INDUSTRIAL RESOURCES, INDUSTRIES, AND POTENTIALITIES OF THE SEVENTH CONGRESSIONAL DISTRICT OF TEXAS

A THESIS

and the second second	
	•

Approved:

Dean of the College

INDUSTRIAL RESOURCES, INDUSTRIES, AND POTENTIALITIES OF THE SEVENTH CONGRESSIONAL DISTRICT OF TEXAS

A THESIS

Submitted to the Faculty of
Sam Houston State Teachers College
in Partial Fulfillment of the Requirements

for the Degree

MASTERS OF ARTS

By

Joseph C. Leadbetter, Jr.

Huntsville, Texas
January, 1953

ACKNOWLEDGMENTS

Grateful acknowledgment is made to Professor

J. B. Snodgrass of the Industrial Arts Department,

Sam Houston State Teachers College for his helpful
guidance and supervision in preparing this thesis.

The writer also wishes to express his appreciation to Professor Victor Randel of the Industrial Arts

Department and to Dr. S. E. Ryan of the Education Department,

Sam Houston State Teachers College for their helpful guidance and advice in preparing this thesis.

J. C. L.

TABLE OF CONTENTS

SECTI	ON	PAGE
I.	INTRODUCTION	. 1
II.	HISTORICAL AND GEOGRAPHICAL BACKGROUND OF THE	
	COUNTIES	. 5
	Anderson	. 6
	Cherokee	. 8
	Grimes	. 11
	Henderson	. 14
	Houston	. 16
	Madison	. 19
	Montgomery	. 22
	Nacogdoches	25
	Polk	28
	San Jacinto	31
	Trinity	34
	Walker	36
III.	PRINCIPAL INDUSTRIAL RESOURCES OF THIS DISTRICT	40
	Asphalt deposits	41
	Building stones	43
	Clays	46
	Crushed rock	49
	Fuller's earth	51
	Gravel deposits	54
	Iron ore deposits	57

SECTION	· · · · · · · · · · · · · · · · · · ·	PAGE
	Kaolin	60
	Lignite	62
	Lime	65
	Mica	68
	Mineral waters	70
	Oil and its products	72
	Phosphate	76
	Quartzite	78
	Salt	80
	Sand	82
	Sandstone	84
	Silica	86
	Strontium	88
	Sulphur	90
	Timber and its products	92
IV. PR	INCIPAL INDUSTRIES OF THIS DISTRICT	100
,	Awning and shade factories	101
	Bakeries	101
	Baseball bat factory	103
	Basket factories	103
	Bottling works	104
	Box and crate factories	108
	Brassiere factories	109
	Brick factories	110

SECTION	1	PAGE
	Broom factory	111
	Bus body factory	111
	Candy factories	112
	Canning factories	112
	Carbon black factory	114
	Childrens clothing factories	115
	Concrete block factories	115
	Concrete culvert factory	116
	Cotton by-products plants	117
	Feed mills	117
	Fertilizer plants	119
	Flooring mills	120
	Furniture factories	121
	Garment factories	122
	Glass factories	124
	Handle factory	125
	Ice cream factories	125
	Ice plants	126
	Iron ore beneficiating plant	130
	Kiln factory	131
	Leather goods factory	131
	Mattress factories	131
	Monument factories	133
	Pottery plant	134

SECTION		PAGE
	Power plant	134
	Power saw factory	134
	Railroad shops	135
*	Refineries and pumping stations	135
	Sash and door factories	137
	Sawmills	138
V	Sawmill equipment factory	160
201	Tile factories	161
	Truck body factories	162
	Valves and fittings factory	162
	Venetian blind factories	163
	Veneer mills	164
	Winery	165
V. Th	HE POSSIBILITIES OF DEVELOPING INDUSTRY IN THIS	
	AREA	166
BIBLIOGE	RAPHY	172
APPENDI	×	175

LIST OF FIGURES

FIGURE	PAGE
I.	The Seventh Congressional District4
II.	Asphalt Deposits42
III.	Building Stones45
IV.	Clays
V.	Crushed Rock50
VI.	Fuller's Earth53
VII.	Gravel Deposits56
VIII.	Iron Ore Deposits59
IX.	Kaolin Deposits61
х.	Lignite Deposits64
XI.	Lime Deposits67
XII.	Mica Deposits69
XIII.	Mineral Waters71
XIV.	Gas Fields74
XV.	0il Fields75
.IVX	Phosphate Deposits77
XVII.	Quartzite Deposits79
.IIIVX	Salt Deposits81
XIX.	Sand Deposits83
XX.	Sandstone Deposits85
XXI.	Silica Deposits87
XXII.	Strontium Deposits89

FIGURE	PAGE
XXIII.	Sulphur Deposits91
XXIV.	Pine Belt97
. VXX	Oak Belt98
XXVI.	National Forests99

SECTION I INTRODUCTION

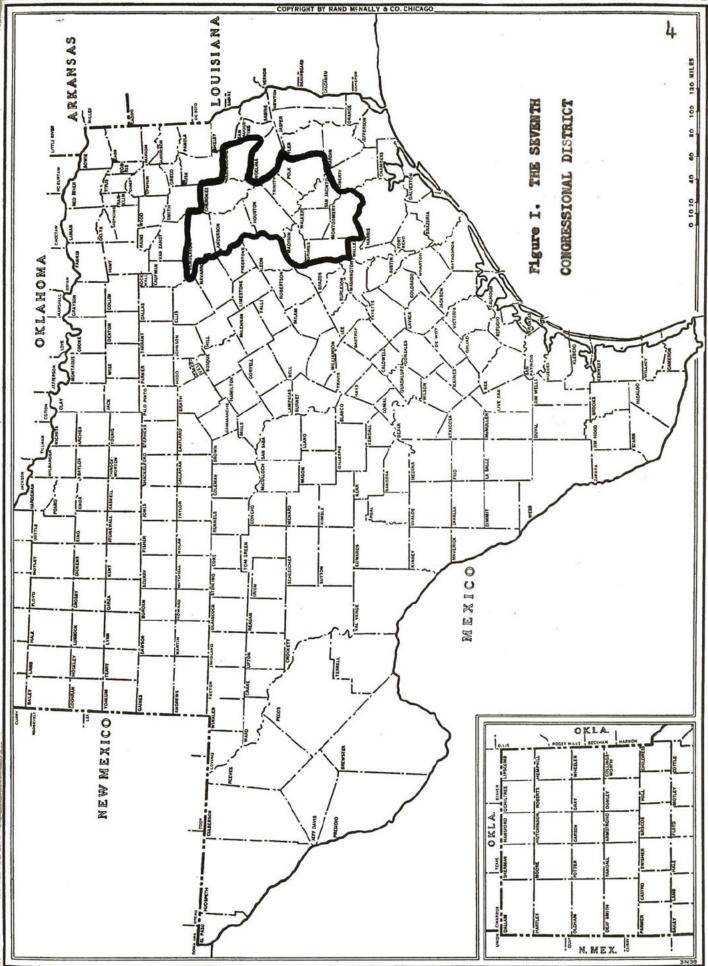
INTRODUCTION

In preparing this thesis three main objectives were set up. They are as follows: first, to collect valuable materials and samples for the author and the Industrial Arts Department, second, to evaluate the material and arrange it so as to be used in preparing this thesis and later be used in the Industrial Arts Department as reference material, and last to prepare a thesis that may be used as a guide in the Industrial Arts Department in its teachings. The Department offers a course in Industrial Resources of Texas and special emphasis is placed on local nearby natural resources. The material collected will be compiled in such order that it will be of valuable assistance in teaching this course.

This thesis is divided into four sections with all four related. The first section contains the background of each county in the Seventh Congressional District in respect to history, geography, and its economic status. Figure I shows the Seventh Congressional District in respect to the other counties in Texas. The second section describes the mineral and natural resources found in this district. This section indicates where each kind of mineral is found, what it is used for, and what it is made of or how it was formed. Also a map follows each topic showing the exact location in the Seventh

Congressional District of these minerals. The third section is a description of the industries, where they are located, what they produce, sales terrority, and number of people employed. The fourth section is a discussion of the possibilities of new industries and the advantages of new industries in this area.

In preparing this thesis the following sources of materials were used: a large number of books, which are listed in the bibliography, from the Estill Library, Sam Houston State Teachers College, a large number of printed pamphlets and brochures that were obtained from Chambers of Commerce in all the towns in this area, a large number of mimeographed booklets and pamphlets from the East Texas Chamber of Commerce, Longview, Texas, several bulletins from the Bureau of Business Research, Austin, Texas, and from personal observation and field trips to various points in the Seventh Congressional District.



SECTION II

HISTORICAL AND GEOGRAPHICAL BACKGROUND OF THE COUNTIES
THAT MAKE UP THE SEVENTH CONGRESSIONAL DISTRICT

ANDERSON COUNTY

Anderson County was originated in 1846 from Houston County which had its beginning that year also. Anderson County was named after Kenneth R. Anderson who was the last Vice-President of the Republic of Texas.

Anderson County is bounded on the north by Henderson County, which is the northernmost county in the Seventh Congressional District. It is bounded on the east by Cherokee County, by Houston County on the south and Freestone and Leon Counties on the west. The white race is in the majority in this county and the Negro Race comprises the minority.

Anderson County has several old historical landmarks. They are: Pilgrim Predestinarian Regular Baptist Church which was organized in 1834, Fort Houston was a stockade built by order of General Sam Houston on the town square of Houston which was later abandoned. It was later the home of John H. Reagan.

Anderson County is bounded on the east side by the Neches River and by the Trinity River on the west. Anderson County has the following varieties of timber: pine, sweet gum, oak, dogwood, ash, elm, hickory, and blackjack. The terrain is rolling in the south to hilly in the northeastern section of the county. Anderson County contains 1,068 square miles of land and its population in the last census

year 1950 was 31,875. The principal towns in this county are: Palestine, which is the county seat, Frankston, Elkhart, Montalaba, Tucker, and Tennessee Colony. The county's tax evaluation is \$27,030,625.

Anderson County has various types of soils. The soils in the eastern section are heavy red clay with iron ore mixed in to fine sand in the western section. The sand is of a quality suitable in glass making. The annual rainfall is 40.75 inches.

Recreational centers in this county are limited to a Methodist summer camp west of Elkhart. There are numerous roadside parks alongside the highways that can be utilized by travelers as well as locally. Anderson County is known for its famous Dogwood Trails in the spring of the year.

Anderson County has the following number of miles of highways: U. S. 101.28 miles, Texas 70.84 miles, Farm to Market 83.64 miles, Loops 2.35 miles, which gives this county a total number of 258.11 miles of good roads.4

Anderson County is served by the International-Great

Northern and Texas and New Orleans Railroads.

l Guide To Manufacturers and Industries of East Texas (Longview, Texas: East Texas Chamber of Commerce, 1951), p. 5.

² Texas Almanac (Dallas, Texas: The Dallas Morning News, 1952), p. 512.

³ Ibid.

⁴ See Appendix A

CHEROKEE COUNTY

Cherokee County was organized in 1846 and was formed from Nacogdoches County. It was named for the Cherokee Indians that lived in the area around Rusk. The Indians lived here until the Cherokee War in 1839.

Cherokee County is one of the northernmost counties in the Seventh Congressional District. It is bounded on the west by Anderson County, and on the northwestern tip by Henderson County. It is bounded on the north by Smith County which is not in the Seventh Congressional District. Cherokee County is bounded on the east by Nacogdoches County and by Houston County on the south. The white race is in the majority and the Negro race is in the minority.

Cherokee County had some very interesting happenings in its beginning. Not far from the townsite of Rusk is the remains of Cook's Fort which was built to protect the colonist from the Indians in this area. Also near Rusk is Mountain Home, which is the birthplace of James S. Hogg, the first native Texan to serve as Governor of the State of Texas. Near the townsite of Rusk also is the old townsite known as New Birmingham which was the scene of the iron rush in the 1890's. It once had a population of about 3,500, but since the iron ore was not profitable the town soon died. In the year 1848 Larissa College

was founded near Jacksonville. It closed its doors after the Civil War in 1866 and it has never been reopened.

Cherokee County is bounded on the west by the Neches River and by the Angelina River on the east. This county is located in what is known as the East Texas Piney Woods Belt. It also contains the following types of timber other than pine: gum, walnut, post oak and birch. The county has rolling terrain generally all over. Cherokee County contains 1,054 square miles of land and its population in 1950 was 38,694. The principal towns in this county are: Rusk, which is the county seat, Jacksonville, Alto, Indian Mound, Summerfield, Gallatin, Maydelle, Ironton, Wells and Dialville. The County's tax evaluation is \$16,837,372.2

Cherokee County has several types of soils. It has light sandy clay, red soils, and in the northeastern section of the county a clay adaptable to making porcelain is found in sufficient amounts. The annual rainfall is 45.29 inches.

Recreational facilities are limited to small lakes in this county. Love's Lookout is one of the most beautiful scenes to be found in East Texas. This is located just

¹ Guide To Manufacturers and Industries of East Texas (Longview, Texas: East Texas Chamber of Commerce, 1951), p. 5.

² Texas Almanac (Dallas, Texas: The Dallas Morning News, 1952), p. 512.

³ Ibid.

north of Jacksonville. This county has three roadside parks for the convenience of travelers. Also in this county many beautiful farms and ranches are located. This county is also noted for its truck farming industry. The following items are grown on a commercial scale: peaches, corn, watermelons, sweet potatoes, onions, bell peppers, and tomatoes.

Cherokee County has the following miles of highways:

U. S. 118.28 miles, Texas 59.94 miles, Farm to Market

155.67 miles, Loops 5.98 miles, which gives Cherokee County

a total of 340.07 miles of paved highways. Cherokee

County is served by the International-Great Northern, and

Texas and New Orleans Railroads.

⁴ See Appendix A

GRINES COUNTY

Grimes County was originated in 1846 from Montgomery County. Grimes County was named for Jesse Grimes, one of the signers of the Texas Declaration of Independence.

Grimes County is on the southwestern corner of the Seventh Congressional District. It is bounded on the west by Brazos County and by Waller and Washington Counties on the south, neither of these three bordering counties belong to the Seventh Congressional District. Grimes County is bounded on the east by Montgomery and Walker Counties and by Madison County on the north. The population of this county is mostly rural with native white in the majority and a large Negro minority.

There are several landmarks in this county of historical importance. Twelve miles south of Navasota is the home of Jared E. Groce, which was built in 1833. Groce was one of the first plantation owners in Texas to plant cotton on a large scale. In Navasota there is a monument to La Salle, who was killed and buried in this area. Also in this county is the famous Fanthorp Inn, which is located on the main street of Anderson. It was built in 1834, and was a famous inn on the trip from San Antonio to Nacogdoches, in which travelers could stop and rest. This was a familiar trail to the early colonist of Texas and was traveled very much.

Grimes County is bounded on the west by the Navasota River. The county is partly in the Post Oak Belt and partly in the Pine Belt of East Texas. The following types of timber are grown in Grimes County: pine, which is cut commercially, post oak, gum, and cottonwood. The terrain is rolling all over the county except in the extreme west along the Navasota River where the land is flat bottom land. Grimes County contains 801 square miles of land and its population in 1950 was 15,135. The principal towns in this county are: Anderson, which is the county seat, Navasota, Roans Prairie, Shiro, Iola, Richards, and Courtney. The county's tax evaluation is \$12,700,540.

Grimes County soil is sandy on the upland to heavy black soil suitable for good farming in the bottoms. The annual rainfall is 40.38 inches.

Grimes County is suitable for fishing in its streams and in its small lakes. There is also enough timber and underbrush to assure good game hunting. There are three roadside parks in this county for the convenience of travelers.

l Guide To Manufacturers and Industries of East Texas (Longview, Texas: East Texas Chamber of Commerce, 1951), p. 5.

² Texas Almanac (Dallas, Texas: The Dallas Morning News, 1952), p. 512.

³ Ibid.

Grimes County has the following number of miles of highways: U. S. none, Texas 79.90 miles, Farm to Market 83.19 miles, Loops none, this gives Grimes County a total milage of 163.09 miles. Grimes County is served by the following railroads: International-Great Northern, Gulf Coast and Santa Fe, and Burlington-Rock Island.

⁴ See Appendix A

HENDERSON COUNTY

Henderson County was created in 1846 from Houston and Nacogdoches Counties. It was named for J. Pinckney Henderson, who was the first Governor of the State of Texas after annexation.

Henderson County is the northernmost county in the Seventh Congressional District. It is bounded on the west by Navarro County, by Kaufman and Van Zandt Counties on the north, and by Smith County on the east. None of these counties is in the Seventh Congressional District.

Henderson County is bounded on the south by Anderson County a member of the Seventh Congressional District. The population of this county is largely rural, of which it is native white except for about twenty percent of the Negro Race.

The only historical landmark in this county is the old townsite of Old Buffalo. It was established by John H. Reagan and was the former county seat before it faded away.

Henderson County is bounded on the west by the Trinity
River and by the Neches River on the east. The west and
central parts of the county are considered as being in the
Post Oak Belt, and the eastern section being in the Pine
Belt of East Texas. Henderson County contains the following types of timber: pine, oak, gum, hickory, and ash.

The terrain is rolling all over the county. Henderson County contains 940 square miles of land and its population in 1950 was 23,405. The principal towns in this county are: Athens, the county seat, Malakoff, Trinidad, Baxter, La Rue, Pickens, Brownsboro, Murchison, Chandler, and Eustace. The county's tax evaluation is \$22,644,755.2

Henderson County has varied types of soils. They are clay, loam, sandy loam, and sand. The annual rainfall is 37.09 inches.

Henderson County is an excellent region for hunters and fishermen. There are eighteen well stocked lakes in this county. Also there are plenty of game to hunt in this county. The most abundant being small game. There are four roadside parks in this county for convenience of travelers.

Henderson County has the following number of miles of highways: U. S. 36.90 miles, Texas 86.04 miles, Farm to Market 139.81 miles, Loops 1.37 miles, which gives a total of 264.12 miles of good roads. This county is served by the Texas and New Orleans and St. Louis and Southwest Railroads.

l Guide To Manufacturers and Industries of East Texas (Longview, Texas: East Texas Chamber of Commerce, 1951), P. 5.

² Texas Almanac (Dallas, Texas: The Dallas Morning News, 1952), p. 559.

³ Ibid.

⁴ See Appendix A

HOUSTON COUNTY

Houston County was originated in 1837 from Nacogdoches County. It was named for Sam Houston who was one of the Presidents of the Republic of Texas.

Houston County is quite centrally located in the Seventh Congressional District. It is bounded on the north by Anderson County, by Cherokee County on the east, by Walker and Trinity Counties on the south, and by Madison County on the southwest. All the above mentioned counties are in the Seventh Congressional District. On the northwest it is bounded by Leon County which is not in the district. The population of Houston County is about thirty percent Negro and the remaining are native white.

This county being one of the older counties of Texas was the scene of very much early Texas History. Among these were the San Francisco de los Tejas, which was the first Texas Mission, and it was near the present community of Weches. This Mission was built in 1690 by the Spanish who were traveling up from what is now Mexico. A replica of this Mission has been erected and stands today just outside of Weches. Near Crockett is the famous Stagecoach Inn which was built by Joseph D. Rice, who was one of the first to settle in this section of the state. Southwest of Crockett is the old townsite of Alabama, an important river shipping point on the Trinity River before the Civil War. The town

of Crockett wanted to do something for the Texas Centennial in 1936 and it built a community center and named it David Crockett Memorial Building in honor of the great Texas soldier.

River and by the Neches River on the east. This county is in the Post Oak Belt, except for a small section of the eastern part which is in the Pine Belt. Houston County has the following varieties of timber: pine, oak, gum, ash, and hickory. The Davy Crockett National Forest extends into the eastern section of the county. The terrain of this county is rolling to hilly in all sections. Houston County contains 1,232 square miles of land and its population in 1950 was 22,825. The principal towns in this county are: Crockett, the county seat, Grapeland, Kennard, Lovelady, Austonio, Weldon, Weches, Latexo, and Ratcliff. The county's tax evaluation is \$12.384.610.

The county's soil is generally sandy to sandy loam, which is adapted to growing timber. The annual rainfall is 45.39 inches. 3

l Guide To Manufacturers and Industries of East Texas (Longview, Texas: East Texas Chamber of Commerce, 1951), p. 5.

² Texas Almanac (Dallas, Texas: The Dallas Morning News, 1952), p. 561.

³ Ibid.

Houston County has an excellent supply of small game and some deer. It has several large lakes for good duck hunting in the winter months and fishing in the summer months. There are six roadside parks in this county for the convenience of travelers.

Houston County has the following number of miles of highways: U. S. 33.71 miles, Texas 86.04 miles, Farm to Market 59.20 miles, and Loops none, which gives this county a total of 203.82 miles of good roads. Houston County is served by the International-Great Northern Railroad.

⁴ See Appendix A

MADISON COUNTY

Madison County was originated in 1854 from Grimes,
Leon, and Walker Counties. It was named for James Madison
who was at that time President of the United States.

Madison County is in the western middle section of the Seventh Congressional District. It is bounded on the south by Walker and Grimes Counties and by Houston County on the east, all of which belong to the district. Madison County is bounded on the north by Leon County and by Brazos County on the west; these counties do not belong to the Seventh Congressional District. The population in this county is mostly native white with a considerable Negro minority.

There was very little early history made in this county, except for Old Trinidad northeast of Madisonville, which was later known as Spanish Bluff. The Old San Antonio Highway passes through this county. This highway was a famous trail from San Antonio to Nacogdoches used by the early Missionaries.

Madison County is bounded on the west by the Navasota River, and by the Trinity River on the east. This county is considered as being in the Post Oak Belt, but it has some pine in the southern section of the county. The following types of timber are grown in Madison County: pine, post oak, ash, gum, pecan, hickory and walnut.

The terrain is rolling to a flat prairie in the central section of the county. The land by the rivers on each side is flat bottom land suitable for good farming and ranching.

Madison County contains 400 square miles of land and its population in 1950 was 7,996. The principal towns in this county are: Madisonville, the county seat, North Zulch, Midway, George, Jozye and a section of the town of Normangee which lies on the county line. The county's tax evaluation is \$14,752,595.

Madison County soil is a loam and sand combination suitable for raising of cattle. Also good profitable farming is carried on in this county's bottom land. The annual rainfall is 43 inches.

Madison County has very little to offer for fishermen except for the two rivers. Hunters find the county good for hunting small game and some deer in certain sections. There are two roadside parks in this county for the convenience of travelers.

Madison County has gained nation-wide recognition for its Madisonville Sidewalk Cattlemens Association. This

l Guide To Manufacturers and Industries of East Texas (Longview, Texas: East Texas Chamber of Commerce, 1951), p. 5.

² Texas Almanac (Dallas, Texas: The Dallas Morning News, 1952), pp. 579-80.

³ Ibid.

association has an annual affair and requires everyone wearing western boots to show ownership of at least one cow. If one is caught violating the law, he is punished by having some prank pulled on him.

Madison County has the following number of miles of highways: U. S. 38.33 miles, Texas 55.88 miles, Farm to Market 40.52 miles, Loops .71 miles, this gives this county a total of 135.44 miles of good roads.4 Madison County is served by the Burlington-Rock Island Railroad.

⁴ See Appendix A

MONTGOMERY COUNTY

Montgomery County was created from Washington County in 1837. The county was named for Richard Montgomery, who was a delegate from Dutchess County in the First New York Provisional Assembly which was held in 1775.

Montgomery County is the southernmost county in the Seventh Congressional District. It is bounded on the southeast by Liberty County, by Harris on the south, and by Waller County on the southwest. All the above mentioned counties are not in the Seventh Congressional District.

Montgomery County is bounded on the west by Grimes County, by Walker County on the north, and by San Jacinto on the northeast. All these counties are in the district. The population is of native white of which a large majority moved to this county after the oil boom in the 1930's.

The county also has a large Negro population which is connected with the lumbering industry.

There are no important notable historical landmarks in this county. This county first became noted for its large oil discovery.

Montgomery County is bounded on the south by Spring Creek, and Peach Creek on the northeast. The county is in the Pine Belt, but it borders the coastal plains on the south. The following types of timber are grown in Montgomery County: pine, oak, ash, gum, and pecan. The terrain is

level in the southeastern section of the county and rolling in the northwestern section of the county.

Montgomery County contains 1,090 square miles of land and its population in 1950 was 24,504. The principal towns in this county are: Conroe, the county seat, Willis, Keenan, Montgomery, New Caney, Splendora, Tamina, Fostoria, Dobbin, Honea, Magnolia, Pinehurst, and Dacus. The county's tax evaluation is \$71,227,745.

Montgomery County soil varies from sand to heavy black bottom land. The soil is good for farming and ranching, also suitable clay is found to make brick from in this county. The annual rainfall is 49.17 inches.

The county is fine for hunting because the Sam Houston and San Jacinto National Forests extends into this county. This assures plenty of cover for small game and deer. The county also has within it several good lakes for fishing and a number of creeks. There are four roadside parks for the convenience of travelers in Montgomery County.

Montgomery County has the following number of miles of highways: U. S. 45.29 miles, Texas 40.23 miles, Farm to

l Guide To Manufacturers and Industries of East Texas (Longview, Texas: East Texas Chamber of Commerce, 1951), p. 5.

² Texas Almanac (Dallas, Texas: The Dallas Morning News, 1952), p. 585.

³ Ibid.

Market 97.86 miles, Loops 1.77 miles, which gives this county a total of 185.15 miles of good roads. 4 Montgomery County is served by the International-Great Northern and Gulf Coast and Santa Fe Railroads.

⁴ See Appendix A

NACOGDOCHES COUNTY

Nacogdoches County is one of the oldest counties in Texas. It was one of the original counties in the beginning. It was created in 1836. It was named for the Nacogdoches Indians which lived in this area.

Nacogdoches County is in the eastern section of the Seventh Congressional District. It is touched by only one county in the district which is Cherokee County. It is bounded on the north by Rusk County, by Shelby and San Augustine Counties on the east, and by Angelina County on the south. The population of this county is mostly rural with native white in the majority and a large Negro minority.

Nacogdoches County has more historical landmarks than any other county in the state. The famous Old Stone Fort which was rebuilt on the campus of Stephen F. Austin State Teachers College, was one of the earlist forts in Texas. The building which housed Nacogdoches University is still standing. The University was started in 1845. The homesite of Antonio Gil Ybarbo; Ybarbo founded the town of Nacogdoches. It is close to the Nuestra Senora de Guadalupe, which was established by the Franciscans in 1716. North of Nacogdoches is the site of Old North Church, which was first known as Union Church. It was organized in 1838 and the present day church was built in 1852. East of

Nacogdoches is the site of Peter Ellis Bean's Home which was erected in 1829. Nacogdoches County contains the remains of the sites of Mission Concepcion, San Jose, and San Juan Capistrano all three being moved to San Antonio. Some of the fine old homes that were built in this beginning era are still standing today.

Nacogdoches County is bounded on the west by the Angelina River and the Attoyac Bayou on the east. This county is deep in the East Texas Pine Belt. The following types of timber are grown in Nacogdoches County: pine, gum, oak, and magnolia. The terrain is rolling to broken with level plateaus and valleys scattered through the county. Nacogdoches County contains 963 square miles of land and its population in 1950 was 30,326. The principal towns in this county are: Nacogdoches, the county seat, Cushing, Garrison, Appleby, Chireno, Martins-ville, Douglass, Oil Springs, Decoy, Trawick, Etiole, and Swift. The county's tax evaluation is \$14,733,115.

Nacogdoches County has several different types of soils. They are as follows: gray sandy, red sandy, red stiff on hills, dark sandy alluvial, and red loam in the

l Guide To Manufacturers and Industries of East Texas (Longview, Texas: East Texas Chamber of Commerce, 1951), p. 5.

² Texas Almanac (Dallas, Texas: The Dallas Norning News, 1952). p. 586.

lowlands. The land is suited for raising timber and cattle, with very little farming carried on.

The Angelina National Forest extends into this county and makes a good cover for the small game. This county is noted for its squirrel, doves and migratory waterfowl. There are several good lakes and streams in which there is good fishing. The annual rainfall in this county is 40.02 inches. There are three roadside parks for the convenience of travelers in this county.

Nacogdoches County has the following number of miles of highways: U. S. 33.03 miles, Texas 95.47 miles, Farm to Market 67.92 miles, Loops 1.91 miles, which gives this county a total of 198.33 miles of good roads. Nacogdoches County is served by the Texas and New Orleans, and the Nacogdoches and the South East Railroads.

³ Ibid.

⁴ See Appendix A

POLK COUNTY

Polk County was created in 1846 from Liberty County.

Polk County was named for James K. Polk, who was President at that time.

Polk County is in the southeastern part of the Seventh Congressional District. It is bounded on the south by Hardin and Liberty Counties, by Tyler County on the east and by Angelina County on the north. None of the above mentioned counties is in the Seventh Congressional District. Polk County is bounded on the northeast by Trinity County and on the southwest by San Jacinto County. The latter above mentioned counties belong to the district. The population is divided among three groups: a white majority, a large Negro minority and about four hundred Indians.

Polk County had two outstanding historical happenings.

The first was the setting up of an Indian Reservation for three hundred and twenty Alabama Indians and eighty Coushatta Indians which live there today. The Big Thicket also covers part of Polk County and it is a good preserve for wildlife.

Polk County is bounded on the southwest by the Trinity River and by the Neches River on the northwest. Polk County is in the East Texas Pine Belt with eighty-nine percent of the county being in forest. The following types of timber are grown in this county: pine, oak, walnut, sweet gum, and magnolia.

The terrain is rolling to broken with pines on the uplands and hardwoods in the valleys. Polk County contains 1,094 square miles of land and its population in 1950 was 16,194. The principal towns in this county are: Livingston, the county seat, Corrigan, New Willard, Camden, Moscow, Leggett, Wakefield, Barnes, Bering, Hortense, Camp Ruby, Dallardsville, and Goodrich. The county's tax evaluation is \$18,037,519.

The soil in Polk County is sand, sandy clay on the uplands, and alluvial in the valleys. This type of soil is suitable for timber and ranching. The annual rainfall is 49 inches. 3

Polk County is excellent for hunting because it has so much timber land. The Big Thicket is a refugee for all animals, But they stray out of it often. It is not advisable to hunt in the Thicket itself because nearly everyone that enters it usually gets lost and some have never come back. The fishing is good in the rivers and a few small lakes in this county. Polk County has two roadside parks for the convenience of travelers.

l Guide To Manufacturers and Industries of East Texas (Longview, Texas: East Texas Chamber of Commerce, 1951), p. 5.

² Texas Almanac (Dallas, Texas: The Dallas Morning News, 1952), p. 592.

³ Ibid.

Polk County has the following number of miles of highways: U. S. 97.24 miles, Texas 17.71 miles, Farm to Market 49.35 miles, Loops 4.22 miles, which gives Polk County a total of 168.52 miles of good roads. Polk County is served by the following railroads: Texas and New Orleans, and the shortest railroad in Texas the Moscow, Camden and San Augustine, it is 6.86 miles long.

⁴ See Appendix A

SAN JACINTO COUNTY

San Jacinto County was created in 1869 from Liberty, Polk, Montgomery, and Walker Counties. The county was named for the famous Battle of San Jacinto.

San Jacinto County is the southeastern corner of the Seventh Congressional District. It is bounded on the north by Trinity County, by Walker County on the west, by Montgomery County on the southwest, and by Polk County on the east. All the above mentioned belong to the district. San Jacinto County is bounded on the south by Liberty County which is not in the district. The population of this county is made up of white majority and a large Negro minority.

San Jacinto County has one famous landmark. Near Coldsprings is the site of Swartout, this small town was laid out in 1838 and was used for a steamboat landing during the Civil War. It succeeded in maintaining a ferry boat until 1930 and then the service was discontinued. Swartout was named for Samuel Swartout, from New York, who advanced funds to the Texas Government in 1836.

San Jacinto County is bounded on the east by the Trinity River and on the southwest by Peach Creek. This county has the following types of timber: pine, cedar, oak, walnut, hickory, gum, ash, and pecan. San Jacinto County contains 619 square miles of land and its population in 1950 was

7,172. The principal towns in this county are: Coldsprings, the county seat, Oakhurst, Shephard, Camilla, Evergreen, Maynard, Urbana, Stephens, and Point Blank. The county's tax evaluation is \$5,462,380.

San Jacinto County has several different types of soils. They are as follows: the upland soils are sandy with clay base with some deep sand, and soil along the streams is heavy alluvials. The terrain in this county is rolling to slightly hilly. The annual rainfall is 47 inches.

This county is covered by the Sam Houston National Forest, therefore it has a sufficient amount of wildlife within its woods. San Jacinto County is noted for its lakes in which there are several different types of fish. Also fishing is fine in the San Jacinto River which flows through the middle of the county. This county has four roadside parks for the convenience of travelers. Also camping facilities are offered at some of the lakes in this county.

San Jacinto County has the following number of miles

l Guide To Manufacturers and Industries of East Texas (Longview, Texas: East Texas Chamber of Commerce, 1951), p. 5.

² Texas Almanac (Dallas, Texas: The Dallas Morning News, 1952), pp. 598-99.

³ Ibid.

of highways: U. S. 25.93 miles, Texas 40.72 miles, Farm to Market 36.11 miles, which gives this county a total of 102.76 miles of good roads. San Jacinto County is served by the Texas and New Orleans Railroad.

⁴ See Appendix A

TRINITY COUNTY

Trinity County was created from Houston County in 1850. It was named for the Trinity River which runs along its west and southern boundaries.

Trinity County is in the center section of the Seventh Congressional District. It is bounded on the northwest by Houston County, by Walker County on the west, by San Jacinto County on the south, and by Polk County on the southeast. All the above mentioned counties belong to the Seventh Congressional District. Trinity County is bounded on the east by Angelina County which is not in the district. The population of the county is mostly rural with a white majority and a Negro minority.

Trinity County is bounded on the southwest by the Trinity River and by the Neches River on the northeast. Trinity County is in the East Texas Pine Belt. Forty percent of the county is in the Davy Crockett National Forest. The following types of timber are found in this county: shortleaf, loblolly and longleaf pine, sweet and black gum, post oak, red oak, pecan, hickory and blackjack. The terrain is a forested plain on the divide between the Trinity and Neches Rivers. Trinity County contains 704 square miles of land and its population in 1950 was 10,040.

l Guide To Manufacturers and Industries of East Texas (Longview, Texas: East Texas Chamber of Commerce, 1951), p. 5.

The principal towns in this county are: Groveton, the county seat, Trinity, Apple Springs, Woodlake, Glendale, Saron, Carlise, Chita, Westville, Friday, Josserand and Centralia. The county's tax evaluation is \$5,501,176.

The soil in Trinity County is light and red sandy, sandy loam, and clay soils on the uplands and alluvials on the bottom lands. The soil is adapted to raising of cattle and timber, which these two industries have expanded in the last two years. The annual rainfall is 44.5 inches.

The forest makes an excellent cover for deer, quail, and miscellaneous game. Fishing is good in the Trinity and Neches Rivers and in the creeks in this county. Trinity County also has some good lakes to fish in as well as hunt ducks upon during their season. Trinity County has three roadside parks for the convenience of travelers.

Trinity County has the following number of miles of highways: U. S. 21.60 miles, Texas 55.63 miles, Farm to Market 46.34 miles, which gives this county a total of 123.57 miles of good roads. Trinity County is served by the International-Great Northern, and Texas and New Orleans Railroads.

² Texas Almanac (Dallas, Texas: The Dallas Morning News, 1952), p. 608.

³ Ibid.

⁴ See Appendix A

WALKER COUNTY

Walker County was created in 1846 from Montgomery
County. Walker County was named for Robert J. Walker who
was Secretary of Treasury during President Polk's adminstration. It was renamed Walker County in 1863 for Captain
Samuel H. Walker, who was a Texas Ranger and was killed in
Mexico. Robert J. Walker was accused of being in support
of President Lincoln and his policies. The people of Walker
County were against the Presidents policies and associates.
They felt that Robert J. Walker did not deserve to have
a county named for him in Texas.

Walker County is in the south central section of the Seventh Congressional District. It is bounded all the way around by counties in the district. It is bounded on the north by Madison and Houston Counties, by Trinity and San Jacinto Counties on the east, by Montgomery County on the south and by Grimes County on the west.

Walker County has several historical happenings of which it is very proud. In 1936 the Sam Houston Shrine was built. It was built into a park which at one time was a part of the Houston homestead. In this park are the two homes of Houston lived in while he lived in Huntsville, his original home and the famous Steamboat House. Also in this park is a museum containing some of Houston's Articles. In the cemetery in Huntsville is the grave of Gen. Sam Houston

and its famous monument. On the campus of Sam Houston State Teachers College is the Austin College Building which housed the college before it was moved to Sherman, Texas. This building was erected in 1851. About twelve miles northeast of Huntsville is the remains of the townsite of Cincinnati which was founded by James C. Dewitt. It was a big shipping point on the Trinity River after it was founded in 1838.

Walker County is bounded on the northeast by the Trinity River. This county is partly in the Hardwood Belt, but most of the county lies in the East Texas Pine Belt. The following types of timber are found in this county: loblolly and shortleaf pine, sweet gum, red oak, sycamore, and elm.

The terrain is rolling to hilly in some sections of the county. The county is covered by the Sam Houston National Forest in the eastern half and by Huntsville State Park in the southern section.

Walker County contains 786 square miles of land and its population in 1950 was 20,163. The principal towns in this county are: Huntsville, the county seat, Dodge, New Waverly, Phelps, and Riverside. Country Campus was a prisoner-of-war camp during World War II and after the

l Guide To Manufacturers and Industries of East Texas (Longview, Texas: East Texas Chamber of Commerce, 1951), p. 5.

conflict was turned over to Sam Houston State Teachers
College for housing purposes. It has its own post office
and store. It is a town within itself. The county's tax
evaluation is \$32.468.351.

The soil in Walker County is sandy and sandy loam on the uplands and stiff black clay and alluvials on the bottom lands. This county is very adaptable to growing cattle and this industry is on the increase. The annual rainfall is 44.40 inches.

Hunting is good in Walker County for small game and deer in the tmbered areas. Fishing is good on the Trinity River and some of the small streams in the county. This county has two roadside parks and an excellent camping area in the Huntsville State Park.

Huntsville is the location of the central unit of the Texas Prison System and two of its branches. In the central unit various industries are carried on. The making of shoes for all the prison system, making of licence plates for all the automobiles and trucks in Texas, textile, mill, foundry and printing shop.

Walker County has the following number of miles of highways: U. S. 48.05 miles, Texas 37.65 miles, Farm to

² Texas Almanac (Dallas, Texas: The Dallas Morning News, 1952), p. 612.

³ Ibid.

Market 47.30 miles, Loops .18 miles, which gives Walker County a total of 133.18 miles of good roads. Walker County is served by the International-Great Northern Railroad.

⁴ See Appendix A

SECTION III

INDUSTRIAL RESOURCES OF THE SEVENTH CONGRESSIONAL DISTRICT

INTRODUCTION TO SECTION III

The natural resources in the Seventh Congressional District are of a wide variety. Some of the resources are more plentiful than others and some are being used to commercial advantage.

There are twenty-two natural resources discussed in the following section. They are discussed at length as to the beginning, their importance in our everyday life, where they are produced and the extent of production at present. Following the discussion of each natural resource is a map showing where the natural resource is found in the Seventh Congressional District.

on a commercial scale. The two leading topics are: oil and its products, and timber and its products. These two items are large industries in the Seventh Congressional District. Some of the items discussed are of little commercial value because they are not plentiful enough to justify the expenditure of funds needed for their conversion into finished products.

ASPHALT

Asphalt is a semi-solid member of the hydrocarbon group, which is found in oil seepages that have evaporated. Asphalt comes from two sources: first, asphalt is obtained as a residual from petroleum refining, second, it is found as cement in sandstones forming bituminous or asphaltic sandstones.

In the United States around two-thirds of the asphalt is used for paving. Asphaltic sandstones are also used in paving. Around one-fourth of the asphalt produced in the United States is used for making of roofing materials. In this group are the following: asphalt shingles, roll roofing and sheet roofing paper. Asphalt is also used for pipe coatings, paints, waterproofing, blending with rubber, molding compounds, and briquetting.

The United States consumes around eight million tons of asphaltic materials annually.

Asphalt is found in the Seventh Congressional District in Anderson County and Nacogdoches County. This is of the cement in sandstone type. It is not of sufficient amounts to be produced in these two counties. Figure II shows the exact location of asphalt in the Seventh Congressional District.

THE SEVENTH CONGRESSIONAL DISTRICT OF TEXAS Henderson Cherokee Anderson Nacogdoches Houston Trinity Madison Walker San Grimes Jacint Montgomery

Figure II. ASPHALT DEPOSITS--The dotted areas show the exact location of this mineral in the Seventh Congressional District.

BUILDING STONES

Building stones are one of the most plentiful of the building materials that are available today. It is also one of the oldest building materials. Rock and stone differ in that the latter is blocks of the former that is used commercially. Not all rock makes good stone, because they must contain certain qualities. They must have strength, durability, and desired color.

Stones have been used for more than 12,000 years.

They were used to build pyramids, palaces, and other buildings of architecture. Some building stones used in the early ages weighed up to ninety tons per stone.

Stone has to be quarried by special processes depending upon the stone. The stone must not be close to joints, cracks, or other lines of weakness.

Stone must contain certain strength qualities. The crushing strength of good stone is from 5,000 to 25,000 pound per square inch. Usually 5,000 pounds per square inch is sufficient.

Stone must contain colors that are desireable. For most building purposes reds, browns, buffs, grays, or whites are preferred. White is not desireable in a smokey city, and also blacks and dark grays are not popular.

In the United States there are eight stones used commercially, they are as follows: granite, limestone,

travertine, marble, serpentine, sandstone, dolerite, and soapstone. Texas produces limestone and sandstone on a commercial basis.

In Walker County sandstone is produced on a commercial basis. Houston County and Trinity County also produce sandstone on a commercial basis. These two above mentioned counties do not produce as much as Walker County. Walker County is known for its quarry and the sandstone it produces. Figure III shows the exact location of building stones in the Seventh Congressional District.

THE SEVENTH CONGRESSIONAL DISTRICT OF TEXAS

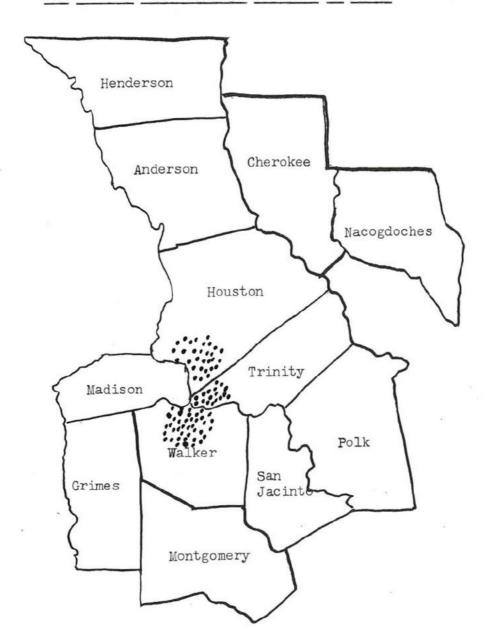


Figure III. BUILDING STONES--The dotted areas show the exact location of this mineral in the Seventh Congressional District.

CLAYS

Clay has an early history, with some of it written on clay tablets. In the ruins of old cities pottery, brick, and other articles of clay have been found. It proves that in ancient times clay was used to a great advantage. All down through the ages clay has been used for pottery and other beautiful works of art.

Clay consist of hydrous aluminum silicates with pieces of rock fragments, with other colloidal materials. It generally turns to a plastic when wet and stonelike when heated.

Clay is not one mineral but a group of minerals combined. Clays as seen under a microscope are flakelike, lathlike, or hollow-tube.

Listed below are the different types of clays and their uses:

Kaol	ins

whiteware, porcelain fillers, paper making

Ball clay

whiteware, mixing

Fire clay

refractories

Stoneware clay

stoneware

Paving and sewer pipe

paving bricks, sewer pipe

Brick and tile clay

brick and tile

Bentonite

iron and steel works,

filtering

Fuller's earth

filtering

In the Seventh Congressional District we have the following types of clays: kaolin, fire clay, paving and sewer pipe clay, brick and tile clay, and fuller's earth. Kaolin is found in Cherokee County, fire clay is found in Henderson County, paving and sewer pipe clay is also found in Henderson County, brick and tile clay is found in Nacogdoches County and Henderson County, and fuller's earth is found in Walker County, Trinity County, and Nacogdoches County. Figure IV shows the exact location of clays in the Seventh Congressional District.

THE SEVENTH CONGRESSIONAL DISTRICT OF TEXAS

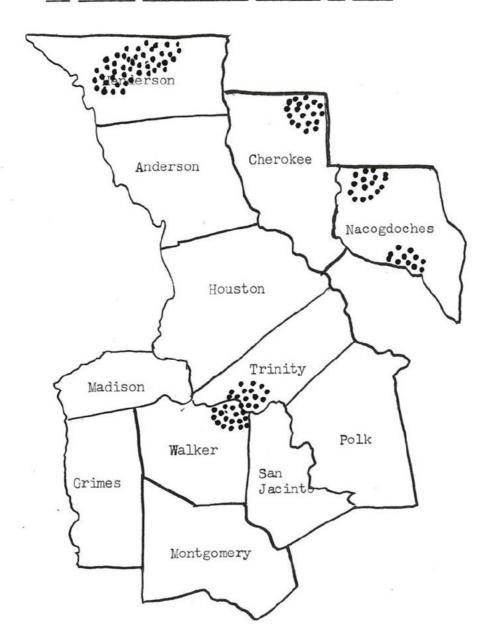


Figure IV. CLAYS--The dotted areas show the exact location of this mineral in the Seventh Congressional District.

CRUSHED ROCK

Crushed rock is found primarily where building stone is found. When stone is quarried you have pieces and broken parts that cannot be sold as building stone. These parts are crushed and sold for another type of building material.

Crushed rock is on the increase due to the increased building of highways. Crushed rock industry has past the building stone industry in tonnage and value.

Raw materials for crushed rock are varied and widespread. Crushed rock can be produced on a large scale and it can be produced cheaply. Transportation is the chief cost of producing crushed rock.

Limestone is the most used rock to be crushed. Smaller amounts of trap rock (dolerite, basalt and andesite), granite, sandstone, and quartzite.

Crushed rock has two main uses: one as a filler in making concrete, railroad ballast, and as retaining walls, and second as chemically used as extracting cement. alkali. and lime.

Sandstone is crushed in Walker County and in Grimes County. Figure V shows the exact location of sandstone used in the production of crushed rock.

THE SEVENTH CONGRESSIONAL DISTRICT OF TEXAS



Figure V. CRUSHED ROCK--The dotted areas show the exact location of this mineral in the Seventh Congressional District.

FULLER'S EARTH

Fuller's earth is a type of clay that got its name from the fullers who used it remove grease from cloth. It is also known as bleaching clay.

Fuller's earth does not have to be treated after it is taken from the ground. It is ready to be used in the process in which it is used. After it has been used as a filter base it can be heat treated and used for about twenty more times.

Around seventy percent of the fuller's earth produced in the United States is used by the petroleum industry. It is used in the refining process as a filter and clarifyer in the making of lubricants. Colored oil can pass through it and the oil will come out clear. It also removes naphtha gum, lowers the acidity, improves the viscosity of the oil, and removes carbon and sludge content.

About ten percent of the fuller's earth produced is used in refining vegetable oils. It removes taste, odor, and color from the oil. After vegetable oil has been filtered with fuller's earth the fuller's earth cannot be used again. Fuller's earth is also used for water purification. Some other minor uses of it is filler, cosmetics, abrasives, and it is used in printing.

The United States is the leading producer of fuller's earth in the world. It produces about three hundred

thousand tons annually. Texas ranks third in the production in the United States. Texas produces about one hundred thousand tons annually.

Fuller's earth is found in Walker County, Trinity
County and some small production in Nacogdoches County.
It is produced in Walker County by the Milwhite Company
and The Texas Company which uses its output in other
branches of the company. It is produced in Trinity
County by The Trinity Clay Products Company. Fuller's
earth is produced in Nacogdoches County by the BennettClark Company. These four companies produce a greater
part of the production of fuller's earth in Texas.

Fuller's earth is mined in open pits with power equipment. All but about fifteen percent of the moisture is taken out, then it is crushed, ground and screened. Fuller's earth is becoming obsolete in the petroleum industry with another bleaching clay bentonite taking its place.

Figure VI shows where fuller's earth can be located in the Seventh Congressional District.

THE SEVENTH CONGRESSIONAL DISTRICT OF TEXAS

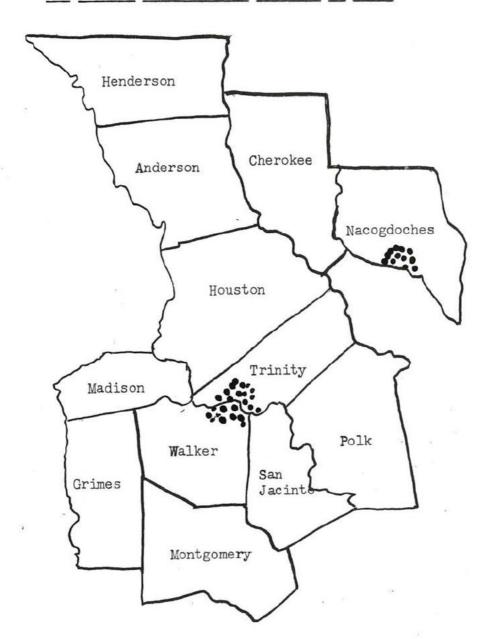


Figure VI. FULLER'S EARTH--The dotted areas shoe the exact location of this mimeral in the Seventh Congressional District.

GRAVEL

Cravel is one of the most essential materials in the building industry of today. It is found to be widely distributed over the world. Gravel is usually used locally and because of this it is relatively cheap. The United States uses about one hundred and eighty million tons annually.

Gravel usually is quartz pebbles and grains, but in some areas other sedimentary rocks are mixed in.

Gravel weighs about ninety to one hundred and seven pounds to the cubic foot. Gravel is usually found in beds with sand.

Gravel is used for many different things. About half the gravel produced goes into concrete. Also gravel is used on roads, driveways and other places where it is needed for all weather traffic. Gravel was used for railroad ballast, but it is becoming obsolete. Crushed stone is taking its place.

Gravel is found in the following counties in the Seventh Congressional District: Anderson, Grimes, Henderson, Houston, Madison, Montgomery, Polk, San Jacinto, Trinity, and Walker. The location of gravel in the above mentioned counties is shown in Figure VII.

At Trinidad in Henderson County, there is one of the

one of the largest deposits of sand and gravel in Texas.

Two companies sell sand and gravel on a large scale operation from this area.

Henderson Cherokee Anderson Nacogdoches Houston Trinity Madison Polk Walker San Grimes Jacint

THE SEVENTH CONGRESSIONAL DISTRICT OF TEXAS

Figure VII. GRAVEL -- The dotted areas show the exact location of this mineral in the Seventh Congressional District.

Montgomery

IRON ORE

Iron has an early history dating back to 1200 B. C. when it was first manufactured. The Age of Iron was started around 800 B. C. During the Seventeenth Century iron was smelted and the blast furnace was discovered shortly after. During this time the forest of England was razed to supply charcoal, but coal was discovered to smelt iron. This was the beginning of great industrial iron age of England. Smelting was started on a large scale in 1664 in Massachusetts. The great iron ore deposits of the Lake Superior area were discovered. When the iron was discovered in this area and coal was discovered in Pennsylvania, they were brought together and a large industrial area was born in the Pennsylvania, Ohio, Illinos, and Minnesota section.

Iron is one of the most used manufactured articles that we use directly or indirectly. We use iron in work, leisure, eating, sleeping and other forms of everyday life. Without iron we would wash our clothes by hand, ride in wooden carts on dirty roads. With this in mind the United States produces fifty percent of the iron ore produced in the world. France is second with eleven percent of production.

The types of iron ore as to mineral content are as follows: magnetite, which contains seventy two percent

pure iron, hematite which contains seventy percent of pure iron, limonite contains sixty percent pure iron, and siderite which contains forty eight percent pure iron.

Iron ore has to be processed twice before it can be used to an advantage. First, it must be smelted with coke and limestone which converts this into pig iron, and second the pig iron has to be changed to cast iron, wrought iron or steel.

Large deposits of iron ore are found in Cherokee County and these deposits are being exploited. Some deposits are in Anderson County and Henderson County, but are not being exploited commercially. Figure VIII shows the exact location of iron ore in the Seventh Congressional District.

THE SEVENTH CONGRESSIONAL DISTRICT OF TEXAS

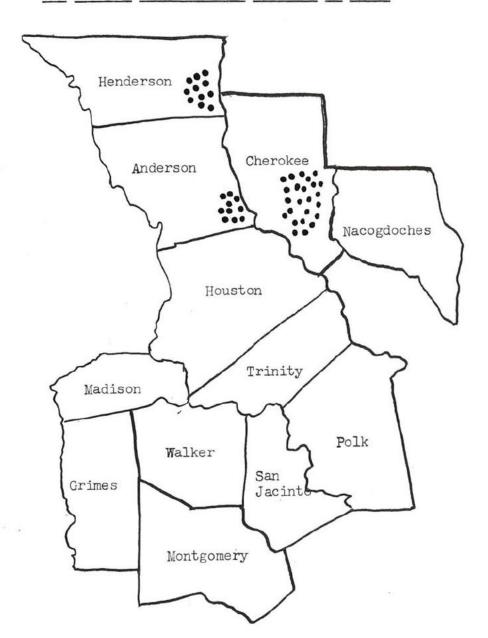


Figure VIII. IRON ORE--The dotted areas show the exact location of this mineral in the Seventh Congressional District.

KAOLIN

Kaolin has already been briefly discussed in the previous topic on clay. Due to the importance of this product a little more detail is brought out.

Kaolin is not as common as other types of clays.

Whenever this product is found ceramic centers are usually established. Kaolin is used in making fine chinaware, filler for paper and it is used in making porcelain.

Large deposits of kaolin in Germany has caused the famous Dresden were to become famous. In France the famous Limoges and Sevres were is produced.

In the United States, North Carolina is the largest producer with limited deposits in Pennsylvania, Virginia, Maryland, Alabama, Connecticut, and Washington. The chief ranking production of kaolin in the world is listed according to production: China, United Kingdom, Bavaria, Japan, United States, and Czechoslovakia.

Kaolin is found in a sufficient deposit in Cherokee
County with a large mining operation under way. The raw
kaolin is shipped to other states for useage from this area.
Figure IX shows the exact location of kaolin in the
Seventh Congressional District.

THE SEVENTH CONGRESSIONAL DISTRICT OF TEXAS



Figure IX. KAOLIN--The dotted areas show the exact location of this mineral in the Seventh Congressional District.

LIGNITE

かり はんけんかん かんかん かんかん こうちょうこう

Lignite is a type of coal that is of great value, yet it is still in the early stages of exploitation.

Lignite, known as brown coal, represents the second stage in the metamorphosis of coal. It is brown and black together and is a portion of decomposed wood combined with decayed vegetable matter. It is banded and jointed and because it contains so much water, it disintegrates after being exposed to the air. It has a low heating value. It is rated as having 7,400 British thermal units. It is used for synthetic gas in Germany, and it is used in this country to make producer gas, and is powdered for heating and steam raising of boilers.

Coal was first used in the ninth century in the household. With the invention of the steam engine coal became very famous as a fuel. Coal has suffered many setbacks. It was first used after charcoal in the early smelting of iron ore and then coke was found to be better. Then coal was used to heat homes but when natural gas was discovered the production of coal was reduced.

It has been estimated that seventy eight percent of the coal produced is used for fuel and the other twenty two percent is used for production of pig iron.

The world uses about one and a half billion tons of coal and lignite annually. Germany ranks first in the production,

with the United States second. Other nations listed according to production are: Great Britian, Russia, France, Japan, Poland, and Czechoslovakia. The ranking states in the United States according to production are: West Virginia, Pennsylvania, Illinois, Kentucky, Ohio, Indiana, Virginia, Alabama, Colorado, and Wyoming.

Texas produces both coal and lignite. Coal is produced at Thurber in Erath County. Lignite is produced in a number of counties with Milam County leading production. Lignite is produced in Henderson County for producing electrical power. Also large deposits are in the following counties: Anderson, Cherokee, Grimes, Houston, Madison, Nacogdoches, Trinity and Walker. Figure X shows the exact location of lignite in the Seventh Congressional District.

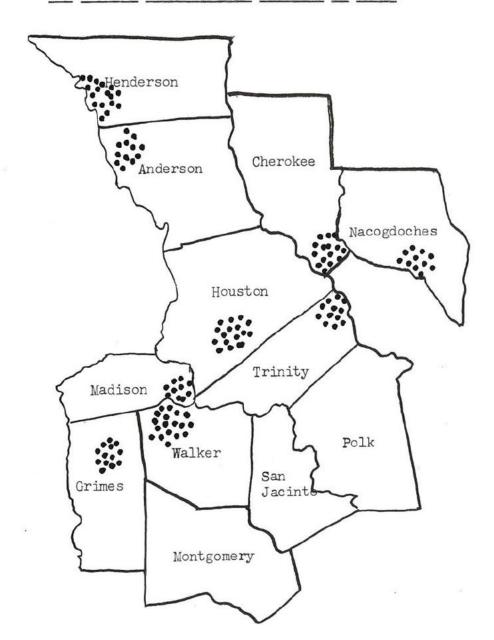


Figure X. LIGNITE--The dotted areas show the exact location of this mineral in the Seventh Congressional District.

LIME

In ancient times the people used lime as a mortar in setting their stones. This same item is still used in our everyday construction procedure. Lime is cheap to produce and an abundant supply of raw materials are available.

Lime can be made from limestone or any other type of calcareous rock. To make lime from this type rock you heat it in a kiln to 903 degrees centigrade and at this point the carbon dioxide is driven off. After this process has been completed you have quicklime. Quicklime when slaked with water and mixed with a porportioned amount of sand makes an excellent mortar or plaster. Lime is made from this same process except the necessary water is added.

One hundred pounds of pure limestone yields about 56 pounds of lime. Dolomite is sometimes used to make a special type of lime. Magnesia lime is made and is used to make a strong, hard, and elastic stucco.

The United States produces about 5 to 6 million tons annually of lime. Ohio and Pennsylvania lead in production of forty two states that produce lime.

San Jacinto County contains a large deposit of limestone. These deposits have not been exploited. Some limestone crushing is carried on in Trinity County.

This limestone is used as fertilizer in pastures and farms. Figure XI shows the exact location of limestone in the Seventh Congressional District.



Figure XI. LIME--The dotted areas show the exact location of this mineral in the Seventh Congressional District.

MICA

Mica is a mineral that is not used very much but when it is used it is essential. Mica is used by the electrical industry.

The chief minerals that contain mica are as follows: muscovite, phlogopite, biotite, vermiculite, lepidolite, zinnawaldite, roscoelite, and flushite. Only three of the above mentioned are used commercially. Also vermiculite is used for sound and heat insulation.

Mica can be split into very thin sheets which makes it so good to work with. Mica can be split into sheets of 1/1,000 of an inch in thickness. With this in mind along with micas low heat conductivity, flexibility, resilience, toughness and high dielectric strength makes mica an outstanding insulator.

Mica is obtained by quarrying the stones that contain this mineral. The mica is trimmed and sold by the piece with the larger the piece the more valuable.

The United States produces about 50,000 to 65,000 tons of mica annually. Large deposits of mica are found in San Jacinto County. Figure XII shows the exact location of mica in the Seventh Congressional District.



Figure XII. MICA--The dotted areas show the exact location of this mineral in the Seventh Congressional District.

MINERAL WATERS

Mineral waters usually occur in springs and in wells, the most common being wells. Mineral water is produced from commercial wells and sold for a medicine to give relief to common ailments of older people.

Mineral water is found in thirty one Texas counties which includes Nacogdoches County. Commercial production of mineral water is carried on at Mineral Wells, Marlin, Milford, and Thorndale. The first two being a resort for health seekers.

Nacogdoches County contains mineral waters in wells and some springs. The mineral water in this county comtains sulphate, chloride, bicarbonate, potassium, sodium, magnesium, and calcium. Most all the water contains sulphate and chloride and some of the other listed above.

Nacogdoches County is the only county in the Seventh Congressional District that contains mineral waters.

Figure XIII shows the exact location of mineral waters in the district.



Figure XIII. MINERAL WATERS--The dotted areas show the exact location of this water in the Seventh Congressional District.

OIL AND ITS PRODUCTS

organic matter. The organic matter buried in marine muds undergoes changes to produce natural hydrocarbons, and these hydrocarbons have settled in porous rocks. After the hydrocarbons have settled in the rocks this is known as a commercial pool. The materials are decomposed in a slow oxygen-free process and they are thought to be remains of plants and animals. The formation of oil from plant material is relative to the formation of coal. It is also believed that the ocean floor offers material for decomposing material.

The bacteria that thrives in the upper mud of the ocean floor are thought to be the changing mechanism of oil to gas. The oil is transformed into gas by the adding of oxygen and nitrogen. During this process natural gas is formed as a by-product of the change.

An oil pool is formed usually in sandstones and is caused by the following reasons: compaction of the mud, capillarity, buoyancy, gravity, and currents. The above mentioned reasons are caused by the oil moving from the mud into the sands. The mud contains up to eighty percent water. As the material decomposes it forces unnecessary water out into pores of the sands. After the water gets so compact it forces the oil out into the other parts of

the sandstones as soon as it will move as a liquid.

The United States produces about two billion barrels of oil annually. Of this figure Texas produces forty four percent of this amount.

Butane is a by-product of the refining of oil and gas. Carbon black is also a by-product of the refining of oil. Gasoline is seperated from the oil by modern refining methods. Natural gas is extracted from the earth and used with very little change being made in it. Plastics are also a by-product of the refining process. This is usually the residual left from the refining of oil.

Oil and gas are found in all the counties that make up the Seventh Congressional District. Figure XIV shows the exact location of all the gas fields in this district. Figure XV shows the exact location of all the oil fields in this district.



Figure XIV. GAS FIELDS--The dotted areas show the exact location of this mineral in the Seventh Congressional District.

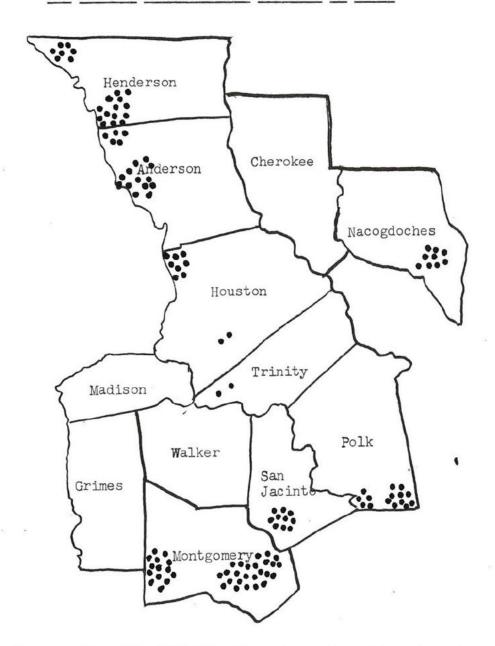


Figure XV. OIL FIELDS--The exact location is shown by dotted areas of this mineral in the Seventh Congressional District.

PHOSPHATE

Phosphate is one of our most valuable commercial fertilizers. It was discovered about a century ago that this was an excellent plant food. Phosphate has a varied life cycle. It is in the igneous rock of the soil, which is absorbed by plants, then by animals and people, which return it in excreta and bones, from which it is dissolved and carried to the sea, and brought back and deposited in beds.

Commercial phosphates are obtained from the following materials: phosphate rock, phosphatic marls, phosphatic limestones, marine phosphate beds, apatite, guano, and basic blast-furnace slag. These materials contain between sixty and eighty percent phosphate.

Ninety percent of the phosphate produced is used as fertilizer. Some materials are added in small amounts to make it more adaptable to plants and give them something they need vitally.

The United States produces about six million tons of phosphate annually. Florida produces about seventy percent and Tennessee about twenty percent. The other ten percent is produced by the other states.

Phosphate is produced in Trinity County by the C. D.

Roberts Company for fertilizer. Figure XVI shows the exact

location of phosphate in the Seventh Congressional District.



Figure XVI. PHOSPHATE -- The dotted areas show the exact location of this mineral in the Seventh Congressional District.

QUARTZITE

Quartzite is a metamorphic rock which is used as an abrasive. Quartzite is sandstone that has been cemented so firmly by a deposit of silica that a fracture takes place through the grains of quarts sand. After this process has taken place, the remains are known as quartzite. If this material is mashed during this process a schist may be formed. If the sandstone is impure a mica-schist may be formed.

Quartzites are usually massive rocks and are of light color. The colors may be white, gray, reddish, of buff and have a hard flinty texture. Mica can be distingushed from quartzite because it has a silvery-lusty color.

Clean, crushed, and graded quartz is used in making flint sandpaper, harsh metal polishes, and various scouring compounds. About 75,000 tons a year of quartz is produced each year. The production is listed as the states lead in production: California, Virginia, North Carolina, Maine, Maryland, and New York.

Trinity County has a large deposit that has not been exploited. Figure XVII shows the exact location of quartzite in the Seventh Congressional District.



Figure XVII. QUARTZITE--The dotted areas show the exact location of this mineral in the Seventh Congressional District.

SALT

Salt is found in beds or domes and are found to be different depths and thickness due to the locality. Salt is a sediment of many geological ages. In North America salt is found in the silurian, permain, and triassic basins. The salt domes in the United States are unusual because they are closely connected with oil. Salt domes are dome-shaped, pipe-shaped, or mushroom shaped. The domes have a caprock of salt, anhydrite, and gypsum. This caprock is directly over the dome and is usually about five to six hundred feet thick.

Salt is used mostly for human consumption and the average person in the United States consumes about twelve pounds a year. Salt is also used in industry for: chemical reactions, packing houses, soaps, ice production, and it is also used as a cattle food.

The United States produces about fifteen million tons of salt annually. The following states leading in production:

New York, Michigan, Ohio, Louisiana, Kansas, and California.

Texas produces about a million and a half tons of salt annually. Grand Saline being one of the largest plants in the world. A large plant is also located at Palestine in Anderson County. Figure XVIII shows the exact location of salt in the Seventh Congressional District.



Figure XVIII. SALT--The dotted areas show the exact location of this mineral in the Seventh Congressional District.

SAND

Sand and gravel as mentioned in the previous topic on gravel are found in the same locallity. The sand used in commercial concrete and other construction procedures is called humdrum sand. Sand is a broad term used to cover almost any type mineral or rock that is in a fine powder. Techinally sand is powdered quartz and a few other impurities such as feldspar, mica, and iron oxides. There is also what is known as black sand which is coral sands, gypsum sands, and others.

Course sand ranges from .6 to 2 milimeters and fine sand ranges from .06 to .2 milimeters in size. Its weight is from ninety to one hundred and ten pounds per cubic foot.

Sand and gravel occur in sedimentary beds along streams and rivers. Sand is used for building, paving, glass, abrasives, and molding.

In Texas sand and gravel rank eighth in production of this states minerals. It usually produces about thirteen million tons annually of sand and gravel. Sand and gravel is found in nearly all the counties of the Seventh Congressional District. Figure XIX shows the exact location of sand in the Seventh Congressional District.



Figure XIX. SAND--The dotted areas show the exact location of this mineral in the Seventh Congressional District.

SANDSTONE

Sandstone belongs to the sedimentary group of rock. These types of rock are formed by the cementation of the sediments by pressure. The pressure forces the water out and causes the sands to dry and causes it to stay in one rock. The type of rock is formed by the type of sediments that are used in this rock sandstone the material is usually quartz sand.

Friable sandstones are ground into a fine powder.

This powder is used for plate glass grinding, sandblasting, sandpaper, and other finer abrasives. About three tons of sand powder is needed to surface one ton of plate glass. The ceramic industry uses about forty percent of the sand produced. The United States produces about one half million tons of this sand powder annually. This sand powder is also used for cleaning and cleaning powders for household use.

Texas does produce some of this sandstone on a commercial basis but on a small scale. A large supply of sandstone is available in Trinity County. Also in Grimes County these sandstones are being ground to be used in paving. Figure XX shows the exact location of sandstone in the Seventh Congressional District.

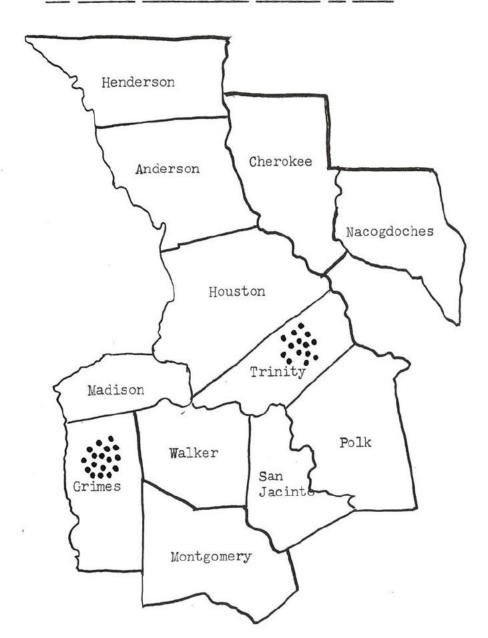


Figure XX. SANDSTONE--The dotted areas show the exact location of this mineral in the Seventh Congressional District.

SILICA

Silica has two uses in industry, and they are as refractories and abrasives. Silica is used in numerous forms of refractory products. The most common form is the mixture of silica and two percent lime which yields a brick material that can be used in metallurgical processes. Also common sand and diatomite mixed makes good ordinary building brick.

The chief deposit of silica for refractories is in Pennsylvania and a large deposit is also in Wisconsin.

Silica brick do not soften or melt when sudden heat or coldness is applied.

Siliceous rocks are quarried and shaped into grindstones and pulpstones, millstones, and hand stones of various types. The most popular type of silica-stone used is quartzite, silcified limestone, flint, chert and novaculite.

The main sources of the above mentioned stone are found in Ohio, West Virginia, and Michigan. Most of these stones taken from this area are used for the following purposes: sharpening saws, machine knives, scythes, shears, and diemaking industry.

Silica found in Anderson County and Henderson County are used in making glass. Figure XXI shows the exact location of silica in the Seventh Congressional District.

一日の大きないというできるとうというないからないというというと

かっている 一切できれた事情のなるとなるとなるとなってあってあるとなるとなっている



Figure XXI. SILICA--The dotted areas show the exact location of this mineral in the Seventh Congressional District.

STRONTIUM

Strontium has two commercial minerals which are celestite (sulphate) and strontiantite (carbonate).

Celestite is the common ore and strontiantite is more valuable because it has a lower manufacturing cost.

Strontium was so named for Strontian, Scotland which has an enormous amount of this mineral.

Strontium is used for its salts, used chiefly to desaccharize beet-sugar molasses. The nitrate is in constant need for pyrotechnics, and the red color is used in making fireworks, dynamite, and flares.

Celestite is found in veins with galena, barite, and calcite. These are in a sedimentary bed which is closely associated with gypsum. Strontiantite is found as a secondary alteration product of celestite and a replacement for limestone. Nearly all the available strontium is found in sedimentary rock, but some has been found in igneous and metamorphic rock.

The most important supply of this mineral is found in England. There are known deposits in the United States but they cannot be exploited and meet the price at which England can produce it. The total world production is about ten thousand tons annually.

Figure XXII shows the exact loction of strontium in the Seventh Congressional District.

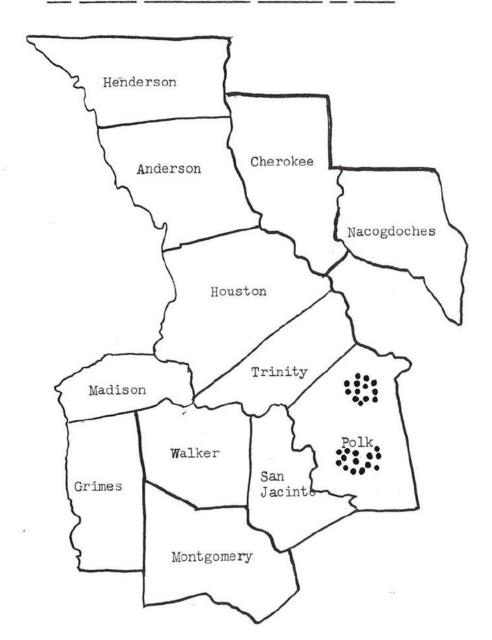


Figure XXII. STRONTIUM -- The dotted areas show the exact location of this mineral in the Seventh Congressional District.

SULPHUR

Sulphur is usually listed as a chemical mineral of which sulphur is one of the most important of this type.

Sulphur is found in three forms: as native sulphur, sulphide, and sulphate. Pyrite is mined for its sulphur content which is rather large.

Sulphur is used in the raw material for the following things: mixing with heavy chemicals, fertilizers, insecticides, paper, paint, explosives, dyes, rubber, and food products. Sulphur is used as the chief material in sulphuric acid, which is used for the following items: oil refining, fertilizers, chemicals, rayon, paints, iron and steel, and textiles. When sulphur is burned it produces a gas and this is converted into sulphuric acid.

The total world production of sulphur is about four million tons annually, of which about ninety two percent is produced in the United States. A large percent of the United States production is produced by Texas and a small amount by Louisiana. Texas produces about three and ninetenths million tons of sulphur annually.

A large deposit of sulphur is in San Jacinto County but it has never been exploited. Figure XXIII shows the exact location of sulphur in the Seventh Congressional District.



Figure XXIII. SULPHUR--The dotted areas show the exact location of this mineral in the Seventh Congressional District.

TIMBER AND ITS PRODUCTS

All the counties in the Seventh Congressional District are either in the Pine Belt or the Post Oak Belt. Most of the counties lie in the Pine Belt.

The following list is the number of acres of timber in some of the counties that are in heavy timber. Also listed is the estimated number of million of board feet of lumber.

Name of County	Acres of timber land	Millions of board feet		
Anderson	362,266	466		
Cherokee	337,280 398.2			
Houston	425,779 1,241.9			
Montgomery	537,152	1,437.5		
Nacogdoches	357,466	547.5		
Polk	567,130 2,944.7			
San Jacinto	305,043	1,147.1		
Trinity	328,909	1,029.8		
Walker	337,037	861.2		

Of the above listed counties they average about sixtysix percent timbered land.

The following species of timber are found in the Seventh Congressional District: basswood, magnolia, cotton-wood, willow, maple, black oak, red oak, cherrybark oak,

¹ Texas Almanac (Dallas, Texas: The Dallas Morning News, 1952), pp. 160-65.

pin oak, Shumard oak, water oak, willow oak, cow oak, forked leaf oak, overcup oak, Durand white oak, bur oak, post oak, hickory, green ash, white ash, beech, birch, cedar elm, white elm, winged elm, hackberry, water locust, pecan, sycamore, and black walnut.

Baskets, boxes, and crates are produced on a commercial basis in the Seventh Congressional District. The companies will be listed in the next section. No figures are available on the amount of products that are produced in this area.

Charcoal is not produced in this area but the material for making this product is produced. It is shipped to points where the charcoal is made.

Chemicals and medicines are not produced in this area but the raw materials for these items are produced.

During recent years longleaf pine stumps have been taken up and many by-products have been distilled from them. It must be brought to mind that the stumps have to be very dense to be of commercial value.

Creosoted products are produced in this area on a large commercial basis. There are two plants at Conroe, one at Nacogdoches, and one at Navasota. They produce utility poles, fence post, and pilings. They also creosote cross ties.

Fence post are produced and are used locally with a small percentage being shipped to other points.

Floor sweep is made primarily from sawdust and oil.

There is an excellent supply of sawdust around the sawmills in this area. The oil can be transported more cheaply than the sawdust.

Forest farms are also found in East Texas with the state of Texas Forest Farm being located in Cherokee County. They produce loblolly, longleaf, shortleaf, and slash pine seedlings at this farm. They raise from ten to twenty million seedlings a year depending upon the weather. They are distributed at a low cost to people that will set them out.

Lumber is the chief resource in the Seventh Congressional District. The following list includes the number of sawmills and the number of board feet of lumber they produce annually.²

County	Number of sawmills	Board feet of lumber
Anderson	28	20,432,000
Cherokee	26	51,027,000
Grimes	8	8,064,000
Henderson	12	2,539,000
Houston	37	34,755,000

² Ibid.

Madison	2		 208,000
Montgomery	50		109,922,000
Nacogdoches	. 27		70,284,000
Polk	2l _‡		83,107,000
San Jacinto	11		9,236,000
Trinity	17		40,185,000
Walker	9	127	25,788,000

Naval stores are produced in this area but not known figures are available. Most of these products are produced from stumps.

Nuts and fruits are produced from trees in this area but no figures are available. Some of the items listed that are produced are peaches, pears, apples, plums, pecans, hickory nuts, walnuts, and persimmons.

Pilings and poles are produced in this area on a large commercial basis. The latest figures of pilings and poles is 540,812 pieces annually. Most of these are creosoted in this area.

Pulp wood is cut in this area and shipped to paper mills which are close by. The pulp wood is either shipped to Lufkin or Pasadena, Texas. The wood is converted into paper at these two plants.

Railroad ties are produced on a commercial basis in

³ Ibid.

this area. The latest figures on ties are 4,490,100 ties are produced annually.4

Sawdust and slab wood are by-products from the sawmills and are used locally for fuel. It is used in the home as well as in small industry.

Staves are produced on a commercial basis in this area. The latest figures of stave production is that 5,975,000 board feet of this material is produced annually.

Veneer is produced on a commercial basis in this area. The latest figures on veneer shows that 64,125,000 board feet is produced annually.6

In the Seventh Congressional District are the following National Forest: Angelina National Forest, Sam Houston
National Forest, and Davy Crockett National Forest. The
following state forest are in the district: I. D. Fairchild
State Forest, Mission State Forest, and W. Goodrich Jones
State Forest.

Figure XXIV shows the Pine Belt in the Seventh Congressional District. Figure XXV shows the Post Oak Belt in the Seventh Congressional District. Figure XXVI shows the National Forest in the Seventh Congressional District.

⁴ Ibid.

⁵ Ibid.

⁶ Ibid.

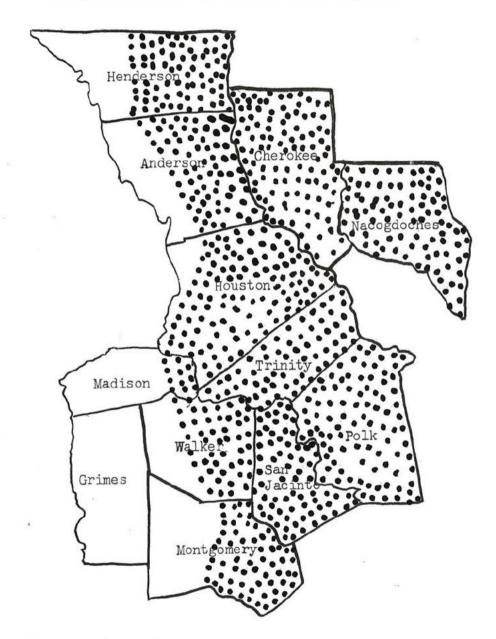


Figure XXIV. PINE BELT--The dotted areas show the exact location of this belt in the Seventh Congressional District.

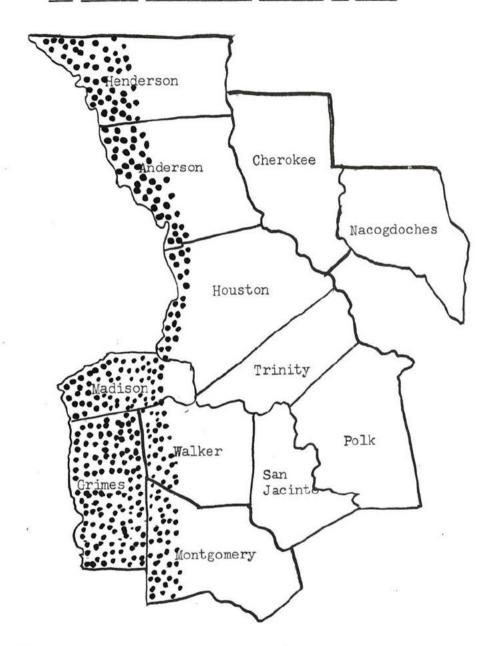


Figure XXV. OAK BELT--The dotted areas show the exact location of this belt in the Seventh Congressional District.

THE SEVENTH CONGRESSIONAL DISTRICT OF TEXAS

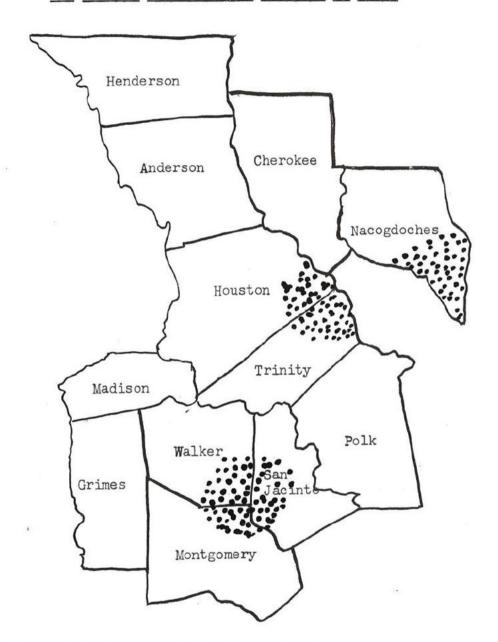


Figure XXVI. NATIONAL FORESTS--The dotted areas show the location of these forest in the Seventh Congressional District.

SUMMARY

After discussing the natural resources in the Seventh Congressional District the author has come to a new conclusion regarding the utilization of natural resources in East Texas.

Natural resources are being used to further industrialize the Seventh Congressional District, and to a greater extent. The development of the iron ore industry in this district was brought about by the large supply available in that area and the need for more steel production. The brick and tile plants of the northern section of this district are utilizing the clays to a great extent. The two glass industries in this district are making good use of the silica found in the area in which they are located. processing which is the largest industry in the Seventh Congressional District is making available the wood products needed in this area with the surplus being shipped to distant points. We also have the Texas Forest Farms which grows replacements for the timber that is cut for lumber and other wood products. The salt industry which has been developed in Anderson County is being utilized to a great extent. One of the newest resources to be used in this area and which also has a great new future in this area is lignite. This valuable material was thought to be of little value at one time and now is found to be of great value in producing electricity.

The natural resources in this district will be of great value in the industrial expansion of this area. There are several resources available that are not being used at this time, but they will probably be used in the near future. Some of them are: lime, asphalt, quartzite and sulphur which are found in amounts sufficient to supply small industries. There are larger amounts of these resources available now, but at the rapid pace the United States consumes natural resources many of these materials will be completely exhausted and in the near future new sources will be needed.

Several of the resources may have to be combined to supply a large industry. These resources are still available to supply a large industry such as an iron foundry, furniture factory or other large industry that needs several raw materials to produce their finished products. The iron industry needs iron ore, sand, charcoal, lime, and several other products of limited amounts to produce castings. All these materials are available in this area. In the furniture industry the following items are needed: wood, cotton, cloth and other materials that are available in this area.

In conclusion there are many good natural resources that could be utilized in this area to produce a great industrial expansion. Possibilities are increasing for a great industrial area in some fields in this area and much outside capitol is being invested in this industrial expansion.

SECTION IV

INDUSTRIES OF THE SEVENTH CONGRESSIONAL DISTRICT

INTRODUCTION TO SECTION IV

There are between four and five hundred industries in the Seventh Congressional District. These industries are of many different types.

The following section lists the industries and as much information about them as possible. The names of the business is given, its finished product, when the business was started, its sales area, and about how many people are employed.

The largest single industry in this district is timber production and processing. Sawmills alone number about one hundred and twenty. The next largest industry is ice manufacturing. There are about twenty ice plants in this area. All other industries have from one to ten factories or plants in this district.

In this district we find small businesses that employ only one person and large industries that employ over five-hundred people annually. Some are very modern in respect to buildings, equipment, and methods used in producing its finished products. Some of the businesses are old and still maintain equipment that is obsolete, in unsafe buildings with poor lighting and ventilation, and have a poor system of organization as to the operational procedure.

AWNING AND SHADE FACTORIES

Of the two awning and shade factories in the Seventh Congressional District the Burleson Trim Shop of Huntsville, Texas is the first one. It is a sole proprietor type of business that was started in 1932. Mr. Burleson makes cotton and duck awnings and he sells tham over an area of several counties. The owner is the only workman in this business.

The second of the awning and shade factories is the Sims Manufacturing Company of Malakoff, Texas. It is a partnership of two brothers and the company began operations in 1945. It manufactures wooden-type awnings and they are sold throughout the United States. They employ fewer than eight men annually.

BAKERIES

There are five bakeries in this district, the first and largest being the American Home Bakery of Palestine, Texas. This business is a partnership between two men--Mr. Westerman and Mr. Eilenberger. The bakery bakes bread, cakes and cookies and distributes them over an area of several counties. They employ between fifty and seventy-five persons annually.

The City Bakery of Athens, Texas is a partnership of the two Hart Brothers. It has been in operation for several years and it bakes bread, cookies and cakes. The bakery distributes its products over an area of several counties. They employ more than eight and fewer than twenty-four persons annually depending upon the season.

The Huntsville City Bakery of Huntsville, Texas is a sole proprietor type business. This bakery has been in operation since 1939 and it bakes pies, cakes, cookies, and a limited amount of bread. It is a distributor of products for a large chain bakery in this area also. They sell their own bakery goods locally and employ fewer than eight persons annually.

The Sweet Shop Bakery of Jacksonville, Texas is a sole proprietor type of business. This bakery has been in operation since 1947 and it bakes all types of bakery goods. It distributes its products over several counties in that area, and it employs fewer than eight people.

The T and P Bakery of Jacksonville, Texas is a partnership type of business. It is a partnership between
Dr. J. M. Travis and Ed Poland and they started their
business in 1951. They bake all types of bakery goods
and distribute them over that county. They employ more
than eight and fewer than twenty-four people annually.

BASEBALL BAT FACTORY

Baseball bats were made by the Lone Star Bat Company of Crockett, Texas. The company has been discontinued for the present. Before the shut-down of the factory it made excellent bats out of local timber.

BASKET FACTORIES

There are five basket factories in the Seventh Congressional District. The oldest and largest being the Aber Box and Basket Factory of Jacksonville, Texas. It is a partnership type of business and was started in 1925. They produce fruit and vegetable baskets which are sold throughout the United States. They employ more than fifty and fewer than one hundred people depending upon the season.

The Newton-Shank Manufacturing Company of Jacksonville, Texas is a partnership of three men. This partnership type of business was started in 1925. They produce fruit and vegetable baskets and sell them all over the United States. They employ more than fifty and fewer than one hundred workmen during the year depending upon the season.

The Trinity Basket Company of Trinity, Texas is a partnership of two men. This partnership type of business was started in 1926, and it produces fruit and vegetable baskets. Their sales are all over the United States, and the factory employs over one hundred people annually.

Edwards Venetian Blind Company of Jacksonville, Texas is a sole proprietor type of business. It produces baskets other than those for fruit and vegetables. The material that is used is a by-product of the venetian blinds. The company was started in 1946 and its sales are over several counties in this area. It employs fewer than eight work-men annually.

The Peacock Crate Factory of Jacksonville, Texas uses its scraps to build baskets. This is a partnership type of business that was started in 1896. It produces other types of baskets than those used for fruits and vegetables. This company's sales are nation-wide and this factory employs more than fifty and fewer than one hundred people annually depending upon seasonal demands.

BOTTLING WORKS

The Seventh Congressional District contains seventeen bottling works companies. They are listed in the following paragraphs.

The Arctic Bottling Company of Conroe, Texas produces fruit-flavored soft drinks. It was started in 1933 and is a sole proprietor type of business. This plant has an area of several counties to serve and employs fewer than eight persons each year.

The Clarke Bottling Company of Conroe, Texas produces

fruit-flavored soft drinks and has a sales area of several counties. This company is a sole proprietor type of business and employs more than eight and fewer than twenty-four people each year.

The Huntsville Coca-Cola Bottling Company is a branch of the Houston Coca-Cola Bottling Company. This company is a portion of a large corporation type of business. It was organized in 1935 and distributes Coca-Cola over several counties in this area. This plant employs more than eight and fewer than twenty-four men annually.

The Crown Coca-Cola Bottling Company is located in Jacksonville, Texas. This company has several owners and was organized in 1903. This plant distributes Coca-Cola over Cherokee County only and it employs more than eight and fewer than twenty four employees annually.

The Dr. Pepper Bottling Company of Nacogdoches has a manager and the owner does not participate in the activities of the company.

The Dr. Pepper Bottling Company of Palestine is a partnership type of business. It was organized in 1898 and has a distribution area of several counties. This plant employs more than eight and fewer than twenty-four people annually.

The Dr. Pepper Bottling Company of Trinity is a partnership type of business. It was organized in 1917

and a distribution area of several counties. This company has fewer than eight employees annually.

The Dr. Pepper Bottling Works of Livingston is a sole proprietor type of business. It was organized in 1928 and has a distribution area of Polk County only. This plant employs fewer than eight people annually.

The J. J. Gindrup and Sons is located in Conroe and is a partnership type of business. It was organized in 1932 and produces milk products as well as soft drinks. This company distributes its products over several counties and employs more than eight and fewer than twenty-four persons each year.

The Grapette Bottling Company of Rusk is a sole proprietor type of business. It was started in 1940 and has a large area in which to distribute Grapette. This plant employs more than eight and fewer than twenty-four persons annually.

The Madison Bottling Company is located in Madisonville.

It is a sole proprietor type of business and was started in 1938. This company distributes fruit-flavored drinks over several counties, and employs more than eight and fewer than twenty-four people each year.

The Nacogdoches Coca-Cola Bottling Company has a martager in charge and the owner is not connected with the business. This company was organized in 1925 and it

distributes Coca-Cola over several counties in that area.

This concern employs more than eight and fewer than twentyfour people annually.

The Palestine Coca-Cola Bottling Company is a sole proprietor type of business and was organized in 1935. It distributes Coca-Cola in several counties in that area, and has more than eight and fewer than twenty-four employees each year.

The Pure Milk and Ice Company is located in Nacogdoches and is a sole proprietor type of business. It was organized in 1928 and distributes its products over several counties in that area. This plant employs more than twenty-five and fewer than forty-nine people annually.

The Seven-Up Bottling Company is located in Jackson-ville and is a partnership composed of three business men. The company was organized in 1940 and it distributes Seven-Up in several counties in that area. This concern employs more than eight and fewer than twenty-four employees each year.

The Seven-Up Bottling Company of Nacogdoches is a partnership type of business between two brothers. The company was started in 1935 and distributes Seven-Up in several counties in that area. It employs more than eight and fewer than twenty-four persons each year.

BOX AND CRATE FACTORIES

The Butler Gin and Crate Factory is at Rusk and is a partnership type of business. This factory gins cotton in season and builds wooden fruit crates in the off-season periods. This company was organized in 1905 and distributes its products internationally. This concern has more than twenty-five and fewer than forty-nine employees annually.

The Frankston Crate Company is located at Frankston and is a sole proprietor type of business. This factory produces tomato lugs and various types of vegetable crates. This company was organized in 1947 and its products are sold within the state. This concern employs more than twenty-five and fewer than forty-nine people each year.

The Newton-Shank Company of Jacksonville is a partnership of three men. This business was started in 1925
and produces tomato lugs and also various types of baskets.
It sells its products throughout the United States. They
employ more than fifty and fewer than ninety-nine persons
annually.

The Aber Box and Basket Factory is located in Jacksonville and is a partnership type of business. This
factory produces all types of wooden boxes and crates.
This company was started in 1925 and it sells its products
all over the United States. This concern employs more
than fifty and fewer than ninety-nine people each year.

The Athens Box and Crate Factory is located at Athens and is a partnership type of business. It manufactures all types of wooden boxes and crates. This factory was started in 1946 and distributes its boxes and crates in the state of Texas. This company has more than eight and fewer than twenty-four employees annually.

The Bagley Box Company is located in Alto and is a sole proprietor type of business. It manufactures several types of boxes and crates. This factory was started in 1949 and has a trade area of the entire state of Texas. This business has more than fifty and fewer than ninetynine employees each year.

The Bruce Slover Crate and Lumber Company is located in Rusk. It manufactures all types of vegetable crates. This company was started in 1946 and is a sole proprietor type of business. This concern has a sales area in this state and it employs more than twenty-five and fewer than forty-nine workman each year.

BRASSIERE FACTORIES

The largest brassiere factory in the Seventh Congressional District is the Marja Brassiere Company which is located in Jacksonville. It was started with one sewing machine and it has grown into a large factory which is still growing. The company's sales in the past year have

been in excess of two million dollars. This factory has been in operation fifteen years, and it is owned by several men. Its product is sold internationally and it employs about four hundred people annually.

A new brassiere factory was started in Athens this year by the Hollywood Brassiere Company which is a nation-wide company with branches all over the United States.

This new business has about fifty people employed at the present and it is making plans for a great future expansion.

BRICK FACTORIES (BUILDING BRICK)

The Acme Brick Company of Fort Worth has a branch plant at Garrison which produces face and common brick. This branch was started at Garrison in 1924 and it sells its products in several nearby states as well as Texas. This business has more than fifty and fewer than ninetynine employees yearly.

The Texas Clay Products Company of Athens has a brick factory at Athens and one at Malakoff. The company is a partnership of three individuals and was started in 1946. This business sells its products all over the United States. It employs more than fifty and fewer than ninety-nine workmen at both plants annually.

BRICK FACTORY (FIRE BRICK)

The only fire brick factory in the Seventh Congressional District is the Harbison-Walker Refractories Company.

This company is owned by a large national concern and this
is a branch plant located at Athens. It produces any type
fire brick that is ordered by special companies for special
purposes. This branch was started in 1940 and it serves
the great Southwest. It has from fifty to ninety-nine
employees annually.

BROOM FACTORY

The only broom factory in the Seventh Congressional District is the Parker Broom Company of Huntsville. It produces brooms and mops and is a sole proprietor type of business. This concern started in 1936 and it serves all nearby counties. This factory has fewer than eight employees annually.

BUS BODY FACTORY

The only bus body factory in the Seventh Congressional District is the Industrial Iron Works of Jacksonville. This is a branch plant which has its home office in Hugo, Oklahoma. This factory builds mostly bus bodies of small capacity. This branch was started in 1940 and serves several nearby states as well as Texas. This concern

employs more than eight and fewer than twenty-four persons each year.

CANDY FACTORIES

The Jacksonville Candy Company is a sole proprietor type of business. This business specializes in peanut candy. This company was started in 1934 and it serves several nearby states as well as Texas. This concern has more than twenty-five and fewer than forty-nine employees annually.

The R. D. Crawford Company is located at Navasota.

This is a sole proprietor type of business started in 1925.

This concern serves all nearby counties and has under eight employees annually.

CANNING FACTORIES

The Athens Canning Company of Athens, Texas is a sole proprietor type of business. This factory started in 1943 and it cans tomato products and different types of vegetables that are grown in that area. It sells most of its products in Texas and employs more than fifty and fewer than ninetynine persons annually.

The Jacksonville Canneries of Jacksonville, Texas is a partnership of three business men. This company was started in 1938 and it cans vegetables that are grown in

that area. It sells its products in Texas and the bordering states. This concern employs over one-hundred people during the canning season.

The Lovelady Canning Company is located in Lovelady and it is a partnership of two business men. This business was started in 1947 and it cans tomato products and vegetables that are grown in that area. It sells its products throughout the Southwest and employs over one-hundred employees annually.

The Ackers Tomato Packing Company is located in Rusk and is a sole proprietor type of business. This company was started in 1941 and it cans tomato products that are grown in that area. It sells it products all over the Southwest and has over twenty-five and fewer than forty-nine people employed during canning season.

The Cherokee County Canning Company is in Rusk and is a sole proprietor type of business. This business was started in 1945 and it cans fruits and vegetables that are grown in that area. This concern sells its products all over the Southwest and employs more than twenty-five and fewer than forty-nine persons annually.

The Maness Packing Company of Rusk is a sole proprietor type of business. It was started in 1941 and it cans tomato products that are grown in that area. This company sells its products all over the Southwest and employs over fifty and fewer than ninety-nine people during canning season.

The Saxet Canning Plant at Rusk is a sole proprietor type of business. It was started in 1948 and it cans tomato products and vegetables that are grown in that area. This plant sells its products all over the Southwest and has over one-hundred people employed during the canning season.

The Southern Products Canning Plant is of Rusk and is a sole proprietor type of business. This company was started in 1951 and it cans fruit juices, tomato products, vegetables, and pet food. This business sells its products all over the Southwest. This concern has over one-hundred employees each year.

The Brownsboro Canning Company is located in Brownsboro and it is a partnership type of business. This company was started in 1946 and cans all types of tomato products from tomatoes that are grown in that area. It sells its products in the state of Texas. This concern employs over one-hundred people during the canning season.

CARBON BLACK FACTORY

The Columbian Carbon Company is located in Conroe and is a branch plant of a large company that has its home office in New York City. This branch plant was built in 1943 and it produces carbon black and carbon black gas. The company's products are used all over the world. This

concern has more than fifty and fewer than ninety-nine employees at this plant annually.

CHILDRENS CLOTHING FACTORIES

The Button and Bow Shop is located in Jacksonville and it is a sole proprietor type of business. This factory makes all types of childrens clothing. It was started in 1947 and it sells most of its finished products in the Jacksonville trade area. This business has fewer than eight employees each year.

The Nancy Ann Company is located in Jacksonville and it is a sole proprietor type of business. It makes childrens underwear, childrens robes, and childrens pajamas. This company was started in 1948 and sells its finished products in the Southwest. This business employs fewer than eight persons annually.

The Schofield Originals is located in Jacksonville and is a sole proprietor type of business. It makes childrens play clothes, girls clothing and childrens robes. This company was started in 1946 and sells most of its products in Texas. This factory has fewer than eight employees annually.

CONCRETE BLOCK FACTORIES

The Baldwin Concrete Products is of Huntsville and

is a partnership of two business men. It makes concrete blocks as well as other concrete products used in building. This company was started in 1947 and it sells its products within several nearby counties. This concern has fewer than eight employees annually.

The E. D. Blessing and Son is located in Nacogdoches and is a sole proprietor type of business. It makes concrete blocks and other types of concrete products that are used in building. This company was started in 1946 and it sells the concrete products within Nacogdoches County. This business employs fewer than eight people annually.

The State Supply Company is of Conroe and is a sole proprietor type of business. It makes many types of concrete blocks and other types of concrete products that are used in building. The company was started in 1934 and it sells its products in all nearby counties. This concern has fewer than eight eight employees annually.

CONCRETE CULVERT FACTORY

The Baldwin Concrete Products is of Huntsville and is a partnership of two business men. It makes concrete culvert pipe as well as other concrete products that are used in building. The company was started in 1947 and it sells its products in several nearby counties. This business has fewer than eight people employed each year.

COTTON BY-PRODUCTS PLANTS

The Swift and Company Oil Mill of Palestine is a branch of a large company that has branches throughout the United States. This branch produces cottonseed oil and other cottonseed by-products that can be used in making feed for cattle and other livestock. This plant was built in 1946 and sells its products throughout the United States. This business employs more than fifty and fewer than ninetynine workmen annually.

The Texas Farm Products Company of Nacogdoches is a sole proprietor type of business. It processes all types of livestock feeds. The company was started in 1930 and sells its products in the East Texas Area. The annual employment is over one hundred.

The H. Schumacher Oil Works of Navasota is a partnership type of business. It produces cottonseed oil and
cottonseed products that can be used in making livestock
feed. The company was started in 1873 and sells its products all over the East Texas Area. This plant employs
more than fifty and fewer than ninety-nine persons annually.

FEED MILLS

The Anderson Grain Company of Nacogdoches is a sole proprietor type of business. It processes livestock feed

mostly with some small amounts of other types. The company was started in 1939 and sells mostly in Nacogdoches County. This mill has fewer than eight employees annually.

The Cherokee Feed Mills is of Jacksonville and is a sole proprietor type of business. It makes livestock feed principally and small amounts of other types of feed. The company was started in 1949 and sells most of its products in Cherokee County. This mill employs fewer than eight people annually.

The Independent Milling Company of Nacogdoches is a sole proprietor type of business. It produces livestock and chicken feed. The company was started in 1946 and sells most of its products in the East Texas Area. This business employs more than eight and fewer than twenty-four people annually.

The Prairie Farms Feed Milling Company of Livingston is a partnership type of business. It produces livestock feed and small amounts of other types of feeds. The company sells its products in all the nearby counties, but mostly in Polk County. This business has fewer than eight employees annually.

The H. Schumacher Oil Works of Navasota is a partnership type of business. It produces livestock feed and a small amount of other types of feed. The company was started in 1873 and its products are sold throughout the East Texas Area. This business employs more than fifty and fewer than ninety-nine people each year.

The Swift and Company Oil Mill of Palestine is a branch of a large company that has branches all over the United States. This branch plant produces all types of livestock feed and chicken feed that is made from cotton-seed and its products all year. This plant was built in 1946 and sells its products all over the United States. The company has more than fifty and fewer than ninety-nine employees annually.

The Texas Farm Products Company of Nacogdoches is a sole proprietor type of business. It produces all types of livestock and chicken feeds and small amounts of other types of feeds. The company was started in 1930 and sells its products in the East Texas Area. This concern employs over one hundred persons each year.

FERTILIZER PLANTS

The Jacksonville Fertilizer Company of Jacksonville is a corporation type of business. It makes all types of commercial fertilizers. The company was started in 1938 and sells its products all over the East Texas Area. This plant employs more than eight and fewer than twenty-four people annually.

The Texas Farm Products Company of Nacogdoches is a sole proprietor type of business. It produces all types of commercial fertilizers. The company was started in 1930 and sells its products throughout the East Texas Area. This concern employs more than one hundred people annually.

FLOORING MILLS

The Texoak Flooring Company of Crockett is a partner-ship type of business. It produces all types of hardwood flooring. The company was started in 1946 and sells its products in Texas. This business employs more than eight and fewer than twenty-four people annually.

The General Oak Flooring Company is located in Nacogdoches and it is a partnership type of business. It makes several types of hardwood flooring. The company was started in 1948 and sells its products all over the United States. This concern employs more than twenty-five and fewer than forty-nine people each year.

The Arkansas Oak Flooring Company of Rusk is a branch of a large flooring concern. This branch at Rusk cuts the timber and saws it into large portions and ships it to its main factory to be finished into flooring. This branch was started in 1951 and the company's products are sold throughout the United States. The company employs more than fifty and fewer than ninety-nine workmen annually.

FURNITURE FACTORIES

The Sims Manufacturing Company of Malakoff is a partnership of two brothers. This factory builds all types of bedroom furniture and lawn furniture. The company was started in 1945 and it sells its products all over the United States. This concern has fewer than eight employees each year.

The Wallace Furniture Factory of Alto is a sole proprietor type of business. It manufactures several types of furniture for the breakfast room and any other types that are ordered by its customers. The factory was started in 1946 and sells most of its furniture in Texas. The factory employs fewer than eight employees annually.

The Campbell Chair Factory of Athens is a sole proprietor type of business. This factory builds mostly woven-cane bottom chairs. The company was started in 1946 and sells most of its products in Texas. This concern employs more than eight and fewer than twenty-four persons annually.

The S-K Fixture and Church Furniture Company is of Jacksonville and is a sole proprietor type of business. It builds all types of church fixtures and living room furniture and also builds many types of store fixtures. The company was started in 1946 and sells its products in the Southeast and Southwest. This concern employs

more than eight and fewer than twenty-four persons annually.

The Penman Manufacturing Company of Nacogdoches is a partnership type of business. It builds all types of furniture and specializes in dining room furniture. The company was started in 1943 and sells its products all over the United States. This business has more than twenty-five and fewer than forty-nine employees annually.

The Builders Service Company of Trinity is a partner ship type of business. It builds any type of furniture to order. The company was started in 1948 and sells its products all over the state of Texas. This factory has more than eight and fewer than twenty-four employees annually.

Whiteheads of Jacksonville is a sole proprietor type of business. It builds many types of furniture that are ordered by its customers. The company was started in 1929 and sells its products in the East Texas Area. This concern employs more than eight and fewer than twenty-four persons each year.

GARMENT FACTORIES (MEN AND WOMEN)

The Mize Brothers Manufacturing Company of Nacogdoches is a partnership type of business. It makes all types of womens dresses with the latest fashion and design being used. The company was started in 1928 and sells its

products all over the United States. This factory employs over one-hundred and fewer than two hundred and forty-nine persons annually.

The Nancy Ann Company of Jacksonville is a sole proprietor type of business. It makes all types of womens dresses, womens robes, and women and young ladies pajamas. The company was started in 1948 and sells its finished products throughout the Southwest. This concern has fewer than eight employees annually.

The Schofield Originals is of Jacksonville and it is a sole proprietor type of business. It makes all types of womens robes. This factory was started in 1946 and sells most of its products in Texas. The company has fewer than eight employees annually.

The Industrial Garment Manufacturing Company of Palestine is a branch of a company that has its home office in Cleveland, Ohio. It produces mens trousers and shirts and at the present time it is filling large contracts for the Armed Forces. This plant was started in 1947 and sells its finished products throughout the United States. The company employs more than one hundred and fewer than two hundred and forty-nine people annually.

The Nicar Manufacturing Company of Alto is a sole proprietor type of business. It makes mostly womens suits and skirts. The company was started in 1946 and sells

its products in Texas. The business has fewer than eight employees annually.

The Tyra Tie Company is located in Jacksonville and is a partnership type of business. It makes all types of neckties. The company was started in 1926 and sells its products all over the Southwest. This concern employs more than fifty and fewer than ninety-nine persons each year.

GLASS FACTORIES

The Knox Glass Bottle Company of Mississippi has a plant located at Palestine. The company's home office is located at Jackson, Mississippi. This branch is used to make soft drink bottles and jars suitable for canning. This plant was built in 1941 and sells its finished products all over the United States. This concern employs more than two hundred and fifty and fewer than four hundred and ninety-nine people annually.

The Athens Glass Company of Athens is a sole proprietor type of business. This plant makes many types of glassware of the higher type workmanship. All the glassware is hand blown by skilled workmen. The plant was started in 1952 and sells its products all over the United States. The company employs fewer than eight persons annually.

HANDLE FACTORY

The A. C. Miller Handle Factory is located in Jackson-ville and is a sole proprietor type of business. It makes all types of handles for tools. The company was started in 1948 and sells its finished products all over the United States. This factory employs more than twenty-five and fewer than forty-nine people each year.

ICE CREAM FACTORIES

The Landons Ice Cream Factory is located at Jackson-ville and is a sole proprietor type of business. It makes all types of ice cream and sherbet. The company was started in 1946 and sells its products in an area of several counties. The factory has less than eight employees each year.

The Nacogdoches Ice Cream Company is located at Nacogdoches and is a sole proprietor type of business. It makes all types of ice cream and sherbet. The company was started in 1921 and sells its products in several nearby counties as well as Nacogdoches County. The business employs more than twenty-five and fewer than forty-nine people each year.

The Norton Ice and Ice Cream Company of Nacogdoches is a partnership type of business. It makes all types of ice cream and sherbet. The company was started in 1947

and sells most of its products locally. The factory has fewer than eight employees annually.

The Palestine Creamery Company is located at Palestine and is a partnership type of business. This factory makes all types of ice cream and sherbet. The company was started in 1910 and sells its products in nearby counties as well as in Anderson County. The business employs more than fifty and fewer than ninety-nine workmen.

ICE PLANTS

The Hugh Drane Ice Company is located at Athens and is a sole proprietor type of business. The plant produces ice and sells it in blocks and crushed. The company sells its ice locally and in nearby communities that do not have ice plants. This concern employs more than eight and fewer than twenty-four people annually.

The Hugh Drane Ice Company has a branch plant which is located in Brownsboro. It is a sole proprietor type of business. This branch plant sells its ice locally and in nearby communities which do not have ice plants. This concern has fewer than eight employees at this branch plant.

The Texas Public Utilities of Crockett has an ice plant in that city. This is a corporation type of business, of which this is a branch. This plant sells its ice in nearby towns which do not have ice plants and also in

Crockett. This concern has more than eight and fewer than twenty-four employees annually.

The Citizens Ice Company of Frankston is a partnership type of business. It produces ice and sells it in blocks or in crushed form. The plant sells its ice locally and in nearby communities that do not have its own ice plant. The business has fewer than eight employees annually.

The City Ice Company of Garrison is a partnership type of business. It produces ice and sells it in block form or crushed. The company was started in 1946 and sells its ice locally and in nearby communities that do not have ice plants. The plant employs fewer than eight people each year.

The Texas Refrigeration and Ice Company of Huntsville is a branch plant of a large corporation type business. The home office of this company is in Dallas, Texas. This plant produces ice and sells it in block form and also crushed. The company was started in 1946 and sells ice locally and all nearby towns that do not have ice plants. The business employs more than eight and fewer than twenty-four workmen annually.

The Independent Ice Company of Jacksonville is a sole proprietor type of business. It produces ice and sells it in block form or crushed. The company was started in 1929 and sells ice locally and in nearby communities that

do not have ice plants. The plant has fewer than eight employees annually.

The Southwestern Electric Company of Jacksonville is a branch of a large corporation type of business. It produces ice and sells it in block and crushed forms. This plant was started in 1945 and it sells its ice locally and in nearby communities that do not have ice plants. The company employs more than one hundred and fewer than two hundred and fifty people annually.

The Livingston Ice Company of Livingston is a sole proprietor type of business. It produces ice and sells it in block and crushed forms. The company sells its ice locally and to people in nearby communities that do not have ice plants. The plant has fewer than eight employees annually.

The Hugh Drane Ice Company of Malakoff is a branch of the company which has its home office in Athens. This plant produces ice and sells it in block or crushed form. This concern has fewer than eight employees each year.

The City Ice Company of Nacogdoches is a sole proprietor type of business. It produces ice and sells it in block and crushed forms. The company was started in 1950 and sells its ice locally and in nearby communities. The plant has fewer than eight employees during the year.

The Home Ice Company of Nacogdoches is a sole proprie-

tor type of business. It produces ice and sells it in block and crushed form. The company was started in 1947 and sells its ice locally. This business has fewer than eight employees annually.

The Norton Ice and Ice Cream Company of Nacogdoches is a partnership type of business. It produces ice and sells it in block or crushed form. The company was started in 1947 and sells most of its ice locally. The plant employs fewer than eight persons each year.

The Pure Milk and Ice Company of Nacogdoches is a sole proprietor type of business. The plant produces ice and sells it in block or crushed form. The company was started in 1928 and sells its products in Nacogdoches County and in nearby counties that do not have ice plants. The business employs more than twenty-five and fewer than forty-nine persons annually.

The Texas Refrigeration and Ice Company of Navasota is a branch of a large corporation type of business. The company's home office is in Dallas, Texas. The plant was started in 1912 and it sells its ice locally and in nearby communities that do not have ice plants. The company employs more than eight and fewer than twenty-four people annually.

The Home Ice Company of Palestine is a branch of a large corporation that has its home office in Dallas, Texas.

The Independent Ice Company of Palestine is a sole proprietor type of business. The plant produces ice and sells it in block or crushed form. The company was started in 1922 and sells its ice locally and in nearby communities that do not have ice plants. The plant has fewer than eight employees annually.

The Shepherd Ice Company of Shepherd is a sole proprietor type of business. It produces ice and sells it in block and crushed form. The plant was started in 1946 and sells its ice locally and in nearby communities that do not have ice plants. The plant has fewer than eight employees annually.

IRON ORE BENEFICIATING PLANT

The Sheffield Steel Corporation has a branch plant at Rusk and it is used for preparing the iron ore for shipment to the blast furnace. The plant takes all foreign matter out of the ore and washes it and loads it into railroad cars for shipment to the Houston Plant. This plant was built in 1952 and it cost about one million dollars. The plant can produce about fifty railroad cars of iron ore per day. The plant employs more than fifty and fewer than ninety-nine persons annually. The company also owns a blast furnace on the plant site but it is not in use.

KILN FACTORY (LUMBER KILN)

The Crockett Manufacturing Company of Crockett is a sole proprietor type of business. It builds kilns used in the drying of lumber. The company was started in 1943 and it sells its products throughout the United States. This concern employs more than twenty-five and fewer than forty-nine workmen annually.

LEATHER GOODS FACTORY

The Shepherd Boot and Shoe Shop of Jacksonville is a sole proprietor type of business. The shop makes all types of custom-made boots and shoes. The shop was started in 1947 and sells its finished products locally. This business has fewer than eight employees annually.

MATTRESS FACTORIES

The City Mattress Factory of Jacksonville is a sole proprietor type of business. The factory rebuilds mattresses as well as builds new ones. The factory was started in 1946 and serves Cherokee County. This business employs more than eight and fewer than twenty-four people each year.

Franks Mattress Factory of Nacogdoches is a partnership type of business. It rebuilds mattresses and builds new ones. The company was started in 1947 and serves all nearby

counties and Nacogdoches County. The business has fewer than eight employees annually.

The Morgans Furniture and Mattress Company of Athens is a partnership type of business. It rebuilds mattresses and builds new ones. The company was started in 1900 and serves Henderson County and all nearby counties. This concern has fewer than eight employees annually.

The Palestine Mattress Factory of Palestine is a sole proprietor type of business. The factory rebuilds old mattresses and builds new ones. The company was started in 1914 and serves Anderson County and all nearby counties. This factory has fewer than eight employees annually.

The Shackleford Mattress Factory is located in Livingston and is a sole proprietor type of business. This factory rebuilds old mattresses and also builds new ones. This company serves Polk County and all nearby counties in that area. This concern has fewer than eight employees annually.

The Smith Mattress Factory of Jacksonville is a sole proprietor type of business. This factory rebuilds old mattresses and builds new ones. This company was started in 1946 and serves Cherokee County and all the nearby counties in that area. The factory employs fewer than eight people annually.

Whiteheads of Jacksonville is a sole proprietor type of business. This factory rebuilds old mattresses and builds new ones. This factory also builds innerspring mattresses. This factory was started in 1929 and serves Cherokee County and all the nearby counties. This business employs more than eight and fewer than twenty-four people annually.

MONUMENT FACTORIES

Athens Marble and Granite Works of Athens is a sole proprietor type of business. It uses its products in monuments and as a building material. This business serves Henderson County and all the nearby counties. This concern has fewer than eight employees annually.

The Black and Black Monuments of Rusk is a partnership type of business. It makes monuments out of marble and granite. The company was started in 1947 and serves Cherokee County and all the nearby counties. This concern has fewer than eight employees annually.

The Gould Monument Works of Jacksonville is a partner-ship type of business. It makes its monuments out of marble and granite to suit the customer. This Company was started in 1900 and serves Texas and all nearby states. This concern employs more than twenty-five and less than forty-nine persons annually.

POTTERY PLANT

The Athens Tile and Pottery Company is located at Athens and is a sole proprietor type of business. This plant makes about thirty thousand flower pots daily. The company was started in 1885 and it serves the Southwest. This business employs more than eight and fewer than twenty-four workmen each year.

POWER PLANT

The Texas Power and Light Company maintains a large power plant at Trinidad. The power is used in that area of the state. The plant is operated by natural gas and lignite. There are no definite figures as to the amount of electricity that is produced.

POWER SAW FACTORY

The Haynes Manufacturing Company of Livingston is a partnership type of business. It builds saws that are portable and can be used in clearing land, also they build models that are mounted on tractors. This company was started in 1947 and it sells its saws throughout the United States. This factory employs more than eight and fewer than twenty-four workmen annually. This company in addition to building saws builds grinders, road grading equipment, and other agricultural equipment.

RAILROAD SHOPS

The Missouri-Pacific Railroad Company maintains a large maintenance shop at Palestine. This shop has some of the most modern shop equipment in the world. They do all the maintenance work in these shops for this area of the Southwest. This shop manufactures most of the new parts that are used in the shop.

REFINERIES AND PUMPING STATIONS

The Mid-Co Gasoline Company of Malakoff is a corporation type of business. It refines gasoline, butane and propane. The plant was built in 1937 and it sells its products all over the United States. The refinery employs more than twenty-five and fewer than forty-nine people annually.

The Mid-Co Gasoline Company of Cayuga is a branch of the large corporation type of business. The home office for this corporation is at Corsicana, Texas. This branch produces refined gasoline and sells it all over the East Texas Area.

The Midland Gasoline Company of Conroe is a corporation type of business. It manufactures refined gasoline, butane, and propane. The company was started in 1929 and sells its products throughout the United States. This concern employs more than fifty and fewer than ninety-nine persons

annually.

The Superior Oil Company of Conroe is a corporation type of business. The plant manufactures refined gasoline, butane and propane. The company was started in 1943 and sells its products throughout the United States. The business employs more than fifty and fewer than ninetynine people annually.

The Humble Oil and Refining Company maintains a large branch plant at Conroe. This is a branch of a large corporation type of business. The plant at Conroe manufactures refined gasoline. The plant was started in 1934 and it sells its products all over the world. This concern has over one-hundred and fewer than two-hundred and fortynine employees annually.

The Grier-Jackson Recycling Plant of Grapeland is a corporation type of business. It manufactures liquified gas and sells all other products in the raw material state. The field from which this plant gets its raw materials was discovered in 1936.

The Tide Water Associated Oil and Seaboard Company maintains a refinery at Palestine. This is a branch of a corporation type of business. The refinery produces liquified gas and refined gasoline. The plant was started in 1938 and it sells its products all over the United States. The refinery employs over twenty-five and fewer

than forty-nine persons annually.

The Inland Refining Company of Palestine is a corporation type of business. This refinery produces kerosene, gasoline, fuel oil, and liquified gas. The plant was started in 1943 and sells its products all over the United States. The refinery employs more than twenty-five and fewer than forty-nine persons annually.

The Lone Star Gas Company maintains a refinery at Trinidad. The refinery is a branch of a corporation type of business. This concern produces refined gasoline. This business employs more than twenty-five and fewer than forty-nine persons annually.

SASH AND DOOR FACTORIES

The Wallace Furniture Factory is located at Alto and is a sole proprietor type of business. The factory builds doors and sashes to order. The factory was started in 1946 and sells its products in Texas. The business has fewer than eight employees annually.

The E. D. Blessing and Sons of Nacogdoches is a sole proprietor type of business. The factory makes all types of sashes and doors that are ordered. The business was started in 1946 and sells its products all over the United States. This concern has fewer than eight employees each year.

The Richardson Lumber and Manufacturing Company of Palestine is a sole proprietor type of business. The factory manufactures all types of doors and sashes that are ordered by their customers. The company was started in 1946 and sells its products locally. The factory employs fewer than eight people annually.

SAWMILLS

The Felder Brothers Lumber Company of Alto is a partnership type of business. This sawmill produces all types of lumber from timber in that area. This sawmill sells its lumber all over Texas. This business was started in 1946. It employs more than twenty-five and fewer than forty-nine people annually.

The Grogan Brothers Lumber Company of Alto is a partnership type of business. This sawmill produces all types of lumber from timber in that area. It sells its lumber all over the state of Texas.

The W. T. Carter and Brother Lumber Company of Camden is a sole proprietor type of business. This sawmill produces all types of lumber from timber in that area. It sells its lumber all over the Southwest. The sawmill has fewer than eight employees annually.

The Saner Ragley Lumber Company of Carmona is a corporation type of business. This sawmill produces all

types of pine lumber from timber in that area. It was started in 1914 and sells its pine lumber all through the state. This business employs more than one hundred and fewer than two hundred and fifty people annually.

The Cade Lumber Company is of Chandler and is a sole proprietor type of business. This sawmill produces all types of lumber from timber in that area. It sells most of its lumber in that area of Texas.

The T. O. Sutton and Sons sawmill is located at Chireno and is a partnership type of business. This sawmill produces both pine and hardwood lumber. It was started in 1938 and sells most of its lumber in Texas. The sawmill employs more than fifty and fewer than ninety-nine persons each year.

The Evans Lumber Company of Coldsprings is a sole proprietor type of business. The sawmill produces all types of lumber from timber in that area. It was started in 1944 and it sells most of its lumber in San Jacinto County. The sawmill employs more than twenty-five and fewer than forty-nine persons annually.

The W. C. Bell Lumber Company of Conroe is a sole proprietor types of business. The sawmill produces all types of lumber from timber in that area. The business was started in 1940 and sells its lumber in Texas. This concern has more than twenty-five and fewer than forty-

nine employees annually.

The Gladstell Lumber Company of Conroe is a sole proprietor type of business. This sawmill produces all types of lumber from timber in that area. It was started in 1945 and sells its lumber all over Texas. This business employs more than one hundred and fewer than two hundred and fifty workmen annually.

The Hub Lumber Company of Conroe is a sole proprietor type of business. This sawmill produces all types of lumber from timber in that area. This business was started in 1948 and sells most of its lumber in Texas. This company has more than fifty and fewer than ninety-nine employees annually.

The Sam Miles Lumber Company of Conroe is a sole proprietor type of business. This sawmill produces all types of pine lumber from timber in that area. This business was started in 1948 and sells its lumber in the eastern section of Texas. The company employs more than eight and fewer than twenty-four people annually.

The Reaves Lumber Company of Conroe is a partnership type of business. This sawmill produces all types of lumber from timber in that area. This business was started in 1946 and sells its lumber in Texas.

The E. E. Walker Lumber Company of Conroe is a sole proprietor type of business. This sawmill produces all

types of lumber from timber in that area. The company was started in 1946 and sells most of its lumber in Texas.

The Edens-Birch Lumber Company of Corrigan is a corporation type of business. This sawmill produces all types of lumber from timber in that area and sells its lumber in the Southwest. The company employs more than two hundred and fifty and fewer than four hundred and ninety-nine persons each year.

The Citizens Lumber Company of Crockett is a corporation type of business. This sawmill produces all types of lumber from timber in that area. This business was started in 1950 and sells most of its lumber in Houston County. This concern has more than eight and fewer than twenty-four employees annually.

The McCreless Lumber Mill of Crockett is a sole proprietor type of business. This sawmill produces all types of lumber from timber in that area. This company was started in 1946 and sells its lumber all over Texas. This concern employs more than twenty-five and fewer than forty-nine persons annually.

The Stowe Lumber Company of Crockett is a sole proprietor type of business. This sawmill produces all types of lumber from timber in that area. This business was started in 1942 and sells its lumber in the East Texas Area. This company has more than twenty-five and fewer

than forty-nine employees each year.

The A. J. Nichols and Sons sawmill of Cushing is a partnership type of business. This sawmill produces all types of pine and hardwood lumber from timber in that area. This business was started in 1948 and sells its lumber throughout Texas. This company has more than eight and fewer than twenty-four employees annually.

The M. P. Richards Sawmill Company of Cushing is a sole proprietor type of business. This sawmill produces all types of lumber from timber in that area.

The Bobo Brothers Sawmill of Douglass is a partnership type of business. This sawmill produces all types of lumber from timber in that area.

The Grounds Lumber Company of Elkhart is a sole proprietor type of business. This sawmill produces all types of lumber from timber in that area.

The Houston-Bostick Lumber Company of Elkhart is a partnership type of business. This sawmill produces all types of lumber from timber in that area. This business was started in 1947 and sells its lumber all over the state of Texas. It has fewer than eight employees each year.

The Burnaman and Kimmey sawmill of Etoile is a partnership type of business. This sawmill produces both hardwood and pine lumber from timber in that area. It

was started in 1946 and sells most of its lumber in the Southwest. This business employs more than twenty-five and fewer than forty-nine people annually.

The Payne Lumber Company of Forest is a sole proprietor type of business. This sawmill produces all types of lumber from timber in that area.

The Foster Lumber Company of Fostoria is a corporation type of business. This sawmill produces both hardwood and pine lumber in that area. This corporation was started in 1903 and sells its lumber over the Southwest. This concern employs more than two hundred and fifty and fewer than four hundred and ninety-nine persons annually.

The C. H. House Lumber Company of Frankston is a sole proprietor type of business. This sawmill produces all types of lumber from the timber in that area and sells its lumber throughout the East Texas Area.

The W. E. Moore Company of Frankston is a sole proprietor type of business. This sawmill produces all types of pine lumber from timber in that area. This company was started in 1938 and sells its lumber throughout Texas. This concern employs more than eight and fewer than twenty-four people annually.

The J. B. Reed Lumber Company of Frankston is a sole proprietor type of business. This sawmill produces all types of lumber from timber in that area. It sells most

of its lumber within Henderson County.

The D. J. Thompson Lumber Company of Frankston is a sole proprietor type of business. This sawmill produces only hardwood lumber from timber in that area. This business sells its lumber throughout Texas and employs more than eight and fewer than twenty-four employees annually.

The Williams and Sons Lumber Company of Frankston is a sole proprietor type of business. This sawmill produces only pine lumber from timber in that area. This company was started in 1936 and sells most of its lumber locally. This concern has fewer than eight employees annually.

The M. R. Friday Sawmill of Friday is a sole proprietor type of business. This sawmill produces all types of lumber from timber that is grown in that area of Trinity County.

The Murchison Sawmill of Grapeland is a sole proprietor type of business. This sawmill produces all types of lumber from timber in that area.

The Groveton Manufacturing Company of Groveton is a sole proprietor type of business. This sawmill produces all types of lumber from timber in that area. It sells its lumber throughout Texas. This company employs more than twenty-five and fewer than forty-nine people each year.

The Boettcher Lumber Company of Huntsville is a sole

proprietor type of business. This sawmill produces pine lumber from pine in this area. This business was started in 1946 and sells most of its lumber over the state of Texas. This company employs more than one hundred and fewer than two hundred and forty-nine workmen annually.

The M. B. Cauthen Lumber Company of Huntsville is a sole proprietor type of business. This sawmill produces both pine and hardwood lumber from timber in this area. This company was started in 1944 and sells its lumber in the East Texas Area. This concern has more than twenty-five and fewer than forty-nine employees annually.

The A. L. Cline and Son Lumber Company of Huntsville is a sole proprietor type of business. This sawmill produces both hardwood and pine lumber from timber in this area. It was started in 1945 and sells most of its lumber in Texas. This business employs more twenty-five and fewer than forty-nine people annually.

The James B. Hall Lumber Company of Huntsville is a sole proprietor type of business. This sawmill produces only pine lumber from timber grown in this area. This company was started in 1946 and sells most of its lumber in the East Texas Area. It employs more than twenty-five and fewer than forty-nine persons annually.

The M. B. Pursley Lumber Company of Huntsville is a sole proprietor type of business. This sawmill produces

both hardwood and pine lumber from timber in this area. It was started in 1937 and sells most of its lumber in Texas. This business employs more than twenty-five and fewer than forty-nine workmen annually.

The Walker Brothers Lumber Company of Huntsville is a partnership type of business. It produces pine lumber from timber in this area. This sawmill was started in 1940 and sells most of its lumber throughout Texas. This company has more than fifty and fewer than ninety-nine employees annually.

The Andrews Lumber Company of Jacksonville is a sole proprietor type of business. This sawmill produces pine lumber from pine grown in that area. This business was started in 1935 and sells most of its lumber throughout the state of Texas. It employs more than eight and less than twenty-four people annually.

The Brown Manufacturing Company of Jackson. Ills is a sole proprietor type of business. This sawmill produces all types of hardwood lumber from timber in this area. This concern was started in 1948 and sells most of its lumber in Texas. It has more than twenty-five and fewer than forty-nine employees annually.

The Brown-Pavletich Lumber Company of Jacksonville is a partnership type of business. This sawmill produces all types of pine lumber from timber in this area. It was

started in 1951 and sells most of its lumber in Texas.

This company employs more than eight and fewer than twentyfour employees annually.

The W. H. Brown Hardwood Lumber Company of Jacksonville is a partnership type of business. It produces all types of hardwood lumber from timber in that area. This sawmill was started in 1920 and sells most of its lumber throughout the state of Texas. This concern employs more than twenty-five and fewer than forty-nine persons annually.

The Cobb-Holman Lumber Company of Jacksonville is a partnership type of business. This sawmill produces both hardwood and pine lumber. This business was started in 1906 and sells most of its lumber in the East Texas Area. It employs over two hundred and fifty and fewer than four hundred and ninety-nine persons annually.

The Lookout Lumber Company of Jacksonville is a partnership type of business. This sawmill produces only pine lumber from timber in that area. This business was started in 1950 and sells most of its lumber in Texas. The company employs more than eight and fewer than twenty-four people annually.

The G. J. Maxwell Lumber Company of Jacksonville is a sole proprietor type of business. This sawmill produces only pine lumber from timber grown in that area. This concern was started in 1946 and sells most of its lumber

in Cherokee County. It has fewer than eight employees annually.

The W. E. Pierce Lumber Company of Jacksonville is a sole proprietor type of business. This sawmill produces only pine lumber from timber grown in that area. This business was started in 1944 and sells most of its lumber in the East Texas Area. It employs more than twenty-five and fewer than forty-nine persons annually.

The Southside Lumber Company of Jacksonville is a partnership type of business. This sawmill produces all types of lumber from timber grown in that area.

The Willis Brown Lumber Company of Jacksonville is a sole proprietor type of business. This sawmill produces all types of lumber from timber in that area. This business sells most of its lumber locally and employs more than twenty-five and fewer than forty-nine people annually.

The H. L. Enos Lumber Company of Kennard is a sole proprietor type of business. This sawmill produces all types of pine lumber from timber grown in that area. It was started in 1933 and sells most of its lumber in the East Texas Area. It has more than fifty and fewer than ninety-nine employees annually.

The A. S. Rushing Sawmill of Kennard and is a sole proprietor type of business. This sawmill produces both hardwood and pine lumber from timber grown in that area.

It was started in 1946 and sells most of its lumber in the East Texas Area. It has more than eight and fewer than twenty-four employees annually.

The Leggett Lumber Company of Leggett is a partnership type of business. This sawmill produces both pine and hardwood lumber. This company was started in 1946 and sells its lumber throughout the state of Texas. This business employs more than fifty and fewer than ninetynine persons annually.

The Callahan Lumber Company of Livingston is a sole proprietor type of business. This sawmill produces both hardwood and pine lumber from timber in that area. This company sells its lumber all over the East Texas Area. This concern has more then eight and fewer than twenty-four employees annually.

The Livingston Wood Products Corporation of Livingston is a corporation type of business. This sawmill produces pine lumber from timber grown in that area. This business was started in 1946 and sells its lumber throughout the state of Texas. This concern employs over fifty and fewer than ninety-nine people annually.

The Marshall Planing Mill of Livingston is a sole proprietor type of business. This sawmill produces all types of lumber from timber grown in that area. This concern sells its lumber throughout Texas. This business

employs more than eight and fewer than twenty-four workmen annually.

The Thornton Sawmill of Livingston is a partnership type of business. This sawmill produces all types of lumber from timber grown in that area. This concern sells its lumber throughout Texas and employs more than one hundred and fewer than two hundred and fifty people annually.

The Lovelady Lumber Company of Lovelady is a partner-ship type of business. This sawmill produces all types of pine and hardwood lumber from timber grown in that area. This company was started in 1946 and sells its lumber all over Texas. This business has more than eight and fewer than twenty-four employees annually.

The B. Brantly Lumber Company of Magnolia is a sole proprietor type of business. This sawmill produces both hardwood and pine lumber from timber grown in that area.

The A. R. Coe Lumber Company of Magnolia is a sole proprietor type of business. This sawmill produces both hardwood and pine lumber from timber grown in that area.

The Grogan-Cochran Lumber Company of Magnolia is a partnership type of business. This sawmill produces both hardwood and pine lumber from timber grown in that area.

The Neidigk Lumber Company of Magnolia is a sole proprietor type of business. This sawmill produces both hardwood and pine lumber from timber grown in that area.

This business was started in 1943 and sells most of its lumber over Texas. This concern employs more than eight and fewer than twenty-four people annually.

The Oualline Lumber Company of Magnolia is a partnership type of business. This sawmill produces both hardwood and pine lumber from timber grown in that area. This company was started in 1940 and sells most of its timber in the Southeast Texas Area. This business has more than eight and fewer than twenty-four employees annually.

The Franks Sawmill of Malakoff is a sole proprietor type of business. This sawmill produces both hardwood and pine lumber from timber grown in that area.

The Thomas Hardwood Mill of Malakoff is a sole proprietor type of business. This sawmill produces only hardwood lumber from timber grown in that area. This concern was started in 1937 and sells most of its lumber in Texas. This company employs more than eight and fewer twenty-four people annually.

The J. M. Adams Sawmill of Martinsville is a sole proprietor type of business. This sawmill produces both hardwood and pine lumber from timber grown in that area. Most of the lumber produced by this sawmill is sold in Nacogdoches County.

The R. B. Moore Sawmill of Montgomery is a sole proprietor type of business. This sawmill produces both

hardwood and pine lumber from timber grown in that area. This business was started in 1950 and sells most of its lumber locally. It has fewer than eight employees each year.

The Cade Lumber Company of Moscow is a sole proprietor type of business. This sawmill produces both hardwood and pine lumber from timber grown in that area. The company sells its lumber in the Southwest and employs more than fifty and fewer than ninety-nine persons annually.

The Marsh Lumber Company of Moscow is a sole proprietor type of business. It produces both hardwood and pine lumber from timber grown in that area.

The R. A. Thompson Sawmill of Moscow is a sole proprietor type of business. This sawmill produces both hardwood and pine lumber from timber grown in that area. This concern was started in 1946 and sells most of its lumber over the state of Texas. This business has more than eight and fewer than twenty-four employees annually.

The Frost Lumber Industry of Nacogdoches is a corporation type of business. This sawmill produces both hardwood and pine lumber from timber grown in that area. This corporation was started in 1910 and sells its lumber all over the Southwest. This concern has more than five hundred and fewer than nine hundred and ninety-nine employees annually.

The General Oak Flooring Company of Nacogdoches is a partnership type of business. This company produces hard-wood lumber only. This sawmill was started in 1948 and sells its lumber throughout Texas. This business employs over twenty-five and fewer than forty-nine people annually.

The J. S. Hunt Lumber Company of Nacogdoches is a corporation type of business. This sawmill produces both hardwood and pine lumber from timber grown in that area. This company was started in 1920 and sells most of its lumber in Texas. This business has more than one hundred and fewer than two hundred and forty-nine employees each year.

The Lacy H. Hunt Lumber Company of Nacogdoches is a sole proprietor type of business. This sawmill produces lumber for mining props. This business was started in 1906 and sells its lumber all over the United States.

This company employs over one hundred and fewer than two hundred and forty-nine persons annually.

The J. E. Stone Lumber Company of Nacogdoches is a sole proprietor type of business. This company produces both hardwood and pine lumber from timber grown in that area. This company was started in 1925 and sells its products all through the Southwest. This concern employs more than one hundred and fewer than two hundred and fortynine workmen annually.

The Boney Lumber Company of Navasota is a sole proprietor type of business. This sawmill produces both hardwood and pine lumber from timber grown in that area. This business was started in 1946 and sells its lumber all over Texas. This company employs more than twenty-five and fewer than forty-nine persons annually.

The E. L. Dyer Lumber Company of Navasota is a partner-ship type of business. This sawmill produces both hardwood and pine lumber from timber that is grown in that area. This company was started in 1905 and sells its lumber in that section of Texas. This business employs more than twenty-five and fewer than forty-nine people each year.

The Texas Long Leaf Lumber Company of New Willard is a corporation type of business. This sawmill produces both hardwood and pine lumber from timber grown in that area. This corporation was started in 1909 and sells its lumber throughout the Southwest. This business employs more than two hundred and fifty and fewer than four hundred and ninety-nine persons annually.

The Angelina Hardwood Company of Palestine is a corporation type of business. This sawmill produces only hardwood lumber from timber grown in that area. This business sells its lumber all over the East Texas Area.

The Rice Lumber Company of Plantersville is a sole proprietor type of business. This sawmill produces only pine lumber. This company was started in 1946 and it sells its lumber all over Texas. This business employs more than twenty-five and fewer than forty-nine employees each year.

The Daniel Lumber Company of Porters is a partnership type of business. This sawmill produces both hardwood and pine lumber from timber grown in that area. This company was started in 1935 and sells its lumber throughout Texas. This business has over one hundred and fewer than two hundred and forty-nine employees annually.

The Bristow Sawmill of Poynor is a sole proprietor type of business. This sawmill produces both hardwood and pine lumber from timber grown in that area. This business was started in 1932 and sells its lumber throughout Texas. This concern has fewer than eight employees annually.

The L. H. Baker Sawmill of Reese is a sole proprietor type of business. This sawmill produces both hardwood and pine lumber from timber grown in that area.

The Keisler Brothers Lumber Company of Richards is a partnership type of business. This sawmill produces both hardwood and pine lumber from timber grown in this area and sells its lumber locally.

The Browning-Lovelady Lumber Company of Rusk is a partnership type of business. This sawmill produces both hardwood and pine lumber from timber grown in that area and sells most of its lumber locally.

The Edwards Brothers Sawmill of Rusk is a partnership type of business. This sawmill produces all types of pine lumber from pine timber grown in that area. This business was started in 1936 and sells its lumber all over Texas. This concern has more than one hundred and fewer than two hundred and forty-nine employees annually.

The Pat O. Byrne Lumber Company of Rusk is a sole proprietor type of business. This sawmill produces both hardwood and pine lumber from timber grown in that area. This company was started in 1950 and sells its lumber in the East Texas Area. This business employs more than eight and fewer than twenty-four persons annually.

The Shattuck-Sartain Lumber Company of Rusk is a partnership type of business. This sawmill produces both hardwood and pine lumber from timber grown in that area. This business was started in 1950 and sells its lumber locally. This company has fewer than eight employees annually.

The Bruce Slover Crate and Lumber Mill of Rusk is a sole proprietor type of business. This sawmill produces both hardwood and pine lumber from timber grown in that

area. This business was started in 1946 and sells its lumber that it does not use in making crates locally. This concern employs more than twenty-five and fewer than forty-nine people annually.

The Terrell Lumber Company of Rusk is a sole proprietor type of business. This sawmill produces both hardwood and pine lumber from timber grown in that area. This company was started in 1948 and sells most of its lumber in the East Texas Area. This business employs over eight and fewer than twenty-four workmen each year.

The Gage and Tobias Sawmill of Sacul is a partnership type of business. This sawmill produces both hardwood and pine lumber from timber grown in that area and it sells most of its lumber in Nacogdoches County.

The Farmer Stave and Lumber Company of Shepherd is a sole proprietor type of business. This sawmill produces all types of hardwood lumber and uses some of it that is suitable for staves. This company was started in 1948 and it sells its lumber locally and staves all over the United States. This business has more than twenty-five and fewer than forty-nine employees annually.

The Sacul Lumber Company of Sacul is a sole proprietor type of business. This sawmill produces both hardwood and pine lumber from timber grown in that area and sells its lumber locally.

The Willis Lumber Company of Shepherd is a sole proprietor type of business. This sawmill produces both hardwood and pine lumber from timber grown in that area. This company was started in 1949 and sells most of its lumber in East Texas.

The M and W Lumber Company of Splendora is a partnership type of business. This sawmill produces both hardwood and pine lumber from timber that is grown in that area and sells most of its lumber in East Texas.

The J. N. Crawford Lumber Company of Trinity is a sole proprietor type of business. This sawmill produces all types of pine lumber from timber grown in that area. This company was started in 1920 and sells its lumber all over Texas. This concern employs more than twenty-five and fewer than forty-nine people annually.

The Farmers Lumber Mill of Trinity is a sole proprietor type of business. This sawmill produces all types of hardwood lumber from timber grown in that area. This firm sells most of its lumber locally and some in nearby counties.

The William Steinkamp Lumber Company of Trinity is a sole proprietor type of business. This sawmill produces both hardwood and pine lumber from timber grown in that area. It sells most of its lumber in East Texas.

The Texas Long Leaf Lumber Company of Trinity is a corporation type of business. This sawmill produces both

hardwood and pine lumber from timber grown in that area. This corporation was started in 1913 and sells its lumber throughout the United States. This business employs more than two hundred and fifty and fewer than four hundred and ninety-nine persons annually.

The Vinson Lumber Company of Trinity is a sole proprietor type of business. This sawmill produces both hardwood and pine lumber from timber grown in that area. It sells most of its lumber in East Texas.

The O. L. Payne Lumber Company of Wells is a partner-ship type of business. This sawmill produces all types of pine lumber from timber grown in that area. This company was started in 1946 and sells most of its lumber in Texas. This concern has over one hundred and fewer than two hundred and forty-nine employees annually.

The Rube Sessions Lumber Company of Wells is a sole proprietor type of business. This sawmill produces all types of pine lumber from timber grown in that area. This business was started in 1911 and sells most of its lumber throughout Texas. This concern employs more than one hundred and fewer than two hundred and forty-nine people annually.

The W. C. Jones Lumber Company of Willis is a sole proprietor type of business. This sawmill produces all types of pine lumber from timber grown in that area.

This company was started in 1947 and sells its lumber throughout Texas. This business has more than fifty and fewer than ninety-nine employees annually.

The L and M Lumber Company is of Willis and is a corporation type of business. This sawmill produces both hardwood and pine lumber from timber grown in that area. This business was started in 1945 and sells its lumber throughout Texas. This concern employs over fifty and fewer than ninety-nine people annually.

The J. A. Parker Lumber Company of Willis is a sole proprietor type of business. This sawmill produces both hardwood and pine lumber from timber grown in that area. This company was started in 1947 and sells its lumber throughout Texas. This business employs more than fifty and fewer than ninety-nine people annually.

The E. W. McClain Sawmill of Woden is a sole proprietor type of business. This sawmill produces both hardwood and pine lumber from timber grown in that area. It sells most of its lumber in East Texas.

SAWMILL EQUIPMENT FACTORY

The Crockett Manufacturing Company of Crockett is a sole proprietor type of business. This factory builds many types of sawmills and sets them up according to the instructions of their customers. This factory was started

in 1943 and sells its sawmills throughout the United States. This business employs more than twenty-five and fewer than forty-nine people each year.

TILE FACTORIES

The Acme Brick Company of Fort Worth has a branch plant at Garrison which produces building and drain tile. The branch plant was started at Carrison in 1924 and this company sells its products in several nearby states as well as in Texas. It has more than fifty and fewer than ninetynine employees annually.

The Texas Clay Products Company of Athens has a brick factory in that city and one at Malakoff. The company is a partnership of three individuals and was started in 1946. This factory also produces hollow building tile and drain tile. This concern sells its products all over the United States. The business employs more than fifty and fewer than ninety-nine persons at each of the plants annually.

The E. C. McCurdy Company of Conroe is a sole proprietor type of business. This company produces all types of building tile. This business was started in 1945 and sells most of its products throughout Texas. This concern has fewer than eight employees annually.

TRUCK BODY FACTORIES

The Greens Welding Service of Jacksonville is a sole proprietor type of business. This welding shop builds all types of truck bodies according to the needs of the customer. This factory was started in 1927 and sells its products throughout Texas. This business has fewer than eight employees annually.

The Malakoff Truck Body Builders of Malakoff is a sole proprietor type of business. This factory builds all types of truck bodies according to needs of the customer. This concern sells its bodies throughout the state of Texas.

から 日本 かんこう はく こうはい かいとうしゃんとう

VALVES AND FITTINGS FACTORY

The Nibco of Texas Factory of Nacogdoches is a branch of the Northern Indiana Brass Company which is a corporation type of business. This factory produces all types of brass valves and pipe fittings. It was started in 1940 and sells its products all over the United States. The business employs more than one hundred and fewer than two hundred and forty-nine persons annually.

VENETIAN BLIND FACTORIES

The Air-Flo Venetian Blind Company of Conroe is a sole proprietor type of business. This factory builds all types and sizes of venetian blinds. This business was started in 1946 and sells its products in all the nearby counties and Montgomery County. It employs fewer than eight persons each year.

The Edwards Venetian Blind Company of Jacksonville is a sole proprietor type of business. This factory produces all types and sizes of venetian blinds. This business was started in 1946 and sells its blinds in all nearby counties and Cherokee County. It has fewer than eight employees annually.

The East-Tex Blind Company of Nacogdoches is a sole proprietor type of business. This company builds all types and sizes of venetian blinds. It sells its venetian blinds in all the nearby counties as well as in Nacogdoches County.

The Ready Cut Manufacturing Company of Huntsville is a sole proprietor type of business. This company builds all sizes and types of venetian blinds. This company was started in 1947 and sells its blinds all over the nearby counties and in Ealker County. This concern has fewer than eight employees annually.

The Sims Manufacturing Company of Malakoff is a partnership type of business. This company builds all types and sizes of venetain blinds. It was started in 1945 and sells its products throughout the United States. This business employs fewer than eight employees annually.

The Twy-Lite Venetain Blind Company of Huntsville is a sole proprietor type of business. This concern has been in operation since 1949 and has a sales area of the Southwest. This business employs about five workmen annually.

VENEER MILLS

The Frankston Crate Company is located at Frankston and is a sole proprietor type of business. This company produces several types of veneer. This business was organized in 1947 and their products are sold within this state. This concern has more than twenty-five and fewer than forty-nine employees annually.

The Bruce Slover Crate and Lumber Company of Rusk is a sole proprietor type of business. This company produces several types of veneers. It was started in 1946 and sells its products throughout Texas. This business employs more than twenty-five and fewer than forty-nine persons annually.

WINERY

The Trinity Wine Company of Trinity is a sole proprietor type of business. This concern produces wine from grapes that are grown in that area. The company sells its wine locally.

SECTION V

THE POSSIBILITIES OF DEVELOPING INDUSTRY IN THIS AREA

THE POSSIBILITIES OF DEVELOPING INDUSTRY IN THIS AREA

The Seventh Congressional District of Texas has a large supply of raw materials that could be used in various types of industry. The first problem in selecting a possible site for a new industry is how much power is available in that area. Almost any where you go in this district a good supply of power is already available. The possibility of needing a larger amount of power than usual, this district also has a large supply of materials that could be converted into power. In 1950. Texas produced in excess of four thousand billion cubic feet of natural gas. The largest and most productive natural gas fields are in the East Texas Area. The Seventh Congressional District has several large gas fields in it and if this is not enough gas there are a great number of fields in the bordering counties. The lignite in this area is also useful in producing power and the known amount of this valuable mineral and how much of it is used in Texas is not known. There are no figures available on lignite because it is not taxed. There is a large strata of lignite that extends from deep central Texas to the Louisiana Border and it covers most of the counties in this district in its path. If there is not a sufficient amount of the

¹ See Appendix B

mineral in this area there is enough nearby that could be transported very cheaply or the power plant could be built in the area where lignite is more plentiful and the power transported into this area.

There is an abundance of iron ore in the northern counties of the district. In Cherokee County of the Seventh Congressional District and four of its nearby adjoining counties is one of the greatest deposits of iron ore that is known that has not been exploited to a large extent. These five counties in East Texas contain a low grade of ore but it is in large amounts. At the north side of these five counties is the large Lone Star Steel Corporation which is a new southern industry. Up until 1948 a blast furnace was operated at Rusk but it was owned by a northern enterprise and they decided not to compete with larger companies. We need more people from the south to invest in industries of this type. If the south wants to expand industrially it must have the southern industries to cooperate with each other. Some iron ore is being mined and shipped to Houston in the Rusk area which is a beginning in the iron ore industry expansion of the Seventh Congressional District.

There are various types of sands that are used in industry found in the Seventh Congressional District.

There is a silica found in Anderson and Henderson Counties

that is highly suitable for making glass. There are two plants at the present making glass in this area. There is a sufficient amount of sands in this area to supply any number of industries of this type. There is also a sand found that is good for pouring castings into. This sand is used as a mold and withstands heat at a high degree. There is a large supply of this type of sand in this area. The large supply of iron ore in Cherokee County and the large supply of sand in Anderson and Henderson Counties would be an excellent raw materials center for a foundry.

In this district there are many other raw materials used in industry. The principal one is timber which is used directly or indirectly in nearly every industry.

There is a large supply of many types of timber in this area. If pine is needed there is a large and plentiful supply of pine, and if hardwood is needed the supply can meet the demand of any industry. This area would be an ideal site for expansion in the furniture industry. There are not any real large commercial furniture factories in this area. This would be a great inducement for the furniture industry to expand in to this area.

There is a good supply of other minerals and natural resources in this area. There are all types of clays that are used in industry. There is a large deposit of kaolin in Cherokee County which could supply a large china ware

factory for a long time with high grade clay of the kaolin type. Also we see that there is a large amount of oil and its by-products in this area which a great many different types of industry rely on.

In the Seventh Congressional District there is a large supply of labor that could be trained for industry. At the present they are working at jobs that any one could do. but they have no other choice at seeking better employment. In this district we have two schools for the training of people for industry. The Josey Vocational School is set up to train men for industry. This vocational school is located at Huntsville and was set up to meet the demands of industry in this section of Texas. This school is broken into sections such as mechanics, printing, photography, heavy equipment maintenance and operation, metal work, upholstery and various other types of training demanded by industry. In Nacogdoches is located the Nacogdoches Business College which trains all types of office personel for industry. This college could supply the demand of office personel for large industry in this area. Also just outside of this district is the Tyler Techinical College which is a vocational type of school that trains people for the northern section of this district. Industry could train some of its men to tailored perfection such as the Nibco of Texas Company of Nacogdoches which trains its own

machinist the way it wants them trained at the company's expense.

In several cities in this district we find that an extended search is on to get new industry to move into their city. Crockett has lead in this program with recently organizing a foundation to help industry to move to Crockett. Other cities who are seeking new industry is Nacogdoches, Athens, Jacksonville, Rusk, Palestine, and Conroe.

² See Appendix C

IMPLICATIONS AND CONCLUSIONS

In the following paragraphs are listed the implications as noted by the author in this study. They are based on material collected by the author and observations from field trips made in this area.

All industries that use wood and its by-products should find excellent materials in this area for expansion. Timber growing and processing comprise the largest industry in this district. In this industry we now have in operation sawmills, planing mills, veneer mills and basket and crate factories. All of these industries in the Seventh Congressional District depend upon the raw materials from this area. There is a supply of timber in this area that could supply a considerably larger number of factories that use timber in their finished products. There is a need for more furniture factories in this area because all raw materials are accessible. There is a need for factories that produce wooden toys in this area. Why would it not be better to ship the finished product than the raw material if it is available? Based on the above facts why should we not have more industries that depend upon timber in this area?

The oil and gas industry in this district refines most of its products in this area. This industry has some available materials that have not been used, but the gas and oil that are taken from the ground in these counties

parallels the amount of oil and gas that are refined in these counties.

Silica is available in several counties in the Seventh Congressional District. Silica is used in one large plant in Anderson County and one small plant in Henderson County to produce glass. These two plants use only a fraction of the amount of silica that is available in that area. There is much need for expansion in that industry in this district due to the abundance of raw materials.

Iron ore deposits are found in great abundance in Anderson, Cherokee, and Henderson Counties. The largest deposits are in Cherokee County from which one concern processes the ore and ships it to its parent plant in Houston. Why not have these industries move to this area instead of transporting the raw materials to them? is an enormous amount of iron ore in these counties, which could supply a large furnace for a number of years. Also there are raw materials that could be associated with the iron ore industry. There is a large supply of sand that is suitable for using in pouring castings, there is material for making charcoal that could be used in smelting the ore. Charcoal produces a higher grade of pig iron than coal. Also in this district we find a large amount of lime that could be used in the smelting process. In a new process electricity is found to be a good material with which to

heat furnaces and there is a supply available. If not there is a supply of lignite that can be used in producing cheap electricity. Lignite is a new material that has been discovered recently to be of great value in this area.

Mica is found in a sufficient amount for industrial purposes in San Jacinto County and it is not being utilized at all. This natural resource is of high value and great importance to the needs of the United States. This material is used in the manufacture of electrical products and is used exclusively in the working parts of electrical appliances. This material could be quarried and used in a factory producing electrical goods of some type in this district.

Lignite is found in most all of the counties in this district but it is only used in Henderson County to operate a power plant. This material could be used for more than the production of power. It could be used for operating small factories, iron ore beneficiating plants, and other plants that operate by steam engines. This material could be used to better advantage by using it to produce power in this area if large industries needed the electricity.

Quartzite is found in Trinity County and is not being used at all. This valuable resource is excellent for making granding wheels and other abrasive products. This material could also be used for making sandpaper. This

natural resource is not being used to the best advantage in this district. There is a sufficient amount of quartzite in this district to operate a medium-size factory in this district.

Strontium is found in Polk County in sufficient amounts to warrant a factory to prepare it for use in industry. The chief use of this natural resource is to take the sugar syrup out of sugar beets. This natural resource is not produced in the United States but in England. This could be the first commercial production in the United States.

Mineral waters are found in the eastern section of this district. These waters are not being used to an advantage. Mineral waters are sold for relief of common ailments to older people. These mineral waters could be sold on a commercial scale or a resort could be developed in this area so as to draw tourist and health seekers. The mineral waters are not being used in this area.

Salt is found in Anderson County in which one small plant is in operation, but this area could develop enough salt domes to operate a number of plants of this type.

Salt domes are found in Henderson County, but no processing plant is in operation in this county. Salt is one of our basic seasonings and also it is essential in the proper function of the human body as well as for the health of animals. Salt deposits are not being used to the best

advantage in this area.

12.00

Kaolin is found in sufficient amounts in Cherokee

County, but this clay is not being used there. It is
shipped to other points to be used in making fine chinaware.

Fine chinaware companies are usually found near large deposits
of kaolin. This would be another of the new industries
that could move into this district and find available raw
materials and become famous for its fine chinaware.

There are few industries in this district that are dependent on other areas for raw materials. These industries are very small and do not show much in the development of industry in this area. Most of these are small industries that sell their finished products locally. They do not have much economic bearing on the Seventh Congressional District. The larger industries in this district get their raw materials locally or from nearby sources. The only industry of any size that does not get its raw materials locally or nearby is the Nibco of Texas plant at Nacogdoches which gets most of its raw materials from out of the state. This plant was built there because a good supply of labor could be obtained and trained very cheaply. Another advantage in getting industry into this area is the supply of labor that could be trained for industry. The wage scale is rather low in this area, even considering the metropolitan areas of Texas, than it is in the northern states. Also

there are fewer taxes on finished products and raw materials than in a large percentage of the other states in the United States. The living conditions in the average town in this district are as good as compared to some of the larger cities.

In conclusion I think the East Texas Chamber of Commerce and all local Chambers of Commerce should make an all-out effort to get new industries into this area. Also other clubs and organizations should encourage new businesses rather than discourage them. Why should this area supply all the raw materials and not have any industry to put the finishing touches on these products?

This area is supplied with some very fine natural resources and they are not going to waste, but they are not being put to best advantage. With a great deal of cooperation and work this could become one of the most industrialized areas in the South. With the supply of resources in the East Texas area this move would not only help the Seventh Congressional District, but it would help the state as a whole. I think that new industry could help solve some of our problems of employment of farm labor that is not needed since mechanized farming is taking over more than ever. This will help balance our agricultural economy and keep the people throughout the district on the same economic level or even higher.

BIBLIOGRAPHY

BIBLIOGRAPHY

A. BOOKS

- Bateman, Alan M., Economic Mineral Deposits. New York: John Wiley and Sons, Inc., 1950. 898 pp.
- Bowles, Oliver, The Stone Industries. New York:
 The McGraw-Hill Book Company, Inc., 1934. 519 pp.
- Bowman, Hilary, Text-Book of Descriptive Mineralogy.
 New York: Longnans, Green and Company, 1902. 429 pp.
- Bureau of Business Research, Directory of Texas Manufacturers.

 Austin: The University of Texas, 1952. 328 pp.
- Campbell, William G., A Form Book For Thesis Writing. San Francisco: Houghton Mifflin Company, 1939. 121 pp.
- Dallas Morning News, Texas Almanac. Dallas: The Dallas Morning News, 1952. 672 pp.
- Dana, Edward Salisbury, Minerals and How To Study Them. New York: John Wiley and Sons, Inc., 1949. 323 pp.
- East Texas Chamber of Commerce, Guide To Manufacturers and Industries of East Texas. Longview: East Texas Chamber of Commerce Press, 1952. 53 pp.
- Feirer, John L., Research In Industrial Arts Education.
 Kalamazoo: Western Michigan College Print Shop,
 1947. 272 pp.
- Leith, Charles K., World Minerals and World Political and International Relations. New York: McGraw-Hill Book Company, 1931. 213 pp.
- Lilly, Ernest Raymond, Economic Geology of Mineral Deposits.
 New York: H. Holt and Company, 1936. 811 pp.
- Lindgren, Waldeman, Mineral Deposits. New York: McGraw-Hill Book Company, 1933. 930 pp.
- Lonsdale, John T., Texas Mineral Resources. Austin: University of Texas Press, 1943. 390 pp.

こうこう かんしょうしん

Pirsson, Louis V., Introductory Geology. New York: John Wiley and Sons. Inc., 1924. 693 pp.

- Rocheleu, William Francis, Minerals. Chicago: A. Flanagan Company, 1927. 212 pp.
- Schluter, William C., How To Do Research Work. New York: Prentice-Hall, Inc., 1929. 137 pp.
- Voskuil, Walter Henry, Minerals in Modern Industry.
 New York: J. Wiley and Sons, Inc., 1930. 350 pp.
- Winchell, Alexander Newton, Elements of Mineralogy. New York: Prentice-Hall, Inc., 1942. 535 pp.
- Wyer, Samuel S., Manufactured Gas In The Home.
 Washington D. C.: U. S. Government Printing Office,
 1923. 82 pp.
- Wyer, Samuel S., Natural Gas. Washington D. C.: U. S. Government Printing Office, 1923. 67 pp.
- Zim, Herbert S., Minerals. New York: Harcourt, Brace and Company, 1943. 368 pp.

APPENDIX A

のでは、「日本のでは、「日本のでは、「日本のでは、日本のでは、日本のでは、「日本のでは、「日本のでは、「日本のでは、」では、「日本のでは、



COMMISSION

HORNTON, JR., CHAIRMAN

TEXAS HIGHWAY DEPARTMENT

Austingia', texas October 7, 1952 STATE HIGHWAY ENGINEER
D. C. GREER

IN REPLY REFER TO

Mr. J. C. Leadbetter

Dear Mr. Leadbetter:

The information you requested in your letter of October 4, 1952 is given below:

State Maintained Mileage as of September 1, 1952

County	U.S. Numbered Highways	State Numbered Highways	Farm to Market Roads	Loops & Spurs	Total Miles
Anderson	101.28	70.84	83.64	2.35	258.11
Cherokee	118.48	59.94	155.67	5.98	340.07
Grimes		79.90	83.19		163.09
Henderson	36.90	86.04	139.81	1.37	264.12
Houston	33.71	110.91	59.20	10 - 1-1-11 p	203.82
Madison	38.33	55.88	40.52	0.71	135.44
Montgomery	45.29	40.23	97.86	1.77	185.15
Nacogdoches	33.03	95.47	67.92	1.91	198.33
Polk	97.24	17.71	49.35	. 4.22	168.52
San Jacinto	25.93	40.72	36.11	- F	102.76
Trinity	21.60	55.63	46.34	776	123.57
Walker	48.05	37.65	47.30	0',18"	133.18

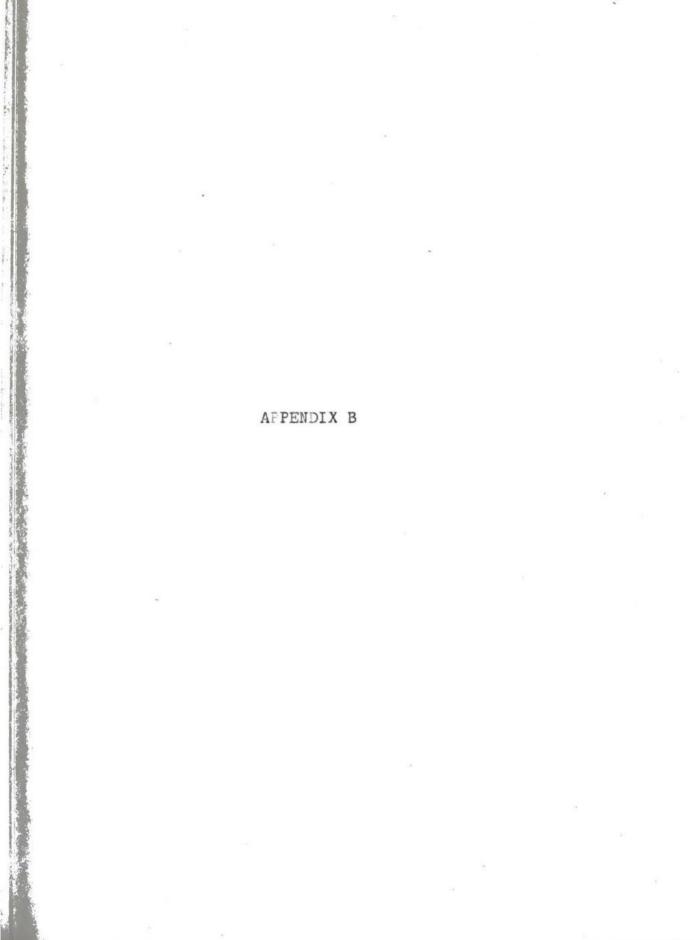
If this Department can be of further help to you and Congressman John Dowdy please advise.

Yours truly,

D. C. Greer State Highway Engineer

By:

H. P. Stockton, Jr., Manager Highway Planning Survey



TAXLESS RESOURCES IN TEXAS POINTED OUT FOR LEGISLATURE 1

AUSTIN, TEXAS, December 13.-The Legislature centers on oil, gas and sulphur taxes and leaves other valuable natural resources of Texas without special taxes, a new research report said Saturday.

"Many of the extractive industries in Texas, including salt, gypsum, lignite, coal, iron ore and timber pay no special state tax whatsoever," said staff members of the University of Texas Bureau of Business Research.

"The annual value of these resources runs over half a billion dollars, and yet the Legislature usually concentrates its tax attack on only oil, gas and sulphur. Many authorities say that when it does so it fails to carry out the constitutional mandate that taxes shall be equal and uniform."

Taxation was part of a study in the new survey entitled "economics of natural gas". Writers were Dr. John R. Stockton, director of the bureau of business research; Statistician Richard C. Henshaw Jr. and Richard W. Graves of Tulane University. Research by private and government agencies was used in preparing the report.

Petroleum and its products, including gasoline, paid sixty five and six-tenths per cent of all state taxes in

¹ The Dallas Morning News, December 14, 1952, Section I page 16.

Texas during 1950, reported.

Natural gas transmission companies and utilities usually can shift the tax onto the consumer, the report added.

Until the Federal Power Commission allows rate increases the cas companies must absorb the tax, it added.

"The cost of transportation and distribution makes up the major portion of the price of gas at most points of consumption," the study said. "For this reason any increase in the price of gas at the well represents a relatively small portion of the price which consumers must pay for gas.

"So far this fact has made it possible for the Texas
Legislature to increase the tax on natural gas produced
within the state with little danger of pricing it out of
the market."

The researchers said that gas prices would have to increase considerably before it would "appreciably" affect industries using it for fuel. They listed twenty industries using gas for fuel and found it equals one and a half per cent of the product's cost.

Chemical industries using gas as a raw material will be pinched more severly by higher priced gas.

"The application of a tax on raw materials in a restricted area such as a state may decrease the number of firms operating there or cause prospective new plants to locate elsewhere," the report declared.

"Much the same can be said for the nonferrous metal industries in Texas which use large amounts of natural gas to generate the great amount of electricity essential in their operations. Hence manufacturing costs of the tin, zinc, and copper refineries and smelters as well as those of the two new aluminum plants in Texas would be significantly increased by new natural gas taxes.

"Texas now has two steel plants and a third is being built. All of these plants use appreciable quantities of natural gas, in one way or another, and the price they pay for this gas will likely be a factor of considerable importance."

About fifty five per cent of the nation's gas reserve is in Texas, the study showed.

Export of the gas increased from twenty per cent of the state's marketed production in 1932 to forty per cent in 1950. Exports now run over forty five per cent of total marketed output.

The two-year research started with a five thousand dollar grant from Texas-Mid Continent Oil and Gas Association, and was completed with university funds.

APPENDIX C

GROUP TO GET NEW CROCKETT PLANTS FORMED 1

CROCKETT, December 16-Articles for incorporation of the Crockett Industrial Foundation were sent to the Secretary of State Monday, calling for a twenty two thousand, five hundred dollar company designed to promote payrolls to balance the agricultural economy of Houston County.

Perfection of the organization was made at a meeting held here. C. W. Kennedy, Jr., local attorney said the capital stock has been half paid in, with an additional eleven thousand. five hundred dollars pledged.

The new company plans to purchase a thirty five acre tract within the city's limits, and joining the Houston-Crockett Highway and the Missouri Pacific Railroad. This acreage will be offered to factory owners who are seeking locations.

In addition, the company is designed to assist in seeking financial help for prospective payrolls that may look to the city for help in moving to Crockett.

"Should additional help be needed, the Crockett
Industrial Foundation is prepared to expand and get
additional money", Ed Munder, manager of the chamber of

¹ The Houston Chronicle, December 16, 1952, Section I, Page 9.

commerce, said.

Several factory managers have looked over Crockett in recent months, with a possible view toward moving to this area. The new foundation is designed to assist these as well as any others interested.