

REPORT ON SURVEY OF SARTWELLE LANDS  
IN JACKSON AND MATAGORDA COUNTIES, TEXAS

The Survey:

Surveys of Sartwelle lands in the Isaac Van Dorn and Thomas Jamison original surveys in Jackson County, Texas, and in the Isaac Van Dorn and Silas Dinsmore original surveys in Matagorda County, Texas, were made by me and my assistants during June and July, 1945.

Since foot measurements have come into general use in Texas, in preference to the official vara measurement, being used almost altogether in city, highway, railroad, oil field and U. S. Government surveys, and are more generally understood throughout the country, and since they have already been applied in areas adjacent to your lands, their use was adopted in these surveys. However, since the vara is the official unit of linear measure of the State of Texas and the General Land Office requires that distances be given in varas on all material coming before it for attention, on certain of the maps we are furnishing you the foot distances of original survey bounds have been supplemented by their vara equivalents.

Accompanying these maps is a brief letter addressed by me to the Commissioner of the General Land Office and intended for submission to him along with the map. As indicated in that letter and in the titles of the principal maps, the survey itself and these maps were made in conformity with the Texas Co-ordinate System, (Lambert Grid), South Central Zone, as established by the Legislature of the State of Texas. As shown by the direction arrow, "Grid North", the meridian used as a basis for bearings in this zone, is about  $1^{\circ}19'$  east of true north in the locality of our surveys. Due to inaccurate variation then used the meridian ("north"), adopted by old surveyors in laying down the lines we investigated, was found to be erratic in the opposite direction, being more than one degree west of true north. This situation is reflected on the U. S. Coast & Geodetic Survey Air Compilation maps.

One principal advantage of this grid system is avoidance in the future of uncertainties and confusion arising from the constantly changing magnetic meridian (north). Another is that its use makes possible the restoration of a survey even though all markers and objects are obliterated. Also, as its adoption becomes more widespread, this grid system correlates various surveys made independently in various parts of an extended area.

As stated in my letter to Land Commissioner Bascom Giles, mentioned above,

distinction upon our maps is made between old markers found, and those set by us in our survey. Description of corner markers is shown on the maps. Line markers, indicated on the maps by the letters L. M. and briefly described under "Legend", are concrete monuments about six inches in diameter and two feet long, cast in place, flush with the ground, with a small iron rod inbedded to mark the exact survey point. Wherever possible these monuments were set along the bounds at prescribed and indicated distances from corners, in order to serve both as line markers and corner references. These reference markers will be of great value in the future in determining or verifying, and thus preserving, the true position of the corners.

#### Maps and Documents:

Below are listed various maps and documents. For reference they are given letter and numeral identification.

##### I. Maps and Documents Loaned for Our Use and Returned Herewith.

###### Maps:

A. U. S. C. & G. S. Air Photo Compilation No. T-5355 dated December 19, 1933, - scale: 1:20,000 or 1" = 600 varas.

B. Three photo negatives U. S. C. & G. S. Topographic Survey, same scale as the Air Photo Compilation:

- (1) No. T-737, (East 1/2) surveyed in 1856
- (2) No. T-737, (West 1/2) surveyed in 1856
- (3) No. T-645, surveyed in 1857-8

C. Blue print of General Land Office Working Sketch prepared October 29, 1937, by J. O. Barrow, - scale 1 inch = 500 varas.

D. Two blue prints mounted on cloth, showing the Theo F. Koch Subdivision, - scale 1 inch = 500 varas.

- (1) Calhoun County portion, recorded in October 24, 1907, in Volume V, pages 18 and 19.
- (2) Matagorda County portion, recorded August 27, 1907, in Volume 19, page 640.

E. Direct white print showing entire Koch Subdivision, and upon which certain boundaries have been marked with red pencil, scale approximately 1 inch = 4000 feet.

F. White print of surveys by H. A. Pierce, F. G. Hoffman and A. C. Russell-Lindsay, a reduction of the original 1 inch = 1000 varas scale.

Documents:

G. Three typewritten copies of Legislative Acts Defining Boundaries of Counties:

- (1) Matagorda County, approved March 20, 1846.
- (2) Jackson County, approved April 3, 1846.
- (3) Calhoun County, approved April 4, 1846.

H. Six photo copies of Original Fieldnotes obtained from General Land Office:

<u>Survey</u>	<u>Surveyor</u>	<u>Date</u>
(1) James Hughson	Seth Ingram	Feb. 18, 1830
(2) Isaac Van Dorn	Horace Yeaman	Mar. 21, 1838 (Certf.)
(3) Silas Dinsmore	Horace Yeaman	Mar. 21, 1838 (Certf.)
(4) (South) Wm. Ahlert	Thomas Simons	Aug. 1, 1838 (Certf.)
(5) Thomas Jamison	Thomas Simons	May 7, 1845 (Certf.)
(6) (South) Juan Maldonado	B. Dupuy	Dec. 10, 1874

J. Three photo copies of Mineral Application Rejections by Commissioner of the

General Land Office:

<u>Min. Appl.</u>	<u>Rejected</u>	<u>Location "Between"</u>	<u>Acres</u>
(1) No. 33775	9-30-38	Jamison & Van Dorn	19.5
(2) No. 33772	9-30-38	Maldonado & Hughson	494.1
(3) No. 33766	10-3-38	Maldonado & Van Dorn	160.2

K. Original Boundary Agreement (with attached blue print map) between The Ward Cattle Company and Mrs. Helen M. Sartwelle, dated April 5th, 1907, unrecorded.

II. Maps and Documents Prepared and Obtained for Submission with this Report.

M. (1) Original tracing of Sartwelle Lands made on cloth from our surveys,-

scale 1 inch = 600 feet.

- (2) Two blue prints made from the tracing.

N. (1) A modification of this original tracing (on transparent paper, same scale) upon which vara equivalents and scale have been added.

- (2) Two blue prints from paper tracing, one for filing at the General Land Office.

O. (1) A reproduction in reduced size on film of the original tracing,-

scale 1 inch = 1667 feet.

- (2) Five blue line prints from film reduction, especially suitable for filing and recording in county records, - 2 on paper; 3 mounted on muslin.

P. A "Van Dyke" negative of original tracing.

These tracings, the film, the vandyke and the prints made from them (M, N, O and P) are in this report referred to as the principal maps.

Q. Letter to Commissioner Bascom Giles to accompany one of the blue prints under "N. (2)".

R. Three pencil overlays on tracing paper, - scale 1 inch = 600 varas, the same as the Air Photo Compilation Maps, upon which they may be superimposed:

(1) Showing Seth Ingram survey of the James Hughson League.

(2) Showing Horace Yeaman survey of the Duncan, Williams and Van Dorn, etc.

(3) Showing Thomas Simons and the Dupuys work north of the Hughson League.

S. Blue print of tracing made by H. M. Henderson, a former County Surveyor of Calhoun County, dated June 18, 1907, of the entire Koch Subdivision in Calhoun, Jackson, and Matagorda Counties. The "Black shore Lines" mentioned in Henderson's "Note" appear in bold white on the print but the "Red Lines" show very dimly and by us have been retraced in red.

T. Blue print from the General Land Office old working-sketch tracing prepared on December 19, by Wynne, - scale 1000 varas to the inch. Upon the tracing red ink (which reproduces poorly) was used to delineate the Van Dorn; hence this survey shows dimly on the print. On this print, and also on the Koch Subdivision print, the dim and ragged lines are caused by creases in the tracings.

U. Small blue print of H. M. Henderson's sketch, - scale 1000 varas = 1 inch, - showing his own findings in that area immediately northwest of the Van Dorn.

V. Photo copy of re-survey fieldnotes of the James Hughson League No. 1. This re-survey was made February 21, 1904, by J. C. Carrington, then County Surveyor of Matagorda County.

The last four items listed, - S, T, U and V, - were obtained from originals now owned by Mr. Carl C. Henny, 454 Cole Street, Corpus Christi, a nephew of Theo F. Koch, developer of the Koch Subdivisions. Mr. Henny has other papers pertaining to the Koch lands, but no others appeared to be of sufficient value to justify the expense of making copies.

Upon the Air Photo Compilation map we have delineated in light solid ink lines the bounds of the Van Dorn and other original surveys, where they are not

already shown by roads and shore lines; in dashed ink lines, the 400-acre tract out of the Van Dorn comprised of Sections 45 and 52 of the Theodore F. Koch Subdivision; and in pencil have shown certain section and quarter-section lines of the Koch Subdivision.

James Hughson League:

Since the survey of the James Hughson league is senior to all other surveys between Carancahua and Tres Palacios bays and the surrounding surveys call for its adjoinder, and since county lines in this area are defined by reference to it, it is most important to know the correct position of this league on the ground. It was originally surveyed by Seth Ingram in 1830 and titled as a Mexican grant in 1832. None of its original markers, except the variable shore lines, can now be found. Its present generally recognized north and east boundaries were surveyed and marked by H. M. Henderson in 1907 in connection with the survey of the Theodore F. Koch Subdivision. It appears he followed and accepted a resurvey made by J. C. Carrington some three years earlier.

In Mr. W. L. D. Sartwelle's possession is a letter of July 20, 1894, addressed by Mr. John Duncan, Jr., to Mr. W. L. Sartwelle. In this letter Mr. Duncan correctly analyzes distance calls of the Hughson league, Van Dorn, Dinsmore and Hughson labor surveys and states he made measurements in this connection along or near Matagorda Bay. He found a 2-inch by 12-inch slab marked "H" on its west side and "V" on its east side for the southeast corner of the Hughson league. Also, in Mr. W. L. D. Sartwelle's possession is a plat with letter written by a Mr. Putnam on April 4, 1895, stating he and Freddie Robins set county line in 1887, following Breckenridge's 1861 work, and set the southeast corner of the Hughson "15 varas west of Plank". This plank was not found by us nor were other markings of the work referred to in either letter.

We found Henderson's northeast corner of the Hughson league, a section of iron railroad rail in the center of an asphalt-topped road with its top about one foot below the surface. Henderson's north boundary and east boundary of the league, also, were identified by established markers and other connections as shown on our map. Using this Henderson northeast corner, we find the length of the east boundary of the league to be 4385 varas, to the present shoreline (1945). Henderson, in 1907, reported 4395 varas. Seth Ingram's original survey call of 1830 was 4120 varas, while J. C. Carrington, who in 1904 seems to have endeavored

carefully to retrace Ingram's shoreline work and whose lines apparently, in 1907, were found, approved and used by Henderson, shows 4140 varas in his resurvey fieldnotes. Walter Carrington, four years after Henderson's work, in his Corrected Fieldnotes of that part of the Isaac Van Dorn survey lying in Matagorda County, gives the distance as 4390 varas. Thus the present measurement is seen to be about 265 varas greater than the original call. The question arises: Could it be possible that Carrington's and Henderson's northeast corner is something like that much too far north and in error to that extent?

Furthermore, Ingram ran east 7800 varas, according to his call, from his northwest corner on the shore of Carancahua Bay to set the northeast corner of the league. J. C. Carrington, after carefully retracing Ingram's shoreline points and re-establishing the northwest corner on the shore of Carancahua Bay, as above noted, ran east 7800 varas from that corner and set there a stake for the northeast corner of the league, presumably at the point now marked by the section of railroad rail above mentioned. Henderson found the distance from his northeast corner (now marked by the rail) west to the shore to be 7803 varas, which is practically the same as Carrington's, especially in view of the fact that Carrington's northwest corner was a post set on the bay shore "in a lot of Mesquit bushes". Our measurement of this distance, to the present shore, (1945) is 7773 varas, indicating that during the last 38 years erosion has cut off about 27 varas, (74 feet) of the bank at this point.

The question here arises: Since there is evidence of erosion of about 27 varas in the last 40 years or less, is it reasonable to assume that there was no erosion at that point in the 77 years intervening between Ingram's original survey, in 1830, and that of Henderson in 1907?

Among the maps studied in this connection is a photoprint of a topographic map or chart of the area, made by the United State Coast & Geodetic Survey in 1856 (only 26 years after Ingram's survey), listed hereinabove as B (2) T-737. Also, to the same scale, is a chart of the same area, dated as of 1933, described as a U. S. Coast & Geodetic Survey Air Photo Compilation chart and listed hereinabove as A. The topographic outline and features of this chart were obtained by accurate photography from the air and details were filled in from information secured on the ground. It is astonishing what close conformity there is between the two charts, made 77 years apart. Making a tracing of one and spreading it over the other fully reveals this conformity.

Many small features and detailed markings shown on the earlier chart are found in the same relative position on the later map. A point which cannot be other than Ingram's original starting point on his survey of the Hughson League is shown clearly on the 1856 chart and is easily recognized at the same place on the air-map of 1933. Ingram's calls for points on the shoreline to the south and to the east accord perfectly, within the limits of the map's scale, with the old shorelines as shown on both charts.

The meandering shorelines of Turtle Bay on the east, Carancahua Bay on the west, and Matagorda Bay on the south, provide a close control on the fit. In some localities erosion has taken place. In a few places there has been accretion. But the general contour of the shoreline has remained the same. At the southeast corner of the League, the indications are that there has been little change,—no accretion; possibly a small amount of erosion. In the vicinity of the League's northwest corner no change can be detected from the charts, although farther south, along the northeast and east shores of the eastern belly of Carancahua Bay, the indications are that erosion has occurred to a greater extent than at any other portion of the coast within the area under investigation. In spite of the 85 feet of erosion found to have taken place sometime between 1907 and 1945, comparison of the charts seems to make it at least very doubtful if there was any noticeable erosion between the years of 1856 and 1933. Therefore I feel that Carrington and Henderson did not err or do unwisely in adopting the shoreline of 1904, at that point, as satisfactory for the re-establishment of the original position of the northwest corner of the Hughson League, from which the easterly measurement of the original call for the north boundary of the league should begin.

Now as to the shortage in Seth Ingram's original call for the length of the east boundary of the League. I believe this can only be accounted for as an error. Ingram's object was to stake off for his client a league of land. A league contains 25 000 000 square varas. A square league is 5000 varas square. From his starting point on the shore of Carancahua Bay, Ingram ran due east 1570 varas to a point on the shore of Matagorda Bay, shortcircuiting the meanders around the point or peninsula to the southwest. From this point on Carancahua Bay shore, he took observation for the direction of the shoreline. The bearing was N.76°E. The purpose of this bearing observation was evidently for the computation

of the dimensions required to inclose the desired area of one league. Ingram then went back to the point designated as his starting point and ran northerly and westerly by rectangular offsets touching the shore at alternate angle points and taking offsets to the shoreline at points along the longer courses. He continued this operation until his total northing summed up to 5000 varas, the length of the side of a square league, setting there, on the shore of Carancahua Bay, his northwest corner of the league. From this point he set his course due east for the north line of the league. Then, unquestionably, he stopped to compute how far east he must go to include the desired area. From his connections he no doubt estimated the amount of land along the shore outside of his actual surveyed lines. (None of the shoreline was actually meandered.) To this he would add his figured area up to a line running north through his point on the shoreline 1570 varas east of the place of beginning. Subtracting this sum from the desired total of 25 000 000 square varas would give him the area needed east of the 5000 vara long line, aforesaid, running north through the point where he observed the direction of the shoreline. To compute this remaining area he would use a west base of 5000 varas, a north line running due east and a south line running, according to his observation, N.76°E. In this manner, undoubtedly he obtained a dimension that gave the north boundary a total length of 7800 varas. Using this figure and the bearing of N.76°E. for the direction of the Carancahua Bay shoreline we obtain a computed length of 4422 varas for the east boundary as adopted instead of 4120 as given in the original fieldnotes.

It is a mile and a quarter from the point where the shoreline bearing was taken to the point determined on for the southeast corner of the league; but the shoreline is fairly straight, curving outward, if anything, instead of inward. We can assume that the surveyor took note of the entire situation when making his shoreline observation, in view of the purpose for which it was made, and took his bearing accordingly. Our distance, as measured in 1945, it will be recalled, is 4385 varas; Henderson's was 4395. How 4420 (calculated) becomes 4120 in the fieldnotes is something that might be explained in any of a number of ways. It is easily possible that the line was never measured. And why the figure should appear practically the same as Ingram's in J. C. Carrington's resurvey fieldnotes of 1904 (4140 varas), is another thing that offers many possibilities for surmise but apparently no certainty of explanation. There is a moderately high bank there, now, making untenable any assumption that there has been any material accretion. Since, according to Ingram's own original fieldnotes, the calculated length,

based on the general direction of the shoreline, is 4420 varas; since a layout of the old survey shows general conformity, with the shorelines of both the chart of 1856 and that of 1933, according to which the length of the east boundary would scale approximately 4400 varas. I am fully convinced that the measurement which we found in our survey is substantially correct and, in view of my discussion of the north boundary, that the position of the iron rail is correct for the northeast corner of the Hughson league and that the north and east boundaries, as we have adopted them, are in their correct position.

Moreover, since these lines, were relocated by Carrington over forty years ago, are incorporated in the boundary agreement, dated April 5, 1907, between The Ward Cattle Company and Mrs. Helen M. Sartwelle, were accepted and used by Henderson in his extensive Koch Subdivision surveys, and have since been generally recognized, they possess much added dignity.

A summation of the areas in the Hughson league, determined by Henderson in subdividing it for Koch, gives a total of 4646.48 acres. This is 218 acres in excess of the area of a league, which is 4428.40 acres. It is probable that the total erosion has been greater than the total accretion. Hence I think it is safe to say that the actual original area of the Hughson League carried some excess over the true area of a league.

#### The Van Dorn 13 1/2 Labors and the Dinsmore Labor:

The Van Dorn and Dinsmore surveys are integral parts of a group of surveys, all shown to have been made by Horace Yeaman on two consecutive days, March 21 and 22, 1838. Yeaman's original fieldnotes of both the Van Dorn and Dinsmore close, mathematically speaking, reasonably well, indicating the absence of material error in their calls for course and distance. The fieldnotes of the Thomas J. Williams league and labor, another of the group, do not close, making evident the existence of material errors somewhere in the survey. The Hughson labor, although failing also to close mathematically, has less material error. Even though the shore lines had not subsequently changed, these errors would preclude locating the original land bounds with certainty from the survey description. In such a case, the findings of an early subsequent surveyor become particularly significant and since Henderson's work was done 38 years ago, covers a large area on the ground, appears to be consistent, and has long been recognized, it is entitled to much respect.

Henderson's work can be easily identified on the ground now. His

subdivision section lines are shown by old graded roads; many of his corners, represented by pipes, and 4-inch by 4-inch pine posts, which he placed, can be found. Some of his lines are preserved by existing old fences built along them. His courses and distances in most cases were verified as substantially correct and as accurate as was usual in compass needle work. Moreover, resolving Yeamans' errors to their most probable locality and nature, this original surveyor's work, when tested by overlays made from it, is found to fit reasonably well both Henderson's lines as they are now on the ground and the present general configuration of the bay shores. Since Yeamans actually meandered the old shores along his surveys, it is possible to discern subsequent changes resulting from erosion and accretion.

In Mr. W. L. D. Sartwelle's possession is an old book of field notes, written in ink, which is believed to be the source of information used by Yeamans in preparing his official field notes for the several surveys made along Matagorda and Tres Palacios bays. Beginning the Van Dorn at its original southwest corner on Matagorda Bay it states "course from the southwest corner of the Vandorn tract to Bayou divide, S.72°W. 820 varas- front of the Vandorn tract from the southwest corner run N.75°E. 600 varas thence N.78°E. 1285 varas to southeast corner ....". The two "runs" comprise the Matagorda shore bounds, or meanders of the original Van Dorn. But the term, "Bayou Divide", and the course to it (S.72°N. 820 varas), are somewhat puzzling. The bearing fits the direction along the shore from this southwest corner, as we locate it, to or near the mouth of a bayou now emptying into the bay from Hughson Lakes; but the use of the term, "Bayou Divide", instead of "Bayou", and its excessive distance, as measured at this time along the present shore (900 varas), indicate either that some other point is referred to, possibly a ridge or break to the east of the Bayou itself, or that the location of the bayou has changed materially in the hundred odd years since the original survey was made. For these reasons and in view of the fact that the call was not incorporated in Yeamans' official field notes, it is found to be of no help as a witness to the position of the southwest corner of the Van Dorn survey.

The "John Duncan" letter of 1894, previously referred to in discussing the Hughson League, states that its writer was making investigations along Matagorda Bay, but it does not appear that he made complete surveys of either the Van Dorn, Dinsmore or Hughson labors. Beginning the first series of

measurements near Well Point, Mr. Duncan omits the easternmost meander call on Matagorda Bay of the Hughson labor, the "S.63°W. 240 varas". Apparently he intended to start with the second meander call. There is nothing, however, to show how close his starting point may have been to the corresponding point in Yeamans' notes. He then measured westward along the shore and across the south ends of the Hughson and Dinsmore labors and, continuing across the Van Dorn survey, along Matagorda Bay shore, finds, at 1245 varas from what he takes to be the Van Dorn southeast corner, the previously mentioned 2-inch by 12-inch slab marked "H" and "V" for the Hughson league southeast corner. Then, after correctly analyzing east and west distance calls of the Hughson league, he describes, not very clearly, a starting point on Carancahua Bay and his chaining "due east" therefrom the requisite 3886 varas to find the slab correct for the league southeast corner. He finds the Van Dorn bay frontage 640 varas short. His final statement is to the effect that he found no trees on the Point, the observation serving to explain the absence of bearing tree calls or connections for the identification of corners.

Mr. Duncan apparently set out to determine if there was a large conflict between the Van Dorn and the Hughson league, and this he did; the conflict is there. While his work is certainly entitled to consideration, it cannot be taken as exact and final as to measurements. There is no way of knowing positively just where he started in his westward chaining or the courses followed, since no bearings are given. His "due east" chaining would be impossible, literally, without much wading in Matagorda Bay. Since the exact point where he actually found the 2-inch by 12-inch slab cannot be determined and since it is now gone and no mention of it by Carrington or Henderson, or other subsequent surveyor was found, it cannot with certainty be re-established.

Our total meander distance along Matagorda Bay across that portion of the Van Dorn not in conflict with the Hughson league is 1241.66 varas, while the straight or airline distance is 1218.12 varas. Since the Duncan 1245 varas in all probability was neither a full meander nor a true straight line measurement, it should more appropriately be compared with a figure somewhere between our two given above. And since bearings along which Duncan chained were not given, it is impossible to make an accurate comparison of his and our perpendicular distances between bounds.

As with the Hughson league, nothing was found to justify discarding

the lines run and marked by Henderson for the Van Dorn survey, in favor of other determinations. With minor exceptions they are approved and accepted by us as found. Our east boundary of the Van Dorn was established by producing southward to Matagorda Bay a straight line determined from the fence along this boundary's north end where it joins the Thomas J. Williams. Its precise location on the ground near Matagorda Bay was obtained by measurement of distances calculated from our transit lines to the east and west of it.

Upon this boundary as a base, the Dinsmore labor was laid out on the ground definitely by course and distance, giving the labor its full and correct width.

Henderson's line was found and, after investigation and study, was adopted and followed for the Van Dorn northeast boundary. For the west boundary of the north portion of the Van Dorn, a straight line was produced southward from the Van Dorn north corner, as found, through a 4-inch by 4-inch post found flush with the ground, along this west line, set by Henderson for the northeast corner of Section 34 of the Koch Subdivision, to a 1-inch iron pipe set by us flush with the ground for the true southwest corner of the north part of the Van Dorn survey, 4122 feet from the aforesaid post, opposite and 14.3 feet west ( $S.88^{\circ}03'50''W.$ ) of a 2-inch iron pipe as found by us, called for in the Ward-Sartwelle boundary agreement of 1907. To the eastward, we marked the Van Dorn original re-entrant corner by another 1-inch iron pipe, set flush with the ground, N. $87^{\circ}39'30''E.$  (East, by original notes) 1580.22 varas (4389.5 feet) from the aforesaid true southwest corner of the north portion of the tract.

Here we note, as shown more clearly by the inset sketches on our principal maps, that the Sartwelle boundary, as recognized and established by the aforesaid Ward-Sartwelle boundary agreement, deviates slightly from the Van Dorn boundary as above described, running from the 4-inch by 4-inch post found at the northeast corner of Section 34, direct ( $S.02^{\circ}28'50''E.$ ) to the aforesaid 2-inch iron pipe located 14.3 feet easterly from our Van Dorn corner. From this 2-inch agreed marker, the Sartwelle line runs  $N.88^{\circ}03'50''E.$  536.54 feet to another 2-inch iron pipe, called for in the Ward-Sartwelle agreement, in the west line of the Jamison survey, and located 3.79 feet southerly from the intersection of said Jamison west line with the Van Dorn boundary, as above described.

Continuing with the Van Dorn survey,- from our 1-inch iron pipe, set as above described for the Van Dorn original re-entrant corner, we ran  $S.02^{\circ}26'30''W.$ ,

(south by original notes) for the west boundary of the south part of the Van Dorn. At 1148.68 feet, this line intersects the Hughson league north line, where the Van Dorn survey necessarily gives way to its senior, the Hughson league, which thus cuts a strip out of the west part of the south portion of the Van Dorn original survey. The west boundary of the conflicting portion and of the original survey, shown on the principal maps as a dashed line, continues southward to Matagorda Bay.

The area conflict of the Van Dorn with the Hughson league is found to be 509.09 acres. The width of this conflict at its north end is 641.36 varas (1781.56 feet), and at its south end the perpendicular width is 649.2 varas (1803.31 feet). This difference in width is due to difference in magnetic variation used originally on the two surveys, a difference noted and mentioned by Henderson. It will be observed, however, that this Van Dorn conflicting west boundary is parallel with the Van Dorn east boundary, making that portion of the Van Dorn between them uniform in width, and of a width conforming very closely to that deduced from Yeamans' original field notes.

The original call length of this west boundary is 5000 varas but its present length to the Matagorda shore is 4927.84 varas representing an apparent loss or shortage of some 72 varas or 200 feet, some of it due, probably, to erosion. A considerable embayment into the five or six foot vertical clay bluff exists at this point. Proceeding eastward one finds at the Hughson league southeast corner only some 10 varas loss in the present boundary length as compared with Henderson's 4395 varas. Though erosion evidently occurred here, some accretion is now apparently taking place. At the Van Dorn southeast corner some 51 varas erosion loss appears, and at the Dinsmore southeast corner, 28 varas, based on Henderson's measurements of 1907. Around Well Point itself extensive erosion is evident.

#### Thomas Jamison Labor:

All corners, save the southwest corner, of the Thomas Jamison Labor as surveyed by H. M. Henderson in 1907, were identified by finding his pipes. This southwest corner, on the north boundary of the Hughson league, we reestablished by measurement from related points. Boundaries of this labor conflicting with its senior, the Van Dorn survey, are shown as dashed lines on the principal maps. Since the labor was laid out by Henderson with its south boundary along the Hughson league north boundary and with its southeast corner substantially 600 varas west

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of the league northeast corner, as called for in its original notes, and since course and distance of its bounds conform reasonably well with original calls, Henderson's work on this survey appears logical and consistent and was accepted by us.

The Samuel C. Lyons and South Juan Maldonado:

The two original surveys adjoining the north portion of the Van Dorn on its west were not surveyed by us, but their eastern portions, determined from Henderson's work, are shown on our maps. The Samuel C. Lyons, by all records, conflicts with the Van Dorn, but being a junior survey it must give way to the Van Dorn. No attempt was made to show the conflict upon our maps.

The Juan Maldonado, junior to all surveys around it, is a fill-in survey, and its original notes, calling for adjoinders to all of these surrounding surveys, disclose the intention to take up all the land within such adjoining bounds. Although calls for adjoinder do not invariably hold as against conflicting calls for course and distance, the former do possess more dignity and will ordinarily prevail. As did Henderson, we accept the Maldonado adjoinder calls to the Hughson League, Jamison Labor, and the Van Dorn as valid.

Sections 45 and 52, Koch Subdivision:

Sections No. 45 and No. 52 of the Theodore F. Koch Subdivision were laid out by Henderson, whose client at the time owned them. Their bounds contiguous to what were then the Helen M. Sartwelle lands, are incorporated in the Ward-Sartwelle boundary agreement, previously described; hence there is no question as to their recognition. From fences and Henderson's original corner markers found, it was possible to determine these section bounds with assurance and accuracy, though they did not in all cases conform exactly with Henderson's bearing, distance, and acreage calls.

The area, 161.67 acres, which we find in the north half of Section 45, is 2.89 acres less than the area shown on the Koch Subdivision map, but is actually 1.29 acres more than the area of the tract (160.38 acres), as correctly computed from its bounds as shown on that map. The correct area of the south half of the section, 154.51 acres, corresponds very well with the subdivision call of 154.76 acres, which is substantially correct in calculation from its bounds as given.

We find an area of 76.86 acres in Section No. 52. This is 3.82 acres less than the original map call of 80.68 acres. It is not necessary to assume any

The excess shown would be definitely greater if allowance were made for loss due to erosion along the bayshore. It is not unusual, however, to find excess area in old surveys such as these. But in the Van Dorn survey, as in the Jamision, the grantee lost a large area, some 500 acres, due to its conflict with a survey senior to it.

County Lines:

Once the position of the James Hughson league is determined, the common boundary line between Calhoun and Matagorda counties as well as that portion of the common boundary line between Calhoun and Jackson Counties lying east of Garancahua Bay are fixed. Legislative acts defining the bounds of all three of these counties are clear and consistant in calling for the corresponding boundaries of this league. That the southern end of the common boundary between Jackson and Matagorda Counties is this league's northeast corner is equally certain.

In this connection, although previously discussed in this report, it may be appropriate to describe here more specifically the land bounds of the James Hughson league.

As previously related and as shown on our principal maps, a section of iron railroad rail was found at the League northeast corner, about one foot deep in the center of an asphalt-topped road leading south from State Highway No. 35 to Matagorda Bay, and at the intersection of an old graded road which runs west 3 1/2 miles and then turns south. One half mile farther west,—that is, 4 miles from the League northeast corner,—we found the 4-inch by 4-inch post already described. These corner markers, together with intervening ones, fix the Hughson league north boundary and the corresponding Calhoun-Jackson county line. The League east boundary, which was found to coincide with the center of the asphalt-topped road, runs from this Hughson northeast corner southward to Matagorda Bay, passing through the re-established position of another iron rail, now missing, which formerly stood near the shore. The original location of this second iron rail was determined from connections to reference points of the U. S. Coast & Geodetic Survey.

924 feet east of the league northeast corner was found a large railway rail about four feet high. About 4000 feet north and slightly east of it another, similar, rail was found. The two, and others farther north, are reported to have been set by someone to mark the Jackson-Matagorda county line. These points

are so far from the true line, as we find it, that I consider them to be of no significance in that connection.

We did not survey the Jackson-Matagorda county line running northward from the rail at the southeast corner of Jackson County as there was no occasion for doing so; but its direction, for portrayal on our maps, was determined with reasonable accuracy by scale and by computation from figures shown on the Koch Subdivision map.

Vacancies:

Among the maps returned to you is one showing surveys made by H. A. Pierce, F. G. Hoffman and A. C. Russell-Lindsay. Upon it are shown numerous areas between Carancahua and Tres Palacios bays claimed by them to be vacancies or State land. Full scale originals, a tracing and a print in colors are on file at the General Land Office, being listed under "Matagorda County, Rolled Sketches". The tracing, designated PHL, was filed October 16, 1937, and the print, designated PHL-1, was filed October 26, 1937. Both accompany fifteen Mineral Applications, numbered 33766 to 33780, inclusive, and two Scrap Files, numbered 13896 and 13897.

For those claims in the vicinity of your lands we find from our surveys on the ground little to support them and much to refute them. Since the Thomas Jamison labor actually conflicts with the Isaac Van Dorn, there appears no possibility of a vacancy occurring east of the Jamison, as represented in their Mineral Application No. 33775. That area covered by their Mineral Application No. 33772 shown lying south of the Calhoun-Jackson county line, is eliminated through the fact that the county line and the north boundary of the Hughson league are coincident. Very clearly, there can be no vacancy within the Hughson league. The correctness of our position on both of these areas is supported by the General Land Office 1937 Working Sketch.

To determine whether simple course and distance factors would give any support to the claim of the last mentioned mineral application (No. 33772) to that part of its area lying north of the county line would require comprehensive surveying on the ground of extensive areas to the north and west. But, since the adjoining surveys, the south Wm. Ahlert and the south Juan Maldonado, are tied to the Hughson survey with adjoinder calls, which could not easily be overthrown by course and distance calls, I believe there can be no vacancy found here. And, while the distance along the Hughson league north line between Carancahua Bay and the Jamison survey exceeds the sum of the Ahlert and Maldonado calls by

some 524 varas, the calls for adjoinder, in the Maldonado survey, with both the Jamison and the Van Dorn surveys should prevail and thus refute the vacancy claimed in Mineral Application No. 33766.

Among the documents returned, and listed under "J" in the early portion of this report, are photo copies of rejections of all these mineral applications by the Land Commissioner, who also takes the position that calls for adjoinder preclude the possibility of a vacancy in each case.

A further examination of records on file in the General Land Office on August 9, 1945, when these photo copies were obtained, reveals that all mineral applications and scrap files previously mentioned and pertaining to the string of claims running north and northeast from the Van Dorn, were rejected, except No. 33777 (far to the north), which by Land Office notation was transferred by claimants to original or good faith owners.

As a result of this study, I believe the possibility of vacancies being established affecting any Sartwelle lands north of the Hughson and west of the Jamison and Van Dorn surveys, is remote enough to be negligible and that the cost of the surveying which would be required for a full investigation on the ground would not be justified under the circumstances.

  
Conrad M. Blucher  
Licensed State Land Surveyor

*Sketch*

File No. 2.8  
Jackson County  
Sartwelle Lands  
Filed Nov. 22, 1978

BOB ARMSTRONG, Com'r  
By James E. McCarty

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General Land Office

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great amount of erosion to account for all or most of this.

The west part of Section No. 52, described in deed of June 10, 1940, from H. C. Lewis and wife to N. L. D. Sartwelle, which recites an area of 50 acres, more or less, now contains within its exterior bounds 46.72 acres. By calculation, assuming its shoreline to have been a straight line, the bounds of the deed description embrace 47.76 acres, or 1.04 acres more than at present contained. Its southwest corner, as therein described, is now in Matagorda Bay and apparently not marked. At the southeast corner, an old iron pipe, uncalled for in any description we know of, was found at the proper position. It also is in the bay, 59 feet from shore.

No effort was made to locate the included Lot No. 19, nor the excluded Lot No. 10, both embraced within the bounds described in the deed. These two lots are supposedly shown on a subdivision map of "Well Point Recreation Club", which I understand was never recorded. Neither was any effort made to determine the former position of the old artesian well nor the road as reserved, since all evidences as to both were completely obliterated by recent Army target-range construction. From records we saw at Camp Hulen we believe it might be possible, should occasion arise, to determine the location of the well.

Original Survey Areas:

The Thomas Jamison Labor as surveyed by Henderson contains 176.80 acres, three tenths of an acre less than a labor (177.1 acres). But when patent to it issued, the grantee actually lost over 75 acres due to its conflict with the Van Dorn survey. There remain in it 101.58 acres.

The Dinsmore Labor, now containing 174.39 acres, is 2.71 acres short of a full labor; but, as in the case of Section No. 52 of the Koch Subdivision, this loss is easily accounted for by erosion.

The original Van Dorn now contains:

In Jackson County	852.84 Ac.
In Matagorda County (as at present)	
Exclusive of Koch Subdivision	648.48 Ac.
In Koch Subdivision, Section 45	316.18
Section 52	76.86      1041.52
In Calhoun County (the conflict with Hughson survey)	<u>509.09</u>
Total present area of Van Dorn	2403.45 Ac.
Original area call of 13 1/2 labors	<u>2390.85</u>
Excess of present area over original call	12.60 Ac.