at the surface or at depth.

Wash: (Material passing the No. 200 sieve). Determined by tests performed in accordance with A.A.S.H.O. designation T11.)

Weathering: The disintegration (physical change) or decomposition (chemical change) of rock by atmospheric agents.

Weight per cubic foot: Determined by tests performed in accordance with A.A.S.H.O. designation T19.

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