APPENDIX I

The following site data forms are designated as "open sites; not sampled." The sites described herein are depicted on the county materials maps as a "○".

LEGEND

== Trail or lane

--- Road

-------- Railroad

---- Hedge or trees

Name—— Major streams

--- Intermittent streams

--- Pond or lake

○ Open materials site; not sampled

○ Center of section

☐ Farm site

✚ Cemetery

✈ School

✚ Church

▧ Town or city
STATE HIGHWAY COMMISSION OF KANSAS

MATERIAL SURVEY REPORT

SG+1
To

Site No. __________________ Date April, 1967

Sand & Gravel County Rawlins

Location NW \( \frac{1}{4} \) SE \( \frac{1}{4} \) Sec. 11 Twp. 2S Range 32W

Mathias Kogl, Jr. Herndon, Kansas

Owner Name Home Address

Nature of Deposit Dry Accessibility Good Site Located on Plate II

Status of Site Open site; not sampled

EXPLORATION DATA

<table>
<thead>
<tr>
<th>Test Hole</th>
<th>Material at Bottom of Hole</th>
<th>Depth of Overburden</th>
<th>Depth of Material</th>
<th>Percent Retained</th>
<th>Wash 200</th>
<th>G.F.</th>
<th>L.L.</th>
<th>P.I.</th>
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CORRELATION DATA

Geological Age Tertiary

Geological Source Ogallala Formation

Material Similar To

Specific Gravity (Sat.) (Dry)

Los Angeles Wear

Absorption Soundness

Wt. Cu.Ft.

Str. Ratio

Remarks

Scale: 1" = \( \frac{1}{4} \) Mile
**MATERIAL SURVEY REPORT**

**SG-2**

- **Site No.:**
- **Qc**
- **Date:** April, 1967

**Material:** Sand & Gravel

**County:** Rawlins

**Location:** S\(\frac{1}{4}\) NE\(\frac{1}{4}\) Sec. 14 Twp. 2S Range 32W

**Owner:** Joseph Pitner

**Address:** Herndon, Kansas

**Nature of Deposit:** Dry

**Accessibility:** Good

**Site Located on Plate:** II

**Status of Site:** Open site; not sampled

### EXPLORATION DATA

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<th>Test Hole</th>
<th>Material at Bottom of Hole</th>
<th>Depth of Overburden</th>
<th>Percent Retained</th>
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<td></td>
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### CORRELATION DATA

- **Geological Age:** Quaternary
- **Geological Source:** Crete Formation
- **Material Similar To:** Site #44

- **Specific Gravity (Nat.)** (Dry)
- **Los Angeles Wear**
- **Absorption**
- **Soundness**
- **M. Cu.Ft.**
- **Str. Ratio**

**Scale:** 1" = \(\frac{1}{4}\) Mile
STATE HIGHWAY COMMISSION OF KANSAS

MATERIAL SURVEY REPORT

S-3

Site No. QC

Date April, 1967

Material Sand

County Rawlins

Location NW 1/4 SE 1/4 Sec. 21 Twp. 2S Range 32W

Owner John Holle

Address Ludell, Kansas

Nature of Deposit Dry

Accessibility Good

Site Located on Plate II

Status of Site Open site; not sampled

EXPLORATION DATA

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<th>Test Hole</th>
<th>Material at Bottom of Hole</th>
<th>Depth of Overburden</th>
<th>Depth of Material</th>
<th>Percent Retained</th>
<th>Wash 200</th>
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<th>L.L.</th>
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CORRELATION DATA

Geological Age Quaternary

Geological Source Crete Formation

Material Similar To

Specific Gravity (sat.) (Dry)

Los Angeles Wear

Absorption Soundness

M. Cu.Ft. Str. Ratio

Remarks

Scale: 1" = 1/4 Mile
MATERIAL SURVEY REPORT

SG+4
To

Date: April, 1967

Sand & Gravel

Rawlins

Location: SE¼ SW¼ Sec. 26 Twp. 2S Range 32W

Vernida F. Rippe
Ludell, Kansas

Dry

Accessibility: Poor

Site Located on Plate IV

Status of Site: Open site; not sampled

EXPLORATION DATA

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<th>Test Hole</th>
<th>Material at Bottom of Hole</th>
<th>Depth of Overburden</th>
<th>Percent Retained</th>
<th>Wash 200</th>
<th>G.f.</th>
<th>L.L.</th>
<th>P.I.</th>
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CORRELATION DATA

Geological Age: Tertiary

Geological Source: Ogallala Formation

Material Similar To: Site No. 24 & 72

Specific Gravity (Sat.) (Dry)

Los Angeles Wear

Absorption

Soundness

M. C. F. Ft.

Str. Ratio

Remarks

Scale: 1" = ½ Mile
MATERIAL SURVEY REPORT

Q-5
To

Site No. __________________________ Date April, 1967

Material Quartzite County Rawlins

Location SW ¼ NE ½ Sec. 30 Twp. 2S Range 32W

Owner Edith Wicke Address Atwood, Kansas

Nature of Deposit Dry Accessibility Fair Site Located on Plate IV

Status of Site Open site; not sampled

EXPLORATION DATA

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<th>Percent Retained</th>
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CORRELATION DATA

Geological Age Tertiary

Geological Source Ogallala Formation

Material Similar To ________________________________

Specific Gravity (Sat.) ____________________________ (Dry)

Los Angeles Wear _____________________________

Absorption _______ Soundness _______

Wt. Cu.Ft. _______ Str. Ratio _______

Remarks _________________________________

Scale: 1" = ¼ Mile
# MATERIAL SURVEY REPORT

**Site No.** SG+6  
**To**  
**Date** April, 1967  
**Material** Sand & Gravel  
**County** Rawlins  
**Location** Center  
**Sec.** 35  
**Twp.** 2S  
**Range** 32W  
**Owner** Aubrey & Golda Briney  
**Address** McDonald, Kansas  
**Nature of Deposit** Dry  
**Accessibility** Poor  
**Status of Site** Open site; not sampled

## EXPLORATION DATA

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<thead>
<tr>
<th>Test Hole</th>
<th>Material at Bottom of Hole</th>
<th>Depth of Overburden</th>
<th>Percent Retained</th>
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## CORRELATION DATA

**Geological Age** Tertiary  
**Geological Source** Ogallala Formation  
**Material Similar To** Site No. 24 & 72

**Specific Gravity (Sat.)**  
**Los Angeles Wear**  
**Assorption** Soundness  
**Ct. Cn. Ft.** Str. Ratio  
**Remarks**

Scale: 1" = ¼ Mile
STATE HIGHWAY COMMISSION OF KANSAS

MATERIAL SURVEY REPORT

SG-7
To

Site No. ____________________ Date ________________

Material Sand & Gravel County Rawlins

Location NW ¼ NE ¼ Sec. 32 Twp. 2S Range 34W

Owner Cyril Bliss Atwood, Kansas

Nature of Deposit Dry Accessibility Poor Site Located on Plate

Status of Site Open site; not sampled

EXPLORATION DATA

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CORRELATION DATA

Geological Age Tertiary

Geological Source Ogallala Formation

Material Similar To ____________________________

Specific Gravity (Sat.) ______________________ (Dry)

Los Angeles Wear ____________________________

Absorption ____________________ Soundness

Mt. Cu.Ft. ____________________ Str. Ratio

Remarks _____________________________

Scale: 1" = ¼ Mile
STATE HIGHWAY COMMISSION OF KANSAS

MATERIAL SURVEY REPORT

SG-9

To

Date April, 1967

Sand & Gravel

Rawlins

Location NW1/4 NE1/4 Sec. 24 Twp. 3S Range 35W

Delbert V. Hawkins

Atwood, Kansas

Nature of Deposit Dry

Accessibility Good

Site Located on Plate III

Status of Site Open site; not sampled

EXPLORATION DATA

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<th>Material at bottom of hole</th>
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<th>Depth of Material 3/4</th>
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CORRELATION DATA

Geological Age Tertiary

Geological Source Ogallala Formation

Material Similar To

Specific Gravity (Sat.) (Dry)

Los Angeles Wear

Absorption Soundness

Mt. Cu.Ft. Str. Ratio

Remarks

Scale: 1" = ¼ Mile
STATE HIGHWAY COMMISSION OF KANSAS

MATERIAL SURVEY REPORT

SG-10
To

April, 1967

Sand & Gravel
Rawlins

Location: NE\4 NE\4
Sec. 24
Twp. 3S
Range 35W

Owner:
Delbert V. Hawkins
Atwood, Kansas

Nature of Deposit:
Dry
Accessibility:
Good

Status of Site:
Open site; not sampled

EXPLORATION DATA

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<th>Material at Bottom of Hole</th>
<th>Depth of Overburden</th>
<th>Percent Retained</th>
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CORRELATION DATA

Geological Age:
Tertiary

Geological Source:
Ogallala Formation

Material Similar To:

Specific Gravity (Sat.) (Dry)

Los Angeles Wear

Adsorption

Soundness

Wt. Cu.Ft.

Str. Ratio

Remarks

Scale: 1" = ¼ Mile
MATERIAL SURVEY REPORT

S-11

Site No. Qc

Date April, 1967

Material Sand

County Rawlins

Location SW¼ NE¼ Sec. 4

3S 34W

Owner Albert L. Harden

Atwood, Kansas

Nature of Deposit Dry

Accessibility Good

Status of Site Open site; not sampled

EXPLORATION DATA

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<th>Test Hole</th>
<th>Material at bottom of hole</th>
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CORRELATION DATA

Geological Age Quaternary

Geological Source Crete Formation

Material Similar To

Specific Gravity (Rel.) (Dry)

Los Angeles Wear

Absorption Soundness

St. Cu.Ft. Str. Ratio

Remarks

Scale: 1" = ¼ Mile
STATE HIGHWAY COMMISSION OF KANSAS

MATERIAL SURVEY REPORT

S-12  
Oc  
Site No.  
Date April, 1967  
County Rawlins  
Sec. 4  
Twp. 3S  
Range 34W  
Owner Jessie Argabright  
Address Atwood, Kansas  
Nature of Deposit Dry  
Accessibility Poor  
Site Located on Plate III  
Status of Site Open site; not sampled

### EXPLORATION DATA

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<th>Depth of Material</th>
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### CORRELATION DATA

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

Scale: 1" = ¼ Mile
MATERIAL SURVEY REPORT

S-13
Qc

Site No. __________________________ Date __________

Sand __________________________

Material __________________________

Rawlins __________________________

County __________________________

SE\(\frac{1}{4}\) SW\(\frac{1}{2}\) __________________________

Location __________________________

5 __________________________

Sec. __________________________

3S __________________________

Twp. __________________________

Range 34W __________________________

Arthur J. & Anna Samson __________________________

Atwood, Kansas __________________________

Owner __________________________

Address __________________________

Dry __________________________

Accessibility __________________________

Poor __________________________

Site Located on Plate III __________________________

Status of Site __________________________

Open site; not sampled

EXPLORATION DATA

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<th>Depth of Overburden</th>
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CORRELATION DATA

Geological Age __________________________

Quaternary __________________________

Geological Source __________________________

Crete Formation __________________________

Material Similar To __________________________

Specific Gravity (Sat.) __________________________

(Dry) __________________________

Los Angeles Wear __________________________

Absorption __________________________

Soundness __________________________

Mt. Co.Ft. __________________________

Str. Ratio __________________________

Remarks __________________________

Scale: 1" = \(\frac{1}{4}\) Mile
STATE HIGHWAY COMMISSION OF KANSAS

MATERIAL SURVEY REPORT

S-14 Qc
Site No. Date April, 1967
Material Sand
County Rawlins
Location NW ¼ NW ¼ Sec. 8 Twp. 3S Range 34W
Owner Arthur J. & Anna Samson Atwood, Kansas
Nature of Deposit Dry
Accessibility Fair Site located on Plate III
Status of Site Open site; not sampled

EXPLORATION DATA

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<th>Percent Retained</th>
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CORRELATION DATA

Geological Age Quaternary
Geological Source Crete Formation
Material Similar To

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

Scale: 1" = ¼ Mile
Material Survey Report

SG-15
QC

Date: April, 1967

Material: Sand & Gravel
County: Rawlins
Location: SW¼ SE¼ Sec. 13 Twp. 3S Range 34W
Owner: H. N. Reinert
Address: Atwood, Kansas

Nature of Deposit: Dry
Accessibility: Poor
Site Located on Plate: III
Status of Site: Open site; not sampled

Exploration Data

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<th>Percent Retained</th>
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Correlation Data

Geological Age: Quaternary
Geological Source: Crete Formation

Material Similar To:

Specific Gravity (Sat.): (Dry)

Los Angeles Wear:

Absorption: Soundness:

Mt. Cu.Ft.: Str. Ratio:

Remarks:

Scale: 1" = ¼ Mile
STATE HIGHWAY COMMISSION OF KANSAS

MATERIAL SURVEY REPORT

SG+16
To

Site No. ____________________ Date _______________ April, 1967

Material Sand & Gravel County Rawlins

Location NW\(\frac{1}{4}\), NE\(\frac{1}{4}\) Sec. 27 Twp. 3S Range 34W

Owner Joseph C. Kogal Atwood, Kansas

Nature of Deposit Dry Accessibility Good Site Located on Plate III

Status of Site Open site; not sampled

EXPLORATION DATA

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<th>Depth of Material</th>
<th>Percent Retained</th>
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CORRELATION DATA

Geological Age Tertiary

Geological Source Ogallala Formation

Material Similar To

Specific Gravity (Sat.) (Dry)

Los Angeles Wear

Absorption Soundness

Wt. Cu. Ft. Str. Ratio

Remarks

Scale: 1" = ½ Mile
# MATERIAL SURVEY REPORT

**SG-17**  
**Qc**

**Site No.**  
**Date** April, 1967  
**Material** Sand & Gravel  
**County** Rawlins  
**Location** SE_{1/2} NW_{1/2}  
**Sec.** 5  
**Twp.** 3S  
**Range** 33W

**Owner** Leo Heble  
**Address** Atwood, Kansas

**Nature of Deposit** Dry  
**Accessibility** Good  
**Status of Site** Open site; not sampled

## EXPLORATION DATA

<table>
<thead>
<tr>
<th>Test Hole</th>
<th>Material at Bottom of Hole</th>
<th>Depth of Overburden</th>
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## CORRELATION DATA

**Geological Age** Quaternary  
**Geological Source** Crete Formation  
**Material Similar To** Site No. 50

**Specific Gravity** (Sat.)  
**Los Angeles Wear**

**Absorption** Soundness  
**M. Co.Ft.** Str. Ratio  
**Remarks**

---

Scale: 1" = 1/4 Mile
STATE HIGHWAY COMMISSION OF KANSAS

MATERIAL SURVEY REPORT

SG-18
To
April, 1967

Site No. ___________________ Date ___________________

Material Sand & Gravel County Rawlins

Location NW\(^4\) NE\(^4\) Sec. 6 Twp. 3S Range 33W

Owner Clarence & Selma Baumfalk Atwood, Kansas

Nature of Deposit Dry Accessibility Fair

Status of Site Open site; not sampled

EXPLORATION DATA

<table>
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<tr>
<th>Test Hole</th>
<th>Material at Bottom of Hole</th>
<th>Depth of Material</th>
<th>Percent Retained</th>
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<td>1/2 3/4 5/8 4 8 16 30 50 100 Wash 200 G.F. L.L. P.I.</td>
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|                       |                           |                 |                 |
|                       |                           |                 |                 |
|                       |                           |                 |                 |

CORRELATION DATA

Geological Age Tertiary

Geological Source Ogallala Formation

Material Similar To ____________________________

Specific Gravity (Sat.) ____________________ (Dry)

Los Angeles Wear ____________________________

Absorption ______________________________ Soundness

St. Gr. Ft. ________________________________ Str. Ratio

Remarks ________________________________

Scale: 1" = ¼ Mile
MATERIAL SURVEY REPORT

SG-19
QC

Site No. Date
April, 1967

Material Sand & Gravel County Rawlins

Location SW¼ Sec. 5 Top 3S Range 33W

Owner Louis Prochazka Address Atwood, Kansas

Nature of Deposit Dry Accessibility Good Status of Site Open site; not sampled Site Located on Plate IV

EXPLORATION DATA

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<th>Test Hole</th>
<th>Material at bottom of Hole</th>
<th>Depth of Overburden</th>
<th>Percent Retained</th>
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CORRELATION DATA

Geological Age Quaternary
Geological Source Crete Formation
Material Similar To Site No. 50

Specific Gravity (Sat.) (Dry)
Los Angeles Wear
Absorption Soundness
Ut. Co.Ft. Str. Ratio
Remarks

Scale: 1" = ½ Mile
MATERIAL SURVEY REPORT

S-20
Qc

Site No.  

Date  April, 1967

Material  Sand 

County  Rawlins

Location  SE¼ SE¼ 

Sec.  7 

Twp.  3S 

Range  33W

Owner  Jessie Argabright

Address  Atwood, Kansas

Nature of Deposit  Dry

Accessibility  Poor

Site Located on Plate  IV

Status of Site  Open site; not sampled

EXPLORATION DATA

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CORRELATION DATA

Geological Age  Quaternary

Geological Source  Crete Formation

Material Similar To

Specific Gravity (sat.)  (Dry)

Los Angeles Wear

Absorption  Soundness

M.t. Cft.  Str. Ratio

Remarks

Scale: 1" = 1/4 Mile
STATE HIGHWAY COMMISSION OF KANSAS

MATERIAL SURVEY REPORT

S-21  Qc  Date  April, 1967

Site No.  Material  Sand  County  Rawlins

Location  NW1/4 SW1/4  Sec.  8  Twp.  3S  Range  33W

Owner  Glynn Walker  Address  Atwood, Kansas

Nature of Deposit  Dry  Accessibility  Fair  Site Located on Plate  IV

Status of Site  Open site; not sampled

EXPLORATION DATA

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CORRELATION DATA

Geological Age  Quaternary

Geological Source  Crete Formation

Material Similar To

Specific Gravity (Sat.)  (Dry)

Los Angeles Wear

Absorption  Soundness

Wt. Cu.Ft.  Str. Ratio

Remarks

Scale: 1" = ¼ Mile
**Material Survey Report**

**Site No.:** S-22  
**Date:** April, 1967  
**Material:** Sand  
**County:** Rawlins  
**Location:** SW¼ SW¼ Sec. 18  
**Twp.:** 3S  
**Range:** 33W  
**Owner:** P. A. Reinert  
**Address:** Atwood, Kansas  
**Type:** Site Located on Plate IV  
**Status of Site:** Open site; not sampled

### Exploration Data

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<th>Percent Retained</th>
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### Correlation Data

**Geological Age:** Quaternary  
**Geological Source:** Crete Formation

**Material Similar To:**

**Specific Gravity (Sat.)**

**Los Angeles Wear**

**Attraction**

**Soundness**

**Wt. Cu.Ft.**

**Str. Ratio**

**Remarks**

---

Scale: 1" = ¼ Mile
MATERIAL SURVEY REPORT

SG+23
To April, 1967

Site No. Date

Sand & Gravel Rawlins

County

Location Center SE¾ Sec. 8 Twp. 3S Range 32W

Jolius Runge Ludell, Kansas

Owner Name

Nature of Deposit Accessibility Site Located on Plate
Dry Poor IV

Status of Site Open site; not sampled

EXPLORATION DATA

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CORRELATION DATA

Geological Age Tertiary

Geological Source Ogallala Formation

Material Similar To Site No. 72

Specific Gravity (Sat.) (Dry)

Los Angeles Wear

Absorption Soundness

Wt. Cu.Ft. Str. Ratio

Remarks

Scale: 1" = ½ Mile
**MATERIAL SURVEY REPORT**

**Site No.** SG+24  
**To**  
**Date** April, 1967

**Material** Sand & Gravel  
**County** Rawlins

**Location** SW¼ SW¼ Sec. 30  
**Twp.** 3S  
**Range** 32W

**Owner** Albert T. Anderson  
**Address** Atwood, Kansas

**Nature of Deposit** Dry  
**Accessibility** Good  
**Site Located on Plate** IV

**Status of Site** Open site; not sampled

### EXPLORATION DATA

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<th>Percent Retained</th>
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### CORRELATION DATA

**Geological Age** Tertiary

**Geological Source** Ogallala Formation

**Material Similar To**

**Specific Gravity (Sat.)**  
**(Dry)**

**Los Angeles Wear**

**Absorption**  
**Soundness**

**Cf. Cts.**  
**Str. Ratio**

**Remarks** County pit

Scale: 1" = 1/4 Mile
STATE HIGHWAY COMMISSION OF KANSAS

MATERIAL SURVEY REPORT

SG-25
Qc
Site No.  Date  April, 1967
Material  Sand & Gravel
County  Rawlins
Location  NWNE  Sec. 15
Twp. 48
Range 31W
Owner  Walter & Edith Cederberg  Oberlin, Kansas
Nature of Deposit  Dry
Accessibility  Fair
Site Located on Plate VI
Status of Site  Open site; not sampled

EXPLORATION DATA

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CORRELATION DATA

Geological Age  Quaternary
Geological Source  Crete Formation
Material Similar To

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

Scale: 1" = 1/4 Mile
STATE HIGHWAY COMMISSION OF KANSAS

MATERIAL SURVEY REPORT

SG-26
To

Date: April, 1967

Material: Sand & Gravel
County: Rawlins

Location: SE 1/4 SW 1/4 Sec. 31

Top. 4S Range 35W

Owner: Gladys M. Latta
Address: McDonald, Kansas

Nature of Deposit: Dry
Accessibility: Good
Site Located on Plate: V
Status of Site: Open site; not sampled

EXPLORATION DATA

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CORRELATION DATA

Geological Age: Tertiary

Geological Source: Ogallala 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

LS-27
To

Site No. _____________________________ Date _____________________________

Material Algal Limestone
County Rawlins
Location NE\(^4\) NE\(^4\) Sec. 4
Twp. 4S
Range 36W

Rowena Williams
Address

Nature of Deposit Dry
Accessibility Poor
Site Located on Plate III

Status of Site Open site; not sampled

EXPLORATION DATA

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CORRELATION DATA

Geological Age Tertiary
Geological Source Ogallala Formation

Material Similar To

Specific Gravity (Sat.) (Dry)

Los Angeles Wear

Absorption Soundness

Wt. Cu.Ft. Str. Ratio

Remarks

Scale: 1" = ¼ Mile
STATE HIGHWAY COMMISSION OF KANSAS

MATERIAL SURVEY REPORT

C-28 To

April, 1967

C-29 To

Site No. ____________________ Date ____________________

Material Chert ____________________ County Rawlins ____________________

Location SE\(^{1/4}\) NW\(^{1/4}\) Sec. 16 Twp. 4S Range 36W

Owner Robert L. & Helen L. Johnson McDonald, Kansas

Nature of Deposit Dry Accessibility Good Site Located on Plate V

Status of Site Open site; not sampled

EXPLORATION DATA

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CORRELATION DATA

Geological Age Tertiary

Geological Source Ogallala 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. C-29
To

Date April, 1967

Material Chert
County Rawlins

Location NE4/ SW4 Sec. 16 Twp. 4S Range 36W
Owner Robert L. & Helen L. Johnson McDonald, Kansas

Nature of Deposit Dry
Accessibility Good

Status of Site Open site; not sampled

EXPLORATION DATA

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CORRELATION DATA

Geological Age Tertiary
Geological Source Ogallala Formation

Material Similar To

Specific Gravity (Sat.)

Los Angeles Wear
Assorption
Soundness

Mtu. Cu.Ft.
Str. Ratio

Remarks

Scale: 1" = ¼ Mile
STATE HIGHWAY COMMISSION OF KANSAS

MATERIAL SURVEY REPORT

C-30
To

Site No. ___________________________ Date ____________

Material Chert ___________________________ County Rawlins

Location SE1/4 SE1/4 Sec. 17 Top. 4S Range 36W

Owner Loren Claude Bell ___________________________ Address (Dry) Good __________ Site Located on Plate

Nature of Deposit ____________ Status of Site Open site; not sampled

Exploration Data

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Correlation Data

Geological Age Tertiary

Geological Source Ogallala Formation

Material Similar To __________________________

Specific Gravity (Stat.) (Dry)

Los Angeles Wear __________________________

Absorption Soundness __________________________

Mt. Cu.Ft. Str. Ratio __________________________

Remarks __________________________

Scale: 1" = ¼ Mile
STATE HIGHWAY COMMISSION OF KANSAS

MATERIAL SURVEY REPORT

SG-31

To

Site No. Date April, 1967

Material Sand & Gravel County Rawlins

Location NE\, NE\, Sec. 31 Top 5S Range 36W

Buell C. Briney Brewster, Kansas

Nature of Deposit Dry Accessibility Fair Site Located on Plate V

Status of Site Open site; not sampled

EXPLORATION DATA

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CORRELATION DATA

Geological Age Tertiary

Geological Source Ogallala Formation

Material Similar To

Specific Gravity (Nat.) (Dry)

Los Angeles Wear

Absorption Soundness

Wt. Cu.Ft. Str. Ratio

Remarks

Scale: 1" = ¼ Mile
STATE HIGHWAY COMMISSION OF KANSAS

MATERIAL SURVEY REPORT

SG-32

To

Site No. ___________________________ Date April, 1967

Material Sand & Gravel County Rawlins

Location SE1/4 NE1/4 Sec. 31 Twp. 5S Range 36W

Owner Buell C. Briney Brewster, Kansas

Nature of Deposit Dry Accessibility Fair Site Located on Plate V

Status of Site Open site; not sampled

EXPLORATION DATA

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CORRELATION DATA

Geological Age Tertiary

Geological Source Ogallala Formation

Material Similar To

Specific Gravity (Sat.) (Dry)

Los Angeles Wear

Absorption Soundness

Wt. Cu.Ft. Str. Ratio

Remarks

Scale: 1" = ¼ Mile
STATE HIGHWAY COMMISSION OF KANSAS

MATERIAL SURVEY REPORT

SG-33
To

Site No.  Date  April, 1967

Sand & Gravel  County  Rawlins

Material  Location  Owner  Name  Gerald E. White  Colby, Kansas

NW1/4 NE1/4  Sec.  31  Twp.  5S  Range  33W

Accessibility  Fair  Site Located on Platte VI

Nature of Deposit  Open site; not sampled

EXPLORATION DATA

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CORRELATION DATA

Geological Age  Tertiary

Geological Source  Ogallala Formation

Material Similar To

Specific Gravity (Sat.)  (Dry)

Los Angeles Wear

Absorption  Soundness

Wt. Cu.Ft.  Str. Ratio

Remarks

Scale: 1" = ¼ Mile
MATERIAL SURVEY REPORT

SG-34
To

April, 1967

Site No.  

Date  

Material  Sand & Gravel

County  Rawlins

Location

NE 4 NE 1

Sec. 31  Twp. 5S  Range 33W

Owner  Francis Freeman 1303 E. Loren, Springfield, Mo.

Nature of Deposit  Dry

Accessibility  Good

Site Located on Plate VI

Status of Site  Open site; not sampled

EXPLORATION DATA

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CORRELATION DATA

Geological Age  Tertiary

Geological Source  Ogallala Formation

Material Similar To  

Specific Gravity (Sat.)  (Dry)

Los Angeles Wear  

Absorption  Soundness  

Wt. Cu.ft.  Str. Ratio  

Remarks  

Scale: 1" = ¼ Mile
STATE HIGHWAY COMMISSION OF KANSAS

MATERIAL SURVEY REPORT

SG-35
To

Date April, 1967

Sand & Gravel

Rawlins

County

Location SE\(\frac{1}{4}\) SE\(\frac{3}{4}\) Sec. 30 Twp. 5S Range 33W

Owner Fred W. Finley

Colby, Kansas

Nature of Deposit Dry

Accessibility Good

Status of Site Open site; not sampled

Scale: 1" = ¼ Mile

EXPLORATION DATA

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CORRELATION DATA

Geological Age Tertiary

Geological Source Ogallala Formation

Material Similar To

Specific Gravity (Sat.) (Dry)

Los Angeles Wear

Absorption

Soundness

Wt. Cu.Ft.

Str. Ratio

Remarks
STATE HIGHWAY COMMISSION OF KANSAS

MATERIAL SURVEY REPORT

SG-36
To

Site No. Date April, 1967

Material Sand & Gravel County Rawlins

Location Center Sec. 27 Twp. 3S Range 34W

Owner Ray McFee Address Atwood, Kansas

Nature of Deposit Dry Accessibility Good

Site Located on Plate III

Status of Site Open site; not sampled

EXPLORATION DATA

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<tr>
<th>Test Hole</th>
<th>Material at bottom of Hole</th>
<th>Depth of Overburden</th>
<th>Depth of Material</th>
<th>Percent Retained</th>
<th>Wash 200</th>
<th>G.F.</th>
<th>L.L.</th>
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CORRELATION DATA

Geological Age Tertiary

Geological Source Ogallala Formation

Material Similar To Site No. 16

Specific Gravity (Sat.) (Dry)

Los Angeles Wear

Absorption Soundness

Mt. Cu.Ft. Str. Ratio

Remarks

Scale: 1" = ¼ Mile
 STATE HIGHWAY COMMISSION OF KANSAS

MATERIAL SURVEY REPORT

SG-38
Qc

Site No. ___________________________ Date ___________________________

Sand & Gravel

County ____________________________

Rawlins

Location SW1/4 SW1/4 Sec. 30 Twp. 5S Range 31W

Owner Mark J. Ryan 115 Villa Vista, Colby, Kansas

Nature of Deposit Dry

Accessibility Good

Site Located on Plate VI

Status of Site Open site; not sampled

EXPLORATION DATA

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CORRELATION DATA

Geological Age Quaternary

Geological Source Crete Formation

Material Similar To

Specific Gravity (Sat.) (Dry)

Los Angeles Wear

Absorption Soundness

Mt. Co.Ft. Str. Ratio

Remarks

Scale: 1" = ¼ Mile
MATERIAL SURVEY REPORT

SG-39
To

Site No. ___________________________ Date ________________

Sand & Gravel Rawlins

Material ___________________________ County ___________________________

Location NE 1/4 SW 1/4 Sec. 15 Twp. 5S Range 31W

Owner Robert Bivans Selden, Kansas

Nature of Deposit Dry Accessibility Poor Site located on Plate VI

Status of Site Open site; not sampled

EXPLORATION DATA

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CORRELATION DATA

Geological Age Tertiary

Geological Source Ogallala Formation

Material Similar To ___________________________

Specific Gravity (Sat.) (Dry)

Los Angeles Wear ___________________________

Absorption Soundness _________________________

M. Co.Ct. Str. Ratio _________________________

Remarks ___________________________________

Scale: 1" = 1/4 Mile
STATE HIGHWAY COMMISSION OF KANSAS

MATERIAL SURVEY REPORT

SG-40
Qc

Site No.____________________Date____________________

Sand & GravelCounty____________________

Rawlins

Location NW1/4 SW1/4 Sec. 1

T6S Range 31W

Owner Scott & Elna Brown

Rexford, Kansas

Nature of Deposit Dry

Accessibility Poor

Site Located on Plate VI

Status of Site Open site; not sampled

EXPLORATION DATA

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<th>Material at bottom of Hole</th>
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CORRELATION DATA

Geological Age Quaternary

Geological Source Crete Formation

Material Similar To

Specific Gravity (Sat.) (Dry)

Los Angeles Wear

Absorption Soundness

Wt. Cu.Ft. Str. Ratio

Remarks

Scale: 1" = ¼ Mile
APPENDIX II

The following site data forms are designated as "open sites; sampled." The sites described herein are depicted on the county materials maps as a "□".

LEGEND

= Trail or lane
Road
Railroad
Hedge or trees
Name
Major streams
Intermittent streams
Pond or lake

□ Open materials site: sampled
○ Center of section
□ Farm site
† Cemetery
¶ School
† Church
Town or city
MATERIAL SURVEY REPORT

Q-42
To
April, 1967

Site No. __________________ Date ________________
Material Quartzite __________________ County Rawlins
Location S1/4 SW1/4 Sec. __ 3 Twp. __ 2S Range __ 31W
Owner Julius Kleidosty __________________ Address Atwood, Kansas
Nature of Deposit Dry Accessibility Good Site located on Plate II
Status of Site Open site; sampled

EXPLORATION DATA

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CORRELATION DATA

Geological Age Tertiary
Geological Source Ogallala Formation
Material Similar To Av. SHC Form 619 No. 77-8
Specific Gravity (Tet.) 2.36 (Dry)
Los Angeles Wear 48.8
Absorption Soundness 0.93
Wt. Co.Ft. Str. Ratio
Remarks Expansion possible
* High extreme of 4 holes
** Low extreme of 4 holes

Scale: 1" = 1/4 Mile
MATERIAL SURVEY REPORT

SG-43 QC

Site No. _______ Date _______

Sand & Gravel County Rawlins

Location SW 1/4 SE 1/4 Sec. 12 Twp. 2S Range 32W

Charles Weishapl Herndon, Kansas

Nature of Deposit Dry Accessibility Good - Site Located on Plate II

Status of Site Open site; sampled

EXPLORATION DATA

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<th>Test Hole</th>
<th>Material at Bottom of Hole</th>
<th>Depth of Overburden</th>
<th>Depth of Material</th>
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CORRELATION DATA

Geological Age Quaternary

Geological Source Crete Formation

Material Similar To Ma-2 of USGS Circular 132 Lab. No. 44481

Specific Gravity (Dry) 2.60

Los Angeles Wear 30.0

Absorption Soundness 0.94

Wt. Cu.Ft. 111.0 Str. Ratio 1 day-1.25, 3 day-1.33

Remarks

Scale: 1" = ¼ Mile
**MATERIAL SURVEY REPORT**

**Site No.** SG+44  
**Date** April, 1967  
**County** Rawlins  
**Location** SW\(\frac{1}{4}\) SE\(\frac{1}{4}\) Sec. 14  
**Top.** 2S  
**Range** 32W  
**Owner** August & Anna M. Martin  
**Herndon, Kansas**  
**Nature of Deposit** Wet  
**Accessibility** Good  
**Status of Site** Open site; sampled

**EXPLORATION DATA**

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**CORRELATION DATA**

- **Geological Age** Quaternary
- **Geological Source** Alluvium
- **Material Similar To** Av. SHC Form 619 No. 77-17
- **Specific Gravity (Sat.)** 2.54 (Dry)
- **Los Angeles Wear** 31.8
- **Absorption** 0.90
- **Water Content** 114.9
- **Density** 1.51
- **Remarks** * High extreme of 11 holes
  ** Low extreme of 11 holes

**Scale:** 1" = \(\frac{1}{4}\) Mile
MATERIAL SURVEY REPORT

SG-45
To
April, 1967

Sand & Gravel
Rawlins

SE\(\frac{1}{4}\) NE\(\frac{1}{4}\)
Sec. 20
Twp. 2S
Range 32W

Adrian Samson
Ludell, Kansas

Dry
Good
Site Located on Plate II

Open site; sampled

EXPLORATION DATA

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CORRELATION DATA

Geological Age
Tertiary

Geological Source
Ogallala Formation

Material Similar To
Ma-3 of USGS Circular 132

Lab. No. 36837

Specific Gravity (Sat.)
(Dry) 2.62

Los Angeles Wear

Absorption
Soundness

Mt. Co.Ft. 112.0
Str. Ratio 1 day-1.22, 3 day-1.116

Remarks

Scale: 1" = ¼ Mile
**MATERIAL SURVEY REPORT**

**Site No.** SG-46  
**To** April, 1967

**Material** Sand & Gravel  
**County** Rawlins

**Location** SW ¼ SW ¼  
**Sec.** 23  
**Twp.** 2S  
**Range** 33W

**Owner** Eulalia M. Foster Goddard  
**Address** Box 296, Arvada, Colorado

**Nature of Deposit** Dry  
**Accessibility** Good

**Status of Site** Open site; sampled

### EXPLORATION DATA

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### CORRELATION DATA

**Geological Age** Tertiary

**Geological Source** Ogallala Formation

**Material Similar To** Ma-5 of USGS Circular 132  
**Lab. No.** 64746

**Specific Gravity (Sat.)** (Dry) 2.54

**Los Angeles Wear** 28.2

**Absorption** Soundness 0.90

**Mt. Co.Ft.** 111.1  
**Str. Ratio** 1 day-1.37, 3 day-1.42

**Remarks**

---

Scale: 1" = ¼ Mile
MATERIAL SURVEY REPORT

SG-47  
Qc  
April, 1967

Site No.  
Date  

Material  Sand & Gravel  
County  Rawlins  

Location  
Sec.  25  
Twp.  2S  
Range  33W  

Owner  Ernst Holste  
Address  Ludell, Kansas  

Nature of Deposit  Dry  
Accessibility  Fair  
Site Located on Plate  IV  

Status of Site  Open site; sampled

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### EXPLORATION DATA

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### CORRELATION DATA

Geological Age  Quaternary  
Geological Source  Crete Formation  

Material Similar To  Av. SHC Form 619 No. 77-13  

Specific Gravity (Sat.)  2.58  
(Dry)  

Los Angeles Wear  31.5  

Absorption  
Soundness  0.91  

Wt. Cu.Ft.  108.4  
Str. Ratio  1 day-1.09, 3 day-1.10  

Remarks  
* High extreme of 12 holes  
** Low extreme of 12 holes  

Scale: 1" = 1/8 Mile
STATE HIGHWAY COMMISSION OF KANSAS

MATERIAL SURVEY REPORT

SG+48  Qc
Site No.  Date   April, 1967
Material  County  Rawlins
Sand & Gravel
Location  Sec. 34  Twp. 2S  Range 33W
NE 1/4
Owner  Name  Charles M. Schmid
Address  Atwood, Kansas
Nature of Deposit  Dry  Accessibility  Good  Site located on Plate  IV
Status of Site  Open site; sampled

EXPLORATION DATA

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<th>Depth of overburden</th>
<th>Percent Retained</th>
<th>Wash 200</th>
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CORRELATION DATA

Geological Age  Quaternary
Geological Source  Crete Formation
Material Similar To  Av. SHC Form 619 No. 77-22

Specific Gravity (Sat.)  2.54 (Dry)
Los Angeles Wear  31.6
Absorption  2.04  Soundness  0.95

Mt. Co. Ft.  Str. Ratio
Remarks
  * High extreme of 49 holes
  ** Low extreme of 49 holes

Scale: 1" = 1/4 Mile
STATE HIGHWAY COMMISSION OF KANSAS

MATERIAL SURVEY REPORT

SG+49
QC

Site No.  Date  April, 1967
SG+49
QC

Material  Sand & Gravel  County  Rawlins

Location  SE 4
Sec. 26  2S  Range  33W

Earl Niermeier  Ludell, Kansas

Owner  Name  Earl Niermeier  Address  Ludell, Kansas

Nature of Deposit  Dry  Accessibility  Good  Site Located on Plate  IV

Status of Site  Open site; sampled

EXPLORATION DATA

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CORRELATION DATA

Geological Age  Quaternary

Geological Source  Crete Formation

Material Similar To  Av. SHC Form 619 No. 77-20

Specific Gravity (Nat.)  2.61 (Dry)

Los Angeles Wear  28.9

Absorption  1.01

Soundness  0.97

Wt. Cu.Ft.  Str. Ratio

Remarks  * High extreme of 38 holes

** Low extreme of 38 holes

Scale: 1" = ¼ Mile
STATE HIGHWAY COMMISSION OF KANSAS

MATERIAL SURVEY REPORT

SG+50
Qc

Site No. 12000001 Date April, 1967
Material Sand & Gravel County Rawlins
Location SW1/4 SE1/4 Sec. 34 Twp. 2S Range 33W
Owner See Remarks
Nature of Deposit Dry Accessibility Good Site Located on Plate IV
Status of Site Open site; sampled

EXPLORATION DATA

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CORRELATION DATA

Geological Age Quaternary
Geological Source Crete Formation
Material Similar To Av. SHC Form 619 No. 77-21

Specific Gravity (Sat.) 2.62 (Dry)
Los Angeles Wear 34.1
Absorption 1.11 Soundness 0.94
Wt. Cu.Ft. 1.10 Str. Ratio
Remarks SE1/4 SW1/4 Charles M. Schmid Atwood, Kansas
SW1/4 SE1/4 Walter S. Conant Atwood, Kansas

* High extreme of 14 holes
** Low extreme of 14 holes

Scale: 1" = ¼ Mile
STATE HIGHWAY COMMISSION OF KANSAS

MATERIAL SURVEY REPORT

SG+51
Site No. __________ Date __________
To __________

Material Sand & Gravel

County Rawlins

Location SE 1/4 NW 1/4 Sec. 6

Twp. 3S Range 32W

Owner R. H. Holle, & Marvin Holle

Address Ludell, Kansas

Nature of Deposit Dry

Accessibility Good

Status of Site Open site; sampled

EXPLORATION DATA

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<th>Material at Bottom of Hole</th>
<th>Depth of Material</th>
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CORRELATION DATA

Geological Age Tertiary

Geological Source Ogallala Formation

Material Similar To Av. SHC Form 619 No. 77-24

Specific Gravity (Sat.) 2.51

Los Angeles Wear 32.8

Assorption 2.56

Soundness 0.97

Rem. Cu.Ft. 100

Str. Ratio

Remarks

* High extreme of 25 holes

** Low extreme of 25 holes

US-36

Scale: 1" = 1/4 Mile
**MATERIAL SURVEY REPORT**

**VA-52**

- **Qs**
- **Site No.:** 0
- **Date:** April, 1967
- **Material:** Volcanic Ash
- **County:** Rawlins
- **Location:** SE_1/4 NW_1/4 Sec. 14 Twp. 3S Range 35W
- **Owner:** E.F. Bishop estate, & Ruth LaDuke, McDonald, Kansas
- **Nature of Deposit:** Dry
- **Accessibility:** Fair
- **Status of Site:** Open site; sampled

### EXPLORATION DATA

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<th>Test Hole</th>
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### CORRELATION DATA

- **Geological Age:** Quaternary
- **Geological Source:** Sappa Formation
- **Material Similar To:** Av. SHC Form 619 No. 77-12
- **Specific Gravity (Sat.)**
- **Los Angeles Wear**
- **Absorption**
- **Soundness**
- **Mt. Co.Ft.**
- **Str. Ratio**
- **Remarks:** Cementation; Top-32, Bottom 1

**Scale:** 1" = ¼ Mile
STATE HIGHWAY COMMISSION OF KANSAS

MATERIAL SURVEY REPORT

VA-53  
QS

Site No.  

Material  Volcanic Ash
County  Rawlins

Location  NW 1/4 SW 1/4
Sec.  22
Twp.  3S
Range  35W

Owner  Pearl Brown
Name  Wilson, Kansas

Nature of Deposit  Dry
Accessibility  Fair
Site Located on Plate  III

Status of Site  Open site; sampled

EXPLORATION DATA

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<th>Depth of overburden</th>
<th>Percent Retained</th>
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CORRELATION DATA

Geological Age  Quaternary
Geological Source  Sappa Formation
Material Similar to  Composite Sample SHC Form 619, No. 77-14

Specific Gravity (Sat.)  2.38  (Dry)
Los Angeles Wear
Absorption
Soundness
Wt. Co.Ft.  62.61
Str. Ratio
Remarks  Cementation 2 av.

Scale: 1" = 1/4 Mile
MATERIAL SURVEY REPORT

SG+54
To
April, 1967

Sand & Gravel
Rawlins

Location
NW1 NW1
Sec. 31
Top. 3S
Range 35W

Owner
Pearl Brown
Wilson, Kansas

Nature of Deposit
Dry
Accessibility
Good
Site Located on Plate

Status of Site
Open site; sampled

EXPLORATION DATA

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<th>Depth of Overburden</th>
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CORRELATION DATA

Geological Age
Tertiary

Geological Source
Ogallala Formation

Material Similar To
Av. SHC Form 619 No. 77-11

Specific Gravity (Nat.)
2.62

Los Angeles Wear
29.1

Absorption
Soundness
1.00

Structural Ratio
1 day-1.26, 3 day-1.02

Remarks
Cementation: 15
* High extreme of 19 holes

** Low extreme of 19 holes
MATERIAL SURVEY REPORT

SG-55
Qc

Site No. ___________________________ Date ____________

Material ___________________________ County Rawlins

Location SW 1/4 NW 1/4 Sec. 3 Twp. 3S Range 34W

Owner ___________________________ Address Atwood, Kansas

Nature of Deposit Dry Accessibility Good Site Located on Plate III

Status of Site Open site; sampled

EXPLORATION DATA

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CORRELATION DATA

Geological Age Quaternary

Geological Source Cretaceous Formation

Material Similar To Ma-6 of USGS Circular 132

Lab. No. 64778

Specific Gravity (Sat.) 2.56

Los Angeles Wear 26.6

Absorption 0.93

Unit Co.Ft. 107.0

Str. Ratio 1 day-1.31, 3 day-1.30

Remarks

Scale: 1" = ¼ Mile
MATERIAL SURVEY REPORT

SG-56
QC

Site No.  Date  April, 1967

Material  Sand & Gravel  County  Rawlins

Location  SW¼ SE¼  Sec. 5  Twp. 3S  Range 34W

Arthur J. Samson  Atwood, Kansas

Owner  Name  Address

Nature of Deposit  Dry  Accessibility  Fair

Status of Site  Open site; sampled

EXPLOSION DATA

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CORRELATION DATA

Geological Age  Quaternary

Geological Source  Crete Formation

Material Similar To  Ma-7 of USGS Circular 132

Lab. No. 44486

Specific Gravity (Sat.)  (Dry)  2.60

Los Angeles Wear  29.8

Attraction  Soundness  0.99

Wt. Cu. Ft.  111.0 Dry  Str. Ratio  1 day-1.69, 3 day-1.26

Remarks

Scale: 1" = ¼ Mile
STATE HIGHWAY COMMISSION OF KANSAS

MATERIAL SURVEY REPORT

SG-57

To

April, 1967

Material: Sand & Gravel  County: Rawlins

Location: E\(\frac{1}{2}\) SW\(\frac{1}{2}\)  Sec.: 25  Twp.: 3S  Range: 34W

Owner: Harold Weishapn  Atwood, Kansas

Nature of Deposit: Dry  Accessibility: Poor  Site Located on Plate III

Status of Site: Open site; sampled

EXPLORATION DATA

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<th>Test Hole</th>
<th>Material at bottom of Hole</th>
<th>Depth of Overburden</th>
<th>Percent Retained</th>
<th>Wash 200</th>
<th>G.F.</th>
<th>L.L.</th>
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CORRELATION DATA

Geological Age: Tertiary

Geological Source: Ogallala Formation

Material Similar To: Av. SHC Form 619 No. 77-4

Specific Gravity (Sat.) 2.60  (Dry)

Los Angeles Wear 29.6

Absorption Soundness 0.88

Str. Ratio 1 day-0.91, 3 day-0.83

Remarks

* High extreme of 13 holes

** Low extreme of 13 holes

Scale: 1" = ¼ Mile
STATE HIGHWAY COMMISSION OF KANSAS

MATERIAL SURVEY REPORT

SG-58
To

Site No. ___________________________ Date ____________

Sand & Gravel

County Rawlins

Location NW 1/4, Sec. 11

Twp.. 3S

Range 33W

Will Fikan

Atwood, Kansas

Nature of Deposit Dry

Accessibility Fair

Site Located on Plate 4

Status of Site Open site; Sampled

EXPLORATION DATA

<table>
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<th>Test Hole</th>
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CORRELATION DATA

Geological Age Tertiary

Geological Source Ogallala Formation

Material Similar To Fa-2 of USGS Circular 132

Lab. No. 64745

Specific Gravity (Sat.) (Dry) 2.60

Los Angeles Wear 30.0

Absorption Soundness 0.94

Wt. Cu.Ft. 114.4

Str. Ratio 1 day-1.37, 3 day-1.36

Remarks

Scale: 1" = 1/4 Mile
STATE HIGHWAY COMMISSION OF KANSAS

MATERIAL SURVEY REPORT

SG-59

Qc

Site No. ________________ Date April, 1967

Material Sand & Gravel

County Rawlins

Location NW ¼ SE ¼ Sec. 11

Twp. 4S Range 31W

Owner Albert Sauvage

Oberlin, Kansas

Nature of Deposit Dry

Accessibility Good

Site Located on Plate IV

Status of Site Open site; sampled

EXPLORATION DATA

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<th>Test Hole</th>
<th>Material at bottom of hole</th>
<th>Depth of overburden</th>
<th>Percent Retained</th>
<th>Wash 200</th>
<th>G.F.</th>
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CORRELATION DATA

Geological Age Quaternary

Geological Source Crete Formation

Material Similar To Av. SHC Form 619 No. 77-5

Specific Gravity (Sat.) 2.62 (Dry)

Los Angeles Wear 27.6

Absorption Soundness 0.94

Mt. an. (in)

115 Str. Ratio 1 day-1.42, 3 day-1.34

Remarks

* High extreme of 10 holes

** Low extreme of 10 holes

Scale: 1" = ¼ Mile
STATE HIGHWAY COMMISSION OF KANSAS

MATERIAL SURVEY REPORT

SG-60
Qc

Date: April, 1967

Material: Sand & Gravel
County: Rawlins

Location: SE 1/4 SW 1/4 Sec. 11, Twp. 4S, Range 31W

Owner: Ivy M. Yoos

Nature of Deposit: Dry
Accessibility: Good
Site Located on Plate: IV

Status of Site: Open site; sampled

EXPLORATION DATA

| Test| Material at| Depth of| Percent Retained |
| Nlle | bottom of Nle | over- | | |
| Material | | Burden | Wash 200 | E.F. | L.L. | P.I. |
| 5 | 9 | .26 | 26 | 96 | 3 | 2.78 |

CORRELATION DATA

Geological Age: Quaternary
Geological Source: Crete Formation
Material Similar To: Ma-11 of USGS Circular 132
Lab. No.: 64779

Specific Gravity (Sat.) (Dry): 2.60
Los Angeles Wear
Absorption
Soundness
Wt. Cu. Ft.: 106.3
Str. Ratio: 1 day-1.33, 3 day-1.34

Remarks

Scale: 1" = ¼ Mile
MATERIAL SURVEY REPORT

C-61  
To  
April, 1967

Chert  
Rawlins

SE Corner  
Sec. 9  
Twp. 4S  
Range 36W

Emma L. Loker  
McDonald, Kansas

Dry  
Good

Nature of Deposit  
Accessibility  
Site Located on Plate

Open site; sampled

EXPLORATION DATA

<table>
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<tr>
<th>Test Hole</th>
<th>Material at Bottom of Hole</th>
<th>Depth of Overburden</th>
<th>Depth of Material</th>
<th>Percent Retained</th>
<th>Wash 200</th>
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CORRELATION DATA

Geological Age  
Tertiary

Geological Source  
Oqallala Formation

Material Similar To Ch-1 of USGS Circular 132

Specific Gravity (Sat.)  
(Dry) 2.05

Los Angeles Value  
34.8

Absorption  
3.76

Soundness  
0.83

Wt. Cu.Ft.  
Str. Ratio

Remarks

Scale: 1" = 1/4 Mile
STATE HIGHWAY COMMISSION OF KANSAS

MATERIAL SURVEY REPORT

SG-62
To

Site No. Date April, 1967

Sand & Gravel County Rawlins

Location Sec. 16 Twp. 5S Range 33W

Frank R. Ruda Atwood, Kansas

Nature of Deposit Dry Accessibility Poor Site Located on Plate VI

Status of Site Open site; sampled

EXPLORATION DATA

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CORRELATION DATA

Geological Age Tertiary

Geological Source Ogallala Formation

Material Similar To Ma-18 of USGS Circular 132

Specific Gravity (Sat.) (Dry) 2.62

Los Angeles Wear 29.8

Absorption Soundness 0.97

Wt. Co Ft. 112.0 Str. Ratio

Remarks

Scale: 1" = ¼ Mile
**STATE HIGHWAY COMMISSION OF KANSAS**

**MATERIAL SURVEY REPORT**

SG-63  
QC

Site No.  Date  April, 1967

Material  Sand & Gravel  County  Rawlins

Location  SW¼ NE¼  Sec. 16  Tup. 5S  Range 31W

Owner  George P. Schmahl  117 S. Griffith, Oberlin, Kansas

Nature of Deposit  Dry  Accessibility  Good  Site located on Plate VI

Status of Site  Open site; sampled

### EXPLORATION DATA

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### CORRELATION DATA

- **Geological Age**: Quaternary
- **Geological Source**: Crete Formation
- **Material Similar To**: Ma-16 of USGS Circular 132

- **Specific Gravity (Sat.)**: (Dry)
- **Los Angeles Wear**: 
- **Absorption**: 
- **Soundness**: 
- **Wt. Cu.Ft.**: 
- **Str. Ratio**: 
- **Remarks**: Small pit-No production

Scale: 1" = ¼ Mile
Tertiary
Ogallala Formation
Geological Source: Fa-6 of USGS, Circular 132
Material Similar to: Lab. No. 64638
Specific Gravity (max.): 2.61
Specific Gravity (min.): 1.105
Density: 1 day-1.30, 3 day-1.22

Site No. SG-64
To

Material: Sand & Gravel
Location: SW¼ NE¼ Sec. 22, T. 5S, R. 31W
Owner: Robert F. Bivans
Return of Deposits: Poor
Status of Site: Open site, sampled

EXPLANATION DATA

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1" = ¼ Mile

STATE HIGHWAY COMMISSION OF KANSAS
MATERIAL SURVEY REPORT

April, 1967

Count: Rawlins
County: Reno
Range: Range 5S
STATE HIGHWAY COMMISSION OF KANSAS

MATERIAL SURVEY REPORT

SG-65

SG-70

QC

QC

Qc

Qc

Site No. 

Material 

Sand & Gravel 

County 

Rawlins 

Location 

NW 3/4 SW 1/4 

Sec. 

11 

Twp. 

58 

Range 

31W 

Owner 

Ellef C. Erickson 

Address 

Rexford, Kansas 

Nature of Deposit 

Dry 

Accessibility 

Good 

Site Located on Plate 

VI 

Status of Site 

Open site; sampled 

EXPLORATION DATA

<table>
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<tr>
<th>Test Hole</th>
<th>Material at Bottom of Hole</th>
<th>Depth of Overburden</th>
<th>Depth of Material</th>
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CORRELATION DATA

Geological Age

Quaternary

Crete Formation

Geological Source

Ma-15 of USGS Circular 132

Lab. No. 64637

Specific Gravity (Sat.)

(Dry) 2.56

Los Angeles Wear

30.4

Absorption

Soundness 0.92


102.4

Str. Ratio 1 day-1.61, 3 day-1.61

Remarks

Scale: 1" = 1/4 Mile
STATE HIGHWAY COMMISSION OF KANSAS

MATERIAL SURVEY REPORT

SG-66
To

Site No. ________________________ Date ________________________

Sand & Gravel ________________________ Rawlins

County ________________________

Location ________________________ Sec. ________________________ Twp. ________________________ Range ________________________

Howard Grover ________________________ Colby, Kansas

Owner ________________________ address ________________________

Nature of Deposit ________________________ Accessibility ________________________ Site Located on Plate ________________________

Status of Site ________________________

Open site; sampled

EXPLORATION DATA

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<th>Depth of Overburden</th>
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CORRELATION DATA

Geological Age ________________________

Tertiary

Geological Source ________________________

Ogallala Formation

Material Similar To ________________________

Av. SHC Form 619 No. 77-23

Specific Gravity (Sat.) ________________________ (Dry) ________________________

2.63

Los Angeles Wear ________________________

30.8

Adsorption 1.73 Soundness 0.92

Wt. Cu.Ft. ________________________ Str. Ratio ________________________

Remarks ________________________

* High extreme of 24 holes

** Low extreme of 24 holes

Scale: 1" = ¼ Mile
STATE HIGHWAY COMMISSION OF KANSAS

MATERIAL SURVEY REPORT

Q-67
TO

Site No. ___________________________ Date April, 1967

Material Quartzite County Rawlins

Location SE1/4 NW1/4 Sec. 29 Top. 2S Range 32W

Owner Name Ernst Holste

Address Ludell, Kansas

Nature of Deposit Dry Accessibility Fair Site Located on Plate IV

Status of Site Open site; sampled

EXPLORATION DATA

<table>
<thead>
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<th>Test Hole</th>
<th>Material at Bottom of Hole</th>
<th>Depth of Overburden</th>
<th>Percent Retained</th>
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CORRELATION DATA

Geological Age Tertiary

Geological Source Ogallala Formation

Material Similar To Q-3 of USGS Circular 132

Specific Gravity (Sat.) — (Dry)

Los Angeles Wear 39.9

Absorption 1.49 Soundness

Wt. Cu. Ft. Str. Ratio

Remarks

Scale: 1" = ¼ Mile
APPENDIX III

The following site data forms are designated as "prospective sites; not sampled." The sites described herein are depicted on the county materials maps as a "○".

LEGEND

Trail or lane  Prospective materials site; not sampled
Road
Railroad
Hedge or trees
Major streams
Intermittent streams
Pond or lake

Center of section
Farm site
Cemetery
School
Church
Town or city
MATERIAL SURVEY REPORT

SG+68
To

Site No. Date April, 1967
Material Sand & Gravel County Rawlins
Location NW 1/4 NE 1/4 Sec. 33 Top. 4S Range 35W
Chauncey Dewey, Jr. et al Brewster, Kansas
Nature of Deposit Dry Accessibility Fair Site Located on Plate V
Status of Site Prospective site; not sampled

EXCAVATION DATA

<table>
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<tr>
<th>Test Hole</th>
<th>Material at Bottom of Hole</th>
<th>Depth of Material</th>
<th>Percent Retained</th>
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<td></td>
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CORRELATION DATA

Geological Age Tertiary
Geological Source Ogallala Formation
Material Similar To Site No. 26

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

Scale: 1" = ¼ Mile
STATE HIGHWAY COMMISSION OF KANSAS

MATERIAL SURVEY REPORT

SG+69

To

Date April, 1967

Site No.  

Sand & Gravel

County Rawlins

Location NE\(\frac{1}{4}\) SE\(\frac{1}{4}\) Sec. 25 Twp. 4S Range 35W

Owner Clara Dixson

Atwood, Kansas

Nature of Deposit Dry

Accessibility Poor

Site Located on Plate V

Status of Site Prospective site; not sampled

EXPLORATION DATA

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<th>Test Hole</th>
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<th>Depth of Material</th>
<th>Percent Retained</th>
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<td>Wash 200 G.F. L.L. P.I.</td>
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CORRELATION DATA

Geological Age Tertiary

Geological Source Ogallala Formation

Material Similar To

Specific Gravity (Sat.) (Dry)

Los Angeles Wear

Absorption Soundness

Mt. Co. Ft. Str. Ratio

Remarks

Scale: 1" = \(\frac{1}{4}\) Mile
STATE HIGHWAY COMMISSION OF KANSAS

MATERIAL SURVEY REPORT

SG+70
Qc

Site No. _______________________ Date ________ April, 1967

Material _______________________ County ________ Rawlins

Location _______________________ Sec. _______ 11  Twp. 5S  Range 31W

Owner _______________________ Address ________ Scott W. Brown  Rexford, Kansas

Nature of Deposit _______________________ Accessibility ____________________ Site Located on Plate VI

Status of Site _______________________ Prospective site; not sampled

EXPLORATION DATA

<table>
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<tr>
<th>Test Hole</th>
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<th>Percent Retained</th>
<th>Mesh 200</th>
<th>G.F.</th>
<th>L.L.</th>
<th>P.I.</th>
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CORRELATION DATA

Geological Age _______________________ Quaternary

Geological Source _______________________ Crete Formation

Material Similar To _______________________ Site No. 65

Specific Gravity (Pet.) _______________________ (Dry)

Los Angeles Wear _______________________ Soundness

Absorption _______________________ Str. Ratio

Scale: 1" = ¼ Mile
SG-71
To
April, 1967

Sand & Gravel
Rawlins

SW ¼ SE ¼
14
5S
31W

F. W. Woerpel 136 Marsh Rd., Watsonville, California

Dry
Poor
Prospective site; not sampled

EXPLORATION DATA

<table>
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<th>Test Hole</th>
<th>Material at bottom of Hole</th>
<th>Depth of Overburden</th>
<th>Percent Retained</th>
<th>Wash 200</th>
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<th>L.L.</th>
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CORRELATION DATA

Tertiary

Ogallala Formation

Geological Source

Material Similar To

Specific Gravity (Sat.)

Los Angeles Wear

Absorption

Soundness

M.t. Cw.Ft.

Str. Ratio

Remarks

Scale: 1" = ¼ Mile
APPENDIX IV

The following site data forms are designated as "prospective sites; sampled." The sites described herein are depicted on the county materials maps as a "\(\wedge\)."

---

LEGEND

--- Trail or lane

Road

Railroad

Hedge or trees

Major streams

Intermittent streams

Pond or lake

\(\wedge\) Prospective materials site; not sampled

\(\bigcirc\) Center of section

\(\square\) Farm site

\(\bigoplus\) Cemetery

\(\bigtriangleup\) School

\(\bigast\) Church

\[\textit{[Town or city]}\]
STATE HIGHWAY COMMISSION OF KANSAS

MATERIAL SURVEY REPORT

SG-72  
To  

Site No.  

Date  April, 1967  

Material  Sand & Gravel  
County  Rawlins  

Location  NW  
Sec.  32  
Top.  2S  
Range  32W  

Owner  Imogene M. Howland  
Address  Atwood, Kansas  

Nature of Deposit  Dry  
Accessibility  Fair  
Status of Site  Prospective site; sampled  

SITE LOCATION

EXPLORATION DATA

<table>
<thead>
<tr>
<th>Test No.</th>
<th>Material at Bottom of Hole</th>
<th>Depth of Overburden</th>
<th>Percent Retained</th>
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<td>2</td>
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CORRELATION DATA

Geological Age  Tertiary  
Geological Source  Ogallala Formation  
Material Similar To  Ma-4 of USGS Circular 132  
Lab. No. 50952  

Specific Gravity (Sat.) (Dry)  2.55  
Los Angeles Wear  31.2  
Absorption  0.88  
Wt. Cu.Ft.  111.4  
Str. Ratio  1 day-1.12, 3 day-1.15  
Remarks  

Scale: 1" = 1/4 Mile
MATERIAL SURVEY REPORT

SG-73
To
April, 1967

Sand & Gravel
Rawlins

Location
NW 1/4 SW 1/4 Sec. 21
Top. 3S
Range 35W

Owner
H. A. Bearley
McDonald, Kansas

Nature of Deposit
Dry

Accessibility
Fair

Site Located On Plate
III

Status of Site
Prospective site; sampled

EXPLORATION DATA

<table>
<thead>
<tr>
<th>Test Hole</th>
<th>Material at Bottom of Hole</th>
<th>Depth of Overburden</th>
<th>Percent Retained</th>
<th>Wash 200</th>
<th>G.F.</th>
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CORRELATION DATA

Geological Age
Tertiary

Geological Source
Ogallala Formation

Material Similar To
Av. SHC Form 619 No. 77-15

Specific Gravity (Sat.) (Dry)
2.56
31.3

Los Angeles Wear

Absorption
Soundness
0.97

Wt. Cu.Ft.
110.8
1 day-1.06, 3 day-0.97

Remarks
* High extreme of 14 holes
** Low extreme of 14 holes

Scale: 1" = ¼ Mile
STATE HIGHWAY COMMISSION OF KANSAS

MATERIAL SURVEY REPORT

SG-74
To

April, 1967

Site No. Date

Sand & Gravel

Rawlins

County

Location

NW Corner NW 1/4 Sec. 24 Twp. 3S Range 35W

Owner

Delbert V. Hawkins

Address

Atwood, Kansas

Nature of Deposit

Dry

Accessibility

Good

Status of Site

Prospective site; sampled

EXPLORATION DATA

Test Percent Retained

<table>
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<tr>
<th>Hole</th>
<th>Depth of</th>
<th>Material at bottom of Hole</th>
<th>Depth of Burden</th>
<th>Wash</th>
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<th>L.L.</th>
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CORRELATION DATA

Geological Age

Tertiary

Geological Source

Ogallala Formation

Material Similar To

Ma-9 of USGS Circular 132

Lab. No. 34768

Specific Gravity (Sat.)

(Dry) 2.55

Los Angeles Wear

Absorption

Soundness

Wt. Cu.Ft.

112.0

Str. Ratio

1 day-1.07, 3 day-1.01

Remarks

Scale: 1" = 1/4 Mile
VA-75
To

April, 1967

Volcanic Ash
Rawlins

NW Corner NW¼ Sec. 33 Twp. 3S Range 34W

George Pianalto
Atwood, Kansas

Dry
Good
Prospective site, sampled

EXPLORATION DATA

<table>
<thead>
<tr>
<th>Test No.</th>
<th>Material at Bottom of Hole</th>
<th>Depth of Overburden</th>
<th>Percent Retained</th>
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<tr>
<td>3</td>
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</table>

CORRELATION DATA

Geological Age
Tertiary

Geological Source
Ogallala Formation

Material Similar To
Ja-1 of USGS Circular 132

Specific Gravity (Sat.)
(Dry) 2.46

Los Angeles Wear

Absorption
Soundness

M. C. F. 60.5
Str. Ratio

Remarks

Scale: 1" = ½ Mile
STATE HIGHWAY COMMISSION OF KANSAS

MATERIAL SURVEY REPORT

SG-76
To
April, 1967

Material: Sand & Gravel
County: Rawlins
Location: NE 1/4 NE 1/4 Sec. 25 Twp. 4S Range 32W
Owner: The Mumm Brothers
Address: Gem, Kansas
Nature of Deposit: Dry
Accessibility: Fair
Status of Site: Prospective site; sampled

EXPLORATION DATA

<table>
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<tr>
<th>Test Hole</th>
<th>Material at Bottom of Hole</th>
<th>Depth of Overburden</th>
<th>Depth of Material</th>
<th>Percent Retained</th>
<th>Washed</th>
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CORRELATION DATA

Geological Age: Tertiary
Geological Source: Ogallala Formation
Material Similar To: Ma-12 of USGS Circular 132
Lab. No.: 64640

Specific Gravity (Sat.) (Dry): 2.59
Los Angeles Wear: 31.8
Absorption: Soundness 0.97
Wt. Cu.Ft.: 108.0
Str. Ratio: 1 day-1.27, 3 day-1.38

Remarks:

Scale: 1" = 1/4 Mile
STATE HIGHWAY COMMISSION OF KANSAS

MATERIAL SURVEY REPORT

SG-77 To

Site No. Date April, 1967

Material Sand & Gravel County Rawlins

Location NE 1/4 NW 1/4 Sec. 29 Twp. 4S Range 34W

Owner Fern L. Price Address Atwood, Kansas

Nature of Deposit Dry Accessibility Site Located on Plate

Status of Site Prospective site; sampled

EXPLOSION DATA

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CORRELATION DATA

Geological Age Tertiary

Geological Source Ogallala Formation

Material Similar To Ma-13 of USGS Circular 132

Lab. No. 64727

Specific Gravity (Sat.) (Dry) 2.60

Los Angeles Wear 28.4

Absorption Soundness 0.95

M. C. Ft. 112.0 Str. Ratio 1 day-1.50, 3 day-1.40

Remarks

Scale: 1" = ¼ Mile
STATE HIGHWAY COMMISSION OF KANSAS

MATERIAL SURVEY REPORT

SG-78
To
April, 1967

Sand & Gravel
Rawlins

Location
NW\(^2\) SW\(^4\)
Sec. 17
Twp. 4S
Range 34W

Clara D. Dixson
Atwood, Kansas

Nature of Deposit
Dry
Accessibility
Poor
Site Located on Plate V

Status of Site
Prospective site; sampled

EXPLORATION DATA

<table>
<thead>
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</table>

Tertiary
Gallala Formation

Material Similar To
Av. SHC Form 619 No. 77-6

Specific Gravity (Sat.)
2.60

Los Angeles Wear
28.1

Absorption

Soundness
0.90

Wt. Cu.Ft.
108

Str. Ratio
1 day-1.19, 3 day-1.05

Remarks

* High extreme of 7 holes

** Low extreme of 7 holes

Scale: 1" = 1/4 Mile
MATERIAL SURVEY REPORT

SG-79
To

Site No. __________________ Date April, 1967

Material Sand & Gravel County Rawlins

Location NW 1/4 SW 1/4 Sec. 25 Twp. 5S Range 32W

Owner Curtis Knudson Gem, Kansas

Nature of Deposit Dry Accessibility Fair Site Located on Plate VI

Status of Site Prospective site; sampled

EXPLORATION DATA

<table>
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<th>Test No.</th>
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CORRELATION DATA

Geological Age Tertiary

Geological Source Ogallala Formation

Material Similar To Ma-17 of USGS Circular 132

Lab. No. 64639

Specific Gravity (Sat.) (Dry) 2.56

Los Angeles Wear 30.6

Absorption Soundness 0.98

M. C. F. 106.2 Str. Ratio 1 day-1.70, 3 day-1.63

Remarks

Scale: 1" = 1/4 Mile
MATERIAL SURVEY REPORT

SG-80
Qc

Site No. ______________________ Date ______________________

Sand & Gravel

County Rawlins

Location NE_2/4 SE_1/4 Sec. 2 Twp. 5S Range 31W

Owner Scott W. Brown

Address Rexford, Kansas

Nature of Deposit Dry

Accessibility Good

Site Located on Plate VI

Status of Site Prospective site; sampled

EXPLORATION DATA

<table>
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<th>Test Hole</th>
<th>Material at Bottom of Hole</th>
<th>Depth of Overburden</th>
<th>Depth of Material</th>
<th>Percent Retained</th>
<th>Wash 200</th>
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<th>L.L.</th>
<th>P.I.</th>
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CORRELATION DATA

Geological Age Quaternary

Geological Source Crete Formation

Material Similar To Ma-14 of USGS Circular 132

Lab. No. 64726

Specific Gravity (Pat.) (Dry) 2.58

Los Angeles Wear 28.0

Absorption Soundness 0.95

Wt. Cu.Ft. 110.5 Str. Ratio 1 day-1.00, 3 day-1.09

Remarks ____________________________

Scale: 1" = 1/4 Mile
GLOSSARY OF SIGNIFICANT TERMS

Absorption: Determined by tests performed in accordance with A.A.S.H.O. designation T 84 and T 85.

Alluvium: A general term used to refer to deposits laid down by water. In this report it is used to refer to material laid down by running water in the floodplain of the stream during relatively recent time.

Bentonite: A clay-like material with a montmorillonite content derived from weathered volcanic ash.

Chert: A hard, dense siliceous rock composed of chalcedony, opal, and quartz.

Colluvial deposits: Heterogeneous aggregates of rock debris resulting from the transporting action of gravity.

Coarse sand: An aggregation of unconsolidated mineral or rock particles the dimensions of which are usually considered to be less than two millimeters and more than five-tenths of a millimeter. The term refers to size of grain and not composition; however, since most sands are composed of quartz and feldspar, and the term is used without qualification, a siliceous composition is implied.

Conglomerate: An aggregate of rounded minerals or rock particles the dimensions of which are usually more than two millimeters. The rock can be consolidated or unconsolidated.

Eolian deposits: Materials produced and laid down by wind action.

Fine sand: An aggregation of unconsolidated minerals or rock particles the dimensions of which are usually considered to be less than five-tenths of a millimeter and greater than five hundredths of a millimeter. The term refers to size of grain and not composition; however, since most sands are composed of quartz and feldspar, and the term is used without qualifications, a siliceous composition is implied.

Geologic Era: Largest unit of geologic time. Paleozoic, Mesozoic, and Cenozoic are examples.

Geologic Period: A unit of geologic time, smaller than an era and larger than an epoch. Cambrian, Cretaceous, and Tertiary are examples.

Geologic System: A term that refers to rocks or deposits that were laid down during a particular geologic period. Cambrian, Cretaceous, and Tertiary are examples.

Gradation factor: Sometimes referred to as the fineness nodules, the value obtained by adding the percentages of material retained on the 1/16", 3/4", 3/8", 4, 8, 16, 30, 50, and 100 sieves respectively and dividing the sum by 100.

Ground-water: Water in the zone of saturation, that is, below the water table. In a more general and popular sense, any water that is standing in or passing through the ground may be called "ground-water."

Light type surfacing material: Siliceous gravel or crushed limestone placed on roads to provide an all weather surface or more commonly "a gravel road."

Liquid limit: Determined by tests performed in accordance with section Y1-18 of the State Highway Commission of Kansas Standard Specifications, 1966 edition.

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

Loess: Silt size material laid down by wind.


Material source bed: A particular geologic unit, consolidated or unconsolidated, that provides material for construction purposes.

Open materials site: A pit or quarry which has produced or is producing material suitable for construction purposes.

Plastic index: Determined by tests performed in accordance with section Y1-18 of the State Highway Commission of Kansas Specifications, 1966 edition.

Pleistocene Series: Deposits laid down during the Pleistocene Epoch.

Sedimentary quartzite: A dense sandstone or conglomeratic rock which has been thoroughly cemented by silica.


Specific gravity: Determined by tests performed in accordance with A.A.S.H.O. designation T 84 for fine aggregate and T 85 for coarse aggregate.

Stratigraphic position: The vertical position of a geologic unit in relation to other geologic units.
Strength ratio: Determined by tests performed in accordance with A.A.S.H.O. designation T 71.

Unconsolidated deposits: Deposits of clay, silt, sand, or gravel without a cementing matrix.

Wash: Material passing the no. 200 sieve. Determined by tests performed in accordance with A.A.S.H.O. designation T 11.

Weight per cubic foot: Determined by tests performed in accordance with A.A.S.H.O. designation T 19.
SELECTED REFERENCES


