Files #98646-7 #14296 Fort Sill, Oklahoma, April 18, 1943.

Hon. Bascom Giles, Commissioner, The General Land Office, Austin, Texas.

Dear Sir:

1429647-6

Mr. C. M. Caldwell, Abilene, Texas, recently forwarded to me your letter of January 27, 1943, in which you request a sketch and statement to support the Field Notes of Sections #54-56-60, T & St. Louis R.R. Co., Block #224, Jeff Davis County, Texas.

Inasmuch as the above three sections are part of a complete survey of Mr. Caldwell's Jeff Davis County Ranch, involving all or part of Sections 22-23-24, Blk 59-F 10-5, T & P.R.R. Co.-Surveys; Sections #230-231-234-235-159-160-161-162-154-155-156-157458-121-122-123-124-125-116-117-118-119-120-86-87-88-89-82-83-84-85-52-53-54-55-Blk-3-G.H. & S.A. R.R. Co. Surveys; Sections 73-76W-71-74-75-78-64-65-66-67-68-57-58-59-60-61-Blk #224-Texas & St. Louid R.R. Co. Surveys; I am submitting herewith an outline report of the entire survey. Information as to the manner in which corners of Sections 54-56-60-T & St. L. Blk #224 were established will be found in paragraphs 7(a) to 7 (1) of the attached report.

It was my intention to submit this report to you when the survey was completed, but before I could complete the office work incidental to preparation of the plat and field notes, I was ordered back to active duty with the army at Fort Sill. As a result, much of the final office work had to be shortened or entirely eliminated in order to turn over to Mr. Caldwell his plat and field notes which he was anxiously awaiting in order to conclude the sale of his ranch.

It was also my intention to submit with this report a linen print of the plat for filing. The enclosed paper copy is submitted as a temporary substitute; a linen copy, properly signed, will be forwarded as soon as it can be obtained. If you desire to retain for your files the computation sheets #1 to 11, please have photostatic copies made and return the originals to me for my files, as they are the only copies I have retained. For a description of the work pertaining to Sections #54-56-60, G.H. & S.A. Blk #357, please be referred to paragraphs 7 (t) to 7 (y) of the report.

-1-

The following papers are enclosed:

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Plat and Report of Survey. Computation Sheets Nos. 1 to 11. Work Sketch of R. M. Kenney F/N Sheet #12. Work Sketch of L. E. Edwards F/N Sheet #13. Photostatic Copy of J. Stovell's Plat.



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Great care was used throughout the progress of this survey with the result that excellent closures were obtained on all traverse circuits. All computations, plat and field notes have been carefully checked and I do not believe that any errors of material importance remain. If, in the course of your review any are found, I will appreciate it if you will correct them as you may see fit as I am, for the duration, out of circulation. Trusting that you will find this report satisfactory, I am,

Yours very truly,

RWB/bjvn

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RALPH W. BAKER, Licensed State Land Surveyor.

P. S. If any changes are found necessary please write me at the following temporary address. When papers are checked please notify Mr. Caldwell.

Major Ralph W. Baker Corps of Engrs. C/O Ordnance Dept. Ft. Sill, Okla.

-2-

## REPORT OF CORRECTED SURVEY

1. Report of a corrected survey of the C. M. Caldwell ranch (formerly known as the Nunn ranch) comprising all or part of Sections #22-23-24-Blk-59-10-S. T & P R.R. Co., Survey. Sections #230-231-234-235-159-160-161-162-154-155-156-157-158-121-122-123-124-125-116-117-118-119-120-86-87-88-89-82-83-84-85-52-52-52-54-55-Blk-#3-G.H. & S.A. R.R. Co. Surveys. Sections #73-76W-71-74-75-78-64-65-66-67-68-57-58-59-60-53-54-55-56-Blk-#357 Tex-Mex. R.R. Co. Surveys. Sections #54-55-56-57-58-60-61-Blk #224-T & St. L. R.R. Co. Surveys, Jefferson Davis County, Texas.

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## 2. Purpose:

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Location of the external boundaries of the ranch with respect to original or accepted section corners and determination of the acreage in various fractional parts of sections created by construction of the new State Highway along the west boundary and relocation and construction of new division fence lines along the north, east and south boundaries, in order to effect transfer or exchange of the various fractional parts of sections for the purpose of establishing the center line of the new highway and the relocated fence lines as the permanent common boundary line of the C. M. Caldwell and adjoining ranch properties.

3. Scope:

Establishment, identification and permanent marking of the corners of all sections traversed by the reconstructed ranch boundaries including such additional interior or exterior section corners as were necessary to establish the lines and corners of all sections comprising the ranch.

4. Preliminary Considerations: (Reference: work sketch of L. E. Edwards Field Notes, Sheet No.13).

(a) Investigation of local records disclosed three sets of Field Note records pertaining to G.H. & S.A. R.R. Co. Block #3. One being a copy of the Field Notes of the original survey made by L. E. Edwards in 1875, (Vol. F, Pages 100-208 Jeff Davis County F/N Records), the second a copy of the Field Notes of a corrected survey by R. M. Kenney in 1889, (Vol. E, Pages 136-243 Jeff Davis County F/N Records), and the third a copy of the Field Notes of a corrected survey of the north tier of fractional sections by George M. Williams in 1907. The following peculiarities were noted:

. (1) Within that part of Blk. #3 covered by this survey, L. E. Edwards appears to have run northward along the west line of Sections #57-80-91-115 to the northwest corner of the latter, thence eastward to the southeast corner of Section #123, thence northward to the northwest corner of Section #160. With the exception of the latter, rock mounds are called for at all corners on this traverse, including the northeast and southeast of Section #157. However, rock mounds were found only at the northwest of #57, the northwest, southwest and northeast of #115, and at the northwest of #160. Of these, the only one which had reference bearings and could be positively identified is the northwest of #57.



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Those foundat the southwest, northwest and northeast of #115 had nothing to identify them except an appearance of great age, but were accepted as original corners as they were found to be in reasonably close agreement with other corners established later by R. M. Kenney, Geo. M. Williams and others. A reference bearing is given at the northwest of #160, but there is no call by Edwards for a rock mound at that point. Nevertheless, a very substantial rock mound was found at that corner built, presumably, by either Kenney or Williams as field notes of both surveyors call for a rock mound at that point. Apparently Edwards did not establish any other corners or rock mounds along either the north or east lines of Block #3, and with the exception of the above mentioned traverse, his Field Notes are obviously nothing more than paper surveys.

(b) (Reference: Work sketch of R. M. Kenney Field Notes, Sheet No.12). R. M. Kenney, in his resurvey of 1889 apparently actually traversed a great deal more territory than did Edwards, but like the latter he did not, within the area of this survey, establish any permanent corners along either the north or east lines of Block #3.

There is nothing of record to indicate that any of the remaining identifiable Edwards corners are incorrect or invalid and it would seem that Kenney's survey was simply an extension of Edwards' work. It should be noted, however, that at no point do Kenney's Field Notes mention or refer to the presence of Edwards' corners, in spite of the fact that the latter were apparently in place in reasonable agreement with Kenney's survey. Examples of this are any of Kenney's Field Notes of the sections adjoining Edwards' traverse, notably those of Sections #57-80-91-115-116-117-124-125-126. It is possible that Kenney did not find the rock mounds called for by Edwards and that those found, during the course of this survey, were placed by surveyors subsequent to Kenney. However, such an assumption is not altogether borne out as the northwast corner of Section #57 has been known and recognized locally for many years and can be very definitely identified.

Another peculiarity of the Kenney Field Notes is that while many of his corners have reference bearings, there are, excepting those later placed by Williams, only two within the area of this survey, namely, the sothwest of #53 and #56 which have rock mounds as permanent reference marks. Excesses of from one to six varas per mile were found to exist in nearly all of Kenney's surveys.

(c) In 1907, Geo. M. Williams re-surveyed the entire north tier of fractional sections in Block #3, the apparent purpose being to eliminate the conflict between the T & P and G.H. & S.A. R.R. Co. surveys and to determine the acreage of the fractional sections. Within the area of this survey all of the corners found or established by Williams, and called for in his Field Notes, were found and accepted in place. Excesses of from one to three varas per mile were found to exist throughout the work which appears to about the normal limit of accuracy found in all of the older survey work checked in Block #3.

-2-

It will be noted that Williams' bearings differ by seven minutes of angle from those established by this survey. Apparently this is due to the fact that Williams began his survey near the northwest corner of Block #3, establishing a true bearing at that point which was carried eastward to the end of his work at the east line of Section #235 of Block #3. The northwest corner of Block #3 is sixteen miles west of the northwest corner of Section #162 at which point Polaris was observed for the purpose of establishing the ture bearings of this survey. If a correction for sixteen miles is applied to Williams' bearings at the northwest corner of Section #162, they will be found to agree, within one or two minutes of angle, with the bearings determined for this survey.

(d) With respect to Block #357 Tex-Mex R.R. Co. Surveys and Block #224-T & St. L. R.R. Co. Surveys, no duplication of original Field Notes was found, but within the area of this survey they were found to be mere pper surveys with but little value in establishing and identifying recognized corners. It was found that within the area of this survey, all recognized corners in these two blocks had been established by local surveyors subsequent to the date of the original Field Notes and since patents were found to have been issued on Field Notes of these later surveys, these corners were, insofar as possible, accepted in place in constructing the lines and corners of these blocks.

(e) Other matters which required preliminary consideration were:

(1) Recent completion by the State Highway Office at Van Horn of the location of the new highway along the west boundary of the Caldwell property.

(2) Recent completion, under the direction of R. L. Withers, Ft. Davis, of an extensive re-survey of the Buckley Ranch property adjoining the Caldwell property along the north boundary.

(3) Recent completion by John Stovell, Alpine, of an extensive re-survey of the Eppenauer ranchproperty adjoining the Caldwell ranch property along the east boundary, parts of which were, for reasons appearing later in this report, not acceptable to Mr. Caldwell.

5. (a) Procedure of Work.

At the northwest corner of Section #162, Blk #3 (a 2" I.P. & Rk. md.) Polaris was observed at elongation and a true meridian established, to which point all bearings of this survey are referred. It will be noted that Williams' bearing for the south line of #230 is  $9.89^{\circ}09^{\circ}E$ . which differs by  $0^{\circ}51^{\circ}$  from the true east bearing given by Kenney. Also that it differs by  $0^{\circ}07^{\circ}$  from the bearing developed by this survey, which was found to be  $9.89^{\circ}16^{\circ}E$ . The difference between Kenney's bearing and that developed by this survey is  $0^{\circ}44^{\circ}$ , which when applied to the two reference bearings given by Kenney for the northwest corner of Section #162 checks the observed bearings exactly.

Both the north and south lines of Sections 223 to 235 were then run out, all of Williams' corners being found and accepted in place, including well marked stone mounds at the southeast corner of Sections #24-23-22-Blk-59-T-10S, T & P. R.R. Co. Surveys, which local records indicate were established by A. J. Adcock in 1927.

-3-

(b) Beginning at the northwest corner of Section #162 (a 2" I.P. marked N.W. 162, N.E. 163, S.W. 230, S.E. 227, Blk 3-G.H. & S.A. set in old Rk. Md.) a line was then run S.O<sup>0</sup>44'W. 1900 varas to a stake, thence N.89°16'W. 1903.1 to a point which fell 3.5 varas north of a large old rock mound accepted as Kenney's southwest of #163 and northwest of #154. Stake at southeast of #163 was then corrected southward 3.5 varas and a marked 2" I.P. set in large stone mound for common corner of Sections #154-155-162-163-Blk #3.

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(c) From the northeast corner of #154 a line was then run S.0°44 W. 1900 varas to a stake, thence S.89°16 E. 1903.1 varas to a point which fell 6.2 varas north of a large old rock mound accepted as Kenney's northeast corner of Section #124. The stake at the southeast of #154 was then corrected southward 6.2 varas and a marked 2" I.P. set in a large rock mound for the common corner of Sections #124-125-154-155-Blk #3.

(d) From the northeast corner of #125 a line was then run S.0°44'W. 1900 varas to a stake, thence N.89°16'W. at 1903.1 varas pass a large set stone in scattered rock mound 4.2 varas south of stake, accepted as Edwards' original S.W. of #125, continue same course 3807.0 varas to a point 4.2 varas north of a large set stone in old rock mound accepted as Edwards' original S.W. of #126. The stake at S.E. corner of #125 was then corrected southward 4.2 varas and 2" marked I.P. set in a large rock mound for the common corner of Sections #116-117-124-125-Blk #3. From the latter corner a line was then run S.89°16'E. 1903.1 varas to a stake, at which point was found a scattered rock mound accepted as Edwards' N.E. of #117, which was rebuilt at stake.

(e) From the S.E. of #125 a line was then run S.0<sup>0</sup>44 W. 1899.4 varas to a large old rock mound accepted as Kenney's common corner of #89-90-116-117 from which a large set stone in old rock mound accepted as Edwards' original S.W. of #115 bears N.89<sup>0</sup>16 W. 3803.2 varas.

(f) From the N.E. of #90 a line was then run S.0°44'W. at 1900.0 varas set a stake at 3808.0 varas, set a stake in a large old rock mound found in place (unidentified) for the common corner of Sections #55-56-81-82-Blk #3. From the latter point a line was then run S.89°16'E. at 1903.1 varas found old rock mound accepted as Kenney's common corner of Sections #54-55-82-83. Continued same course 3806.2 varas to an old rock mound on south slope of mountain accepted as Kenney's common corner of Sections #53-54-83-84-Blk #3. The stake at S.E. of Section #90 was then corrected southward 4.0 varas and a marked 2" I.P. set in a large rock mound for the common corner of Sections #81-82-89-90 G.H. & S.A. Blk #3.

(g) From the northeast of #56 a line was then run N.89°16'W. 3807.0 varas to a set stone in old rock mound identified by marked bearing trees as Edwards' original common corner of Sections #57-58-79-80-Blk #3. (a 2" marked I.P. was then set in the rock mound of N.E. of #56 for the common corner of Sections #55-56-81-82-Blk #3.)

(h) From the northeast of #56 a line was then run S. 0° 44'W. 1901.25 varas to a marked 2" I.P. in a large rock mound set for the common corner of Sections #47-48-55-56-Blk.#3, from which a set stone in a large old rock mound, accepted as Kenneys' common corner of Sections #46-67-56-57, Blk. #3, bears N. 89° 21'W. 1903.1 varas.

(i) From the southwest of #55 a line was then run S. 89° 21' E. at 1903.1 varas set a marked 2" I.P. in a large rock mound for common corner of Sections #48-49-54-55-Blk. #3, continued same course 3806.2 varas to a marked 2" I.P. in a large old rock mound, on south bank of Cherry Creek, identified by marked bearing trees as Kenneys' common corner of Sections #49-50-53-54-Blk. #3.

(j) Thence S. 89° 06' E. at768.6 varas pass stake in angle of the Caldwell-Eppenauer division fence (Trav. Sta. #4) at 1900.8 varas pass a rock mound set by Jno. Stovell for the common corner of Sections #50-51-52-53-Blk. #3, continue same course 3801.6 varas to a rock mound set by Jno. Stovell for the northeast corner of Section #51 and southeast of Section #52, Blk. #3.

(k) Thence N. 0° 54' E. at 191.9 varas, pass a rock mound set by Jno. Stovell for the northwest corner of section #62 and southwest corner of Section #61-Block #224, T & St. L. R.R. Co. Surveys. Continue on same course at 1082.8 varas cross the Caldwell-Eppenauer division fence 1879.2 varas in all, to a scattered old rock mound accepted as J. W. Merrill's northeast of #52 and southeast of #85, Blk. #3, continue same course 2092.7 varas to an old rock mound accepted as J. W. Merrill's southwest corner of Section #60 and the northwest corner of Section #61, Blk-224, T & St.L. R.R. Co. surveys.

(1) Thence N. 0° 30' E. 1665.7 varas to an old rock mound accepted as J. W. Merrill's northeast corner of Section #85 and the southeast corner of Section #86, Blk #3, G.H. & S.A. R.R. Surveys.

(m) Thence N. 0° 06' W. 261.0 varas to old rock mound accepted as J. W. Merrill's northwest of corner of Section #60 and the southwest corner of Section #58, Blk. 224, T & St. L. R.R. Co. Surveys.

 (n) Thence N. 0° 29: E. 903.6 varas to an old rock mound accepted as Merrill's N.W. corner of Section #58 and the southwest corner of Section #57, Blk. #224, T & St. L. R.R. Co. Surveys.

(o) Thence N. 2<sup>0</sup> 23' E. at 791.7 varas pass an old rock mound accepted as J. W. Merrill's Northeast corner of Section #86 and the southeast corner of Section #120, G.H. & S.A. Blk. #3. Continue same course 972.0 varas to an old rock mound accepted as J. W. Merrill's southwest corner of Section #56-Tex-Mex Blk. #357 and the northwest corner of Section #57, T & St. L. Blk. #224.

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(p) Thence N. 0° 35' E. at 1718.8 pass a stake in rock mound set for the northeast corner of Section #120 and the southeast corner of Section #121, G.H. & S.A. Blk. #3, at 1900.8 varas pass a set stone in a large old rock mound identified by marked bearing trees as J.W. Merrill's northwest corner of Section #56 and the southwest corner of Section #57-Tex-Mex. Blk #357, at 3622.3 varas, pass stake in rock mound set for the northeast corner of Section #121 and the southeast corner of Section #158, G.H. & S.A. Blk. #3. at 3800.8 varas, pass a large old rock mound under cliff identified by marked bearings on rocks as J. W. Merrill's northwest corner of Section #57 and the southwest corner of Section #68, Tex-Mex. Blk #357, at 5528.5 varas pass stake in Rock Mound set for the northeast corner of Section #158 and the southeast corner of Section #159, G.H. & S.A. Blk. #3 at 6919.5 varas, pass a large old rock mound near bottom of Bee Canyon accepted as J.W. Merrill's northwest corner of Section #71 and the southwest corner of Section #73, Tex-Mex. Blk. #357, at 7174.5 varas to a large old rock mound under east face of a cliff accepted aw J. W. Merrill's northeast corner of Section #159 and the southeast corner of Section #235, G.H. & S.A. Blk. #3. From the latter point a large old rock mound identified as Geo. M. Williams' northeast corner of Section #235 bears N. 0º 44' E. 837.9 xs and a large rock mound set by A. J. Adcock in 1927 for the same corner bears N. 00 44' E. 847.5 varas.

(q) Thence N. 890 16 W. at 112.0 varas pass a large old rock mound near top of ridge identified by marked bearing trees as Kenneys' and Williams'. Reference monument for the southeast corner of Section #235, at 1636.8 varas, pass a large old rock mound on top of high ridge identified by marked bearing trees as Kenneys' and Williams Reference Monument for the southwest corner of Section #235, at 1900.8, pass a large rock mound on west slope of high ridge identified by local records as set by A. J. Adcock in 1927 for the common carner of Sections #159-160-234-235, G.H. & S.A. Blk #3, from the latter point a rock mound set by A. J. Adcock in 1927 for the northwest corner of #235 and northeast corner of #234 bears N. 0° 44' E. 840.5 varas. Continuing course N. 89 16'W. at 3801.6 varas pass a large old rock mound accepted as Williams' common corner of Sections #160-161-234-231, G.H. & S.A. Blk. #3 at 5704.5 varas pass a marked 2" I.P. and set stone in large old rock mound in valley identified as Williams' Common corner of Sections #161-162-230-231, Blk. #3 from which a marked 2" I.P. in and set stone identified by marked bearing trees as Williams' northwest corner of Section #231 and the northeast corner of Section #230, Blk. #3, bears N. 0° 39' E. 829.4 varas, continuing course N. 89º 16'W. 7607.5 varas to place of beginning.

6. (a) From the southwest corner of Section #162 G.H. & S.A. Blk. #3, a line was then run S. 89° 16' E. parallel to the north line of Sections #162-161-160-159 at 1903.1 varas, set a stake in rock mound for the common corner of Sections #161-162-155-156-Blk. #3, at 3806.2varas set a stake in rock mound for the common corner of Sections 156-157-160-161@Blk. #3 at 5707.0 varas set a stake in rock mound for the common corner of Sections #157-158-159-160-Blk. #3, at 7611.0 varas close line on stake and rock mound previously set for southeast corner of Section #159 and northeast corner of Section #158 G.H. & S.A. Blk. #3.

(b) From the southwest corner of Section #156, Blk. #3, a line was then run S. 89° 16' E. at 1903.1 varas set a stake in rock mound for the common corner of Sections #122423-156-157-Blk. #3 at 3803.9 varas set a stake in rock mound for the common corner of Sections #121-122-157-58, Blk. #3 at 5711.7 varas close line on stake in rock mound previously set for the northeast corner of Section #121 and the southeast corner of Section #158, Blk. #3.

(c) From the southwest corner of Section #123, Blk. #3, a line was then S. 89° 16'E. at 1903.1 varas set a stake in rock mound for the common corner of Sections #118-119-122-123, Blk. #3 at 3803.9 varas set a stake in rock mound for the common corner of Sections #119-120-121-122, Blk. #3 at 5713.4 varas close line on stake in rock mound previously set for the northeast corner of Section #120 and the southeast corner of Section #121, G.H. & S.A., Blk. #3.

(d) From the southwest corner of Section #117, Blk. #3, a line was then run S. 89° 16'E. at 1903.1 varas set a stake in rock mound for the common corner of Sections #88-89-117-118, Blk. #3, at 3806.2 varas set a stake in rock mound for the common corner of Sections #87-88-118-119, Blk. #3, at 5707.0 varas set a rock mound for the common corner of Sections #86-87-119-120, Blk. #3, at 7620.0 varas close line on old rock mound previously found and accepted as J. W. Merrill's northeast corner of Section #86 and the southeast corner of Section #120, B.H. & S.A. Blk. #3.

(e) From the southwest corner of Section #89, Blk. #3, a line was then run S. 89° 16'E. at 1903.1 varas set a stake in rock mound for the common corner of Sections #82-83-88-89, Blk. #3 at 3806.2 varas set a stake in rock mound for the common corner of Sections #83-84-87-88, Elk. #3, at 5707.0 varas set a stake in rock mound for the common corner of Sections #84-85-86-87, Blk. #3, Thence \$87°42' E. 1900.3 varas to an old rock mound previously found and accepted as J.W. Merrill's northeast corner of Section #85 and the southeast corner of Section #86, Blk. #3.

(f) From the southeast corner of Section #84, Blk. #3, a line was then run S. 89° 16'E. at 1900.8 varas set a stake in rock mound for the common corner of Sections #52-53-84-85, G.H. & S.A. Blk. #3. Thence S. 88° 26'E. 1906.4 varas to an old rock mound previously found and accepted as J. W. Merrill's northeast corner of Section #52 and the southeast corner of Section #85, G.H. & S.A. Blk. #3.

(g) Heretofore the west boundary of the C. M. Caldwell ranch had been the line from the northwest corner of Section #162 south to the southwest corner of Section #55, G.H. & S.A. Blk. #3; however, since location of the new highway, more or less followed the latter line, Mr. Caldwell and the Reynolds Cattle Company had agreed to accept the center line of the new highway as the permanent common boundary line between their properties with those fragments of Caldwell-owned sections lying west of the center line to be exchanged for similar fragments of Reynolds-owned sections lying east of the center line. It was also agreed that after completing exchange of the lands on this basis, each was to deed to the State one-

half of the required right of way acreage. Accordingly, separate traverses were run around each fractional part of all sections crossed by the highway, namely, Sections #162-155-154-125-116-117-89-82 and corrected field notes prepared for incorporation in deeds.

(h) From the northwest corner of Section #231, Blk. #3, a traverse was then run eastward along the division fence line between the Caldwell and Reynolds ranches and the Caldwell and Buckley Ranches (the latter later purchased by Lee Lane) to Traverse Station #77 at the fence corner near the southeast corner of Section #78 Tex-Mex. Blk. #357. This fence corner being the northeast corner of the C. M. Caldwell ranch, the northwest corner of the A. R. Eppenauer ranch and being 106.7 varas east of the southwest corner of the W. L. Kingston ranch.

(i) From Traverse Station #4, a stake in fence corner 788.6 varas
S. 89° 06'E. of the southwest corner of Section #53, Blk. #3, a traverse was then run northeastward along the division fence line between the
C. M. Caldwell and A.R. Eppenauer ranches to a closure on traverse Station #77 described in paragraph 6 (h) above.

(j) Using the southwest corner of Section #55 as a beginning point, latitudes and departures were computed for the entire outside circuit and closing error found to be 6.5 varas. Since this is negligible in proportion to the length of the circuit, it was adjusted by inspection and the figures balanced. (See computation Sheets #1-5 enclosed).

(k) As a further check on the work, latitudes and departures were also calculated for both the east and west parts of Traverse #1 (outer circuit) based upon the length of the east line of G.H. & S.A. Blk. #3, from the southeast corner of Section #52 north to the northeast corner of Section #159. The closing errors thus obtained were so small as to be of no material importance and no further adjustment was made to the traverse. Computations for the west part were begun at southwest corner of Section #55 and for the east part at Traverse Station #77 (Fence corner near southeast corner of Section #78, Tex-Mex. Blk. #357, also northeast corner of Caldwell Ranch). Copies of computation sheet #6 for the west part and Sheets #7-10 for the east part are enclosed.

(1) Latitudes and departures were also computed for Traverse #4 (north part of Caldwell ranch) beginning at the northeast corner of Section #161-Blk. #3. Thence eastward to Traverse Station #14 at intersection of the traverse line with the division fence line between the Caldwell and Lee Lane ranches. Thence north westward with the division fence line to Traverse Station #120 at northwest corner of Section #231, thence south to place of beginning. (See computation Sheet #11.)

7. (a) The construction of section lines and corners in T & St. L. R.R. Co. Block #224 and Tex-Mex. R.R. Co. Block #357, as far north as the south line of Sections #71-74-75-78 was based (1) upon the position of the the corners established by J. W. Merrill along the south line of above sections and along the east line of Blocks #357 Tex-Mex, and #224 T & St.L. as far south as the southeast corner of Section #52, G.H. & S.A. Bl& #3; (2) upon corners established or identified by John Stovell, Alpine, Texas, in his re-survey of the A. R. Eppenauer ranch in 1941.

(b) Referring to Mr. Stovell's plat, al copy of which is enclosed. It will be noted that the bearing of his lines differs from those used by this survey by 0° 30'. This difference is greater than can be accounted for by the difference in longitude of starting points of the two surveys. However, it is consistent throughout the survey and therefore only relative.

(c) From information obtained from Mr. Jno. Stovell, (see copy of Stovell Plat), it appears that in the course of his survey of the north part of the Eppenauer ranch, he began at the recognized northwest corner of Section #37-T & St. L. R.R. Blk #224, and, using the bearing of the west line of Sections #37 and #38 (true north) as established by Frank Friend in 1934, he ran a line due north as far as the northeast corner of Section #60, Tex-Mex R.R. Co. Blk #357, establishing a rock mound corner at each even mile.

(d) From the southwest corner of Section #53, G.H. & S.A. Blk #3, he then ran a line S. 88° 36'E. (which is at 90° to the west line of Section #50 and marked by two R.M. Kenney corners) at 1900.8 varas establishing a rock mound for the common corner of Sections #50-51-52-53, at 3801.6, establishing a rock mound for the northeast of #51 and the southeast of #50, Blk. #3. From the southeast corner of Section #52, Blk #3, he then ran a line northward as far as the northwest corner of Section #57, T & St. L. R.R. Blk. #224, establishing as he went the southwest corner of Section #61 and northwest corner of Section #62, T & St. L. R.R. Blk #224, and accepting in place J. W. Merrill corners at the northeast of #57, Blk #224, the northeast of #58 Blk. #224, the southwest of #57, Blk #224.

(e) From the northwest corner of Section #57, Blk. #224, he then ran east to a connection with his previously established southeast corner of Section #53, establishing at 1386.4 varas the common corner of Sections 55-56, Tex-Mex Blk. #357 and Sections #55-57, T & St. L. R.R. Blk #224. His construction in these two blocks being based, apparently, upon the assumption that all north and south section lines should be parallel to and at 1900.8 vara intervals east and west from the line previously run northward from the northwest corner of Section #37-Blk. #224. All excesses or shortages being thrown into the westernmost tier of sections of these two blocks. Proceeding with this construction, Mr. Stovell then established the southeast corners of Sections #57-58-60-61, T & St.L. R.R. Co. Blk. #224, tying in the division fence line to the nearest section corner thus established.

(f) From his previously established southeast corner of Section #54, Blk. #357, he then appears to have run north to the southwest corner of Section #60, thence east to his previously established southeast corner of Section #60.

(g) At the southwest corner of Section #60, Blk #357, there was found in place two old rock mounds 55.0 varas apart east and west, and 20 varas apart north and south. No record of which could be found and no information concerning them except that one of them was presumed to have been established about 1917 by Randolph of Pecos, Texas, for the southwest patent corner of Section #60. It was found that Mr. Stovell's construction for the southwest corner of #60 agreed very closely with the most westerly of these rock mounds and presumably his survey ties into it; however, he recorded field notes for only the eastern parts of Sections #53 and #60 and in neither is any reference made to this corner. For the purposes of this survey the most westerly of these rock mounds was accepted in place as the common corner of Sections #53-54-59-60, Blk #357, Tex-Mex R.R. Co. Surveys.

(h) It is obvious that if the north and south lines of Mr. Stovell's construction were run due north, or in terms of this survey, N.0°30'W., to the south line of Sections #71-74-75-78, Blk #357, they would fall at a point approximately 225 varas west of Merrill's south corners of those sections.

It is equally obvious that if the bearing of Stovell's north and south lines was corrected eastward to make the north end fall on Merrill's corners along the south line of Sections #71-74-75-78, Blk #357, the east line of Sections #68-57-56, Tex-Mex Blk #357 and Sections #57-58-60-61-T & St. L. Blk #224 would be moved eastward to approximately the position in which Merrill placed it in his surveys of those sections.

(i) It was found, however, that if this was done it would cause a serious conflict among established surveys farther eastward, and since none of Merrill's corners along the east line of Sections #57-58-60-61 could be found, Mr. Stovell apparently found it advisable to disregard Merrill's construction of those sections and place all shortage in the western tier of fractional sections. From the southwest corner of Section #53, G.H. & S.A. Blk #3, Mr. Stovell then ran a traverse north-eastward along the division fence line between the Eppenauer and Caldwell ranches, to the northeast corner of Section #60, Tex-Mex Blk #357, tying in all sections lines as they were crossed. Corrected field notes of all of the fractional parts of sections crossed by the fence were then prepared and recorded.

(j) Inasmuch as Mr. Stovell's construction in T. & St.L. Blk #224 and the south part of Tex-Mex Blk #357 was acceptable to both Mr. Eppenauer and Mr. Caldwell, it was accepted without change as far north as the south line of Sections #57-58-59-60, Blk #357. (which was as far north as he had actually surveyed.) However, with respect to Sections #71-73-74-75-76-76W-78, Blk #357, there was found not only a number of J. W. Merrill's corners, but several of later date established by A. J. Advock and very recently by R. C. Withers in his re-survey of the Euckley (Lee Lane) ranch, which definitely established the position of all comers pertaining to these sections.

(k) In order to connect the south corners of Sections #71-74-75-78 with the north corners of Sections #53-54-55-56, it was necessary to make an angle of 3°24' at the northeast of each of the latter corners and this construction also placed an angle of 2°58' at each of the former corners.

(1) This construction leaves all sections of Blks #224 and 357, lying east of the fractional west tier, and south of the south line of Sections #65-66-67, full sections of 1900.8 varas on all sides. However, since the north and south boundary lines of Sections #65-66-67-68 converge eastward, Sections #65 and #66 are necessarily a little short, while Section #67 contains some excess. It will be noted that all east and west section lines, in these two blocks, which lie south of the south line of Sections #71-74-75-78 Blk #357, have a bearing N.89°30'E. This bearing was determined by the direction of the line from Merrill's northwest corner of Section #57 to Stovell's northeast corner of Section #25, T & St. L. Blk #224, and by the direction of the line from Merrill's southwest corner of Section #57 to the old rock mound found in place at the southeast corner of Section #59 Tex-Mex Blk #357. All other east and west lines in Blocks #224 and 357 were made parallel to these two lines.

(m) The corners established by J. W. Merrill, A. J. Adcock and R. C. Withers in Sections #71-73-74-75-76-76W-77-78-Tex-Mex Blk #357 were found, identified, or where missing, re-established as follows:

At the northeast corner of Section #235-G.H. & S.A. Blk #3, there are two old rock mounds, the most southerly of which, identified as Williams', was found to be 837.9 varas N.O<sup>0</sup>44'E. from the southeast corner and the most northerly, identified as Adcock's, was found to be 847.5 varas N.O<sup>0</sup>44'E. from the southeast corner. Since the latter was at the correct distance from the southeast corner as given by Williams' Field Notes, it was accepted as the correct northeast corner of Section #235.

(n) From Adcock's northeast corner of Section #235, G.H. & S.A. Blk #3, a line was then run S.89°16'E. at 1971.0 varas pass a scattered rock mound accepted as Merrill's northwest corner of Section #76W and the northeast corner of Section #73, Tex-Mex Blk #357 at 1989.0 varas pass a rock mound marked "N.W. #76", identified as Adcock's northeast corner of Section #73 and northwest corner of Section #76W (established in 1927) at 2055.5 varas an unidentified rock mound, at 3227.0 varas pass a rock mound marked "N.L. #76", identified as Adcock's Witness Monument for the northeast corner of Section 76W and northwest corner of Section 76E, at 3274.1 varas, a point in deep canyon for northeast corner #76W, 4522.1 varas to a rock mound marked "N.E. #76" identified as Adcock's Northeast corner of Section #76E and the northwest corner of Section #77, Tex-Mex Blk #357.

(c) From J. W. Merrill's southwest corner of Section #73, Blk #357, a line was then run S.89°16'E. at 1485.2 varas pass an old rock mound in canyon accepted as Merrill's northeast corner of Section #71 and northwest corner of Section #74, Tex-Mex Blk #357, at 1871.7 varas pass large rock mound marked "S.W. #76" identified as A. J. Adcock's

-11-

monument for the southeast corner of Section #73 and southwest corner #76W, Blk #357 at 1983.7 varas set stake and rock mound in canyon for the southeast corner of #73 and southwest corner of #76W, as called for by Merrill Field Notes. At 3286.7 pass a large rock mound marked "S.E. 76W" on north side of junction of Bee and Cherry Canyons identified as A. J. Adcock's southeast corner of Section #76W, and southwest corner of Section #76, Tex-Mex Blk #357, at 3386.0 varas pass an old rock mound accepted as J. W. Merrill's northeast corner of Section #74 and northwest corner of Section #75, Blk #357 at 3530.0 varas cross Cherry Canyon, at 4616.0 set a rock mound on high bluff for the southeast corner of Section #76 and southwest corner of Section #77, Blk #357, at 5286.0 varas set a rock mound on high ridge on east side of canyon for the northeast corner of Section #75 and northwest corner of Section #78, Tex-Mex Blk #357.

(p) From A. J. Adcock's southeast corner of Section #76W, a check line was then run N. 0°4'E. 1102.5 varas to a connection with the northeast corner of Section #76W.

(q) From J. W. Merrill's southwest corner of Section #71, Tex-Mex Blk #357, a line was then run S. 89<sup>°</sup>16'E. at 1501.0 varas, set a rock mound near bottom of Cherry Canyon for the common corner of Sections #67-68-71-74, Blk #357 at 3401.8 varas pass an old rock mound on high ridge accepted as Merrill's common corner of Sections #66-67-74-75, Blk #357 at 5302.6 varas pass an old rock mound on west slope of ridge accepted as Merrill's common corner of Sections #65-66-75-78, Blk #357 at 7203.4 varas set a 2" I.P. marked "S.E. #78-N.E. #65, B. 357" near edge of bluff on west side of Madera Canyon, for the common corner of Sections #64-65-78-80 Blk #357. Thence N. 0°04'W. at 55.8 varas cross Caldwell-Lee Lane division fence 1391.0 varas to a rock mound on high ridge set for the southeast corner of Section #77 and the nor theast corner of Section #78, Tex-Mex Block #357.

(r) From J. W. Merrill's southwest corner of Section #68, Tex-Mex Blk #357, a line was then run N. 89°30'E. at 280 varas cross Cherry Canyon at 1425.5 set stake in rock mound for the common corner of Sections #57-58-67-68, Blk #357, at 3326.3 varas set rock mound on high ridge for the common corner of Sections #58-59-66-67 Blk #357 at 5227.1 varas set a rock mound on west slope of high ridge on east side of Holes Canyon for the common corner of Sections #59-60-65-66, Blk #357, at 6726.6 varas cross Caldwell-Eppenauer division fence 7127.9 varas to a rock mound near bottom of a deep canyon set for the common corner of Sections #60-61-64-65, Blk #357. Thence N.2°54'E. at 627.4 varas cross Caldwell-Kingston division fence, 1835.2 varas to the previously set northeast corner of Section #65, Blk #357.

(s) From J. W. Merrill's southwest corner of Section #57, Tex-Mex Blk #357, a line was then run N.89°30'E. at 1350.4 varas set a rock mound for the common corner of Sections #55-56-57-58, Blk #357, at 3251.2 varas set a rock mound for the common corner of Sections #54-55-58-59, Blk #357, at 5152.0 varas pass an old rock mound accepted as the common corner of Sections #53-54-59-60, Blk #357, at 5587.3 varas cross Caldwell-Eppenauer division fence, 7052.8 varas to a rock mound set by J. Stovell, in 1941, for the common corner of Sections #52-53-60-61-Blk #357.

-12-

(t) From the southwest corner of Section #60 Blk #357, a check line was then run N.2°54'E. 1900.8 varas to the previously set northwest corner of Section #60.

(u) From J. W. Merrill's southwest corner of Section #56, Tex-Max Blk #357 and the northwest corner of Section #57, T & St. L. Blk #224, a line was then Mun N.89º50'E. at 1386.4 varas pass a rock mound set by J. Stovell in 1941 for the southwest corner of Section #55 and southeast corner of Section #56, Tex-Mex Blk #357, the northeast corner of Sections #57 and northwest corner of Section #55, T & St. L. R.R. Co. Blk #224, at 3287.2 varas pass a rock mound on high ridge set by J. Stovell in 1941 for the southwest corner of Section #54 and southeast corner of Section #55, Tex-Mex Blk #357, the northwest corner of Section #56 and northeast corner of Section #55, T & St. L. Blk #224, at 3477.4 cross Caldwell-Eppenauer division fence, at 5188.0 pass a rock mound set by J. Stovell in 1941 for the southwest corner of Section #53 and southeast corner of Section #54, Tex-Mex Blk #357, the northwest corner of Section #25, T.C. Ry. Co. Blk #311, and northeast corner of Section #56-T & St. L. R.R. Co., Blk #224, 7088.8 varas to a rock mound set by J. Stovell in 1941, for the southeast corner of Section #53, Tex-Mex Blk #357, and northeast corner of Section #25, T.C. Ry Blk #311.

(v) From the southwest corner of Section #54, Blk #357, a check line was then run N.0°30'W. 1900.8 varas to the previously set nor thwest corner of Section #54, Blk #357.  $T_{1} \neq St.L.R.R.C_{1}$ .

224

(w) From J. W. Merrill's southwest corner of Section #58, Tex-Mex Blk #3, a line was then run S.89°29'E. 1451.0 varas to a rock mound set by J. Stovell for the common corner of Sections #54-55-58-60, T & St. I. Blk #224, from which a rock mound set by J. Stovell for the southeast corner of Section #57 and northeast corner of Section #58, T & St. L. R.R. Co. Blk #224 bears N. 0°30'W. 930.0 varas. Thence N.89°30'E. at 250.9 varas cross Caldwell-Eppenauer division fence, 1900/8 varas to a rock mound set for the common corner of Section #21, T.C. Ry. Co. Blk #311. Thence N.0°30'W. at 1661.1 varas cross Caldwell-Eppenauer division fence, 1900.8 varas to the previously set northeast corner of Section #55 and northwest corner of Section #56, T & St. L. Blk #224.

(x) From J. W. Merrill's southwest corner of Section #60, T & St. L. Blk #224, a line was then run N.89°30'E. at 1029.4 varas cross Caldwell-Eppenauer division fence 1481.6 varas to a rock mound set by J. Stovell for the common corner of Sections #54-60-61, T & St. L. Blk #224. Thence N.0°30'W. at 1058.2 varas cross Caldwell-Eppenauer division fence, 1900.8 varas to the previously set common corner of Sections #54-55-58-60 T & St.L. Blk #224.

(y) From Stovell's southwest corner of Section #61, T & St. L. Blk #224 a line was then run N.89°30'E. 1528.0 varas to rock mound found in place and accepted as Jno. Stovell's common corner of Sections #52-53-61-62, T & St. L. Blk #224. Thence N.0°30'W. 1900.8 varas to the previously established common corner of Sections #53-54-60-61.

(z) Where necessary to complete closures, separate traverses were then run around all fractional parts of sections crossed by the division fence, and corrected field notes prepared for each fractional tract.

8. (a) It will be noted the acreage of the various fractional tracts in Blocks 224 and 357 as shown by Mr. Stovell's plat do not agree with those developed by this survey. This isnot due to any difference in the position of Section corners, but solely to the fact that at the time Mr. Stovell made his survey, the Caldwell-Eppenauer division fence which he traversed was later re-constructed in a different location. For that reason, that part of Mr. Stovell's survey was not accepted by either Mr. Caldwell or Mr. Eppenauer.

9. With respect to the Caldwell-Lee Lane division fence along the north boundary of the Caldwell Ranch, such differences as were developed between this survey and that made by Mr. R. L. Withers were adjusted on the ground with the full consent and cooperation of Mr. Withers personally. The corners of all sections in G.H. & S.A. Blk #3 and Tex-Mex Blk #357 crossed by that line being established jointly by Mr. Withers and myself.

RALPH W. BAKER, Licensed State Land Surveyor.



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-14-

Sketch File No. 31 Jeff Davis county .R.W. Baker's Report of Surveys in T.&P. Bik. 59, TSP.105, G.H.S.S.A. Blk3, Tex. Mex. Blk.357 + Ty St.I. Blk224 Filed May 8 1943. Bascom Giles , Com'r Milvon Rocenberg (See Jeff Davis Rolled Sk. 19A for Surveyor's Sketch)