Rec'd 12-8-1913.

Lu Sketch filed 1/25/12
Upton Co. Rolled Sk. No. "8"
5/10/58-J.L.W.

Rec'd 12/8/13

REPORT on RESURVEY
of certain lands
in Crane, Crockett and Upton Co.s
Texas
by R.S.Dod
State Sur.

Received and filed in
General Land Office
December 8th, 1913.
J.T.Robison, Comr
C.F.Bludau, Clk

Hon.J.T.Robison
Commissioner Gen'l Land Office
Austin,Texas,

Dear Sir,

I would here with submit the following report and the accompanying Plat and fieldnotes for your approval.

Object of the Resurvey.

To ascertain the true boundaries and mark the corners of certain surveys in Crane,crockett and Upton Counties,to correct the errors in the original survey ,if any,determine the position of the lands in question relative to adjacent lands,and to return corrected field notes and plat of resurvey to the Commissioner of the General Land Office for examination and approval.

Lands to be resurveyed.

Certain Surveys in Blocks 35 & 36 H.& T.C.Ry.Co.
Individual surveys ,No.3 in the name of Mrs A.E.Baxley
No.4 " " " Mrs. S.Hearn
No.1 " " " J.W.Murphy.
Survey No.4 G.C.& S.F.Ry.Co.
Also certain surveys in Block 1 M.K.&T.Ry.Co.not reported on as yet.

Authority for the Resurvey.

Appointment as State Surveyor by the Hon.Commissioner of the General Land Office in a letter dated Oct.10 1911.

Assignment to this special work at the request of the owners of the lands in question through their agent,by the Commissioner of the General Land Office ,July 1st1911.

Letter of instructions for the work dated July 1st1913.

Data for the Resurvey.

Coppies of field notes of surveys in Blocks 35 & 36 H.& T.C.Ry.Co. from resurvey made by Mr.Neyland State Sur.in 1888,and approved by the Commissioner of the Gen'l Land Office

Working sketch of that part of Crane,Crockett and Upton Co.s covering the lands in question and giving the original fieldnotes,from the record of the Gen'l Land Office,

Plat of connecting line run by Mr.Neyland from the Pontoon crossing to original N.E.cor.sur.3 and Sur 34,M.K.& T.Ry.Co.Blk 1. and on to the H.& T.C.Blocks.

Corrected Field notes of A.E.Baxley sur 3,made by me and approved by the Commissioner of the Gen'l Land Office,

Sketch from the Gen'l Land Office compiled from the connections run and corners found on survey made to establish the Baxley lines.

Map furnished by the owners of lands in question showing their lands in red.

Method of Resurvey.

Surveyors Transit with 5 1/2"needle and solar attachment was used in determining Course and in running the lines of this survey.

A true meridian was established and the courses between original corners and from corners to definite objects given as bearings were compared with the true meridian from time to time.

The average needle reading gave a Var.of 10°46'E in Blk.35,and 10°45'E in Blk.36. This is about 05' greater than the Var.determined some two years ago on the same ground.

The north and south lines were extended by the transit.There were no long east and west lines as they checked on corners about every two miles. The new bearings called for were read from the needle as there was some little local attraction and by this method the needle should read with the calls.

Stadia method was used for measuring distances,a target rod in front set from the instrument,read and booked by the rodman,a self reading rod behind,read and booked at the instrument,giving two rewdings for the same distance,the one checking the other.Rods and wires were checked by 100 varas standard tape.

Note.This method through the low brush flats and over occasional steep slopes ,in our estimation ,gave quicker and more accurate results than chaining.There was practically no refraction and the work checked nicely with the work done on the same ground two yewrs ago,and checked out with measured distances on the R.R.track.

There were four fairly definite mountain points used as bearings,so placed as to give fair readings over the whole territory.Angular measurement were made on these from various points on the lines so as to give a good chech on long distances.

Sugar Loaf,one of these,is a cone shaped peak,standing by itself and fairly symetrical,and can be seen from a long distance in several directions

A lone mountain across the river has a very pronounced west bluff on the rim rock and can be seen from a number of points.

Scallop Top has a definite break in the middle and made a good bearing.

The east point of a long mountain south of 56 in 35 was another good point.

Readings were taken on points of the rim-rock and the course of the foot of the lower ridges noted where possible,so that an approximate contour of mountain top and hilly land as contrastewith the flats,could be indicated on the plat.

History of the resurvey.

Block 35 H.& T.C.Ry.Co. resurveyed by Neyland 1888 and approved.

General principles of a resurvey.

No section or sections in any Block can be corrected until the lines of the Block are settled and its relation to adjoining Blocks determined.

The original corners found and identified on the ground will controll the surveys in a block,even if they are relatively out of their true position as called for. Resurvey corners when approved by the Commissioner are original corners so far as any resurvey by State Surveyor is concerned.

In Blocks 35 & 36 the corners made by the Neyland survey have been approved and consequently the Block lines fixed and this survey was concerned simply in locating these corners in reference to the lands in question and placing corners where the Neyland survey had omitted them.

My letter of instructions reads; "In your resurvey ---- you should be governed by the original corners and approved corners, that of such Blocks that were resurveyed by former State Surveyor."

On looking over the field notes of Block 35,we find that the north Blockline calls for a marked corner at each mile.

That there is a row of marked corners called for every two miles starting at the north line and running S 40° W through the Block,and connecting with the corners of the river surveys.

The west part of the north Block line is in the hills and we would expect some irregularities in the survey here if anywhere.

It was a custom of some of the earlier surveyors,as related to me, to estimate the probable shortage due to rough ,brushy or sloping surface and throw in a certain number of varas per mmile .We find by actual measurement that the miles in Blk 35 run from 1898 varas to 1945.5.Some of these would seem to be errors in chaining,but others extend for a number of miles with such regularity as to lead one to suppose them intentional.

The bounds of the original Block were fixed by Mr.Neyland when he ran his connecting line ftom Pontoon Bridge,and he may have been distributing an excess.However this may be,we do find the irregularity of distance between well defined corners in the Block,and these must be the basis for the other lines and corners not definitely marked.

The Plat and field notes show how this has been done.Although it may not be necessary to repeat here the details given in the field notes for eacg section yet a reference to certain facts as a basis for the readjustment of certain surveys will illustrate the principles involved.

In Survey 57 Blk.35,we found the original corner and original stake, and S 40° W we found the original S.W.corner of 57,and 403 varas further the S.W.cor 44 and N.E.Cor of river survey.All three of these were identified as original corners by marks and bearings and relative position.

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On running S 50° E one mile from the N.W.cor.57 we came out north of an old rock mound .This should be the S.E.cor 56 and it fits the original bearings,but these are not so definite but that the corner could be moved 20 varas or more and still fit the calls.We then ran north and at 1930 found the well identified original corner N E 56,The question then came up was the rock mound near SE 56 the original or had it been moved 30 varas south

Had all measurements been regular through the Block the presumption would have been that it had been moved,but in view of the many excesses found in meaurement,and the probability that this row of corners was put in by chain from the north line without cross checking,and a further examination of the mound itself showing its age by the sinking of the rocks into the ground,and their being weathered on the exposed sides of the mound,we were forced to the conclusion that it was the original corner and ran to it.

From this S.E.56 we ran S 50° E and found an old rock mound that fit the calls for N.E.57 but it was 10 varas too far and 22 to the north, bringing us back to nearly our true course from N.W.57.

Here we turned S 40° W and at 1112 found an old rock mound,as called for only too far.Here we turned N 50° W and at 437 reached an old rock mound, evidently the original corner of the river survey. North 40° E 257 vars to another old mound.Note the slight excess in each measurement but that the course is true and fits the Var.with which we started,taken from the 3 corners on the west line of 57.

We ran on N50° W 950,then S 40° W 123,then N 50° W 953,to divide excess, south 40° W 531 ,then N 50° W 953 to the corner.

Although there might be some question as to each mound taken by itself, yet when one follows after the other,fitting the calls for bearings and true to course,the proof is cumulative and the survey is fixed.

In order to determine the meridian on which to place the corners of 47 and 54,we went to the N.E.Cor.55 a well defined original corner on a continuous line of mile corners from the north line,but not true in course.

We ran from this to the S.W.cor 47 a corner on the next line of continuous corners,two miles west,and found it N 49° 50'W 3852 varas.

We placed the common corner of the four surveys meeting at this point, 46,47,55,54, at the middle point of this connecting line.

We ran two miles north from this common corner and had a definite point on our line where it crossed the rim-rock some 5 or 6 miles ahead.We then went back on the line to a point from which we could see the flags on N.W. & S.W.corners of 57 and found them in line with our line and the poin on the mountain.This established a line at the average var.determined from various readings and seemed to fit nicely with the corners tested and ran close to the corner on the Blockline when run out.

But later on we ran from N.E.49 to N.W.49 and found the original corner 45.5 varas N 50° W,and 53 varas N 40° E of the point reached from our line.To further identify this N.W.49,we ran S 40° W 1916 varas and found the original corner 12 varas S 50° E,on S40° W at 1937 found the corner some 7 varas S 50° E,on south a mile and reached the original cor of 47.

It looked as though the original N.W.49 had been missplaced and the course shifted to get back to the line on survey 47. The change in course and evident error in location of N.W.49 did warrant moving or bending the line we had run straight through the Block,although ordinarily we would have taken the middle point between the two old corners for the common corner,but nowhere else did we find any such excess in distance,and nowhere else did we find any such change of course.

A line run on west from our line for four miles checked up nicely in course,and in average excess in distance and came out on a line run north from corners on the south line.

Therefore we treated 49 as a corner missplced in error and did not give it precedence over course.

We ran a line N 50° W from N.W.57 and at 1923 varas found a rock mound some 23 varas S 40° W,but although it fit the bearings fairly well it did not look like an old corner.We ran on 3843 further and reached the well identified S.W.cor.31. I did not think the mound found at S.W.12 was an original mound,it was near a road ,not far from an abandoned homestead, and we had found a recent rock mound south of NW 57,they looked about the same age.I therefore disregarded it and placed oru line directly between Original NW 57 and S.W.31 giving each mile 1922 varas,

We ran the east line of 31 and ran the north line 1922 varas and reaced a point some 15 varas east of a fence. An earth mound is called for

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but we could not find it.We found a 2"x4" stake about 150 N.E.but no mound near it.We looked carefully along the fence but found nothing.The fence corner is about 106 vara S 45° W from our point.At our point we get the bearings of the original call from the earth mound.Along the north line of 31 we passed a windmill north of the line,at 1350 passed a grave about 30 steps north and from there on could see the signs of an old fence quite close to our line,but found no earth mound along it or where it would strike the other fence.The fence we found runs to the east of the line as it runs north.

Running on N 50° W two miles and 44 varas further we reached a point wher another earth mound is called for but did not find it ,but we get the old bearings and the calls on the east line of survey 12. At this point one fenc was 85 varas south another 60 west of our point.

In running the line N 40° E from S.W.28 we noted the line ran through a sharp boulder in a mountain gap.And on running from SW 47 to SW25 and t turning N 40° E the line ran through the same boulder.

At S.W.34 the point reached by our line called for an earth mound, but we did not find it.Our point fit the original calls at this corner.We were about 120 varas N 50° W from a fence,which is I think the same fence we crossed at N.W 31.We found a 2"x4" stake N 62° 30'E 145 varas from our SW34.

We found a number of these 2"x4" stakes scattered over the country,some in the old mounds,some at a distance from them,some as far as 150 varas from where we made the corner.They had been numbered with a stencil but it had not lasted long.They seemed to be not over a year old.

I do not think there are any other points of the survey that will refurther explanation than will be found in the plat and field notes.The above will give an idea of the method of the work and the field notes will give details.

Block 36.

The north line of Block 36 is a continuation of that of Block 35.

The corners on this line are easily identified.A fence runs over them for some miles.

We found the Neyland corners in Blk.36 well marked and undisturbed,as far as we examined them.We found a fence on the east line of 4 & 5 .

The distance between corners as measured on the west line was 1918 varas The distance between corners on the Block line was 1920 varas,until we reached the south line of 15 where it was 1901.

The only undetermined point was the N.E.Cor 13,this would come on the steep south slope of the mountain.This mountain,like almost all the other elevations,has a flat mesa top,bordered by a projecting bluff from a few feet to 40 feet in height and perpendicular or projecting,this makes it impossible to reach the top of the mountain except where erosion has washed out or filled in a path up the rim-rock.One of the boys walked over a mile under the rim-rock without finding a place to climb up.

Mr.Neyland marked a boulder with an X and 3 & 277 varas N 40° E from the corner.This we found,but could not get from there to the corner,nor reach the corner from the south.There is a succession of deep drains and sharp ridges and an accumulation of boulders that make it almost impassable

We checked on a number of points on the mountain so as to place the outline on our plat and it checks nicely with Mr.Neylands calls.He seemsto have climbed the mountain at the west end,where the slope is more gradual and run his line on top.

No.3 A.E.Baxley.

For this survey we started at the S.W.cor.R.T.Co.sur.No.1,which is also the N.E.cor 77 in Blk 35 and the N.W.cor of 5 in Blk 36.We ran east two miles and 349 varas for the N.E.cor.sur 1 GC&SFRy.and set a stake for the initial corner of the Baxley survey.There are no marked corners given in the field notes,so course and distance governed.

From this point the Baxley calls to run east 3451 varas to the S.E.corner R.T.Co.sur 4,and then on east,but at 3417.6 we reached the east line of sur 9 GC&SFRy.as run fron the Pontoon connection with original NE 3 MK&TRy.Blk 1.three miles south and then west one mile,on 1140 varas to east line Sur.9,and on 2662 to the west line sur.9. /33.6

From this point we ran south 620 varas and then ran west 1336 to reach the point fixed by the original call of 845 varas north from the S.E.corner which S.E.corner is called for 3284 east of the S.W.corner,and the S.W.cor is 1465 varas south of the initial point above described.We marked these points with mounds and stakes as related in the fieldnotes.

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Sur.No.4 Mrs.S.Hearn.

This survey takes original course and distance from S.E. & S.W.cors of the Baxley survey.We stopped our line at the rim-rock and made our call for S.W.corner on the south side of the mountain,having run the connection from S.W.Cor.R.T.Co.sur.1 by way of surs5.6.& 13 in Blk.36 and by way of the R.T.Blk south line and east line No.1 GC&SF.

Sur.No.1 J.W.Murphy.

This survey shows to start at a point in the west line of 2 MK&T Blk.1, 526 varas north of the north east cor sur 10 at the S.E.cor.of the Baxley No.2.

The approved resurvey of the Baxley No,2 and connection from the Pontoon crossing ,showed that sur No.2 and sur No.10 were a mile further north than the position shown on the original map.The consequent readjustment places the S.E.cor.of Baxley No.2 an the west line of sur.10 and 600 varas west of the west line of sur 2 MK&T.

The original call for NE ;urphy would apparently place it 600 varas east of the present SE Baxley 2,on the west line of sur 2 M.K.&T,but sur 10 being the senior survey we must move to its west line to the SE Baxley 2 for the N.E.cor of the land left for the Murphy survey.

We then ran west,with the south line of the Baxley No.2 ,4547.4 vrs to SW Baxley 2,a point in the east line of sur.4 GC&SF,a connection shown in the original Murphy plat.

Here the Murphy field notes call to run south 449 varas,but on turning south we reach the north line of the senior R.T.sur No.4 at 170 varas and stop.

Thence running east the Murphy calls 1510 varas but at 1378 we reahh the N.E.cor R.T.4,and the plat of the original Murphy survey shows that it follows the east line of the R.T.Blk.Hence we followed that line 780.8 vrs to a point in the north line ofSur.9 GC&SF.Ry.as above located.

Thence we ran east to the west line of sur 10,3168.6 varas.

To locate the east line we return to the original initial point 600 varas east of the N.E.corner as now placed in order to locate and satisfy the original calls.From this initial point we call is south 526 varas,thence west 1710 varas ,which line will cross the present west line of sur 10 at a point 526 varas south of SE Baxley 2,on west 1110 varas ,then South 543 varas to a point then east 1710,but we stop with the west line of sur 10,at 1110 varas .

At this point we are 221 varas north of the extension east of the north line of survey 9 GC&SFRy,as above located,which extension will be the line of survey 10 same grantee,and we turn south 221 varas and reach the point located above as the S.E.cor.Murphy No.1.

The corners and bearings for the east line of the Murphy have not been put in as I wait your instructions in the premisses.

I have signed the field notes with course and distance for these points on the east line and will mark the corners when I receive your instructions, or move them according to your advices and return new field notes.

Sur.4 GC&SFRy.Co.

This survey was very simple and the field notes cover all the points.

The shortage north and south was passed on when the Baxley No.was approved.

I believe that the above will make the plat and field notes intelligible and they are respectfully submitted for your examination.

I shall continue the field work in the M.K.& T.Blk. and report when it is finished unless some matter needing a ruling from your Office should come up,when I will report for further instructions.

Respectfully

R A. Dod

State Surveyor.

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Sketch File No. "D"

Upton County

Report by

R.S. Dod

Filed Dec. 12, 1913

~~W.J. McDONALD~~, Com'r

5/10/38 — Woodland

File Clerk

Re-survey of Land in Crane,

Descriptive: Crockett & Upton Co's

See Rolled Sk. No. 8"

5/10/38 J.A.W.

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