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GEOLOGICAL SURVEY

W. C. Mendenhall, Director

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Bulletin 883-B

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# SPIRIT LEVELING IN TEXAS

PART 2. PANHANDLE, 1896-1939

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Chief Topographic Engineer



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# SPIRIT LEVELING IN TEXAS

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## PART 2. THE PANHANDLE, 1896-1939

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### INTRODUCTION

*Scope of report.*—This bulletin, which for convenience is to be published in seven parts, contains the results of all spirit leveling done by the Geological Survey in Texas, including those heretofore published.<sup>1</sup> Each of the parts deals with one of seven sections into which the State has been divided for this purpose and which have been designated northeastern, southeastern, north-central, south-central, west-central, and western Texas, and the Panhandle. In each part descriptions of the points for which figures of elevation have been determined are listed according to the quadrangles in which the points occur. Results of spirit leveling other than that done by the Geological Survey have not been included.

*Classification of leveling.*—Spirit leveling is classified according to the degree of refinement in the instruments and methods used and according to the closure errors.

First-order leveling<sup>2</sup> consists of leveling done with the most improved instruments, all sections being leveled twice, in opposite directions, under varying conditions. Closures are not allowed to exceed the amount in feet represented by the formula

$$0.017\sqrt{\text{length of section in miles.}}$$

All corrections for rod error, temperature, and unbalanced sights are supplied, as well as the orthometric corrections for convergence toward the poles of level surfaces of different elevations.

<sup>1</sup> For the results of spirit leveling in Texas previously published see Triangulation and spirit leveling—Southern Texas: U. S. Geol. Survey 18th Ann. Rept., pt. 1, pp. 364-391, 1897; Triangulation and spirit leveling—Southern Texas: U. S. Geol. Survey 19th Ann. Rept., pt. 1, pp. 327-353, 1898; Triangulation and spirit leveling—Southern Texas: U. S. Geol. Survey 20th Ann. Rept., pt. 1, pp. 423-457, 1899; Triangulation, primary traverse, and spirit leveling—Southern Texas: U. S. Geol. Survey 21st Ann. Rept., pt. 1, pp. 483-495, 1900; Spirit leveling in Texas, 1896 to 1910, inclusive: U. S. Geol. Survey Bull. 468, 133 pp., 1911; Spirit leveling in Texas, 1896 to 1915, inclusive: U. S. Geol. Survey Bull. 637, 254 pp., 1916.

<sup>2</sup> See Avers, H. G., Manual of first-order leveling: U. S. Coast and Geodetic Survey Special Pub. 140, 1929.

Second-order leveling, according to regulations of the Geological Survey, comprises lines leveled twice with reliable instruments, though not necessarily of the most improved type. Closures are not allowed to exceed  $0.035\sqrt{\text{length of section in miles}}$ .

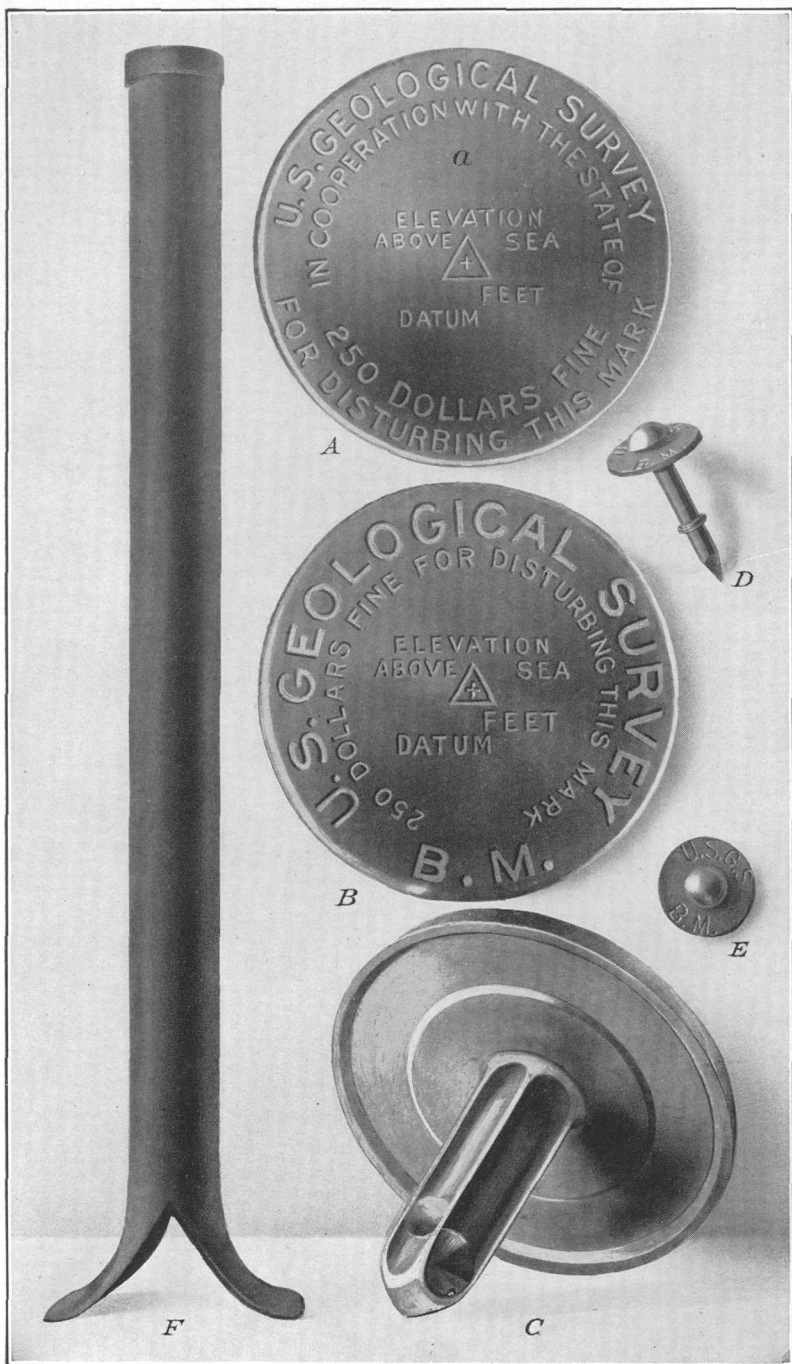
Third-order leveling is made up of lines that are run, either with first-order equipment or with an engineer's wye level and rods of the New York type, in single-line circuits that are required to close within the limits, in feet, of  $0.05\sqrt{\text{length of circuit in miles}}$ . This is equivalent to  $0.071\sqrt{\text{length of section}}$  if the line is leveled twice.

All leveling done by the Geological Survey in Texas is of third-order accuracy except as otherwise stated.

*Adjustments.*—The adjustment of a net of leveling begins with the first-order lines. Most of these lines in both the United States and Canada have already been combined in a general net, and the orthometric differences derived from the observed values by correction for the convergence of level planes toward the north have been adjusted by least squares to remove accidental closure errors. The latest adjustment of this kind was made in 1929 by the United States Coast and Geodetic Survey and is known as the "1929 general adjustment of first-order leveling." This adjustment included the first-order lines in Texas, and the elevations thus derived are the fundamental references for elevations determined by second- and third-order nets. The third-order leveling of the Geological Survey in Texas has been adjusted by determining weighted mean elevations for new junction points and prorating the errors of each link. The weights are taken as the reciprocals of lengths of links. The third-order net has thus been brought into agreement with the best information available for the results of the fundamental first-order leveling, although the published figures of elevation may be changed slightly by future adjustments of the level net.

*Bench marks.*—The bench marks used by the Geological Survey (pl. 1) are of two general classes—principal and supplementary. Principal bench marks are placed at more or less regular intervals along a level line, at sites offering them protection from disturbance and affording favorable conditions for their future recovery. They are usually bronze or aluminum tablets, iron posts, or copper bolts. Supplementary or auxiliary bench marks are less formal in design and are placed between the principal bench marks. Some of the supplementary bench marks in common use are marks cut with a chisel on rock or masonry, spikes, and copper nails fitted with washers.

The tablets are circular in shape, measure  $3\frac{3}{8}$  inches in diameter, and taper from a thickness of three-eighths of an inch at the center to about a quarter of an inch near the rounded edge. During a short period in the earlier years of the Survey's leveling the tablets set were



STANDARD GEOLOGICAL SURVEY BENCH MARKS.

*A* and *B*, Standard tablets, principal bench marks, used where masonry or rock is available to hold them. *A* is used in cooperating States; the State name is inserted at *a*. *C*, Under side of *A* and *B*, showing shank used to hold tablet in place. *D* and *E*, Two views of copper nail and copper washer, a supplementary bench mark, used for points lying between those marked by standard tablets. *F*, Standard iron post fitted with bronze cap similar in design to the standard tablet, formerly used where no rock or masonry was available; superseded by concrete post with tablet set in top.

made of aluminum. The softness of this metal, however, made them susceptible to damage, so that aluminum as a material for tablets was soon discarded. The earliest tablets were made of bronze and it is the material now specified for standard tablets. Each tablet is cast with a 3-inch shank extending from the center of its reverse side, by means of which it is cemented in place, and each bears an inscription on its face. The inscriptions on the tablets already placed differ in many details, because of changes in design at various times. The face of every tablet, however, is cast with the words "U. S. Geological Survey," a cross at the center, which indicates the fiducial point for position or elevation, and the words "Elevation above sea." On some tablets the inscription indicates that they were set in connection with a project in which a State or other organization cooperated; on some, the inscription includes a triangle, which signifies a located point, enclosing a small cross at the center. Tablets bearing a triangle enclosing a cross may be used not only as bench marks but also as triangulation- or traverse-station marks. The inscription on most of the tablets already set includes the warning "250 dollars fine for disturbing this mark," but the latest design omits this phrase and adds the sentence "For information write the Director, Washington, D. C."

If the tablet is set to mark a transit-traverse station, the traverseman stamps upon it with steel dies letters indicating this use of it, such as "Prim Trav Sta," "PTS," or "TT," as well as his own identifying letter or letters, the serial number of the station, and the year. If the tablet is set as a bench mark, the levelman stamps it with his identifying letter or letters, the serial number of the bench mark, and the year. He may at the same time stamp upon it the figures of elevation to the nearest foot, or these figures may be added later. A tablet may be used both as a traverse-station mark and as a bench mark. The engineer who establishes the mark stamps it as noted above and records the stamping with the description to facilitate identification. Engineers who use the mark in subsequent surveys do not alter the original stamping nor add their own stampings with the exception of figures of elevation.

The figures of elevation that appear on a tablet are usually those determined by field computation only. It is sometimes found, therefore, that they do not represent the latest information. This has happened either because they refer to some independent datum temporarily adopted before first-order trunk lines made standard datum available, or because a later adjustment made in the office has rendered necessary an appreciable change in the figures as determined in the field. It is assumed that engineers and others who require accurate figures of elevation for the marks will use those printed in the bulletin instead of accepting the stamped figures. If the appropriate bulletin is not conveniently accessible, a request for the desired infor-

mation may be addressed to the Director of the Geological Survey, United States Department of the Interior, Washington, D. C.

The tablet, of whatever style, is cemented into a hole drilled in solid rock or in the wall of a public building, bridge abutment, or other masonry structure. Where masonry or rock is not available the tablet is set in the top of a reinforced concrete post, which may be either precast or mixed and molded at the selected site. The posts are about 8 inches square or 8 inches in diameter at the top and larger at the base. They are generally set so as to project about 6 inches above ground and are made sufficiently long to reach below the frost line.

Antedating the concrete posts which are now constructed to hold the tablets, in places where masonry or rock is not available, are wrought-iron posts, to the tops of which are riveted bronze caps similar in design to the tablets. These iron posts measure 4 feet in length and  $3\frac{1}{2}$  inches in outer diameter and are set about 3 feet in the ground. The bottom of the post spreads out to a width of about 10 inches in order to give it a firm footing in the earth. No iron posts have been set in recent years. They have proved impracticable, as they are easily disturbed and are eventually destroyed by rust at the ground level.

The third form of principal bench mark, set only in the early leveling, is a copper bolt, designed to be wedged into a drill hole in rock or masonry and perhaps further secured with lead or cement. This bolt measures 4 inches in length and 1 inch in diameter and has a slot at the bottom end into which fits a brass wedge. The wedge serves to expand the lower part of the bolt, so that after the bolt has been driven nearly its full length into the hole, it cannot easily be removed. The exposed end of the bolt bears an appropriate inscription, stamped upon it with steel dies. The inscription is made up of the letters "USGS," the letters indicating the datum used, the figures of elevation, and the abbreviated word "Ft."

Supplementary bench marks are of many kinds. One kind consists of a copper nail  $1\frac{1}{2}$  inches long supplied with a copper washer seven-eighths of an inch in diameter. The nail is driven into the root of a tree or cemented into rock. The designation "USGSBM" is stamped on each washer, and on some washers the abbreviation of the name of the cooperating State is added. Another kind of supplementary bench mark is a chiseled square, used on the horizontal surface of a rock or masonry structure, or a chiseled cross, used on a vertical surface. Nails, track spikes, and small capped iron pipes also serve as supplementary bench marks, and easily described and recognized points, such as doorsills and tops of hydrants, are occasionally used.

*Preservation and restoration of bench marks.*—Any person who finds that a principal bench mark has been damaged, disturbed, or destroyed or that it should be reset or redescribed on account of highway or other improvements will render a public service by communicating the facts to the Director, Geological Survey, United States Department of the Interior, Washington, D. C., before taking any action affecting the location or elevation of the mark. A proper form, accompanied by a return-addressed, franked envelope, will be sent for use in reporting the action taken and in recording the revised description of the mark, if any, and the notes made in obtaining the revised elevation.

*Datum.*—All elevations determined by the Geological Survey and those determined by the Coast and Geodetic Survey for inland mapping are referred to mean sea level, which is the level that the sea would assume if the influence of winds, tides, and currents were eliminated. This level is not the elevation determined from the mean of the highest and lowest tides, nor is it the half sum of the mean of all the high tides and the mean of all the low tides, which is called the half-tide level. *Mean sea level is the average height of the water, all stages of the tide being considered.* It is determined from observations made by means of tidal gages placed at stations where local conditions, such as those due to long, narrow bays, rivers, and like features, will not affect the height of the water. To obtain even approximately correct results these observations must extend over at least one lunar month, and if accuracy is desired they must extend over several years. At stations on the open coast the half-tide level and the mean sea level usually differ but little. It is assumed that there is no difference between the mean sea levels determined from observations made in the Atlantic Ocean, the Gulf of Mexico, and the Pacific Ocean.<sup>3</sup>

*Location of the area.*—The Panhandle, as the term is used in this bulletin and as the subject of part 2 of the bulletin, is that section of the State lying north of latitude 32° and between longitudes 100° and 103°. (See fig. 3.)

*Index map.*—The accompanying index map of the Panhandle (fig. 4) shows the relative position of the quadrangle areas in which leveling has been done. They are of two sizes—15-minute and 30-minute quadrangles. Each 15-minute quadrangle measures 15 minutes in latitude by 15 minutes in longitude. Each 30-minute quadrangle measures 30 minutes in latitude by 30 minutes in longitude and is equal in area to four 15-minute quadrangles.

<sup>3</sup> See Jones, E. L., *Hypsometry—Use of mean sea level as the datum for elevations*: U. S. Coast and Geodetic Survey Special Pub. 41, 1917; *Manual of tide observations*: U. S. Coast and Geodetic Survey Special Pub. 196, 1935.



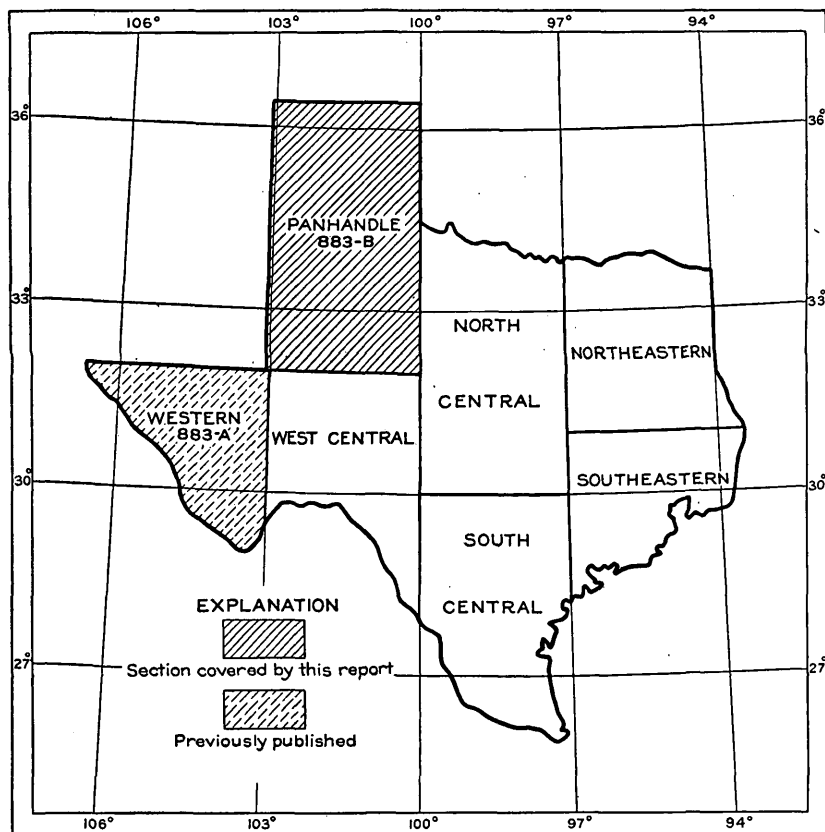


FIGURE 3.—Outline map of Texas showing the names and relative position of the seven sections covered by the parts of Bulletin 883 on spirit leveling in the State.

Maps of quadrangles in the Panhandle for which surveys have been completed may be purchased at 10 cents each retail or 6 cents wholesale, in lots of 50 or more. Prepayment is required and may be made by money order, payable to the Director of the Geological Survey, or in cash—the exact amount, at sender's risk. Postage stamps should not be sent. These maps are of nearly uniform size regardless of the size of the areas they represent, because they are drawn on different scales. For some of the 15-minute quadrangles that appear on the index map there are as yet no corresponding maps, but these areas are included in 30-minute quadrangles, for some of which maps may be purchased.

*Cooperation.*—The State of Texas, through the University of Texas Mineral Survey in 1902 and 1903 and the State Reclamation Service in 1909, 1910, and 1923–27, contributed financially to the work of mapping and leveling this section of the State.

## O K L A H O M A

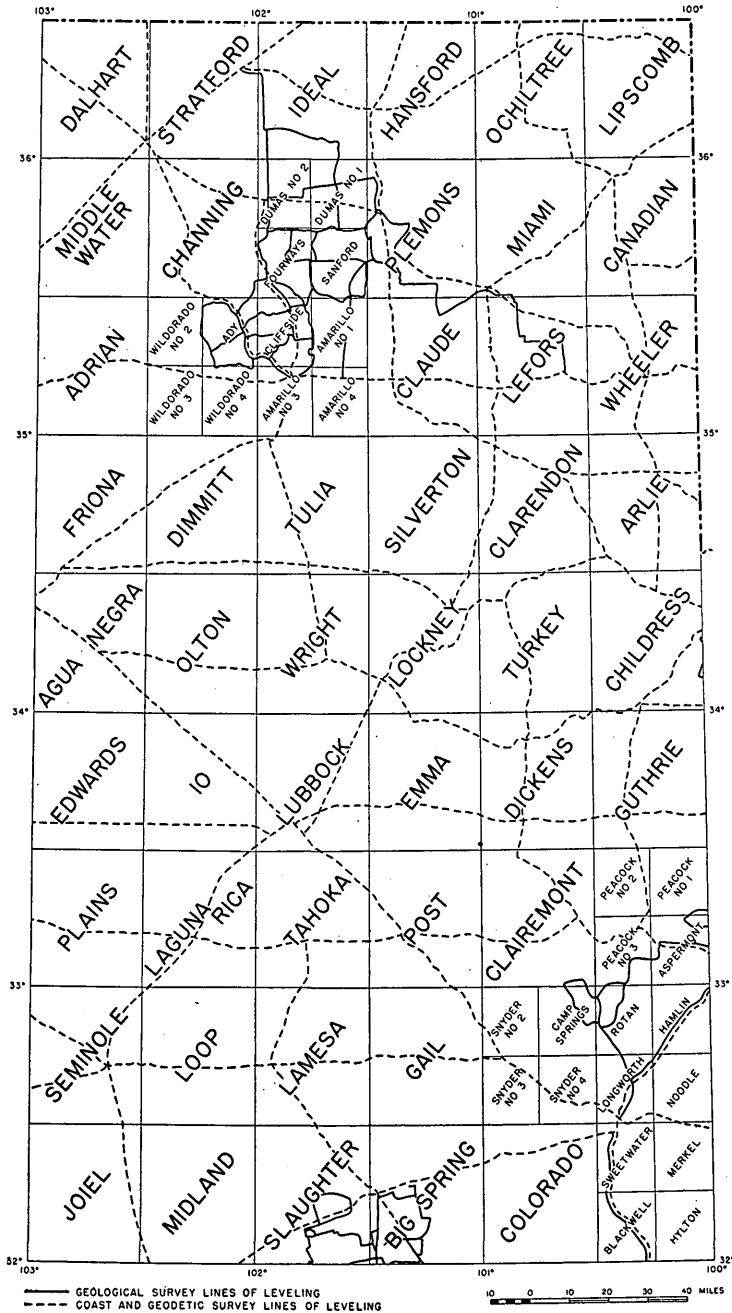


FIGURE 4.—Index map of the Panhandle showing the quadrangles into which this section of the State has been divided and the routes of leveling.

*Personnel.*—The leveling of the Geological Survey in the Panhandle was done under the supervision of the several chief geographers or chief topographic engineers who were in administrative charge of the topographic branch during the years when the lines were run. The name of the levelman who ran a particular line and the date when it was run immediately follow the designation of the route of that line and form part of the heading that precedes the description of bench marks. The adjustment of the third-order level net and the revision, correlation, and compilation of the descriptions and elevations of bench marks, as well as the assembling of the lists, were done by R. G. Clinite, associate geodetic engineer, under the supervision of R. M. Wilson, chief of the section of computing, under the general direction of J. G. Staack, chief topographic engineer.

## DESCRIPTIONS OF BENCH MARKS

### ADY QUADRANGLE<sup>4</sup>

[Latitude 35°15'–35°30'; longitude 102°00'–102°15']

#### OLDHAM AND POTTER COUNTIES

From Cliffside quadrangle southwest and northwest along Fort Worth & Denver City Railway to point near Boden station, thence northeast across country and back into Cliffside quadrangle at point near Canadian River (by J. M. Lawson in 1928; a portion of this line was relevelled by S. R. Archer in 1933)

Gentry, 1.2 mi. SW. of, 0.3 mi. SW. of milepost 348, 4 ft. N. of track, at trestle over branch of West Amarillo Creek, on top of NW. corner of W. concrete abutment; chiseled square-----	<i>Feet</i> 3, 435. 32
Gentry, 2.2 mi. SW. of, 930 ft. W. of milepost 349, 35 ft. S. of track, opposite "W" signal, in line with row of telegraph poles, on top of section of rail set vertically; chiseled cross-----	3, 467. 16
Gentry, 2.6 mi. SW. of, 2.3 mi. SE. of Fitz siding, on line between secs. 122 and 151, block 9, Beaty, Seale, & Forwood survey, 40 ft. S. of track, in line with fence S., in concrete post; standard tablet stamped "7 L 1928 Texas" and "T T Sta No 7 L 1928" (recovered in 1933; also recovered by U. S. C. & G. S. in 1933)-----	3, 459. 931
Reference mark, 60 ft. S. of tablet, 100 ft. S. of track, 200 ft. SE. of milepost 350, at corner post of T-fence S., at 3-in. gas pipe filled with concrete; top of rim (recovered in 1933)-----	3, 463. 44
U. S. C. & G. S. standard disk stamped "X 236 1933" <sup>5</sup> -----	3, 413. 205
Fitz siding, 1.4 mi. SE. of, 0.5 mi. NW. of milepost 350, 15 ft. W. of track, at R. R. culvert across high embankment, on N. end of W. stone head wall; chiseled square (recovered in 1933)-----	3, 413. 22
Fitz siding, 0.8 mi. SE. of, 0.2 mi. NW. of milepost 351, 130 ft. S. of R. R. iron post marked "S," 14 ft. W. of track, on top of N. end of W. concrete head wall of R. R. culvert; chiseled square (recovered in 1933)-----	3, 388. 74

<sup>4</sup> The figures of elevation given are preliminary figures based on the 1929 general adjustment; additional leveling may necessitate further adjustment.

<sup>5</sup> The tie between this mark and the bench mark stamped "T T Sta No 7 L 1928" was made in 1933.

Fitz siding, opposite and 50 ft. W. of "Fitz" sign, 520 ft. S. of milepost 352, 33 ft. W. of main track, 6 ft. N. of telegraph pole, in line with row of poles, in concrete post; standard tablet stamped "8 L 1928 Texas" and "T T Sta No 12 L 1928" (recovered in 1933; also recovered by U. S. C. & G. S. in 1933)-----	<i>Feet</i> 3, 358. 835
U. S. C. & G. S. standard disk stamped "W 236 1933" <sup>6</sup> -----	3, 336. 030
Fitz siding, 0.6 mi. NW. of, 0.5 mi. N. of milepost 352, 110 ft. N. of point of switch for siding, 10 ft. S. and 7 ft. E. from center of trestle, on top of E. end of S. concrete abutment; chiseled square-----	3, 336. 18
Fitz siding, 1.4 mi. NW. of, 0.3 mi. N. of milepost 353, on line between secs. 7 and 10, block 6, Beaty, Seale, & Forwood survey, 100 ft. E. of track, at edge of right-of-way fence, at 3-in. gas pipe filled with concrete; top of rim-----	3, 310. 50
Fitz siding, 2.0 mi. NW. of, 3.9 mi. SE. of Boden sta., 0.5 mi. S. of trestle over Tecovas Creek, 450 ft. S. of milepost 354, 500 ft. N. of R. R. curve, 35 ft. W. of track, in line with row of telegraph poles, in concrete post; standard tablet stamped "9 L 1928 Texas" and "T T Sta No 13 L 1928" (recovered in 1933; also recovered by U. S. C. & G. S. in 1933)-----	3, 297. 264
Reference mark, 790 ft. N. of tablet, 340 ft. N. of milepost 354, at small trestle, on top of E. corner of S. concrete abutment; chiseled square (recovered in 1933)-----	3, 293. 85
Boden, 3.4 mi. SE. of, 0.4 mi. N. of milepost 354, at 300-ft. steel trestle over Tecovas Creek, on top of E. end of N. concrete abutment; chiseled square (recovered in 1933)-----	3, 290. 63
U. S. C. & G. S. standard disk stamped "V 236 1933" <sup>7</sup> -----	3, 291. 411
Boden, 2.6 mi. SE. of, 0.2 mi. NW. of milepost 355, 350 ft. S. of point of switch to siding for stone crusher at N. edge of cut, 8 ft. E. of track; top of section of rail set vertically (recovered in 1933)-----	3, 310. 46
Boden, 1.9 mi. SE. of, on line between secs. 5 and 12, block JAD, Beaty, Seale, & Forwood survey, 400 ft. N. of "W" signal, opposite milepost 356, 100 ft. N. of point where R. R. right-of-way fence angles from 100 ft. to 50 ft., 65 ft. E. of track, in concrete post; standard tablet stamped "10 L 1928 Texas" and "T T Sta No 25 L 1928" (recovered in 1933)-----	3, 280. 672
Boden, 1.4 mi. SE. of, 0.6 mi. NW. of milepost 356, 15 ft. W. of track, on top of N. end of W. head wall of culvert; chiseled square <sup>8</sup> -----	3, 251. 50
Boden, 0.6 mi. SE. of, 20 ft. S. and 15 ft. E. from center of trestle at milepost 357.40, 12 ft. E. of track, 4 ft. below top of rail, on top of E. end of S. concrete abutment; chiseled square <sup>8</sup> -----	3, 247. 00
Boden, 0.4 mi. SE. of, on line between secs. 3, 4, 5, and 6, block 21 W, E. L. & R. R. R. R. Co. survey, 100 ft. E. of track, at R. R. right-of-way fence, at 3-in. gas pipe filled with concrete, on top of rim; chiseled bar (recovered in 1933)-----	3, 251. 07
Boden, 1.1 mi. across country SE. of, 1.0 mi. E. of track, 4 ft. N. of cor. secs. 5, 6, 11, and 12, block 21 W, E. L. & R. R. R. R. Co. survey, 40 ft. S. of rd. winding across prairie, in concrete post; standard tablet stamped "11 L 1928 Texas" and "T T Sta No 26 L 1928"-----	3, 241. 104

<sup>6</sup> The tie between this mark and the bench mark stamped "T T Sta No 12 L 1928" was made in 1933.

<sup>7</sup> The tie between this mark and the bench mark with elevation 3,290.63 feet was made in 1933.

<sup>8</sup> In 1933 it was reported that this bench mark had been destroyed.

Boden, 1.2 mi. E. and 0.6 mi. N. from, 2 ft. W. of N. cor. secs. 6 and 11, block 21 W, E. L. & R. R. R. Co. survey, at top of mesa, 300 ft. N. of edge, on top of section of rail set vertically; chiseled cross-----	Feet 3, 293. 07
Gunter & Munson survey, block G & M 5, 2 ft. N. of cor. secs. 47, 50, and 51, on top of section of rail set vertically; chiseled cross-----	3, 259. 58
Gunter & Munson survey, block G & M 5, 0.2 mi. S. of cor. secs. 47, 49, and 51, 0.5 mi. S. of edge of bluff; top of rock-----	3, 293. 92
Gunter & Munson survey, block G & M 5, 2 ft. N. of rock set in place at cor. secs. 47, 49, and 51, directly S. of sharp angle to NE. in Canadian River, on top of bluff, in concrete post; standard tablet stamped "12 L 1928 Texas" and "T T Sta No 28 L 1928"-----	3, 303. 856
Reference mark, at rock marking section corner; top of rock-----	3, 304. 15
Gunter & Munson survey, block G & M 5, near W. cor. secs. 46 and 50, in river valley, 8 ft. S. and 12 ft. W. from sharp angle in rd. to N. and W., 40 ft. E. of S. end of washout at edge of rd., on top of section of rail set vertically; chiseled cross-----	3, 200. 76
Gunter & Munson survey, block G & M 5, about 0.2 mi. W. of N. cor. secs. 44 and 46, 80 ft. W. of edge of top of bluff on W. side of mouth of Tecovas Creek, 140 ft. S. of edge of bluff over Canadian River, at slight angle in E.-W. fence line, in concrete post; standard tablet stamped "13 L 1928 Texas" and "T T Sta No 29 L 1928"-----	3, 174. 679
Reference mark, 10 ft. NW. of tablet, 3 ft. N. of E.-W. fence, on rock; chiseled square-----	3, 174. 27
Mouth of Tecovas Creek, 0.5 mi. E. of W. bank of, 1,500 ft. S. of river, at head of ravine about 900 ft. long, 3 ft. S. of edge of bluff, 10 ft. SW. of lone tree on top of edge of bluff, on top of large rock shelf; chiseled square-----	3, 178. 70
From Cliffside quadrangle generally west along road to point on Fort Worth & Denver City Railway 2.6 miles southeast of Boden (by J. M. Lawson in 1928)	
Fuqua ranch house, about 6 mi. SW. of, 2.6 mi. SE., thence 2.2 mi. E. from Boden, 1,900 ft. E. of stone and T-fence N. at W. cor. secs. 25 and 26, block 6, Beaty, Seale, & Forwood survey, 700 ft. along E.-W. fence line W. of Horse Creek, in concrete post; standard tablet stamped "31 L 1928 Texas" and "T T Sta No 14 L 1928"-----	3, 369. 425
Boden, 2.6 mi. SE., thence 1.8 mi. E. from, 80 ft. W. of stone marking E. cor. secs. 25 and 26, block 6, Beaty, Seale, & Forwood survey, 50 ft. W. of corner fence post, 65 ft. E. of cattle guard gate across main rd., on top of rail set vertically; chiseled cross-----	3, 384. 98
Boden, 2.6 mi. SE., thence 0.8 mi. E. from, about 700 ft. E. of stone at probable cor. secs. 3, 4, 5, and 6, block JAD, Beaty, Seale, & Forwood survey, about 1,000 ft. E. of Tecovas Creek, 4 ft. E. of corner post of fence E. and angling fence NW., on top of rail set vertically; chiseled cross-----	3, 276. 22
From point 2.6 miles southwest of Gentry on Fort Worth & Denver City Railway south and west across country and along roads to Gray ranch, thence northwest along road about 10 miles into Wildorado No. 2 quadrangle (by S. R. Archer in 1933)	
Gentry, 2.6 mi. SW., thence 1.2 mi. S. from, 0.35 mi. N. of cor. secs. 123, 124, 149, and 150, block 9, Beaty, Seale, & Forwood survey, on S. side of Tascosa Highway at crossing of ranch rd., 3 ft. W. of corner post of T-fence S., under fence, set flush with ground; top of iron rod-----	3, 496. 65

Gentry, 2.6 mi. SW., thence 1.6 mi. S. from, 5.0 mi. N. and 2.0 mi. E. from Bushland, 36 ft. N. and 6 ft. W. from rock marking cor. secs. 123, 124, 149, and 150, block 9, Beaty, Seale, & Forwood survey, 6 ft. N. of corner post of fence lines N. and W., in concrete post; standard tablet stamped "T T Sta No 8 L 1928 3515"----- *Feet* 3, 514. 690

Gentry, 2.6 mi. SW., thence 2.7 mi. S. from, 4.0 mi. N. and 1.6 mi. E. from Bushland, about 640 ft. E. of quarter corner between secs. 148 and 149, block 9, Beaty, Seale, & Forwood survey, 25 ft. E. of center of gate in E.-W. fence line, 15 ft. E. of corner post of T-fence S., under fence, set flush with ground; top of iron rod----- 3, 601. 17

[Line jogs into Wildorado No. 4 quadrangle]

Bushland, 4.0 mi. N. of, about 10 ft. S. and 43 ft. E. from cor. secs. 158, 159, 182, and 183, block 9, Beaty, Seale, & Forwood survey, 400 ft. S. of T-rd. E., 600 ft. SW. of Campbell ranch house, 43 ft. E. of N.-S. highway, in NE. corner of T-fence E., in concrete post; standard tablet stamped "T T 18 L 1933 3662" (recovered by U. S. C. & G. S. in 1935)----- 3, 661. 787

Bushland, 5.0 mi. N. and 0.4 mi. W. from, about 275 ft. E. of quarter corner between secs. 183 and 184, block 9, Beaty, Seale, & Forwood survey, 55 ft. N. and 275 ft. E. from corner of T-fence S., 55 ft. N. of E.-W. section-line fence, on W. bank of creek, at S. side of grove of cottonwood trees, in root on SW. side of tree with triple-forked top; copper nail and washer----- 3, 555. 08

Bushland, 5.0 mi. N. and 1.0 mi. W. from, near cor. secs. 183, 184, 191, and 192, block 9, Beaty, Seale, & Forwood survey, 45 ft. N. of E.-W. section-line fence, on W. bank of creek, at S. end of cluster of cottonwood trees, on W. side of trunk of 30-in. tree, 5 ft. above ground, in center of triangular blaze; center of nail of copper nail and washer----- 3, 533. 47

Bushland, 5.0 mi. N. and 2.0 mi. W. from, 0.9 mi. by rd. NE. of Fryingpan ranch house, at W. cor. secs. 191 and 192, block 9, Beaty, Seale, & Forwood survey, on E. side of gate in E.-W. section-line fence, in SW. corner of T-fence S., set flush with ground; top of iron rod----- 3, 611. 80

[Line jogs into Wildorado No. 4 quadrangle]

Bushland, 4.0 mi. N. and 3.0 mi. W. from, 0.6 mi. SW. of Fryingpan ranch house, at N. cor. secs. 1 and 2, G., C. & S. F. Ry. Co. survey, and S. cor. secs. 1 and 2, block Z 6, John Gibson survey, 1 ft. S. of corner of fences E. and S., in fence line S., set flush with ground; top of iron rod----- 3, 711. 56

Bushland, 4.3 mi. N. and 4.0 mi. W. from, 1.6 mi. by rd. W. of Fryingpan ranch house, 0.3 mi. N. of SW. cor. sec. 2, block Z 6, John Gibson survey, and SE. cor. sec. 38, block M 19, Gunter & Munson survey, at point where rd. crosses N.-S. section line, on N. side of rd., in old fence line, set flush with ground; top of iron rod----- 3, 676. 91

Bushland, 4.8 mi. N. and 4.6 mi. W. from, 2.5 mi. by rd. NW. of Fryingpan ranch house, 0.9 mi. NW. along rd. from point where rd. crosses E. line of sec. 38, block M 19, Gunter & Munson survey, about 350 ft. SE. of angle to N. in rd., on E. side of rd., set flush with ground and surrounded by stones; top of iron rod----- 3, 597. 92

Bushland, 4.0 mi. N. and 5.0 mi. W. from, at probable cor. secs. 38, 39, and 40, block M 19, Gunter & Munson survey, and SE. cor. sec. 2, H. & G. N. R. R. block, 17 ft. E. of T-fence N., 27 ft. W. of corner of fences S. and W., 2 ft. N. of fence line, in concrete post; standard tablet stamped "T T 20 L 1933 3718"-----	Feet 3, 717. 899
Bushland, 4.0 mi. N. and 6.0 mi. W. from, 1.2 mi. E. of Gray ranch house, at N. cor. secs. 40 and 41, block M 19, Gunter & Munson survey, and S. cor. secs. 1 and 2, H. & G. N. R. R. block, at Oldham-Potter county line, 2 ft. E. of corner post of fences E. and S., under fence line, set flush with ground; top of iron rod-----	3, 738. 32
Gray ranch house, 29 ft. W. of NW. corner of barn at, 3.0 mi. N. of Wildorado, about 200 ft. W. of old Wildorado-Tascosa rd., on N. side of E.-W. fence, in concrete post; standard tablet stamped "T T 21 L 1933 3747" (recovered by U. S. C. & G. S. in 1935) --	3, 746.692
Gray ranch house, 1.2 mi. along old Wildorado-Tascosa rd. NW. of, at line between secs. 43 and 44, block M 19, Gunter & Munson survey, on W. side of gate in E.-W. fence line, 1 ft. W. of W. gatepost, under fence, flush with ground; top of iron rod-----	3, 709. 16
Gray ranch house, 2.3 mi. NW. of, at rd. crossing line between sec. 44, block M 19, Gunter & Munson survey, and sec. 2, block S, G. C. & S. F. Ry. Co. survey, 18 in. E. of E. post of gate in E.-W. fence line, under fence, set flush with ground; top of iron rod (recovered by U. S. C. & G. S. in 1935)-----	3, 609. 553
Gray ranch house, 3.8 mi. NW. of, in sec. 6, block S, G. C. & S. F. Ry. Co. survey, 30 ft. E. of rd., under windmill derrick, in feeding lot, 3 ft. SW. of well casing, in concrete post; standard tablet stamped "T T 22 L 1933" (recovered by U. S. C. & G. S. in 1935) --	3, 558. 366
Gray ranch house, 5.0 mi. NW. of, on S. side of Goodman Creek, 725 ft. S. of point in creek where there are two cottonwood trees on S. bank, 12 ft. E. of fork of old and new rds., set flush with ground and surrounded by rocks; top of iron rod-----	3, 531. 52
Gray ranch house, 5.7 mi. NW. of, 1 ft. S. and 35 ft. E. from gate in E.-W. fence on line between secs. 12 and 13, block S, G. C. & S. F. Ry. Co. survey, and line between Gray and L S ranches, in concrete post; standard tablet stamped "T T 23 L 1933" (recovered by U. S. C. & G. S. in 1935)-----	3, 549. 835
Gray ranch house, 6.6 mi. NW. of, at point where rd. crosses spur ridge between forks of drain NE. (clump of cottonwood trees in drain to SE.), at top of ridge, on W. side of rd., set flush with ground and surrounded by rocks; top of iron rod (recovered by U. S. C. & G. S. in 1935)-----	3, 502. 900
Gray ranch house, 7.5 mi. NW. of, 0.7 mi. SE. of new (upper) ford across Sierrita de la Cruz Creek, 200 ft. N. of point where rd. crosses small drain (point is W.15°S. of low detached hill E. of rd.), on W. side of rd., set flush with ground and surrounded by rocks; top of iron rod-----	3, 467. 94
Gray ranch house, 8.2 mi. NW. of, at upper ford of Sierrita de la Cruz Creek, on W. bank of creek, SW. of rd., at point on bank where rd. leaves creek bed, 1 ft. S. of 1½-in. iron pipe driven in ground, set flush with ground and surrounded by rocks; top of iron rod (recovered by U. S. C. & G. S. in 1935)-----	3, 406. 532

Gray ranch house, 8.7 mi. NW. of, 200 ft. W. of rd., on N. side of and at head of small drain, 10 ft. N. and 15 ft. E. from NE. corner of stone shed, in concrete post; standard tablet stamped "T T 24 L 1933"	Feet 3, 463. 523
Gray ranch house, 10.0 mi. NW. of, 2.0 mi. SE. of Cottonwood Camp, 0.9 mi. S. of E.-W. fence line crossing, at angle in rd., on E. side of rd., on S. side of clump of mesquite bushes, set flush with ground and surrounded by rocks; top of iron rod	3, 509. 72
From Wildorado No. 2 quadrangle at point about 2.1 miles southwest of L S ranch northeast along road to Fort Worth & Denver City Railway, thence east and southeast to point 1.9 miles southeast of Boden (by S. R. Archer in 1933)	
L S ranch headquarters, 1.0 mi. SW. of, at foot of bluff, on N. side of junction of rds. NW. to Tascosa and NE. to L S ranch headquarters, between rds., 18 in. SE. of signpost, set flush with ground and surrounded by rocks; top of iron rod	3, 286. 12
L S ranch headquarters, 200 ft. N. of dwelling, at E.-W. fence line crossing, on W. side of rd., 1 ft. W. of W. tall brace post of gate, in fence line, set flush with ground; top of iron rod	3, 178. 89
L S ranch headquarters, 1.1 mi. E. of, 2.1 mi. along Fort Worth & Denver City Ry. SE. of Tascosa, 4.6 mi. NW. of Ady, 26 ft. S. and 70 ft. W. from grade crossing, 70 ft. NW. of gate in S. right-of-way fence, inside fence, in concrete post; standard tablet stamped "T T 28 L 1933"	3, 171. 996
Reference mark, on S. side of Tascosa Highway, 3.5 ft. W. of W. gatepost in R. R. right-of-way fence, set flush with ground and surrounded by rocks; top of iron rod	3, 172. 44
Ady, 3.9 mi. NW. of, at milepost 369, opposite telegraph pole with mile number nailed to it, on S. side of highway, at R. R. right-of-way fence line, set flush with ground and surrounded by rocks; top of iron rod	3, 161. 28
Ady, 3.0 mi. NW. of, 660 ft. W. of highway crossing, 55 ft. E. of milepost 368, on top of W. end of N. head wall of concrete R. R. culvert 367.99; chiseled square	3, 149. 45
Ady, 2.1 mi. NW. of, on fence line between R. R. and highway, on Oldham-Potter county line, in concrete post; bronze tablet stamped "Oldham-Potter County 1930"	3, 136. 921
Ady, 1.4 mi. NW. of, 0.2 mi. E. of sign "Ady," 2.5 ft. E. of sign "Gross Spur," on N. side of main track, between main track and switch to gravel pit; top of section of rail set vertically	3, 167. 58
Ady, 11 ft. S. and 66 ft. W. from sta. sign, 96 ft. S. and 70 ft. E. from rd. crossing, 90 ft. SE. of SE. gatepost in SW. right-of-way fence, at milepost 365, in concrete post; standard tablet stamped "T T 30 L 1933" (recovered by U. S. C. & G. S. in same year)	3, 146. 834
Ady, 0.2 mi. SE. of, at concrete bridge 364.79, on top of SE. end of SW. head wall; chiseled square	3, 141. 19
Ady, 0.8 mi. SE. of, at concrete R. R. culvert 364.22, on top of NW. end of NE. head wall; chiseled square	3, 171. 26
Ady, 1.3 mi. SE. of, at SE. concrete abutment of bridge 363.73, on top of SW. parapet; chiseled square	3, 164. 18
Ady, 2.0 mi. SE. of, at milepost 363, on NE. side of highway, at SW. right-of-way fence line, set flush with ground and surrounded by rocks; top of iron rod	3, 140. 05



Ady, 2.8 mi. SE. of, on top of NW. bent at NW. end of trestle 362.23 over Sierrita de la Cruz Creek, in top of NE. end of 12- by 12-in. sleeper; copper nail and washer-----	Feet 3, 112. 86
Ady, 3.4 mi. SE. of, 3.6 mi. NW. of Boden sta., 77 ft. S. and 30 ft. E. from rd. crossing, in S. corner of crossing, inside R. R. right-of-way, in angle of R. R. fence to SE. cattle guard, in concrete post; standard tablet stamped "T T 31 L 1933" (recovered by U. S. C. & G. S. in same year)-----	3, 154. 390
Boden, 3.1 mi. NW. of, 140 ft. NW. of milepost 361, at concrete bridge 361.06, on top of SE. end of NE. head wall; chiseled square-----	3, 154. 72
Boden, 2.7 mi. NW. of, at bridge 360.66, on top of NE. parapet of SE. concrete abutment; chiseled square-----	3, 155. 07
Boden, 2.2 mi. NW. of, 245 ft. NW. of milepost 360, on top of SW. parapet of SE. concrete abutment of old bridge which has been filled in so that old abutments are now level with ground; chiseled square-----	3, 176. 02
Boden, 1.2 mi. N. of, opposite and 7 ft. N. of telegraph pole with mile number 359 nailed to it, at E. right-of-way fence line, set flush with ground and surrounded by rocks; top of iron rod-----	3, 224. 67
Boden, 30 ft. E. of center line of track, in SW. corner of yard of residence of section foreman, in fence corner, in line with row of trees N., in concrete post; standard tablet stamped "T T 32 L 1933 3243" (recovered by U. S. C. & G. S. in same year)-----	3, 242. 546
Boden, 0.4 mi. SE. of, on line between secs. 3, 4, 5, and 6, E. L. & R. R. R. Co. block, 100 ft. E. of track, at right-of-way fence, on rim of 3-in. gas pipe filled with concrete; chiseled bar-----	3, 251. 07
Boden, 1.5 mi. SE. of, 0.6 mi. N. of milepost 356, 15 ft. W. of center line of track, on top of N. end of W. head wall of concrete R. R. culvert; chiseled square-----	3, 253. 34
From point on Fort Worth & Denver City Railway 2.8 miles southeast of Ady north-east along roads about 4.4 miles by way of Bivins River Camp into Channing No. 4 quadrangle (by F. J. Fricke in 1933; releveled by C. S. Carney in 1934)	
Bivins River Camp, 1.0 mi. SW. of house at, in NW. part of sec. 54, block 5, Gunter & Munson survey, on S. bank of Canadian River, 100 ft. E. of mouth of Sierrita de la Cruz Creek, 40 ft. SE. of double-forked cottonwood tree, in root 6 in. under ground on NW. side of 6-in. cottonwood tree with triangular blaze directly above point; copper nail and washer-----	3, 098. 08
Bivins River Camp, 23 ft. S. and 28 ft. W. from house at, in sec. 98, block 47, H. & T. C. R. R. Co. survey, about 1,000 ft. NE. of mouth of Corral Creek, in concrete post; standard tablet stamped "T T 5 D 1933"-----	3, 120. 772
Bivins River Camp, 1.0 mi. along rd. to Bivins ranch headquarters NE. of, 30 ft. E. of point between old and new rds., 270 ft. N. of point where rds. separate, set flush with ground and surrounded by rocks; top of iron rod-----	3, 158. 17
Bivins River Camp, 2.1 mi. NE. of, 9 ft. W. of W. gatepost in E.-W. fence line, set flush with ground and surrounded by rocks; top of iron rod-----	3, 247. 89

From point 1.9 miles southeast of Boden station on Fort Worth & Denver City Railway southeast 0.7 mile, thence generally west and southwest across country and along roads to point 5.7 miles northwest of Gray ranch (by C. S. Carney in 1933 and 1934; leveled twice beyond Tascosa Highway)

Boden, 2.6 mi. SE. along R. R., thence 1.2 mi. W. along fence line from, 150 ft. E. of $\frac{3}{4}$ -in. iron pipe driven in ground, set in concrete; top of steel rod.....	Feet 3, 409. 51
Boden, 2.6 mi. SE., thence 2.3 mi. W. from, 1.6 mi. S. and 0.5 mi. E. from Vanetti ranch, 30 ft. W. of $\frac{3}{4}$ -in. iron pipe driven in ground, in E.-W. fence line, in line with T-fence N., 5 ft. E. of S. end of wire gate, set in concrete; top of steel rod.....	3, 453. 09
Boden, 2.6 mi. SE., thence 3.1 mi. W. from, 1.6 mi. S. and 0.3 mi. W. from Vanetti ranch, on W. side of Tascosa Highway, 170 ft. S. of T-fence W., in concrete post; standard tablet stamped "T T 6 D 1933 3516" (recovered by U. S. C. & G. S. in 1935).....	3, 516. 072
Reference mark, 170 ft. E. of tablet, 47.5 ft. E. of center line of rd., 2.5 ft. W. of fence along E. side of graded rd., in line with T-fences E. and W., set in concrete; top of steel rod.....	3, 515. 30
Boden, 2.6 mi. SE., thence 4.2 mi. W. from, in E.-W. fence line, set in concrete; top of steel rod.....	3, 558. 11
Boden, 2.6 mi. SE., thence 5.4 mi. W. from, 9.2 mi. by rd. NE. of Gray ranch house, 450 ft. W. of iron pipe at W. cor. secs. 11 and 12, block 20 F, E. L. & R. R. R. R. Co. survey, 2 ft. S. and 94 ft. W. from gate across rds., in concrete post; standard tablet stamped "T T 7 D 1933 3518".....	3, 517. 792
Reference mark, 390 ft. E. of tablet, on top of ridge, 275 ft. E. of gate, 60 ft. W. of $\frac{3}{4}$ -in. iron pipe driven in ground, in E.-W. fence line, set in concrete; top of steel rod.....	3, 525. 15
Gray ranch house, 8.0 mi. NE. of, 30 ft. E. of center of dim crossroads, 5 ft. W. of large mesquite tree, set in concrete; top of steel rod.....	3, 544. 43
Gray ranch house, 6.8 mi. NE. of, 22 ft. E. of N.-S. fence line, about 600 ft. N. of wire gate, on rock outcrop; chiseled square.....	3, 538. 96
Oldham-Potter county line; top of milepost marked "Oldham-Potter 18.8674 1930".....	3, 409. 29
Oldham-Potter county line, 0.5 mi. NW. of, in floor of W. fork of canyon, in root of lone mesquite tree; copper nail and washer.....	3, 298. 66
Oldham-Potter county line, 1.8 mi. NW. of, 7.1 mi. in air line N. of Gray ranch house, in saddle of W. wall of canyon, in root of lone mesquite tree; copper nail and washer.....	3, 353. 66
Gray ranch house, 5.7 mi. by rd. NW., thence 2.8 mi. NE. from, 5.5 mi. SE. of Cottonwood Camp, 2.4 mi. E. of old Wildorado-Tascosa rd., along dim rd. on ridge between Wildorado and Sierrita de la Cruz Creeks, due E. of lone mesa in valley, 10 ft. N. and 6 ft. W. from dim rd. fork; standard tablet stamped "T T 33 L 1933".....	3, 462. 401
Reference mark, 230 ft. SW. of tablet, 10 ft. NW. of center line of rd., set in concrete; top of steel rod.....	3, 457. 74
Gray ranch house, 5.7 mi. NW., thence 1.9 mi. NE. from, 160 ft. E. of curve in rd., at edge of cliff wall of canyon, in large juniper tree; copper nail and washer.....	3, 474. 18
Gray ranch house, 5.7 mi. NW., thence 1.1 mi. NE. from, 105 ft. E. of rd., at head of drain, in root of large mesquite tree; copper nail and washer.....	3, 511. 24

AMARILLO NO. 1 QUADRANGLE<sup>10</sup>

[Latitude 35°15'–35°30'; longitude 101°30'–101°45']

## CARSON AND POTTER COUNTIES

From Sanford quadrangle generally south across country and along roads by way of St. Francis into Amarillo No. 4 quadrangle (by Tom Carney in 1926)

St. Francis, 15.6 mi. N. of Panhandle & Santa Fe Ry. crossing at, 300 ft. E. of SW. cor. sec. 32, block Y 2, H. & T. C. R. R. Co. survey, 2 ft. N. of fence; iron hub-----	Feet 3, 486. 22
St. Francis, 14.4 mi. N. of, about 0.5 mi. W. of St. Francis-Pantex rd., in SW. cor. sec. 1, block Y 2, H. & T. C. R. R. Co. survey, in concrete post; standard tablet stamped "TC 44 1926"-----	3, 507. 157
Reference mark, 180 ft. N. of tablet, in fence line; iron hub-----	3, 503. 92
St. Francis, 13.4 mi. N. of, about 0.5 mi. W. of rd., in SW. cor. sec. 10, block T, Beaty, Seale, & Forwood survey; iron hub-----	3, 488. 63
St. Francis, 12.4 mi. N. of, in SW. cor. sec. 11, block T, Beaty, Seale, & Forwood survey, in concrete post; standard tablet stamped "TC 45 1926"-----	3, 503. 738
Reference mark, 80 ft. N. of tablet, in fence line; iron hub-----	3, 496. 79
St. Francis, 11.4 mi. N. of, 30 ft. W. of center line of St. Francis-Pantex rd., in NE. corner of field fence; iron hub-----	3, 583. 48
St. Francis, 10.3 mi. N. of, 30 ft. W. of center line of rd., at junction of T-rd. E. to Panhandle, in NE. corner of pasture fence, in concrete post; standard tablet stamped "TC 46 1926"-----	3, 572. 936
Reference mark, 630 ft. N. of tablet, in fence line; iron hub-----	3, 573. 75
St. Francis, 9.3 mi. N. of, at N. side sec. 50, block T, Beaty, Seale, & Forwood survey, 30 ft. W. of center line of rd., in NE. corner of pasture fence; iron hub-----	3, 554. 33
St. Francis, 8.4 mi. N. of, 35 ft. W. of center line of rd., in NE. corner of pasture, in concrete post; standard tablet stamped "TC 47 1926"-----	3, 573. 810
Reference mark, 180 ft. N. of tablet, in fence line; iron hub-----	3, 572. 35
St. Francis, 7.3 mi. N. of, 35 ft. W. of center line of rd., in NE. corner of pasture fence; iron hub-----	3, 590. 13
St. Francis, 6.3 mi. N. of, at junction of rd. to Panhandle, in SE. corner of field, in concrete post; standard tablet stamped "TC 48 1926" (recovered by U. S. C. & G. S. in 1935)-----	3, 595. 928
Reference mark, 240 ft. N. of tablet, in fence line; iron hub-----	3, 595. 28
St. Francis, 5.0 mi. N. of, 35 ft. W. of center line of rd., in NE. corner of field; iron hub-----	3, 575. 30
St. Francis, 4.0 mi. N. of, 45 ft. W. of center line of rd., at jog, in NE. corner of pasture, in concrete post; standard tablet stamped "TC 49 1926"-----	3, 577. 385
Reference mark, 240 ft. N. of tablet, in fence line; iron hub-----	3, 576. 50
St. Francis, 3.0 mi. N. of, 30 ft. W. of center line of rd., in NE. corner of field; iron hub-----	3, 563. 17
St. Francis, 2.0 mi. N. of, 30 ft. W. of center line of rd., in SE. corner of field, in concrete post; standard tablet stamped "TC 50 1926"-----	3, 514. 966
Reference mark, 160 ft. N. of tablet, in fence line; iron hub-----	3, 514. 96
St. Francis, 1.0 mi. N. of, 45 ft. W. of center line of rd., in NE. corner of field fence, near W. gatepost; iron hub-----	3, 541. 16

<sup>10</sup> The figures of elevation given are preliminary figures based on the 1929 general adjustment; additional leveling may necessitate further adjustment.

St. Francis, about 0.2 mi. N. of Panhandle & Santa Fe Ry. crossing at, 35 ft. W. of center line of rd., 60 ft. S. of telephone line, in NE. corner of field, in concrete post; standard tablet stamped "TC 51 1926"	Feet 3, 526. 039
Reference mark, 120 ft. N. of tablet, in SE. corner of field fence across E.-W. lane; iron hub	3, 524. 97

Northeast, north, and west along Chicago, Rock Island & Gulf Railway, along road, and across country (by C. S. Carney in 1933)

[A jog from Cliffside quadrangle]

Amarillo, 6.3 mi. along R. R. NE. of, opposite S. end of Mayer siding, 500 ft. S. of intersection of State Highway 136 and N.-S. rd., 145 ft. N. and 36 ft. E. from intersection of rd. and R. R., in concrete post; standard tablet stamped "T T 2 L 1933 3631" (recovered by U. S. C. & G. S. in 1935)	3, 630. 901
Reference mark, 660 ft. N. of tablet, 175 ft. N. of center of rd. and highway intersection, 20 ft. W. of rd., on top of W. end of concrete culvert; chiseled square	3, 634. 56
Amarillo, 6.3 mi. NE. along R. R., thence 1.1 mi. N. along graded rd. from, 18 ft. E. of center line of rd., on top of S. end of concrete culvert; chiseled square	3, 618. 73
Amarillo, 6.3 mi. NE., thence 2.0 mi. N. from, 15 ft. E. of center line of rd., on top of E. end of concrete culvert; chiseled square	3, 579. 29
Amarillo, 6.3 mi. NE., thence 2.2 mi. N. from, 4.7 mi. by rd. SW., thence 3.2 mi. E. from Bivins ranch house, at N. end of graded rd., at cor. secs. 67, 68, 97, and 98, block 2, Adams, Beaty, & Moulton survey, in SE. angle of T-fence S. along W. side of rd., in concrete post; standard tablet stamped "T T 3 L 1933 3554"	3, 554. 057

Along road south of Bivins ranch (by C. S. Carney in 1933)

[A jog from Cliffside quadrangle]

Bivins ranch house, 1.1 mi. S. of, 4.7 mi. E. and 9.0 mi. N. from Amarillo, near quarter corner between secs. 17 and 32, block 1, Beaty, Seale & Forwood survey, 18 ft. E. of cattle guard in fence, in concrete post; standard tablet stamped "T T 5 L 1933 3530"	3, 529. 883
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Along roads northeast and northwest about 3 miles north of Bivins ranch (by C. S. Carney in 1933)

[A jog from Cliffside quadrangle]

Bivins ranch house, 3.0 mi. N. of, about 720 ft. N. and 300 ft. E. from quarter corner between secs. 2 and 58, block 2, Adams, Beaty, & Moulton survey, and block 1, Beaty, Seale, & Forwood survey, along rd. to LX ranch, on E. side of rd., at junction of rd. W., in concrete post; standard tablet stamped "T T 8 L 1933 3457"	3, 457. 086
Reference mark, 54 ft. W. of tablet, 27 ft. W. of center line of rd., set in concrete; top of steel rod	3, 456. 41

From Sanford quadrangle at point 3 miles west of Carson-Potter county line generally east along roads and across country near north border of quadrangle to point near northeast corner, thence north and back into Sanford quadrangle (by C. S. Carney in 1933-34)

Gunter & Munson survey, block 22, near S. line sec. 9, 780 ft. W. of windmill, 50 ft. SE. of wye of rd. fork, in concrete post; standard tablet stamped "T T 47 L 1933 3413"	3, 412. 838
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Reference mark, 720 ft. SE. of tablet, 230 ft. S. of windmill, 15 ft. N. of rd., set in concrete; top of steel rod.....	<i>Feet</i> 3, 419. 47
Gunter & Munson survey, block 22, in NW¼ sec. 11, 30 ft. SE. of junction of T-rd. S. to windmill, set in concrete; top of steel rod....	3, 467. 40
Gunter & Munson survey, block 22, near quarter corner between secs. 2 and 11, 43 ft. NE. of center of crossroads, in telephone line, 18 in. SW. of telephone pole, set in concrete; top of steel rod.....	3, 440. 60
Gunter & Munson survey, block 22, near center of SE¼ sec. 2, 1,470 ft. N. of highway and fence E. on line between secs. 2 and 28, 21 ft. S. and 51 ft. W. from junction of rd. W. through gate, in concrete post; standard tablet stamped "T T 48 L 1933 3491".....	3, 490. 829
Reference mark, 75 ft. N. of tablet, in fence line, set in concrete; top of steel rod.....	3, 489. 33
H. & G. N. R. R. Co. survey, block S, 300 ft. S. of NW. cor. sec. 32, in fence line; top of 1½-in. pipe.....	3, 472. 31

[Line jogs into Sanford quadrangle]

H. & G. N. R. R. Co. survey, block S, about 850 ft. W. of cor. secs. 17, 18, 23, and 26, 15 ft. NW. of W. bank of Antelope Creek, 65 ft. E. of center line of N.-S. rd., set in concrete; top of steel rod.....	3, 320. 13
Deal, about 6.5 mi. S. of, 3.0 mi. N. and 3.0 mi. W. from Pomeroy, in NW. cor. sec. 13, block S, H. & G. N. R. R. Co. survey, 8 ft. S. and 2 ft. E. from fence corner, in concrete post; standard tablet stamped "T T 21 D 1933 3404".....	3, 404. 120
Reference mark, 152 ft. E. of tablet, in fence line, set in concrete; top of steel rod.....	3, 395. 38
H. & G. N. R. R. Co. survey, block S, 530 ft. W. of NE. cor. sec. 13, at top of ridge, 6 in. S. of fence line, set in concrete; top of steel rod....	3, 404. 03
H. & G. N. R. R. Co. survey, block S, in NE. cor. sec. 8, 14 in. S. of E.-W. fence line, set in concrete; top of steel rod (recovered by U. S. C. & G. S. in 1935).....	3, 385. 810
Deal, about 6.5 mi. S. and 3.5 mi. E. from, 2 ft. S. and 3 ft. W. from iron pipe at SW. cor. sec. 34, block 5, I. & G. N. R. R. Co. survey, 2 ft. W. of fence, in concrete post; standard tablet stamped "T T 20 D 1933 3408".....	3, 408. 223
Reference mark, 122 ft. N. of tablet, in N.-S. fence line, set in concrete; top of steel rod.....	3, 405. 91

#### AMARILLO NO. 3 QUADRANGLE<sup>11</sup>

[Latitude 35°00'-35°15'; longitude 101°45'-102°00']

#### POTTER AND RANDALL COUNTIES

At Amarillo (by E. E. Harris in 1927)

U. S. C. & G. S. standard disk stamped "Y 19 1911".....	3, 663. 775
Amarillo, at Fort Worth & Denver City Ry. sta.; top of rail.....	3, 668. 1
Amarillo, 50 ft. from sta., at sta. platform; SE. corner of curb of platform.....	3, 668. 36

<sup>11</sup> The figures of elevation given are preliminary figures based on the 1929 general adjustment; additional leveling may necessitate further adjustment.

	<i>Feet</i>
U. S. C. & G. S. standard disk stamped "X 19 1911"-----	3, 667. 470
From Amarillo northwest along Fort Worth & Denver City Railway into Cliffside quadrangle (by J. M. Lawson in 1928; leveled twice)	
Amarillo, on N. side of Fort Worth and Denver City Ry. sta., 62 ft. E. of W. end of sta., at W. entrance, 9 in. N. of E. porch pier, on top of concrete foundation of pier; chiseled square-----	3, 669. 18
Amarillo, 0.6 mi. NW. of sta., directly under overhead crossing of Chicago, Rock Island & Gulf Ry.; top of NE. rail-----	3, 636. 81
Amarillo, 0.9 mi. NW. of, 30 ft. S. and 86 ft. W. from center of rd. crossing, inside R. R. right-of-way, in line with row of telegraph poles, 18 ft. E. of nearest pole, in concrete post; standard tablet stamped "1 L 1928" and "T T Sta No 1 L 1928" (recovered by U. S. C. & G. S. in 1933)-----	3, 622. 735
Amarillo, 2.0 mi. NW. of, 50 ft. SW. of track, at right-of-way fence, opposite T-street W., at N. end of first R. R. cut NW. of Amarillo; top of section of rail set vertically-----	3, 633. 18
Amarillo, 2.3 mi. NW. of, 6 ft. N. and 68 ft. W. from center of rd. crossing, 30 ft. N. of rd. fork, 60 ft. from milepost 338, at edge of R. R. right-of-way; top of section of rail set vertically-----	3, 613. 69
Amarillo, 3.2 mi. NW. of, 1,070 ft. SE. of milepost 339, 100 ft. SW. of track, at edge of right-of-way; top of section of rail set vertically-----	3, 569. 23
Amarillo, 3.8 mi. NW. of, about 0.2 mi. N. of cor. secs. 11 and 12, block 9, and cor. secs. 223 and 224, block 2, Beaty, Seale, & Forwood survey, 20 ft. N. and 160 ft. E. from center of N.-S. rd. crossing, 50 ft. N. of track, at right-of-way fence, 100 ft. E. of angle in fence at rd., in concrete post; standard tablet stamped "2 L 1928" and "T T Sta No 2 L 1928" (recovered by U. S. C. & G. S. in 1933)-----	3, 544. 137
Amarillo, 4.6 mi. NW. of, 15 ft. E. of center of trestle over roadway to ranch house of J. E. Hall, on top at NE. corner of SE. concrete abutment; chiseled square-----	3, 499. 75
From Amarillo northeast along Atchison, Topeka & Santa Fe and Chicago, Rock Island & Gulf Railways into Cliffside quadrangle (by C. S. Carney in 1933)	
U. S. C. & G. S. iron pipe with red metal cap designated "W 19"-----	3, 655. 852
Amarillo, 1.8 mi. NE. of, 23 ft. SE. of center of intersection of U. S. Highway 66 and double track, on top of N. side of concrete base of electric warning signal; chiseled square-----	3, 655. 77
Amarillo, 2.7 mi. along Chicago, Rock Island & Gulf Ry. NE. of, 60 ft. N. and 10 ft. W. from crossing of U. S. Highway 66, inside R. R. right-of-way, in concrete post; standard tablet stamped "T T 1 L 1933 3645" (recovered by U. S. C. & G. S. in 1935)-----	3, 644. 907
Amarillo, 3.4 mi. NE. of, at NE. end of wooden underpass, 8.5 ft. SE. of center line of track, 8 in. NE. of NE. head wall, on boulder; chiseled square-----	3, 643. 32
Amarillo, 4.1 mi. NE. of, 210 ft. NW. of center line of track, 420 ft. SE. of center of intersection of rd. and State Highway 136, at SE. boundary of highway, on top of concrete highway marker; chiseled square-----	3, 651. 84
Amarillo, 5.0 mi. NE. of, 100 ft. N. of center of grade crossing, 18 in. N. of right-of-way fence, at W. end of gate, on boulder; chiseled square-----	3, 647. 29

AMARILLO NO. 4 QUADRANGLE<sup>12</sup>

[Latitude 35°00'-35°15'; longitude 101°30'-101°45']

## ARMSTRONG, CARSON, POTTER, AND RANDALL COUNTIES

From Amarillo No. 1 quadrangle near St. Francis south along roads to point on Chicago, Rock Island & Gulf Railway 4 miles west of Yarnall (by Tom Carney in 1926)

	<i>Feet</i>
St. Francis, about 0.8 mi. S. of Santa Fe Ry. crossing at, 30 ft. W. of center line of lane, in NE. corner of pasture; iron hub.....	3, 508. 54
St. Francis, about 2.1 mi. S. of R. R. crossing, in NE. corner of pasture, 30 ft. W. of center line of lane, in concrete post; standard tablet stamped "TC 52 1926".....	3, 513. 733
Reference mark, 200 ft. N. of tablet, in fence line; iron hub.....	3, 512. 08
St. Francis, about 3 mi. S. of R. R. crossing at, 0.6 mi. N. and 4.0 mi. W. from Yarnall, on S. side of Amarillo-Jericho rd., in line with division fence; iron hub.....	3, 533. 48
U. S. C. & G. S. B. M. designated "S 19".....	3, 519. 396

ASPERMONT QUADRANGLE<sup>12</sup>

[Latitude 33°00'-33°15'; longitude 100°00'-100°15']

## STONEWALL COUNTY

From Peacock No. 3 quadrangle along Rotan-Aspermont road north to Aspermont, thence along roads generally east to Old Glory, thence north and east along State Highway 120 into Rule quadrangle (by E. R. Martin in 1924)

Aspermont, at Stonewall County courthouse, in E. side of front, under marble cornerstone, 7 in. above bottom of wall; standard tablet stamped "M 21 1924".....	1, 786. 711
Reference mark, on E. side of lower step of courthouse; chiseled cross..	1, 786. 69
Aspermont, at First National Bank, 6 ft. N. of main entrance, on sill of southernmost window on E. side, 2.5 ft. above pavement, 1.5 ft. N. of edge of wall, 3 in. from S. edge of sill; small indentation.....	1, 788. 10
Aspermont, at standpipe, on SW. foundation pier, about 3 ft. above ground, at SW. edge of top; chiseled cross (recovered by U. S. C. & G. S. in 1935).....	1, 785. 000
Aspermont, 0.7 mi. NE. of, on N. edge of high school campus, N. of main building, on SW. side of S. entrance of red brick school building, in concrete doorsill, 5 in. above pavement; small indentation..	1, 783. 68
Aspermont, 3.6 mi. E. of, about 250 ft. N. of residence of Fred Dalby, at NE. corner of junction of lane and Aspermont-Old Glory highway, in field, in fence corner, in concrete post at ground surface; standard tablet stamped "M 22 1924" (recovered by U. S. C. & G. S. in 1935).....	1, 723. 123
Aspermont, 4.8 mi. E. of, 30 ft. N. of highway, on S. end of E. section of twin iron culvert under Fort Worth & Denver City Ry.; small indentation.....	1, 708. 86
Aspermont, 5.6 mi. E. of, at steel bridge over Tonk Creek, in N. end of W. abutment, 6 in. below top; standard tablet stamped "M 23 1924".....	1, 679. 738
Reference mark, on top of N. end of W. concrete abutment of bridge; chiseled cross.....	1, 680. 25

<sup>12</sup> The figures of elevation given are preliminary figures based on the 1929 general adjustment; additional leveling may necessitate further adjustment.

Aspermont, 8.9 mi. E. of, 2.8 mi. W. of Old Glory, on E. side of E. driveway to old county courthouse (now residence of J. H. Baldwin), in concrete column, 5 in. above ground; standard tablet stamped "M 24 1924"-----	Feet 1, 715. 379
Old Glory, 125 ft. W. of Wichita Valley Ry. sta., on S. side of track, on NE. corner of NE. concrete foundation pier of water tank; standard tablet stamped "M 25 1924" (recovered in 1925; also recovered by U. S. C. & G. S. in 1935)-----	1, 670. 771
Reference mark, 7.3 ft. S. of tablet, on SE. foundation pier of water tank; chiseled cross-----	1, 670. 79
Old Glory, 2.1 mi. N. of, on W. side of Old Glory-Rule highway, in NW. angle of junction of T-rd. W., in corner of field owned by the J. B. Plumphry estate, in concrete post, at ground surface; standard tablet stamped "M 26 1924"-----	1, 638. 337
Old Glory, 4.0 mi. N. of, 9.9 mi. W. of Rule, in SE. angle of junction of E.-W. rd., in corner of field owned by the J. B. Plumphry estate, in concrete post, at ground surface; standard tablet stamped "M 27 1924"-----	1, 636. 566

From Old Glory southeast along Wichita Valley Railway into Rule quadrangle  
(by E. E. Harris in 1925)

Old Glory, 0.8 mi. SE. of, 40 ft. S. of track, on W. side of rd. crossing, on top of 18-in. iron drain pipe; chiseled square-----	1, 654. 47
Old Glory, 1.9 mi. SE. of, 350 ft. W. of milepost B-132, 350 ft. E. of farm rd. crossing, on S. side of track, 3 ft. S. of fence line, in root on N. side of 12-in. mesquite tree; copper nail and washer-----	1, 640. 05

From Rule quadrangle at point 2.9 miles north and 0.9 mile west from Sweet Home Church along roads west 3 miles, thence north to point 0.3 mile north of New Hope School, thence southwest and southeast to road junction 4 miles north of Old Glory (by W. R. Broadus in 1925)

Sweet Home Church, 2.9 mi. N. and 1.3 mi. W. from, 0.8 mi. S., thence 2.6 mi. E. from New Hope School, at crossroads, 50 ft. N. of rd. W., in line with rd. S., in bench on N. side of 15-in. mesquite tree; copper nail and washer-----	1, 609. 17
New Hope School, 0.8 mi. S., thence 1.8 mi. E. from, 25 ft. S. of rd., at junction of detour through pasture, on S. side of gate, on concrete base of corner fence post; chiseled square-----	1, 623. 09
New Hope School, 0.8 mi. S., thence 1.0 mi. E. from, at jog in rd., 12 ft. N. and 20 ft. W. from rd. corner, on S. side of stone fence post, on rock; chiseled square-----	1, 632. 53
New Hope School, 0.8 mi. S. of, 15 ft. N. and 55 ft. E. from turn in rd. from W. to N., in fork of large mesquite tree; copper nail and washer-----	1, 627. 07
New Hope School, 0.3 mi. N. of, 18 ft. S. and 18 ft. W. from crossroads, 4 ft. SW. of fence corner, in concrete post; standard tablet stamped "B 35 1925"-----	1, 586. 949
Reference mark, 7 ft. NW. of tablet; top of iron pipe-----	1, 586. 74
New Hope School, 0.3 mi. N., thence 0.9 mi. W. from, 0.5 mi. E., thence 0.6 mi. N. from Redhorse Crossing of Salt Fork of Brazos River, 10 ft. N. and 25 ft. W. from rd. corner, in large mesquite tree; copper nail and washer-----	1, 588. 86
Redhorse Crossing, 0.5 mi. E. of, 120 ft. N. and 60 ft. W. from junction of rd. W., 25 ft. NE. of residence of M. J. Morton, in 16-in. mesquite tree; copper nail and washer-----	1, 594. 63



Salt Fork of Brazos River, at Redhorse Crossing; surface of water Feb. 12, 1925-----	<i>Feet</i> 1, 498. 5
Redhorse Crossing, 650 ft. W. of W. bank of Salt Fork of Brazos River at, 650 ft. E. of two-story red house, on E. side of rd., 20 ft. N. of bend in rd., in rock outcrop; standard tablet stamped "B 36 1925"-----	1, 531. 079
Reference mark, 25.5 ft. S. 40° E. of tablet, on S. side of rd., on rock outcrop; chiseled square-----	1, 529. 51
Redhorse Crossing, 0.7 mi. W. of, 1.7 mi. N. of Robinson Crossing, 0.4 mi. SW. of two-story red house, 45 ft. NE. of rd. junction, in fork of group of mesquite trees; copper nail and washer-----	1, 551. 70
Robinson Crossing, 1.0 mi. N. of, on W. bank of Salt Fork of Brazos River, 25 ft. E. of gate across rd., in bench on N. side of small mesquite tree; copper nail and washer-----	1, 517. 42
Robinson Crossing, on W. bank of Salt Fork of Brazos River at, 25 ft. S. of crossing of E.-W. rd., in fork of large mesquite tree, 1.5 ft. above ground; copper nail and washer-----	1, 529. 18
Robinson Crossing, 1.3 mi. E. of, 4.0 mi. N., thence 2.3 mi. NW. from Old Glory, on bluff on E. side of Salt Fork of Brazos River, 400 ft. W. of W. end of Ten X water hole, 120 ft. N. of rd. junction, 10 ft. W. of rd., in concrete post; standard tablet stamped "B 37 1925"-----	1, 627. 125
Reference mark, 12 ft. W. of tablet, in small mesquite tree; copper nail and washer-----	1, 627. 27
Old Glory, 4.0 mi. N., thence 1.0 mi. NW. from, 0.4 mi. NW. of corner of public rd., 180 ft. NW. of junction of dim rd. SW., in mesquite tree; copper nail and washer-----	1, 664. 70
Old Glory, 4.0 mi. N., thence 0.6 mi. W. from, 25 ft. W. of and in line with rd. E., 1 ft. E. of fence line, on top of iron pipe in ground; chiseled cross-----	1, 660. 11

From Rule quadrangle west along State Highway 18 to Old Glory (by W. R.  
Broadus in 1925)

Old Glory, 2.1 mi. along Sagerton rd. E. of, 27 ft. S. and 26 ft. W. from junction of T-rd. S., 13 ft. W. of fence corner, in concrete post; standard tablet stamped "B 33 1925"-----	1, 620. 137
Reference mark, 100 ft. N. and 320 ft. W. from rd. junction, 55 ft. W. of fence line, in root on W. side of large forked mesquite tree; copper nail and washer-----	1, 619. 75
Old Glory, 1.5 mi. E. of, 35 ft. S. and 85 ft. W. from junction of T-rd. N., 5 ft. inside fence, in 14-in. mesquite tree; copper nail and washer-----	1, 637. 33
Old Glory, 0.6 mi. E. of, at jog in highway, 40 ft. S. and 25 ft. W. from junction of rd. S., in small mesquite tree; copper nail and washer--	1, 652. 58

#### BIG SPRING NORTH QUADRANGLE

[Latitude 32°15'-32°30'; longitude 101°15'-101°30']

#### HOWARD COUNTY

Northeast of Big Spring (by E. W. Gouchenour in 1938)

[A jog from Big Spring South quadrangle]

Big Spring, 3.4 mi. E. of, about 1 mi. S. along old county rd. from U. S. Highway 80, about 100 ft. W. of steel bridge, 15 ft. N. of rd., in root on N. side of small mesquite tree; copper nail and washer--	2, 380. 48
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Big Spring, 4.2 mi. E. of, about 0.8 mi. W. of right-angle bend to N. in old U. S. Highway 80, about 0.6 mi. S. of Cosden refinery, on S. side of rd., in concrete post; standard tablet stamped "G 1 1938 2434"-----	Feet 2, 434. 409
Big Spring, 5.0 mi. along old Highway 80 E. of, at right-angle bend from E. to N., 1.0 mi. SE. of Cosden refinery, on S. head wall of concrete culvert; chiseled square-----	2, 429. 27

From Big Spring South quadrangle at point about 3 miles south and 0.6 mile south west from Coahoma northeast and north along roads to Coahoma, thence west along Texas & Pacific Railway 1.9 miles (by E. W. Gouchenour in 1938)

Coahoma, 3.0 mi. S. of, 1.0 mi. W. of Gulf pumping sta., 120 ft. E. of point where rd. to Coahoma crosses Gulf pipe line, 3 ft. W. of telephone pole, in concrete post; standard tablet stamped "G 4 1938 2268"-----	2, 267. 407
Reference mark, 80 ft. SE. of tablet, in root on S. side of mesquite tree; copper nail and washer-----	2, 267. 23
Coahoma, 2.0 mi. along trail to signal peak S. of, about 0.3 mi. S. of telephone line, 60 ft. W. of rd., in root of mesquite tree; copper nail and washer-----	2, 287. 86
Coahoma, 0.9 mi. S. of, at right-angle bend from N. to W. in old U. S. Highway 80, on W. head wall of concrete culvert; chiseled square--	2, 376. 44
U. S. C. & G. S. B. M. designated "I 14"-----	2, 406. 905
U. S. C. & G. S. B. M. designated "J 14"-----	2, 424. 218

## BIG SPRING NO. 4 QUADRANGLE

[Latitude 32°00'-32°15'; longitude 101°00'-101°15']

## HOWARD, MITCHELL, AND STERLING COUNTIES

Southeast and southwest along roads northeast of Ross City (by E. W. Gouchenour in 1938; leveled twice)

[A jog from Big Spring South quadrangle]

Coahoma, 10.6 mi. SE. of, in narrow canyon, in root of mesquite tree; copper nail and washer-----	2, 293. 70
Coahoma, 11.3 mi. SE. of, on N. edge of S. bluff of Devil's Creek, 3 ft. S. of tall fence post, at gate in fence; standard tablet stamped "G 7 1938 2386"-----	2, 386. 066
Coahoma, 11.9 mi. SE. of, 7.6 mi. NE. of Ross City, on second-class rd. N. from main rd., about 150 ft. S. of woven wire gate with steel pipe frame, 27 ft. SE. of rd., in root of mesquite tree; copper nail and washer-----	2, 397. 86
Ross City, 6.9 mi. NE. of, 2.2 mi. along second-class rd. N. from main rd., 200 ft. W. of black oil storage tank, 50 ft. NW. of rd., in root on N. side of mesquite tree; copper nail and washer-----	2, 417. 14
Ross City, 5.8 mi. NE. of, 1.4 mi. NE. along main rd., thence 0.8 mi. N. along Lockhart oil field rd. from Chalk Store, 55 ft. N. of cattle guard in E.-W. fence, in root on N. side of mesquite bush; copper nail and washer-----	2, 423. 86
Ross City, 4.7 mi. NE. of, 1.4 mi. NE. of Chalk Store, on top of W. edge of mesa, 500 ft. SW. of white house with green roof and steel wind-charger tower, 500 ft. E. of junction of rd. N. to Lockhart oil field, 35 ft. S. of rd., 6 ft. W. of mesquite tree, in concrete post; standard tablet stamped "G 8 1938 2501"-----	2, 500. 531

## BIG SPRING SOUTH QUADRANGLE

[Latitude 32°00'-32°15'; longitude 101°15'-101°30']

## GLASSCOCK, HOWARD, AND STERLING COUNTIES

From Big Spring alternately southwest and southeast along roads by way of  
Lees into Garden City No. 2 quadrangle at point about 5.6 miles south of Lees  
(by E. E. Harris in 1920)

	<i>Feet</i>
U. S. C. & G. S. standard disk designated "L 14"-----	2, 401. 563
Big Spring, in front of new brick sta. of Texas & Pacific Ry.; top of nearest rail.-----	2, 401. 3
Big Spring, 1.1 mi. SW. of, on E. side of main rd. S., 2 ft. E. of telephone pole, on N. side of fireplug, on top of circular outlet; chiseled cross-----	2, 519. 97
Big Spring, 2.8 mi. SW. of, at entrance to waterworks, 30 ft. S. and 45 ft. W. from rd. fork, 2 ft. N. of telephone pole, 1 ft. W. of wire fence; iron post stamped "1920 Texas 2620" (recovered by U. S. C. & G. S. in 1933)-----	2, 620. 431
Big Spring, 3.9 mi. S. of, on W. side of rd., 350 ft. S. of right-angle turn, in center of top of concrete culvert; chiseled square-----	2, 635. 22
Big Spring, 7.2 mi. S. of, 20 ft. S. and 38 ft. W. from junction of T-rd. SW., 4 ft. W. of corner fence post, 1 ft. N. of wire fence; iron post stamped "1920 Texas 2622" (recovered by U. S. C. & G. S. in 1933)-----	2, 621. 340
Big Spring, 8.2 mi. S. of, at creek crossing, on W. side of iron bridge, 3 ft. S. of N. end; top of bolt head-----	2, 604. 02
Big Spring, 10.2 mi. S. of, 38 ft. S. and 28 ft. W. from junction of Garden City and Sterling City rds., on rd. side of wire fence, 4 ft. S. of corner fence post; iron post stamped "1920 Texas 2694" (recovered in 1938; recovered also by U. S. C. & G. S. in 1933)-----	2, 694. 089
Big Spring, 10.2 mi. S., thence 1.0 mi. SW. from, 3.0 mi. NW., thence 1.0 mi. NE. from Lees, opposite gate at entrance to ranch house of C. A. Ballard, on S. side of rd., in SW. corner of angle in wire fence, on projecting rock; chiseled square-----	2, 662. 38
Lees, 3.0 mi. NW. of, in center of NW.-SE. rd., in line with rd. NE., on large rock outcrop; highest point-----	2, 614. 58
Lees, 2.0 mi. NW. of, 15 ft. E. of center line of rd., 140 ft. N. of junction of T-rd. W., on top of E. end of 15-in. drain pipe; chiseled square-----	2, 665. 27
Lees, in NW. angle of crossroads at, inside wire fence; iron post stamped "1920 Texas 2590"-----	2, 590. 211
Lees, 1.0 mi. SE. of, 5 ft. W. of center line of rd., in center line of lane to ranch house of W. S. Woolsey, on large rock level with rd.; chiseled square-----	2, 587. 53
Lees, 2.0 mi. SE. of, 25 ft. W. of center line of rd., 4 ft. N. of angle in wire fence, on milestone "G C 15"; chiseled square-----	2, 616. 35
Lees, 3.0 mi. SE. of, in NW. angle in rd., 7 ft. W. of corner fence post, on milestone "G C 14"; chiseled square-----	2, 700. 63
Lees, 4.4 mi. by rd. S. of, in E. angle of rd. junction, 2 ft. W. of corner fence post; iron post stamped "1920 Texas 2617"-----	2, 617. 534
Lees, 5.4 mi. S. of, 10 ft. E. of center line of rd., opposite milestone "G C 11," in line with ditch W., in NE. corner of box culvert; copper nail and washer-----	2, 606. 44

From Big Spring alternately northeast and southeast along roads and trails into Big Spring North quadrangle at point about 3 miles south and 0.6 mile southwest from Coahoma (by E. W. Gouchenour in 1938)

	<i>Feet</i>
U. S. C. & G. S. standard disk stamped "Big Spring 1933"-----	2, 409. 887
Big Spring, at E. limits of, 1.0 mi. E. of municipal auditorium, about 200 ft. NE. of Hall Wrecking Co. building, on E. end of S. head wall of concrete culvert over small drain; chiseled square-----	2, 398. 92
Big Spring, 1.1 mi. E. along U. S. Highway 80, thence 0.8 mi. S. from auditorium, 100 ft. NE. of crossroads, in root on S. side of mesquite tree; copper nail and washer-----	2, 486. 14

[Line jogs into Big Spring North quadrangle]

Big Spring, 6.0 mi. E. of, 1.0 mi. S. of right-angle bend N. and E. in old U. S. Highway 80, about 0.3 mi. along ranch rd. NE. of ranch house of A. Richardson, at wooden bridge over Beals Creek, in NW. corner of floor; copper nail and washer-----	2, 351. 71
Big Spring, 7.4 mi. E. of, about 2 mi. S. of Cosden refinery, 1.0 mi. along ranch rd. SE. of Richardson ranch house, 68 ft. S. of telephone pole 5895, 18 ft. W. of center line of wooden gate, in root of cedar tree; copper nail and washer-----	2, 469. 88
Big Spring, 8.3 mi. along rds. and trails E. of, 1.8 mi. SE. of Richardson ranch house, 2.5 mi. S. of Midway School on old U. S. Highway 80, at point of hill, at pipe line, 55 ft. S. of telephone pole, in root on W. side of cedar tree; copper nail and washer-----	2, 475. 85
Big Spring, 9.2 mi. E. of, 500 ft. N. of point where signal peak rd. crosses Gulf pipe line, 25 ft. E. of rd., in concrete post; standard tablet stamped "G 2 1938 2434"-----	2, 434. 073
Big Spring, 10.5 mi. E. of, along Gulf pipe line, 250 ft. SW. of residence of Elmer Martin on ranch belonging to Mrs. Etta Wade, 40 ft. SE. of telephone pole, in root on N. side of mesquite tree; copper nail and washer-----	2, 427. 20
Big Spring, 11.8 mi. E. of, 2.8 mi. along pipe line W. of Gulf pumping sta., 50 ft. NE. of junction of dim rd., 4 ft. S. of telephone pole 161-49, in concrete post; standard tablet stamped "G 3 1938 2396"-----	2, 395. 536
Reference mark, 800 ft. E. of tablet, 50 ft. NW. of center of gate, 20 ft. N. of center line of rd., in root of mesquite tree; copper nail and washer-----	2, 389. 84
Big Spring, 12.8 mi. E. of, 3.0 mi. S., thence 1.0 mi. SW. from Coahoma, 2.0 mi. along pipe line W. of Gulf pumping sta., on E. break of ridge, 60 ft. S. of telephone pole along pipe line, in root on W. side of mesquite tree; copper nail and washer-----	2, 357. 80

From Big Spring North quadrangle at point about 3.5 miles southeast of Coahoma southeast and southwest along roads and trails by way of Ross City to proposed site of town of New Drumright, 1.9 miles southwest of intersection of route road and U. S. Highway 87 (by E. W. Gouchenour in 1938; leveled twice to Ross City)

Coahoma, 4.2 mi. SE. of, along old rd. S. to R. L. Powell ranch and along Magnolia water line to Chalk oil field, 0.9 mi. S. of Magnolia pumping sta., 1.5 mi. SW. of Gulf pumping sta., 190 ft. NW. of gate at S. break of hill, 18 ft. E. of rd., in root of mesquite tree; copper nail and washer-----	2, 296. 92
Coahoma, 5.3 mi. SE. of, 0.8 mi. S. of Powell ranch house, along Magnolia water pipe line, on NE. edge of mesa, 12 ft. E. of rd., 19 ft. E. of pipe line and fence, in root on N. side of mesquite tree; copper nail and washer-----	2, 317. 99

Coahoma, 6.3 mi. SE. of, along Magnolia water pipe line and telephone line S. to Chalk Store, about 2.2 mi. SW. of Gulf pumping sta., on top of ridge, at fence corner, 2 ft. E. of telephone pole, in concrete post; standard tablet stamped "G 5 1938 2358"-----	Feet 2, 357. 467
Reference mark, 160 ft. E. of tablet, in root of mesquite tree; copper nail and washer-----	2, 355. 42
Coahoma, 7.4 mi. SE. of, along Magnolia water pipe line, 4.0 mi. E. of signal peak, on top of ridge, 30 ft. SE. of telephone pole, in root on N. side of small mesquite tree; copper nail and washer-----	2, 322. 32
Coahoma, 8.6 mi. SE. of, along old Magnolia water pipe line, 15 ft. W. of dim rd., in root on N. side of mesquite tree; copper nail and washer--	2, 271. 32
Coahoma, 9.5 mi. SE. of, 4.0 mi. N. of Chalk Store by way of Magnolia water pipe line, 5.3 mi. NW. of intersection of trail and main Coahoma-Ross City rd., 200 ft. W. of gate in fence line, in large sandstone boulder; standard tablet stamped "G 6 1938 2276"-----	2, 275. 923
Reference mark, 35 ft. N. of tablet, on sandstone ledge; chiseled square-----	2, 274. 48

[Line jogs into Big Spring No. 4 quadrangle]

Ross City, 3.7 mi. NE. of, 0.5 mi. NE. of Chalk Store, 120 ft. W. of pipe line crossing, about 1,000 ft. W. of low-water bridge over drain, 30 ft. N. of center line of rd., in root on E. side of mesquite tree; copper nail and washer-----	2, 407. 60
Ross City, 2.7 mi. NE. of, 0.5 mi. SW. of Chalk Store, 120 ft. W. of center of crossroads, on N. side of rd., opposite large "Conoco" sign, in root of mesquite tree; copper nail and washer-----	2, 470. 31
Ross City, 1. 6 mi. NE. of, about 500 ft. E. of Chalk School, 60 ft. W. of rd., in small stump at base of 6-in. hackberry tree; copper nail and washer-----	2, 555. 51
Ross City, 0.8 mi. E. of, 50 ft. NW. of junction of rd. S. to Sterling City, on W. concrete head wall of culvert; chiseled square-----	2, 637. 52
Ross City, 0.3 mi. E. of junction of rd. to center of village, 50 ft. S. of junction of dim rd. N., in NW. cor. sec. 140, block 29, Waco & Northwestern R. R. survey, in concrete post, marked by cairn; standard tablet stamped "G 9 1938 2707"-----	2, 707. 050
Ross City, 0.7 mi. SW. of, 300 ft. E. of junction of rd. S., 15 ft. S. of center line of highway, on S. head wall of concrete culvert over drain; chiseled square-----	2, 634. 29
Ross City, 1.7 mi. SW. of, 0.6 mi. E. of Texas Tool & Machine Shop building, 60 ft. S. of junction of rd. SE., 70 ft. S. and 35 ft. W. from junction of rd. NE., in crotch of twin mesquite tree; copper nail and washer-----	2, 699. 53
Ross City, 2.3 mi. SW. of, 480 ft. W. of Texas Tool & Machine Shop building, on top of ridge, 170 ft. SW. of twin oil storage tanks, 150 ft. W. of junction of rd. N. to oil lease, 60 ft. N. of highway, 6 ft. E. of second telephone pole W. of shop, in rock ledge; standard tablet stamped "G 10 1938 2753"-----	2, 753. 140
Ross City, 3.2 mi. SW. of, at E. foot of small ridge, on N. concrete head wall of culvert; chiseled square-----	2, 742. 74
Ross City, 4.7 mi. SW. of, 1.2 mi. E. of intersection of U. S. Highway 87, about 150 ft. W. of angle to NE. in rd., on NE. head wall of concrete culvert over drain; chiseled square-----	2, 671. 46

Ross City, 5.9 mi. SW. of, 13.9 mi. SE. of Big Spring, 90 ft. E. of center of intersection of U. S. Highway 87, 42 ft. SE. of center line of cattle guard, inside fence, in concrete post; standard tablet stamped "G 11 1938 2657"-----	Feet 2, 657. 120
Reference mark, 32 ft. NW. of tablet, on E. end of S. concrete head wall of cattle guard; chiseled square-----	2, 658. 56
Ross City, 6.8 mi. SW. of, 1.0 mi. along graded rd. SW. of intersection of U. S. Highway 87, 0.9 mi. E. of proposed town of New Drum-right, about 300 ft. E. of drain, 30 ft. S. of center line of rd., in root on S. side of small mesquite tree; copper nail and washer-----	2, 631. 65
U. S. C. & G. S. standard disk stamped "W 111 1935"-----	2, 664. 821

From point about 4 miles in air line south of Ross City along roads east 0.9 mile, thence north 3.8 miles to road junction 0.8 mile east of Ross City (by E. W. Gouchenour in 1938; partly leveled twice)

U. S. C. & G. S. standard disk stamped "S 111 1933"-----	2, 577. 275
Ross City, 0.8 mi. E., thence 3.8 mi. S. from, 125 ft. W. of house, 84 ft. W. of stake at cor. secs. 180, 181, 196, and 197, block 29, Waco & Northwestern R. R. survey, 9 ft. S. and 105 ft. W. from center of junction of T-rd. W., in N. ditch of old Highway 385, on exposed rock; chiseled square-----	2, 607. 07
Ross City, 0.8 mi. E., thence 2.7 mi. S. from, about 600 ft. N. of E.-W. fence line crossing rd., 300 ft. S. of point where power line angles from rd. SW. across field, 35 ft. W. of rd., at cor. secs. 168, 169, 180, and 181, block 29, W. & N. W. R. R. survey, in small mesquite tree; copper nail and washer-----	2, 602. 21
Ross City, 0.8 mi. E., thence 2.3 mi. S. from, near quarter corner between secs. 168 and 169, block 29, W. & N. W. R. R. survey, 30 ft. S. and 21 ft. W. from junction of private T-rd. E., in concrete post; standard tablet stamped "G 12 1938 2611"-----	2, 611. 143
Ross City, 0.8 mi. E., thence 0.8 mi. S. from, at junction of rd. W., at point where power line from W. joins main N.-S. power line, at SW. corner of steel and wood cattle guard; top of 2-in. iron pipe---	2, 655. 96

From point 0.8 mile east and 5.7 miles south from Ross City south along road 1.1 miles, thence generally west along trails to road junction 4.4 miles south of Lees (by E. W. Gouchenour in 1938)

U. S. C. & G. S. standard disk stamped "R 111 1933"-----	2, 593. 059
Ross City, 0.8 mi. E., thence 6.8 mi. S. from, 120 ft. S. and 113 ft. W. from intersection of rd. and fence line W., 82 ft. N. and 113 ft. W. from intersection of U. S. Highway 87, at cor. secs. 28, 29, 224, and 225, blocks 29 and 30, W. & N. W. R. R. survey, in NW. corner of concrete bridge; standard tablet stamped "T T 25 C 1938 2558"-----	2, 557. 720
Reference mark, 50 ft. N. of tablet, on E. end of N. head wall of concrete bridge; chiseled square-----	2, 557. 71
Ross City, 6.8 mi. in air line S. of, 1.0 mi. W. of highway intersection, 15 ft. E. of N.-S. fence, 3 ft. S. of E.-W. fence, at cor. secs. 29, 40, 223, and 224, blocks 29 and 30, W. & N. W. R. R. survey, in root of mesquite tree; copper nail and washer-----	2, 555. 58

Ross City, 6.8 mi. S. and 1.1 mi. W. from, 285 ft. W. of T-fence N. at cor. secs. 222, 223, 40, and 41, blocks 29 and 30, W. & N. W. R. R. survey, in root on S. side of mesquite tree; copper nail and washer	2, 612. 73
Ross City, 6.8 mi. S. and 2.2 mi. W. from, along section line between blocks 29 and 30, W. & N. W. R. R. survey, about 400 ft. SE. of gate at power line, in crotch of twin mesquite tree; copper nail and washer	2, 653. 64
Ross City, 6.8 mi. S. and 3.0 mi. W. from, 6.0 mi. due S. of Texas Tool & Machine Shop, 300 ft. E. of T-fence S. at cor. secs. 221, 222, 41, and 52, blocks 29 and 30, W. & N. W. R. R. survey, on rock in place; chiseled square	2, 714. 62
Ross City, 6.8 mi. S. and 3.5 mi. W. from, about 7 mi. S. and 0.6 mi. E. in air line from Forsan, 555 ft. W. of center of gate at McCamey-Healdton pipe line, on top of ridge, 2 ft. N. of fence on line between secs. 53 and 220, blocks 29 and 30, W. & N. W. R. R. survey, in concrete post; standard tablet stamped "T T 26 C 1938 2710"	2, 710. 327
Reference mark, 110 ft. NW. of tablet, on rock in place; chiseled square	2, 708. 45
Ross City, 6.8 mi. S. and 4.3 mi. W. from, about 7 mi. S. of Forsan, on top of prominent ridge, on section line between blocks 29 and 30, W. & N. W. R. R. survey, on rock in place; chiseled square	2, 731. 62
Ross City, 6.8 mi. S. and 5.9 mi. W. from, about 5.1 mi. S. and 5.1 mi. E. in air line from Lees, on section line between blocks 29 and 30, W. & N. W. R. R. survey, 33 ft. E. of telephone pole along pipe line, 12 ft. N. and 48 ft. E. from red gate in E.-W. fence, on rock in place; chiseled square	2, 720. 40
Lees, 5.1 mi. S. and 4.0 mi. E. from, 4.0 mi. S. of Panther Draw School, on line between secs. 60 and 217, blocks 29 and 30, W. & N. W. R. R. survey, 10 ft. E. of center of gate, 3 ft. S. of E.-W. section-line fence, in concrete post; standard tablet stamped "T T 27 C 1938 2726"	2, 725. 957
Reference mark, 280 ft. N. of tablet, 3 ft. N. of fence, on rock in place; chiseled square	2, 726. 97
Lees, 5.1 mi. S. and 3.3 mi. E. from, 4.0 mi. S. and 0.8 mi. W. from Panther Draw School, 190 ft. E. of gate, at SW. cor. sec. 217, block 30, W. & N. W. R. R. survey, in root on E. side of mesquite tree; copper nail and washer	2, 742. 26
[Line jogs into Garden City No. 2 quadrangle]	
Lees, 4.4 mi. by rd. S., thence 1.7 mi. E. from, 30 ft. S. and 70 ft. E. from SE. corner of corral fence at windmill and tank, in root of 5-in. mesquite tree; copper nail and washer	2, 676. 93
Lees, 4.4 mi. by rd. S., thence 0.6 mi. E. from, along section-line fence between secs. 40 and 45, T. 2 S., block 33, Texas & Pacific Ry. survey, 20 ft. N. of fence, in root on S. side of 4-in. mesquite tree; copper nail and washer	2, 634. 90
From road junction 10.2 miles south of Big Spring along roads alternately southwest and southeast by way of Lees to road junction 4.4 miles south of Lees (by S. G. Lunde in 1938)	
Lees, 3.0 mi. NW., thence 1.0 mi. NE. from, 30 ft. NW. of center line of rd., at T-fence N., in S. side of corner post, 6 in. above ground; top of five spikes	2, 661. 04
Lees, 3.0 mi. NW. of, at junction of NW.-SE. rd., on E. side of rd. to El Bow, at NE. corner fence post; top of 1½-in. iron pipe with cap stamped "91 MO 06," projecting 1 ft. above ground	2, 614. 81

Lees, 3.0 mi. NW. of, in NW. angle of rd. junction, 6 ft. S. of T-fence W., 1 ft. E. of fence line, in concrete post; standard tablet stamped "T T 15 C 1938 2614"-----	Feet 2, 613. 917
Lees, 2.0 mi. NW. of, at S. end of culvert, on top of W. concrete wall; chiseled square-----	2, 665. 54
Lees, 1.2 mi. NW. of, at S. end of culvert, on top of W. concrete wall; chiseled square-----	2, 619. 26
Lees, 1.0 mi. NW. of, 90 ft. S. of ranch gate, in fence line on W. side of rd.; top of 1½-in. iron pipe with cap stamped "MOCO," projecting 6 in. above ground-----	2, 609. 83
Lees, 95 ft. N. of Miss Westerman's store, 135 ft. NW. of crossroads, 2 ft. E. of fence, in concrete post; standard tablet stamped "T T 16 C 1938 2589"-----	2, 588. 687
Lees, 1.0 mi. SE. of, at junction of T-rd. E., on top of W. end of S. concrete head wall of cattle guard; chiseled square-----	2, 587. 60
Lees, 2.0 mi. SE. of, on W. side of rd., at angle of fences W. and N., in E. side of corner post, 6 in. above ground; top of square-headed bolt-----	2, 615. 08
Lees, 3.0 mi. SE. of, at junction of private rds. SE. and E., 70 ft. NE. of angle in highway, 6 ft. S. of telephone pole E-20; top of 1½-in. iron pipe with cap stamped "MOCO 85," projecting 1 ft. above ground-----	2, 706. 09

## BLACKWELL QUADRANGLE

[Latitude 32°00'-32°15'; longitude 100°15'-100°30']

## COKE AND NOLAN COUNTIES

From Sweetwater quadrangle generally southeast along Kansas City, Mexico & Orient Railway<sup>13</sup> into Robert Lee quadrangle (by A. K. Andrews in 1921; double-rodged line)

Maryneal, just S. of sta., about 0.5 mi. S. of milepost 657, 500 ft. S. of water tank, 200 ft. S. of crossing, 70 ft. W. of center line of track; iron post stamped "2568" (recovered by U. S. C. & G. S. in 1935)-----	2, 567. 544
Maryneal, 3.5 mi. S. of, 50 ft. W. of center line of track, 300 ft. E. of rd., 100 ft. N. of milepost 661; iron post stamped "1921 Texas 2440" (recovered by U. S. C. & G. S. in 1935)-----	2, 439. 838
Maryneal, 6.6 mi. S. of, 7.1 mi. N. of Blackwell, 300 ft. S. of R. R. bridge 132, 300 ft. S. of milepost 664, 60 ft. W. of center line of track at N. end of cut; iron post stamped "1921 Texas 2300" (recovered by U. S. C. & G. S. in 1935)-----	2, 299. 546
Blackwell, 4.1 mi. N. of, 40 ft. W. of center line of track, 1,500 ft. S. of milepost 667, on N. side of public rd. crossing track, 4 ft. outside fence; iron post stamped "1921 Texas 2183" (recovered by U. S. C. & G. S. in 1935)-----	2, 183. 148
Blackwell, 1.0 mi. N. of, 450 ft. S. of milepost 670, 30 ft. E. of center line of track, on N. side of rd., 2 ft. outside fence; iron post stamped "1921 Texas 2082" (recovered by U. S. C. & G. S. in 1935)-----	2, 081. 781
Blackwell, 2.0 mi. S. of, 1,500 ft. S. of milepost 673, on N. side of public rd. crossing track, 50 ft. W. of center line of track, 4 ft. from fence corner; iron post stamped "1921 Texas 1999" <sup>14</sup> (recovered by U. S. C. & G. S. in 1935)-----	1, 998. 513
Blackwell, 4.4 mi. S. of, 2.1 mi. N. of Fort Chadbourne, 900 ft. N. of rd. crossing track, near S. end of cut, 20 ft. E. of center line of track, in sandstone ledge; standard tablet stamped "1921 Texas 2029"-----	2, 028. 200

<sup>13</sup> Now the Panhandle & Santa Fe Railway.<sup>14</sup> In July 1930 this bench mark was moved 49 feet west of this position and reset at the same elevation.



Fort Chadbourne, 100 ft. NW. of sta., about 0.5 mi. S. of milepost 677, 70 ft. W. of center line of track, 70 ft. S. of rd.; iron post stamped "1921 Texas 1962" (recovered by U. S. C. & G. S. in 1935) 1, 961. 866 Feet

### CAMP SPRINGS QUADRANGLE

[Latitude 32°45'-33°00'; longitude 100°30'-100°45']

#### FISHER, KENT, SCURRY, AND STONEWALL COUNTIES

From Rotan quadrangle west and northwest along Rotan-Clairemont road into Clairemont quadrangle (by C. E. Walker in 1925)

Rotan, 7.9 mi. along Rotan-Aspermont rd. N., thence 1.0 mi. W. from, 65 ft. SW. of junction of T-rd. N., 2 ft. above ground, in NE. side of leaning 6-in. mesquite tree; copper nail and washer-----	1, 942. 45
Rotan, 7.9 mi. N., thence 2.0 mi. W. from, on top of long hill, at S-bend in rd., 54 ft. N. of pasture gate, in N. side of 6-in. mesquite tree; copper nail and washer-----	2, 112. 69
Rotan, 7.9 mi. N., thence 3.1 mi. NW. from, near Kent-Stonewall county line, 0.3 mi. N. of Fisher county line, at S-bend in rd., 100 ft. NW. of fence corner, at gate on E. side of rd., 2 ft. N. of N. gatepost, in fence line, in concrete post; standard tablet stamped "13 WA 1925 Texas"-----	2, 125. 793
Reference mark, 110 ft. SE. of gate, 90 ft. NE. of center line of rd., 40 ft. NW. of NE.-SW. fence line, in W. side of leaning mesquite tree; copper nail and washer-----	2, 124. 62
Rotan, 7.9 mi. N., thence 4.2 mi. NW. from, 51 ft. W. of center line of rd., 42 ft. SW. of corner of E.-W. and N.-S. fence lines, in NW. side of 8-in. mesquite tree; copper nail and washer-----	2, 125. 18

From Clairemont quadrangle at point 2.8 miles southwest of ranch of Sid Johnson along roads generally south and east into Rotan quadrangle at point about 2 miles northwest of Rotan (by C. E. Walker in 1925)

Johnson ranch house, 3.3 mi. SW. of, 2.4 mi. NE. of ranch house of Amos Bostick, 65 ft. W. of rd., in NW. side of leaning mesquite tree; copper nail and washer-----	2, 119. 00
Bostick ranch, 29 ft. SE. of SE. corner of ranch house, at SE. corner of yard, 3 ft. W. of fence corner, in concrete post; standard tablet stamped "12 WA 1925 Texas"-----	1, 932. 215
Reference mark, in barn lot, on top of SE. corner of concrete watering tank; chiseled square-----	1, 931. 30
Bostick ranch house, 0.8 mi. S. of, 2.3 mi. N. of County Line School, 0.25 mi. E. of Murphy ranch house, at rd. junction, 60 ft. SW. of gate, in N. side of leaning mesquite tree; copper nail and washer----	1, 856. 91
County Line School, 1.4 mi. N. of, at Garrison ranch, on N. bank of Double Mountain Fork of Brazos River, 15 ft. W. of rd., in crotch of 6-in. mesquite tree; copper nail and washer-----	1, 852. 02
County Line School, 165 ft. SE. of, 2.0 mi. N. of Baron ranch, in concrete post; standard tablet stamped "Prim Trav Sta No 8 WC 1924"-----	2, 011. 077
Reference mark, 500 ft. SE. of schoolhouse, 15 ft. E. of center line of rd., in N. side of 8-in. mesquite tree, on top of projecting limb 2 ft. above ground; copper nail and washer-----	2, 011. 94
County Line School, 1.0 mi. S. of, about 1,500 ft. E. of farmhouse of L. C. Poteet, 150 ft. N. of small pond, on S. side of rd., in N. side of 10-in. mesquite tree; copper nail and washer-----	2, 038. 64
County Line School, 2.5 mi. S. of, about 12 mi. NW. of Rotan, on N. bank of Rough Creek, at crossing, 15 ft. S. of rd., in crotch of triple-trunked mesquite tree; copper nail and washer-----	1, 904. 32

Rotan, 7.1 mi. W. of, on Rotan-Hudd rd., 25 ft. E. of mail box of O. M. Davidson, in right-angle bend in rd. from W. to N., 14 ft. NE. of corner of rd., at SW. corner of cultivated field, at wire gate, in concrete post; standard tablet stamped "Prim Trav Sta No 7 WC 1924"-----	Feet 2, 082. 911
Reference mark, 0.25 mi. SW. of ranch house of O. M. Davidson, 120 ft. E. of gate, at right-angle bend in rd. to N., on S. side of rd., in crotch of mesquite tree; copper nail and washer-----	2, 081. 82
Rotan, 4.5 mi. W. of, on Rotan-Hudd rd., in corner of fence, 3 ft. from T-fence, at right-angle turn in rd., in concrete post; standard tablet stamped "Prim Trav Sta No 6 WC 1924"-----	2, 104. 707
Rotan, 4.0 mi. W. of, in NW. corner of crossroads, at SE. corner of front yard of residence, about 30 ft. E. of house, in concrete post; standard tablet stamped "Prim Trav Sta No 5 WC 1924"-----	2, 040. 155

CHANNING NO. 4 QUADRANGLE<sup>14</sup>

[Latitude 35°30'-35°45'; longitude 102°00'-102°15']

## HARTLEY, MOORE, OLDHAM, AND POTTER COUNTIES

Northwest along Panhandle &amp; Santa Fe Railway and east along State Highway 5 (by S. R. Archer in 1933)

[A jog from Fourways quadrangle]

Exell, 3.3 mi. along Panhandle & Santa Fe Ry. NW. of sta. at, at milepost 38, at E. right-of-way fence line, in top of 6- by 6-in. concrete post; bolt (R. R. B. M.; recovered by U. S. C. & G. S. in 1934)-----	3, 731. 610
Exell, 4.6 mi. NW. of, 2.8 mi. W. of Fourways, near N. cor. secs. 19 and 20, block P Mc, E. L. & R. R. R. R. Co. survey, 63 ft. S. and 129 ft. E. from intersection of State Highway 5 and track, inside SE. R. R. right-of-way fence corner, in concrete post; standard tablet stamped "T T 35 L 1933" (recovered by U. S. C. & G. S. in 1934)-----	3, 729. 064
Reference mark, 0.3 mi. along R. R. SW. of tablet, at milepost 39, at E. right-of-way fence line, in top of 6- by 6-in. concrete post; bolt (R. R. B. M.; recovered by U. S. C. & G. S. in 1934)-----	3, 730. 823

From Ady quadrangle northeast along roads by way of Bivins ranch into Fourways quadrangle (by F. J. Fricke in 1933; releveled by C. S. Carney in 1934)

Bivins River Camp, 3.2 mi. along rd. to Bivins ranch headquarters NE. of, on top of hill, 20 ft. E. of center line of rd., set flush with ground and surrounded by rocks; top of iron rod-----	3, 388. 77
Bivins River Camp, 4.0 mi. NE. of, 4.4 mi. SW. of Bivins ranch headquarters, 120 ft. S. of point where old and new rds. separate, 17 ft. W. of new rd., 20 ft. E. of old rd., set flush with ground and surrounded by rocks; top of iron rod-----	3, 363. 51
Bivins ranch headquarters, 3.8 mi. SW. of, in NE¼ sec. 46, 810 ft. S. and 340 ft. W. from iron pipe at cor. secs. 46 and 53, block 2, Gunter & Munson survey, and block O 18, D. & P. R. R. Co. survey, in concrete post; standard tablet stamped "T T D 4 1933"-----	3, 454. 249

<sup>14</sup> The figures of elevation given are preliminary figures based on the 1929 general adjustment; additional leveling may necessitate further adjustment.

Bivins ranch headquarters, 2.6 mi. SW. of, on top of ridge, 9 ft. E. of center line of rd., set flush with ground and surrounded by rocks; top of iron rod.....	Feet 3, 481. 82
Bivins ranch headquarters, 1.9 mi. SW. of, 10 ft. N. of center of gate, 3.5 ft. N. of N. post of gate in N.-S. fence line, set flush with ground and surrounded by rocks; top of iron rod.....	3, 458. 98
Bivins ranch headquarters, 1.2 mi. S. of, 40 ft. SW. of point where old and new rds. separate, 2.4 ft. W. of corner post of fences S. and W., in fence line, set flush with ground and surrounded by rocks; top of iron rod.....	3, 462. 18
Bivins ranch headquarters, 10 ft. E. of NE. corner of porch, 616 ft. N. and 317 ft. W. from cor. secs. 17, 20, and 21, block O 18, D. & P. R. R. Co. survey, and block B11, E. L. & R. R. R. Co. survey, in concrete post; standard tablet stamped "T T D 3 1933".....	3, 431. 282
Bivins ranch headquarters, 1.0 mi. E. of, 10 ft. S. of center of cattle guard in N.-S. fence line, 2.5 ft. S. of S. steel post of cattle guard, in fence line, set flush with ground; top of steel rod.....	3, 470. 70

**CHILDRESS NO. 4 QUADRANGLE**

[Latitude 34°00'-34°15'; longitude 100°00'-100°15']

**COTTE AND FOARD COUNTIES**

Along roads southwest to Y L ranch, thence east (by R. W. Burchard in 1925)

[A jog from Vivian quadrangle]

Y L ranch, about 3 mi. NE. of, 30 ft. S. of gate, in N.-S. fence line, in concrete post; standard tablet stamped "Prim Trav Sta No 64 K 1925".....	1, 671. 215
Reference mark, on rock at base of S. gatepost; chiseled square....	1, 670. 96

**CLAIREMONT NO. 4 QUADRANGLE**

[Latitude 33°00'-33°15'; longitude 100°30'-100°45']

**KENT AND STONEWALL COUNTIES**

From Camp Springs quadrangle along Rotan-Clairemont road northwest 1.3 miles, thence west and south and back into Camp Springs quadrangle (by C. E. Walker in 1925)

Rotan, 7.9 mi. N., thence 6.6 mi. NW. from, at head of canyon, 20 ft. S. of center line of rd., on rock outcrop in streambed; chiseled square.....	2, 149. 68
Rotan, 7.9 mi. N., thence 7.3 mi. NW. from, 9.0 mi. NW. of highway bridge over Double Mountain Fork of Brazos River, on W. side of Rotan-Clairemont rd., 38 ft. W. of cattle guard, in fence line, in concrete post; standard tablet stamped "Prim Trav Sta No 10 WC 1924".....	2, 186. 684
Reference mark, at gate to Haynes pasture, 130 ft. NW. of cattle guard, 40 ft. SW. of center line of rd., in NW. side of double-forked mesquite tree; copper nail and washer.....	2, 182. 11
Rotan, 15.2 mi. NW., thence 1.9 mi. W. from, 1.0 mi. E. of ranch house of Sid Johnson, at jog in rd., about 1,000 ft. SE. of tenant house, on N. side of rd., in NW. side of leaning 4-in. mesquite tree; copper nail and washer.....	2, 181. 37
Johnson ranch house, 25 ft. SE. of SE. corner of, 1 ft. SW. of SE. corner of yard fence, in concrete post; standard tablet stamped "11 WA 1925 Texas".....	2, 142. 983
Reference mark, 48 ft. S. of SW. corner of ranch house, in SE. branch of triple-trunked mesquite tree; copper nail and washer.....	2, 141. 85

Johnson ranch house, 0.9 mi. SW. of, on rd. to Bostick ranch, 60 ft. W. of N.-S. rd. along fence, 120 ft. W. of pond, in top of fork of double 8-in. mesquite tree; copper nail and washer.....	Feet 2, 147. 56
Johnson ranch house, 2.0 mi. SW. of, on dim rd. S. to Bostick ranch, 15 ft. W. of center line of rd., in N. fork of double mesquite tree; copper nail and washer.....	2, 123. 38

CLAUDE NO. 1 QUADRANGLE<sup>16</sup>

[Latitude 35°15'-35°30'; longitude 101°00'-101°15']

## CARSON AND GRAY COUNTIES

From Plemons quadrangle southwest along Panhandle & Santa Fe Railway to White Deer, thence north along road about 5 miles and back into Plemons quadrangle (by Tom Carney in 1926)

Pampa, 4.0 mi. SW. of, 3.0 mi. NE. of Kings Mill, 50 ft. S. of milepost 503, in right-of-way fence line; iron hub.....	3, 271. 36
Kings Mill, 2.0 mi. NE. of, opposite milepost 504, in right-of-way fence line, in concrete post; standard tablet stamped "TC 21 1926" (recovered by U. S. C. & G. S. in 1935).....	3, 279. 770
Reference mark, 120 ft. E. of tablet, in fence line; iron hub.....	3, 278. 22
Kings Mill, 1.0 mi. NE. of, 7 telephone poles W. of milepost 505, 28 ft. N. of center line of highway, in right-of-way fence line; iron hub...	3, 290. 71
Kings Mill, at milepost 506, on S. side of track, in corner of right-of-way fence, in concrete post; standard tablet stamped "TC 22 1926" (recovered by U. S. C. & G. S. in 1935) <sup>17</sup> .....	3, 304. 199
Reference mark, 220 ft. E. of tablet; iron hub.....	3, 302. 93
Kings Mill, 1.0 mi. SW. of, 0.3 mi. W. of Carson-Gray county line, at milepost 507, 28 ft. N. of center line of rd., in right-of-way fence line; iron hub.....	3, 311. 41
Kings Mill, 2.0 mi. SW. of, at milepost 508, in concrete post; standard tablet stamped "TC 23 1926" (recovered by U. S. C. & G. S. in 1935).....	3, 316. 772
Reference mark, 240 ft. E. of tablet, 28 ft. N. of center line of highway, in right-of-way fence line; iron hub.....	3, 314. 31
Kings Mill, 3.0 mi. SW. of, 4.0 mi. NE. of White Deer, at milepost 509, 28 ft. N. of highway, in right-of-way fence line; iron hub.....	3, 286. 94
White Deer, 3.0 mi. NE. of, at milepost 510, on S. side of track, in concrete post; standard tablet stamped "TC 24 1926" (recovered by U. S. C. & G. S. in 1935).....	3, 298. 110
Reference mark, 140 ft. E. of tablet, in right-of-way fence line; iron hub.....	3, 296. 81
White Deer, 2.0 mi. NE. of, 220 ft. W. of milepost 511, at trestle, in SE. angle of right-of-way fence; iron hub.....	3, 305. 37
White Deer, 1.0 mi. NE. of, at milepost 512, 28 ft. N. of center line of highway, in right-of-way fence line, in concrete post; standard tablet stamped "TC 25 1926" (recovered by U. S. C. & G. S. in 1935)...	3, 342. 385
Reference mark, 490 ft. W. of tablet, in right-of-way fence line; iron hub.....	3, 343. 36
White Deer, 200 ft. N. of milepost 513, in R. R. property line; iron hub.....	3, 365. 54

<sup>16</sup> The figures of elevation given are preliminary figures based on the 1929 general adjustment; additional leveling may necessitate further adjustment.

<sup>17</sup> In November 1939 this bench mark was reported destroyed.

White Deer, 0.2 mi. W., thence 0.7 mi. N. from milepost 513 at, at jog in N.-S. rd., 40 ft. E. of SW. corner of wheat field, in concrete post; standard tablet stamped "TC 26 1926"-----	Feet 3, 375. 071
Reference mark, 180 ft. E. of tablet, in fence line; iron hub-----	3, 373. 29
White Deer, 0.2 mi. W., thence 1.7 mi. N. from, in NE. angle of cross-roads; iron hub-----	3, 366. 18
White Deer, 0.2 mi. W., thence 2.7 mi. N. from, in NE. angle of cross-roads, in concrete post; standard tablet stamped "TC 27 1926"-----	3, 361. 114
Reference mark, 260 ft. S. of tablet, on E. side of rd., in fence line; iron hub-----	3, 361. 62
White Deer, 0.2 mi. W., thence 3.7 mi. N. from, in NE. angle of junction of T-rd. E.; iron hub-----	3, 355. 08
White Deer, 0.2 mi. W., thence 4.7 mi. N. from, on E. side of rd., in section corner, in concrete post; standard tablet stamped "TC 28 1926"-----	3, 354. 258

CLIFFSIDE QUADRANGLE<sup>18</sup>

[Latitude 35°15'-35°30'; longitude 101°45'-102°00']

## POTTER COUNTY

From Amarillo No. 3 quadrangle northwest and southwest along Fort Worth &amp; Denver City Railway into Ady quadrangle (by J. M. Lawson in 1928)

Amarillo, 5.4 mi. NW. of, 1.6 mi. SE. of Cliffside, 120 ft. NW. of milepost 341, 25 ft. SW. of track, 25 ft. NE. of R. R. right-of-way fence, in top of northernmost of three 7- by 7-in. oak posts driven in ground and used as spare rail carrier; copper nail and washer-----	3, 464. 60
Cliffside, 0.5 mi. SE. of, 0.3 mi. E. of cor. secs. 21, 22, 47, and 48, block 9, Beaty, Seale, & Forwood survey, 180 ft. N. and 40 ft. W. from center of rd. crossing, 12 ft. S. of rd., on E. side of track, at edge of R. R. right-of-way fence, in concrete post; standard tablet stamped "3 L 1928" and "T T Sta No 3 L 1928" (recovered by U. S. C. & G. S. in 1933)-----	3, 404. 914
Cliffside, opposite sta. sign; top of rail-----	3, 406. 5
Cliffside, 350 ft. SE. of R. R. water tank at, 0.4 mi. SE. of milepost 343, 60 ft. SE. of center of trestle over West Amarillo Creek, on top of S. corner of SE. concrete abutment; chiseled square-----	3, 391. 57
Cliffside, 0.7 mi. NW. of water tank at, about 0.4 mi. NW. of milepost 343, 42 ft. W. of center of crossing of private rd., 27 ft. N. of gate at edge of right-of-way fence, 12 ft. SE. of telegraph pole, in line with row of poles, on top of section of rail set vertically; chiseled cross--	3, 412. 04
Cliffside, 1.5 mi. NW. of, 0.2 mi. NW. of milepost 344, at summit of R. R. grade, 45 ft. NE. of track, 25 ft. SE. of right-of-way fence, in concrete post; standard tablet stamped "4 L 1928 Texas" and "T T Sta No 4 L 1928" (recovered by U. S. C. & G. S. in 1933)-----	3, 422. 296
Reference mark, 70 ft. SW. of tablet, 25 ft. SW. of track, 10 ft. E. of telegraph pole, on sandstone rock; chiseled square-----	3, 424. 11
Cliffside, 1.8 mi. NW. of, 0.5 mi. SE. of milepost 345, at crossing of private rd.; top of NE. rail of main track-----	3, 410. 6
Cliffside, 2.6 mi. NW. of, 1.7 mi. SE. of Gentry, 12 ft. N. of stone marking cor. secs. 53, 54, 83, and 84, block 9, Beaty, Seale, & Forwood survey, 44 ft. N. of track, 44 ft. N. and 85 ft. E. from crossing of private rd., 6 ft. S. of corner post of T-fence N., at W. side of cut, at 3-in. pipe filled with concrete; top of rim-----	3, 410. 78

<sup>18</sup> The figures of elevation given are preliminary figures based on the 1929 general adjustment; additional leveling may necessitate further adjustment.

Gentry, 0.9 mi. E. of, 83 ft. S. of rd. crossing, 17 ft. N. and 25 ft. E. from gate across rd. at edge of R. R. right-of-way, 15 ft. SE. of first telegraph pole E. of rd., in line with row of telegraph poles, in concrete post; standard tablet stamped "5 L 1928 Texas" and "T T Sta No 5 L 1928" (recovered by U. S. C. & G. S. in 1933)-----	Feet 3, 425. 502
Gentry, 0.2 mi. E. of sta., 70 ft. E. of point of switch, at W. side of section house, at center of rd. crossing; top of N. rail-----	3, 458. 4
Gentry, 60 ft. W. of sta., 180 ft. W. of milepost 347, at center of rd. crossing; top of N. rail of main track-----	3, 459. 78
Gentry, 0.5 mi. SW. of, 450 ft. N. and 60 ft. W. from rock marking cor. sec. 87, 88, 117, and 118, block 9, Beaty, Seale, & Forwood survey, 140 ft. SW. of point of switch, 60 ft. N. of corner post of T-fence S., 40 ft. S. of track, at edge of R. R. right-of-way, in line with row of telegraph poles and fence line S., in concrete post; standard tablet stamped "6 L 1928 Texas" and "T T Sta No 6 L 1928" (recovered by U. S. C. & G. S. in 1933)-----	3, 475. 433

From Ady quadrangle generally east along south side of Canadian River to point on U. S. Highway 87 about 1.8 miles southeast of bridge over Canadian River, thence southeast along highway and alternately west and south across country to point near Cliffside on Fort Worth & Denver City Railway (by J. M. Lawson in 1928)

Gunter & Munson survey, block G & M 5, about 0.5 mi. S. of N. cor. secs. 42 and 43, 0.2 mi. W. of lone windmill, in line with N.-S. section-line fence, on top of knoll, on large rock set in place; chiseled circle-----	3, 116. 52
Block G & M 5, about 160 ft. S. of N. cor. secs. 42 and 43, 90 ft. S. of corner of T-fence S., at small timber grove, in concrete post; standard tablet stamped "14 L 1928 Texas" and "T T Sta No 30 L 1928"-----	3, 061. 505
Mouth of John Ray Creek, directly S. of, in river valley, 0.4 mi. along E.-W. fence line E. of standard tablet stamped "T T Sta No 30 L 1928," 12 ft. E. of gate across old rd., at slight angle in fence, on top of section of rail set vertically; chiseled cross-----	3, 049. 73
Block G & M 5, along N. side sec. 41, 350 ft. SW. of bank of Canadian River, in river valley, 100 ft. N. of foot of bluff, 40 ft. S. and 80 ft. E. from corner post of fences E. and NW., in exposed root on N. side of 9-in. tree, westernmost of two lone and prominent cottonwood trees; copper nail and washer-----	3, 042. 88
Block G & M 5, along N. side sec. 41, 16 ft. below top of bluff, on W. side of mouth of Horse Creek, on large boulder; chiseled square-----	3, 132. 67
Mouth of Horse Creek, on E. side of, on top of bluff; top of rock-----	3, 137. 82
Block G & M 5, near N. cor. secs. 40 and 41, about 200 ft. S. of bank of Canadian River, 600 ft. W. of old telephone pole line, 20 ft. S. of edge of bluff, in N.-S. fence line, in concrete post; standard tablet stamped "15 L 1928 Texas" and "T T Sta No 31 L 1928"-----	3, 153. 976
Block G & M 5, along N. edge sec. 40, 480 ft. E. of mouth of Ranch Creek, 400 ft. S. of bank of Canadian River, 15 ft. E. of gate, on top of section of rail set vertically; chiseled cross-----	3, 042. 92
Block G & M 5, along N. side sec. 38, at foot of bluff, just W. of river valley, at edge of Canadian River bank, about 4 ft. above river bed, on top of projecting rock ledge; chiseled square-----	3, 022. 85
Block G & M 5, along N. side sec. 36, 300 ft. S. of S. bank of river, just E. of angle to SW., 200 ft. S. of nearest tree of prominent grove of trees, 15 ft. E. of gate across old rd., at E.-W. fence line, in concrete post; standard tablet stamped "16 L 1928 Texas" and "T T Sta No 32 L 1928"-----	3, 041. 863

Block G & M 5, near N. cor. secs. 34 and 36, 180 ft. E. of mouth of small creek, at bottom of river bank, in small grove of 25 trees, in root on N. side of 8-in. cottonwood tree; copper nail and washer.....	Feet 3, 018. 23
Block G & M 5, along N. side sec. 34, 400 ft. W. of large lone cottonwood tree at river edge, 100 ft. SW. of corner post of fences W. and SE. over bluff, near foot of bluff, on large boulder; chiseled square.....	3, 029. 26
Mouth of West Amarillo Creek, 200 ft. S. of, 30 ft. E. of edge of creek bank, 30 ft. NE. of corner post of fence angling across creek, 10 ft. NE. of tree in fence line, in concrete post; standard tablet stamped "17 L 1928 Texas" and "T T Sta No 33 L 1928".....	3, 016. 696
Reference mark, 280 ft. W. of mouth of West Amarillo Creek, at angle in river, at foot of bluff, on top of prominent rock ledge projecting into river; chiseled square.....	3, 011. 09
Mouth of East Amarillo Creek, 60 ft. E. of, 170 ft. S. of bank of Canadian River, 2 ft. SW. of corner post of fences S. and E., at gate in fence line, on flat rock set in place; chiseled square.....	3, 011. 92
Block G & M 5, near center of sec. 32, about 0.3 mi. E. of mouth of East Amarillo Creek, at foot of bluff, just S. of prairie rd., on top of projecting slab of rock; standard tablet stamped "T T Sta No 34 L 1928 Texas".....	3, 029. 437
Block G & M 5, near S. side sec. 32, on top of bluff, between two gravel pits, in line with N.-S. row of telephone poles, 20 ft. N. of telephone pole directly E. of large stone crusher, 100 ft. E. of U. S. Highway 87, at head of draw from which mouth of East Amarillo Creek can be seen, on top of section of rail set vertically; chiseled cross.....	3, 124. 71
Block G & M 5, in sec. 35, 1.8 mi. SE. of bridge over Canadian River, about 600 ft. E. of N.-S. row of telephone poles, on summit of first high hill on S. side of river, 25 ft. W. of highway, 8 ft. S. of highway signpost 104, in concrete post; standard tablet stamped "18 L 1928 Texas" and "T T Sta No 35 L 1928" (recovered in 1933).....	3, 164. 673
Reference mark, 1,000 ft. S. of tablet, between two hills, 5 ft. W. of highway, at corrugated iron pipe culvert No. 30; top of W. end of culvert.....	3, 143. 05
Canadian River bridge, 2.7 mi. SE. of, 70 ft. S. and 25 ft. E. from junction of rd. W., 30 ft. SW. of highway, 8 ft. NW. of highway signpost, on top of section of rail set vertically; chiseled cross (recovered in 1933).....	3, 214. 60
Canadian River bridge, 3.3 mi. SE. of, in NE¼ sec. 210, block 2, Beaty, Seale, & Forwood survey, at summit of hill, 40 ft. W. of highway, in line with row of telephone poles angling across highway, 6 ft. S. of first pole S. of highway, on top of section of rail set vertically; chiseled cross.....	3, 267. 34
Canadian River bridge, 3.8 mi. SE. of, 80 ft. S. and 15 ft. E. from junction of rd. W. to gravel pit, 35 ft. SW. of highway, in concrete post; standard tablet stamped "19 L 1928 Texas" and "T T Sta No 36 L 1928".....	3, 266. 517
Reference mark, 340 ft. SE. of tablet, at corrugated iron culvert; top of W. end of culvert.....	3, 255. 85
Canadian River bridge, 4.4 mi. SE. of, between two hills, 15 ft. E. of highway, on top of E. concrete head wall of culvert; chiseled square.....	3, 257. 56
Canadian River bridge, 5.0 mi. SE. of, 13.8 mi. N. of Potter County courthouse in Amarillo, 0.7 mi. NW. of bridge over East Amarillo Creek, 400 ft. NW. of curve in highway, 20 ft. E. of highway, at 30-in. corrugated iron culvert, southernmost of two highway culverts; top of E. end of culvert.....	3, 257. 93

Amarillo, 13.1 mi. N. of, about 700 ft. W. of E. cor. secs. 205 and 208, block 2, Beaty, Seale, & Forwood survey, 200 ft. N. and 30 ft. W. from center of bridge over East Amarillo Creek, 130 ft. N. of store at end of highway pavement, in concrete post; standard tablet stamped "20 L 1928 Texas"-----	Feet 3, 213. 170
Reference mark, on top of NE. corner of NE. concrete abutment of bridge; chiseled square-----	3, 210. 63
Amarillo, 12.0 mi. N. of, about 500 ft. S. of E. cor. secs. 204 and 205, block 2, Beaty, Seale, & Forwood survey, 370 ft. S. of fences E. and W., 15 ft. W. of center line of paving, on top of W. concrete head wall of culvert; chiseled square (recovered in 1933)-----	3, 291. 28
Amarillo, 12.0 mi. N. and 0.6 mi. W. from, in line with row of telephone poles, 5 ft. W. of pole, 10 ft. W. of gate in E.-W. fence, 3 ft. S. of fence, on top of section of rail set vertically; chiseled cross-----	3, 233. 43
Amarillo, 12.0 mi. N. and 1.0 mi. W. from, 125 ft. S. of stone and iron stake at cor. secs. 203, 204, 205, and 206, block 2, Beaty, Seale, & Forwood survey, 48 ft. W. of telephone line S., 8 ft. E. of telephone line N., in line with E.-W. row of poles, in concrete post; standard tablet stamped "21 L 1928 Texas" and "T T Sta No 19 L 1928"-----	3, 268. 533
Amarillo, 11.0 mi. N. and 1.0 mi. W. from, 50 ft. W. of row of telephone poles, at iron stake in center of pile of stones marking cor. secs. 201, 202, 203, and 204, block 2, Beaty, Seale, & Forwood survey; top of stake-----	3, 285. 10
Amarillo, 10.8 mi. N. and 1.0 mi. W. from, 0.25 mi. S. of cor. secs. 201, 202, 203, and 204, block 2, Beaty, Seale, & Forwood survey, 25 ft. S. and 1 ft. E. from corner post of fences S. and NW., 20 ft. N. of telephone pole, 20 ft. S. of gate across prairie rd., in line with row of poles, on top of section of rail set vertically; chiseled cross----	3, 288. 15
Amarillo, 10.0 mi. N. and 1.0 mi. W. from, 300 ft. S. of ranch house, along N.-S. fence, in line with distant fence W., 25 ft. W. of rd., 95 ft. E. of telephone line, in concrete post; standard tablet stamped "22 L 1928 Texas" and "T T Sta No 20 L 1928"-----	3, 297. 175
Amarillo, 10.0 mi. N. and 1.5 mi. W. from, 1 ft. S. and 10 ft. E. from corner gatepost, in E.-W. fence line, on top of section of rail set vertically; chiseled cross-----	3, 389. 10
Amarillo, 10.0 mi. N. and 2.0 mi. W. from, at cor. secs. 199, 202, 215, and 216, block 2, Beaty, Seale, & Forwood survey, 320 ft. E. of N.-S. prairie rd., 9 ft. S. of telephone pole, in line with row of poles, on top of section of rail set vertically; chiseled cross-----	3, 427. 43
Amarillo, 10.0 mi. N. and 3.0 mi. W. from, near E. cor. secs. 2 and 3, block 6, Beaty, Seale, & Forwood survey, 130 ft. E. of corner post of T-fence S., 6 ft. W. of corner post of T-fence N., in concrete post; standard tablet stamped "23 L 1928 Texas" and "T T Sta No 21 L 1928"-----	3, 354. 260
Amarillo, 10.0 mi. N. and 4.0 mi. W. from, near cor. secs. 2, 3, 6, and 7, block 6, Beaty, Seale, & Forwood survey, 20 ft. N. of creek bank, 150 ft. W. of angle to N. in creek, 10 ft. S. of E.-W. fence, in root on W. side of lone cottonwood tree; copper nail and washer-----	3, 220. 00
Amarillo, 9.0 mi. N. and 4.0 mi. W. from, 25 ft. N. of rock in ground marking cor. secs. 3, 4, 5, and 6, block 6, Beaty, Seale, & Forwood survey, on top of hill range in pasture, in concrete post; standard tablet stamped "24 L 1928 Texas" and "T T Sta No 22 L 1928"----	3, 296. 300



	<i>Feet</i>
Reference mark, 25 ft. S. of tablet, at section corner; top of rock-----	3, 295. 79
Amarillo, 8.0 mi. N. and 4.0 mi. W. from, 3.7 mi. N. and 1.0 mi. E. from Cliffside, 5 ft. W. of rock marking S. cor. secs. 4 and 5, block 6, Beaty, Seale, & Forwood survey, 1 ft. N. and 7 ft. E. from corner post of T-fence S., on top of section of rail set vertically; chiseled cross-----	3, 349. 93
Cliffside, 3.7 mi. N. of, 20 ft. W. of rock marking S. cor. secs. 5 and 12, block 6, Beaty, Seale, & Forwood survey, 1 ft. S. and 4 ft. E. from corner post of cross fence, in concrete post; standard tablet stamped "25 L 1928 Texas" and "T T Sta No 23 L 1928"-----	3, 316. 295
Reference mark, 20 ft. E. of tablet, at section corner; top of rock-----	3, 316. 45
Cliffside, 2.6 mi. N. of, 25 ft. E. of T-fence S., 12 ft. E. of T-fence N., at bolt in rock pile marking cor. secs. 18, 19, 50, and 51, block 9, Beaty, Seale, & Forwood survey; head of bolt-----	3, 392. 92
Cliffside, 2.2 mi. N. of, on line between secs. 19 and 50, block 9, Beaty, Seale, & Forwood survey, 47 ft. W. of fence S., 3 ft. E. of fence N., 10 ft. S. of main prairie rd., 4 ft. SE. of S. post of gate across rd., in concrete post; standard tablet stamped "26 L 1928 Texas" and "T T Sta No 24 L 1928"-----	3, 395. 364
Cliffside, 1.9 mi. N. of, 420 ft. N. of stone at cor. secs. 19, 20, 49, and 50, block 9, Beaty, Seale, & Forwood survey, in line with T-fence N., 40 ft. E. of fence S., 35 ft. E. of gate, on top of section of rail set vertically; chiseled cross-----	3, 367. 82
Cliffside, 0.8 mi. N. of, at cor. secs. 20, 21, 48, and 49, block 9, Beaty, Seale, & Forwood survey, 150 ft. W. of rd. across pasture, 8 ft. W. of corner post of fences W. and S., in line with fence W., on top of section of rail set vertically; chiseled cross-----	3, 375. 28
From point 12 miles north and 1 mile west from Amarillo west across country to Fuqua ranch, thence generally west and southwest along road into Ady quadrangle (by J. M. Lawson in 1928)	
Amarillo, 12.0 mi. N. and 2.0 mi. W. from, 180 ft. S. and 230 ft. E. from stone and stake at cor. secs. 203, 206, 213, and 214, block 2, Beaty, Seale, & Forwood survey, 1 ft. S. and 25 ft. E. from corner post of T-fence S., 35 ft. W. of gate at dim N.-S. rd., 15 ft. W. of telephone line, on top of section of rail set vertically; chiseled cross-----	3, 399. 45
Amarillo, 12.0 mi. N. and 3.1 mi. W. from, 1.6 mi. in air line E. of Fuqua ranch house, 180 ft. S. of E. cor. secs. 1 and 2, block 6, Beaty, Seale, & Forwood survey, 1,200 ft. N. of prairie rd., 220 ft. W. of gate across rd. N., at top of hill, 1 ft. S. and 6 ft. W. from corner post of cross fences, at angle in N.-S. fence, in concrete post; standard tablet stamped "27 L 1928 Texas" and "T T Sta No 18 L 1928"-----	3, 385. 277
Fuqua ranch house, 0.8 mi. E. of, 30 ft. E. of creek bank, in fence line; top of gas pipe driven in ground-----	3, 291. 87
Fuqua ranch house, 0.5 mi. E. of, on top of ridge, 110 ft. E. of angle in E.-W. fence, 10 ft. S. of fence line, on rock outcrop; chiseled square-----	3, 278. 71
Fuqua ranch house, about 600 ft. NW. of, in sec. 8, block 6, Beaty, Seale, & Forwood survey, 1,200 ft. SE. of crossing of West Amarillo Creek, 1 ft. N. and 3 ft. W. from corner post of T-fence S., 60 ft. W. of gate in E.-W. fence, on top of section of rail set vertically; chiseled cross-----	3, 210. 39

Fuqua ranch house, 0.4 mi. by rd. NW. of, near NW. cor. sec. 8, block 6, Beaty, Seale, & Forwood survey, 670 ft. NW. of crossing of West Amarillo Creek, 60 ft. S. and 12 ft. W. from gate across rd., 5 ft. S. of corner post of T-fence W., at jog in N.-S. fence line, on top of section of rail set vertically; chiseled cross-----	<i>Feet</i> 3, 194. 07
Fuqua ranch house, 0.7 mi. W. of, at corner common to block M19, Gunter & Munson survey, and blocks 21 W and 6, Beaty, Seale, & Forwood survey, at N. cor. secs. 8 and 9, block 6, 250 ft. N. of T-fence W., 60 ft. S. of rd., 8 ft. E. of angle in fences S. and E., in concrete post; standard tablet stamped "28 L 1928 Texas" and "T T Sta No 17 L 1928"-----	3, 248. 653
Fuqua ranch house, 1.8 mi. W. of, about 800 ft. S. of N. cor. secs. 9 and 16, block 6, Beaty, Seale, & Forwood survey, slightly E. of section line, at top of hill, 12 ft. N. of prairie rd., in pasture, on top of section of rail set vertically; chiseled cross-----	3, 356. 13
Fuqua ranch house, 2.8 mi. W. of, 1.0 mi. NE. of helium division gas well No. 1, on line between secs. 16 and 17, block 6, Beaty, Seale, & Forwood survey, 860 ft. S. of rd. crossing N.-S. fence through gate, directly S. of three-way rd. fork, in concrete post; standard tablet stamped "29 L 1928 Texas" and "T T Sta No 16 L 1928"-----	3, 390. 740
Fuqua ranch house, 3.9 mi. SW. of, at helium division gas well No. 1, in NW¼ sec. 18, block 6, Beaty, Seale, & Forwood survey, 10 ft. N. and 7 ft. E. from NE. leg of derrick, 2 ft. S. of fence around overflow basin, in concrete post; standard tablet stamped "30 L 1928 Texas" and "T T Sta No 15 L 1928"-----	3, 429. 714
Fuqua ranch house, 4.2 mi. SW. of, at cor. secs. 17, 18, 23, and 24, block 6, Beaty, Seale, & Forwood survey, 1,460 ft. NW. of helium gas well, 1 ft. S. and 4 ft. W. from corner post of fences S. and W., on top of section of rail set vertically; chiseled cross-----	3, 392. 97
Fuqua ranch house, 5.2 mi. SW. of, about 400 ft. along fence line E. of cor. secs. 23, 24, 25, and 26, block 6, Beaty, Seale, & Forwood survey, almost due N. of gas well on Bush ranch, on top of section of rail set vertically; chiseled square-----	3, 363. 66
From Amarillo No. 3 quadrangle northeast along Chicago, Rock Island & Gulf Railway and north along road to point 6.3 miles northeast and 2.2 miles north from Amarillo, thence west across country and north, northeast, and west along roads to U. S. Highway 87, thence north 1.9 miles to point 12 miles north of Amarillo (by C. S. Carney in 1933)	
Amarillo, 5.7 mi. along R. R. NE. of, 35 ft. S. of center of junction of rd. S. and State Highway 136, on top of SW. end of concrete culvert; chiseled square-----	3, 644. 67
[Line jogs into Amarillo No. 1 quadrangle]	
Bivins ranch house, 4.7 mi. along rd. SW., thence 1.0 mi. across country E. from, in SE. cor. sec. 99, block 2, Adams, Beaty, & Moulton survey, 2.2 ft. W. of N.-S. fence line, 7 in. N. of E.-W. fence line, set in concrete; top of steel rod-----	3, 520. 58
Bivins ranch house, 4.7 mi. SW. of, 5.9 mi. N. and 3.0 mi. E. from Amarillo, at cor. secs. 99, 100, 129, and 130, block 2, Adams, Beaty, & Moulton survey, 21 ft. E. of center of cattle guard and N.-S. rd., 2.8 ft. W. of fence N., in E.-W. fence line, on boulder; chiseled square-----	3, 547. 83

Bivins ranch house, 3.8 mi. SW. of, at S. cor. secs. 9 and 10, block 1, Beaty, Seale, & Forwood survey, and N. cor. secs. 99 and 130, block 2, Adams, Beaty, & Moulton survey, 20 ft. W. of cattle guard across rd., at angle to NE. in rd., in fence corner, in concrete post; standard tablet stamped "T T 4 L 1933 3522"-----	Feet 3, 522. 104
Reference mark, 83 ft. N. of tablet, 39 ft. W. of center line of rd., at S. end of wire gate in fence N., on boulder; chiseled square-----	3, 521. 05
Bivins ranch house, 2.6 mi. SW. of, in NE¼ sec. 9, block 1, Beaty, Seale, & Forwood survey, on bedrock bottom of Amarillo Creek, 14 ft. W. of center line of rd.; chiseled square-----	3, 413. 72
[Line jogs into Amarillo No. 1 quadrangle]	
Bivins ranch house, 765 ft. S. of, 10.0 mi. N. and 4.5 mi. E. from Amarillo, on top of E. side of concrete cattle guard; chiseled square--	3, 455. 35
Bivins ranch house, 0.9 mi. N. of, near quarter corner between secs. 41 and 55, block 1, Beaty, Seale, & Forwood survey, at S. end of offset in rd., 18.5 ft. E. of center of cattle guard, 11 in. N. of fence line, set in concrete; top of steel rod-----	3, 480. 47
Bivins ranch house, 1.5 mi. N., thence 0.7 mi. SW. from, 3.6 mi. by rd. NE. of S. end of Gluck siding on Panhandle & Santa Fe Ry., near cor. secs. 40, 41, 54, and 55, block 1, Beaty, Seale, & Forwood survey, 35 ft. N. of corner of T-fence E. and gates in fence line, on E. side of N.-S. fence, in concrete post; standard tablet stamped "T T 6 L 1933 3433" (recovered by U. S. C. & G. S. in 1935)-----	3, 432. 933
Reference mark, 70 ft. S. of tablet, 35 ft. S. of corner of T-fence E., in N.-S. fence line, set in concrete; top of steel rod-----	3, 433. 70
Gluck siding, 2.4 mi. NE. of S. end of, about 500 ft. N. of cor. secs. 39, 40, 53, and 54, block 1, Beaty, Seale, & Forwood survey, in saddle of ridge, 25 ft. S. of center line of rd., set in concrete; top of steel rod--	3, 446. 52
Gluck siding, 1.4 mi. NE. of S. end of, on line between secs. 52 and 53, block 1, Beaty, Seale, & Forwood survey, 28 ft. N. of center of wire gate, 1 ft. E. of fence line, set in concrete; top of steel rod-----	3, 416. 33
Gluck siding, 0.7 mi. NE. of S. end of, 40 ft. N. and 150 ft. E. from ranch house, 13 ft. N. of center line of rd., 8.5 ft. E. of SW. corner of cultivated field, in fence line, set in concrete; top of steel rod-----	3, 282. 03
Gluck siding, at S. end of, 10.1 mi. along highway N., thence 1.3 mi. NE. from Amarillo, 100 ft. S. of grade crossing, 100 ft. S. along W. right-of-way fence from cattle guard across rd., outside fence, in concrete post; standard tablet stamped "T T 7 L 1933 3313" (recovered by U. S. C. & G. S. in 1934)-----	3, 312. 746
Reference mark, 157.5 ft. W. of tablet, 1 ft. N. of NW. corner of section-house fence, set in concrete; top of steel rod-----	3, 314. 14
Amarillo, 10.1 mi. N., thence 0.7 mi. NE. from, 12 ft. S. of center line of rd., 21 ft. W. of bottom of drain, set in concrete; top of steel rod--	3, 354. 10
Amarillo, 10.1 mi. N. of, 101 ft. E. of center of junction of rd. and U. S. Highway 87, 36 ft. S. of center line of rd., 7 in. E. of fence line, set in concrete; top of steel rod-----	3, 415. 49
Amarillo, 11.0 mi. N. of, 49 ft. E. of center line of highway, in line with T-fence E., 7 in. W. of corner post, set in concrete; top of steel rod--	3, 367. 14
From point 0.9 mile north of Bivins ranch house along road north and northwest to mouth of Bonita Creek, thence west along south side of Canadian River to U. S. Highway 87, thence southeast 1.8 miles (by C. S. Carney in 1933)	
Bivins ranch house, 1.9 mi. N. of, on top of W. concrete base of cattle guard; chiseled square-----	3, 457. 90

[Line jogs into Amarillo No. 1 quadrangle]

Bivins ranch house, 3.8 mi. by rd. NW. of, 4.9 mi. SE. of headquarters of L X ranch, 19.3 ft. NE. of center line of rd., 1 ft. N. of fence, set in concrete; top of steel rod.....	Feet 3, 428. 39
L X ranch headquarters, 4.0 mi. SE. of, 65 ft. NE. of center line of rd., on top and near point of finger ridge, set in concrete; top of steel rod.....	3, 380. 56
L X ranch headquarters, 3.1 mi. SE. of, 10 ft. N. and 25 ft. W. from rd. fork, on N. side of large mesquite tree, in concrete post; standard tablet stamped "T T 9 L 1933 3337".....	3, 336. 591
Reference mark, 25 ft. N. and 52 ft. W. from tablet, in root of lone mesquite tree; copper nail and washer.....	3, 336. 78
L X ranch headquarters, 2.3 mi. SE. of, 150 ft. S. of bottom of small drain crossing rd., 15 ft. E. of center line of rd., 5 ft. S. of lone mesquite tree, set in concrete; top of steel rod.....	3, 152. 16
L X ranch headquarters, 1.5 mi. SE. of, on E. side of gate across rd. to ranch house, in bottom, in concrete post; standard tablet stamped "T T 10 L 1933 3055".....	3, 054. 875
Reference mark, 410 ft. W. of tablet, 112 ft. N. of E.-W. fence line, in crotch of hackberry tree, southernmost tree in clump; copper nail and washer.....	3, 056. 54
L X ranch headquarters, 0.7 mi. S. of, 1.4 mi. SE. of mouth of Bonita Creek, on W. bank of creek, 35.5 ft. S. of center line of rd. to ranch house, in N.-S. fence line, set in concrete; top of steel rod.....	3, 024. 08
Mouth of Bonita Creek, about 460 ft. S. of stream bed of Canadian River, 120 ft. W. of stream bed of creek, at NE. point of rocky cliff, 1 ft. SW. of large white boulder, set in concrete; top of steel rod....	2, 979. 66
Mouth of Bonita Creek, 1.1 mi. W. of, 4.4 mi. E. of Canadian River bridge on U. S. Highway 87, 165 ft. S. of S. edge of river stream bed, in corner of fences NE. and W., in root on S. side of 30-in. cottonwood tree; copper nail and washer.....	2, 974. 01
Canadian River bridge, 3.7 mi. E. of, at rocky point on S. side of river, 2 ft. above water level, on rock outcrop; chiseled square.....	2, 975. 21
Canadian River bridge, 2.5 mi. E. of, near center of low island in stream bed, in bole of 8-in. leaning cottonwood tree; copper nail and washer.....	2, 985. 39
Canadian River bridge, 1.4 mi. E. of, 160 ft. E. of mouth of drain, 115 ft. NE. of white stake, on S. bank of river, in root of 18-in. cottonwood tree; copper nail and washer.....	2, 992. 79
Canadian River bridge, at S. end of, 33 ft. W. of center line of highway, on concrete post with bronze plate marked "FAP 585-A Sta 996+16.7 Built 1931"; chiseled square.....	3, 009. 35
Canadian River bridge, 1.1 mi. SE. of, 115 ft. N. of center line of private rd. crossing highway, 50 ft. W. of center line of highway, on concrete right-of-way marker; chiseled square.....	3, 086. 81

From mouth of Bonita Creek northeast along east side of Canadian River into  
Fourways quadrangle (by C. S. Carney in 1933)

Mouth of Bonita Creek, 1.0 mi. NE. of, on S. bank of Canadian River, in bottom of small wash, in fence line, in crotch of 18-in. hackberry tree; copper nail and washer.....	2, 969. 12
Mouth of Bonita Creek, 1.8 mi. NE. of, on E. side of wide sandy-bottom canyon, in crotch of 9-in. cottonwood tree; copper nail and washer.....	2, 965. 25

Mouth of Bonita Creek, 2.9 mi. NE. of, 50 ft. E. of river, 65 ft. N. of rocky point, 52 ft. W. of fence corner, on SW. corner of base of large limestone boulder; chiseled square----- Feet  
2, 958. 89

From point 1.8 miles southeast of Canadian River bridge on U. S. Highway 87 northwest along highway 4.3 miles into Fourways quadrangle (by S. R. Archer in 1933)

Canadian River bridge, on E. side of N. end of, at concrete steps leading to spring under N. concrete abutment, near center of upper step; chiseled square----- 3, 015. 82

Canadian River bridge, 1.0 mi. NW. of, on SW. side of highway, 25 ft. N. and 8 ft. W. from gate across private rd. SW. to John Fain ranch house, in concrete post; standard tablet stamped "T T 17 L 1933"----- 3, 137. 446

Canadian River bridge, 2.0 mi. NW. of, 220 ft. SE. of highway mile-post sign, on top of SE. end of NE. head wall of concrete culvert; chiseled square----- 3, 228. 40

From mouth of Bonita Creek northwest across country and along road into Fourways quadrangle (by C. S. Carney in 1934)

Mouth of Bonita Creek, 1.0 mi. in air line NW. of, 1.3 mi. N. and 1.0 mi. W. from L X ranch headquarters, on top of bluff, 16 ft. N. of large cairn, in limestone outcrop; standard tablet stamped "T T 11 L 1933 3202"----- 3, 202. 053

Reference mark, 108 ft. W. of tablet, 20 ft. N. of bluff, on limestone outcrop; chiseled square----- 3, 205. 56

Mouth of Bonita Creek, 1.6 mi. in air line NW. of, on top of bluff, 30 ft. N. of center line of rd., 6 ft. N. of rock pile, in root of mesquite tree; copper nail and washer----- 3, 269. 14

Mouth of Bonita Creek, 2.6 mi. NW. of, near center of sec. 68, H. & T. C. R. R. Co. survey, 12 ft. NE. of center line of rd., in root of mesquite tree; copper nail and washer----- 3, 277. 34

#### DUMAS NO. 1 QUADRANGLE<sup>19</sup>

[Latitude 35°45'-36°00'; longitude 101°30'-101°45']

#### HUTCHINSON AND MOORE COUNTIES

From Plemons quadrangle along road west to point 1 mile east of Beede, thence south into Sanford quadrangle (by E. E. Harris in 1927)

Beede, 7.5 mi. E. of, at store of J. O. Hatcher, on N. side of right-angle turn in highway, 3 ft. S. and 25 ft. W. from corner fence post, in concrete post; standard tablet stamped "H 15 1927"----- 3, 353. 535

Reference mark, 160 ft. N. of tablet; iron hub----- 3, 353. 18

Beede, 6.6 mi. E. of, 2.0 mi. N. of Stevenson, on S. side of right-angle turn in rd. W., in line with fence line on W. side of rd. N.; iron hub----- 3, 351. 64

Beede, 5.6 mi. E. of, 2.0 mi. N. and 1.0 mi. W. from Stevenson, on S. side of rd., in bottom, in concrete post; standard tablet stamped "H 16 1927"----- 3, 334. 586

Beede, 4.6 mi. E. of, about 0.5 mi. NE. of Marland well, on N. side of rd.; iron hub----- 3, 361. 45

Beede, 4.0 mi. E. of, 30 ft. N. of highway, 100 ft. E. of rd. fork, at windmill, 10 ft. N. and 2 ft. E. from corner fence post, in concrete post; standard tablet stamped "H 17 1927"----- 3, 365. 668

<sup>19</sup> The figures of elevation given are preliminary figures based on the 1929 general adjustment; additional leveling may necessitate further adjustment.

Beede, 2.7 mi. E. of, on N. side of rd., at angle in fence line, 18 in. N. of corner fence post, in line with fence N.; iron hub-----	Feet 3, 372. 82
Beede, 1.8 mi. E. of, 30 ft. N. and 60 ft. E. from right-angle turn in rd. to N., in concrete post; standard tablet stamped "H 18 1927"----	3, 383. 543
Beede, 1.0 mi. E. and 0.5 mi. S. from, 6.1 mi. N. of Bar X ranch house, at E. gate to ranch, in NW. corner of rd. fork; iron hub-----	3, 384. 35
Bar X ranch house, 5.4 mi. N. of, at SE. corner of another ranch, in L-angle in fence line, 2 ft. from each fence; iron hub-----	3, 382. 64
Bar X ranch house, 4.6 mi. N. of, in SW. angle of crossroads, 25 ft. from each rd., in concrete post; standard tablet stamped "H 20 1927"-----	3, 377. 691
Bar X ranch house, 4.0 mi. N. of, 50 ft. W. of rd., 1 ft. N. of fence line crossing rd.; iron hub-----	3, 359. 16
Bar X ranch house, 3.0 mi. N. of, in small clearing, 30 ft. W. of rd., just N. of prominent cattle path W. to water hole, in concrete post; standard tablet stamped "H 21 1927"-----	3, 358. 822
Bar X ranch house, 1.9 mi. N. of, 25 ft. N. and 50 ft. W. from crossroads; top of hub-----	3, 360. 92
Bar X ranch house, in SE. corner of yard of, on W. side of rd., in L-angle in fence line, 3 ft. from each fence, in concrete post; standard tablet stamped "H 22 1927"-----	3, 367. 235
Reference mark, 150 ft. N.15° W. of tablet, in NE. corner of yard; iron hub-----	3, 367. 40
Bar X ranch house, 1.1 mi. S. of, in wye of rd. fork, 150 ft. from fork, in NW. corner of small enclosure for engine at water well; iron hub-----	3, 236. 26
Bar X ranch house, 1.5 mi. S. of, 0.5 mi. S. of water well, at summit of grade, 60 ft. W. of rd., in concrete post; standard tablet stamped "H 23 1927"-----	3, 276. 515
Bar X ranch house, 2.3 mi. S. of, at summit of grade, 40 ft. W. of rd.; iron hub-----	3, 217. 26
Bar X ranch house, 3.1 mi. S. of, 40 ft. W. of rd., 1 ft. N. of fence line crossing rd.; iron hub-----	3, 191. 11
Bar X ranch house, 3.8 mi. S. of, in center of triangle formed by junction of rd. W., 60 ft. from each rd., in concrete post; standard tablet stamped "H 24 1927"-----	3, 174. 618
Reference mark, 137.1 ft. N.20° W. of tablet, 2 ft. W. of small mesquite bush, 4 in. underground; iron hub-----	3, 173. 59
Bar X ranch house, 5.0 mi. S. of, on sage-brush summit, 35 ft. E. of rd.; iron hub-----	3, 179. 19

From point 1 mile east and 0.5 mile south from Beede generally west along roads by way of Beede into Dumas No. 2 quadrangle (by E. E. Harris in 1927)

Beede, on S. side of right-angle turn in rd. at, 50 ft. W. of store, in L-angle in fence line, 3 ft. from each fence, in concrete post; standard tablet stamped "H 19 1927" (recovered by U. S. C. & G. S. in 1935)-----	3, 390. 820
Reference mark, 185 ft. N. of tablet; iron hub-----	3, 390. 38
Beede, 1.0 mi. W. of, on N. side of rd., in NE. corner of T-angle in fence line, 3 ft. from each fence; iron hub-----	3, 397. 78
Beede, 2.1 mi. W. of, between two culverts, 200 ft. S. of rd., 2 ft. N. of fence line, 2 ft. E. of gatepost, in concrete post; standard tablet stamped "H 39 1927"-----	3, 409. 193
Reference mark, 56.3 ft. E. of tablet, 1 ft. N. of fence line, 3 in. underground; iron hub-----	3, 408. 69

Beede, 3.1 mi. W. of, on N. side of rd., 40 ft. E. of rd. N. through gate; iron hub-----	Fee 3, 422. 75
Beede, 4.1 mi. W. of, on N. side of rd., 2 ft. N. and 12 ft. W. from T-angle in fence line, in concrete post; standard tablet stamped "H 40 1927"-----	3, 438. 404
Reference mark, 90 ft. E. of tablet, 1 ft. N. of fence line, 4 in. under ground; iron hub-----	3, 437. 02
Beede, 5.1 mi. W. of, in NE. corner of junction of T-rd. N., in L-angle in fence line, 2 ft. from each fence; iron hub-----	3, 448. 43
Beede, 6.1 mi. W. of, on S. side of rd., in L-angle in fence line, 2 ft. from each fence; iron hub-----	3, 464. 65

From Beede north along road into Ideal quadrangle (by E. E. Harris in 1927)

Beede, 1.1 mi. N. of, 650 ft. N. of Morton ranch house, on E. side of rd. junction, at angle in fence line; iron hub-----	3, 378. 30
Beede, 2.4 mi. N. of, in SE. corner of crossroads, in concrete post; standard tablet stamped "H 58 1927" (recovered by U. S. C. & G. S. in 1935)-----	3, 383. 632
Reference mark, 88.9 ft. S. 20° W. of tablet, 4 in. under ground; iron hub-----	3, 382. 72
Beede, 3.8 mi. N. of, on W. side of rd., 30 ft. W. of cattle guard, 1 ft. S. of fence line; iron hub-----	3, 369. 10
Beede, 4.7 mi. N. of, 30 ft. W. of angle in rd. at junction of dim rd., in concrete post; standard tablet stamped "H 59 1927"-----	3, 345. 991
Reference mark, 90.8 ft. N.35°E. of tablet, 4 in. under ground; iron hub-----	3, 345. 87
Beede, 5.2 mi. N. of, about 1,000 ft. NW. of McDowell ranch house, on W. side of angle in rd., at fence corner, 50 ft. N. of gate; iron hub-----	3, 290. 94
Beede, 6.8 mi. N. of, in SE. angle of crossroads, 30 ft. from each rd., in concrete post; standard tablet stamped "H 60 1927"-----	3, 359. 046
Reference mark, 126.6 ft. S. of tablet, 4 in. under ground; iron hub-----	3, 358. 35

From Fourways quadrangle <sup>20</sup> near mouth of Grapevine Creek alternately northeast and southeast along roads and across country into Sanford quadrangle at point 1.3 miles west of Moore-Hutchinson county line (by F. J. Fricke in 1934)

Block M 1, sec. 5, 150 ft. S. of junction of Grapevine and Big Blue Creeks, 5 ft. S. of five-forked cottonwood tree, in root on W. side of 18-in. cottonwood tree; copper nail and washer-----	3, 052. 50
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[Line jogs into Sanford quadrangle]

J. S. Johnson survey, 80 ft. W. of creek bank, 45 ft. S. of center line of rd., in root on N. side of 36-in. cottonwood tree; copper nail and washer-----	3, 053. 84
J. S. Johnson survey, 10 ft. S. of center of cattle guard in N.-S. fence line, 20 ft. N. of center of gate, under fence, set flush with ground and surrounded by rocks; top of iron rod-----	3, 174. 17
I. & G. N. R. R. Co. survey, in sec. 2, at intersection of E.-W. telephone line and N.-S. fence line, 7 ft. W. of telephone pole, in fence line, set flush with ground; top of iron rod-----	3, 186. 38

<sup>20</sup> This line cuts the northwest corner of Sanford quadrangle but no bench marks were set in that portion of the line.

DUMAS NO. 2 QUADRANGLE<sup>21</sup>

[Latitude 35°45'–36°00'; longitude 101°45'–102°00']

## MOORE COUNTY

From Dumas No. 1 quadrangle alternately west and south along roads to point 0.5 mile east of Dumas, thence north into Ideal quadrangle (by E. E. Harris in 1927)

Beede, 6.6 mi. W. of, about 500 ft. E. of windmill, on S. side of main rd., on E. side of cut-off rd., 3 ft. S. and 3 ft. E. from L-angle in fence line, in concrete post; standard tablet stamped "H 41 1927"	<i>Feet</i>
(recovered by U. S. C. & G. S. in 1935).....	3, 470. 039
Reference mark, 71 ft. E. of tablet, 4 in. under ground; iron hub....	3, 468. 93
Beede, 7.1 mi. W. of, on N. side of rd.; iron hub.....	3, 475. 32
Beede, 8.1 mi. W. of, 1.0 mi. E. of turn to S. in rd., on N. side of rd., 2 ft. N. and 2 ft. W. from L-angle in fence line; iron hub.....	3, 492. 58
Beede, 9.1 mi. W. of, 3.0 mi. N., thence 9.0 mi. E. from Moore County courthouse at Dumas, on W. side of turn to S. in rd., 30 ft. N. of rd. SW. to Morton well, 10 ft. S. of S. side of rd. E., 2 ft. W. of fence line, in concrete post; standard tablet stamped "H 42 1927"	
(recovered by U. S. C. & G. S. in 1935).....	3, 507. 208
Reference mark, 133.8 ft. N.70°E. of tablet, 1 ft. S. of fence line, 4 in. under ground; iron hub.....	3, 506. 03
Dumas, 9.0 mi. E., thence 2.0 mi. N. from, on W. side of rd., 2 ft. N. and 2 ft. W. from L-angle in fence line; iron hub.....	3, 510. 11
Dumas, 9.0 mi. E., thence 1.0 mi. N. from, on E. side of rd., 3 ft. S. and 3 ft. E. from T-angle in fence line, in concrete post; standard tablet stamped "H 43 1927" (recovered by U. S. C. & G. S. in 1935)...	3, 517. 916
Reference mark, 129.8 ft. N. of tablet, 1 ft. E. of fence line, 4 in. under ground; iron hub.....	3, 517. 68
Dumas, 9.0 mi. E. of, in SE. corner of junction of rd. E. through gate at turn W. in rd., 4 ft. N. and 4 ft. E. from T-angle in fence line; iron hub.....	3, 503. 20
Dumas, 8.0 mi. E. of, on S. side of rd., 2 ft. S. of fence line, in concrete post; standard tablet stamped "H 44 1927".....	3, 547. 679
Reference mark, 61.5 ft. E. of tablet, 1 ft. S. of fence line, 4 in. under ground; iron hub.....	3, 546. 69
Dumas, 7.0 mi. E. of, on N. side of rd., in front of deserted shack, 1 ft. N. and 1 ft. W. from T-angle in fence line; iron hub.....	3, 565. 79
Dumas, 6.2 mi. E. of, on S. side of rd., 900 ft. E. of angle in rd., 25 ft. E. of rd. S. through gate, 1 ft. S. of fence line, in concrete post; standard tablet stamped "H 45 1927" (recovered by U. S. C. & G. S. in 1934).....	3, 568. 585
Reference mark, 164.3 ft. E. of tablet, 1 ft. N. of fence line, 4 in. under ground; iron hub.....	3, 567. 70
Dumas, 5.5 mi. E. of, on N. side of angle in rd., on E. side of farm rd. crossing, 1 ft. N. and 1 ft. E. from T-angle in fence line; iron hub....	3, 581. 81
Dumas, 4.5 mi. E. of, on N. side of rd., 3 ft. N. and 3 ft. E. from L-angle in fence line, in concrete post; standard tablet stamped "H 46 1927" (recovered by U. S. C. & G. S. in 1934).....	3, 597. 690
Reference mark, 235.5 ft. E. of tablet, 1 ft. N. of fence line, 4 in. under ground; iron hub.....	3, 596. 22
Dumas, 3.5 mi. E. of, at summit of slight grade, on S. side of rd., 340 ft. W. of fence corner, 1 ft. N. of fence line; iron hub.....	3, 615. 82

<sup>21</sup> The figures of elevation given are preliminary figures based on the 1929 general adjustment; additional leveling may necessitate further adjustment.



Dumas, 2.5 mi. E. of, on S. side of rd., at W. edge of dim rd. S. through gate, 3 ft. S. and 3 ft. W. from T-angle in fence line, in concrete post; standard tablet stamped "H 47 1927"-----	Feet 3, 615. 316
Reference mark, 218.3 ft. E. of tablet, 1 ft. S. of fence line, 4 in. under ground; iron hub-----	3, 614. 69
Dumas, 1.5 mi. E. of, in NW. corner of farm rd. crossing, 1 ft. W. of fence line, 1 ft. N. of leaning support for corner fence post; iron hub-----	3, 634. 78
Dumas, 0.5 mi. E. of, at junction of rd. N. to Stratford, on S. side of rd., 3 ft. S. and 50 ft. E. from fence corner, in concrete post; standard tablet stamped "H 48 1927" (recovered in 1933; recovered also by U. S. C. & G. S. in 1934)-----	3, 649. 796
Reference mark, 200.5 ft. E. of tablet, 1 ft. S. of fence line, 4 in. under ground; iron hub-----	3, 647. 64
Dumas, 0.5 mi. E., thence 1.0 mi. N. from, on E. side of rd., 25 ft. S. of farm rd. crossing, 1 ft. W. of fence line; iron hub-----	3, 650. 96
Dumas, 0.5 mi. E., thence 2.0 mi. N. from, in SE. angle of junction of T-rd. E., 2 ft. S. and 2 ft. E. from L-angle in fence line, in concrete post; standard tablet stamped "H 49 1927"-----	3, 639. 367
Reference mark, 96.5 ft. S. of tablet, 1 ft. E. of fence line, 4 in. under ground; iron hub-----	3, 638. 82
Dumas, 0.5 mi. E., thence 3.0 mi. N. from, on E. side of rd., 80 ft. N. of farm rd. NE. through gate, 1 ft. W. of fence line; iron hub-----	3, 626. 93
Dumas, 0.5 mi. E., thence 4.0 mi. N. from, on E. side of rd., 3 ft. S. and 3 ft. E. from T-angle in fence line, in concrete post; standard tablet stamped "H 50 1927"-----	3, 613. 759
Reference mark, 105.3 ft. S. of tablet, 1 ft. E. of fence line, 4 in. under ground; iron hub-----	3, 613. 00
Dumas, 0.5 mi. E., thence 5.0 mi. N. from, on E. side of rd., 30 ft. S. of dim rd. E. through gate, 1 ft. W. of fence line; iron hub-----	3, 609. 38
Dumas, 0.5 mi. E., thence 6.0 mi. N. from, on E. side of rd., 3 ft. S. and 3 ft. E. from T-angle in fence line, in concrete post; standard tablet stamped "H 51 1927"-----	3, 600. 157
Reference mark, 188.3 ft. S. of tablet, 1 ft. E. of fence line, 4 in. under ground; iron hub-----	3, 598. 52
Dumas, 0.5 mi. E., thence 7.0 mi. N. from, on W. side of rd., in SW. angle of farm rd. crossing, 2 ft. S. and 2 ft. W. from L-angle in fence line; iron hub-----	3, 614. 08
Dumas, 0.5 mi. E., thence 8.0 mi. N. from, in SE. angle of farm rd. crossing, 3 ft. S. and 3 ft. E. from T-angle in fence line, at gate, in concrete post; standard tablet stamped "H 52 1927"-----	3, 613. 743
Reference mark, 82.1 ft. S. of tablet, 1 ft. E. of fence line, 4 in. under ground; iron hub-----	3, 613. 28
Dumas, 0.5 mi. E., thence 9.0 mi. N. from, 9.0 mi. S. of Palo Duro School, on E. side of angle in rd. to E., 2 ft. S. and 1 ft. E. from fence post; iron hub-----	3, 607. 42
From road junction 0.5 mile east of Dumas along road west to Dumas (by E. E. Harris in 1927; spur line leveled twice)	
Dumas, at Moore County courthouse, in NE. corner of grounds, in concrete post; standard tablet stamped "H 84 1927" (recovered in 1933; recovered also by U. S. C. & G. S. in 1934) <sup>22</sup> -----	3, 655. 737

<sup>22</sup> In 1933 it was reported that this bench mark had been destroyed.

From Fourways quadrangle north along U. S. Highway 87 (State Highway 9) to Dumas  
(by S. R. Archer in 1933)

Dumas, 6.9 mi. S. of Moore County courthouse at, 0.14 mi. SW. of point where highway crosses line between secs. 101 and 110, block 44, H. & T. C. R. R. Co. survey, on top of S. end of E. head wall of concrete highway culvert; chiseled square-----	<i>Feet</i> 3, 599. 84
Dumas, 5.4 mi. S. of, near center of SW¼ sec. 143, block 44, H. & T. C. R. R. Co. survey, 210 ft. S. of S. end of concrete highway bridge over Big Blue Creek, on E. side of highway, 2 ft. NW. of corner post of T-fence E., in concrete post; standard tablet stamped "3437"-----	3, 437. 359
Reference mark, 210 ft. N. of tablet, at highway bridge over Big Blue Creek, on top of W. parapet of S. concrete abutment; chiseled square-----	3, 430. 37
Dumas, 5.2 mi. S. of, 0.25 mi. W. of center of sec. 143, block 44, H. & T. C. R. R. survey, at highway bridge over North Fork of Big Blue Creek, on top of E. parapet of N. concrete abutment; chiseled square-----	3, 437. 71
Dumas, 4.0 mi. S. of, in NW¼ sec. 152, block 44, H. & T. C. R. R. Co. survey, at angle in highway at top of hill, on E. side of highway at junction of T-rd. SE., on N. side of cattle guard and gate, midway between N. gatepost and corner post of highway right-of-way fence, under fence leading to cattle guard and gate, set flush with ground and surrounded by rocks; top of iron rod-----	3, 579. 00
Dumas, 3.2 mi. S. of, 0.3 mi. NE. of center of sec. 184, block 44, H. & T. C. R. R. Co. survey, on top of S. end of W. head wall of concrete culvert; chiseled square-----	3, 616. 38
Dumas, 2.7 mi. S. of, at quarter corner between secs. 184 and 195, block 44, H. & T. C. R. R. Co. survey, on W. side of highway, near S. end of curve to SE., 35 ft. N. of center of cattle guard on private rd. SW. to ranch house, 2 ft. SE. of corner post of T-fence W., in concrete post; standard tablet stamped "3646"-----	3, 645. 667
Dumas, 2.0 mi. S. of, near center of sec. 195, block 44, H. & T. C. R. R. Co. survey, on top of S. end of W. head wall of concrete highway culvert; chiseled square-----	3, 632. 55
Dumas, 1.2 mi. S. of, near center of sec. 226, block 44, H. & T. C. R. R. Co. survey, on E. side of highway, at fence line, on top of concrete highway right-of-way post; chiseled cross-----	3, 665. 76
Dumas, 0.6 mi. S. of courthouse, at S. city corporation line, at quarter corner between secs. 226 and 237, block 44, H. & T. C. R. R. Co. survey, in SE. corner of crossroads, on top of concrete highway right-of-way post; chiseled cross-----	3, 659. 36

#### FOURWAYS QUADRANGLE<sup>23</sup>

[Latitude 35°30'-35°45'; longitude 101°45'-102°00']

#### MOORE AND POTTER COUNTIES

From Cliffside quadrangle generally northwest along U. S. Highway 87 and Panhandle & Santa Fe Railway to road junction 0.5 mile south of Bivins Booster Station, thence west along road and northwest along railway to point 2.8 miles west of Fourways, thence east and north along State Highway 5 and U. S. Highway 87 (State Highway 9) into Dumas No. 2 quadrangle (by S. R. Archer in 1933)

Canadian River bridge, 2.9 mi. NW. of, 225 ft. NW. of gate in NE. highway fence line across ranch rd. N., 630 ft. SE. of highway mile-post sign, on top of NW. end of NE. head wall of concrete highway culvert; chiseled square-----	3, 351. 27
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<sup>23</sup> The figures of elevation given are preliminary figures based on the 1929 general adjustment; additional leveling may necessitate further adjustment.

Canadian River bridge, 3.5 mi. NW. of, 335 ft. NW. of point where telephone line crosses highway, on top of SE. end of NE. head wall of concrete highway culvert; chiseled square-----	<i>Feet</i> 3, 400. 31
Canadian River bridge, 4.0 mi. NW. of, 1.2 mi. SE. of Panhandle & Santa Fe Ry. overpass, 1 ft. W. of E. right-of-way fence, 3 ft. S. of corner of T-fence E., in concrete post; standard tablet stamped "T T 16 L 1933"-----	3, 424. 506
Canadian River bridge, 4.6 mi. NW. of, 0.6 mi. SE. of R. R. overpass, near SE. end of NE. head wall of concrete highway culvert; chiseled square-----	3, 445. 69
Canadian River bridge, 5.2 mi. NW. of, 0.7 mi. SW. of Marsh sta. on Panhandle & Santa Fe Ry., at R. R. overhead bridge 26-C, on SW. side of highway, on top of SW. corner of SE. end of SW. concrete abutment; chiseled square (recovered by U. S. C. & G. S. in 1934)-----	3, 411. 266
Marsh, 0.4 mi. N. of sta. sign, on top of S. end of E. head wall of R. R. concrete culvert 27-A; chiseled square-----	3, 431. 28
Marsh, 0.9 mi. N. of, 6.5 mi. NW., thence 0.8 mi. NE. from Canadian River bridge, 15 ft. N. and 120 ft. W. from grade crossing, outside right-of-way fence, in concrete post; standard tablet stamped "T T 15 L 1933" (recovered in 1934; also recovered by U. S. C. & G. S. in same year)-----	3, 463. 914
Canadian River bridge, 6.8 mi. NW. of, 0.4 mi. NW. of junction of T-rd. NE., at highway bridge over John Ray Creek, on top of NE. end of NW. concrete abutment; chiseled square-----	3, 424. 20
Canadian River bridge, 7.5 mi. NW. of, 0.7 mi. SE. of junction of T-rd. W., on top of SE. end of SW. head wall of concrete highway culvert; chiseled square-----	3, 467. 60
Canadian River bridge, 8.2 mi. NW. of, 4.5 mi. SE. of Bivins Booster Sta., 3.2 mi. S. of Moore-Potter county line, 0.25 mi. E. of SW. cor. sec. 80, block O 18, D. & P. R. R. Co. survey, 18 ft. S. and 99 ft. W. from junction of T-rd. W., in concrete post; standard tablet stamped "T T 1 D 1933"-----	3, 542. 751
Bivins Booster Sta., 3.6 mi. SE. of, on top of N. end of W. head wall of concrete highway culvert; chiseled square-----	3, 557. 65
Bivins Booster Sta., 3.0 mi. S. of, on top of N. end of W. head wall of concrete highway culvert; chiseled square-----	3, 606. 45
Bivins Booster Sta., 2.2 mi. S. of, 0.7 mi. S. of Panhandle & Santa Fe Ry. overpass, on W. side of highway, at highway sta. 1559+99.1, on top of concrete highway marker with bronze plate marked "Fed Aid Proj 585 B Sta 1559+99.1"; chiseled square-----	3, 688. 09
Bivins Booster Sta., 1.4 mi. S. of, 0.2 mi. S. of Moore-Potter county line, at N. end of R. R. overpass, on E. side of highway, on top of E. end of N. wall of concrete highway culvert, outlet for subway drainage; chiseled square-----	3, 668. 02
Bivins Booster Sta., 1.2 mi. S. of, at Moore-Potter county line, at end of concrete pavement, 270 ft. W. of center line of pavement, in top of county-line concrete post; bronze tablet stamped "Moore-Potter County M P 19" (recovered by U. S. C. & G. S. in 1934)-----	3, 672. 804
Bivins Booster Sta., 0.5 mi. S. of, 1.2 mi. E. of Exell sta. on Panhandle & Santa Fe Ry., 320 ft. N. of junction of T-rd. W., on top of N. end of W. head wall of concrete highway culvert; chiseled square-----	3, 653. 22

Exell, 750 ft. NW. along R. R., thence 250 ft. E. along rd. from sta., on S. side of rd., in E. right-of-way (R. R.) fence line, 2 ft. SE. of corner post, under fence, set flush with ground; top of iron rod (recovered by U. S. C. & G. S. in 1934)-----	<i>Feet</i> 3, 726. 410
Exell, 1.4 mi. along R. R. NW. of, 350 ft. NW. of milepost 36, 160 ft. NW. of dimrd. crossing, 57 ft. E. of track, inside R. R. right-of-way, 7 ft. E. of corner of right-of-way fence where it widens from 50 to 100 ft., in concrete post; standard tablet stamped "T T 34 L 1933" (recovered by U. S. C. & G. S. in 1934)-----	3, 733. 116
Reference mark, 350 ft. SE. of tablet, at E. right-of-way fence line, at milepost 36, in 6- by 6-in. concrete post; top of bolt (R. R. B. M.; recovered by U. S. C. & G. S. in 1934)-----	3, 733. 159
Exell, 2.3 mi. NW. of, at milepost 37, 235 ft. SE. of rd. crossing, at E. right-of-way fence line, in 6- by 6-in. concrete post; top of bolt (R. R. B. M.; recovered by U. S. C. & G. S. in 1934)-----	3, 729. 080

## [Line jogs into Channing No. 4 quadrangle]

Fourways, 2.0 mi. W. of, at SW. cor. sec. 15, block 44, H. & T. C. R. R. Co. survey, on N. side of highway, 40 ft. E. of center line of tangent of T-rd. N., 25 ft. E. of center of gate, 2.5 ft. E. of tall cedar fence post at E. side of gate, at fence line, under fence, set flush with ground; top of iron rod-----	3, 713. 95
Fourways, 1.0 mi. W. of, at SW. cor. sec. 16, block 44, H. & T. C. R. R. Co. survey, on N. side of highway, 20 ft. E. of fence line N., 4 ft. E. of E. post of gate to field, under fence, set flush with ground; top of iron rod-----	3, 689. 85
Fourways, 65 ft. N. and 68 ft. E. from junction of U. S. Highway 87 (State Highway 9) and State Highway 5, 11.9 mi. S. of Moore County courthouse at Dumas, 34 ft. N. and 68 ft. E. from junction of T-rd. E. at S. cor. secs. 16 and 17, block 44, H. & T. C. R. R. Co. survey, 20 ft. E. of fence corner, in concrete post; standard tablet stamped "T T 38 L 1933"-----	3, 652. 323
Reference mark, 0.2 mi. N. of tablet, on top of N. end of E. head wall of concrete highway culvert; chiseled square-----	3, 623. 60
Dumas, 10.8 mi. S. of, 740 ft. N. of cor. secs. 16, 17, 26, and 27, block 44, H. & T. C. R. R. Co. survey, on top of S. end of E. head wall of concrete highway culvert; chiseled square-----	3, 597. 09
Dumas, 9.6 mi. S. of, 0.25 mi. N. of cor. secs. 26, 27, 58, and 59, block 44, H. & T. C. R. R. Co. survey, at highway bridge over Sand Creek, on top of W. parapet of S. concrete abutment; chiseled square-----	3, 537. 65
Dumas, 8.9 mi. S. of, at cor. secs. 58, 59, 68, and 69, block 44, H. & T. C. R. R. Co. survey, 42 ft. N. and 49 ft. E. from center line of highway opposite fence line W., 42 ft. N. of gate in E. highway fence line, in concrete post; standard tablet stamped "T T 37 L 1933"-----	3, 552. 420
Dumas, 8.6 mi. S. of, at highway bridge over Grapevine (Little Blue) Creek, on top of W. parapet of N. concrete abutment; chiseled square-----	3, 502. 75
Dumas, 7.9 mi. S. of, 160 ft. S. of cor. secs. 68, 69, 100, and 101, block 44, H. & T. C. R. R. Co. survey, on top of S. end of E. head wall of concrete highway culvert; chiseled square-----	3, 584. 08

From Cliffside quadrangle northeast along east bank of Canadian River 2.8 miles, thence southeast along road 0.6 mile into Sanford quadrangle (by C. S. Carney in 1933)

Mouth of Bonita Creek, 3.8 mi. NE. of, 600 ft. E. of mouth of wide drain, 150 ft. SE. of river bed, 100 ft. SE. of wire gate, in root of 6-in. hackberry tree; copper nail and washer-----	Feet 2, 961. 12
Mouth of Bonita Creek, 5.1 mi. NE. of, at end of rocky point of ridge, on N. bank of drain, on boulder; chiseled square-----	2, 935. 88
H. & T. C. R. R. Co. survey, block 46, N. of center of sec. 106, at end of rd. in valley on S. side of Canadian River, in SE. corner of fence around Canadian River Gas Co. well Bivins C 1, about 25 ft. SE. of well, in concrete post; standard tablet stamped "T T 45 L 1933 2957"-----	2, 957. 016
Reference mark, 175 ft. S. of tablet, 20 ft. W. of rd., on NE. corner of concrete pit; chiseled square-----	2, 958. 87

From Channing No. 4 quadrangle east along road to point 8.2 miles northwest along U. S. Highway 87 from Canadian River bridge (by F. J. Fricke in 1933; releveled by C. S. Carney in 1934)

Bivins ranch headquarters, 2.2 mi. E. of, 4.5 mi. SE. along U. S. Highway 87, thence 2.3 mi. W. from Bivins Booster Sta., on line between secs. 9 and 16, block O 18, D. & P. R. R. Co. survey, 520 ft. W. of abandoned schoolhouse, 3 ft. E. of fence corner, in concrete post; standard tablet stamped "T T 2 D 1933"-----	3, 598. 159
Bivins Booster Sta., 4.5 mi. SE., thence 1.3 mi. W. from, 8.2 mi. NW., thence 1.3 mi. W. from Canadian River bridge, 360 ft. S. of corner post of T-fence W., 15 ft. N. of center of cattle guard in N.-S. fence line, 3.5 ft. N. of N. post of cattle guard, set flush with ground; top of iron rod-----	3, 501. 81

From point 7.9 miles south of Dumas on U. S. Highway 87 west across country 6 miles, thence south and southwest across country and along roads by way of Brown ranch and Sneed's South Camp to point on Panhandle & Santa Fe Railway 0.9 mile north of Marsh station (by S. R. Archer and F. J. Fricke in 1933-34)

H. & T. C. R. R. Co. survey, block 44, about 570 ft. E. of cor. secs. 67, 68, 101, and 102, 711 ft. E. of gate in E.-W. section-line fence, on first small rise E. of gate, under fence, set flush with ground; top of iron rod-----	3, 514. 18
H. & T. C. R. R. Co. survey, block 44, about 0.3 mi. W. of cor. secs. 66, 67, 102, and 103, 66 ft. S. and 220 ft. E. from lone windmill, at angle in E.-W. section-line fence SE. around draw, on S. side of fence, in concrete post; standard tablet stamped "T T 39 L 1933"-----	3, 433. 057
H. & T. C. R. R. Co. survey, block 44, at cor. secs. 65, 66, 103, and 104, 2 ft. SE. of corner post of T-fence N., set flush with ground; top of iron rod-----	3, 509. 40
H. & T. C. R. R. Co. survey, block 44, 540 ft. E. of cor. secs. 64, 65, 104, and 105, 370 ft. E. of gate in E.-W. section-line fence, 9 ft. W. of T-fence line NW., on N. side of section-line fence, in concrete post; standard tablet stamped "T T 40 L 1933"-----	3, 483. 848
H. & T. C. R. R. Co. survey, block 44, at E. cor. secs. 64 and 105, and W. cor. secs. 18 and 19, block 6 T, T. & N. O. R. R. Co. survey, at T-fence line N., at 2-in. gas pipe marking section corner; top of pipe-----	3, 450. 66

Fourways, 6.0 mi. E., thence 4.0 mi. N. from, at cor. secs. 17, 18, 19, and 20, block 6 T, T. & N. O. R. R. Co. survey, 2.2 ft. S. of corner of T-fence S. and stone marking section corner, under fence, set flush with ground; top of iron rod.....	Feet 3, 410. 68
Fourways, 6.0 mi. E., thence 2.9 mi. N. from, 732 ft. S. of cor. secs. 19, 20, 33, and 34, block 6 T, T. & N. O. R. R. Co. survey, 0.4 mi. N. of ranch rd. W. to Brown ranch headquarters, 732 ft. S. of T-fence W., on S. side of Grapevine Creek, on E. side of N.-S. section-line fence, in concrete post; standard tablet stamped "T T 8 D 1933".....	3, 346. 932
Fourways, 6.0 mi. E., thence 2.5 mi. N. from, near quarter corner between secs. 33 and 34, block 6 T, T. & N. O. R. R. Co. survey, at intersection of N.-S. section-line fence and rd. W. to Brown ranch headquarters, 5.3 ft. S. of S. gatepost in fence, under fence, set flush with ground; top of iron rod.....	3, 368. 89
Fourways, 6.0 mi. E., thence 2.0 mi. N. from, at cor. secs. 33, 34, 35, and 36, block 6 T, T. & N. O. R. R. Co. survey, 4.5 ft. E. of corner of fences N. and W., at 2-in. pipe marking section corner; top of pipe.....	3, 388. 93
Fourways, 6.0 mi. E., thence 1.0 mi. N. from, at cor. secs. 35, 36, 49, and 50, block 6 T, T. & N. O. R. R. Co. survey, at 2-in. gas pipe projecting about 2 ft. above ground and marking section corner; top of pipe.....	3, 444. 15
Fourways, 6.0 mi. E., thence 0.5 mi. N. from, near quarter corner between secs. 49 and 50, block 6 T, T. & N. O. R. R. Co. survey, at gate in E.-W. fence line, 30 in. W. of W. gatepost, under fence, set flush with ground; top of iron rod.....	3, 476. 21
Fourways, 6.0 mi. E. of, 6 ft. W. of iron pipe and stone marking cor. secs. 49, 50, 51, and 52, block 6 T, T. & N. O. R. R. Co. survey, 23 ft. S. of E.-W. rd., 326 ft. W. of pipe line crossing rd., in concrete post; standard tablet stamped "T T 41 L 1933".....	3, 496. 033
Fourways, 6.0 mi. E., thence 1.1 mi. S. from, at S. cor. secs. 51 and 52, block 6 T, T. & N. O. R. R. Co. survey, and at N $\frac{1}{4}$ corner Horace Hall block, 20 in. S. of corner of T-fence W. and pipe marking section corner, under fence S., set flush with ground and surrounded by rocks; top of iron rod.....	3, 410. 07
Fourways, 6.0 mi. E., thence 2.1 mi. S. from, 0.7 mi. NE. of Sneed's South Camp, 5 ft. N. and 457 ft. W. from iron pipe marking N. cor. secs. 6 and 8, block B 10, E. L. & R. R. R. R. Co. survey, 175 ft. E. of T-fence N. through center of Horace Hall block, on S. side of E.-W. fence, 1 ft. S. and 15 ft. W. from cattle guard across rd., in concrete post; standard tablet stamped "T T 42 L 1933".....	3, 449. 635
Sneed's South Camp, at NE. corner of yard, in sec. 6, block B 10, E. L. & R. R. R. R. Co. survey, 5.3 ft. W. of corner post of fences W. and NE., 20 ft. NW. of center line of rd., under fence, set flush with ground; top of iron rod.....	3, 382. 16
Sneed's South Camp, 0.6 mi. SW. of, in sec. 3, block B 10, E. L. & R. R. R. R. Co. survey, 25 ft. S. of S. bank of creek, about 8 ft. S. of center line of rd., in NE. root of lone 48-in. double-forked cottonwood tree; copper nail and washer.....	3, 369. 74
Sneed's South Camp, 1.4 mi. SW. of, at SW. cor. sec. 3, block B 10, E. L. & R. R. R. R. Co. survey, at T-fence N., 55 ft. W. of center of gate, at 2-in. pipe marking section corner; top of pipe.....	3, 511. 01

Sneed's South Camp, 2.5 mi. SW. of, 4.2 mi. along interstate pipe line E. of Bivins Booster Sta., 0.5 mi. N. of Moore-Potter county line, 24 ft. S. of rd. and cattle guard in N.-S. fence, on W. side of fence, in concrete post; standard tablet stamped "T T 43 L 1933"-----	Feet 3, 625. 155
Sneed's South Camp, 3.3 mi. SW. of, at quarter corner between secs. 83 and 92, block O 18, D. & P. R. R. Co. survey, 1.6 ft. S. of corner post of T-fence E., in fence line, 20 ft. E. of center of windmill, set flush with ground; top of iron rod-----	3, 541. 52
Sneed's South Camp, 4.3 mi. SW. of, at quarter corner between secs. 92 and 93, block O 18, D. & P. R. R. Co. survey, about 0.2 mi. E. of cattle guard, 1.4 ft. W. of corner post of N.-S. and E.-W. fence lines, in E.-W. fence line, set flush with ground and surrounded by rocks; top of iron rod-----	3, 520. 73
Sneed's South Camp, 5.6 mi. SW. of, 0.9 mi. N. along R. R., thence 3.7 mi. NE. along rd. from Marsh sta., about 0.4 mi. NE. of Master-son ranch headquarters, about 1,000 ft. S. and 750 ft. E. from NW. cor. sec. 101, block O 18, D. & P. R. R. Co. survey, in SE. angle of cross fences, in concrete post; standard tablet stamped "T T 44 L 1933"-----	3, 482. 843
Marsh, 0.9 mi. N., thence 2.9 mi. NE. from, about 1,000 ft. S. of cor. secs. 64, 65, 93, and 102, block O 18, D. & P. R. R. Co. survey, 40 ft. N. of center of cattle guard in N.-S. fence line, 2 ft. S. of corner post of fence lines E. and S., under fence, set flush with ground; top of iron rod-----	3, 469. 68
Marsh, 0.9 mi. N., thence 1.5 mi. NE. from, in sec. 69, block O 18, D. & P. R. R. Co. survey, 720 ft. S. of Masterson E-2 gas well, 30 ft. E. of center of cattle guard, under fence, set flush with ground; top of iron rod-----	3, 526. 78
From Sanford quadrangle at point 1.3 miles north of Moore-Potter county line along roads generally west to road junction 4.5 miles southeast of Bivins Booster Station on U. S. Highway 87 (by C. S. Carney in 1933-34)	
Four Section Camp, 3.8 mi. SE. of, 1.3 mi. N. of Moore-Potter county line, 325 ft. E. of center of Plum Creek, 12.5 ft. W. of center line of rd., in telephone line, set in concrete; top of steel rod-----	3, 059. 74
Four Section Camp, 2.9 mi. SE. of, on top of W. wall of Plum Creek Canyon, 5 ft. E. of telephone pole, in telephone line, in limestone outcrop; standard tablet stamped "1933 3269"-----	3, 269. 133
Four Section Camp, 1.7 mi. SE. of, 15 ft. N. of center line of rd., 36 ft. S. of telephone line, on ridge between two round-topped hills, in root of mesquite tree; copper nail and washer-----	3, 317. 28
Four Section Camp, 1.0 mi. SE. of, 95 ft. N. of interstate pipe line, 90 ft. N. of telephone line, 4.5 ft. SW. of center of cattle guard, on concrete base of cattle guard; chiseled square-----	3, 315. 04
Four Section Camp, 1,500 ft. S. and 250 ft. E. from house at, 9.2 mi. along interstate pipe line E. of Bivins Booster Sta., in SE¼ sec. 14, block B 10, E. L. & R. R. R. Co. survey, 540 ft. N. of intersection of fence and pipe line, 22 ft. N. and 2 ft. E. from cattle guard, in concrete post; standard tablet stamped "T T 54 L 1933 3317"-----	3, 317. 336
Reference mark, 180 ft. W. of tablet, 20 ft. N. of rd. fork, in root of mesquite tree; copper nail and washer-----	3, 313. 40
Bivins Booster Sta., 8.5 mi. along interstate pipe line E. of, 28 ft. N. of center of cattle guard, in telephone line, 1 ft. W. of fence line, set in concrete; top of steel rod-----	3, 332. 29

Bivins Booster Sta., 7.6 mi. E. of, 50 ft. N. of rd., 15 ft. N. of telephone line, in root of mesquite tree; copper nail and washer-----	Feet 3, 381. 52
Bivins Booster Sta., 7.1 mi. E. of, 90 ft. W. of center of rd. fork, 54 ft. S. of telephone line, in concrete post; standard tablet stamped "1934 3448"-----	3, 447. 499
Bivins Booster Sta., 5.5 mi. E. of, 33 ft. N. of rd., in telephone line, 8 in. W. of telephone pole, set in concrete; top of steel rod-----	3, 549. 88

From Cliffside quadrangle at point about 2.7 miles northwest of mouth of Bonita Creek generally northwest along roads to point on Panhandle & Santa Fe Railway 0.9 mile north of Marsh station (by C. S. Carney in 1934)

Mouth of Bonita Creek, 3.7 mi. NW. of, in SE¼ sec. 18, block G & M 3, Gunter & Munson survey, 12 ft. N. and 21 ft. E. from gas line crossing prairie rd., in concrete post; standard tablet stamped "T T 12 L 1933 3369"-----	3, 369. 125
Reference mark, 90 ft. S. of tablet, in root of mesquite tree; copper nail and washer-----	3, 367. 93
Gunter & Munson survey, block G & M 3, near cor. secs. 18, 19, 20, and 22, 145 ft. N. of rd. fork, 6 in. E. of N.-S. fence line, set in concrete; top of steel rod-----	3, 408. 87
Gunter & Munson survey, block G & M 3, near quarter corner on probable line between secs. 20 and 22, 25 ft. N. and 3 ft. W. from cattle guard in N.-S. fence crossing E.-W. prairie rd., in concrete post; standard tablet stamped "T T 13 L 1933 3429"-----	3, 428. 685
Gunter & Munson survey, block G & M 3, in north half sec. 21, 8 ft. N. of center line of rd., in center line of dim abandoned crossroad, set in concrete; top of steel rod-----	3, 448. 76
Masterson G-2 gas well, about 0.8 mi. SE. of, 30 ft. N. of center of cattle guard, 1 ft. E. of fence line, set in concrete; top of steel rod--	3, 399. 60
Masterson G-2 gas well, 205 ft. N. and 460 ft. W. from, in sec. 10, block G & M 3, Gunter & Munson survey, E. of four-way rd. fork, 64 ft. S. and 37 ft. E. from SE. corner of white ranch house, at corner of yard fence, in concrete post; standard tablet stamped "T T 14 L 1933 3418"-----	3, 417. 633
Masterson G-2 gas well, about 0.6 mi. along graded rd. N. of, on summit of small knoll, 17 ft. W. of center line of rd., set in concrete; top of steel rod-----	3, 466. 60
D. & P. R. R. Co. survey, block O 18, on line between secs. 102 and 103, 12 ft. E. of center of cattle guard, 20 ft. SE. of center of four-way rd. fork, 8 in. S. of fence line, set in concrete; top of steel rod----	3, 518. 57

From point east of Canadian River generally north across country to point east of Plum Creek and 1.3 miles north of Moore-Potter county line (by C. S. Carney in 1934)

H. & T. C. R. R. Co. survey, block 46, near NW. cor. sec. 106, on SE. side of Canadian River, in root of tree, one of clump of four 8-in. cottonwood trees; copper nail and washer-----	2, 929. 87
H. & T. C. R. R. Co. survey, block 47, in SE¼ sec. 61, on NW. side of Canadian River, at windmill, 5 ft. E. of center of well, on top of 6-in. well casing set in ground; chiseled cross-----	2, 924. 38
H. & T. C. R. R. Co. survey, block 47, in N½ sec. 60, in floor of and against W. wall of canyon, on boulder; chiseled square-----	3, 003. 75
H. & T. C. R. R. Co. survey, block 47, in sec. 60, on top of ridge, at large rock monument, set in concrete; top of steel rod-----	3, 333. 04
Gunter & Munson survey, block G & M 3, at SE. cor. sec. 33; top of 1½-in. pipe marked "S E 33"-----	3, 294. 54



Gunter & Munson survey, block G & M 3, in S½ sec. 34, about 0.2 mi. SE. of water tank, 1,000 ft. S. of fence line, on N. wall of canyon, on rock outcrop; chiseled square.....	Feet 3, 311. 40
H. & T. C. R. R. Co. survey, block 47, on line between secs. 58 and 59, on top of bluff on S. side of Plum Creek, 30 ft. S. of edge of cliff, 70 ft. N. of fence line, 10 ft. S. of cairn, in concrete post; standard tablet stamped "T T 22 D 1933 3285".....	3, 284. 844
Gunter & Munson survey, block G & M 3, in sec. 34, 12 ft. SW. of head of deep wash, 100 ft. E. of base of W. wall of Plum Creek Canyon, 7 ft. S. of rd., in bole of 6-in. leaning mesquite tree; copper nail and washer.....	3, 008. 57
Interstate pipe line crossing Plum Creek, 1.6 mi. along creek S. of, on S. bank of wash, in root on W. side of lone 72-in. cottonwood tree; copper nail and washer.....	2, 997. 38
Interstate pipe line crossing Plum Creek, 0.5 mi. S. of, 35 ft. S. of S. edge of creek at S-bend, in root in center of clump of five cottonwood trees; copper nail and washer.....	3, 015. 52
Near center of east side of northeast quarter of quadrangle, along road west 0.1 mile, thence north across country 0.9 mile, thence east 0.1 mile (by C. S. Carney in 1934)	
[A jog from Sanford quadrangle]	
T. & N. O. R. R. Co. survey, block 6 T, in SE. cor. sec. 44, 12.0 mi. E. of junction of U. S. Highway 87 and State Highway 5 at Fourways, 2 ft. N. and 3 ft. W. from fence corner, on N. side of rd., in concrete post; standard tablet stamped "T T 11 D 1933 3342".....	3, 341. 677
T. & N. O. R. R. Co. survey, block 6 T, 750 ft. S. of NE. cor. sec. 43, on E. concrete base of cattle guard; chiseled square.....	3, 321. 36
From point 0.2 mile east of Brown ranch generally northeast across country and along roads into Dumas No. 1 quadrangle near mouth of Grapevine Creek (by F. J. Fricke in 1934) <sup>24</sup>	
Brown ranch headquarters, 1.3 mi. NE. of, near NW. cor. sec. 32, block 6 T, T. & N. O. R. R. Co. survey, 225 ft. S. of center of Grapevine Creek, 25 ft. N. of bend in main rd. and junction of dim rd., set flush with ground and surrounded by rocks; top of iron rod.....	3, 300. 42
T. & N. O. R. R. Co. survey, block 6 T, sec. 32, 65 ft. S. of center of Grapevine Creek, in root on S. side of lone 36-in. cottonwood tree; copper nail and washer.....	3, 278. 54
T. & N. O. R. R. Co. survey, block 6 T, about 2,000 ft. N. of cor. secs. 21, 22, 31, and 32, in N.-S. fence line, on W. end of N. concrete foundation of cattle guard, level with rd.; chiseled square.....	3, 376. 31
T. & N. O. R. R. Co. survey, block 6 T, 1 ft. S. and 3 ft. E. from fence corner at cor. secs. 22, 23, 30, and 31, in concrete post; standard tablet stamped "T T 9 D 1933".....	3, 321. 085
T. & N. O. R. R. Co. survey, block 6 T, in NW. cor. sec. 29, 45 ft. S. of T-fence W., 1.8 ft. S. of corner post of T-fence E., 110 ft. N. of center of gate, under fence, set flush with ground and surrounded by rocks; top of iron rod.....	3, 320. 70
T. & N. O. R. R. Co. survey, block 6 T, 3 ft. S. and 19 ft. W. from iron pipe at cor. secs. 24, 25, 28, and 29, 3 ft. S. and 2 ft. E. from fence corner, in concrete post; standard tablet stamped "T T 10 D 1933".....	3, 241. 858

<sup>24</sup> This line cuts the northwest corner of Sanford quadrangle, but no bench marks were established along that portion of the line.

T. & N. O. R. R. Co. survey, block 6 T, about 0.2 mi. S. of N. cor. secs. 25 and 26, 225 ft. N. of center of Grapevine Creek, 60 ft. S. of 2½-in. surface pipe line, 22 in. S. of S. post of twin gates in N.-S. fence line, under fence, set flush with ground and surrounded by rocks; top of iron rod..... Feet  
3, 092. 63

## HAMLIN QUADRANGLE

[Latitude 32°45'-33°00'; longitude 100°00'-100°15']

## FISHER, JONES, AND STONEWALL COUNTIES

From Rule quadrangle southwest along Kansas City, Mexico & Orient Railway <sup>25</sup>  
into Noodle quadrangle (by E. E. Harris in 1925)

Sagerton, 6.6 mi. SW. of, 240 ft. S. of milepost 595, on E. side of track, 15 ft. E. of fence line, in root on E. side of small mesquite tree; copper nail and washer..... 1, 636. 90

Sagerton, 7.8 mi. SW. of, 1,400 ft. S. of milepost 596, on E. side of track, 180 ft. S. of crossroads, 50 ft. E. of dirt rd., in root on S. side of leaning mesquite tree; copper nail and washer..... 1, 649. 93

Sagerton, 8.9 mi. SW. of, 8.6 mi. NE. of Hamlin, 1,700 ft. S. of milepost 597, on E. side of track, on E. side of dirt rd., 12 ft. N. and 2 ft. W. from angle in fence line, in concrete post; standard tablet stamped "H 270 1925" (recovered by U. S. C. & G. S. in 1933).... 1, 660. 774

Reference mark, 95 ft. S.75°W. of tablet, in crotch of mesquite tree; copper nail and washer..... 1, 661. 06

Hamlin, 7.0 mi. NE. of, in NE. angle of rd. crossing, 80 ft. N. and 20 ft. E. from T-angle in fence line, in root on N. side of leaning mesquite tree; copper nail and washer..... 1, 679. 66

Hamlin, 5.3 mi. NE. of, 60 ft. E. of track, on N. side of rd., in NE. corner of T-angle in fence line, 4 ft. from each fence, in concrete post; standard tablet stamped "H 270 A 1925" (recovered by U. S. C. & G. S. in 1933)..... 1, 690. 088

Reference mark, 60 ft. N.40°E. of tablet, in root on S. side of leaning mesquite tree; copper nail and washer..... 1, 690. 90

Hamlin, 2.7 mi. NE. of, 1,100 ft. S. of milepost 603, in SE. angle of rd. crossing, 3 ft. E. of fence line, in concrete post; standard tablet stamped "H 271 1925" (recovered by U. S. C. & G. S. in 1933).... 1, 707. 726

Hamlin, 1.0 mi. NE. of, in SE. angle of crossing of State highway E. to Stamford, in crotch of mesquite tree; copper nail and washer.... 1, 713. 08

Hamlin, in front of sta.; top of rail..... 1, 720. 8

Hamlin, 600 ft. SW. of sta., in NW. angle of crossing of State highway S. to Sweetwater, in SE. corner of SE. concrete foundation of city water tank; standard tablet stamped "H 272 1925" (recovered by U. S. C. & G. S. in 1933)..... 1, 718. 245

Reference mark, 154 ft. W. of tablet, in root on N. side of 12-in. mesquite tree; copper nail and washer..... 1, 717. 26

Hamlin, 1.0 mi. SW. of, 650 ft. N. of milepost 607, on E. side of track, in SW. corner of crossroads, in center of W. side of concrete bridge over ditch; chiseled square..... 1, 724. 51

Hamlin, 2.2 mi. SW. of, on E. side of track, on E. side of rd., in fence line, in root on N. side of mesquite tree; copper nail and washer.... 1, 748. 97

Hamlin, 3.3 mi. SW. of, at Y-rd. fork, just NE. of rd. crossing, in angle in fence line, in concrete post; standard tablet stamped "H 273 1925" (recovered by U. S. C. & G. S. in 1933)..... 1, 776. 401

<sup>25</sup> Now the Panhandle & Santa Fe Railway.

Reference mark, 90 ft. N. 20° W. of tablet, in root on N. side of small mesquite tree; copper nail and washer-----	<i>Feet</i> 1, 776. 31
Hamlin, 5.5 mi. SW. of, 3.0 mi. NE. of McCaulley, on W. side of track, in NW. angle of rd. junction, in L-angle in fence line, 4 ft. from each fence, in stone post; standard tablet stamped "H 274 1925"-----	1, 803. 830
Reference mark, 60 ft. N. of tablet, in fence line, in root on S. side of lone mesquite tree; copper nail and washer-----	1, 804. 20
McCaulley, 1.0 mi. NE. of, on E. side of track, on E. side of State highway, 100 ft. S. of angle in forks of rd. crossing R. R., 20 ft. E. of fence line, in root on S. side of leaning mesquite tree; copper nail and washer-----	1, 855. 90
McCaulley, in front of sta.; top of rail-----	1, 883. 0
McCaulley, 200 ft. SE. of sta., on E. side of dirt rd., 25 ft. S. and 2 ft. W. from angle in fence line, in concrete post; standard tablet stamped "H 275 1925"-----	1, 880. 577
Reference mark, 70 ft. N. of tablet, in root on E. side of small mesquite tree; copper nail and washer-----	1, 880. 12
McCaulley, 1. 8 mi. SW. of, 360 ft. S. of milepost 616, 100 ft. N. and 100 ft. W. from highway crossing, in root on S. side of mesquite tree; copper nail and washer-----	1, 879. 98

#### IDEAL QUADRANGLE<sup>28</sup>

[Latitude 36°00'-36°30'; longitude 101°30'-102°00']

#### HANSFORD, HUTCHINSON, MOORE, AND SHERMAN COUNTIES

From Dumas No. 2 quadrangle along roads north and northwest into Stratford quadrangle (by E. E. Harris in 1927)

Dumas, 0.5 mi. E., thence 10.4 mi. N. from, 7.6 mi. S. of Palo Duro School, in NW. corner of farm rd. crossing, 4 ft. N. and 3 ft. W. from T-angle in fence line, in concrete post; standard tablet stamped "H 53 1927"-----	3, 593. 408
Reference mark, 108.9 ft. S. of tablet, 1 ft. W. of fence line, 4 in. under ground; iron hub-----	3, 592. 65
Palo Duro School, 6.6 mi. S. of, on E. side of angle in rd., in SE. corner of farm rd. crossing, in L-angle in fence line, 2 ft. from each fence; iron hub-----	3, 588. 00
Palo Duro School, 5.6 mi. S. of, on E. side of rd., 3 ft. N. and 3 ft. E. from L-angle in fence line, in concrete post; standard tablet stamped "H 54 1927"-----	3, 580. 129
Reference mark, 50 ft. E. of tablet, 1 ft. N. of fence line, 4 in. under ground; iron hub-----	3, 579. 45
Palo Duro School, 4.6 mi. S. of, on E. side of rd., at jog in fence line, 3 ft. from each fence; iron hub-----	3, 580. 51
Palo Duro School, 3.6 mi. S. of, on E. side of rd., 3 ft. S. and 3 ft. E. from T-angle in fence line, in concrete post; standard tablet stamped "H 55 1927"-----	3, 579. 411
Reference mark, 223.3 ft. S. of tablet, 1 ft. E. of fence line, 4 in. under ground; iron hub-----	3, 578. 50
Palo Duro School, 2.5 mi. S. of, on E. side of rd., 10 ft. S. of lane E. through gate, 1 ft. W. of fence line; iron hub-----	3, 588. 02
Palo Duro School, 1. 6 mi. S. of, in SE. angle of crossroads, 2 ft. E. of gatepost, in concrete post; standard tablet stamped "H 56 1927"-----	3, 579. 817

<sup>28</sup> The figures of elevation given are preliminary figures based on the 1929 general adjustment; additional leveling may necessitate further adjustment.

Reference mark, 151.5 ft. S. of tablet, 1 ft. E. of fence line, 4 in. under ground; iron hub-----	Feet 3, 578. 88
Palo Duro School, 0.5 mi. S. of, on E. side of rd., 3 ft. S. and 3 ft. E. from T-angle in fence line; iron hub-----	3, 556. 31
Palo Duro School, 0.5 mi. N. of, on E. side of rd., 50 ft. S. of gate, 1 ft. E. of fence line; iron hub-----	3, 558. 29
Palo Duro School, 1.5 mi. N. of, 4.1 mi. W. of Spurlock School, on E. side of rd., 3 ft. N. and 3 ft. E. from T-angle in fence line at gate, in concrete post; standard tablet stamped "H 57 1927"-----	3, 571. 568
Reference mark, 80 ft. S. of tablet, 1 ft. E. of fence line; iron hub----	3, 571. 18
Palo Duro School, 2.5 mi. N. of, in SE. corner of farm rd. crossing, 2 ft. S. and 2 ft. E. from L-angle in fence line; iron hub-----	3, 588. 15
Palo Duro School, 3.5 mi. N. of, on E. side of rd., 2 ft. S. and 2 ft. E. from L-angle in fence line, in concrete post; standard tablet stamped "H 73 1927"-----	3, 586. 606
Reference mark, 212 ft. S. of tablet, 1 ft. E. of fence line, 4 in. under ground; iron hub-----	3, 587. 26
Palo Duro School, 4.5 mi. N. of, on E. side of rd., 50 ft. SW. of wind-mill, 1 ft. W. of fence line; iron hub-----	3, 563. 06
Palo Duro School, 5.5 mi. N. of, in SE. corner of crossroads, 3 ft. S. and 3 ft. E. from L-angle in fence line, in concrete post; standard tablet stamped "H 74 1927"-----	3, 553. 159
Reference mark, 122.1 ft. S. of tablet, 1 ft. E. of fence line, 4 in. under ground; iron hub-----	3, 553. 27
Palo Duro School, 6.4 mi. N. of, on E. side of rd., on top of 40-in. drain pipe; bolt head within chiseled square-----	3, 550. 00
Palo Duro School, 7.6 mi. N. of, on W. side of rd., on N. side of private rd. W., 6 ft. N. and 6 ft. W. from L-angle in fence line, in concrete post; standard tablet stamped "H 75 1927"-----	3, 569. 393
Reference mark, 52.2 ft. E. of tablet, 4 in. under ground; iron hub----	3, 568. 48
Palo Duro School, 8.6 mi. N. of, on E. side of rd., 3 ft. N. and 3 ft. E. from L-angle in fence line; iron hub-----	3, 575. 16
Palo Duro School, 9.7 mi. N. of, on E. side of rd., 10 ft. S. and 3 ft. E. from jog in fence line, in concrete post; standard tablet stamped "H 76 1927"-----	3, 564. 145
Reference mark, 167.5 ft. S. of tablet, 1 ft. E. of fence line, 4 in. under ground; iron hub-----	3, 563. 47
Palo Duro School, 10.6 mi. N. of, on E. side of rd., 1 ft. N. and 12 ft. E. from T-angle in fence line; iron hub-----	3, 574. 91
Palo Duro School, 11.6 mi. N. of, on E. side of rd., 15 ft. S. and 2 ft. W. from jog in fence line, in concrete post; standard tablet stamped "H 77 1927"-----	3, 575. 529
Reference mark, 194.6 ft. S. of tablet, 1 ft. E. of fence line, 4 in. under ground; iron hub-----	3, 575. 70
Palo Duro School, 13.6 mi. N. of, in NW. angle of junction of private rd. W., 3 ft. N. and 3 ft. W. from L-angle in fence line, in concrete post; standard tablet stamped "H 78 1927"-----	3, 591. 259
Reference mark, 154.2 ft. S.45°E. of tablet, 1 ft. E. of fence line, 4 in. under ground; iron hub-----	3, 590. 39
Palo Duro School, 14.6 mi. N. of, 6.7 mi. SE. of Stratford, on W. edge of turn in rd. to W., 2 ft. S. of angle in fence line; iron hub-----	3, 592. 41
Stratford, 5.7 mi. SE. of, on S. side of rd., 4 ft. S. and 4 ft. W. from T-angle in fence line, in concrete post; standard tablet stamped "H 79 1927"-----	3, 599. 485

Reference mark, 92.4 ft. E. of tablet, 1 ft. S. of fence line, 4 in. under ground; iron hub-----	Feet 3, 598. 56
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From Dumas No. 1 quadrangle north and northwest along roads by way of Ideal to point 4.1 miles west of Spurlock School (by E. E. Harris in 1927)

Beede, 7.4 mi. N. of, in NE. angle of crossroads, 100 ft. E. of Hutchin-son-Moore county line, 1 ft. S. and 30 ft. E. from gate in fence line crossing rd.; iron hub-----	3, 352. 58
Beede, 8.5 mi. N. of, in SE. corner of crossroads; iron hub-----	3, 343. 47
Beede, 9.0 mi. N. of, 0.6 mi. SE. of Phillips ranch house, in SE. corner of rd. fork, 3 ft. S. and 3 ft. E. from T-angle in fence line at gate across rd., in concrete post; standard tablet stamped "H 61 1927"-----	3, 339. 357
Reference mark, 300 ft. S. of tablet, 1 ft. W. of fence line, 4 in. under ground; iron hub-----	3, 338. 60
Phillips ranch house, 500 ft. NW. of, in SE. corner of angle in rd., 3 ft. S. and 3 ft. E. from L-angle in fence line; iron hub-----	3, 323. 75
Phillips ranch house, 0.7 mi. NW. of, 150 ft. N. of rd. fork; iron hub--	3, 339. 24
Phillips ranch house, 1.6 mi. NW. of, 0.5 mi. E., thence 0.8 mi. S. from Ideal, on W. side of angle in rd. N. through gate, 5 ft N. and 5. ft. W. from T-angle in fence line, in concrete post; standard tablet stamped "H 62 1927"-----	3, 362. 702
Reference mark, 99.7 ft. E. of tablet, 1 ft. N. of fence line, 4 in. under ground; iron hub-----	3, 361. 30
Ideal, 0.5 mi. E. of, on E. side of rd., 30 ft. S. of jog in fence line; iron hub-----	3, 367. 12
Ideal, 100 ft. SW. of post office, 2 ft. N. and 2 ft. E. from L-angle in fence line, in concrete post; standard tablet stamped "H 63 1927"--	3, 374. 053
Reference mark, 151.2 ft. E. of tablet, 2 ft. N. and 2 ft. W. from T-angle in fence line, 4 in. under ground; iron hub-----	3, 373. 06
Ideal, 1.2 mi. along Spurlock rd. W. of, in NE. corner of rd. fork, 20 ft. E. of cattle guard, 1 ft. S. of fence line; iron hub-----	3, 393. 67
Ideal, 2.0 mi. NW. of, in Blake Draw of Palo Duro Creek, in NW. corner of crossroads, in concrete post; standard tablet stamped "H 64 1927"-----	3, 296. 806
Reference mark, 146.8 ft. S.60°E. of tablet, 4 in. under ground; iron hub-----	3, 293. 37
Ideal, 3.0 mi. NW. of, on S. side of rd. fork, at gate, in fence corner; iron hub-----	3, 401. 49
Ideal, 4.3 mi. NW. of, 90 ft. N. of angle in rd., at T-angle in fence line, in concrete post; standard tablet stamped "H 65 1927"-----	3, 427. 399
Reference mark, 75.2 ft. E. of tablet, 1 ft. S. of fence line, 4 in. under ground; iron hub-----	3, 426. 27
Ideal, 5.4 mi. NW. of, 80 ft. N. of rd., 30 ft. S. and 30 ft. E. from T-angle in fence line; iron hub-----	3, 437. 41
Ideal, 6.4 mi. NW. of, on W. side of angle in rd. NW. through gate, 20 ft. N. and 2 ft. W. from T-angle in fence line, in concrete post; standard tablet stamped "H 66 1927"-----	3, 450. 597
Reference mark, 173.7 ft. E. of tablet, 1 ft. N. of fence line, 4 in. under ground; iron hub-----	3, 449. 56
Ideal, 7.2 mi. NW. of, 100 ft. from rd. fork, equidistant from each rd.; iron hub-----	3, 451. 31

Ideal, 7.9 mi. NW. of, 60 ft. SW. of angle in rd., 170 ft. W. of cattle guard, 4 ft. S. of fence line, in concrete post; standard tablet stamped "H 67 1927"-----	Feet 3, 461. 885
Reference mark, 200 ft. E. of tablet; top of zinc post-----	3, 461. 35
Ideal, 9.2 mi. NW. of, 1,100 ft. S. of house, in wye of rd. fork, 100 ft. from fork; iron hub-----	3, 477. 87
Ideal, 10.3 mi. NW. of, on N. side of angle in rd. NW., 3 ft. N. and 3 ft. E. from L-angle in fence line, in concrete post; standard tablet stamped "H 68 1927"-----	3, 498. 971
Reference mark, 141 ft. E. of tablet, 1 ft. N. of fence line, 4 in. under ground; iron hub-----	3, 497. 57
Ideal, 11.5 mi. NW. of, 40 ft. S. of rd., 1 ft. E. of fence line crossing rd.; iron hub-----	3, 505. 27
Ideal, 12.3 mi. NW. of, 3.3 mi. E. of Spurlock School, on S. side of angle in rd., 3 ft. S. and 3 ft. W. from L-angle in fence line, in concrete post; standard tablet stamped "H 69 1927"-----	3, 506. 837
Reference mark, 55.8 ft. S. of tablet, 1 ft. W. of fence line, 4 in. under ground; iron hub-----	3, 505. 81
Spurlock School, 2.5 mi. E. of, on S. side of rd., 20 ft. W. of gate, 1 ft. S. of fence line; iron hub-----	3, 532. 80
Spurlock School, 1.9 mi. E. of, in NE. corner of crossroads, 3 ft. N. and 3 ft. E. from L-angle in fence line, in concrete post; standard tablet stamped "H 70 1927"-----	3, 545. 880
Reference mark, 93.2 ft. E. of tablet, 1 ft. N. of fence line, 4 in. under ground; iron hub-----	3, 546. 37
Spurlock School, 0.9 mi. E. of, in SE. corner of farm rd. crossing, 2 ft. S. and 2 ft. E. from T-angle in fence line; iron hub-----	3, 544. 03
Spurlock School, 470 ft. W. of, in NW. angle of crossroads, 3 ft. N. and 3 ft. W. from L-angle in fence line, in concrete post; standard tablet stamped "H 71 1927"-----	3, 532. 901
Reference mark, 100.6 ft. S.45°E. of tablet, 1 ft. S. of fence line, 4 in. under ground; iron hub-----	3, 533. 52
Spurlock School, 1.1 mi. W. of, in SW. corner of farm rd. crossing, 1 ft. S. and 4 ft. W. from gatepost; iron hub-----	3, 527. 27
Spurlock School, 2.4 mi. W. of, 150 ft. E. of abandoned house, 15 ft. E. of rd. through gate, 2 ft. S. of fence line, in concrete post; standard tablet stamped "H 72 1927"-----	3, 544. 205
Reference mark, 76.3 ft. E. of tablet, 1 ft. N. of fence line, 4 in. under ground; iron hub-----	3, 543. 68
Spurlock School, 3.1 mi. W. of, 1.5 mi. N., thence 1.0 mi. E. from Palo Duro School, on N. side of dim rd., 1 ft. S. and 100 ft. E. from T-angle in fence line; iron hub-----	3, 552. 01

LEFORS QUADRANGLE<sup>27</sup>

[Latitude 35°00'-35°30'; longitude 100°30'-101°00']

## COLLINGSWORTH, GRAY, DONLEY, AND WHEELER COUNTIES

From McLean alternately north and west along roads by way of Lefors into Miami No. 3 quadrangle (by Tom Carney in 1928)

U. S. C. & G. S. standard disk stamped "S 9 1909"-----	2, 858. 715
McLean, 0.5 mi. W., thence 0.5 mi. N. from Chicago, Rock Island & Pacific Ry. sta. at, 700 ft. E. of cemetery, at junction of T-rd., on S. side of rd.; iron hub-----	2, 893. 40

<sup>27</sup> The figures of elevation given are preliminary figures based on the 1929 general adjustment; additional leveling may necessitate further adjustment.

McLean, 0.5 mi. W., thence 1.5 mi. N. from, 50 ft. E. of junction of T-rd. W., at farm of S. A. Cousin, in SW. corner of orchard, in concrete post; standard tablet stamped "TC 1 1926"-----	<i>Feet</i> 2, 846. 991
Reference mark, 60 ft. W. of tablet, in NE. corner of field; iron hub-----	2, 844. 66
McLean, 0.5 mi. W., thence 2.5 mi. N. from, 35 ft. W. of rd., in SW. angle of line fence; iron hub-----	2, 767. 96
McLean, 0.5 mi. W., thence 3.5 mi. N. from, 1,500 ft. S. of residence of J. B. Hart, in NW. angle of crossroads, in concrete post; standard tablet stamped "TC 2 1926"-----	2, 799. 243
Reference mark, 400 ft. NE. of tablet, on E. side of rd., on top of chalk mound; iron hub-----	2, 782. 73
McLean, 0.5 mi. W., thence 4.5 mi. N. from, in SW. angle of section-line fence W.; iron hub-----	2, 729. 22
McLean, 0.5 mi. W., thence 5.8 mi. N. from, 0.5 mi. S. of crossing of McClellan Creek, 60 ft. E. of junction of rd. W., in concrete post; standard tablet stamped "TC 3 1926"-----	2, 678. 350
McLean, 0.5 mi. W., thence 6.5 mi. N. from, 200 ft. S. of McClellan Creek, 3 ft. E. of fence, in root of willow tree; copper nail and washer-----	2, 560. 33
McLean, 0.5 mi. W., thence 6.6 mi. N. from, 500 ft. N. of McClellan Creek, 60 ft. W. of rd., in root of double cottonwood tree; copper nail and washer-----	2, 554. 03
McLean, 0.5 mi. W., thence 7.5 mi. N. from, in NE. angle of rd. junction, in concrete post; standard tablet stamped "TC 4 1926" (recovered by U. S. C. & G. S. in 1935)-----	2, 656. 973
Reference mark, 100 ft. W. of tablet, in SE. angle of rd. junction; iron hub-----	2, 654. 22
McLean, 1.5 mi. W. and 7.5 mi. N. from, in SE. corner of section owned by Mrs. Ella Cubine; iron hub-----	2, 672. 18
McLean, 2.5 mi. W. and 7.5 mi. N. from, 35 ft. N. of center line of rd., in NE. angle of line fence N., in concrete post; standard tablet stamped "TC 5 1926" (recovered by U. S. C. & G. S. in 1935)-----	2, 713. 594
Reference mark, 160 ft. E. of tablet, in fence line; iron hub-----	2, 712. 34
McLean, 4.5 mi. W. and 7.5 mi. N. from, 6.2 mi. S. and 7.0 mi. E. from Lefors, 35 ft. N. of center line of rd., in NW. angle of line fence N., in concrete post; standard tablet stamped "TC 6 1926" (recovered by U. S. C. & G. S. in 1935)-----	2, 821. 070
Reference mark, 100 ft. W. of tablet, 35 ft. N. of center line of rd.; iron hub-----	2, 823. 30
Lefors, 6.2 mi. S. and 5.8 mi. E. from Gray County courthouse at, at gatepost, in rd.; iron hub-----	2, 880. 11
Lefors, 6.2 mi. S. and 4.8 mi. E. from, 35 ft. N. of center line of rd., 50 ft. E. of line fence N., in concrete post; standard tablet stamped "TC 7 1926" (recovered by U. S. C. & G. S. in 1935)-----	2, 932. 809
Reference mark, 660 ft. W. of tablet, on N. side of rd., in fence line; iron hub-----	2, 937. 15
Lefors, 6.2 mi. S. and 3.7 mi. E. from, 35 ft. N. of center line of rd., on hilltop, in pasture; iron hub-----	2, 967. 94
Lefors, 6.2 mi. S. and 2.6 mi. E. from, 35 ft. N. of center line of rd., in pasture, in concrete post; standard tablet stamped "TC 8 1926"-----	2, 991. 686

Reference mark, 160 ft. E. of tablet, 35 ft. N. of center line of rd.; iron hub-----	Feet 2, 997. 56
Lefors, 5.8 mi. S. and 2.1 mi. E. from, 35 ft. N. of center line of rd., in NE. angle of line fence; iron hub-----	2, 974. 36
Lefors, 5.8 mi. S., thence 1.0 mi. E. from, on W. side of rd., in NW. angle of line fence, in concrete post; standard tablet stamped "TC 9 1926" (recovered by U. S. C. & G. S. in 1935)-----	3, 026. 241
Reference mark, 250 ft. N. of tablet, in fence line; iron hub-----	3, 015. 12
Lefors, 4.7 mi. S., thence 1.0 mi. E. from, 35 ft. W. of center line of rd., in fence line; iron hub-----	2, 998. 21
Lefors, 3.8 mi. S., thence 1.0 mi. E. from, 35 ft. W. of center line of rd., in NW. angle of line fence, in concrete post; standard tablet stamped "TC 10 1926" (recovered by U. S. C. & G. S. in 1935)-----	2, 930. 496
Reference mark, 450 ft. S. of tablet, in fence line; iron hub-----	2, 940. 32
Lefors, 2.8 mi. S., thence 1.0 mi. E. from, 35 ft. E. of center line of rd., in SE. angle of line fence; iron hub-----	2, 965. 61
Lefors, 2.6 mi. S. of, 35 ft. N. of center line of rd., 90 ft. E. of turn N., in concrete post; standard tablet stamped "TC 11 1926" (recovered by U. S. C. & G. S. in 1935)-----	2, 925. 273
Reference mark, 200 ft. N. of tablet, in fence line; iron hub-----	2, 919. 71
Lefors, 1.9 mi. S. of, 0.4 mi. S. of Turkey Creek, 35 ft. E. of center line of rd., on hilltop, in fence line; iron hub-----	2, 846. 90
Lefors, 1.5 mi. S. of, 150 ft. S. of Turkey Creek, on E. side of rd., in fence line, in root of 24-in. cottonwood tree; copper nail and washer-----	2, 775. 48
Turkey Creek; surface of water May 29, 1926-----	2, 771. 0
Lefors, 0.6 mi. S. of, 710 ft. N. of bend in North Fork of Red River, on ridge, near grove of cottonwood trees, in concrete post; standard tablet stamped "TC 12 1926" (recovered by U. S. C. & G. S. in 1934)-----	2, 784. 679
Lefors, at courthouse, in NE. corner of yard; iron hub-----	2, 801. 78
Lefors, 0.6 mi. NW. of courthouse, 50 ft. N. of NW. corner of town site section, in SW. corner of orchard, in concrete post; standard tablet stamped "TC 13 1926" (recovered by U. S. C. & G. S. in 1934)-----	2, 811. 372
Reference mark, 200 ft. N. of tablet, on E. side of rd., in orchard fence line; iron hub-----	2, 811. 81
Lefors, 1.4 mi. N. of, 50 ft. N. of turn to W. in Lefors-Pampa rd., in fence line; iron hub-----	2, 947. 60
Lefors, 1.4 mi. N., thence 0.9 mi. W. from, 30 ft. N. of rd., at curve NW., in concrete post; standard tablet stamped "TC 14 1926" (recovered by U. S. C. & G. S. in 1934)-----	2, 918. 925
Reference mark, 420 ft. E. of tablet, 35 ft. N. of center line of rd.; iron hub-----	2, 899. 24
Lefors, 2.5 mi. N. and 0.9 mi. W. from, 200 ft. N. of curve NW. in rd., 8 ft. E. of telegraph line; iron hub-----	2, 958. 68
Lefors, 2.9 mi. N. and 1.4 mi. W. from, at curve to NW. in rd., 50 ft. N. of center line of rd., in concrete post; standard tablet stamped "TC 15 1926"-----	3, 059. 200
Reference mark, 640 ft. E. of tablet, 28 ft. N. of center line of rd.; iron hub-----	3, 080. 26



## LONGWORTH QUADRANGLE

[Latitude 32°30'-32°45'; longitude 100°15'-100°30']

## FISHER AND NOLAN COUNTIES

From point 2.9 miles north of Longworth along roads north by way of Roby into  
 Rotan quadrangle (by E. R. Martin in 1924)

Roby, 75 ft. from Fisher County courthouse, in NW. corner of county jail, about 1 ft. from ground; standard tablet stamped "M 7 1924"	Feet 1, 970. 853
Reference mark, at W. entrance of courthouse, in S. end of first step, at junction of step and balustrade, in copper bolt 1 in. in diameter set in stone; copper nail and washer	1, 970. 76

From Sweetwater quadrangle north along Roby road to Longworth (by E. R. Martin  
 in 1924; releveled by E. E. Harris in 1925)

Sweetwater, 7.8 mi. NE. of, on S. side of rd., in SW. end of SE. shoulder of concrete culvert; standard tablet stamped "M 2 1924"	2, 083. 179
Reference mark, 25 ft. NW. of tablet, in end of NW. shoulder of concrete culvert; square hole	2, 083. 62
Sweetwater, 10.4 mi. NE. of, on S. side of rd., in top of SE. shoulder of concrete culvert; square hole	2, 111. 04
Sweetwater, 11. 6 mi. NE. of, 0.6 mi. SW. of Palava, on S. side of rd., on S. shoulder of concrete culvert; standard tablet stamped "M 3 1924"	2, 132. 664
Reference mark, 30 ft. from tablet, in top of N. shoulder of same culvert; square hole	2, 132. 44
Palava, in NE. corner of junction of rd. E. to Abilene, on E. end of concrete culvert; chiseled cross	2, 153. 23
Palava, 3.2 mi. N. of, 1.8 mi. S. of Longworth, 150 ft. E. of residence of W. A. Hale, near S. line of house, 2 ft. N. of corner fence post, in concrete pier; standard tablet stamped "M 4 1924"	2, 023. 026
Reference mark, 158 ft. from tablet, at NE. corner of residence, on concrete foundation; chiseled cross	2, 028. 16
Longworth, 0.7 mi. S. of, about 740 ft. S. of R. R. crossing, in W. end of S. abutment of 75-ft. concrete bridge; chiseled cross	1, 956. 14
Longworth, just W. of Kansas City, Mexico & Orient Ry. <sup>28</sup> sta., in SW. angle of crossroads, in W. abutment or shoulder of concrete culvert; standard tablet stamped "M 5 1924" (recovered in 1933; also recovered by U. S. C. & G. S. in 1933)	1, 968. 641

From Noodle quadrangle southwest along Kansas City, Mexico & Orient Railway to  
 Longworth (by E. E. Harris in 1925)

Sylvester, 1.1 mi. SW. of, 1,800 ft. S. of milepost 620, on inside of sharp turn in rd., at point where rd. leaves R.R., in root on S. side of small mesquite tree; copper nail and washer	1, 865. 47
Sylvester, 3.8 mi. SW. of, 3.9 mi. NE. of Longworth, in SW. corner of crossing, 70 ft. W. of track, in SW. angle of T in fence line, 3 ft. from each fence, in stone post; standard tablet stamped "H 278 1925" (recovered by U. S. C. & G. S. in 1933)	1, 904. 481
Reference mark, 120 ft. N.30°W. of tablet, in crotch of mesquite tree; copper nail and washer	1, 903. 31
Longworth, 3.2 mi. NE. of, 100 ft. E. of crossing, on W. side of rd., at highway bridge over creek, in E. end of SW. wing wall; chiseled square	1, 902. 69

<sup>28</sup> Now the Panhandle & Santa Fe Railway.

Longworth, 1.9 mi. NE. of, 200 ft. N. of milepost 625, 100 ft. SW. of crossing, on W. side of track, on W. side of private rd. S., in angle in fence line, in crotch of mesquite tree; copper nail and washer.....	Feet 1, 935. 31
Longworth, 1.0 mi. NE. of, 900 ft. N. of milepost 626, on E. side of track, 70 ft. E. of highway, in line with T-rd. W., in crotch of mesquite tree; copper nail and washer.....	1, 949. 95

From Longworth north along Longworth-Roby road 2.9 miles (by E. R. Martin in 1924; releveled by J. M. Lawson in 1933)

Longworth, 1.1 mi. N. of, on top of NW. corner of concrete dip in highway; chiseled square (established in 1933).....	1, 996. 78
Longworth, 1. 8 mi. N. of, 60 ft. N. and 15 ft. E. from crossroads, in rock ditch of highway, on top of rock outcrop; chiseled square (established in 1933).....	2, 032. 25
Longworth, 2.4 mi. N. of, on E. side of rd., on top of E. side of E. shoulder of culvert; chiseled cross.....	2, 025. 19
Longworth, 2.9 mi. N. of, 4.2 mi. S. of Roby, in W. end of concrete culvert; standard tablet stamped "M 6 1924".....	1, 999. 068
Reference mark, 25 ft. from tablet, in E. end of concrete culvert; square hole.....	1, 999. 18

### MIAMI NO. 3 QUADRANGLE<sup>29</sup>

[Latitude 35°30'-35°45'; longitude 100°45'-101°00']

#### GRAY AND ROBERTS COUNTIES

From Lefors quadrangle north and west along roads to road junction 1 mile south and 1 mile east from Pampa, thence west along road and southwest along Panhandle & Santa Fe Railway into Plemons quadrangle (by Tom Carney in 1926)

Lefors, 3.5 mi. N. and 1.8 mi. W. from, 250 ft. SE. of rock mound, N. of curve in rd., in fence line; iron hub.....	3, 136. 68
Pampa, 2.0 mi. S. and 4.0 mi. E. from, 0.5 mi. E. of plains, 35 ft. N. of center line of rd., in concrete post; standard tablet stamped "TC 16 1926" (recovered by U. S. C. & G. S. in 1934).....	3, 163. 360
Reference mark, 230 ft. E. of tablet; iron hub.....	3, 164. 37
Pampa, 2.0 mi. S. and 3.0 mi. E. from, 100 ft. NE. of entrance to H. F. Wilcox Pampa Oil Co. field, in fence line; iron hub.....	3, 209. 66
Pampa, 2.0 mi. S. and 2.5 mi. E. from, at junction of lane N., in SW. corner of wheat field; iron hub.....	3, 213. 86
Pampa, 2.0 mi. S. and 2.0 mi. E. from, in SW. corner of pasture, in concrete post; standard tablet stamped "TC 17 1926" (recovered by U. S. C. & G. S. in 1934).....	3, 227. 133
Pampa, 2.0 mi. S. and 1.0 mi. E. from, in NE. angle of crossroads; iron hub.....	3, 233. 19
Pampa, 1.0 mi. S., thence 1.0 mi. E. from, 30 ft. N. of center line of rd., at junction of T-rd. S., 28 ft. E. of section-line fence N., in concrete post; standard tablet stamped "TC 18 1926" (recovered by U. S. C. & G. S. in 1934).....	3, 232. 936
Reference mark, 490 ft. S. of tablet, on E. side of rd., in fence line; iron hub.....	3, 231. 40
Pampa, 1.0 mi. S. of, at intersection of Pampa-Jericho and Lefors-Kings Mill rds., in NE. angle of crossroads; iron hub.....	3, 232. 37

<sup>29</sup> The figures of elevation given are preliminary figures based on the 1929 general adjustment; additional leveling may necessitate further adjustment.

Pampa, 1.0 mi. S., thence 0.5 mi. W. from, at intersection of new Pampa-Jericho highway, in NE. angle of crossroads; iron hub-----	<i>Feet</i> 3, 236. 75
Pampa, 1.0 mi. S., thence 1.0 mi. W. from, at crossroads, in SW. corner of dairy pasture, in concrete post; standard tablet stamped "TC 19 1926" (recovered by U. S. C. & G. S. in 1934)-----	3, 241. 634
Pampa, 1.0 mi. S., thence 2.0 mi. W. from, about 525 ft. S. of Panhandle & Santa Fe Ry. crossing E. of milepost 501, in NE. angle of junction of N.-S. rd.; iron hub-----	3, 249. 90

## MORITA QUADRANGLE

[Latitude 32°00'-32°15'; longitude 101°30'-101°45']

## GLASSCOCK, HOWARD, AND MARTIN COUNTIES

From Big Spring South quadrangle at point near Lees alternately southwest and northwest along roads by way of Lomax into Slaughter No. 3 quadrangle at point about 1.8 miles south and 2.4 miles east from Stanton (by S. G. Lunde in 1938)

Lees, 1.0 mi. SW. of, at cor. secs. 16, 17, 20, and 21, T. 2 S., block 33, Texas & Pacific Ry. survey, 40 ft. N. of center line of rd. at junction of private rds. N. and S., in S. side of corner post of T-fence N., 6 in. above ground; top of square-headed bolt-----	2, 555. 11
Lees, 2.0 mi. SW. of, at cor. secs. 17, 18, 19, and 20, T. 2 S., block 33, T. & P. Ry. survey, 40 ft. N. of center line of rd. at junction of private rds. N. and S., at iron-pipe cattle guard, in S. side of E. gatepost, 6 in. above ground; top of bolt-----	2, 548. 17
Lees, 3.0 mi. SW. of, at cor. secs. 13, 18, 19, and 24, T. 2 S., blocks 33 and 34, T. & P. Ry. survey, 27 ft. S. and 46 ft. E. from junction of T-rd. E., 9 ft. E. of corner fence post, in concrete post; standard tablet stamped "T T 17 C 1938 2536"-----	2, 535. 742
Lees, 3.0 mi. SW., thence 1.0 mi. NW. from, near cor. secs. 7, 12, 13, and 18, T. 2 S., blocks 33 and 34, T. & P. Ry. survey, 25 ft. E. of center line of rd., on N. side of private lane E., in W. side of corner fence post, 6 in. above ground; top of head of 60-penny spike-----	2, 518. 19
Lees, 3.0 mi. SW., thence 2.0 mi. NW. from, near cor. secs. 1, 6, 7, and 12, T. 2 S., blocks 33 and 34, T. & P. Ry. survey, 110 ft. S. of McDowell ranch pasture gate No. 2, 25 ft. W. of center line of rd., in E. side of corner post of T-fence W., 6 in. above ground; top of head of 60-penny spike-----	2, 516. 92
Lees, 3.0 mi. SW., thence 3.0 mi. NW. from, near cor. secs. 1, 6, 43, and 48, Tps. 1 and 2 S., blocks 33 and 34, T. & P. Ry. survey, 84 ft. S. and 40 ft. E. from center of rd. at fences, 93 ft. S. along fence from corner post of T-fence E., in concrete post; standard tablet stamped "T T 18 C 1938 2521"-----	2, 521. 161
Lees, 3.0 mi. SW., thence 4.0 mi. NW. from, 1.0 mi. SE., thence 5.0 mi. NE. from Lomax, near cor. secs. 37, 42, 43, and 48, T. 1 S., blocks 33 and 34, T. & P. Ry. survey, in NW. angle of junction of T-rd. W., in fence post, 6 in. above ground; top of head of 60-penny spike-----	2, 514. 85
Lomax, 1.0 mi. SE., thence 4.0 mi. NE. from, near cor. secs. 37, 38, 47, and 48, T. 1 S., block 34, T. & P. Ry. survey, 50 ft. N. of red gate marked "I. B. Cauble Hereford Farms," 15 ft. W. of windmill with 6-in. casing, in corner post of T-fence N., 6 in. above ground; top of head of 60-penny spike-----	2, 524. 55

Lomax, 1.0 mi. SE., thence 3.0 mi. NE. from, near cor. secs. 38, 39, 46, and 47, T. 1 S., block 34, T. & P. Ry. survey, 37 ft. S. and 33 ft. W. from center line of rd. at N.-S. fence, 48 ft. W. along fence from center of red gate marked "I. B. Cauble Hereford Farms," in concrete post; standard tablet stamped "T T 19 C 1938 2510"-----	Feet 2, 509. 927
Lomax, 1.0 mi. SE., thence 2.0 mi. NE. from, near cor. secs. 39, 40, 45, and 46, T. 1 S., block 34, T. & P. Ry. survey, on N. side of rd., in S. side of corner post of T-fence N., 6 in. above ground; top of head of 60-penny spike-----	2, 451. 37
Lomax, 1.0 mi. SE., thence 1.0 mi. NE. from, near cor. secs. 40, 41, 44, and 45, T. 1 S., block 34, T. & P. Ry. survey, 25 ft. N. of junction of T-rd S., in S. side of corner post of T-fence S., 6 in. above ground; top of head of 60-penny spike-----	2, 507. 28
Lomax, 1.0 mi. SE. of, near cor. secs. 41, 42, 43, and 44, T. 1 S., block 34, T. & P. Ry. survey, 10 ft. S. and 52 ft. E. from crossroads, 39 ft. E. of corner fence post, in concrete post; standard tablet stamped "T T 20 C 1938 2504"-----	2, 504. 343
Lomax, 25 ft. NW. of junction of T-rd. SW. at, near cor. secs. 31, 32, 41, and 42, T. 1 S., block 34, T. & P. Ry. survey, on top of N. end of W. head wall of culvert; chiseled square-----	2, 501. 43
Lomax, 1.0 mi. SW. of, near cor. secs. 31, 36, 37, and 42, T. 1 S., blocks 34 and 35, T. & P. Ry. survey, 45 ft. NW. of crossroads, in E. side of corner post of fences N. and W., 6 in. above ground; top of head of 60-penny spike-----	2, 516. 01
Lomax, 1.0 mi. SW., thence 1.0 mi. NW. from, near cor. secs. 25, 30, 31, and 36, T. 1 S., blocks 34 and 35, T. & P. Ry. survey, 15 ft. S. and 42 ft. E. from junction of T-rd. W., 27 ft. N. of post at angle in fence, in concrete post; standard tablet stamped "T T 21 C 1938 2510"-----	2, 510. 438
Lomax, 1.0 mi. NW. and 2.0 mi. SW. from, near cor. secs. 25, 26, 35, and 36, T. 1 S., block 35, T. & P. Ry. survey, 45 ft. NE. of center of rd. at fences N. and S., in W. side of telephone pole at angle in line, 6 in. above ground; top of head of 60-penny spike-----	2, 528. 94
Lomax, 1.0 mi. NW. and 3.0 mi. SW. from, near cor. secs. 26, 27, 34, and 35, T. 1 S., block 35, T. & P. Ry. survey, 40 ft. N. of center line of rd. at fences N. and S., 10 ft. E. of fence N., in SW. side of S. pole of double telephone pole, 6 in. above ground; top of head of 60-penny spike-----	2, 554. 14
Lomax, 1.0 mi. NW. and 4.0 mi. SW. from, near cor. secs. 27, 28, 33, and 34, T. 1 S., block 35, T. & P. Ry. survey, 50 ft. N. of center line of rd., in S. side of third pole W. of double pole in telephone line, 6 in. above ground; top of head of 60-penny spike-----	2, 558. 51
Lomax, 1.0 mi. NW. and 5.0 mi. SW. from, 1.5 mi. in air line S. and 3.5 mi. E. from Stanton, near cor. secs. 28, 29, 32, and 33, T. 1 S., block 35, T. & P. Ry. survey, on W. side of rd., 75 ft. S. and 57 ft. W. from telephone pole at angle in line, 76 ft. S. of center of cattle guard, 74 ft. S. along fence from fence angle to W., in concrete post; standard tablet stamped "T T 22 C 1938 2574"-----	2, 574. 062
Lomax, 2.0 mi. NW. and 5.0 mi. SW. from, near cor. secs. 20, 21, 28, and 29, T. 1 S., block 35, T. & P. Ry. survey, at NE. corner of cattle guard, 6 ft. W. of 4-in. iron-pipe gatepost at W. side of gate in fence line crossing rd., on top of large sharp-pointed stone projecting 6 in. above ground; painted square-----	2. 574. 84

Lomax, 2.6 mi. NW. and 5.5 mi. SW. from, 2.8 mi. NE., thence 0.5 mi. SE. from Stanton, at wooden cattle guard and gate across rd., 20 ft. W. of center of cattle guard, in base of post in N.-S. fence line, on top of reddish stone; painted square-----	Feet 2, 653. 98
From Big Spring South quadrangle at point 4.4 miles south and 0.9 mile southwest from Lees southwest about 3.7 miles along fence line and road into Dewey Lake No. 1 quadrangle (by E. W. Gouchenour in 1938 and 1939; leveled twice)	
Lees, 4.4 mi. by rd. S., thence 1.0 mi. SW. from, 12 ft. S. and 45 ft. E. from T-fence S. at cor. secs. 41, 42, 43, and 44, T. 2 S., block 34, T. & P. Ry. survey, in root of mesquite bush; copper nail and washer-----	2, 598. 92
Lees, 4.4 mi. S., thence 2.1 mi. SW. from, 350 ft. W. of iron pipe at cor. secs. 35, 36, 41, and 42, T. 2 S., block 34, T. & P. Ry. survey, 54 ft. N. of E.-W. fence, in root on N. side of twin mesquite tree; copper nail and washer-----	2, 554. 12
Lees, 4.4 mi. S., thence 3.0 mi. SW. from, near cor. secs. 33, 34, 43, and 44, T. 2 S., block 34, T. & P. Ry. survey, 19 ft. S. and 33 ft. E. from center of right-angle bend from NW. to SW. in rd., 25 ft. E. of T-fence S., 24 ft. S. of T-fence E., in concrete post; standard tablet stamped "T T 29 C 1938"-----	2, 538. 556
Lees, 4.4 mi. S., thence 4.0 mi. SW. from, 33 ft. N. of center line of rd. at cor. secs. 34, 35, 42, and 43, T. 2 S., block 34, T. & P. Ry. survey, 5 ft. N. and 2 ft. W. from corner post at T-fence N. (two orange gates at entrance to Powell ranch weaning pasture); top of 2-in. iron pipe flush with ground-----	2, 521. 78
Near west border of south half of quadrangle (by E. W. Gouchenour in 1938 and 1939; leveled twice)	
[A jog from Slaughter No. 3 quadrangle]	
Stanton, about 6.5 mi. by route SE. of, 4.0 mi. S. and 6.2 mi. in air line W. from Lomax, near cor. secs. 1, 6, 43, and 48, Tps. 1 and 2 S., blocks 35 and 36, T. & P. Ry. survey, 30 ft. S. and 51 ft. E. from junction of private T-rd. SE., 30 ft. S. of T-fence N., in concrete post; standard tablet stamped "T T 2 C 1938 2616"-----	2, 615. 785
Reference mark, 110 ft. NW. of tablet, in root of mesquite tree; copper nail and washer-----	2, 615. 57
From Slaughter No. 3 quadrangle northeast along section line 1.4 miles to road junction 5 miles southwest and 1 mile northwest from Lomax (by E. W. Gouchenour in 1938 and 1939; leveled twice)	
Lomax, 6.0 mi. SW. and 1.0 mi. NW. from, 1.7 mi. S. and 2.6 mi. E. from Stanton, along telephone line, 45 ft. S. of telephone pole, in base of W. side of mesquite tree; copper nail and washer-----	2, 647. 08
From point near Trunk flag station on Texas & Pacific Railway southwest along U. S. Highway 80 to road junction 4.4 miles northeast of Stanton, thence northwest and northeast along roads into Slaughter No. 1 quadrangle (by E. W. Gouchenour in 1938-39; leveled twice along highway)	
U. S. C. & G. S. B. M. designated "Q 14"-----	2, 472. 869
Stanton, 5.9 mi. NE. of, 93 ft. N. and 21 ft. W. from junction of rd. N. to Trunk flag sta. on T. & P. Ry., on W. side of rd. N., in root of mesquite tree; copper nail and washer-----	2, 492. 11

Stanton, 4.8 mi. NE. of, 0.4 mi. NE. of rd. N. at service sta., 30 ft. E. of crossing of private rd. and R. R. track, on NW. corner of base of electric signal box; top of bolt.....	<i>Fed</i> 2, 530. 42
Stanton, 4.4 mi. NE. of, on line between secs. 15 and 16, T. 1 S., block 35, T. & P. Ry. survey, 37 ft. S. and 42 ft. E. from junction of T-rd. N., 145 ft. S. of service sta., 3 ft. N. and 10 ft. E. from telephone pole, in concrete post; standard tablet stamped "T T 5 C 1938 2544".....	2, 544. 146
Stanton, 4.4 mi. NE., thence 1.3 mi. NW. from, about 300 ft. S. of sharp angle in rd., 80 ft. S. and 33 ft. W. from center of rd. at power line and gate in W. fence, in root on S. side of mesquite tree; copper nail and washer.....	2, 539. 91
Stanton, 4.4 mi. NE., thence 2.3 mi. NW. from, 60 ft. S. and 27 ft. E. from rd. at crossing of E.-W. fence line, in root on E. side of mesquite tree; copper nail and washer.....	2, 556. 12
Stanton, 4.4 mi. NE., thence 3.3 mi. NW. from, near cor. secs. 39, 40, 45, and 46, T. 1 N., block 35, T. & P. Ry. survey, 103 ft. S. and 10 ft. W. from junction of T-rd. E., 81 ft. S. along fence from red gate, in concrete post; standard tablet stamped "T T 6 C 1938 2546".....	2, 546. 123
Reference mark, 255 ft. NE. of tablet, on E. side of rd., in fence line, in root of mesquite tree; copper nail and washer.....	2, 543. 69
Stanton, 4.4 mi. NE., thence 4.4 mi. NW. from, about 600 ft. NW. of section line crossing rd., 15 ft. S. and 12 ft. W. from green gate of fence line W. of rd., in root on E. side of mesquite tree; copper nail and washer.....	2, 554. 23
Stanton, 4.4 mi. NE., thence 5.3 mi. NW. from, 230 ft. N. and 30 ft. W. from center of crossroads at cor. secs. 27, 28, 33, and 34, T. 1 N., block 35, T. & P. Ry. survey, in base of mesquite tree; copper nail and washer.....	2, 590. 88

## [Line jogs into Slaughter No. 3 quadrangle]

Stanton, 4.4 mi. along highway NE. and 6.5 mi. in air line N. from, at cor. secs. 22, 23, 26, and 27, T. 1 N., block 35, T. & P. Ry. survey, in base of corner post; copper nail and washer.....	2, 548. 68
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From Slaughter No. 1 quadrangle along roads alternately southeast and northeast to U. S. Highway 80, thence southwest by way of Morita to point 6.8 miles northeast of Stanton (by E. W. Gouchenour in 1938-39; leveled twice to Morita)

Morita, 3.6 mi. N. and 0.2 mi. E. in air line from, at cor. secs. 20, 21, 24, and 25, T. 1 N., block 34, T. & P. Ry. survey, at right-angle bend N. and E. in rd., on N. concrete head wall of culvert; chiseled square.....	2, 461. 07
Morita, 2.7 mi. N. and 1.0 mi. E. from, 4.6 mi. SE. along highway, thence 2.1 mi. NW. from Big Spring airport, near quarter corner between secs. 24 and 33, T. 1 N., block 34, T. & P. Ry. survey, 18 ft. S. and 20 ft. E. from intersection of rds. and fence W., 35 ft. E. of wire gate at private rd. S., in concrete post; standard tablet stamped "T T 10 C 1938 2471".....	2, 471. 488
Morita, 1.5 mi. N. and 3.0 mi. E. from, on line between secs. 33 and 34, T. 1 N., block 34, T. & P. Ry. survey, 15 ft. S. and 30 ft. E. from center of rd. at crossing of dim trail, in root of mesquite bush; copper nail and washer.....	2, 471. 03

Morita, 3.2 mi. NE. of, 4.6 mi. SW. of Big Spring airport, on line between secs. 1 and 2, T. 1 S., block 34, T. & P. Ry. survey, 145 ft. N. and 5 ft. E. from junction of rd. N., 20 ft. N. along fence from fence corner, in concrete post; standard tablet stamped "T T 11 C 1938 2462"	Feet 2, 461. 915
Reference mark, 0.27 mi. along highway SW. of tablet, in valley, on N. head wall of concrete bridge over drain; chiseled square	2, 432. 50
Morita, 1.8 mi. NE. of, about 0.2 mi. NW. of intersection of old highway, on top of concrete right-of-way stake; painted square	2, 470. 08
Morita, 0.6 mi. N. of, at junction of highway and rd. S. to village, on S. side of highway; top of square concrete right-of-way post	2, 472. 60
U. S. C. & G. S. B. M. designated "P 14"	2, 475. 487
Morita, 1.0 mi. SW. of, on S. side of highway right-of-way, 50 ft. N. of center line of T. & P. Ry. track; top of concrete right-of-way post	2, 476. 24
Morita, 2.4 mi. SW. of, 7.7 mi. NE. of Stanton, about 1,000 ft. E. of sign marked "Trunk 1 mile," 200 ft. E. of drain crossing, on S. side of highway; top of concrete right-of-way post	2, 477. 17

From point 4.4 miles northeast along U. S. Highway 80 from Stanton southwest about 1.9 miles into Slaughter No. 3 quadrangle (by E. W. Gouchenour in 1939)

Stanton, 2.8 mi. NE. of, 45 ft. N. and 6 ft. W. from junction of private rd. N. to DuPont power storage plant, on W. end of concrete culvert; chiseled square	2, 611. 71
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#### NOODLE QUADRANGLE

[Latitude 32°30'–32°45'; longitude 100°00'–100°15']

#### FISHER, JONES, NOLAN, AND TAYLOR COUNTIES

From Hamlin quadrangle southwest along Kansas City, Mexico & Orient Railway<sup>20</sup> into Longworth quadrangle (by E. E. Harris in 1925)

McCaulley, 3.1 mi. SW. of, 1.8 mi. NE. of Sylvester, 9.0 mi. E. of Roby, 100 ft. W. of rd. crossing, on S. side of rd., 2 ft. N. of fence line, 3 ft. E. of T-angle in fence line, in stone post; standard tablet stamped "H 276 1925"	1, 842. 272
Reference mark, 130 ft. N.30°W. of tablet, in crotch of prominent mesquite tree; copper nail and washer	1, 843. 21
Sylvester, 0.8 mi. NE. of, on E. side of track, 40 ft. S. of S. end of highway bridge over creek, on W. side of rd., on top of S. end of parapet of concrete culvert; chiseled square	1, 837. 33
Sylvester, just SE. of R. R. sta., at service sta. of Tom Garland, in center of W. face of NW. concrete pillar support, 1 ft. above ground; standard tablet set vertically and stamped "H 277 1925"	1, 856. 381

#### PEACOCK NO. 1 QUADRANGLE

[Latitude 33°15'–33°30'; longitude 100°00'–100°15']

#### KING AND STONEWALL COUNTIES

From Rule quadrangle along roads west, thence north, thence east into Haskell No. 2 quadrangle (by W. R. Broadus in 1925; single spur line)<sup>21</sup>

Rule, 5.5 mi. N. and 6.3 mi. W. from, 0.4 mi. S. and 47 ft. above Brazos River forks, 40 ft. S. of rd. junction, in root on E. side of 6-in. mesquite tree; copper nail and washer	1, 521. 42
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<sup>20</sup> Now the Panhandle & Santa Fe Railway.

<sup>21</sup> No bench marks were established on that portion of the line which crosses the northeast corner of Aspermont quadrangle.

## PEACOCK NO. 3 QUADRANGLE

[Latitude 33°00'-33°15'; longitude 100°15'-100°30']

## STONEWALL COUNTY

From Rotan quadrangle along Rotan-Aspermont road northeast into Aspermont quadrangle (by E. R. Martin in 1924)

	<i>Feet</i>
Rotan, 14.0 mi. NE. of, at Wright School, in concrete foundation of front porch, S. of steps, 10 in. above ground; standard tablet stamped "M 15 1924"-----	1, 875. 137
Reference mark, 275 ft. S. of schoolhouse, in top of concrete cistern; square hole-----	1, 874. 09
Rotan, 14.8 mi. NE. of, on property of W. F. Edwards, 8 ft. S. of windmill, on SW. corner of concrete tank; chiseled cross (recovered in 1925)-----	1, 884. 51
Rotan, 16.6 mi. NE. of, on property of J. W. Kennedy, 200 ft. from rd., on N. bank of creek, 30 ft. N. of windmill, in SW. corner of concrete watering trough; standard tablet stamped "M 16 1924"-----	1, 884. 844
Reference mark, 170 ft. S. of dry creek bed, 125 ft. from rd., in top of cistern; square hole (recovered in 1925)-----	1, 895. 31
Rotan, 19.7 mi. NE. of, at steel bridge over creek, in S. face of NE. abutment; standard tablet stamped "M 17 1924"-----	1, 749. 082
Reference mark, on NW. abutment of bridge; chiseled cross-----	1, 749. 68
Rotan, 23.4 mi. N. of, at green house at turn to right in rd., SW. of farmhouse of B. J. Cochran, in top of concrete cistern; square hole-----	1, 858. 71
Rotan, 23.8 mi. N. of, 11.8 mi. SW. of Stonewall County courthouse at Aspermont, at intersection of Aspermont-Peacock rd., on property of W. G. Cochran, in SW. side of base of gasoline service sta. pump; standard tablet stamped "M 18 1924"-----	1, 867. 771
Aspermont, 11.0 mi. SW. of, at schoolhouse known as Johnson's Chapel, on SW. corner of foundation, on stone; chiseled cross-----	1, 851. 22
Aspermont, 10.2 mi. SW. of, near rd., on E. side of two-room house facing S., in top of concrete cistern; square hole-----	1, 882. 77
Aspermont, 7.8 mi. SW. of, at N. side of farmhouse owned by Mrs. M. V. Guest, 6 in. below top of cistern; standard tablet stamped "M 19 1924"-----	1, 850. 815
Aspermont, 4.6 mi. SW. of, in SW. corner at point where rd. turns S., in concrete post; standard tablet stamped "M 20 1924"-----	1, 793. 915

From Rotan quadrangle at point about 2 miles northwest of Red Bluff Crossing of Double Mountain Fork of Brazos River northwest to Rotan-Aspermont road, thence southwest to point 14.8 miles northeast of Rotan (by C. E. Walker in 1925)

Red Bluff Crossing, 2.3 mi. NW. of, 0.8 mi. E. of dwelling of G. T. Sparks, in SW. corner of crossroads, 2 ft. from corner of wire fence, in concrete post; standard tablet stamped "Prim Trav Sta No 17 K 1924"-----	1, 922. 013
Red Bluff Crossing, 2.8 mi. NW. of, 16.6 mi. along Rotan-Aspermont rd. NE., thence 0.5 mi. S. from Rotan, 0.5 mi. S. of farmhouse of W. F. Edwards, at farmhouse of Frank Sparks, on SW. corner of concrete watering tank below windmill; chiseled square-----	1, 920. 64



PLEMONS QUADRANGLE<sup>23</sup>

[Latitude 35°30'–36°00'; longitude 101°00'–101°30']

## CARSON, GRAY, HUTCHINSON, AND ROBERTS COUNTIES

From Miami No. 3 quadrangle southwest along Panhandle & Santa Fe Railway  
into Claude No. 1 quadrangle (by Tom Carney in 1926)

Pampa, 3.0 mi. along R. R. SW. of, 4.0 mi. NE. of Kings Mill, at milepost 502, 30 ft. N. of center line of highway, in concrete post; standard tablet stamped "TC 20 1926" (recovered by U. S. C. & G. S. in 1935).....	Feet 3, 259. 062
Reference mark, 220 ft. W. of tablet, on S. side of track, in right-of-way fence line; iron hub.....	3, 258. 89

From Claude No. 1 quadrangle at point about 5 miles north of White Deer north and west along road by way of Pantex into Sanford quadrangle (by Tom Carney in 1926)

White Deer, 0.2 mi. W., thence 5.7 mi. N. from, in NE. angle of cross-roads; iron hub.....	3, 276. 82
White Deer, 0.2 mi. W., thence 6.7 mi. N. from, 40 ft. E. of center line of rd., in NE. angle of section-line fence; iron hub.....	3, 239. 15
White Deer, 0.2 mi. W., thence 7.7 mi. N. from, in NE. angle of cross-roads, 80 ft. N. of center line of Pampa-oil field rd., in concrete post; standard tablet stamped "TC 29 1926".....	3, 243. 584
Reference mark, 920 ft. S. of tablet, on E. side of rd., in fence line; iron hub.....	3, 226. 36
White Deer, 1.2 mi. W. and 7.7 mi. N. from, 40 ft. N. of center line of Pampa-oil field rd., at U-curve, in SW. corner of pasture; iron hub.....	3, 175. 99
White Deer, 2.2 mi. W. and 7.7 mi. N. from, 70 ft. N. of center line of rd., in concrete post; standard tablet stamped "TC 30 1926".....	3, 234. 583
White Deer, 3.2 mi. W. and 7.7 mi. N. from, 25 ft. N. of center line of rd.; iron hub.....	3, 255. 50
White Deer, 4.2 mi. W. and 7.7 mi. N. from, 100 ft. N. of center line of rd., at junction of T-rd. S., in concrete post; standard tablet stamped "TC 31 1926".....	3, 215. 619
Reference mark, 60 ft. N. of tablet; iron hub.....	3, 214. 20
White Deer, 5.6 mi. W. and 7.7 mi. N. from, at curve NW. in rd., 30 ft. S. of rd., in fence line; iron hub.....	3, 261. 44
White Deer, 6.3 mi. W. and 7.7 mi. N. from, 6.0 mi. S. and 9.7 mi. E. from Pantex, 4 ft. N. of fence, in concrete post; standard tablet stamped "TC 32 1926".....	3, 245. 534
Pantex, 6.0 mi. S. and 9.2 mi. E. from, 360 ft. W. of creek, in line fence; iron hub.....	3, 173. 46
Pantex, 6.0 mi. S. and 8.3 mi. E. from, 60 ft. W. of line fence S.; iron hub.....	3, 235. 15
Pantex, 6.0 mi. S. and 7.9 mi. E. from, 3 ft. N. of section-line fence, in concrete post; standard tablet stamped "TC 33 1926".....	3, 256. 495
Reference mark, 120 ft. W. of tablet, in fence line; iron hub.....	3, 256. 52
Pantex, 6.0 mi. S. and 7.4 mi. E. from, in fence line; iron hub.....	3, 235. 00
Pantex, 6.0 mi. S. and 6.3 mi. E. from, 370 ft. E. of creek; iron hub.....	3, 079. 25
Pantex, 6.0 mi. S. and 5.6 mi. E. from, 30 ft. W. of center line of Panhandle-Pantex rd., in SE. fence corner, in concrete post; standard tablet stamped "TC 34 1926".....	3, 178. 828

<sup>23</sup> The figures of elevation given are preliminary figures based on the 1929 general adjustment; additional leveling may necessitate further adjustment.

Pantex, 5.0 mi. S. and 5.5 mi. E. from, 0.4 mi. S. of Dixon Creek, 30 ft. W. of center line of rd., in rd. fence line; iron hub.....	<i>Feet</i> 3, 152. 19
Pantex, 4.6 mi. S. and 5.3 mi. E. from, at NW. corner of bridge over Dixon Creek, on angle-iron cross beam; chiseled mark.....	3, 055. 91
Pantex, 3.7 mi. S. and 5.2 mi. E. from, 0.9 mi. N. of Dixon Creek, 30 ft. W. of center line of rd., at curve NW., in concrete post; standard tablet stamped "TC 35 1926".....	3, 138. 865
Reference mark, 260 ft. S. of tablet, in fence line; iron hub.....	3, 130. 68
Pantex, 2.9 mi. S. and 5.4 mi. E. from, in sec. 107, block 5, International-Great Northern Ry. survey, 300 ft. SE. of Marland well No. 4, in line of telegraph poles; iron hub.....	3, 135. 66
Pantex, 1.6 mi. S. and 4.5 mi. E. from, 500 ft. N. of storage tank; iron hub.....	3, 104. 07
Pantex, 1.5 mi. S. and 3.8 mi. E. from, 200 ft. E. of Santa Fe Ry. at crossing of Panhandle-Pantex rd. and Pantex 4-in. oil line, 30 ft. W. of telegraph pole, in concrete post; standard tablet stamped "TC 36 1926".....	3, 218. 370
Pantex, 1.2 mi. S. and 3.0 mi. E. from, 0.8 mi. W. of crossing of Santa Fe Ry., in sec. 117, block 5, International-Great Northern Ry. survey, in section-line fence; iron hub.....	3, 165. 36
Pantex, 0.6 mi. S. and 1.5 mi. E. from, 50 ft. N. of rd.; iron hub.....	3, 209. 72
Pantex, 0.3 mi. S. of, 3 ft. N. and 100 ft. E. from fence line crossing rd., in concrete post; standard tablet stamped "TC 37 1926" (recovered in 1927).....	3, 239. 645
Reference mark, 60 ft. W. of tablet, in fence line; iron hub.....	3, 237. 69
Pantex, 1.3 mi. along Borger rd. W. of, 0.3 mi S. of rd., in SW. cor. sec. 6, block 1, B. & B. survey of Hutchinson County, 0.4 mi. E. of Pantex pumping sta., in NE. corner of T-angle in fence line; iron hub (recovered in 1927 and 1934).....	3, 253. 30

From Pantex generally north along road by way of Stinnett to Dumas-Spearman road, thence west into Dumas No. 1 quadrangle (by E. E. Harris in 1927; leveled twice to Stinnett)

Pantex, 0.4 mi. W. of, on N. side of rd., 60 ft. E. of junction of rd. N. to Stinnett and Oil City; iron hub.....	3, 216. 36
Pantex, 1.1 mi. NW. of, 80 ft. E. of rd., on small cleared hill, on rock outcrop; chiseled square.....	3, 202. 72
Pantex, 1.6 mi. NW. of, in SE. corner of crossroads, 5 ft. W. of mesquite tree; iron hub.....	3, 199. 64
Pantex, 2.1 mi. NW. of, in concrete post; standard tablet.....	3, 145. 962
Reference mark, 58.6 ft. E. of tablet, 1 ft. N. of fence line; iron hub..	3, 147. 00
Pantex, 2.7 mi. NW. of, 30 ft. W. of rd., on S. side of drain, on prominent boulder; bottom of chiseled hole.....	3, 068. 62
Pantex, 3.2 mi. NW. of, on E. bank of rd., at junction of rd. W. to R. G. Barnum well, in root on W. side of small mesquite tree; copper nail and washer.....	3, 034. 53
Pantex, 3.9 mi. NW. of, 55 ft. W. of rd., on N. bank of drain, in prominent boulder; standard tablet stamped "H 2 1927".....	3, 048. 323
Reference mark, 61 ft. N.30°E. of tablet, on boulder; chiseled square..	3, 052. 02
Pantex, 4.7 mi. NW. of, 40 ft. W. of rd., 1 ft. S. of fence line crossing rd.; iron hub.....	3, 032. 82
Pantex, 5.2 mi. NW. of, on E. side of rd.; iron hub.....	3, 011. 62
Pantex, 6.2 mi. NW. of, 40 ft. E. of rd., at summit of grade, at center of small hill, in concrete post; standard tablet stamped "H 3 1927"...	2, 952. 384

Reference mark, 240 ft. S.10°E. of tablet, in crotch of mesquite tree; copper nail and washer.....	<i>Feet</i> 2, 945. 27
Pantex, 6.6 mi. NW. of, on N. edge of sharp turn in rd., at point of cliff, at junction of rd. SW., on flat boulder; bottom of chiseled hole.....	2, 836. 18
Pantex, 7.6 mi. NW. of, just N. of Canadian River, on W. side of rd., S. of junction of rd. E. to Marland pumping sta., 55 ft. N. of point of cliff, on rock ledge; standard tablet stamped "H 4 1927".....	2, 793. 438
Reference mark, 54 ft. S.50°E. of tablet, on sharp boulder; bottom of chiseled hole.....	2, 791. 29
Pantex, 8.3 mi. NW. of, 270 ft. N. of junction of rd. E. to Marland pumping sta., on W. side of rd., on prominent boulder; bottom of chiseled hole.....	2, 826. 98
Pantex, 9.4 mi. NW. of, 3.4 mi. SE. of Oil City, 6.8 mi. S. of proposed site of new Hutchinson County courthouse at Stinnett, 30 ft. N. of E.-W. rd., in line with rd. S., in concrete post; standard tablet stamped "H 5 1927".....	2, 901. 388
Stinnett, 6.0 mi. S. of, at summit of grade, at junction of rd. E. to Signal Hill, on N. side of rd.; iron hub.....	3, 071. 95
Stinnett, 5.1 mi. S. of, on SW. side of rd., 35 ft. S. of crossing of telephone line, just W. of creek crossing, in rock ledge; standard tablet stamped "H 6 1927".....	2, 948. 063
Reference mark, 65.7 ft. S.65°W. of tablet, on top of rock ledge; chiseled square.....	2, 948. 10
Stinnett, 4.6 mi. S. of, 300 ft. N. of creek crossing, 100 ft. N. of junction of rd. E., on W. side of rd., in root on E. side of 24-in. cottonwood tree; copper nail and washer.....	2, 936. 39
Stinnett, 3.7 mi. S. of, 130 ft. N. of junction of and midway between rds. E. to Signal Hill and N. to Stinnett, in concrete post; standard tablet stamped "H 7 1927".....	3, 072. 664
Reference mark, 93.5 ft. S. of tablet; iron hub.....	3, 069. 80
Stinnett, 3.0 mi. S. of, in SE. angle of crossroads, 10 ft. S. of gate in fence line crossing E.-W. rd., 1 ft. W. of fence lide; iron hub.....	3, 143. 29
Stinnett, 1.9 mi. S. of, on E. edge of rd. junction, 2 ft. W. of fence line, in concrete post; standard tablet stamped "H 8 1927" (recovered by U. S. C. & G. S. in 1934).....	3, 145. 797
Reference mark, 193.5 ft. S.15°E. of tablet; iron hub.....	3, 142. 15
Stinnett, 1.4 mi. S. of, in NE. angle of crossroads, 25 ft. N. and 1 ft. W. from fence line; iron hub.....	3, 172. 78
Stinnett, near S. limits of, at service sta. of Pete Borger, in N. end of concrete foundation of gasoline pumps; standard tablet stamped "H 9 1927" (recovered by U. S. C. & G. S. in 1934).....	3, 177. 707
Reference mark, 90 ft. S. of tablet; iron hub.....	3, 178. 07
Stinnett, in NW. corner of yard of proposed site of new courthouse, in concrete post; standard tablet stamped "H 10 1927".....	3, 187. 753
Stinnett, 0.8 mi. NW. of, on N. side of angle in rd., 1 ft. W. of fence line crossing rd.; iron hub.....	3, 234. 93
Stinnett, 1.8 mi. NW. of, on W. side of rd., at summit of long grade, in NE. corner of yard of dwelling (formerly Groves School), in concrete post; standard tablet stamped "H 11 1927".....	3, 336. 251
Reference mark, 195 ft. S.15°W. of tablet; iron hub.....	3, 337. 42
Stinnett, 2.8 mi. NW. of, on S. side of fence line crossing rd., midway between two driveways; iron hub.....	3, 335. 73

Stinnett, 3.8 mi. NW. of, on property of R. F. Graves, 800 ft. E. of house, 40 ft. S. of rd., in L-angle in fence line, 4 ft. from each fence, in concrete post; standard tablet stamped "H 12 1927"-----	Feet 3, 356. 127
Reference mark, 80 ft. N. of tablet; iron hub-----	3, 357. 21
Stinnett, 4.8 mi. NW. of, 30 ft. E. of rd., 1 ft. S. of fence line crossing rd.; iron hub-----	3, 356. 02
Stinnett, 5.9 mi. NW. of, on W. side of rd., 3 ft. N. of fence line crossing rd., in concrete post; standard tablet stamped "H 13 1927"-----	3, 363. 956
Reference mark, 70 ft. N.80°E. of tablet; iron hub-----	3, 365. 42
Stinnett, 6.6 mi. NW. of, in center of junction of E.-W. rd. and rd. S., on top of stone post, probably section corner; SW. quadrant of chiseled cross-----	3, 354. 99
Stinnett, 7.4 mi. NW. of, 9.1 mi. E. of Beede, on S. side of junction of Dumas-Spearman rd., 2 ft. N. of fence line W. of rd. S. through gate to Stinnett, in concrete post; standard tablet stamped "H 14 1927"-----	3, 354. 730
Reference mark, 190 ft. S.30°W. of tablet, in root on E. side of tree; nail-----	3, 354. 16
Beede, 8.4 mi. E. of, on N. side of rd., 350 ft. W. of abandoned house, in NE. corner of T-angle in fence line, 2 ft. from each fence; iron hub-----	3, 356. 72

From point 1.4 miles south of Stinnett southeast and southwest along roads and Panhandle & Santa Fe Railway to point 3.8 miles south of Borger (by E. E. Harris in 1927; partly leveled twice)

Stinnett, 2.4 mi. SE. of, in SW. corner of junction of T-rd. W., in L-angle in fence line, 4 ft. from each fence, in concrete post; standard tablet stamped "H 29 1927"-----	3, 146. 608
Reference mark, 62 ft. N. of tablet, 4 in. under ground; iron hub-----	3, 145. 43
Stinnett, 3.6 mi. SE. of, in wye of rd. fork, 35 ft. from fork, equidistant from each rd.; iron hub-----	3, 099. 07
Stinnett, 4.9 mi. SE. of, 1.5 mi. S. of Signal Hill, 0.5 mi. N. of Gulf Camp, at junction of Signal Hill-Borger rd., on W. side of rd., 150 ft. N. of junction of rd. W., in concrete post; standard tablet stamped "H 30 1927"-----	3, 091. 550
Signal Hill, 2.4 mi. S. of, near S. end of Gulf Camp, in NE. corner of right-angle turn in rd., 7 ft. N. and 2 ft. E. from L-angle in fence line, on top of rock ledge; bottom of chiseled hole-----	3, 128. 32
Signal Hill, 3.5 mi. S. of, 30 ft. S. of rd. at summit of grade, in fence line, in concrete post; standard tablet stamped "H 31 1927"-----	3, 088. 869
Reference mark, 60.7 ft. N.15°W. of tablet; iron hub-----	3, 088. 90
Signal Hill, 4.4 mi. S. of, on S. side of sharp turn in rd., on top of small hill; iron hub-----	3, 074. 08
Signal Hill, 5.1 mi. S. of, in SE. corner of angle in rd. at fork, in concrete post; standard tablet stamped "H 32 1927" (recovered by U. S. C. & G. S. in 1935)-----	3, 007. 044
Reference mark, 57.5 ft. N.75°W. of tablet, 4 in. under ground; iron hub-----	3, 008. 74
Signal Hill, 6.1 mi. S. of, 60 ft. E. of curve in rd. at culvert, on N. bank of wash, in root on N. side of small mesquite tree; copper nail and washer-----	2, 814. 03
Signal Hill, 7.2 mi. S. of, 9.4 mi. NE. of Borger, 2.0 mi. W. of Plemons, on W. edge of wide turn in rd., 400 ft. S. of rd. fork in low saddle, in prominent boulder; standard tablet stamped "H 33 1927"-----	2, 740. 824
Reference mark, 60 ft. N. 60° E. of tablet, on boulder; chiseled square--	2, 741. 49

Borger, 8.2 mi. NE. of, on W. side of rd., at point of hill, on boulder; chiseled square.....	<i>Feet</i> 2, 735. 74
Borger, 7.5 mi. NE. of, at new toll bridge over Canadian River, in W. end of N. concrete abutment; standard tablet stamped "H 34 1927" (recovered by U. S. C. & G. S. in 1935).....	2, 747. 186
Borger, 7.0 mi. NE. of, at new toll bridge over Canadian River, on E. end of S. concrete abutment; chiseled square (recovered by U. S. C. & G. S. in 1935).....	2, 743. 147
Borger, 6.1 mi. NE. of, 50 ft. S. of rd., 20 ft. E. of second-class rd. S. around point of hill; iron hub.....	2, 748. 41
Borger, 4.8 mi. NE. of, near White Eagle Camp, at summit of grade, on W. edge of rd., in concrete post; standard tablet stamped "H 35 1927" (recovered by U. S. C. & G. S. in 1935).....	2, 803. 853
Borger, 3.8 mi. NE. of, on E. edge of turn in rd., 50 ft. N. of intersection of second-class rd., in root on E. side of small mesquite tree; copper nail and washer.....	2, 978. 20
Borger, 3.0 mi. NE. of, at Phillips School, 25 ft. S. of E. entrance, in angle of concrete guardrail of steps to basement; standard tablet stamped "H 36 1927".....	3, 047. 661
Reference mark, 110 ft. N.80°E. of tablet, in angle in concrete walk of schoolhouse; chiseled square.....	3, 042. 39
Borger, 2.2 mi. NE. of, 10 ft. E. of Panhandle & Santa Fe Ry. track, 160 ft. S. of highway crossing, at target switch, on top of section of rail set vertically; chiseled cross.....	3, 071. 30
Borger, 1.6 mi. NE. of, on E. side of highway, 25 ft. E. of track, 50 ft. N. of rd. crossing, in concrete post; standard tablet stamped "H 37 1927".....	3, 085. 952
Borger, in front of sta.; top of rail.....	3, 114. 4
Borger, 1.2 mi. S. of, at Panhandle Camp of Marland Oil Co., in SE. corner of highway crossing, 55 ft. S. and 1 ft. W. from fence line, in concrete post; standard tablet stamped "H 38 1927" (recovered by U. S. C. & G. S. in 1934).....	3, 164. 747
Reference mark, 55 ft. N.30°E. of tablet, on top of section of rail set vertically; chiseled cross.....	3, 164. 55
Borger, 3.4 mi. S. of, 90 ft. S. of grade crossing, 10 ft. E. of track, on top of section of rail set vertically; chiseled cross.....	3, 231. 80

From Sanford quadrangle at point about 1 mile northeast of Oil City along roads north-east to road junction 6.8 miles south of Stinnett (by E. E. Harris in 1927)

Oil City, 1.4 mi. NE. of, on N. side of rd., at summit of grade, in concrete post; standard tablet stamped "H 28 1927".....	2, 912. 069
Reference mark, 78 ft. W. of tablet, in crotch of small mesquite tree; copper nail and washer.....	2, 910. 69
Oil City, 2.3 mi. NE. of, 50 ft. S. of rd., at summit of long grade; iron hub.....	3, 049. 31

#### ROTAN QUADRANGLE

[Latitude 32°45'-33°00'; longitude 100°15'-100°30']

#### FISHER AND STONEWALL COUNTIES

From Longworth quadrangle generally northwest along Roby-Rotan road to Rotan, thence north along Rotan-Aspermont road into Peacock No. 3 quadrangle (by E. R. Martin in 1924)

Roby, 2.1 mi. N. of, on W. side of Roby-Rotan rd., in SW. side of bridge abutment; square hole.....	1, 910. 66
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Roby, 3.1 mi. N. of, 6.7 mi. S. of post office at Rotan, at steel bridge over South Fork of Clearfork Creek, in N. abutment; standard tablet stamped "M 8 1924"-----	<i>Feet</i> 1, 904. 968
Reference mark, on E. end of S. abutment of bridge; chiseled cross----	1, 905. 00
Rotan, 5.2 mi. S. of, 150 ft. E. of rd., on S. side of North Roby School, 9 in. from E. edge of E. balustrade of step, 14 in. above ground; small chiseled cross-----	1, 924. 96
Rotan, 3.8 mi. S. of, in NW. angle of crossroads, 4 ft. from right-of-way fence of Missouri-Kansas-Texas R. R., 119 ft. from R. R. crossing, 126 ft. from cattle guard and culvert, in concrete pier; standard tablet stamped "M 9 1924"-----	1, 931. 240
Rotan, 2.7 mi. S. of, in E. shoulder of concrete culvert; square hole----	1, 933. 64
Rotan, 2.0 mi. S. of, in E. shoulder of concrete culvert; square hole----	1, 934. 61
Rotan, at post office, on NE. side of entrance, in wall, 2.5 ft. above ground; standard tablet stamped "M 10 1924" (recovered in 1925)-----	1, 945. 516
Reference mark, on E. side of street, opposite post office entrance, at SW. corner of rear of red brick store building, on concrete curb; chiseled cross (recovered in 1925)-----	1, 942. 03
Rotan, 2.5 mi. along Aspermont rd. N. of, in E. abutment of concrete culvert; square hole-----	1, 961. 14
Rotan, 3.0 mi. N. of, in E. shoulder of concrete culvert; standard tablet stamped "M 11 1924"-----	1, 993. 939
Reference mark, on top of W. shoulder of concrete culvert; chiseled cross-----	1, 993. 97
Rotan, 5.7 mi. N. of, at S. end of swinging bridge over Double Mountain Fork of Brazos River, in E. anchor block; standard tablet stamped "M 12 1924"-----	1, 791. 360
Reference mark, 18 ft. W. and across highway from tablet, in W. anchor block of bridge; square hole-----	1, 791. 30
Rotan, 6.9 mi. N. of, at first concrete bridge N. of Double Mountain Fork of Brazos River, on SE. corner of bridge; chiseled square-----	1, 794. 62
Rotan, 7.6 mi. N. of, on top of E. abutment of concrete culvert; chiseled cross (recovered in 1925)-----	1, 882. 56
Rotan, 8.6 mi. N. of, near Fisher-Stonewall county line, in E. end of concrete culvert; standard tablet stamped "M 13 1924"-----	1, 848. 510
Reference mark, in top of W. abutment of culvert; chiseled square-----	1, 848. 55
Rotan, 10.9 mi. N. of, at double-span steel bridge, in NW. corner of N. abutment; standard tablet stamped "M 14 1924"-----	1, 771. 235
Reference mark, 20 ft. E. of tablet, in NE. corner of N. abutment of bridge; square hole-----	1, 771. 22

From Rotan along roads northeast 4.8 miles, thence generally north into Peacock No. 3 quadrangle at point about 2 miles northwest of Red Bluff Crossing of Double Mountain Fork of Brazos River (by C. E. Walker in 1925)

Rotan, at head of Main Street, in SW. corner of yard of city hall, in concrete post; standard tablet stamped "Prim Trav Sta No 1 WC 1924"-----	1, 952. 533
Rotan, 2.8 mi. NE. of post office at, in NE. angle of crossroads, 30 ft. NE. of intersection, 2 ft. inside fence corner, in concrete post; standard tablet stamped "9 WA 1925 Texas"-----	2, 030. 192
Rotan, 3.0 mi. NE. of, 720 ft. E. of crossroads, on top of center of N. head wall of concrete culvert; chiseled square-----	2, 018. 24

Rotan, 3.3 mi. NE. of, about 200 ft. W. of farmhouse, on S. side of rd., on top of center of concrete head wall of culvert; chiseled square.....	<i>Feet</i> 2, 012. 10
Rotan, 3.8 mi. NE. of, 105 ft. E. of crossroads, in N. side of 8-in. mes- quite tree; copper nail and washer.....	2, 000. 41
Rotan, 4.8 mi. in air line E., thence 1.0 mi. in air line N. from, in NE. corner of crossroads, 300 ft. NW. of house of C. McCallister, in con- crete post; standard tablet stamped "Prim Trav Sta No 14 K 1924".....	1, 965. 159
Reference mark, 15 ft. NW. of intersection, on N. end of concrete culvert, on top of center of head wall; chiseled square.....	1, 967. 16
Rotan, 4.3 mi. in air line E., thence 2.8 mi. in air line N. from, 0.25 mi. E. of junction of T-rd. N., at large bridge over canyon, on SE. con- crete pier; chiseled square.....	1, 876. 50
Rotan, 4.0 mi. in air line E., thence 2.8 mi. in air line N. from, in NW. corner of junction of T-rd N., 20 ft. NW. of wheel with six mail boxes, in concrete post; standard tablet stamped "Prim Trav Sta No 15 K 1924".....	1, 909. 291
Rotan, 4.8 mi. by rd. NE., thence 3.0 mi. N. from, in NW. corner of crossroads, 14 ft. W. of wagon wheel with five mail boxes, in W. side of 8-in. mesquite tree; copper nail and washer.....	1, 875. 07
Rotan, 4.8 mi. NE., thence 5.0 mi. N. from, 2.2 mi. S. of Bullock Bend, 600 ft. E. of tombstone of R. W. Millsap, near rd. junction, in con- crete post; standard tablet stamped "Prim Trav Sta No 16 K 1924".....	1, 914. 918
Reference mark, 450 ft. due E. of marble shaft at grave of R. W. Mill- sap, 40 ft. SE. of rd., in NE. side of 4-in. mesquite tree; copper nail and washer.....	1, 911. 45
Rotan, 4.8 mi. NE., thence 7.3 mi. N. from, 2.3 mi. N. of Millsap grave, 0.5 mi. S. of farmhouse of William Martin, on top of plain, 15 ft. W. of rd., in fork of 6-in. mesquite tree; copper nail and washer.....	1, 821. 95
Rotan, 4.8 mi. NE., thence 7.8 mi. N. from, near Martin farmhouse, at SE. corner of barn, 75 ft. SW. of windmill, in E. side of 8-in. mesquite tree; copper nail and washer.....	1, 740. 01
Rotan, 4.8 mi. NE., thence 8.8 mi. N. from, 0.5 mi. NW. of Whatley ranch house, about 0.5 mi. S. of Red Bluff Crossing of Double Moun- tain Fork of Brazos River, 40 ft. S. of triangle formed in rd. fork, 400 ft. SW. of tenant house, in concrete post; standard tablet stamped "10 WA 1925 Texas".....	1, 758. 151
Reference mark, 350 ft. SW. of tenant house, 20 ft. W. of rd. fork, in S. side of leaning mesquite tree; copper nail and washer.....	1, 756. 69
Red Bluff Crossing, about 1 mi. NW. of, on NW. trail, 0.25 mi. E. of cottonfield, 40 ft. S. of rd., in mesquite tree; copper nail and washer.....	1, 801. 37

From point 7.6 miles north of Rotan along roads north 0.3 mile, thence west into  
Camp Springs quadrangle (by C. E. Walker in 1925)

Rotan, 7.9 mi. N. of, at junction of E.-W. rd., 2.2 mi. N. of bridge over Double Mountain Fork of Brazos River, 3 ft. N. of wire fence, at side of E.-W. rd., in line with E. side of rd. S., in concrete post; stand- ard tablet stamped "Prim Trav Sta No 3 WC 1924".....	1, 887. 077
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SANFORD QUADRANGLE<sup>33</sup>

[Latitude 35°30'–35°45'; longitude 101°30'–101°45']

## CARSON, HUTCHINSON, MOORE, AND POTTER COUNTIES

From Plemons quadrangle generally southwest along Borger road and across country into Amarillo No. 1 quadrangle at point 1.3 miles east of Carson-Potter county line and 0.2 mile west of Chicago, Rock Island & Gulf Railway (by Tom Carney in 1928)

Pantex, 2.3 mi. SW. of, in NW. cor. sec. 122, block 1, B. & B. survey of Hutchinson County, in concrete post; standard tablet stamped "TC 38 1926" (recovered in 1934)-----	Feet 3, 252. 305
Reference mark, 140 ft. E. of tablet, in fence line; iron hub-----	3, 253. 01
Pantex, 3.4 mi. SW. of, 50 ft. N. of Pantex-Amarillo rd., 30 ft. W. of section fence; iron hub-----	3, 224. 16
Pantex, 4.9 mi. SW. of, 2.2 mi. NE. of Deal, 600 ft. S. of rd., 3 ft. E. of fence, in concrete post; standard tablet stamped "TC 39 1926"-----	3, 141. 486
Reference mark, 230 ft. S. of tablet, in fence line; iron hub-----	3, 134. 74
Deal, 1.2 mi. NE. of, 25 ft. S. of rd.; iron hub-----	3, 211. 63
Deal, in space reserved for post office park at, N.15°12'E. of SW. cor. sec. 3, block Y 2, Carson County, in concrete post; standard tablet stamped "TC 40 1926" (recovered by U. S. C. & G. S. in 1935)-----	3, 293. 904
Deal, 1.7 mi. SW. of, at base of rocky hill, 700 ft. E. of rd., on N. side sec. 5, block 5, B. & B. survey; iron hub-----	3, 306. 45
Deal, 2.8 mi. SW. of, 180 ft. E. of SW. cor. sec. 5, block 5, B. & B. survey, about 180 ft. E. of rd., in concrete post; standard tablet stamped "TC 41 1926"-----	3, 395. 634
Reference mark, 130 ft. E. of tablet, 50 ft. E. of SW. cor. sec. 5, block 5, B. & B. survey, in fence line; iron hub-----	3, 390. 57
Deal, 2.8 mi. SW., thence 0.9 mi. SE. from, at SW. cor. sec. 6, block 5, B. & B. survey, 20 ft. E. of center line of rd.; iron hub-----	3, 378. 08
Deal, 4.6 mi. along Chicago, Rock Island & Gulf Ry. SW., thence 0.2 mi. W. from, 0.3 mi. S., thence 0.2 mi. W. from Wilhelm, 2 ft. N. of S. fence of sec. 7, block 5, B. & B. survey, in concrete post; standard tablet stamped "TC 42 1926"-----	3, 405. 130
Reference mark, 80 ft. W. of tablet, in fence line; iron hub-----	3, 402. 12
Wilhelm, 1.3 mi. S. along R.R., thence 0.2 mi. W. from, 2 ft. N. of S. fence of sec. 8, block 5, B. & B. survey; iron hub-----	3, 405. 83
Wilhelm, 2.3 mi. SW. along R.R., thence 0.2 mi. W. from, about 17 mi. NE. of St. Francis, 1.1 mi. E. of Carson-Potter county line, along S. fence of sec. 31, block Y 2, H. & T. C. R. R. Co. survey, in concrete post; standard tablet stamped "TC 43 1926" (recovered in 1933 and 1934)-----	3, 453. 876
Reference mark, 160 ft. E. of tablet, in fence line; iron hub-----	3, 453. 78

From Dumas No. 1 quadrangle at point 0.7 mile northwest of Ingerton ranch along roads generally south and east by way of Oil City into Plemons quadrangle (by E. E. Harris in 1927)

Bar X ranch, 5.8 mi. S. of, 4.2 mi. by rd. W. of Oil City, at gate at W. entrance to Ingerton ranch, 15 ft. S. of E.-W. rd., 2 ft. W. of fence line, in concrete post; standard tablet stamped "H 25 1927"-----	3, 122. 776
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<sup>33</sup> The figures of elevation given are preliminary figures based on the 1929 general adjustment; additional leveling may necessitate further adjustment.



Reference mark, 138 ft. N.10°W. of tablet, 1 ft. W. of fence line; iron hub.....	<i>Feet</i> 3, 127. 41
Oil City, 3.6 mi. W. of, at E. gate to Ingerton ranch, 40 ft. S. of rd., 1 ft. W. of fence line crossing rd.; iron hub.....	3, 108. 40
Oil City, 2.4 mi. W. of, 40 ft. S. of sharp turn in rd., 1 ft. W. of fence line crossing rd.; iron hub.....	2, 993. 64
Oil City, 1.3 mi. W. of, on S. side of rd., in center of large triangle formed by junction of rd. S., in concrete post; standard tablet stamped "H 26 1927".....	2, 864. 579
Reference mark, 205 ft. W. of tablet, in root on S. side of prominent hackberry tree; copper nail and washer.....	2, 868. 39
Oil City, 0.9 mi. W. of, just E. of Carson Creek, on S. side of rd., at NE. corner of Marland pumping sta.; iron hub.....	2, 836. 70
Oil City, near highest point of town, on W. side of rd., at NE. corner of Phillips lease, in L-angle in fence line, 3 ft. from each fence, in concrete post; standard tablet stamped "H 27 1927".....	3, 010. 513
Reference mark, 150 ft. S. of tablet, on Phillips lease, in fence corner; iron hub.....	3, 005. 06
Oil City, 0.9 mi. E. of, about 500 ft. E. of oil well, on N. side of rd., 55 ft. E. of fence line crossing rd.; iron hub.....	2, 884. 52

From Fourways quadrangle at point near Mullinaw Creek southeast along roads into Amarillo No. 1 quadrangle at point 2 miles west of Carson-Potter county line (by C. S. Carney in 1933)

Gunter & Munson survey, block M 20, near NW. cor. sec. 5, 125 ft. S. of bottom of creek, 100 ft. W. of center line of rd., on point of rock outcrop; chiseled square.....	2, 975. 35
Gunter & Munson survey, block M 20, near center of sec. 5, 30 ft. W. of center line of rd., 20 ft. E. of drain, in root of mesquite tree; copper nail and washer.....	3, 148. 32
Gunter & Munson survey, block M 20, near line between secs. 5 and 13, on top of ridge, 565 ft. E. of point of ridge, 25 ft. S. of center line of rd., set in concrete; top of steel rod.....	3, 314. 47
Gunter & Munson survey, block M 20, S. of center of sec. 13, in triangle of rd. forks, 75 ft. SW. of E. point of triangle, 60 ft. NE. of S. point of triangle, 25 ft. S. of rd. W., 68 ft. NW. of gas pipe line under ground, in concrete post; standard tablet stamped "T T 46 L 1933 3318".....	3, 317. 911
Gunter & Munson survey, block M 20, in NW¼ sec. 19, about 100 ft. W. of junction of rd. NW., 18 ft. S. of center line of rd., set in concrete; top of steel rod.....	3, 378. 46
Gunter & Munson survey, blocks M 20 and 22, near line between secs. 19 and 9, 25 ft. N. of rd., 6 ft. S. of lone mesquite tree, set in concrete; top of steel rod.....	3, 362. 44

From point 4.9 miles southwest of Pantex along roads northwest and west to Fritch, thence southwest and west into Fourways quadrangle (by C. S. Carney in 1933)

Pantex, 3.7 mi. SW. of, 1.7 mi. E., thence 2.2 mi. SE. from Fritch post office, 240 ft. SW. of junction of Borger-Stinnett and Borger-Amarillo rds., 45 ft. W. of center line of Amarillo rd., 120 ft. S. of center line of Stinnett rd., in line with dim T-rd. N., set in concrete; top of steel rod.....	3, 097. 54
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Fritch, 1.7 mi. E., thence 1.1 mi. SE. of, 30 ft. SW. of center line of rd. at cattle guard; 30 ft. S. of telephone line, in fence corner, 18 in. N. of fence line, set in concrete; top of steel rod.....	Feet 3, 196. 07
Fritch, 1.7 mi. E. of post office, 1.5 mi. E. of booster sta., at junction of Borger-Stinnett and Amarillo-Stinnett rds., 134 ft. N. and 38 ft. W. from NW. fork of rds., 20 ft. N. of angle in telephone line, in concrete post; standard tablet stamped "T T 49 L 1933 3186"....	3, 185. 718
Reference mark, 240 ft. S. of tablet, in N. point of triangle of rd. forks, set in concrete; top of steel rod.....	3, 184. 18
Fritch, 1.0 mi. E. of post office, 40 ft. NW. of center of crossroads, 90 ft. E. of center line of private rd. N., 1 ft. N. of corner post in T-fence W., 6 in. E. of N.-S. fence line, set in concrete; top of steel rod....	3, 186. 00
Fritch, about 175 ft. NW. of post office, at five-way rd. fork and angle in rd., 54 ft. N. of center of fork, 1 ft. SW. of fence corner, set in concrete; top of steel rod.....	3, 188. 95
Fritch, about 0.4 mi. SW. of sta. on Chicago, Rock Island & Gulf Ry., in NW. corner of schoolyard, 108 ft. W. of NW. corner of schoolhouse,* in concrete post; standard tablet stamped "T T 50 L 1933 3198".....	3, 198. 104
Fritch, 1.4 mi. SW. of post office, 30 ft. S. of center line of rd., 18 in. E. of N.-S. fence line, set in concrete; top of steel rod.....	3, 200. 84
Fritch, 2.2 mi. SW. of, at corner of Carson, Hutchinson, Moore, and Potter Counties; top of iron pipe.....	3, 202. 38
Moore-Potter county line, 0.5 mi. N. of, 0.8 mi. NW. of corner of Carson, Hutchinson, Moore, and Potter Counties, 6 ft. N. of center line of rd., 1 ft. N. of mesquite tree, set in concrete; top of steel rod...	3, 184. 13
Fritch, 3.1 mi. in air line SW. of, in sec. 95, block 46, H. & T. C. R. R. Co. survey, in SW. corner of fence around Bivins H-1 gas well, 20 ft. S. and 12 ft. W. from center of well, in concrete post; standard tablet stamped "T T 51 L 1933 3110".....	3, 110. 161
Reference mark, 75 ft. N. of tablet, on boulder; chiseled square.....	3, 105. 40
Canadian River, 25 ft. E. of high bank of, 225 ft. SW. of pipe line, 100 ft. NE. of telephone line, in root of mesquite tree; copper nail and washer.....	2, 889. 20
H. & T. C. R. R. Co. survey, block 47, in sec. 52, 0.8 mi. SW. of Ozier ranch house, 265 ft. SW. of windmill, 50 ft. S. of pipe line, in root of mesquite tree; copper nail and washer.....	2, 894. 13
H. & T. C. R. R. Co. survey, block 47, about 0.6 mi. S. of N. line between secs. 53 and 54, 33 ft. N. and 36 ft. W. from short fence on top of bluff, at point where interstate pipe line drops into valley to cross Canadian River, 480 ft. NE. of J. J. Perkins A-1 gas well, in dolomite outcrop; standard tablet stamped "T T 52 L 1933 3149"....	3, 148. 592
Reference mark, 300 ft. SW. of tablet, 112 ft. S. of telephone line, in root of mesquite tree; copper nail and washer.....	3, 150. 70
Moore-Potter county line, 1.0 mi. N. of, about 4 mi. along interstate pipe line E. of rd. crossing Plum Creek, 30 ft. N. of center of cattle guard and rd. fork, 15 ft. N. of pipe line, in telephone line, 6 in. W. of fence line, set in concrete; top of steel rod.....	3, 209. 59
Moore-Potter county line, 1.1 mi. N. of, about 3 mi. E. of rd. crossing Plum Creek, 210 ft. N. of angle in rd., 65 ft. W. of blow-off drain in pipe line, 7.5 ft. N. of pipe line, in line with telephone poles, set in concrete; top of steel rod.....	3, 212. 76

\* In 1935 it was reported that this schoolhouse had been destroyed by fire.  
214917-40-6

Moore-Potter county line, 1.4 mi. N. of, in SW $\frac{1}{4}$  sec. 46, block 3, Gunter & Munson survey, about 500 ft. S. of fence angle NW., 23 ft. S. of interstate pipe line, 12 ft. S. of cattle guard, on E. side of fence, in concrete post; standard tablet stamped "T T 53 L 1933 3274"----- *Feet* 3, 273. 623

Reference mark, 360 ft. W. of tablet, 60 ft. SE. of rd. fork, 35 ft. S. of telephone line, in root of mesquite tree; copper nail and washer---- 3, 263. 69

From point near northeast corner of Amarillo No. 1 quadrangle north across country to point 2.3 miles southwest of Pantex, thence west into Plemons quadrangle (by C. S. Carney in 1934)

I. & G. N. R. R. Co. survey, block 5, in NW. cor. sec. 34, at intersection of telephone line and N.-S. fence line, 27 ft. S. of center of cattle guard, set in concrete; top of steel rod----- 3, 385. 99

H. & G. N. R. R. Co. survey, block 5, in NE. cor. sec. 5, in N.-S. fence line, 16 in. S. of corner of T-fence W., set in concrete; top of steel rod----- 3, 341. 38

Pantex, 6.0 mi. S. and 2.0 mi. W. from, 6.0 mi. N. of Pomeroy, 2 ft. W. of fence corner at SW. cor. sec. 77, block 5, I. & G. N. R. R. Co. survey, in concrete post; standard tablet stamped "T T 19 D 1933 3299"----- 3, 299. 643

I. & G. N. R. R. Co. survey, block 5, in NW. cor. sec. 77, 1 ft. S. and 0.3 ft. E. from corner stake marked "77 and 78," 1 ft. S. and 0.5 ft. E. from corner of T-fence W., set in concrete; top of steel rod----- 3, 266. 01

I. & G. N. R. R. Co. survey, block 5, 4 ft. S. of iron stake marking NW. cor. sec. 78, 1 ft. E. of N.-S. fence line, set in concrete; top of steel rod----- 3, 284. 62

Deal, 0.5 mi. S. and 3.5 mi. E. from, 3.0 mi. S. and 2.0 mi. W. from Pantex, in NW. cor. sec. 99, block 5, I. & G. N. R. R. Co. survey, 16 ft. E. of fence corner, 2 ft. S. of fence, in concrete post; standard tablet stamped "T T 18 D 1933 3221"----- 3, 220. 845

Reference mark, 268 ft. N. of tablet, in fence line, set in concrete; top of steel rod----- 3, 219. 82

I. & G. N. R. R. Co. survey, block 5, 3 ft. S. and 0.5 ft. E. from stake at NW. cor. sec. 100, 8 ft. E. of center line of rd., in fence line, set in concrete; top of steel rod----- 3, 273. 44

Adams, Beaty, & Moulton survey, block 3, 2 ft. S. of marker at NE. cor. sec. 6, 6 in. W. of N.-S. fence line, set in concrete; top of steel rod----- 3, 254. 60

From point 1.4 miles north of Moore-Potter county line near middle of west border of quadrangle generally north across country and along roads into Dumas No. 1 quadrangle (by C. S. Carney in 1934)

Gunter & Munson survey, block G & M 3, in N $\frac{1}{2}$  sec. 80, at top of ridge between two washes, in NW.-SE. fence line, set in concrete; top of steel rod----- 3, 265. 40

Fourways, 2.8 mi. S. and 12.0 mi. E. from junction of State Highway 5 and U. S. Highway 87 at, 1.0 mi. N. and 7.5 mi. W. from Fritch, 1 ft. N. and 4 ft. W. from rock monument 3 ft. high, 1 ft. N. of fence, in concrete post; standard tablet stamped "T T 12 D 1933 3277"--- 3, 276. 555

D. & P. R. R. Co. survey, block B 12, in SW. cor. sec. 13, 0.5 ft. N. and 1.2 ft. W. from corner of fences N. and W.; top of 1½-in. pipe-----	Feet 3, 270. 10
D. & P. R. R. Co. survey, block B 12, in NW. cor. sec. 13, 2 ft. NW. of corner of fences S. and E.; top of 1½-in. pipe-----	3, 278. 04

[Line jogs into Fourways quadrangle]

T. & N. O. R. R. Co. survey, block 6 T, in NE¼ sec. 42, 30 ft. N. of center of rd. fork, set in concrete; top of steel rod-----	3, 316. 95
T. & N. O. R. R. Co. survey, block 6 T, in N½ sec. 27, on top of ridge, 25 ft. E. of rd., 500 ft. N. of center of junction of dim rd. W., set in concrete; top of steel rod-----	3, 259. 67
T. & N. O. R. R. Co. survey, block T 6, in S½ sec. 26, 800 ft. N. of junction of rd. E. at pipe line, 22 ft. E. of junction of rd. NW., set in concrete; top of steel rod-----	3, 225. 04

Across country southeast of junction of Big Blue and Grapevine Creeks (by F. J. Fricke in 1934)

[A jog from Dumas No. 1 quadrangle]

D. & P. R. R. Co. survey, block B 12, in sec. 1, about 1,000 ft. S. of Big Blue Creek, 1,000 ft. W. of T-fence S., 2 ft. NW. of corner post of fences NW. and E., under fence, set flush with ground and surrounded by rocks; top of iron rod-----	3, 047. 30
Dumas, 7.0 mi. S. and 14.5 mi. E. from, on hill E. of Big Blue Creek, 45 ft. E. of intersection of pipe line and fence, 25 ft. W. of cattle guard, 1 ft. N. of fence, in concrete post; standard tablet stamped "T T 13 D 1933"-----	3, 097. 782

From Dumas No. 1 quadrangle at point 1.3 miles west of Hutchinson-Moore county line south and east along roads to point 4.2 miles west of Oil City (by F. J. Fricke in 1934)

T. & T. R. R. Co. survey, at approximate NE. cor. sec. 4, at W. steel cattle-guard post in E.-W. fence line, on S. portion of concrete base, level with ground; chiseled square-----	3, 213. 75
Dumas, 8.0 mi. S. and 18.0 mi. E. from, 7.0 mi. N. and 1.5 mi. W. from Fritch, 8.1 mi. W. of Oil City, near NW. cor. sec. 2, J. Poitevent survey, 3 ft. N. and 1 ft. W. from corner of fences S. and E., in concrete post; standard tablet stamped "T T 14 D 1933"-----	3, 210. 010
Oil City, 7.1 mi. W. of, 0.2 mi. W. of Hutchinson-Moore county line, at NE. cor. sec. 2, J. Poitevent survey, 25 ft. W. of corner post of fences S. and W., in fence line, at 2-in. pipe projecting 1 ft. above ground and marking section corner; top of pipe-----	3, 150. 30
Oil City, 6.0 mi. W. of, at NE. cor. sec. 3, J. Poitevent survey, 0.3 mi. S. of center of cattle guard, 11 ft. E. of N.-S. fence line, at 2-in. pipe projecting about 1 ft. above ground and marking section corner; top of pipe-----	3, 126. 36
Oil City, 5.3 mi. W. of, in sec. 1, block B, Hutchinson County, about 800 ft. E. of Busby Creek, about 0.3 mi. SE. of rd. crossing creek, 25 ft. S. of 24-in. live fallen cottonwood tree, 25 ft. E. of drain, set flush with ground and surrounded by rocks; top of iron rod-----	3, 069. 25

**SLAUGHTER NO. 1 QUADRANGLE**

[Latitude 32°15'-32°30'; longitude 101°30'-101°45']

**HOWARD AND MARTIN COUNTIES**

From northwest corner of Morita quadrangle northeast and southeast along roads and trails and back into Morita quadrangle (by E. W. Gouchenour in 1938; partly leveled twice)

Stanton, 5.4 mi. NE. along U. S. Highway 80, thence 6.5 mi. in air line N. from, 4.1 mi. N. and 5.0 mi. W. in air line from Morita, near cor. secs. 23, 24, 25, and 26, T. 1 N., block 35, Texas & Pacific Ry. survey, at fence corner on W. side of N.-S. rd., at corner post, in top of stake; copper nail and washer-----	Feet 2, 527. 97
Morita, 4.3 mi. N. and 4.0 mi. W. from, 3.0 mi. SW. of Hartwell School, at cor. secs. 8, 16, 24, and 25, T. 1 N., blocks 34 and 35, T. & P. Ry. survey, 525 ft. N. along fence from corner post of T-fence W., 35 ft. N. and 94 ft. W. from NW. corner of tenant house, 3 ft. S. of S. gatepost, in concrete post; standard tablet stamped "T T 8 C 1938 2503"-----	2, 503. 392
Morita, 4.6 mi. N. and 3.0 mi. W. from, 160 ft. SE. of fence corner at cor. secs. 8, 9, 15, and 16, T. 1 N., block 34, T. & P. Ry. survey, in root on N. side of southernmost of group of mesquite trees; copper nail and washer-----	2, 474. 52
Morita, 4.4 mi. N. and 2.0 mi. W. from, 180 ft. E. of fence corner at quarter corner between secs. 14 and 15, T. 1 N., block 34, T. & P. Ry. survey, in base of large mesquite tree; copper nail and washer-----	2, 469. 15
Morita, 4.2 mi. N. and 1.0 mi. W. from, about 10 mi. S. of Knott, 1.0 mi. S. of Hartwell School, about 740 ft. E. of cor. secs. 13, 14, 19, and 20, T. 1 N., block 34, T. & P. Ry. survey, 375 ft. E. of corner post of T-fence E., on top of E. bank of Calf Creek, in concrete post; standard tablet stamped "T T 9 C 1938 2458"-----	2, 458. 268
Morita, 4.4 mi. N. of, at cor. secs. 12, 13, 20, and 21, T. 1 N., block 34, T. & P. Ry. survey, 40 ft. S. and 21 ft. E. from junction of private T-rd. E. from graded N.-S. rd., in root of small mesquite bush; copper nail and washer-----	2, 478. 56

**SLAUGHTER NO. 3 QUADRANGLE**

[Latitude 32°00'-32°15'; longitude 101°45'-102°00']

**GLASSCOCK, MARTIN, AND MIDLAND COUNTIES**

From Morita quadrangle at point about 2.4 miles northeast of Stanton southwest along road to Stanton (by S. G. Lunde in 1938)

Stanton, 2.2 mi. NE. of Martin County courthouse at, at cor. secs. 17, 18, 19, and 20, T. 1 S., block 35, Texas & Pacific Ry. survey, 25 ft. S. of center line of rd., in N. side of corner post of T-fence S., 6 in. above ground; top of head of 60-penny spike-----	2, 659. 74
U. S. C. & G. S. B. M. designated "S 14"-----	2, 673. 400

In northeast corner of quadrangle (by E. W. Gouchenour in 1938)

[A jog from Morita quadrangle]

Stanton, 4.3 mi. NE., thence 6.3 mi. NW. from, at cor. secs. 21, 22, 27, and 28, T. 1 N., block 35, T. & P. Ry. survey, 51 ft. N. and 11 ft. E. from center of junction of private rd. E., 105 ft. N. and 3 ft. W. from center line of rd. at fence W., 53 ft. N. along fence from center of wire gate, in concrete post; standard tablet stamped "T T 7 C 1938 2565"-----	2, 564. 793
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From northeast corner of Dewey Lake No. 2 quadrangle alternately northeast and northwest along section lines into Morita quadrangle at point 1 mile northwest and 6.4 miles southwest from Lomax (by E. W. Gouchenour in 1938 and 1939; leveled twice)

Stanton, 11.6 mi. by route SE. of courthouse at, near cor. secs. 23, 24, 25, and 26, T. 2 S., block 36, T. & P. Ry. survey, 6 ft. N. and 20 ft. E. from gate in E.-W. fence, in root on E. side of small mesquite tree; copper nail and washer.....	Feet 2, 640. 51
Stanton, 10.6 mi. SE. of, near cor. secs. 13, 14, 23, and 24, T. 2 S., block 36, T. & P. Ry. survey, 190 ft. NE. of rd. along NW.-SE. section line, in W. side of base of triple mesquite tree; copper nail and washer.....	2, 618. 09
Stanton, 9.6 mi. SE. of, 1.0 mi. W. of ranch house of S. C. Houston, at cor. secs. 11, 12, 13, and 14, T. 2 S., block 36, T. & P. Ry. survey, 30 ft. E. along fence line from center line of abandoned N.-S. rd., on W. slope of N.-S. sand ridge, in concrete post; standard tablet stamped "T T 1 C 1938 2635".....	2, 634. 600
Reference mark, 300 ft. N. of tablet, in root of mesquite tree; copper nail and washer.....	2, 631. 22
Stanton, 8.6 mi. SE. of, 24 ft. N. and 90 ft. W. from T-fence N. at cor. secs. 1, 2, 11, and 12, T. 2 S., block 36, T. & P. Ry. survey, 21 ft. N. and 24 ft. W. from center of wooden gate in E.-W. fence line, in root of small mesquite tree; copper nail and washer.....	2, 614. 02
Stanton, 7.5 mi. SE. of, at bend from N. to E. in rd., at junction of private T-rd. S., 12 ft. N. and 9 ft. W. from gate at N. entrance to Houston ranch, in root on N. side of southernmost of cluster of small mesquite trees; copper nail and washer.....	2, 622. 36

[Line jogs into Morita quadrangle]

Stanton, 5.5 mi. SE. of, 6 ft. N. and 15 ft. E. from T-fence W. at cor. secs. 42, 43, 37, and 48, T. 1 S., blocks 35 and 36, T. & P. Ry. survey, in small stump at base of mesquite tree; copper nail and washer....	2, 656. 95
Stanton, 4.4 mi. SE. of, 500 ft. N. and 70 ft. E. from T-fence W. at cor. secs. 37 and 42, T. 1 S., block 36, T. & P. Ry. survey, in crotch of twin mesquite tree; copper nail and washer.....	2, 667. 35
Stanton, 2.0 mi. S. and 1.5 mi. E. from, 1.0 mi. NW. and 7.0 mi. SW. from Lomax, at cor. secs. 25, 30, 31, and 36, T. 1 S., blocks 35 and 36, T. & P. Ry. survey, 10 ft. N. and 5 ft. W. from intersection of telephone line and fence N., 10 ft. N. and 35 ft. W. from T-fence S., 11 ft. N. and 3 ft. E. from pole 6887, in concrete post; standard tablet stamped "T T 3 C 1938 2668".....	2, 667. 497

From point 2 miles south and 1.5 miles east from Stanton northwest to Stanton (by E. W. Gouchenour in 1939)

Stanton, 1.5 mi. S. of, at main entrance to Evergreen Cemetery, on concrete base of S. gatepost; painted square.....	2, 674. 01
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From Morita quadrangle southwest along U. S. Highway 80 to Stanton (by E. W. Gouchenour in 1939)

Stanton, 2.3 mi. NE. of, 80 ft. N. of highway, 148 ft. W. of gate at private rd. N., 3 ft. E. of T-fence N., in concrete post; standard tablet stamped "T T 4 C 1938 2650".....	2, 650. 761
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Stanton, at E. edge of, 60 ft. N. and 130 ft. W. from intersection of old and new highways, 6 in. W. of pipe projecting 2 ft. above ground; top of 2-in. steel pipe barely projecting above concrete base. Feet  
2, 677. 52

**STRATFORD NO. 1 QUADRANGLE<sup>32</sup>**

[Latitude 36°15'–36°30'; longitude 102°00'–102°15']

**DALLAM AND SHERMAN COUNTIES**

From Ideal quadrangle along roads west to Stratford (by E. E. Harris in 1927; single spur line)

Stratford, 3.7 mi. SE. of, on N. side of rd., 40 ft. E. of private rd. N. through gate, 2 ft. N. of fence line, in concrete post; standard tablet stamped "H 80 1927" .....	3, 634. 277
Reference mark, 59.8 ft. E. of tablet, 1 ft. N. of fence line, 4 in. under ground; iron hub .....	3, 633. 12
Stratford, 2.7 mi. SE. of, on N. side of rd., at junction of T-rd. S., 1 ft. N. and 1 ft. E. from T-angle in fence line; iron hub .....	3, 643. 95
Stratford, 1.7 mi. SE. of, on N. side of rd., at junction of T-lane S., at angle in fence line, 3 ft. N. of corner post; standard tablet stamped "H 81 1927" .....	3, 659. 773
Reference mark, 142.7 ft. E. of tablet, 1 ft. N. of fence line, 4 in. under ground; iron hub .....	3, 658. 60
Stratford, 0.7 mi. SE. of, in NE. angle of crossroads, 1 ft. N. and 1 ft. E. from L-angle in fence line; iron hub .....	3, 682. 85
Stratford, at Chicago, Rock Island & Gulf Ry. sta., in front of window of telegraph office; top of rail .....	3, 692. 6
Stratford, 100 ft. W. of sta., at city water tank, in NE. corner of N. concrete block foundation; standard tablet stamped "H 82 1927" (recovered by U. S. C. & G. S. in 1933) .....	3, 692. 621
Stratford, at entrance to Sherman County courthouse, in top concrete step; standard tablet stamped "H 83 1927" (recovered by U. S. C. & G. S. in 1933) .....	3, 692. 535
Reference mark, 90 ft. S. of tablet, in concrete walk to courthouse; bottom of chiseled hole .....	3, 689. 68

**SWEETWATER QUADRANGLE**

[Latitude 32°15'–32°30'; longitude 100°15'–100°30']

**NOLAN COUNTY**

From point on Texas & Pacific Railway 3.6 miles west of Sweetwater east to Sweetwater, thence south along Kansas City, Mexico & Orient Railway <sup>33</sup> into Blackwell quadrangle (by A. K. Andrews in 1921; double-rodged line)

U. S. C. & N. S. iron pipe with standard cap designated "R 13" .....	2, 361. 892
U. S. C. & G. S. copper bolt designated "Q 13" .....	2, 174. 608
Sweetwater, 2.6 mi. S. of, 150 ft. NE. of milepost 643, 50 ft. E. of track, 30 ft. W. of N.-S. rd.; iron post stamped "2212" (recovered by U. S. C. & G. S. in 1935) .....	2, 211. 593
Sweetwater, 5.6 mi. S. of, 0.2 mi. S. of S. end of switch, 10 ft. NW. of milepost 646, 50 ft. W. of center line of track; iron post stamped "2198" (recovered by U. S. C. & G. S. in 1935) .....	2, 197. 837

<sup>32</sup> The figures of elevation given are preliminary figures based on the 1929 general adjustment; additional leveling may necessitate further adjustment.

<sup>33</sup> Now the Panhandle & Santa Fe Railway.

Sweetwater, 8.6 mi. S. of, 1.0 mi. S. of signal board, at Lake Trammle sta., 600 ft. W. of S. end of Lake Trammle, 75 ft. N. of milepost 649, on W. side of track; iron post stamped "1921 Texas 2299" (recovered by U. S. C. & G. S. in 1935)-----	Feet 2, 298. 532
Sweetwater, 10.6 mi. S. of, 0.5 mi. S. of signboard at Mile 12 sta., 50 ft. W. of center line of track, 65 ft. N. of milepost 651; iron post stamped "1921 Texas 2345" (recovered by U. S. C. & G. S. in 1935)-----	2, 344. 323
Sweetwater, 13.5 mi. S. of, 3.6 mi. N. of Maryneal, 500 ft. N. of milepost 654, 300 ft. S. of R. R. bridge 125, on E. side of track; iron post stamped "1921 Texas 2461" (recovered by U. S. C. & G. S. in 1935)-----	2, 460. 989

From Sweetwater northeast along Atchison, Topeka & Santa Fe Railway to bridge over Sweetwater Creek, thence north along roads into Longworth quadrangle (by E. R. Martin in 1924; releveled by E. E. Harris in 1925)

Sweetwater, 4.0 mi. NE. of Nolan County courthouse at, at R. R. bridge crossing Sweetwater Creek, 228 ft. E. of milepost 459, 430 ft. NW. of highway crossing, in top of W. pier, 1 ft. S. of N. end, 9 ft. below track; standard tablet stamped "M 1 1924"-----	2, 035. 018
Reference mark, 70 ft. SE. of tablet, in N. end of E. pier, 9 ft. below track; round-headed steel bolt-----	2, 034. 589
U. S. C. & G. S. standard disk stamped "O 13 1910" <sup>37</sup> -----	2, 000. 865

WILDORADO NO. 2 QUADRANGLE<sup>38</sup>

[Latitude 35°15'-35°30'; longitude 102°15'-102°30']

## OLDHAM COUNTY

From Ady quadrangle at point about 10 miles northwest of Gray ranch northwest and northeast along roads and back into Ady quadrangle at point 2.1 miles southwest of L S ranch (by S. R. Archer in 1933)

Cottonwood Camp, 1.2 mi. along old Wildorado-Tascosa rd. S. of, near center of N. side sec. 81, block 5, Gunter & Munson survey, 400 ft. E. of fence corner, at cattle guard and gate in E.-W. fence line crossing rd., 20 ft. E. of center of cattle guard, 15 ft. E. of E. high fence post of cattle guard, under fence, set flush with ground; top of iron rod (recovered by U. S. C. & G. S. in 1935)-----	3, 561. 571
Cottonwood Camp, 280 ft. SE. of camphouse, about 40 ft. S. of S. side of corral fence, on E. side of N.-S. fence S. from corral, in concrete post; standard tablet stamped "T T 25 L 1933"-----	3, 538. 499
Cottonwood Camp, 1.0 mi. N. of, 40 ft. N.20°E. of center of rd. fork at top of gravel ridge, midway between rds., set flush with ground and surrounded by rocks; top of iron rod (recovered by U. S. C. & G. S. in 1935)-----	3, 596. 056
Cottonwood Camp, 2.1 mi. N. of, 12 ft. N. and 36 ft. E. from intersection of old and new Wildorado-Tascosa rds., in concrete post; standard tablet stamped "T T 26 L 1933" (recovered by U. S. C. & G. S. in 1935)-----	3, 513. 940

<sup>37</sup> Not included in leveling by E. E. Harris in 1925.

<sup>38</sup> The figures of elevation given are preliminary figures based on the 1929 general adjustment; additional leveling may necessitate further adjustment.



Cottonwood Camp, 3.5 mi. N. of, at crossing of E.-W. fence line, 20 ft. E. of center of cattle guard, 9 ft. E. of center of gate, 3 ft. E. of tall fence post on E. side of gate, under fence, set flush with ground; top of iron rod.....	Feet 3, 528. 08
Cottonwood Camp, 4.4 mi. N. of, 3.4 mi. SW. of L S ranch headquarters, 0.9 mi. N. of crossing of E.-W. fence line, 1.2 mi. S. of cattle guard in N.-S. fence line at top of bluff, 10 ft. W. of center of intersection of old and new rds., set flush with ground and surrounded by stones; top of iron rod (recovered by U. S. C. & G. S. in 1935).....	3, 492. 939
L S ranch headquarters, 2.2 mi. SW. of, 2.5 mi. S. of Tascosa sta. on Fort Worth & Denver City Ry., on top of bluff, 127 ft. NW. along fence line from cattle guard across rd. in N.-S. fence line, in concrete post; standard tablet stamped "T T 27 L 1933" (recovered by U. S. C. & G. S. in 1935).....	3, 508. 261

**WILDORADO NO. 4 QUADRANGLE<sup>39</sup>**

[Latitude 35°00'-35°15'; longitude 102°00'-102°15']

**DEAF SMITH, OLDEHAM, POTTER, AND RANDALL COUNTIES**

Southwest and northwest along road about 4 miles north and 1.5 miles east from Bushland (by S. R. Archer in 1933)

[A jog from Ady quadrangle]

Bushland, 3.3 mi. N. and 1.5 mi. E. from, 800 ft. S. and 540 ft. E. from center of sec. 148, block 9, Beaty, Seale, & Forwood survey, 21 ft. E. of corner post of fences N. and E., in concrete post; standard tablet stamped "T T Sta No 9 L 1928 3694".....	3, 694. 004
Reference mark, 10 ft. E. of tablet, in fence line E., set flush with ground; top of iron rod.....	3, 694. 31
Bushland, 3.8 mi. N. and 1.0 mi. E. from, about 0.2 mi. S. of cor. secs. 148, 149, 158, and 159, block 9, Beaty, Seale, & Forwood survey, at intersection of ranch rd. and section-line fence, 15 ft. S. of center of gate, 5.5 ft. S. of center of cattle guard, under fence, set flush with ground; top of iron rod.....	3, 674. 30

South and northwest across country about 4 miles north and 2 miles west from Bushland (by S. R. Archer in 1933)

[A jog from Ady quadrangle]

Bushland, 4.0 mi. N. and 2.0 mi. W. from, about 0.9 mi. SE. of Fry- ingpan ranch house, 2 ft. W. of T-fence E., at W. cor. secs. 192 and 193, block 9, Beaty, Seale, & Forwood survey, 817 ft. S. of T-fence W. and probable SE. cor. sec. 1, block Z 6, John Gibson survey, and NE. cor. sec. 2, G. C. & S. F. Ry. Co. survey, in concrete post; standard tablet stamped "T T 19 L 1933 3713".....	3, 713. 191
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<sup>39</sup> The figures of elevation given are preliminary figures based on the 1929 general adjustment; additional leveling may necessitate further adjustment.

## SUPPLEMENTAL ELEVATIONS IN THE TEXAS PANHANDLE

The table below shows altitudes of well-known features in the Texas Panhandle, such as summits and top-of rails at railroad stations, as assembled from records and topographic maps of the Geological Survey and from other sources.<sup>40</sup>

These altitudes, with the exception of rail heights, which were determined by spirit leveling along the railroads, were obtained by barometric and vertical-angle measurements. The figures given are in accord with the latest information, but they are only approximate and should not be used for accurate work.

*Supplemental elevations*

Location	County	Quadrangle	Elevation (feet)
Alanreed, C. R. I. & G. Ry.....	Gray.....	Lefors.....	3,043
Allen Δ (U. S. C. & G. S.).....	Fisher.....	Longworth.....	2,210
Amarillo, A. T. & S. F. Ry.....	Potter.....	Amarillo No. 3.....	3,662
Amherst, P. & S. F. Ry.....	Lamb.....	Olton No. 3.....	3,650
Antelope Peak.....	Carson.....	Sanford.....	3,360
Anton, P. & S. F. Ry.....	Hockley.....	10.....	3,385
Aspermont, W. V. Ry.....	Stonewall.....	Aspermont.....	1,768
Augustus, P. & S. F. Ry.....	Garza.....	Post No. 3.....	2,471
Bain Δ (U. S. C. & G. S.).....	Donley.....	Clarendon No. 1.....	2,638
Bainer, P. & S. F. Ry.....	Lamb.....	10.....	3,449
Balch, P. & S. F. Ry.....	Lubbock.....	Laguna Rica No. 1.....	3,335
Barwise, F. W. & D. C. Ry.....	Floyd.....	Lubbock No. 1.....	3,246
Becton, F. W. & D. C. Ry.....	Lubbock.....	Lubbock No. 1.....	3,253
Benonina, C. R. I. & G. Ry.....	Wheeler.....	Wheeler.....	2,145
Berger, F. W. & D. C. Ry.....	Oldham.....	Channing No. 3.....	3,310
Bernecker, P. & S. F. Ry.....	Fisher.....	Snyder No. 4.....	2,186
Bernstein, C. R. I. & G. Ry.....	Hansford.....	Hansford No. 2.....	3,136
Black, A. T. & S. F. Ry.....	Parmer.....	Friona No. 4.....	3,995
Boden, F. W. & D. C. Ry.....	Potter.....	Ady.....	3,251
Bovina, A. T. & S. F. Ry.....	Parmer.....	Friona No. 3.....	4,069
Brand, P. & S. F. Ry.....	Scurry.....	Snyder No. 2.....	2,414
Branson Δ (U. S. C. & G. S.).....	Collingsworth.....	Arlie No. 1.....	2,212
Brickel, C. R. I. & G. Ry.....	Sherman.....	Stratford No. 1.....	3,725
Briscoe, P. & S. F. Ry.....	Wheeler.....	Canadian.....	2,654
Broadview, P. & S. F. Ry.....	Lubbock.....	Lubbock No. 3.....	3,244
Brownfield, P. & S. F. Ry.....	Terry.....	Laguna Rica No. 3.....	3,314
Burris, P. & S. F. Ry.....	Lubbock.....	Lubbock No. 3.....	3,155
Canyon, A. T. & S. F. Ry.....	Randall.....	Tulia No. 2.....	3,571
Cap Rock, P. & S. F. Ry.....	Garza.....	Post No. 2.....	2,659
Castle Peak.....	Taylor.....	Merkel.....	2,400
Challis, P. & S. F. Ry.....	Terry.....	Laguna Rica No. 1.....	3,338
Chamberlin, C. R. I. & G. Ry.....	Dallam.....	Stratford No. 3.....	3,959
Chorn, P. & S. F. Ry.....	Scurry.....	Snyder No. 3.....	2,355
Clarendon, F. W. & D. C. Ry.....	Donley.....	Clarendon No. 2.....	2,727
Cliffside, F. W. & D. C. Ry.....	Potter.....	Cliffside.....	3,407
Coahoma, T. & P. Ry.....	Howard.....	Big Spring North.....	2,412
Colorado, T. & P. Ry.....	Mitchell.....	Colorado No. 2.....	2,070

<sup>40</sup> Gannett, Henry, A dictionary of altitudes in the United States (fourth edition): U. S. Geol. Survey Bull. 274, pp. 943-974, 1906; Avers, H. G., Precise leveling in Texas: U. S. Coast and Geodetic Survey Special Pub. 77, 1929.

## Supplemental elevations—Continued

Location	County	Quadrangle	Elevation (feet)
Conlen, C. R. I. & G. Ry.....	Dallam.....	Stratford No. 4.....	3,817
Conway, C. R. I. & G. Ry.....	Carson.....	Claude No. 3.....	3,459
Dalhart, C. R. I. & G. Ry.....	Dallam.....	Dalhart No. 4.....	3,985
Dawn, A. T. & S. F. Ry.....	Deaf Smith.....	Dimmitt No. 1.....	3,803
Dermott, P. & S. F. Ry.....	Scurry.....	Gail No. 1.....	2,492
Doud, P. & S. F. Ry.....	Lubbock.....	Lubbock No. 3.....	3,280
Dugger, P. & S. F. Ry.....	Garza.....	Post No. 2.....	2,736
Edgin, F. W. & D. C. Ry.....	Floyd.....	Lockney No. 1.....	2,588
Eppler, P. & S. F. Ry.....	Garza.....	Post No. 4.....	2,292
Eskota, T. & P. Ry.....	Fisher.....	Longworth.....	1,941
Fitz, F. W. & D. C. Ry.....	Potter.....	Ady.....	3,361
Flat Top Mtn.....	Jones-Stonewall.....	Hamlin.....	1,798
Friona, A. T. & S. F. Ry.....	Parmer.....	Friona No. 4.....	4,007
Fuller, C. R. I. & G. Ry.....	Wheeler.....	Wheeler.....	2,183
Fullerville, P. & S. F. Ry.....	Scurry.....	Gail No. 1.....	2,468
Gentry, F. W. & D. C. Ry.....	Potter.....	Cliffside.....	3,460
Germania, T. & P. Ry.....	Midland.....	Slaughter No. 3.....	2,752
Gravel, F. W. & D. C. Ry.....	Floyd.....	Lockney No. 1.....	2,618
Groom, C. R. I. & G. Ry.....	Carson.....	Claude No. 4.....	3,264
Gruver, C. R. I. & G. Ry.....	Hansford.....	Hansford No. 2.....	3,169
Hamlin, P. & S. F. Ry.....	Jones.....	Hamlin.....	1,721
Haney, A. T. & S. F. Ry.....	Randall.....	Amarillo No. 3.....	3,643
Hartley, F. W. & D. C. Ry.....	Hartley.....	Channing No. 2.....	3,904
Harwell Δ (U. S. C. & G. S.).....	Oldham.....	Adrian No. 4.....	4,374
Hereford, A. T. & S. F. Ry.....	Deaf Smith.....	Dimmitt No. 2.....	3,814
Hermleigh, P. & S. F. Ry.....	Scurry.....	Snyder No. 3.....	2,442
Hitt, C. R. I. & G. Ry.....	Dallam.....	Stratford No. 3.....	3,980
Iatan, T. & P. Ry.....	Mitchell.....	Big Spring No. 1.....	2,215
Indian Fort Mesa.....	Potter.....	Cliffside.....	3,366
Irwin, C. R. I. & G. Ry.....	Dallam.....	Stratford No. 3.....	3,872
Jayton, W. V. Ry.....	Kent.....	Clairemont No. 1.....	2,009
Jericho, C. R. I. & G. Ry.....	Donley.....	Lefors.....	3,203
Joel, A. T. & S. F. Ry.....	Deaf Smith.....	Dimmitt No. 2.....	3,769
John Ray Butte.....	Potter.....	Fourways.....	3,664
Johnfarris, F. W. & D. C. Ry.....	Floyd.....	Lockney No. 3.....	2,999
Justiceburg, P. & S. F. Ry.....	Garza.....	Post No. 4.....	2,257
Kinder, F. W. & D. C. Ry.....	Briscoe.....	Lockney No. 1.....	2,542
King, C. R. I. & G. Ry.....	Hartley.....	Middle Water No. 1.....	4,040
Kitalou, F. W. & D. C. Ry.....	Lubbock.....	Lubbock No. 4.....	3,186
Kitalou, crossing of F. W. & D. C. and P. & S. F. Rys.....	Lubbock.....	Lubbock No. 4.....	3,184
Lahey, P. & S. F. Ry.....	Terry.....	Laguna Rica No. 3.....	3,316
Lariat, P. & S. F. Ry.....	Parmer.....	Agua Negra No. 2.....	4,007
Lark, C. R. I. & G. Ry.....	Carson.....	Claude No. 4.....	3,375
Lela, C. R. I. & G. Ry.....	Wheeler.....	Wheeler.....	2,415
Lester, A. T. & S. F. Ry.....	Randall.....	Dimmitt No. 1.....	3,669
Littlefield, P. & S. F. Ry.....	Lamb.....	10.....	3,557
Lloyd Δ (U. S. C. & G. S.).....	Nolan.....	Sweetwater.....	2,600
Lockney, F. W. & D. C. Ry.....	Floyd.....	Lockney No. 3.....	3,282
Lockney, crossing of F. W. & D. C. and P. & S. F. Rys.....	Floyd.....	Lockney No. 3.....	3,282
Lorraine, T. & P. Ry.....	Mitchell.....	Colorado No. 1.....	2,267
Lubbock, P. & S. F. Ry.....	Lubbock.....	Lubbock No. 3.....	3,196
Lubbock Junction, P. & S. F. Ry.....	Lubbock.....	Lubbock No. 3.....	3,202

*Supplemental elevations—Continued*

Location	County	Quadrangle	Elevation (feet)
McCauley, P. & S. F. Ry.....	Fisher.....	Hamlin.....	1,883
McLean, C. R. I. & G. Ry.....	Gray.....	Lefors.....	2,859
Magenta, F. W. & D. C. Ry.....	Oldham.....	Channing No. 3.....	3,231
Meadow, P. & S. F. Ry.....	Terry.....	Laguna Rica No. 1.....	3,331
Merkel, T. & P. Ry.....	Taylor.....	Merkel.....	1,872
Midland, T. & P. Ry.....	Midland.....	Midland No. 4.....	2,777
Monument Peak.....	Fisher.....	Longworth.....	2,028
Morita, T. & P. Ry.....	Howard.....	Morita.....	2,475
Morse, C. R. I. & G. Ry.....	Hansford.....	Hansford No. 3.....	3,186
Muleshoe, P. & S. F. Ry.....	Bailey.....	Agua Negra No. 4.....	3,792
Murdo, F. W. & D. C. Ry.....	Oldham.....	Channing No. 3.....	3,523
Old Glory, W. V. Ry.....	Stonewall.....	Aspermont.....	1,669
Parmerton, A. T. & S. F. Ry.....	Parmer.....	Friona No. 3.....	4,179
Parnell, F. W. & D. C. Ry.....	Hall.....	Clarendon No. 4.....	1,946
Petersburg, F. W. & D. C. Ry.....	Hale.....	Lubbock No. 1.....	3,255
Posey, P. & S. F. Ry.....	Lubbock.....	Tahoka No. 1.....	3,152
Post, P. & S. F. Ry.....	Garza.....	Post No. 3.....	2,592
Pringle, C. R. I. & G. Ry.....	Hutchinson.....	Plemons.....	3,312
Pyron, P. & S. F. Ry.....	Scurry.....	Snyder No. 4.....	2,365
Quitaque, F. W. & D. C. Ry.....	Briscoe.....	Lockney No. 1.....	2,574
Ramsdell, C. R. I. & G. Ry.....	Wheeler.....	Wheeler.....	2,564
Rehm, C. R. I. & G. Ry.....	Hartley.....	Middle Water No. 1.....	4,000
Rockledge, C. R. I. & G. Ry.....	Donley.....	Lefors.....	3,167
Romero, C. R. I. & G. Ry.....	Hartley.....	Middle Water No. 3.....	4,121
Ropes, P. & S. F. Ry.....	Hockley.....	Laguna Rica No. 1.....	3,364
Roscoe, T. & P. Ry.....	Nolan.....	Colorado No. 1.....	2,388
Rotten Hill.....	Oldham.....	Ady.....	3,408
Royal, C. R. I. & G. Ry.....	Potter.....	Amarillo No. 4.....	3,599
Seagraves, P. & S. F. Ry.....	Gaines.....	Seminole No. 1.....	3,346
Shallowater, P. & S. F. Ry.....	Lubbock.....	Lubbock No. 3.....	3,297
Shamrock, C. R. I. & G. Ry.....	Wheeler.....	Wheeler.....	2,331
Skeen, P. & S. F. Ry.....	Lynn.....	Tahoka No. 3.....	3,023
Skinout Mtn.....	Jones.....	Hamlin.....	1,960
Slaton, P. & S. F. Ry.....	Lubbock.....	Tahoka No. 1.....	3,087
Snyder, P. & S. F. Ry.....	Scurry.....	Snyder No. 3.....	2,359
South Plains, F. W. & D. C. Ry.....	Floyd.....	Lockney No. 3.....	3,218
Southland, P. & S. F. Ry.....	Garza.....	Tahoka No. 1.....	3,023
Stanton, T. & P. Ry.....	Martin.....	Slaughter No. 3.....	2,664
Stratford, crossing of C. R. I. & G. and P. & S. F. Rys.....	Sherman.....	Stratford No. 1.....	3,693
Sterley, F. W. & D. C. Ry.....	Floyd.....	Lockney No. 3.....	3,257
Stevens, C. R. I. & G. Ry.....	Sherman.....	Ideal.....	3,535
Sudan, P. & S. F. Ry.....	Lamb.....	Agua Negra No. 4.....	3,752
Summerfield, A. T. & S. F. Ry.....	Castro.....	Friona No. 4.....	3,937
Sweetwater, G. C. & S. F. Ry.....	Nolan.....	Sweetwater.....	2,147
Sweetwater, P. & S. F. Ry.....	Nolan.....	Sweetwater.....	2,147
Sweetwater, T. & P. Ry.....	Nolan.....	Sweetwater.....	2,166
Sylvester, P. & S. F. Ry.....	Fisher.....	Longworth.....	1,855
Tampico, F. W. & D. C. Ry.....	Hall.....	Turkey No. 2.....	2,267
Texas-New Mexico State line (near Tex- line), F. W. & D. C. Ry.....	Dallam, Texas; Un- ion, New Mexico.	Clayton.....	4,729

*Supplemental elevations—Continued*

Location	County	Quadrangle	Elevation (feet)
Texline, F. W. & D. C. Ry.....	Dallam.....	Clayton.....	4,692
Trent, T. & P. Ry.....	Taylor.....	Merkel.....	1,915
Turkey, F. W. & D. C. Ry.....	Hall.....	Turkey No. 2.....	2,350
Twist, F. W. & D. C. Ry.....	Hartley.....	Stratford No. 3.....	3,966
Umbarger, A. T. & S. F. Ry.....	Randall.....	Dimmitt No. 1.....	3,768
Vega North Base $\Delta$ (U. S. C. & G. S.)...	Oldham.....	Adrian No. 4.....	4,134
Vega South Base $\Delta$ (U. S. C. & G. S.)...	Deaf Smith.....	Adrian No. 4.....	4,180
Wellman, P. & S. F. Ry.....	Terry.....	Laguna Rica No. 3....	3,343
Westbrook, T. & P. Ry.....	Mitchell.....	Colorado No. 2.....	2,135
Wilsey, A. T. & S. F. Ry.....	Parmer.....	Agua Negra No. 2....	4,170
Wolfforth, P. & S. F. Ry.....	Lubbock.....	Lubbock No. 3.....	3,320

## APPENDIX

The following information is supplemental to that published in Bulletin 883-A, Spirit Leveling in Texas, Part 1, Western Texas, which was issued in June 1937.

### SUPPLEMENTAL ELEVATIONS IN WESTERN TEXAS

The table below shows altitudes of well-known features, mostly mountain summits, in western Texas as assembled from records and topographic maps of the Geological Survey and from other sources.<sup>1</sup> The figures of elevation of triangulation stations and vertical-angle bench marks included in this list and indicated respectively by "△" and "V. A. B. M." were determined by vertical-angle measurements, while altitudes of features which have no marked point of reference were obtained by barometric observations. The figures given are in accord with the latest information, but they are only approximate and should not be used for accurate work.

#### *Supplemental elevations*

Location	County	Quadrangle	Elevation (feet)
Adobe Walls Mtn.....	Brewster.....	Chisos Mine.....	4, 500
Agua Fria Mtn. (V. A. B. M.).....	Brewster.....	Agua Fria.....	4, 828
Aguja.....	Presidio.....	Chinati Peak.....	5, 981
Alamoore △, Carrizo Mtns.....	Hudspeth.....	Van Horn.....	5, 285
Apache Mtns., East △ (U. S. C. & G. S.).....	Culberson.....	Kent.....	5, 315
Apache Mtns., Krouse △ (U. S. C. & G. S.).....	Culberson.....	Kent.....	5, 657
Apache Mtns., Reynolds △ (U. S. C. & G. S.).....	Culberson.....	Kent.....	5, 390
Apache Mtns., Seay △ (U. S. C. & G. S.).....	Culberson.....	Kent.....	4, 023
Apache Mtns., West △ (U. S. C. & G. S.).....	Culberson.....	Kent.....	5, 110
Apache Peak.....	Culberson-Hudspeth.....	Van Horn.....	5, 696
Anthony's Nose.....	El Paso.....	Fort Bliss.....	6, 906
Arbuckle△, Cave Mesa.....	Pecos.....	Hovey.....	4, 420
Baldy Peak, Baldy △.....	Jeff Davis.....	Valentine.....	8, 382
Baylor Mtns., Baylor △.....	Culberson.....	Van Horn.....	5, 560
Beach Mtn. (V. A. B. M., NW.).....	Culberson.....	Van Horn.....	5, 935
Beach Mtn. (V. A. B. M., S.).....	Culberson.....	Van Horn.....	5, 305
Beard Mtn., Beard △ (U. S. C. & G. S.).....	Pecos.....	Fort Davis.....	5, 012

<sup>1</sup> Gannett, Henry, A dictionary of altitudes in the United State (fourth edition): U. S. Geol. Survey Bull. 274, pp. 943-974, 1906; Garner, C. L., Precise triangulation in Texas, Rio Grande arc: U. S. Coast and Geodetic Survey Special Pub. 78, pp. 31-32, 1922.

*Supplemental elevations—Continued*

Location	County	Quadrangle	Elevation (feet)
Bee Mtn.....	Brewster.....	Chisos Mine.....	3,460
Bee Mtn.....	Brewster.....	Emory Peak.....	3,376
Big Aguja Mtn.....	Jeff Davis.....	Fort Davis.....	5,743
Big Christmas△, Christmas Mtns.....	Brewster.....	Paint Gap.....	5,735
Bissett Mtn. (V. A. B. M.).....	Brewster.....	Altuda.....	5,481
Black Hill, La Negra△.....	Brewster.....	Agua Fria.....	4,007
Black Hills.....	Presidio.....	Fort D A Russell.....	5,550
Black Knob△.....	Brewster.....	Chilicotal.....	2,617
Black Mtn.△.....	Jeff Davis.....	Fort Davis.....	7,550
Black Peak.....	Brewster.....	Monument Spring.....	4,958
Black Peak.....	Culberson.....	Kent.....	4,710
Black Peak, Black Cap△.....	Brewster.....	Nine Point Mesa.....	4,818
Blue Mtn.....	Jeff Davis.....	Valentine.....	7,330
Boracho Peak.....	Jeff Davis.....	Valentine.....	5,661
Buck Hill, Buck△.....	Brewster.....	Buck Hill.....	4,203
Bush Mtn., Bush△.....	Culberson.....	Guadalupe Peake.....	8,676
Butcherknife Hill.....	Brewster.....	Buck Hill.....	4,050
Butterbowl.....	Brewster.....	Nine Point Mesa.....	4,104
Camels Hump.....	Brewster.....	Agua Fria.....	3,671
Canyon Flag △, Mesa de Angulla.....	Brewster.....	Terlingua Abaja.....	3,884
Capote Peak.....	Presidio.....	San Carlos.....	6,185
Carrizo Mtns., Alamoore△.....	Hudspeth.....	Van Horn.....	5,285
Casket Mtn.....	Jeff Davis.....	Fort Davis.....	6,180
Cathedral Mtn.....	Brewster.....	Alpine.....	6,860
Cathedral Mtn. (V. A. B. M.).....	Brewster.....	Altuda.....	6,125
Cave Mesa, Arbuckle△.....	Pecos.....	Hovey.....	4,420
Cerro Alto.....	Hudspeth.....	Cerro Alto.....	6,767
Cerro Boludo.....	Presidio.....	Jordan Gap.....	4,746
Cerro Castellan, Sierra Castellan△.....	Brewster.....	Emory Peak.....	3,283
Cerro Diablo.....	Hudspeth.....	Salt Basin.....	5,700
Chancellor△, Pikes Peak (U. S. C. & G. S.).....	Pecos.....	Hovey.....	3,858
Chilicotal Mtn. (V. A. B. M.).....	Brewster.....	Chilicotal.....	4,104
Chinati Peak, Chinati△.....	Presidio.....	Chinati Peak.....	7,730
Chisos△, Emory Peak.....	Brewster.....	Emory Peak.....	7,835
Chispa Mtn., Chispa△.....	Culberson.....	Chispa.....	5,215
Christmas Mtns., Big Christmas△.....	Brewster.....	Paint Gap.....	5,735
Christmas Mtns., North Christmas△.....	Brewster.....	Paint Gap.....	5,460
Cienega Mtn.....	Brewster.....	Alpine.....	6,600
Cienega Mtns.....	Presidio.....	Cienega.....	5,227
Cigar Mtn.....	Brewster.....	Chisos Mine.....	3,290
Cone Peak△.....	Culberson.....	Guadalupe Peake.....	5,080
Cone△, Spring Hill.....	Culberson.....	Kent.....	4,955
Corazones Peak, West Corazones△.....	Brewster.....	Paint Gap.....	5,306
Coyote Peak.....	Culberson.....	Guadalupe Peake.....	6,658
Croton Peak△.....	Brewster.....	Paint Gap.....	4,600
Crown Mtn.....	Brewster.....	Paint Gap.....	7,186
Cutoff△.....	Hudspeth.....	Guadalupe Peake.....	6,910
Davis Mtns., Newman△ (U. S. C. & G. S.).....	Jeff Davis.....	Valentine.....	6,390
Delaware Mtns., Delaware△.....	Culberson.....	Van Horn.....	5,870
Del Norte△, Santiago Mtns.....	Brewster.....	Santiago Peak.....	5,602
Devils Backbone.....	Brewster.....	Marathon.....	4,081
Diablo△, Sierra Diablo.....	Hudspeth.....	Van Horn.....	6,513
Dogie Mtn.....	Brewster.....	Paint Gap.....	3,700
Dome Peak.....	Hudspeth.....	Sierra Blanca.....	5,400
Dome△, Round Hill.....	Brewster.....	Buck Hill.....	5,071
Dugout Mtn.....	Brewster.....	Monument Spring.....	5,195
Eagle Mtn., Eagle△.....	Hudspeth.....	Eagle Mtn.....	7,516
East△, Apache Mtns. (U. S. C. & G. S.).....	Culberson.....	Kent.....	5,315

*Supplemental elevations—Continued*

Location	County	Quadrangle	Elevation (feet)
El Capitan.....	Culberson.....	Guadalupe Peake.....	8,078
El Capitan $\Delta$ , Guadalupe Peake.....	Culberson.....	Guadalupe Peake.....	8,751
El Muerto Peak.....	Jeff Davis.....	Valentine.....	5,800
Elephant Mtn.....	Brewster.....	Alpine.....	6,210
Elephant Mtn.....	Brewster.....	Buck Hill.....	5,067
Emory Peak, Chisos $\Delta$ .....	Brewster.....	Emory Peak.....	7,835
Flattop $\Delta$ , San Martine Peak (U.S.C. & G.S.)	Reeves.....	Kent.....	3,909
Forks $\Delta$ .....	Culberson.....	Guadalupe Peake.....	4,232
Fresno Peak, Fresno $\Delta$ .....	Presidio.....	Lajitas.....	5,131
Frijole $\Delta$ .....	Culberson.....	Guadalupe Peake.....	8,245
Gage $\Delta$ .....	Brewster.....	Monument Spring.....	4,455
Garden Springs $\Delta$ .....	Brewster.....	Monument Spring.....	4,465
Gemelo Mesa.....	Presidio.....	Jordan Gap.....	5,065
Gemelo Mesa, Sharp Rock $\Delta$ .....	Presidio.....	Jordan Gap.....	4,953
Gettysburg Peak.....	Presidio.....	San Carlos.....	4,897
Gillion $\Delta$ , Old Blue Mtn.....	Brewster.....	Altuda.....	6,286
Glass $\Delta$ .....	Pecos.....	Hess Canyon.....	5,473
Goat Mtn.....	Brewster.....	Alpine.....	6,700
Goat Mtn.....	Brewster.....	Emory Peak.....	4,537
Gomez Peak $\Delta$ .....	Jeff Davis.....	Kent.....	6,323
Graytop (V. A. B. M.).....	Brewster.....	Nine Point Mesa.....	4,356
Guadalupe Peake, <sup>2</sup> El Capitan $\Delta$ .....	Culberson.....	Guadalupe Peake.....	8,751
Guadalupe Summit $\Delta$ .....	Culberson.....	Guadalupe Peake.....	5,446
Hackett Peake.....	Hudspeth.....	Van Horn.....	5,280
Hat Mtn.....	Presidio.....	Jordan Gap.....	5,300
Hen Egg Mtn., Hen Egg $\Delta$ .....	Brewster.....	Chisos Mine.....	5,002
Horse Mtn., Horse $\Delta$ .....	Brewster.....	Marathon.....	5,010
Housetop Mtn.....	Presidio.....	Jordan Gap.....	5,337
Indian Head.....	Brewster.....	Chisos Mine.....	3,495
Indianola Peak.....	Brewster.....	Emory Peak.....	5,240
Iron Mtn.....	Brewster.....	Altuda.....	5,420
Kit Mtn.....	Brewster.....	Emory Peak.....	3,803
Krouse $\Delta$ , Apache Mtns. (U. S. C. & G. S.)	Culberson.....	Kent.....	5,657
La Mota Mtn.....	Presidio.....	Tascotal Mesa.....	5,046
La Negra $\Delta$ , Black Hill.....	Brewster.....	Agua Fria.....	4,007
La Viuda.....	Presidio.....	Tascotal Mesa.....	4,080
Lava $\Delta$ .....	Brewster.....	Hood Spring.....	4,105
Leonard Mtn., Leonard $\Delta$ .....	Brewster.....	Hess Canyon.....	5,860
Little Aguja Mtn.....	Jeff Davis.....	Fort Davis.....	4,910
Lone Cone.....	Culberson.....	Guadalupe Peake.....	4,476
Lone Mtn.....	Brewster.....	McKinney Springs.....	4,132
Lost Mine Peak (V. A. B. M.).....	Brewster.....	Paint Gap.....	7,550
Lost Peak, Lost $\Delta$ .....	Culberson.....	Guadalupe Peake.....	7,834
McKinney Mtn.....	Brewster.....	Jordan Gap.....	5,000
McKittrick $\Delta$ .....	Culberson.....	Guadalupe Peake.....	7,052
Major Peak.....	Jeff Davis.....	Fort Davis.....	5,822
Marathon $\Delta$ .....	Brewster.....	Marathon.....	4,553
Mariscal Mtn., Mariscal $\Delta$ .....	Brewster.....	Chilicotal.....	3,940
Mesa de Anguila, Canyon Flag $\Delta$ .....	Brewster.....	Terlingua Abaja.....	3,884
Mitchell Mesa, Mitchell $\Delta$ .....	Brewster.....	Buck Hill.....	5,351
Mitre Peak.....	Jeff Davis.....	Alpine.....	6,100
Mount Ord, Ord $\Delta$ .....	Brewster.....	Alpine.....	6,814
Mule Ear Peaks.....	Brewster.....	Emory Peak.....	3,880

<sup>2</sup>Highest point in the State thus far determined;

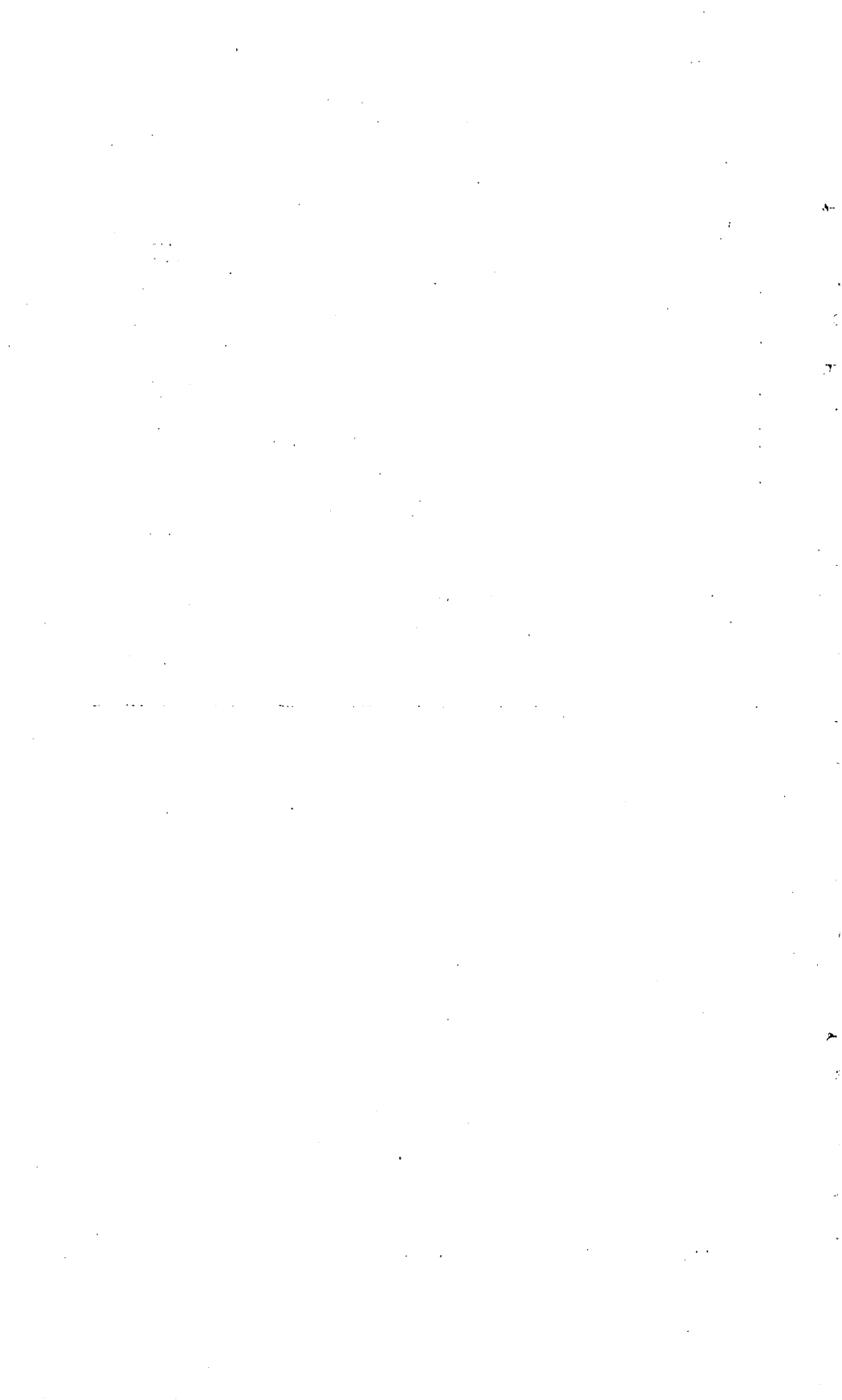


*Supplemental elevations—Continued*

Location	County	Quadrangle	Elevation (feet)
Needle Peak.....	Presidio.....	Tascotal Mesa.....	4, 225
Newman△, Davis Mtns (U. S. C. & G.S.)..	Jeff Davis.....	Valentine.....	6, 390
Nine Point Mesa.....	Brewster.....	Nine Point Mesa.....	5, 551
Nipple Hill.....	Culberson.....	Guadalupe Peake.....	5, 694
North Christmas△, Christmas Mtns.....	Brewster.....	Paint Gap.....	5, 460
North Diablo△, Sierra Diablo.....	Hudspeth.....	Van Horn.....	6, 630
North Franklin△.....	El Paso.....	Fort Bliss.....	7, 141
North Mtn.....	Pecos.....	Hovey.....	4, 107
Nugent Mtn.....	Brewster.....	McKinney Springs..	4, 783
Old Blue Mtn., Gillion△.....	Brewster.....	Altuda.....	6, 286
Ord△, Mount Ord.....	Brewster.....	Alpine.....	6, 814
Packsaddle Mtn.....	Brewster.....	Agua Fria.....	4, 661
Paint Gap Hills.....	Brewster.....	Paint Gap.....	4, 258
Paint Mtn.....	Brewster.....	Agua Fria.....	3, 471
Paisano Peak.....	Jeff Davis.....	Alpine.....	6, 050
Panther Mesa.....	Pecos.....	Hovey.....	4, 410
Pikes Peak, Chancellor△ (U. S. C. & G.S.)..	Pecos.....	Hovey.....	3, 858
Pine Mesa.....	Pecos.....	Hovey.....	4, 550
Pinks Peak.....	Brewster.....	Chisos Mine.....	3, 681
Post Mtn.....	Presidio.....	Lajitas.....	4, 600
Post△.....	Brewster.....	Monument Spring..	4, 255
Pummel Peak.....	Brewster.....	McKinney Springs..	6, 630
Quitman Mtns.....	Hudspeth.....	Fort Hancock.....	6, 500
Red Bluff.....	Brewster.....	Agua Fria.....	4, 016
Red Hill.....	Presidio.....	Jordan Gap.....	4, 054
Reynolds△, Apache Mtns. (U. S. C. & G. S.).	Culberson.....	Kent.....	5, 390
Rim△.....	Culberson.....	Guadalupe Peake.....	5, 632
Rincon Mtn.....	Presidio.....	Lajitas.....	4, 410
Rosillo Peake, Rosillos△.....	Brewster.....	Bone Spring.....	5, 420
Rosillos Mountains.....	Brewster.....	Nine Point Mesa.....	5, 373
Round Hill, Dome△.....	Brewster.....	Buck Hill.....	5, 071
Round Mtn.....	Hudspeth.....	Sierra Blanca.....	5, 100
Round Mtn., Round△ (U. S. C. & G. S.)..	Reeves.....	Toyah.....	3, 298
Roys Peak.....	Brewster.....	McKinney Springs..	3, 935
San Antonio Mtn. (V. A. B. M.).....	Hudspeth.....	Cerro Alto.....	7, 020
San Jacinto Mtn., San Jacinto△.....	Presidio.....	Jordan Gap.....	4, 965
San Martine Peak, Flattop△ (U. S. C. & G. S.).	Reeves.....	Kent.....	3, 909
Santiago Mtns., Del Norte△.....	Brewster.....	Santiago Peak.....	5, 602
Santiago Mtns., South Pass△.....	Brewster.....	Bone Spring.....	4, 150
Santiago Mtns., S W P△.....	Brewster.....	Santiago Peak.....	4, 915
Santiago Mtns., White Ends△.....	Brewster.....	Santiago Peak.....	5, 354
Santiago Peak, Santiago△.....	Brewster.....	Santiago Peak.....	6, 521
Sawmill Mtn.....	Brewster.....	Chisos Mine.....	3, 795
Sawtooth Mtn.....	Jeff Davis.....	Valentine.....	7, 748
Seay△, Apache Mtns. (U. S. C. & G. S.)..	Culberson.....	Kent.....	4, 023
Sharp Rock△, Gemelo Mesa.....	Presidio.....	Jordan Gap.....	4, 953
Sheep Peak.....	Hudspeth.....	Van Horn.....	6, 055
Sierra Aguja.....	Brewster.....	Terlingua Abaja.....	3, 281
Sierra Blanca Peak.....	Hudspeth.....	Sierra Blanca.....	6, 950
Sierra Castellan△, Cerro Castellan.....	Brewster.....	Emory Peak.....	3, 283
Sierra Diablo, Diablo△.....	Hudspeth.....	Van Horn.....	6, 513
Sierra Diablo, North Diablo△.....	Hudspeth.....	Van Horn.....	6, 630
Sierra Vieja, Vieja△.....	Presidio.....	San Carlos.....	6, 467
Sist△ (U. S. C. & G. S.).....	Reeves.....	Barstow.....	2, 617
Slickrock Mtn.....	Brewster.....	Paint Gap.....	4, 001

*Supplemental elevations—Continued*

Location	County	Quadrangle	Elevation (feet)
Solitario Peak.....	Presidio.....	Lajitas.....	4,700
South Pass△, Santiago Mtns.....	Brewster.....	Bone Spring.....	4,150
Spring Hill, Cone△.....	Culberson.....	Kent.....	4,955
Star Mtn., Star△.....	Jeff Davis.....	Fort Davis.....	6,344
Straddlebug Mtn. (V. A. B. M.).....	Brewster.....	Buck Hill.....	3,940
Stuarts Peak△.....	Brewster.....	McKinney Springs..	5,106
Study Butte.....	Brewster.....	Chisos Mine.....	2,835
S W P△, Santiago Mtns.....	Brewster.....	Santiago Peak.....	4,915
Tabernacle Mtn.....	Hudspeth.....	Sierra Blanca.....	5,650
Talley Mtn.....	Brewster.....	Chilicotal.....	3,850
Tepee Butte.....	Hudspeth.....	Cerro Alto.....	5,173
Three Mile Hill.....	Brewster.....	Santiago Peak.....	4,035
Toyah△ (U. S. C. & G. S.).....	Reeves.....	Toyah.....	3,375
Trap Mtn.....	Brewster.....	Emory Peak.....	4,135
Tres Cuevas Mtn.....	Brewster.....	Terlingua Abaja.....	3,635
Triple Butte.....	Pecos.....	Hovey.....	3,810
Tule Mtn.....	Brewster.....	Paint Gap.....	3,833
Turney Peak, Turney△.....	Brewster.....	Jordan Gap.....	4,849
Upper Flattop Hill.....	Brewster.....	Nine Point Mesa....	4,140
Victoria Peak.....	Culberson.....	Van Horn.....	6,432
Vieja△, Sierra Vieja.....	Presidio.....	San Carlos.....	6,467
West Corazones△, Corazones Peak.....	Brewster.....	Paint Gap.....	5,306
West△, Apache Mtns. (U. S. C. & G. S.).....	Culberson.....	Kent.....	5,110
White Ends△, Santiago Mtns.....	Brewster.....	Santiago Peak.....	5,354
Willow Mtn.....	Brewster.....	Chisos Mine.....	3,830



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