

OPEN MATERIALS SITES ; SAMPLED

LEGEND

=====	Trail or lane	■	Open materials sites; sampled
—————	Road	●	Open materials sites; not sampled
+ + + + +	Railroad	▼	Prospective materials sites; sampled
~~~~~	Hedge or trees	◆	Prospective materials sites; not sampled
~~~~~ Name	Major streams	⑤	Center of section
		□	Dwelling
	Intermittent streams	⊕	Cemetery
	Pond or lake	⌘	School
		⌘	Church
		■	Town or city

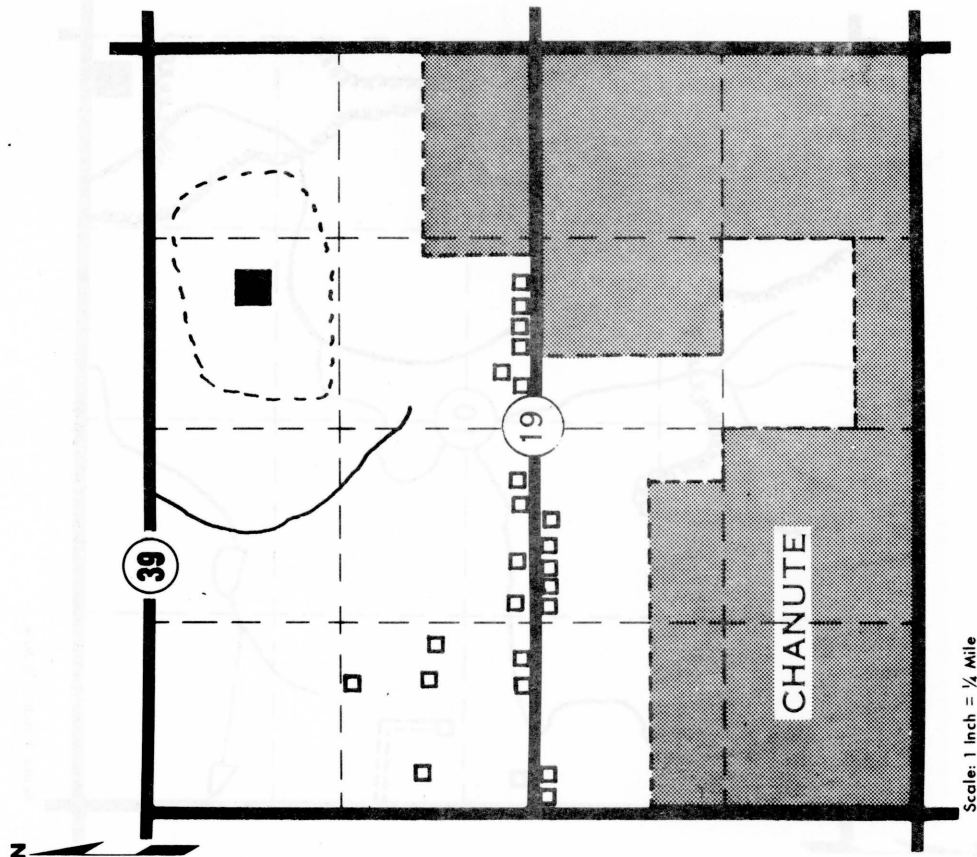
$$\frac{LS+7}{Pi}$$

LS+1
Pi
 Site No. _____ Date June 27, 1978
 Material Limestone County Neosho
 Location NE $\frac{1}{4}$ Sec. 19 Twp. 27S Range 18E
 Owner Harry Byers & Sons, Inc. Box 491 Chanute, KS 66720
 name _____ address _____
 Nature of Deposit Dry Accessibility Good Site Located on Plate I
 Status of Site Open Materials Site; Sampled

[illegible]

Pennsylvania
 Geological Age _____
 Raytown Limestone Mbr. - Iola Limestone Fm.
 Geological Source _____
 KDOT Lab. No.s 75-141, 76-46, 77-89
 Material Similar To _____
 Specific Gravity (Sat.) 2.64-2.66 (Dry) 2.60-2.63
 Los Angeles Wear 27(B) - 30(B)
 Absorption 1.0-1.8
 Soundness 0.96-0.97

Wt. Cu. Ft.	Str. Ratio
Permanent type crushing operation. Soft chalky seam 1' thick (.3m)	
Remarks	approximately 9' (2.7m) from bottom. Matl's. Dept. Site No. 67-3



Scale: 1 Inch = $\frac{1}{4}$ Mile

$$\frac{LS+2}{Pd}$$

LS+2
Pd

Site No. _____ Date June 27, 1978

Material Limestone County Neosho

SE $\frac{1}{4}$, SE $\frac{1}{4}$ Sec. 10 Twp. 27S Range 19E

Location _____

Owner Kenneth D. Clasen & W R.R. 1 Erie, KS 66733

name _____ address _____

Nature of Deposit Dry Accessibility Good Site Located on Plate I

Status of Site Open Materials Site; Sampled

[illegible]

Geological Age Pennsylvanian
 Geological Source Winterset Limestone Mbr. - Dennis Limestone Fm.
 Material Similar To KDOT Lab No. 10266

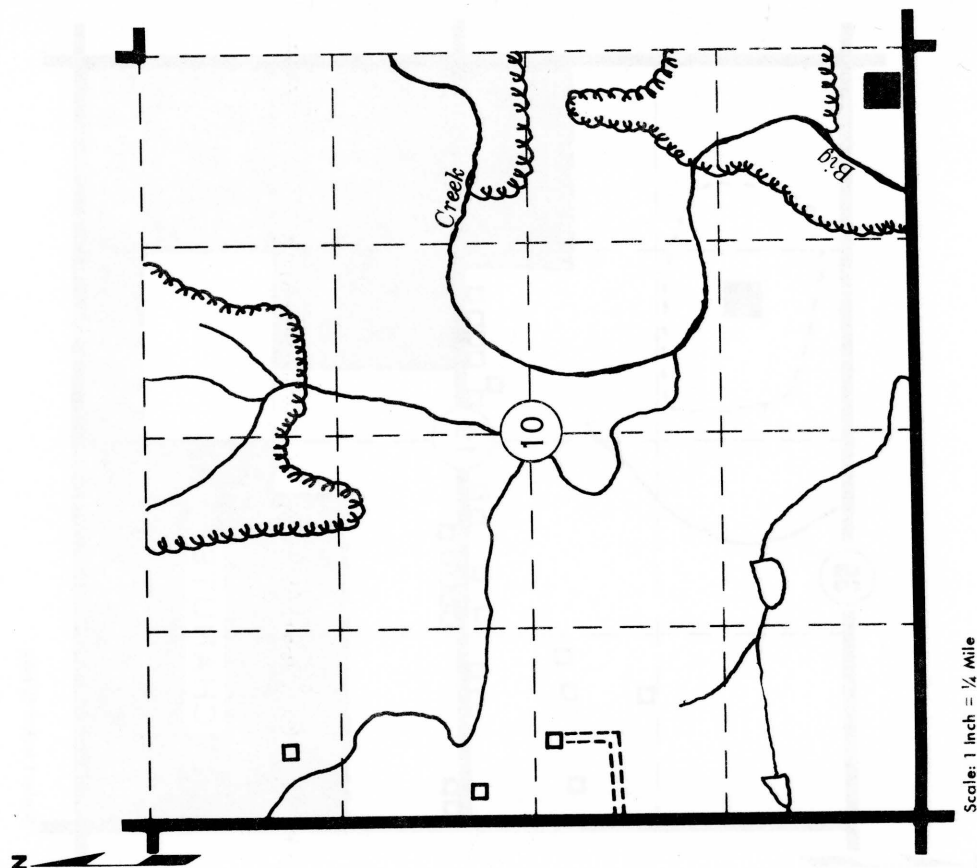
Specific Gravity (Sat.) _____ (Dry) _____ 2.38

Los Angeles Wear _____ 38.7 (B)

Absorption _____ Soundness _____ 0.96

Wt. Cu. Ft. _____ Str. Ratio _____

Wt. Co. H.	Remarks
	Periodic crushing operation. Ledge contains several vertical clay seams. Mat'l's. Dept. Site No. 67-29



Scale: 1 inch = $\frac{1}{4}$ Mile

LS+3
Pd
 Site No. _____ Date June 27, 1978
 Material Limestone County Neosho
 Location N₂, SW₄ Sec. 23 Twp. 27S Range 19E
 Owner H. Eddie Smith & Wife Stark, KS 66775
 name _____ address _____
 Nature of Deposit Dry Accessibility Good Site Located on Plate II
 Status of Site Open Materials Site; Sampled

[illegible]

Geological Age	Pennsylvanian
Geological Source	Winterset Limestone Mbr. - Dennis Limestone Fm.
Material Similar To	KDOT Lab No.s 100524 & 73-605

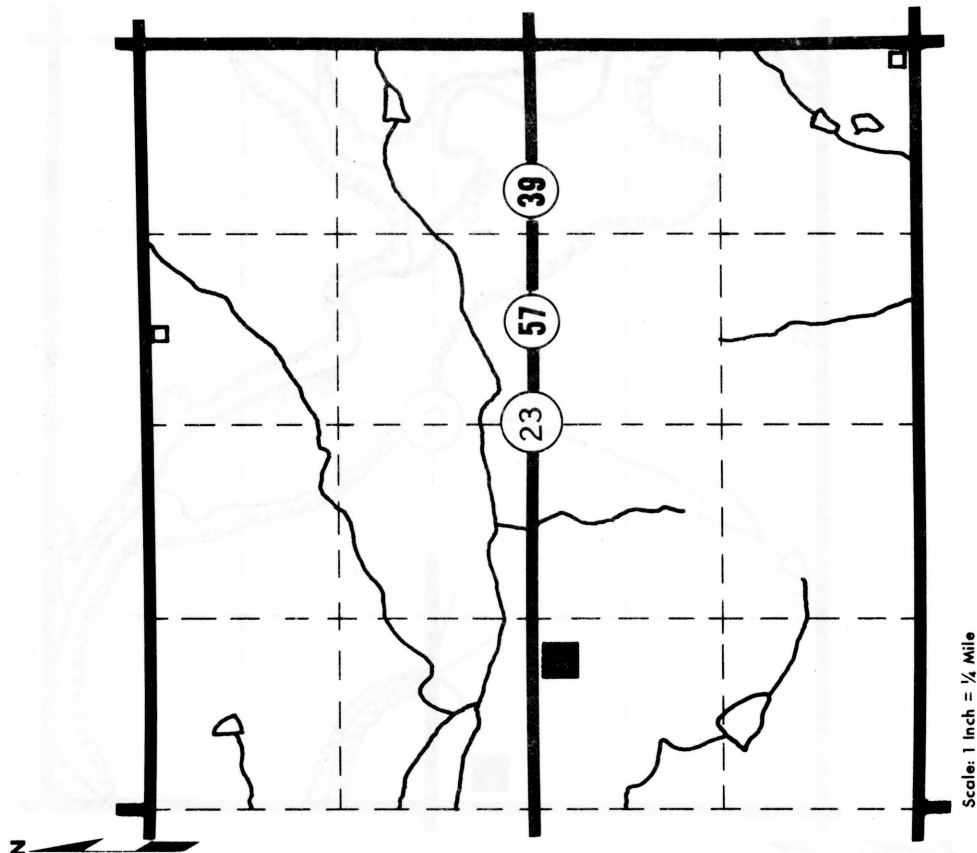
Specific Gravity (Sat.) 2.54, 2.56 (Dry) 2.46, 2.47

Los Angeles Wear 32.0 (C), 33 (B)

Absorption 3.19, 3.52 Soundness 0.94, 0.91

Wt. Cu. Ft. _____ Str. Ratio _____

Remarks
Periodic portable crushing operation. Quarry partially full of water. Mat'ls. Dept. Site No. 67-25.



LS+4
Pd

Site No. _____ Date June 27, 1978

Material Limestone County Neosho

Location SW $\frac{1}{4}$, NW $\frac{1}{4}$ Sec. 27 Twp. 27S Range 20E

Owner William C. Weir & wife 115 S. Main Erie, KS 66733

name _____ address _____

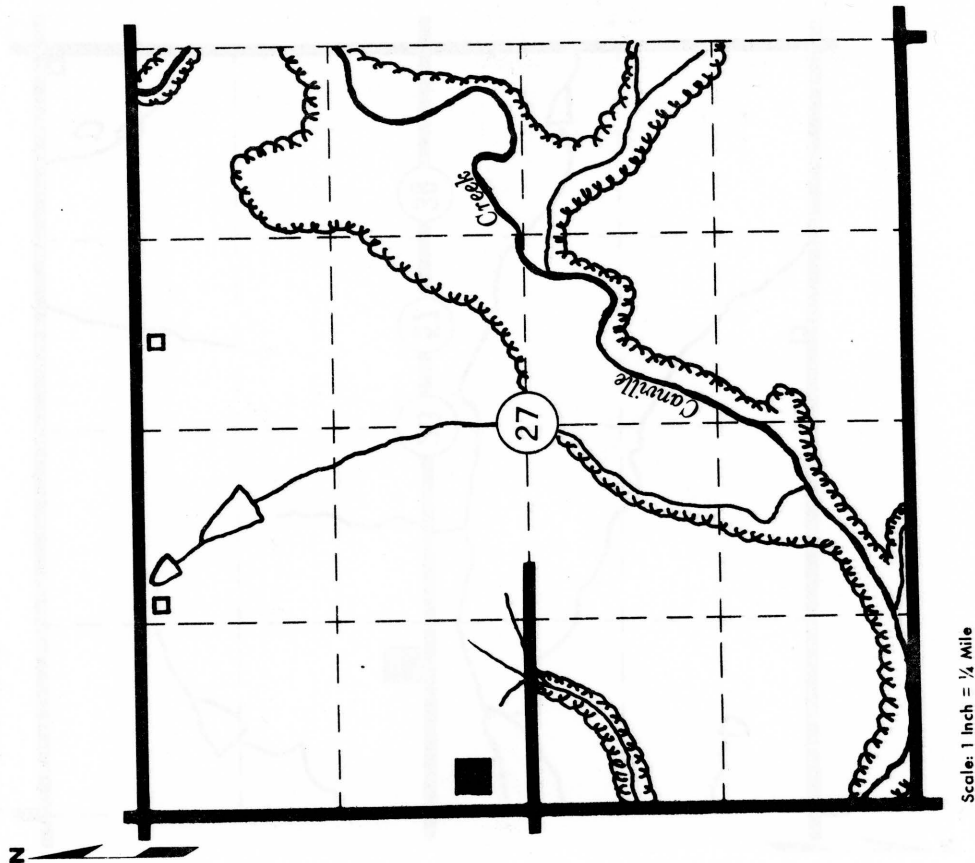
Nature of Deposit Dry Accessibility Good Site Located on Plate II

Status of Site Open Materials Site; Sampled

[illegible]

Geological Age	Pennsylvanian
Geological Source	Winterset Limestone Mbr. - Dennis Limestone Fm.
Material Similar To	KDOT Lab No. 77-896

Specific Gravity (Sat.)	2.53	(Dry)	2.43
Los Angeles Wear	38(B)		
Absorption	3.8	Soundness	0.99
Wt. Cu. Ft.		Str. Ratio	
Remarks	Periodic portable crushing operation. Mat'ls. Dept.		
Site No.	67-34.		



$$\frac{LS+5}{Pd}$$

Site No. _____ Date _____
 Limestone _____ County _____ Neosho _____
 Material _____
 SE $\frac{1}{4}$, SE $\frac{1}{4}$ _____ 12 _____ Twp. _____ 27S _____ Range _____ 20E _____
 Location _____
 Charles M. Hill, Jr. et al _____ Stark, KS 66775 _____
 Owner _____ name _____ address _____
 Dry _____ Good _____ II _____
 Nature of Deposit _____ Accessibility _____ Site Located on Plate _____
 Open Materials Site; Sampled _____
 Status of Site _____

EXPLORATION DATA

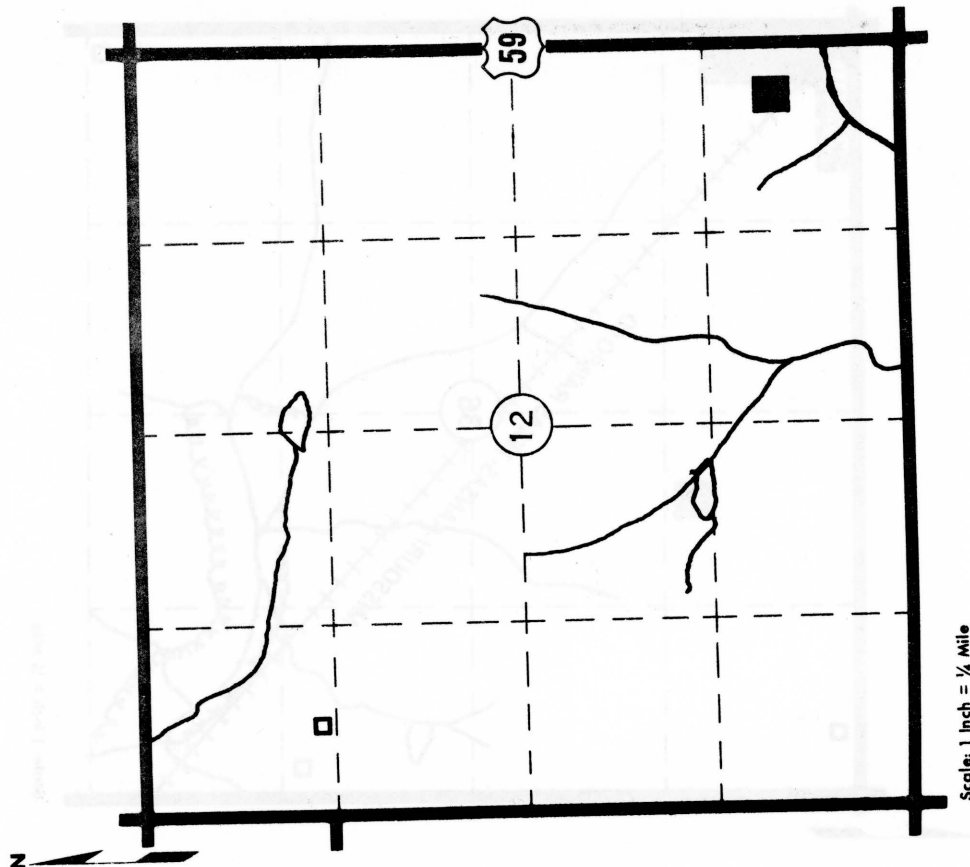
[illegible]

CORRELATION DATA

Geological Age	Pennsylvanian
Geological Source	Winterset Limestone Mbr. - Dennis Limestone Fm.
Material Similar To	KD0T Lab No.s 100527, 11995, 21111 & 37421

Specific Gravity (Sat.)	2.54 - 2.57	(Dry)	2.46 - 2.50
Los Angeles Wear	33.6 - 39.8		
	2.66 - 3.21	Soundness	.93 - .97

Wt. Cu. Ft.	Str. Ratio	Remarks
	Periodic portable crushing operation. Mat'l's. Dept.	Site No. 67-23.



Scale: 1 inch = 1/4 mile

LS+6
Pd

Site No. _____ Date June 27, 1978

Material Limestone County Neosho

Location NE $\frac{1}{4}$, NW $\frac{1}{4}$ Sec. 36 Twp. 27S Range 20E

Owner J. R. Clements R. #1 Box 67 Erie, KS 66733

name
Dry

Accessibility Good address II

Nature of Deposit _____ Site Located on Plate _____

Status of Site Open Materials Site; Sampled

[illegible]

Geological Age	Pennsylvanian
Geological Source	Winterset Limestone Mbr. - Dennis Limestone Fm.
Material Similar To	KDOT Lab No. 65-4880

Specific Gravity (Sat.) 2.56 (Dry) 2.47

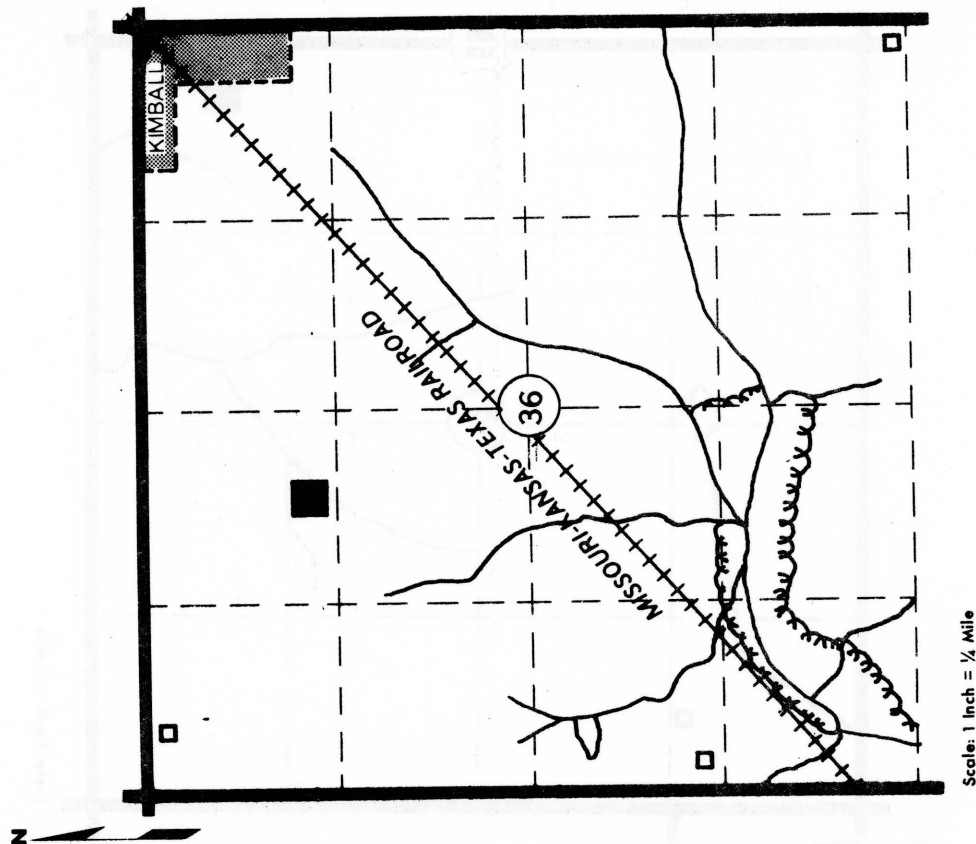
Los Angeles Wear 36.4 (B)

Absorption 3.39 Soundness 0.96

Wt. Cu. Ft. _____ Str. Ratio _____

Wt. Co. n.	Remarks
	Periodic portable crushing operation. Mat'ls. Dept. Site

No. 67-31



Scale: 1 Inch = 1/4 Mile

LS+7

EXPLORATION DATA

[illegible]

CORRELATION DATA

Geological Age	Pennsylvanian
Geological Source	Winterset Limestone Mbr. - Dennis Limestone Fm.
Material Similar To	KDOT Lab No.s 10515, 21112, & 77-898

Specific Gravity (Sat.) 2.46 - 2.56 (Dry) 2.34 - 2.49

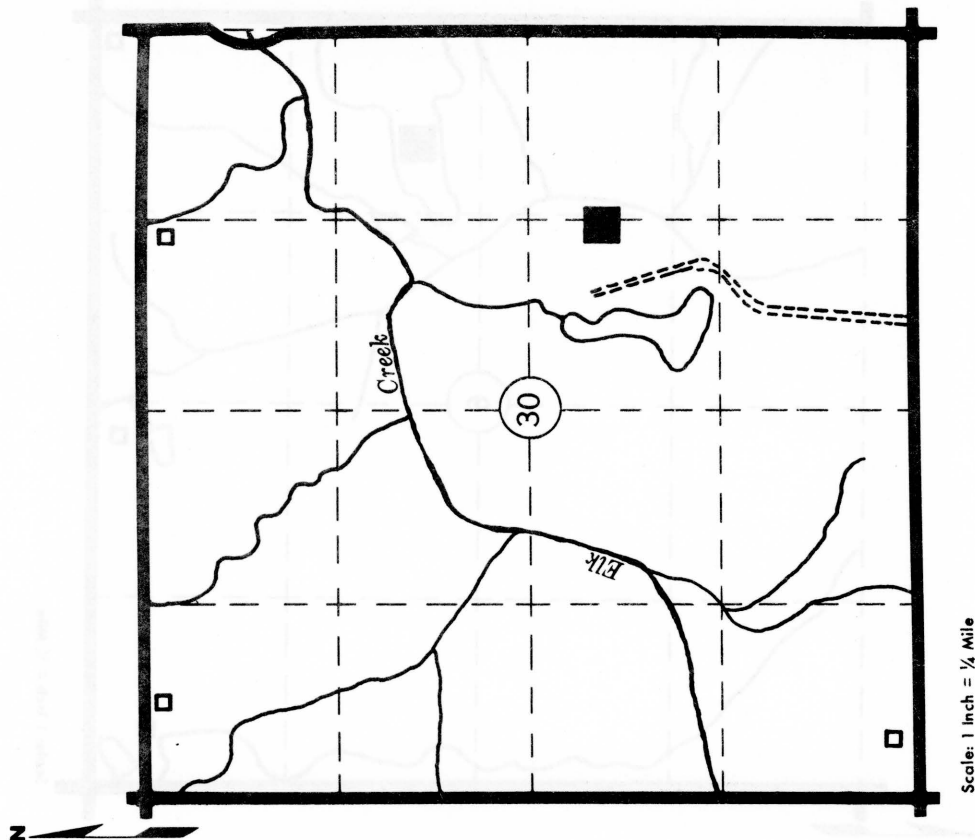
Los Angeles Wear 35.1 (B) - 43.3 (B)

Absorption 3.06 - 4.81 Soundness 0.93

Wt. Cu. Ft. _____ Str. Ratio _____

Periodic portable crushing operation. Mat'l's. Dept.

Site No. 67-24



Scale: 1 Inch = 1/4 Mile

LS+8
1Pd

Site No. _____ Date June 27, 1978

Material Limestone County _____ Township _____ Range _____
NE $\frac{1}{4}$, SE $\frac{1}{4}$ 9 29S 19E

Location _____
Wayne C. Johnson R.#2 Box 127 Erie, KS 66733

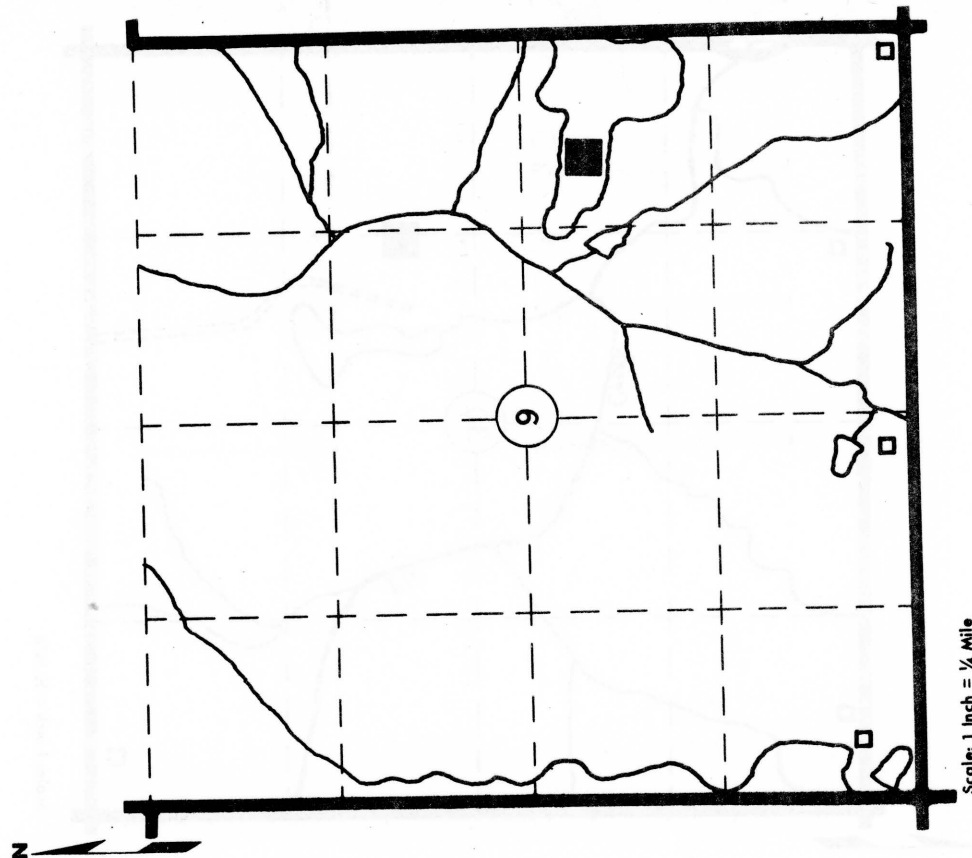
Owner Wayne C. Johnson name _____ address _____
Wayne C. Johnson

Nature of Deposit Dry Accessibility _____ Good _____ Site Located on Plate _____
Open Materials Site; Sampled

Status of Site _____

[illegible]

Pennsylvanian	
Geological Age	Winterset Limestone Mbr. - Dennis Limestone Fm.
Geological Source	KDOT Lab No.s 76-1487 & 77-75
Material Similar To	
Specific Gravity (Sat.)	2.59, 2.56 (Dry) 2.53, 2.48
Los Angeles Wear	30(B) 34(B)
Absorption	2.4, 3.1 0.97, 0.99
Wt. Cu. Ft.	Sfr. Ratio
Remarks	Periodic portable crushing operation. Mat'l's. Dept.
Site No. 67-35	



MATERIAL SITE DATA FORM

6+57

June 27, 1978

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Site No. _____ Date _____

Limestone _____ Neosho _____
County _____

Material	County	Tw.	Range
NE $\frac{1}{4}$, NW $\frac{1}{4}$	12	29S	19E

Location NE 1/4, NW 1/4 Sec. 12 Twp. 166 Range Erie, KS 66733
Wingail Hinos & wife R. #2 Box 166

Virgil Hines & wife R.#2 BOX 166 ERIE, N3 00753
Owner address address IV

Owner _____ name Dry Good _____ Site Located on Plate _____ address _____ IV _____

Nature of Deposit _____ Accessibility _____ Site Located on Plate _____
City _____
Onen Materials Site; Sampled _____

	Status of Site
Open Area	

EXPLORATION DATA

[illegible]

CORRELATION DATA

Pennsylvanian

Geological Age —

Winterset Limestone Mbr. - Dennis Limestone Fm.

Geological Source _____ KDOT Lab No. S 9430 & 20597

Material Similar To — KDOT Lab No.S 9430 & 20357

2.53	(Dry)	2.46
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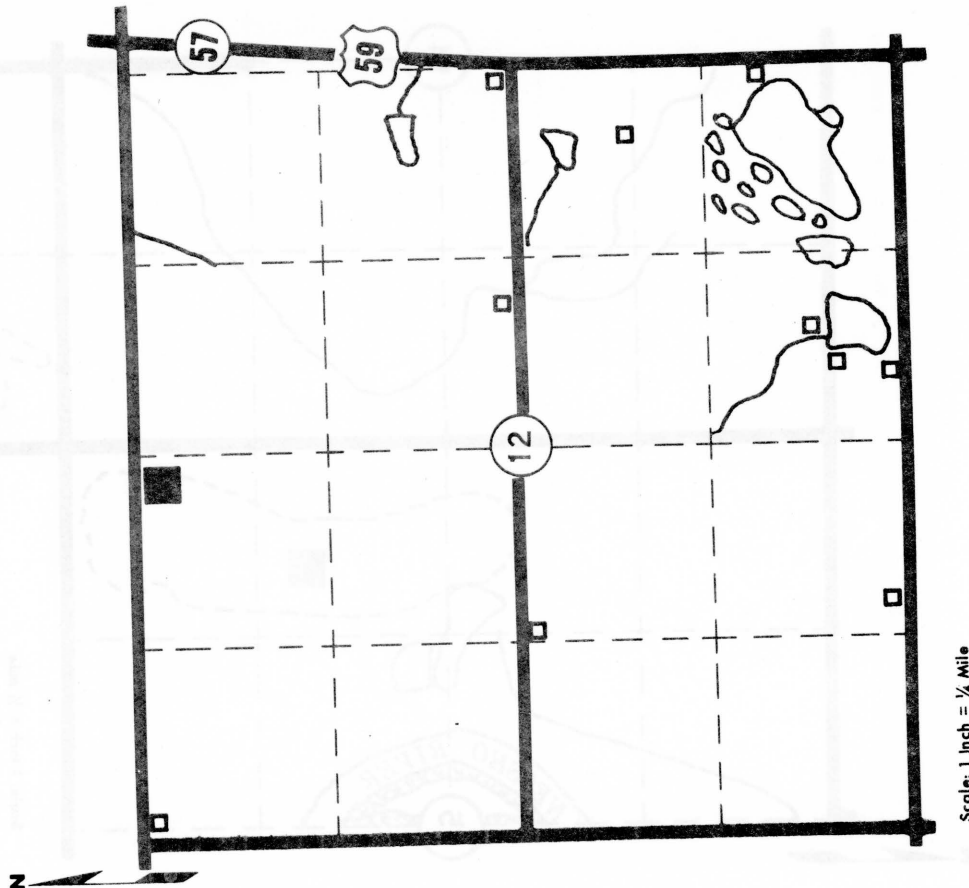
Specific Gravity (Sat.)	38.8 (B).	38.7 (B)
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Los Angeles Wear	3.04	3.10	0.97, 0.99
			Soundcast

Absorption	Color	Sourness	St. Basic
0.00	0.00	0.00	0.00
0.01	0.01	0.01	0.01
0.02	0.02	0.02	0.02
0.03	0.03	0.03	0.03
0.04	0.04	0.04	0.04
0.05	0.05	0.05	0.05
0.06	0.06	0.06	0.06
0.07	0.07	0.07	0.07
0.08	0.08	0.08	0.08
0.09	0.09	0.09	0.09
0.10	0.10	0.10	0.10
0.11	0.11	0.11	0.11
0.12	0.12	0.12	0.12
0.13	0.13	0.13	0.13
0.14	0.14	0.14	0.14
0.15	0.15	0.15	0.15
0.16	0.16	0.16	0.16
0.17	0.17	0.17	0.17
0.18	0.18	0.18	0.18
0.19	0.19	0.19	0.19
0.20	0.20	0.20	0.20
0.21	0.21	0.21	0.21
0.22	0.22	0.22	0.22
0.23	0.23	0.23	0.23
0.24	0.24	0.24	0.24
0.25	0.25	0.25	0.25
0.26	0.26	0.26	0.26
0.27	0.27	0.27	0.27
0.28	0.28	0.28	0.28
0.29	0.29	0.29	0.29
0.30	0.30	0.30	0.30
0.31	0.31	0.31	0.31
0.32	0.32	0.32	0.32
0.33	0.33	0.33	0.33
0.34	0.34	0.34	0.34
0.35	0.35	0.35	0.35
0.36	0.36	0.36	0.36
0.37	0.37	0.37	0.37
0.38	0.38	0.38	0.38
0.39	0.39	0.39	0.39
0.40	0.40	0.40	0.40
0.41	0.41	0.41	0.41
0.42	0.42	0.42	0.42
0.43	0.43	0.43	0.43
0.44	0.44	0.44	0.44
0.45	0.45	0.45	0.45
0.46	0.46	0.46	0.46
0.47	0.47	0.47	0.47
0.48	0.48	0.48	0.48
0.49	0.49	0.49	0.49
0.50	0.50	0.50	0.50
0.51	0.51	0.51	0.51
0.52	0.52	0.52	0.52
0.53	0.53	0.53	0.53
0.54	0.54	0.54	0.54
0.55	0.55	0.55	0.55
0.56	0.56	0.56	0.56
0.57	0.57	0.57	0.57
0.58	0.58	0.58	0.58
0.59	0.59	0.59	0.59
0.60	0.60	0.60	0.60
0.61	0.61	0.61	0.61
0.62	0.62	0.62	0.62
0.63	0.63	0.63	0.63
0.64	0.64	0.64	0.64
0.65	0.65	0.65	0.65
0.66	0.66	0.66	0.66
0.67	0.67	0.67	0.67
0.68	0.68	0.68	0.68
0.69	0.69	0.69	0.69
0.70	0.70	0.70	0.70
0.71	0.71	0.71	0.71
0.72	0.72	0.72	0.72
0.73	0.73	0.73	0.73
0.74	0.74	0.74	0.74
0.75	0.75	0.75	0.75
0.76	0.76	0.76	0.76
0.77	0.77	0.77	0.77
0.78	0.78	0.78	0.78
0.79	0.79	0.79	0.79
0.80	0.80	0.80	0.80
0.81	0.81	0.81	0.81
0.82	0.82	0.82	0.82
0.83	0.83	0.83	0.83
0.84	0.84	0.84	0.84
0.85	0.85	0.85	0.85

Periodic portable crushing operation. Mat'ls. Dept.

Remarks	Site No.
	67-28



MATERIAL SITE DATA FORM

CG+10
Qa1

Site No. _____ Date June 27, 1978

Material Chert Gravel County Neosho

Location E_{1/2} Sec. 15 Twp. 29S Range 20E

Owner Hy Grade Const. & Materials, Inc. St. Paul, KS 66771

name _____ address _____

Nature of Deposit Wet Accessibility Good Site Located on Plate IV

Status of Site Open Materials Site; Sampled

EXPLORATION DATA

[illegible]

CORRELATION DATA

Geological Age	Quaternary
Geological Source	Alluvium and Terrace Deposits
Material Similar To	KDOT Lab No.s 77-72 and 77-73

Specific Gravity (Sat.) 2.53 - 2.56 (Dry) 2.47

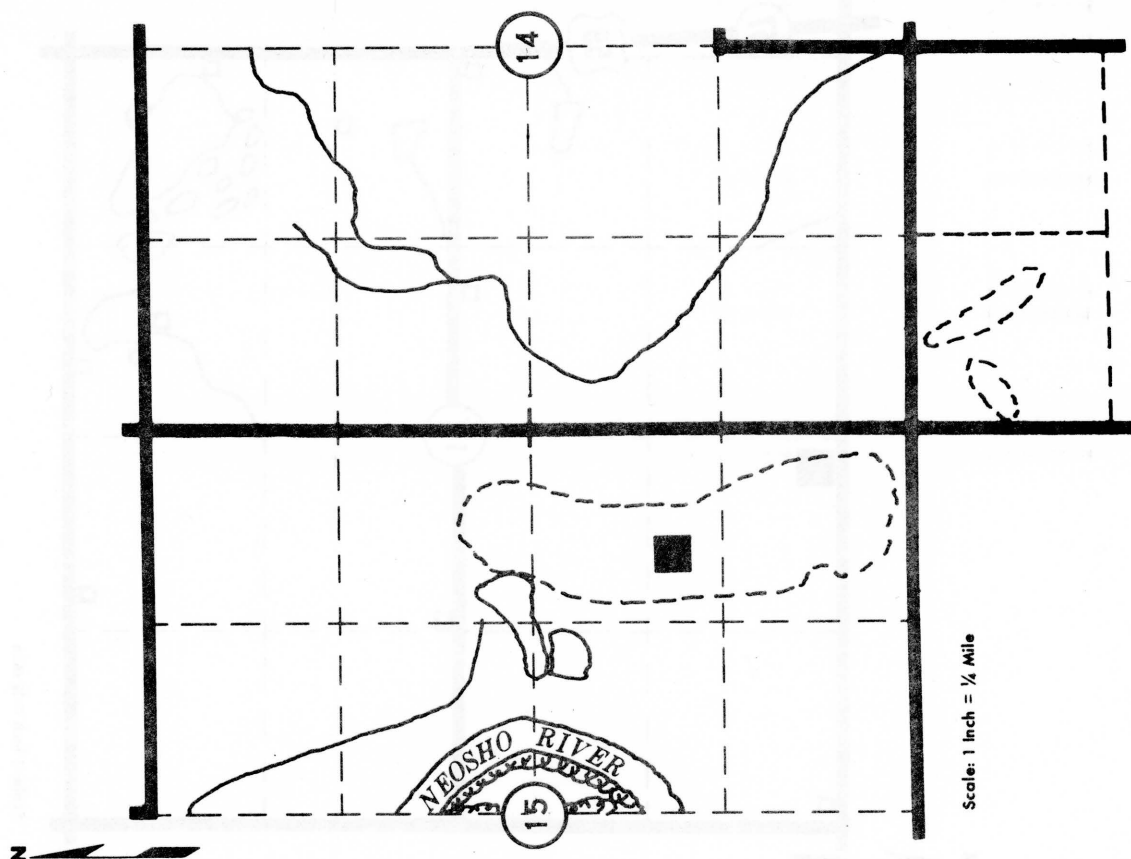
Los Angeles Wear 19(B)

Absorption 2.4 - 2.0 Soundness 0.99

Wt. Cu. Ft. Str. Ratio

Material is very difficult to saw. Mat'l's. Dept.

Site No. 67-11



MATERIAL SITE DATA FORM

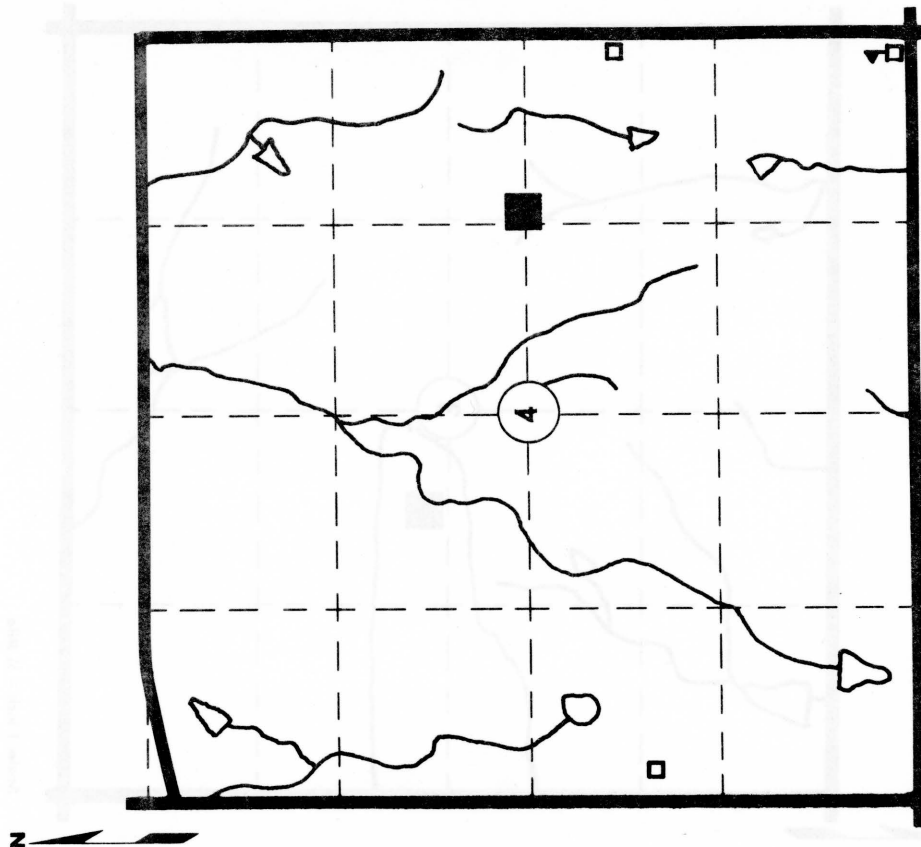
Site No. LS+11 Date June 27, 1978
Pa
 Material Limestone County Neosho
 Location E $\frac{1}{2}$ Sec. 4 Twp. 29S Range 21E
 Owner Joe O'Brien and wife R.1 St. Paul, KS 66771
 name address
 Nature of Deposit Dry Accessibility Good Site Located on Plate IV
 Status of Site Open Materials Site; Sampled

EXPLORATION DATA

Test Hole	Material at Bottom of Hole	Depth of Over-Burden	Depth of Material	Wash								G.F.	L.L.	P.I.		
				1½	¾	3/8	4	8	16	30	50				100	200

CORRELATION DATA

Geological Age Pennsylvanian
 Geological Source Worland Limestone Mbr. - Altamont Limestone Fm.
 Material Similar To KDOT Lab No.s 75-1450, 75-3575, & 77-74
 Specific Gravity (Sat.) 2.58 - 2.63 (Dry) 2.54 - 2.59
 Los Angeles Wear 24(B) - 27(B)
 Absorption 1.3 - 2.0 Soundness 0.98
 Wt. Cu. Ft. Periodic portable crushing operation. Mat'l's. Dept.
 Remarks Site No. 67-32



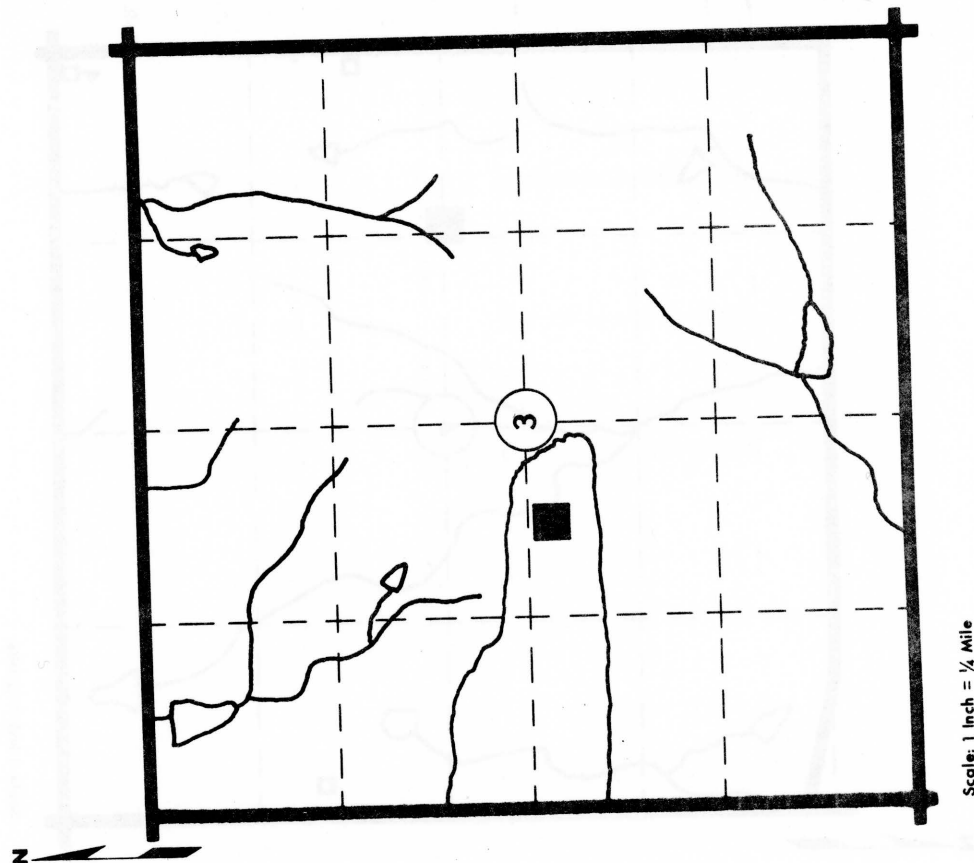
Scale: 1 Inch = 1/4 Mile

LS+12
 Pa
 Site No. _____ Date June 27, 1978
 Limestone _____ County Neosho
 Material SW_{1/4} _____ Sec. 3 _____ Twp. 29S _____ Range 21E
 Location Cleo O'Brien _____ R.R. 1 _____ St. Paul, KS 66771
 Owner _____ name Dry _____ address _____
 Nature of Deposit _____ Accessibility Good _____ Site Located on Plate IV
 Status of Site _____ Open Materials Site; Sampled _____

[illegible]

Geological Age	Pennsylvanian
Geological Source	Worland Limestone Mbr. - Altamont Limestone Fm. KDOT Lab No.s 10229, 20922, 32148 & 38411
Material Similar To	

Specific Gravity (Sat.)	2.56 - 2.61	(Dry)	2.51 - 2.58
Los Angeles Wear	21.3 - 24.6		
Absorption	1.16 - 1.99	Soundness	0.98 - 0.99
Wt. Cu. Ft.		Str. Ratio	
Remarks	Mat'l's. Dept. Site No. 62-21		



$$\frac{LS+13}{Pd}$$

June 27, 1978

Site No. _____ Date _____

Limestone _____ Neosho _____
County _____

Material NE $\frac{1}{4}$, NE $\frac{1}{4}$ Sec. 33 Twp. 29S Range 19E

Location Horace Jones R.#2 Box 136 Erie, KS 66733

Owner Horace Jones address Box 136 Erie, KS 66733

Owner _____ name _____ address _____
 Nature of Deposit _____ Dry _____ Good _____ Site Located on Plate _____ V _____
 Accessibility _____

Nature of Deposit

Open Materials Site; Sampled

Status of Site

[illegible]

Geological Age	Pennsylvanian
Geological Source	Winterset Limestone Mbr. - Dennis Limestone Fm.
Material Similar To	KDOT Lab. No. 10157

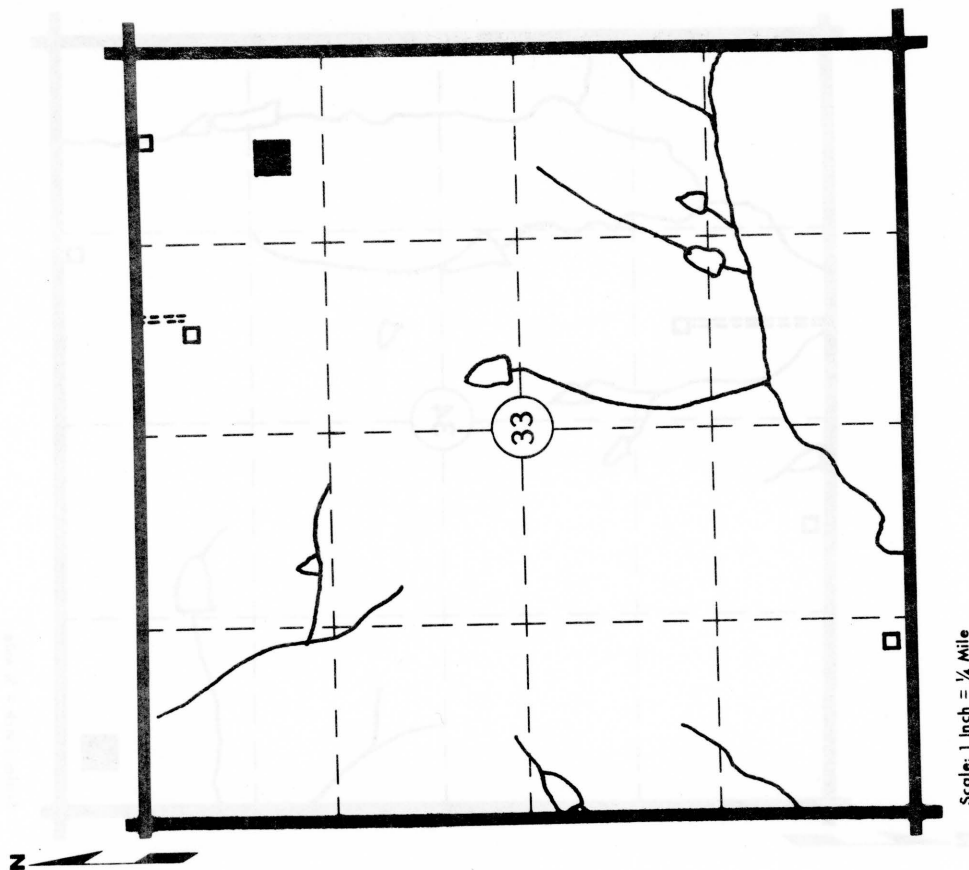
2.54	2.45	Dry
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Specific Gravity (Sat.) 41.0 (B)

Los Angeles Wear	11.0 - 1.57	3.51	0.98
Location			Soundness

Wt. Cu. Ft. _____ Str. Ratio _____

Wt. Cu. Ft.	Sir. Ratio	Remarks
		Periodic portable crushing operation. Ledge contains some thin clay seams. Mat'ls. Dept. Site No. 67-27



Scale: 1 Inch = $\frac{1}{4}$ Mile

MATERIAL SITE DATA FORM

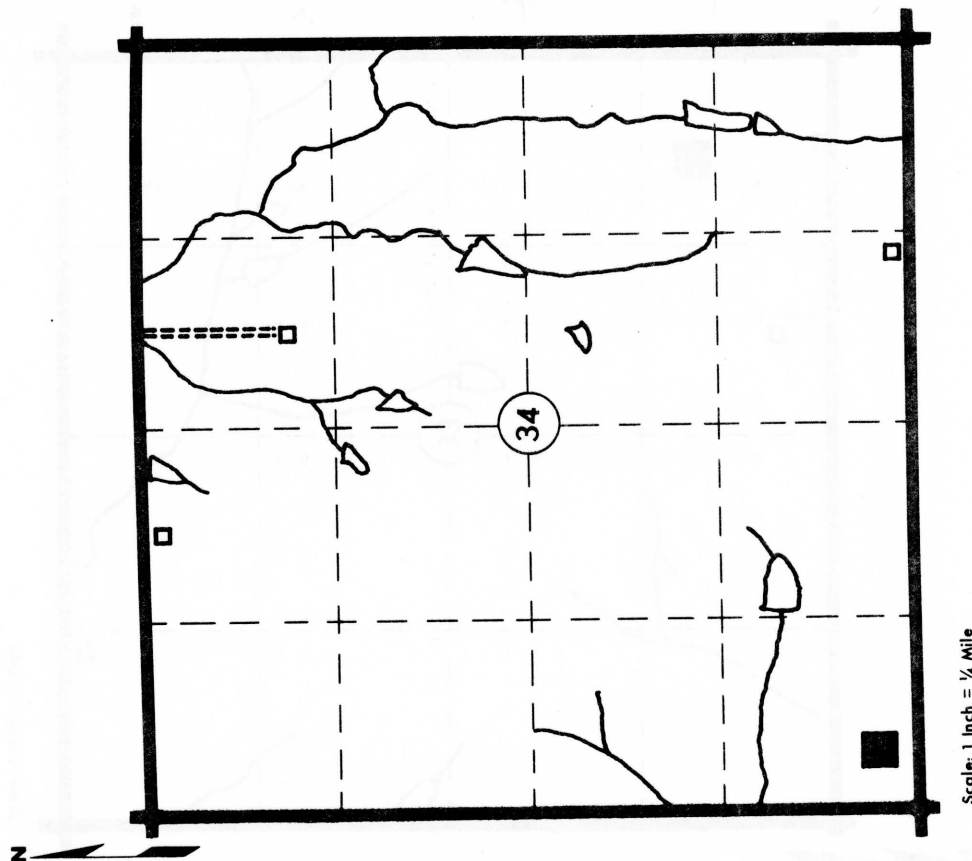
Site No. LS+14 Date June 27, 1978
PD
 Material Limestone County Neosho
 Location SW 1/4 Sec. 34 Twp. 29S Range 19E
 Owner Eva E. Kramer Box 194 Galesburg, KS 66740
R.R. 1 address
 Nature of Deposit Dry Accessibility Good Site Located on Plate V
 Status of Site Open Materials Site; Sampled

EXPLORATION DATA

Test Hole	Material at Bottom of Hole	Depth of Over-Burden	Depth of Material	Wash								G.F.	L.L.	P.I.	
				1 1/2	3/4	8	16	30	50	100	200				

CORRELATION DATA

Geological Age Pennsylvanian
 Geological Source Winterset Limestone Mbr. - Dennis Limestone Fm.
 Material Similar To KDOT Lab No.s 10156, 20595, 21113, 31260 & 32147
 Specific Gravity (Sat.) 2.52 - 2.54 (Dry) 2.43 - 2.46
 Los Angeles Wear 36.8 - 41.6
 Absorption 3.40 - 3.97 Soundness 0.90 - 0.98
 Wt. Cu. Ft. Str. Ratio
 Remarks Periodic portable crusher operation. Mat'l's. Dept. Site
 No. 67-26



$$\frac{LS+75}{Ph}$$

Site No. _____ Date _____
 Material Limestone County Neosho
 Location NW $\frac{1}{4}$, NE $\frac{1}{4}$ Sec. 16 Twp. 30S Range 20E
 Owner LeRoy H. Lacen et al Thayer, KS 66776
 Name address
 Nature of Deposit Dry Accessibility Good Site Located on Plate VI
 Status of Site Open Materials Site; Sampled

[illegible]

Geological Age _____ Pennsylvanian

Geological Source _____ Hertha Limestone Fm.

Material Similar To _____ KDOT Lab No.s 28396 & 30102

Specific Gravity (Sat.) _____ 2.64 _____ (Dry) _____ 2.61, 2.60 _____

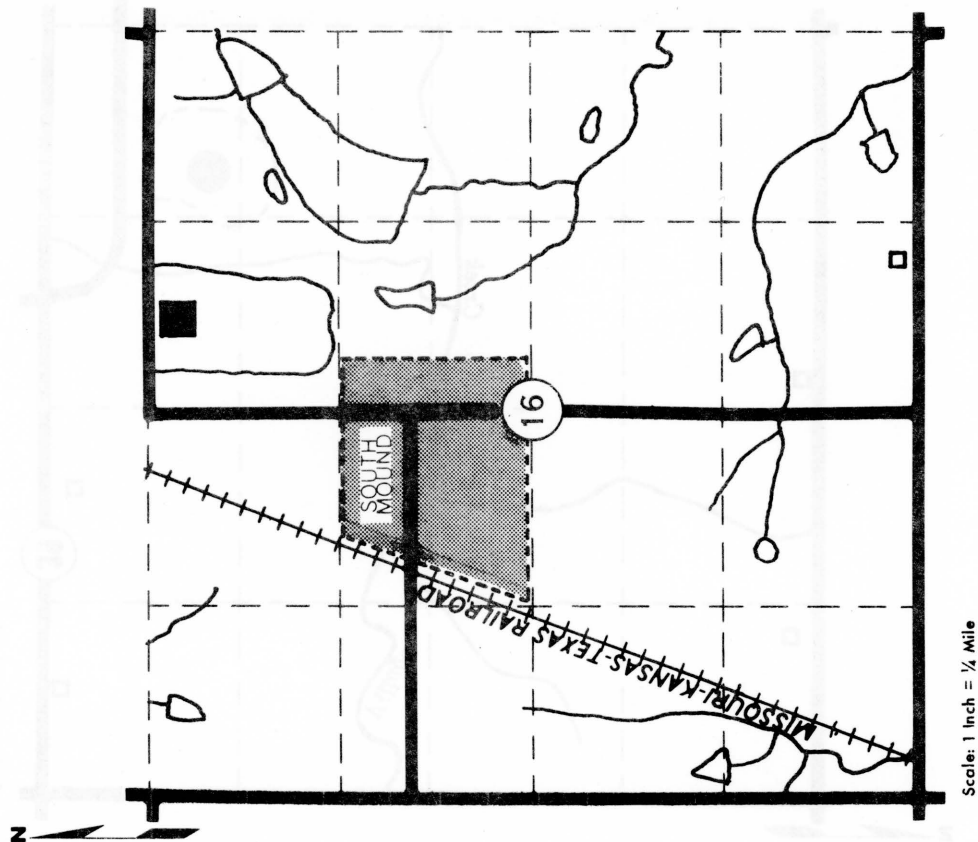
Los Angeles Wear _____ 27.3(B) _____ 26.8(B) _____

Absorption _____ 1.24, 1.61 _____ Soundness _____ 0.98, 0.97 _____

Wt. Cu. Ft. _____ Str. Ratio _____

Periodic portable crushing operations. Mat'ls. Dept.

Site No. 67-30.



Scale: 1 Inch = 1/4 Mile

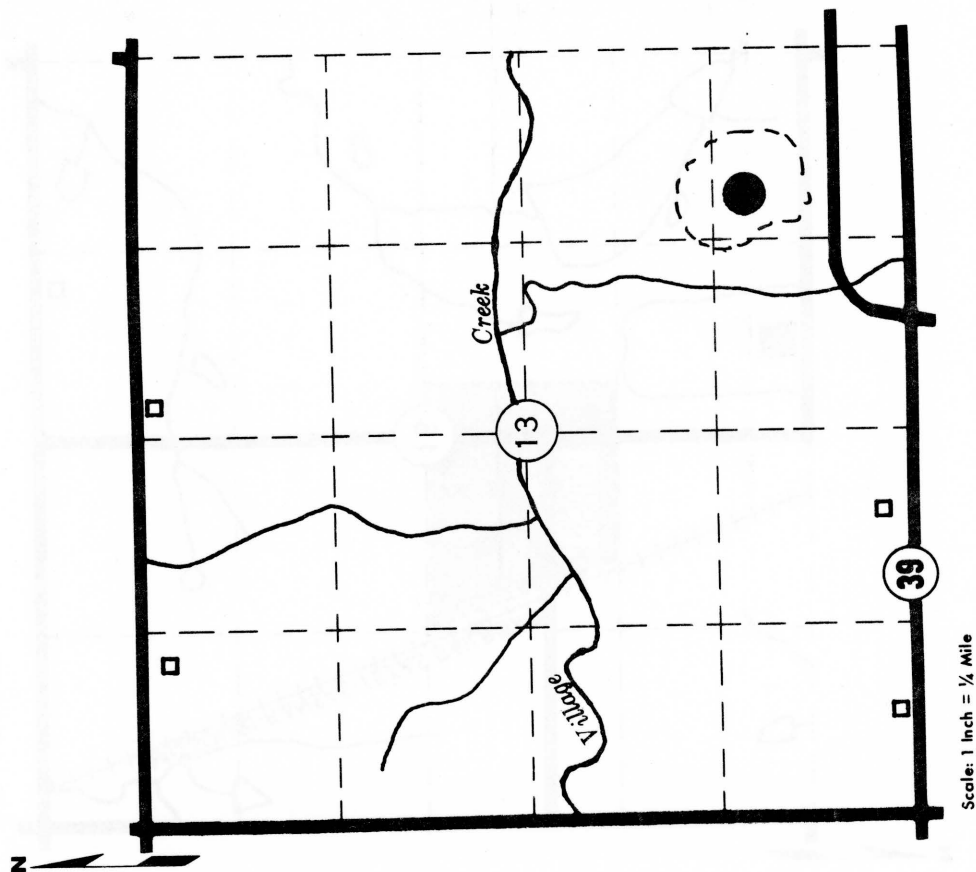
LS-16
Pi

Site No. pi Date June 27, 1978
 Material Limestone County Neosho
 Location SE $\frac{1}{4}$ Sec. 13 Twp. 27S Range 17E
 Owner Ash Grove Lime & Portland Cement Co. 101 W. 11th KC, MO,
 name Dry address I
 Nature of Deposit Good Site Located on Plate I
Open Materials Site; Not Sampled
 Status of Site Open Materials Site; Not Sampled

[illegible]

CORRELATION DATA

Geological Age Pennsylvanian
 Raytown Limestone Mbr. - Iola Limestone Fm.
 Geological Source _____
 Material Similar To _____
 Specific Gravity (Sat.) _____ (Dry) _____
 Los Angeles Wear _____
 Absorption _____ Soundness _____
 Wt. Cu. Ft. _____ Str. Ratio _____
 Remarks Area has been extensively quarried for material to
manufacture cement.



OPEN MATERIALS SITES ; NOT SAMPLED

LEGEND

=====	Trail or lane	■	Open materials sites; sampled
—————	Road	●	Open materials sites; not sampled
+++++++	Railroad	▼	Prospective materials sites; sampled
~~~~~	Hedge or trees	◆	Prospective materials sites; not sampled
~~~~~ Name	Major streams	⑤	Center of section
~~~~~	Intermittent streams	□	Dwelling
~~~~~	Pond or lake	⊕	Cemetery
		▣	School
		✠	Church
		▨	Town or city

MATERIAL SITE DATA FORM

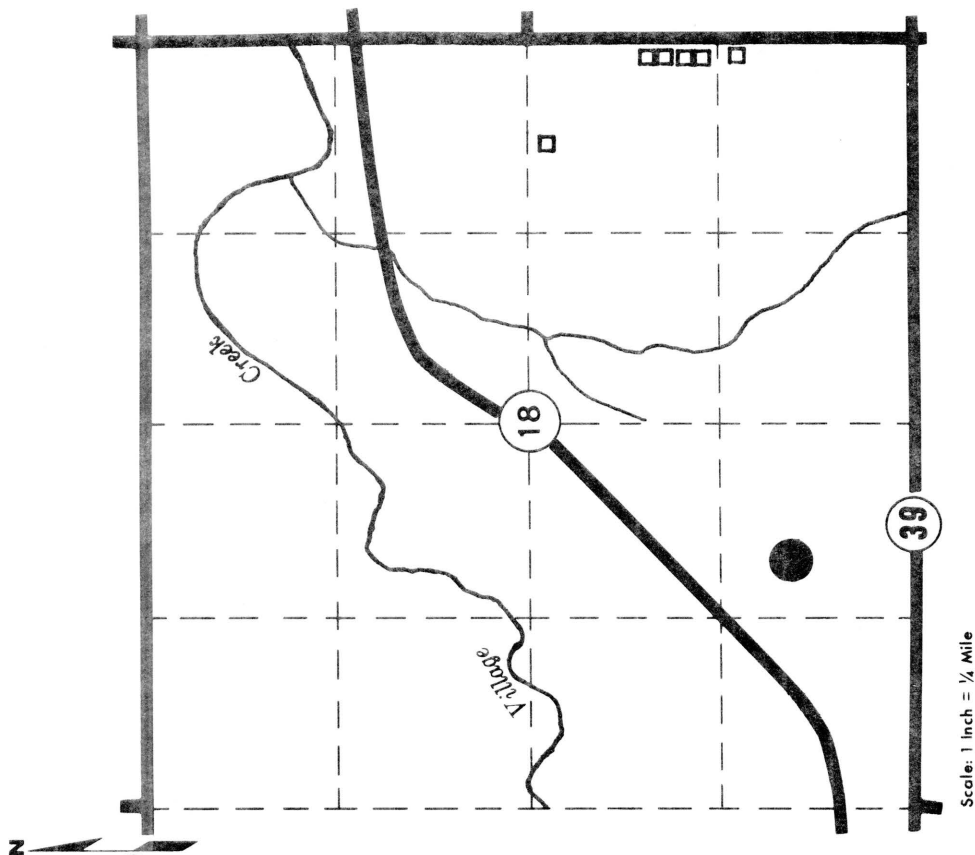
Site No. LS+17 Date June 27, 1978
Pi
 Material Limestone County Neosho
 Location SW $\frac{1}{4}$ Sec. 18 Twp. 27S Range 18E
 Owner Ash Grove & Portland Cement Co. 101 W. 11th Kansas City, MO
 name Dry Accessibility Good Site Located on Plate I
 Nature of Deposit Open Materials Site; Not Sampled
 Status of Site _____

EXPLORATION DATA

Test Hole	Material at Bottom of Hole	Depth of Core or Burden	Depth of Material	1 1/2	3/4	4	8	16	30	50	100	Wash 200	G.F.	L.L.	P.I.

CORRELATION DATA

Geological Age Pennsylvanian
 Geological Source Raytown Limestone Mbr. - Iola Limestone Fm.
 Material Similar To _____
 Specific Gravity (Sat.) _____ (Dry) _____
 Los Angeles Wear _____
 Absorption _____ Soundness _____
 Wt. Cu. Ft. _____ Str. Ratio _____
 Remarks Material from this location is being used to manufacture cement.



LS+78

Site No. Pi Date June 27, 1978
 Material Limestone County Neosho
 Location SE $\frac{1}{4}$ Sec. 8 Twp. 27S Range 18E
 Owner Ash Grove & Portland Cement Co. 101 W. 11th Kansas City
 name Dry address _____
 Nature of Deposit _____ Accessibility Good Site Located on Plate I
 Status of Site Open Materials Site; Not Sampled

EXPLORATION DATA

[illegible]

CORRELATION DATA

Geological Age — Pennsylvanian

Geological Source — Raytown Limestone Mbr. - Iola Limestone Fm.

Material Similar To _____

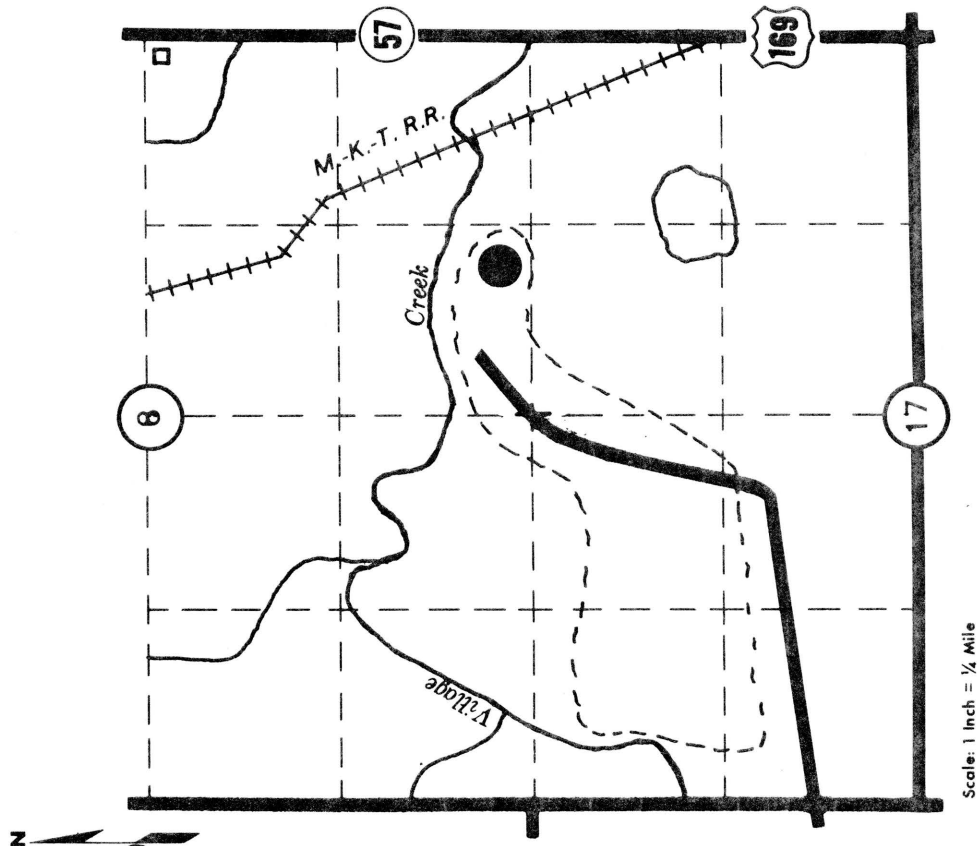
Specific Gravity (Sat.) _____ (Dry) _____

Los Angeles Wear

Absorption _____ **Soundness** _____

Wt. Cu. Ft. _____ Str. Ratio _____

Remarks	Material from this location is used to manufacture cement.
---------	--



$$\frac{LS+19}{Pi}$$

LS+19
Pi

Site No. _____ Date June 27, 1978

Material Limestone County _____ Neosho

Location W₂ Sec. 24 Twp. 27S Range 17E

Owner _____

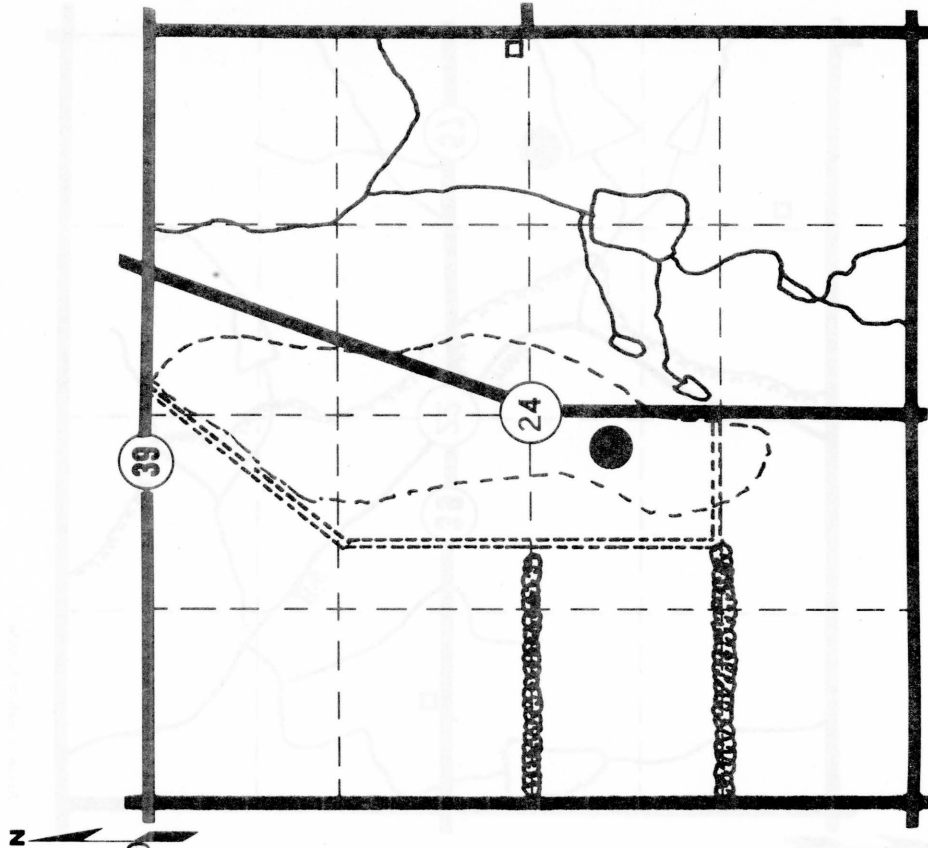
name _____ address _____

Nature of Deposit _____ Accessibility Good Site Located on Plate I

Status of Site _____
Open Materials Site; Not Sampled

[illegible]

Pennsylvania
 Geological Age _____
 Geological Source _____ Raytown Limestone Mbr. - Iola Limestone Fm.
 Material Similar To _____
 Specific Gravity (Sat.) _____ (Dry) _____
 Los Angeles Wear _____
 Absorption _____ Soundness _____
 Wt. Cu. Ft. _____ Str. Ratio _____
 Remarks _____ Material quarried for cement manufacturer.



Scale: 1 Inch = $\frac{1}{4}$ Mile

$$\frac{LS+20}{Pd}$$

Site No. 70 Date June 27, 1978

Material Limestone County Neosho

Location SE $\frac{1}{4}$, NE $\frac{1}{4}$ Sec. 22 Twp. 27S Range 19E

Owner Marion P. & wife & Nelle H. Stevens R.R.3 Chanute, KS 66722 name Dry address I

Nature of Deposit Open Materials Site; Not Sampled Accessibility Good Site Located on Plate

Status of Site

[illegible]

Geological Age	Pennsylvanian
Geological Source	Winterset Limestone Mbr. - Dennis Limestone Fm.

Material Similar To _____

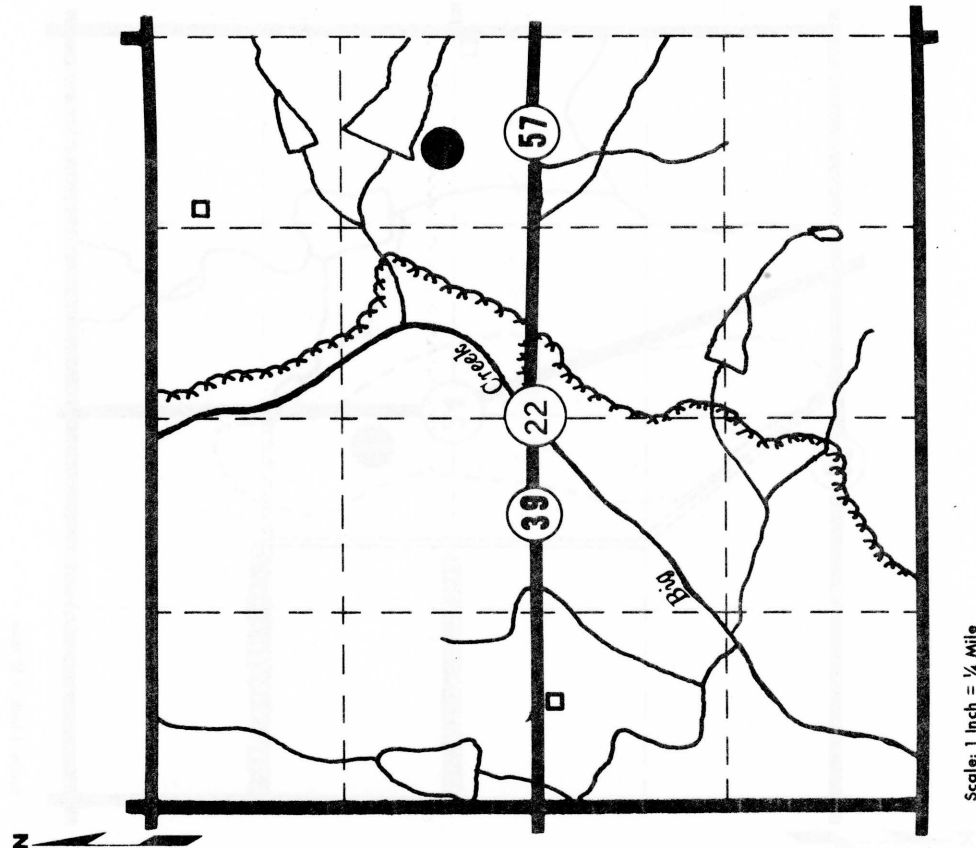
Specific Gravity (Sal.) _____ (Dry) _____

Los Angeles Wear _____

Absorption _____ **Soundness** _____

Wt. Cu. Ft. _____ Str. Ratio _____

Abandoned



Scale: 1 Inch = 1/4 Mile

$$\frac{SH+27}{PC}$$

June 27, 1978

Site No. _____ Date _____

Shale	Neosho
1. 100 ft. of shale, gray, blue, and black, with thin layers of sandstone and limestone. 2. 100 ft. of shale, gray, blue, and black, with thin layers of sandstone and limestone. 3. 100 ft. of shale, gray, blue, and black, with thin layers of sandstone and limestone. 4. 100 ft. of shale, gray, blue, and black, with thin layers of sandstone and limestone. 5. 100 ft. of shale, gray, blue, and black, with thin layers of sandstone and limestone. 6. 100 ft. of shale, gray, blue, and black, with thin layers of sandstone and limestone. 7. 100 ft. of shale, gray, blue, and black, with thin layers of sandstone and limestone. 8. 100 ft. of shale, gray, blue, and black, with thin layers of sandstone and limestone. 9. 100 ft. of shale, gray, blue, and black, with thin layers of sandstone and limestone. 10. 100 ft. of shale, gray, blue, and black, with thin layers of sandstone and limestone.	1. 100 ft. of shale, gray, blue, and black, with thin layers of sandstone and limestone. 2. 100 ft. of shale, gray, blue, and black, with thin layers of sandstone and limestone. 3. 100 ft. of shale, gray, blue, and black, with thin layers of sandstone and limestone. 4. 100 ft. of shale, gray, blue, and black, with thin layers of sandstone and limestone. 5. 100 ft. of shale, gray, blue, and black, with thin layers of sandstone and limestone. 6. 100 ft. of shale, gray, blue, and black, with thin layers of sandstone and limestone. 7. 100 ft. of shale, gray, blue, and black, with thin layers of sandstone and limestone. 8. 100 ft. of shale, gray, blue, and black, with thin layers of sandstone and limestone. 9. 100 ft. of shale, gray, blue, and black, with thin layers of sandstone and limestone. 10. 100 ft. of shale, gray, blue, and black, with thin layers of sandstone and limestone.

SW $\frac{1}{4}$ 25 27S Range 17E

Ash Grove & Portland Cement Co. 101 W. 11th Kansas City, MO

owner	name	Good	address	I
	Dry	Good	Site located on	Plate

Nature of Deposit _____ Accessibility _____ Site Located on Plate _____

Open Materials Site; Not Sampled

EXPLORATION DATA

[illegible]

CORRELATION DATA

Pennsylvanian

Chanute Shale

Material Similar To _____

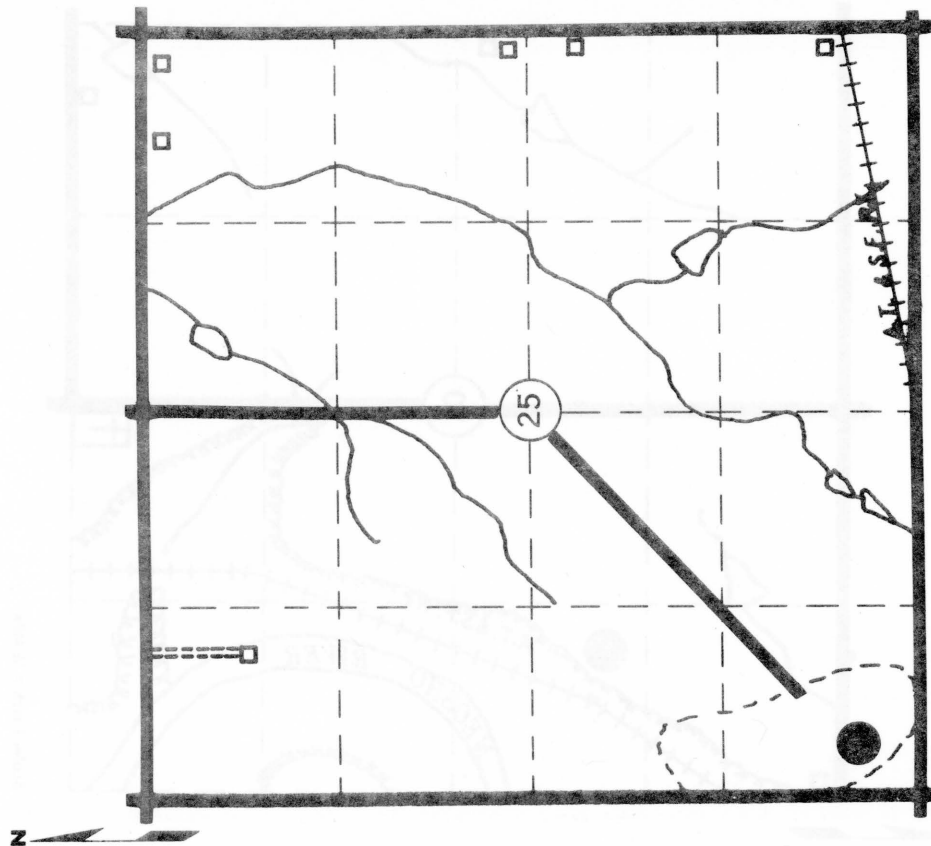
Specific Gravity (Sat.) _____ (Dry) _____

Los Angeles Wear _____

Absorption _____ Soundness _____

Wt. Cu. Ft. _____ Str. Ratio _____

Material quarried for manufacturer of cement.



Scale: 1 Inch = $\frac{1}{4}$ Mile

MATERIAL SITE DATA FORM

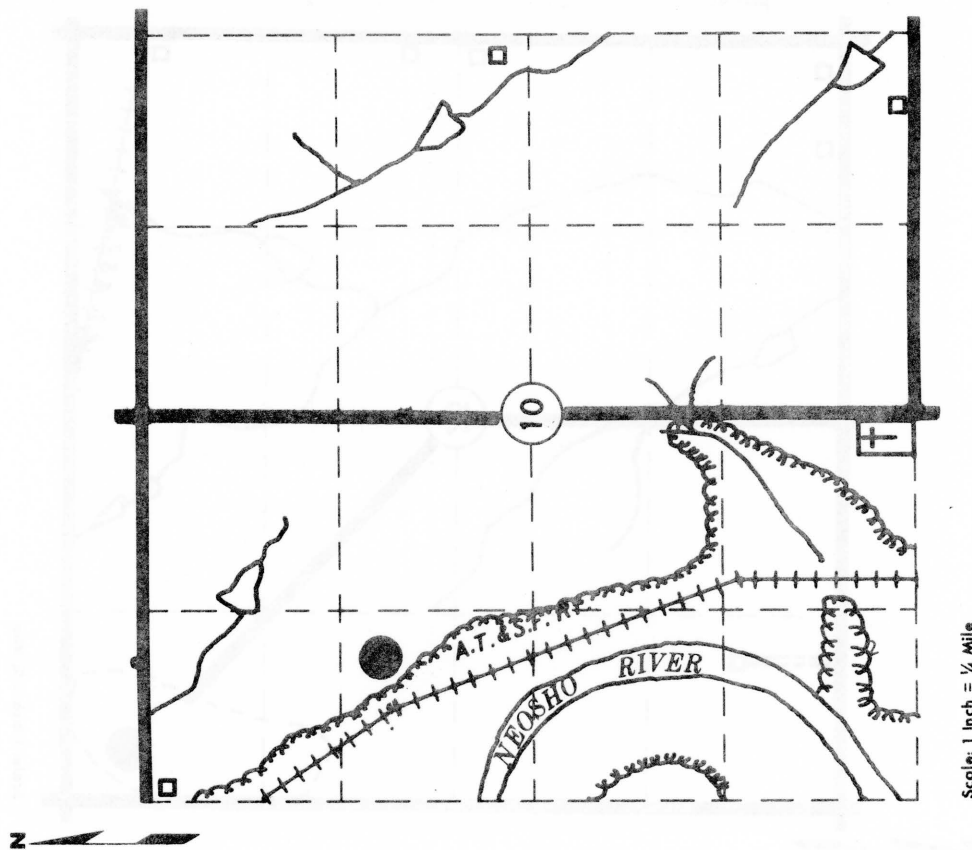
Site No. LS+22 Date June 27, 1978
Pd
 Material Limestone County Neosho
 Location NW 1/4 Sec. 10 Twp. 28S Range 19E
 Owner Homer J. LaRue & wife R.R. II Erie, KS 66733
 name address
 Nature of Deposit Dry Accessibility Fair Site Located on Plate III
 Status of Site Open Materials Site; Not Sampled

EXPLORATION DATA

Test Hole	Material at Bottom of Hole	Depth of Over-Burden	Depth of Material	Wash								G.F.	LL	P.I.
				1½	¾	3/8	4	8	16	30	50			

CORRELATION DATA

Geological Age Pennsylvanian
 Geological Source Winterset Limestone Mbr. - Dennis Limestone Fm.
 Material Similar To _____
 Specific Gravity (Sat.) _____ (Dry) _____
 Los Angeles Wear _____
 Absorption _____ Soundness _____
 Wt. Cu. Ft. _____ Str. Ratio _____
 Remarks Abandoned



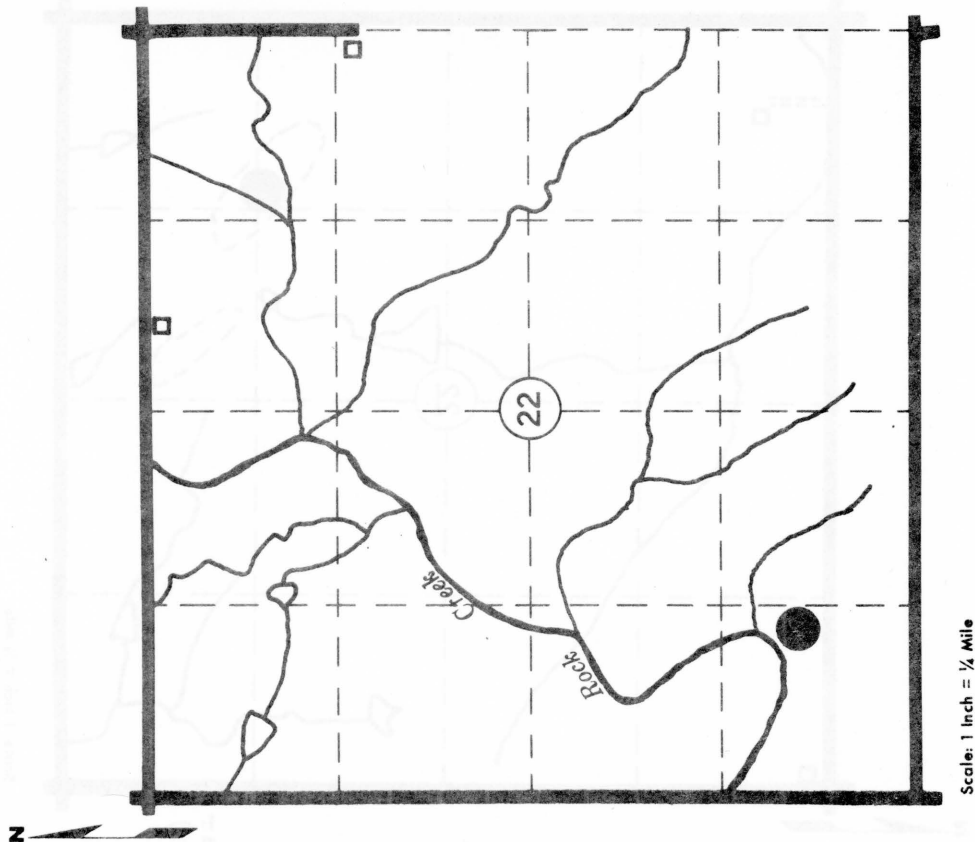
$$\frac{LS+23}{Ph}$$

Ph _____ June 27, 1978
 Site No. _____ Date _____
 Material _____ Limestone _____ Neosho _____
 Location _____ SW $\frac{1}{4}$ _____ 22 _____ Twp. _____ 27S _____ Range _____ 21E _____
 Owner _____ H. Edward Smith & wife _____ Stark, KS 66775 _____
 name _____ address _____
 Nature of Deposit _____ Dry _____ Accessibility _____ Good _____ Site Located on Plate _____ II _____
 Status of Site _____ Open Materials Site; Not Sampled _____

[illegible]

Pennsylvanian _____
 Hertha Limestone Formation _____
 Geological Age _____
 Geological Source _____
 Material Similar To _____

 Specific Gravity (Sat.) _____ (Dry) _____
 Los Angeles Wear _____
 Absorption _____ Soundness _____
 Wt. Cu. Ft. _____ Str. Ratio _____
 Abandoned _____
 Remarks _____



MATERIAL SITE DATA FORM

CG-24
Qtu

Site No. _____ Date June 27, 1978

Material Chert Gravel County Neosho

Location SE 1/4 Sec. 22 Twp. 28S Range 18E

Owner Lewis E. Taylor & W. 924 S Western Chanute, KS

Nature of Deposit Dry Accessibility Good address 66720 Site Located on Plate III

Status of Site Open Materials Site; Not Sampled

EXPLORATION DATA

Test Hole	Material at Bottom of Hole	Depth of Overburden	Depth of Material	1 1/2	3/4	4	8	16	30	50	100	Wash 200	G.F.	L.L.	P.I.

CORRELATION DATA

Geological Age Quaternary

Geological Source Undifferentiated Terrace Deposits (Kansan-Nebraskan)

Material Similar To _____

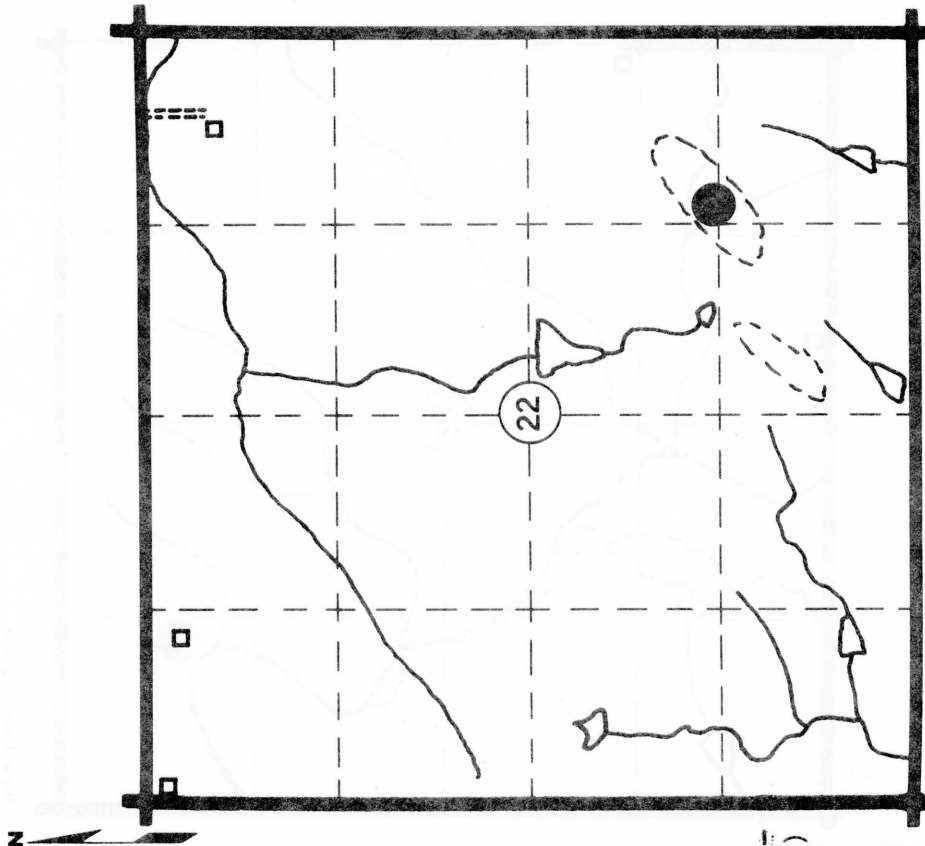
Specific Gravity (Sat.) _____ (Dry) _____

Los Angeles Wear _____

Absorption _____ Soundness _____

Wt. Cu. Ft. _____ Str. Ratio _____

Remarks Depleted



Scale: 1 Inch = 1/4 Mile

MATERIAL SITE DATA FORM

Site No. LS+25 Date June 27, 1978
Ed
 Material Limestone County Neosho
 Location SE 1/4, SW 1/4 Sec. 28 Twp. 29S Range 19E
 Owner Stella Burke Galesburg, KS 66740
 Nature of Deposit Dry Accessibility Good address V
 Status of Site Open Materials Site; Not Sampled Site Located on Plate _____

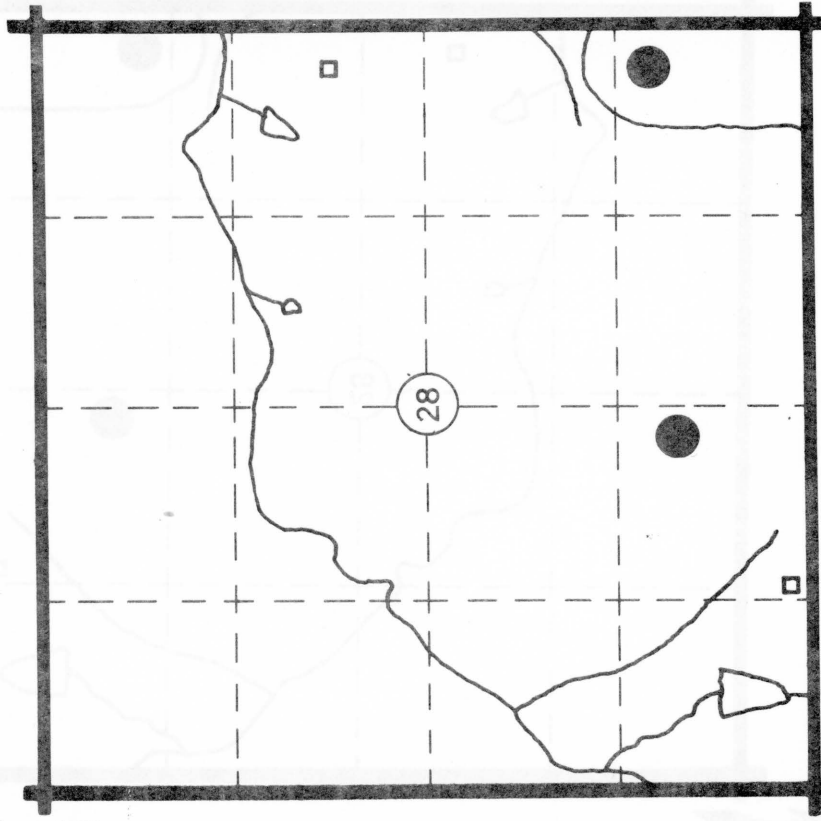
EXPLORATION DATA

Test Hole	Material at Bottom of Hole	Depth of Over-Burden	Depth of Material	1 1/2	3/8	4	8	16	30	50	100	Wash 200	G.F.	L.L.	P.I.

CORRELATION DATA

Geological Age Pennsylvanian
 Geological Source Winterset Limestone Mbr.-Dennis Limestone Fm.
 Material Similar To _____
 Specific Gravity (Sat.) _____ (Dry) _____
 Los Angeles Wear _____
 Absorption _____ Soundness _____
 Wt. Cu. Ft. _____ Str. Ratio _____
 Remarks Material should be similar to Mat'ls. Dept. Site
 No. 67-27

N



Scale: 1 Inch = 1/4 Mile

LS+26
Pd Date June 27, 1978

Material Limestone County Neosho

Location SE $\frac{1}{4}$, SE $\frac{1}{4}$ Sec. 28 Twp. 29S Range 19E

Owner Ira R. or Nannie E. Dorris 321 S Lincoln Erie, KS
name address 66733

Nature of Deposit Dry Accessibility Good Site Located on Plate V

Status of Site Open Materials Site; Not Sampled

[illegible]

CORRELATION DATA

Pennsylvanian

Winterset Limestone Mbr.-Dennis Limestone Fm.

Winter set Limestone Mbr. - Dennis

Material Similar To _____

Specific Gravity (Sat.) _____ (Dry) _____

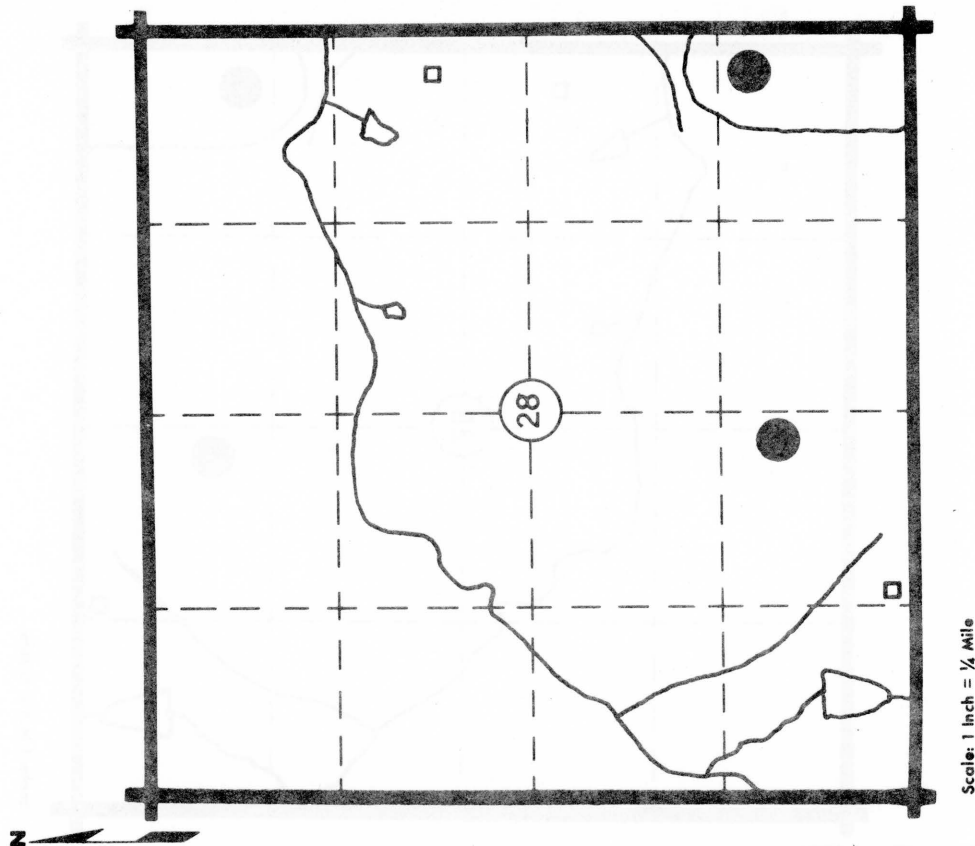
Los Angeles Wear _____

Absorption _____ Soundness _____

Wt. Cu. Ft. _____ Str. Ratio _____

Remarks
Material should be similar to Mat'ls. Dept.

Site No. 67-27

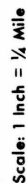


Scale: 1 Inch = $\frac{1}{4}$ Mile

LS+27
Pd
 Site No. _____ Date June 27, 1978
 Material Limestone County Neosho
 Location SE $\frac{1}{4}$, SE $\frac{1}{4}$, SE $\frac{1}{4}$ Sec. 36 Twp. 29S Range 18E
 Owner Jack E. Shields & W. 411 Manor Dr. Belton, MO 64012
 name _____ address _____
 Nature of Deposit Dry Accessibility Good Site Located on Plate V
 Status of Site Open Materials site; Not Sampled

[illegible]

Geological Age Pennsylvanian
Geological Source Winter set Limestone Mbr.-Dennis Limestone Fm.
Material Similar To _____
Specific Gravity (Sat.) _____ (Dry) _____
Los Angeles Wear _____
Absorption _____ Soundness _____
Wt. Cu. Ft. _____ Str. Ratio _____
Remarks Abandoned



MATERIAL SITE DATA FORM

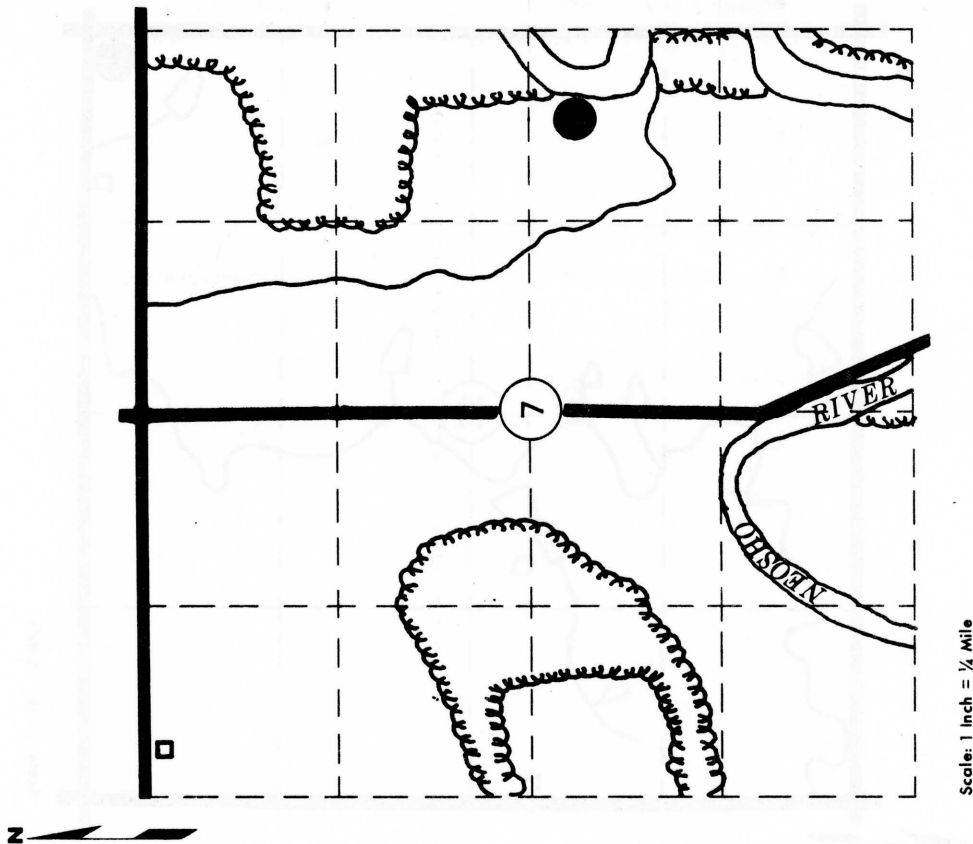
Site No. CG+28 Date June 27, 1978
 Material Chert Gravel County Neosho
 Location NE 1/4, SE 1/4 Sec. 7 Twp. 30S Range 21E
 Owner Melvin E. Harris St. Paul, Kansas 66771
 name Wet address VI
 Nature of Deposit Open Materials Site; Not Sampled
 Status of Site Open Materials Site; Not Sampled

EXPLORATION DATA

Test Hole	Material at Bottom of Hole	Depth of Overburden	Depth of Material	1 1/2	3/8	4	8	16	30	50	100	Wash 200	G.F.	LL	P.I.

CORRELATION DATA

Geological Age Quaternary
 Geological Source Alluvium
 Material Similar To _____
 Specific Gravity (Sat.) _____ (Dry) _____
 Los Angeles Wear _____
 Absorption _____ Soundness _____
 Wt. Cu. Ft. _____ Shr. Ratio _____
 Remarks Material only accessible during periods of low flow in Neosho River channel.

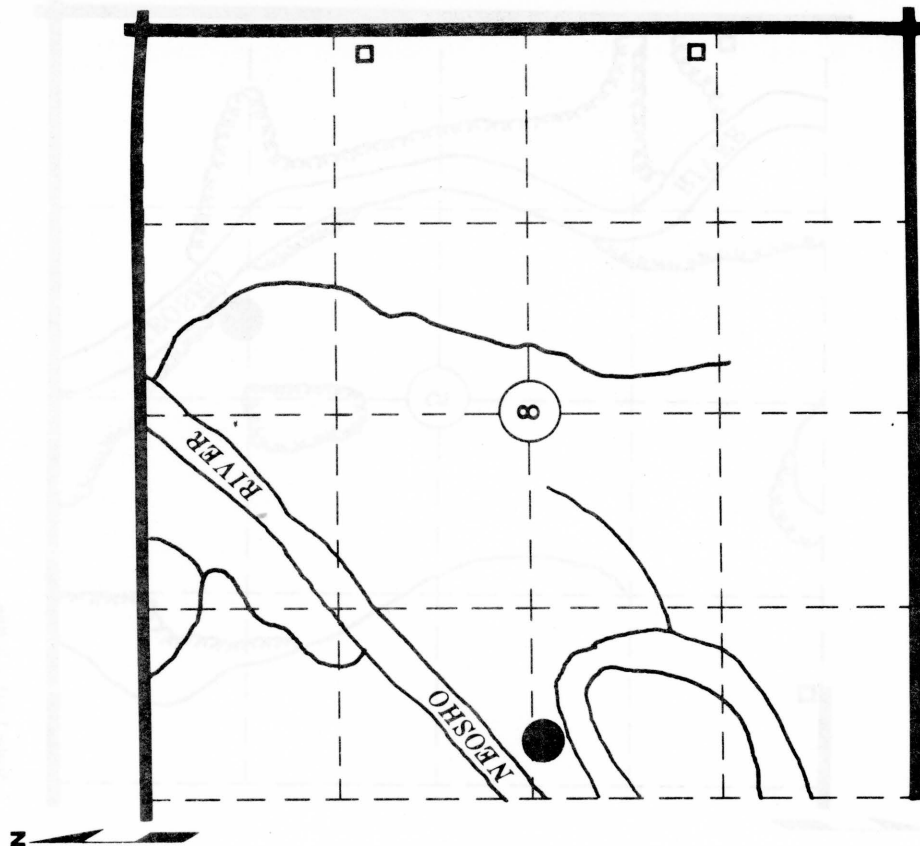


CG+29 _____
Qal _____ Date June 27, 1978
 Chert Gravel _____ County _____ Neosho
 W $\frac{1}{2}$ _____ Sec. 8 Twp. 30S Range 21E
 Location _____
 Owner Wilbur R. Goley Box 203 Erie, Kansas 66733
 name _____
 Nature of Deposit Wet Accessibility Fair Site Located on Plate VI
 Status of Site Open Materials site; Not Sampled

[illegible]

Quaternary _____
Geological Age _____
Alluvium _____
Geological Source _____
Material Similar To _____

Specific Gravity (Sat.) _____ (Dry) _____
Los Angeles Wear _____
Absorption _____ Soundness _____
Wt. Cu. Ft. _____ Str. Ratio _____
Remarks: Material only accessible during periods of low
flow in River channel.



Scale: 1 Inch = $\frac{1}{4}$ Mile

MATERIAL SITE DATA FORM

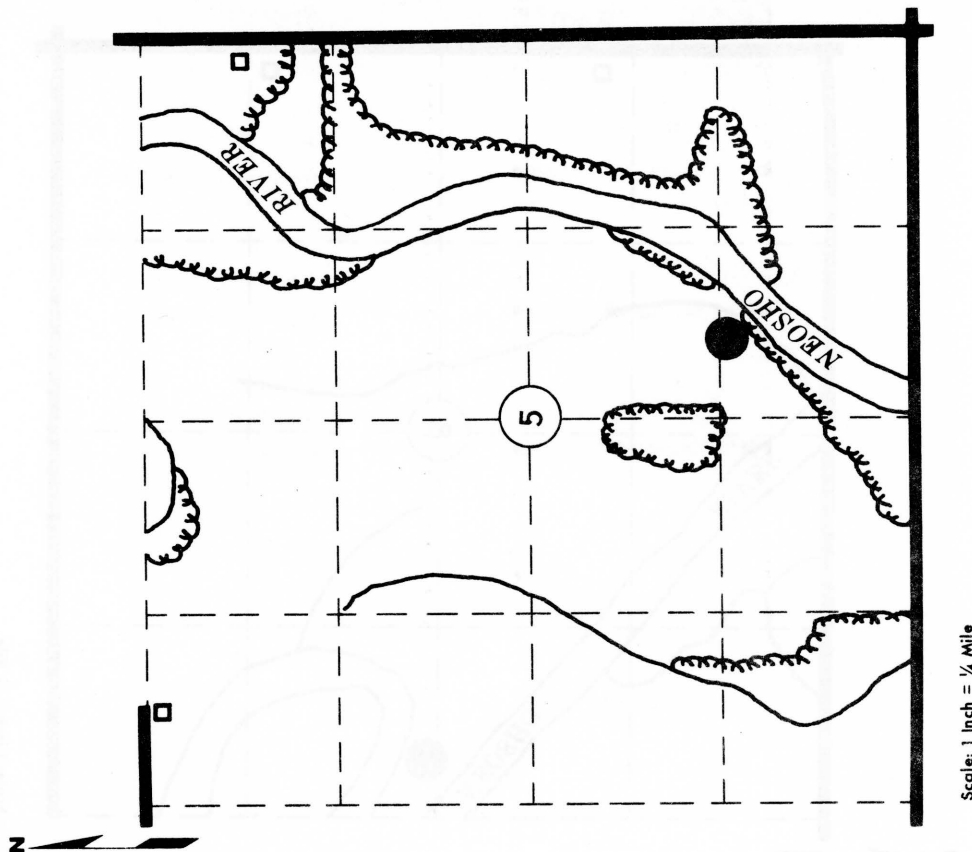
CG+30
Qal Date June 27, 1978
 Material Chert Gravel County Neosho
 Location SE 1/4 Sec. 5 Twp. 30S Range 21E
 Owner Wesley Kroeker et al RR 4 Box 99 Enid, OK
 Nature of Deposit Wet Accessibility Fair Site Located on Plate VI
 Status of Site Open Materials Site; Not Sampled

EXPLORATION DATA

Test Hole	Material at Bottom of Hole	Depth of Overburden	Depth of Material	1 1/2	3/4	3/8	4	8	16	30	50	100	Wash 200	G.F.	L.L.	P.I.

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 Material only accessible during periods of low flow.



MATERIAL SITE DATA FORM

CG+31
Qtu

Site No. _____ Date June 27, 1978

Material Chert Gravel County Neosho

Location NW $\frac{1}{4}$ Sec. 4 Twp. 30S Range 21E

Owner Bertha Mansker Rt. # 1 St. Paul, KS 66771

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 Over-Burden	Depth of Material	1 1/2	3/8	4	8	16	30	50	100	Wash 200	G.F.	LL	P.I.

CORRELATION DATA

Geological Age Quaternary

Geological Source Undifferentiated Terrace (Nebraskan-Kansan?)

Material Similar To _____

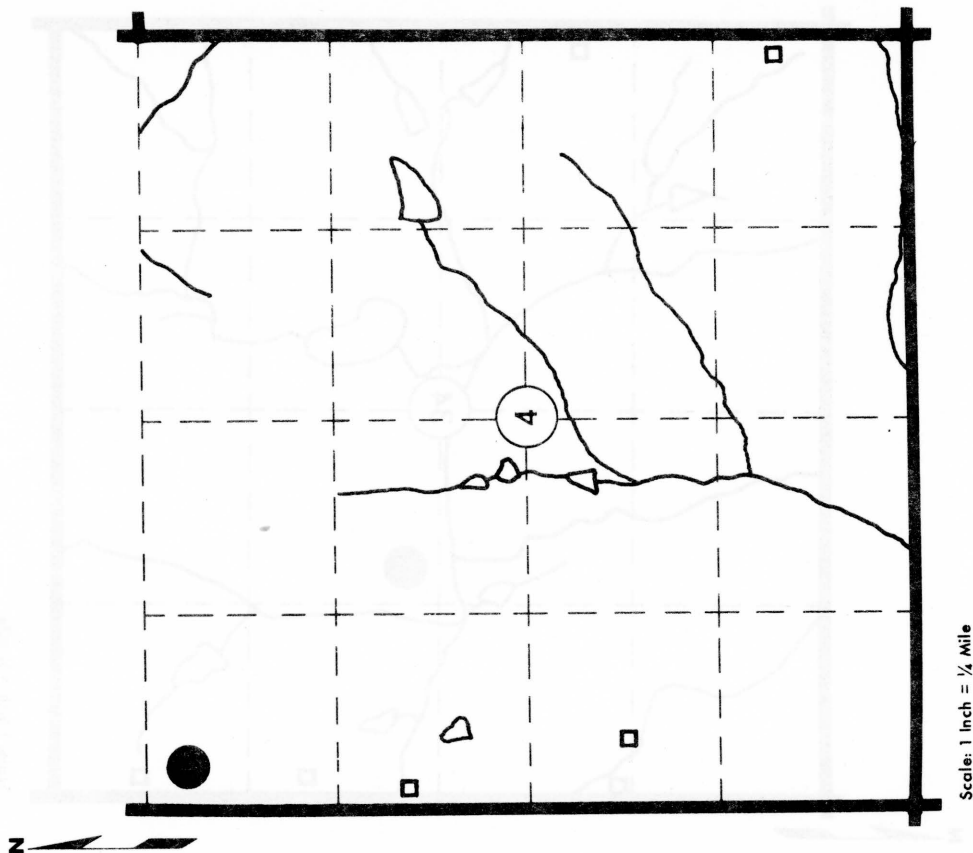
Specific Gravity (Sat.) _____ (Dry) _____

Los Angeles Wear _____

Absorption _____ Soundness _____

Wt. Cu. Ft. _____ Str. Ratio _____

Remarks _____



CG+32 Site No. Qtu Date June 27, 1978

Material Chert Gravel County Neosho

Location SW $\frac{1}{4}$ Sec. 34 Twp. 29S Range 21E

Owner R. Dean Rose & W.R. Paul, Kansas 66771

Nature of Deposit Dry Accessibility Good Site Located on Plate VI

Status of Site Open Materials Site; Not Sampled

[illegible]

Geological Age Quaternary
Geological Source Undifferentiated Terrace (Nebraskan-Kansan?)

Material Similar To _____

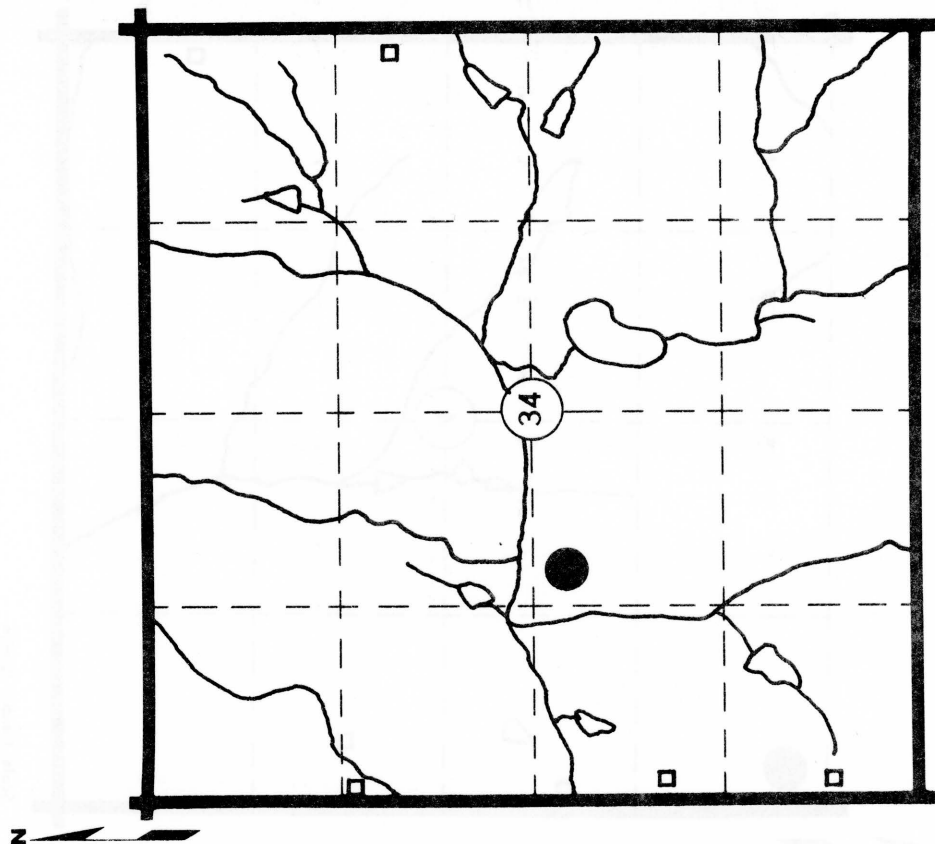
Specific Gravity (Sat.) _____ (Dry) _____

Los Angeles Wear _____

Absorption	Soundness
1. <i>Phragmites</i> (Common Reed) 2. <i>Scirpus</i> (Sedges) 3. <i>Cyperus</i> (Rushes) 4. <i>Juncus</i> (Juncos) 5. <i>Eleocharis</i> (Nutrushes) 6. <i>Sagittaria</i> (Arrow Arise) 7. <i>Najas</i> (Mosses) 8. <i>Chara</i> (Charophytes) 9. <i>Algae</i> (Various species) 10. <i>Hydrochara</i> (Water Boatmen) 11. <i>Notonecta</i> (Backswimmers) 12. <i>Psephenus</i> (Hellgrammites) 13. <i>Belostomatidae</i> (Dipodomys) 14. <i>Amphipoda</i> (Scud-like creatures) 15. <i>Isopoda</i> (Millipedes) 16. <i>Crustacea</i> (Various species) 17. <i>Insecta</i> (Various species) 18. <i>Mollusca</i> (Various species) 19. <i>Arachnida</i> (Various species) 20. <i>Chelicerata</i> (Various species)	1. <i>Phragmites</i> (Common Reed) 2. <i>Scirpus</i> (Sedges) 3. <i>Cyperus</i> (Rushes) 4. <i>Juncus</i> (Juncos) 5. <i>Eleocharis</i> (Nutrushes) 6. <i>Sagittaria</i> (Arrow Arise) 7. <i>Najas</i> (Mosses) 8. <i>Chara</i> (Charophytes) 9. <i>Algae</i> (Various species) 10. <i>Hydrochara</i> (Water Boatmen) 11. <i>Notonecta</i> (Backswimmers) 12. <i>Psephenus</i> (Hellgrammites) 13. <i>Belostomatidae</i> (Dipodomys) 14. <i>Amphipoda</i> (Scud-like creatures) 15. <i>Isopoda</i> (Millipedes) 16. <i>Crustacea</i> (Various species) 17. <i>Insecta</i> (Various species) 18. <i>Mollusca</i> (Various species) 19. <i>Arachnida</i> (Various species) 20. <i>Chelicerata</i> (Various species)

Wt. Cu. Ft. _____ Str. Ratio _____

Remarks _____

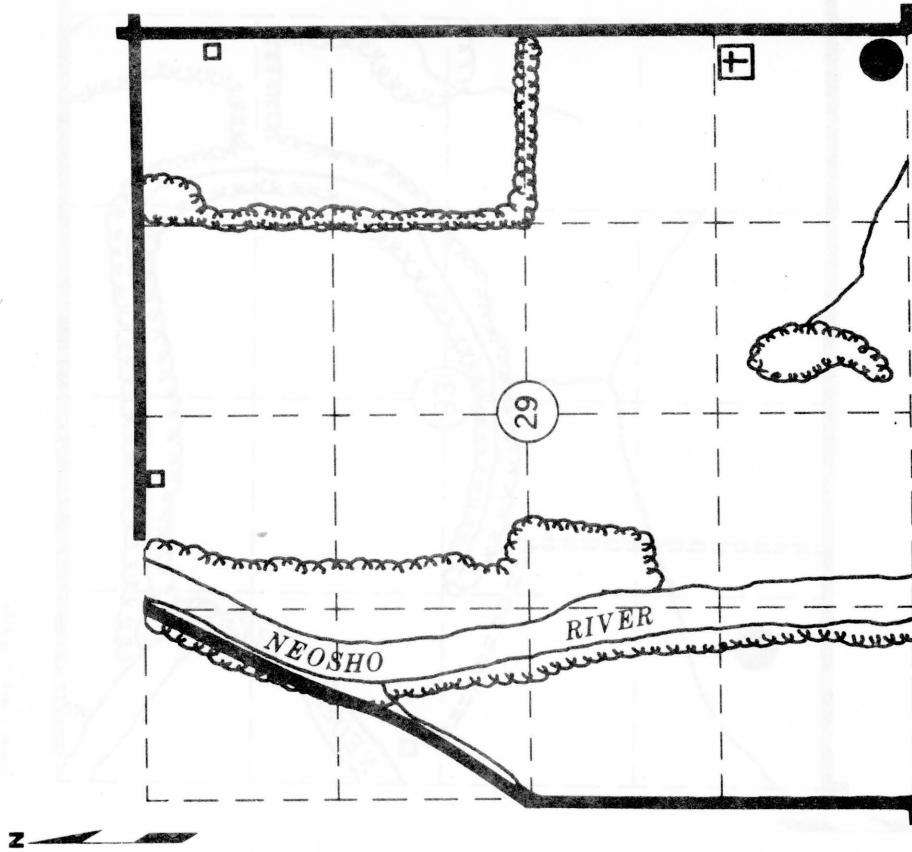


Scale: 1 inch = $\frac{1}{4}$ Mile

CG+33

CORRELATION DATA

Scale: 1 Inch = $\frac{1}{4}$ Mile



MATERIAL SITE DATA FORM

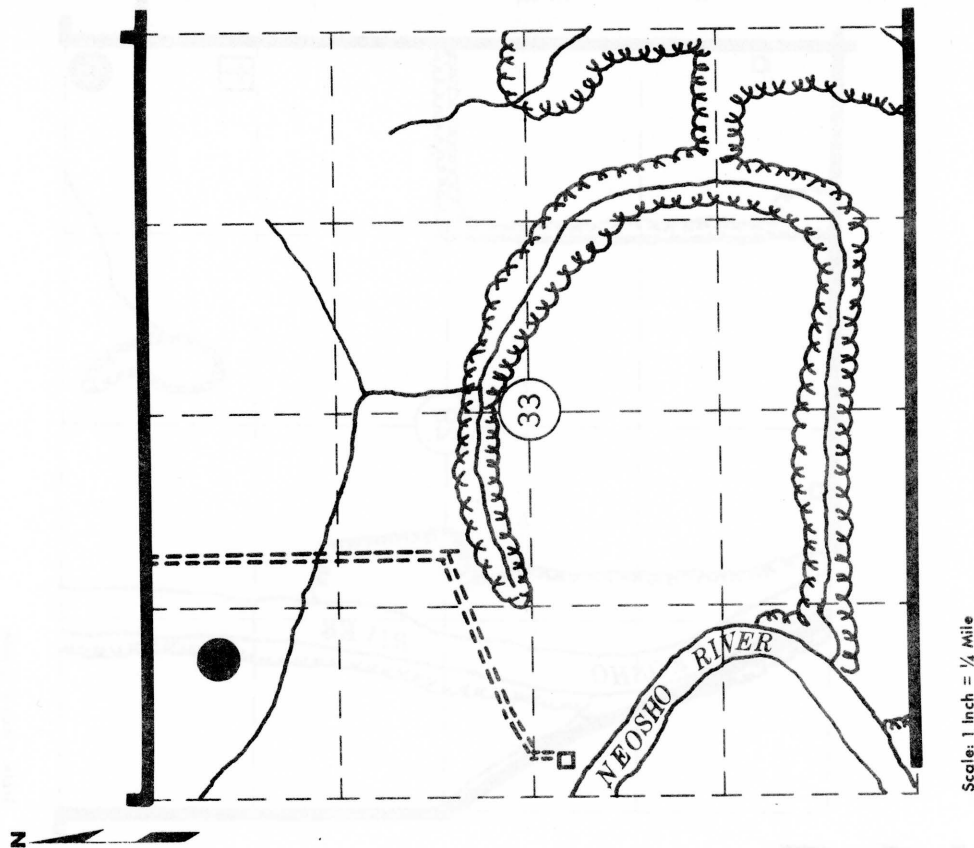
CG+34
 Site No. Qa1 Date June 27, 1978
 Material Chert Gravel County Neosho
 Location NW 1/4 Sec. 33 Twp. 30S Range 21E
 Owner Harold Wright St. Paul, Kansas 66771
 name address
 Nature of Deposit Wet Accessibility Good Site Located on Plate VI
 Status of Site Open Materials Site; Not Sampled

EXPLORATION DATA

Test Hole	Material at Bottom of Hole	Depth of Over-Burden	Depth of Material	1 1/2	3/8	4	8	16	30	50	100	Wash 200	G.F.	L.L.	P.I.

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 _____



PROSPECTIVE MATERIALS SITES ; NOT SAMPLED

LEGEND

=====	Trail or lane	■	Open materials sites; sampled
—————	Road	●	Open materials sites; not sampled
+ + + + +	Railroad	▼	Prospective materials sites; sampled
~~~~~	Hedge or trees	◆	Prospective materials sites; not sampled
~~~~~ Name	Major streams	⑤	Center of section
		□	Dwelling
~~~~~	Intermittent streams	⊕	Cemetery
~~~~~	Pond or lake	□ ^P	School
		⊕	Church
		■	Town or city

MATERIAL SITE DATA FORM

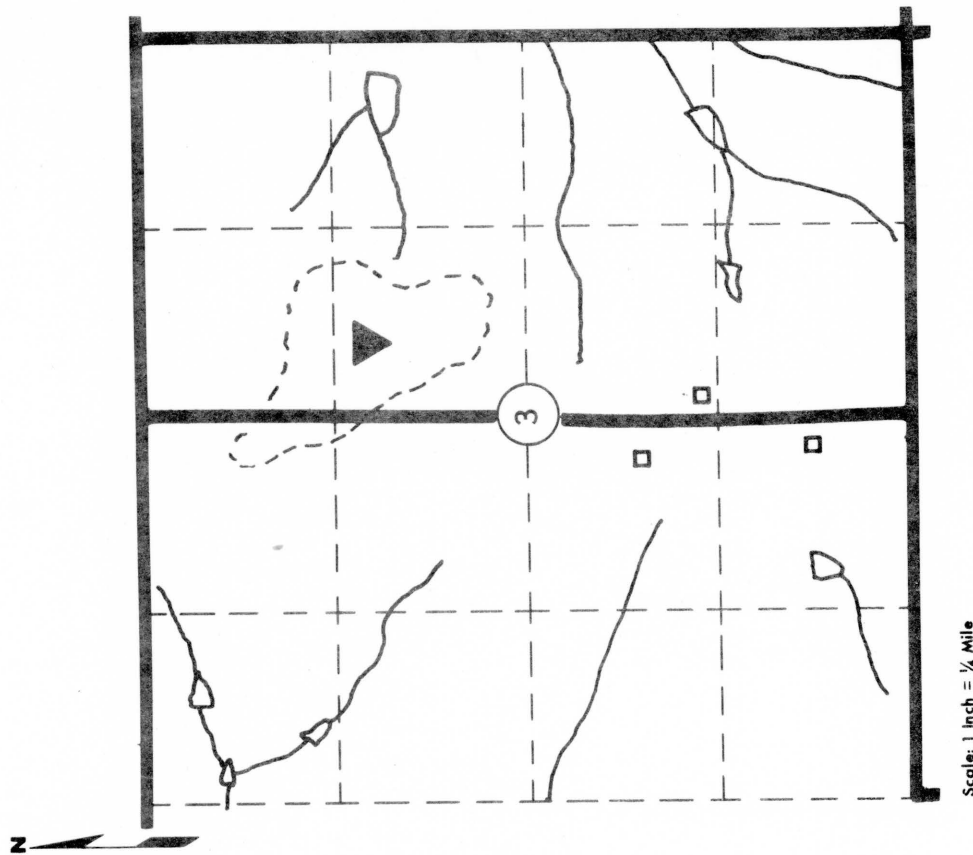
CG-35
 Site No. Qtu Date June 27, 1978
 Material Chert Gravel County Neosho
 Location SW 1/4, NE 1/4 Sec. 3 Twp. 29S Range 19E
 Owner Wesley Kroeker & W. RR 4 Box 99 Enid, OK
 address
 Nature of Deposit Dry Accessibility Good Site Located on Plate III
 Status of Site Prospective Materials Site; Not Sampled

EXPLORATION DATA

Test Hole	Material at Bottom of Hole	Depth of Overburden	Depth of Material	1 1/2	3/8	4	8	16	30	50	100	Wash 200	G.F.	LL	P.I.

CORRELATION DATA

Geological Age Quaternary
 Geological Source Undifferentiated Terrace (Nebraskan-Kansan?)
 Material Similar To _____
 Specific Gravity (Sat.) _____ (Dry) _____
 Los Angeles Wear _____
 Absorption _____ Soundness _____
 Wt. Cu. Ft. _____ Str. Ratio _____
 Remarks _____



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 by mixing of 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 includes sufficient saturated permeable material to conduct ground water and to yield economically significant quantities of ground water to wells and springs.

Arenaceous: A sediment consisting wholly or in part of sand-size fragments, or having a sandy texture or the appearance of sand.

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

Brachiopod: Shelled animal of marine origin, having two unequal shells or valves, each of which are normally bilaterally symmetrical.

Chat: Crushed gangue remaining after the extraction of lead and zinc materials.

Chert: A dull, flint-like siliceous rock.

Chonetes: Small fossil brachiopods with a shallow concave-convex shell and short pointed spines.

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.

Crinoid columns: Fossils of an ancient group of sea-lily type animals belonging to the phylum **Echinodermata**.

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.

Detritus: Loose rock and mineral material that is worn off or removed directly by mechanical means, as by disintegration or abrasion; esp. fragmental material, such as sand, silt, and clay, derived from older rocks and moved from its place of origin.

Dolomitic limestone: A limestone in which the mineral dolomite ($\text{CaMg}(\text{CO}_3)_2$) is conspicuous but calcite is more abundant.

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.

Flaggy: Descriptive of a sedimentary rock that splits into layers from 1 cm to 5 cm in thickness.

Fluvial deposit: A sedimentary deposit consisting of material transported by, suspended in, or laid down by a river stream.

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.

Fusulinids: Small marine fossils, about the size and shape of a grain of wheat, belonging to the **Foraminifera**.

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 unconsolidated deposit.

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.

Igneous rocks: Rocks produced from molten or partly molten material.

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 constructed 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 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.

Lithographic limestone: A very fine-grained, dense, light-colored limestone.

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

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.

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

Micaceous: Consisting of, containing, or pertaining to mica.

Oolitic limestone: A textural term for rock containing small, rounded grains that resemble fish eggs.

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

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.

Residual soil: In place soil material resulting from the decomposition of rock.

Siltstone: A very fine-grained stone composed of silt-sized particles.

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 beds 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.

Sweetner: Gravel or crushed stone courser than No. 8 sieve, added to sand and gravel to meet gradation specifications.

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

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

Vadose water: Suspended water.

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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