

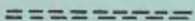









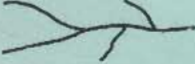





APPENDIX I

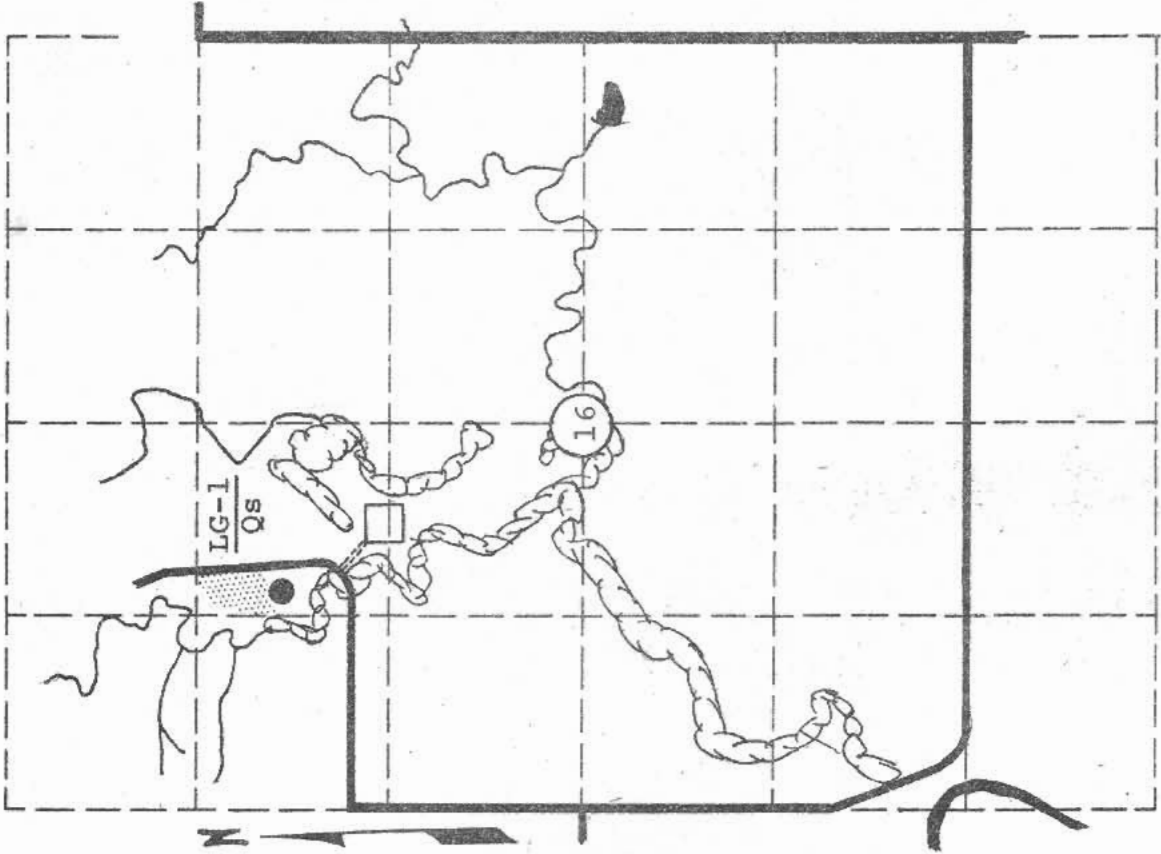
The following Site Data Forms are designated as Open Sites; Not Sampled. The sites described herein are depicted on the county materials map as a "●".

LEGEND

	Fence		Farm site
	Trail or lane		Open materials site
	Railroad		Prospective materials site
	Road		Center of section
	Hedge or trees		Cemetery
	Major streams		School
	Intermittent stream		Church
	Pond or lake		Town or city

MATERIAL SURVEY REPORT

Site No. LG-1 Date April, 1963
Qs
 Material Limestone Gravel County Ellis
 Location NW 1/4, NW 1/4 Sec. 16 Twp. 11S Range 16W
 Owner W. I. Craig address Plainville, Kansas
 Nature of Deposit Dry Accessibility Good
 Status of Site Open site; not sampled



Scale: 1" = 1/4 Mile

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	1/2	3/16	1/8	3/32					

CORRELATION DATA

Geological Age Pleistocene
 Geological Source Sanborn Formation
 Material Similar To _____
 Specific Gravity (Sat.) _____ (Dry) _____
 Los Angeles Wear _____
 Absorption _____ Soundness _____
 Wt. Cu.ft. _____ Str. Ratio _____
 Remarks Approx. 8' of limestone gravel derived from Fort Hays and other soft limestones. Estimated quantity 3,500 cu. yds.

MATERIAL SURVEY REPORT

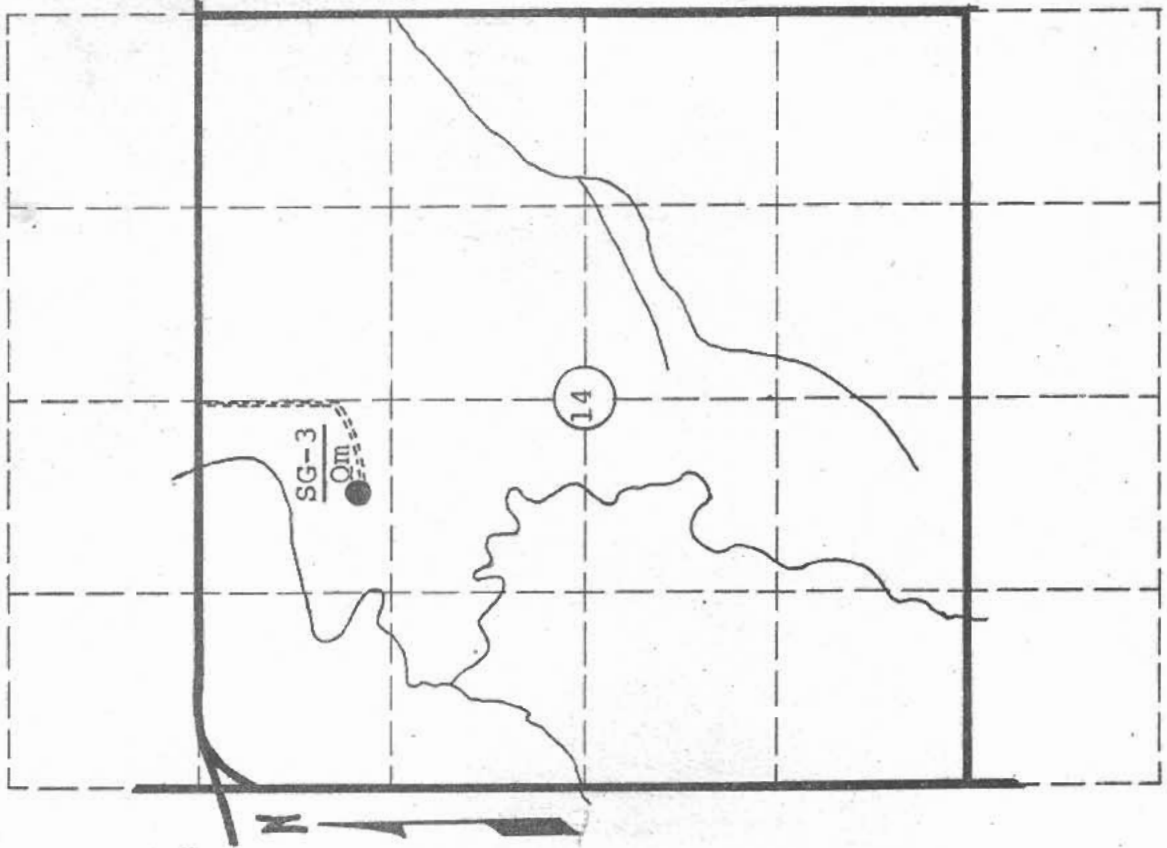
Site No. SG-3 Date April 1963
Om
 Material Sand and Gravel County Ellis
 Location NE 1/4 NW 1/4 Sec. 14 Twp. 11S Range 17W
 Owner Stanley E. Simpson Rte. 2, Plainville, Kansas
name
 Nature of Deposit Dry Accessibility Fair
 Status of Site Open site; not sampled

EXPLORATION DATA

Test Hole	Material 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	3/16	30				

CORRELATION DATA

Geological Age Pleistocene
 Geological Source Meade Formation
 Material Similar To _____
 Specific Gravity (Sat.) _____ (Dry)
 Los Angeles Wear _____
 Absorption _____ Soundness _____
 Wt. Cu.Ft. _____ Str. Ratio _____
 Remarks Expansion possible with increasing amount of overburden.



Scale: 1" = 1/4 Mile

MATERIAL SURVEY REPORT

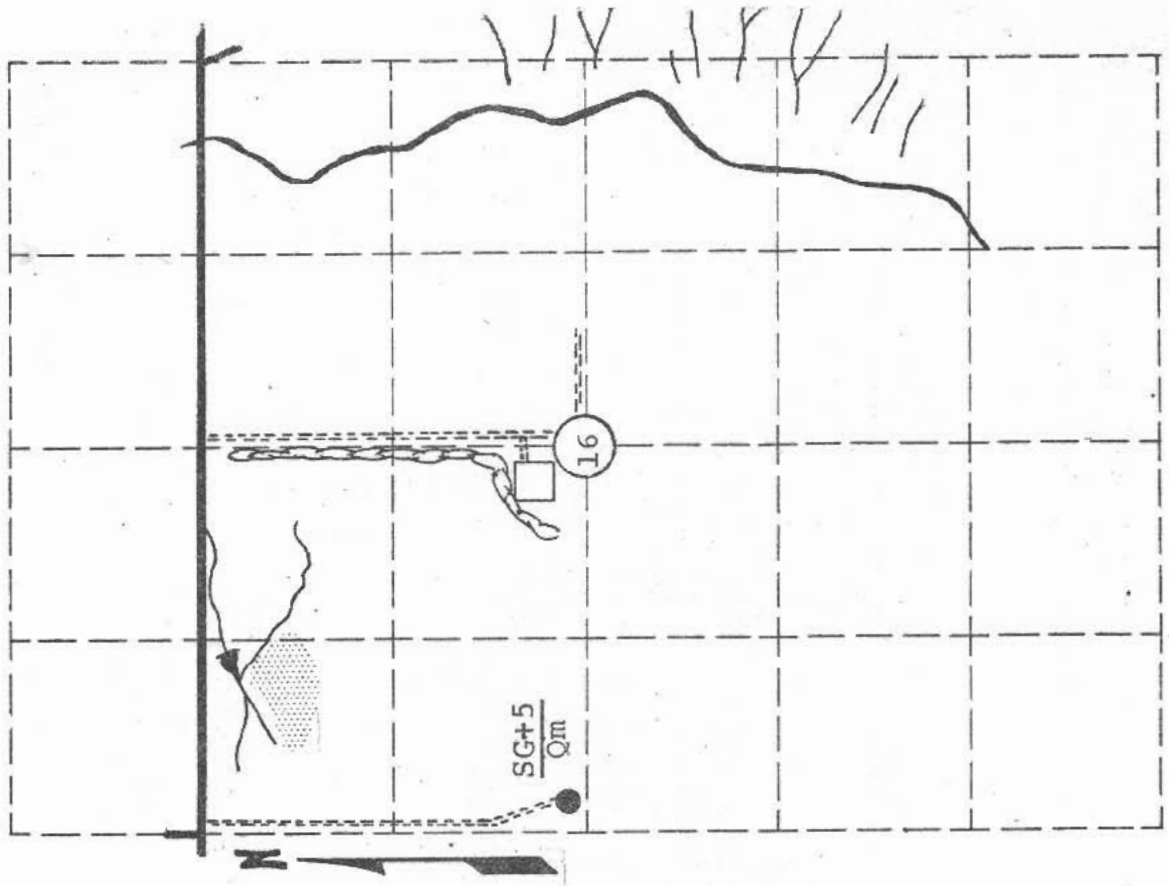
Site No. SG+5 Date April 1963
Qm
 Material Sand and Gravel County Ellis
 Location NW 1/4 Sec. 16 Twp. 11S Range 17W
 Owner Lawrence A. Bemis Plainville, Kansas
 name address
 Nature of Deposit Dry Accessibility Good
 Status of Site Open site; not sampled

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.L.		
				1/2	3/4	3/8	4	8	16	30					50	100

CORRELATION DATA

Geological Age Pleistocene
 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 SURVEY REPORT

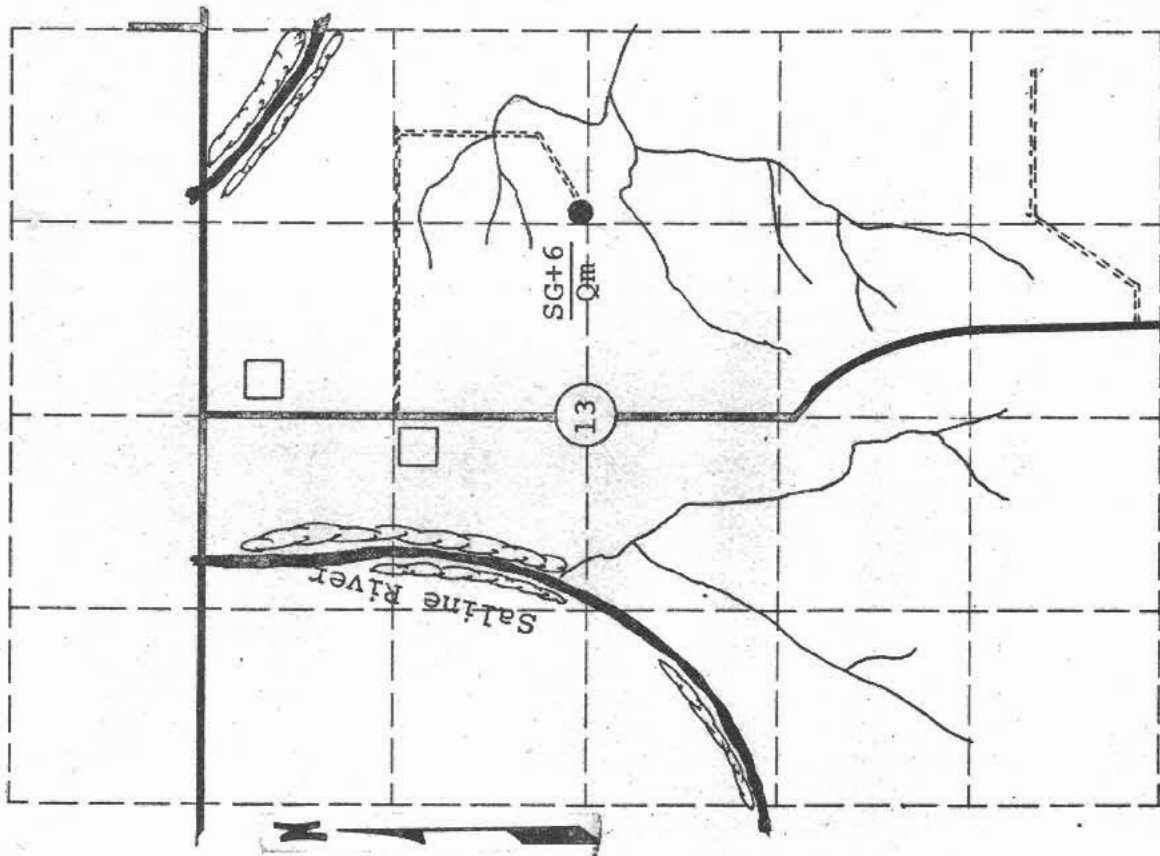
SG+6
 Site No. Qm Date April 1963
 Material Sand and Gravel County Ellis
 Location SW 1/4 NE 1/4 Sec. 13 Twp. 11S Range 18W
 Owner O. C. Peavey Rte. 2, Ft. Morgan, Colorado
 name address
 Nature of Deposit Dry Accessibility Fair
 Status of Site Open site; not sampled

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	100

CORRELATION DATA

Geological Age Pleistocene
 Geological Source Meade Formation
 Material Similar To _____
 Specific Gravity (Set.) _____ (Dry)
 Los Angeles Near _____
 Absorption _____ Soundness _____
 Vt. Cu. Ft. _____ Str. Ratio _____
 Remarks _____



Scale: 1" = 1/4 Mile

MATERIAL SURVEY REPORT

Site No. SG-8 Date April 1963
Qm
 Material Sand and Gravel County Ellis
 Location SE 1/4 SW 1/4 Sec. 9 Twp. 11S Range 18W
 Owner Mary E. O'Brien Ellis, Kansas
 address
 Nature of Deposit Dry Accessibility Good
 Status of Site Open site; not sampled

EXPLORATION DATA

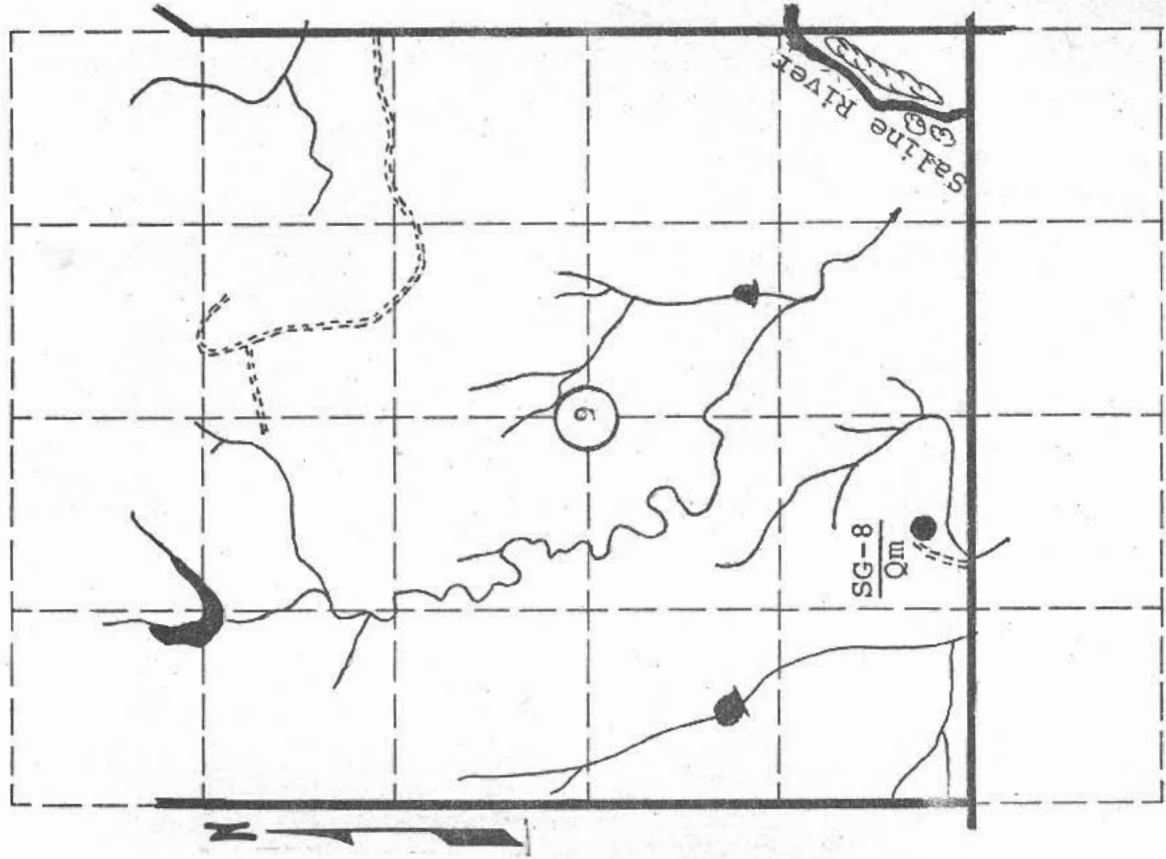
Test Hole	Material at Bottom of Hole	Depth of overburden	Depth of Material	Percent Retained							Mash 200	G.F.	L.L.	P.I.		
				1 1/2	3/4	3/8	4	8	16	30					50	100

CORRELATION DATA

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

Remarks Fine to medium sand with limestone gravels.

Limited expansion possibilities without encountering heavy overburden.



Scale: 1" = 1/4 Mile

MATERIAL SURVEY REPORT

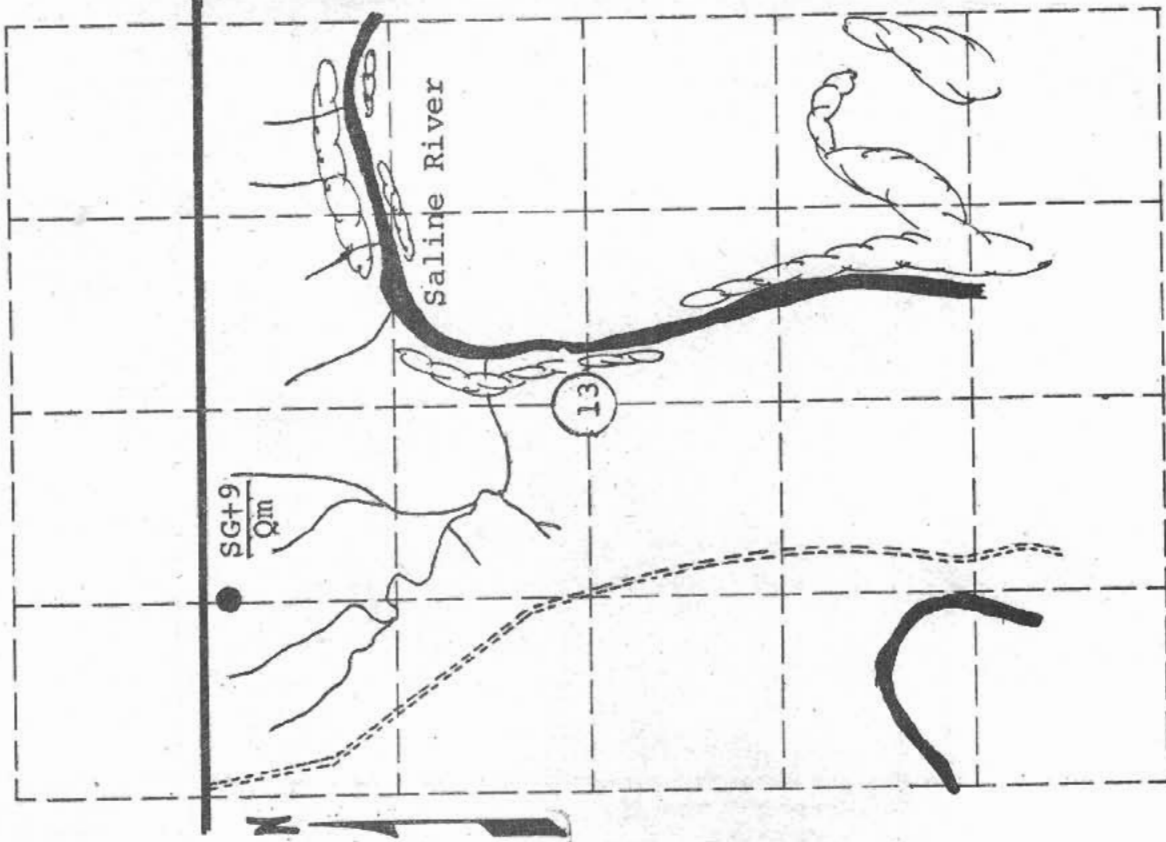
Site No. SG+9 Date April 1963
Qm
 Material Sand and Gravel County Ellis
 Location NW 1/4 Sec. 13 Twp. 11S Range 19W
 Owner Nellie G. Devine address Unknown
 Nature of Deposit Dry Accessibility Good
 Status of Site Open site; not sampled

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	30				

CORRELATION DATA

Geological Age Pleistocene
 Geological Series Meade Formation SG-168
 Material Similar to Material reported in site Qm
 Specific Gravity (Sat.) _____ (Dry) _____
 Los Angeles Wear _____
 Absorption _____ Soundness _____
 Wt. Cu.ft. _____ Str. Ratio _____
 Remarks _____



Scale: 1" = 1/4 Mile

MATERIAL SURVEY REPORT

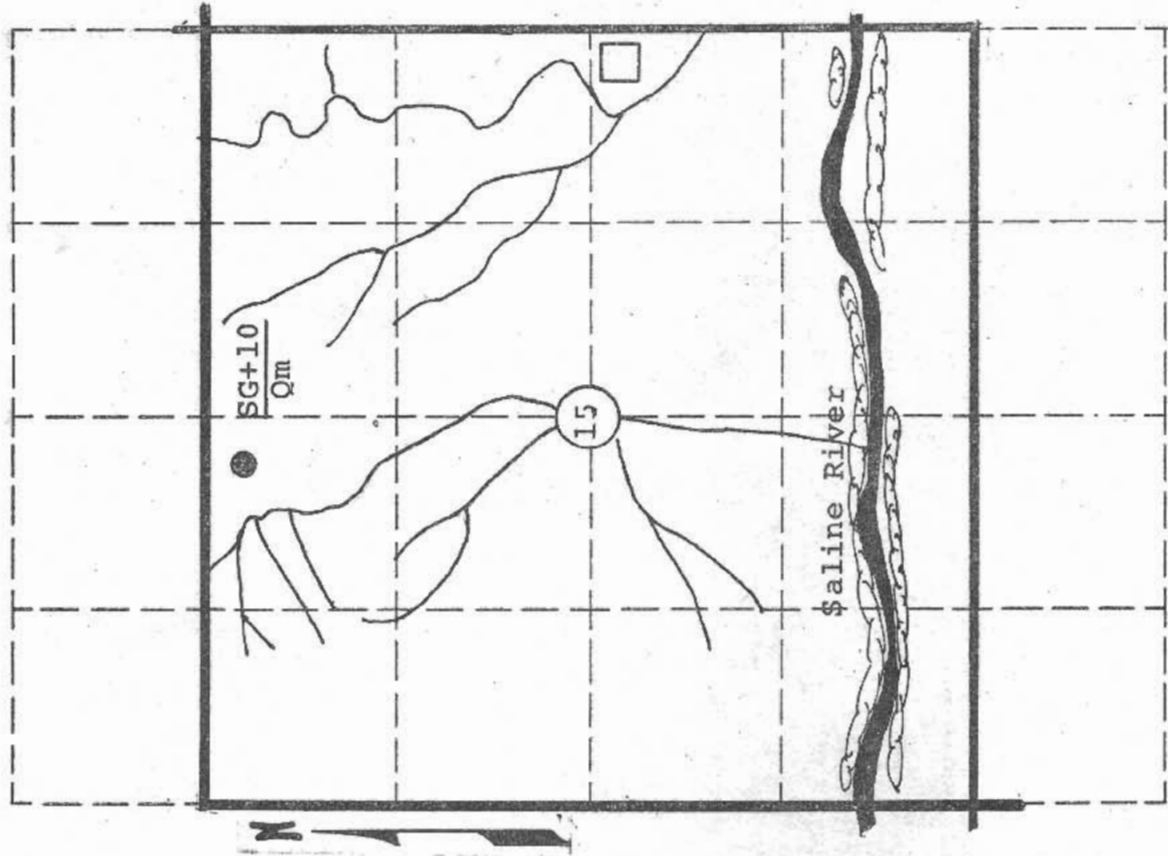
SG+10
 Site No. Qm Date April 1963
 Material Sand and Gravel County Ellis
 Location NE 1/4 NW 1/4 Sec. 15 Twp. 11S Range 19W
 Owner Fred Sessin name Zurick, Kansas address
 Nature of Deposit Dry Accessibility Good
 Status of Site Open site; not sampled

EXPLORATION DATA

Test Hole	Material at Bottom of Hole	Depth of over-Burden	Depth of Material	Percent Retained					Wash 200	e.f.	L.L.	P.I.
				1/2	3/4	3/8	1/4	15				

CORRELATION DATA

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



Scale: 1" = 1/2 Mile

MATERIAL SURVEY REPORT

Site No. SG+11
Qm
 Date April 1963
 Material Sand and Gravel County Ellis
 Location SE 1/4 SW 1/4 Sec. 21 Twp. 11S Range 19W
 Owner Louise Sessin Zurick, Kansas
 Nature of Deposit Dry Accessibility Good
 Status of Site Open site; not sampled

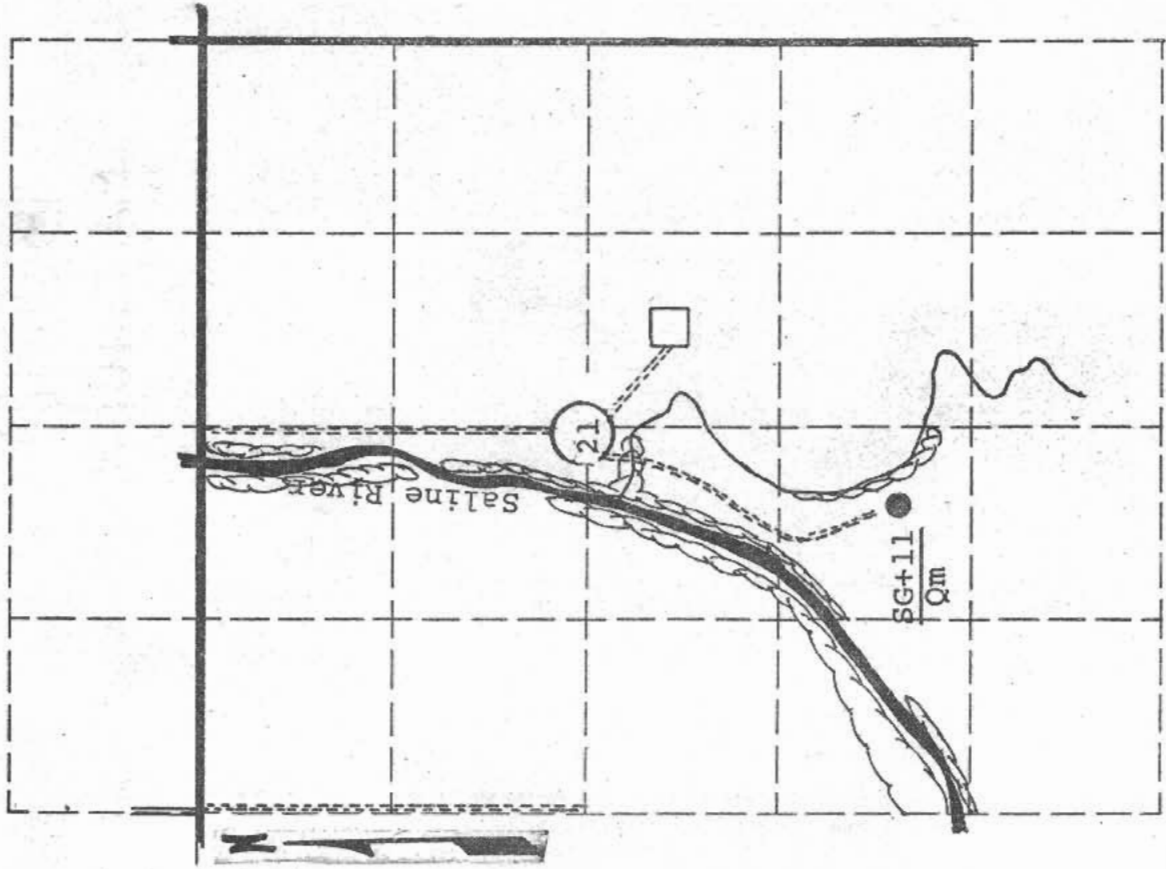
EXPLORATION DATA

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

CORRELATION DATA

Geological Age Pleistocene
 Geological Source Meade Formation
 Material Similar To _____
 Specific Gravity (Sat.) _____ (Dry) _____
 Los Angeles Near _____
 Absorption _____ Soundness _____
 Wt. Co.Ft. _____ Str. Ratio _____

Remarks Present producing ledge is approximately 20' thick, interbedded soft limestone pebbles and fine to medium sand.



Scale: 1" = 1/4 Mile

MATERIAL SURVEY REPORT

SG+12
 Site No. Qm Date April 1963
 Material Sand and Gravel County Ellis
 Location SW 1/4 SE 1/4 Sec. 22 Twp. 11S Range 16W
 Owner Melvin Chrysler address Natoma, Kansas
 Nature of Deposit Dry Accessibility Good
 Status of Site open site; not sampled

EXPLORATION DATA

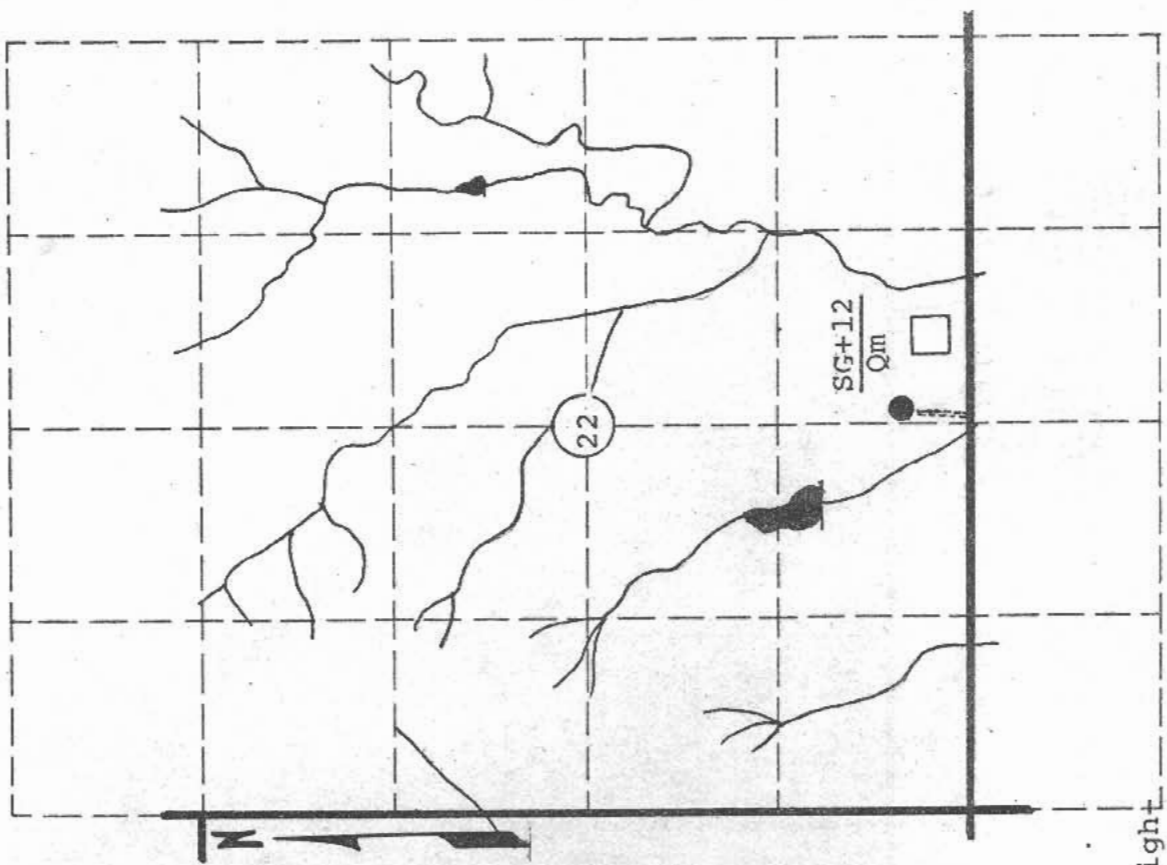
Test hole	Material at bottom of hole	Depth of overburden	Depth of Material	Percent Retained							Wash 200	G.F.	L.L.	P. I.	
				1 1/2	3/4	3/8	4	8	16	30					50

CORRELATION DATA

Geological Age Pleistocene
 Geological Source Meade Formation
 Material Similar To _____
 Specific Gravity (Sst.) _____ (Dry)
 Los Angeles Year _____
 Absorption _____ Soundness _____
 Wt. Cu.Ft. _____ Str. Ratio _____

Remarks Site is now being produced by the Ellis County Highway Department. Approximately 3,000 cubic yards have been produced from a 10' ledge. Material is fine to medium sand with soft limestone gravel.

Scale: 1" = 1/4 Mile



MATERIAL SURVEY REPORT

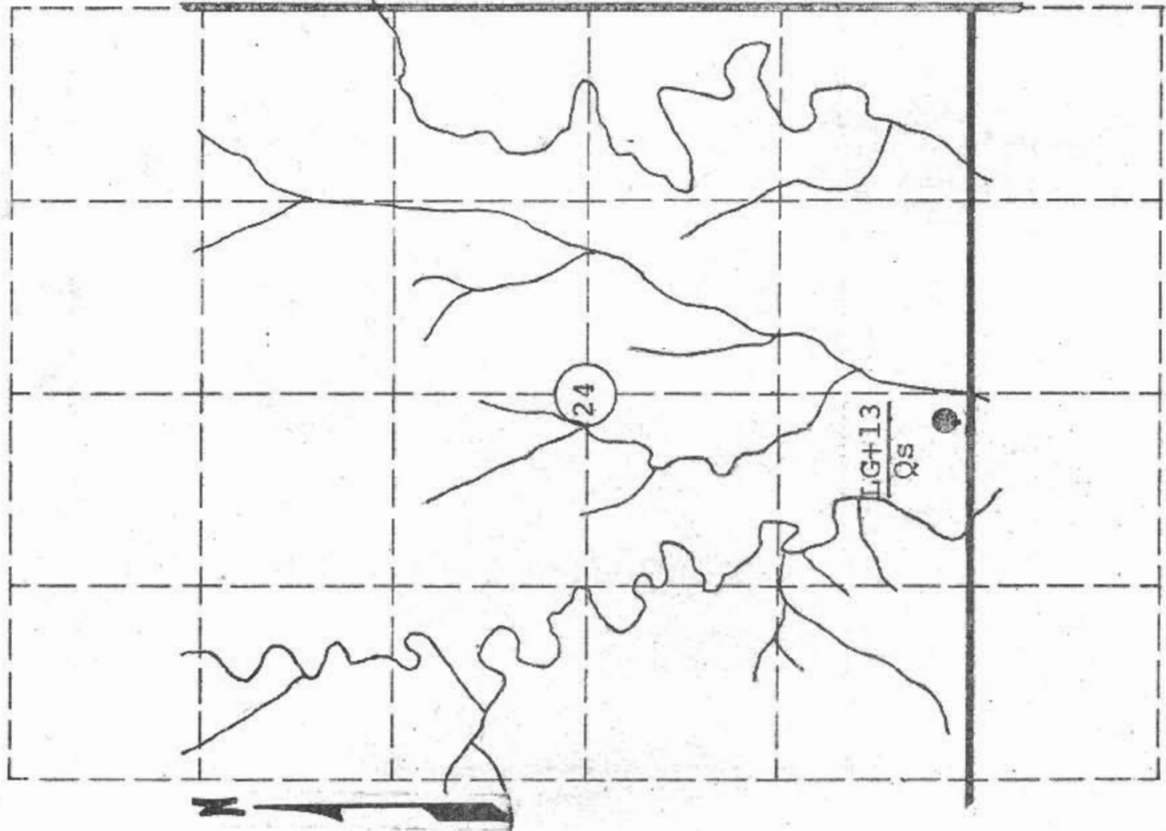
Site No. LG+13
QS
 Date April 1963
 Material Limestone Gravel County Ellis
 Location SE 1/4 SW 1/4 Sec. 24 Twp. 11S Range 16W
 Owner R. C. Bowlby Rte. 2, Natoma, Kansas
name address
 Nature of Deposit DRY Accessibility Good
 Status of Site Site open; not sampled

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	8	16	30				

CORRELATION DATA

Geological Age Pleistocene
 Geological Source Sanborn 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 SURVEY REPORT

LG+14

Pr

Site No. _____ Date April 1963

Material Limestone Gravel & Fine Sand Ellis

Location SE 1/4 SW 1/4 Sec. 3 Twp. 13S Range 20W

Owner Jakie J. Hendrickson Rte. 3, Ellis, Kansas

Nature of Deposit Dry Accessibility Good

Status of Site Open 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	3	16	30					50

CORRELATION DATA

Geological Age Pleistocene - Recent

Geological Force Undifferentiated

Material Similar To _____

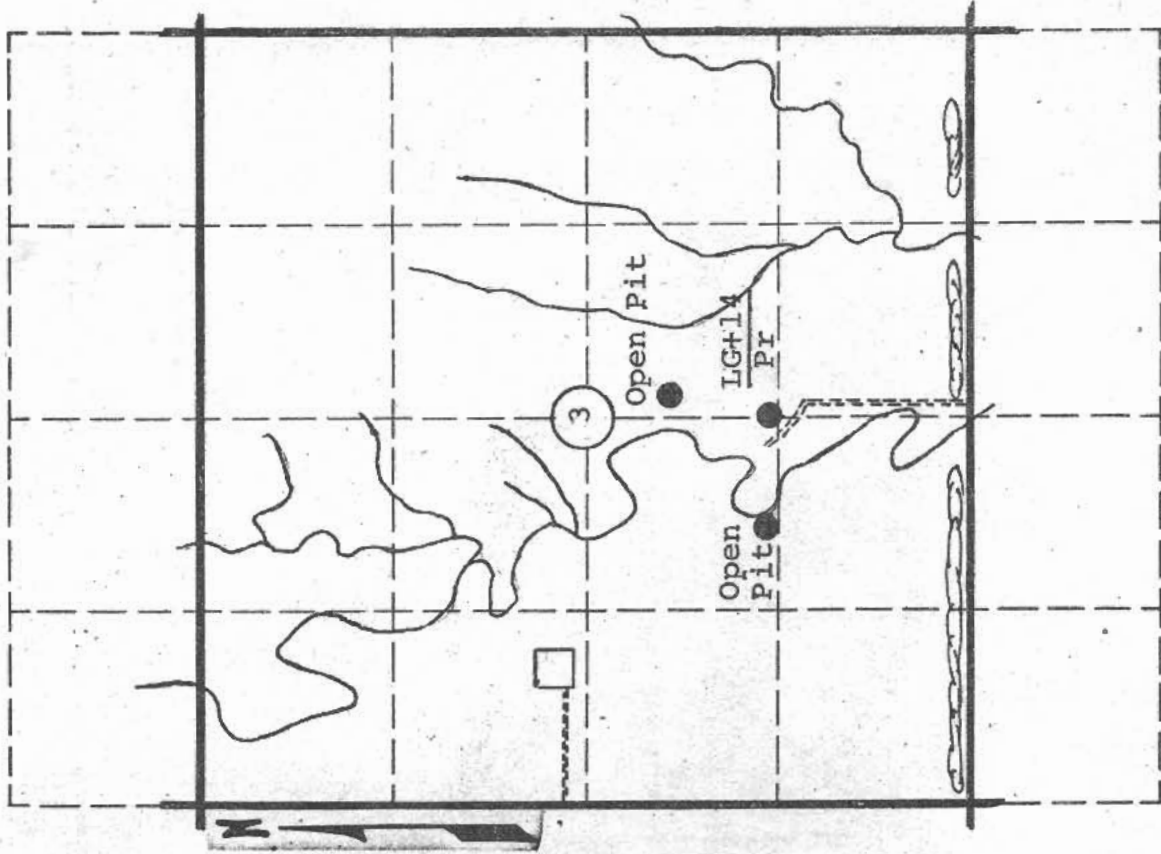
Specific Gravity (Sat.) _____ (Dry)

Los Angeles Wear _____

Absorption _____ Soundness _____

Wt. Co.Ft. _____ Str. Ratio _____

Remarks _____



Scale: 1" = 1/4 Mile

MATERIAL SURVEY REPORT

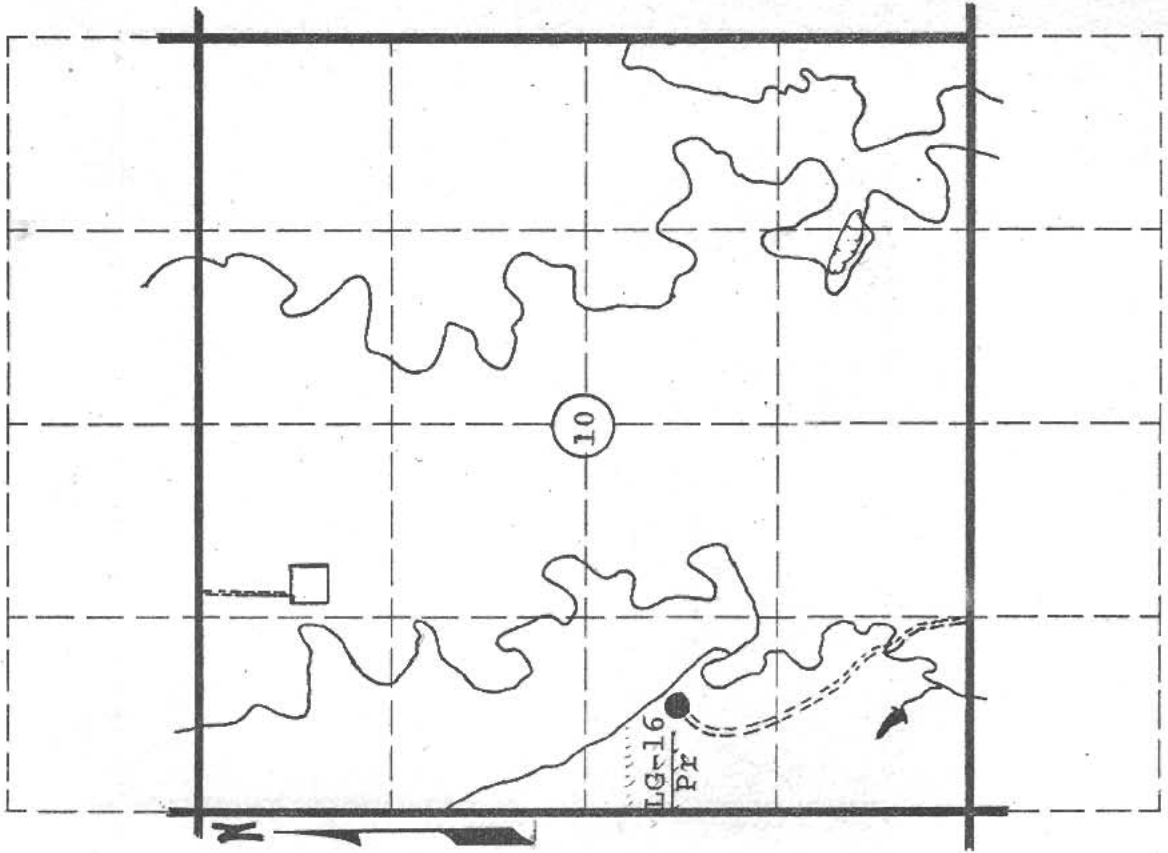
Site No. LG-16
Pr Date April 1963
 Material Limestone Gravel County Ellis
 Location NW 1/4 SW 1/4 Sec. 10 Twp. 13S Range 17W
 Owner Leo Dorgweiler, et al Catherine, Kansas
 name address
 Nature of Deposit Dry Accessibility Fair
 Status of Site Open site; not sampled

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				

CORRELATION DATA

Geological Age Pleistocene-Recent
 Geological Source Undifferentiated
 Material Similar To _____
 Specific Gravity (Set.) _____ (Dry)
 Los Angeles Wear _____
 Absorption _____ Soundness _____
 Wt. Cu-ft. _____ Str. Ratio _____
 Remarks Small inactive pit. Material is a mixture of silt
some fine sand and soft limestone gravel.



Scale: 1" = 1/4 Mile

MATERIAL SURVEY REPORT

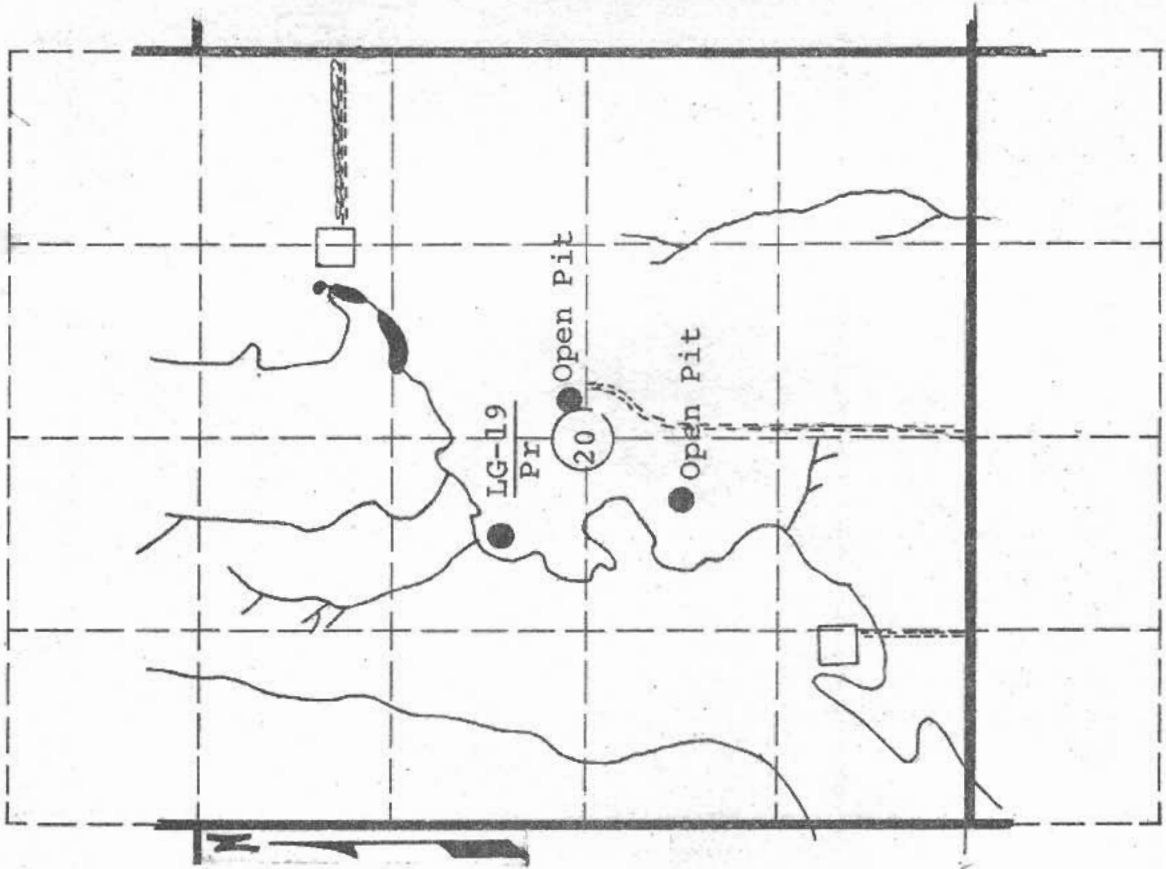
LG-19
Pr
 Site No. _____ Date April 1963
 Material Limestone Gravel County Ellis
 Location SE 1/4 NW 1/4 Sec. 20 Twp. 13S Range 18W
 Owner Walter McIntosh Hays, Kansas address
 Nature of Deposit Dry Accessibility Poor
 Status of site Open site; not sampled

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 1/2	3/4	3/8	4	8	16	30				50	100	200						

CORRELATION DATA

Geological Age Pleistocene-Recent
 Geological Source Undifferentiated
 Material Similar To _____
 Specific Gravity (Sat.) _____ (Dry)
 Los Angeles Wear _____
 Absorption _____ Soundness _____
 Mt. Cu.Ft. _____ Str. Ratio _____
 Remarks _____



Scale: 1" = 1/4 Mile

MATERIAL SURVEY REPORT

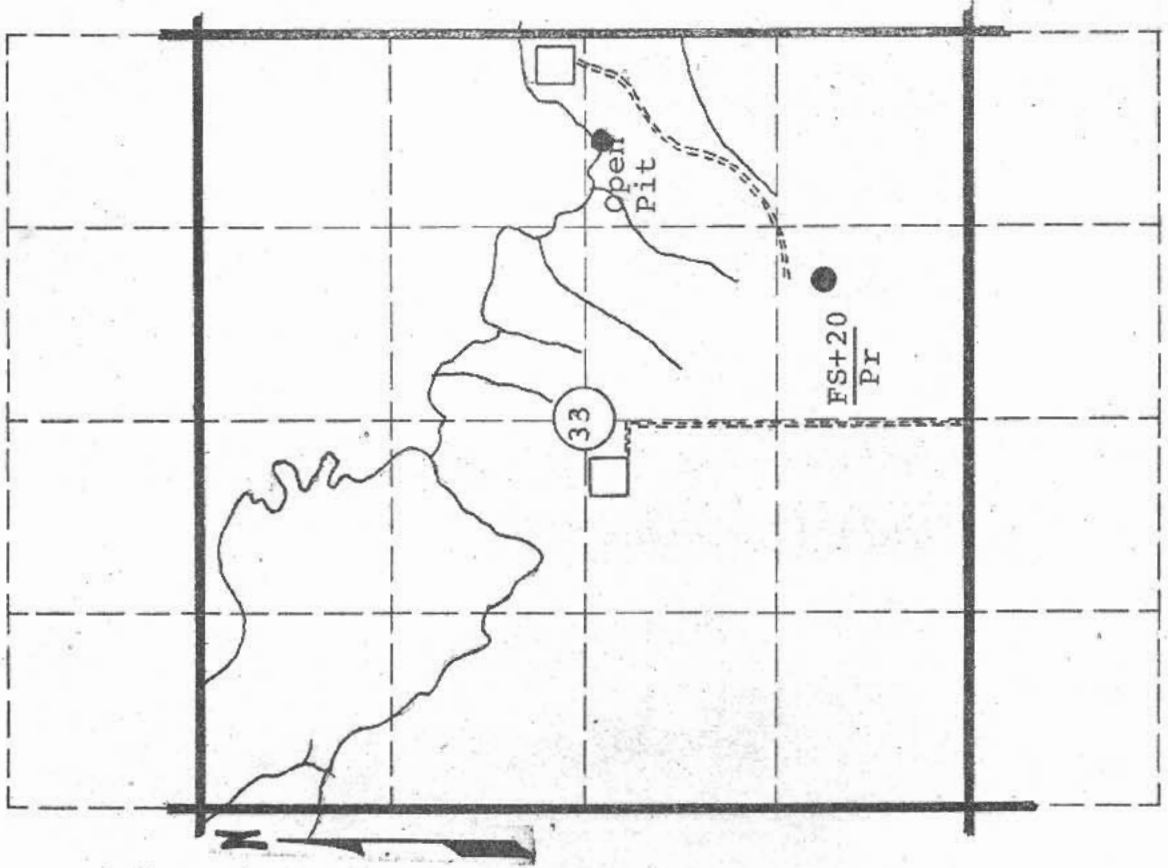
FS+20
Pr
 Site No. _____ Date April 1963
 Material Fine Sand & Silt County Ellis
 Location C SE 1/4 Sec. 33 Twp. 13S Range 17W
 Owner Andrew A. Braun address Victoria, Kansas
 Nature of Deposit: A DRY Accessibility Fair
 Status of Site Open site; not samples

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	3/8	4	8				

CORRELATION DATA

Geological Age Pleistocene-Recent
 Geological Source Undifferentiated
 Material Similar To Material reported in site Pr
 Specific Gravity (Sat.) _____ (Dry) _____
 Los Angeles Wear _____
 Absorption _____ Soundness _____
 Mt. Cu. Ft. _____ Str. Ratio _____
 Remarks Anticipated material is fine sand and silt.
Some mortar bed may be encountered.



Scale: 1" = 1/4 Mile

MATERIAL SURVEY REPORT

FS+21

Site No. PR Date April 1963
 Material Fine Sand & Silt County Ellis
 Location C NW 1/4 Sec. 2 Twp. 14S Range 17W
 Owner Don E. Pratt name Hays, Kansas address
 Nature of Deposit Dry Accessibility Good
 Status of Site Open site; not sampled

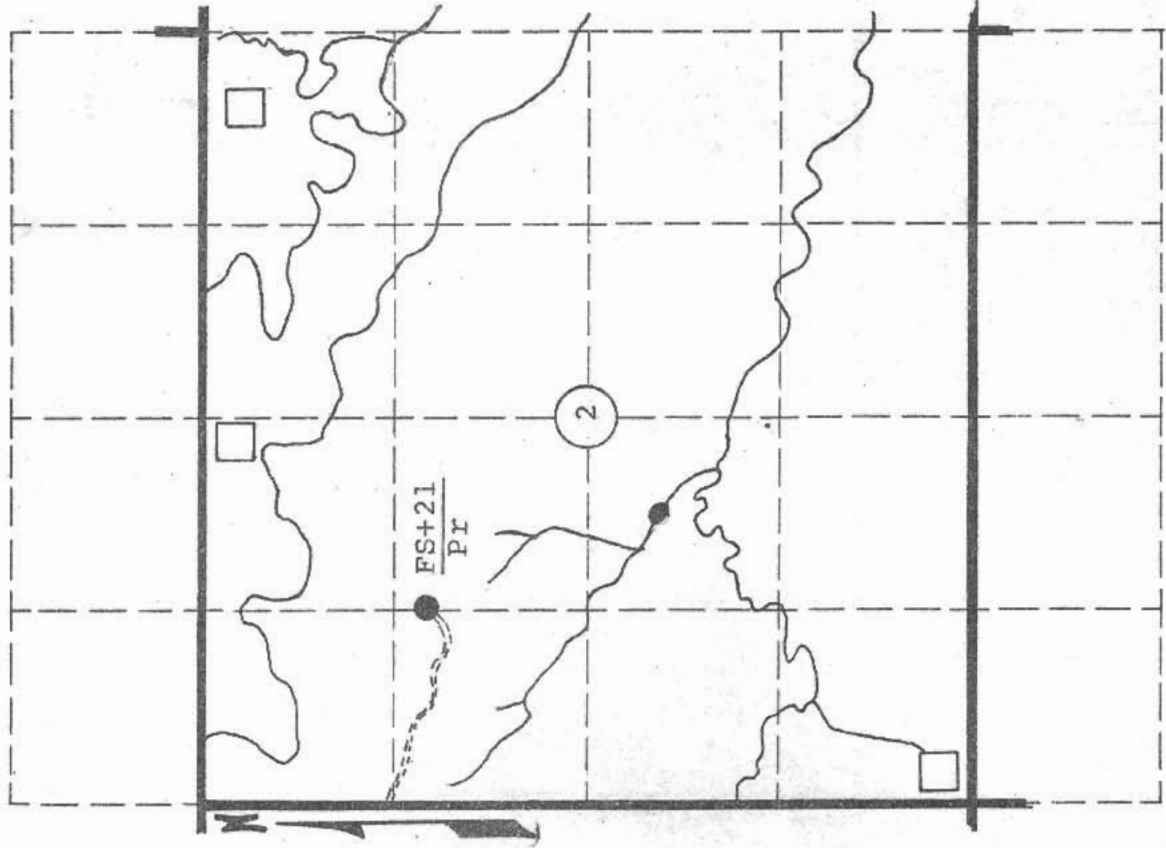
EXPLORATION DATA

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	16				

CORRELATION DATA

Geological Age Pleistocene-Recent
 Geological Source Undifferentiated
 Material Similar To _____
 Specific Gravity (Sat.) _____ (Dry)
 Los Angeles Wear _____
 Absorption _____ Soundness _____
 Wt. Cu.-ft. _____ Str. Ratio _____

Remarks This pit is producing a silty sand from an approximate 3 ft. zone. The Ellis Co. Highway Dept. has drilled this immediate area and rejected the material because of a high percentage of silt.



Scale: 1" = 1/4 Mile

MATERIAL SURVEY REPORT

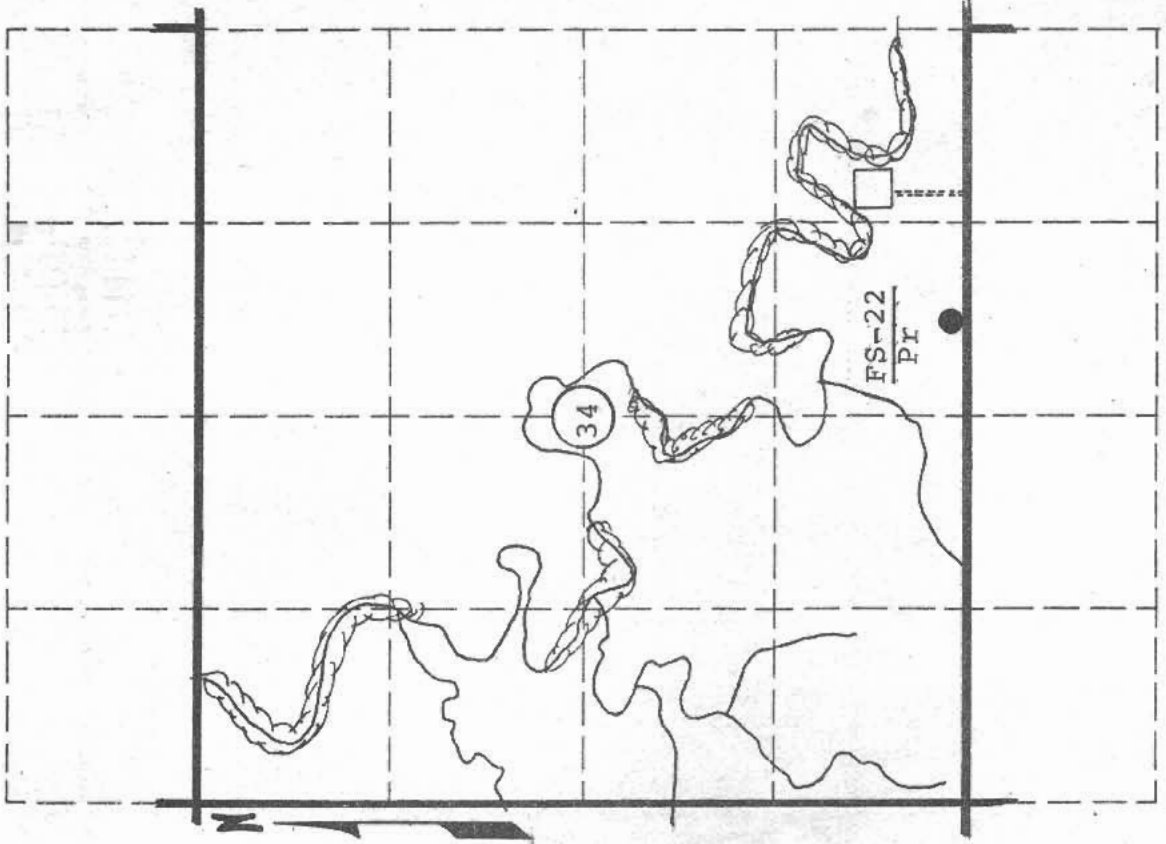
FS-22
Pr
 Site No. _____ Date April 1963
 Material Fine Sand & Silt County Ellis
 Location SW 1/4 SE 1/4 Sec. 34 Twp. 13S Range 17W
 Owner Bernard Braun Rte. 2, Victoria, Kansas
 Nature of Deposit Dry Accessibility Fair
 Status of site Open site; not sampled

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	100

CORRELATION DATA

Geological Age Pleistocene-Recent
 Geological Source Undifferentiated
 Material Similar To _____
 Specific Gravity (Sat.) _____ (Dry) _____
 Los Angeles Wear _____
 Absorption _____ Soundness _____
 Wt. Cu.Ft. _____ Str. Ratio _____
 Remarks _____



Scale: 1" = 1/4 Mile

MATERIAL SURVEY REPORT

SG+26

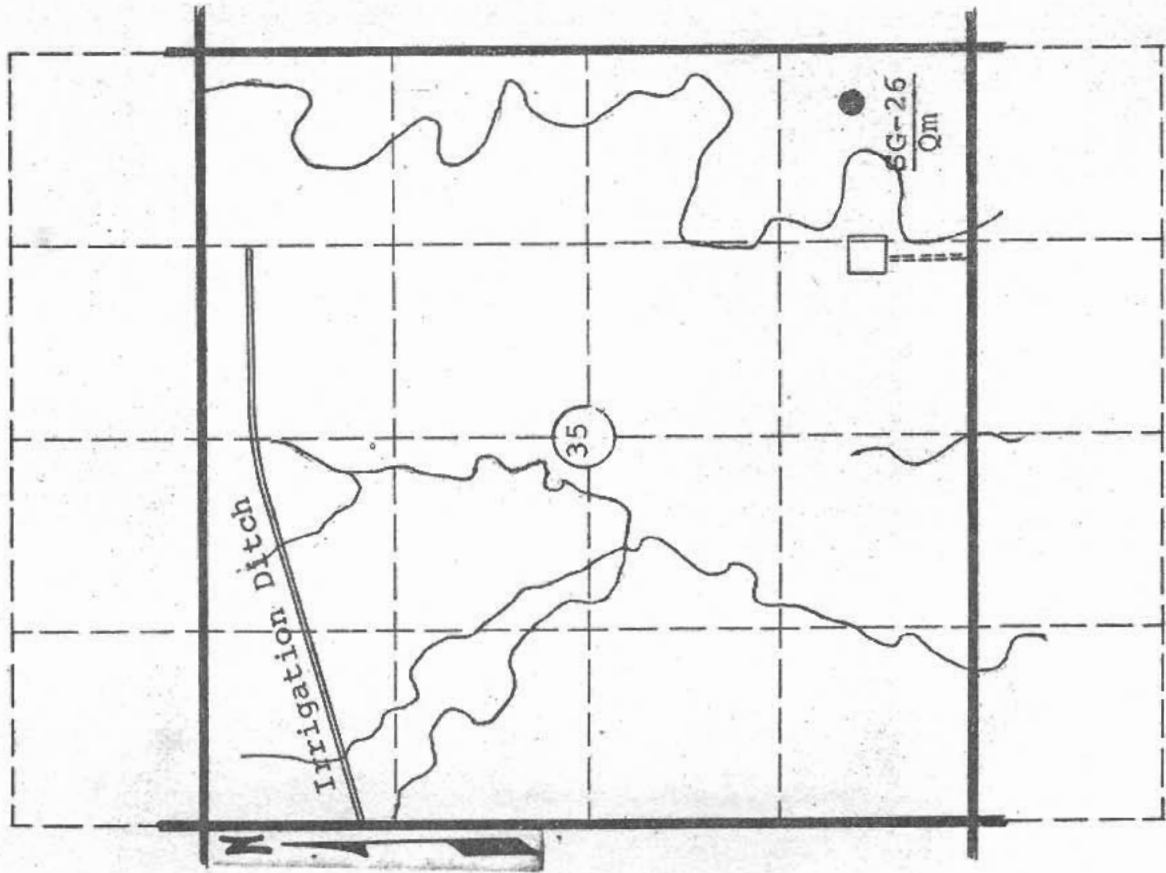
Site No. Qm Date April 1963
 Material Sand and Gravel County Ellis
 Location SE 1/4 SE 1/4 Sec. 35 Twp. 14S Range 20W
 Owner Fidelis A. Pfannestiel Antonino, Kansas
 name address
 Nature of Deposit Dry Accessibility Good
 Status of Site Open site; not sampled

EXPLORATION DATA

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

CORRELATION DATA

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



Scale: 1" = 1/4 Mile

MATERIAL SURVEY REPORT

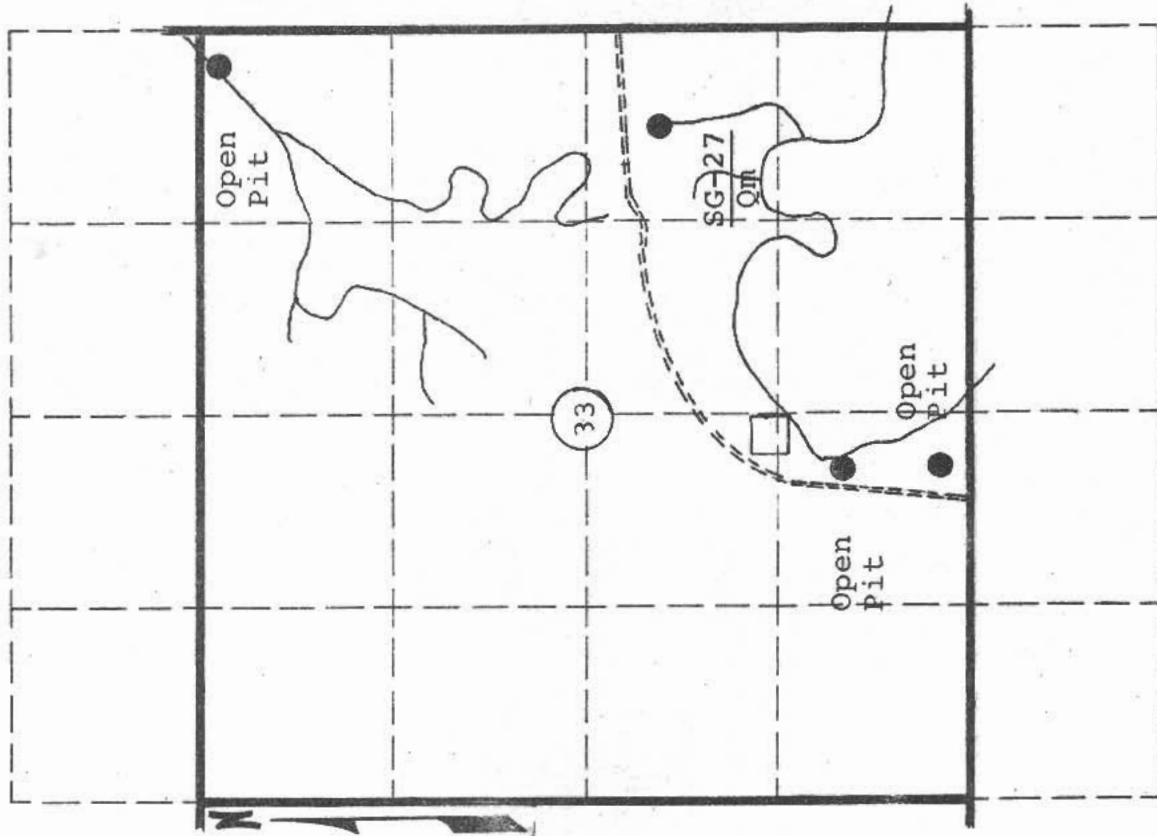
SG-27
 Site No. Qm Date April 1963
 Material Sand and Gravel County Ellis
 Location NE 1/4 SE 1/4 Sec. 33 Twp. 15S Range 16W
 Owner Jerome E. Urban Bison, Kansas
 Nature of Deposit Dry Accessibility Good
 Status of Site Open site; not sampled

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	100		

CORRELATION DATA

Geological Age Pleistocene
 Geological Source Meade Formation SG-136
 Material Similar To Material reported in site Qm
 Specific Gravity (Sat.) (Dry)
 Los Angeles Wear _____
 Absorption _____ Soundness _____
 Wt. Cu.Ft. _____ Str. Ratio _____
 Remarks Excessive overburden is being encountered.



Scale: 1" = 1/4 Mile

MATERIAL SURVEY REPORT

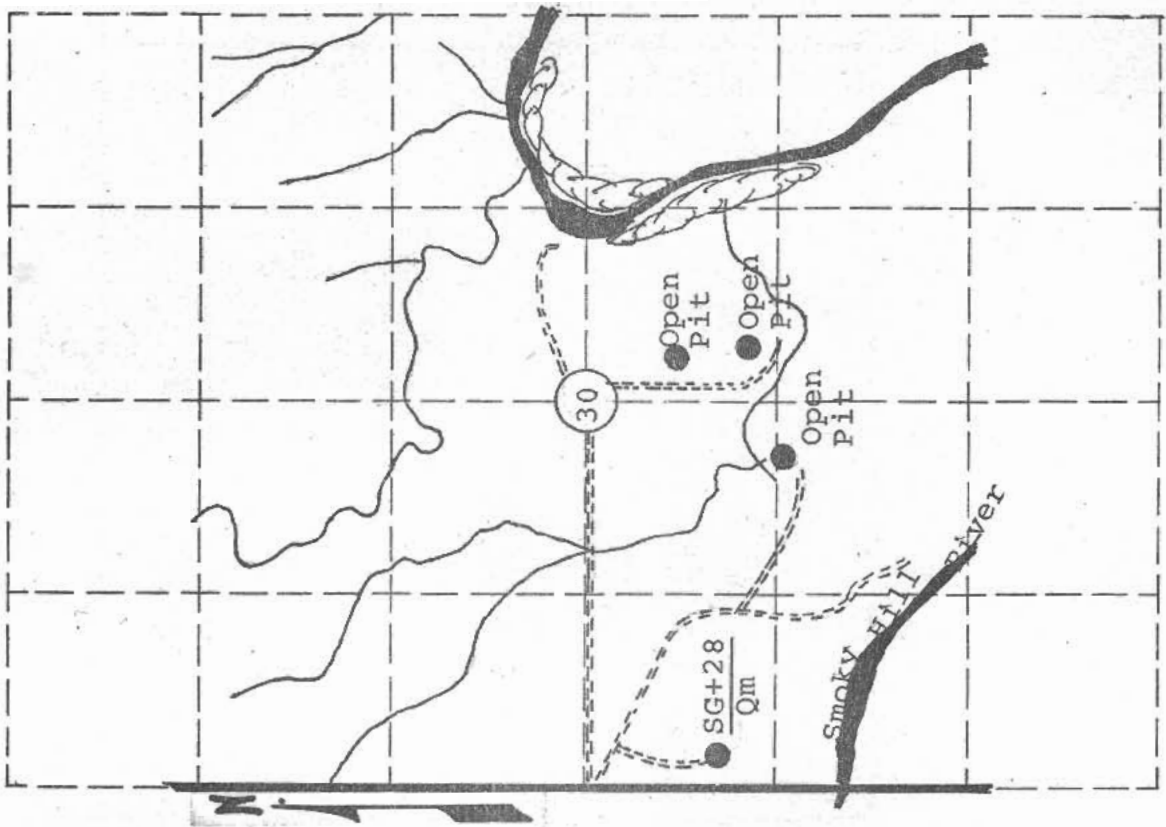
Site No. SG+28
Qm
 Date April 1963
 Material Sand and Gravel County Ellis
 Location SW 1/4 Sec. 30 Twp. 15S Range 16W
 Owner Peter C. Kippes address Victoria, Kansas
 Nature of Deposit Dry Accessibility Good
 Status of Site Open site; not sampled

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	100

CORRELATION DATA

Geological Age Pleistocene
 Geological Source Meade Formation
 Material Similar to Material reported in site Qm
 SG-108
 Specific Gravity (Sat.) (Dry)
 Los Angeles Wear
 Absorption Soundness
 Wt. Cu.Ft. Str. Ratio
 Remarks



Scale: 1" = 1/4 Mile

MATERIAL SURVEY REPORT

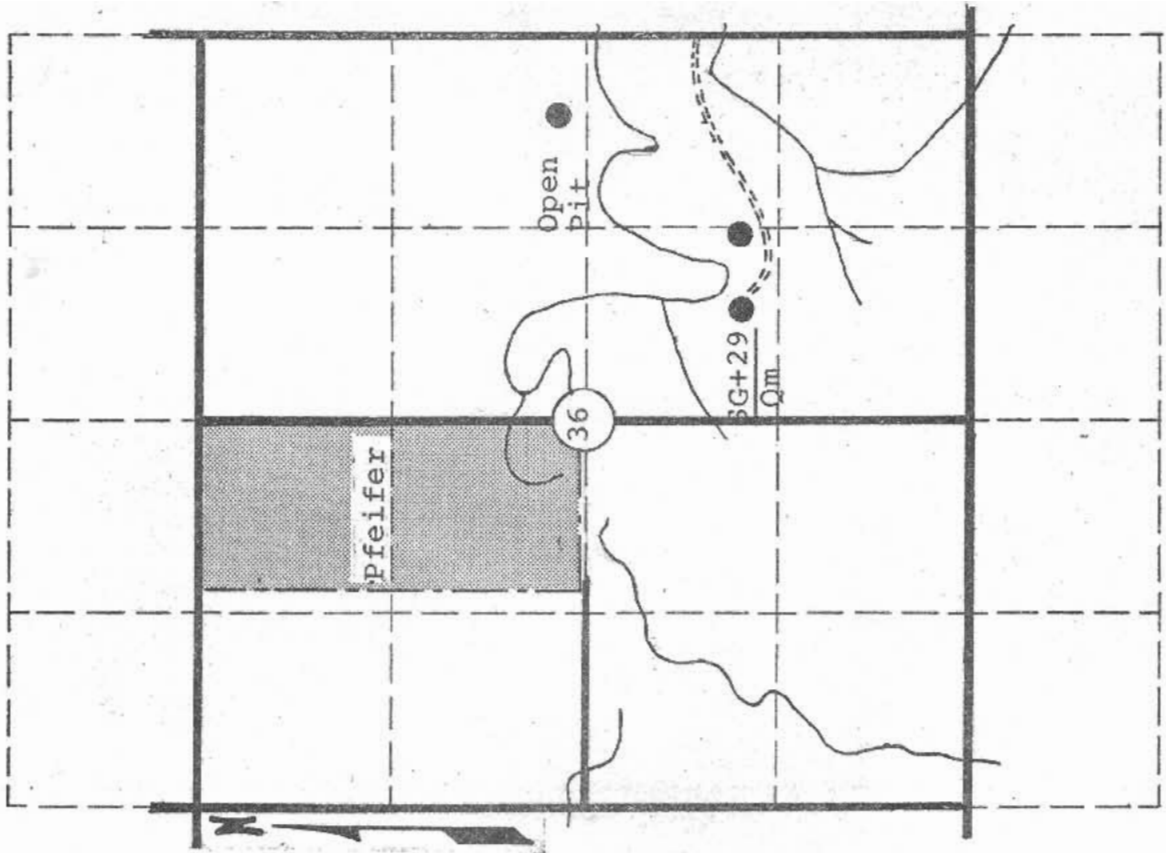
SG+29
 Site No. Qm Date April 1963
 Material Sand and Gravel County Ellis
 Location NE 1/4 SE 1/4 Sec. 36 Twp. 15S Range 17W
 Owner Adam Kisner Pfiefer, Kansas
 name address
 Nature of Deposit Dry Accessibility Good
 Status of Site Open site; not sampled

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.L.		
				1/2	3/4	3/8	4	8	16	30					50	100

CORRELATION DATA

Geological Age Pleistocene
 Geological Source Meade Formation SG+107
 Material Similar To Material reported in site Qm
 Specific Gravity (Sat.) (Dry)
 Los Angeles Wear _____
 Absorption _____ Soundness _____
 Mt. Cu.Ft. _____ Str. Ratio _____
 Remarks _____



Scale: 1" = 1/4 Mile

MATERIAL SURVEY REPORT

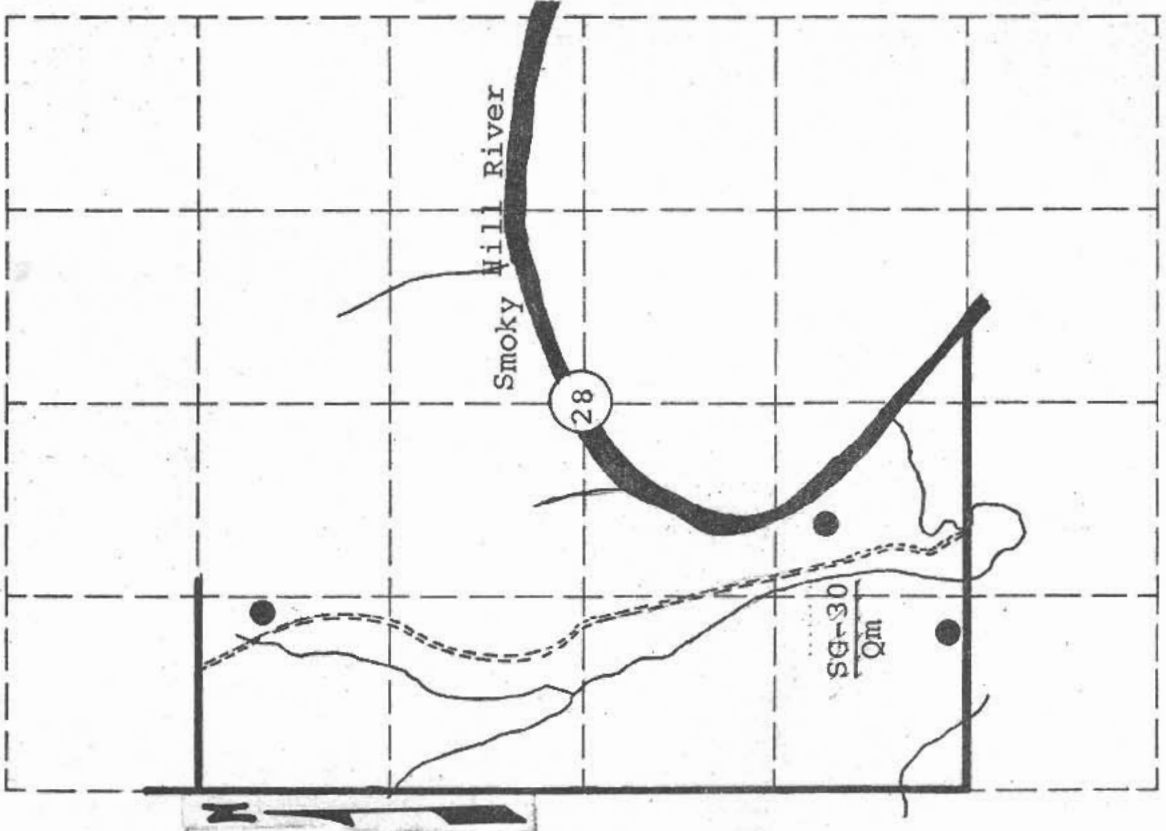
SG-30
Qm
 Site No. _____ Date April 1963
 Material Sand and Gravel County Ellis
 Location SW 1/4 SW 1/4 Sec. 28 Twp. 15S Range 17W
 Owner Mary F. Rajewski Victoria, Kansas
 Nature of Deposit Dry Accessibility Fair
 Status of Site Open site; not sampled

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.L.		
				1/2	3/4	3/8	4	8	16	30					50	100

CORRELATION DATA

Geological Age Pleistocene
 Geological Source Meade Formation
 Material Similar To Material in reported site SG+138
Qm
 Specific Gravity (Sat.) _____ (Dry)
 Los Angeles Wear _____
 Absorption _____ Soundness _____
 Wt. Cu.Ft. _____ Str. Ratio _____
 Remarks _____



Scale: 1" = 1/4 Mile

MATERIAL SURVEY REPORT

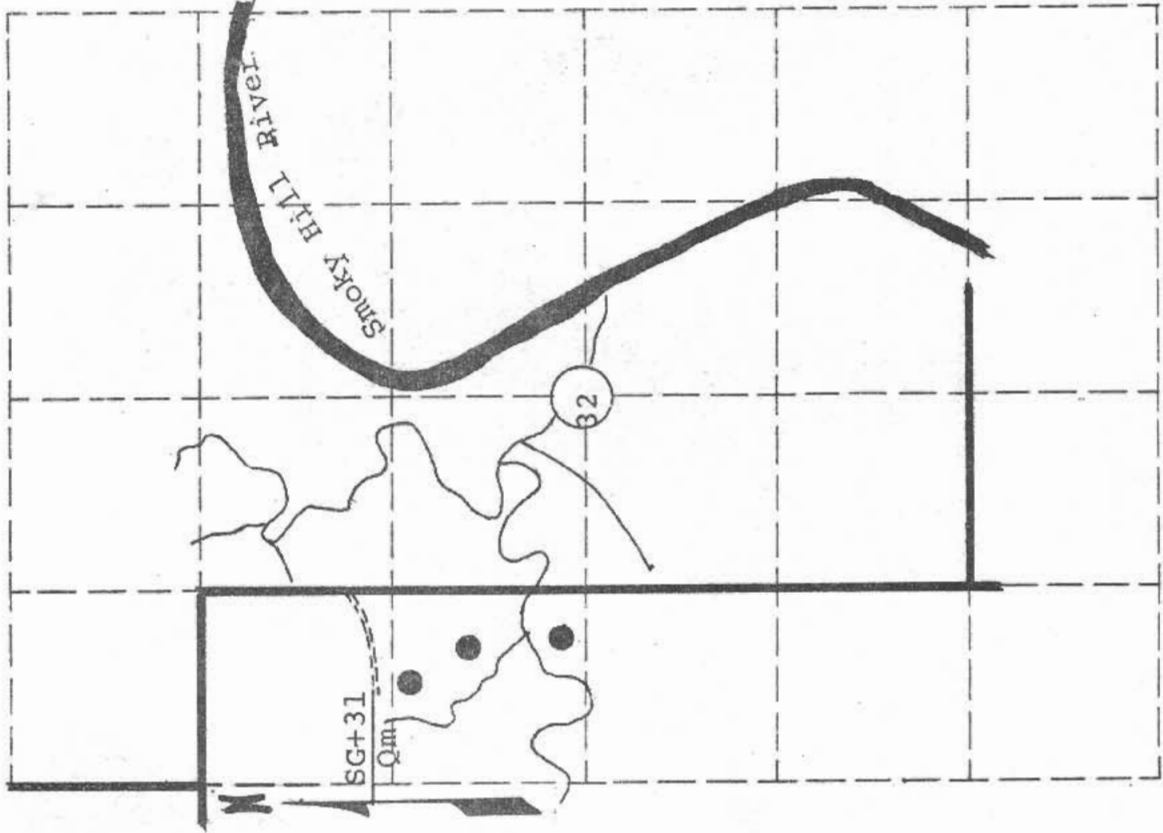
Site No. SG+31
Qm
 Material Sand and Gravel
 Location SW 1/4 NW 1/4 Sec. 32 Twp. 15S Range 17W
 Owner Clarence Dinkel McCracken, Kansas
 Nature of Deposit Dry Accessibility Good
 Status of Site Open site; not sampled

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	16	30					50	100			

CORRELATION DATA

Geological Age Pleistocene
 Geological Source Meade Formation
 Material Similar To Material reported in site SG+109
Qm
 Specific Gravity (sat.) _____ (Dry) _____
 Los Angeles Wear _____
 Absorption _____ Soundness _____
 Wt. Cu.Ft. _____ Str. Ratio _____
 Remarks _____



Scale: 1" = 1/4 Mile

MATERIAL SURVEY REPORT

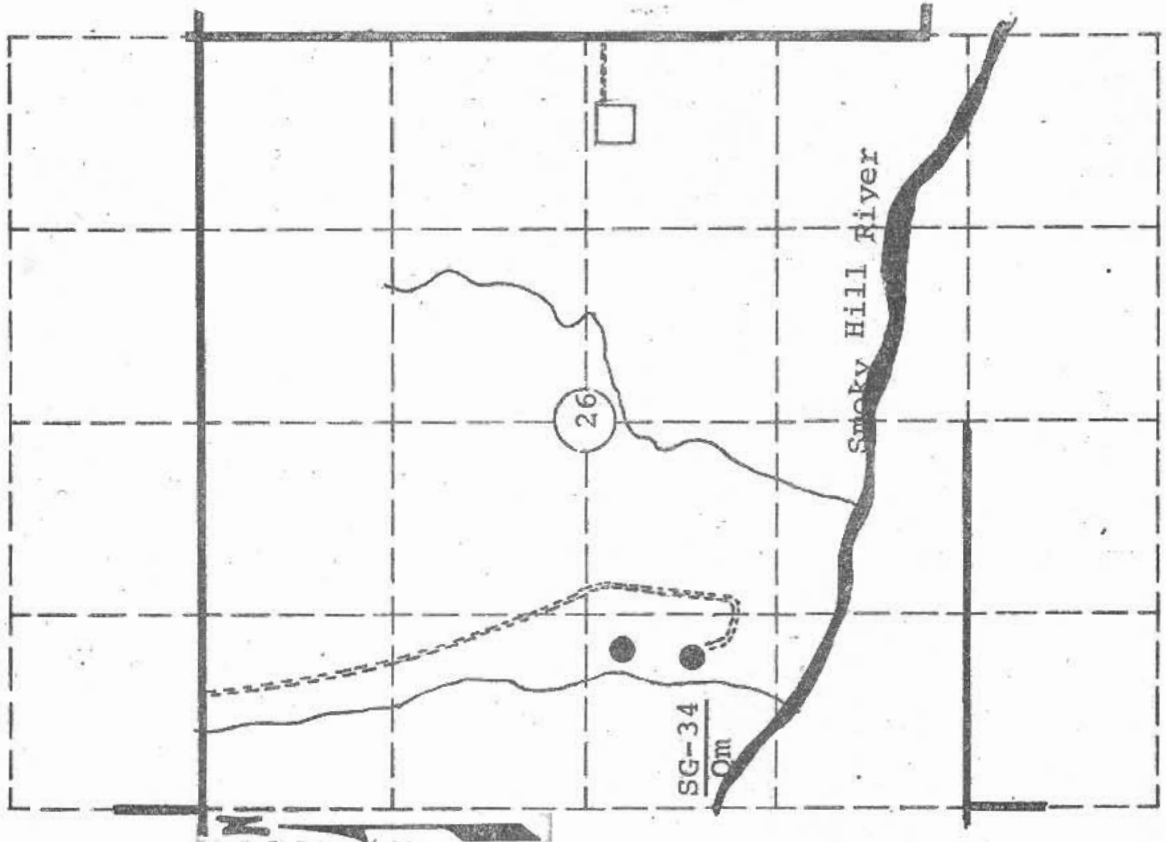
Site No. SG-34 Date April 1963
Om
 Material Sand and Gravel County Ellis
 Location NW 1/4 SW 1/4 Sec. 26 Twp. 15S Range 18W
 Owner E. F. Madden, et al 1608 Main, Hays, Kansas
name address
 Nature of Deposit Dry Accessibility Fair
 Status of Site Open site; not sampled

EXPLORATION DATA

Test Hole	Material at bottom of hole	Depth of over-burden	Depth of Material	Percent Retained					Moisture	S.F.	L.L.	P.I.
				1/2	3/4	2/8	4	8				

CORRELATION DATA

Geological Age Pleistocene
 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 SURVEY REPORT

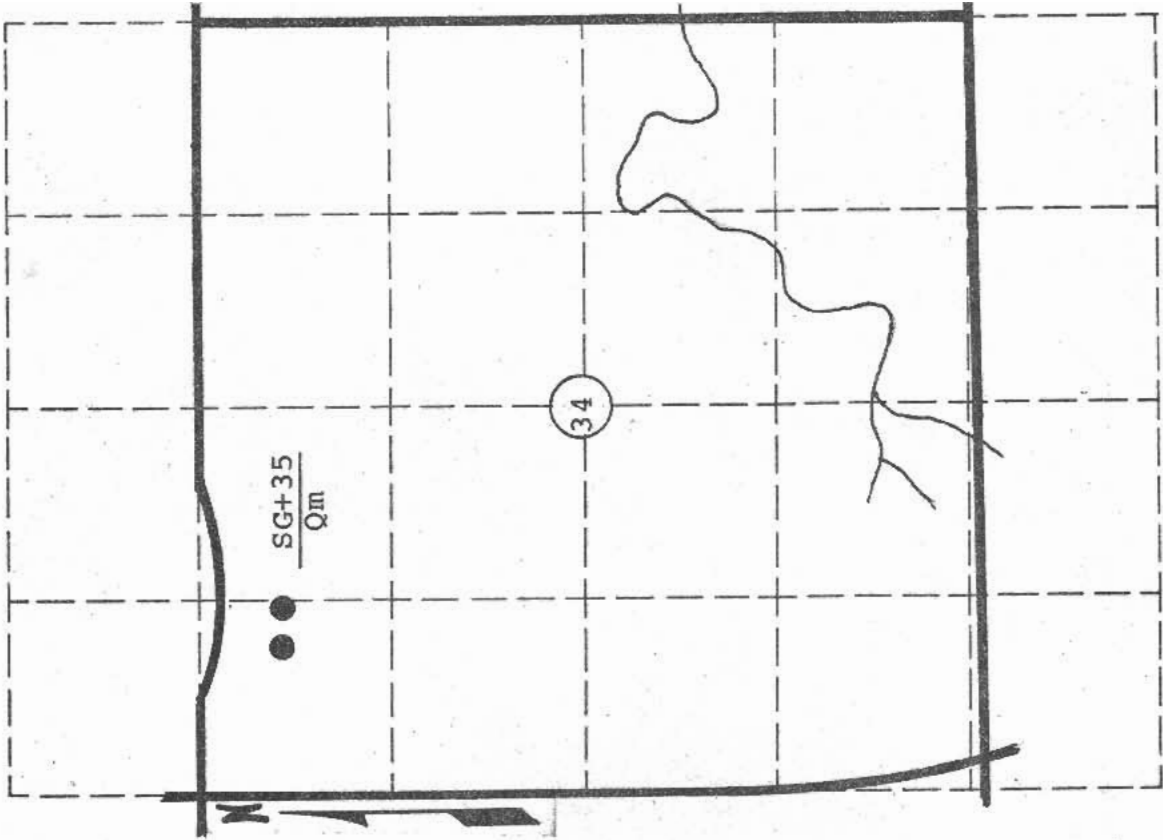
Site No. SG+35 Date April 1963
Qm
 Material Sand and Gravel County Ellis
 Location NW 1/4 Sec. 34 Twp. 15S Range 18E
 Owner Mary Bieker, Et al 107 East 13th, Hays, Kans.
 address
 Nature of Deposit Dry Accessibility Fair
 Status of Site Open site; not sampled

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 1/2	3/8	3/16	16	30				50	100	Mash 200						

CORRELATION DATA

Geological Age Pleistocene
 Geological Source Meade Formation
 Material Similar to Material reported in site SG-111
Qm
 Specific Gravity (Sat.) _____ (dry)
 Los Angeles Wear _____
 Absorption _____ Soundness _____
 Mt. Cu.Ft. _____ Str. Ratio _____
 Remarks _____



Scale: 1" = 1/4 Mile

MATERIAL SURVEY REPORT

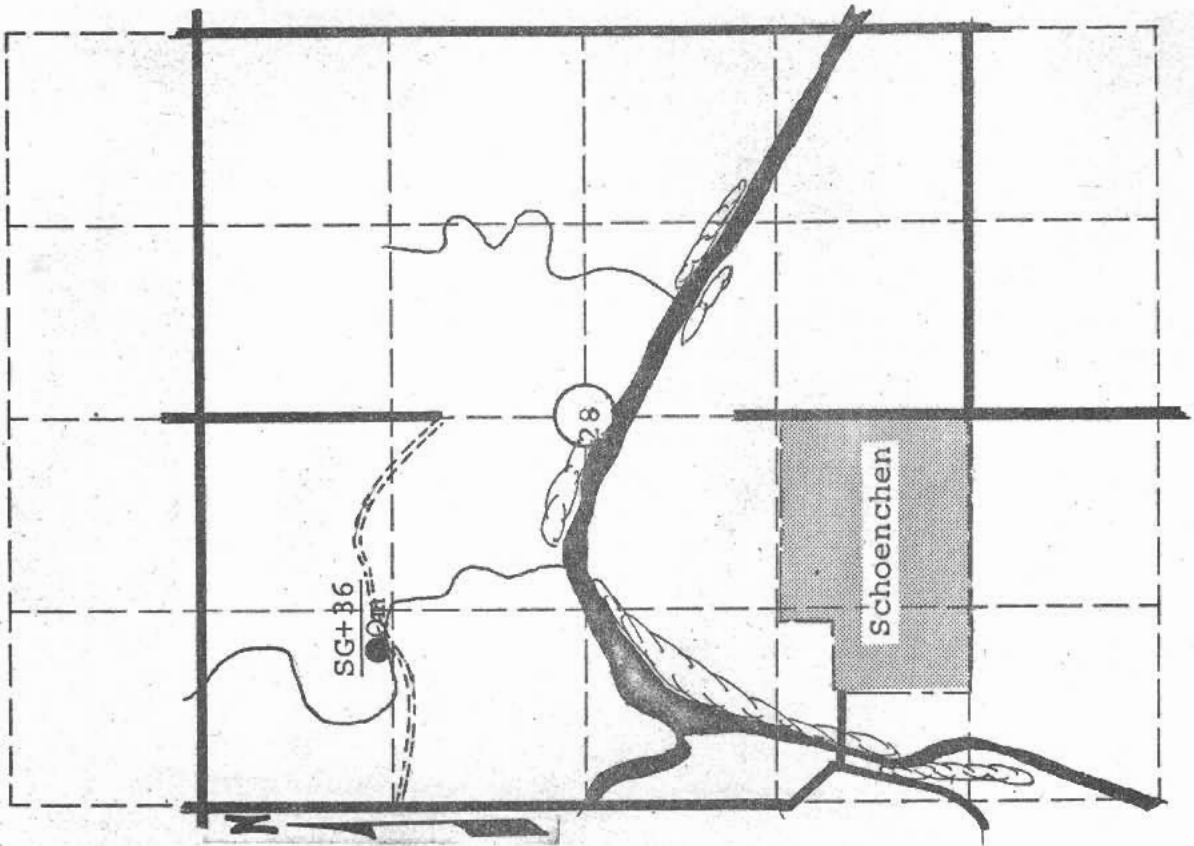
Site No. SG+36 Date April 1963
Qm
 Material Sand and Gravel County Ellis
 Location NW 1/4 NW 1/4 Sec. 28 Twp. 15S Range 18W
 Owner Katie Dinges, et al 304 East 17th, Hays, Kansas
name address
 Nature of Deposit Dry Accessibility Good
 Status of Site Open site; not sampled

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.			
				1/2	3/4	3/8	4	8	16	30					50	100	

CORRELATION DATA

Geological Age Pleistocene
 Geological Source Meade Formation
 Material Similar to Material reported in site SG-112
Qm
 Specific Gravity (Sat.) _____ (Dry) _____
 Los Angeles Wear _____
 Absorption _____ Soundness _____
 Wt. Cu.Ft. _____ Str. Ratio _____
 Remarks Material is present but operations probably stopped due to excessive overburden.



MATERIAL SURVEY REPORT

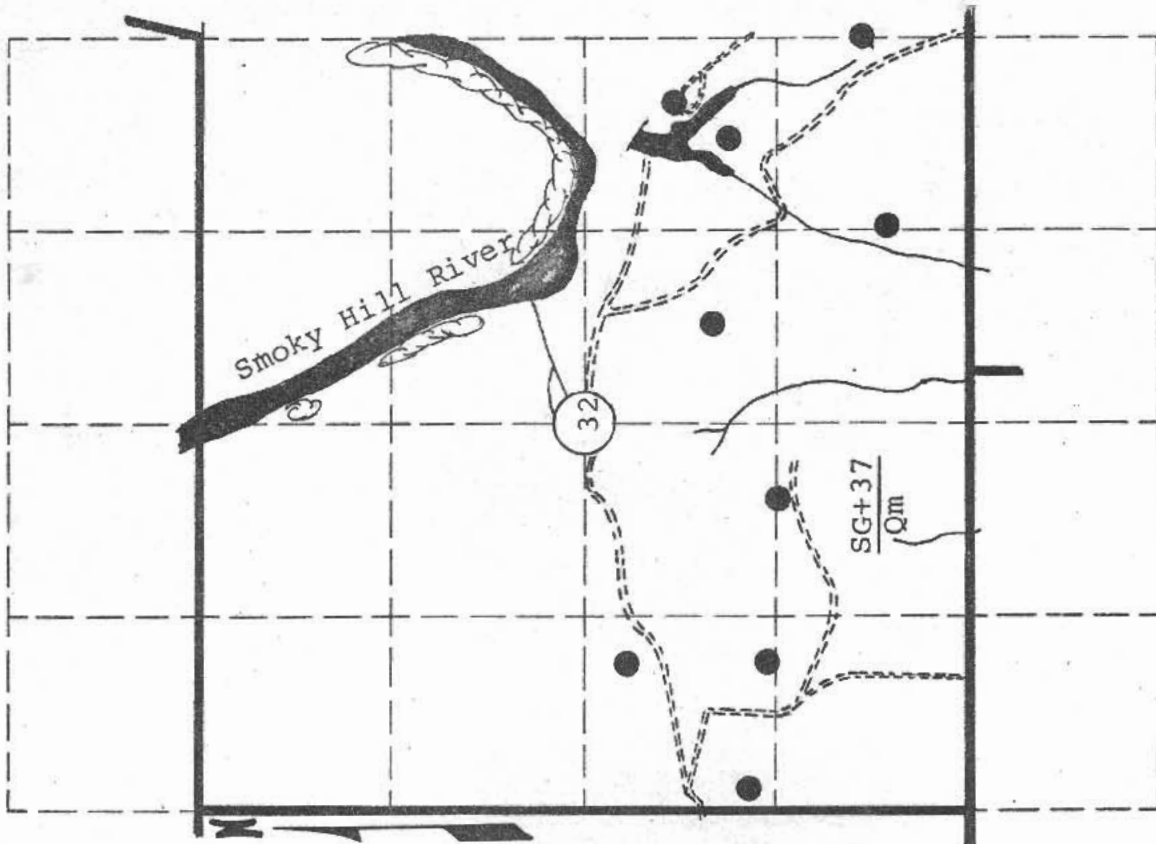
Site No. SG+37
Qm
 Date April 1963
 Material Sand and Gravel County Ellis
 Location S $\frac{1}{2}$ Sec. 32 Twp. 15S Range 18W
 Owner Aloysius Werth ^{name} McCracken, Kansas address
 Nature of Deposit Dry Accessibility Good
 Status of Site Open site; not sampled

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	3/8	8	16				

CORRELATION DATA

Geological Age Pleistocene
 Geological Source Meade Formation
 Material Similar To Material reported in site SG+114
Qm
 Specific Gravity (Sat.) _____ (Dry) _____
 Los Angeles Wear _____
 Absorption _____ Soundness _____
 Mt. Cu.Ft. _____ Str. Ratio _____
 Remarks _____



Scale: 1" = 1/4 Mile

MATERIAL SURVEY REPORT

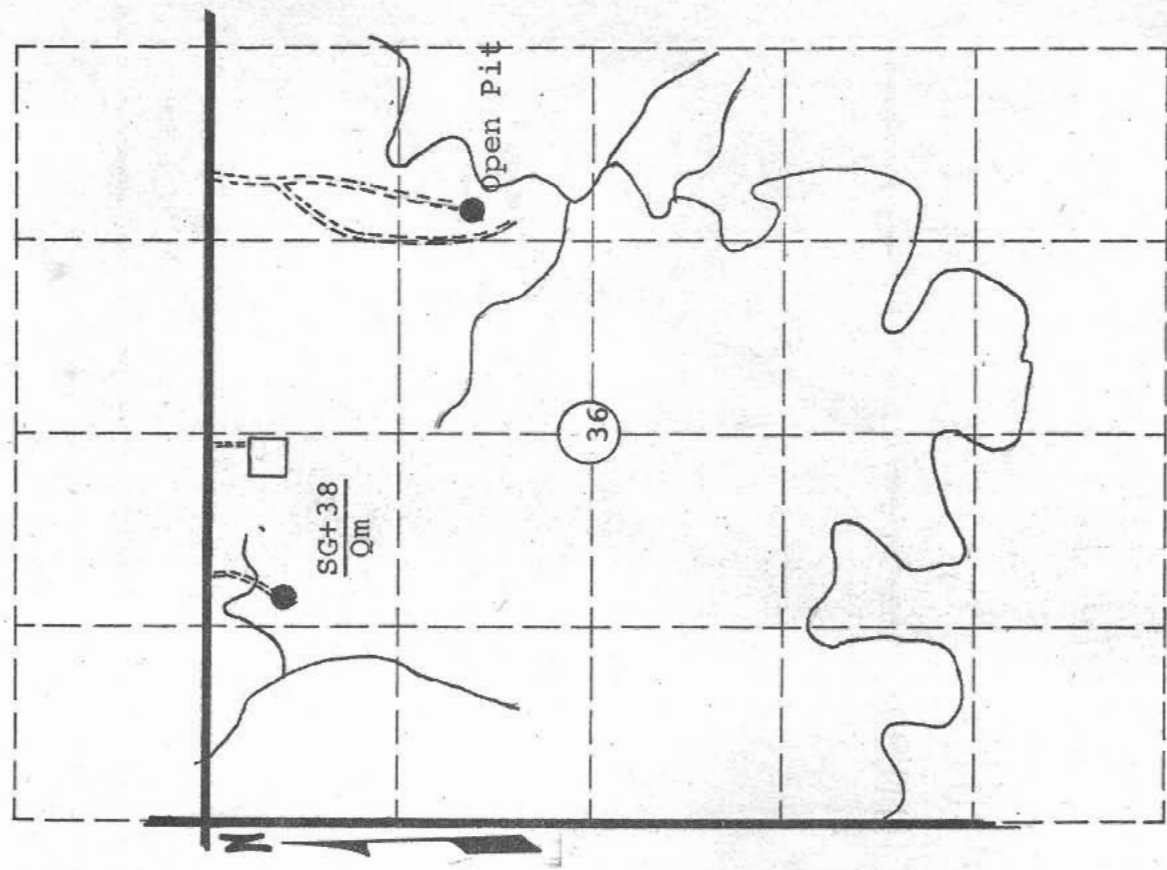
Site No. SG+38
Qm
 Date April 1963
 Material Sand and Gravel County Ellis
 Location NE 1/4 NW 1/4 Sec. 36 Twp. 158 Range 19W
 Owner B. J. Zimmerman McCracken, Kansas
 name address
 Nature of Deposit Dry Accessibility Good
 Status of Site Open site; not sampled

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	

CORRELATION DATA

Geological Age Pleistocene
 Geological Source Meade Formation
 Material Similar to Material reported in site SG-115
Qm
 Specific Gravity (Set.) (Dry)
 Los Angeles Near _____
 Absorption _____ Soundness _____
 Wt. Cu.ft. _____ Str. Ratio _____
 Remarks _____



Scale: 1" = 1/4 Mile

MATERIAL SURVEY REPORT

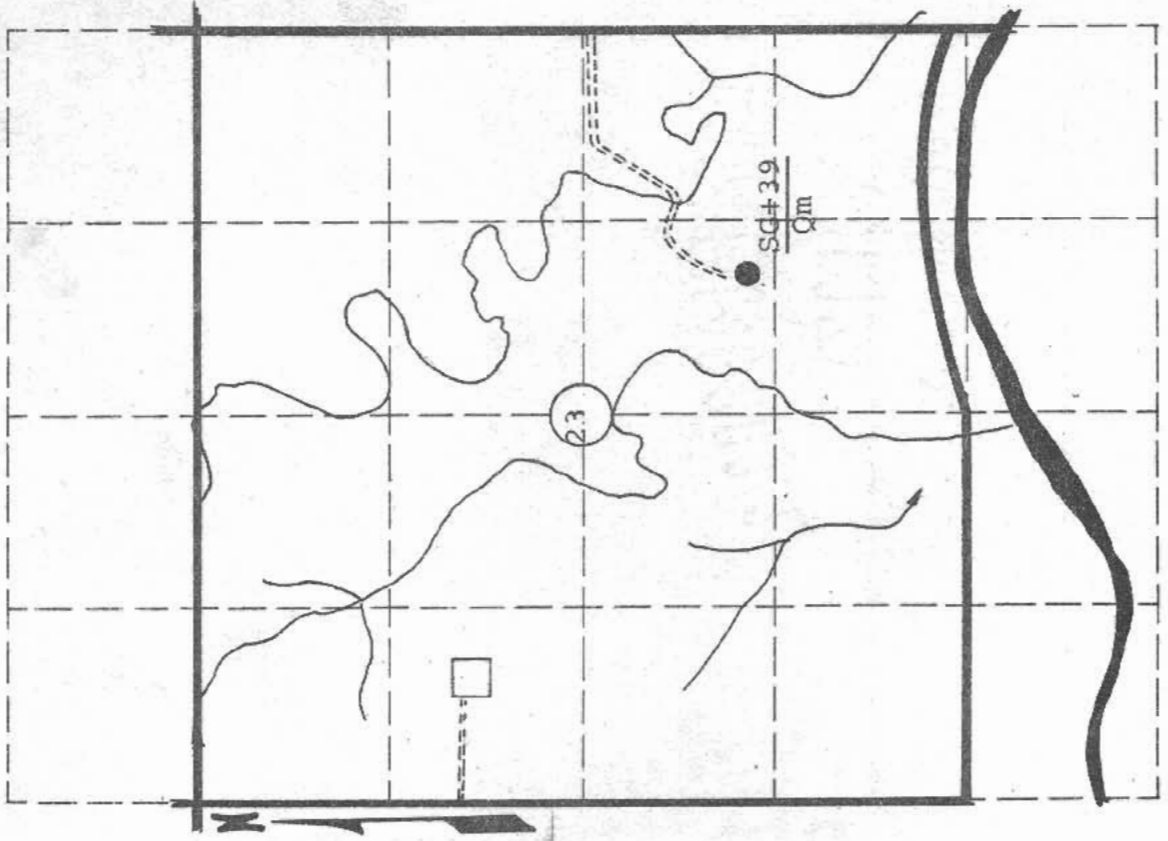
Site No. SG+39
Qm
 Date April 1963
 Material Sand and Gravel county Ellis
 Location SE 1/4 sec. 23 Twp. 15S Range 19W
 Owner Katie Dinges 304 West 17th, Hays, Kansas
name address
 Nature of Deposit Dry Accessibility Fair
 Status of Site Open site; not sampled

EXPLORATION DATA

Test Hole	Material at Bottom of Hole	Depth of over-Bardon	Depth of Material	Percent Retained							Wash 200	L.L.	P.I.		
				1 1/2	3/4	3/8	4	8	16	30				50	100

CORRELATION DATA

Geological Age Pleistocene
 Geological Source Meade Formation
 Material Similar To Material reported in site SG-117
Qm
 Specific Gravity (Sat.) _____ (Dry) _____
 Los Angeles Near _____
 Absorption _____ Soundness _____
 Wt. Cu.Ft. _____ Str. Ratio _____
 Remarks _____



MATERIAL SURVEY REPORT

Site No. SG+40
Qm

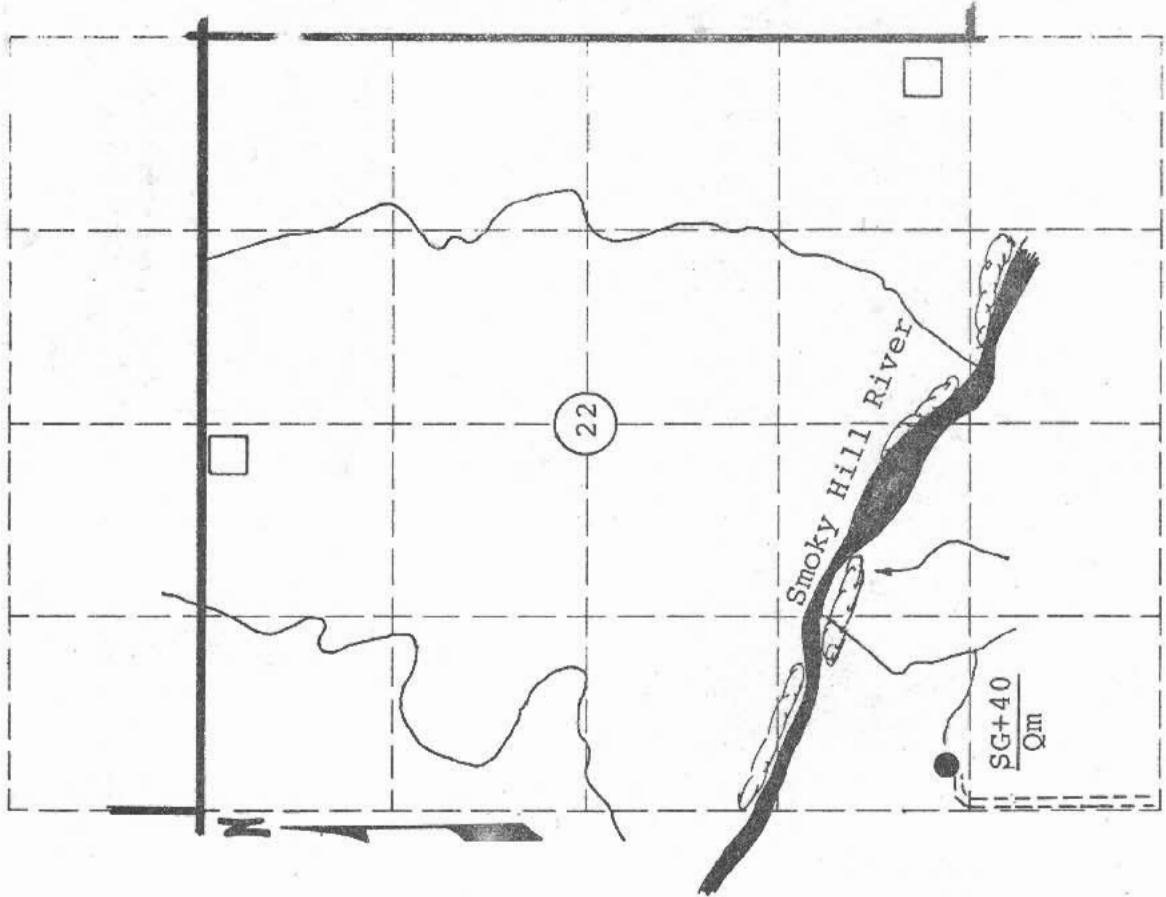
Date April 1963
Material Sand and Gravel County Ellis
Location SW $\frac{1}{4}$ SW $\frac{1}{4}$ Sec. 22 Twp. 15S Range 19W
Owner Wendelin W. Werth Rte. 2, Hays, Kansas
name address
Nature of Deposit Dry Accessibility Fair
Status of Site Open site; not sampled

EXPLORATION DATA

Test Note	Material Bottom of Hole	Depth or over-burden	Depth of Material	Percent Retained							Mesh 200	G.F.	L.L.	P.I.			
				1 1/2	3/4	3/8	4	8	16	30					50	100	

CORRELATION DATA

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



MATERIAL SURVEY REPORT

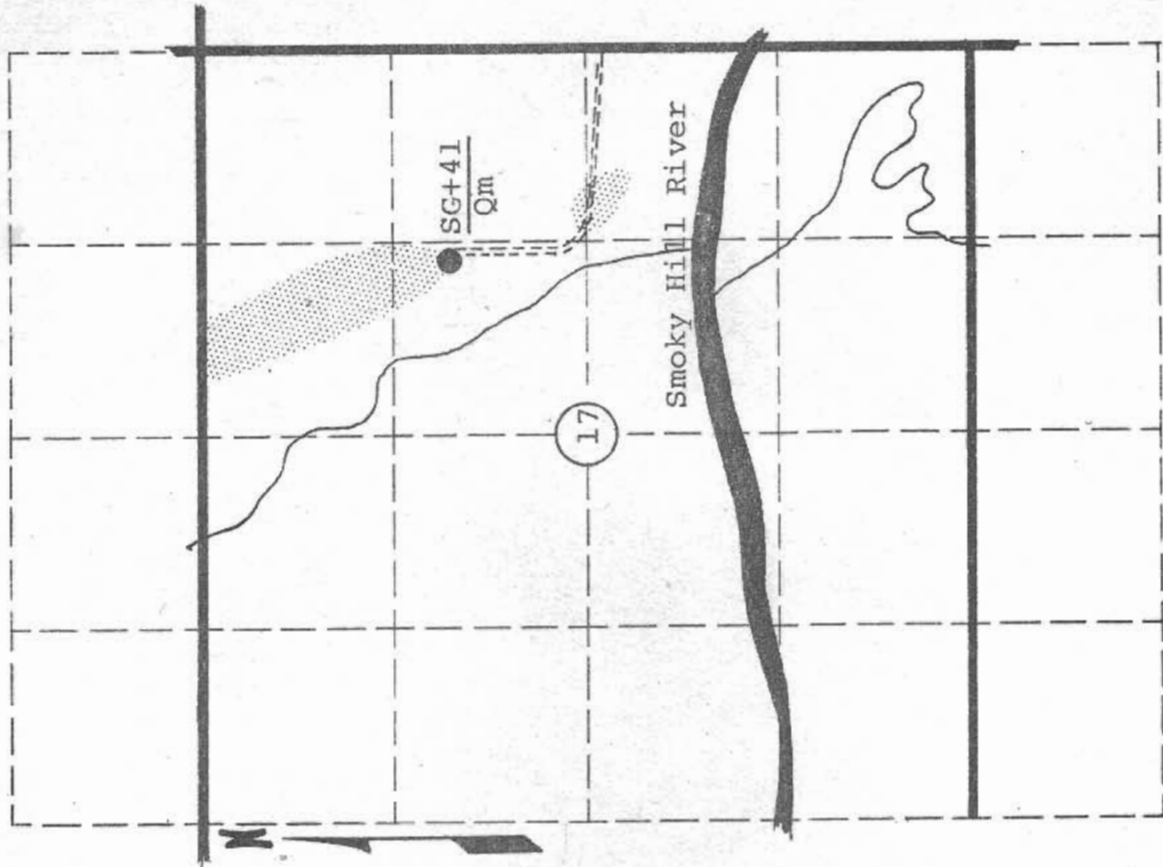
Site No. SG+41 Date April 1963
Qm
 Material Sand and Gravel County Ellis
 Location NE 1/4 NE 1/4 Sec. 17 Twp. 15S Range 19W
 Owner Johanna Wahl LaCrosse, Kansas
 name address
 Nature of Deposit Dry Accessibility Fair
 Status of Site Open site; not sampled

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	3/8	8	16				

CORRELATION DATA

Geological Age Pleistocene
 Geological Source Meade Formation
 Material Similar To Material reported in site SG-141
Qm
 Specific Gravity (Sat.) _____ (dry) _____
 Los Angeles Wear _____
 Absorption _____ Soundness _____
 Wt. Cu.Ft. _____ Str. Ratio _____
 Remarks _____



Scale: 1" = 1/4 Mile