

RECEIVED

SEP 18 1940

REFERRED TO MAP

COUNTY OF NUECES,
STATE OF TEXAS.

Corpus Christi, Texas, July 19, 1940.

File No. Sketch File 60
Nueces
Submerged Areas ML-25013-25014,
Tracts 402, 403, & 406
Filed Sept. 18 19 40
GARRY MAURO, Com'r
By (Douglas Howard)

Mr. Paul A. McDermott,
Legal Department,
Sinclair Prairie Oil Company,
Fort Worth, Texas.

Dear Sir:

I have your letter of the 8th, addressed to Mr. W. W. Baker of the Sinclair Prairie Oil Company of this city, concerning the survey and map of Tracts 402, 403 and 406 in Corpus Christi Bay, and will attempt to clarify some of the questions raised.

I should have shown on my map that the Shamrock Point Survey of 1902 was a resurvey of the original survey of 1848 as used in the patent of 1867.

While this survey is located on an island that is now called Shamrock Island it was originally described as a survey located on Mustang Island on Shamrock Point. It never did purport to embrace an entire island. The official General Land Office Map of Nueces County shows Shamrock Point but not Shamrock Island. I am enclosing a photostat of a portion of this map for your information and convenience in this connection. The formation consists of a series of islands and flats extending in the nature of a peninsula out from the mainland of Mustang Island. The main island of the formation, comprising its most southwesterly and its greatest portion, is designated on the U. S. Coast Charts as Shamrock Island. The old survey (L. S. 20, patent field-notes), however, did not take in the entire island. The fieldnotes definitely show that the last two courses leave the shore and cross the land to the place of beginning on the other shore.

The designation, "Dagger Point", shown on my map, was placed there simply to indicate that that particular spot is locally known, now, by that name. It has no significance as concerns the name of an area.

In 1902, my father, C. F. H. v. Blucher, then County Surveyor, made a resurvey of the land described in the patent to Wm. Little, being the old survey made by W. H. Jones in 1848 by virtue of L.S. 20, issued in 1836. I was fortunate in being able to find two of the old corners set by him at that time as a reestablishment of the corresponding original corners of the old survey. The lines shown in green on my map, to which you refer in your letter, are a correct representation of the north-east portion of the resurvey of 1902, known as Survey 607, showing the extent to which it overlaps the tracts (402 and 403) in which Sinclair Prairie Oil Company is interested. I am confident that the position as shown is accurate.

In 1907, Geo. M. Williams, in the capacity of Special State Surveyor under John J. Terrell, Commissioner of the General Land Office, made some surveys to reestablish certain survey corners on the north portion of Mustang Island. The following is a copy of the first part of Williams' report. (note: The Dagger Island or Point referred to in this report has no connection with the Dagger Point shown on my map.)

Del Rio, Tex., July 4th, 1907.

Hon. John J. Terrell,
Commissioner of the General Land Office,
Austin, Texas.

Dear Sir:

I and Mr. C. F. Von Blucher, Surveyor of Nueces County, went to Mustang Island on June 26th, and from June 27th to July 2, 1907 we established the S. E. corner of the Thos. T. Williamson Survey No. 92, now State land, and the N. E. corner of Thos. T. Williamson Sur. No. 90. Also the second corner of Sur. No. 90 where according to the original field notes of No. 90 it first calls for Aransas Bay. After considerable random work without any definite results, we went to an old clump of tree Spanish Daggers on what is called Dagger Island on the margin of Corpus Christi Bay. One dagger is standing and is about 10 ins. dia. and some 8 or 9 feet high. Several are dead and down, one of which is about 12 ins. in dia. and some 9 feet long. This clump of Daggers is an old land mark and can be seen for miles just like a lone tree on a prairie. Old men who have known this locality for a long time say this dagger point was to be seen when they first saw this part of the country and that there was no other daggers in that immediate vicinity. This is an old land mark and is of as such dignity as an old lone tree or clump of trees on a prairie. Mr. von Blucher says that he ran out the Wm. Little survey that covers Shamrock Island, from Shamrock Point at lower end of said island which point is said to have changed but little, if any, since 1848, and connected said Little survey with the clump of Daggers and the connection was a reasonable fit according to W. H. Jones' original work connecting S. W. corner of the Saml. Ward Sur. No. 192 with the survey covering Shamrock Island. This connection of Mr. von Blucher identifies the clump of daggers above mentioned as the bearing or witness tree for S. W. corner of the Wm. Little Sur. No. 19. The run we made from the old dagger clump for point 640 vs. S. 70 W. of S. W. corner of said Little Sur. No. 19 to locate the surveys on upper end of Mustang Island satisfied the original calls, fitting the old Gulf shore, also the old shore of Aransas Bay. This fit is remarkably good and is about the best I ever saw for old surveys made back in the forties. We think there is no reasonable doubt that the daggers are the original bearing to S. W. corner of the Wm. Little Sur. No. 19 and we so adopted it, and put in our work by a course and distance run from it, and the following are the field notes of the connecting lines:

I have quoted the above portion of Mr. Williams' report in order to demonstrate the complete authenticity of the lines I have shown on the map. I am in a position to prepare fieldnotes embodying the connection of these old lines with the boundary lines of Tracts 402 and 403, and also to run the lines out on the ground, if desired.

I have a U. S. Coast & Geodetic Survey chart (Air Photo Compilation No. T-5368) which depicts very clearly the area under consideration. On this chart I have platted in correct position and orientation the tracts, 402, 403 and 406, in which Sinclair Prairie is interested. I am able to do this through having made an accurate geographical connection with the U. S. Coast & Geodetic Survey triangulation station located near the end of Shamrock Point. I have also indicated, with a dotted line, the location of the before mentioned resurvey of 1902, as tied into the three tracts (402, 403, 406) by our surveys. It is remarkable how closely the line of the old survey, as platted, conforms with the outline of the island or point as depicted on the government chart, which is based on comparatively recent airplane photographs. I am enclosing a photostat of this portion of the chart.

I am also enclosing a sketch on tracing paper showing, in red lines, a plat of the original survey as used in the patent fieldnotes. By placing this over the figure on the photostat one can get a good idea of the relation between the field notes of the original survey of 1848 and of the resurvey of 1902. Unfortunately, there has been, as is usually the case, a slight distortion in the print of the photostat, so that the exact relationship is not shown. The difference, however, is almost negligible.

In regard to the matter of the beginning point for the patent fieldnotes being on the shore of Corpus Christi Bay, I believe that if you give further consideration to the question you will recognize that the point I have indicated, at the northeast extremity of the green lines and on the shore of Shamrock Island, is also, of necessity, on the shore of Corpus Christi Bay. In the first place, a point on the shore of any island in a bay would, at least technically, have to be on the shore of that bay. Second, the formation may be considered as a peninsula and, in a general sense, a part of the mainland, in which case it would be clear that its shore would be a part of the shore of Corpus Christi Bay. Third, the waters lying between Shamrock and the body of Mustang Island are known as Shamrock Cove and the situation is such that it is not unreasonable to consider the main shore of Corpus Christi Bay as lying along the margin of the Shamrock formation rather than farther back among the flats and inlets.

Computing the area of the conflict between the Sinclair Prairie leases and the old Shamrock survey, as patented, I find the amount involved to be very small, indeed. Tract 402 embraces 0.40 acre and Tract 403 embraces 0.09 acre of the original Shamrock survey as patented. The sum of the two is 0.49 or slightly less than half an acre.

Miscellaneous notes.

The area embraced by this survey, L. S. 20, is now in the name of Coy Burnett, under a quitclaim deed. Patented in 1867 using fieldnotes of survey made in 1848 by virtue of scrip issued in 1836. The original patent of 1867 would appear

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Shamrock to Sinclair Prairie

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to have been invalidated by the courts (110 S. W. 1st, P. 733); may have been validated in some manner, later; I didn't investigate. The preliminary line for the channel from Aransas Pass to Naval Air Training Station at Flour Bluff (200 feet bottom width; depth 30 feet) crosses this area approximately as shown by the double dotted line on the photostat, passing southwest of the tracts surveyed.

There has been some confusion in regard to the numbering of the surveys on Mustang Island. They do not seem to have had regular survey numbers, as most surveys have, but are known by their land scrip numbers. In some cases, instead, the file numbers of the land scrip have been used, resulting in confusion and uncertainty. In the interest of greater accuracy I have made some changes in this connection on my map since the first blueprints were made.

Two-inch by six-inch pine timbers, projecting about four feet above ground or water surface were used for corner posts and were set at all corners of the three tracts, 402, 403 and 406, except at the north, east and west corners of Tract 402. These points fall in water about 10 feet deep. Besides being impractical to set permanent corners at these points, on account of the depth, they, if set, would be objectionable as possible obstructions to navigation.

A great deal of care and effort was used to make the survey of these tracts accurate. On account of the long distances of the tracts from the starting or base point designated by the Land Office, near the town of Aransas Pass, introducing problems due to the curvature of the earth's surface, the convergence of meridians and the curving effect of parallels of latitude, and of the fact that these distances lie over deep water and that the area of operations is difficult of access, methods out of the ordinary had to be adopted.

In the first place, a transit traverse line, starting at the base point, U. S. Coast & Geodetic Survey triangulation station, "Draw", near Aransas Pass, was run northwesterly to the mainland shore and then southwesterly, along or near the shore, about seven miles to a point computed to be approximately on a northwesterly extension of the line of the southwest boundary of Tracts 402 and 403 and north-east boundary of Tract 406, which are the tracts we were surveying. Another such line was run southeasterly along the causeway, across the channel at Port Aransas by triangulation, and then southwesterly along the west shore of Mustang Island to a corresponding point computed to be approximately on a southeasterly extension of the said line of the southwest boundary of Tracts 402 and 403 and northeast boundary of Tract 406. The traverse lines were then connected by observations across the bay between these two points, approximately six miles apart, using tall signals. This connecting line was adopted as an auxiliary base line.

Orientation was secured by means of observation from base point, Station "Draw", to another Coast & Geodetic Survey triangulation station, "Pogy", located on St. Joseph's Island about 4 miles to the eastward.

In all this work constant and careful readings were taken of temperatures at which chaining measurements were made and corrections were applied to reduce all observed distance measurements to corrected values for the temperature at which the steel tapes are standardized (68°F).

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Second, a main baseline was run out along the Harbor Island causeway, approximately three and a half miles long, extending southeasterly from basepoint, Station "Draw". Then, by triangulation, using tall signals and very careful angular measurements, the length and position of the previously mentioned auxiliary baseline were accurately computed. A network of several triangles was used in order to provide a mathematical check on the accuracy of the field measurements and the computations. As indicated, this triangulation work was done with a great deal of care and the results were found to be markedly accurate.

In the third place, accurate connections were made between our lines and the U. S. Coast & Geodetic Survey triangulation stations "Draw", near the town of Aransas Pass; "Dagger", located on an island off the mainland shore, northeasterly from McGloin's Point; and "Shamrock", located near the southwest end of Shamrock Point. Computing the relative positions of these points from their latitudes and longitudes, as given in publications of the Coast & Geodetic Survey, and using our connections thereto, as made on the ground, we were able to obtain a check on the work done by the first and second procedures, above outlined.

The work done by means of the large triangulation net and that by connection with the Coast & Geodetic Survey triangulation stations verify each other within about 1 1/2 feet. This is most satisfactory, considering that the direct distance from Station "Draw" to Station "Shamrock" is about 10 miles. Hence a correlation of the results of these two procedures was used as a basis for the establishment of the corners and boundaries desired. The traverse line closure differed by several feet and was considered less reliable.

Concrete monuments have been set as reference points in an effort to preserve the lines established by this survey. The positions of these monuments are given on the completed map of the survey. The first prints from the tracing do not show the monuments as they had not then been placed.

I desire to say a word in regard to the interpretation I have placed on the instructions for the location of these tracts as given by the General Land Office on their plat accompanying the Notice for Bids (Tracts offered for lease April 2, 1940).

The instructions are as follows:

Note:

Tracts 307 through 485 are each 1/2 mile by one mile and contain 320 acres except where otherwise indicated. In the latter instances the areas are approximate.

Boundary lines of all tracts, except where controlled by shore line or some other predetermined boundary, are perpendicular or parallel to a line S 45° 36' W on a true course from U. S. C. & G. Triangulation Sta. "Draw 1934". For example, the northwest corner of tract 400 is S 45° 36' W 6 miles and S 44° 24' E 3 miles from this adopted base.

Note that the regular boundary lines are all to be "perpendicular or

parallel to a line S. 45° 36' W. on a true course from U. S. C. & G. S. Triangulation Sta. "Draw". It is clear that the reference line for boundaries running S 45°36'W. passes through Sta. "Draw". But there is nothing to indicate that any of the perpendicular lines passes through St. Draw. In other words the position of the lines perpendicular to the line running S. 45° 36'W. is not fixed except by inference from the example given (In an earlier map, the example was not included).

As already brought out, lines extending over long distances introduce various problems resulting from the fact that the earth's surface is spherical, while surveying measurements are made as if it were a flat plane. A true course, unless it runs north and south, will be a curved line, that is it will curve to the right or to the left. A line running S. 45° 36' W. on a true course will not be exactly straight parallel but will diverge or spread away from each other at the start. Being true courses themselves, they also will curve, introducing further complications. These divergences can be ignored if the distances are not great, up to, say three or four miles, for ordinary purposes, depending on the accuracy desired. But over distances of 8 to 12 miles, as found in the present case, they cannot well be ignored.

The instructions, however, contain another requirement not in harmony with the above. Being given first it might (and by all means should) be given precedence. That is the provision that all tracts, except fractional tracts, "are each 1/2 mile by one mile and contain 320 acres". As indicated above, this requirement cannot be maintained if all the lines are on true courses.

I endeavored to get the Land Office to clarify the instructions but they failed to do so. Hence it became necessary for me to adopt a specific interpretation. It is evident that the regular boundary lines of the tracts are intended to be parallel and perpendicular to each other, and 1/2 mile apart one way and one mile apart the other way. My adopted interpretation of the provision as to the direction of the lines is:

Boundary lines of all tracts, except where controlled by shore line or some other predetermined boundary, are parallel with or perpendicular to a straight line having a true bearing of S. 45° 36' W. at U. S. Coast and Geodetic Survey Triangulation Station, "Draw 1934". Said Triangulation Station, "Draw 1934", shall be the beginning or control point for the measurement of said 1/2 mile and one-mile spacing in each direction.

My work was all done on this basis, the lines all being straight lines (great circles) and parallel with and perpendicular to each other. The bearings are all referred to a meridian passing through Triangulation Station "Draw 1934". I believe this construction can be maintained and will be sustained as the correct procedure in this case.

If any additional information is desired in regard to the survey or the map, please let me know.

Very truly yours,

(sgd) Conrad M. Blucher.

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1/2 52017-52018
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FILE WITH NUCCES CO. RLD SKETCH NO 23
REPORT BY CONRAD M. BLUCHER
RE M.L. 25013-25014 TRACTS 402-403-406
SUBMITTED BY PAUL A. McDERMOTT

SEPT 18TH 1940
W.S.

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