

To the Hon. J. T. Robison  
Commissioner General Land Office

1399  
**RECEIVED**

Report of a resurvey  
of Sections 459, 460, and adjacent  
Surveys in Block G. 5.  
Presidio Co. Tex.  
by R. S. Dod  
State Surveyor.

JAN 6 1916

**Referred to Map**

*S.F. 11131*  
Object of the resurvey.

To determine the relative position on the Ground of Section 459 & 460 G.C. & S.F. Ry. Co. and the relative position on the ground of certain Sections in Block G. 5, D. & W. Ry. Co. as determined by their original calls and field notes, also the position of J. F. Rawles School survey No. 1, as determined by the facts on the ground.

Authority for this resurvey.

A letter of instruction from the Commissioner of the Gen'l Land Office dated Dec. 8 1915, issued to me at the request of J. F. Rawles.

Data for the resurvey.

A Blue print copy of the southern part of the Official Map of Presidio County, with the field notes of sections adjacent to Section 459 written in.

Also a blue print of a Land Office sketch covering the surveys in question, drawn to the scale of the U.S. Topographic Map.

Also copies of the field notes of sections 459, 457, 815, G.C. & S.F. Ry. Co. 503 T.C. Ry. Co. and Nos. 87 and 89, G. 5, No. 1 J. F. Rawles, also connecting line run by H. B. Tarver, special deputy surveyor, in 1912.

All kindly furnished by the Gen'l Land Office,

Field notes of surveys in Block G 5, from the County Surveyors records at Marfa.

A copy of the U.S. Top. Map, Chisos and Terlingua sheets.

Field notes of a resurvey of Block G 12 Brewster Co. made by R. S. Dod, State Surveyor, and approved by the Gen'l Land Office.

Course.

Sur. 459 was surveyed by Dan Buckley Jun. 26 1880 var.  $11^{\circ}30'E$ .

" ~~815~~ 815 " J. T. Gano Dec. 3, 1881 var.  $11^{\circ}30'E$ .

" in G 5 " J. T. Gano Aug. 1881 var.  $11^{\circ}30'E$ .

All the surveyors call for the same variation, hence course for all surveys in question will be the same, unless the bearings on the ground give some other course.

The N.E. corner of sur 1 Blk G 5, calls for two mountain bearings, one the monument on Hen Egg, about 8 miles off, the other a peak in the Chisos some 30 miles away, both good sharp bearings. The rock mound made by J. T. Gano was found by Reavis and he marked a small Mesquite as an additional bearing, this identifies the rock mound and with the 30 mile air line it is easy to get Gano's course. This course was used in G 12, and we picked it up at S.W. 52 and used it on this resurvey.

I would note in this relation that the Compass Needle seemed more erratic during this survey than I have ever noticed it outside of Stone-wall Co. I ran N  $67^{\circ}W$  from the N.W. cor 459, carrying a peak as backsight, and along the east line of 88 the needle shifted some  $20^{\circ}$  back and forth.

We used a transit line, which ~~ix~~ works nicely as in addition to the back rod, we could run with a peak or a sharp boulder as back or front sight for long distances.

The Gano meridian shows some  $1^{\circ}05'$  greater variation than the Top. Map.

Distance.

Measured by the double rod stadia method, the Fresno Country is very rough and precipitous, and chaining would be tedious and uncertain. In one instance it took nearly 3 hours to run 670 varas, with the rods. one has to head so many precipitous canyons.

We also had a good opportunity to check on B.M.s on the run up from 52 G 12 to S.W. 72 G. 5, and some checks on the Fresno Triangulation monument.

Beginning Point.

Survey 459, the older of the surveys in question will depend on its original N.W. corner if it can be found.

The G. 5 surveys begin at the N.E. corner sur. 1, and on by a chain of course and distance calls, through the block, except that surs. 87 & 89 call for the N.W. cor. of 459 and repeat the call for a bearing as given in the field notes of that section. From an examination of the field notes of Blk. G 5, there would be no occasion to break the call for course and distance until, at least we reached 87.

As stated above, we put in the S.W. corner of 52 Blk. G 12, from the Agua Erico and No. 1 Blk G 5, and a connecting line to the Alamo Caesario, after Reavis. Consequently we made the S.W. cor. 52 G 12 our starting point, not

as a G 12 corner but as a <sup>a</sup> carefully placed point a certain course and distance from the N.E.cor.sur.1 Blk.G 5.

#### History of Survey.

We began at B.M.2662, on the old Marfa-Terlingua Road, and ran west 511, south 65 varas to a rock mndmkd "SW 52 G12"

Emory brs S 79° 55' E  
 Sharp Peak brs S 70° W  
 High Point of Mt. (Fresno)  
 brs N 15° 40' W  
 Fresno Monument N 15° 46' W <sup>54' Sec letter of 1-15-16</sup>

From this point we ran a traverse as follows;  
 N 19° E 501, N 45° 30' W 353, N 36° 45' W 517, N 50° 45' W 453, N 49° 15' W 508,  
 N 38° 15' W 670, N 19° 30' W 291, N 40° 10' W 468, N 35° W 416, N 37° 15' W 335, N  
 N 87° 15' W 537, S 84° W 258, to B.M.2789, on east side of creek.

Resultant North ~~3225~~, West ~~2222~~.  
 3517.4 3180.9 N 42° 07' W 4750. as shown on  
 plat. See SK. File P-1 for correction - calls this N 46° 55' W 5054 vrs -  
 = North 3452.2  
 West 3691.2

From B.M.2789 we ran a traverse as follows;  
 N 44° W 384, N 46° 47' W 141, from this point Fresno Mon. brs N 3° 57' W  
 N 60° 30' W 740, S 79° W 176, S 79° 35' W 422, N 37° 15' W 570, N 21° 40' W 662, from  
 this point Fresno Mon. brs N 7° 05' E, N 1° 25' E 456, N 6° 30' W 395, N 8° 30' W 343,  
 N 45° 45' W 578, N 33° 19' W 490, N 52° 35' W 422, N 15° 35' W 117, N 11° 35' W 143, to  
 B.M.3119. Resultant North 4204.8 West 3350.1 N 38° 32' W 5376 as noted on  
 plat.

From B.M.3119 we ran the following traverse; <sup>159</sup>  
 N 16° W 416, N 8° 22' W 726, N 13° 30' W 161, N 24° W ~~140~~, N 21° 35' W 199, N 68° 30' W  
 314, S 49° W 468, N 51° W 312, N 13° 40' E 63, to a rock set in a garden spot  
 and marked "SW 72 G 5",

Resultant North 1670.1 West 1260. N 37° 02' W 2092, as on plat.

The rock above mentioned was shown me. It is in an enclosure which had been cultivated and the rock was in plowed land. A company formed for producing wax from the *Candallia* plant had built a house supposed to be on section 72, but even from this rock the house would have been to the west of the west line of 72. It was reported that Mr. Tarver had set this corner of 72, but a tree near by was not marked and we had no bearings for the corner, and the rock might easily have been moved, there was nothing on the ground to indicate whether this rock was, or was not in its original position.

We ran 98 varas north and 191 varas east and set the corner of 72 as located by course and distance from the original N.E. corner of sur. 1 G 5. The house above referred to is located on the bank of the creek on ~~xxxxx~~ a comparatively level spot. It could not have been built much farther east.

Our S.W. cor 72 is in the roughs on the east side of the creek, it is a rock mound on east slope of small draw, with a rock mkd 'S W 72', from which East bluff of rim rock bears S 39° E,

Square boulder at foot of rim rock bears S 53° W.

We ran 83 varas east and set a rock mound for N.E. 89 with rock marked NE 89 from which a high point of rim rock bears N 51° 30' W

Square boulder at foot of rim rock bears S 57° W.

We ran 452 varas south, crossing the creek, and set a rock mound for the S.E. cor 89, with rock marked 'S E 89'.

We ran S 67° E 188 varas and set a rock mound for the reentrant corner on the west line of sur. 71, and marked it "N E R.R." from this point we set a rock mound on the rim of the canon S 23° W ~~60~~ 690 varas, on the west line of 71. The rim rock is some 420 feet above the corner and nearly perpendicular.

We then ran a traverse from the S.W. cor. sur 72 G 5, as above described, as follows; (This traverse followed the general course of the only practicable trail leading west out of the Fresno canyon.)

West 191, South 98, S 12° 15' E 490, S 42° W 614, N 77° 35' W 650, S 87° 45' W 654,  
 N 54° 15' W 84, N 75° 35' W 427, N 69° 55' W 109, to a rock mound set on a large rock, one rock marked by Mr. Tarver 'NW 459'. Resultant West 2368, South 726, from the S.W. corner sur 72.

The field notes of the original corner of 459 read as follows;

"Rock mound on east side of creek on top of another rock in the ground", we found, " " " " " " " " " " " "

"from which a large cottonwood, 2ft. in dia. at spring in bed of creek"

The creek runs in a draw, course S.E. just above the cottonwood is a fall of some 20 feet, a little below this the water breaks out and in the bed of the creek, in a draw or canyon some 40 feet deep stands a large cottonwood tree which forks into two main branches each of which is over a foot in dia.

This tree bears from the rock mound S 17° W 65 3/4 varas. The call is S 18 1/2° W, 65 varas.

The evidence of the identity of this corner seemed to me very strong. It was cumulative. There are numerous boulders all over that country, but no other that I noticed which stood course and distance called for from a cottonwood.

There are cottonwoods in many of the draws, but generally on the bank of the creek. This tree is in the creek, and in addition to this the water breaks out just above the tree.

There is a further call, "thence S 67° E at 950 varas to creek at deep bluff". We ran from the above described corner S 67° E and at 974 varas reached the edge of a steep bluff, some 50 to 75 feet high almost perpendicular, course of dry creek bed at bottom of bluff S.W.

These facts seemed to me sufficient to identify the above described rock mound as the original N.W. corner of 459 as described by Mr. Buckley in his field notes.

The traverse above given places this corner 726 varas south and 2368 varas west of the S.W. cor 72 G 5, as we located it, and 502 varas east and 2556 south of the S.W. cor. sur. 89 G 5.

We then ran from this rock mound N 42° 57' E 1285 varas where we placed a rock mound for the middle corner on south line of 89.

Thence N 23° E 950 varas dropping down into a canyon.

Thence N 67° W for the south line of 89. We ran over a hill top and at 1030 crossed a small flat draw or creek, but there was no steep bluff as called for on north line of 459, on at 1900 varas we placed a rock mound for S.W. cor 89, and a middle corner on south line of 87 G 5.

There was no creek, no cottonwood in sight. The distance ran out on the east slope of a high hill. Allowing the rock in the garden to have been the true S.W. 72, and measuring from it would have thrown us further up on the hill no creek or cottonwood in sight.

The Mexican Canyon, called Segundo on topographic map, is nearly half a mile north.

The details of the topography on this Terlingua sheet are not quite as accurate as on the Chisos sheet, but the Fresno monument being one of their triangulation monuments can be relied on and checks nicely with our work.

The bench marks also correspond with our measurements, so that I do not think there can be any material error in our run.

I neglected to state that near the rock mound identified as N.W. 549, we noted a change in variation of the needle. The 4th course (3rd from the corner) read with needle and transit S 87° 45' W 654, but on reaching this point and reading back, the needle read S 82° W.

We also ran a line N 67° W from N.W. 459, to the east line of 125 G 5, and set a mound on the line. On this line the needle varied 20°. I note this to suggest that if Mr. Buckley used a needle bearing for his cottonwood at the corner, it might have been influenced by the local attraction so very evident in that neighborhood and west. So that the difference between our reading and his call,  $1\frac{1}{2}^\circ$  would not be serious error under the conditions.

As a result of the facts above recited we placed sur 459 on the ground as run from the corner above described as N.W. 459.

And we placed the surveys in G 5 by course and distance from the N.E. cor. sur. G 5.

The field notes of 89 do call for the bearing found at N.W. 459, but they call for it as the corner of 459 and not as a corner made on the ground by Mr. Gano the original surveyor of G 5. It is hardly probable that Mr. Gano would have run from the corner he made at N.E. 1 G 5, through the block to the S.W. cor 89 and made a cor. there without having indicated this route by corners made for the surveys passed through on his way.

Consequently we placed 89 from S.W. 72 in the position relative to surveys in its own block as shown on the map of Block G 5, subject to your approval.

This construction leaves an unoccupied space between the G 5 surveys and 459 of 1632.1 acres of land.

I expect to return to the Fresno shortly to correct an error made on the east side and do some work for Mr. Bogel about Panther Spring (unofficial) and if the data above given are insufficient or not clear in any point, I can make any further investigation you wish made at that time.

The accompanying plat shows facts and construction as developed by the survey.

Respectfully submitted

R. L. Dod  
State Surveyor

Sketch File No. P County

Presidio

Report By R. S. Dod

Filed January 6 1936

J. T. Robinson  
Wm. H. McDonald, Com'r

3/28/38 Woodland  
File Clerk

Descriptive: Re-Survey of Sec 45, 46  
to adjacent surveys in  
Block G. 5

*see Sk. Filed P-18 P-2 &  
Rolled Sketches 8, 5-185-2*

counter 34555

LB<sup>3</sup>

Consequently we placed the corner in the position relative to the survey as shown on the sketch. The distance between the corners was 60 and made a corner there without having indicated this route by corners. Mr. Gano the original surveyor of G. 5. It is hardly probable that Mr. Gano would call for it as the corner of 450 and not as a corner made on the ground by the field notes of 80 90 90 call for the bearing found at N.W. 450; but they are G. 5.

And we placed the survey in G. 5 by course and distance from the N.E. corner. As a result of the facts above recited we placed our 450 on the ground.

His call, 1 1/8 would not be serious error under the conditions.

In that neighborhood and west. So that the difference between our reading and the corner, it might have been influenced by the local attraction so very evident suggest that if Mr. Buckley used a needle bearing for his cottonwood at the set a mound on the line. On this line the needle bearing for his cottonwood at the reading back, the needle read 8 55. W.

We also ran a line N 67. W from N.W. 450 to the east line of 135 65 and a reading with the needle and transit 8 87. W. but on reaching the corner and a change in variation of the needle. The dip course (87 from the corner) there can be any material error in our measurements, so that I do not think

The pencil marks also correspond with our measurements, so that I do not think triangulation monuments can be relied on and checks nicely with our work. The details of the topography on the terrain sheet are not quite as accurate as on the original sheet, but the details are not quite as accurate as on the original sheet. The Mexican Ganyon, called Sekundo on topographic map, is nearly half a mile north.

The creek or cottonwood in sketch. The creek or cottonwood in sketch. The creek or cottonwood in sketch.

There was no creek, no cottonwood in sketch. The distance ran out on the north line of 450, on at 1000 yards we placed a rock mound for S.W. corner 89, and a middle corner on south line of 87 G. 5.

crossed a small flat area or creek, but there was no steep bluff as called for. Thence N 67. W for the south line of 80. We ran over a hill top and at 1030 rock mound for the middle corner on south line of 80.

We then ran from this rock mound N 40. 27. E 1355 yards where we placed a west of the S.W. corner 89 G. 5. The distance between the corners was 600 yards east and 3556 south

notes. The distance between the corners was 600 yards north and 3556 yards. These facts seemed to me sufficient to identify the above described rock

dry creek bed at bottom of bluff S.W. edge of a steep bluff, some 50 to 75 feet high almost perpendicular, course of We ran from the above described corner S 67. E and at 944 yards reached the

Just above the tree. There is a further call, distance S 67. E at 950 yards for creek at deep bluff. There are cottonwoods in many of the draws, but generally on the bank of the

that I noticed which stood course and distance called for from a cottonwood. The evidence of the identity of this corner seemed to me very strong. It was