

**THE UNIVERSITY OF TEXAS**

Bureau of Economic Geology

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**MINERAL RESOURCE SURVEY**

Circular No. 18

**REPORT ON GRAVEL IN WILLIAMSON COUNTY**

by David Leedy, Supervisor

The eastern part of Williamson County is in the black land belt of Texas where roads must be surfaced to be passable in wet weather. Road materials are scarce in this area, so much of the time spent on the mineral resource survey was concentrated on finding gravel.

Two main streams traverse Williamson County—San Gabriel River, composed of two forks which join at Georgetown, and Brushy Creek. These streams head to the west in areas of Lower Cretaceous rocks from which they obtain hard limestone and flint which is carried to the lower reaches of these streams and deposited as gravel.

The streams during the past have been excavating their valleys and thus lowering their beds. During this process gravel deposits were isolated along the sides of these valleys and are now scattered throughout the area as terrace remnants. These terraces range from the present stream bed well up the sides of the stream valleys.

**Round Rock Area**

In the vicinity of Round Rock, Brushy Creek has several gravel deposits along it, mostly in low terraces. A pit about 300 feet east of highway No. 81 on the north side of Brushy Creek on land owned by Mr. Tom Nelson, of Round Rock, was investigated for the quality and amount of gravel. This pit is in a terrace about 18 feet above stream level and consequently is older than another one present which ranges from 3 to 9 feet above stream level. Eight test pits were excavated around the borders of this pit and from one to four cubic yards of material was examined from each test pit.

**Hutto Area**

On the Farley ranch 2.8 miles southeast of Hutto and half a mile north of Brushy Creek is a gravel pit from which gravel was examined in 14 test pits. The basal 5 to 8 feet of gravel is well cemented, followed by a 6-inch layer of uncemented gravel above which in most places is a layer of silt 1 to 2 feet thick. Above the silt is another 2- to 5-foot layer of cemented gravel. The overburden ranges from 3 to 6 feet thick. About 40,000 cubic yards of gravel remain in this pit.

Other deposits were examined on the Kruger farm northeast of Hutto, at the Nelson Gin north of Hutto near Monadale School, and on the Nelson farm north of the Monadale School.

**Jonah-Walburg Area**

The Leggett pit 1½ miles west of Jonah along the Taylor-Georgetown highway is near water level of San Gabriel River. About 20,000 cubic yards of gravel is available.

Two caliche areas east of Walburg were examined. One of these on the Wagner farm has about 5000 cubic yards of good caliche available, and the other on the Brown farm has about 1000 cubic yards of a low grade caliche present.

**Granger-Schwertner Area**

Five miles northwest of Granger, 2 miles south of Schwertner, and 300 yards north of Willis Creek, grade-A gravel was found in 10 test pits on the Bart Trayler farm. These pits were 8 feet deep but did not penetrate to bed rock. On the basis of the amount of testing done on this 100- by 600-foot terrace it is estimated that about 25,000 cubic yards of gravel are present.

The gravel contains enough sand and clay to serve as a binder. The pebbles are mostly small, round, hard limestone.

An extension of this area to the northwest was found containing another 25,000 cubic yards of gravel.

Ten widely spaced test pits to the north of this deposit indicate the presence of 50,000 cubic yards of gravel.

These gravel areas are the most important in this part of the county and are sufficient to surface the roads tributary to it.

A caliche pit also on the Bart Trayler farm has about 3000 cubic yards of available surfacing material in it.

**Friendship Area**

Two and one-half miles east of Friendship on Mrs. Bessie Brookshire's farm 8 feet of gravel is exposed in road ditches beneath 4 feet of silt. Test pits in the adjoining areas show 8 to 10 feet of good gravel. The presence of farm dwellings on the best part of this deposit, however, limits the use of this gravel.

On the Juracek farm 3 miles northeast of Friendship several test pits were dug on the basis of 4 feet of gravel found in a well. If gravel is present it is too deeply buried to be commercial.

**Circleville Area**

Half a mile north of San Gabriel River on the Smith farm a terrace extends for over a mile west of Circleville School. Test pits show 15 feet of excellent gravel, with 4 to 5 feet of overlying soil. The gravel rests on clay. At the western end of this terrace a newly opened gravel pit has 10 feet of good gravel without overburden. Two hundred yards south of this terrace is a mound containing several thousand yards of excellent gravel.

To the south of San Gabriel River on the W. F. Goetz farm about 3 miles north of Taylor a small amount of poor gravel was found.

Just to the north of this farm is a very large gravel deposit on which testing was not permitted by the owner. This may be one of the largest deposits in the area.

One mile east of the Taylor-Granger road an enormous gravel deposit was found on the Ernest McFadin farm. Enough time to test it was lacking, but from natural exposures it is estimated that 100,000 cubic yards are available.

Another deposit just east of the Circleville School has an estimated 20,000 cubic yards of gravel available.

#### Taylor Area

South of Taylor on the Mulaski farm a good gravel deposit about 200 by 400 feet containing 6000 to 8000 cubic yards of gravel was found. The pebbles are rather large and are in sharp sand containing some clay. Throughout the deposit are lenses of caliche. The light gray gravel layers alternate with thicker layers of rich tan or sienna gravel layers containing occasional large fossil shells.

To the east 1000 feet a continuation of this deposit was found containing about 2000 cubic yards of grade-B gravel.

On the Hinston farm a fourth of a mile west of Rice Crossing on Brushy Creek a wash-gravel was found of limited amount and inferior quality. On the George Stiba farm a fourth of a mile east of the Rice Crossing School and 200 yards south of the Stiba farm house, another low-grade gravel deposit was found. To the east of this another 100 cubic yard remnant is present.

To the north on the Holliday farm, 8 feet of gravel under 20 feet of clay was found in a well. The gravel outcrops nearby; therefore, the overburden must be excessive and the gravel economically unavailable.

Other deposits examined in the vicinity of Taylor are: pit near Wilson Springs School; Taylor city pit on north edge of town; cemetery pit on east edge of Taylor; gravel bed near Taylor country club; and a gravel remnant east of the railroad about halfway between Taylor and Coupland.

The following table is a summary of the deposits examined, giving location of deposit, grade of gravel, and estimate of tonnage. The numbers refer to map localities on a map submitted with this report. Detailed sketches and notes on many of these deposits are in the files of the Bureau of Economic Geology.

#### Summary of Road Materials Investigated

#	Location	Grade	Cubic yards
1,2	George Stiba farm, ¼ mile east of Rice Crossing School . . . . .	C	1,000
3	Holliday farm north of Rice Crossing . . . . .	Overburden too great; non-commercial	
3-A	East of railroad, midway between Taylor and Coupland . . . . .	Remnant	
4	Near Taylor Country Club . . . . .	B	2,000
5	Mulaski farm, 1 mile south of Taylor . . . . .	A	6,000- 8,000
6	Mulaski farm, 1,000 feet east of No. 5 . . . . .	B	2,000
7	Near cemetery, east city limit of Taylor . . . . .	Good	5,000
8	Taylor city pit, near north city limit of Taylor . . . . .	Good	5,000- 10,000
9	Pit near Wilson Spring School, northwest of Taylor . . . . .	Good	4,000- 5,000
10	Kruger farm, northeast of Hutto . . . . .	Good	5,000
11	Nelson gin pit, north of Hutto near Monadale School . . . . .	Good	5,000- 6,000
12	Nelson pit, north of Monadale School . . . . .	A	10,000- 15,000
13	W. F. Goetz farm, south of Circleville . . . . .	Poor	500
14	North of No. 13 . . . . .	A	50,000
15	Ernest McFadin farm, 1 mile east of Circleville . . . . .	A and B	100,000
16	Smith farm, ½ mile north of San Gabriel at Circleville . . . . .	A	50,000
17	Pit just east of Circleville School . . . . .	B	20,000
18	Juracek farm, 3 miles northeast of Friendship . . . . .	Overburden too great; non-commercial	
19	Bessie Brookshire farm, 2½ miles east of Friendship . . . . .	A	15,000
20	Bart Trayler farm, 5 miles northwest of Granger . . . . .	Fair	3,000
21	Bart Trayler farm, west of No. 20 . . . . .	A	50,000
22	Bart Trayler farm, north of No. 21 . . . . .	A	50,000
23	Farley ranch, 2.8 miles southeast of Hutto . . . . .	A	40,000
24	Nelson pit, north edge of Round Rock . . . . .	B	10,000- 15,000
25	Wagner farm, east of Walburg . . . . .	Caliche; good	5,000
26	Brown farm, east of Walburg . . . . .	Caliche; poor	1,000
27	Leggett gravel pit, 1½ miles west of Jonah . . . . .	A	20,000
Total			459,500-478-500