File No. Sketch File 29

Wilbarger County

Surveyor's Report of Re Survey of S.F. - 12189, G. C. Morris A-2073

Date Filed ~~12~~ 12/19/2018

George P. Bush, Commissioner

By K. Schreiber July 12, 2016

SEE SKETCH FILE 28 for Plat

Shine & Associates, Inc.

LAND BOUNDARY SURVEYORS
NEDRA J. FOSTER, RPLS, LSLS
DANIEL J. WARRICK, RPLS

Mr. Mark Neugebauer
Texas General Land Office
1700 N. Congress Avenue, 1st Floor
Austin, Texas 78701-1495

Re: Area of the G. C. Morris Survey, Abstract 2073, Wilbarger County, Texas

Dear Mr. Neugebauer:

I have performed a resurvey of the above referenced G. C. Morris Survey, assignee H. A. Turner. This resurvey focuses not only on the upland boundaries but also the boundaries fronting on the Red River. There has been substantial accretion occur since the original lands were granted, and this will be addressed. Accompanying this report is a plat of the area.

HISTORY

Following is the chronology of the grants within the Fannin Land District in the vicinity of the subject Morris Survey:

Jacob DeCordova surveyed many of the oldest grants in the area which call for the Red River as their north boundary:

1) Luke J. Gillespie, A-32, Donation 823, Survey #822, patented for 640 acres, surveyed May 29, 1856.
2) Luke J. Gillespie, A-31, Bounty 822, Survey #823, called 320 acres, surveyed May 29, 1856.

Corrected survey performed on Survey #823 by H. L. Coleman on January 26, 1926, with patent issued for 320 acres on March 16, 1926.

3) Perry G. Gibbon, A-29, Bounty 788, Survey #817, patented for 640 acres, surveyed on June 8, 1856.
4) Perry G. Gibbon, A-30, Bounty 788, Survey #818, patented for 640 acres, surveyed on June 8, 1856.
5) Eli Philips, A-522, Bounty 789, Survey #819, patented for 640 acres, surveyed June 8, 1856.
6) Eli Philips, A-521, Bounty 789, Survey #820, patented for 640 acres, surveyed June 8, 1856.
7) A. M. Clopper, A-18, Bounty 821, Survey #821, patented for 640 acres, surveyed May 29, 1857.

Mr. DeCordova marked witness trees with an X two hacks above and below. Most of his on the ground work appears to have been confined to working along the river front as he makes detailed witness calls on all river front corners but calls for 'stake and mound' on the back corners.

P. O. BOX 305
330 NORTH 4TH STREET
SILSBEE, TEXAS 77656

409-385-9383
shineandassociates.com
TBPLS FIRM #10040800

95325

B. R. Milam surveyed the M.E.P.&P. Railway Surveys in 1861. Below are sections in the subject area:
8) M.E.P.&P. Railway Survey #875, A-795 (Wilbarger) A-229 (Wichita), S-1761, patented to James C. Moore for 640 acres. Surveyed by B. R. Milam on June 25, 1861. On the west line, traversing South, there is a call to pass the natural feature of Farmer's Branch at 3770 varas. This survey calls on its north line to be on the Red River.
9) M.E.P.&P. Railway Survey #880, A-485, S-1766, patented to James C. Moore for 640 acres. Surveyed June 25, 1861.
10) M.E.P.&P. Railway Survey #887, A-490 (Wilbarger) A-585 (Wichita), S-1773, patented to James C. Moore for 640 acres. Surveyed June 26, 1861.
11) M.E.P.&P. Railway Survey #886, A-489 (Wilbarger) A-584 (Wichita), S-1772, patented to James C. Moore for 640 acres. Surveyed June 26, 1861.
Mr. Milam marked witness trees with an X.

12) Mrs. F. C. Culwell, Survey #1, (assignee W. M. Walton et al), A-554, patented for 640 acres (5/7/1889) on survey by J. W. Field on February 24, 1886. This survey was called to be adjacent to and lying north of MEP&P Survey #875. The Culwell southwest corner is called to be common with the northwest corner of Survey #875.

13) A. J. Williams (assignee J. M. Huddleston), A-1332, Survey #2, School Land 31991, patented for 434 ½ acres based on corrected survey by R. M. Kenney on April 11, 1893, bearings marked X one hack above and below. It's notable that Mr. Kenney did not call to front on the Red River with the northern boundary.

14) A. L. Hooper, A-563, Donation 1559, patented on corrected field notes by R. M. Kenney, survey performed on March 13, 1894, for 291.96 acres.

15) G. C. Morris, assignee H. A. Turner, A-2073, Scrap File 12189, survey by John B. Nabers on August 3, 1919. Patented for 78.2 acres on corrected field notes by John B. Nabers (same survey date as original). When Mr. Nabers surveyed in the subject Morris Survey in 1919, he called his northeast corner to join the west line of MEP&P Survey #875. This may have been a mistaken call because in 1886, the Mrs. F. C. Culwell Survey (12 above) was described by Surveyor J. W. Field with its southwest corner being common to the northwest corner of MEP&P Survey #875. This placement of the Culwell Survey lying adjacent and north of Survey #875 would cause its west line to be common with the east line of the subject Morris Survey.

WAGGONER COLONY SUBDIVISION

The lands in the subject area are for the most part included in the vast Waggoner Colony Subdivision. Daniel Waggoner came into the North Texas area in the early 1850's and began to acquire lands. He moved the headquarters of his holdings to Wichita County. The ranch came to cover a block running thirty miles east and west and twenty-five miles north and south, including more than a million acres. The portion in Wilbarger County in the subject area was recorded in 1906 at Volume 1, Page 23 of the Map

Records of Wilbarger County as Waggoner Colony Subdivision. For the most part the subdivision blocks do not conform to the configuration of the original land grants; however, there are a few coincident corners, and some references are given on the plat showing the relationship of the Waggoner Subdivision to the original grants.

Because most of the real property transactions and occupation follow the Waggoner Colony Subdivision, it is important to locate the subdivision as well as search for evidence of the original land grants. In my retracement, I have located several monuments at the section corners of this Subdivision. Also, this area is heavily used for agricultural purposes. These two things combined: 1) the occupation mostly being different than the original grant lines and 2) the heavy use of the land, make the task of finding original evidence difficult.

In the vicinity of the subject G. C. Morris (assignee, H. A. Turner) Survey, the land has been described since 1956 in warranty deeds, affidavits, and quitclaim deeds as being "all of Subdivision 144 of the Waggoner Colony Lands Subdivision, except the South 160 acres thereof, this conveyance covering 184.75 acres, more or less. Said 184.75 acres of land being out of the L. J. Gillespie Survey #823, the A. J. Williams (J. M. Huddleston) Survey #2, and the G. C. Morris Survey SF-12189 , and includes all accretions to said Block 144." [1] In 1906 Block 144 Waggoner Colony Subdivision was laid out to contain 160 acres in the southern portion and 88.3 acres in the northern portion. By 1956 the northern portion of Block 144 was being conveyed as 184.75 acres in the northern portion and 160 acres in the southern portion of Block 144. The east line of the subject G. C. Morris Survey is coincident with a portion of the east line of Waggoner Colony Block 144.

FIELD EVIDENCE OF SURVEYS

G. C. Morris Survey:

On the subject Morris Survey, the original set of field notes by John B. Nabers called for a 2"x4" pine stake at the northwest corner with the west line call being North 483.8 varas. The corrected set of field notes also by Mr. Nabers changed this west line to N18°W 598.2 varas and called for a stake at the corner. The North line was held at the same bearing on both sets of field notes as S65°19'E with the first distance called as 726.9 varas and the corrected field notes calling 930.5 varas on this north line.

[1] Some of these public transactions include V201/P359 (1956), V216/P304 (1959), V280/P456 (1971), V309/P282 (1976), V396/P201 (1986).

95327

It is probable we found the pine stake set by Mr. Nabers. We found it disturbed - lying on the ground – a length of milled pine about 4.5 feet in length and about 1" x 3.5" – clearly worn down but definitely heartwood pine. This disturbed pine stake was lying S50°28'13"E 2.8 varas from the northwest corner of the subject Morris Survey. Heartwood pine was often used to mark corners because of its durability. This pine stake was brought to this spot as there is no pine for many miles. While the stake was not found in place, it is good evidence that this corner is correctly located as set by the original surveyor, Mr. Nabers.

In this same area as the pine stake was found, profiles of approximately 150 feet in length were run across a portion of the old river banks. From the toe of berm to top was a rise of 6 feet. From the area where the pine stake was found (Point 1035), this berm was visible extending in both directions paralleling the river. Quoting from the research[2] done in the 1920's in connection with the lawsuit between Texas and Oklahoma, "A bluff recently abandoned by the river is in general steep and abrupt, but after being abandoned gradually decreases in steepness, the slope becoming progressively gentle with age." This statement describes the banks located along the northern boundary of the original location of the subject Morris Survey. Much land has accreted in front of the 1919 location of the Morris Survey, but the old, alluvial banks along the original location are still evident today, although 'gentled' down.

M.E.P.&P. Railway Survey #875

As mentioned in (8) above, on the west line of Survey #875, traversing South, Surveyor Milam made a call to pass Farmer's Branch at 3770 varas. Nowadays this watercourse is known as Adam's Creek. We surveyed the creek in the vicinity of the west line of Survey #875 and found the channel today to be southerly some 63 varas from the call. There is some evidence from historic topographic maps that the channel has changed somewhat which may account for this variance.

At the northwest corner of MEP&P Survey #875, B. R. Milam (June 25, 1861) called for a Cottonwood marked X at N26°30'E and another Cottonwood marked X at N32°30'W with no distances recited. On April 11, 1893, R. M. Kenney, at the northeast corner of the J. M. Huddleston #2 (aka A. J. Williams) called for a red sandstone from which a lone cottonwood bears N27°10'E with no distance recited. The subject Morris Survey by John B. Nabers on August 3, 1919, called for its southeast corner (bois d'arc stake 3 hacks) to be common with the northeast corner Huddleston. In 1919 Mr. Nabers also made the northeast corner of the subject Morris Survey to be common with the northwest corner of Survey #875 (perhaps a call by mistake or conjecture). It is my opinion the subject Morris Survey was laid in by Mr. Nabers on land that accreted above the Williams (Huddleston) Survey #2. Again, in the original survey by Mr. Kenney in

[2] "Investigation on the Red River Made in Connection with the Oklahoma-Texas Boundary Suit," by E. H. Sellards, B. C. Tharp, and R. T. Hill, University of Texas Bulletin No. 2327, July 15, 1923, page 59.

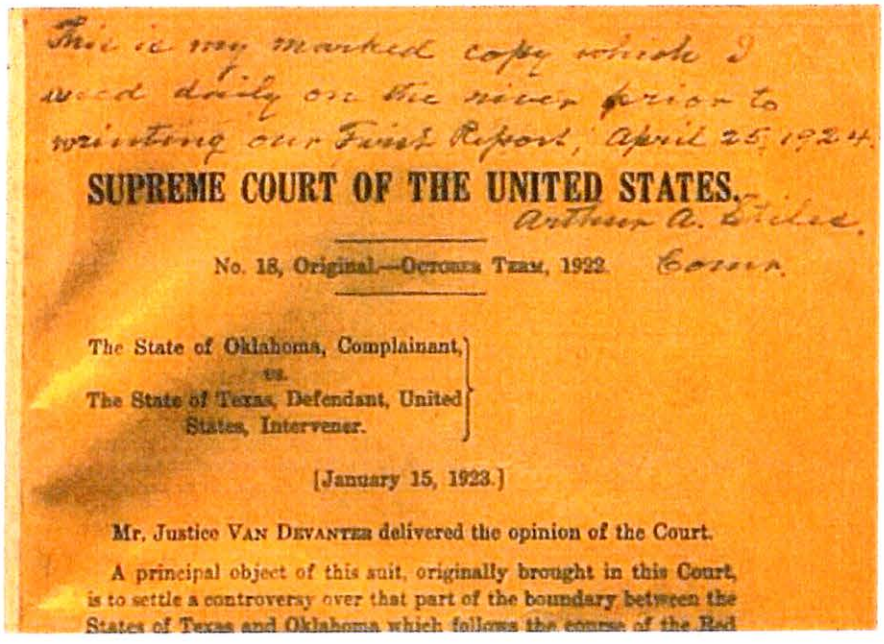
95328

1893, he did not call for the north line of the Williams (Huddleston) Survey to follow the Red River; therefore, the General Land Office granted the accretion that lay to the north of the Huddleston to G. C. Morris (assignee H. A. Turner). Mr. Nabers called for the north line of the Morris Survey to follow the Red River.

An unsuccessful search was made for the red sandstone and/or bois d'arc stake. It is in an area with several generations of fencing (occupation) and a major powerline passing through, so it would have been surprising for this evidence to have survived. It is reassuring to note that in this search vicinity, cottonwood trees are present at the bearings called in the Huddleston and MEP&P Survey #875 field notes. This area is on a hill that does not have many cottonwoods present.

GRADIENT BOUNDARY ON RED RIVER

I performed a gradient boundary survey in the area of the subject Morris Survey in accordance with the precepts developed by Surveyors Arthur Stiles and Arthur Kidder in connection with the Oklahoma v. Texas, 260 U. S. 606 (January 15, 1923). I have at my office original records of Arthur Stiles in connection with this lawsuit as well as other records throughout his career. One of the items is Mr. Stiles' copy of the Opinion of the Court in connection with this Oklahoma v. Texas lawsuit. Below is a scan of part of the first page of this opinion with Mr. Stiles' statement of how he carried it daily on the river as he and Arthur Kidder performed the work assigned to them as Commissioners by the Supreme Court. Throughout the article, Mr. Stiles observations and comments are added in the margin. I was privileged to learn the 'how to' of performing a gradient boundary survey from my mentor, Darrell Shine, who learned from Irving Webb, a direct student of Arthur Stiles.



This is my marked copy which I used daily on the river prior to writing our First Report, April 25, 1924.
Arthur A. Stiles.
Comm.

SUPREME COURT OF THE UNITED STATES.

No. 18, Original.—October Term, 1922.

The State of Oklahoma, Complainant,
vs.
The State of Texas, Defendant, United States, Intervener.

[January 15, 1923.]

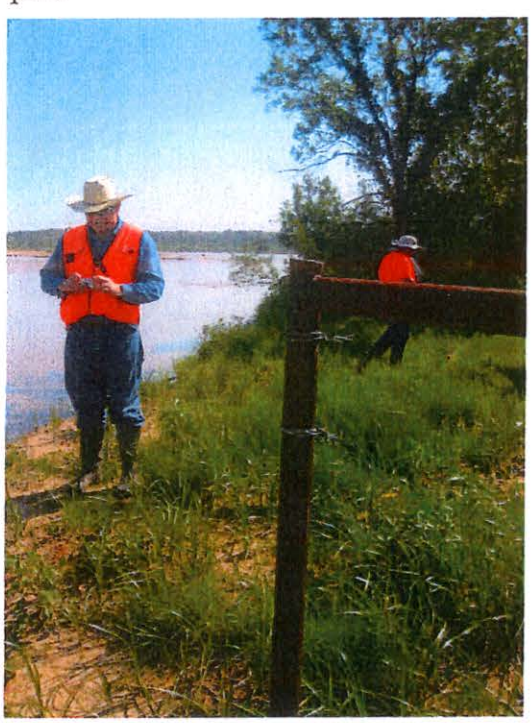
Mr. Justice VAN DEVANTER delivered the opinion of the Court.

A principal object of this suit, originally brought in this Court, is to settle a controversy over that part of the boundary between the States of Texas and Oklahoma which follows the course of the Red

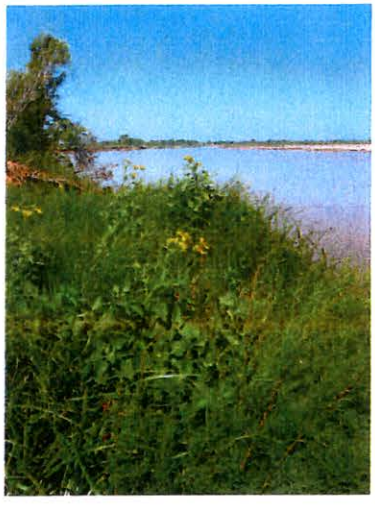
95329

The subject Morris Survey lies just upstream from the 'Big Bend' area of Wichita County that was the subject of the 1923 lawsuit. The conditions described in the lawsuit are just the same in our subject area. This is Reference Marker 15 which was set in the survey work performed by Commissioners Stiles and Kidder. The survey work was tied to reference marks both in Oklahoma and Texas which were placed back away from the river in hopes of preserving them.

Although most of the banks in the vicinity of the Morris Survey are currently in an erosional state due to rainfall, I did find one qualified bank downstream from the Morris Survey. From this beginning point, the boundary banks were surveyed for about two miles in the vicinity of the subject Morris Survey as shown on the accompanying plat.



Although I surveyed the gradient boundary in my work, it should be noted that the vegetation line is coincident with the gradient boundary throughout the survey. This photograph is typical of the vegetation present on most of the surveyed area. The tree in the background is 13" in diameter and is located 10.6 feet South of the South river bank. (Near point 1031 – looking easterly)



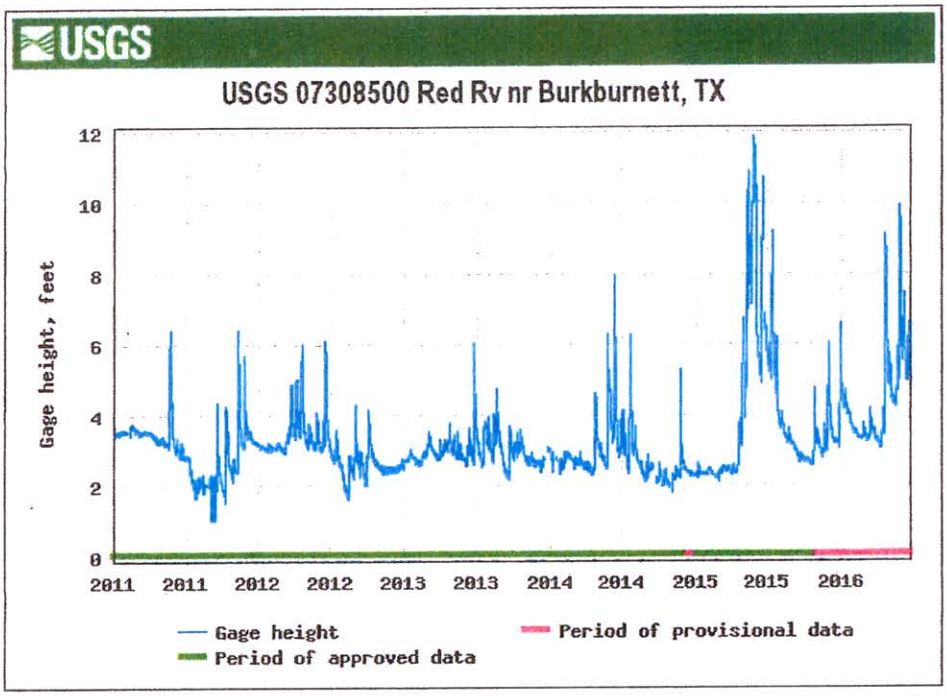
This photograph was taken from the same area (near point 1031) as the above photograph and is looking westerly. Again, note the well vegetated bank and sizable trees in the background.

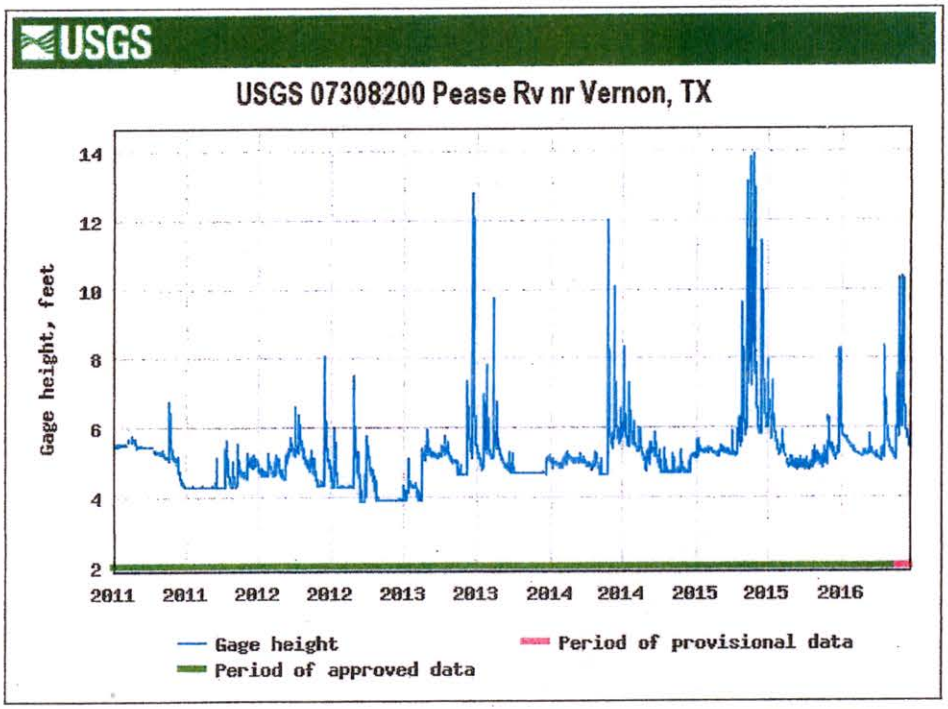
RAINFALL AMOUNTS

Because of the erosional state of most of the banks in the area surveyed, I acquired rainfall records from National Weather Service shown below. Annual average rainfall for Vernon, Texas is reported as 28"-29". Rainfall from National Weather Service showing annual amounts of precipitation:

YEAR	AMOUNT	YEAR	AMOUNT
2016 to May	13"	2011	10"-15"
2015	40"-50"	2010	Not Available
2014	20"-25"	2009	25"-30"
2013	15"-20"	2008	15"-20"
2012	15"-20"	2007	20"-25"

United States Geodetic Survey and National Weather Service maintain gauges at various points which record the rise and fall of waters on streams. Above our area of interest, there is a gauge on the Pease River near Vernon and below our area of interest there is a gauge on the Red River near Burkburnett. Included here are exhibits showing heights from 2011 to June 2016 on these two gauges. Notice that 2015 was a year of unusual rainfall amounts over a period of several months. Again, in 2016 there has been substantial rainfall – although not yet reaching the 2015 levels.


USGS
USGS 07308500 Red Rv nr Burkburnett, TX
Gage height, feet
12
10
8
6
4
2
0
2011 2011 2012 2012 2013 2013 2014 2014 2015 2015 2016
Gage height
Period of provisional data
Period of approved data


USGS
USGS 07308200 Pease Rv nr Vernon, TX
Gage height, feet
14
12
10
8
6
4
2
2011 2011 2012 2012 2013 2013 2014 2014 2015 2015 2016
Gage height
Period of provisional data
Period of approved data

95332

This is significant because the quantity and velocity of waters crossing this area have scoured out and shifted channel locations. The river had been in a building process for many years with accretion being added to lands on the south bank of the river. However, these unusual amounts of rainfall in the last couple of years have caused erosion in the subject area. Almost all of the south boundary bank surveyed during June of 2016 was in an erosional state. It is my opinion that these changes have not been avulsive in nature but are the normal erosion and accretion that will occur on any river during periods of rainfall.

APPORTIONMENT OF ACCRETION

Since the lands were originally granted, there has been substantial accretion to the grants fronting on the Red River. In the subject area, I apportioned the accretion between the Luke Gillespie Survey #823 and the subject G. C. Morris in accordance with methodology set out in Sharp v. Womack, *92 SW2d 712 (1936)* and by James A. Simpson, Riparian Surveyor for the Bureau of Land Management of the United States.[3]

It's my opinion that the field notes describing the land grants from 1856-1919 are the best evidence of the original location of the banks. This opinion was confirmed by finding evidence on the ground of the alluvial banks at the original location of the surveys. In order to apportion, I projected the west line of the Luke Gillespie #823 and the east line of the subject Morris Survey to the current right bank of the Red River. I calculated the original called distance along the north boundaries of both of these surveys (2119.50 varas or 5887.5 feet) and measured the distance of the current gradient boundary between the projected boundary lines (2553.76 varas or 7093.77 feet)

	Frontage Orig.	Ratio	Ratio x 2553.76 v. or 7093.77 ft.
Gillespie #823	1189 v.	0.5609817	1432.61 v. or 3979.48'
Morris	930.5 v.	0.4390183	1121.15 v. or 3114.29'
	2119.5 v. or 5887.5 feet		2553.76 v. or 7093.77 feet

After allotting the portions, there are approximately 268.8 acres of accretion added to the G. C. Morris Survey with a total acreage of 349.88 acres, and approximately 143 acres of accretion added to the Luke Gillespie Survey #823 for a total acreage of 469.30 acres.

LICENSED STATE LAND SURVEYOR
STATE OF TEXAS

Respectfully submitted,

Nedra J. Foster

Nedra J. Foster
Licensed State Land Surveyor

[3] River & Lake Boundaries –Surveying Water Boundaries- A Manual, James A. Simpson, Plat Key Publishing, Kingman, Arizona (1994), pp 157-219.

95333